

**QINETIQ LTD**

**MOD UK NOISE  
AND VIBRATION  
SURVEYS**

**MOD PENDINE  
RANGE**

**JUNE 2016**

**VOLUME 3:  
TECHNICAL  
APPENDICES –  
RESULTS**

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**QINETIQ LTD  
MOD UK NOISE AND VIBRATION SURVEYS  
PENDINE RANGE  
VOLUME 3: TECHNICAL APPENDICES – RESULTS**

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02	Final	Final Report issued	21/12/2015
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This is Volume 3 of 3 of the MOD Pendine Range Final Report. This volume should be read in conjunction with Volumes 1 and 2.



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**VOLUME 3: TECHNICAL APPENDICES – RESULTS**

**CHAPTER 1: RANGE FIRING LOGS**

Date	Start Time Range Blocked	End Time Range Open	Trigger Type	Range	NEQ Criteria	Measured Level $L_{Cpeak}$		Southdowns Generated Trigger ID
						PEN_R1 Brill Gate	PEN_R2 Building E7	
03/11/2014	10:19	14:58	Small arms & Cannon	West 6	7.62			
04/11/2014	09:26	10:40	Small arms & Cannon	West 6	7.62mm			
05/11/2014	10:24	13:31	Small arms & Cannon	Central 7	7.62mm			
06/11/2014	10:15	12:38	Small arms & Cannon	East 3	7.62mm			
06/11/2014	10:15	12:18	Small arms & Cannon	Central 7	7.62mm			
06/11/2014	14:11	14:47	Small arms & Cannon	Central 7	7.62mm			
07/11/2014	10:00	13:56	Small arms & Cannon	Central 7	7.62mm			
07/11/2014	10:03	14:38	Small arms & Cannon	West 6	7.62mm			
08/11/2014	09:34	13:10	Small arms & Cannon	West 6	7.62mm			
08/11/2014	13:21	13:30	Small arms & Cannon	West 6	7.62mm			
09/11/2014	09:44	10:35	Small arms & Cannon	West 6	7.62mm			
09/11/2014	11:35	15:00	Small arms & Cannon	West 6	7.62mm			
10/11/2014	10:32	13:27	Small arms & Cannon	East 3	7.62mm			
10/11/2014	10:47	13:54	Small arms & Cannon	Sands 4	40mm			
10/11/2014	14:30	-	Static	East 11	20kg	116	132	S1-35, S2-69
10/11/2014	15:21	-	Static	East 11	5KG	118	140	S1-36, S2-70
11/11/2014	09:24	09:36	Small arms & Cannon	West 6	5.56mm			
11/11/2014	09:45	10:56	Small arms & Cannon	Sands 4	40mm			
11/11/2014	11:03	11:38	Small arms & Cannon	Sands 4	40mm			
11/11/2014	11:37	13:09	Small arms & Cannon	West 6	5.56mm			
11/11/2014	12:28	13:47	Small arms & Cannon	East 3	7.62mm			
11/11/2014	15:04	-	Static	East 11	5kg	113	131	S1-41
11/11/2014	15:31	-	Static	East 11	20kg	115	136	S1-42

**TABLE 1 1: RANGE EVENTS FOR MONITORING PERIOD 01 NOVEMBER 2014 TO 05 MAY 2015**

Notes:

[1] Trigger Threshold PEN\_R1 (Brill Gate) = 75 dB(A); Trigger Threshold PEN\_R2 (Building E7) = 75 dB(A);

[2] A-weighting used for trigger thresholds to reduce number of triggers caused by wind noise; and

[3] \*As presented in Range logs supplied by QinetiQ. B = Blocked. A = Active. O = Open.

Date	Start Time Range Blocked	End Time Range Open	Trigger Type	Range	NEQ Calibre	Measured Level $L_{Cpeak}$		Southdowns Generated Trigger ID
						PEN R1 Brill Gate	PEN R E7	
12/11/2014	15:37	-	Static	East 11	5kg	-	98	S2-111
12/11/2014	14:08	-	Static	East 11	20kg	-	98	S2-104
13/11/2014	09:24	14:56	Small arms & Cannon	West 6	7.62mm			
13/11/2014	10:09	12:37	Small arms & Cannon	Central 7	9, 7.62, 5.56mm			
13/11/2014	10:30	-	Static	East 11	5kg	112	123	S1-49, S2-118
13/11/2014	11:26	-	Static	East 11	20kg	119	137	S1-50, S2-122
14/11/2014	09:24	12:34	Small arms & Cannon	West 6	7.62mm			
14/11/2014	10:33	-	Static	East 11	5kg	-	-	-
14/11/2014	11:13	-	Static	East 11	20kg	114	-	S1-65
14/11/2014	14:39	-	Static	East 11	20kg	114	-	S1-66
14/11/2014	15:12	-	Static	East 11	20kg	118	-	S1-68
15/11/2014	09:17	14:57	Small arms & Cannon	West 6	7.62mm			
16/11/2014	09:37	14:31	Small arms & Cannon	West 6	7.62mm			
17/11/2014	09:22	15:02	Small arms & Cannon	West 6	7.62mm			
17/11/2014	10:18	12:36	Small arms & Cannon	West 2A	5.56			
17/11/2014	12:19	15:27	Small arms & Cannon	West 5	81mm			
18/11/2014	09:07	10:03	Small arms & Cannon	East 3	7.62mm			
19/11/2014	09:07	14:41	Small arms & Cannon	West 6	7.62mm			
18/11/2014	09:25	14:58	Small arms & Cannon	West 6	5.56, 7.62mm			
18/11/2014	10:11	15:25	Small arms & Cannon	West 5	81mm			
18/11/2014	11:56	-	Dynamic	Central 9	5kg	124	-	S1-165
18/11/2014	15:43	-	Dynamic	Central 9	13kg	To be presented in ¼ report		S1-200
19/11/2014	09:46	16:24	Small arms & Cannon	West 5	81mm			

**TABLE 1 1 CTD : RANGE EVENTS FOR MONITORING PERIOD 1ST NOVEMBER 2011 TO 5TH MAY 2015**

Notes:

[1] Trigger Threshold PEN\_R1 (Brill Gate) = 75 dB(A); Trigger Threshold PEN\_R2 (Building E7) = 75 dB(A);

[2] A-weighting used for trigger thresholds to reduce number of triggers caused by wind noise; and

[3] \*As presented in Range logs supplied by QinetiQ. B = Blocked. A = Active. O = Open.

Date	Start Time Range Blocked	End Time Range Open	Trigger Type	Range	NEQ Criteria	Measured Level $L_{Cpeak}$		Southdowns Generated Trigger ID
						PEN R1 Brill Gate	PEN R E7	
20/11/2014	09:59	15:33	Small arms & Cannon	West 5	81mm			
20/11/2014	15:58	16:54	Small arms & Cannon	West 5	81mm			
21/11/2014	10:22	13:47	Small arms & Cannon	West 2A	9mm			
24/11/2014	09:51	12:33	Small arms & Cannon	West 5	81mm			
24/11/2014	13:28	15:48	Small arms & Cannon	West 6	7.62mm			
24/11/2014	13:46	-	Static	Central 9	5KG	123	-	S1-186
24/11/2014	14:48	-	Dynamic	Central 7	13KG	130	-	S1-187
25/11/2014	09:42	14:39	Small arms & Cannon	West 6	7.62mm			
25/11/2014	10:04	12:04	Small arms & Cannon	Central 7	7.62mm			
25/11/2014	12:07	-	Static	East 5	1.3kg	101	-	S1-189
26/11/2014	09:05	12:33	Small arms & Cannon	West 6	5.56mm			
26/11/2014	09:54	11:58	Small arms & Cannon	Central 7	7.62mm			
26/11/2014	14:14	-	Static	East 5	3kg	Didn't exceed trigger level		
26/11/2014	14:58	-	Static	East 5	11kg	Didn't exceed trigger level		
27/11/2014	10:15	12:44	Small arms & Cannon	West 2A	9mm			
27/11/2014	13:04	15:36	Small arms & Cannon	West 6	5.56mm			
28/11/2014	09:00	09:14	Small arms & Cannon	West 6	5.56mm / 7.62mm			
28/11/2014	09:24	10:06	Small arms & Cannon	West 6	5.56mm / 7.62mm			
29/11/2014	09:33	13:38	Small arms & Cannon	West 6	7.62			
29/11/2014	14:06	14:52	Small arms & Cannon	West 6	7.62			
30/11/2014	09:47	14:27	Small arms & Cannon	West 6	7.62mm/5.56mm			
01/12/2014	15:21	-	Dynamic	Central 9	5kg or 13kg. QinetiQ to confirm NEQ	133	109	S1-2; S2-9
02/12/2014	B 08:45; A 09:19; B 13:42; O 14:25		Small arms & Cannon	West 6	5.56mm			

**TABLE 1 1 CTD : RANGE EVENTS FOR MONITORING PERIOD 1ST NOVEMBER 01 TO 5TH UNE 015**

Notes:

[1] Trigger Threshold PEN\_R1 (Brill Gate) = 75 dB(A); Trigger Threshold PEN\_R2 (Building E7) = 75 dB(A);

[2] A-weighting used for trigger thresholds to reduce number of triggers caused by wind noise; and

[3] \*As presented in Range logs supplied by QinetiQ. B = Blocked. A = Active. O = Open.

Date	Start Time Range Blocked	End Time Range Open	Trigger Type	Range	NEQ Charge	Measured Level $L_{Cpeak}$		Southdowns Generated Trigger ID
						PEN R1 Bri Gate	PEN R E7	
02/12/2014	B 08:44; A 09:54; B 12:23; O 14:30		Small arms & Cannon	East 4	12.7mm			
03/12/2014	B 08:48; A 09:25 (Reduced 09:47); L 11:16; B 12:18; O 15:02		Small arms & Cannon	East 3	5.56MM			
03/12/2014	B 08:55; A 09:24; B 11:11; A 11:16; B 15:36; O 15:48		Small arms & Cannon	West 6	5.56MM +7.62MM			
04/12/2014	B 08:48; A 09:09; B 15:11; O 15:31		Small arms & Cannon	West 6	5.56mm and 7.62mm			
05/12/2014	11:39	-	Dynamic	Central 9	13kg	127	118	S1-22; S2-45
05/12/2014	B 09:16; A 09:27; B 14:14; O 15:00		Small arms & Cannon	West 6	5.56mm+7.62mm			
06/12/2014	B 08:46; A 10:06; B 14:39; O 15:00		Small arms & Cannon	West 6	5.56, 7.62mm			
07/12/2014	B 08:39, A 08:55, B 09:18, A 09:29, B 14:35, O 14:47		Small arms & Cannon	West 6	5.56			
08/12/2014	B 08:55, A 09:19, B 12:40, O 13:47		Small arms & Cannon	West 6	5.56, 7.62mm			
09/12/2014	B 09:04, A 09:30, B 13:19, O 14:31		Small arms & Cannon	West 6	7.62mm			
09/12/2014	B 09:06, A 10:02, B 12:43, O 14:58		Small arms & Cannon	East 4	30mm			
09/12/2014	12:45	-	Static	East 5	1.22kg	-	109	S2-82
09/12/2014	15:40	-	Static	East 5	1.22kg	-	114	S2-61
10/12/2014	B 09:14; A 09:32; B 14:54; O 15:11		Small arms & Cannon	West 6	5.56, 7.62mm			
10/12/2014	B 08:00; A 11:52; B 12:45, A 14:11; B15:45,		Small arms & Cannon	Central 7	5.56mm			
10/12/2014	B 08:47, A 09:16, B 15:02, O 15:30		Small arms & Cannon	East 4	30mm			
11/12/2014	B 08:40, A 09:02, B 14:44, O 15:07		Small arms & Cannon	West 6	5.56mm			
11/12/2014	B 08:00, A 10:15, B 12:34, A 13:46, B 15:29		Small arms & Cannon	Central 7	5.56, 7.62mm			

**TABLE 1 1 CTD : RANGE EVENTS FOR MONITORING PERIOD 1ST NOVEMBER 2011 TO 5TH MAY 2015**

Notes:

[1] Trigger Threshold PEN\_R1 (Brill Gate) = 75 dB(A); Trigger Threshold PEN\_R2 (Building E7) = 75 dB(A);

[2] A-weighting used for trigger thresholds to reduce number of triggers caused by wind noise; and

[3] \*As presented in Range logs supplied by QinetiQ. B = Blocked. A = Active. O = Open.



Date	Start Time Range Blocked	End Time Range Open	Trigger Type	Range	NEQ Calibre	Measured Level $L_{Cpeak}$		Southdowns Generated Trigger ID
						PEN R1 Brill Gate	PEN R E7	
11/12/2014	B 08.41, A 09.58, B 13.57, O 14.29		Small arms & Cannon	East 4	30mm			
12/12/2014	B 08.50; A 10.28; B 14.06; O 14.36		Small arms & Cannon	West 6	5.56, 7.62mm			
12/12/2014	B 09.04; A 09.55; B 12.26; O 13.21		Small arms & Cannon	East 4	30mm			
15/12/2014	B 09.36; A 09.43; B 14.38; O 14.56		Small arms & Cannon	West 6	7.62mm			
15/12/2014	B 10.24; A 10.47; B 13.46; O 14.58		Small arms & Cannon	East 4	30mm			
15/12/2014		15:10	Static	East 5	0.68kg	Event didn't exceed Range trigger thresholds.		-
16/12/2014	B 08.46; A 09.03; B 14.22; O 14.38		Small arms & Cannon	West 6	5.56, 7.62mm			
16/12/2014	B 08.36; A 10.18; B 12.12; A 13.10; B 14.47; O 15.22		Small arms & Cannon	Central 7	5.56, 7.62, 9mm			
16/12/2014		11:12	Static	East 5	0.68kg	-	112	S2-110
16/12/2014		13:23	Static	East 5	0.68kg	-	105	S2-111
16/12/2014		15:02	Static	East 5	0.68kg	-	103	S2-204
17/12/2014	B 09.19; A 09.46; B 14.44; O 14.57		Small arms & Cannon	West 6	7.62mm	-	-	-
17/12/2014		11:13	Static	East 5	0.68kg	-	103	S2-116
17/12/2014		13:41	Static	East 5	0.68kg	-	106	S2-117
18/12/2014	B 08.52; A10.44; B 11.32; O15:21		Static	East 5	3.75kg	-	107	
18/12/2014		14:31	Static	East 9	4oz	-	135	S2-124
19/12/2014		10:17	Static	East 5	3.75kg	-	118	S2-127
05/01/2015	B 13:47, O 14.35,		-	Central 6	-	-	-	-
06/01/2015	B 08:46, A 09:44, B 15.24, O 15.27		Small arms & Cannon	West 6	5.56, 7.62mm	-	-	-

**TABLE 1 1 CTD : RANGE EVENTS FOR MONITORING PERIOD 1ST NOVEMBER 01 TO 5TH MAY 015**

Notes:

[1] Trigger Threshold PEN\_R1 (Brill Gate) = 75 dB(A); Trigger Threshold PEN\_R2 (Building E7) = 75 dB(A);

[2] A-weighting used for trigger thresholds to reduce number of triggers caused by wind noise; and

[3] \*As presented in Range logs supplied by QinetiQ. B = Blocked. A = Active. O = Open.

Date	Start Time Range Blocked	End Time Range Open	Trigger Type	Range	NEQ Criteria	Measured Level L <sub>Cpeak</sub>		Southdowns Generated Trigger ID
						PEN R1 Brill Gate	PEN R E7	
06/01/2015	B 08:59, O 14.42		-	Central 6	-	-	-	-
07/01/2015	B 08:57, A 09:20, B 12:10, O 13.27		Small arms & Cannon	West 6	5.56, 7.62mm	-	-	-
08/01/2015	B 08:44, A 09:07, B 14:29, O 14:47		Small arms & Cannon	West 6	5.56, 7.62mm	-	-	-
08/01/2015	B 09:19, A 11:25, B 11:39, O 12.21		-	East 6	-	-	-	-
08/01/2015	B 11:40 A 12:03 B 13:06, A 14.00, B 15.29, O 15.36		Small arms & Cannon	Central 7	5.56mm	-	-	-
09/01/2015	B:08:59, A:09:14, B:11:52, A:12:34, B:12:48, O 13.50		Small arms & Cannon	West 6	5.56, 7.62mm	-	-	-
09/01/2015	B 08:34, A 09:57, B 12:45, O 14.00		Small arms & Cannon	Central 7	5.56mm	-	-	-
09/01/2015	B:08:43, A:10:03, B:11:29, A:12:43, B:12:48, O 13.56		Small arms & Cannon	West 2B	5.56mm	-	-	-
12/01/2015	B:09:14 A:11:08 B:15:34		Small arms & Cannon	West 2B	5.56, 7.62, 9mm	-	-	-
12/01/2015	12:56		Static	East 9	-	-	127	S2-84
12/01/2015	14:16		Static	East 9	-	-	127	S2-89
13/01/2015	B:08:00 A:09:35 B:14:11		Small arms & Cannon	West 2B	9mm	-	-	-
13/01/2015	B:08:26 A:11:03 B:15:29 O:15:34		Small arms & Cannon	Central 7	5.56	-	-	-
13/01/2015	B:08:26 A:11:03 B:15:29 O:15:34		Small arms & Cannon	Central 7	5.56	-	-	-
13/01/2015	09:50		Static	East 9	0.6KG	-	123	S2-97
13/01/2015	10:09		Static	East 9	0.6KG	-	126	S2-99
13/01/2015	10:31		Static	East 9	0.6KG	-	126	S2-100
13/01/2015	10:50		Static	East 9	0.6KG	-	122	S2-101
13/01/2015	11:11		Static	East 9	0.6KG	-	119	S2-102

**TABLE 1.1 CTD : RANGE EVENTS FOR MONITORING PERIOD 1ST NOVEMBER 01 TO 5TH MAY 015**

Notes:

[1] Trigger Threshold PEN\_R1 (Brill Gate) = 75 dB(A); Trigger Threshold PEN\_R2 (Building E7) = 75 dB(A);

[2] A-weighting used for trigger thresholds to reduce number of triggers caused by wind noise; and

[3] \*As presented in Range logs supplied by QinetiQ. B = Blocked. A = Active. O = Open.

Date	Start Time Range Blocked	End Time Range Open	Trigger Type	Range	NEQ Calibre	Measured Level $L_{Cpeak}$		Southdowns Generated Trigger ID
						PEN R1 Brill Gate	PEN R E7	
13/01/2015	13:35		Static	East 9	0.6KG	-	124	S2-105
13/01/2015	14:08		Small arms & Cannon	West 6	7.62mm	-	-	-
14/01/2015	B:08:00 A:09:50 B:14:57		Small arms & Cannon	West 2B	5.56, 7.62mm	-	-	-
14/01/2015	B:08:55 A:09:12 B:13:04 O:13:28		Small arms & Cannon	West 6	5.56, 7.62	-	-	-
14/01/2015	B:08:32 A:09:26 B:15.24 O:15.31		Small arms & Cannon	Central 7	5.56	-	-	-
14/01/2015	10:44		Static	East 9	0.6kg	-	130	S2-123
14/01/2015	11:10		Static	East 9	0.6kg	-	120	S2-125
14/01/2015	11:37		Static	East 9	0.6kg	-	121	S2-126
14/01/2015	12:51		Static	East 9	0.6kg	-	131	S2-127
14/01/2015	13:17		Static	East 9	0.6kg	-	137	S2-130
14/01/2015	14:09		Static	East 9	0.6kg	-	141	S2-138
15/01/2015	B:08:00 A:10:22 B:15.03		Small arms & Cannon	West 2B	12.7, 9, 7.62, 5.56mm	-	-	-
15/01/2015	B:09:16 A:10:24 B:15:05 O:15:24		Small arms & Cannon	West 6	5.56, 7.62mm	-	-	-
15/01/2015	B:08:32 A:09:40 B:15.49 O:16:01		Small arms & Cannon	Central 7	5.56, 7.62mm	-	-	-
15/01/2015	14:04		Static	East 9	0.6kg	-	125	S2-214
15/01/2015	14:48		Static	East 9	0.6kg	-	130	S2-223
16/01/2015	B:08:00 A:09:24 B:12:03		Small arms & Cannon	West 2B	5.56, 12.7mm	-	-	-
16/01/2015	B:08:50 A:09:43 B:14:05 O:14:11		Small arms & Cannon	West 6	5.56, 7.62mm	-	-	-
16/01/2015	B:08:40 A:09:35 B:14:18 O:14:54		Small arms & Cannon	Central 7	7.62mm	-	-	-

**TABLE 1 1 CTD : RANGE EVENTS FOR MONITORING PERIOD 1ST NOVEMBER 01 TO 5TH MAY 015**

Notes:

[1] Trigger Threshold PEN\_R1 (Brill Gate) = 75 dB(A); Trigger Threshold PEN\_R2 (Building E7) = 75 dB(A);

[2] A-weighting used for trigger thresholds to reduce number of triggers caused by wind noise; and

[3] \*As presented in Range logs supplied by QinetiQ. B = Blocked. A = Active. O = Open.

Date	Start Time Range Blocked	End Time Range Open	Trigger Type	Range	NEQ Charge	Measured Level $L_{Cpeak}$		Southdowns Generated Trigger ID
						PEN R1 Brill Gate	PEN R2 E7	
16/01/2015	B:09:34	O:14:49	-	Central 9	-	-	-	-
16/01/2015	09:46		Static	East 9	0.6kg	-	-	-
16/01/2015	10:08		Static	East 9	0.6kg	-	125	S2-243
16/01/2015	10:39		Static	East 9	0.6kg	-	129	S2-244
16/01/2015	11:05		Static	East 9	0.6kg	-	126	S2-246
16/01/2015	11:36		Static	East 9	0.6kg	-	129	S2-249
16/01/2015	12:15		Static	East 9	0.6kg	94	-	S1-124
17/01/2015	Blocked 08:47 Active 09:02	BLOCKED 15:03 Open 15:28	Small arms & Cannon	West 6	5.56mm&7.62mm	-	-	-
18/01/2015	Blocked 08:38 Active 09:45	Blocked 14:04 Open 14:35	Small arms & Cannon	West 6	7.62MM & 5.56MM	-	-	-
19/01/2015	B:09:36 A:10:08	B:15:27 O:15:43	Small arms & Cannon	West 6	5.56, 7.62mm	-	-	-
19/01/2015	B:08:55 A:10:50	B:12:38 O:13:45	Small arms & Cannon	Central 7	7.62mm	-	-	-
19/01/2015	B:09:40 A:10:37	B:15:02 O:15:21	Small arms & Cannon	East 4	30mm	-	-	-
19/01/2015	B:12:45 A:14:40	B:15:35 O:16:01	Military Training	East 5	81MM	-	-	-
20/01/2015	B:08:40 A:09:19	B:15:07 O:15:29	Small arms & Cannon	West 6	5.56, 7.62mm	-	-	-
20/01/2015	B:08:47 A:09:40	B:10:29 O:13:23	Small arms & Cannon	East 4	30mm	-	-	-
21/01/2015	B:09:01	O:14:21	-	East 3	-	-	-	-
21/01/2015	B:08:29	O:14:34	-	East 5	81mm	-	-	-
22/01/2015	B:08:47 A:9:05	B:11:17 A:11:31 B:12:14 A:12:17 B:15:06 O:15:28	Small arms & Cannon	West 6	5.56, 7.62mm	-	-	-
22/01/2015	B:08:49 A:09:22	B:11:17 A:11:31 B:12:14 A:12:17 B:14:58 O:15:31	Small arms & Cannon	East 3	5.56, 7.62mm	-	-	-
22/01/2015	B:08:33 A:09:22	B:11:17 A:11:31 B:12:14 A:12:17 B:15:22 O:15:51	Military Training	East 5	81mm	-	-	-

**TABLE 1 1 CTD : RANGE EVENTS FOR MONITORING PERIOD 1ST NOVEMBER 01 TO 5TH MAY 015**

Notes:

[1] Trigger Threshold PEN\_R1 (Brill Gate) = 75 dB(A); Trigger Threshold PEN\_R2 (Building E7) = 75 dB(A);

[2] A-weighting used for trigger thresholds to reduce number of triggers caused by wind noise; and

[3] \*As presented in Range logs supplied by QinetiQ. B = Blocked. A = Active. O = Open.

Date	Start Time Range Blocked	End Time Range Open	Trial Type	Range	NEQ Calibre	Measured Level $L_{Cpeak}$		Southdowns Generated Trigger ID
						PEN R1 Brill Gate	PEN R E7	
22/01/2015	13:51		Static	East 9	1.25kg	-	136	S2-271
22/01/2015	14:06		Static	East 9	1.25kg	-	131	S2-272
22/01/2015	14:07		Static	East 9	1.25kg	-	134	S2-273
23/01/2015	Blocked 08.55, Active 10.13, Blocked 13.32, Open 13.52		Small arms & Cannon	West 6	5.56mm	-	-	-
23/01/2015	B 08.27, O 13.32		-	East 5	81mm	-	-	-
23/01/2015	11:20		Static	East 9	1.25Kg	-	144	S2-282
23/01/2015	11:21		Static	East 9	1.25Kg	-	144	S2-283
23/01/2015	11:28		Static	East 9	1.25Kg	-	139	S2-284
23/01/2015	11:29		Static	East 9	1.25Kg	-	-	-
25/01/2015	B 08.51, A 09.35, B 15.02, O 15.20		Small arms & Cannon	West 6	5.56, 7.62mm	-	-	-
26/01/2015	B:08:57 A:10:12 B:14:37 O:14:43		Small arms & Cannon	West 2B	5.56mm	-	-	-
26/01/2015	B:09:20 A:09:39 B:15:00 O:15:31		Small arms & Cannon	West 6	5.56mm	-	-	-
26/01/2015	B:08:40 A:09:57 B:14:42 O:14:59		Military Training	East 5	81mm	-	-	-
26/01/2015	11:51		Dynamic	Central 9	21kg	121	-	S1-153
27/01/2015	B:08:27 A:09:54 B:15:15 A:15:17		Small arms & Cannon	West 2A	5.56	-	-	-
27/01/2015	B:08:38 A:09:22 B:14:48 O:15:23		Small arms & Cannon	West 6	5.56	-	-	-
28/01/2015	B:08:29 A:09:54 B:12:31 A:13:02 B:14:53 O:15:00		Small arms & Cannon	West 2A	5.56	-	-	-
28/01/2015	B:08:29 A:09:54 B:12:31 A:13:02 B:14:53 O:15:00		Small arms & Cannon	West 2C	0.5	-	-	-
28/01/2015	B:08:36 A:09:23 B:14:19 O:15:00		Small arms & Cannon	West 6	5.56	-	-	-

**TABLE 1 1 CTD : RANGE EVENTS FOR MONITORING PERIOD 1ST NOVEMBER 01 TO 5TH MAY 015**

Notes:

[1] Trigger Threshold PEN\_R1 (Brill Gate) = 75 dB(A); Trigger Threshold PEN\_R2 (Building E7) = 75 dB(A);

[2] A-weighting used for trigger thresholds to reduce number of triggers caused by wind noise; and

[3] \*As presented in Range logs supplied by QinetiQ. B = Blocked. A = Active. O = Open.

Date	Start Time Range Blocked	End Time Range Open	Trial Type	Range	NEQ Criteria	Measured Level $L_{Cpeak}$		Southdowns Generated Trigger ID
						PEN R1 Brill Gate	PEN R E7	
28/01/2015	B:08:35 O:14:22		-	East 5	81MM	-	-	-
29/01/2015	B:08:59 A:09:18 B:13:27 A:13:42 B:14:49 O:15:11		Small arms & Cannon	West 6	5.56mm	-	-	-
29/01/2015	B:08:43 A:12:52 B:13:22 O:15:26		Military Training	East 5	81mm	-	-	-
30/01/2015	B:08:50 A:09:05 B:14:20 O:14:43		Small arms & Cannon	West 6	5.56	-	-	-
30/01/2015	B:08:33 A:10:02 B:11:29 O:12:38		Military Training	East 5	81mm	-	-	-
30/01/2015	11:42		Static	East 11	6.65kg	-	130	S2-352
02/02/2015	B:09:06 A:09:38 B:10:29 O:11:52		Small arms & Cannon	West 6	5.56mm	-	-	-
02/02/2015	B:09:15 A:10:28 B:13:46 A:15:00		Small arms & Cannon	East 3	5.56mm	-	-	-
02/02/2015	Unknown		Static	East 5	0.63kg		Insufficient information provided	
02/02/2015	12:06		Static	East 11	6.65kg	-	132	S2-2
02/02/2015	15:08		Static	East 11	6.65kg		Did not exceed trigger threshold	
03/02/2015	B:09:13 A:10:23, B:12:45 O:15:01		Small arms & Cannon	East 3	5.56	-	-	-
03/02/2015	11:02		Static	East 5	1.4kg		Did not exceed trigger threshold	
03/02/2015	13:26		Static	East 5	1.4kg		Did not exceed trigger threshold	
03/02/2015	10:42		Static	East 11	6.65kg	120	130	S1-10 & S2-13
03/02/2015	13:18		Static	East 11	6.65kg		Did not exceed trigger threshold	
03/02/2015	14:44		Static	East 11	6.65kg	113	129	S1-12 & S2-19
03/02/2015	15:25		Static	East 5	1.4kg	97	100	S1-13 & S2-22
04/02/2015	B:09:26 A:10:53 B:15:01 O:15:05		Small arms & Cannon	East 3	5.56mm	-	-	-
04/02/2015	10:37		Static	East 5	0.63kg		Did not exceed trigger threshold	

**TABLE 1 1 CTD : RANGE EVENTS FOR MONITORING PERIOD 1ST NOVEMBER 01 TO 5TH MAY 015**

Notes:

[1] Trigger Threshold PEN\_R1 (Brill Gate) = 75 dB(A); Trigger Threshold PEN\_R2 (Building E7) = 75 dB(A);

[2] A-weighting used for trigger thresholds to reduce number of triggers caused by wind noise; and

[3] \*As presented in Range logs supplied by QinetiQ. B = Blocked. A = Active. O = Open.

Date	Start Time Range Blocked	End Time Range Open	Trial Type	Range	NEQ Calibre	Measured Level $L_{Cpeak}$		Southdowns Generated Trigger ID
						PEN R1 Brill Gate	PEN R E7	
04/02/2015	11:48		Static	East 11	7.2Kg.	95	128	S1-22 & S2-32
04/02/2015	15:10		Static	East 11	7.7Kg	-	130	S2-36
05/02/2015	B:08:55 A:09:56 B:12:17 A:13:16 B:15:31 O:15:53		Small arms & Cannon	West 6	7.62, 5.56mm	-	-	-
05/02/2015	13:58		Static	East 5	1.3Kg			Did not exceed trigger threshold
05/02/2015	13:59		Static	East 5	1.3Kg			Did not exceed trigger threshold
05/02/2015	14:00		Static	East 5	1.3Kg			Did not exceed trigger threshold
05/02/2015	14:01		Static	East 5	1.3Kg			Did not exceed trigger threshold
05/02/2015	10:59		Static	East 11	7.7Kg	-	129	S2-42
05/02/2015	13:17		Static	East 11	7.7Kg	113	130	S1-29 & S2-47
05/02/2015	15:22		Static	East 11	7.7Kg	110	130	S1-30 & S2-50
06/02/2015	B:09:01 A:09:28 B:12:21 A:13:13 B:14:55 O:15:06		Small arms & Cannon	West 6	5.56mm	-	-	-
06/02/2015	10:08		Static	East 5	1.3Kg			Did not exceed trigger threshold
06/02/2015	10:10		Static	East 5	1.3Kg			Did not exceed trigger threshold
06/02/2015	10:11		Static	East 5	1.3Kg			Did not exceed trigger threshold
06/02/2015	10:12		Static	East 5	1.3Kg			Did not exceed trigger threshold
06/02/2015	10:45		Static	East 11	7.7Kg	122	135	S1-34
06/02/2015	10:47		Static	East 5	1.3Kg			Did not exceed trigger threshold
06/02/2015	10:48		Static	East 5	1.3Kg			Did not exceed trigger threshold
06/02/2015	10:49		Static	East 5	1.3Kg			Did not exceed trigger threshold
06/02/2015	10:50		Static	East 5	1.3Kg			Did not exceed trigger threshold

**TABLE 1 1 CTD : RANGE EVENTS FOR MONITORING PERIOD 1ST NOVEMBER 01 TO 5TH MAY 015**

Notes:

[1] Trigger Threshold PEN\_R1 (Brill Gate) = 75 dB(A); Trigger Threshold PEN\_R2 (Building E7) = 75 dB(A);

[2] A-weighting used for trigger thresholds to reduce number of triggers caused by wind noise; and

[3] \*As presented in Range logs supplied by QinetiQ. B = Blocked. A = Active. O = Open.

Date	Start Time Range Blocked	End Time Range Open	Trial Type	Range	NEQ Charge	Measured Level L <sub>Cpeak</sub>		Southdowns Generated Trigger ID
						PEN R1 Brill Gate	PEN R E7	
09/02/2015	B:08:44 A:10:22 B:15:10 O:15:30		Small arms & Cannon	West 2C	7.62mm	-	-	-
09/02/2015	12:41		Static	East 11	7.7kg	-	129	S2-76
09/02/2015	15:07		Static	East 11	7.7kg	110	131	S1-92 & S2-82
10/02/2015	B:09:04 A:14:18 B:15:26 O:15:30		Small arms & Cannon	West 2C	7.62mm	-	-	-
10/02/2015	B:08:57 A:09:22 B:09:51 A:14:15 B:15:15 O:15:32		Small arms & Cannon	West 6	5.56mm	-	-	-
10/02/2015	No Information Provided		Military Training	East 4	No Information Provided	-	-	-
10/02/2015	10:50		Static	East 11	7.7kg	119	128	S1-99 & S2-88
10/02/2015	12:22		Static	East 11	7.7kg	118	129	S1-100 & S2-94
10/02/2015	15:04		Static	East 11	7.7kg	116	130	S1-103 & S2-100
10/02/2015	No Information Provided		No Data	Central 9	No Information Provided	-	-	-
11/02/2015	B:08:40 A:09:15 B:11:06 A:11:15 B:12:22 O:14:32		Small arms & Cannon	West 2B	5.56, 7.62, 9mm	-	-	-
11/02/2015	B:08:40 A:09:15 B:11:06 A:11:15 B:12:22 A:13:18 B:14:24 O:14:32		Small arms & Cannon	West 2C	7.62mm	-	-	-
11/02/2015	B:08:40 A:09:14 B:11:06 A:11:15 B:12:17 A:13:17 B:14:51 O:15:17		Small arms & Cannon	West 6	5.56mm	-	-	-
11/02/2015	11:44		Static	East 11	7.7kg	-	131	S2-104
11/02/2015	12:01		Static	East 5	1.3kg	Did not exceed trigger threshold		
11/02/2015	12:02		Static	East 5	1.3kg	Did not exceed trigger threshold		
11/02/2015	12:03		Static	East 5	1.3kg	-	106	S2-107
11/02/2015	12:04		Static	East 5	1.3kg	-	106	S2-108
11/02/2015	13:36		Static	East 5	1.3kg	-	106	S2-111
11/02/2015	13:38		Static	East 5	1.3kg	-	110	S2-112

**TABLE 1 1 CTD : RANGE EVENTS FOR MONITORING PERIOD 1ST NOVEMBER 01 TO 5TH MAY 015**

Notes:

[1] Trigger Threshold PEN\_R1 (Brill Gate) = 75 dB(A); Trigger Threshold PEN\_R2 (Building E7) = 75 dB(A);

[2] A-weighting used for trigger thresholds to reduce number of triggers caused by wind noise; and

[3] \*As presented in Range logs supplied by QinetiQ. B = Blocked. A = Active. O = Open.



Date	Start Time Range Blocked	End Time Range Open	Trigger Type	Range	NEQ Calibre	Measured Level $L_{Cpeak}$		Southdowns Generated Trigger ID
						PEN R1 Brill Gate	PEN R2 E7	
11/02/2015	13:40		Static	East 5	1.3kg	103	107	S2-113
11/02/2015	13:42		Static	East 5	1.3kg	103	107	S1-110
11/02/2015	14:14		Static	East 5	1.3kg	-	106	S2-114
11/02/2015	14:16		Static	East 5	1.3kg	-	106	S2-115
12/02/2015	B:08:45 A:09:07 B:12:20 A:13:14 B:14:59 O:14:59		Small arms & Cannon	West 6	5.56mm	-	-	-
12/02/2015	B:14:59, A:16:06 B: 21:41 Open 21:49		Small arms & Cannon	West 6	7.62mm	-	-	-
13/02/2015	No Information Provided		No Information Provided	Central 9	No Information Provided	Insufficient information provided		
16/02/2015	No Information Provided		Static	West 2B	9mm	Insufficient information provided		
16/02/2015	No Information Provided		Static	West 6	5.56mm	Insufficient information provided		
16/02/2015	No Information Provided		Static	East 4	30mm	Insufficient information provided		
17/02/2015	B:08:56 A:12:00 B:13:25 O:13:33		Small arms & Cannon	West 2B	5.56mm	-	-	-
17/02/2015	B:08:52 A:09:20 B:12:25 A:13:21 B:15:19 O:15:34		Small arms & Cannon	West 6	5.56mm	-	-	-
17/02/2015	B:08:56 A:12:00 B:13:25 O:13:33		Small arms & Cannon	West 2A	5.56mm	-	-	-
18/02/2015	B:08:35 A:08:51 B:12:31 A:13:18 B:15:12 O:15:32		Small arms & Cannon	West 6	5.56mm	-	-	-
18/02/2015	B:08:18 A:09:00 B:15:10 O:15:15		Small arms & Cannon	West 2B	5.56mm	-	-	-
18/02/2015	B:08:24 A:09:00 B:15:10 O:15:15		Small arms & Cannon	West 2C	5.56mm	-	-	-
18/02/2015	B:10:54 A:11:54 B:12:17 A:13:48 B:14:07 O:14:41		Small arms & Cannon	Central 7	5.56mm	-	-	-
19/02/2015	B:08:32 A:09:23 B:12:33 O:14:24		Small arms & Cannon	Central 7	5.56mm	-	-	-
19/02/2015	No Information Provided		No Information Provided	Central 9	No Data	Insufficient information provided		

**TABLE 1 1 CTD : RANGE EVENTS FOR MONITORING PERIOD 1ST NOVEMBER 2011 TO 5TH MAY 2015**

Notes:

[1] Trigger Threshold PEN\_R1 (Brill Gate) = 75 dB(A); Trigger Threshold PEN\_R2 (Building E7) = 75 dB(A);

[2] A-weighting used for trigger thresholds to reduce number of triggers caused by wind noise; and

[3] \*As presented in Range logs supplied by QinetiQ. B = Blocked. A = Active. O = Open.

Date	Start Time Range Blocked	End Time Range Open	Trigger Type	Range	NEQ Criteria	Measured Level $L_{Cpeak}$		Southdowns Generated Trigger ID
						PEN_R1 Brill Gate	PEN_R2 E7	
23/02/2015	B:09:52 A:10:10 B:12:29 A:13:23 B:14:53 O:15:14		Small arms & Cannon	West 6	5.56mm	-	-	-
23/02/2015	B:10:53 A:12:35 B:15:00 O:15:09		Small arms & Cannon	West 2C	5.56mm	-	-	-
23/02/2015	B:10:53 A:12:35 B:15:00 O:15:09		Small arms & Cannon	West 2A	5.56mm	-	-	-
24/02/2015	B:08:41 A:09:26 B:12:42 A:13:36 B:15:14 O:15:21		Small arms & Cannon	West 2A	5.56mm	-	-	-
24/02/2015	B:08:41 A:09:16 B:15:23 O:15:46		Small arms & Cannon	West 6	5.56mm	-	-	-
24/02/2015	B:08:47 A:09:35 B:15:24 O:15:31		Small arms & Cannon	Central 7	5.56, 7.62mm	-	-	-
25/02/2015	B:08:48 A:09.12(Air rifle only) A:09.25 B:12.26 A:13:17 B 15.08 O:15:25		Small arms & Cannon	West 6	5.56mm	-	-	-
25/02/2015	B:08:44 A:09:15 B:12.24 A:13.34 B:15:22 O:15:34		Small arms & Cannon	Central 7	5.56mm	-	-	-
25/02/2015	No Information Provided		No Information Provided	East 3	No Data	Insufficient information provided		-
26/02/2015	B:08:44 A:09:43 B:12:36 A:13:23 B:14:27 O:14:45		Small arms & Cannon	West 2C	5.56mm	-	-	-
26/02/2015	B:08:40 A:09:06		Small arms & Cannon	West 6	7.62mm	-	-	-
26/02/2015	B:08:34 A:09:47 B:12:35 A:13:21 B:14:42 O:14:58		Small arms & Cannon	Central 7	5.56mm	-	-	-
27/02/2015	B:08:48 A:09:33		Small arms & Cannon	West 2C	5.56mm	-	-	-
27/02/2015	B:08:47 A:09:05		Small arms & Cannon	West 6	7.62mm	-	-	-
27/02/2015	B:08:54 A:09:35		Small arms & Cannon	Central 7	5.56, 7.62mm	-	-	-
02/03/2015	Blocked 08.36, Active(Air Rifle Only) 09.04 Active 09.25, Blocked 14.36, Open 14.59		Small arms & Cannon	West 6	5.56mm	-	-	-

**TABLE 1 1 CTD : RANGE EVENTS FOR MONITORING PERIOD 1ST NOVEMBER 2014 TO 5TH MAY 2015**

Notes:

[1] Trigger Threshold PEN\_R1 (Brill Gate) = 75 dB(A); Trigger Threshold PEN\_R2 (Building E7) = 75 dB(A);

[2] A-weighting used for trigger thresholds to reduce number of triggers caused by wind noise; and

[3] \*As presented in Range logs supplied by QinetiQ. B = Blocked. A = Active. O = Open.

Date	Start Time Range Blocked	End Time Range Open	Tria Type	Range	NEQ Ca i re	Measured Level L <sub>Cpeak</sub>		Southdowns Generated Trigger ID
						PEN R1 Brill Gate	PEN R E7	
03/03/2015	Blocked 08.39, Active 09.05, Blocked 14.37, Open 15.01		Small arms & Cannon	West 6	5.56mm	-	-	-
03/03/2015	Blocked 08.47, Active 10.06, Blocked 12.20, Active 13.39, Blocked 14.19, Open 15.21		Small arms & Cannon	Central 7	7.62mm	-	-	-
04/03/2015	Blocked 08.32, Active 09.52, Blocked 12.37, Active 13.26, Blocked 14.26, Open 15.09		Small arms & Cannon	Central 7	5.56mm	-	-	-
04/03/2015	Blocked 08.41, Active 13.54, Blocked 15.42		Small arms & Cannon	West 2C	12.7mm	-	-	-
04/03/2015	Blocked 08.44, Active 09.04, Blocked 15.20, Open 15.38		Small arms & Cannon	West 6	5.56mm	-	-	-
05/03/2015	14:58		Static	East 6	1 kg	Did not exceed trigger threshold		
05/03/2015	Blocked 08.00, Active 09.59, Blocked 13.24, Open 14.22		Small arms & Cannon	West 2C	12.7mm	-	-	-
05/03/2015	Blocked 08.55, Active 09.04, Blocked 15.01, Open 15.25		Small arms & Cannon	West 6	5.56mm	-	-	-
05/03/2015	Blocked 08.54, Active 09.38, Blocked 12.38, Active 14.03, Blocked 15.06, Open 15.10		Small arms & Cannon	Central 7	5.56mm 7.62mm	-	-	-
06/03/2015	B:08.44 A:09:02 B:11.24 A:11.27, B14.40 O:14:56		Small arms & Cannon	West 6	7.62mm	-	-	-
06/03/2015	B:08.40 A:09:42 B:10:54 A:12:25 B:13:40 O:14:15		Small arms & Cannon	Central 7	5.56mm	-	-	-
09/03/2015	B:08:45 A:09:38 B:12:36 A:13.56 B:15:03 O:15:10		Small arms & Cannon	Central 7	5.56mm	-	-	-
09/03/2015	10:30		Static	East 6	1kg	-	106	S2-168
09/03/2015	B:13:22		-	Central 9	-	-	-	-
10/03/2015	B:08:51 A:09:43 B:12:10		Small arms & Cannon	West 2C	5.56, 7.62mm	-	-	-
10/03/2015	B:08:56 A:09:06		Small arms & Cannon	West 6	7.62mm	-	-	-
10/03/2015	B:08:50 A:09:29		Small arms & Cannon	Central 7	7.62, 5.56mm	-	-	-
10/03/2015	12:40		Static	East 6	2kg	Did not exceed trigger threshold		
10/03/2015	15:52		Dynamic	Central 9	-	Did not exceed trigger threshold		

**TABLE 1 1 CTD : RANGE EVENTS FOR MONITORING PERIOD 1ST NOVEMBER 01 TO 5TH MAY 015**

Notes:

[1] Trigger Threshold PEN\_R1 (Brill Gate) = 75 dB(A); Trigger Threshold PEN\_R2 (Building E7) = 75 dB(A);

[2] A-weighting used for trigger thresholds to reduce number of triggers caused by wind noise; and

[3] \*As presented in Range logs supplied by QinetiQ. B = Blocked. A = Active. O = Open.

Date	Start Time Range Blocked	End Time Range Open	Trigger Type	Range	NEQ Calibre	Measured Level L <sub>Cpeak</sub>		Southdowns Generated Trigger ID
						PEN R1 Brill Gate	PEN R2 E7	
11/03/2015	B:08:37 O:15:42		-	East 6	-	-	-	-
12/03/2015	B:09:06 A:10:03 B:10:36 O:14:54		Small arms & Cannon	West 2B	9mm	-	-	-
12/03/2015	B:08:44 A:10:08 B:10:36 O:14:46		Small arms & Cannon	West 6	7.62mm	-	-	-
12/03/2015	10:21		Static	East 6	2kg	102	-	S1-134
12/03/2015	14:20		Static	East 6	7kg	-	121	S2-178
13/03/2015	B:08:52, A:09:47 B:11:16 O:11:32		Small arms & Cannon	West 2B	5.56, 7.62mm	-	-	-
13/03/2015	B:08:32 A:09:02 B:13:01 O:13:24		Small arms & Cannon	West 6	5.56, 7.62mm	-	-	-
13/03/2015	15:02		Static	East 6	-	97	-	S1-213
13/03/2015	B:08:48 A:11:07 B:13:43 O:15:06		Small arms & Cannon	Central 7	7.62mm	-	-	-
16/03/2015	B:08:45 A:11:52 B:12:32 O 12:53		Small arms & Cannon	West 2D	30mm	-	-	-
16/03/2015	12:00		Static	East 6	7kg	94	-	S1-237
17/03/2015	B:08:39 O:15:55		-	East 6	-	-	-	-
18/03/2015	14:22		Static	East 6	4.5kg	Did not exceed trigger threshold		
23/03/2015	B:11:25 A:13:18 B:15:16 O:15:35		Small arms & Cannon	East 4	30mm	-	-	-
23/03/2015	10:06		Static	East 6	2.2kg	-	108	S2-198
24/03/2015	B: 08:36:00		Small arms & Cannon	East 4	30mm	-	-	-
24/03/2015	11:21		Static	East 7	323g	Did not exceed trigger threshold		
24/03/2015	12:02		Static	East 6	7kg	-	115	S2-208
25/03/2015	B:09:00 A:09:42 B:12:58 A:13:31 B:14:50 O:14:53		Small arms & Cannon	East 4	30mm	-	-	-

**TABLE 1 1 CTD : RANGE EVENTS FOR MONITORING PERIOD 1ST NOVEMBER 01 TO 5TH MAY 015**

Notes:

[1] Trigger Threshold PEN\_R1 (Brill Gate) = 75 dB(A); Trigger Threshold PEN\_R2 (Building E7) = 75 dB(A);

[2] A-weighting used for trigger thresholds to reduce number of triggers caused by wind noise; and

[3] \*As presented in Range logs supplied by QinetiQ. B = Blocked. A = Active. O = Open.

Date	Start Time Range Blocked	End Time Range Open	Trigger Type	Range	NEQ Charge	Measured Level $L_{Cpeak}$		Southdowns Generated Trigger ID
						PEN R1 Brill Gate	PEN R E7	
25/03/2015	15:06		Static	East 7	1.2kg	Did not exceed trigger threshold		
26/03/2015	B:08:38 A:09:44 B:15:11 O:15:18		Small arms & Cannon	East 4	30mm	-	-	-
30/03/2015	-		Small arms & Cannon	West 6	30mm	-	-	-
30/03/2015	B:10:23		-	West 2A	30mm	-	-	-
31/03/2015	-		-	West 2A	30mm	-	-	-
31/03/2015	-		-	West 6	30mm	-	-	-
31/03/2015	Blocked 09:29		-	Central 7	-	-	-	-
01/04/2015	B:08:00		-	West 2A	30mm	-	-	-
01/04/2015	B:11:00 A:11:15 B:12:08 O:12:35		Small arms & Cannon	West 6	30mm	-	-	-
01/04/2015	B:09:08		-	Central 7		-	-	-
01/04/2015	B:13:12 A:14:00 B:14:21 A:15:30 B:15:51 O:15:58		Small arms & Cannon	East 11	40mm	-	-	-
02/04/2015	B:08:00 O:09:16		-	West 2A	30mm	-	-	-
02/04/2015	B:09:08 A:09:28 B:11:09 O:11:36		Small arms & Cannon	West 6	30mm	-	-	-
02/04/2015	B:09:18 O:11:43		-	Central 7	Drop Test	-	-	-
02/04/2015	B:09:31 A:13:12 B:13:26 open 14:04		Small arms & Cannon	East 11	40mm	-	-	-
07/04/2015	Blocked 09.11, Open 14.59		-	East 3	0.22	-	-	-
08/04/2015	B:08:49 A:09:23 B:12:23 A:13:37 B:14:20 O:14:40		Small arms & Cannon	West 6	30mm	-	-	-
08/04/2015	B:08:46 A:09:30 B 13:18 O:14:35		Small arms & Cannon	East 3	0.22	-	-	-
08/04/2015	B:08:24 A:09:29 B:10:10 A:10:19 B:11:08 A:14:16 B:15:08 O:15:43		Small arms & Cannon	East 11	40mm	-	-	-

**TABLE 1 1 CTD : RANGE EVENTS FOR MONITORING PERIOD 1ST NOVEMBER 01 TO 5TH MAY 015**

Notes:

[1] Trigger Threshold PEN\_R1 (Brill Gate) = 75 dB(A); Trigger Threshold PEN\_R2 (Building E7) = 75 dB(A);

[2] A-weighting used for trigger thresholds to reduce number of triggers caused by wind noise; and

[3] \*As presented in Range logs supplied by QinetiQ. B = Blocked. A = Active. O = Open.

Date	Start Time Range Blocked	End Time Range Open	Trigger Type	Range	NEQ Criteria	Measured Level L <sub>Cpeak</sub>		Southdowns Generated Trigger ID
						PEN R1 Brill Gate	PEN R2 E7	
09/04/2015	B:08:51 A:10:24 B:10:34 A:10:44 B:12:15 A:13:22 B:15:20 O:15:33		Small arms & Cannon	West 6	30mm	-	-	-
09/04/2015	B:09:08 O:14:40		Small arms & Cannon	Central 7	-	-	-	-
09/04/2015	B:08:50 A:11:21 B:12:12 A:15:16 B:15:39 O:15:48		Small arms & Cannon	East 11	40mm	-	-	-
09/04/2015	15:33		Static	East 9	2kg	-	138	S2-9
09/04/2015	15:34		Static	East 9	2kg	-	141	S2-11
10/04/2015	B:09:00 A:09:22 B:11:42 O:12:16		Small arms & Cannon	West 6	30mm	-	-	-
10/04/2015	B:08:56 A:09:54 B:10:12 A:10:40 B:10:59 A:12:05 B:12:19 O:13:10		Small arms & Cannon	East 11	40mm	-	-	-
10/04/2015	12:14		Static	East 9	2kg	-	137	S2-15
10/04/2015	12:15		Static	East 9	2kg	-	137	S2-15
13/04/2015	B:08:40 A:13:08 B:14:11 O:14:38		Small arms & Cannon	West 6	30mm	-	-	-
13/04/2015	B:09:03 A:10:21 B:12:46 A:13:28 B:15:24 O:15:28		Small arms & Cannon	Central 7	2.2mm	-	-	-
13/04/2015	B:11:07 A:11:34 B:11:36 A:12:00 B:12:18 A:14:04 B:14:26 O:15:38		Small arms & Cannon	East 11	40mm	-	-	-
14/04/2015	B:08:47 A:09:55 B:12:16 A:13:32 B:14:26 O:15:03		Small arms & Cannon	West 6	30mm	-	-	-
14/04/2015	B:08:55 A:09:36 B:11:27 O:12:20		Small arms & Cannon	Central 7	0.22mm	-	-	-
14/04/2015	B:08:44 A:09:48 B:10:04 A:12:36 B:13:30 O:14:58		Small arms & Cannon	East 11	40mm 0.5kg	-	-	-
15/04/2015	B:09:43 A:14:04 B:14:14 A:14:21 B:15:00 O:14:04		Small arms & Cannon	West 2C	.22RF	-	-	-
15/04/2015	B:08:54 A:11:04 B:12:21 A:13:20 B:13:21 A:13:36 B:14:14 A:14:21 B:14:52 O:14:58		Small arms & Cannon	West 6	30mm	-	-	-
15/04/2015	B:08:40 A:10:09 B:11:04 OPEN 15:49		Small arms & Cannon	East 11	40mm	-	-	-
15/04/2015	15:03		Static	East 9	2kg PE4	-	88	S2-30

**TABLE 1 1 CTD : RANGE EVENTS FOR MONITORING PERIOD 1ST NOVEMBER 01 TO 5TH MAY 015**

Notes:

[1] Trigger Threshold PEN\_R1 (Brill Gate) = 75 dB(A); Trigger Threshold PEN\_R2 (Building E7) = 75 dB(A);

[2] A-weighting used for trigger thresholds to reduce number of triggers caused by wind noise; and

[3] \*As presented in Range logs supplied by QinetiQ. B = Blocked. A = Active. O = Open.

Date	Start Time Range Blocked	End Time Range Open	Trigger Type	Range	NEQ Calibre	Measured Level L <sub>Cpeak</sub>		Southdowns Generated Trigger ID
						PEN R1 Brill Gate	PEN R2 E7	
17/04/2015	B:08:51 A:09:25 B:09:56 A:10:21 B:10:53 O:12:00		Small arms & Cannon	West 6	30mm	-	-	-
17/04/2015	B:9:00 A:09:30 B:13:00 O:13:32		Small arms & Cannon	Central 7	Drop Test	-	-	-
20/04/2015	B:08:46 ACTIVE 10:07 B:10:35 O:10:55		Small arms & Cannon	West 6	30mm	-	-	-
20/04/2015	B: 10:00 A:10:07 B:15:36 O:15:37		Small arms & Cannon	Central 7	0.22	-	-	-
21/04/2015	B:08:47 A:09:40 B:10:12 A:10:47 B:11:38		Small arms & Cannon	West 6	30mm	-	-	-
21/04/2015	B:08:50 A:09:47		Small arms & Cannon	Central 7	0.22	-	-	-
21/04/2015	12:32		Static	East 11	40mm	-	108	S2-58
22/04/2015	11:10		Static	East 11	1kg	Did not exceed trigger threshold		
22/04/2015	12:56		Static	East 11	1kg	-	107	S2-65
22/04/2015	14:28		Static	East 11	1kg	103	113	S1-136 & S2-68
22/04/2015	B:08:42 A:10:41 B:14:10 O:14:14		Small arms & Cannon	West 2A	0.22	-	-	-
23/04/2015	B:08:29 A:10:33 B:12:54 O:14:52		Small arms & Cannon	West 2B	5.56, 7.62, 9mm	-	-	-
23/04/2015	B:08:48 A:10:51 B:12:37 A:13:05 B:14:55 O:15:01		Small arms & Cannon	Central 7	0.22	-	-	-
23/04/2015	08:52		Static	East 11	40mm 0.5kg	Did not exceed trigger threshold		
24/04/2015	B:09:07 A:09:27 B:11:00 O:11:26		Small arms & Cannon	West 2B	5.56, 7.62, 9mm	-	-	-
24/04/2015	B:08:47 A:09:27 B:11:27 O:11:47		Small arms & Cannon	Central 7	.22mm	-	-	-
27/04/2015	-	-	-	East 5	0.5KG	-	-	-
27/04/2015	Blocked 09.40, Active 11.21, Blocked 12.57, Active 13.38, Blocked 14.42, Open 15.10		Small arms & Cannon	East 4	7.62mm	-	-	-
28/04/2015	Blocked 10.57, Active 11.00, Blocked 12.21, Active 14.26 B15:31 OPEN 15:41		-	East 5	40MM	-	-	-

**TABLE 1 1 CTD : RANGE EVENTS FOR MONITORING PERIOD 1ST NOVEMBER 01 TO 5TH MAY 015**

Notes:

[1] Trigger Threshold PEN\_R1 (Brill Gate) = 75 dB(A); Trigger Threshold PEN\_R2 (Building E7) = 75 dB(A);

[2] A-weighting used for trigger thresholds to reduce number of triggers caused by wind noise; and

[3] \*As presented in Range logs supplied by QinetiQ. B = Blocked. A = Active. O = Open.

Date	Start Time Range Blocked	End Time Range Open	Trigger Type	Range	NEQ Criteria	Measured Level $L_{Cpeak}$		Southdowns Generated Trigger ID
						PEN_R1 Brill Gate	PEN_R2 E7	
28/04/2015	Blocked 08.39, Active 10.32, Blocked 12.20 A13:22 B:13:37, Open 13.45		Small arms & Cannon	East 4	7.62mm	-	-	-
28/04/2015	Blocked 08.42, Active 09.22, Blocked 12.08 A13:22, Blocked 14.14, Open 14.23		Small arms & Cannon	West 2C	0.22	-	-	-
29/04/2015	Blocked 10.56, Open 15.49		-	Central 6	-	-	-	-
29/04/2015	B:09:05 A:09:39 B12:13 A12:59 B:14:51 A:15:11 B:15:20		Small arms & Cannon	East 5	7.62mm & 40mm	-	-	-
30/04/2015	Blocked 08.38, Active 10.09 Blocked 12.26, Open 13.46		Small arms & Cannon	East 4	5.56mm	-	-	-
30/04/2015	Blocked 09.06, Active 10.09, Blocked 12.17, Active 13.16 B;15:19		Small arms & Cannon	East 5	-	-	-	-

**TABLE 1.1 CTD : RANGE EVENTS FOR MONITORING PERIOD 1ST NOVEMBER 2011 TO 5TH MAY 2015**

Notes:

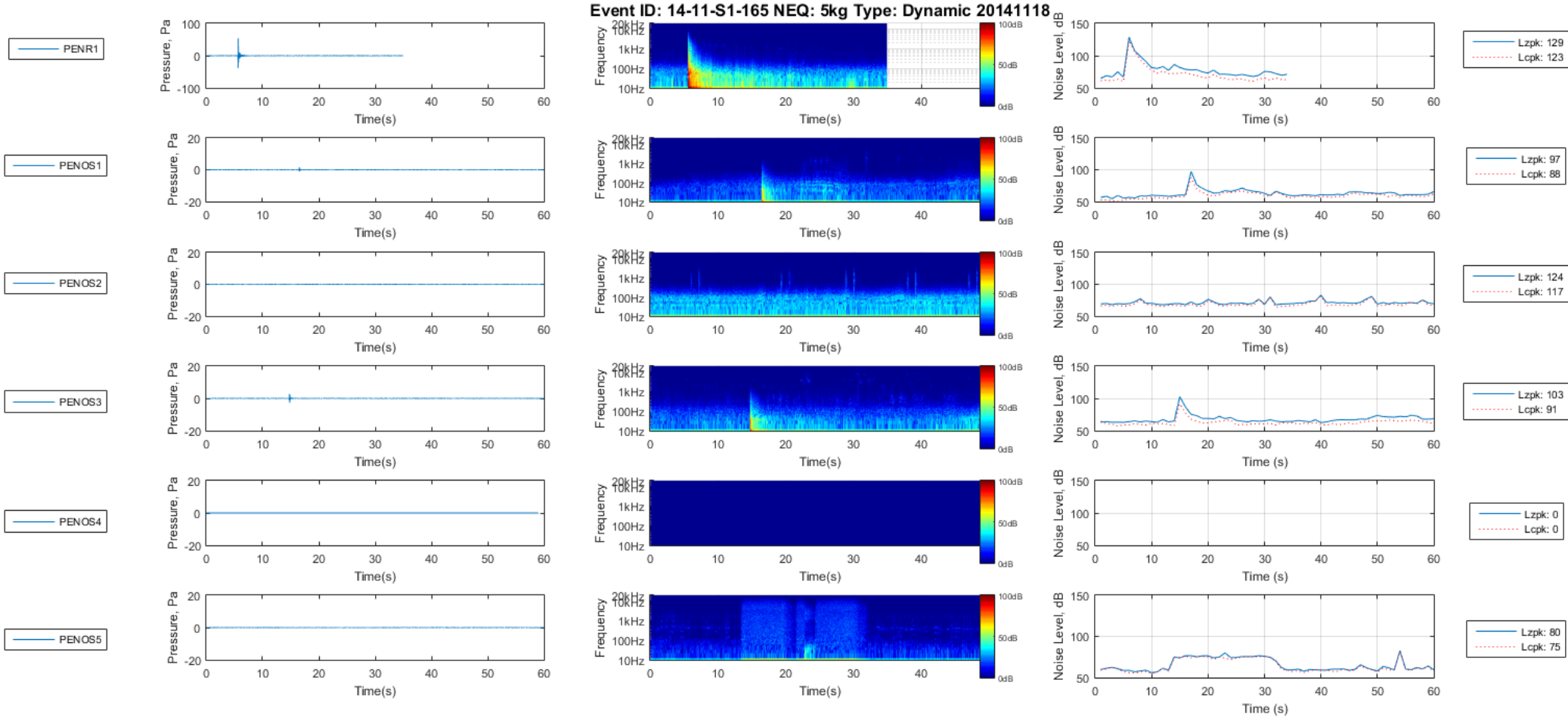
[1] Trigger Threshold PEN\_R1 (Brill Gate) = 75 dB(A); Trigger Threshold PEN\_R2 (Building E7) = 75 dB(A);

[2] A-weighting used for trigger thresholds to reduce number of triggers caused by wind noise; and

[3] \*As presented in Range logs supplied by QinetiQ. B = Blocked. A = Active. O = Open.



**VOLUME 3: TECHNICAL APPENDICES – RESULTS**  
**CHAPTER : FULL MONITORING RESULTS – SOUND PRESSURE**  
**LEVELS**



**FIGURE 2.1: PEN\_OS 1 - 5 14-11-S1-165**

Event ID: 14-11-S1-165 NEQ: 5kg Type: Dynamic 20141118 CTD

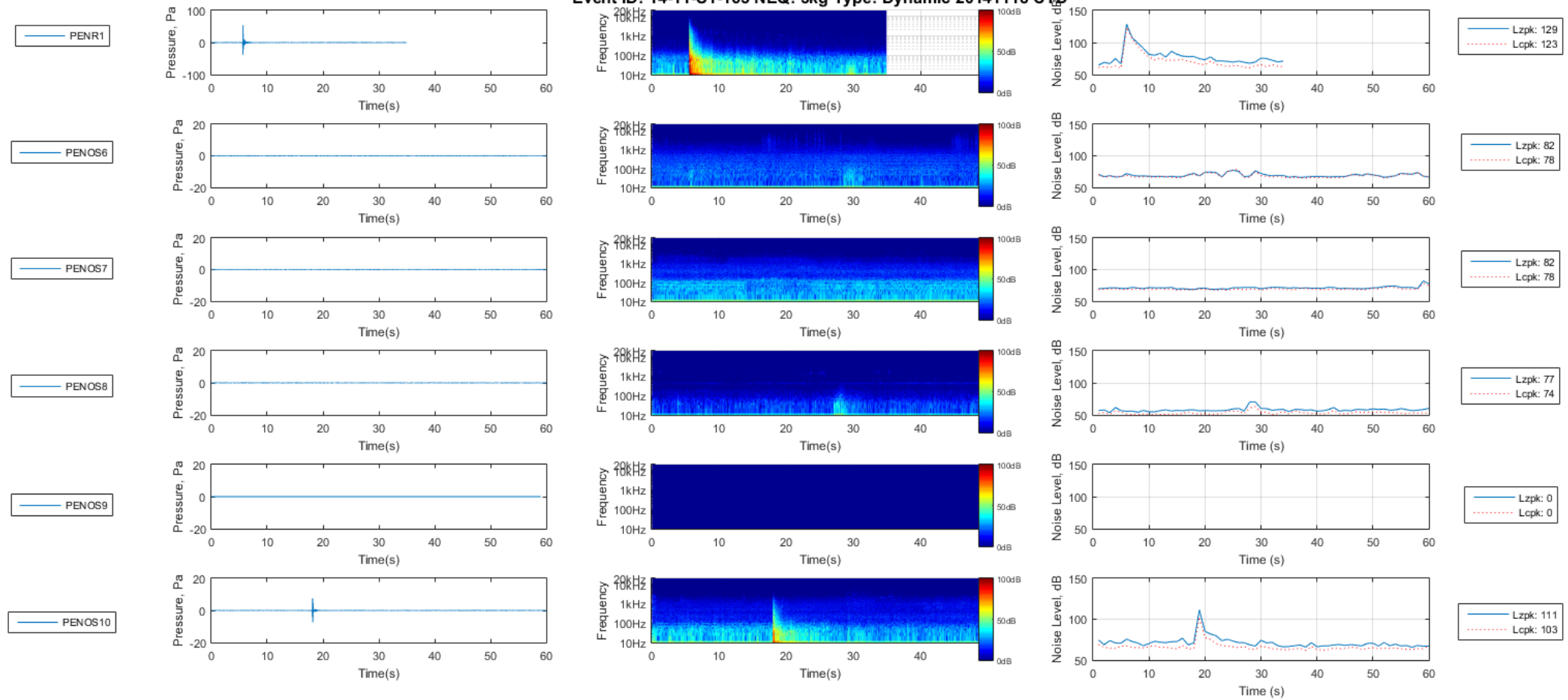


FIGURE 2.2: PEN\_OS 6 - 10 14-11-S1-165

Event ID: 14-11-S1-165 NEQ: 5kg Type: Dynamic 20141118

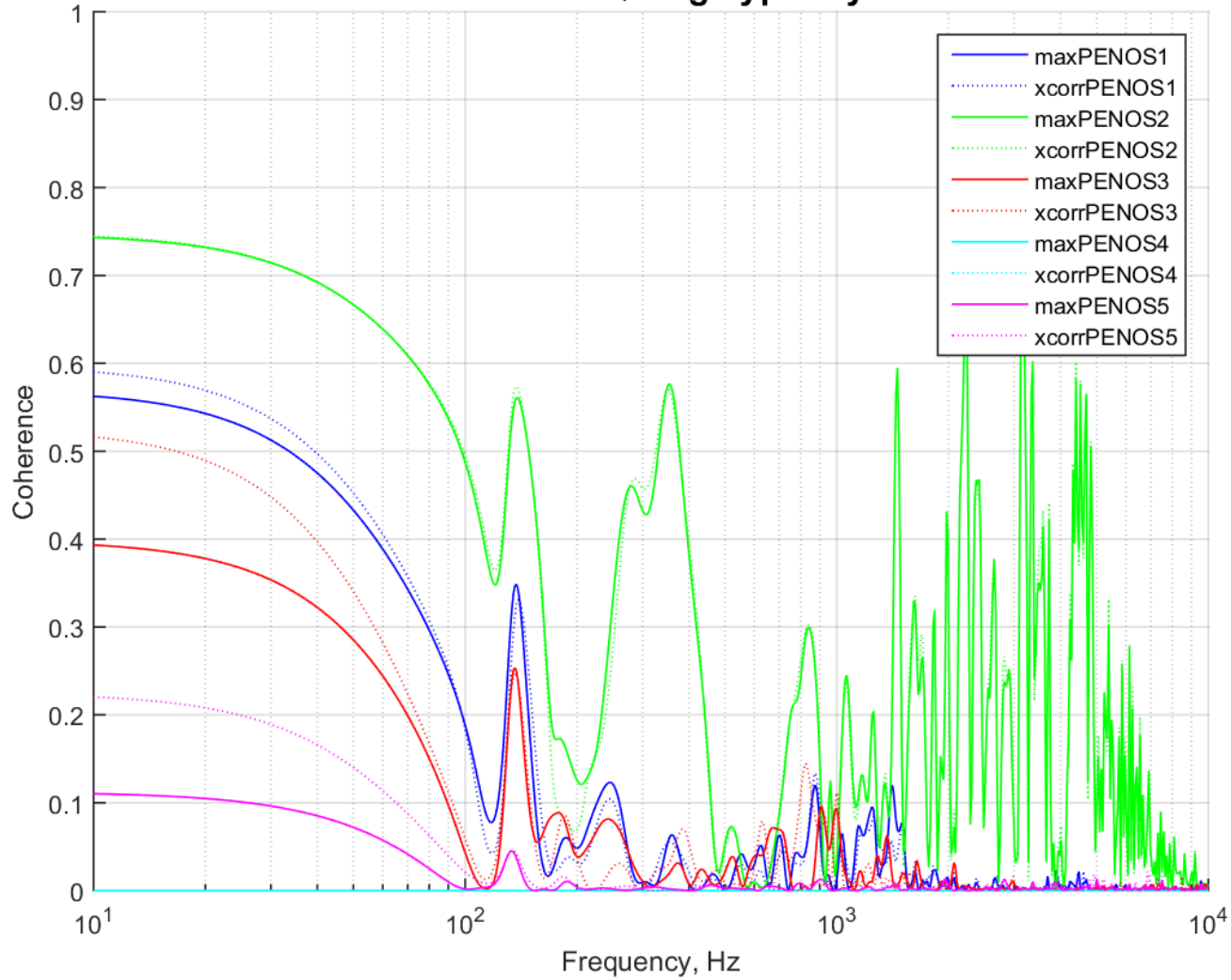
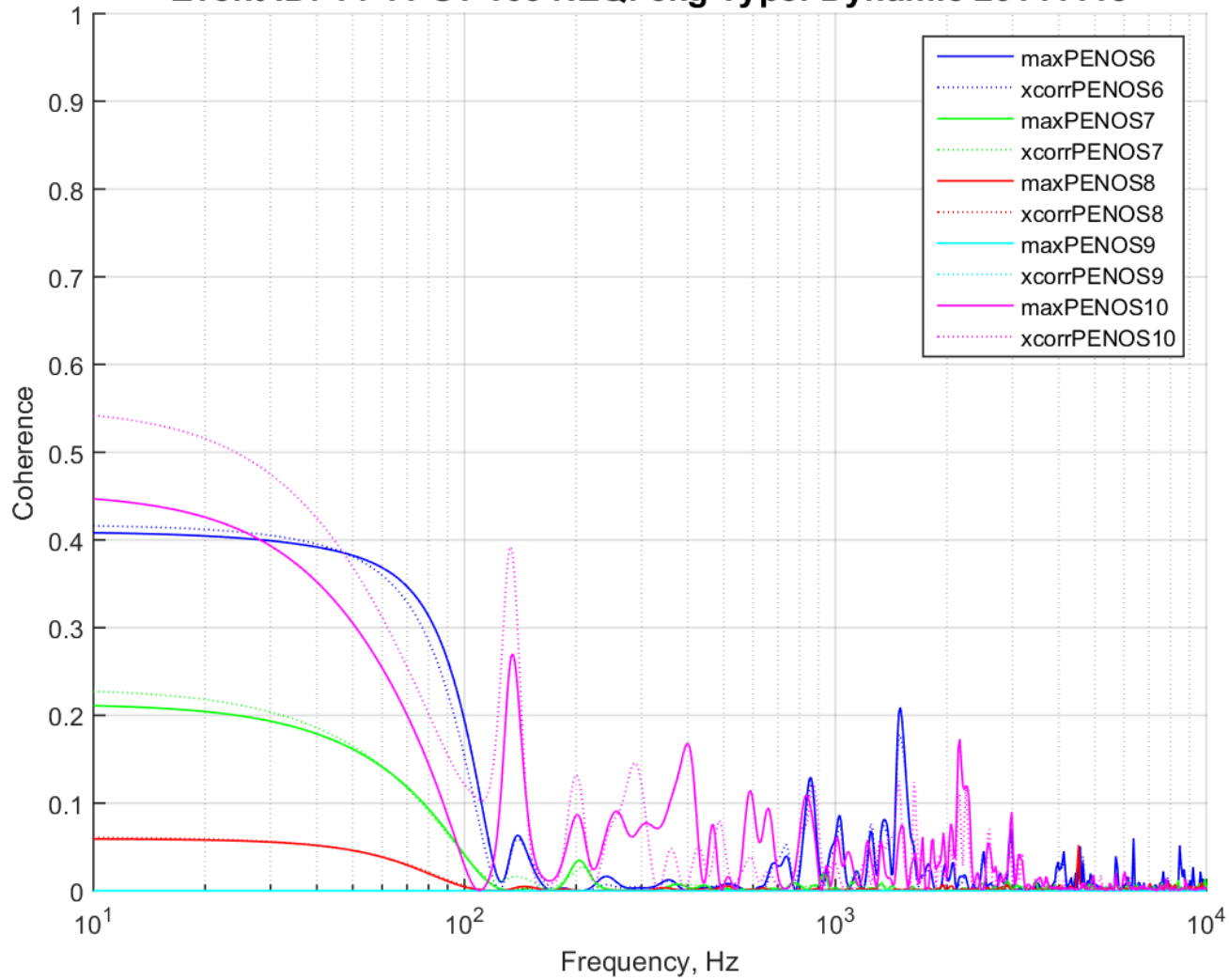


FIGURE 2.3: COHERENCE PEN\_OS 1 - 5 14-11-S1-165

**Event ID: 14-11-S1-165 NEQ: 5kg Type: Dynamic 20141118**



**FIGURE 2.4: COHERENCE PEN\_OS 6 - 10 14-11-S1-165CTD**

### Event ID: 14-11-S1-165 NEQ: 5kg Type: Dynamic 20141118

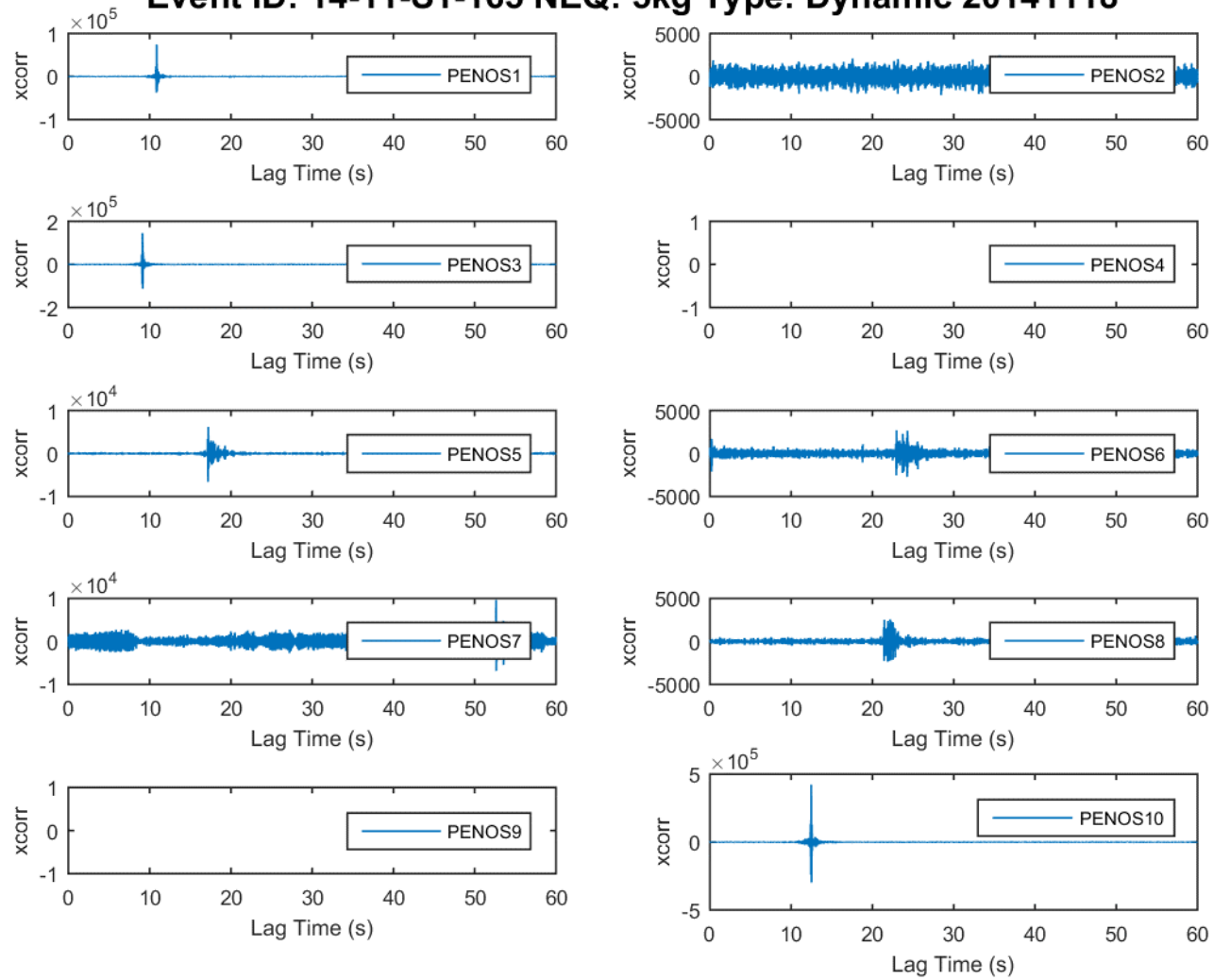
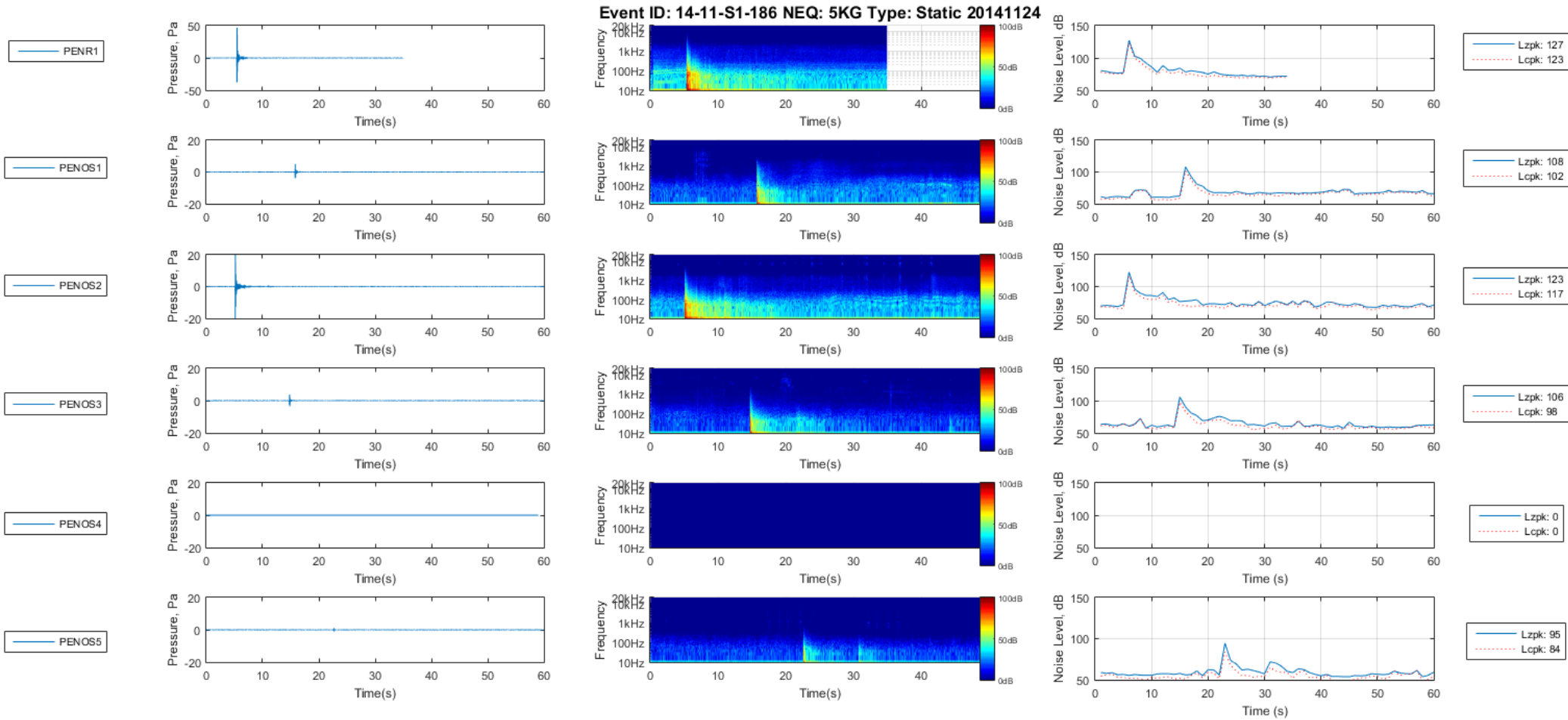


FIGURE 2.5: CROSS CORRELATION PEN\_OS 1 - 10 14-11-S1-165



**FIGURE 2.6: PEN\_OS 1 - 5 14-11-S1-186**

Event ID: 14-11-S1-186 NEQ: 5KG Type: Static 20141124 CTD

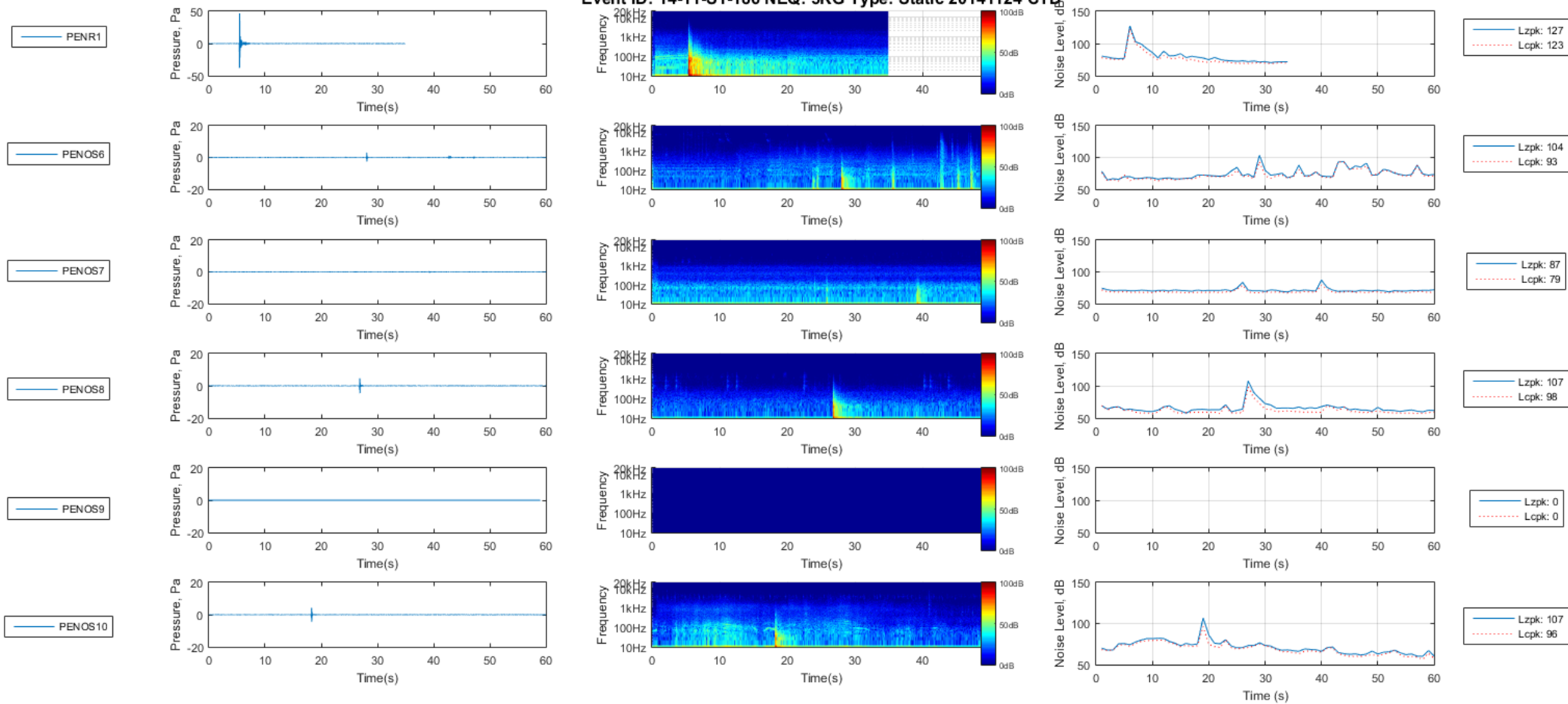


FIGURE 2.7: PEN\_OS 6 - 10 14-11-S1-186



Event ID: 14-11-S1-186 NEQ: 5KG Type: Static 20141124

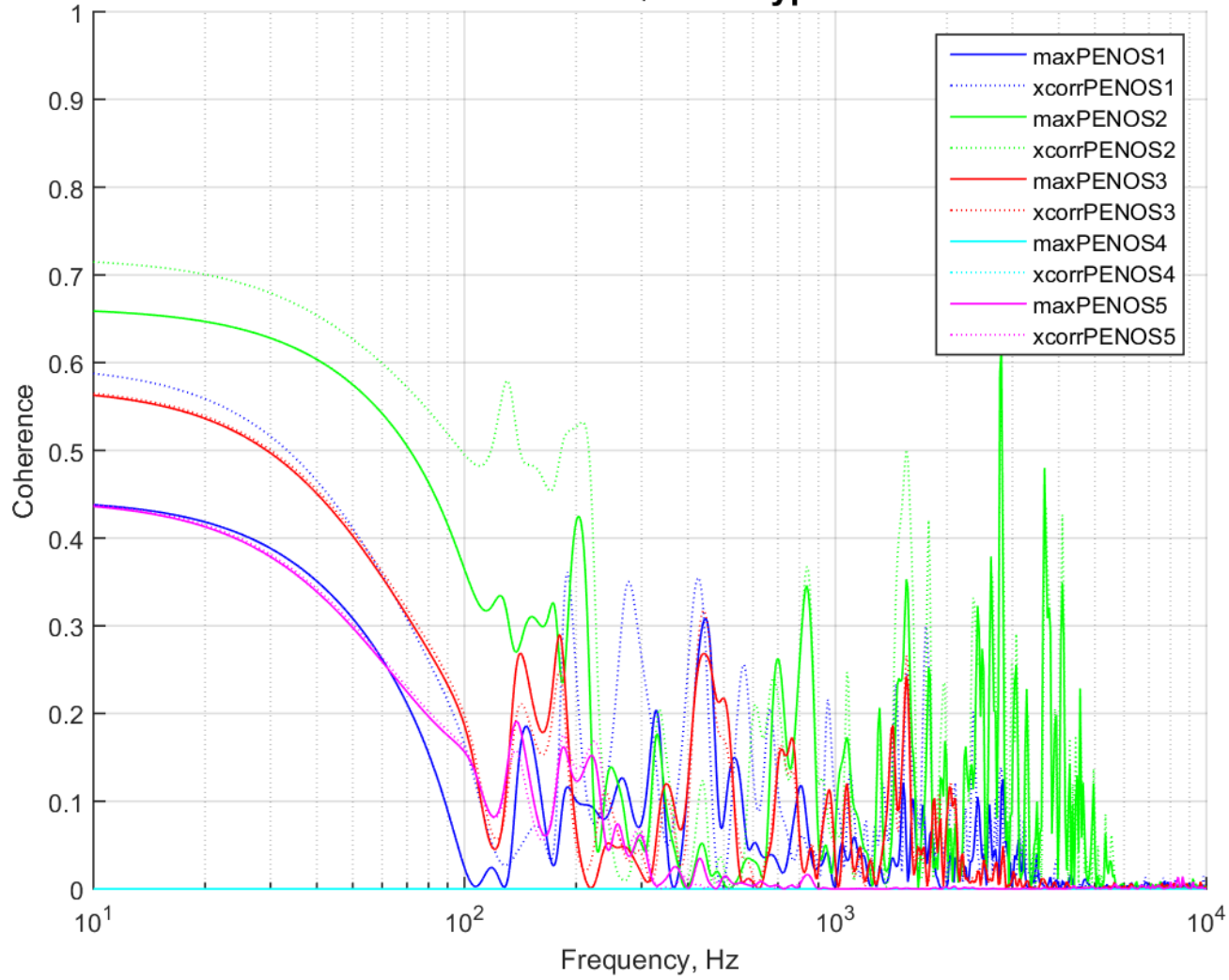


FIGURE 2.8: COHERENCE PEN\_OS 1 - 5 14-11-S1-186

Event ID: 14-11-S1-186 NEQ: 5KG Type: Static 20141124

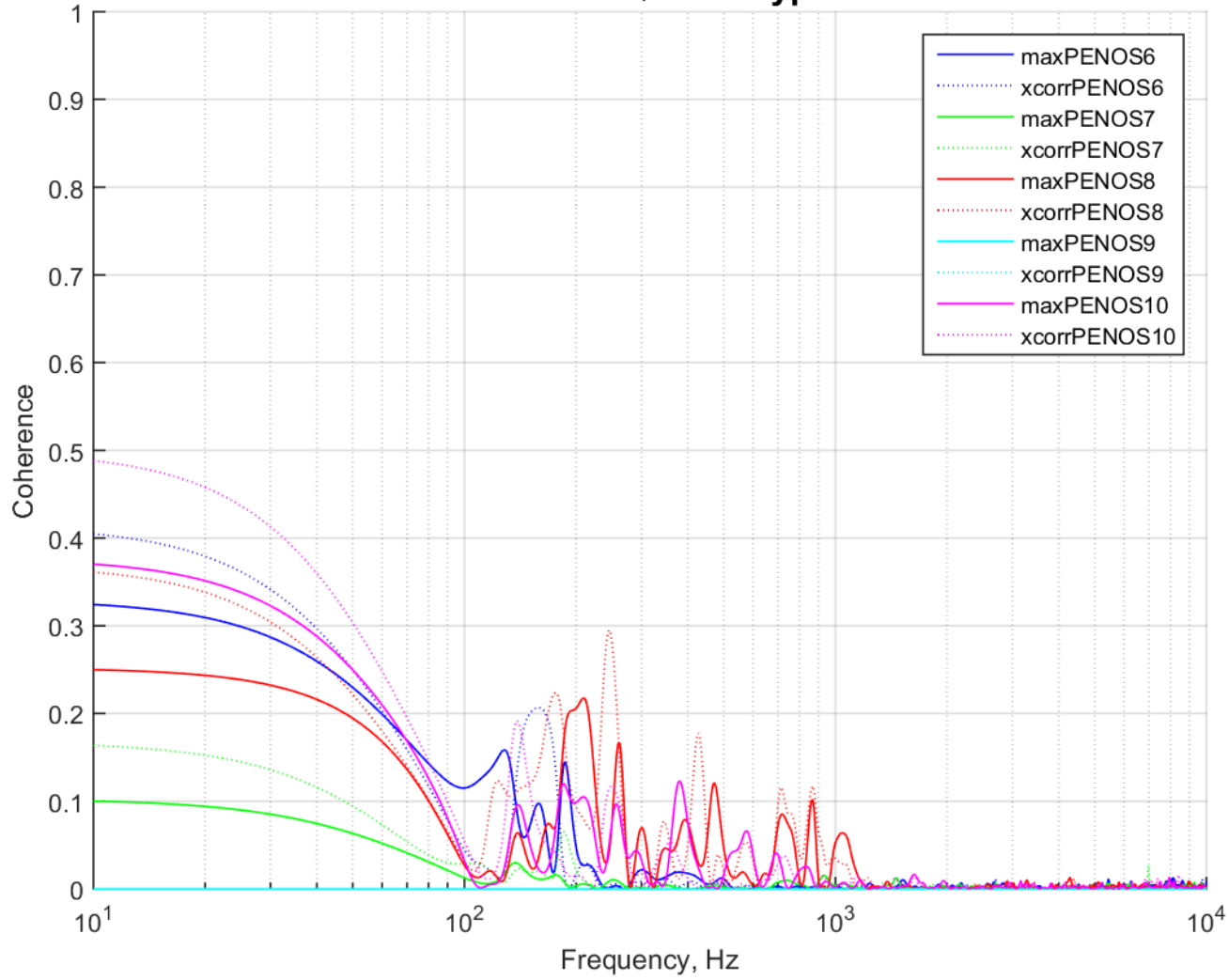
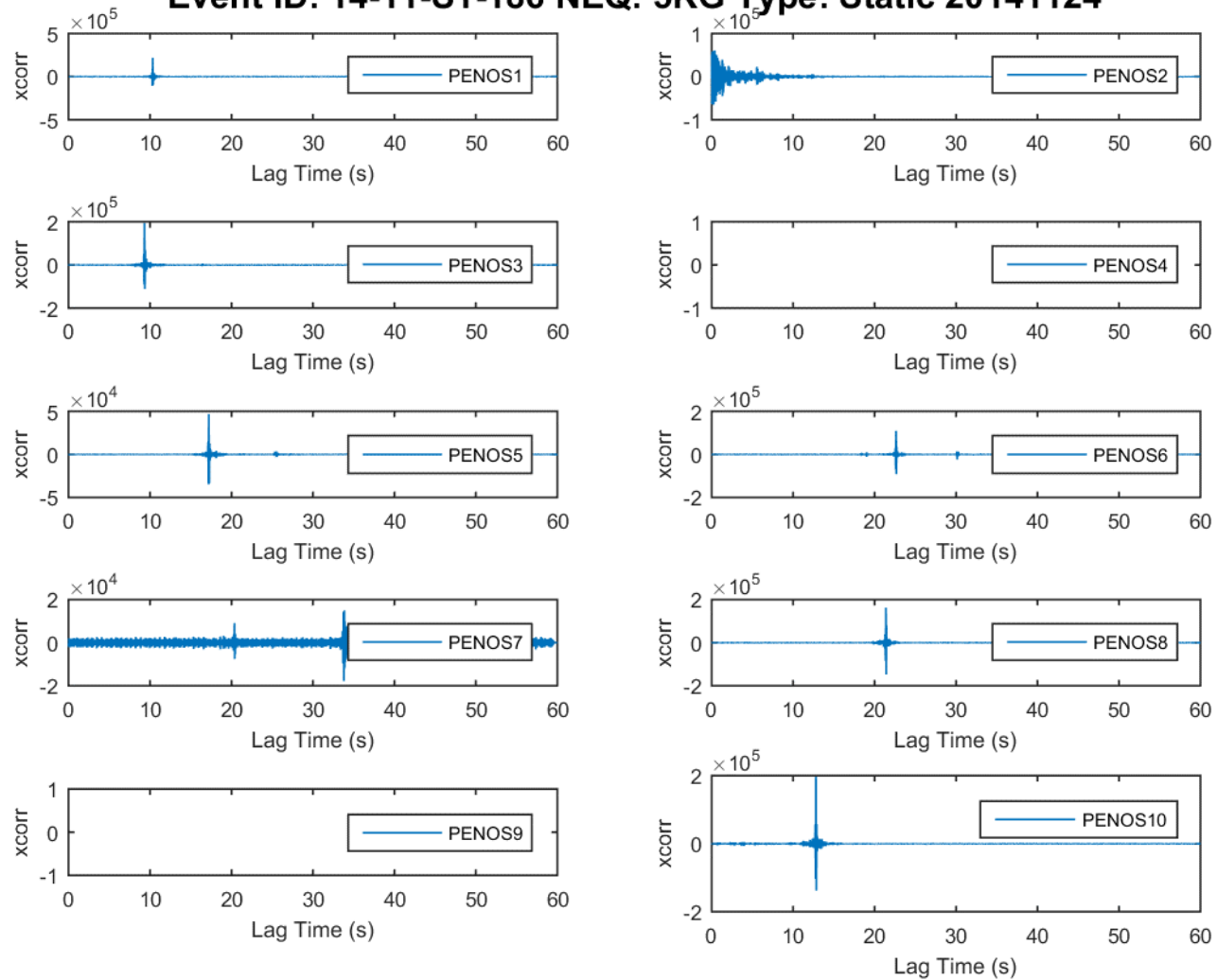
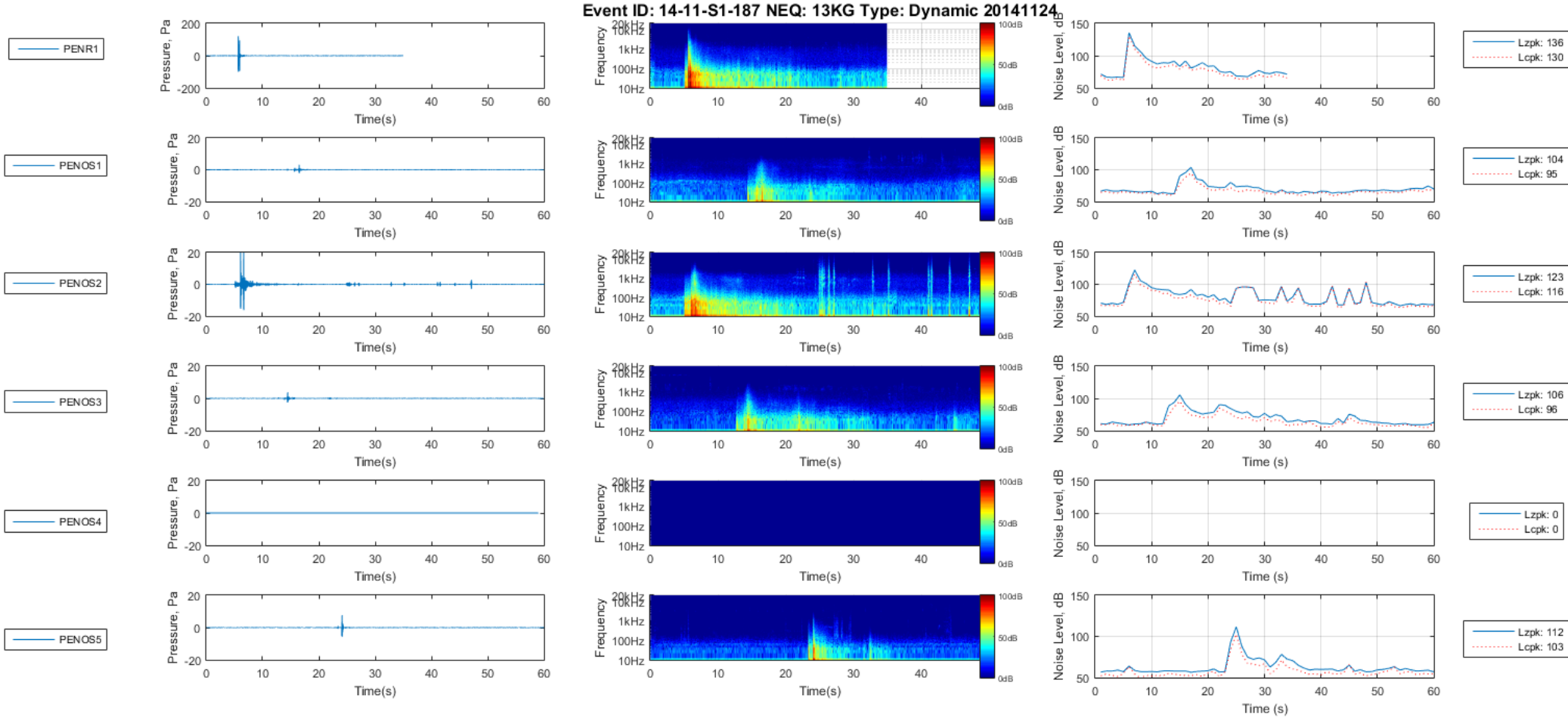


FIGURE 2.9: COHERENCE PEN\_OS 6 - 10 14-11-S1-186CTD

**Event ID: 14-11-S1-186 NEQ: 5KG Type: Static 20141124**



**FIGURE 2.10: CROSS CORRELATION PEN\_OS 1 - 10 14-11-S1-186**



**FIGURE 2.11: PEN\_OS 1 - 5 14-11-S1-187**

Event ID: 14-11-S1-187 NEQ: 13KG Type: Dynamic 20141124 CTD

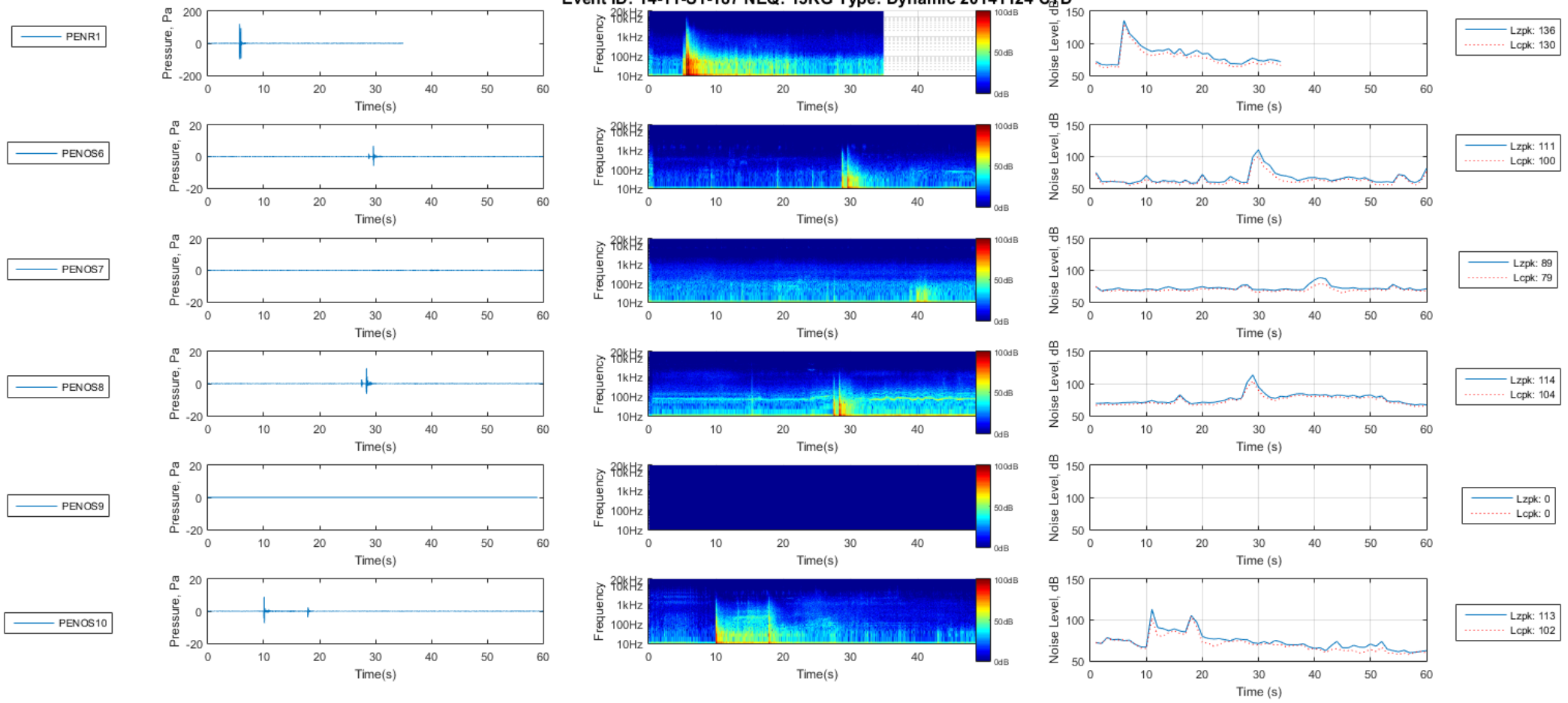
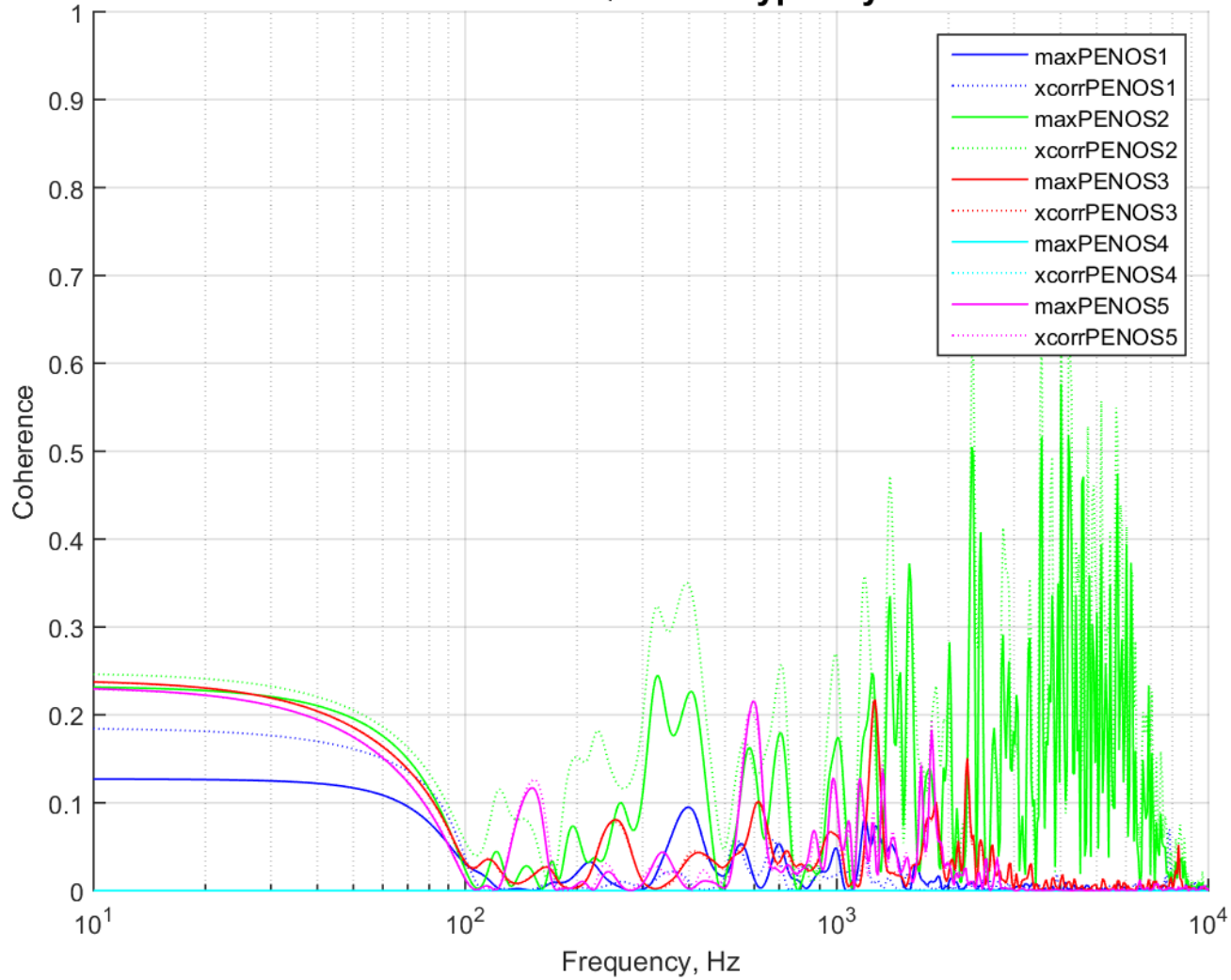


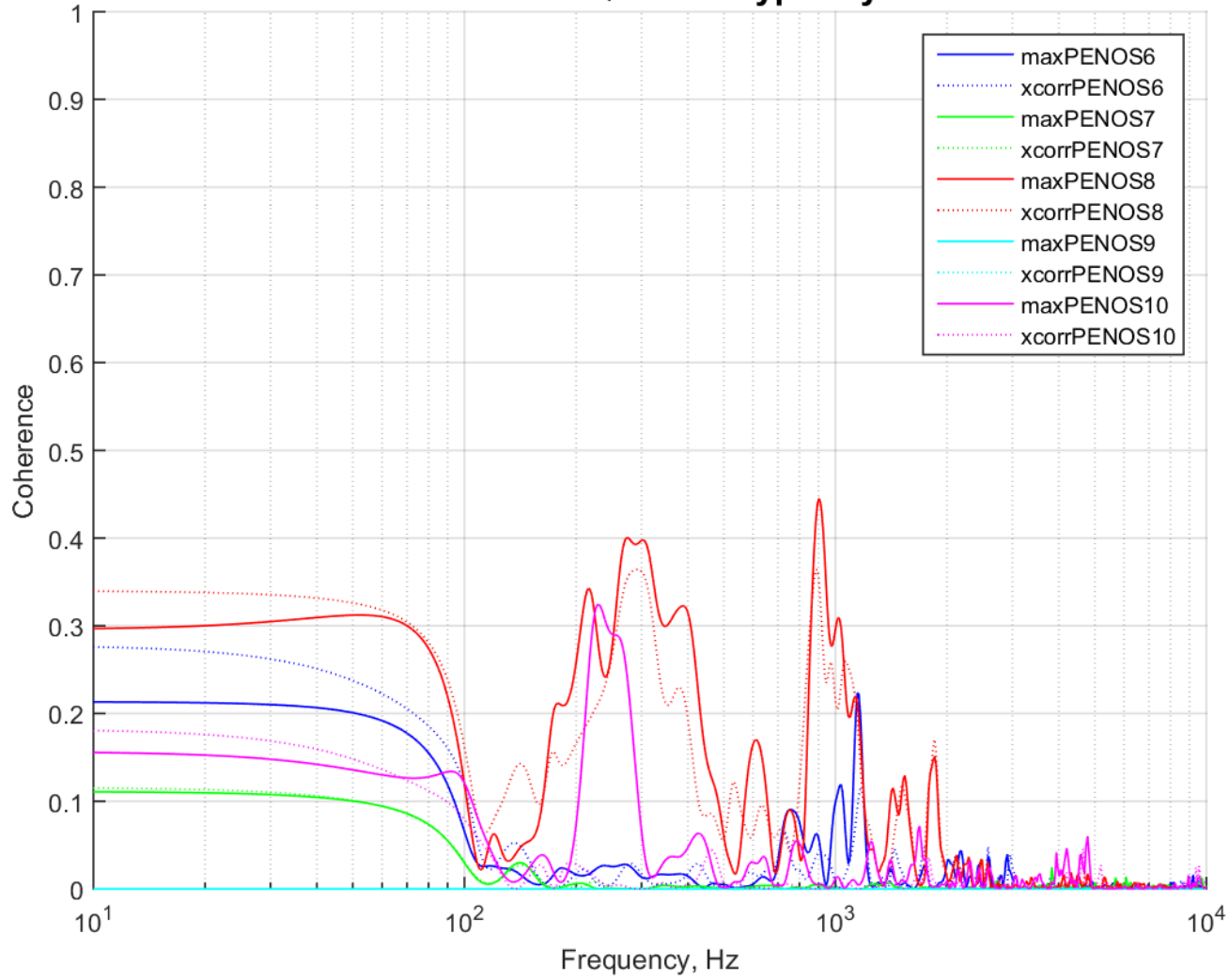
FIGURE 2.12: PEN\_OS 6 - 10 14-11-S1-187

**Event ID: 14-11-S1-187 NEQ: 13KG Type: Dynamic 20141124**



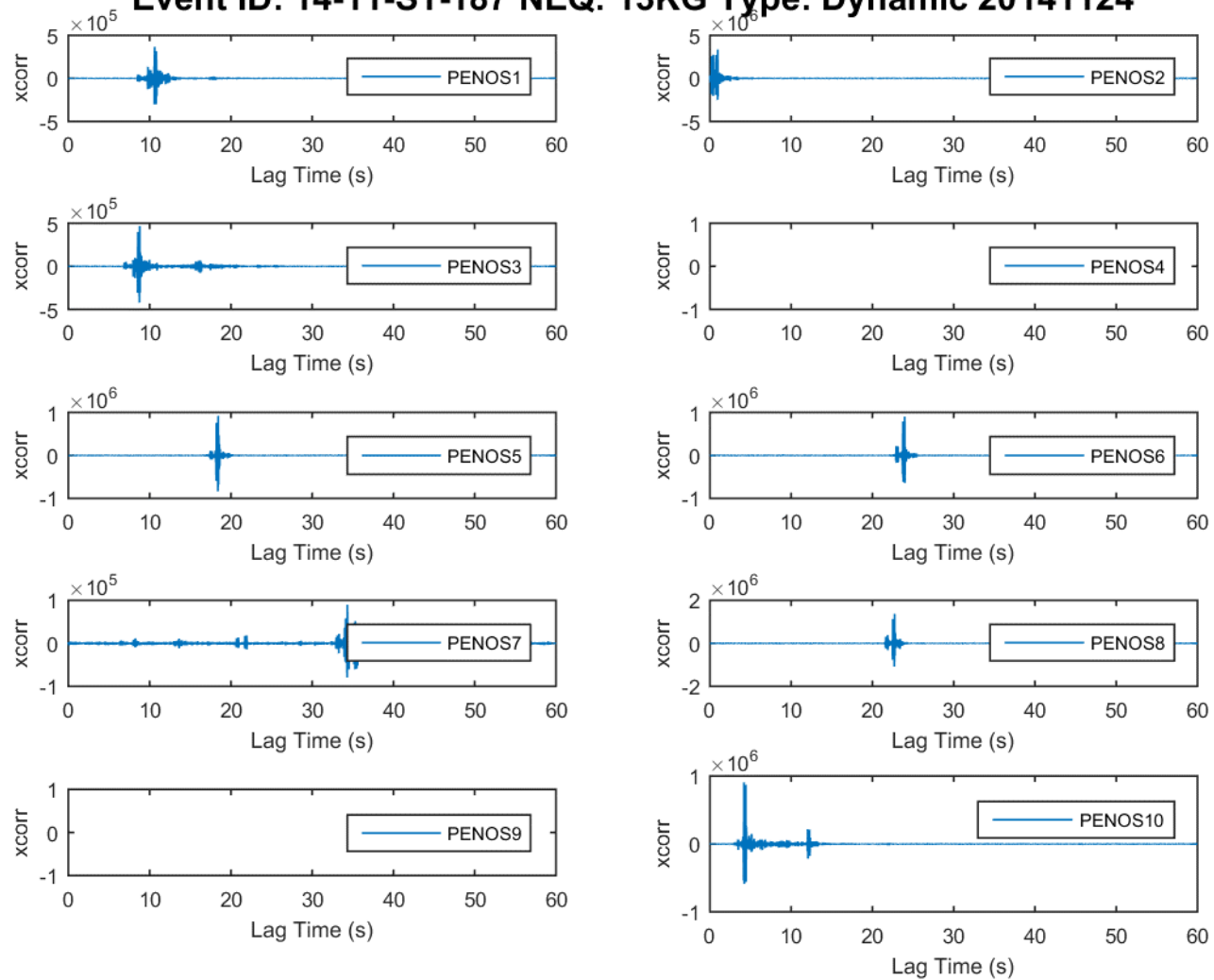
**FIGURE 2.13: COHERENCE PEN\_OS 1 - 5 14-11-S1-187**

**Event ID: 14-11-S1-187 NEQ: 13KG Type: Dynamic 20141124**



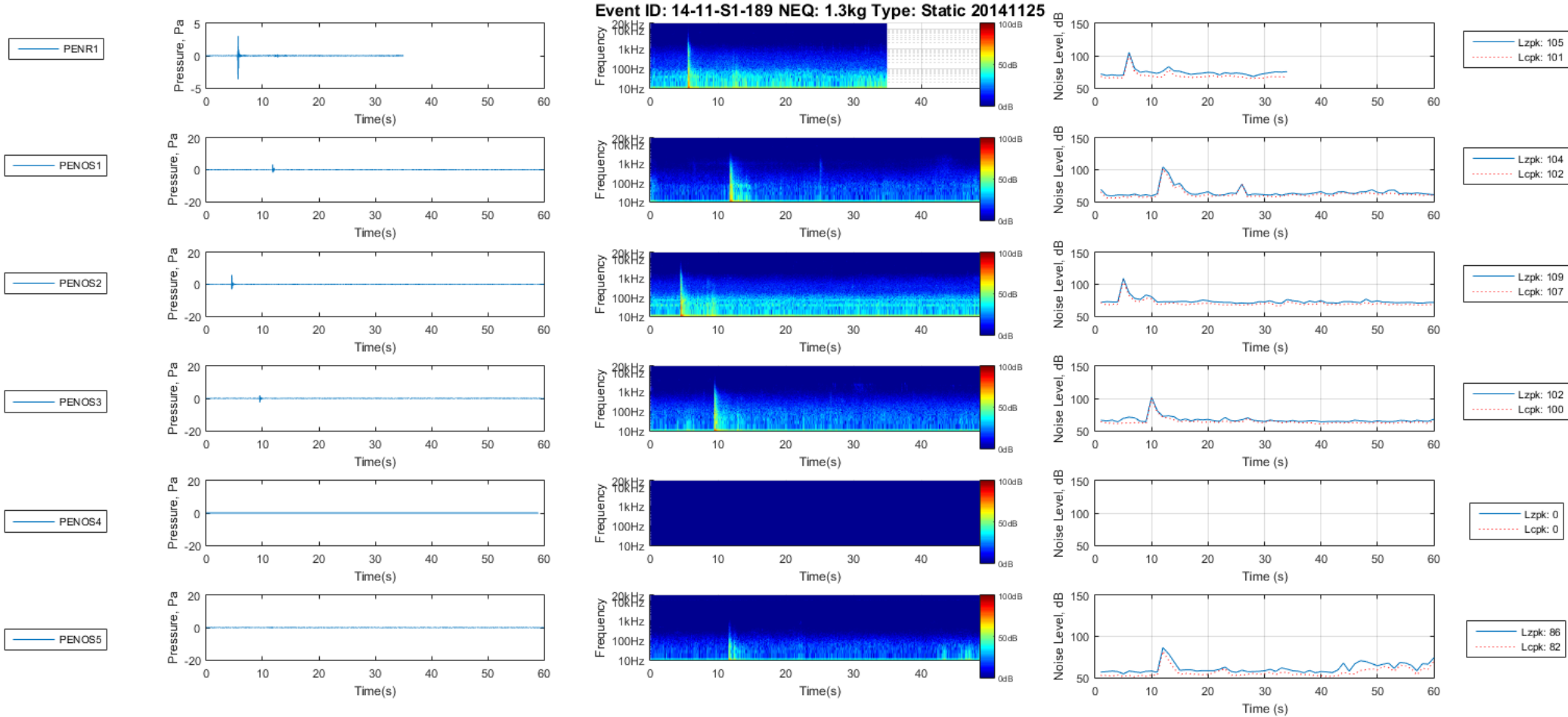
**FIGURE 2.14: COHERENCE PEN\_OS 6 - 10 14-11-S1-187CTD**

**Event ID: 14-11-S1-187 NEQ: 13KG Type: Dynamic 20141124**

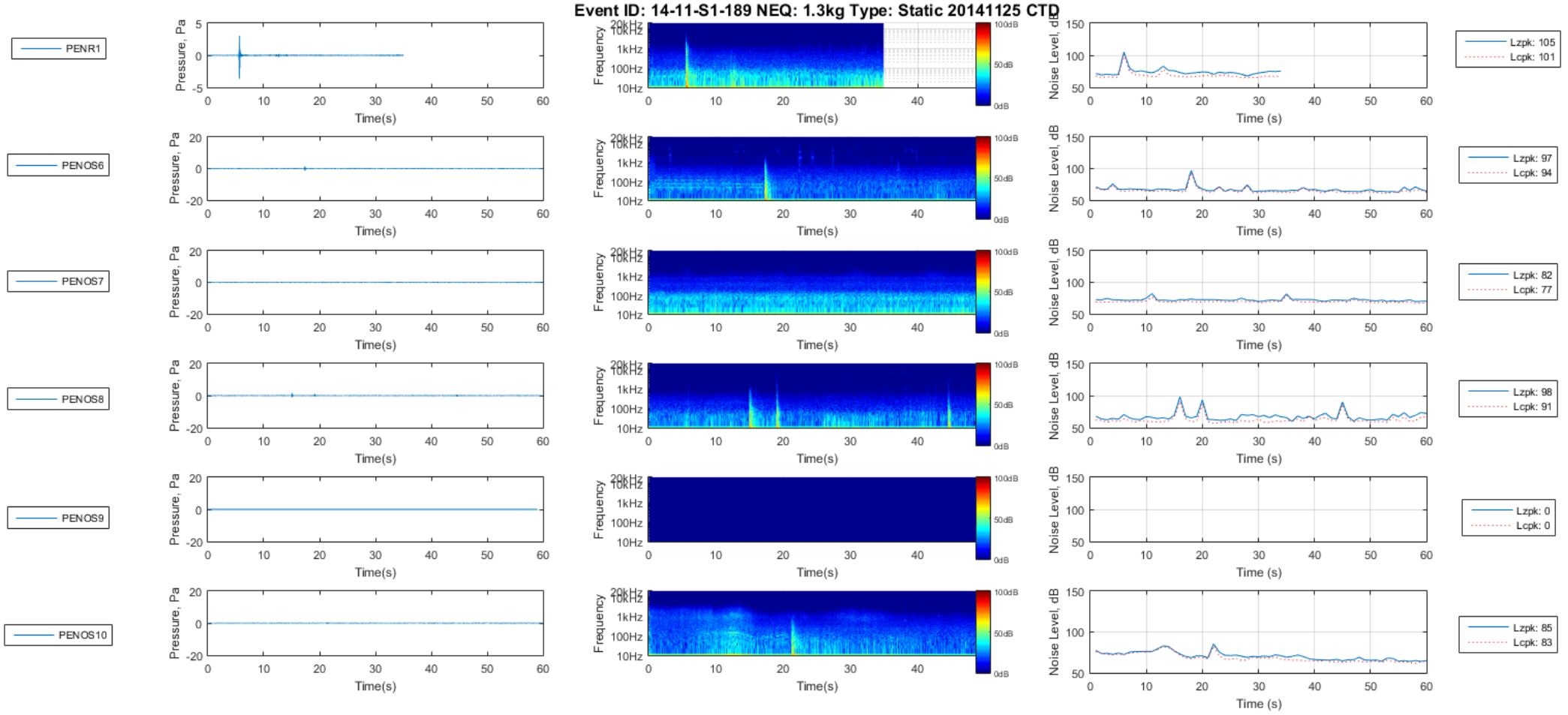


**FIGURE 2.15: CROSS CORRELATION PEN\_OS 1 - 10 14-11-S1-187**



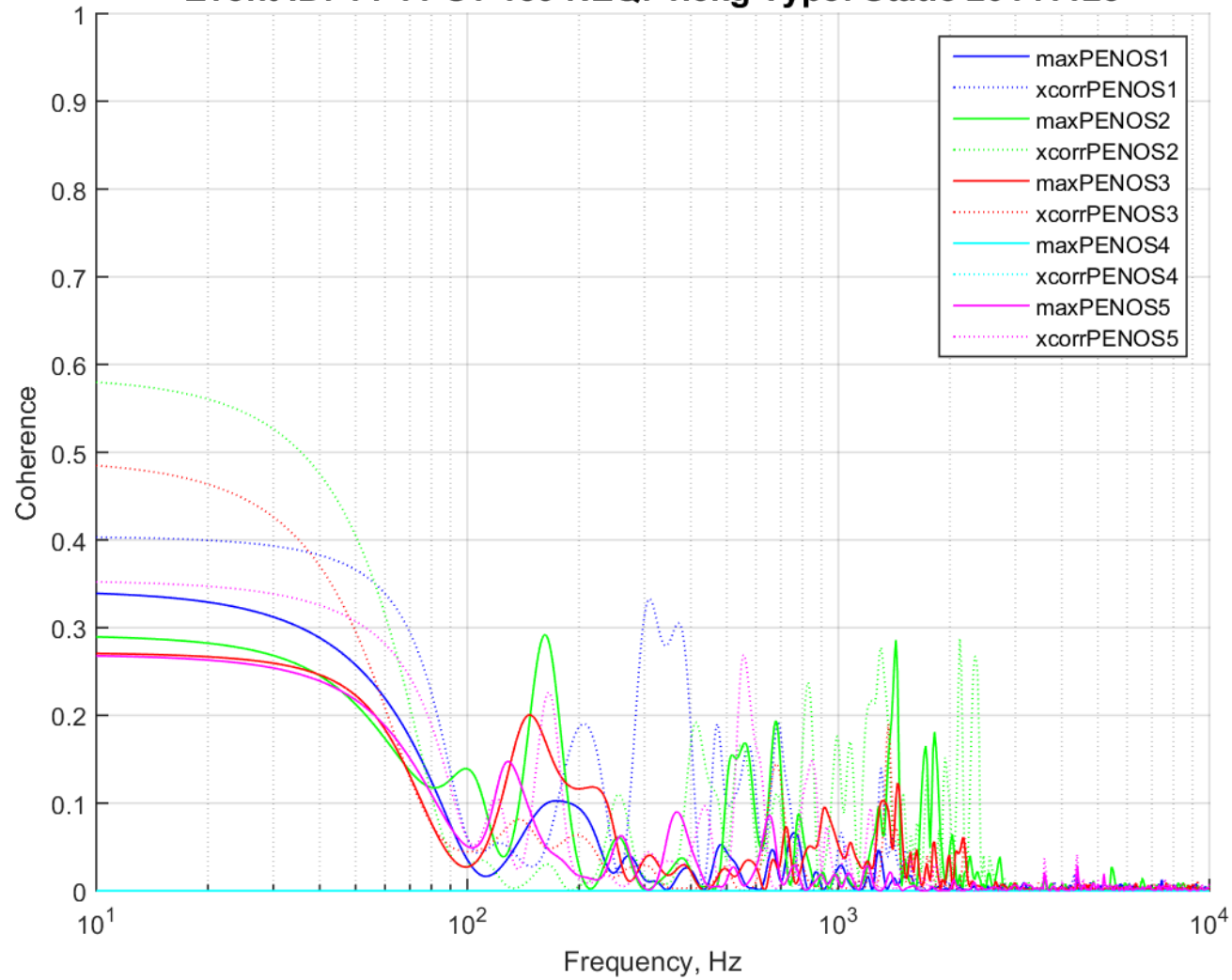


**FIGURE 2.16: PEN\_OS 1 - 5 14-11-S1-189**



**FIGURE 2.17: PEN\_OS 6 - 10 14-11-S1-189**

**Event ID: 14-11-S1-189 NEQ: 1.3kg Type: Static 20141125**



**FIGURE 2.18: COHERENCE PEN\_OS 1 - 5 14-11-S1-189**

Event ID: 14-11-S1-189 NEQ: 1.3kg Type: Static 20141125

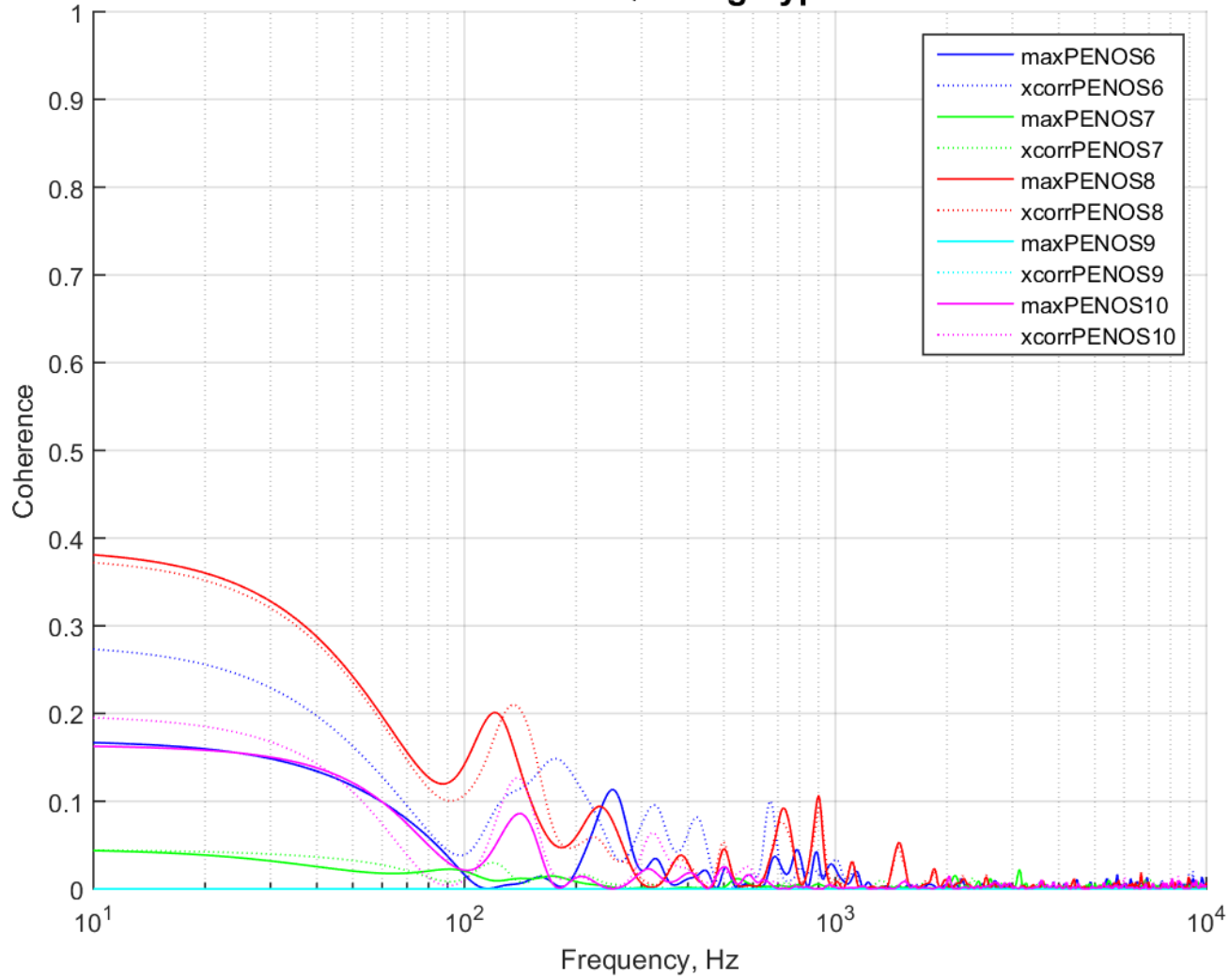
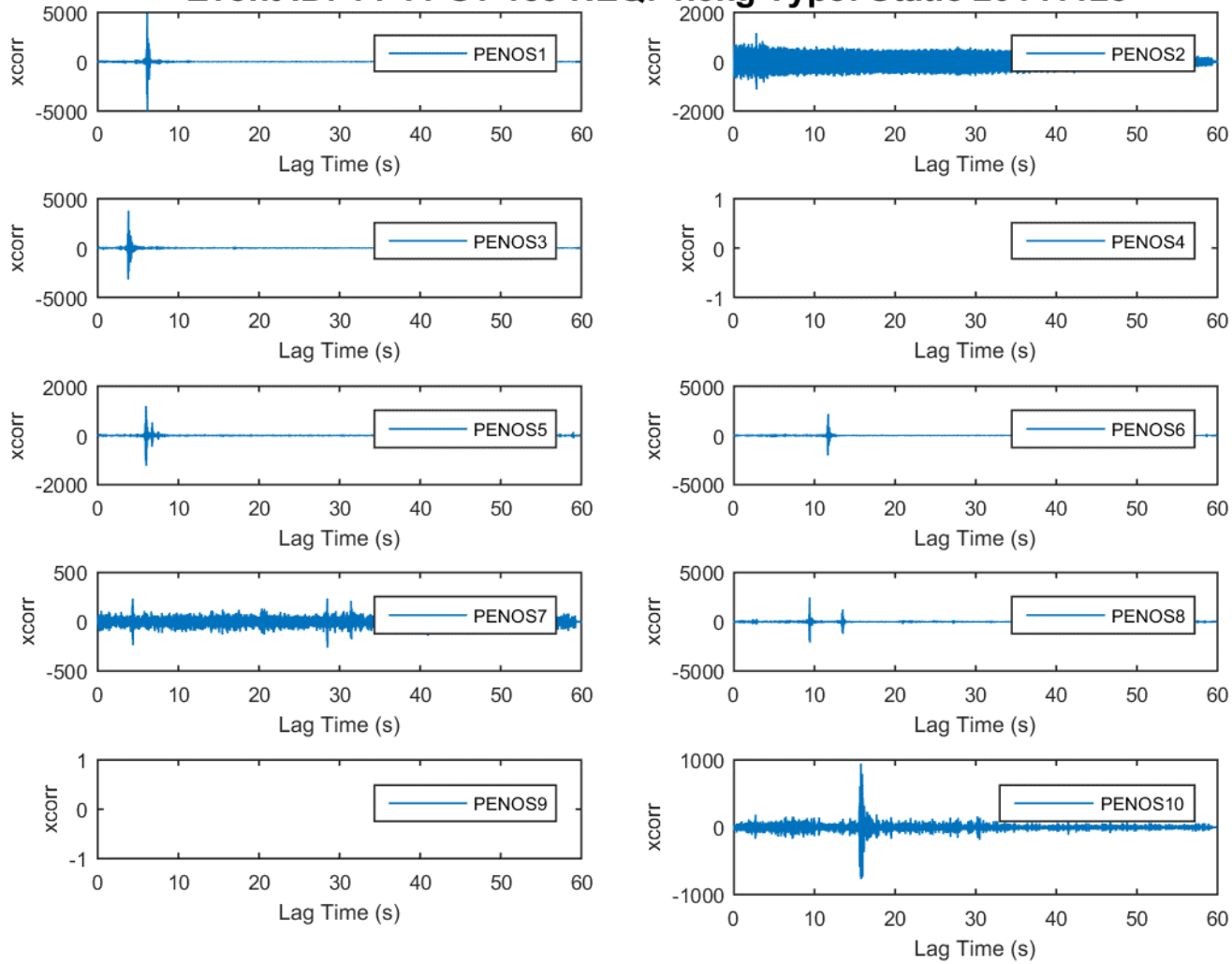
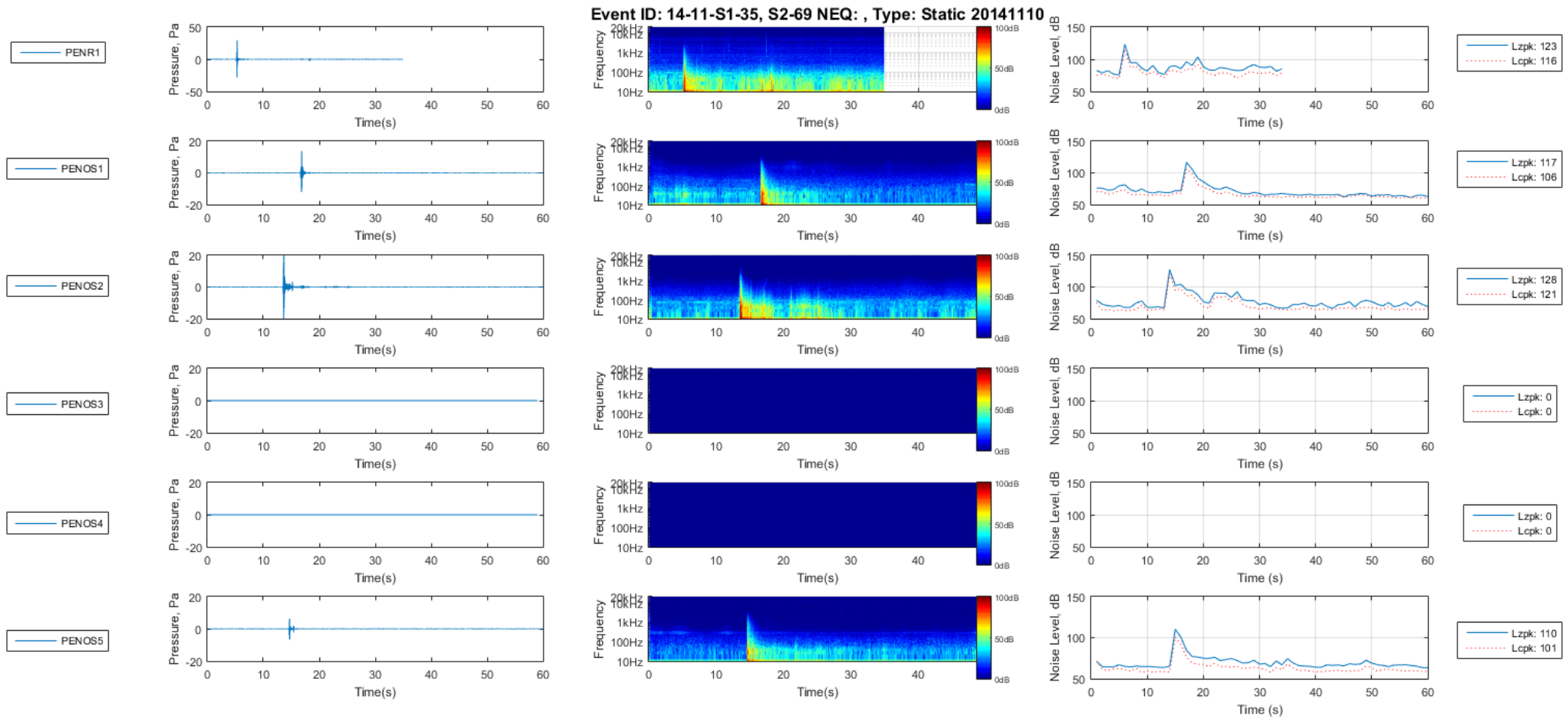


FIGURE 2.19: COHERENCE PEN\_OS 6 - 10 14-11-S1-189CTD

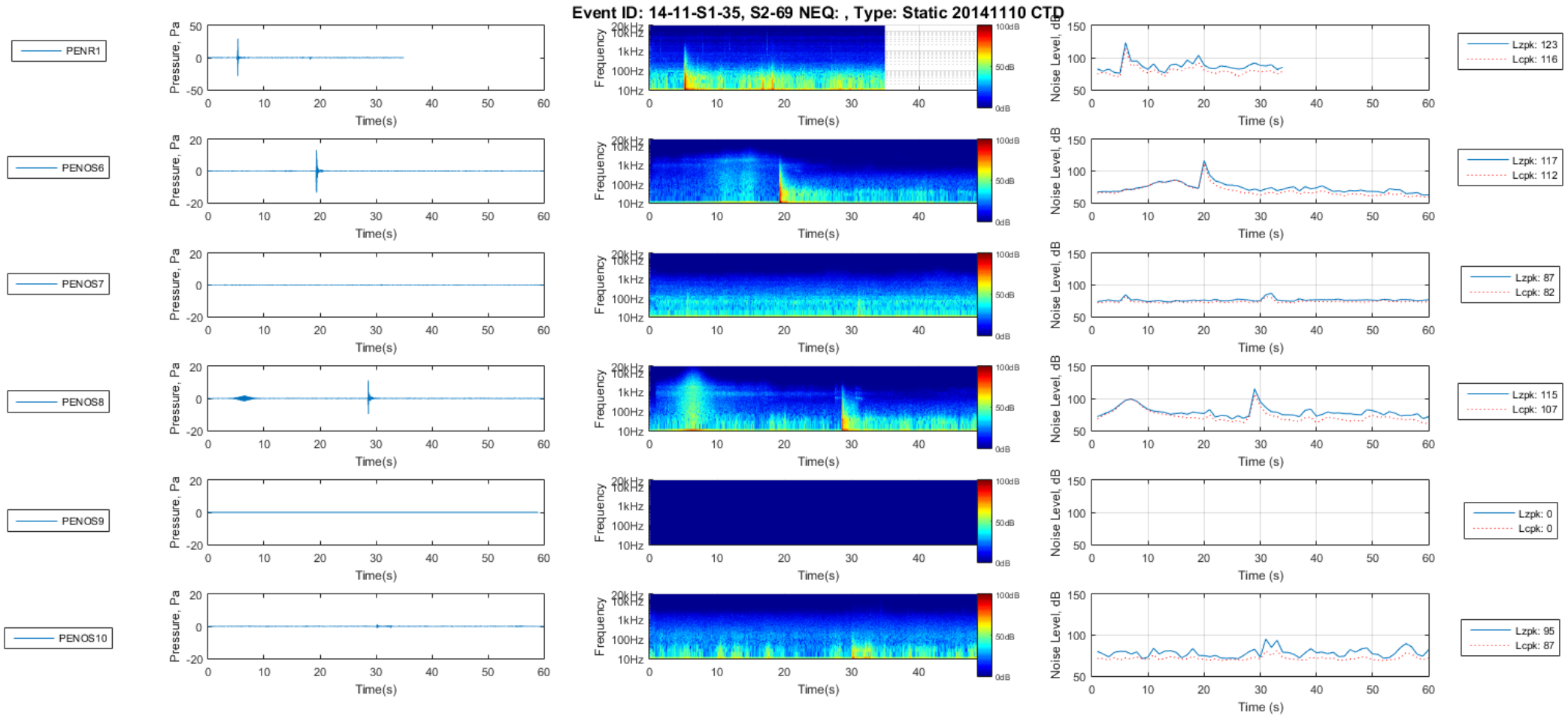
**Event ID: 14-11-S1-189 NEQ: 1.3kg Type: Static 20141125**



**FIGURE 2.20: CROSS CORRELATION PEN\_OS 1 - 10 14-11-S1-189**



**FIGURE 2.21: PEN\_OS 1 - 5 14-11-S1-35, S2-69**



**FIGURE 2.22: PEN\_OS 6 - 10 14-11-S1-35, S2-69**

Event ID: 14-11-S1-35, S2-69 NEQ: , Type: Static 20141110

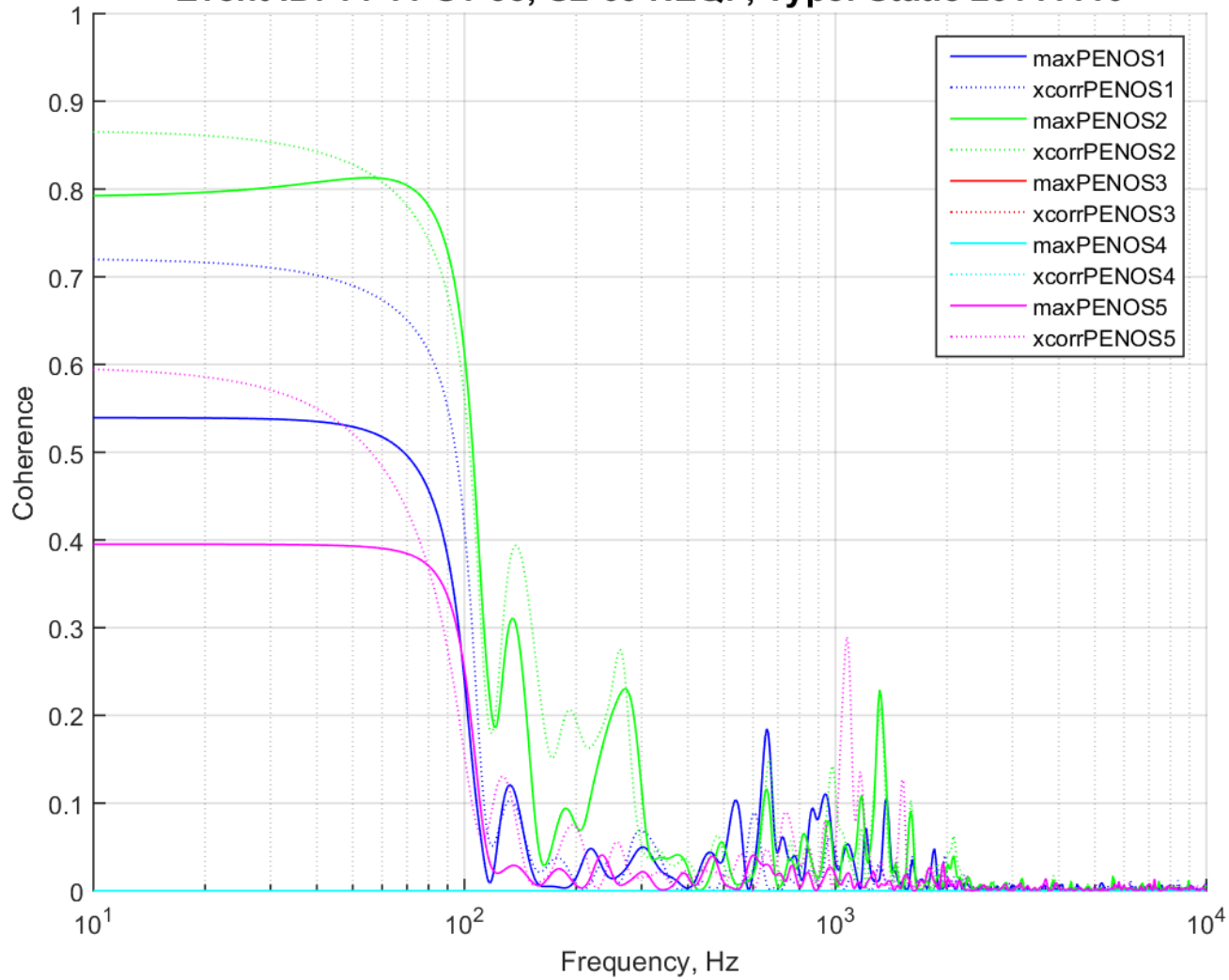


FIGURE 2.23: COHERENCE PEN\_OS 1 - 5 14-11-S1-35, S2-69



Event ID: 14-11-S1-35, S2-69 NEQ: , Type: Static 20141110

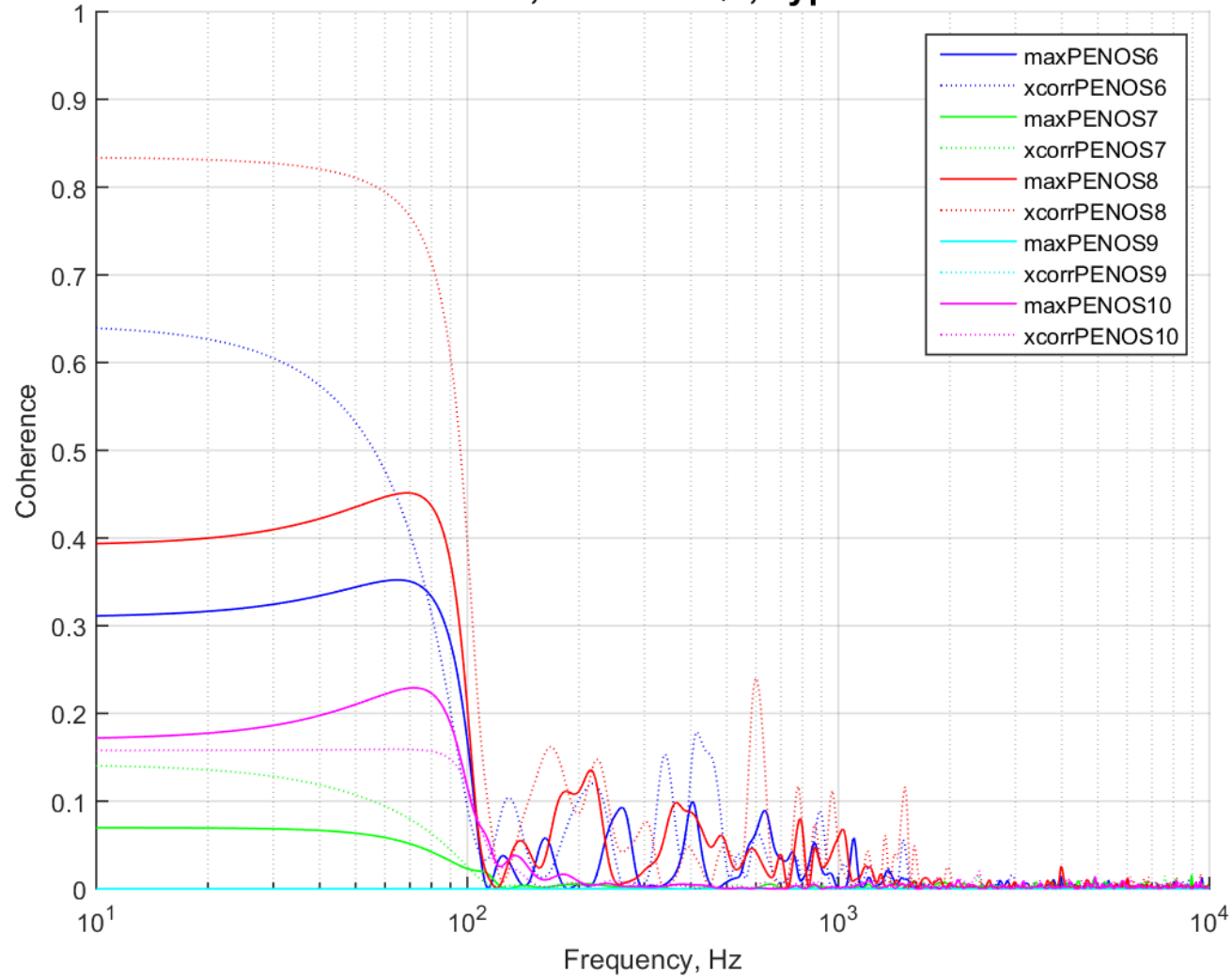
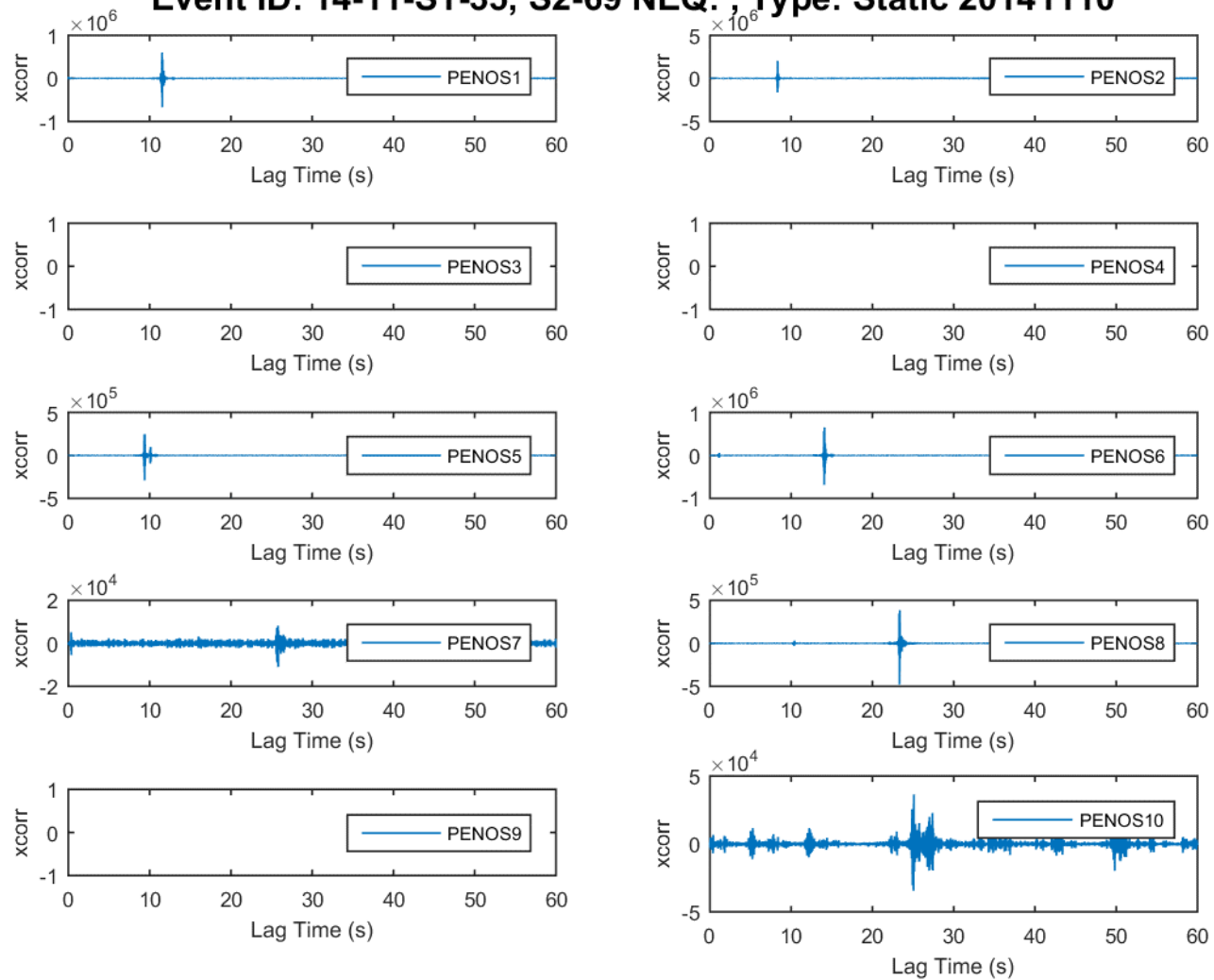
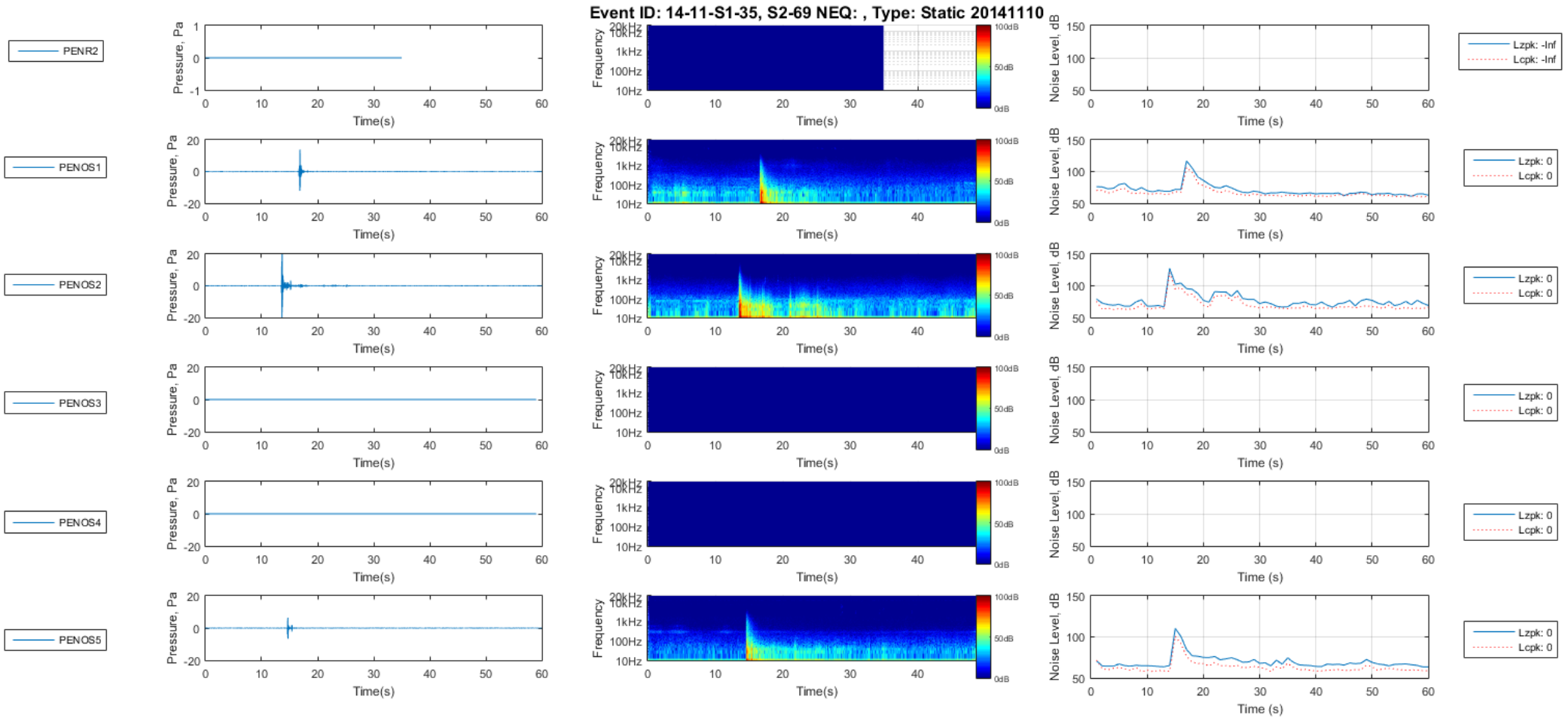


FIGURE 2.24: COHERENCE PEN\_OS 6 - 10 14-11-S1-35, S2-69CTD

**Event ID: 14-11-S1-35, S2-69 NEQ: , Type: Static 20141110**



**FIGURE 2.25: CROSS CORRELATION PEN\_OS 1 - 10 14-11-S1-35, S2-69**



**FIGURE 2.26: PEN\_OS 1 - 5 14-11-S1-35, S2-69**

Event ID: 14-11-S1-35, S2-69 NEQ: , Type: Static 20141110 CTD

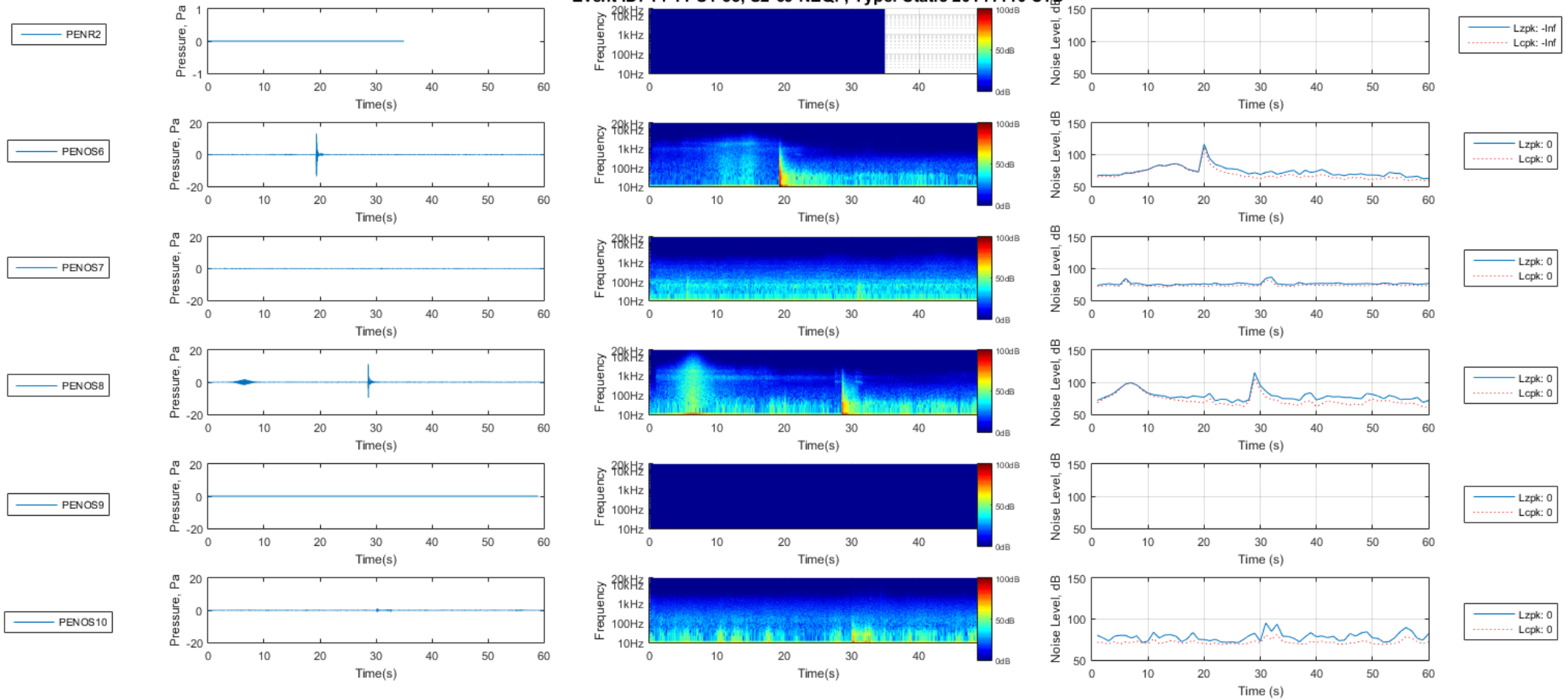


FIGURE 2.27: PEN\_OS 6 - 10 14-11-S1-35, S2-69

Event ID: 14-11-S1-35, S2-69 NEQ: , Type: Static 20141110

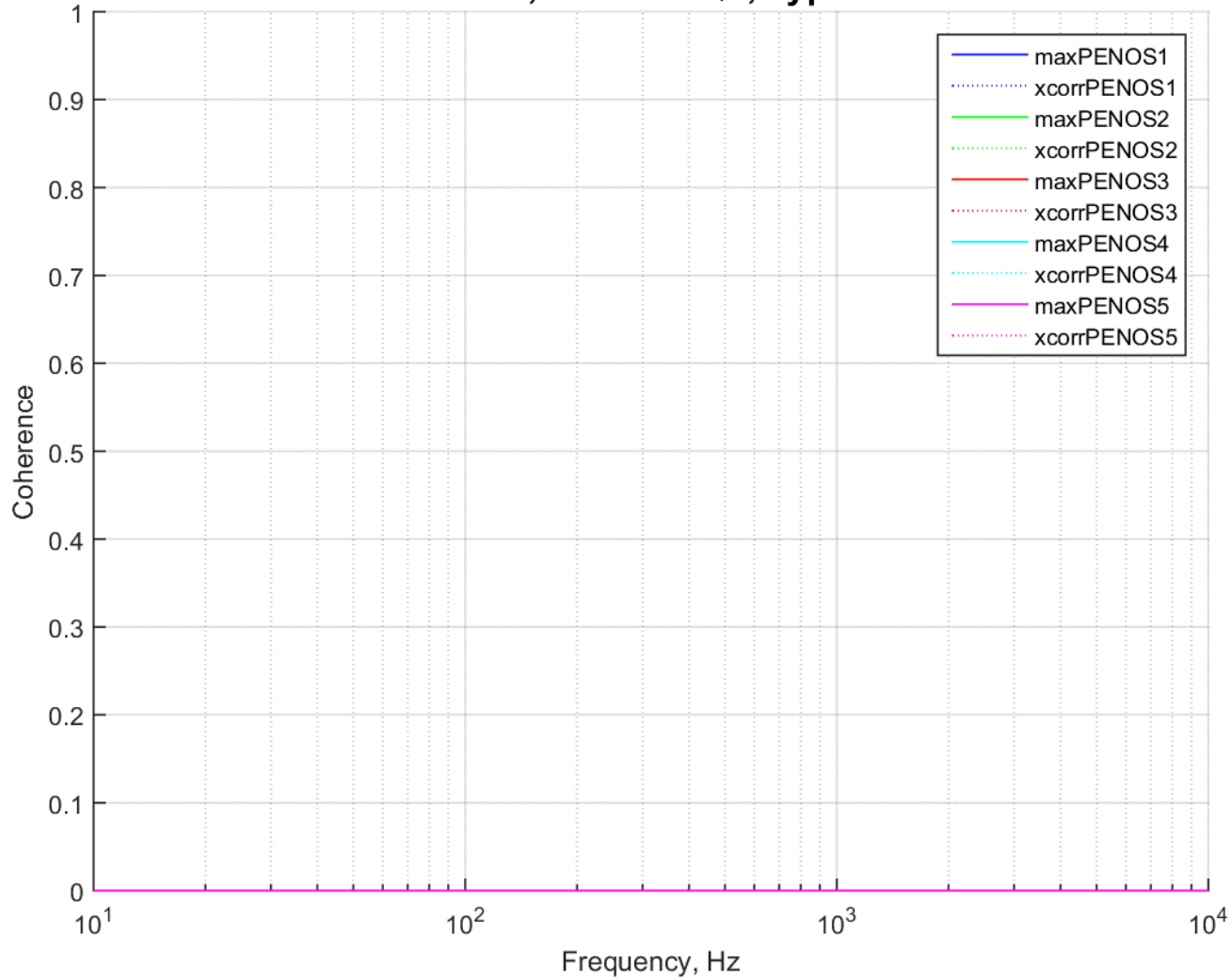
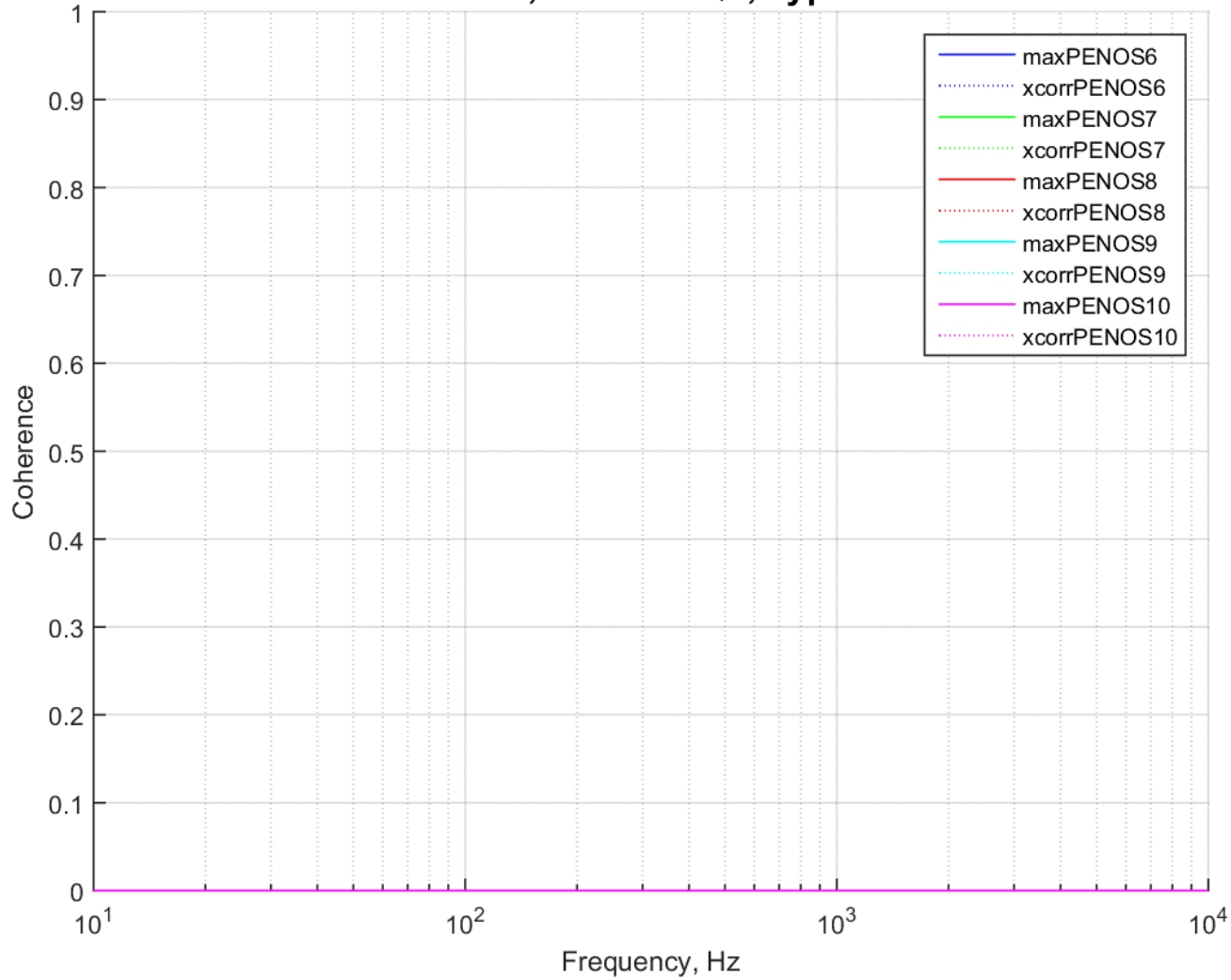


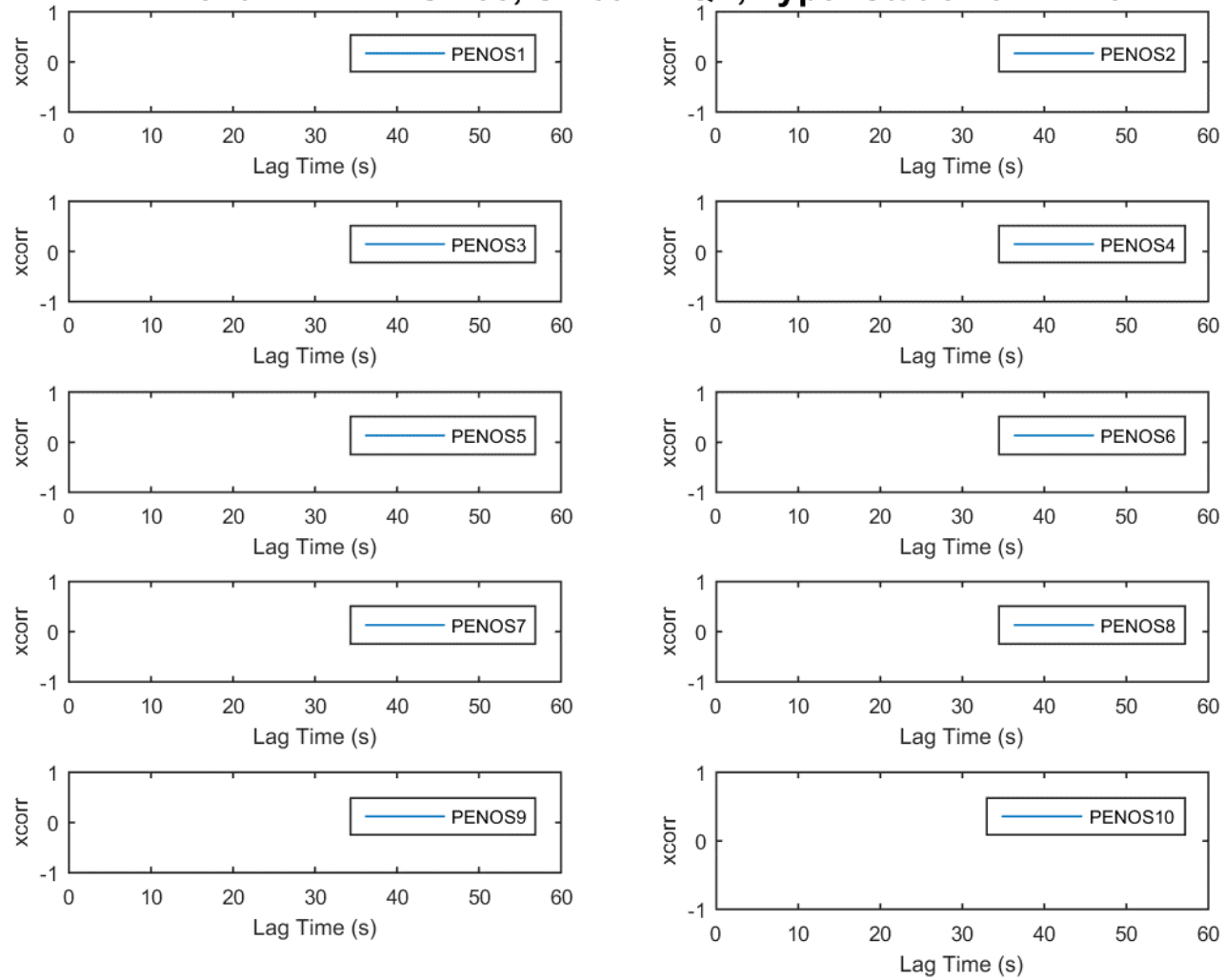
FIGURE 2.28: COHERENCE PEN\_OS 1 - 5 14-11-S1-35, S2-69

**Event ID: 14-11-S1-35, S2-69 NEQ: , Type: Static 20141110**

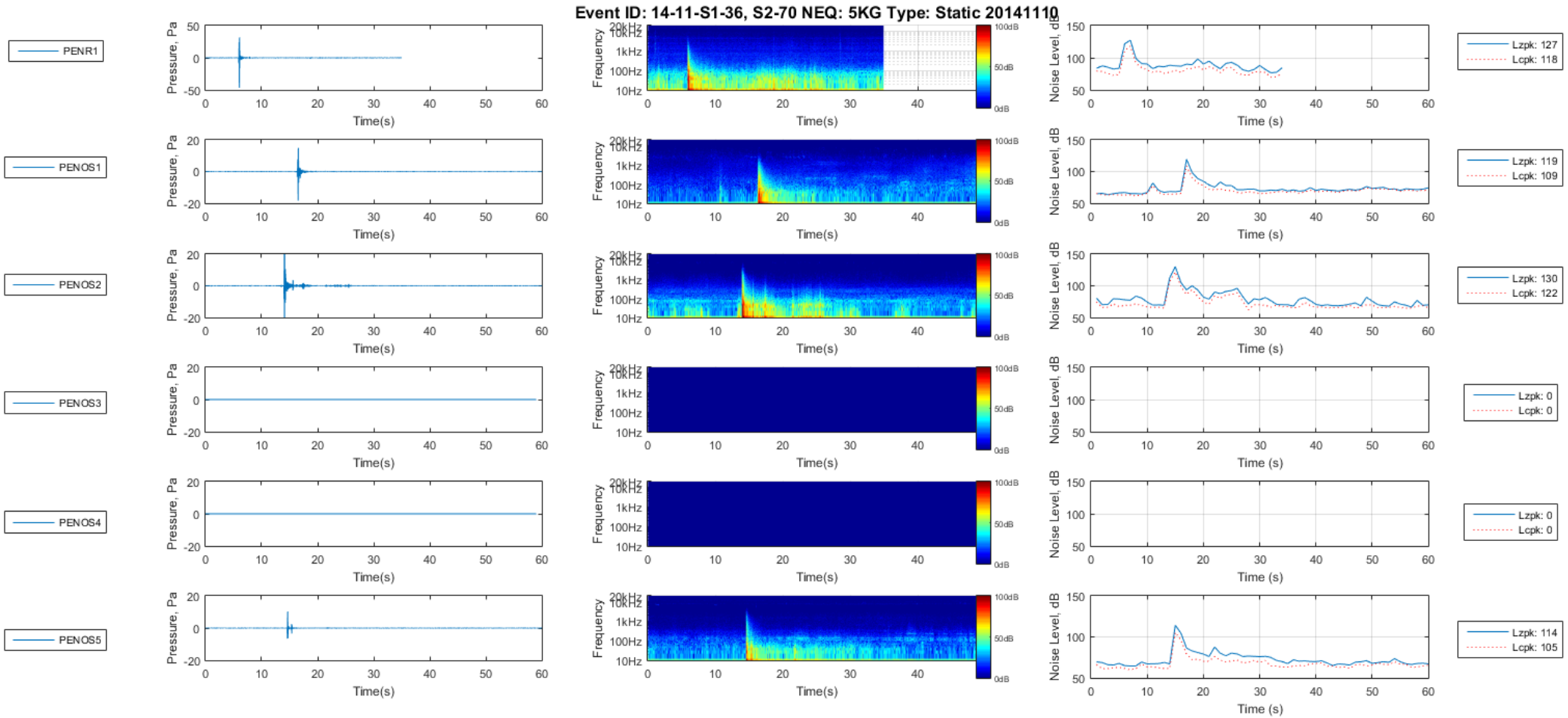


**FIGURE 2.29: COHERENCE PEN\_OS 6 - 10 14-11-S1-35, S2-69CTD**

**Event ID: 14-11-S1-35, S2-69 NEQ: , Type: Static 20141110**



**FIGURE 2.30: CROSS CORRELATION PEN\_OS 1 - 10 14-11-S1-35, S2-69**



**FIGURE 2.31: PEN\_OS 1 - 5 14-11-S1-36, S2-70**



Event ID: 14-11-S1-36, S2-70 NEQ: 5KG Type: Static 20141110 CTD

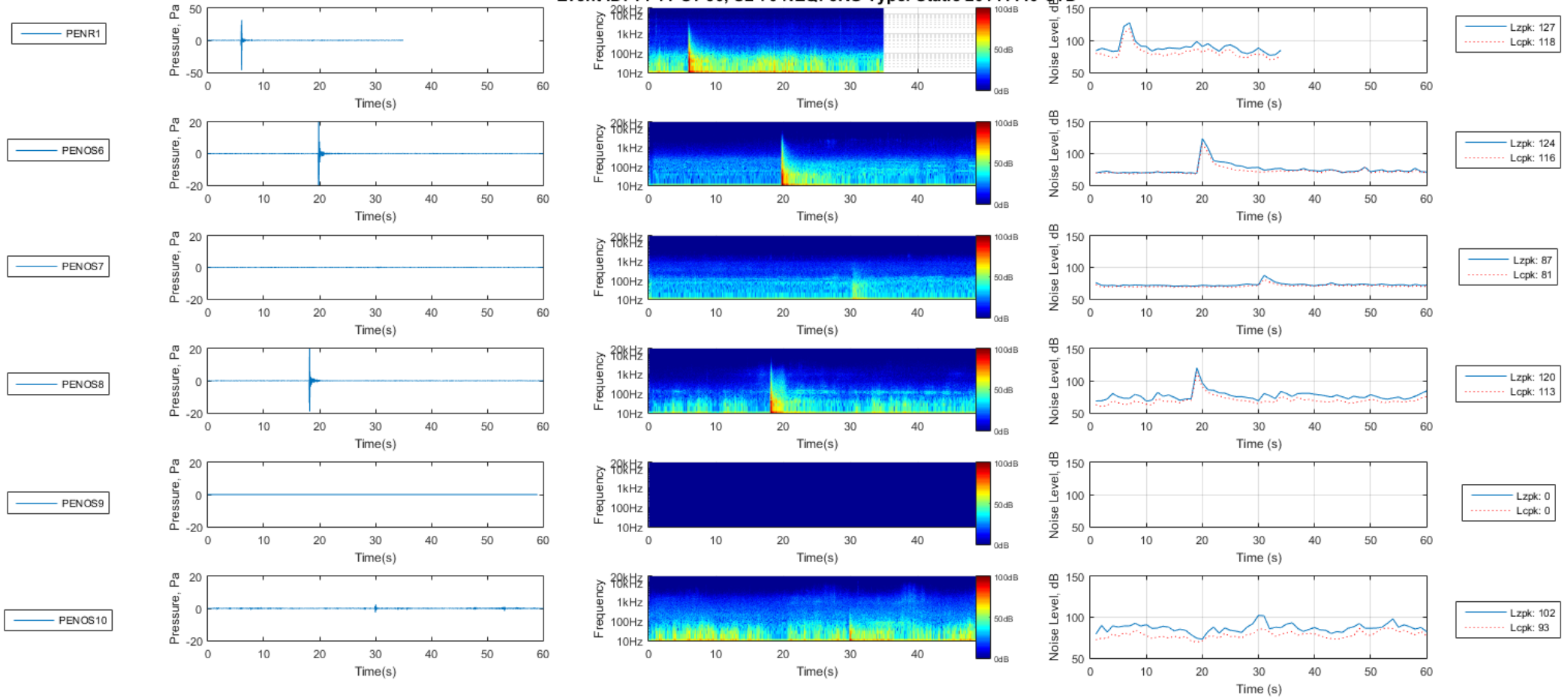
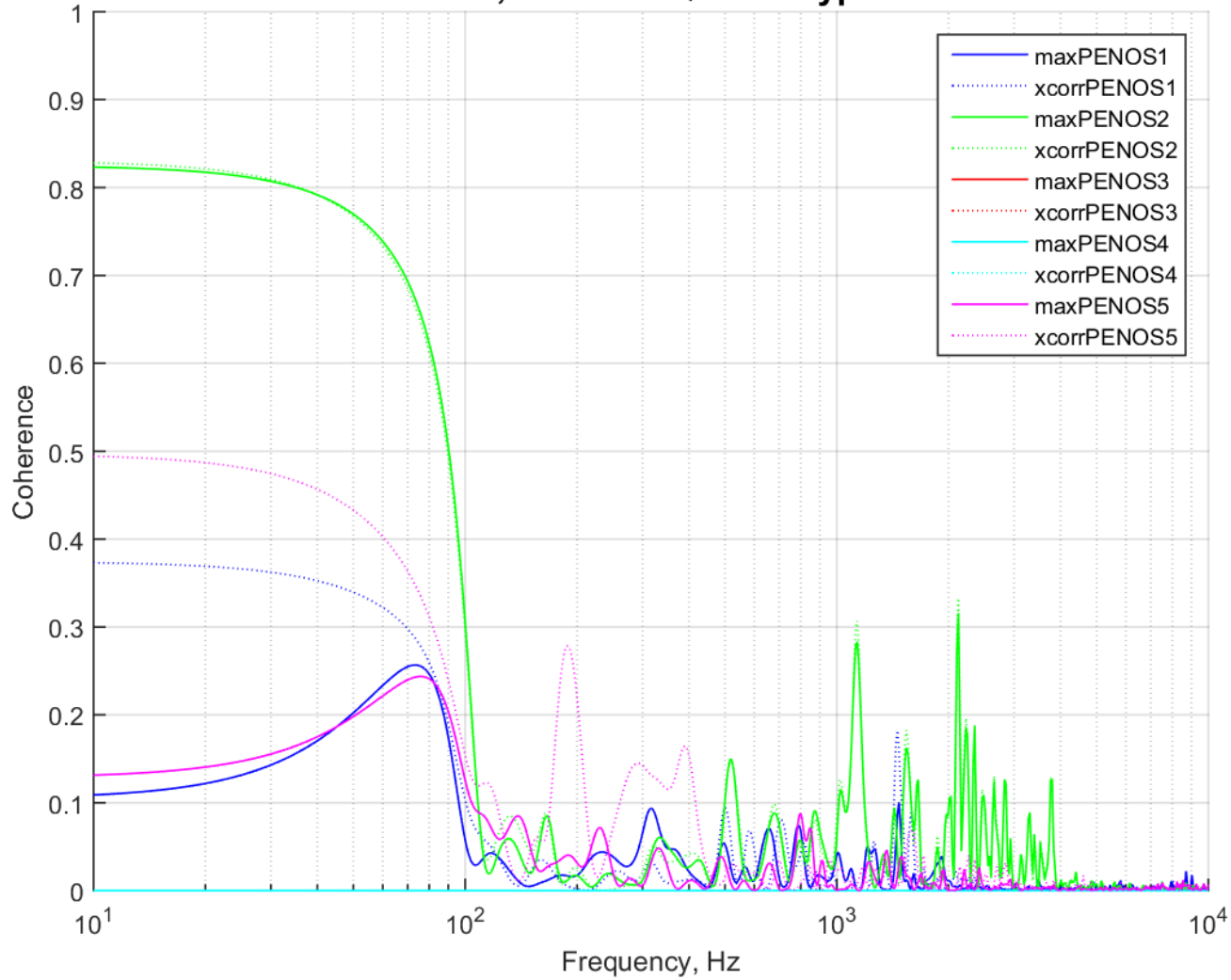


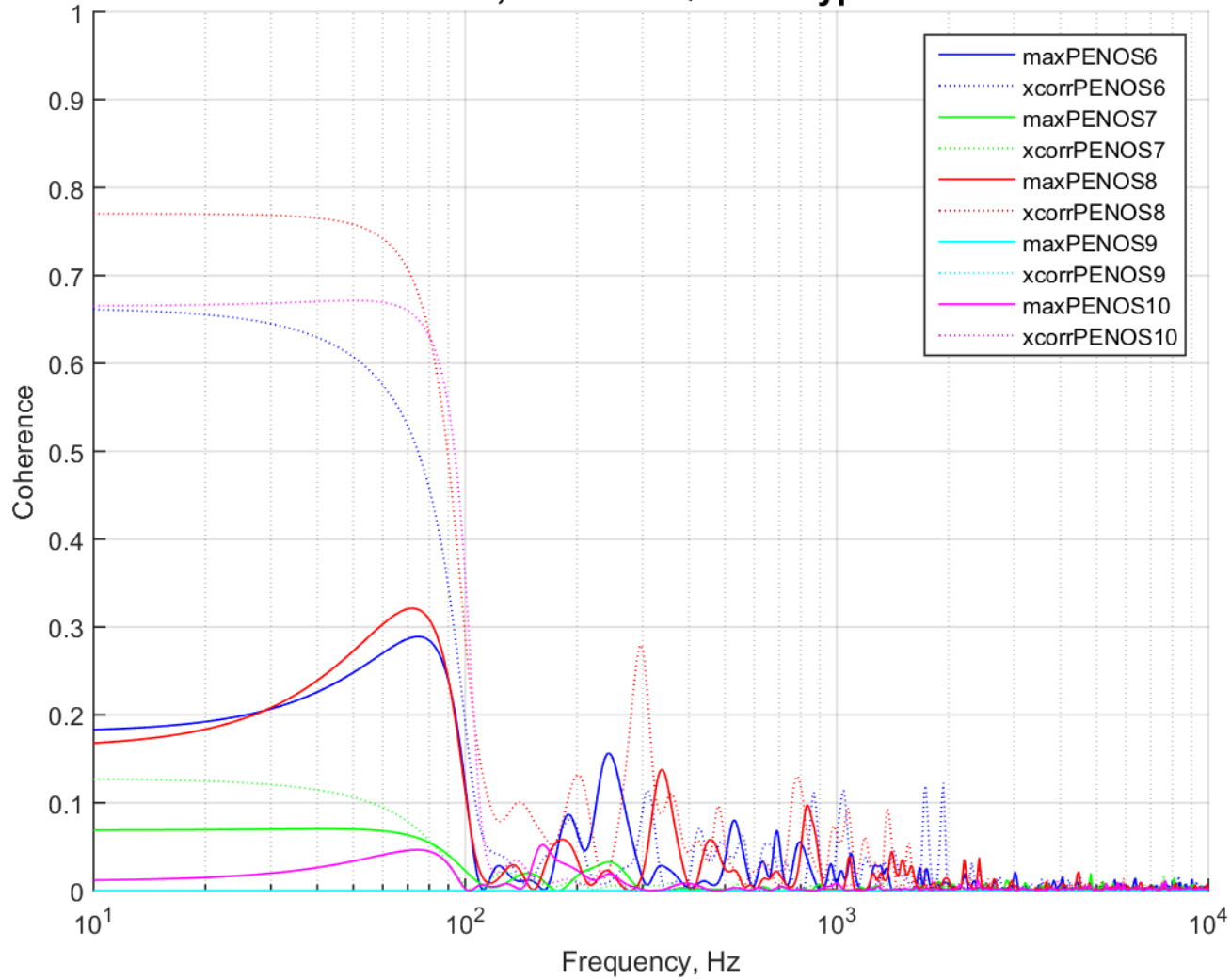
FIGURE 2.32: PEN\_OS 6 - 10 14-11-S1-36, S2-70

**Event ID: 14-11-S1-36, S2-70 NEQ: 5KG Type: Static 20141110**



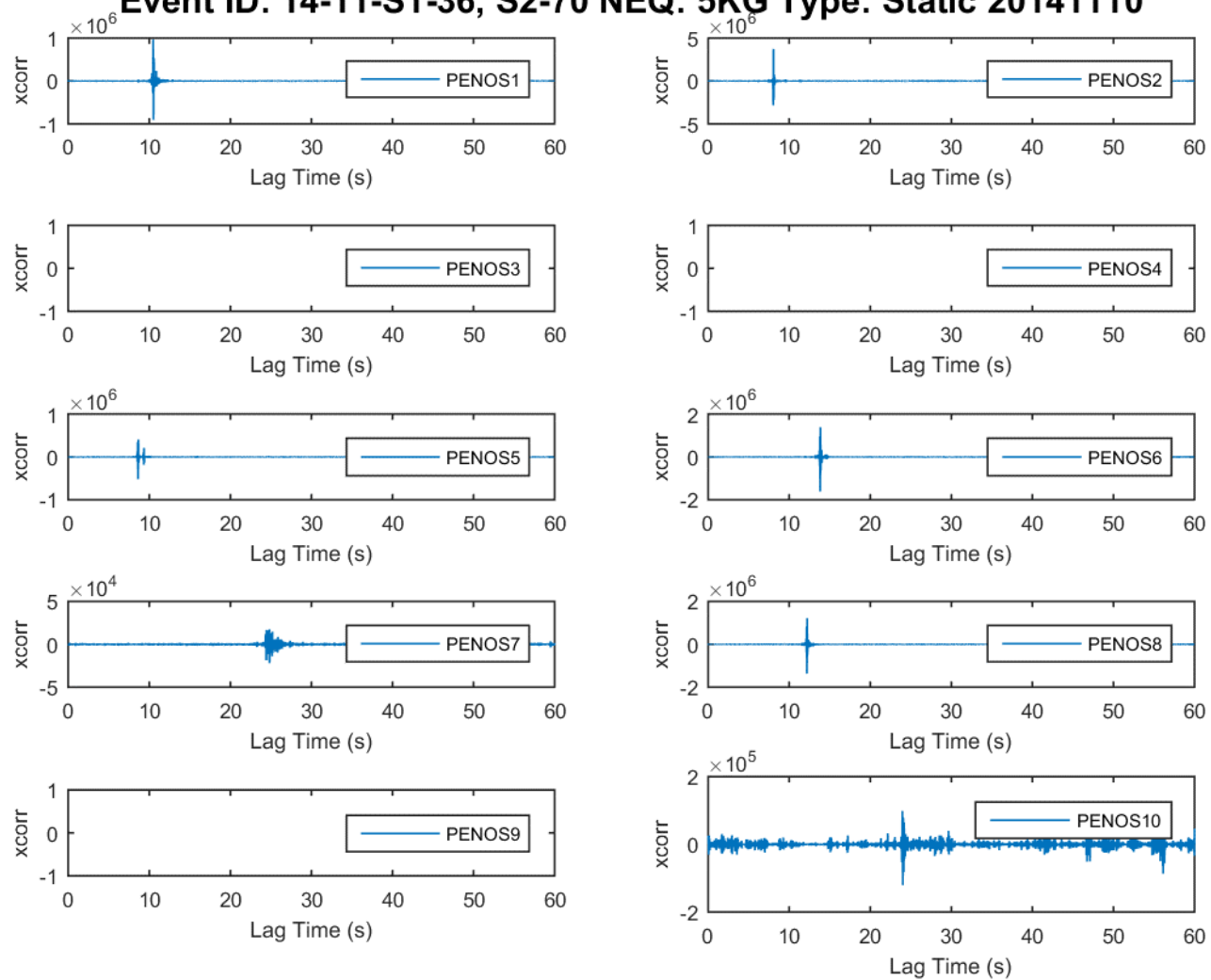
**FIGURE 2.33: COHERENCE PEN\_OS 1 - 5 14-11-S1-36, S2-70**

**Event ID: 14-11-S1-36, S2-70 NEQ: 5KG Type: Static 20141110**

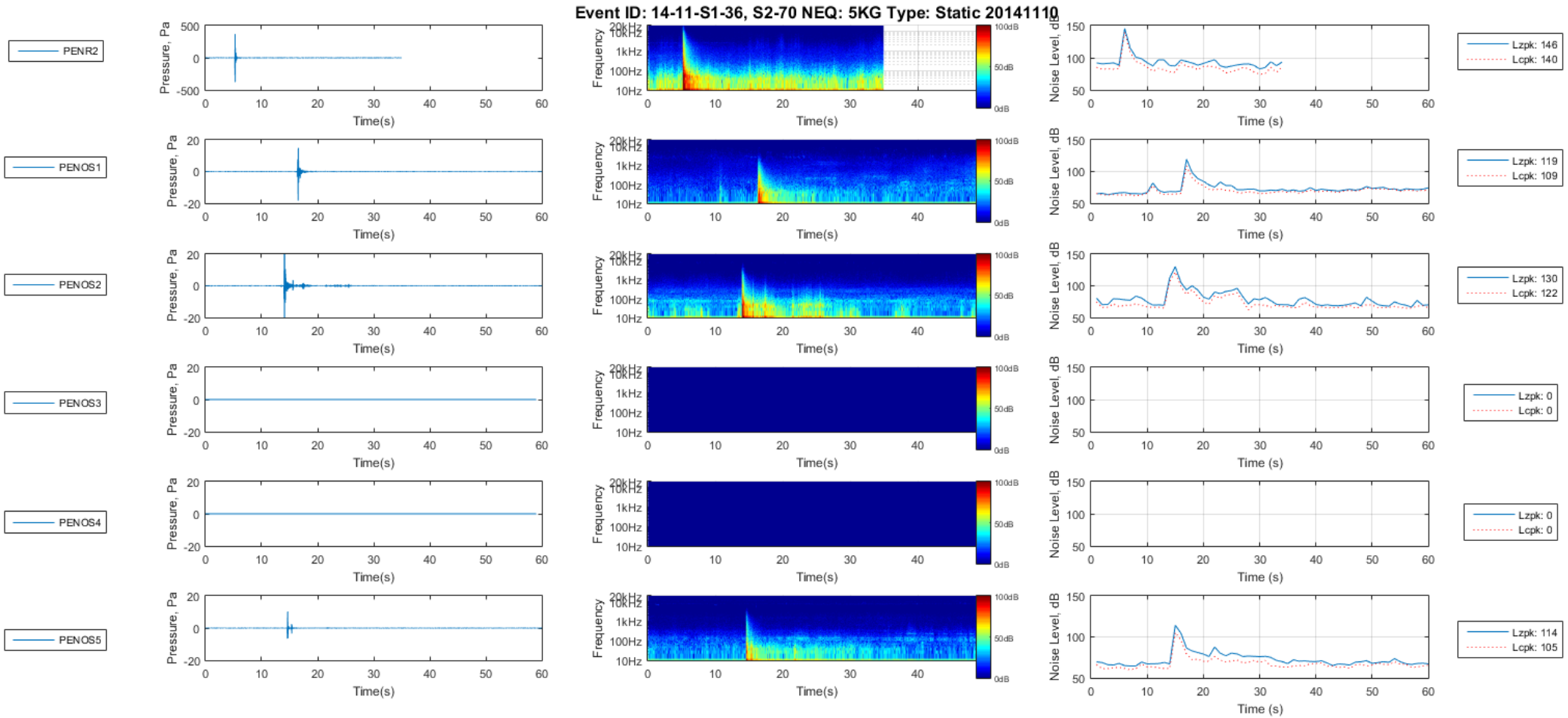


**FIGURE 2.34: COHERENCE PEN\_OS 6 - 10 14-11-S1-36, S2-70CTD**

**Event ID: 14-11-S1-36, S2-70 NEQ: 5KG Type: Static 20141110**



**FIGURE 2.35: CROSS CORRELATION PEN\_OS 1 - 10 14-11-S1-36, S2-70**



**FIGURE 2.36: PEN\_OS 1 - 5 14-11-S1-36, S2-70**

Event ID: 14-11-S1-36, S2-70 NEQ: 5KG Type: Static 20141110 CTD

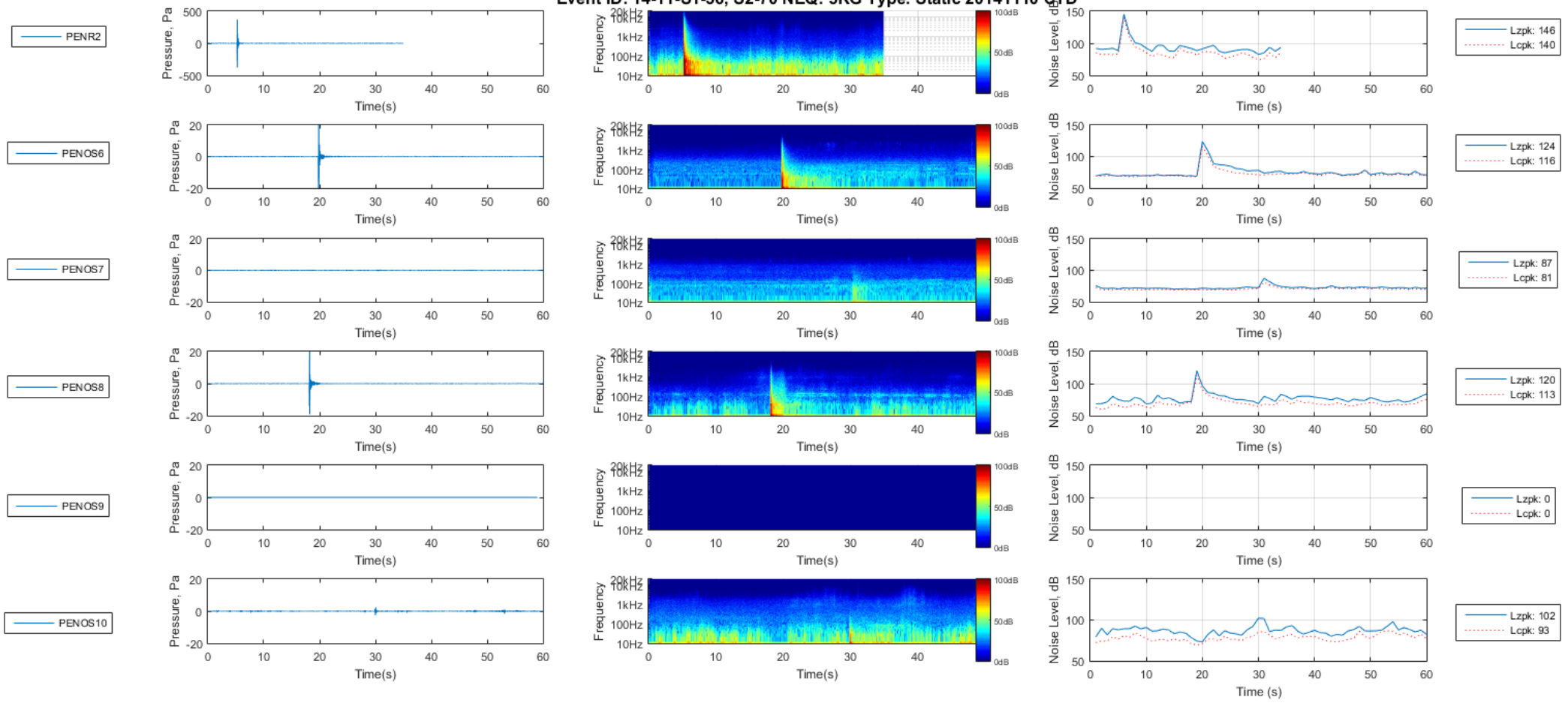
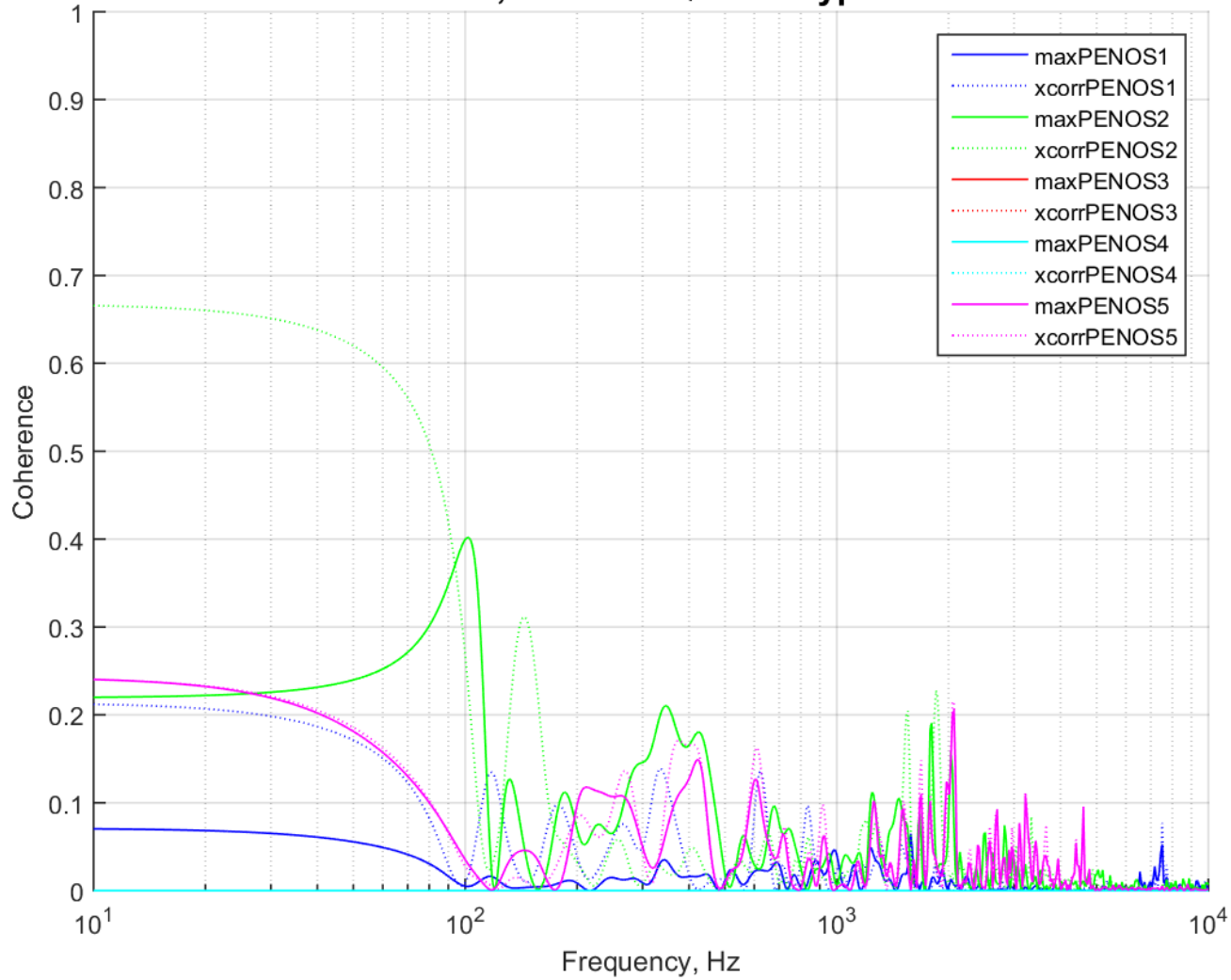


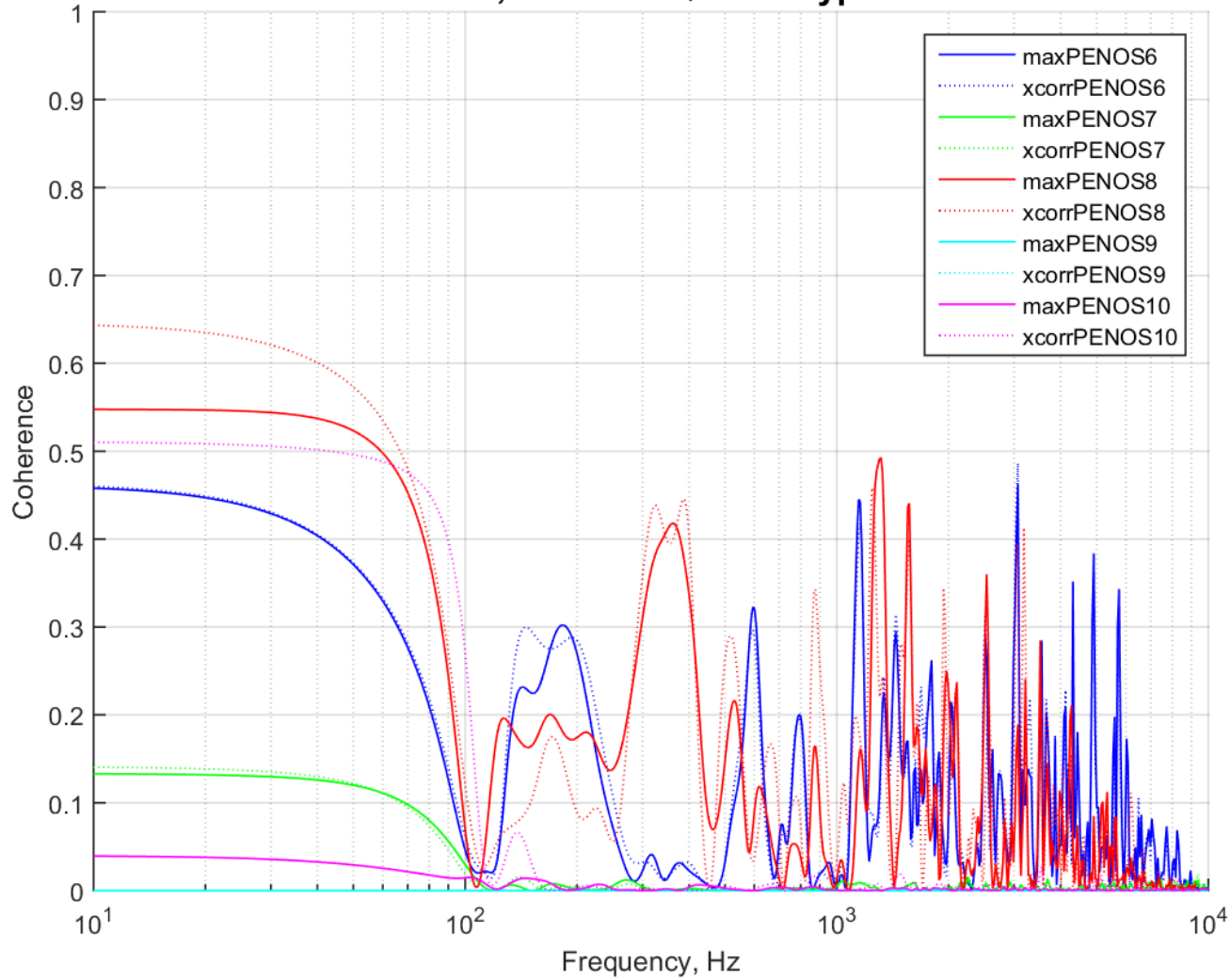
FIGURE 2.37: PEN\_OS 6 - 10 14-11-S1-36, S2-70

**Event ID: 14-11-S1-36, S2-70 NEQ: 5KG Type: Static 20141110**



**FIGURE 2.38: COHERENCE PEN\_OS 1 - 5 14-11-S1-36, S2-70**

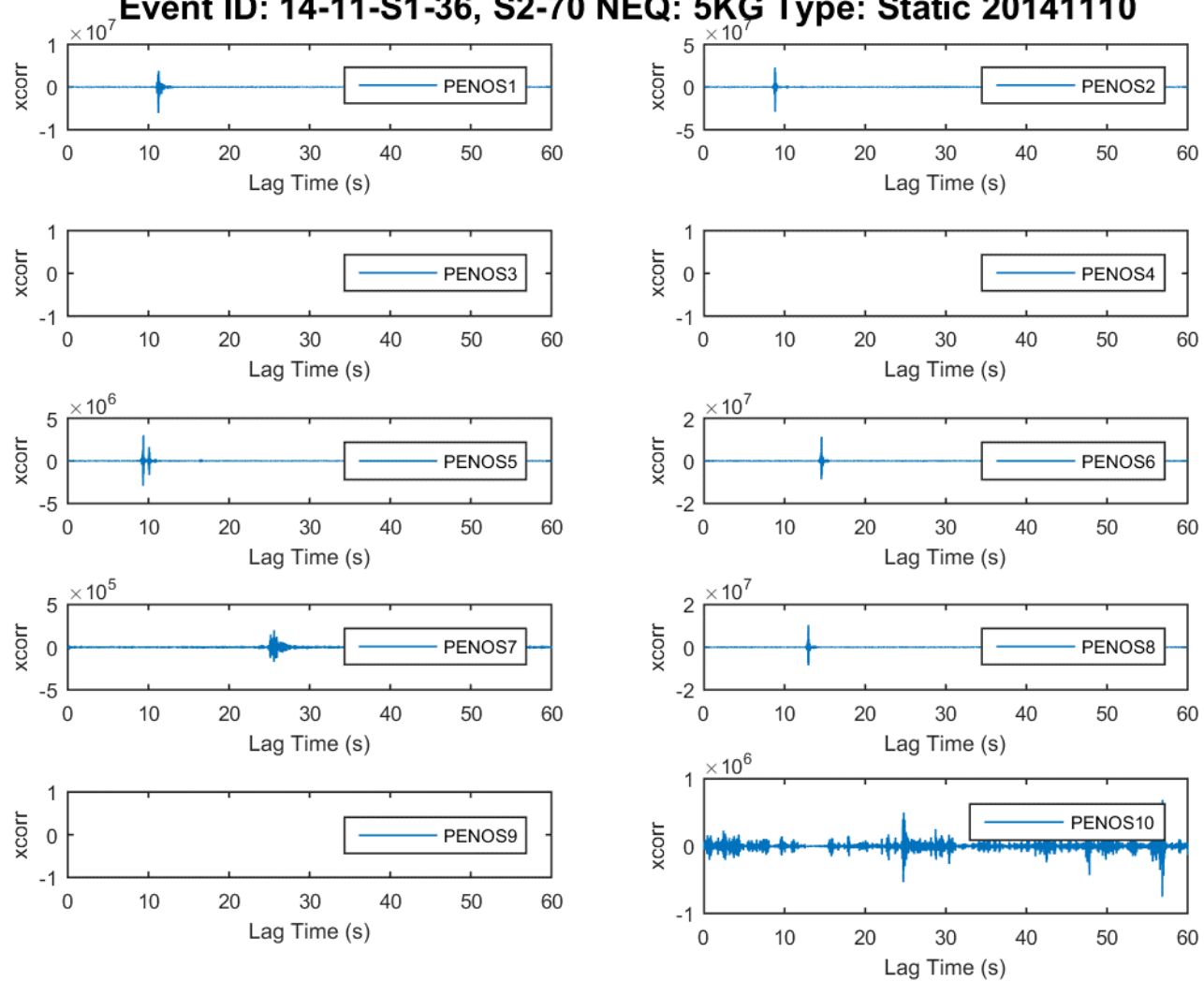
**Event ID: 14-11-S1-36, S2-70 NEQ: 5KG Type: Static 20141110**



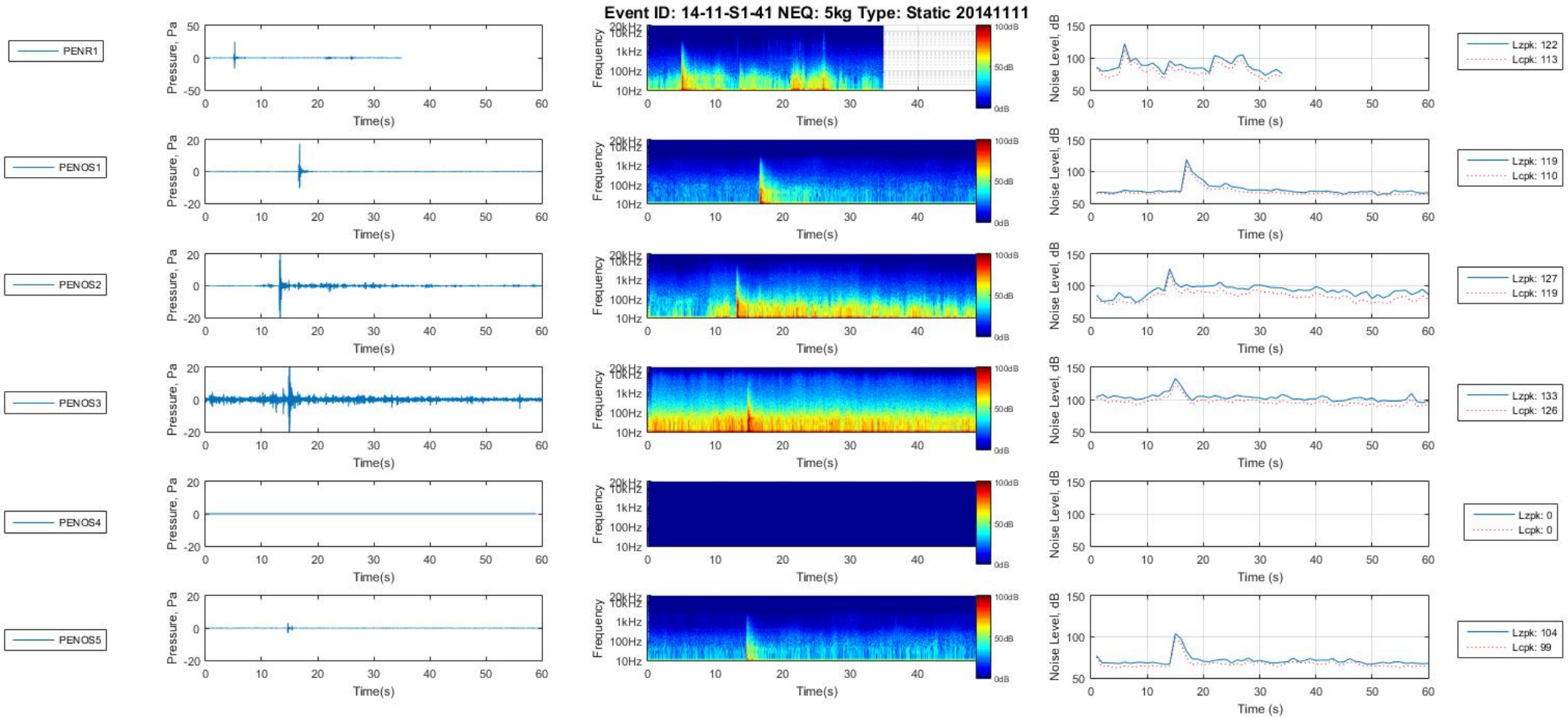
**FIGURE 2.39: COHERENCE PEN\_OS 6 - 10 14-11-S1-36, S2-70CTD**



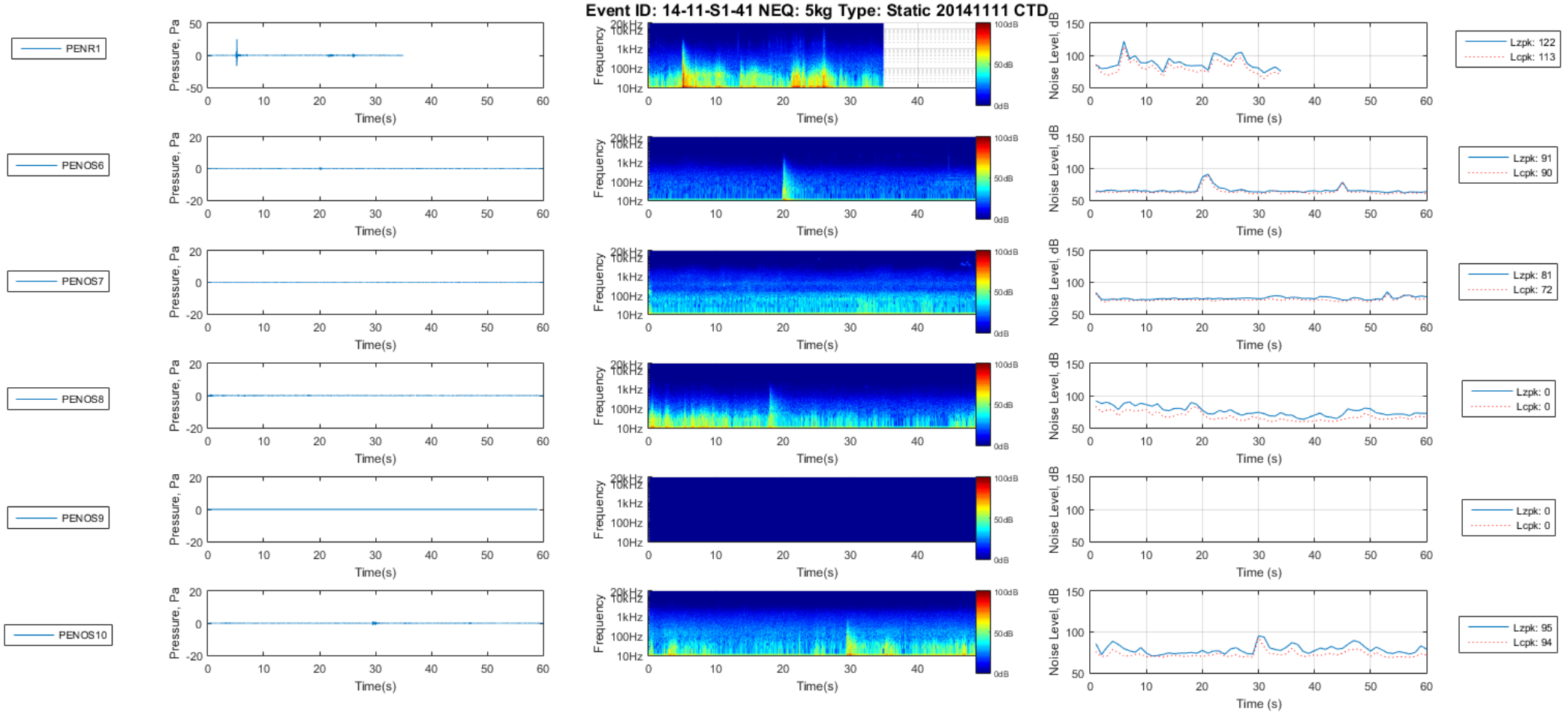
**Event ID: 14-11-S1-36, S2-70 NEQ: 5KG Type: Static 20141110**



**FIGURE 2.40: CROSS CORRELATION PEN\_OS 1 - 10 14-11-S1-36, S2-70**



**FIGURE 2.41: PEN\_OS 1 - 5 14-11-S1-41**



**FIGURE 2.42: PEN\_OS 6 - 10 14-11-S1-41**

Event ID: 14-11-S1-41 NEQ: 5kg Type: Static 20141111

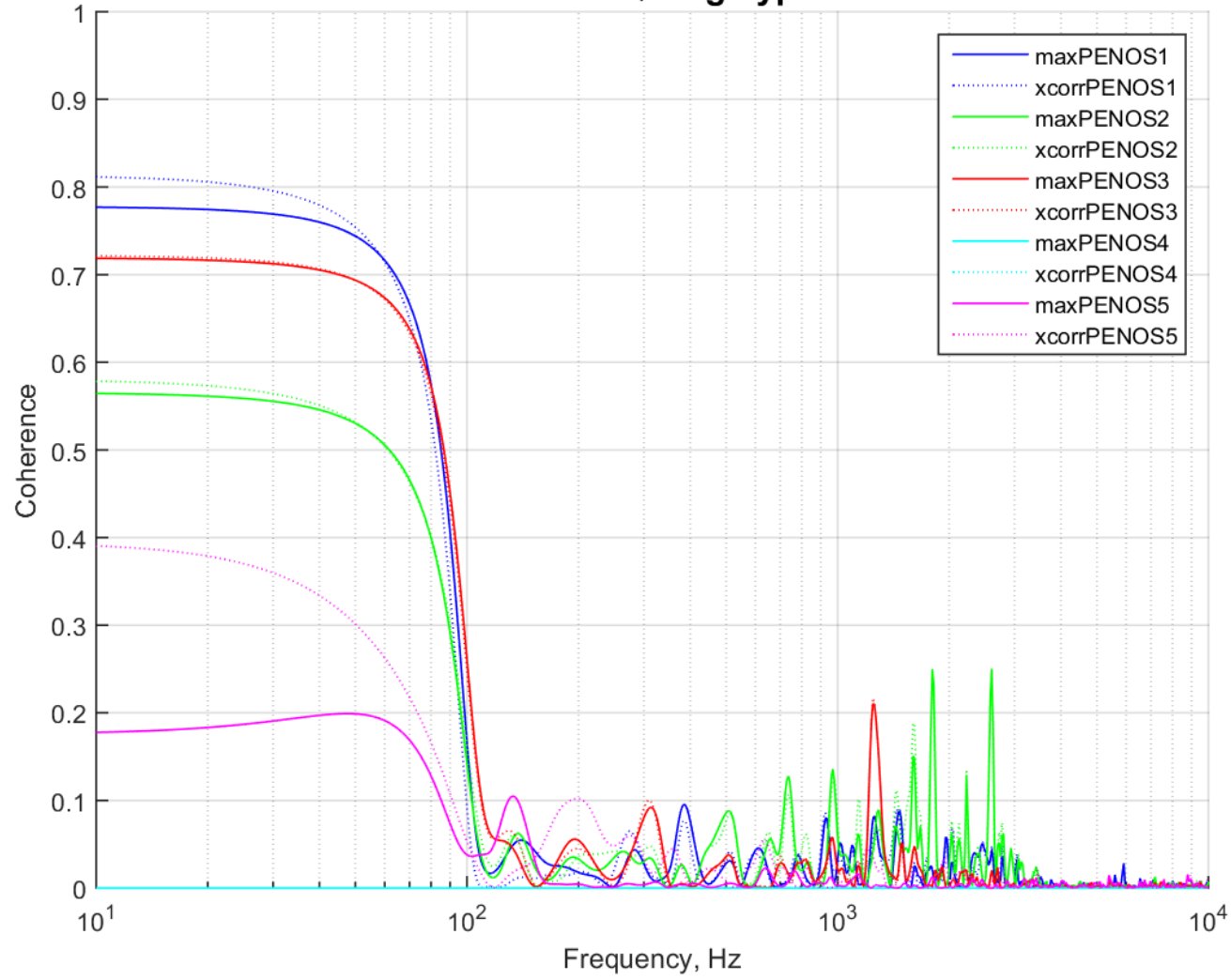


FIGURE 2.43: COHERENCE PEN\_OS 1 - 5 14-11-S1-41

Event ID: 14-11-S1-41 NEQ: 5kg Type: Static 20141111

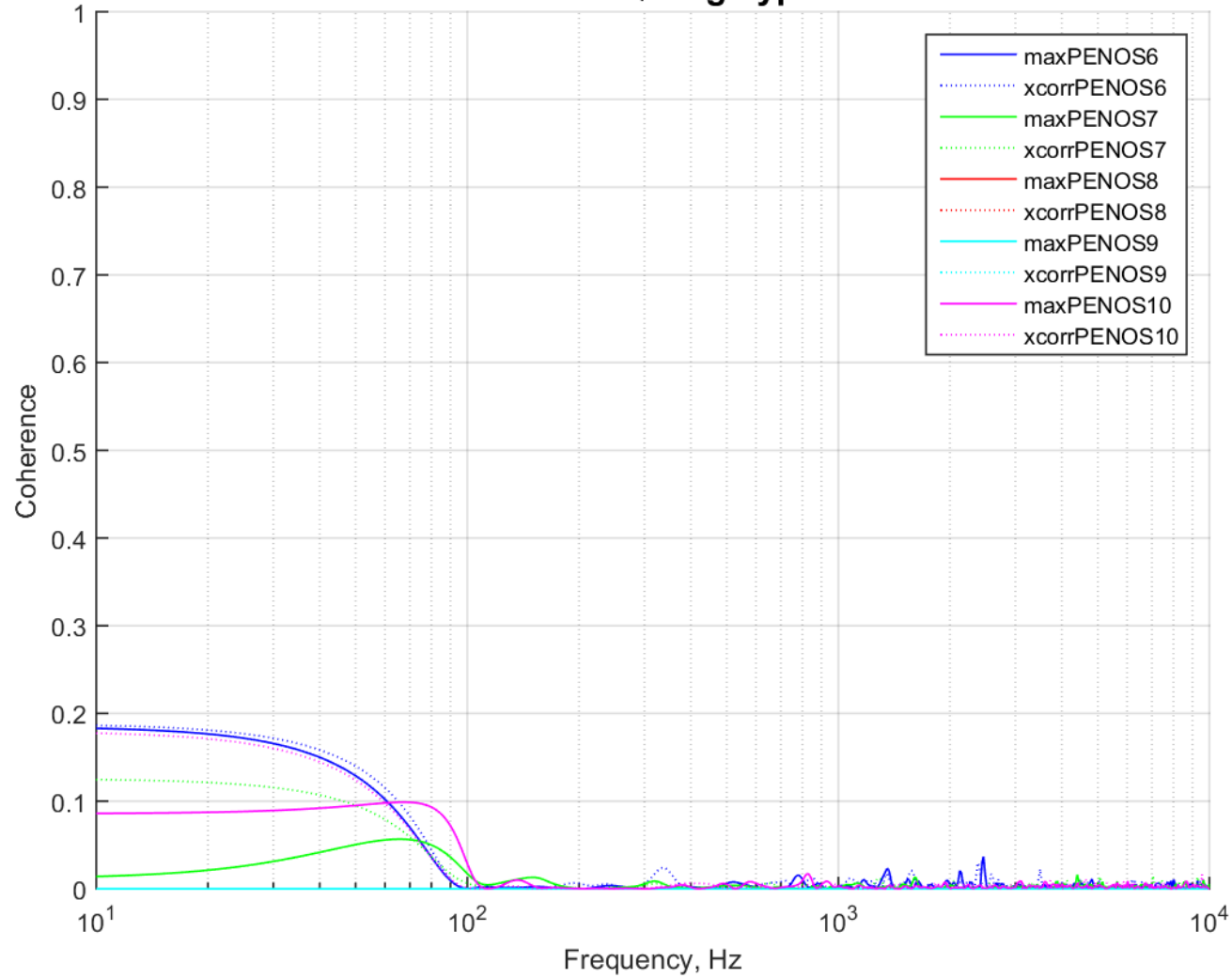
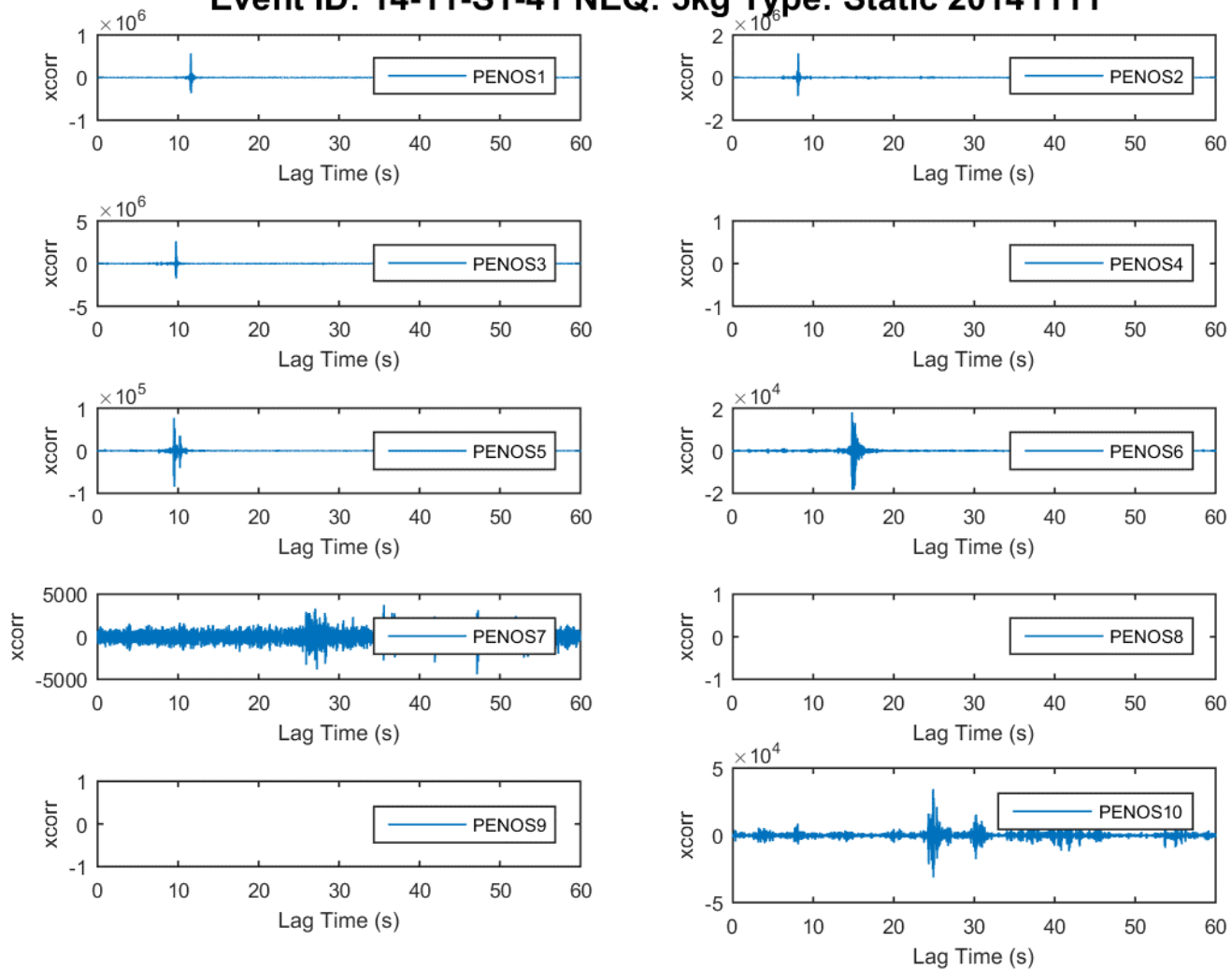


FIGURE 2.44: COHERENCE PEN\_OS 6 - 10 14-11-S1-41CTD

**Event ID: 14-11-S1-41 NEQ: 5kg Type: Static 20141111**



**FIGURE 2.45: CROSS CORRELATION PEN\_OS 1 - 10 14-11-S1-41**

Event ID: 14-11-S1-41 NEQ: 5kg Type: Static 20141111

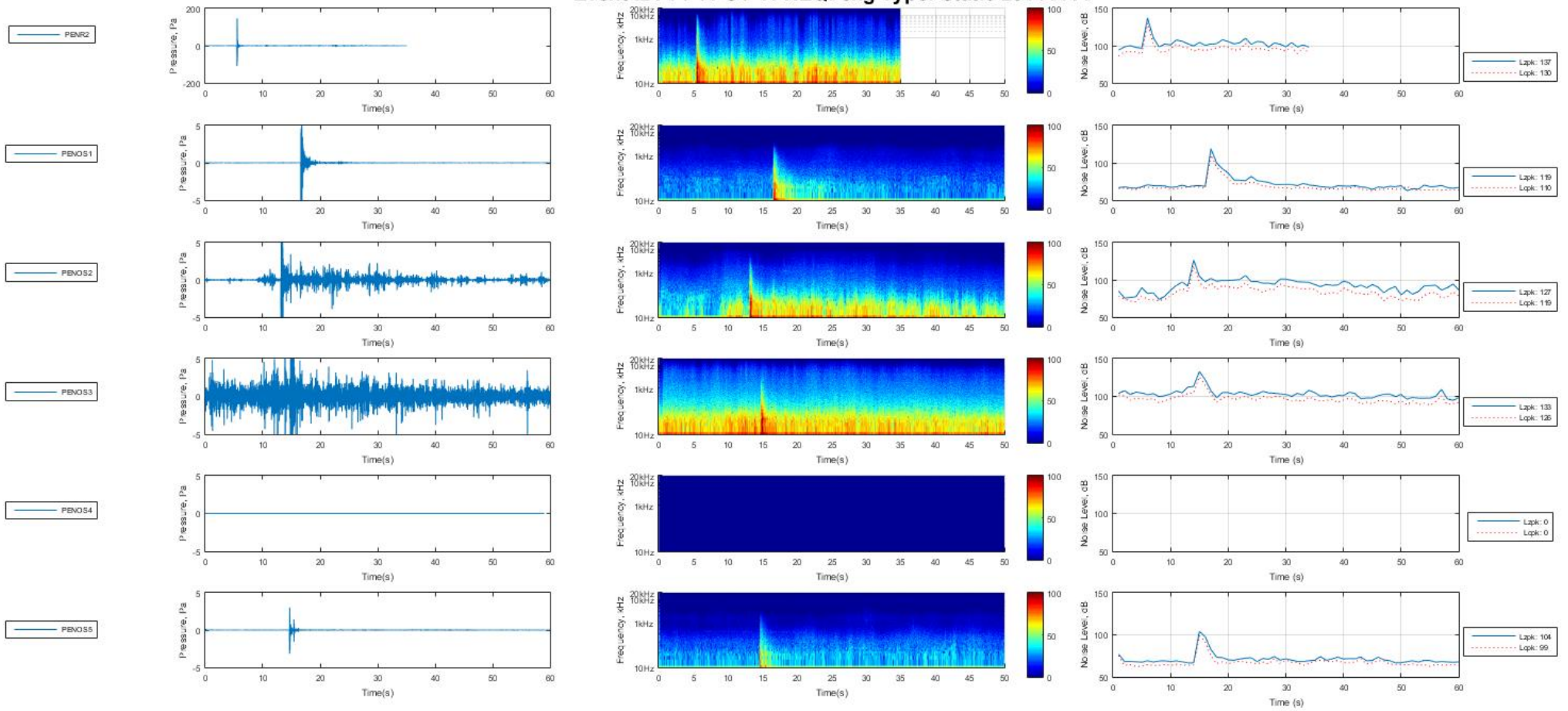


FIGURE 2.46: PEN\_OS 1 - 5 14-11-S1-41

Event ID: 14-11-S1-41 NEQ: 5kg Type: Static 20141111 CTD

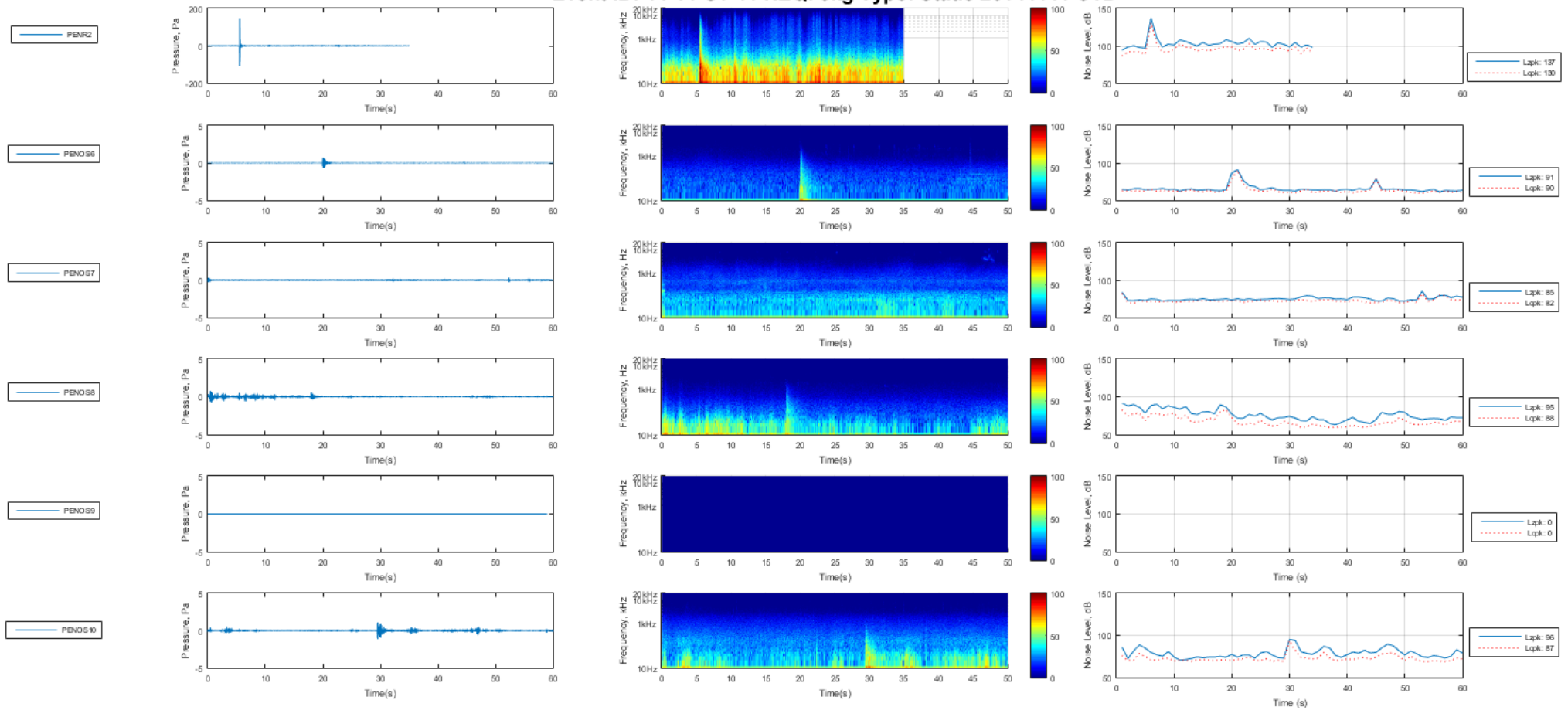
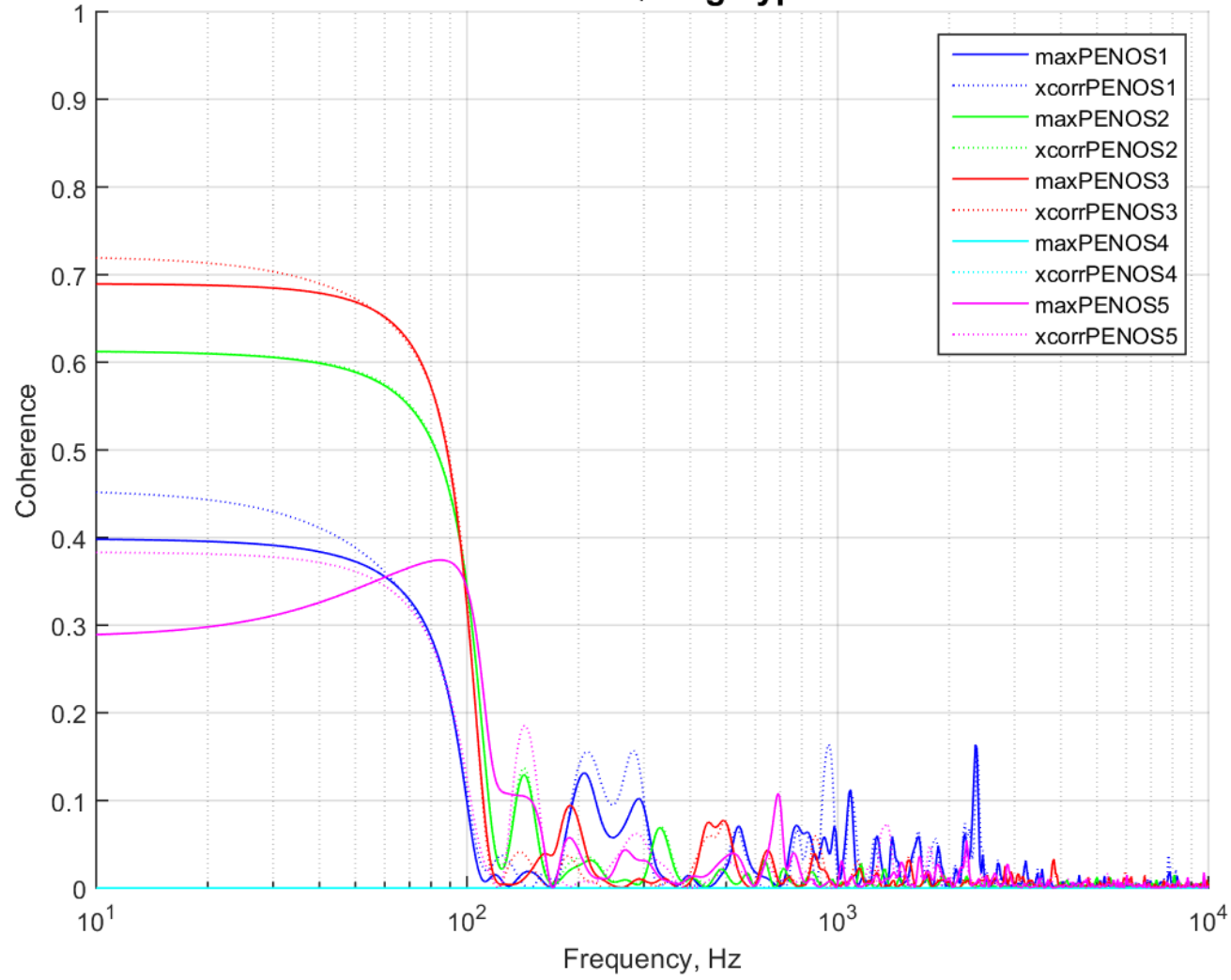


FIGURE 2.47: PEN\_OS 6 - 10 14-11-S1-41



**Event ID: 14-11-S1-41 NEQ: 5kg Type: Static 20141111**



**FIGURE 2.48: COHERENCE PEN\_OS 1 - 5 14-11-S1-41**

Event ID: 14-11-S1-41 NEQ: 5kg Type: Static 20141111

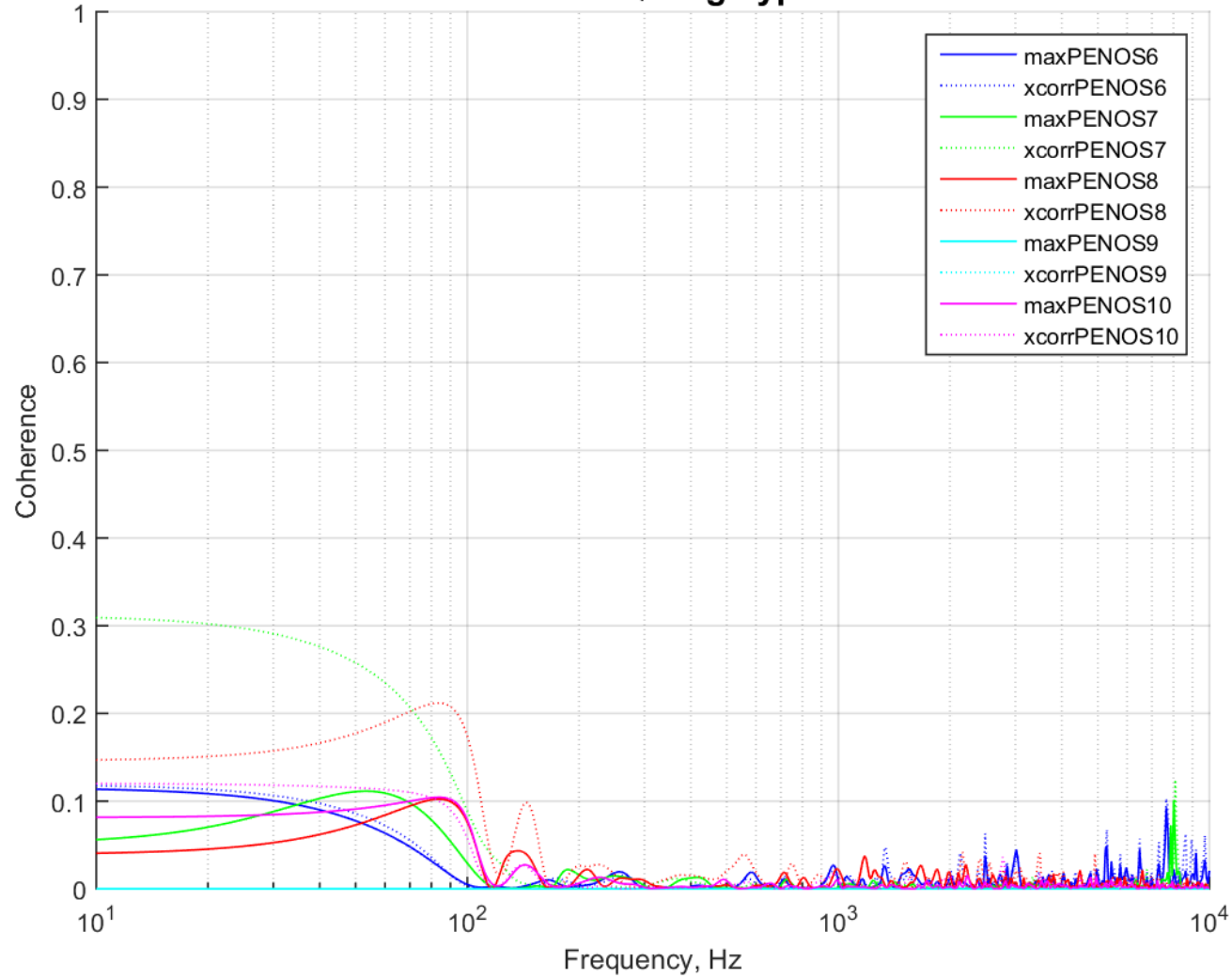
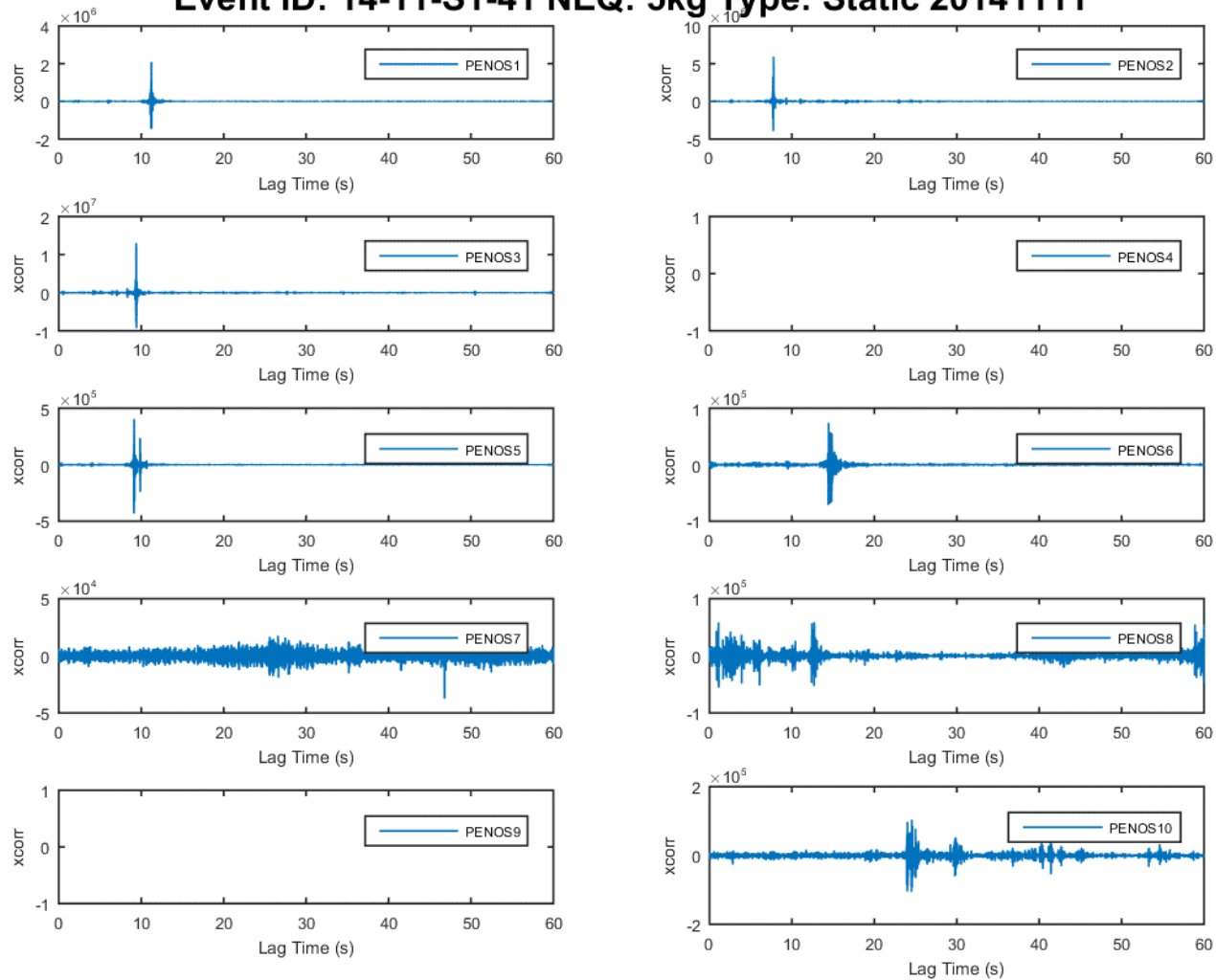
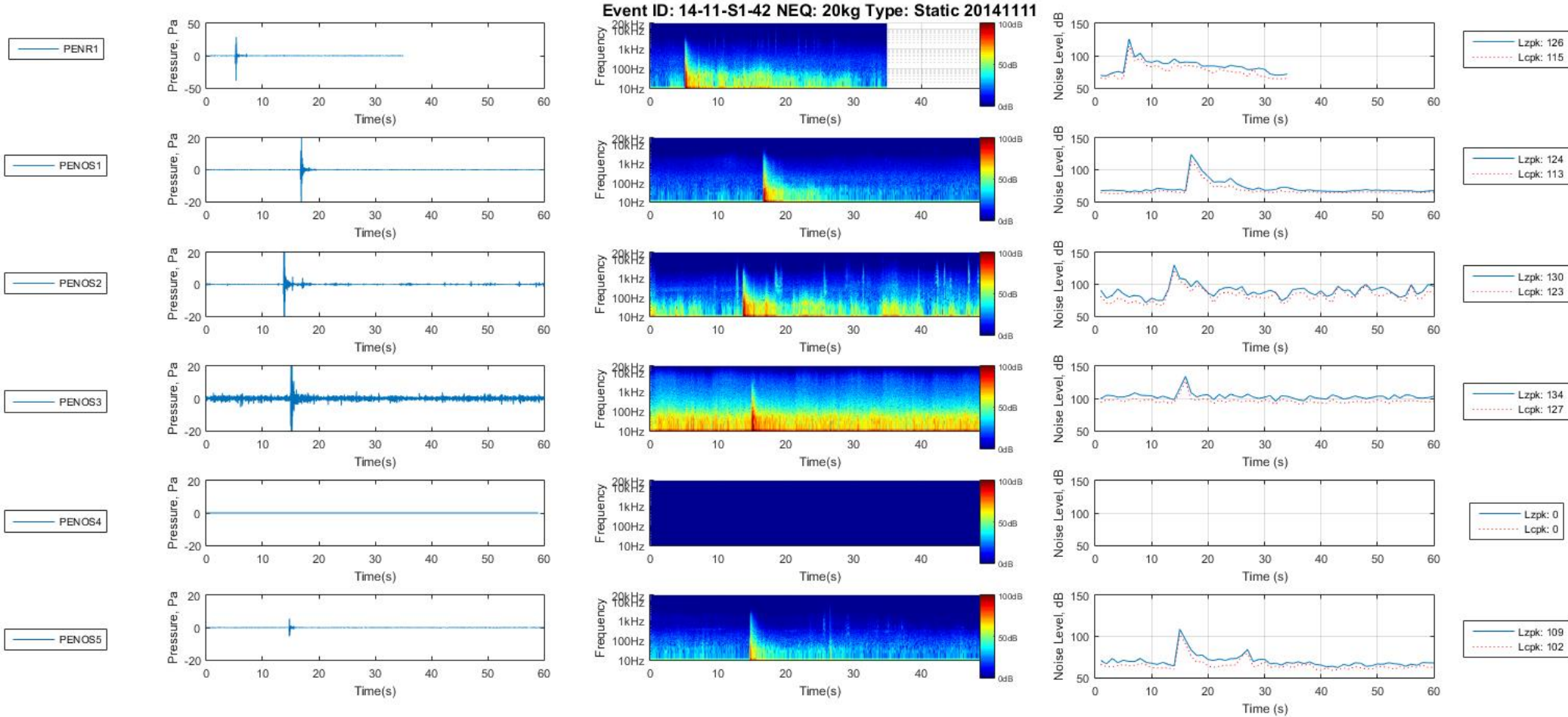


FIGURE 2.49: COHERENCE PEN\_OS 6 - 10 14-11-S1-41CTD

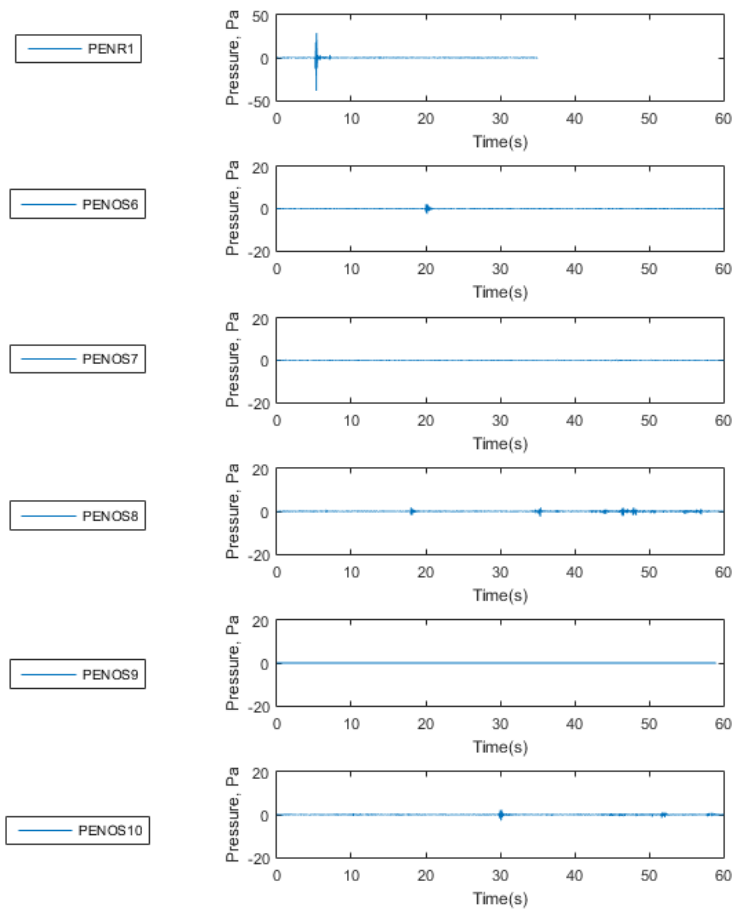
**Event ID: 14-11-S1-41 NEQ: 5kg Type: Static 20141111**



**FIGURE 2.50: CROSS CORRELATION PEN\_OS 1 - 10 14-11-S1-41**



**FIGURE 2.51: PEN\_OS 1 - 5 14-11-S1-42**



Event ID: 14-11-S1-42 NEQ: 20kg Type: Static 20141111 CTD.

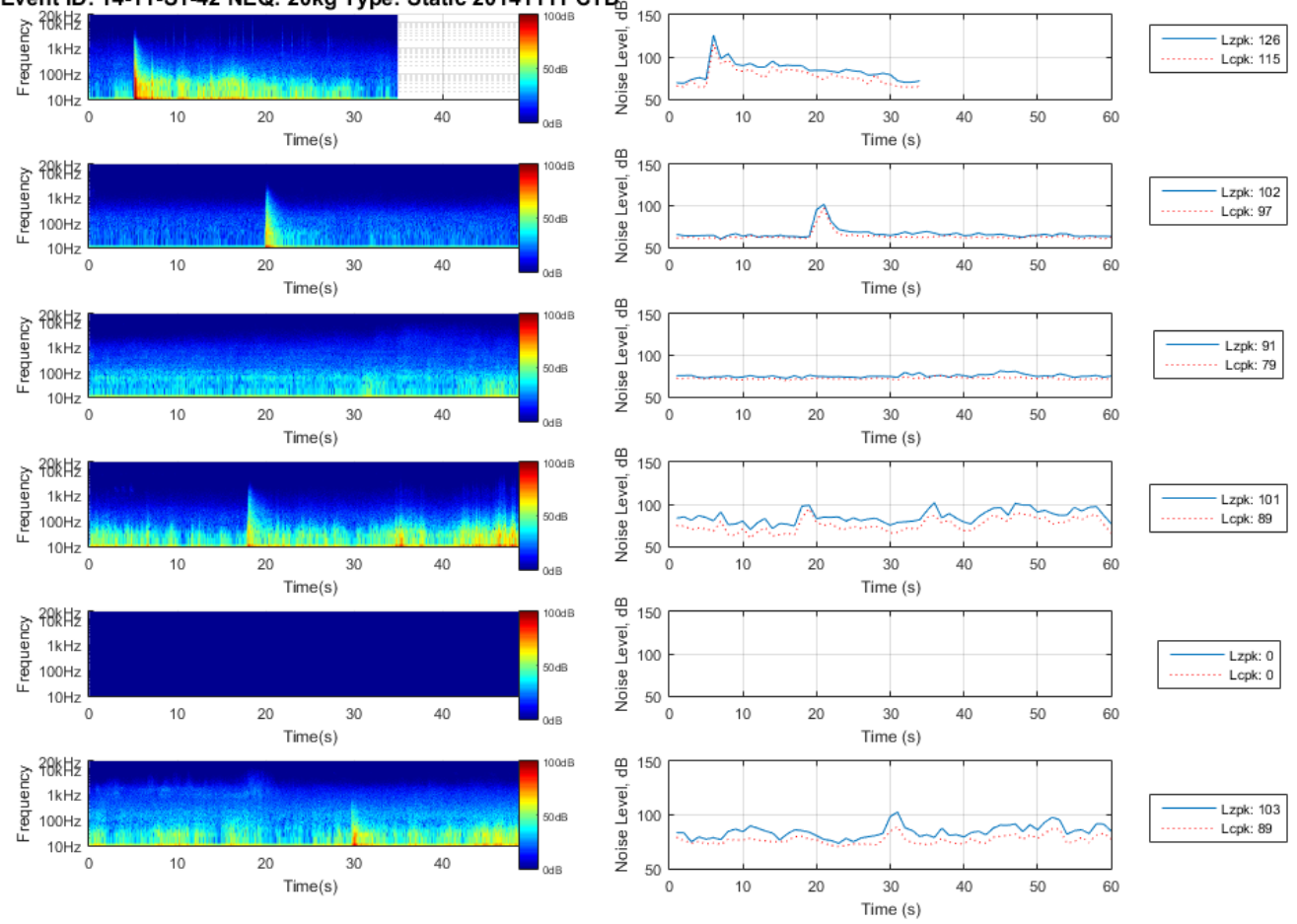


FIGURE 2.52: PEN\_OS 6 - 10 14-11-S1-42

Event ID: 14-11-S1-42 NEQ: 20kg Type: Static 20141111

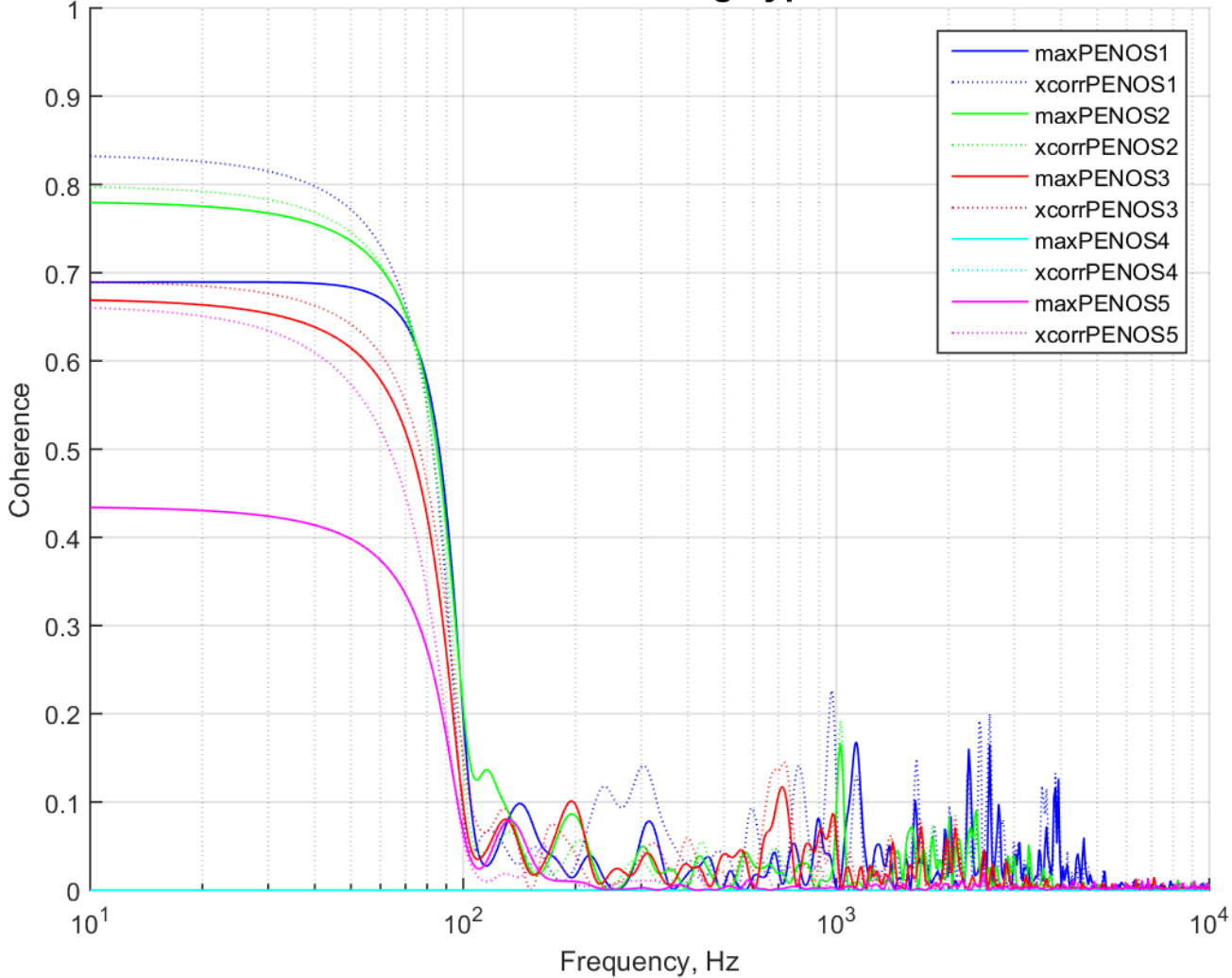


FIGURE 2.53: COHERENCE PEN\_OS 1 - 5 14-11-S1-42

Event ID: 14-11-S1-42 NEQ: 20kg Type: Static 20141111

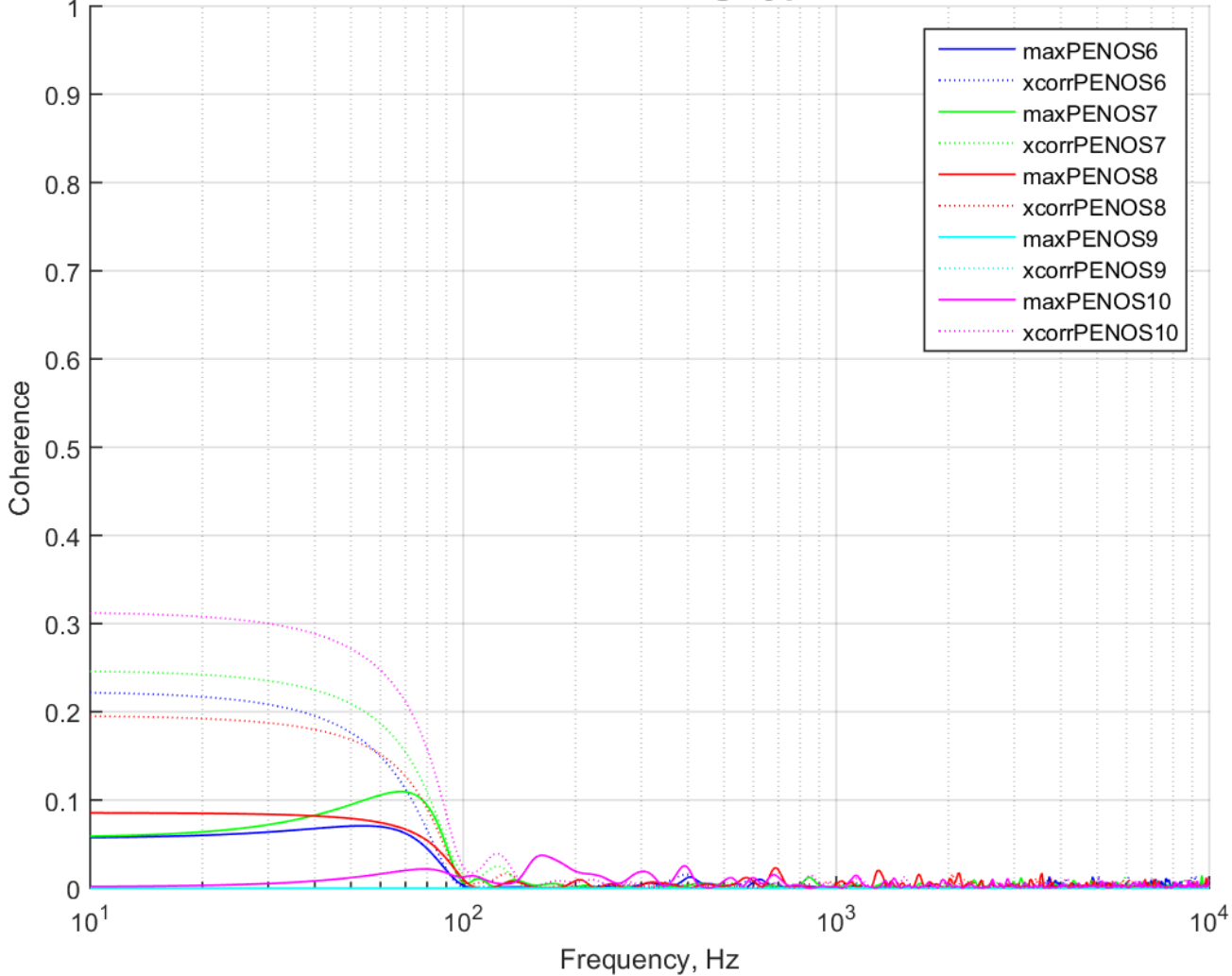
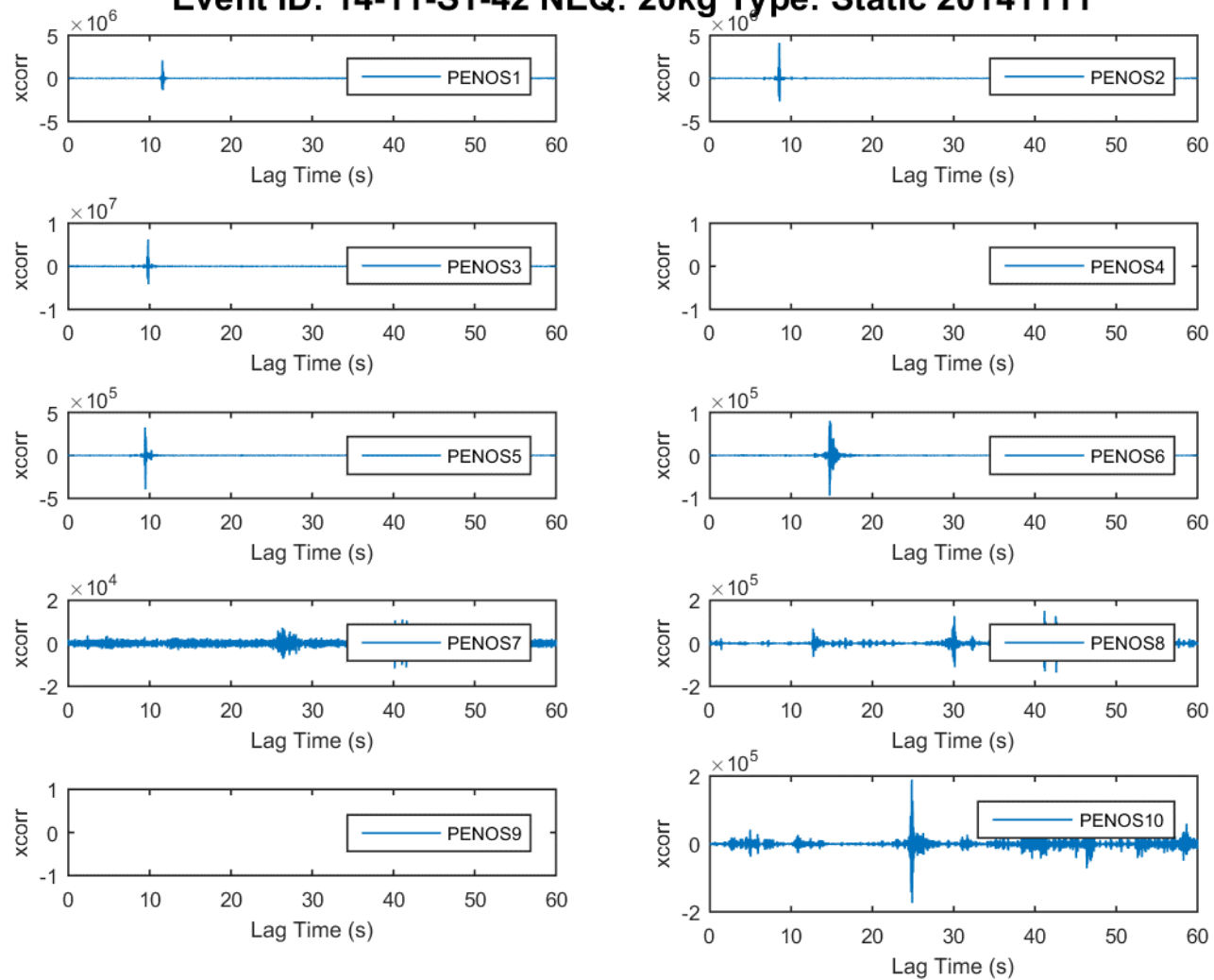


FIGURE 2.54: COHERENCE PEN\_OS 6 - 10 14-11-S1-42CTD

**Event ID: 14-11-S1-42 NEQ: 20kg Type: Static 20141111**



**FIGURE 2.55: CROSS CORRELATION PEN\_OS 1 - 10 14-11-S1-42**



Event ID: 14-11-S1-42 NEQ: 20kg Type: Static 20141111

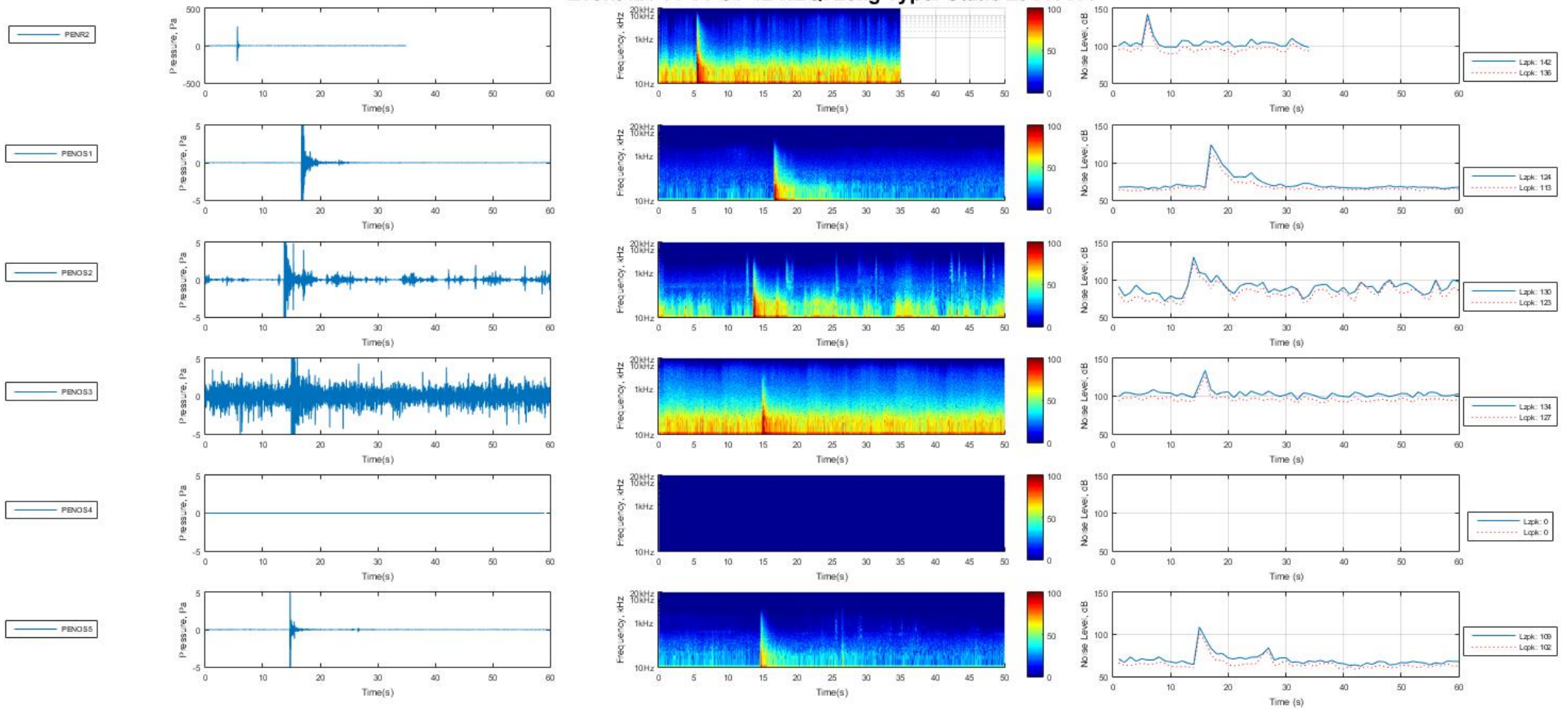


FIGURE 2.56: PEN\_OS 1 - 5 14-11-S1-42

Event ID: 14-11-S1-42 NEQ: 20kg Type: Static 20141111 CTD

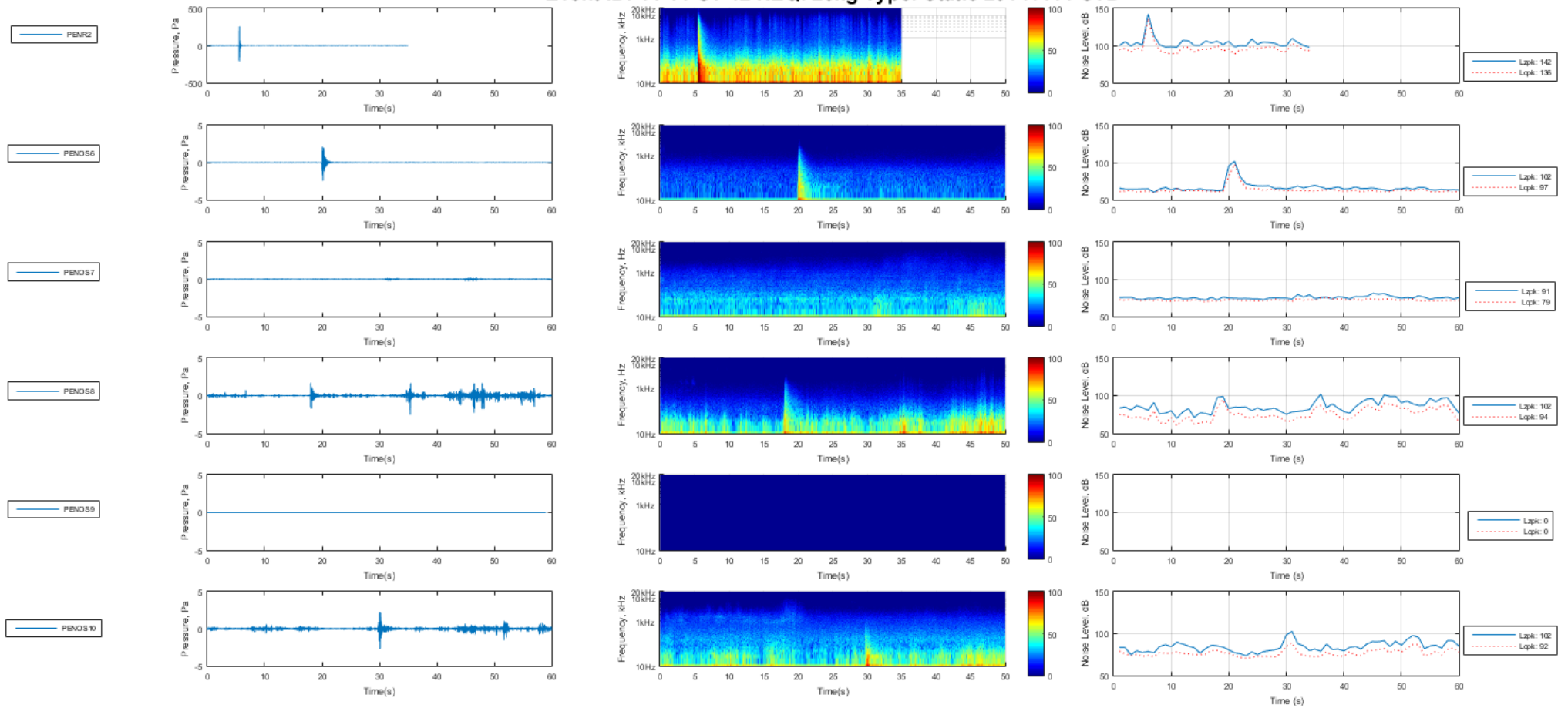


FIGURE 2.57: PEN\_OS 6 - 10 14-11-S1-42

Event ID: 14-11-S1-42 NEQ: 20kg Type: Static 20141111

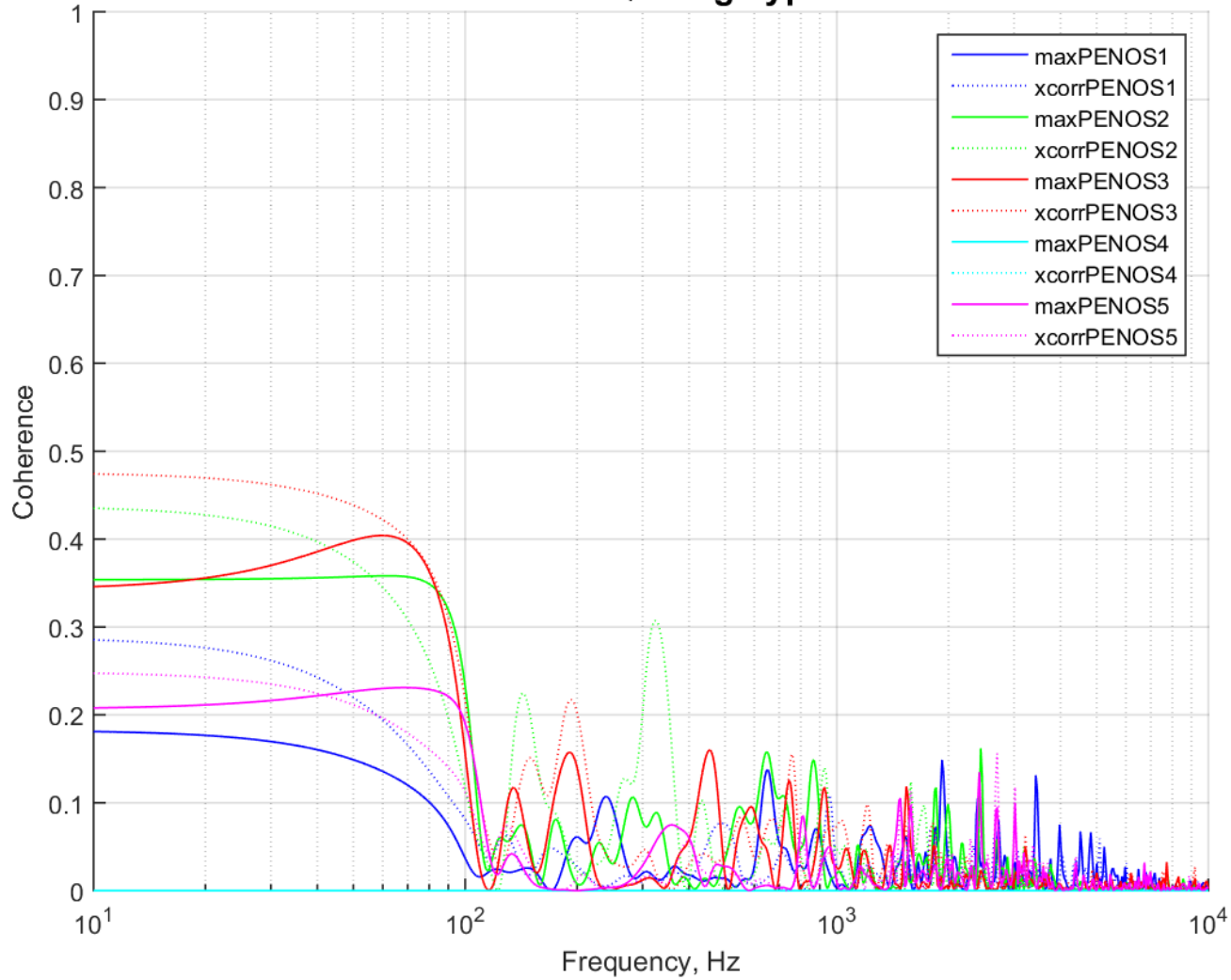


FIGURE 2.58: COHERENCE PEN\_OS 1 - 5 14-11-S1-42

Event ID: 14-11-S1-42 NEQ: 20kg Type: Static 20141111

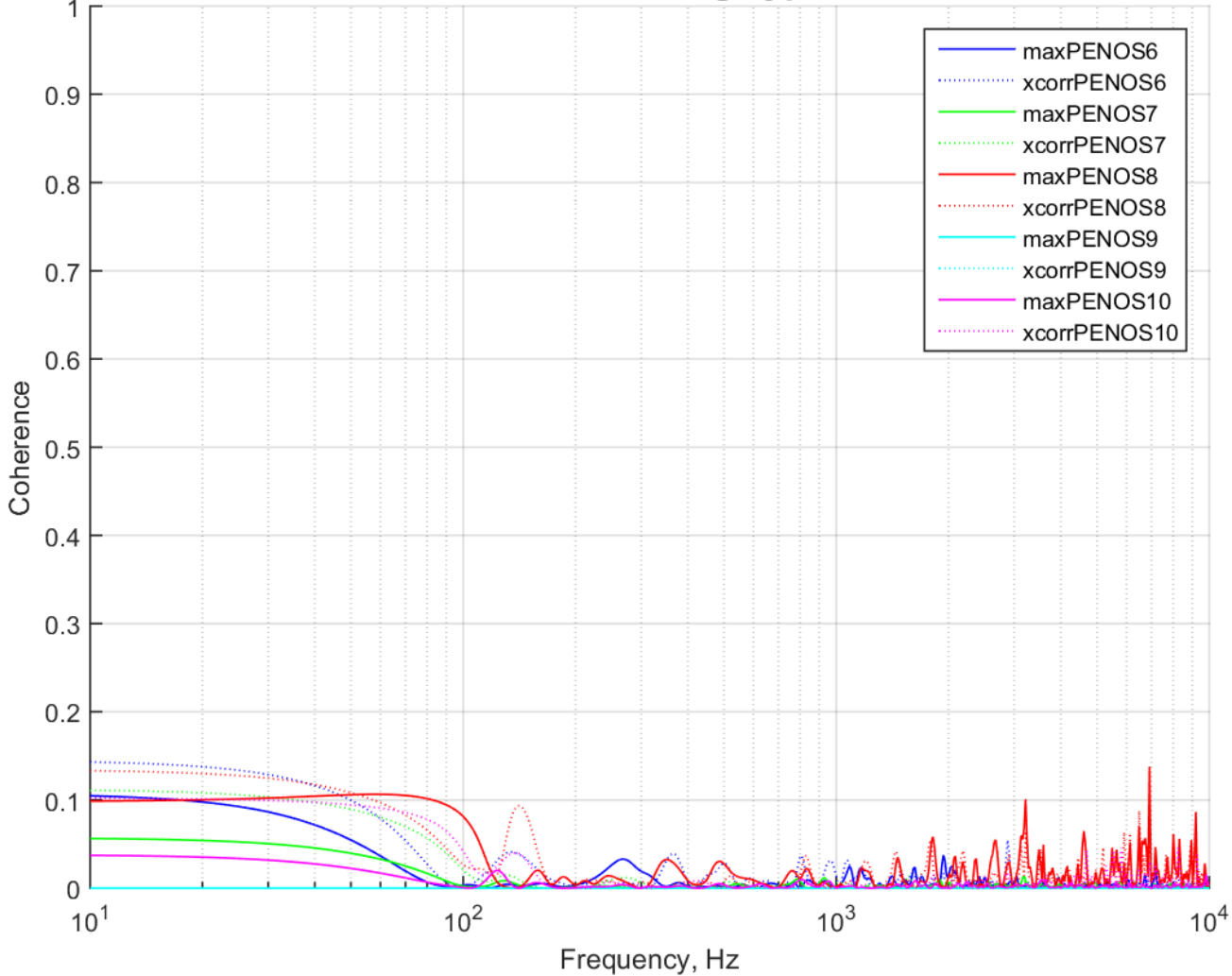
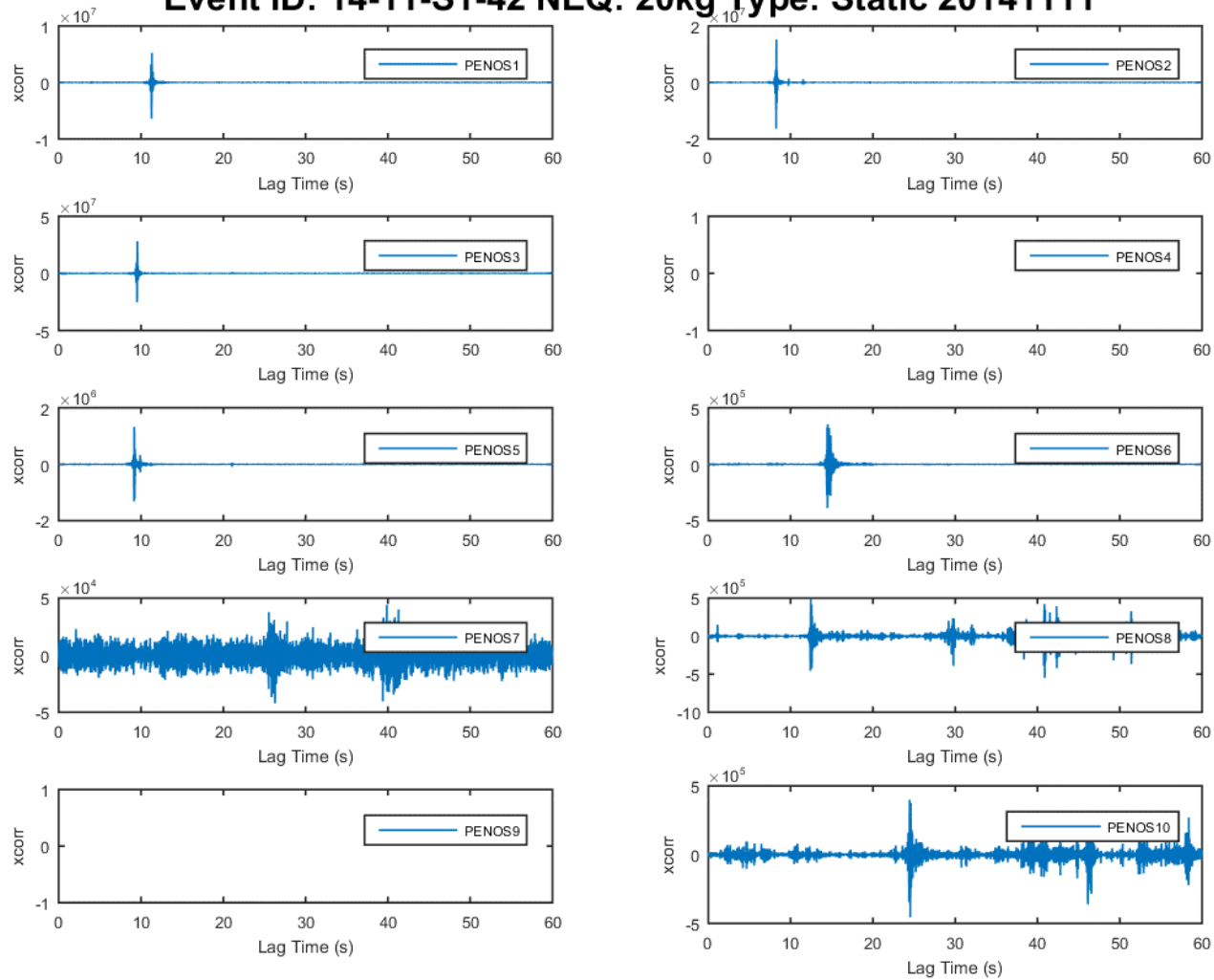


FIGURE 2.59: COHERENCE PEN\_OS 6 - 10 14-11-S1-42CTD

**Event ID: 14-11-S1-42 NEQ: 20kg Type: Static 20141111**



**FIGURE 2.60: CROSS CORRELATION PEN\_OS 1 - 10 14-11-S1-42**

Event ID: 14-11-S1-49, S2-118 NEQ: 5kg Type: Static 20141113

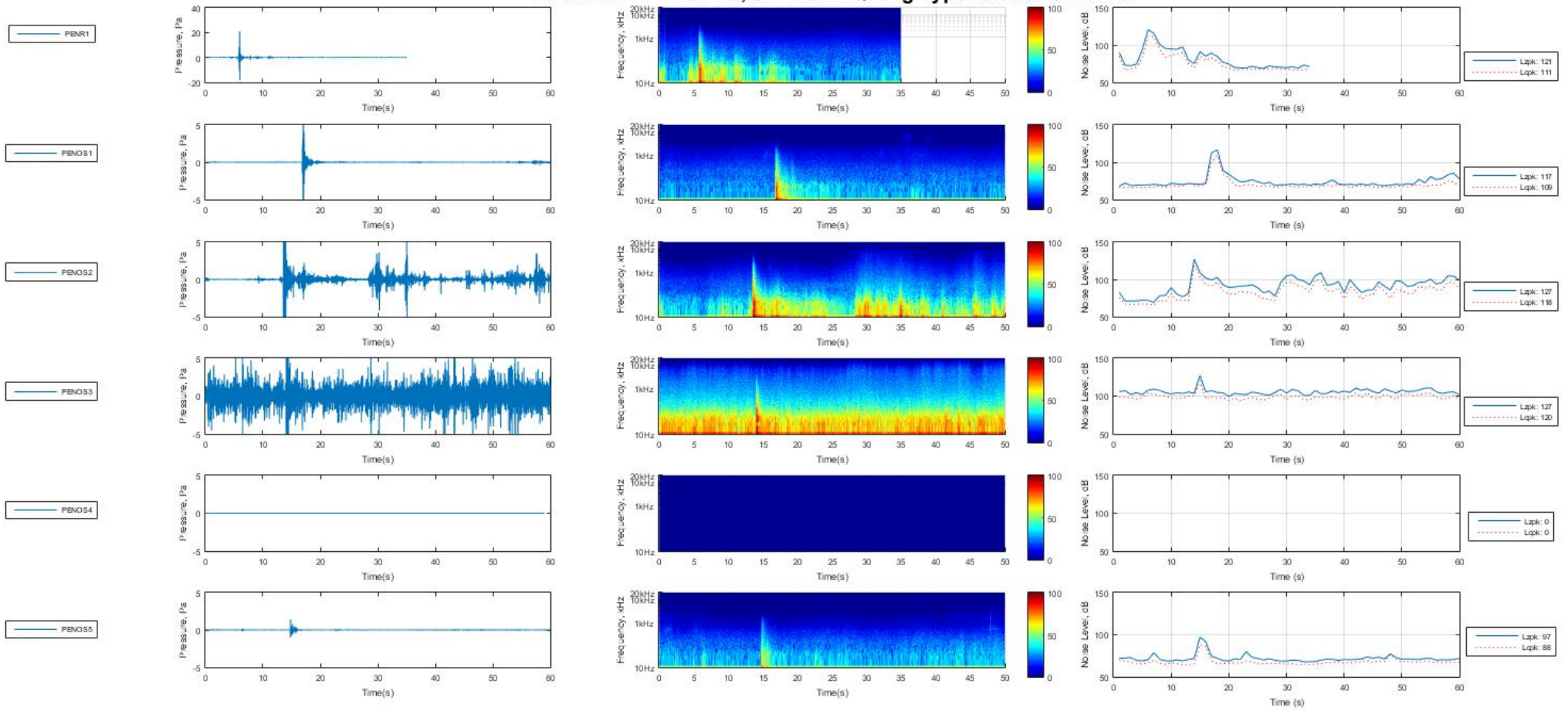


FIGURE 2.61: PEN\_OS 1 - 5 14-11-S1-49, S2-118

Event ID: 14-11-S1-49, S2-118 NEQ: 5kg Type: Static 20141113 CTD

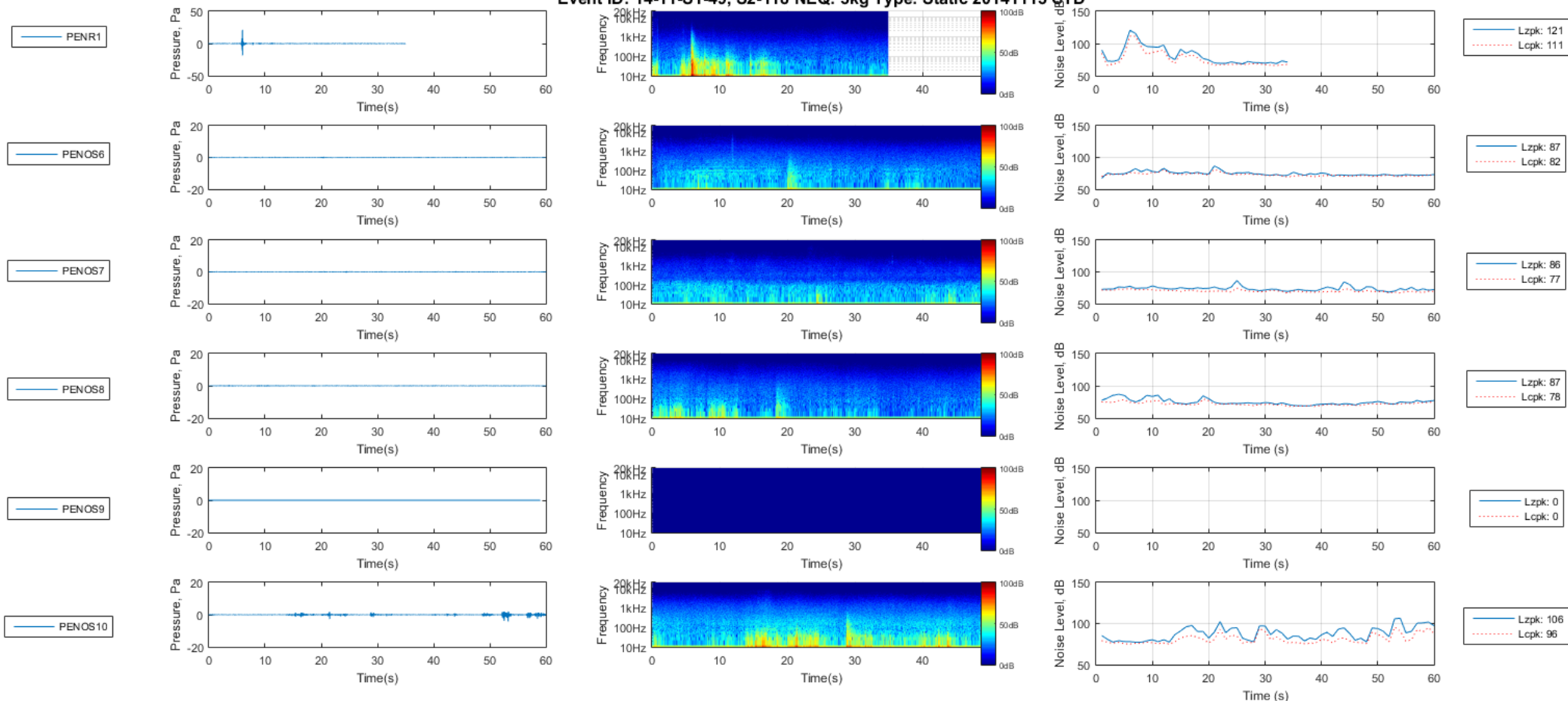


FIGURE 2.62: PEN\_OS 6 - 10 14-11-S1-49, S2-118

Event ID: 14-11-S1-49, S2-118 NEQ: 5kg Type: Static 20141113

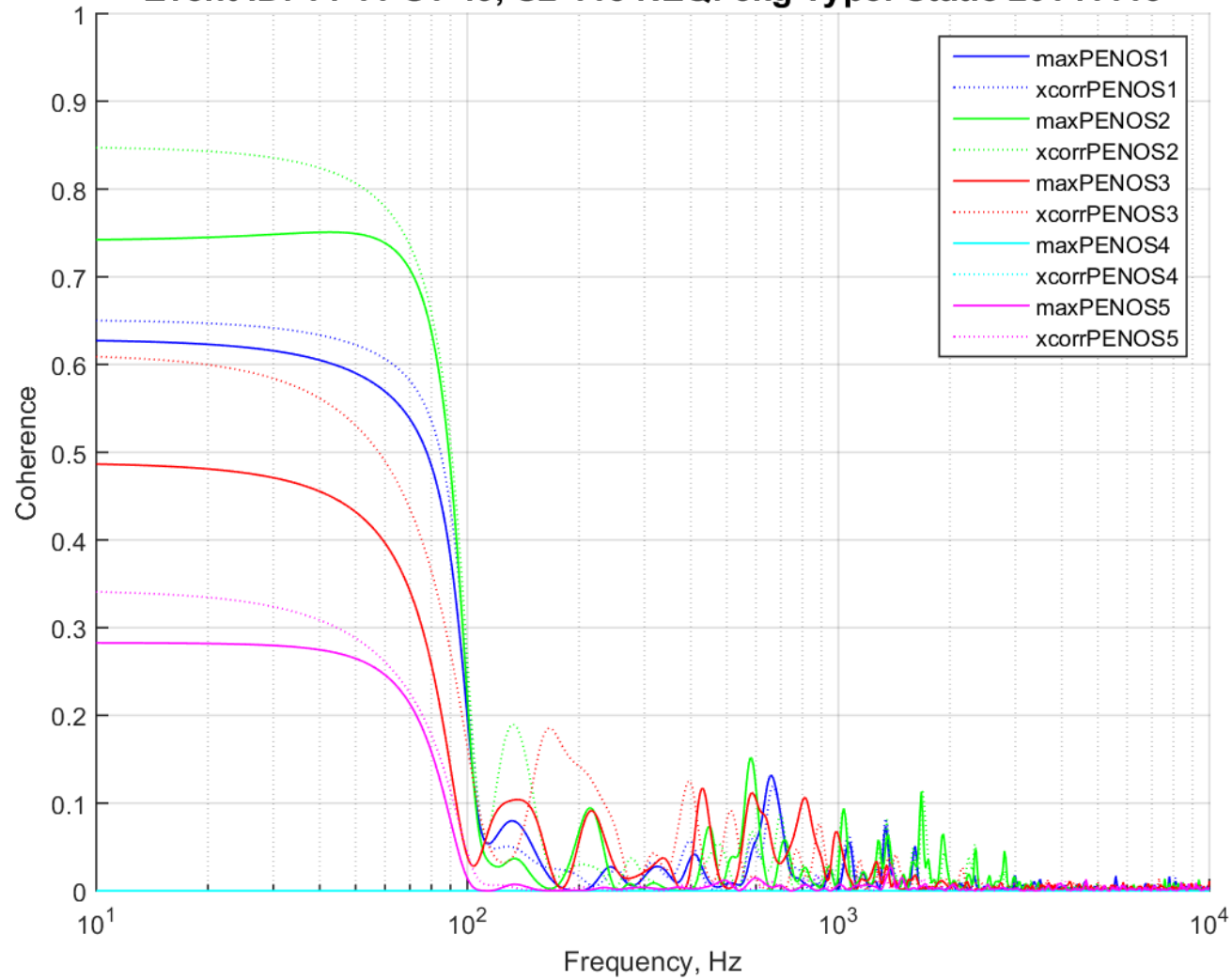


FIGURE 2.63: COHERENCE PEN\_OS 1 - 5 14-11-S1-49, S2-118



Event ID: 14-11-S1-49, S2-118 NEQ: 5kg Type: Static 20141113

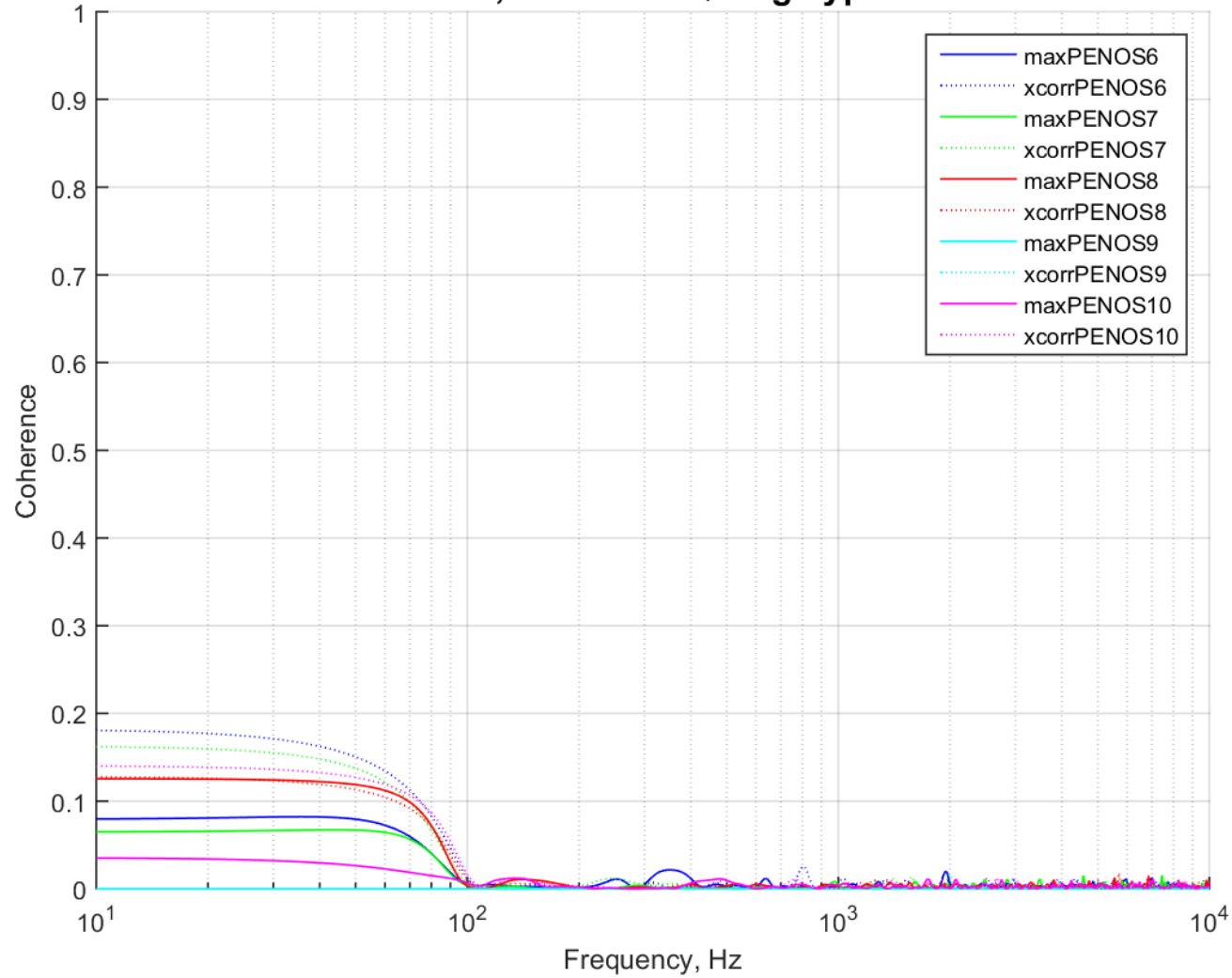
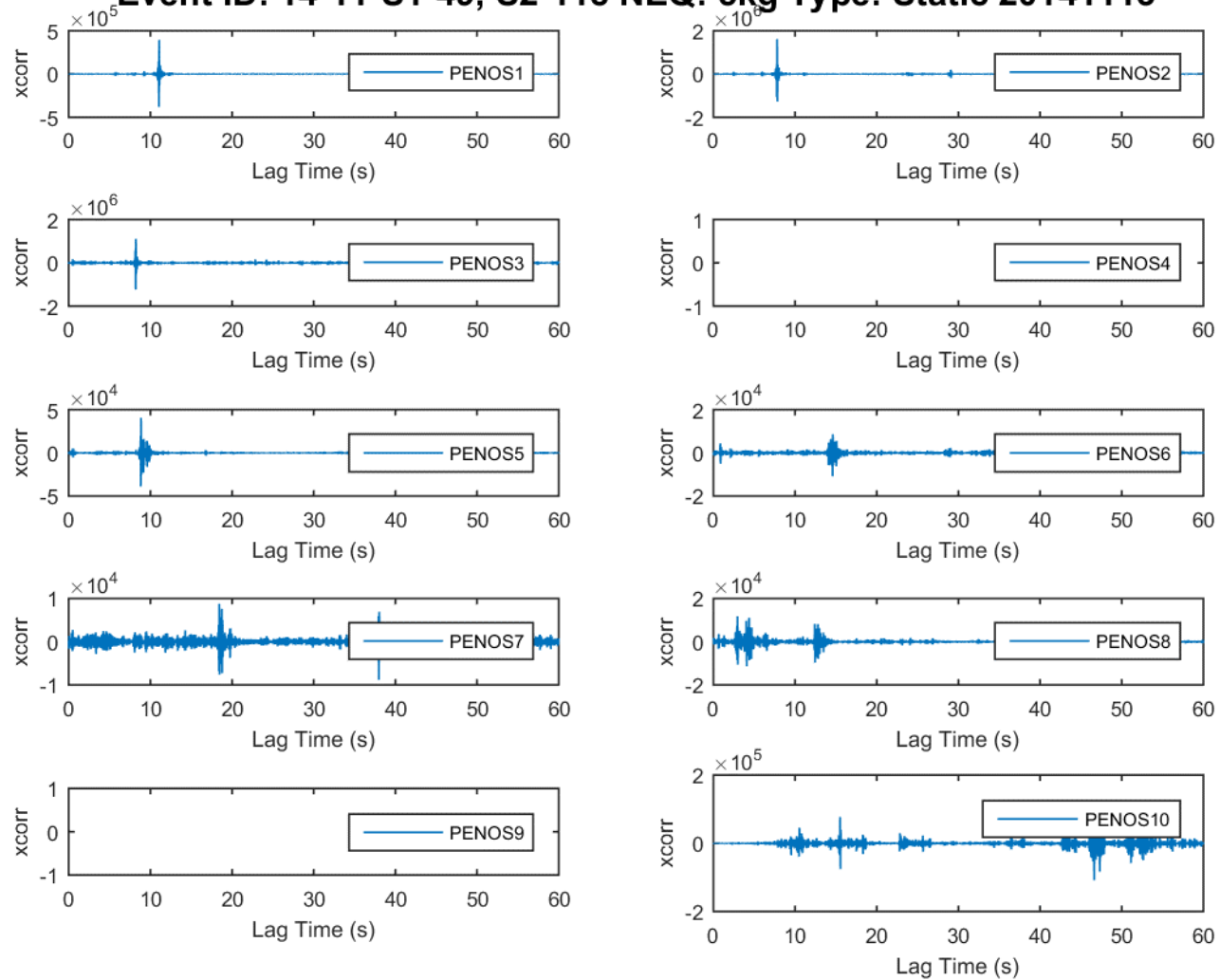
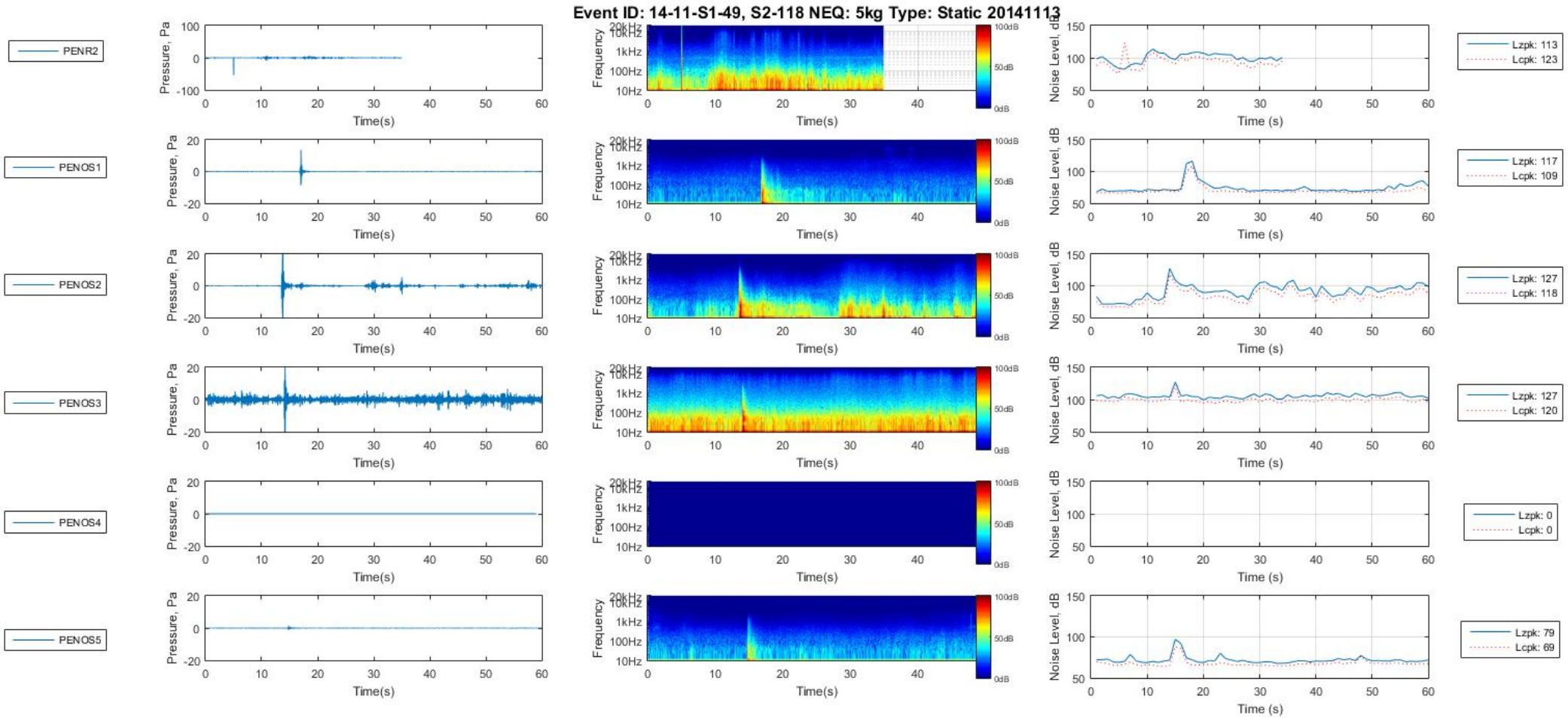


FIGURE 2.64: COHERENCE PEN\_OS 6 - 10 14-11-S1-49, S2-118CTD

**Event ID: 14-11-S1-49, S2-118 NEQ: 5kg Type: Static 20141113**



**FIGURE 2.65: CROSS CORRELATION PEN\_OS 1 - 10 14-11-S1-49, S2-118**



**FIGURE 2.66: PEN\_OS 1 - 5 14-11-S1-49, S2-118**

Event ID: 14-11-S1-49, S2-118 NEQ: 5kg Type: Static 20141113 CTD

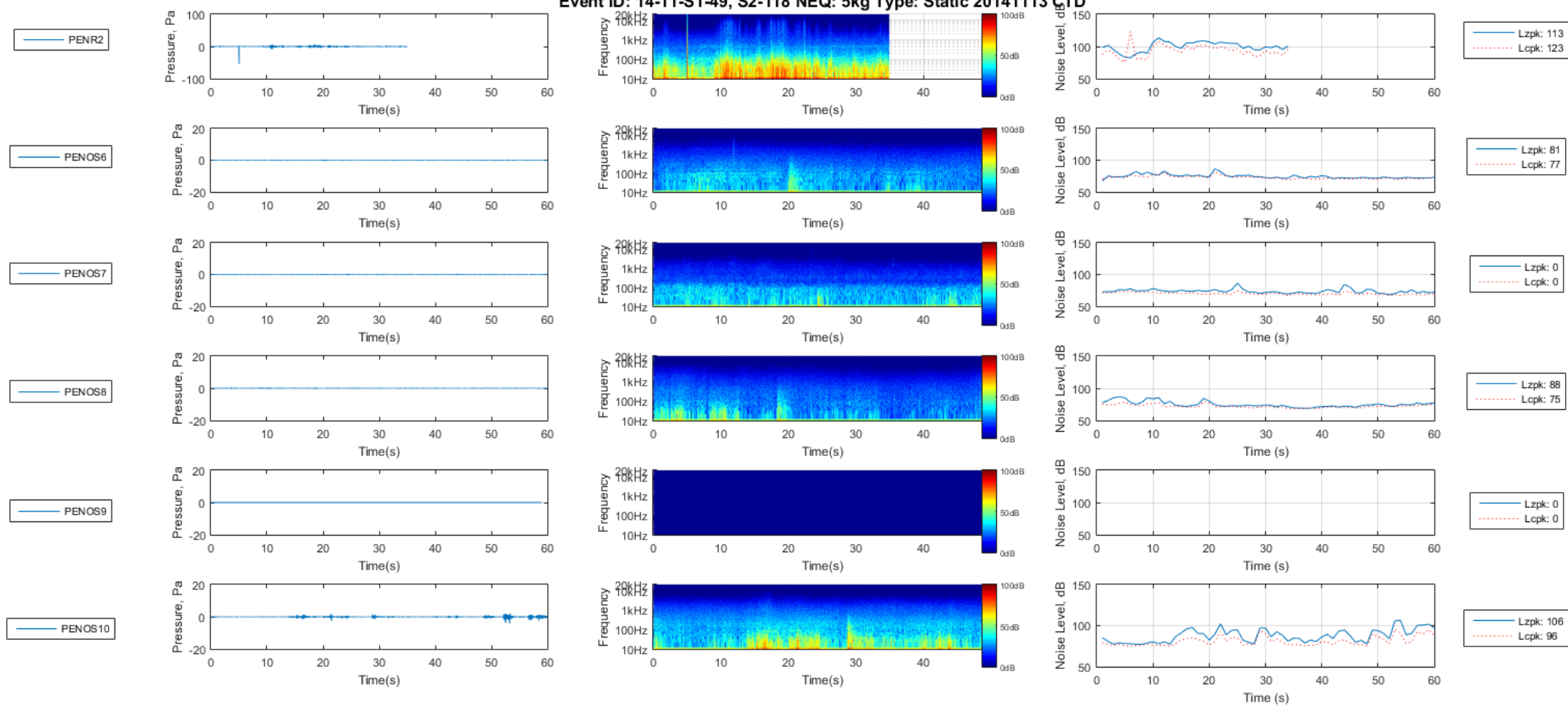
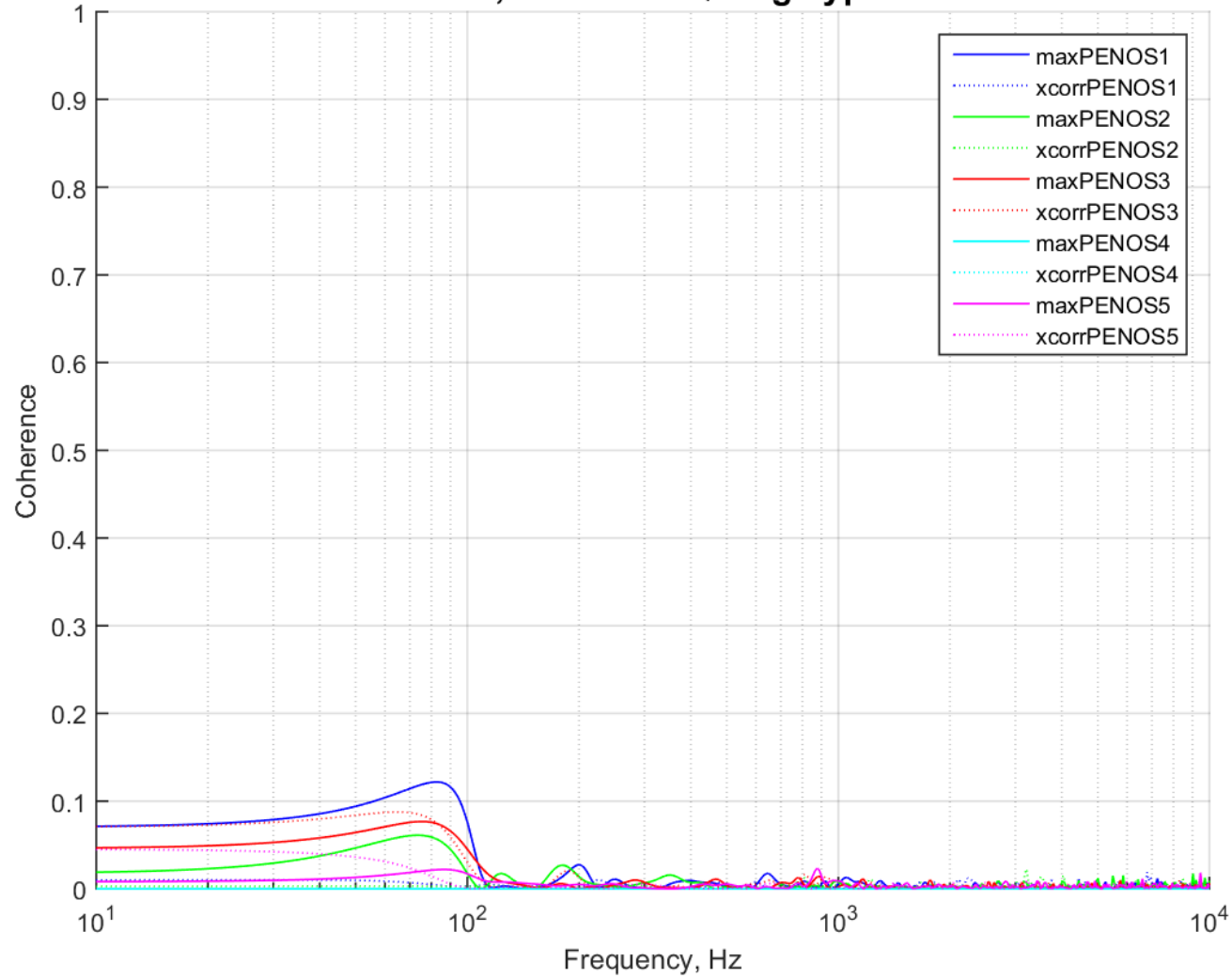


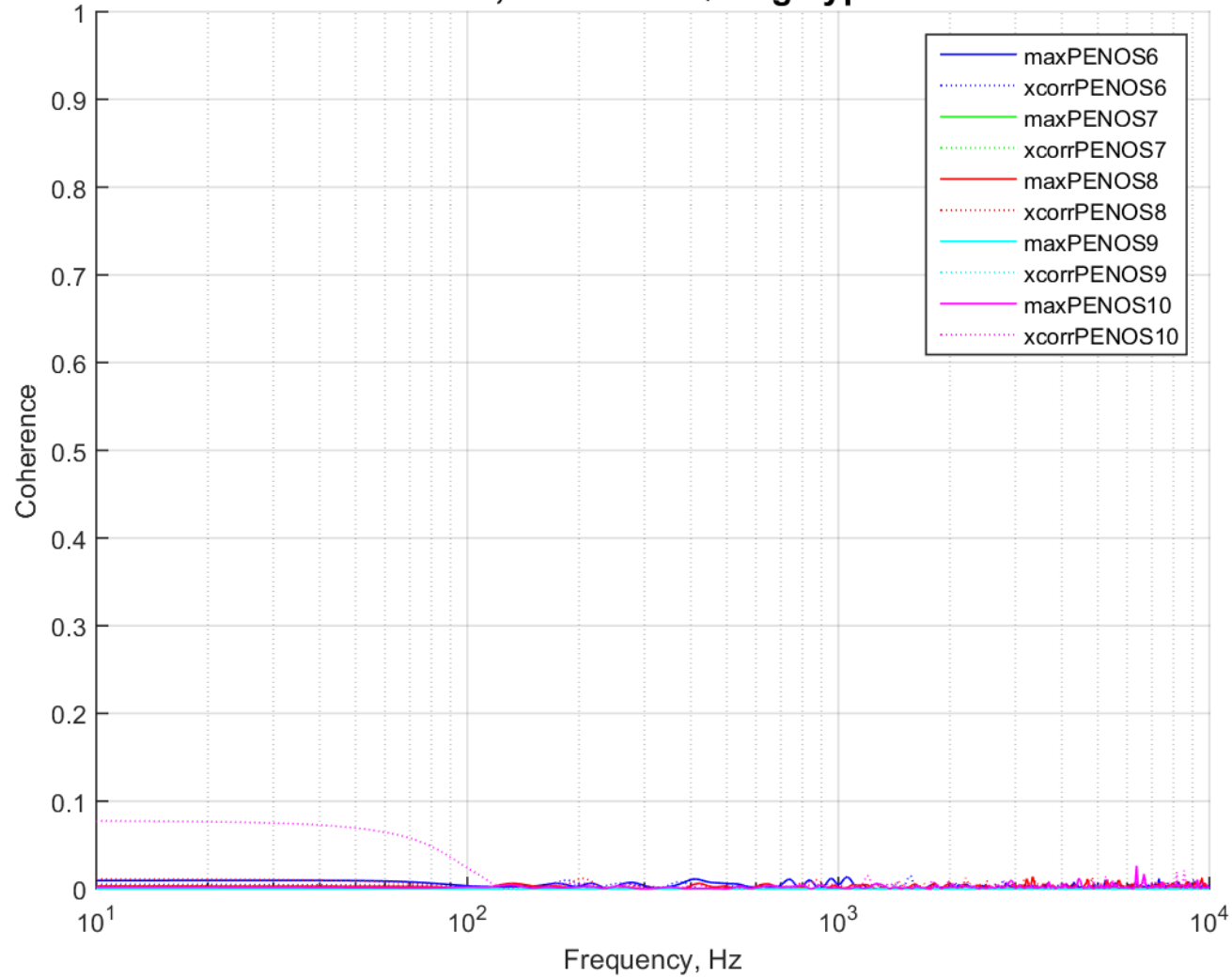
FIGURE 2.67: PEN\_OS 6 - 10 14-11-S1-49, S2-118

**Event ID: 14-11-S1-49, S2-118 NEQ: 5kg Type: Static 20141113**



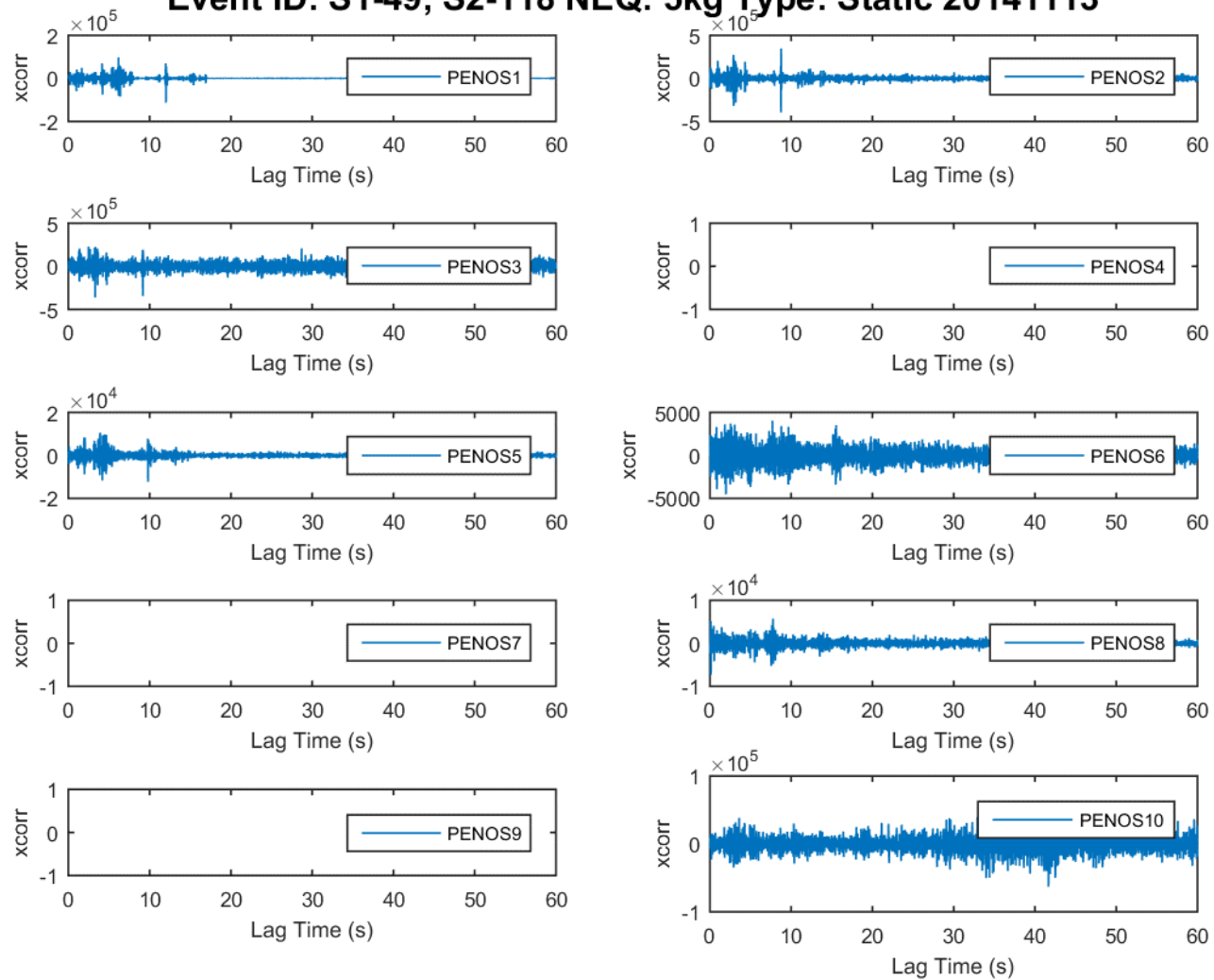
**FIGURE 2.68: COHERENCE PEN\_OS 1 - 5 14-11-S1-49, S2-118**

**Event ID: 14-11-S1-49, S2-118 NEQ: 5kg Type: Static 20141113**



**FIGURE 2.69: COHERENCE PEN\_OS 6 - 10 14-11-S1-49, S2-118CTD**

**Event ID: S1-49, S2-118 NEQ: 5kg Type: Static 20141113**



**FIGURE 2.70: CROSS CORRELATION PEN\_OS 1 - 10 14-11-S1-49, S2-118**

Event ID: 14-11-S1-50, S2-122 NEQ: 20kg Type: Static 20141113

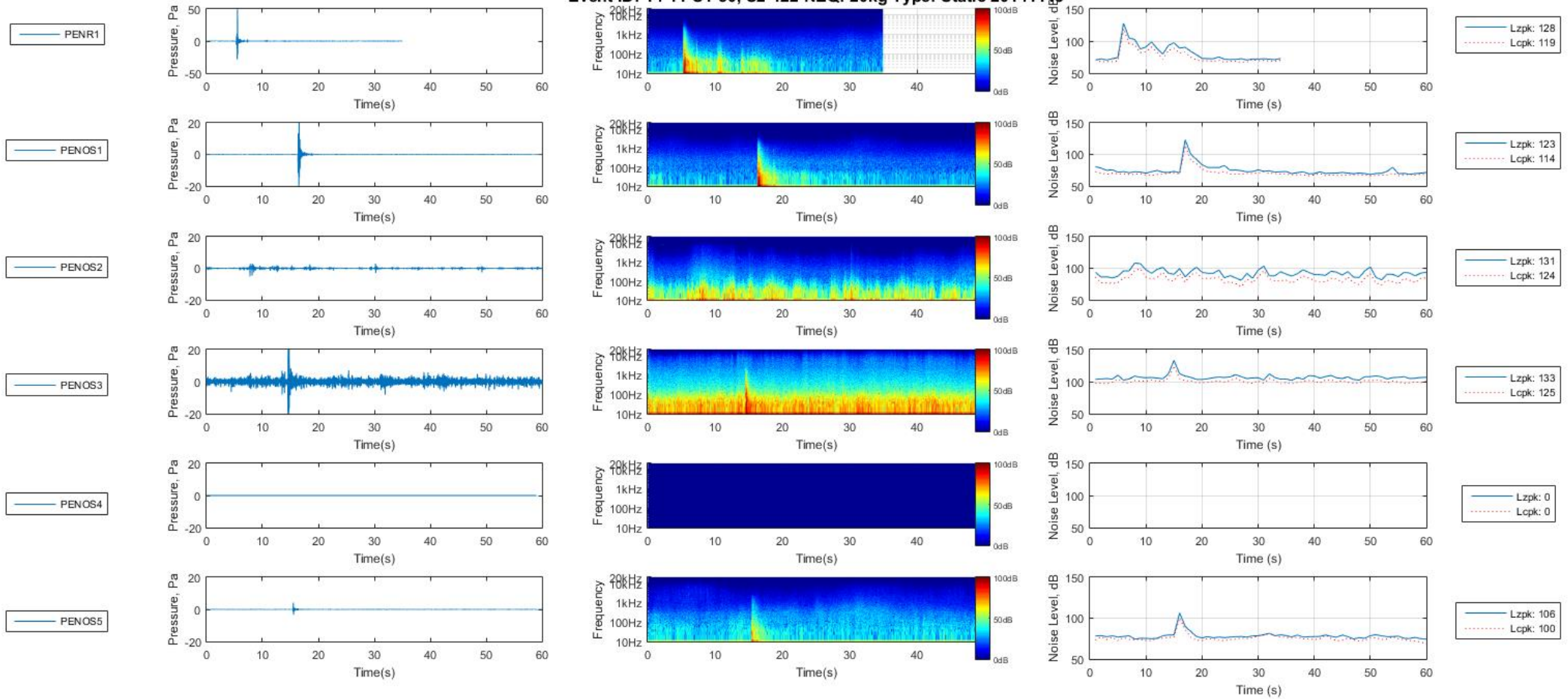


FIGURE 2.71: PEN\_OS 1 - 5 14-11-S1-50, S2-122



Event ID: 14-11-S1-50, S2-122 NEQ: 20kg Type: Static 20141113 CTD

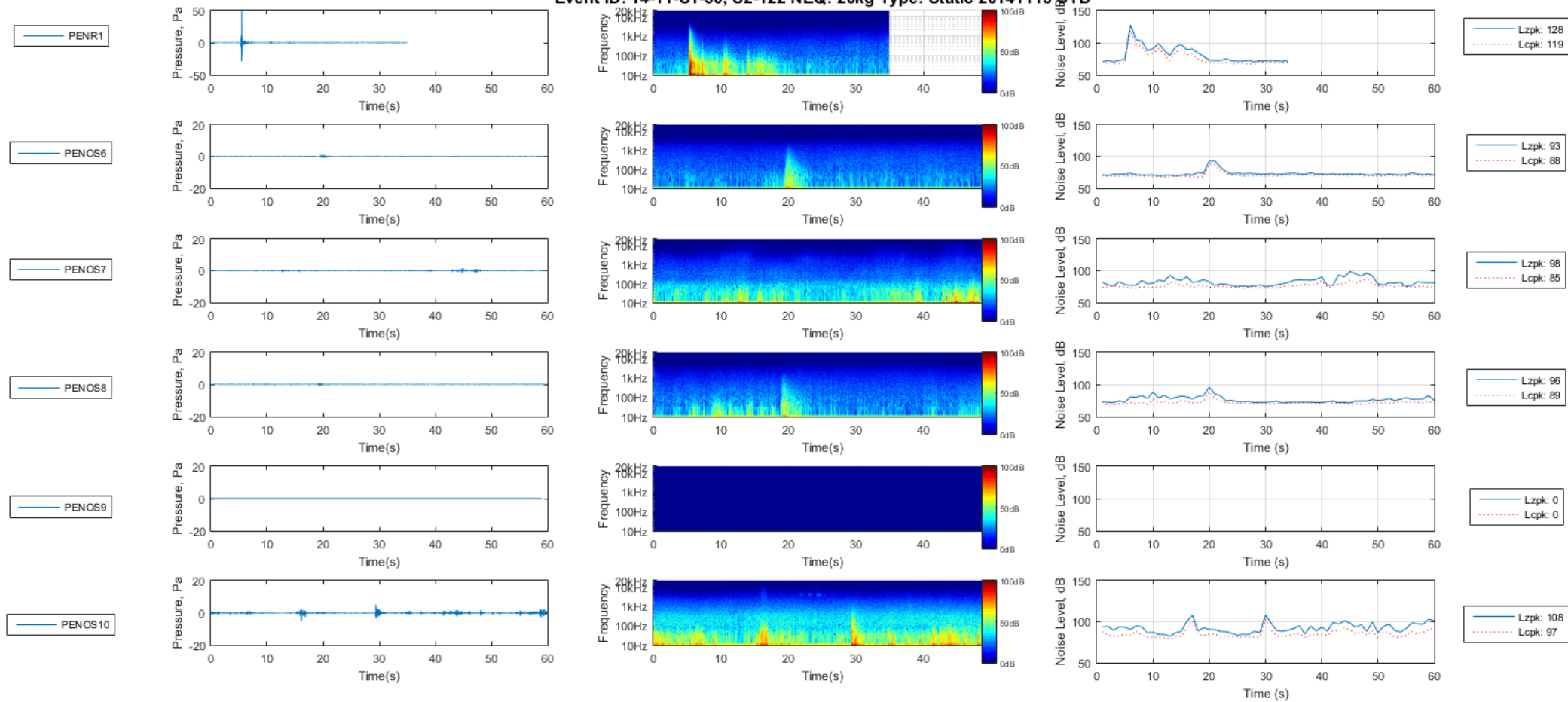


FIGURE 2.72: PEN\_OS 6 - 10 14-11-S1-50, S2-122

Event ID: 14-11-S1-50, S2-122 NEQ: 20kg Type: Static 20141113

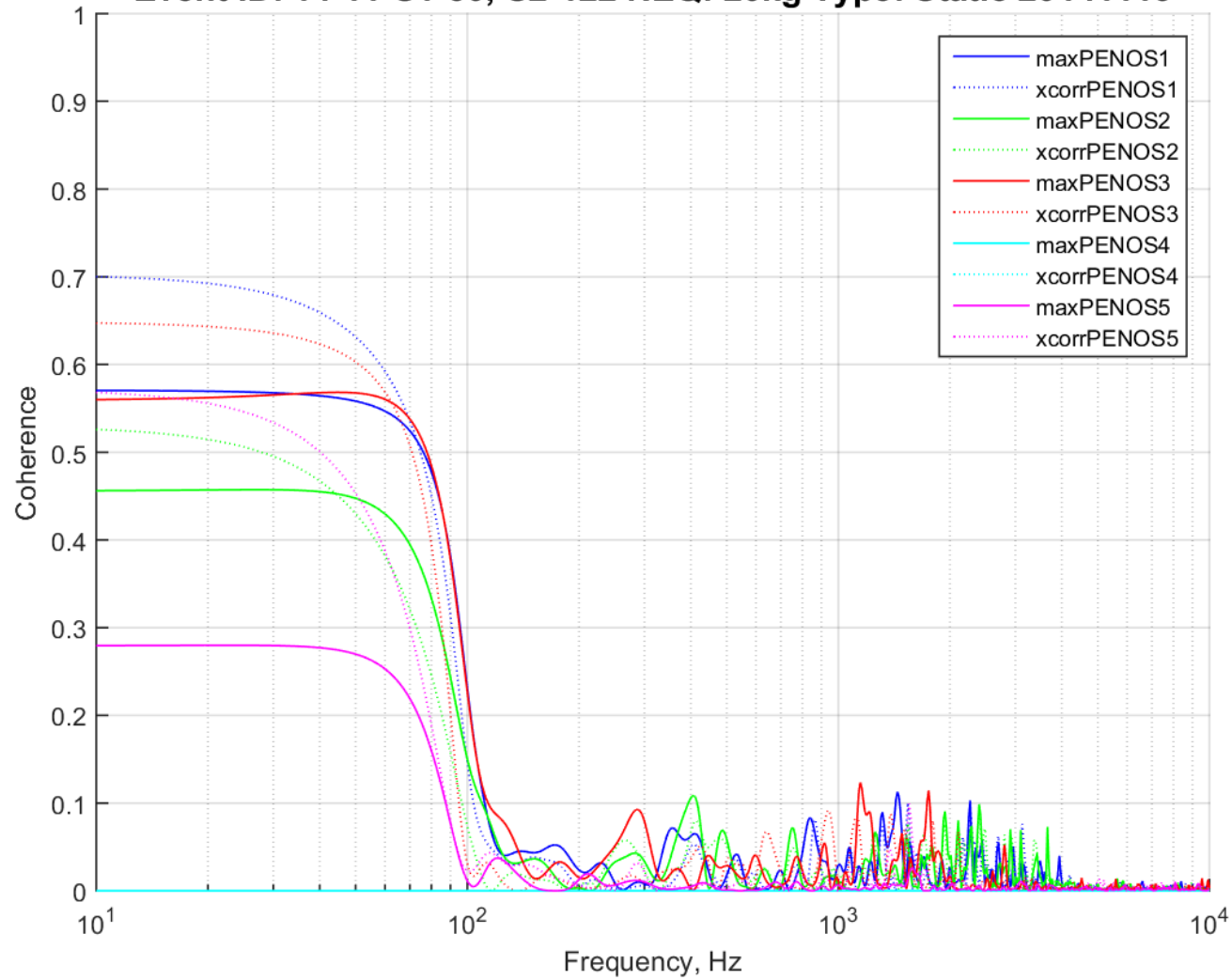


FIGURE 2.73: COHERENCE PEN\_OS 1 - 5 14-11-S1-50, S2-122

Event ID: 14-11-S1-50, S2-122 NEQ: 20kg Type: Static 20141113

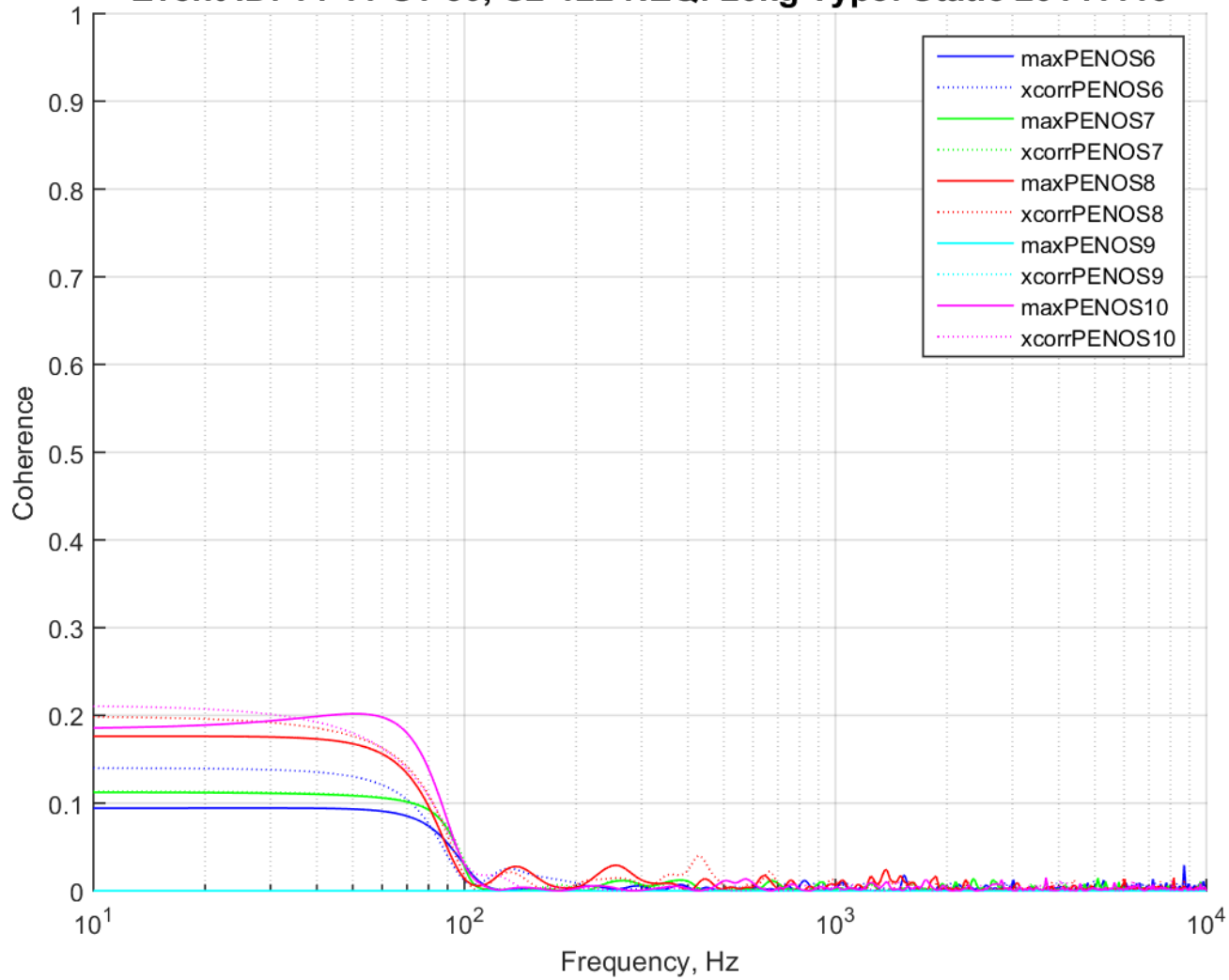
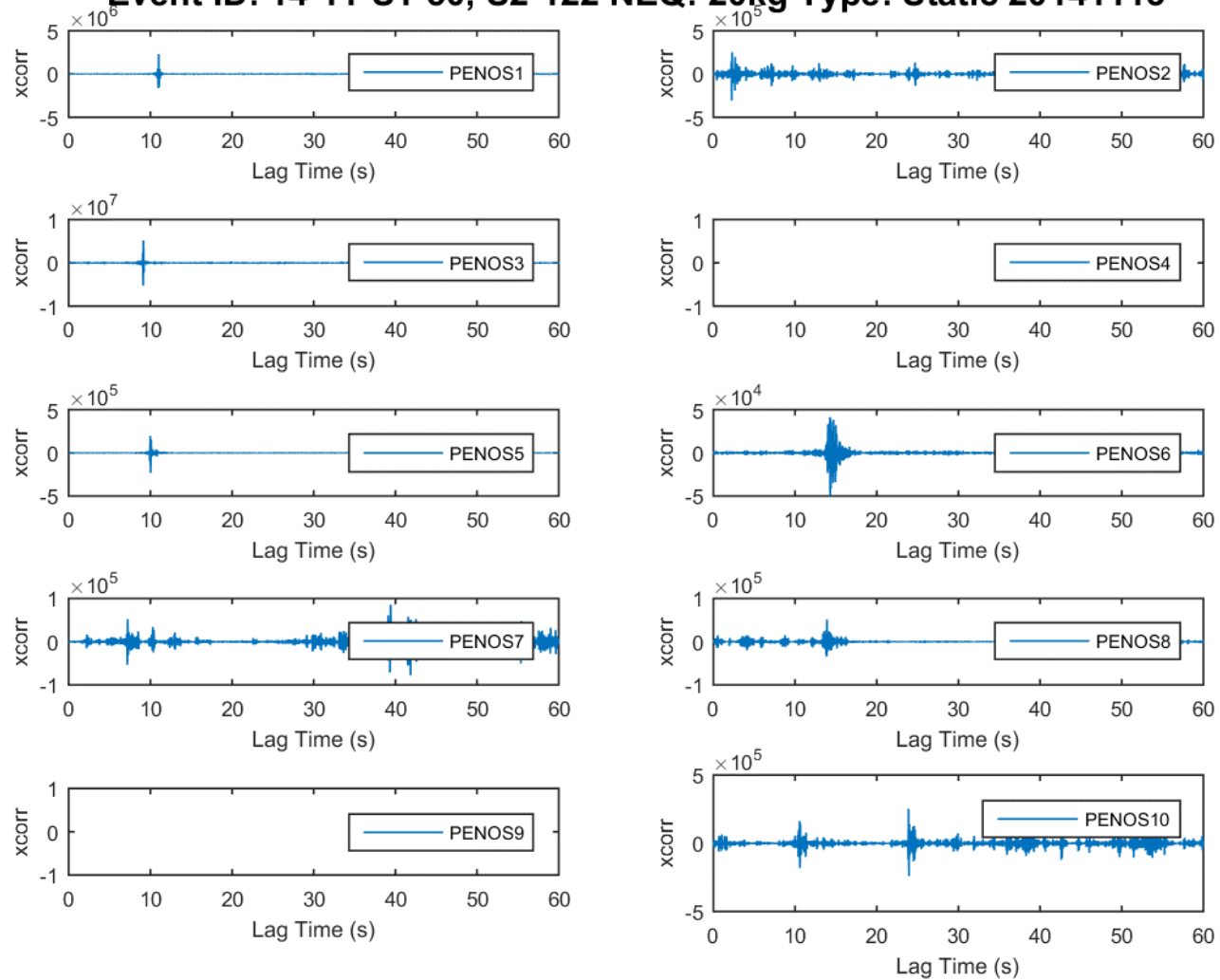


FIGURE 2.74: COHERENCE PEN\_OS 6 - 10 14-11-S1-50, S2-122CTD

**Event ID: 14-11-S1-50, S2-122 NEQ: 20kg Type: Static 20141113**



**FIGURE 2.75: CROSS CORRELATION PEN\_OS 1 - 10 14-11-S1-50, S2-122**

Event ID: 14-11-S1-50, S2-122 NEQ: 20kg Type: Static 20141113

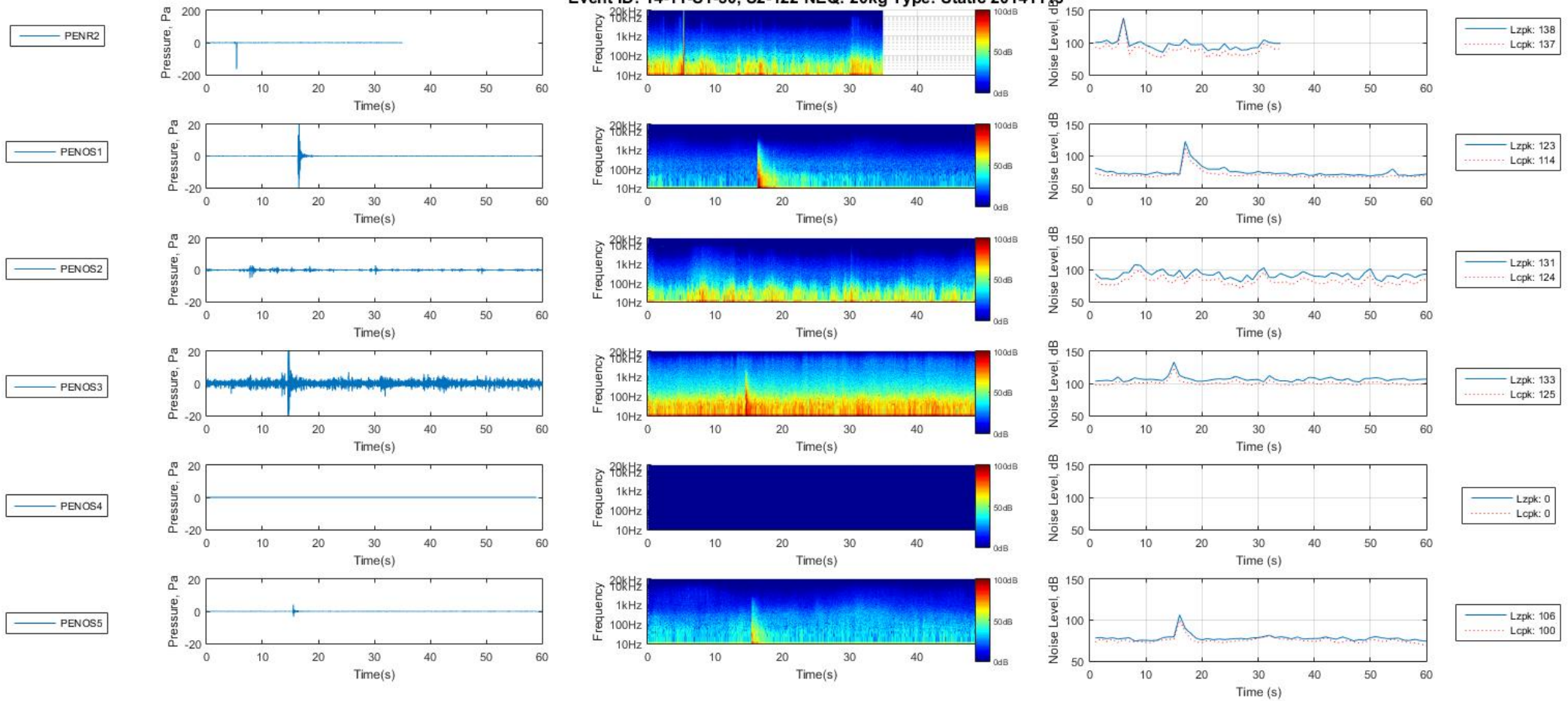


FIGURE 2.76: PEN\_OS 1 - 5 14-11-S1-50, S2-122

Event ID: 14-11-S1-50, S2-122 NEQ: 20kg Type: Static 20141113 CTD

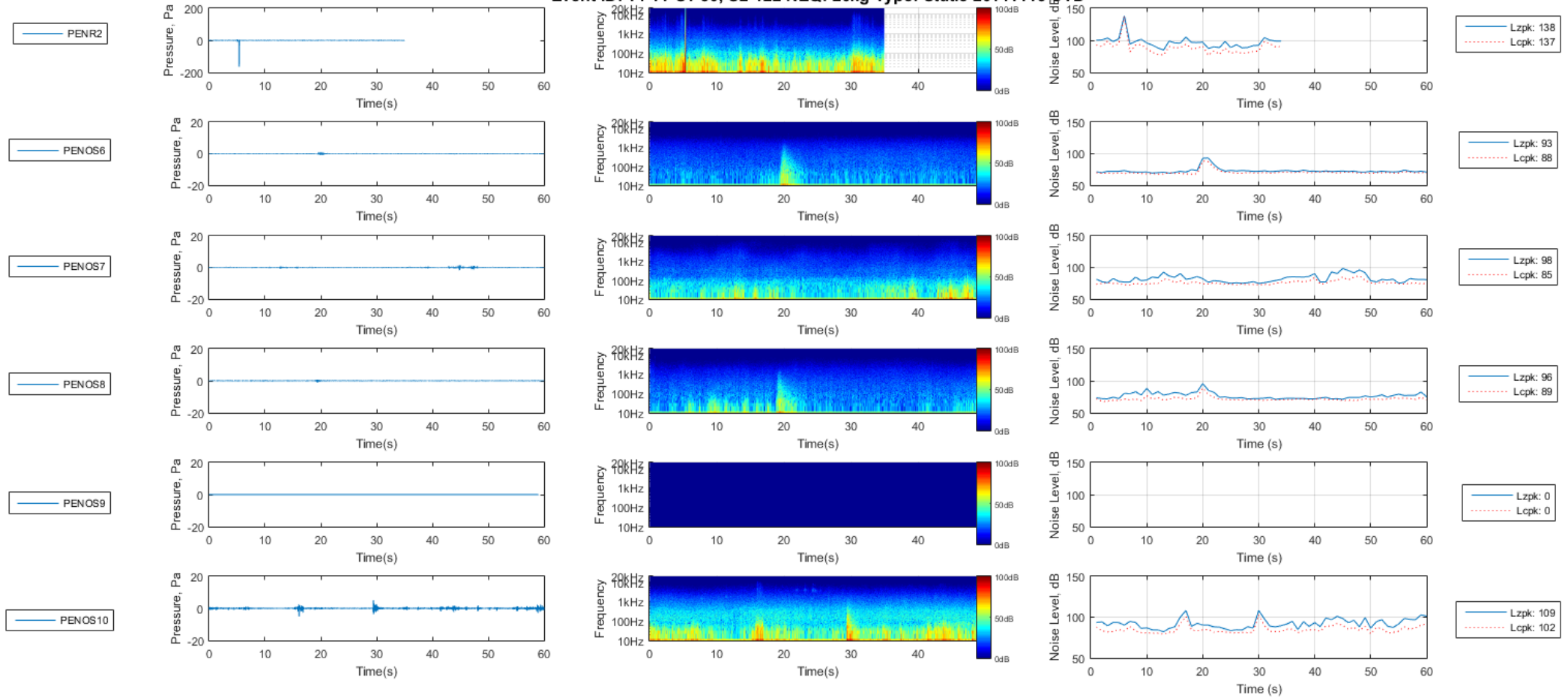


FIGURE 2.77: PEN\_OS 6 - 10 14-11-S1-50, S2-122

Event ID: 14-11-S1-50, S2-122 NEQ: 20kg Type: Static 20141113

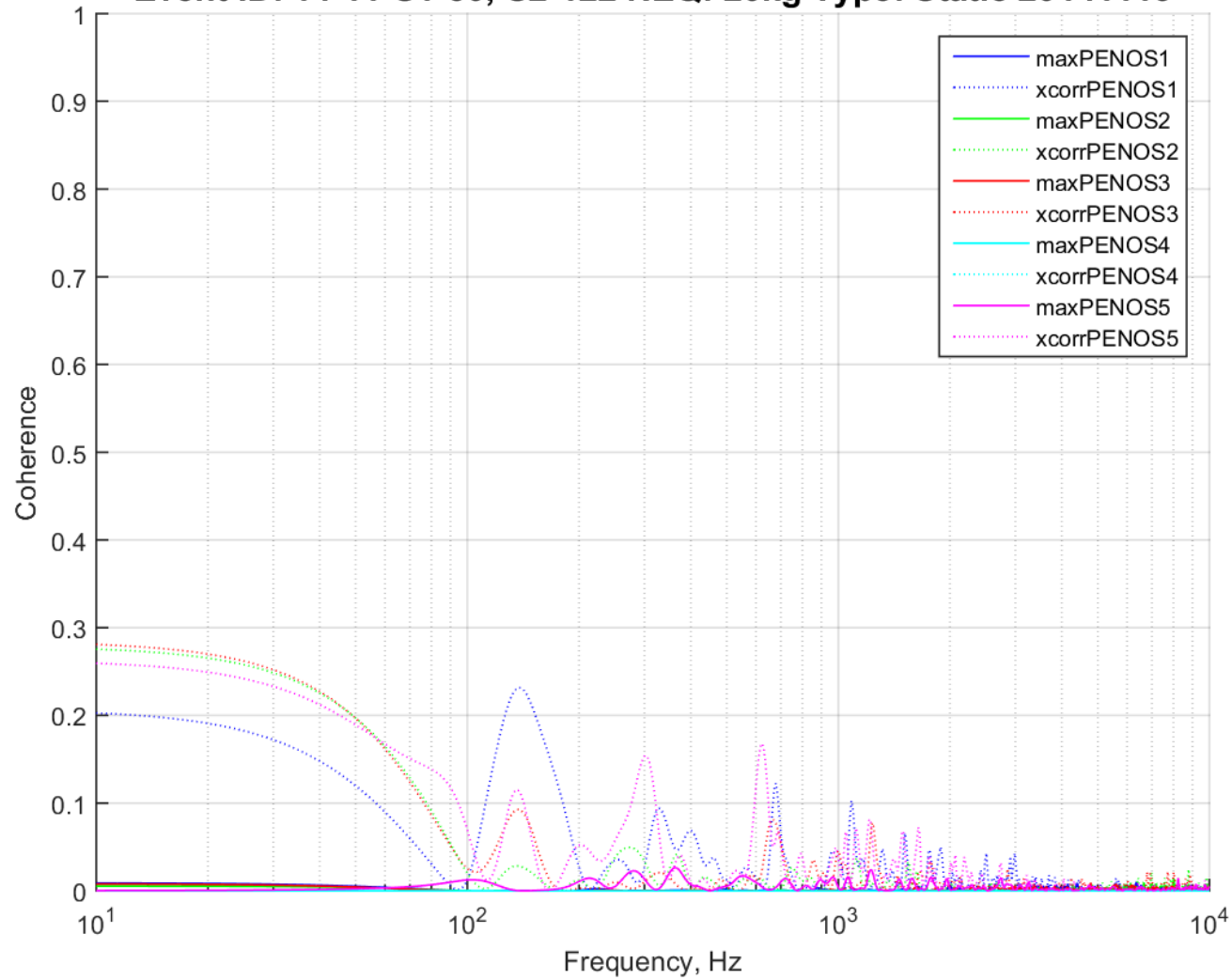


FIGURE 2.78: COHERENCE PEN\_OS 1 - 5 14-11-S1-50, S2-122

Event ID: 14-11-S1-50, S2-122 NEQ: 20kg Type: Static 20141113

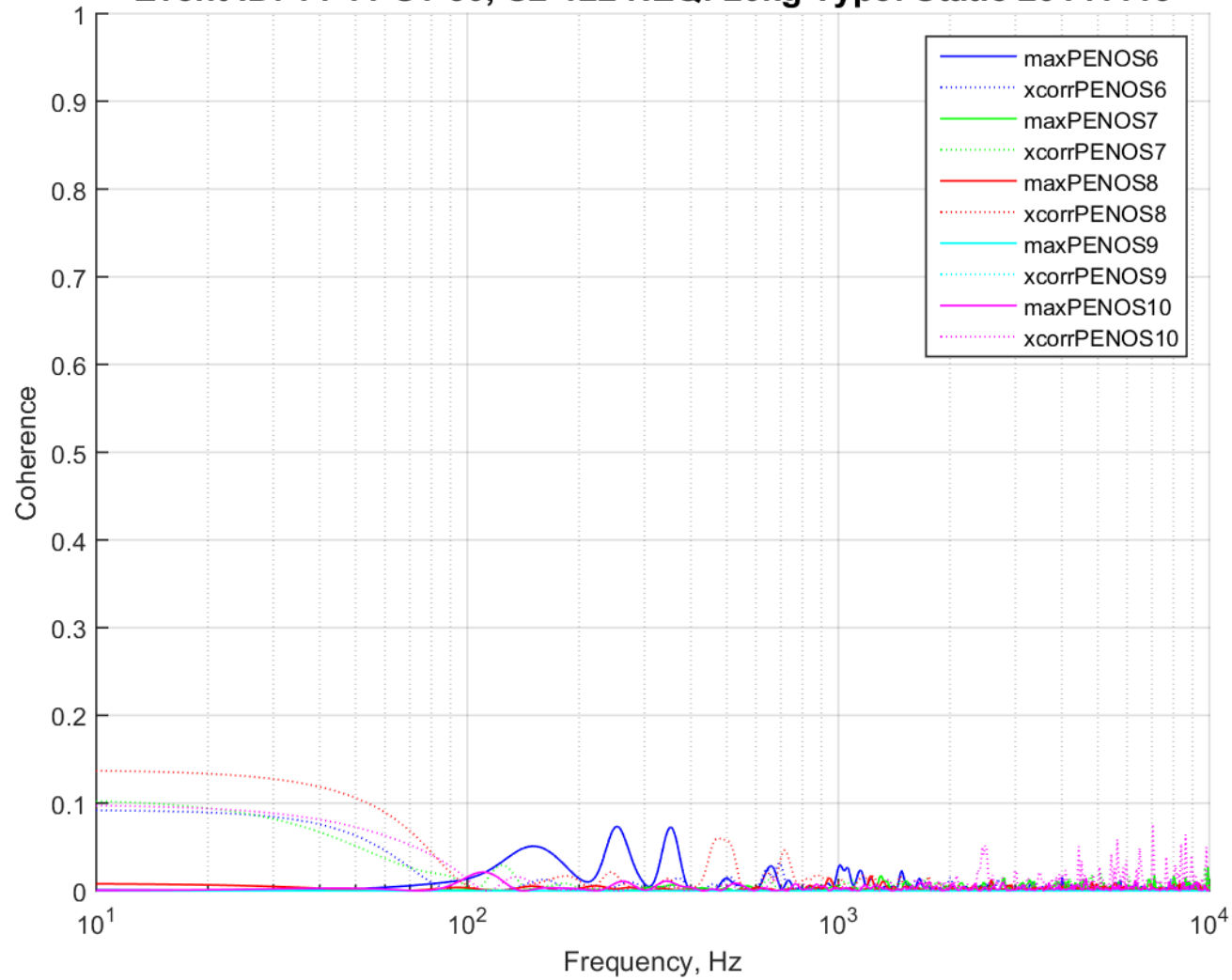
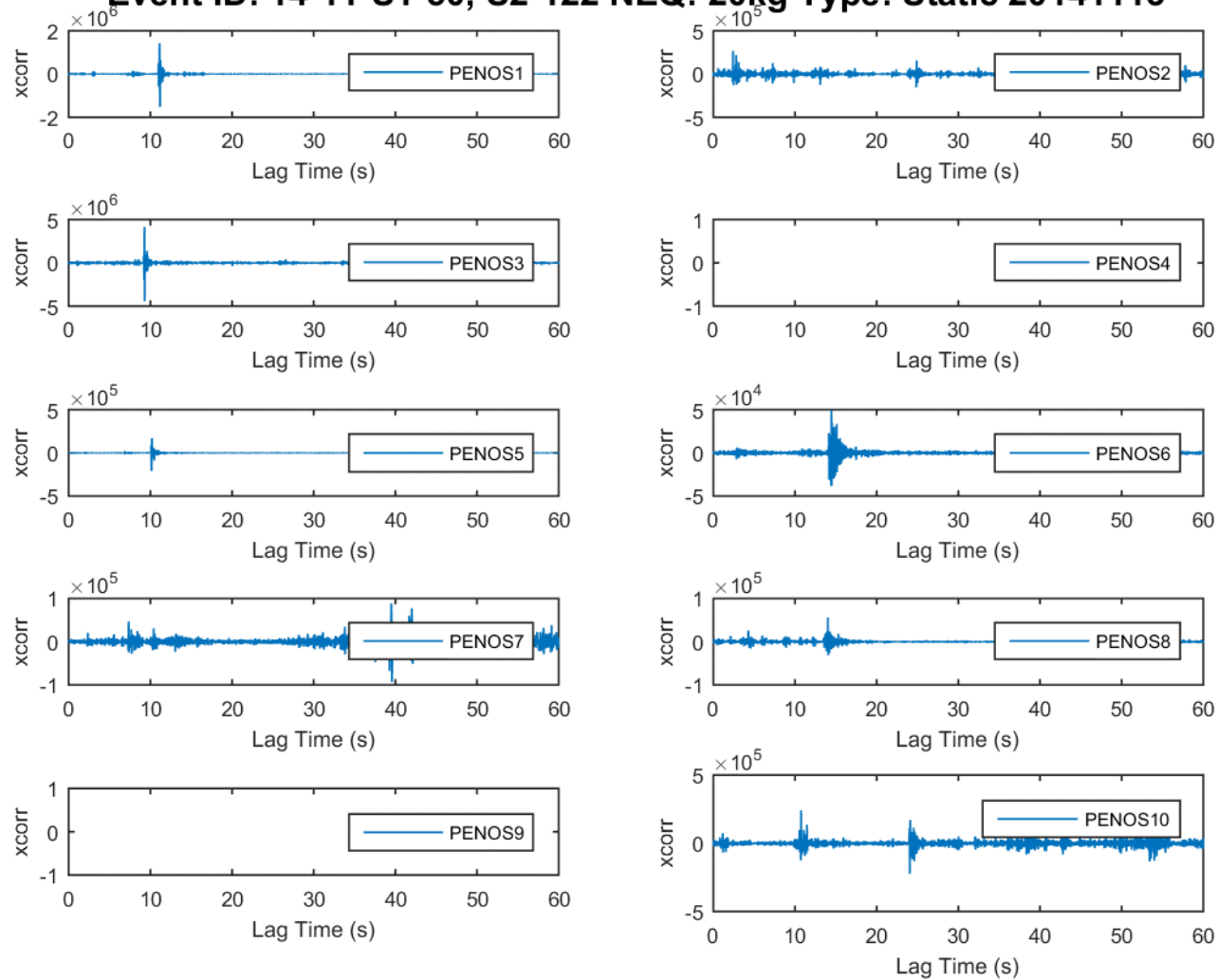


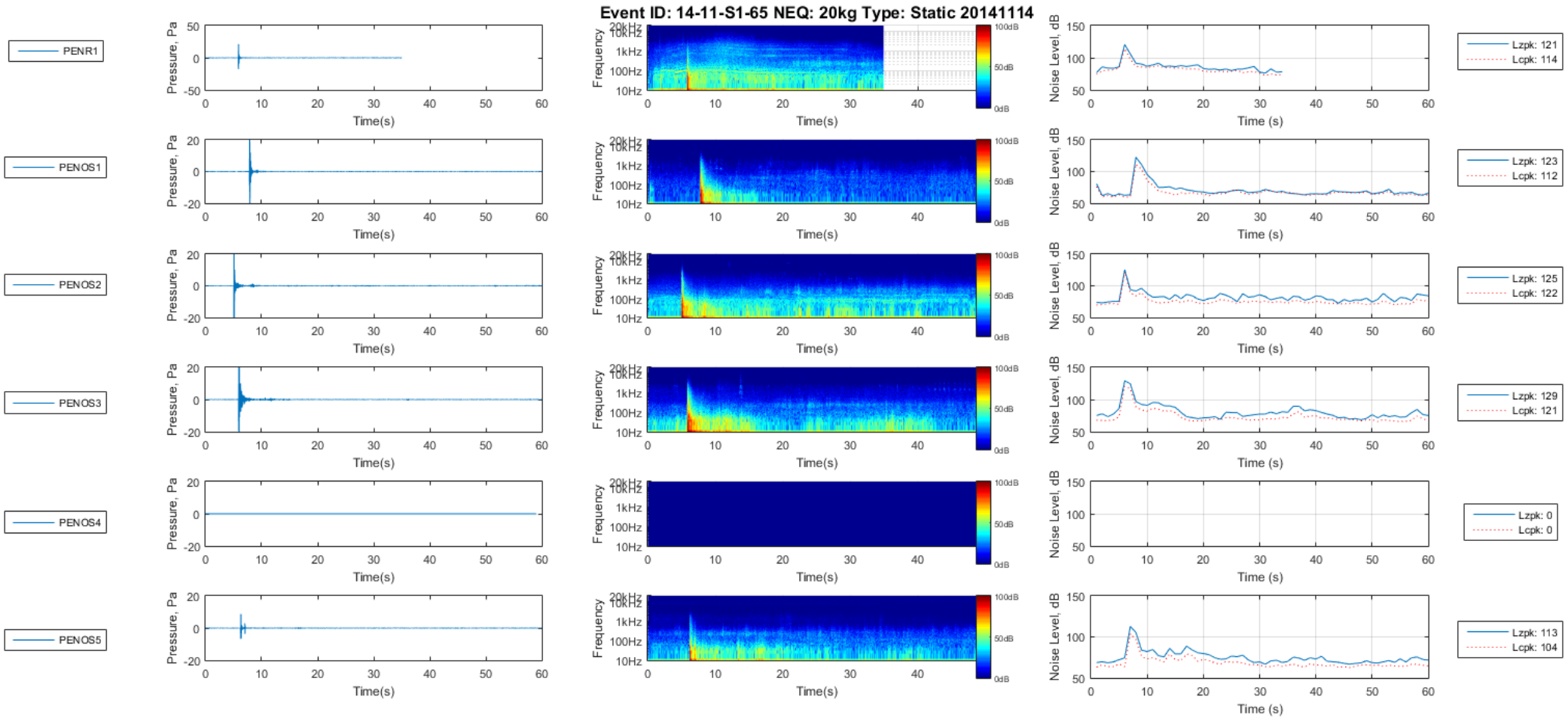
FIGURE 2.79: COHERENCE PEN\_OS 6 - 10 14-11-S1-50, S2-122CTD



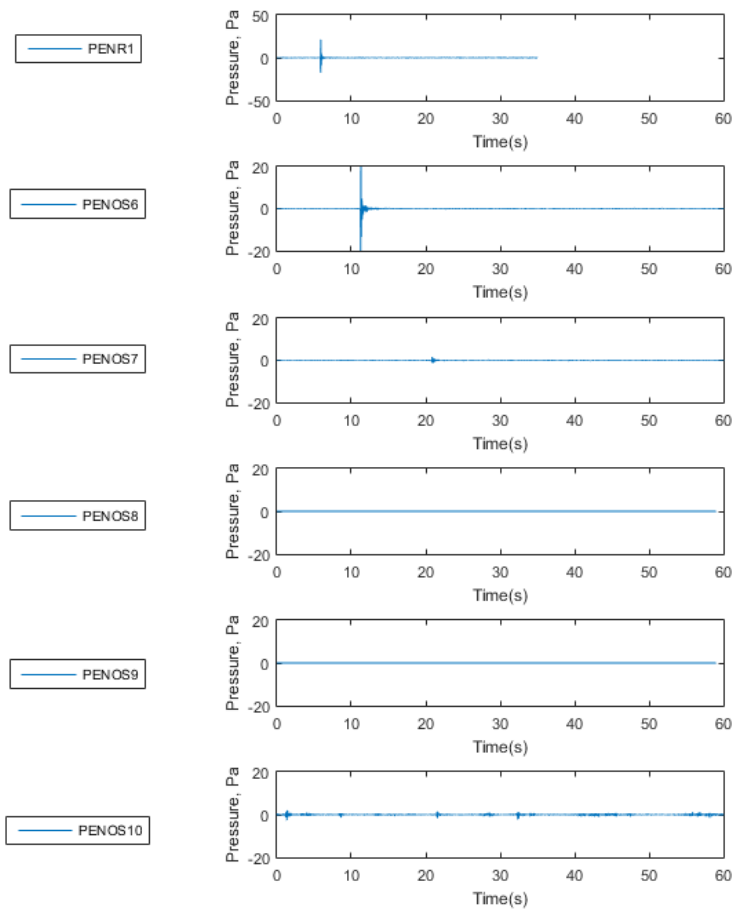
**Event ID: 14-11-S1-50, S2-122 NEQ: 20kg Type: Static 20141113**



**FIGURE 2.80: CROSS CORRELATION PEN\_OS 1 - 10 14-11-S1-50, S2-122**



**FIGURE 2.81: PEN\_OS 1 - 5 14-11-S1-65**



Event ID: 14-11-S1-65 NEQ: 20kg Type: Static 20141114 CTD.

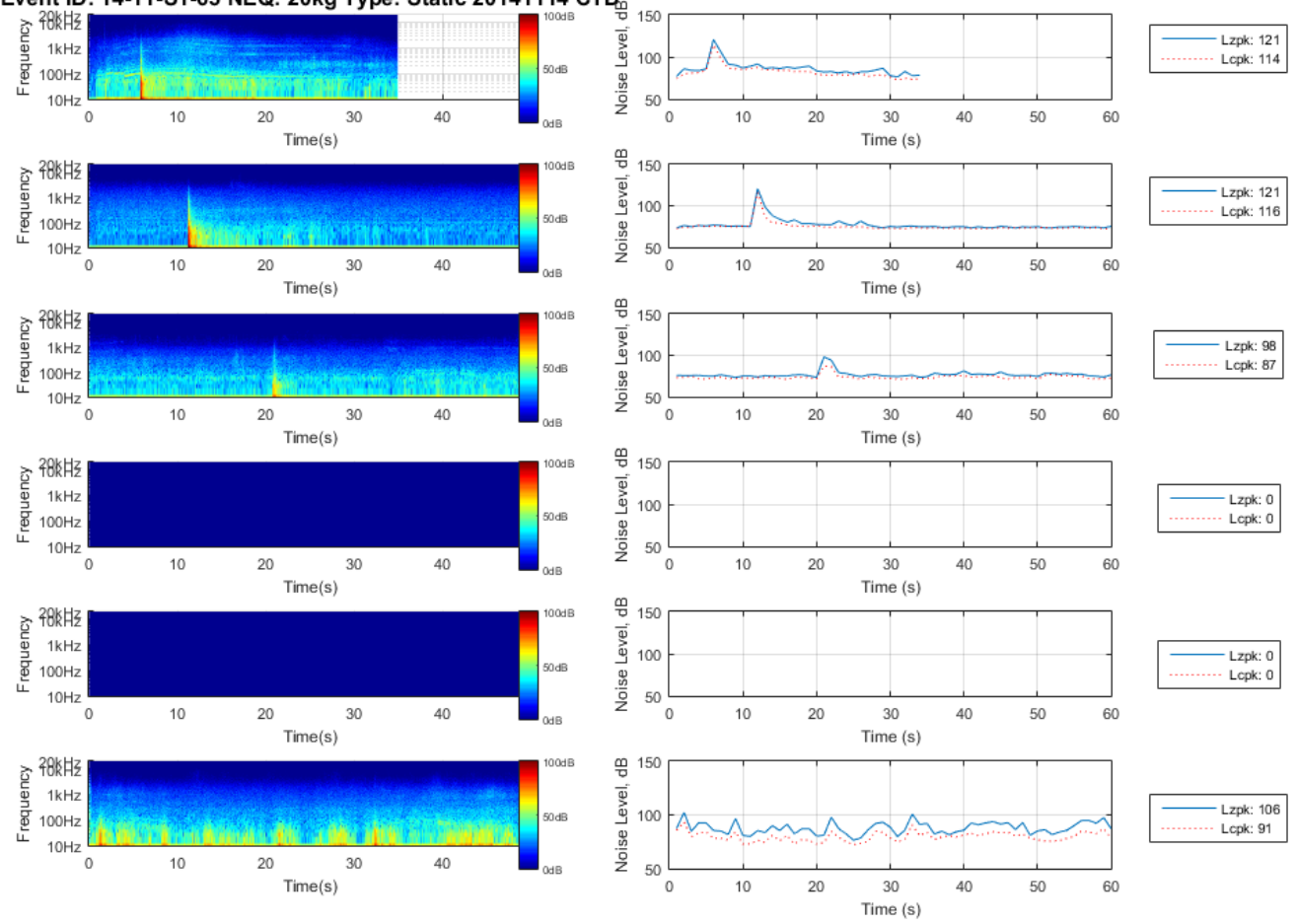


FIGURE 2.82: PEN\_OS 6 - 10 14-11-S1-65

Event ID: 14-11-S1-65 NEQ: 20kg Type: Static 20141114

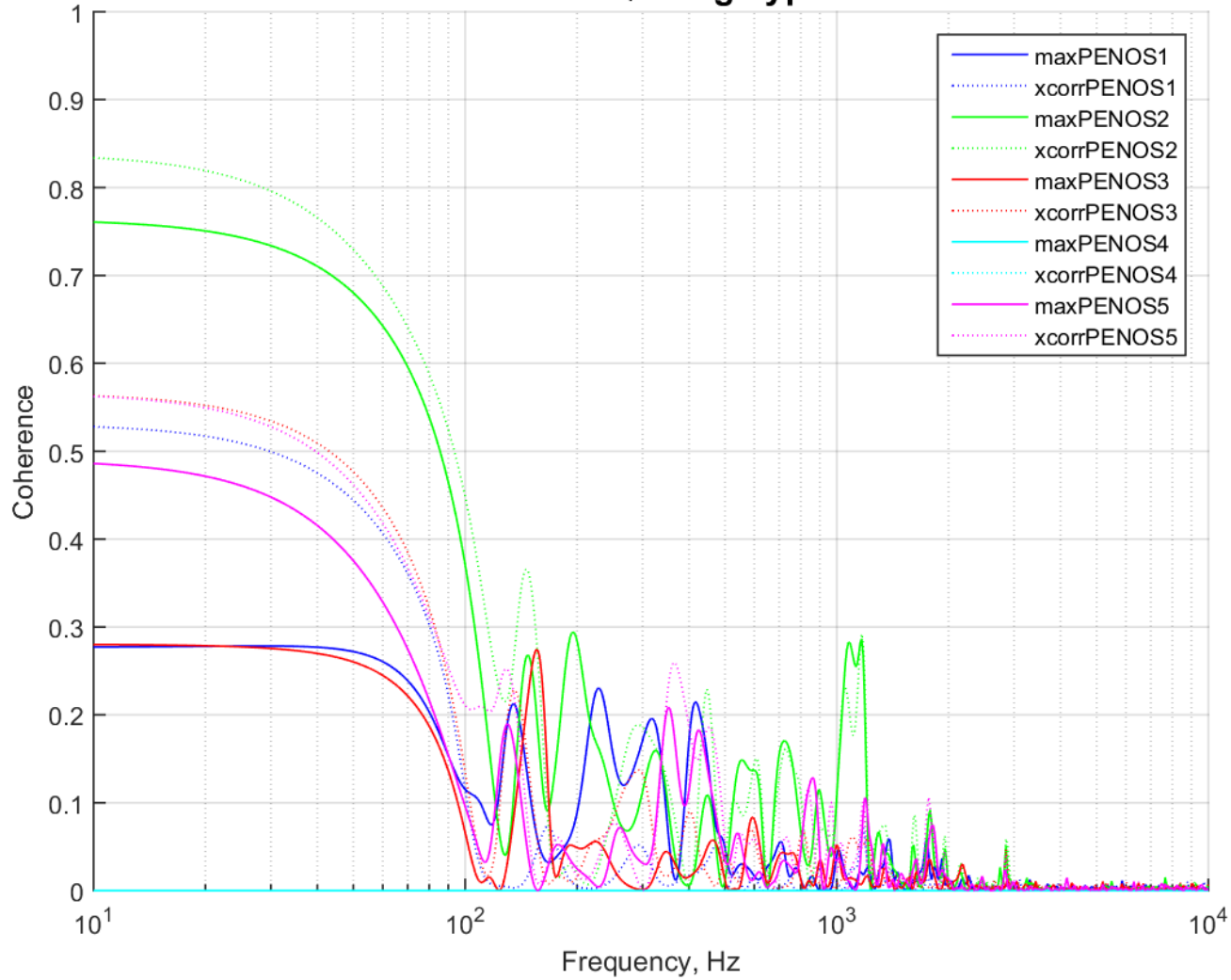


FIGURE 2.83: COHERENCE PEN\_OS 1 - 5 14-11-S1-65

Event ID: 14-11-S1-65 NEQ: 20kg Type: Static 20141114

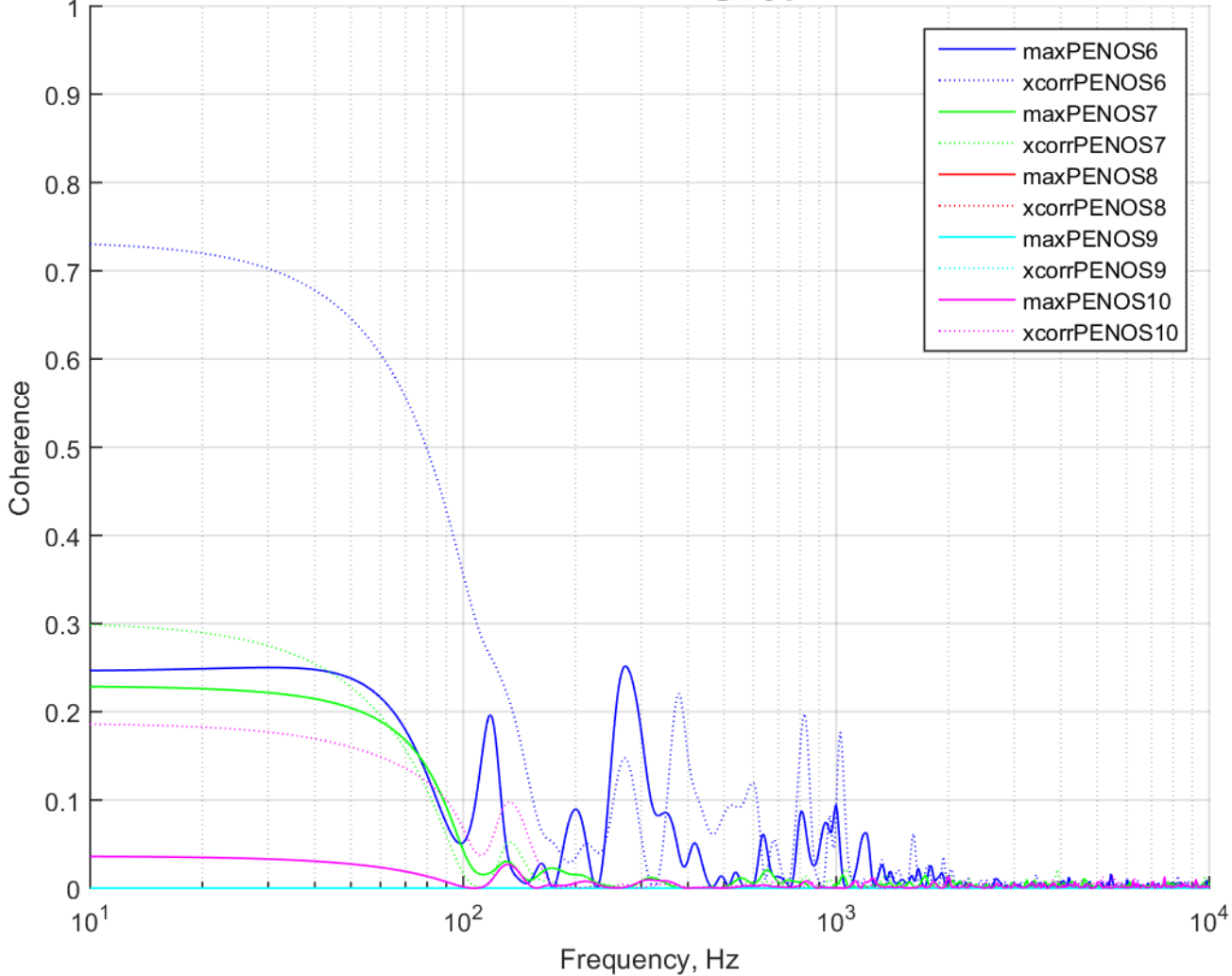
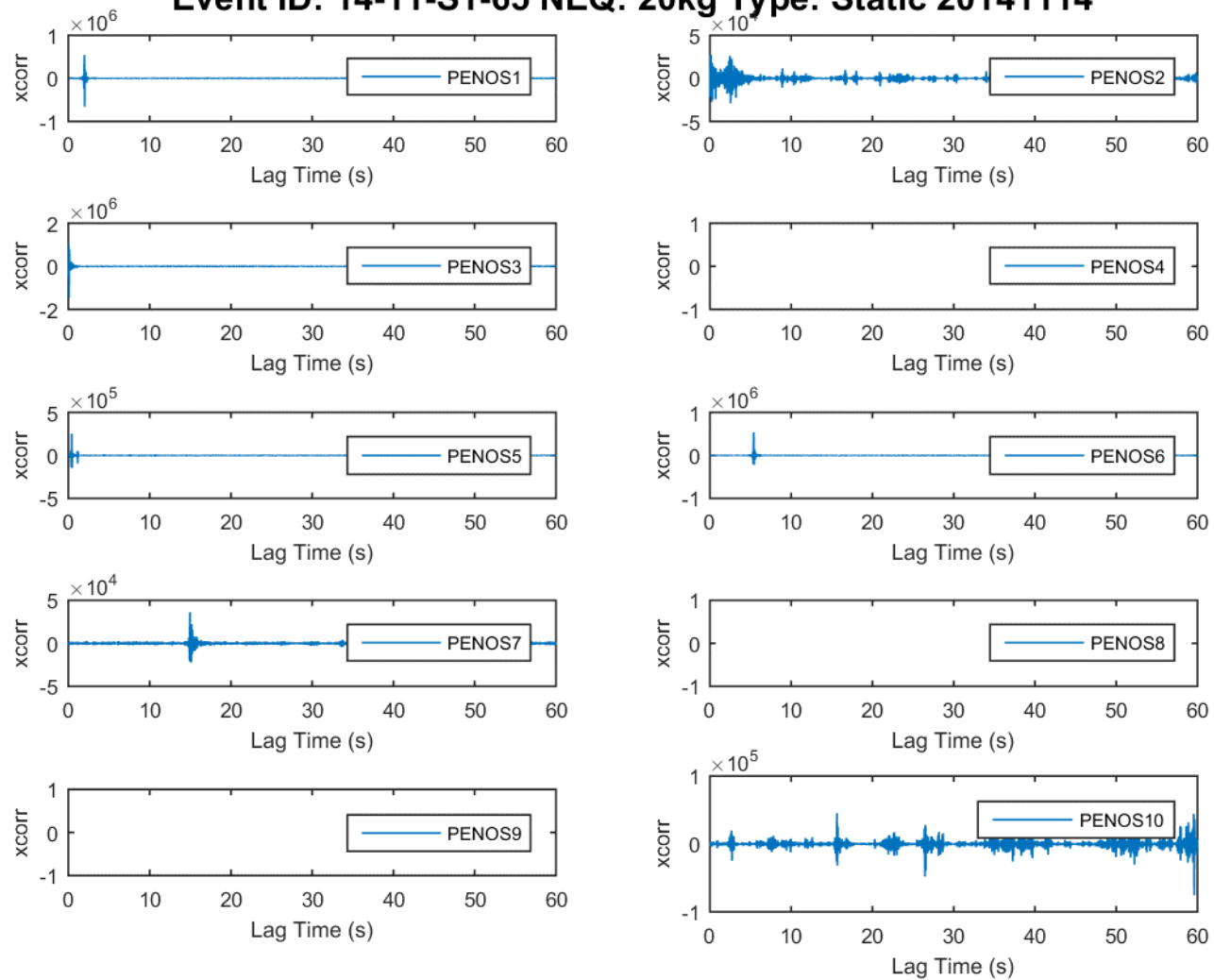
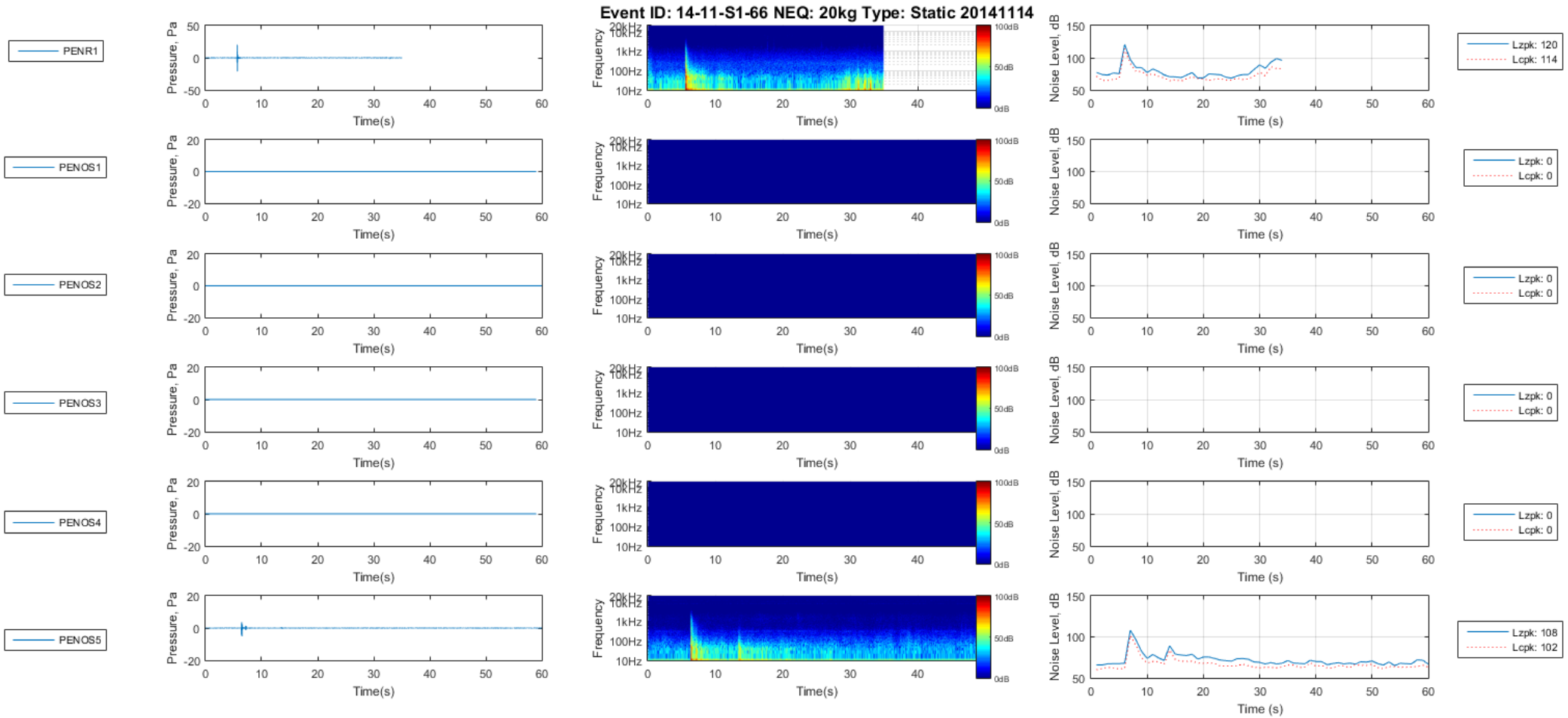


FIGURE 2.84: COHERENCE PEN\_OS 6 - 10 14-11-S1-65CTD

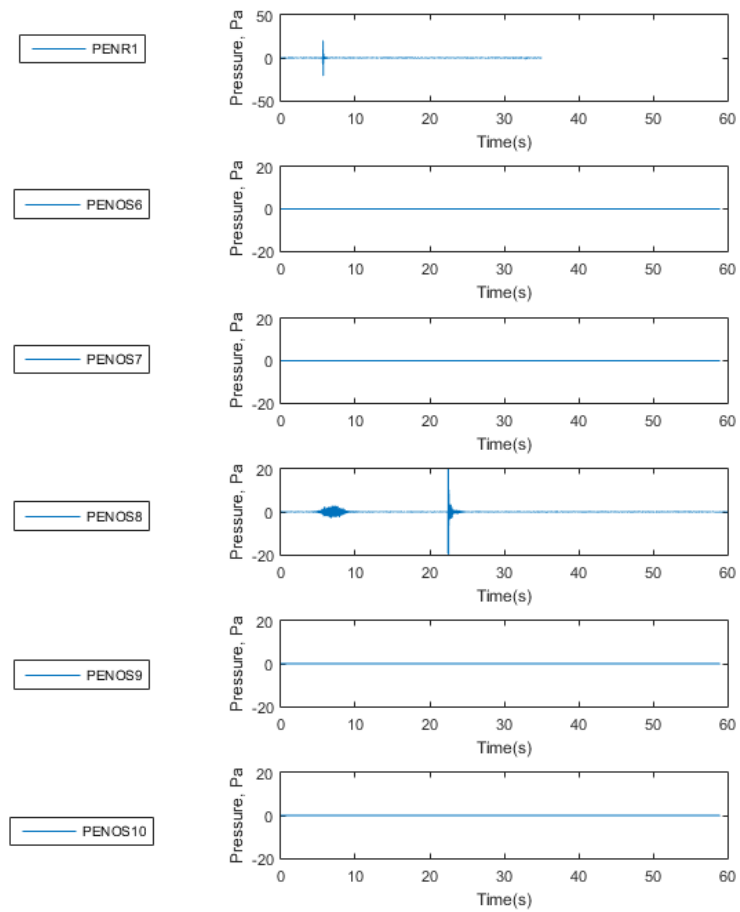
**Event ID: 14-11-S1-65 NEQ: 20kg Type: Static 20141114**



**FIGURE 2.85: CROSS CORRELATION PEN\_OS 1 - 10 14-11-S1-65**



**FIGURE 2.86: PEN\_OS 1 - 5 14-11-S1-66**



Event ID: 14-11-S1-66 NEQ: 20kg Type: Static 20141114 CTD

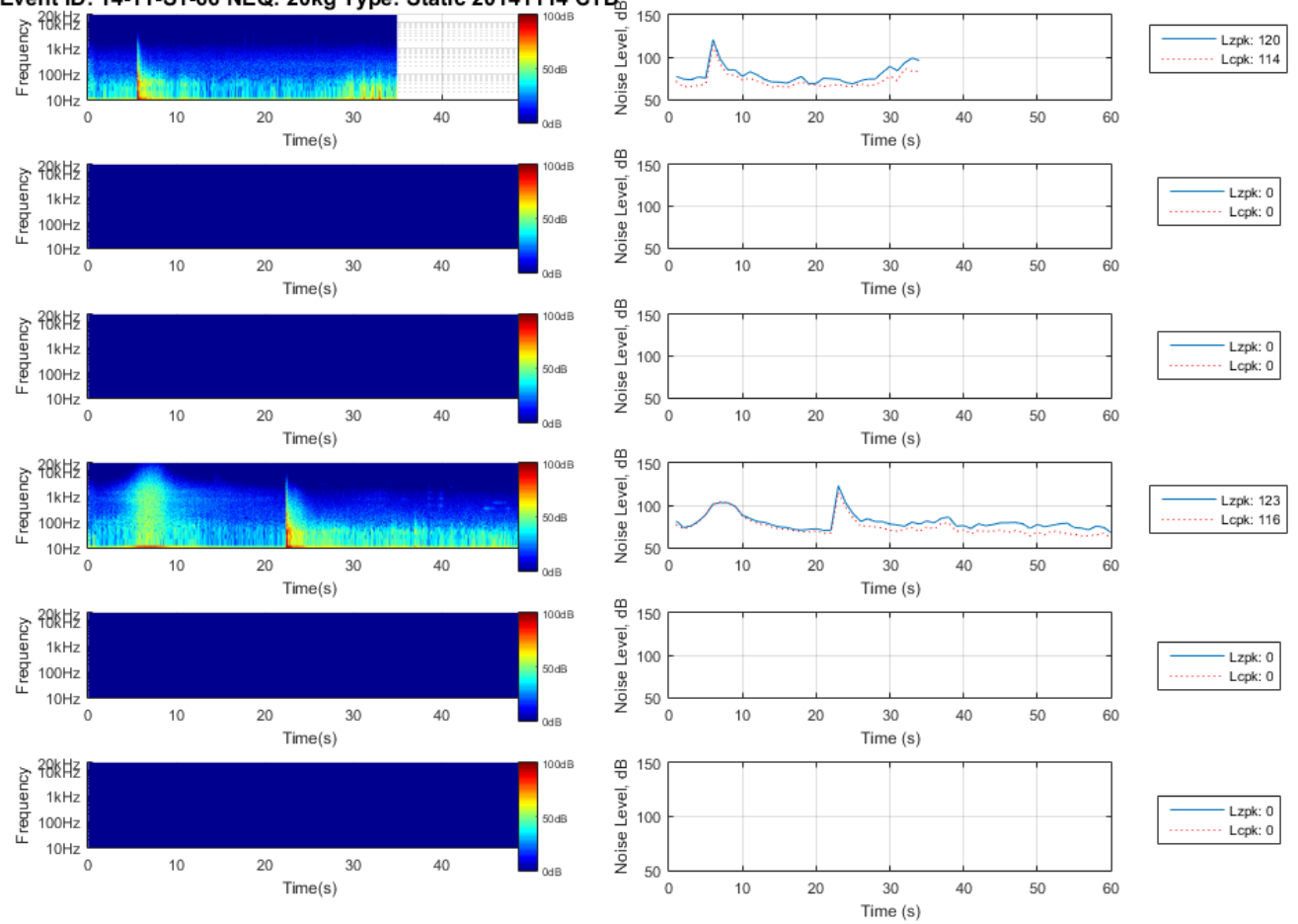


FIGURE 2.87: PEN\_OS 6 - 10 14-11-S1-66



Event ID: 14-11-S1-66 NEQ: 20kg Type: Static 20141114

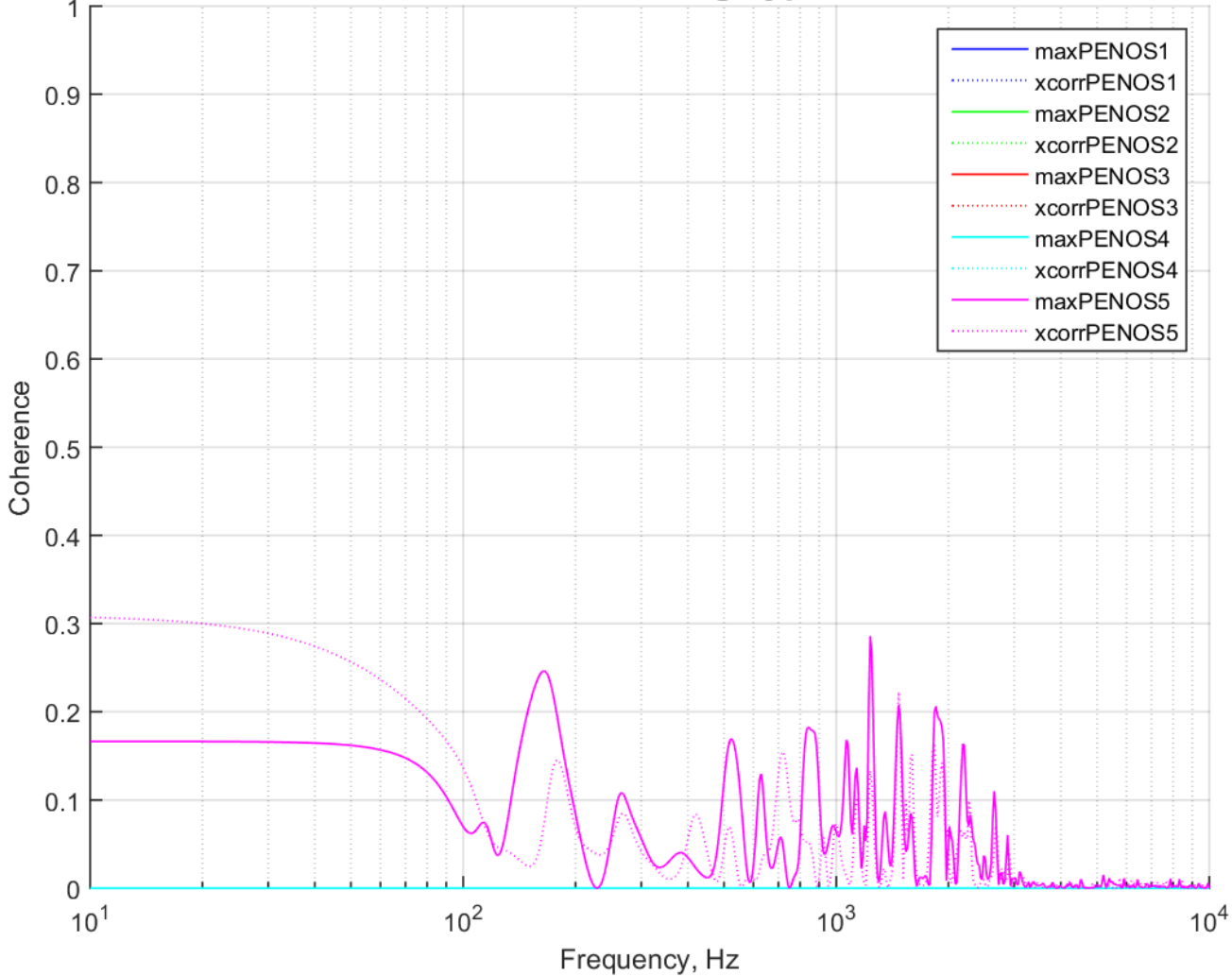


FIGURE 2.88: COHERENCE PEN\_OS 1 - 5 14-11-S1-66

Event ID: 14-11-S1-66 NEQ: 20kg Type: Static 20141114

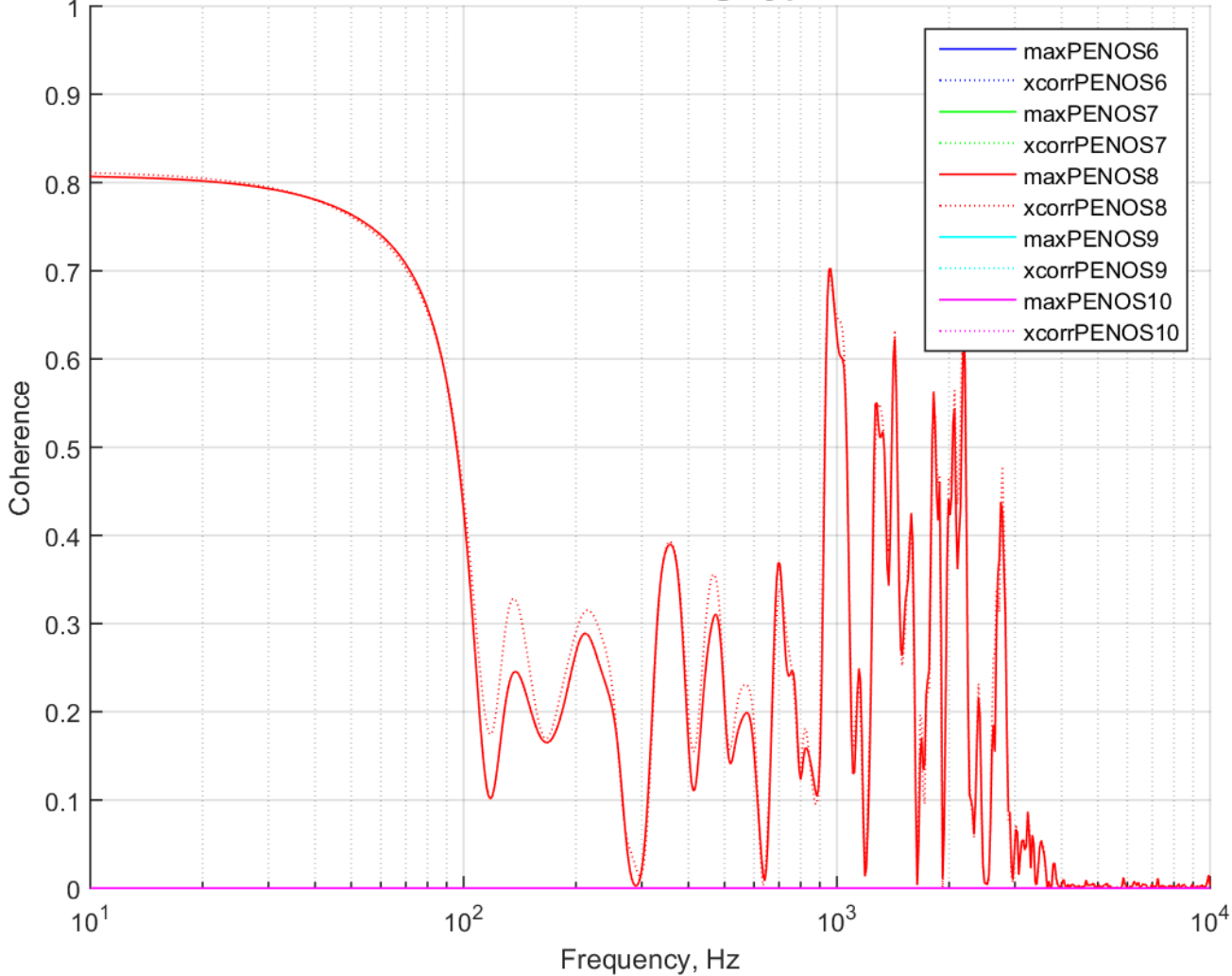
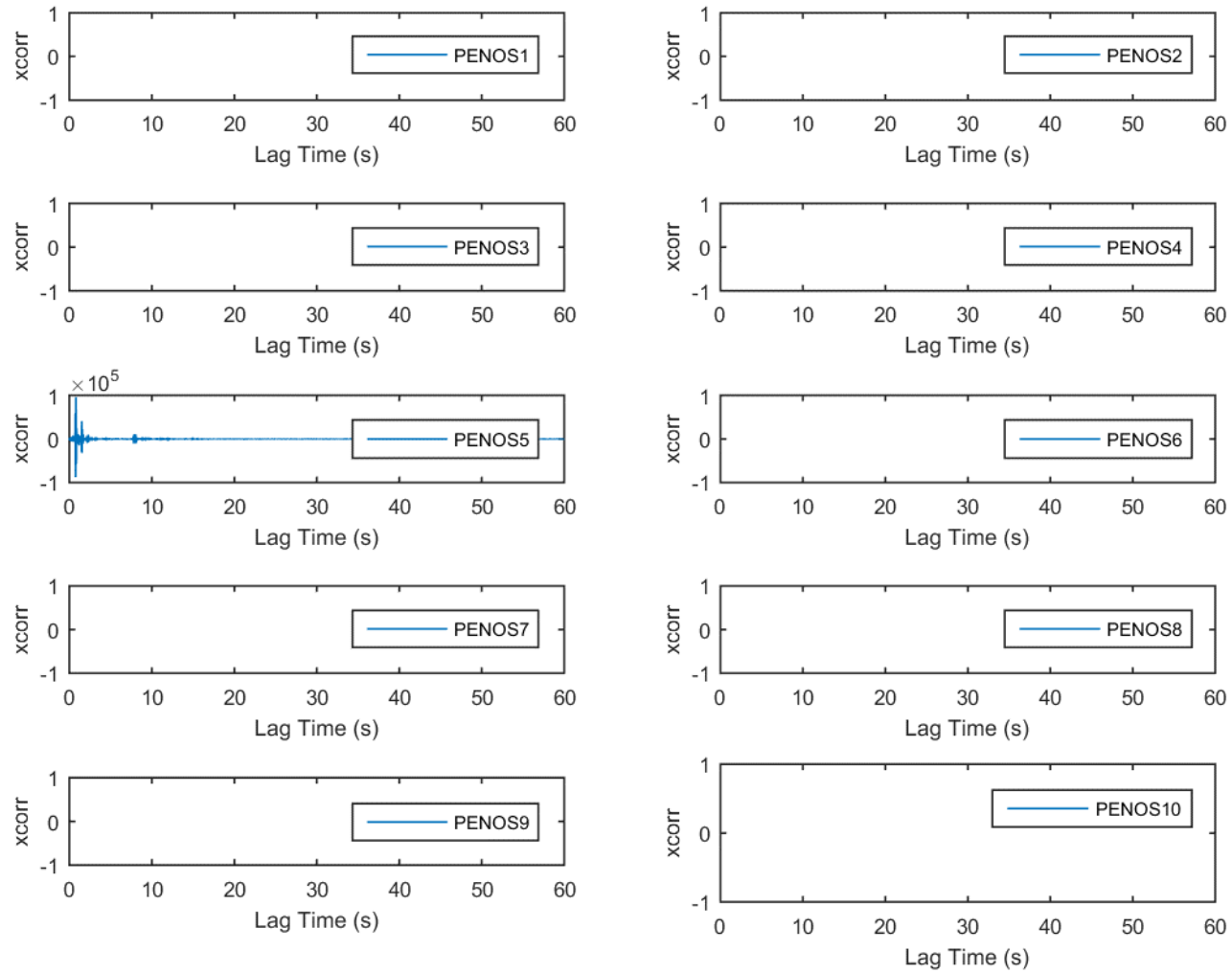
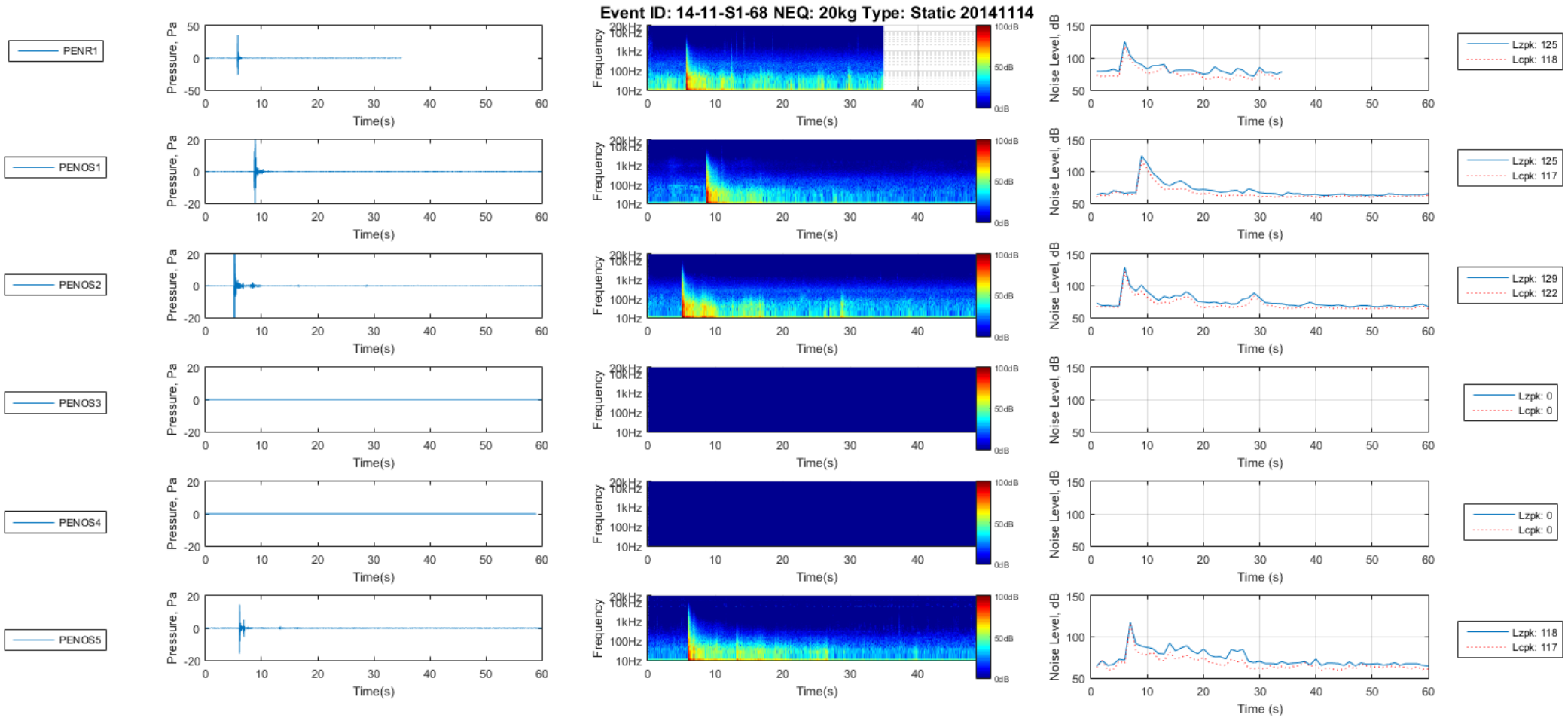


FIGURE 2.89: COHERENCE PEN\_OS 6 - 10 14-11-S1-66CTD

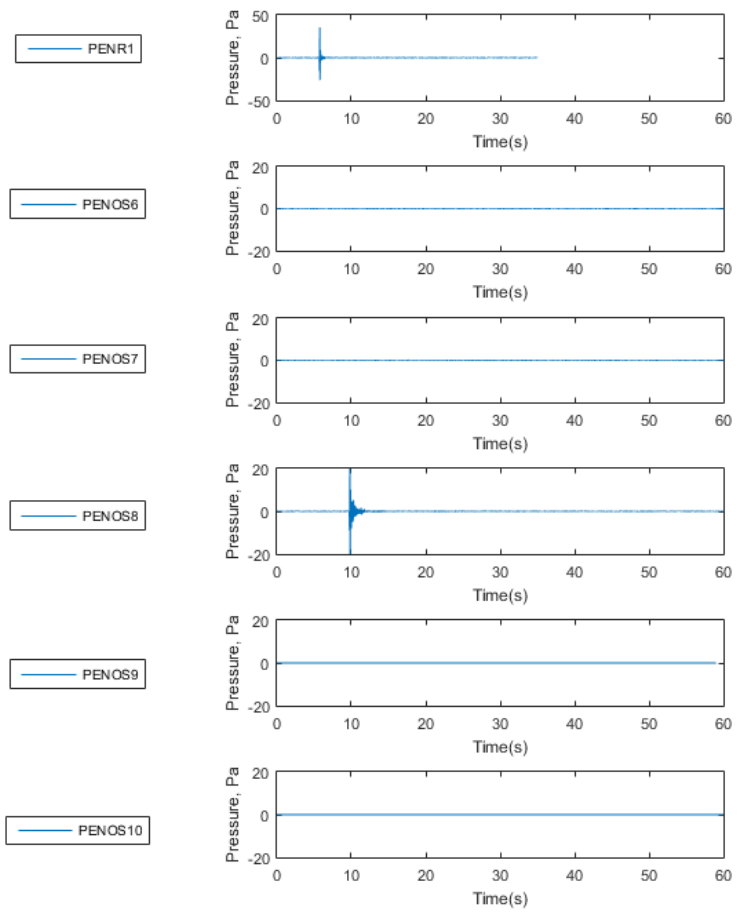
**Event ID: 14-11-S1-66 NEQ: 20kg Type: Static 20141114**



**FIGURE 2.90: CROSS CORRELATION PEN\_OS 1 - 10 14-11-S1-66**



**FIGURE 2.91: PEN\_OS 1 - 5 14-11-S1-68**



Event ID: 14-11-S1-68 NEQ: 20kg Type: Static 20141114 CTD.

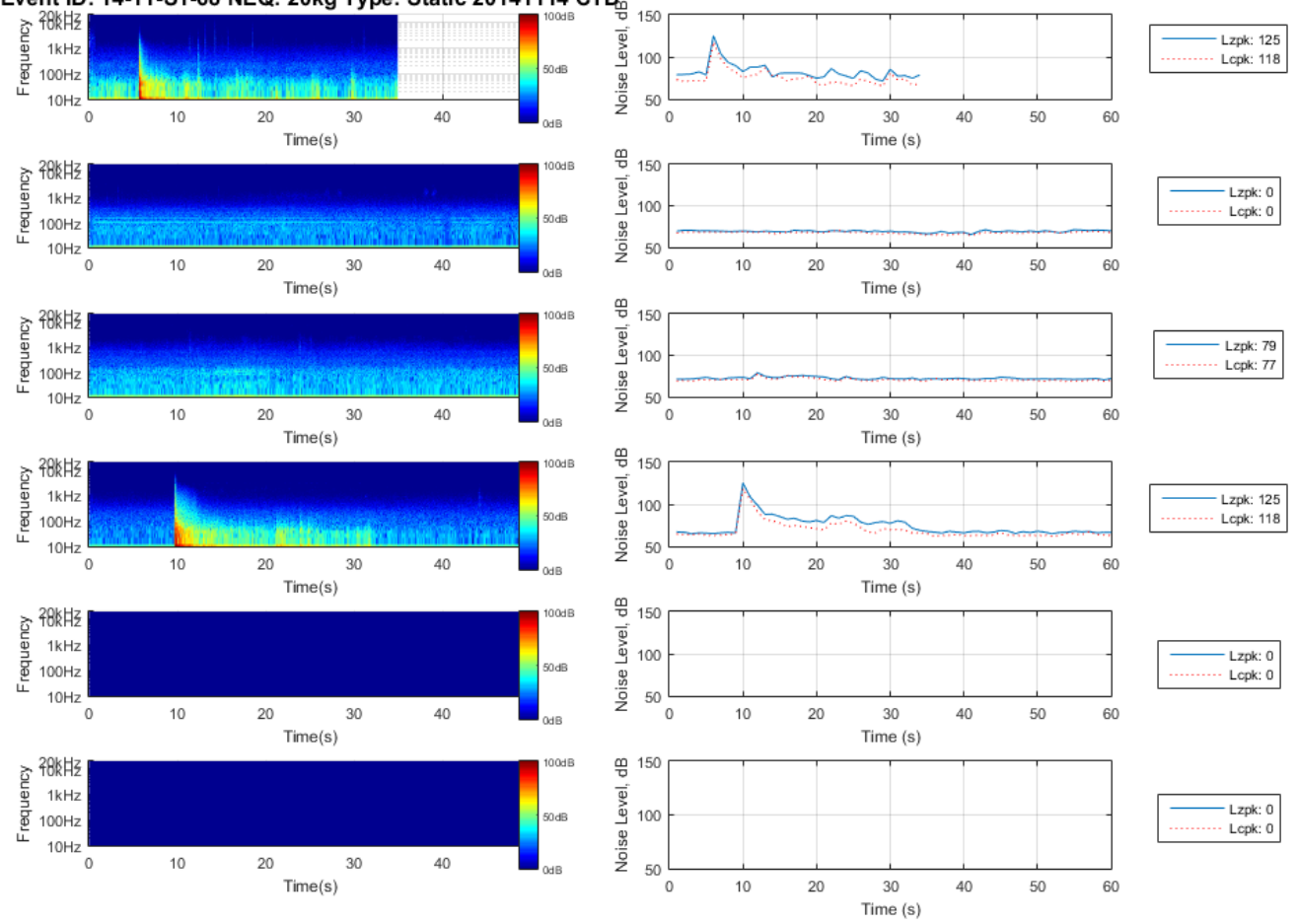


FIGURE 2.92: PEN\_OS 6 - 10 14-11-S1-68

Event ID: 14-11-S1-68 NEQ: 20kg Type: Static 20141114

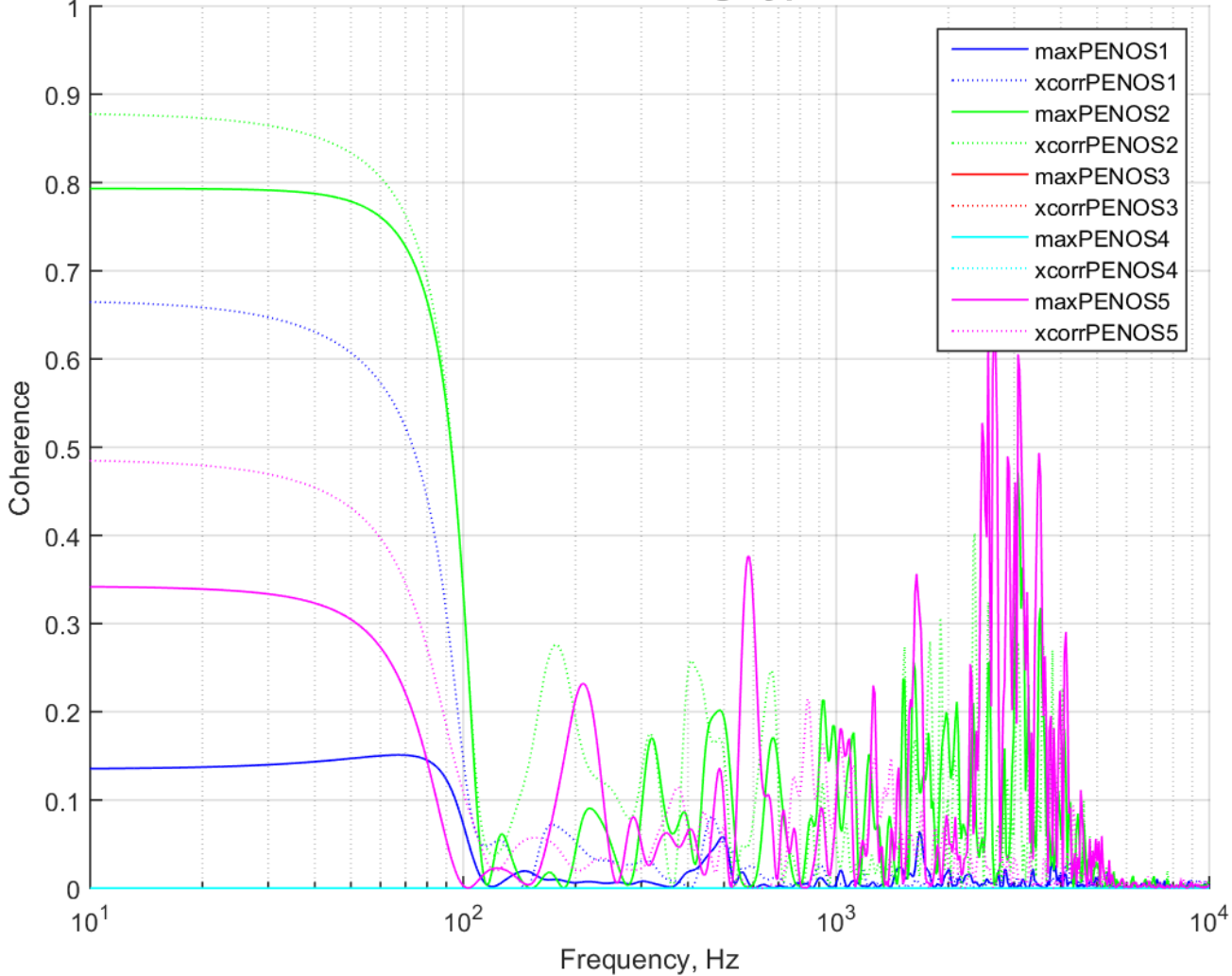


FIGURE 2.93: COHERENCE PEN\_OS 1 - 5 14-11-S1-68

Event ID: 14-11-S1-68 NEQ: 20kg Type: Static 20141114

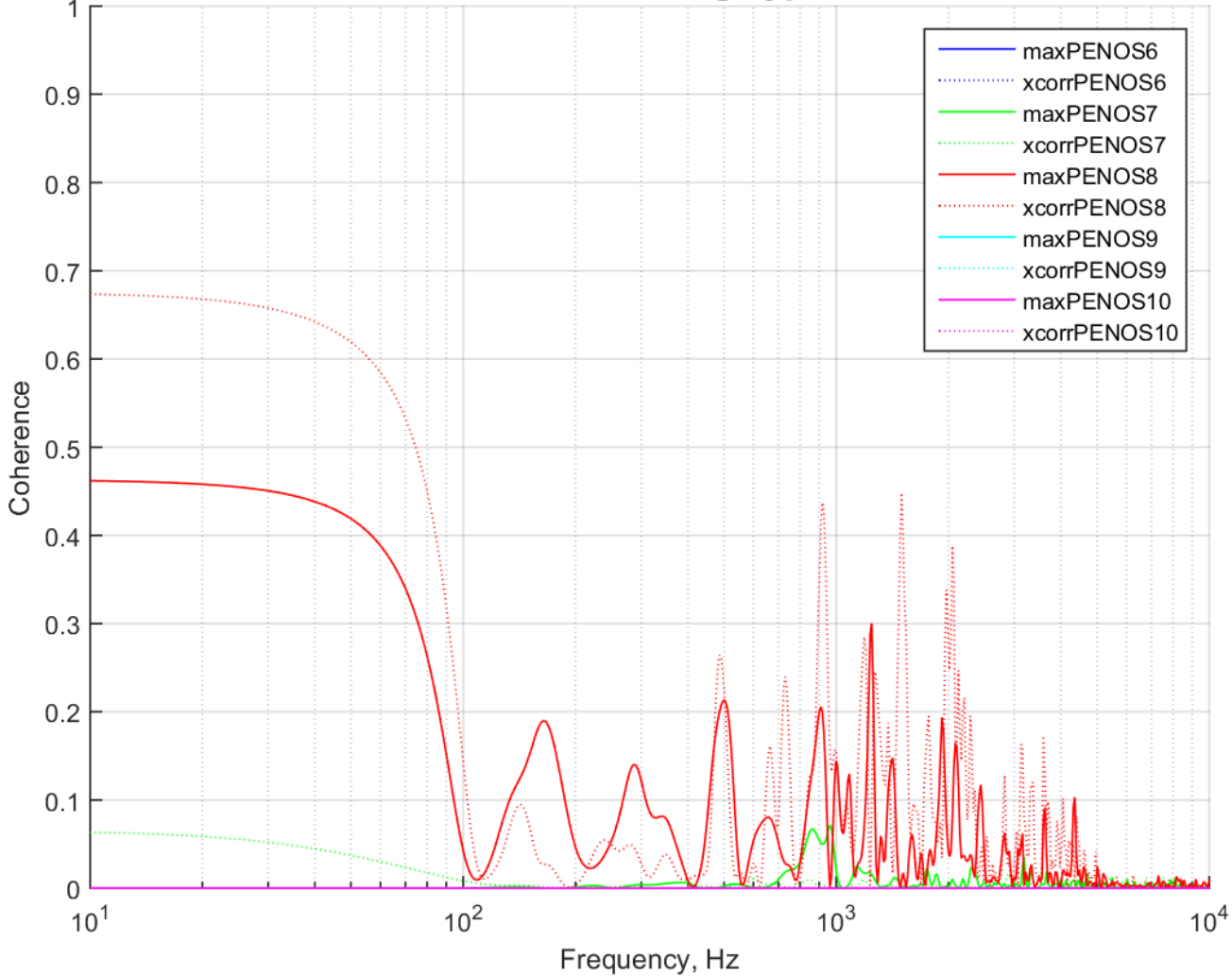
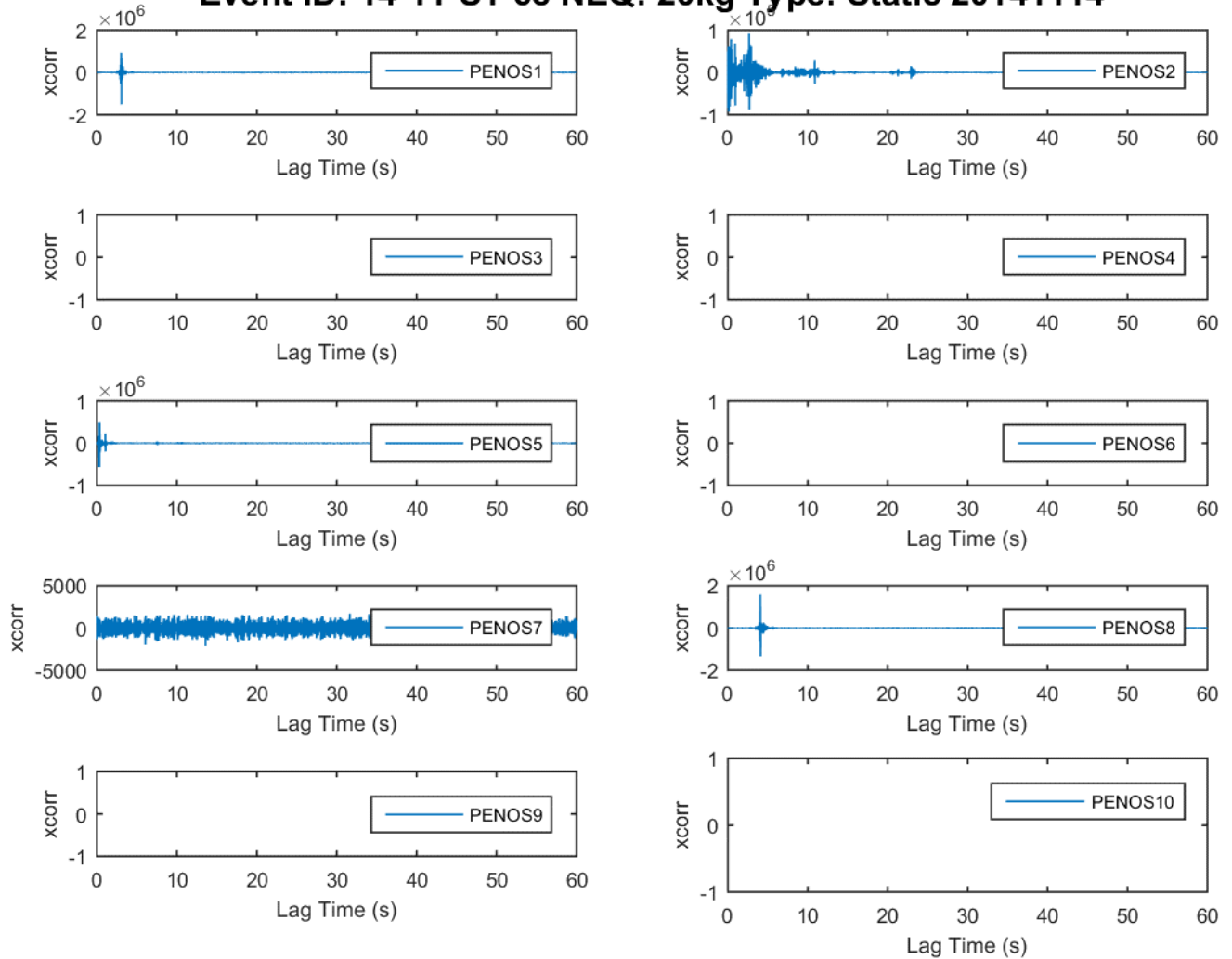


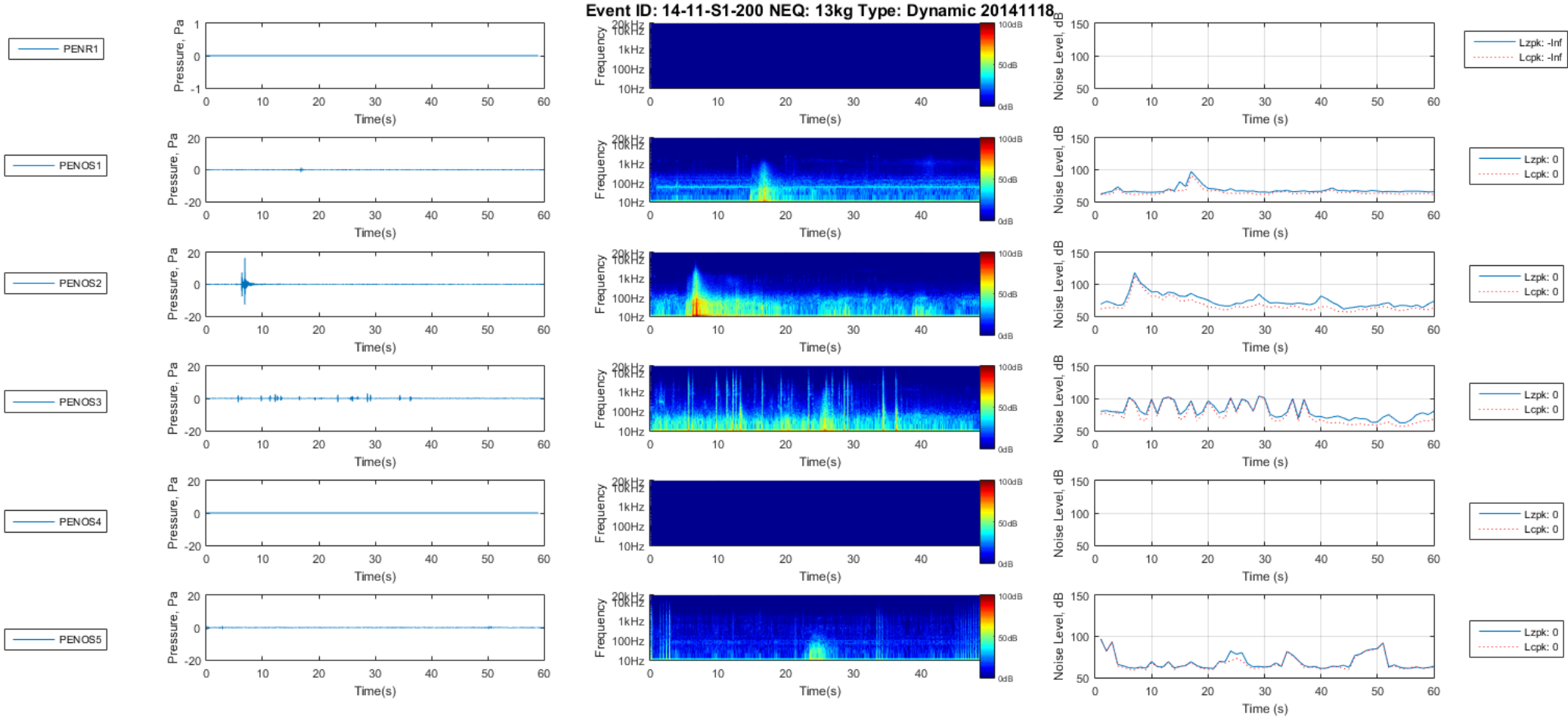
FIGURE 2.94: COHERENCE PEN\_OS 6 - 10 14-11-S1-68CTD

**Event ID: 14-11-S1-68 NEQ: 20kg Type: Static 20141114**

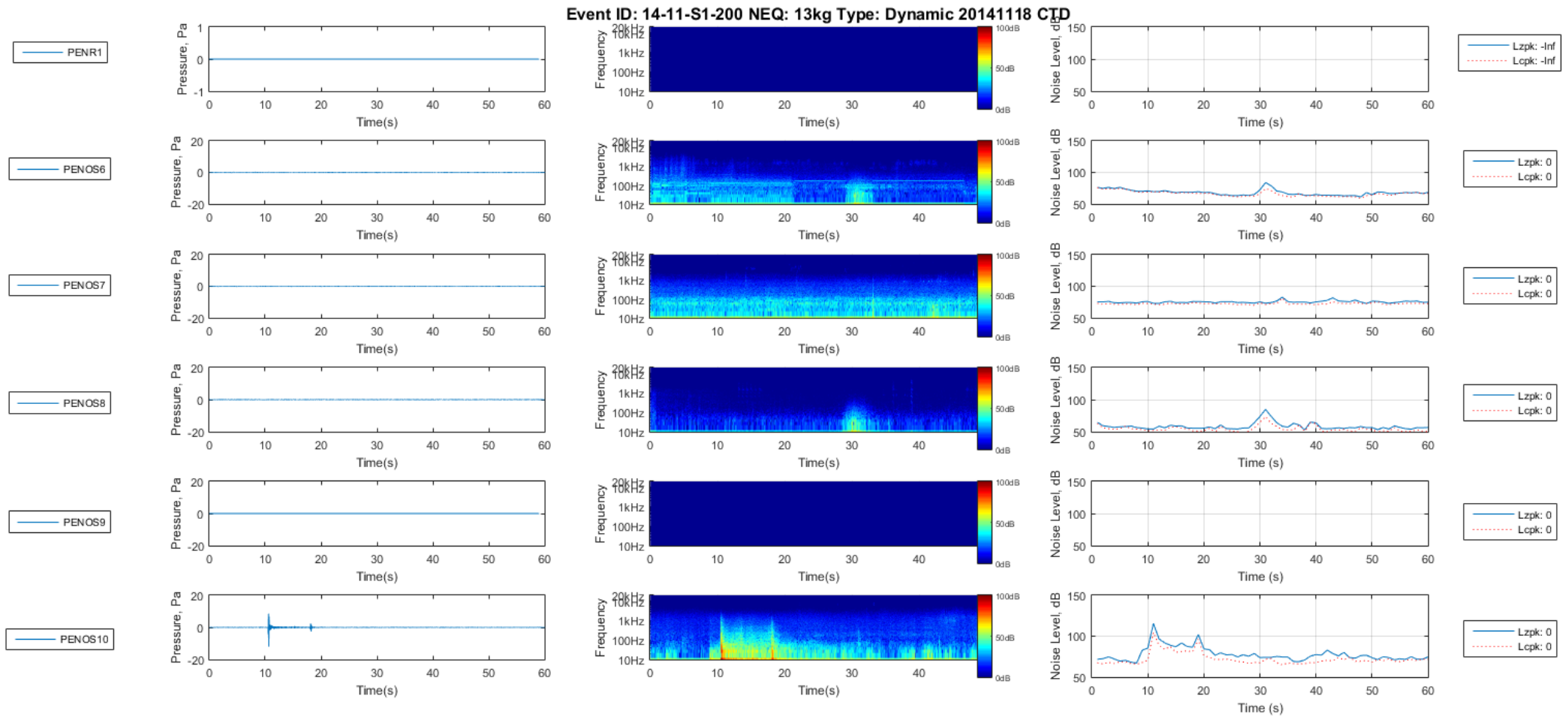


**FIGURE 2.95: CROSS CORRELATION PEN\_OS 1 - 10 14-11-S1-68**



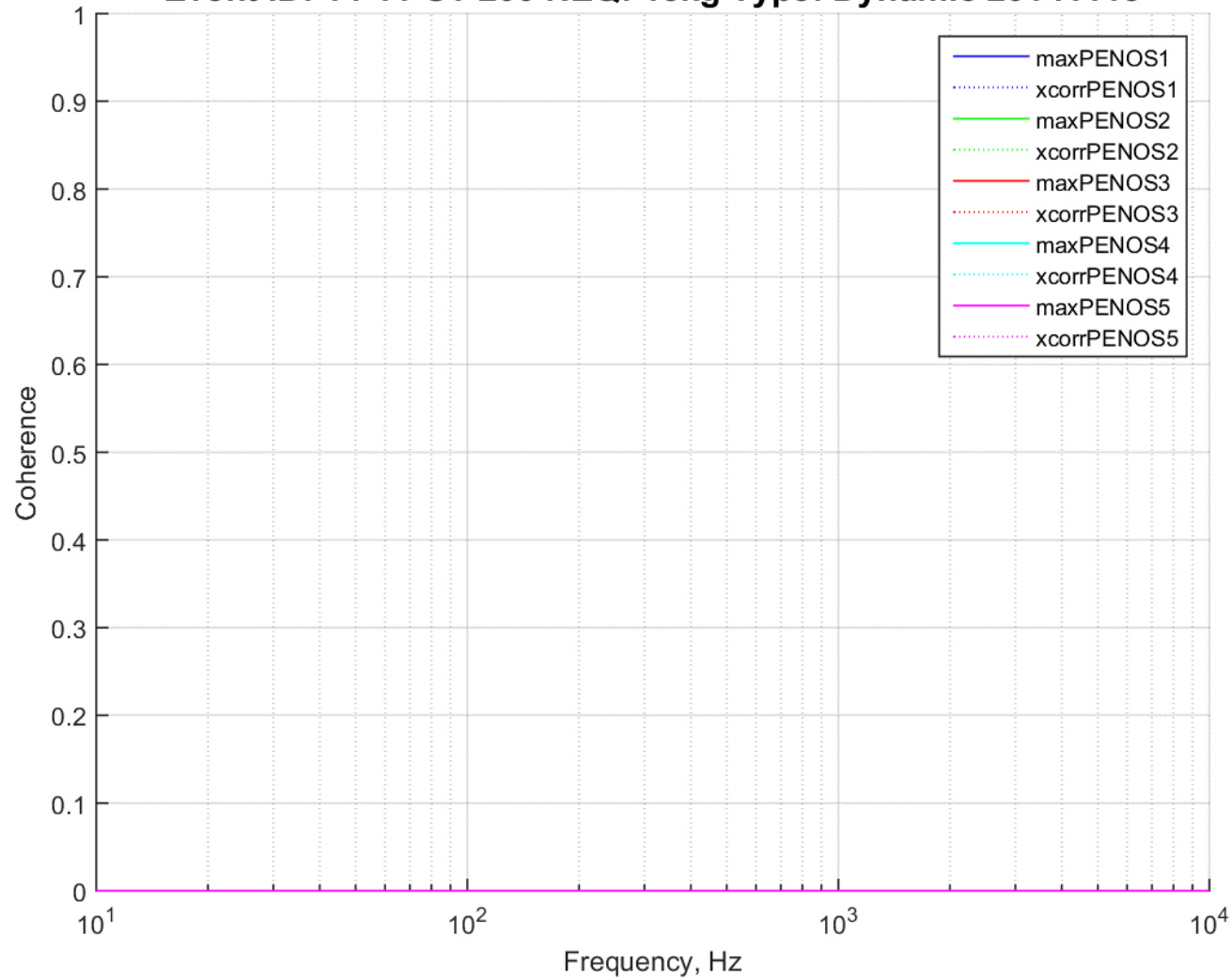


**FIGURE 2.96: PEN\_OS 1 - 5 14-11-S1-200**



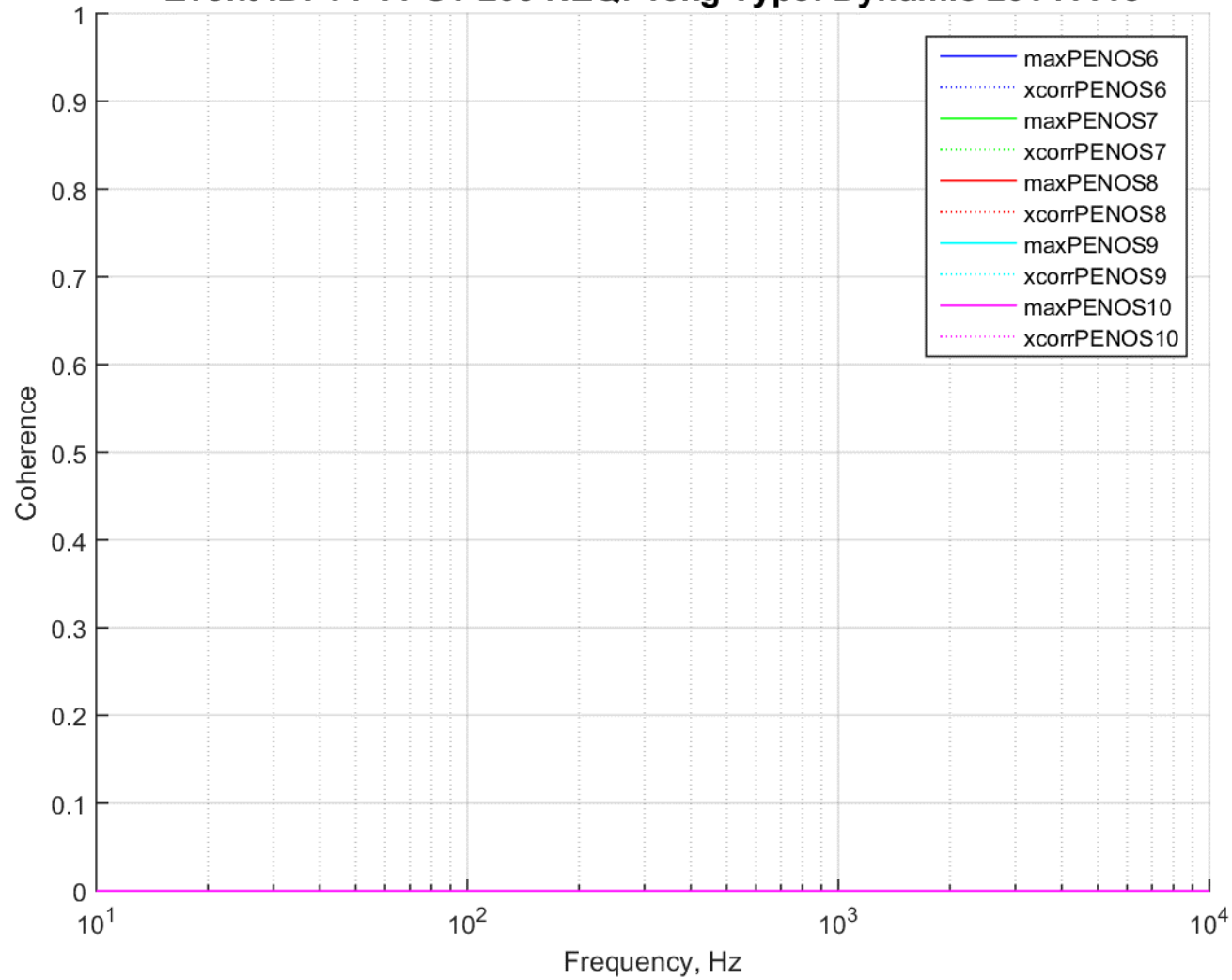
**FIGURE 2.97: PEN\_OS 6 - 10 14-11-S1-200**

**Event ID: 14-11-S1-200 NEQ: 13kg Type: Dynamic 20141118**



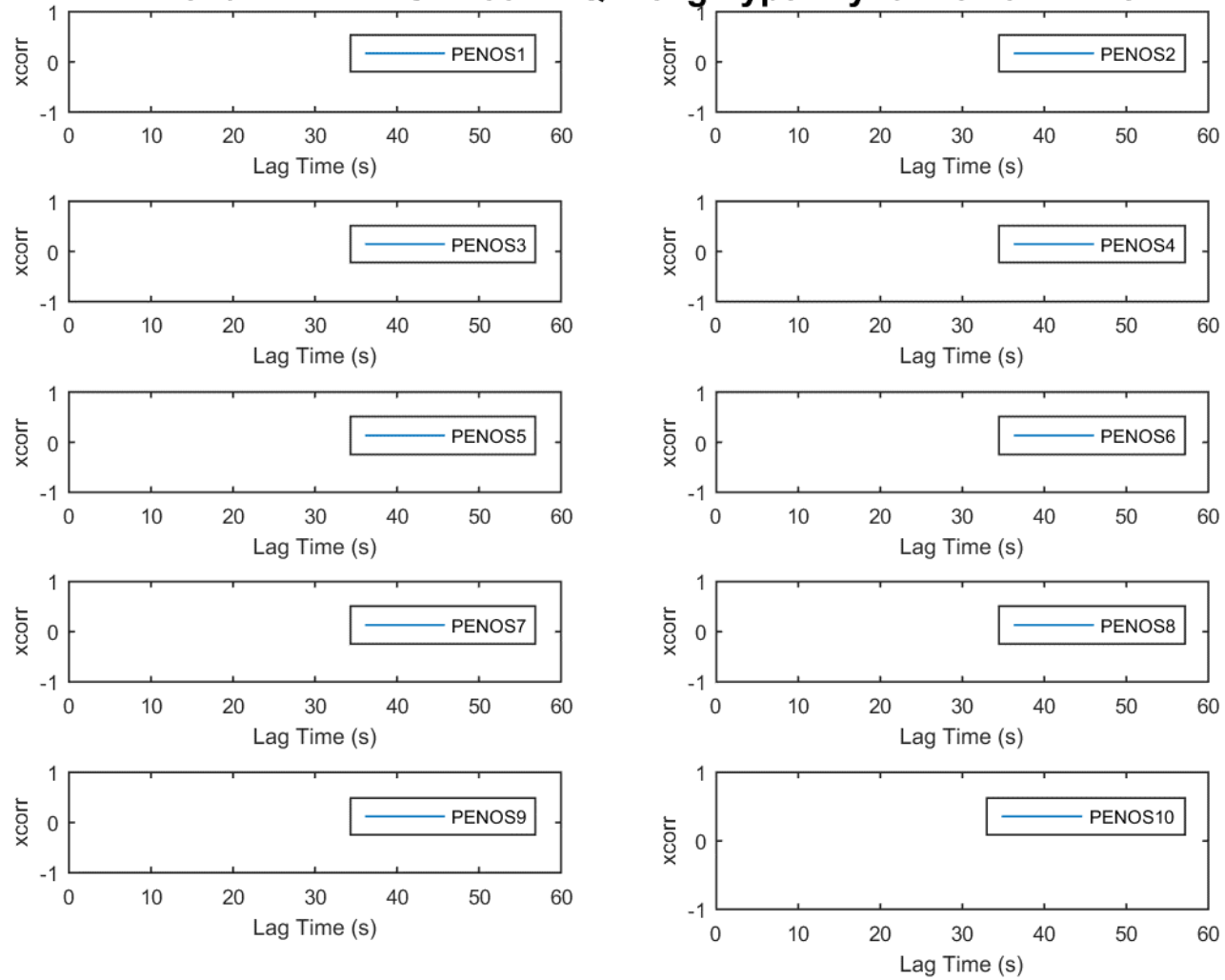
**FIGURE 2.98: COHERENCE PEN\_OS 1 - 5 14-11-S1-200**

**Event ID: 14-11-S1-200 NEQ: 13kg Type: Dynamic 20141118**

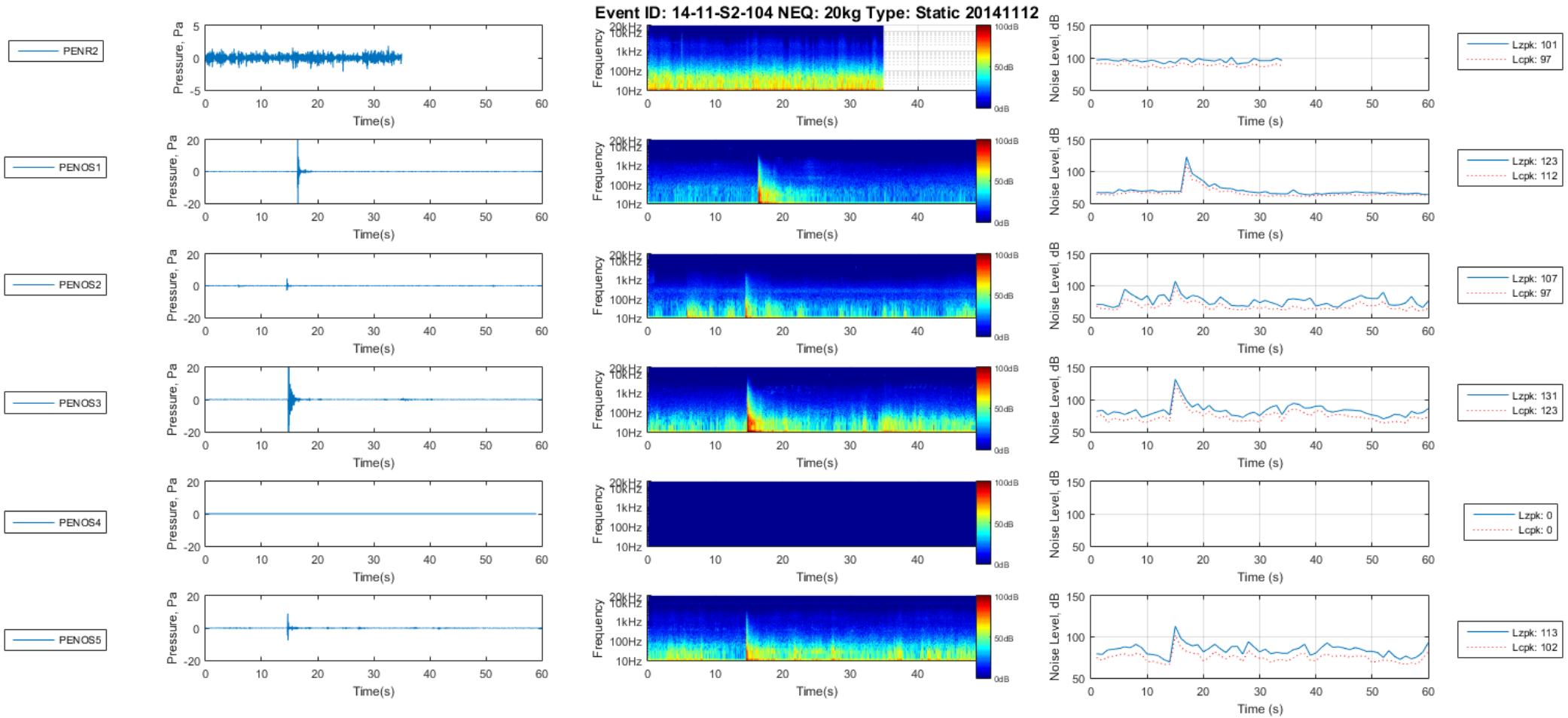


**FIGURE 2.99: COHERENCE PEN\_OS 6 - 10 14-11-S1-200CTD**

**Event ID: 14-11-S1-200 NEQ: 13kg Type: Dynamic 20141118**



**FIGURE 2.100: CROSS CORRELATION PEN\_OS 1 - 10 14-11-S1-200**



**FIGURE 2.101: PEN\_OS 1 - 5 14-11-S2-104**

Event ID: 14-11-S2-104 NEQ: 20kg Type: Static 20141112 CTD

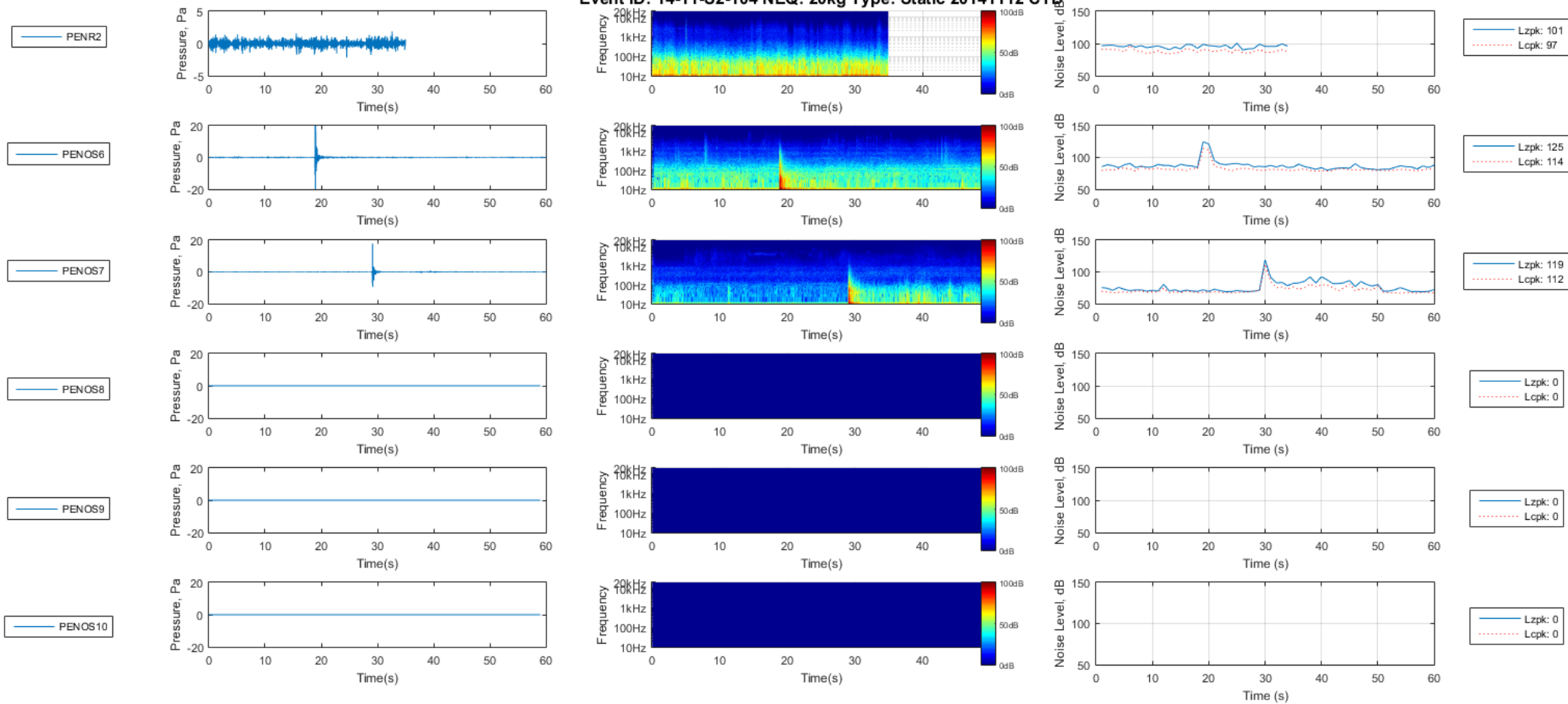


FIGURE 2.102: PEN\_OS 6 - 10 14-11-S2-104

Event ID: 14-11-S2-104 NEQ: 20kg Type: Static 20141112

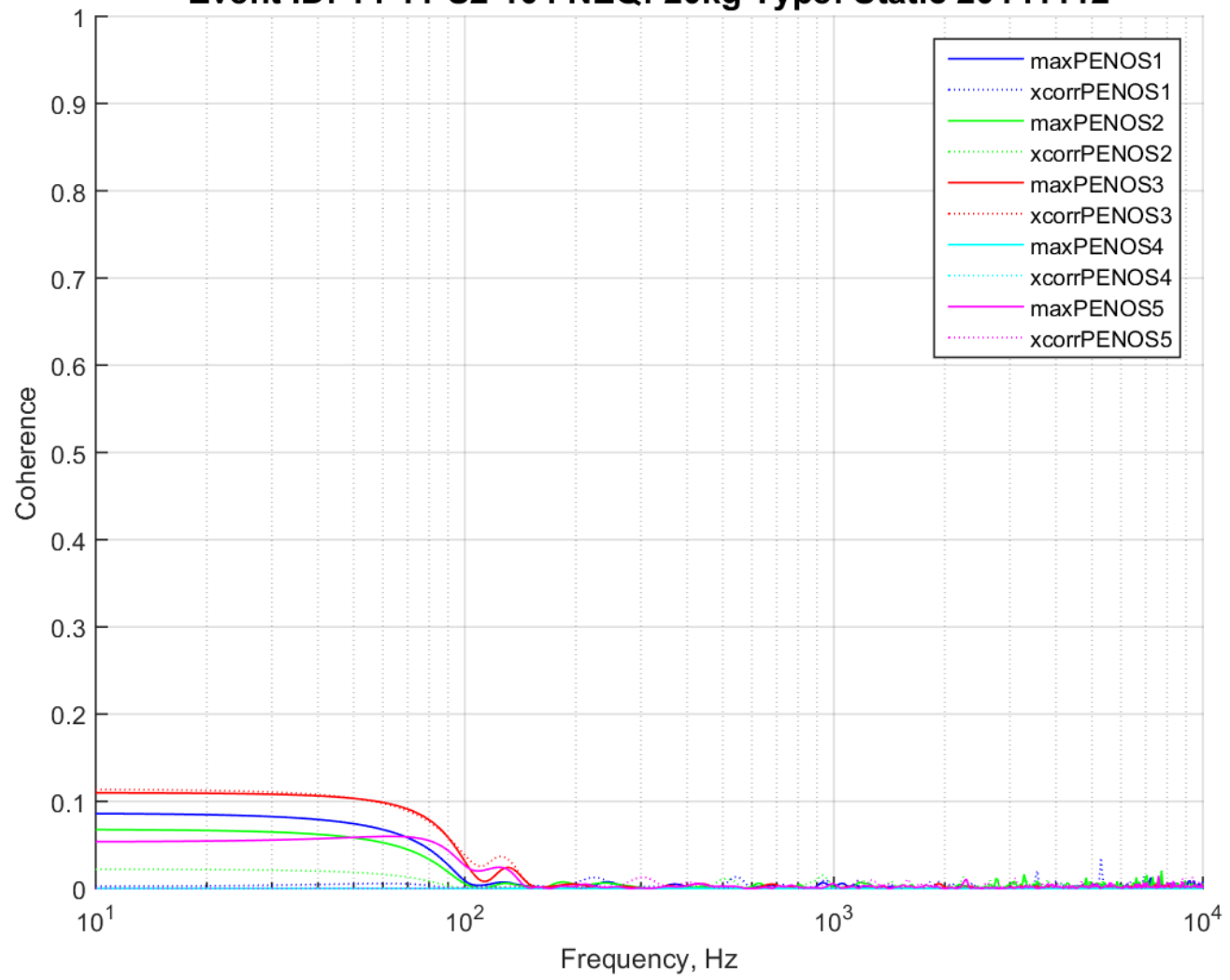


FIGURE 2.103: COHERENCE PEN\_OS 1 - 5 14-11-S2-104



Event ID: 14-11-S2-104 NEQ: 20kg Type: Static 20141112

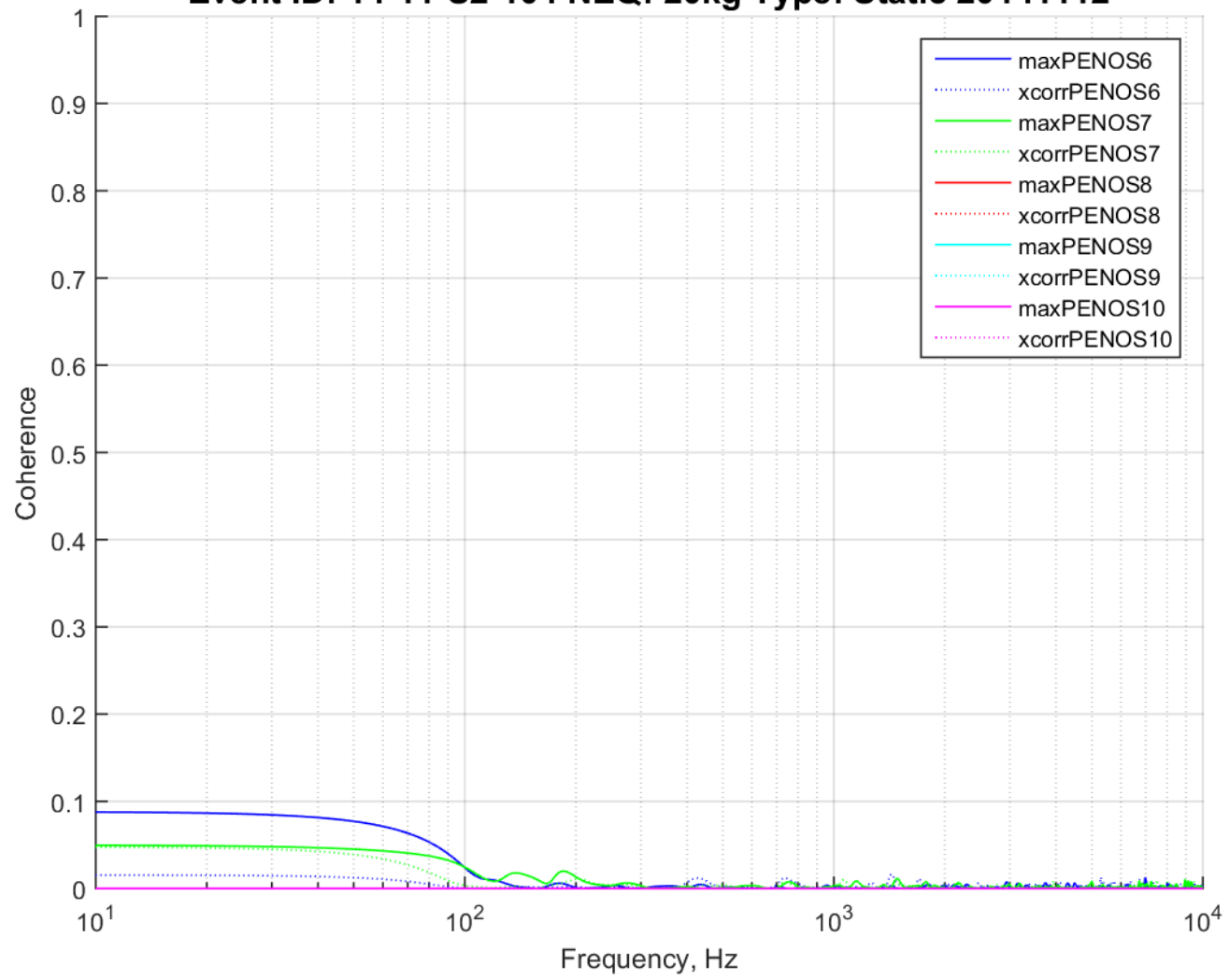
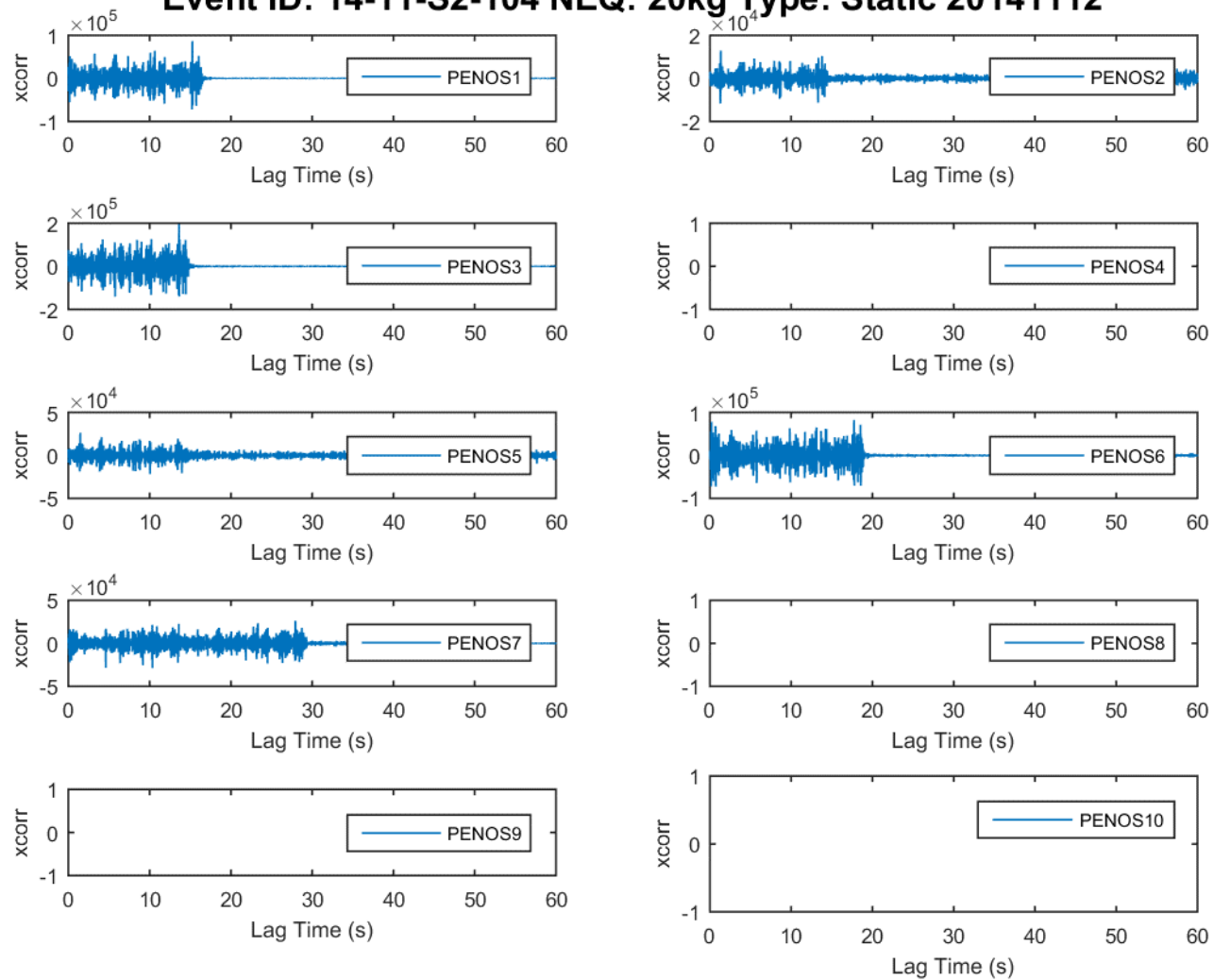
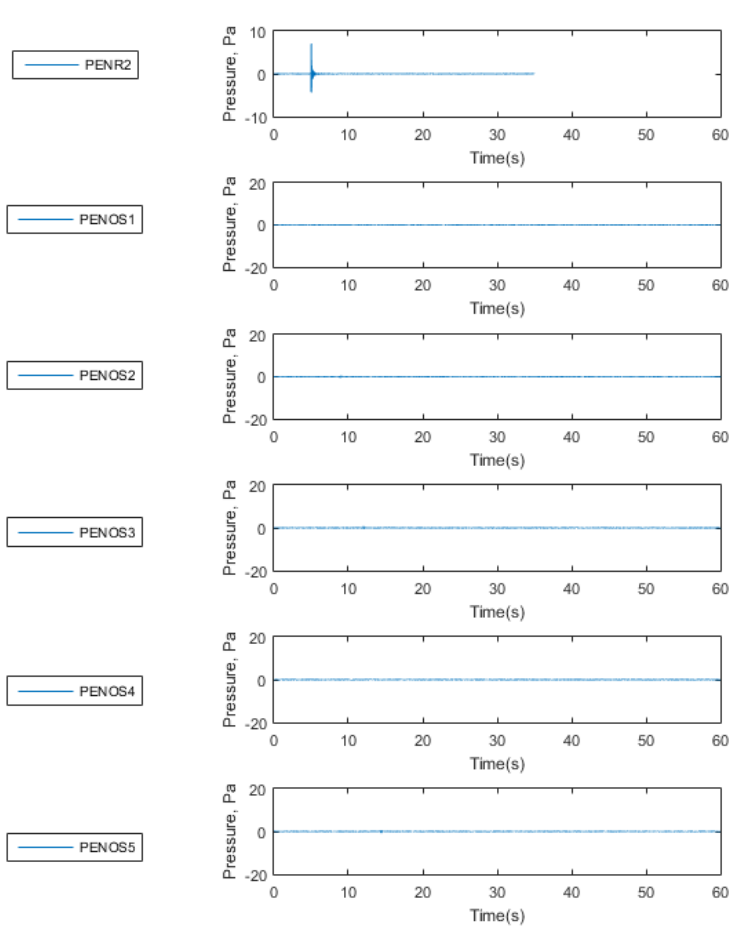


FIGURE 2.104: COHERENCE PEN\_OS 6 - 10 14-11-S2-104CTD

**Event ID: 14-11-S2-104 NEQ: 20kg Type: Static 20141112**



**FIGURE 2.105: CROSS CORRELATION PEN\_OS 1 - 10 14-11-S2-104**



Event ID: 14-12-S2-111 NEQ: 0.68kg Type: Static 20141216

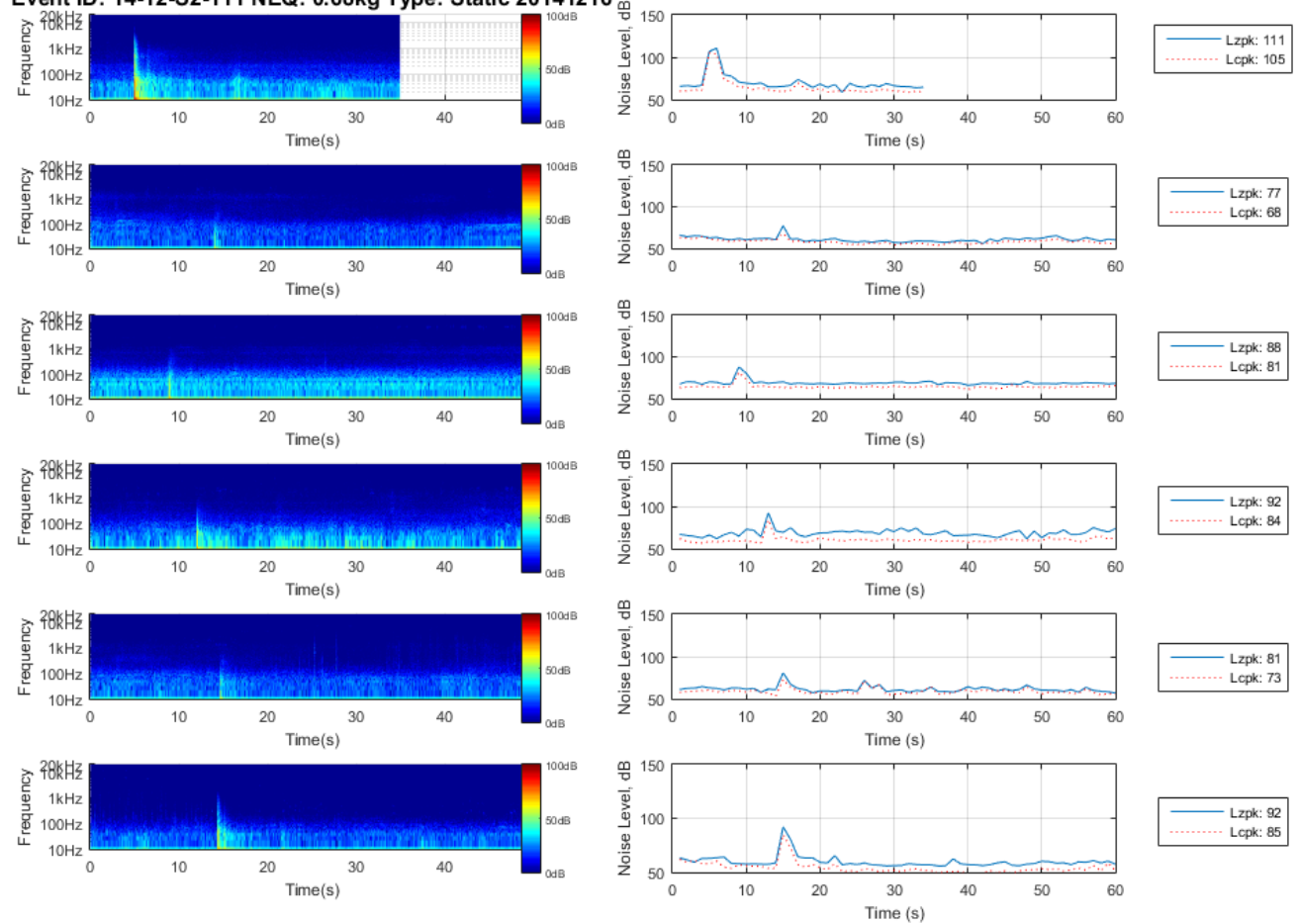


FIGURE 2.106: PEN\_OS 1 - 5 14-11-S2-111

Event ID: 14-12-S2-111 NEQ: 0.68kg Type: Static 20141216 CTD

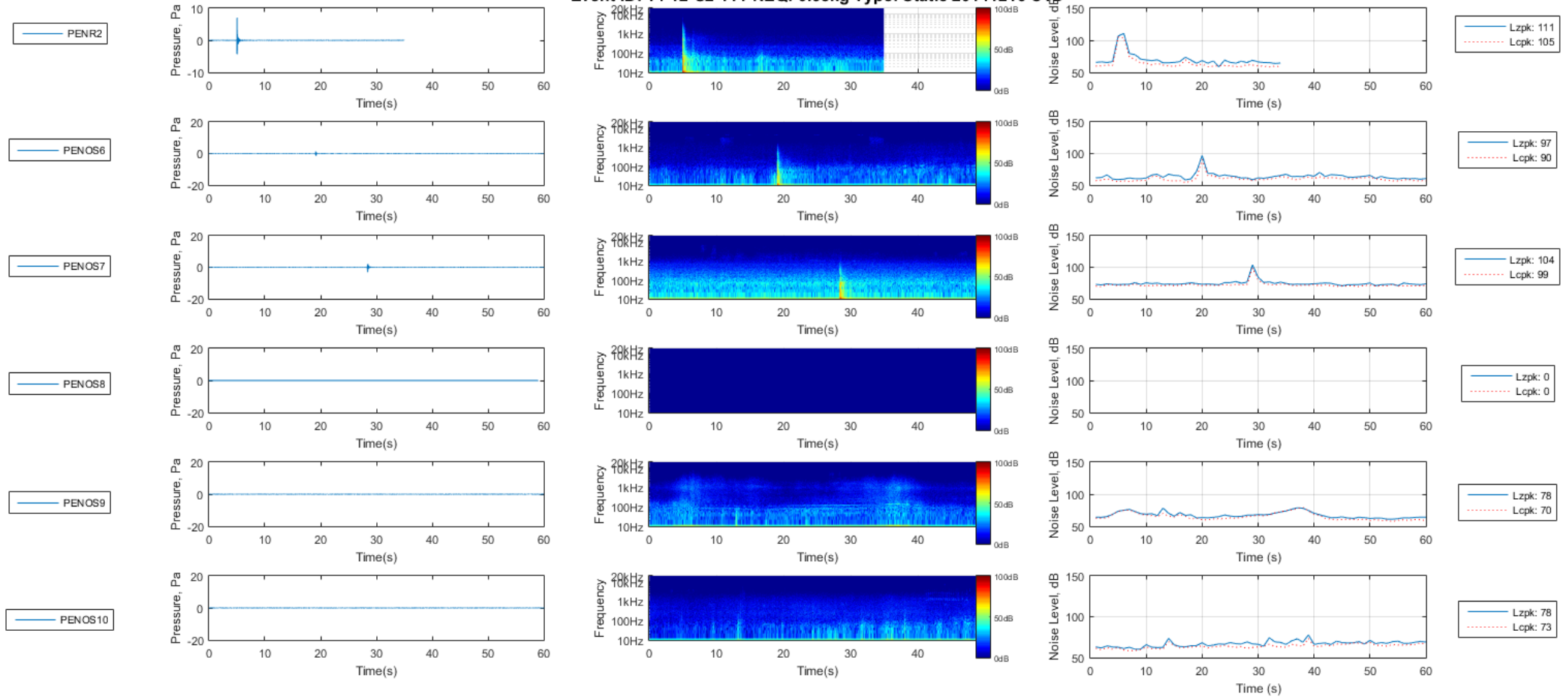


FIGURE 2.107: PEN\_OS 6 - 10 14-11-S2-111

Event ID: 14-12-S2-111 NEQ: 0.68kg Type: Static 20141216

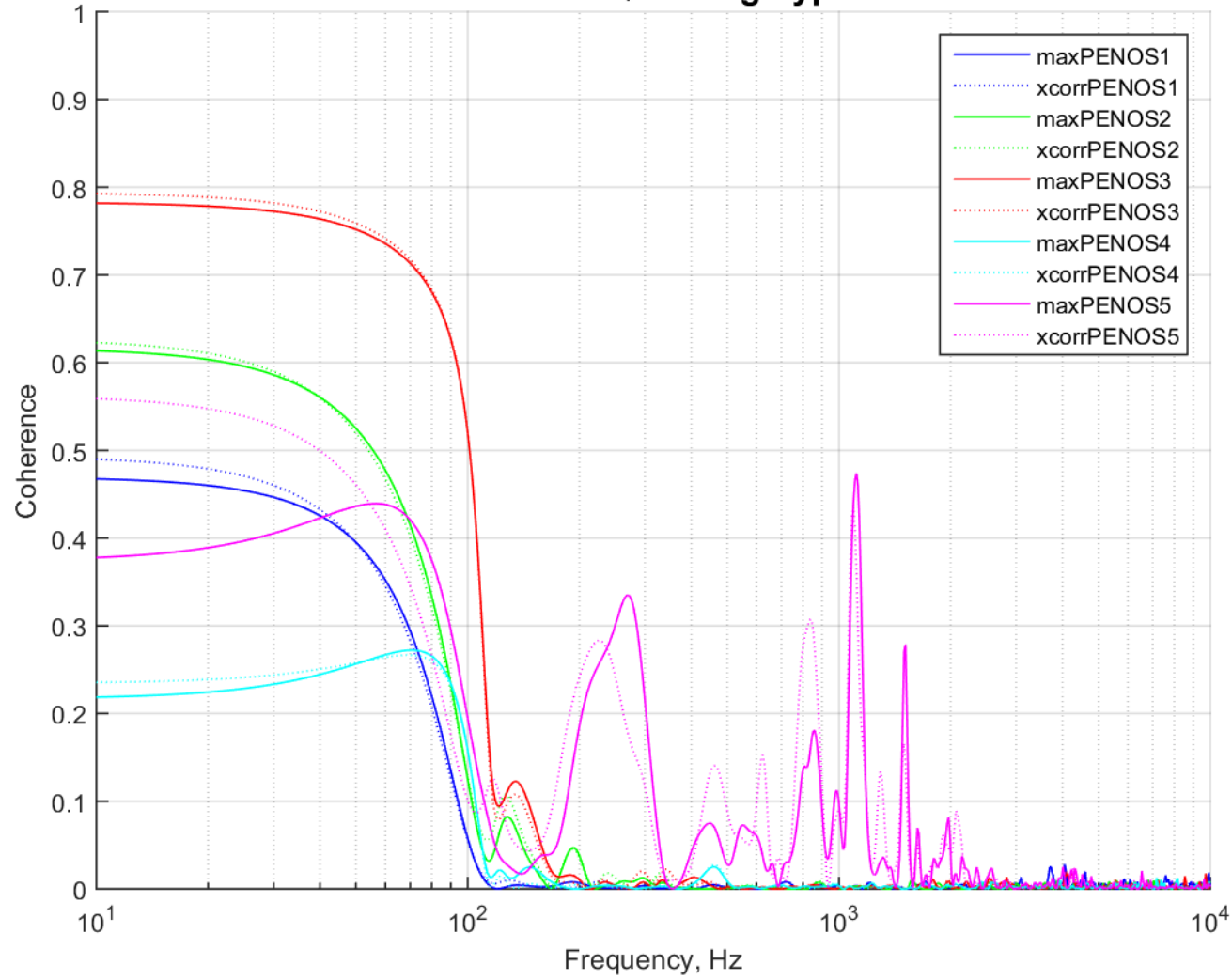


FIGURE 2.108: COHERENCE PEN\_OS 1 - 5 14-11-S2-111

Event ID: 14-12-S2-111 NEQ: 0.68kg Type: Static 20141216

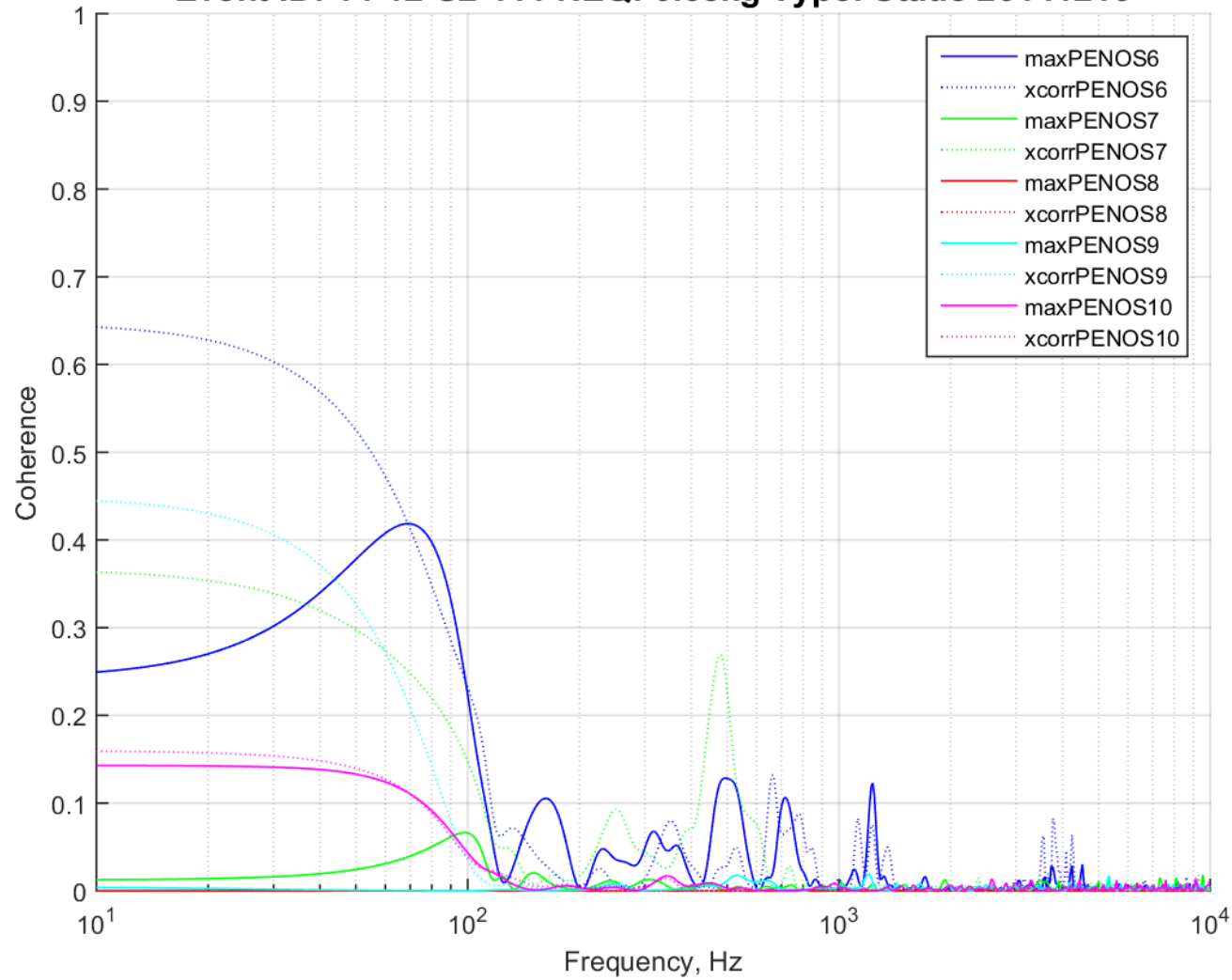
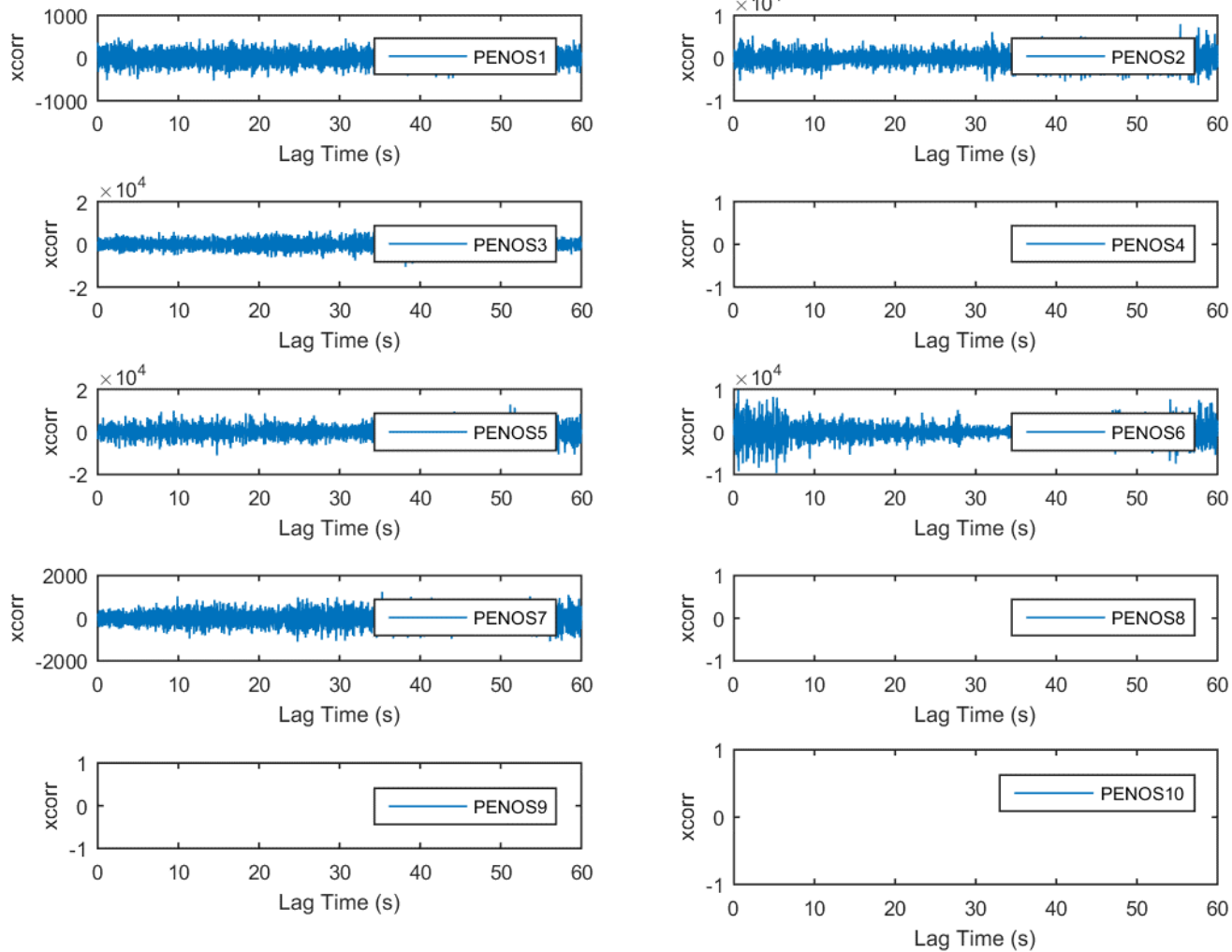


FIGURE 2.109: COHERENCE PEN\_OS 6 - 10 14-11-S2-111CTD

**Event ID: 14-11-S2-111 NEQ: 5kg Type: Static 20141112**



**FIGURE 2.110: CROSS CORRELATION PEN\_OS 1 - 10 14-11-S2-111**

Event ID: 14-12-S1-22; S2-45 NEQ: 13kg Type: Dynamic 20141205

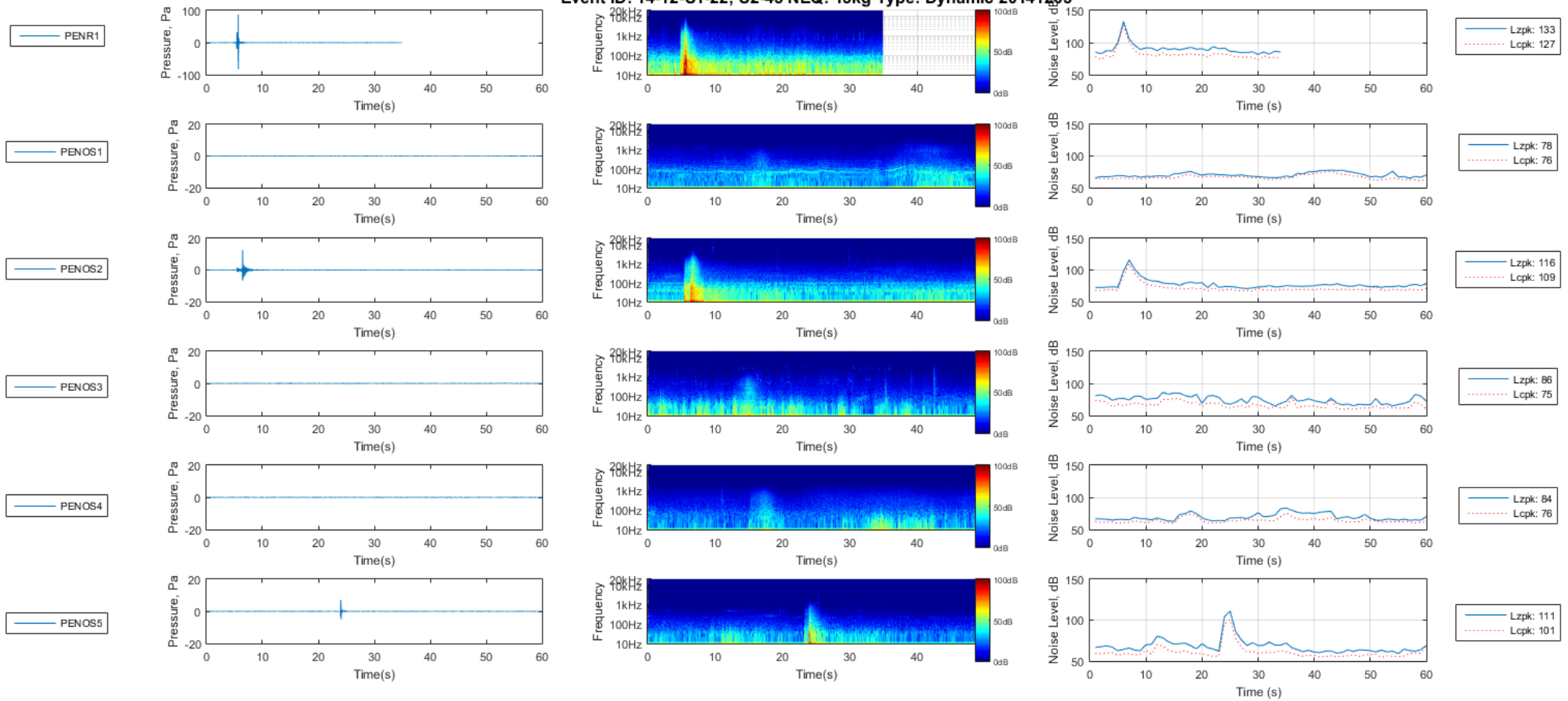


FIGURE 2.111: PEN\_OS 1 - 5 14-12-S1-22; S2-45



Event ID: 14-12-S1-22; S2-45 NEQ: 13kg Type: Dynamic 20141205.CTD

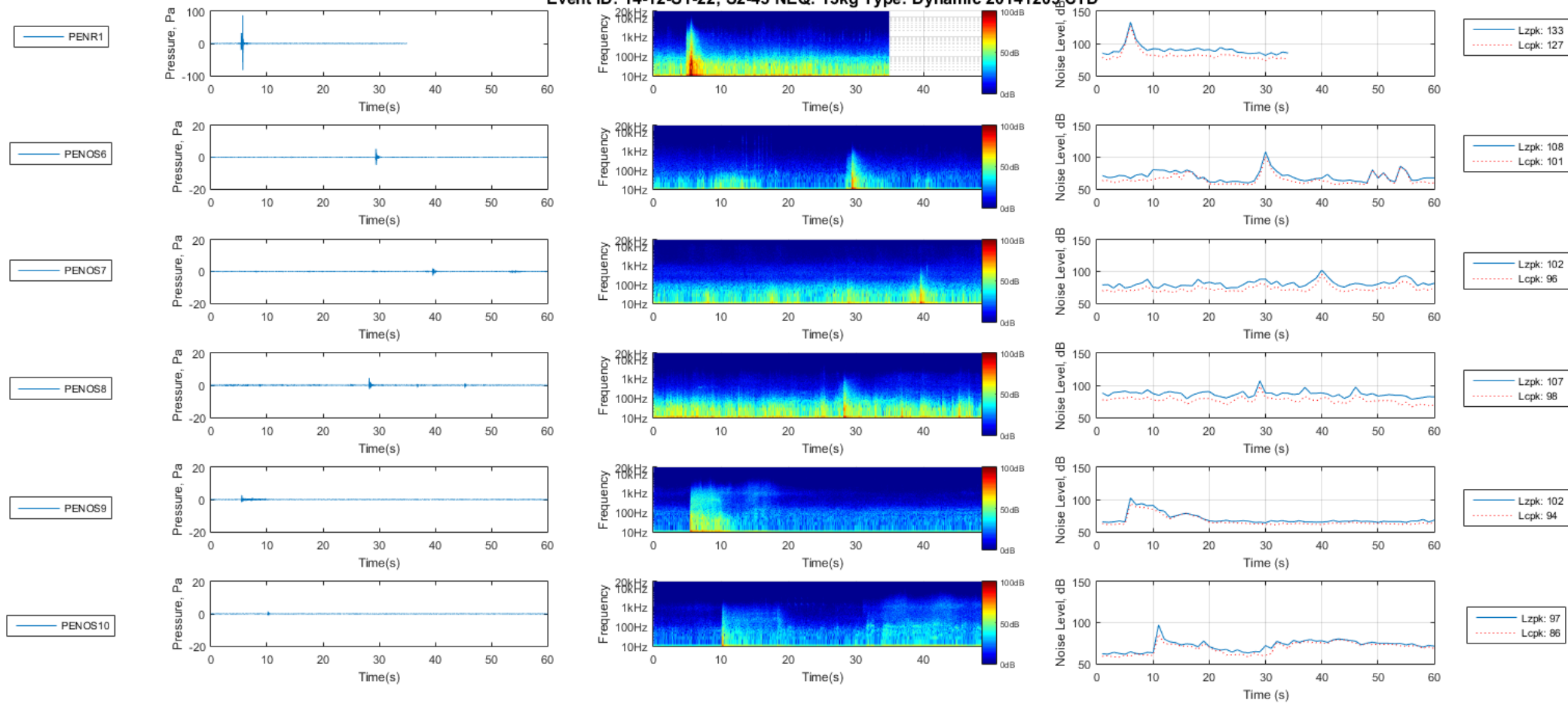
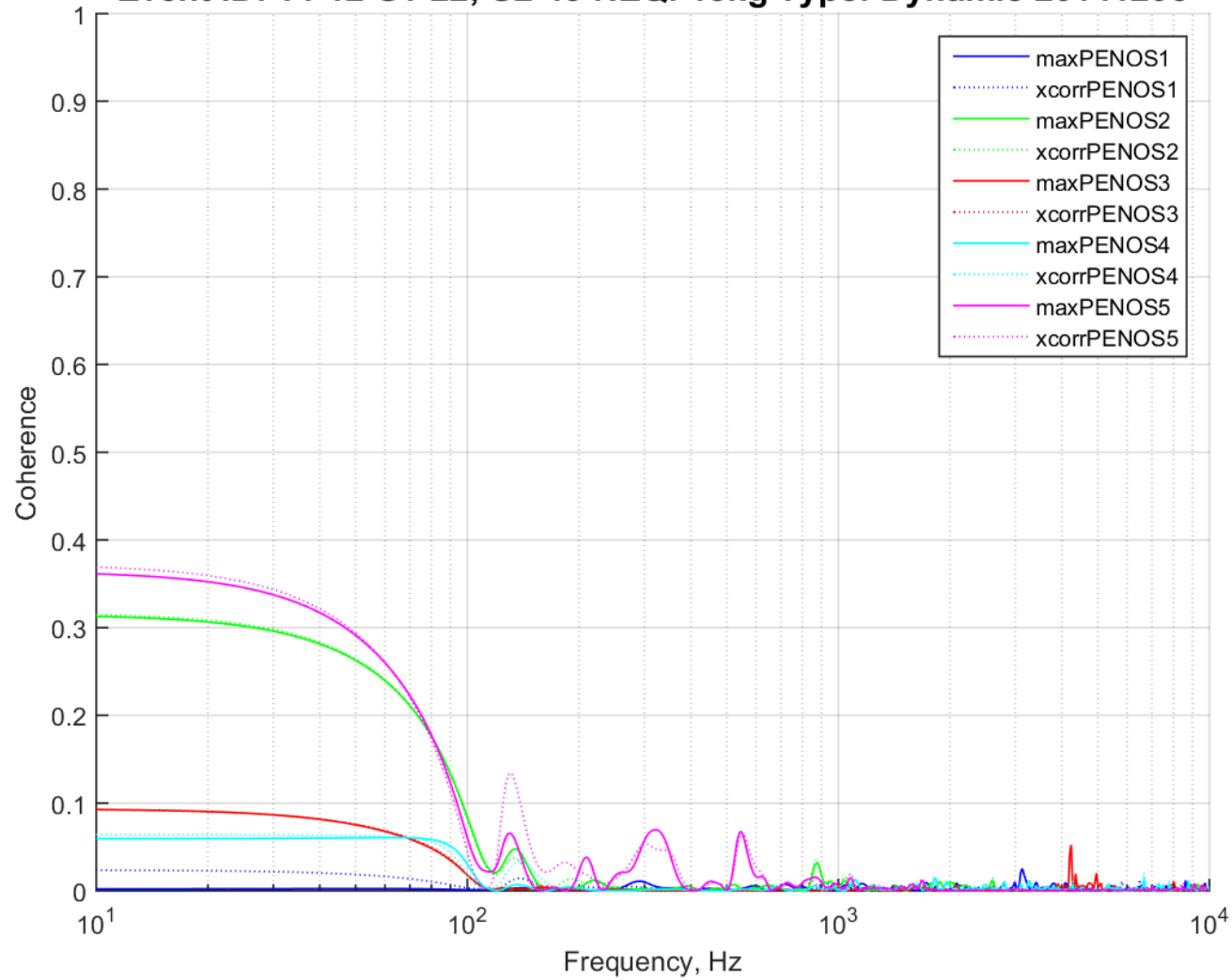


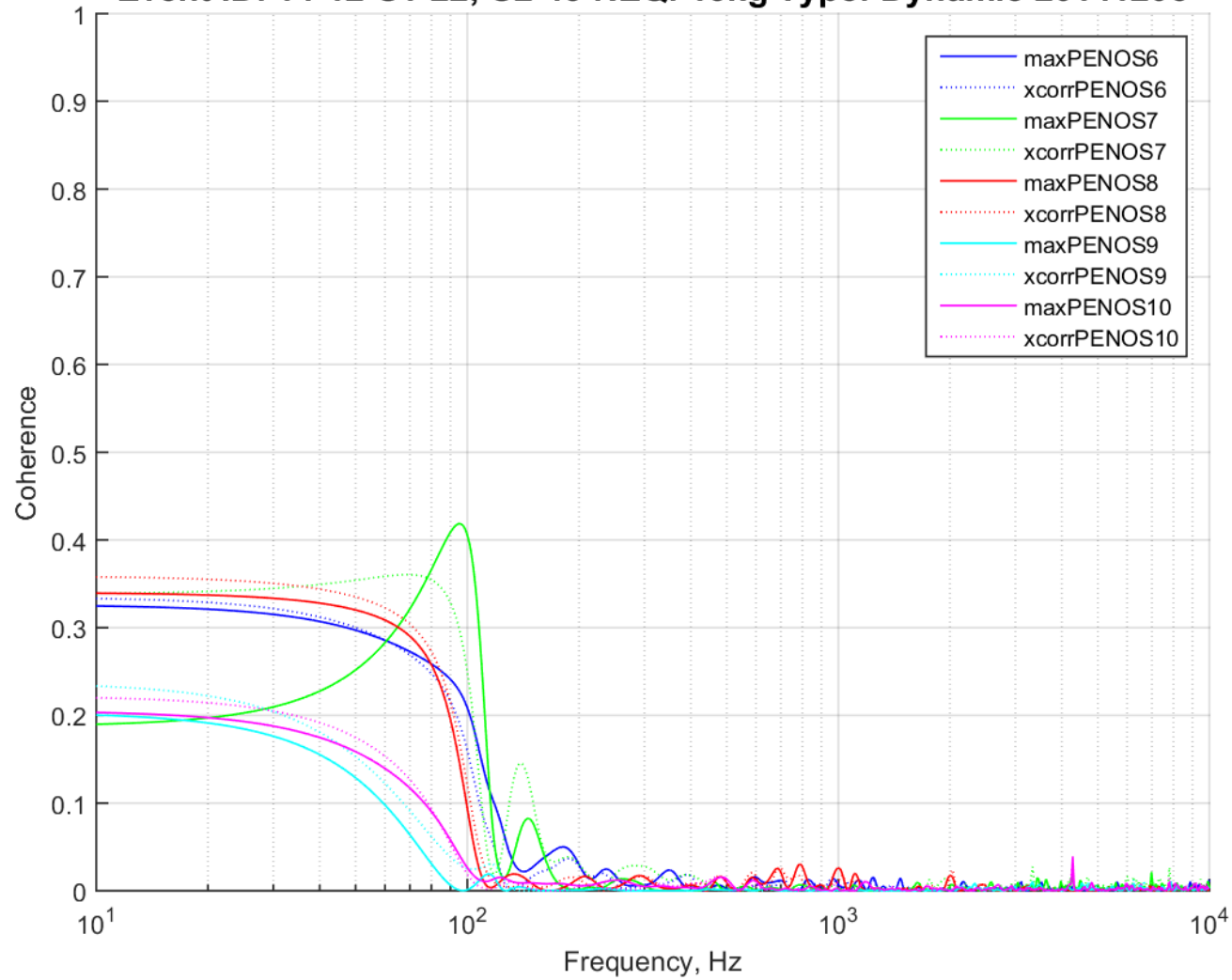
FIGURE 2.112: PEN\_OS 6 - 10 14-12-S1-22; S2-45

**Event ID: 14-12-S1-22; S2-45 NEQ: 13kg Type: Dynamic 20141205**



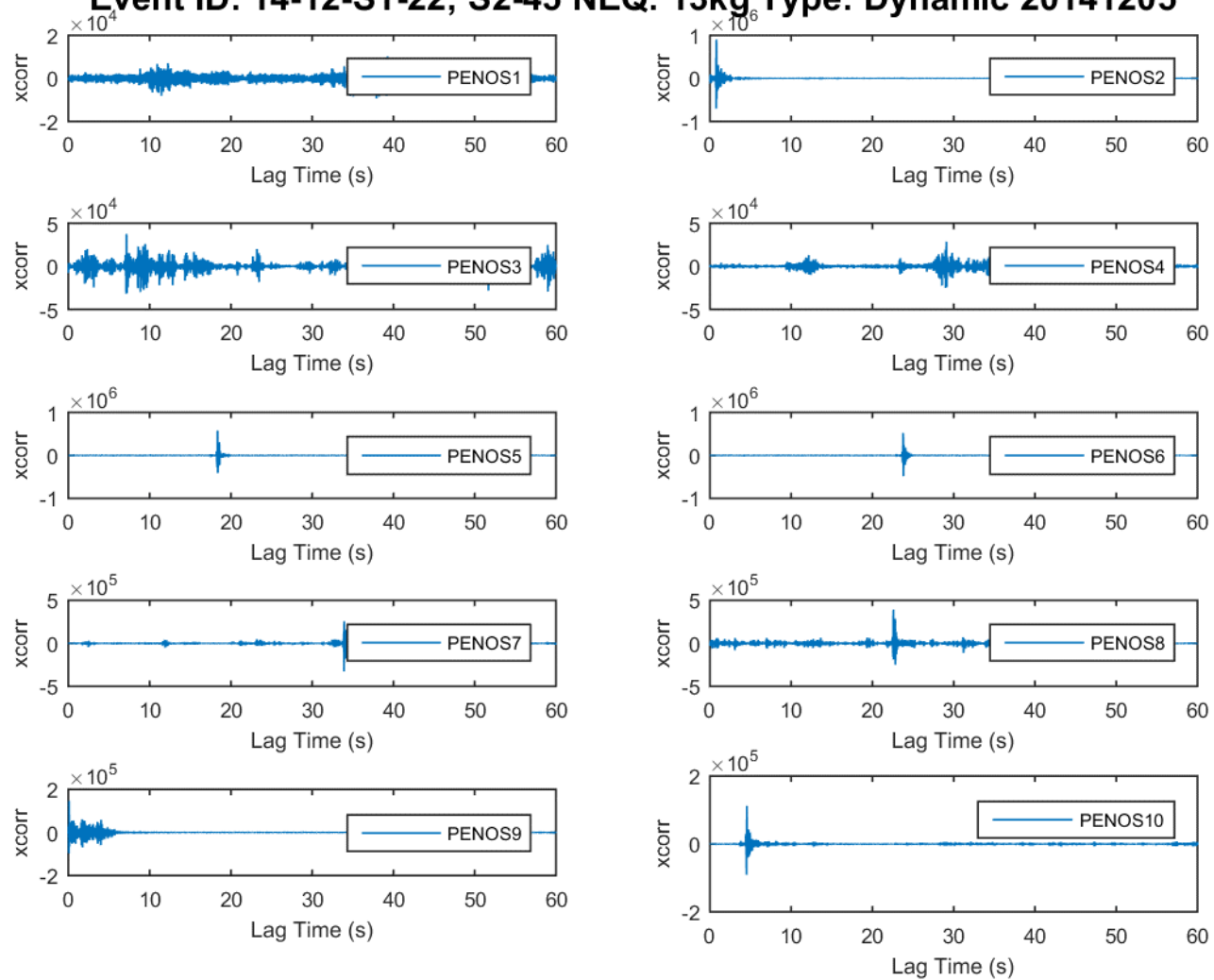
**FIGURE 2.113: COHERENCE PEN\_OS 1 - 5 14-12-S1-22; S2-45**

**Event ID: 14-12-S1-22; S2-45 NEQ: 13kg Type: Dynamic 20141205**



**FIGURE 2.114: COHERENCE PEN\_OS 6 - 10 14-12-S1-22; S2-45CTD**

**Event ID: 14-12-S1-22; S2-45 NEQ: 13kg Type: Dynamic 20141205**



**FIGURE 2.115: CROSS CORRELATION PEN\_OS 1 - 10 14-12-S1-22; S2-45**

Event ID: 14-12-S1-22; S2-45 NEQ: 13kg Type: Dynamic 20141205

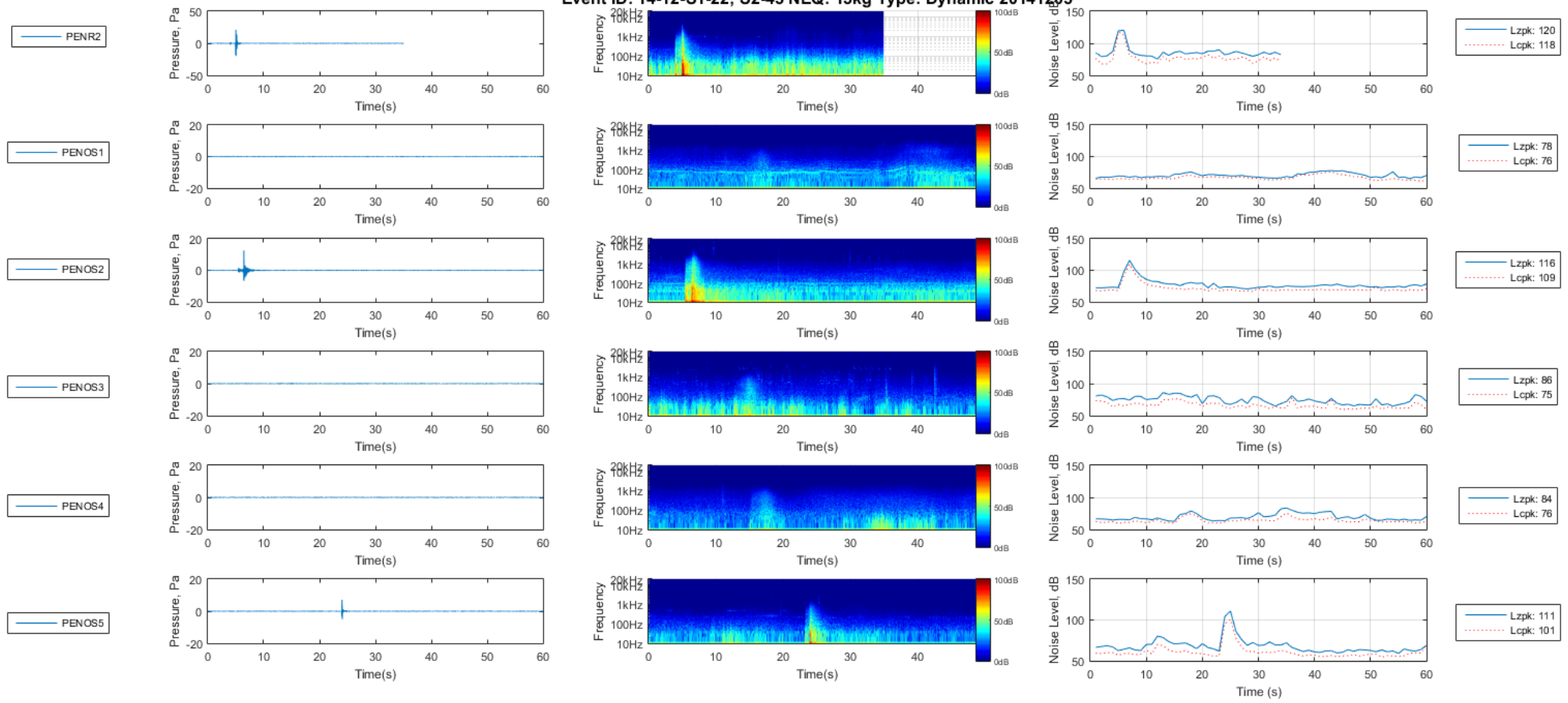


FIGURE 2.116: PEN\_OS 1 - 5 14-12-S1-22; S2-45

Event ID: 14-12-S1-22; S2-45 NEQ: 13kg Type: Dynamic 20141205.CTD

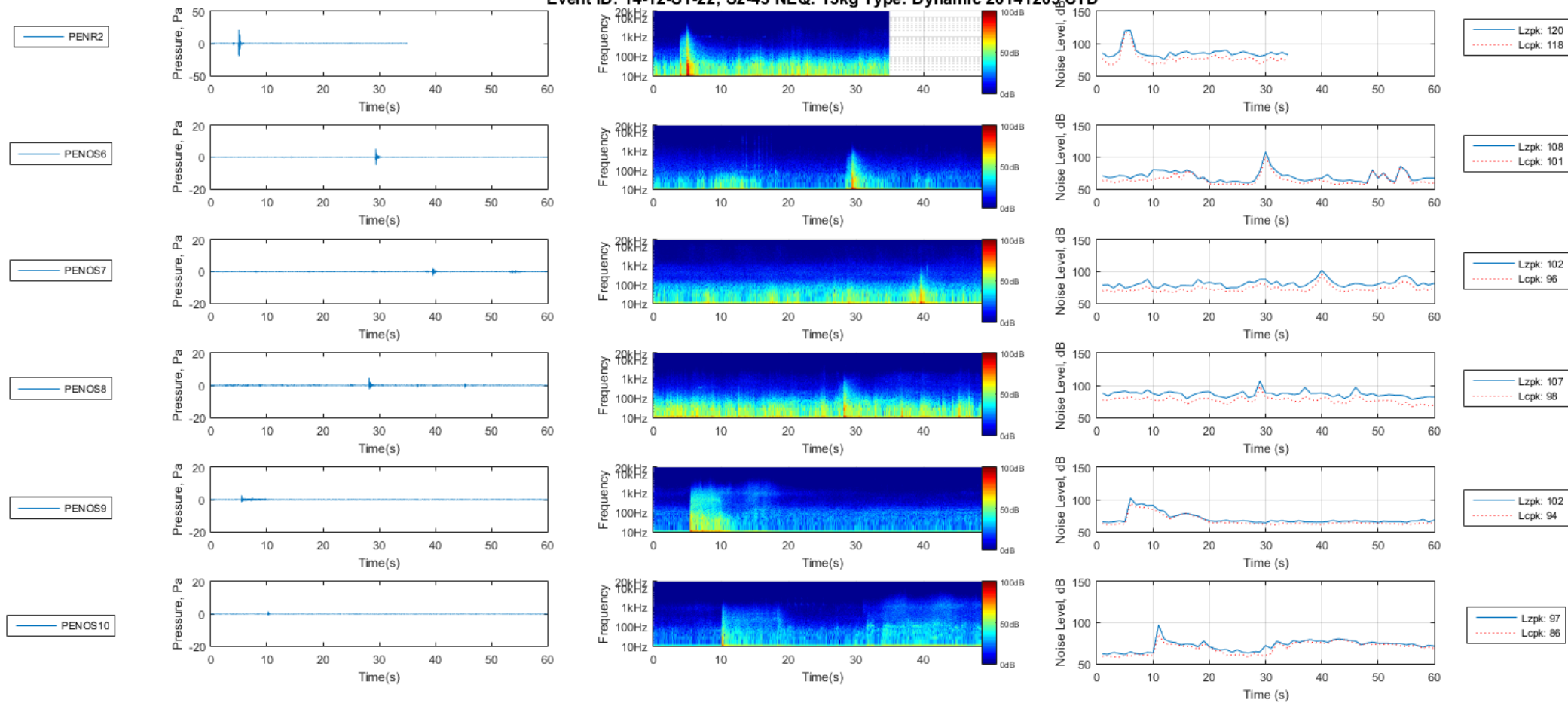
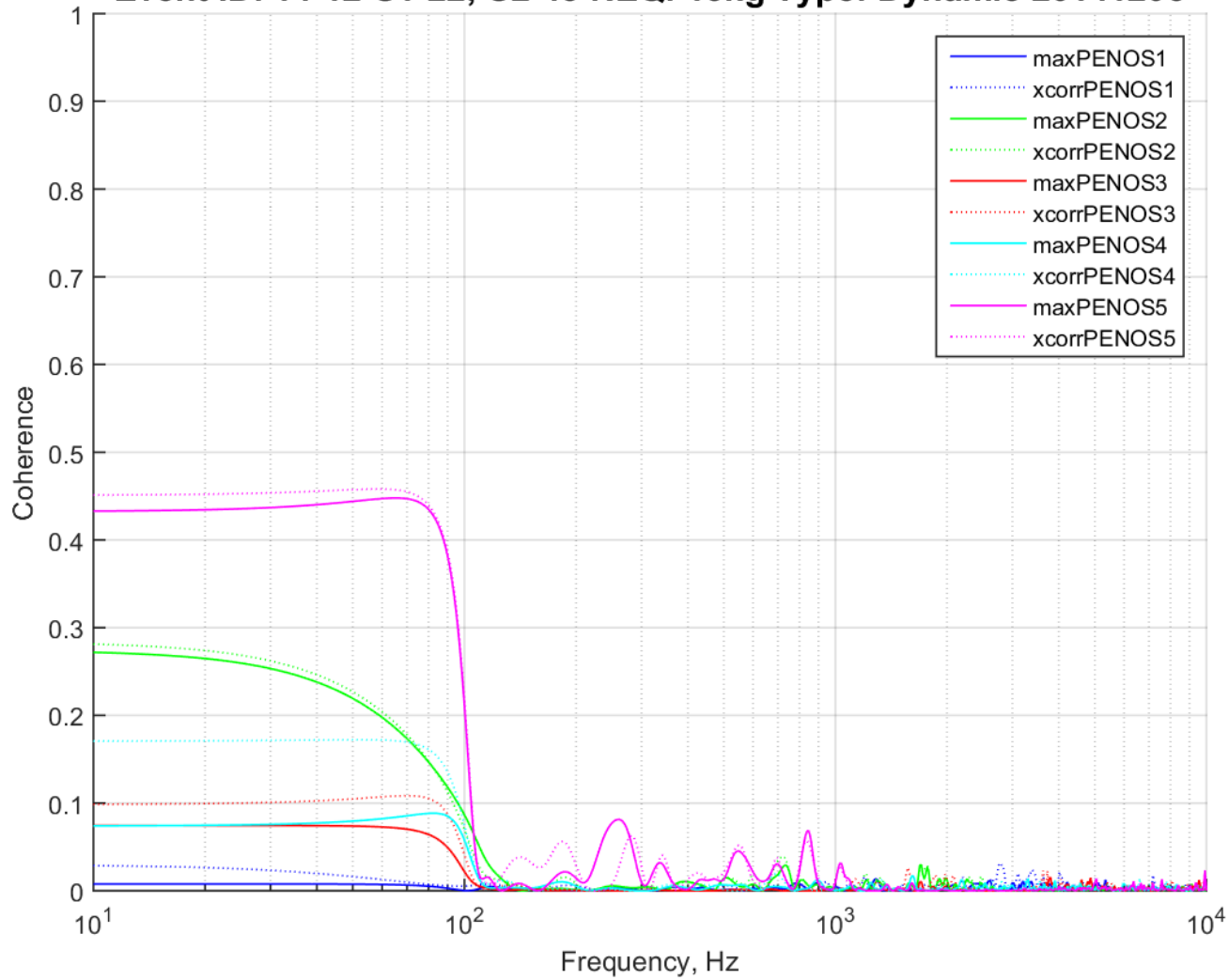


FIGURE 2.117: PEN\_OS 6 - 10 14-12-S1-22; S2-45

**Event ID: 14-12-S1-22; S2-45 NEQ: 13kg Type: Dynamic 20141205**



**FIGURE 2.118: COHERENCE PEN\_OS 1 - 5 14-12-S1-22; S2-45**

Event ID: 14-12-S1-22; S2-45 NEQ: 13kg Type: Dynamic 20141205

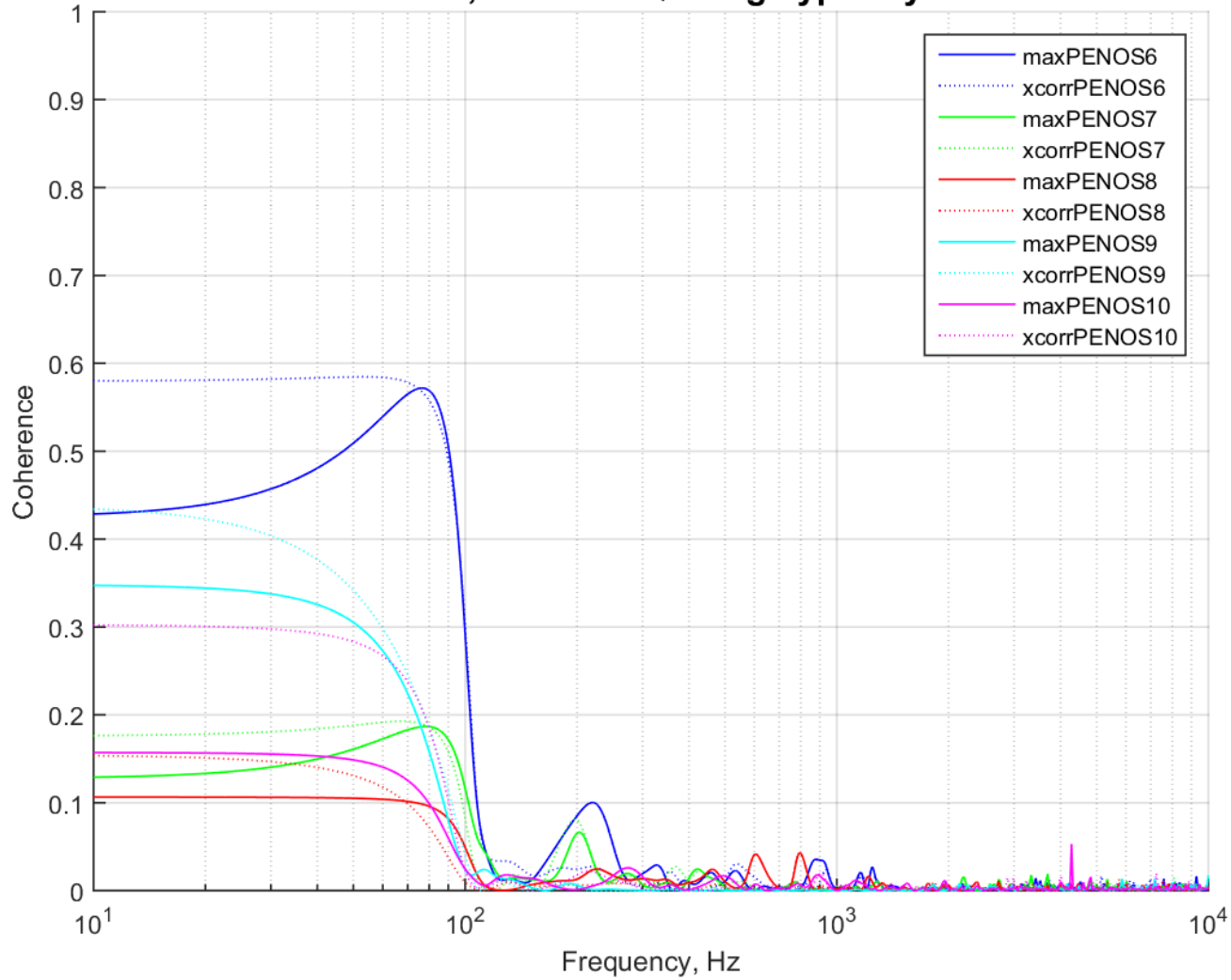
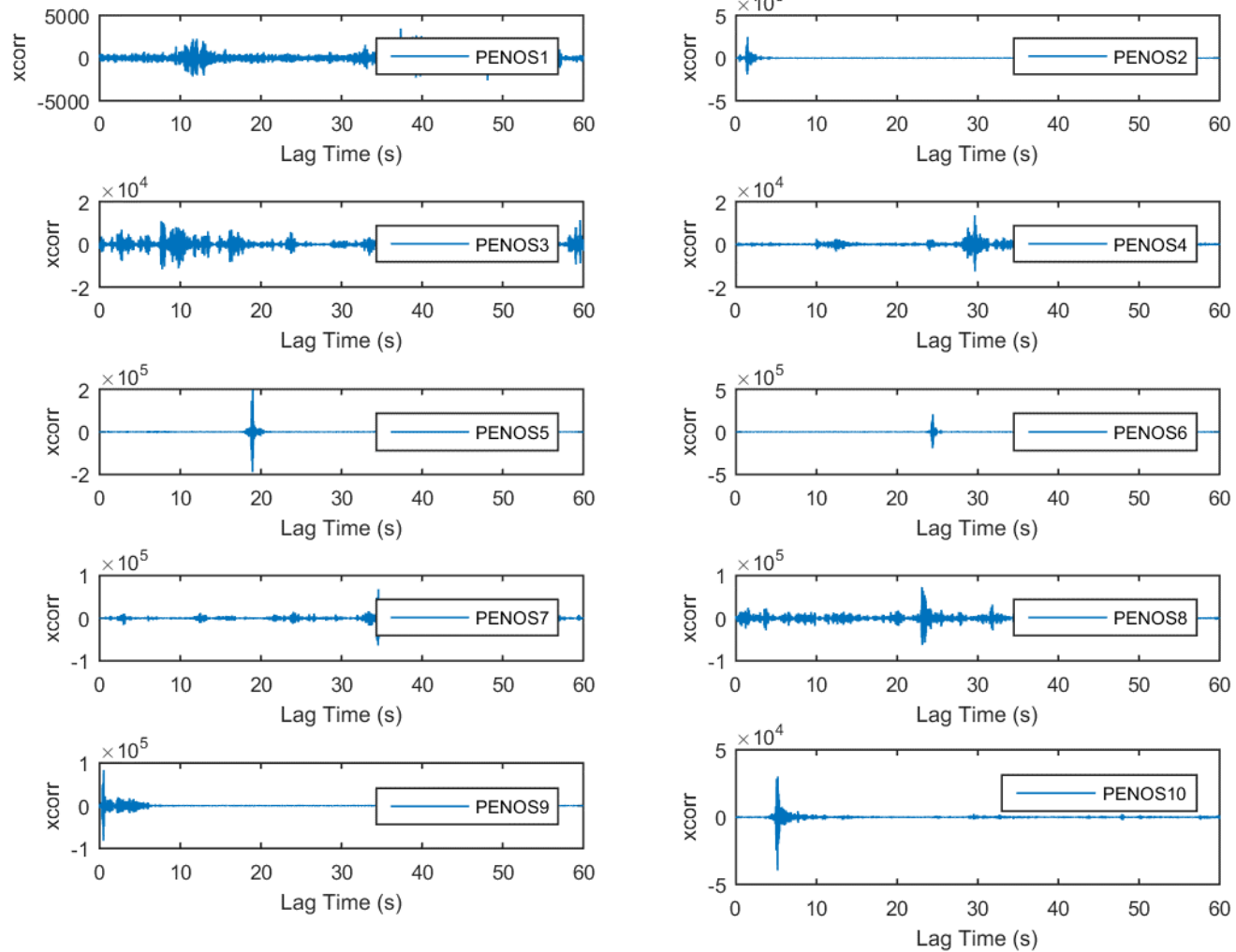


FIGURE 2.119: COHERENCE PEN\_OS 6 - 10 14-12-S1-22; S2-45CTD



**Event ID: 14-12-S1-22; S2-45 NEQ: 13kg Type: Dynamic 20141205**



**FIGURE 2.120: CROSS CORRELATION PEN\_OS 1 - 10 14-12-S1-22; S2-45**

Event ID: 14-12-S1-2; S2-9 NEQ: 5kg or 13kg. QinetiQ to confirm NEQ Type: Dynamic 20141201

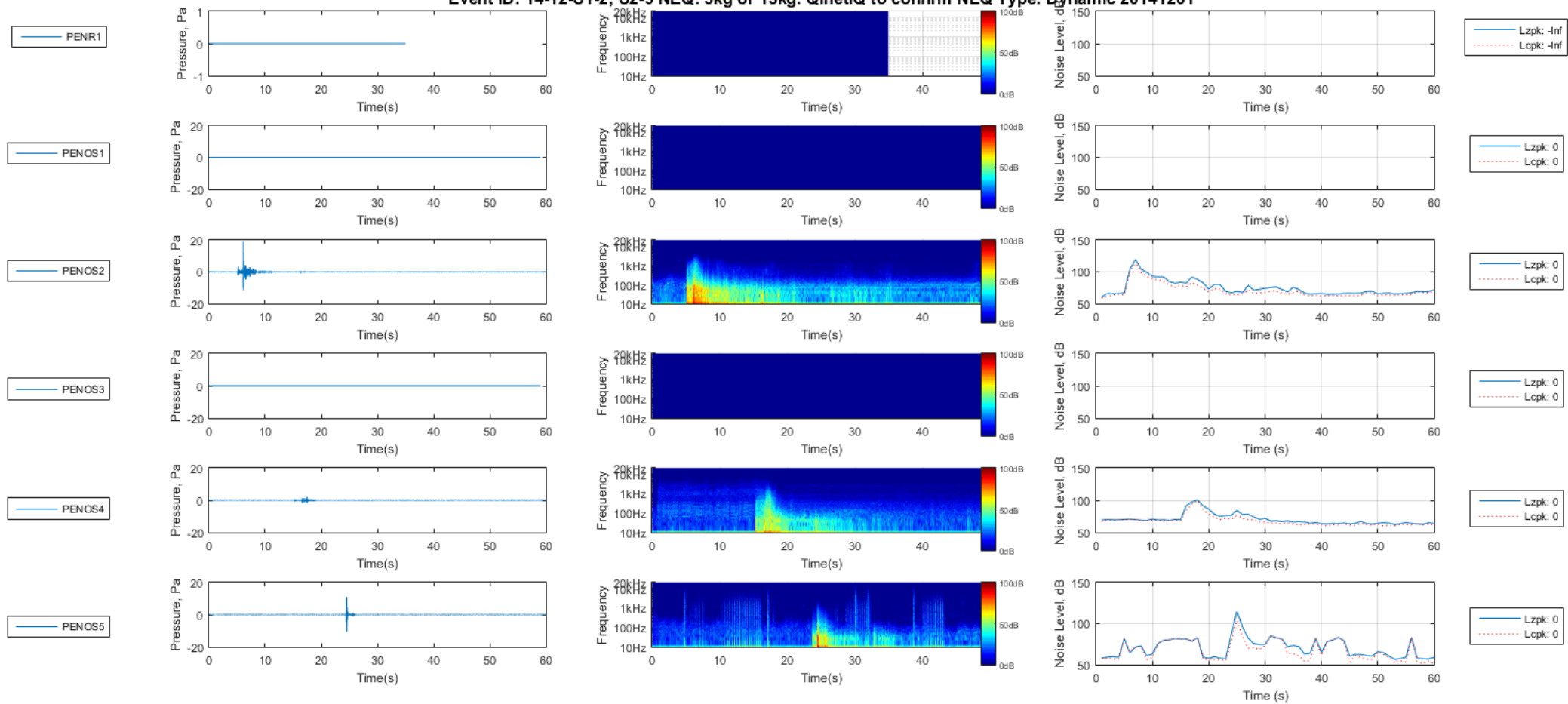


FIGURE 2.121: PEN\_OS 1 - 5 14-12-S1-2; S2-9

Event ID: 14-12-S1-2; S2-9 NEQ: 5kg or 13kg. QinetiQ to confirm NEQ Type: Dynamic 20141201 CTD

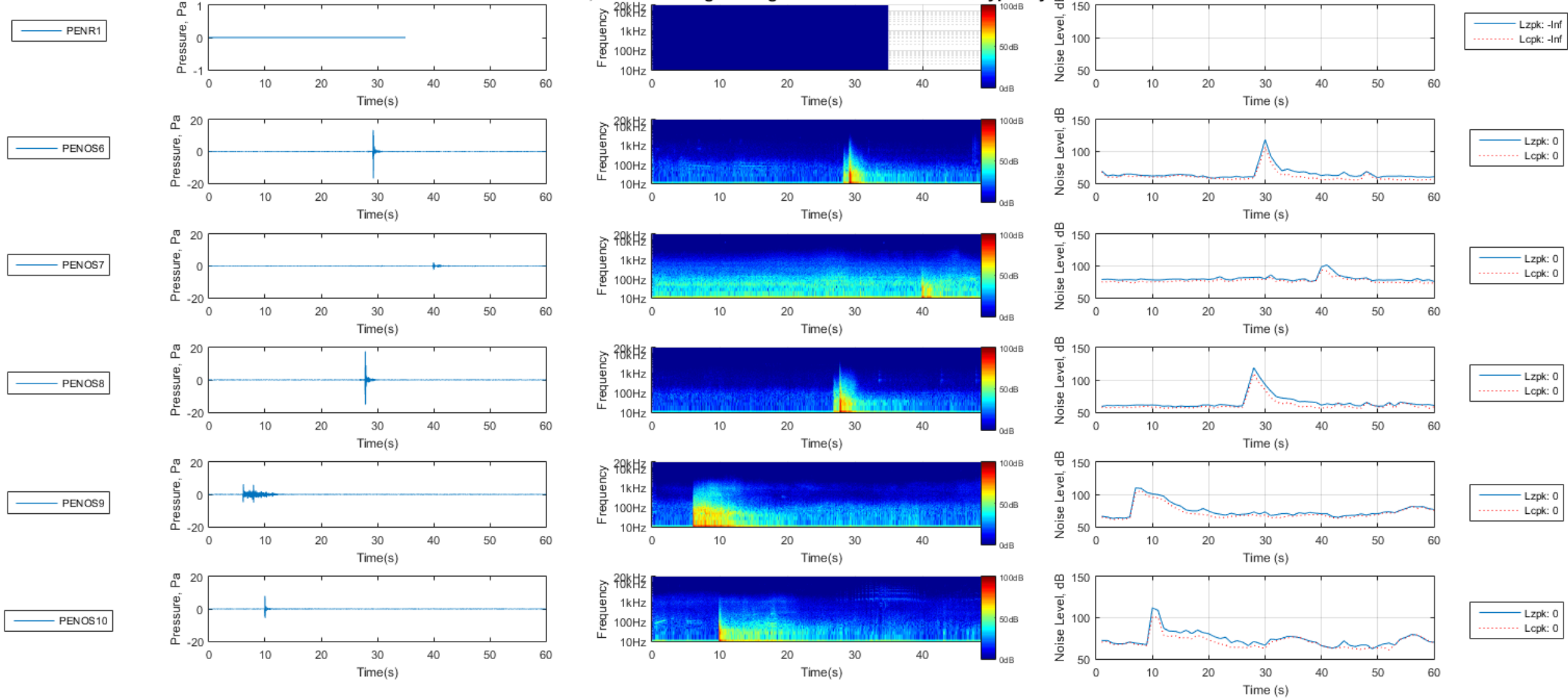


FIGURE 2.122: PEN\_OS 6 - 10 14-12-S1-2; S2-9

rent ID: 14-12-S1-2; S2-9 NEQ: 5kg or 13kg. QinetiQ to confirm NEQ Type: Dynamic 2014

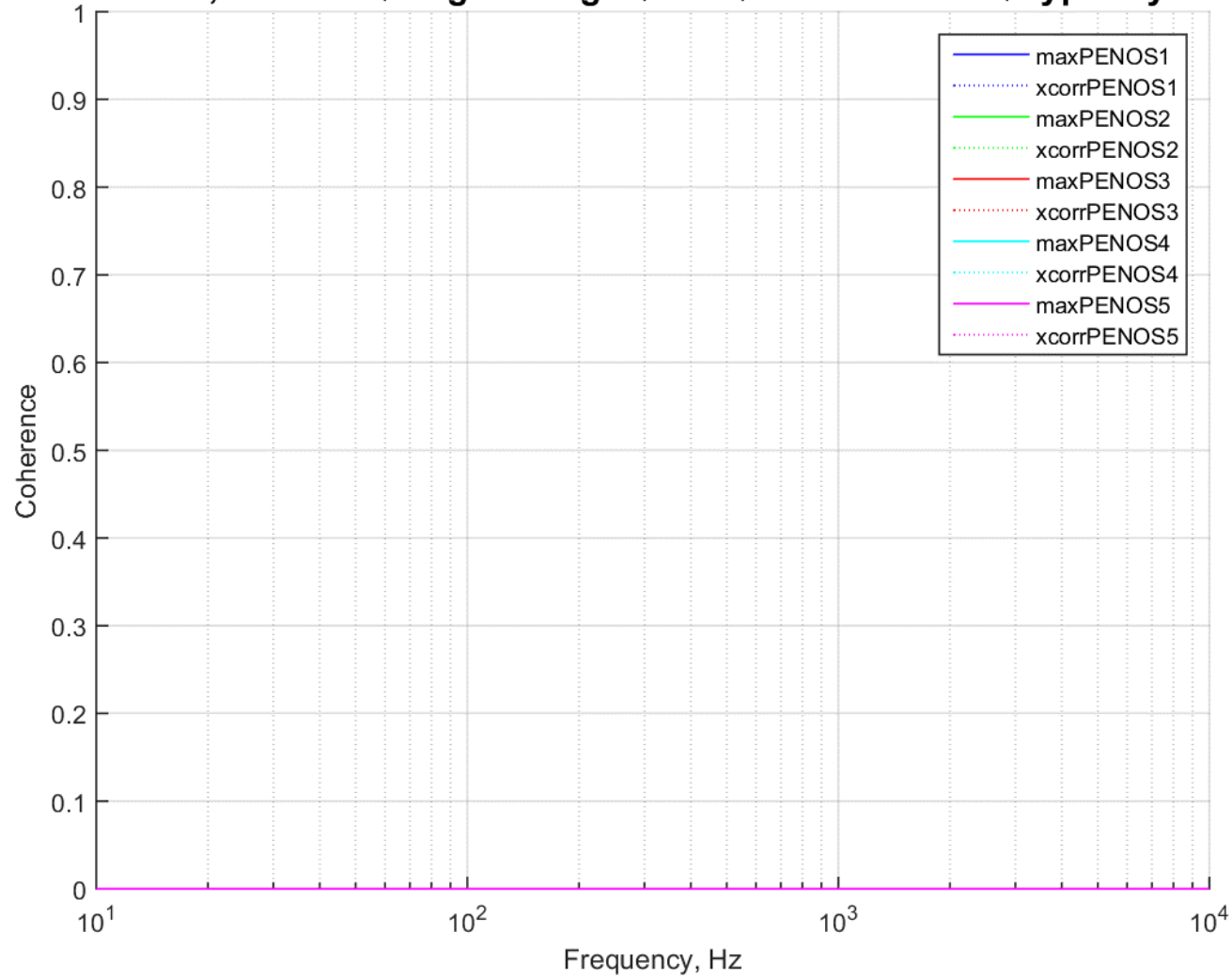


FIGURE 2.123: COHERENCE PEN\_OS 1 - 5 14-12-S1-2; S2-9

rent ID: 14-12-S1-2; S2-9 NEQ: 5kg or 13kg. QinetiQ to confirm NEQ Type: Dynamic 2014

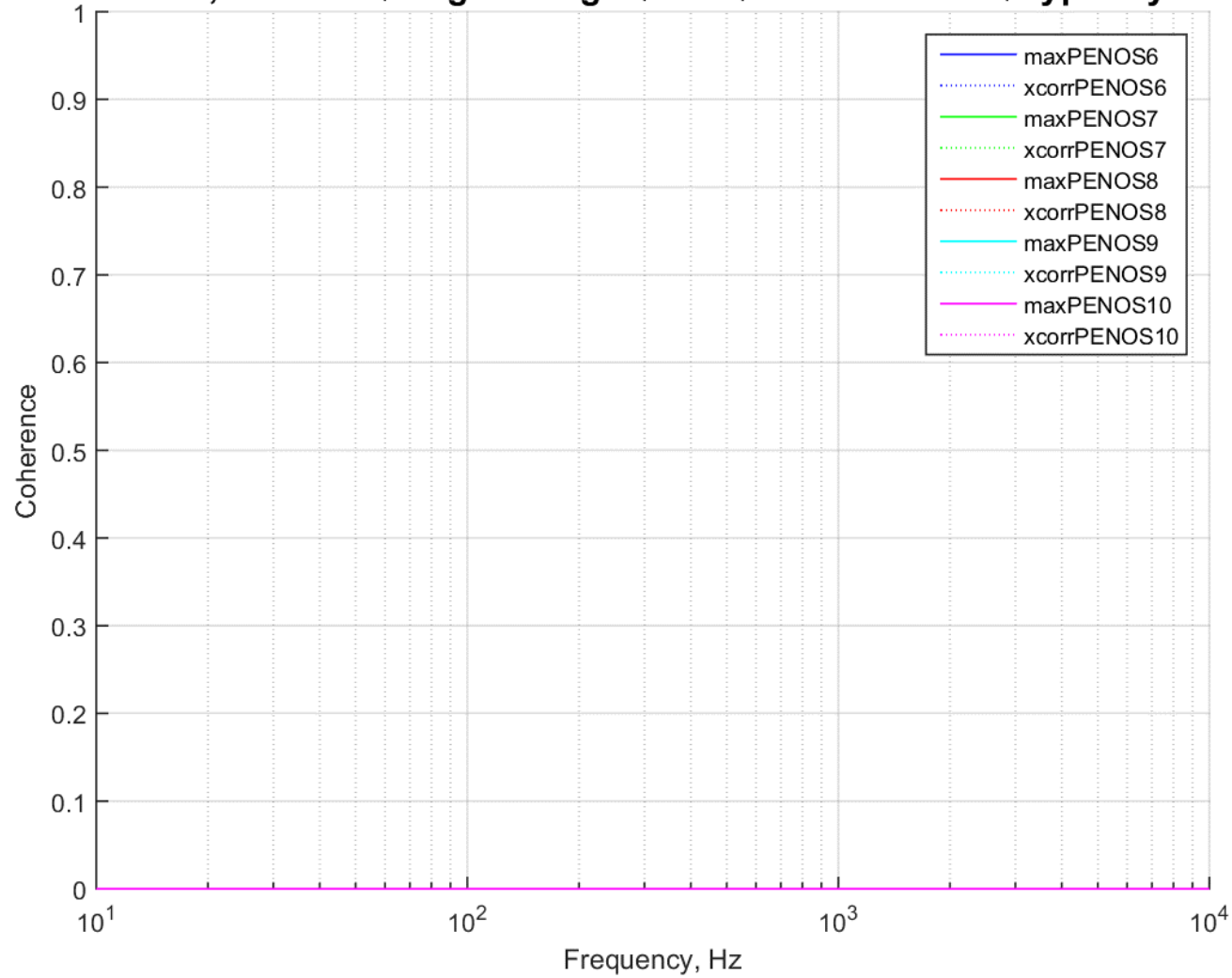


FIGURE 2.124: COHERENCE PEN\_OS 6 - 10 14-12-S1-2; S2-9CTD

rent ID: 14-12-S1-2; S2-9 NEQ: 5kg or 13kg. QinetiQ to confirm NEQ Type: Dynamic 2014

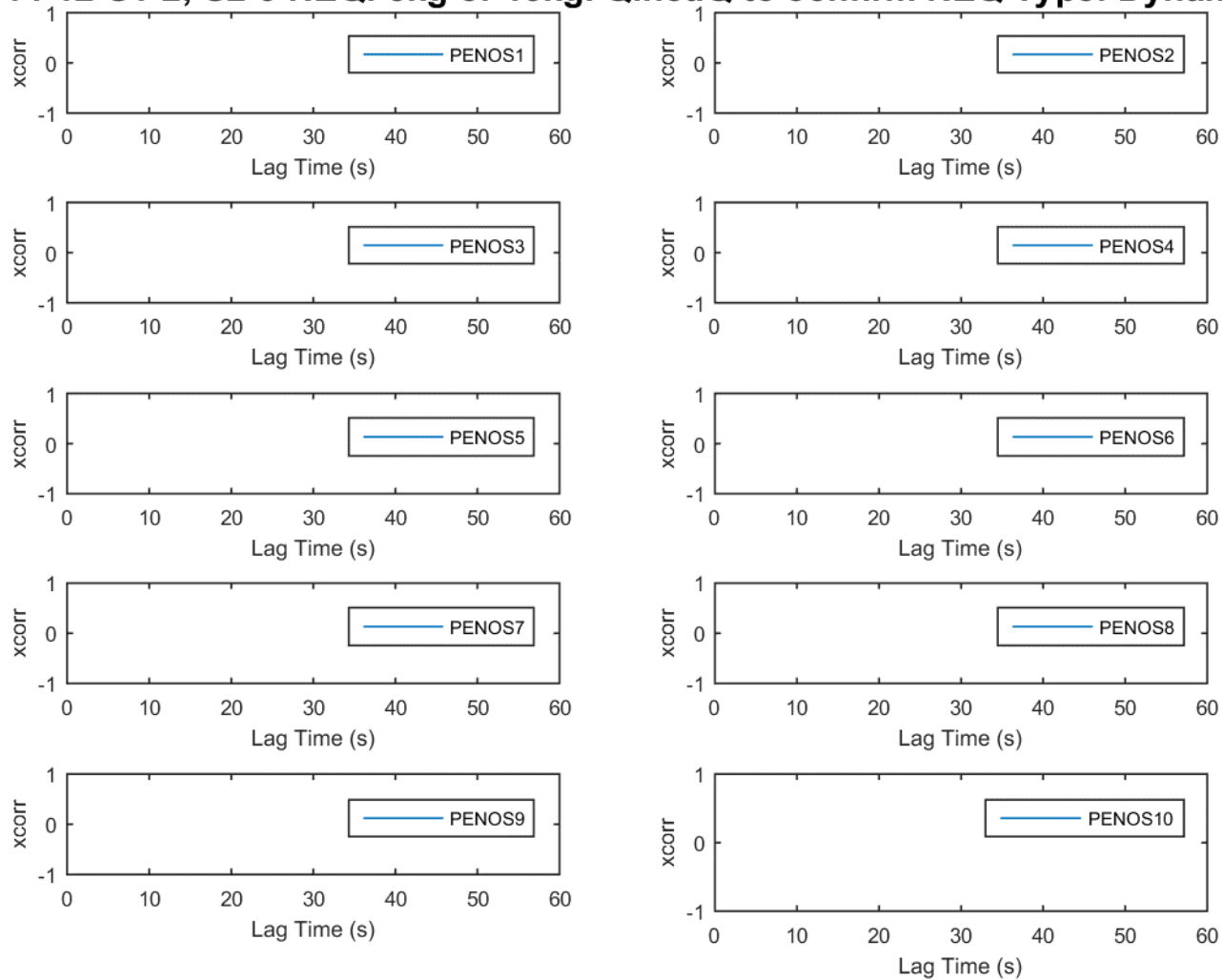


FIGURE 2.125: CROSS CORRELATION PEN\_OS 1 - 10 14-12-S1-2; S2-9

Event ID: 14-12-S1-2; S2-9 NEQ: 5kg or 13kg. QinetiQ to confirm NEQ Type: Dynamic 20141201

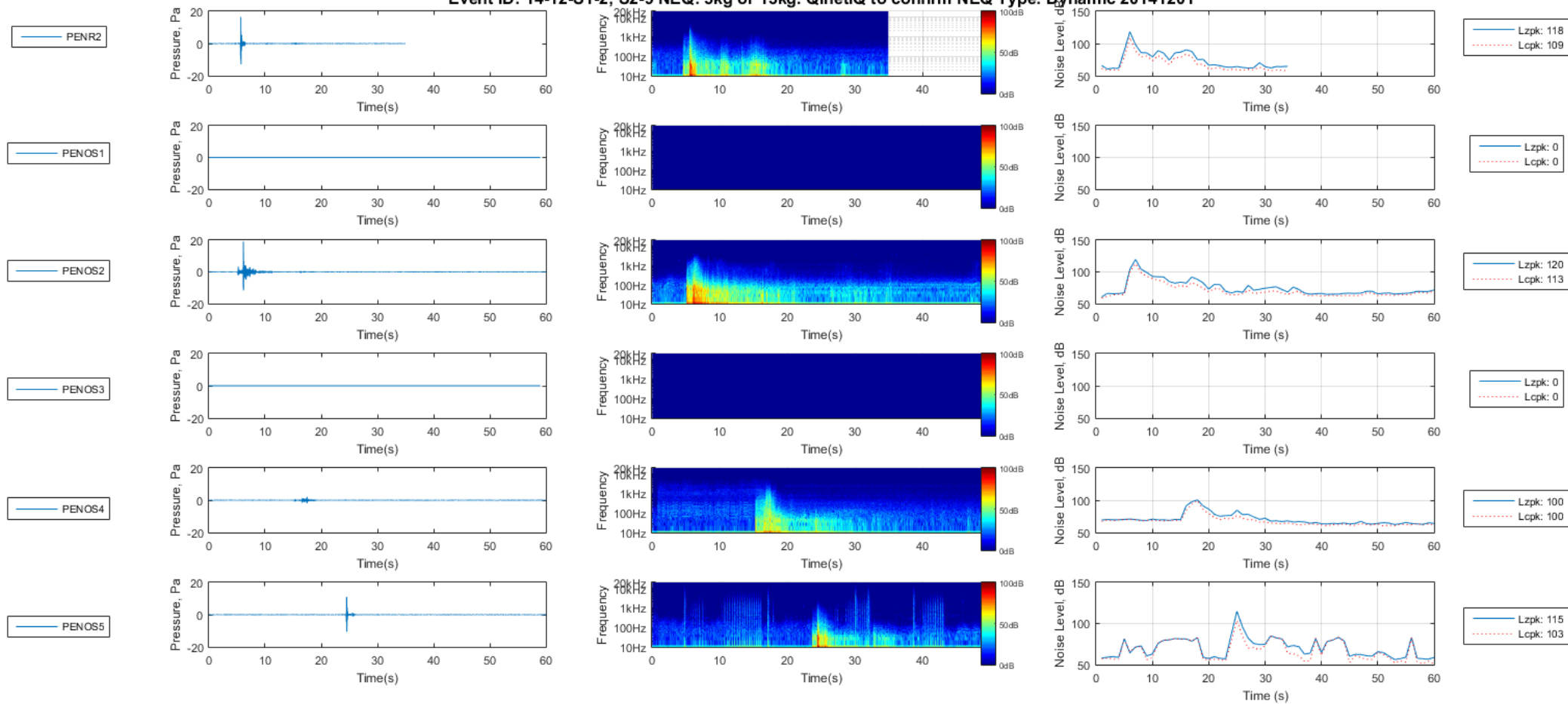


FIGURE 2.126: PEN\_OS 1 - 5 14-12-S1-2; S2-9

Event ID: 14-12-S1-2; S2-9 NEQ: 5kg or 13kg. QinetiQ to confirm NEQ Type: Dynamic 20141201 CTD

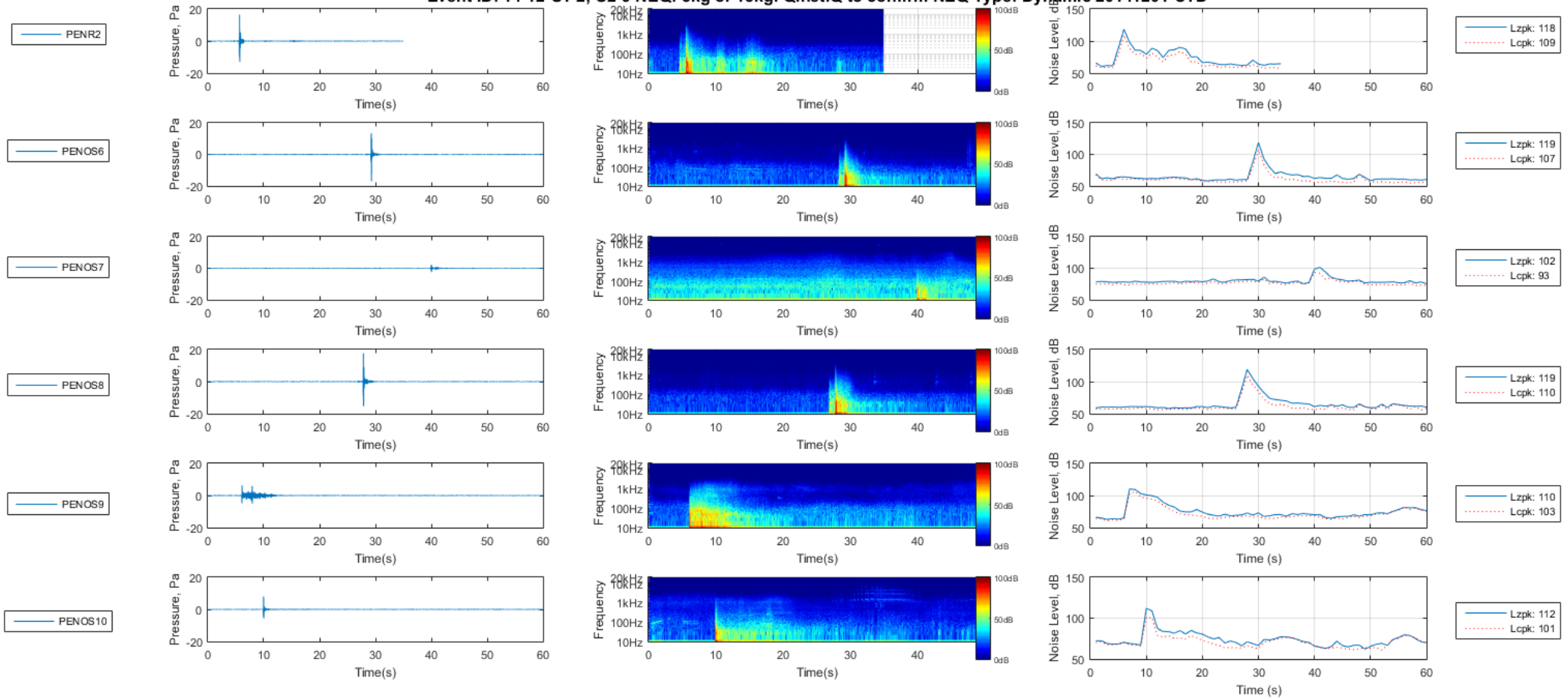


FIGURE 2.127: PEN\_OS 6 - 10 14-12-S1-2; S2-9



rent ID: 14-12-S1-2; S2-9 NEQ: 5kg or 13kg. QinetiQ to confirm NEQ Type: Dynamic 2014

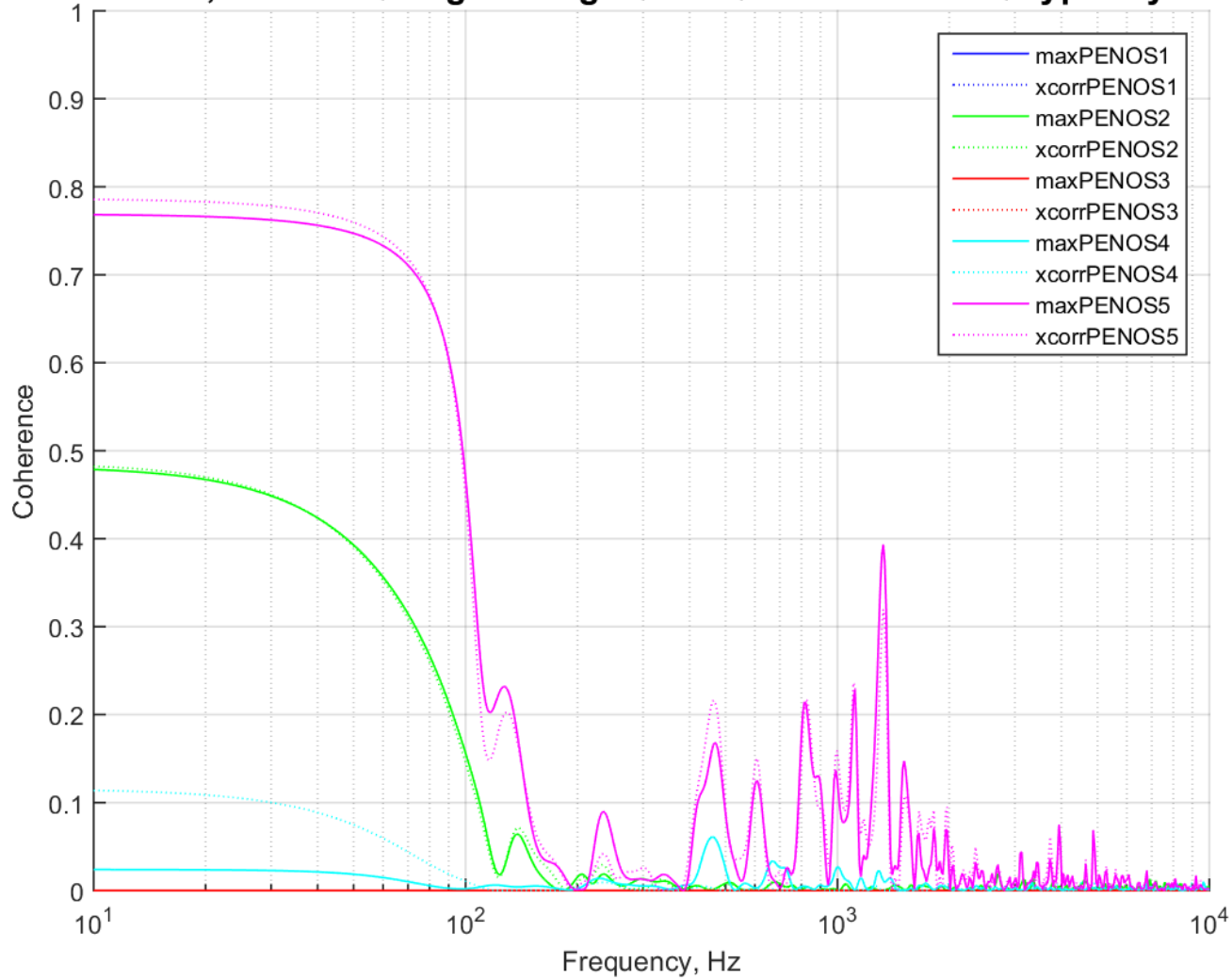


FIGURE 2.128: COHERENCE PEN\_OS 1 - 5 14-12-S1-2; S2-9

rent ID: 14-12-S1-2; S2-9 NEQ: 5kg or 13kg. QinetiQ to confirm NEQ Type: Dynamic 2014

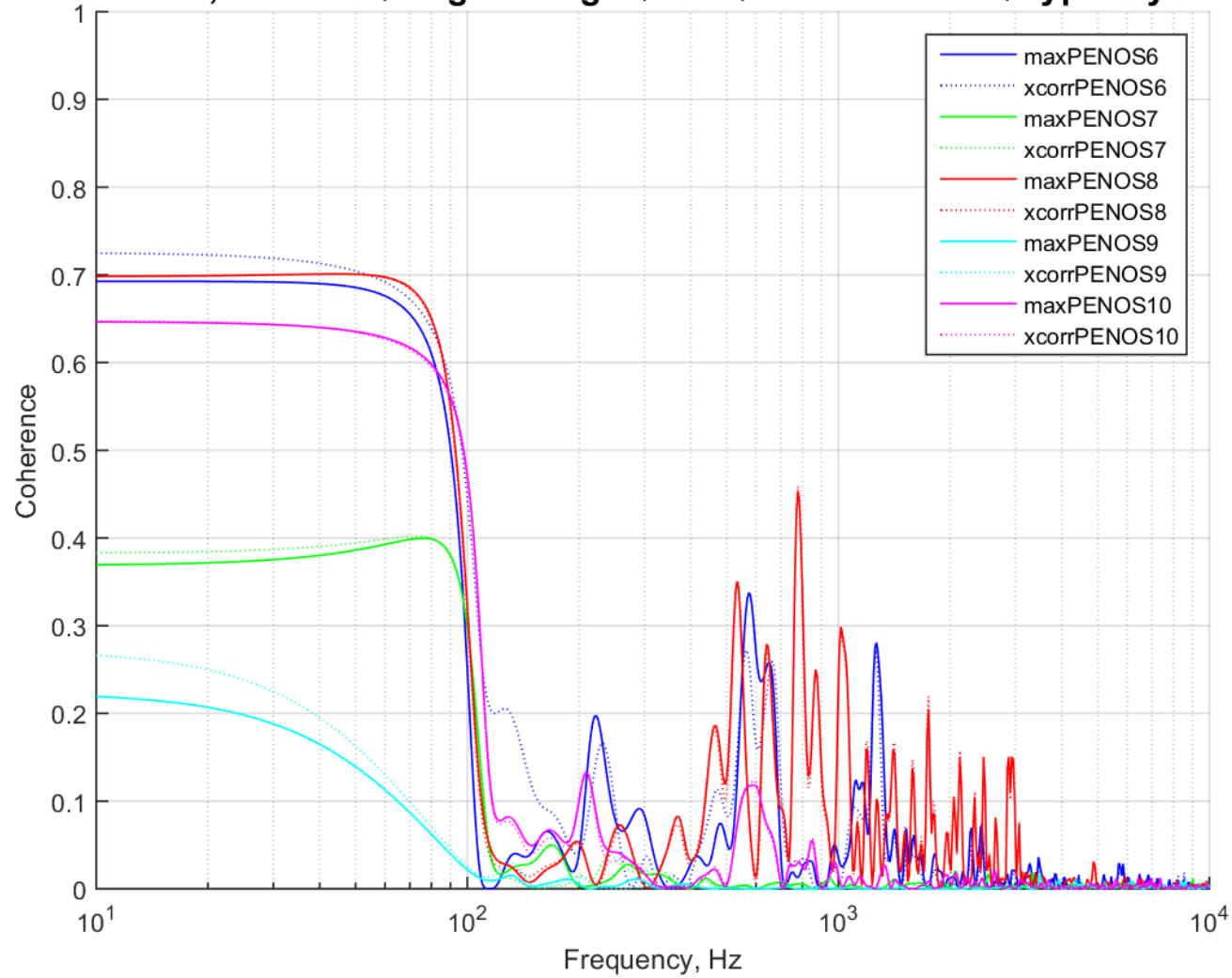


FIGURE 2.129: COHERENCE PEN\_OS 6 - 10 14-12-S1-2; S2-9CTD

rent ID: 14-12-S1-2; S2-9 NEQ: 5kg or 13kg. QinetiQ to confirm NEQ Type: Dynamic 2014

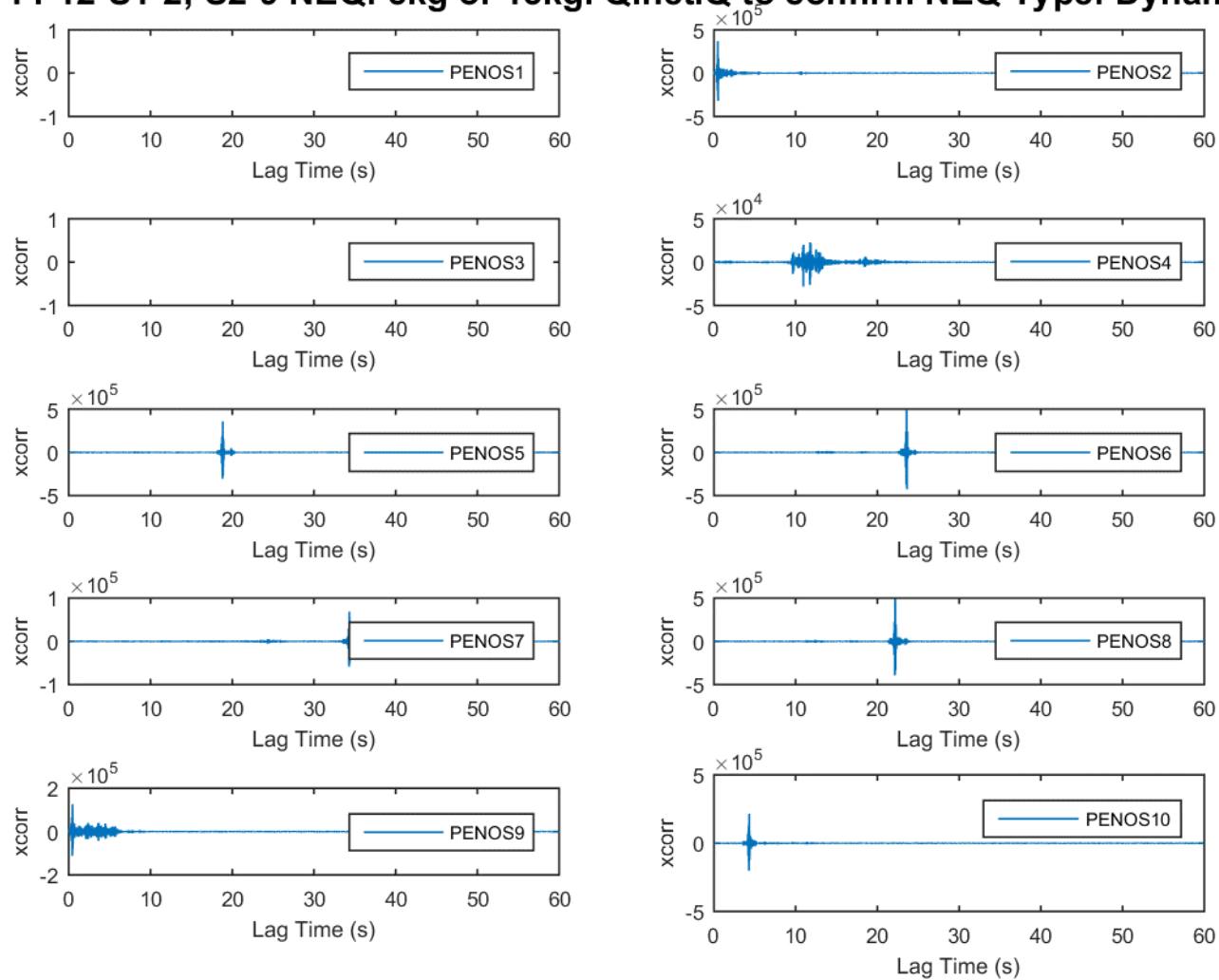
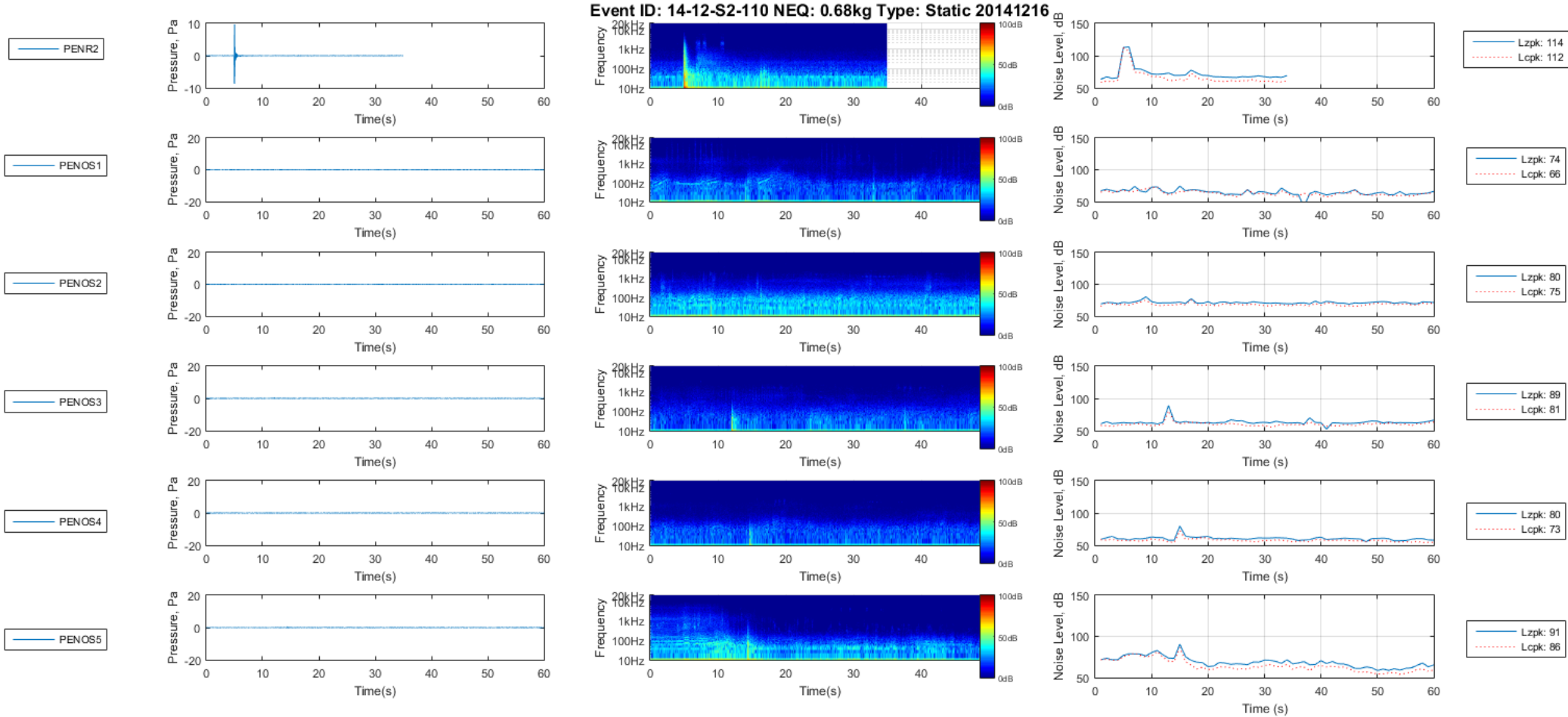


FIGURE 2.130: CROSS CORRELATION PEN\_OS 1 - 10 14-12-S1-2; S2-9



**FIGURE 2.131: PEN\_OS 1 - 5 14-12-S2-110**

Event ID: 14-12-S2-110 NEQ: 0.68kg Type: Static 20141216 CTD

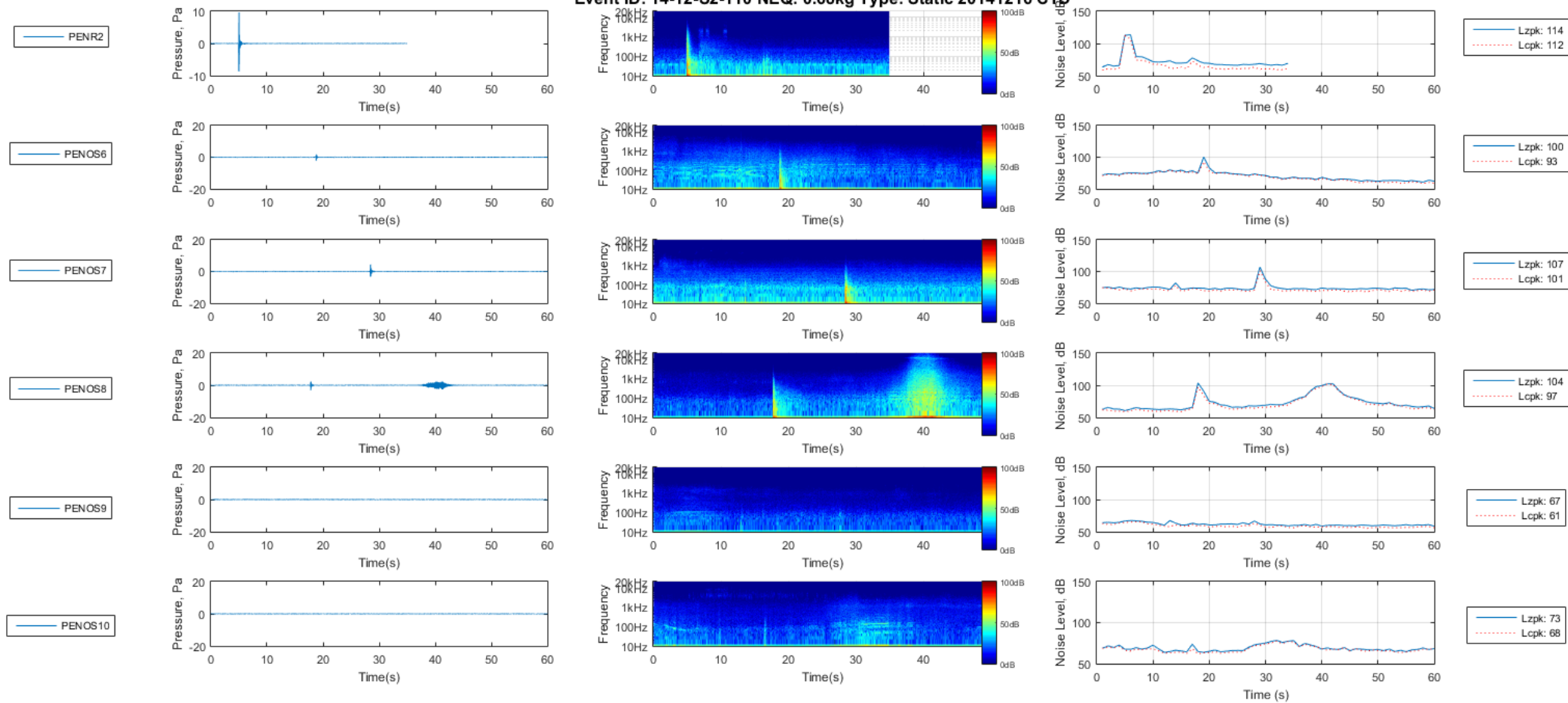


FIGURE 2.132: PEN\_OS 6 - 10 14-12-S2-110

Event ID: 14-12-S2-110 NEQ: 0.68kg Type: Static 20141216

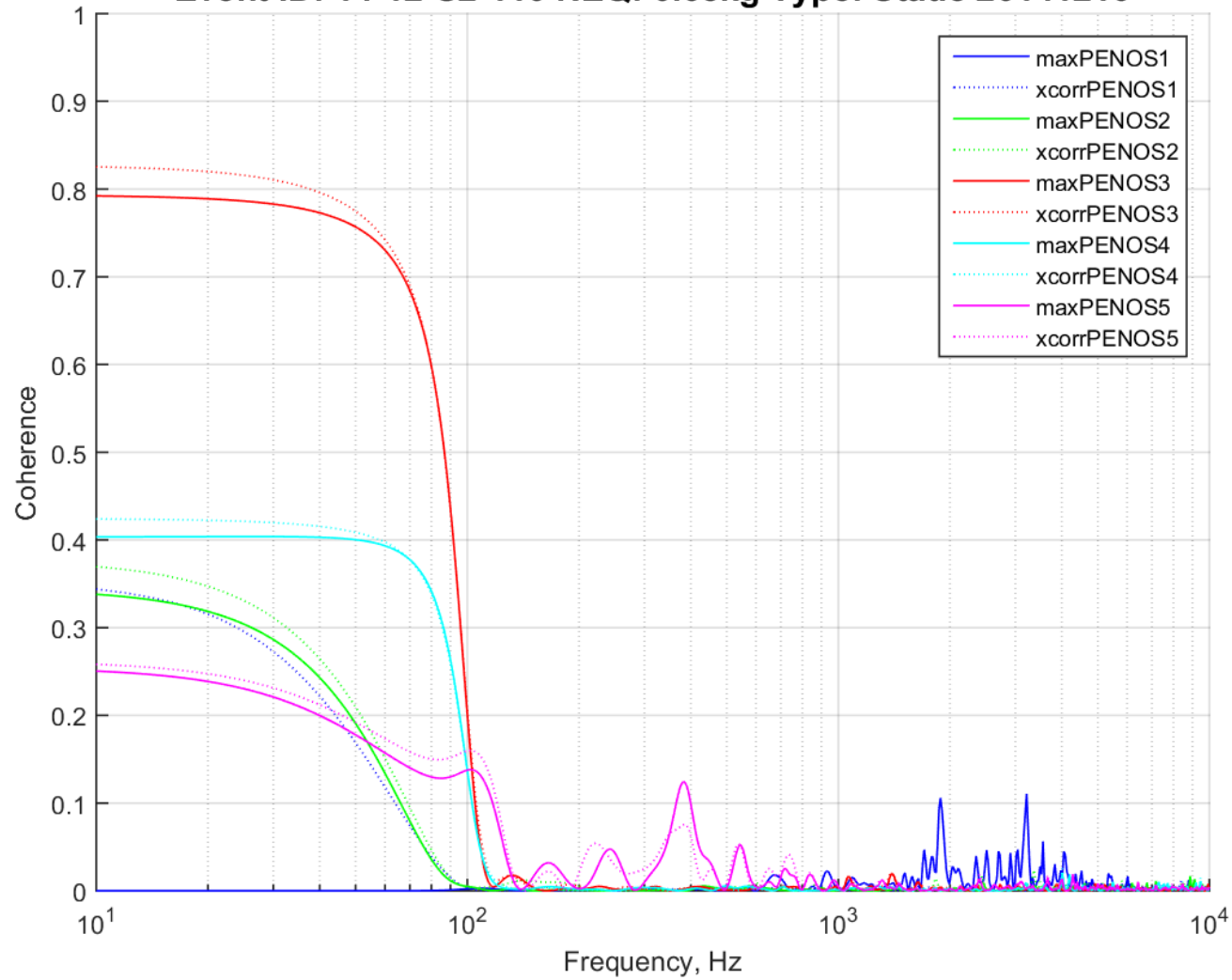


FIGURE 2.133: COHERENCE PEN\_OS 1 - 5 14-12-S2-110

Event ID: 14-12-S2-110 NEQ: 0.68kg Type: Static 20141216

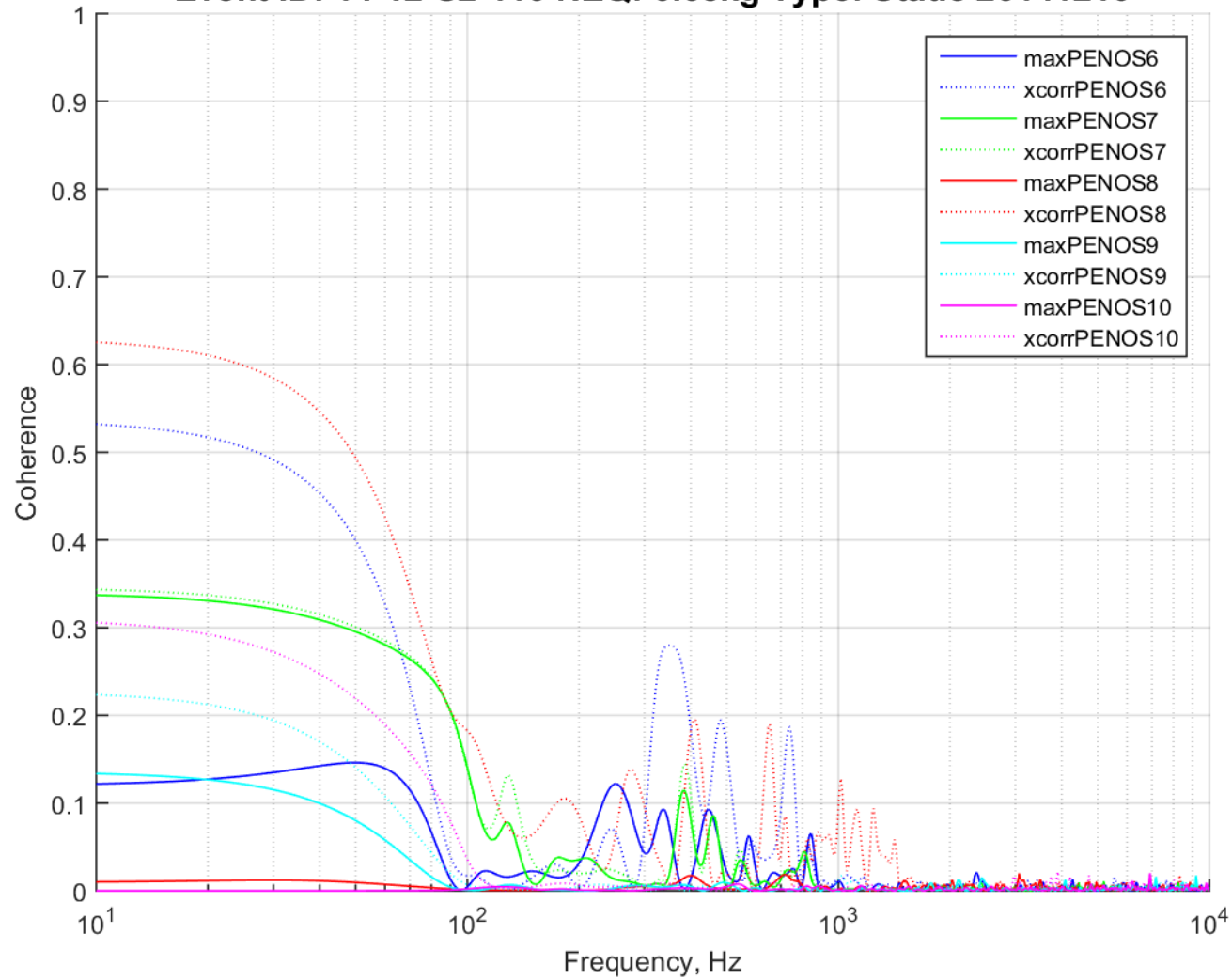
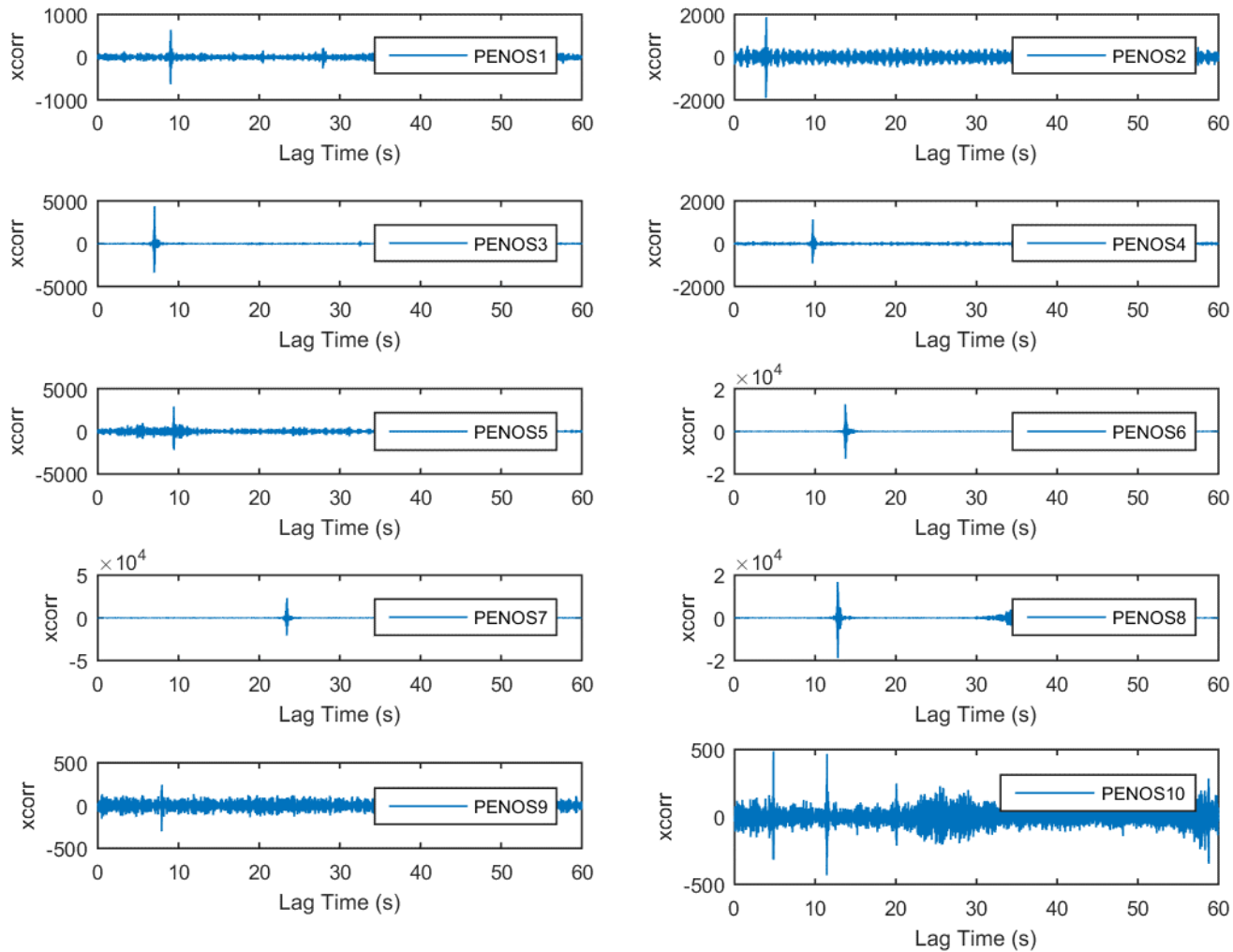


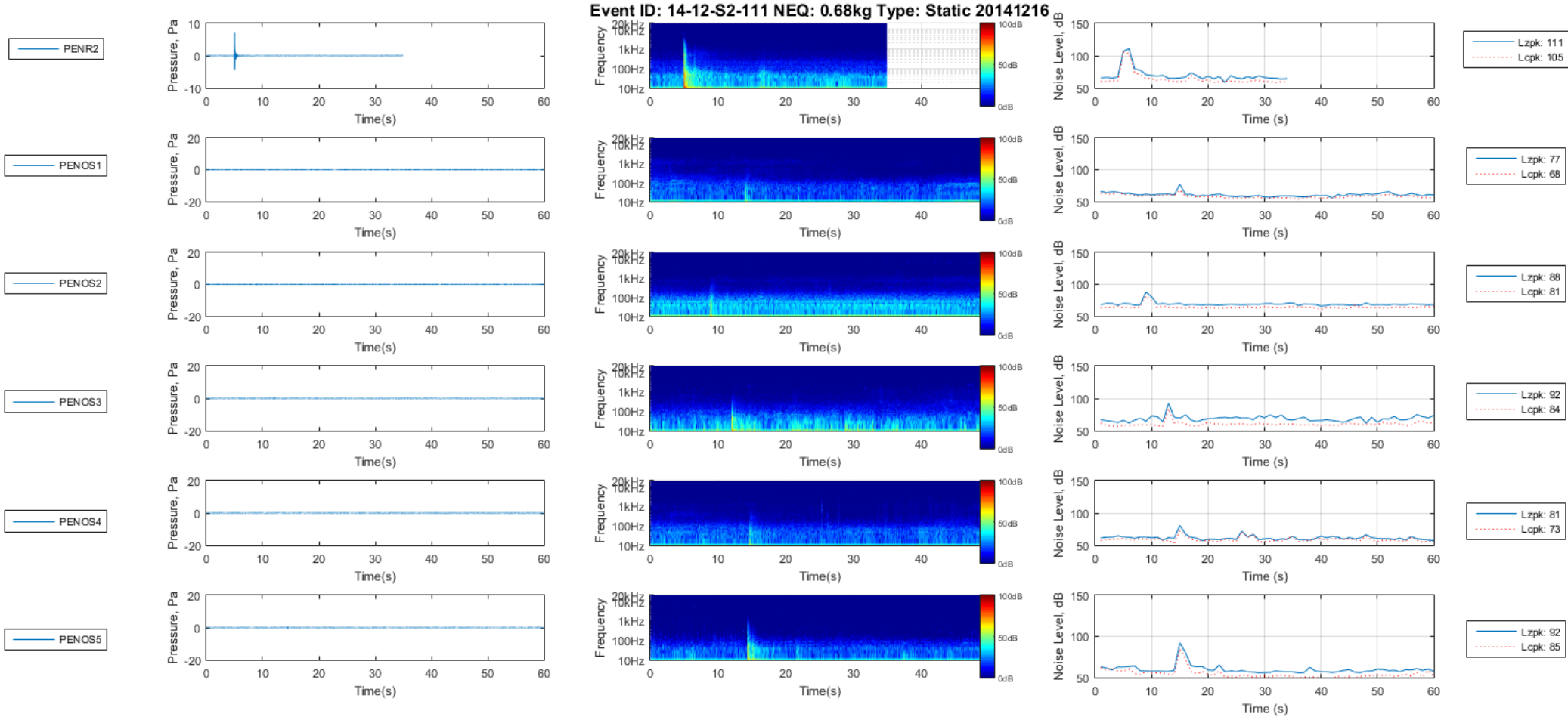
FIGURE 2.134: COHERENCE PEN\_OS 6 - 10 14-12-S2-110CTD

**Event ID: 14-12-S2-110 NEQ: 0.68kg Type: Static 20141216**



**FIGURE 2.135: CROSS CORRELATION PEN\_OS 1 - 10 14-12-S2-110**





**FIGURE 2.136: PEN\_OS 1 - 5 14-12-S2-111**

Event ID: 14-12-S2-111 NEQ: 0.68kg Type: Static 20141216 CTD

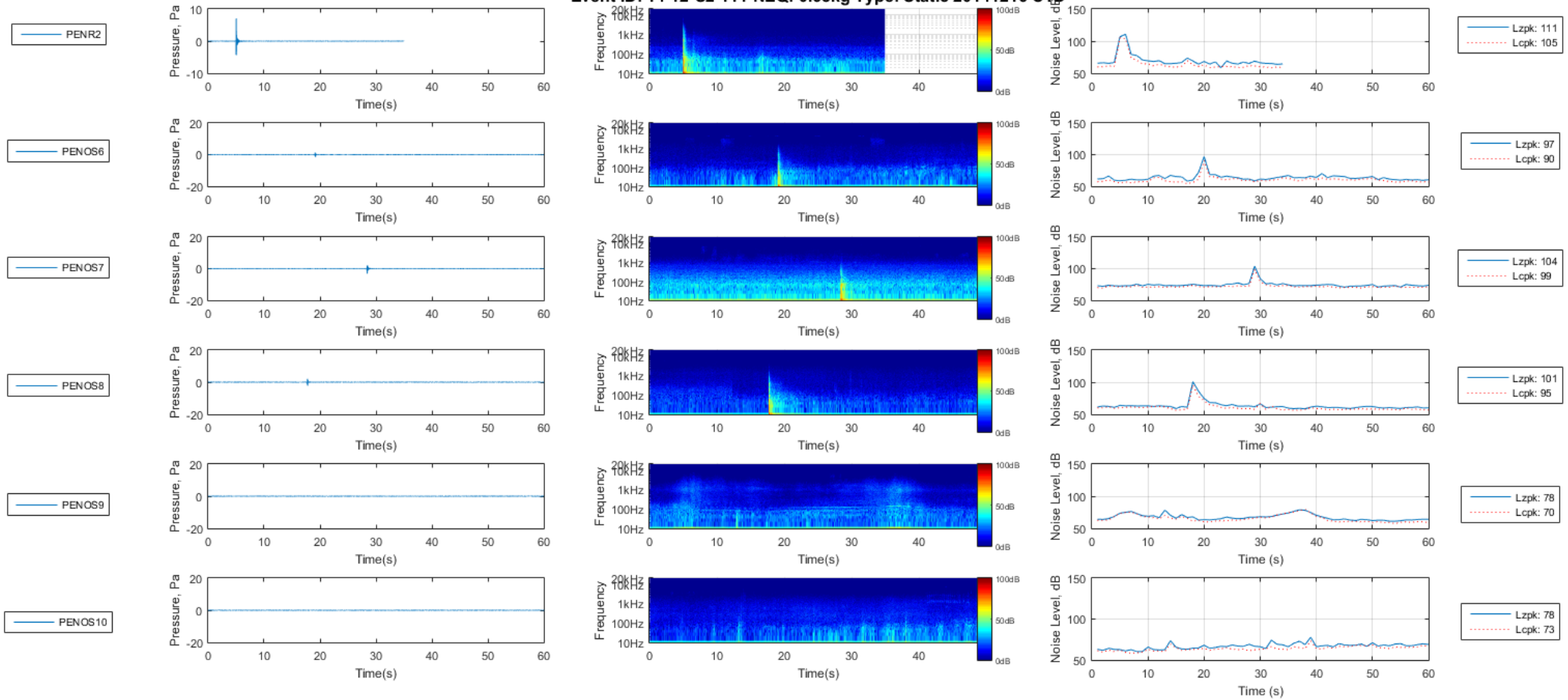


FIGURE 2.137: PEN\_OS 6 - 10 14-12-S2-111

Event ID: 14-12-S2-111 NEQ: 0.68kg Type: Static 20141216

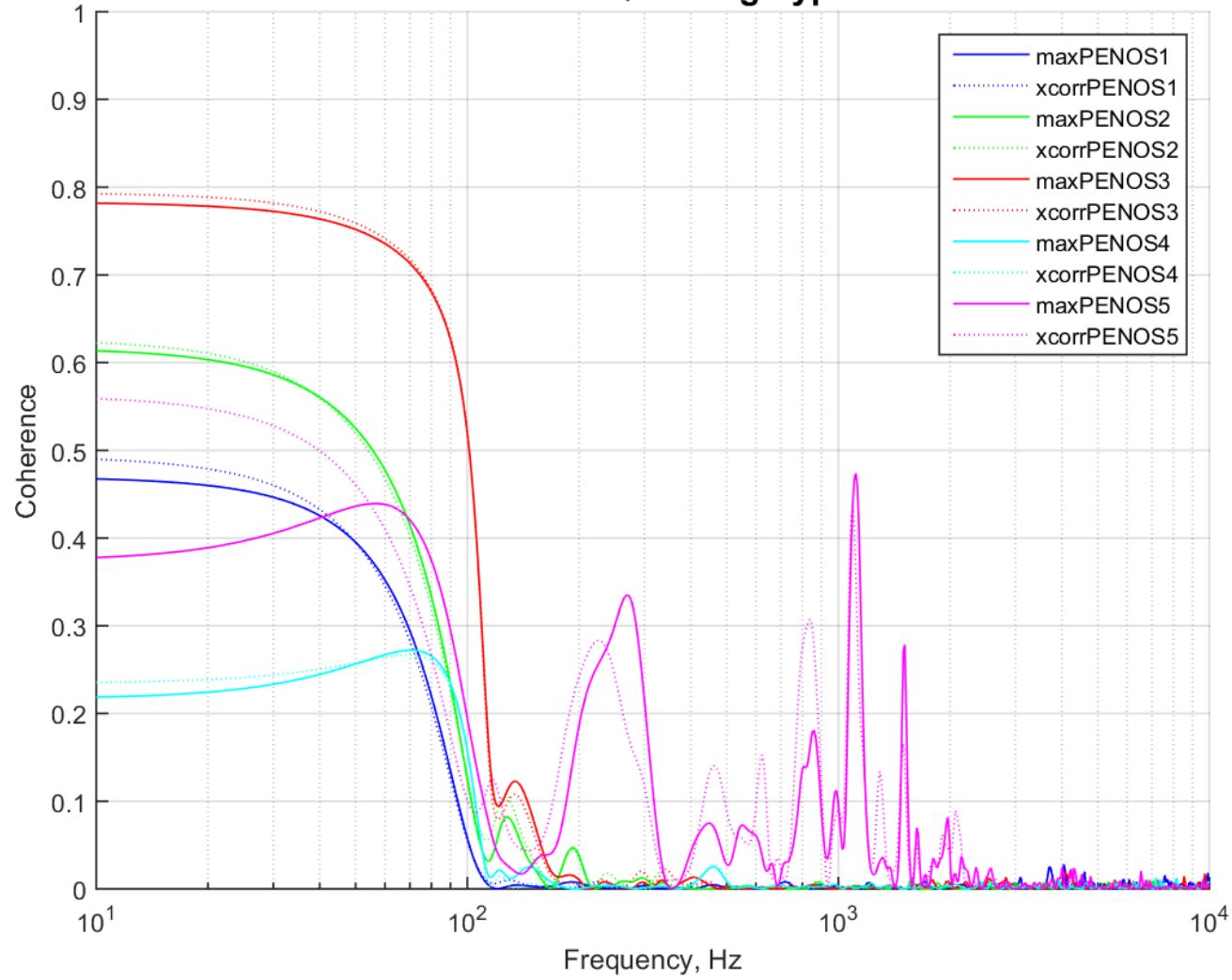


FIGURE 2.138: COHERENCE PEN\_OS 1 - 5 14-12-S2-111

Event ID: 14-12-S2-111 NEQ: 0.68kg Type: Static 20141216

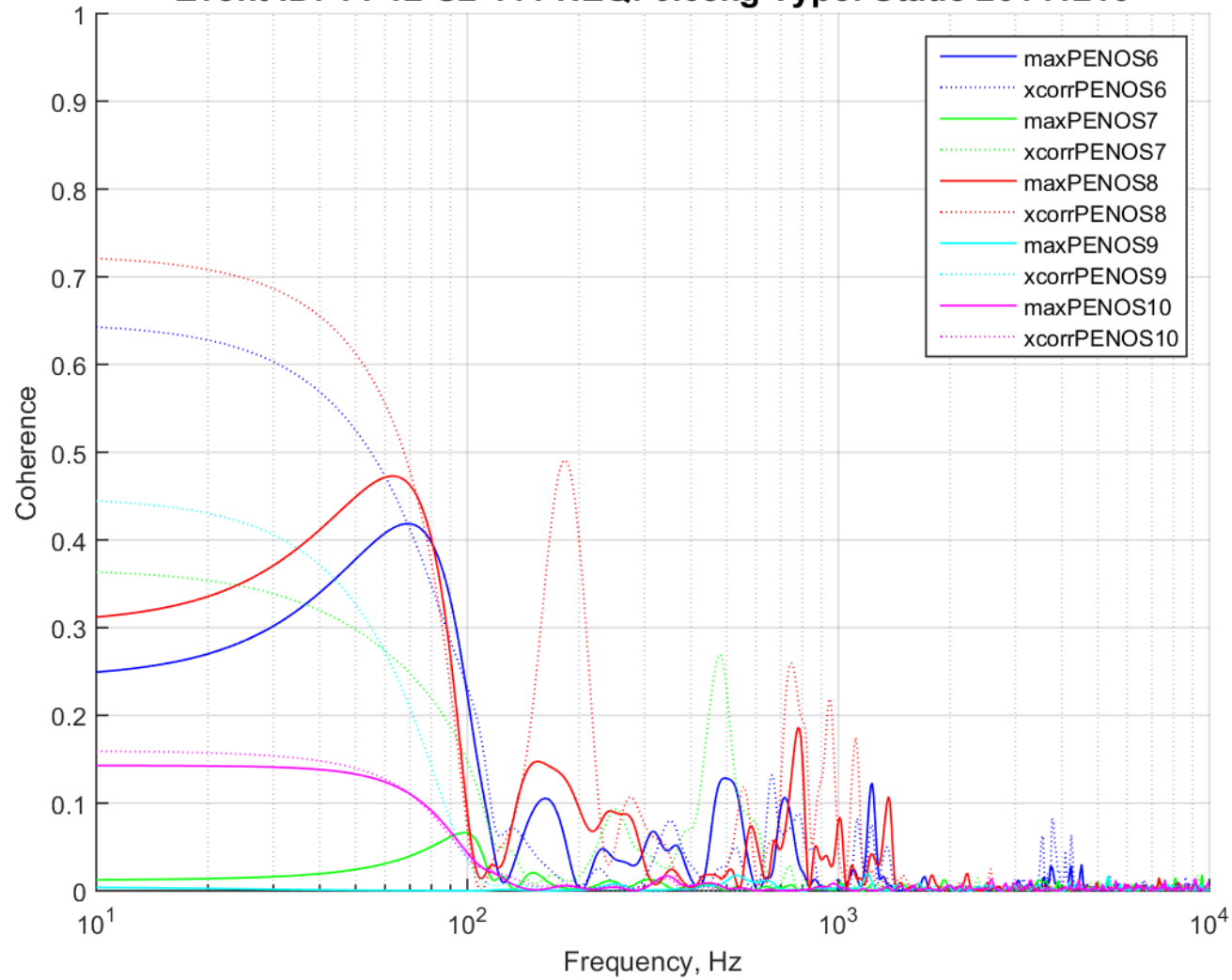
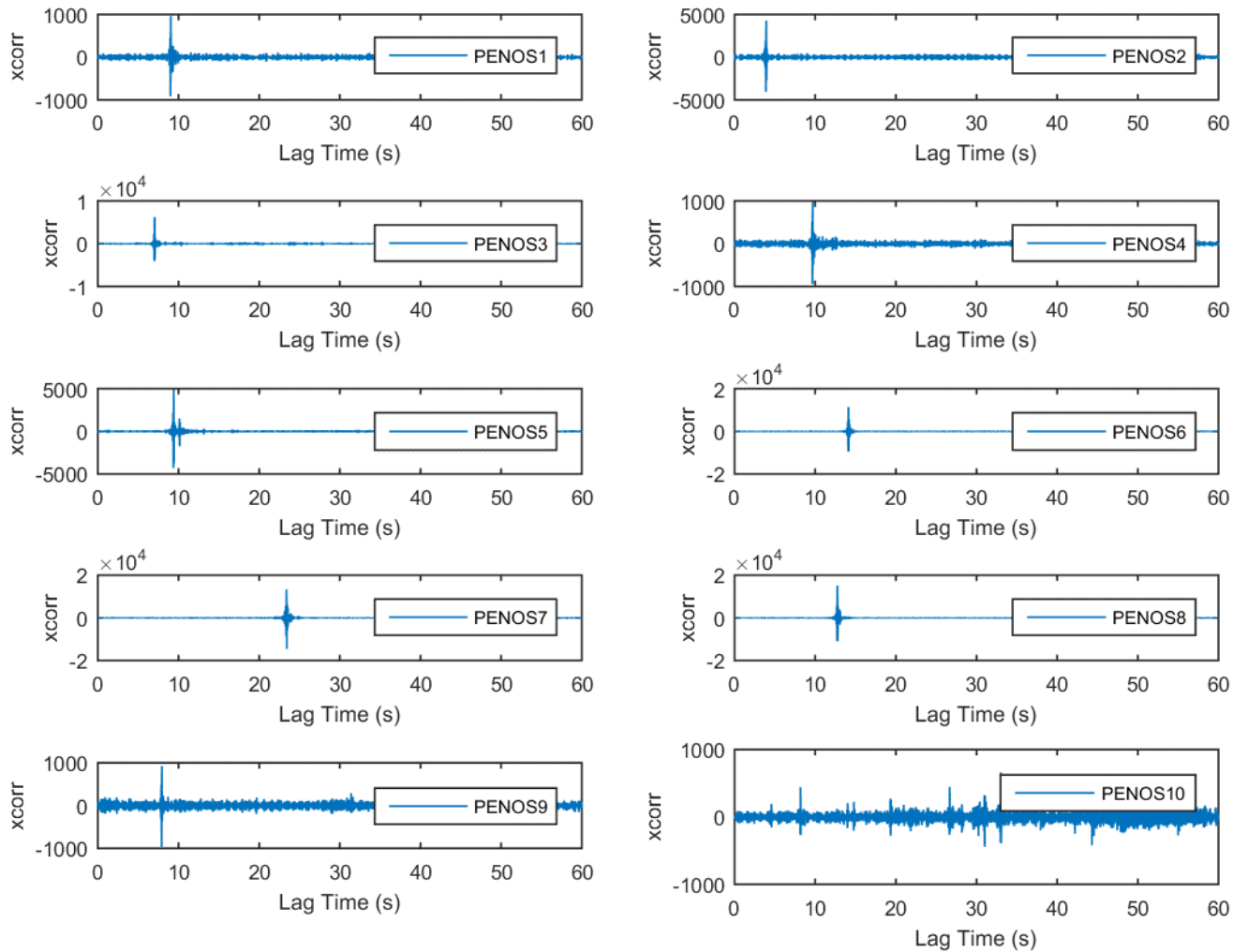
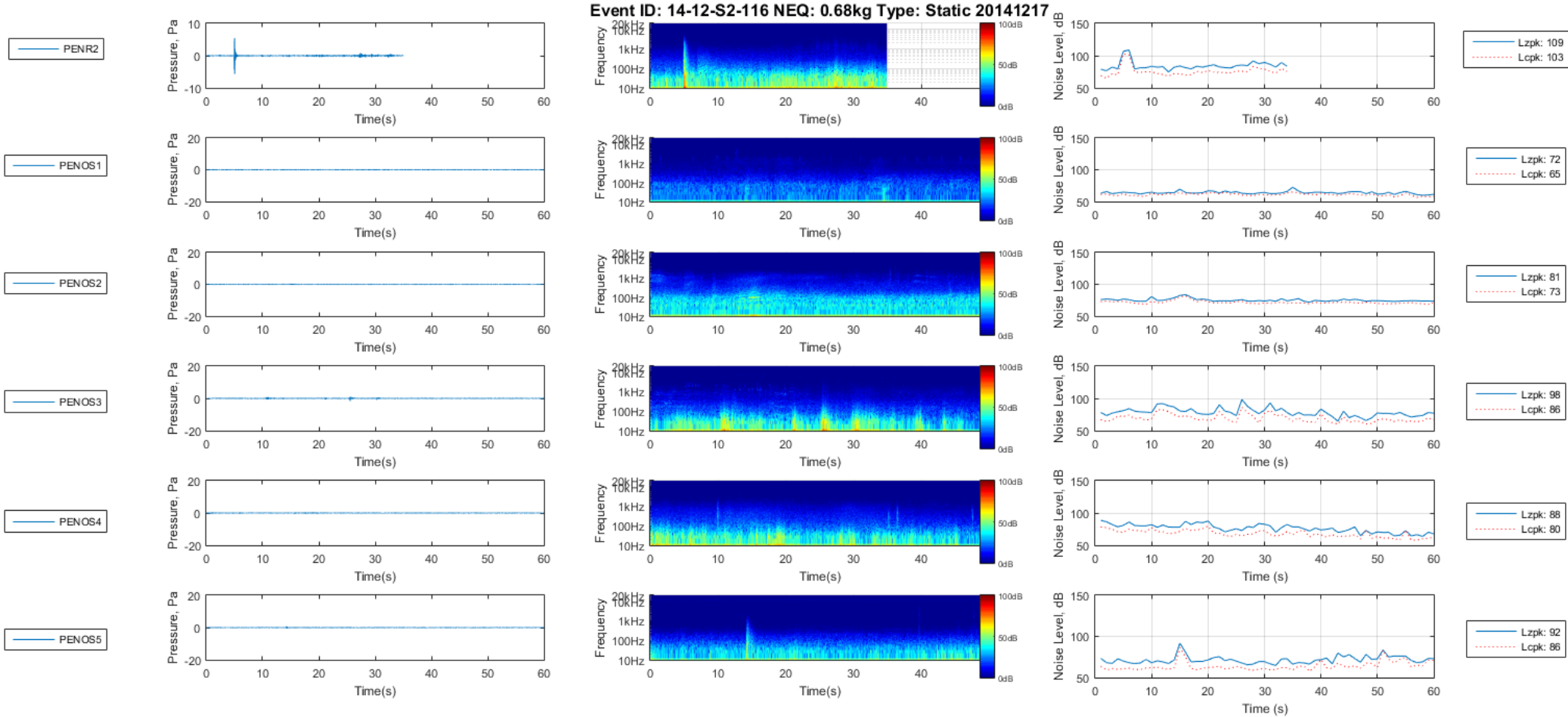


FIGURE 2.139: COHERENCE PEN\_OS 6 - 10 14-12-S2-111CTD

**Event ID: 14-12-S2-111 NEQ: 0.68kg Type: Static 20141216**



**FIGURE 2.140: CROSS CORRELATION PEN\_OS 1 - 10 14-12-S2-111**



**FIGURE 2.141: PEN\_OS 1 - 5 14-12-S2-116**

Event ID: 14-12-S2-116 NEQ: 0.68kg Type: Static 20141217 CTD

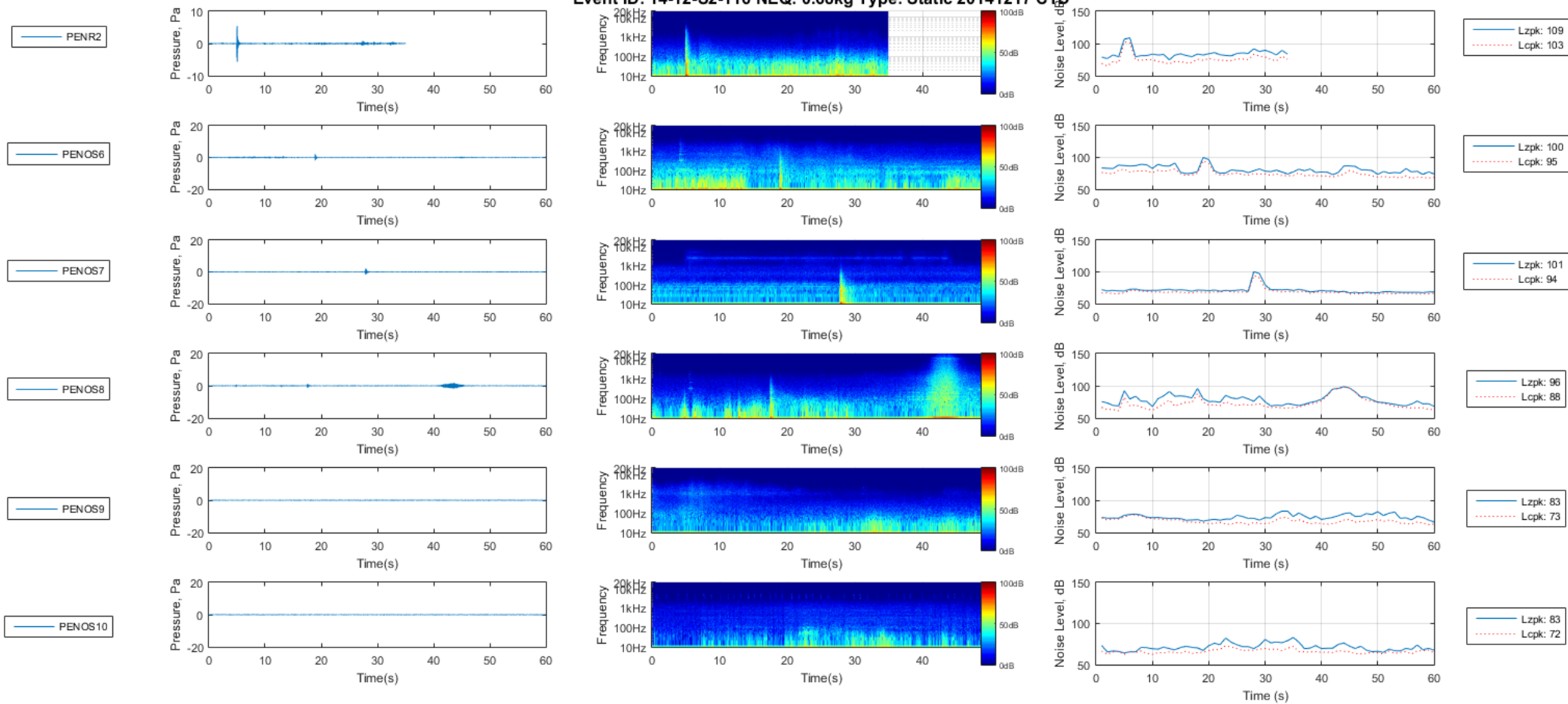


FIGURE 2.142: PEN\_OS 6 - 10 14-12-S2-116

Event ID: 14-12-S2-116 NEQ: 0.68kg Type: Static 20141217

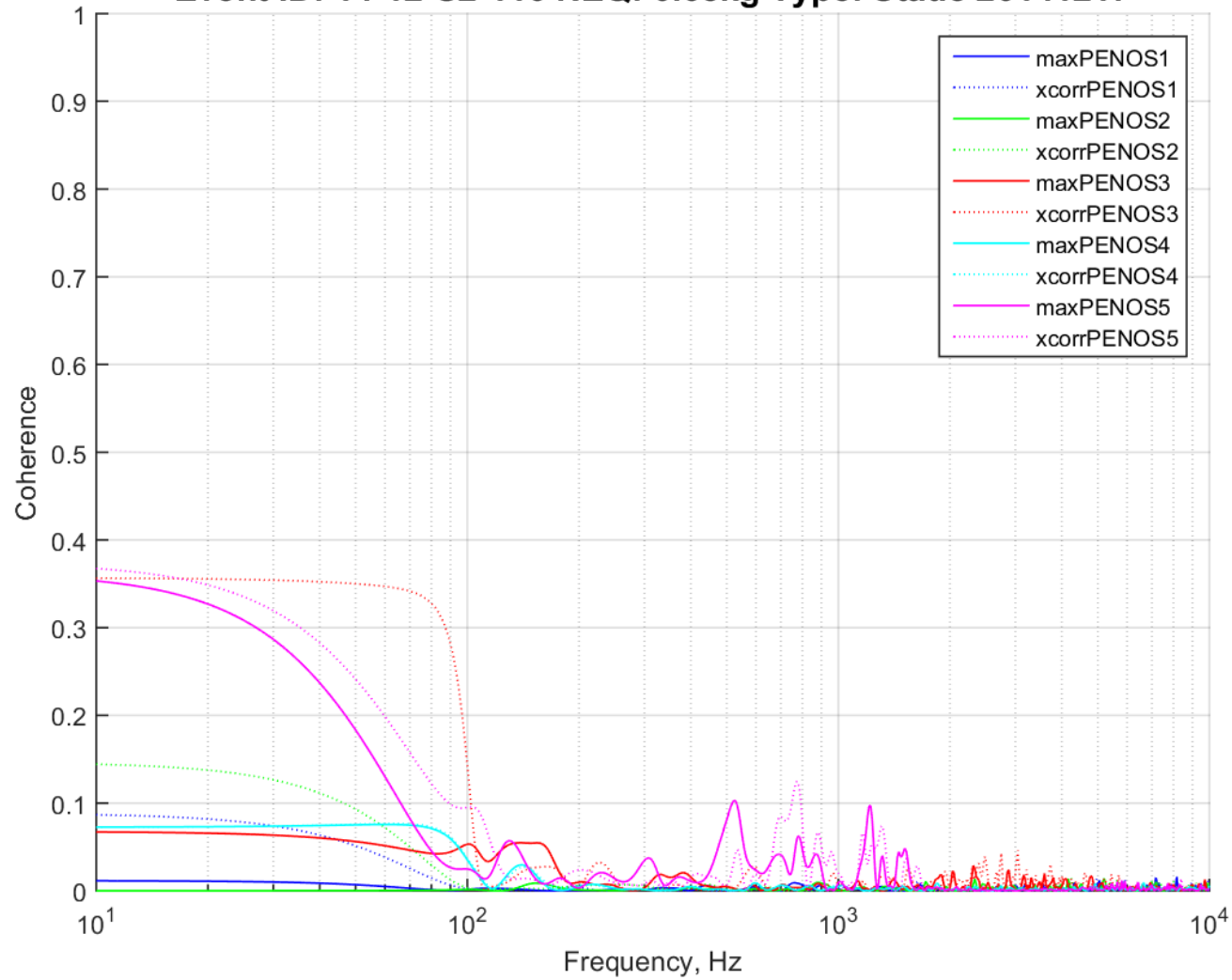


FIGURE 2.143: COHERENCE PEN\_OS 1 - 5 14-12-S2-116



Event ID: 14-12-S2-116 NEQ: 0.68kg Type: Static 20141217

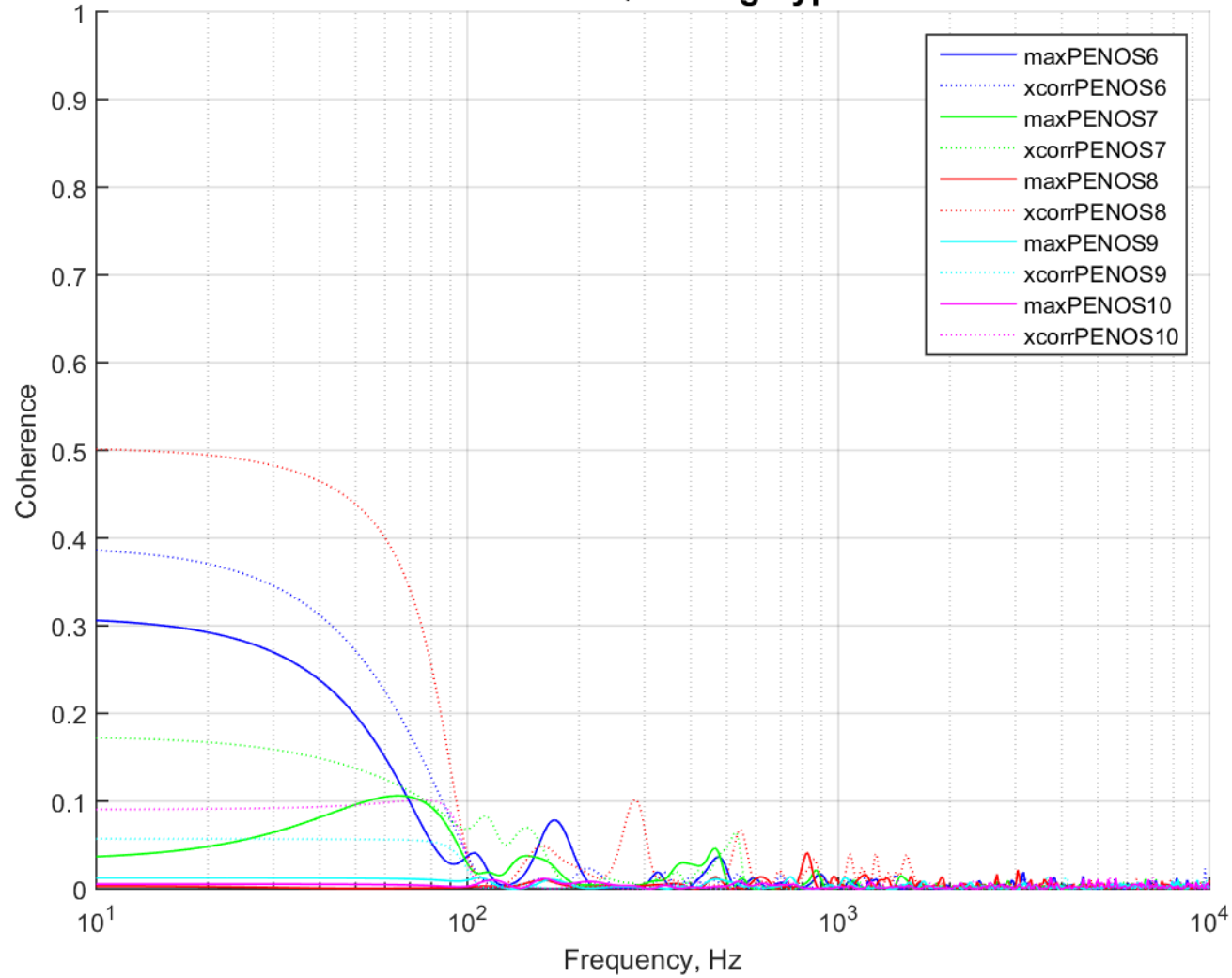
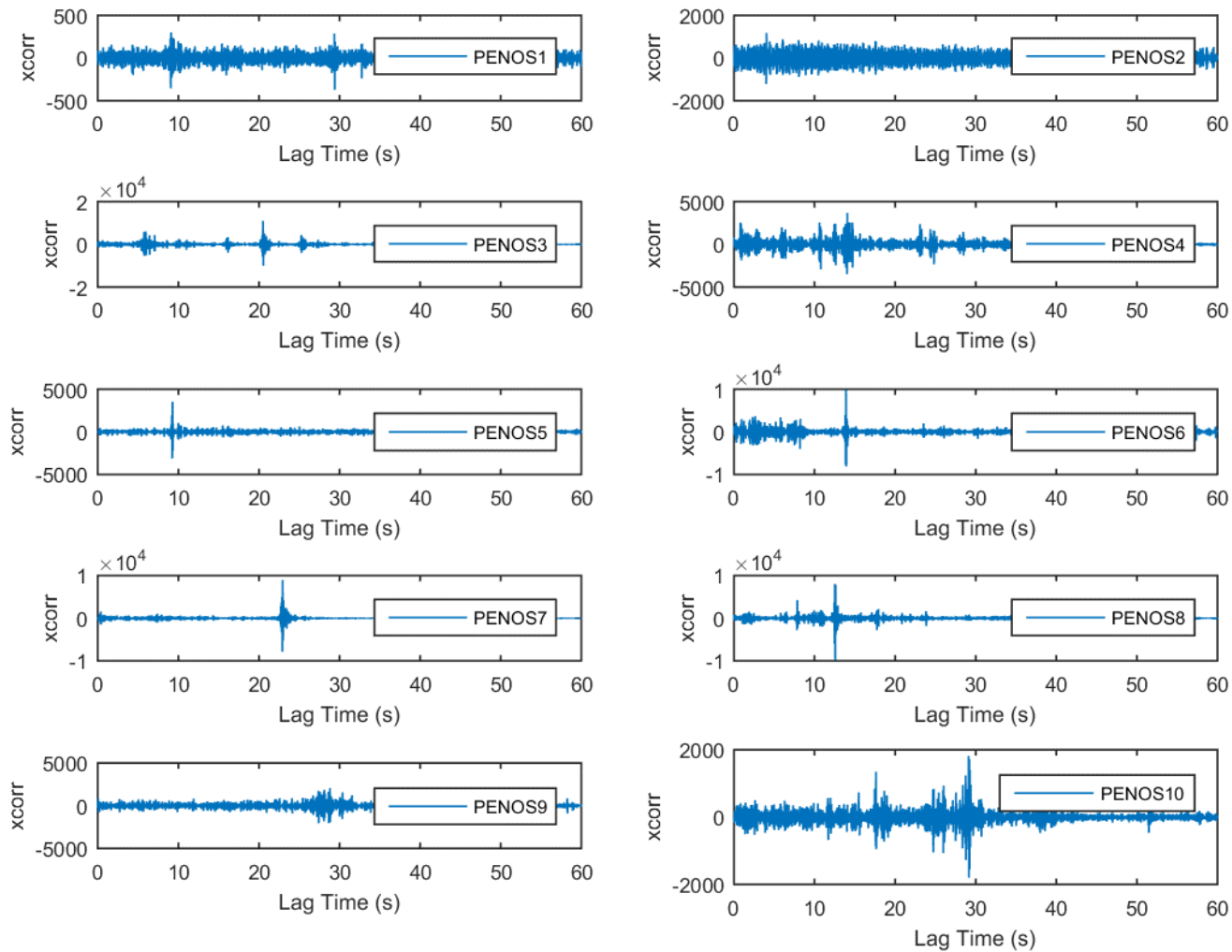
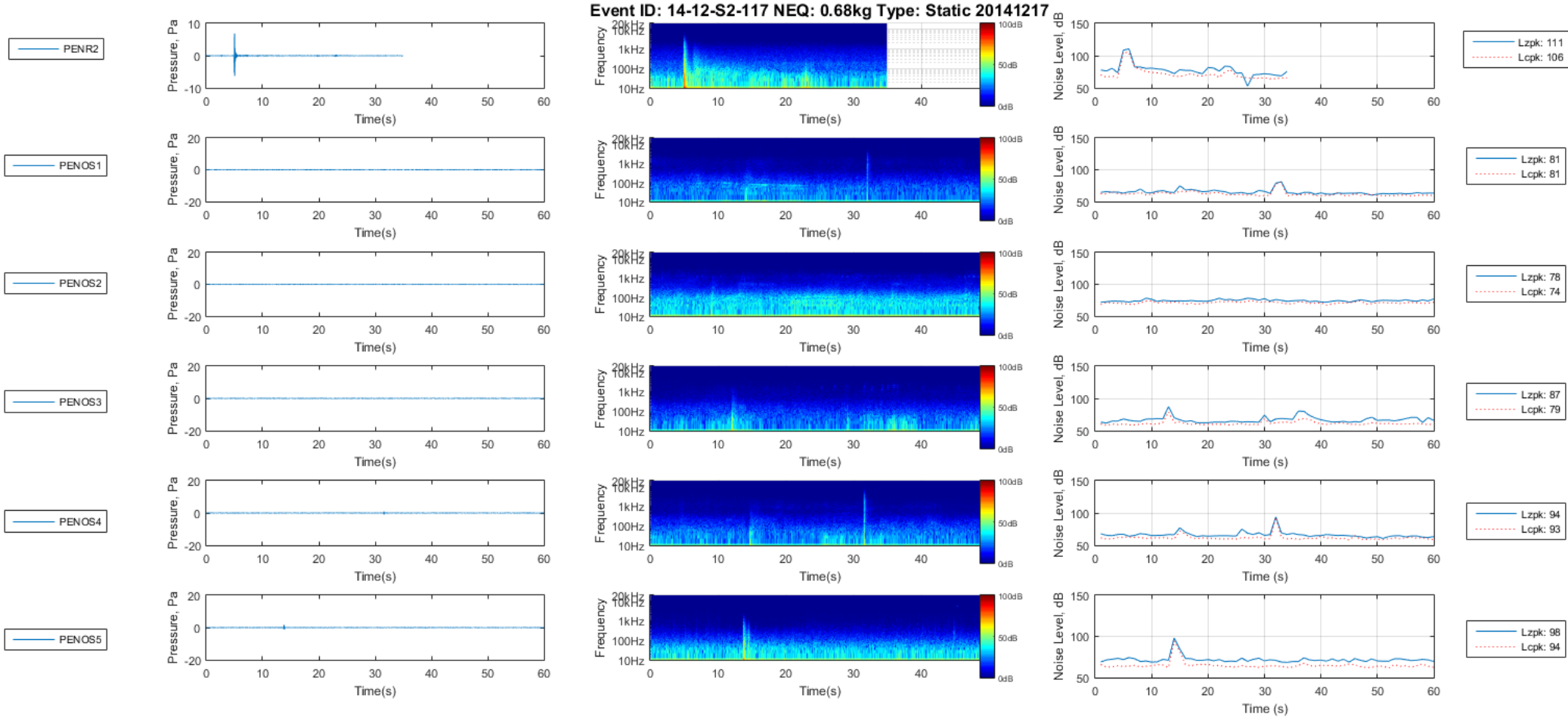


FIGURE 2.144: COHERENCE PEN\_OS 6 - 10 14-12-S2-116CTD

**Event ID: 14-12-S2-116 NEQ: 0.68kg Type: Static 20141217**



**FIGURE 2.145: CROSS CORRELATION PEN\_OS 1 - 10 14-12-S2-116**



**FIGURE 2.146: PEN\_OS 1 - 5 14-12-S2-117**

Event ID: 14-12-S2-117 NEQ: 0.68kg Type: Static 20141217 CTD

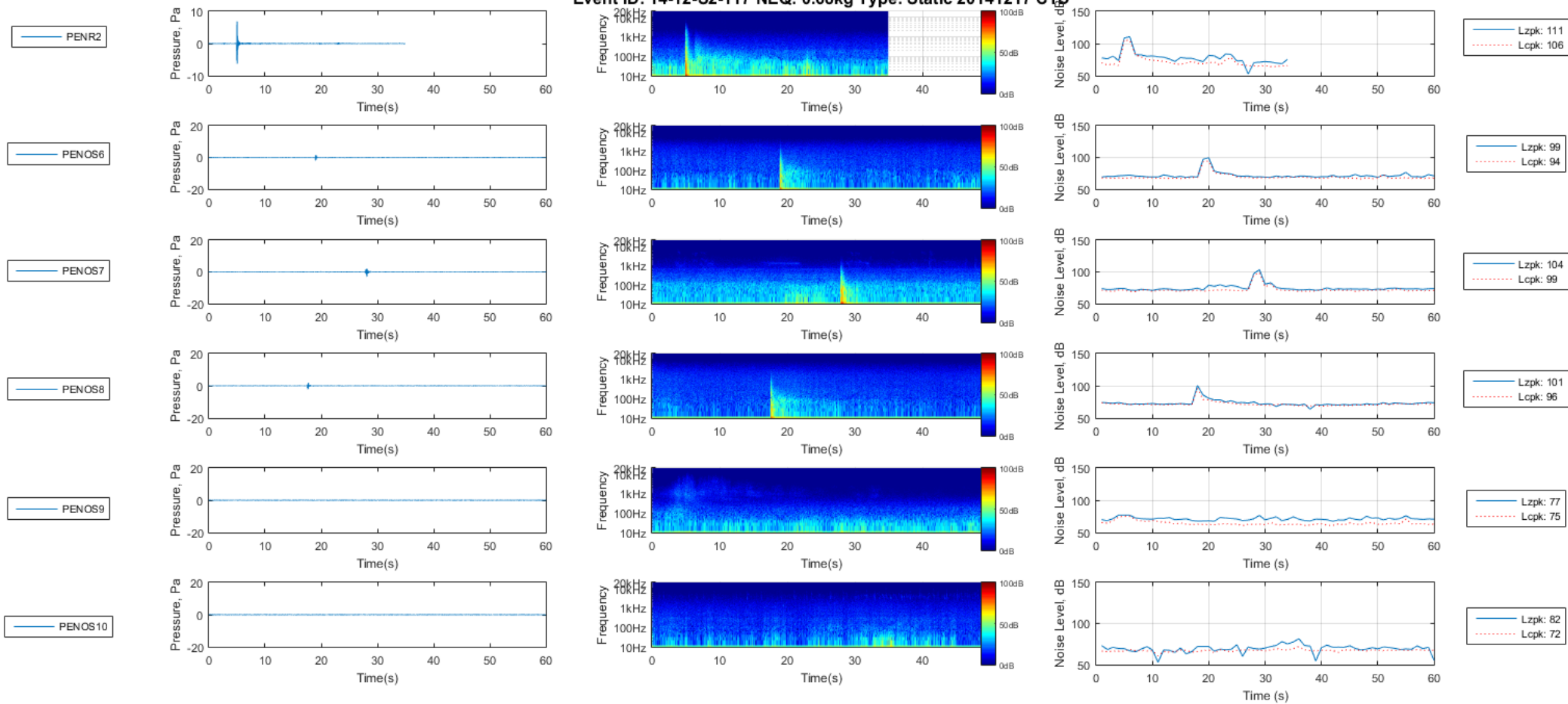
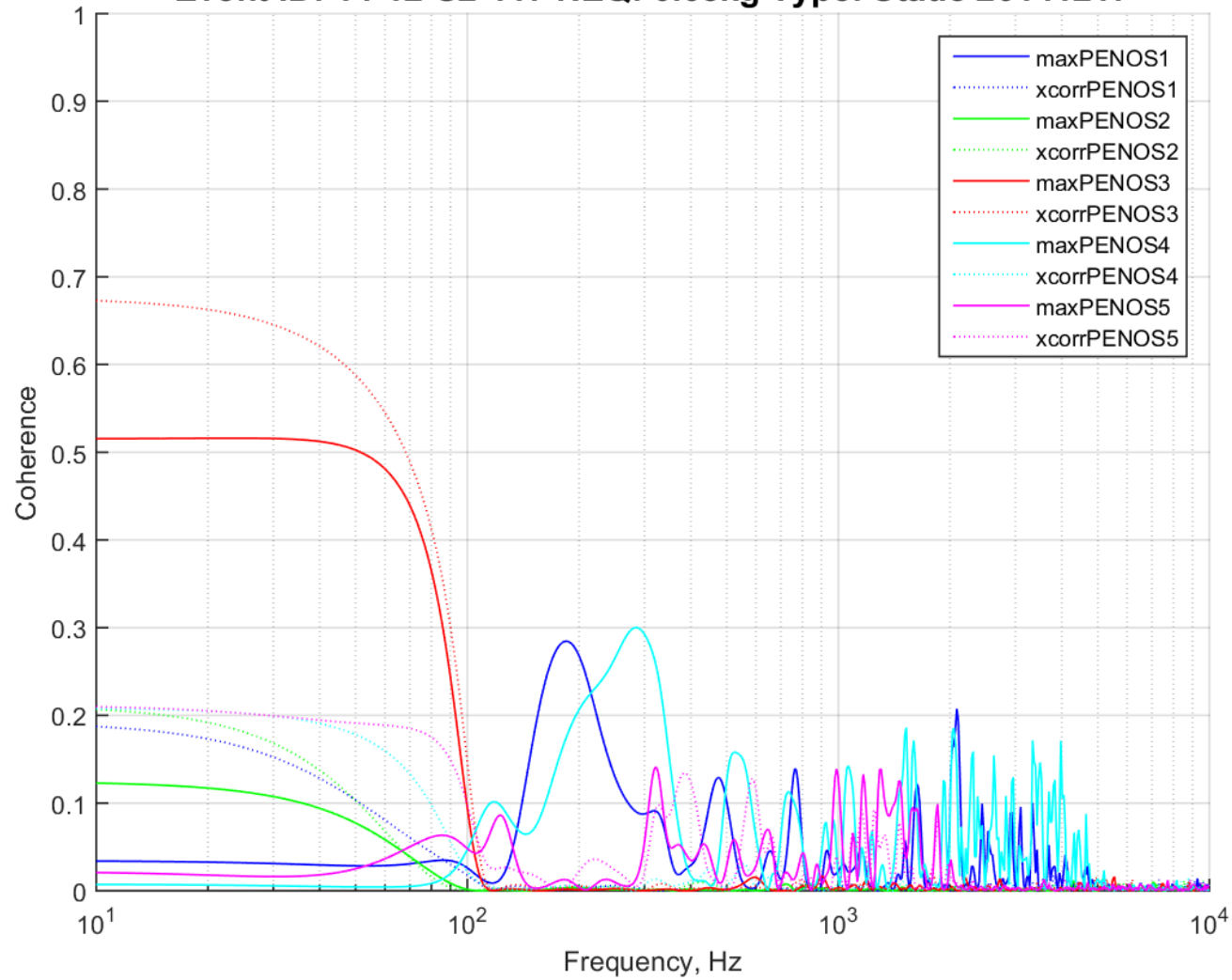


FIGURE 2.147: PEN\_OS 6 - 10 14-12-S2-117

**Event ID: 14-12-S2-117 NEQ: 0.68kg Type: Static 20141217**



**FIGURE 2.148: COHERENCE PEN\_OS 1 - 5 14-12-S2-117**

Event ID: 14-12-S2-117 NEQ: 0.68kg Type: Static 20141217

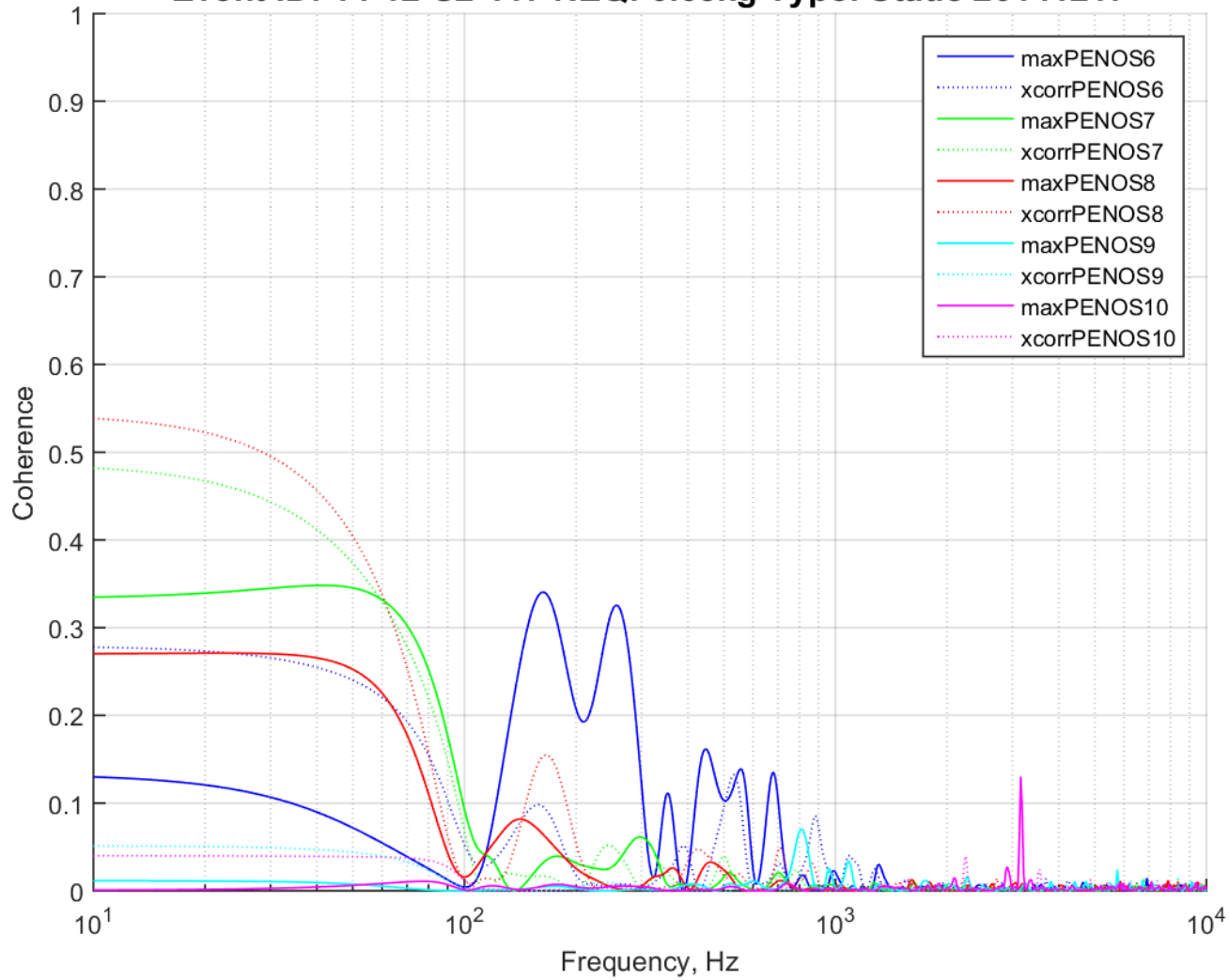
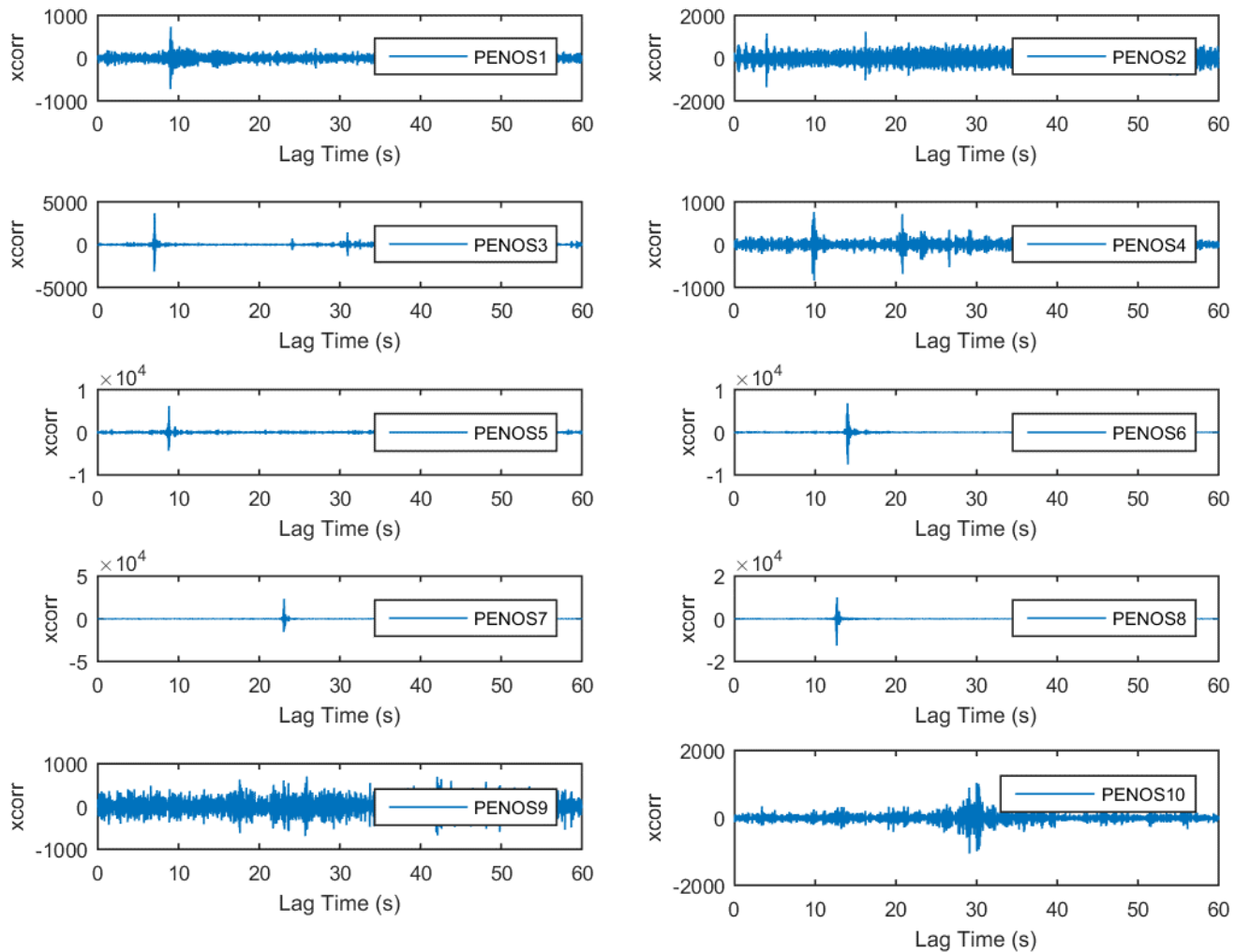
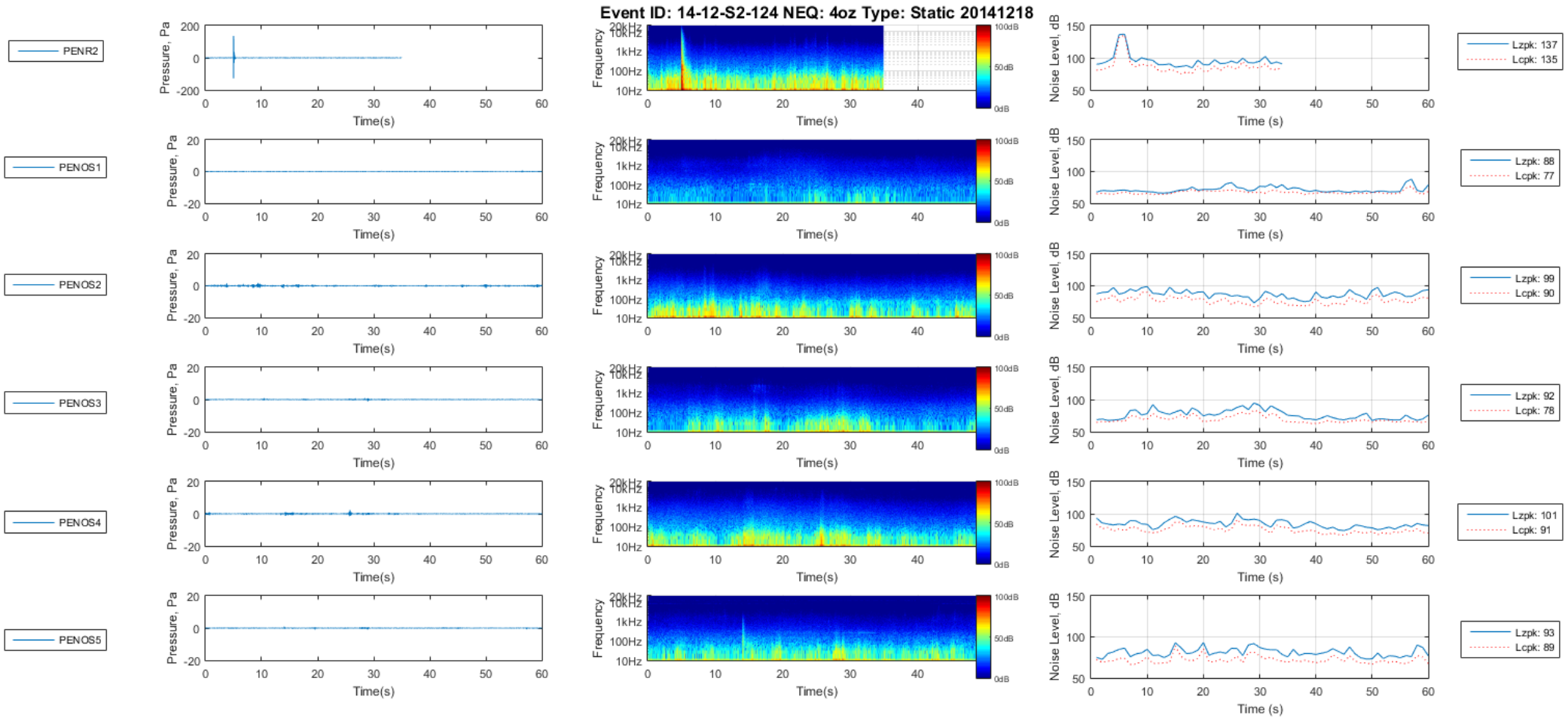


FIGURE 2.149: COHERENCE PEN\_OS 6 - 10 14-12-S2-117CTD

**Event ID: 14-12-S2-117 NEQ: 0.68kg Type: Static 20141217**

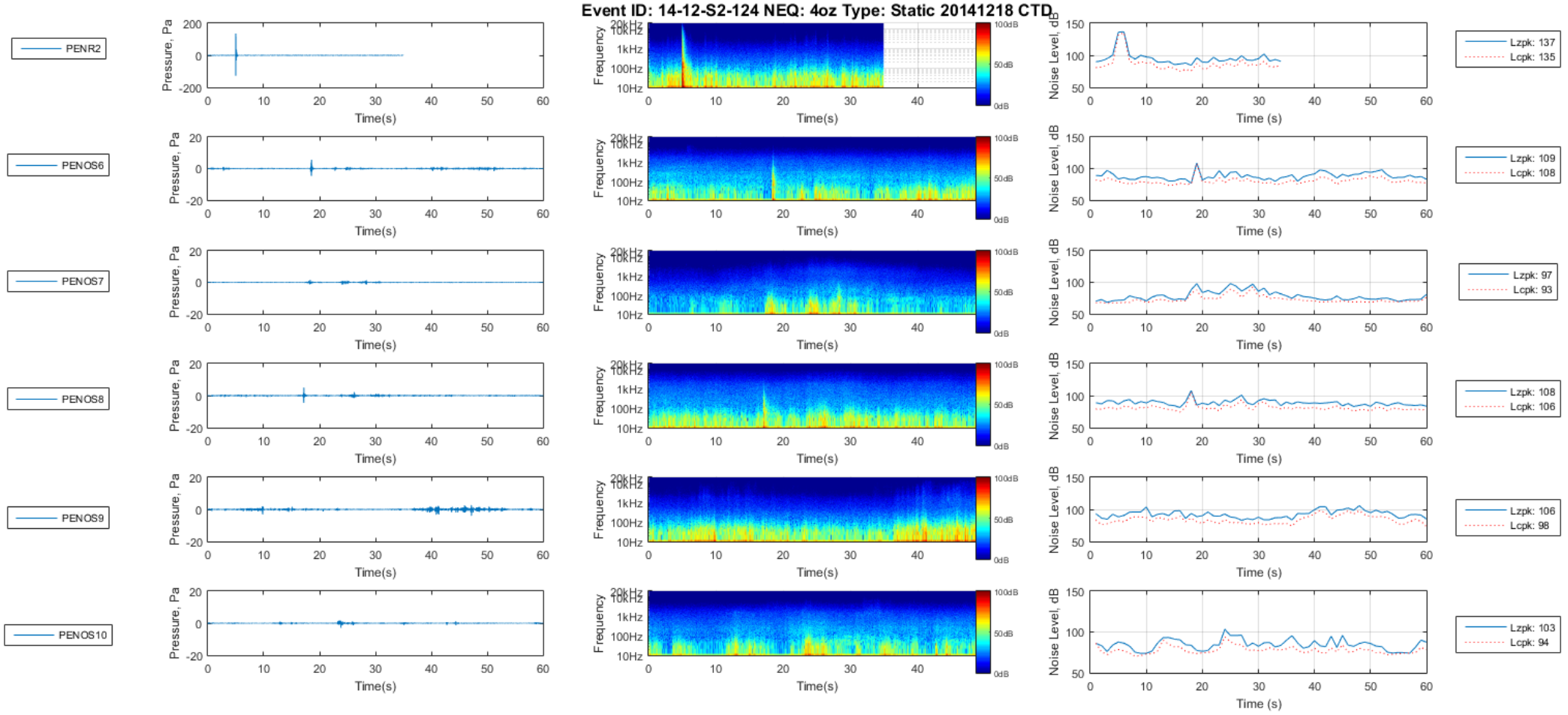


**FIGURE 2.150: CROSS CORRELATION PEN\_OS 1 - 10 14-12-S2-117**



**FIGURE 2.151: PEN\_OS 1 - 5 14-12-S2-124**





**FIGURE 2.152: PEN\_OS 6 - 10 14-12-S2-124**

Event ID: 14-12-S2-124 NEQ: 4oz Type: Static 20141218

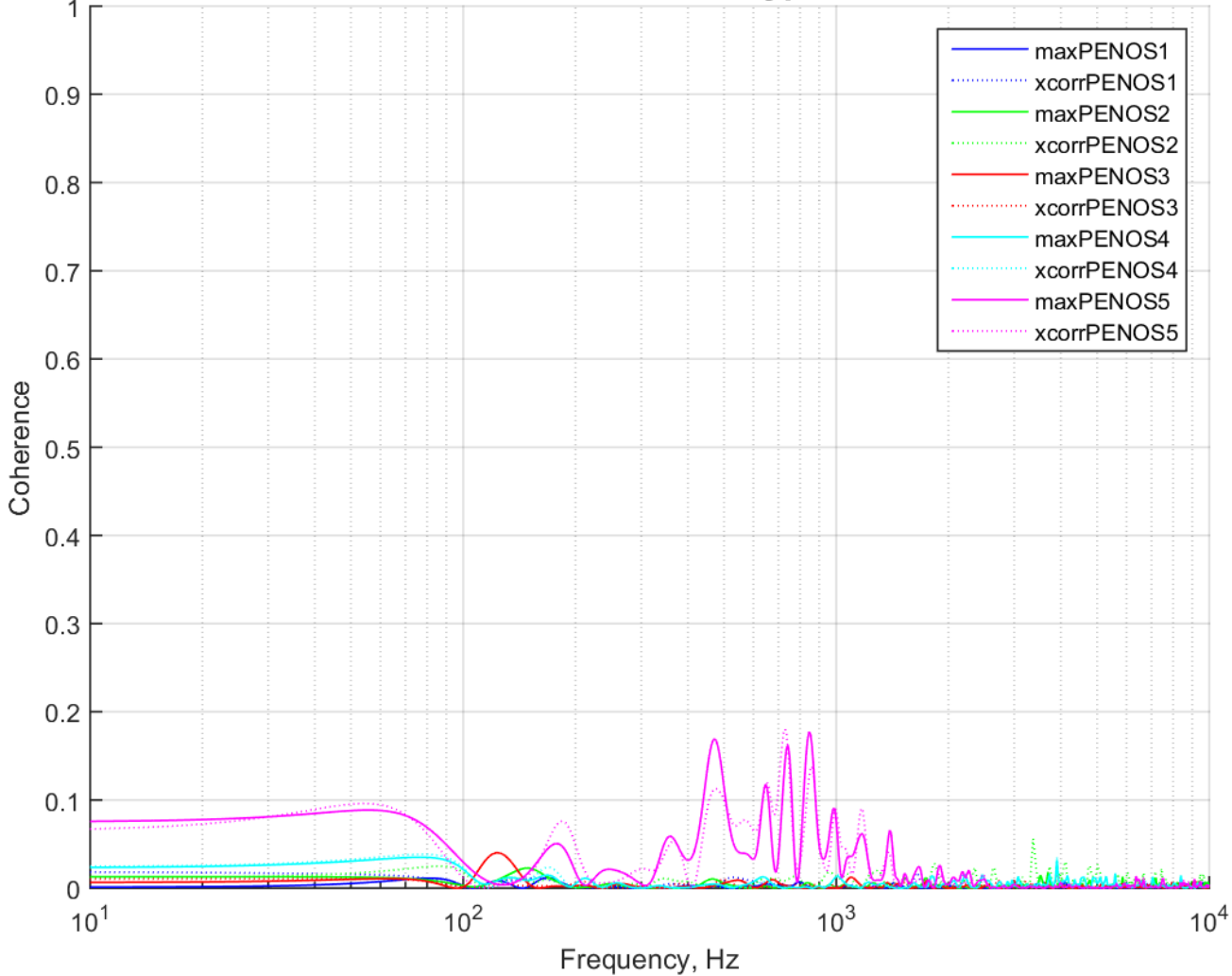


FIGURE 2.153: COHERENCE PEN\_OS 1 - 5 14-12-S2-124

Event ID: 14-12-S2-124 NEQ: 4oz Type: Static 20141218

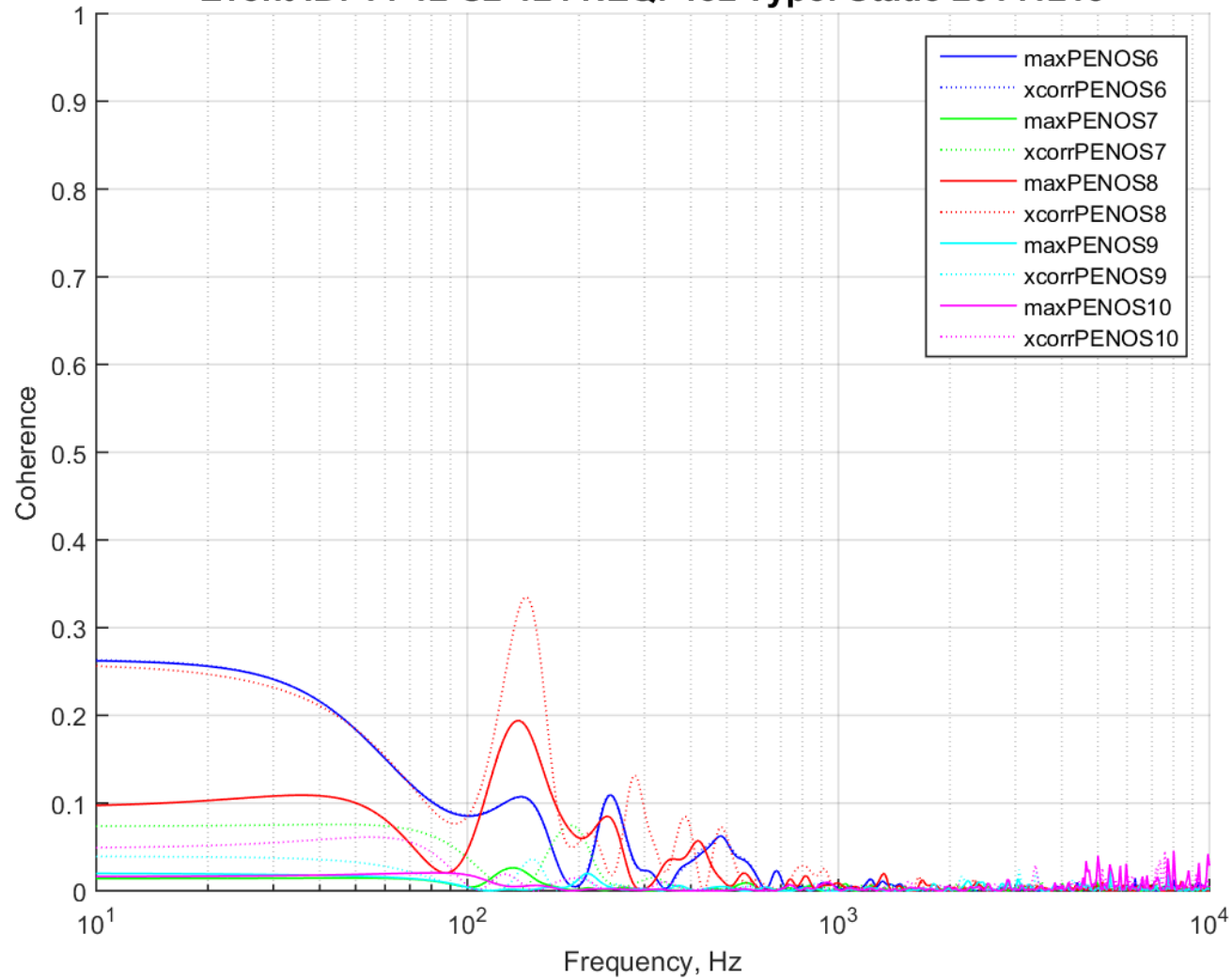
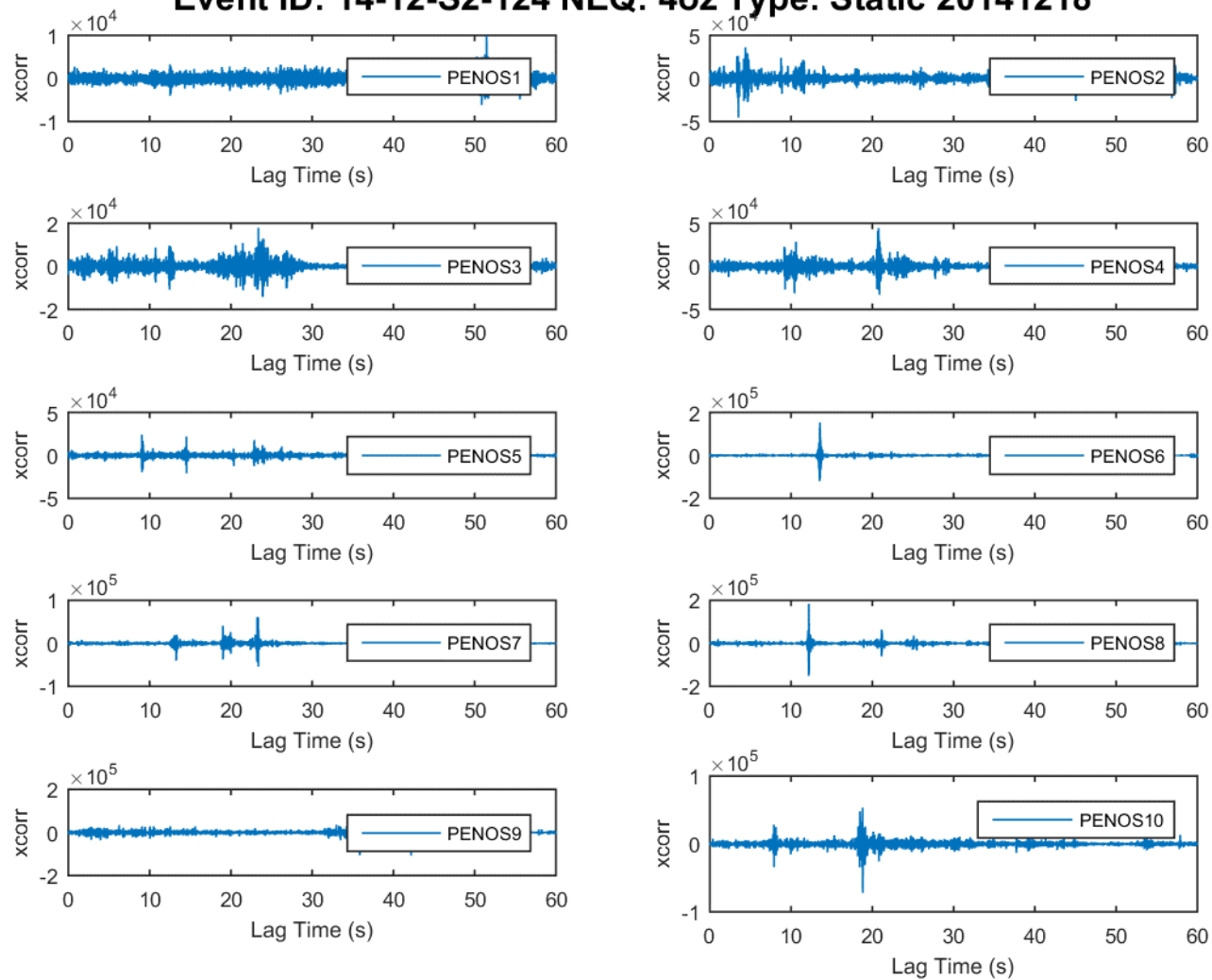
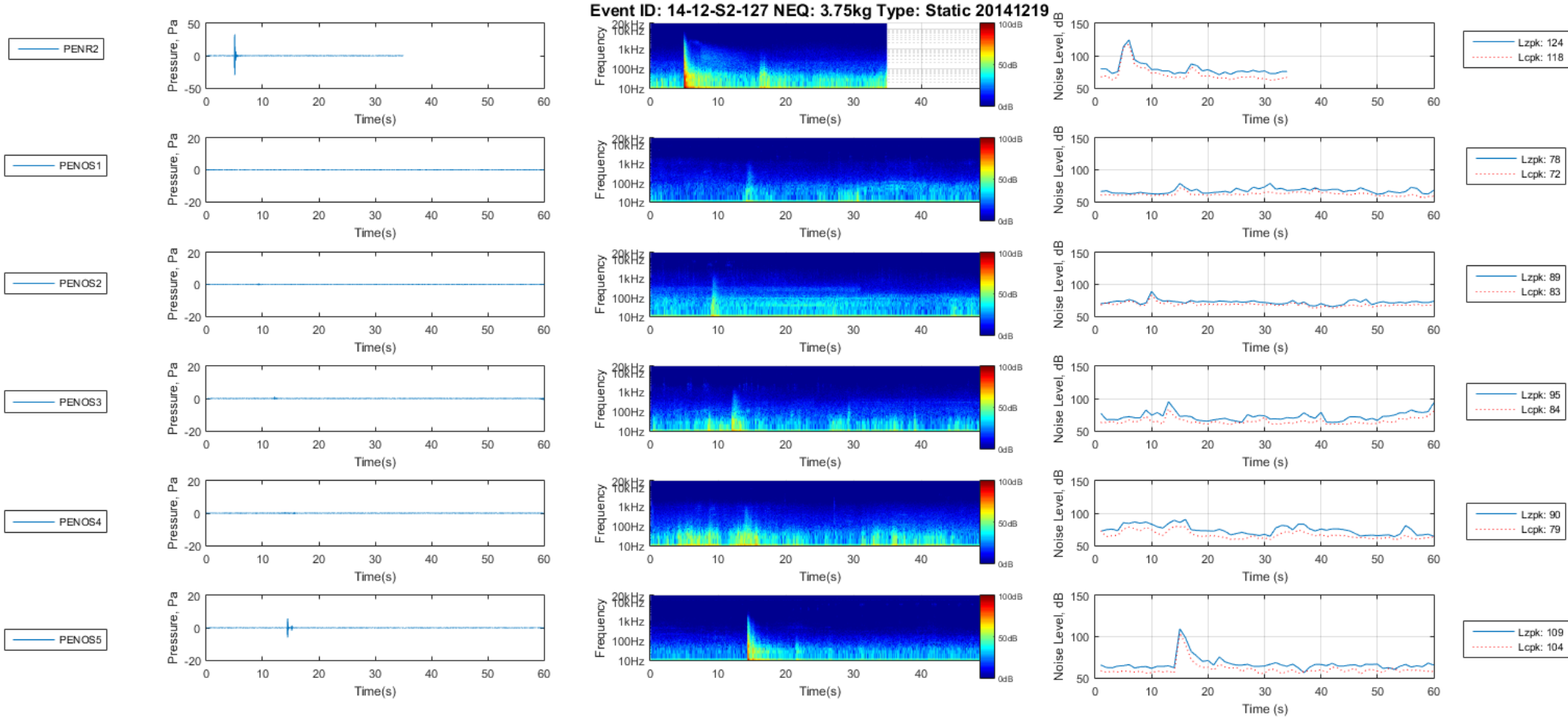


FIGURE 2.154: COHERENCE PEN\_OS 6 - 10 14-12-S2-124CTD

**Event ID: 14-12-S2-124 NEQ: 4oz Type: Static 20141218**



**FIGURE 2.155: CROSS CORRELATION PEN\_OS 1 - 10 14-12-S2-124**



**FIGURE 2.156: PEN\_OS 1 - 5 14-12-S2-127**

Event ID: 14-12-S2-127 NEQ: 3.75kg Type: Static 20141219 CTD

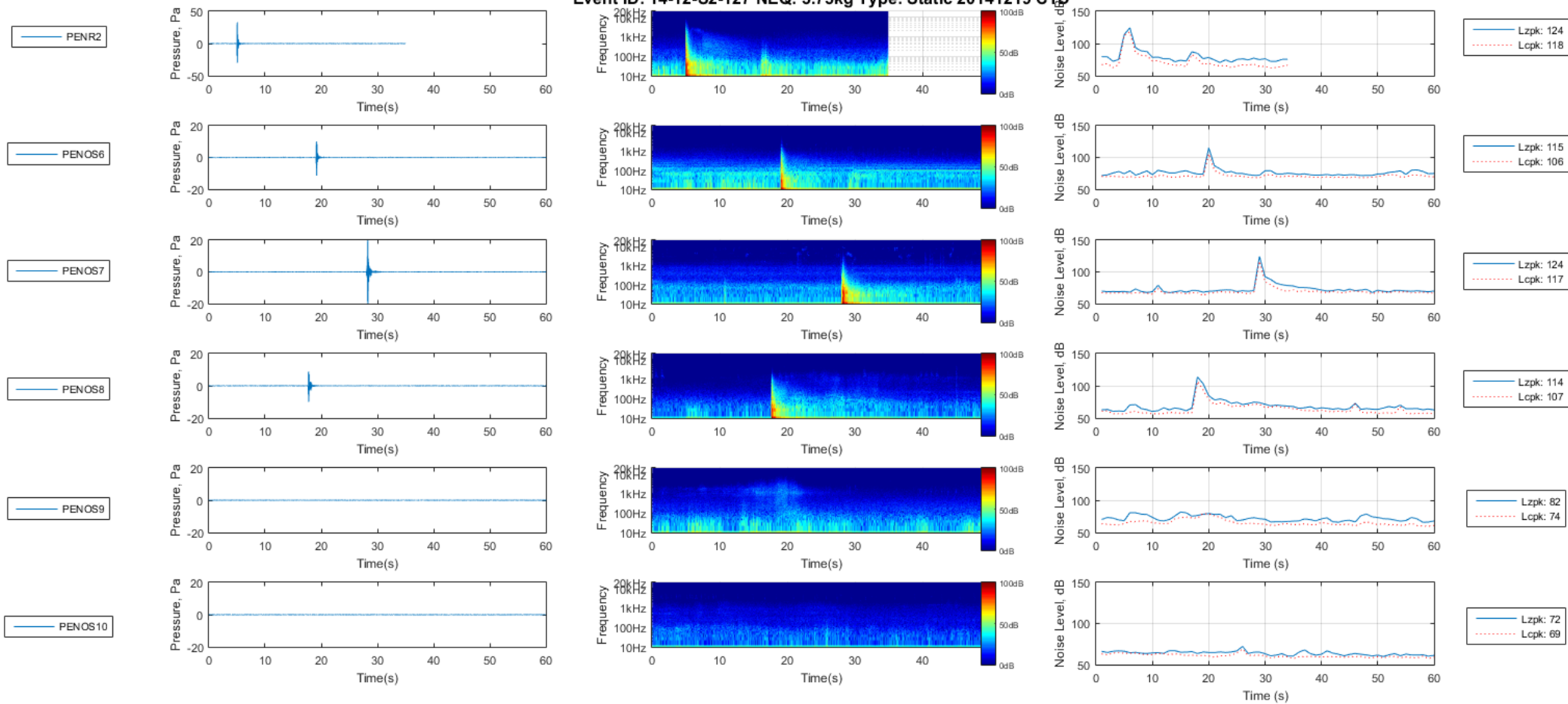


FIGURE 2.157: PEN\_OS 6 - 10 14-12-S2-127

Event ID: 14-12-S2-127 NEQ: 3.75kg Type: Static 20141219

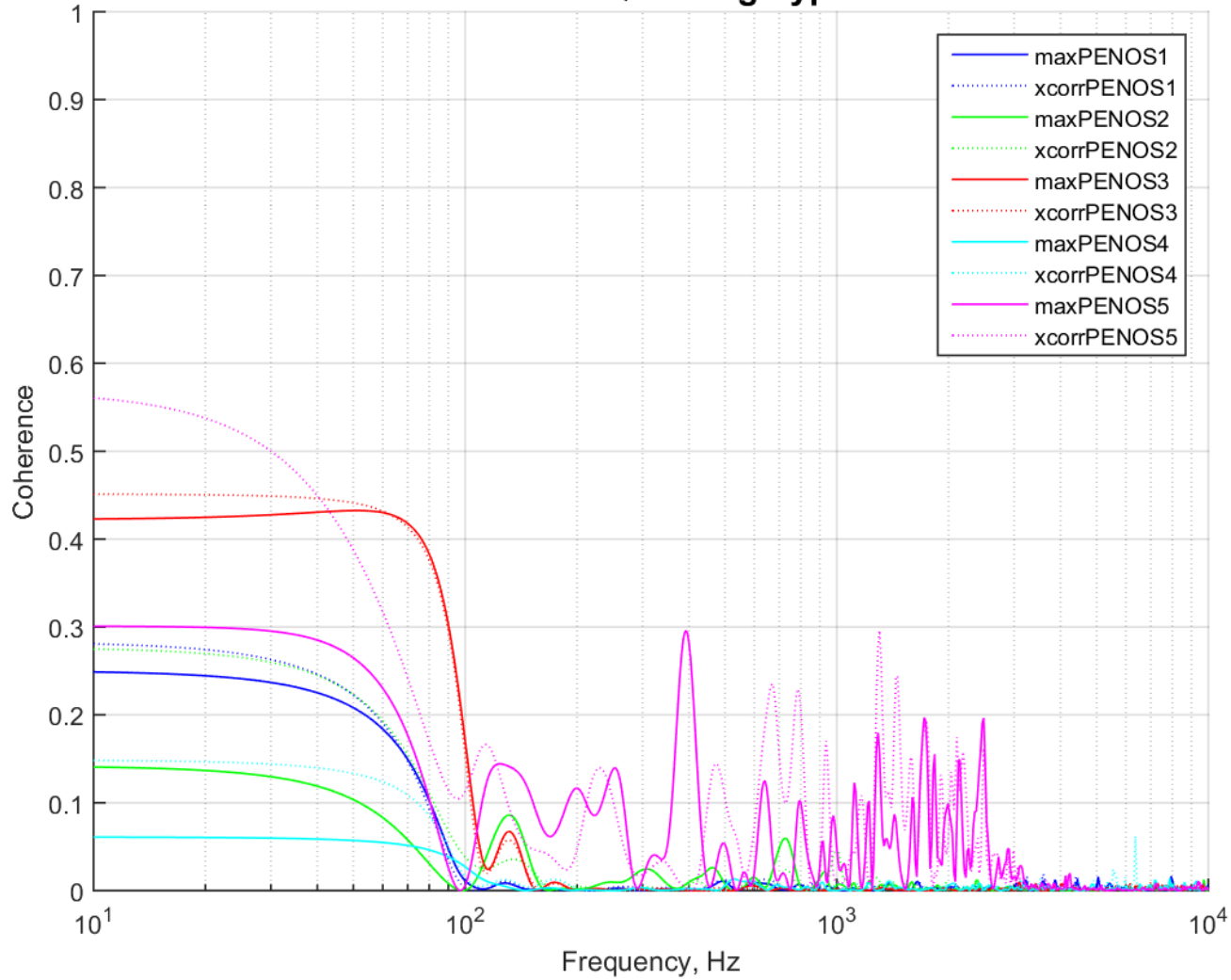


FIGURE 2.158: COHERENCE PEN\_OS 1 - 5 14-12-S2-127

Event ID: 14-12-S2-127 NEQ: 3.75kg Type: Static 20141219

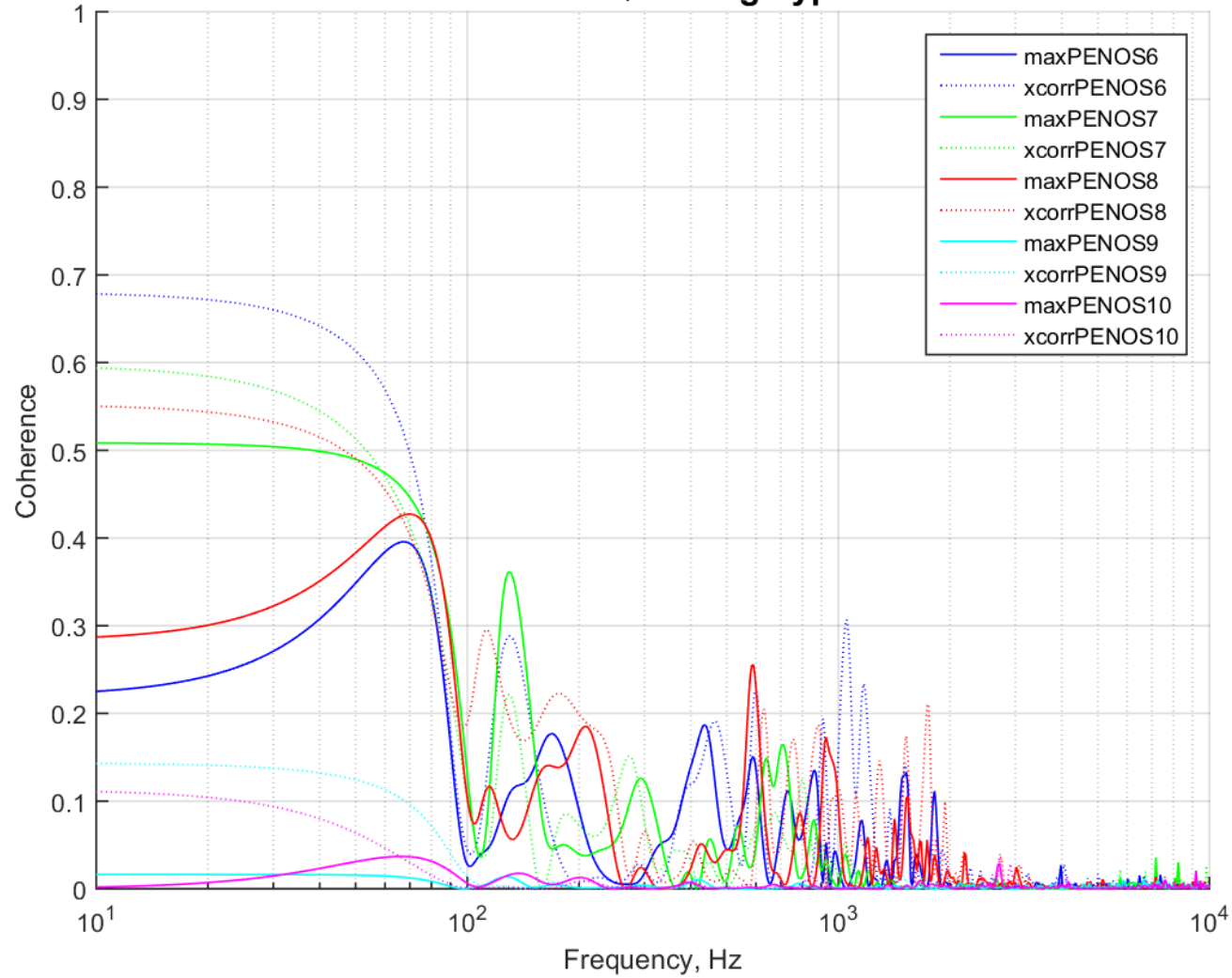
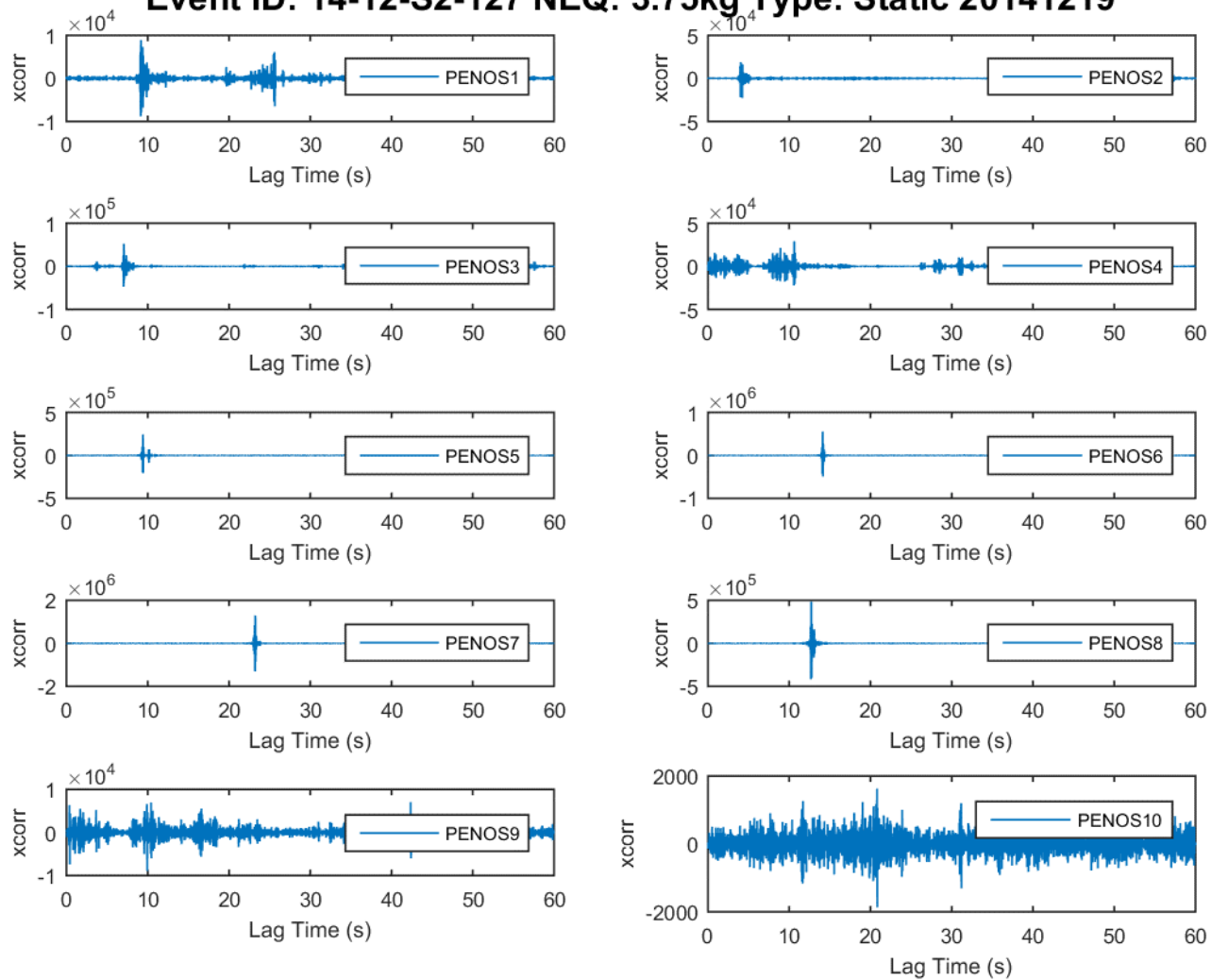


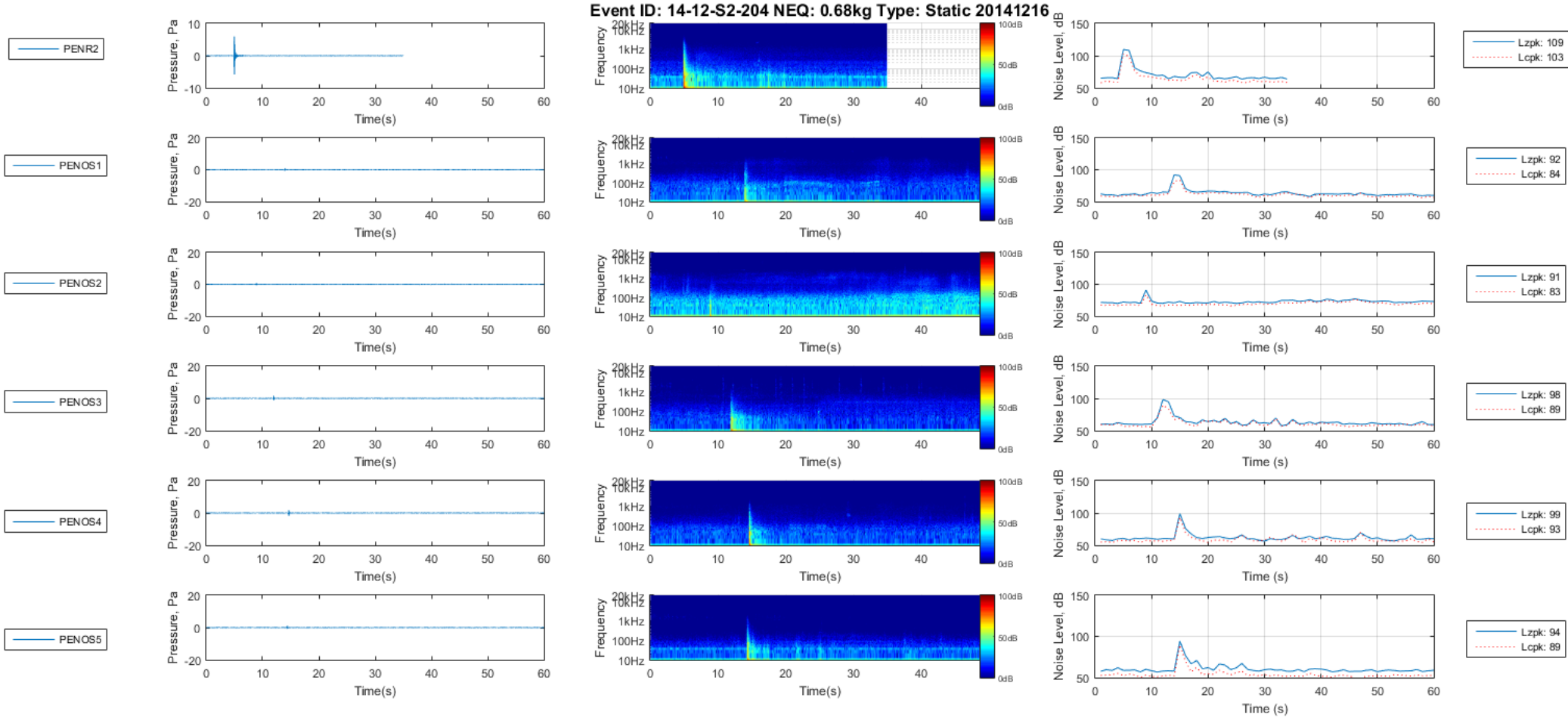
FIGURE 2.159: COHERENCE PEN\_OS 6 - 10 14-12-S2-127CTD



**Event ID: 14-12-S2-127 NEQ: 3.75kg Type: Static 20141219**



**FIGURE 2.160: CROSS CORRELATION PEN\_OS 1 - 10 14-12-S2-127**



**FIGURE 2.161: PEN\_OS 1 - 5 14-12-S2-204**

Event ID: 14-12-S2-204 NEQ: 0.68kg Type: Static 20141216 CTD

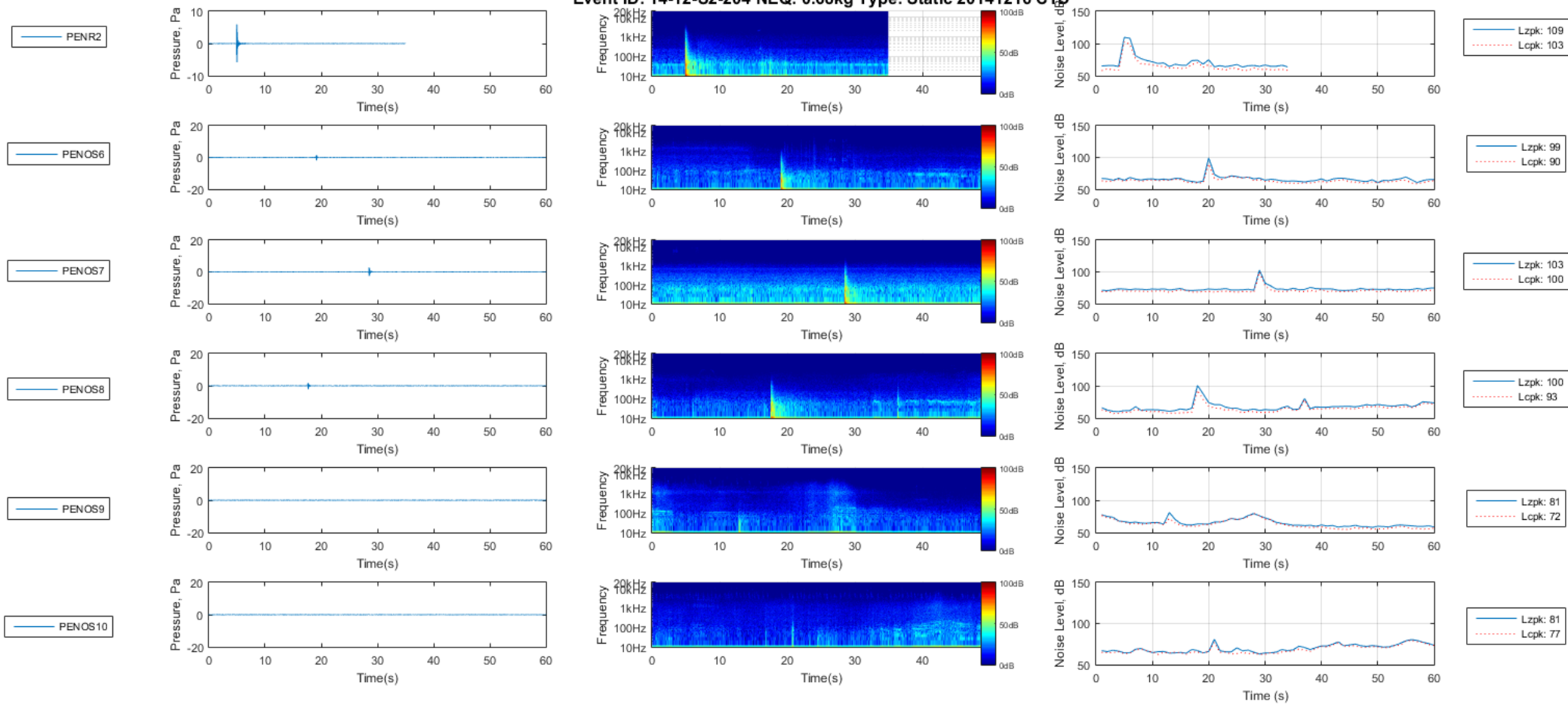


FIGURE 2.162: PEN\_OS 6 - 10 14-12-S2-204

Event ID: 14-12-S2-204 NEQ: 0.68kg Type: Static 20141216

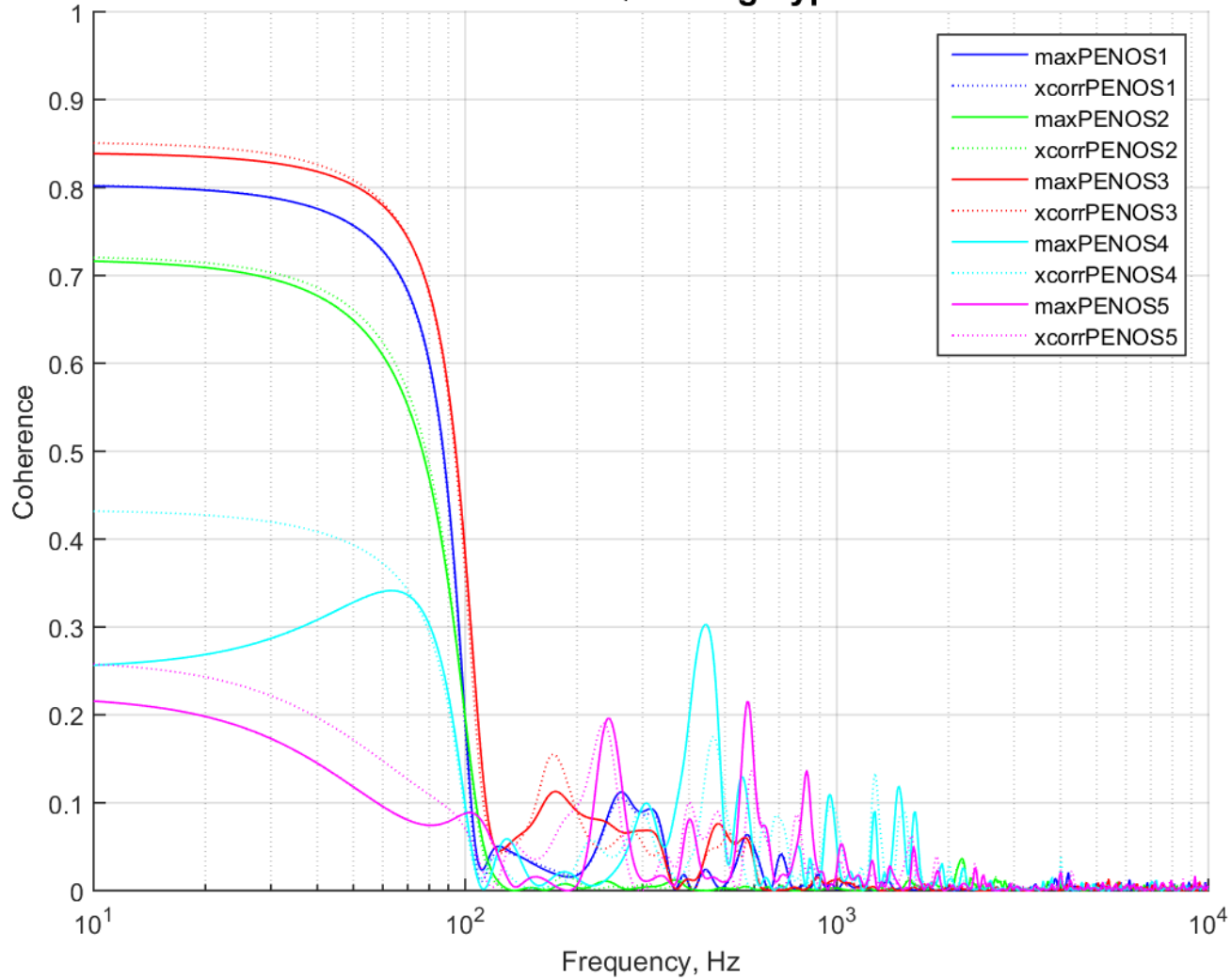


FIGURE 2.163: COHERENCE PEN\_OS 1 - 5 14-12-S2-204

Event ID: 14-12-S2-204 NEQ: 0.68kg Type: Static 20141216

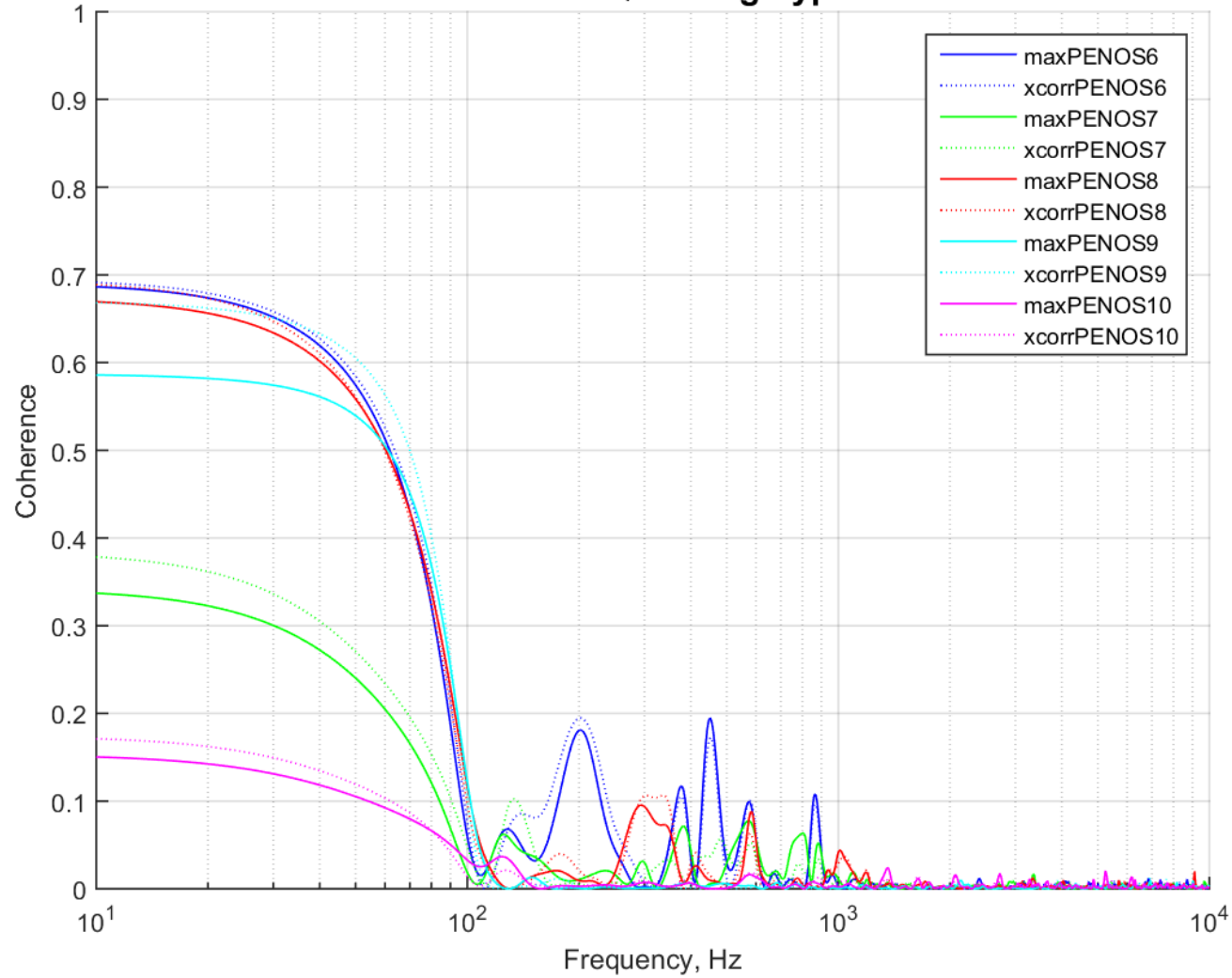
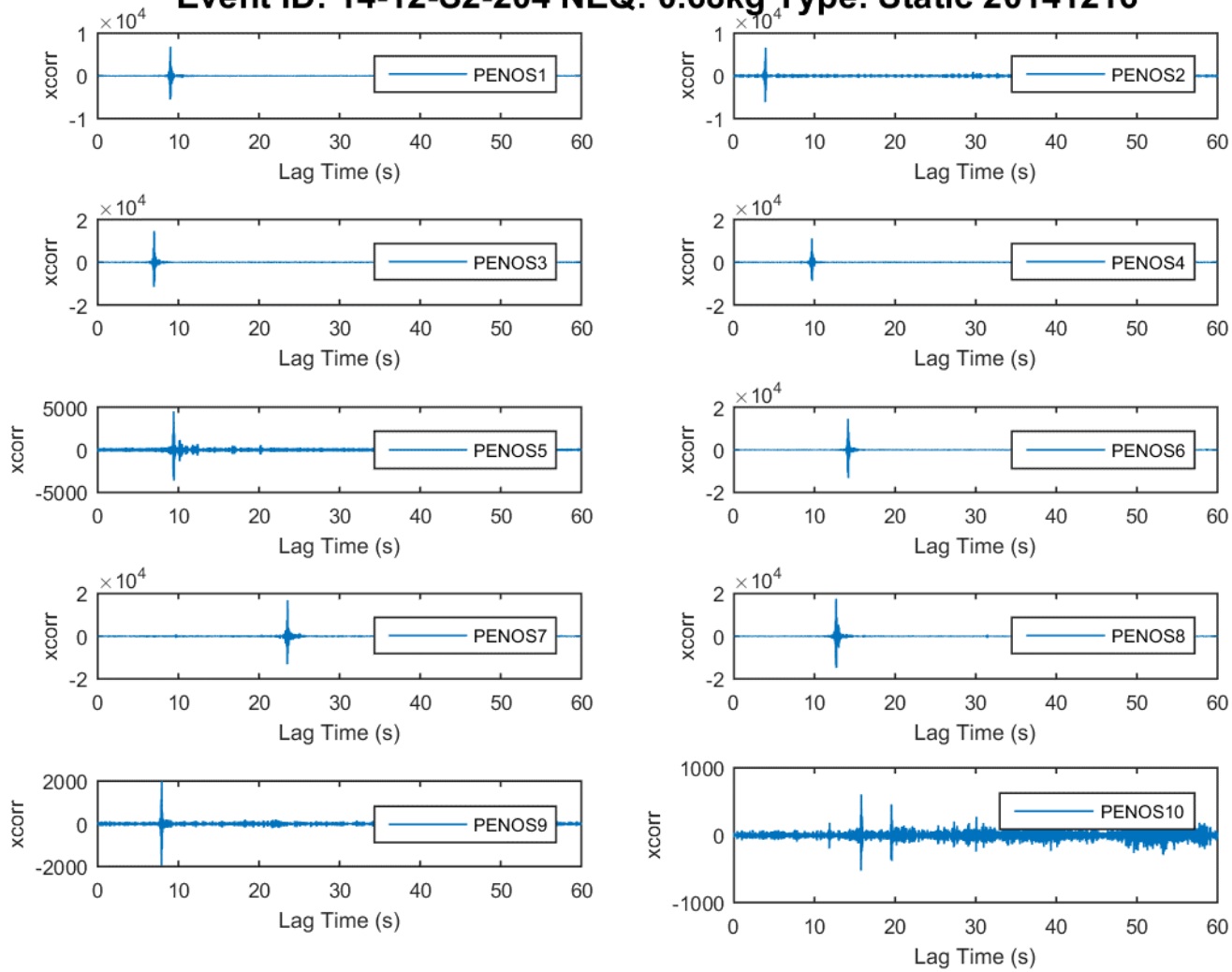
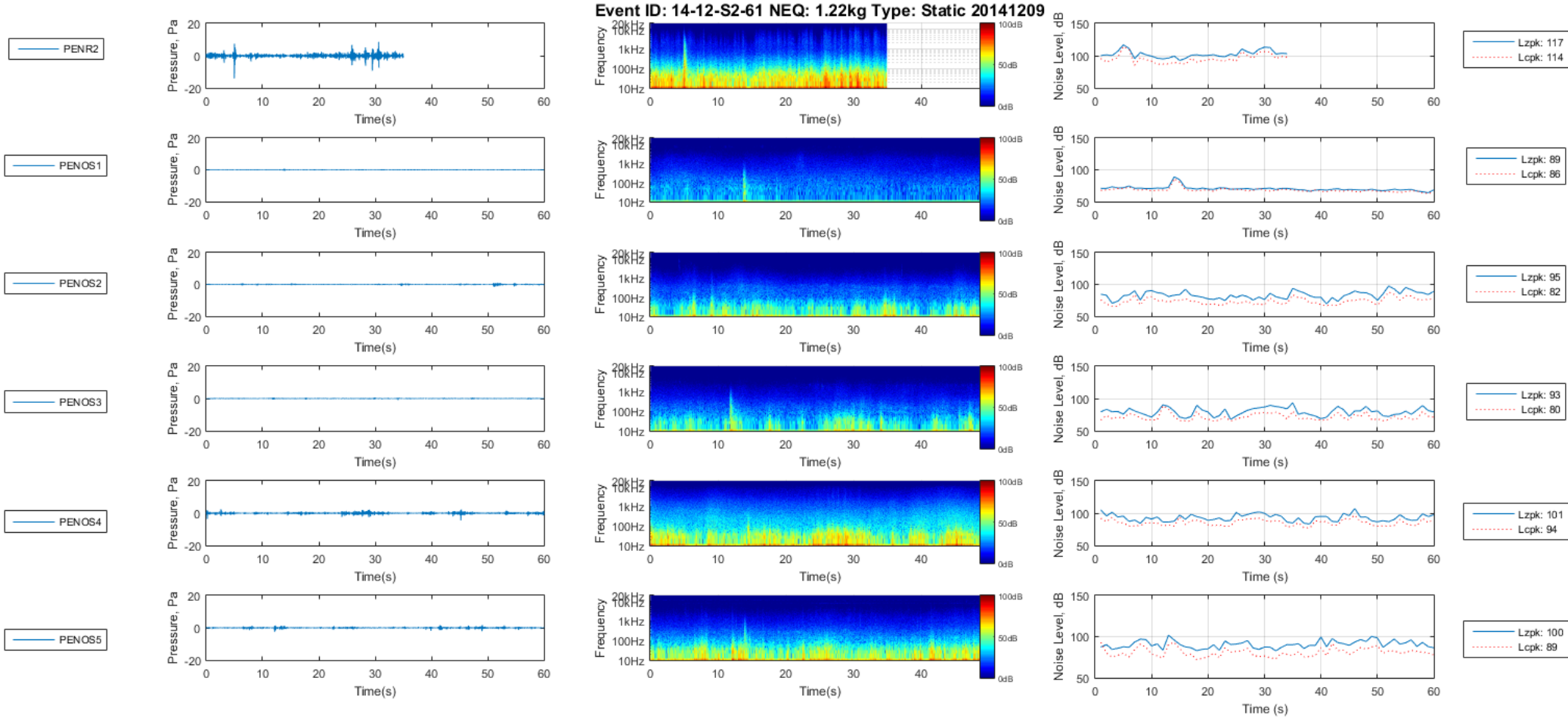


FIGURE 2.164: COHERENCE PEN\_OS 6 - 10 14-12-S2-204CTD

**Event ID: 14-12-S2-204 NEQ: 0.68kg Type: Static 20141216**



**FIGURE 2.165: CROSS CORRELATION PEN\_OS 1 - 10 14-12-S2-204**



**FIGURE 2.166: PEN\_OS 1 - 5 14-12-S2-61**

Event ID: 14-12-S2-61 NEQ: 1.22kg Type: Static 20141209 CTD

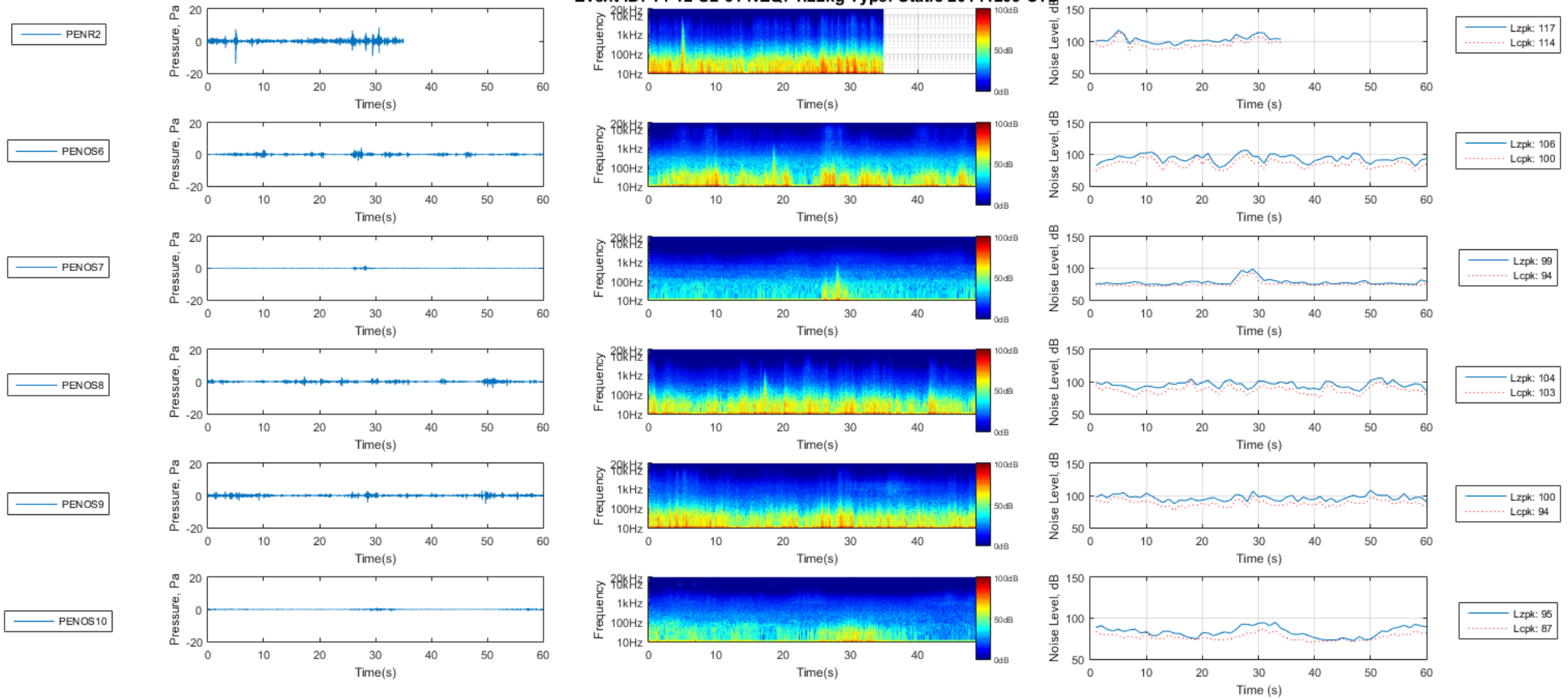


FIGURE 2.167: PEN\_OS 6 - 10 14-12-S2-61



Event ID: 14-12-S2-61 NEQ: 1.22kg Type: Static 20141209

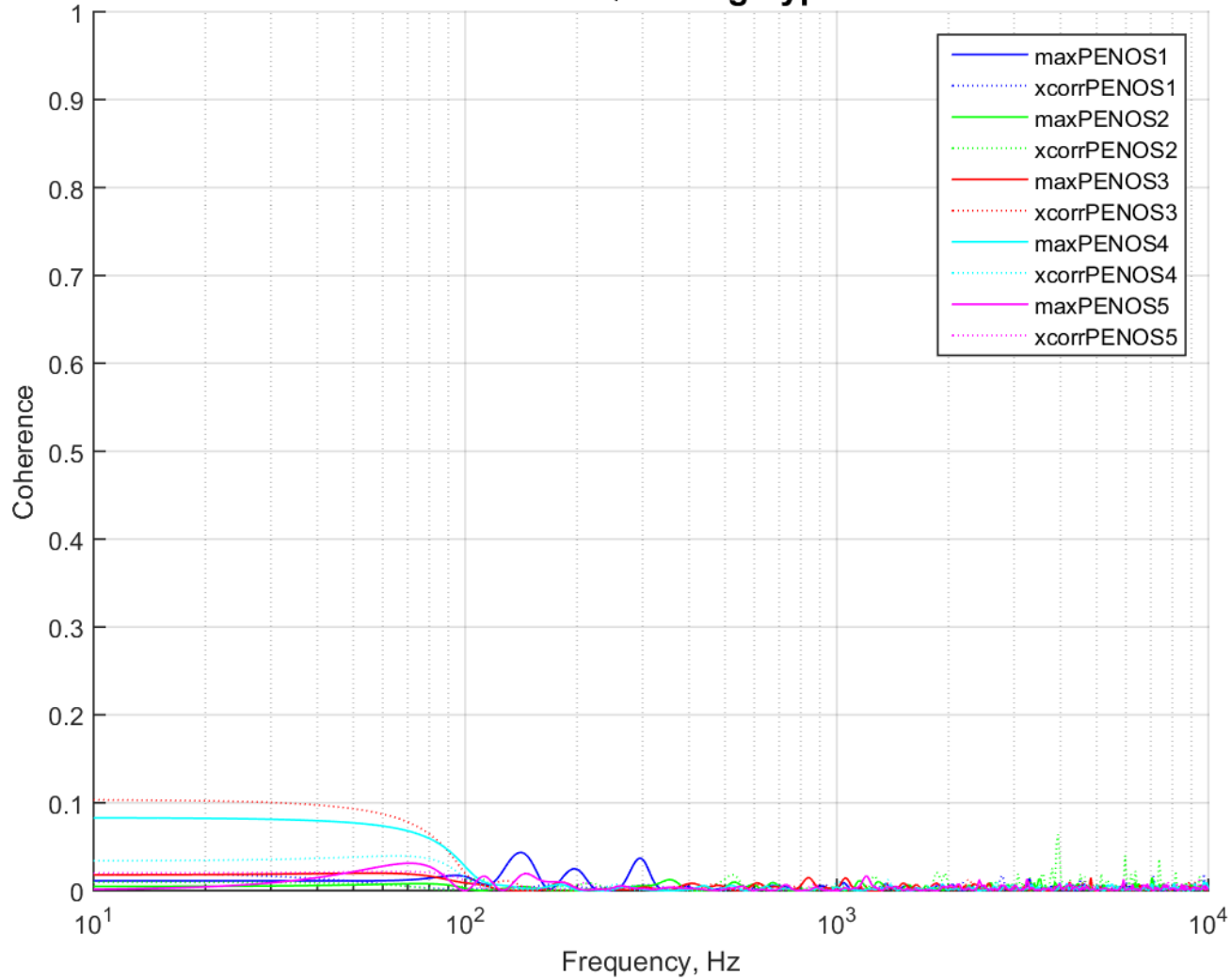


FIGURE 2.168: COHERENCE PEN\_OS 1 - 5 14-12-S2-61

Event ID: 14-12-S2-61 NEQ: 1.22kg Type: Static 20141209

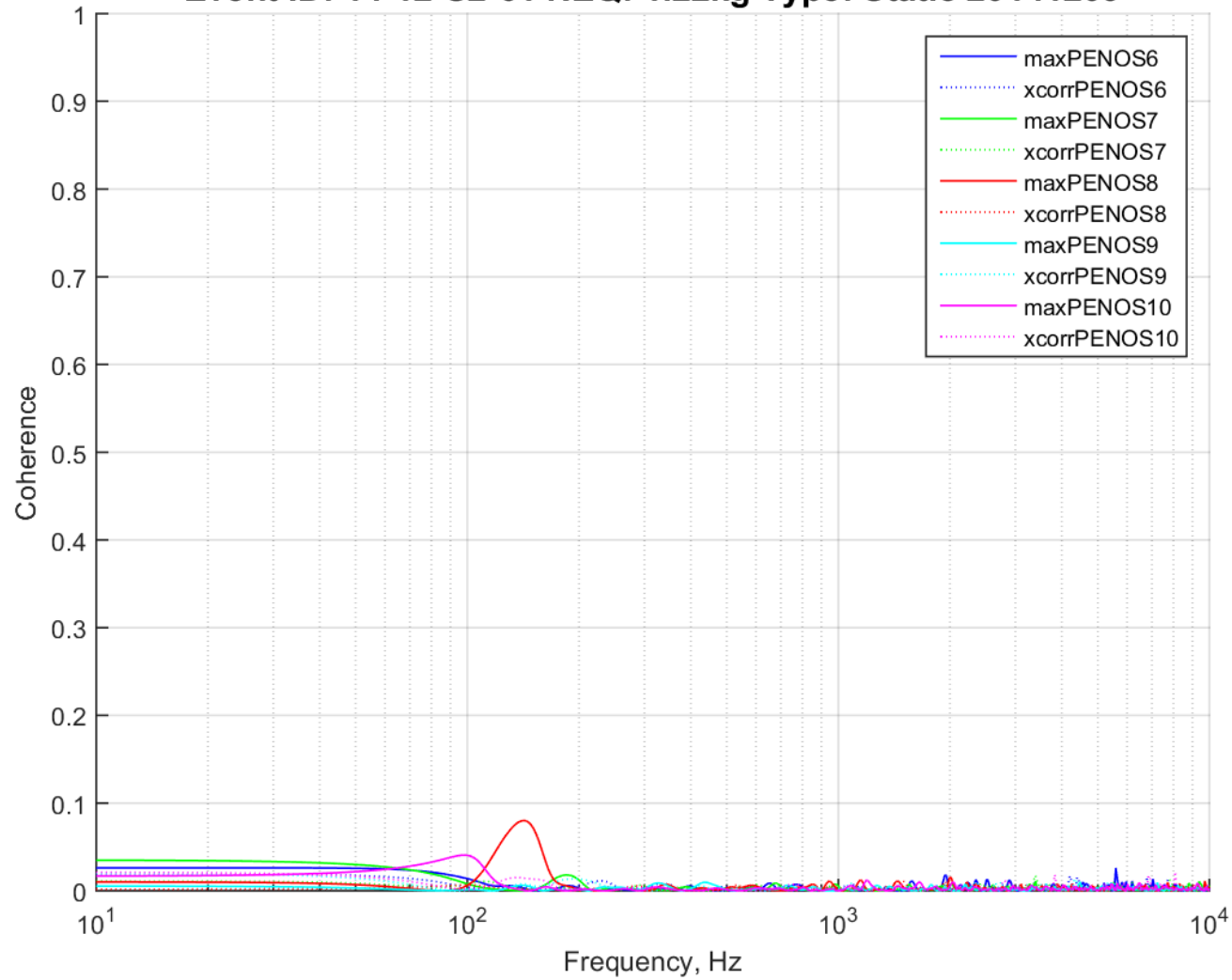
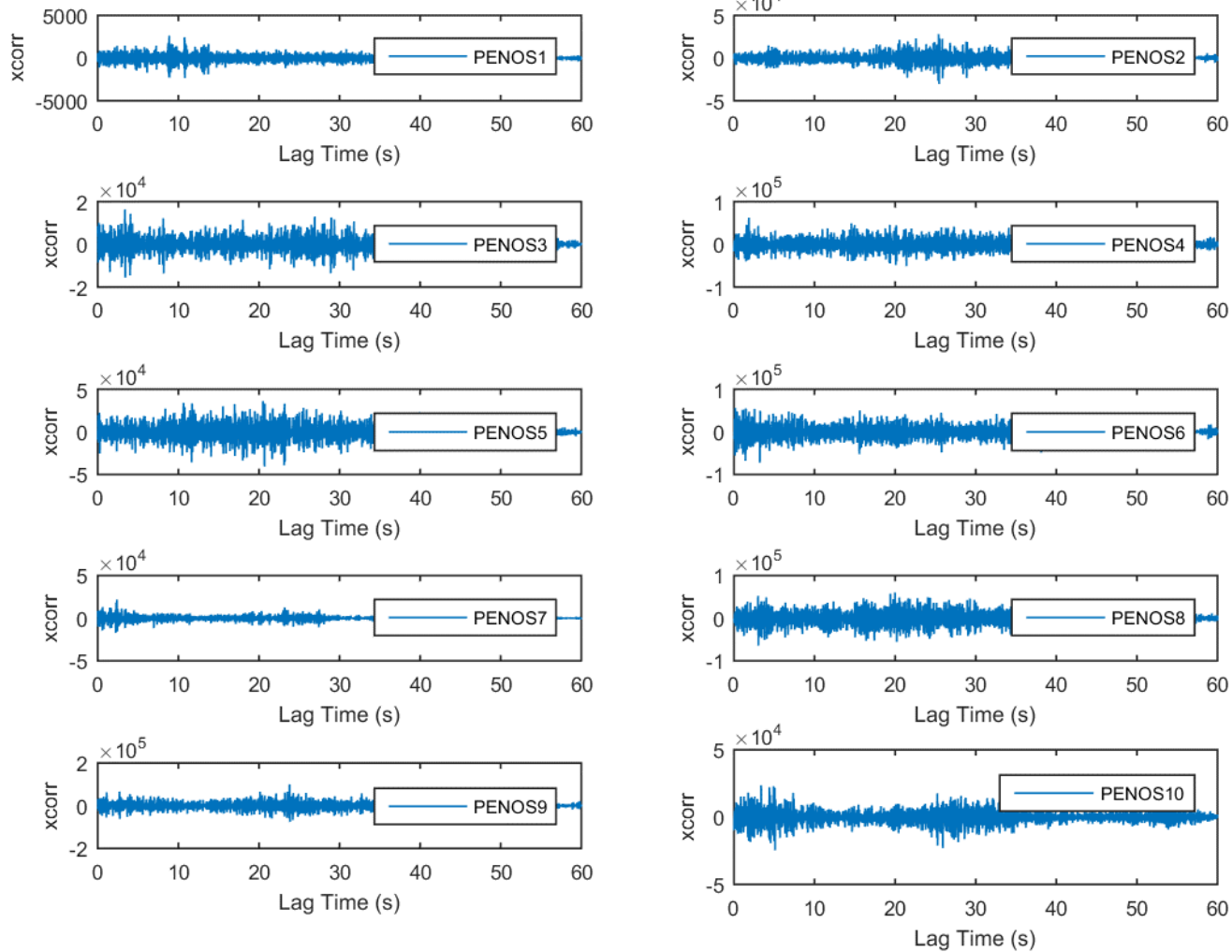
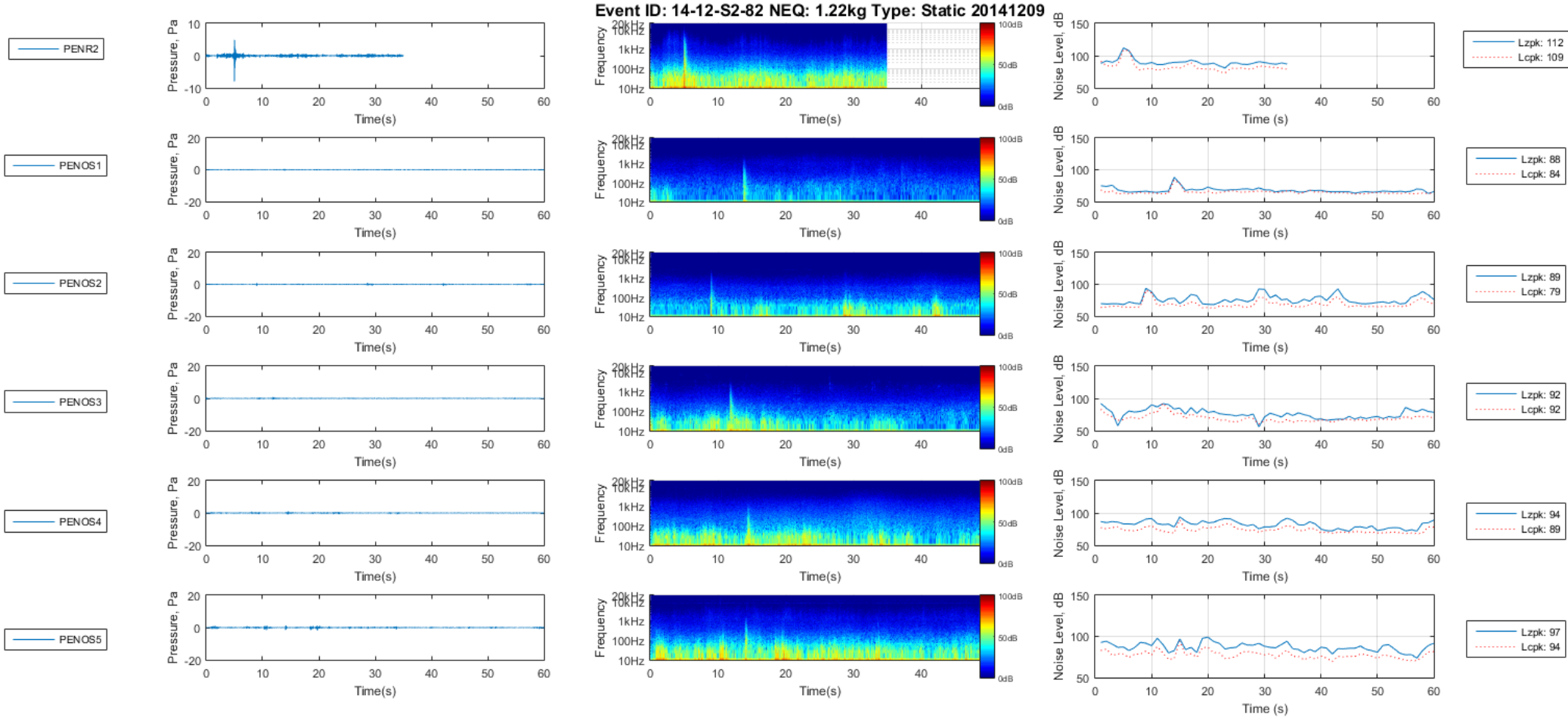


FIGURE 2.169: COHERENCE PEN\_OS 6 - 10 14-12-S2-61CTD

**Event ID: 14-12-S2-61 NEQ: 1.22kg Type: Static 20141209**



**FIGURE 2.170: CROSS CORRELATION PEN\_OS 1 - 10 14-12-S2-61**



**FIGURE 2.171: PEN\_OS 1 - 5 14-12-S2-82**

Event ID: 14-12-S2-82 NEQ: 1.22kg Type: Static 20141209 CTD

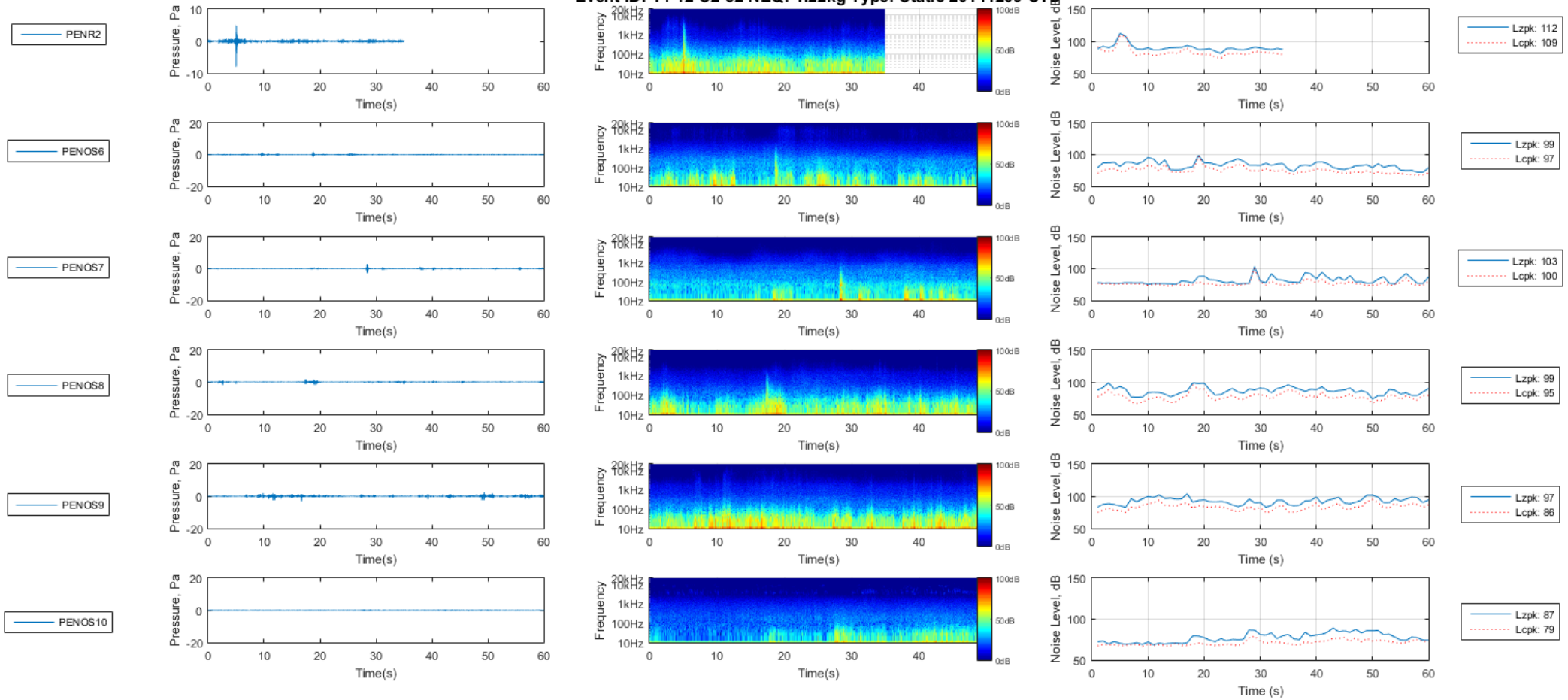


FIGURE 2.172: PEN\_OS 6 - 10 14-12-S2-82

Event ID: 14-12-S2-82 NEQ: 1.22kg Type: Static 20141209

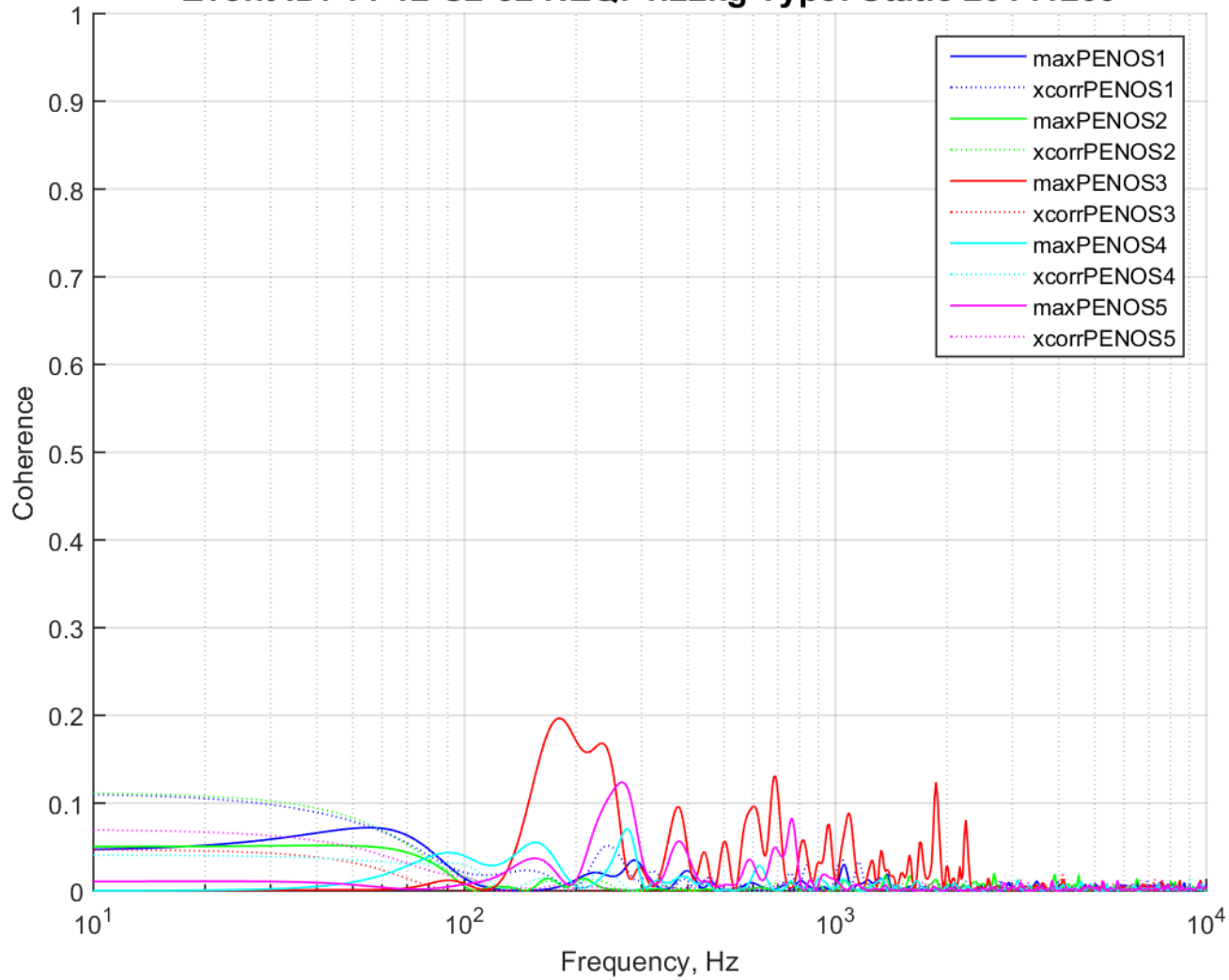


FIGURE 2.173: COHERENCE PEN\_OS 1 - 5 14-12-S2-82

Event ID: 14-12-S2-82 NEQ: 1.22kg Type: Static 20141209

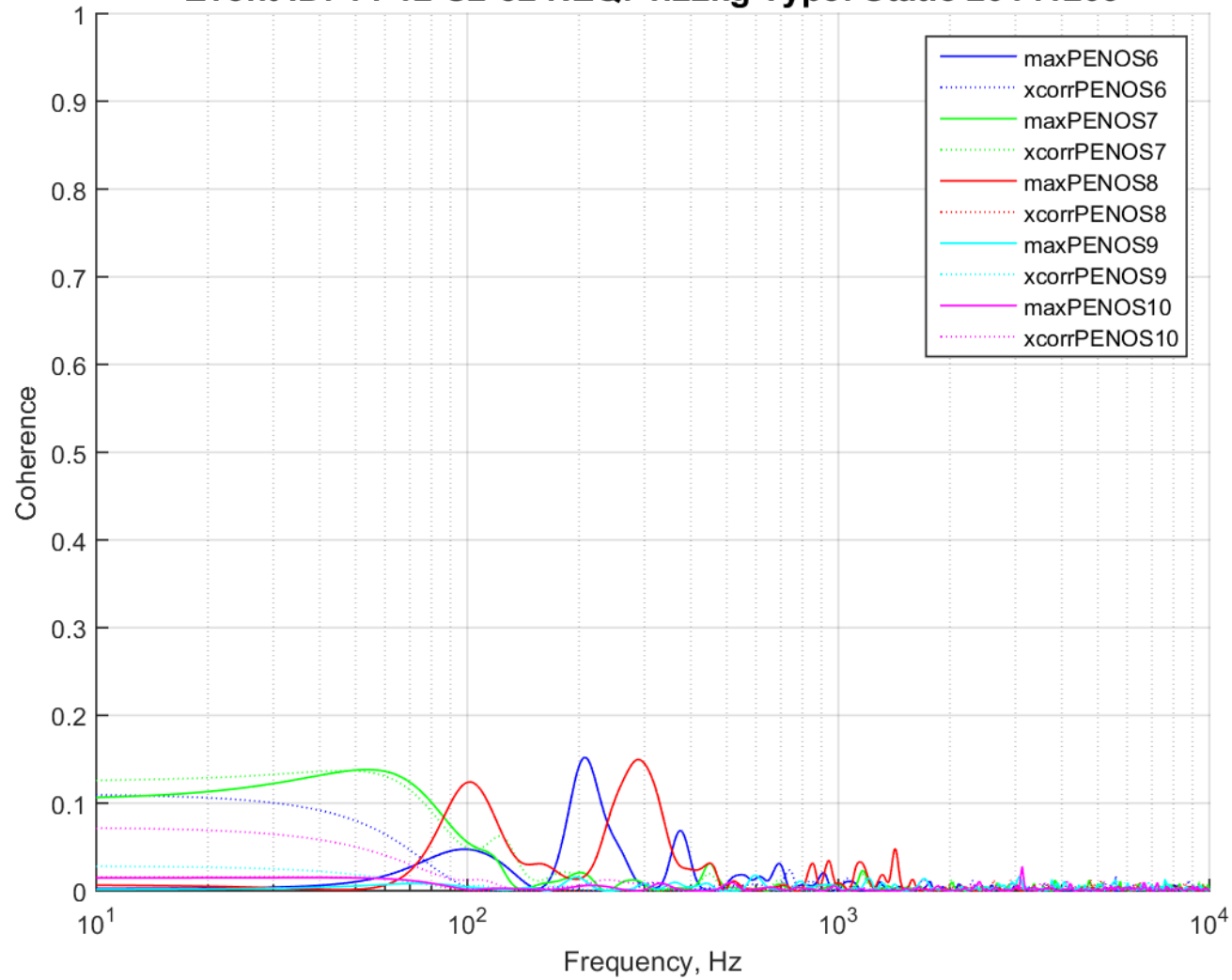
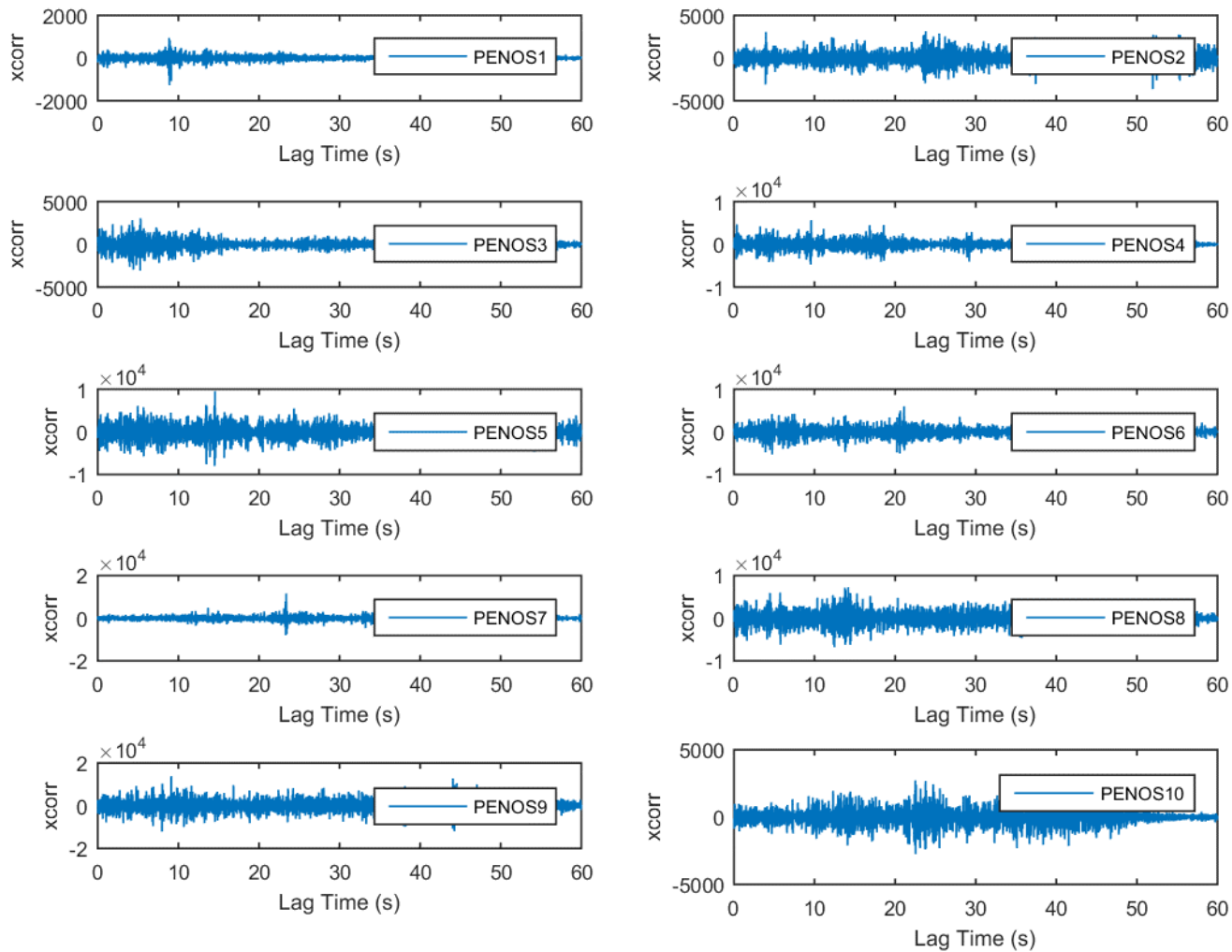


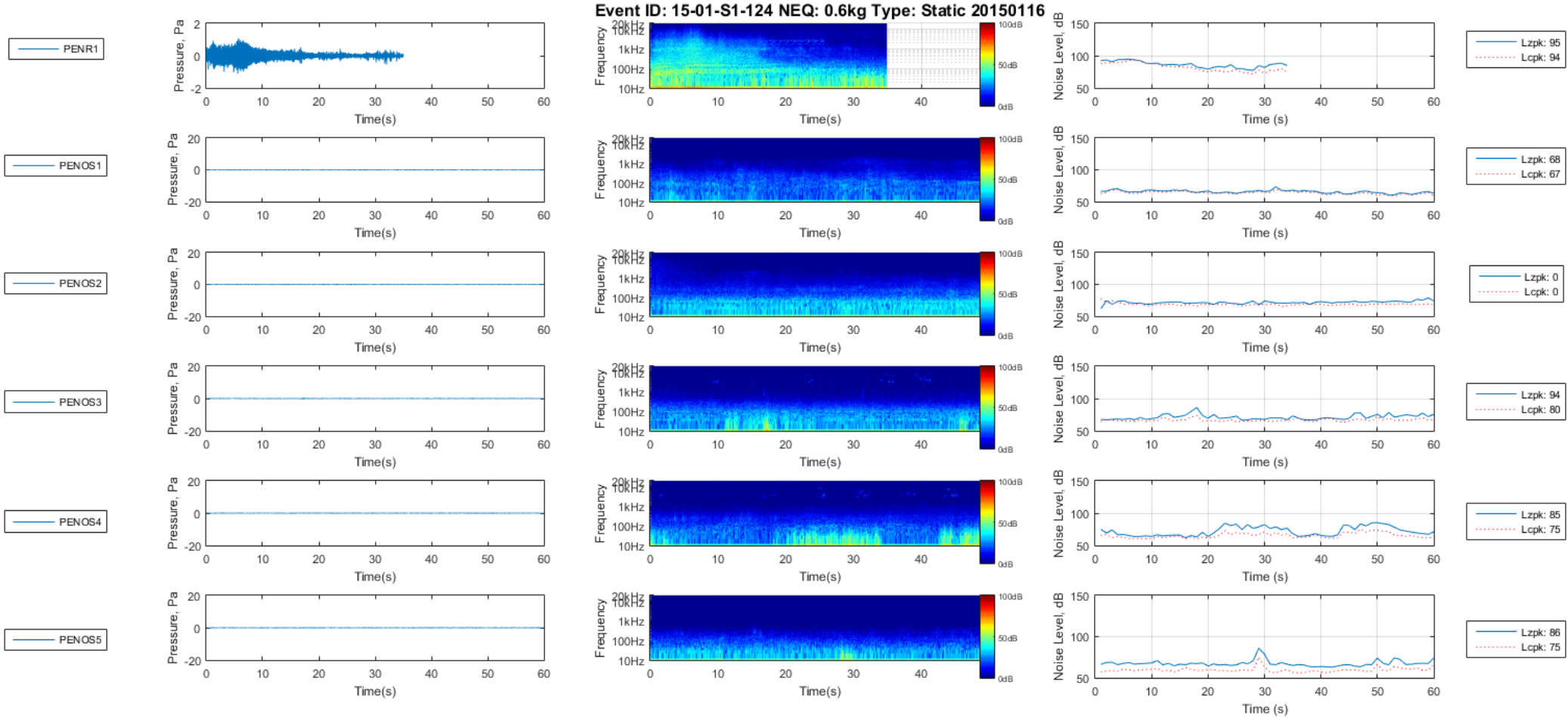
FIGURE 2.174: COHERENCE PEN\_OS 6 - 10 14-12-S2-82CTD

**Event ID: 14-12-S2-82 NEQ: 1.22kg Type: Static 20141209**

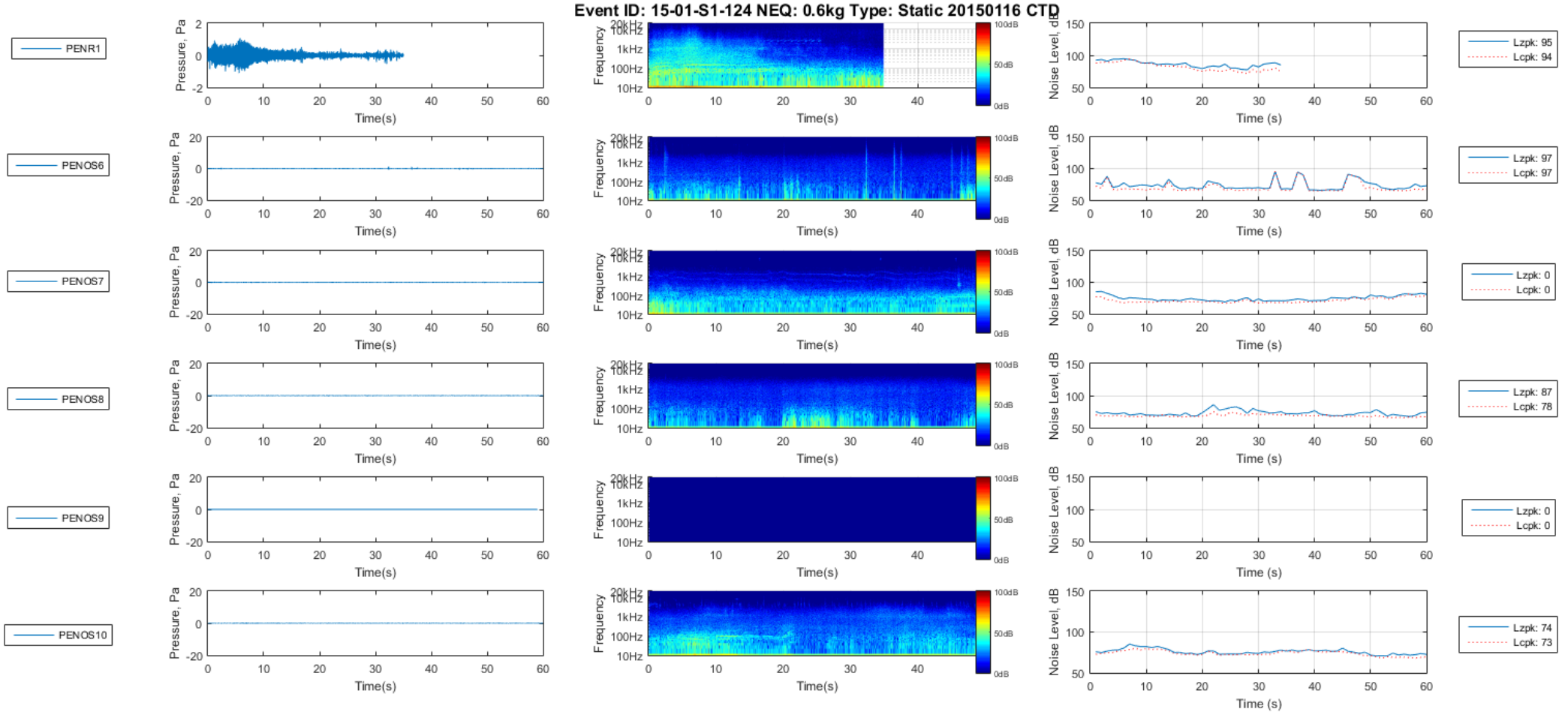


**FIGURE 2.175: CROSS CORRELATION PEN\_OS 1 - 10 14-12-S2-82**





**FIGURE 2.176: PEN\_OS 1 - 5 15-01-S1-124**



**FIGURE 2.177: PEN\_OS 6 - 10 15-01-S1-124**

Event ID: 15-01-S1-124 NEQ: 0.6kg Type: Static 20150116

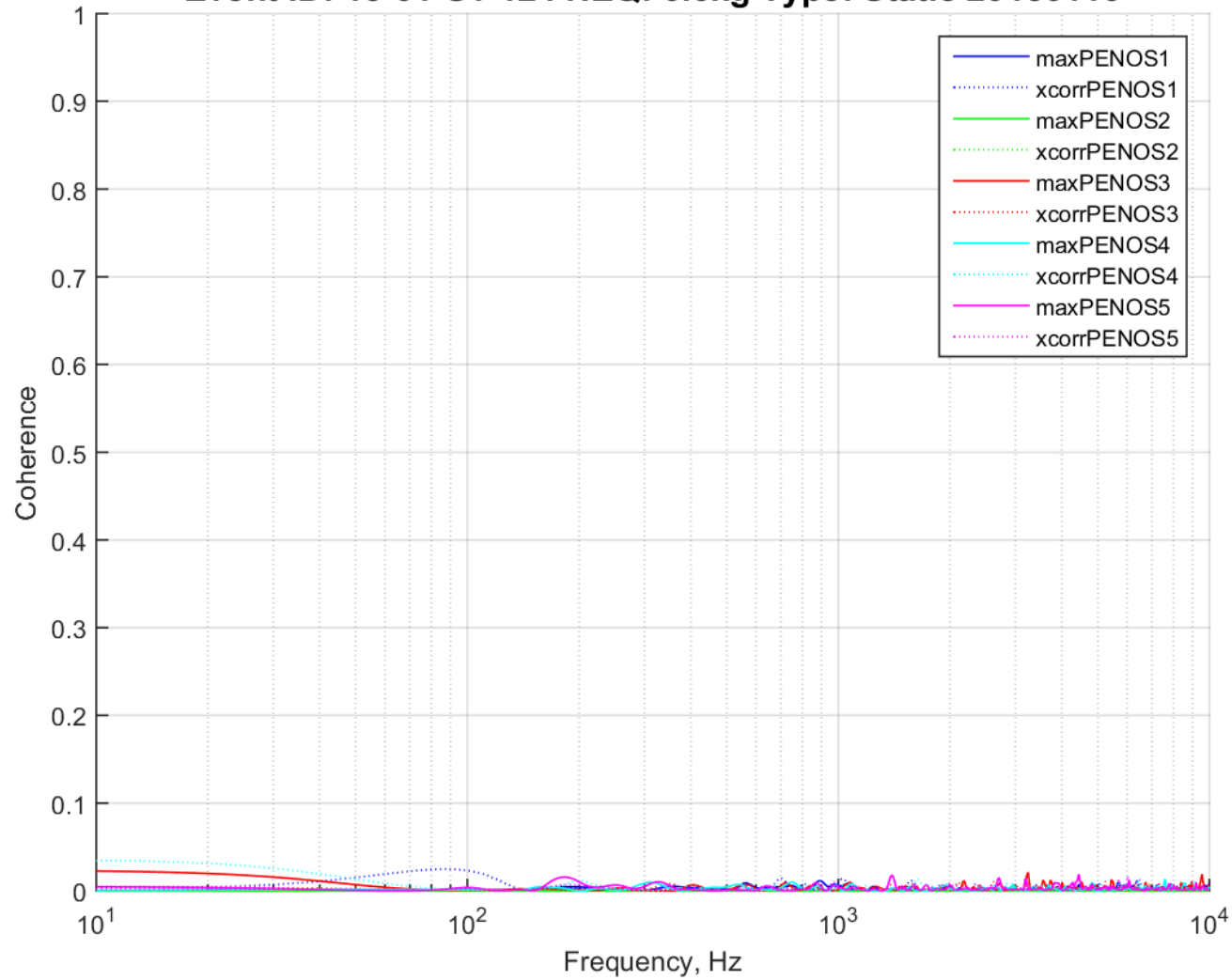


FIGURE 2.178: COHERENCE PEN\_OS 1 - 5 15-01-S1-124

Event ID: 15-01-S1-124 NEQ: 0.6kg Type: Static 20150116

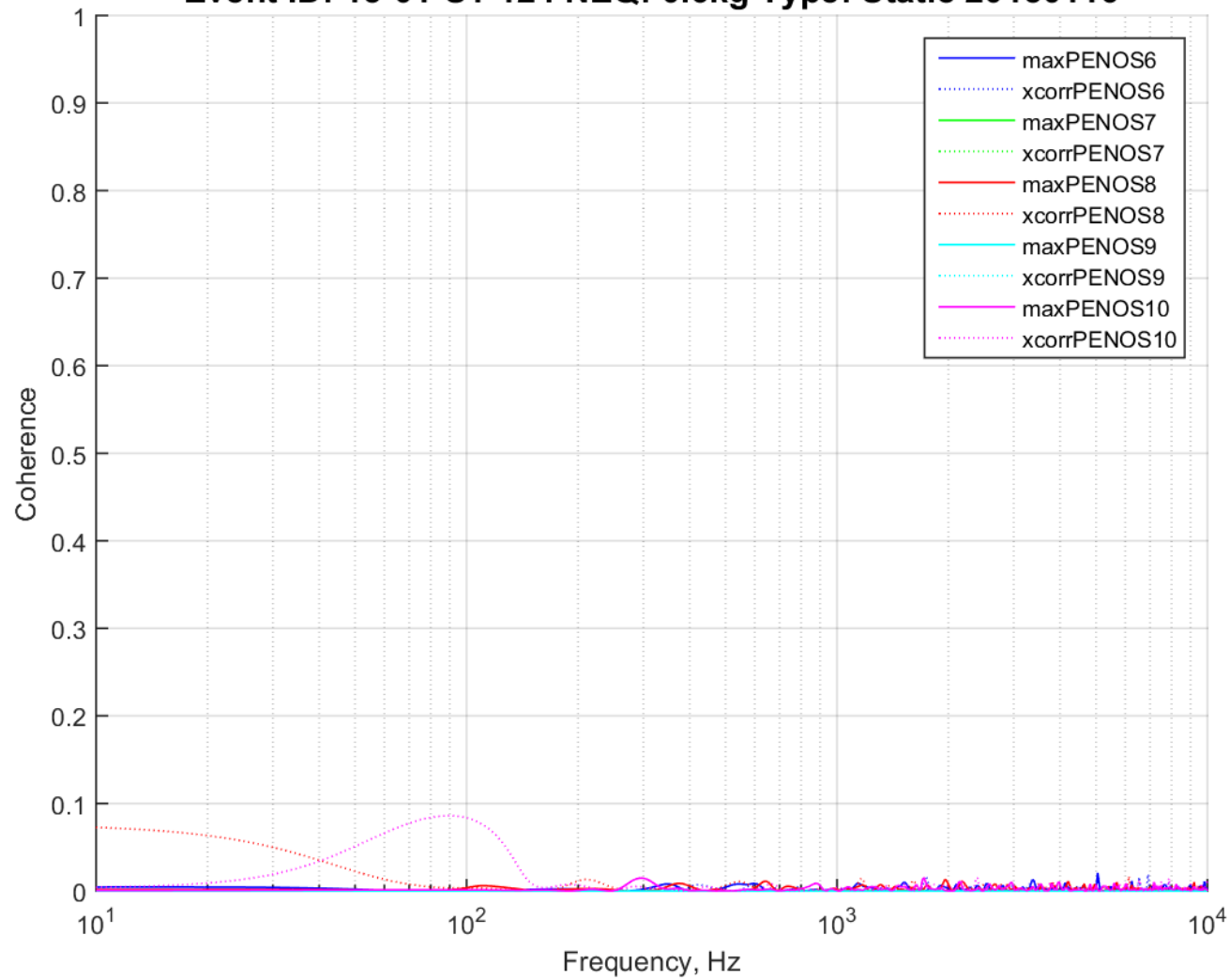
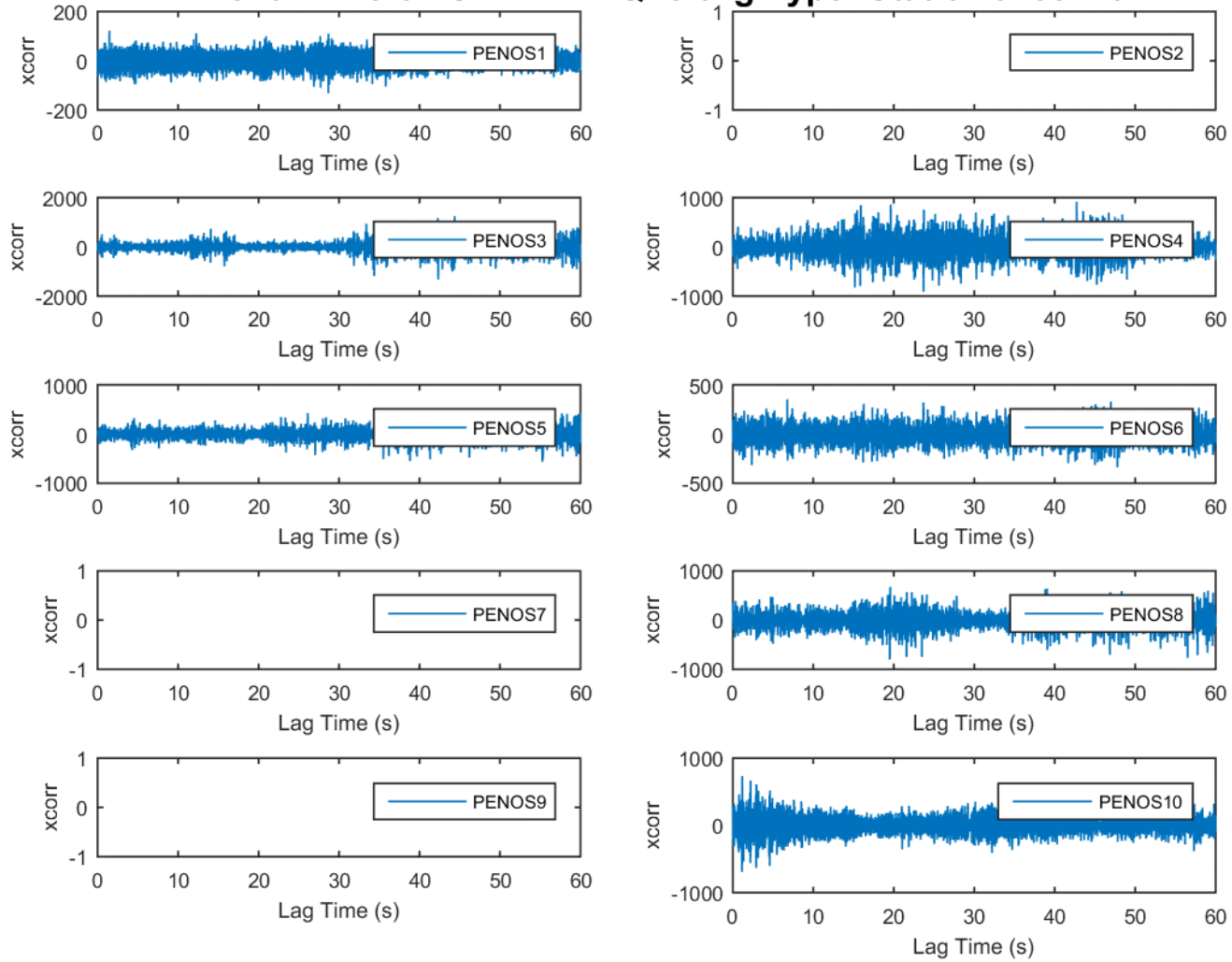
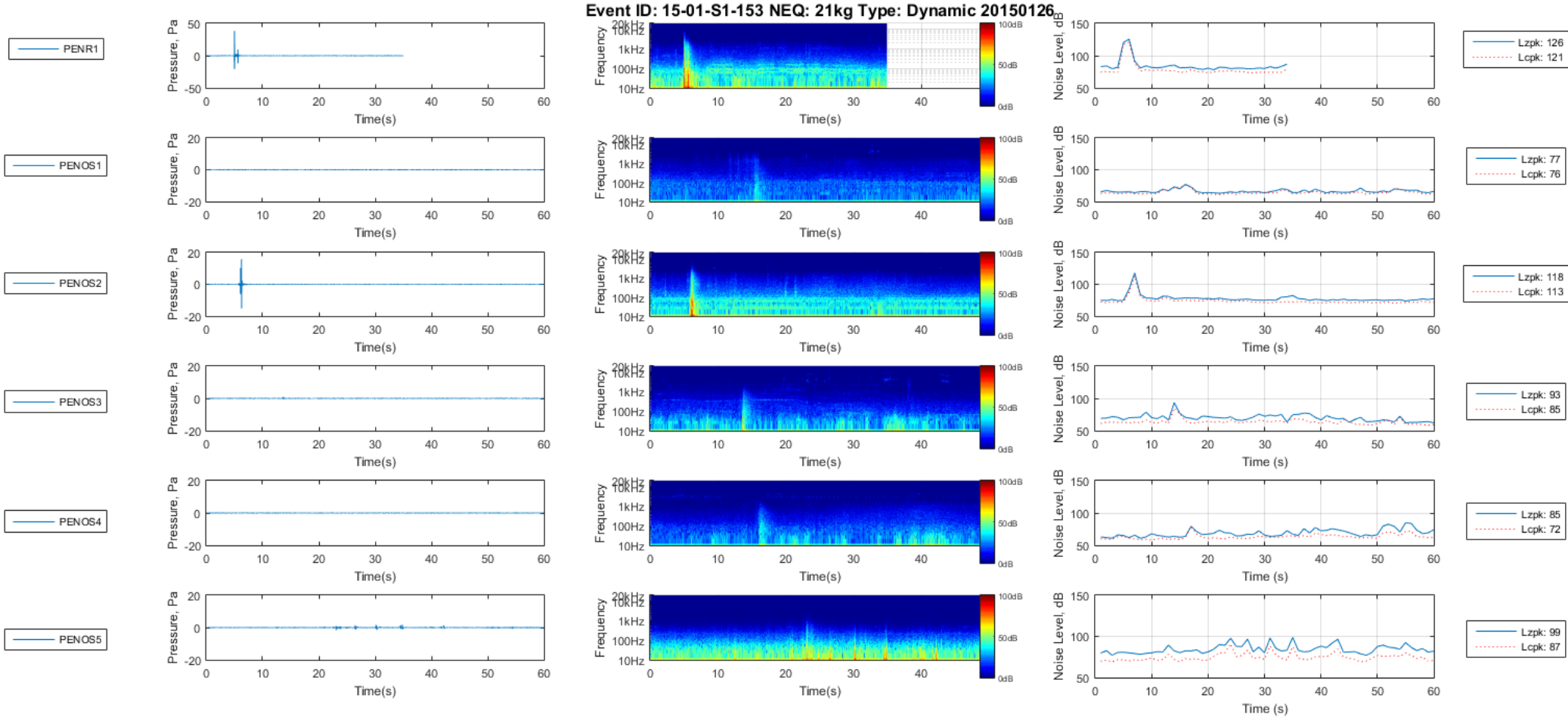


FIGURE 2.179: COHERENCE PEN\_OS 6 - 10 15-01-S1-124CTD

**Event ID: 15-01-S1-124 NEQ: 0.6kg Type: Static 20150116**



**FIGURE 2.180: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S1-124**



**FIGURE 2.181: PEN\_OS 1 - 5 15-01-S1-153**

Event ID: 15-01-S1-153 NEQ: 21kg Type: Dynamic 20150126 CTD

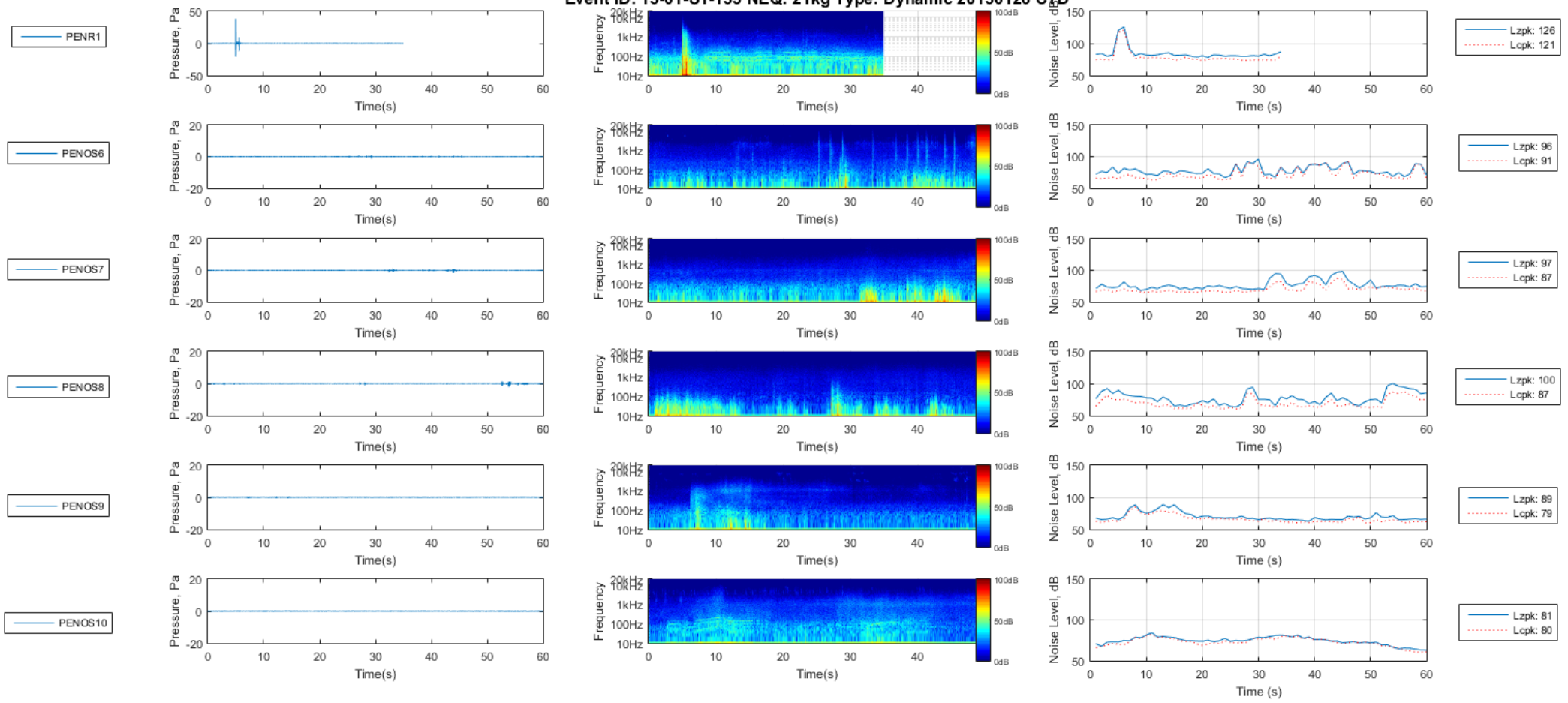


FIGURE 2.182: PEN\_OS 6 - 10 15-01-S1-153

Event ID: 15-01-S1-153 NEQ: 21kg Type: Dynamic 20150126

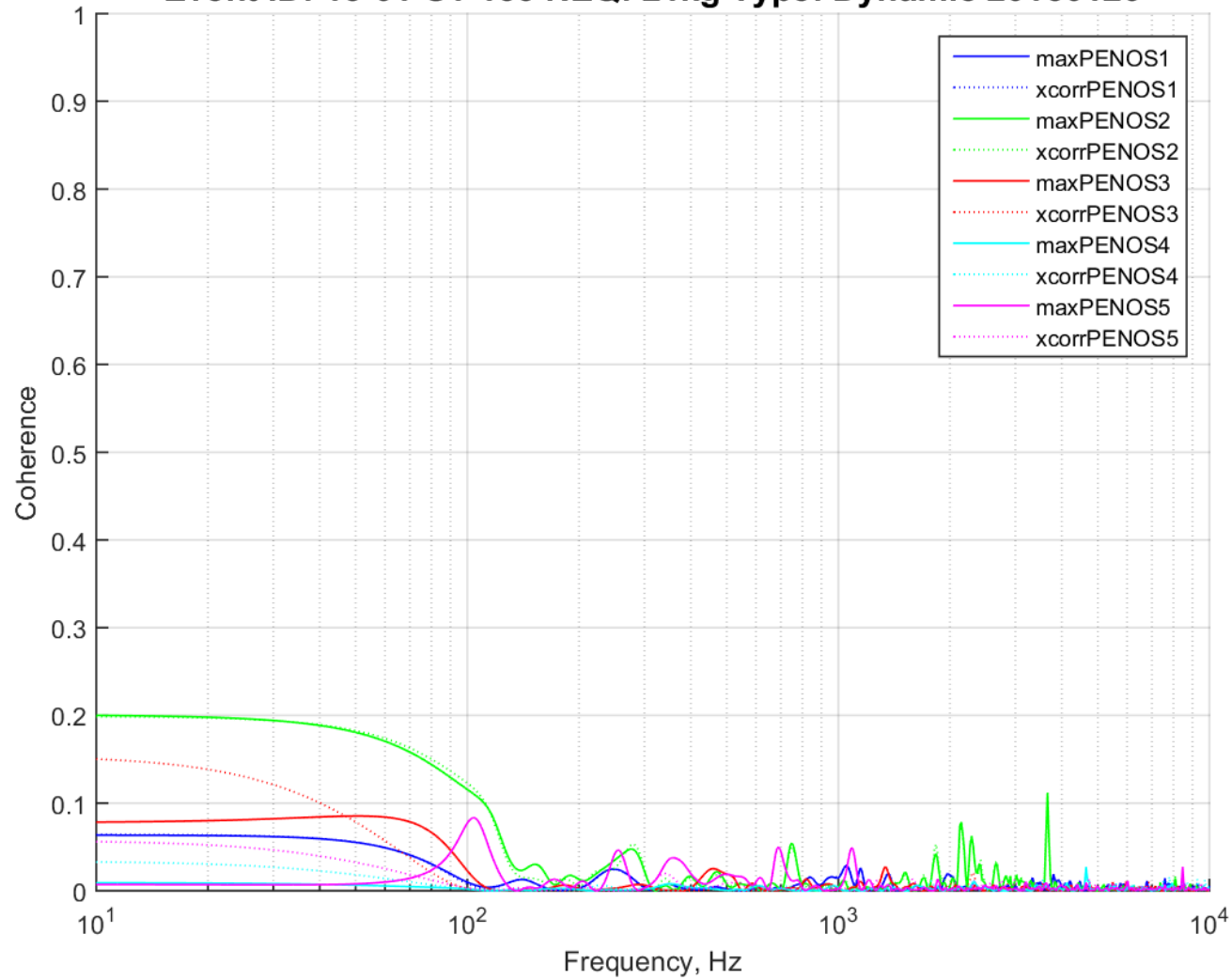


FIGURE 2.183: COHERENCE PEN\_OS 1 - 5 15-01-S1-153



Event ID: 15-01-S1-153 NEQ: 21kg Type: Dynamic 20150126

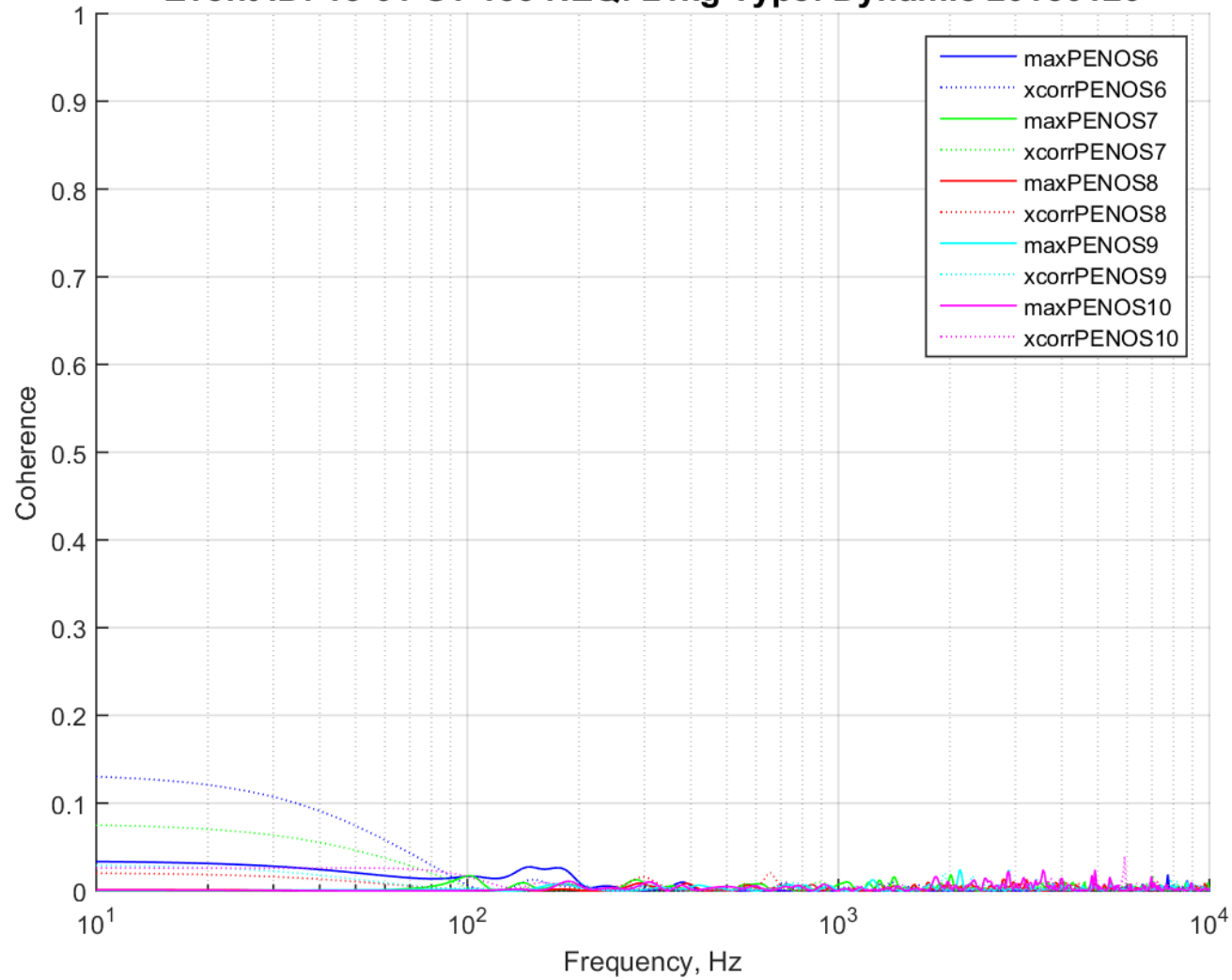
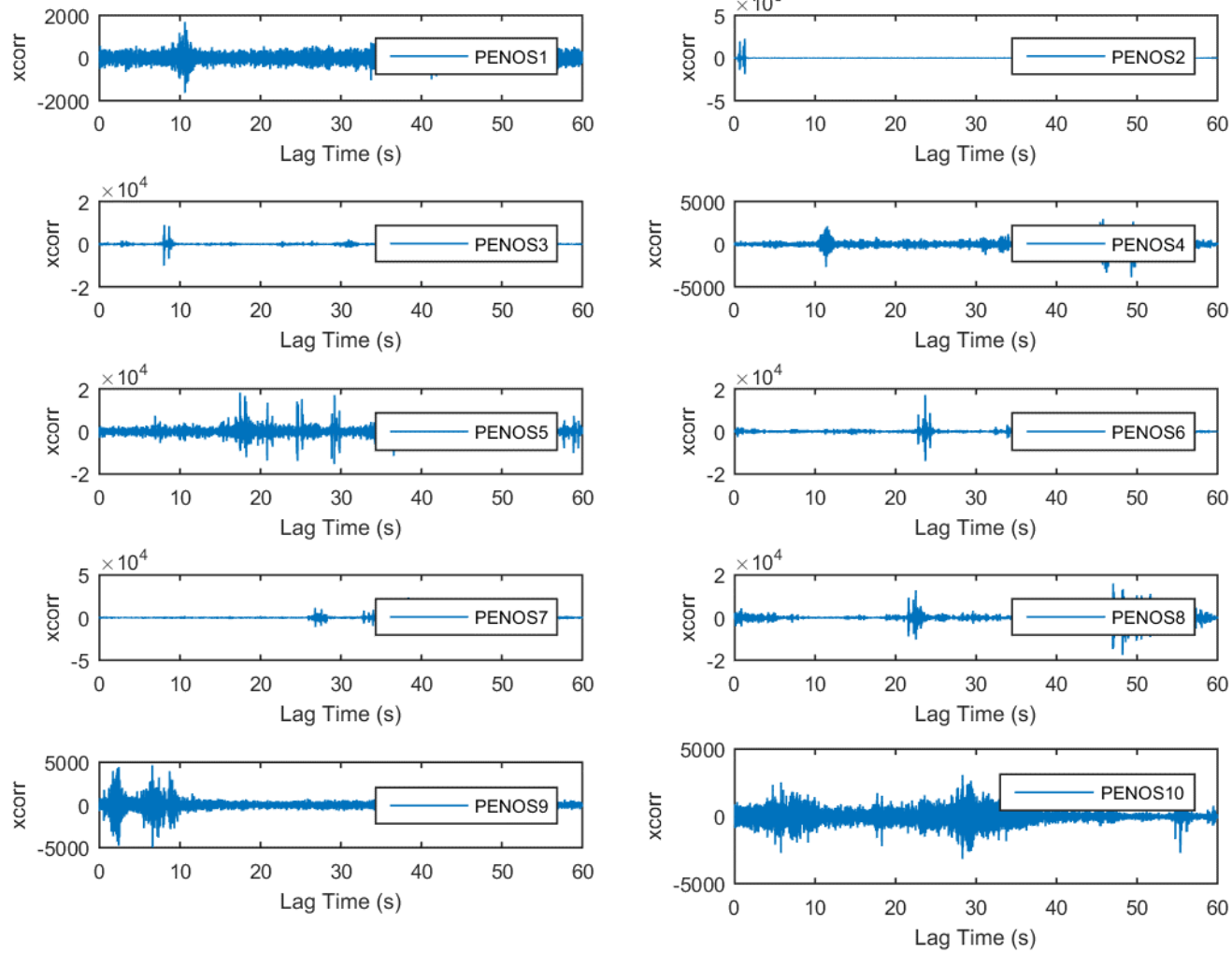
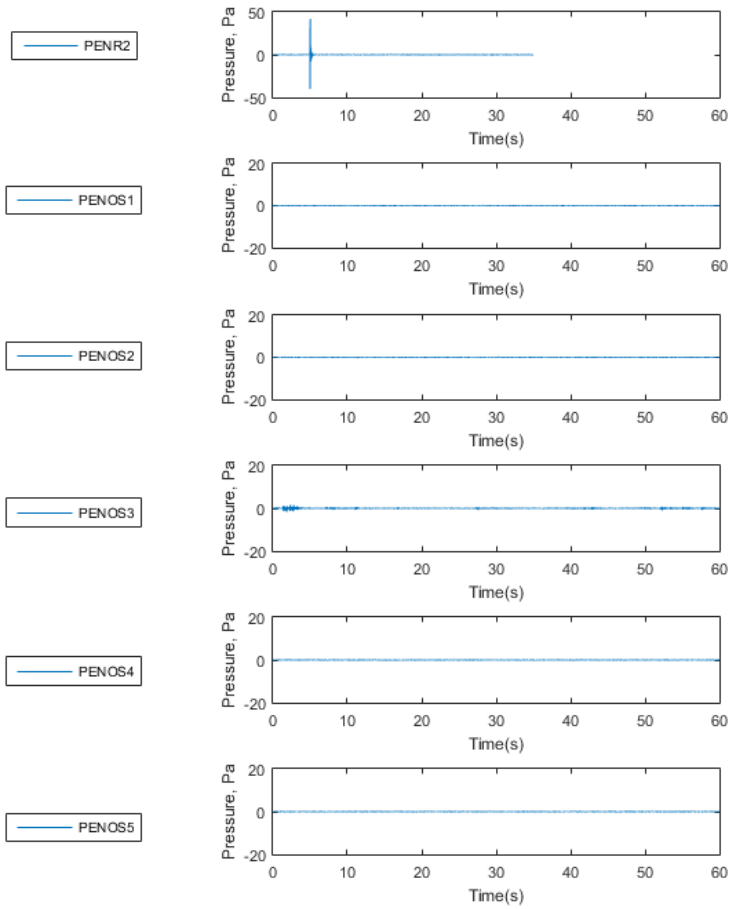


FIGURE 2.184: COHERENCE PEN\_OS 6 - 10 15-01-S1-153CTD

**Event ID: 15-01-S1-153 NEQ: 21kg Type: Dynamic 20150126**



**FIGURE 2.185: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S1-153**



Event ID: 15-01-S2-100 NEQ: 0.6KG Type: Static 20150113

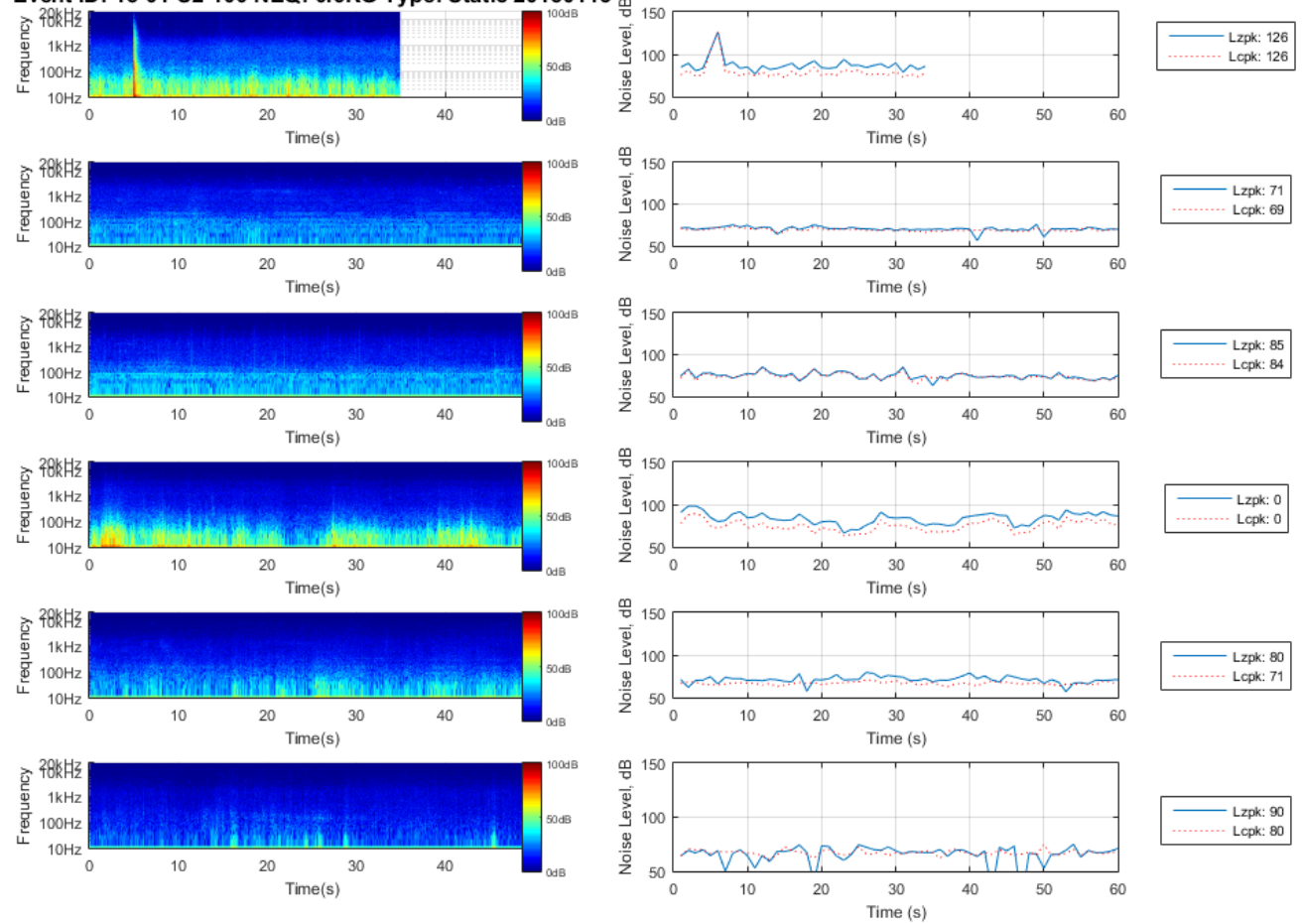


FIGURE 2.186: PEN\_OS 1 - 5 15-01-S2-100

Event ID: 15-01-S2-100 NEQ: 0.6KG Type: Static 20150113 CTD

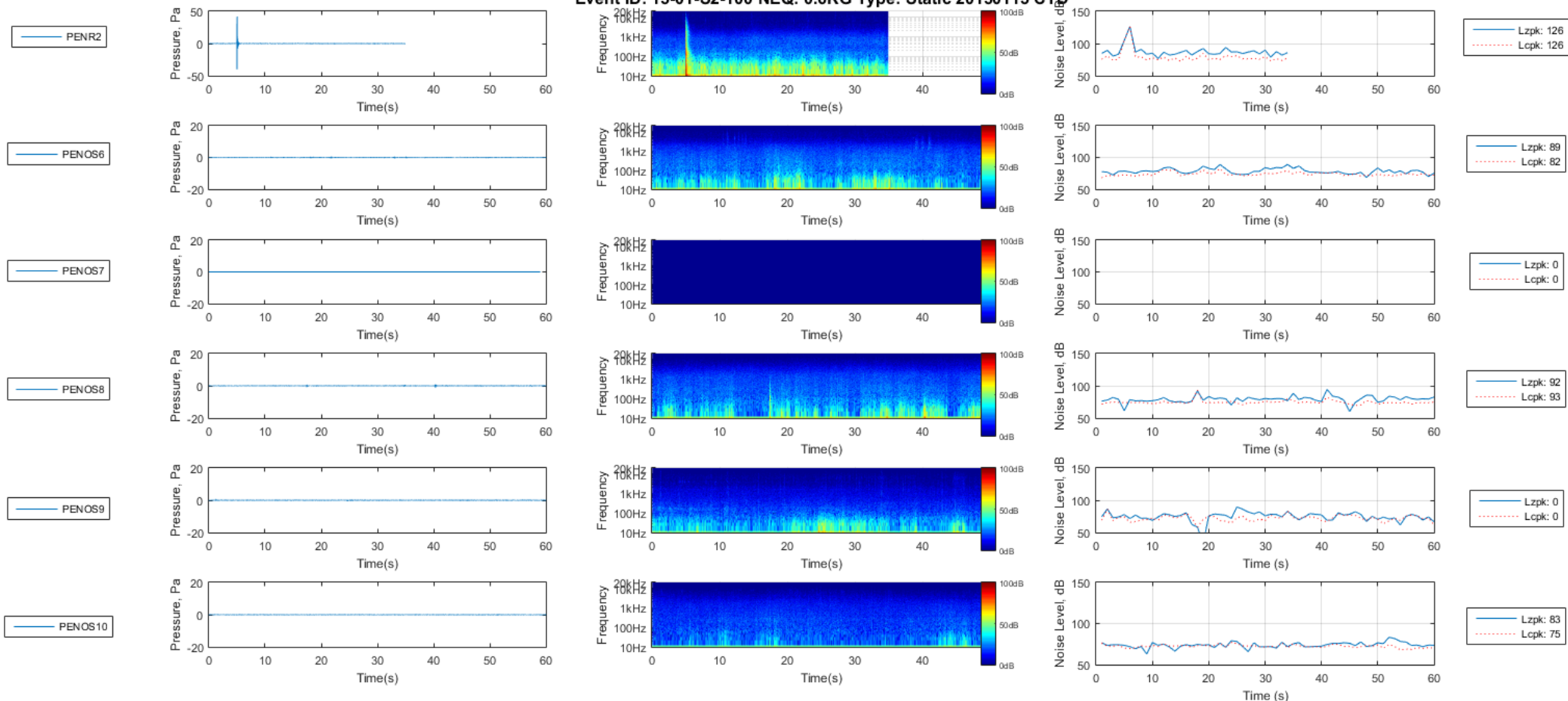
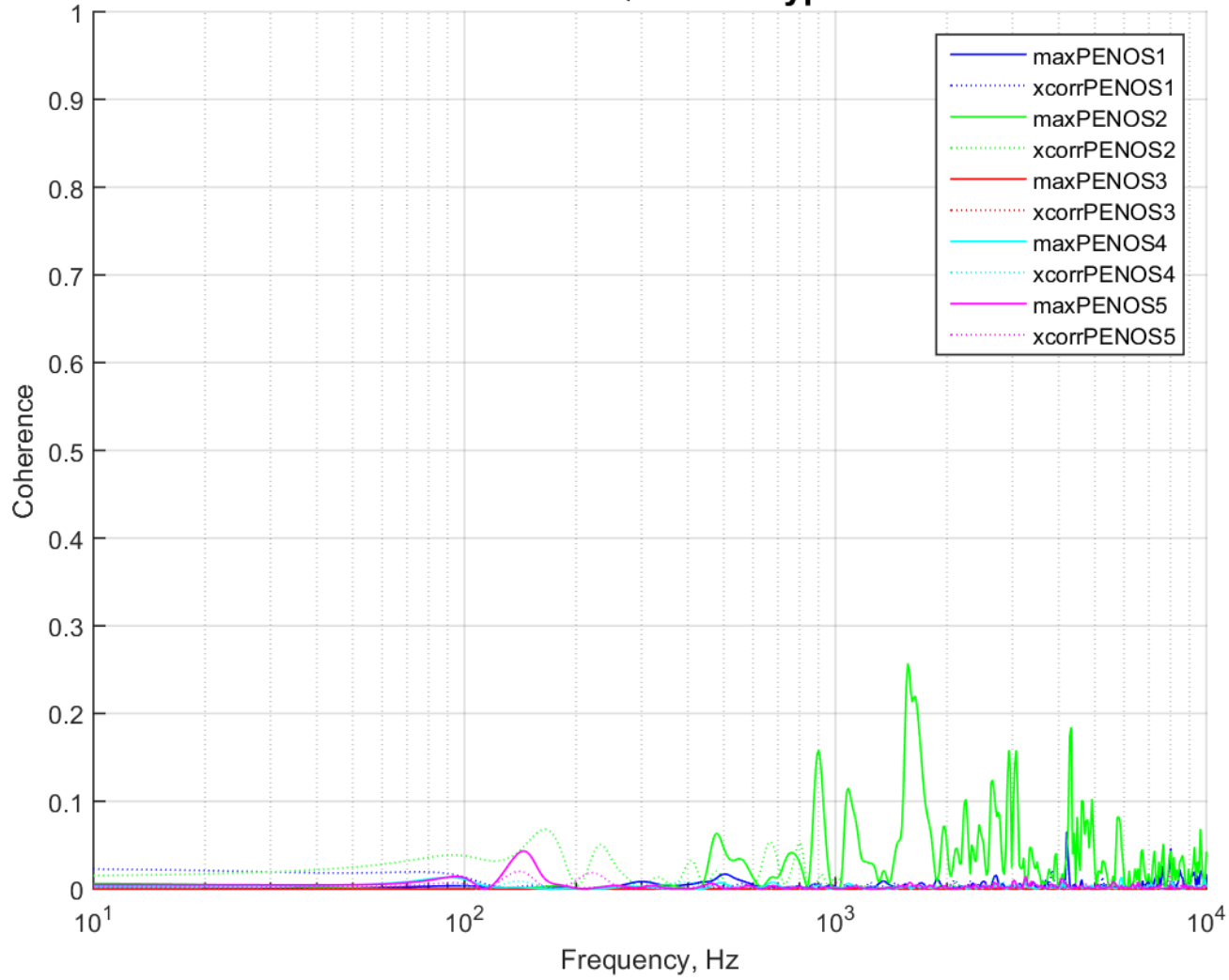


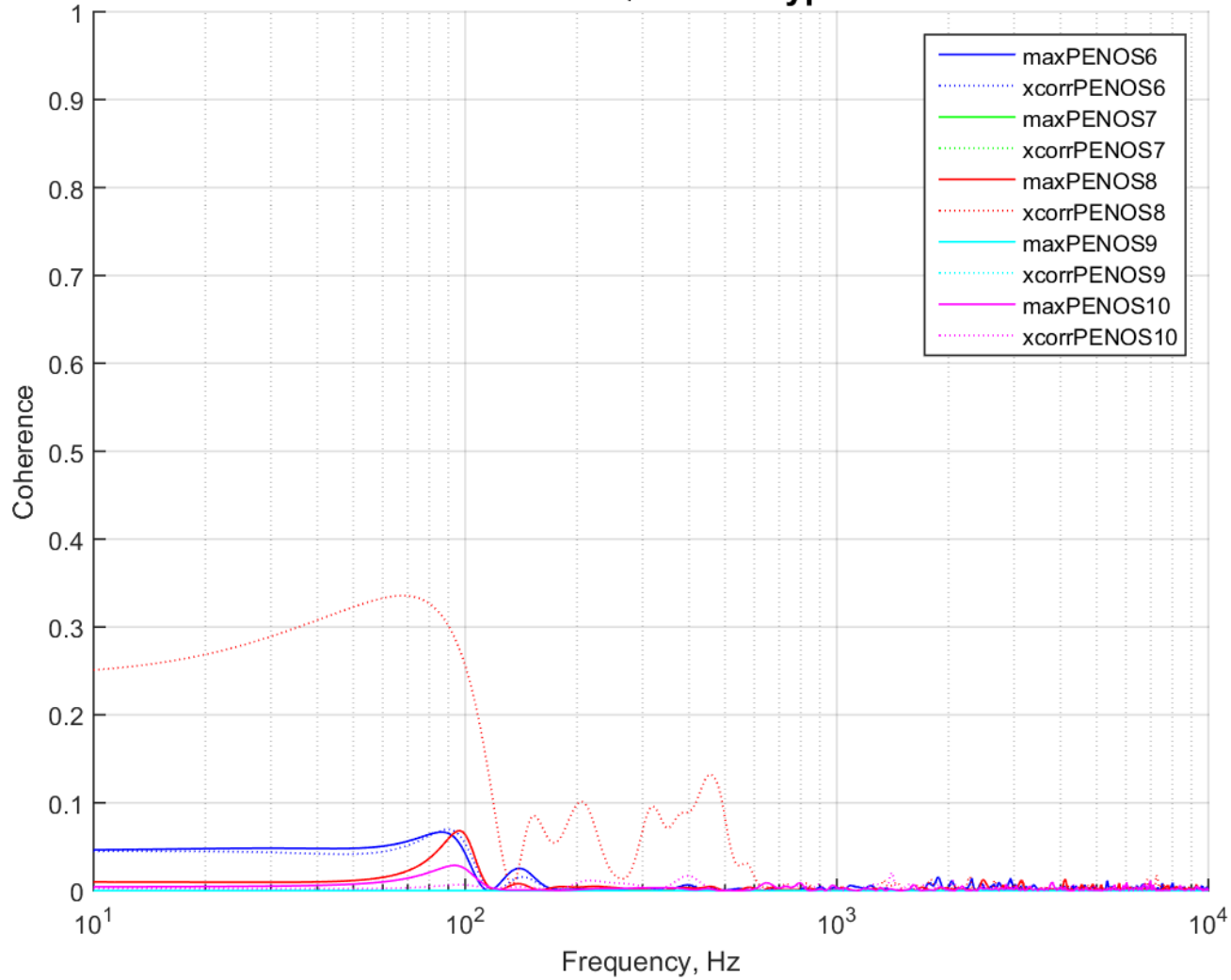
FIGURE 2.187: PEN\_OS 6 - 10 15-01-S2-100

**Event ID: 15-01-S2-100 NEQ: 0.6KG Type: Static 20150113**



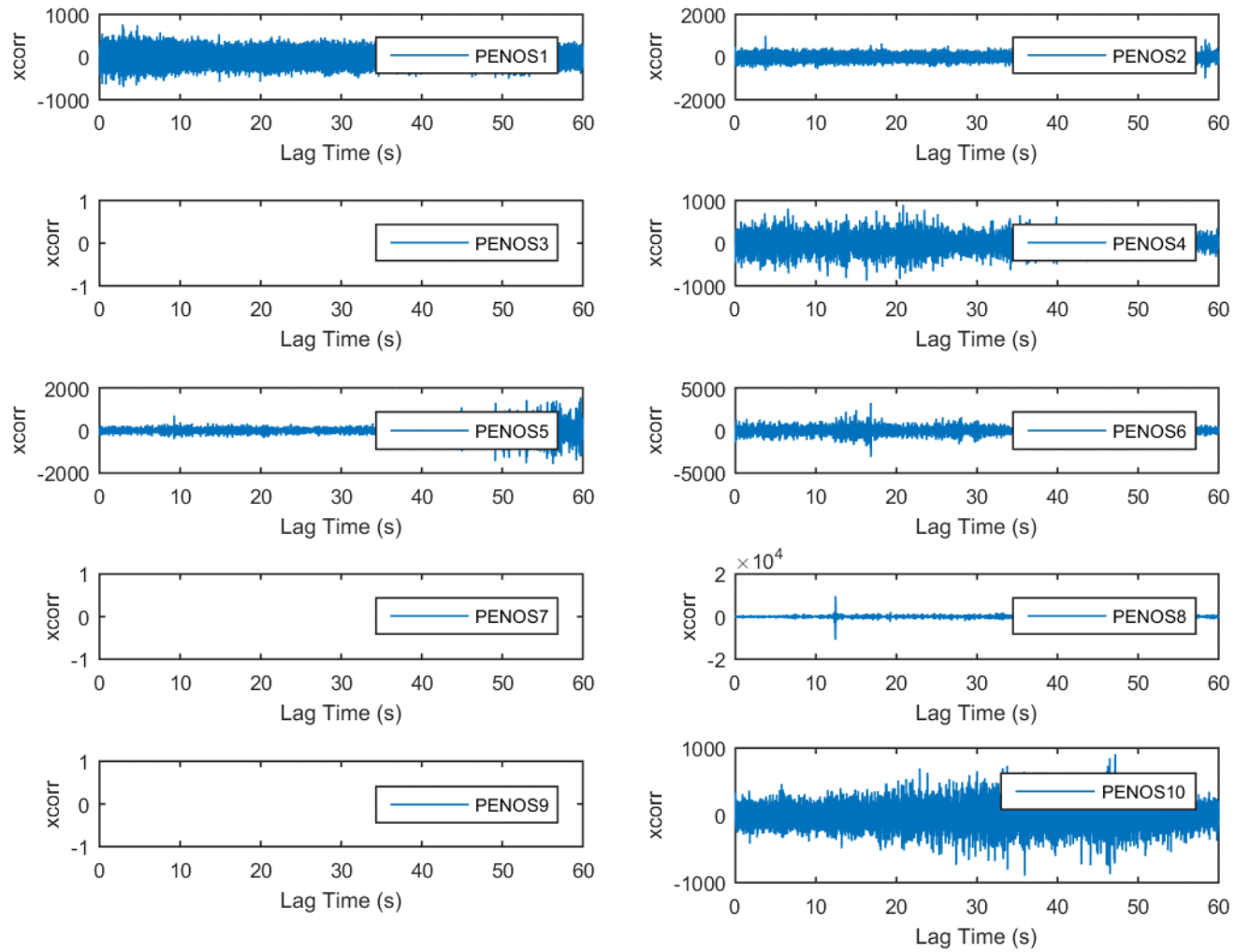
**FIGURE 2.188: COHERENCE PEN\_OS 1 - 5 15-01-S2-100**

**Event ID: 15-01-S2-100 NEQ: 0.6KG Type: Static 20150113**

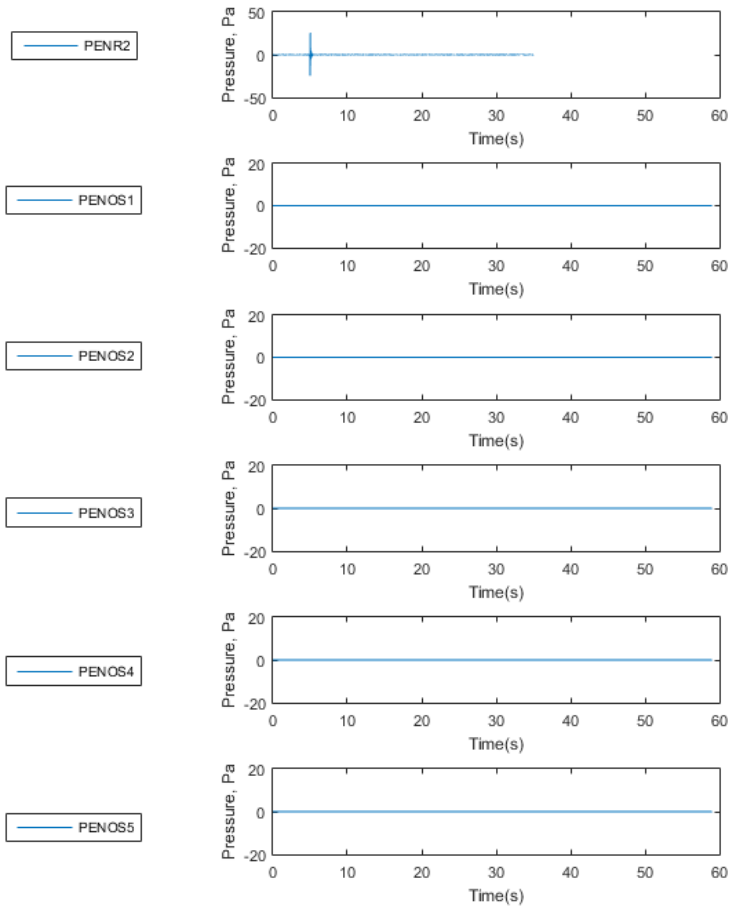


**FIGURE 2.189: COHERENCE PEN\_OS 6 - 10 15-01-S2-100CTD**

**Event ID: 15-01-S2-100 NEQ: 0.6KG Type: Static 20150113**



**FIGURE 2.190: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-100**



Event ID: 15-01-S2-101 NEQ: 0.6KG Type: Static 20150113

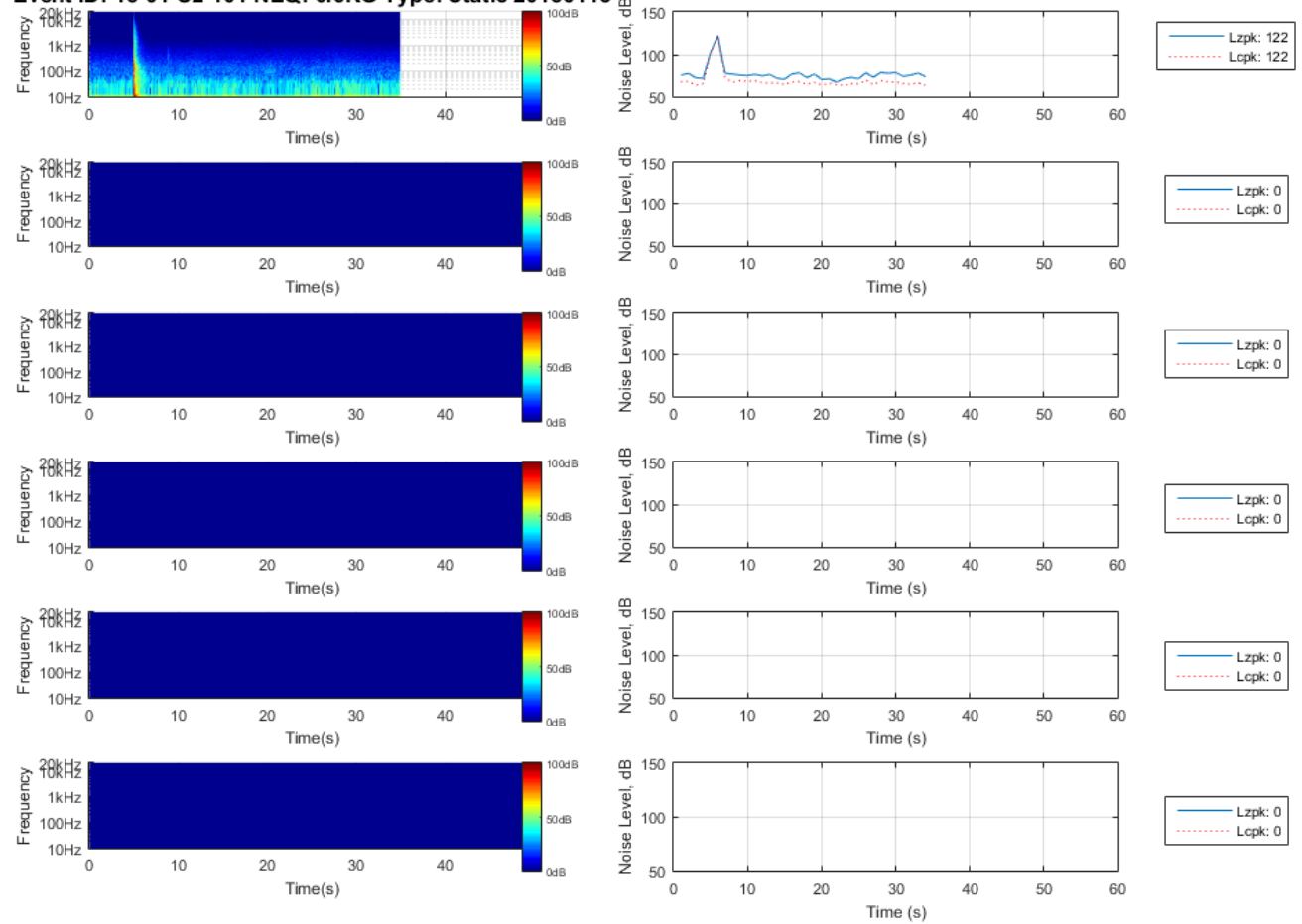
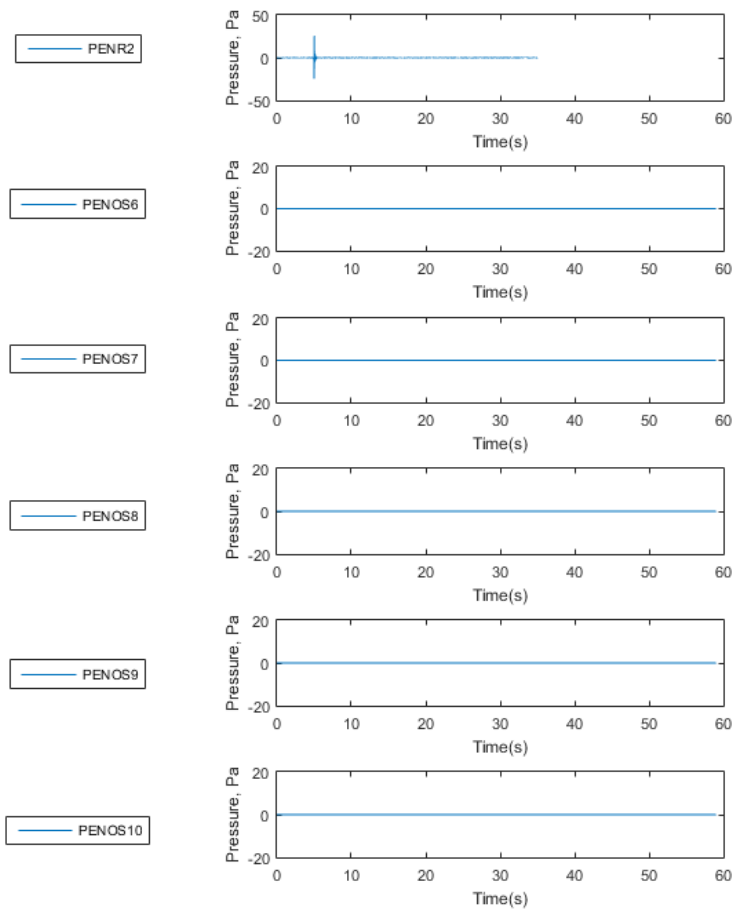


FIGURE 2.191: PEN\_OS 1 - 5 15-01-S2-101





Event ID: 15-01-S2-101 NEQ: 0.6KG Type: Static 20150113 CTD

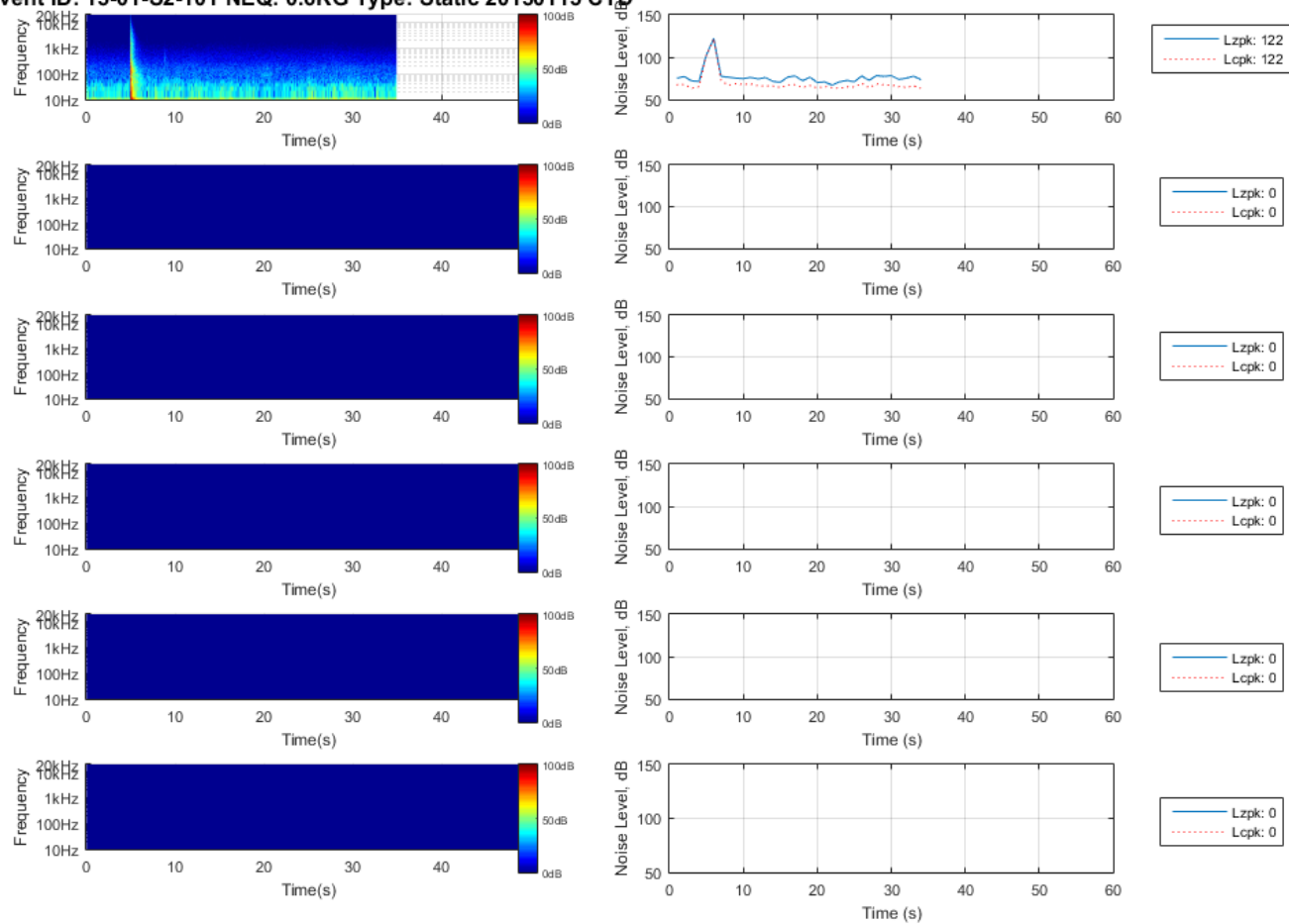
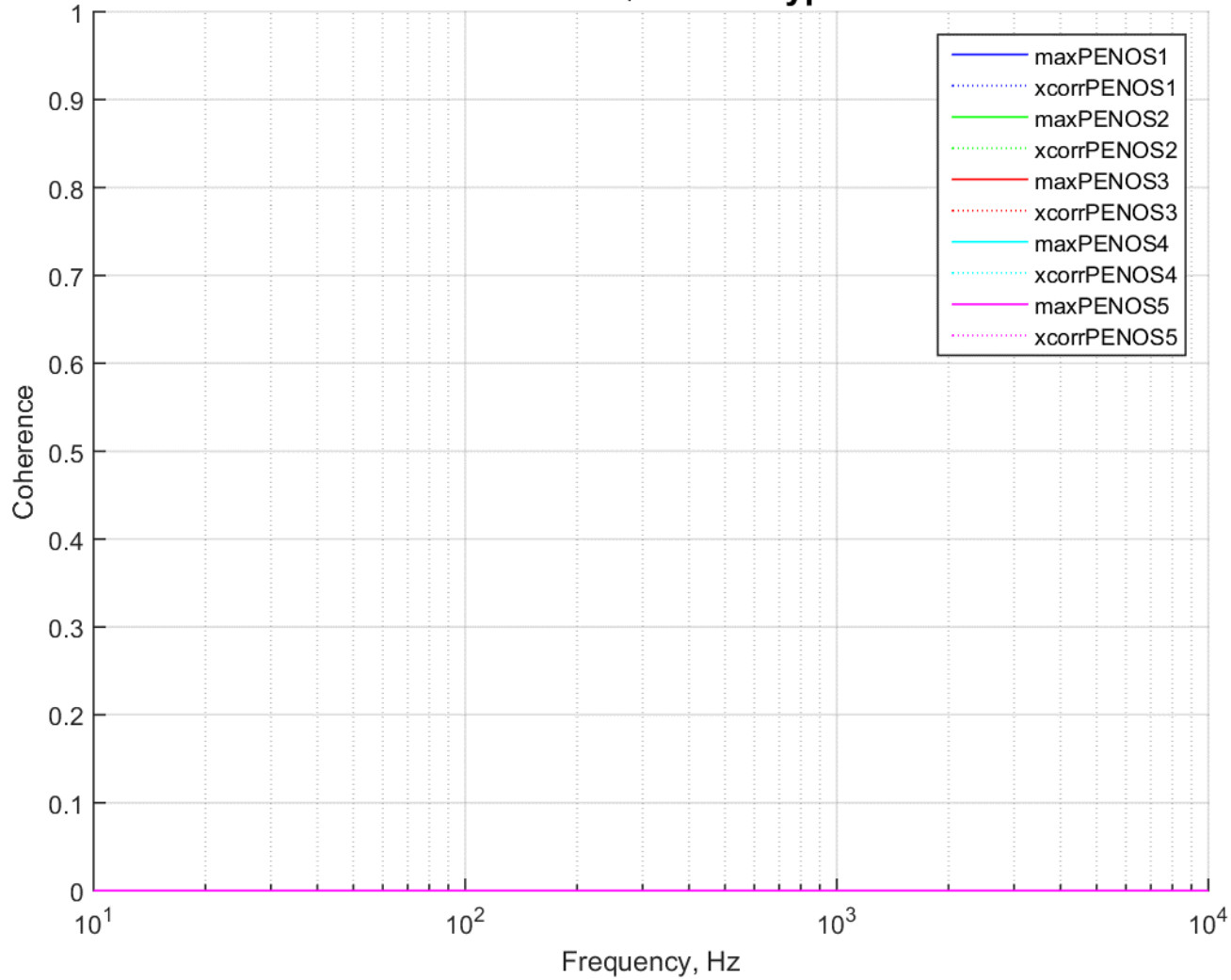


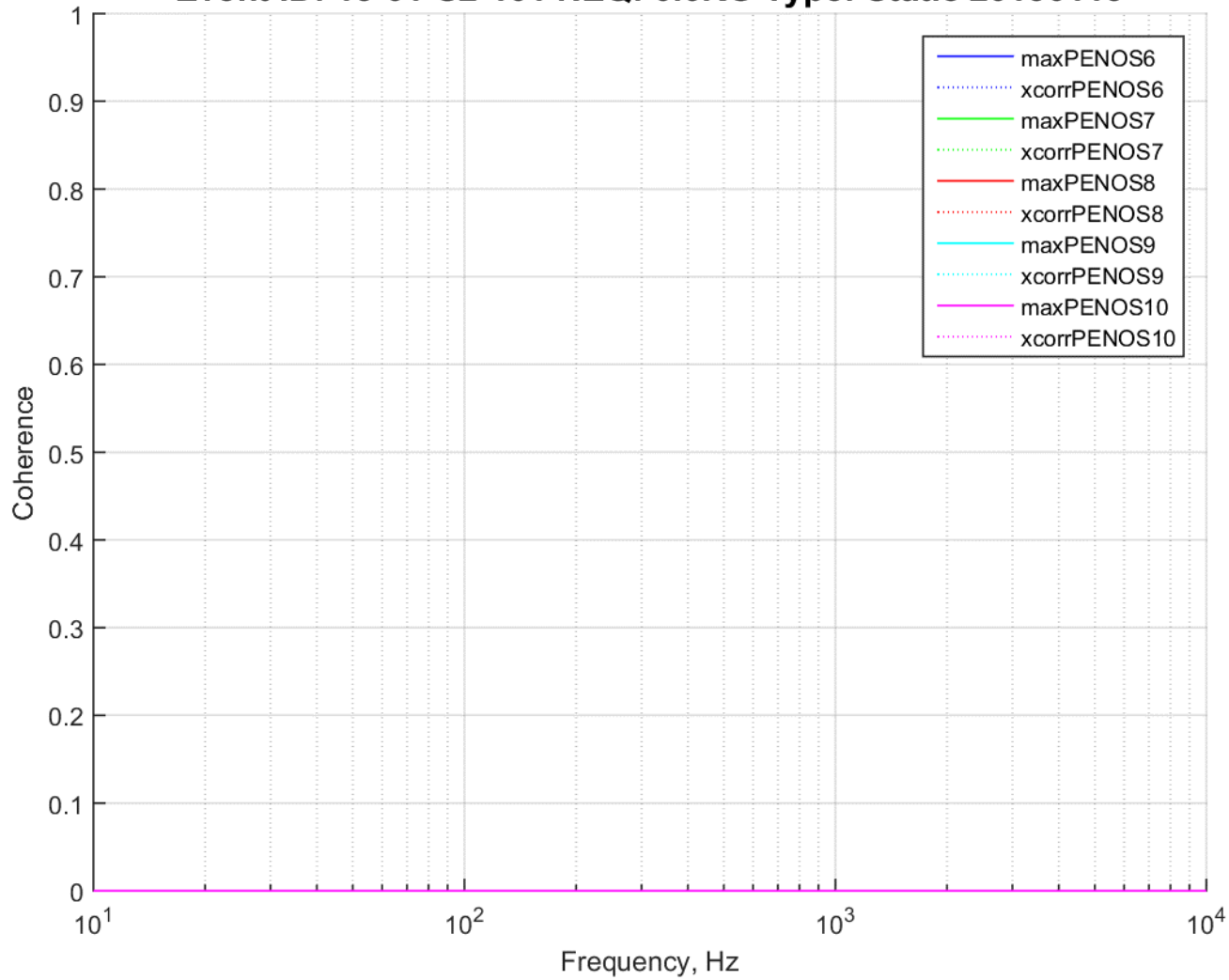
FIGURE 2.192: PEN\_OS 6 - 10 15-01-S2-101

**Event ID: 15-01-S2-101 NEQ: 0.6KG Type: Static 20150113**



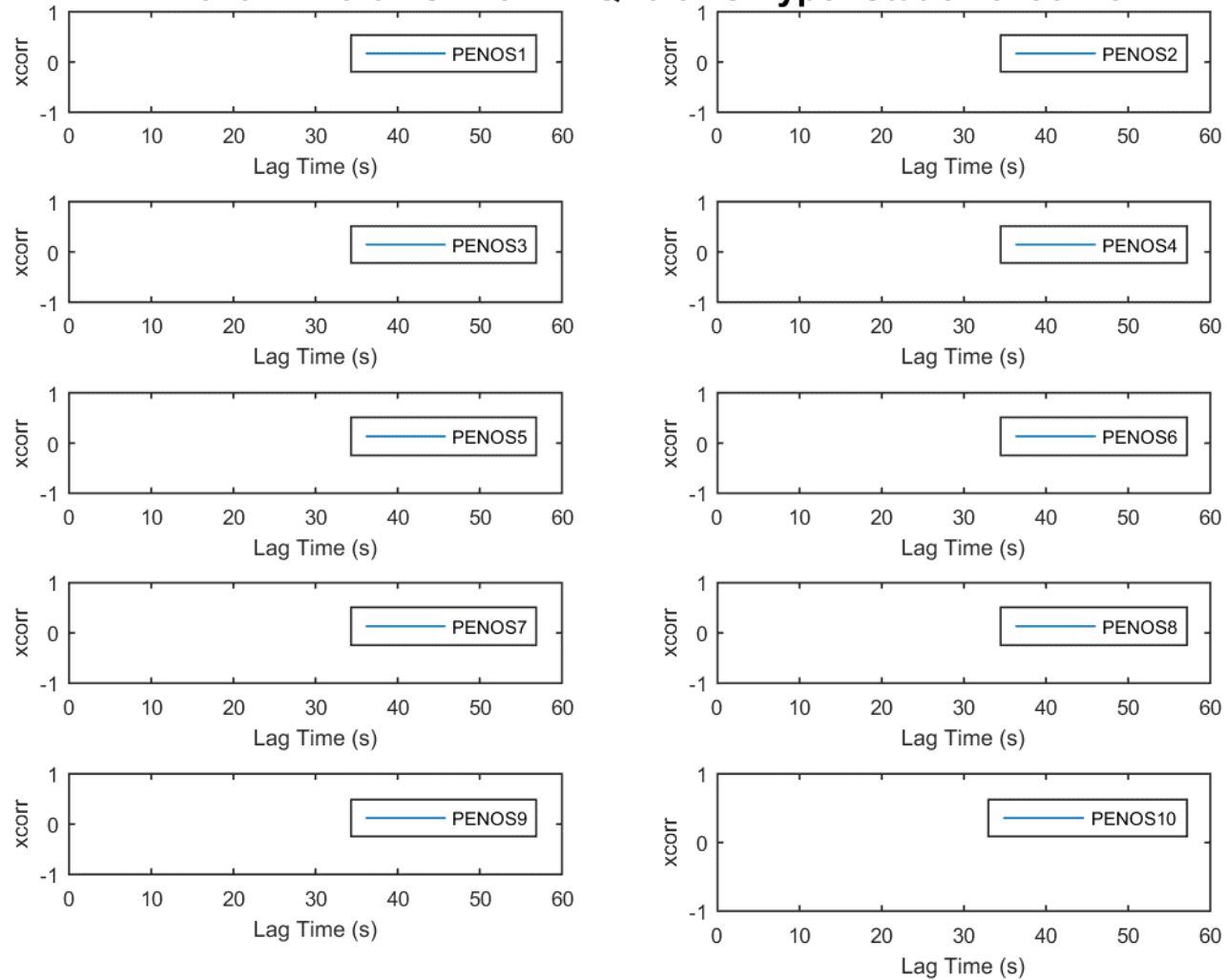
**FIGURE 2.193: COHERENCE PEN\_OS 1 - 5 15-01-S2-101**

**Event ID: 15-01-S2-101 NEQ: 0.6KG Type: Static 20150113**

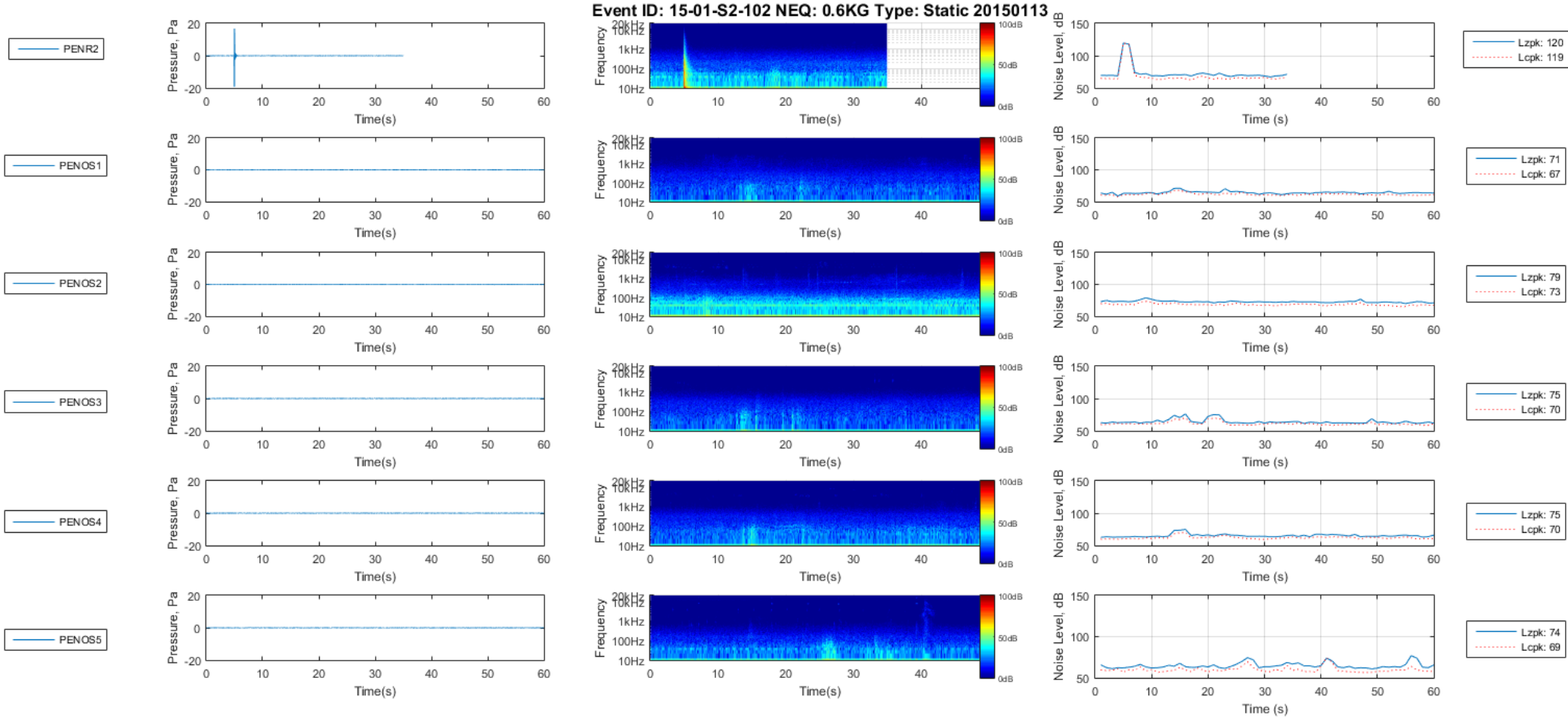


**FIGURE 2.194: COHERENCE PEN\_OS 6 - 10 15-01-S2-101CTD**

**Event ID: 15-01-S2-101 NEQ: 0.6KG Type: Static 20150113**



**FIGURE 2.195: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-101**



**FIGURE 2.196: PEN\_OS 1 - 5 15-01-S2-102**

Event ID: 15-01-S2-102 NEQ: 0.6KG Type: Static 20150113 CTD

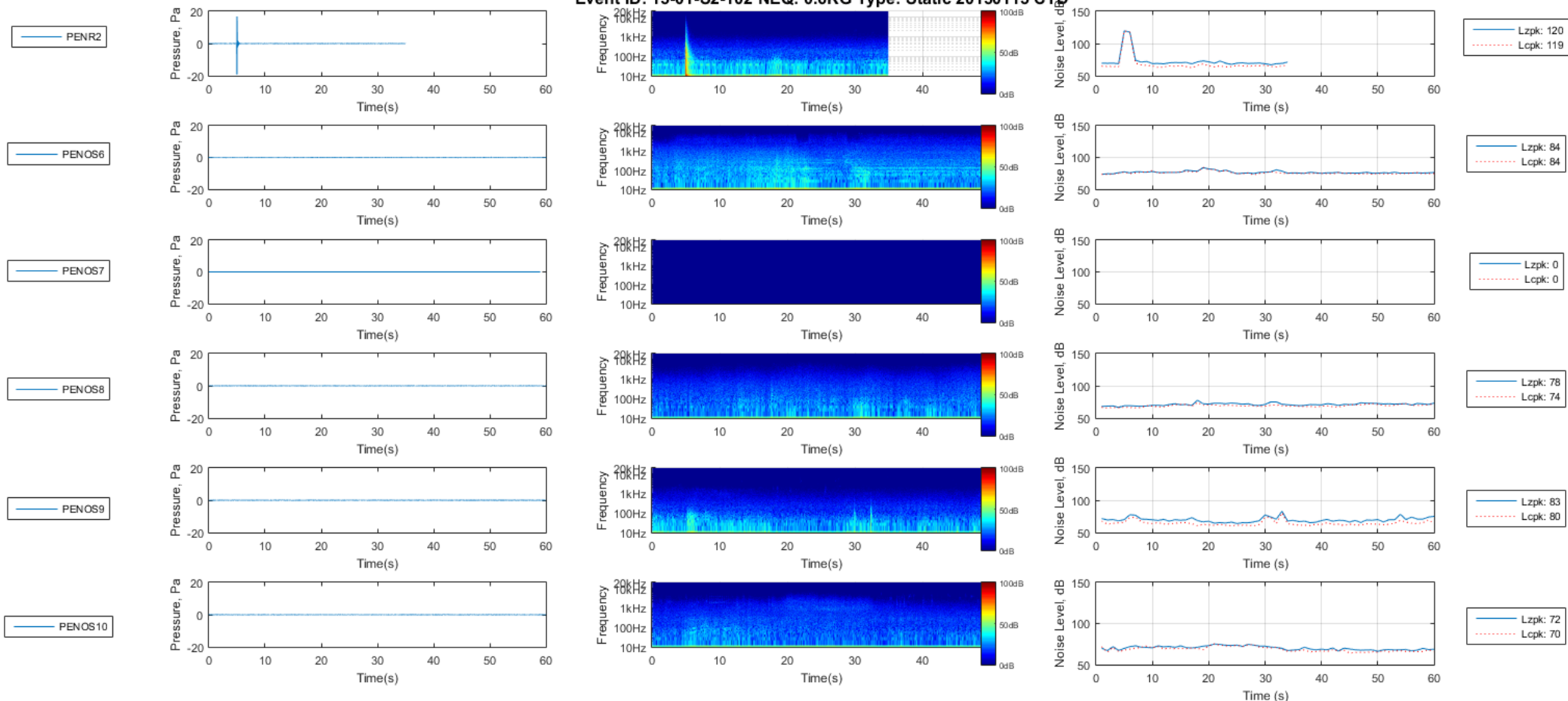
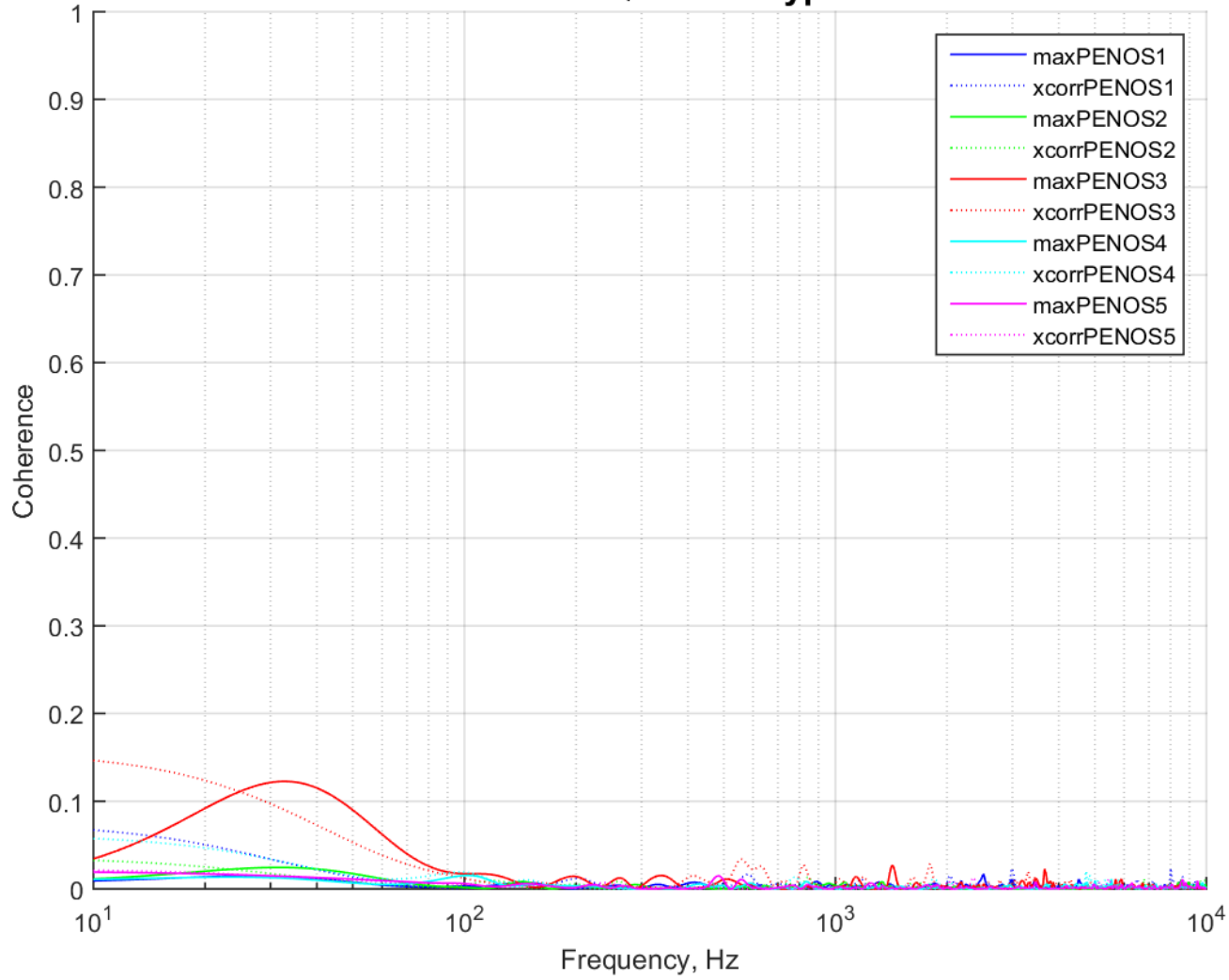


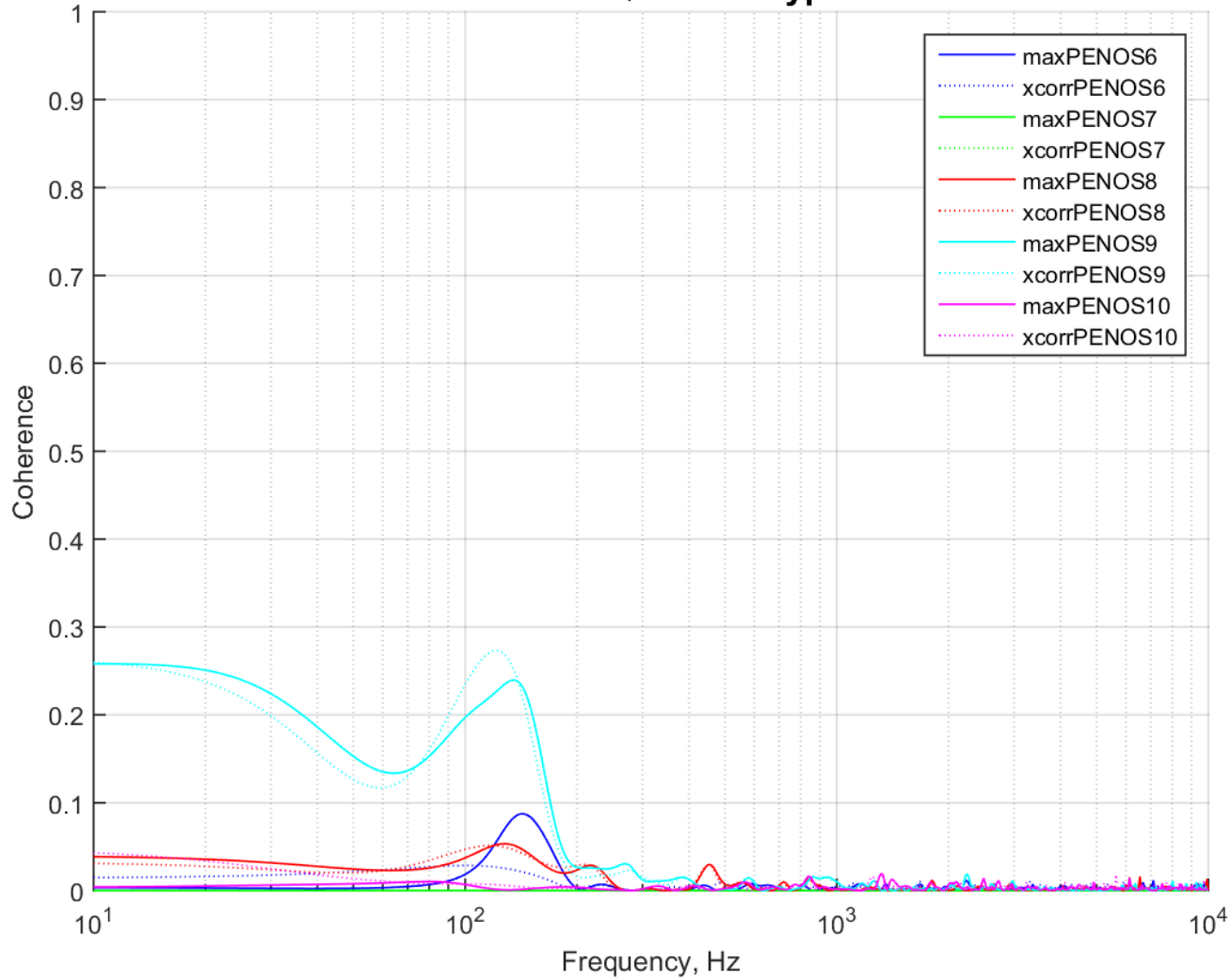
FIGURE 2.197: PEN\_OS 6 - 10 15-01-S2-102

**Event ID: 15-01-S2-102 NEQ: 0.6KG Type: Static 20150113**



**FIGURE 2.198: COHERENCE PEN\_OS 1 - 5 15-01-S2-102**

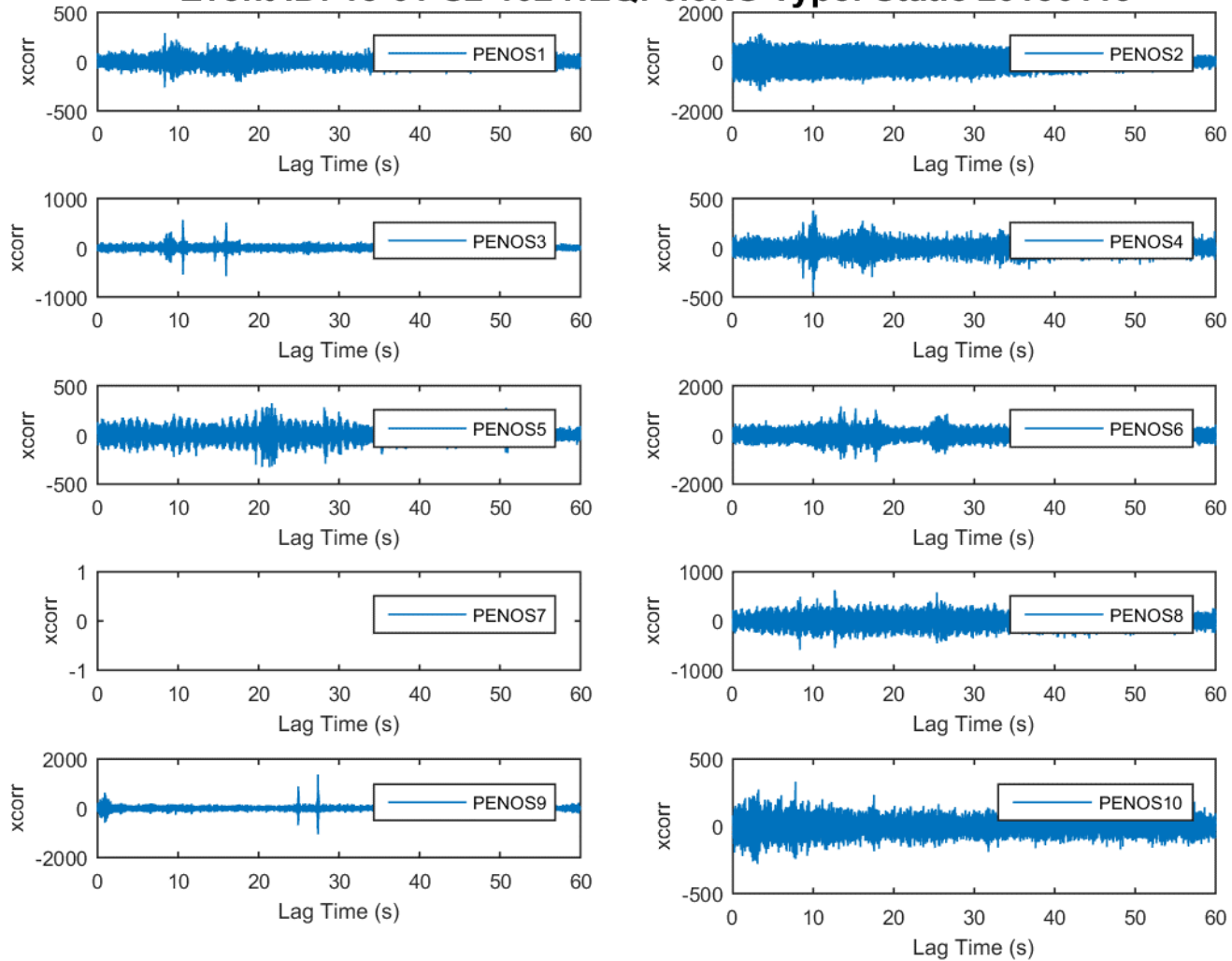
**Event ID: 15-01-S2-102 NEQ: 0.6KG Type: Static 20150113**



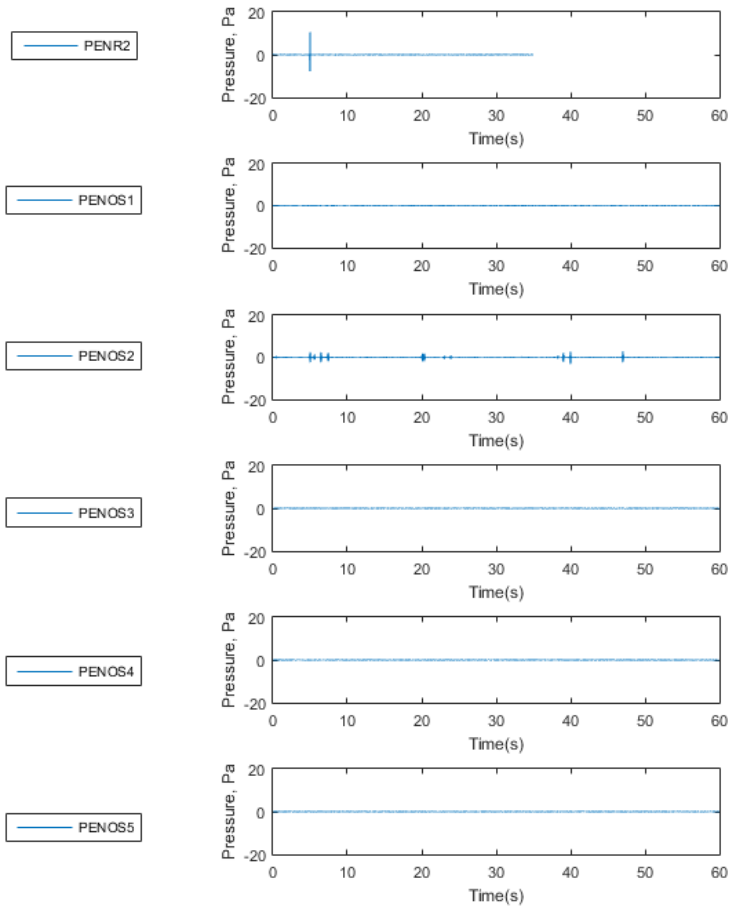
**FIGURE 2.199: COHERENCE PEN\_OS 6 - 10 15-01-S2-102CTD**



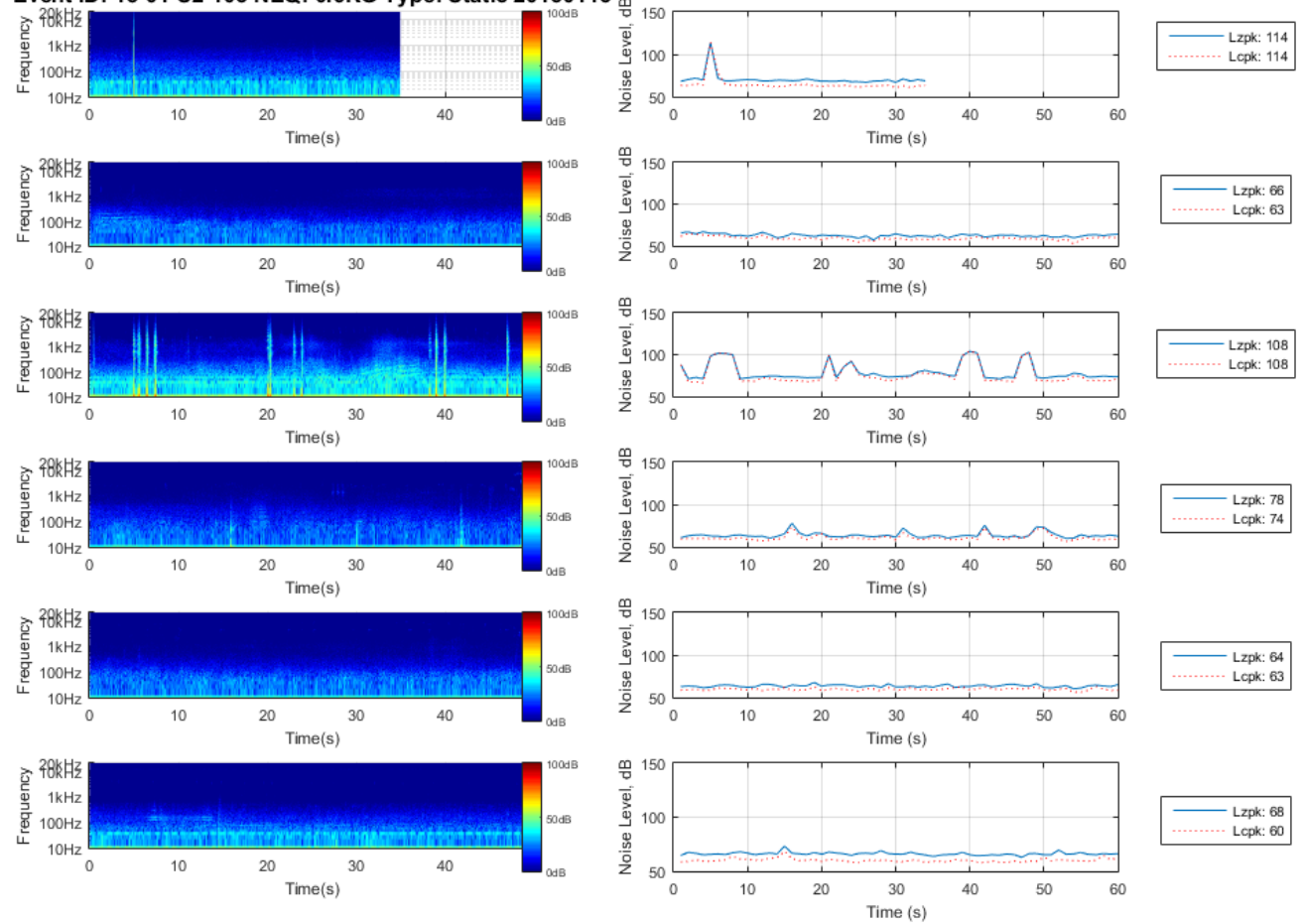
**Event ID: 15-01-S2-102 NEQ: 0.6KG Type: Static 20150113**



**FIGURE 2.200: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-102**



**Event ID: 15-01-S2-103 NEQ: 0.6KG Type: Static 20150113**



**FIGURE 2.201: PEN\_OS 1 - 5 15-01-S2-103**

Event ID: 15-01-S2-103 NEQ: 0.6KG Type: Static 20150113 CTD

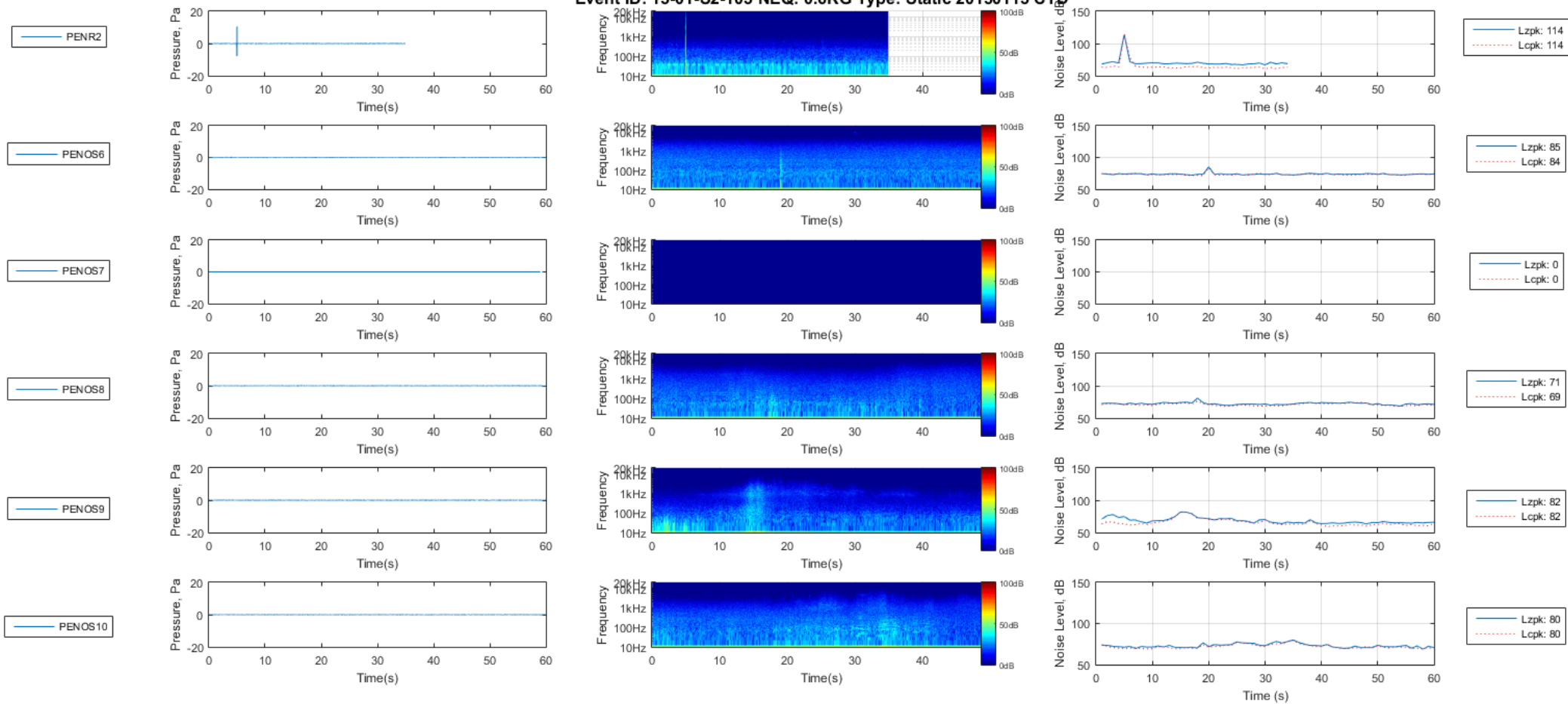
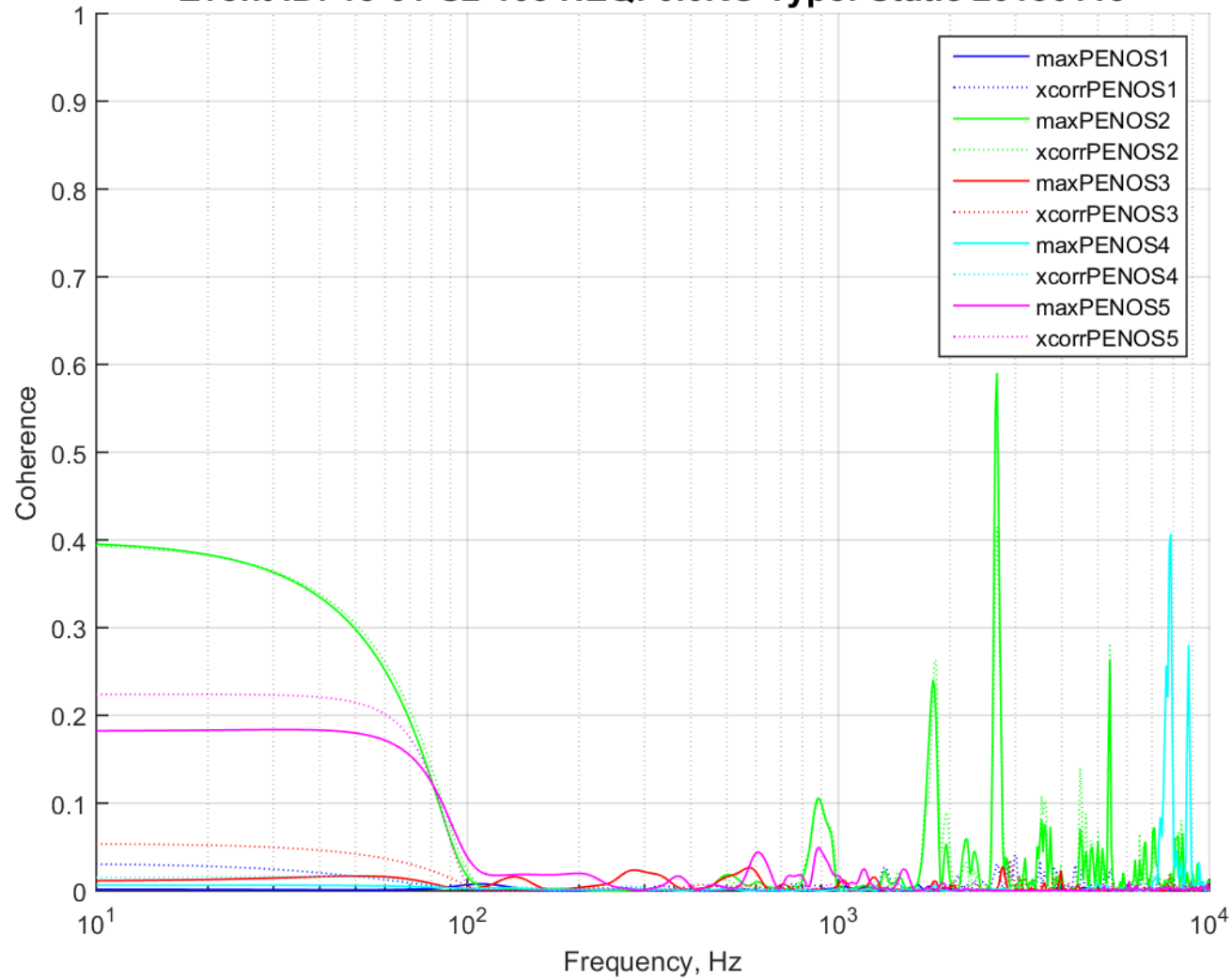


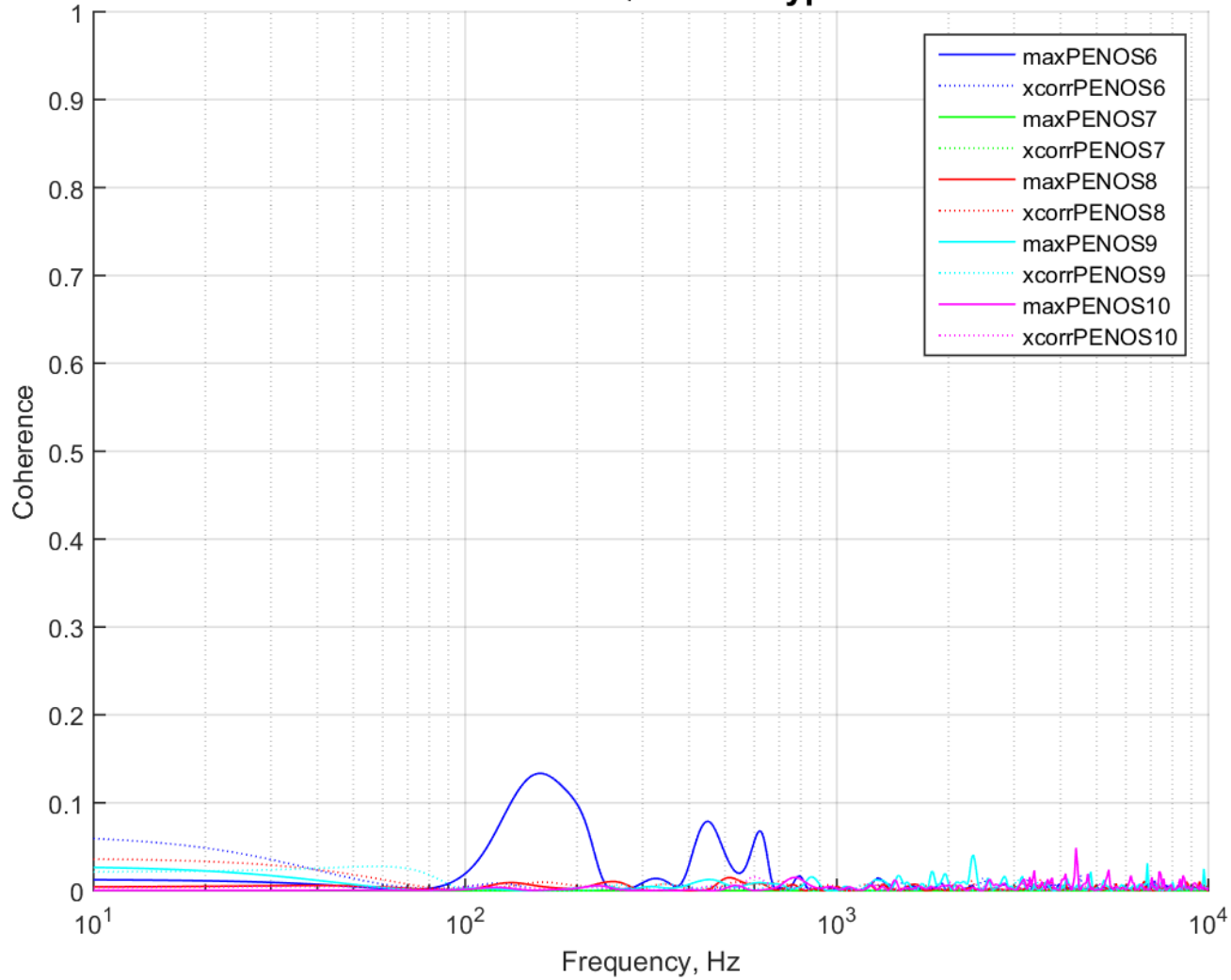
FIGURE 2.202: PEN\_OS 6 - 10 15-01-S2-103

**Event ID: 15-01-S2-103 NEQ: 0.6KG Type: Static 20150113**



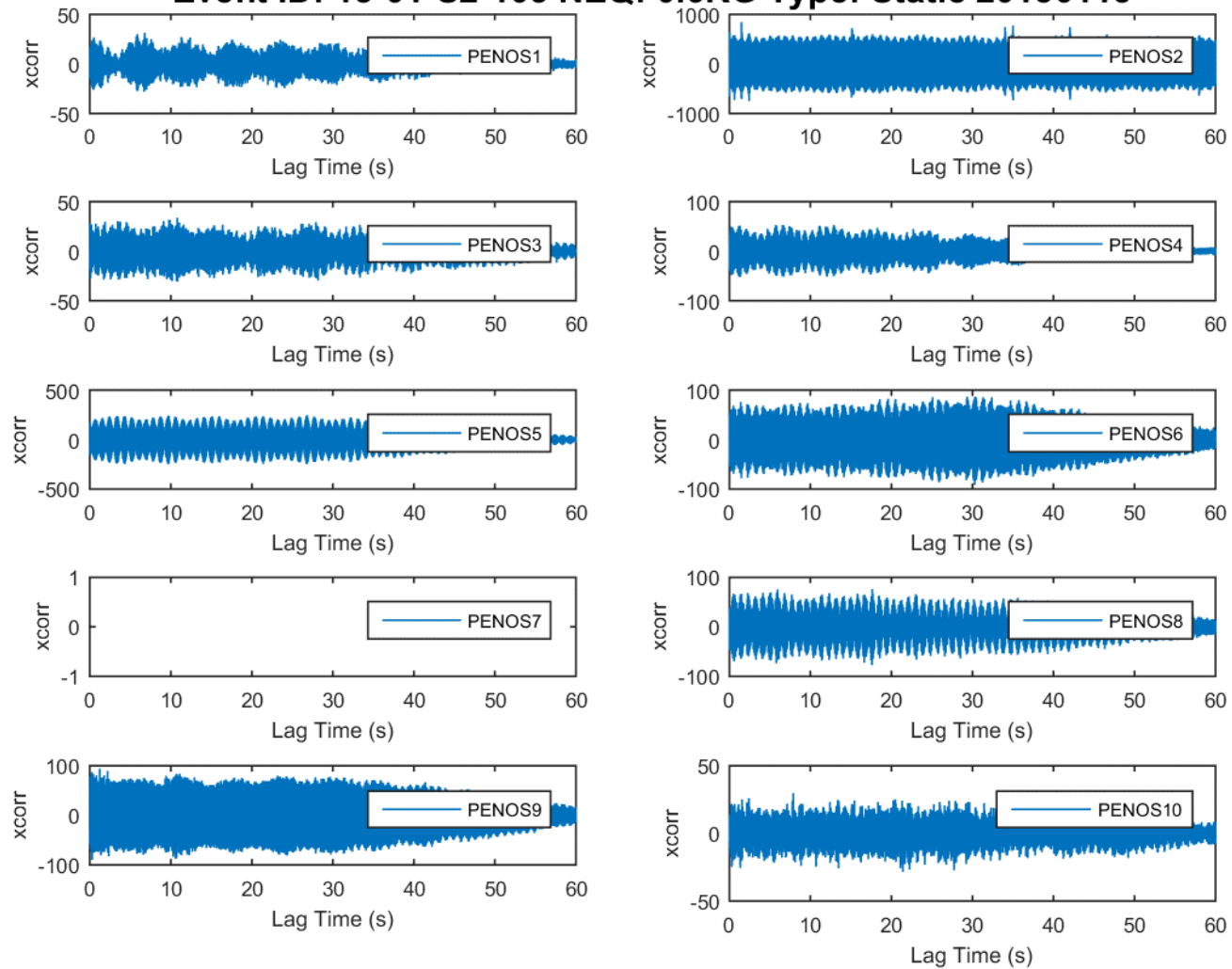
**FIGURE 2.203: COHERENCE PEN\_OS 1 - 5 15-01-S2-103**

**Event ID: 15-01-S2-103 NEQ: 0.6KG Type: Static 20150113**

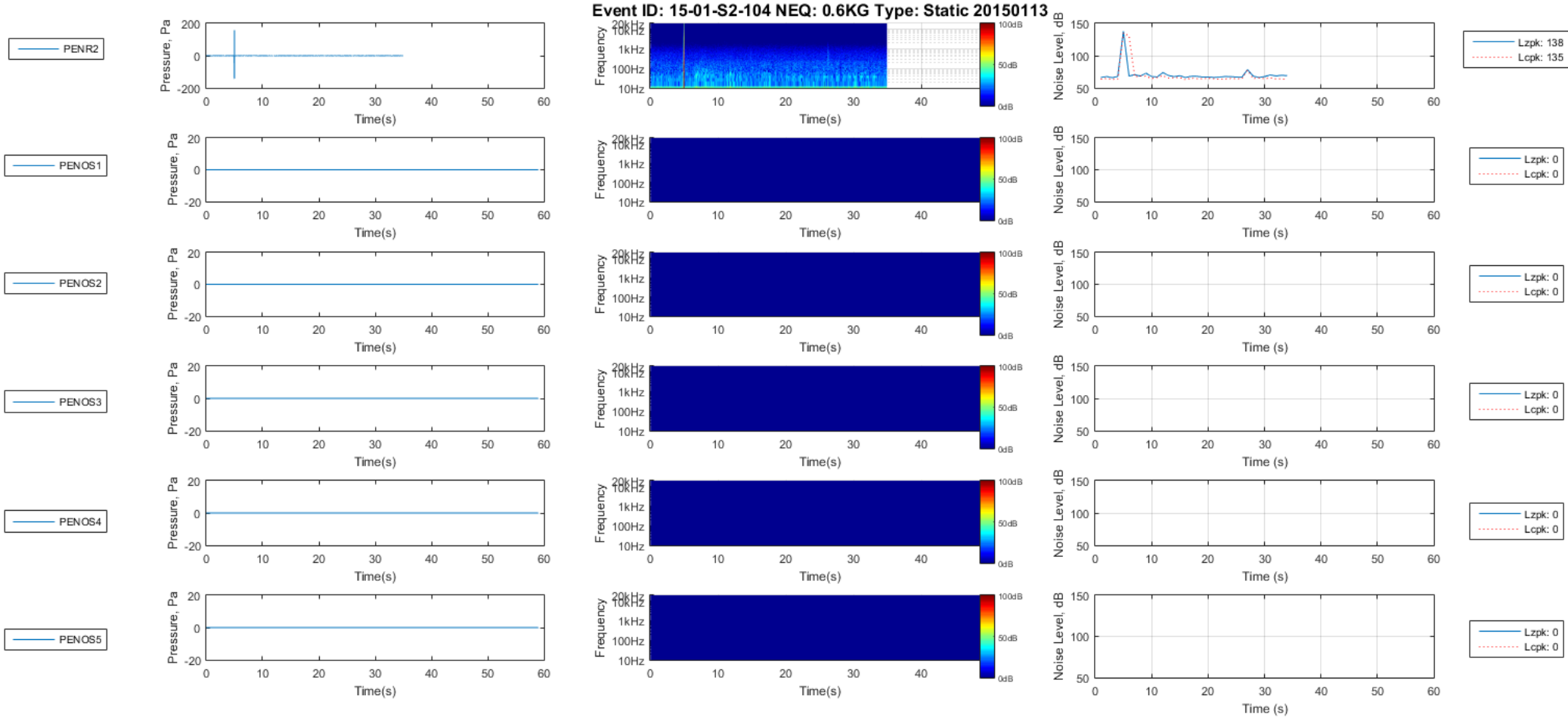


**FIGURE 2.204: COHERENCE PEN\_OS 6 - 10 15-01-S2-103CTD**

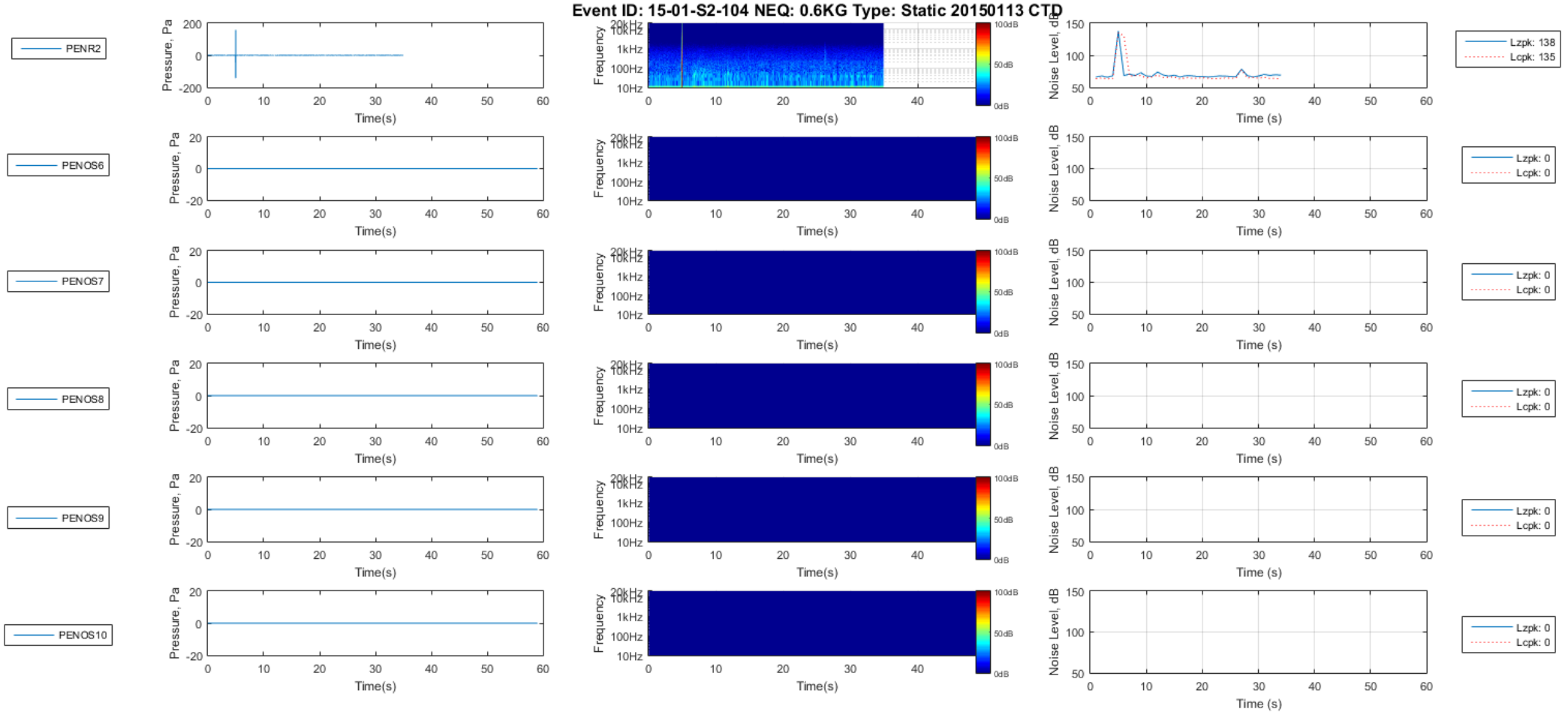
**Event ID: 15-01-S2-103 NEQ: 0.6KG Type: Static 20150113**



**FIGURE 2.205: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-103**



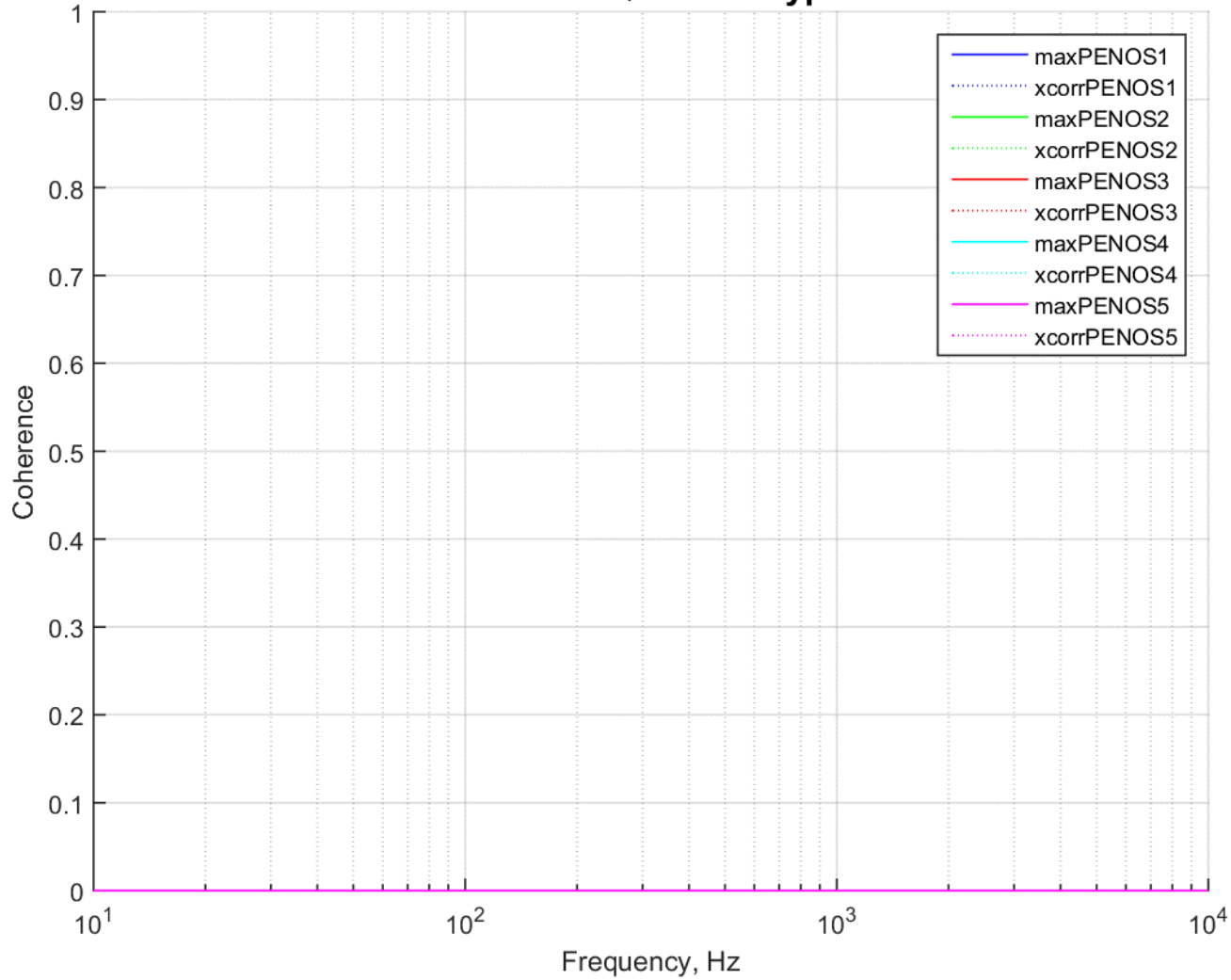
**FIGURE 2.206: PEN\_OS 1 - 5 15-01-S2-104**



**FIGURE 2.207: PEN\_OS 6 - 10 15-01-S2-104**

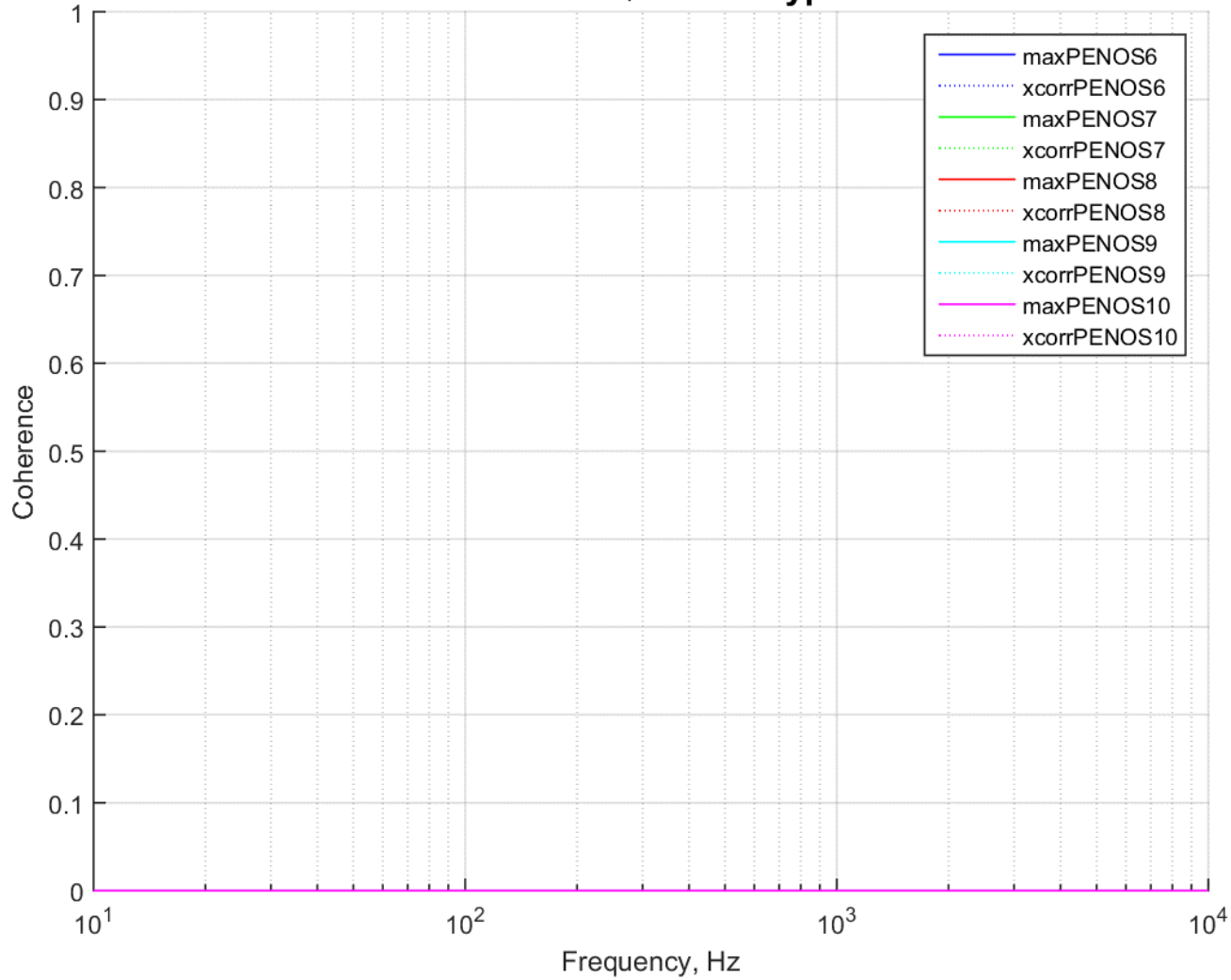


**Event ID: 15-01-S2-104 NEQ: 0.6KG Type: Static 20150113**



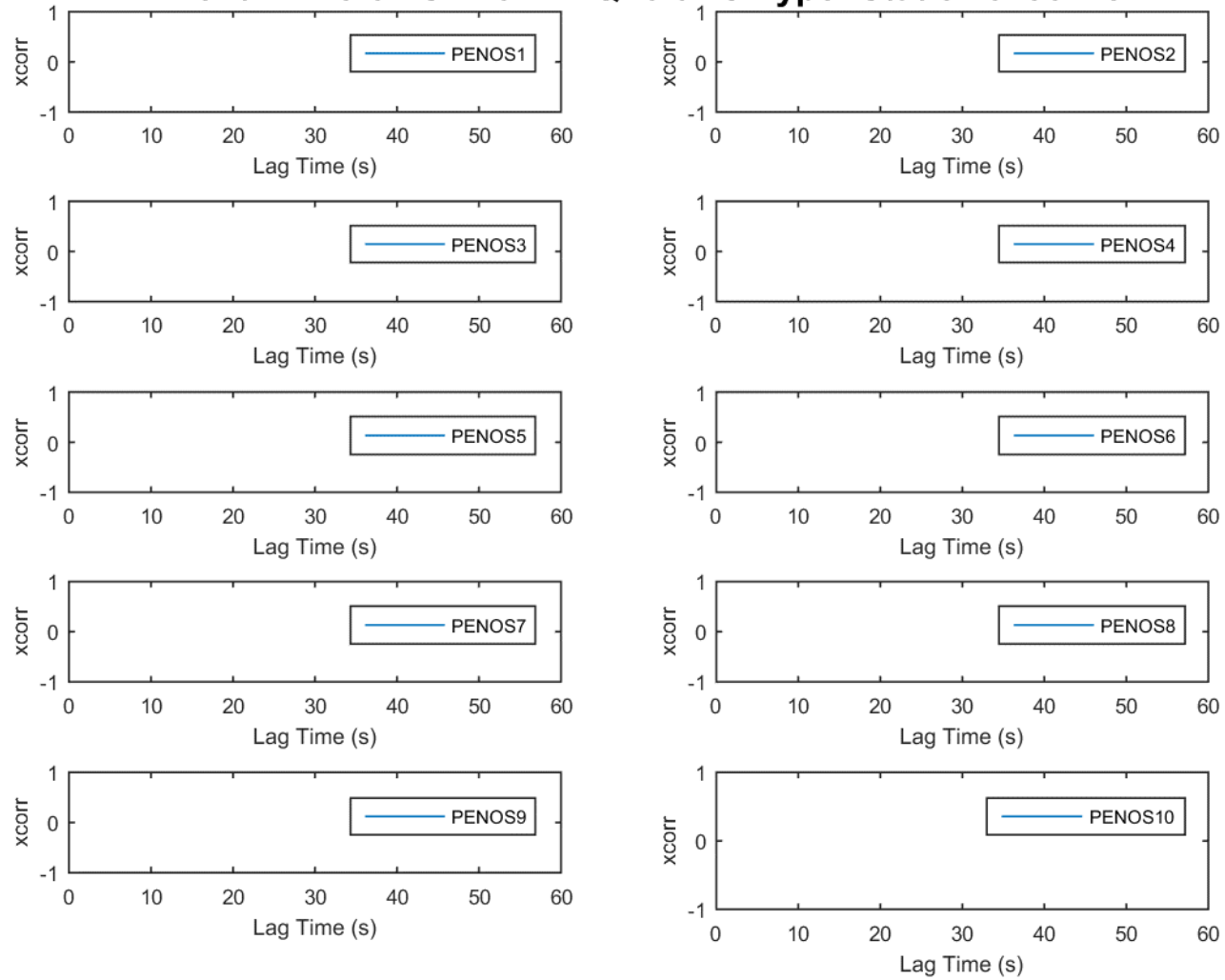
**FIGURE 2.208: COHERENCE PEN\_OS 1 - 5 15-01-S2-104**

**Event ID: 15-01-S2-104 NEQ: 0.6KG Type: Static 20150113**

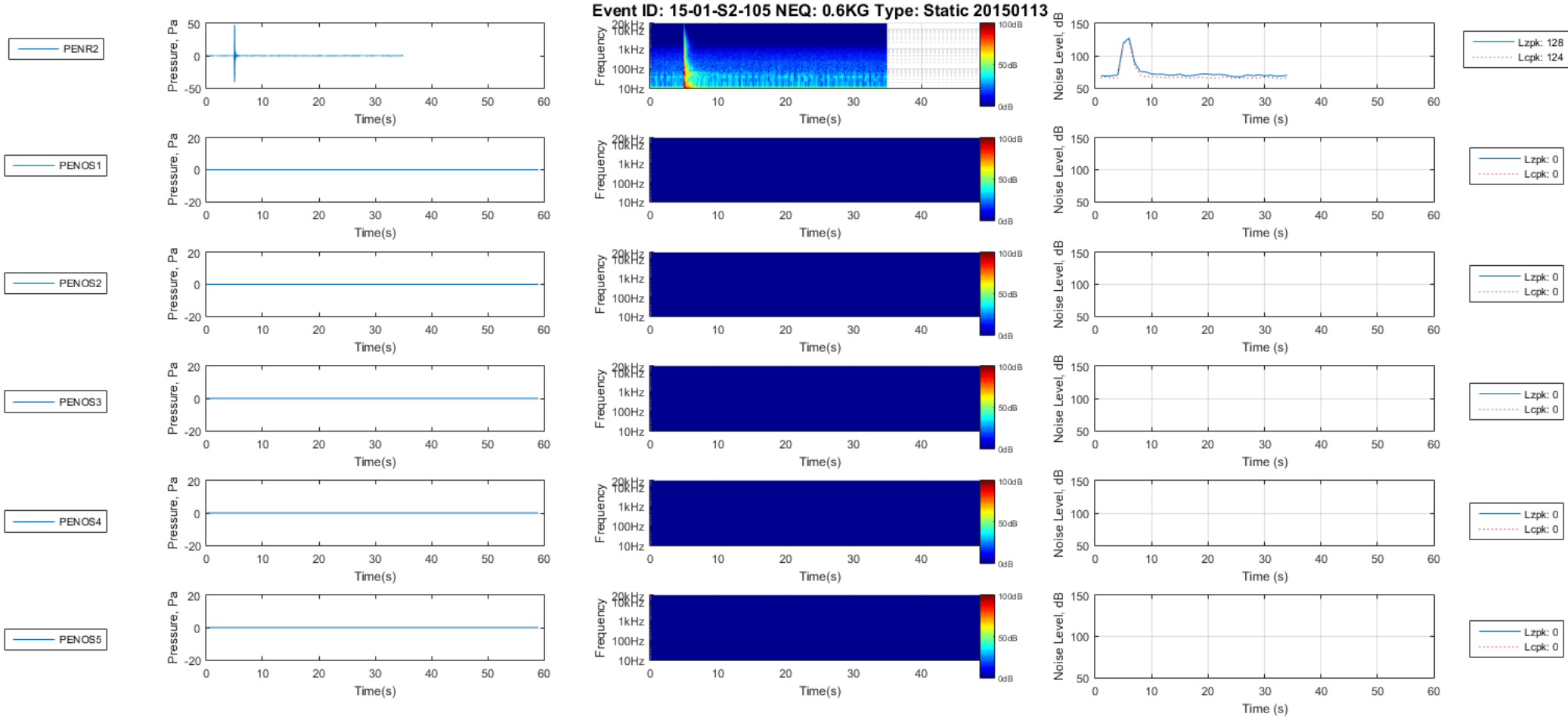


**FIGURE 2.209: COHERENCE PEN\_OS 6 - 10 15-01-S2-104CTD**

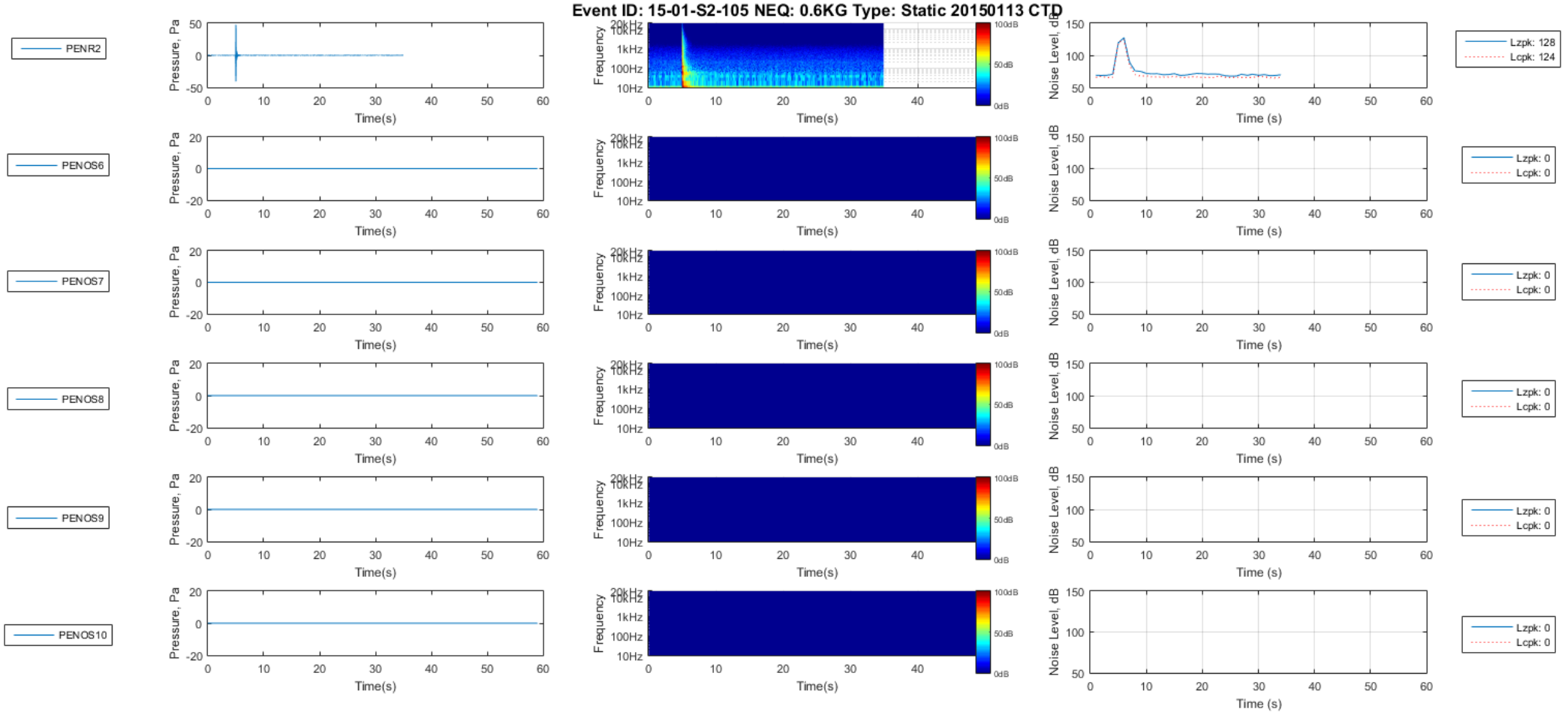
**Event ID: 15-01-S2-104 NEQ: 0.6KG Type: Static 20150113**



**FIGURE 2.210: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-104**

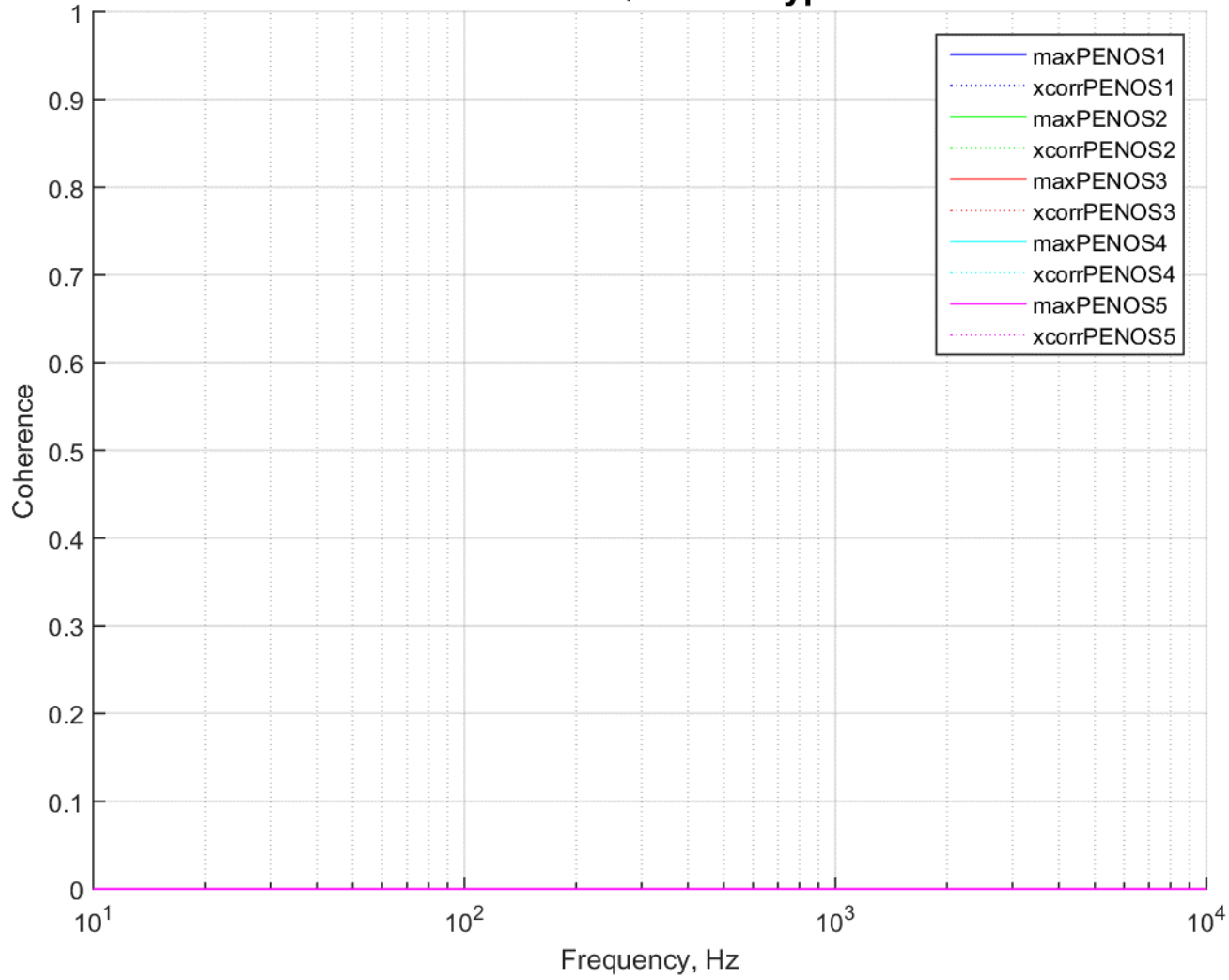


**FIGURE 2.211: PEN\_OS 1 - 5 15-01-S2-105**



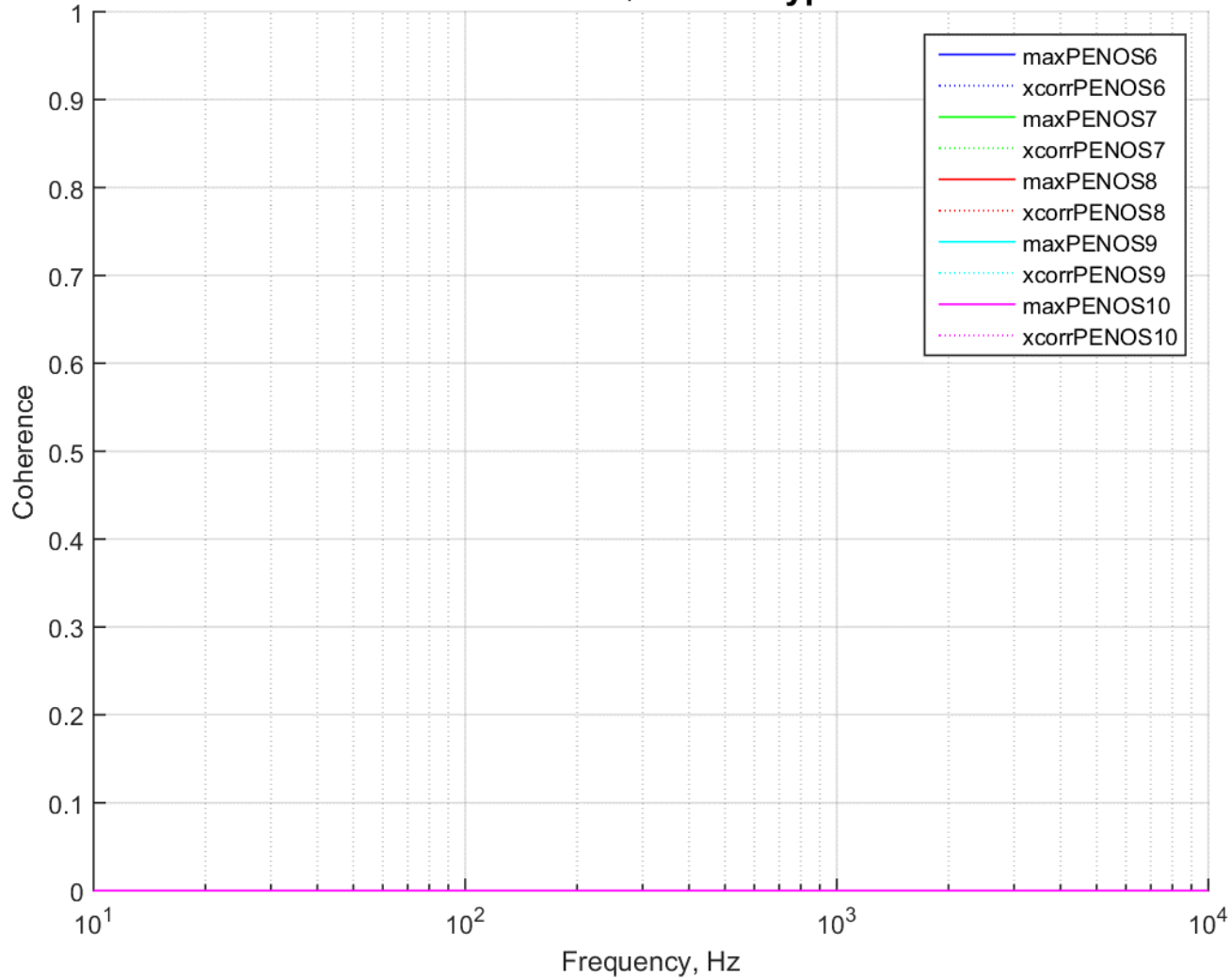
**FIGURE 2.212: PEN\_OS 6 - 10 15-01-S2-105**

**Event ID: 15-01-S2-105 NEQ: 0.6KG Type: Static 20150113**



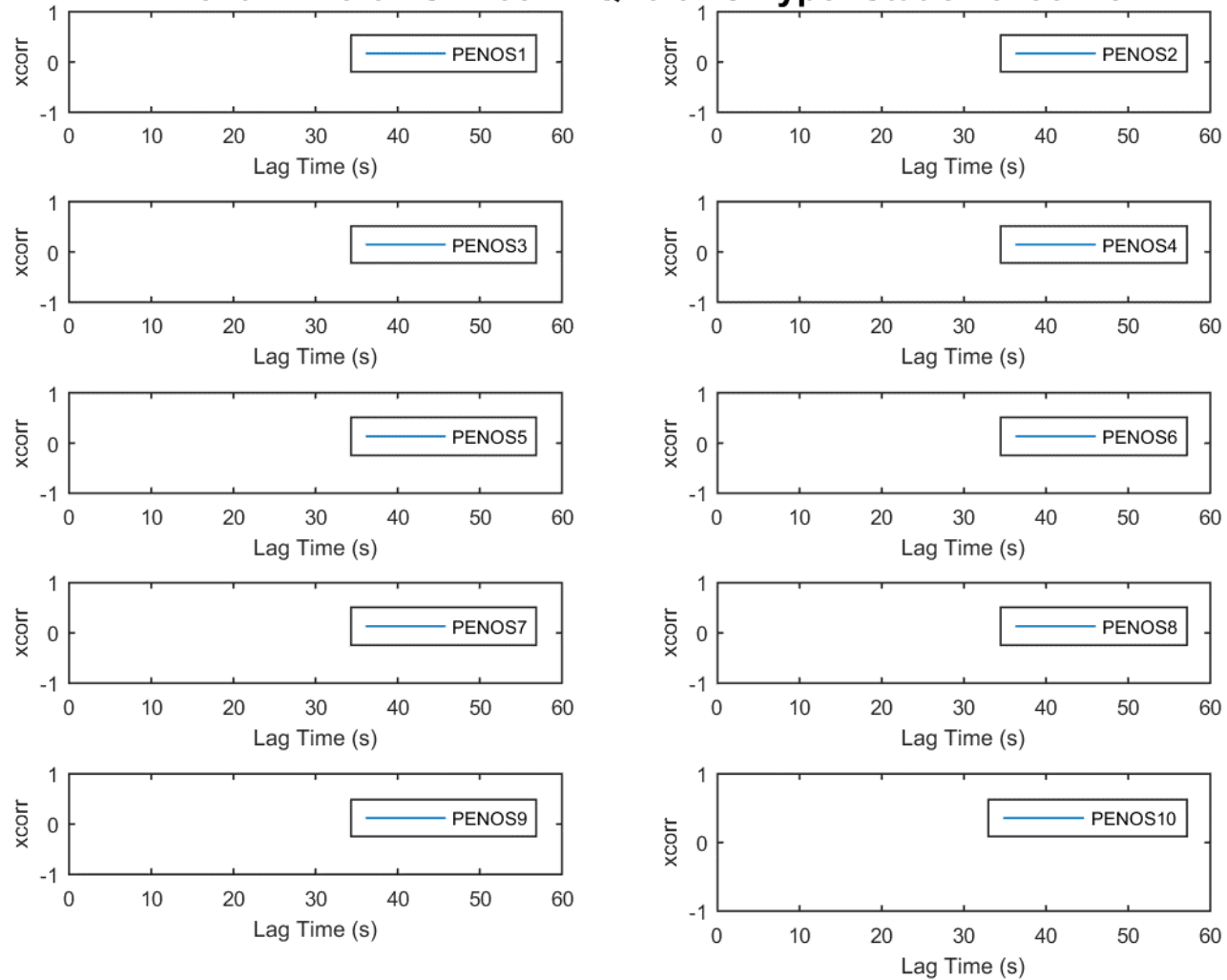
**FIGURE 2.213: COHERENCE PEN\_OS 1 - 5 15-01-S2-105**

**Event ID: 15-01-S2-105 NEQ: 0.6KG Type: Static 20150113**



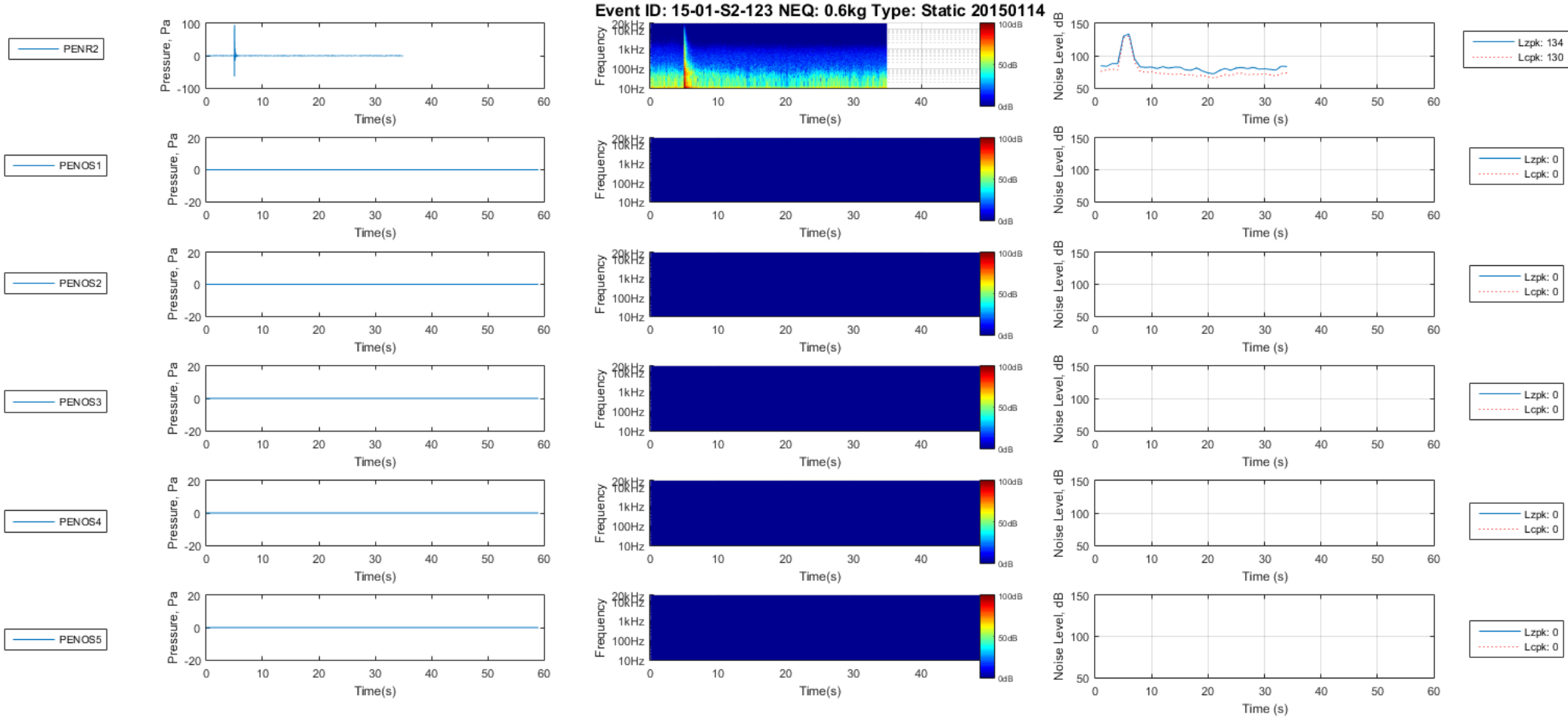
**FIGURE 2.214: COHERENCE PEN\_OS 6 - 10 15-01-S2-105CTD**

**Event ID: 15-01-S2-105 NEQ: 0.6KG Type: Static 20150113**

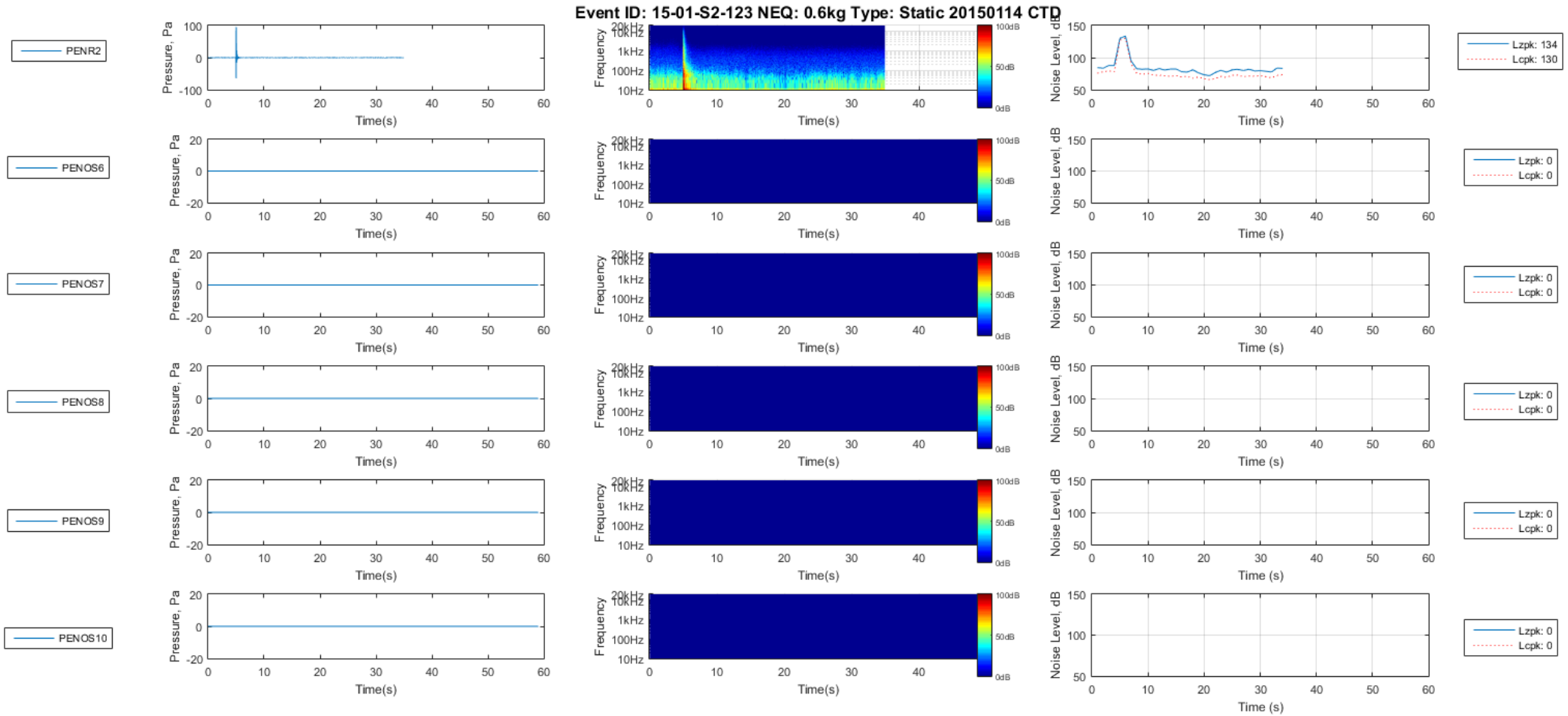


**FIGURE 2.215: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-105**



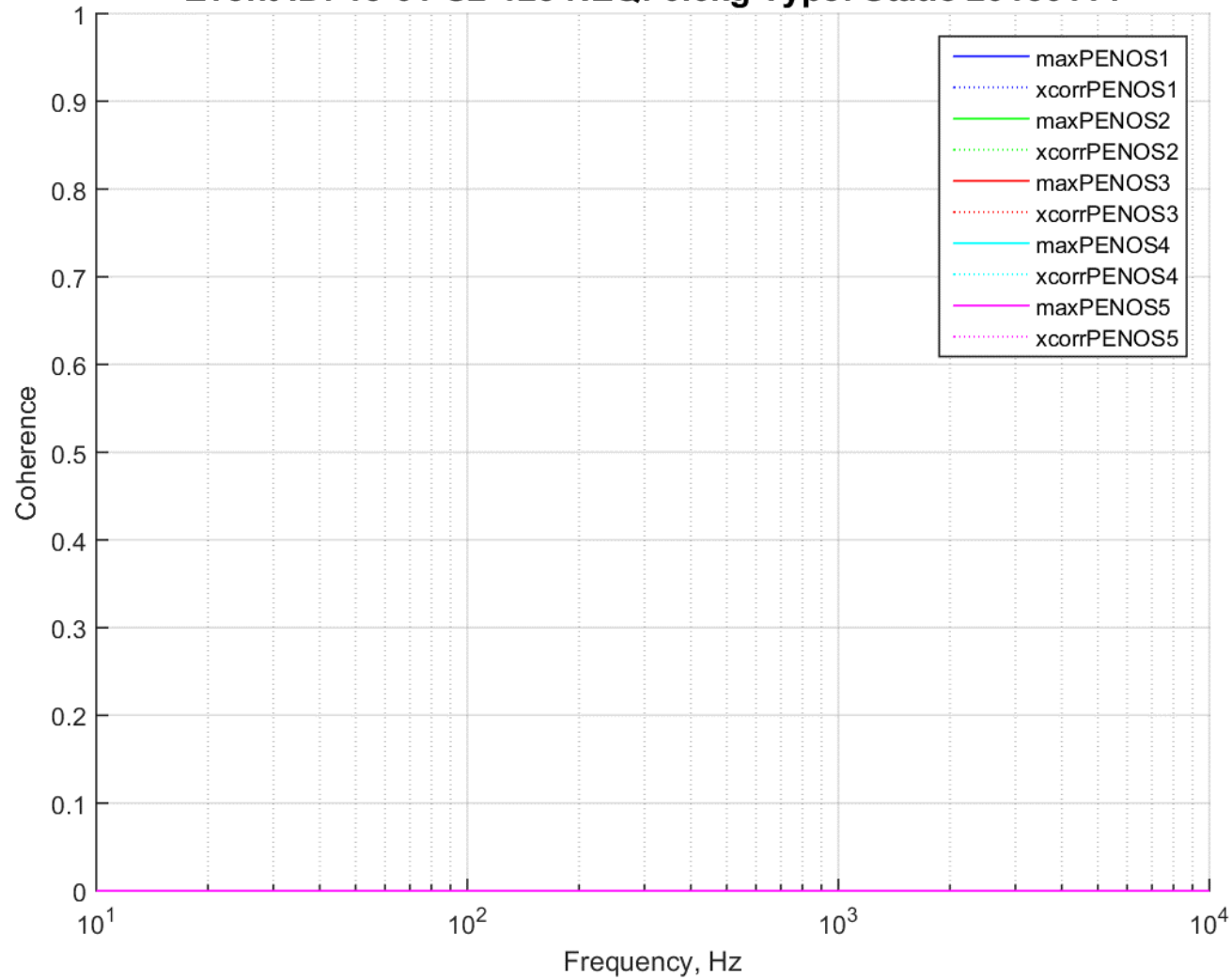


**FIGURE 2.216: PEN\_OS 1 - 5 15-01-S2-123**



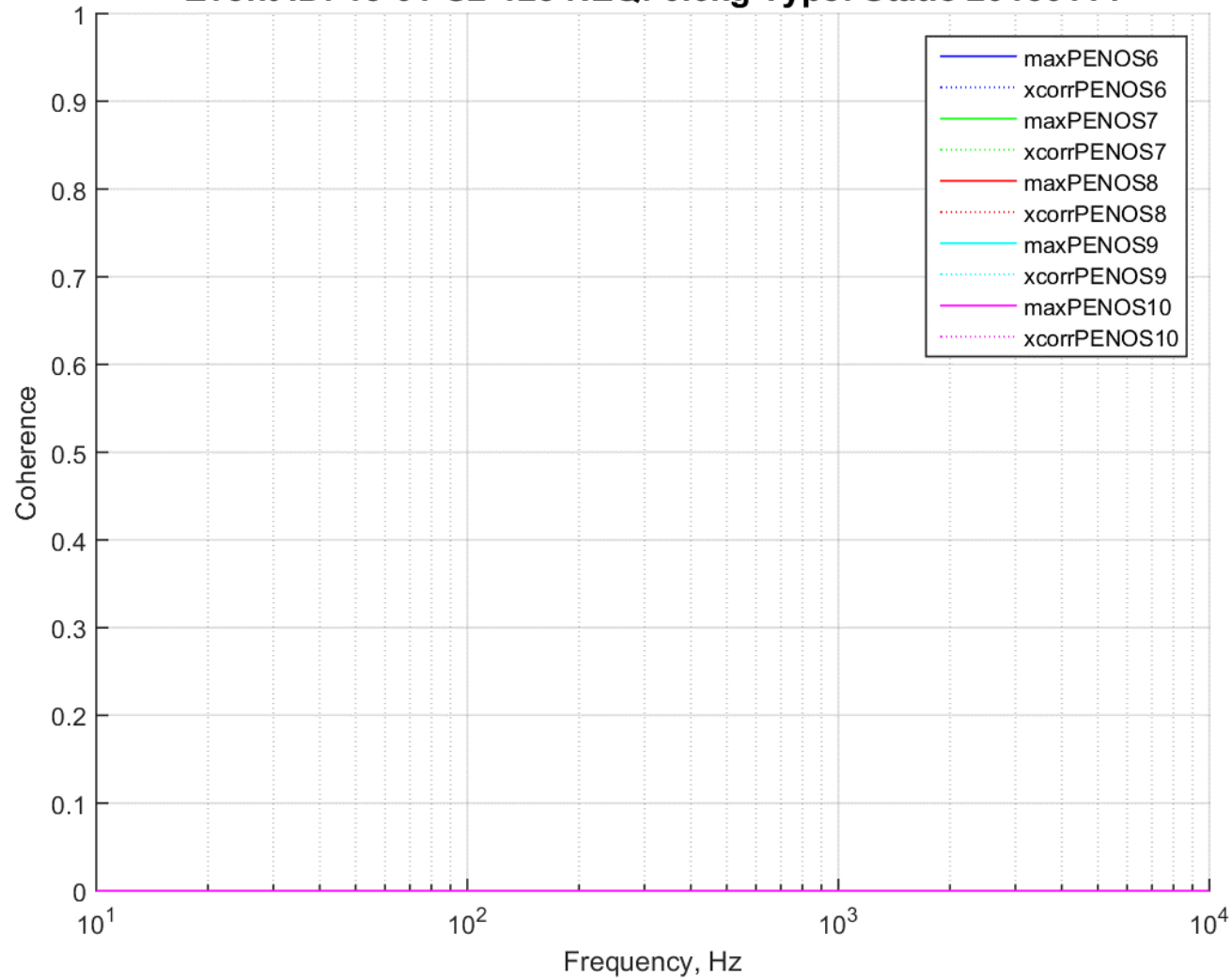
**FIGURE 2.217: PEN\_OS 6 - 10 15-01-S2-123**

**Event ID: 15-01-S2-123 NEQ: 0.6kg Type: Static 20150114**



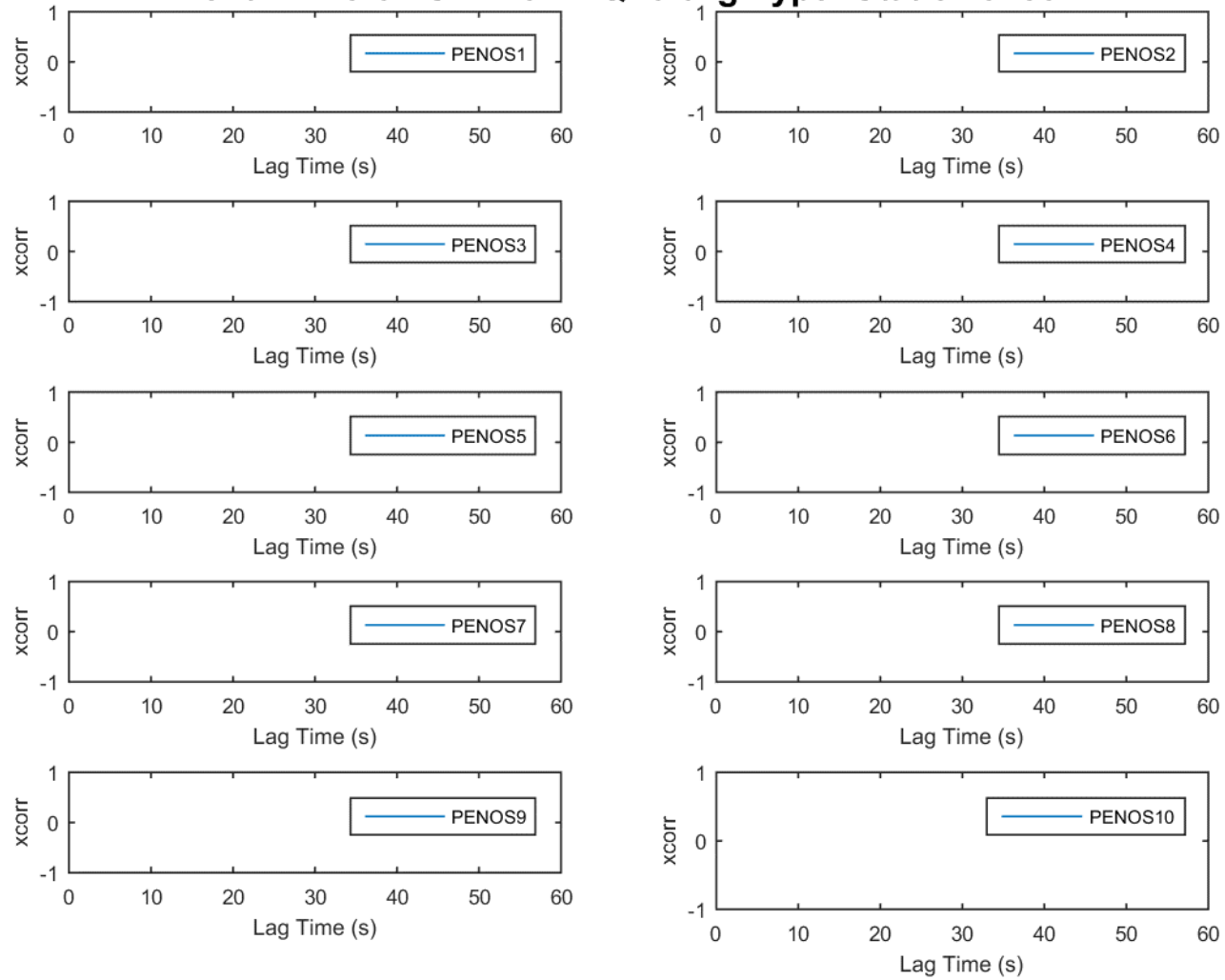
**FIGURE 2.218: COHERENCE PEN\_OS 1 - 5 15-01-S2-123**

**Event ID: 15-01-S2-123 NEQ: 0.6kg Type: Static 20150114**

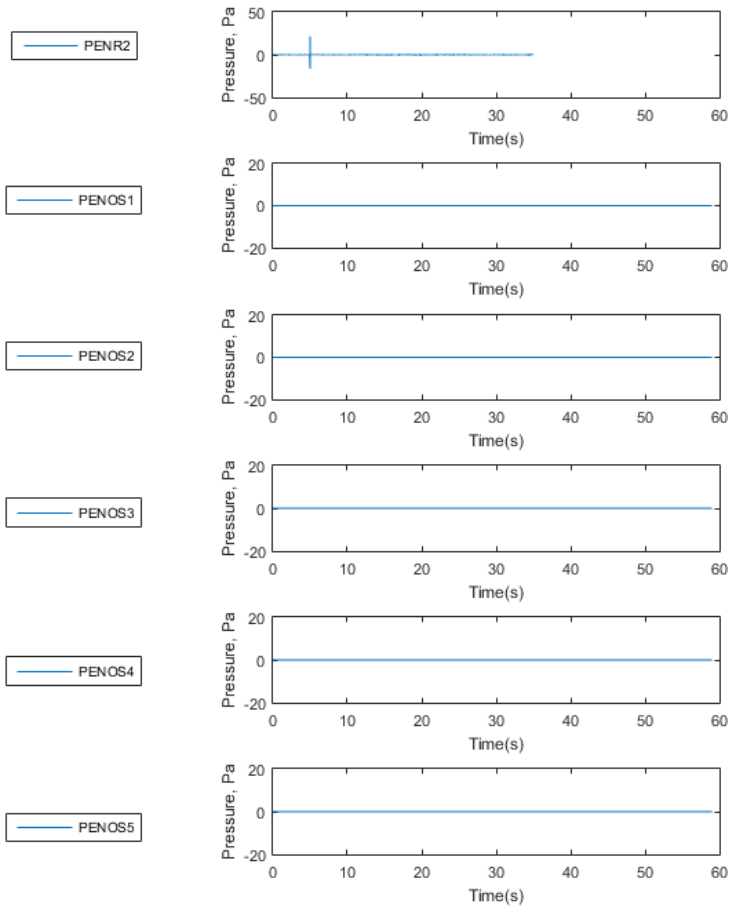


**FIGURE 2.219: COHERENCE PEN\_OS 6 - 10 15-01-S2-123CTD**

**Event ID: 15-01-S2-123 NEQ: 0.6kg Type: Static 20150114**



**FIGURE 2.220: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-123**



Event ID: 15-01-S2-126 NEQ: 0.6kg Type: Static 20150114

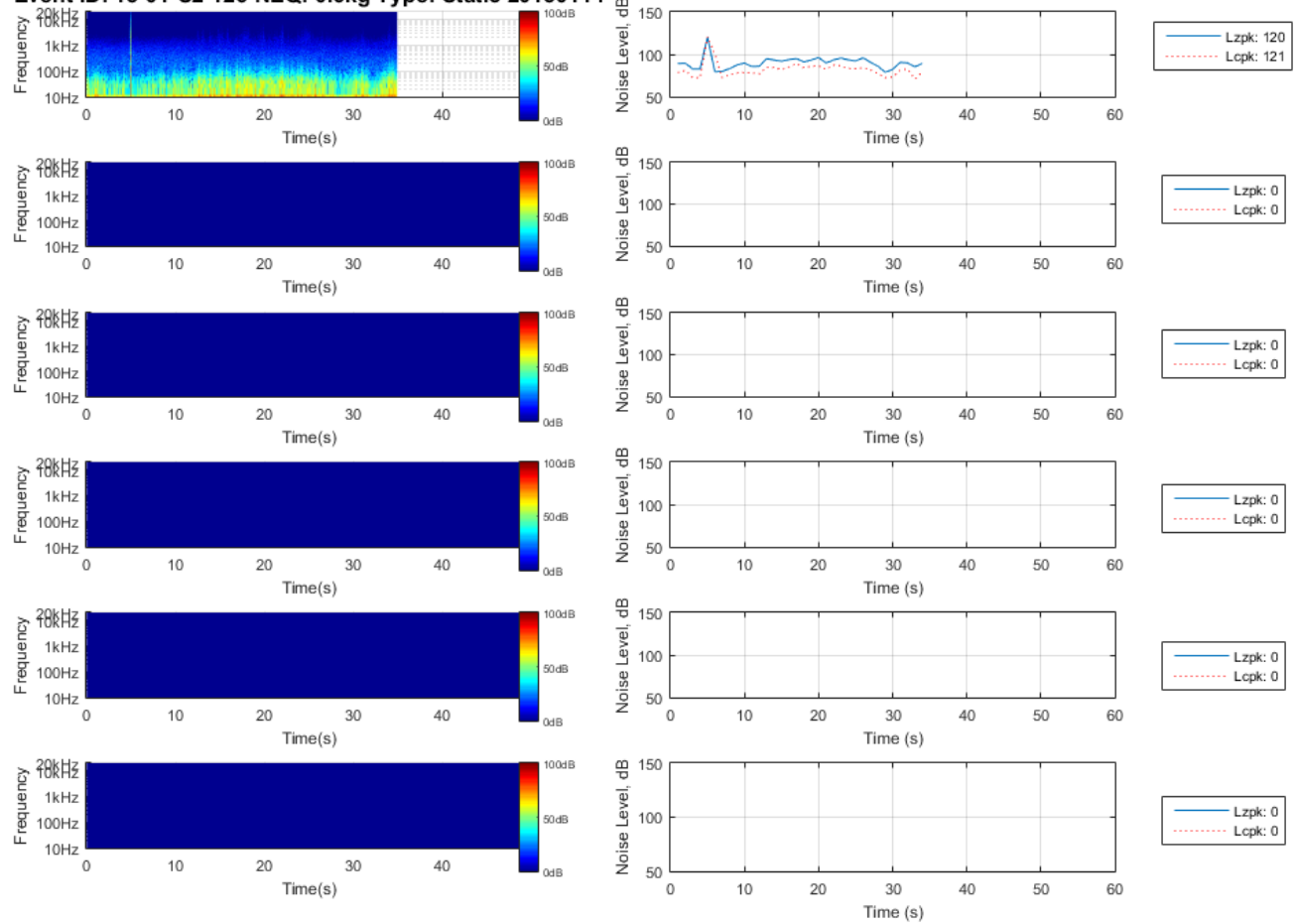
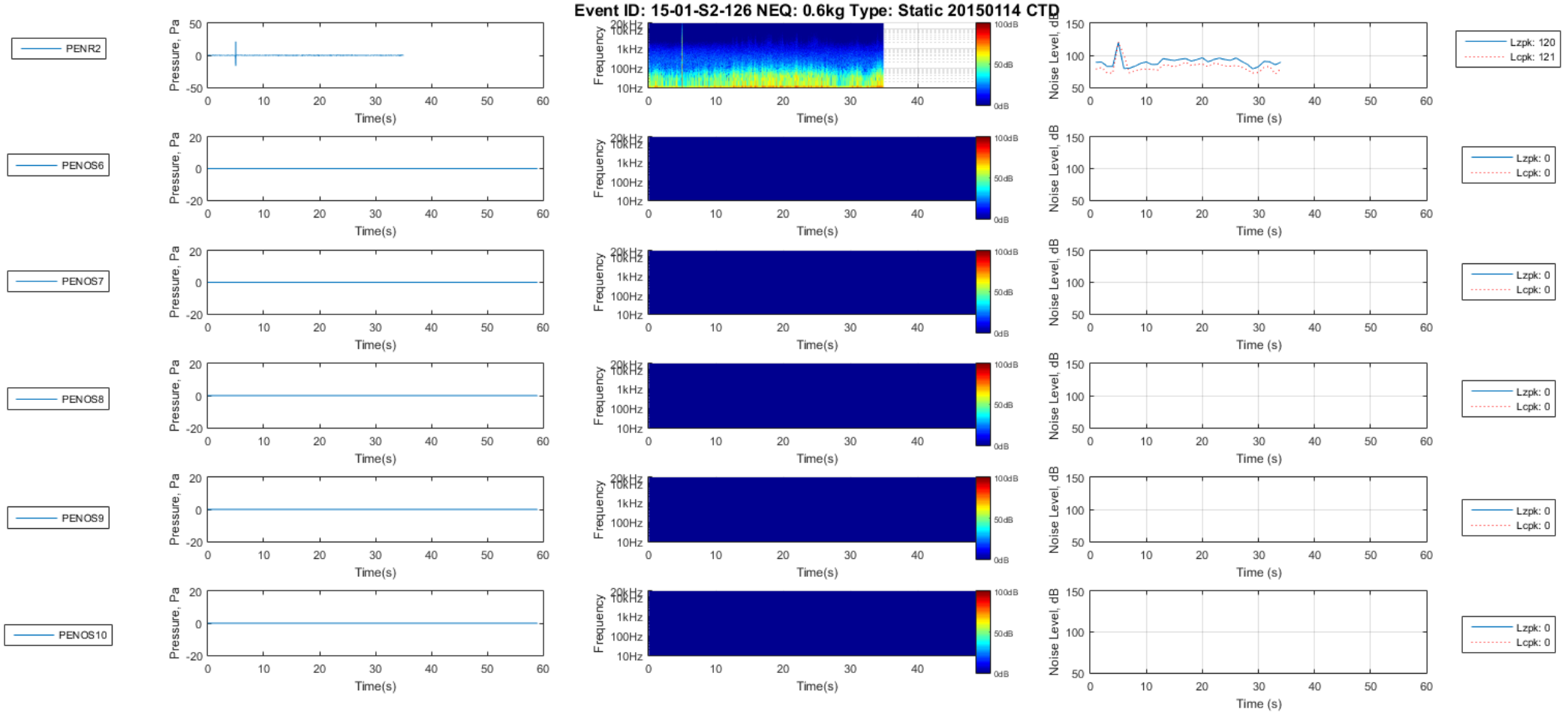
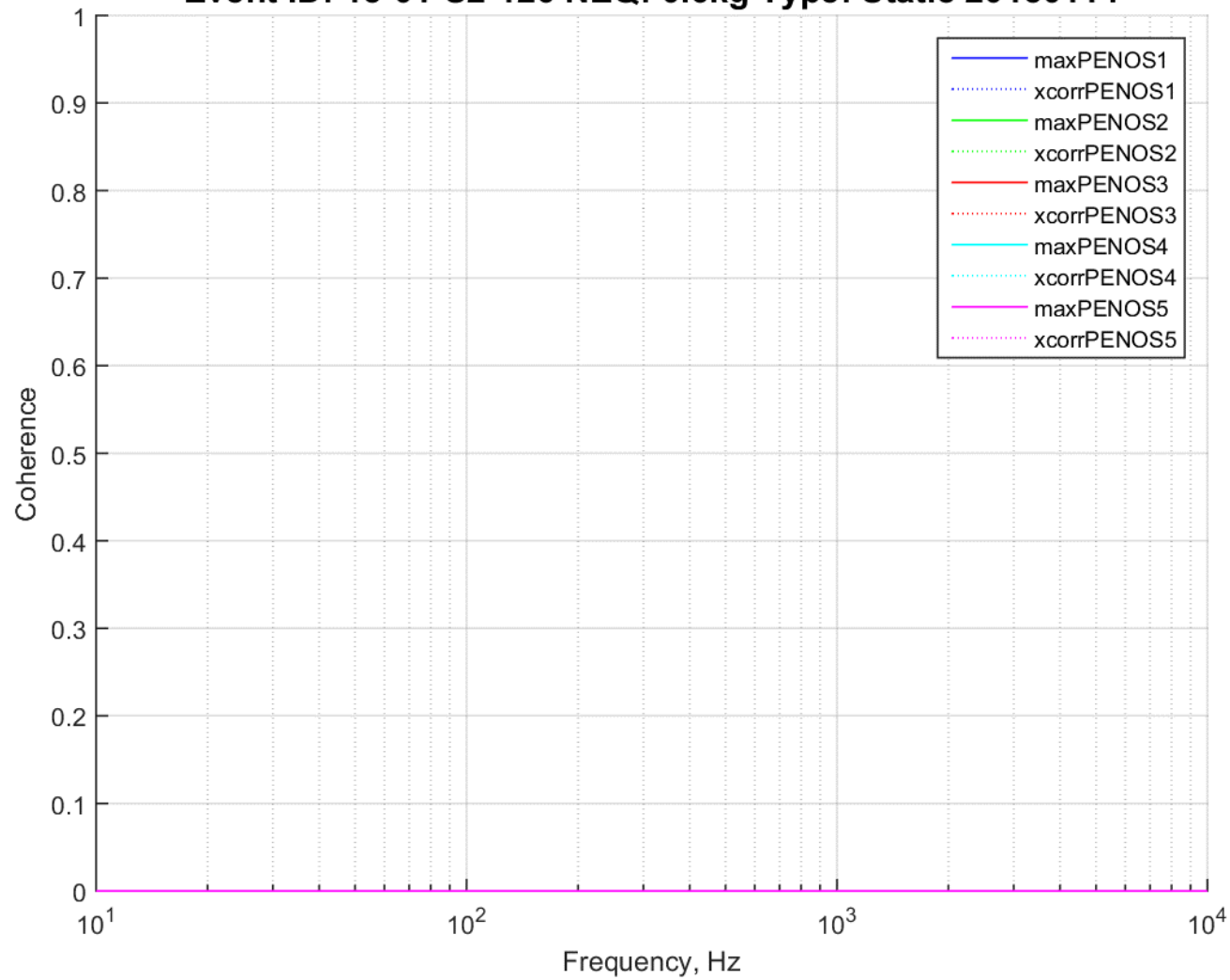


FIGURE 2.221: PEN\_OS 1 - 5 15-01-S2-126



**FIGURE 2.222: PEN\_OS 6 - 10 15-01-S2-126**

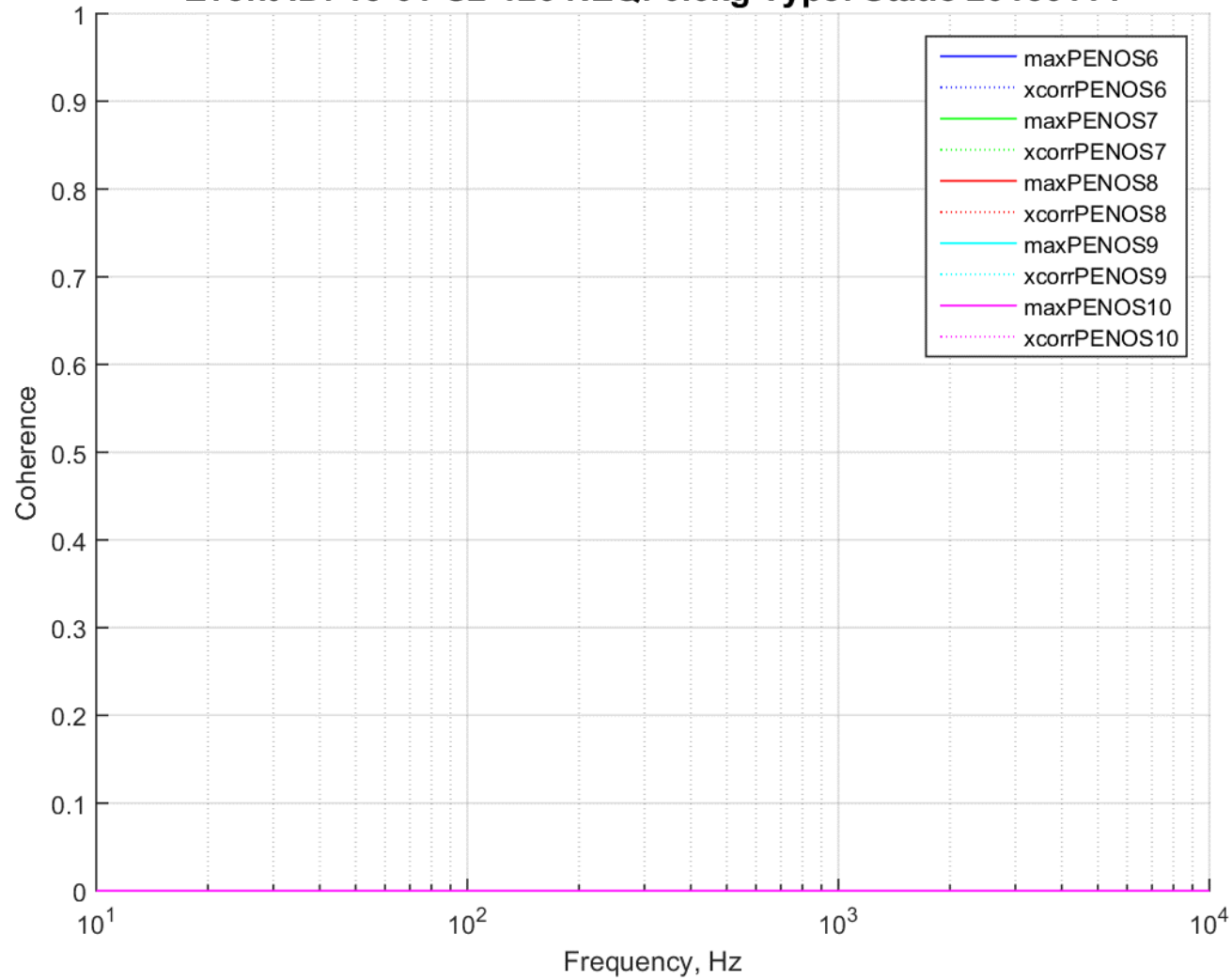
**Event ID: 15-01-S2-126 NEQ: 0.6kg Type: Static 20150114**



**FIGURE 2.223: COHERENCE PEN\_OS 1 - 5 15-01-S2-126**

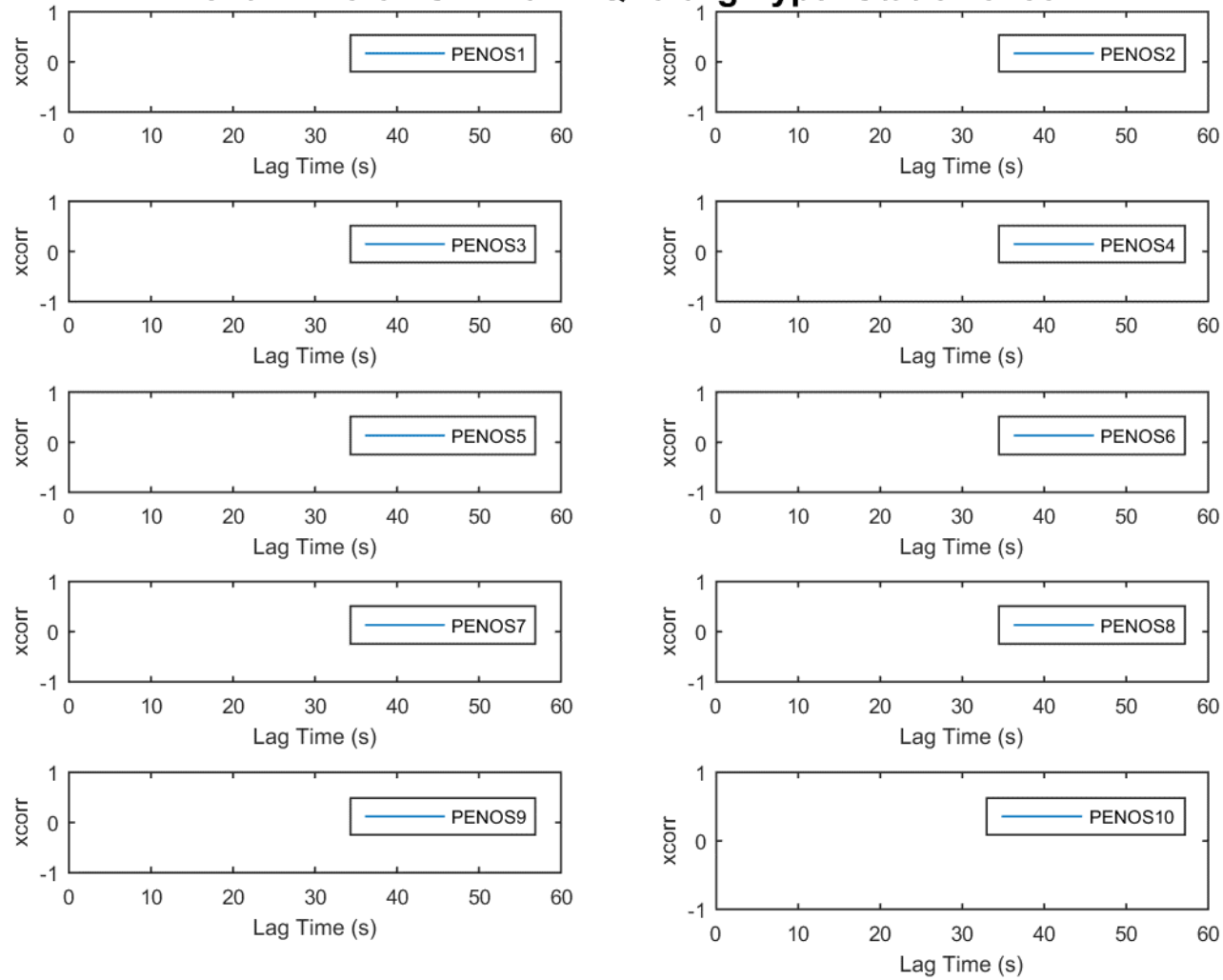


**Event ID: 15-01-S2-126 NEQ: 0.6kg Type: Static 20150114**

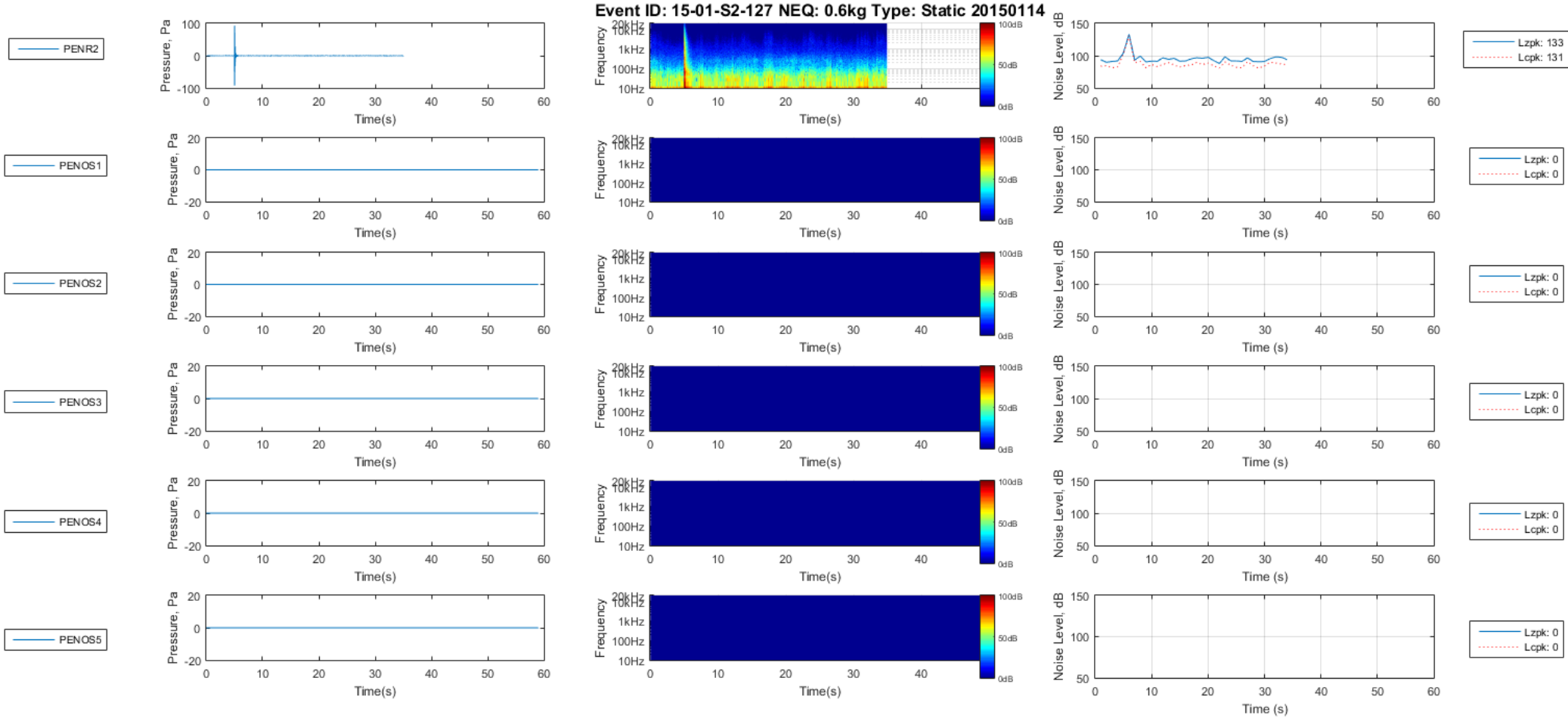


**FIGURE 2.224: COHERENCE PEN\_OS 6 - 10 15-01-S2-126CTD**

**Event ID: 15-01-S2-126 NEQ: 0.6kg Type: Static 20150114**



**FIGURE 2.225: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-126**



**FIGURE 2.226: PEN\_OS 1 - 5 15-01-S2-127**

Event ID: 15-01-S2-127 NEQ: 0.6kg Type: Static 20150114 CTD

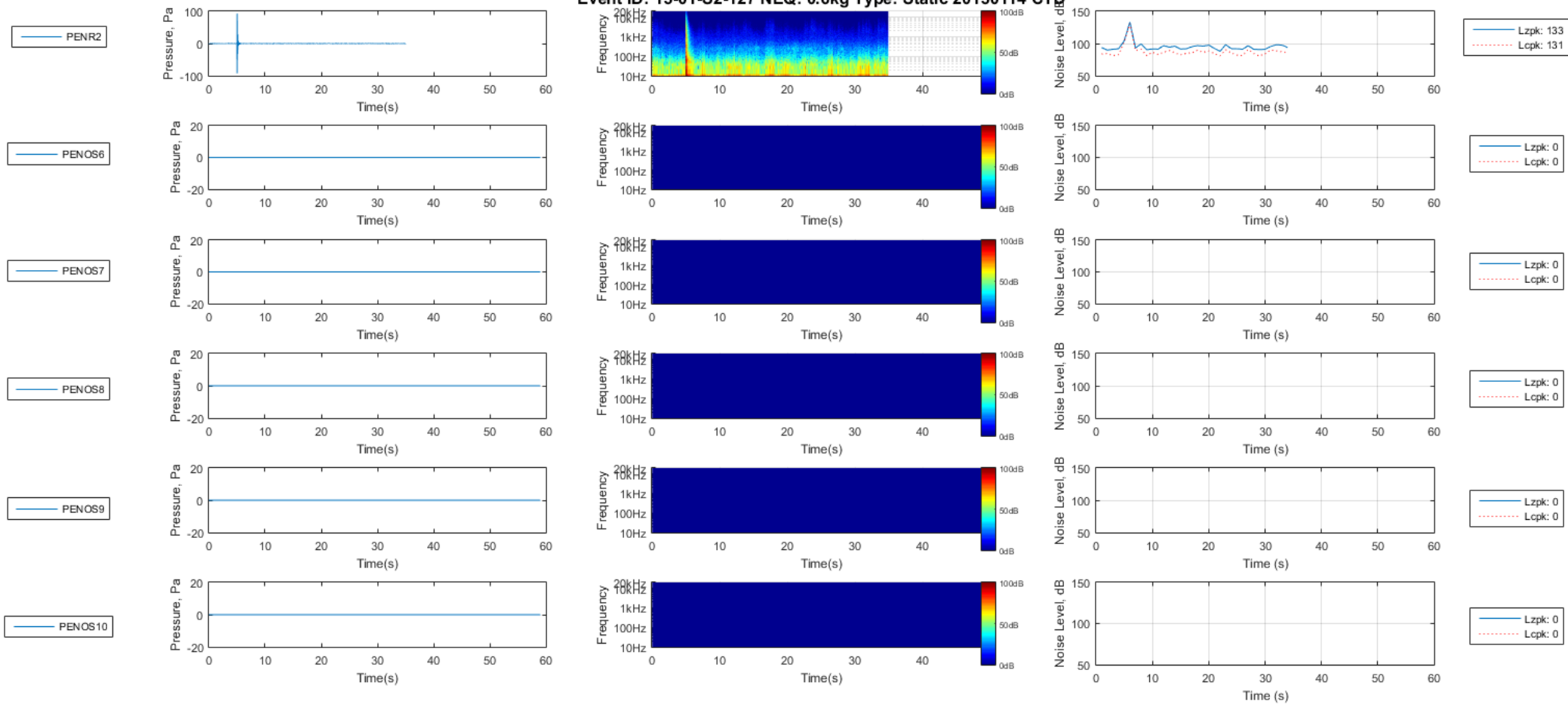
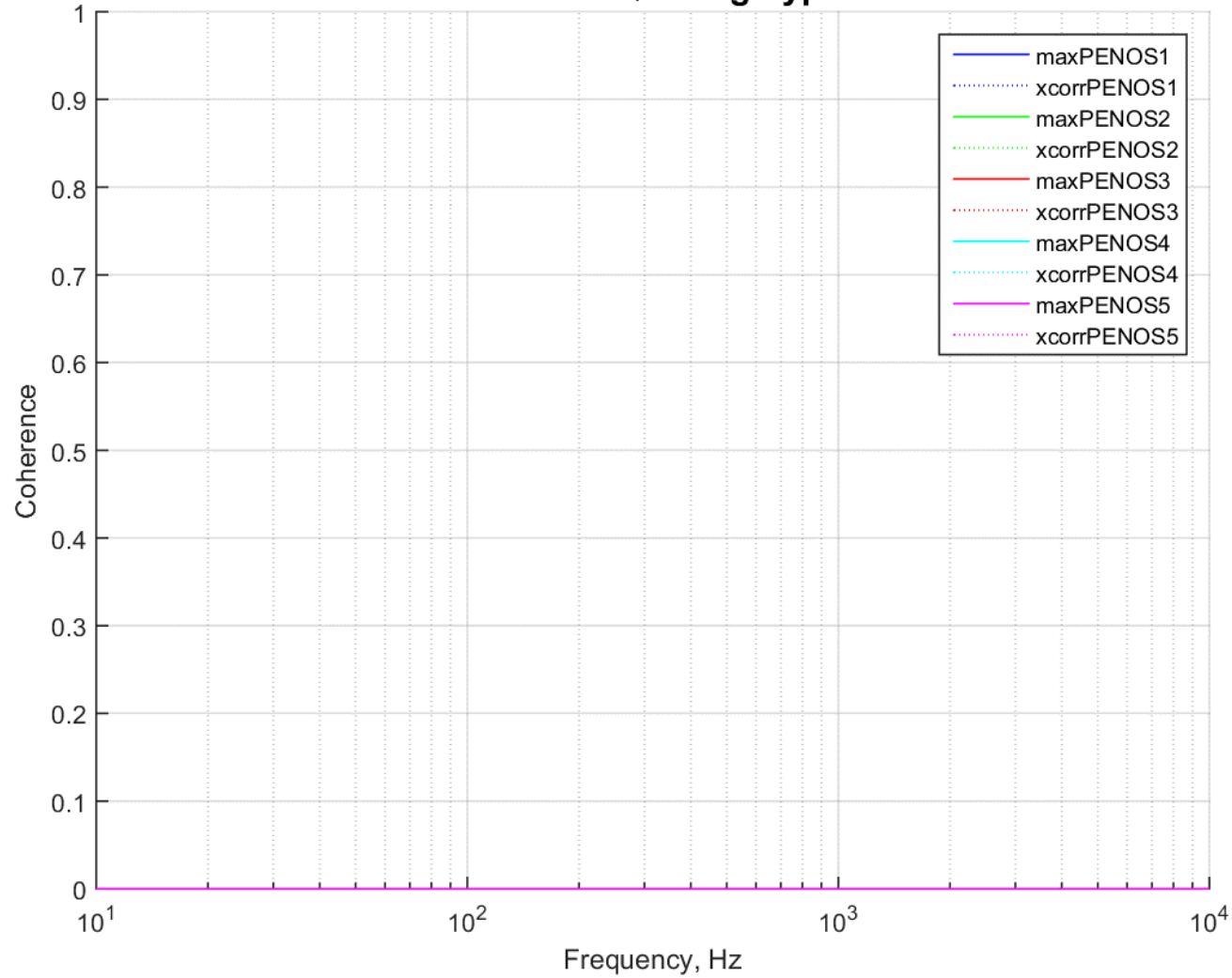


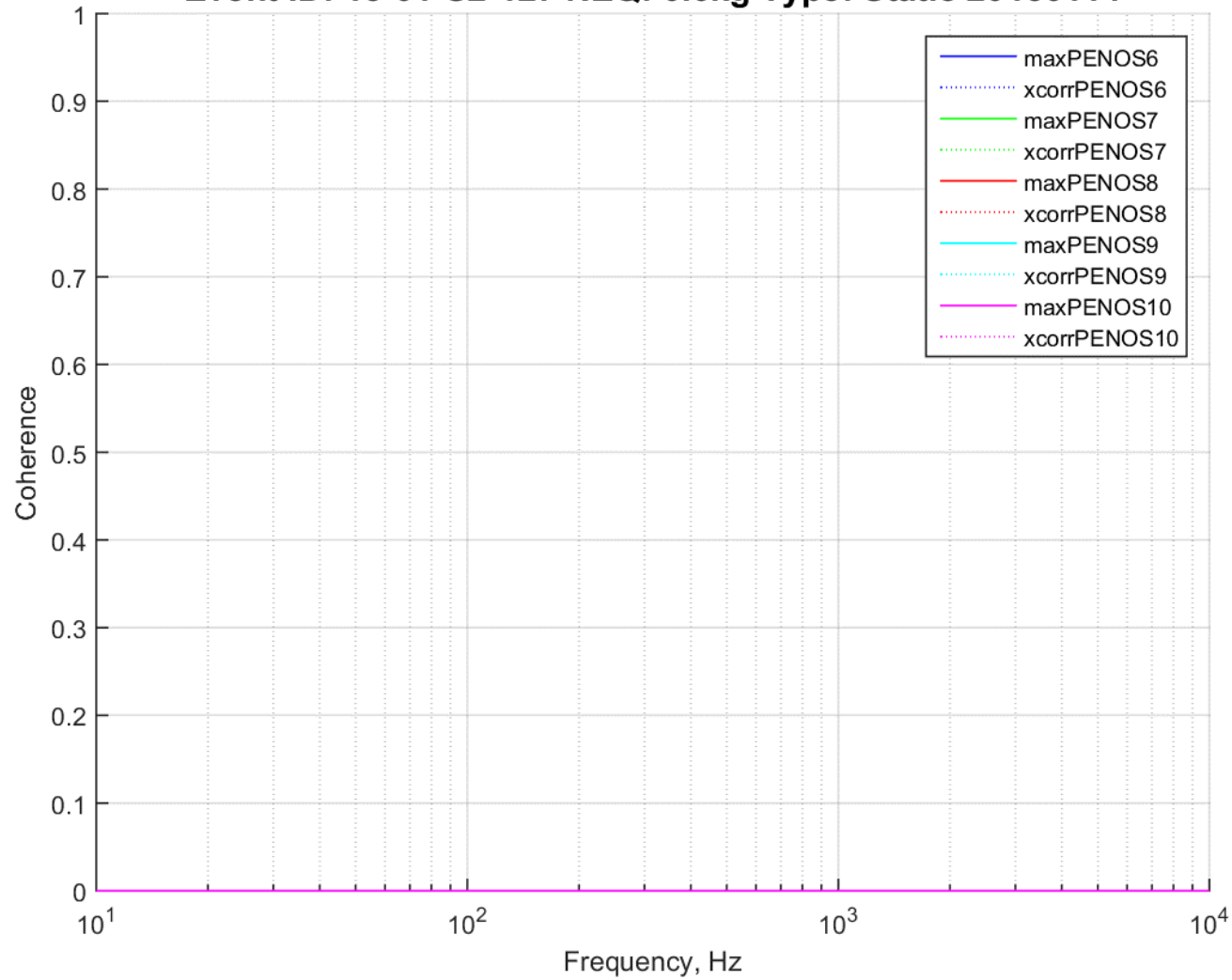
FIGURE 2.227: PEN\_OS 6 - 10 15-01-S2-127

**Event ID: 15-01-S2-127 NEQ: 0.6kg Type: Static 20150114**



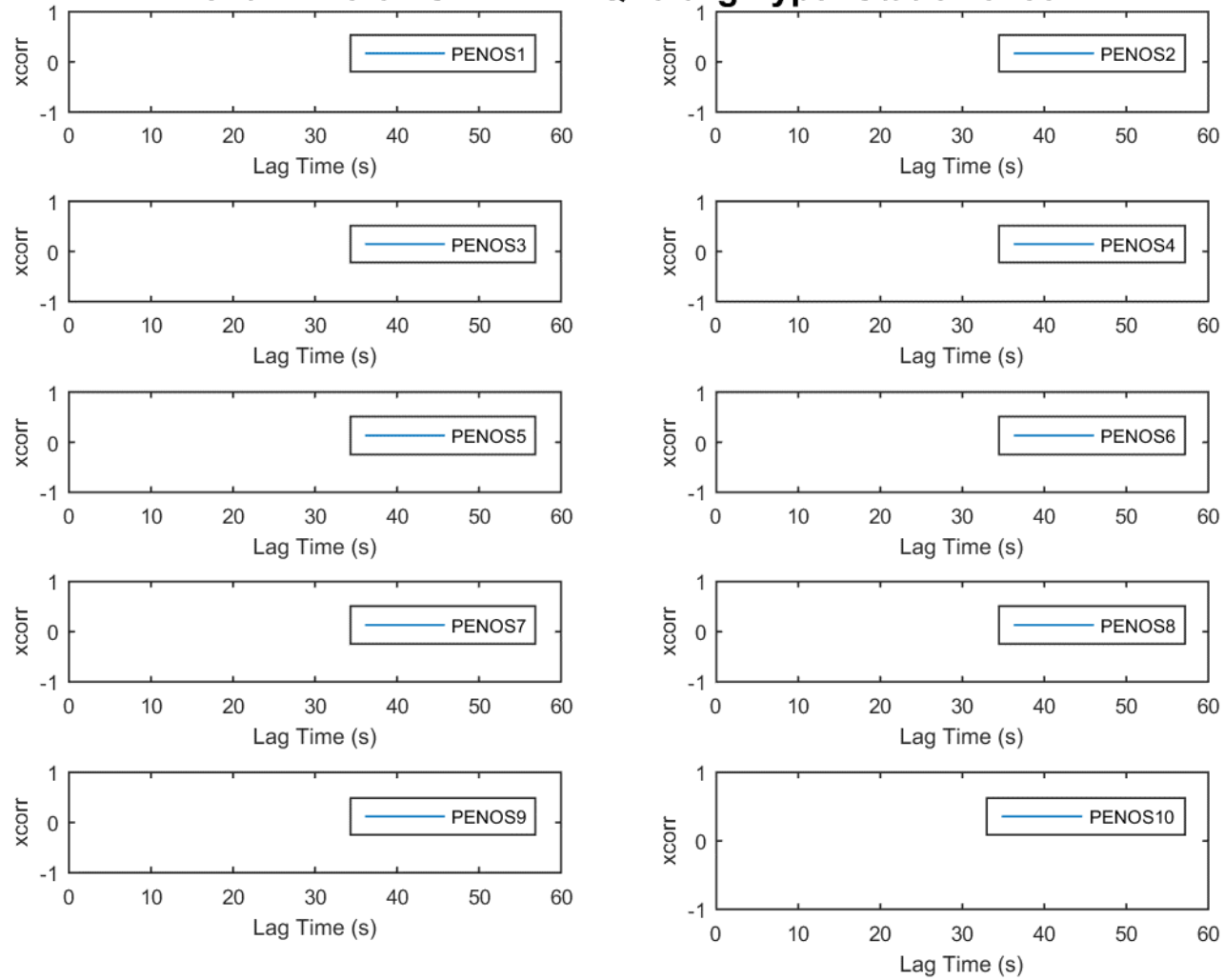
**FIGURE 2.228: COHERENCE PEN\_OS 1 - 5 15-01-S2-127**

**Event ID: 15-01-S2-127 NEQ: 0.6kg Type: Static 20150114**

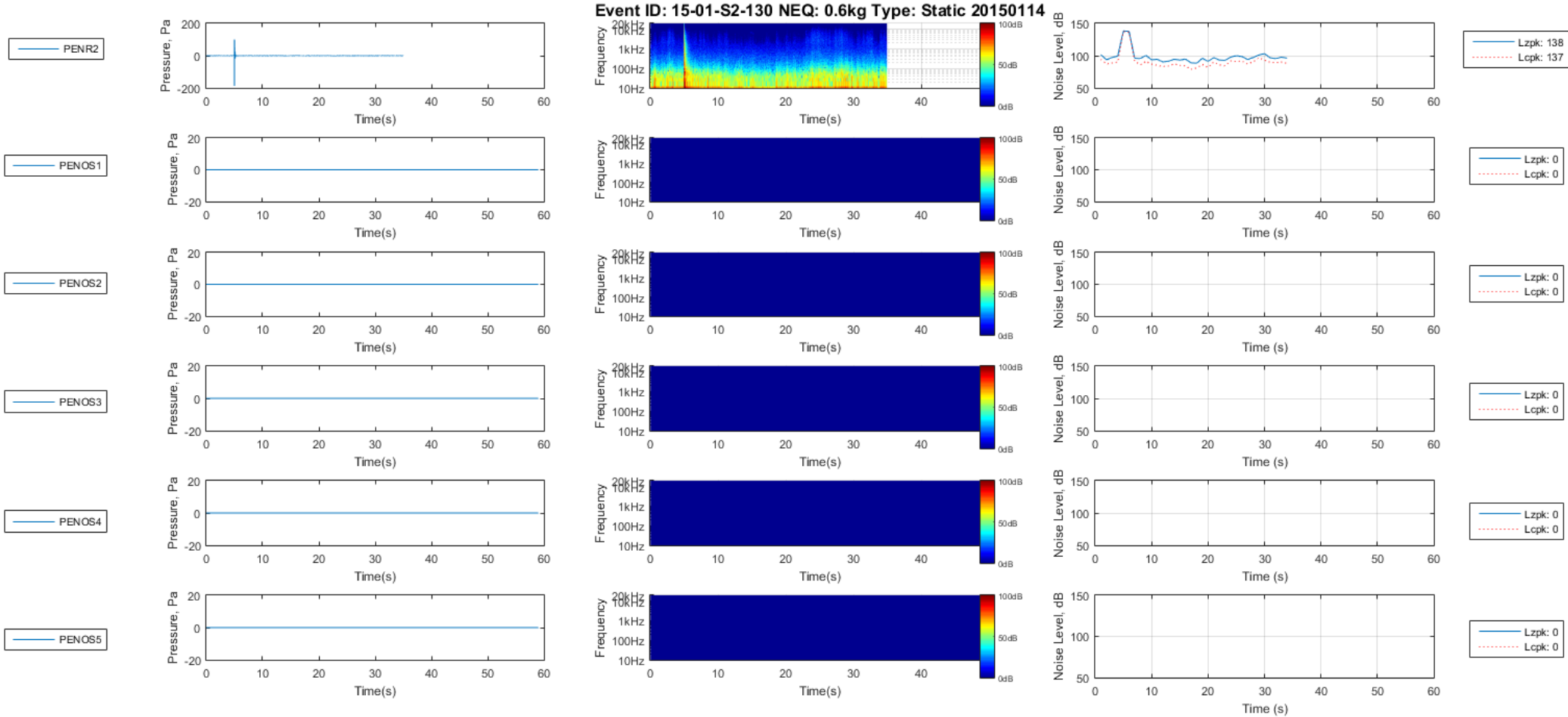


**FIGURE 2.229: COHERENCE PEN\_OS 6 - 10 15-01-S2-127CTD**

**Event ID: 15-01-S2-127 NEQ: 0.6kg Type: Static 20150114**



**FIGURE 2.230: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-127**



**FIGURE 2.231: PEN\_OS 1 - 5 15-01-S2-130**



Event ID: 15-01-S2-130 NEQ: 0.6kg Type: Static 20150114 CTD

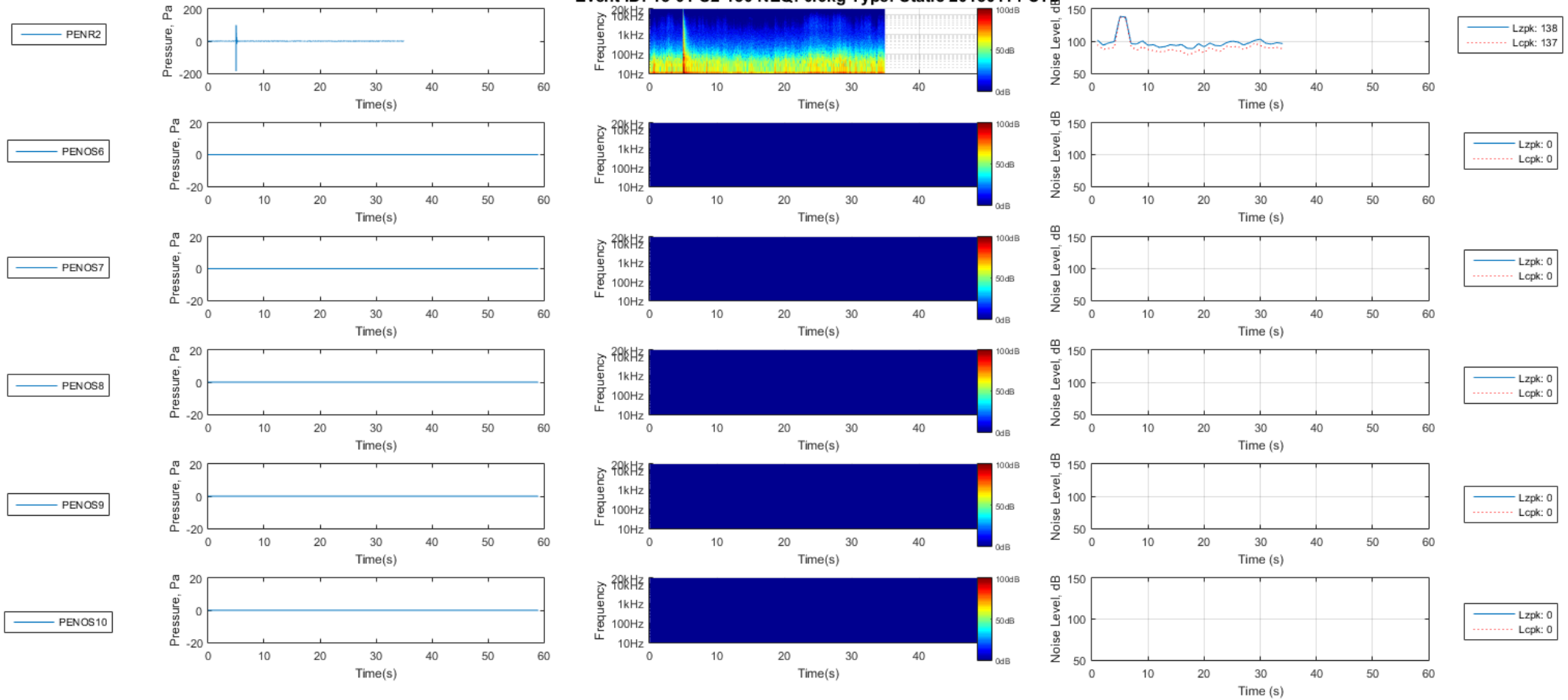
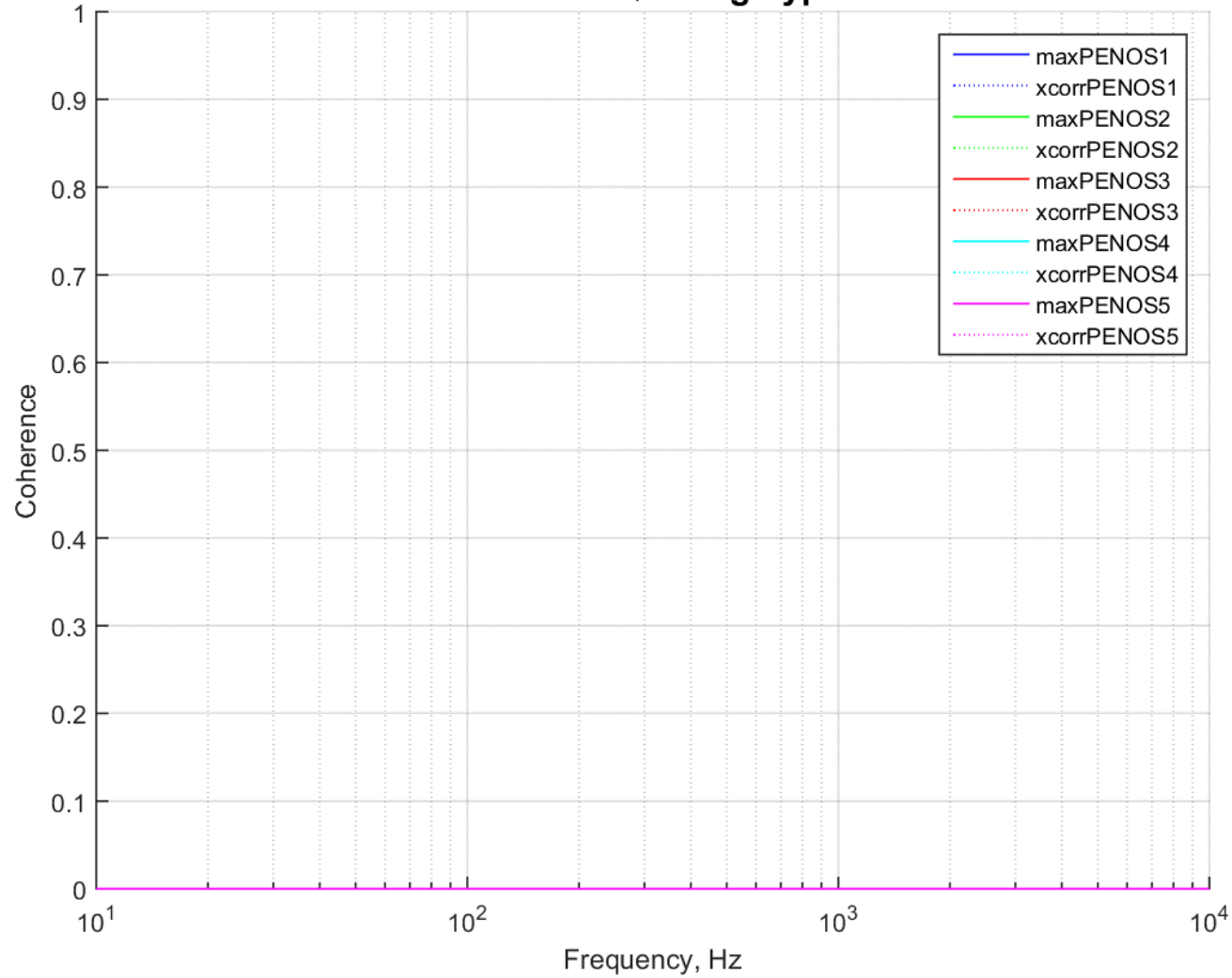


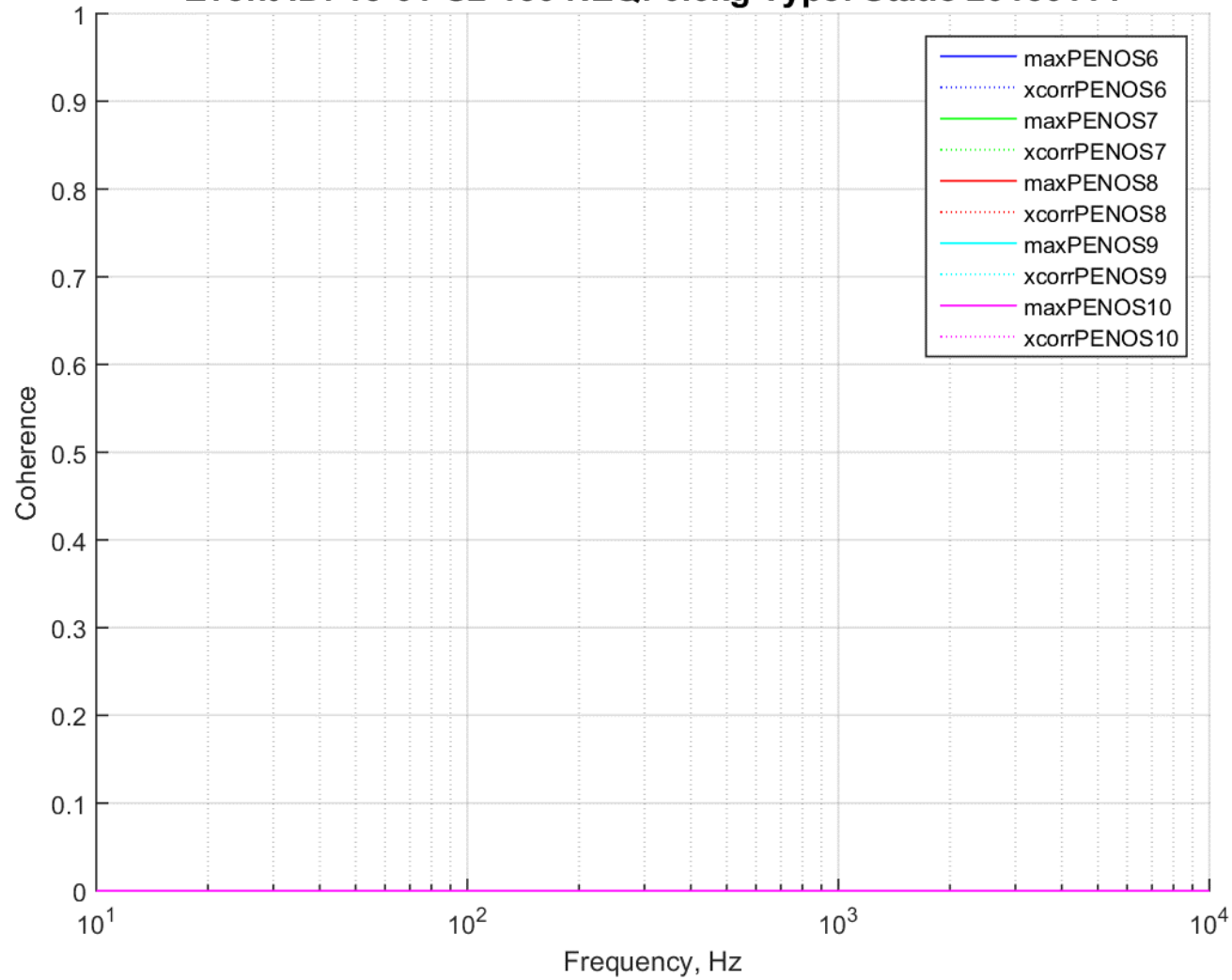
FIGURE 2.232: PEN\_OS 6 - 10 15-01-S2-130

**Event ID: 15-01-S2-130 NEQ: 0.6kg Type: Static 20150114**



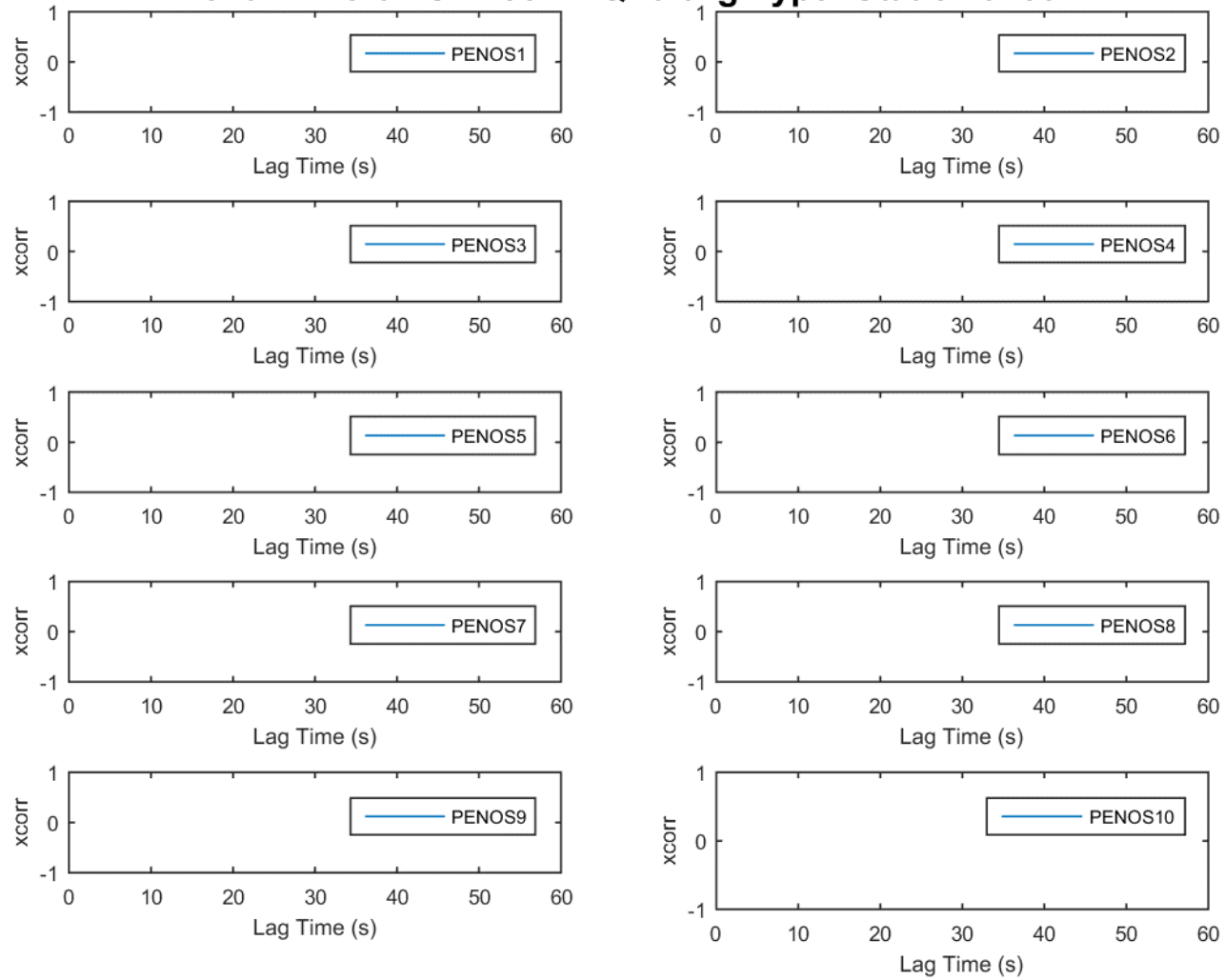
**FIGURE 2.233: COHERENCE PEN\_OS 1 - 5 15-01-S2-130**

**Event ID: 15-01-S2-130 NEQ: 0.6kg Type: Static 20150114**

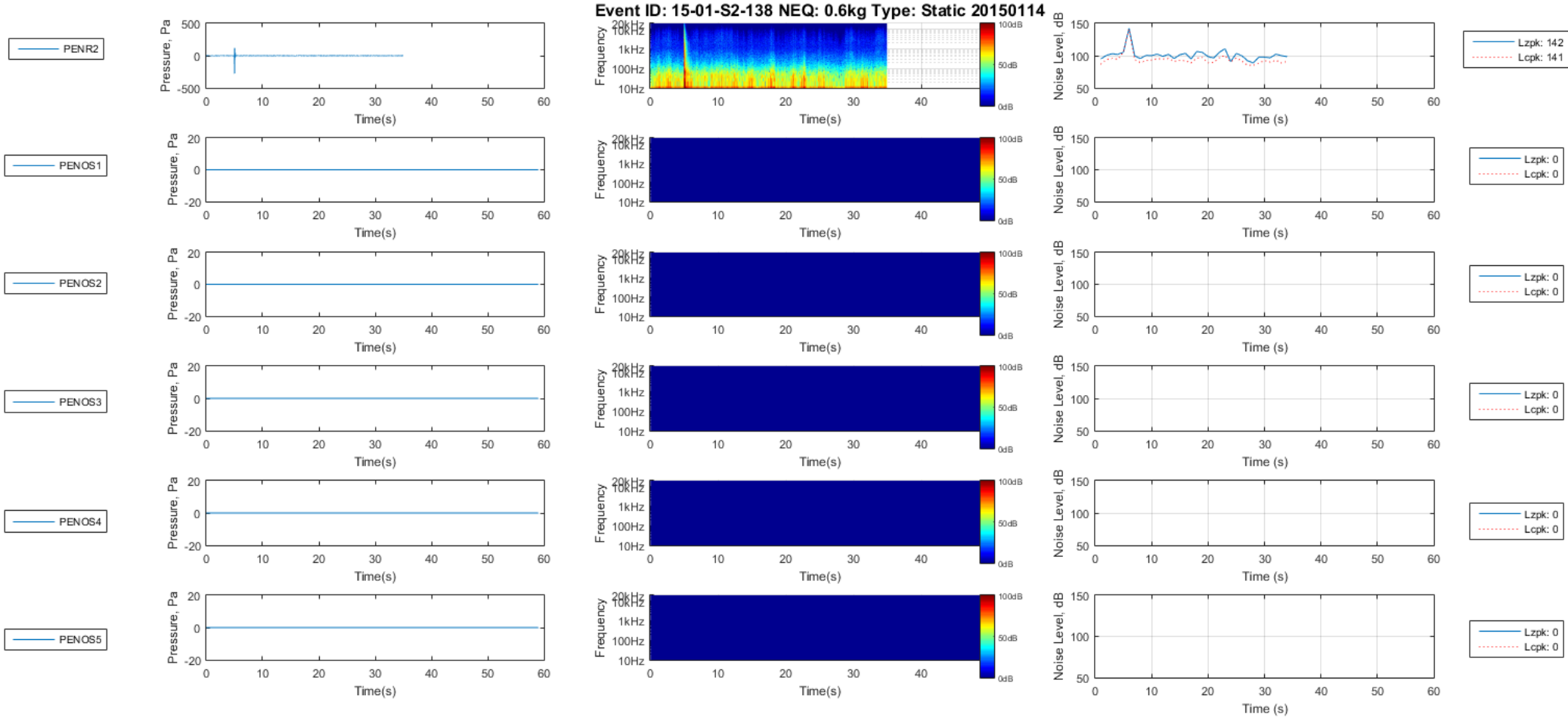


**FIGURE 2.234: COHERENCE PEN\_OS 6 - 10 15-01-S2-130CTD**

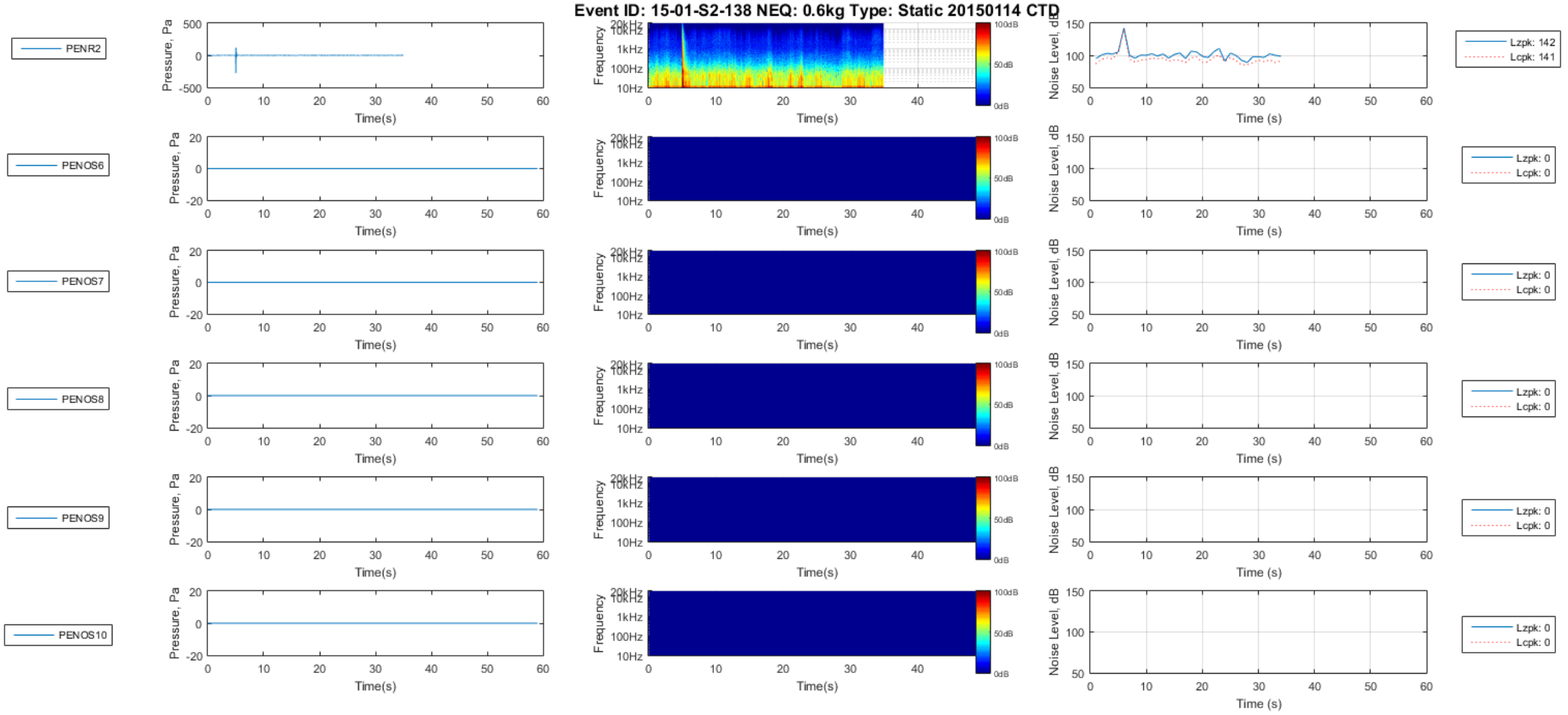
**Event ID: 15-01-S2-130 NEQ: 0.6kg Type: Static 20150114**



**FIGURE 2.235: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-130**

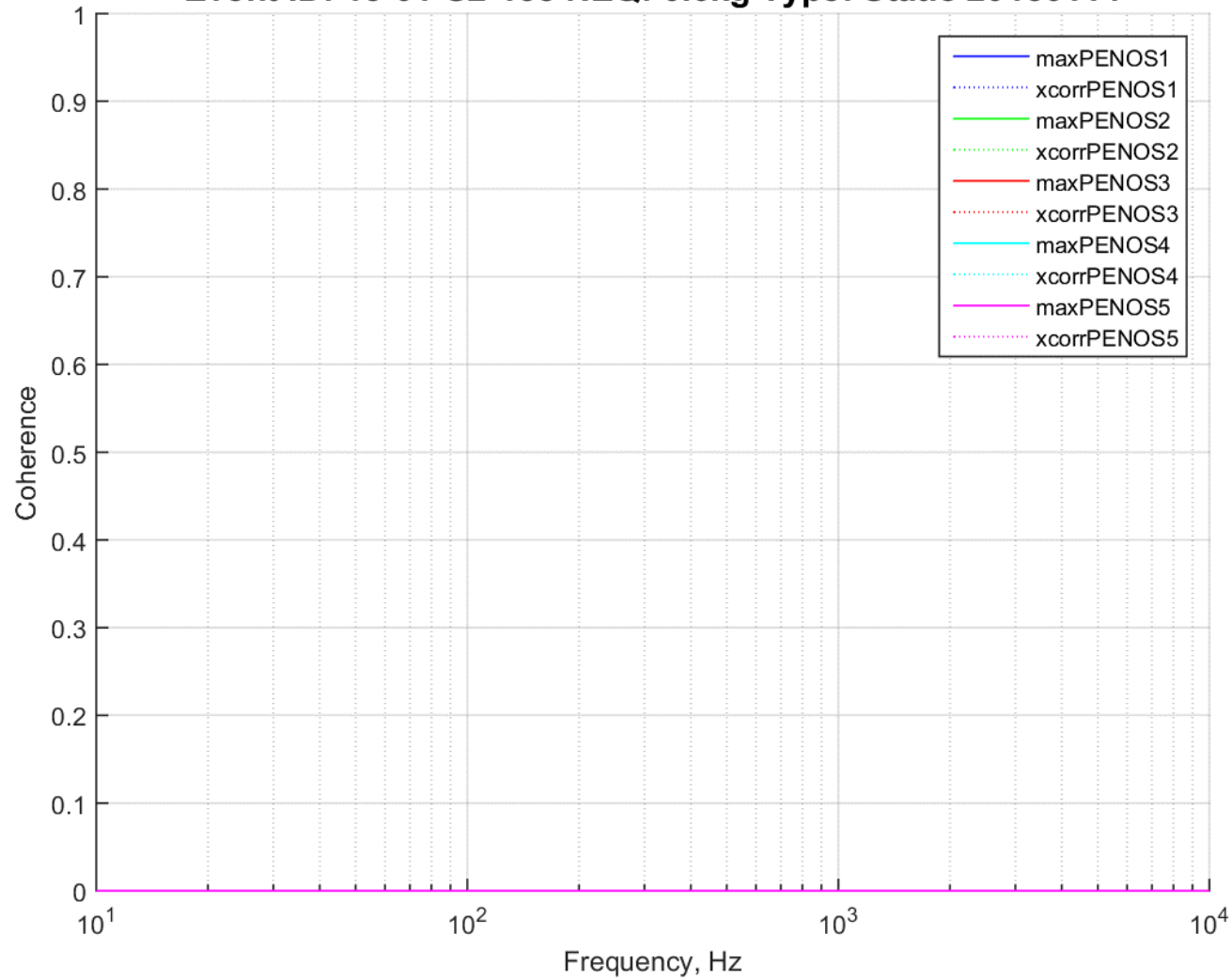


**FIGURE 2.236: PEN\_OS 1 - 5 15-01-S2-138**



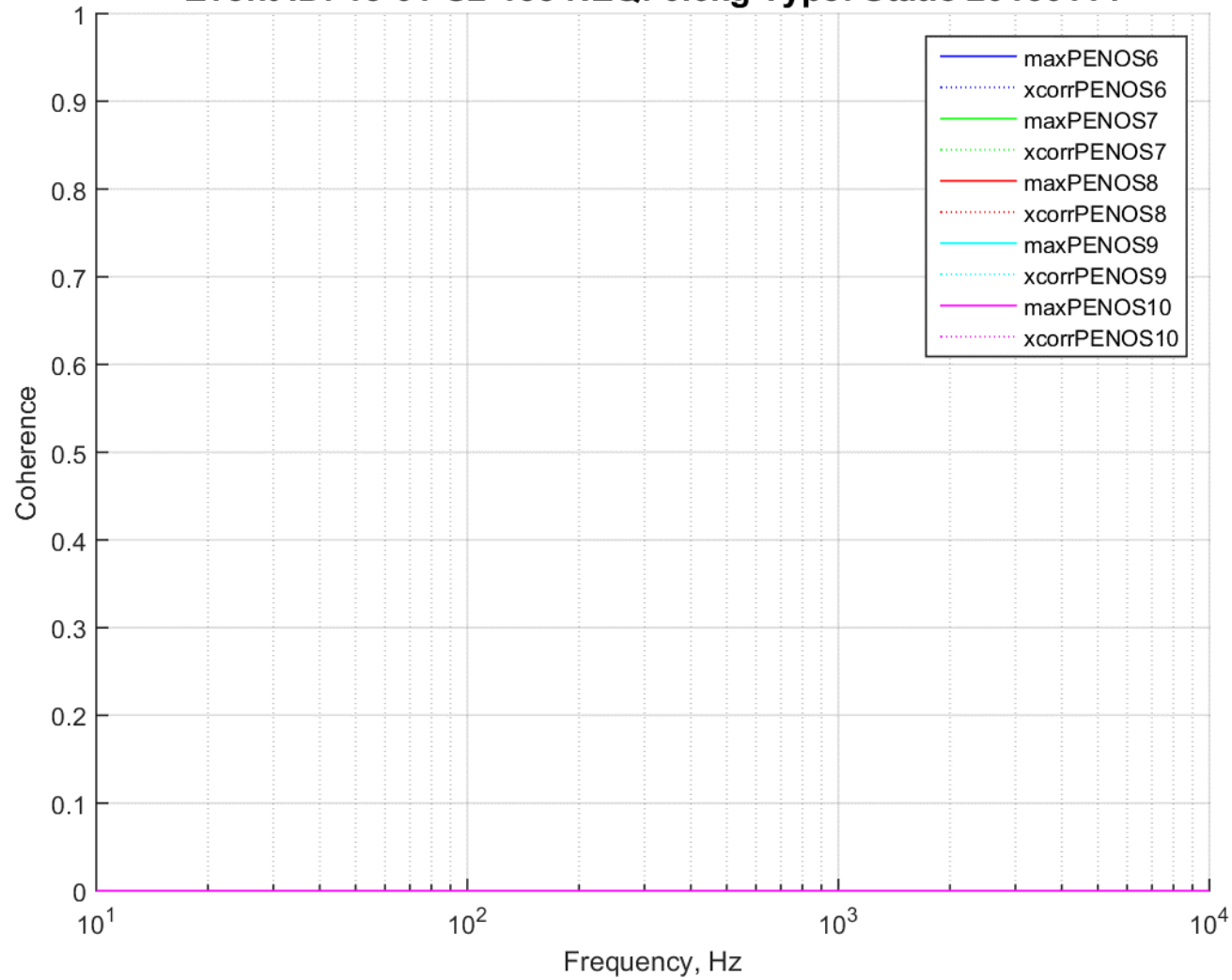
**FIGURE 2.237: PEN\_OS 6 - 10 15-01-S2-138**

**Event ID: 15-01-S2-138 NEQ: 0.6kg Type: Static 20150114**



**FIGURE 2.238: COHERENCE PEN\_OS 1 - 5 15-01-S2-138**

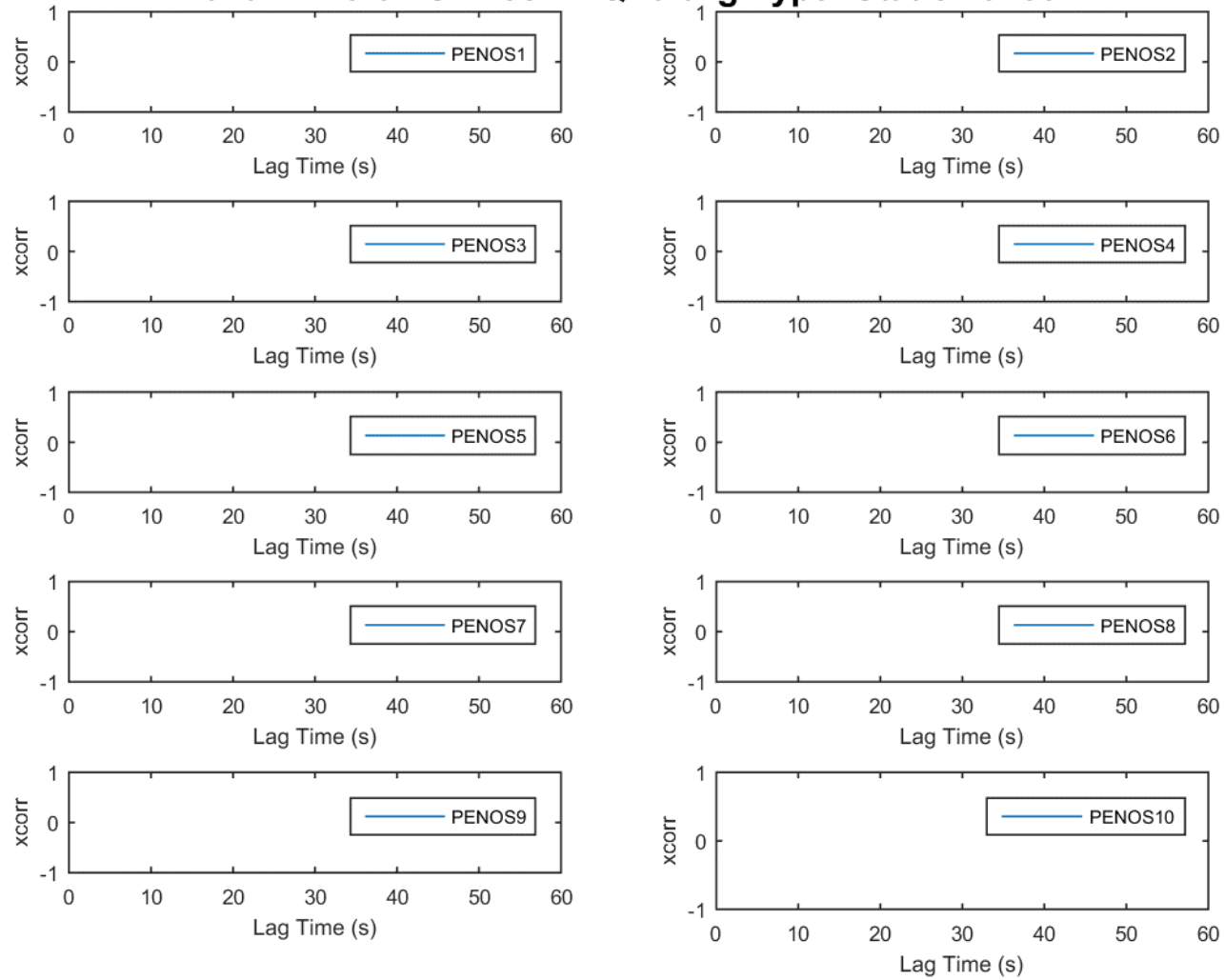
**Event ID: 15-01-S2-138 NEQ: 0.6kg Type: Static 20150114**



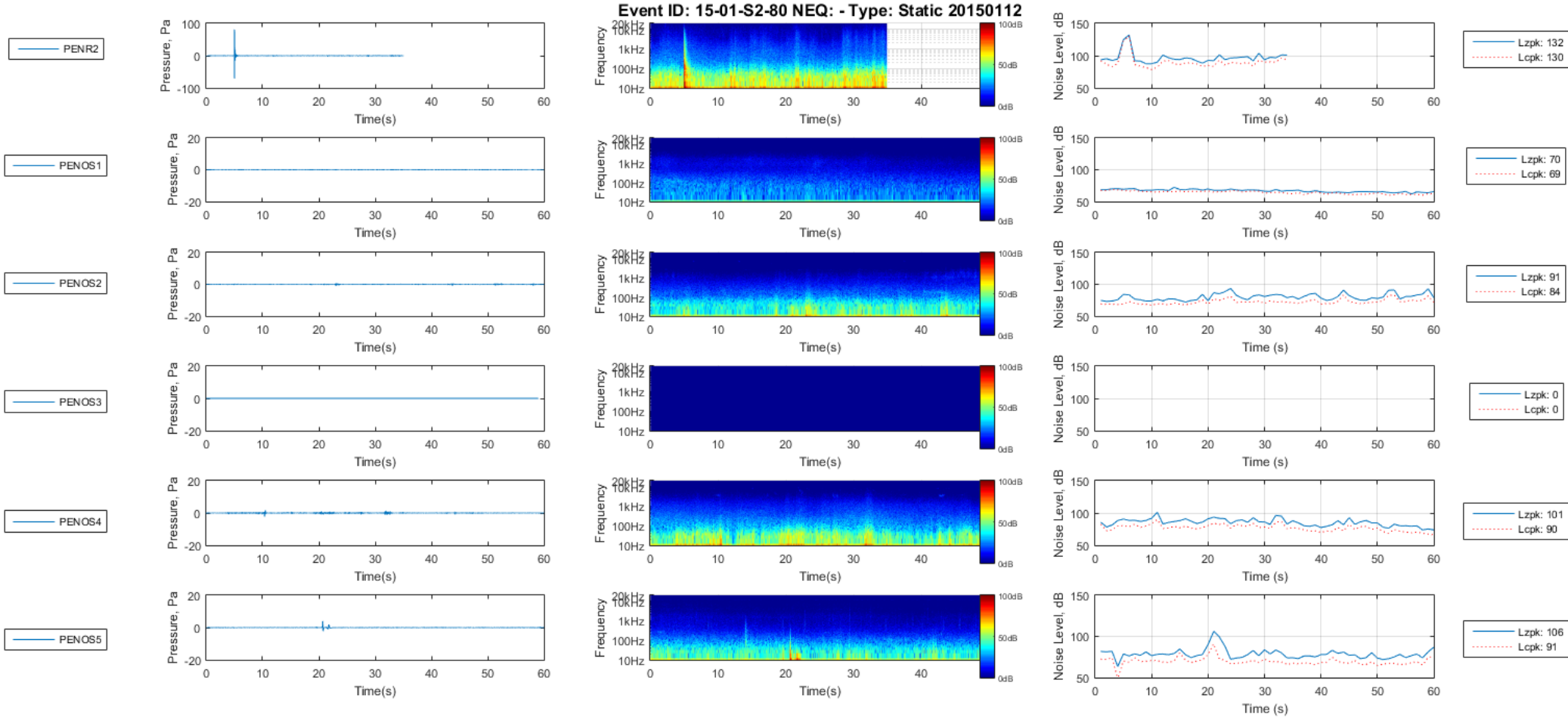
**FIGURE 2.239: COHERENCE PEN\_OS 6 - 10 15-01-S2-138CTD**



**Event ID: 15-01-S2-138 NEQ: 0.6kg Type: Static 20150114**



**FIGURE 2.240: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-138**



**FIGURE 2.241: PEN\_OS 1 - 5 15-01-S2-80**

Event ID: 15-01-S2-80 NEQ: - Type: Static 20150112 CTD

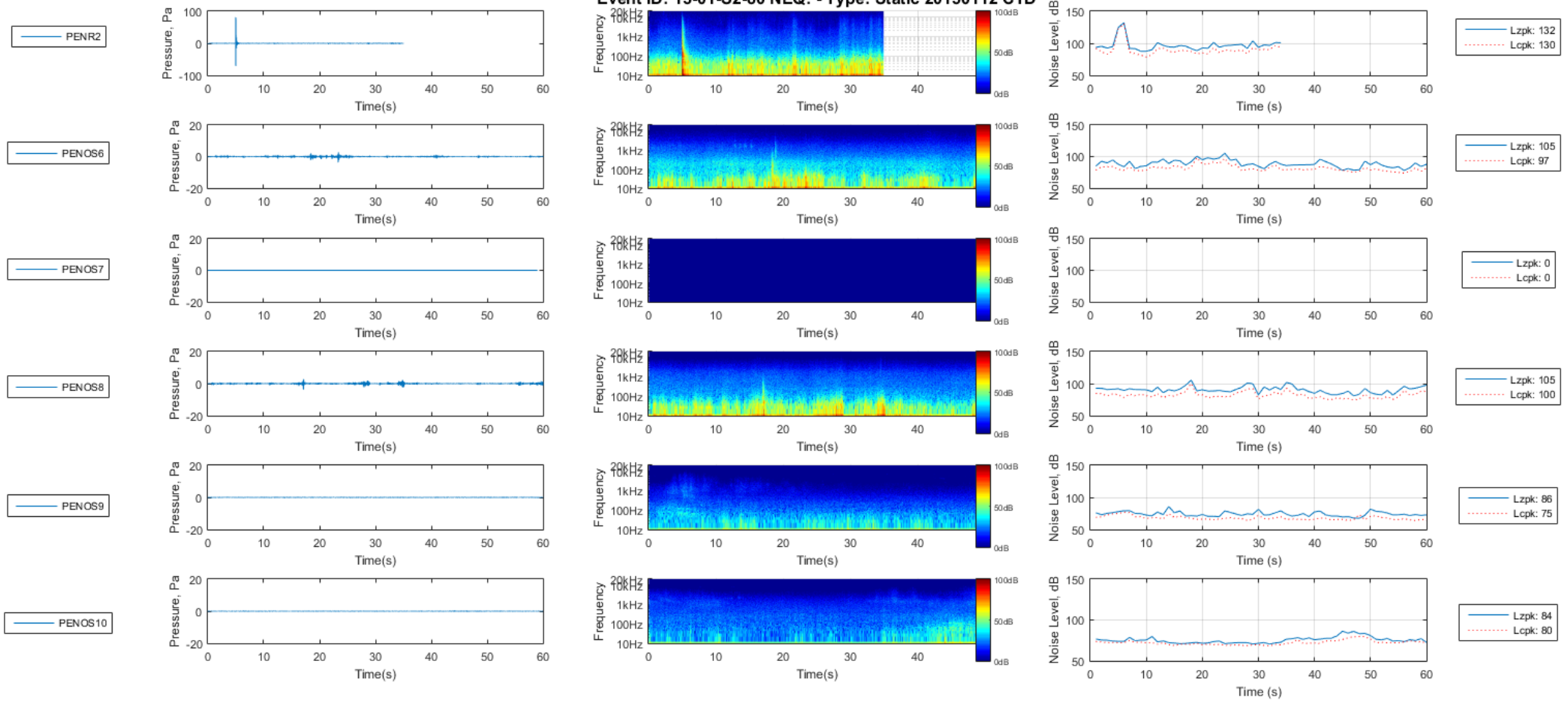


FIGURE 2.242: PEN\_OS 6 - 10 15-01-S2-80

Event ID: 15-01-S2-80 NEQ: - Type: Static 20150112

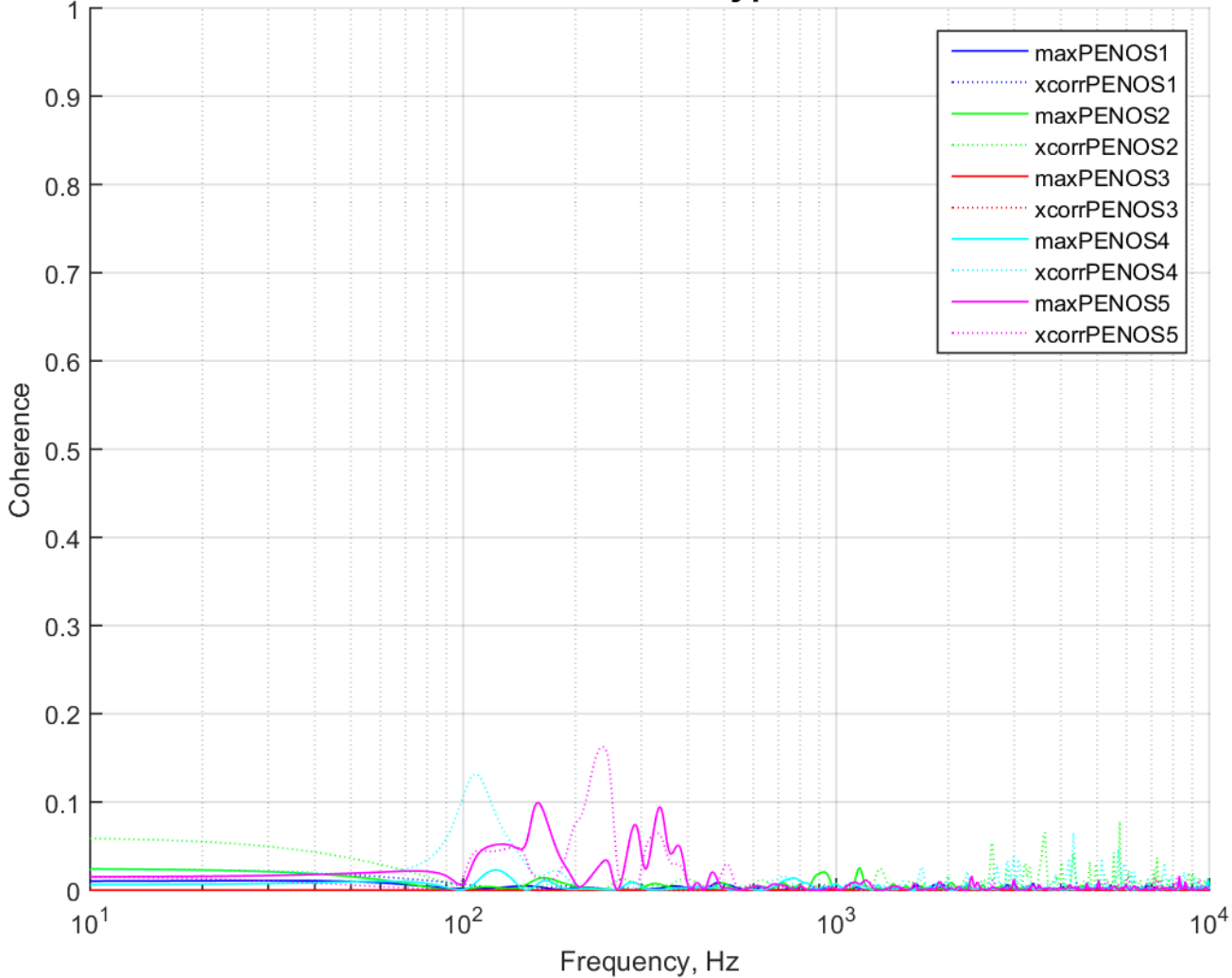


FIGURE 2.243: COHERENCE PEN\_OS 1 - 5 15-01-S2-80

Event ID: 15-01-S2-80 NEQ: - Type: Static 20150112

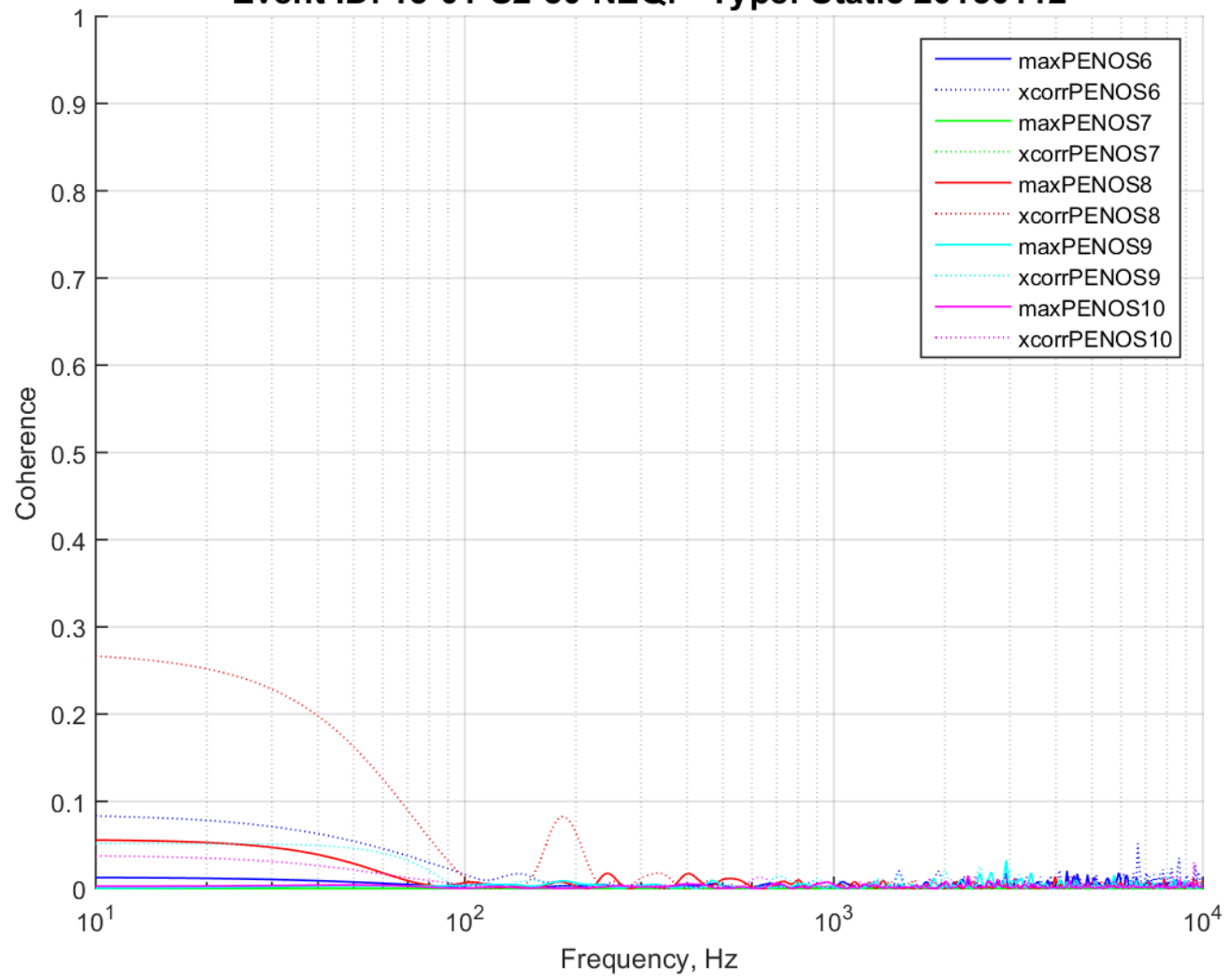
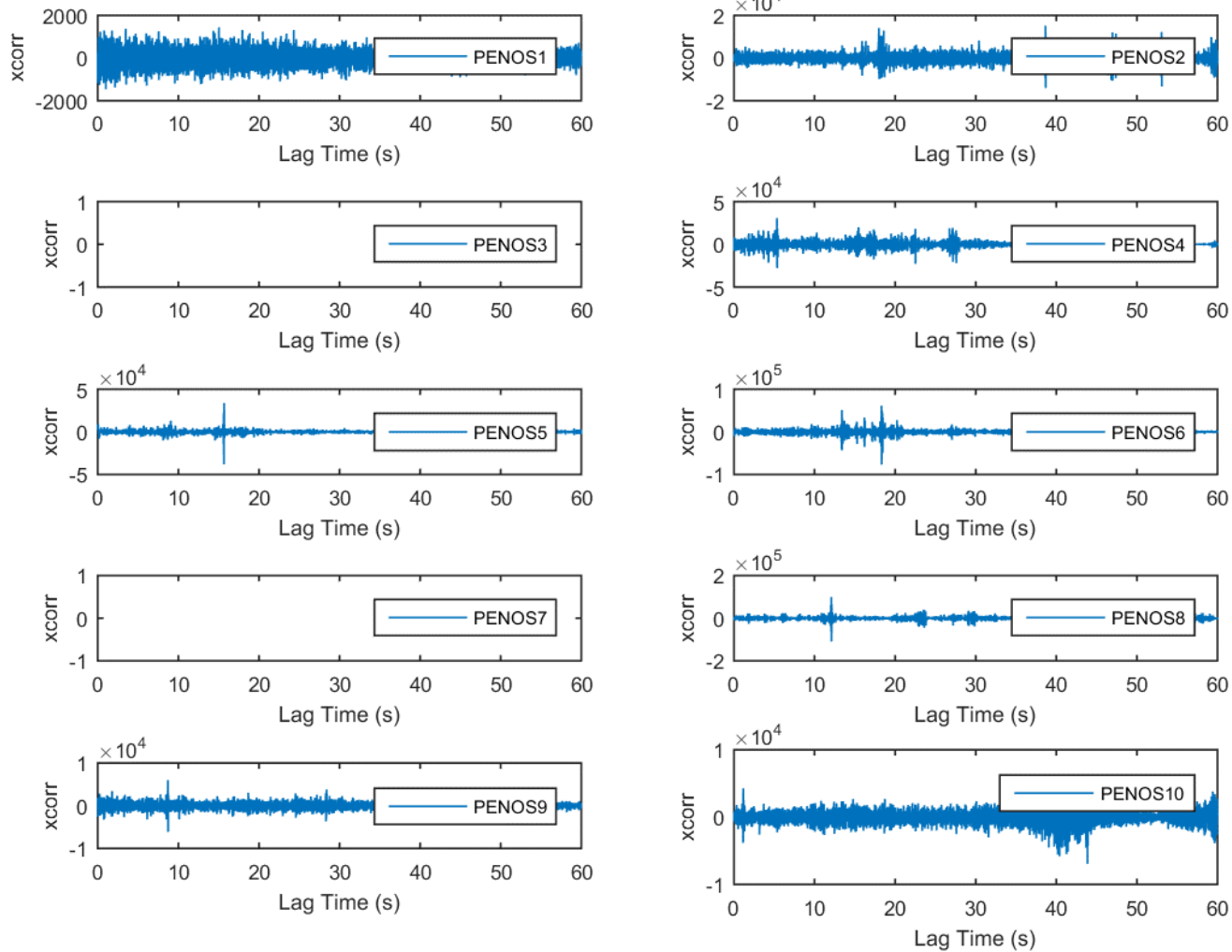
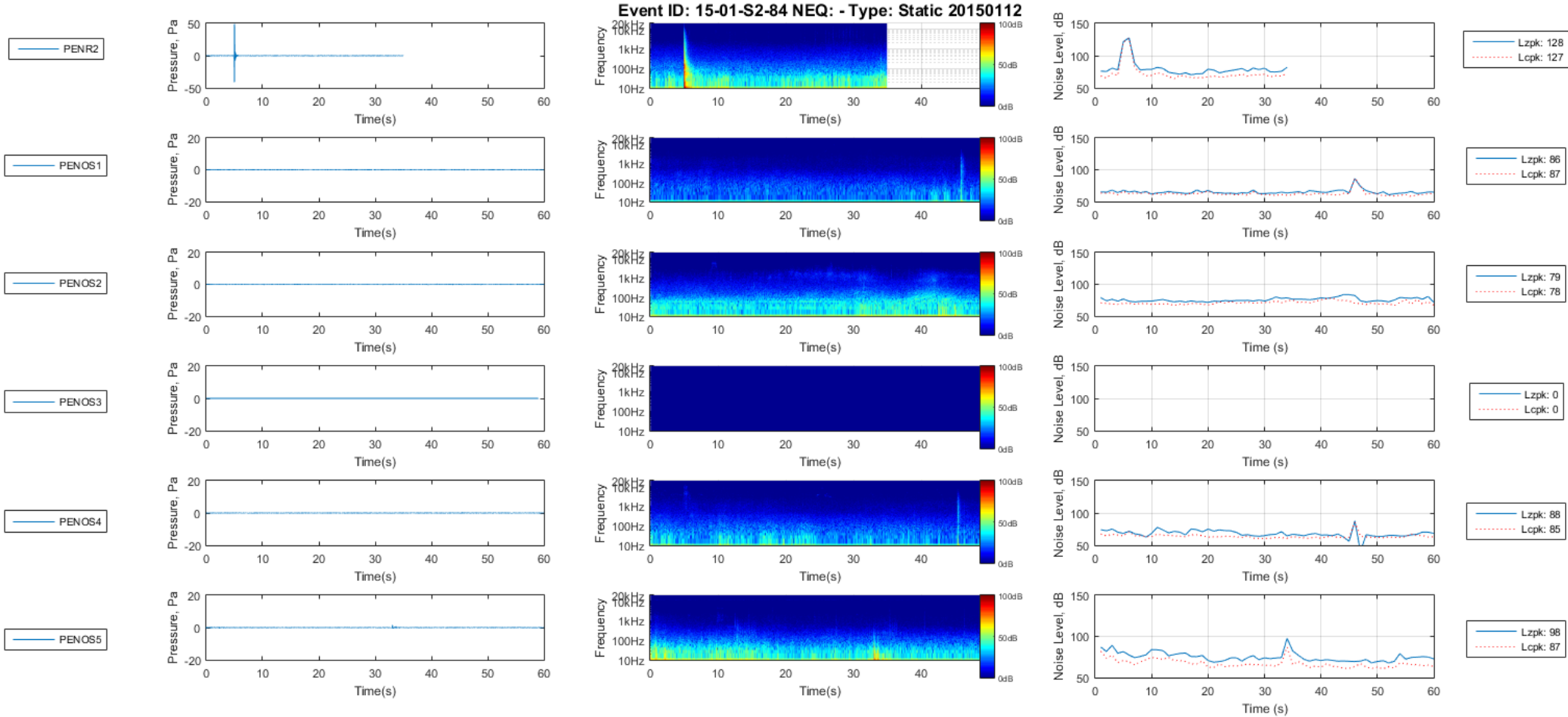


FIGURE 2.244: COHERENCE PEN\_OS 6 - 10 15-01-S2-80CTD

**Event ID: 15-01-S2-80 NEQ: - Type: Static 20150112**



**FIGURE 2.245: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-80**



**FIGURE 2.246: PEN\_OS 1 - 5 15-01-S2-84**

Event ID: 15-01-S2-84 NEQ: - Type: Static 20150112 CTD

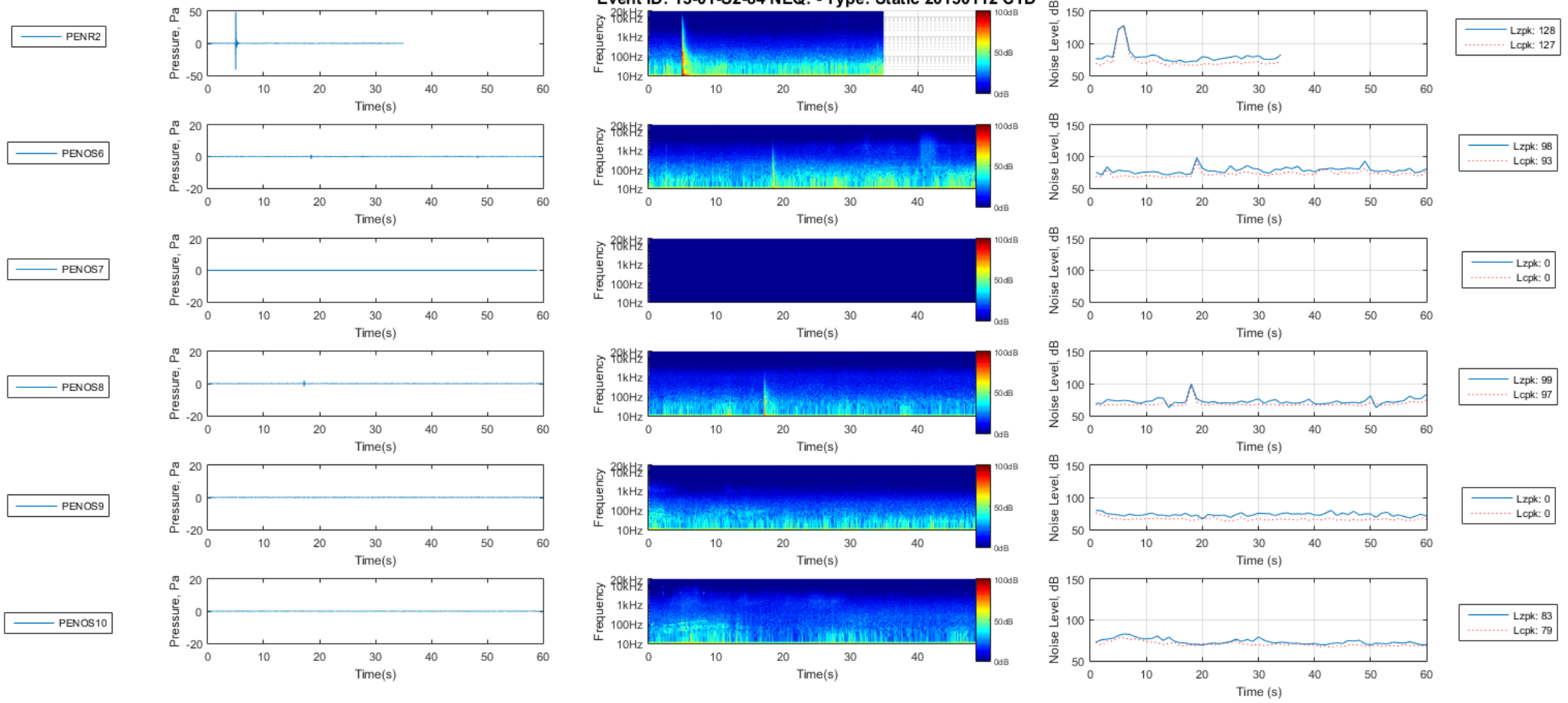


FIGURE 2.247: PEN\_OS 6 - 10 15-01-S2-84



Event ID: 15-01-S2-84 NEQ: - Type: Static 20150112

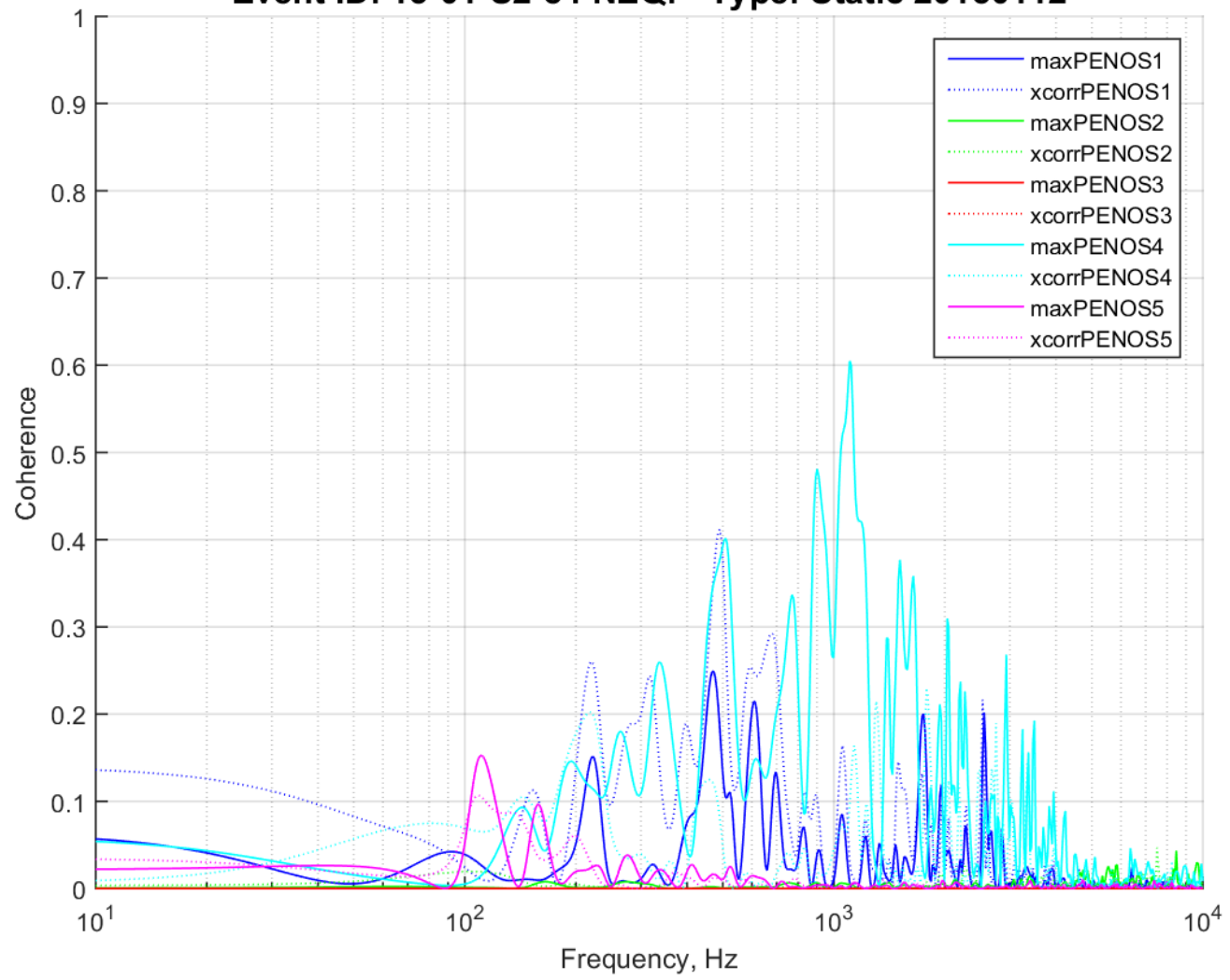


FIGURE 2.248: COHERENCE PEN\_OS 1 - 5 15-01-S2-84

Event ID: 15-01-S2-84 NEQ: - Type: Static 20150112

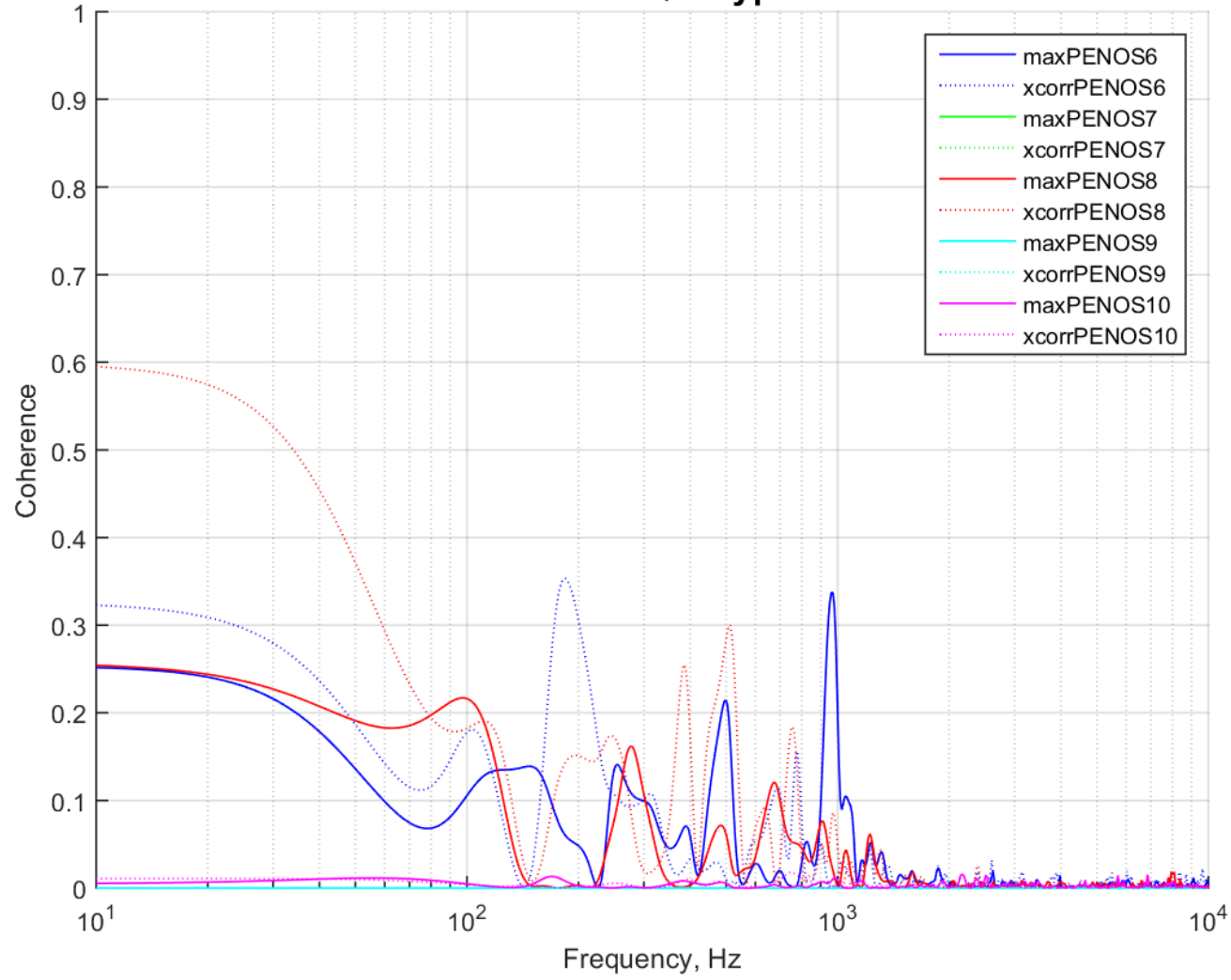
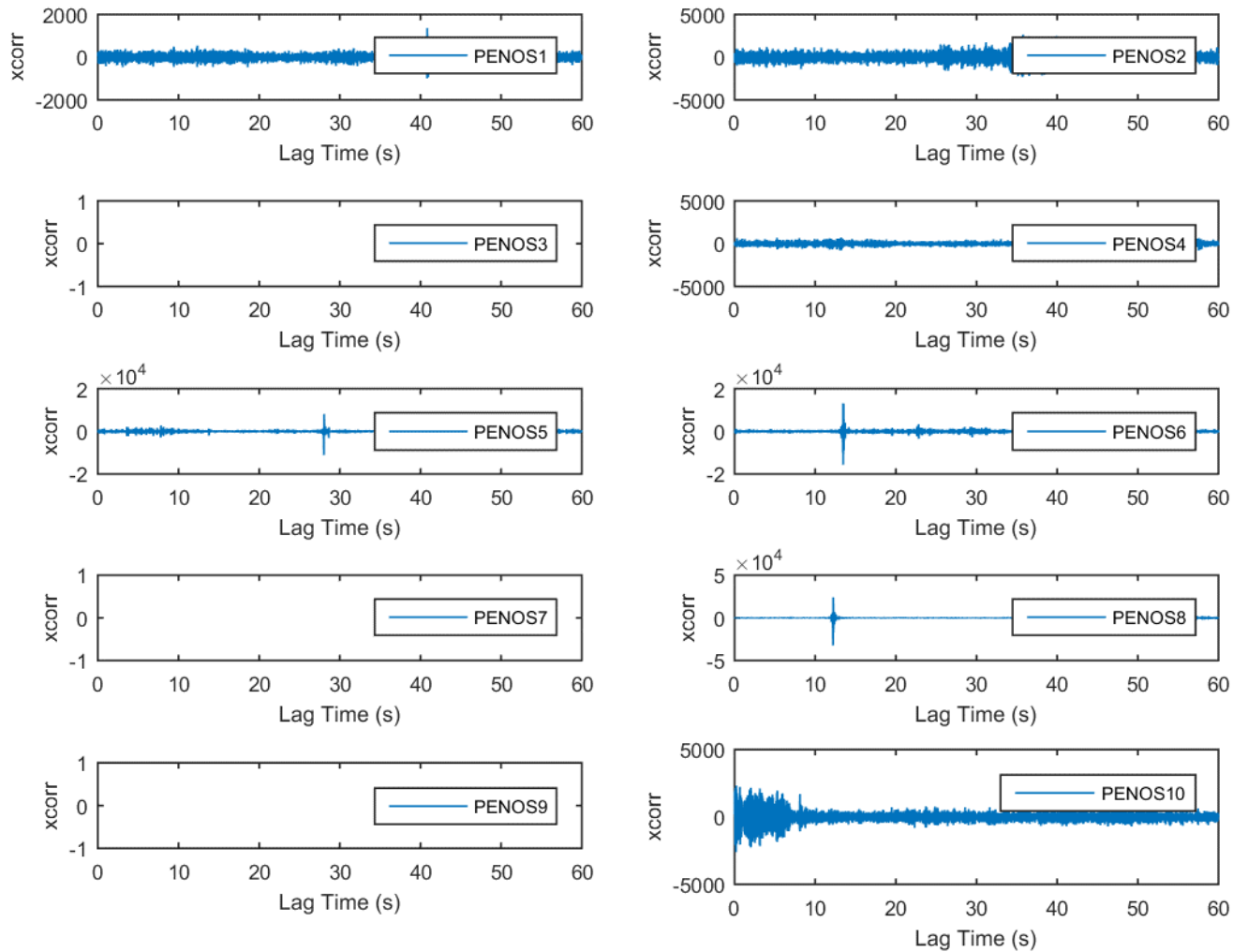
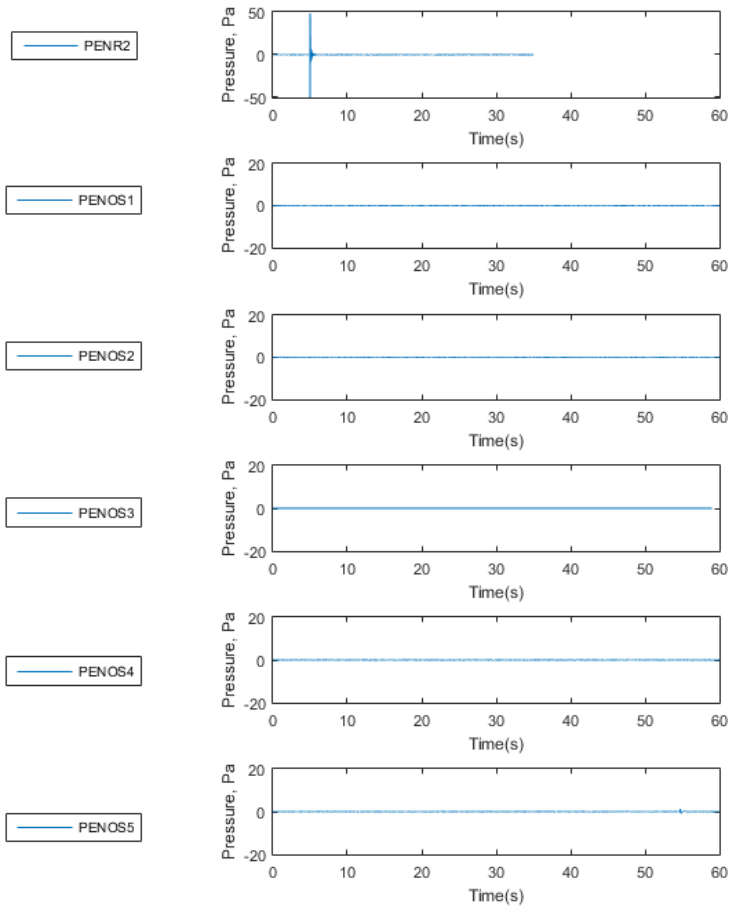


FIGURE 2.249: COHERENCE PEN\_OS 6 - 10 15-01-S2-84CTD

**Event ID: 15-01-S2-84 NEQ: - Type: Static 20150112**



**FIGURE 2.250: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-84**



Event ID: 15-01-S2-89 NEQ: - Type: Static 20150112

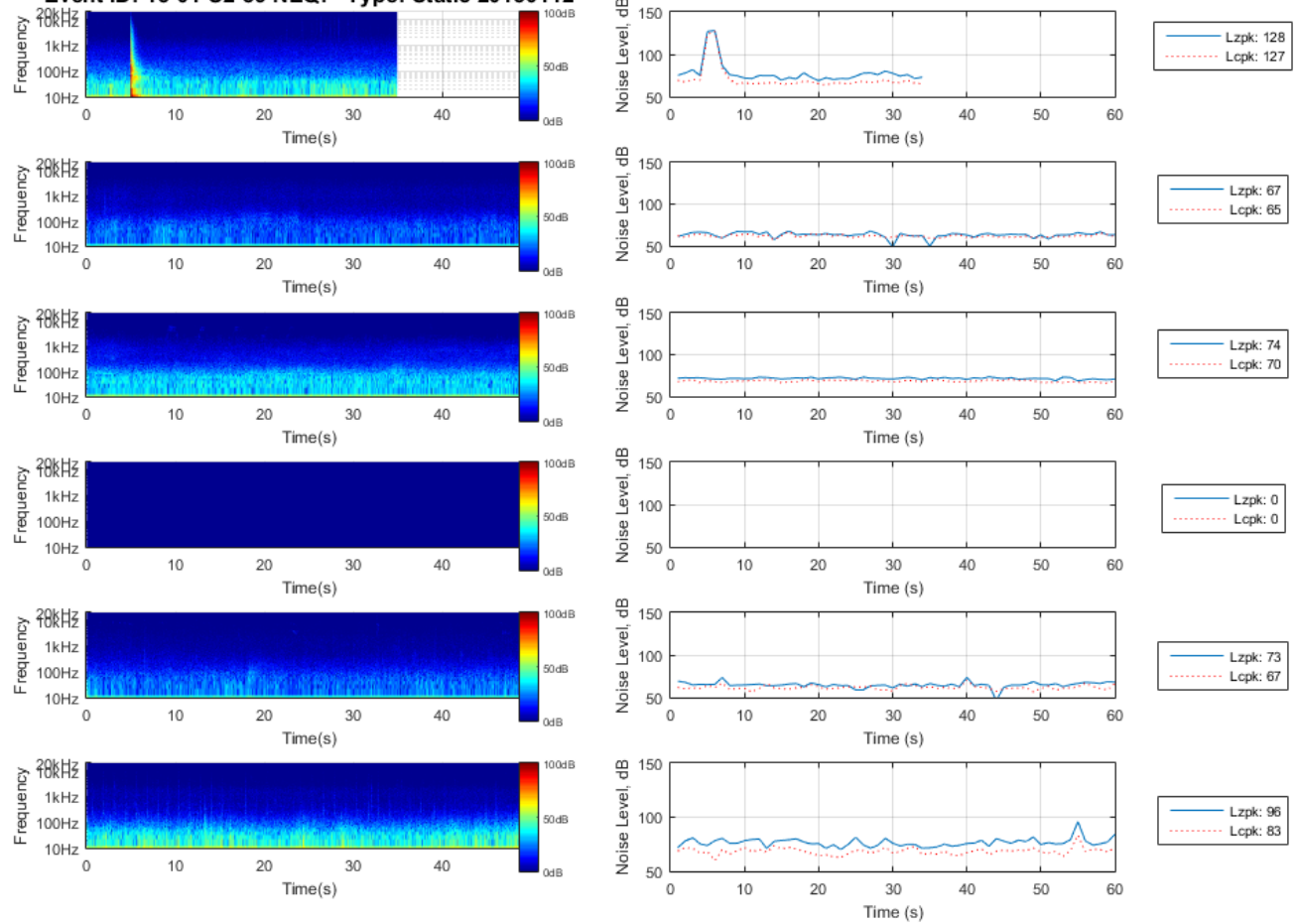
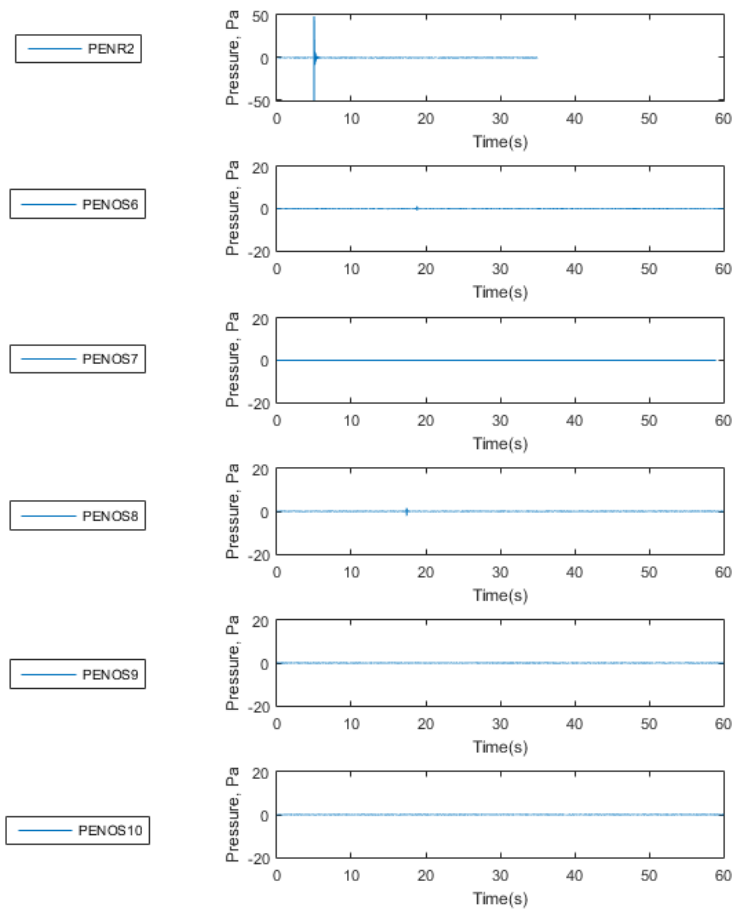


FIGURE 2.251: PEN\_OS 1 - 5 15-01-S2-89



Event ID: 15-01-S2-89 NEQ: - Type: Static 20150112 CTD

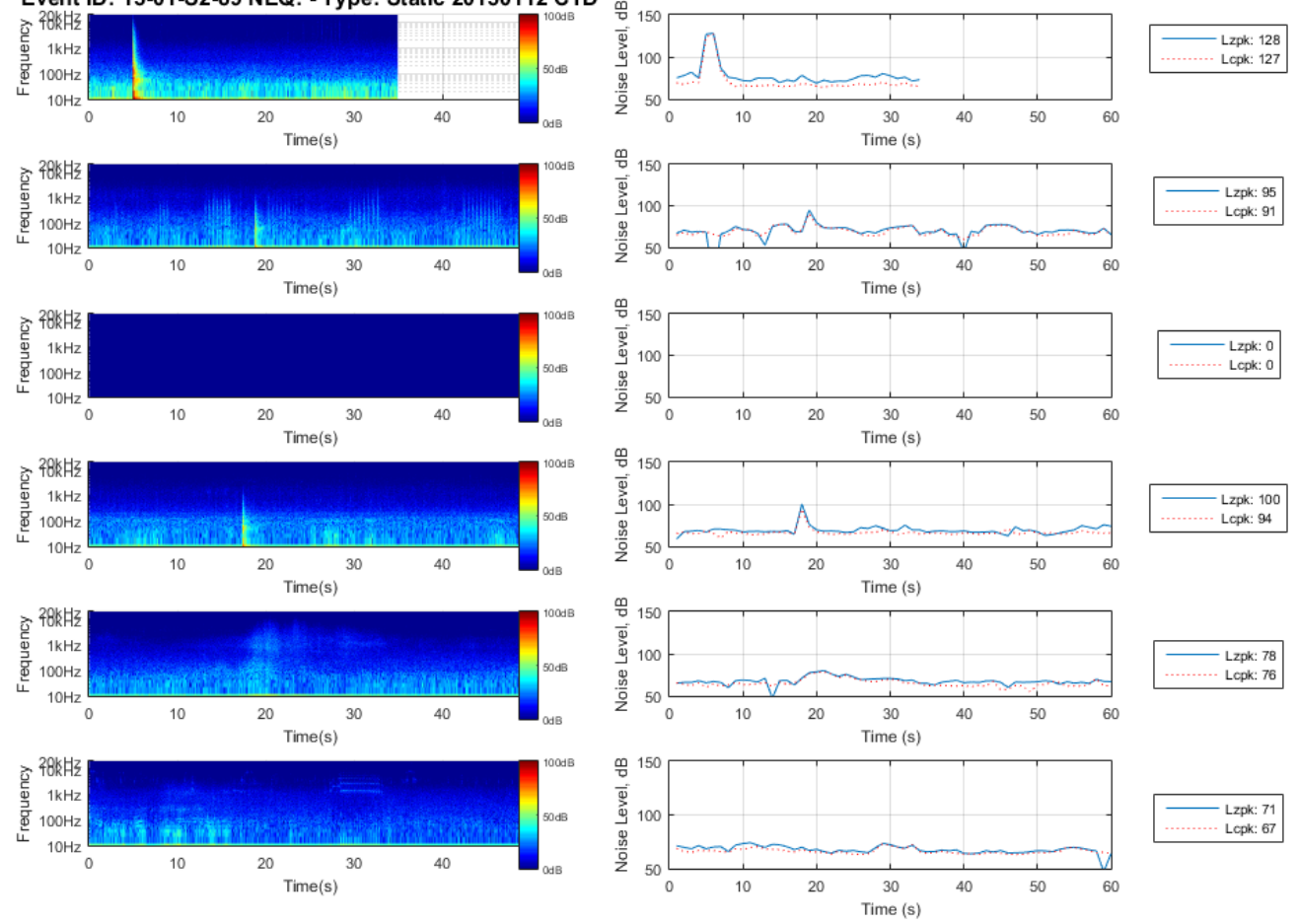


FIGURE 2.252: PEN\_OS 6 - 10 15-01-S2-89

Event ID: 15-01-S2-89 NEQ: - Type: Static 20150112

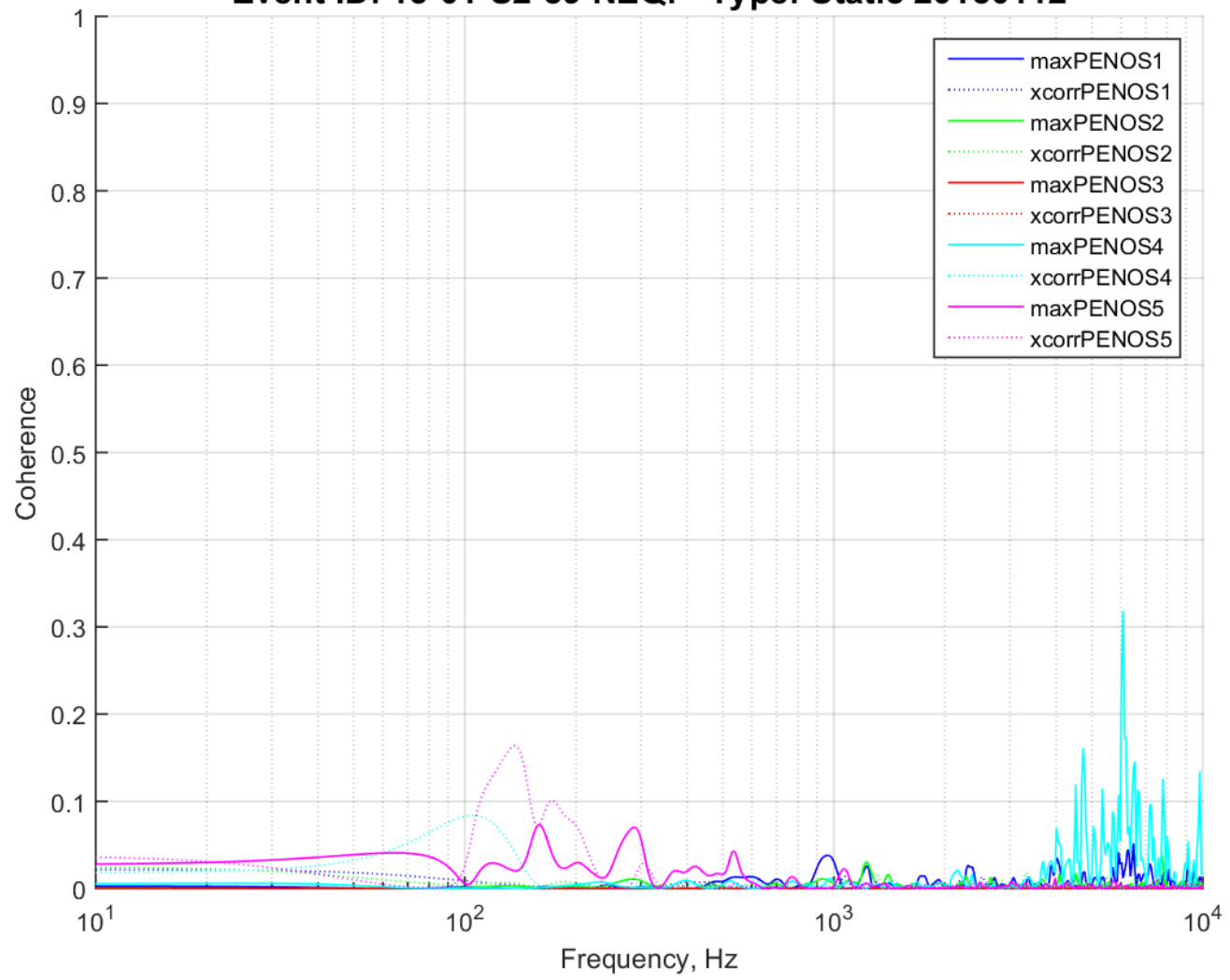


FIGURE 2.253: COHERENCE PEN\_OS 1 - 5 15-01-S2-89

Event ID: 15-01-S2-89 NEQ: - Type: Static 20150112

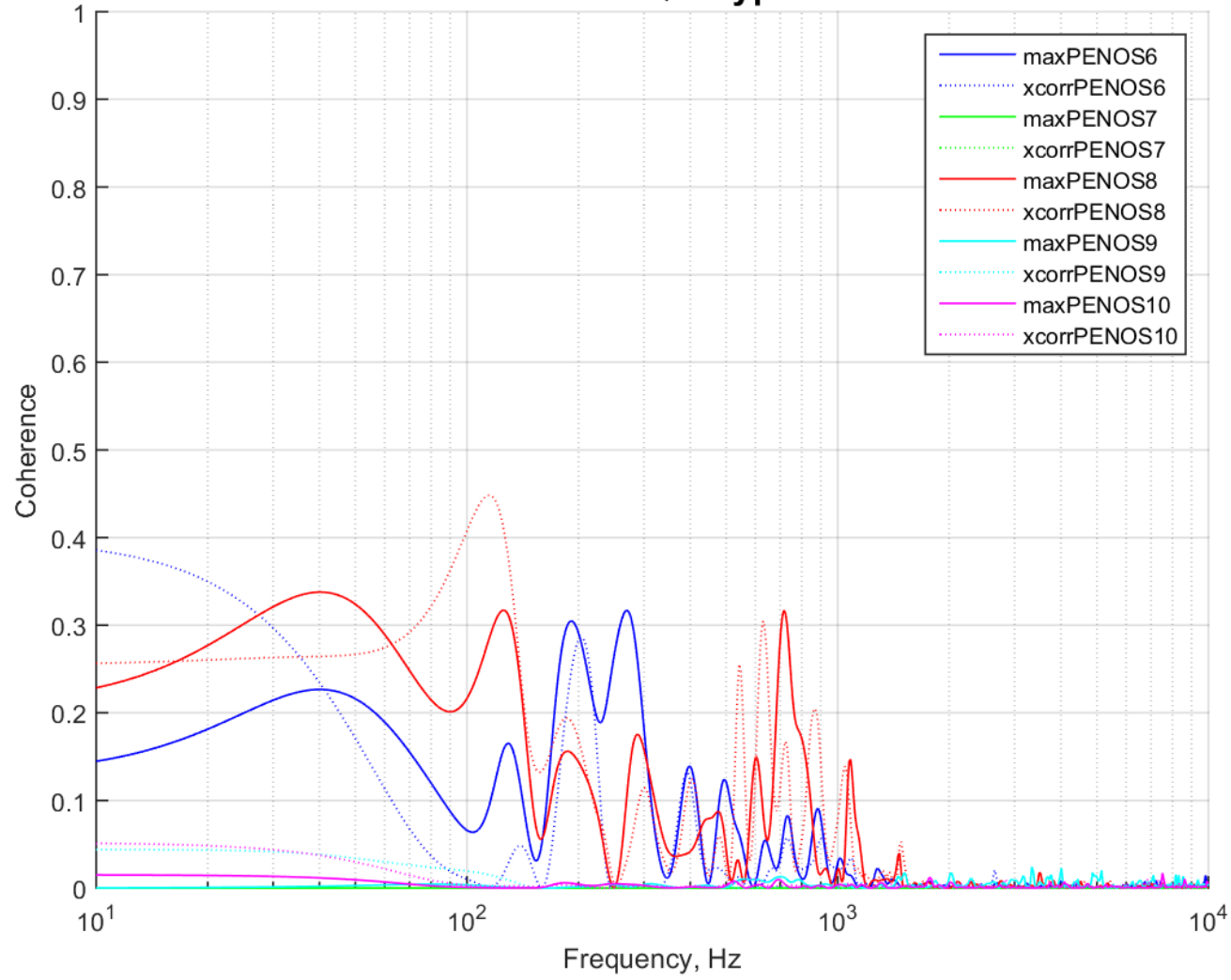
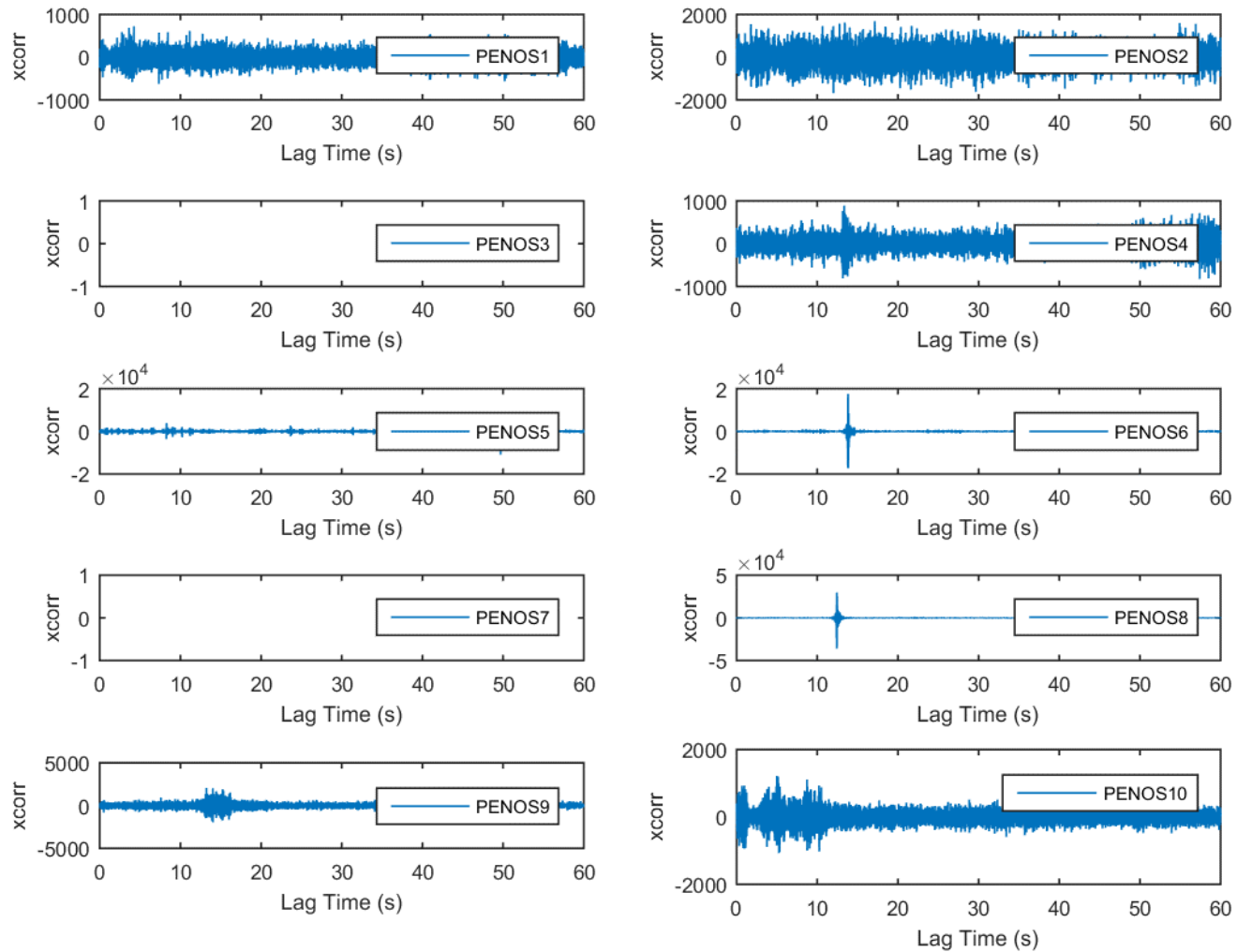


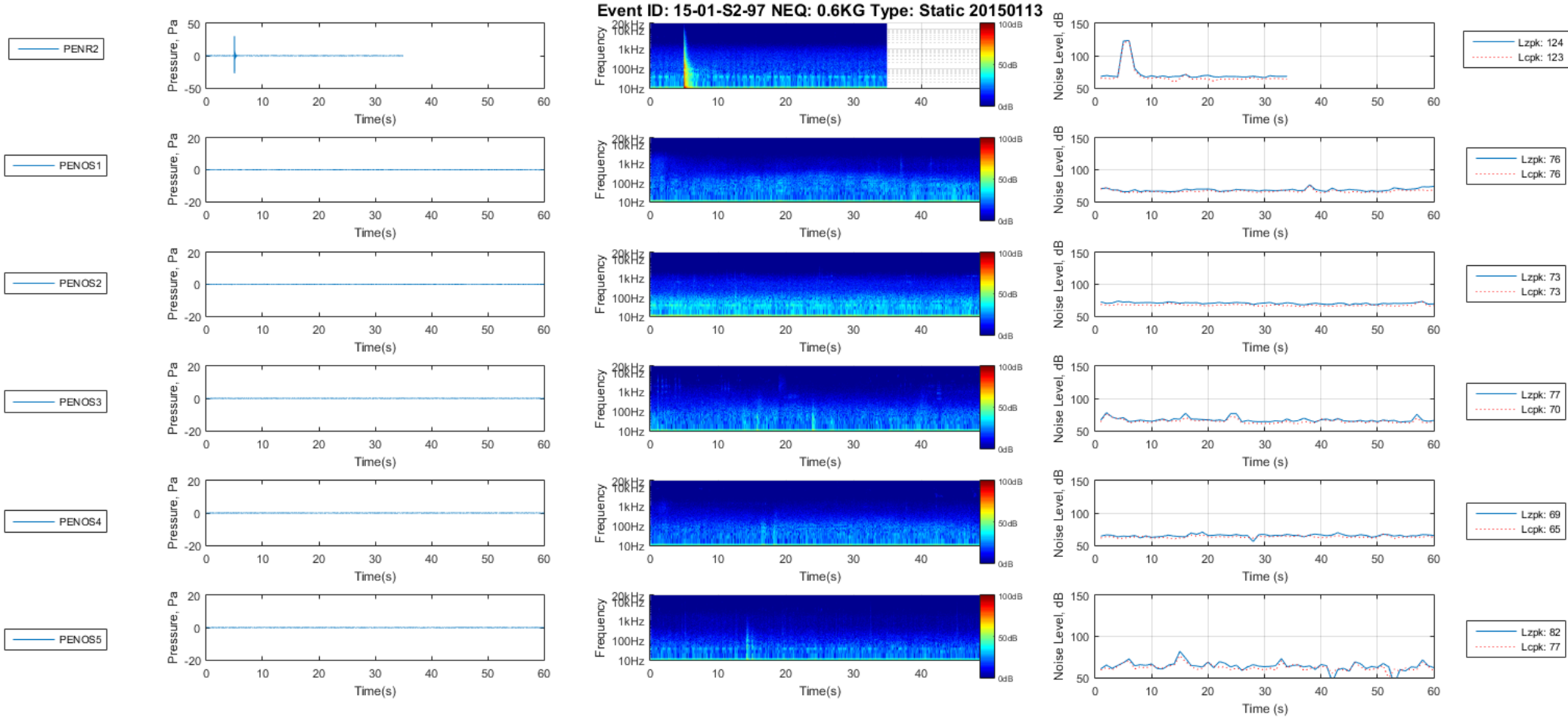
FIGURE 2.254: COHERENCE PEN\_OS 6 - 10 15-01-S2-89CTD

**Event ID: 15-01-S2-89 NEQ: - Type: Static 20150112**



**FIGURE 2.255: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-89**





**FIGURE 2.256: PEN\_OS 1 - 5 15-01-S2-97**

Event ID: 15-01-S2-97 NEQ: 0.6KG Type: Static 20150113 CTD

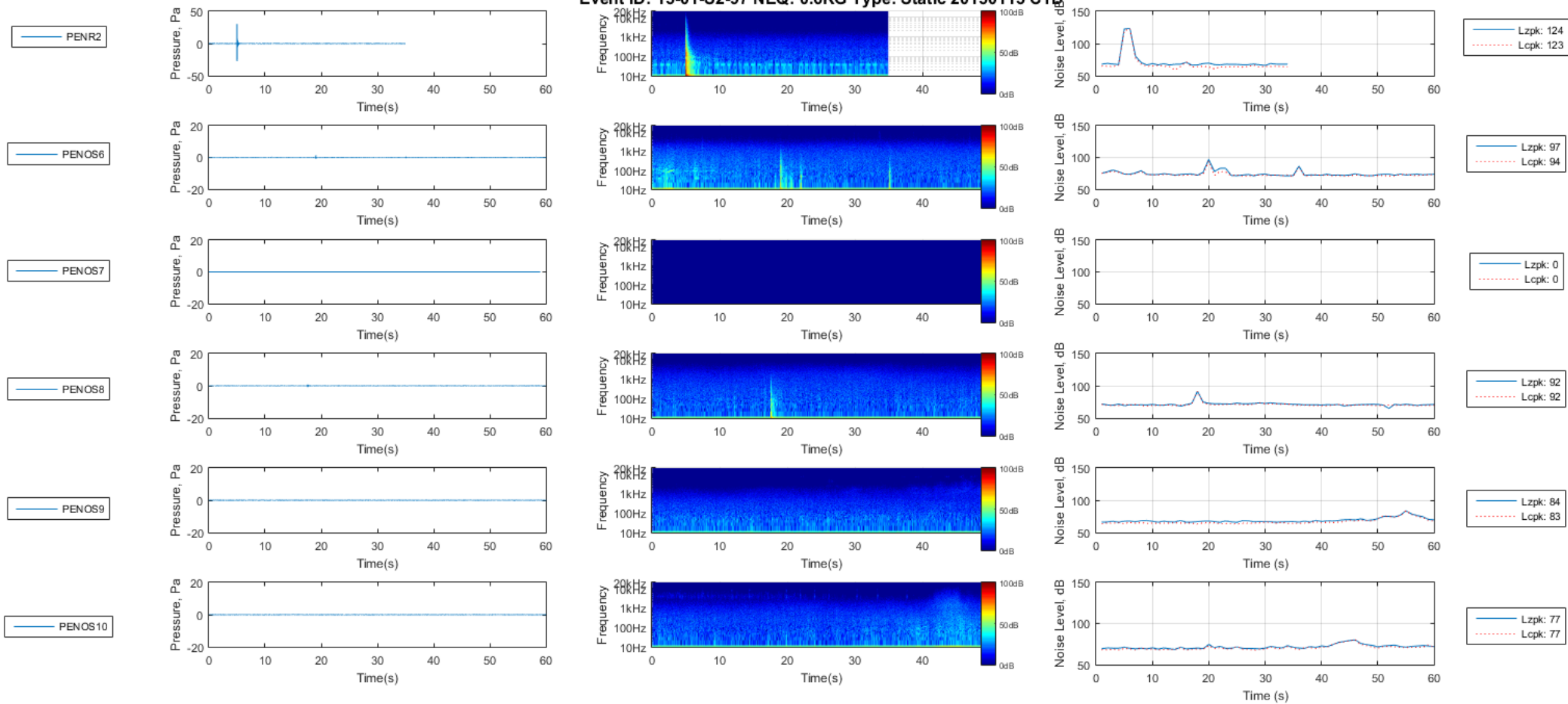


FIGURE 2.257: PEN\_OS 6 - 10 15-01-S2-97

Event ID: 15-01-S2-97 NEQ: 0.6KG Type: Static 20150113

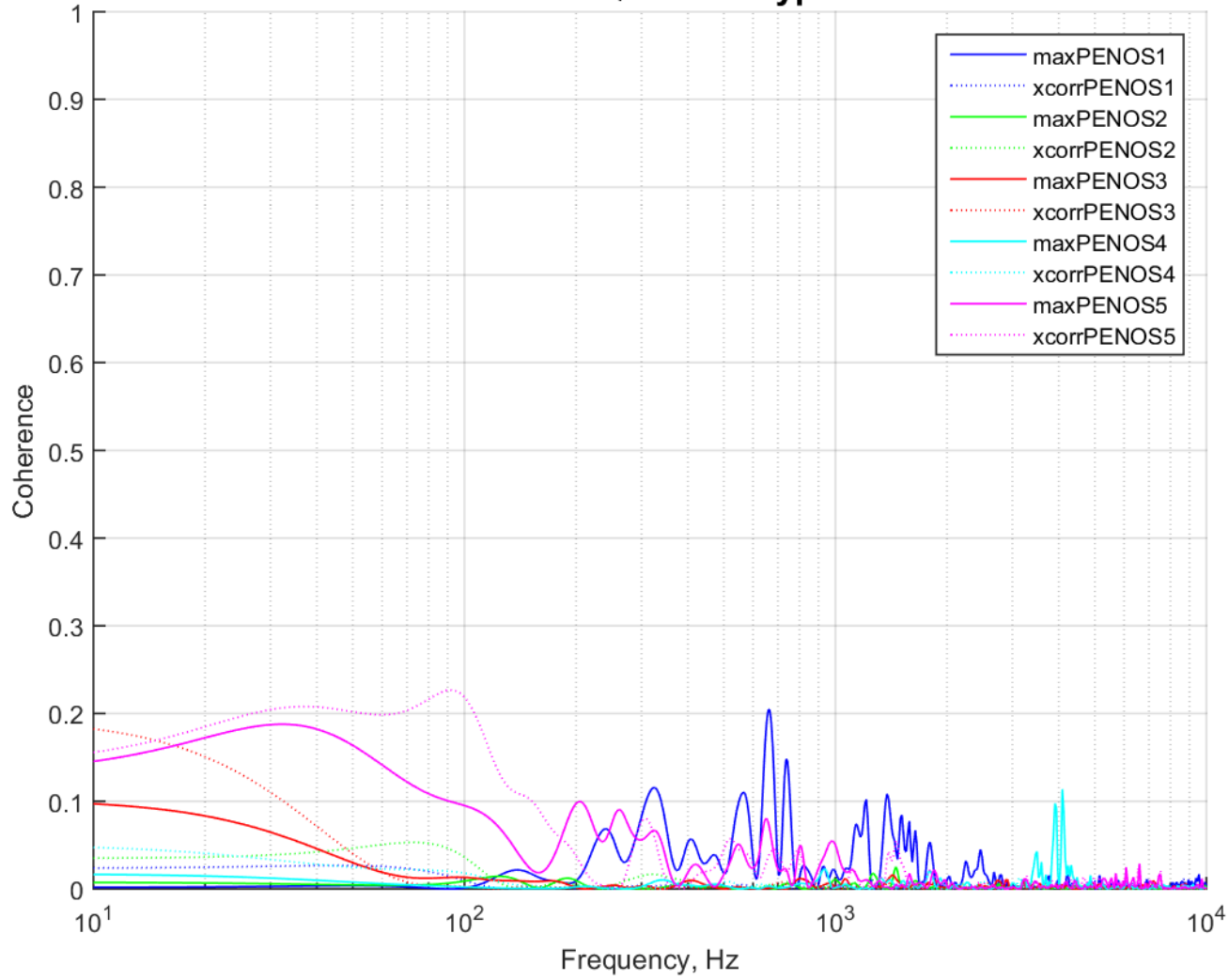


FIGURE 2.258: COHERENCE PEN\_OS 1 - 5 15-01-S2-97

Event ID: 15-01-S2-97 NEQ: 0.6KG Type: Static 20150113

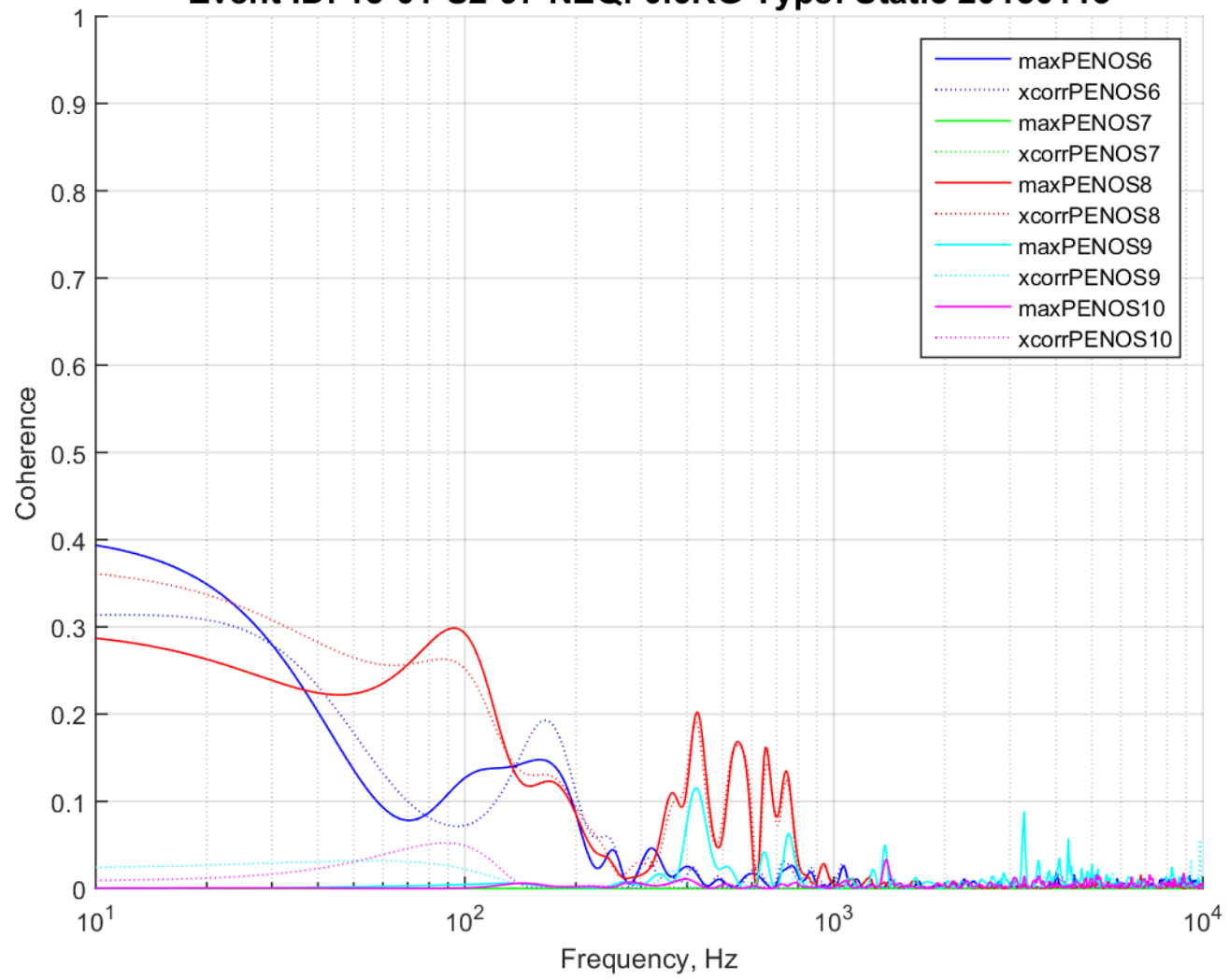
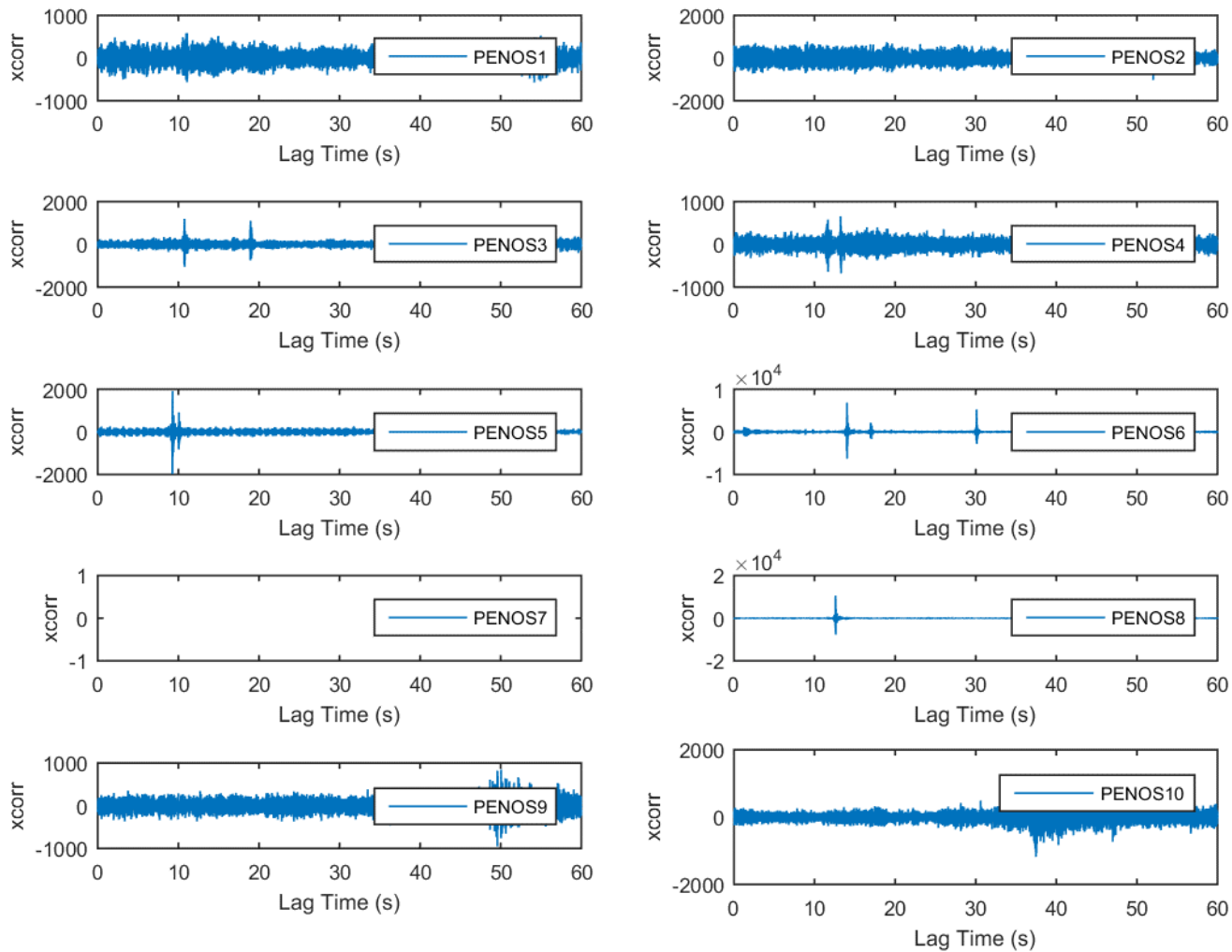
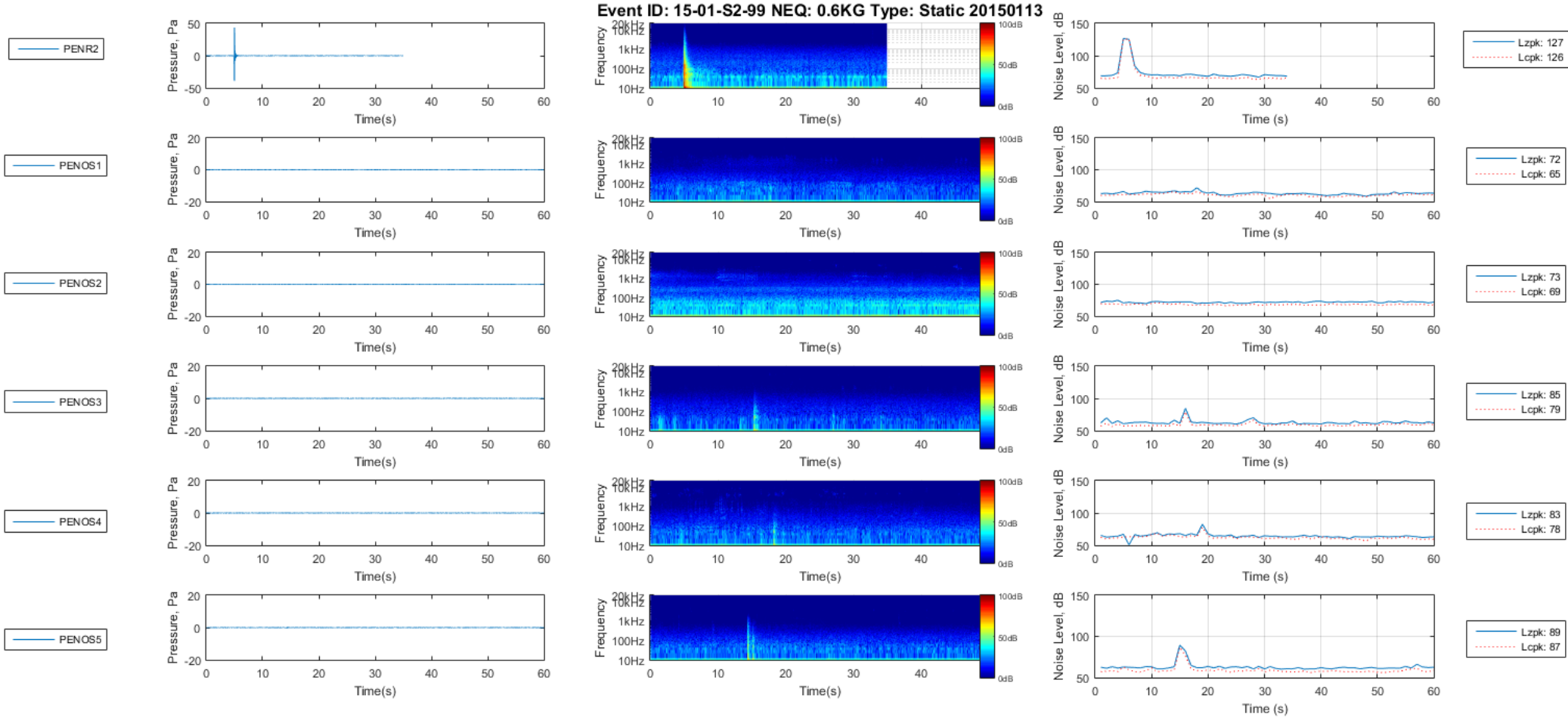


FIGURE 2.259: COHERENCE PEN\_OS 6 - 10 15-01-S2-97CTD

**Event ID: 15-01-S2-97 NEQ: 0.6KG Type: Static 20150113**



**FIGURE 2.260: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-97**



**FIGURE 2.261: PEN\_OS 1 - 5 15-01-S2-99**

Event ID: 15-01-S2-99 NEQ: 0.6KG Type: Static 20150113 CTD

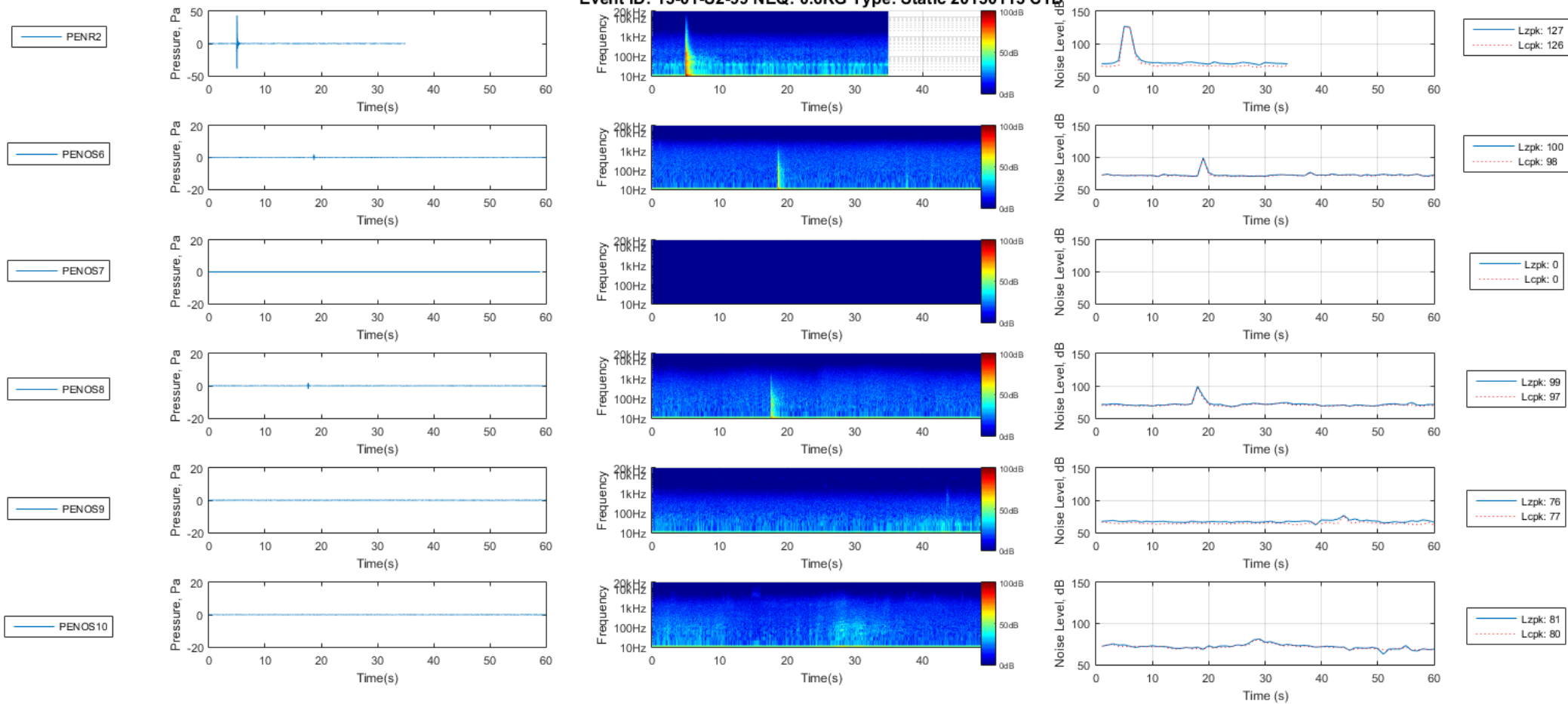


FIGURE 2.262: PEN\_OS 6 - 10 15-01-S2-99

Event ID: 15-01-S2-99 NEQ: 0.6KG Type: Static 20150113

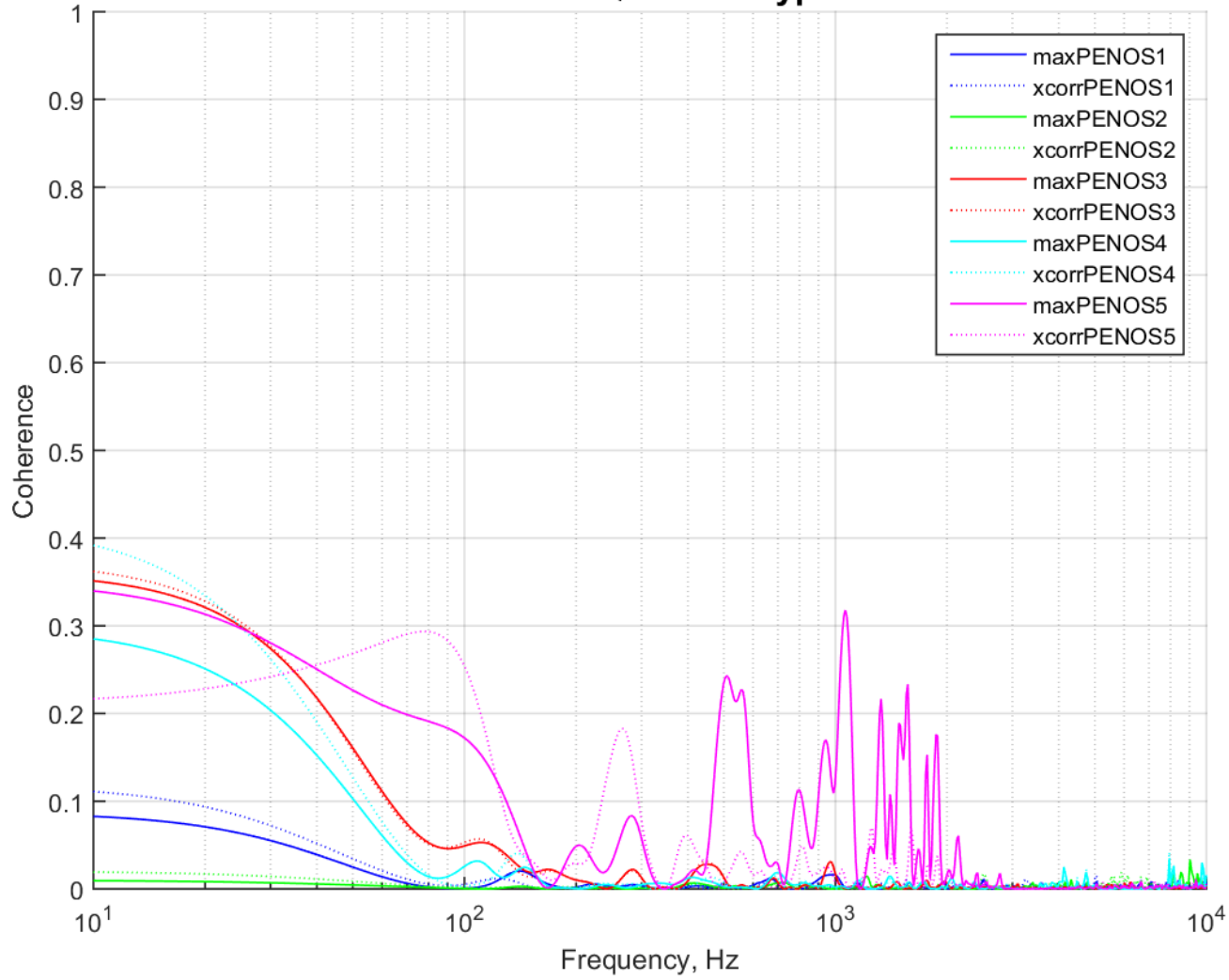


FIGURE 2.263: COHERENCE PEN\_OS 1 - 5 15-01-S2-99



Event ID: 15-01-S2-99 NEQ: 0.6KG Type: Static 20150113

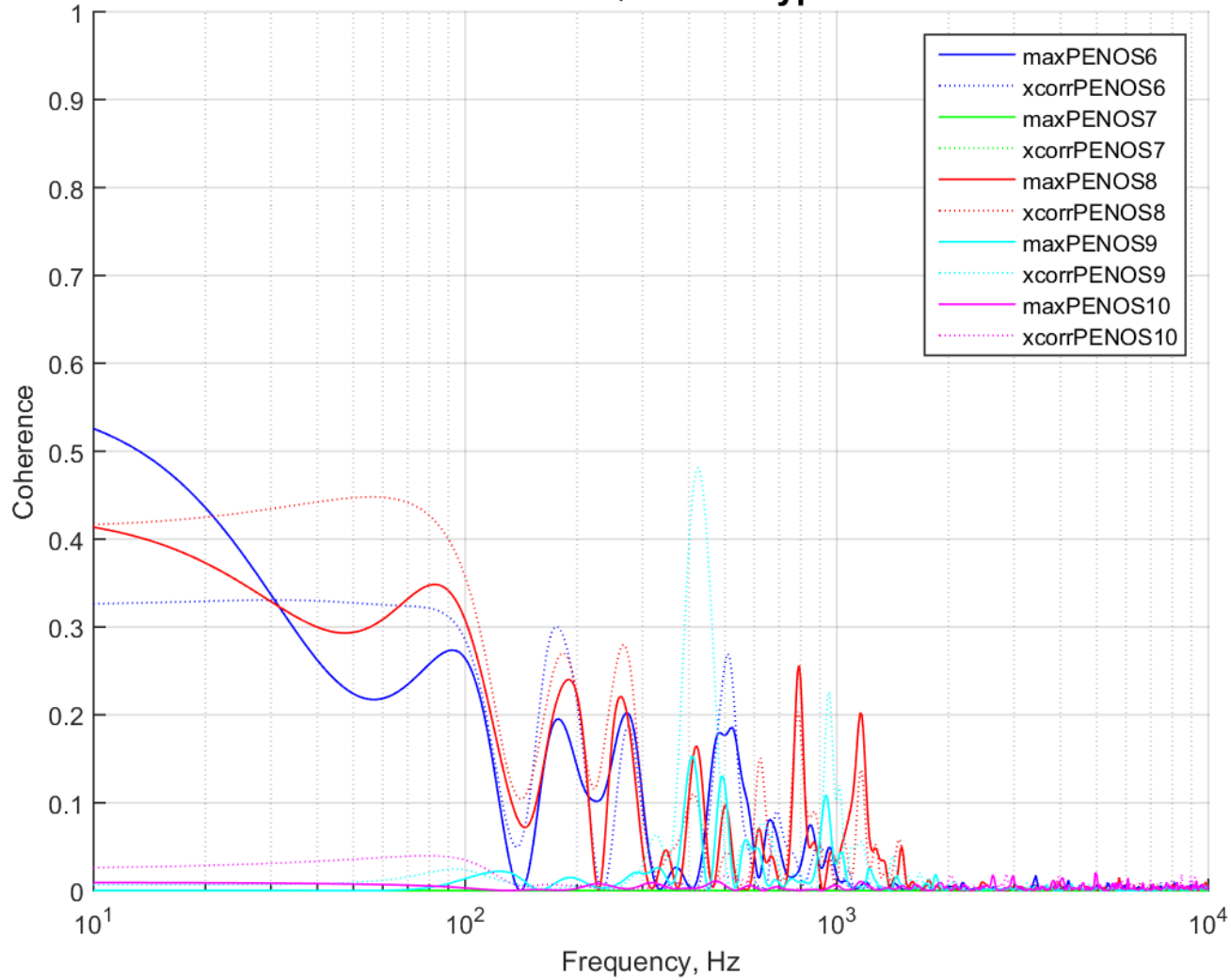
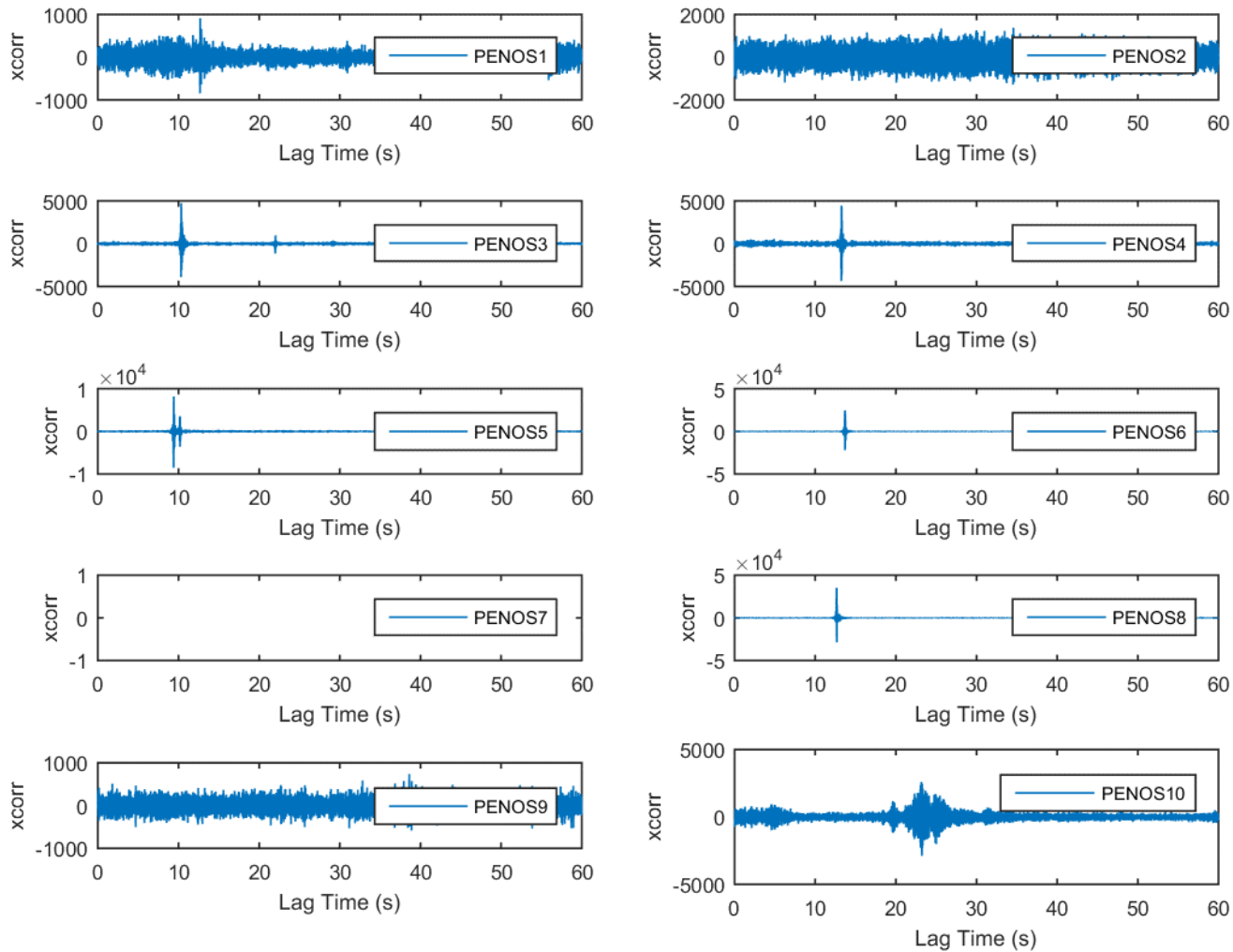
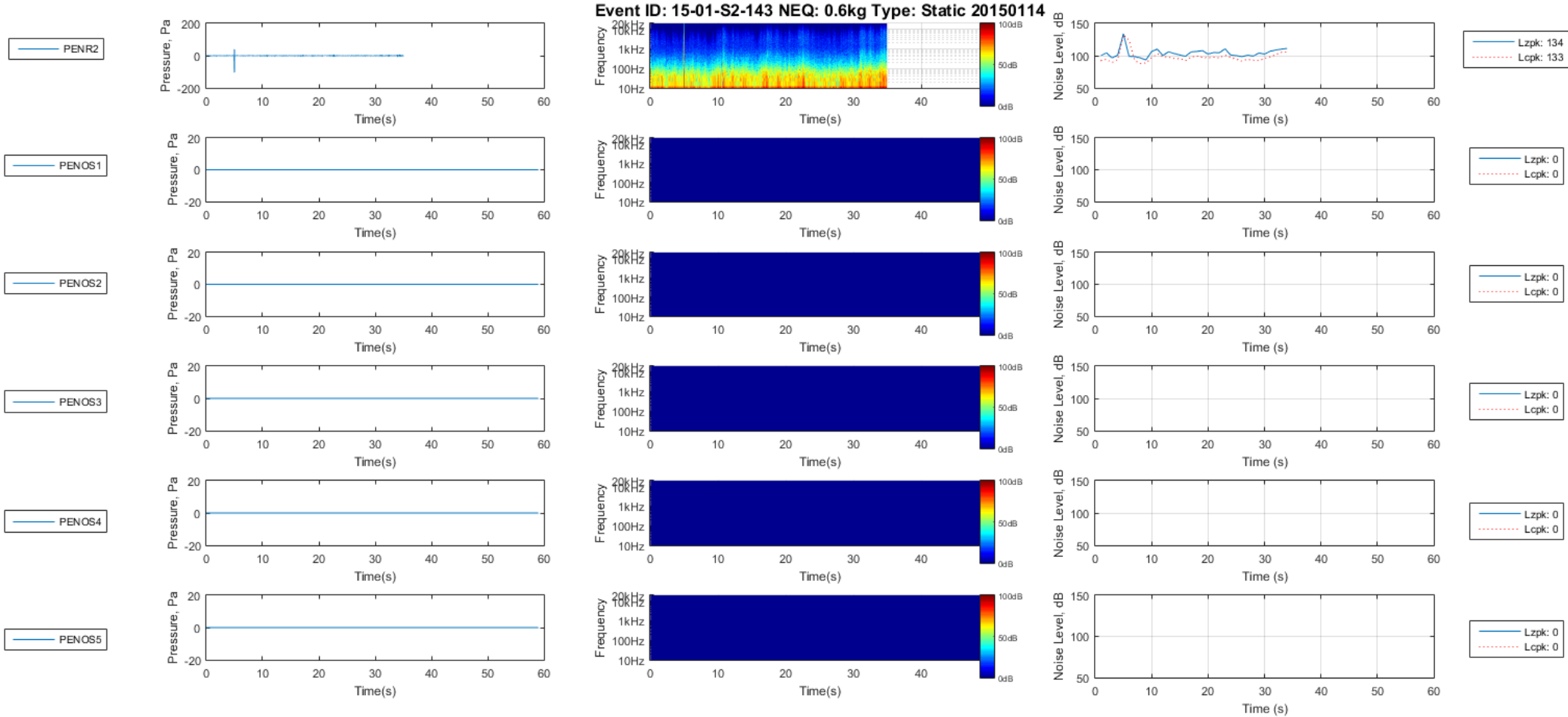


FIGURE 2.264: COHERENCE PEN\_OS 6 - 10 15-01-S2-99CTD

**Event ID: 15-01-S2-99 NEQ: 0.6KG Type: Static 20150113**



**FIGURE 2.265: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-99**



**FIGURE 2.266: PEN\_OS 1 - 5 15-01-S2-143**

Event ID: 15-01-S2-143 NEQ: 0.6kg Type: Static 20150114 CTD

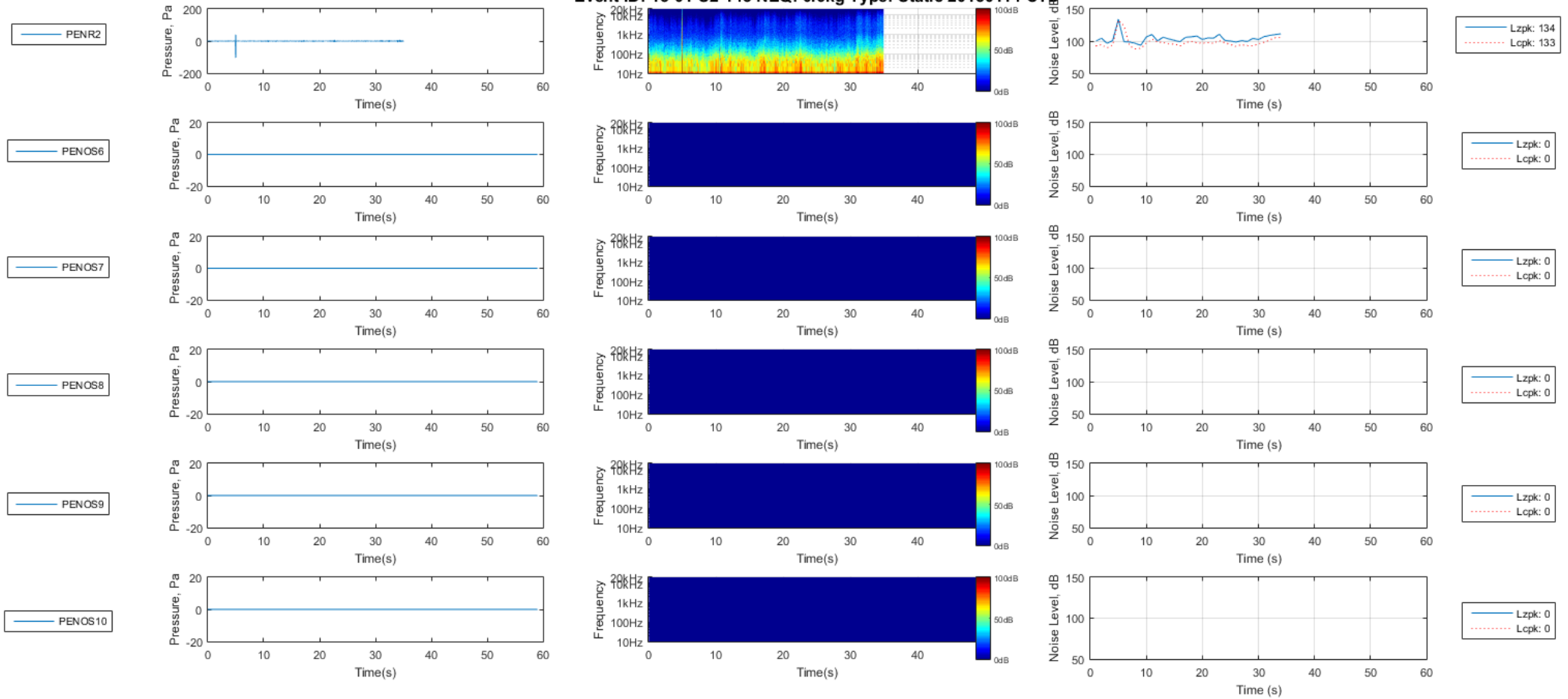
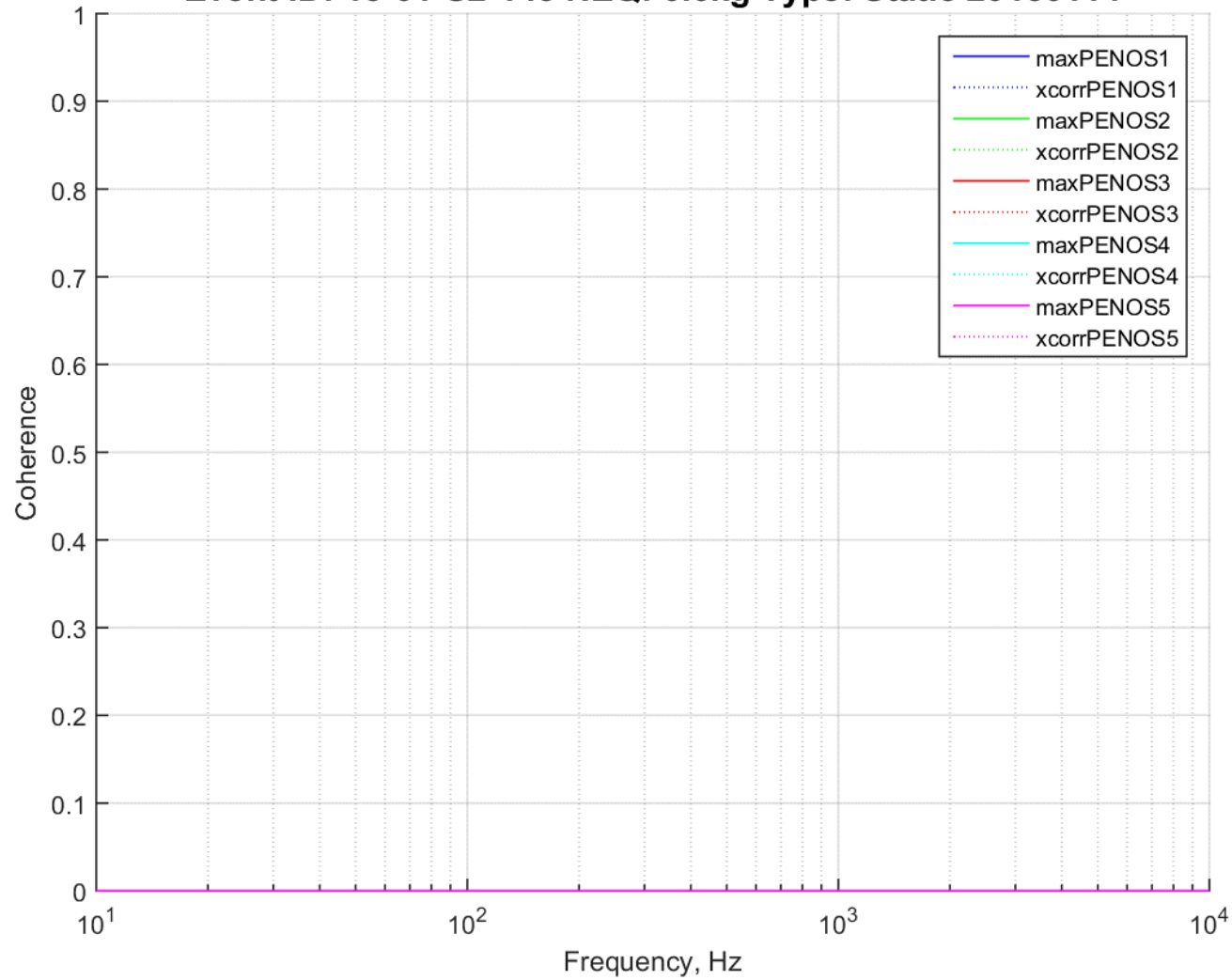


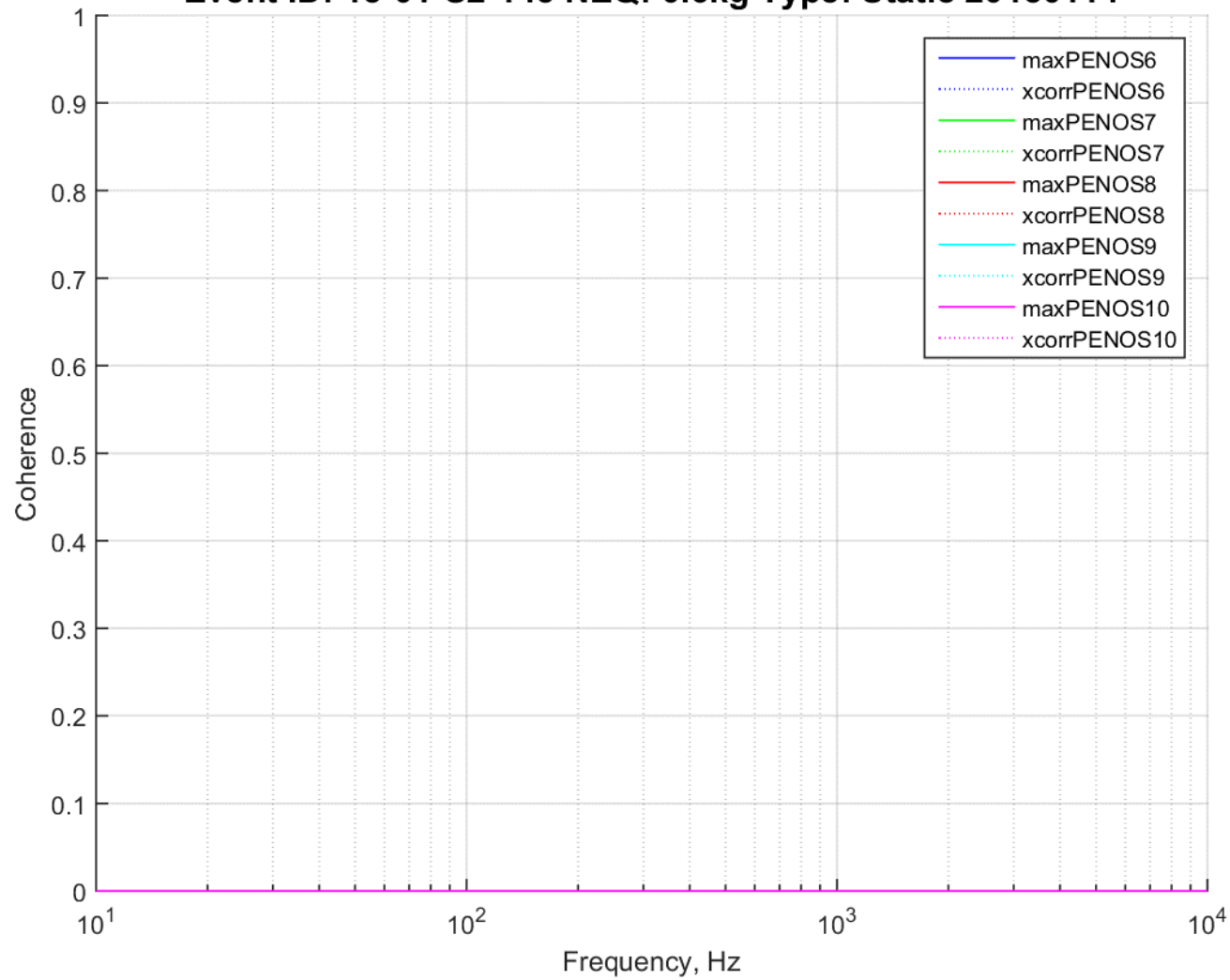
FIGURE 2.267: PEN\_OS 6 - 10 15-01-S2-143

**Event ID: 15-01-S2-143 NEQ: 0.6kg Type: Static 20150114**



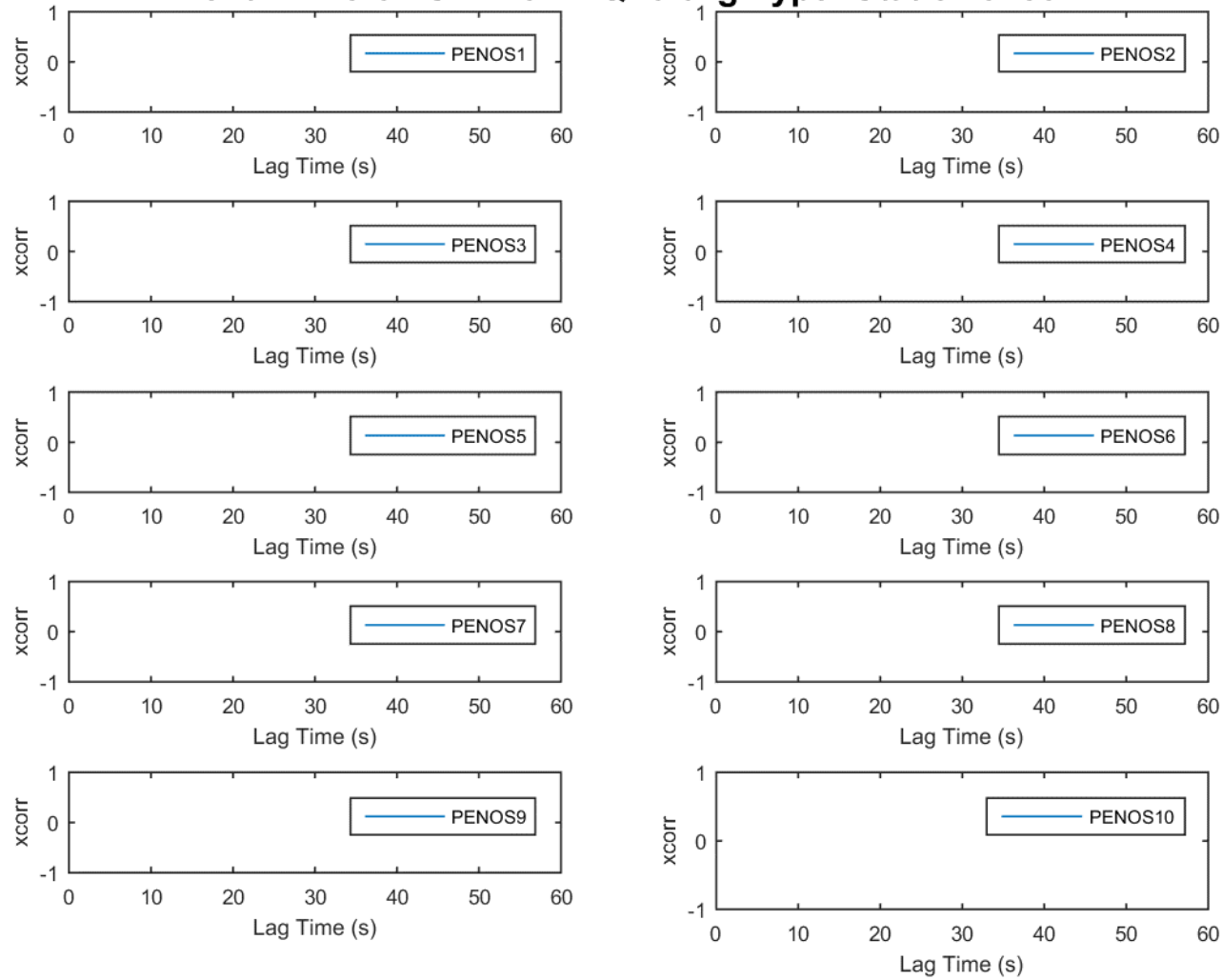
**FIGURE 2.268: COHERENCE PEN\_OS 1 - 5 15-01-S2-143**

**Event ID: 15-01-S2-143 NEQ: 0.6kg Type: Static 20150114**

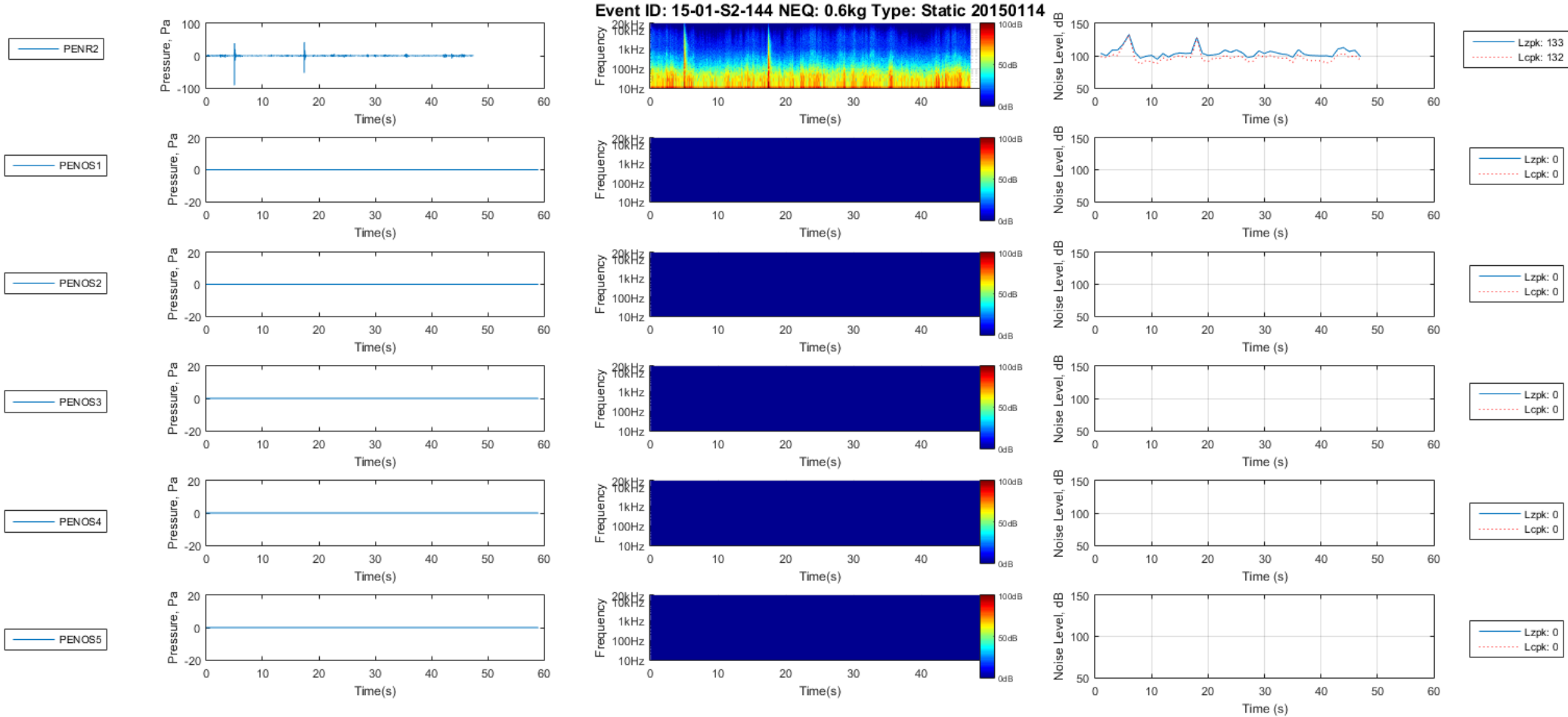


**FIGURE 2.269: COHERENCE PEN\_OS 6 - 10 15-01-S2-143CTD**

**Event ID: 15-01-S2-143 NEQ: 0.6kg Type: Static 20150114**



**FIGURE 2.270: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-143**



**FIGURE 2.271: PEN\_OS 1 - 5 15-01-S2-144**



Event ID: 15-01-S2-144 NEQ: 0.6kg Type: Static 20150114 CTD

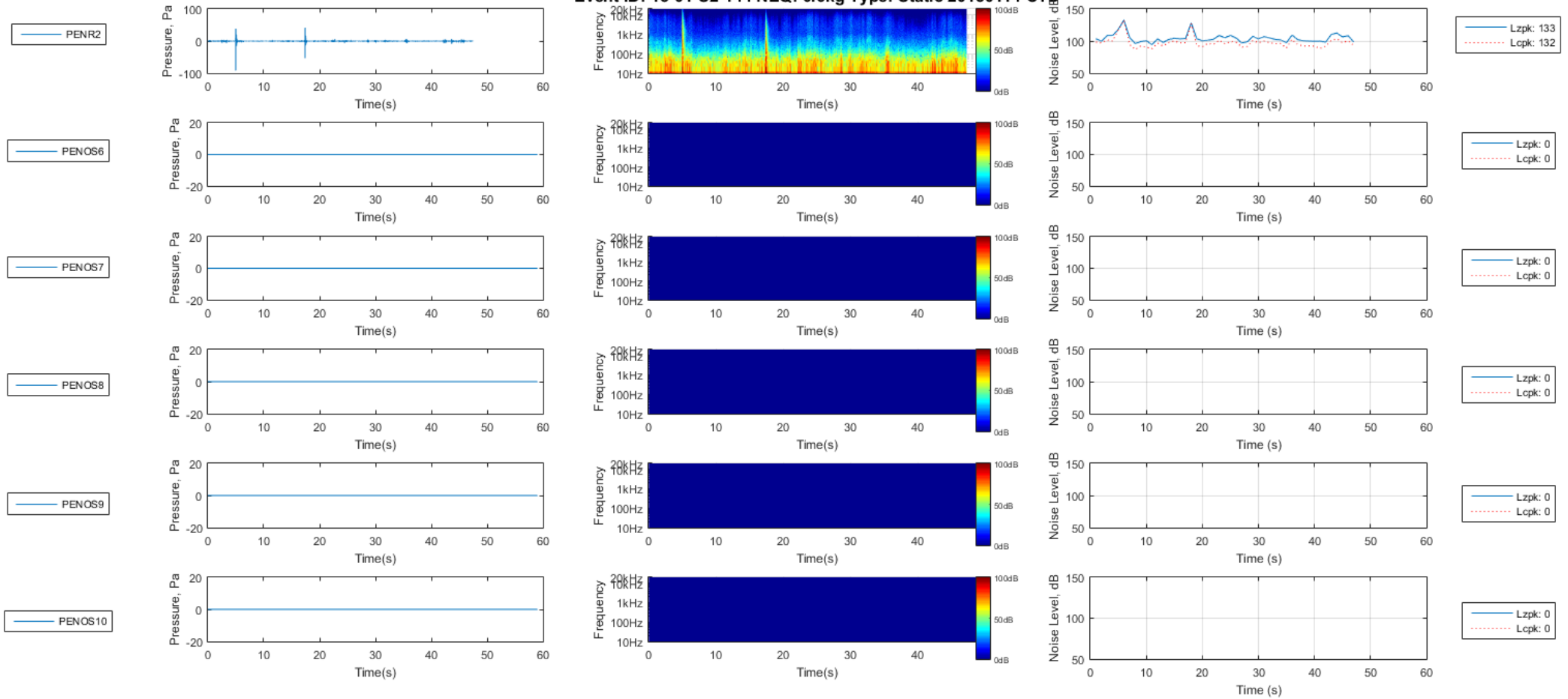
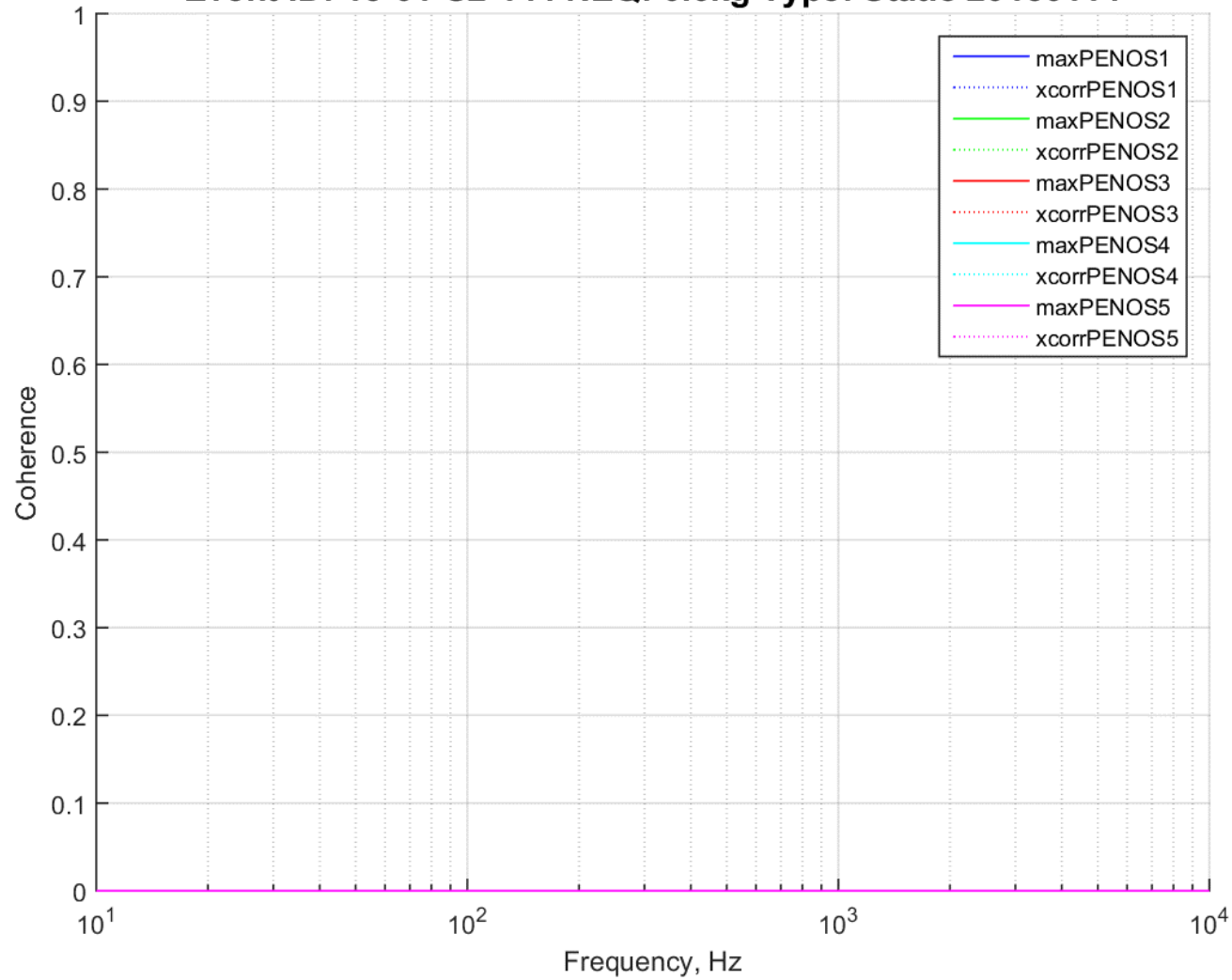


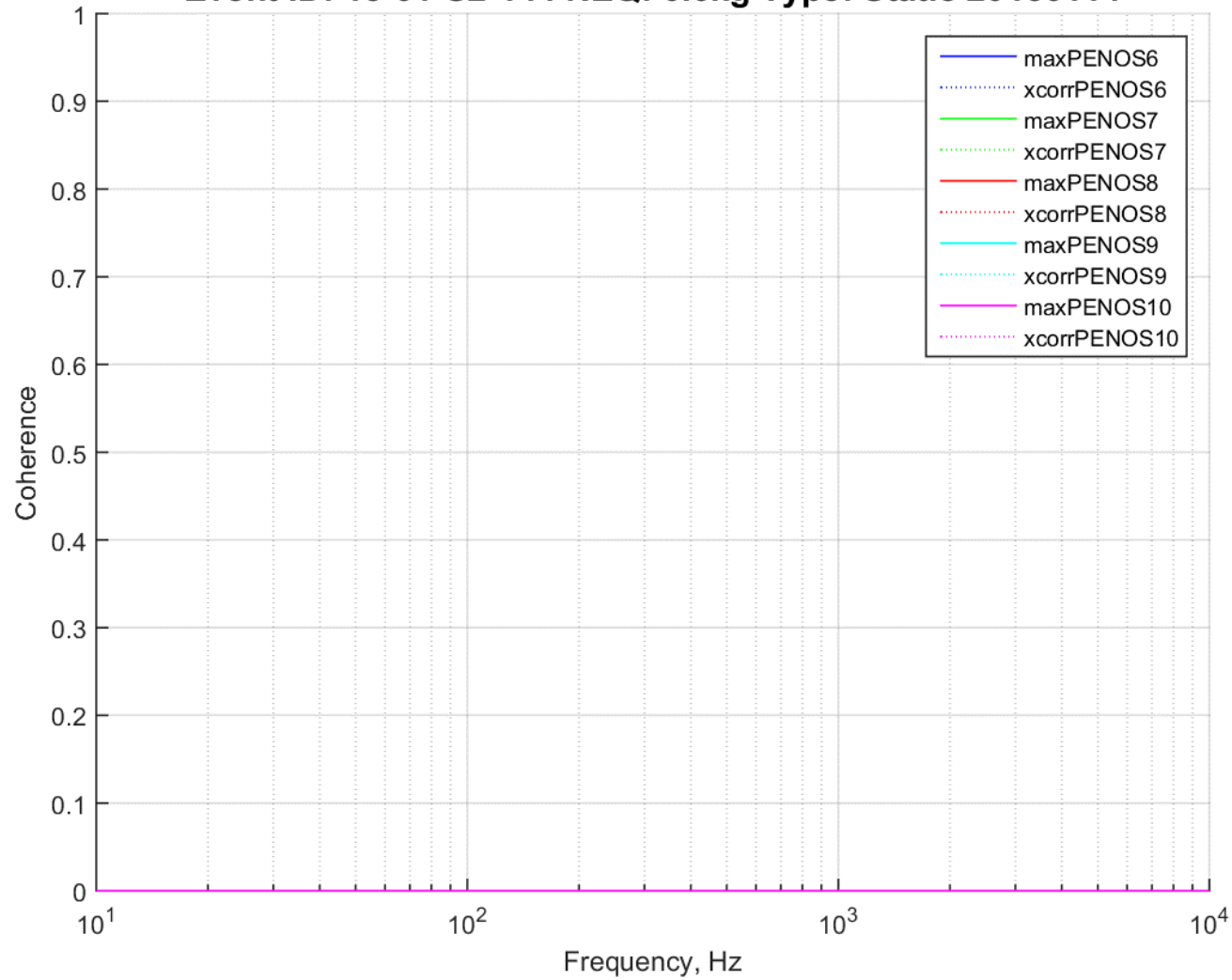
FIGURE 2.272: PEN\_OS 6 - 10 15-01-S2-144

**Event ID: 15-01-S2-144 NEQ: 0.6kg Type: Static 20150114**



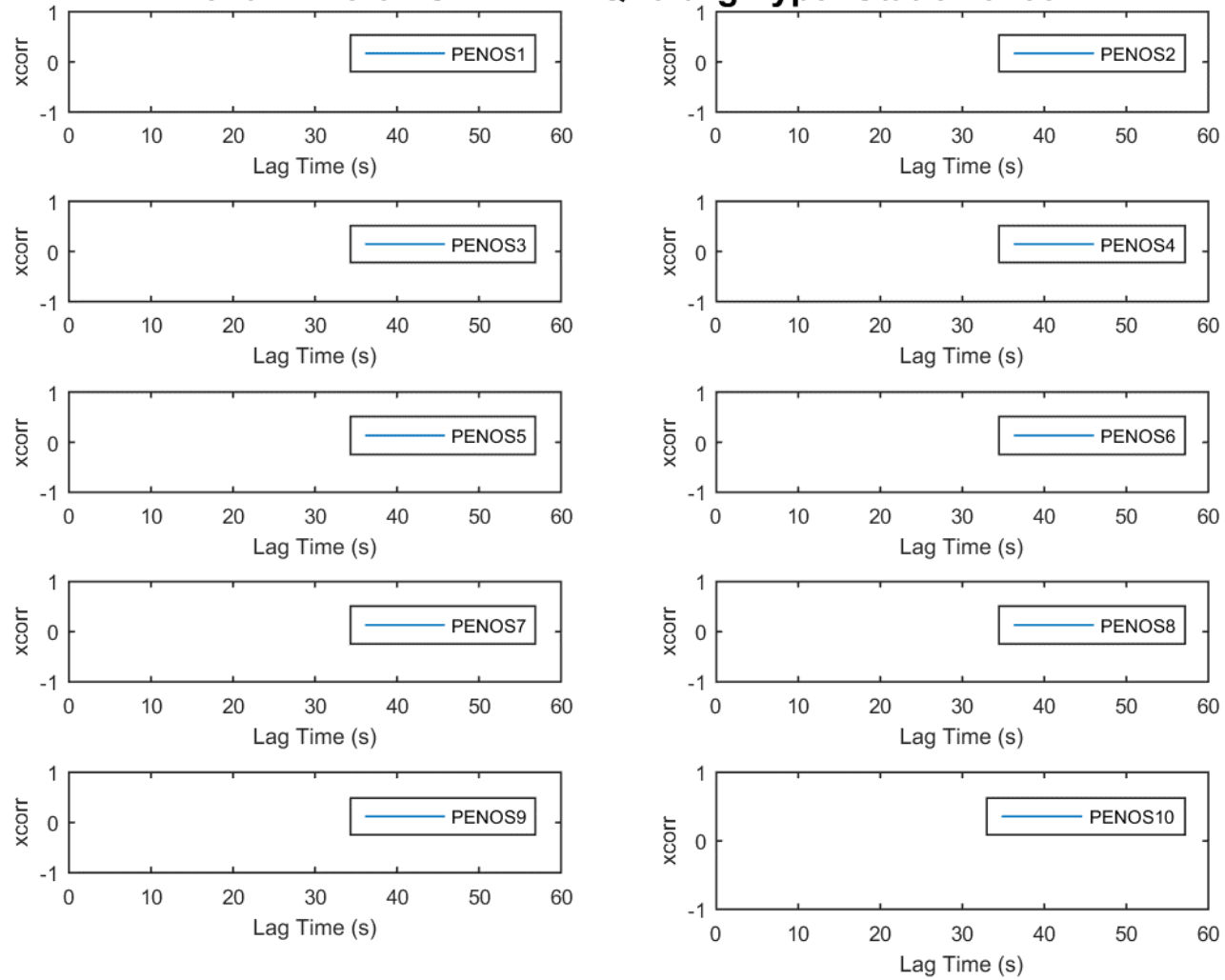
**FIGURE 2.273: COHERENCE PEN\_OS 1 - 5 15-01-S2-144**

**Event ID: 15-01-S2-144 NEQ: 0.6kg Type: Static 20150114**

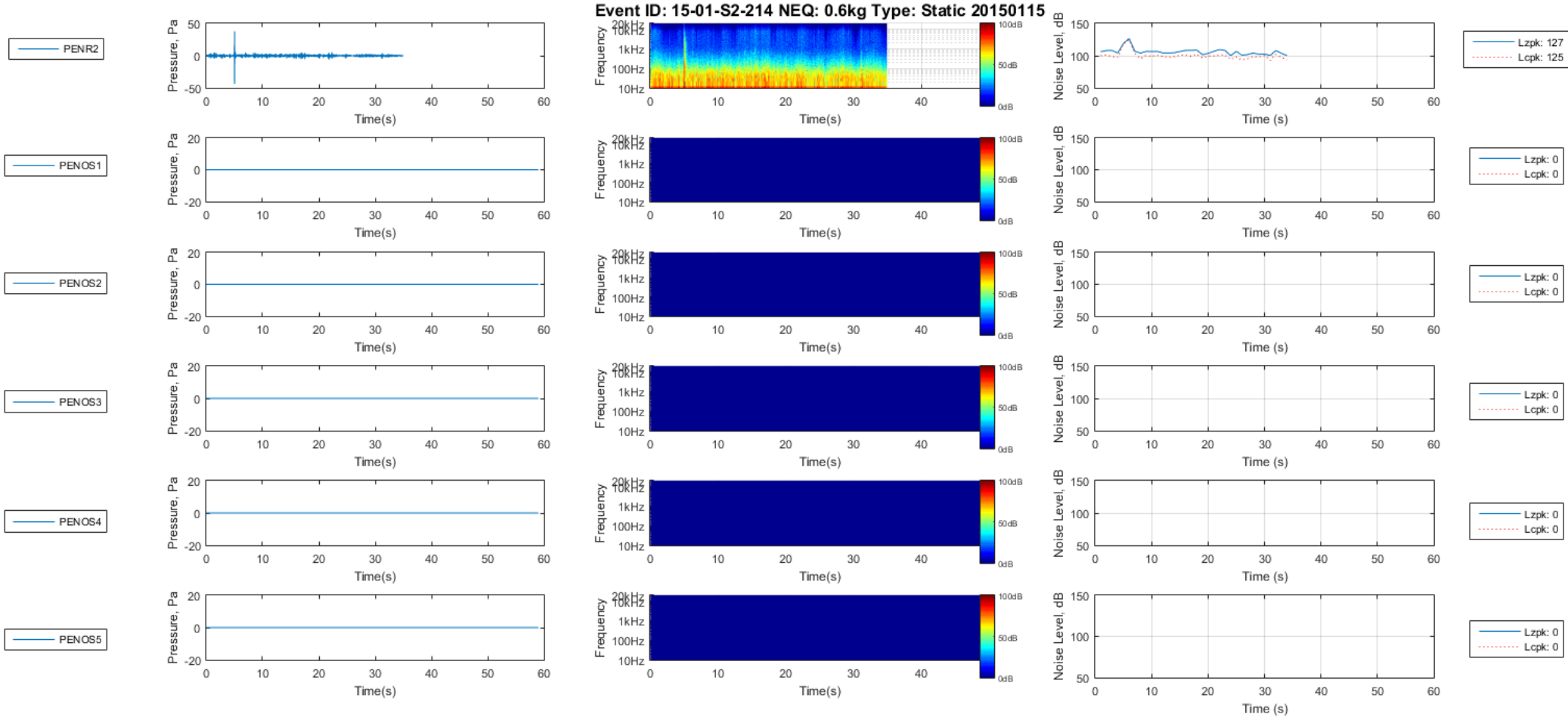


**FIGURE 2.274: COHERENCE PEN\_OS 6 - 10 15-01-S2-144CTD**

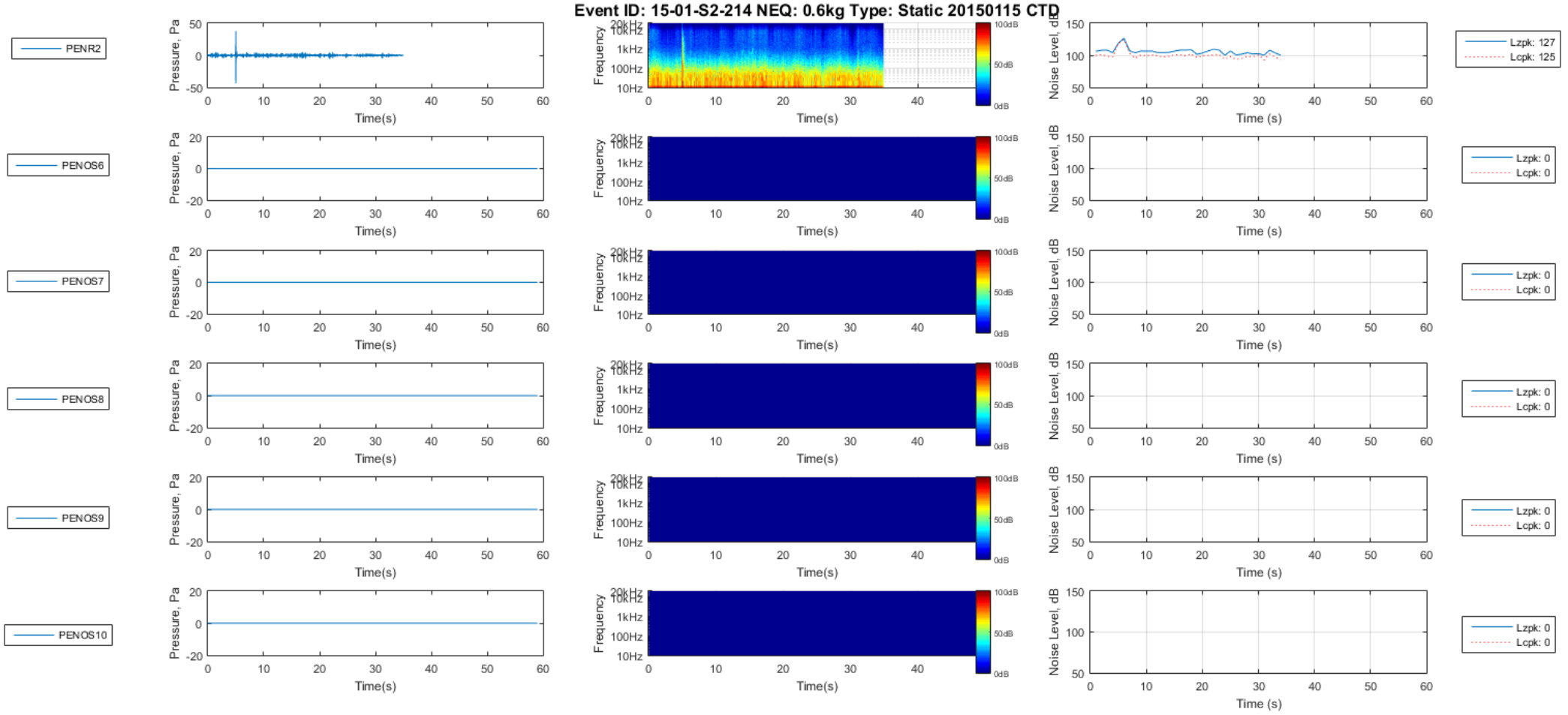
**Event ID: 15-01-S2-144 NEQ: 0.6kg Type: Static 20150114**



**FIGURE 2.275: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-144**

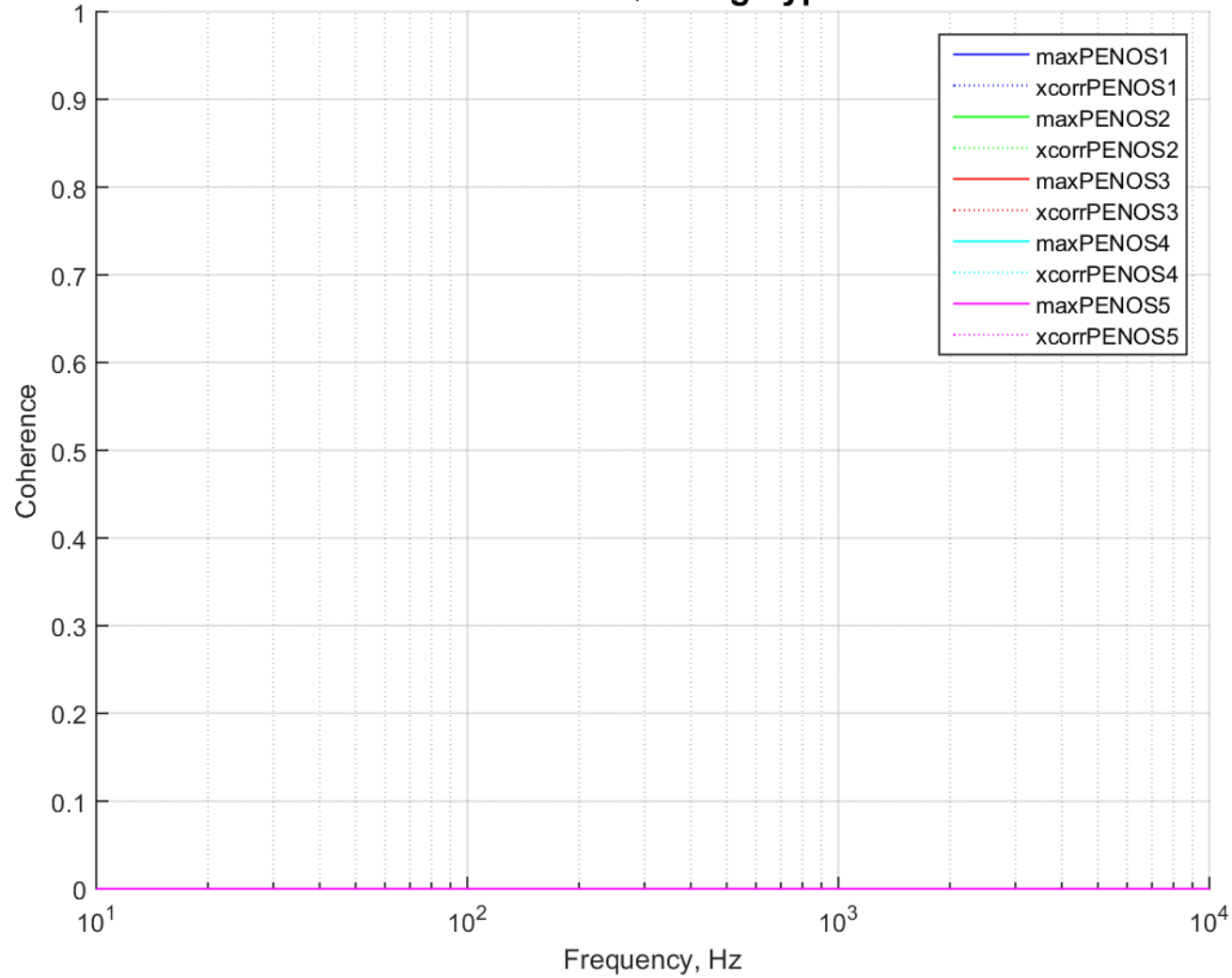


**FIGURE 2.276: PEN\_OS 1 - 5 15-01-S2-214**



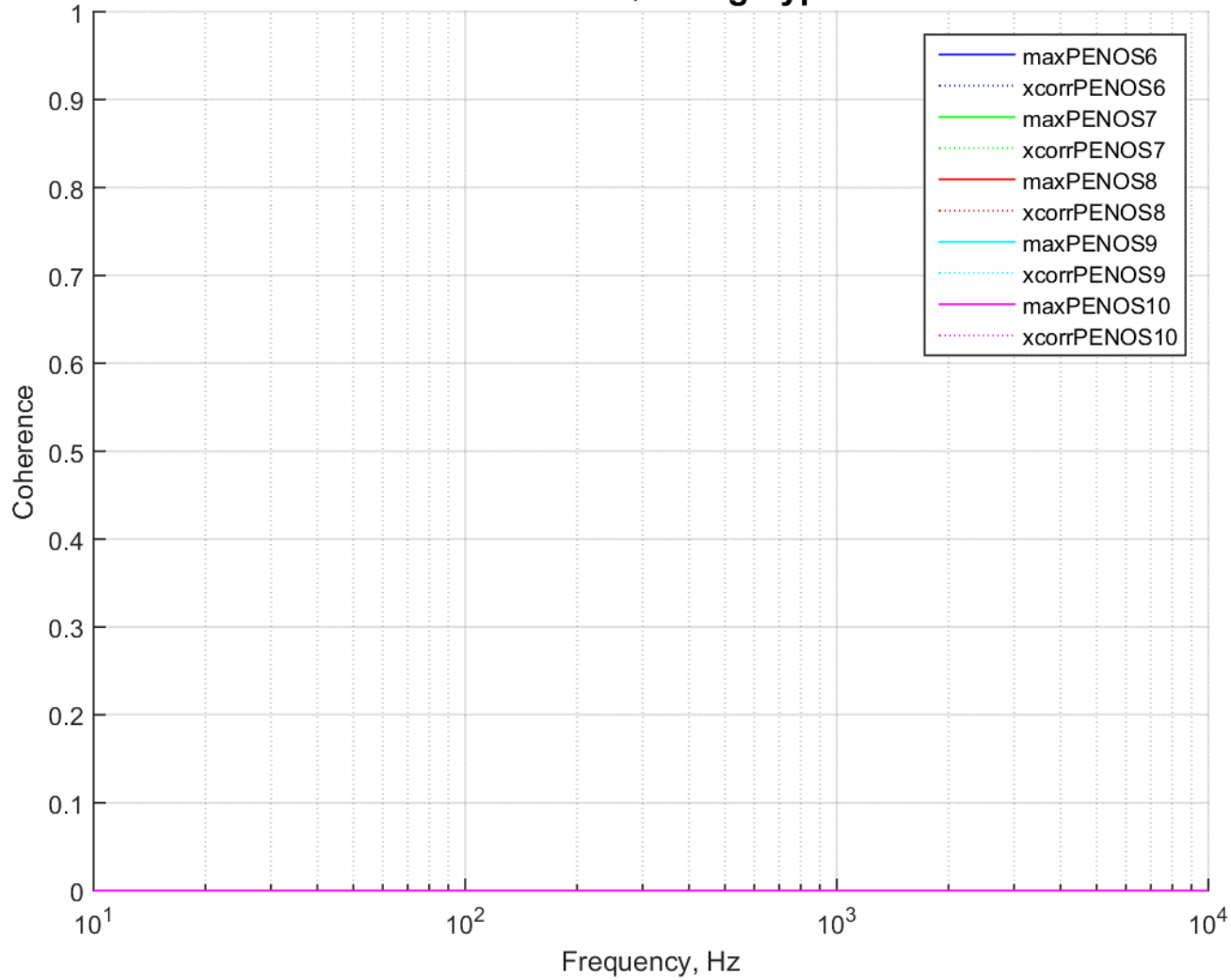
**FIGURE 2.277: PEN\_OS 6 - 10 15-01-S2-214**

**Event ID: 15-01-S2-214 NEQ: 0.6kg Type: Static 20150115**



**FIGURE 2.278: COHERENCE PEN\_OS 1 - 5 15-01-S2-214**

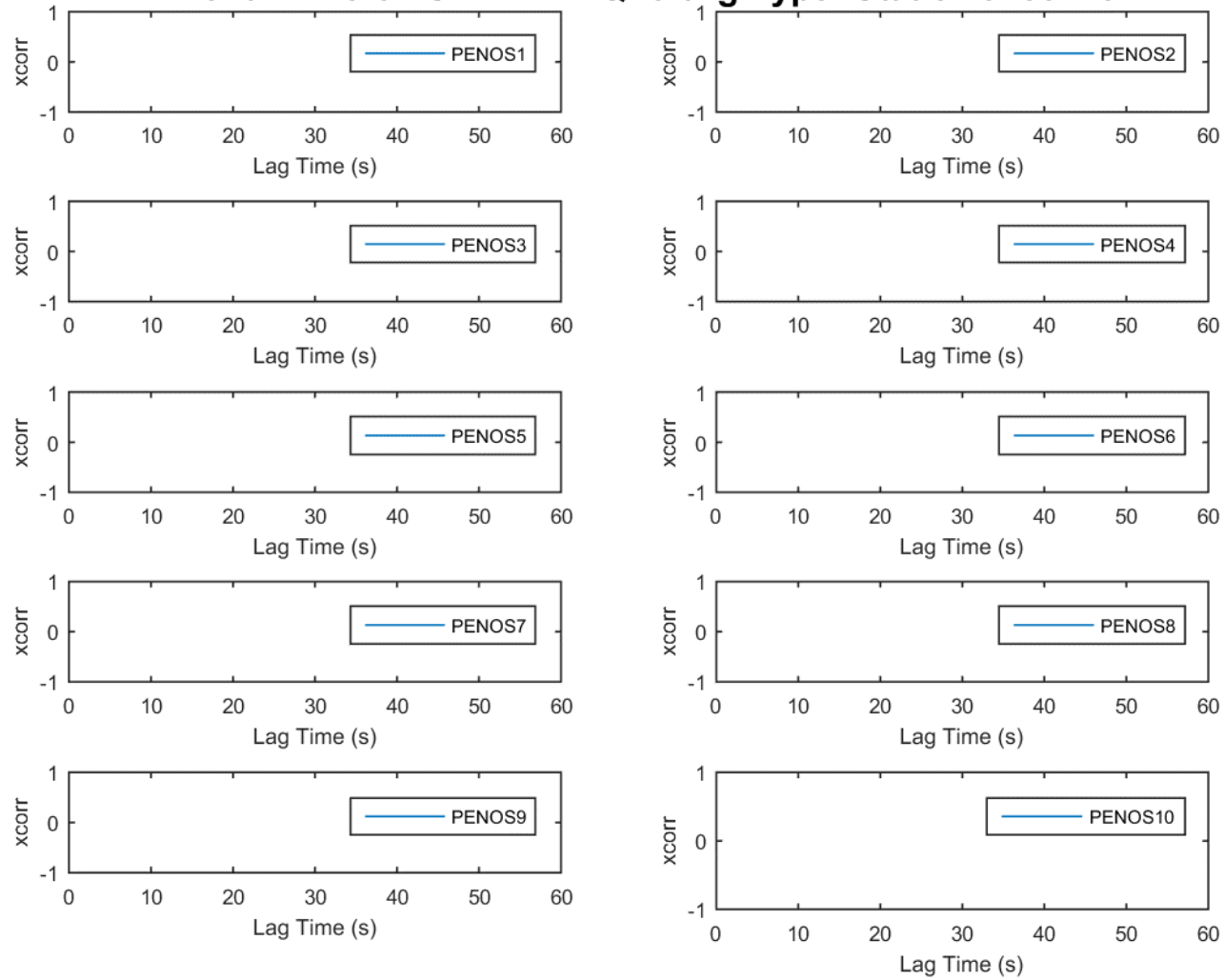
**Event ID: 15-01-S2-214 NEQ: 0.6kg Type: Static 20150115**



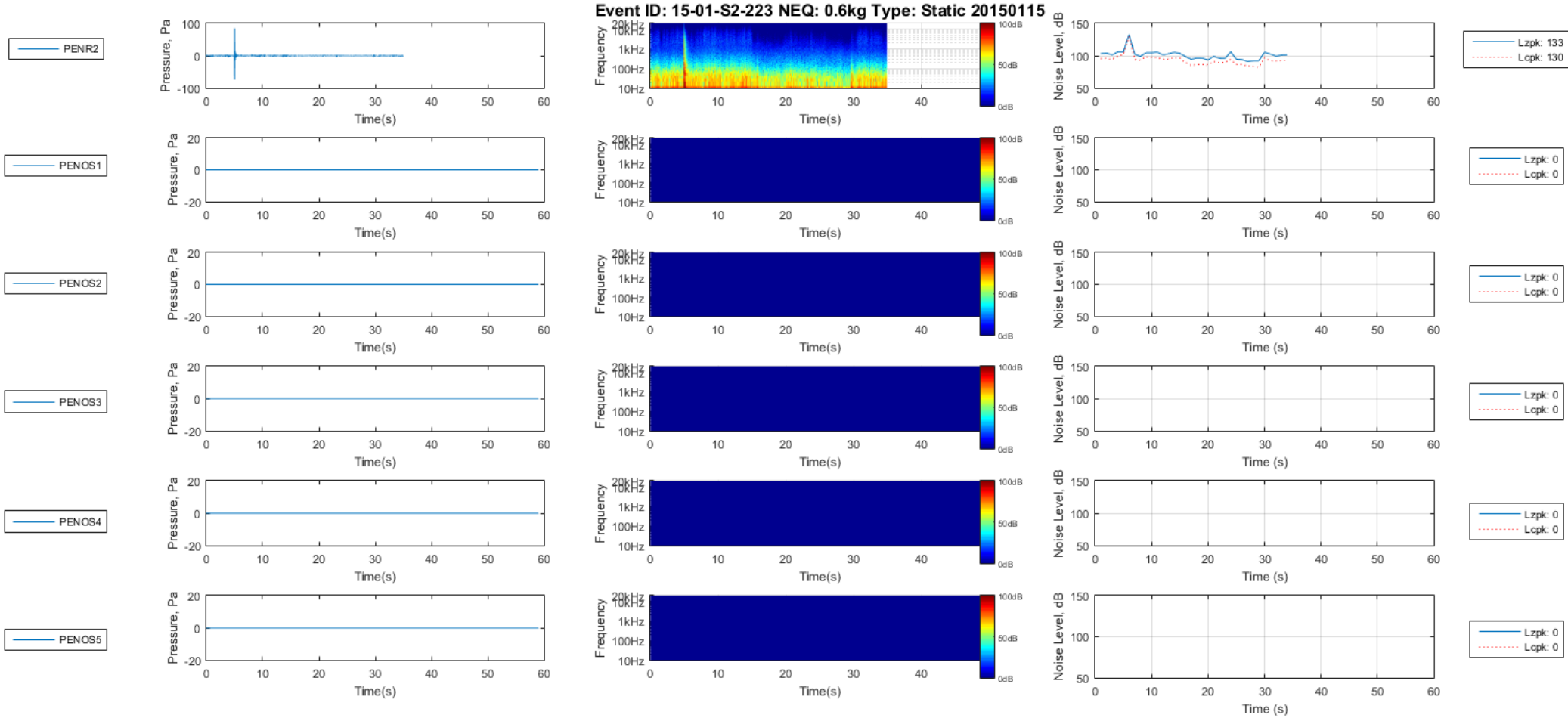
**FIGURE 2.279: COHERENCE PEN\_OS 6 - 10 15-01-S2-214CTD**



**Event ID: 15-01-S2-214 NEQ: 0.6kg Type: Static 20150115**



**FIGURE 2.280: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-214**



**FIGURE 2.281: PEN\_OS 1 - 5 15-01-S2-223**

Event ID: 15-01-S2-223 NEQ: 0.6kg Type: Static 20150115 CTD

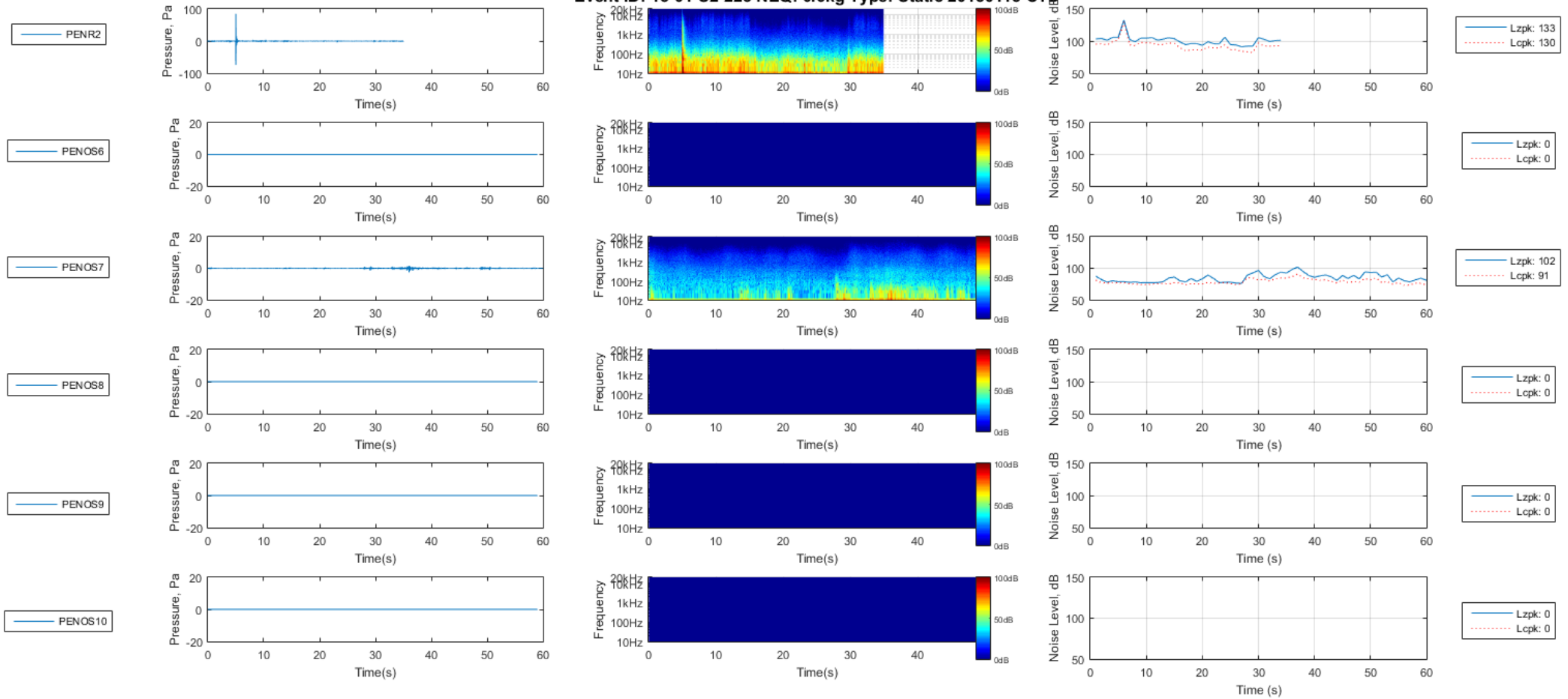
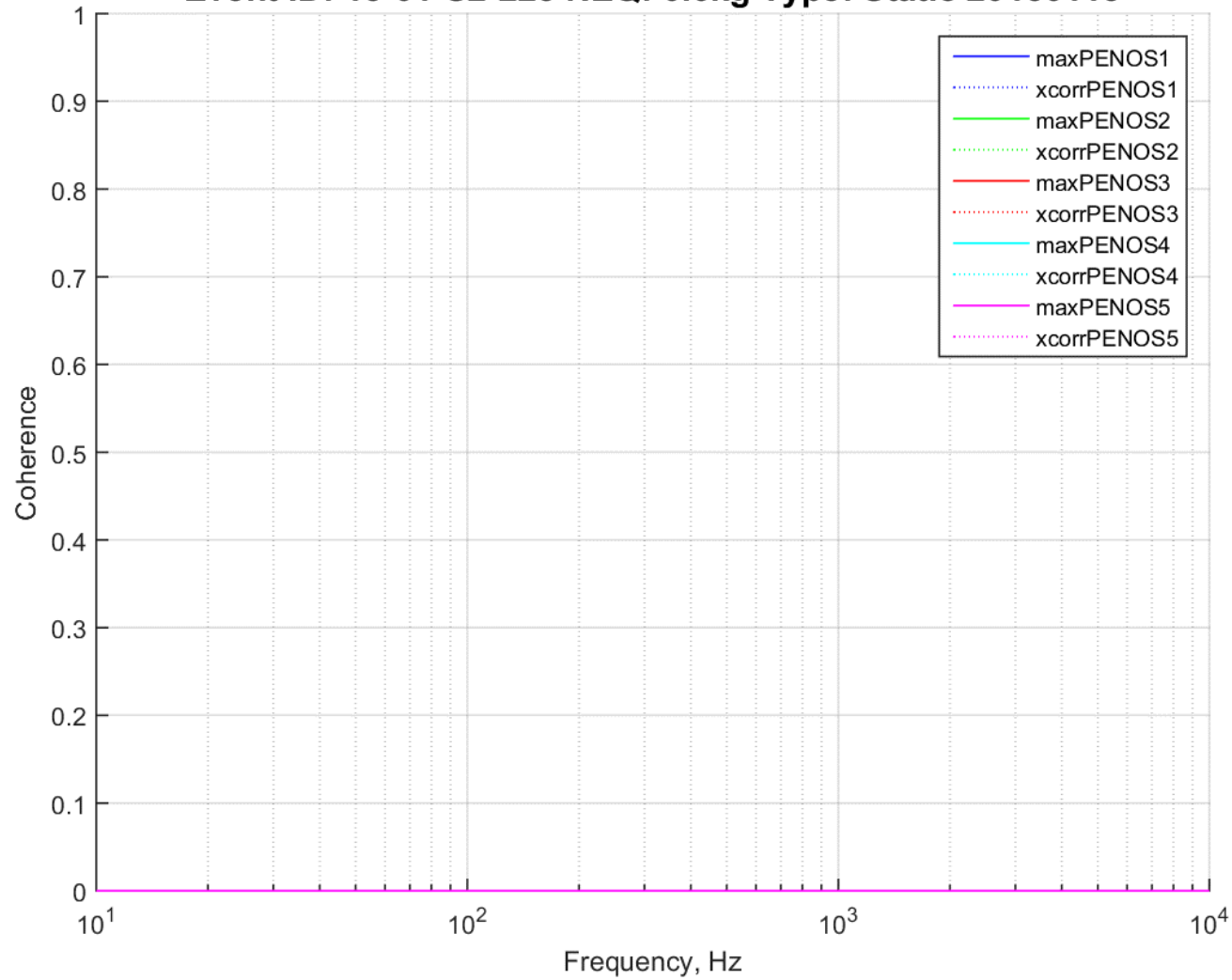


FIGURE 2.282: PEN\_OS 6 - 10 15-01-S2-223

**Event ID: 15-01-S2-223 NEQ: 0.6kg Type: Static 20150115**



**FIGURE 2.283: COHERENCE PEN\_OS 1 - 5 15-01-S2-223**

Event ID: 15-01-S2-223 NEQ: 0.6kg Type: Static 20150115

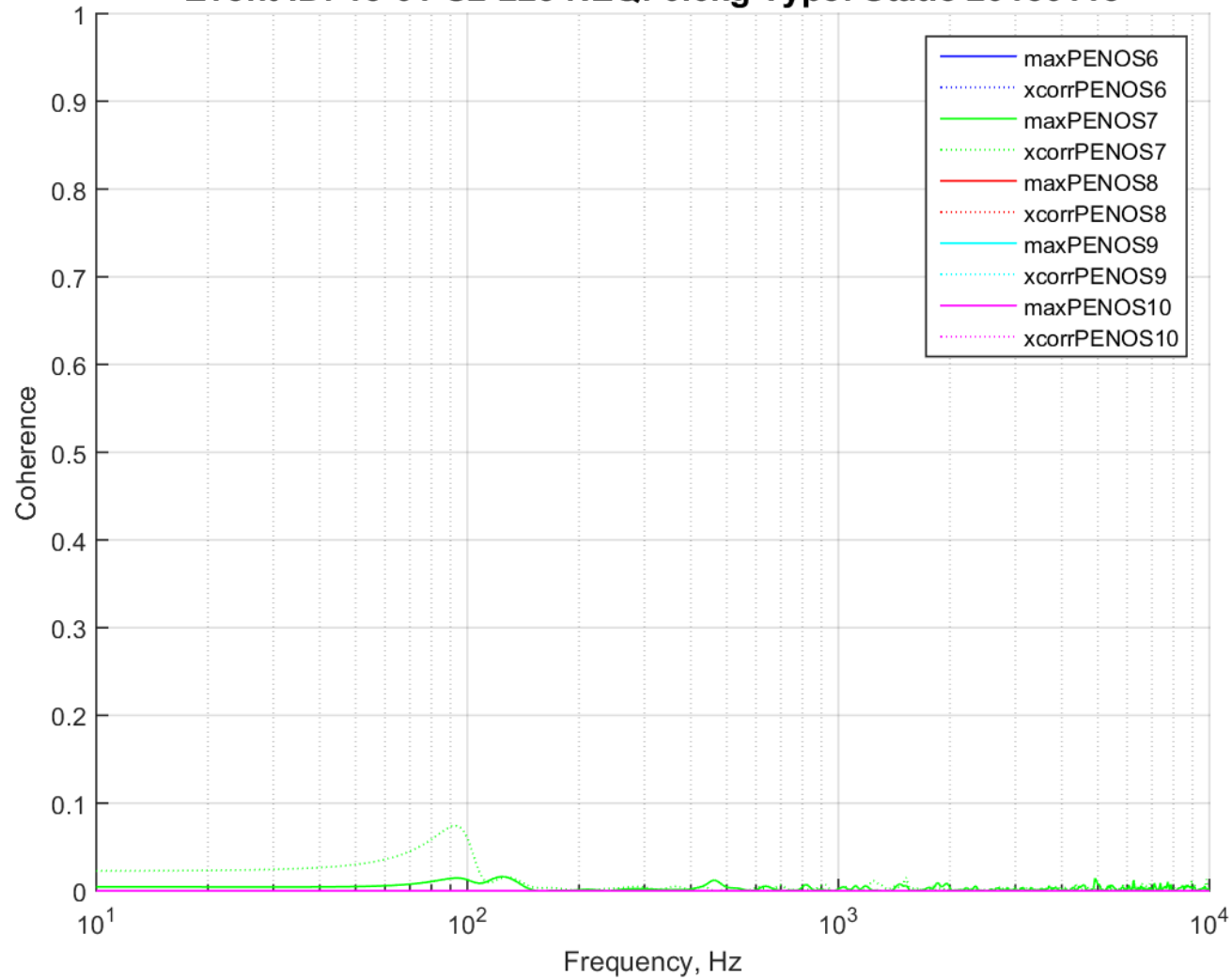
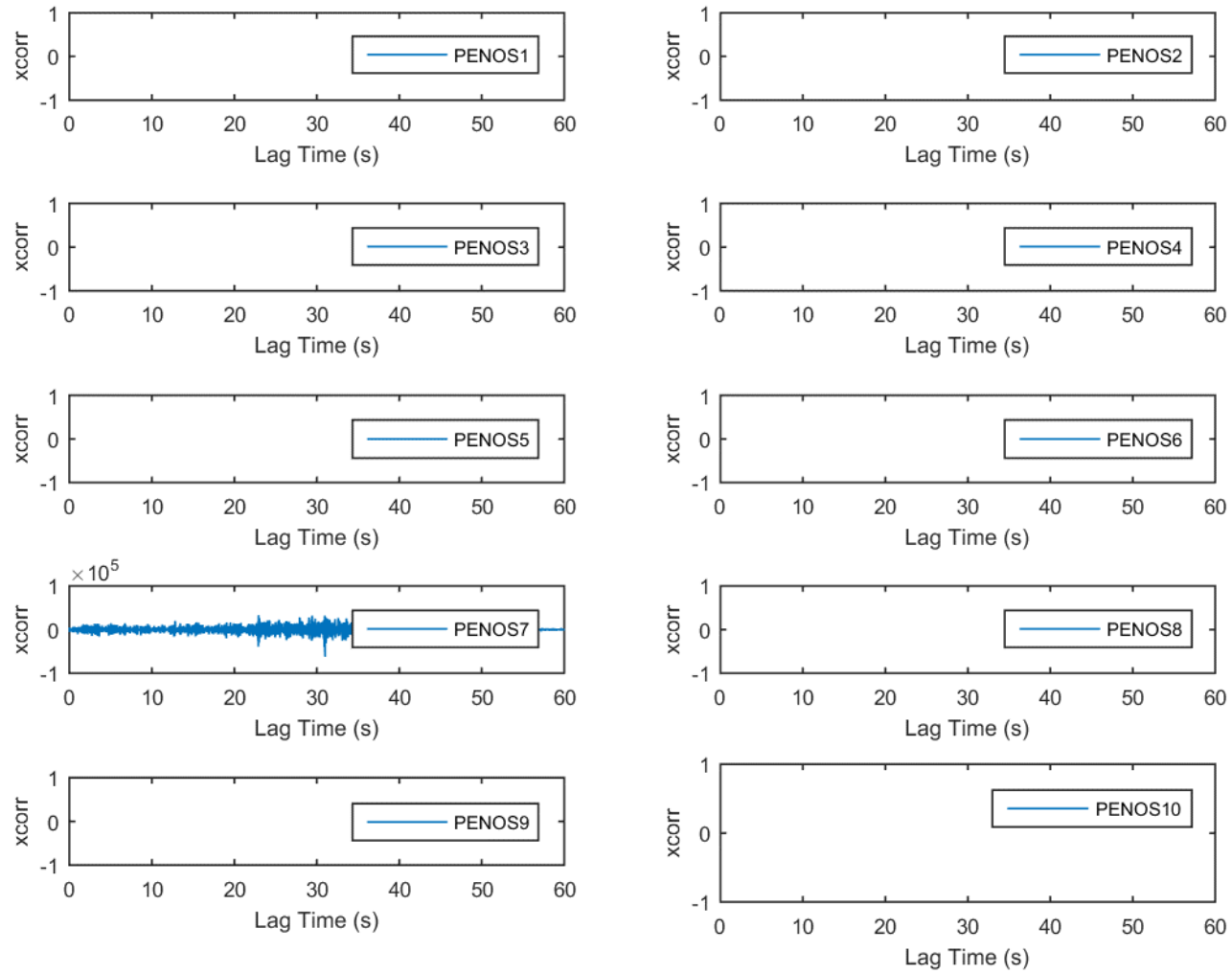
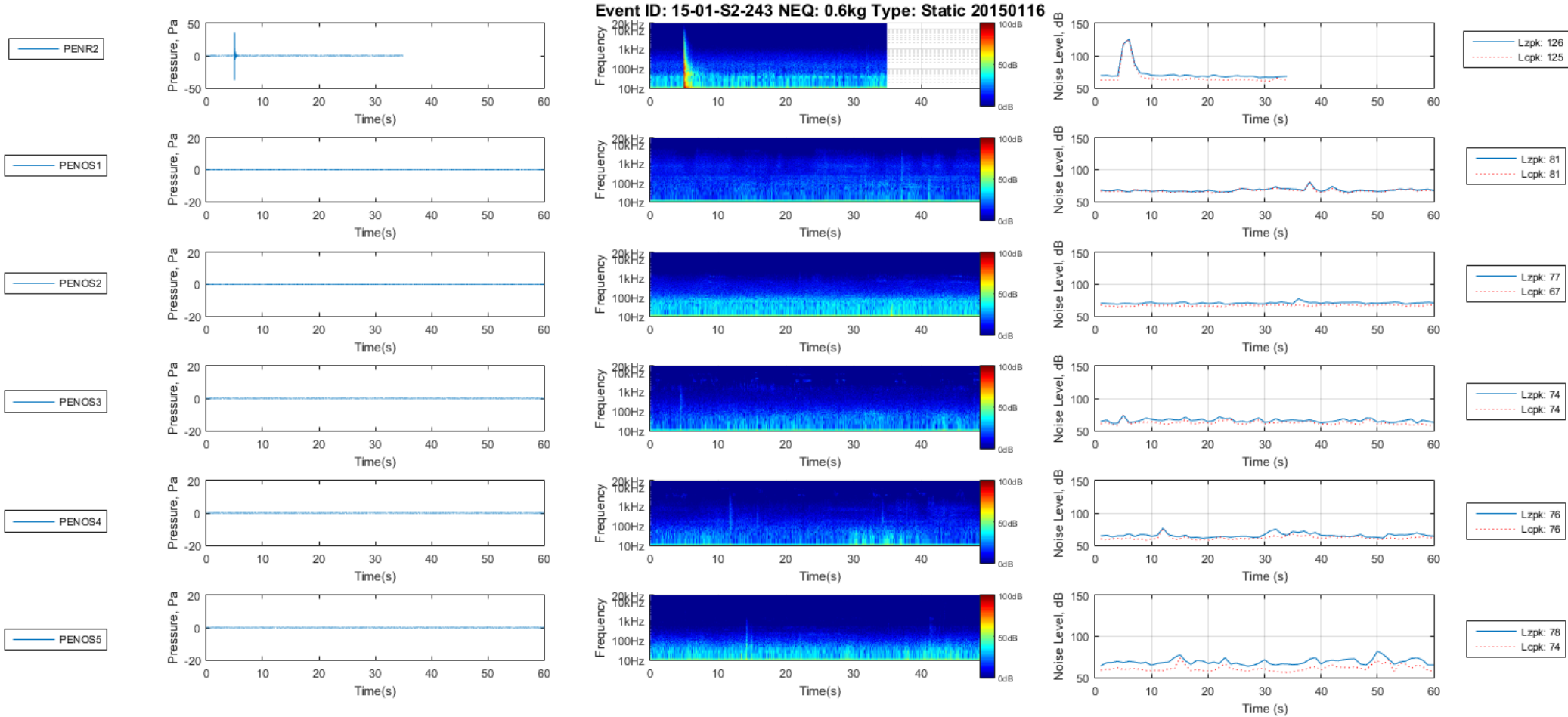


FIGURE 2.284: COHERENCE PEN\_OS 6 - 10 15-01-S2-223CTD

**Event ID: 15-01-S2-223 NEQ: 0.6kg Type: Static 20150115**



**FIGURE 2.285: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-223**



**FIGURE 2.286: PEN\_OS 1 - 5 15-01-S2-243**

Event ID: 15-01-S2-243 NEQ: 0.6kg Type: Static 20150116 CTD

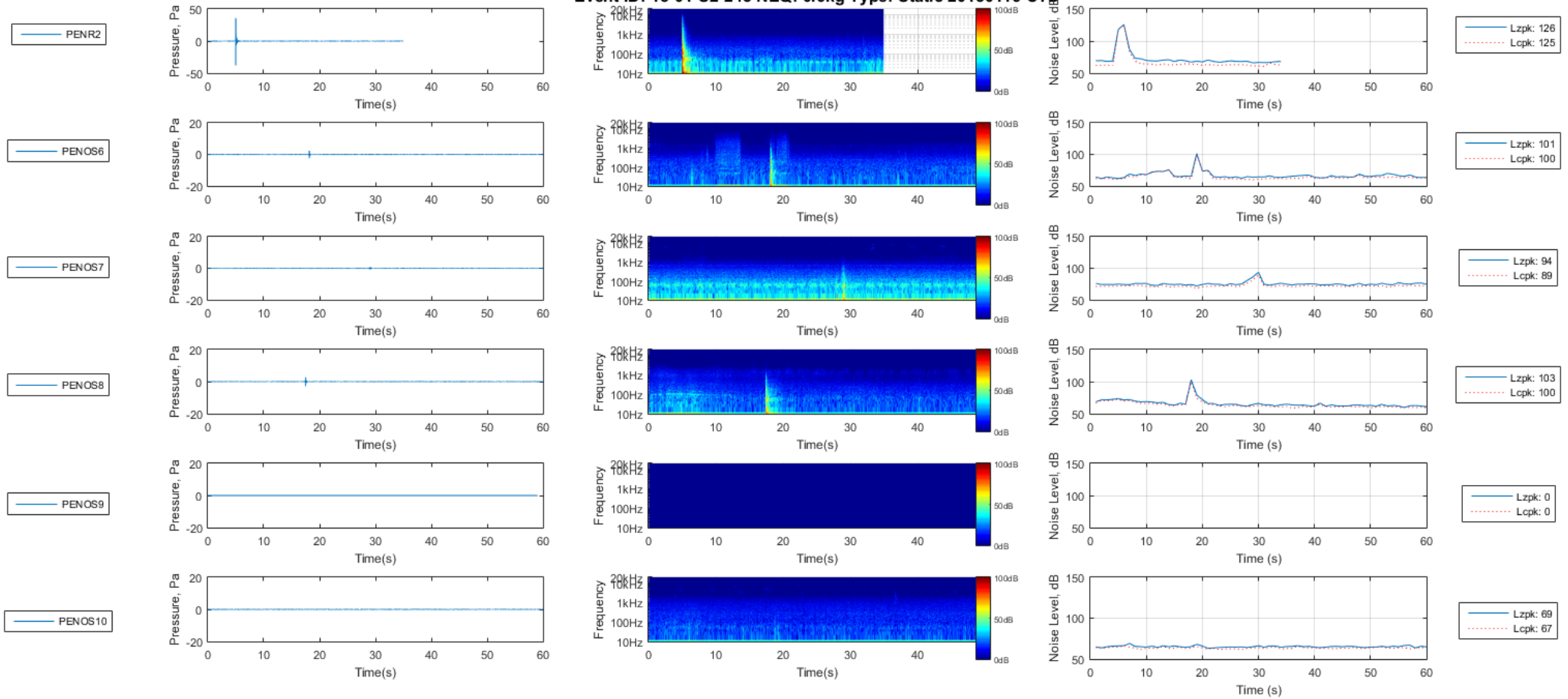


FIGURE 2.287: PEN\_OS 6 - 10 15-01-S2-243



Event ID: 15-01-S2-243 NEQ: 0.6kg Type: Static 20150116

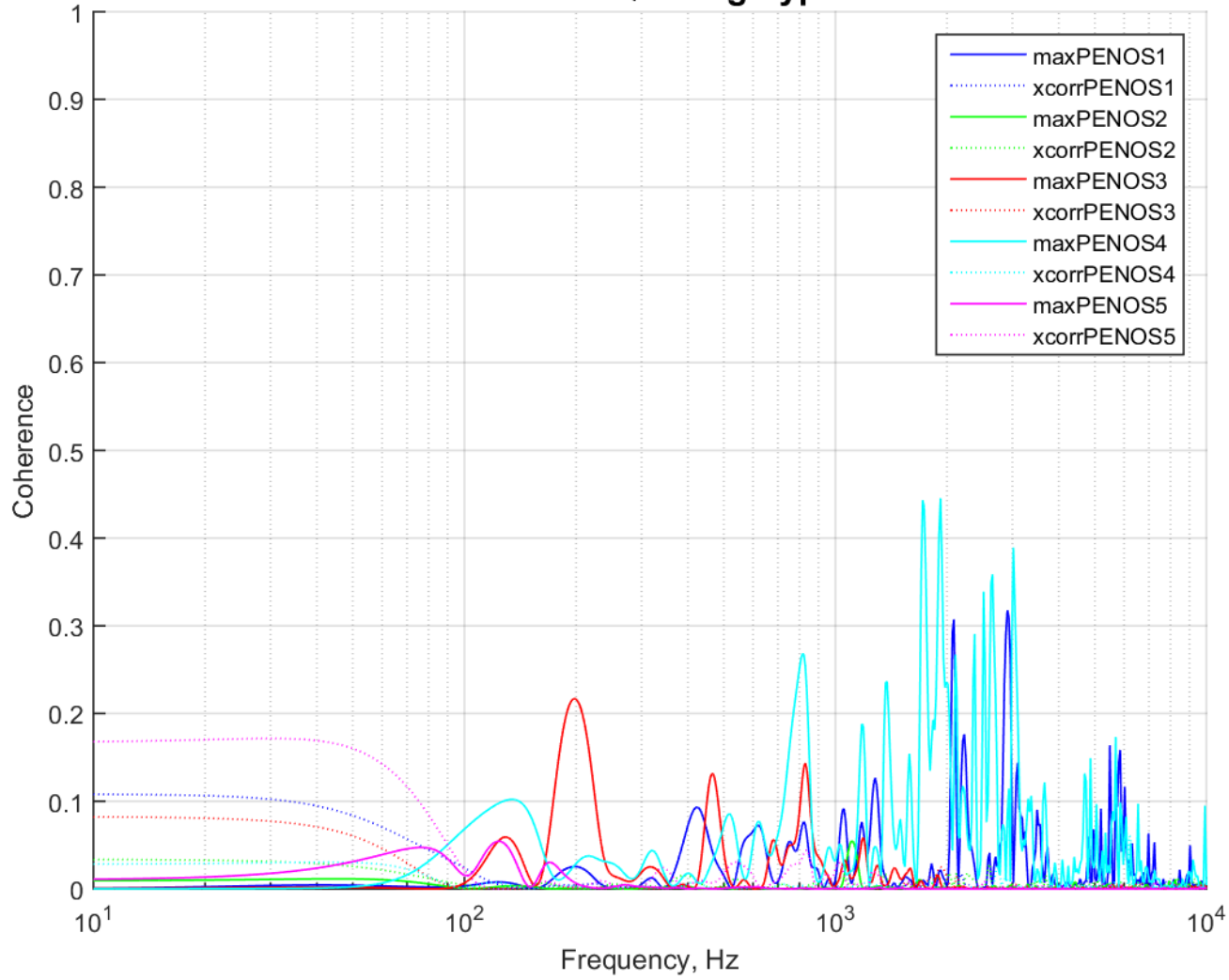


FIGURE 2.288: COHERENCE PEN\_OS 1 - 5 15-01-S2-243

Event ID: 15-01-S2-243 NEQ: 0.6kg Type: Static 20150116

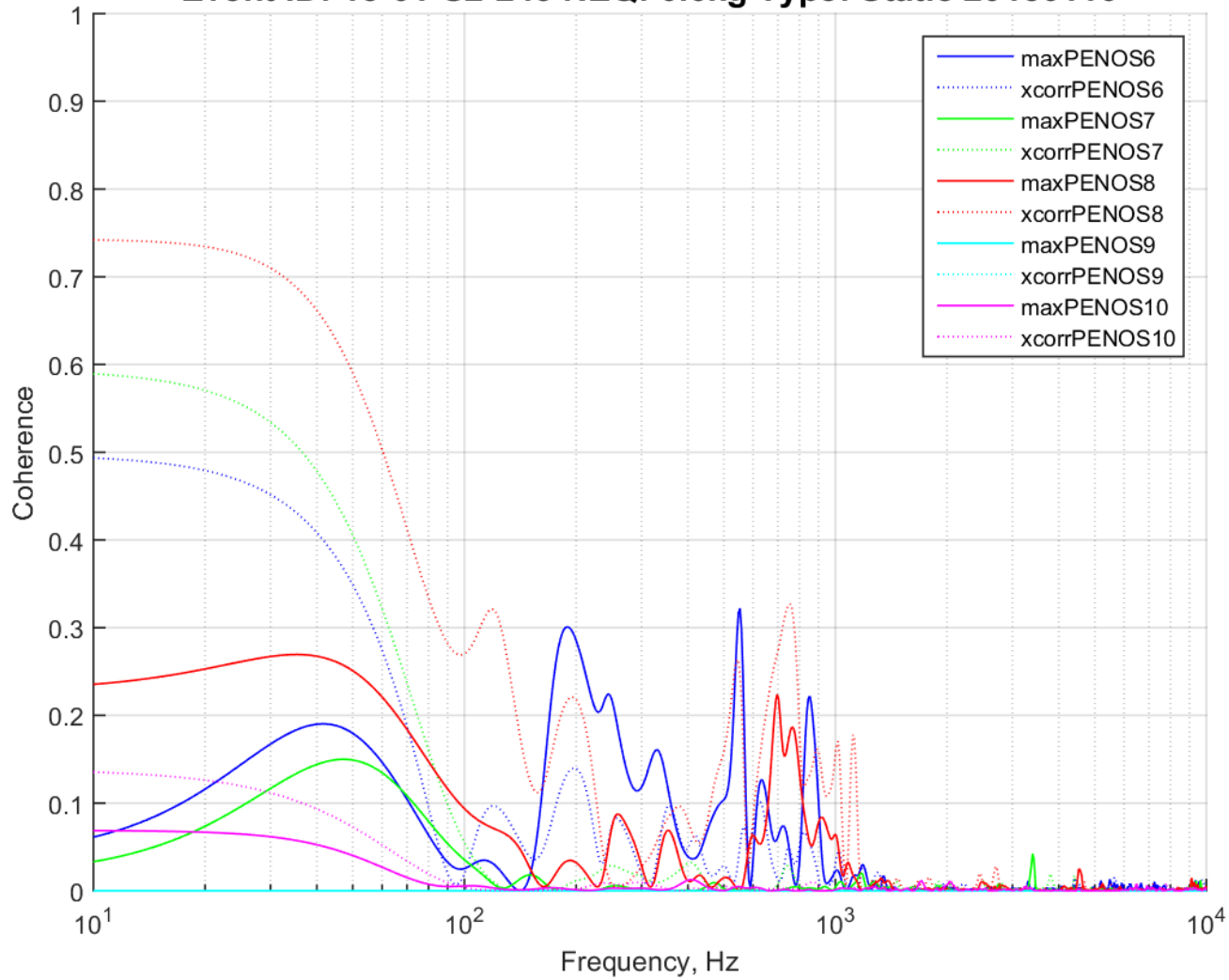
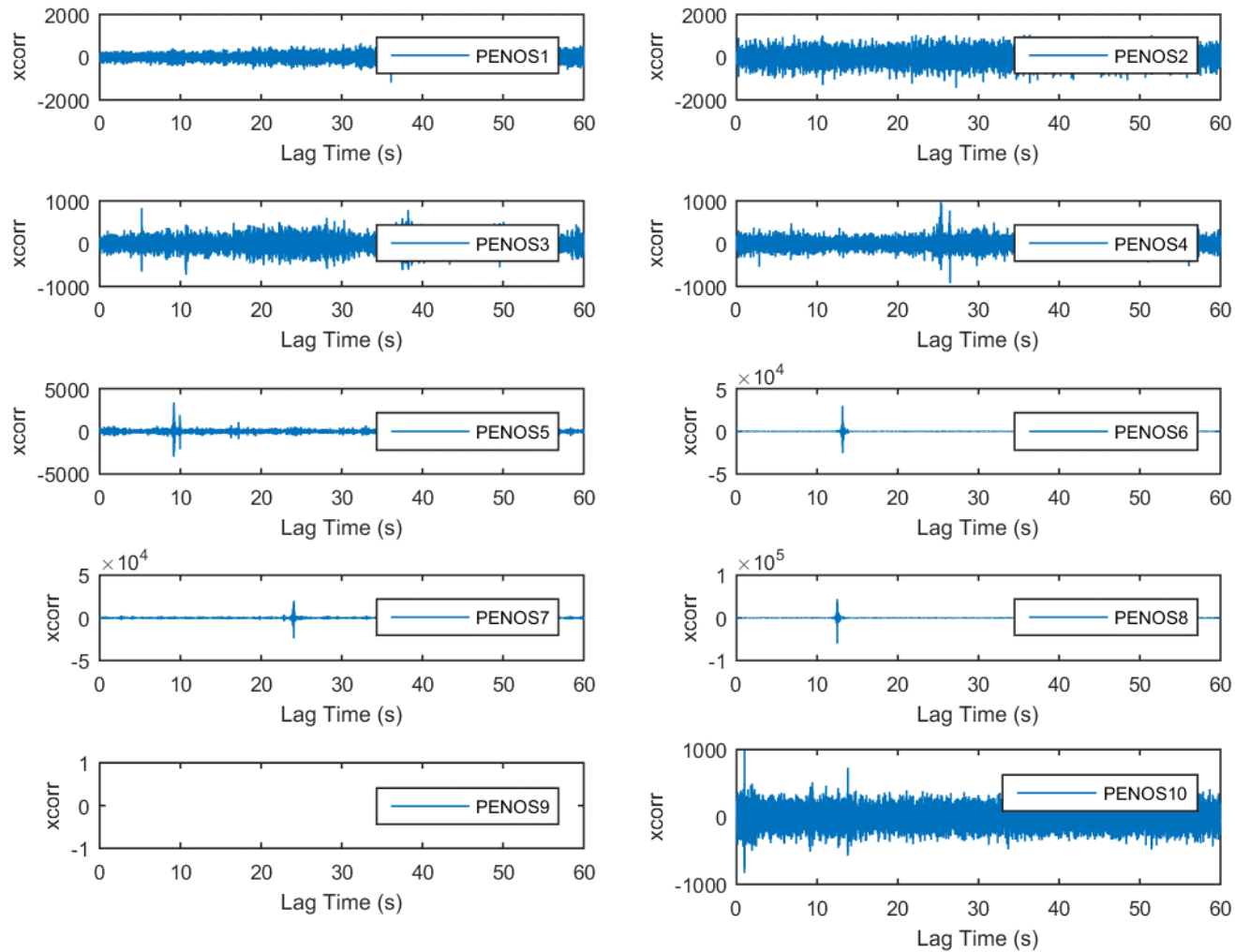
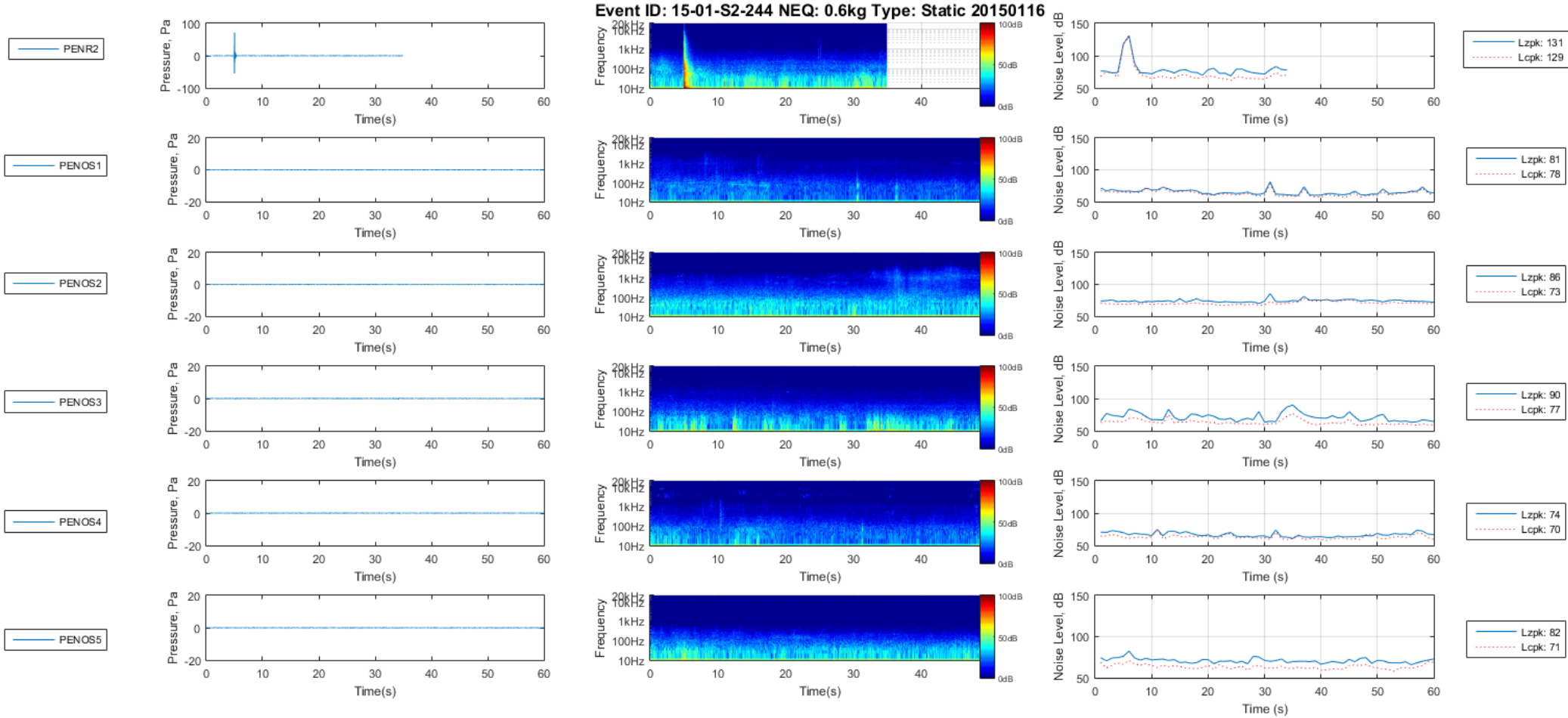


FIGURE 2.289: COHERENCE PEN\_OS 6 - 10 15-01-S2-243CTD

**Event ID: 15-01-S2-243 NEQ: 0.6kg Type: Static 20150116**



**FIGURE 2.290: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-243**



**FIGURE 2.291: PEN\_OS 1 - 5 15-01-S2-244**

Event ID: 15-01-S2-244 NEQ: 0.6kg Type: Static 20150116 CTD

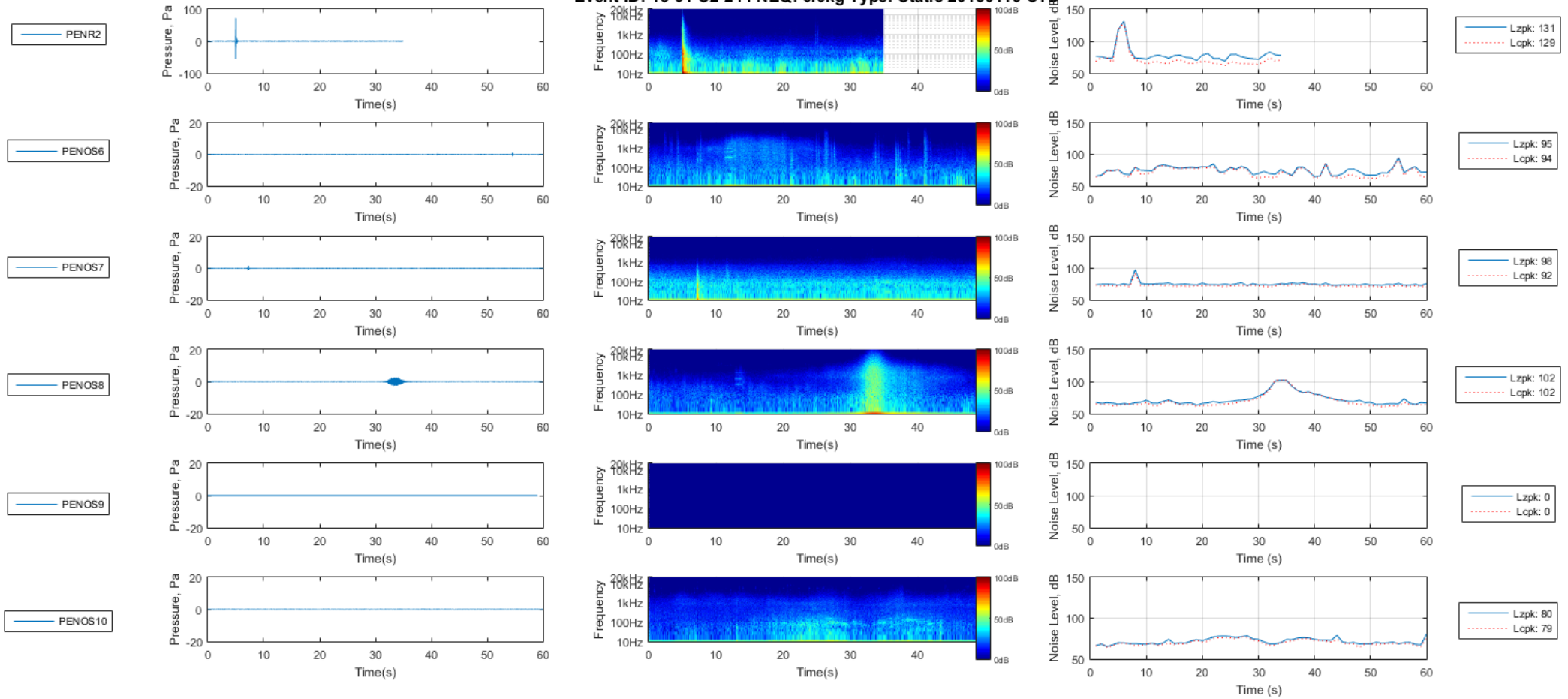
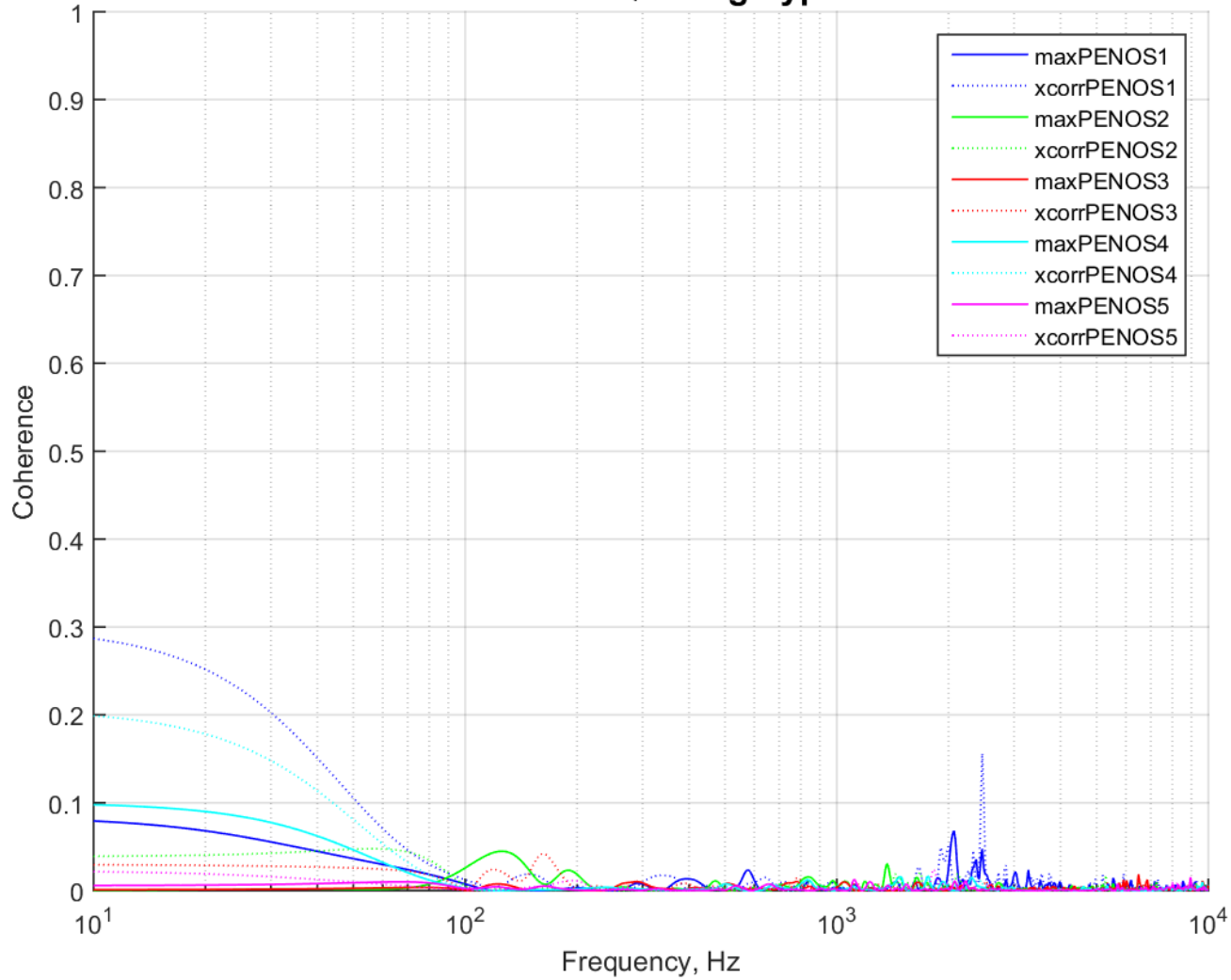


FIGURE 2.292: PEN\_OS 6 - 10 15-01-S2-244

**Event ID: 15-01-S2-244 NEQ: 0.6kg Type: Static 20150116**



**FIGURE 2.293: COHERENCE PEN\_OS 1 - 5 15-01-S2-244**

Event ID: 15-01-S2-244 NEQ: 0.6kg Type: Static 20150116

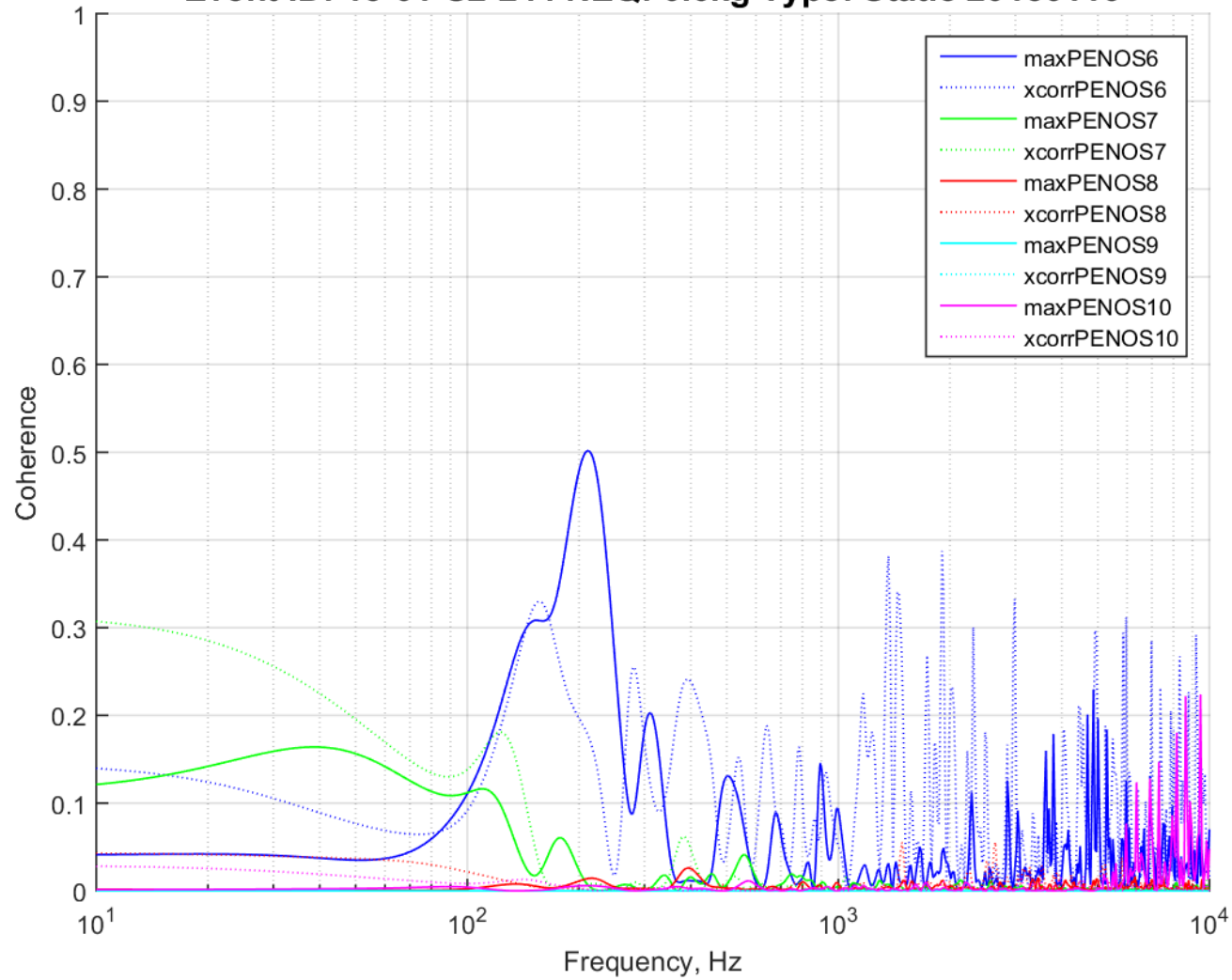
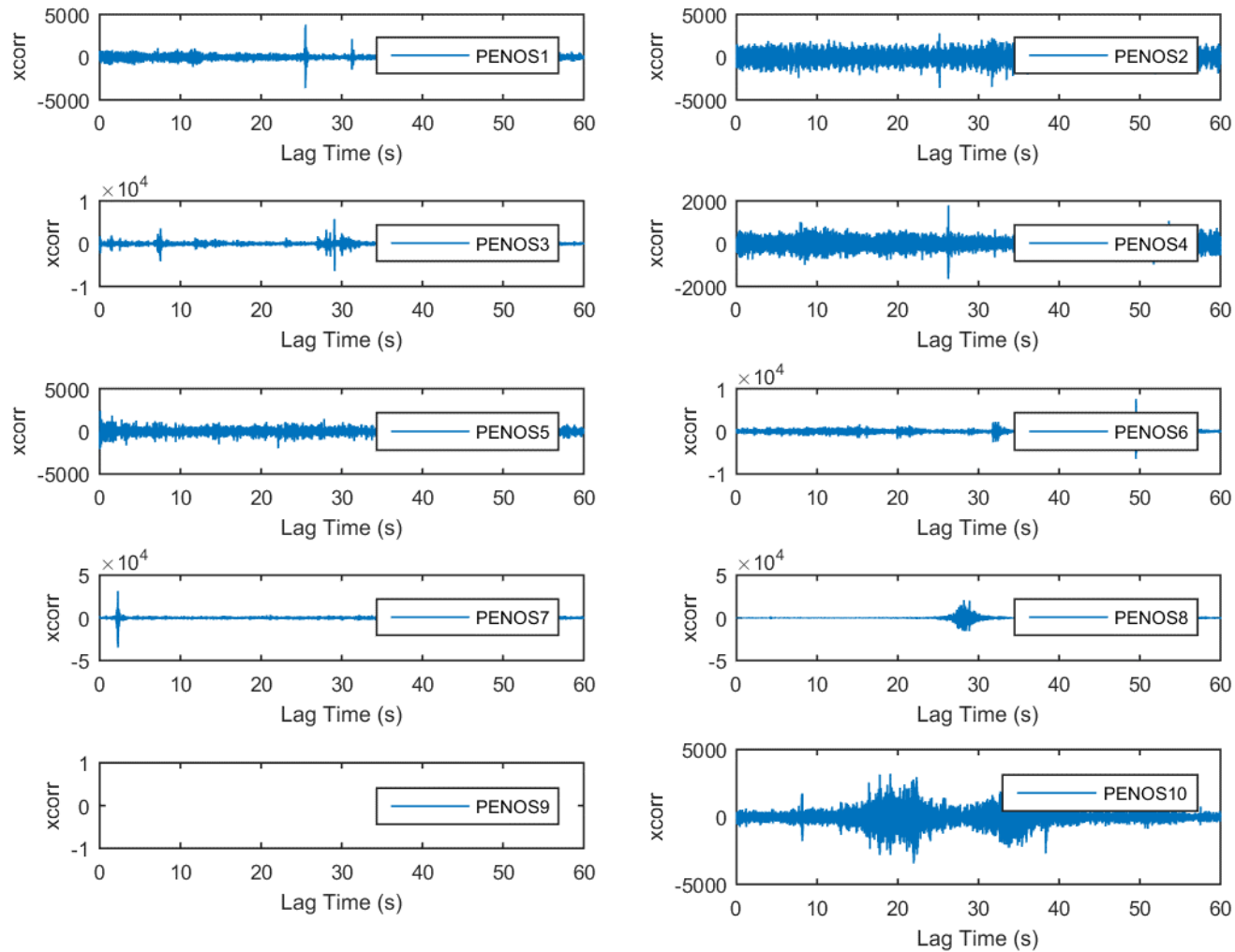


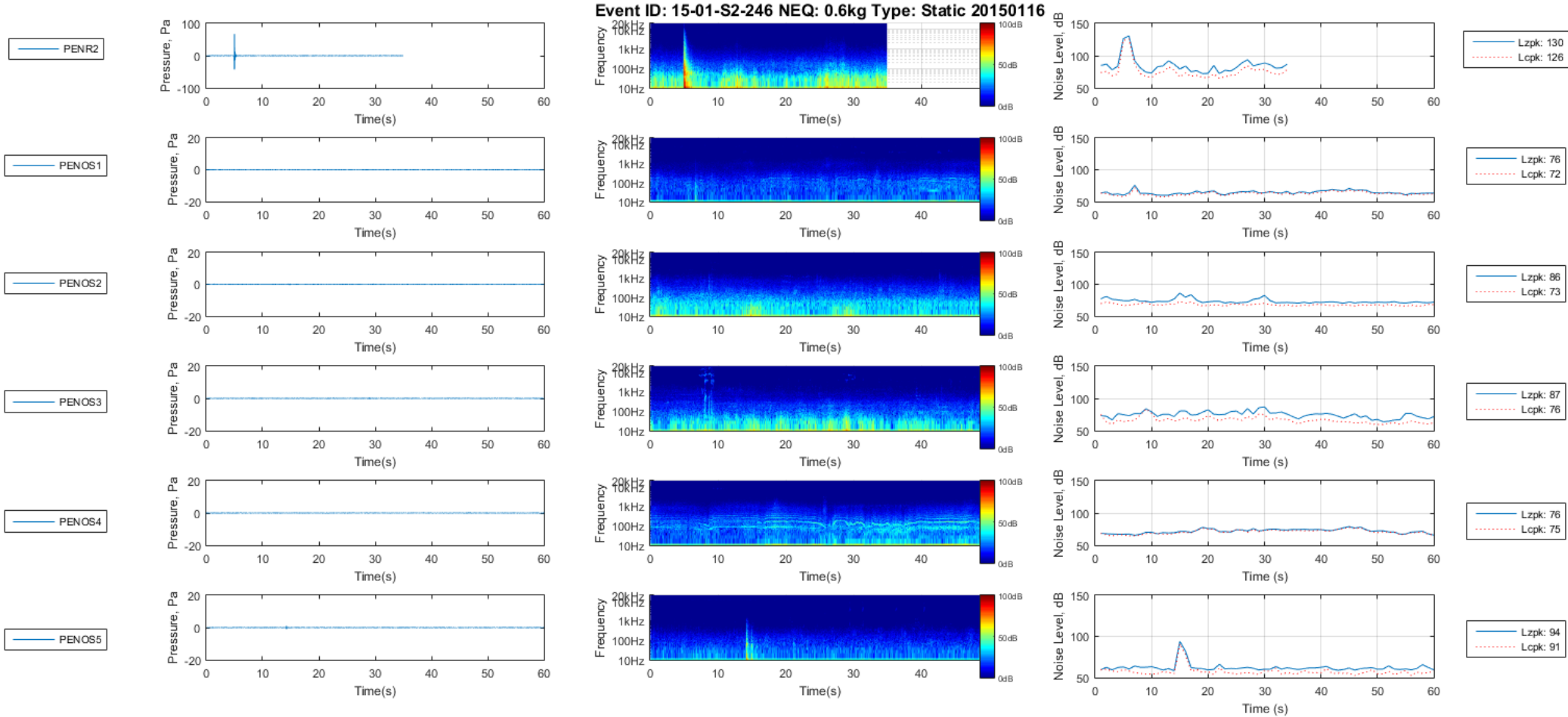
FIGURE 2.294: COHERENCE PEN\_OS 6 - 10 15-01-S2-244CTD

**Event ID: 15-01-S2-244 NEQ: 0.6kg Type: Static 20150116**



**FIGURE 2.295: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-244**





**FIGURE 2.296: PEN\_OS 1 - 5 15-01-S2-246**

Event ID: 15-01-S2-246 NEQ: 0.6kg Type: Static 20150116 CTD

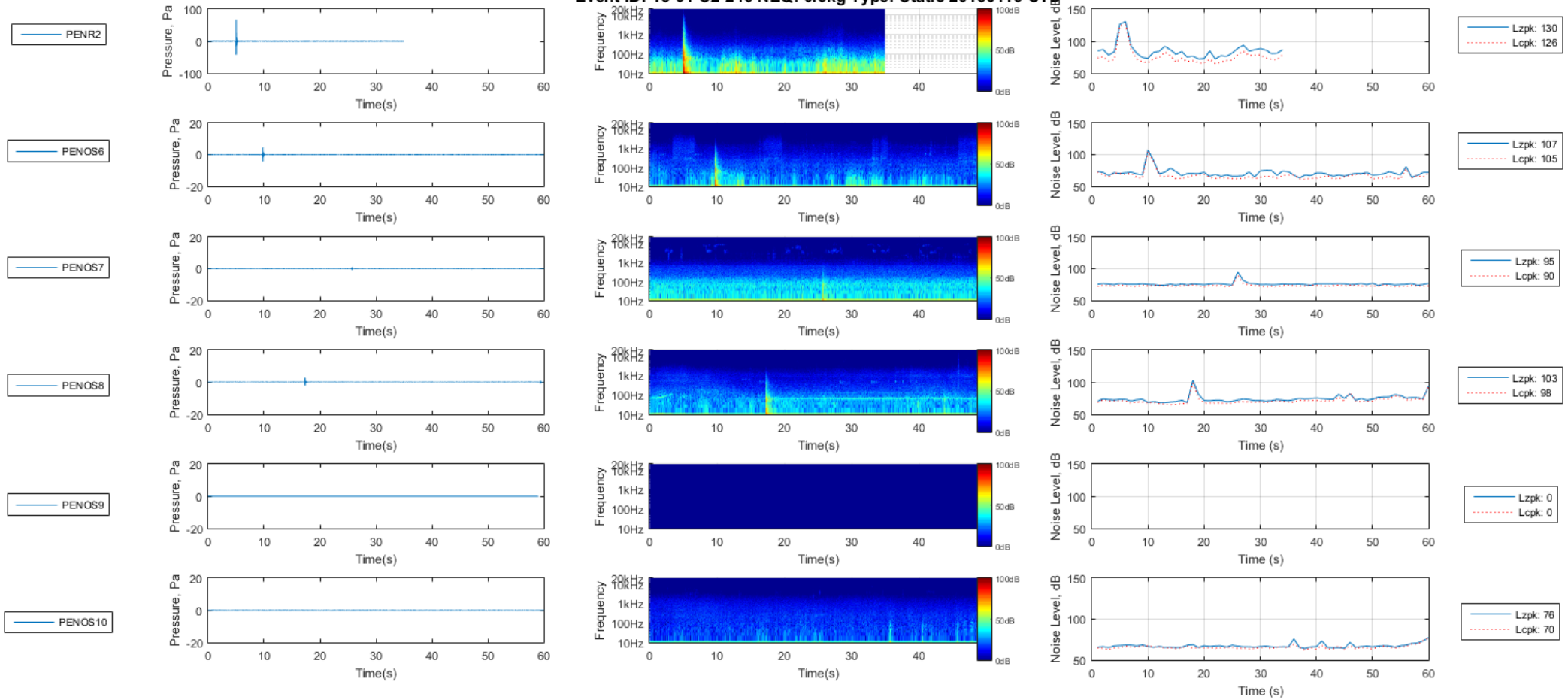
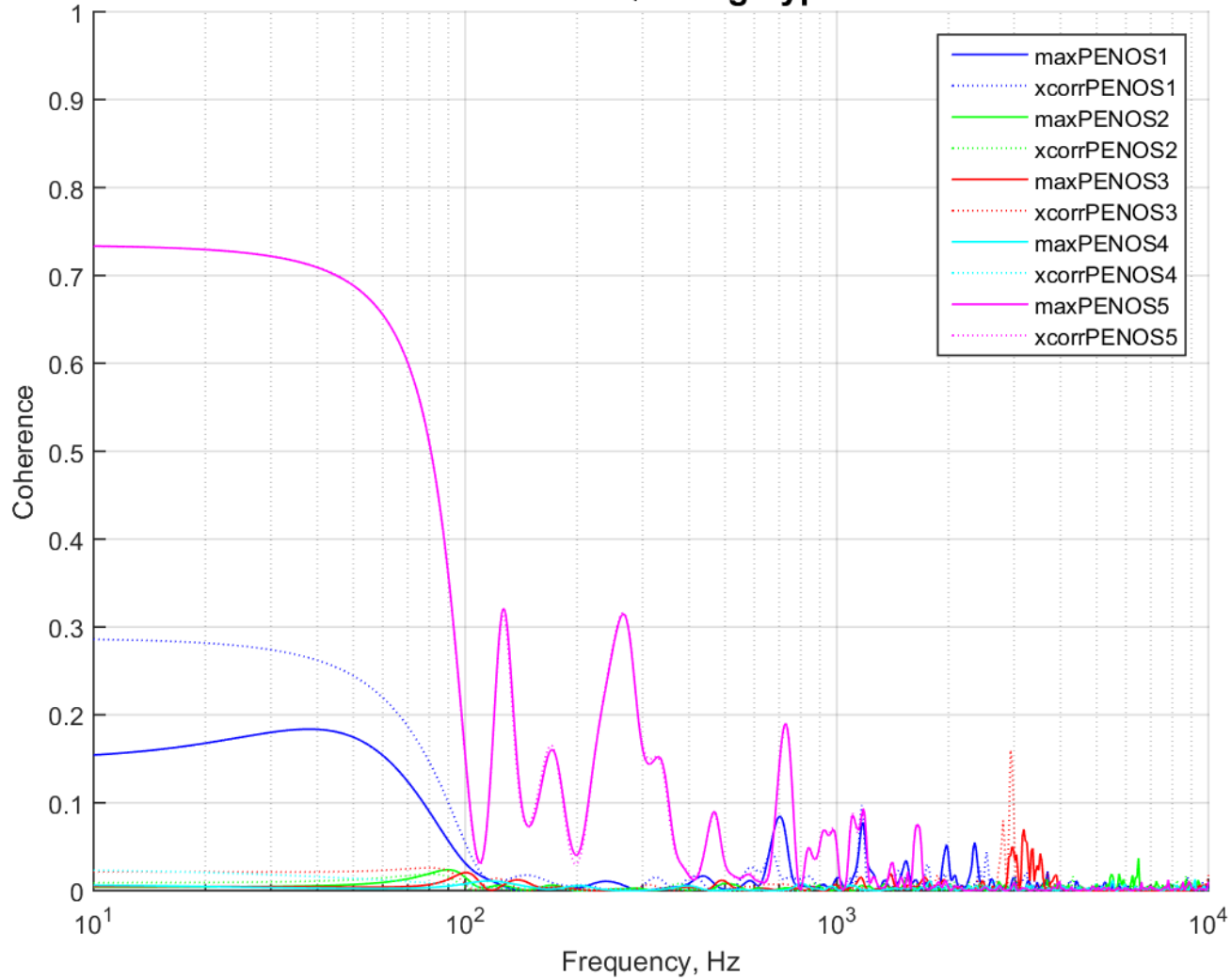


FIGURE 2.297: PEN\_OS 6 - 10 15-01-S2-246

**Event ID: 15-01-S2-246 NEQ: 0.6kg Type: Static 20150116**



**FIGURE 2.298: COHERENCE PEN\_OS 1 - 5 15-01-S2-246**

Event ID: 15-01-S2-246 NEQ: 0.6kg Type: Static 20150116

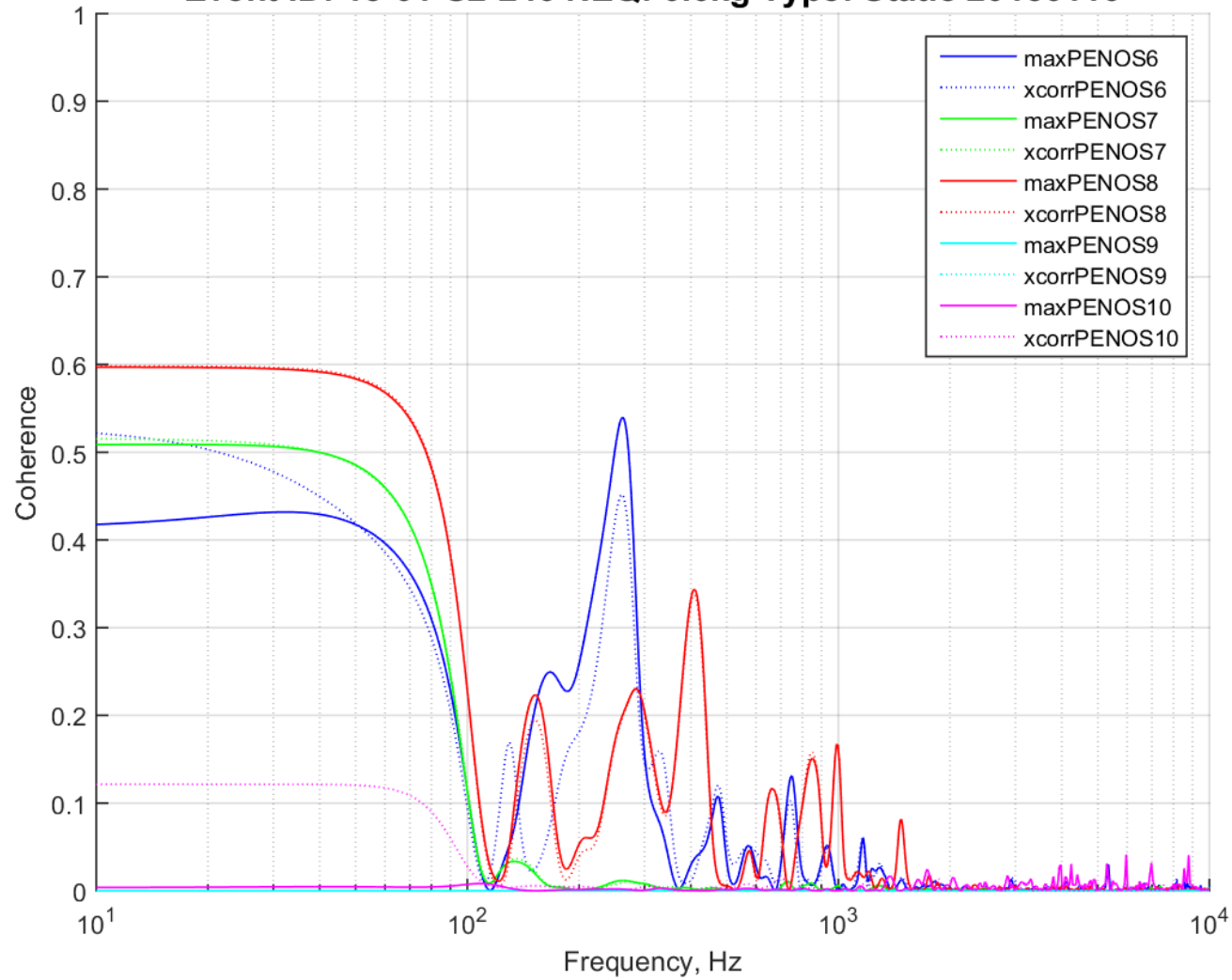
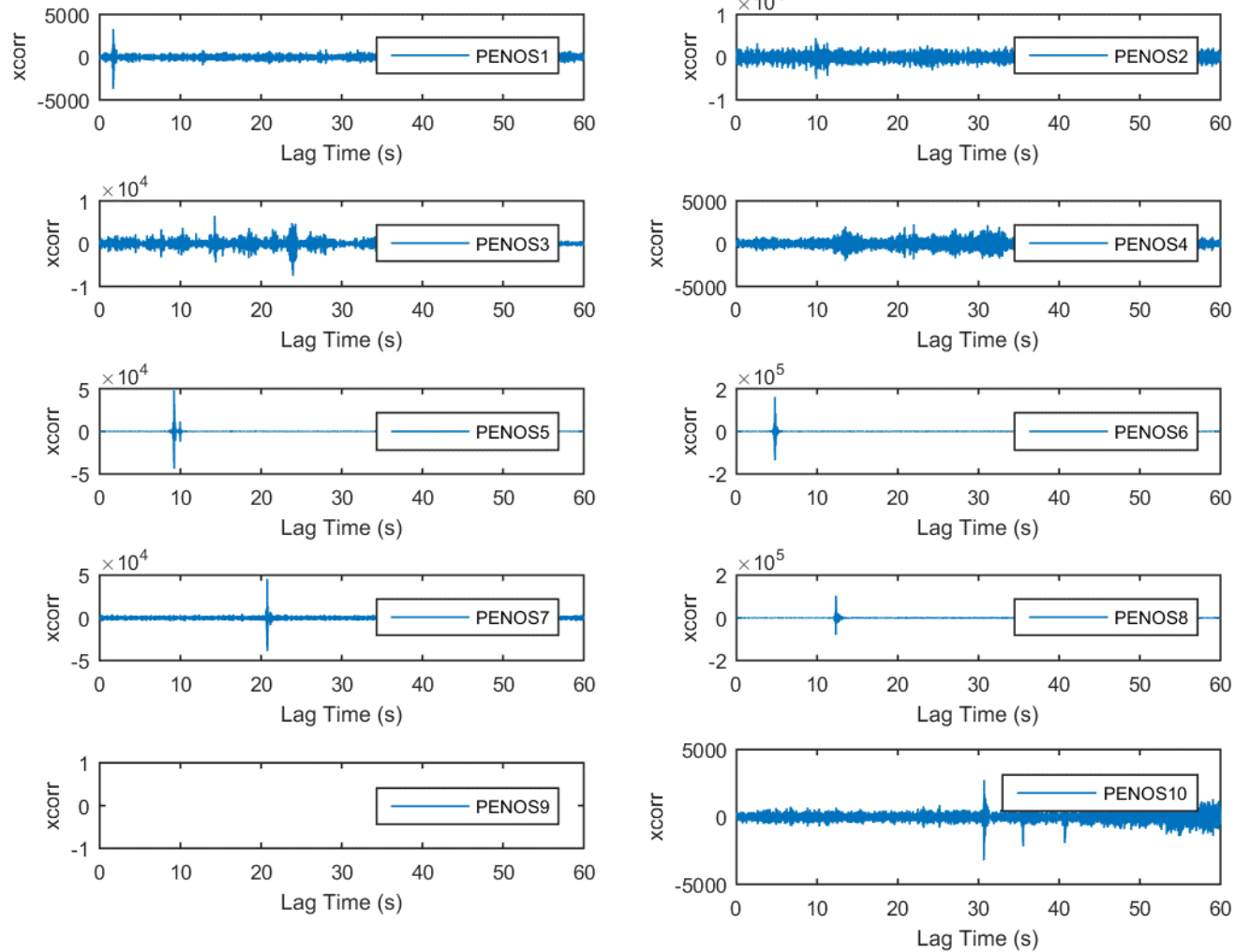
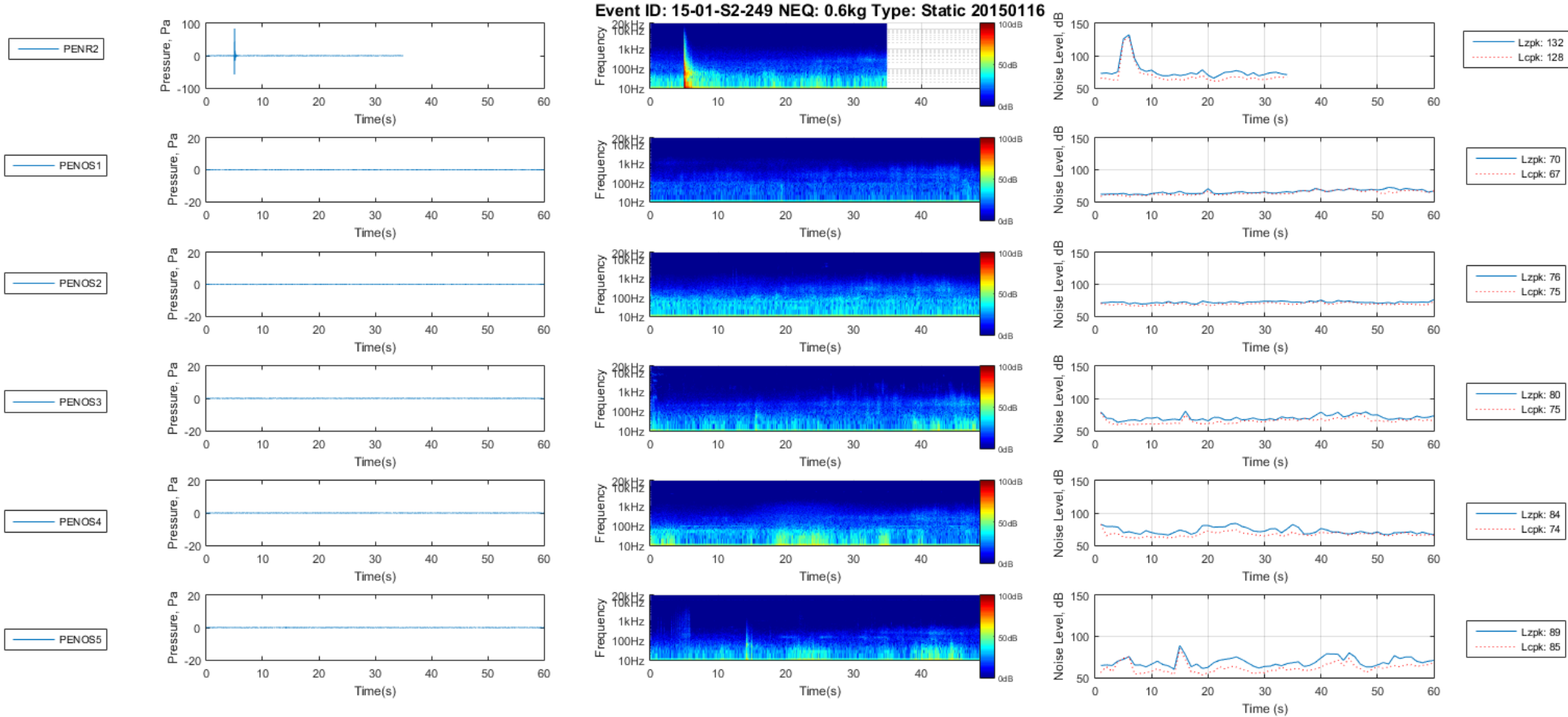


FIGURE 2.299: COHERENCE PEN\_OS 6 - 10 15-01-S2-246CTD

**Event ID: 15-01-S2-246 NEQ: 0.6kg Type: Static 20150116**



**FIGURE 2.300: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-246**



**FIGURE 2.301: PEN\_OS 1 - 5 15-01-S2-249**

Event ID: 15-01-S2-249 NEQ: 0.6kg Type: Static 20150116 CTD

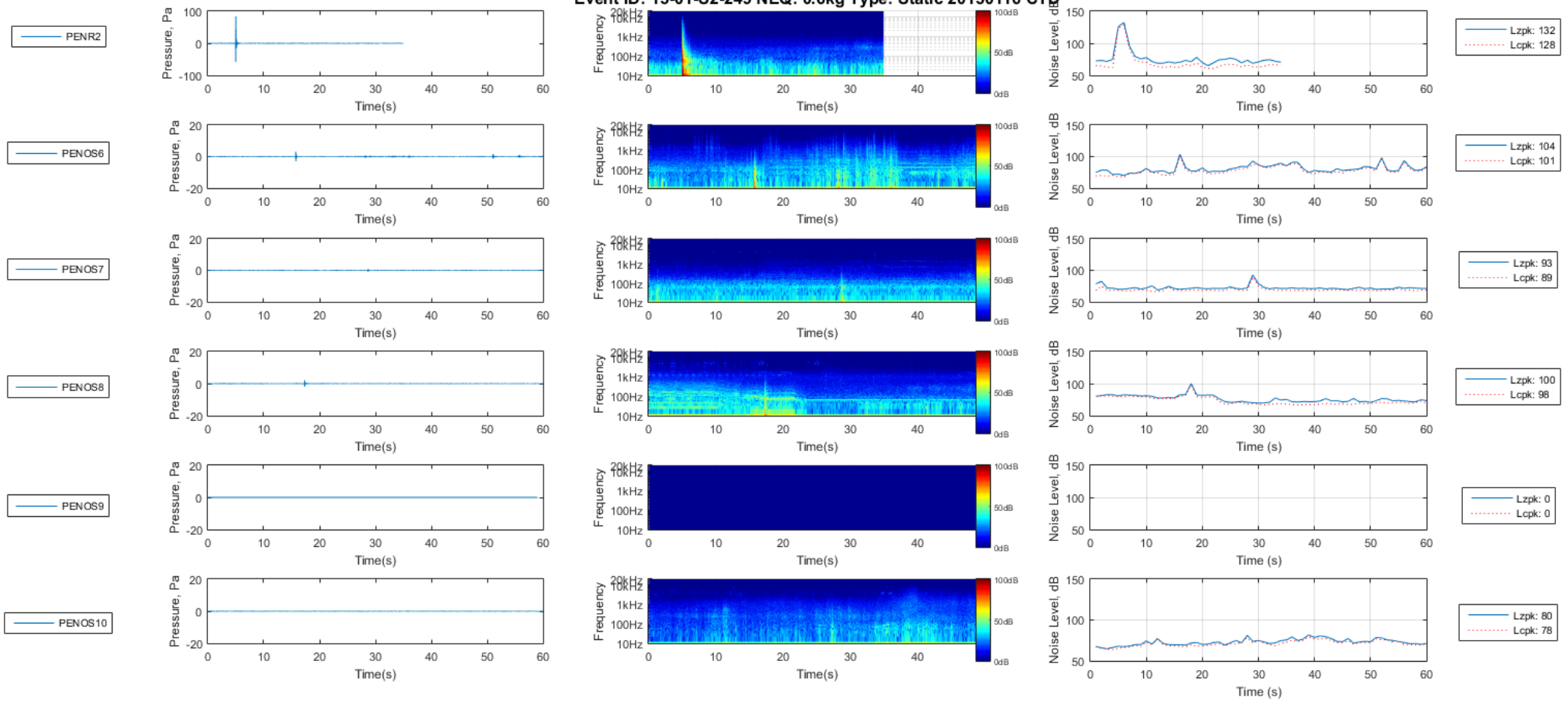


FIGURE 2.302: PEN\_OS 6 - 10 15-01-S2-249

Event ID: 15-01-S2-249 NEQ: 0.6kg Type: Static 20150116

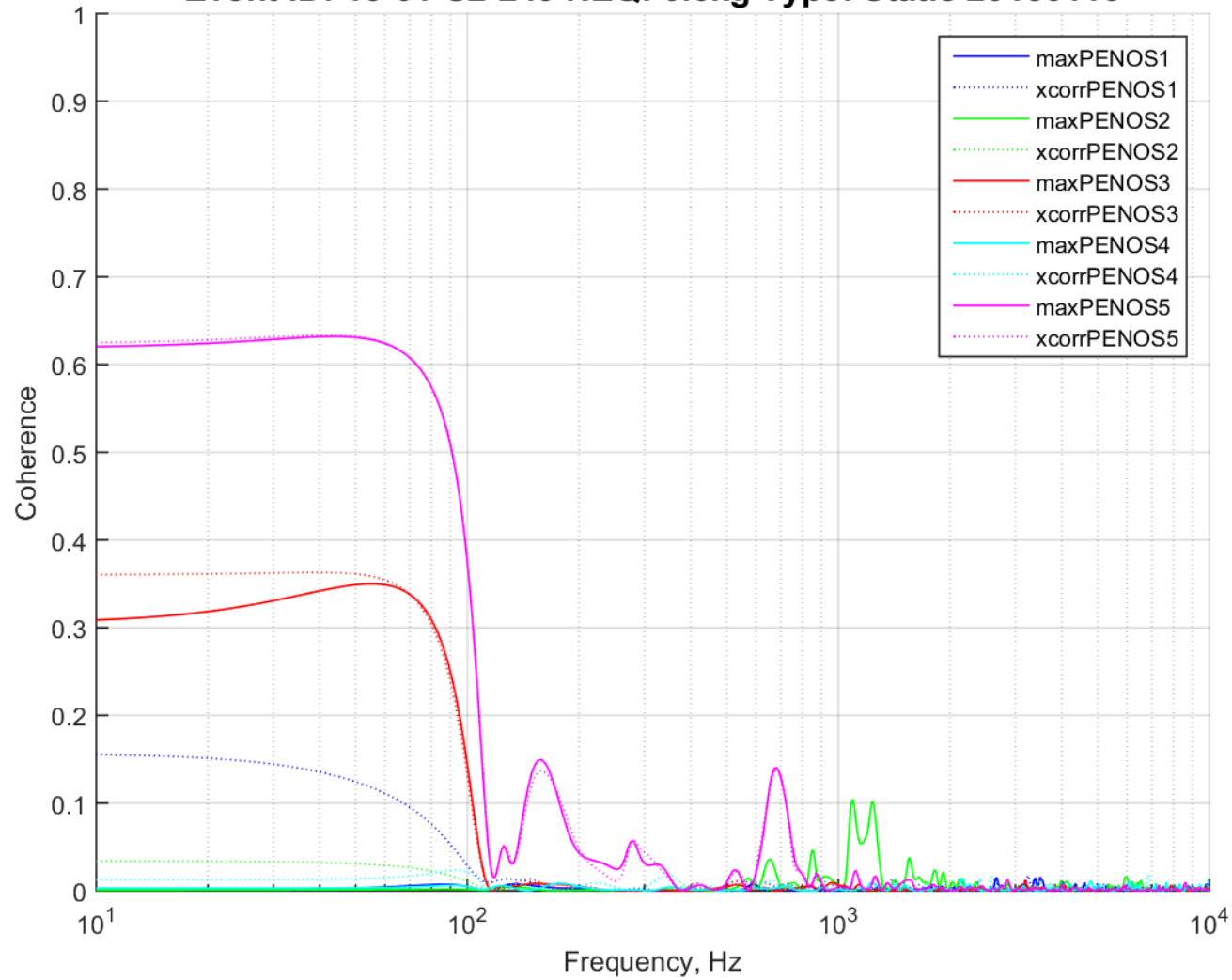


FIGURE 2.303: COHERENCE PEN\_OS 1 - 5 15-01-S2-249



Event ID: 15-01-S2-249 NEQ: 0.6kg Type: Static 20150116

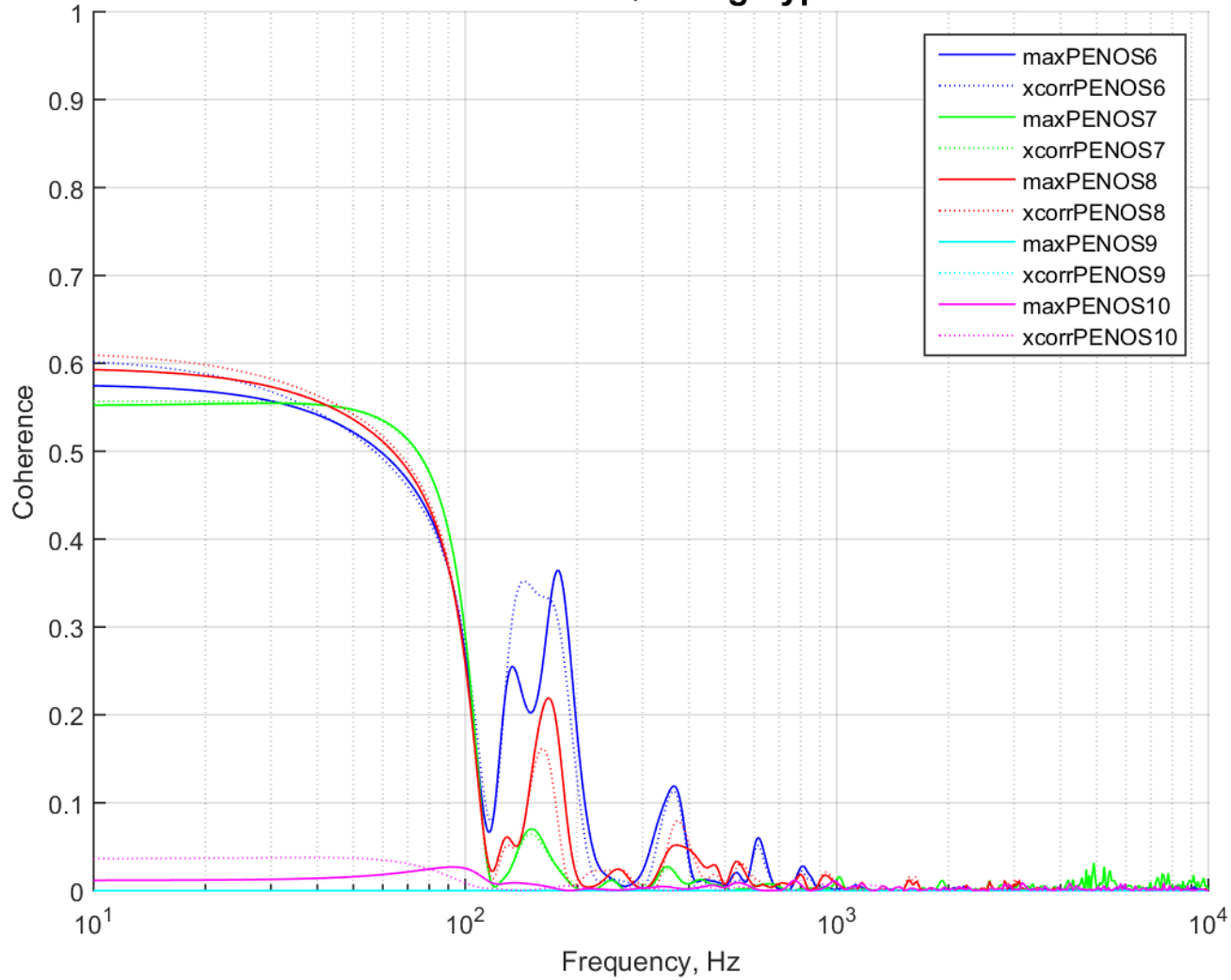
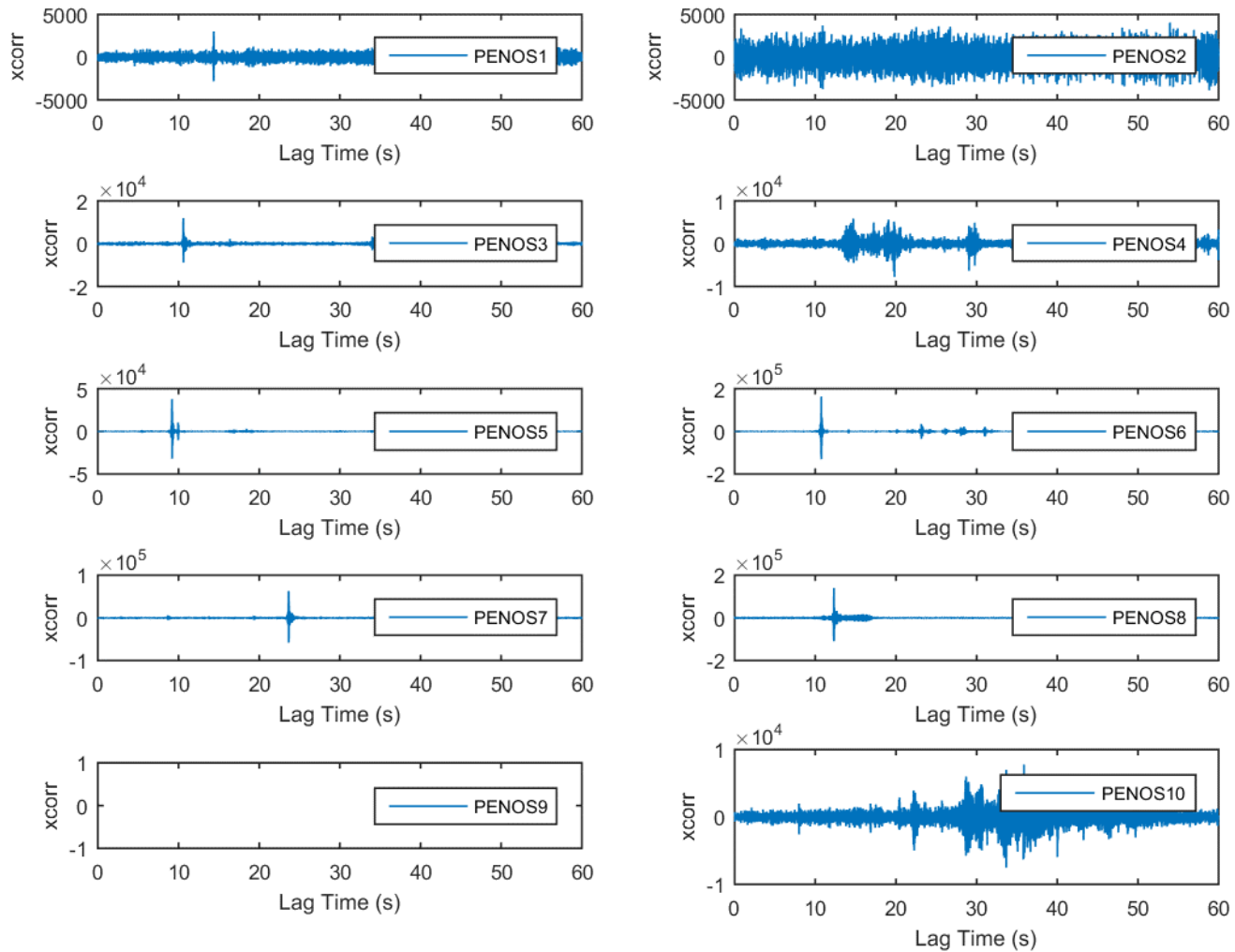
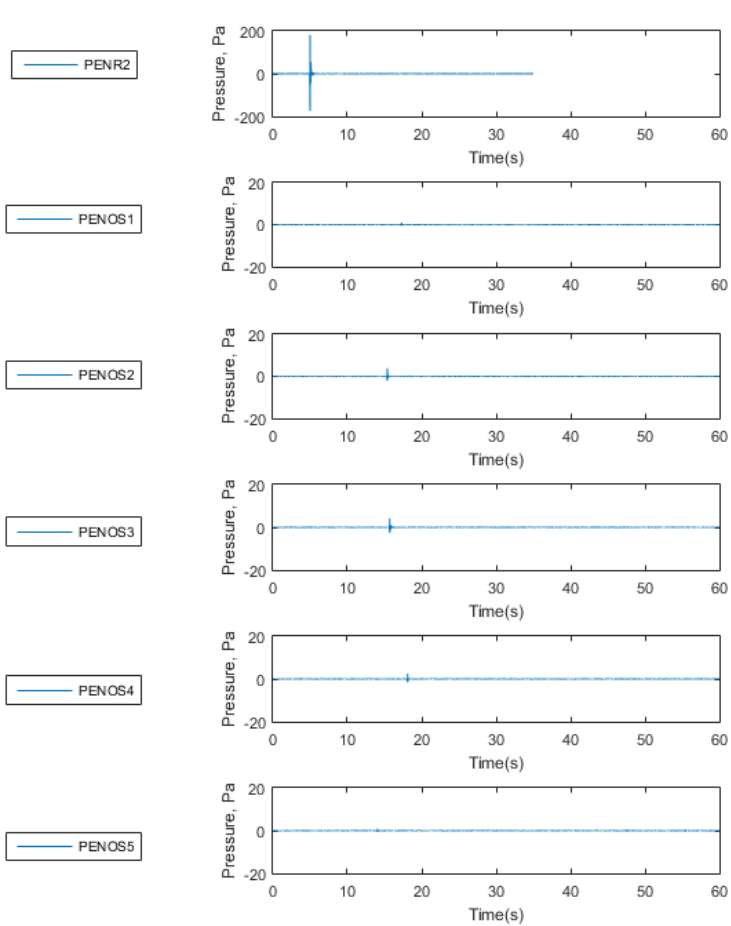


FIGURE 2.304: COHERENCE PEN\_OS 6 - 10 15-01-S2-249CTD

**Event ID: 15-01-S2-249 NEQ: 0.6kg Type: Static 20150116**



**FIGURE 2.305: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-249**



Event ID: 15-01-S2-270 NEQ: 1.25kg Type: Static 20150122

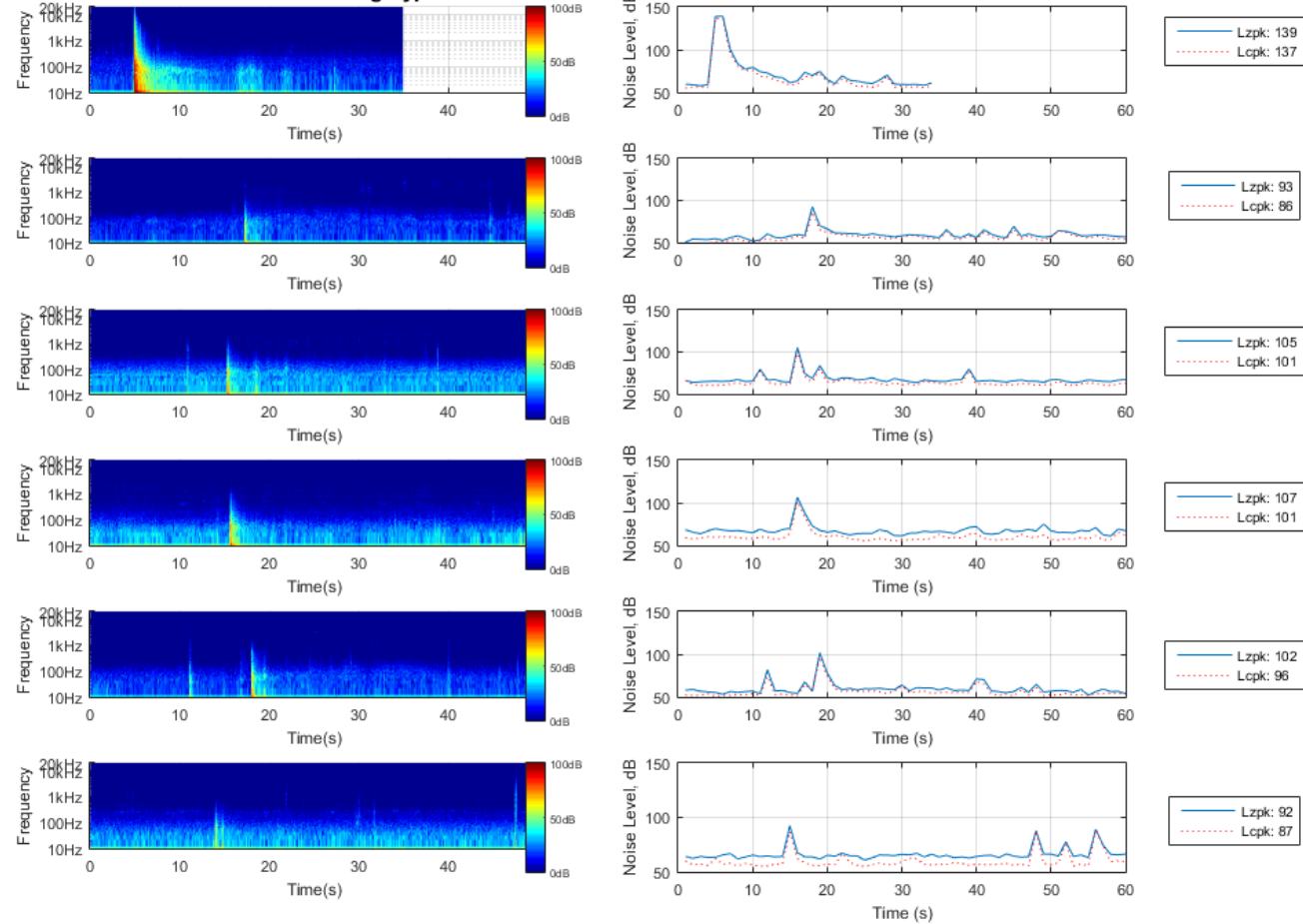


FIGURE 2.306: PEN\_OS 1 - 5 15-01-S2-270

Event ID: 15-01-S2-270 NEQ: 1.25kg Type: Static 20150122 CTD

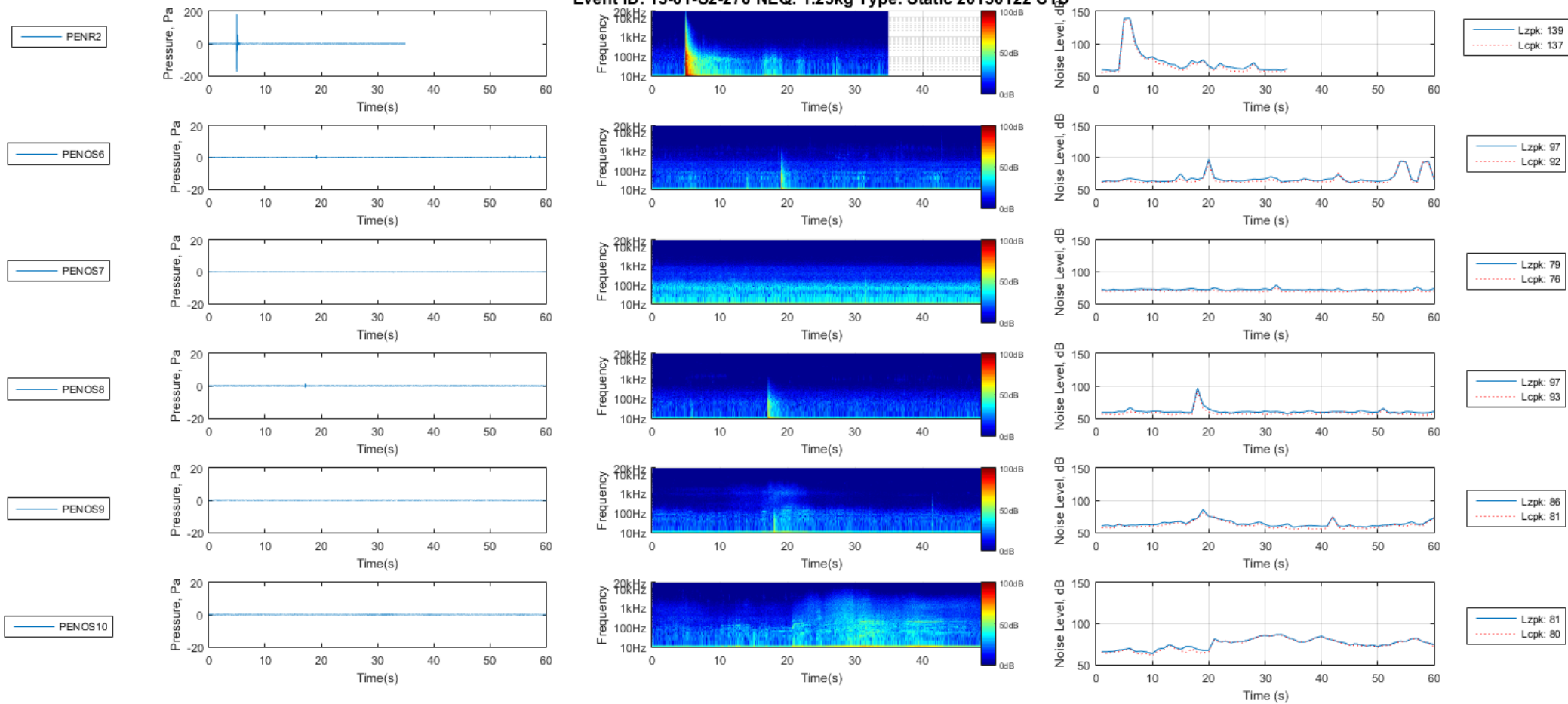


FIGURE 2.307: PEN\_OS 6 - 10 15-01-S2-270

Event ID: 15-01-S2-270 NEQ: 1.25kg Type: Static 20150122

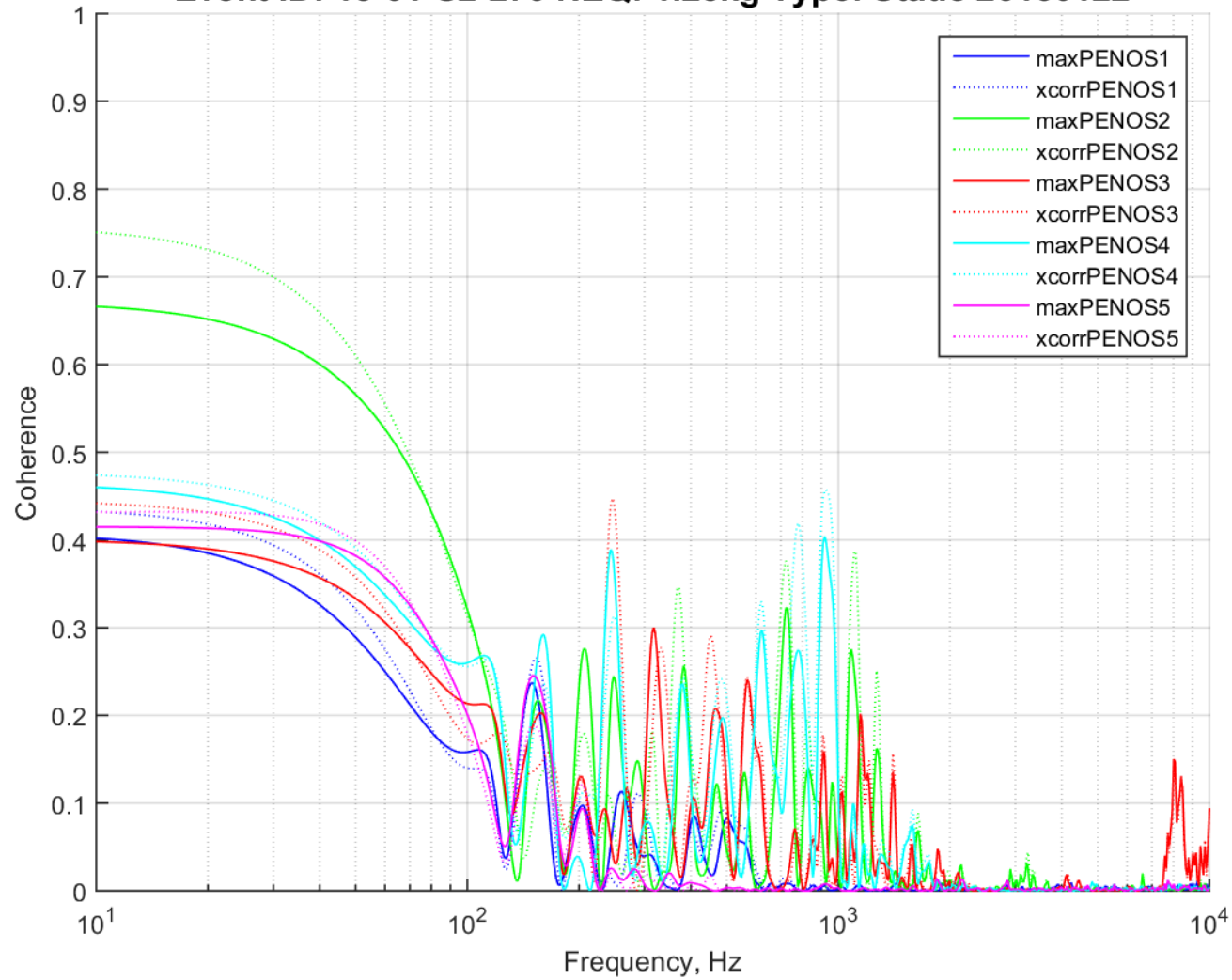


FIGURE 2.308: COHERENCE PEN\_OS 1 - 5 15-01-S2-270

Event ID: 15-01-S2-270 NEQ: 1.25kg Type: Static 20150122

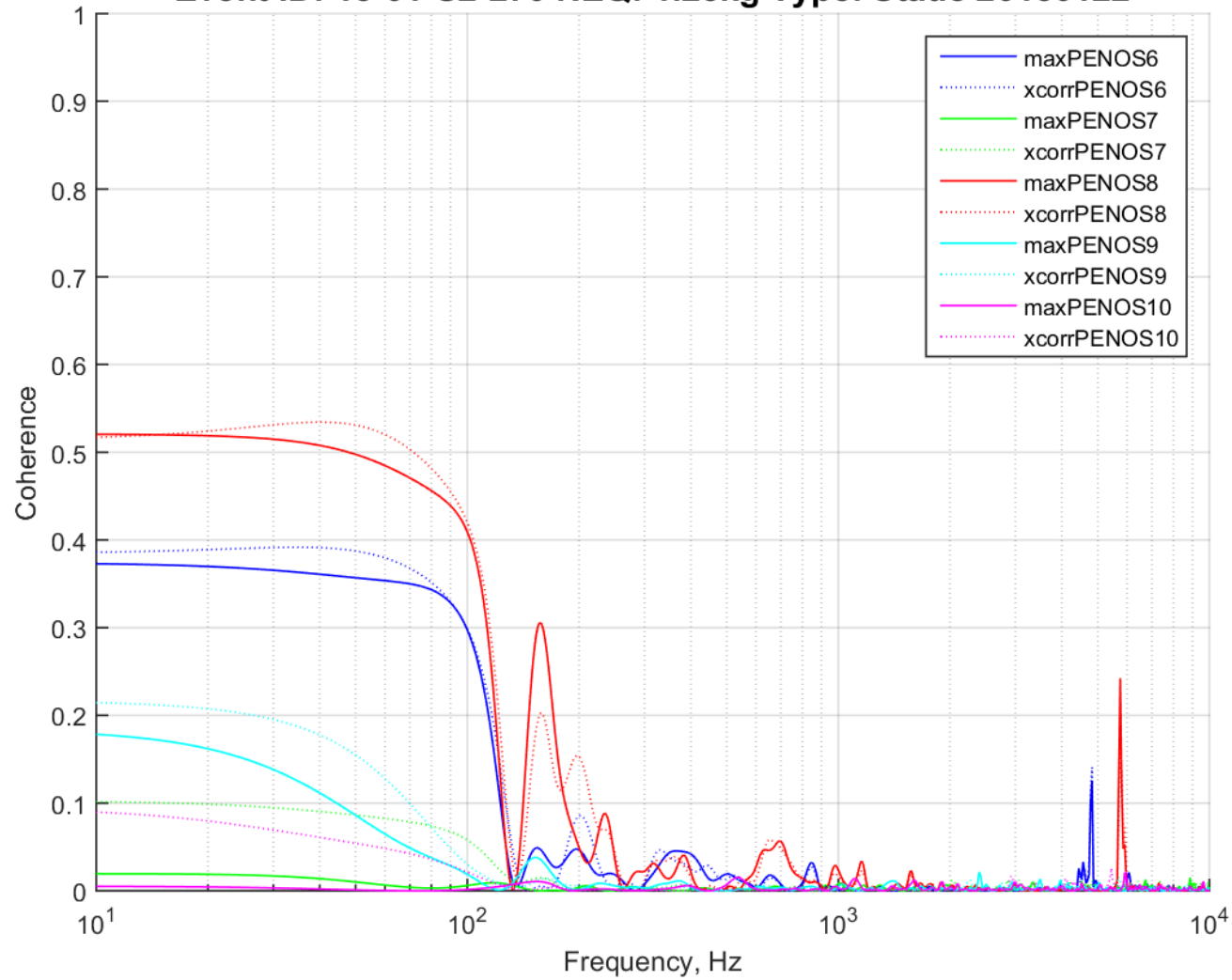
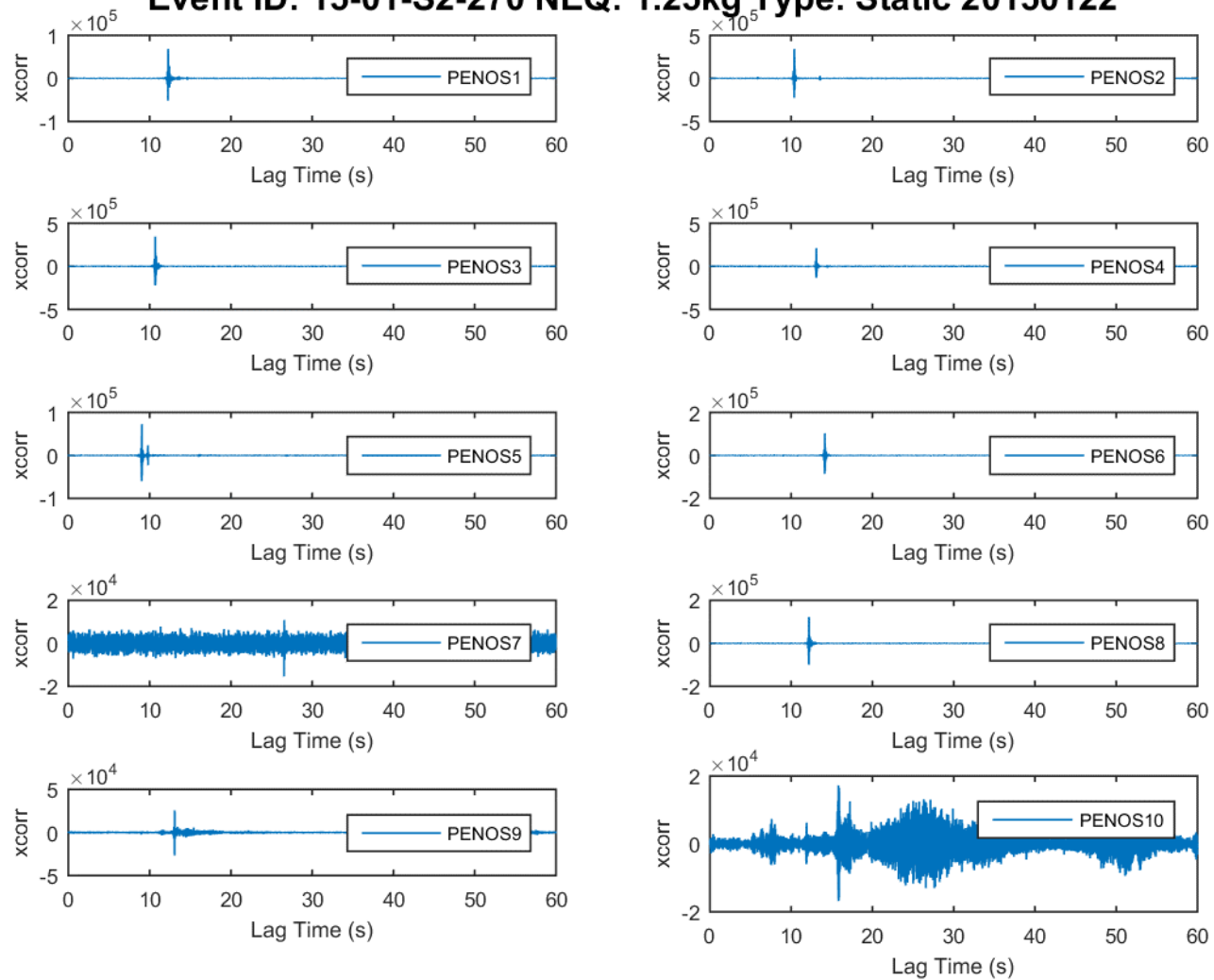
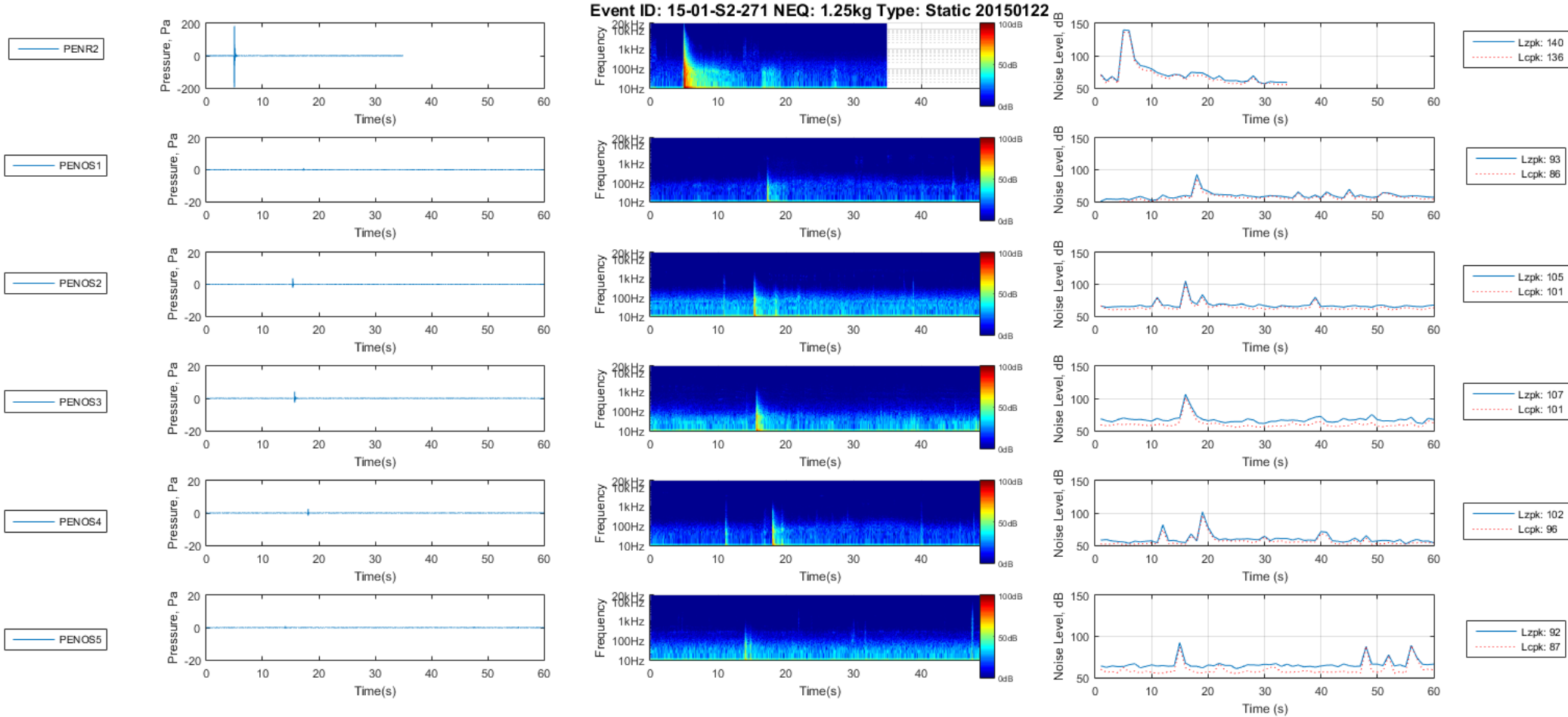


FIGURE 2.309: COHERENCE PEN\_OS 6 - 10 15-01-S2-270CTD

**Event ID: 15-01-S2-270 NEQ: 1.25kg Type: Static 20150122**



**FIGURE 2.310: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-270**



**FIGURE 2.311: PEN\_OS 1 - 5 15-01-S2-271**



Event ID: 15-01-S2-271 NEQ: 1.25kg Type: Static 20150122 CTD

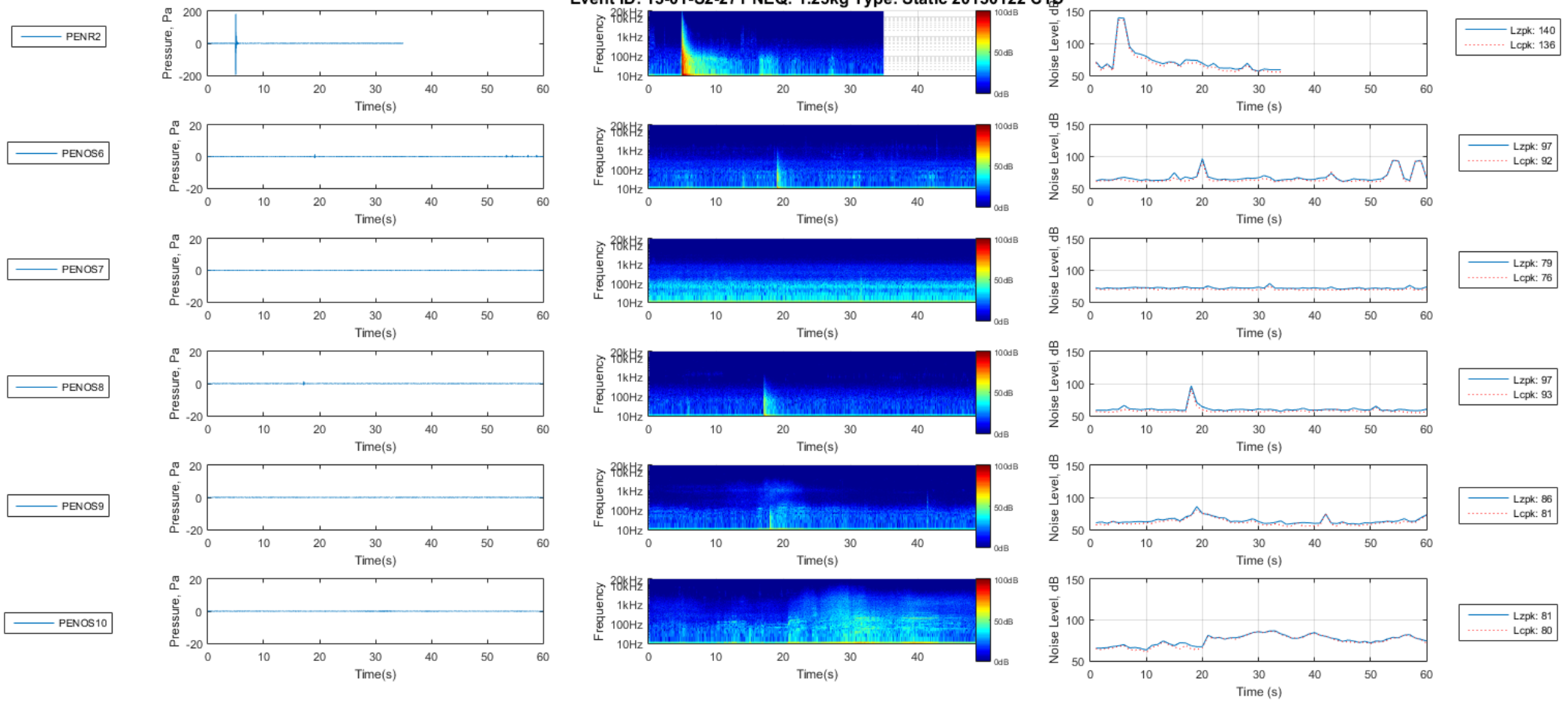


FIGURE 2.312: PEN\_OS 6 - 10 15-01-S2-271

Event ID: 15-01-S2-271 NEQ: 1.25kg Type: Static 20150122

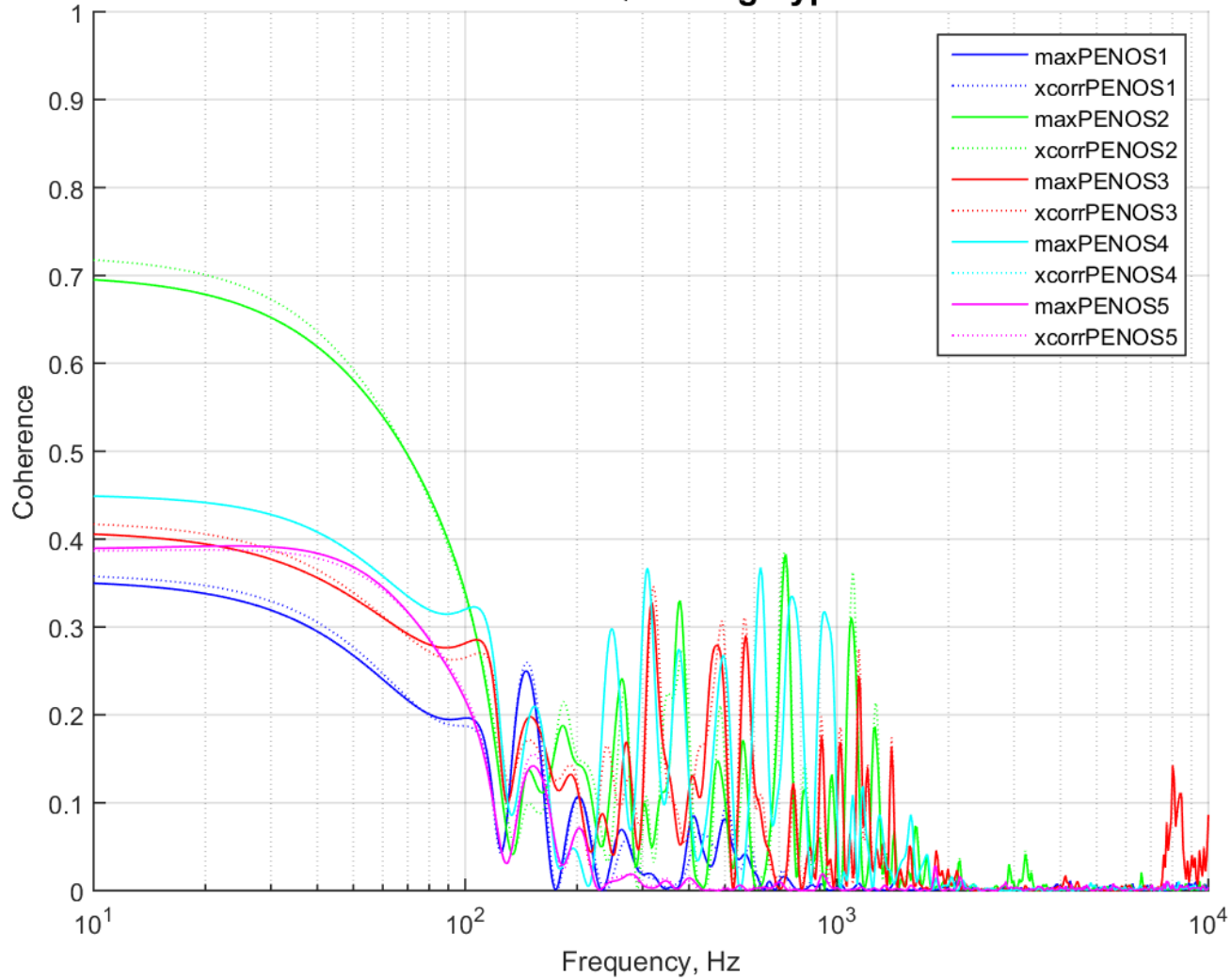


FIGURE 2.313: COHERENCE PEN\_OS 1 - 5 15-01-S2-271

Event ID: 15-01-S2-271 NEQ: 1.25kg Type: Static 20150122

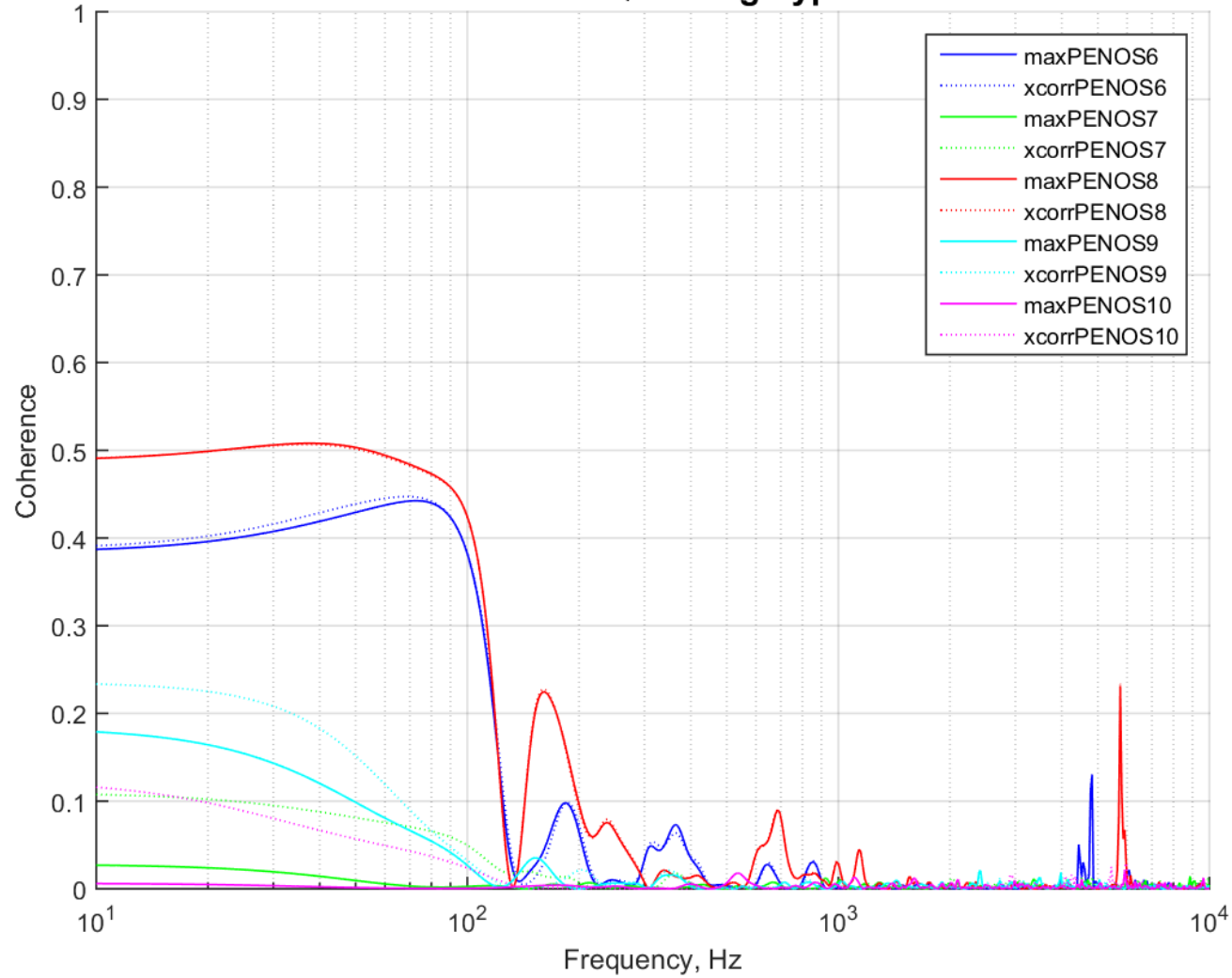
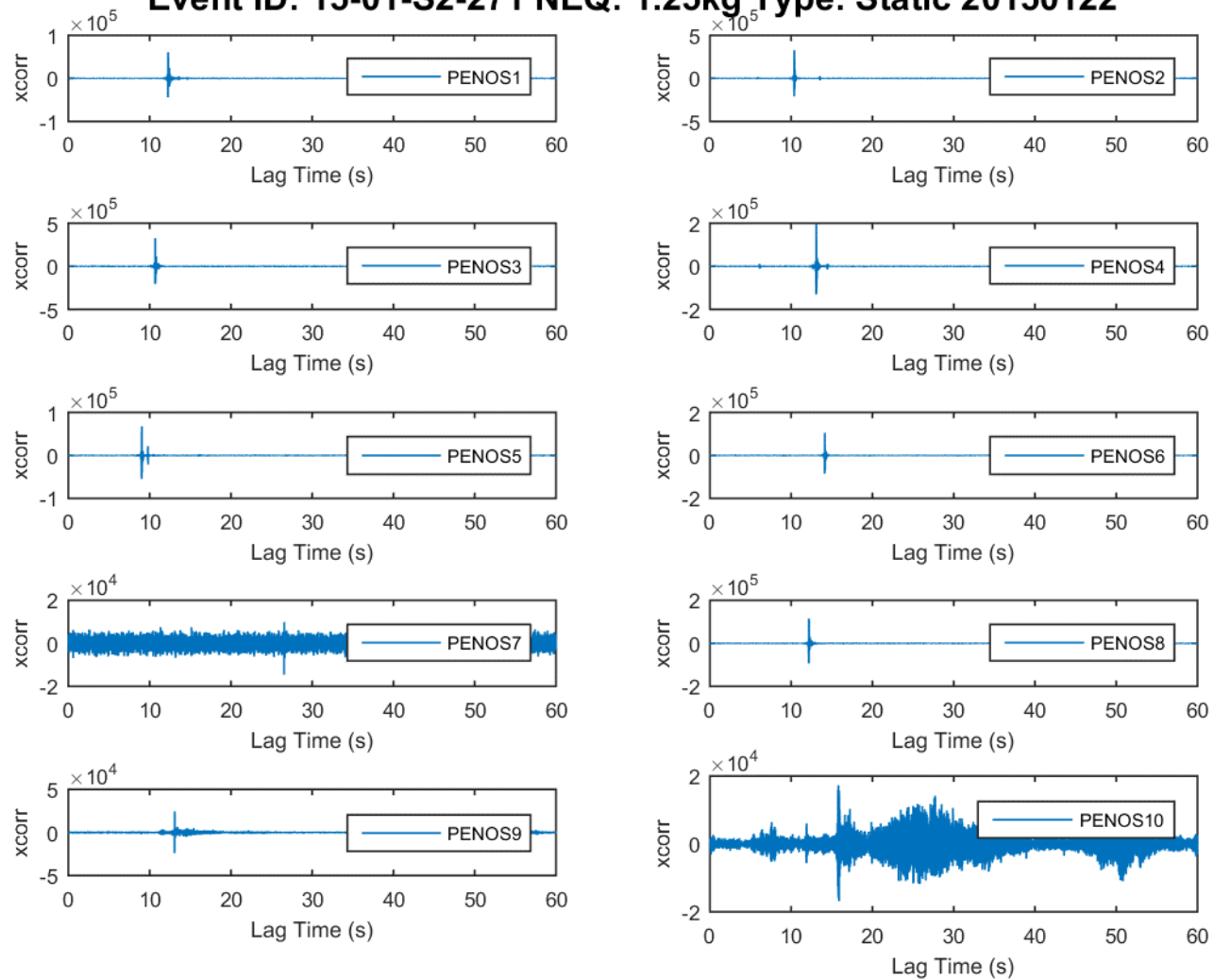
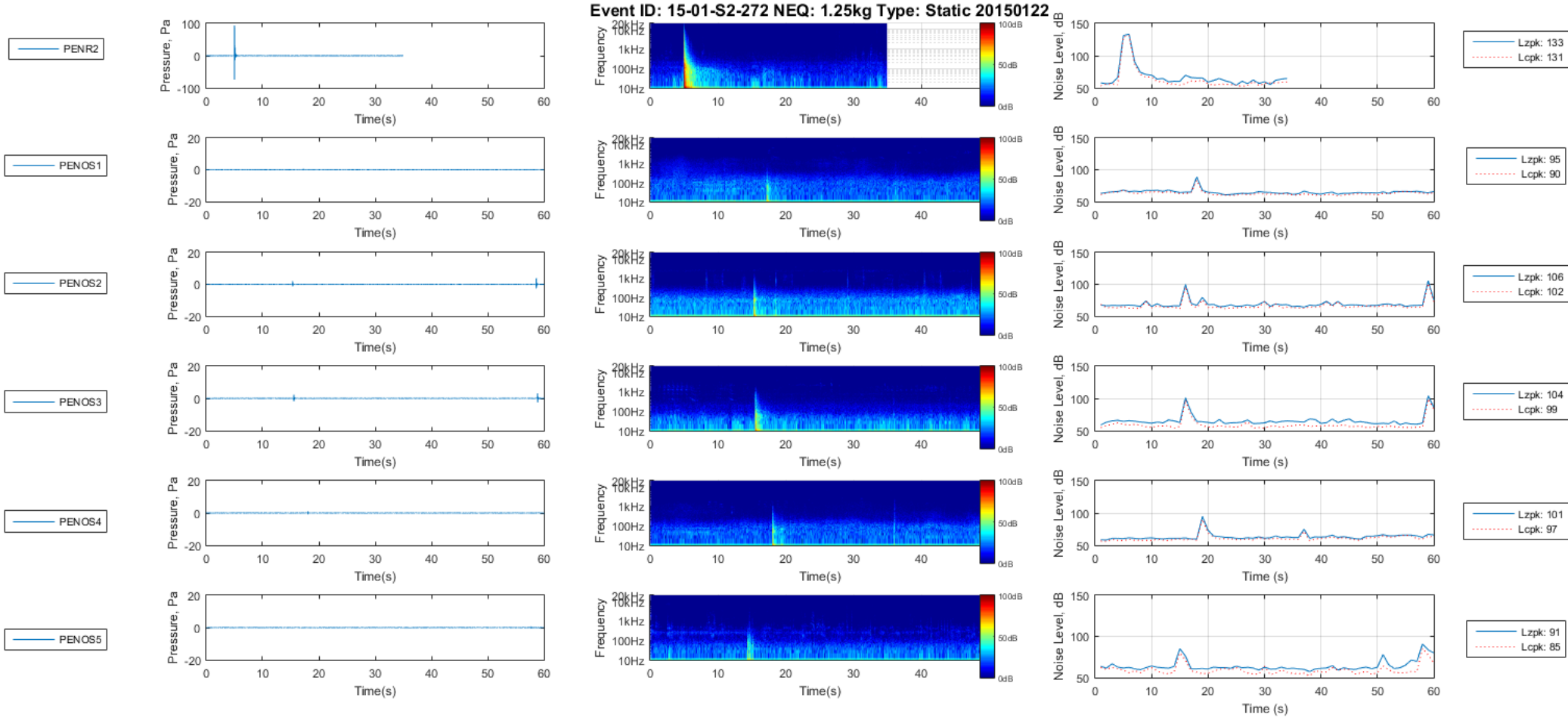


FIGURE 2.314: COHERENCE PEN\_OS 6 - 10 15-01-S2-271CTD

**Event ID: 15-01-S2-271 NEQ: 1.25kg Type: Static 20150122**



**FIGURE 2.315: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-271**



**FIGURE 2.316: PEN\_OS 1 - 5 15-01-S2-272**

Event ID: 15-01-S2-272 NEQ: 1.25kg Type: Static 20150122 CTD

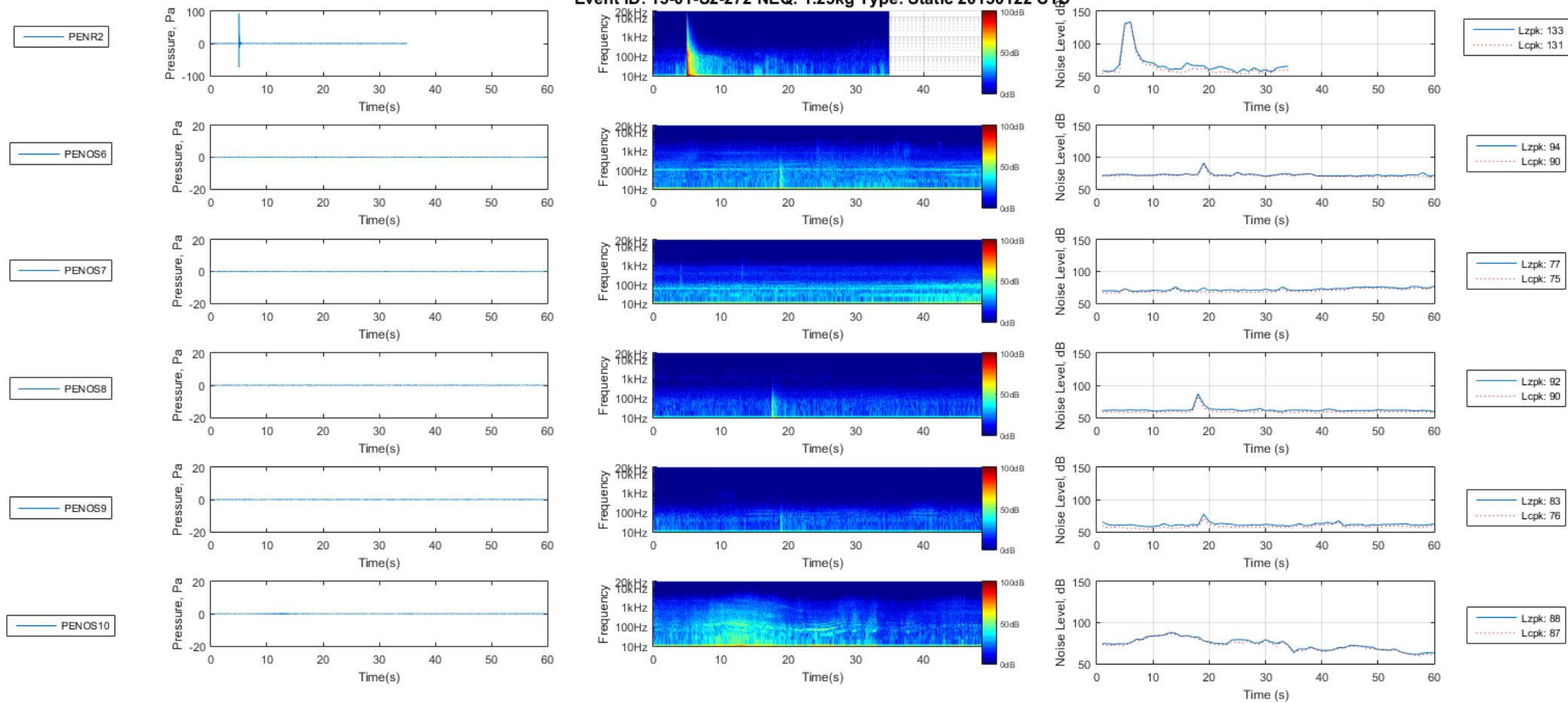


FIGURE 2.317: PEN\_OS 6 - 10 15-01-S2-272

Event ID: 15-01-S2-272 NEQ: 1.25kg Type: Static 20150122

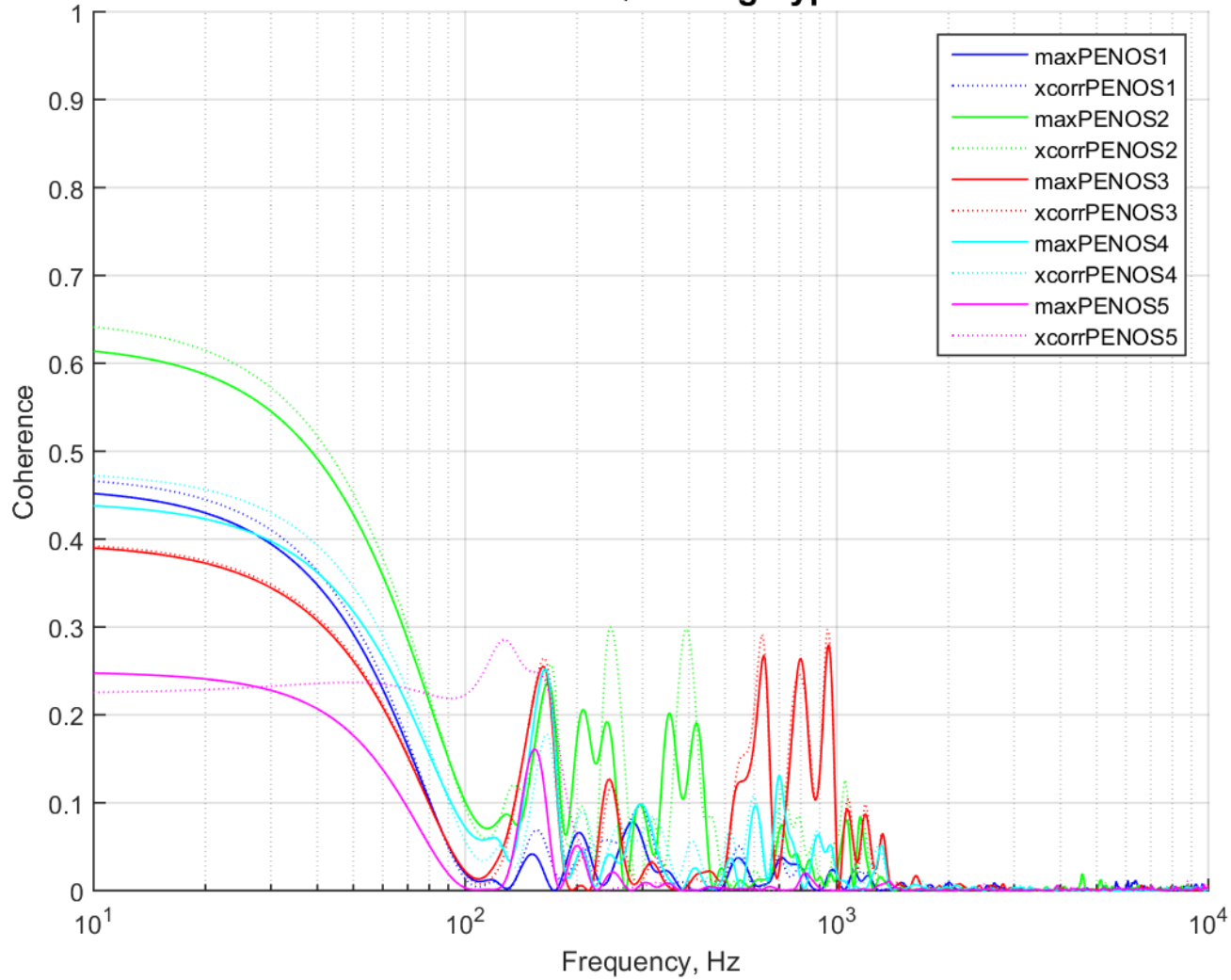


FIGURE 2.318: COHERENCE PEN\_OS 1 - 5 15-01-S2-272

Event ID: 15-01-S2-272 NEQ: 1.25kg Type: Static 20150122

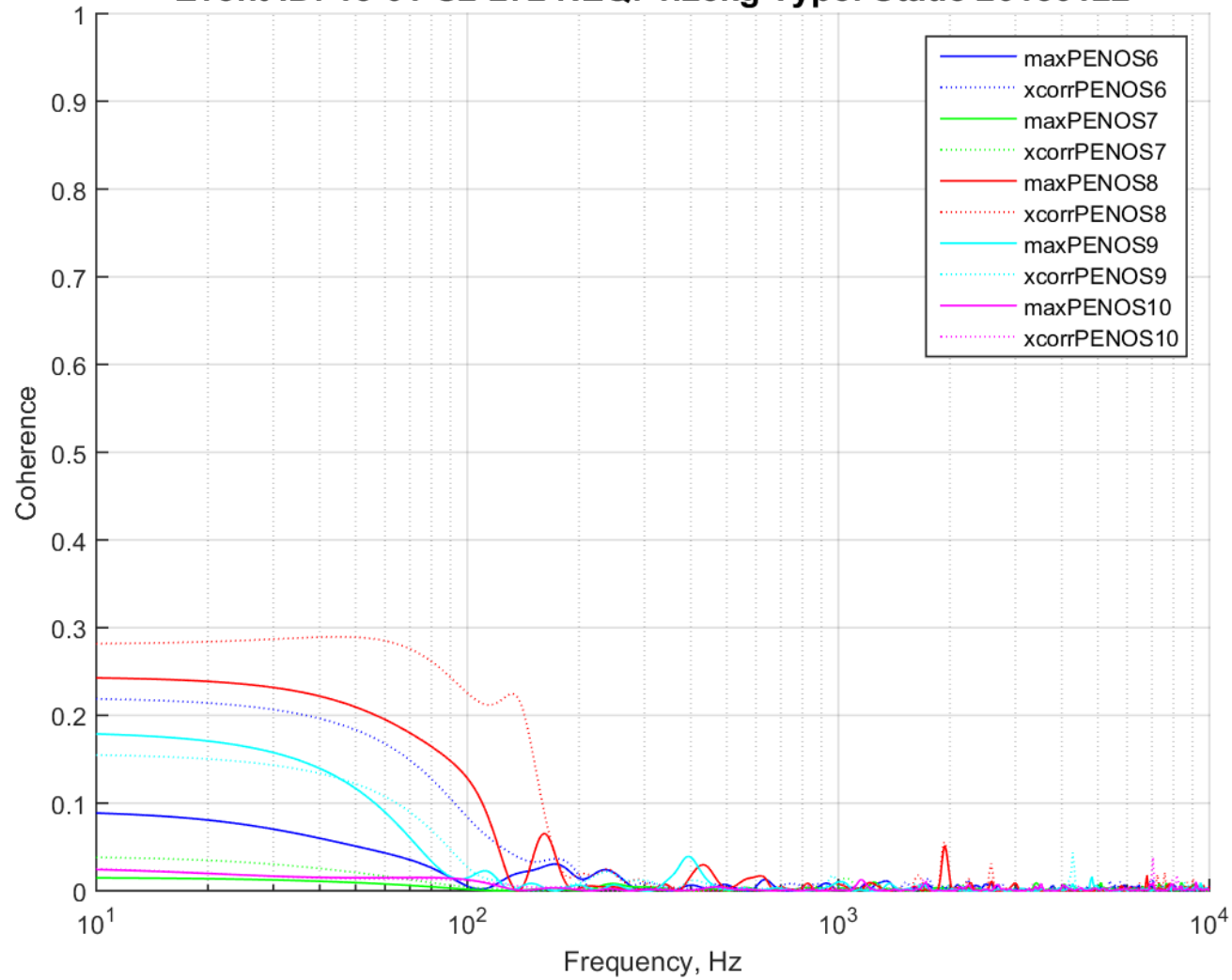
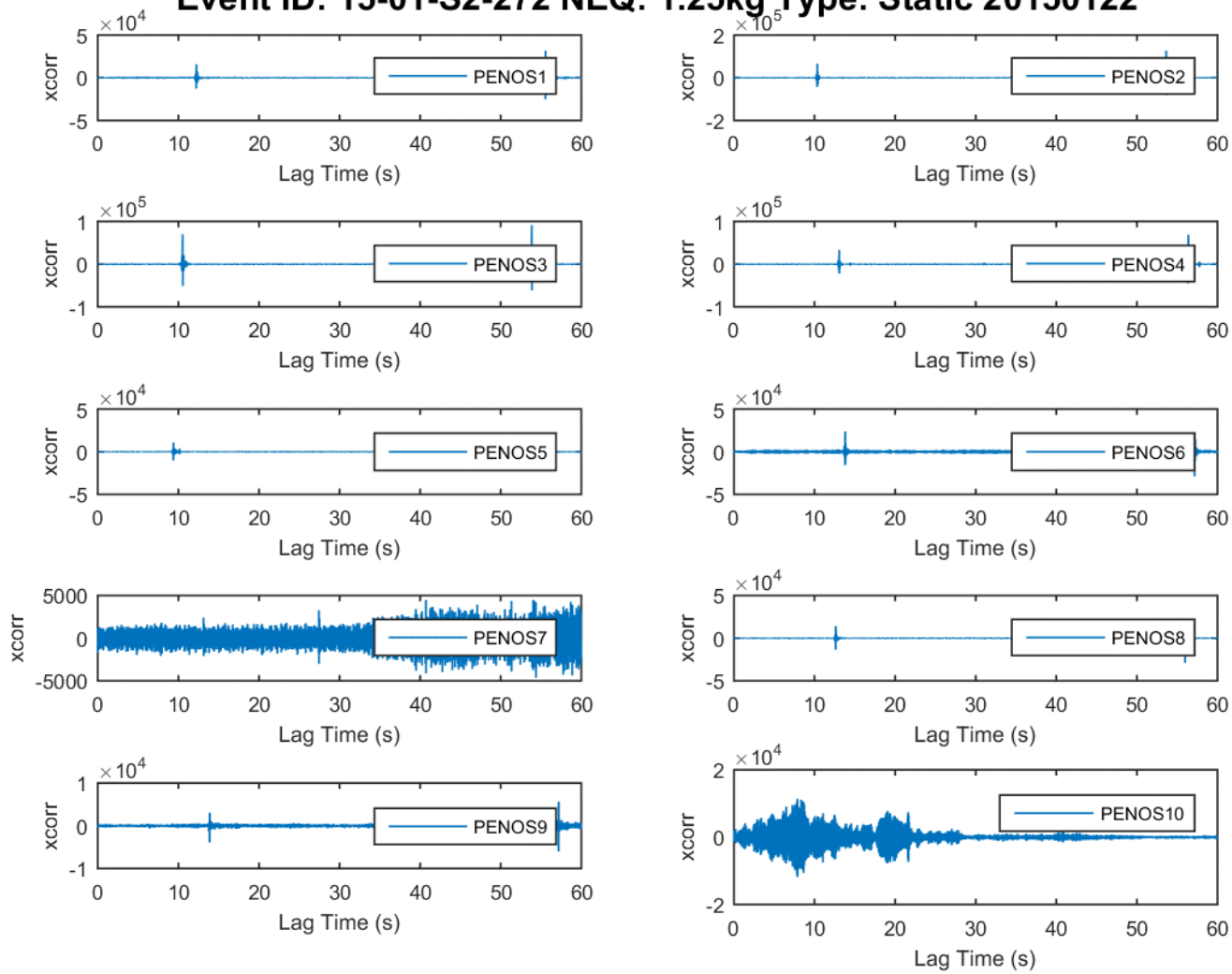


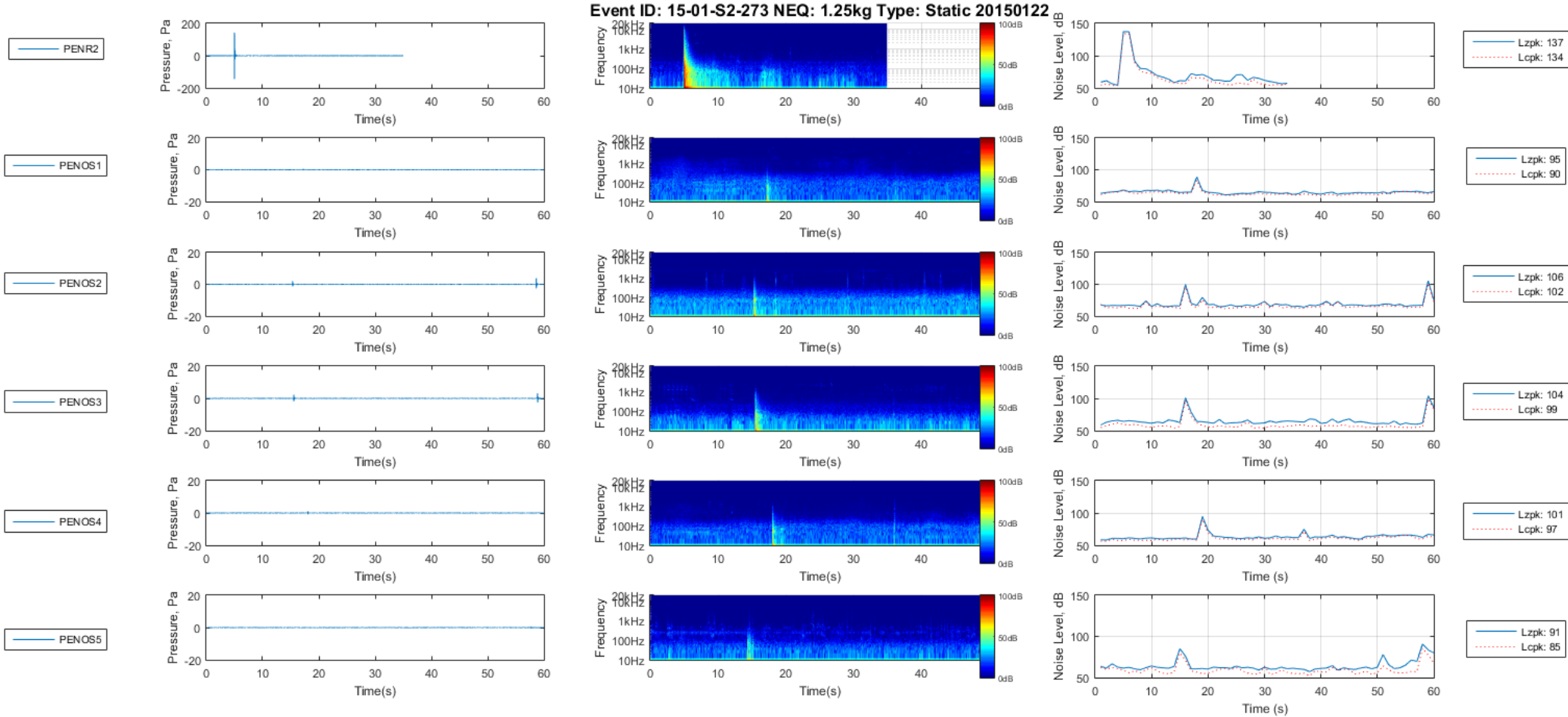
FIGURE 2.319: COHERENCE PEN\_OS 6 - 10 15-01-S2-272CTD



**Event ID: 15-01-S2-272 NEQ: 1.25kg Type: Static 20150122**



**FIGURE 2.320: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-272**



**FIGURE 2.321: PEN\_OS 1 - 5 15-01-S2-273**

Event ID: 15-01-S2-273 NEQ: 1.25kg Type: Static 20150122 CTD

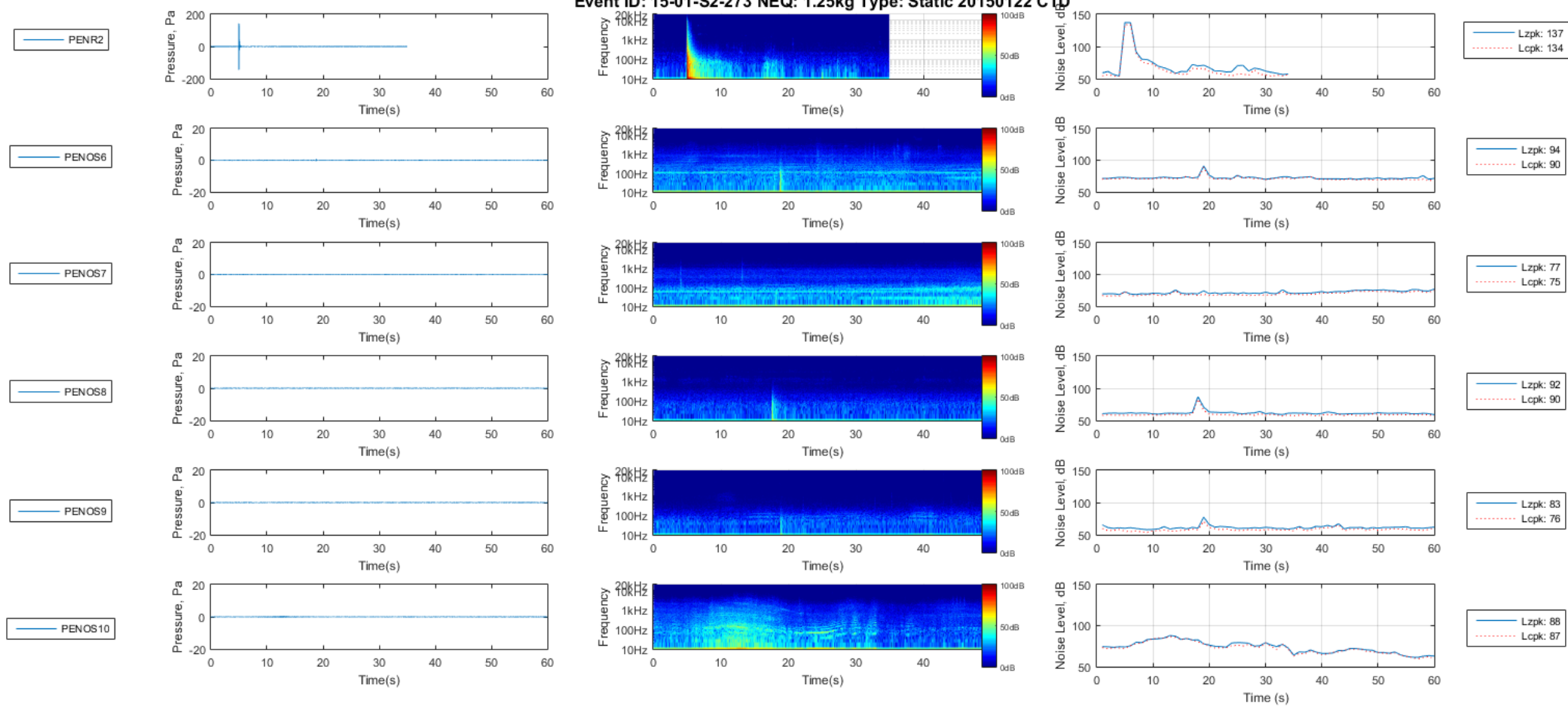


FIGURE 2.322: PEN\_OS 6 - 10 15-01-S2-273

Event ID: 15-01-S2-273 NEQ: 1.25kg Type: Static 20150122

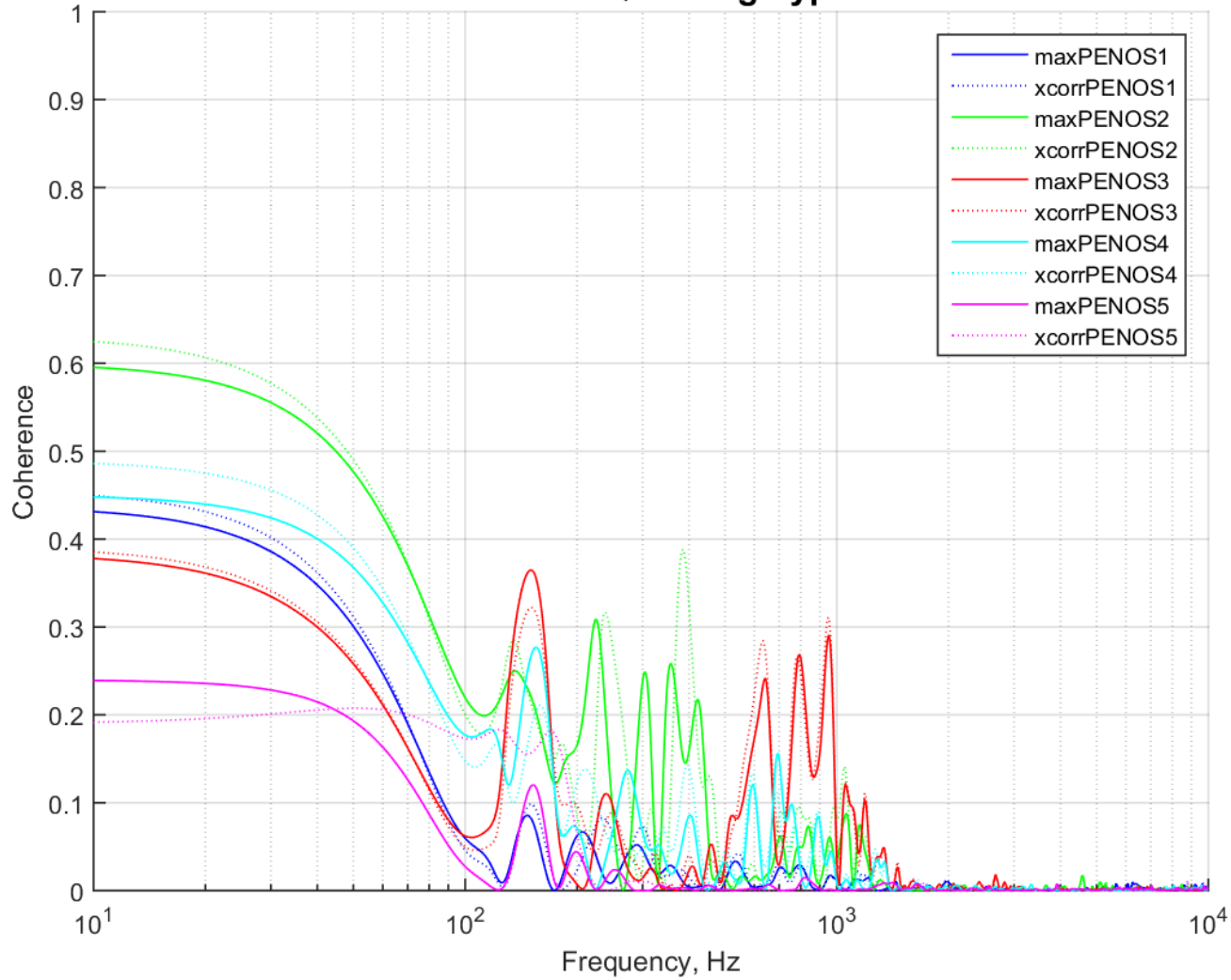


FIGURE 2.323: COHERENCE PEN\_OS 1 - 5 15-01-S2-273

Event ID: 15-01-S2-273 NEQ: 1.25kg Type: Static 20150122

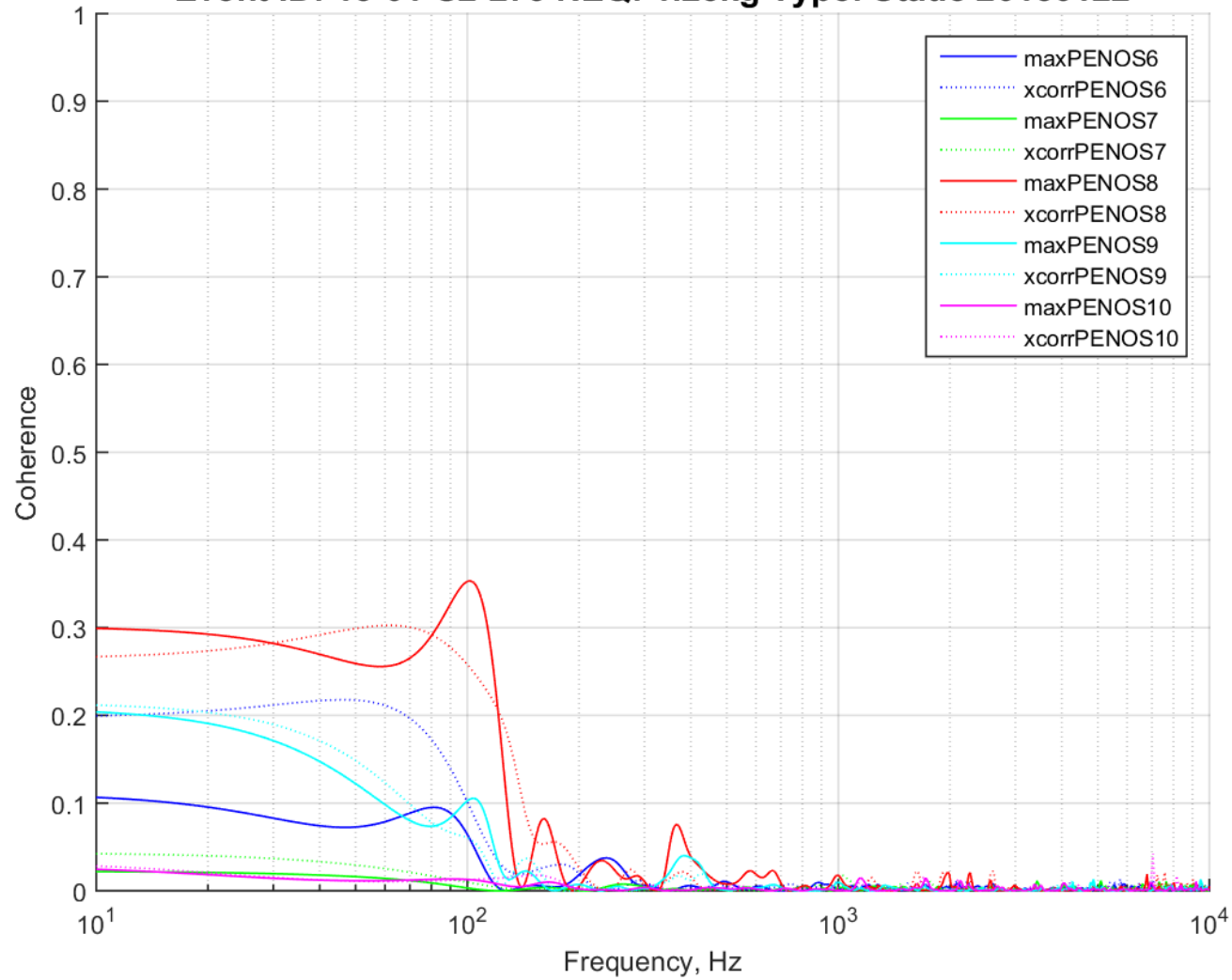
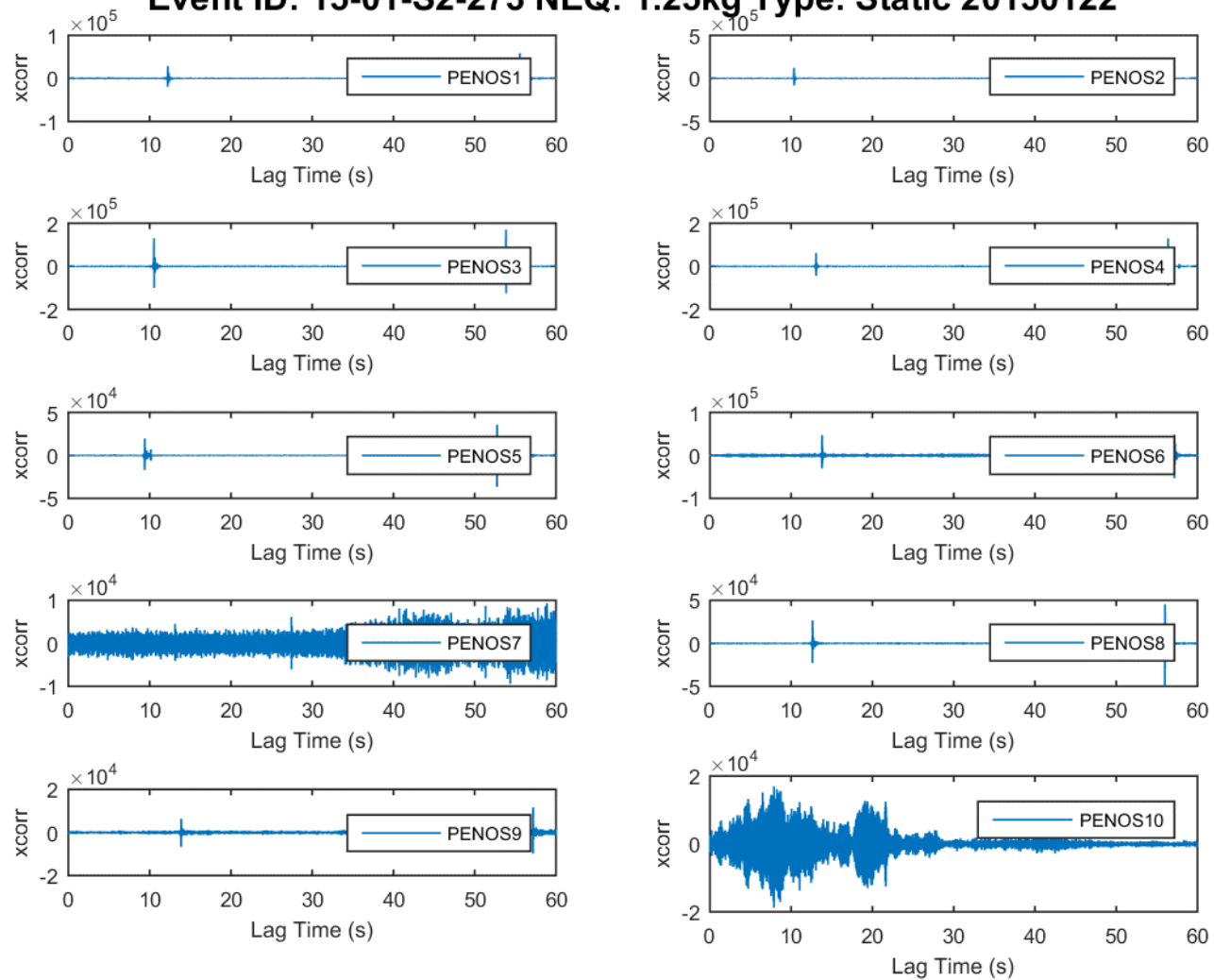
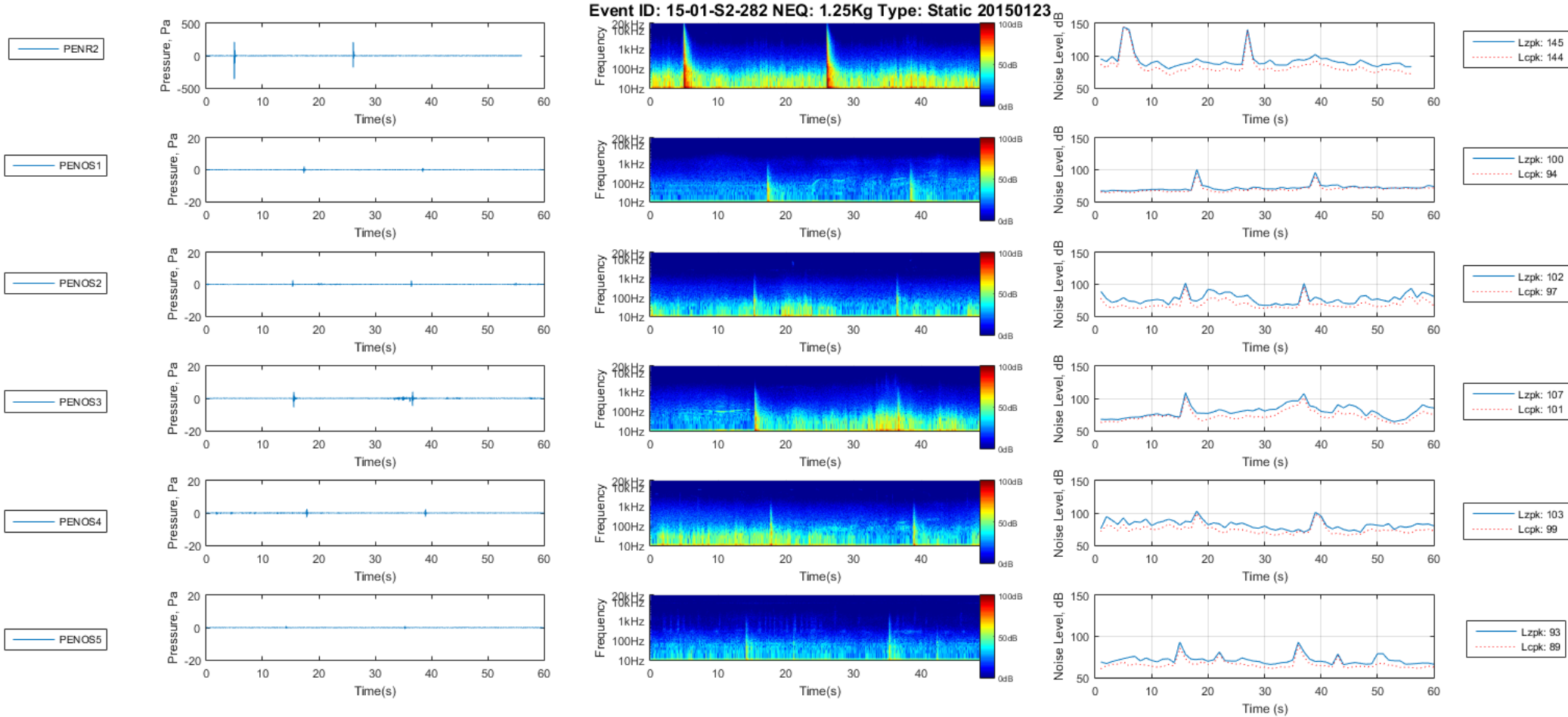


FIGURE 2.324: COHERENCE PEN\_OS 6 - 10 15-01-S2-273CTD

**Event ID: 15-01-S2-273 NEQ: 1.25kg Type: Static 20150122**



**FIGURE 2.325: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-273**



**FIGURE 2.326: PEN\_OS 1 - 5 15-01-S2-282**

Event ID: 15-01-S2-282 NEQ: 1.25Kg Type: Static 20150123 CTD

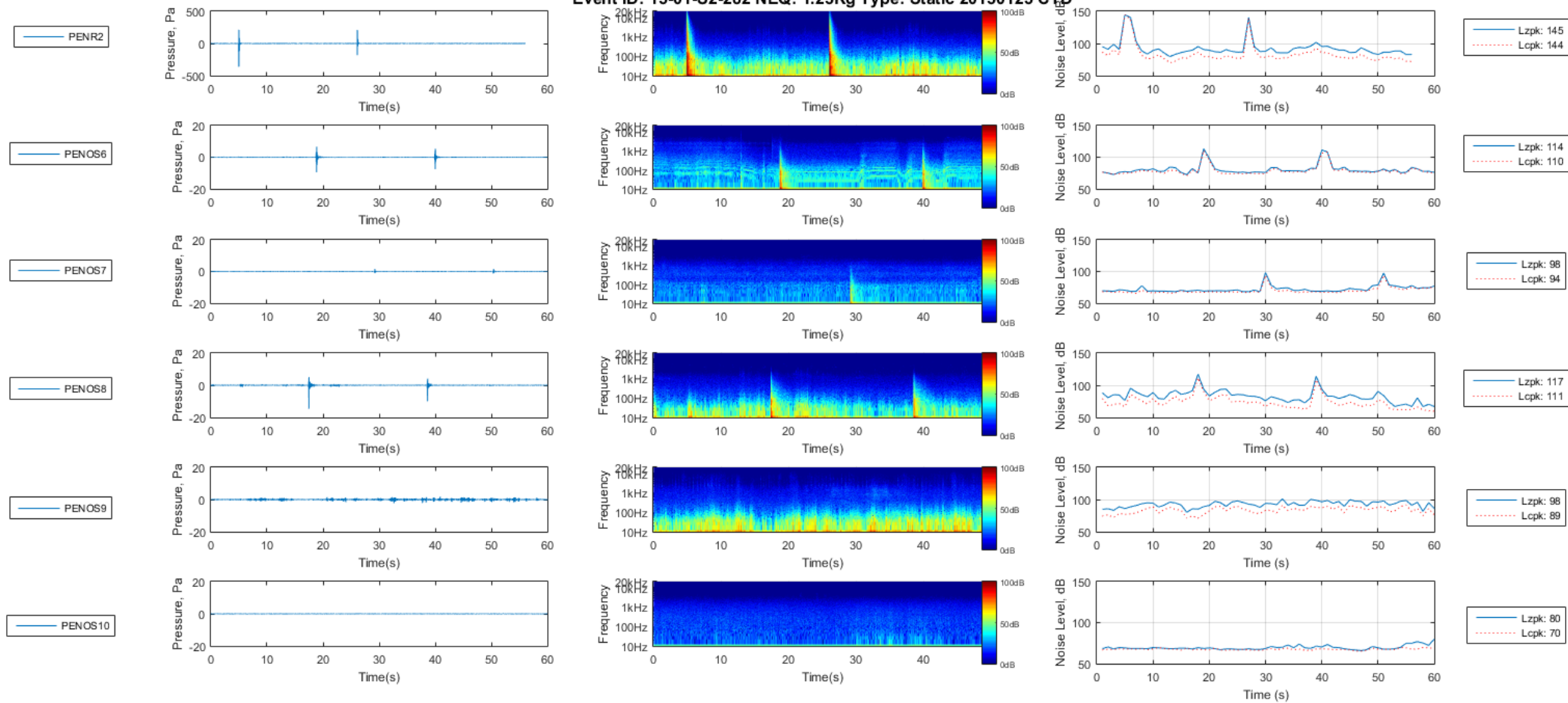


FIGURE 2.327: PEN\_OS 6 - 10 15-01-S2-282



Event ID: 15-01-S2-282 NEQ: 1.25Kg Type: Static 20150123

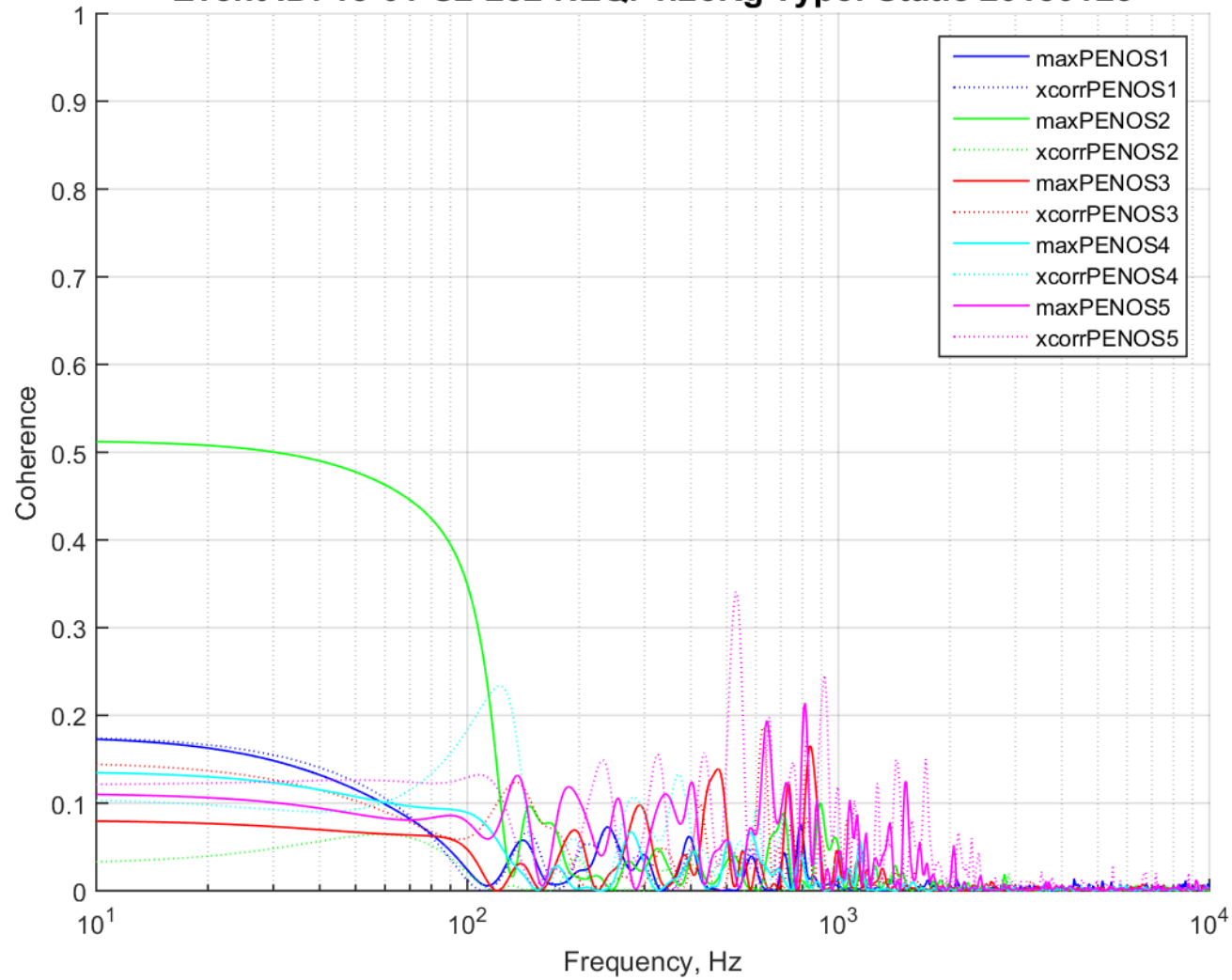


FIGURE 2.328: COHERENCE PEN\_OS 1 - 5 15-01-S2-282

Event ID: 15-01-S2-282 NEQ: 1.25Kg Type: Static 20150123

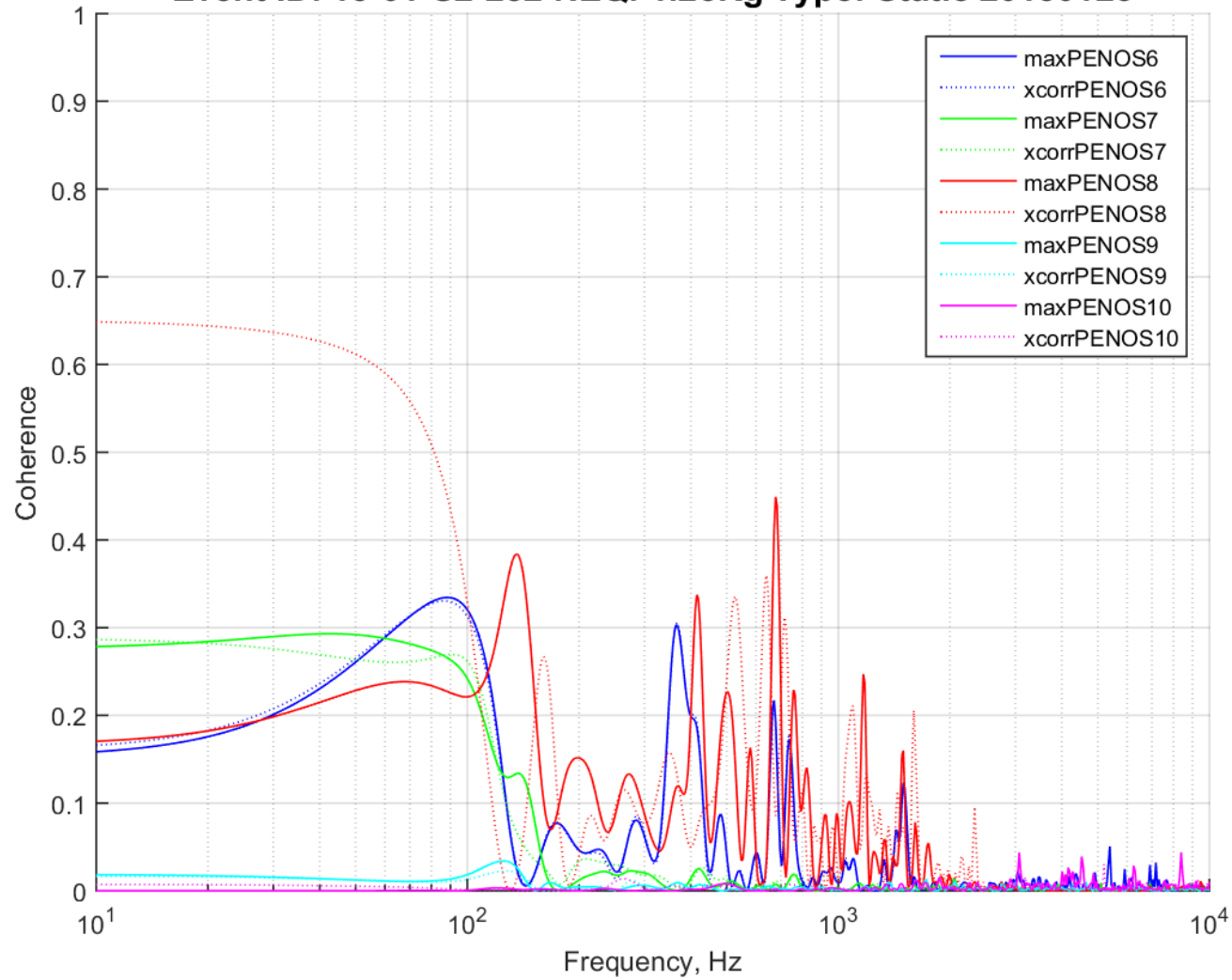
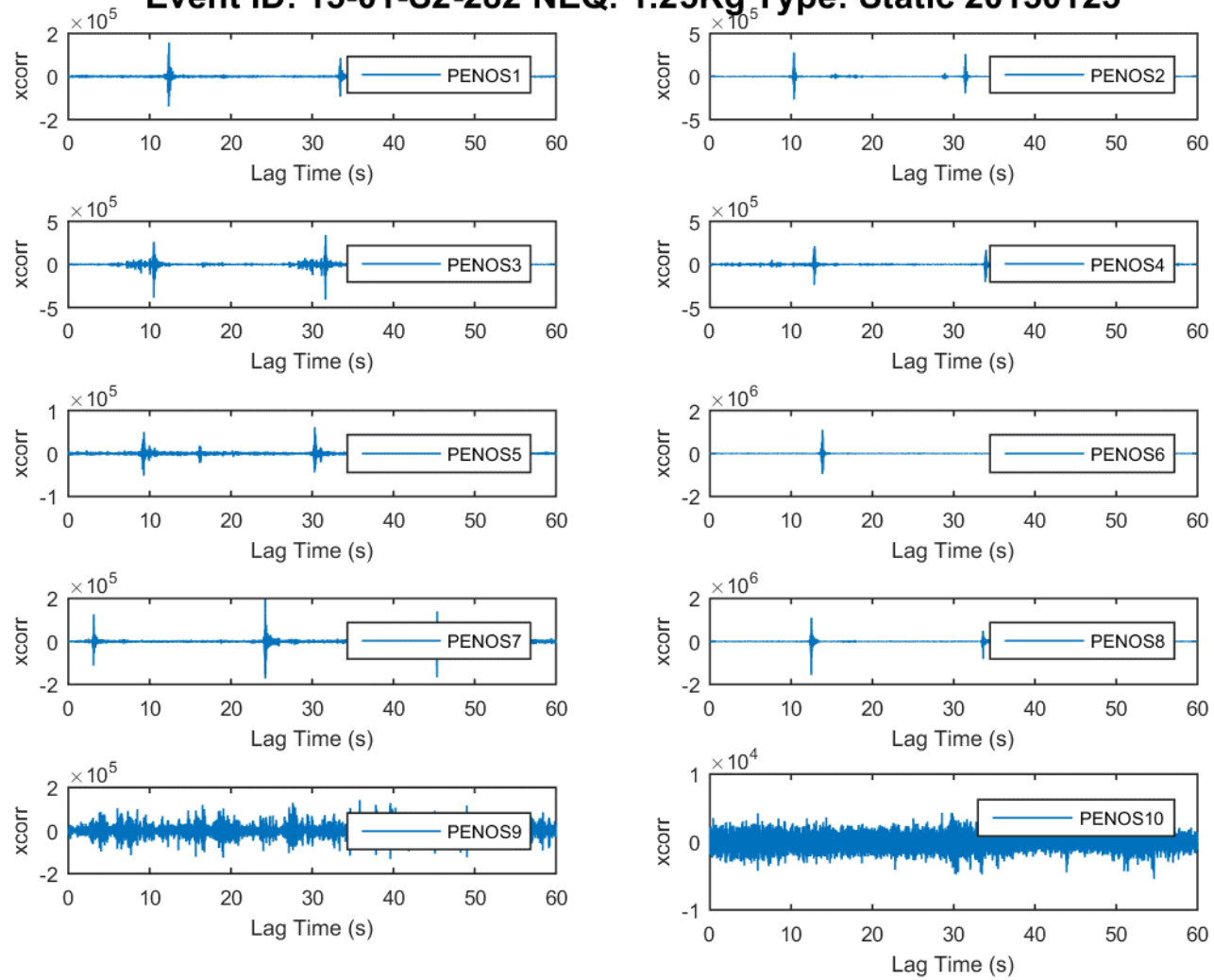
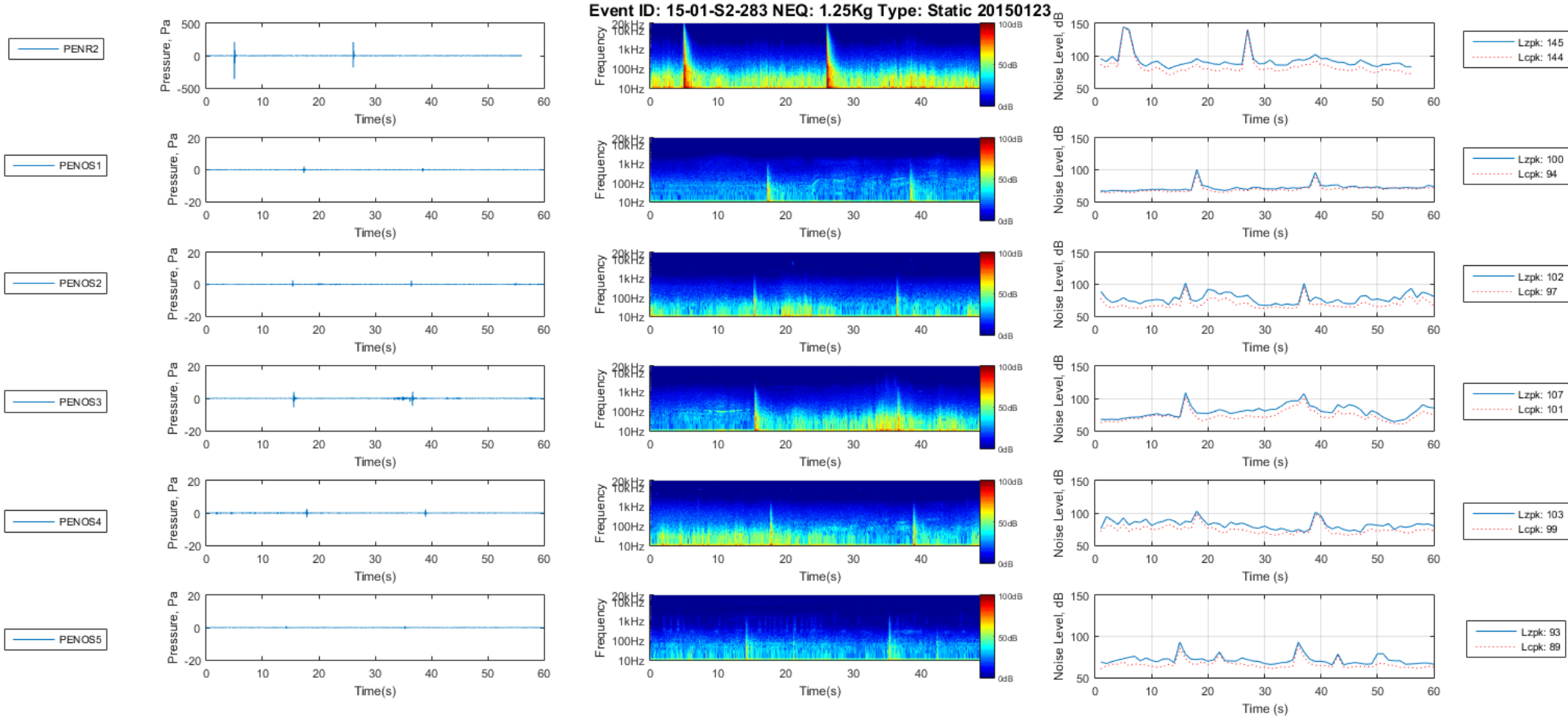


FIGURE 2.329: COHERENCE PEN\_OS 6 - 10 15-01-S2-282CTD

**Event ID: 15-01-S2-282 NEQ: 1.25Kg Type: Static 20150123**



**FIGURE 2.330: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-282**



**FIGURE 2.331: PEN\_OS 1 - 5 15-01-S2-283**

Event ID: 15-01-S2-283 NEQ: 1.25Kg Type: Static 20150123 CTD

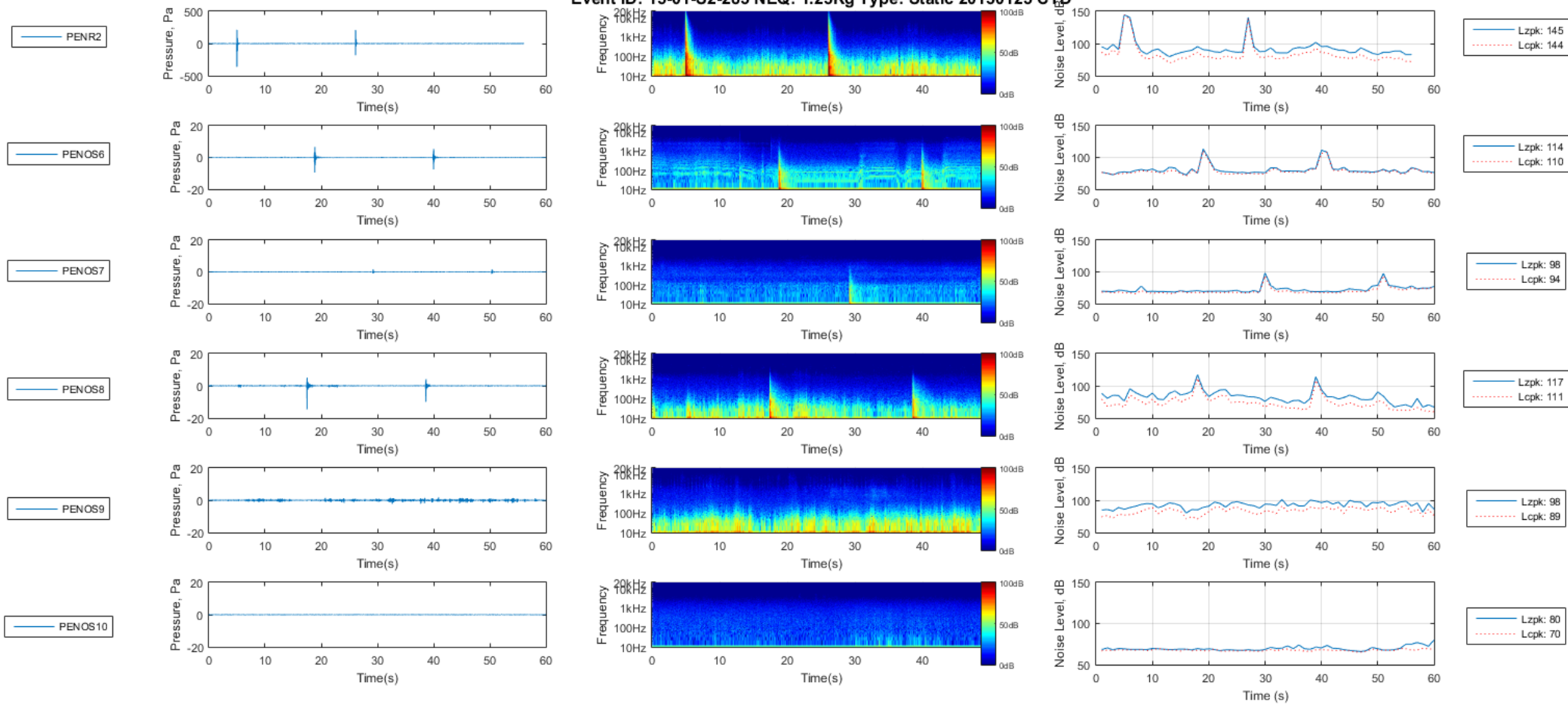


FIGURE 2.332: PEN\_OS 6 - 10 15-01-S2-283

Event ID: 15-01-S2-283 NEQ: 1.25Kg Type: Static 20150123

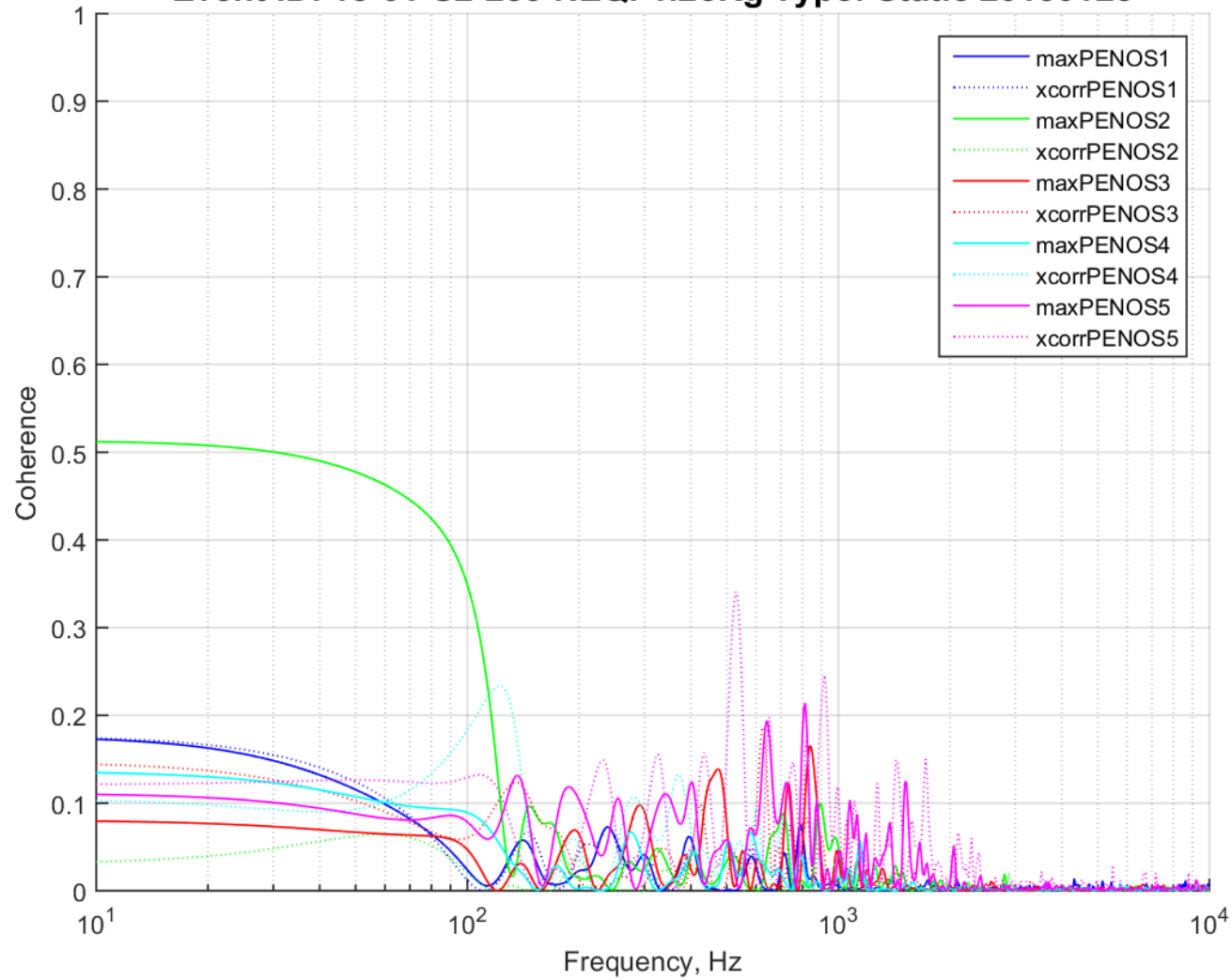


FIGURE 2.333: COHERENCE PEN\_OS 1 - 5 15-01-S2-283

Event ID: 15-01-S2-283 NEQ: 1.25Kg Type: Static 20150123

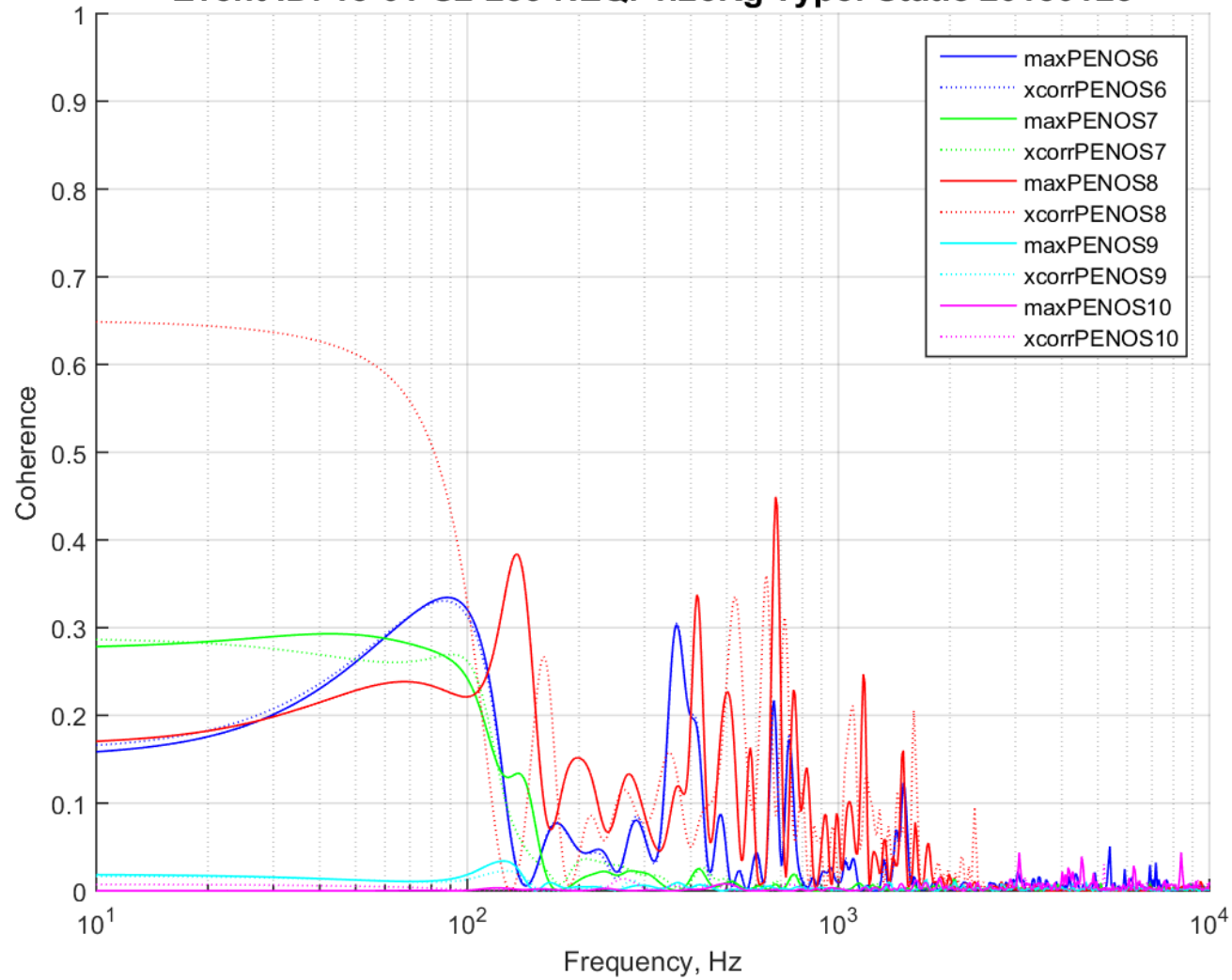
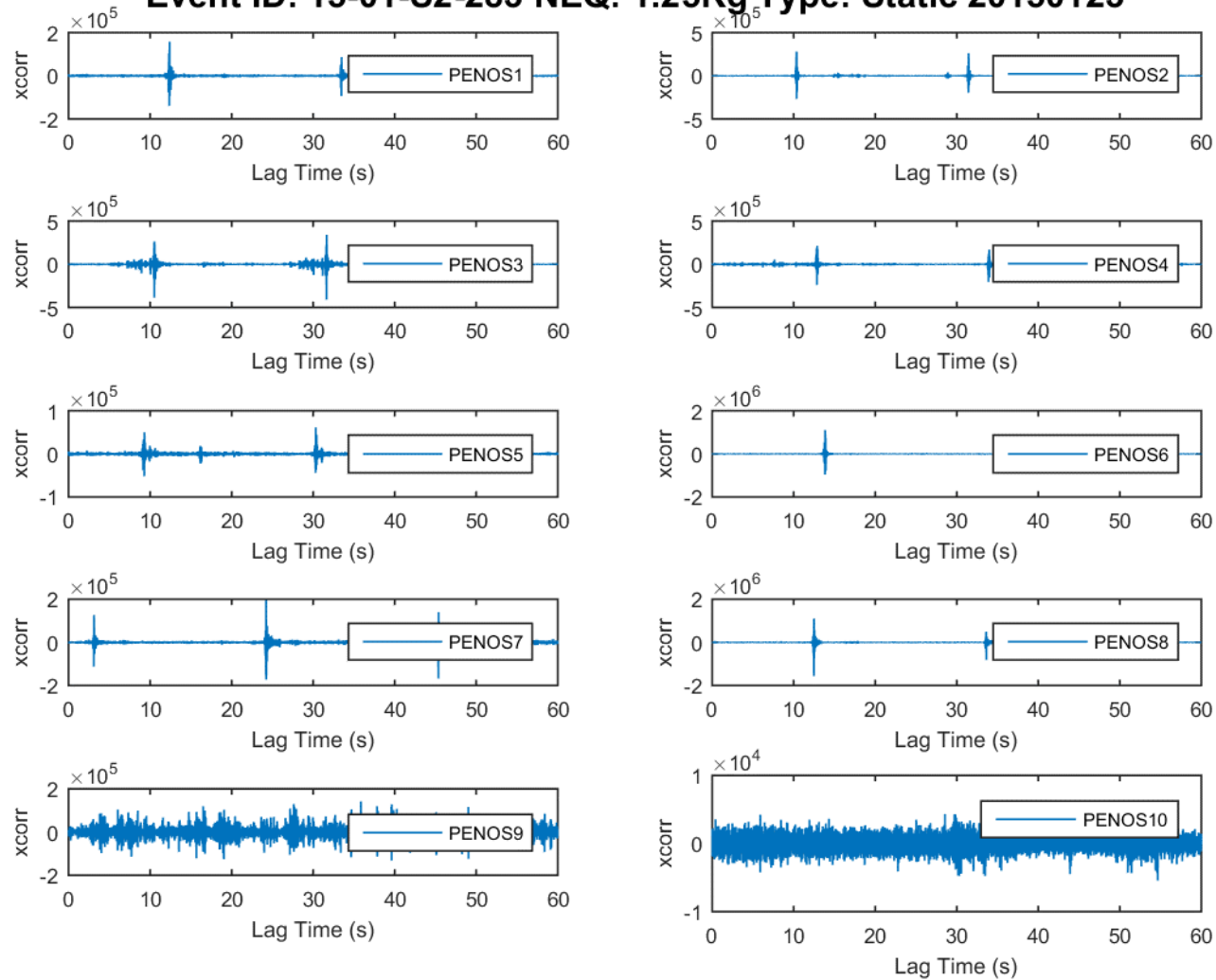


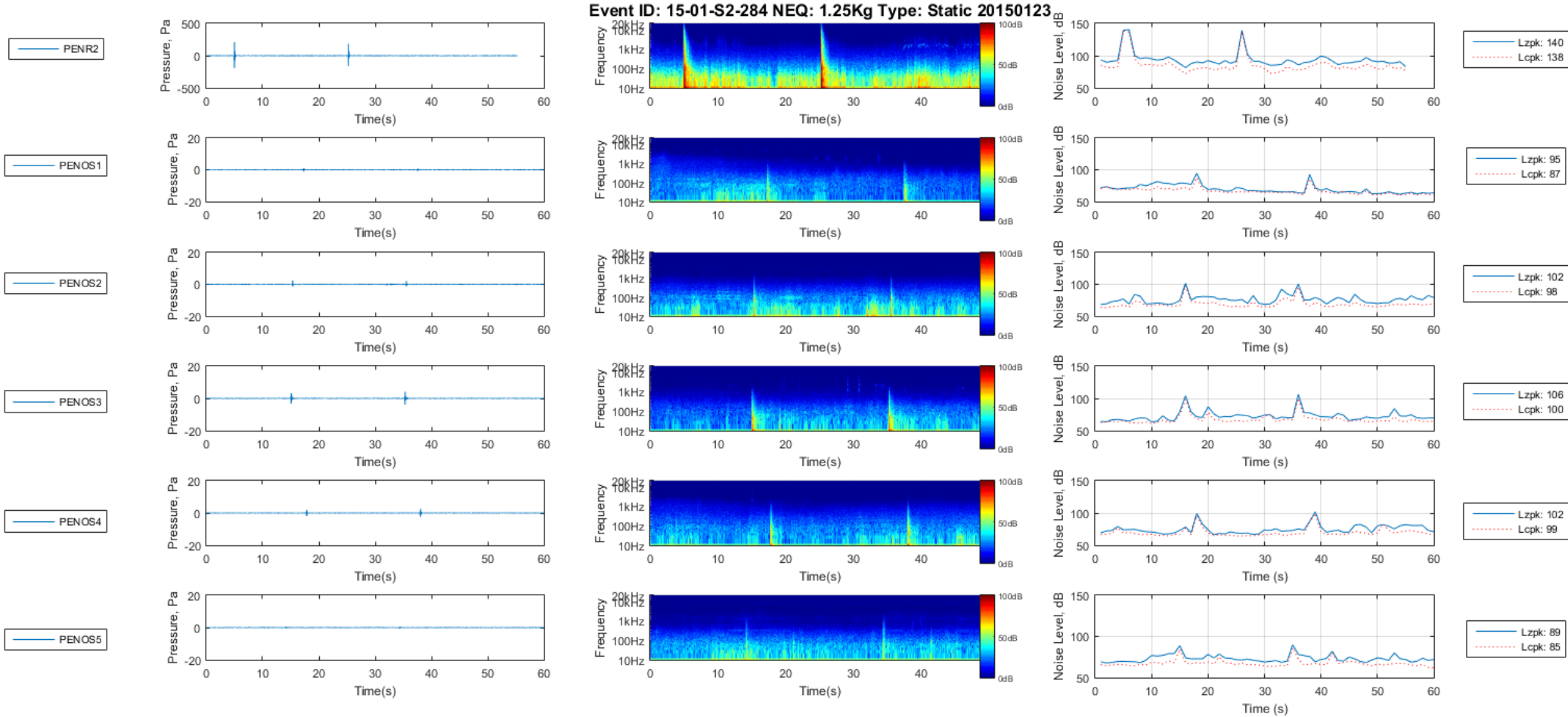
FIGURE 2.334: COHERENCE PEN\_OS 6 - 10 15-01-S2-283CTD

**Event ID: 15-01-S2-283 NEQ: 1.25Kg Type: Static 20150123**



**FIGURE 2.335: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-283**





**FIGURE 2.336: PEN\_OS 1 - 5 15-01-S2-284**

Event ID: 15-01-S2-284 NEQ: 1.25Kg Type: Static 20150123 CTD

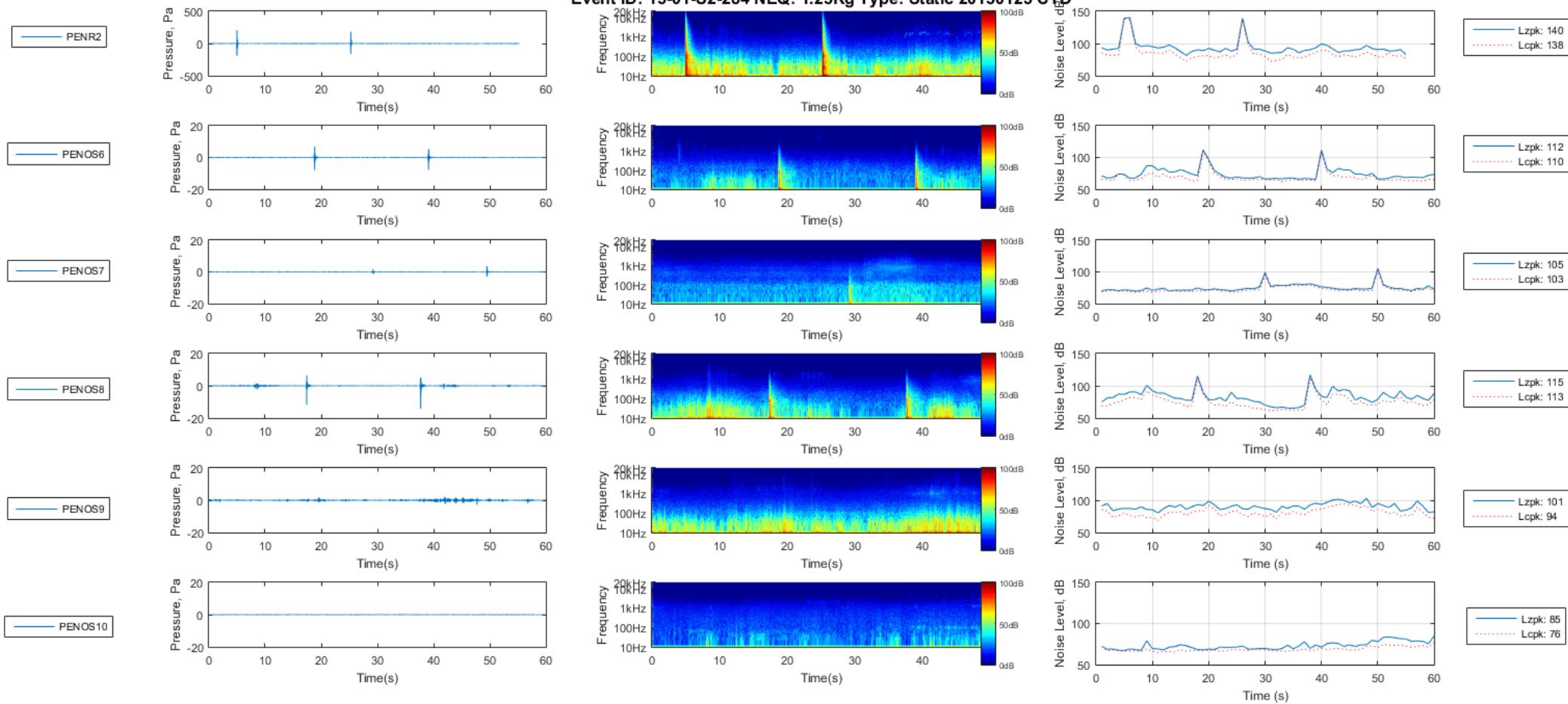


FIGURE 2.337: PEN\_OS 6 - 10 15-01-S2-284

Event ID: 15-01-S2-284 NEQ: 1.25Kg Type: Static 20150123

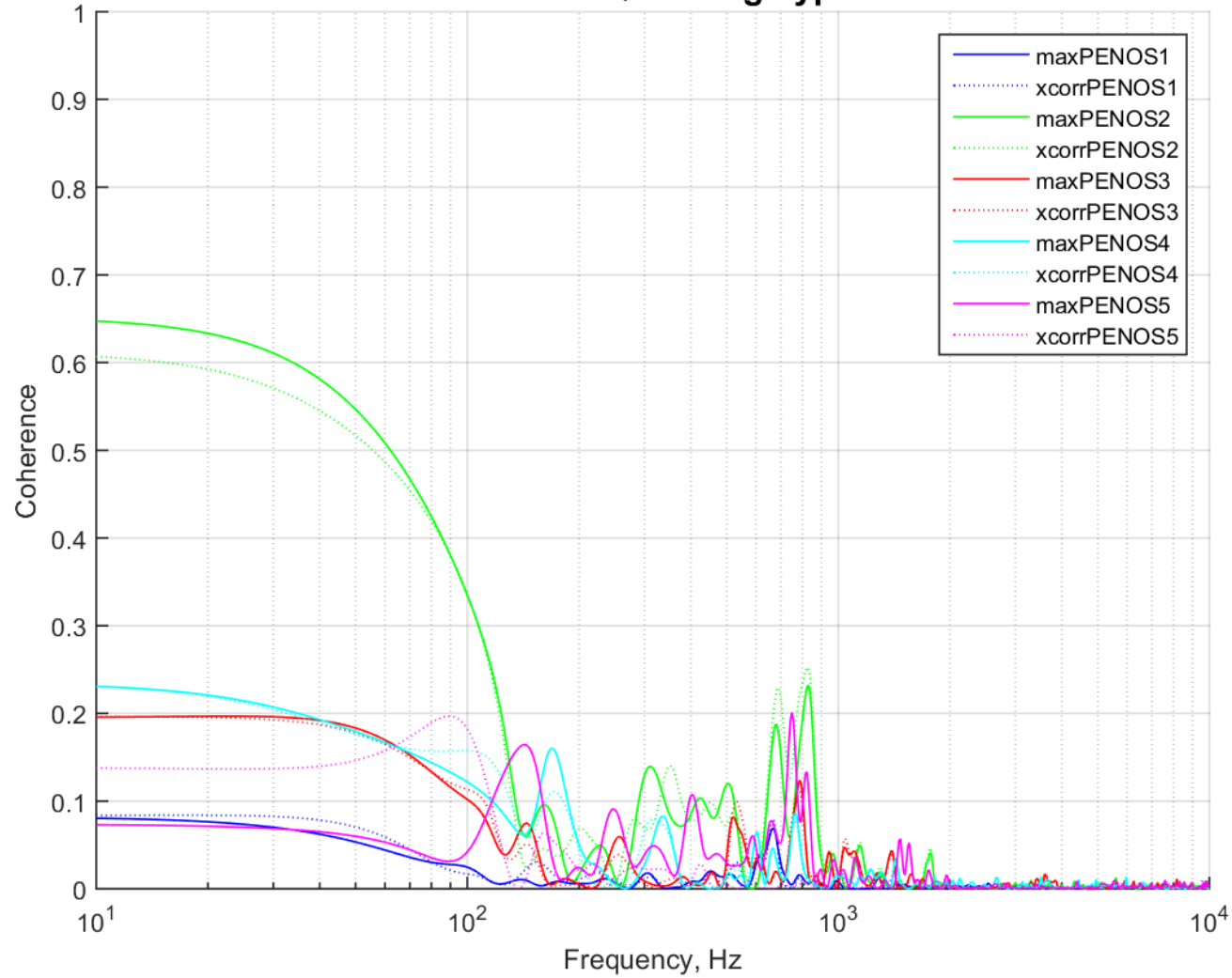


FIGURE 2.338: COHERENCE PEN\_OS 1 - 5 15-01-S2-284

Event ID: 15-01-S2-284 NEQ: 1.25Kg Type: Static 20150123

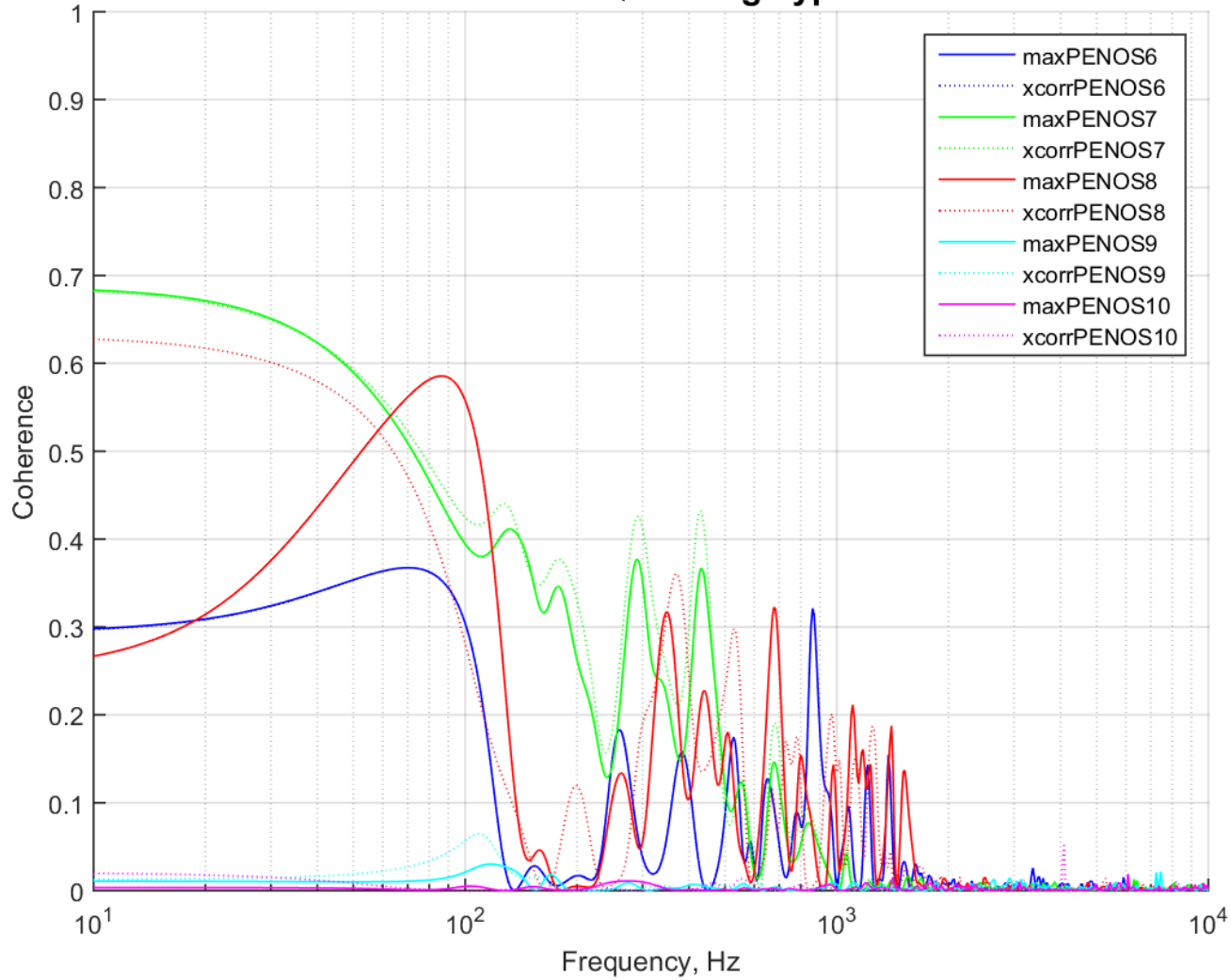
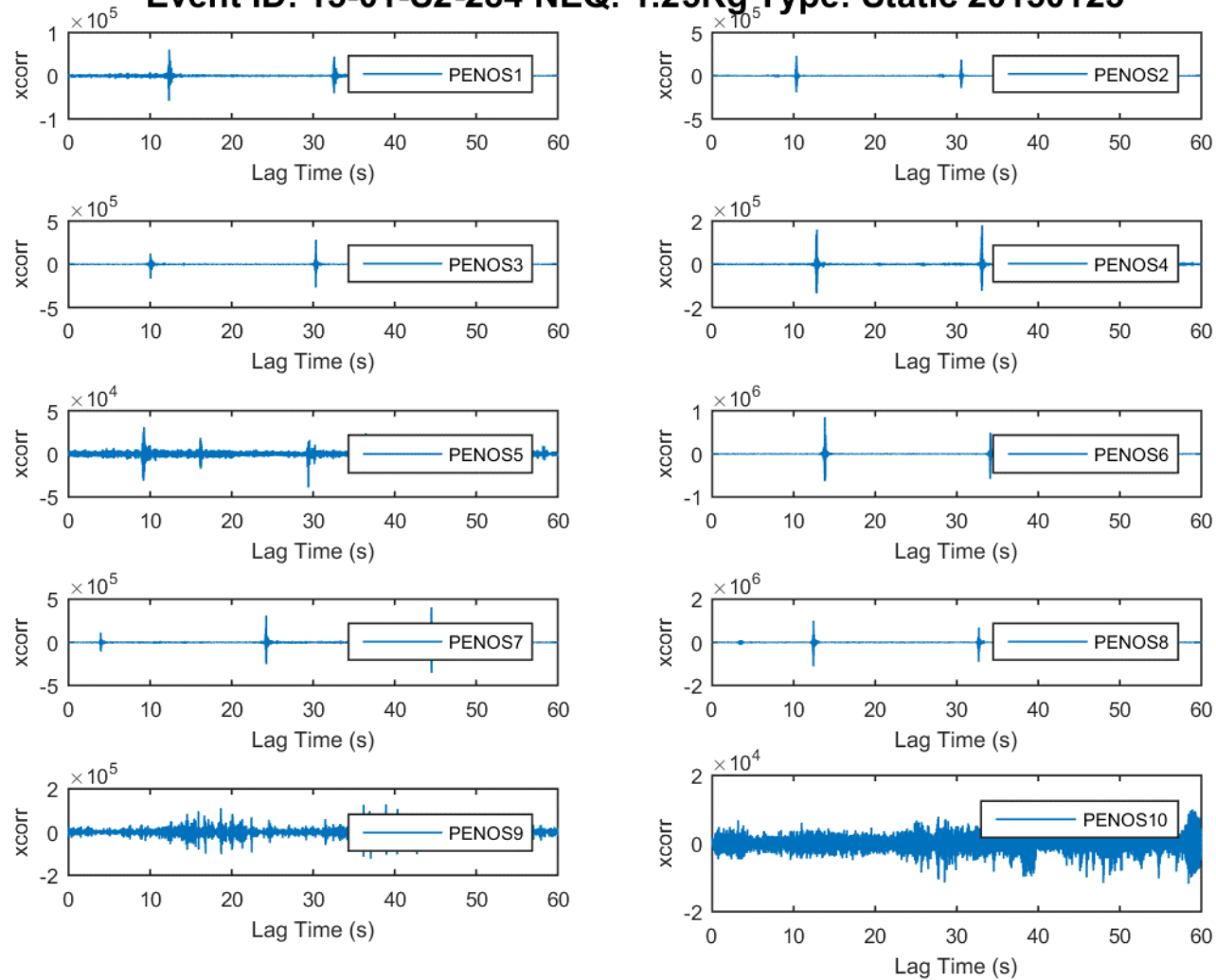
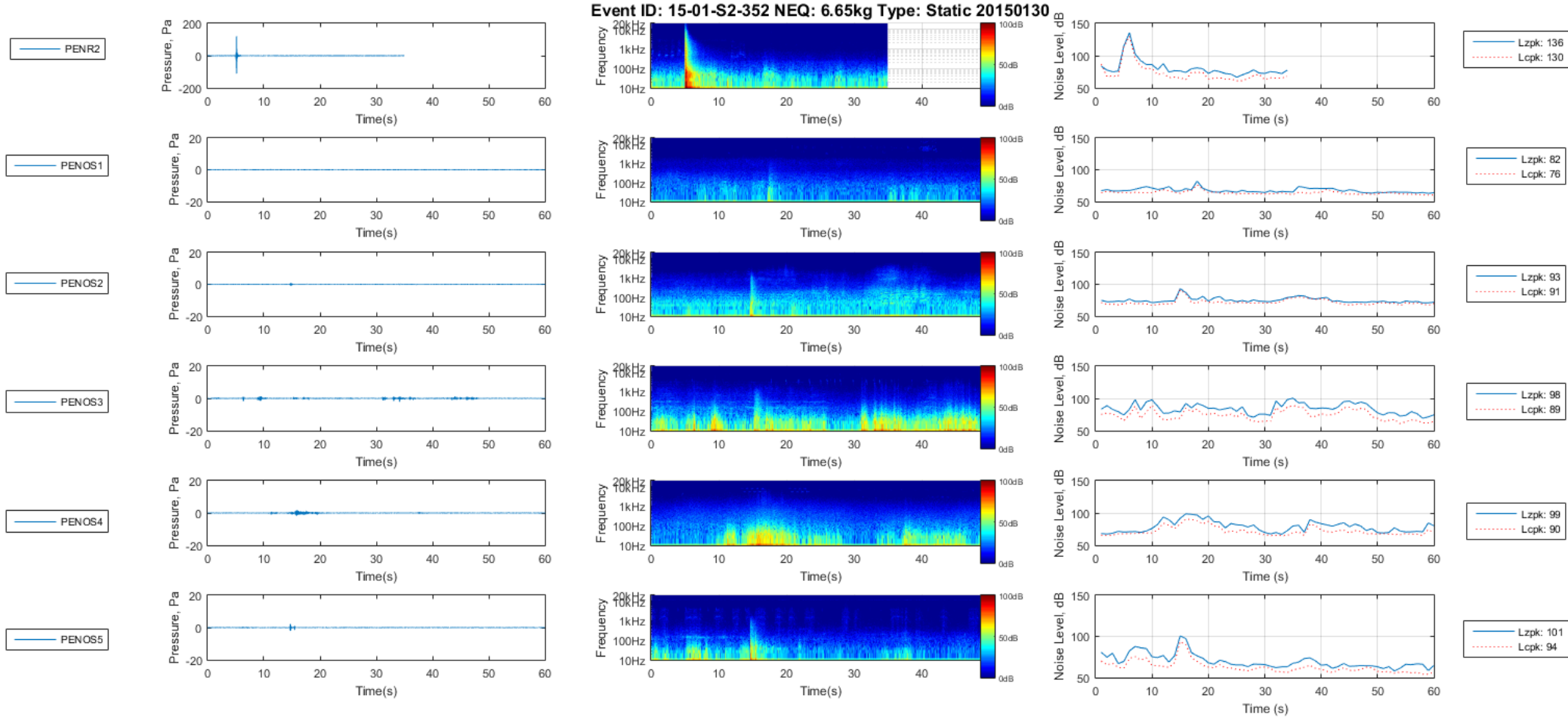


FIGURE 2.339: COHERENCE PEN\_OS 6 - 10 15-01-S2-284CTD

**Event ID: 15-01-S2-284 NEQ: 1.25Kg Type: Static 20150123**



**FIGURE 2.340: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-284**



**FIGURE 2.341: PEN\_OS 1 - 5 15-01-S2-352**

Event ID: 15-01-S2-352 NEQ: 6.65kg Type: Static 20150130 CTD

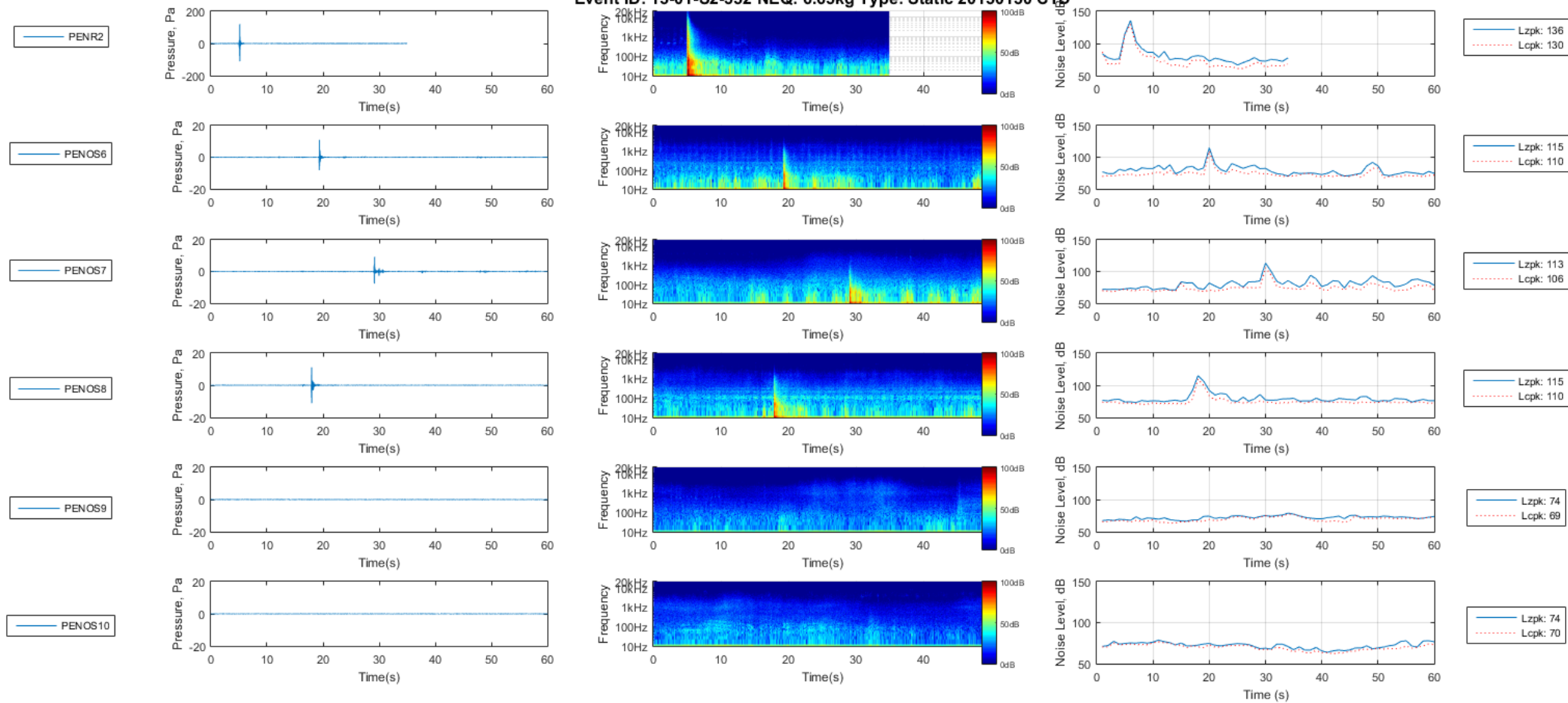


FIGURE 2.342: PEN\_OS 6 - 10 15-01-S2-352

Event ID: 15-01-S2-352 NEQ: 6.65kg Type: Static 20150130

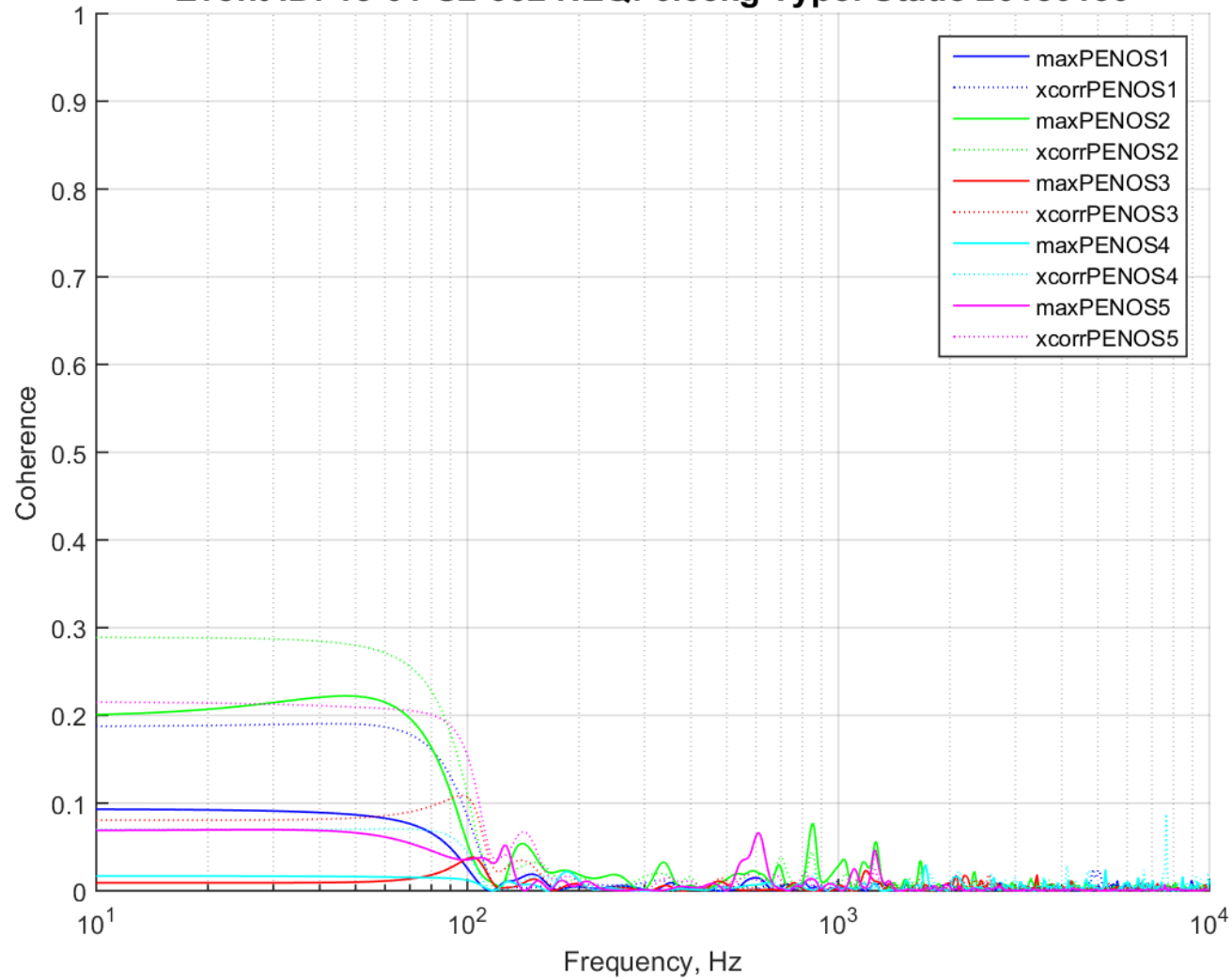


FIGURE 2.343: COHERENCE PEN\_OS 1 - 5 15-01-S2-352



Event ID: 15-01-S2-352 NEQ: 6.65kg Type: Static 20150130

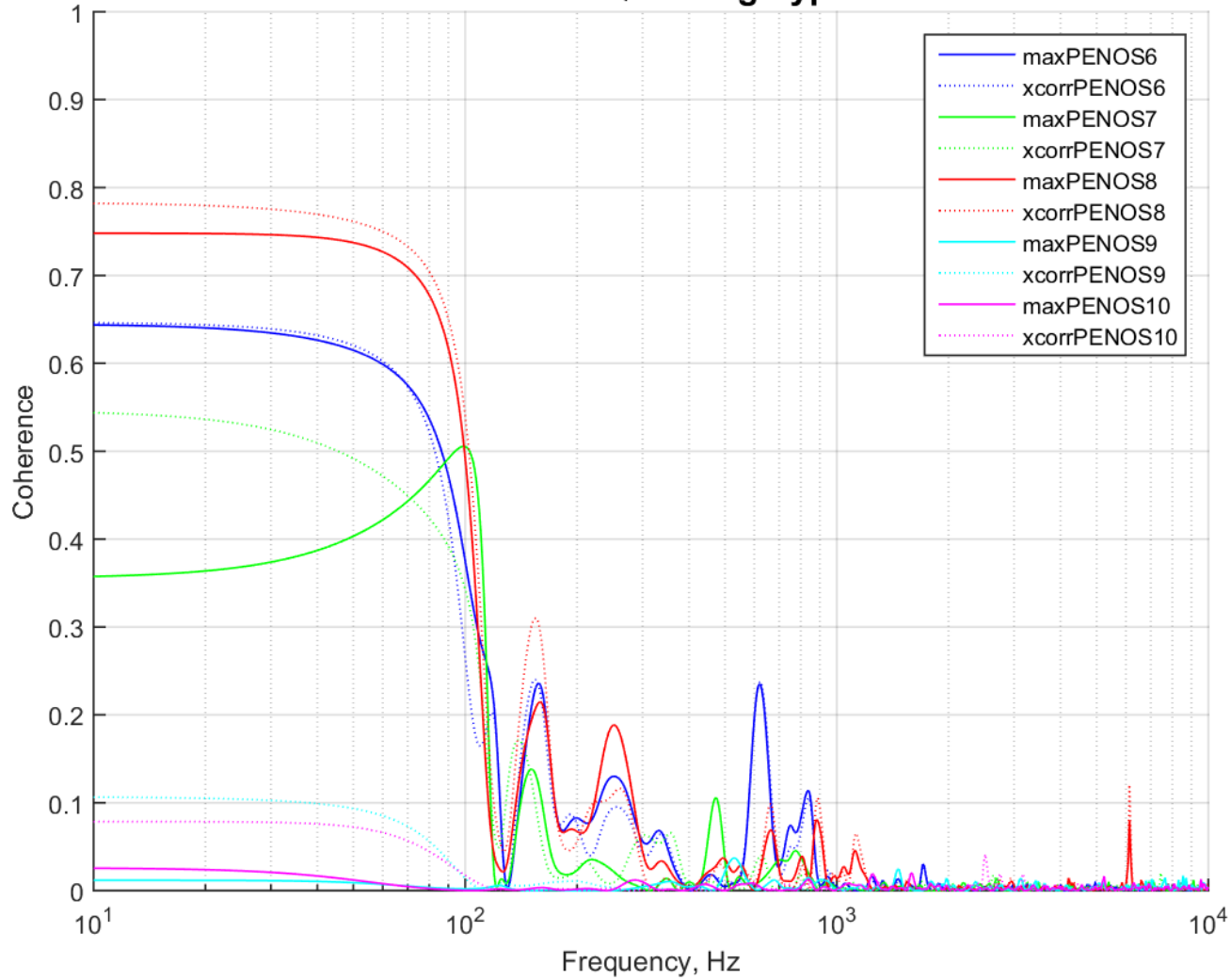
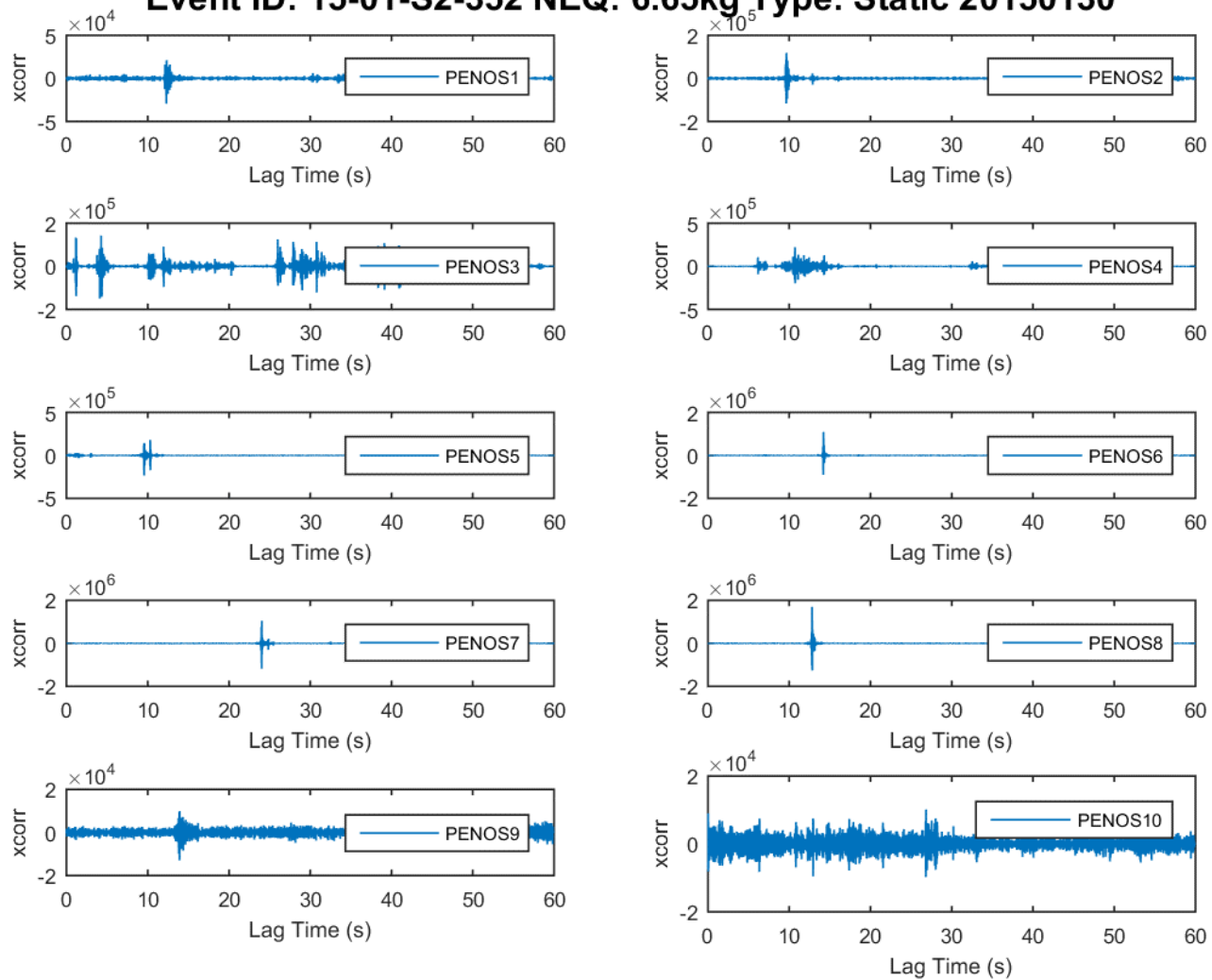


FIGURE 2.344: COHERENCE PEN\_OS 6 - 10 15-01-S2-352CTD

**Event ID: 15-01-S2-352 NEQ: 6.65kg Type: Static 20150130**



**FIGURE 2.345: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-352**

Event ID: 15-02-S1-10 & S2-13 NEQ: 6.65kg Type: Static 20150203

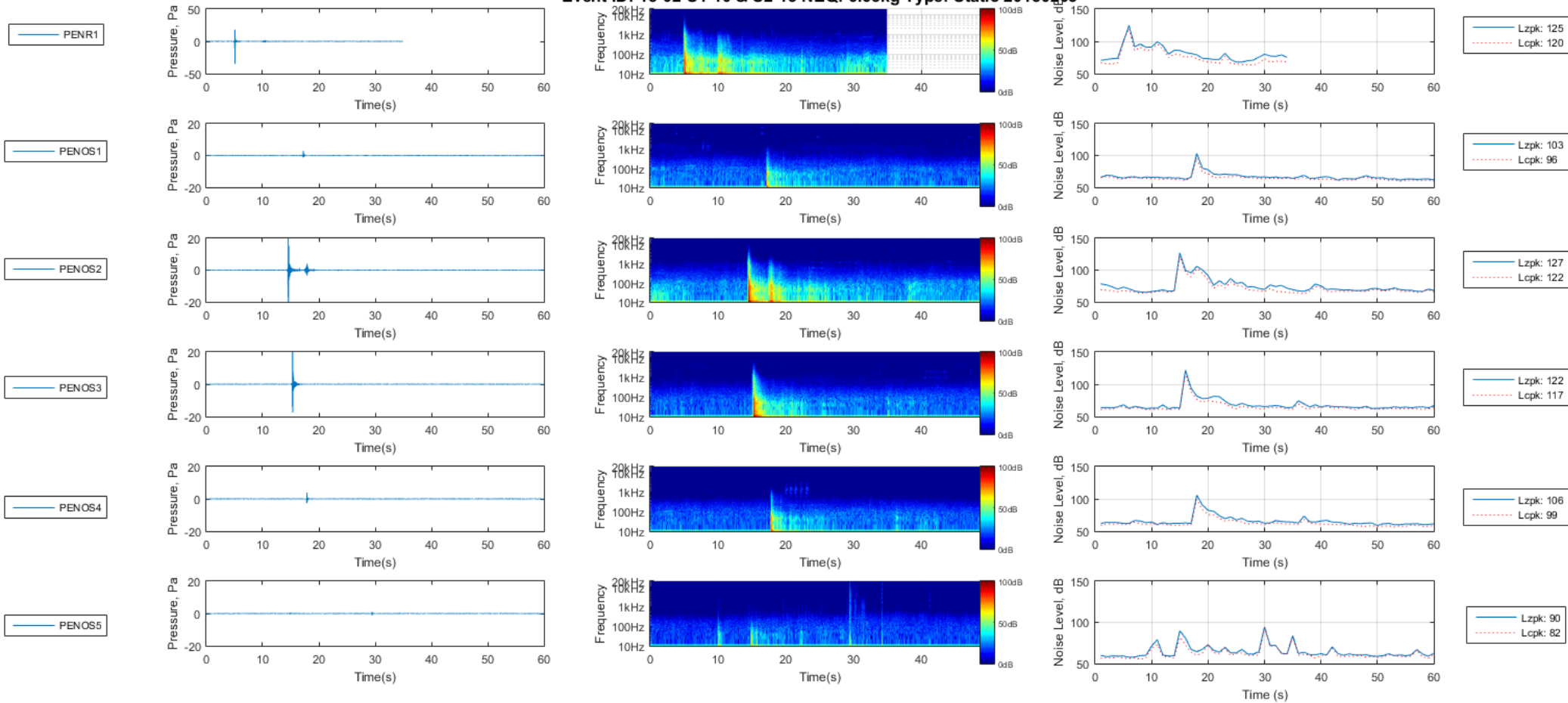


FIGURE 2.346: PEN\_OS 1 - 5 15-02-S1-10 & S2-13

Event ID: 15-02-S1-10 & S2-13 NEQ: 6.65kg Type: Static 20150203.CTD

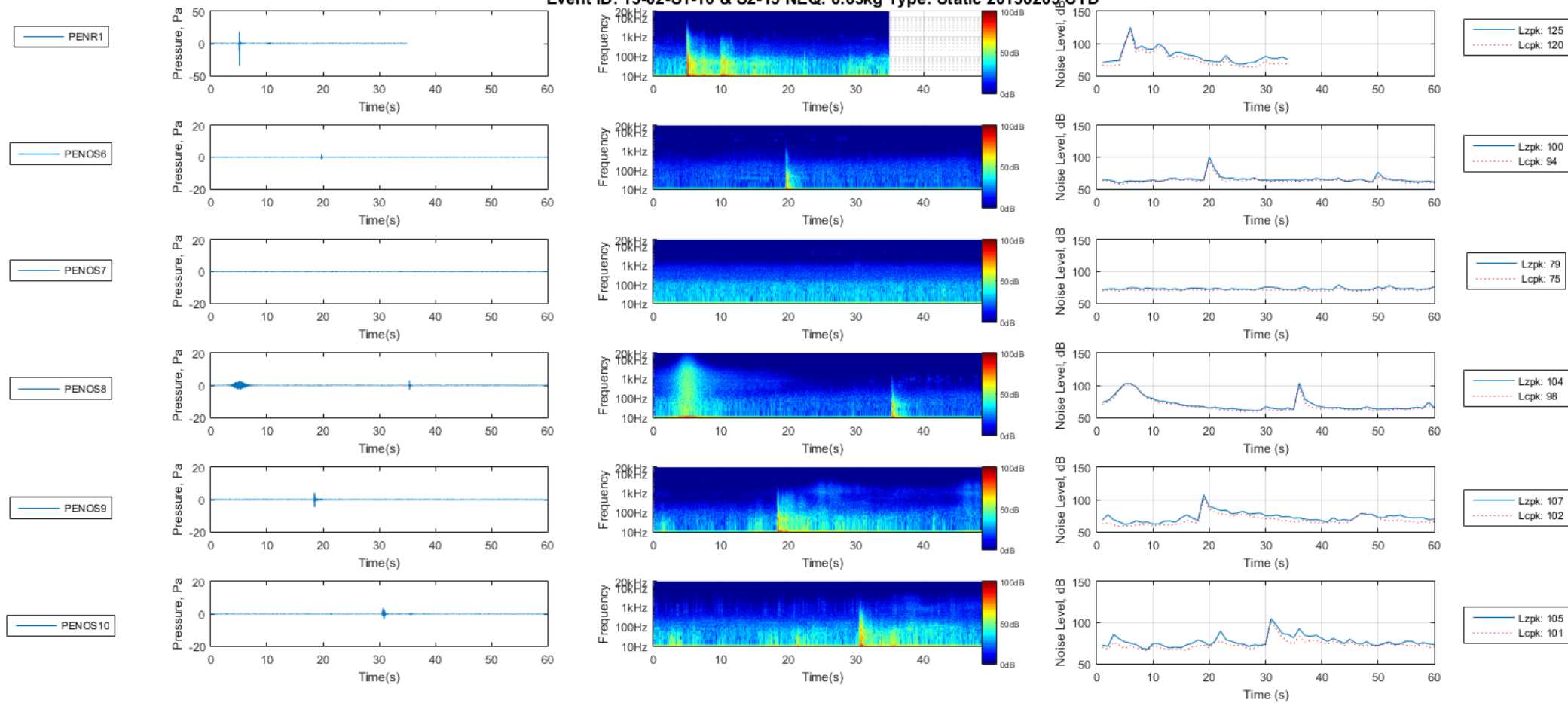
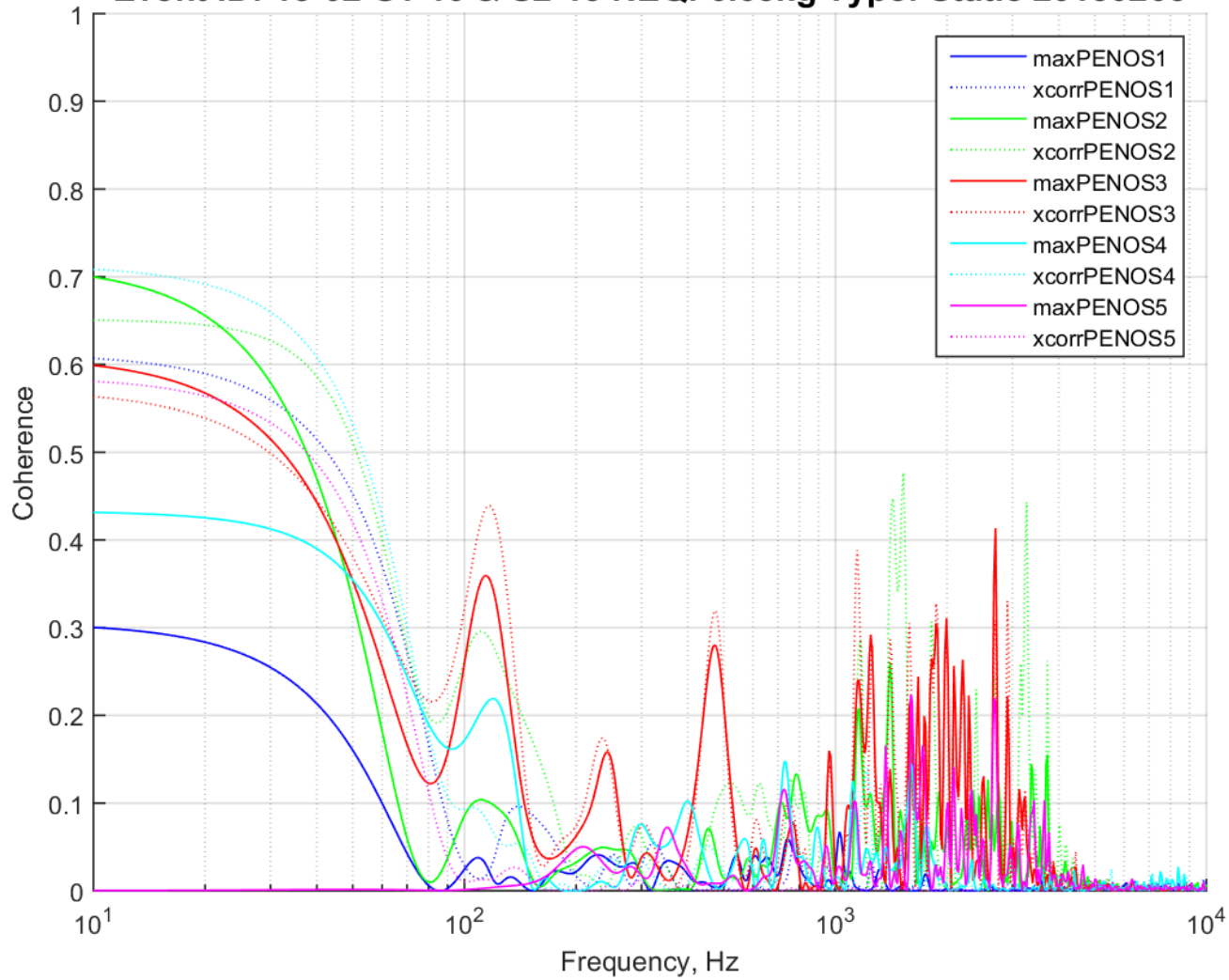


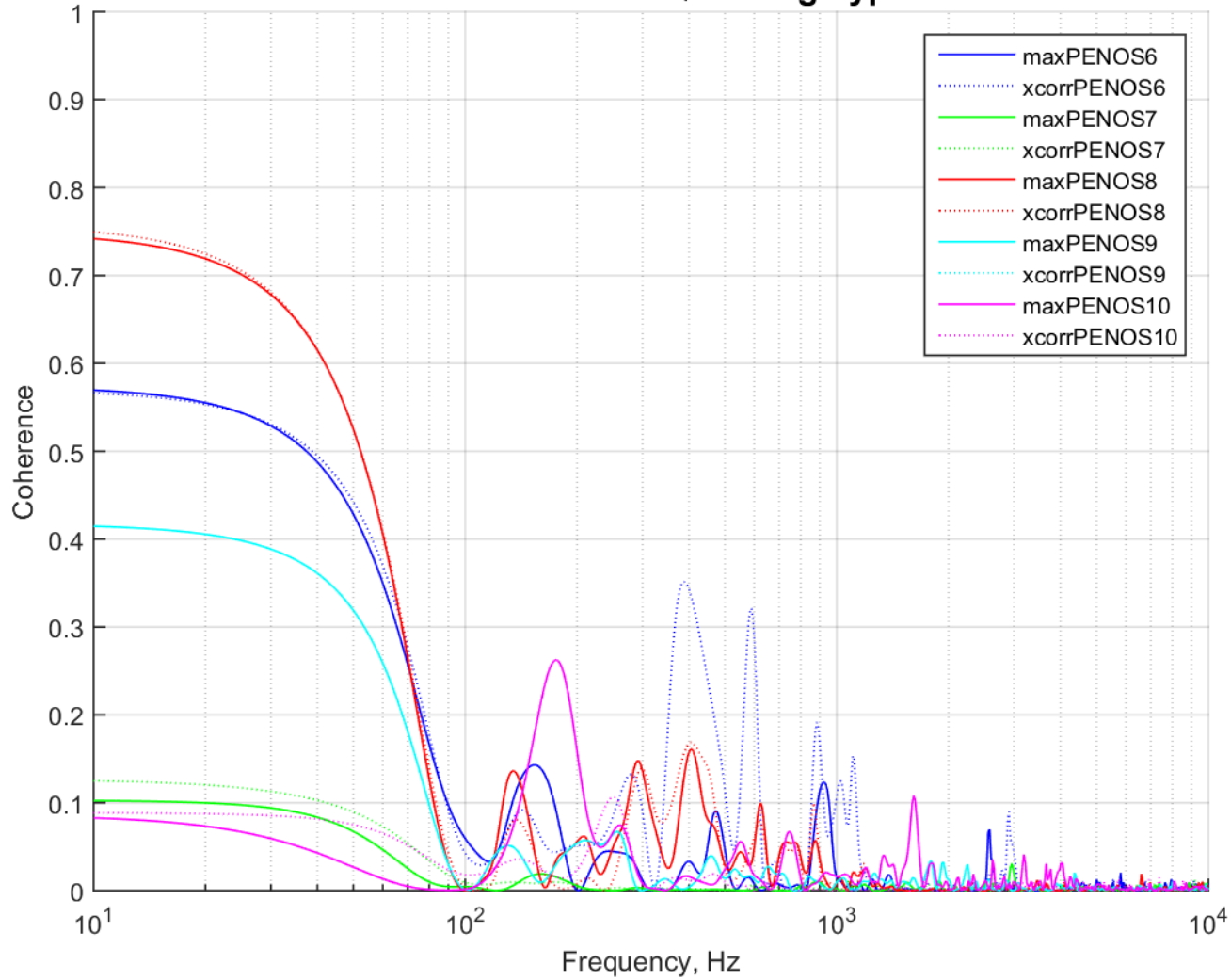
FIGURE 2.347: PEN\_OS 6 - 10 15-02-S1-10 & S2-13

**Event ID: 15-02-S1-10 & S2-13 NEQ: 6.65kg Type: Static 20150203**



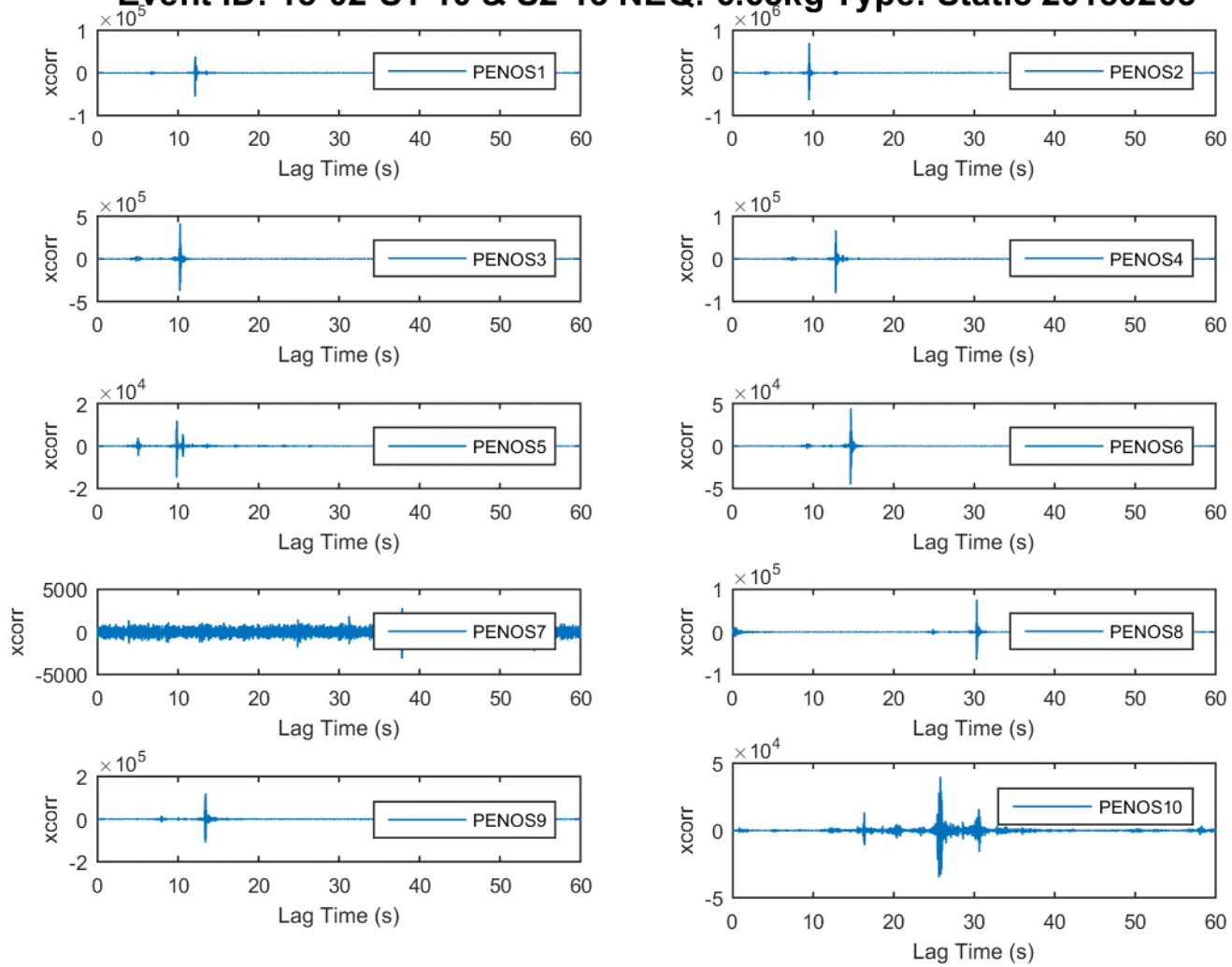
**FIGURE 2.348: COHERENCE PEN\_OS 1 - 5 15-02-S1-10 & S2-13**

**Event ID: 15-02-S1-10 & S2-13 NEQ: 6.65kg Type: Static 20150203**



**FIGURE 2.349: COHERENCE PEN\_OS 6 - 10 15-02-S1-10 & S2-13CTD**

**Event ID: 15-02-S1-10 & S2-13 NEQ: 6.65kg Type: Static 20150203**



**FIGURE 2.350: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S1-10 & S2-13**

Event ID: 15-02-S1-10 & S2-13 NEQ: 6.65kg Type: Static 20150203

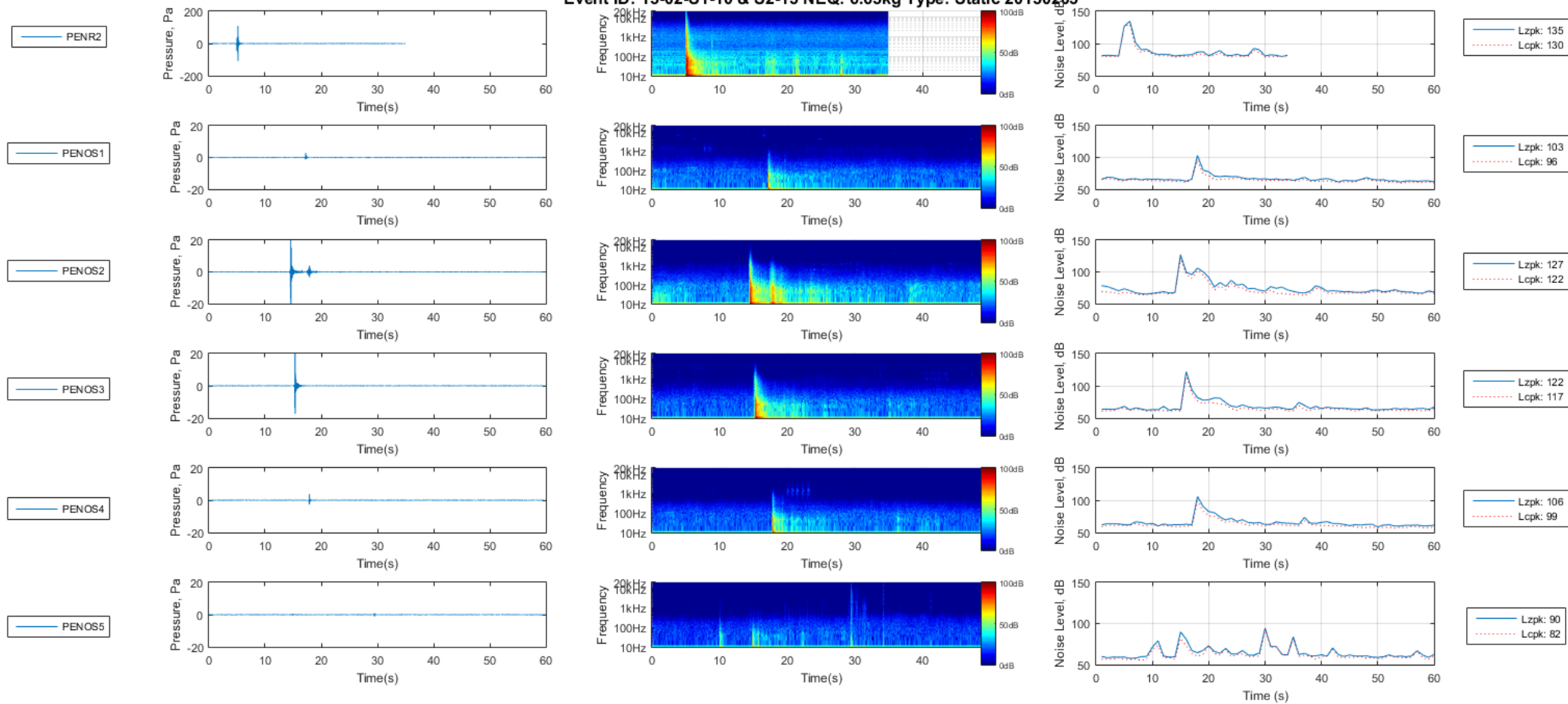


FIGURE 2.351: PEN\_OS 1 - 5 15-02-S1-10 & S2-13



Event ID: 15-02-S1-10 & S2-13 NEQ: 6.65kg Type: Static 20150203.CTD

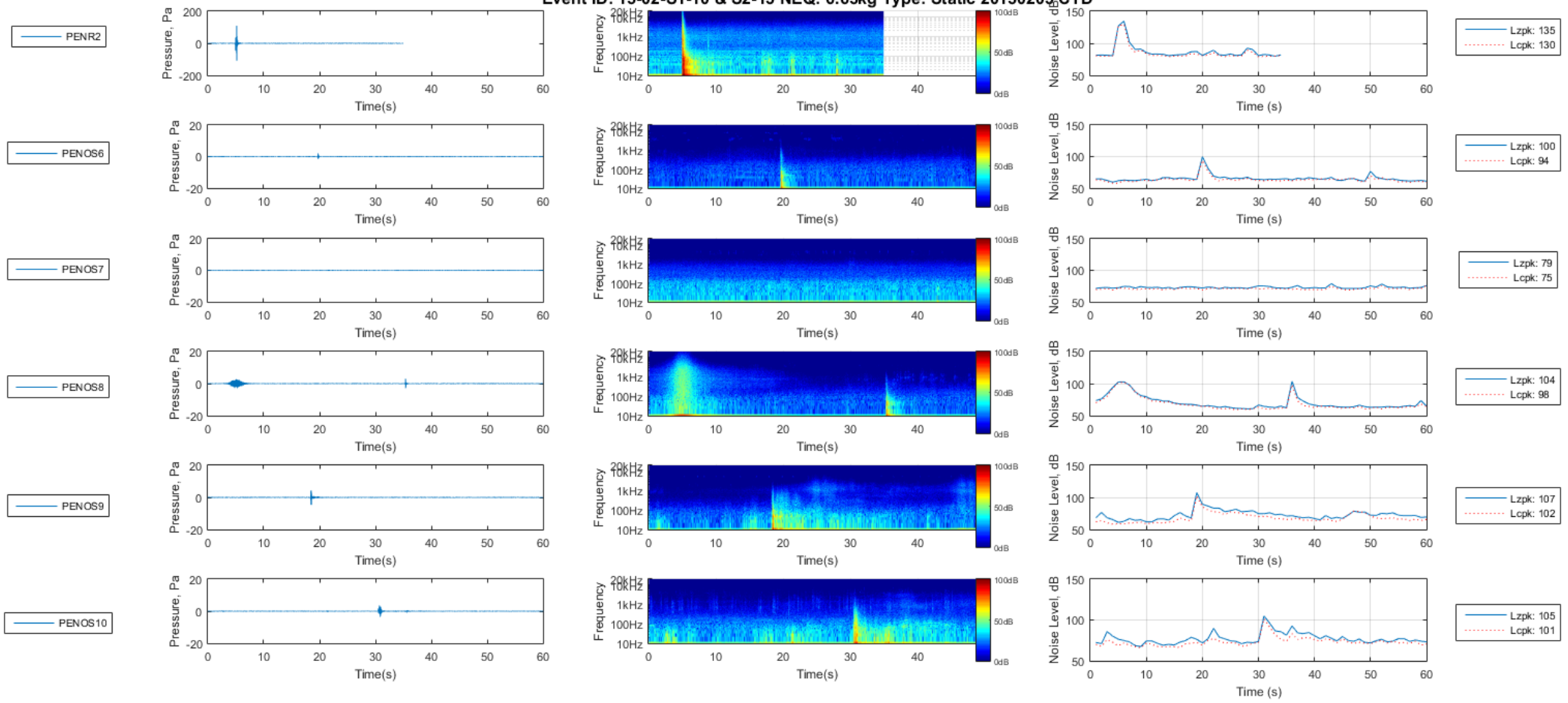
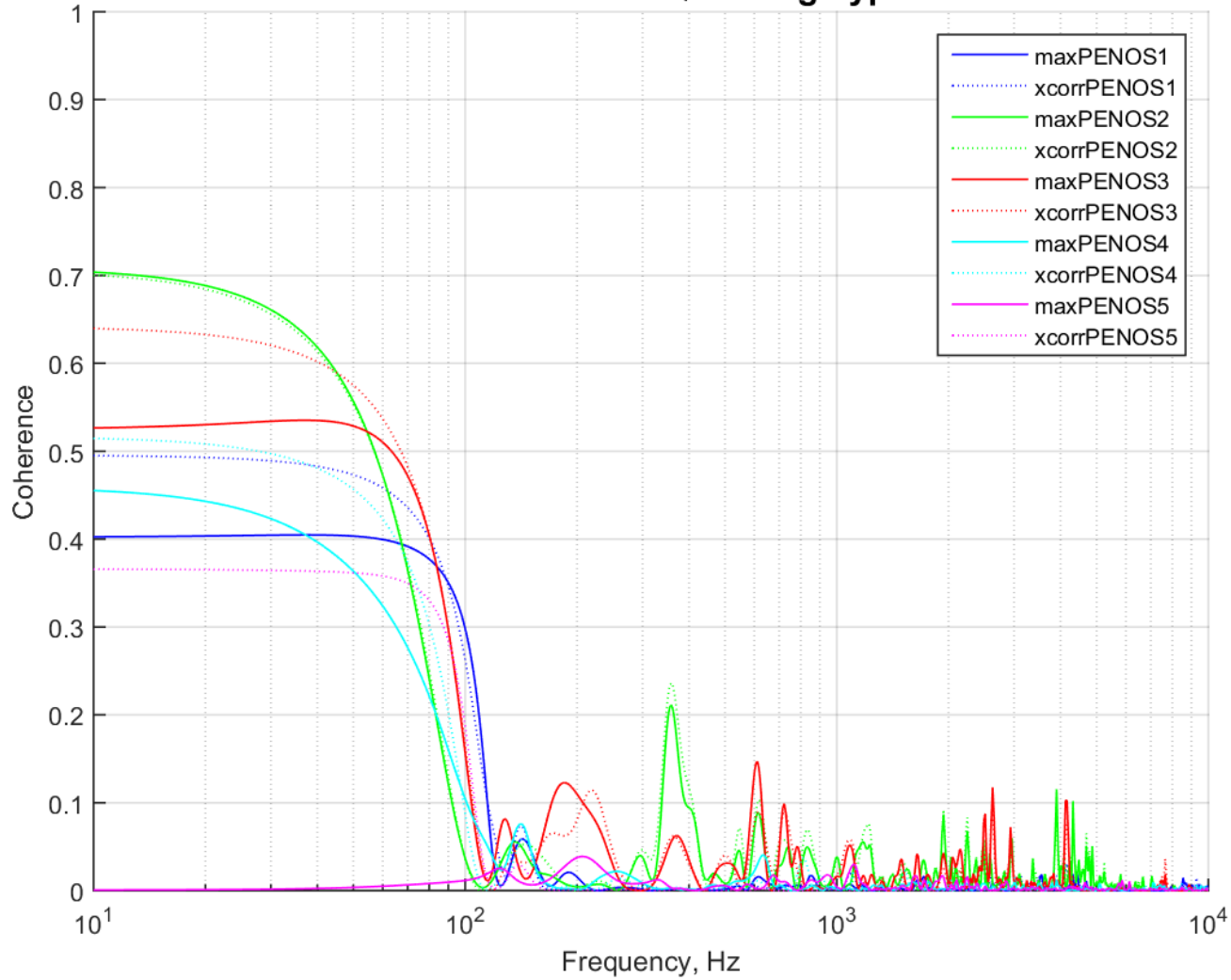


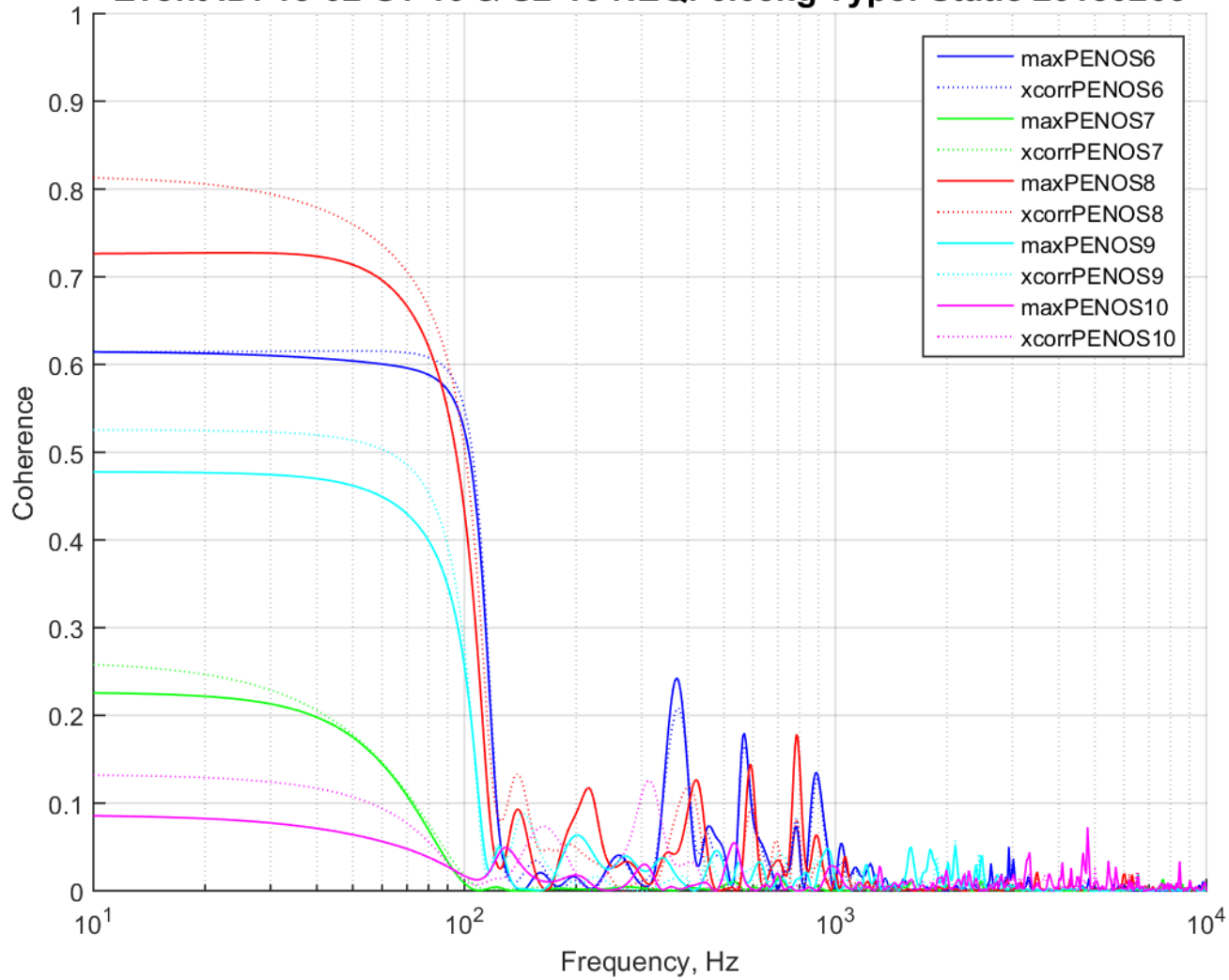
FIGURE 2.352: PEN\_OS 6 - 10 15-02-S1-10 & S2-13

**Event ID: 15-02-S1-10 & S2-13 NEQ: 6.65kg Type: Static 20150203**



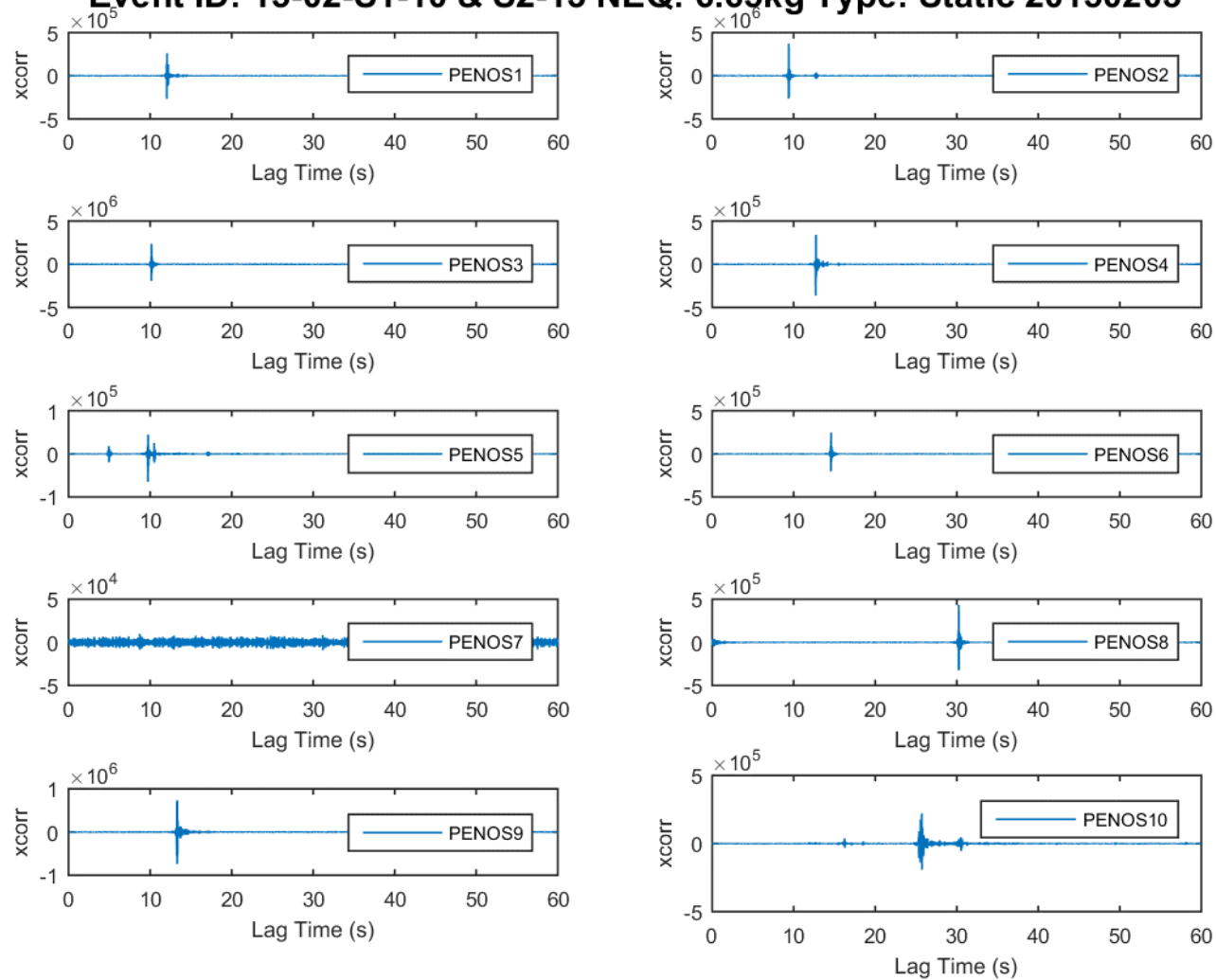
**FIGURE 2.353: COHERENCE PEN\_OS 1 - 5 15-02-S1-10 & S2-13**

**Event ID: 15-02-S1-10 & S2-13 NEQ: 6.65kg Type: Static 20150203**



**FIGURE 2.354: COHERENCE PEN\_OS 6 - 10 15-02-S1-10 & S2-13CTD**

**Event ID: 15-02-S1-10 & S2-13 NEQ: 6.65kg Type: Static 20150203**



**FIGURE 2.355: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S1-10 & S2-13**

Event ID: 15-02-S1-100 & S2-94 NEQ: 7.7kg Type: Static 20150210

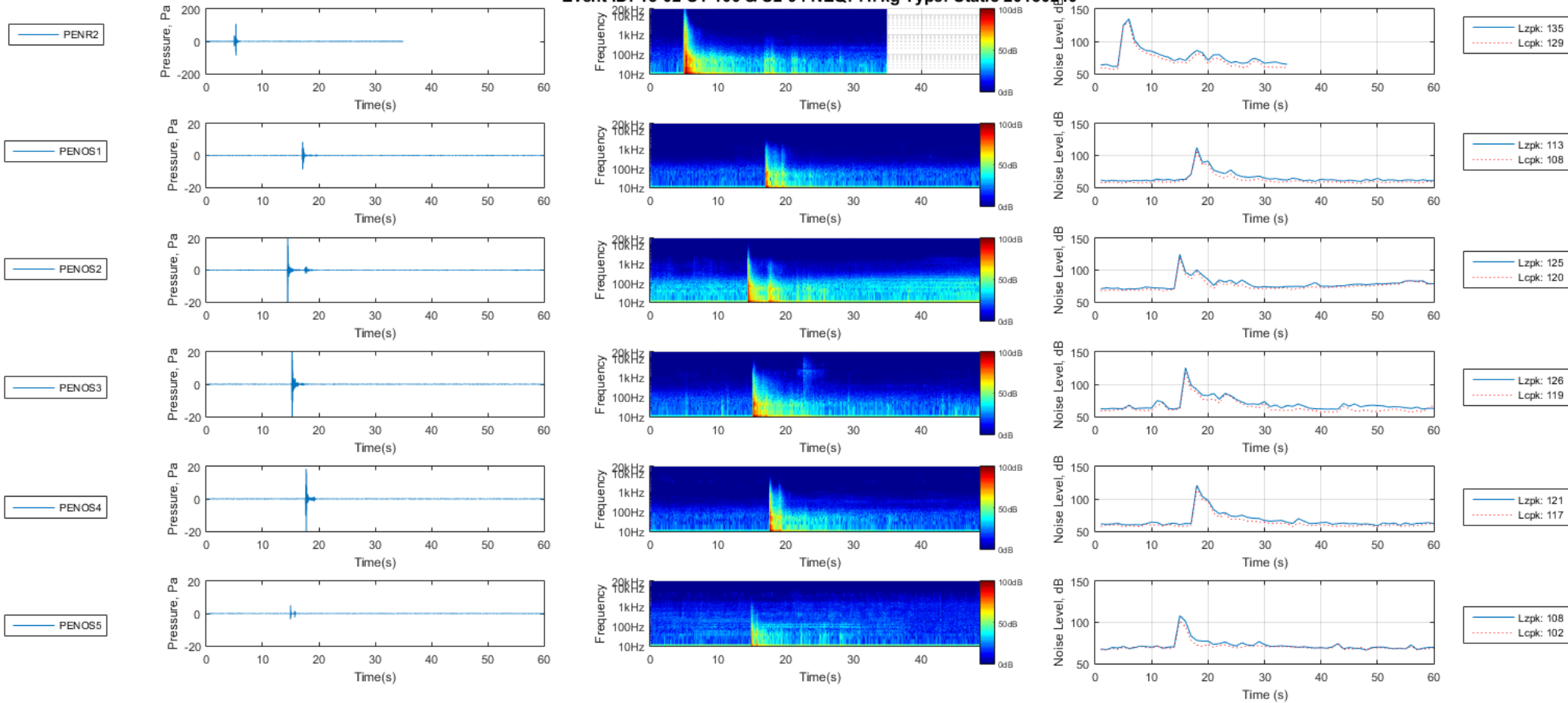


FIGURE 2.356: PEN\_OS 1 - 5 15-02-S1-100 & S2-94

Event ID: 15-02-S1-100 & S2-94 NEQ: 7.7kg Type: Static 20150210.CTD

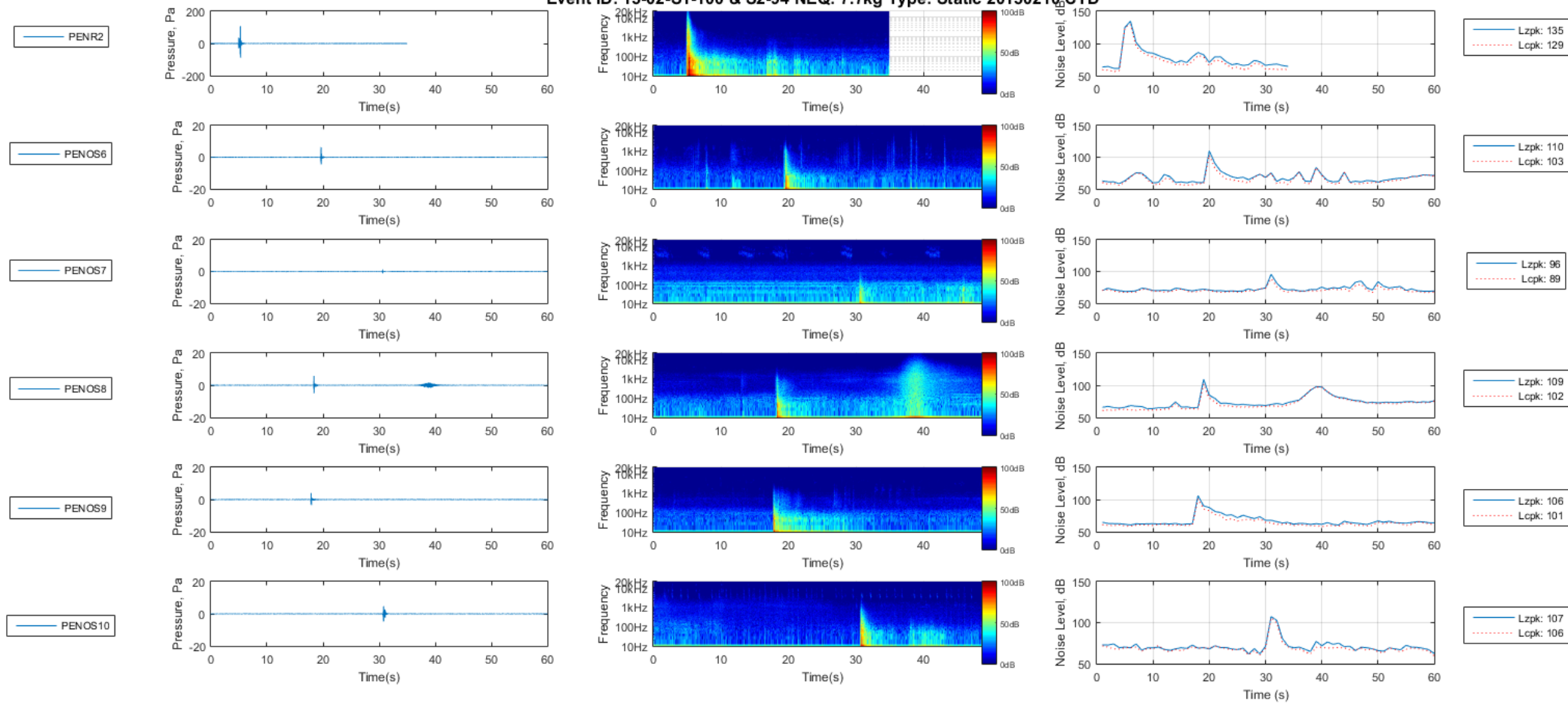
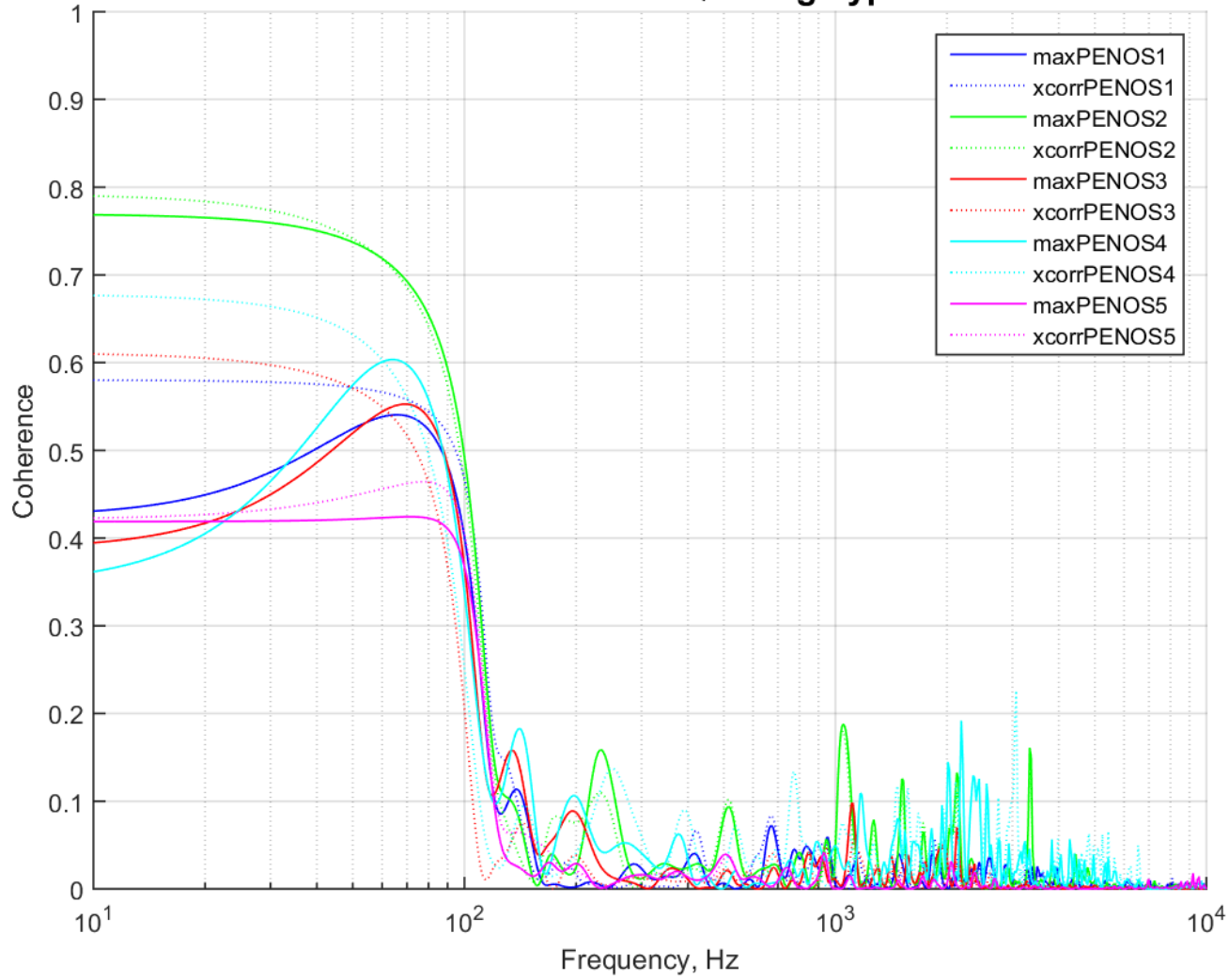


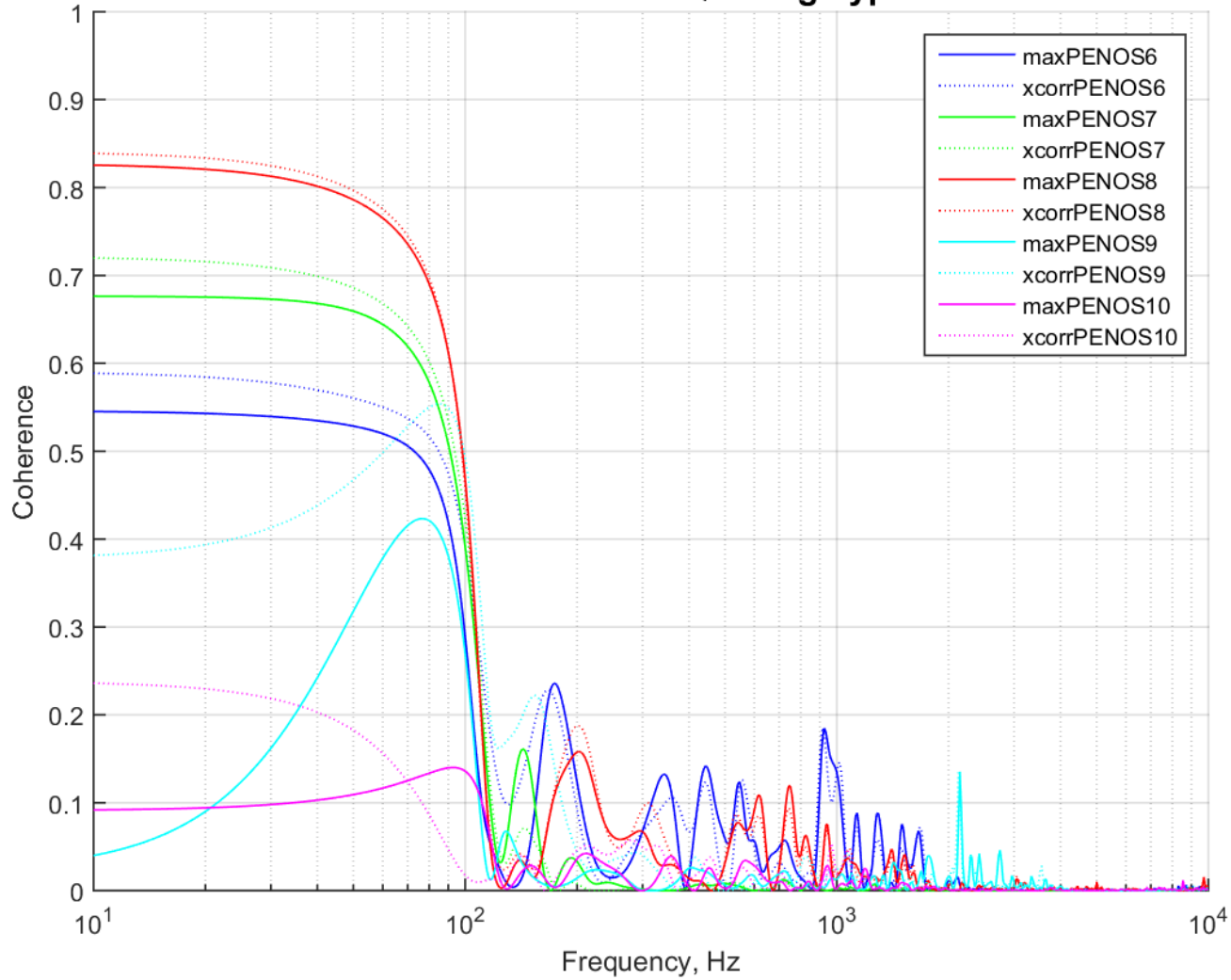
FIGURE 2.357: PEN\_OS 6 - 10 15-02-S1-100 & S2-94

**Event ID: 15-02-S1-100 & S2-94 NEQ: 7.7kg Type: Static 20150210**



**FIGURE 2.358: COHERENCE PEN\_OS 1 - 5 15-02-S1-100 & S2-94**

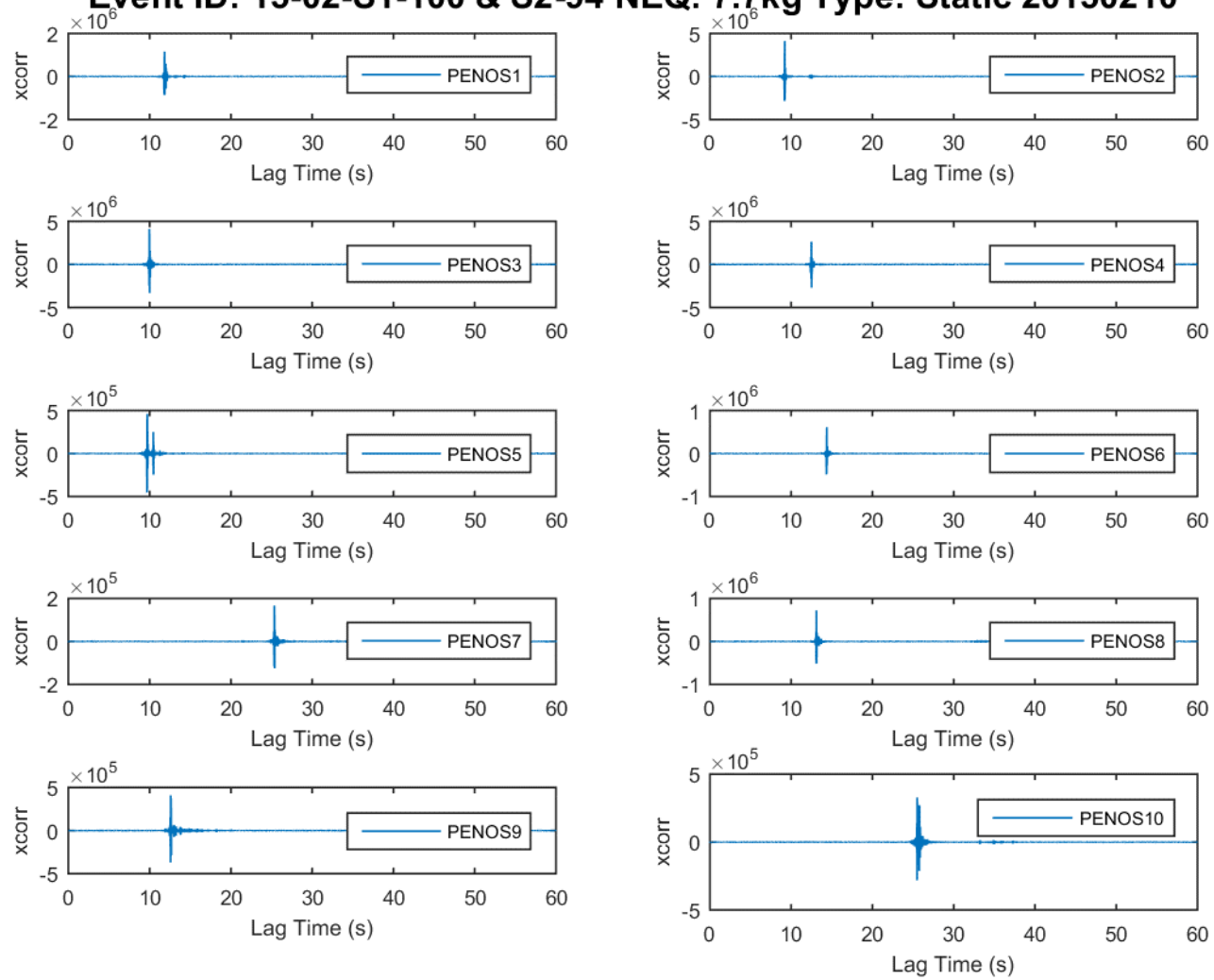
**Event ID: 15-02-S1-100 & S2-94 NEQ: 7.7kg Type: Static 20150210**



**FIGURE 2.359: COHERENCE PEN\_OS 6 - 10 15-02-S1-100 & S2-94CTD**



**Event ID: 15-02-S1-100 & S2-94 NEQ: 7.7kg Type: Static 20150210**



**FIGURE 2.360: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S1-100 & S2-94**

Event ID: 15-02-S1-103 & S2-100 NEQ: 7.7kg Type: Static 20150210

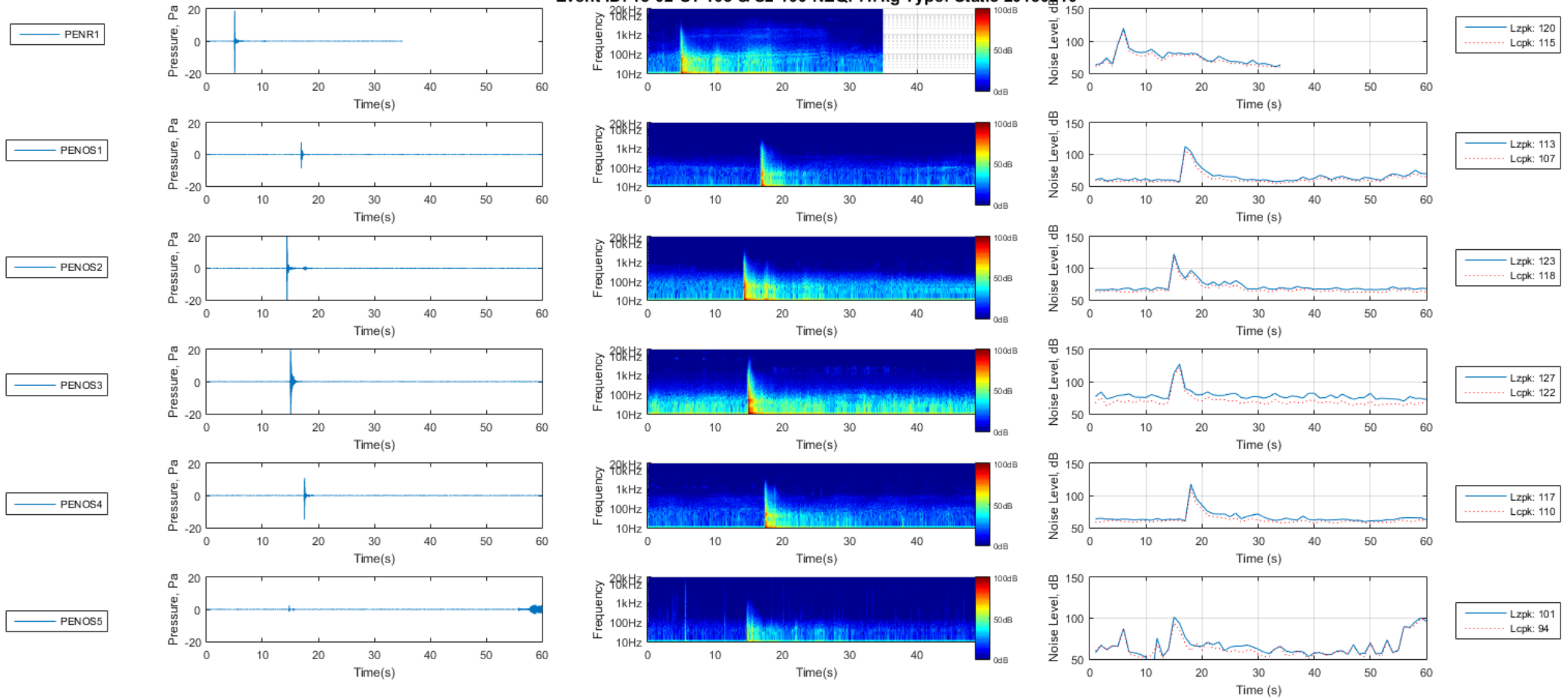


FIGURE 2.361: PEN\_OS 1 - 5 15-02-S1-103 & S2-100

Event ID: 15-02-S1-103 & S2-100 NEQ: 7.7kg Type: Static 20150210 CTD

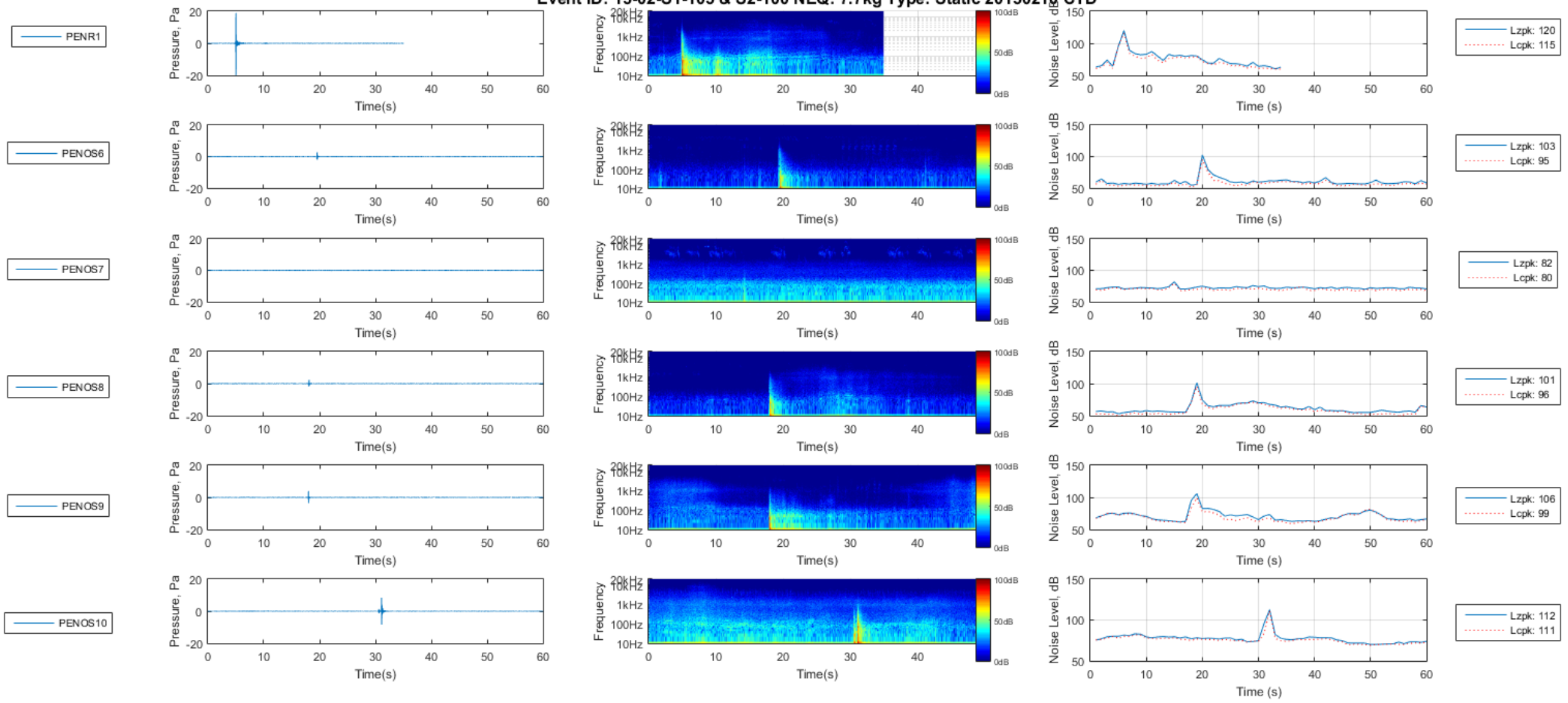
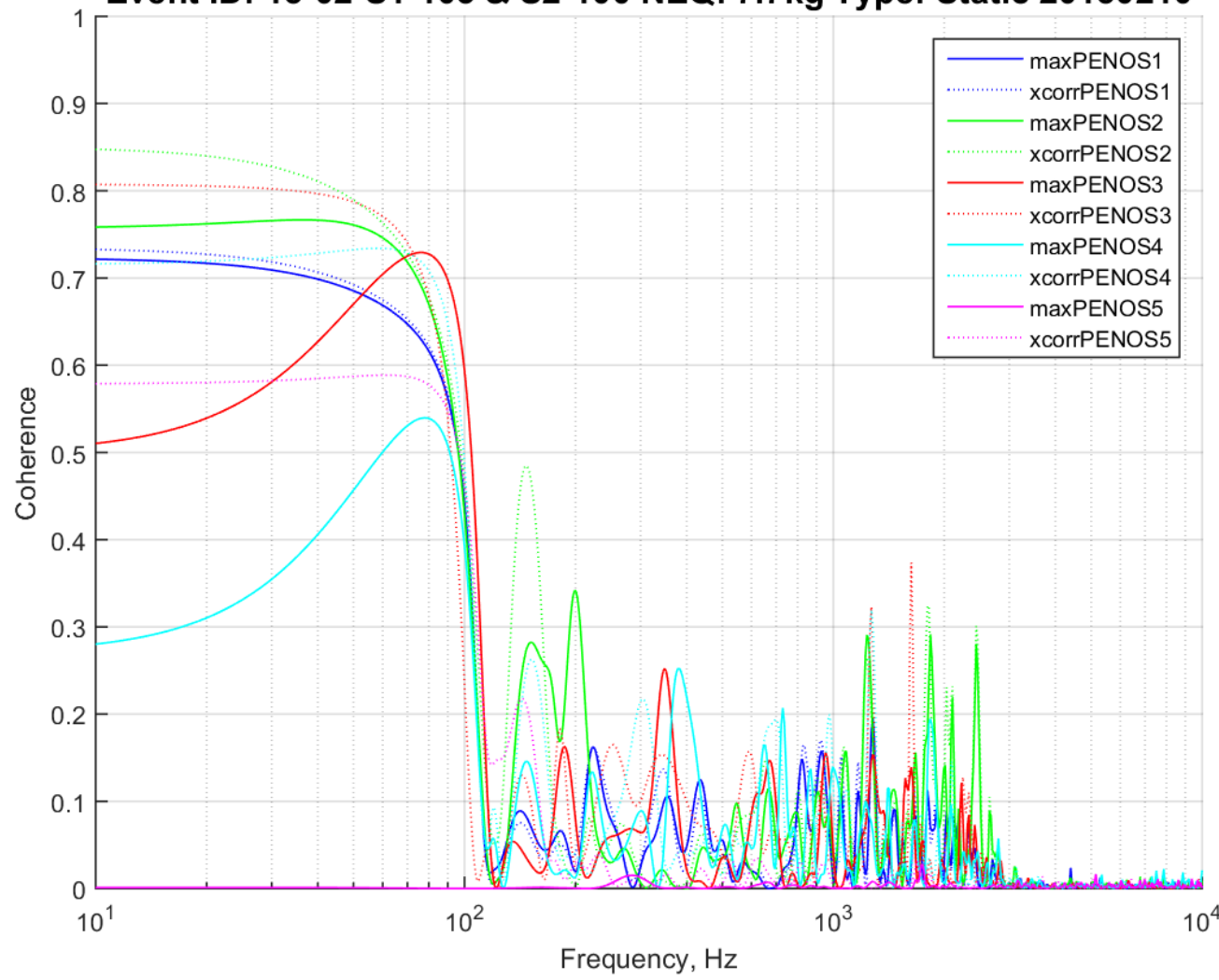


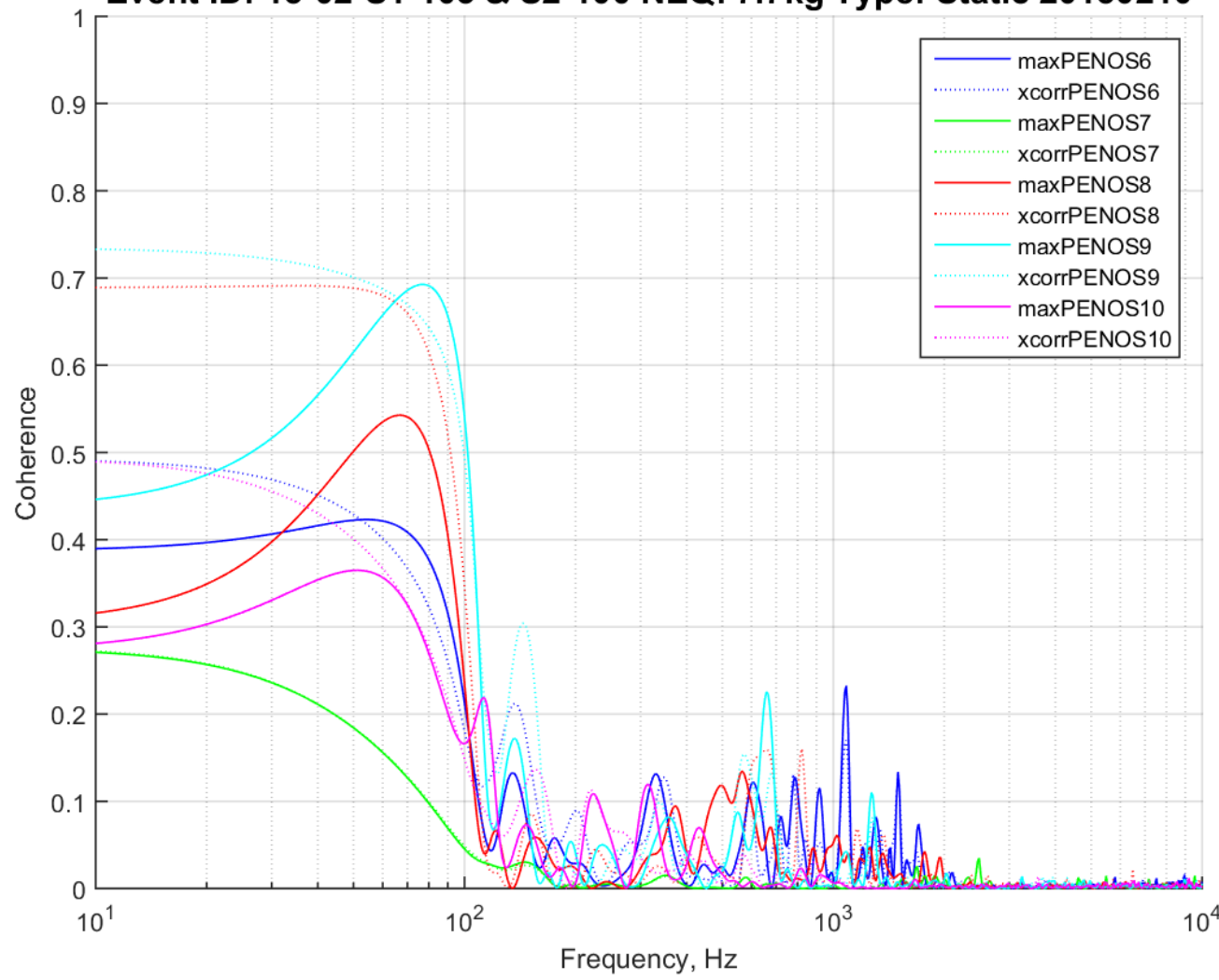
FIGURE 2.362: PEN\_OS 6 - 10 15-02-S1-103 & S2-100

**Event ID: 15-02-S1-103 & S2-100 NEQ: 7.7kg Type: Static 20150210**



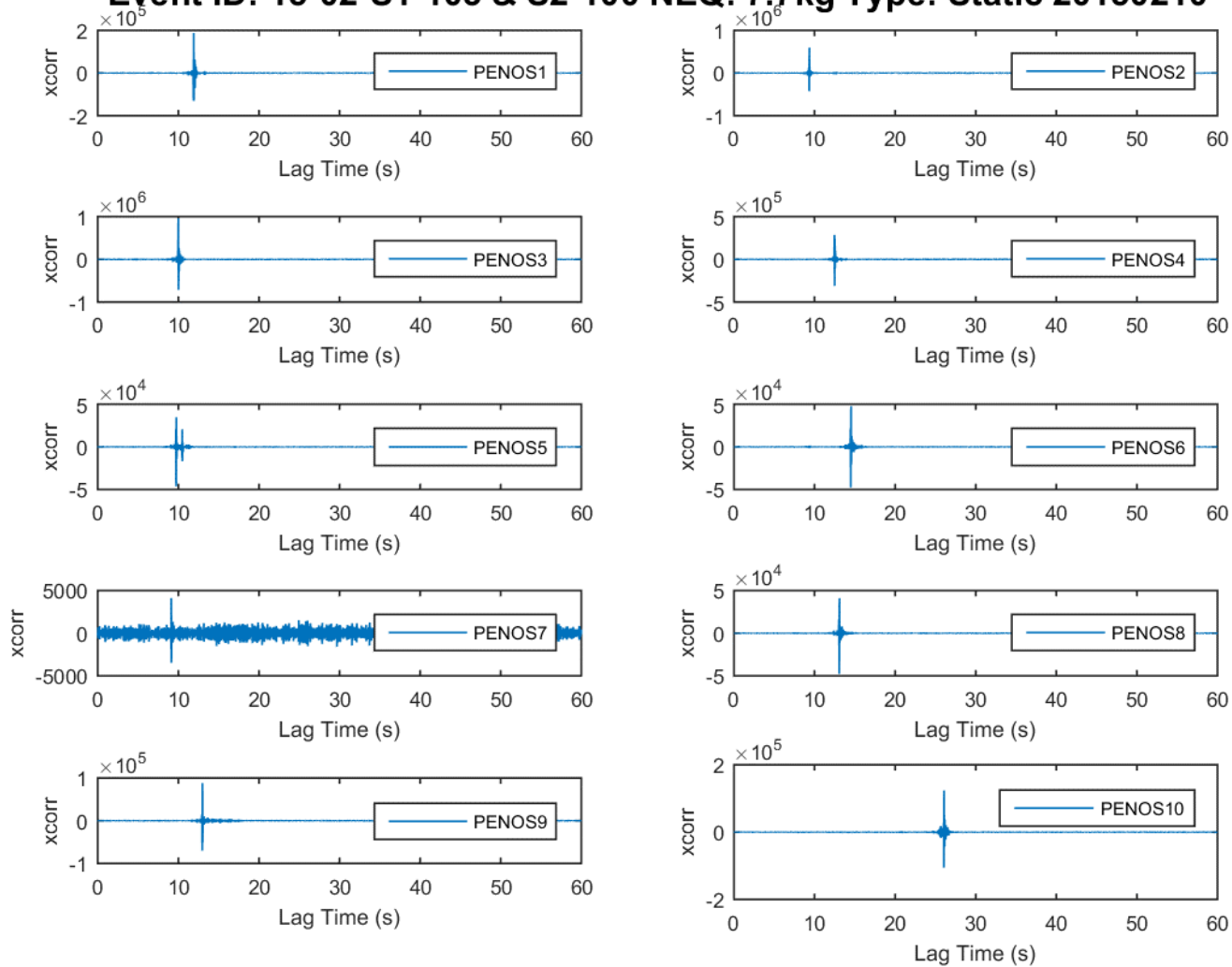
**FIGURE 2.363: COHERENCE PEN\_OS 1 - 5 15-02-S1-103 & S2-100**

**Event ID: 15-02-S1-103 & S2-100 NEQ: 7.7kg Type: Static 20150210**



**FIGURE 2.364: COHERENCE PEN\_OS 6 - 10 15-02-S1-103 & S2-100CTD**

**Event ID: 15-02-S1-103 & S2-100 NEQ: 7.7kg Type: Static 20150210**



**FIGURE 2.365: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S1-103 & S2-100**

Event ID: 15-02-S1-103 & S2-100 NEQ: 7.7kg Type: Static 20150210

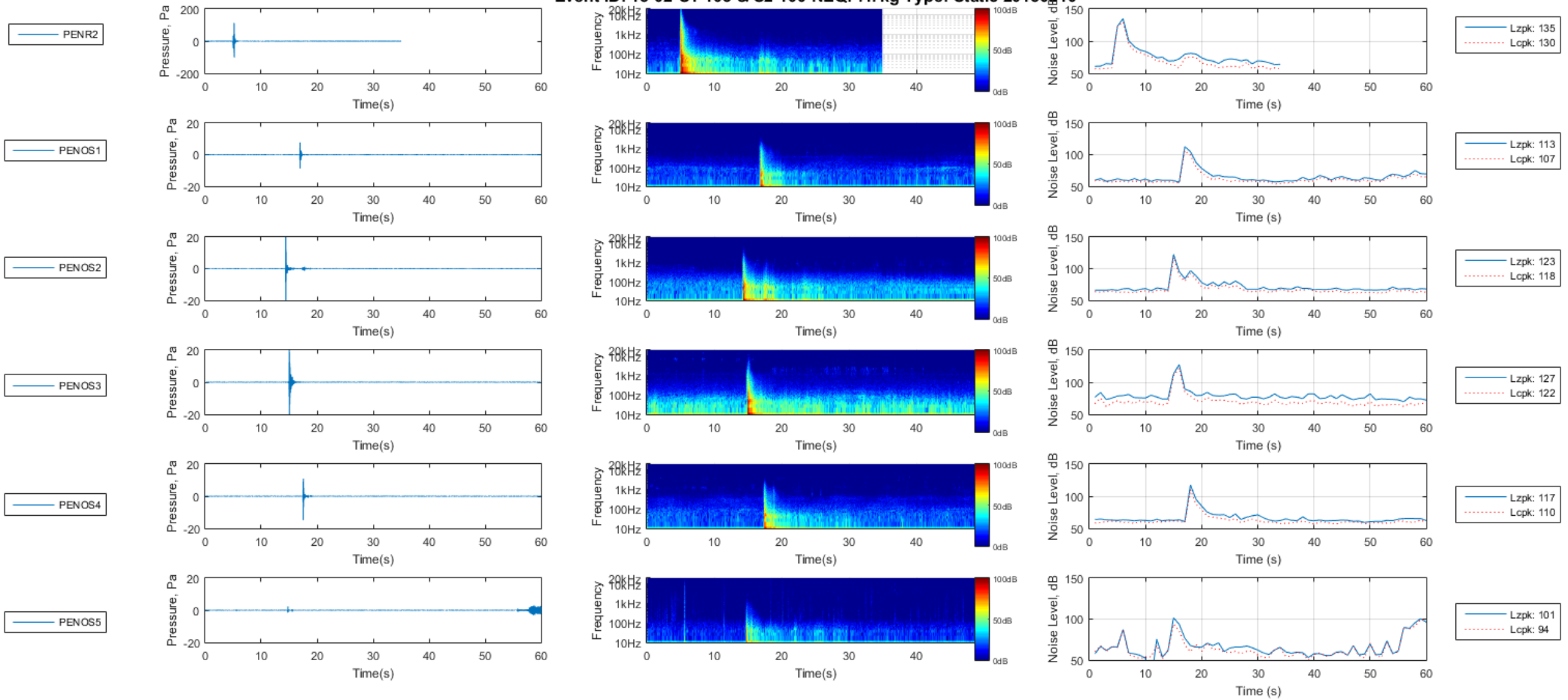


FIGURE 2.366: PEN\_OS 1 - 5 15-02-S1-103 & S2-100

Event ID: 15-02-S1-103 & S2-100 NEQ: 7.7kg Type: Static 20150210 CTD

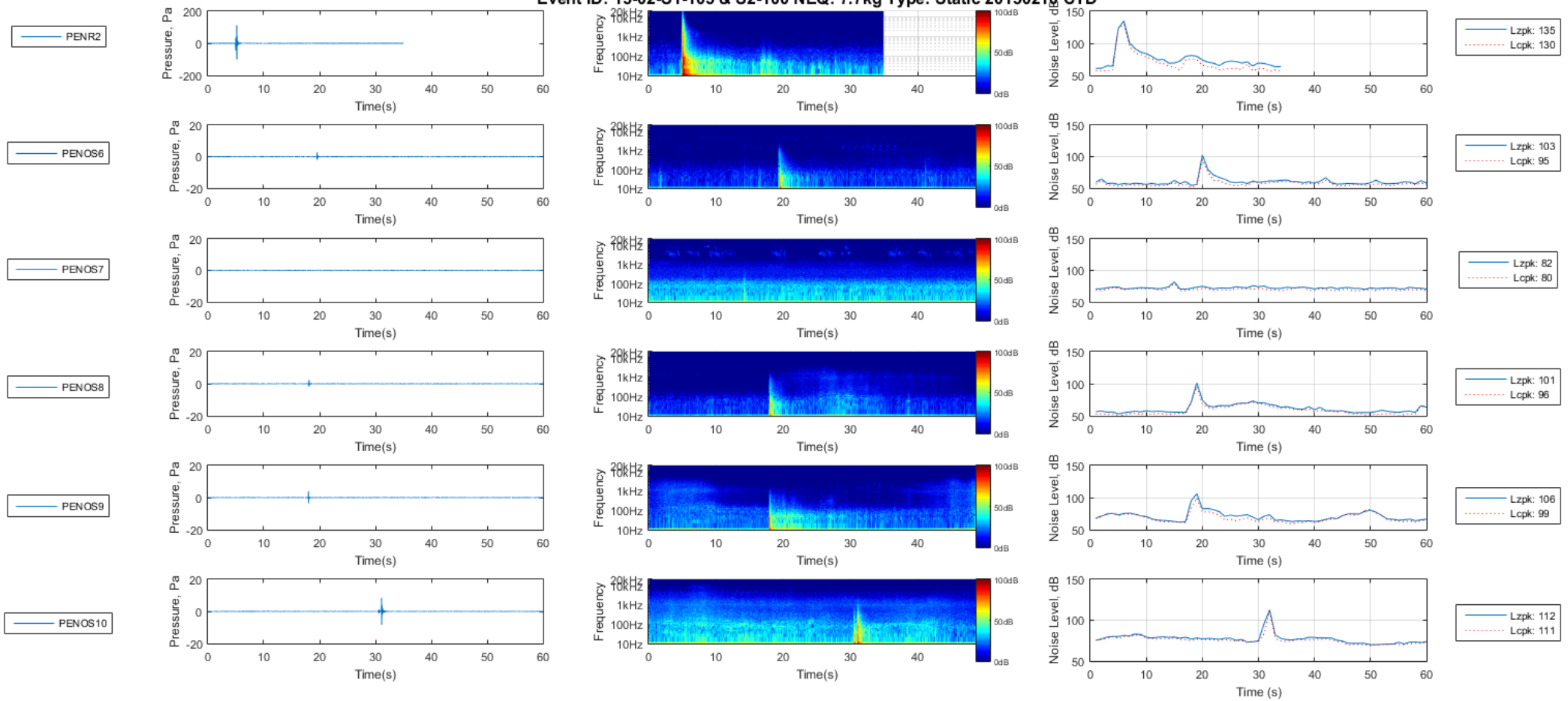
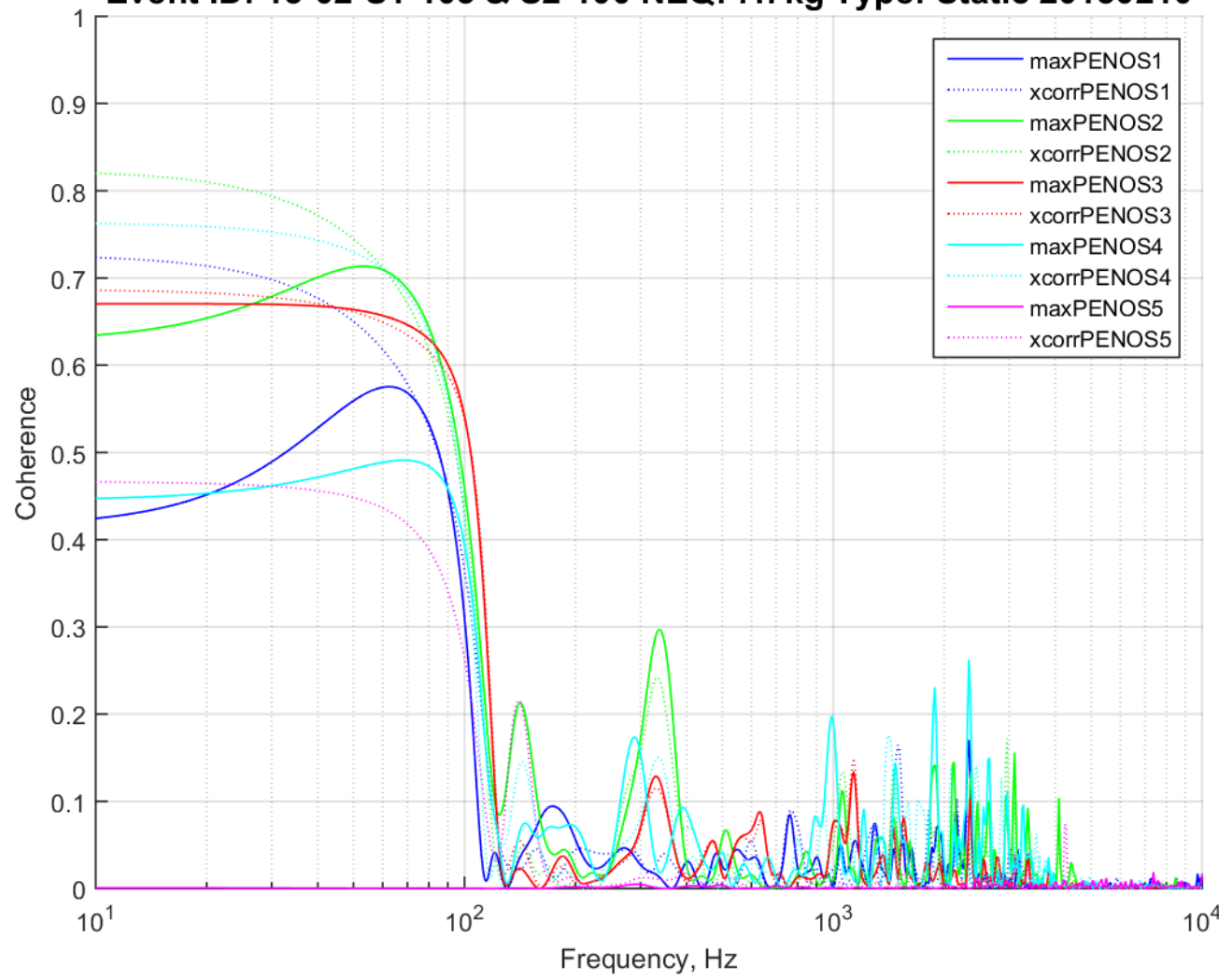


FIGURE 2.367: PEN\_OS 6 - 10 15-02-S1-103 & S2-100



**Event ID: 15-02-S1-103 & S2-100 NEQ: 7.7kg Type: Static 20150210**



**FIGURE 2.368: COHERENCE PEN\_OS 1 - 5 15-02-S1-103 & S2-100**

Event ID: 15-02-S1-103 & S2-100 NEQ: 7.7kg Type: Static 20150210

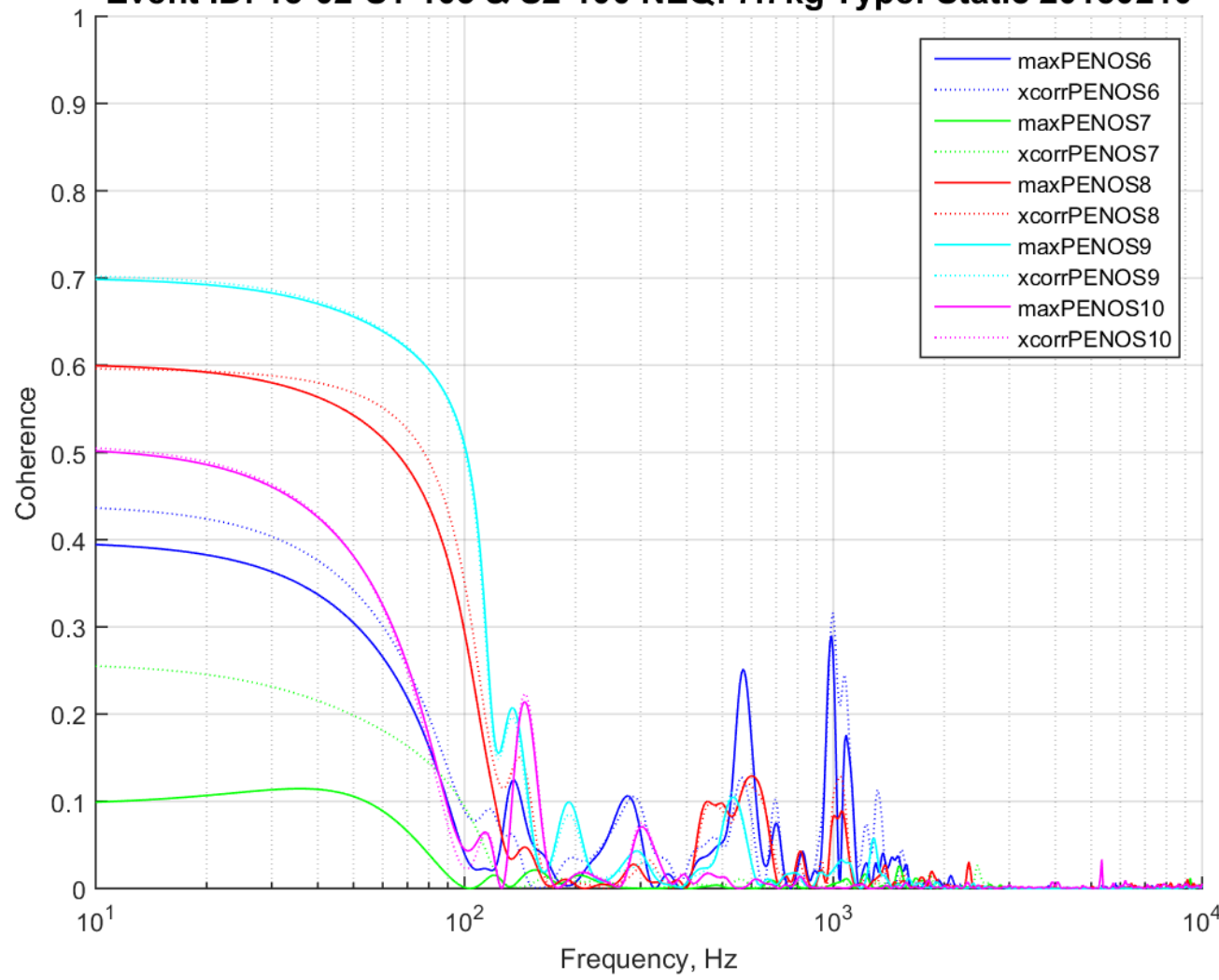
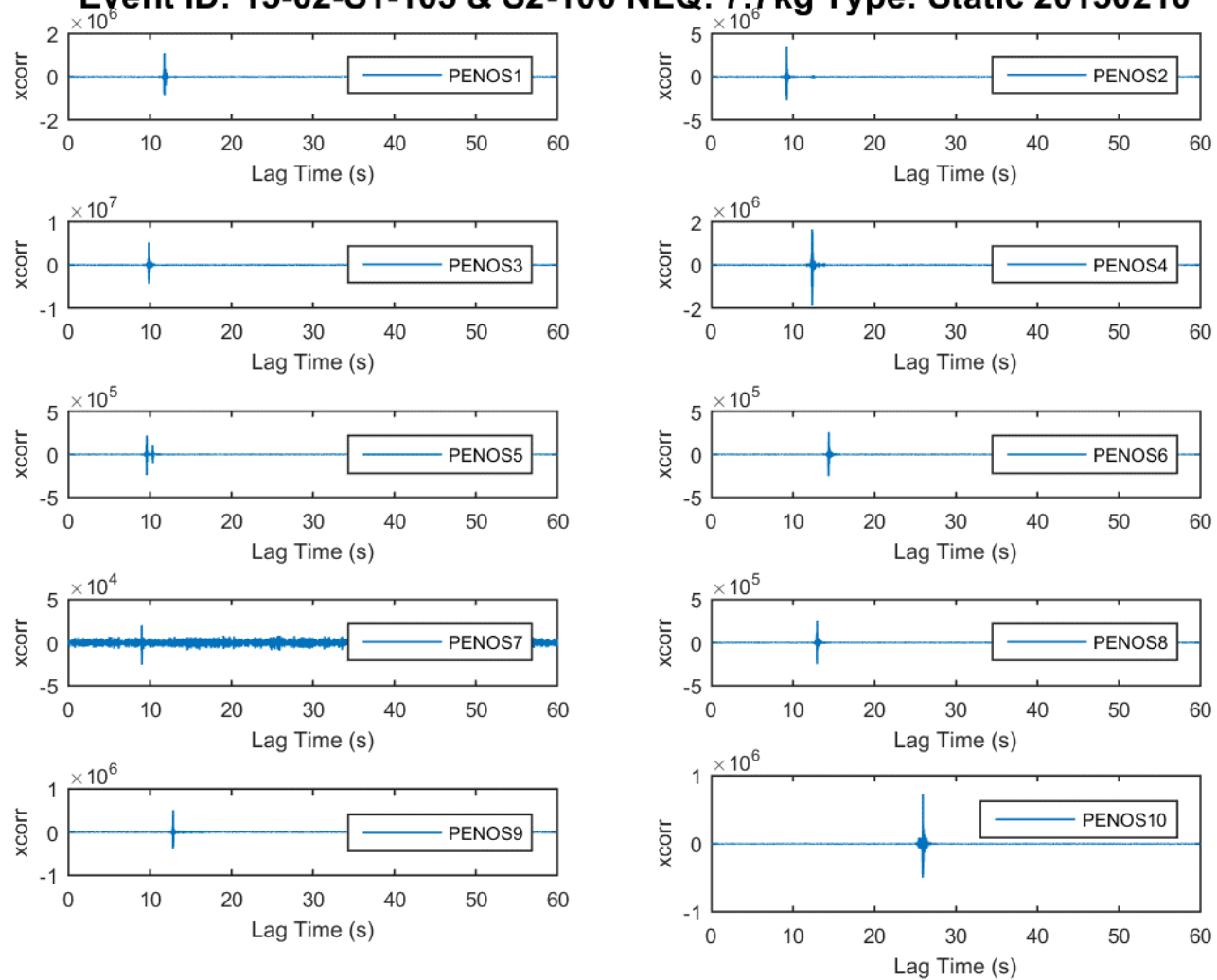


FIGURE 2.369: COHERENCE PEN\_OS 6 - 10 15-02-S1-103 & S2-100CTD

**Event ID: 15-02-S1-103 & S2-100 NEQ: 7.7kg Type: Static 20150210**



**FIGURE 2.370: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S1-103 & S2-100**

Event ID: 15-02-S1-12 & S2-19 NEQ: 6.65kg Type: Static 20150203

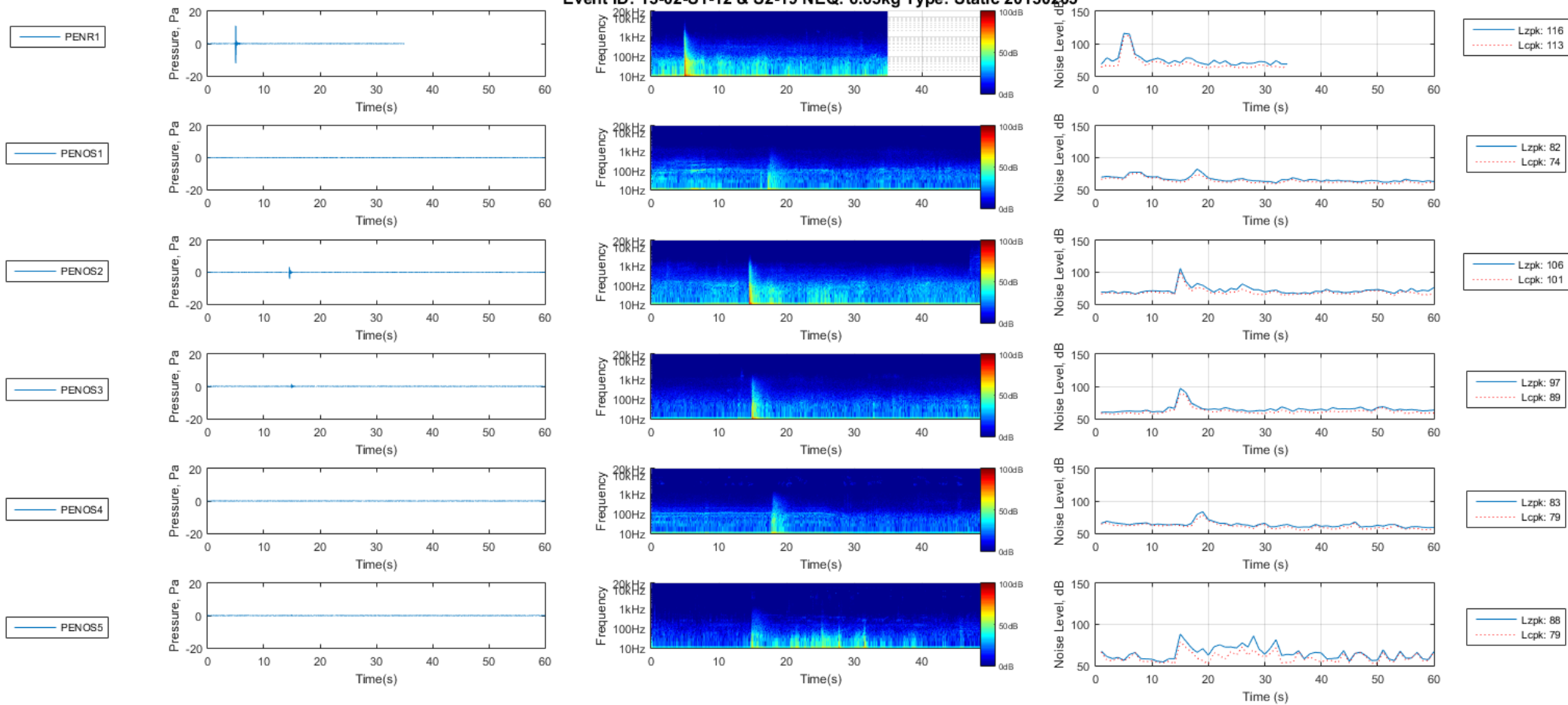


FIGURE 2.371: PEN\_OS 1 - 5 15-02-S1-12 & S2-19

Event ID: 15-02-S1-12 & S2-19 NEQ: 6.65kg Type: Static 20150203.CTD

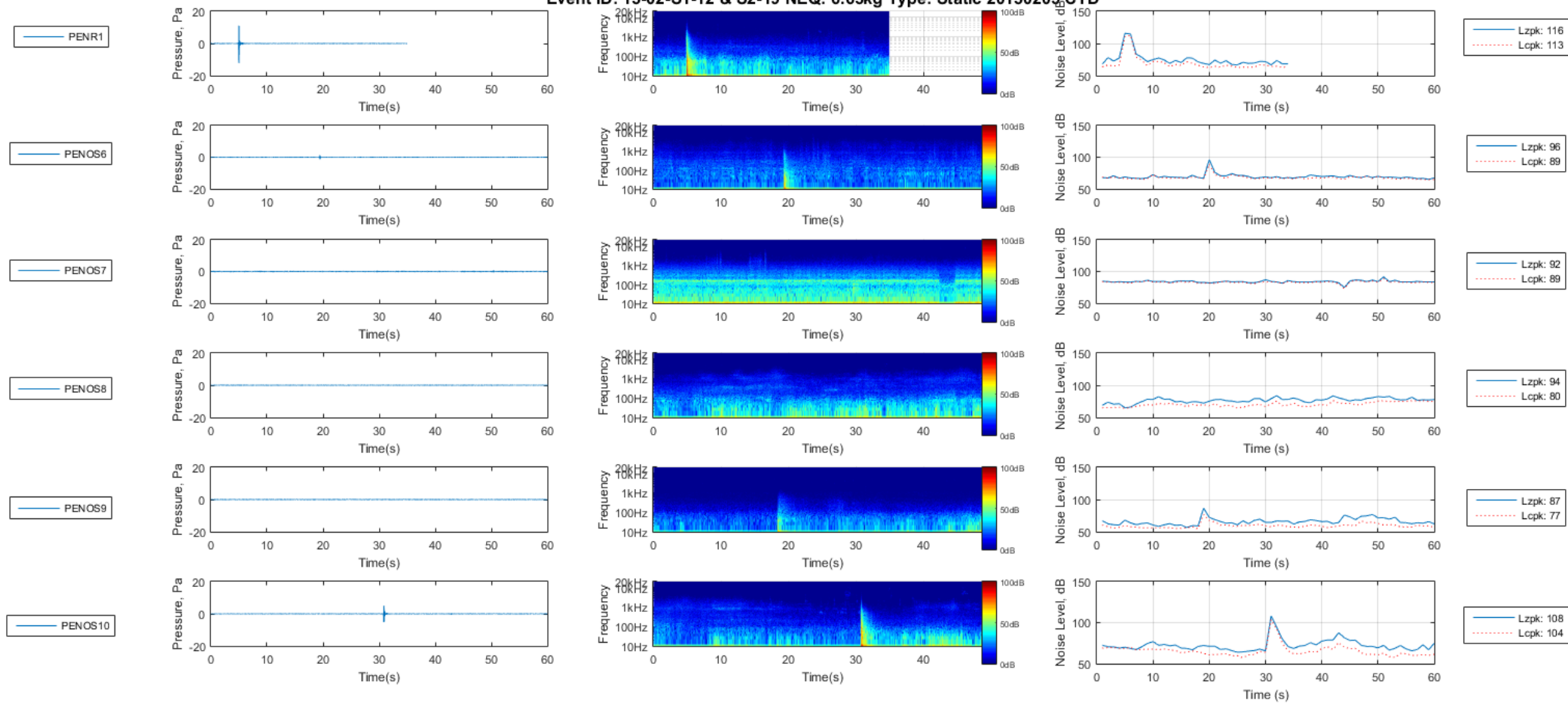
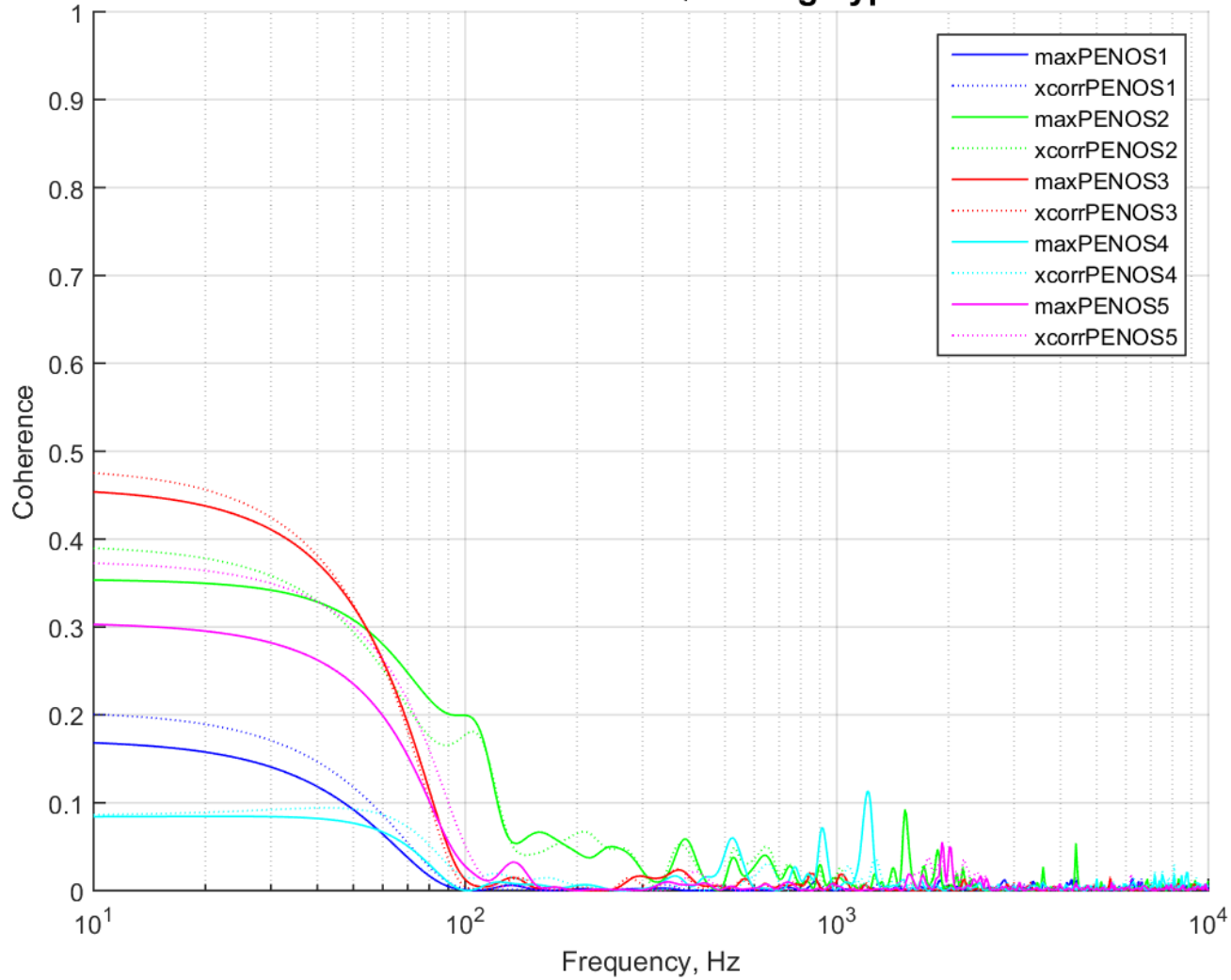


FIGURE 2.372: PEN\_OS 6 - 10 15-02-S1-12 & S2-19

**Event ID: 15-02-S1-12 & S2-19 NEQ: 6.65kg Type: Static 20150203**



**FIGURE 2.373: COHERENCE PEN\_OS 1 - 5 15-02-S1-12 & S2-19**

Event ID: 15-02-S1-12 & S2-19 NEQ: 6.65kg Type: Static 20150203

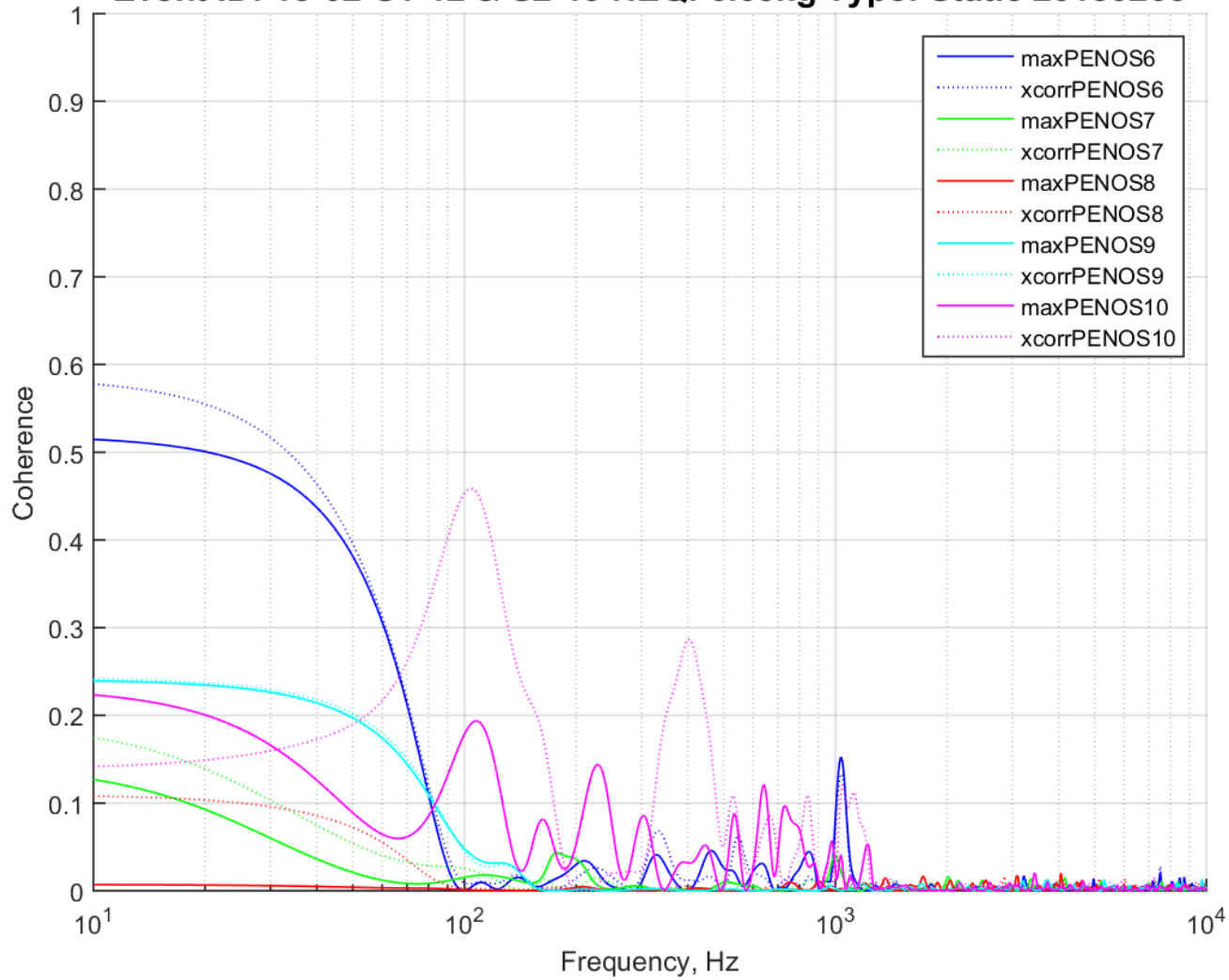
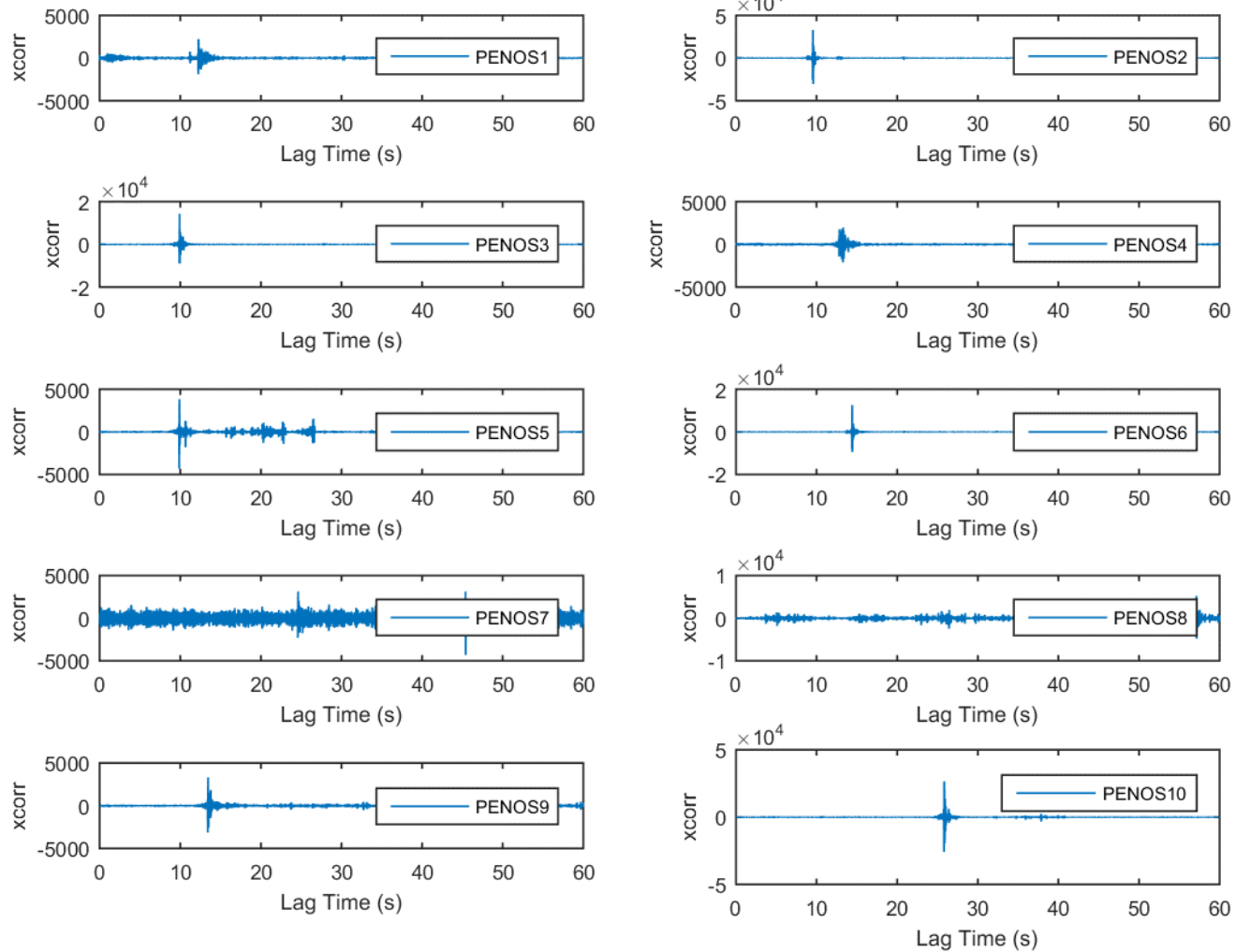


FIGURE 2.374: COHERENCE PEN\_OS 6 - 10 15-02-S1-12 & S2-19CTD

**Event ID: 15-02-S1-12 & S2-19 NEQ: 6.65kg Type: Static 20150203**



**FIGURE 2.375: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S1-12 & S2-19**



Event ID: 15-02-S1-12 & S2-19 NEQ: 6.65kg Type: Static 20150203

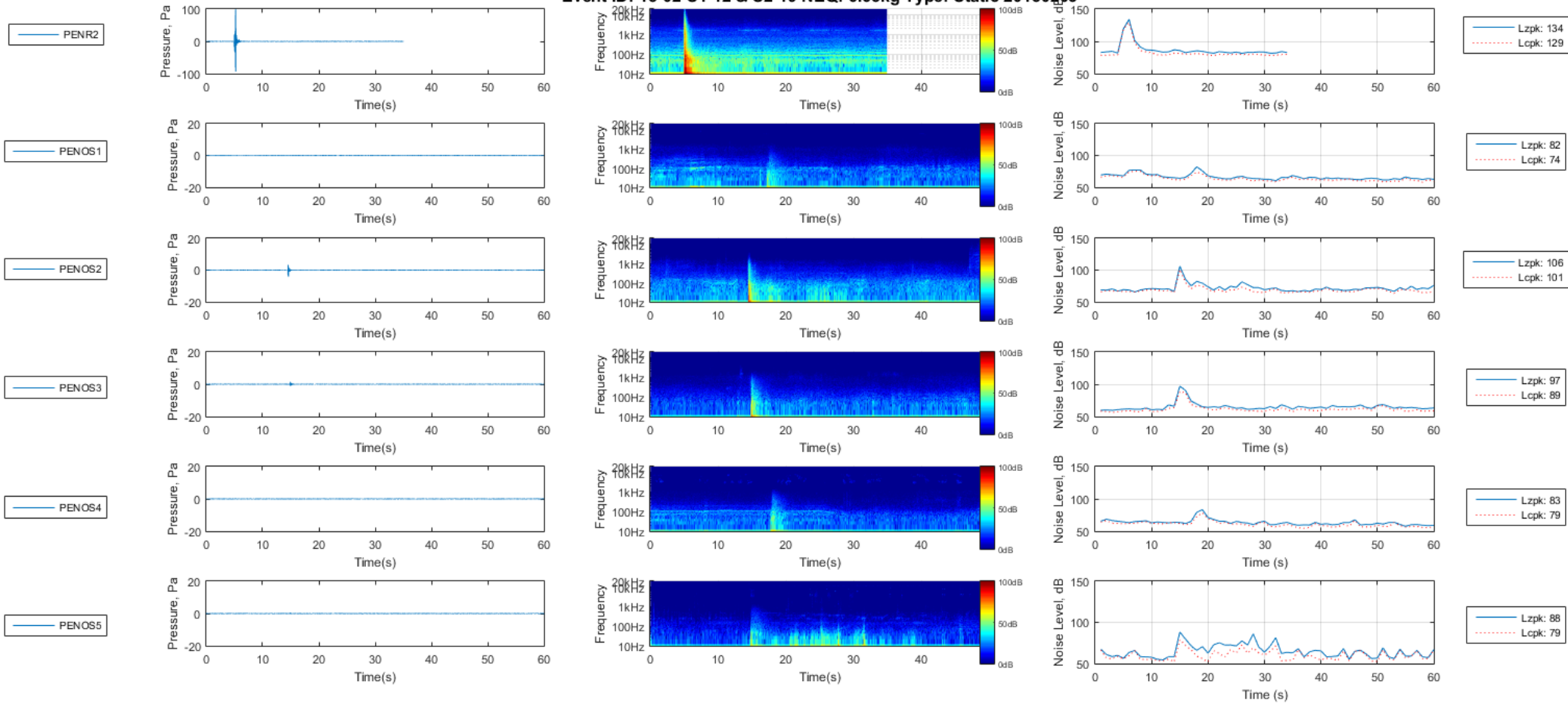


FIGURE 2.376: PEN\_OS 1 - 5 15-02-S1-12 & S2-19

Event ID: 15-02-S1-12 & S2-19 NEQ: 6.65kg Type: Static 20150203.CTD

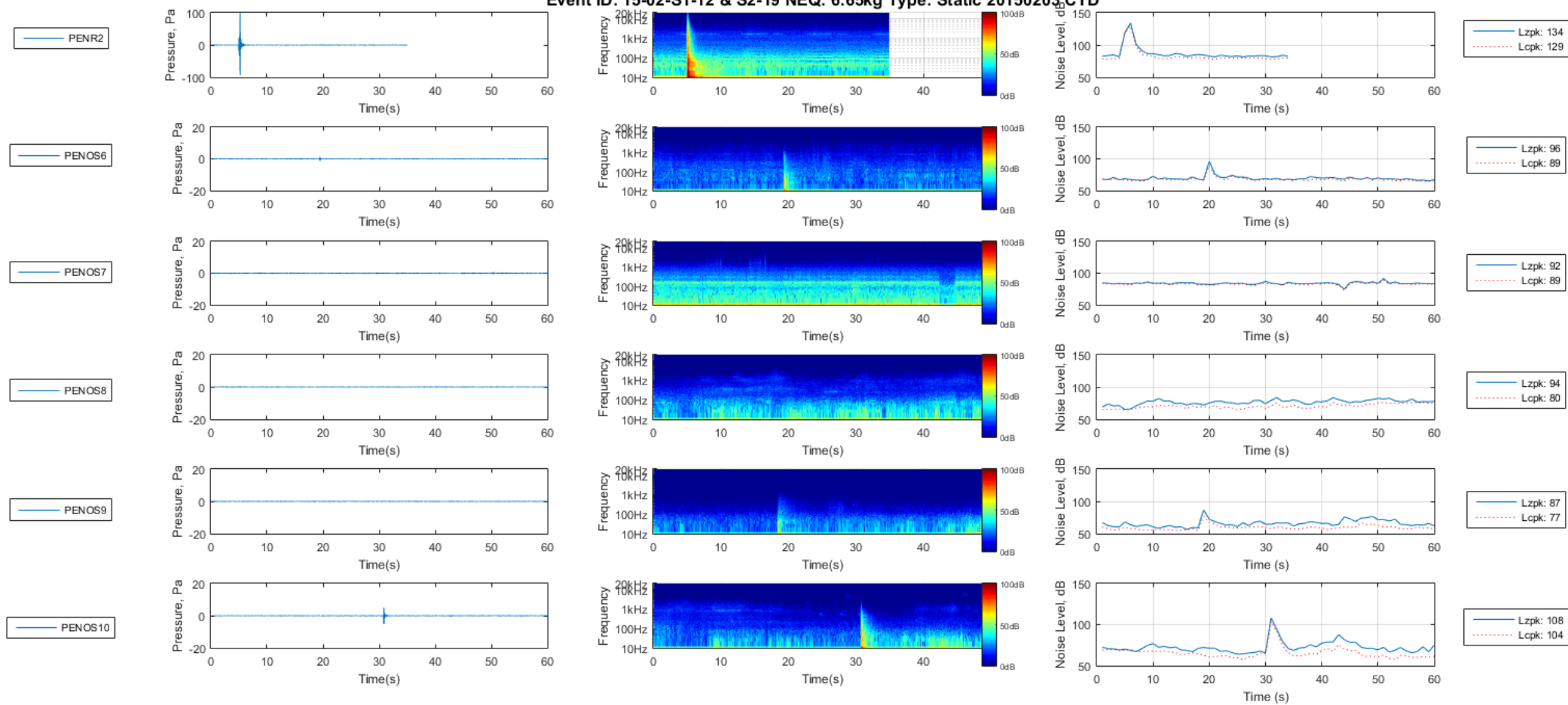
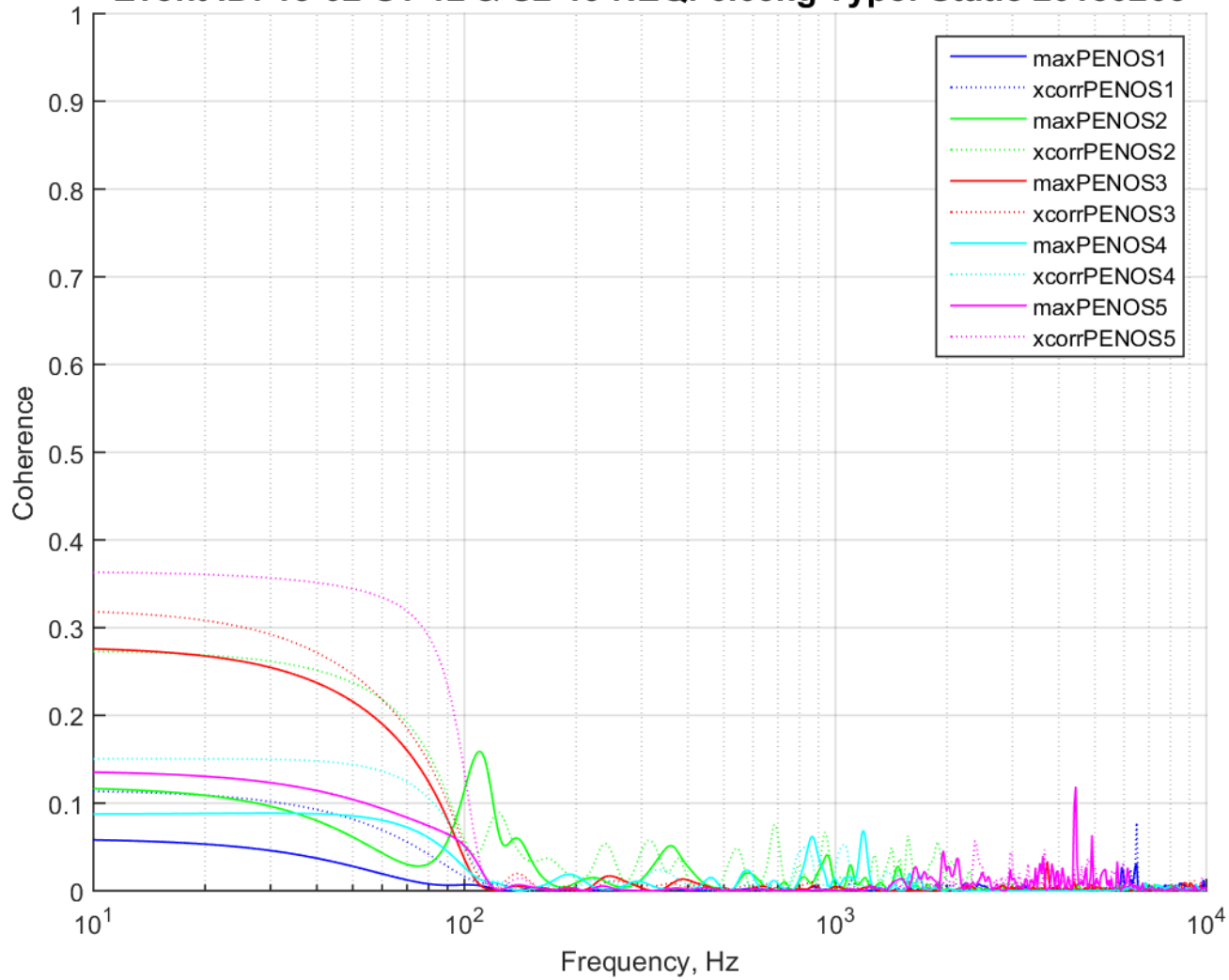


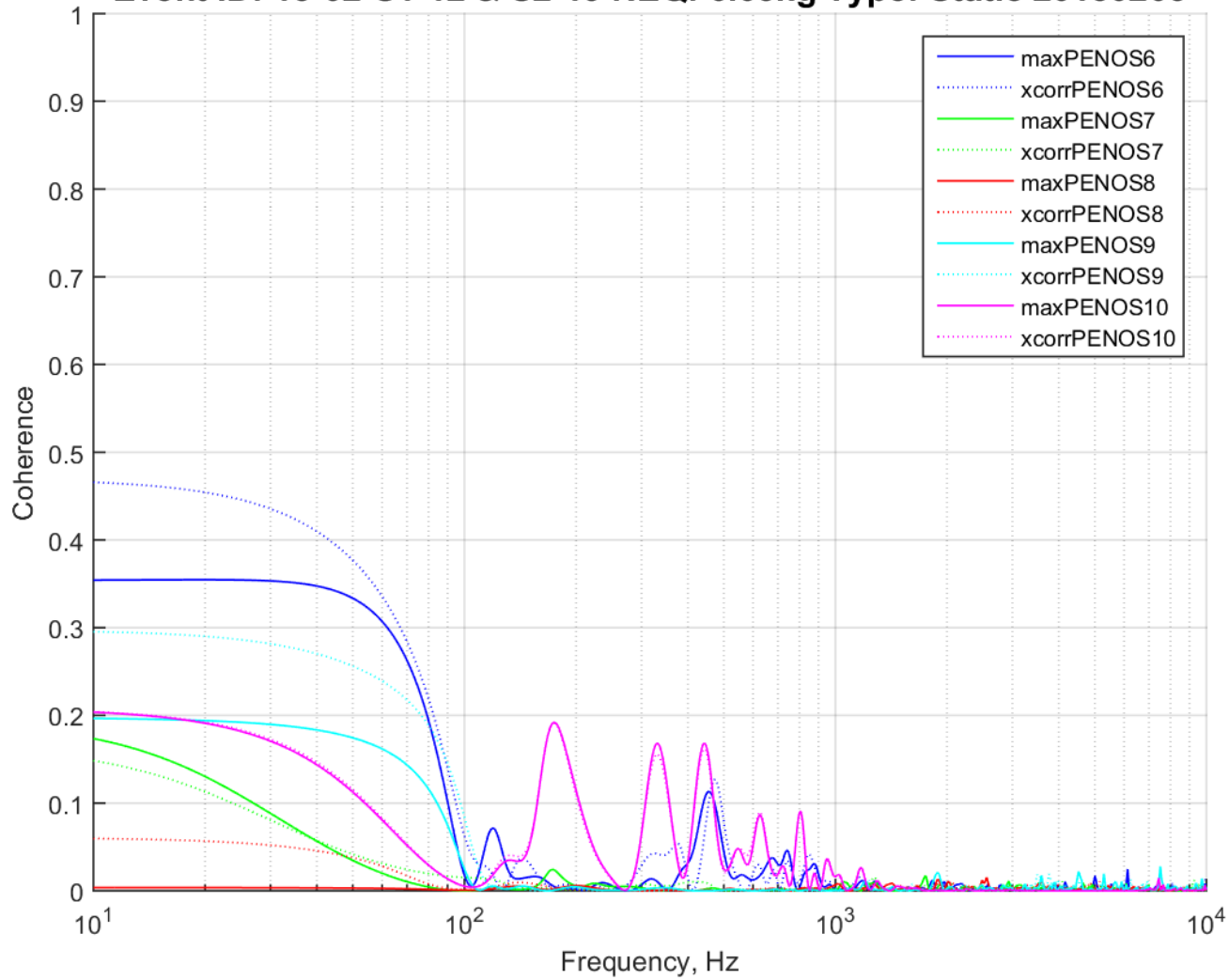
FIGURE 2.377: PEN\_OS 6 - 10 15-02-S1-12 & S2-19

**Event ID: 15-02-S1-12 & S2-19 NEQ: 6.65kg Type: Static 20150203**



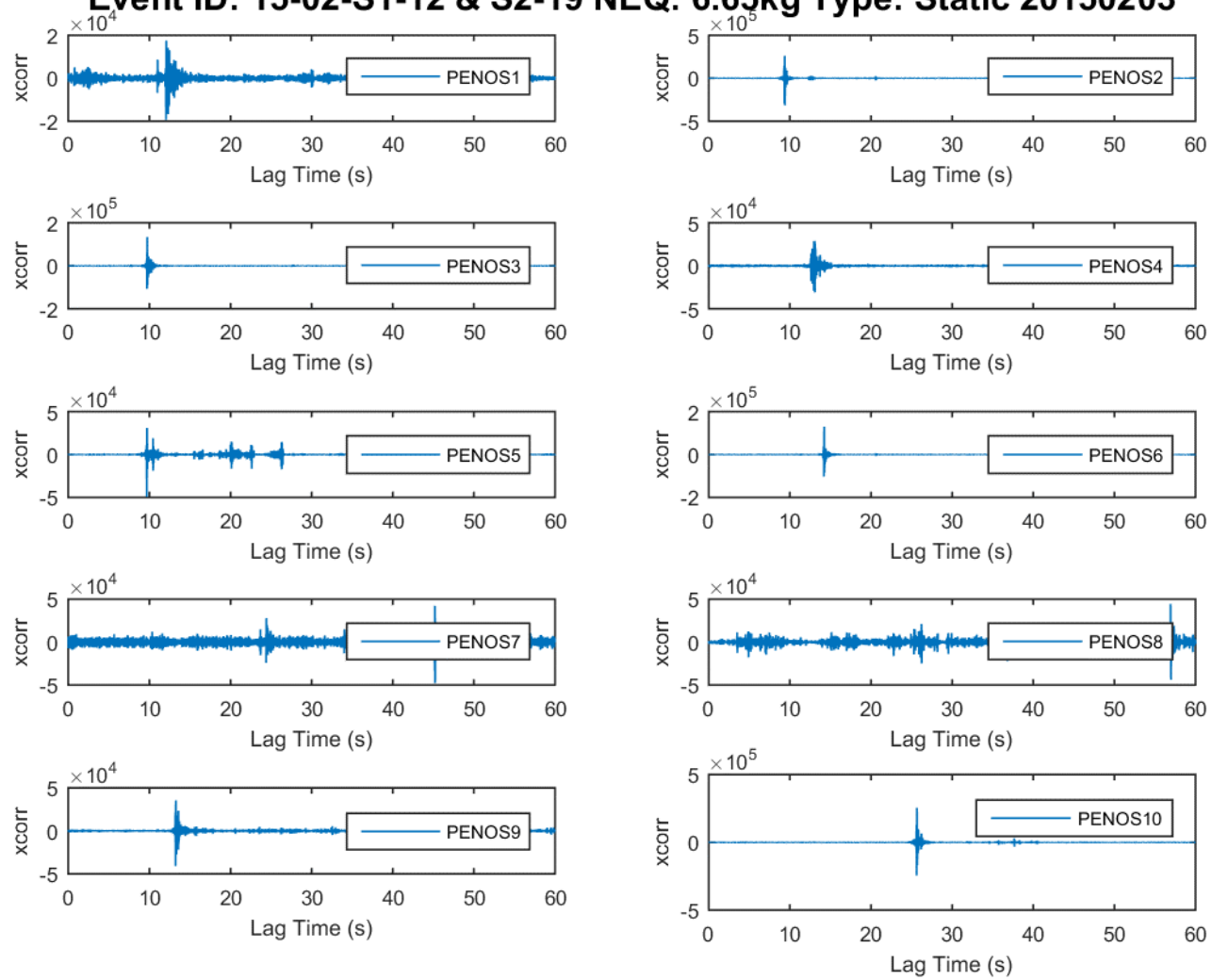
**FIGURE 2.378: COHERENCE PEN\_OS 1 - 5 15-02-S1-12 & S2-19**

**Event ID: 15-02-S1-12 & S2-19 NEQ: 6.65kg Type: Static 20150203**



**FIGURE 2.379: COHERENCE PEN\_OS 6 - 10 15-02-S1-12 & S2-19CTD**

**Event ID: 15-02-S1-12 & S2-19 NEQ: 6.65kg Type: Static 20150203**



**FIGURE 2.380: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S1-12 & S2-19**

Event ID: 15-02-S1-13 & S2-22 NEQ: 1.4kg Type: Static 20150203

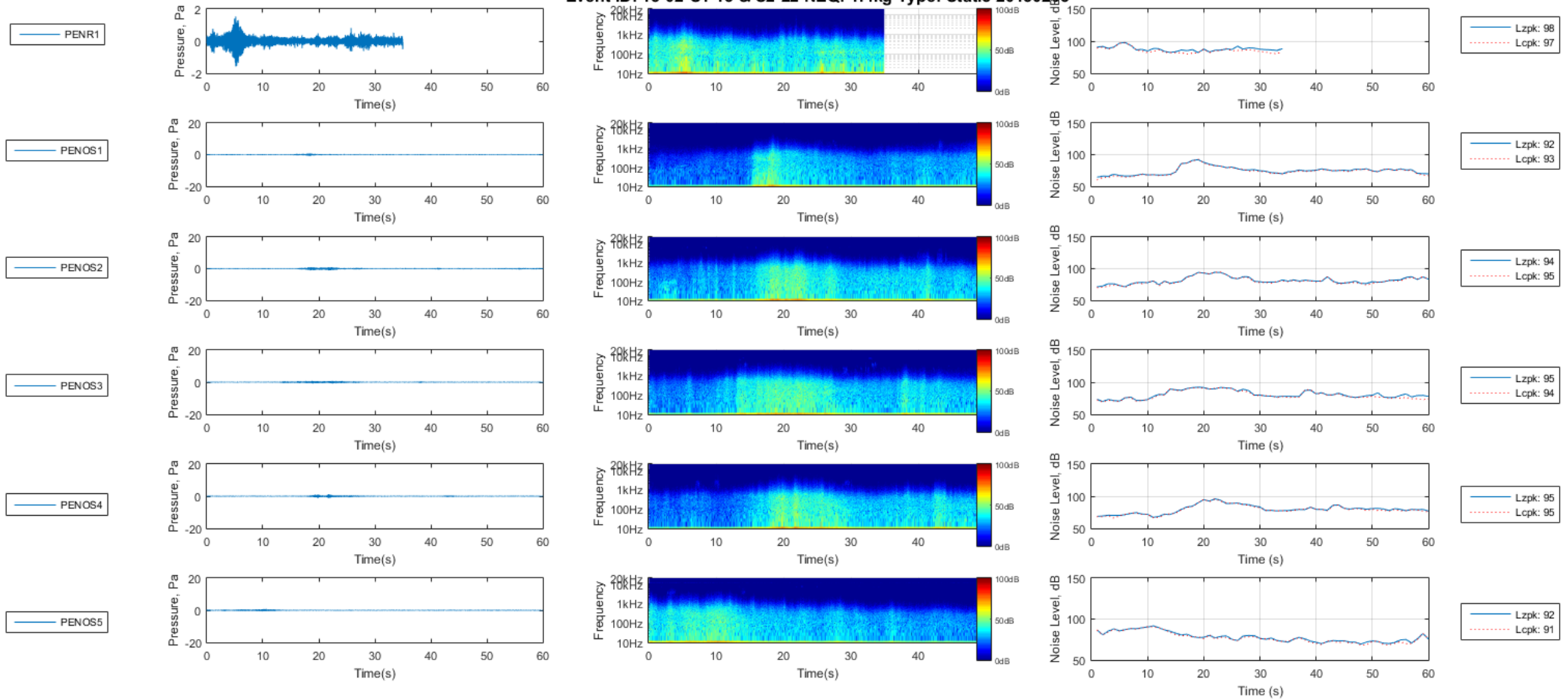


FIGURE 2.381: PEN\_OS 1 - 5 15-02-S1-13 & S2-22

Event ID: 15-02-S1-13 & S2-22 NEQ: 1.4kg Type: Static 20150203.CTD

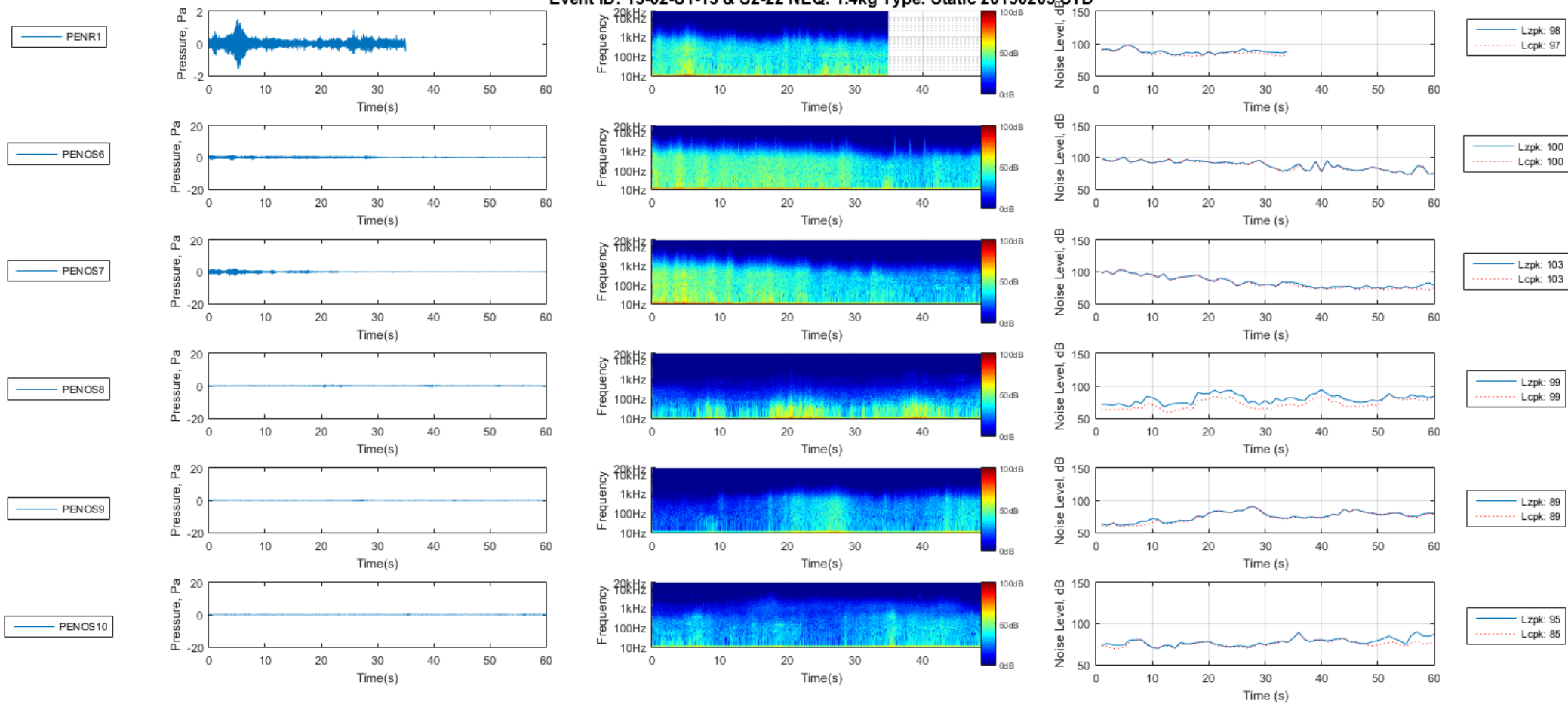
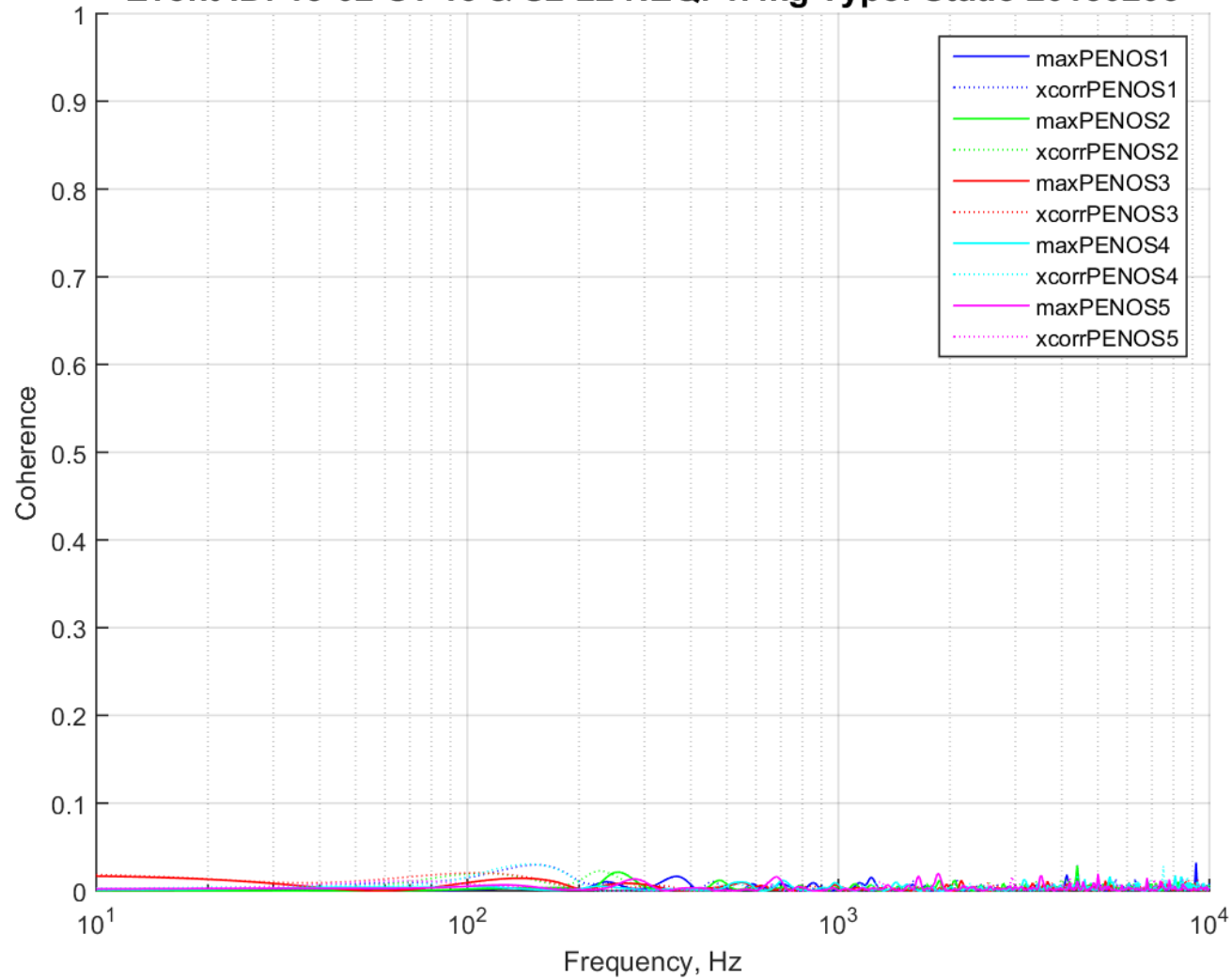


FIGURE 2.382: PEN\_OS 6 - 10 15-02-S1-13 & S2-22

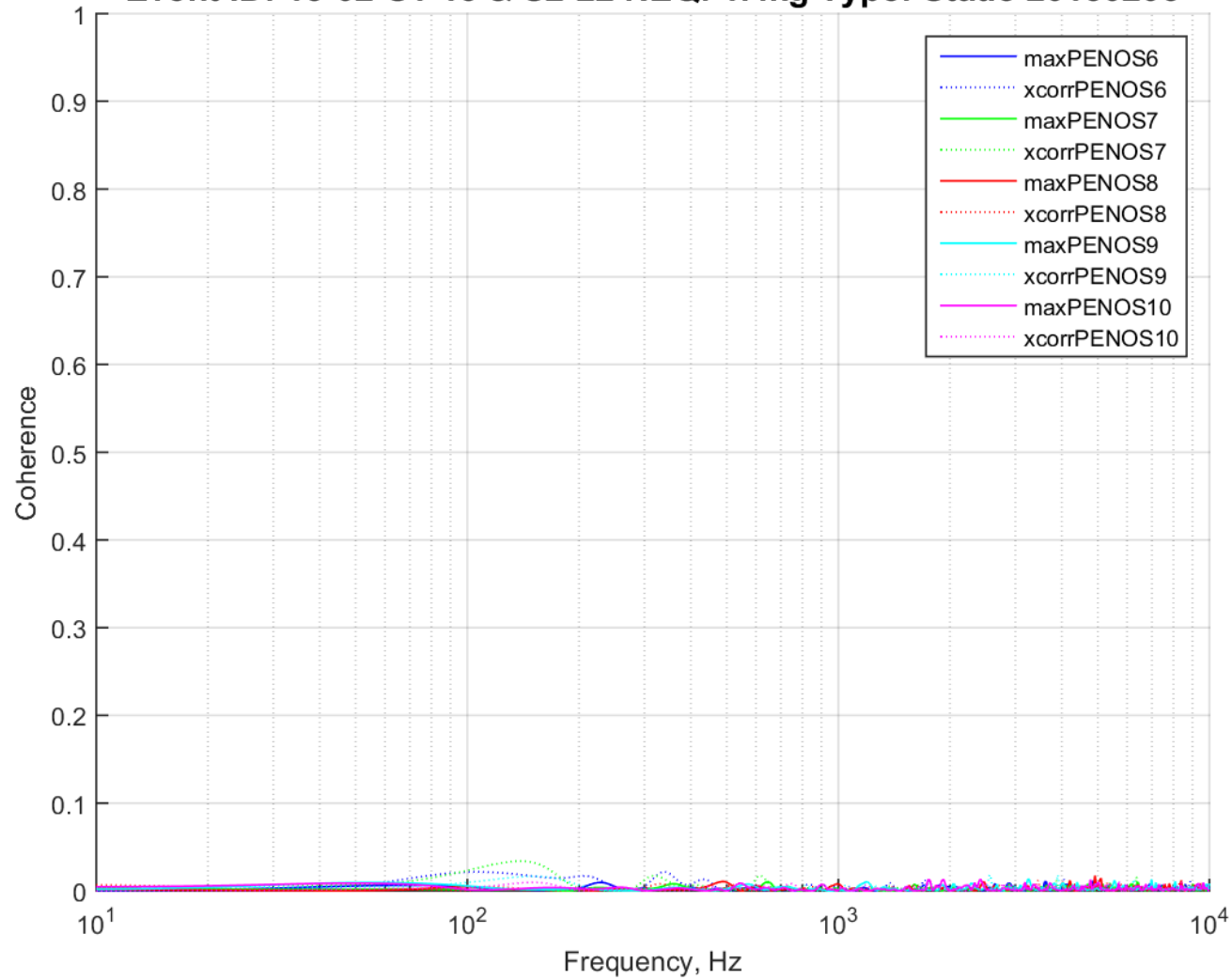
**Event ID: 15-02-S1-13 & S2-22 NEQ: 1.4kg Type: Static 20150203**



**FIGURE 2.383: COHERENCE PEN\_OS 1 - 5 15-02-S1-13 & S2-22**

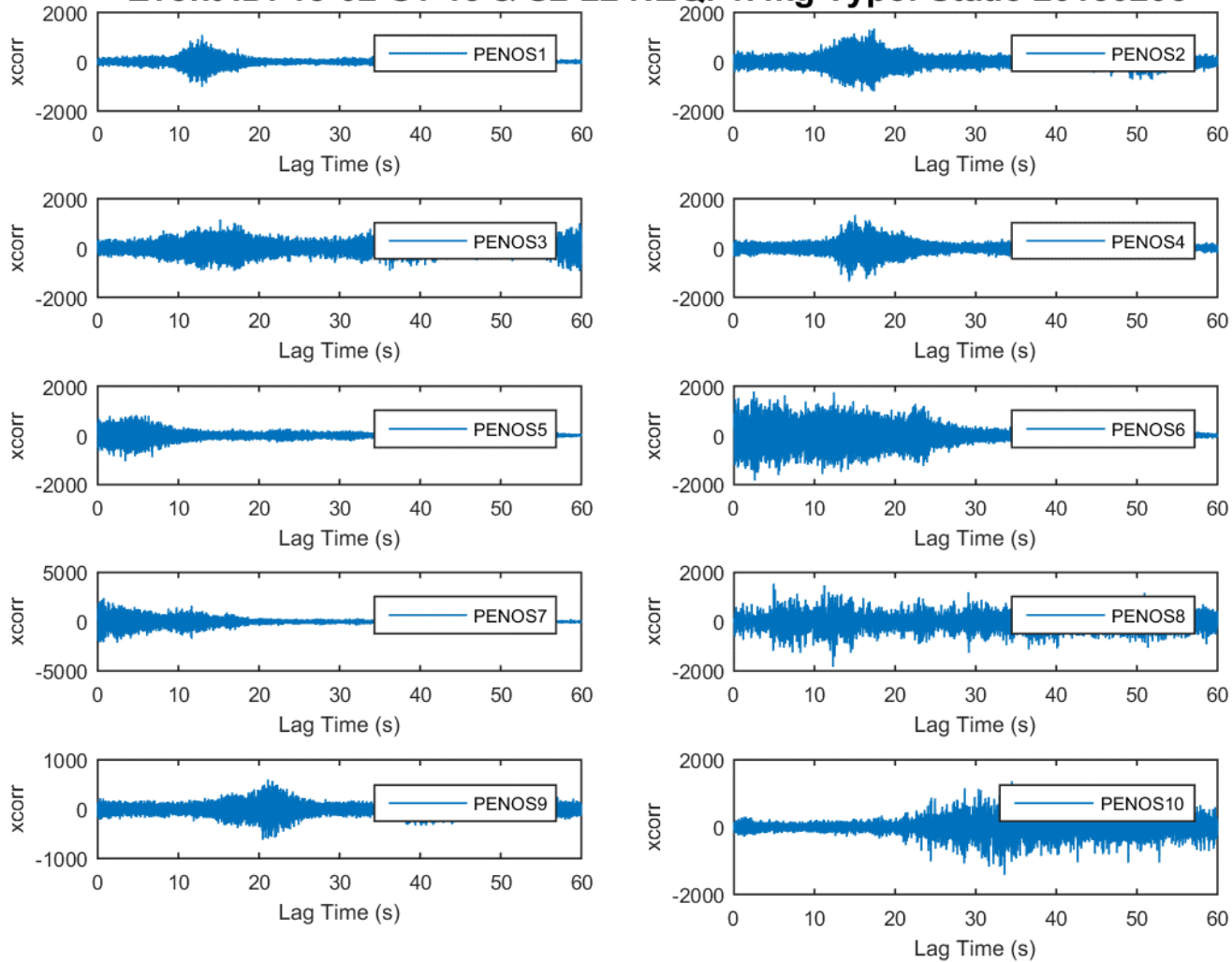


**Event ID: 15-02-S1-13 & S2-22 NEQ: 1.4kg Type: Static 20150203**

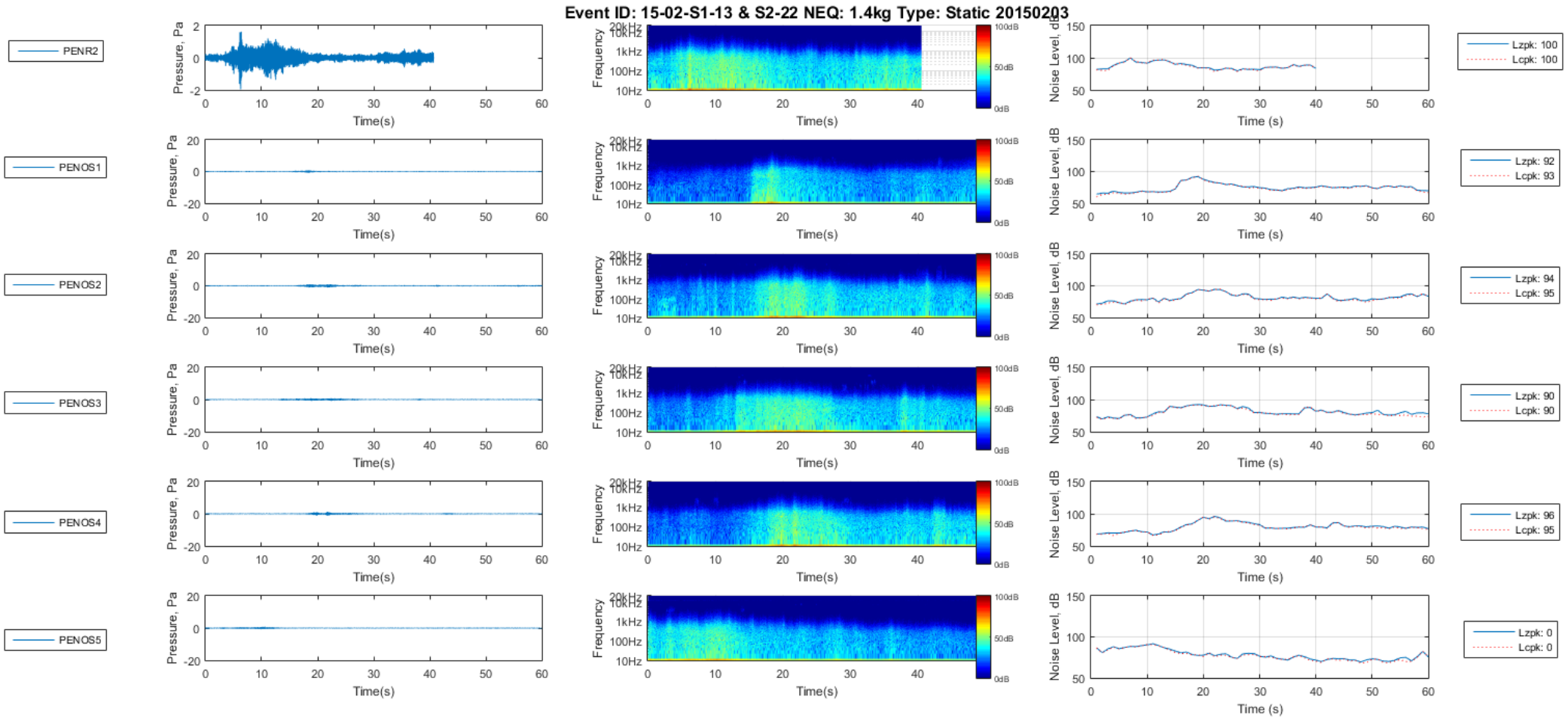


**FIGURE 2.384: COHERENCE PEN\_OS 6 - 10 15-02-S1-13 & S2-22CTD**

**Event ID: 15-02-S1-13 & S2-22 NEQ: 1.4kg Type: Static 20150203**



**FIGURE 2.385: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S1-13 & S2-22**



**FIGURE 2.386: PEN\_OS 1 - 5 15-02-S1-13 & S2-22**

Event ID: 15-02-S1-13 & S2-22 NEQ: 1.4kg Type: Static 20150203.CTD

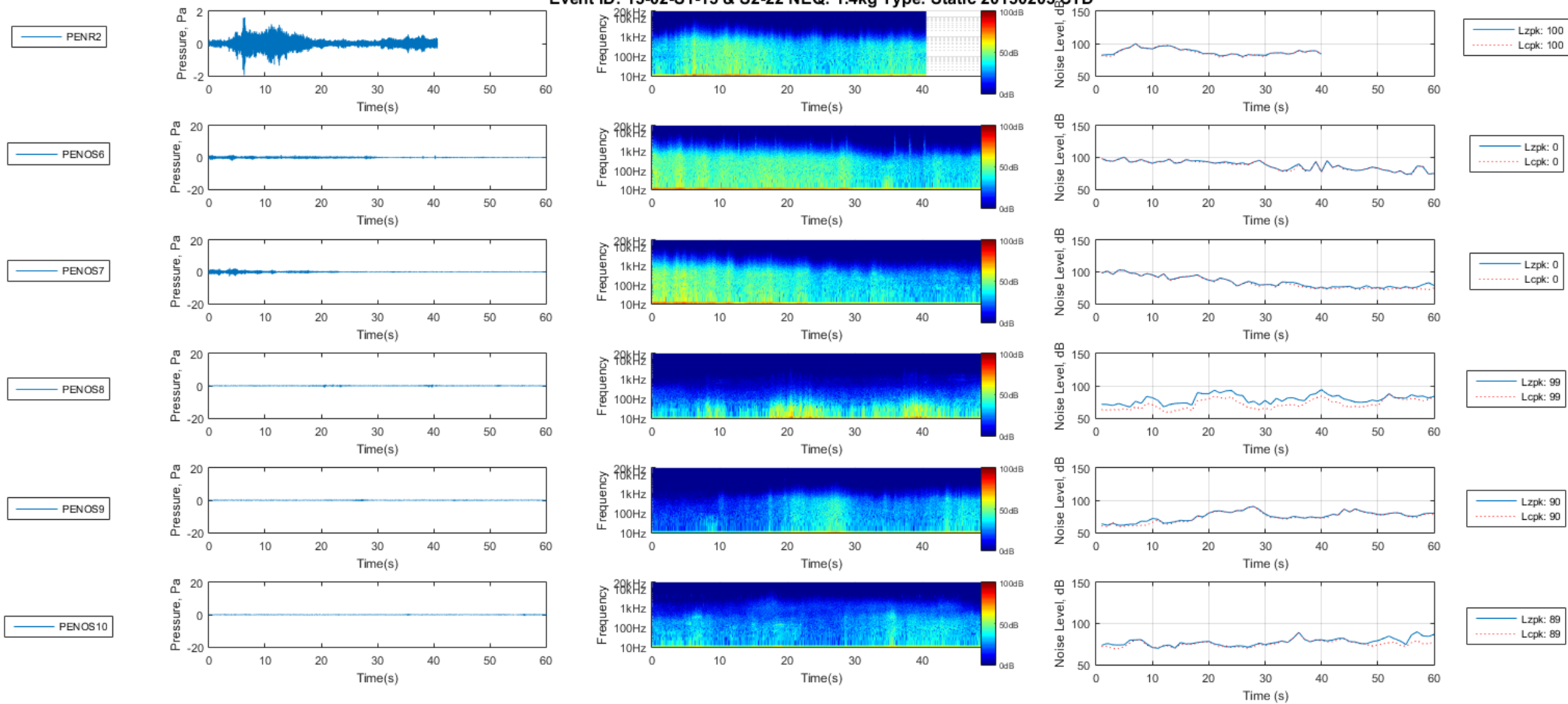


FIGURE 2.387: PEN\_OS 6 - 10 15-02-S1-13 & S2-22

Event ID: 15-02-S1-13 & S2-22 NEQ: 1.4kg Type: Static 20150203

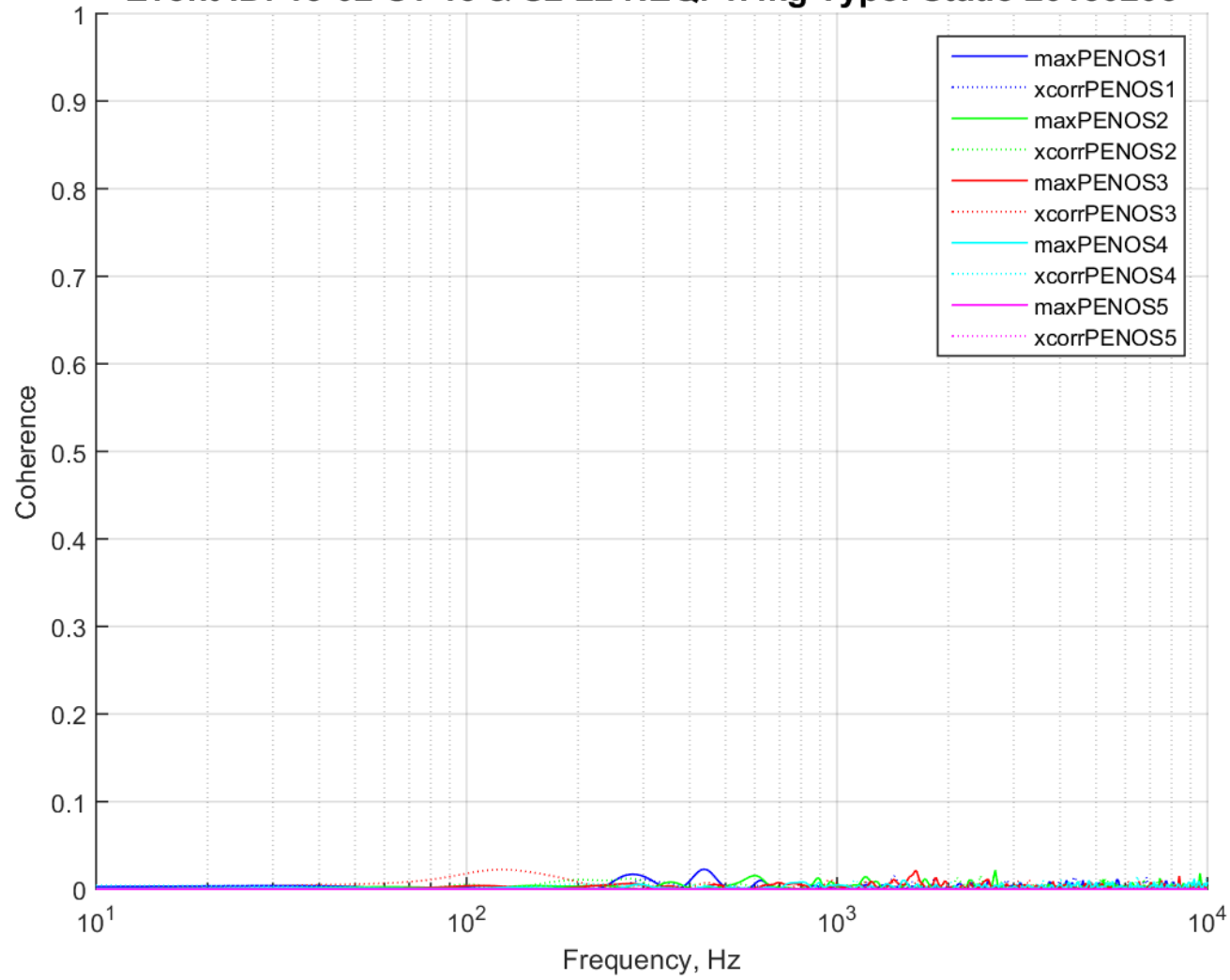
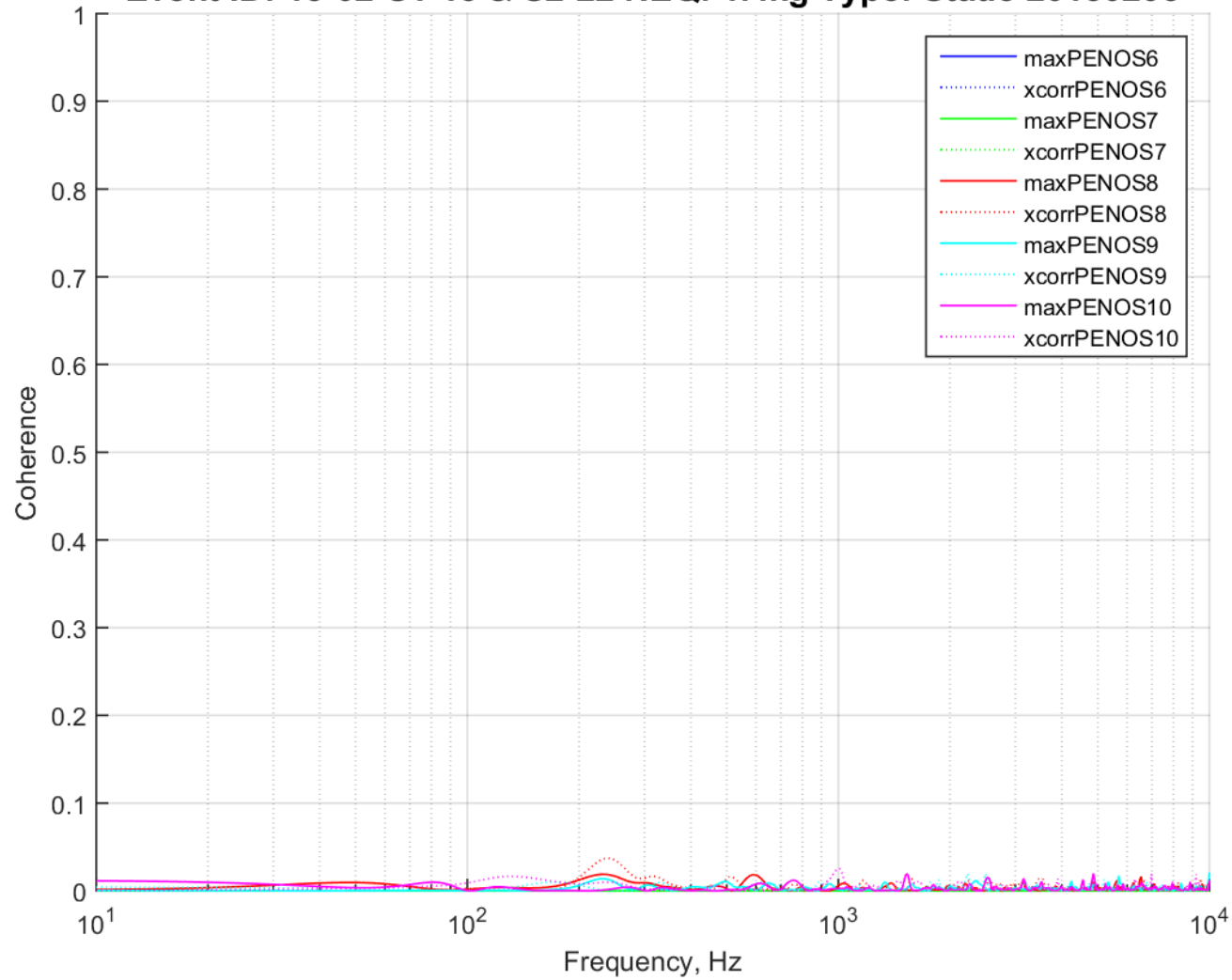


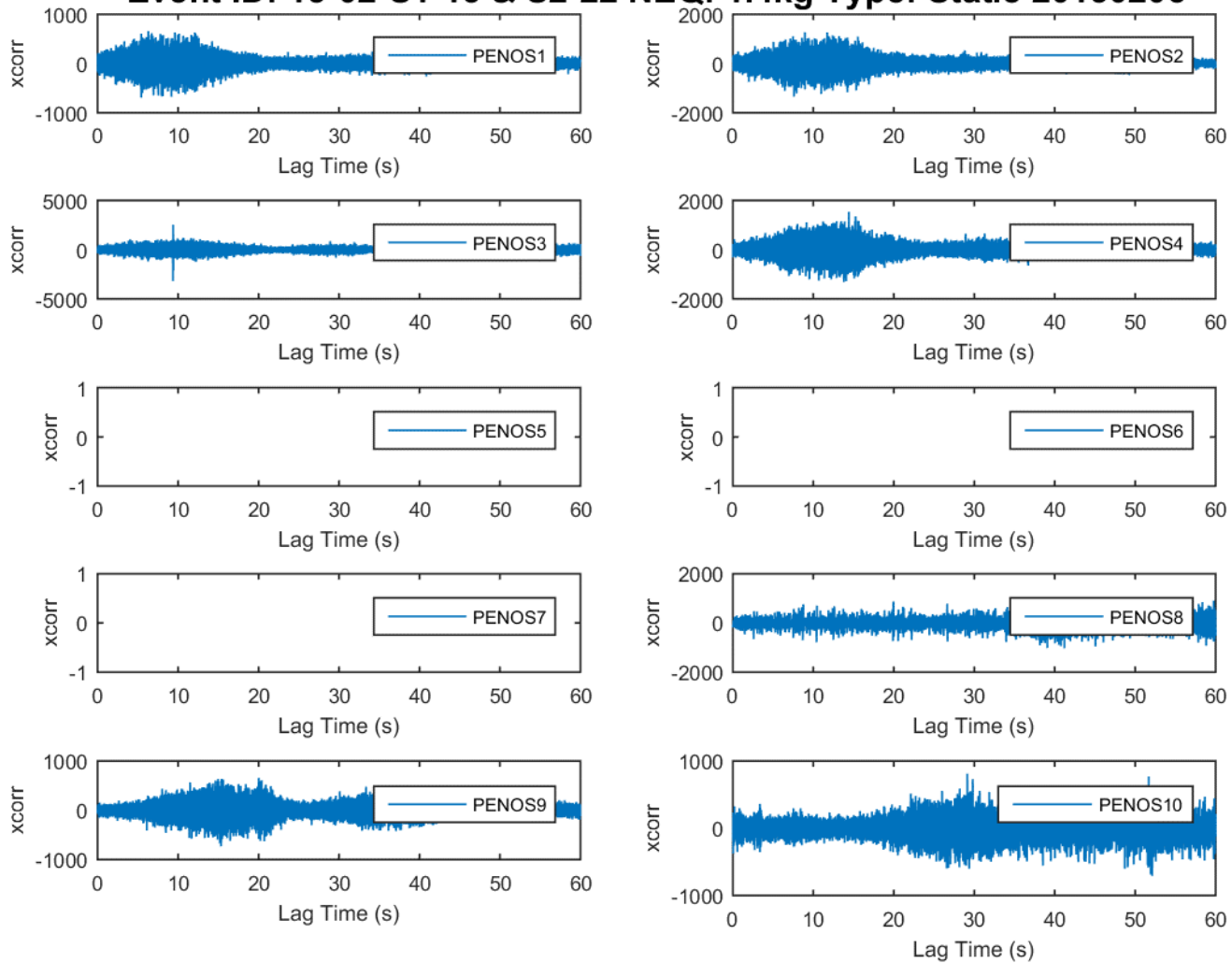
FIGURE 2.388: COHERENCE PEN\_OS 1 - 5 15-02-S1-13 & S2-22

**Event ID: 15-02-S1-13 & S2-22 NEQ: 1.4kg Type: Static 20150203**



**FIGURE 2.389: COHERENCE PEN\_OS 6 - 10 15-02-S1-13 & S2-22CTD**

**Event ID: 15-02-S1-13 & S2-22 NEQ: 1.4kg Type: Static 20150203**



**FIGURE 2.390: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S1-13 & S2-22**

Event ID: 15-02-S1-22 & S2-32 NEQ: 7.2Kg. Type: Static 20150204

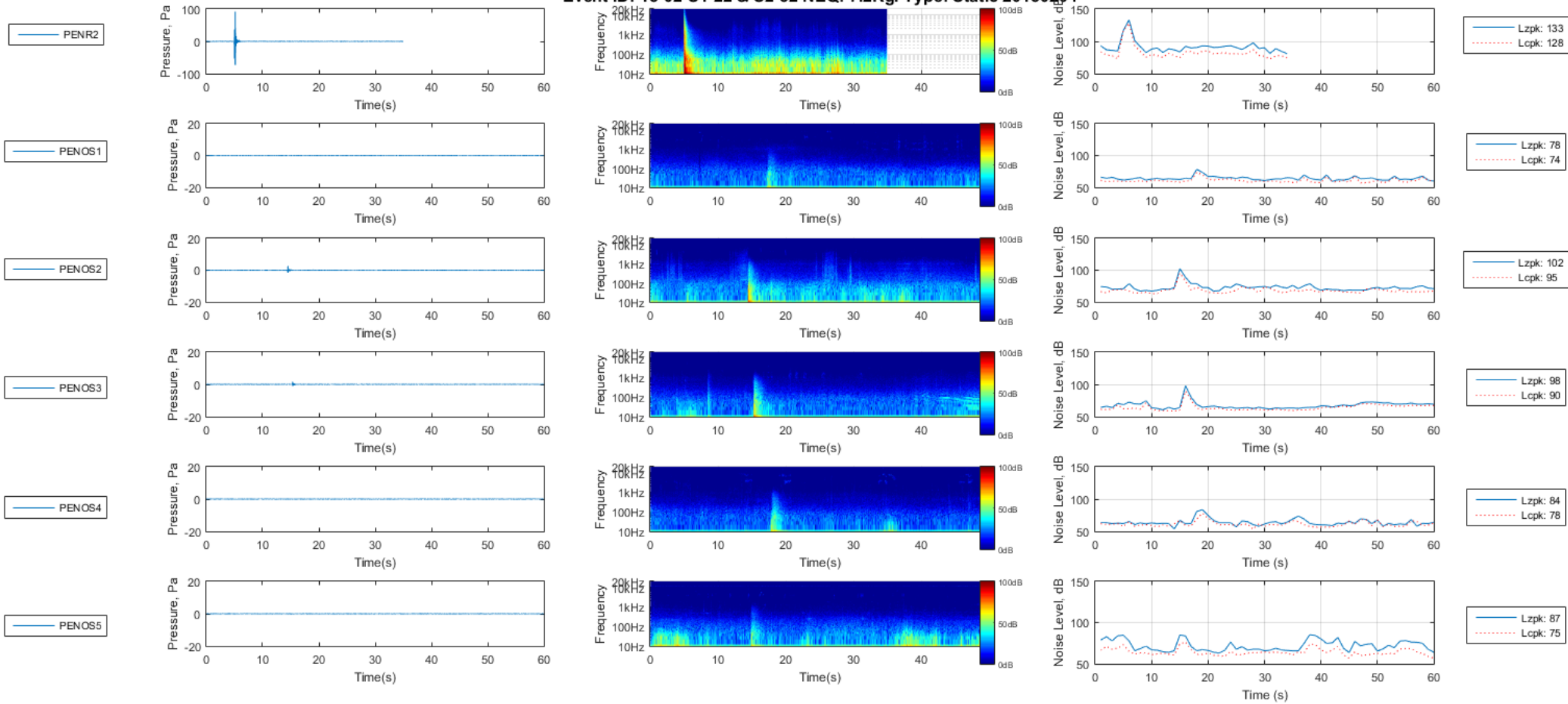


FIGURE 2.391: PEN\_OS 1 - 5 15-02-S1-22 & S2-32



Event ID: 15-02-S1-22 & S2-32 NEQ: 7.2Kg. Type: Static 20150204.CTD

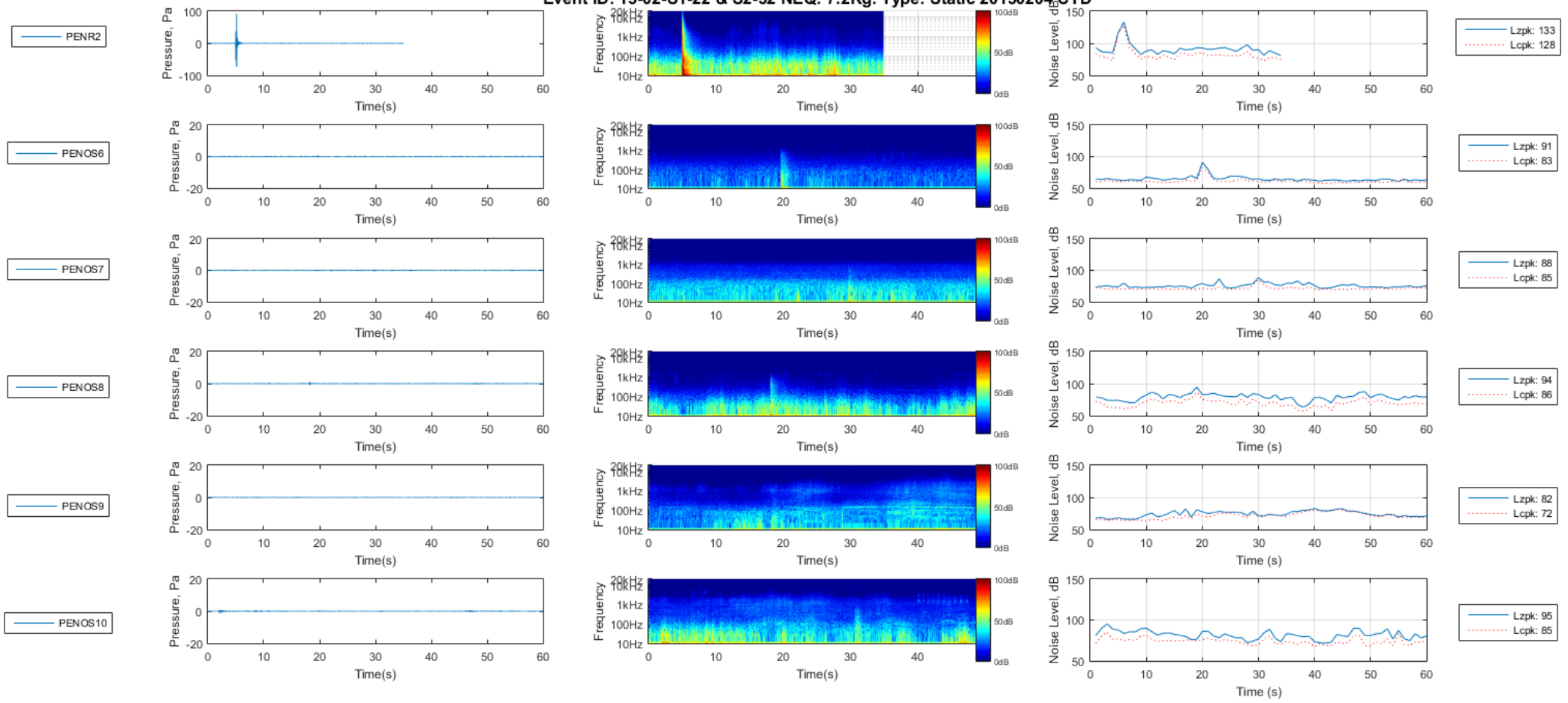
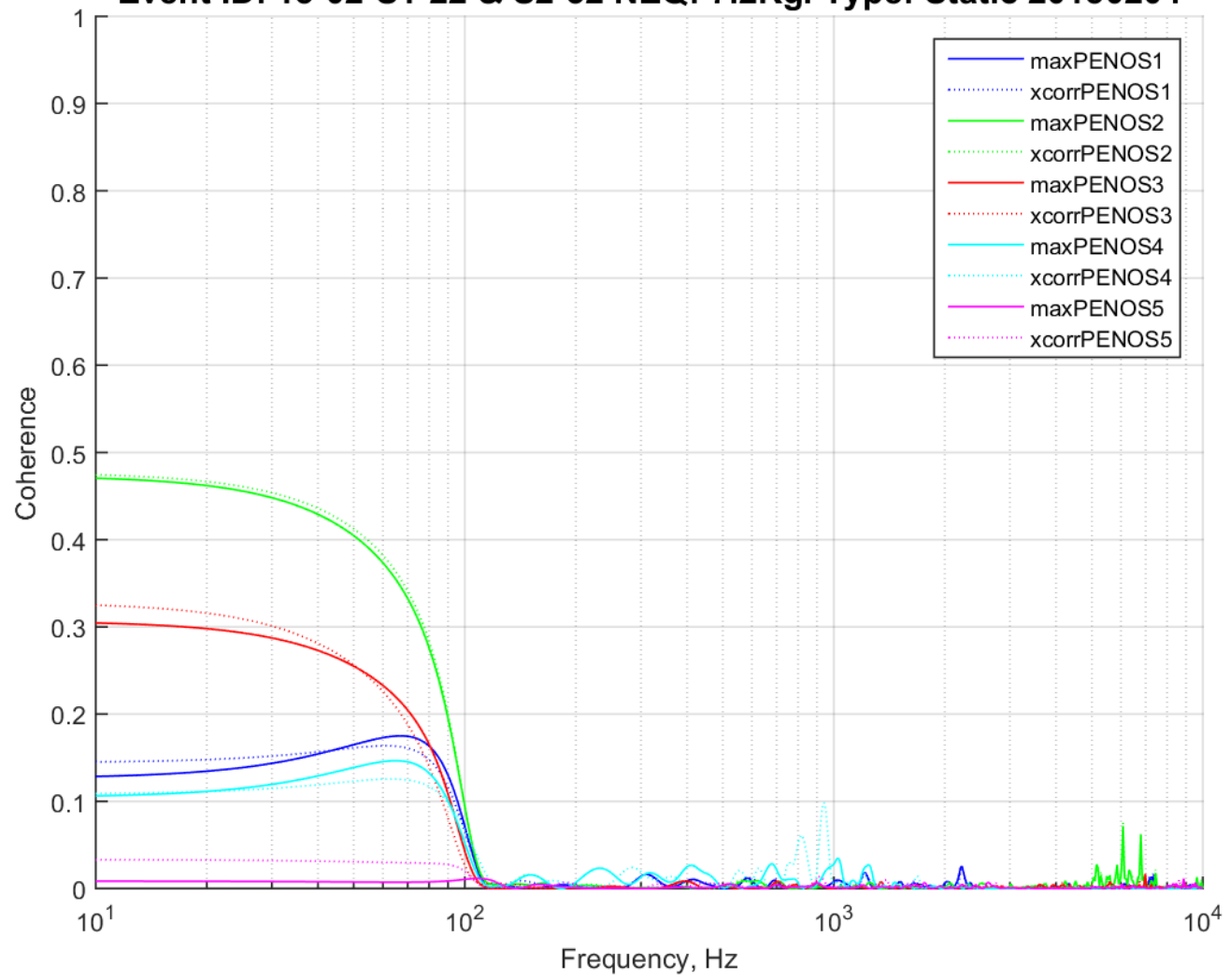


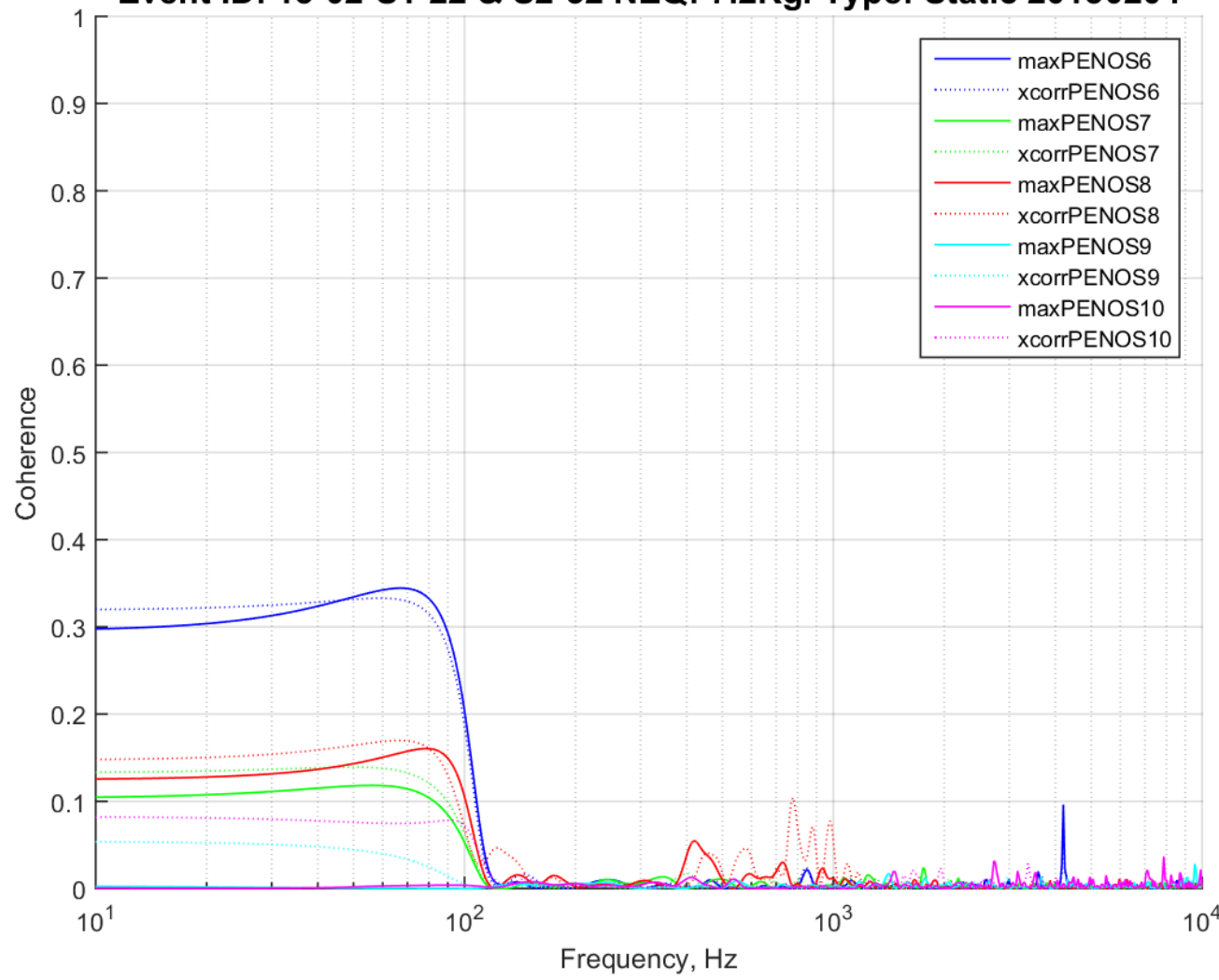
FIGURE 2.392: PEN\_OS 6 - 10 15-02-S1-22 & S2-32

**Event ID: 15-02-S1-22 & S2-32 NEQ: 7.2Kg. Type: Static 20150204**



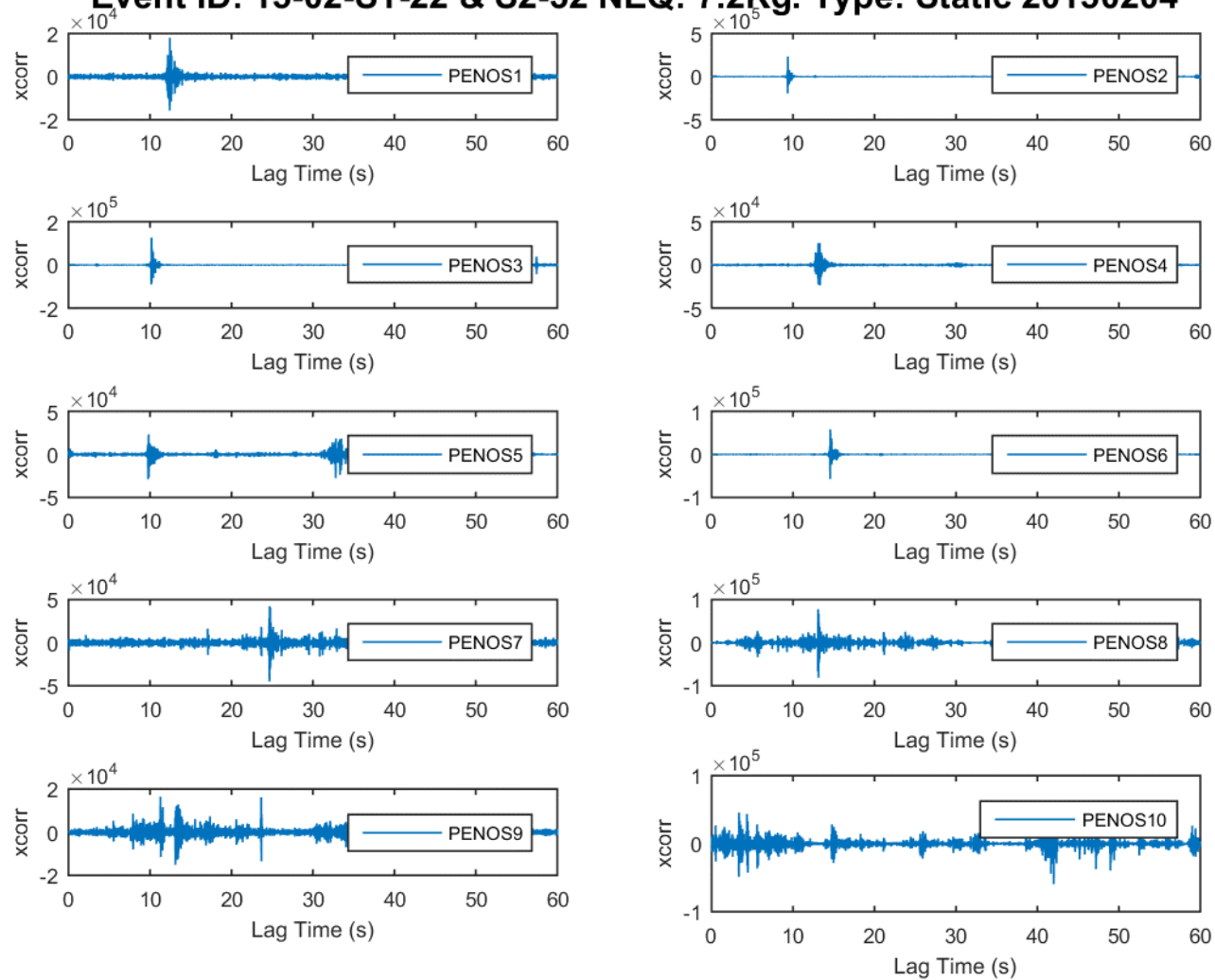
**FIGURE 2.393: COHERENCE PEN\_OS 1 - 5 15-02-S1-22 & S2-32**

**Event ID: 15-02-S1-22 & S2-32 NEQ: 7.2Kg. Type: Static 20150204**



**FIGURE 2.394: COHERENCE PEN\_OS 6 - 10 15-02-S1-22 & S2-32CTD**

**Event ID: 15-02-S1-22 & S2-32 NEQ: 7.2Kg. Type: Static 20150204**



**FIGURE 2.395: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S1-22 & S2-32**

Event ID: 15-02-S1-29 & S2-47 NEQ: 7.7Kg Type: Static 20150205

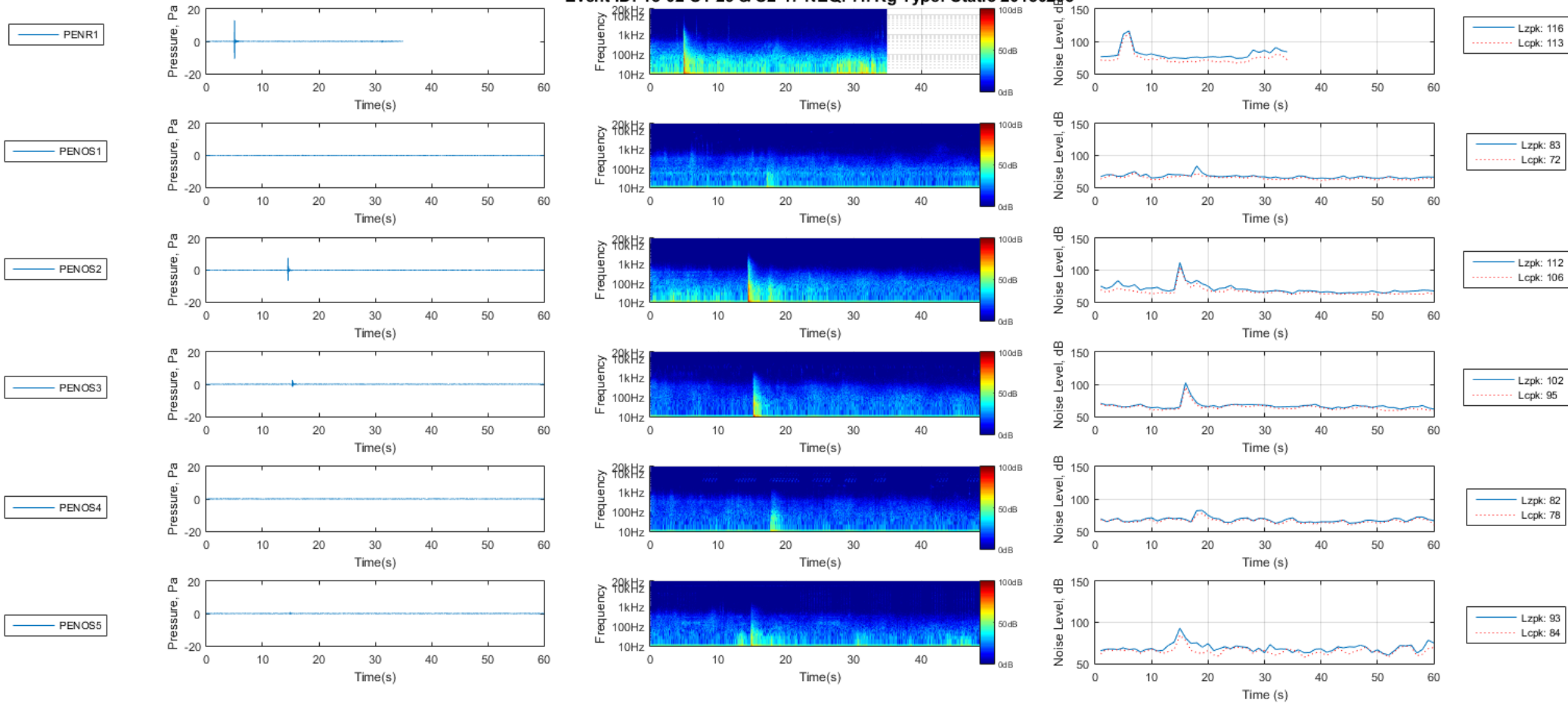


FIGURE 2.396: PEN\_OS 1 - 5 15-02-S1-29 & S2-47

Event ID: 15-02-S1-29 & S2-47 NEQ: 7.7Kg Type: Static 20150205.CTD

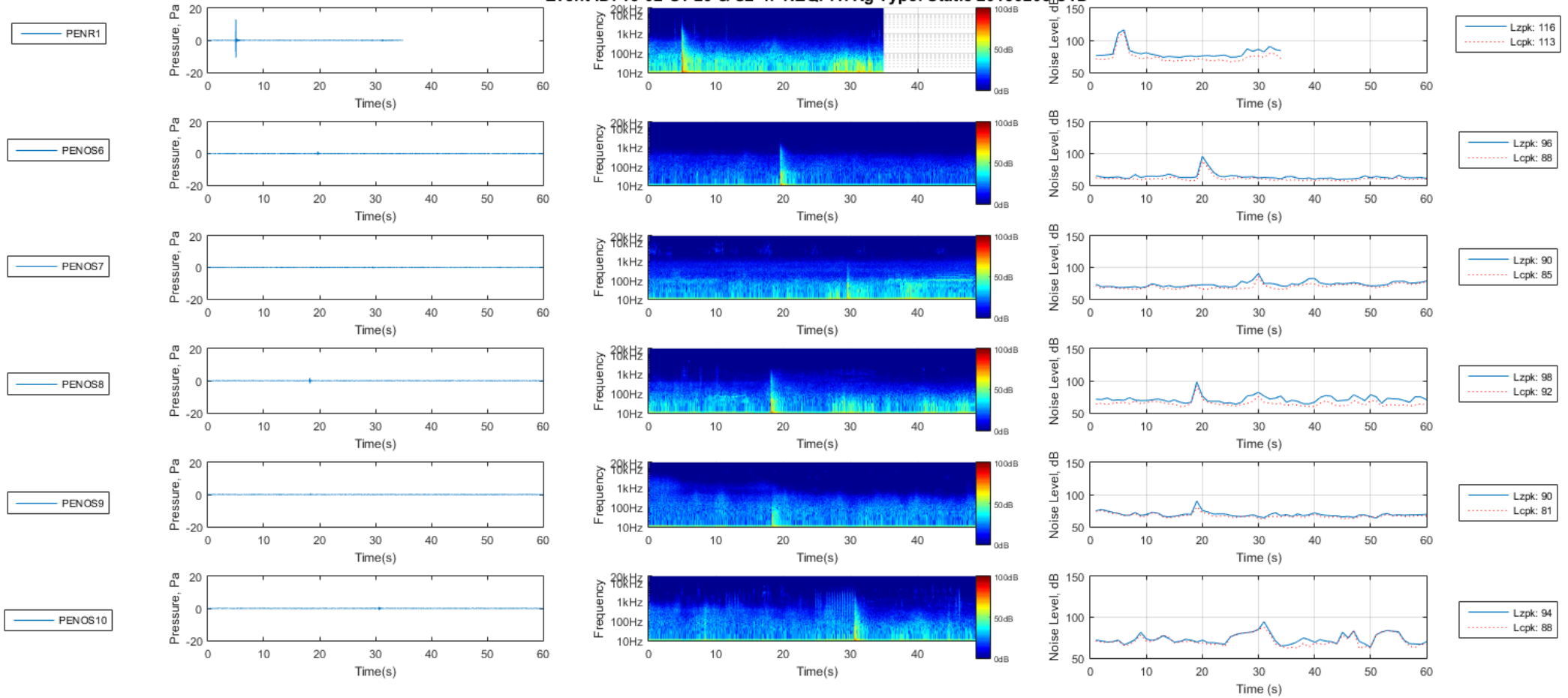


FIGURE 2.397: PEN\_OS 6 - 10 15-02-S1-29 & S2-47

Event ID: 15-02-S1-29 & S2-47 NEQ: 7.7Kg Type: Static 20150205

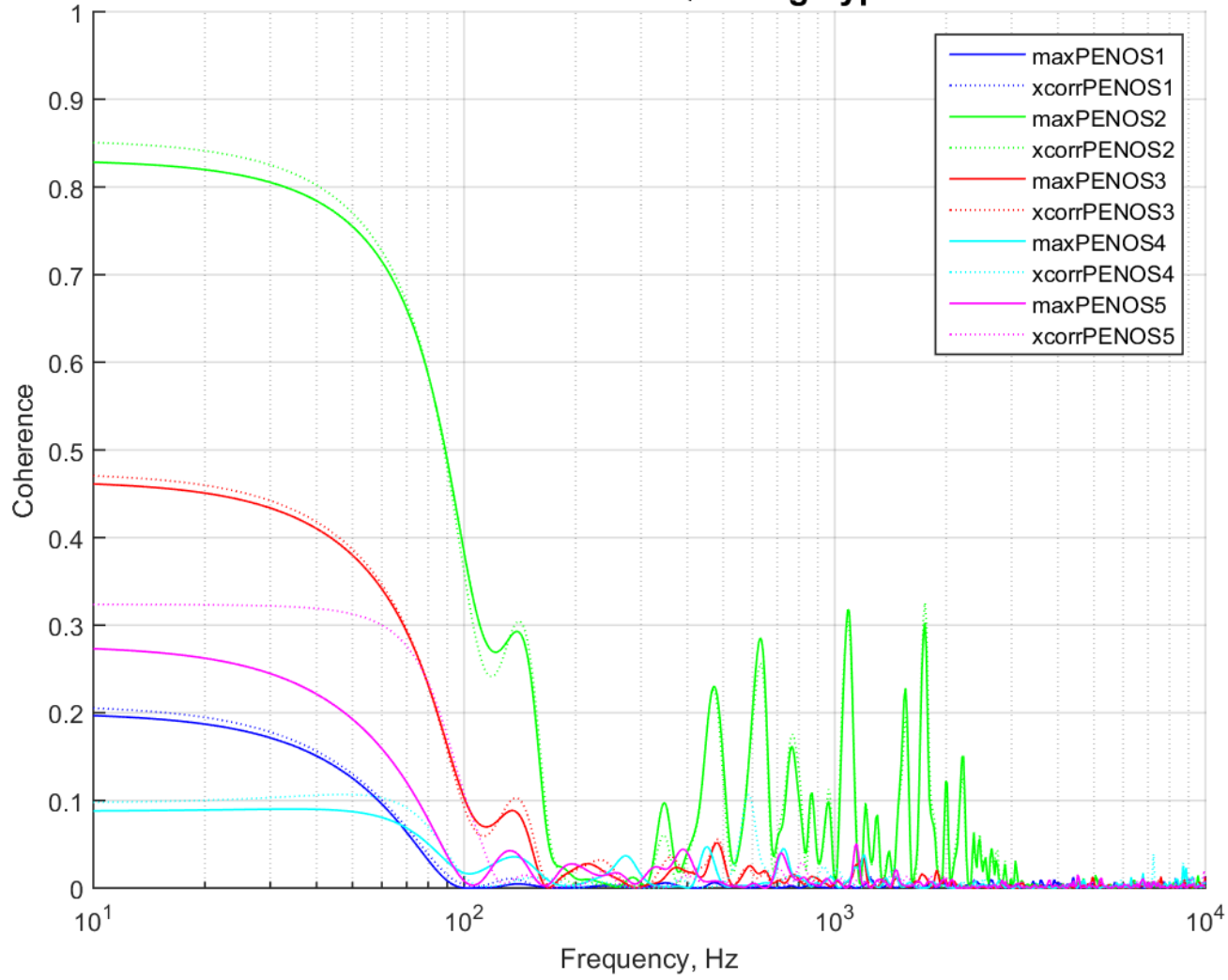
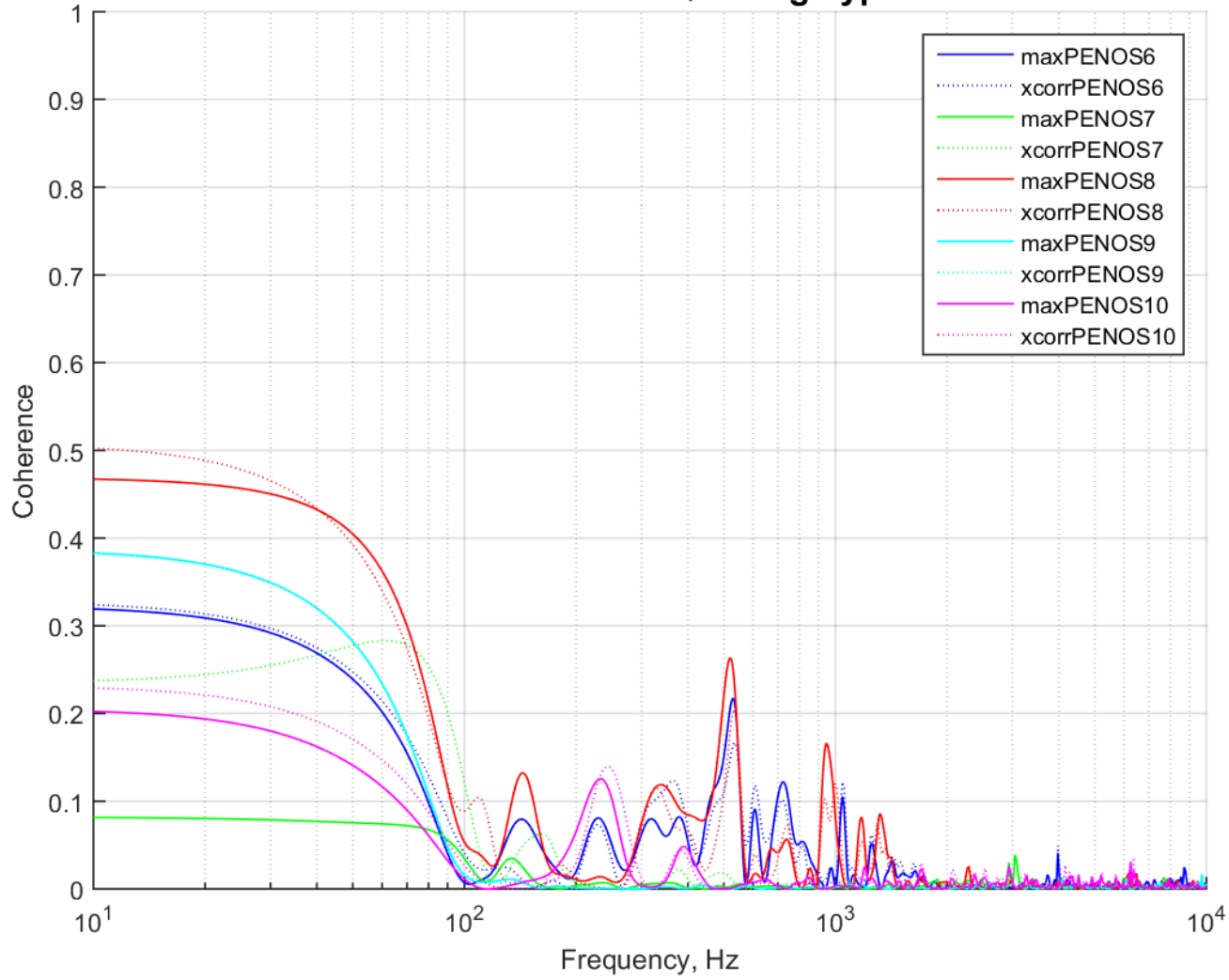


FIGURE 2.398: COHERENCE PEN\_OS 1 - 5 15-02-S1-29 & S2-47

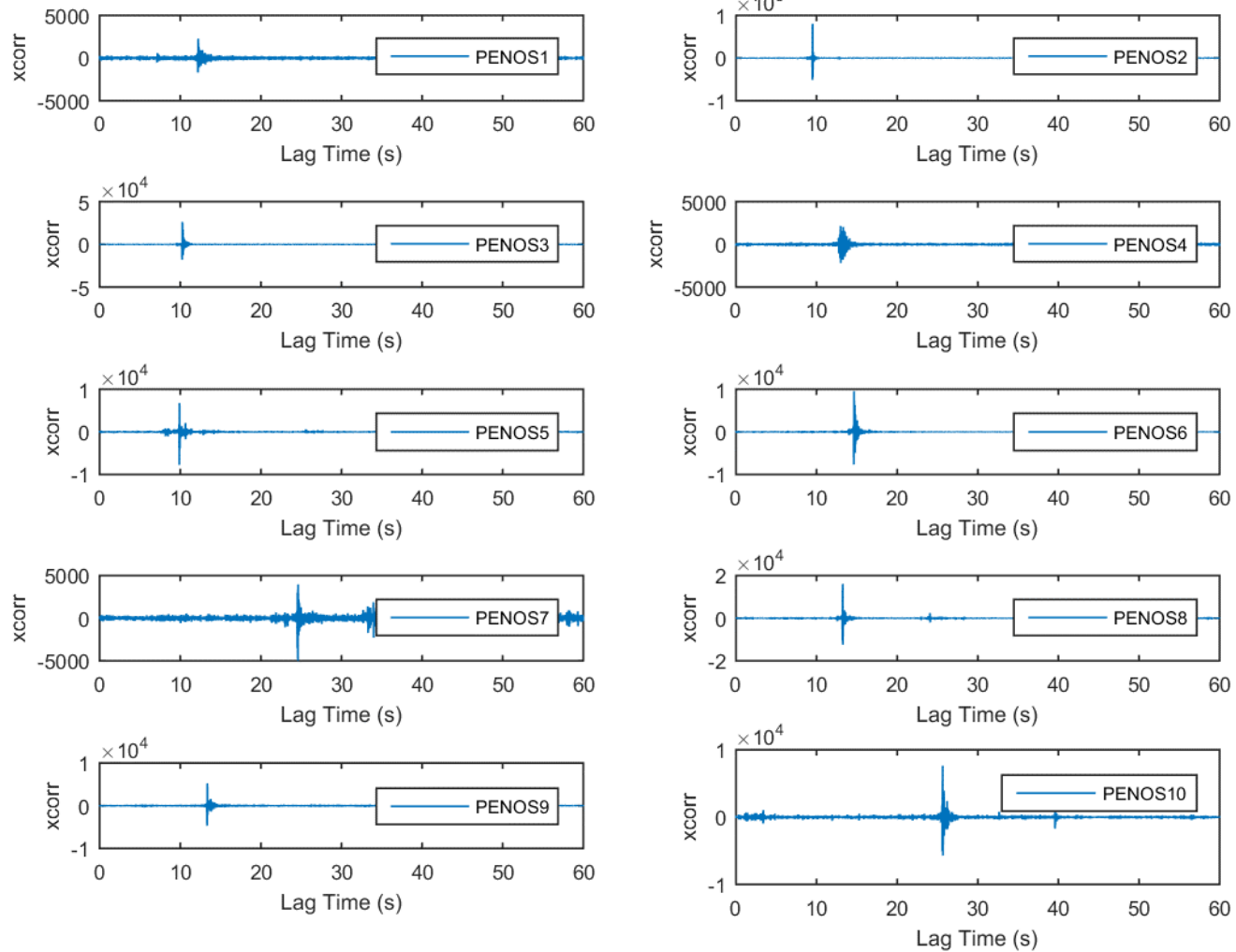
**Event ID: 15-02-S1-29 & S2-47 NEQ: 7.7Kg Type: Static 20150205**



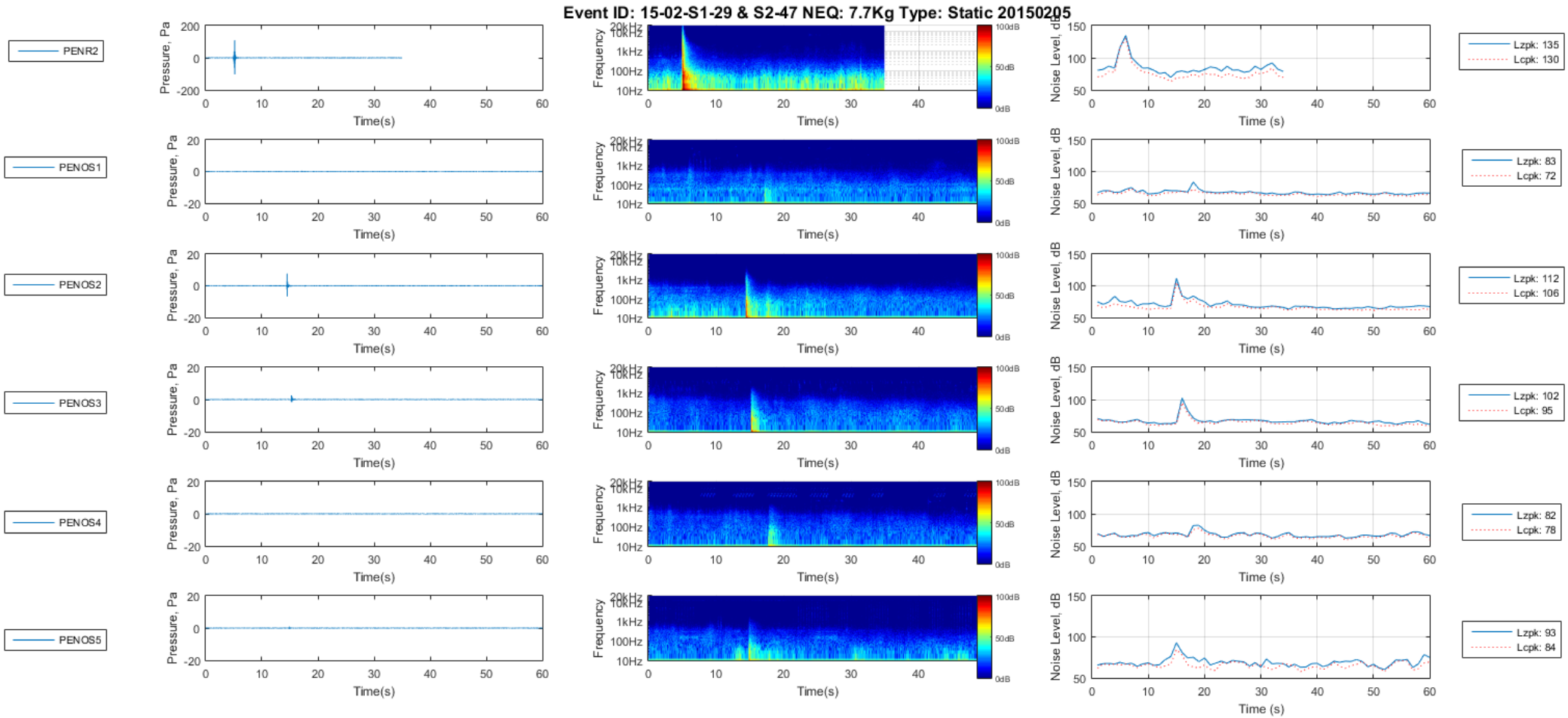
**FIGURE 2.399: COHERENCE PEN\_OS 6 - 10 15-02-S1-29 & S2-47CTD**



**Event ID: 15-02-S1-29 & S2-47 NEQ: 7.7Kg Type: Static 20150205**



**FIGURE 2.400: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S1-29 & S2-47**



**FIGURE 2.401: PEN\_OS 1 - 5 15-02-S1-29 & S2-47**

Event ID: 15-02-S1-29 & S2-47 NEQ: 7.7Kg Type: Static 20150205.CTD

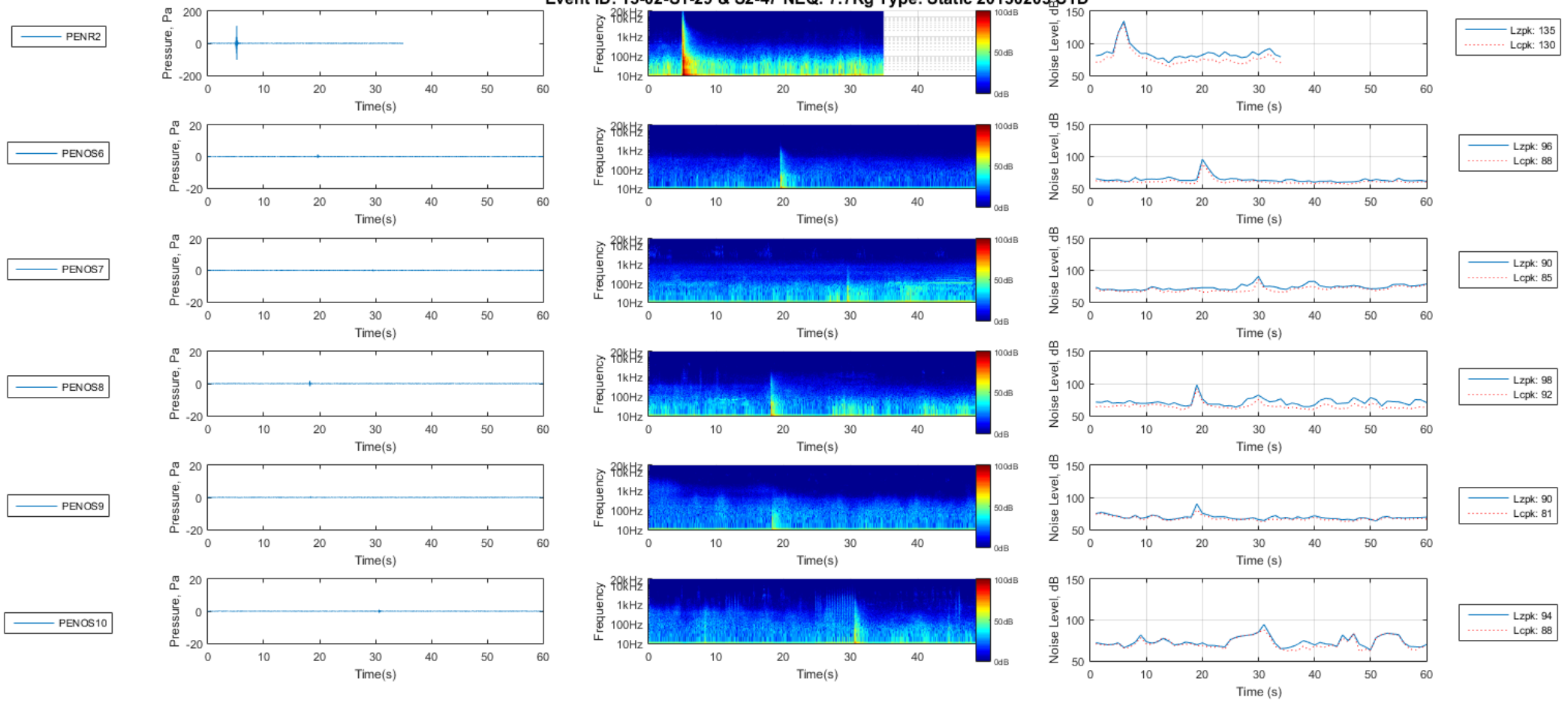
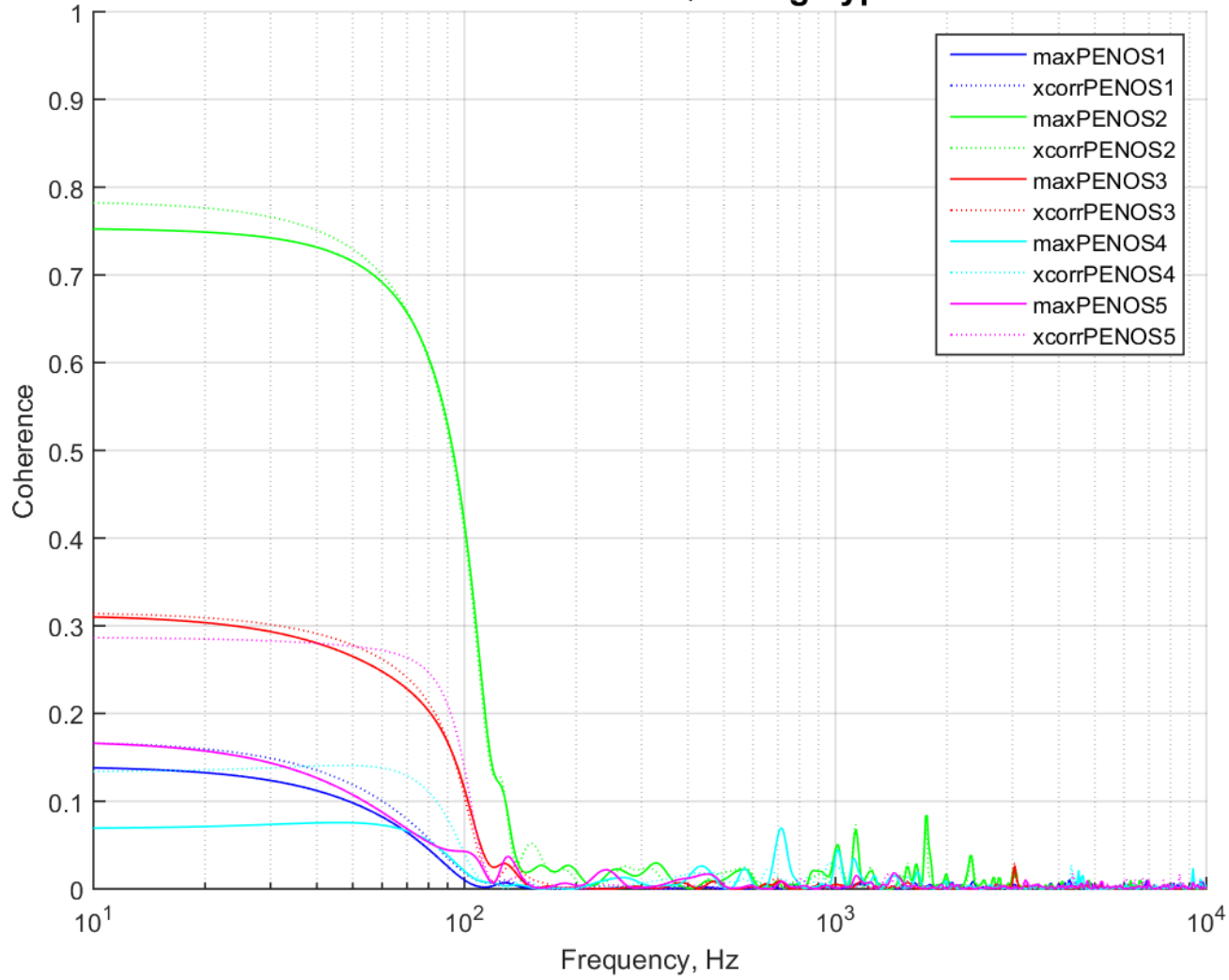


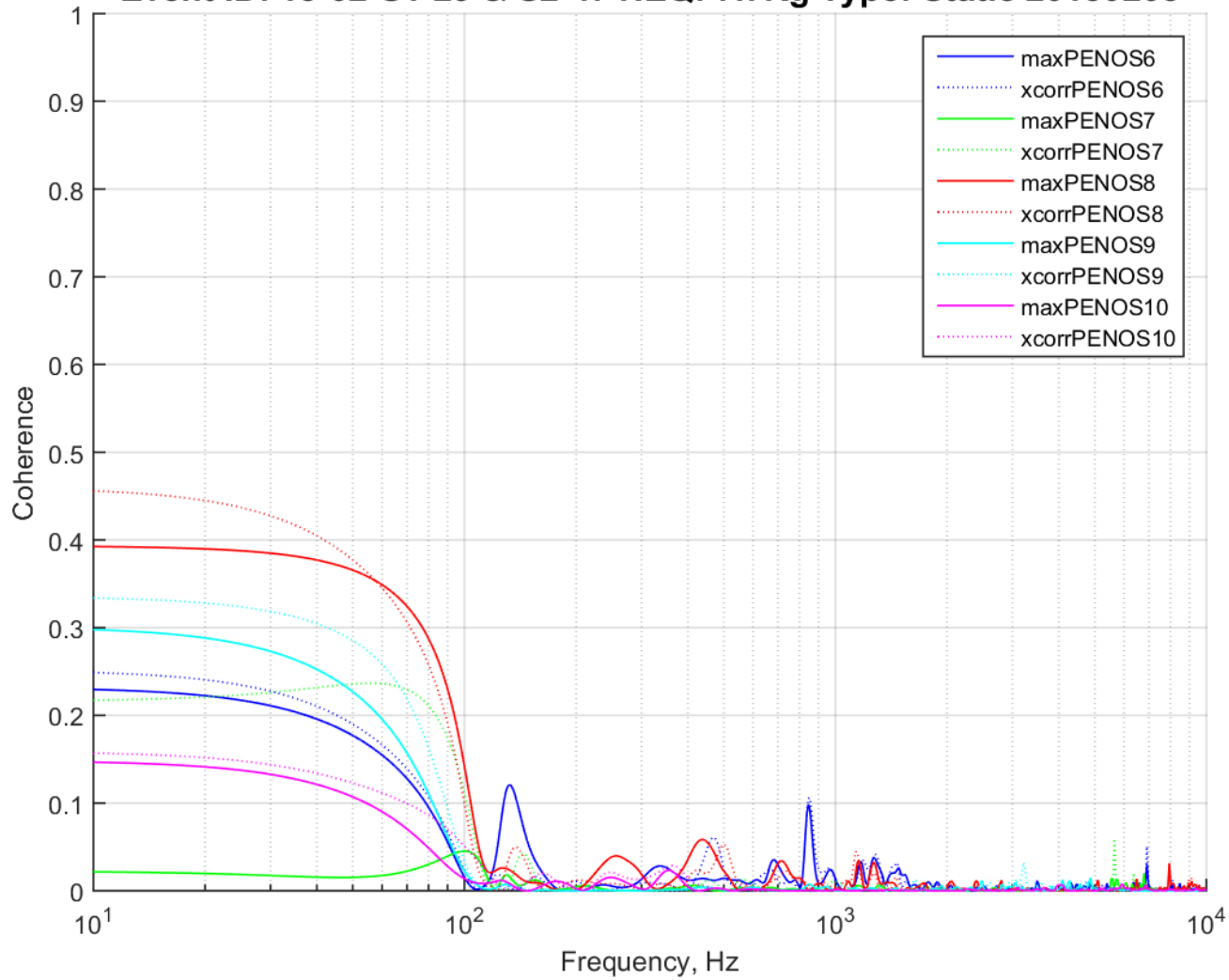
FIGURE 2.402: PEN\_OS 6 - 10 15-02-S1-29 & S2-47

**Event ID: 15-02-S1-29 & S2-47 NEQ: 7.7Kg Type: Static 20150205**



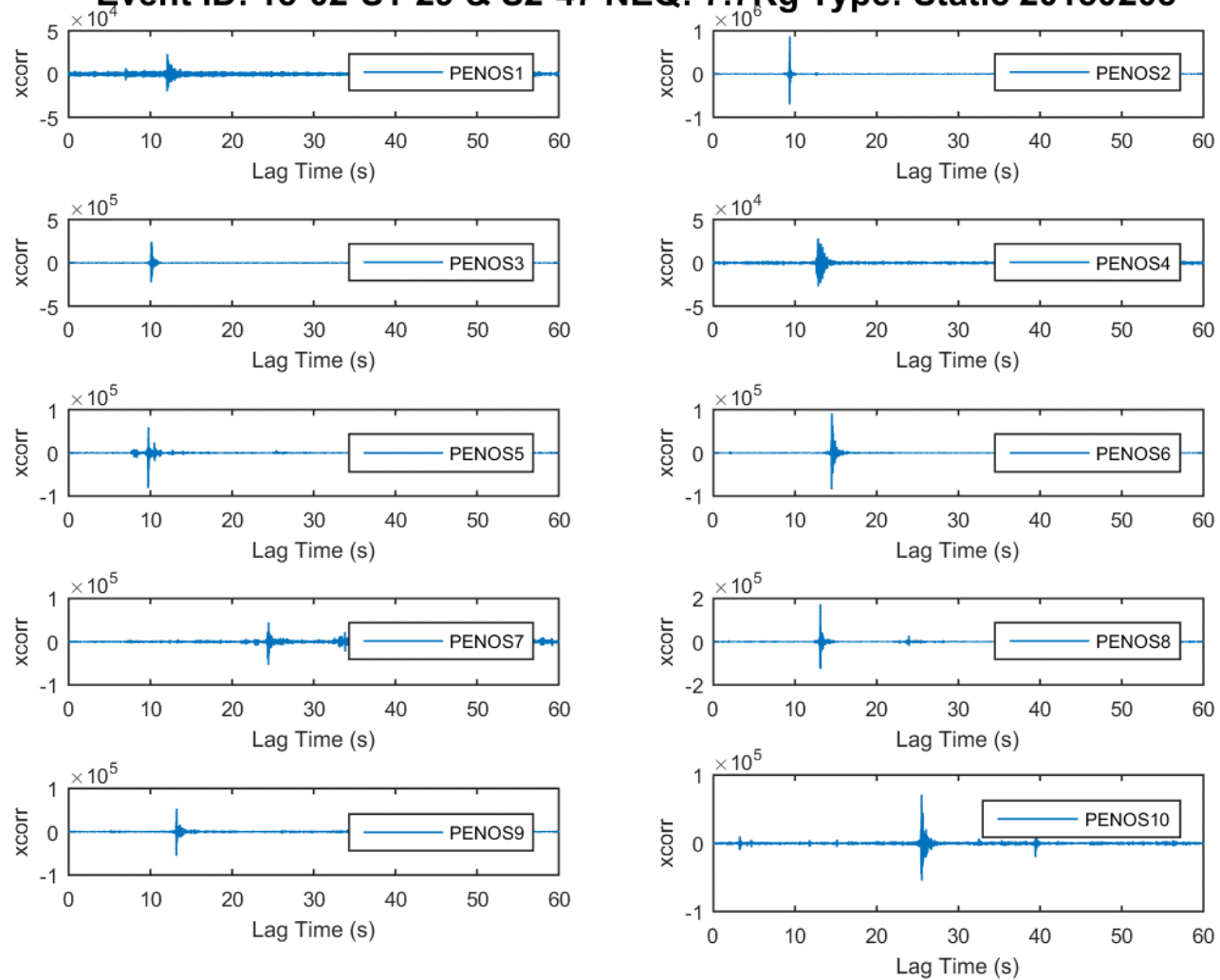
**FIGURE 2.403: COHERENCE PEN\_OS 1 - 5 15-02-S1-29 & S2-47**

**Event ID: 15-02-S1-29 & S2-47 NEQ: 7.7Kg Type: Static 20150205**



**FIGURE 2.404: COHERENCE PEN\_OS 6 - 10 15-02-S1-29 & S2-47CTD**

**Event ID: 15-02-S1-29 & S2-47 NEQ: 7.7Kg Type: Static 20150205**



**FIGURE 2.405: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S1-29 & S2-47**

Event ID: 15-02-S1-30 & S2-50 NEQ: 7.7Kg Type: Static 20150205

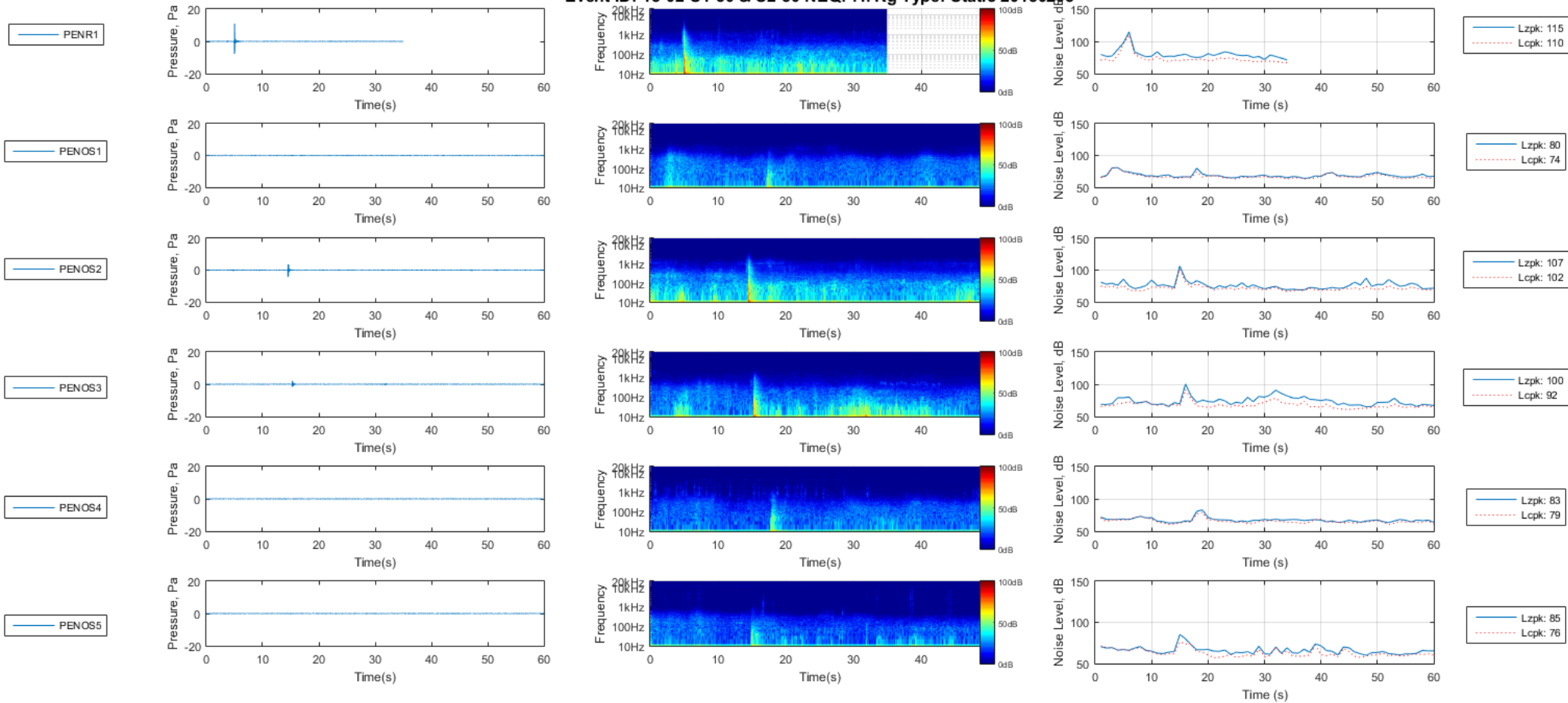


FIGURE 2.406: PEN\_OS 1 - 5 15-02-S1-30 & S2-50

Event ID: 15-02-S1-30 & S2-50 NEQ: 7.7Kg Type: Static 20150205.CTD

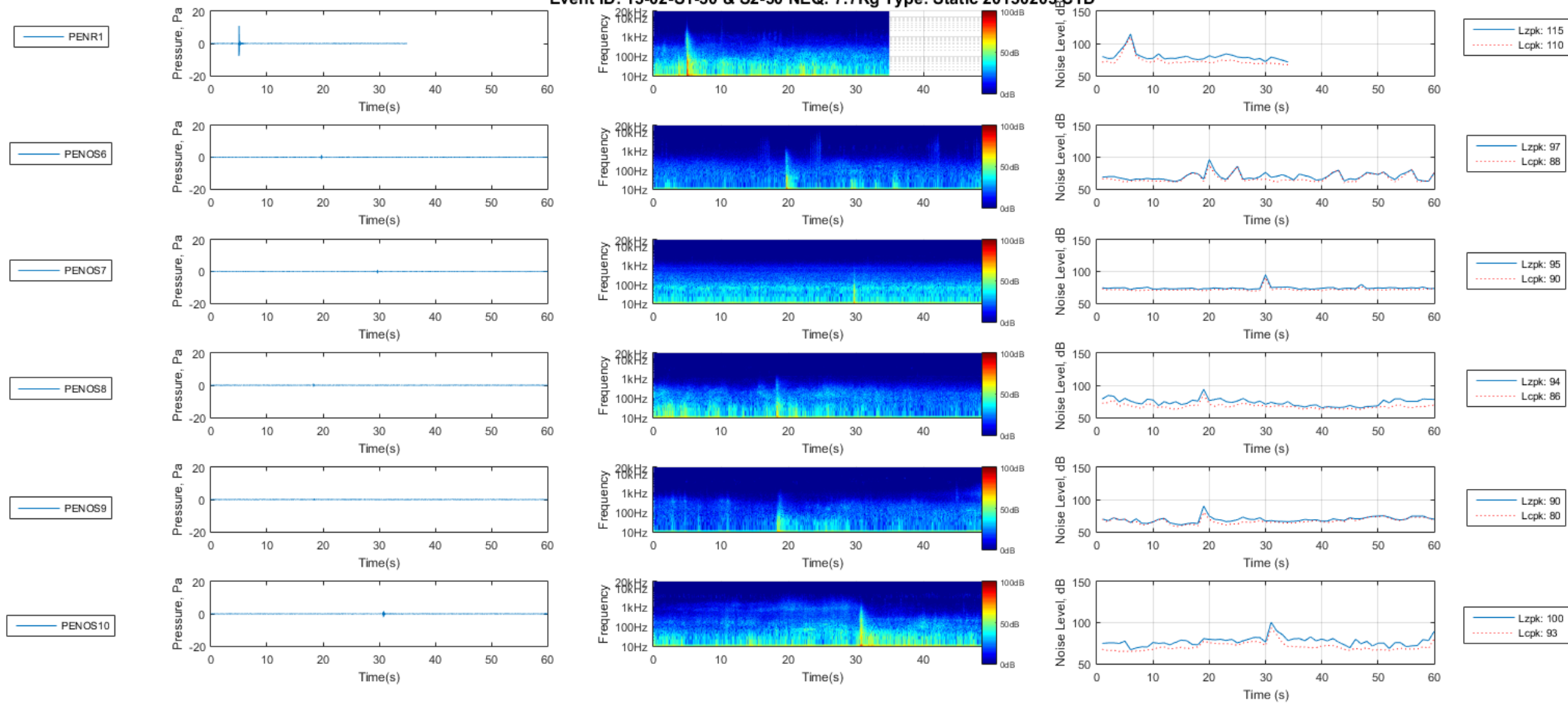
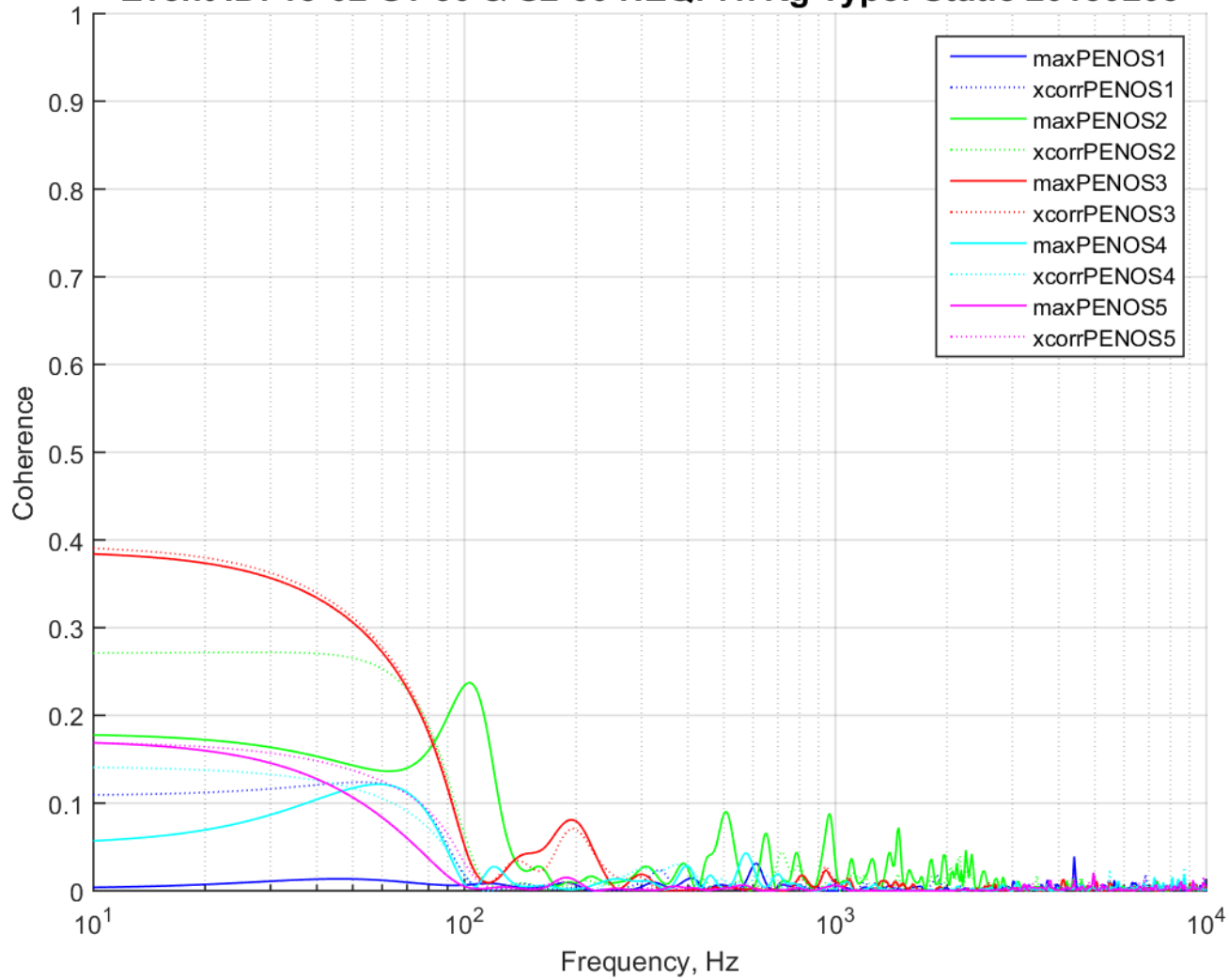


FIGURE 2.407: PEN\_OS 6 - 10 15-02-S1-30 & S2-50

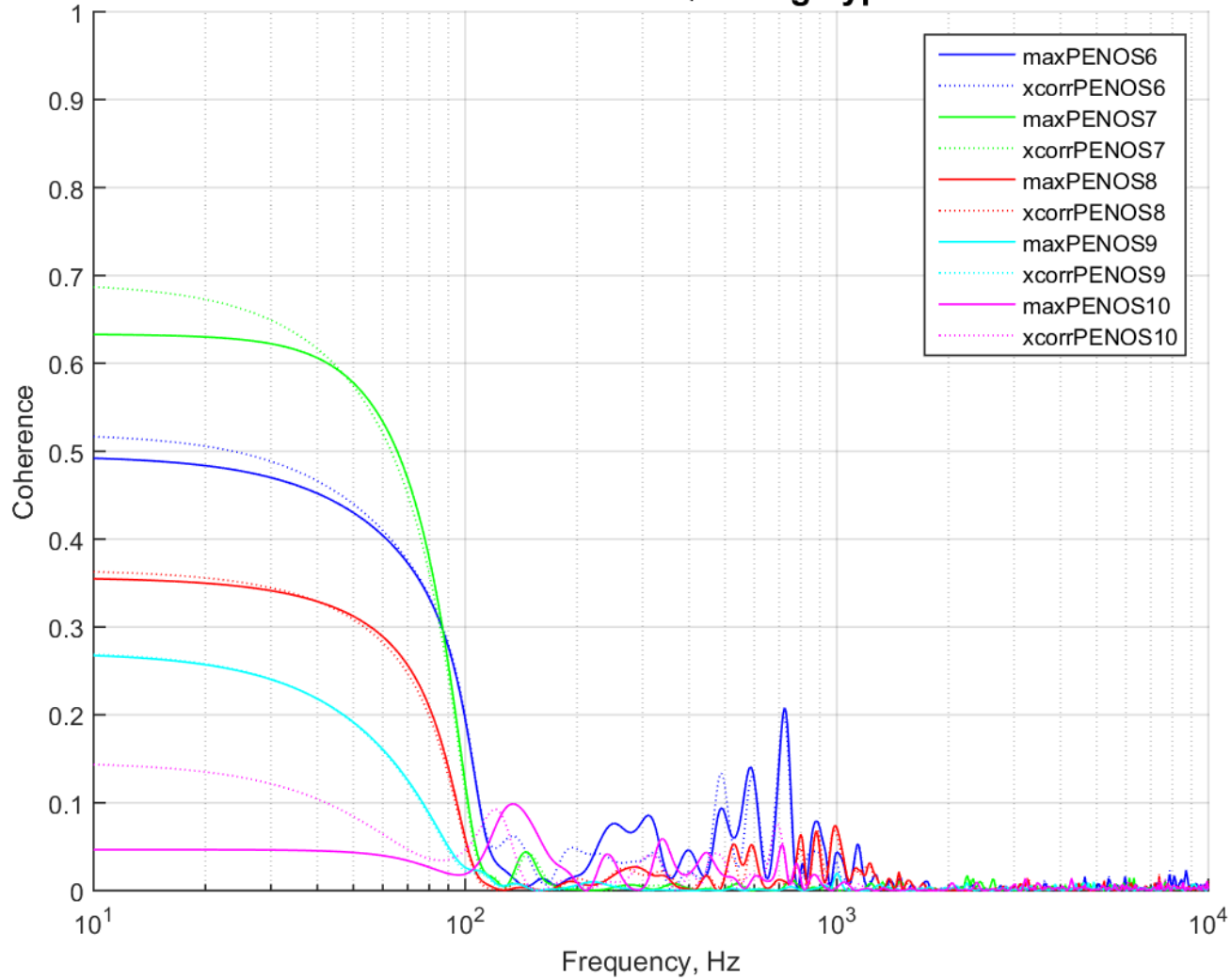


**Event ID: 15-02-S1-30 & S2-50 NEQ: 7.7Kg Type: Static 20150205**



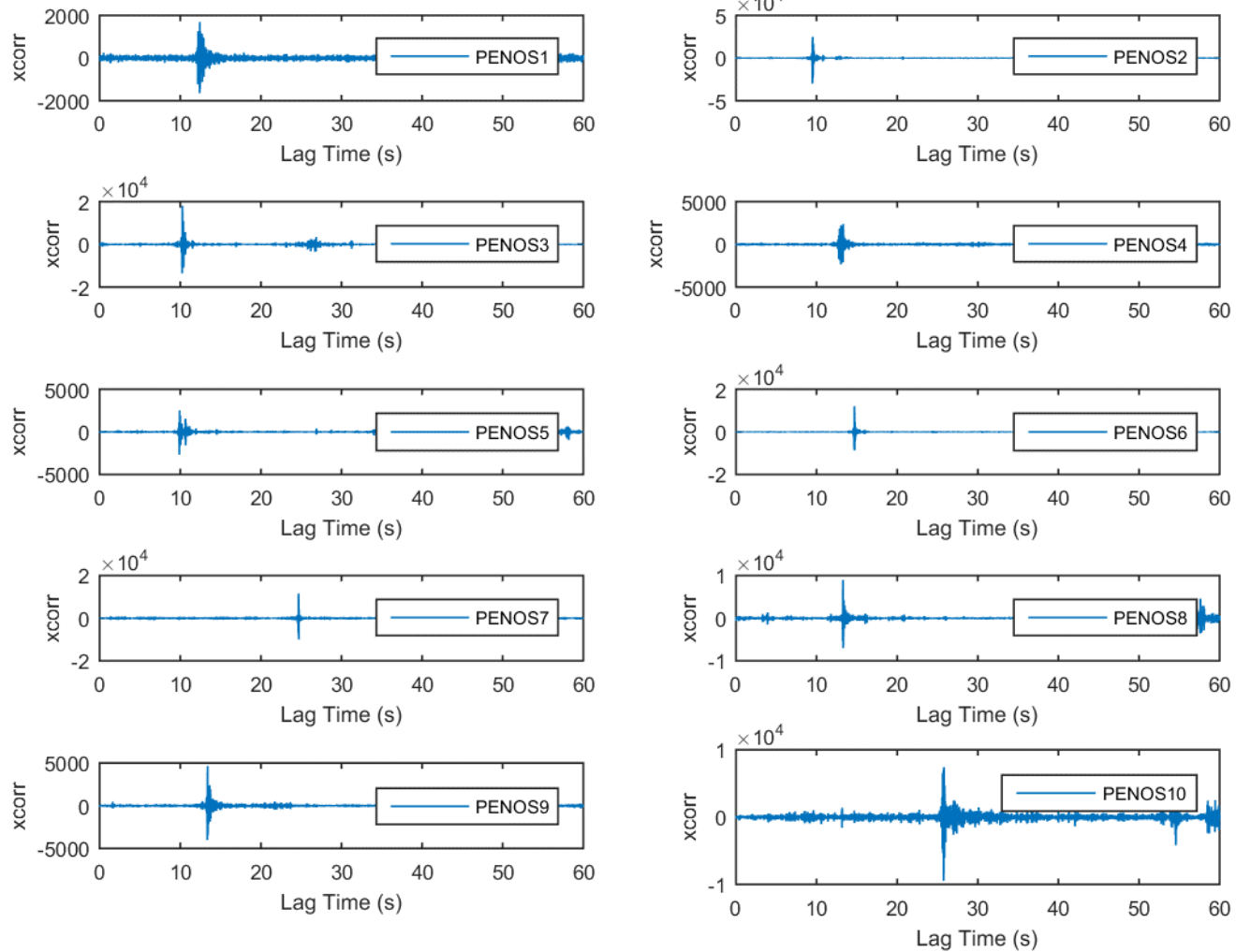
**FIGURE 2.408: COHERENCE PEN\_OS 1 - 5 15-02-S1-30 & S2-50**

**Event ID: 15-02-S1-30 & S2-50 NEQ: 7.7Kg Type: Static 20150205**



**FIGURE 2.409: COHERENCE PEN\_OS 6 - 10 15-02-S1-30 & S2-50CTD**

**Event ID: 15-02-S1-30 & S2-50 NEQ: 7.7Kg Type: Static 20150205**



**FIGURE 2.410: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S1-30 & S2-50**

Event ID: 15-02-S1-30 & S2-50 NEQ: 7.7Kg Type: Static 20150205

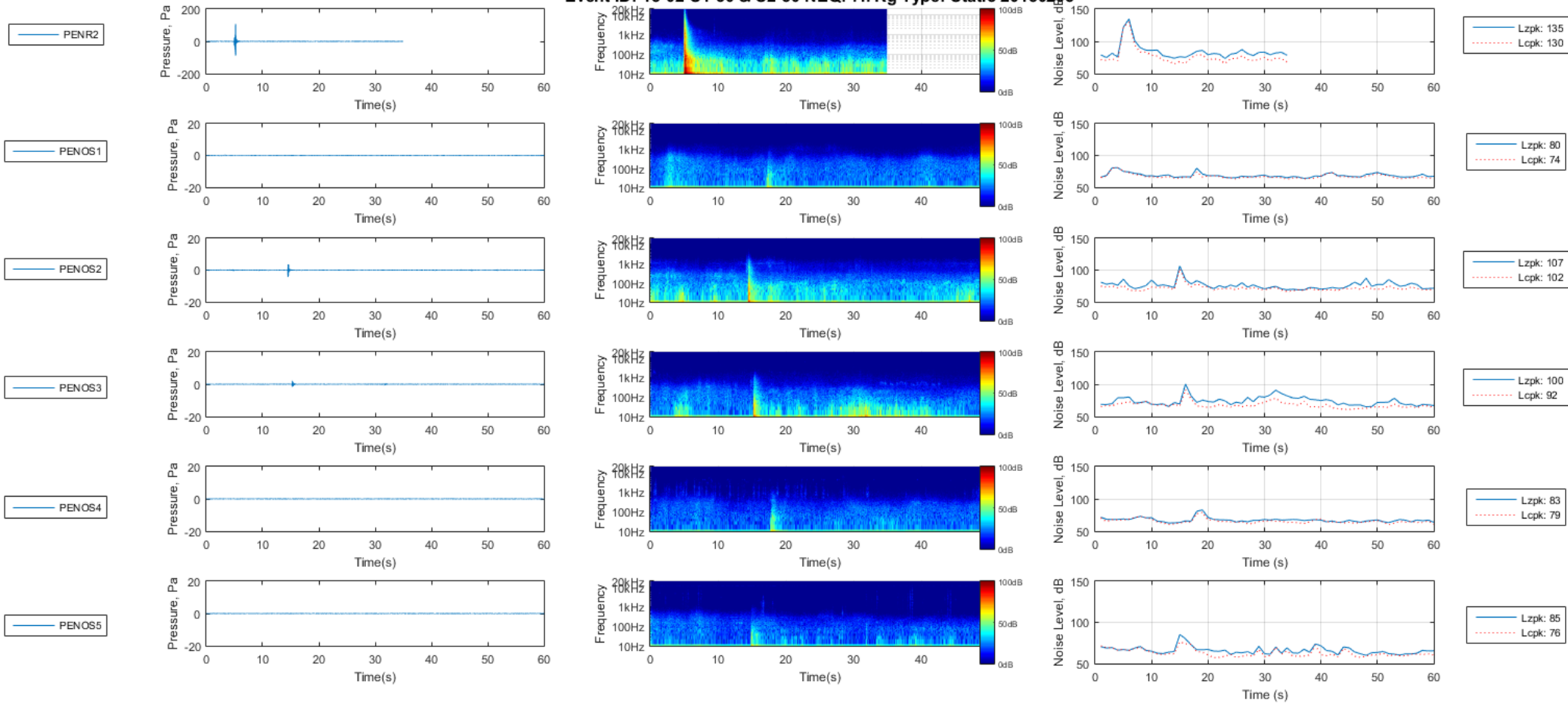


FIGURE 2.411: PEN\_OS 1 - 5 15-02-S1-30 & S2-50

Event ID: 15-02-S1-30 & S2-50 NEQ: 7.7Kg Type: Static 20150205.CTD

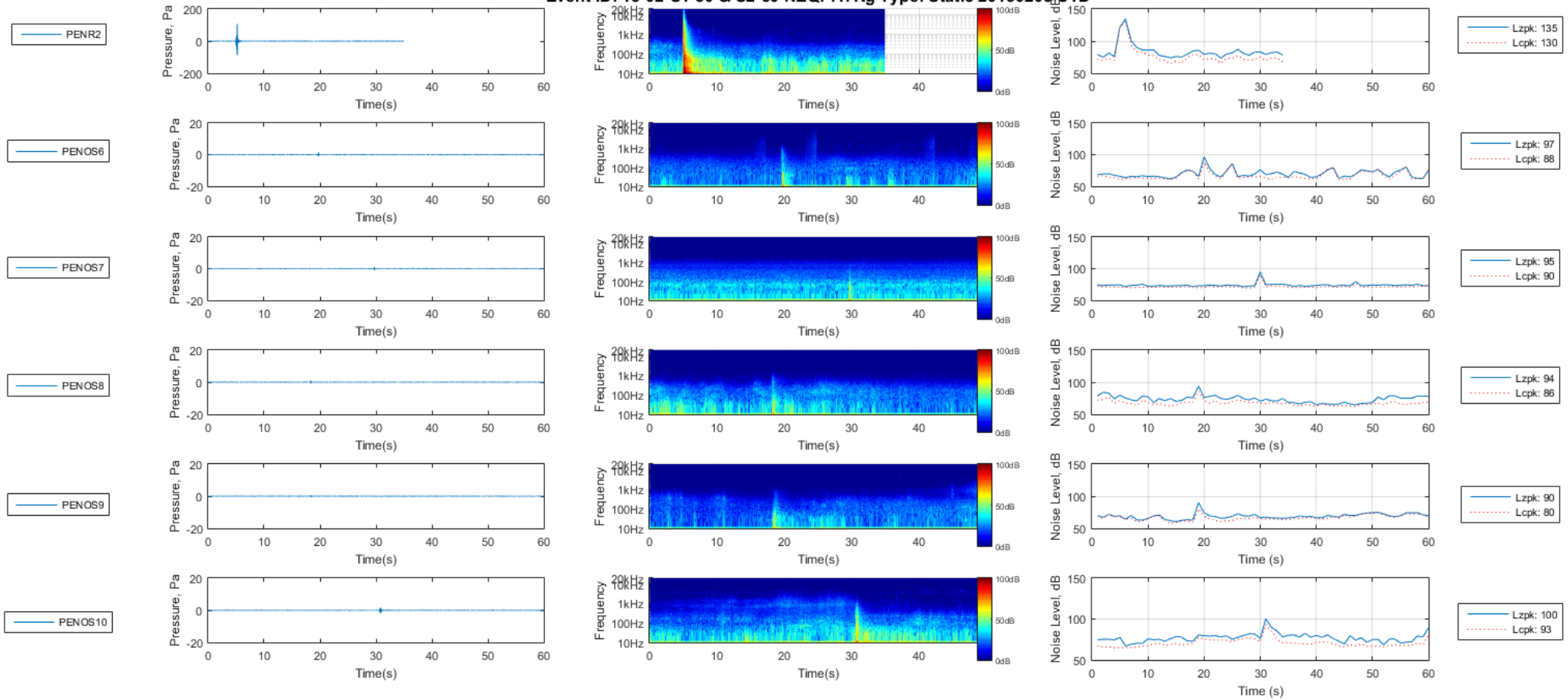
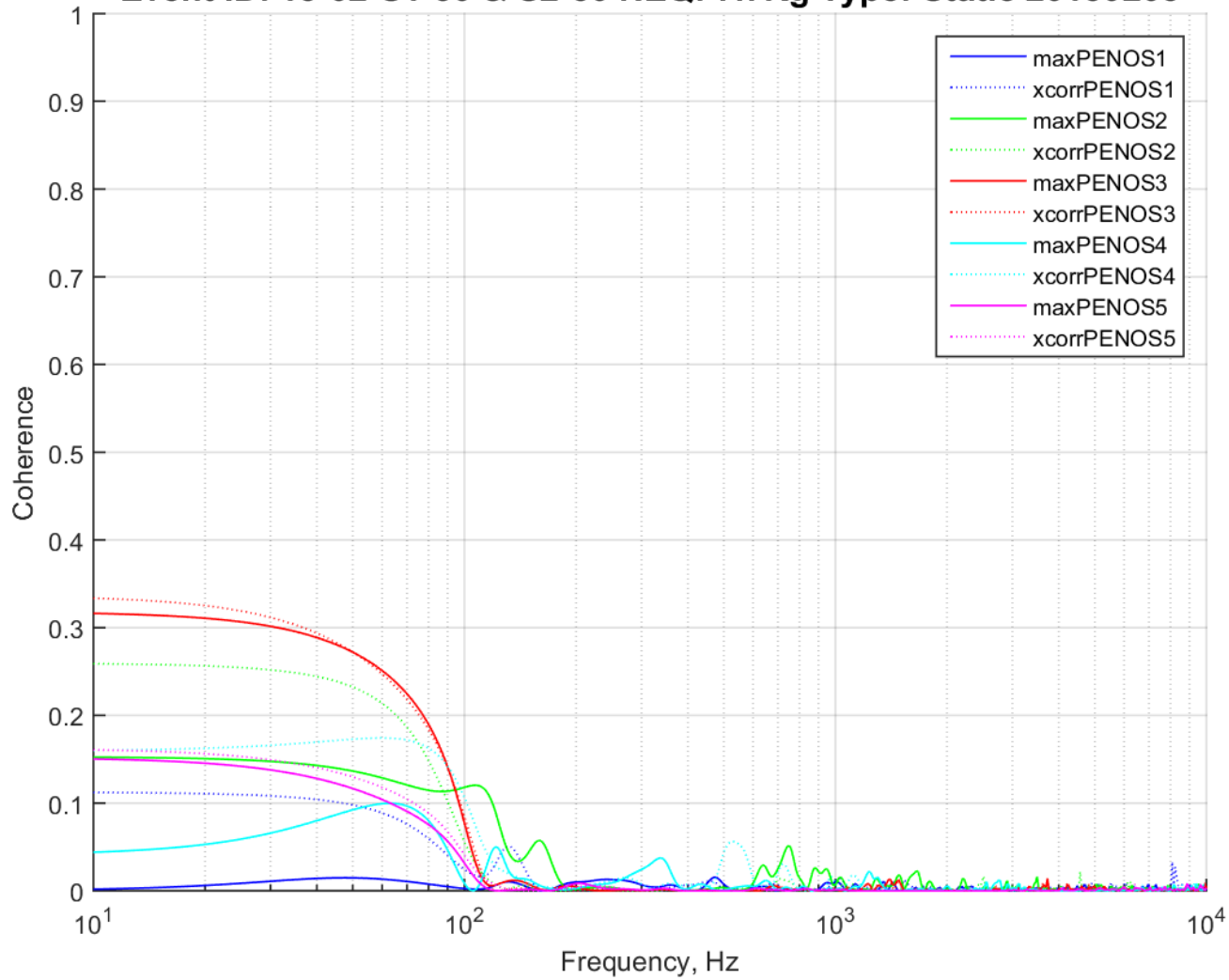


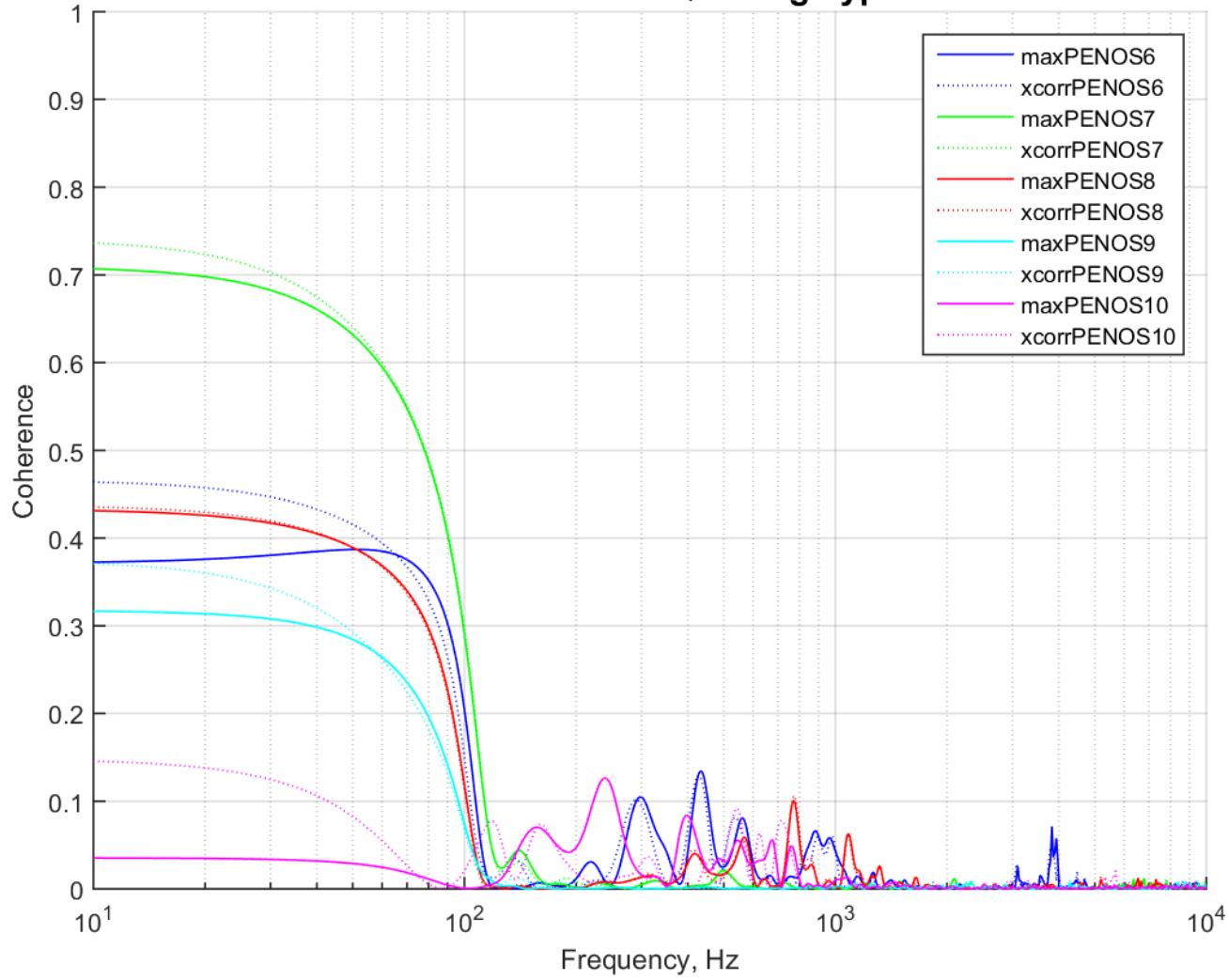
FIGURE 2.412: PEN\_OS 6 - 10 15-02-S1-30 & S2-50

**Event ID: 15-02-S1-30 & S2-50 NEQ: 7.7Kg Type: Static 20150205**



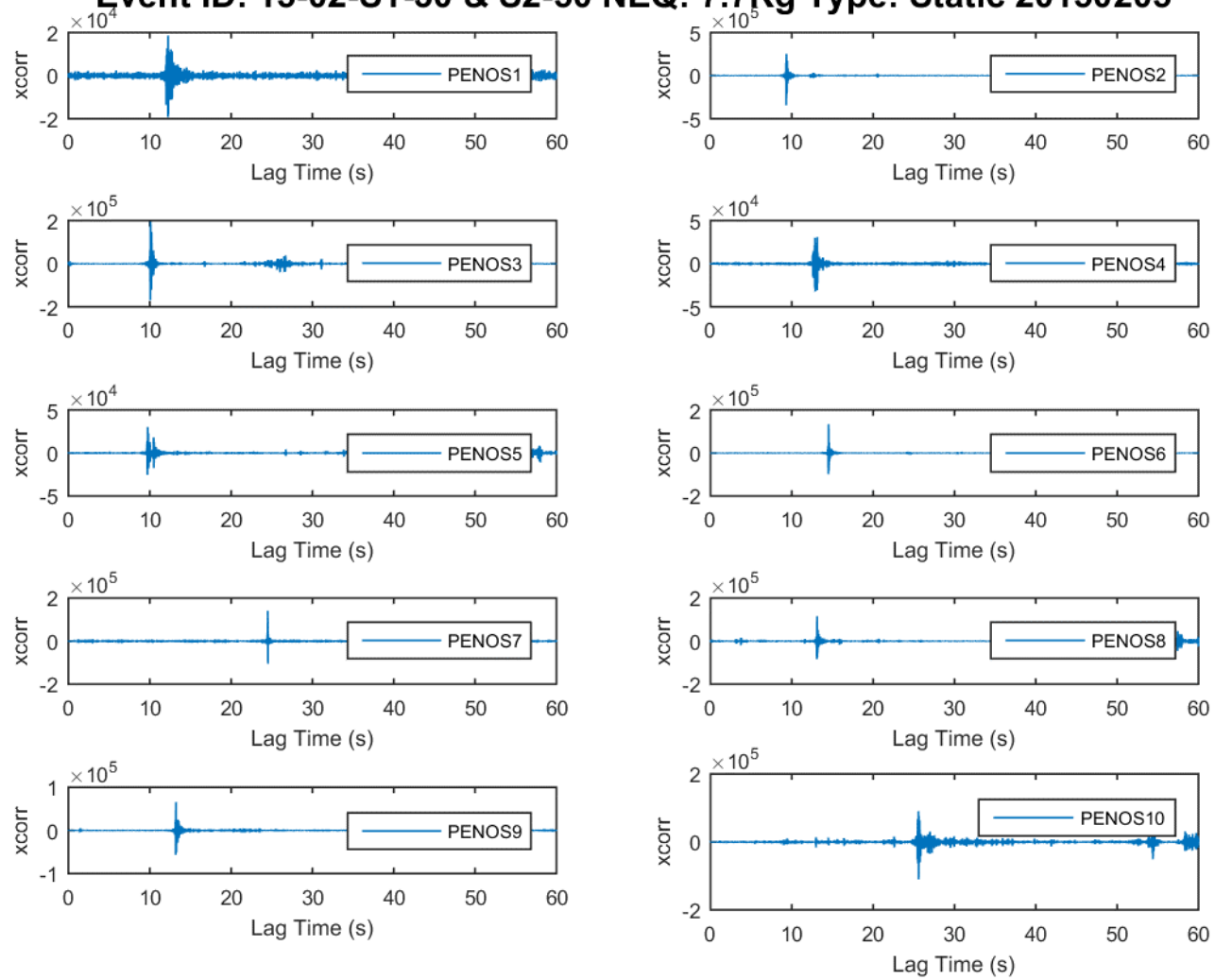
**FIGURE 2.413: COHERENCE PEN\_OS 1 - 5 15-02-S1-30 & S2-50**

**Event ID: 15-02-S1-30 & S2-50 NEQ: 7.7Kg Type: Static 20150205**



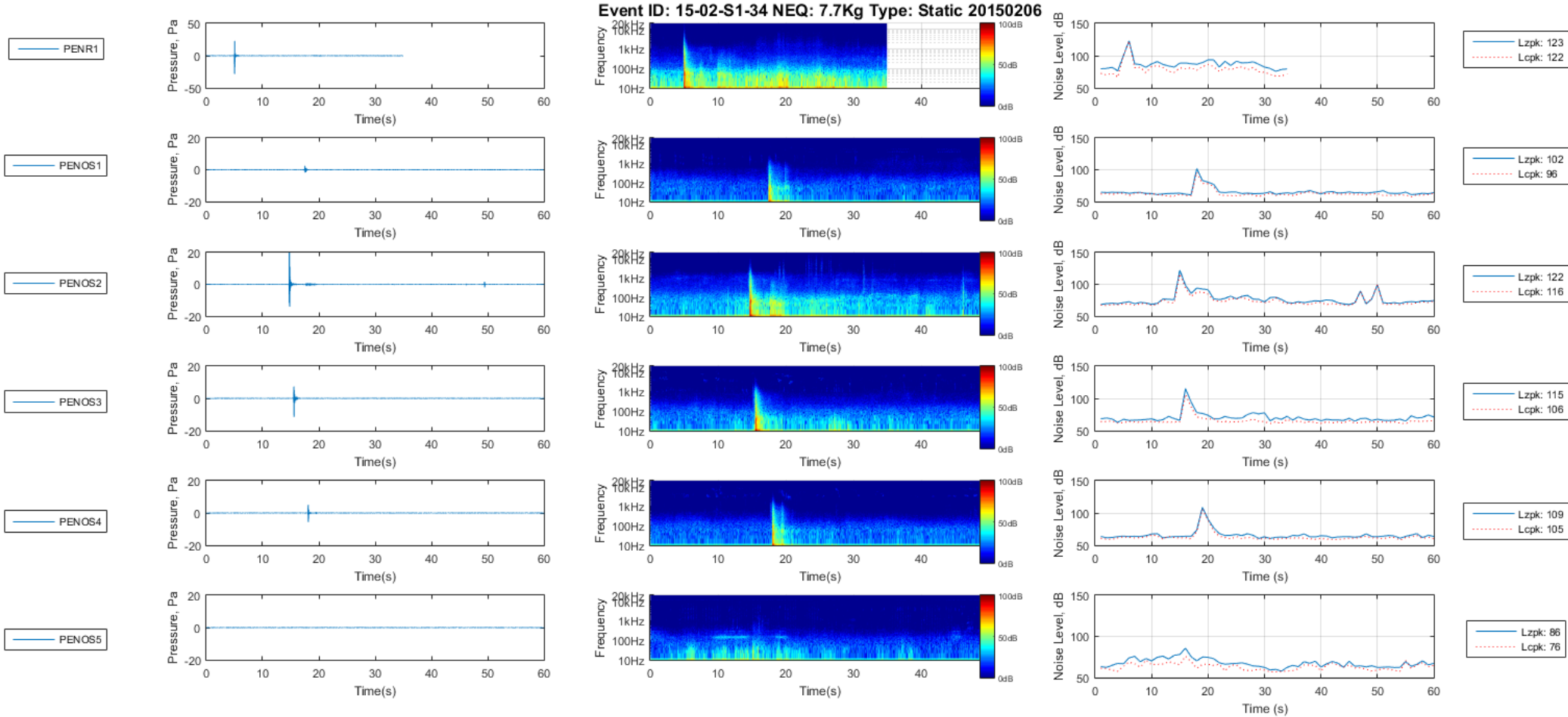
**FIGURE 2.414: COHERENCE PEN\_OS 6 - 10 15-02-S1-30 & S2-50CTD**

**Event ID: 15-02-S1-30 & S2-50 NEQ: 7.7Kg Type: Static 20150205**



**FIGURE 2.415: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S1-30 & S2-50**





**FIGURE 2.416: PEN\_OS 1 - 5 15-02-S1-34**

Event ID: 15-02-S1-34 NEQ: 7.7Kg Type: Static 20150206 CTD

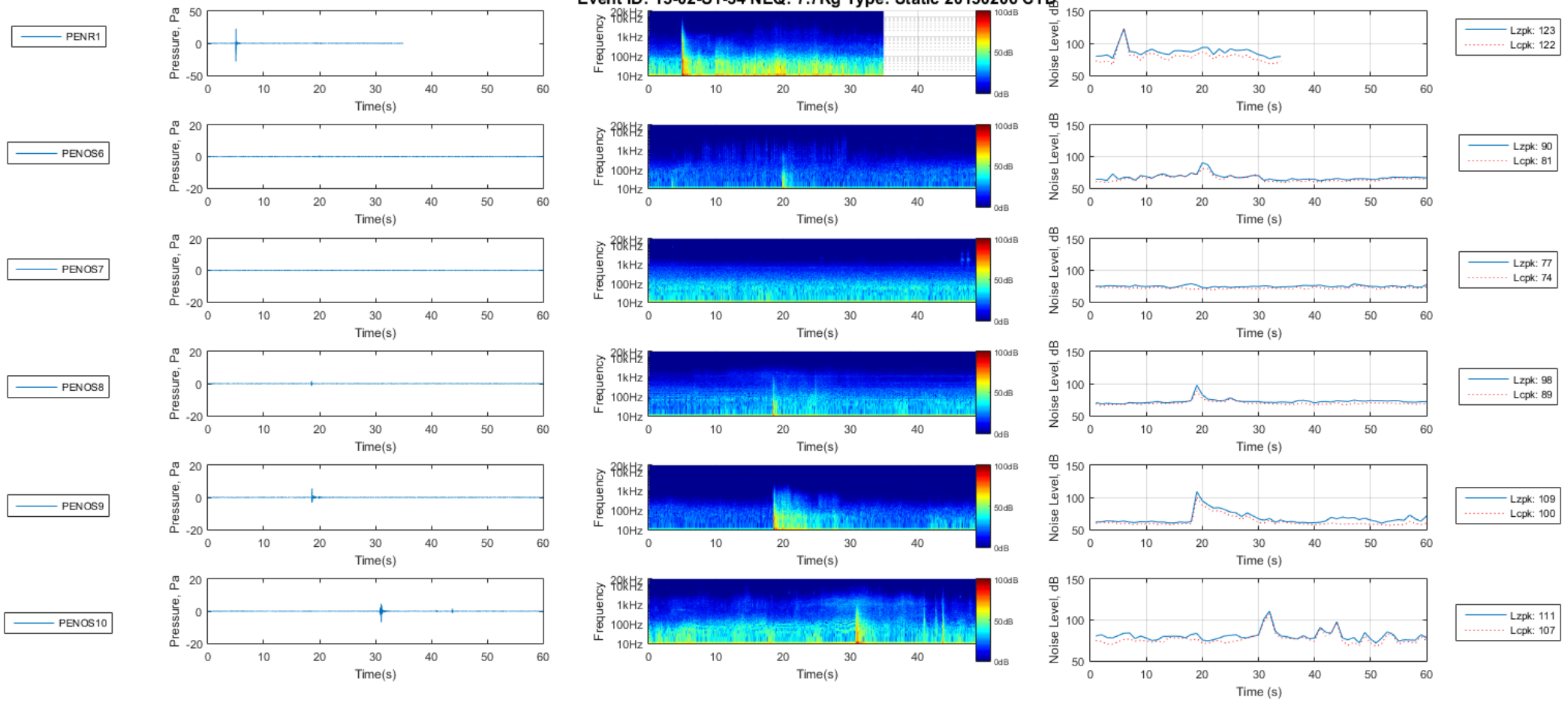


FIGURE 2.417: PEN\_OS 6 - 10 15-02-S1-34

Event ID: 15-02-S1-34 NEQ: 7.7Kg Type: Static 20150206

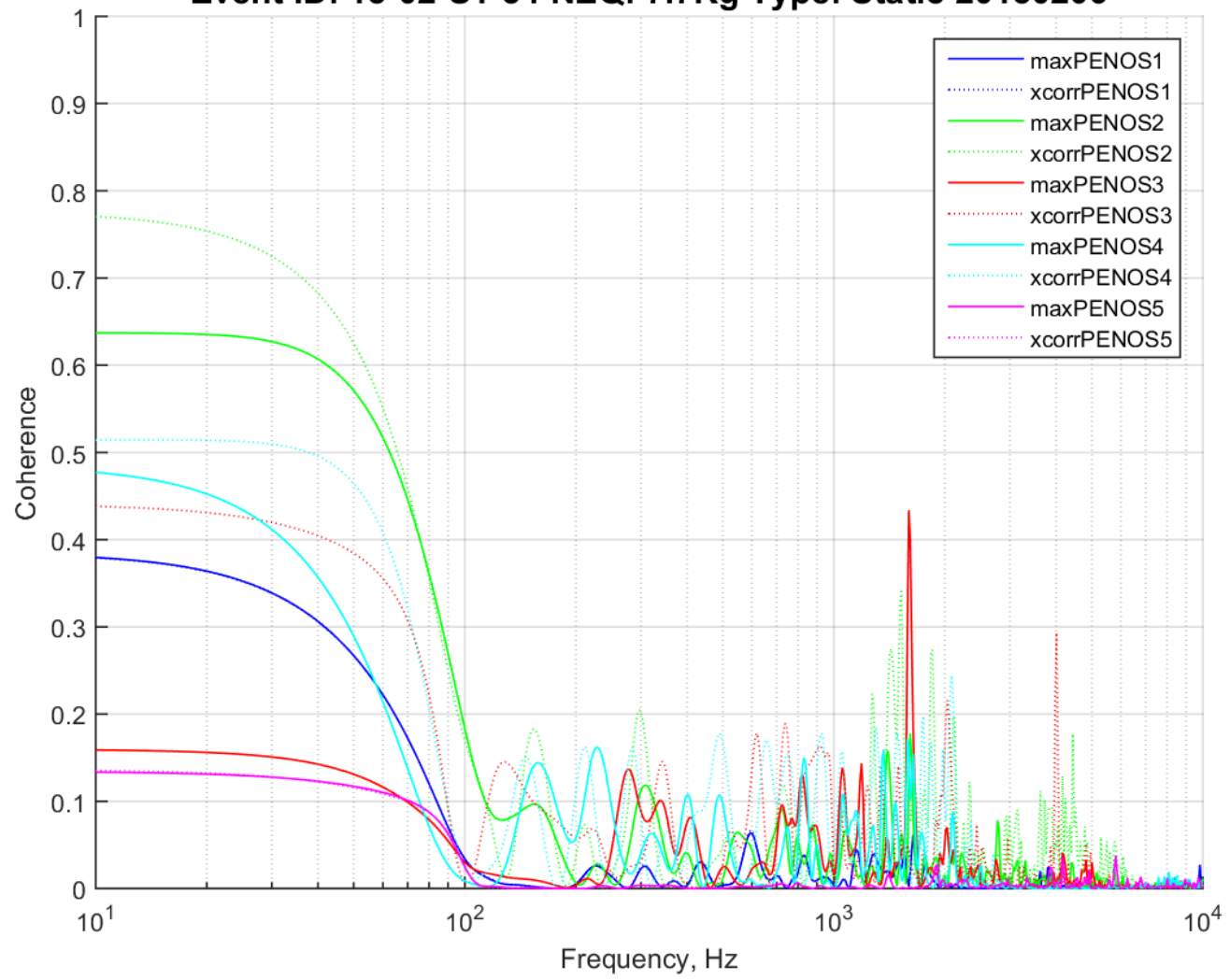


FIGURE 2.418: COHERENCE PEN\_OS 1 - 5 15-02-S1-34

Event ID: 15-02-S1-34 NEQ: 7.7Kg Type: Static 20150206

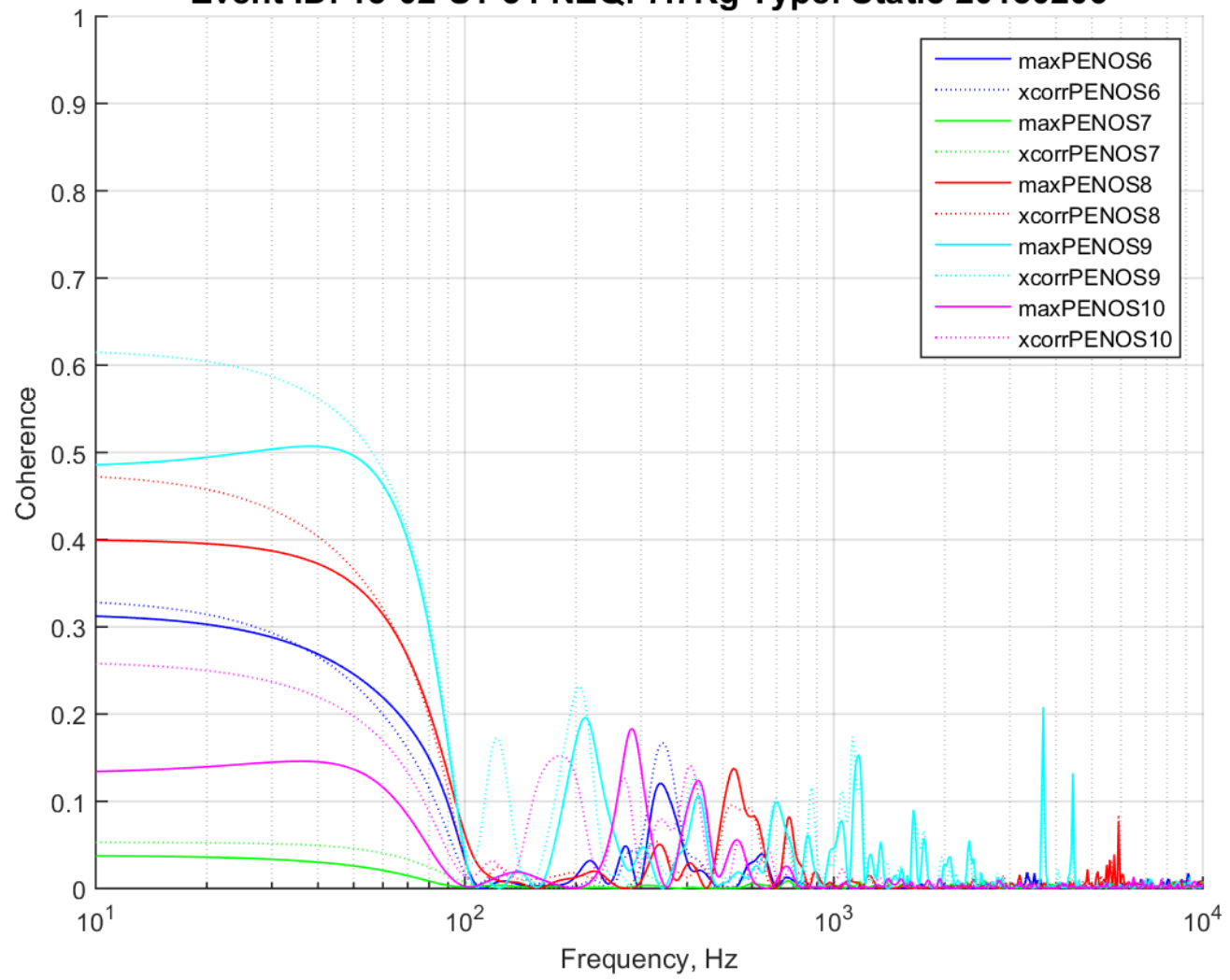
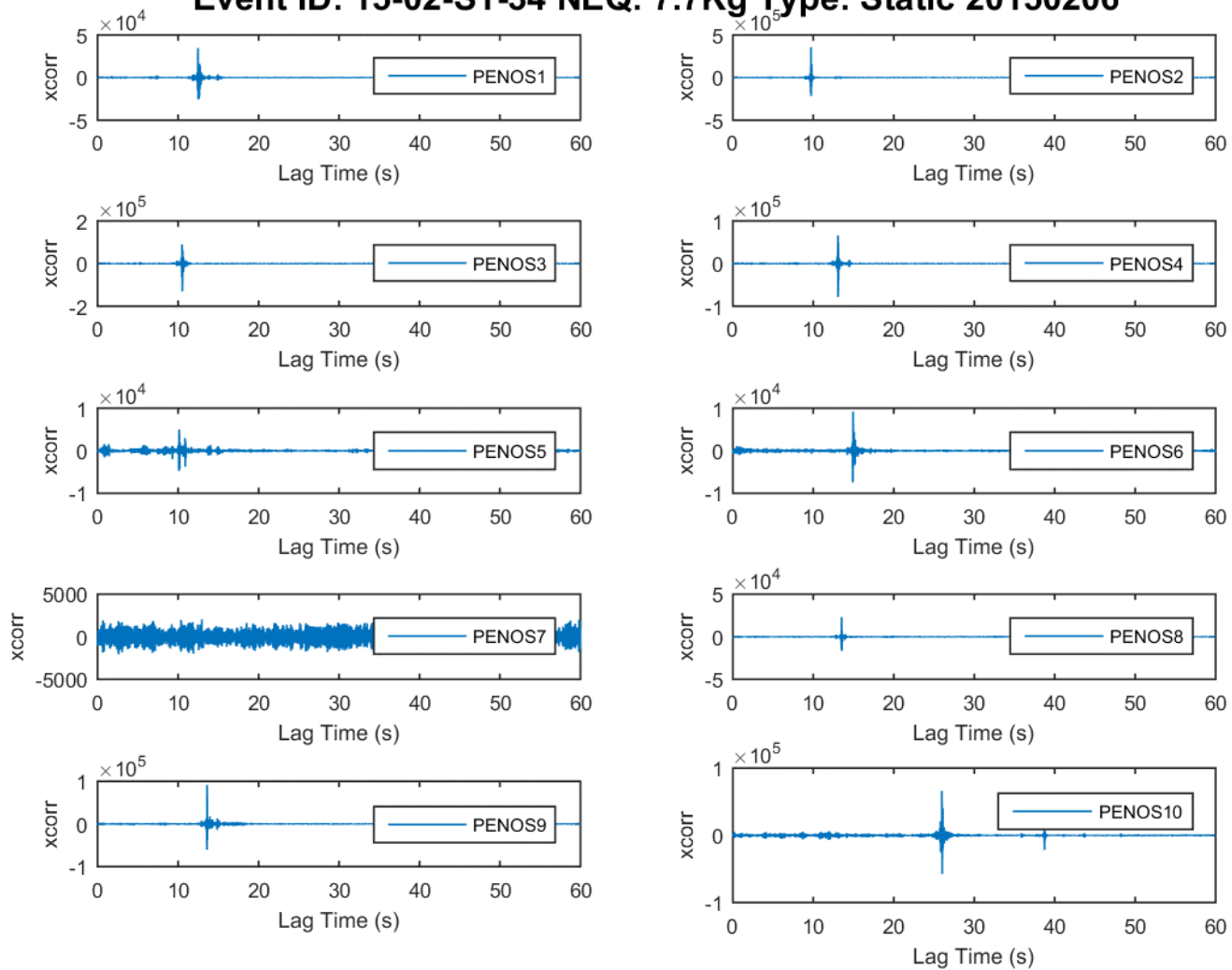


FIGURE 2.419: COHERENCE PEN\_OS 6 - 10 15-02-S1-34CTD

**Event ID: 15-02-S1-34 NEQ: 7.7Kg Type: Static 20150206**



**FIGURE 2.420: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S1-34**

Event ID: 15-02-S1-34 NEQ: 7.7Kg Type: Static 20150206

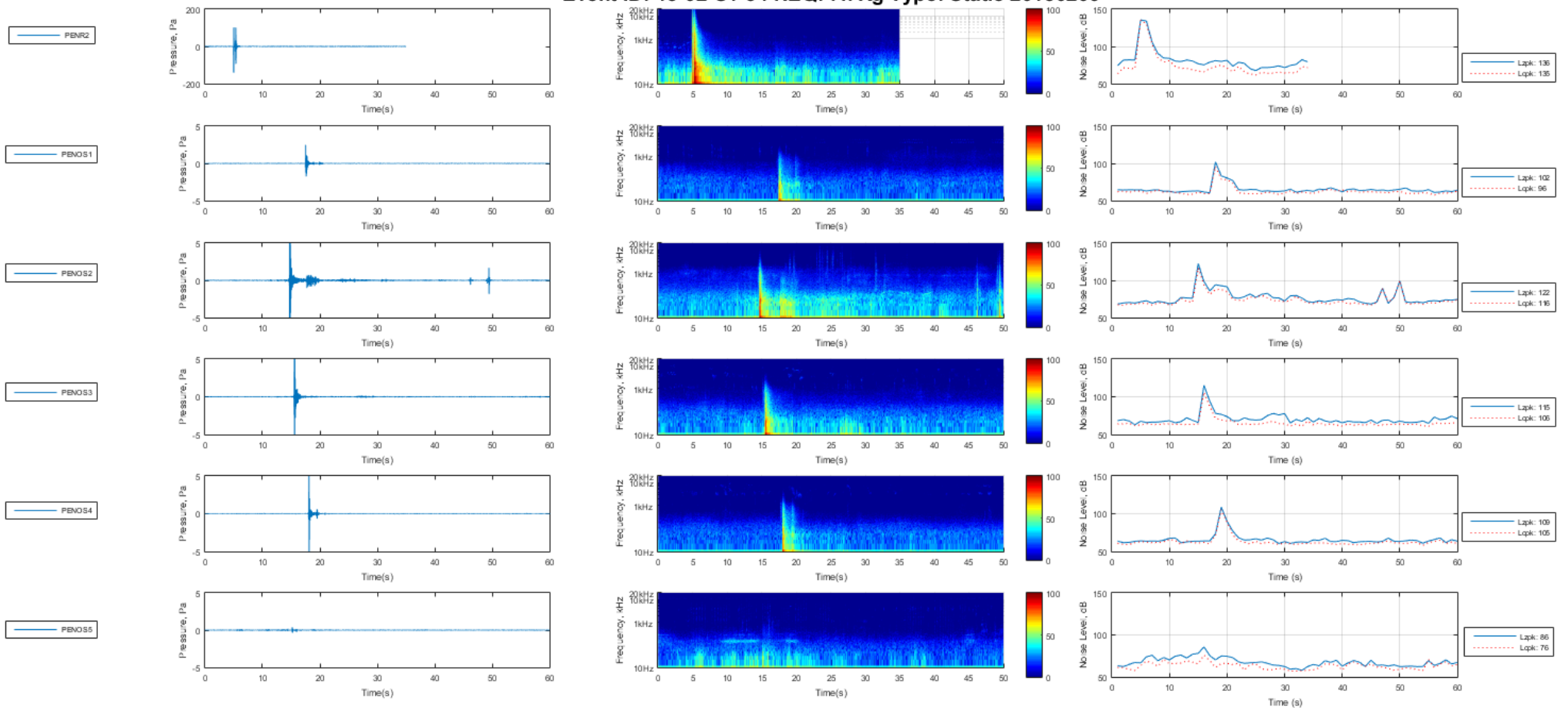


FIGURE 2.421: PEN\_OS 1 - 5 15-02-S1-34

Event ID: 15-02-S1-34 NEQ: 7.7Kg Type: Static 20150206 CTD

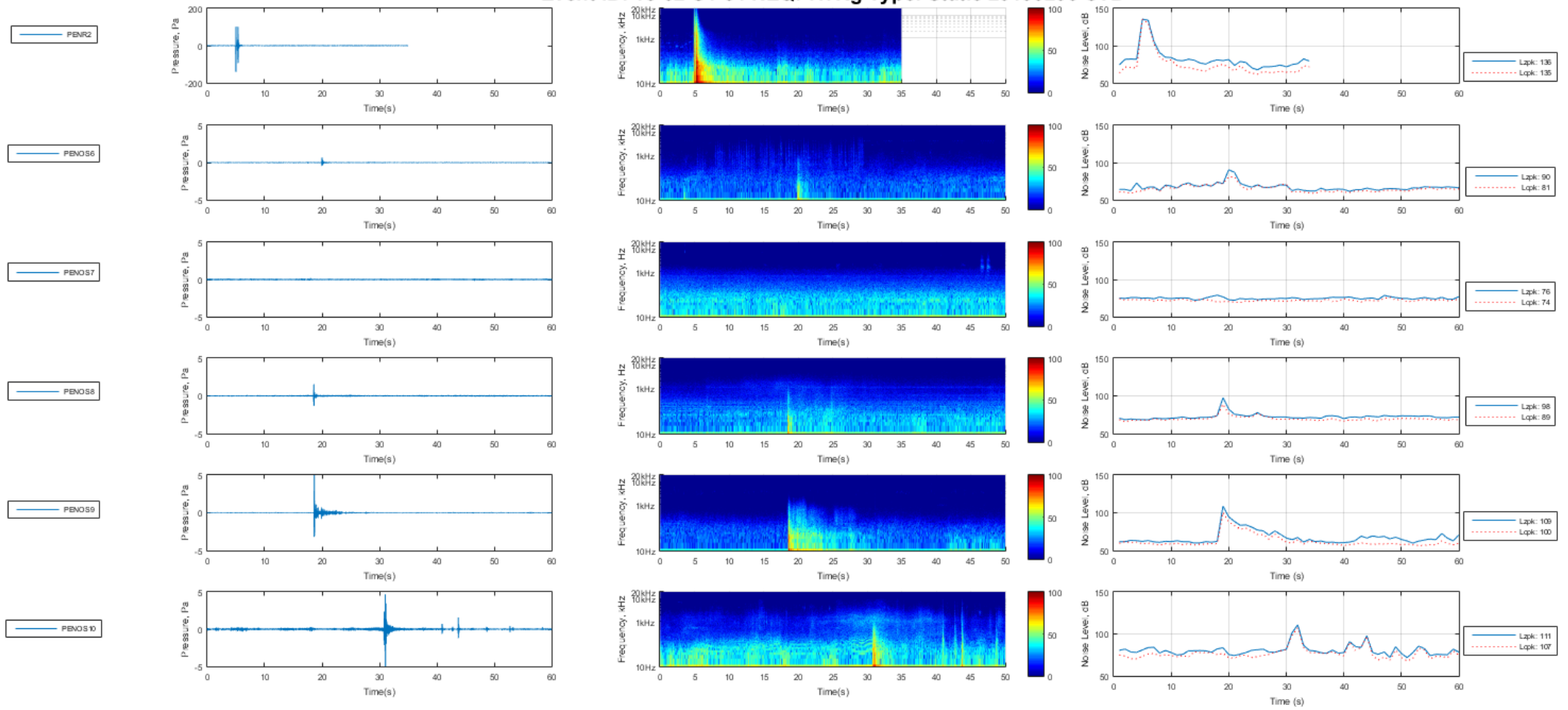


FIGURE 2.422: PEN\_OS 6 - 10 15-02-S1-34

Event ID: 15-02-S1-34 NEQ: 7.7Kg Type: Static 20150206

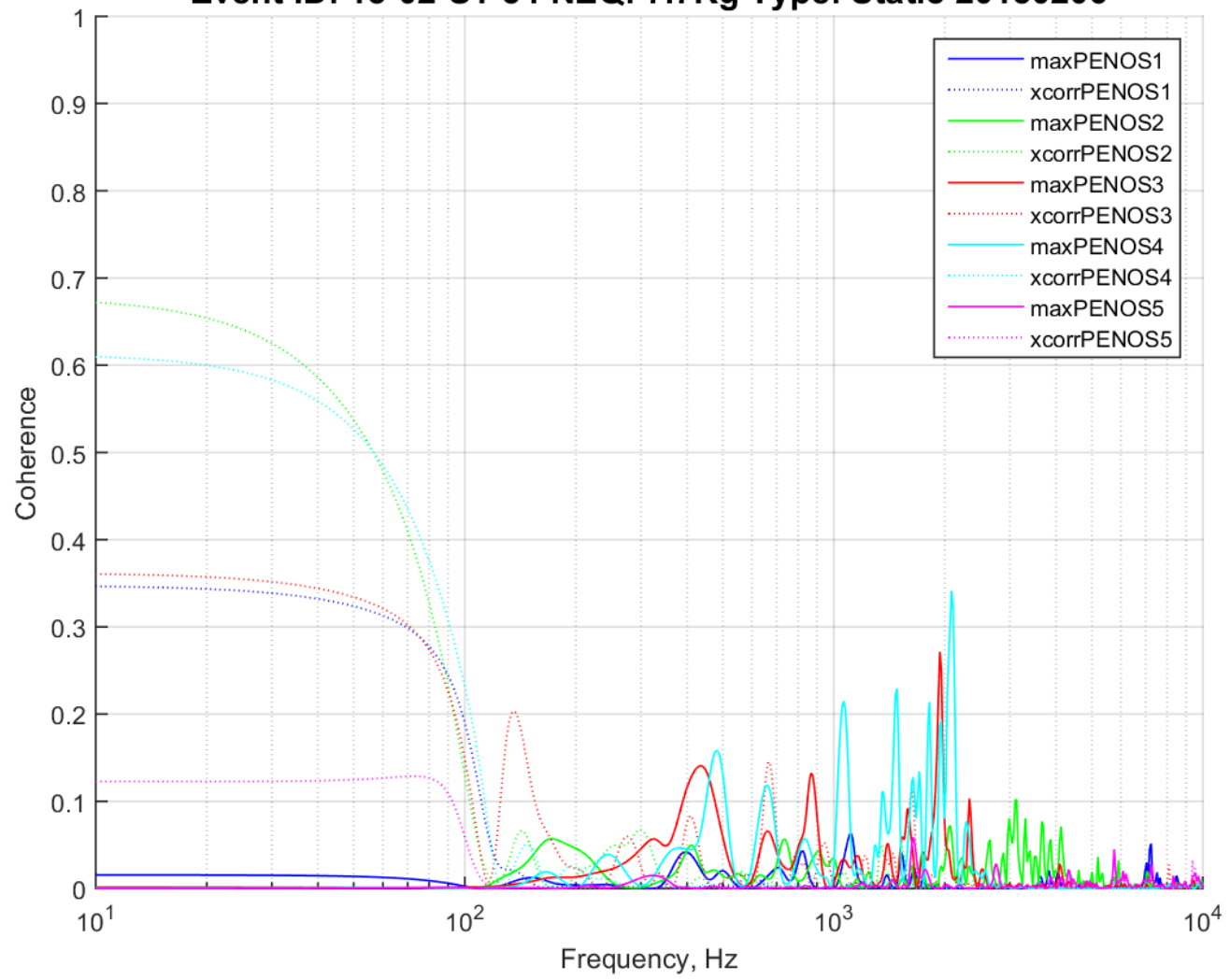


FIGURE 2.423: COHERENCE PEN\_OS 1 - 5 15-02-S1-34



Event ID: 15-02-S1-34 NEQ: 7.7Kg Type: Static 20150206

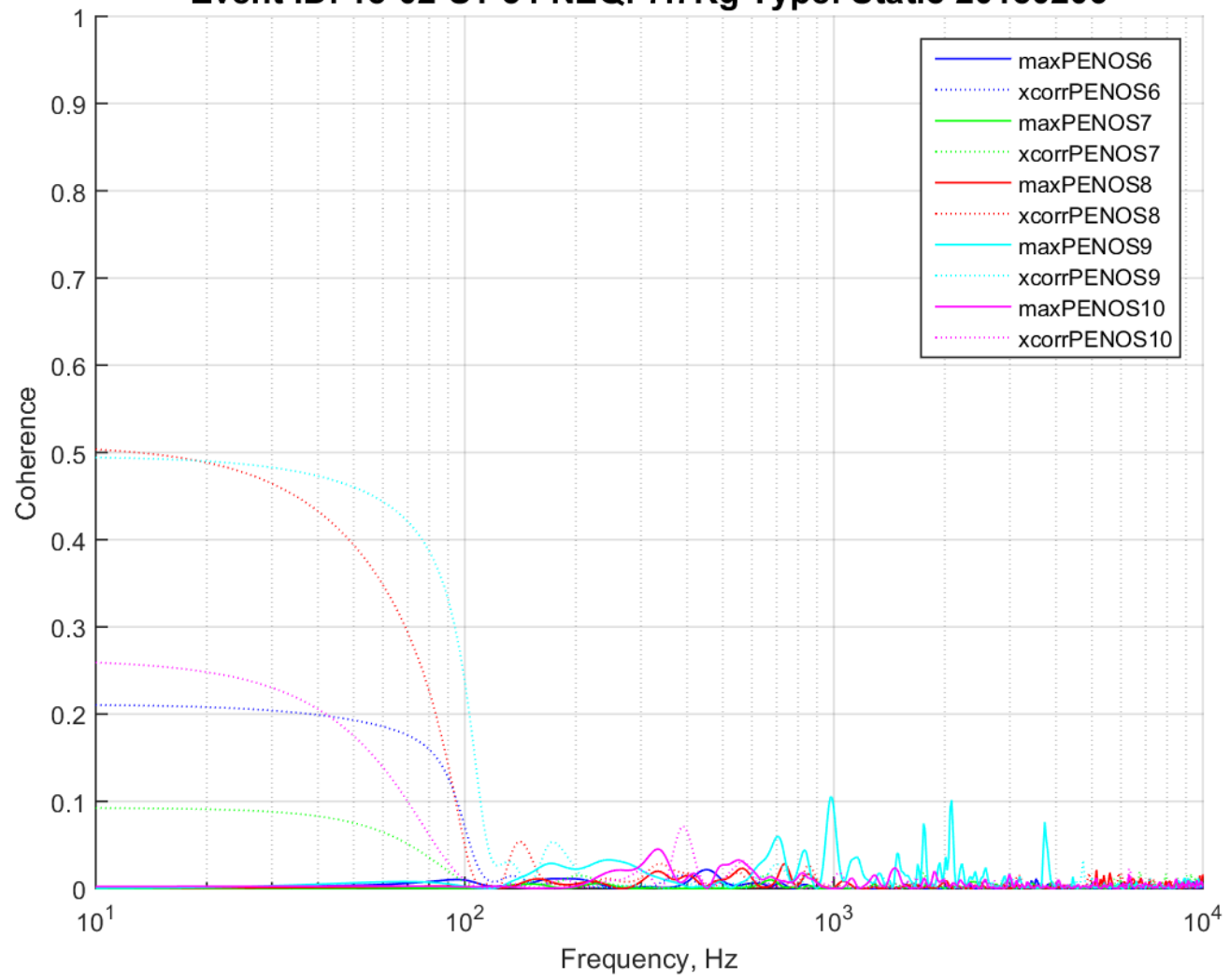
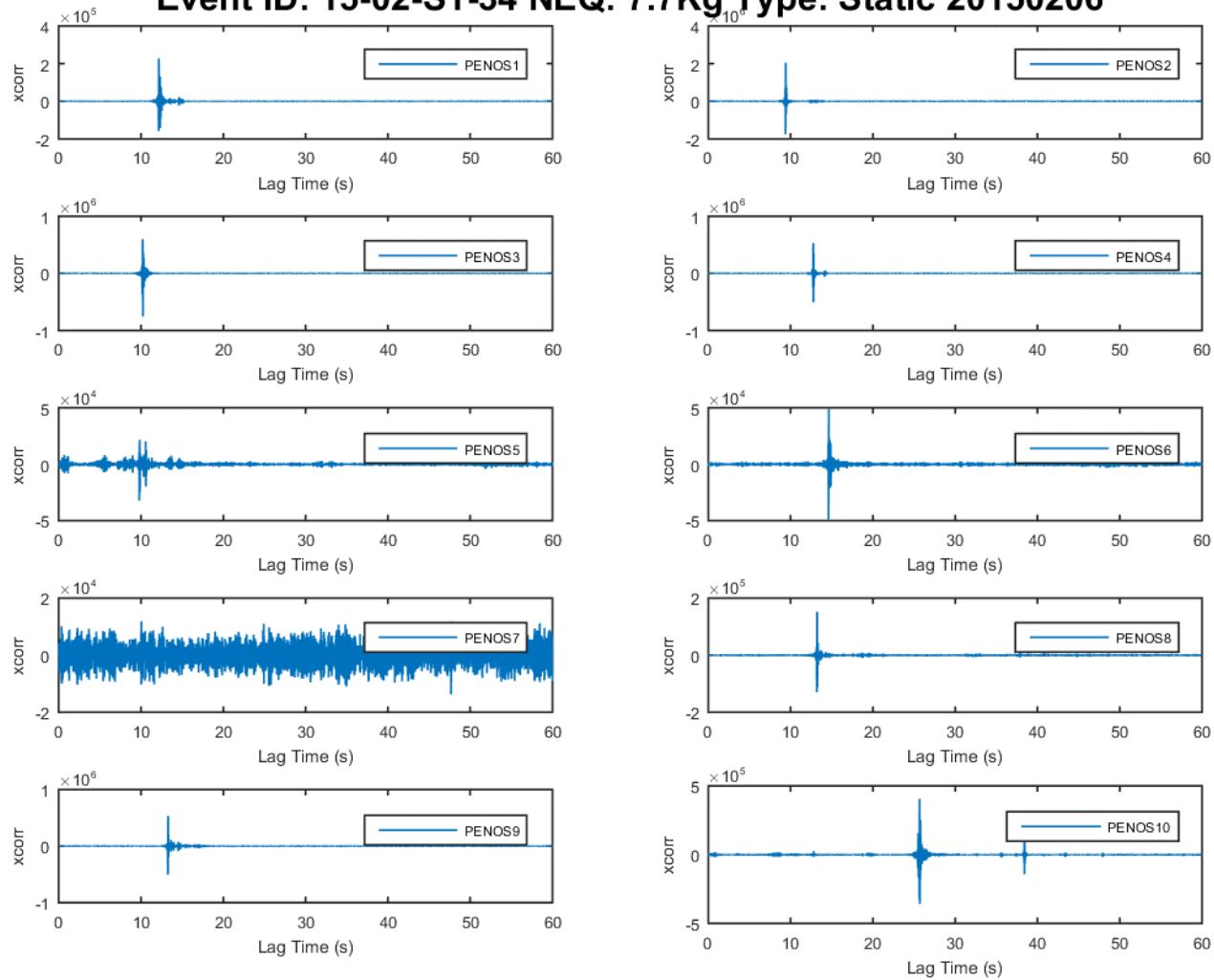
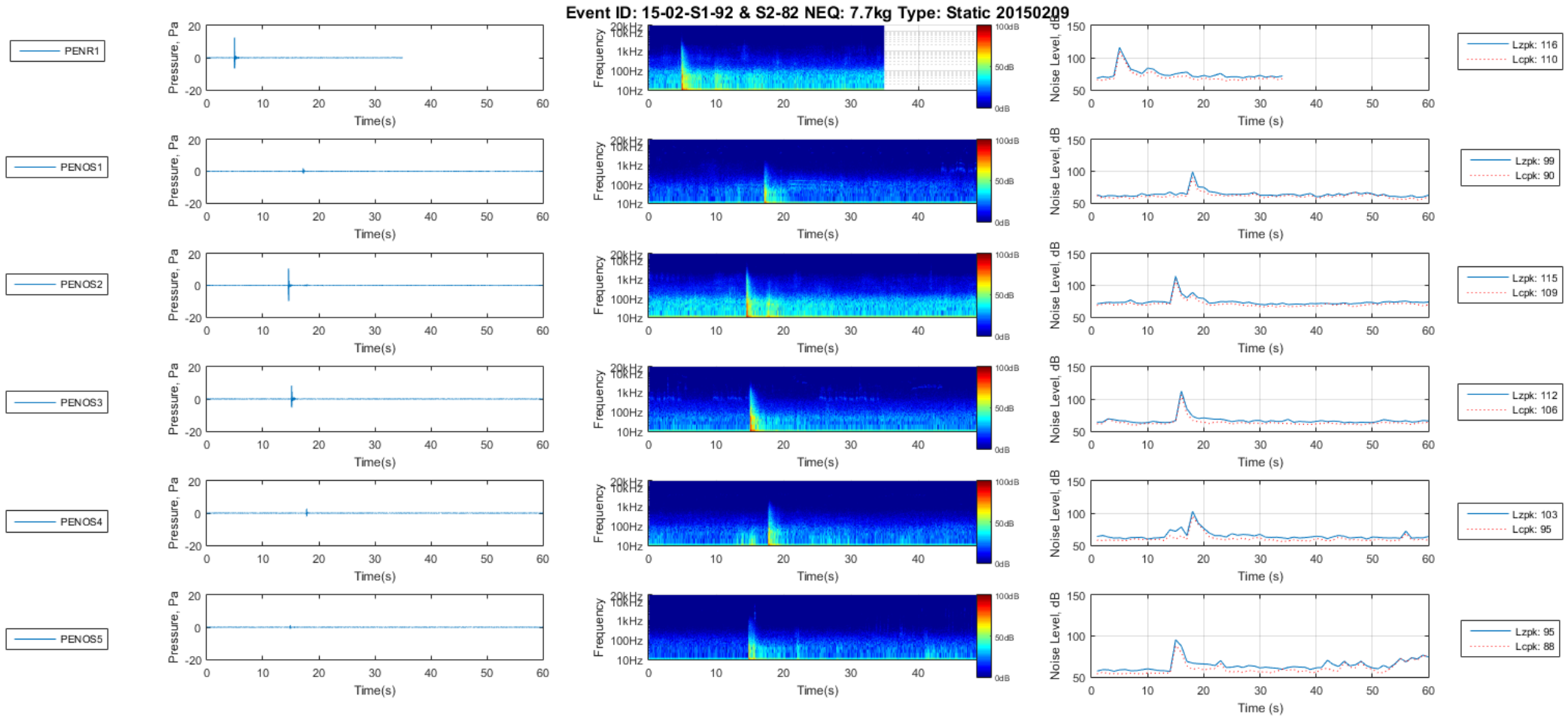


FIGURE 2.424: COHERENCE PEN\_OS 6 - 10 15-02-S1-34CTD

**Event ID: 15-02-S1-34 NEQ: 7.7Kg Type: Static 20150206**



**FIGURE 2.425: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S1-34**



**FIGURE 2.426: PEN\_OS 1 - 5 15-02-S1-92 & S2-82**

Event ID: 15-02-S1-92 & S2-82 NEQ: 7.7kg Type: Static 20150209.CTD

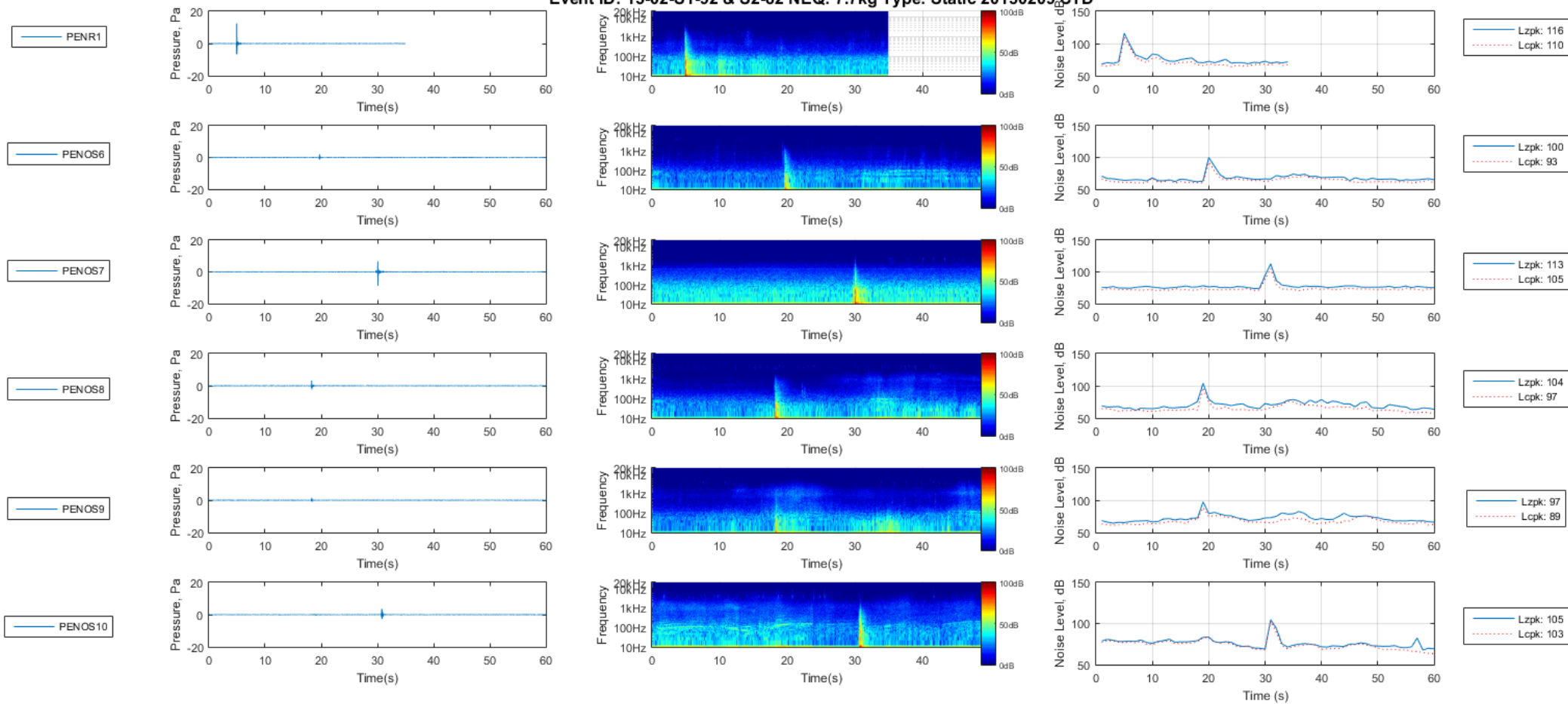


FIGURE 2.427: PEN\_OS 6 - 10 15-02-S1-92 & S2-82

Event ID: 15-02-S1-92 & S2-82 NEQ: 7.7kg Type: Static 20150209

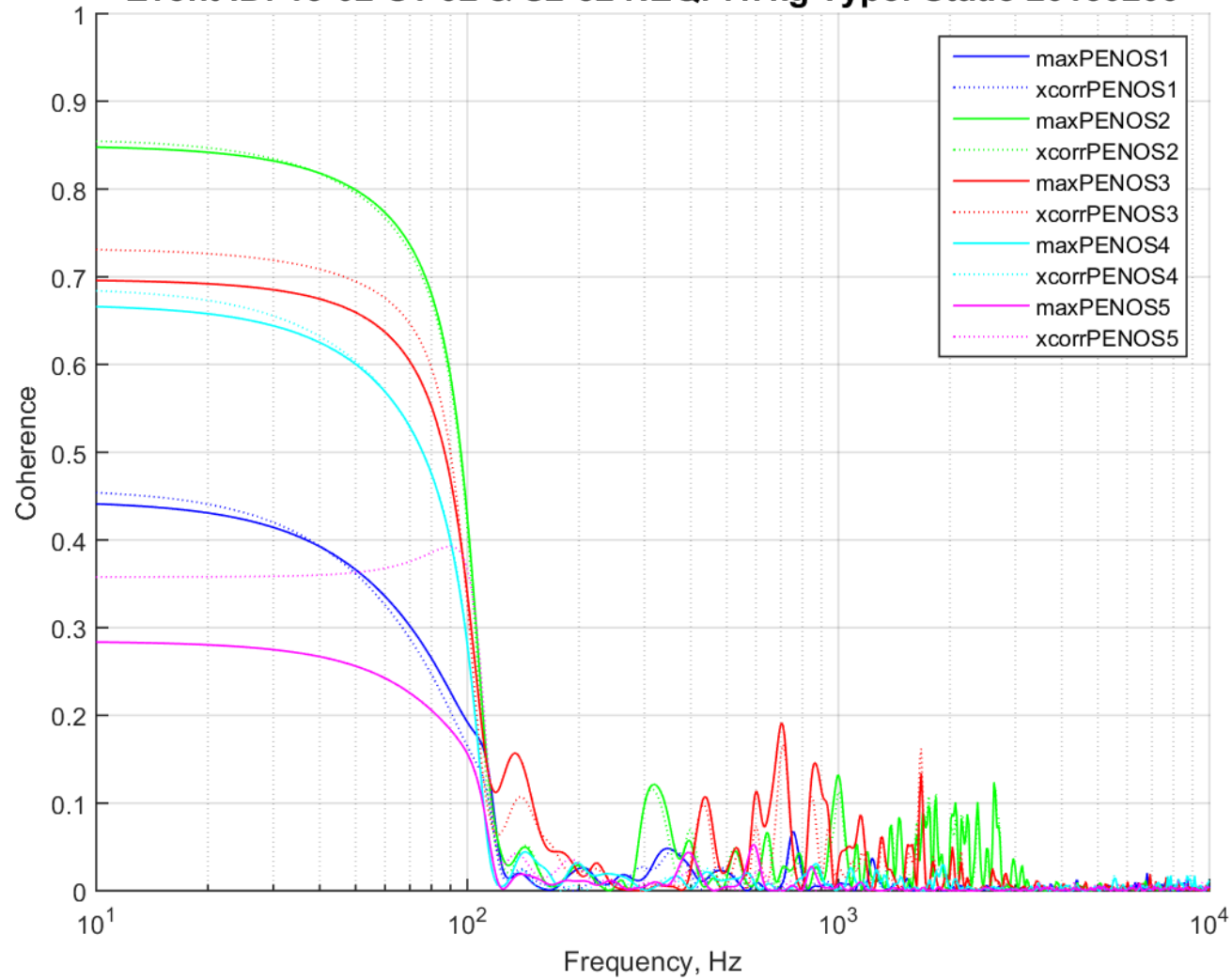


FIGURE 2.428: COHERENCE PEN\_OS 1 - 5 15-02-S1-92 & S2-82

Event ID: 15-02-S1-92 & S2-82 NEQ: 7.7kg Type: Static 20150209

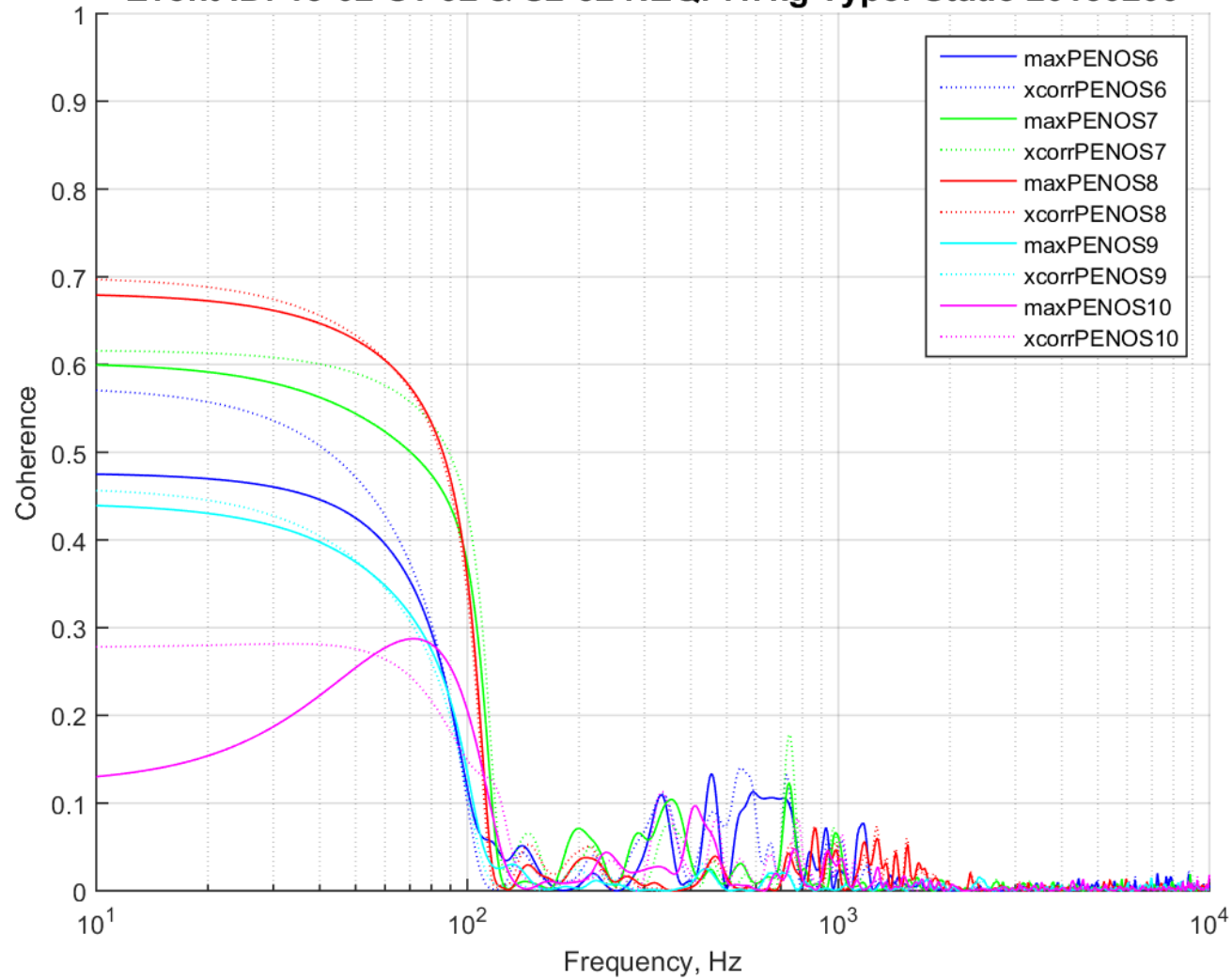
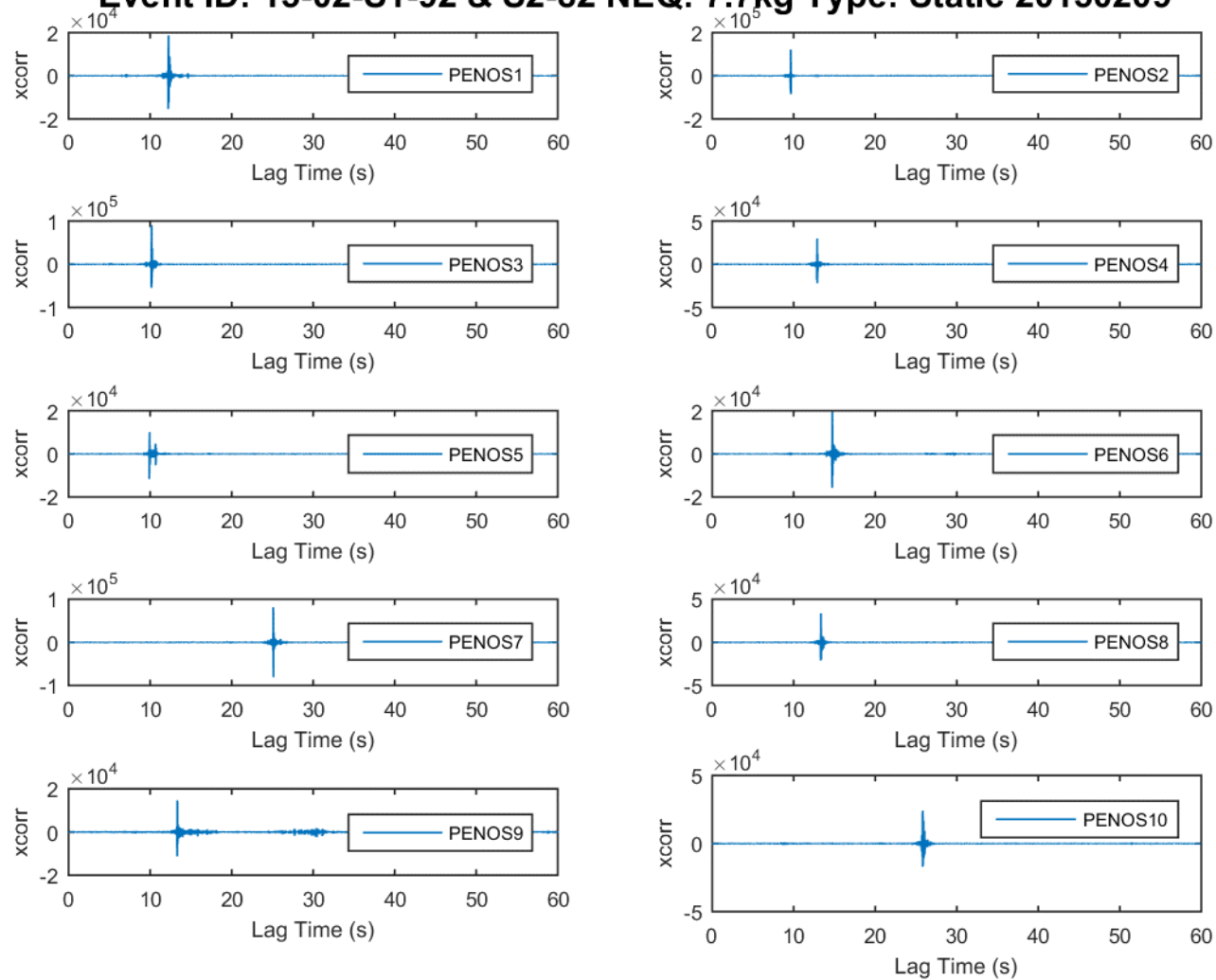


FIGURE 2.429: COHERENCE PEN\_OS 6 - 10 15-02-S1-92 & S2-82CTD

**Event ID: 15-02-S1-92 & S2-82 NEQ: 7.7kg Type: Static 20150209**



**FIGURE 2.430: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S1-92 & S2-82**

Event ID: 15-02-S1-92 & S2-82 NEQ: 7.7kg Type: Static 20150209

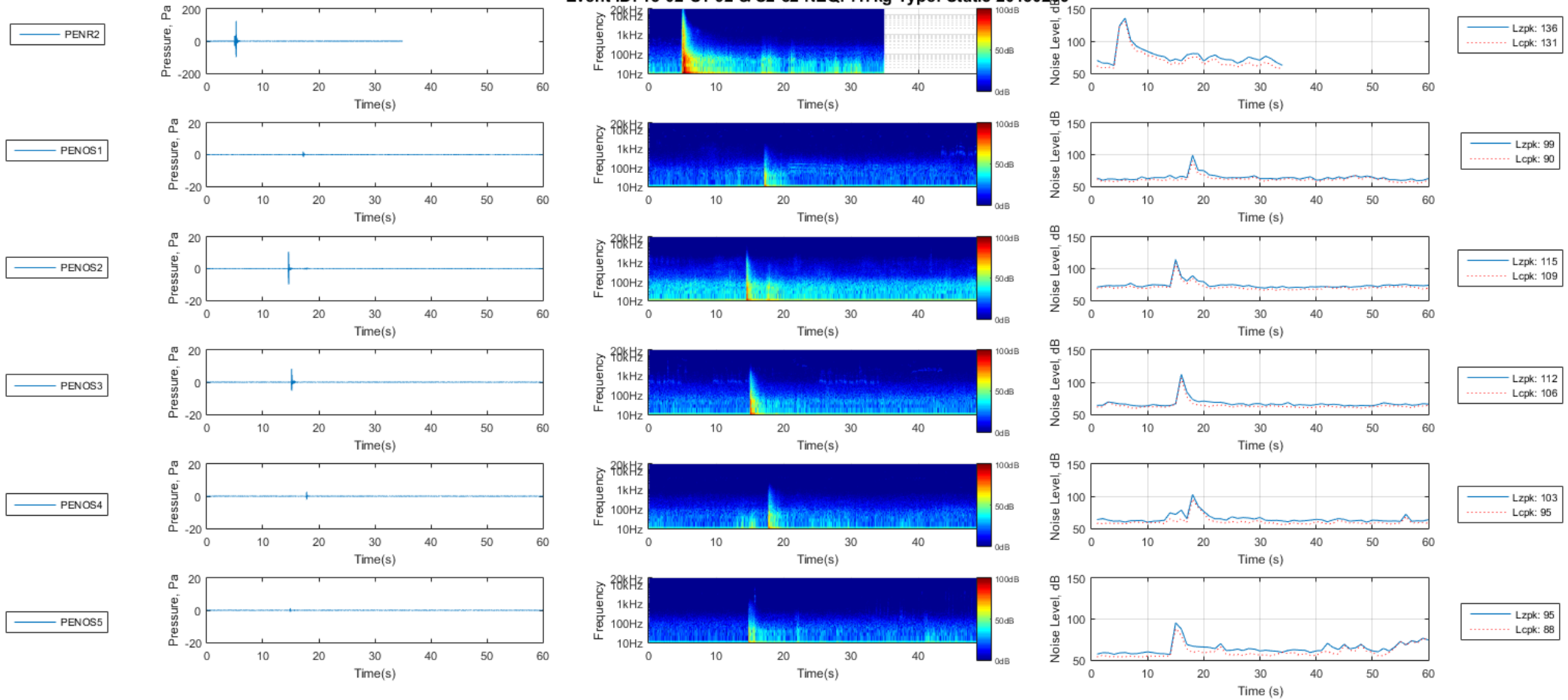


FIGURE 2.431: PEN\_OS 1 - 5 15-02-S1-92 & S2-82



Event ID: 15-02-S1-92 & S2-82 NEQ: 7.7kg Type: Static 20150209.CTD

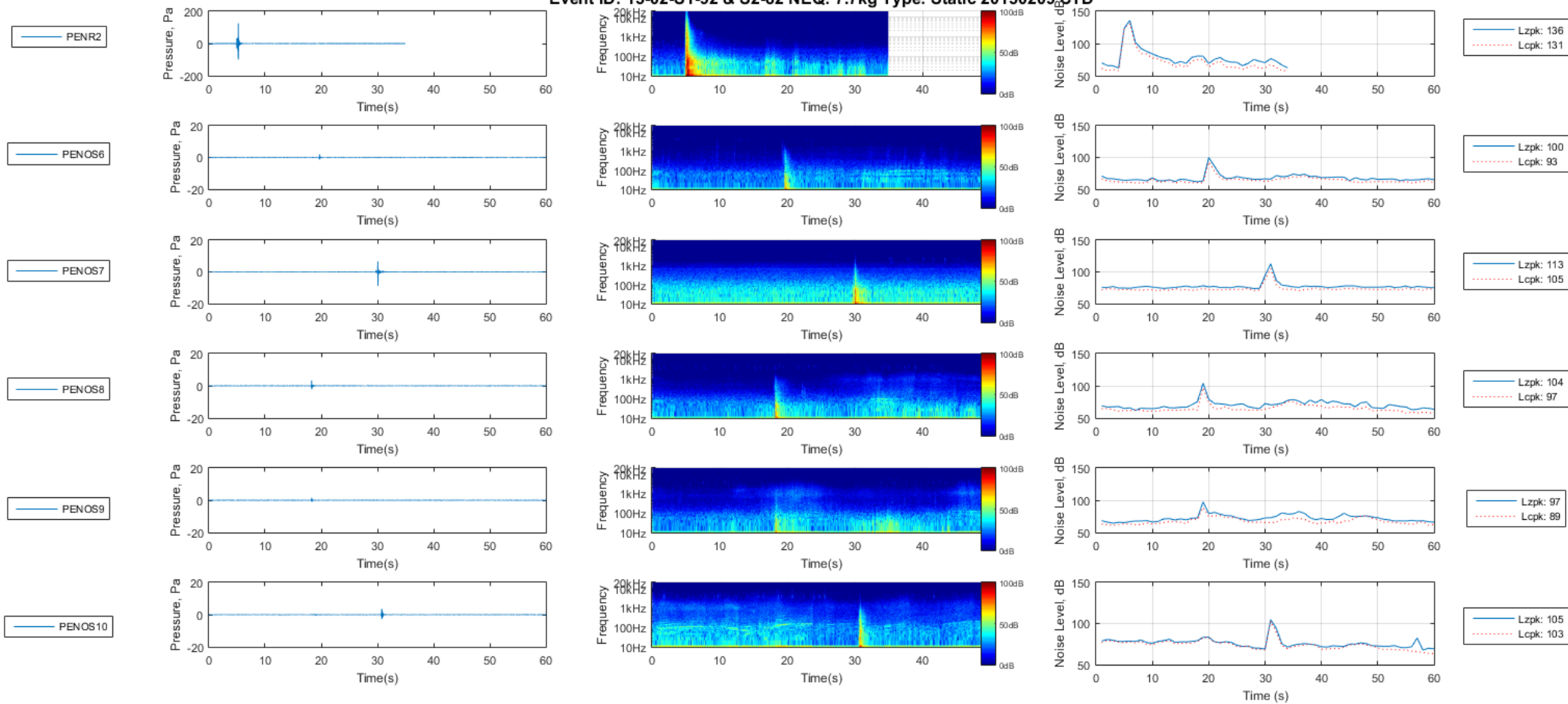
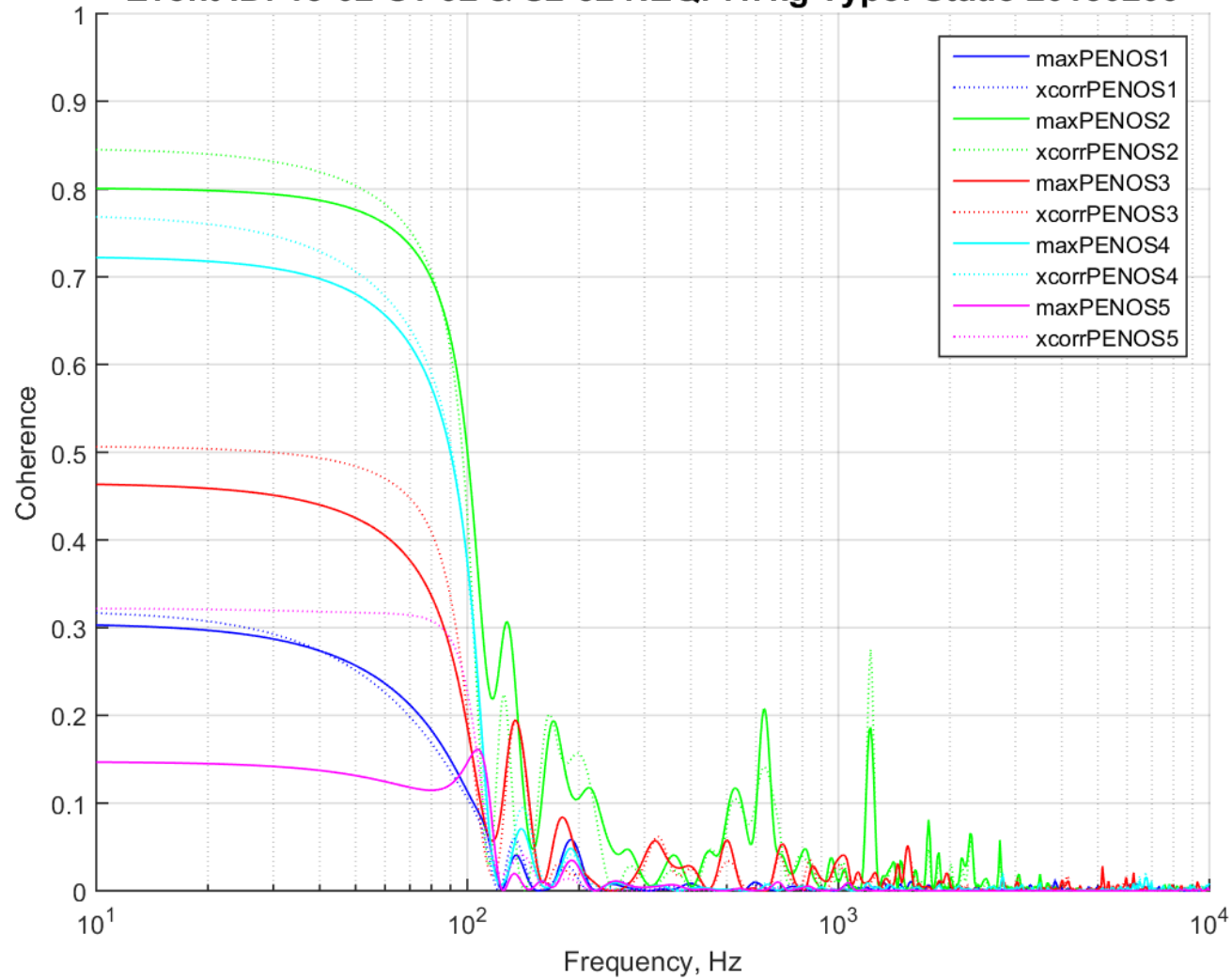


FIGURE 2.432: PEN\_OS 6 - 10 15-02-S1-92 & S2-82

**Event ID: 15-02-S1-92 & S2-82 NEQ: 7.7kg Type: Static 20150209**



**FIGURE 2.433: COHERENCE PEN\_OS 1 - 5 15-02-S1-92 & S2-82**

Event ID: 15-02-S1-92 & S2-82 NEQ: 7.7kg Type: Static 20150209

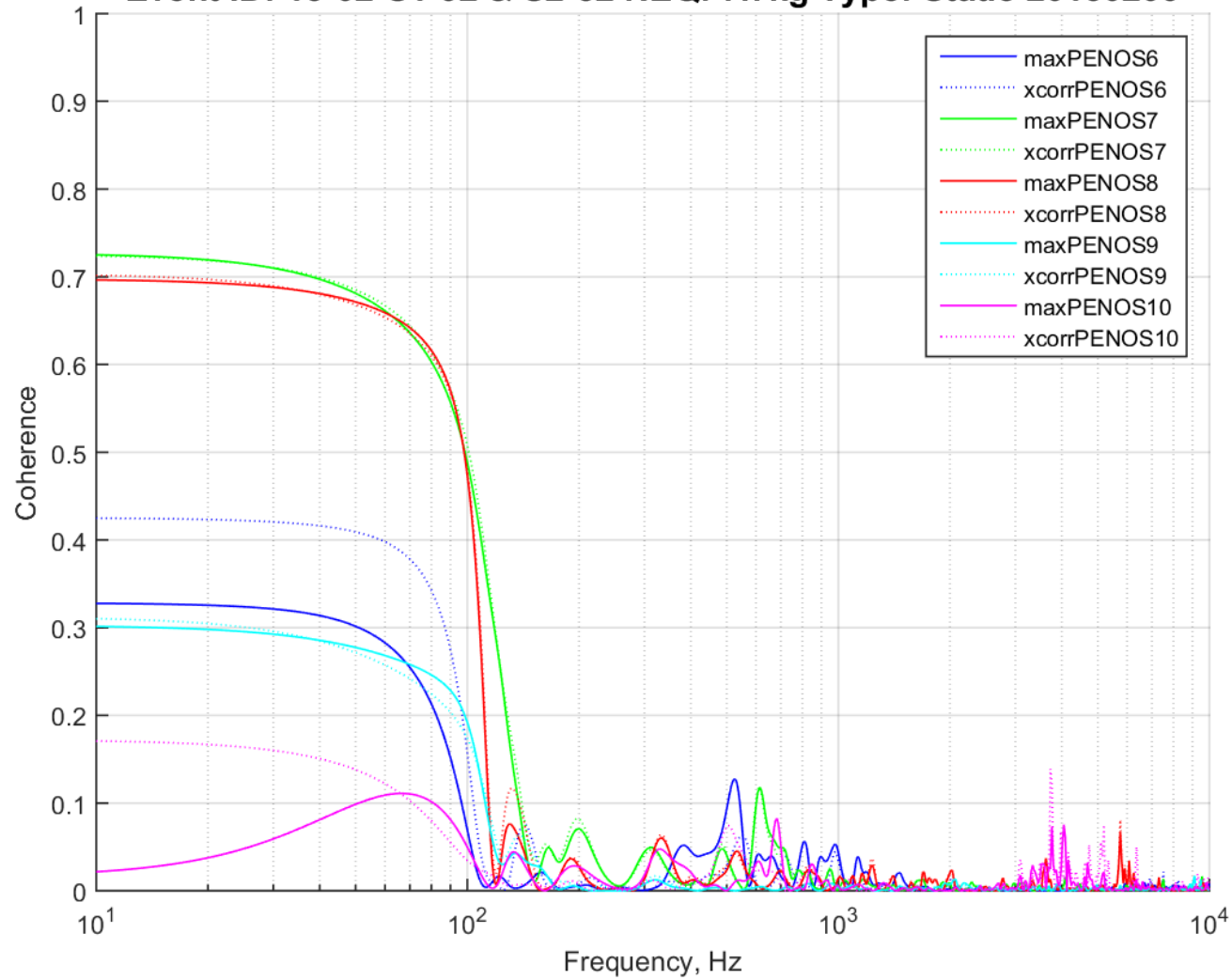
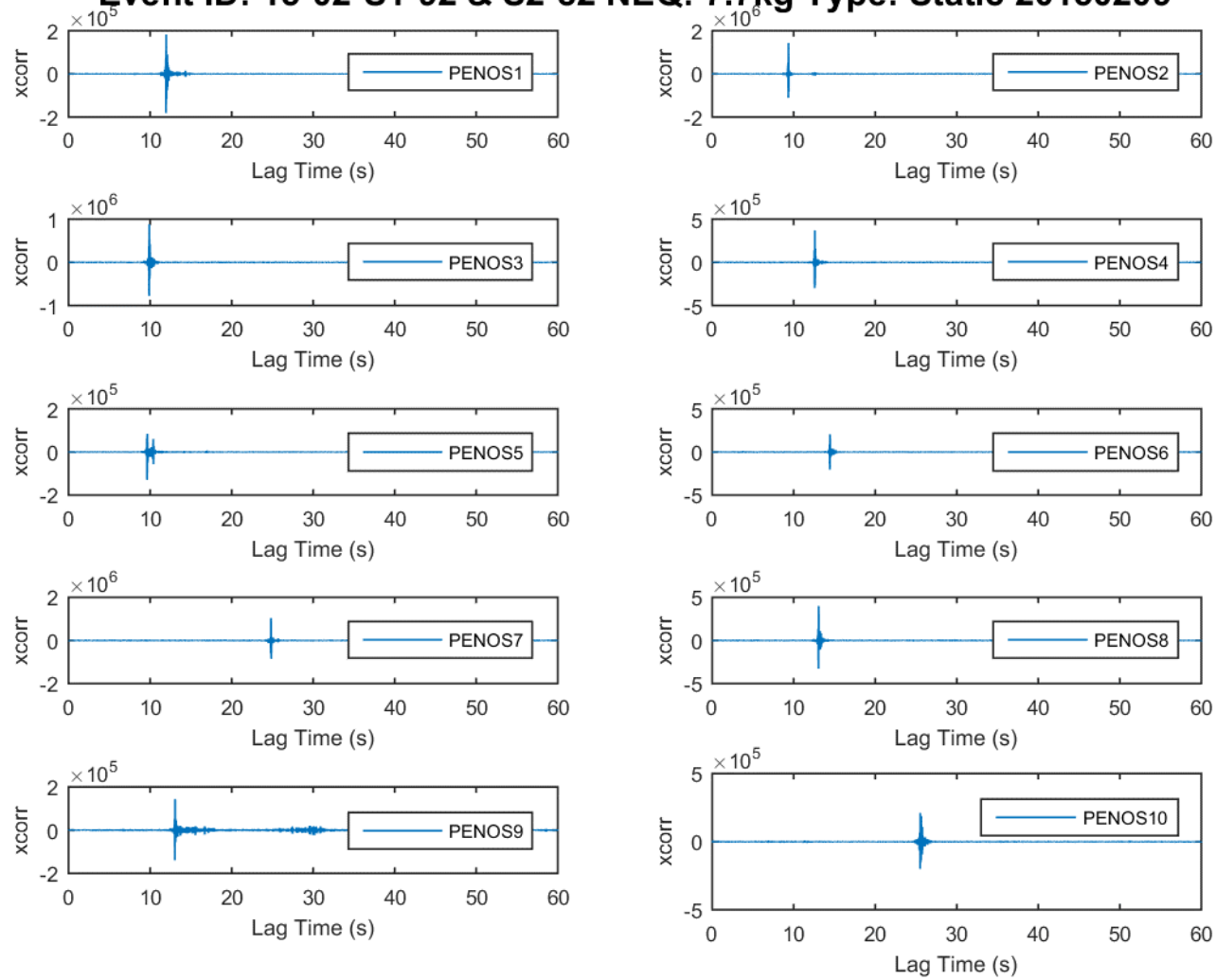


FIGURE 2.434: COHERENCE PEN\_OS 6 - 10 15-02-S1-92 & S2-82CTD

**Event ID: 15-02-S1-92 & S2-82 NEQ: 7.7kg Type: Static 20150209**



**FIGURE 2.435: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S1-92 & S2-82**

Event ID: 15-02-S1-99 & S2-88 NEQ: 7.7kg Type: Static 20150210

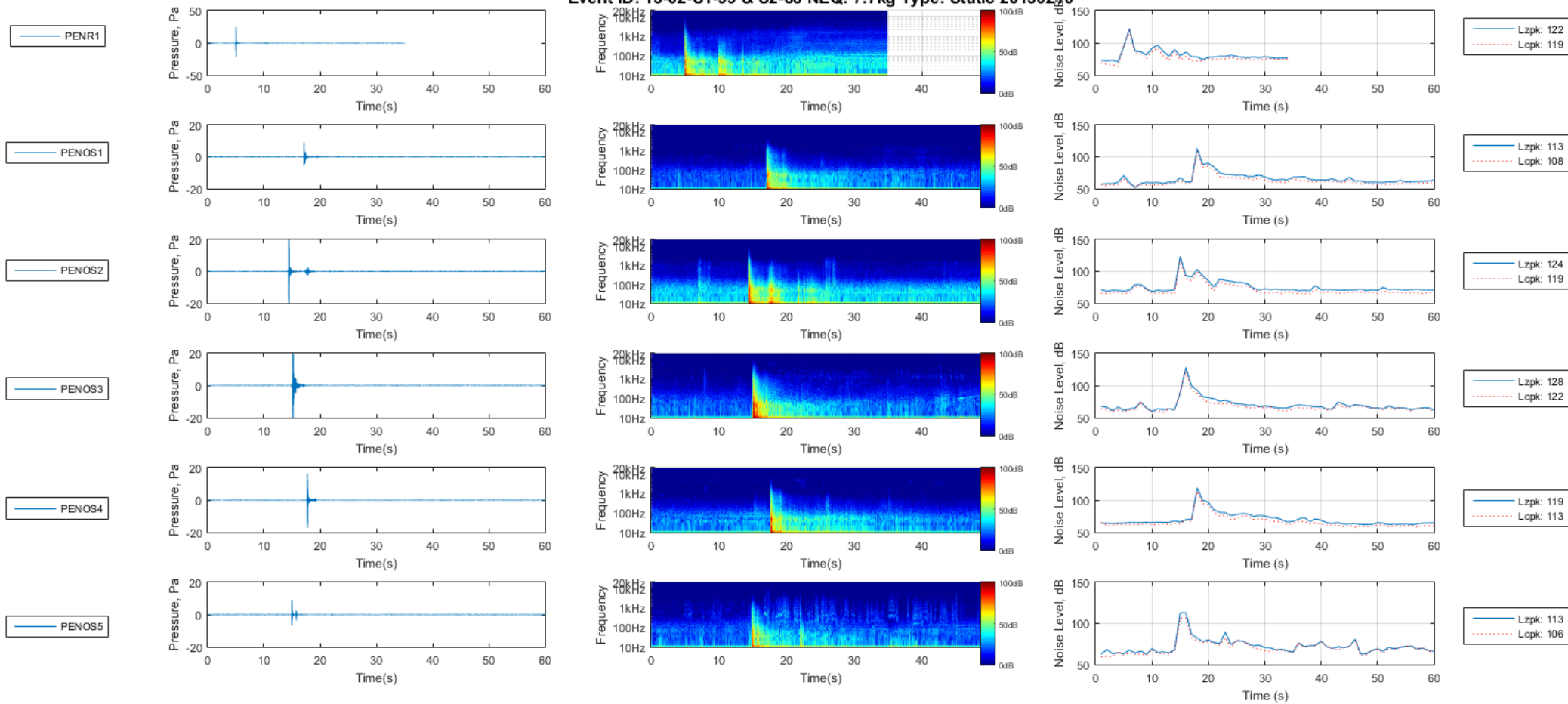


FIGURE 2.436: PEN\_OS 1 - 5 15-02-S1-99 & S2-88

Event ID: 15-02-S1-99 & S2-88 NEQ: 7.7kg Type: Static 20150210.CTD

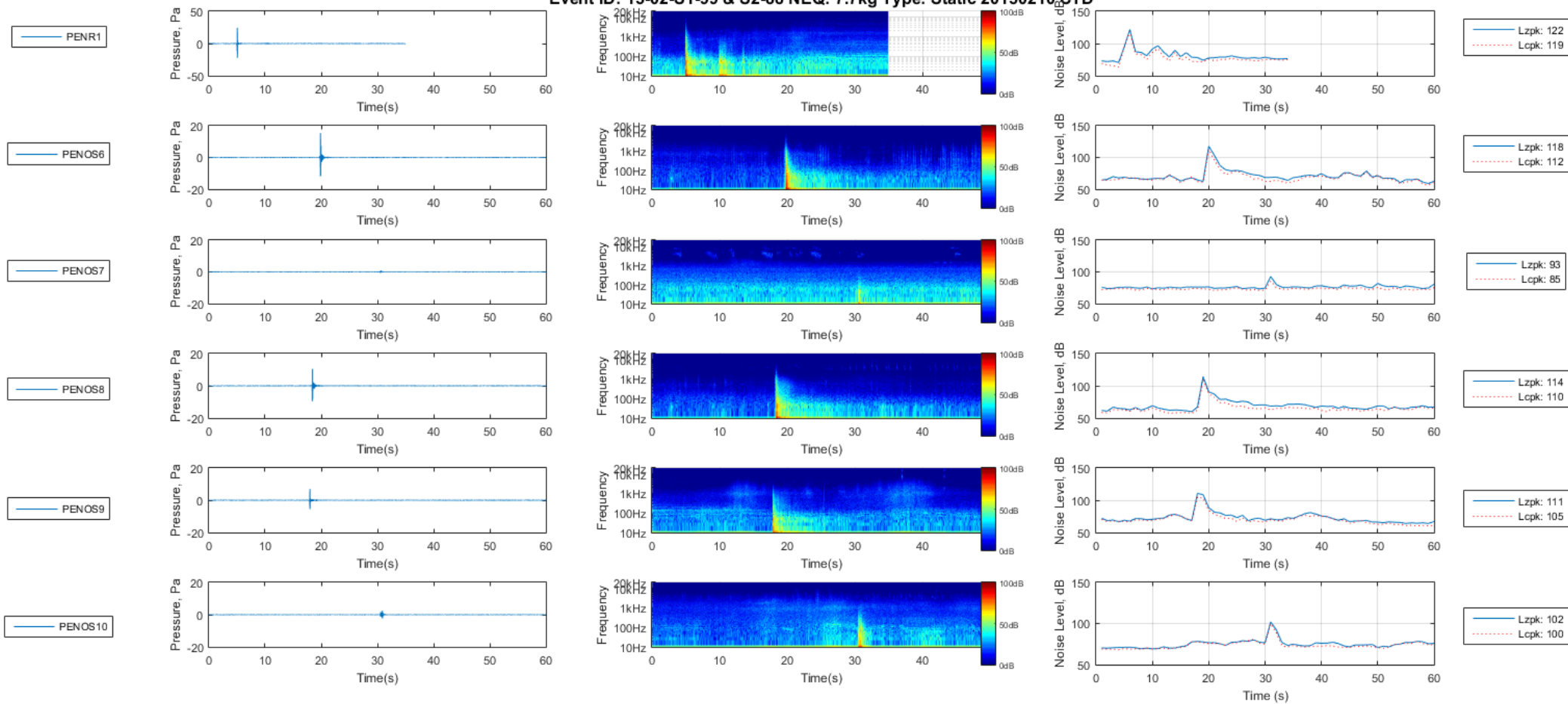
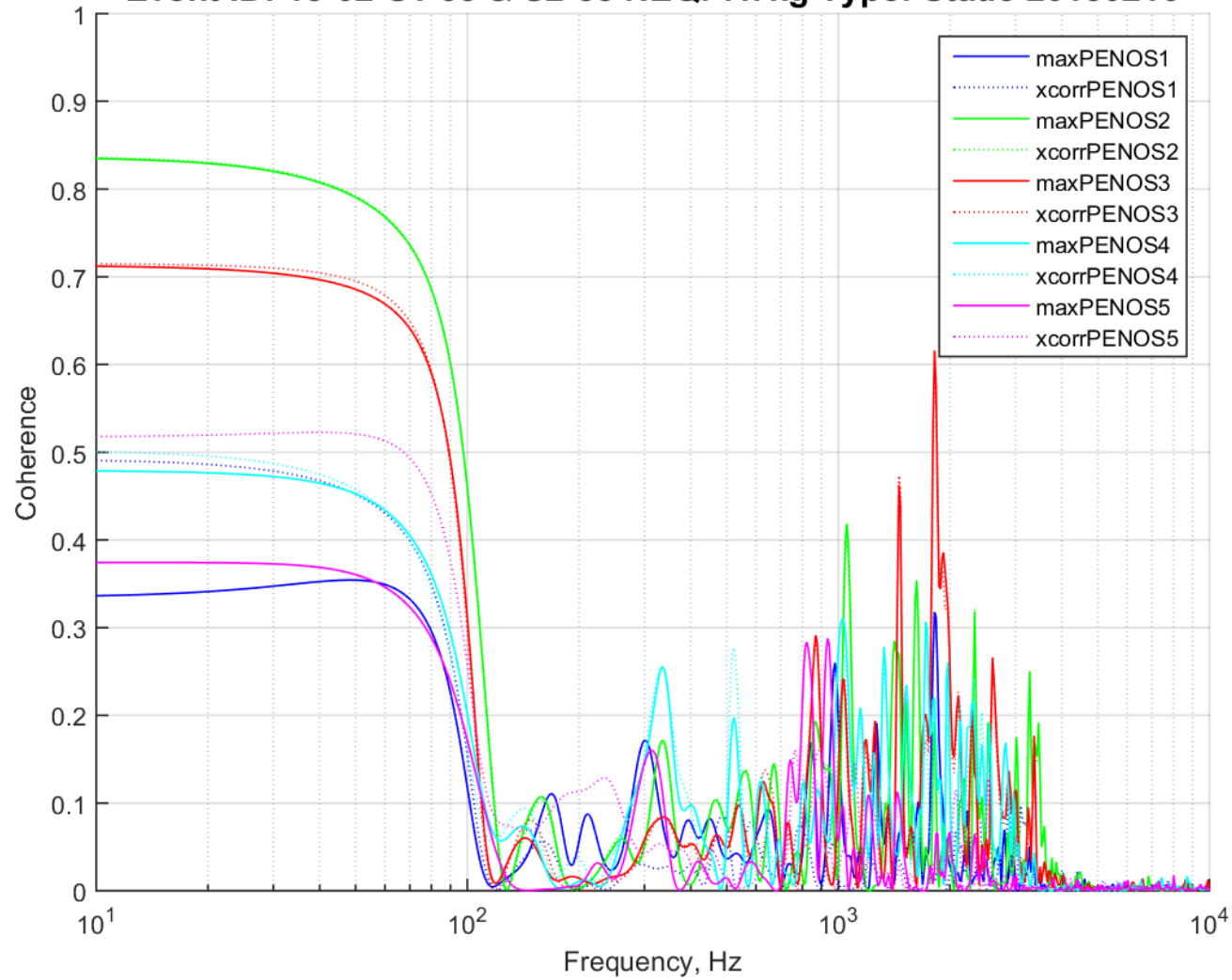


FIGURE 2.437: PEN\_OS 6 - 10 15-02-S1-99 & S2-88

**Event ID: 15-02-S1-99 & S2-88 NEQ: 7.7kg Type: Static 20150210**



**FIGURE 2.438: COHERENCE PEN\_OS 1 - 5 15-02-S1-99 & S2-88**

Event ID: 15-02-S1-99 & S2-88 NEQ: 7.7kg Type: Static 20150210

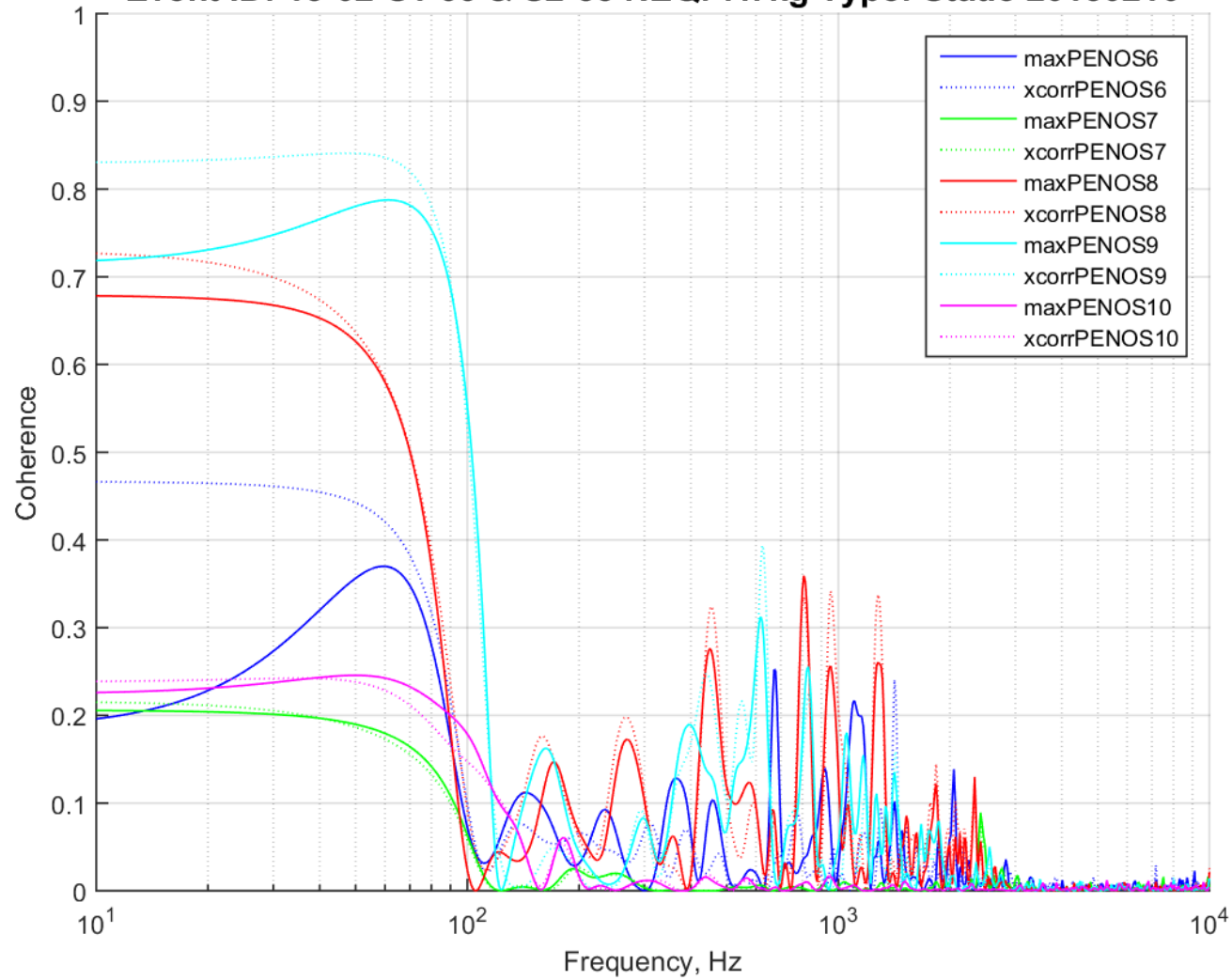
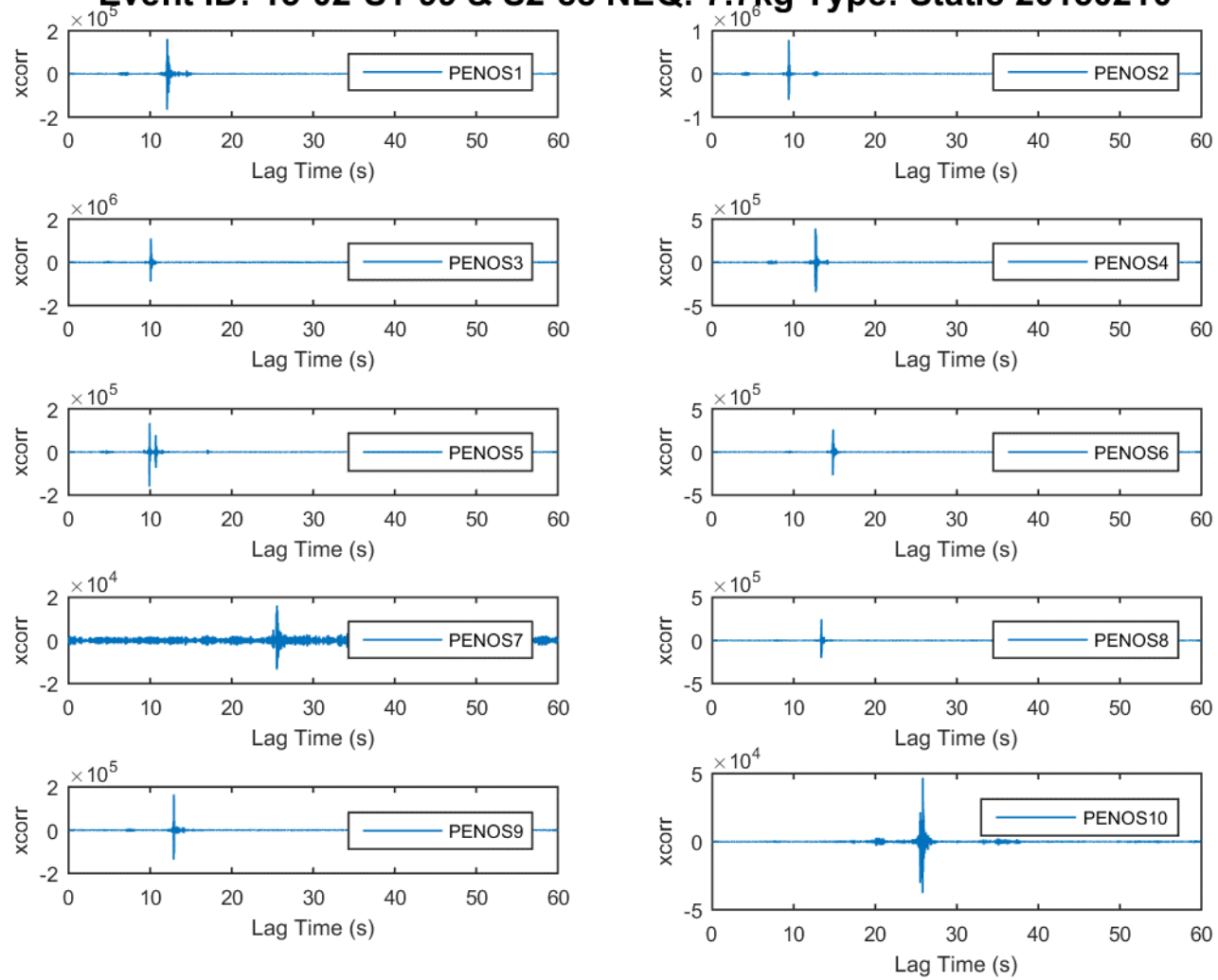


FIGURE 2.439: COHERENCE PEN\_OS 6 - 10 15-02-S1-99 & S2-88CTD



**Event ID: 15-02-S1-99 & S2-88 NEQ: 7.7kg Type: Static 20150210**



**FIGURE 2.440: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S1-99 & S2-88**

Event ID: 15-02-S1-99 & S2-88 NEQ: 7.7kg Type: Static 20150210

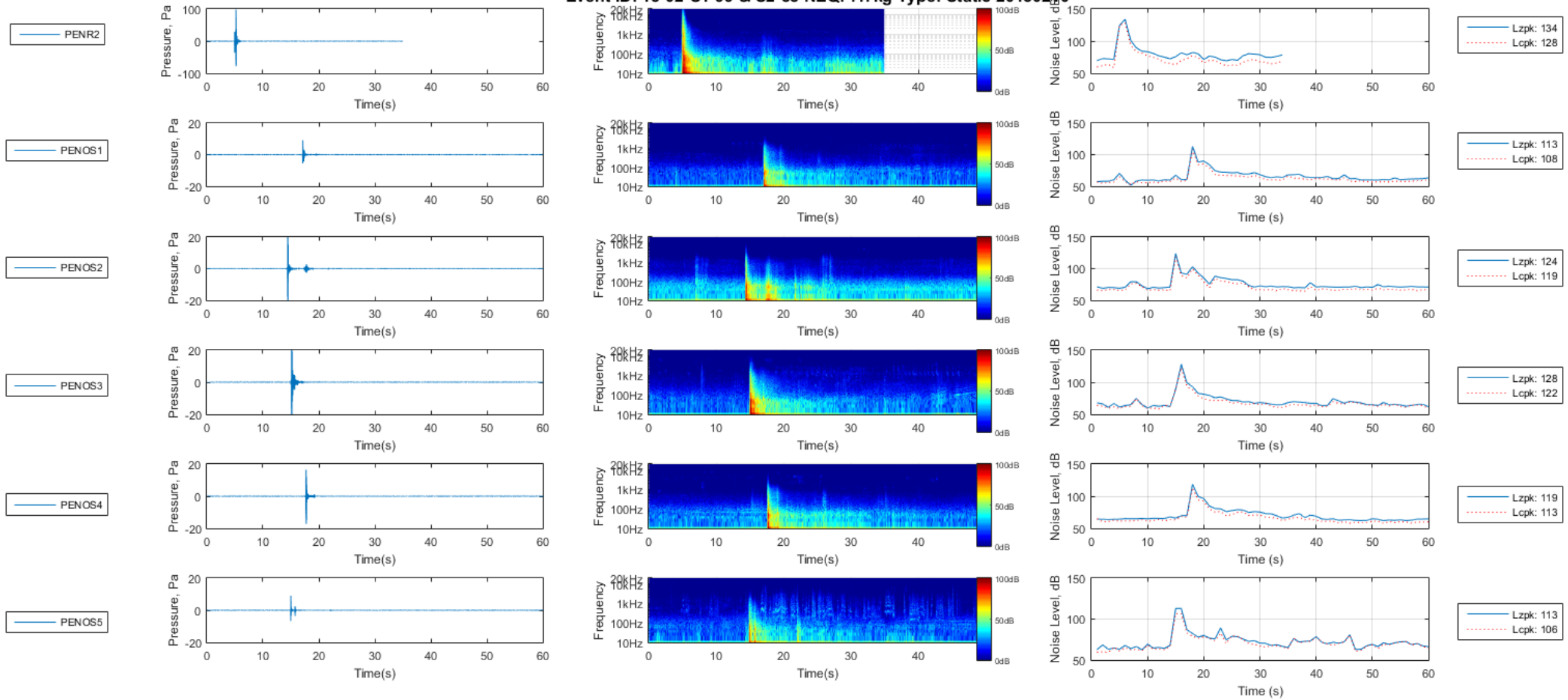


FIGURE 2.441: PEN\_OS 1 - 5 15-02-S1-99 & S2-88

Event ID: 15-02-S1-99 & S2-88 NEQ: 7.7kg Type: Static 20150210.CTD

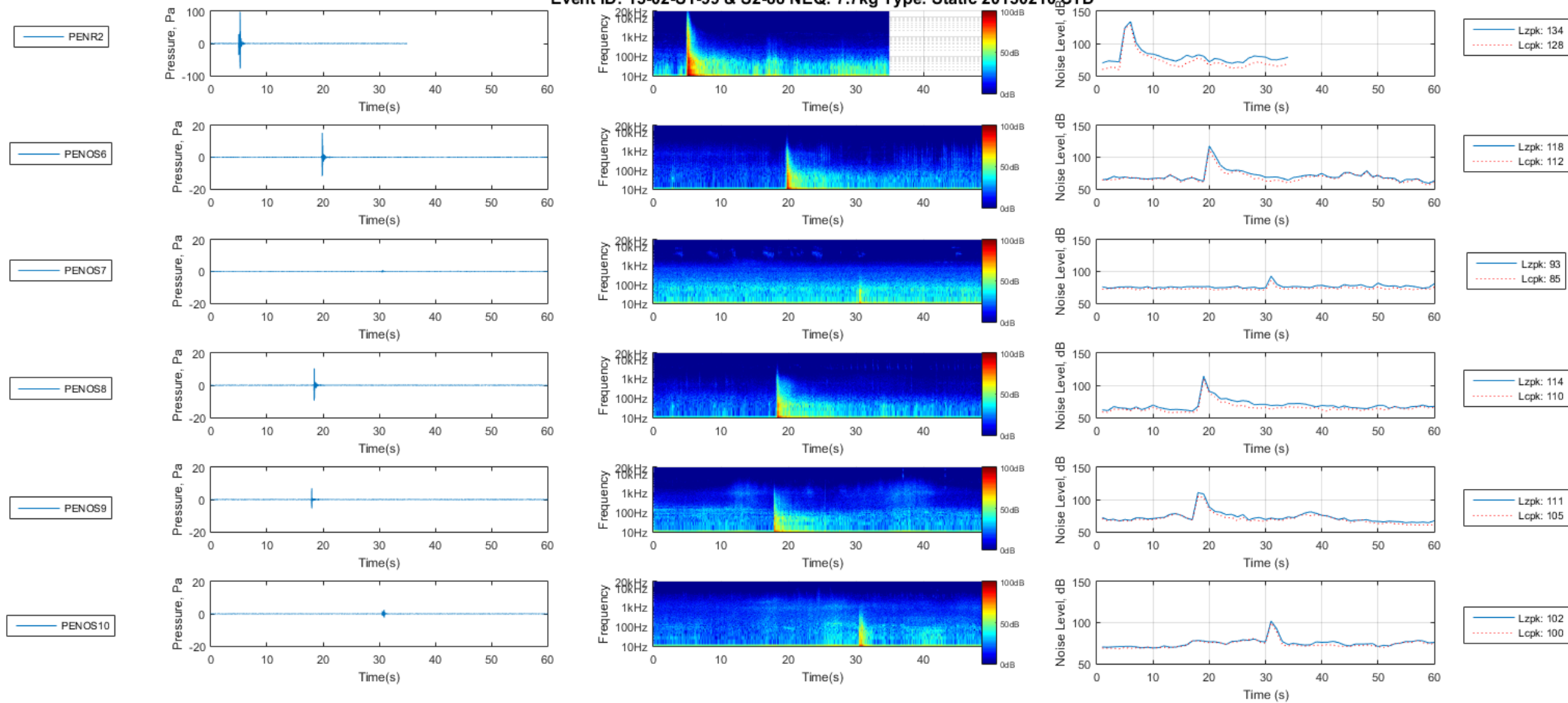
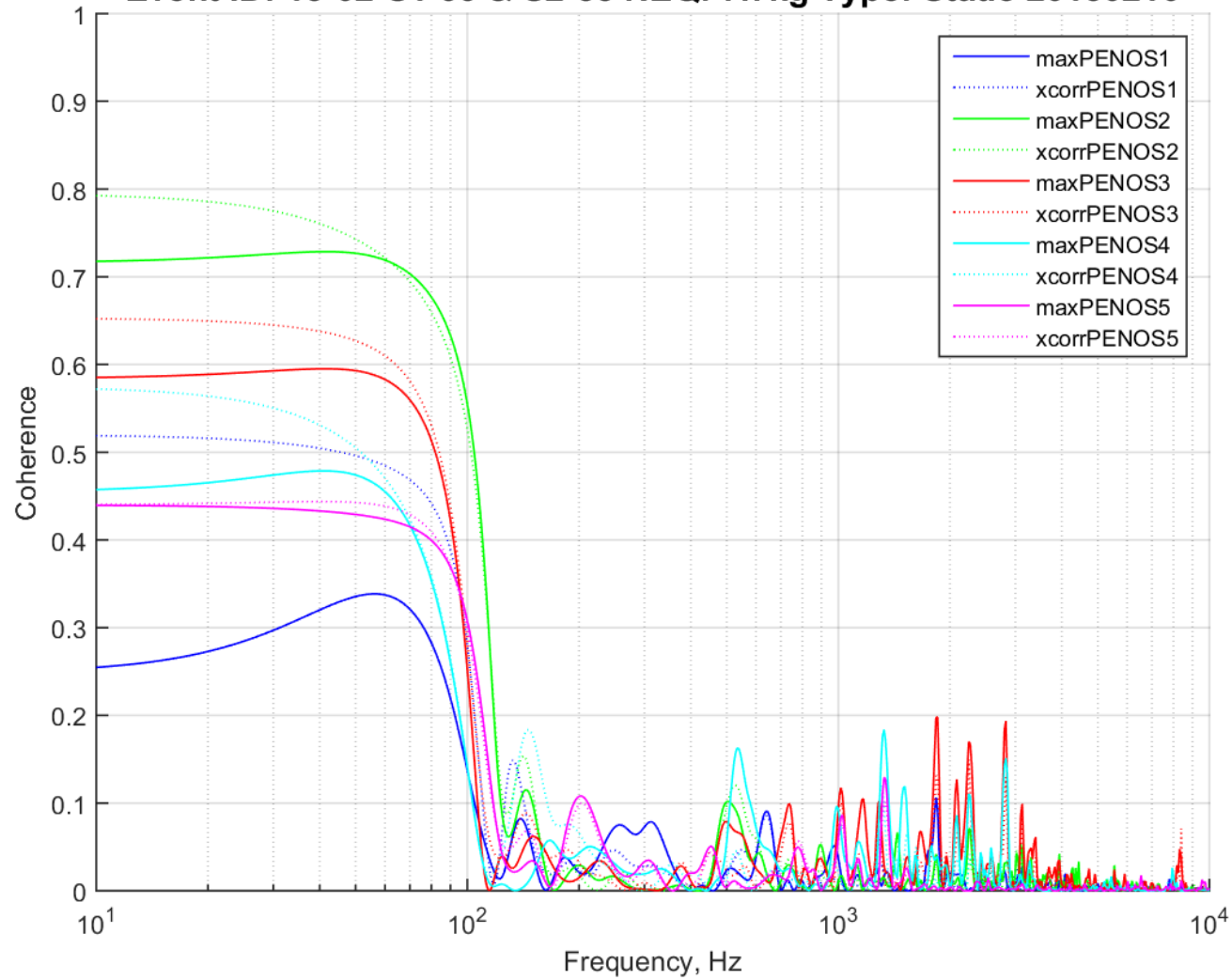


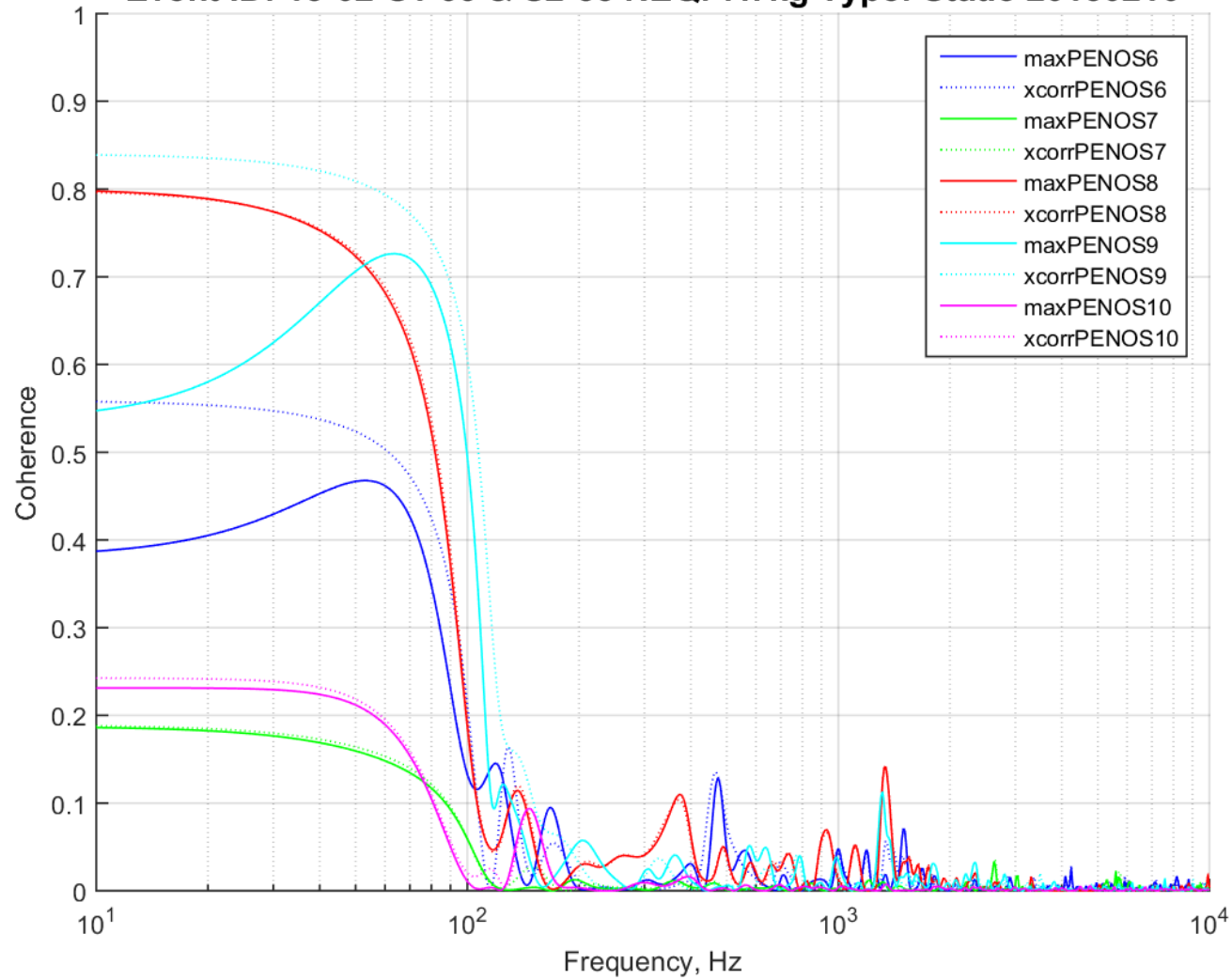
FIGURE 2.442: PEN\_OS 6 - 10 15-02-S1-99 & S2-88

**Event ID: 15-02-S1-99 & S2-88 NEQ: 7.7kg Type: Static 20150210**



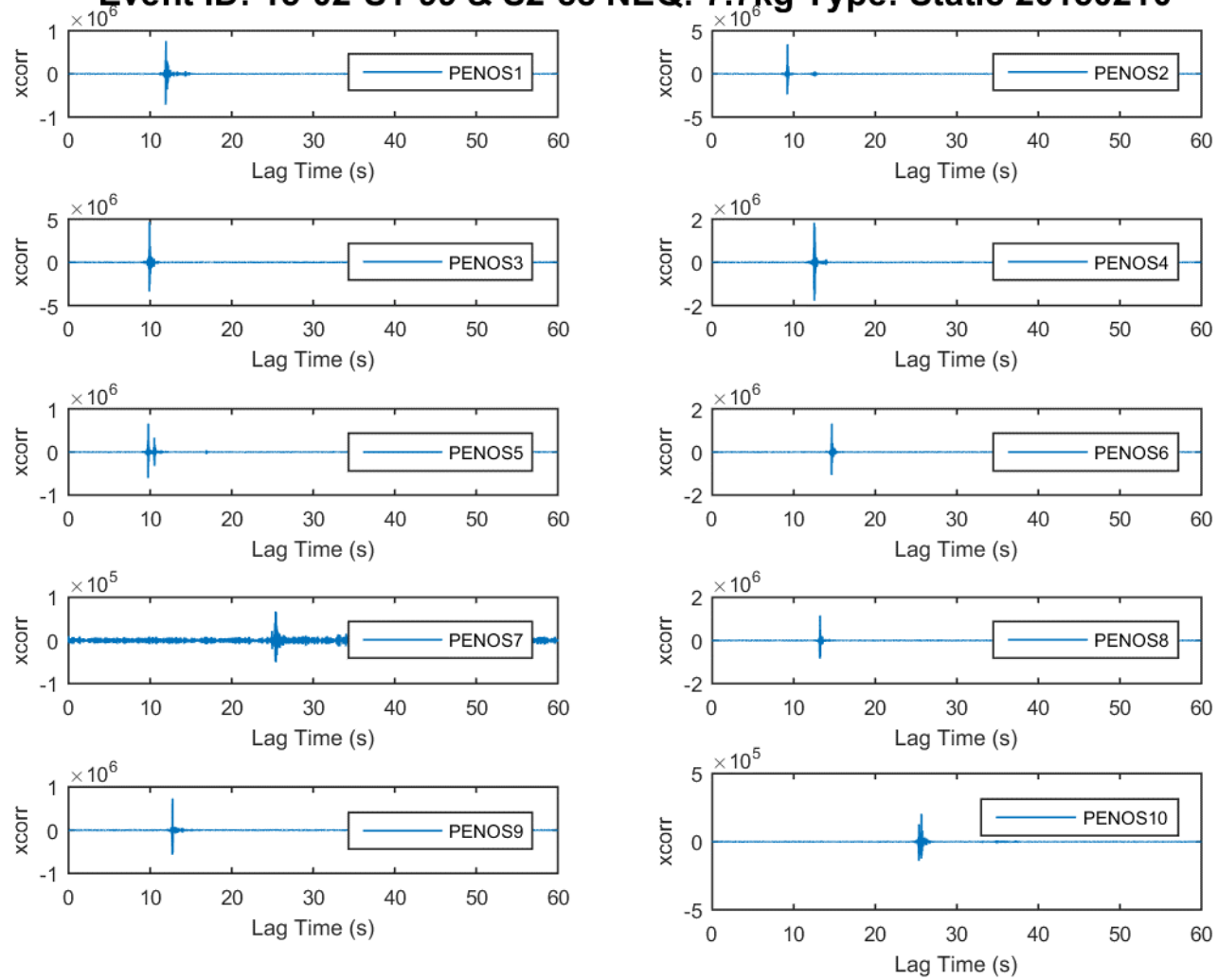
**FIGURE 2.443: COHERENCE PEN\_OS 1 - 5 15-02-S1-99 & S2-88**

**Event ID: 15-02-S1-99 & S2-88 NEQ: 7.7kg Type: Static 20150210**

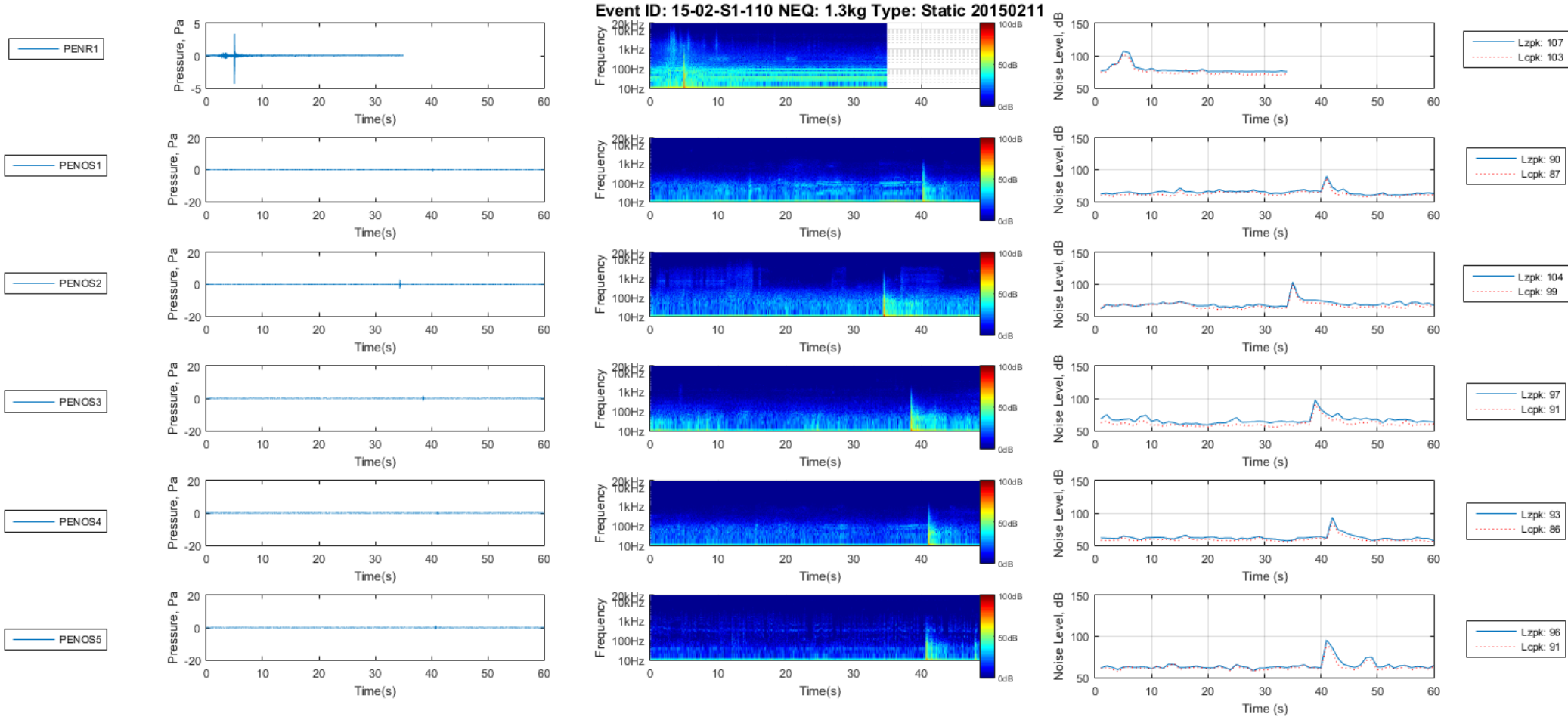


**FIGURE 2.444: COHERENCE PEN\_OS 6 - 10 15-02-S1-99 & S2-88CTD**

**Event ID: 15-02-S1-99 & S2-88 NEQ: 7.7kg Type: Static 20150210**



**FIGURE 2.445: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S1-99 & S2-88**



**FIGURE 2.446: PEN\_OS 1 - 5 15-02-S1-110**

Event ID: 15-02-S1-110 NEQ: 1.3kg Type: Static 20150211 CTD

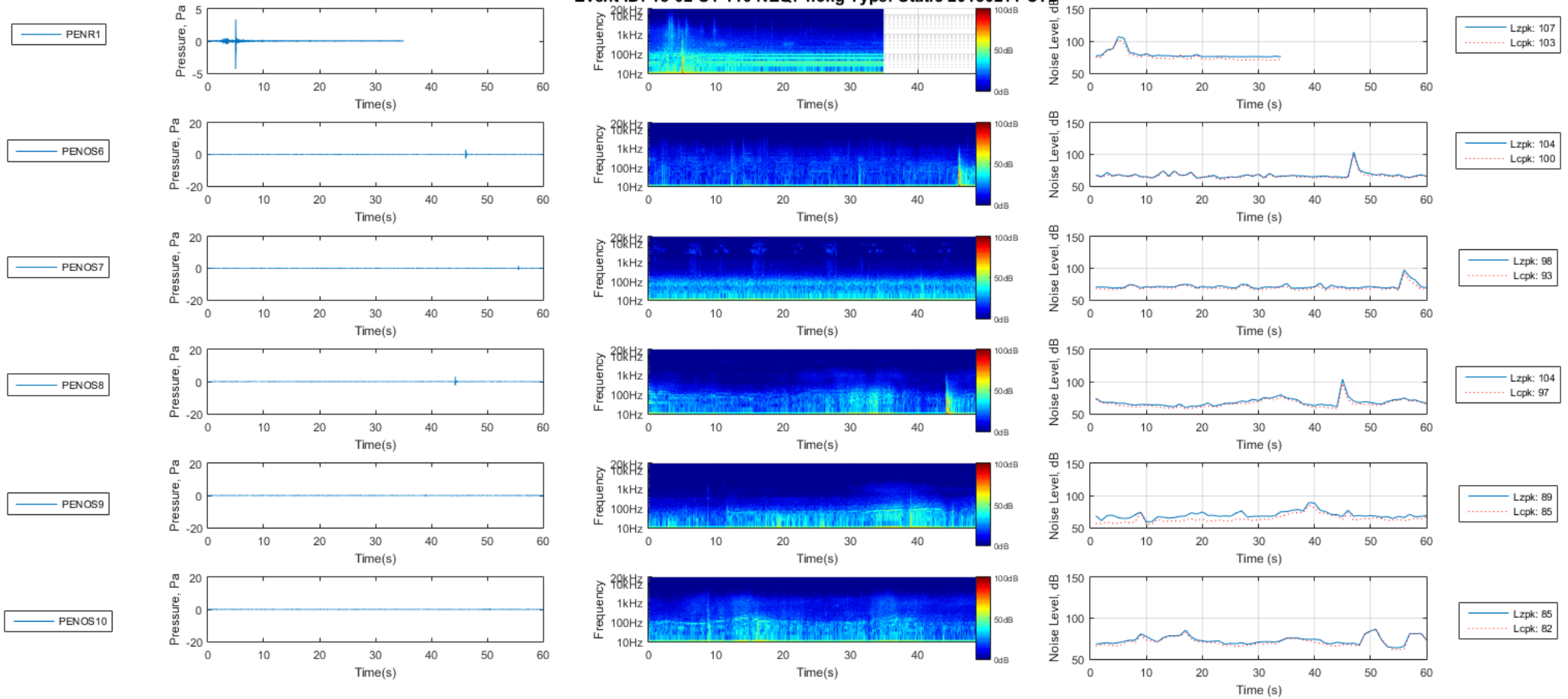


FIGURE 2.447: PEN\_OS 6 - 10 15-02-S1-110



Event ID: 15-02-S1-110 NEQ: 1.3kg Type: Static 20150211

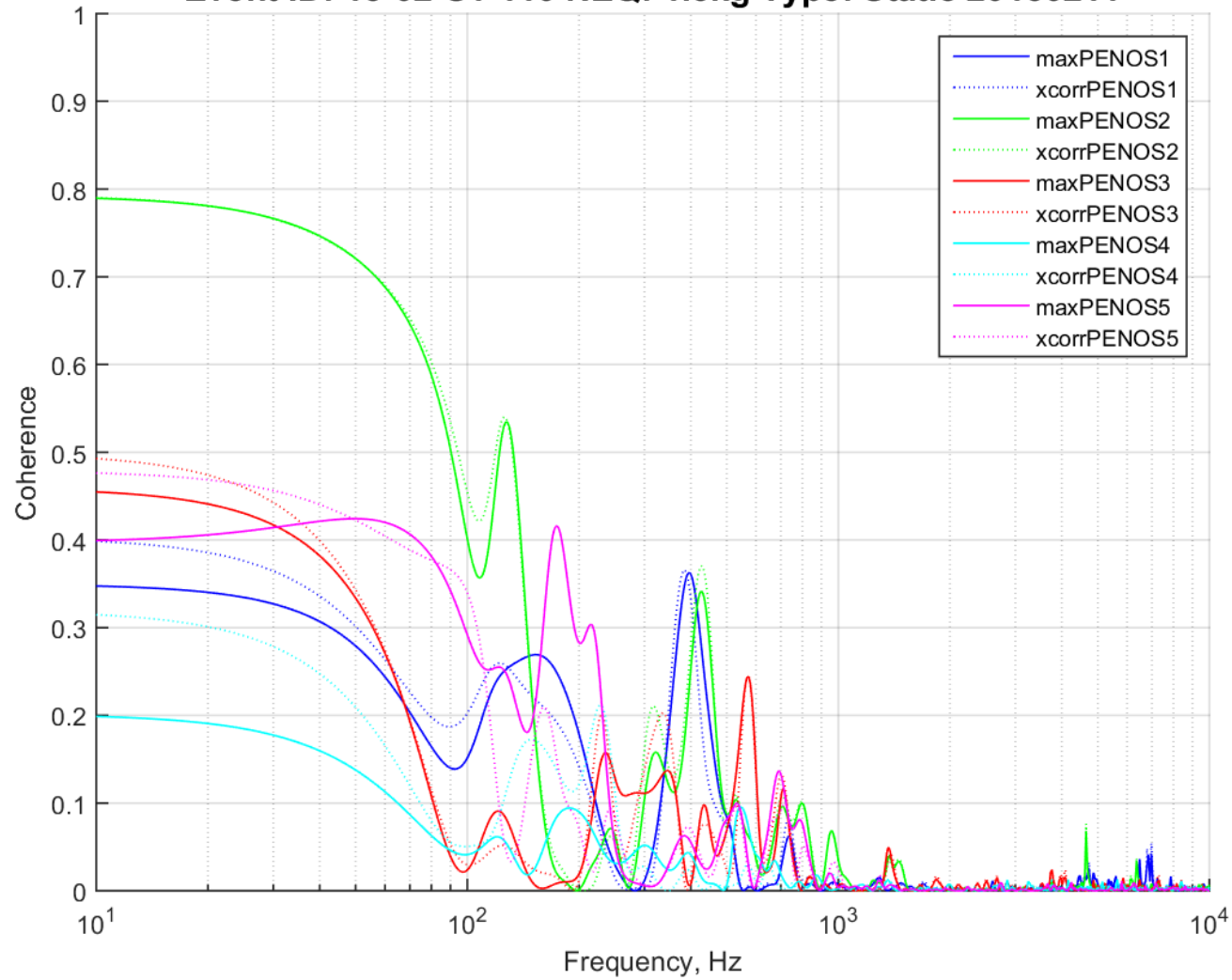


FIGURE 2.448: COHERENCE PEN\_OS 1 - 5 15-02-S1-110

Event ID: 15-02-S1-110 NEQ: 1.3kg Type: Static 20150211

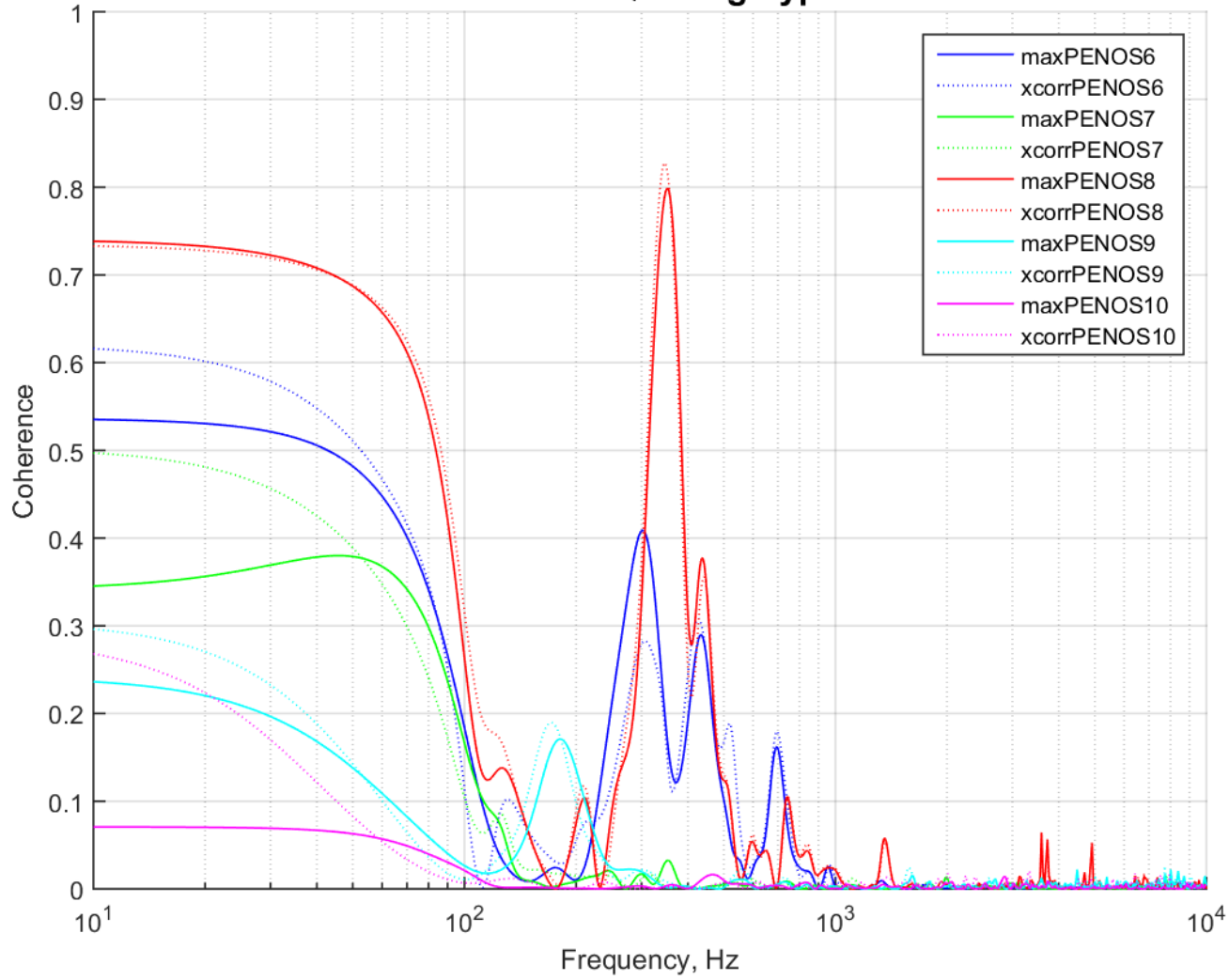
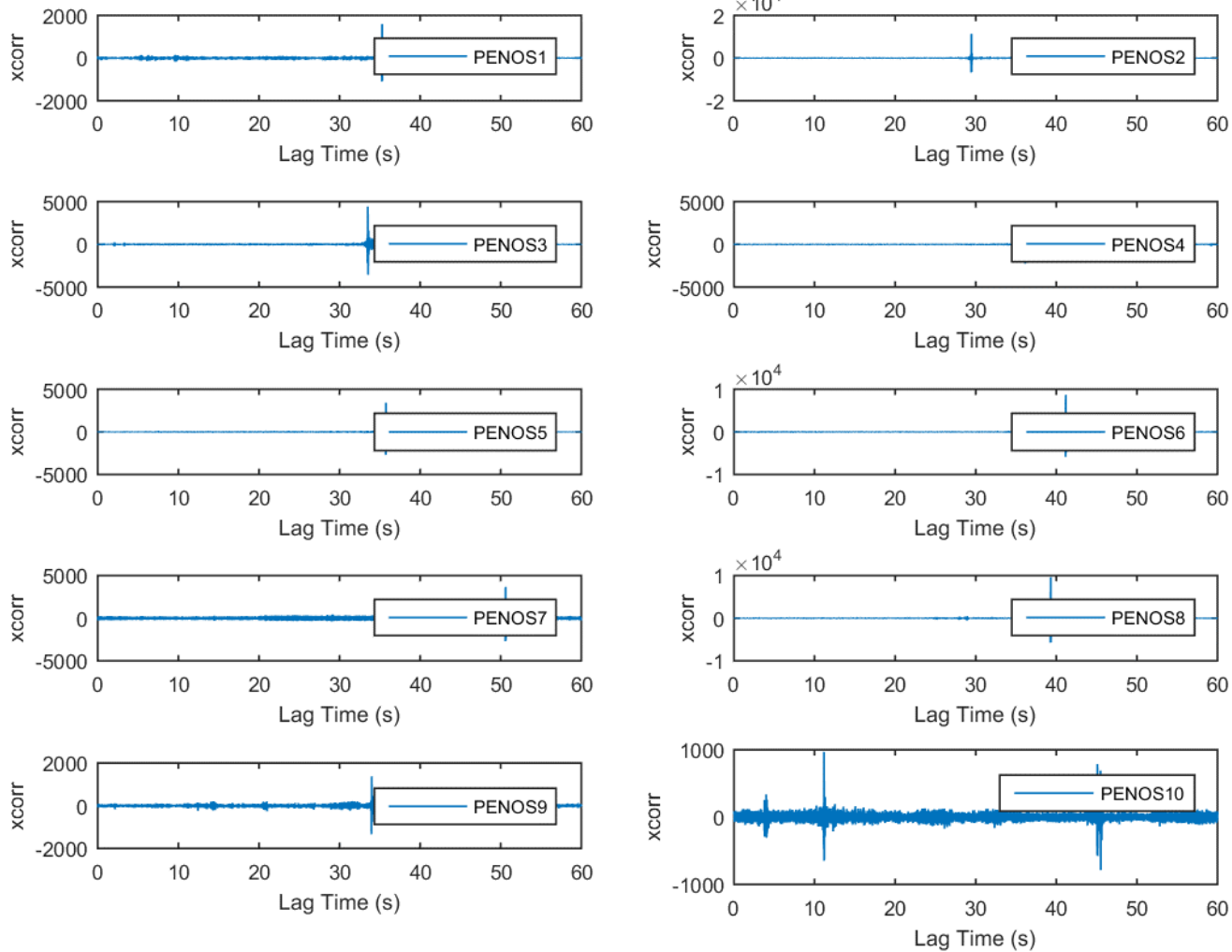
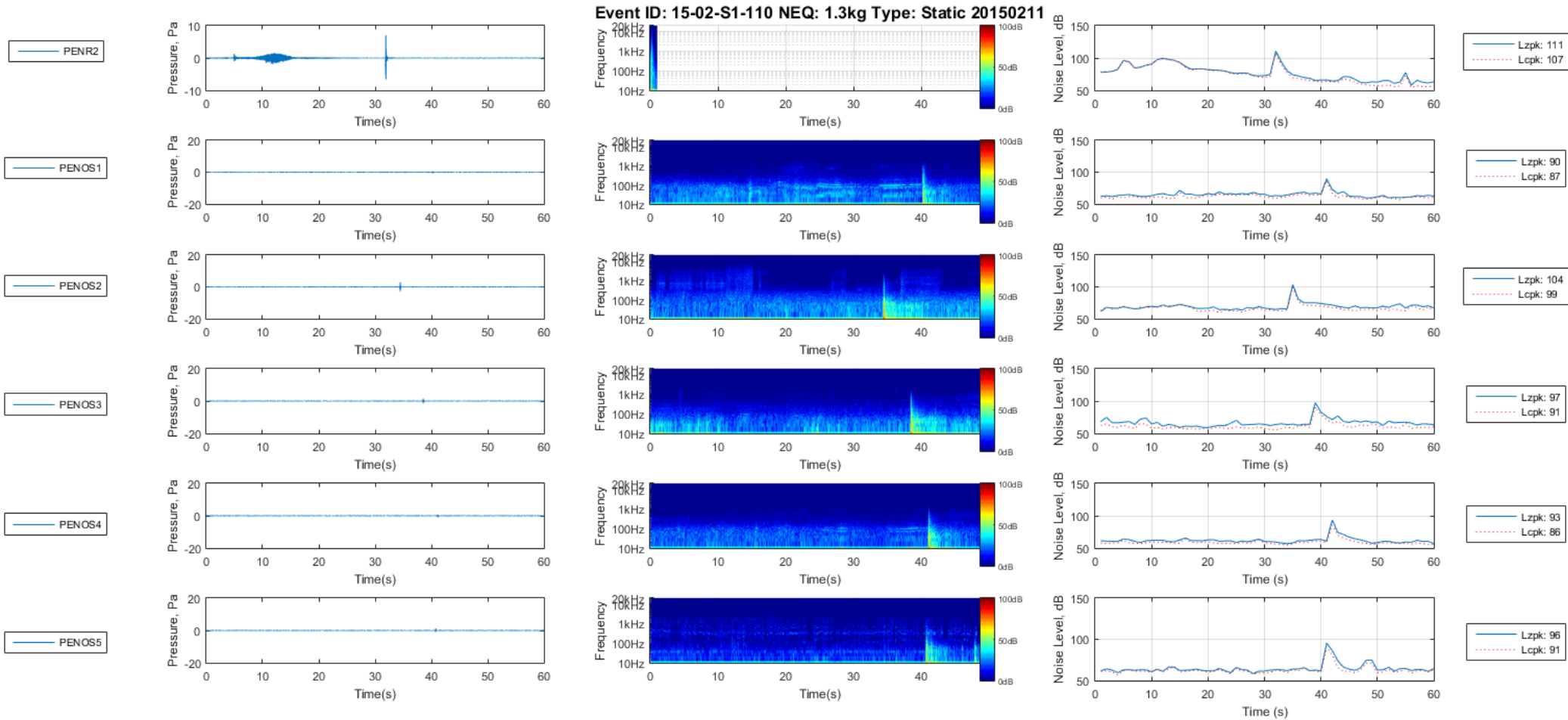


FIGURE 2.449: COHERENCE PEN\_OS 6 - 10 15-02-S1-110CTD

**Event ID: 15-02-S1-110 NEQ: 1.3kg Type: Static 20150211**



**FIGURE 2.450: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S1-110**



**FIGURE 2.451: PEN\_OS 1 - 5 15-02-S1-110**

Event ID: 15-02-S1-110 NEQ: 1.3kg Type: Static 20150211 CTD

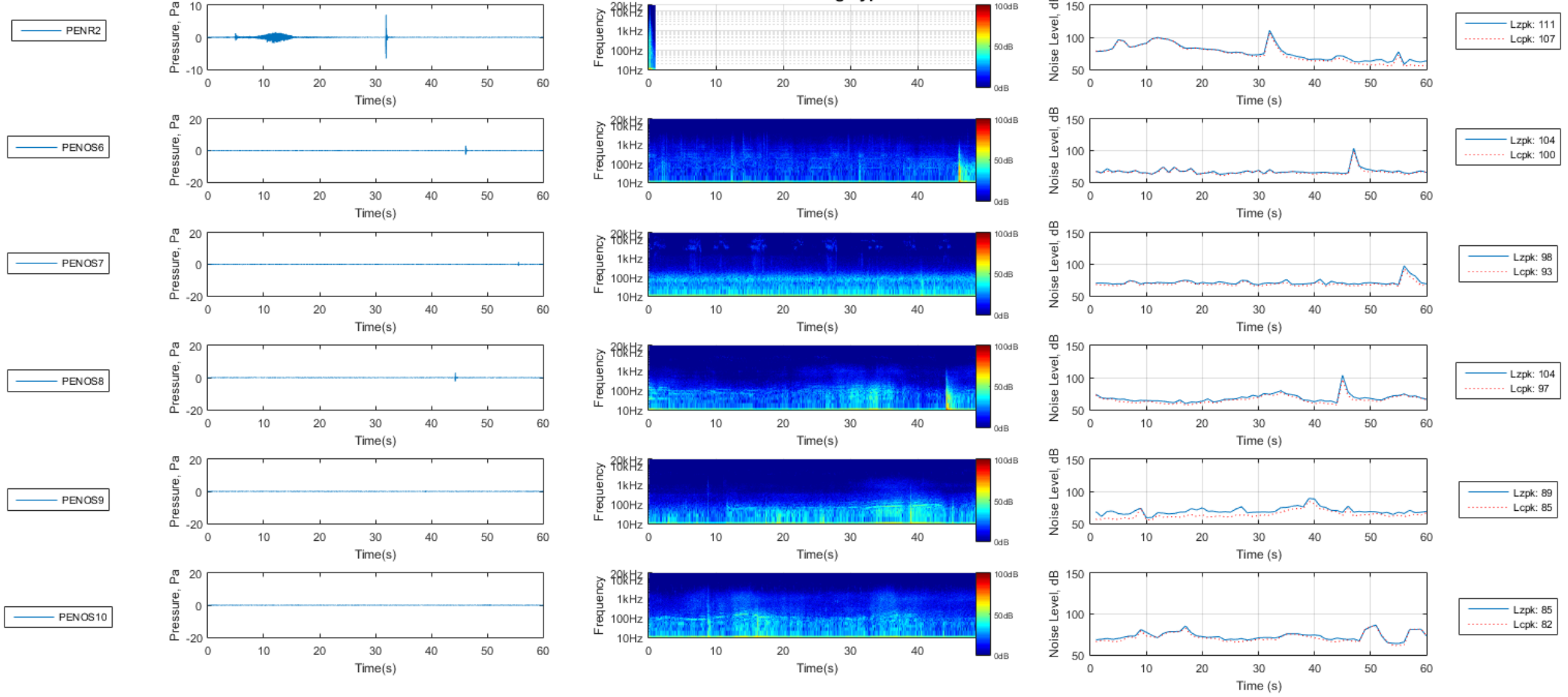


FIGURE 2.452: PEN\_OS 6 - 10 15-02-S1-110

Event ID: 15-02-S1-110 NEQ: 1.3kg Type: Static 20150211

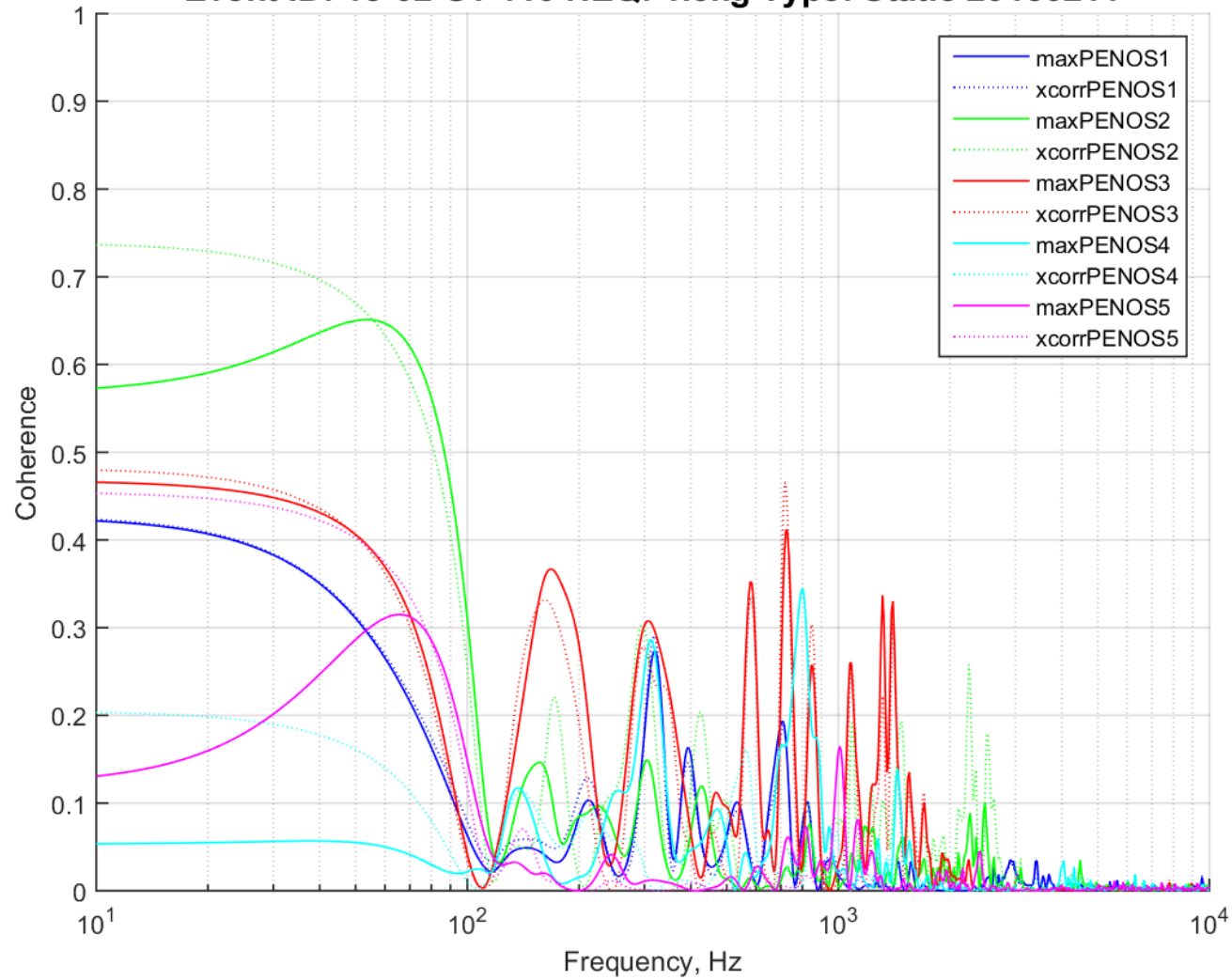


FIGURE 2.453: COHERENCE PEN\_OS 1 - 5 15-02-S1-110

Event ID: 15-02-S1-110 NEQ: 1.3kg Type: Static 20150211

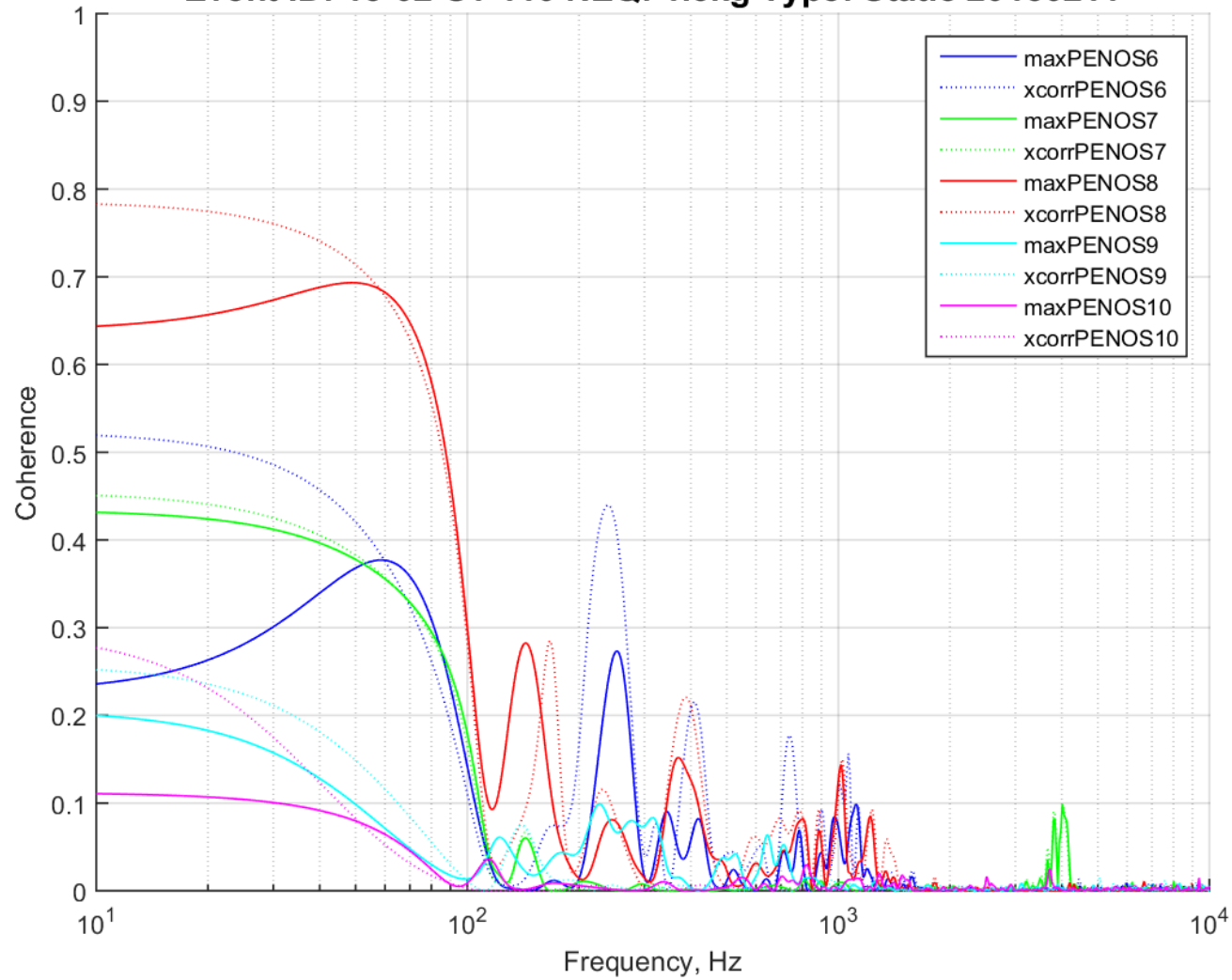
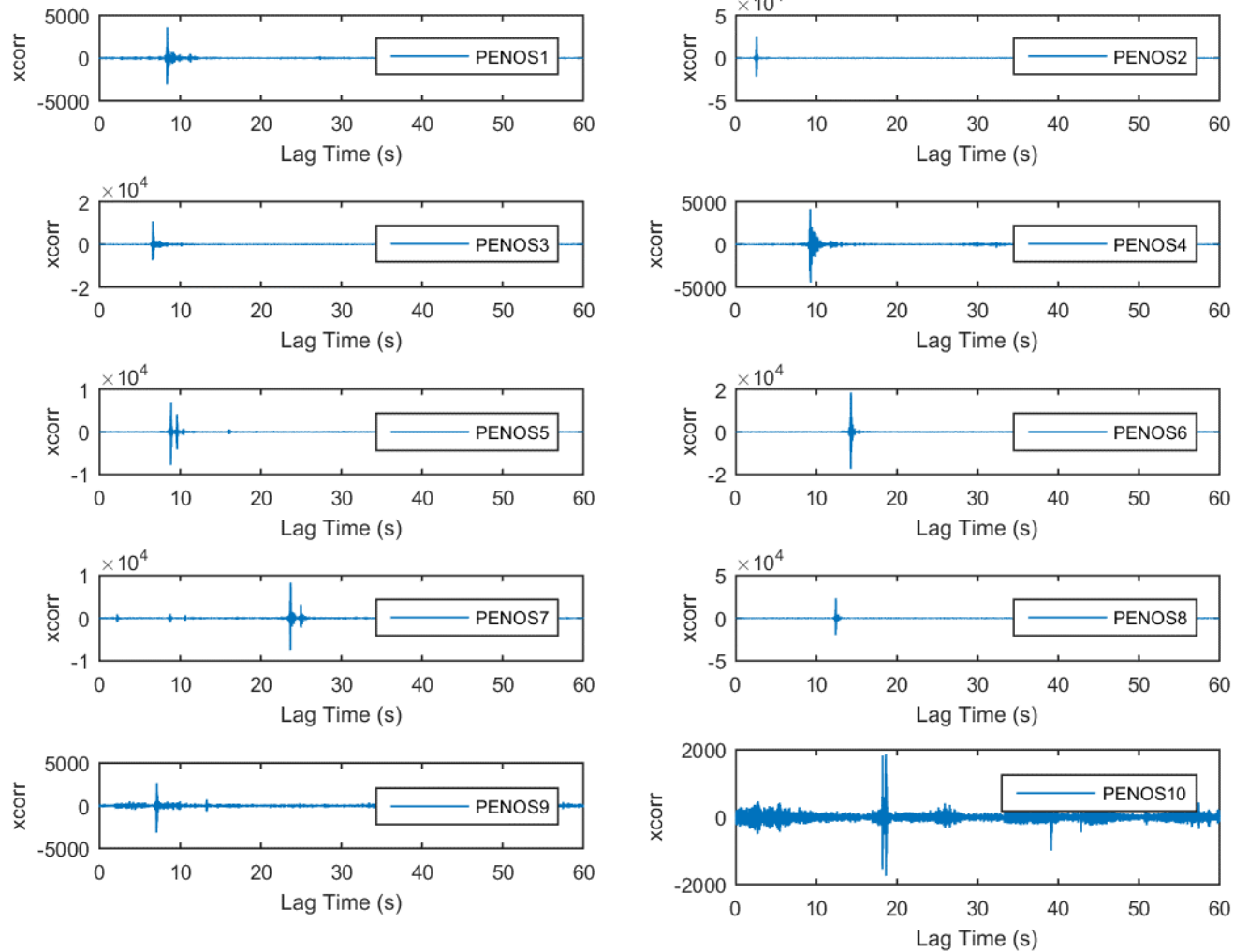


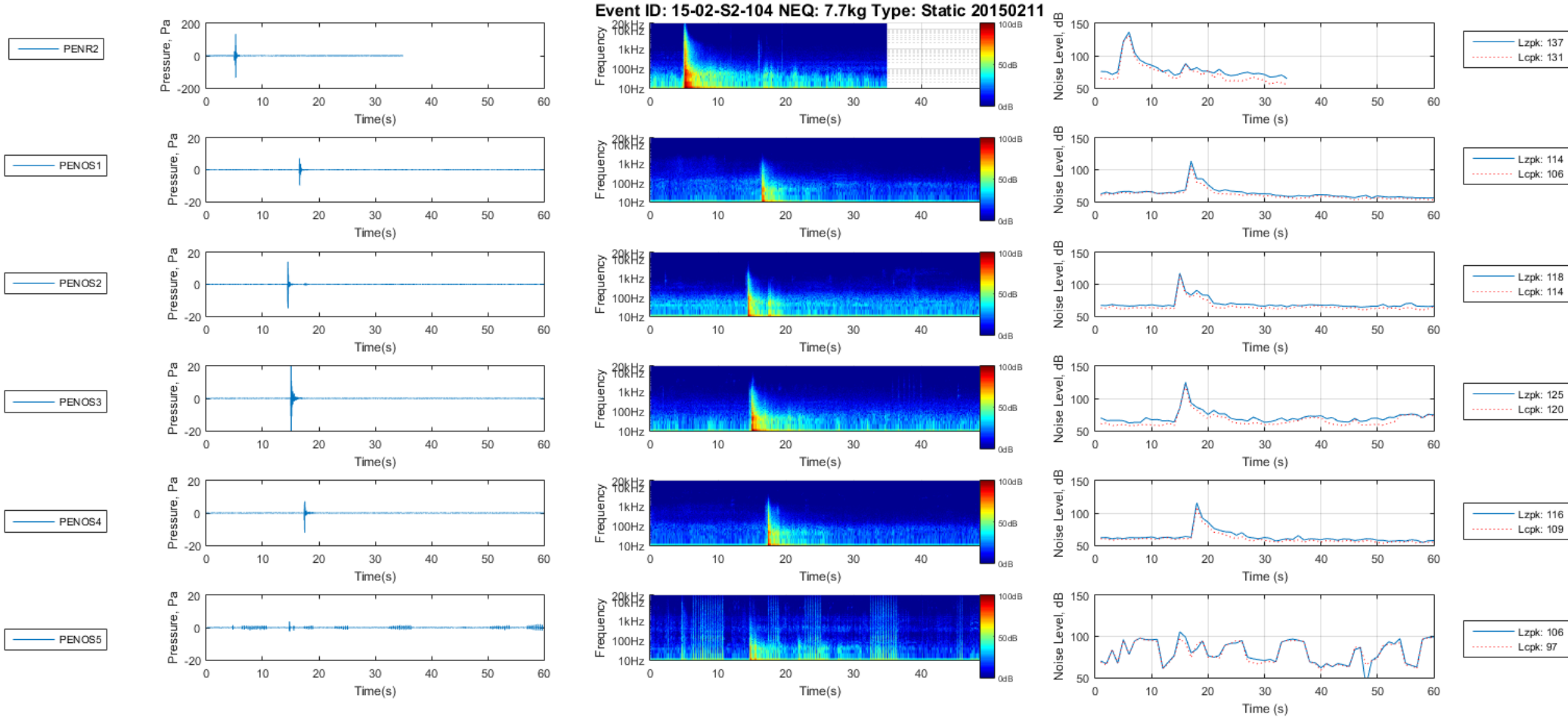
FIGURE 2.454: COHERENCE PEN\_OS 6 - 10 15-02-S1-110CTD

**Event ID: 15-02-S1-110 NEQ: 1.3kg Type: Static 20150211**



**FIGURE 2.455: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S1-110**





**FIGURE 2.456: PEN\_OS 1 - 5 15-02-S2-104**

Event ID: 15-02-S2-104 NEQ: 7.7kg Type: Static 20150211 CTD

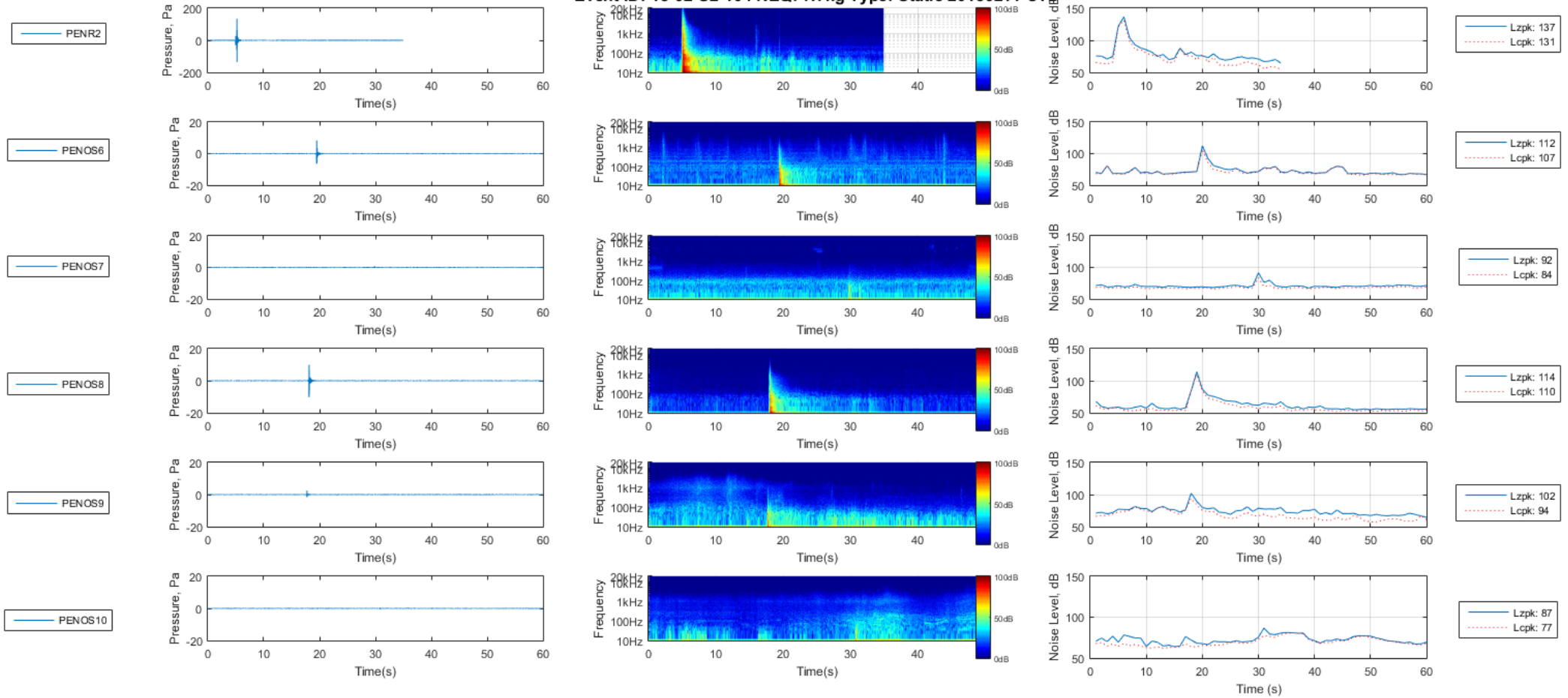


FIGURE 2.457: PEN\_OS 6 - 10 15-02-S2-104

Event ID: 15-02-S2-104 NEQ: 7.7kg Type: Static 20150211

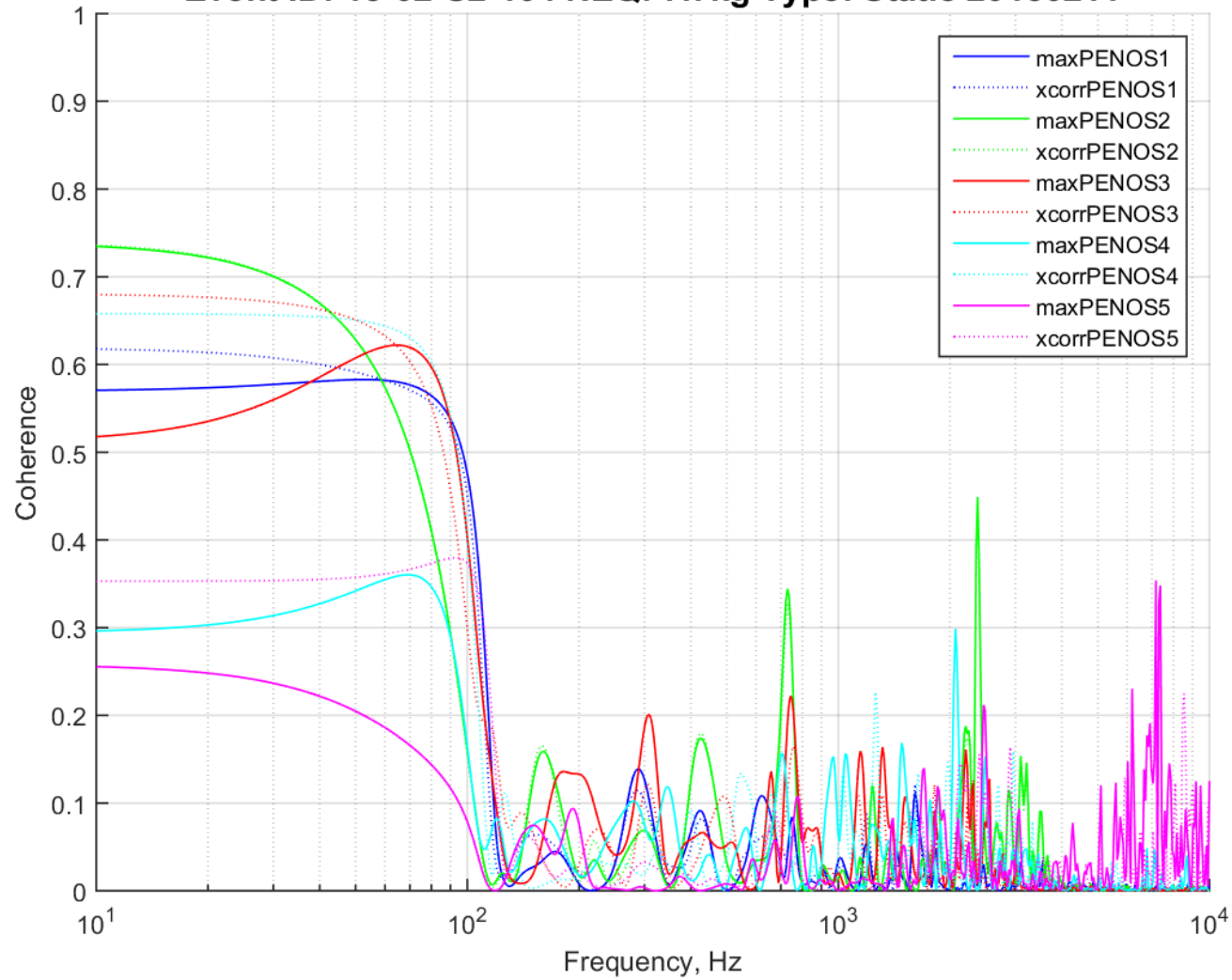


FIGURE 2.458: COHERENCE PEN\_OS 1 - 5 15-02-S2-104

Event ID: 15-02-S2-104 NEQ: 7.7kg Type: Static 20150211

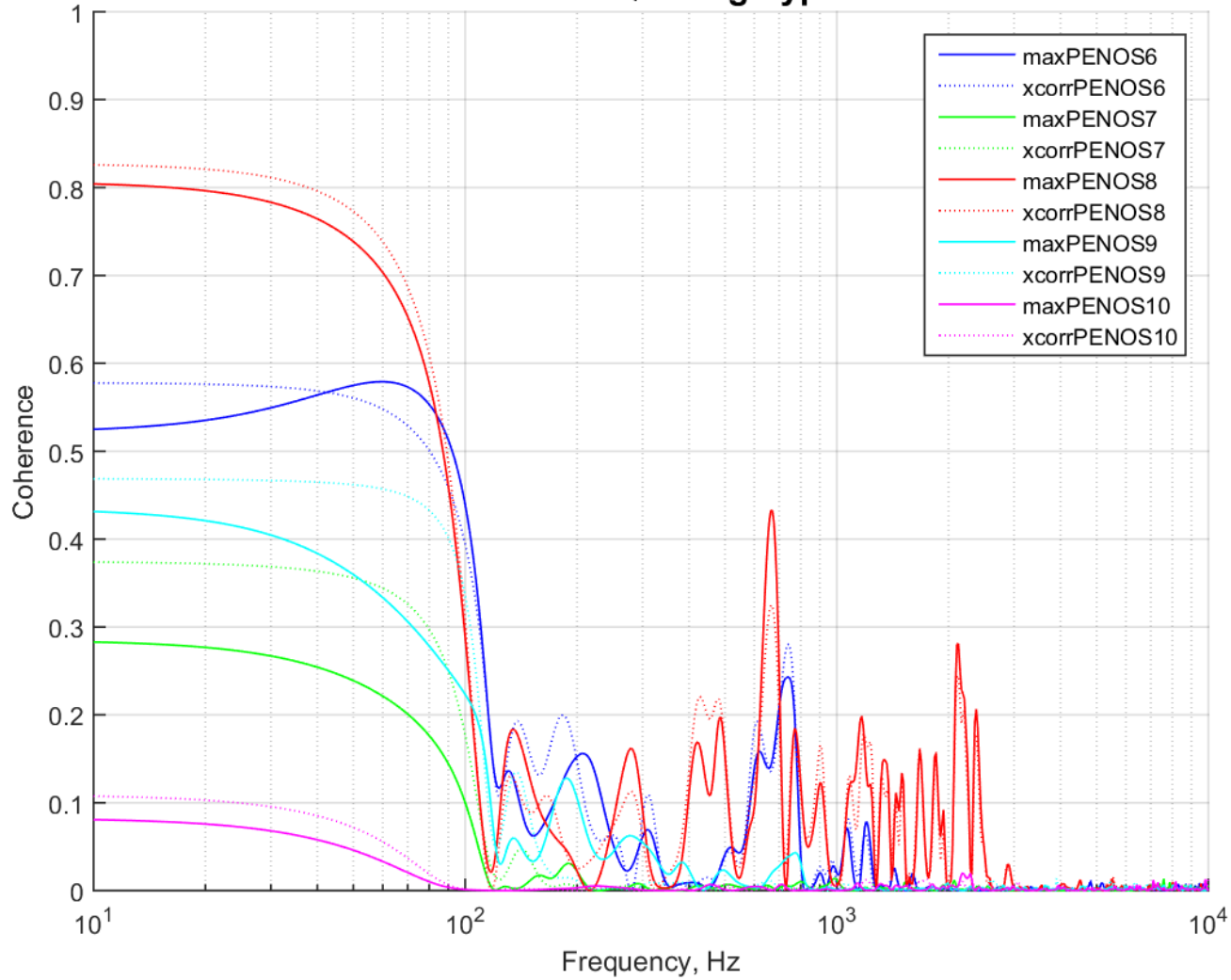
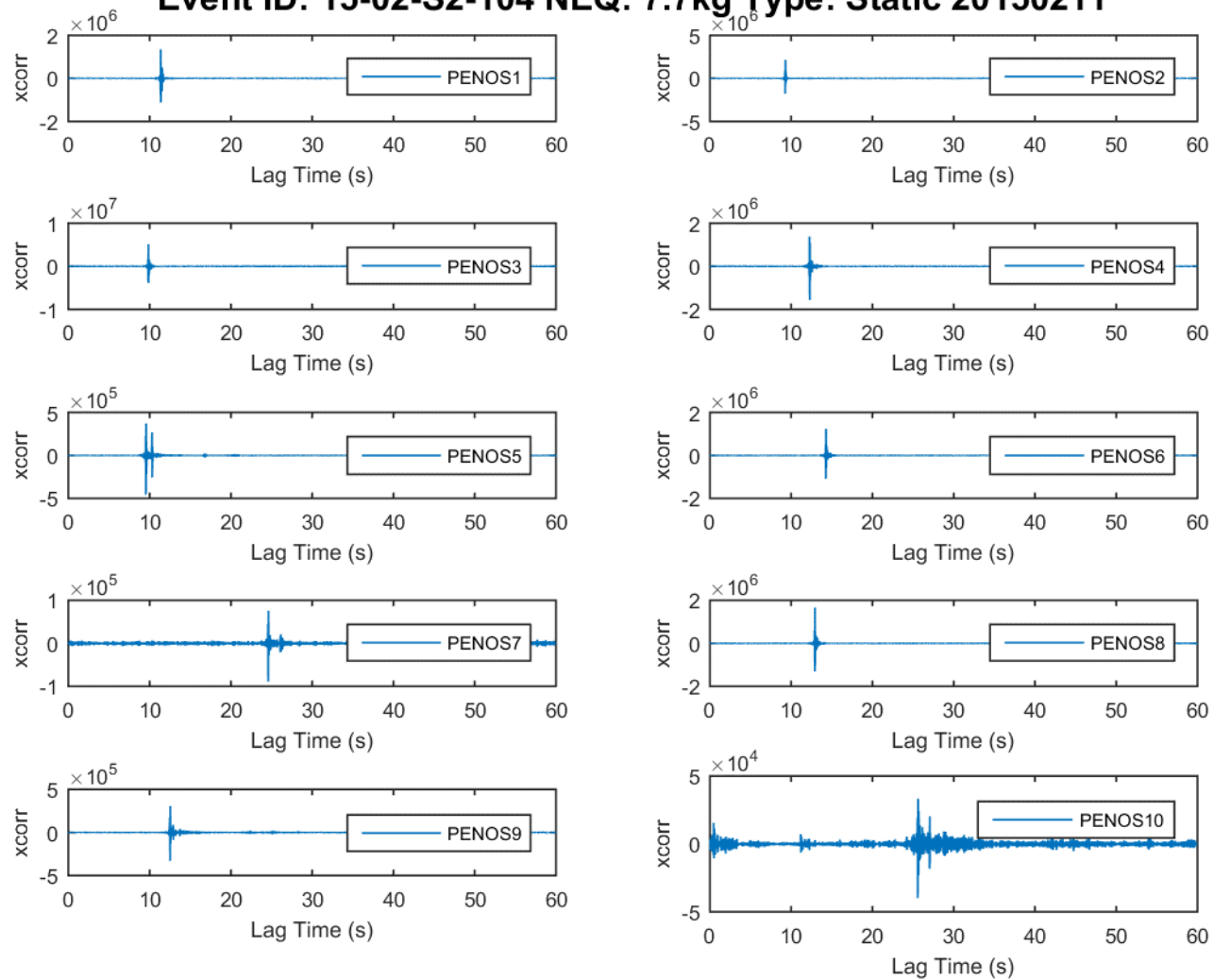
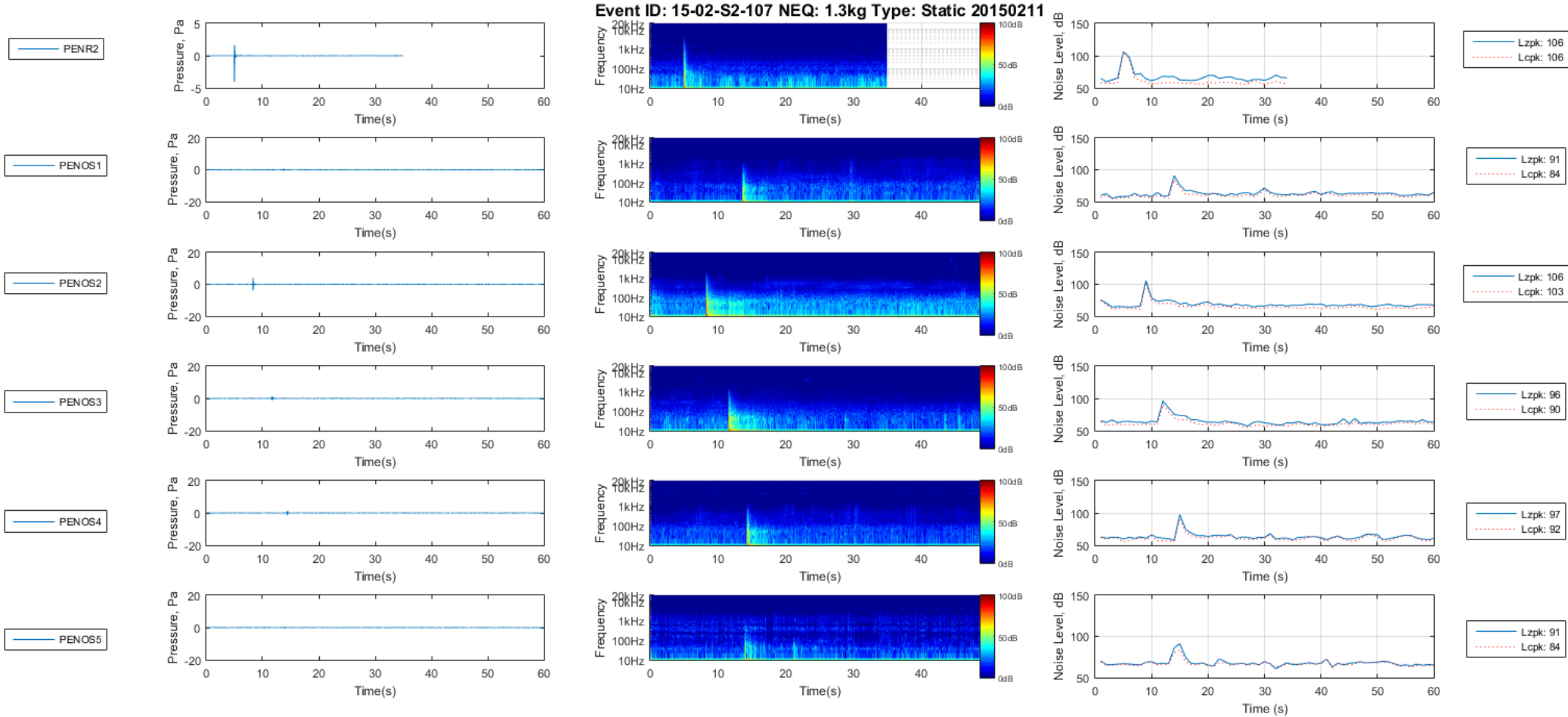


FIGURE 2.459: COHERENCE PEN\_OS 6 - 10 15-02-S2-104CTD

**Event ID: 15-02-S2-104 NEQ: 7.7kg Type: Static 20150211**



**FIGURE 2.460: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S2-104**



**FIGURE 2.461: PEN\_OS 1 - 5 15-02-S2-107**

Event ID: 15-02-S2-107 NEQ: 1.3kg Type: Static 20150211 CTD

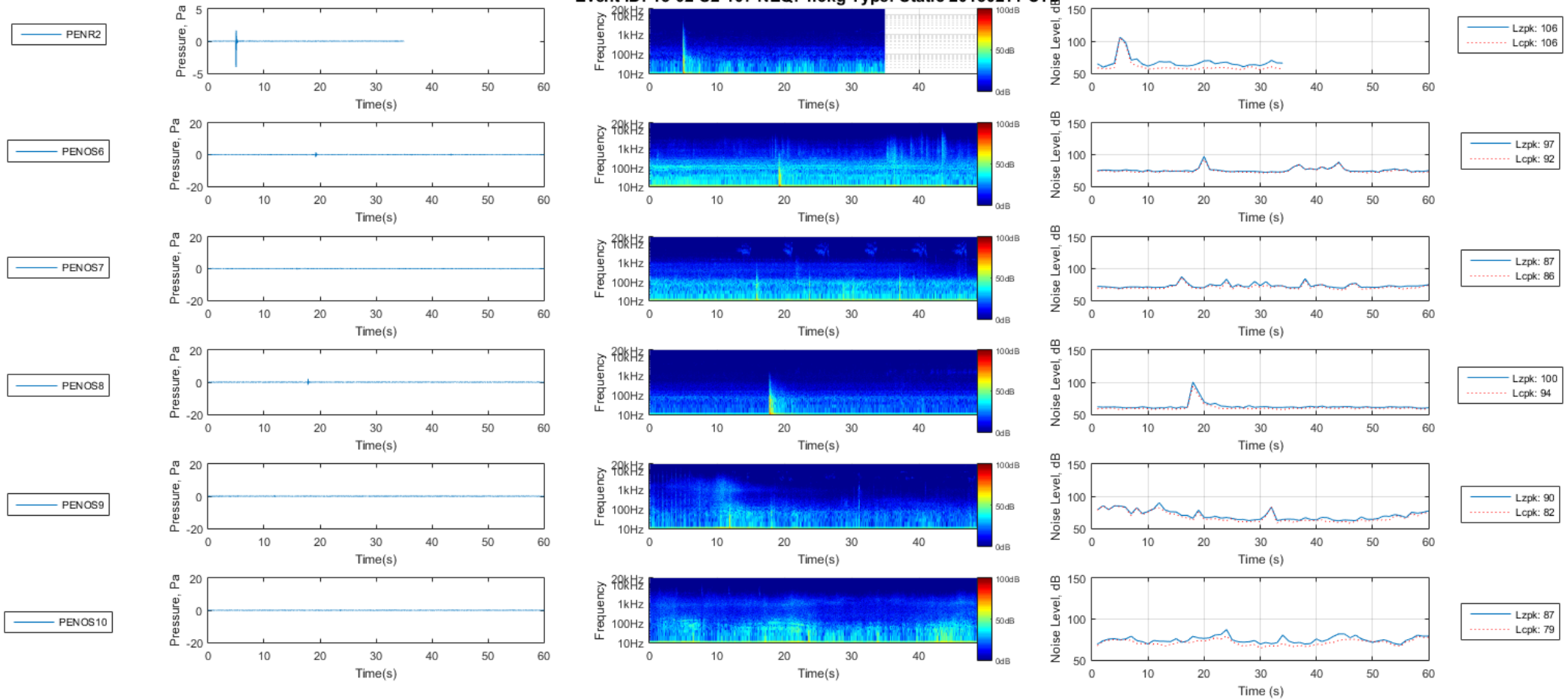


FIGURE 2.462: PEN\_OS 6 - 10 15-02-S2-107

Event ID: 15-02-S2-107 NEQ: 1.3kg Type: Static 20150211

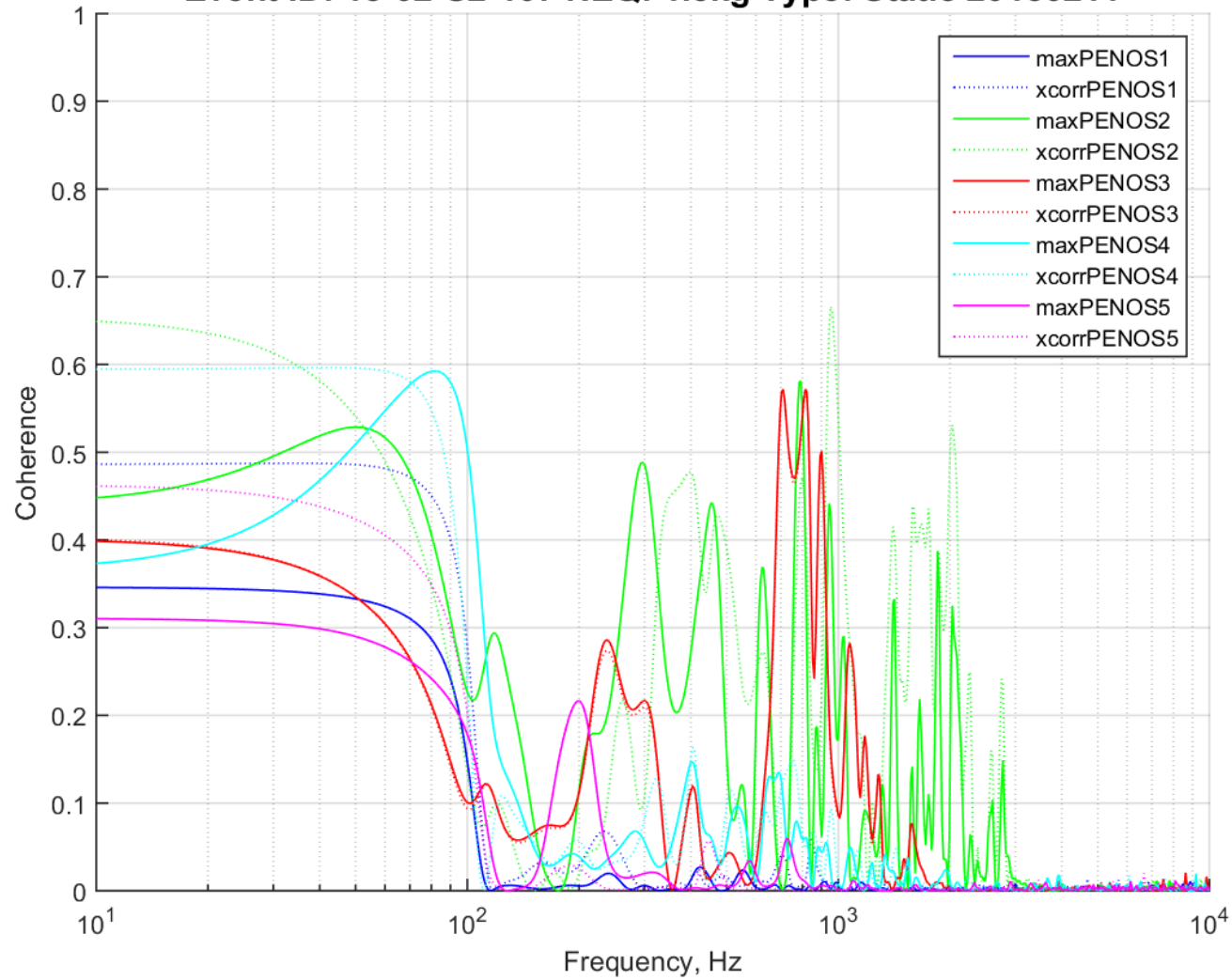


FIGURE 2.463: COHERENCE PEN\_OS 1 - 5 15-02-S2-107



Event ID: 15-02-S2-107 NEQ: 1.3kg Type: Static 20150211

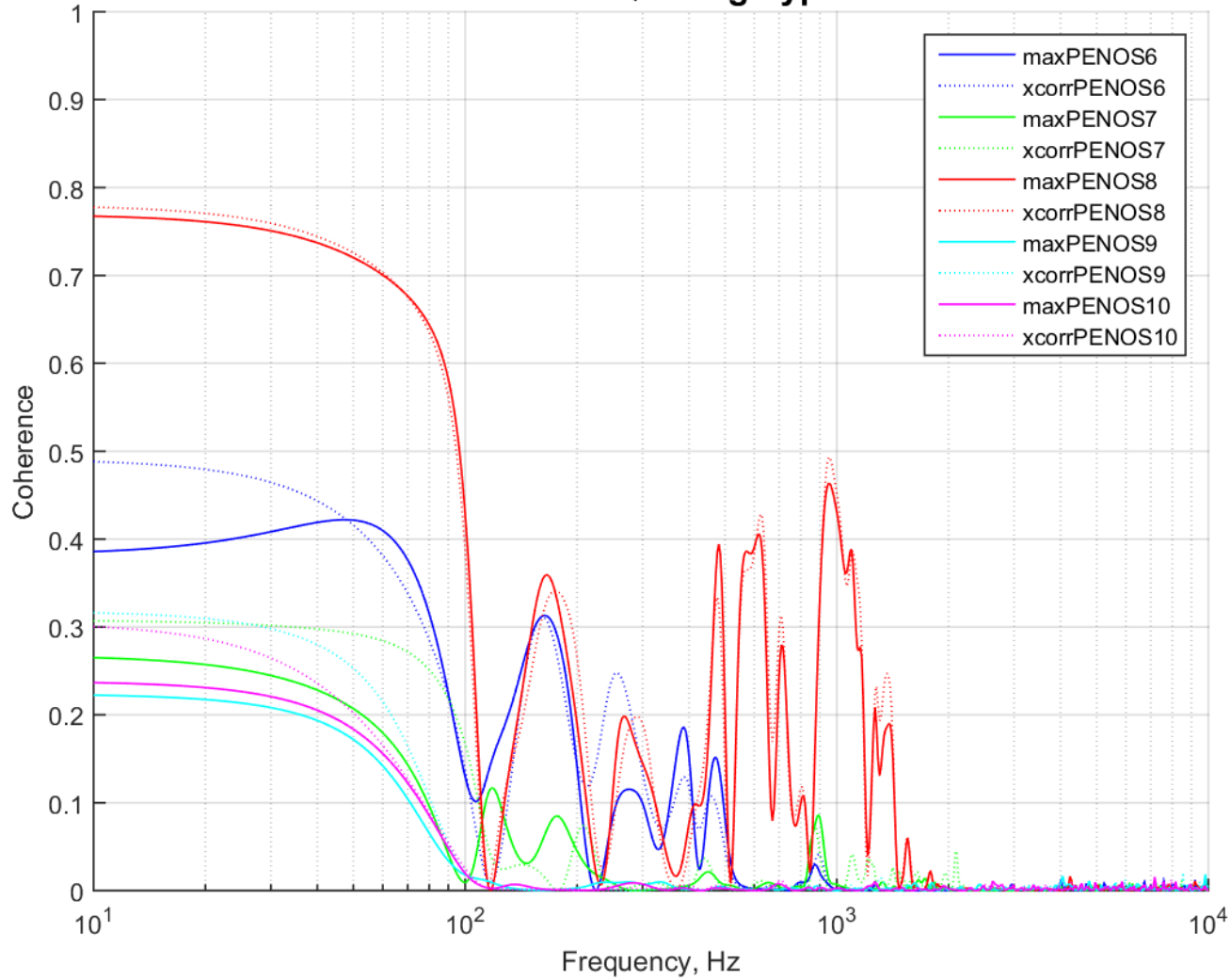
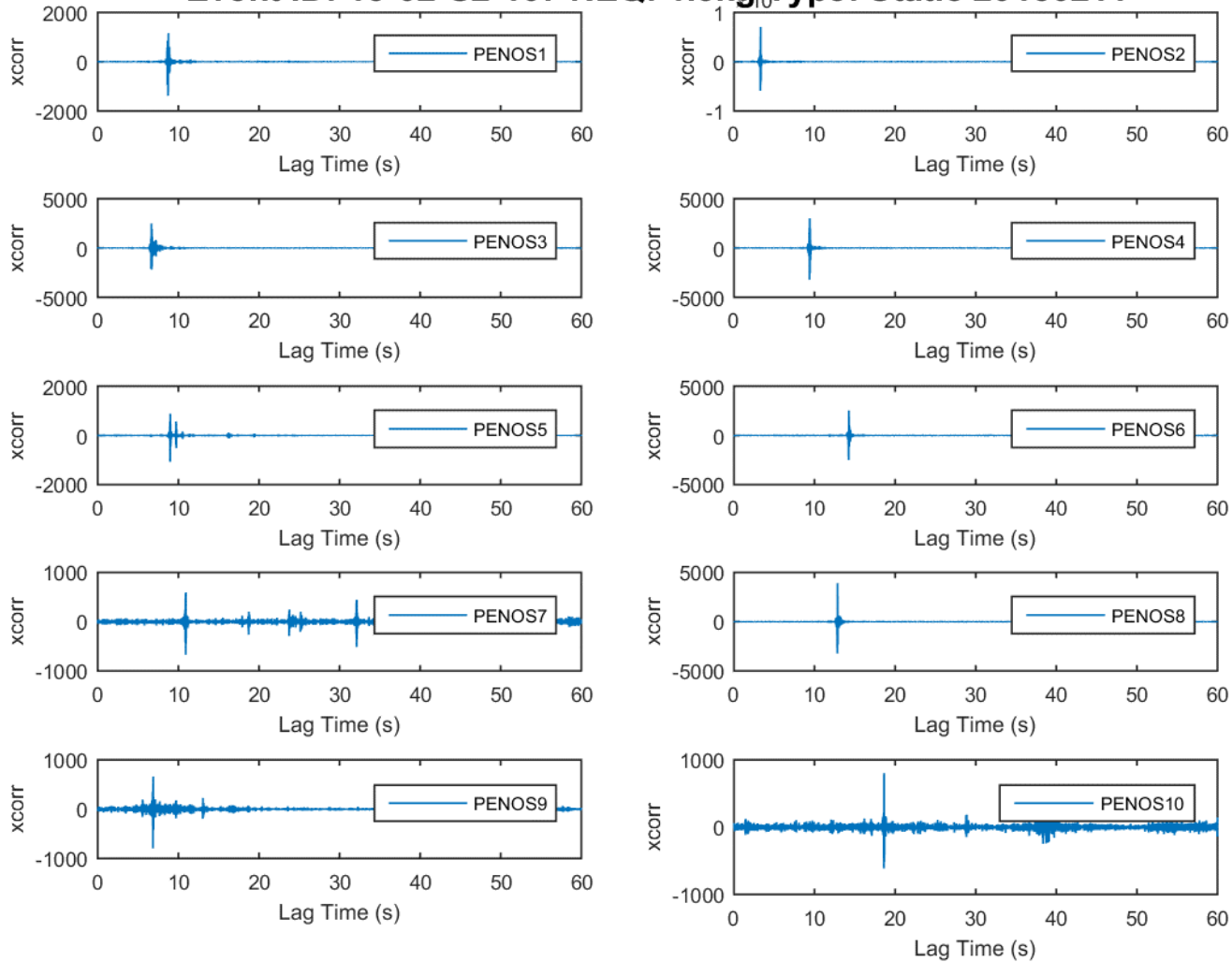
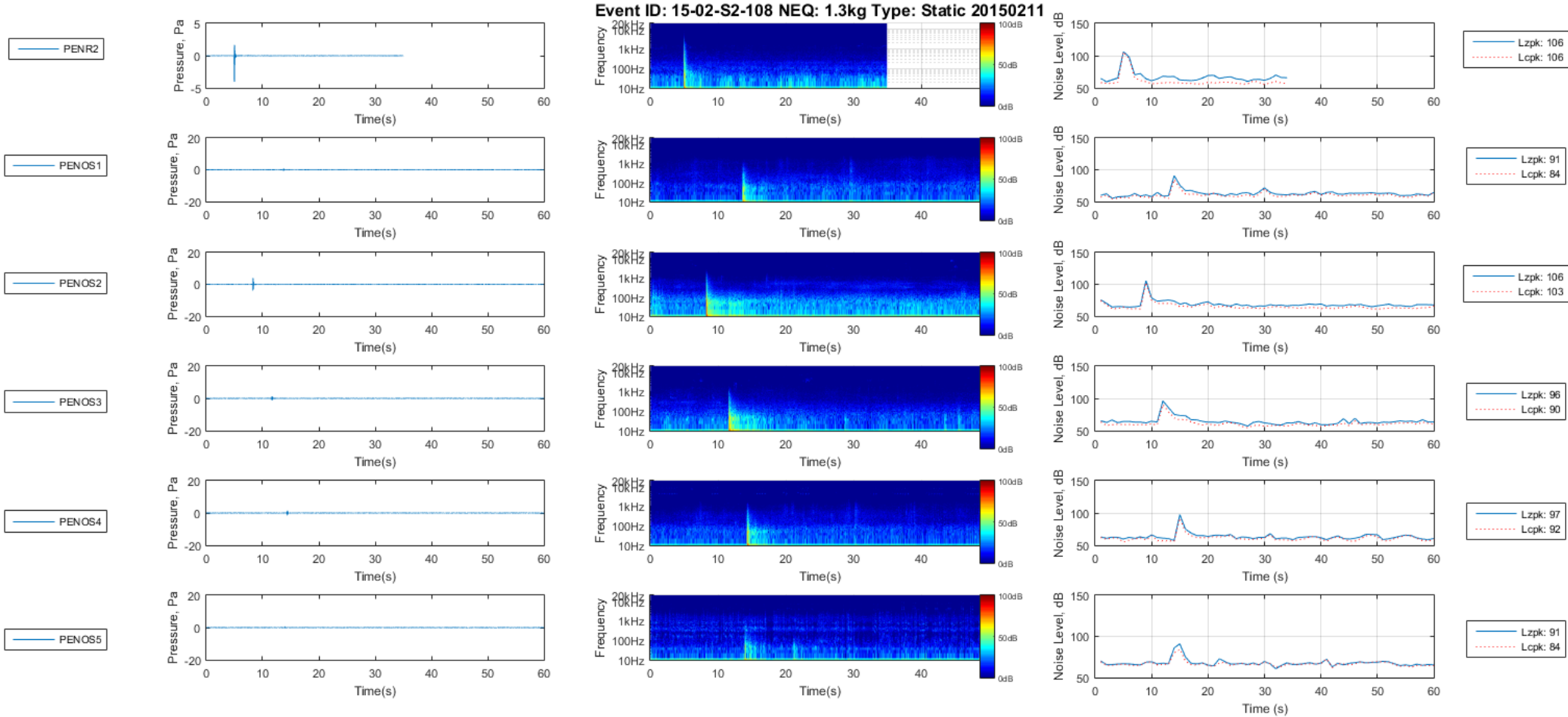


FIGURE 2.464: COHERENCE PEN\_OS 6 - 10 15-02-S2-107CTD

**Event ID: 15-02-S2-107 NEQ: 1.3kg Type: Static 20150211**



**FIGURE 2.465: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S2-107**



**FIGURE 2.466: PEN\_OS 1 - 5 15-02-S2-108**

Event ID: 15-02-S2-108 NEQ: 1.3kg Type: Static 20150211 CTD

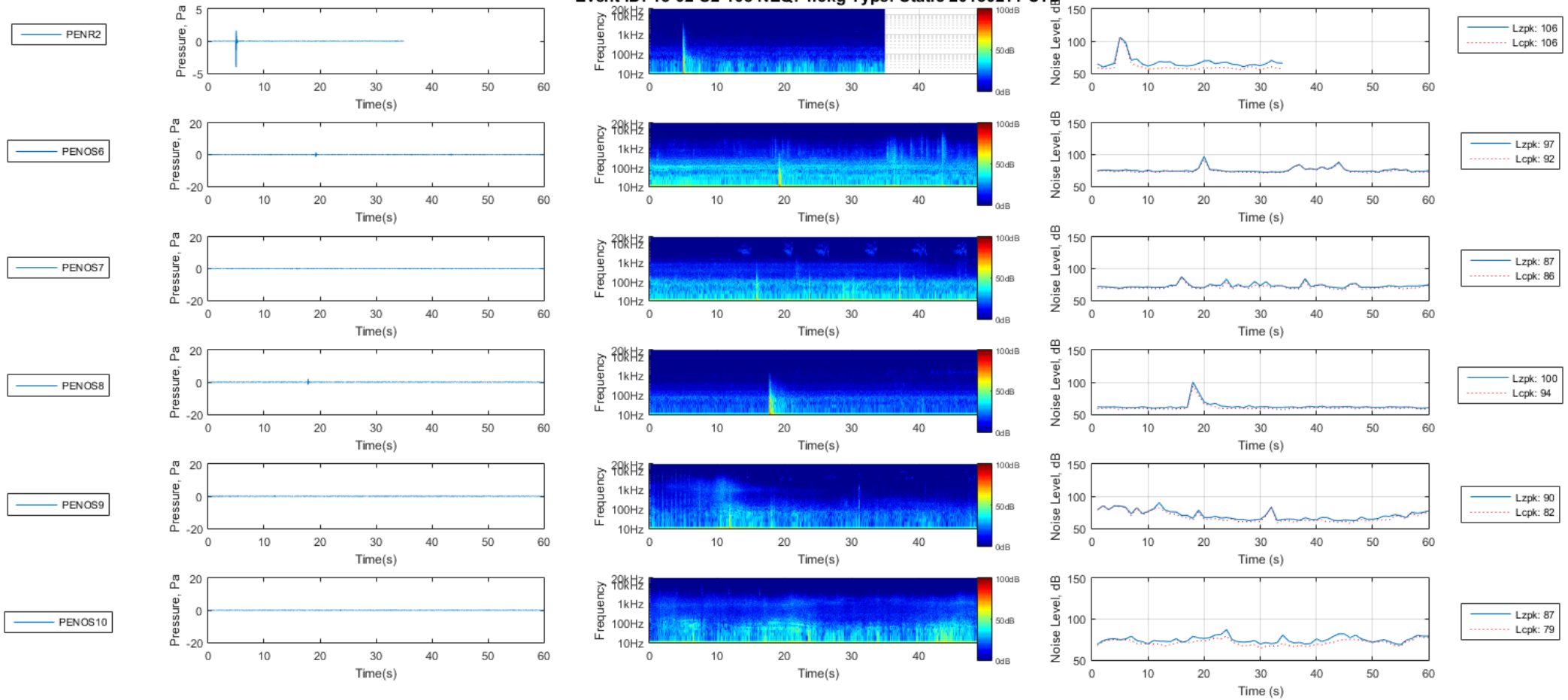


FIGURE 2.467: PEN\_OS 6 - 10 15-02-S2-108

Event ID: 15-02-S2-108 NEQ: 1.3kg Type: Static 20150211

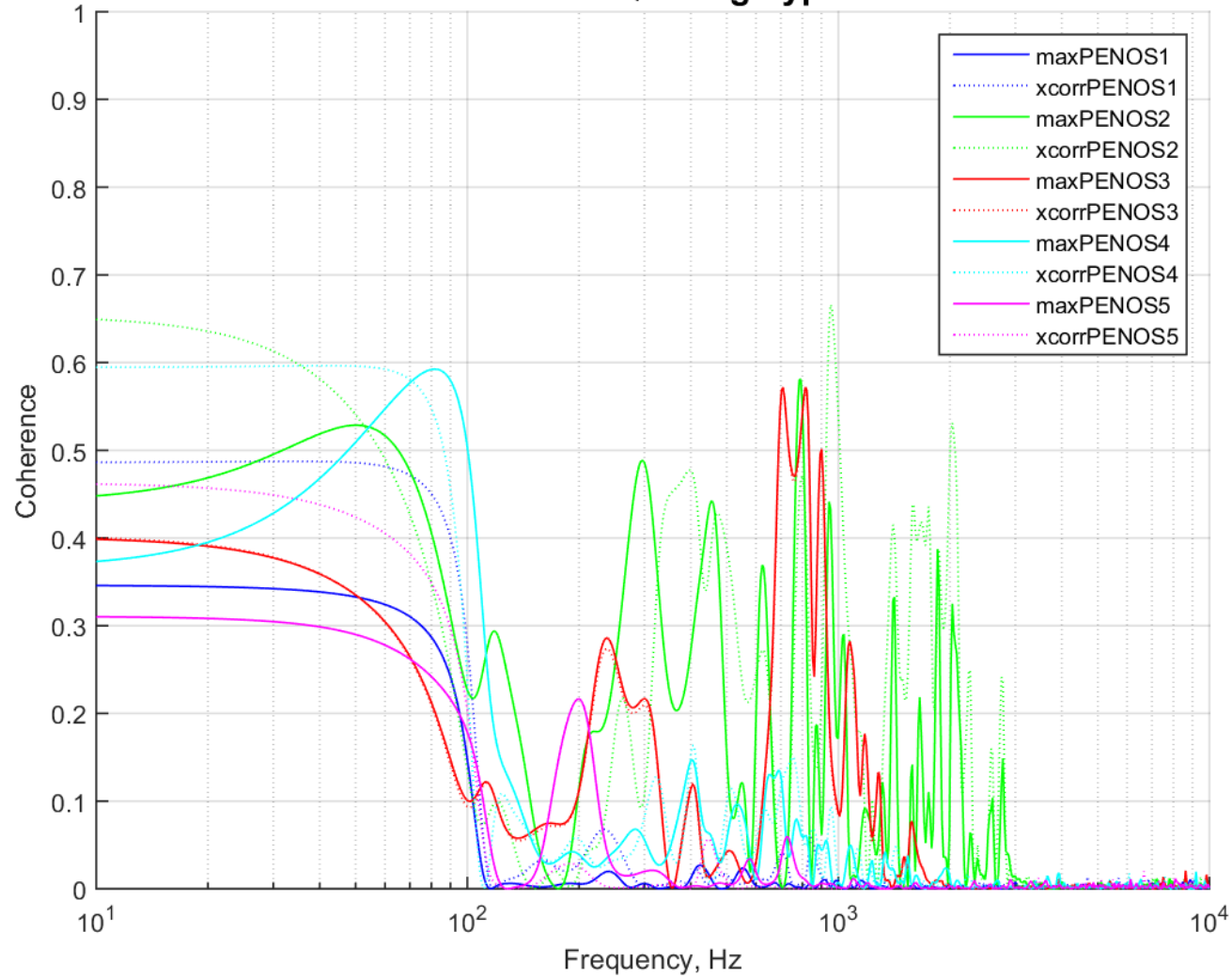


FIGURE 2.468: COHERENCE PEN\_OS 1 - 5 15-02-S2-108

Event ID: 15-02-S2-108 NEQ: 1.3kg Type: Static 20150211

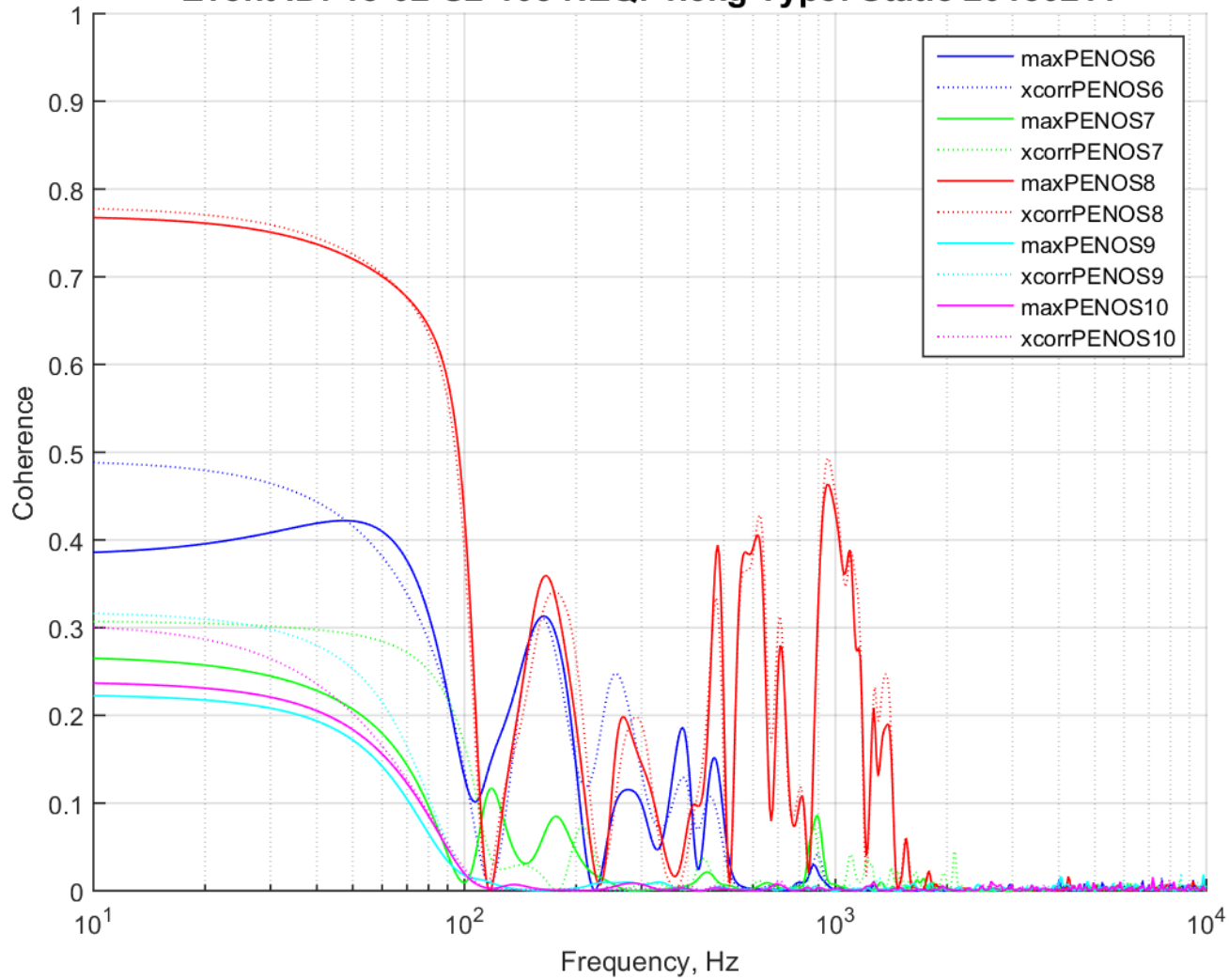
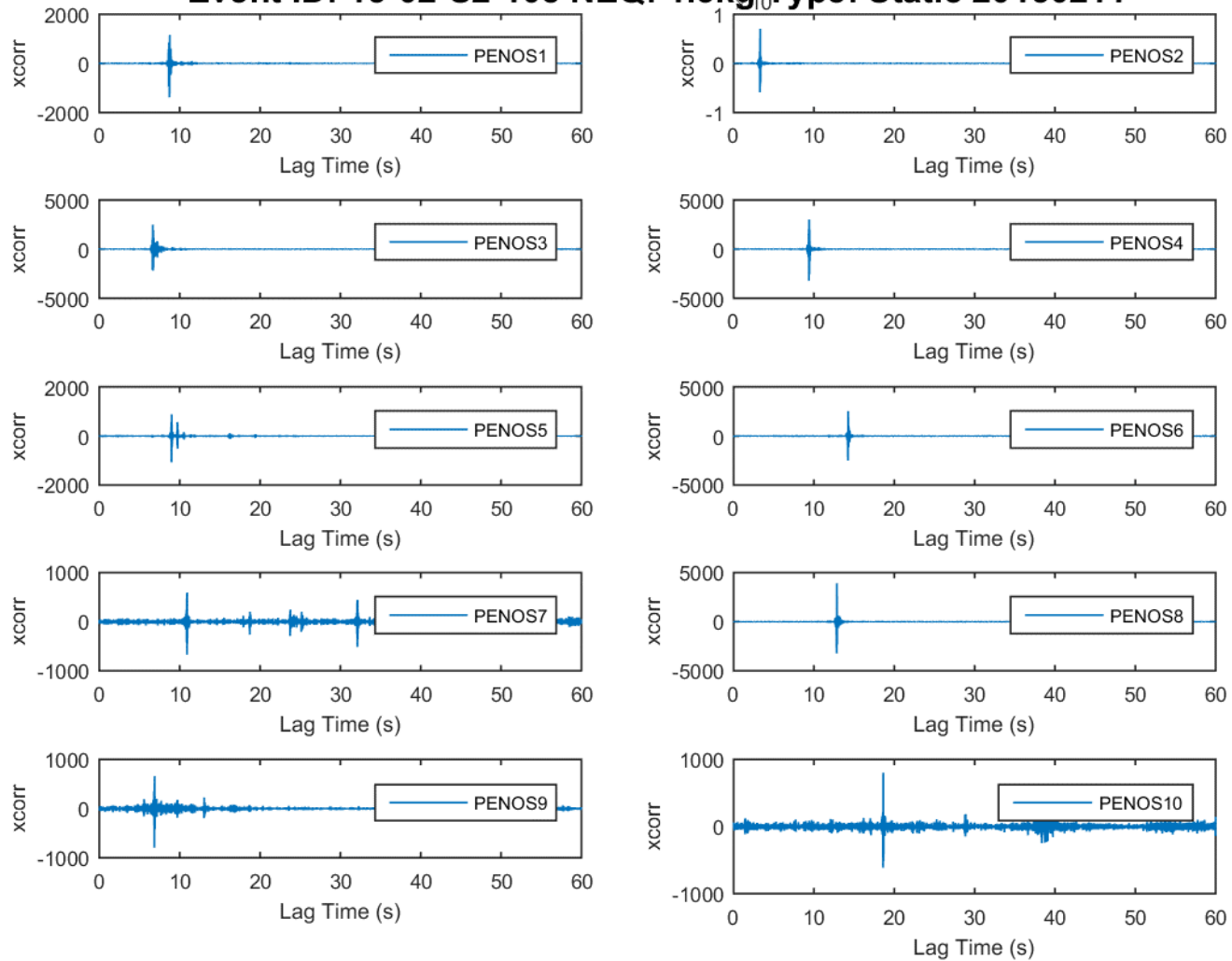
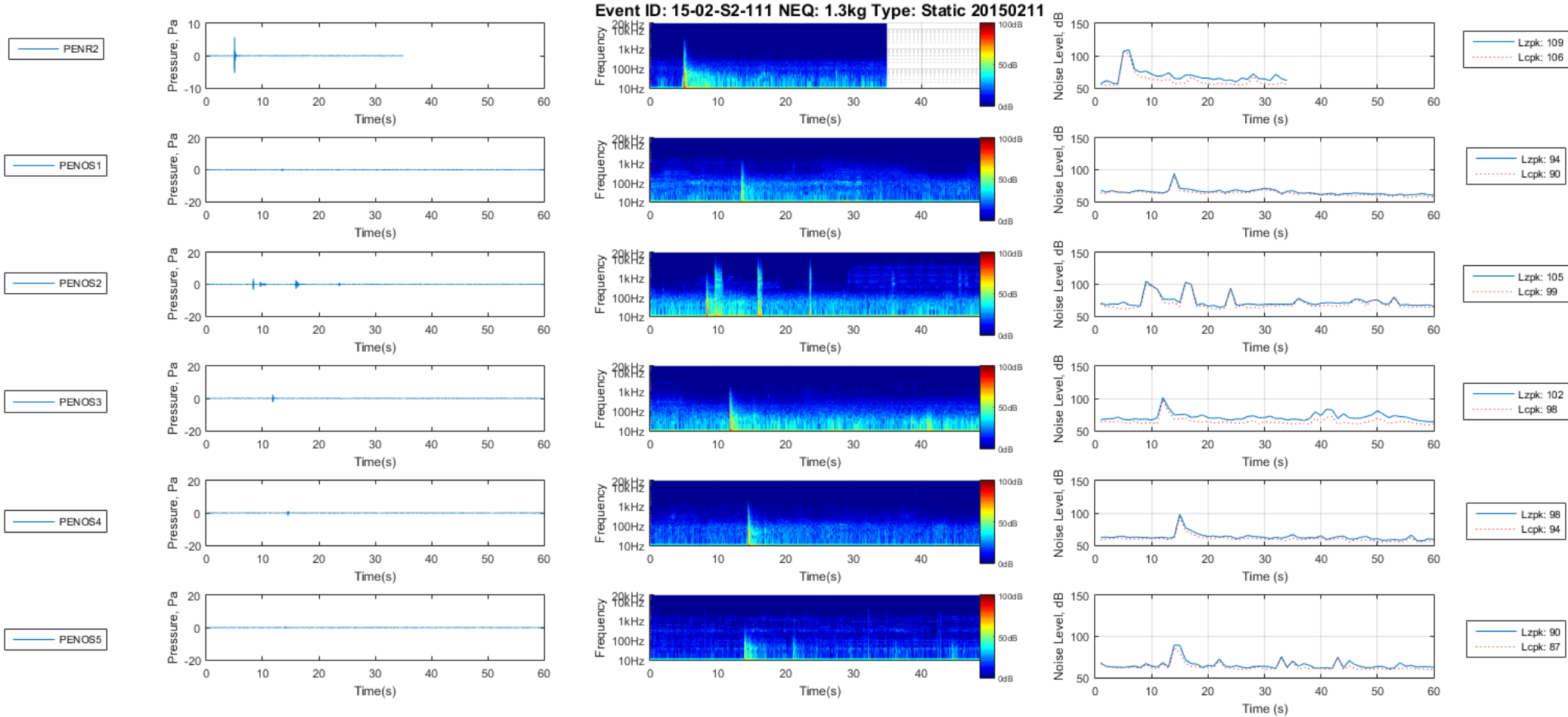


FIGURE 2.469: COHERENCE PEN\_OS 6 - 10 15-02-S2-108CTD

**Event ID: 15-02-S2-108 NEQ: 1.3kg Type: Static 20150211**



**FIGURE 2.470: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S2-108**



**FIGURE 2.471: PEN\_OS 1 - 5 15-02-S2-111**



Event ID: 15-02-S2-111 NEQ: 1.3kg Type: Static 20150211 CTD

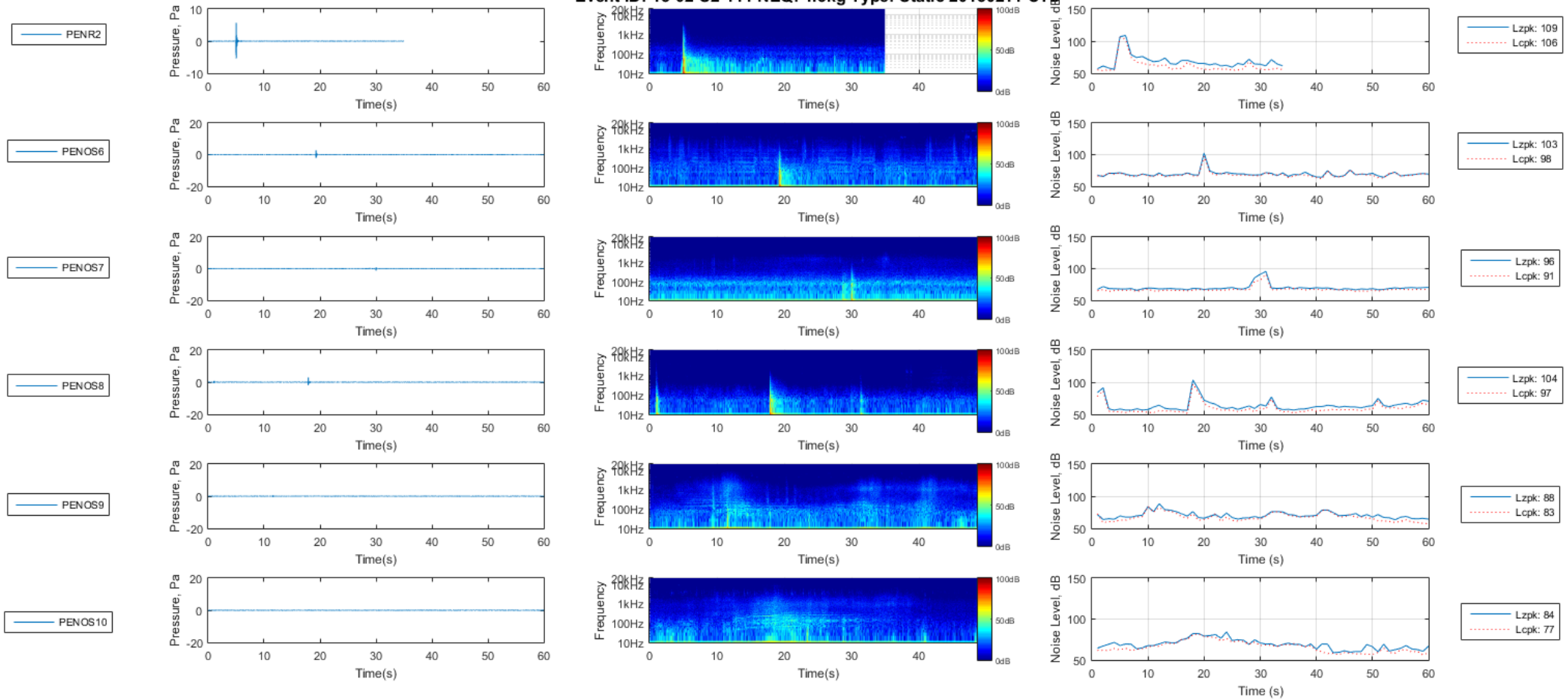
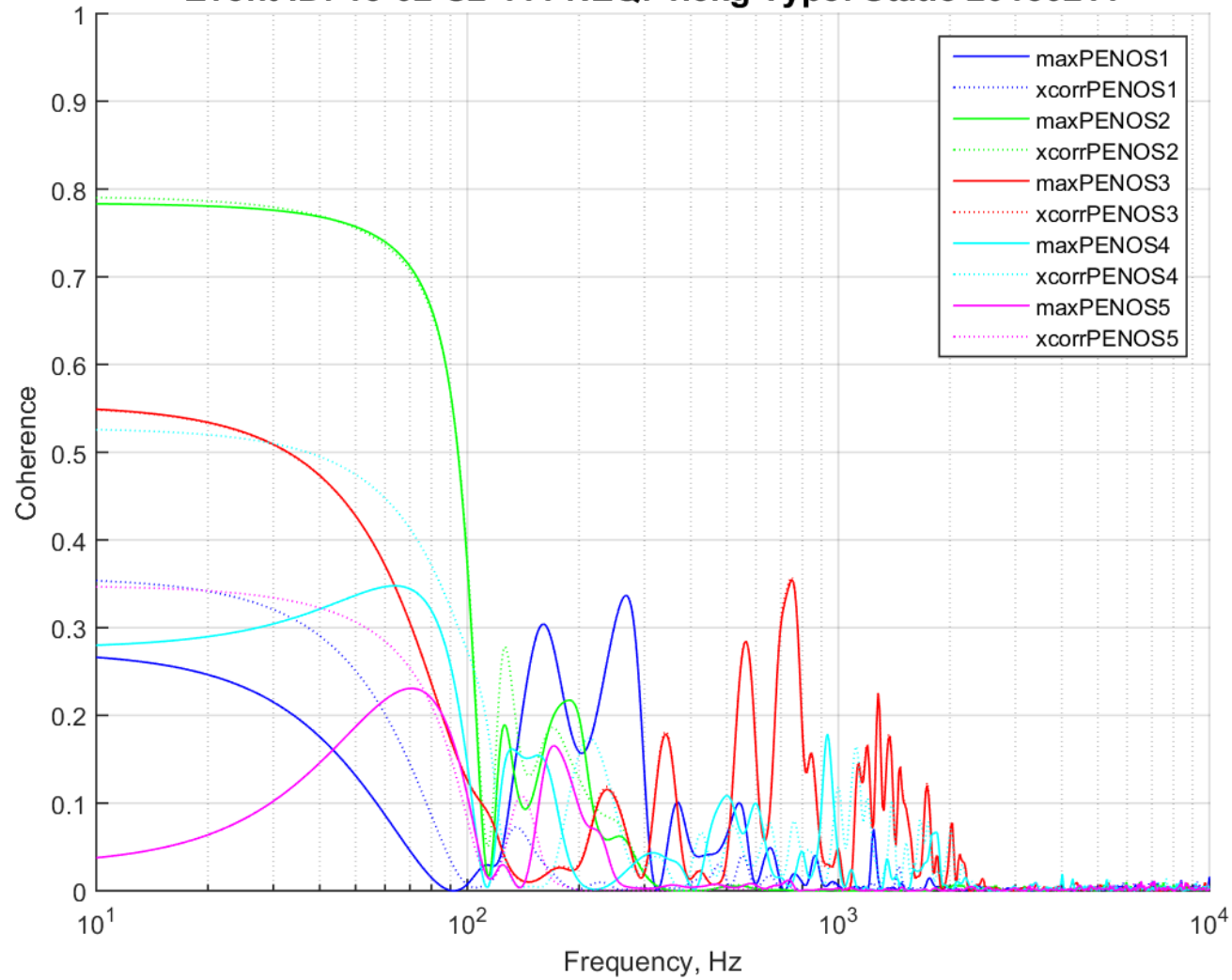


FIGURE 2.472: PEN\_OS 6 - 10 15-02-S2-111

**Event ID: 15-02-S2-111 NEQ: 1.3kg Type: Static 20150211**



**FIGURE 2.473: COHERENCE PEN\_OS 1 - 5 15-02-S2-111**

Event ID: 15-02-S2-111 NEQ: 1.3kg Type: Static 20150211

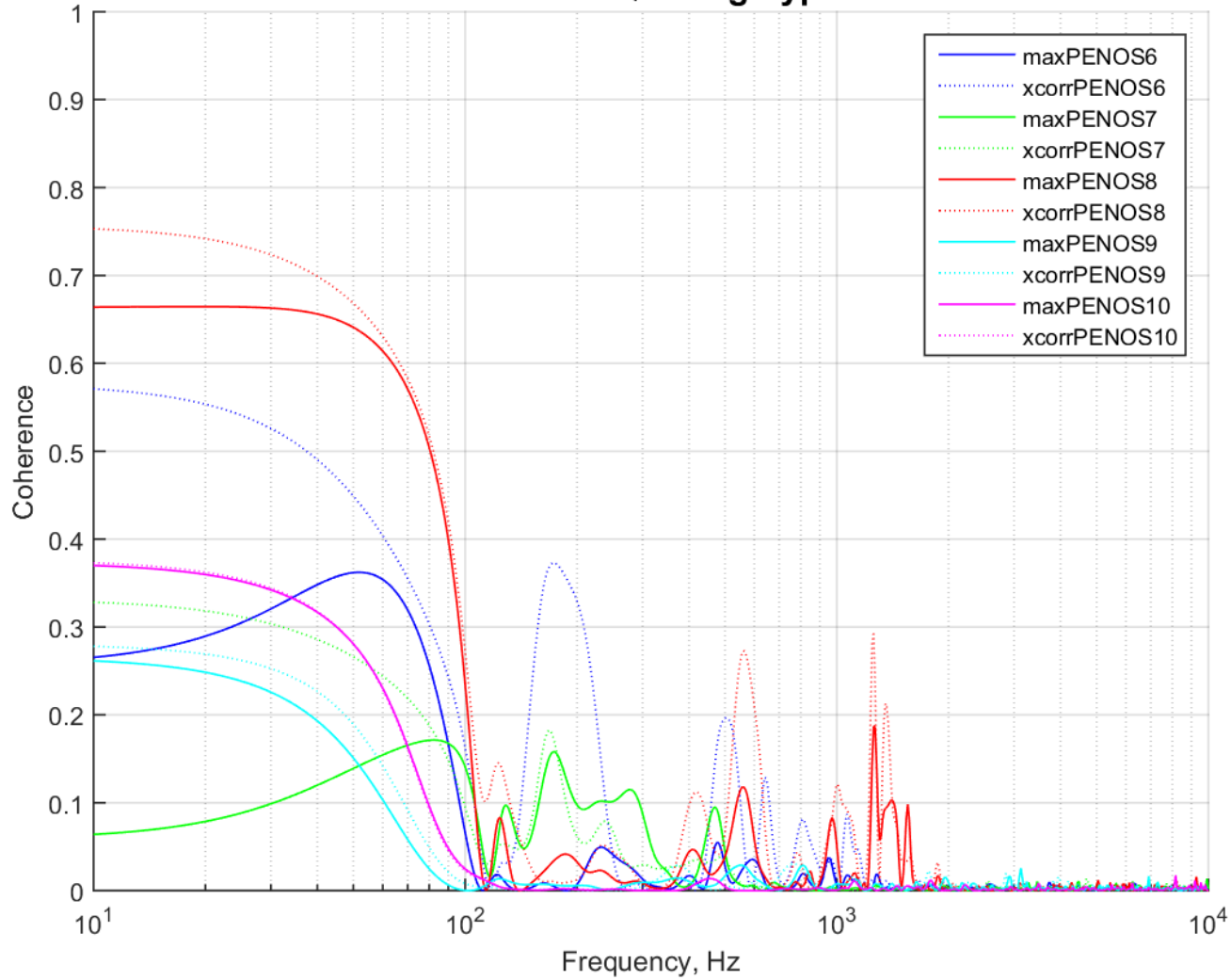
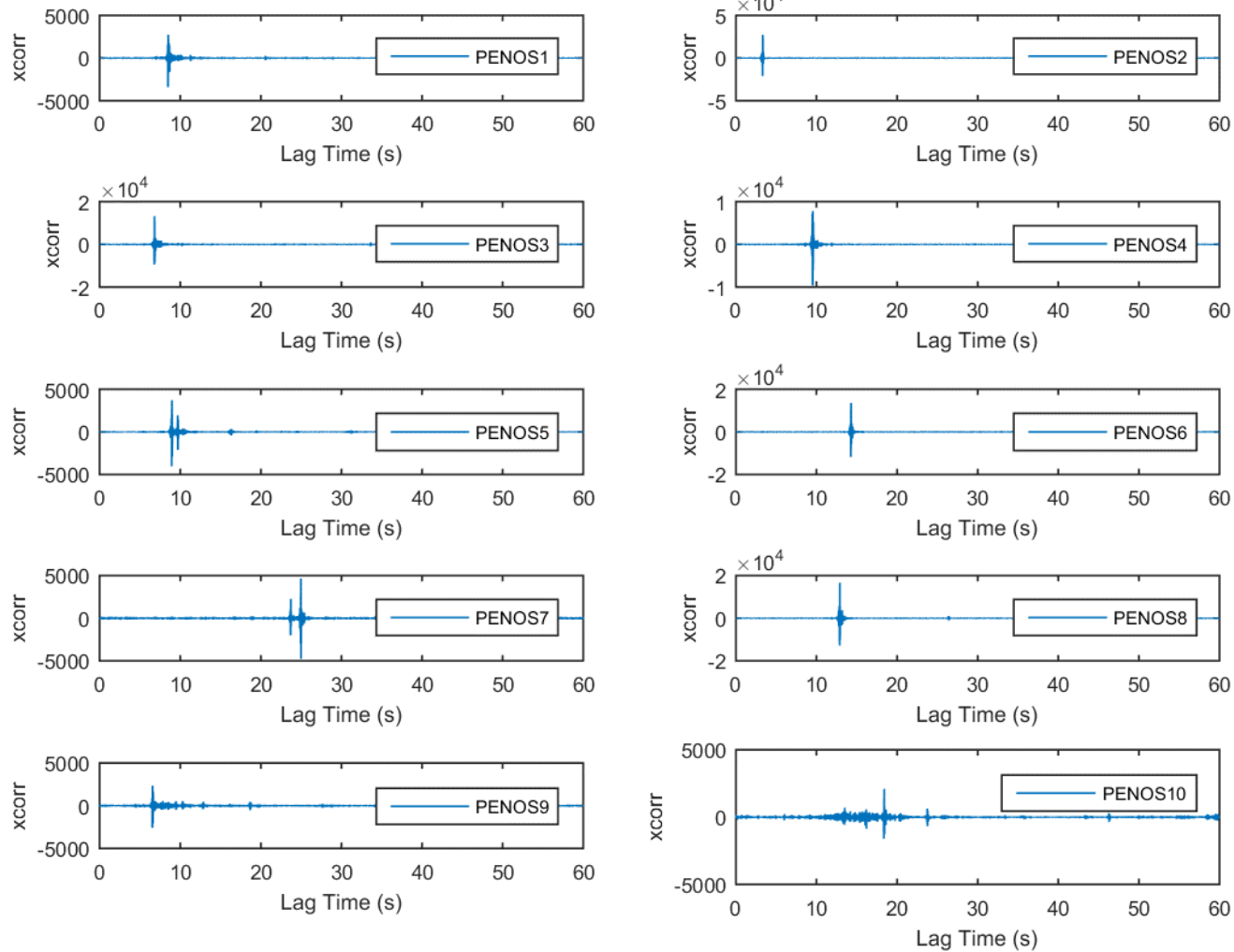
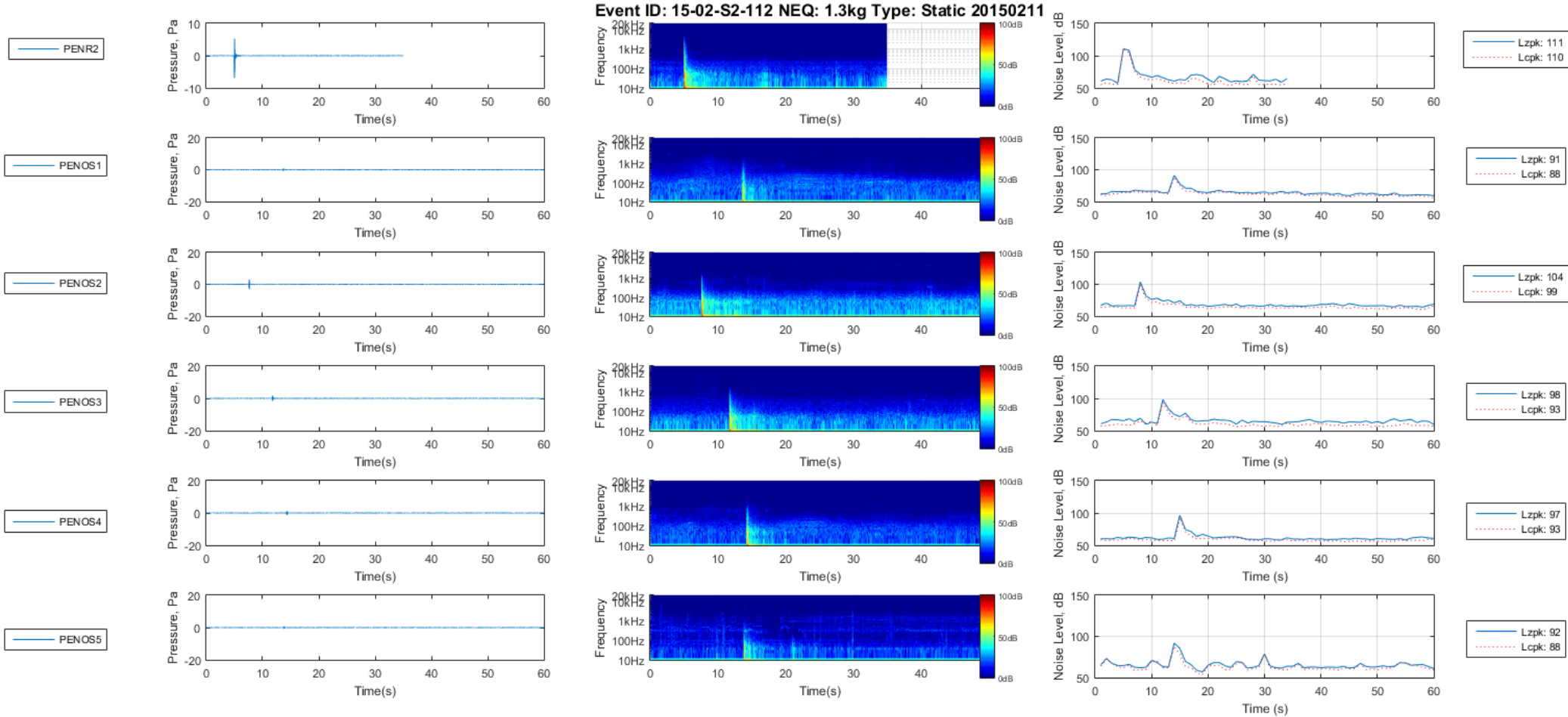


FIGURE 2.474: COHERENCE PEN\_OS 6 - 10 15-02-S2-111CTD

**Event ID: 15-02-S2-111 NEQ: 1.3kg Type: Static 20150211**



**FIGURE 2.475: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S2-111**



**FIGURE 2.476: PEN\_OS 1 - 5 15-02-S2-112**

Event ID: 15-02-S2-112 NEQ: 1.3kg Type: Static 20150211 CTD

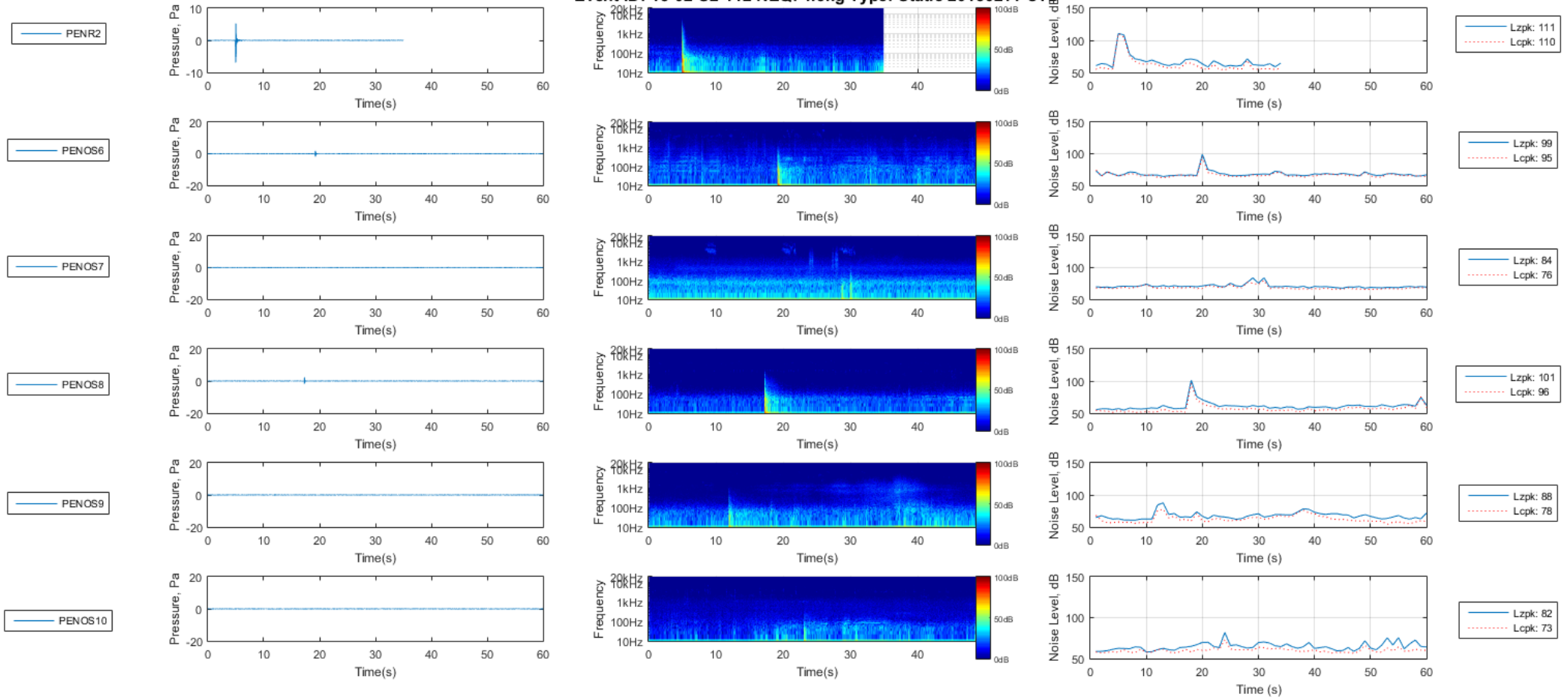
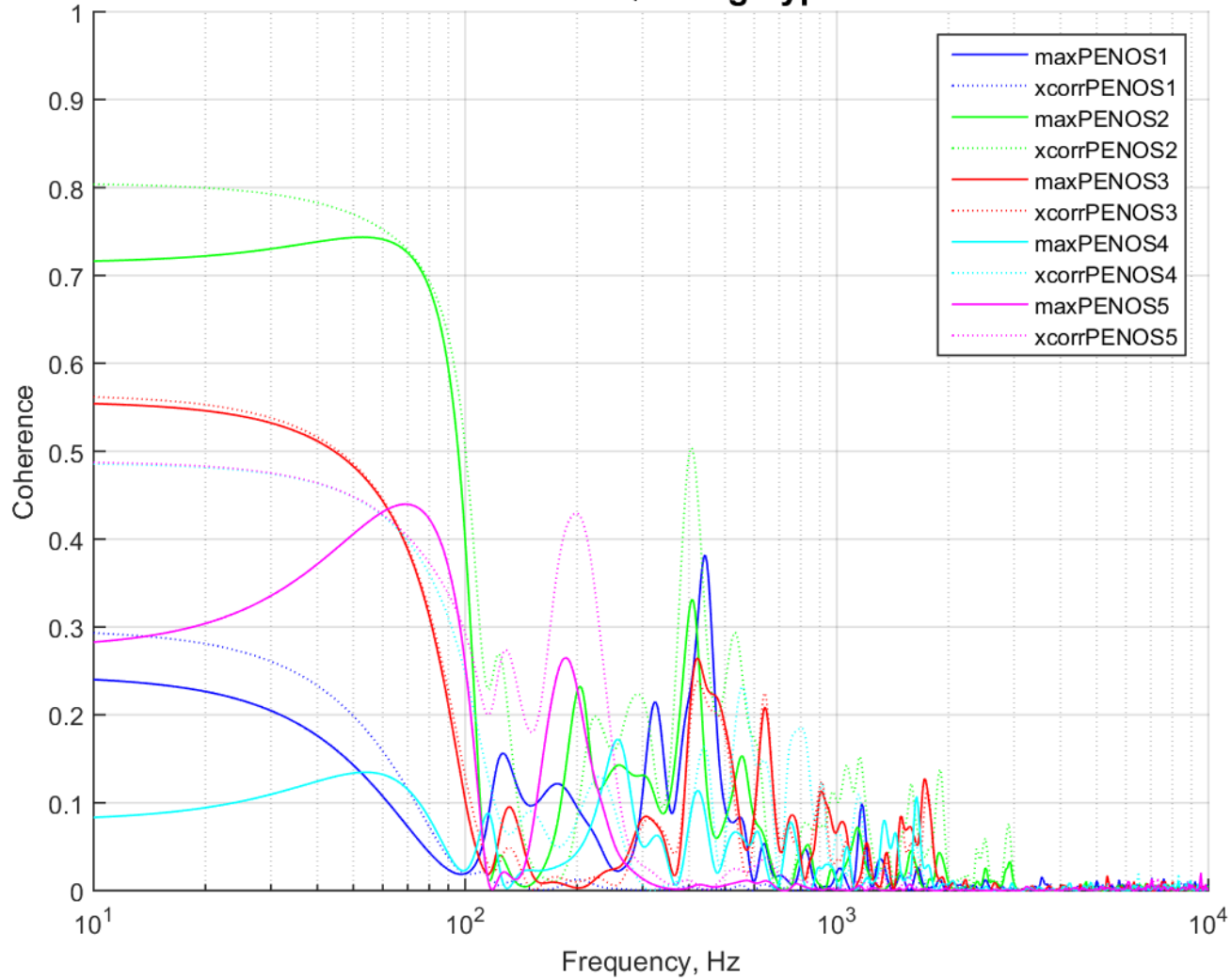


FIGURE 2.477: PEN\_OS 6 - 10 15-02-S2-112

**Event ID: 15-02-S2-112 NEQ: 1.3kg Type: Static 20150211**



**FIGURE 2.478: COHERENCE PEN\_OS 1 - 5 15-02-S2-112**

Event ID: 15-02-S2-112 NEQ: 1.3kg Type: Static 20150211

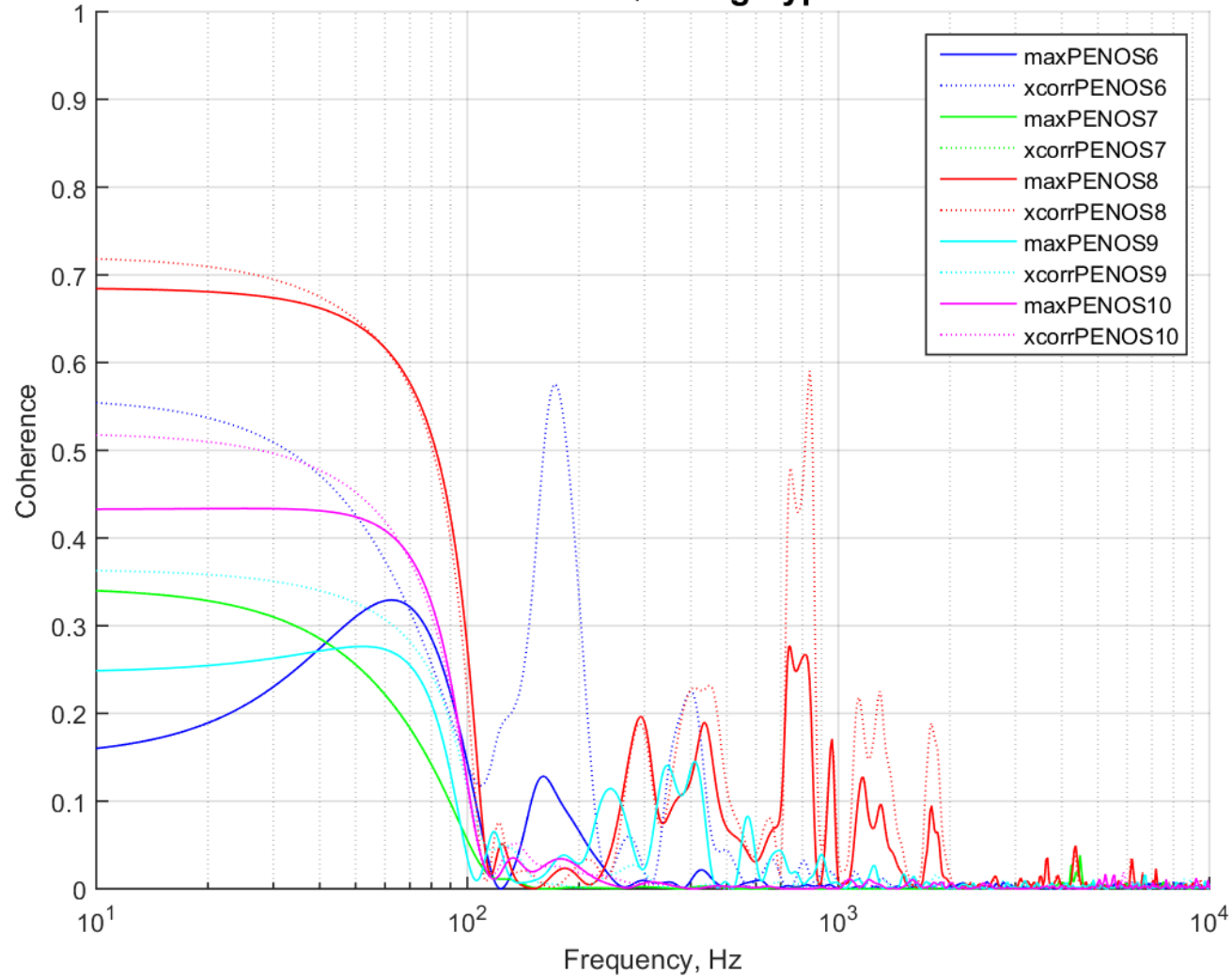
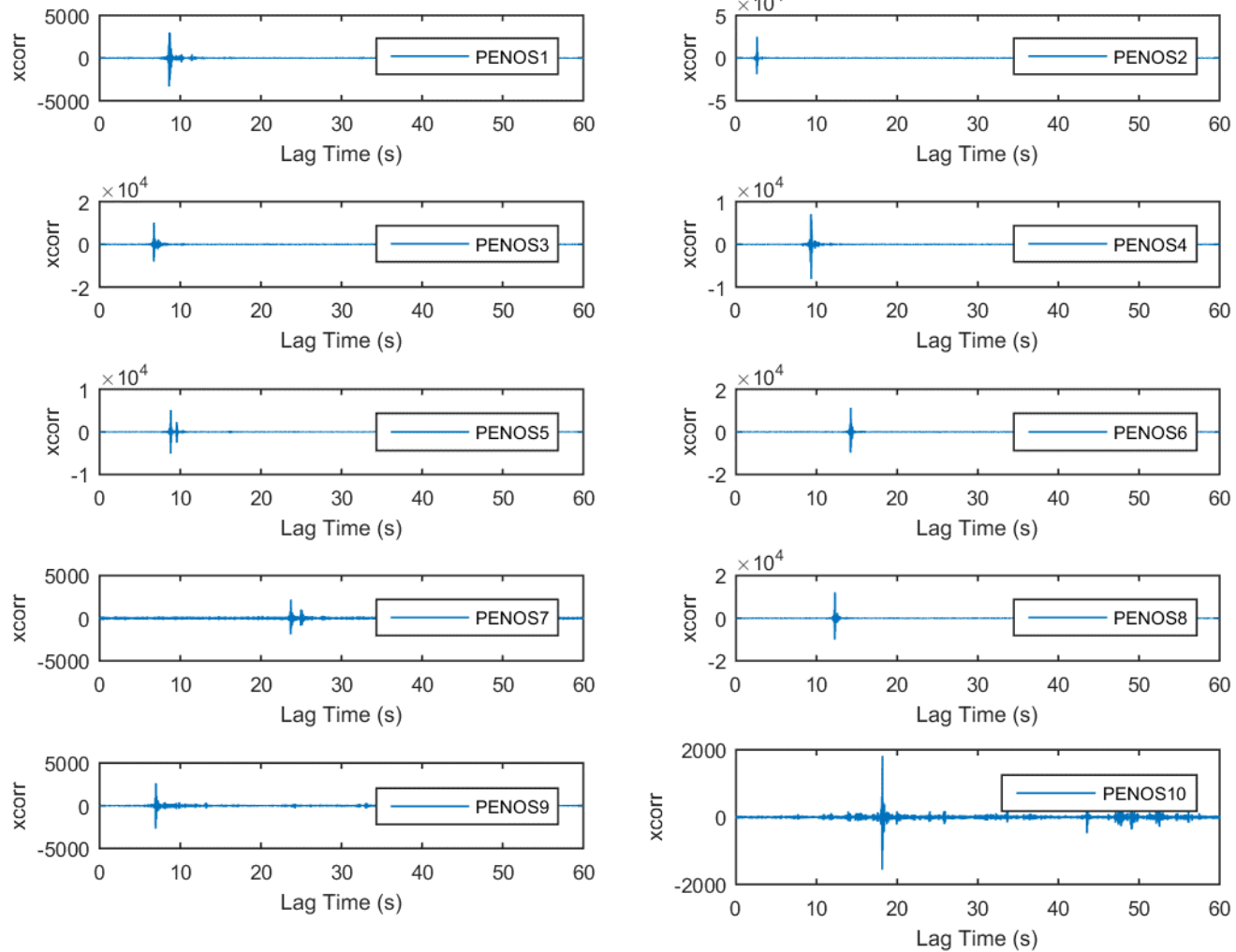


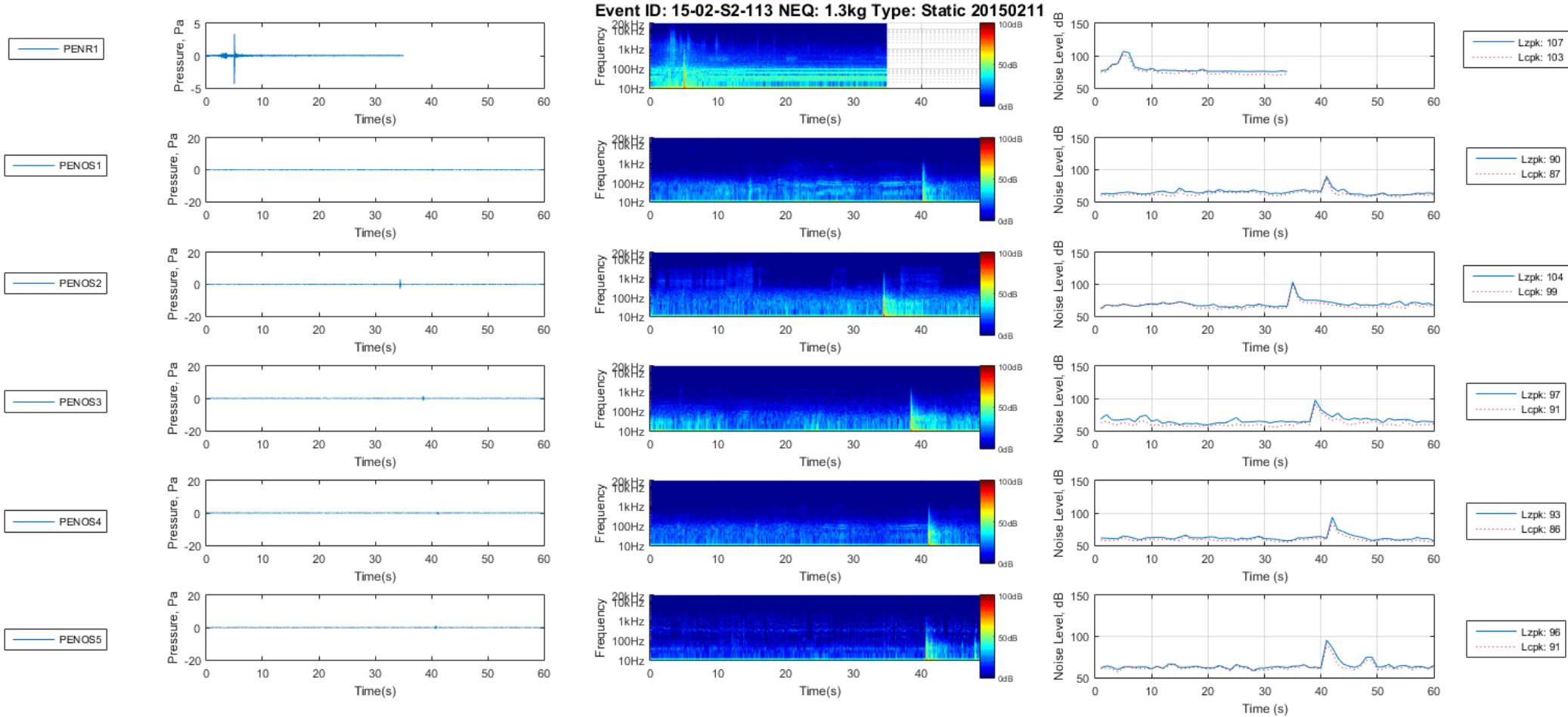
FIGURE 2.479: COHERENCE PEN\_OS 6 - 10 15-02-S2-112CTD



**Event ID: 15-02-S2-112 NEQ: 1.3kg Type: Static 20150211**



**FIGURE 2.480: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S2-112**



**FIGURE 2.481: PEN\_OS 1 - 5 15-02-S2-113**

Event ID: 15-02-S2-113 NEQ: 1.3kg Type: Static 20150211 CTD

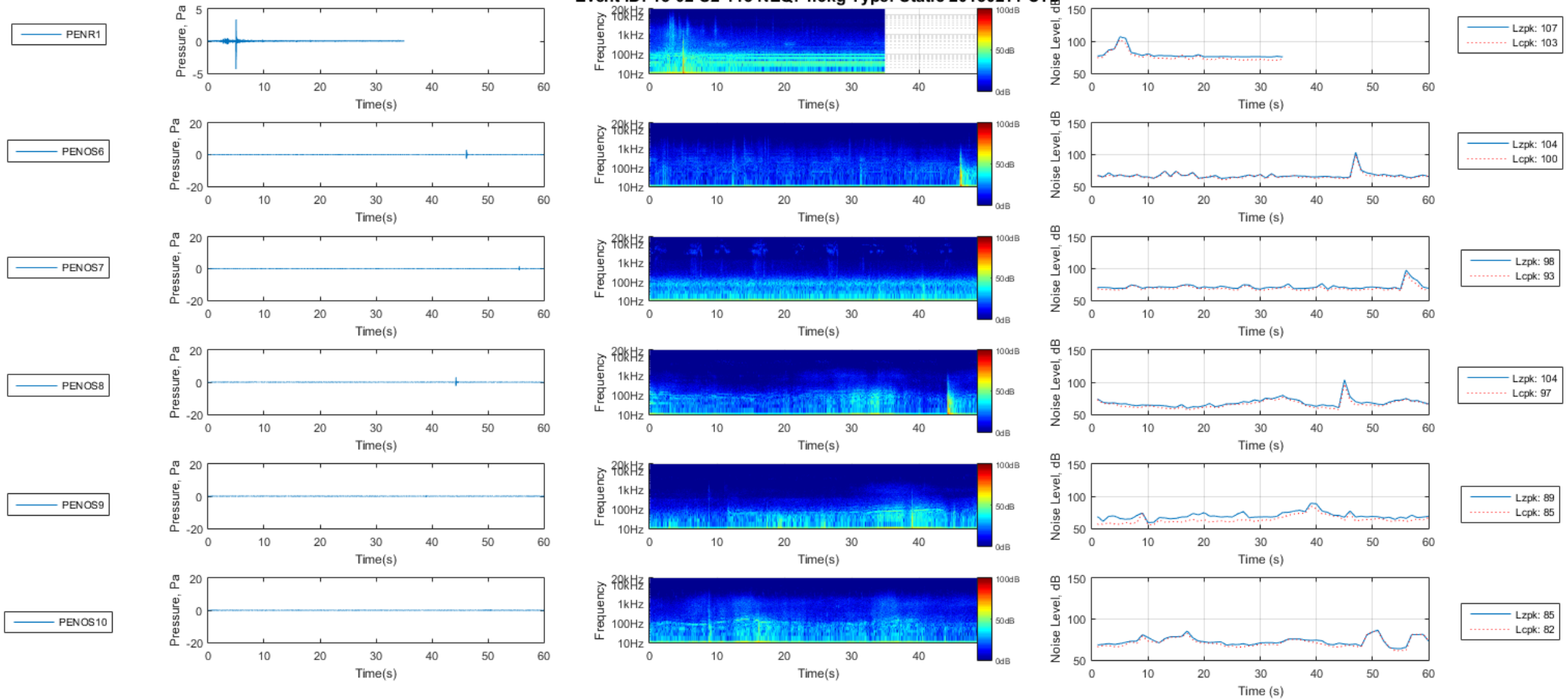


FIGURE 2.482: PEN\_OS 6 - 10 15-02-S2-113

Event ID: 15-02-S2-113 NEQ: 1.3kg Type: Static 20150211

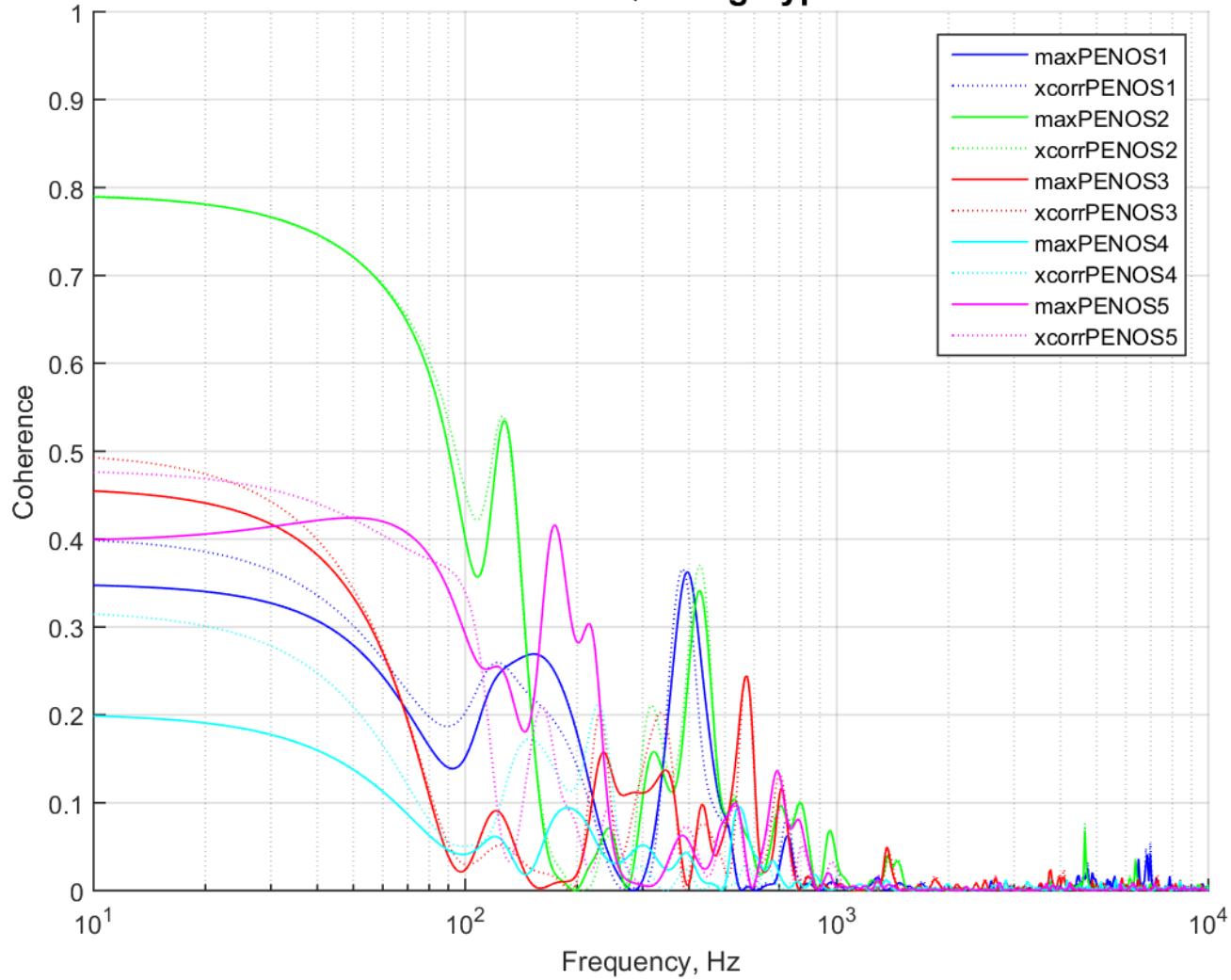


FIGURE 2.483: COHERENCE PEN\_OS 1 - 5 15-02-S2-113

Event ID: 15-02-S2-113 NEQ: 1.3kg Type: Static 20150211

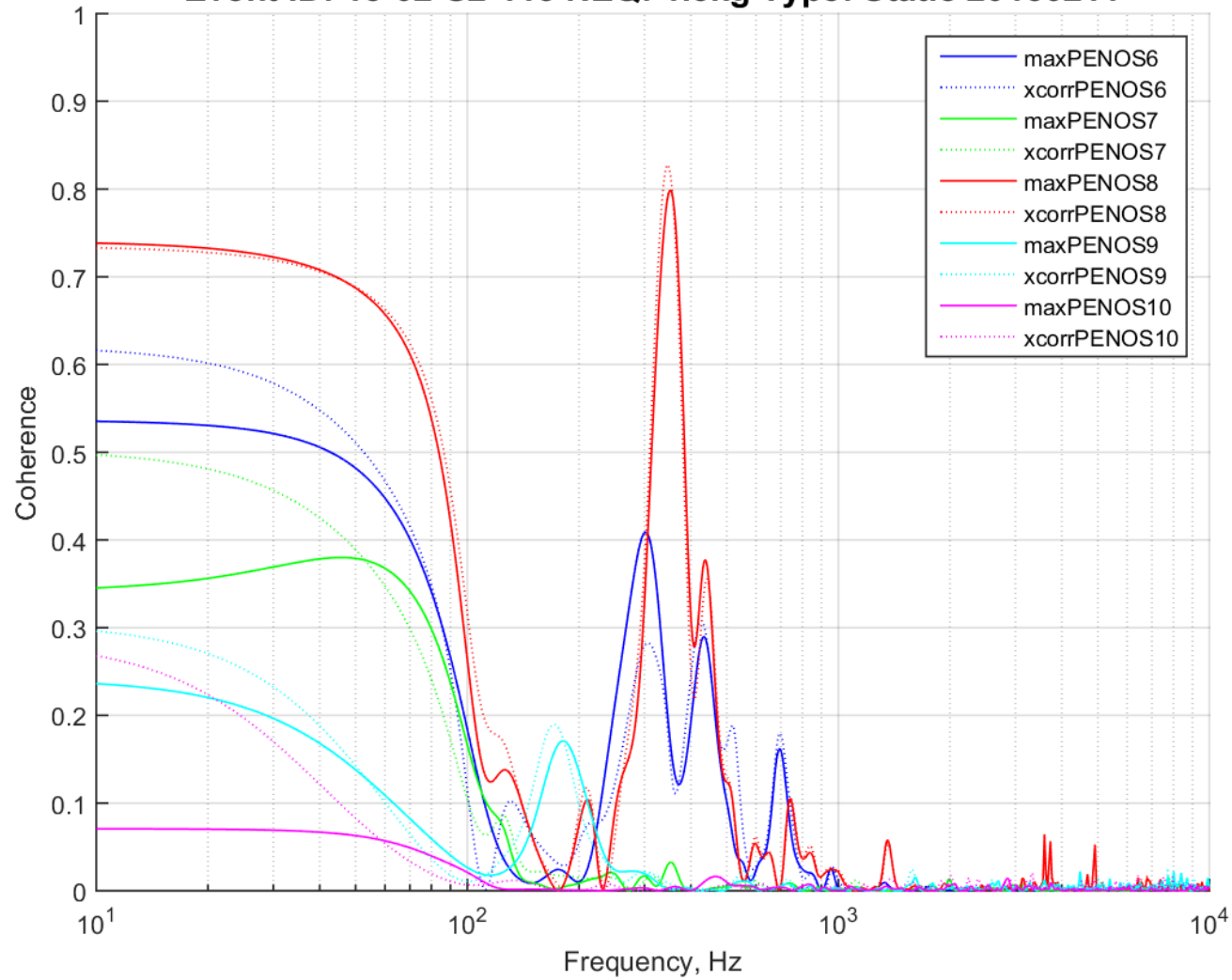
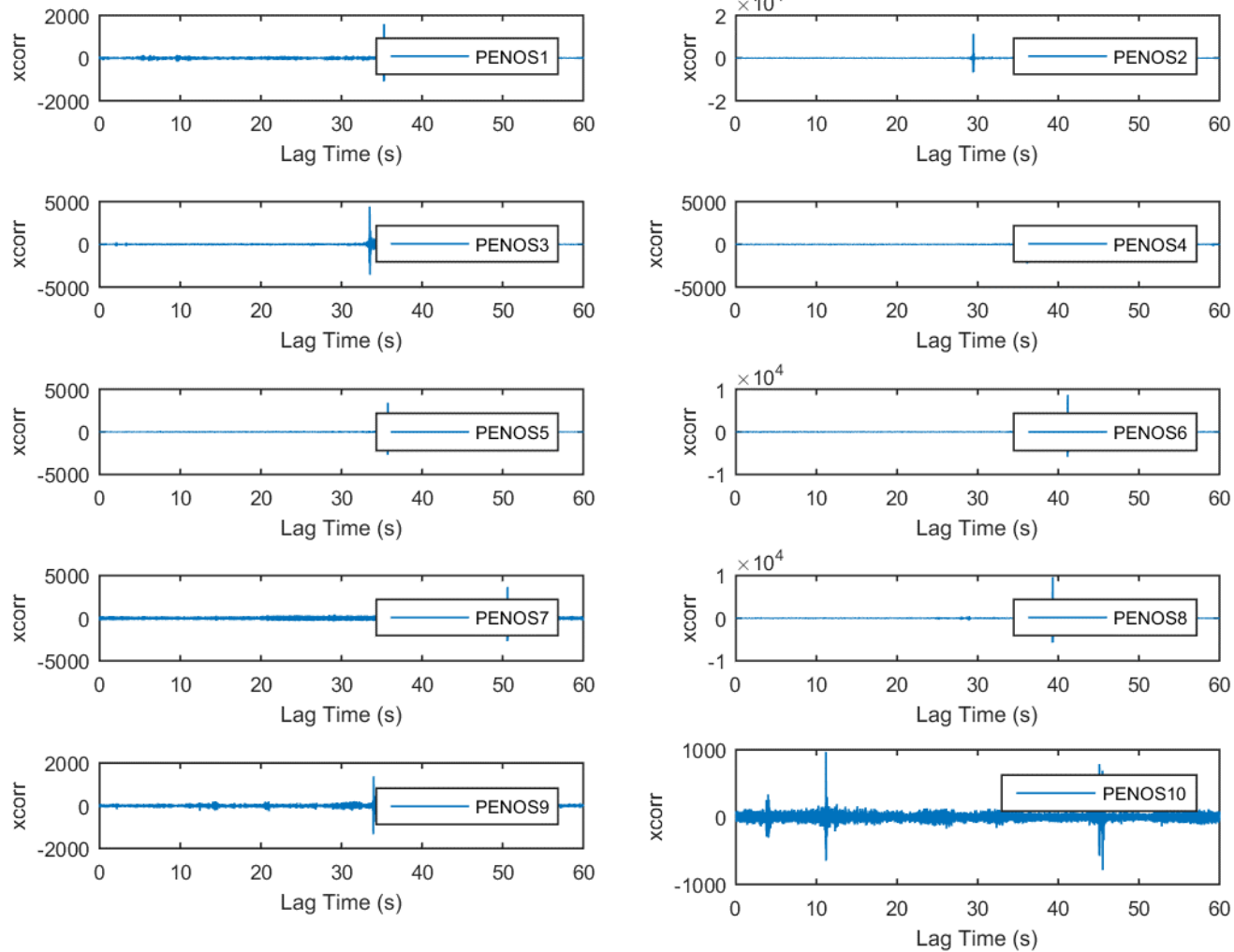
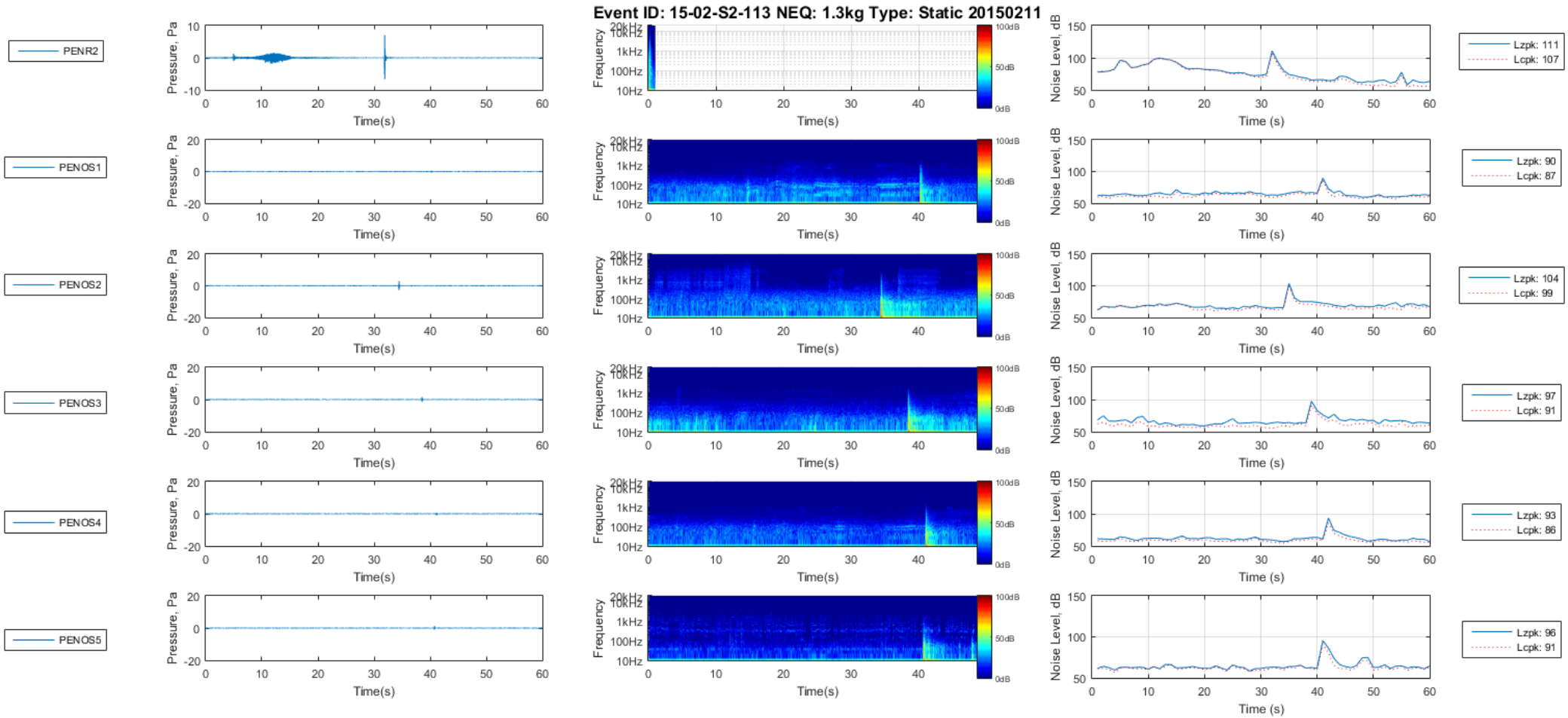


FIGURE 2.484: COHERENCE PEN\_OS 6 - 10 15-02-S2-113CTD

**Event ID: 15-02-S2-113 NEQ: 1.3kg Type: Static 20150211**



**FIGURE 2.485: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S2-113**



**FIGURE 2.486: PEN\_OS 1 - 5 15-02-S2-113**

Event ID: 15-02-S2-113 NEQ: 1.3kg Type: Static 20150211 CTD

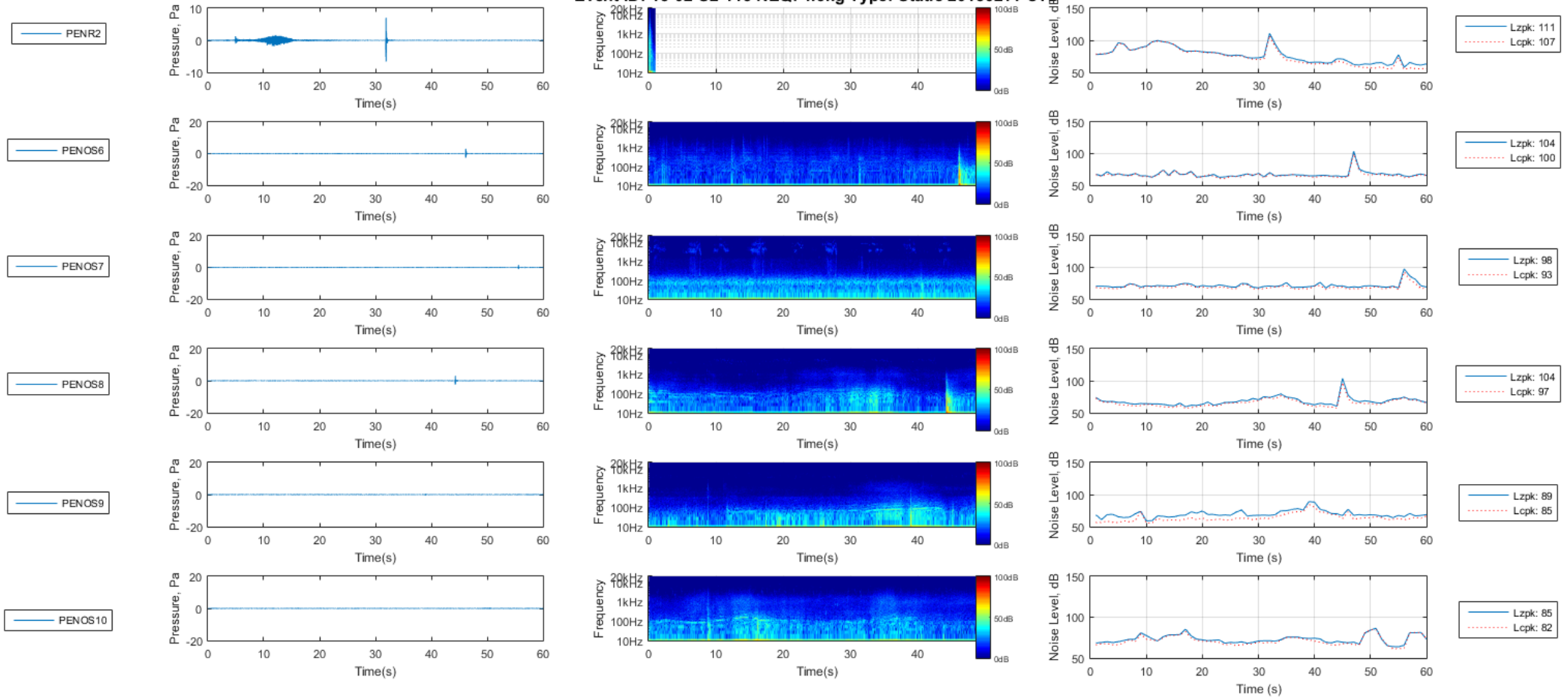


FIGURE 2.487: PEN\_OS 6 - 10 15-02-S2-113



Event ID: 15-02-S2-113 NEQ: 1.3kg Type: Static 20150211

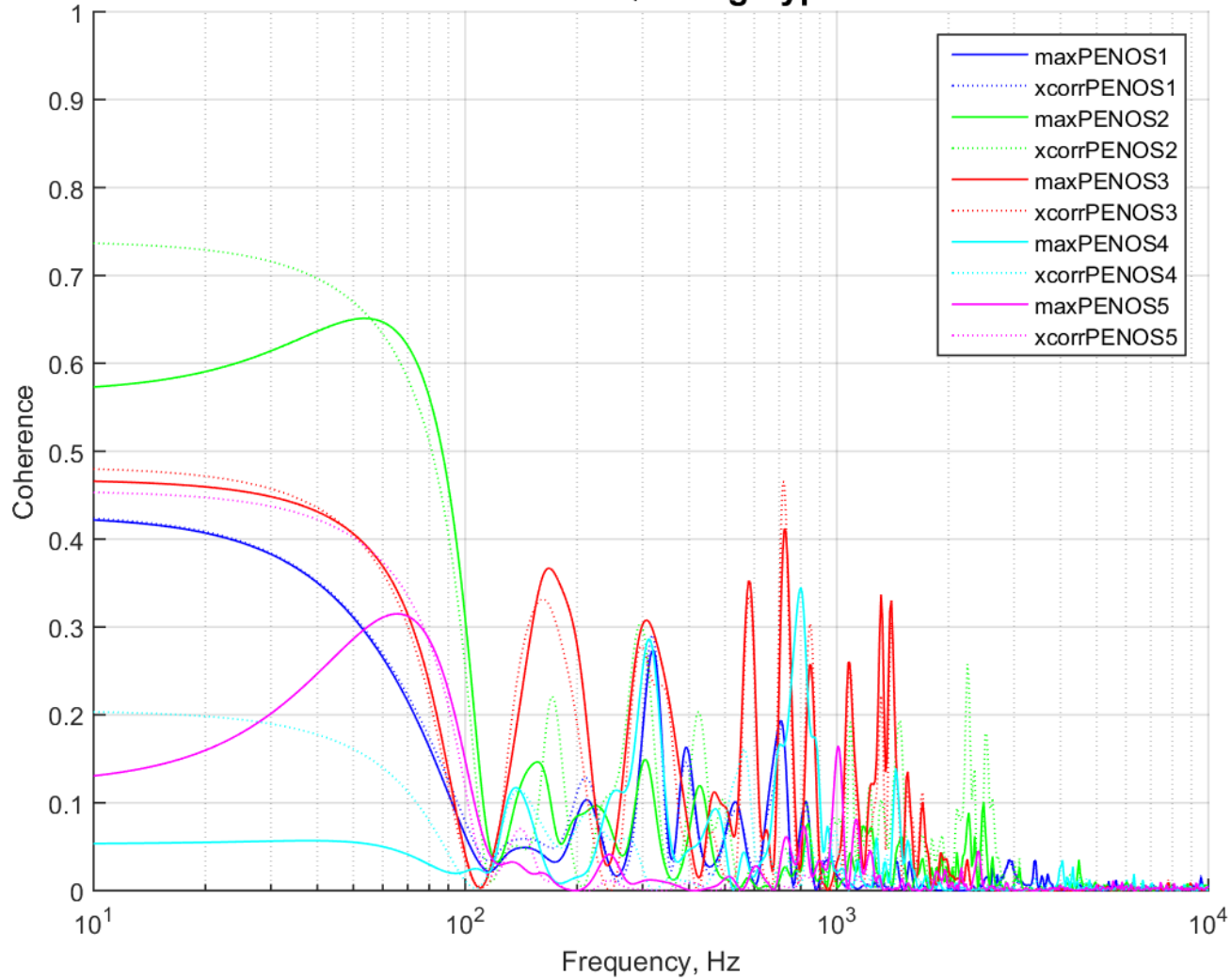


FIGURE 2.488: COHERENCE PEN\_OS 1 - 5 15-02-S2-113

Event ID: 15-02-S2-113 NEQ: 1.3kg Type: Static 20150211

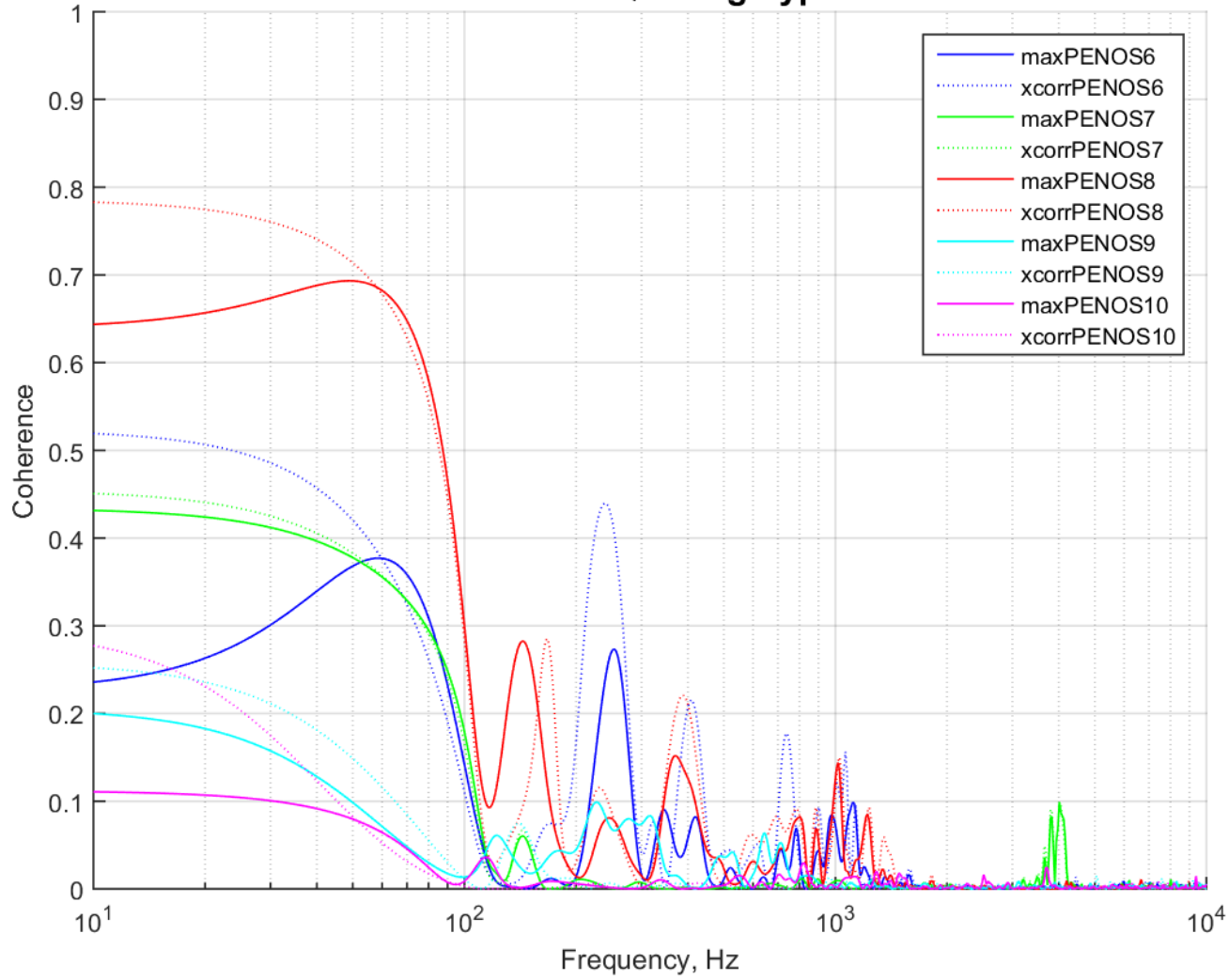
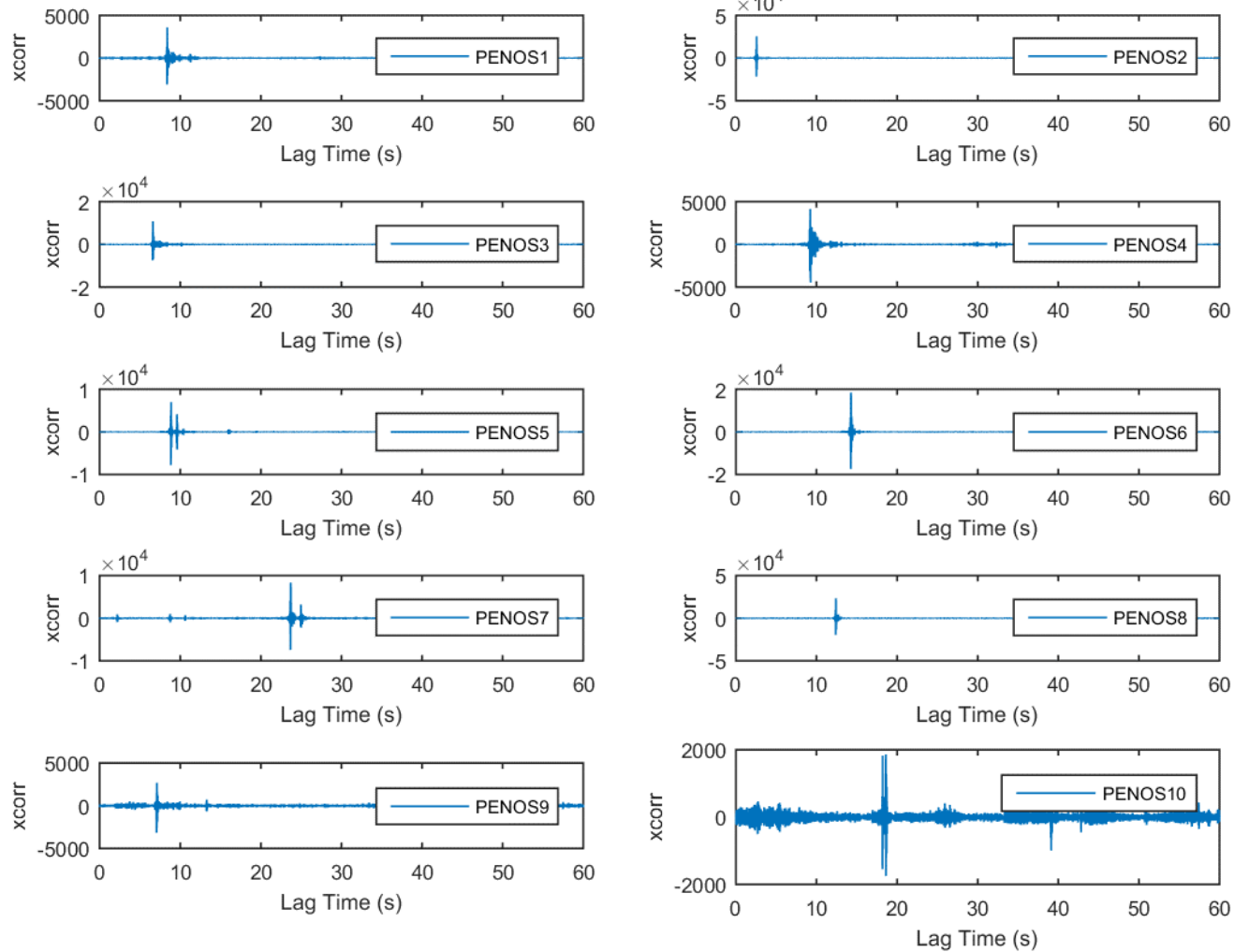
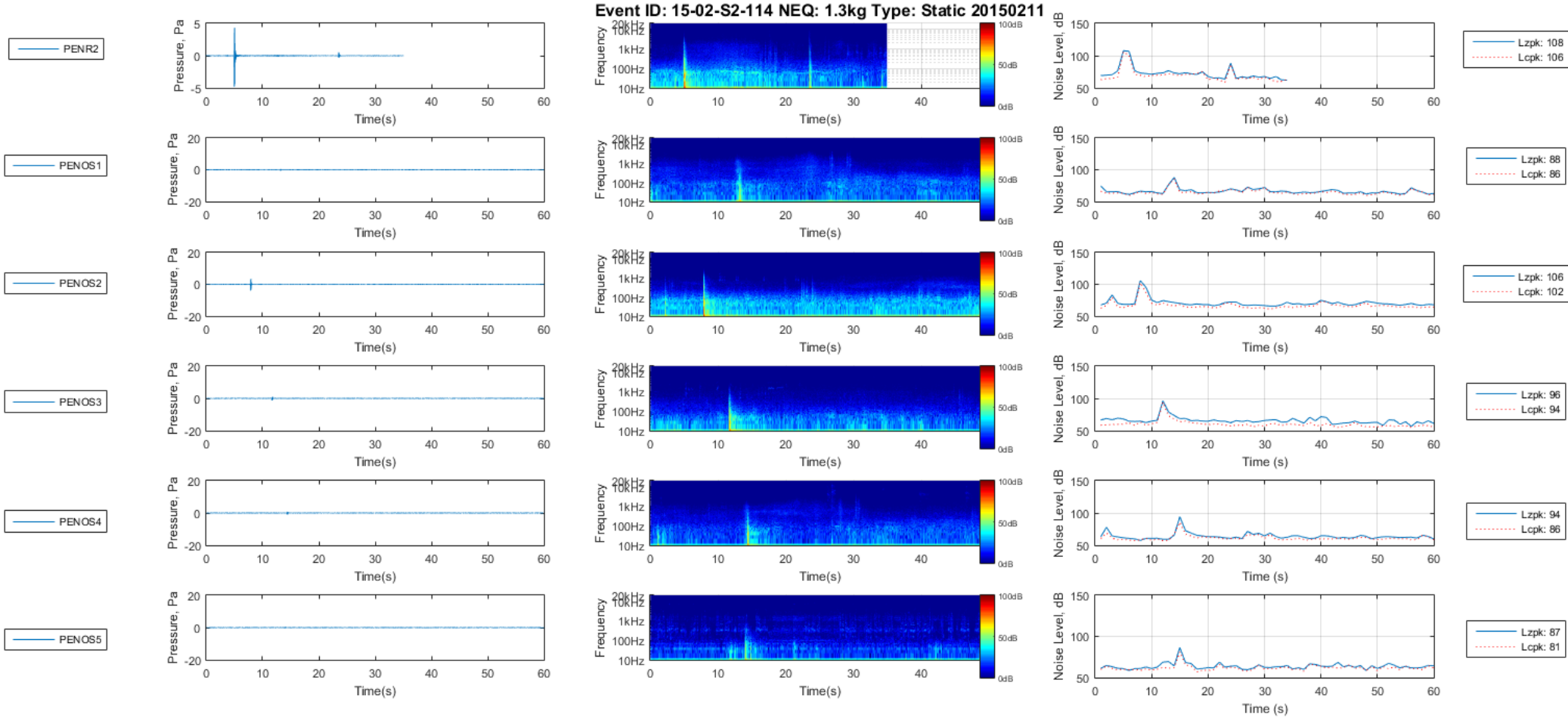


FIGURE 2.489: COHERENCE PEN\_OS 6 - 10 15-02-S2-113CTD

**Event ID: 15-02-S2-113 NEQ: 1.3kg Type: Static 20150211**



**FIGURE 2.490: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S2-113**



**FIGURE 2.491: PEN\_OS 1 - 5 15-02-S2-114**

Event ID: 15-02-S2-114 NEQ: 1.3kg Type: Static 20150211 CTD

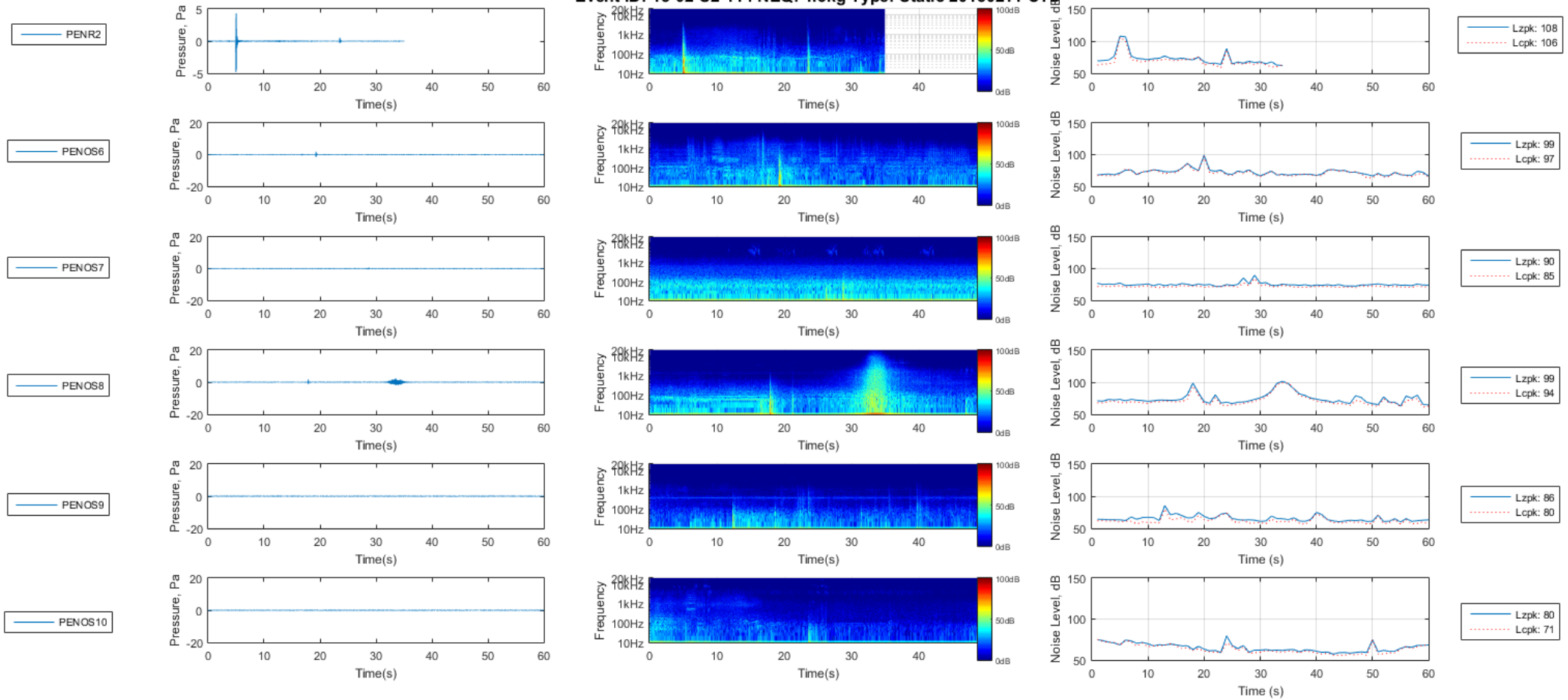
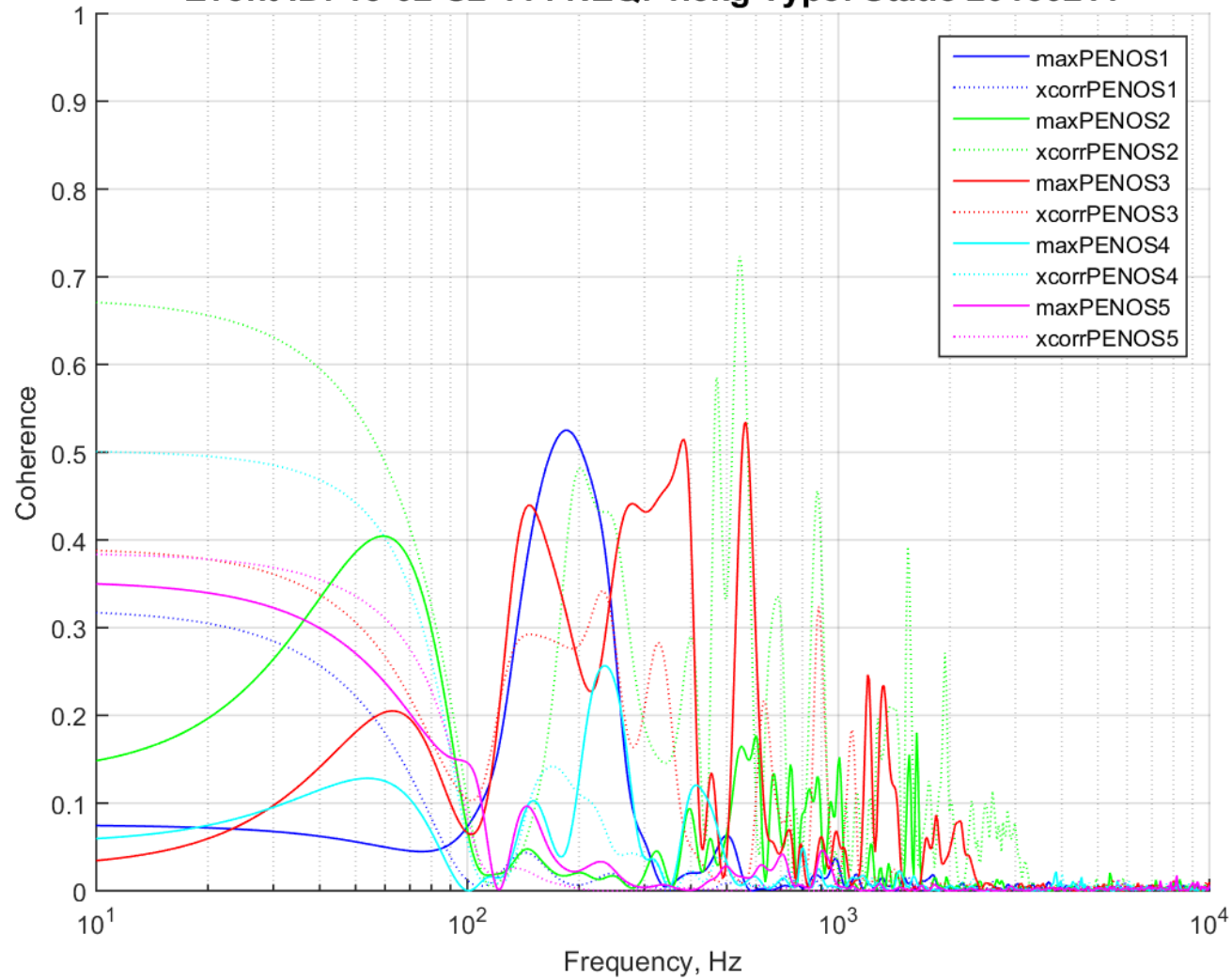


FIGURE 2.492: PEN\_OS 6 - 10 15-02-S2-114

**Event ID: 15-02-S2-114 NEQ: 1.3kg Type: Static 20150211**



**FIGURE 2.493: COHERENCE PEN\_OS 1 - 5 15-02-S2-114**

Event ID: 15-02-S2-114 NEQ: 1.3kg Type: Static 20150211

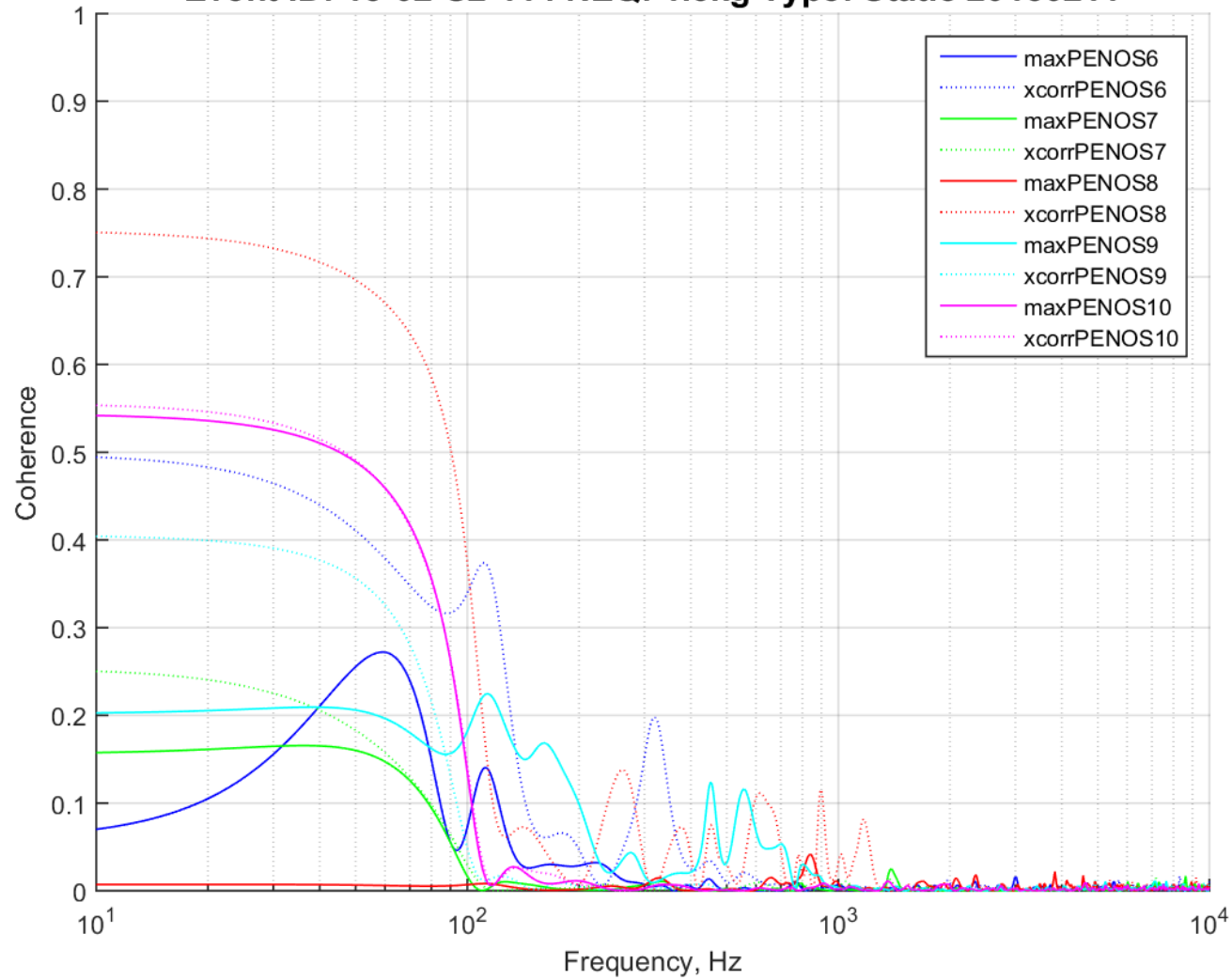
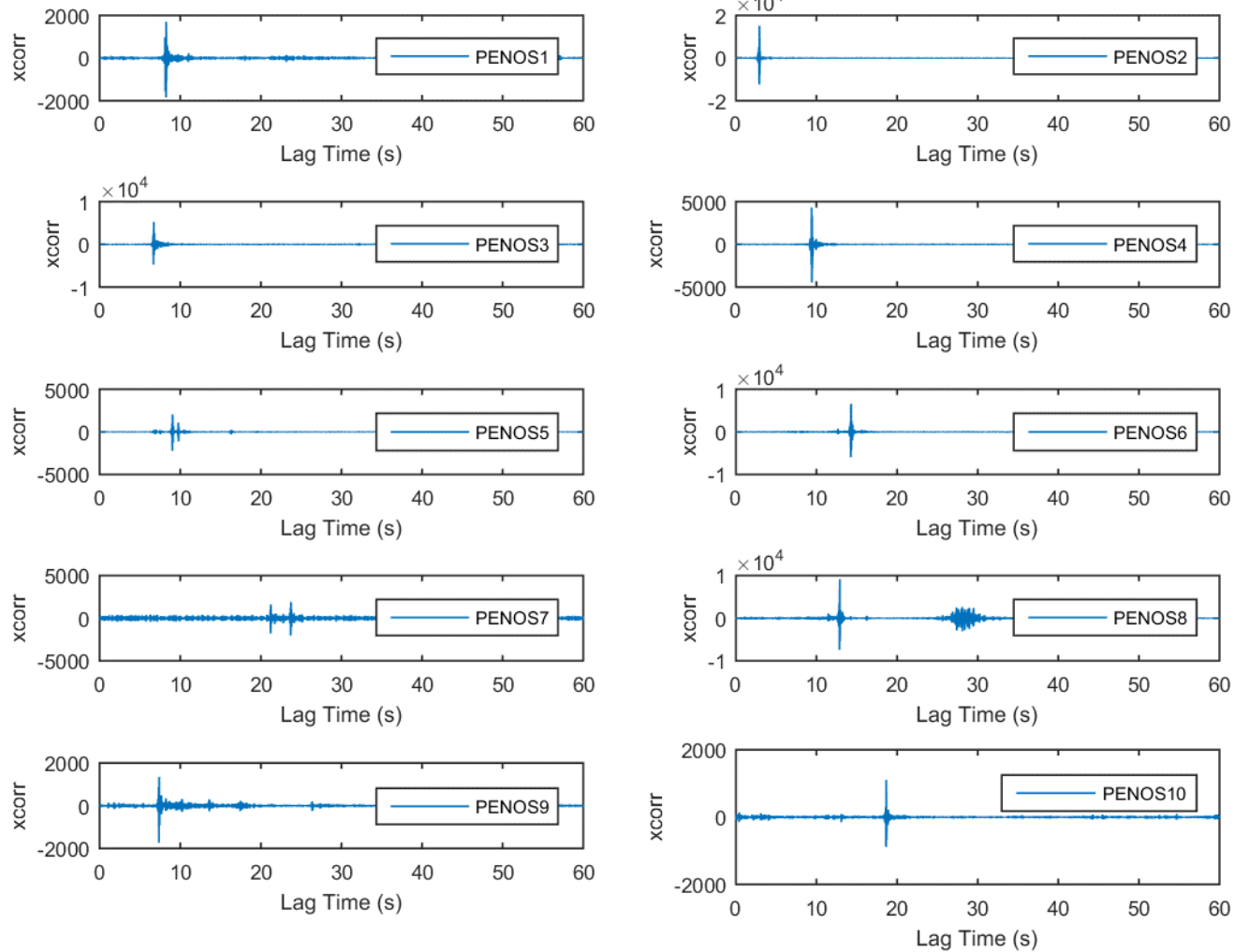


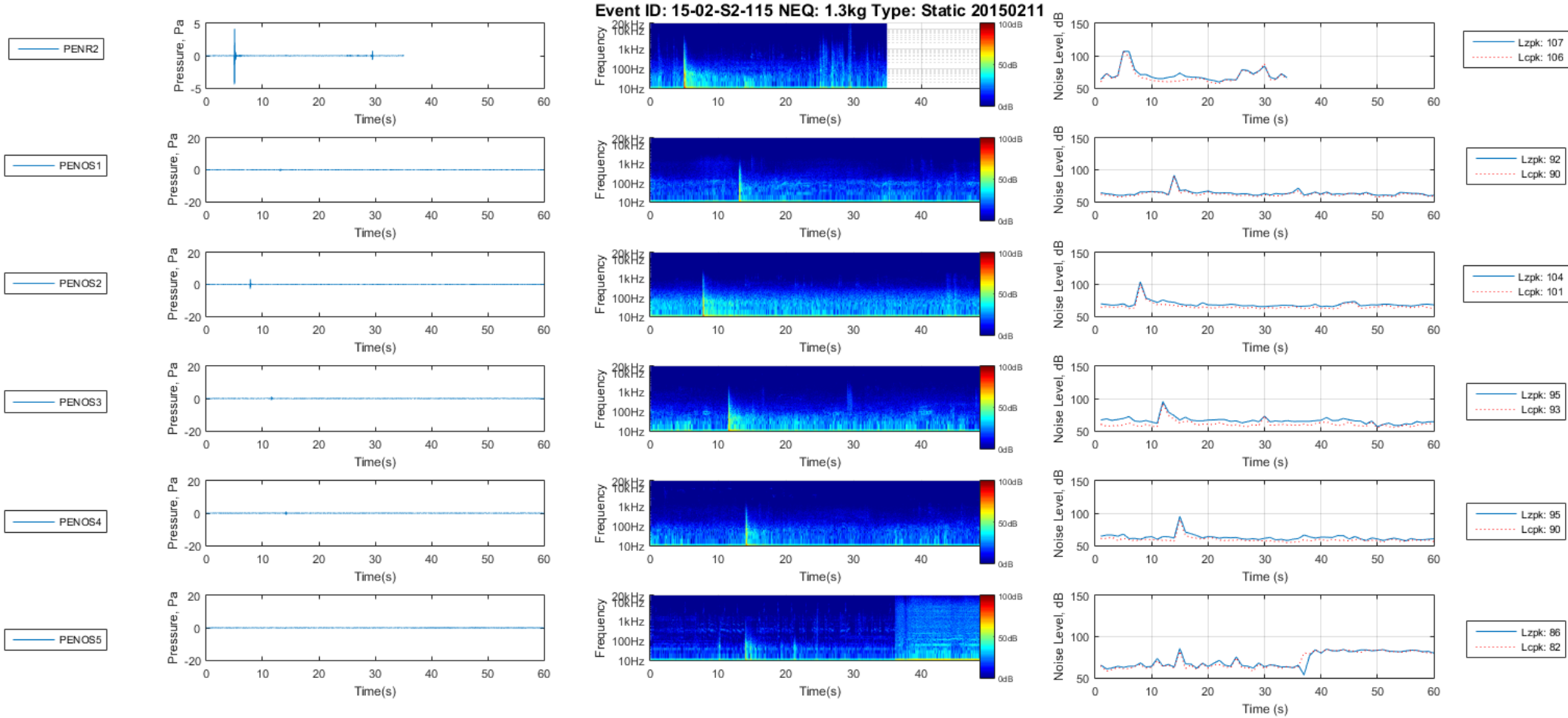
FIGURE 2.494: COHERENCE PEN\_OS 6 - 10 15-02-S2-114CTD

**Event ID: 15-02-S2-114 NEQ: 1.3kg Type: Static 20150211**



**FIGURE 2.495: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S2-114**





**FIGURE 2.496: PEN\_OS 1 - 5 15-02-S2-115**

Event ID: 15-02-S2-115 NEQ: 1.3kg Type: Static 20150211 CTD

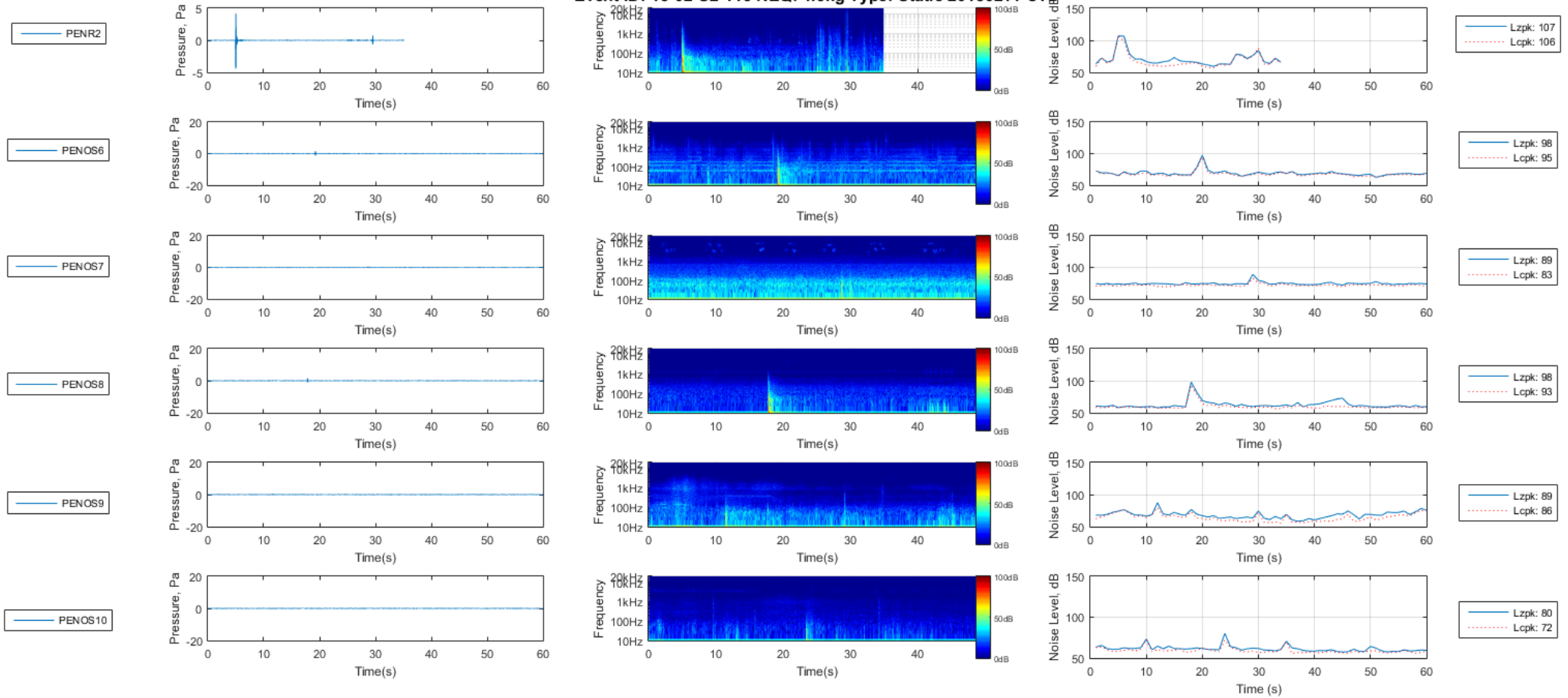
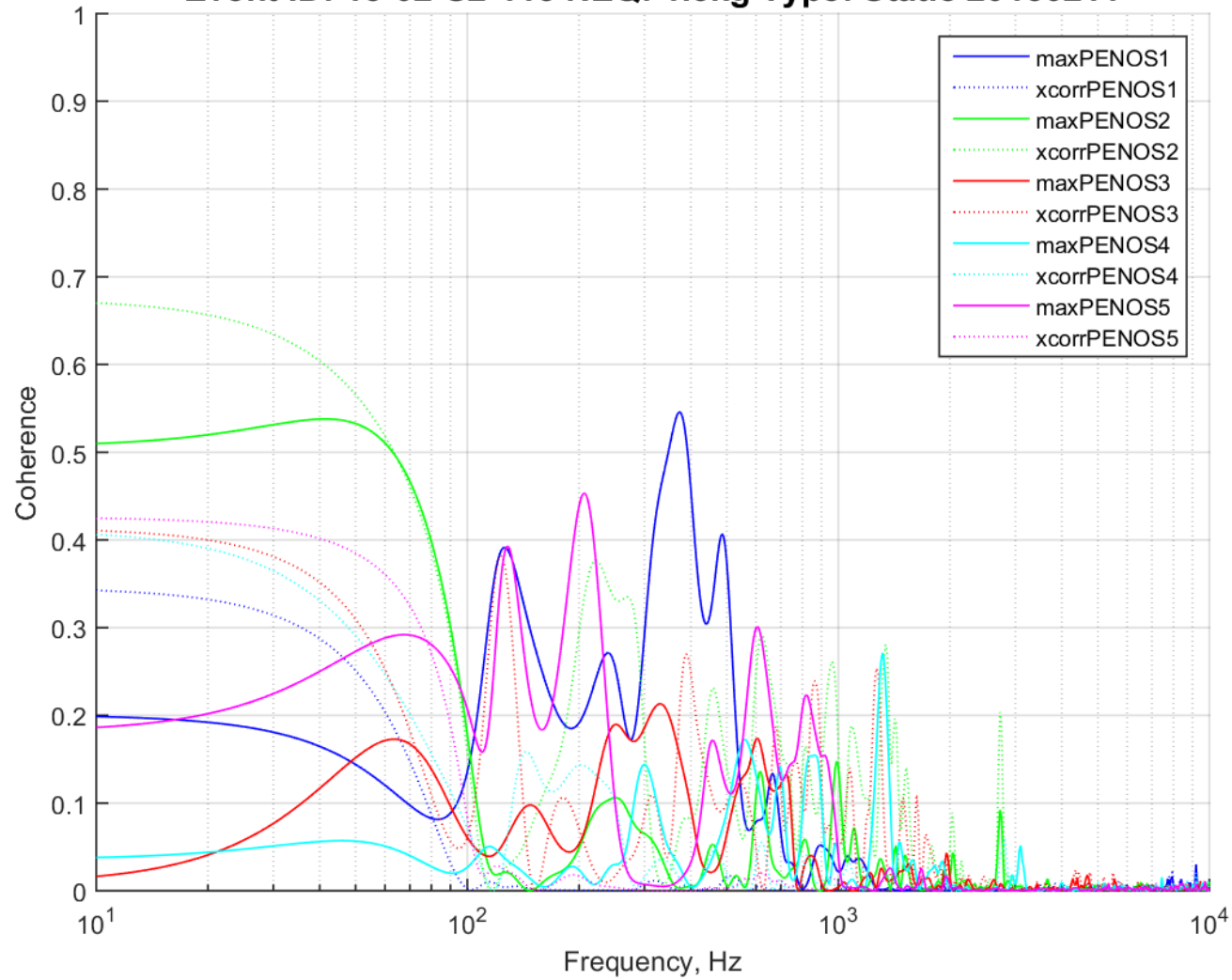


FIGURE 2.497: PEN\_OS 6 - 10 15-02-S2-115

**Event ID: 15-02-S2-115 NEQ: 1.3kg Type: Static 20150211**



**FIGURE 2.498: COHERENCE PEN\_OS 1 - 5 15-02-S2-115**

Event ID: 15-02-S2-115 NEQ: 1.3kg Type: Static 20150211

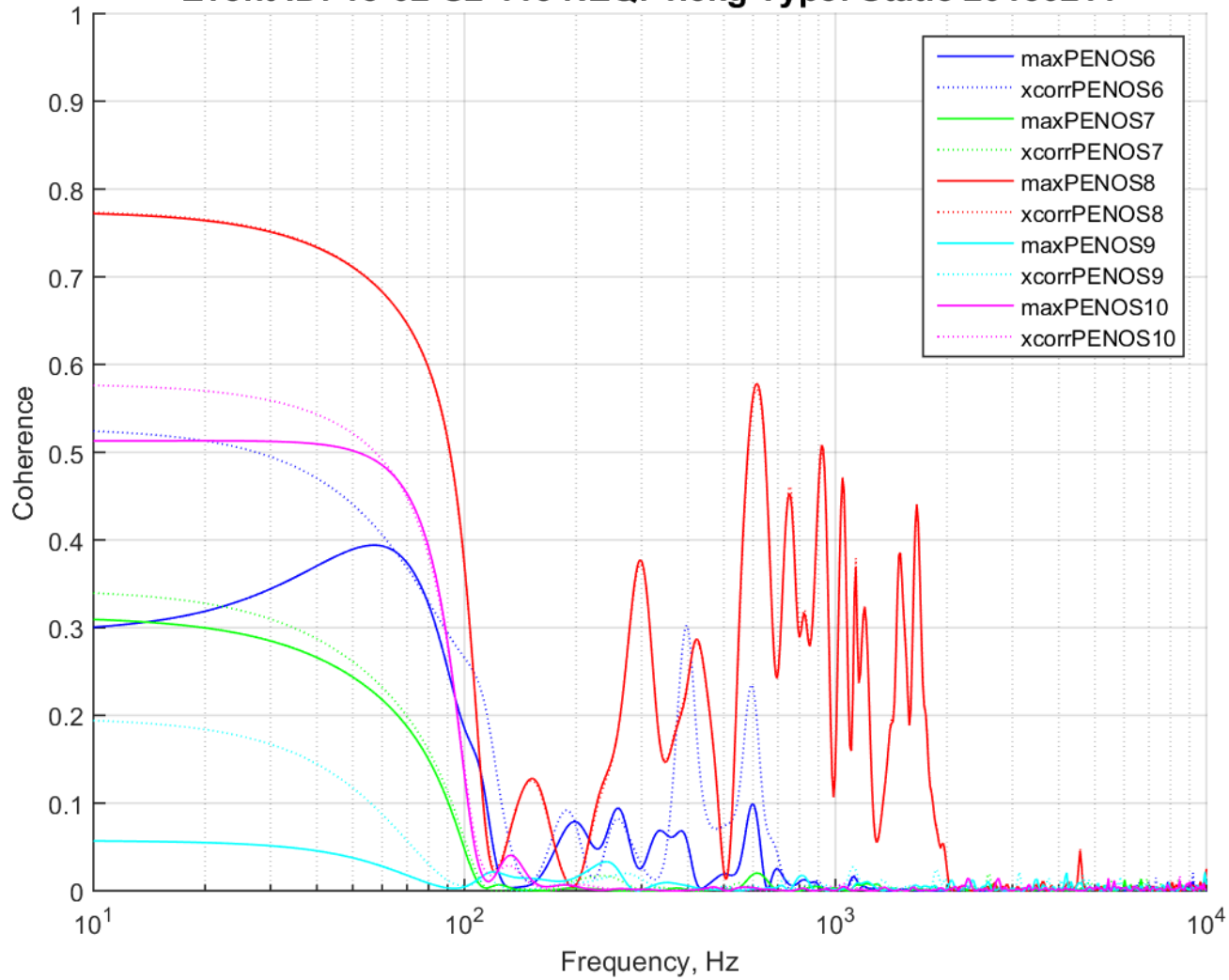
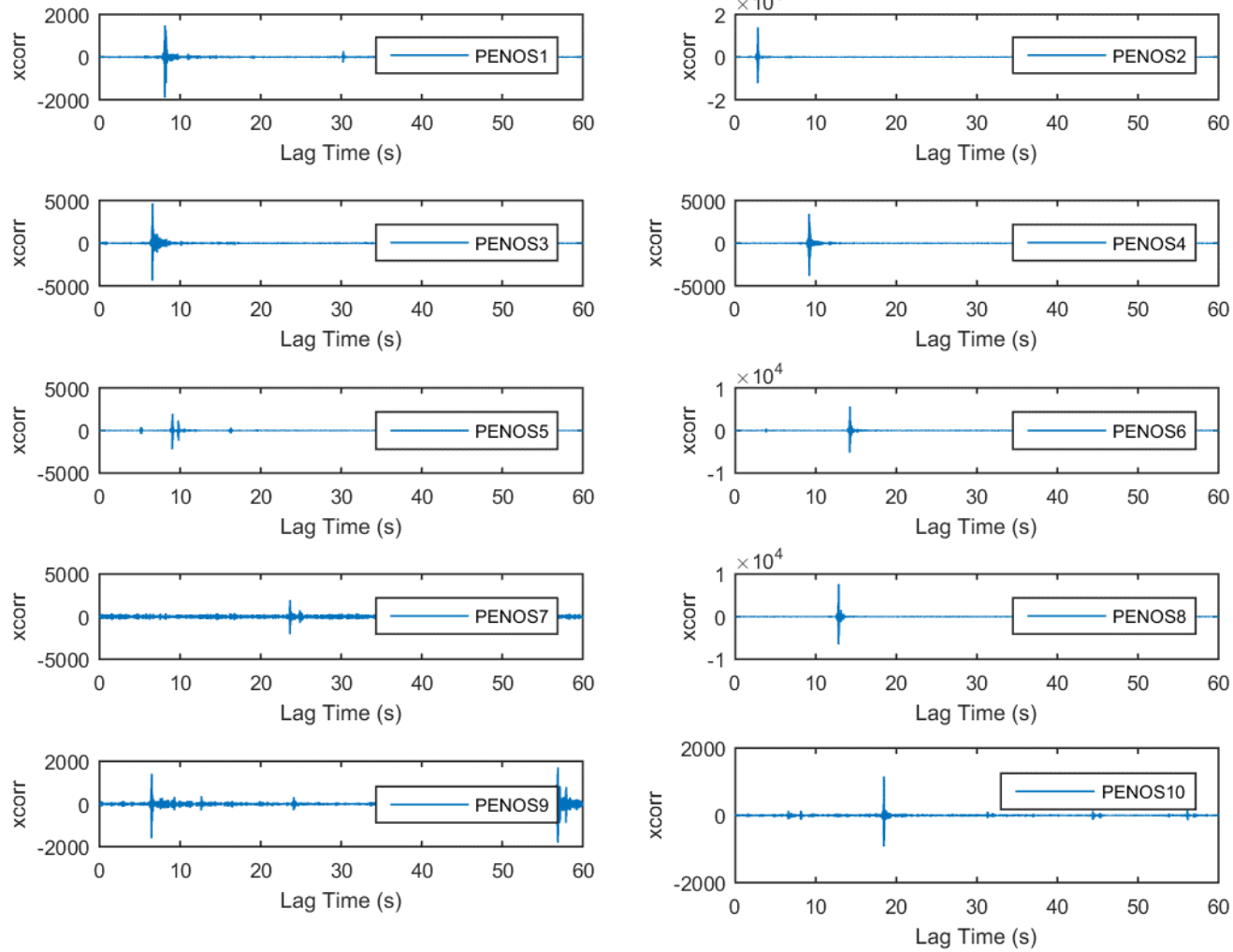
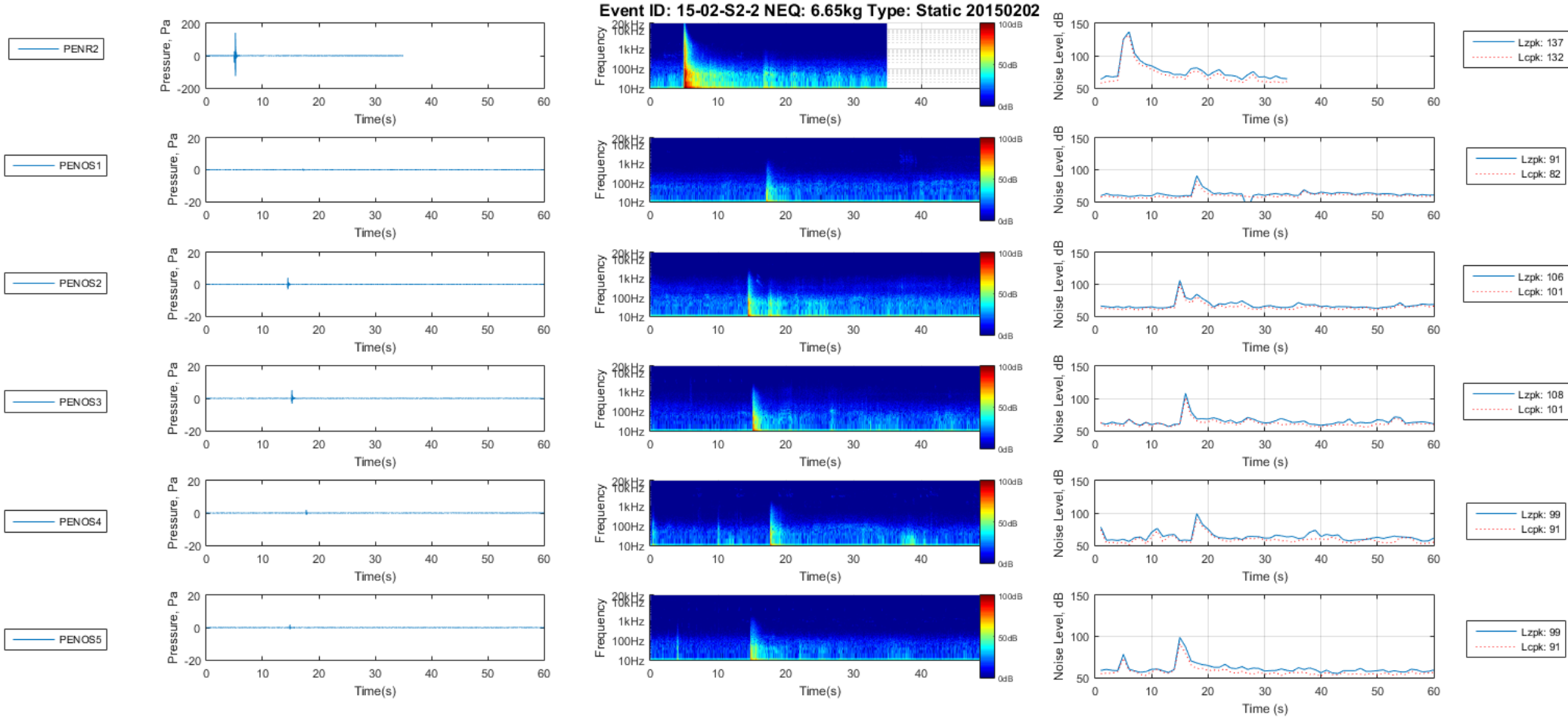


FIGURE 2.499: COHERENCE PEN\_OS 6 - 10 15-02-S2-115CTD

**Event ID: 15-02-S2-115 NEQ: 1.3kg Type: Static 20150211**



**FIGURE 2.500: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S2-115**



**FIGURE 2.501: PEN\_OS 1 - 5 15-02-S2-2**

Event ID: 15-02-S2-2 NEQ: 6.65kg Type: Static 20150202 CTD

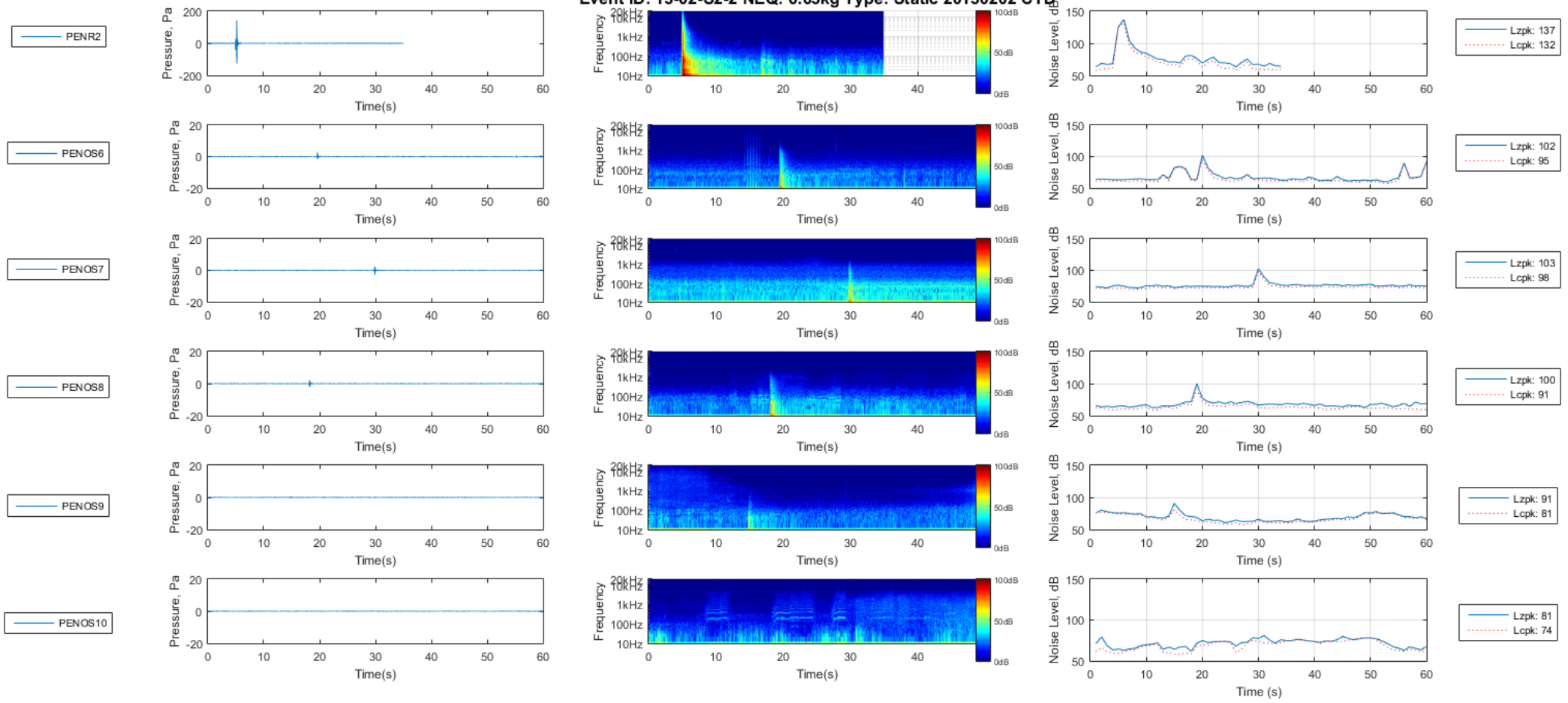


FIGURE 2.502: PEN\_OS 6 - 10 15-02-S2-2

Event ID: 15-02-S2-2 NEQ: 6.65kg Type: Static 20150202

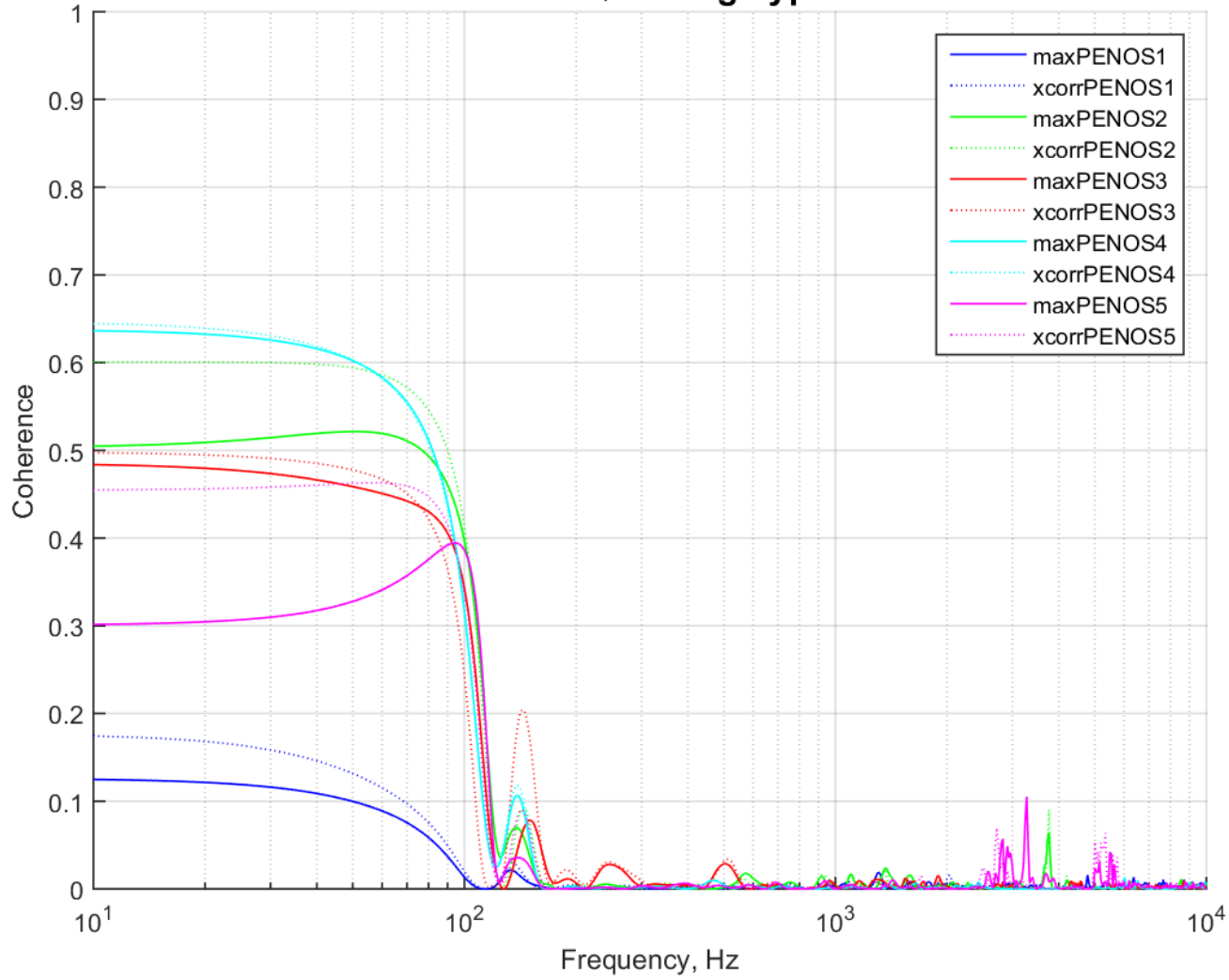


FIGURE 2.503: COHERENCE PEN\_OS 1 - 5 15-02-S2-2



Event ID: 15-02-S2-2 NEQ: 6.65kg Type: Static 20150202

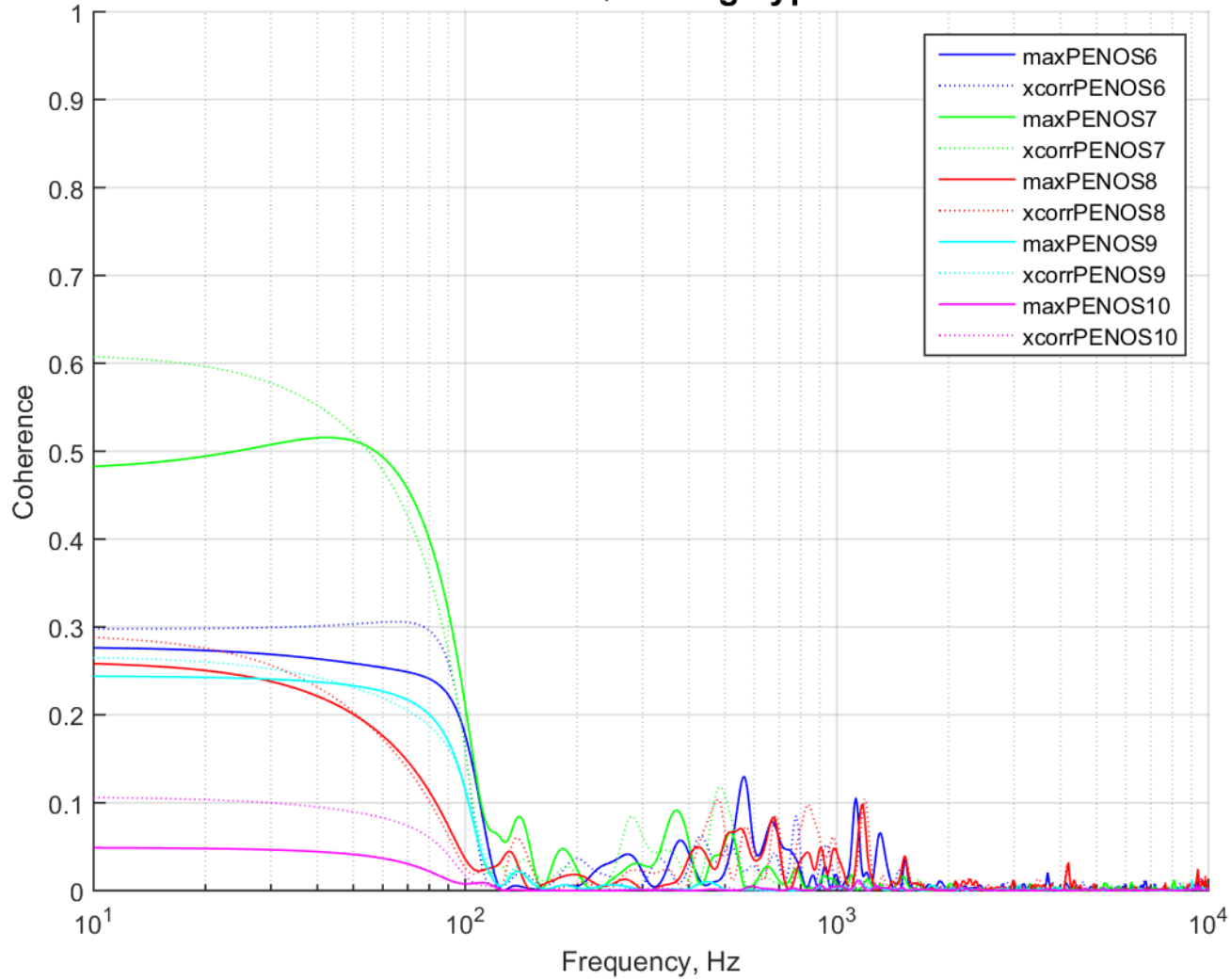
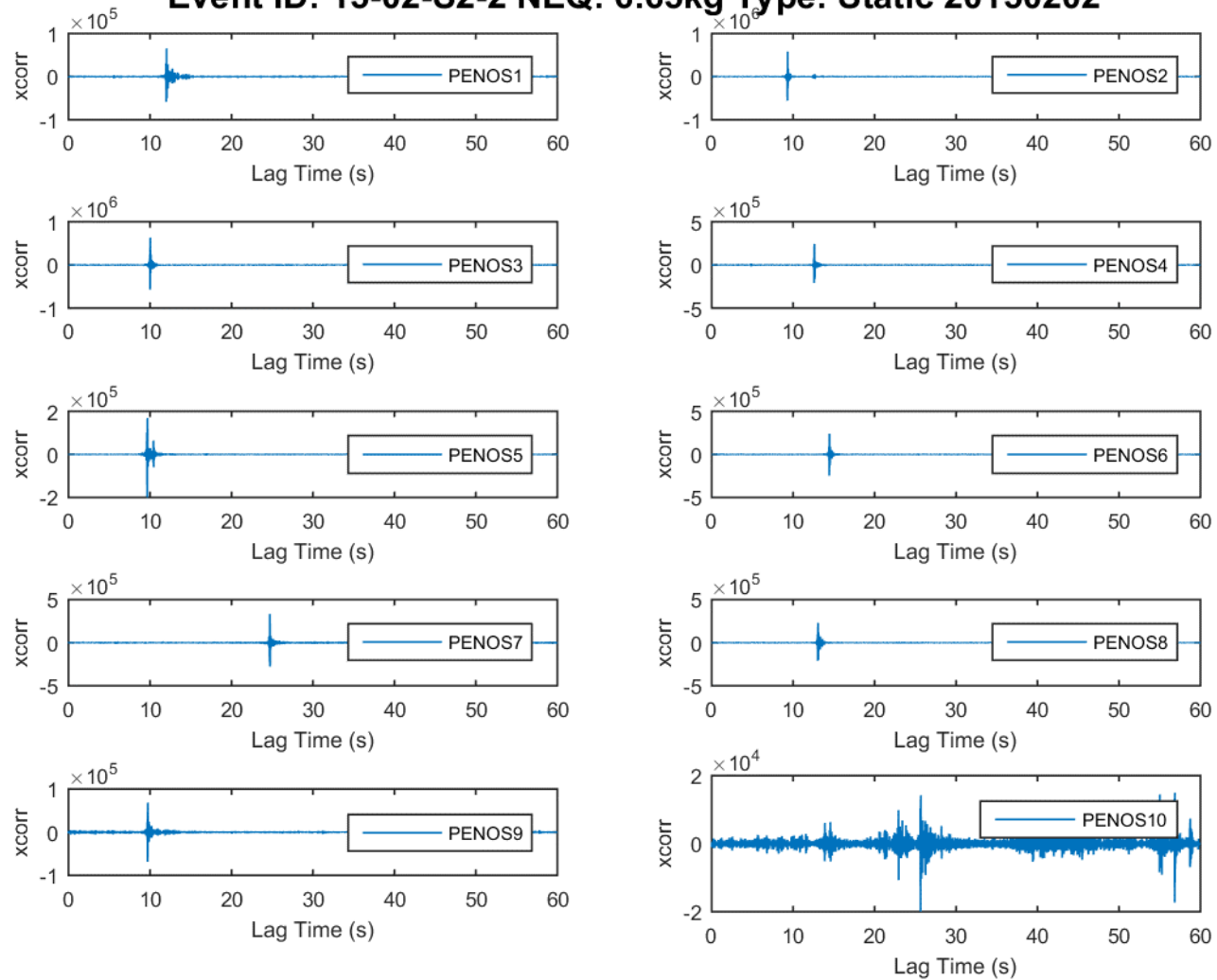
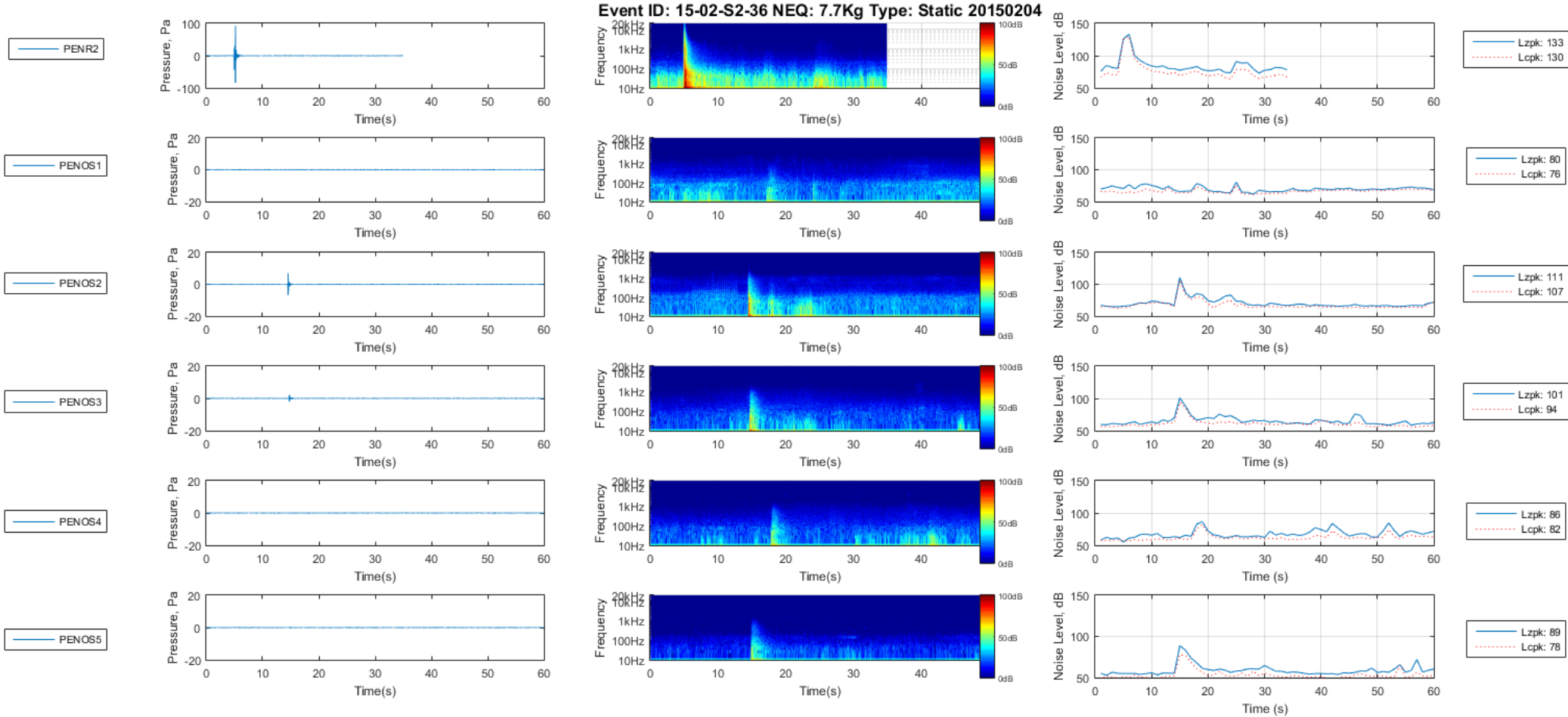


FIGURE 2.504: COHERENCE PEN\_OS 6 - 10 15-02-S2-2CTD

**Event ID: 15-02-S2-2 NEQ: 6.65kg Type: Static 20150202**



**FIGURE 2.505: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S2-2**



**FIGURE 2.506: PEN\_OS 1 - 5 15-02-S2-36**

Event ID: 15-02-S2-36 NEQ: 7.7Kg Type: Static 20150204 CTD

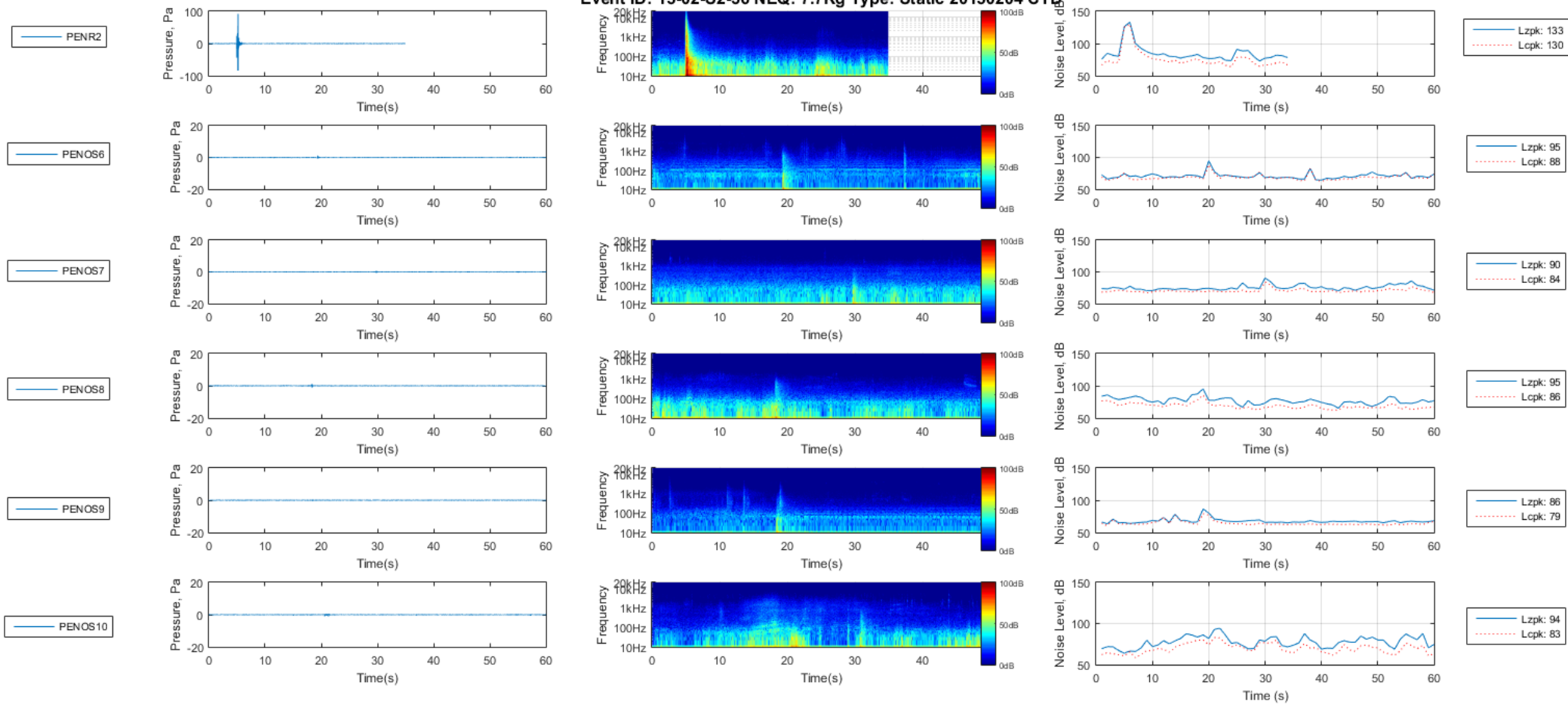


FIGURE 2.507: PEN\_OS 6 - 10 15-02-S2-36

Event ID: 15-02-S2-36 NEQ: 7.7Kg Type: Static 20150204

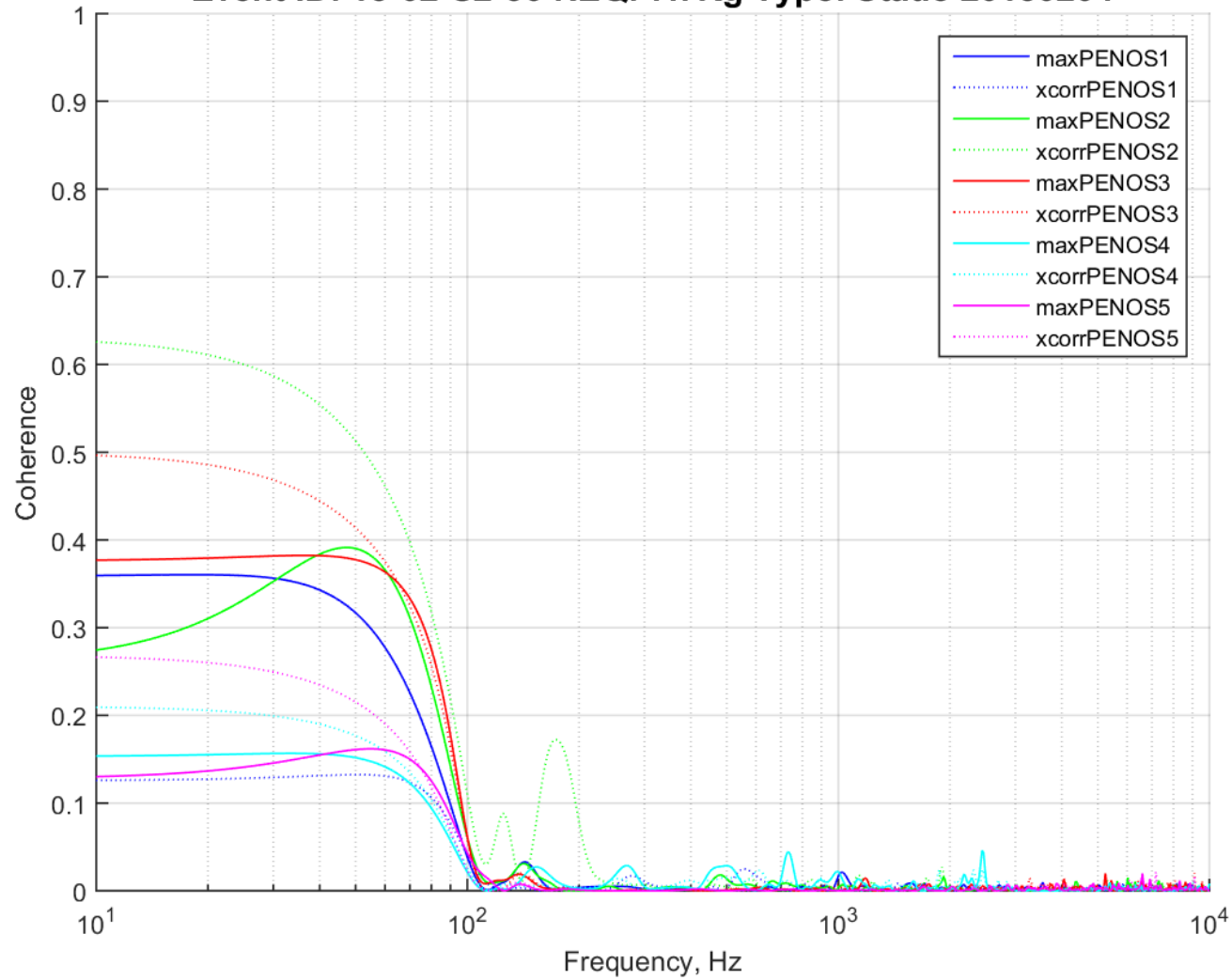


FIGURE 2.508: COHERENCE PEN\_OS 1 - 5 15-02-S2-36

Event ID: 15-02-S2-36 NEQ: 7.7Kg Type: Static 20150204

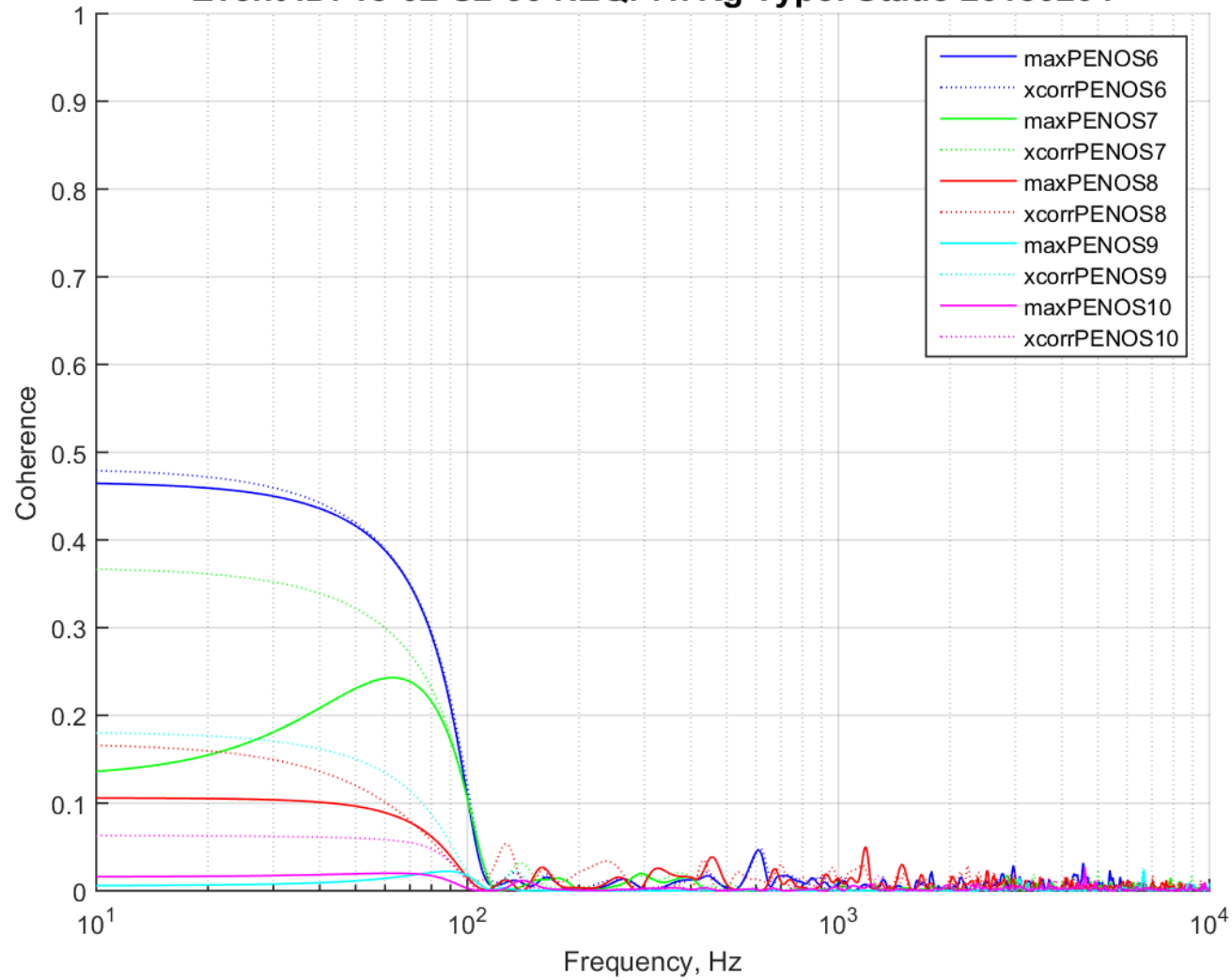
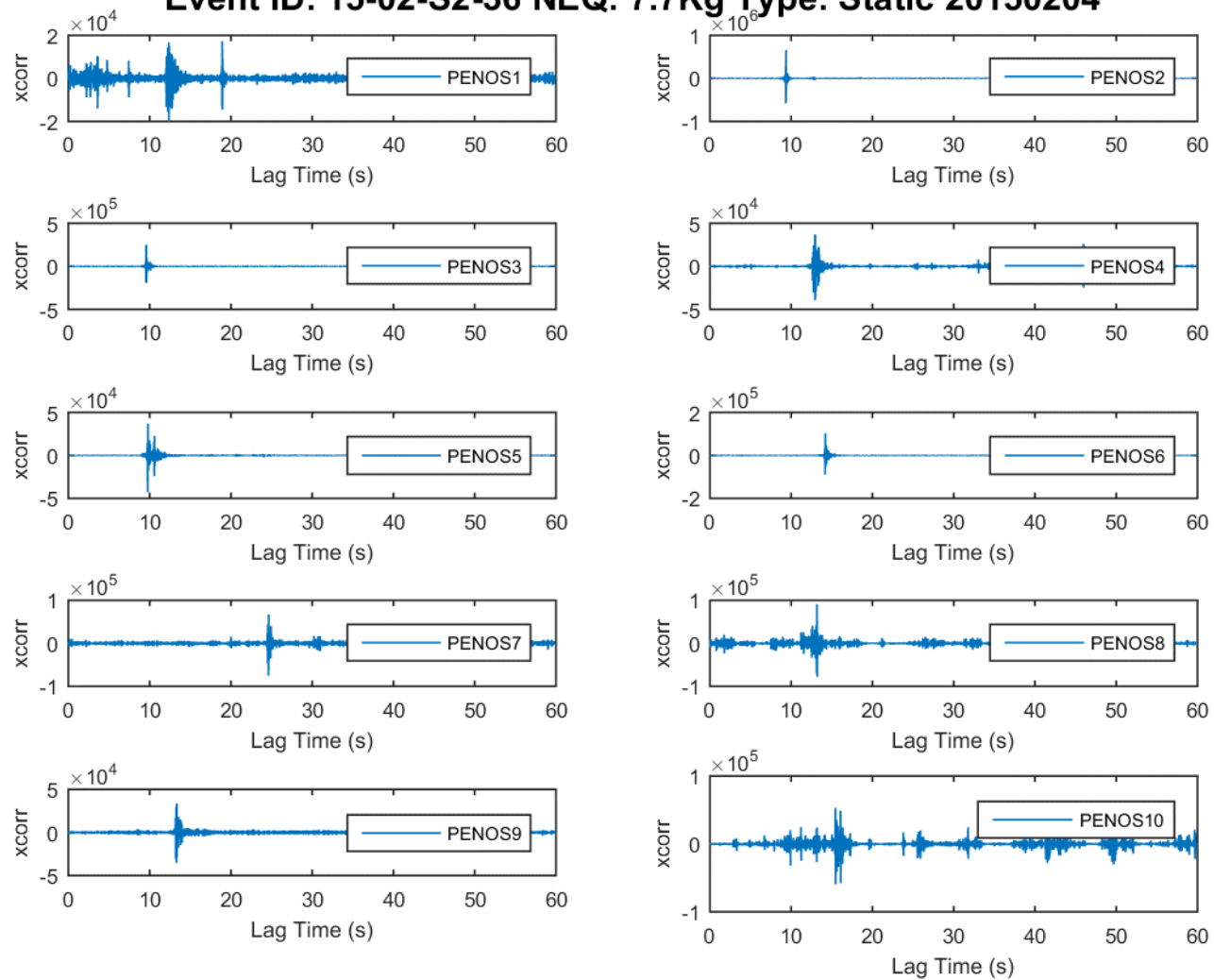
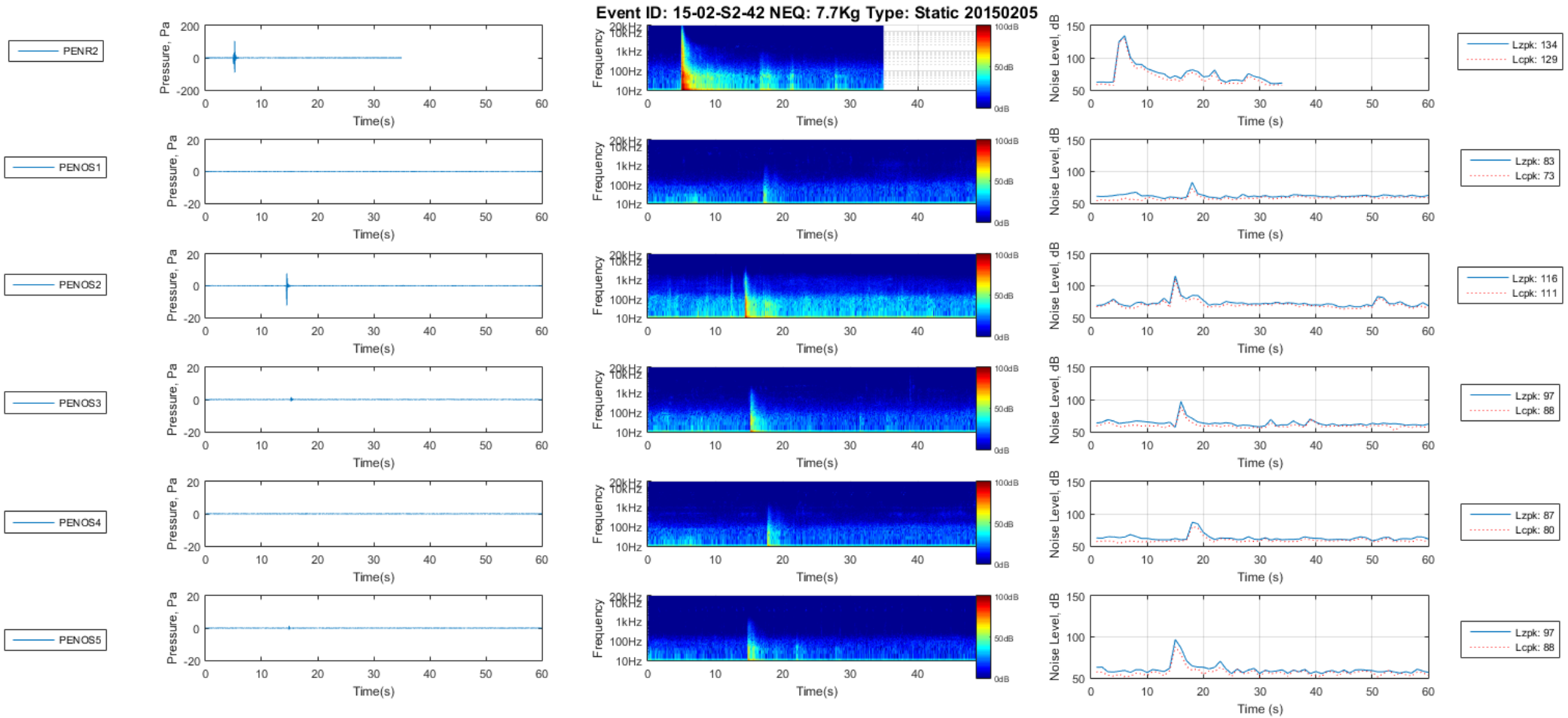


FIGURE 2.509: COHERENCE PEN\_OS 6 - 10 15-02-S2-36CTD

**Event ID: 15-02-S2-36 NEQ: 7.7Kg Type: Static 20150204**



**FIGURE 2.510: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S2-36**



**FIGURE 2.511: PEN\_OS 1 - 5 15-02-S2-42**



Event ID: 15-02-S2-42 NEQ: 7.7Kg Type: Static 20150205 CTD

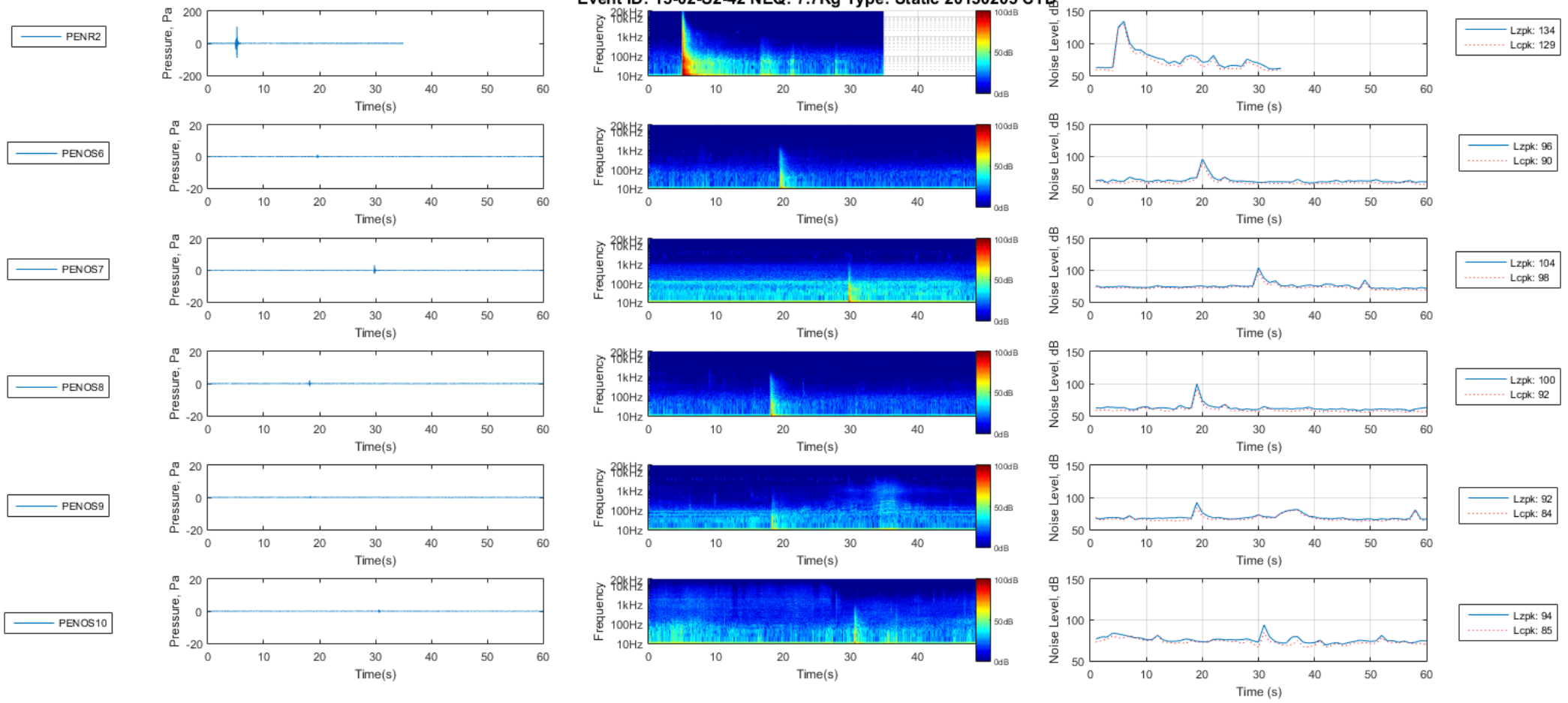


FIGURE 2.512: PEN\_OS 6 - 10 15-02-S2-42

Event ID: 15-02-S2-42 NEQ: 7.7Kg Type: Static 20150205

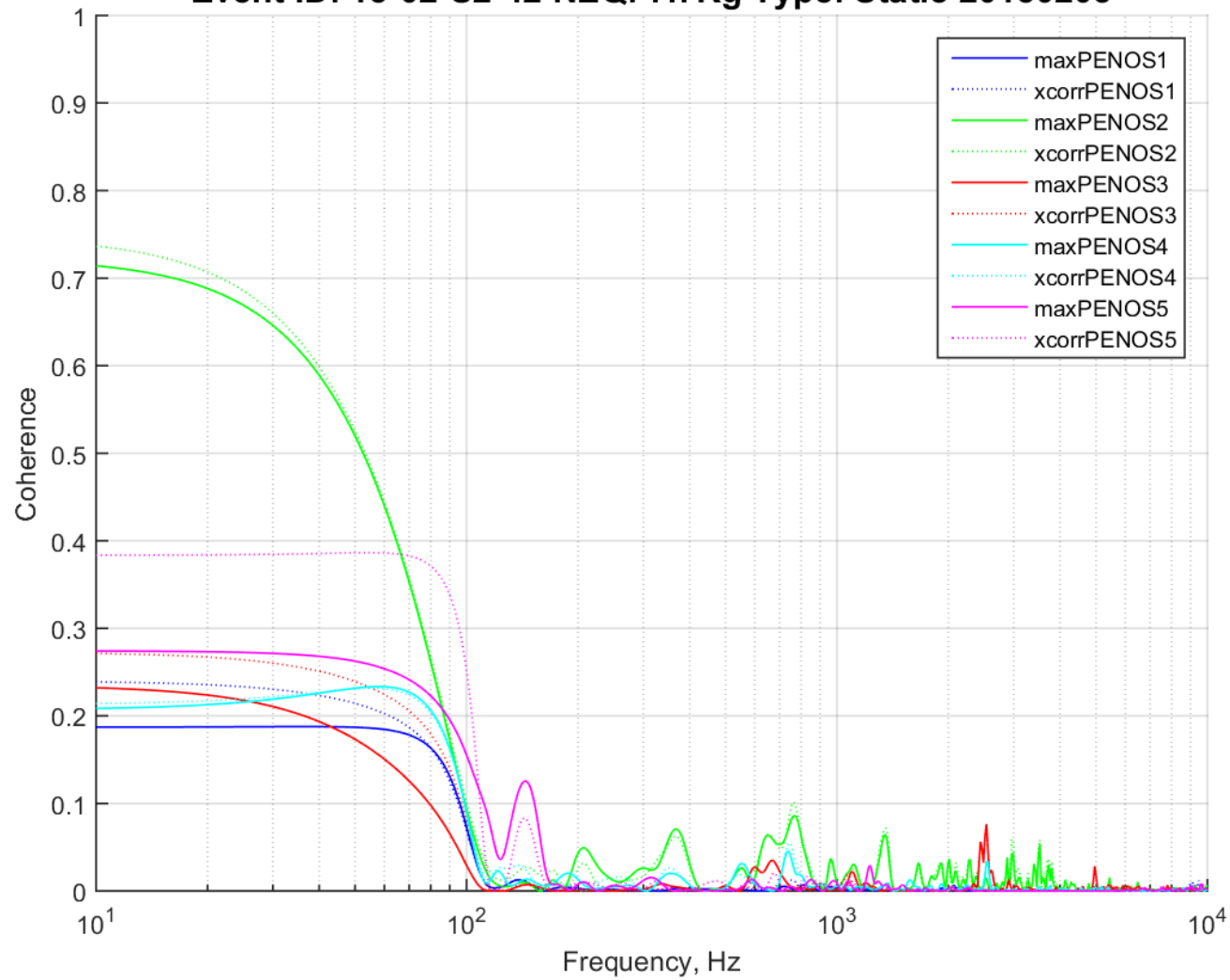


FIGURE 2.513: COHERENCE PEN\_OS 1 - 5 15-02-S2-42

Event ID: 15-02-S2-42 NEQ: 7.7Kg Type: Static 20150205

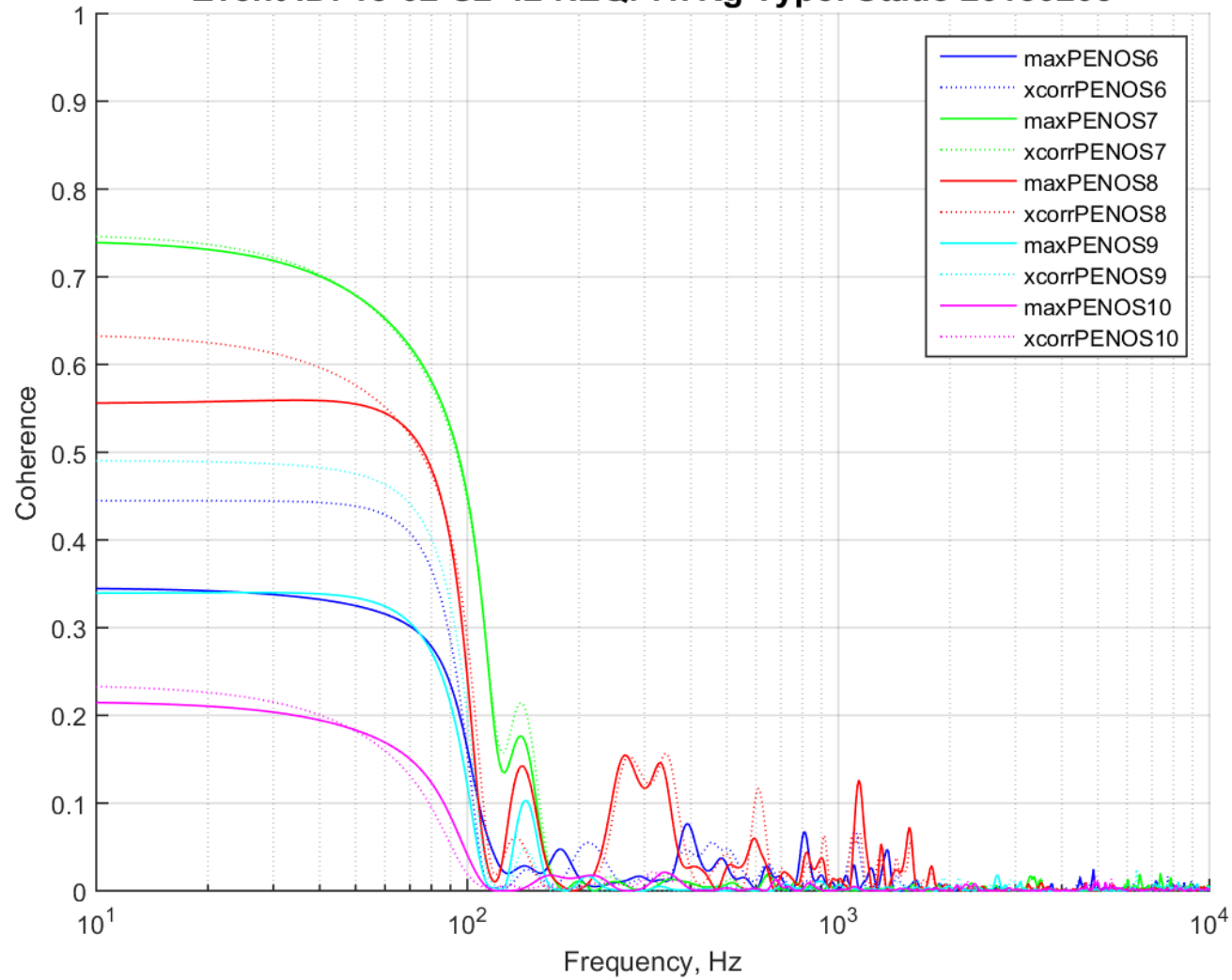
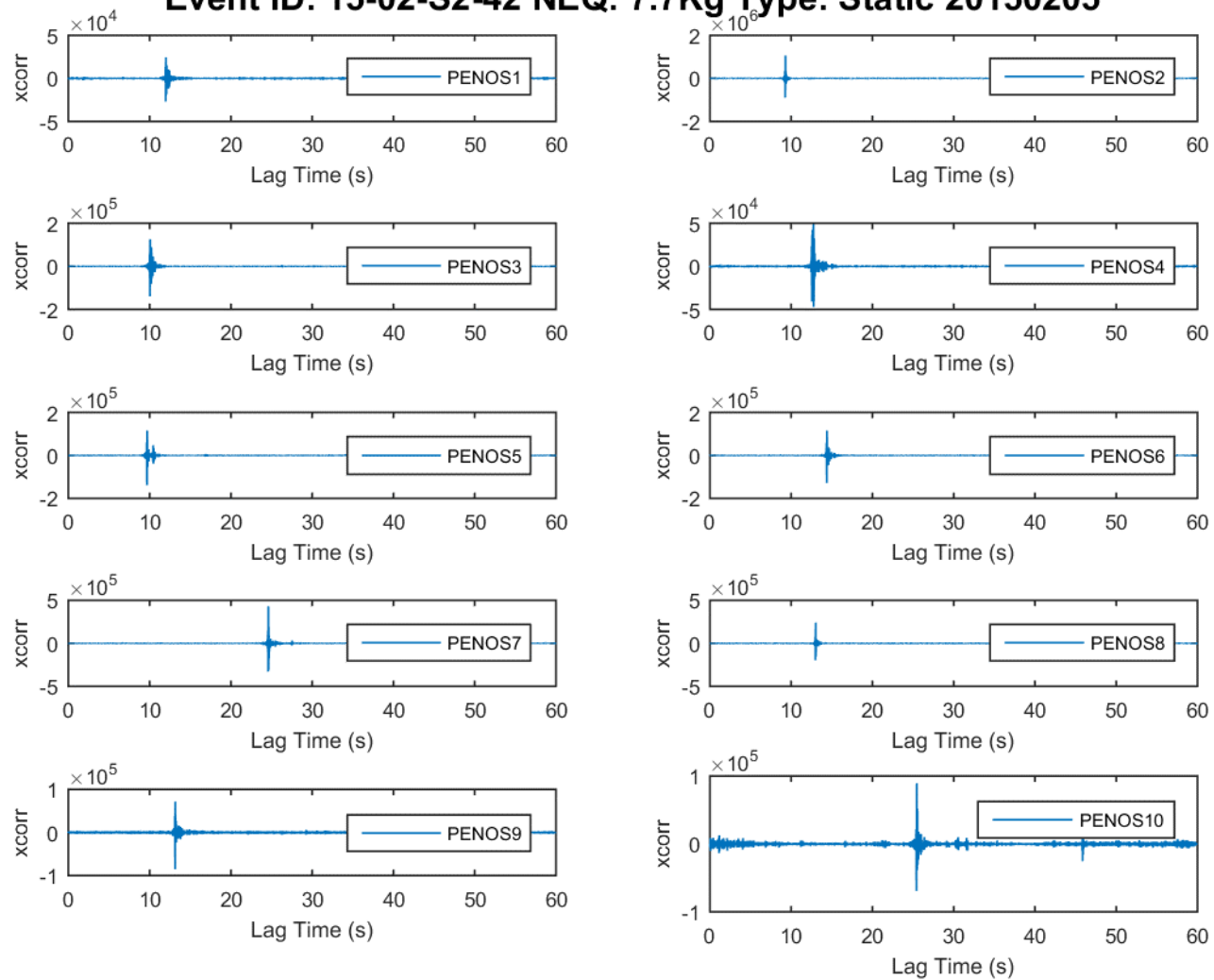
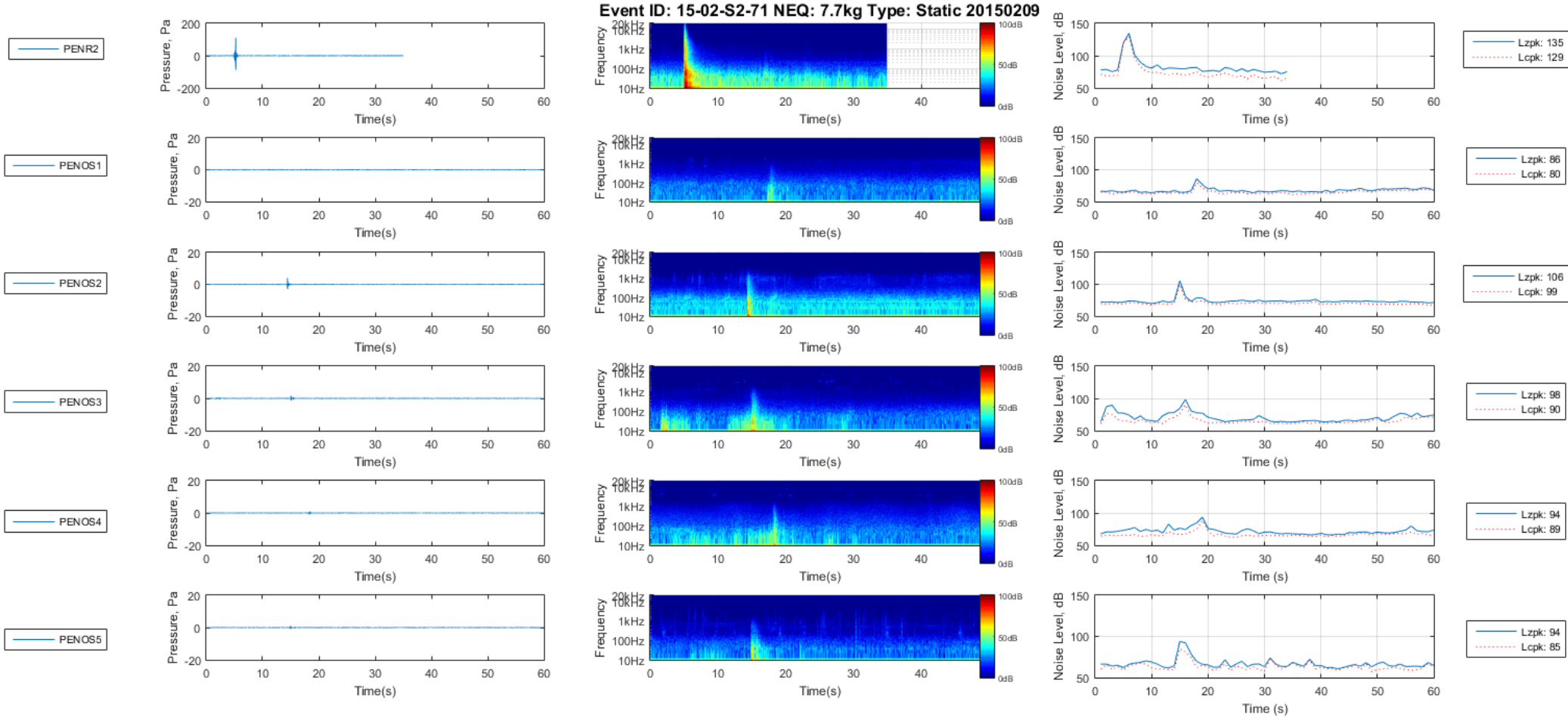


FIGURE 2.514: COHERENCE PEN\_OS 6 - 10 15-02-S2-42CTD

**Event ID: 15-02-S2-42 NEQ: 7.7Kg Type: Static 20150205**



**FIGURE 2.515: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S2-42**



**FIGURE 2.516: PEN\_OS 1 - 5 15-02-S2-71**

Event ID: 15-02-S2-71 NEQ: 7.7kg Type: Static 20150209 CTD

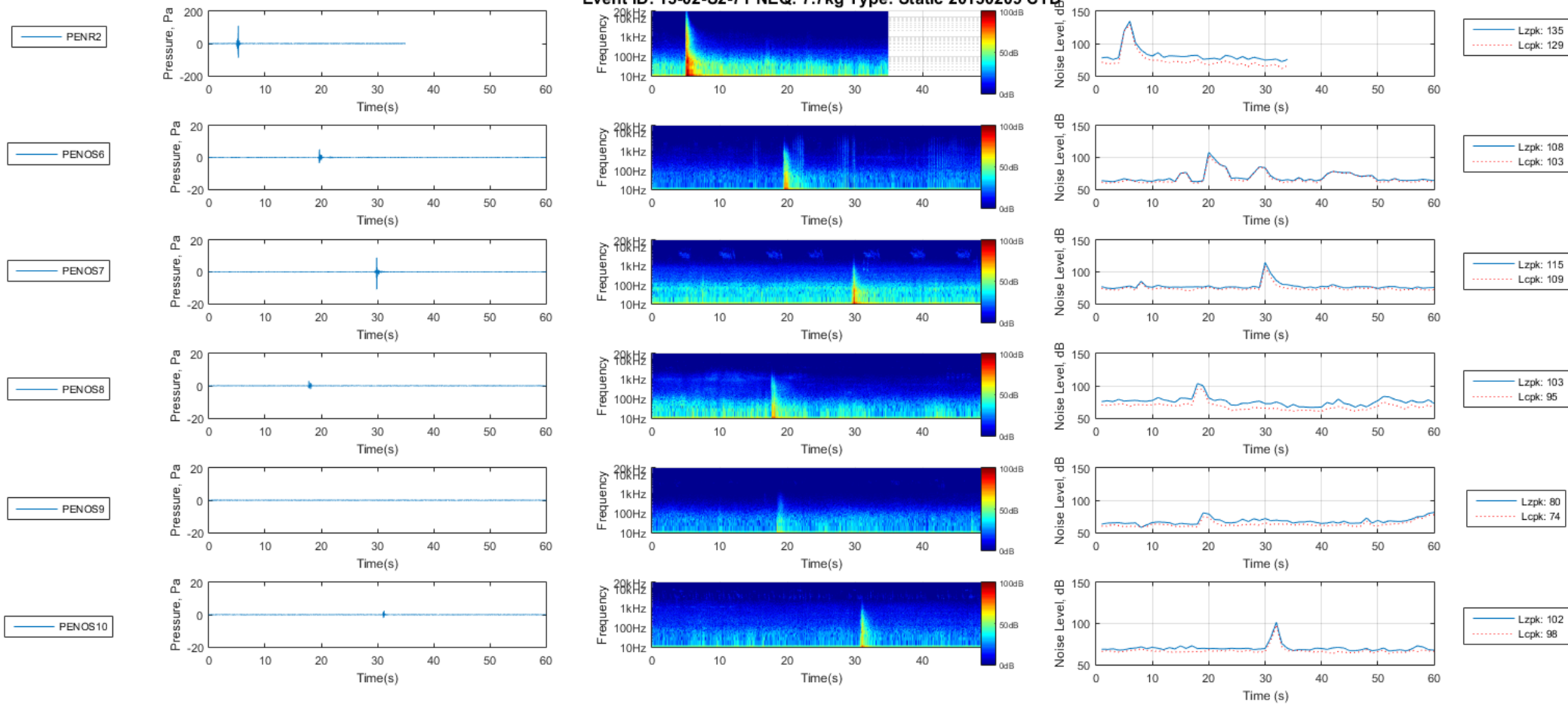


FIGURE 2.517: PEN\_OS 6 - 10 15-02-S2-71

Event ID: 15-02-S2-71 NEQ: 7.7kg Type: Static 20150209

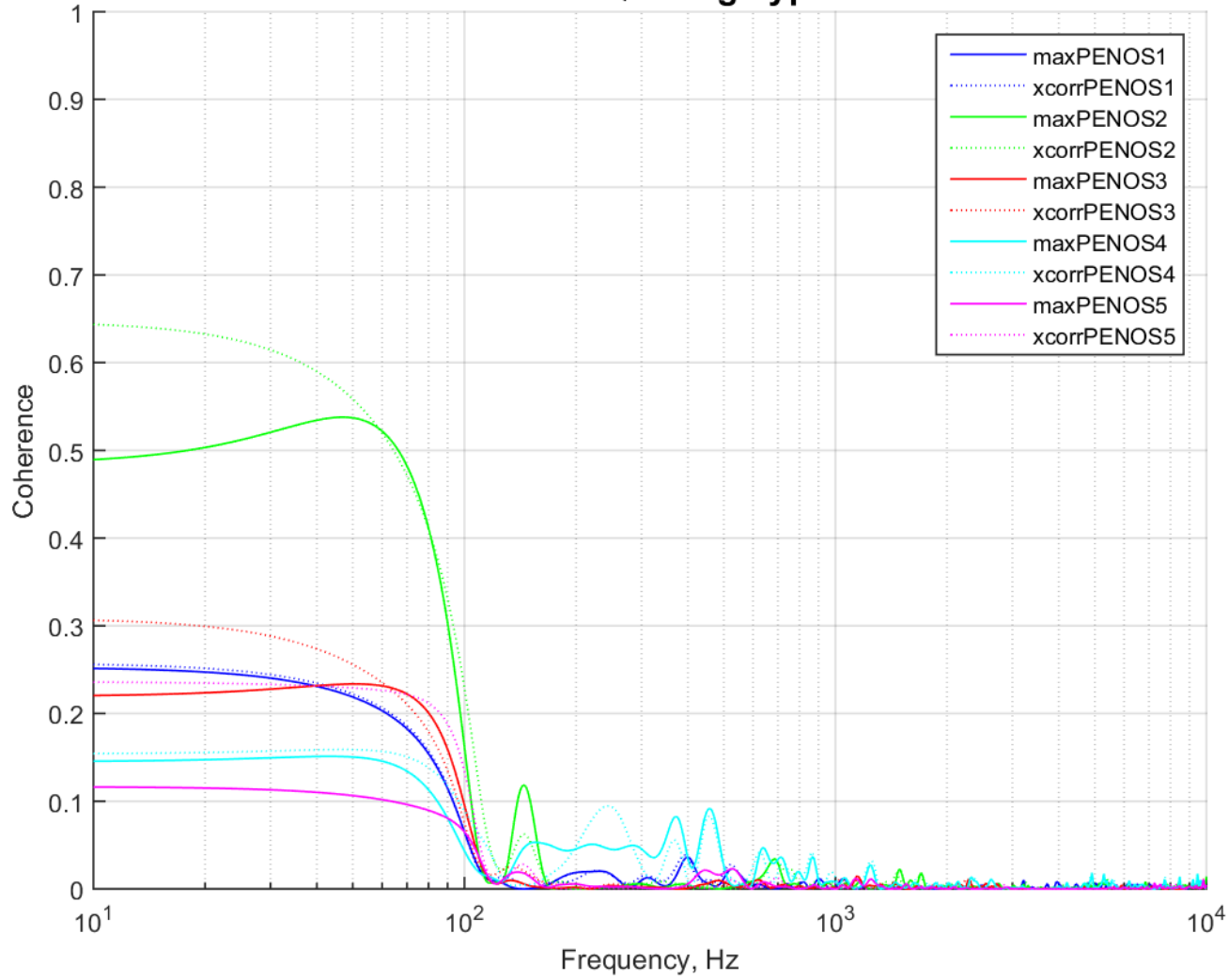


FIGURE 2.518: COHERENCE PEN\_OS 1 - 5 15-02-S2-71

Event ID: 15-02-S2-71 NEQ: 7.7kg Type: Static 20150209

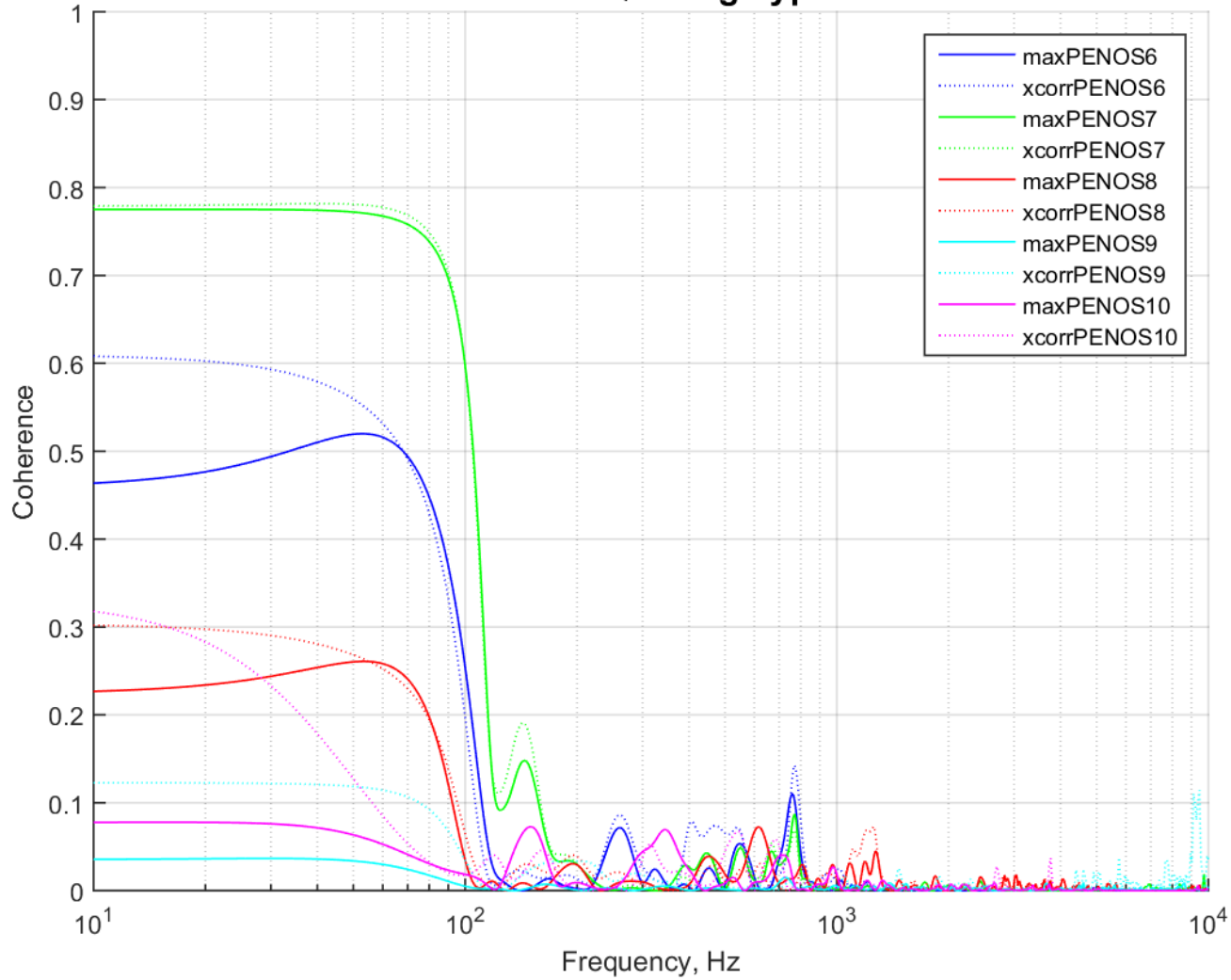
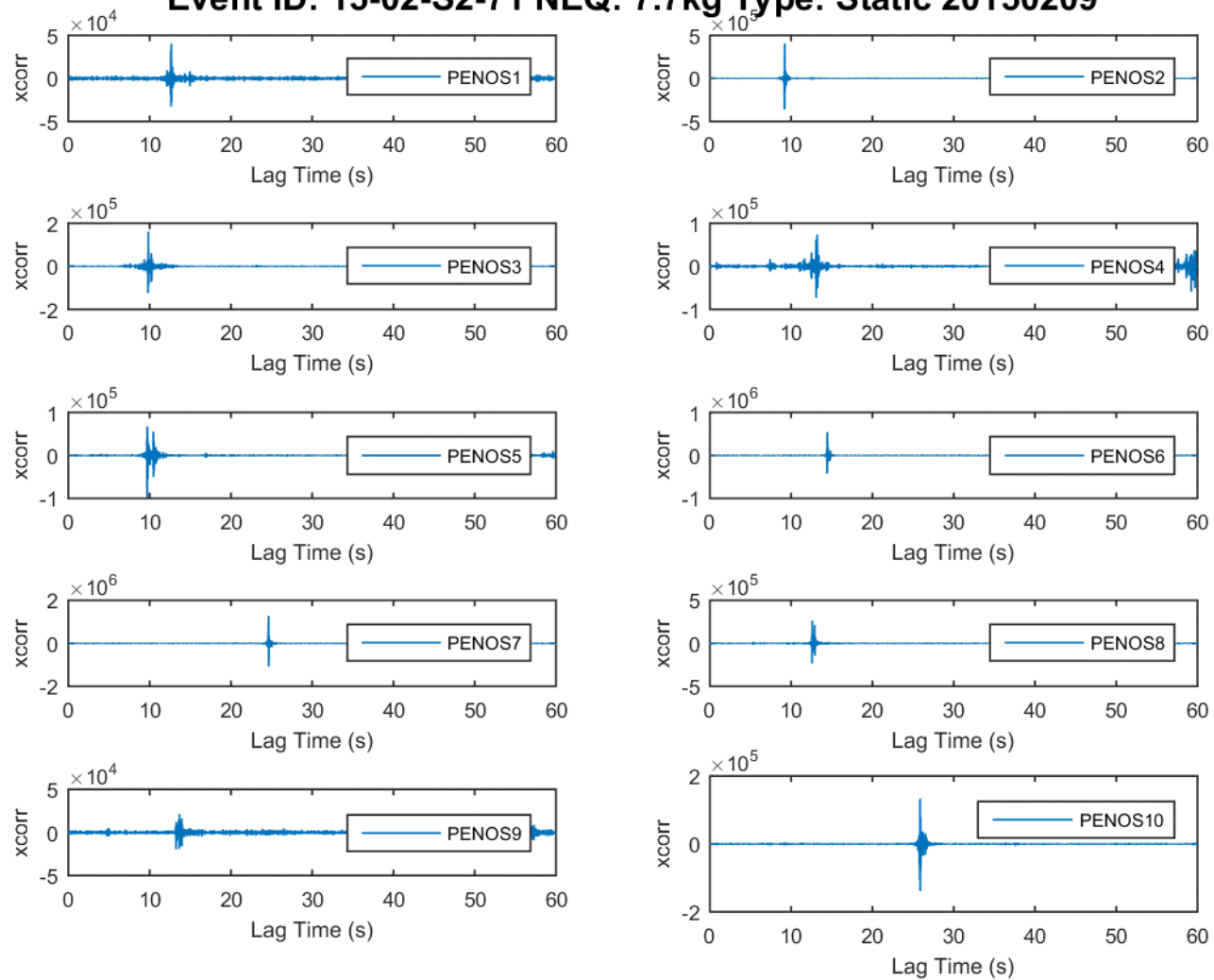


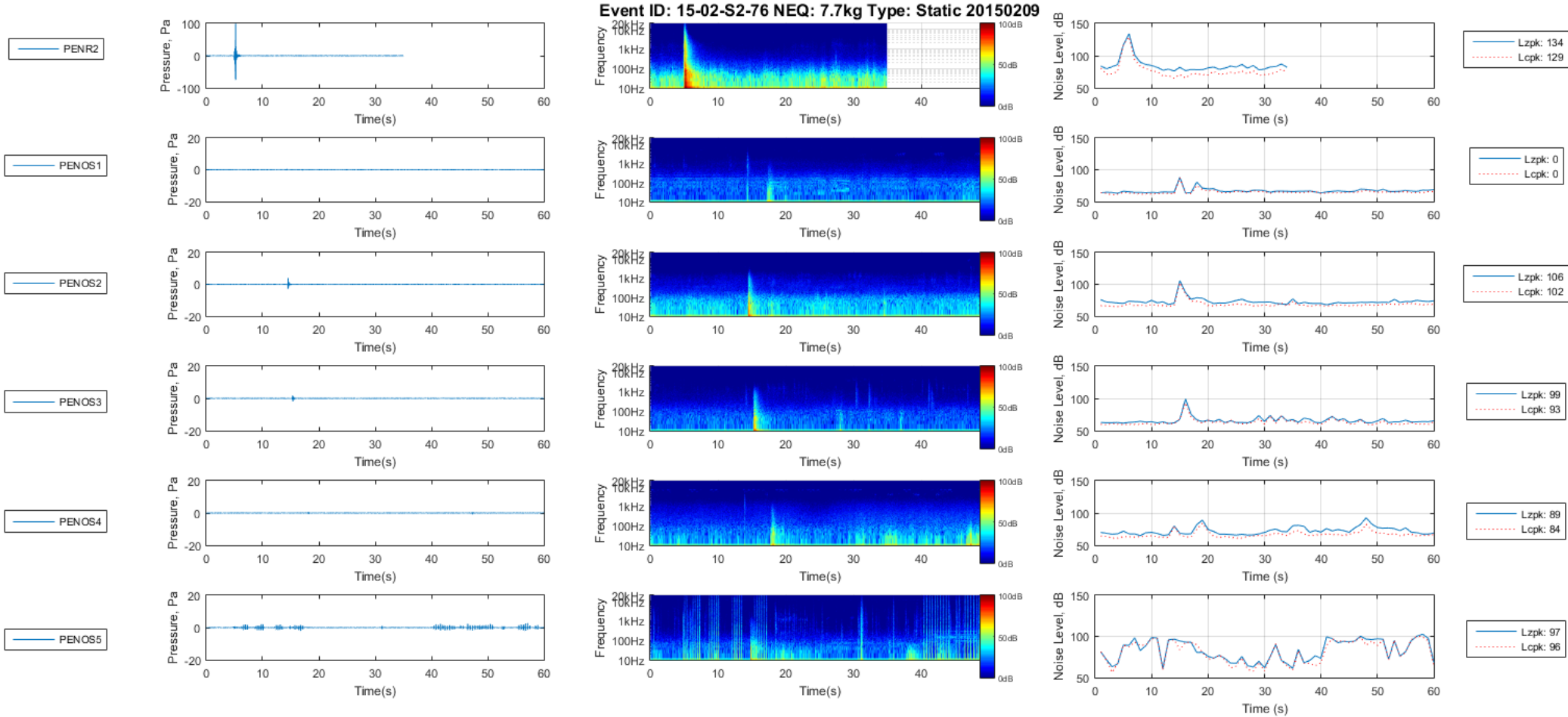
FIGURE 2.519: COHERENCE PEN\_OS 6 - 10 15-02-S2-71CTD



**Event ID: 15-02-S2-71 NEQ: 7.7kg Type: Static 20150209**



**FIGURE 2.520: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S2-71**



**FIGURE 2.521: PEN\_OS 1 - 5 15-02-S2-76**

Event ID: 15-02-S2-76 NEQ: 7.7kg Type: Static 20150209 CTD

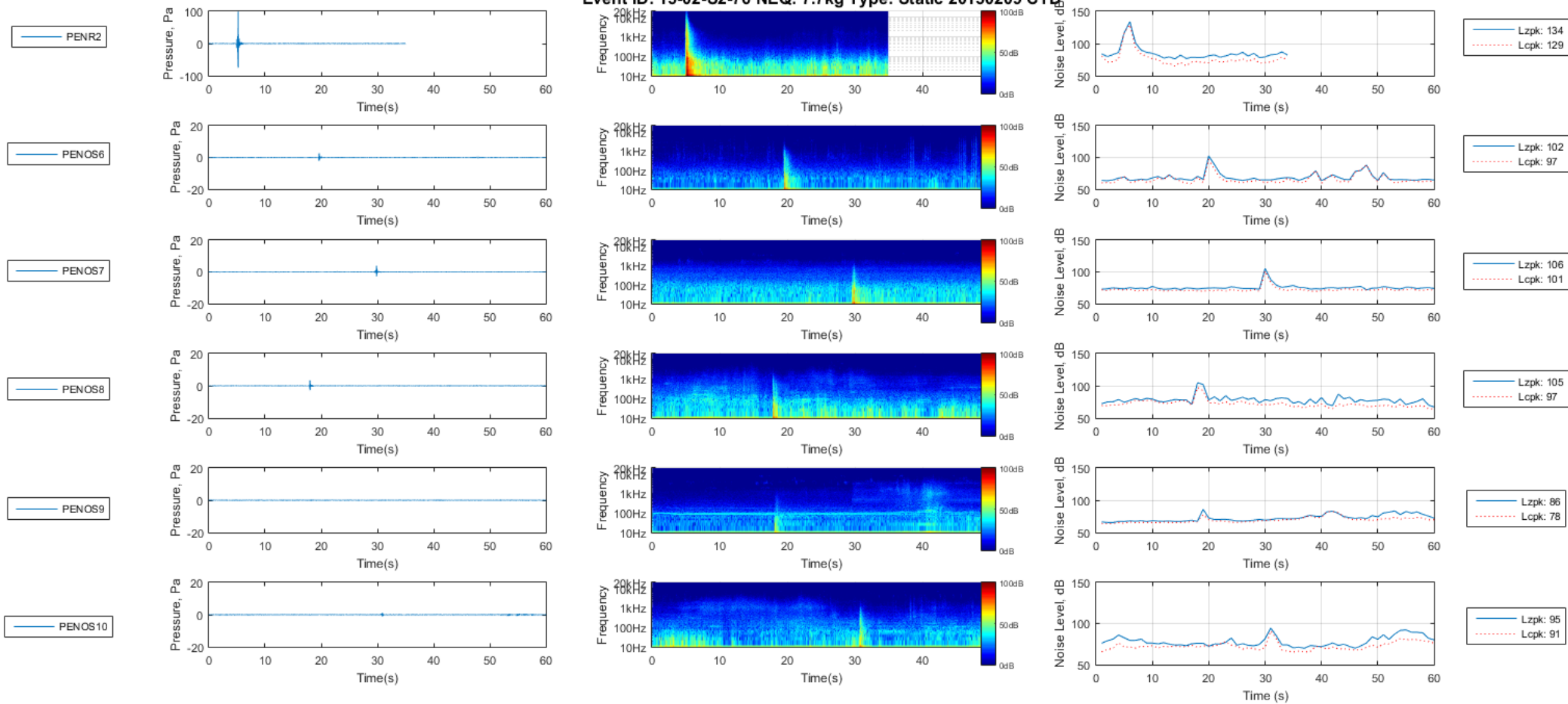


FIGURE 2.522: PEN\_OS 6 - 10 15-02-S2-76

Event ID: 15-02-S2-76 NEQ: 7.7kg Type: Static 20150209

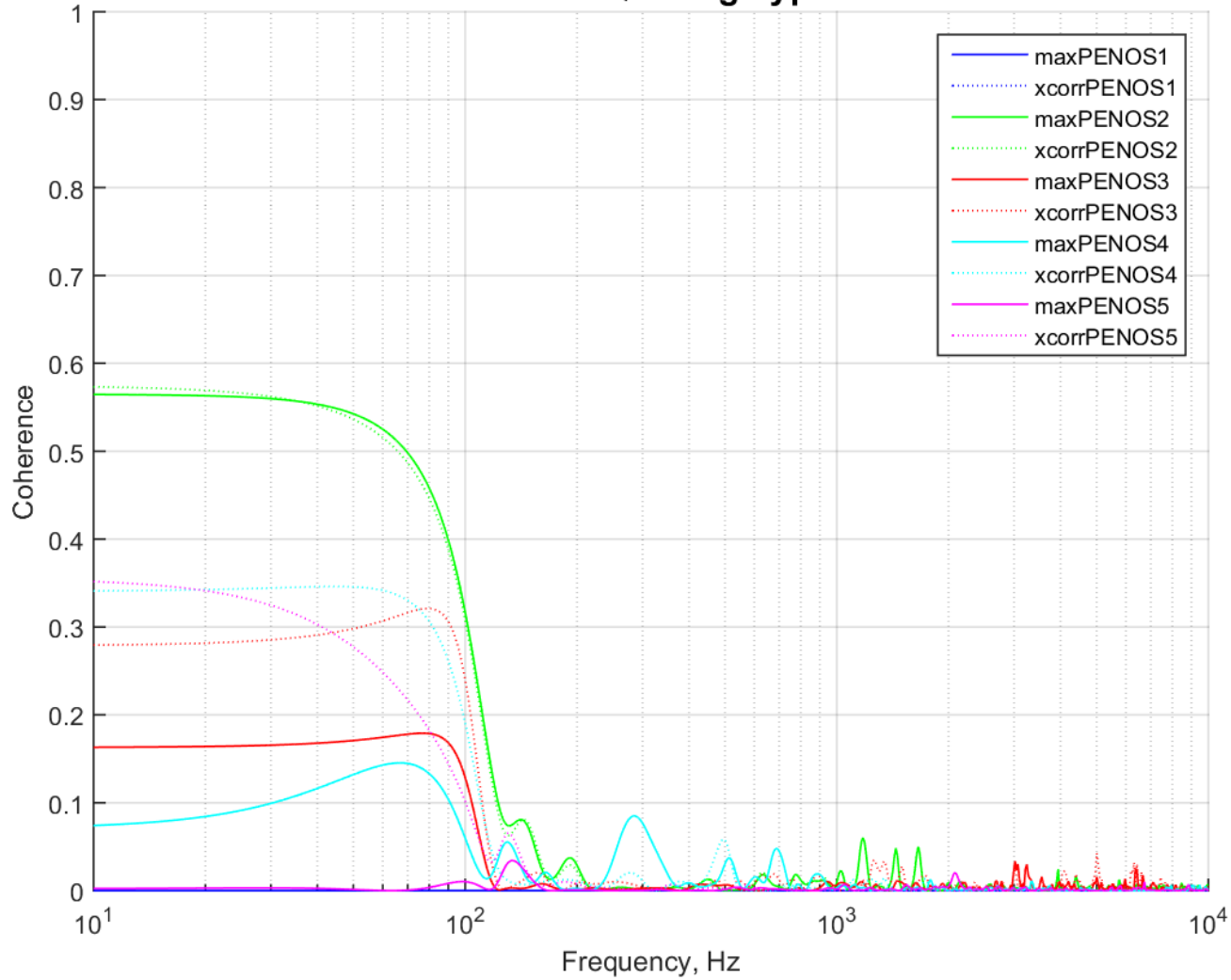


FIGURE 2.523: COHERENCE PEN\_OS 1 - 5 15-02-S2-76

Event ID: 15-02-S2-76 NEQ: 7.7kg Type: Static 20150209

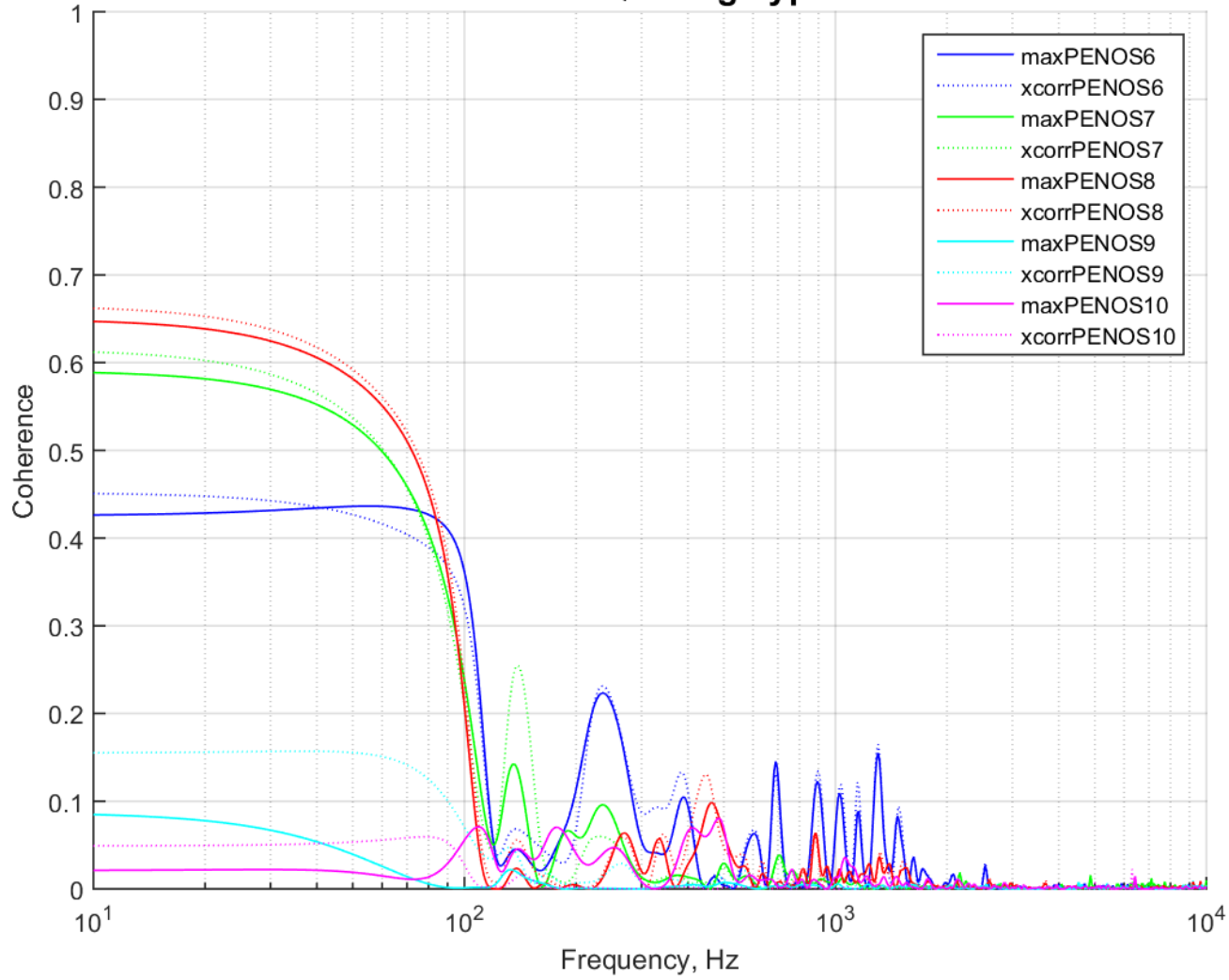
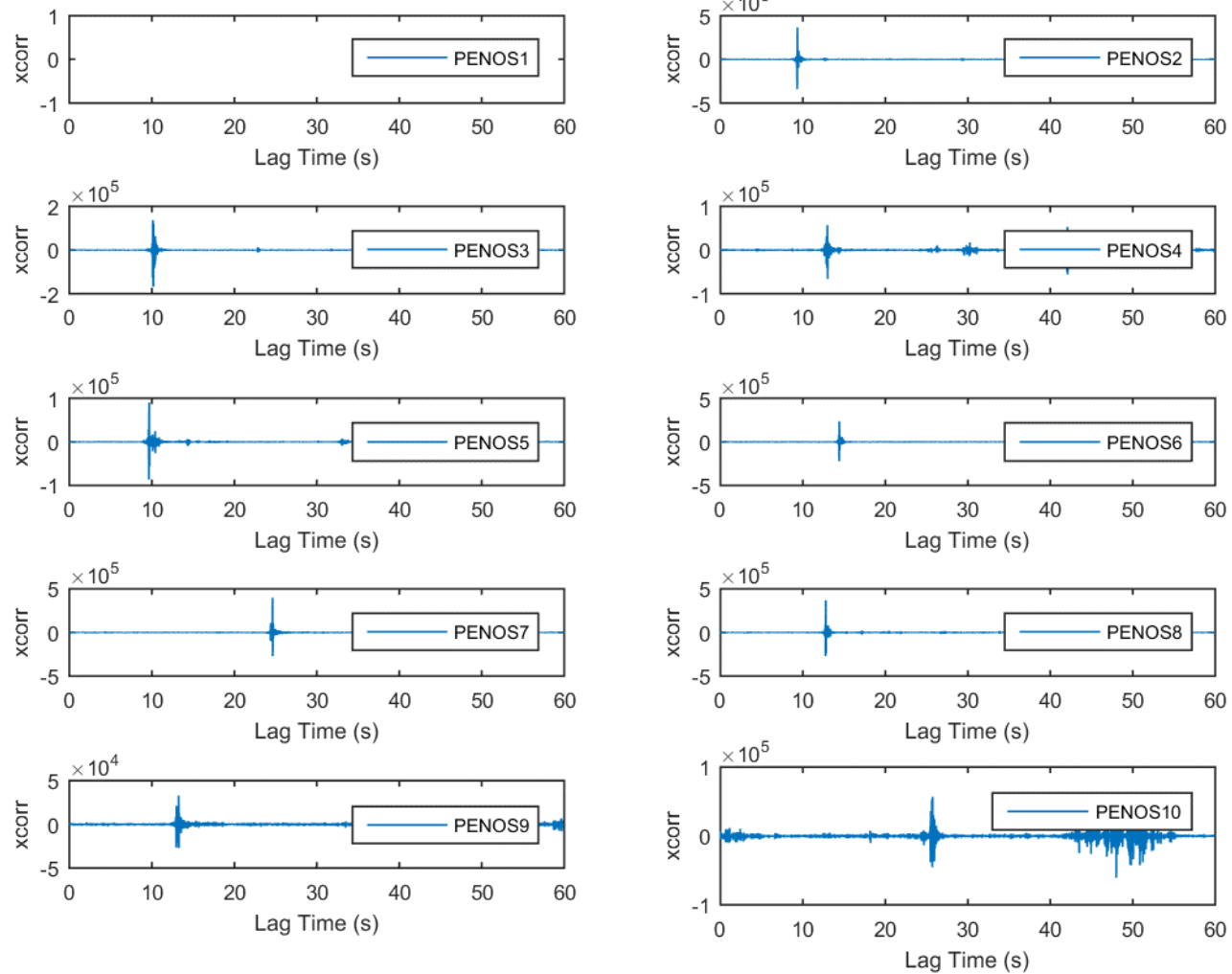
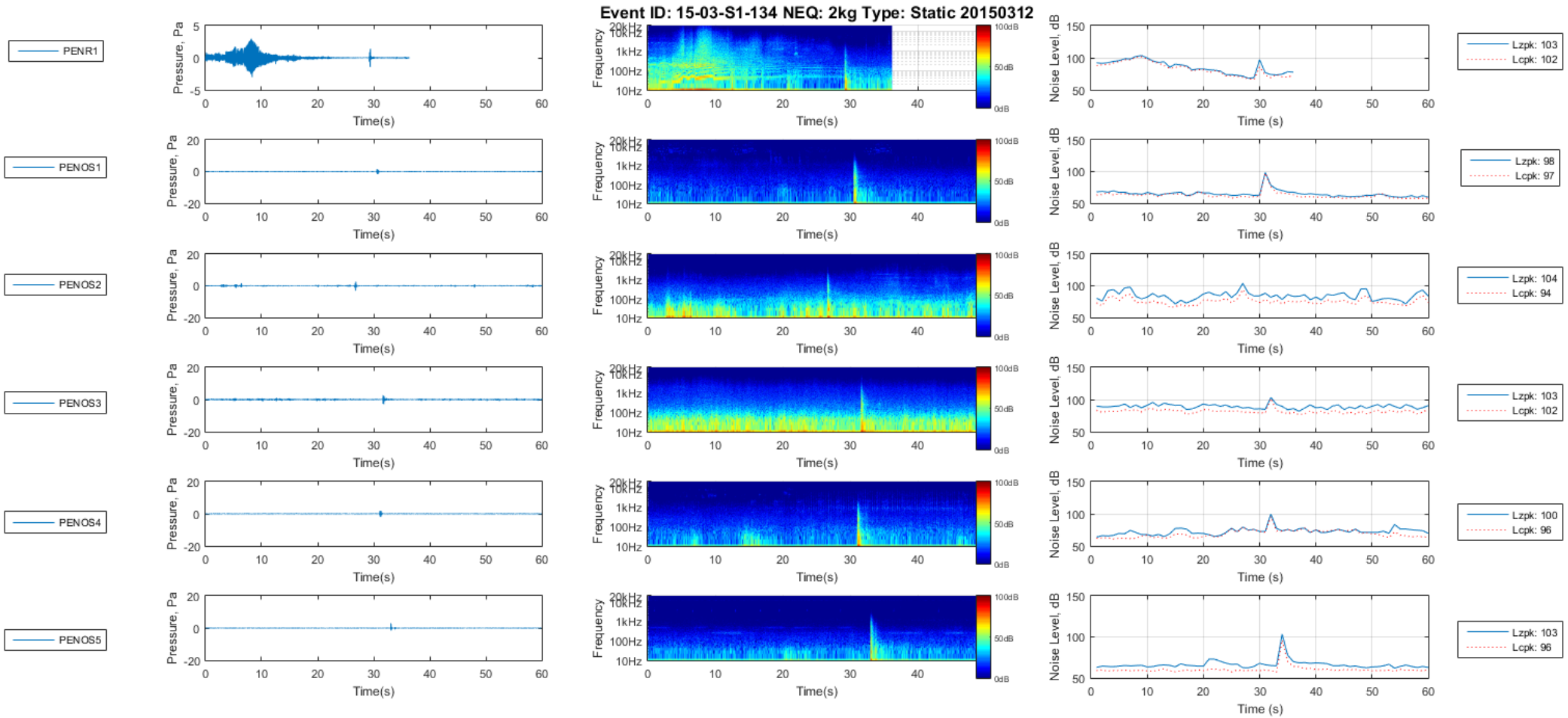


FIGURE 2.524: COHERENCE PEN\_OS 6 - 10 15-02-S2-76CTD

**Event ID: 15-02-S2-76 NEQ: 7.7kg Type: Static 20150209**



**FIGURE 2.525: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S2-76**



**FIGURE 2.526: PEN\_OS 1 - 5 15-03-S1-134**

Event ID: 15-03-S1-134 NEQ: 2kg Type: Static 20150312 CTD.

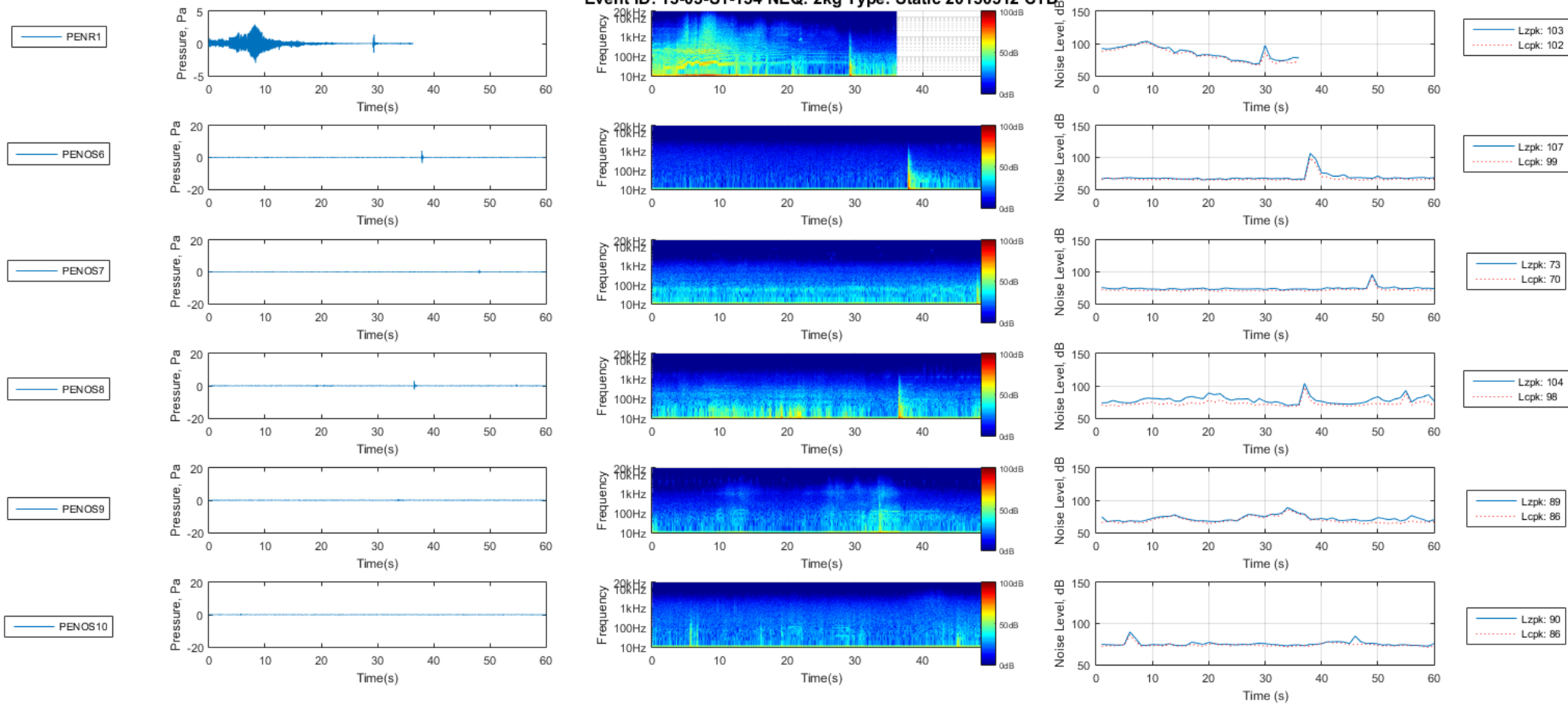


FIGURE 2.527: PEN\_OS 6 - 10 15-03-S1-134



Event ID: 15-03-S1-134 NEQ: 2kg Type: Static 20150312

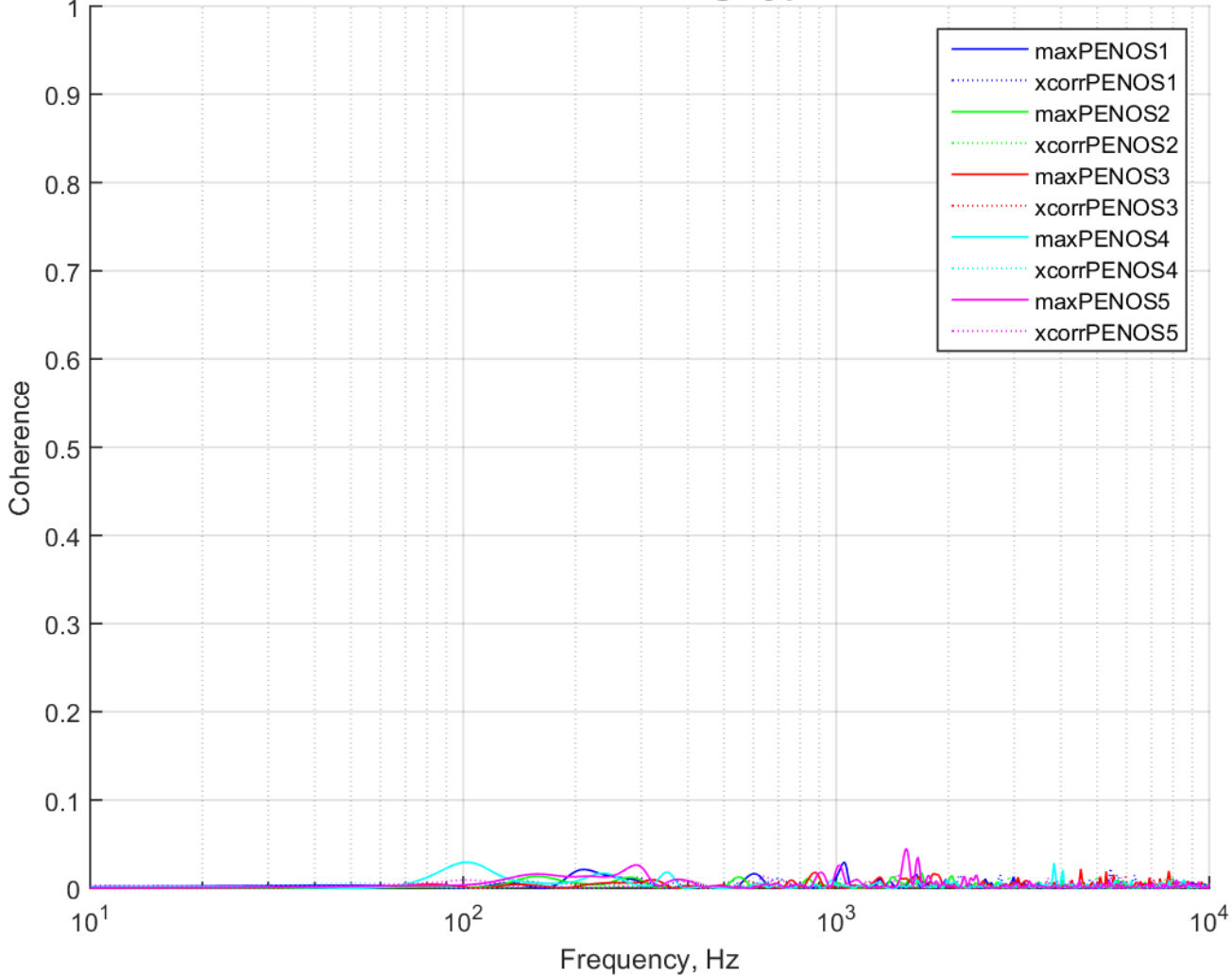


FIGURE 2.528: COHERENCE PEN\_OS 1 - 5 15-03-S1-134

Event ID: 15-03-S1-134 NEQ: 2kg Type: Static 20150312

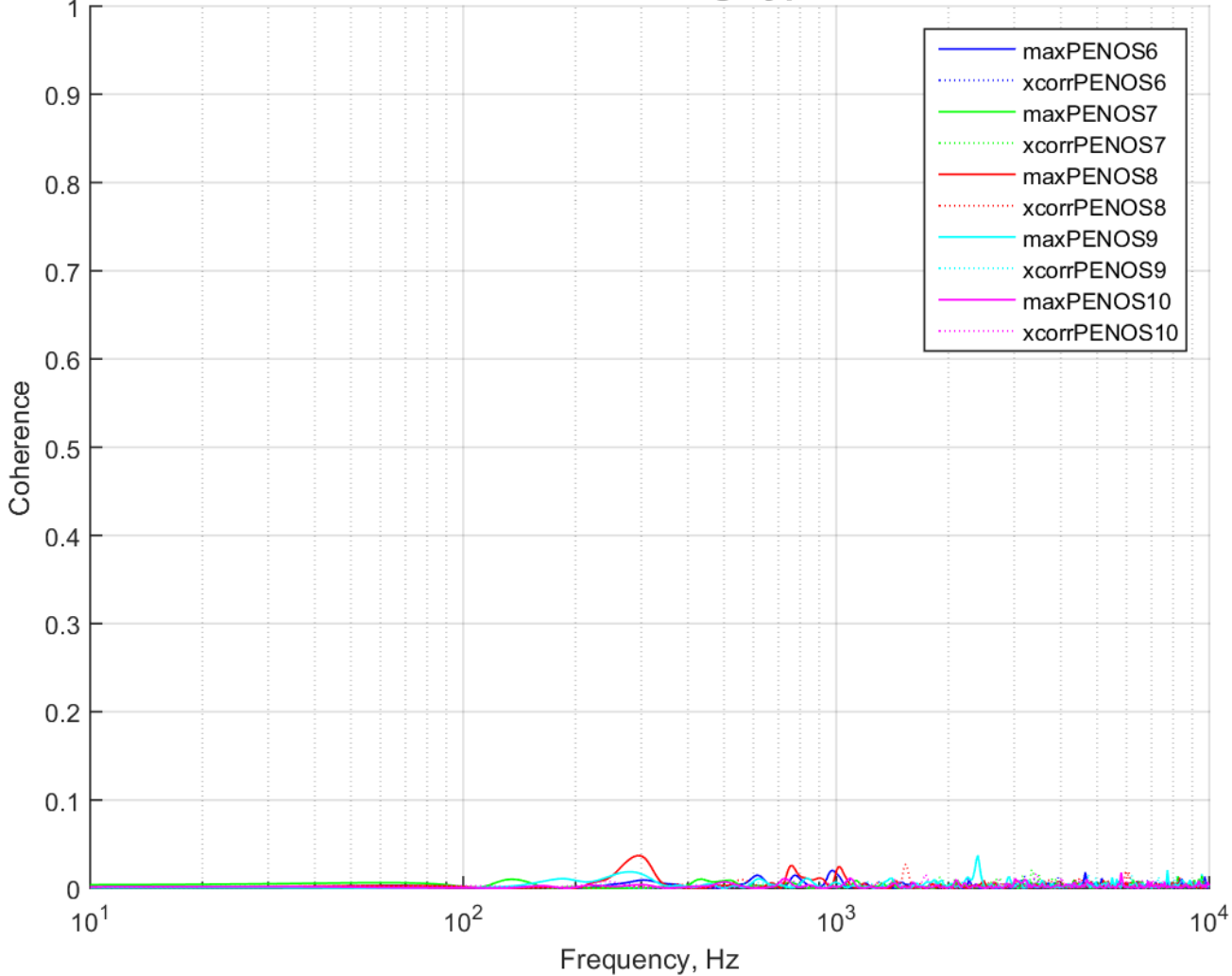
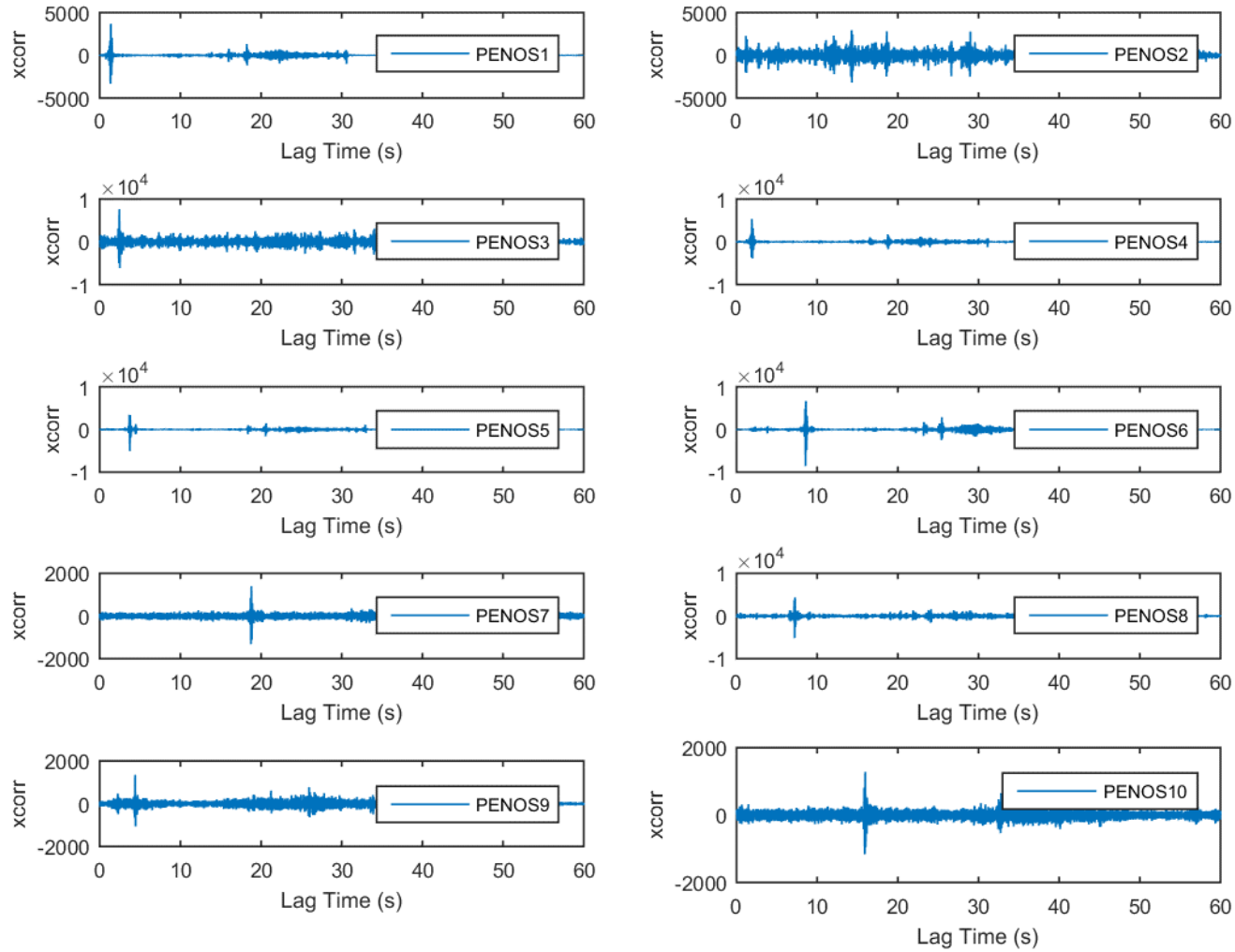
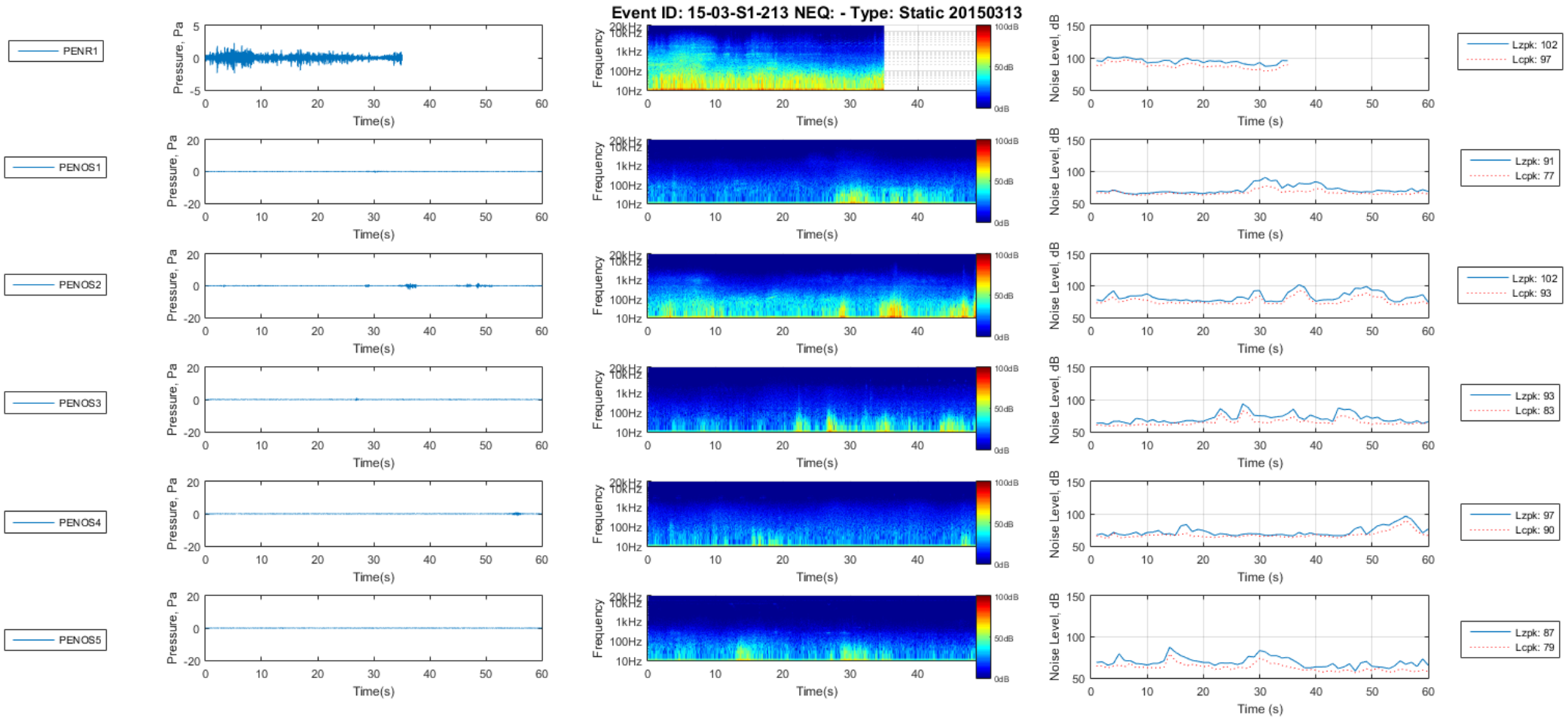


FIGURE 2.529: COHERENCE PEN\_OS 6 - 10 15-03-S1-134CTD

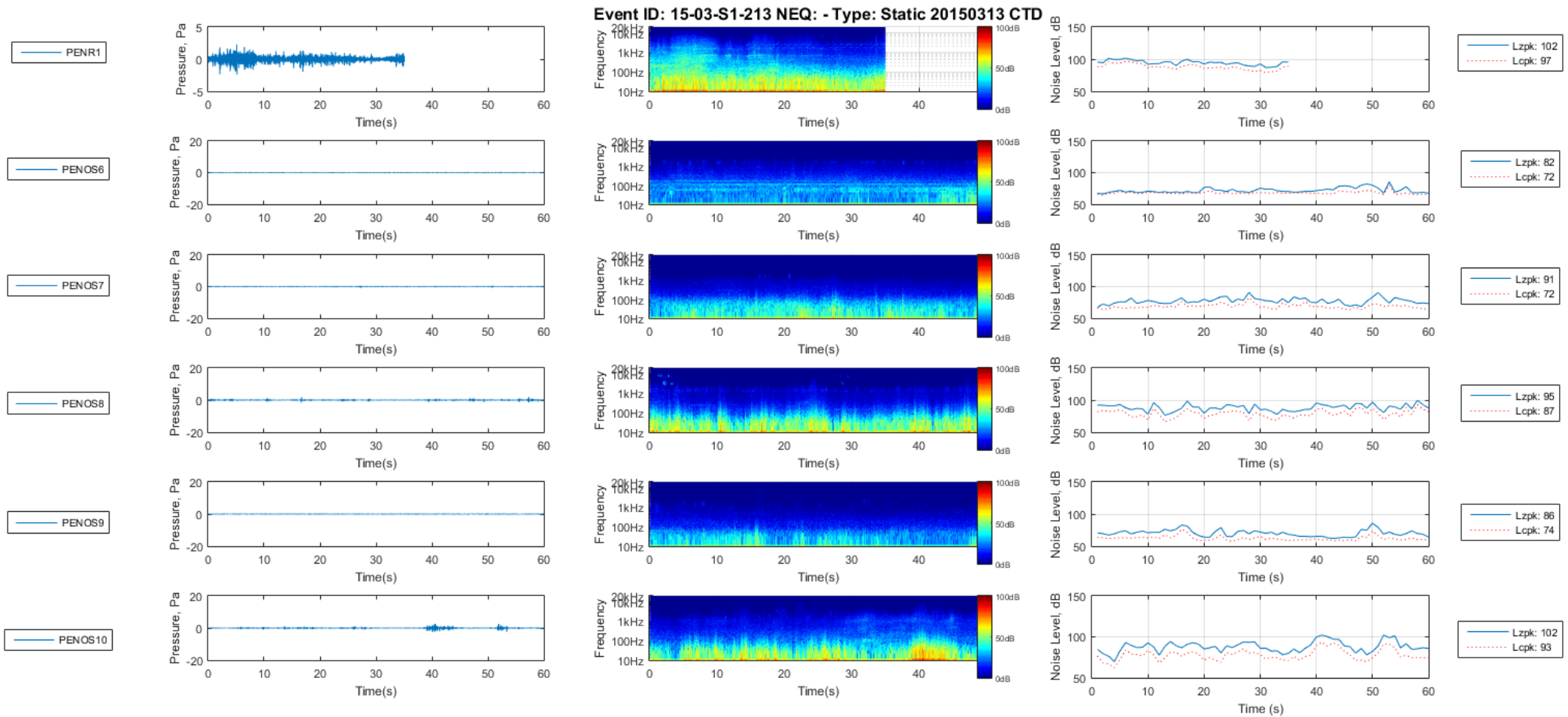
**Event ID: 15-03-S1-134 NEQ: 2kg Type: Static 20150312**



**FIGURE 2.530: CROSS CORRELATION PEN\_OS 1 - 10 15-03-S1-134**

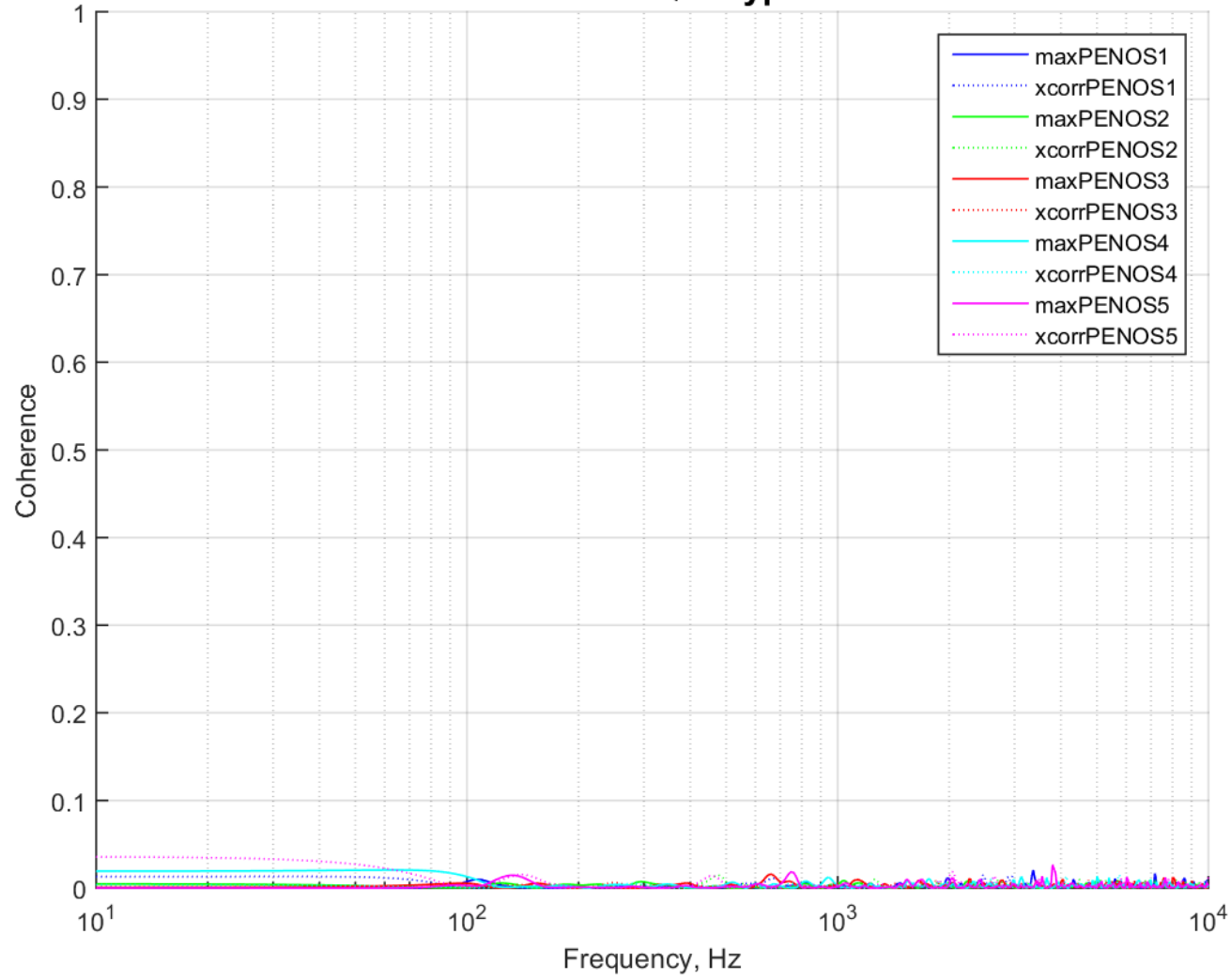


**FIGURE 2.531: PEN\_OS 1 - 5 15-03-S1-213**



**FIGURE 2.532: PEN\_OS 6 - 10 15-03-S1-213**

**Event ID: 15-03-S1-213 NEQ: - Type: Static 20150313**



**FIGURE 2.533: COHERENCE PEN\_OS 1 - 5 15-03-S1-213**

Event ID: 15-03-S1-213 NEQ: - Type: Static 20150313

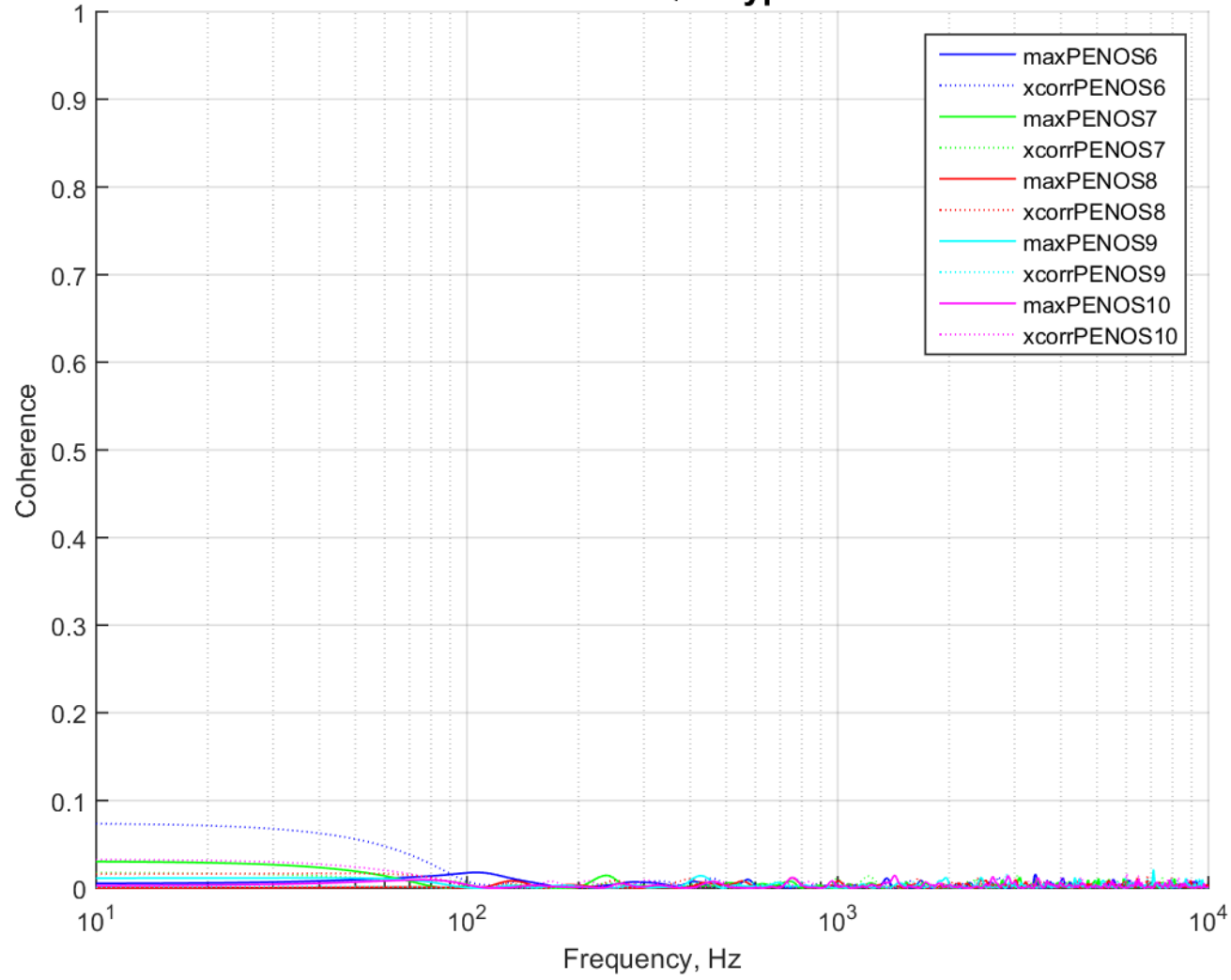
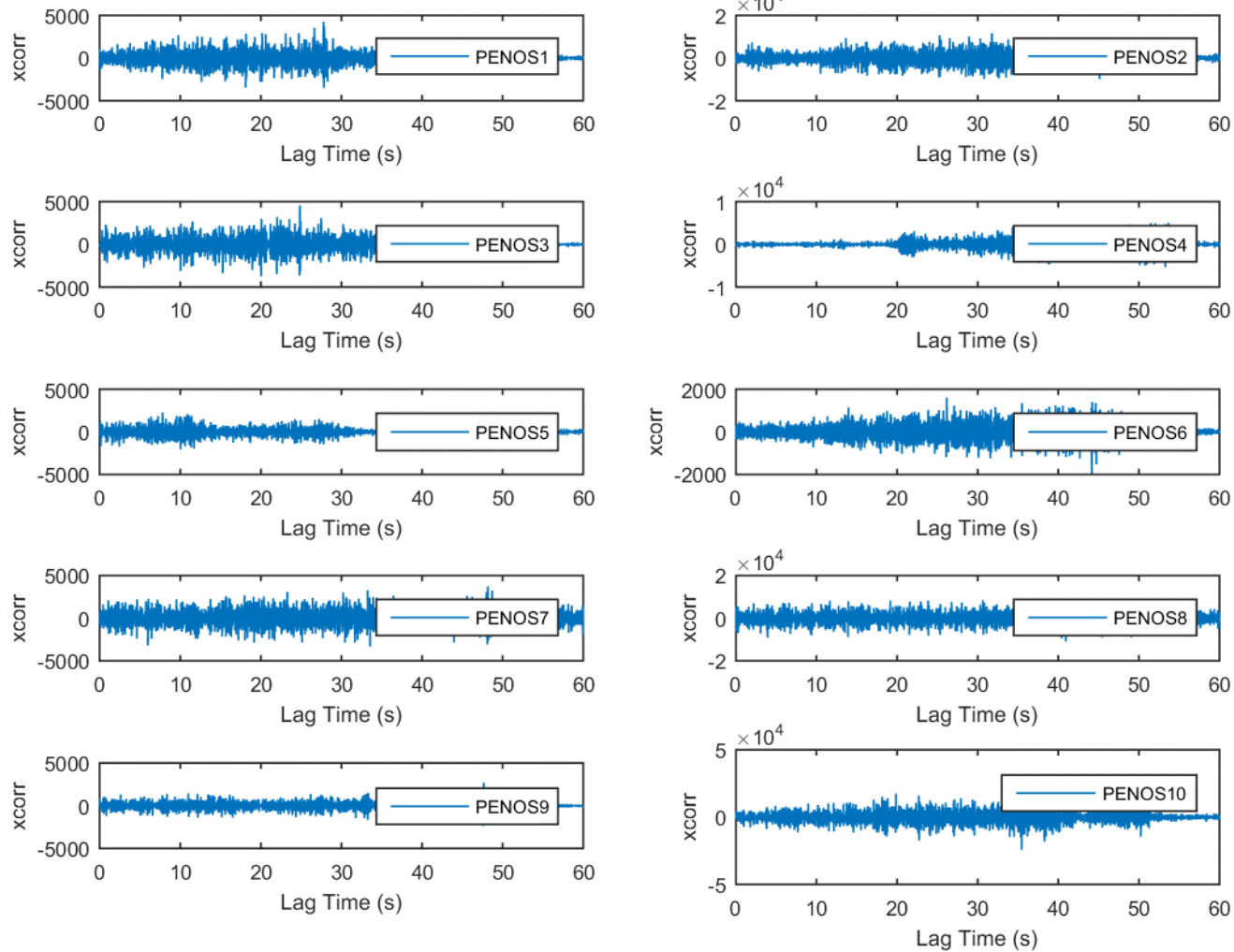


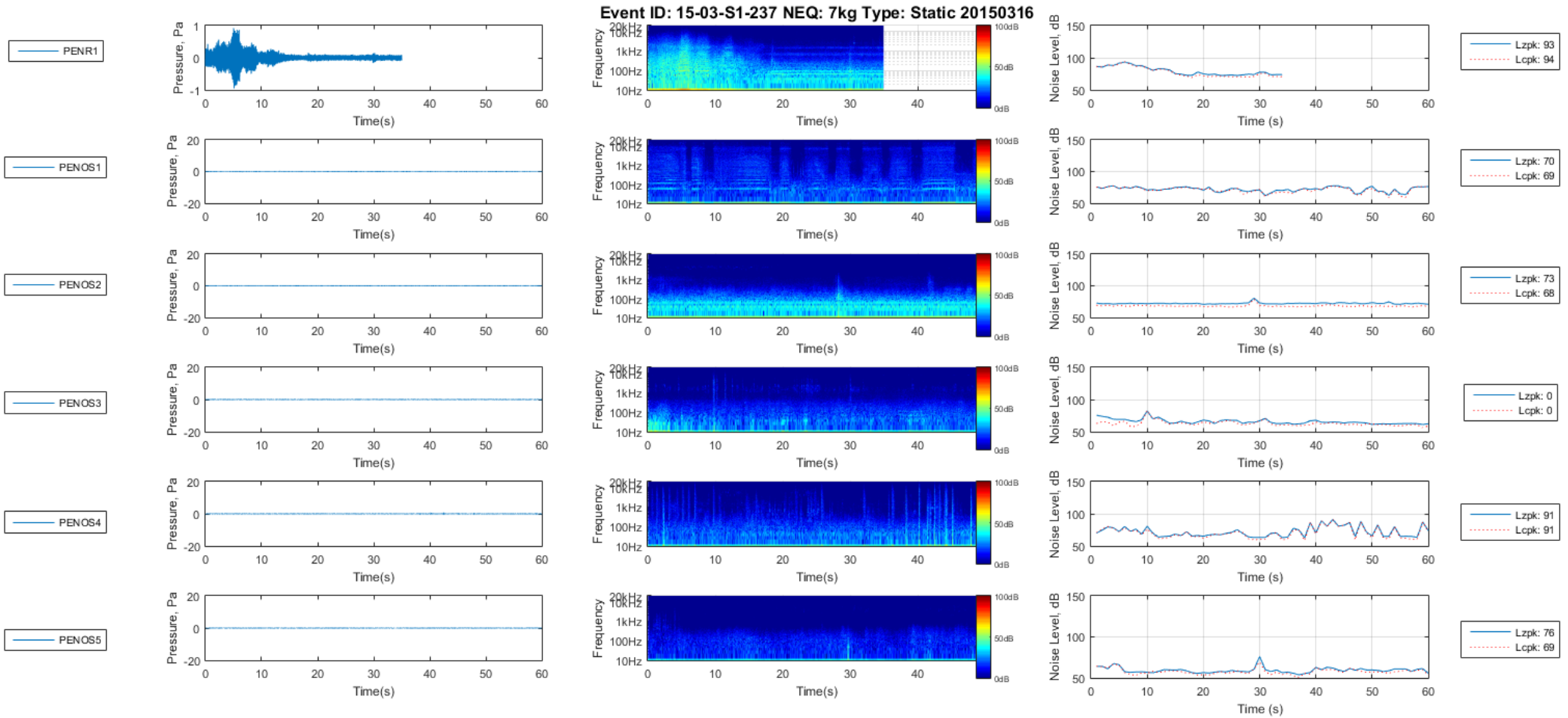
FIGURE 2.534: COHERENCE PEN\_OS 6 - 10 15-03-S1-213CTD

**Event ID: 15-03-S1-213 NEQ: - Type: Static 20150313**



**FIGURE 2.535: CROSS CORRELATION PEN\_OS 1 - 10 15-03-S1-213**





**FIGURE 2.536: PEN\_OS 1 - 5 15-03-S1-237**

Event ID: 15-03-S1-237 NEQ: 7kg Type: Static 20150316 CTD.

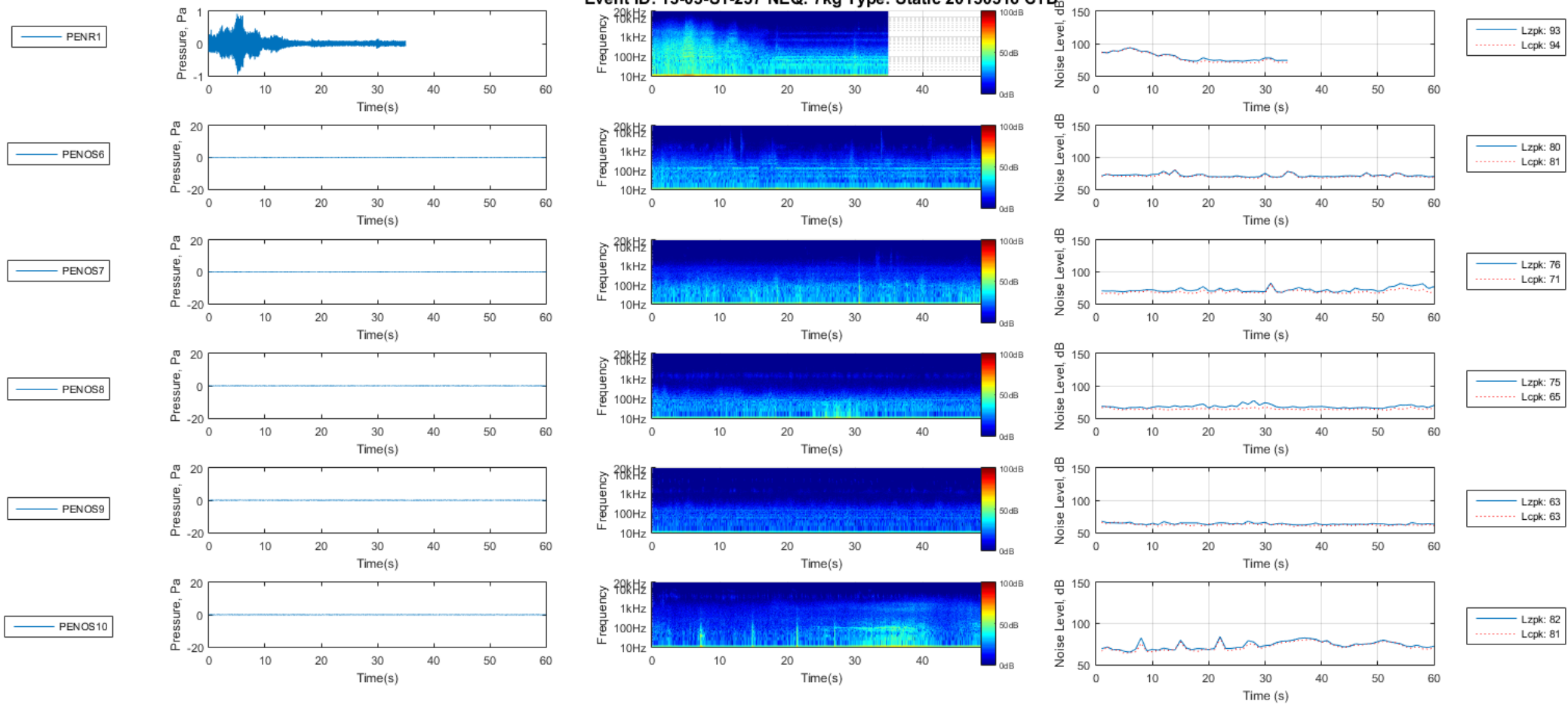


FIGURE 2.537: PEN\_OS 6 - 10 15-03-S1-237

Event ID: 15-03-S1-237 NEQ: 7kg Type: Static 20150316

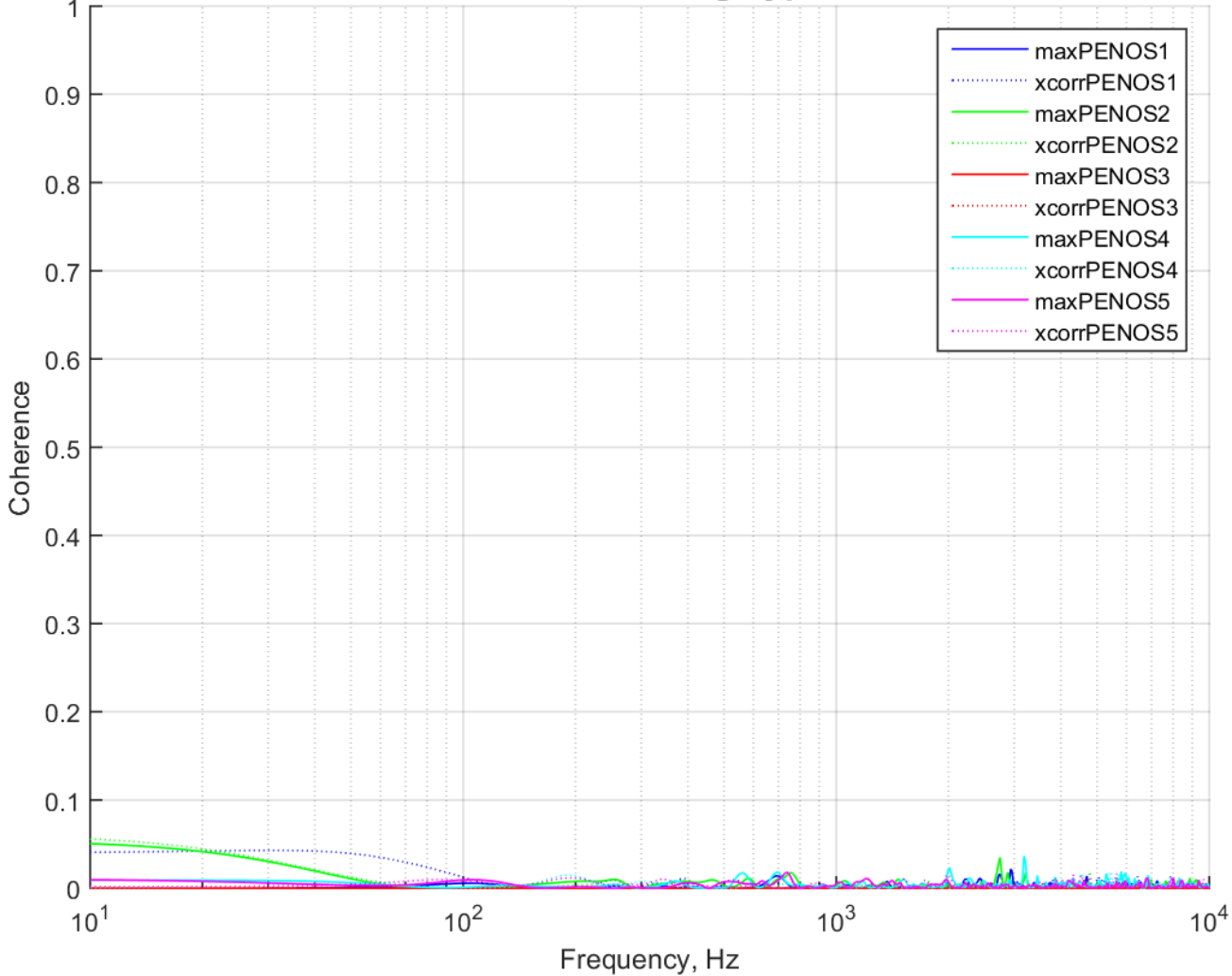


FIGURE 2.538: COHERENCE PEN\_OS 1 - 5 15-03-S1-237

Event ID: 15-03-S1-237 NEQ: 7kg Type: Static 20150316

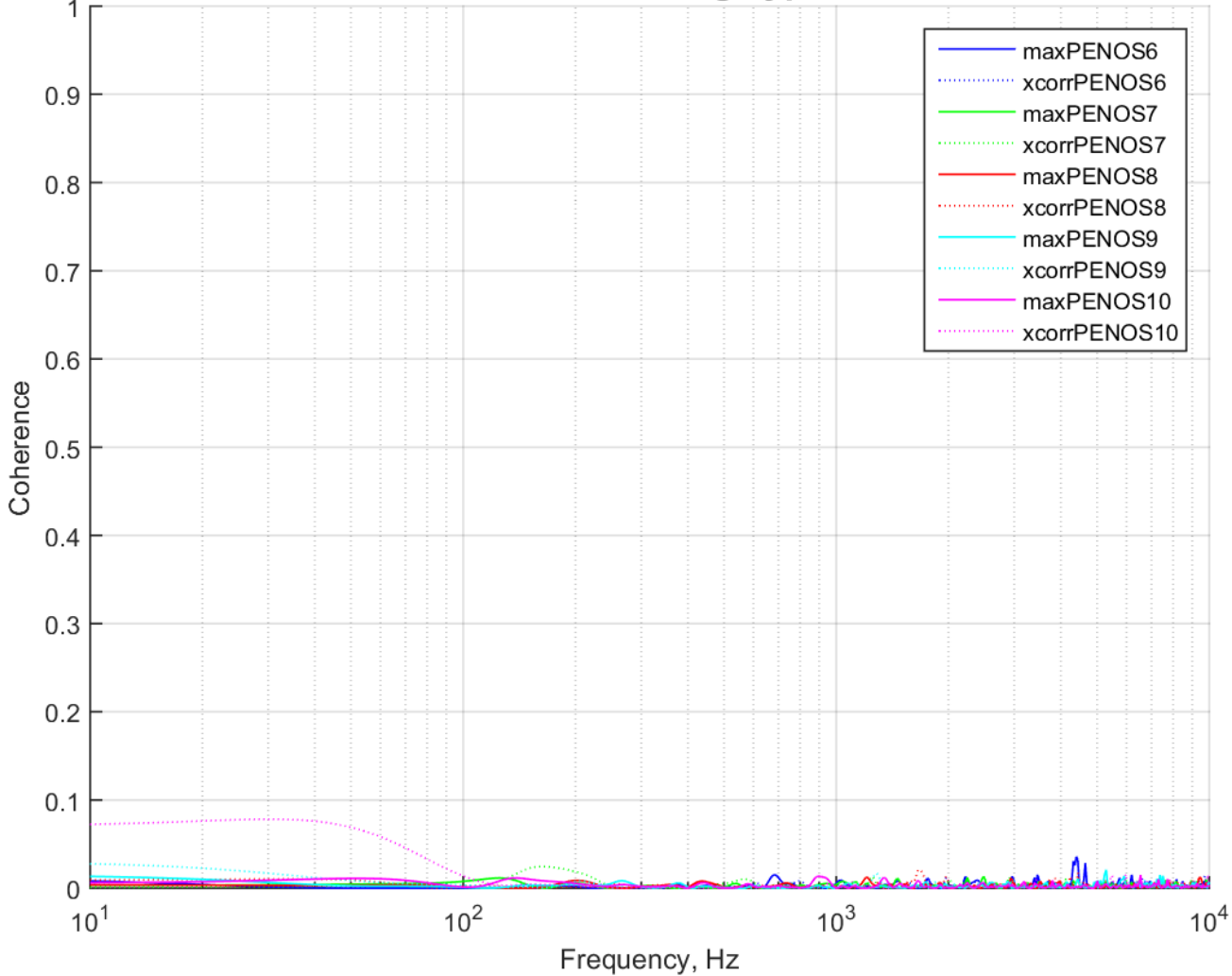
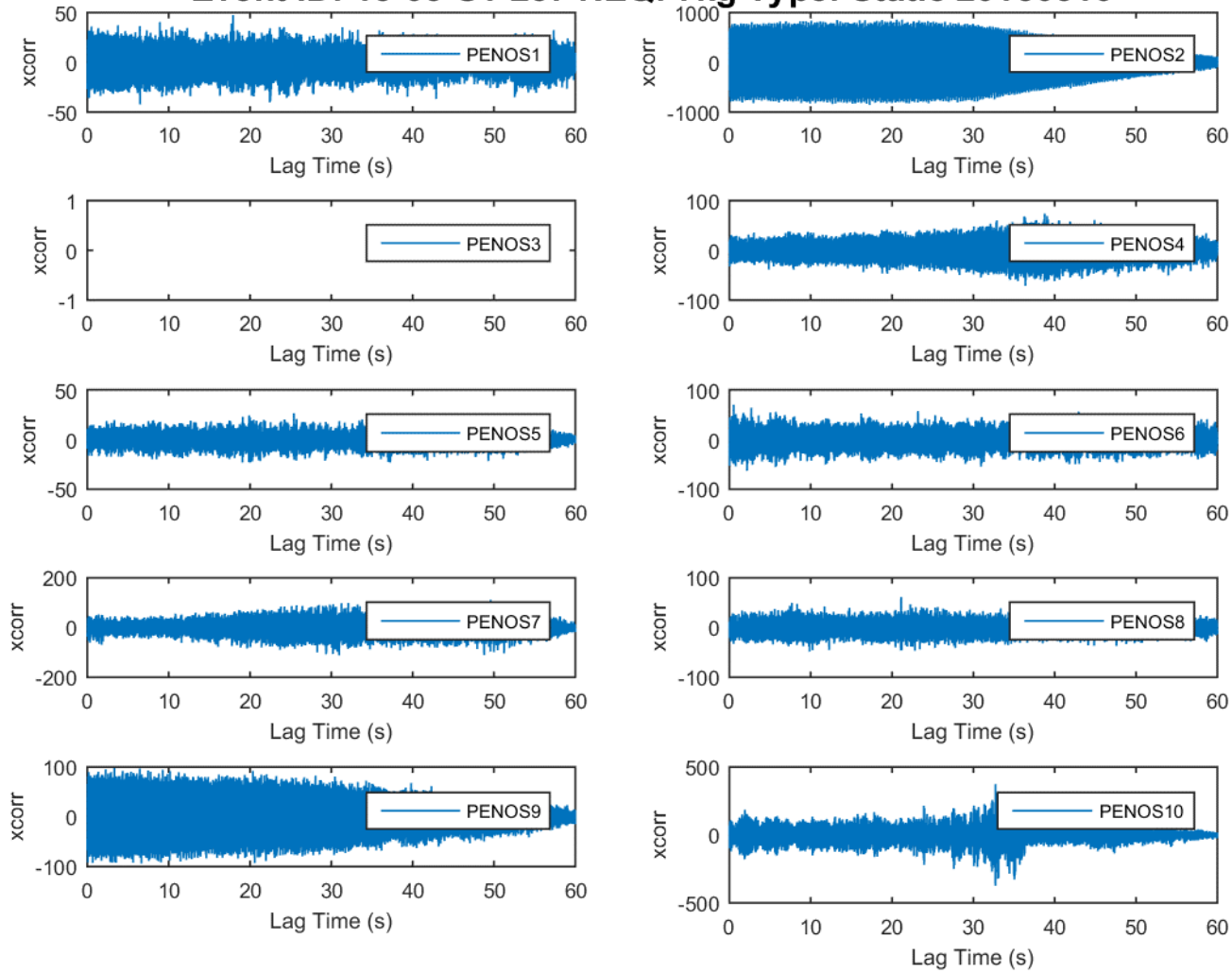
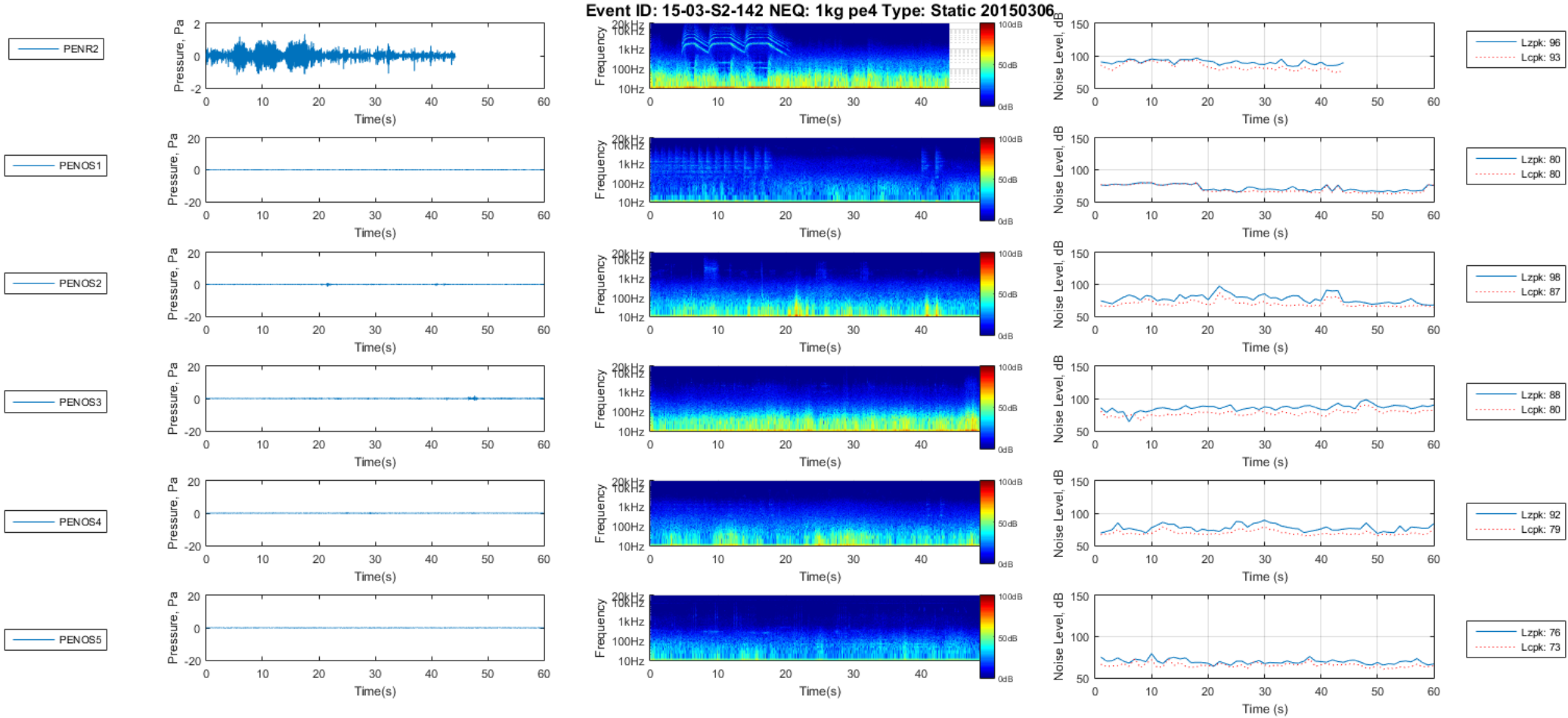


FIGURE 2.539: COHERENCE PEN\_OS 6 - 10 15-03-S1-237CTD

**Event ID: 15-03-S1-237 NEQ: 7kg Type: Static 20150316**



**FIGURE 2.540: CROSS CORRELATION PEN\_OS 1 - 10 15-03-S1-237**



**FIGURE 2.541: PEN\_OS 1 - 5 15-03-S2-142**

Event ID: 15-03-S2-142 NEQ: 1kg pe4 Type: Static 20150306 CTD

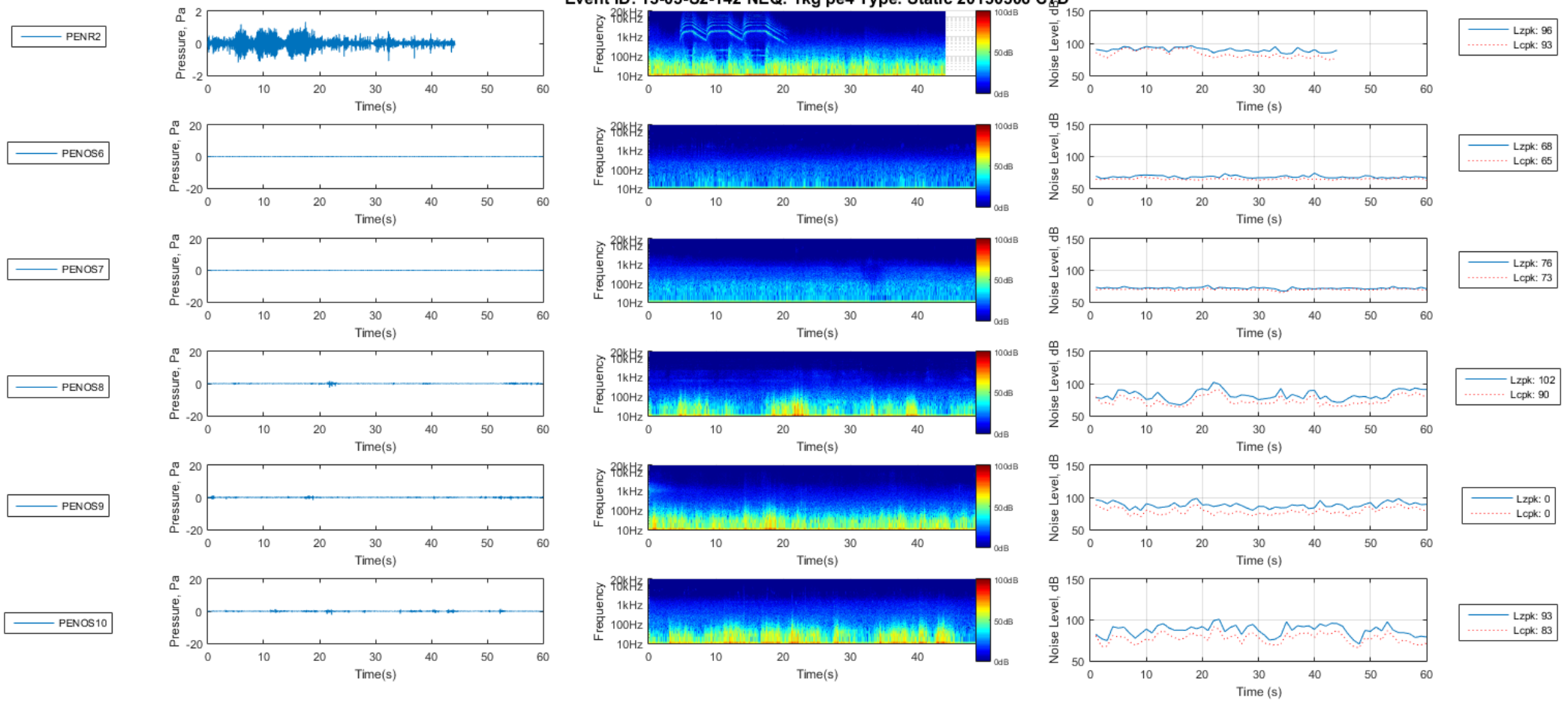


FIGURE 2.542: PEN\_OS 6 - 10 15-03-S2-142

Event ID: 15-03-S2-142 NEQ: 1kg pe4 Type: Static 20150306

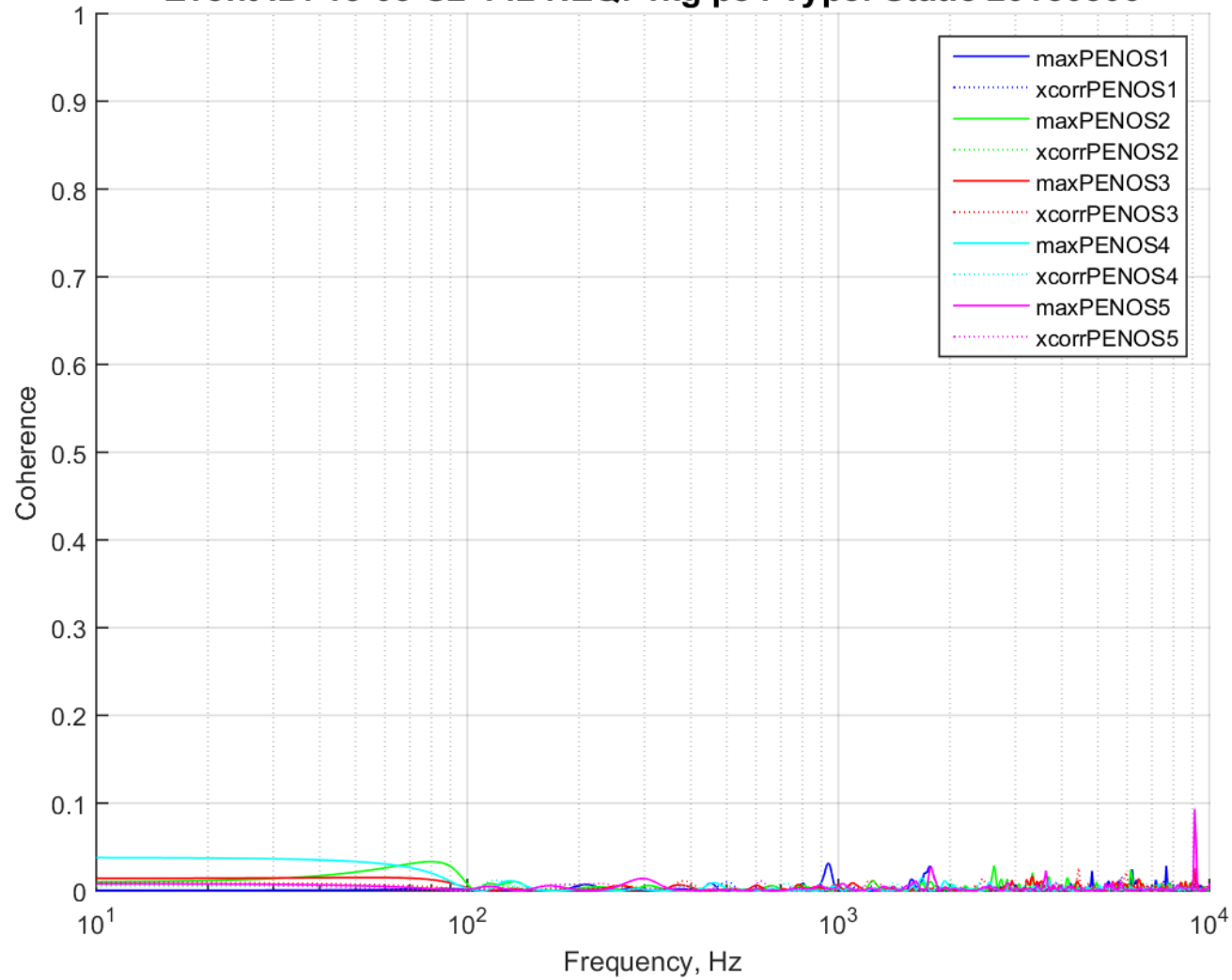


FIGURE 2.543: COHERENCE PEN\_OS 1 - 5 15-03-S2-142



Event ID: 15-03-S2-142 NEQ: 1kg pe4 Type: Static 20150306

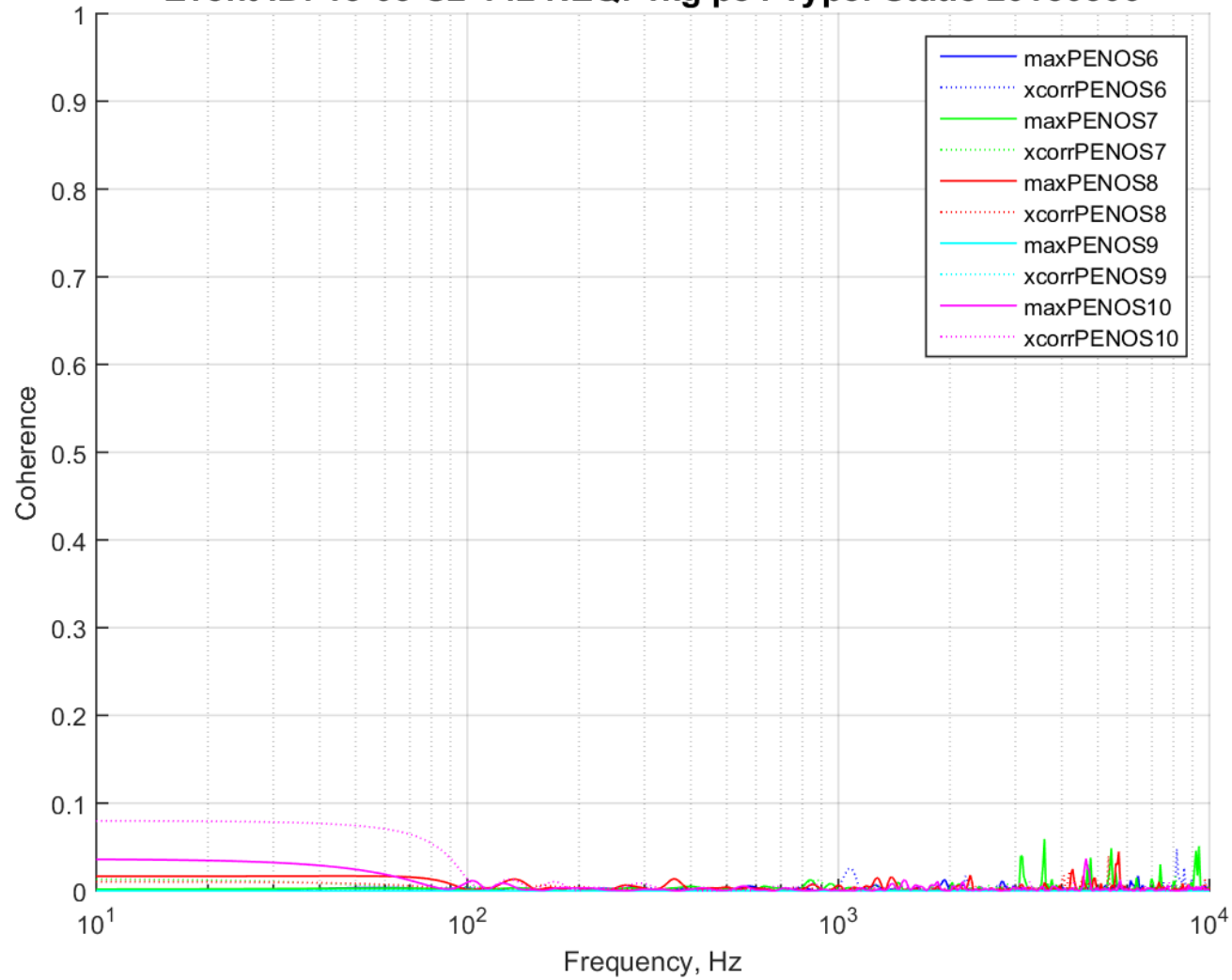
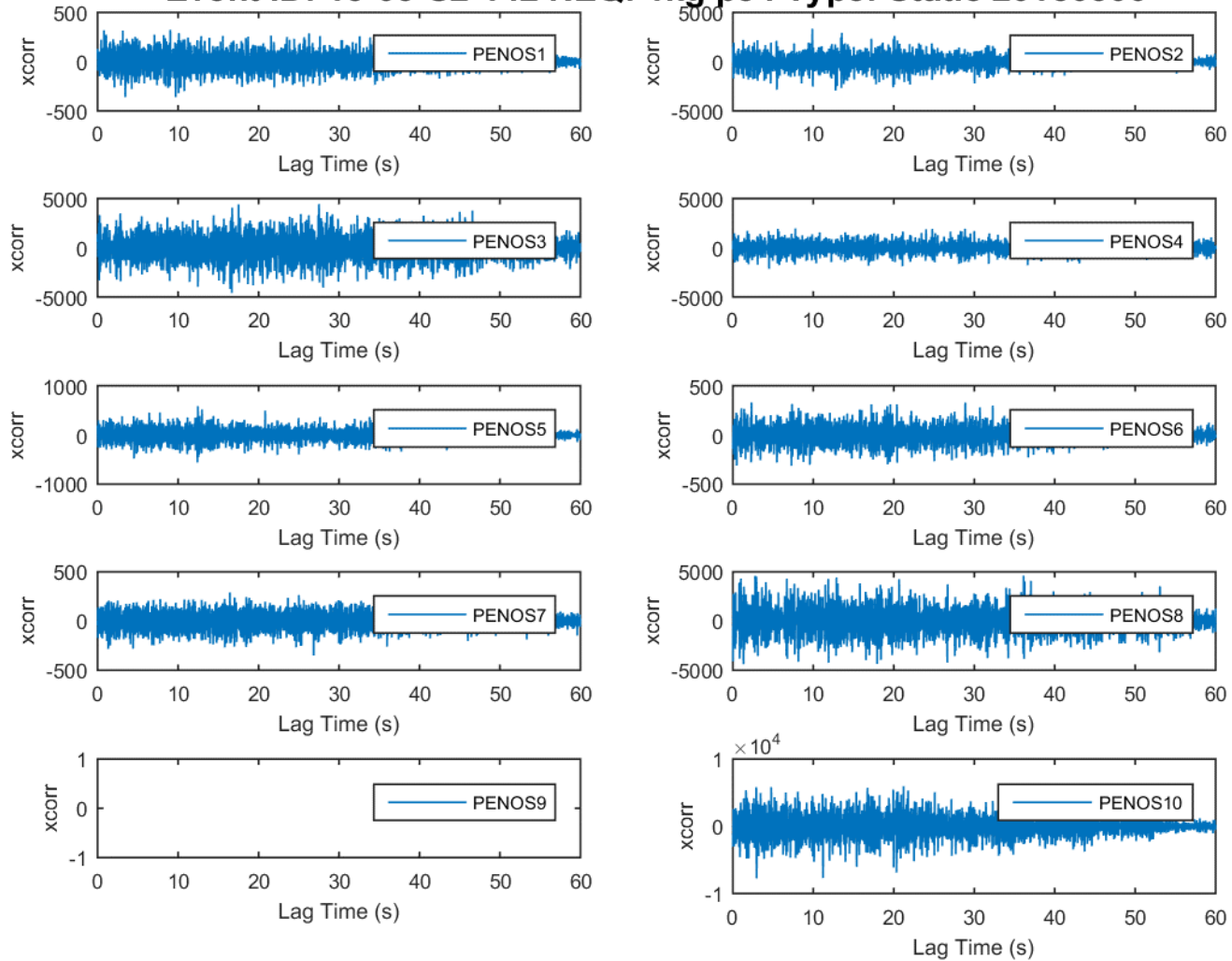
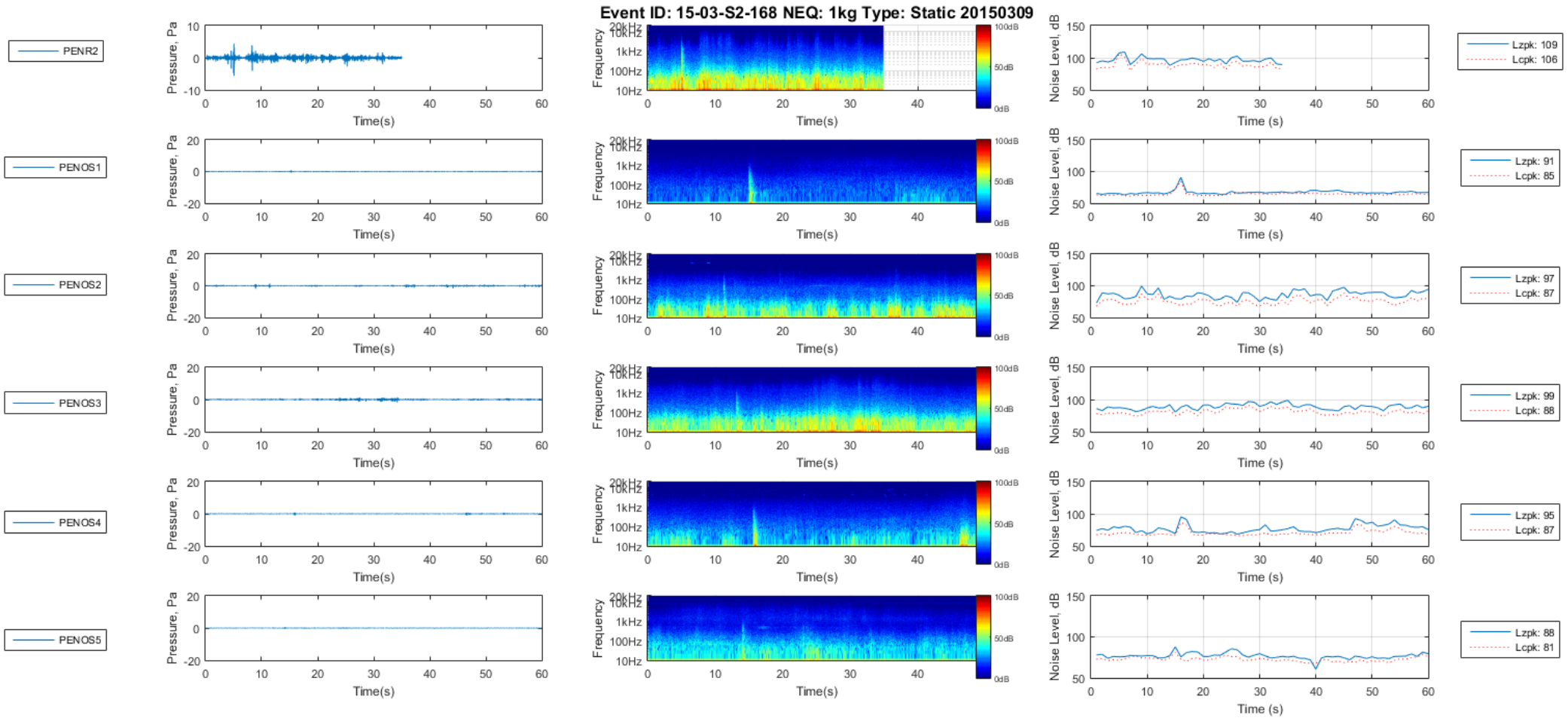


FIGURE 2.544: COHERENCE PEN\_OS 6 - 10 15-03-S2-142CTD

**Event ID: 15-03-S2-142 NEQ: 1kg pe4 Type: Static 20150306**



**FIGURE 2.545: CROSS CORRELATION PEN\_OS 1 - 10 15-03-S2-142**



**FIGURE 2.546: PEN\_OS 1 - 5 15-03-S2-168**

Event ID: 15-03-S2-168 NEQ: 1kg Type: Static 20150309 CTD.

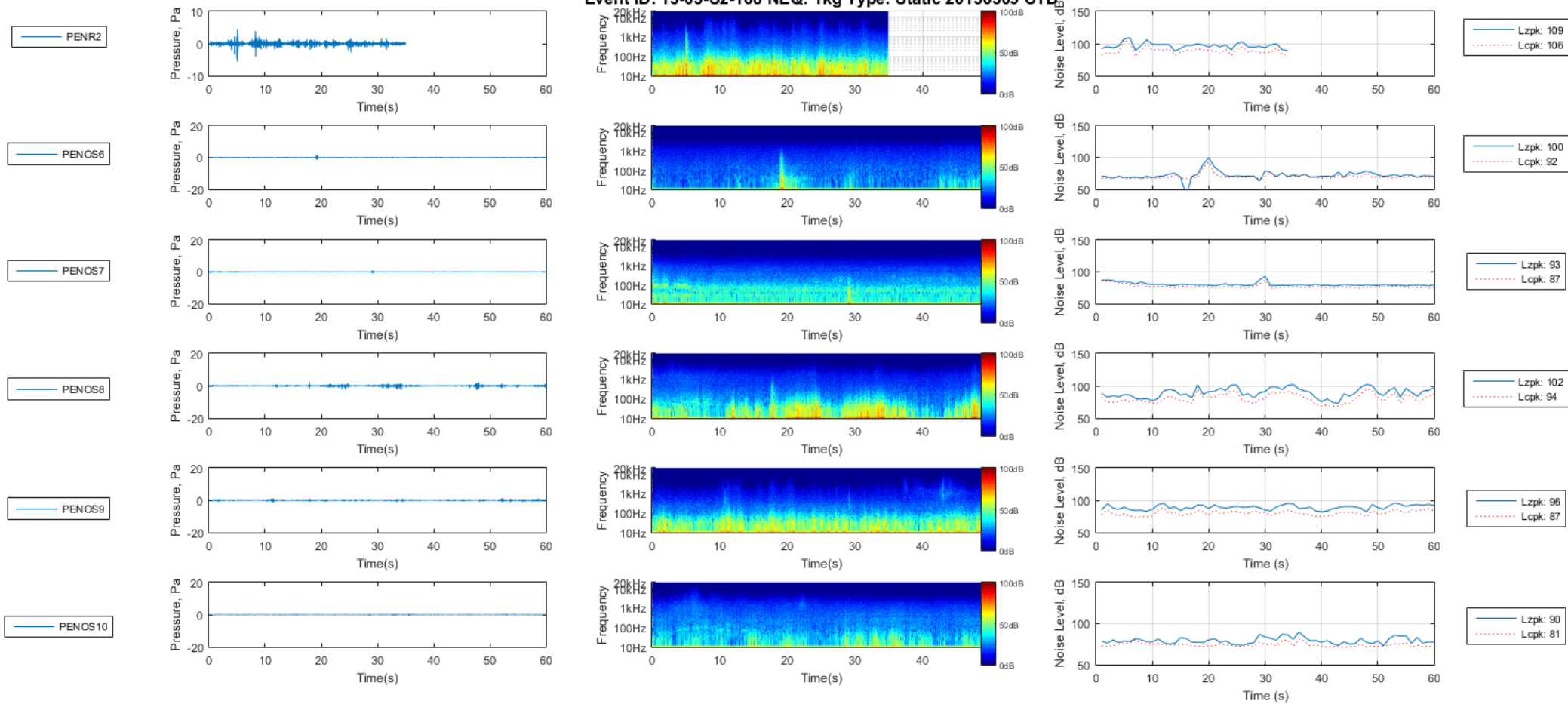


FIGURE 2.547: PEN\_OS 6 - 10 15-03-S2-168

Event ID: 15-03-S2-168 NEQ: 1kg Type: Static 20150309

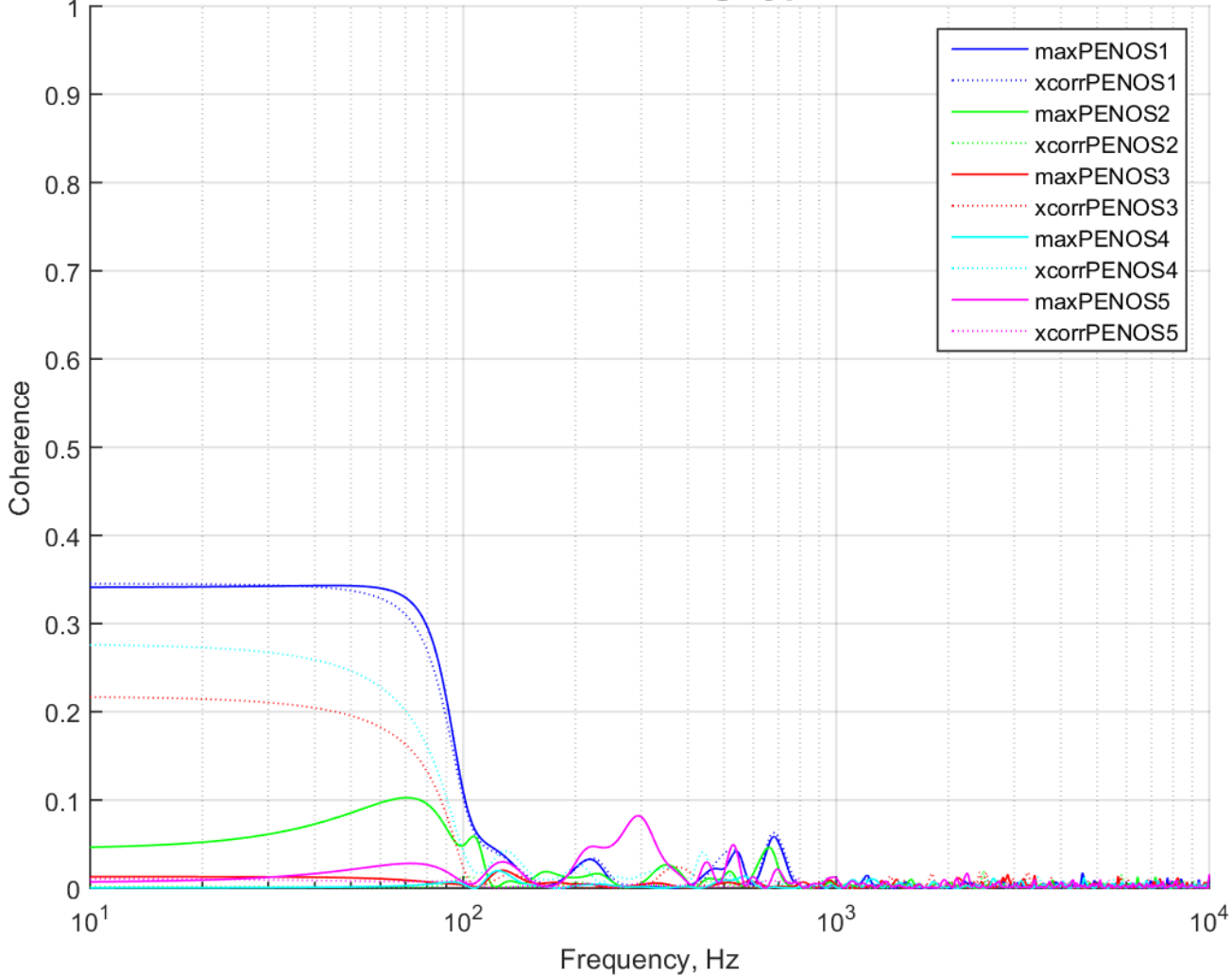


FIGURE 2.548: COHERENCE PEN\_OS 1 - 5 15-03-S2-168

Event ID: 15-03-S2-168 NEQ: 1kg Type: Static 20150309

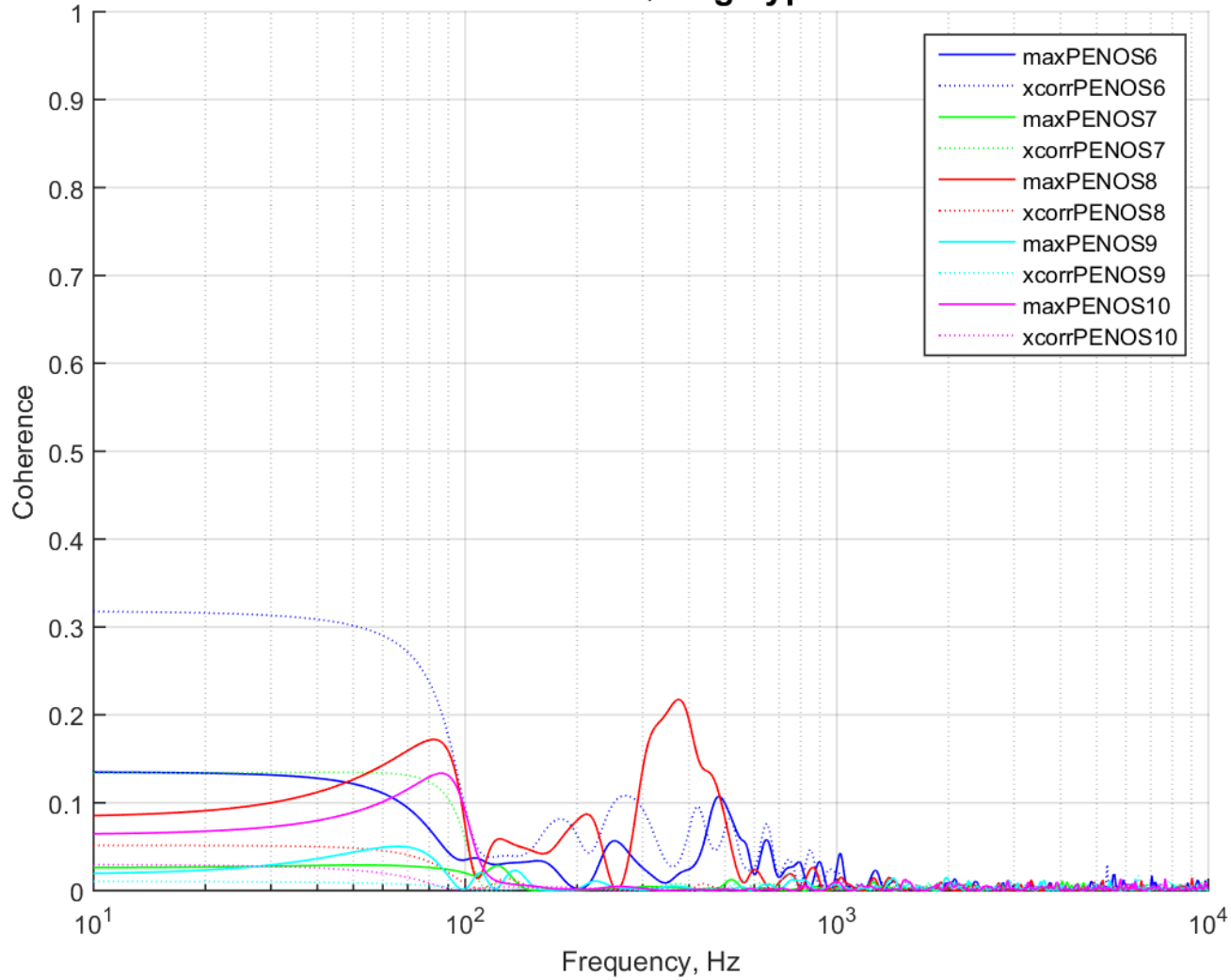
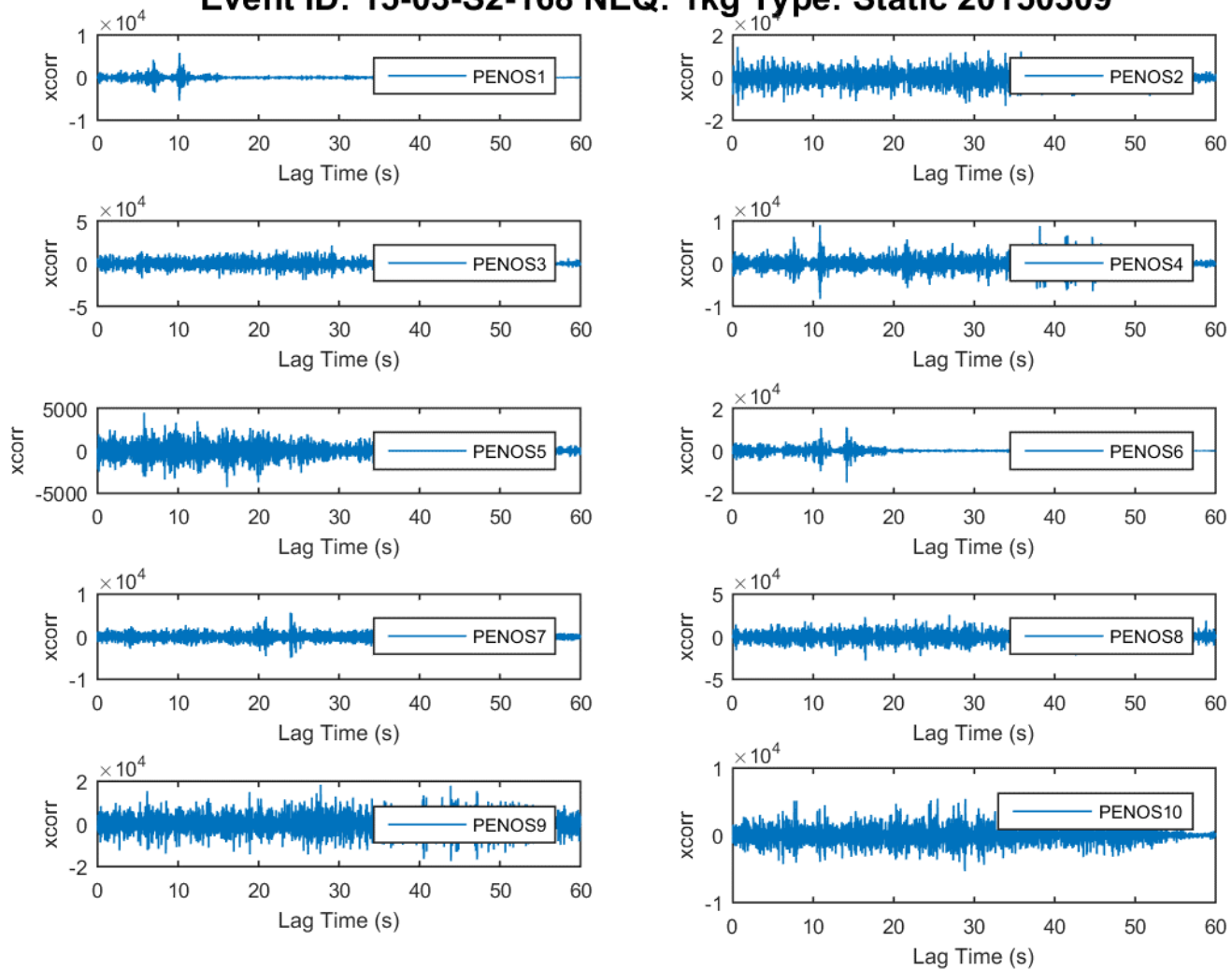
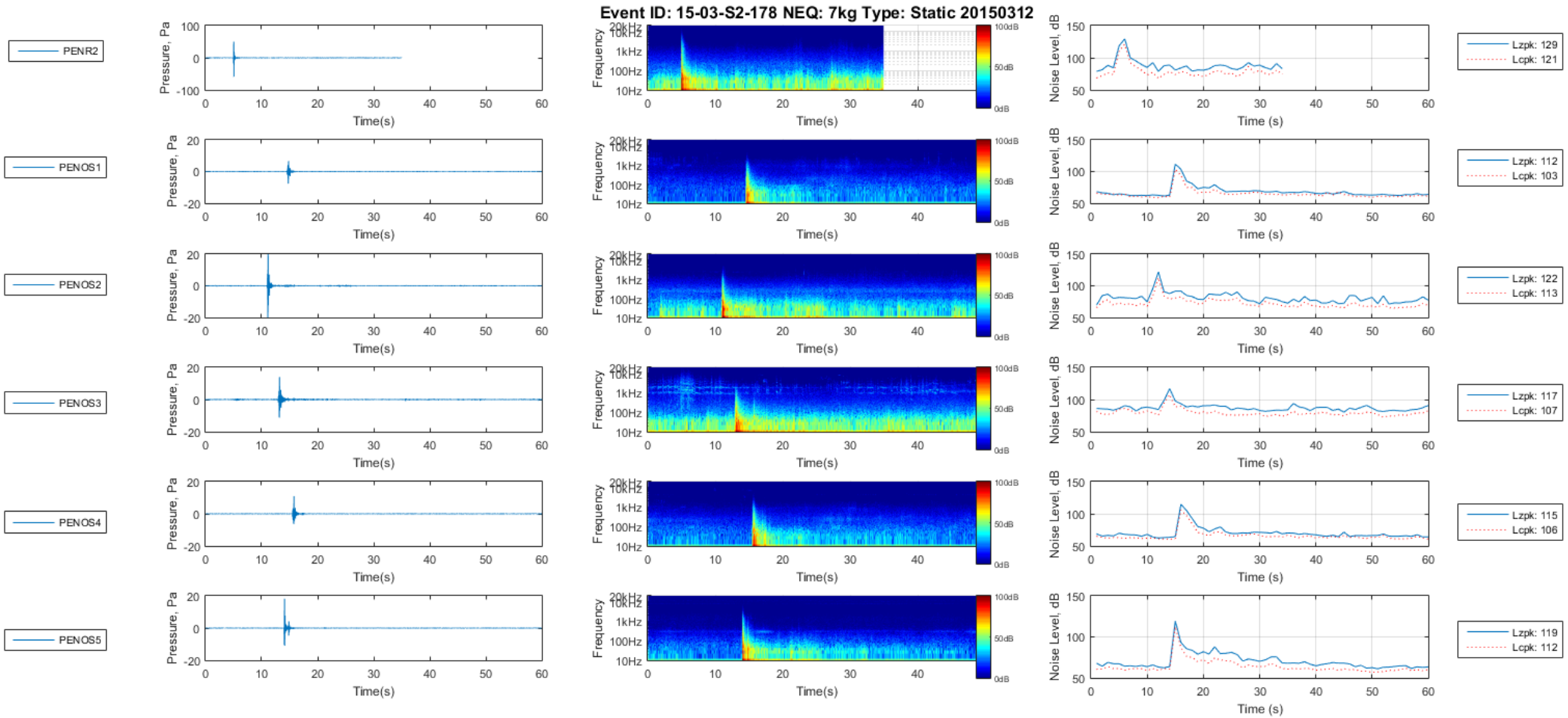


FIGURE 2.549: COHERENCE PEN\_OS 6 - 10 15-03-S2-168CTD

**Event ID: 15-03-S2-168 NEQ: 1kg Type: Static 20150309**



**FIGURE 2.550: CROSS CORRELATION PEN\_OS 1 - 10 15-03-S2-168**



**FIGURE 2.551: PEN\_OS 1 - 5 15-03-S2-178**



Event ID: 15-03-S2-178 NEQ: 7kg Type: Static 20150312 CTD.

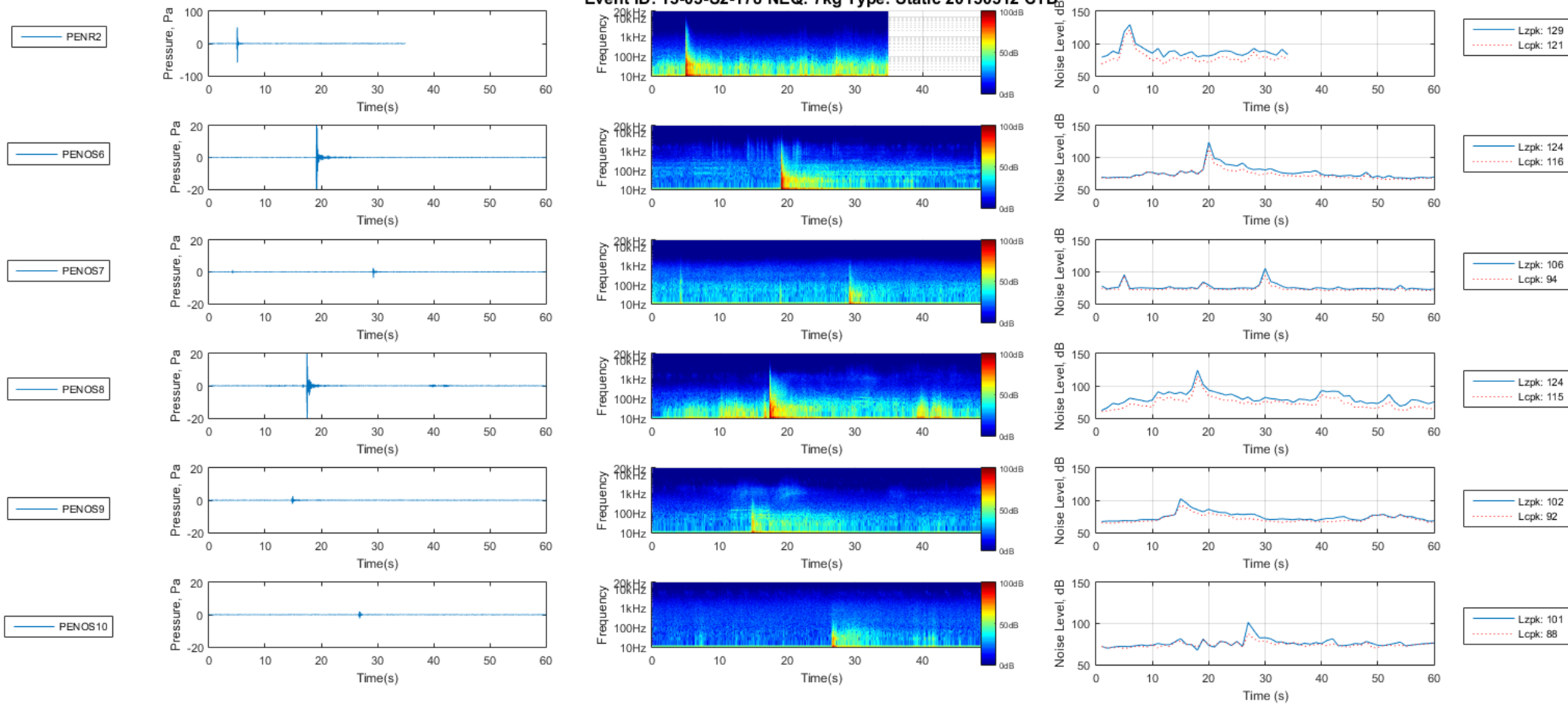


FIGURE 2.552: PEN\_OS 6 - 10 15-03-S2-178

Event ID: 15-03-S2-178 NEQ: 7kg Type: Static 20150312

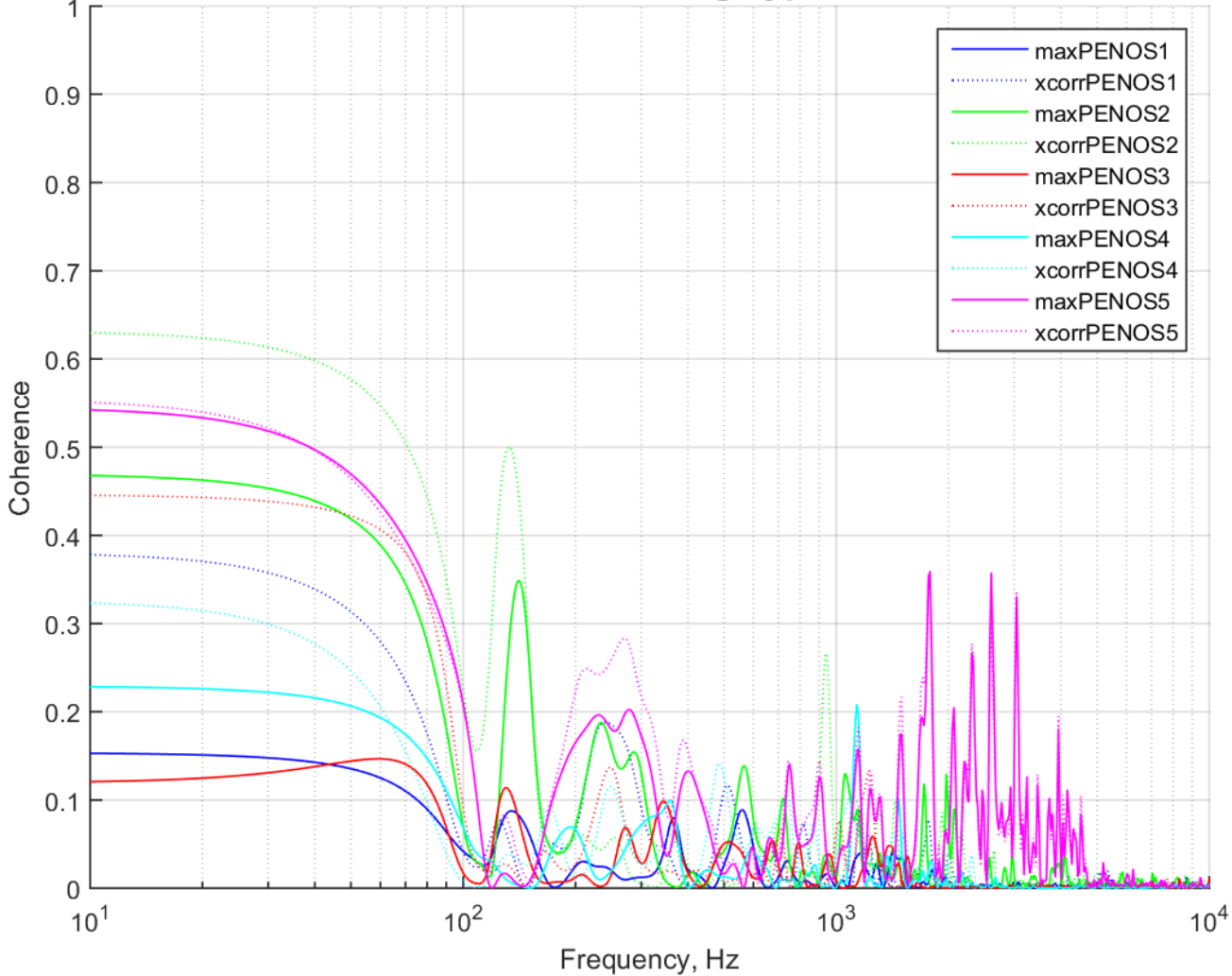


FIGURE 2.553: COHERENCE PEN\_OS 1 - 5 15-03-S2-178

Event ID: 15-03-S2-178 NEQ: 7kg Type: Static 20150312

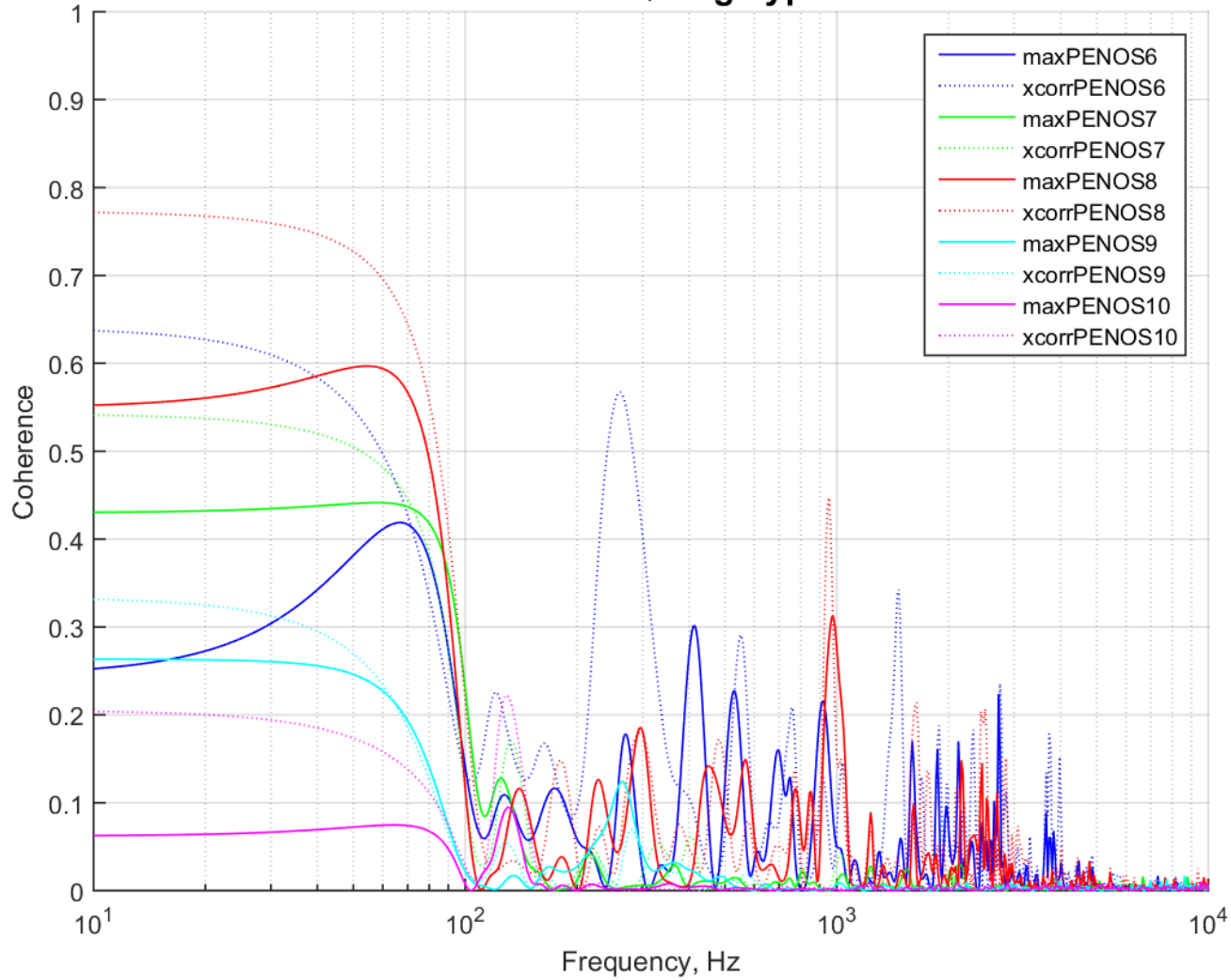
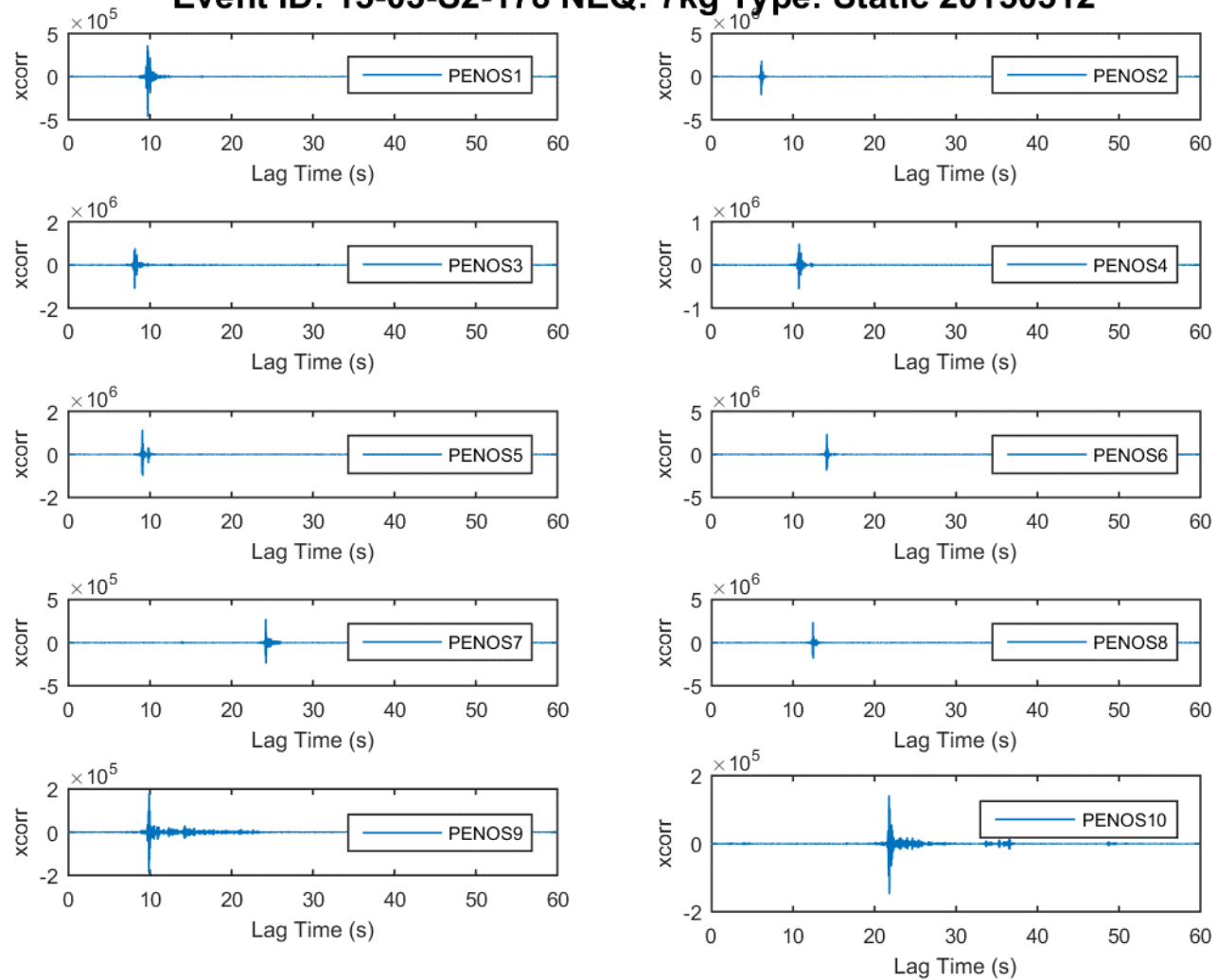
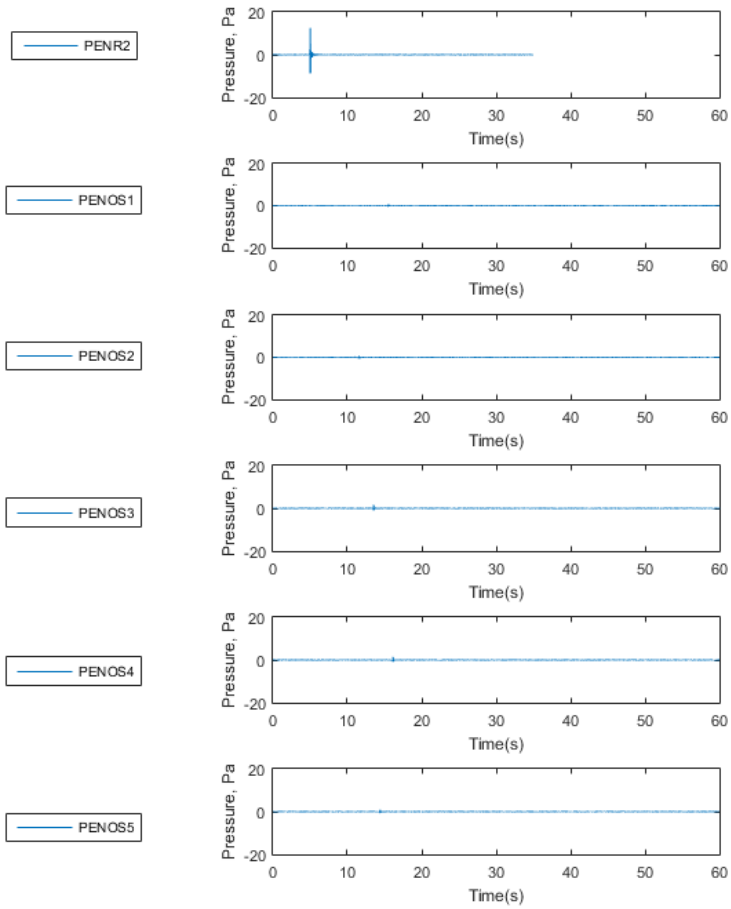


FIGURE 2.554: COHERENCE PEN\_OS 6 - 10 15-03-S2-178CTD

**Event ID: 15-03-S2-178 NEQ: 7kg Type: Static 20150312**



**FIGURE 2.555: CROSS CORRELATION PEN\_OS 1 - 10 15-03-S2-178**



Event ID: 15-03-S2-198 NEQ: 2.2kg Type: Static 20150323

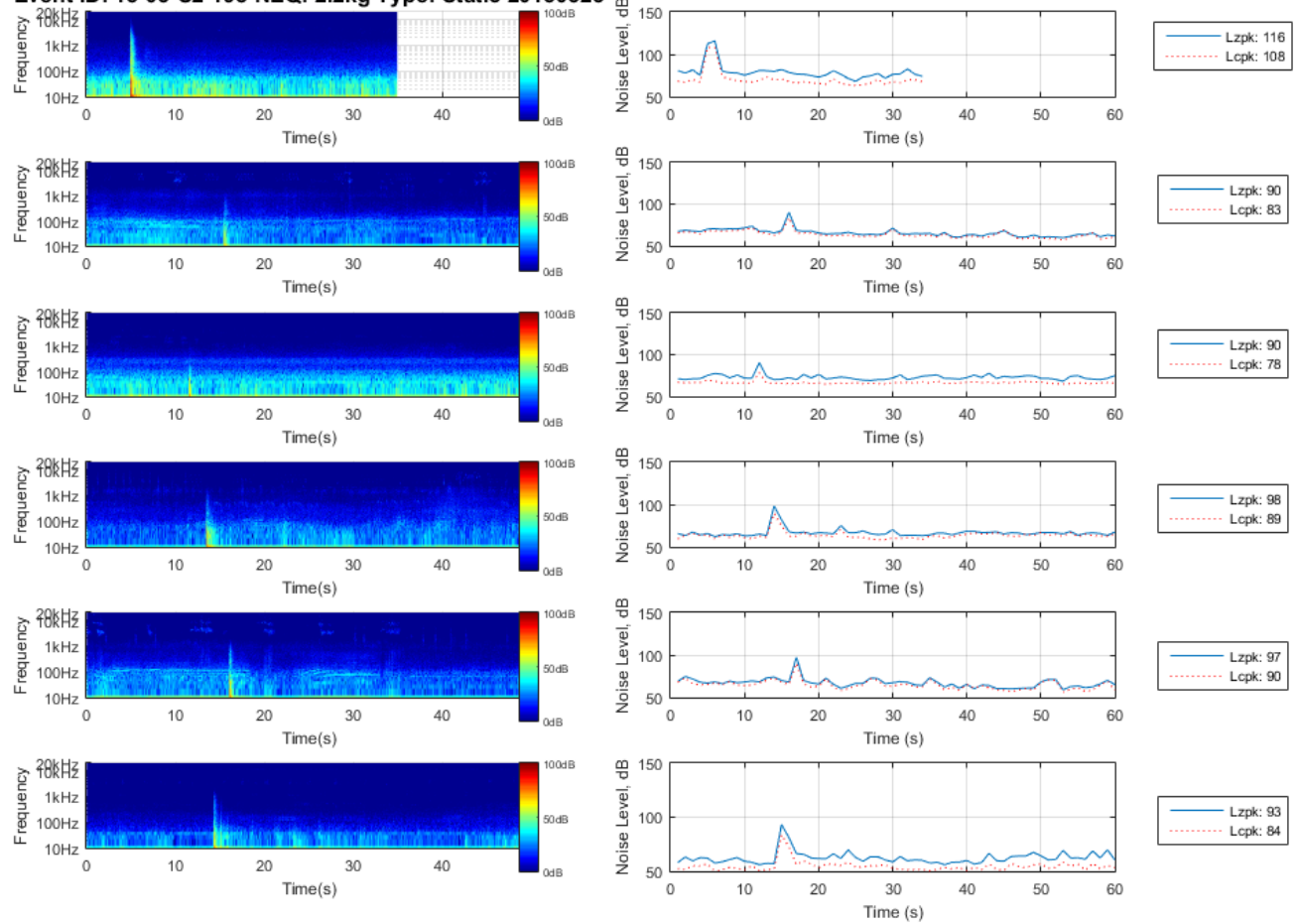


FIGURE 2.556: PEN\_OS 1 - 5 15-03-S2-198

Event ID: 15-03-S2-198 NEQ: 2.2kg Type: Static 20150323 CTD

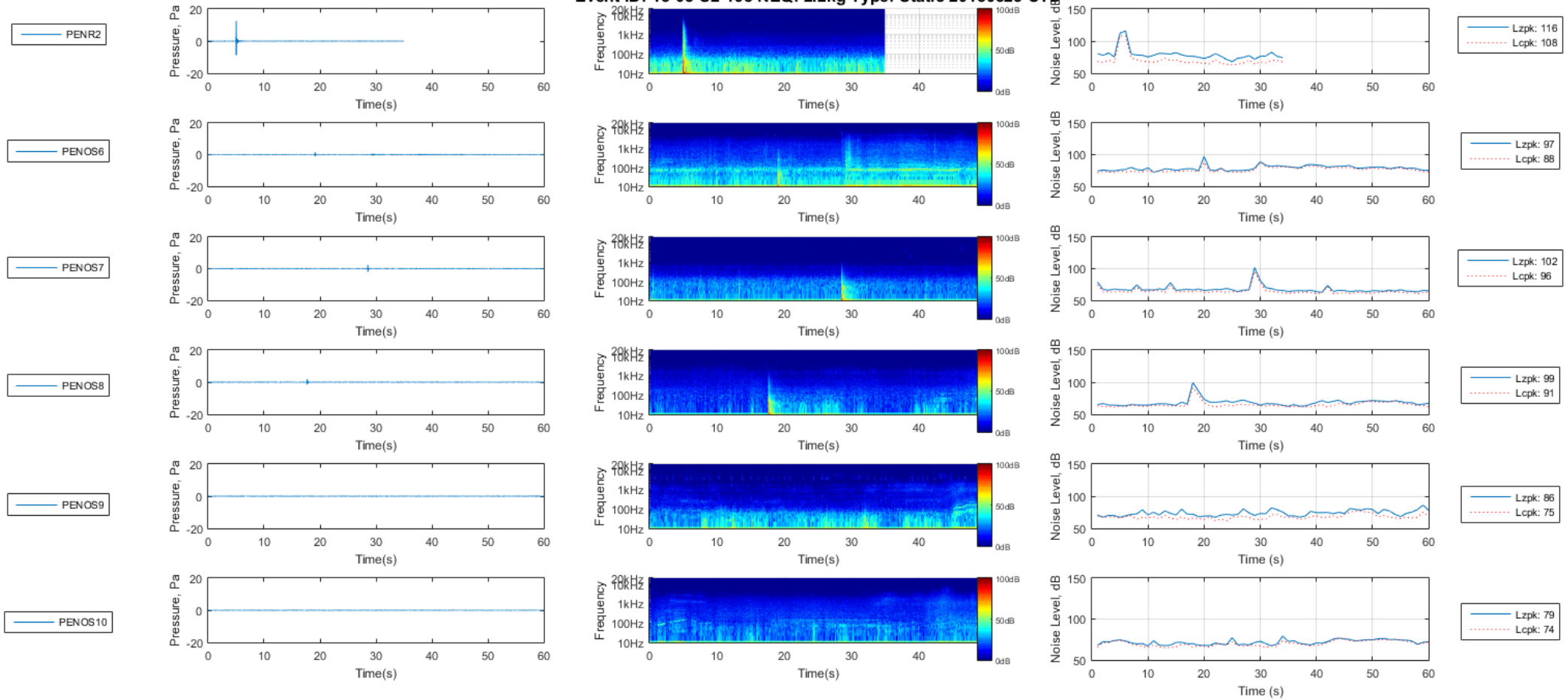
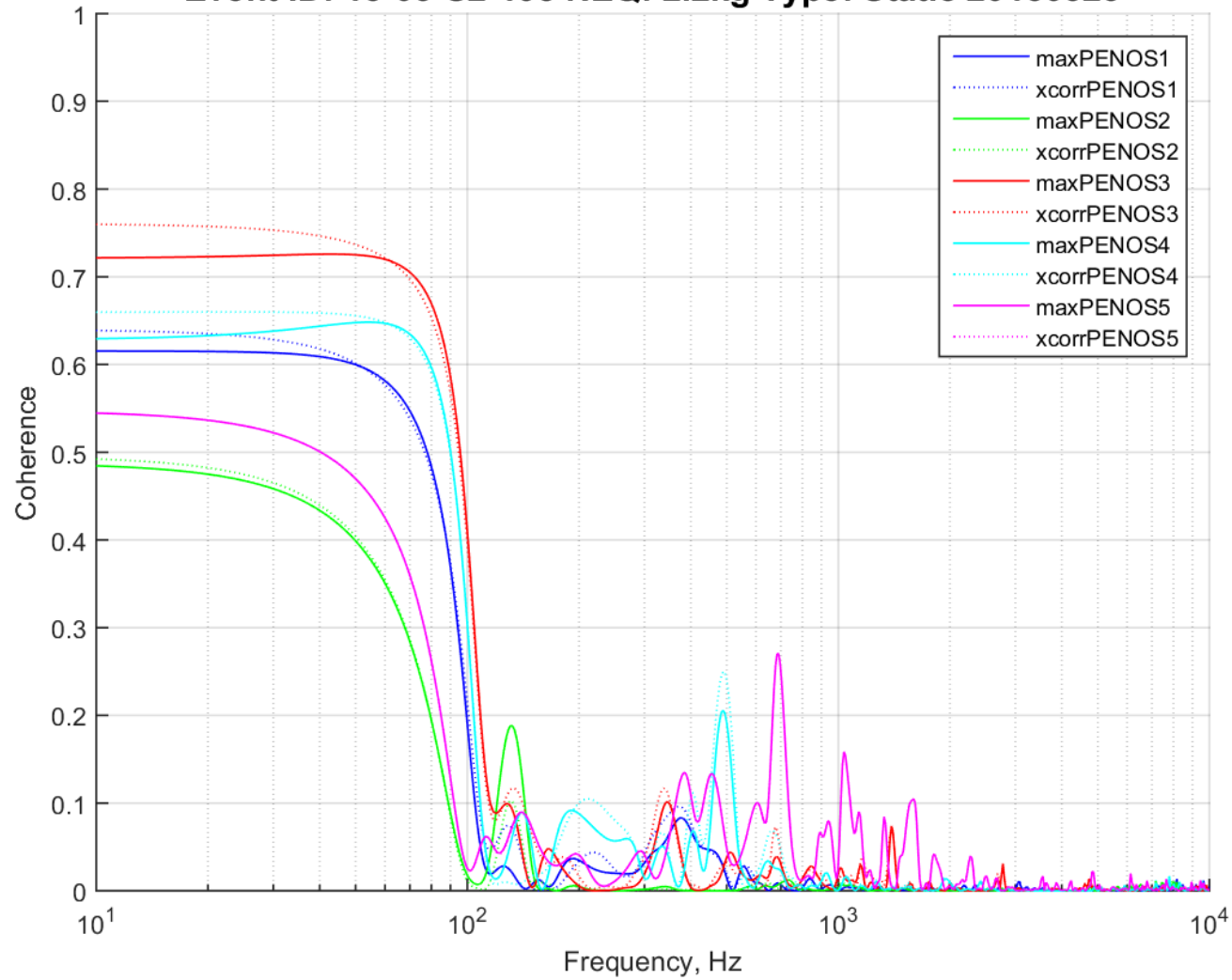


FIGURE 2.557: PEN\_OS 6 - 10 15-03-S2-198

**Event ID: 15-03-S2-198 NEQ: 2.2kg Type: Static 20150323**



**FIGURE 2.558: COHERENCE PEN\_OS 1 - 5 15-03-S2-198**

Event ID: 15-03-S2-198 NEQ: 2.2kg Type: Static 20150323

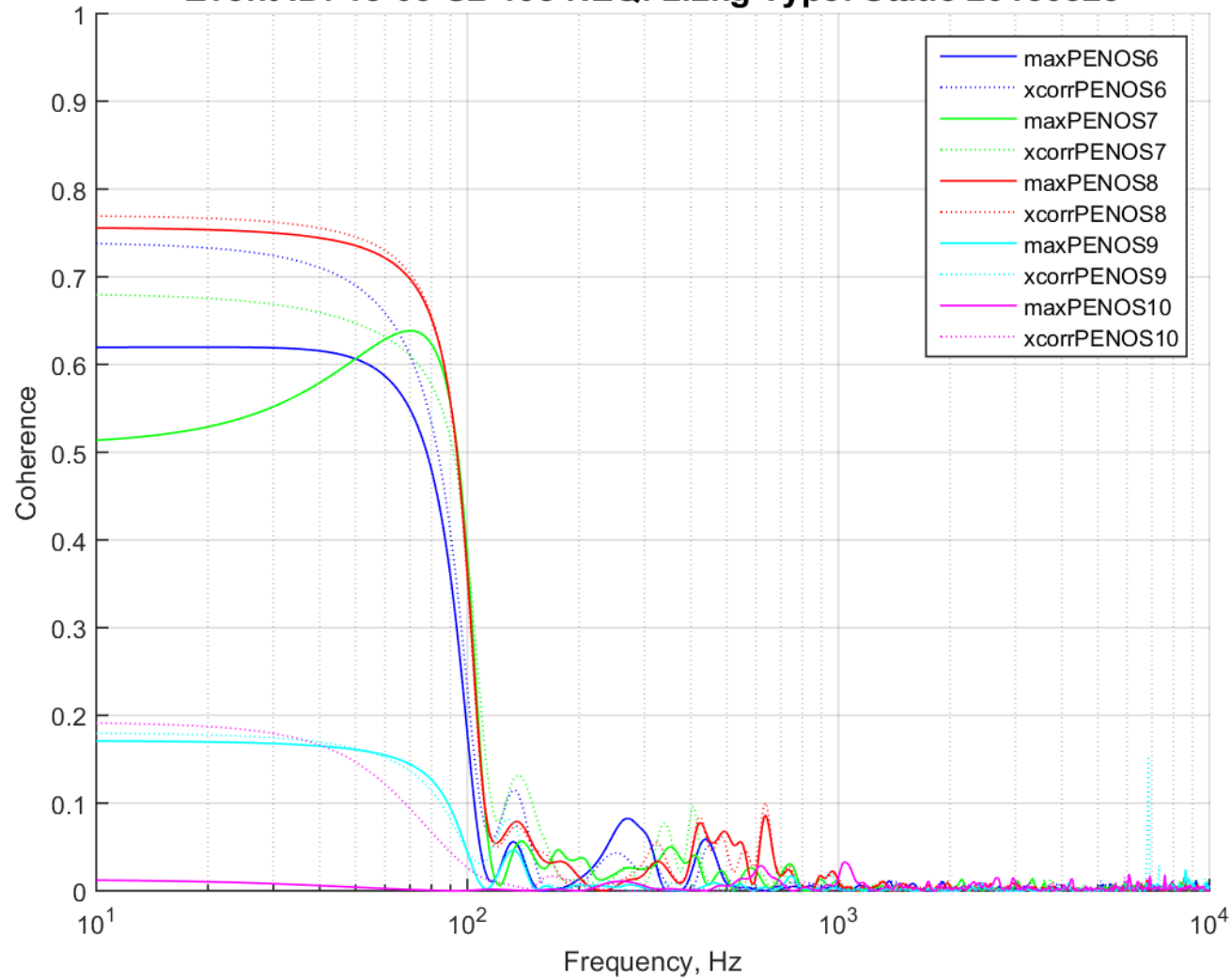
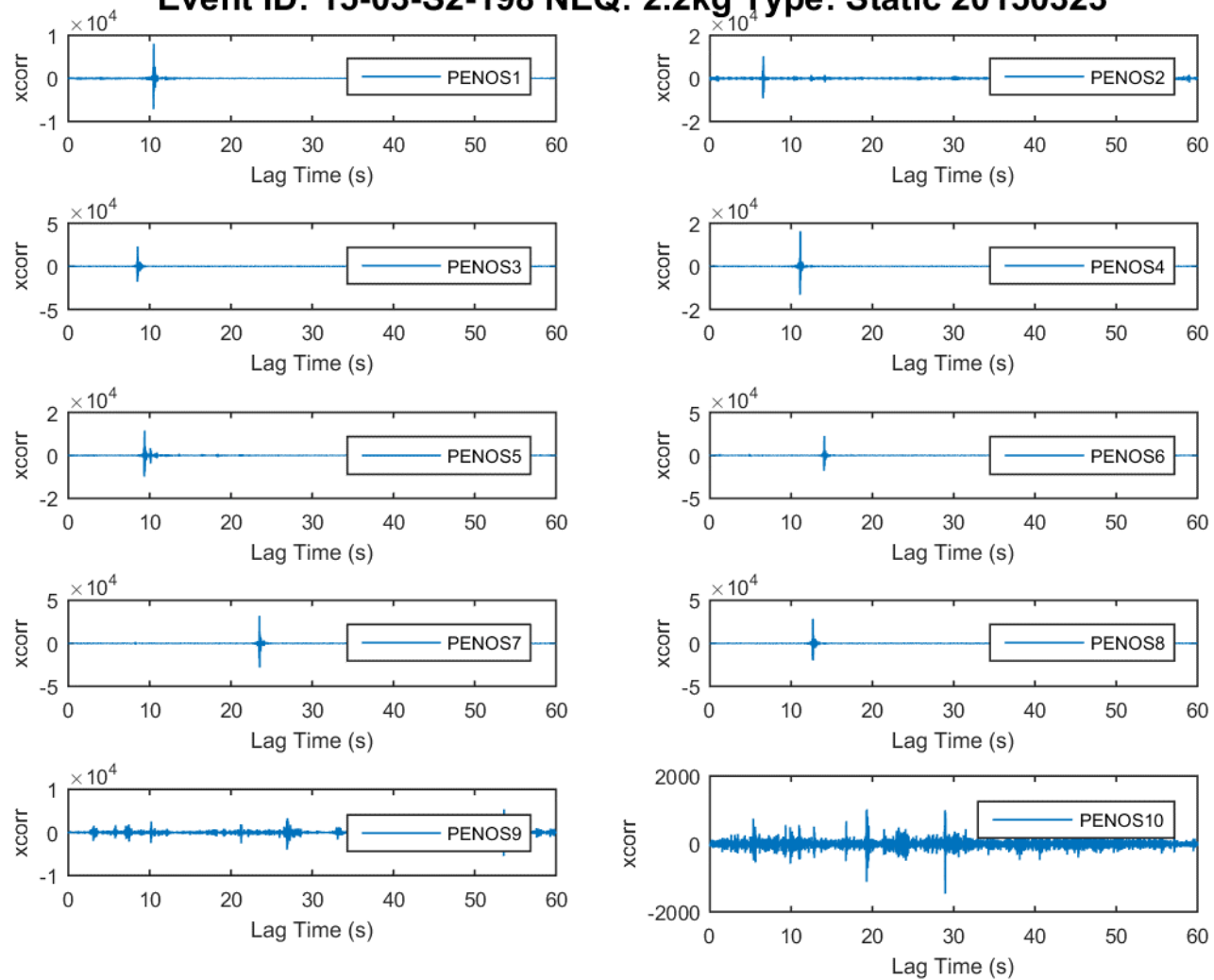


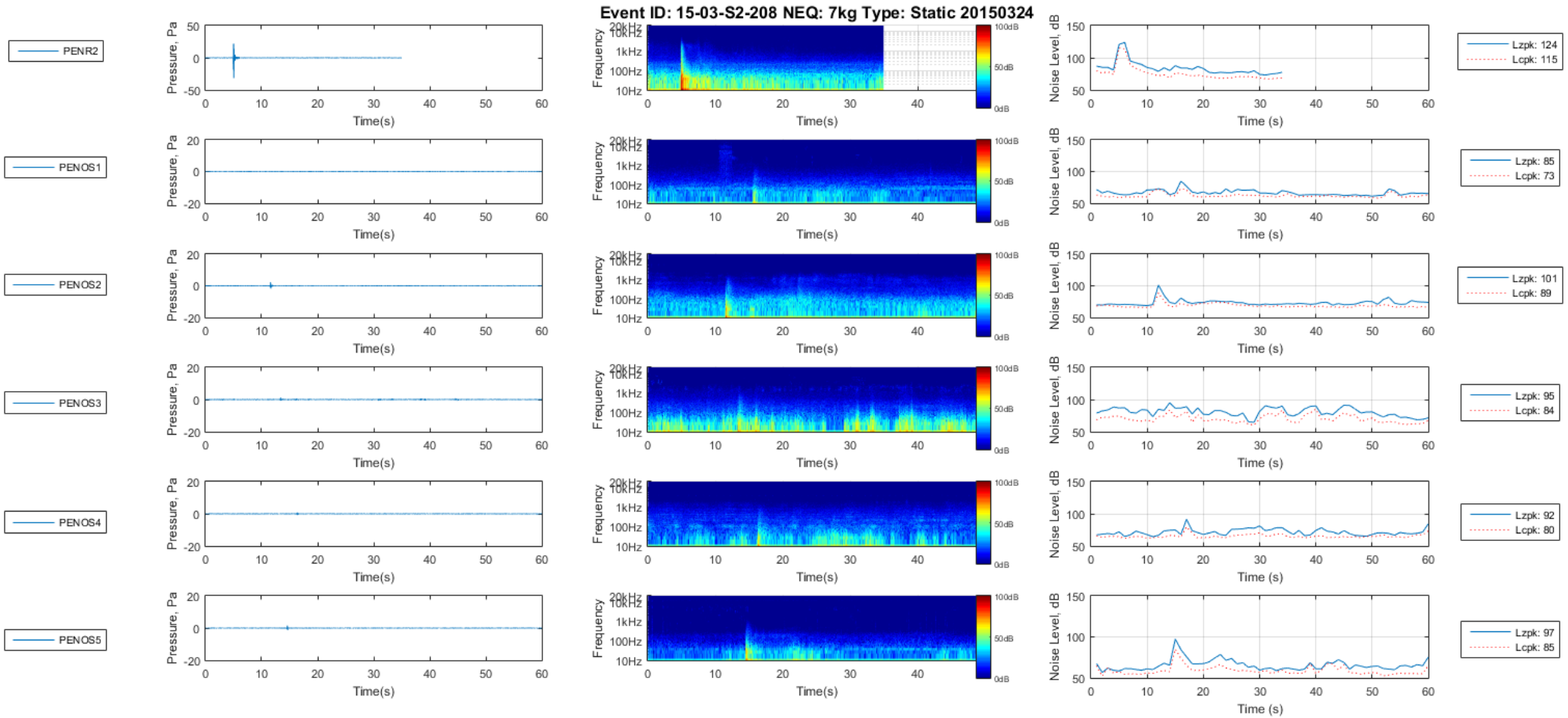
FIGURE 2.559: COHERENCE PEN\_OS 6 - 10 15-03-S2-198CTD



**Event ID: 15-03-S2-198 NEQ: 2.2kg Type: Static 20150323**



**FIGURE 2.560: CROSS CORRELATION PEN\_OS 1 - 10 15-03-S2-198**



**FIGURE 2.561: PEN\_OS 1 - 5 15-03-S2-208**

Event ID: 15-03-S2-208 NEQ: 7kg Type: Static 20150324 CTD.

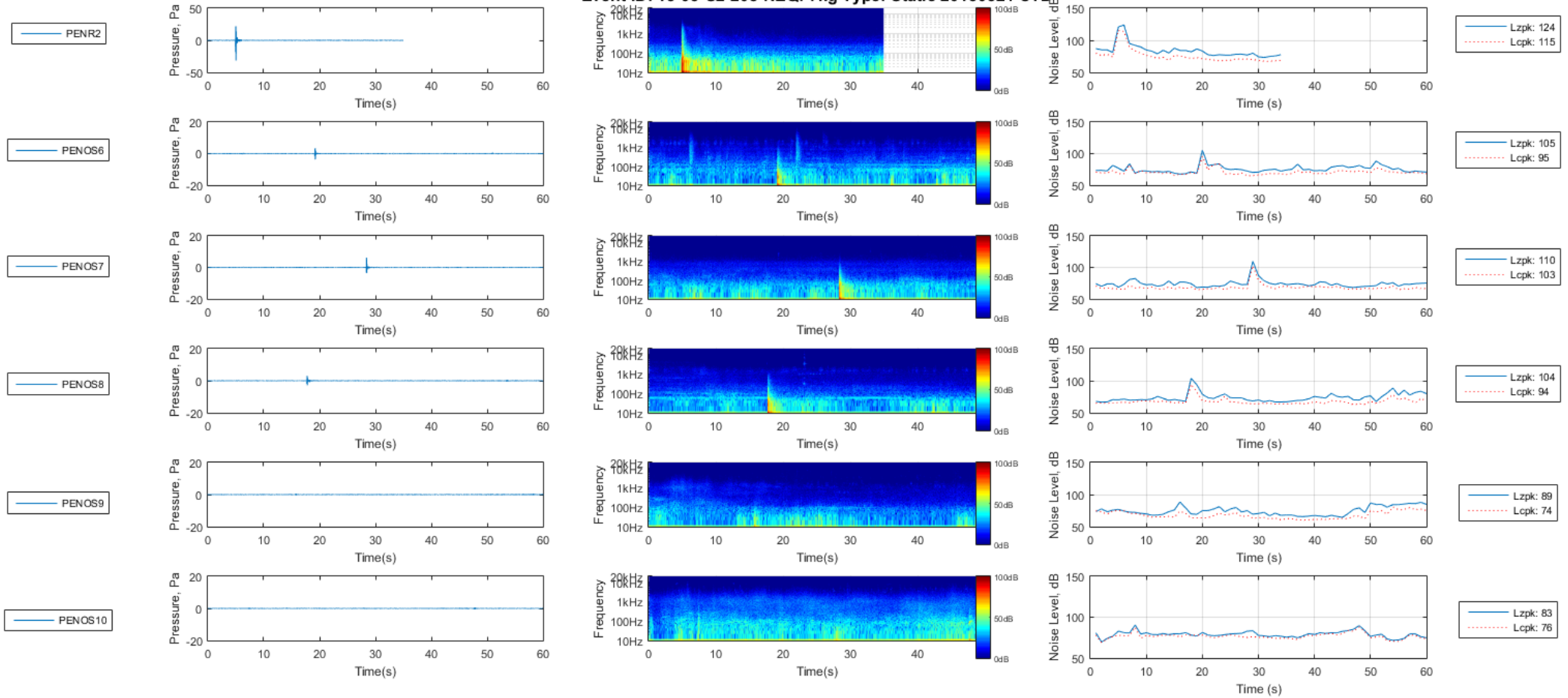


FIGURE 2.562: PEN\_OS 6 - 10 15-03-S2-208

Event ID: 15-03-S2-208 NEQ: 7kg Type: Static 20150324

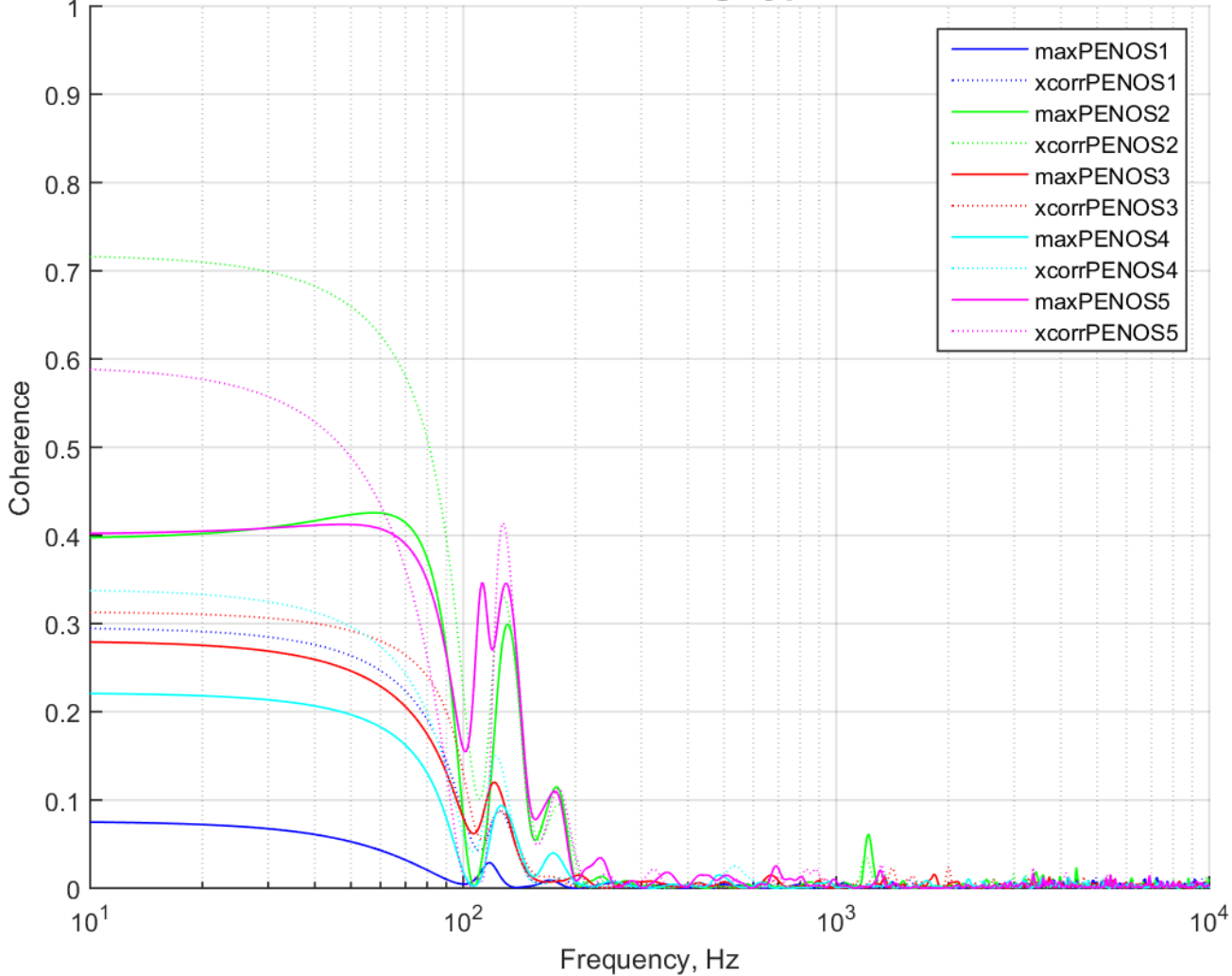


FIGURE 2.563: COHERENCE PEN\_OS 1 - 5 15-03-S2-208

Event ID: 15-03-S2-208 NEQ: 7kg Type: Static 20150324

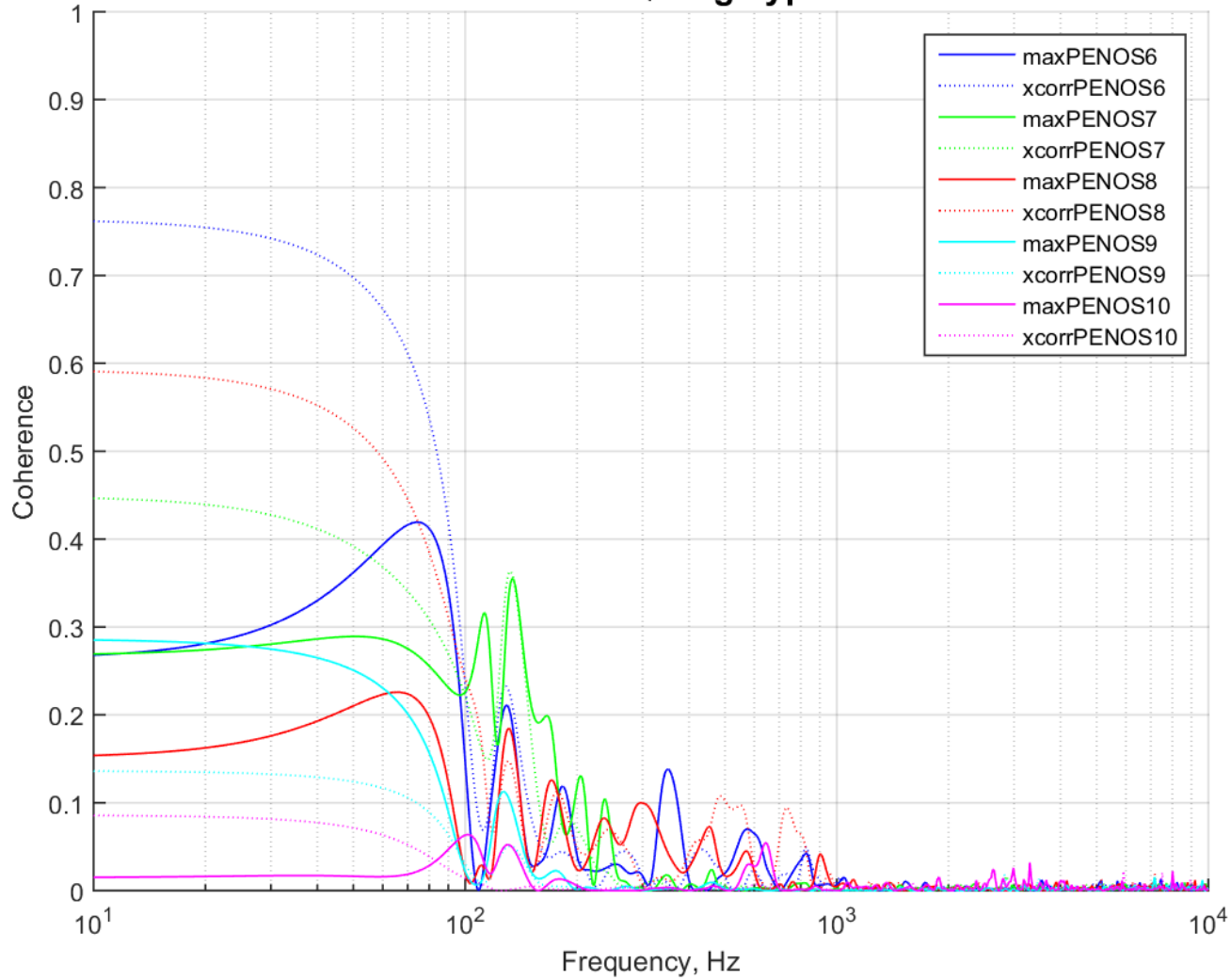
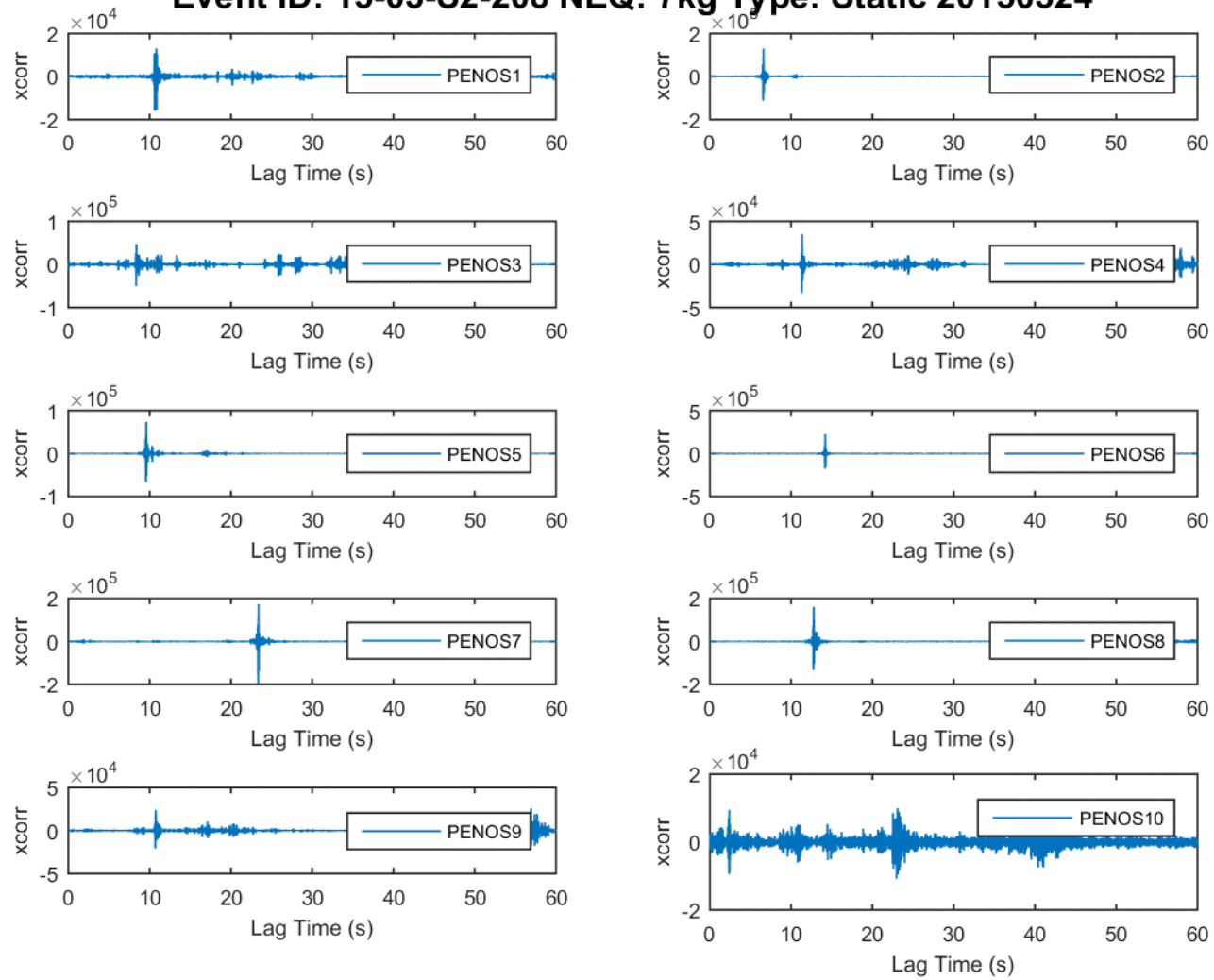
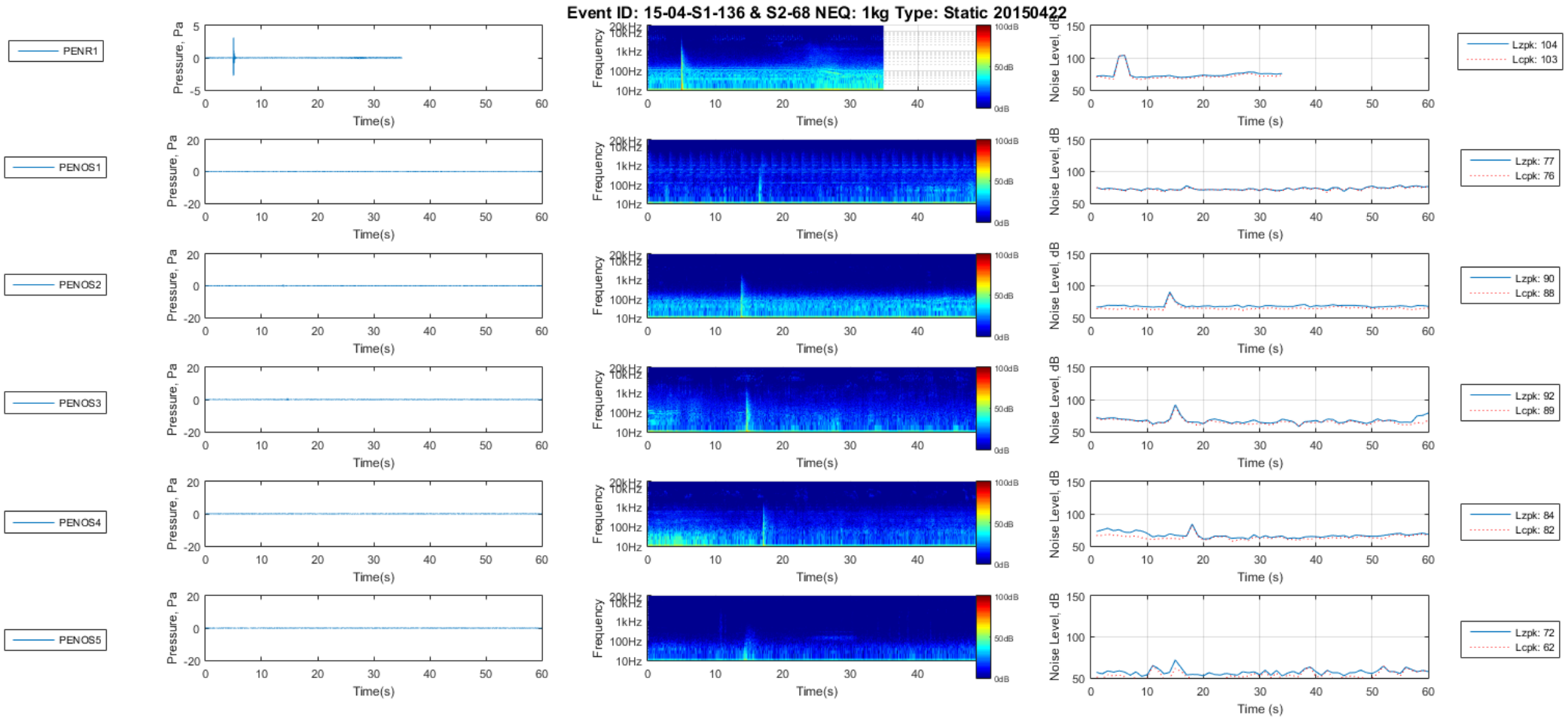


FIGURE 2.564: COHERENCE PEN\_OS 6 - 10 15-03-S2-208CTD

**Event ID: 15-03-S2-208 NEQ: 7kg Type: Static 20150324**



**FIGURE 2.565: CROSS CORRELATION PEN\_OS 1 - 10 15-03-S2-208**



**FIGURE 2.566: PEN\_OS 1 - 5 15-04-S1-136 & S2-68**

Event ID: 15-04-S1-136 & S2-68 NEQ: 1kg Type: Static 20150422.CTD

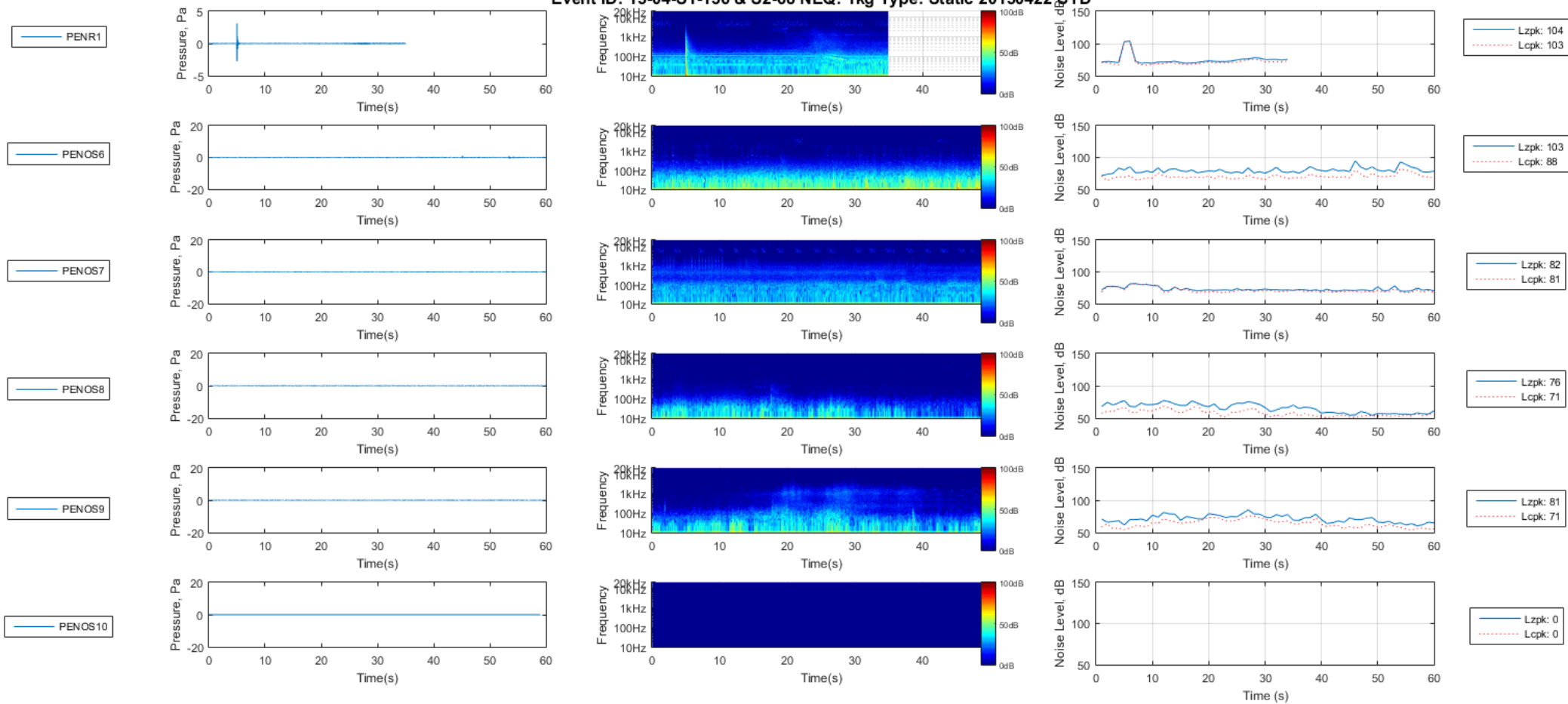


FIGURE 2.567: PEN\_OS 6 - 10 15-04-S1-136 & S2-68



Event ID: 15-04-S1-136 & S2-68 NEQ: 1kg Type: Static 20150422

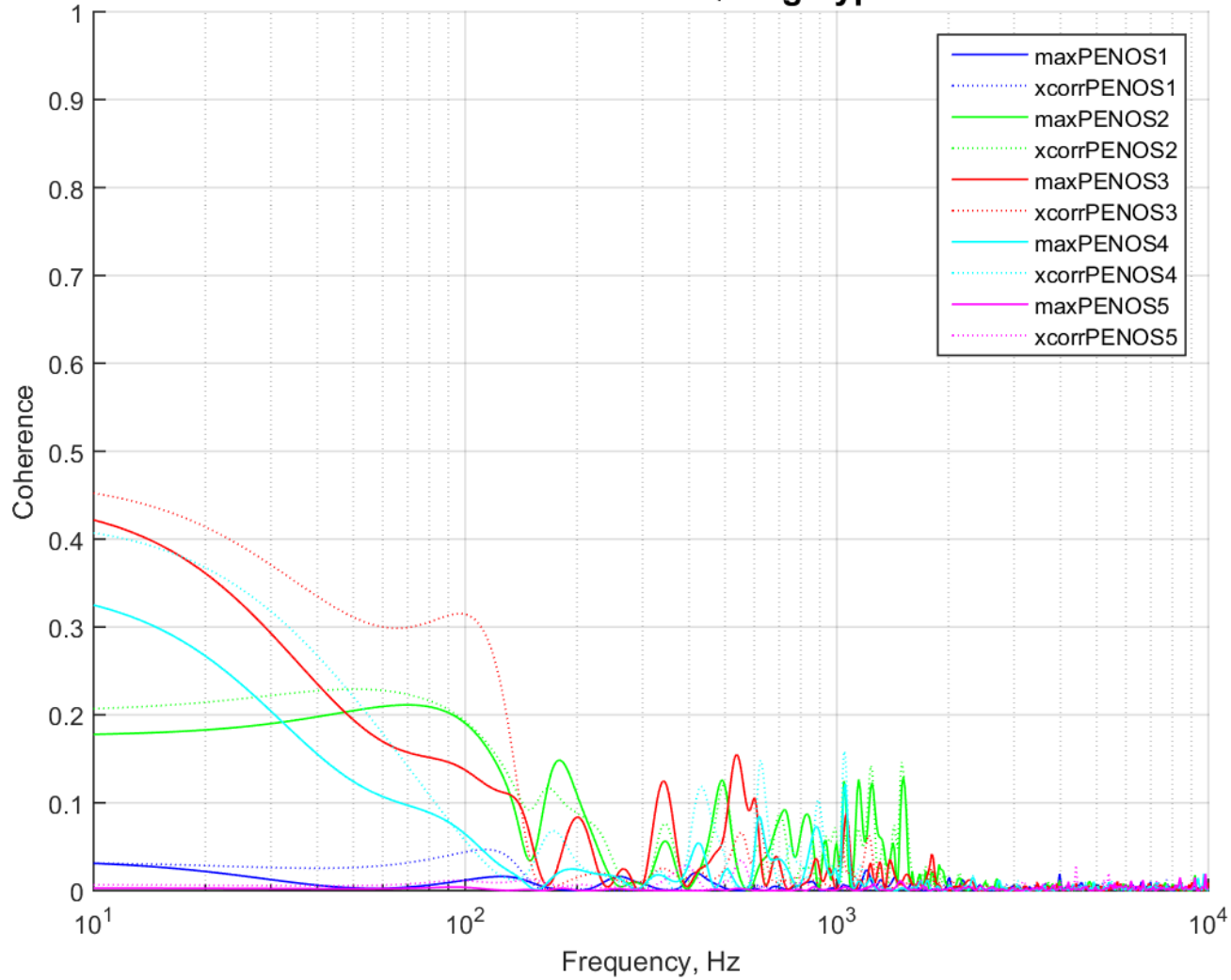


FIGURE 2.568: COHERENCE PEN\_OS 1 - 5 15-04-S1-136 & S2-68

Event ID: 15-04-S1-136 & S2-68 NEQ: 1kg Type: Static 20150422

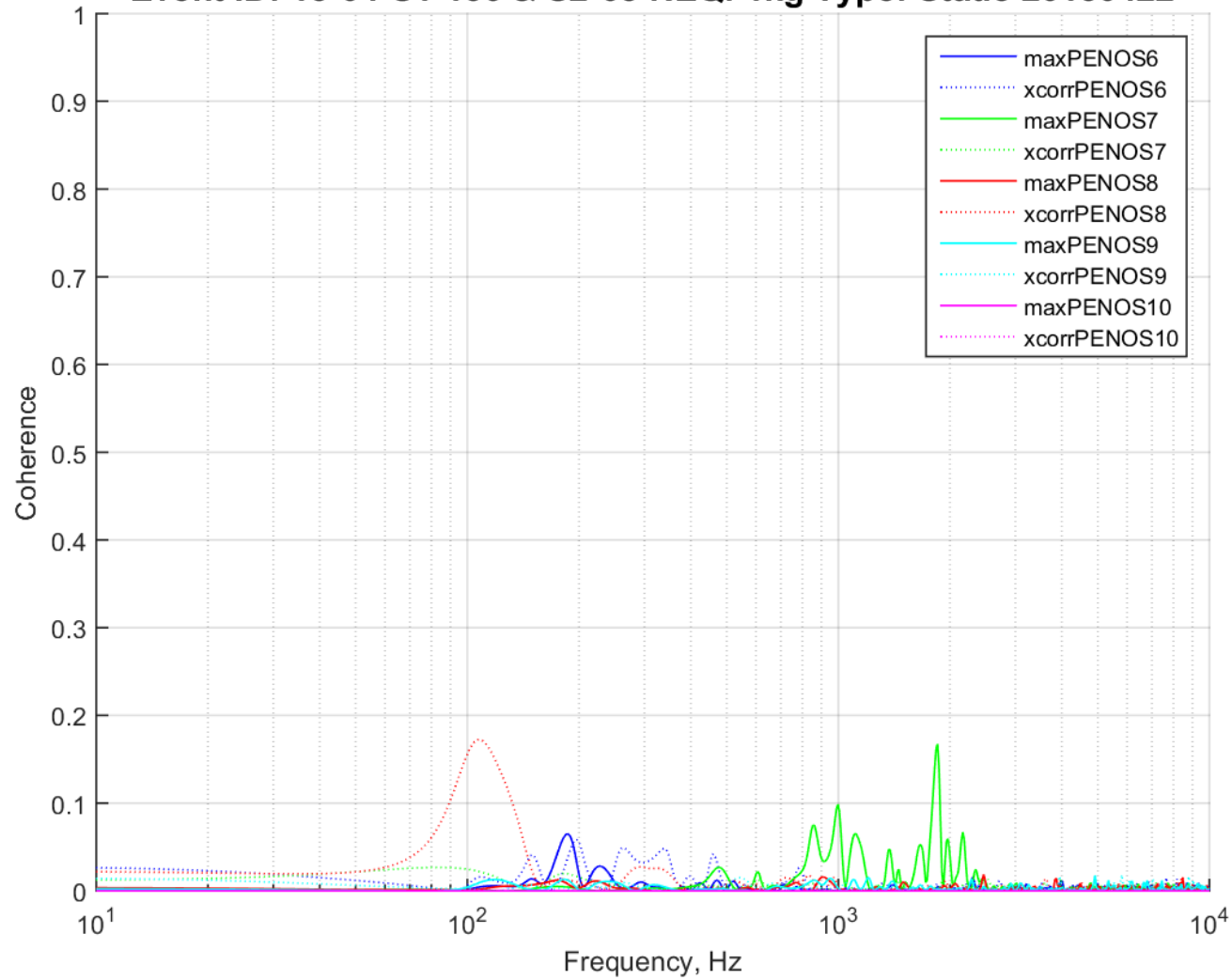
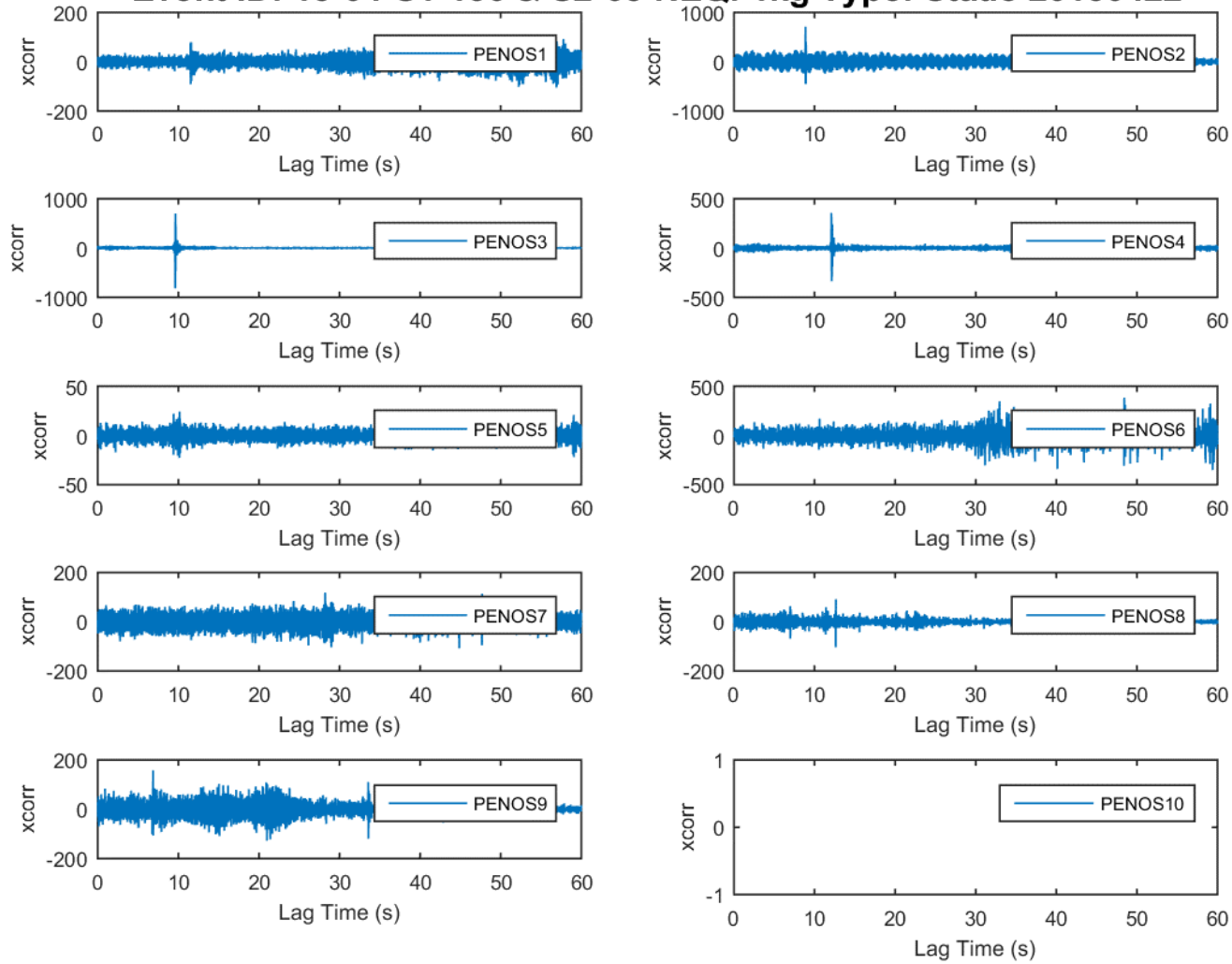


FIGURE 2.569: COHERENCE PEN\_OS 6 - 10 15-04-S1-136 & S2-68CTD

**Event ID: 15-04-S1-136 & S2-68 NEQ: 1kg Type: Static 20150422**



**FIGURE 2.570: CROSS CORRELATION PEN\_OS 1 - 10 15-04-S1-136 & S2-68**

Event ID: 15-04-S1-136 & S2-68 NEQ: 1kg Type: Static 20150422

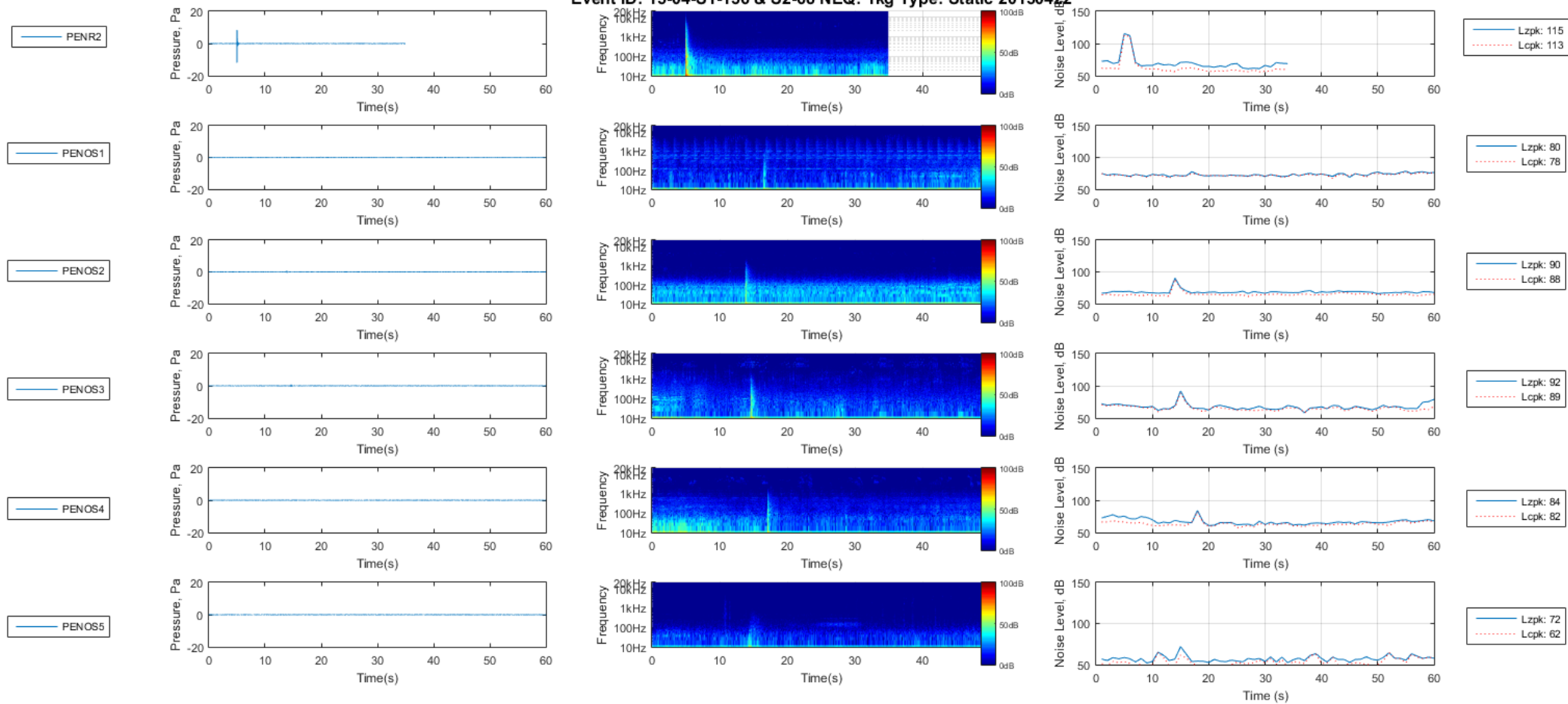


FIGURE 2.571: PEN\_OS 1 - 5 15-04-S1-136 & S2-68

Event ID: 15-04-S1-136 & S2-68 NEQ: 1kg Type: Static 20150422.CTD

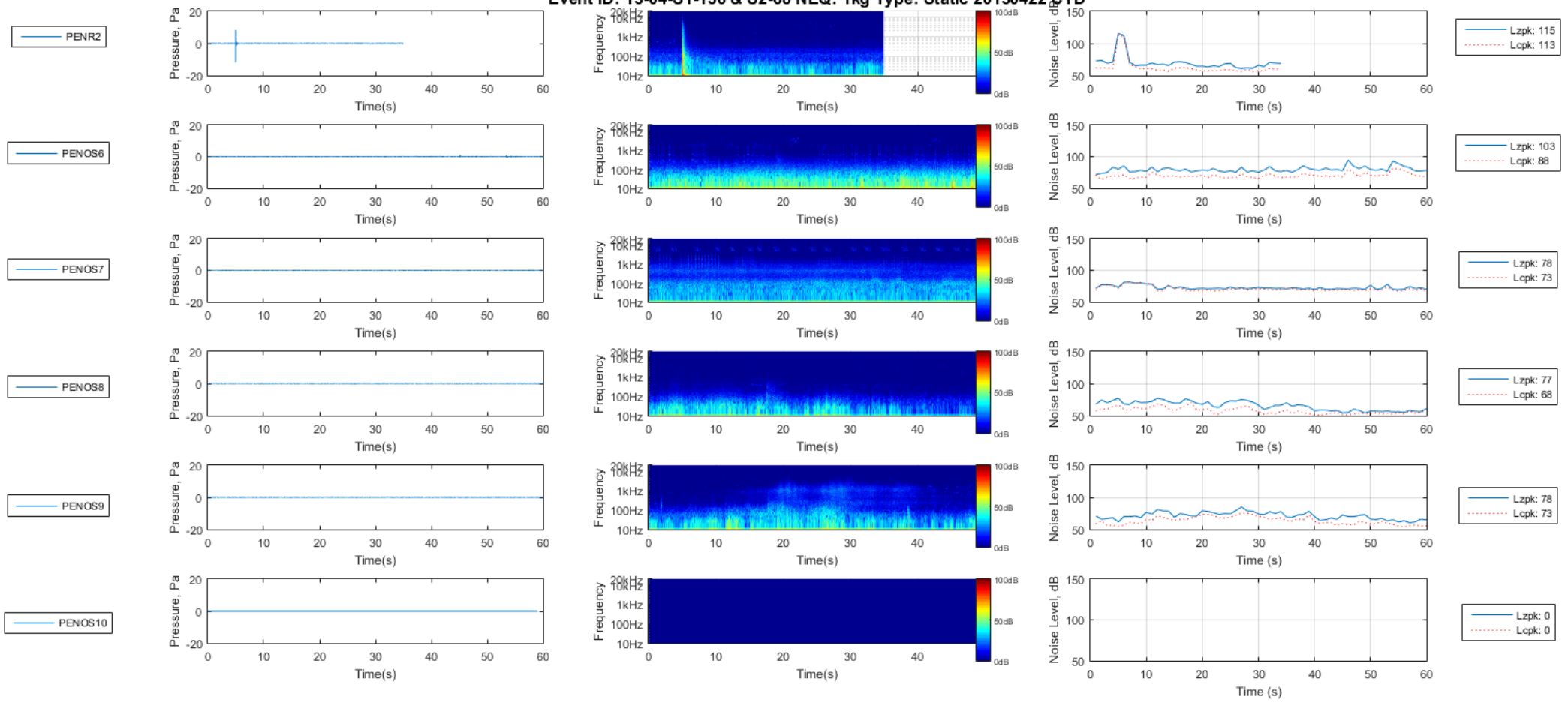


FIGURE 2.572: PEN\_OS 6 - 10 15-04-S1-136 & S2-68

Event ID: 15-04-S1-136 & S2-68 NEQ: 1kg Type: Static 20150422

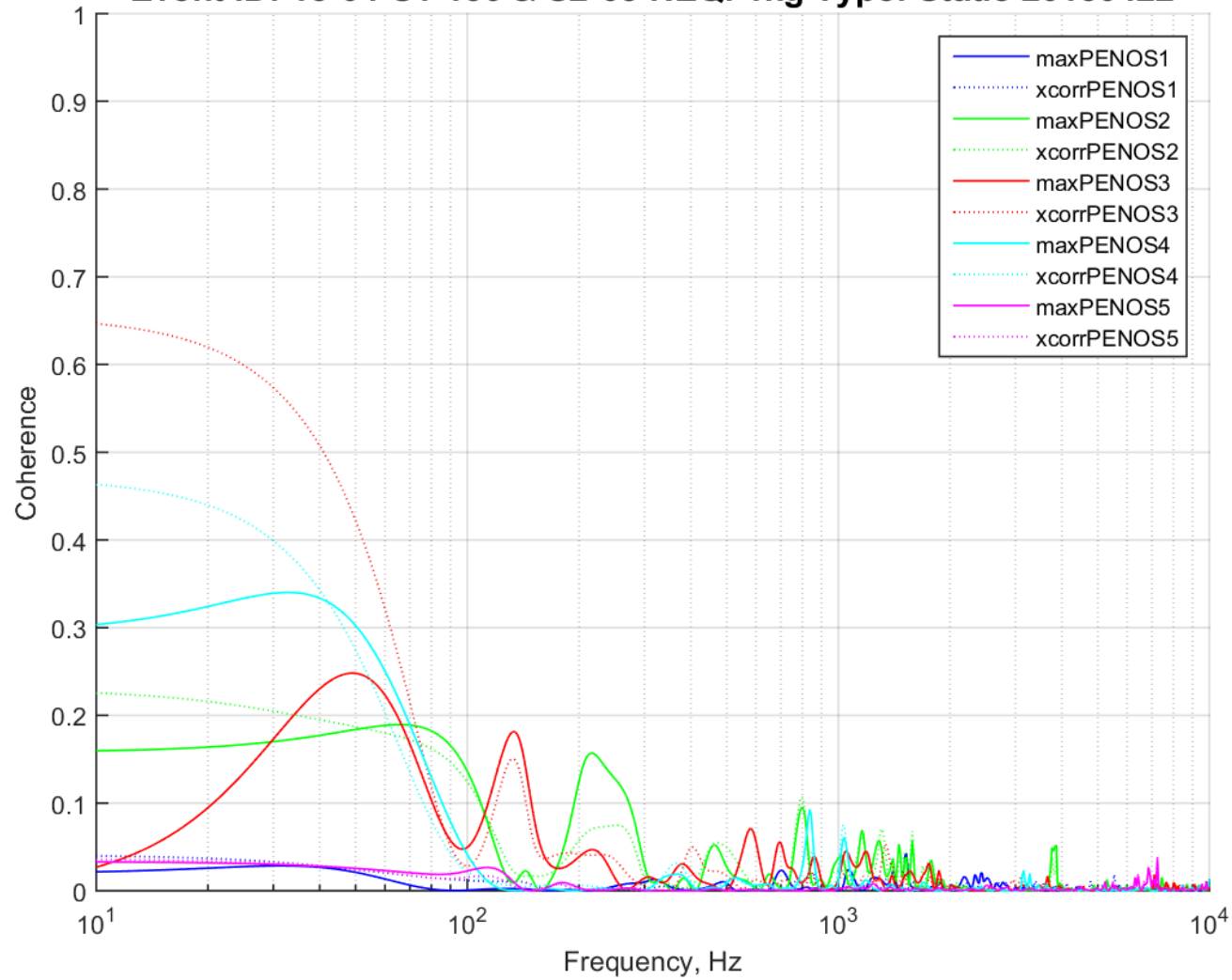


FIGURE 2.573: COHERENCE PEN\_OS 1 - 5 15-04-S1-136 & S2-68

Event ID: 15-04-S1-136 & S2-68 NEQ: 1kg Type: Static 20150422

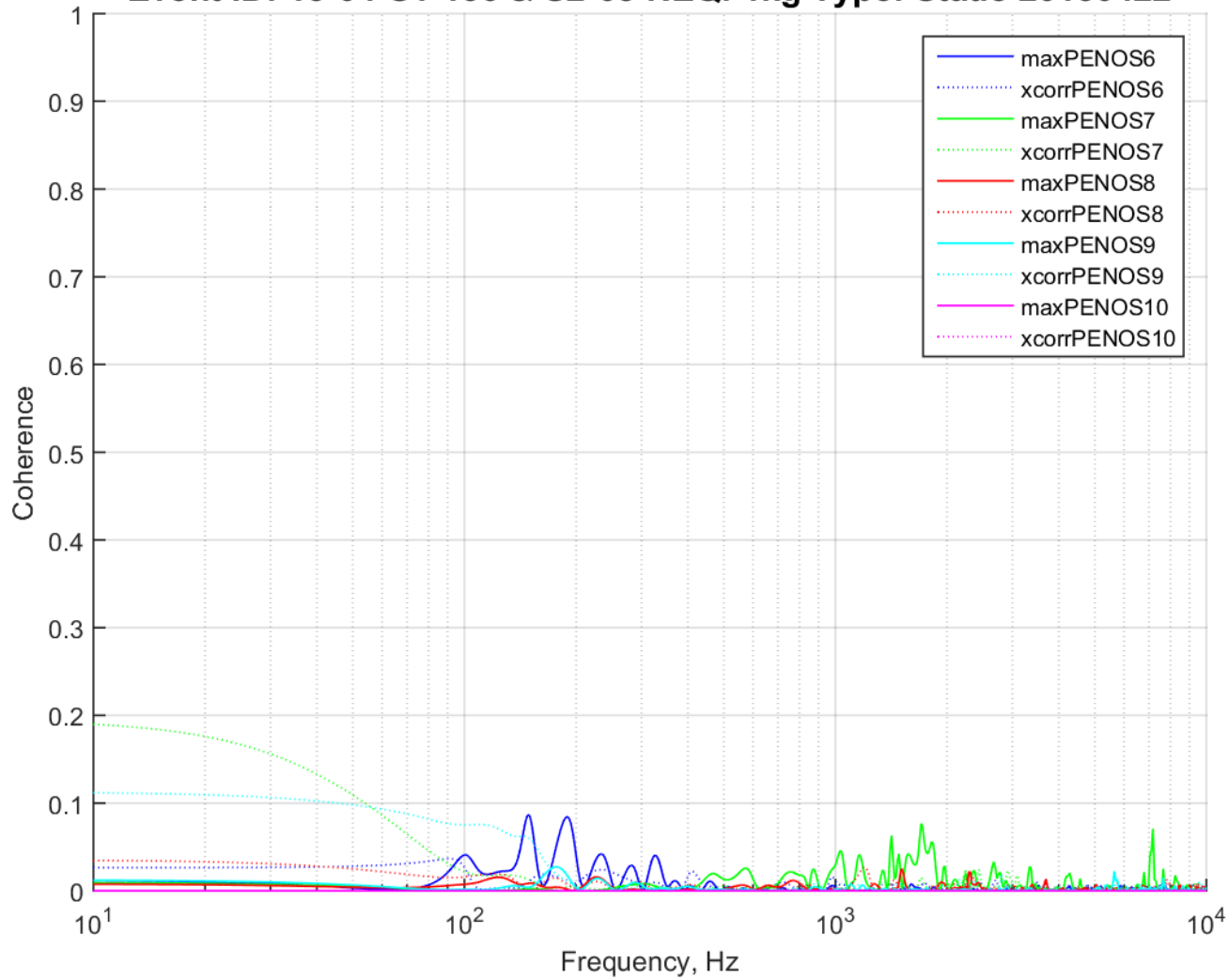
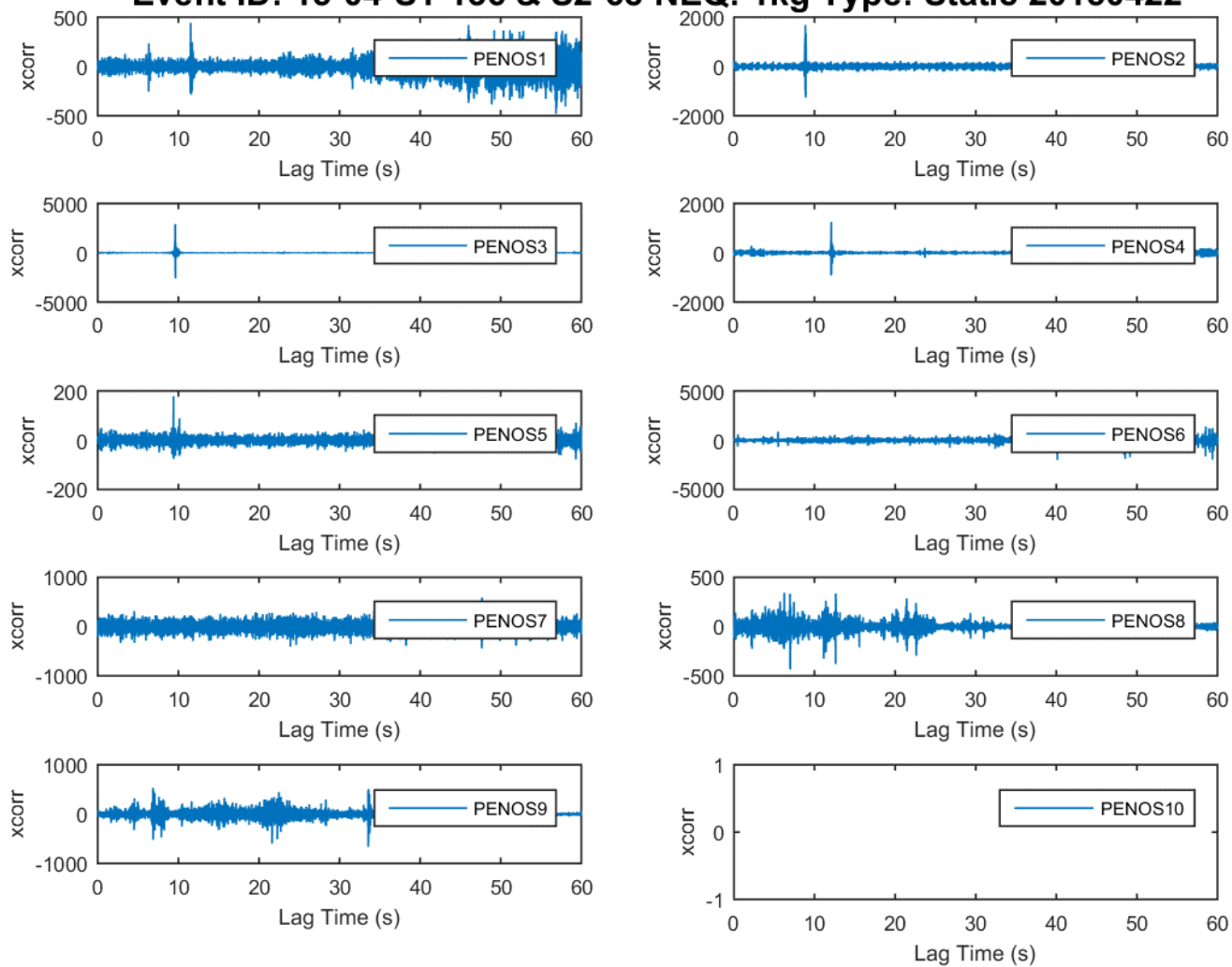


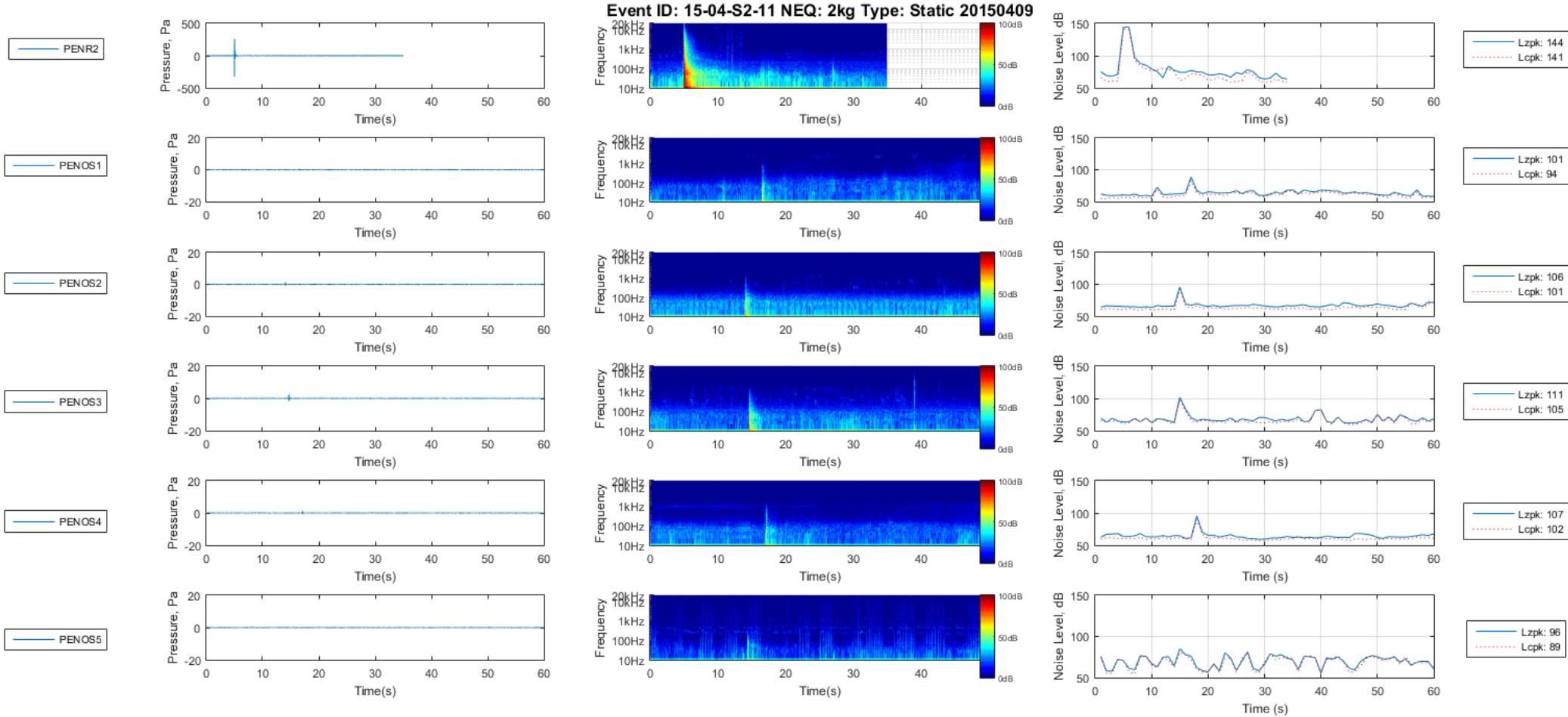
FIGURE 2.574: COHERENCE PEN\_OS 6 - 10 15-04-S1-136 & S2-68CTD

**Event ID: 15-04-S1-136 & S2-68 NEQ: 1kg Type: Static 20150422**

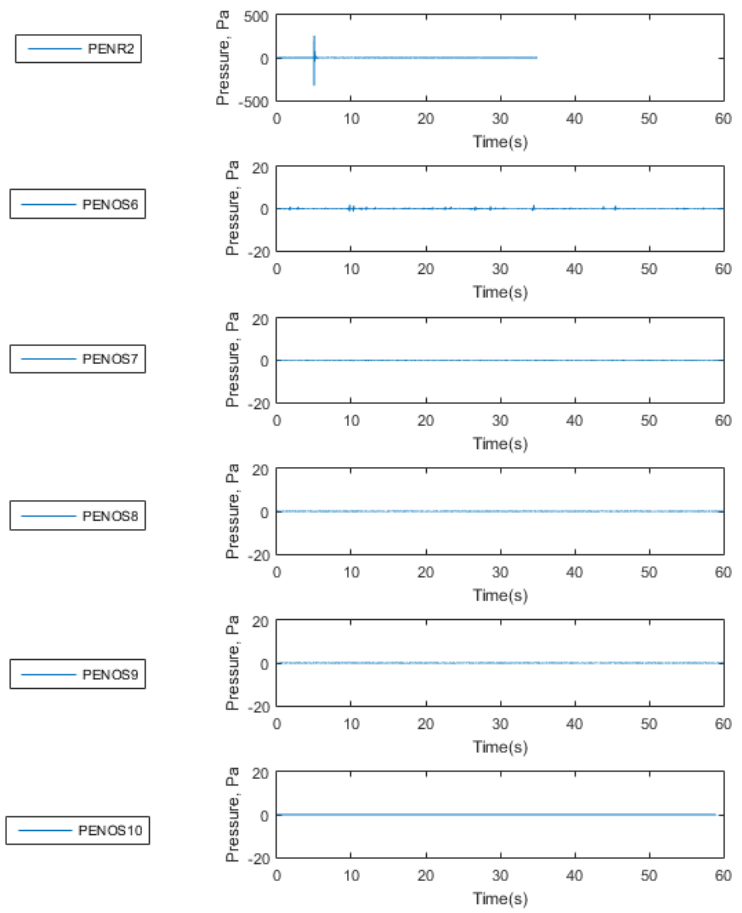


**FIGURE 2.575: CROSS CORRELATION PEN\_OS 1 - 10 15-04-S1-136 & S2-68**





**FIGURE 2.576: PEN\_OS 1 - 5 15-04-S2-11**



Event ID: 15-04-S2-11 NEQ: 2kg Type: Static 20150409 CTD

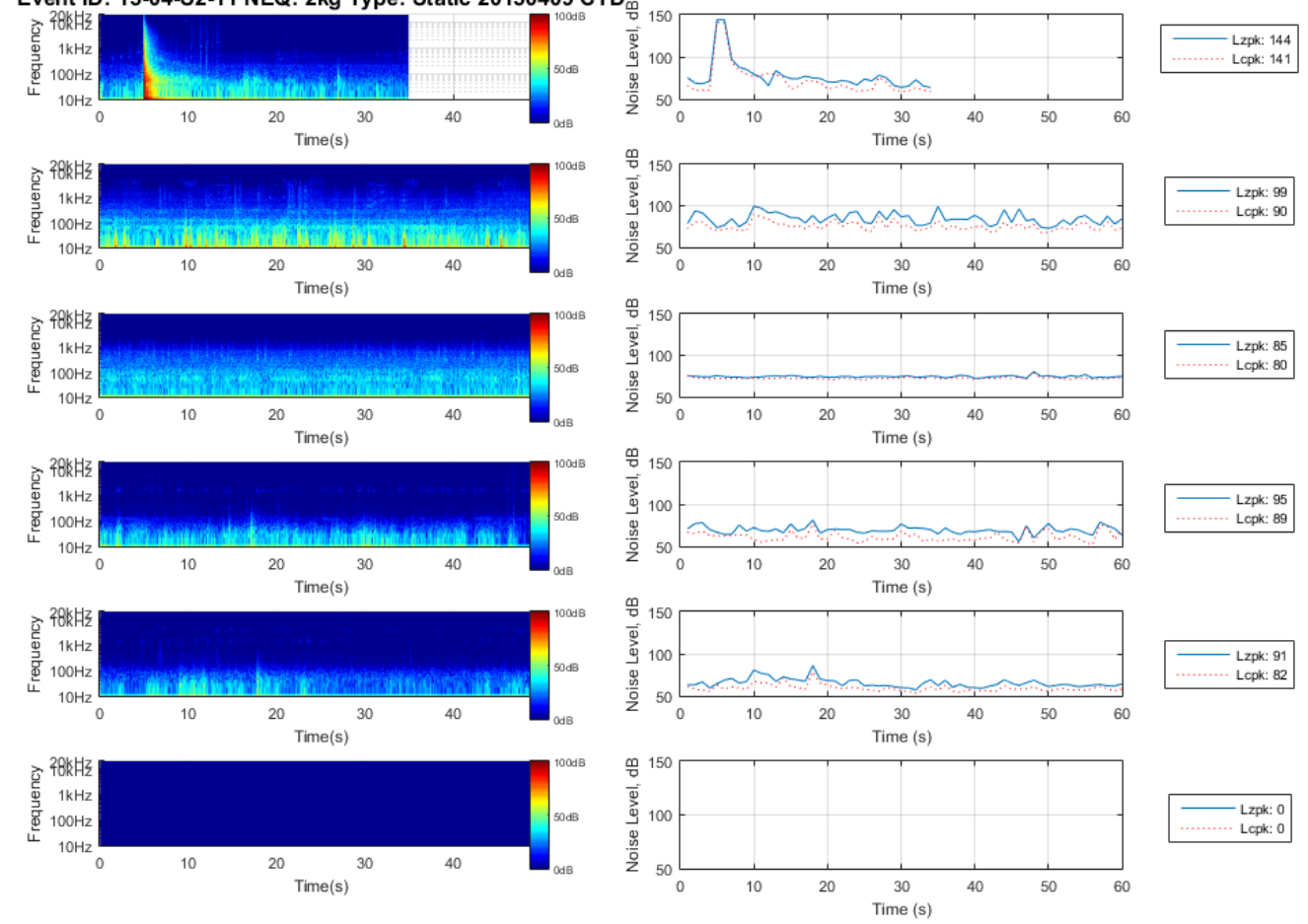


FIGURE 2.577: PEN\_OS 6 - 10 15-04-S2-11

Event ID: 15-04-S2-11 NEQ: 2kg Type: Static 20150409

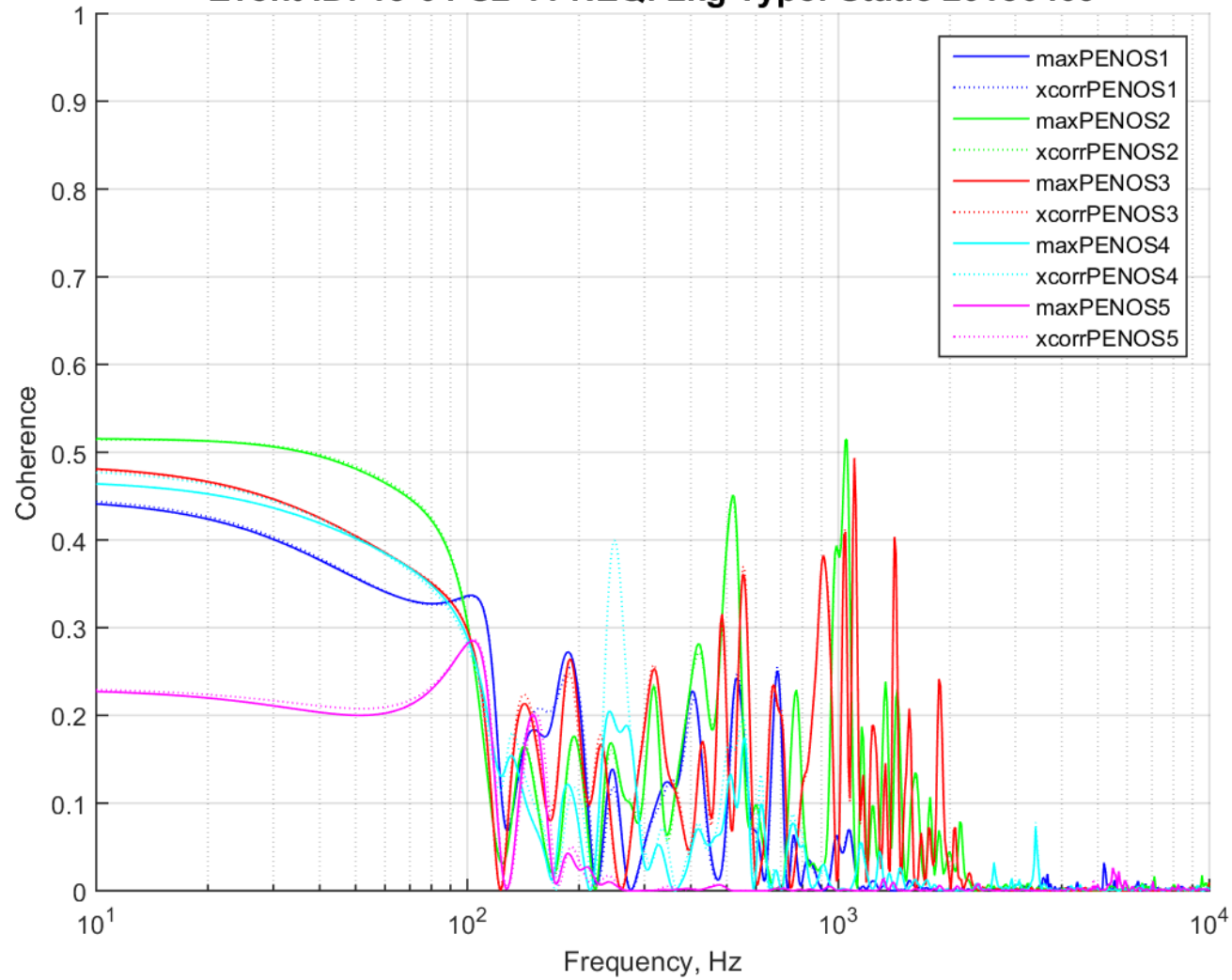


FIGURE 2.578: COHERENCE PEN\_OS 1 - 5 15-04-S2-11

Event ID: 15-04-S2-11 NEQ: 2kg Type: Static 20150409

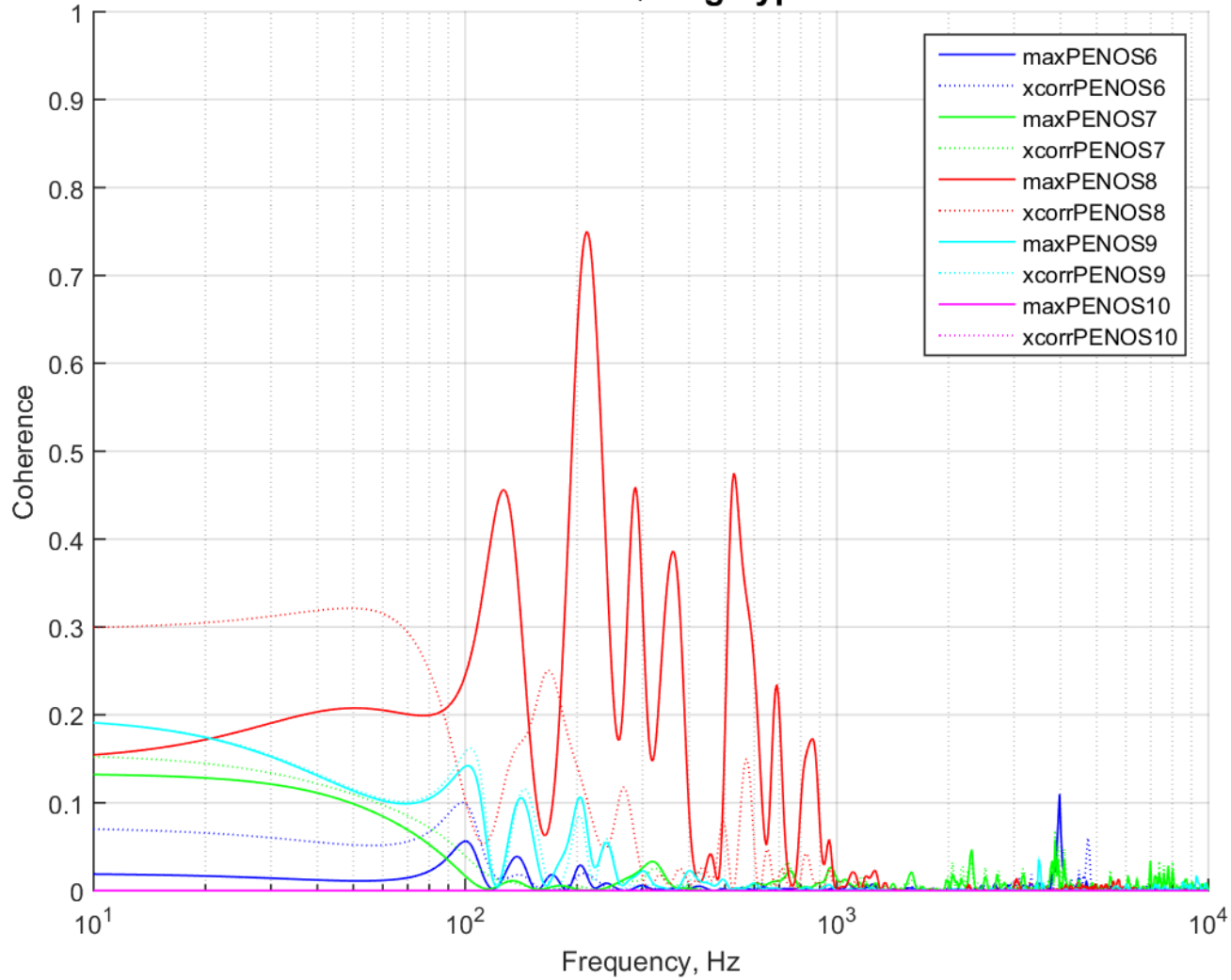
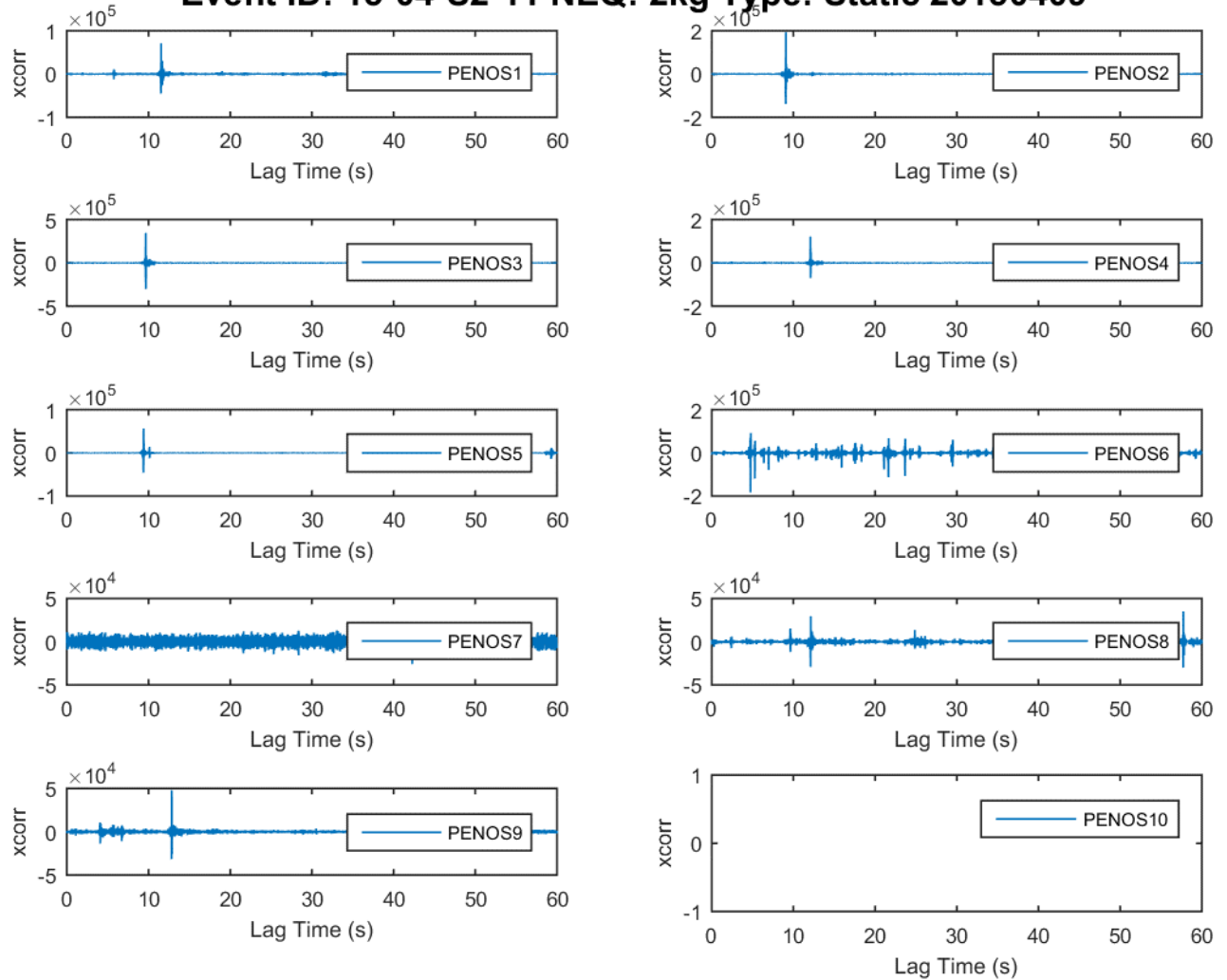
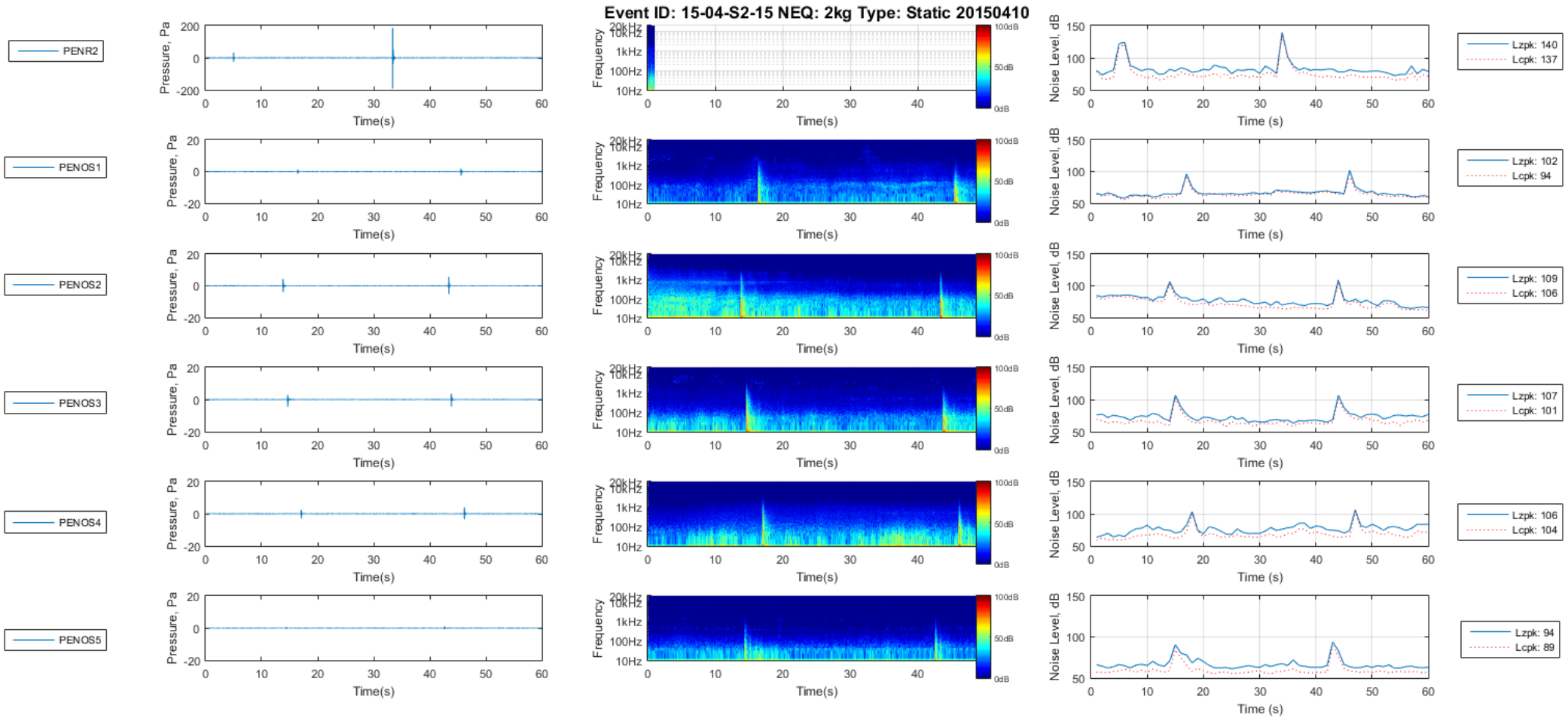


FIGURE 2.579: COHERENCE PEN\_OS 6 - 10 15-04-S2-11CTD

**Event ID: 15-04-S2-11 NEQ: 2kg Type: Static 20150409**



**FIGURE 2.580: CROSS CORRELATION PEN\_OS 1 - 10 15-04-S2-11**



**FIGURE 2.581: PEN\_OS 1 - 5 15-04-S2-15**

Event ID: 15-04-S2-15 NEQ: 2kg Type: Static 20150410 CTD

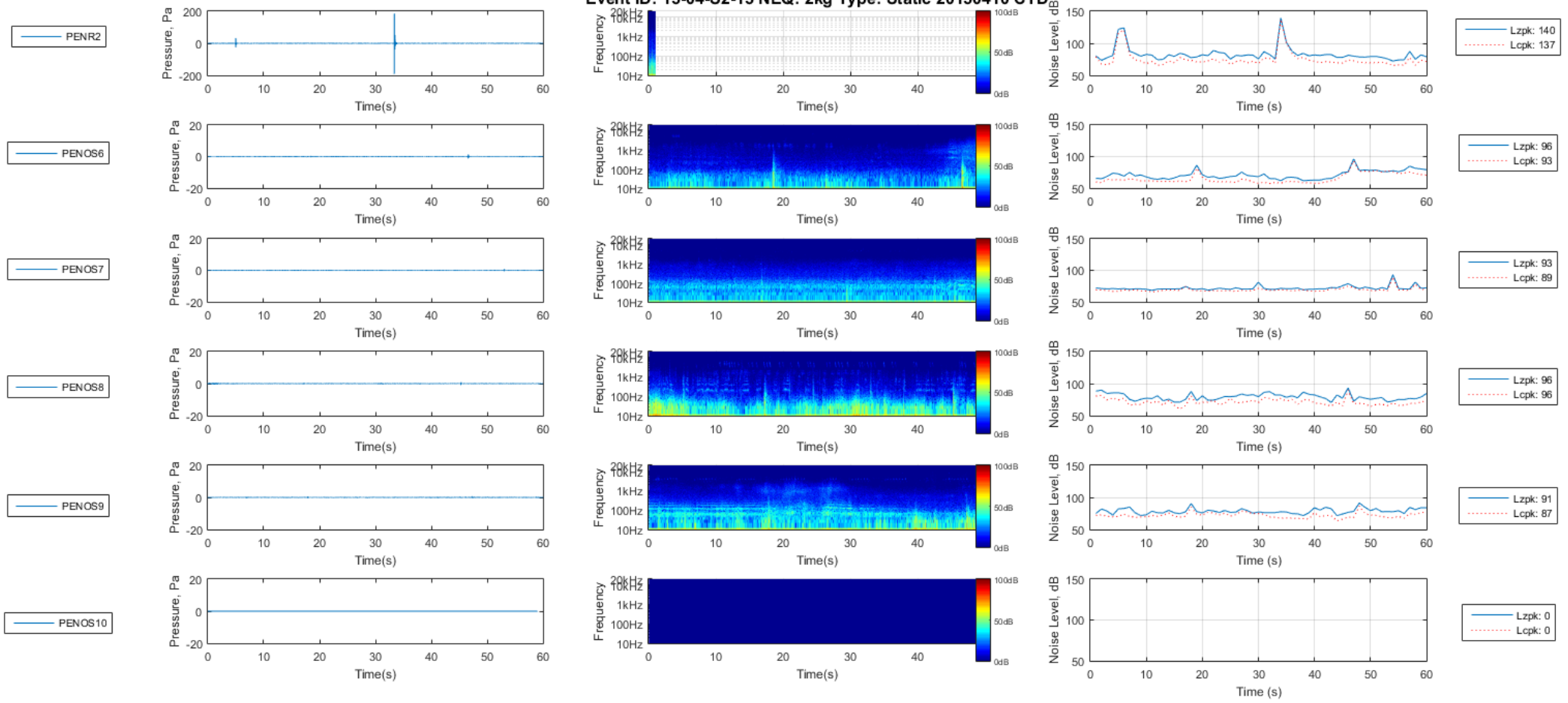
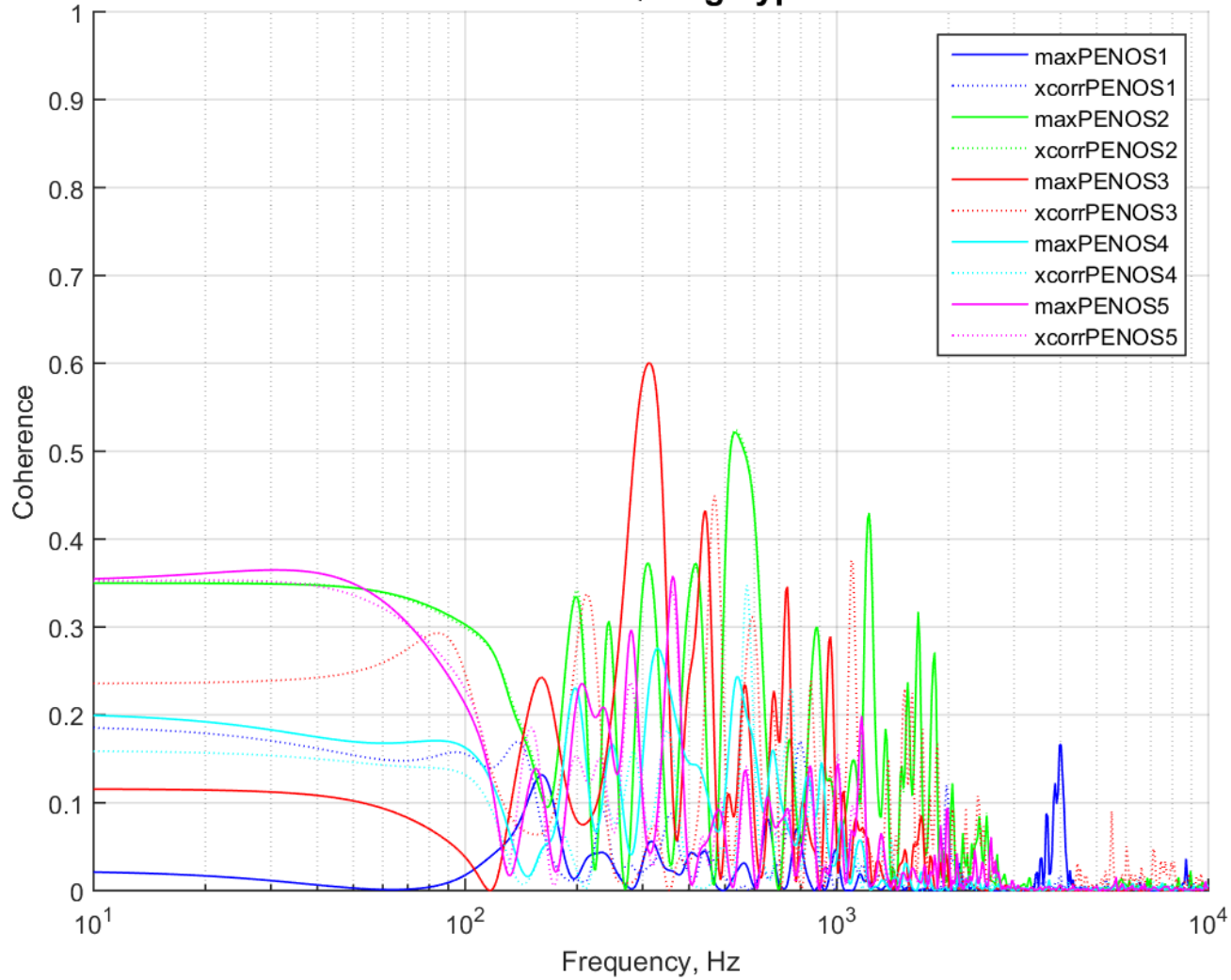


FIGURE 2.582: PEN\_OS 6 - 10 15-04-S2-15

**Event ID: 15-04-S2-15 NEQ: 2kg Type: Static 20150410**



**FIGURE 2.583: COHERENCE PEN\_OS 1 - 5 15-04-S2-15**



Event ID: 15-04-S2-15 NEQ: 2kg Type: Static 20150410

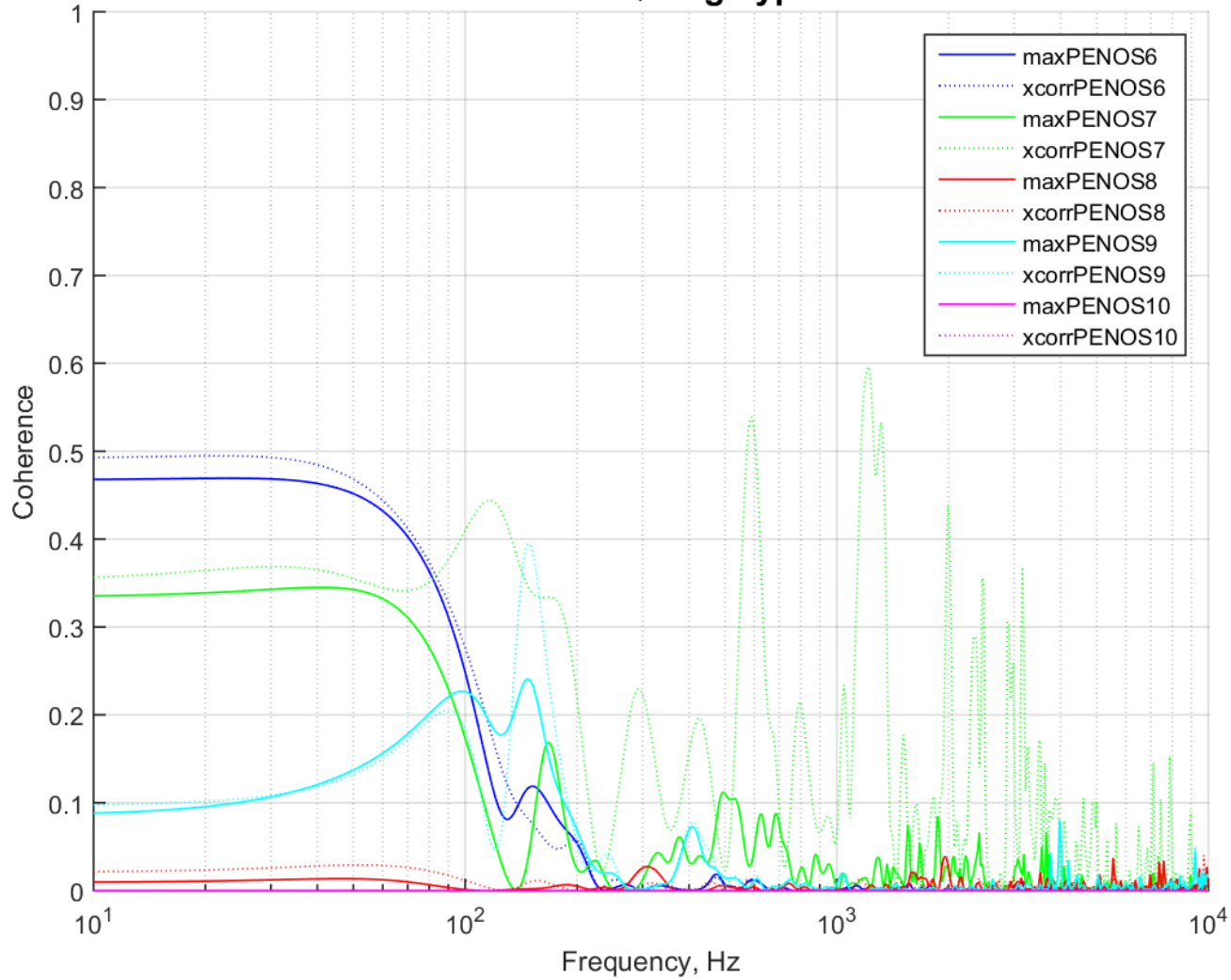
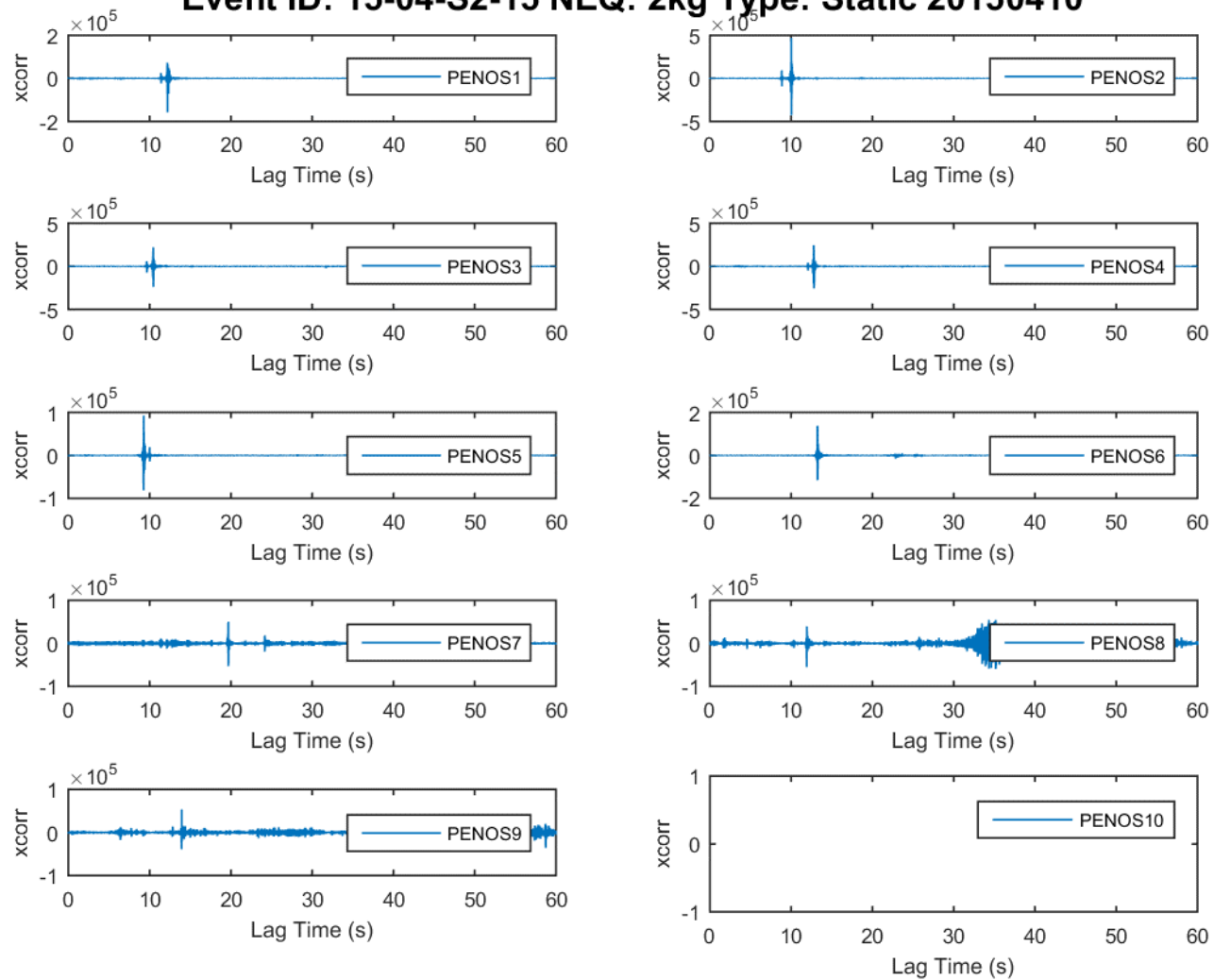
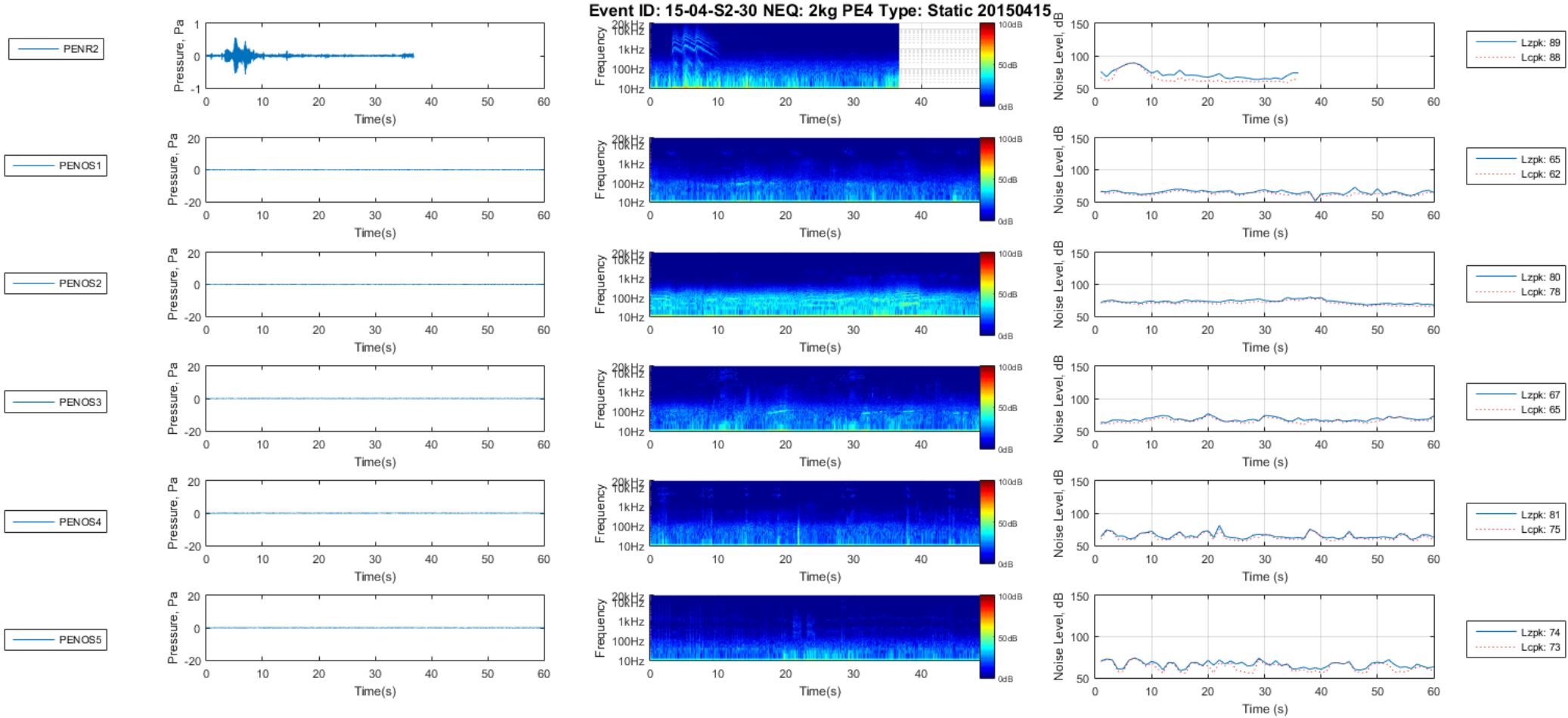


FIGURE 2.584: COHERENCE PEN\_OS 6 - 10 15-04-S2-15CTD

**Event ID: 15-04-S2-15 NEQ: 2kg Type: Static 20150410**



**FIGURE 2.585: CROSS CORRELATION PEN\_OS 1 - 10 15-04-S2-15**



**FIGURE 2.586: PEN\_OS 1 - 5 15-04-S2-30**

Event ID: 15-04-S2-30 NEQ: 2kg PE4 Type: Static 20150415 CTD

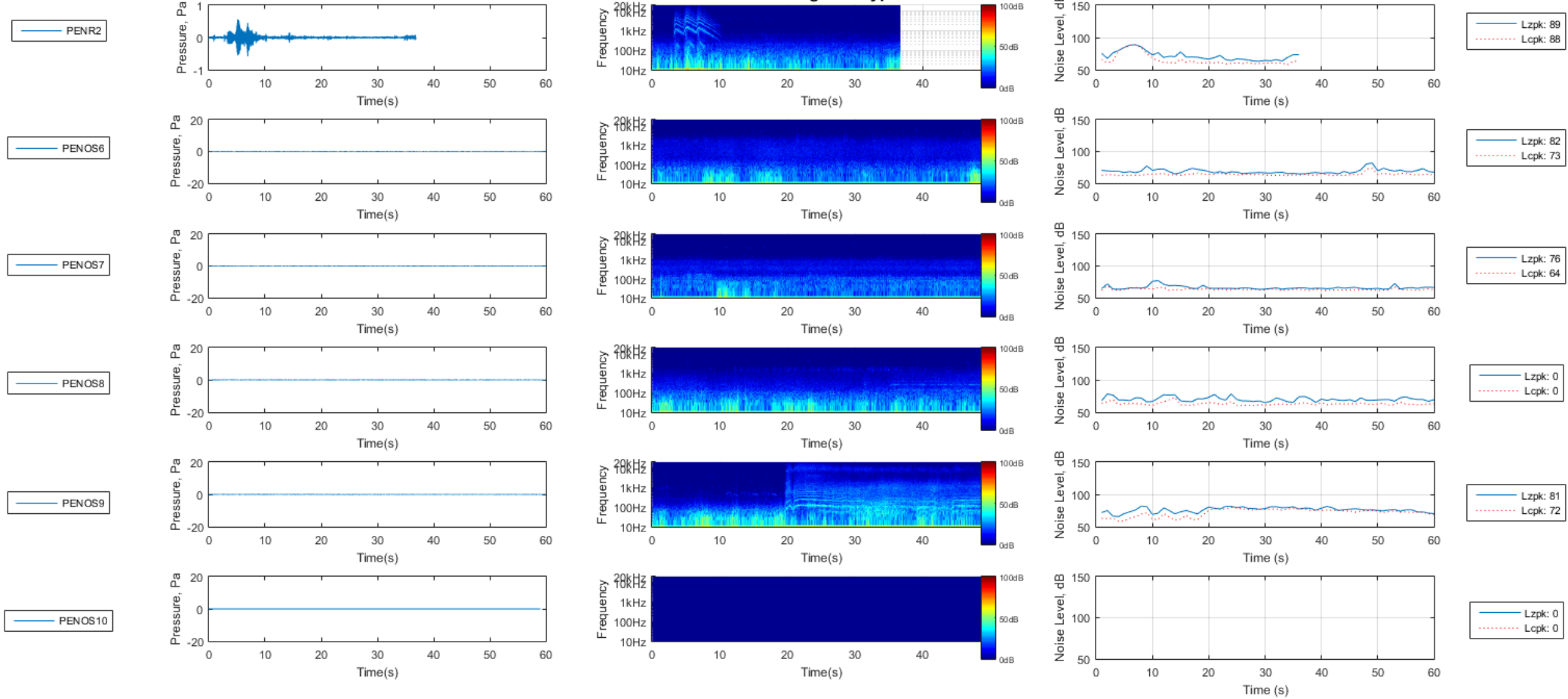
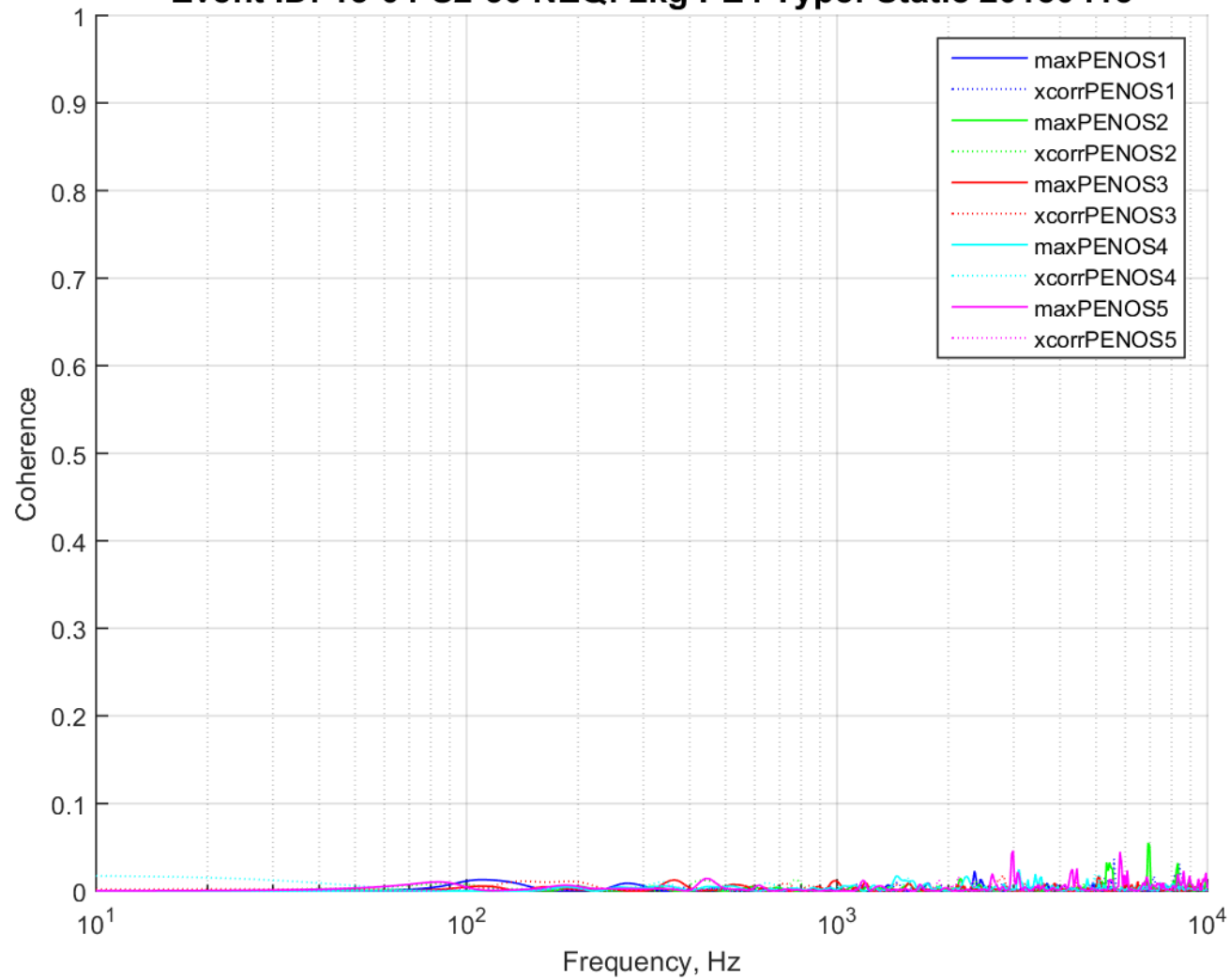


FIGURE 2.587: PEN\_OS 6 - 10 15-04-S2-30

**Event ID: 15-04-S2-30 NEQ: 2kg PE4 Type: Static 20150415**



**FIGURE 2.588: COHERENCE PEN\_OS 1 - 5 15-04-S2-30**

Event ID: 15-04-S2-30 NEQ: 2kg PE4 Type: Static 20150415

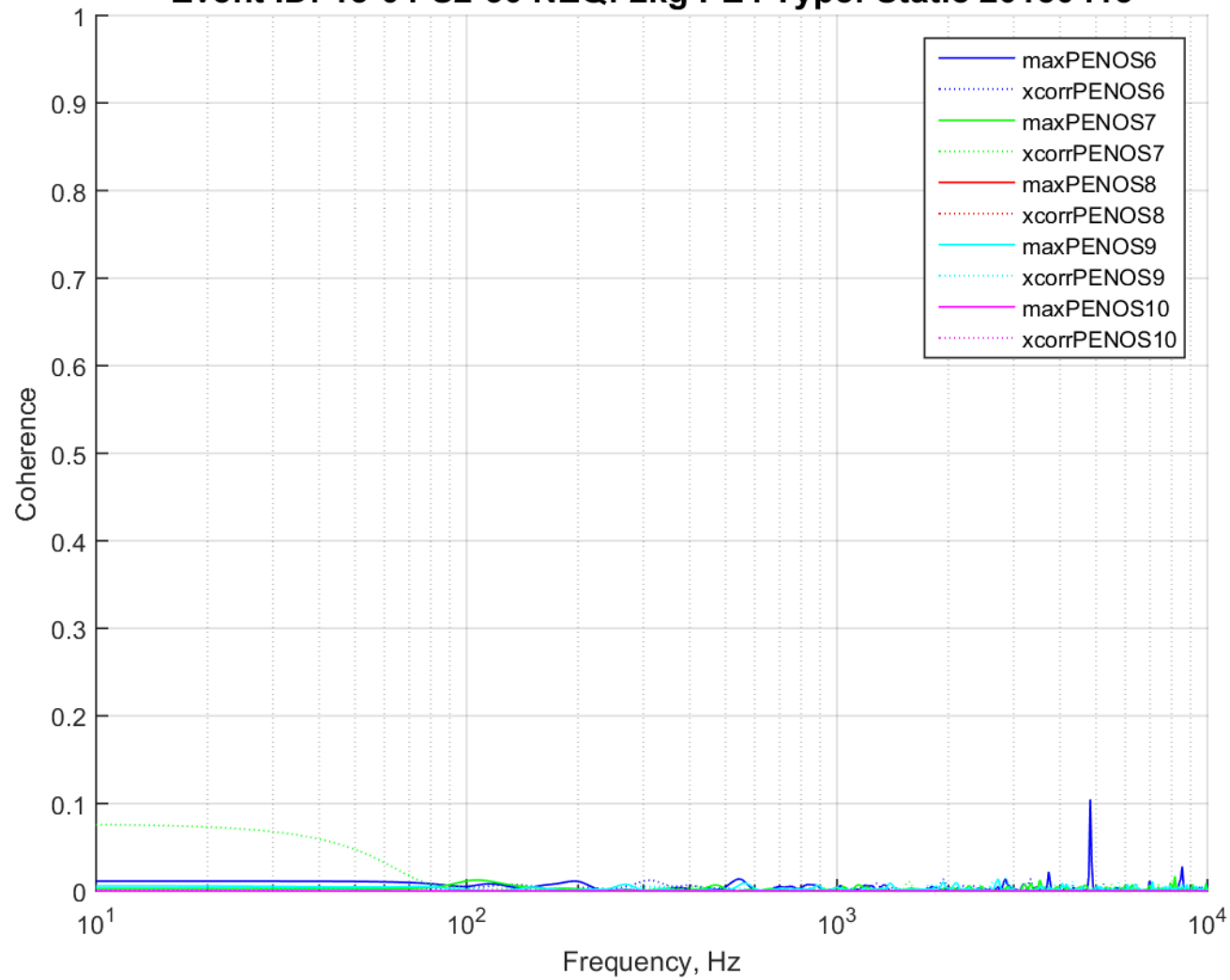
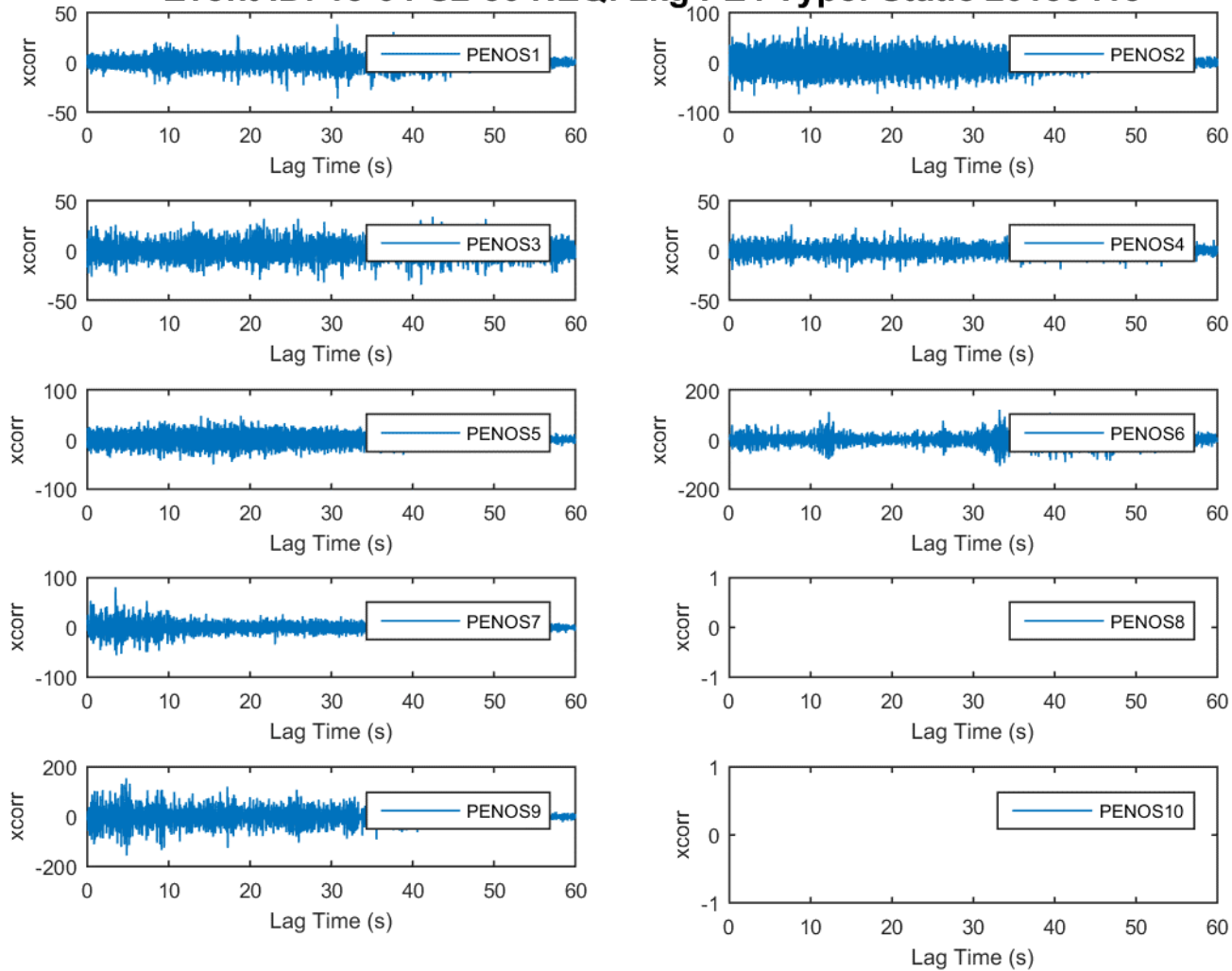
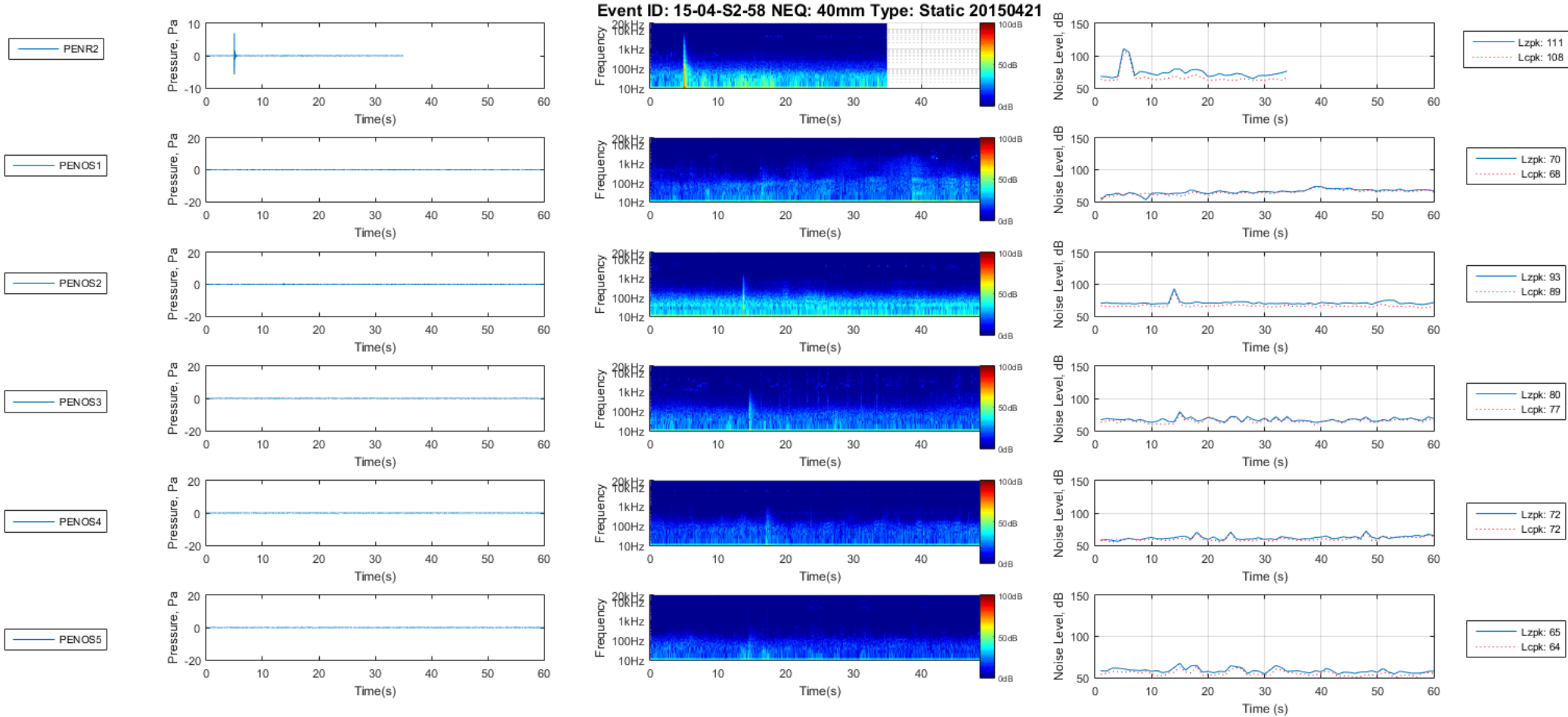


FIGURE 2.589: COHERENCE PEN\_OS 6 - 10 15-04-S2-30CTD

**Event ID: 15-04-S2-30 NEQ: 2kg PE4 Type: Static 20150415**

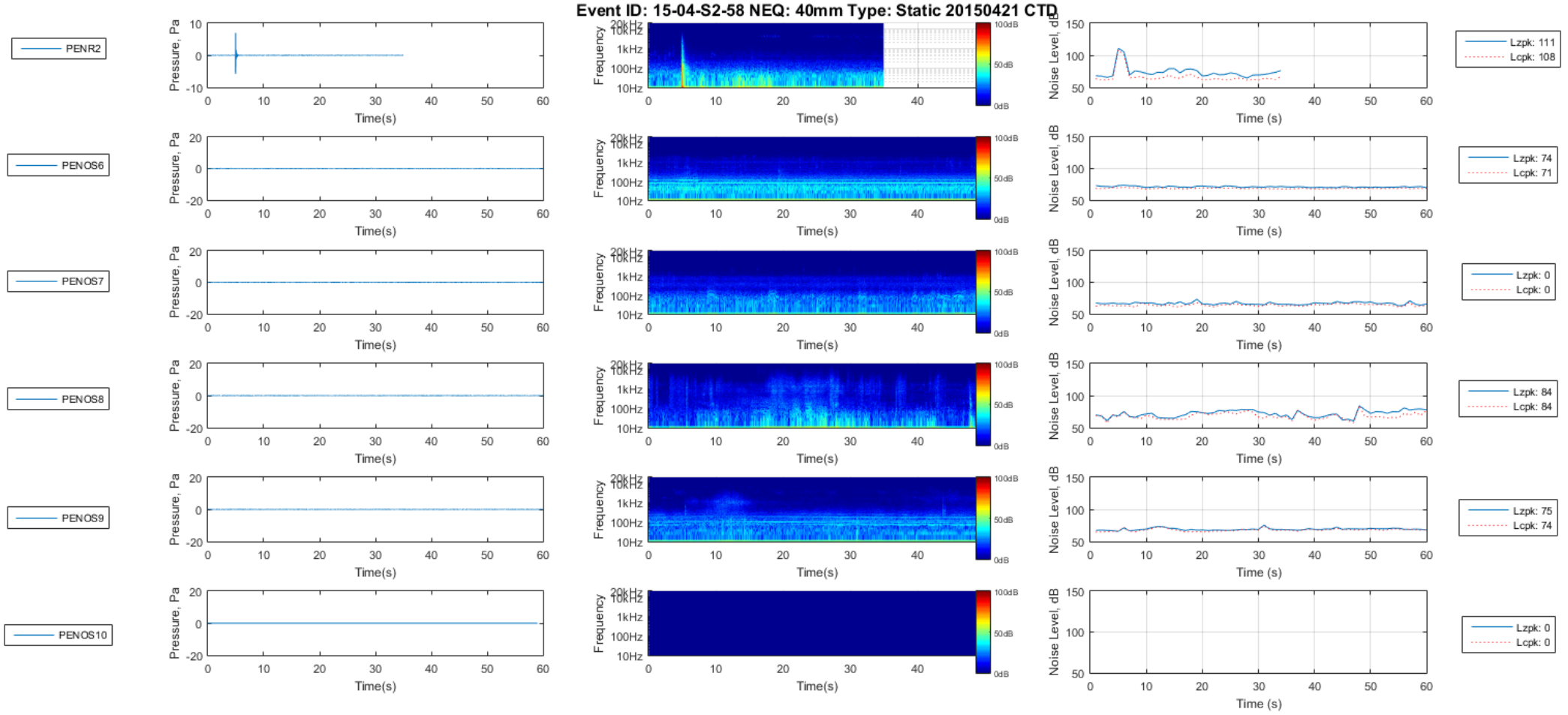


**FIGURE 2.590: CROSS CORRELATION PEN\_OS 1 - 10 15-04-S2-30**



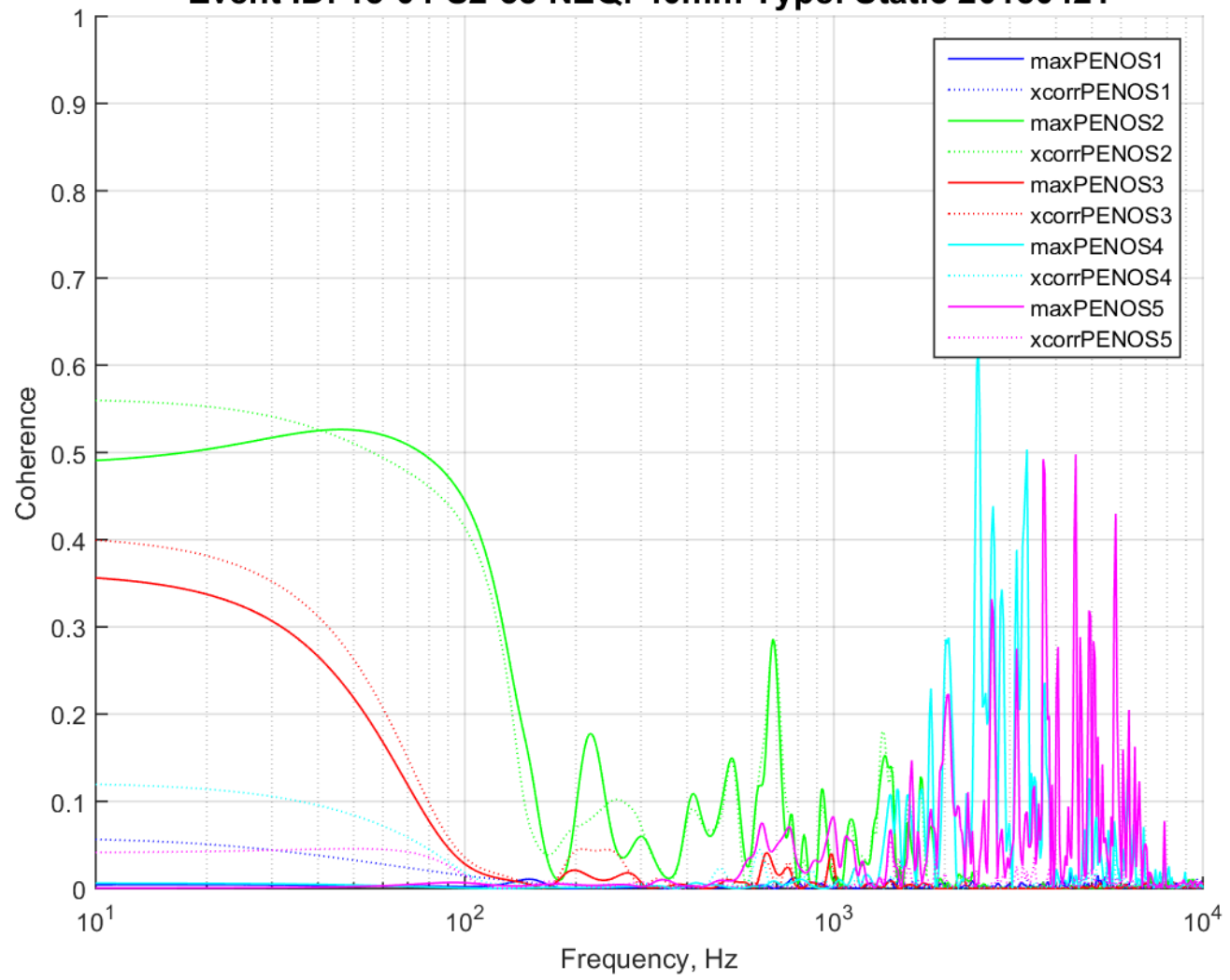
**FIGURE 2.591: PEN\_OS 1 - 5 15-04-S2-58**





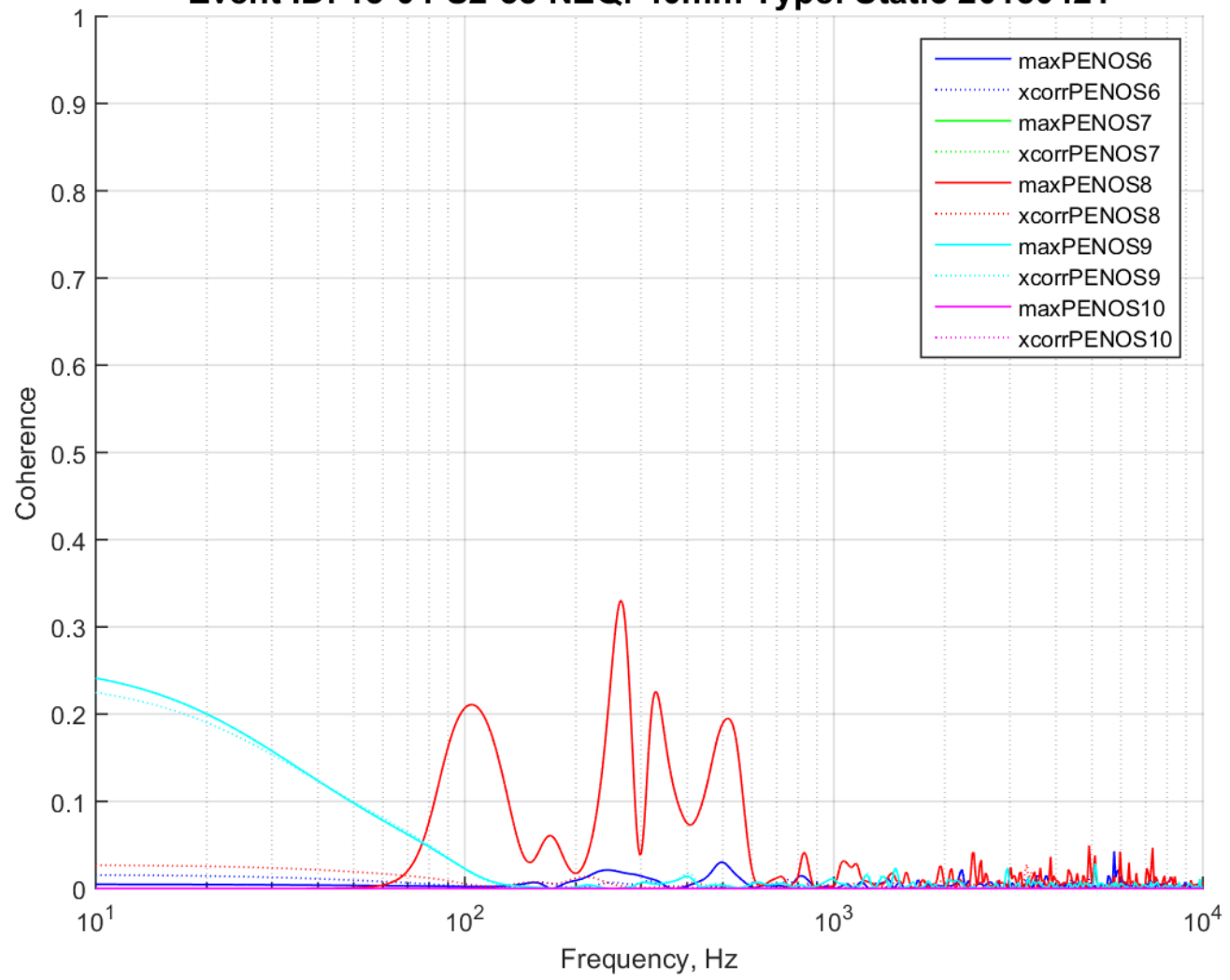
**FIGURE 2.592: PEN\_OS 6 - 10 15-04-S2-58**

**Event ID: 15-04-S2-58 NEQ: 40mm Type: Static 20150421**



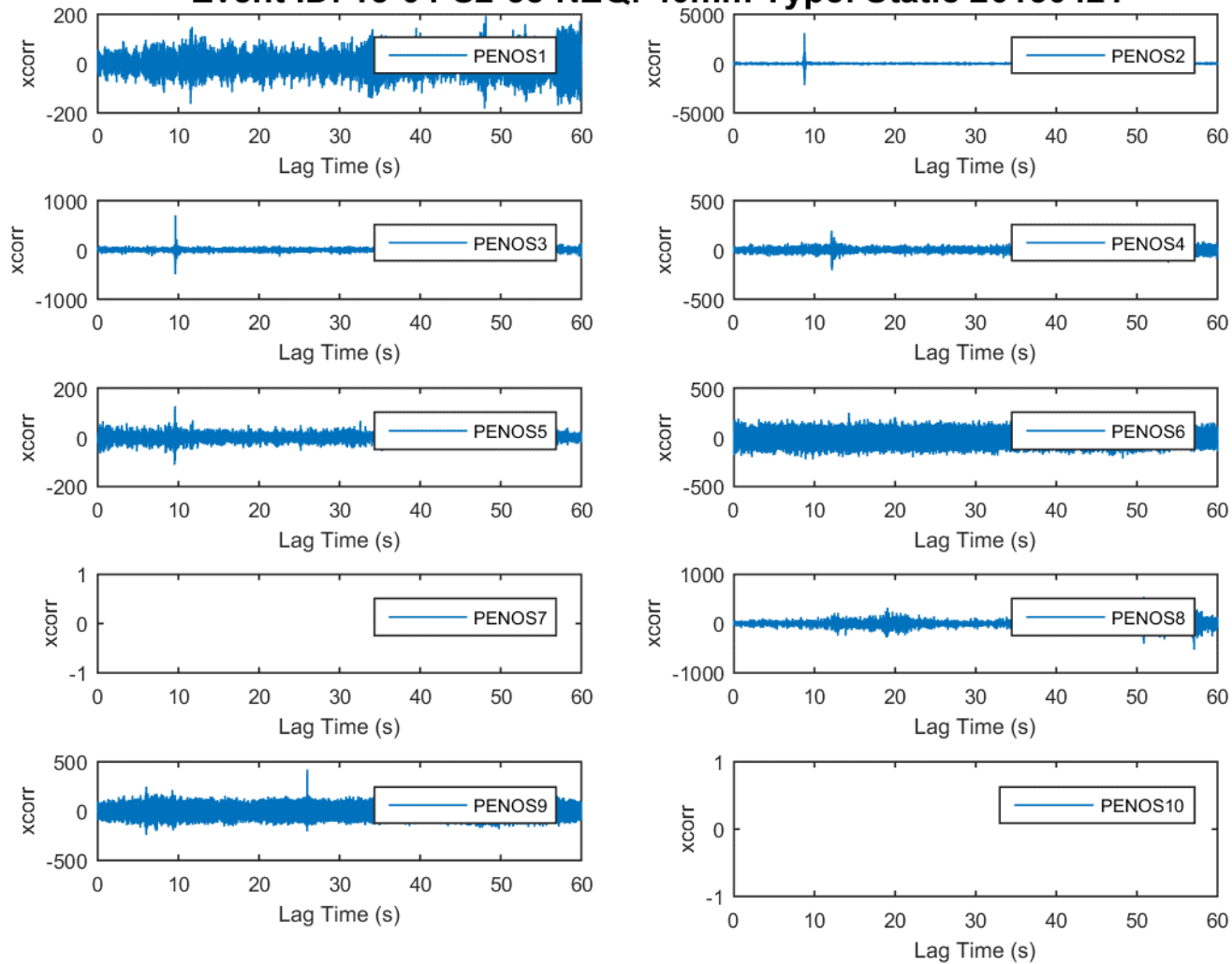
**FIGURE 2.593: COHERENCE PEN\_OS 1 - 5 15-04-S2-58**

**Event ID: 15-04-S2-58 NEQ: 40mm Type: Static 20150421**

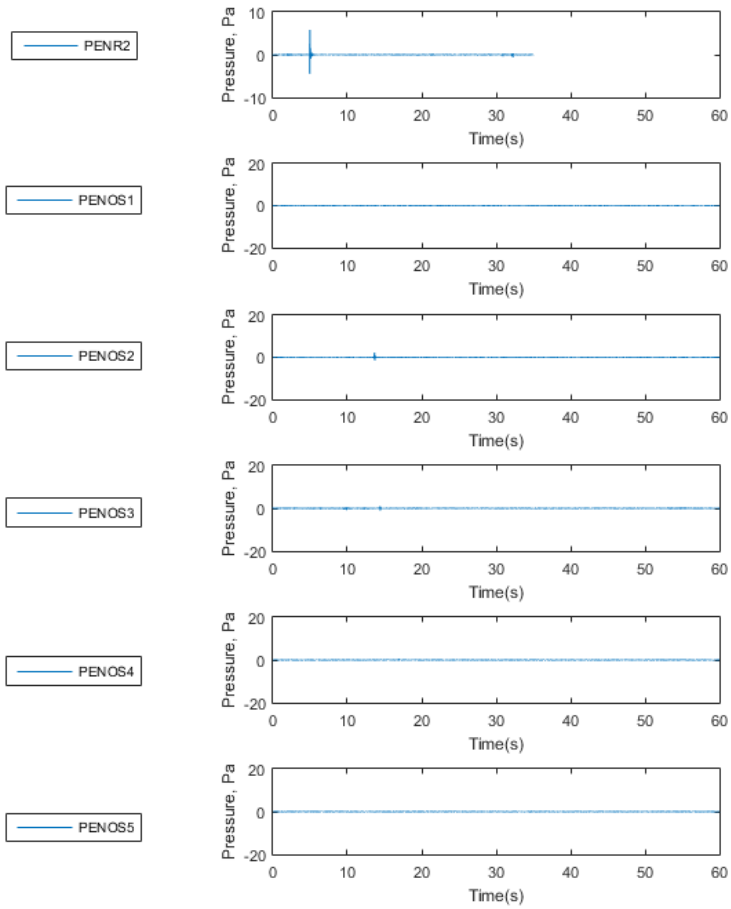


**FIGURE 2.594: COHERENCE PEN\_OS 6 - 10 15-04-S2-58CTD**

**Event ID: 15-04-S2-58 NEQ: 40mm Type: Static 20150421**



**FIGURE 2.595: CROSS CORRELATION PEN\_OS 1 - 10 15-04-S2-58**



Event ID: 15-04-S2-65 NEQ: 1kg Type: Static 20150422

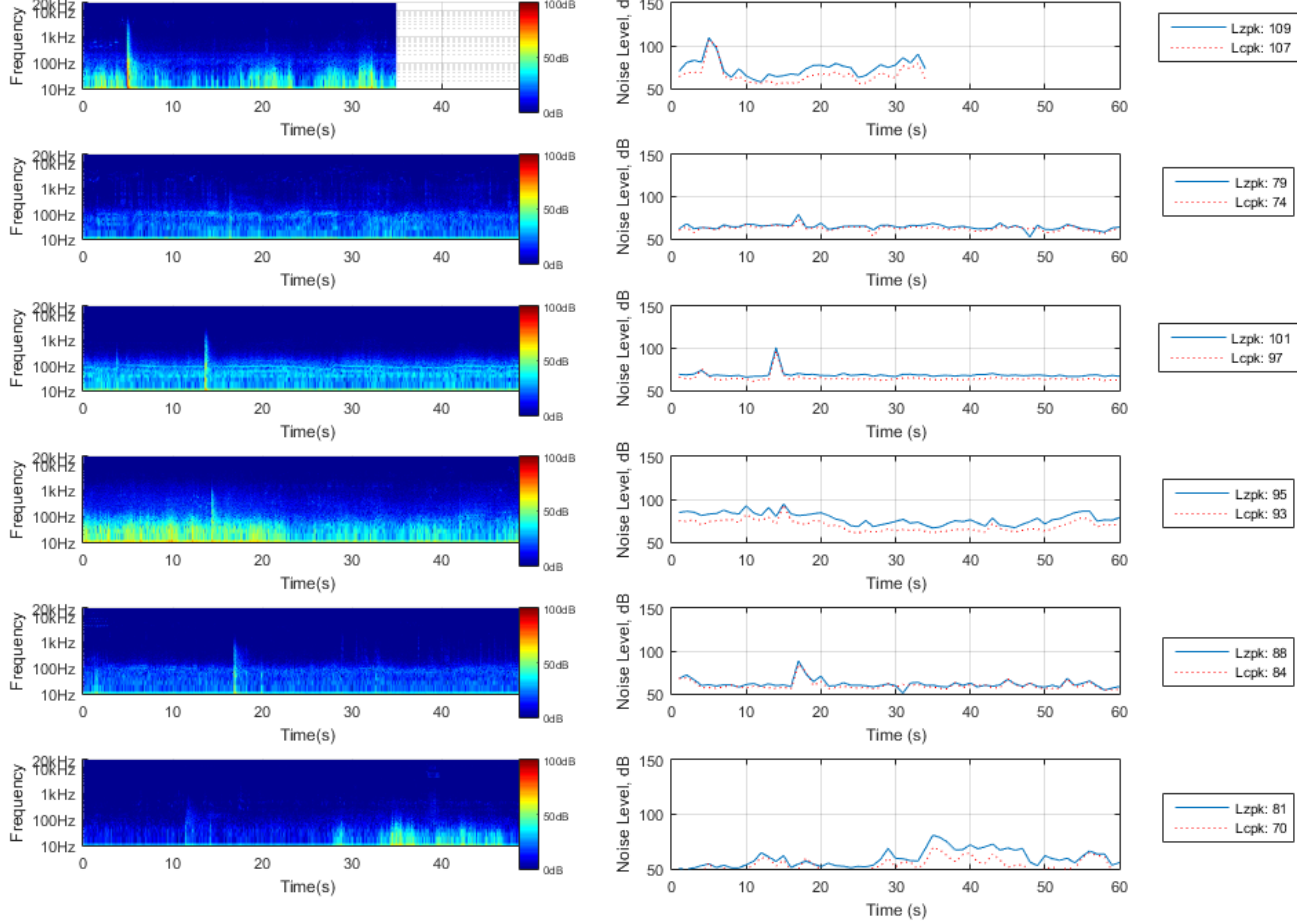
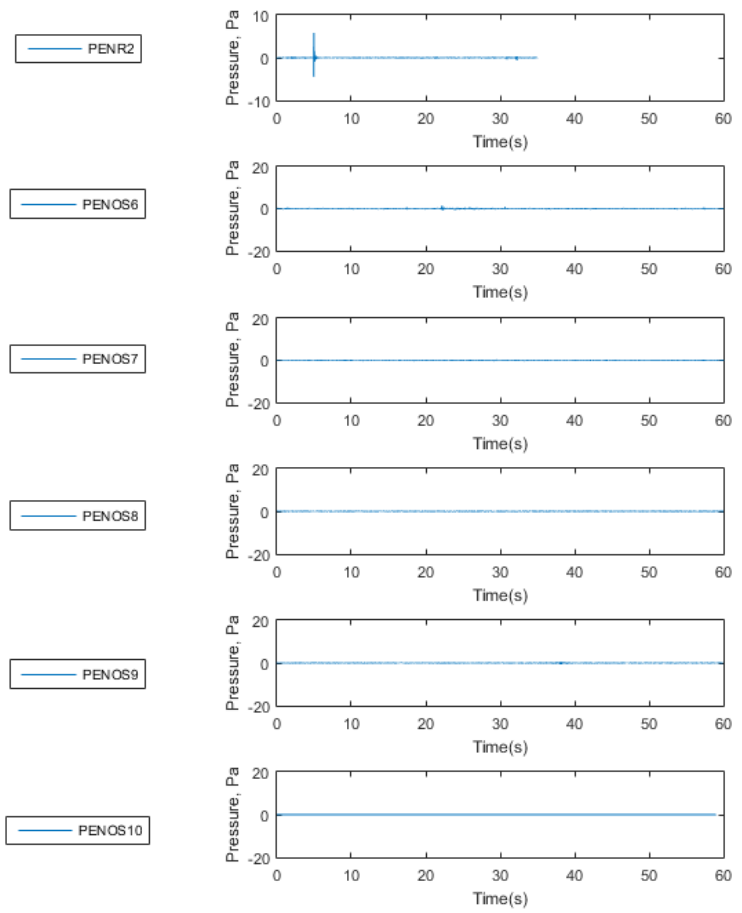


FIGURE 2.596: PEN\_OS 1 - 5 15-04-S2-65



Event ID: 15-04-S2-65 NEQ: 1kg Type: Static 20150422 CTD

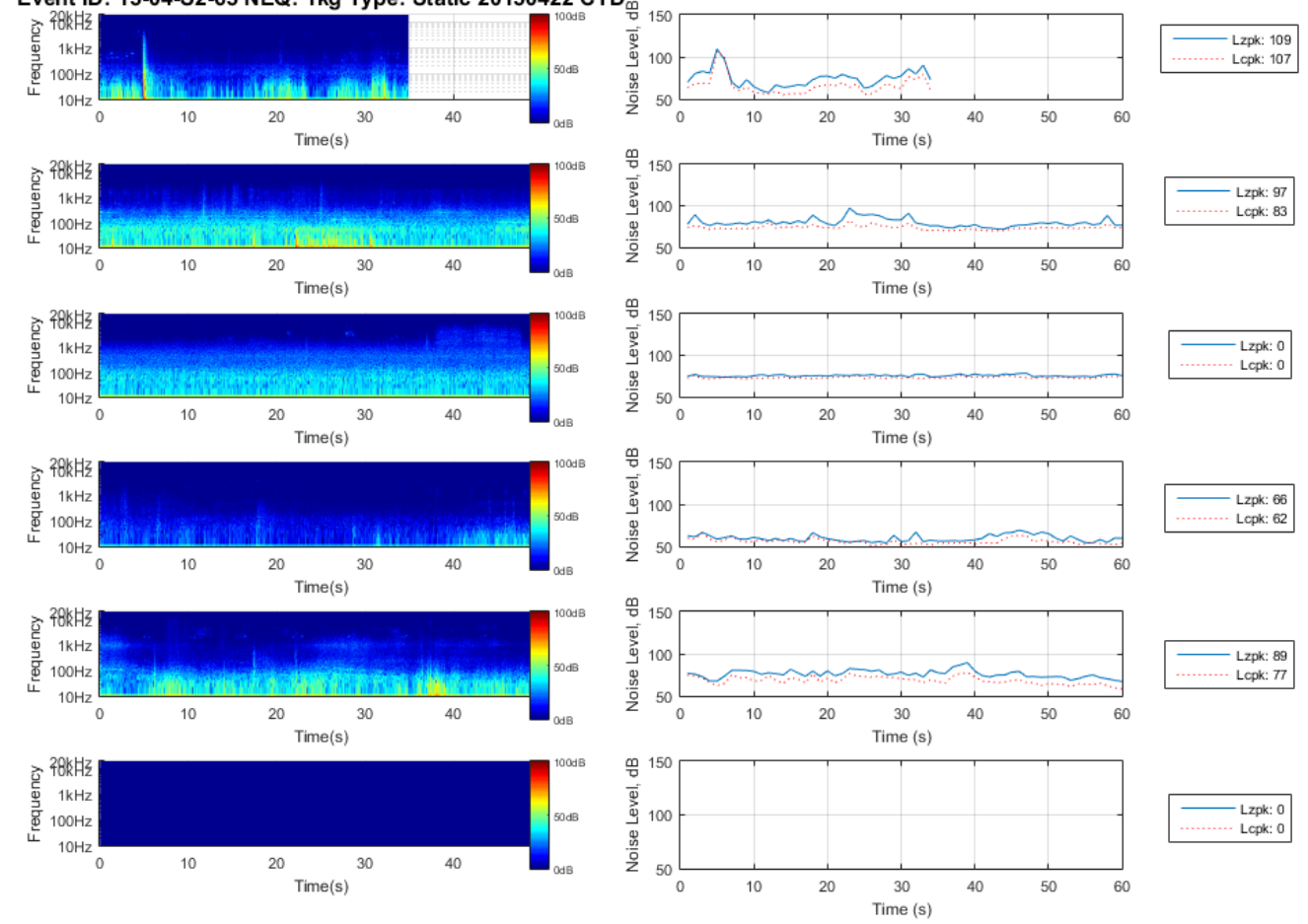


FIGURE 2.597: PEN\_OS 6 - 10 15-04-S2-65

Event ID: 15-04-S2-65 NEQ: 1kg Type: Static 20150422

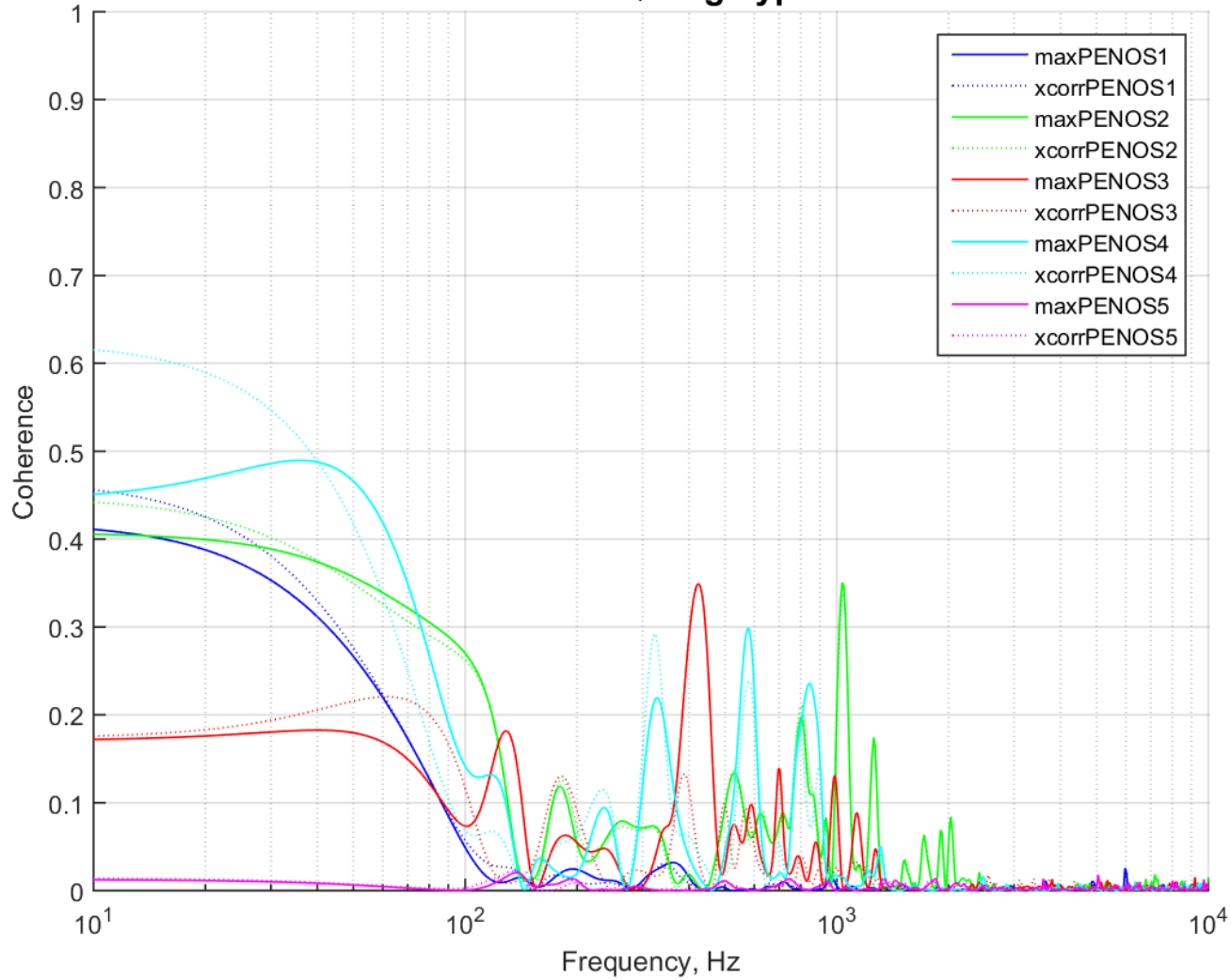
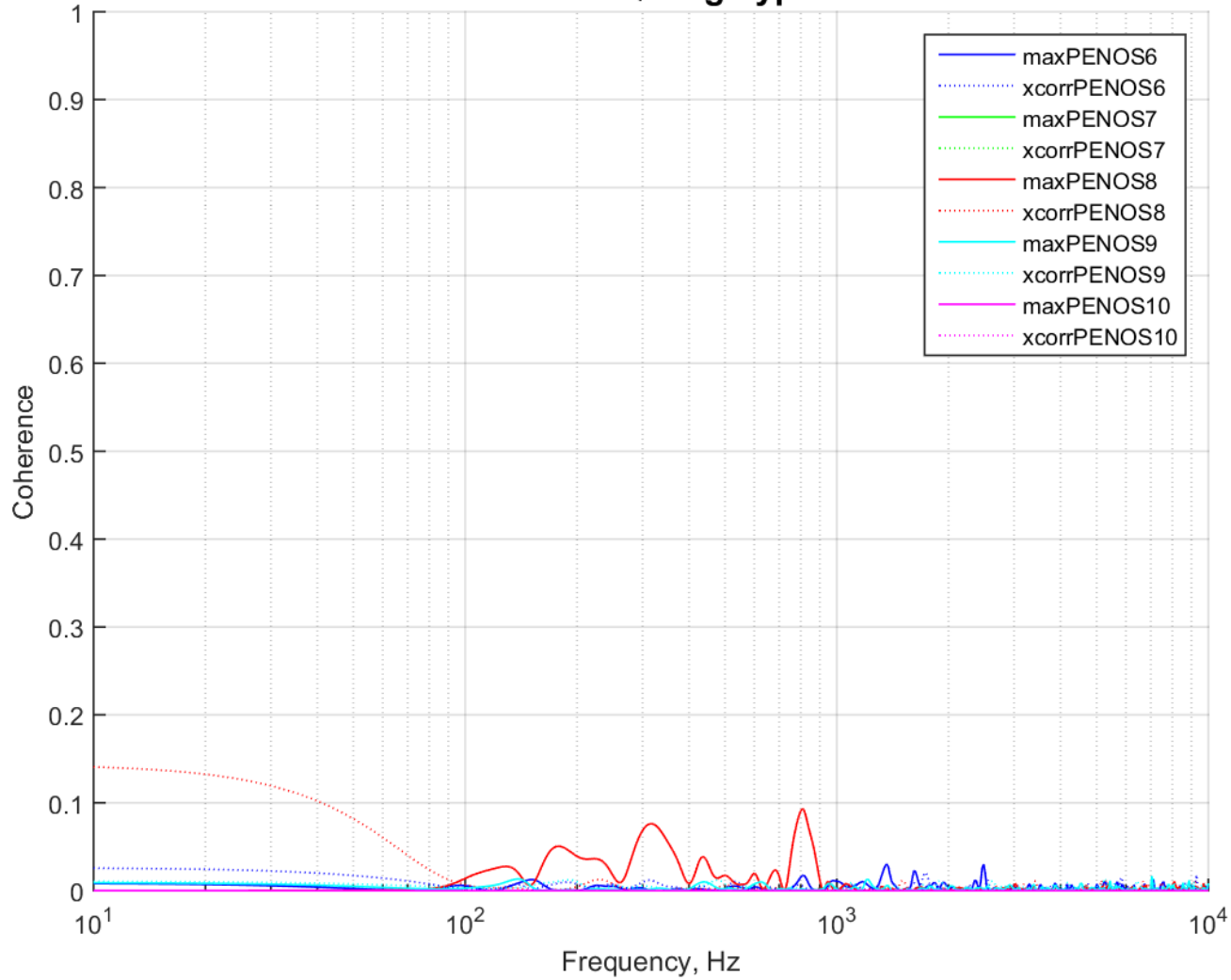


FIGURE 2.598: COHERENCE PEN\_OS 1 - 5 15-04-S2-65

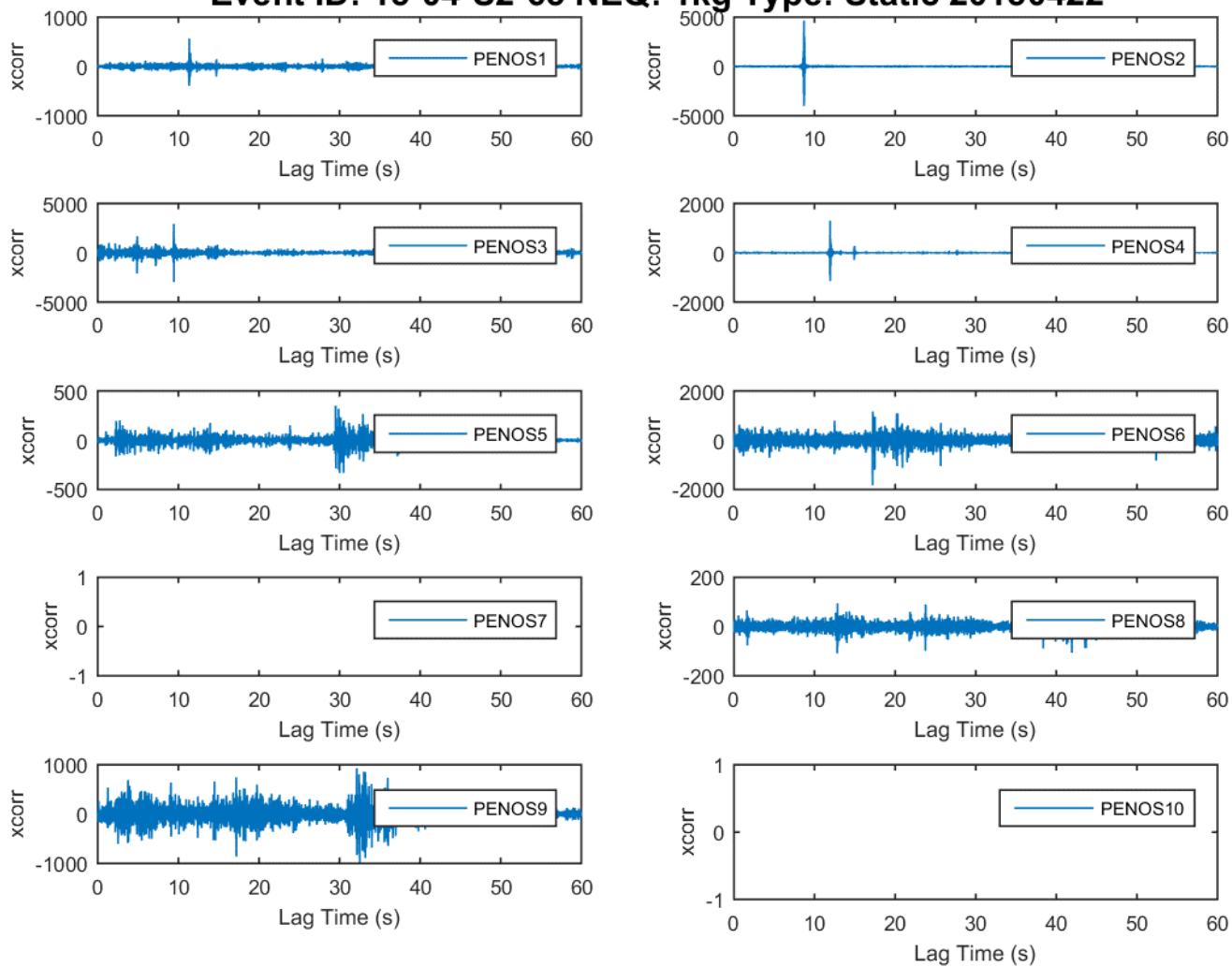
**Event ID: 15-04-S2-65 NEQ: 1kg Type: Static 20150422**



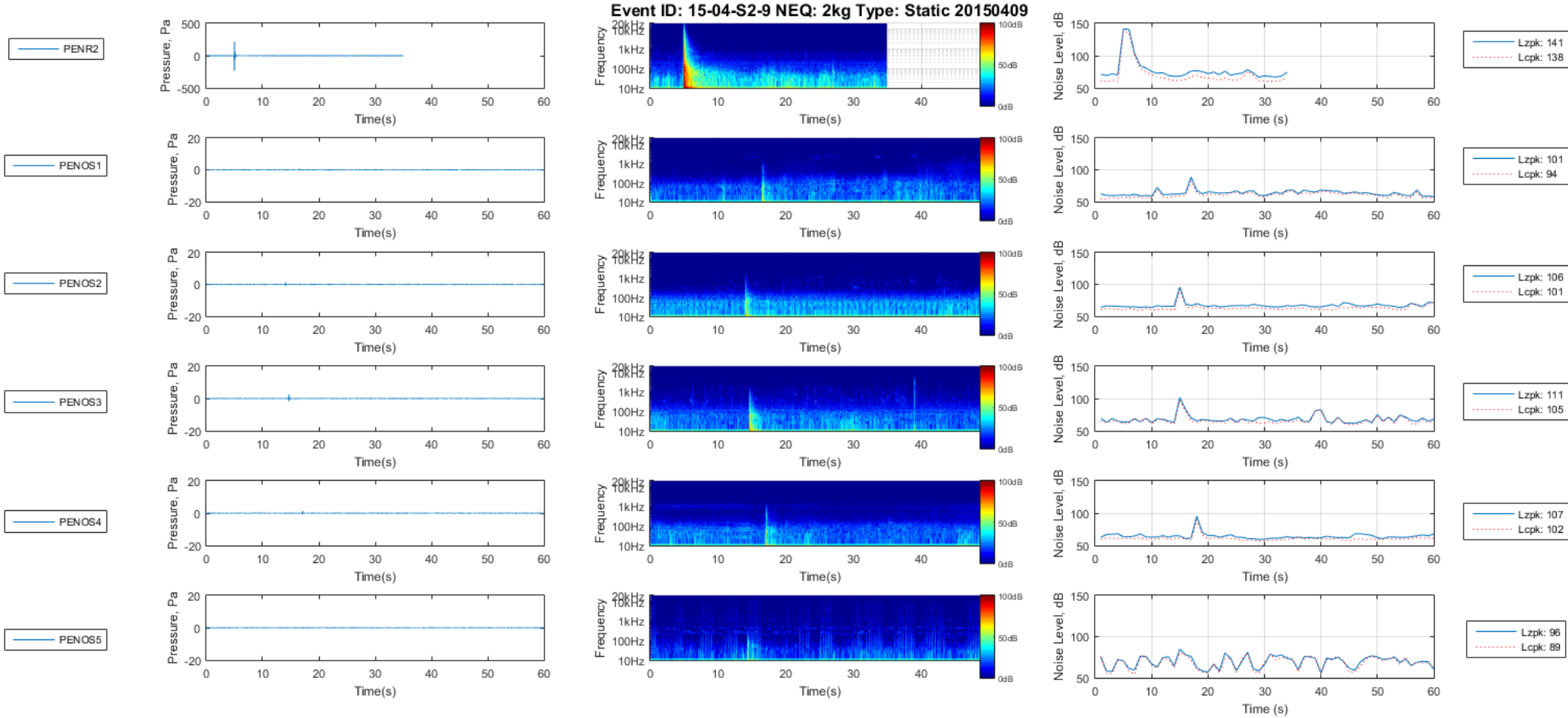
**FIGURE 2.599: COHERENCE PEN\_OS 6 - 10 15-04-S2-65CTD**



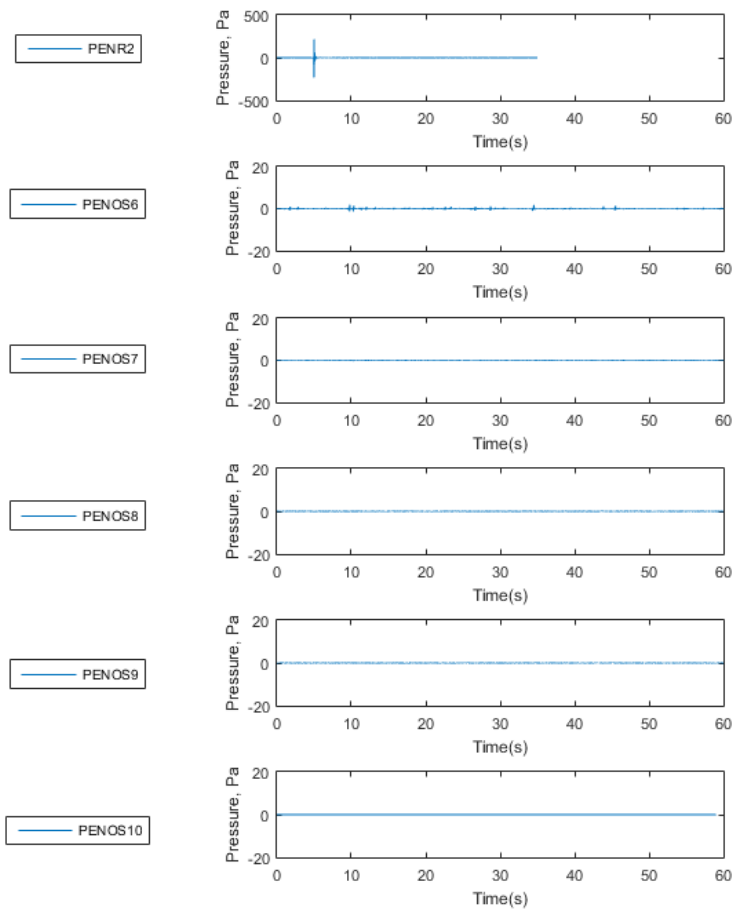
**Event ID: 15-04-S2-65 NEQ: 1kg Type: Static 20150422**



**FIGURE 2.600: CROSS CORRELATION PEN\_OS 1 - 10 15-04-S2-65**



**FIGURE 2.601: PEN\_OS 1 - 5 15-04-S2-9**



Event ID: 15-04-S2-9 NEQ: 2kg Type: Static 20150409 CTD

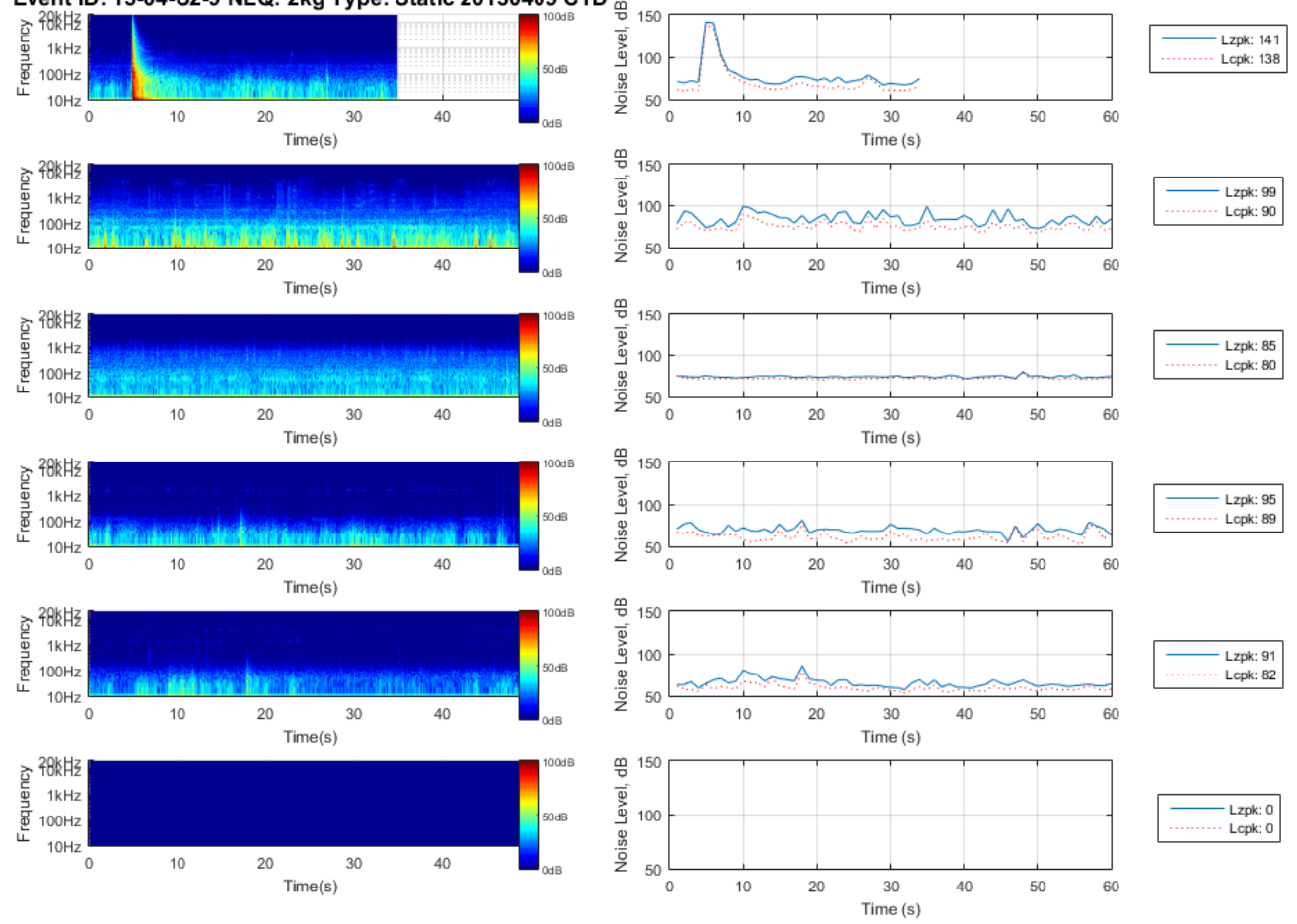


FIGURE 2.602: PEN\_OS 6 - 10 15-04-S2-9

Event ID: 15-04-S2-9 NEQ: 2kg Type: Static 20150409

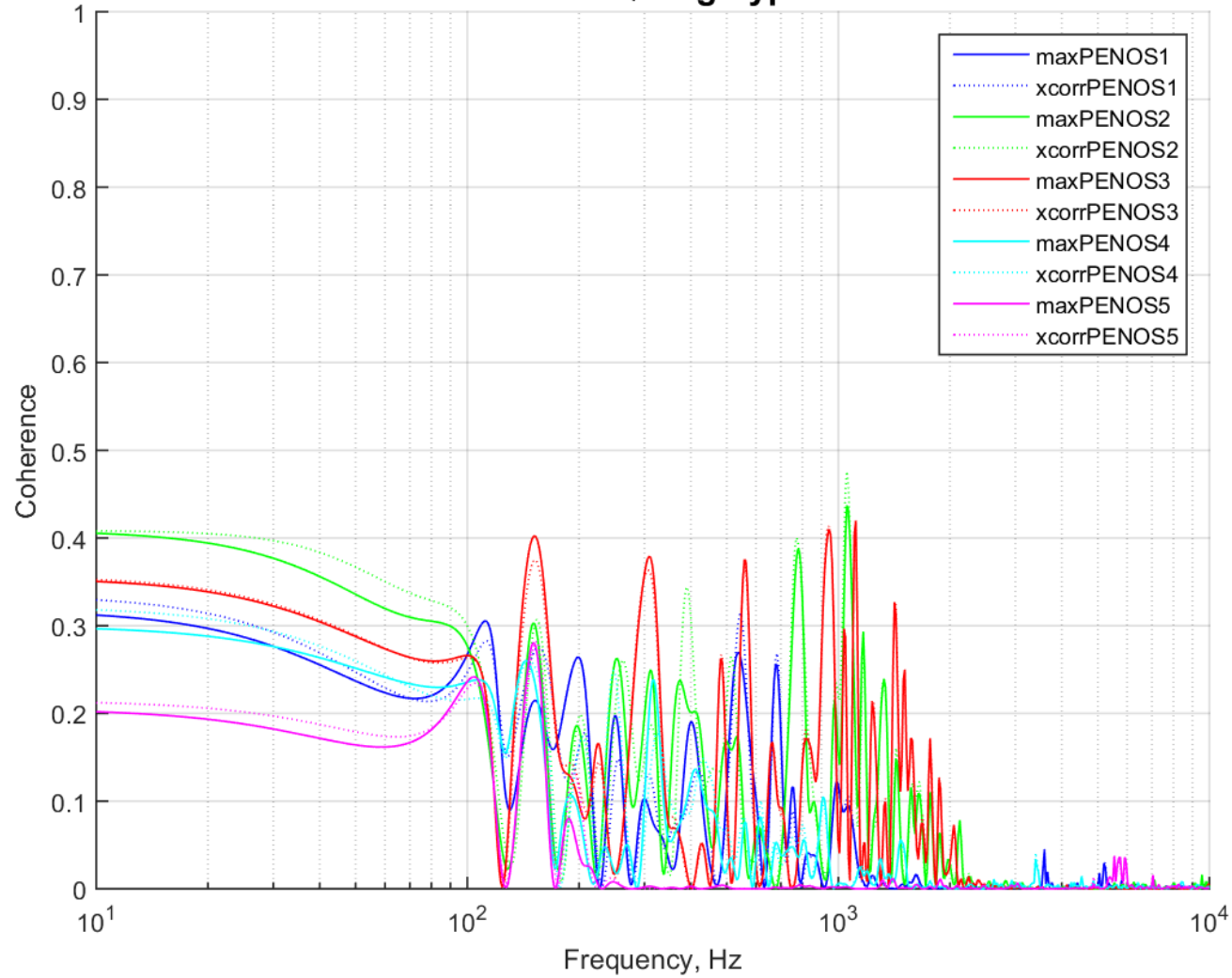


FIGURE 2.603: COHERENCE PEN\_OS 1 - 5 15-04-S2-9

Event ID: 15-04-S2-9 NEQ: 2kg Type: Static 20150409

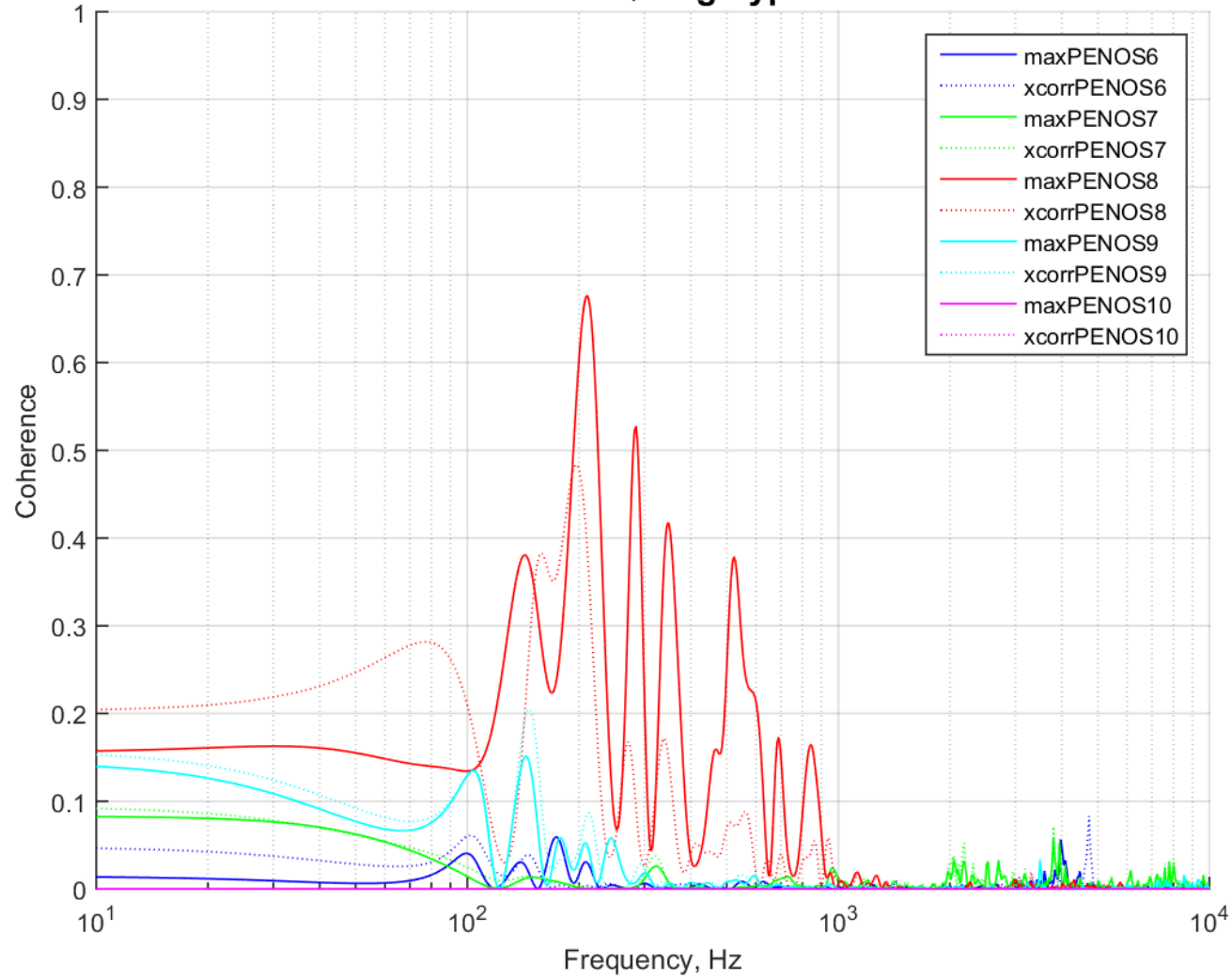
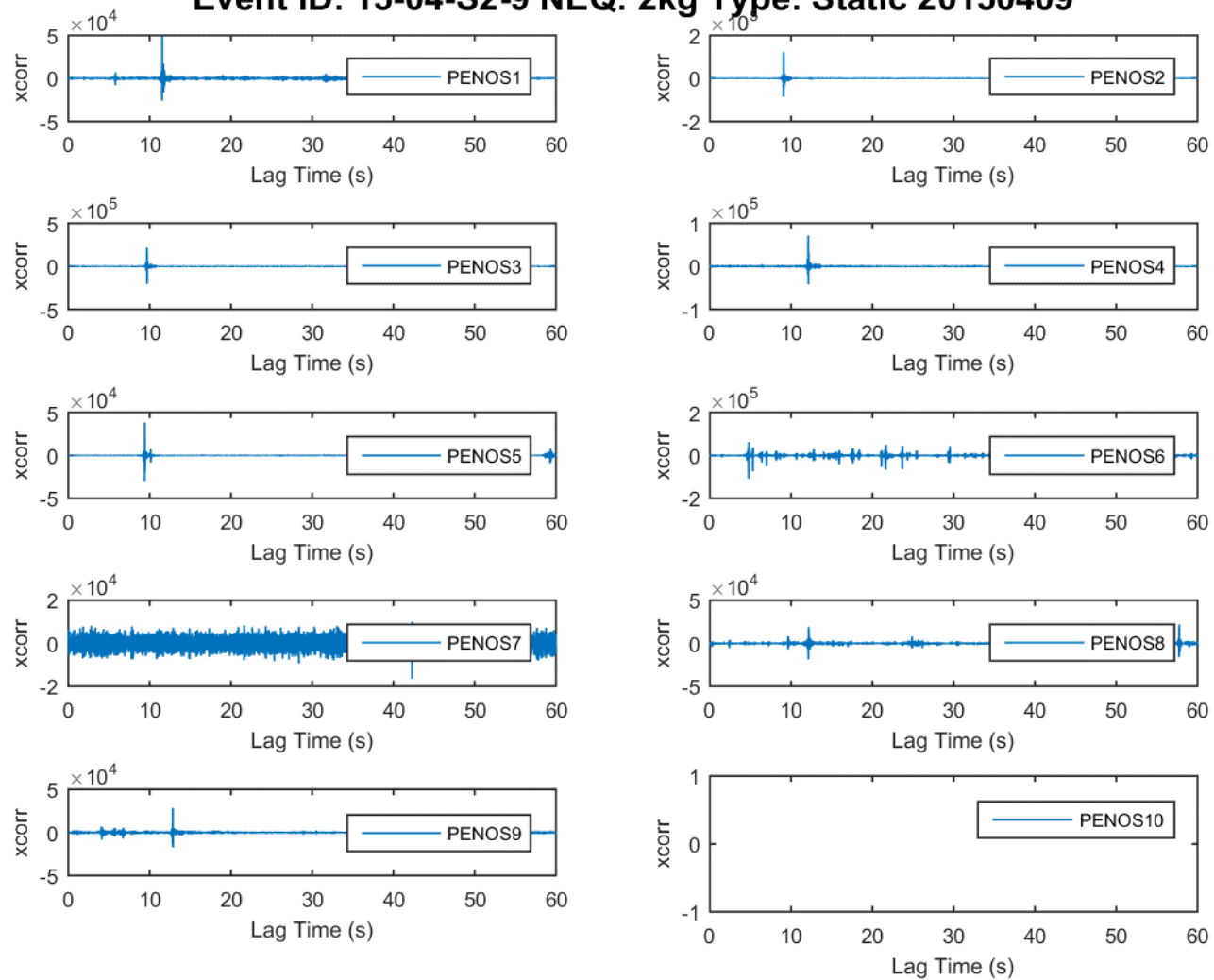


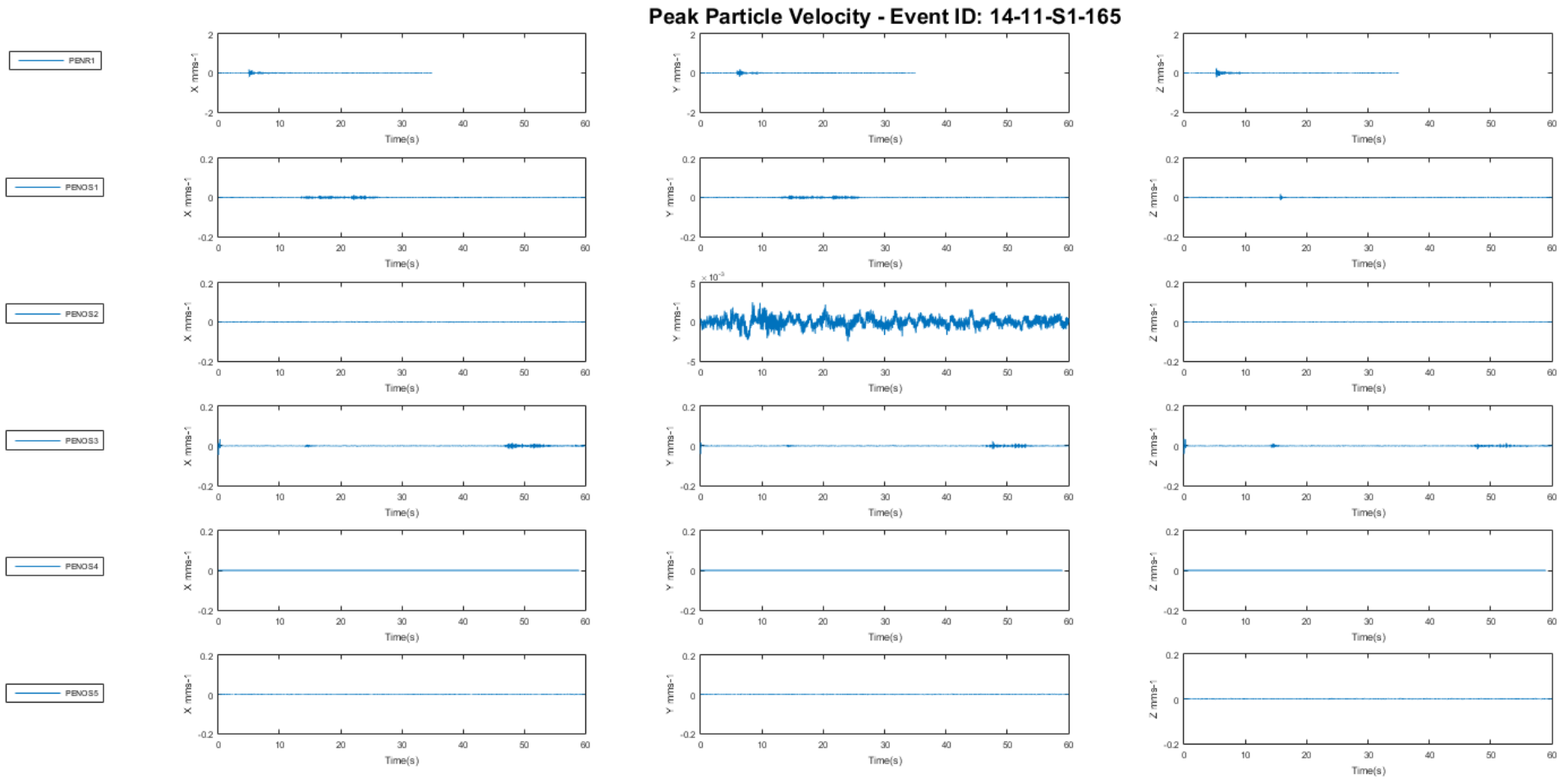
FIGURE 2.604: COHERENCE PEN\_OS 6 - 10 15-04-S2-9CTD

**Event ID: 15-04-S2-9 NEQ: 2kg Type: Static 20150409**



**FIGURE 2.605: CROSS CORRELATION PEN\_OS 1 - 10 15-04-S2-9**

**VOLUME 3: TECHNICAL APPENDICES - RESULTS**  
**CHAPTER 3: FULL MONITORING RESULTS - GROUNDBORNE  
VIBRATION**



**FIGURE 3.1: PEN\_OS 1 - 5 14-11-S1-165**



Peak Particle Velocity - Event ID: 14-11-S1-165

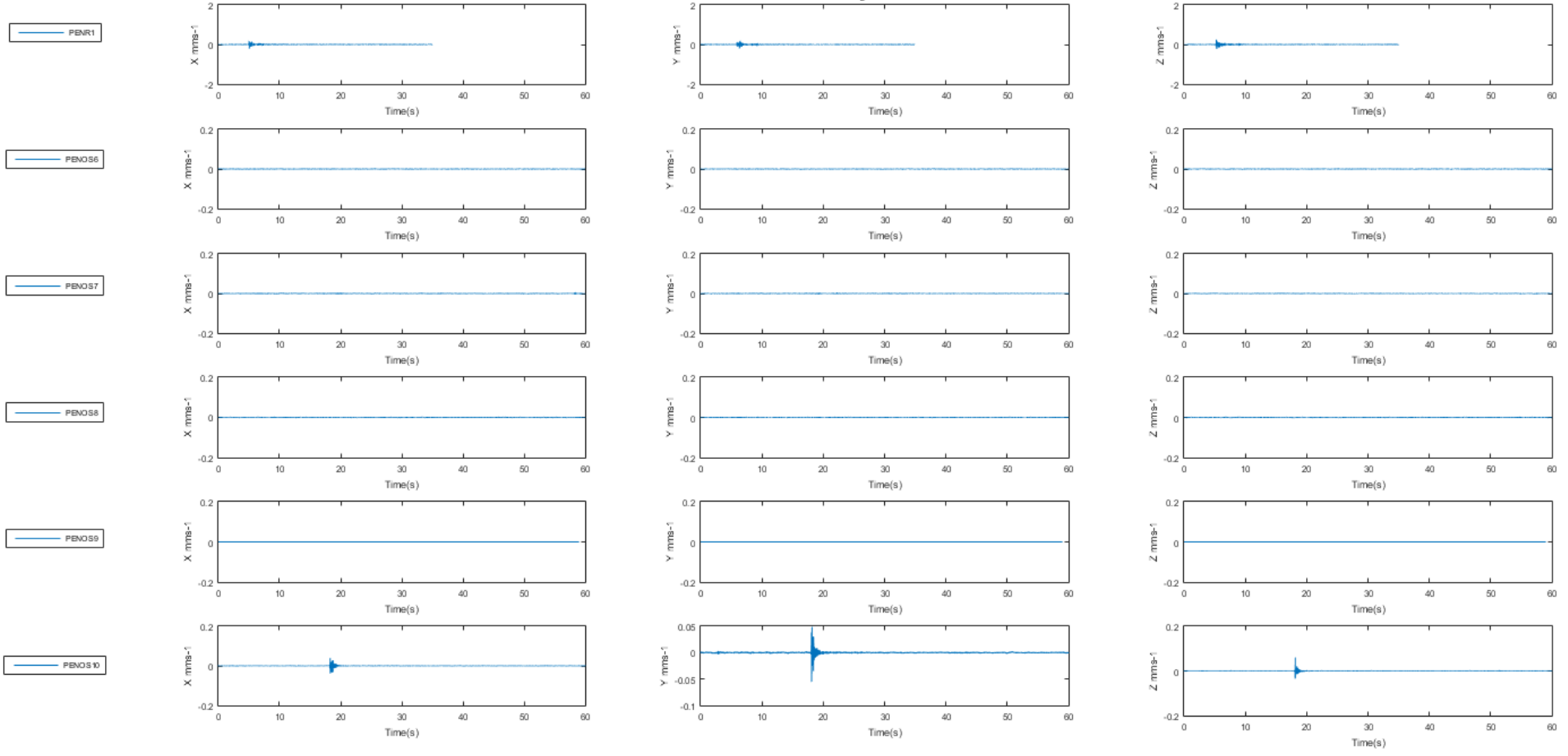


FIGURE 3.2: PEN\_OS 6 - 10 14-11-S1-165

### Event ID: 14-11-S1-165

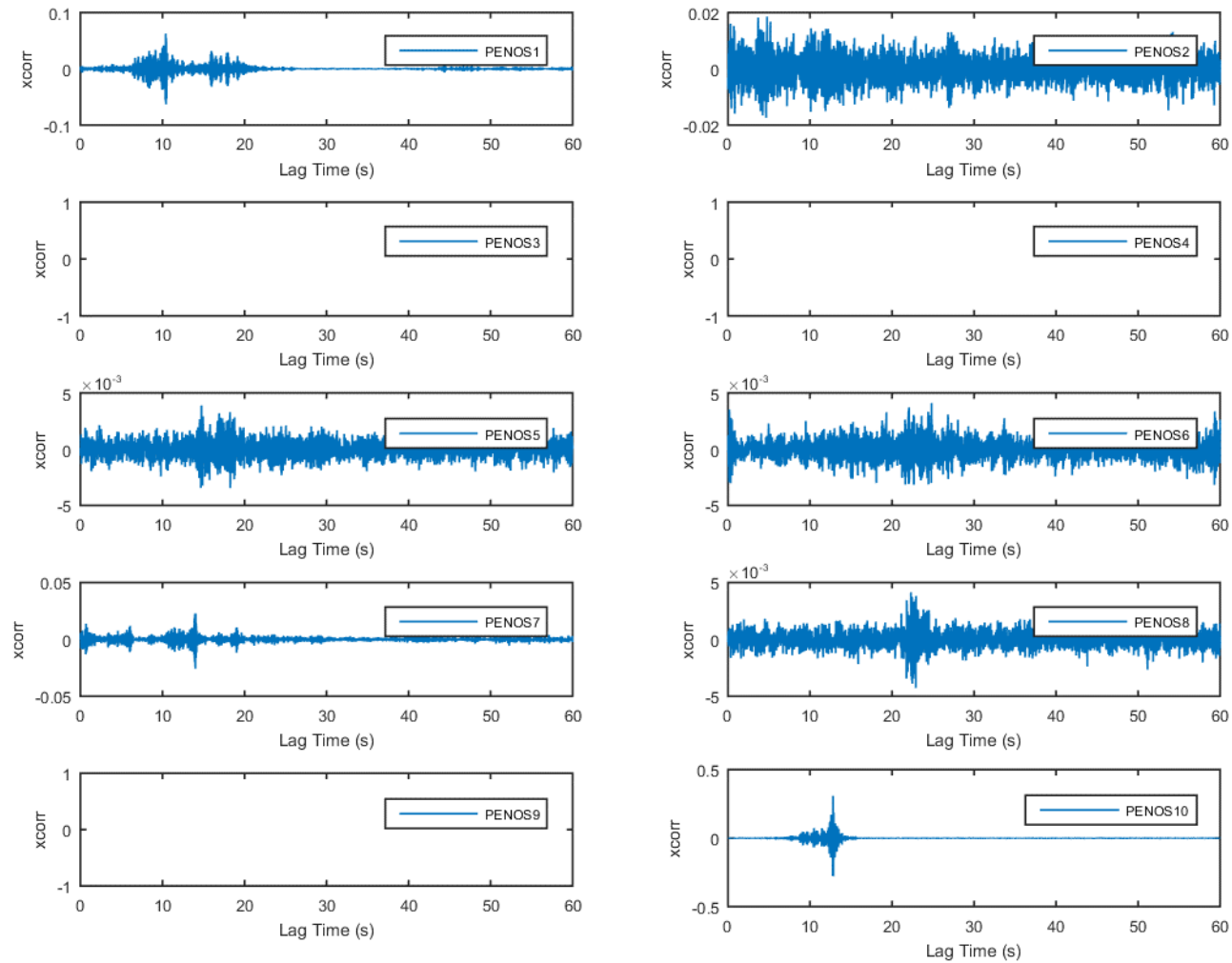


FIGURE 3.3: CROSS CORRELATION PEN\_OS 1 - 10 14-11-S1-165

Peak Particle Velocity - Event ID: 14-11-S1-186

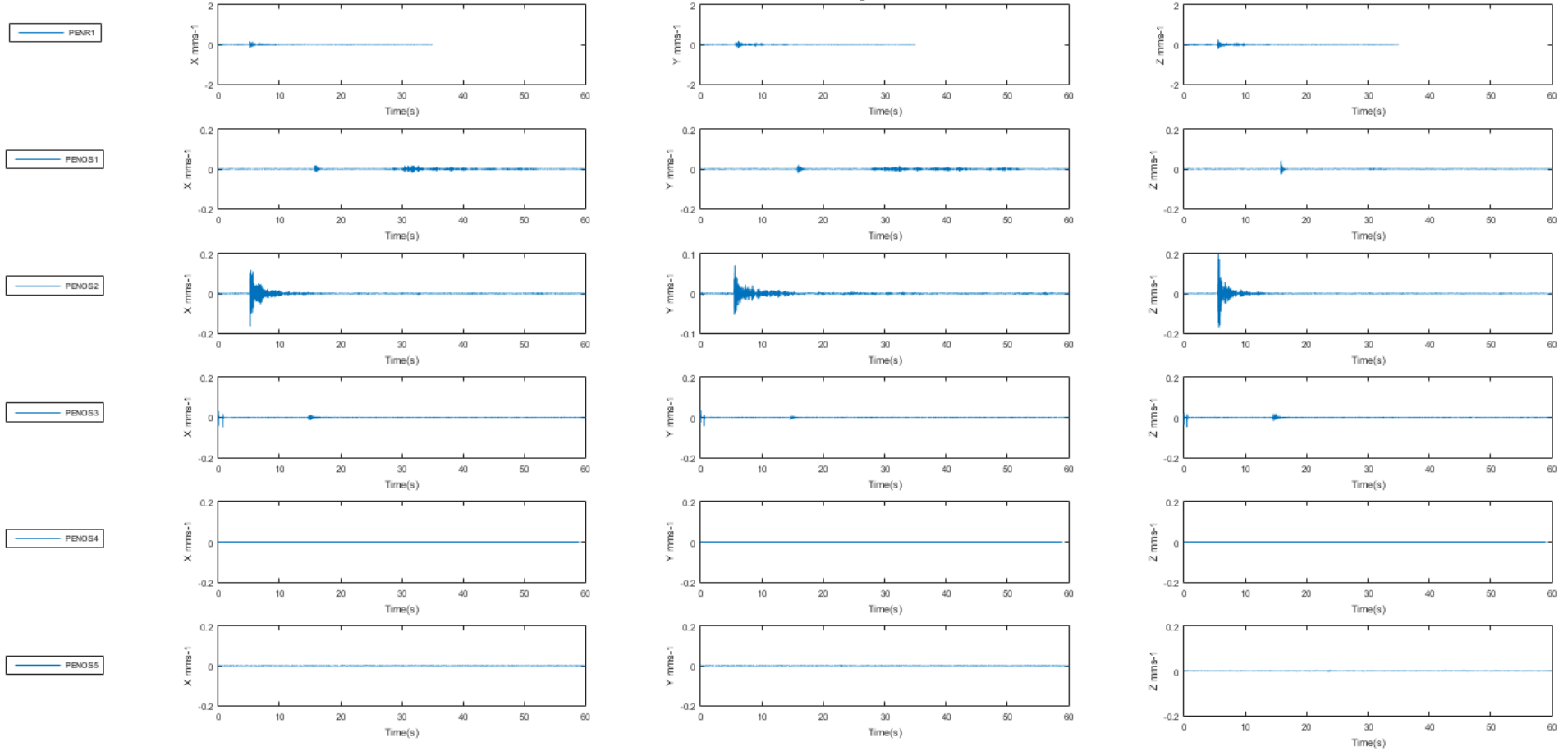
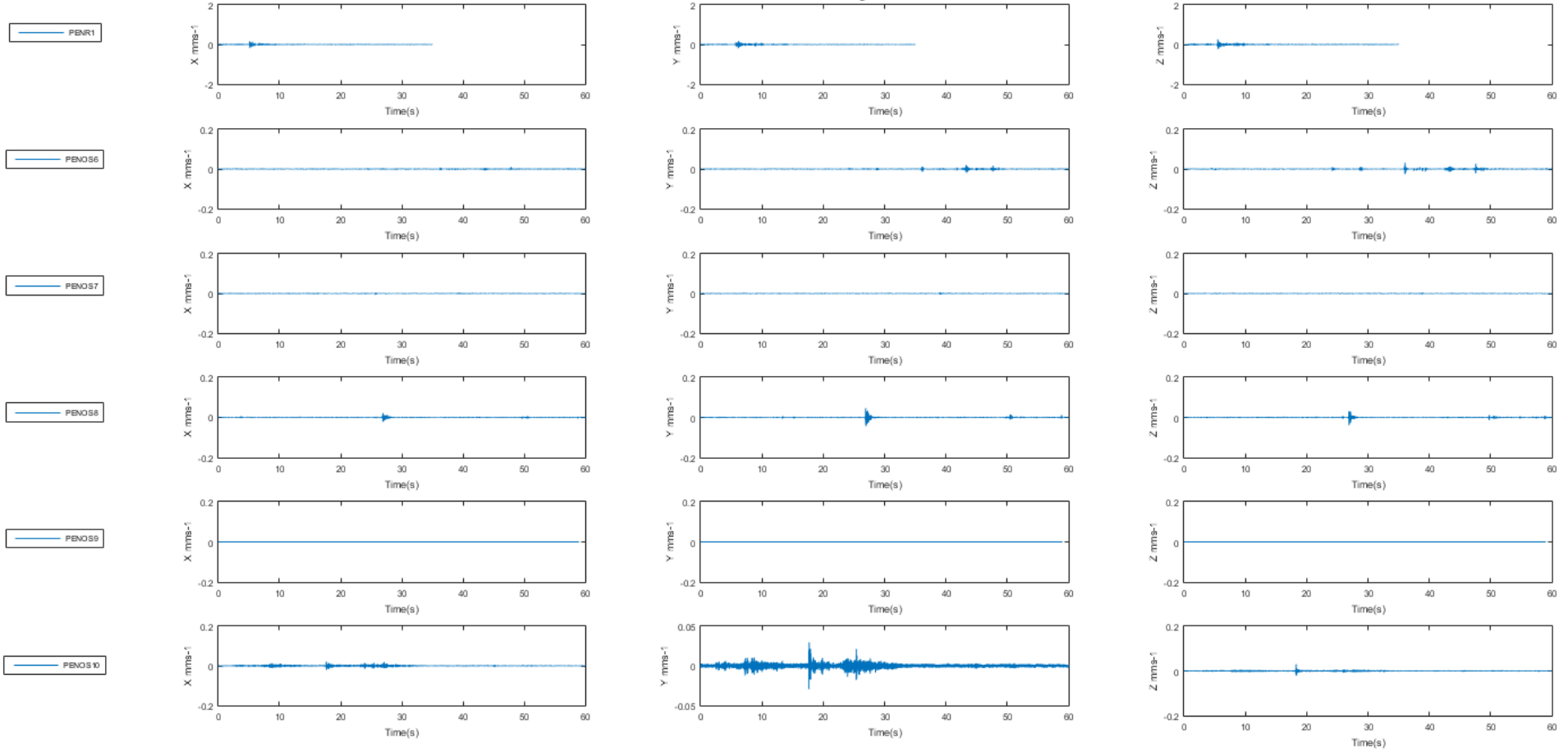


FIGURE 3.4: PEN\_OS 1 - 5 14-11-S1-186

**Peak Particle Velocity - Event ID: 14-11-S1-186**



**FIGURE 3.5: PEN\_OS 6 - 10 14-11-S1-186**

### Event ID: 14-11-S1-186

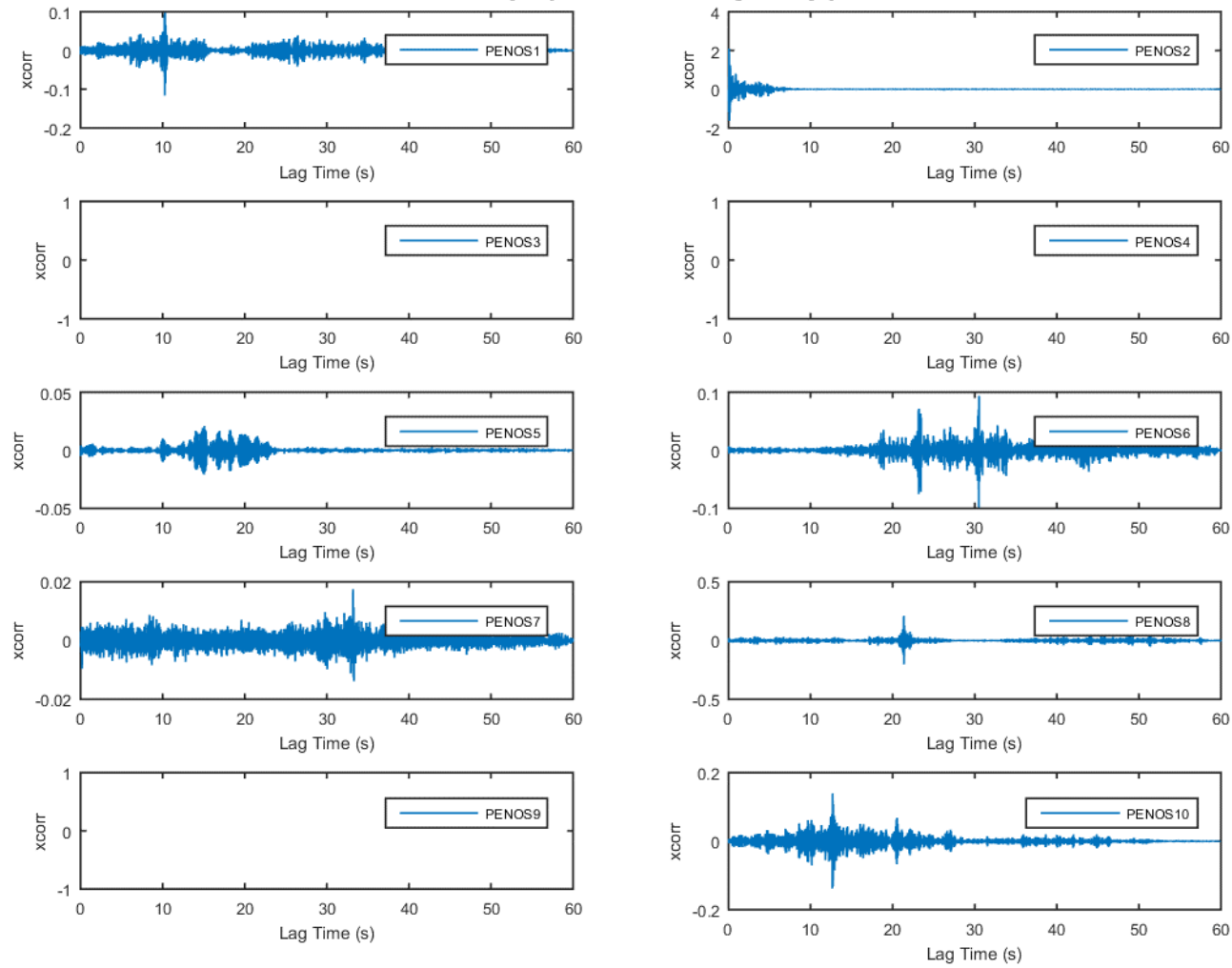
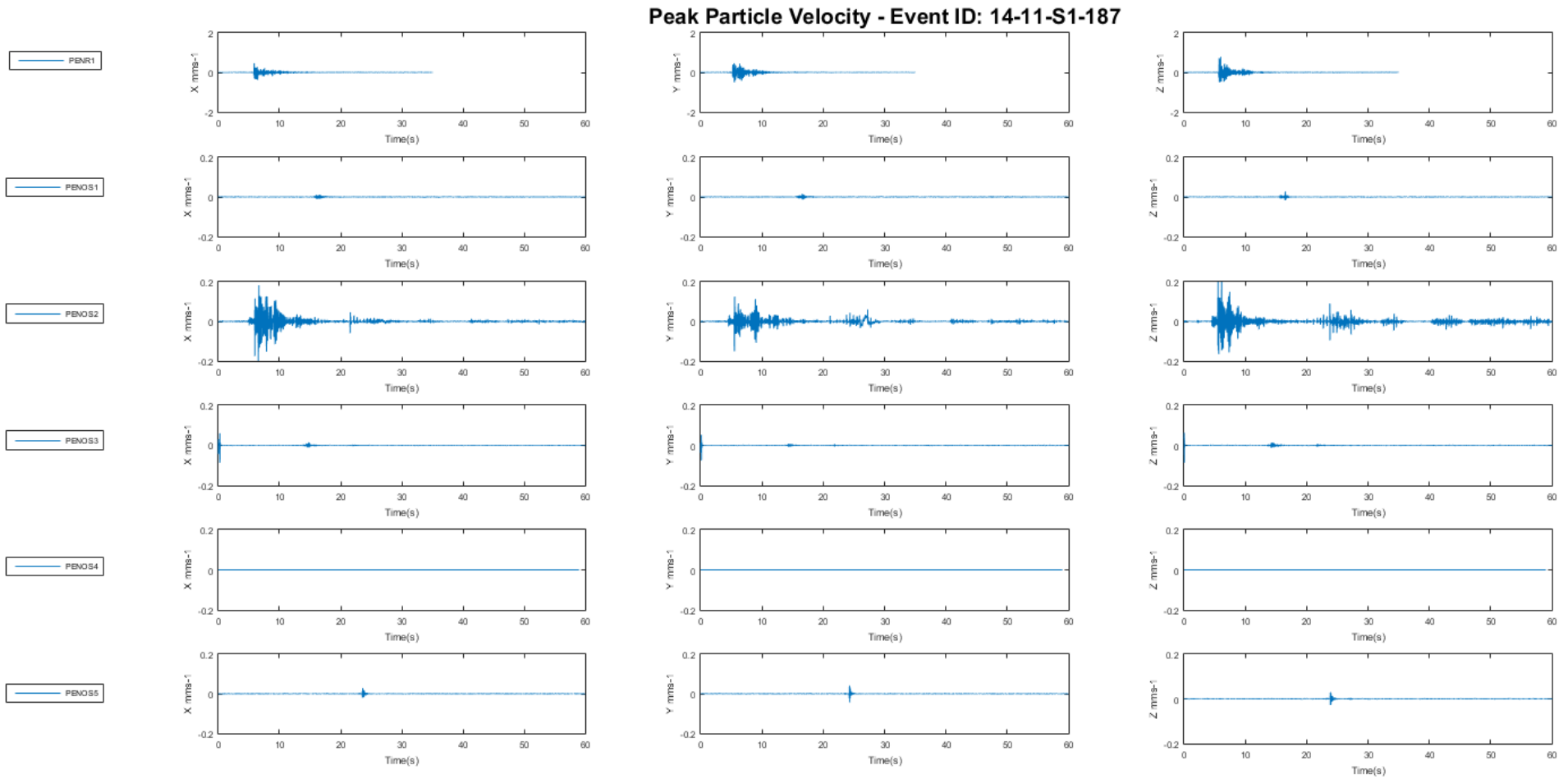


FIGURE 3.6: CROSS CORRELATION PEN\_OS 1 - 10 14-11-S1-186



**FIGURE 3.7: PEN\_OS 1 - 5 14-11-S1-187**

Peak Particle Velocity - Event ID: 14-11-S1-187

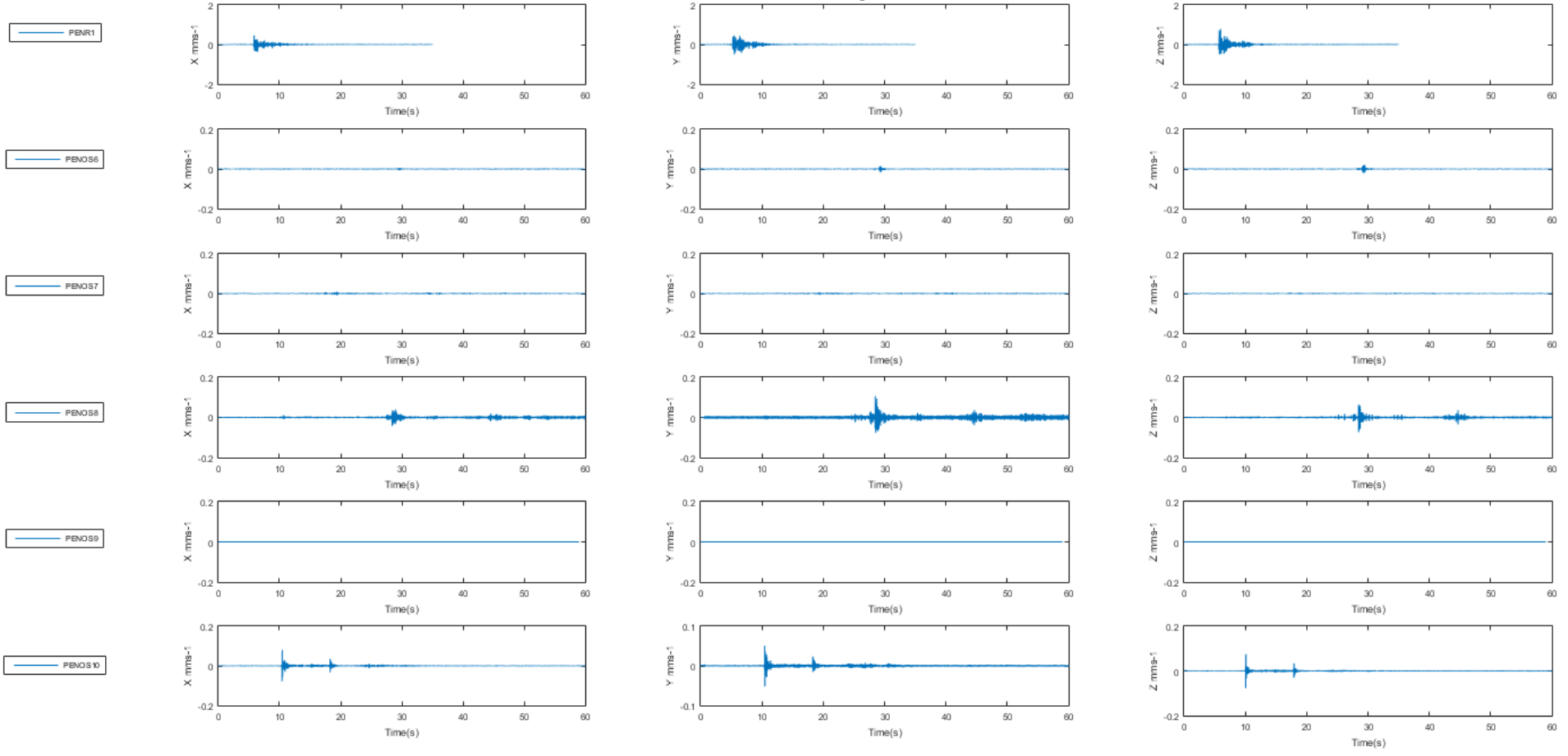


FIGURE 3.8: PEN\_OS 6 - 10 14-11-S1-187

### Event ID: 14-11-S1-187

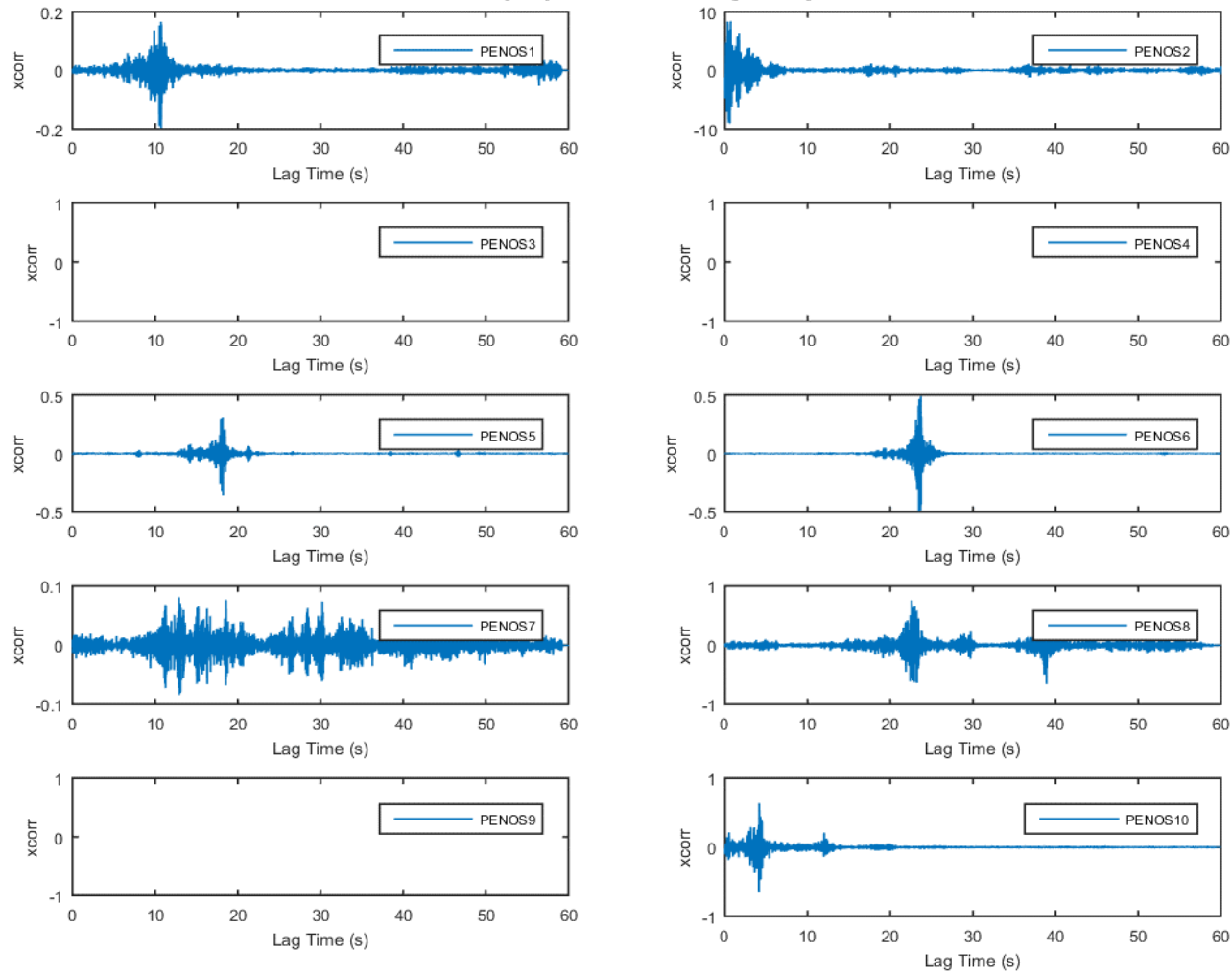


FIGURE 3.9: CROSS CORRELATION PEN\_OS 1 - 10 14-11-S1-187



Peak Particle Velocity - Event ID: 14-11-S1-189

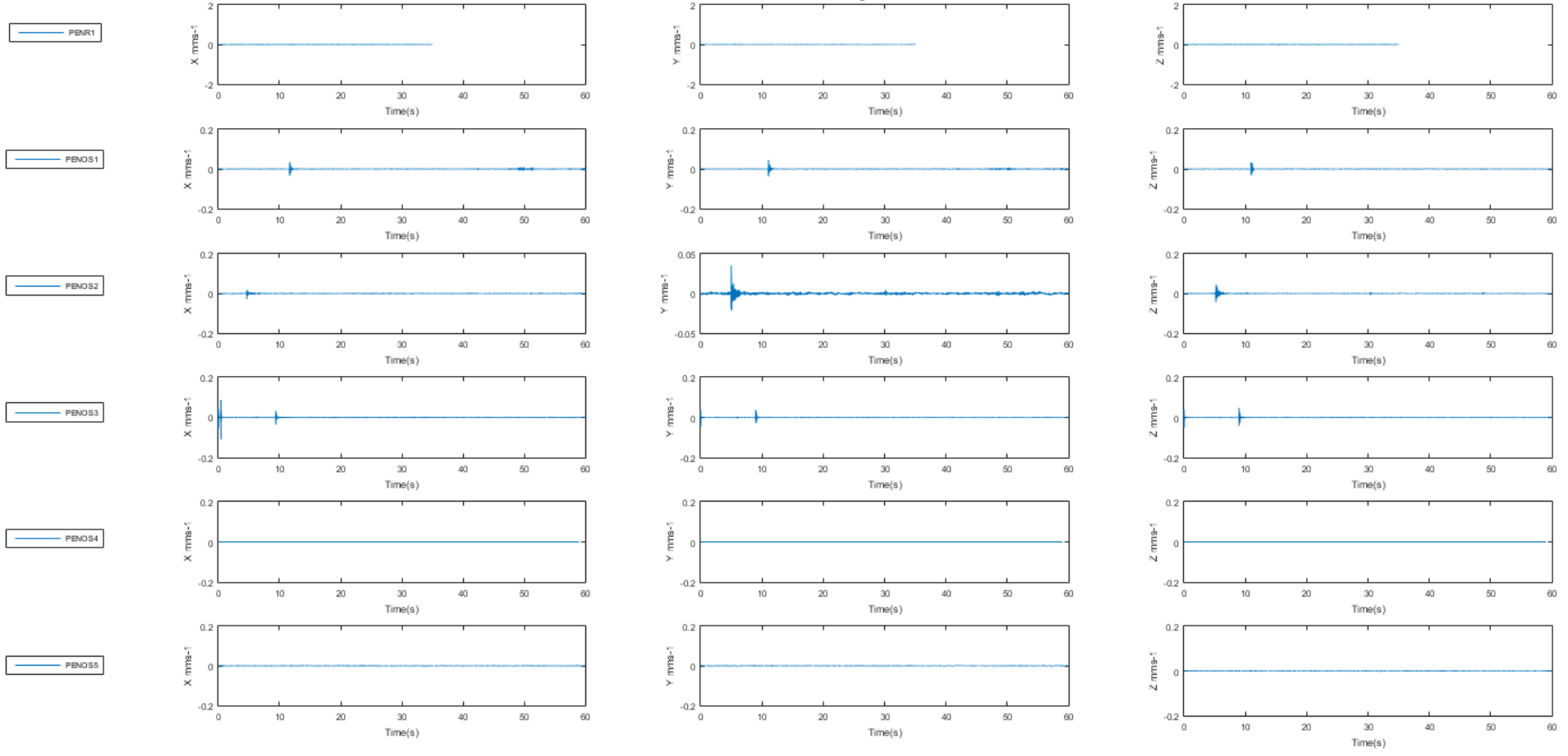


FIGURE 3.10: PEN\_OS 1 - 5 14-11-S1-189

Peak Particle Velocity - Event ID: 14-11-S1-189

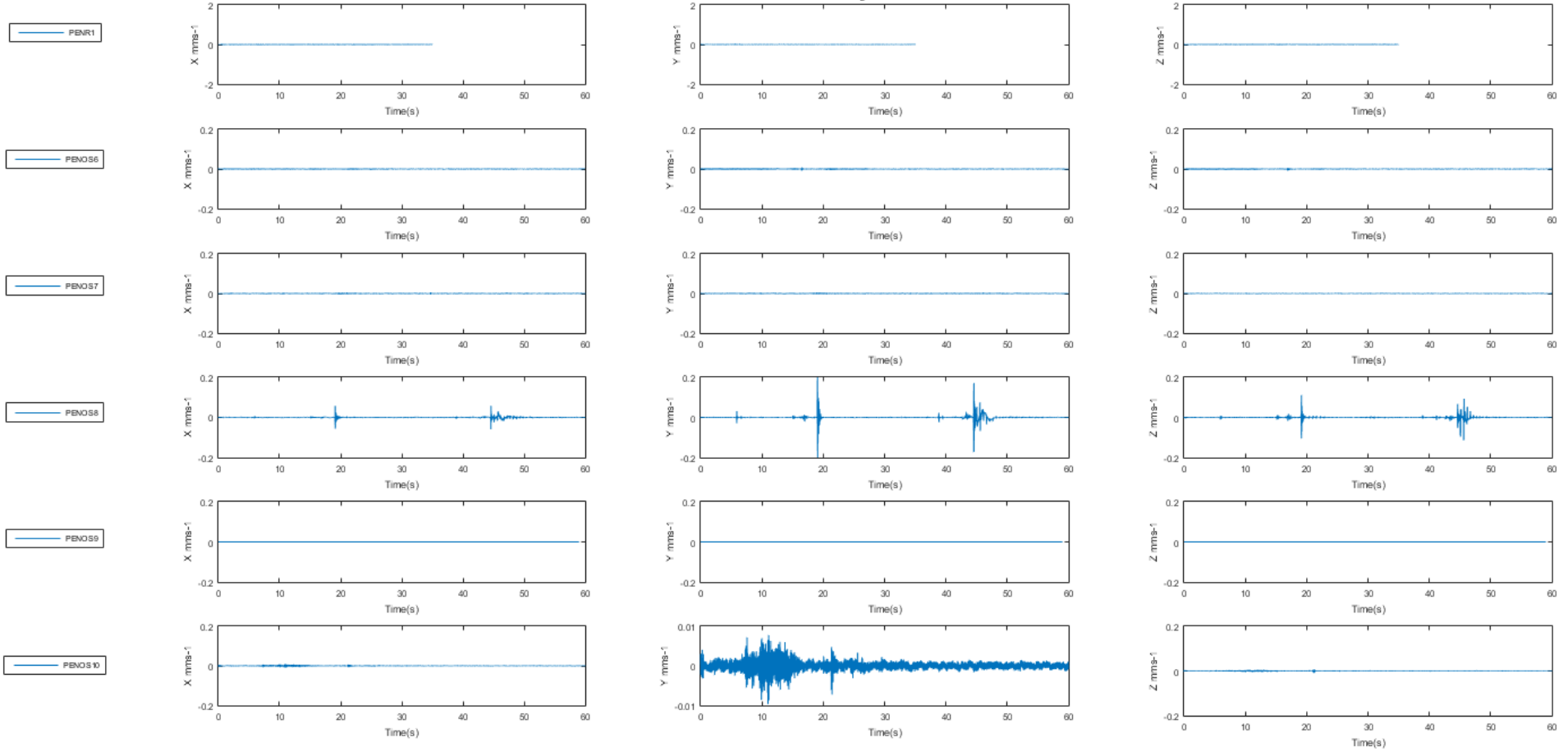


FIGURE 3.11: PEN\_OS 6 - 10 14-11-S1-189

### Event ID: 14-11-S1-189

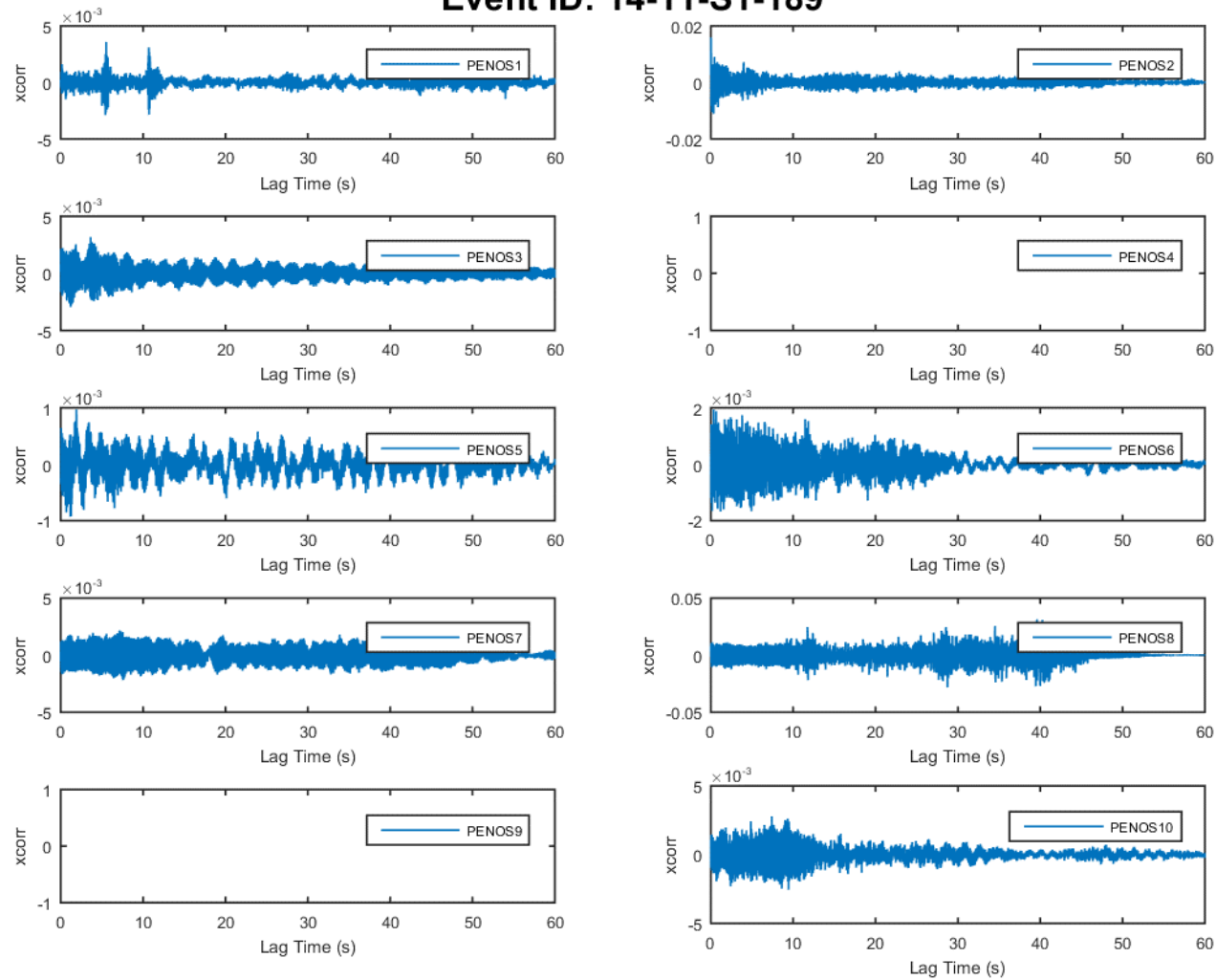


FIGURE 3.12: CROSS CORRELATION PEN\_OS 1 - 10 14-11-S1-189

Peak Particle Velocity - Event ID: 14-11-S1-35, S2-69

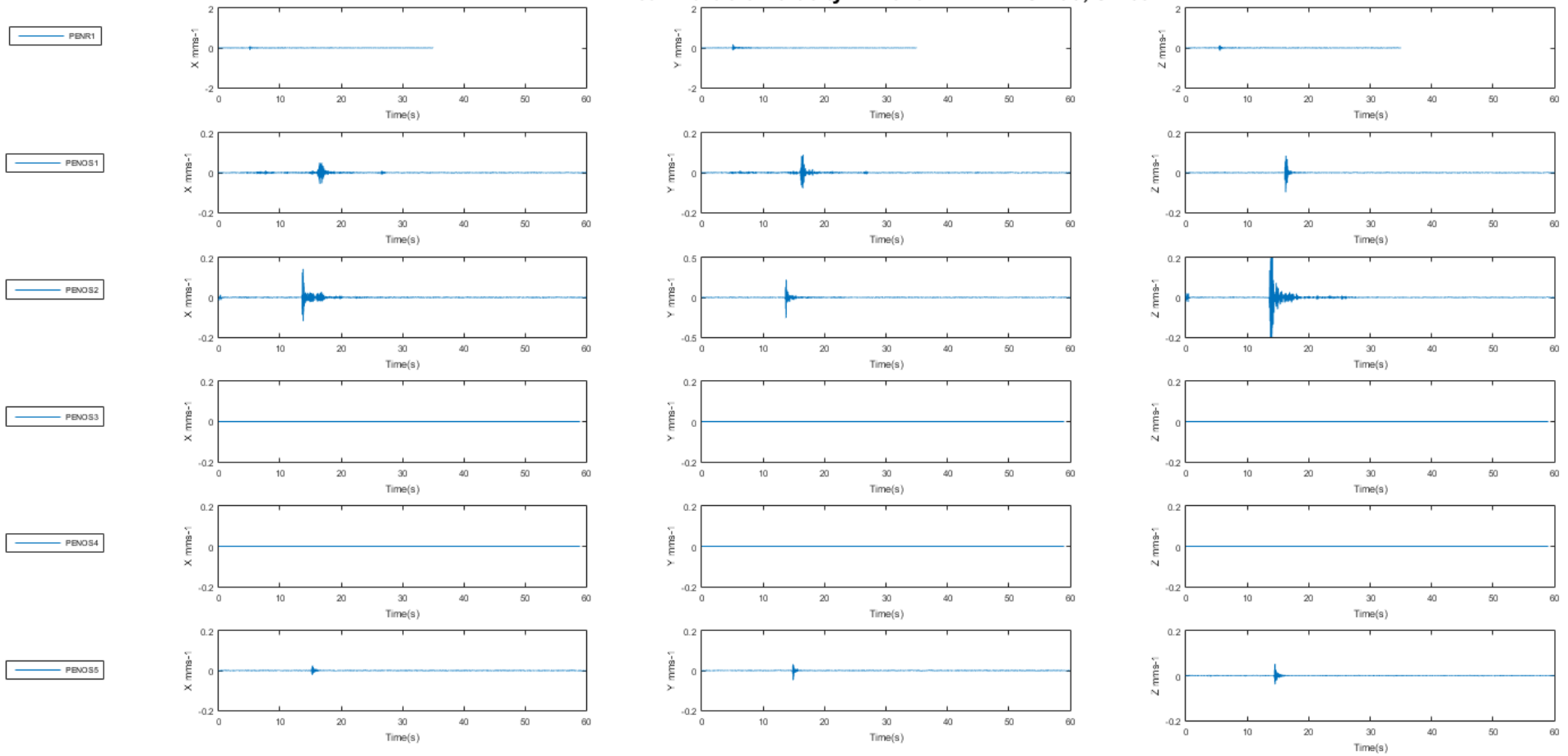
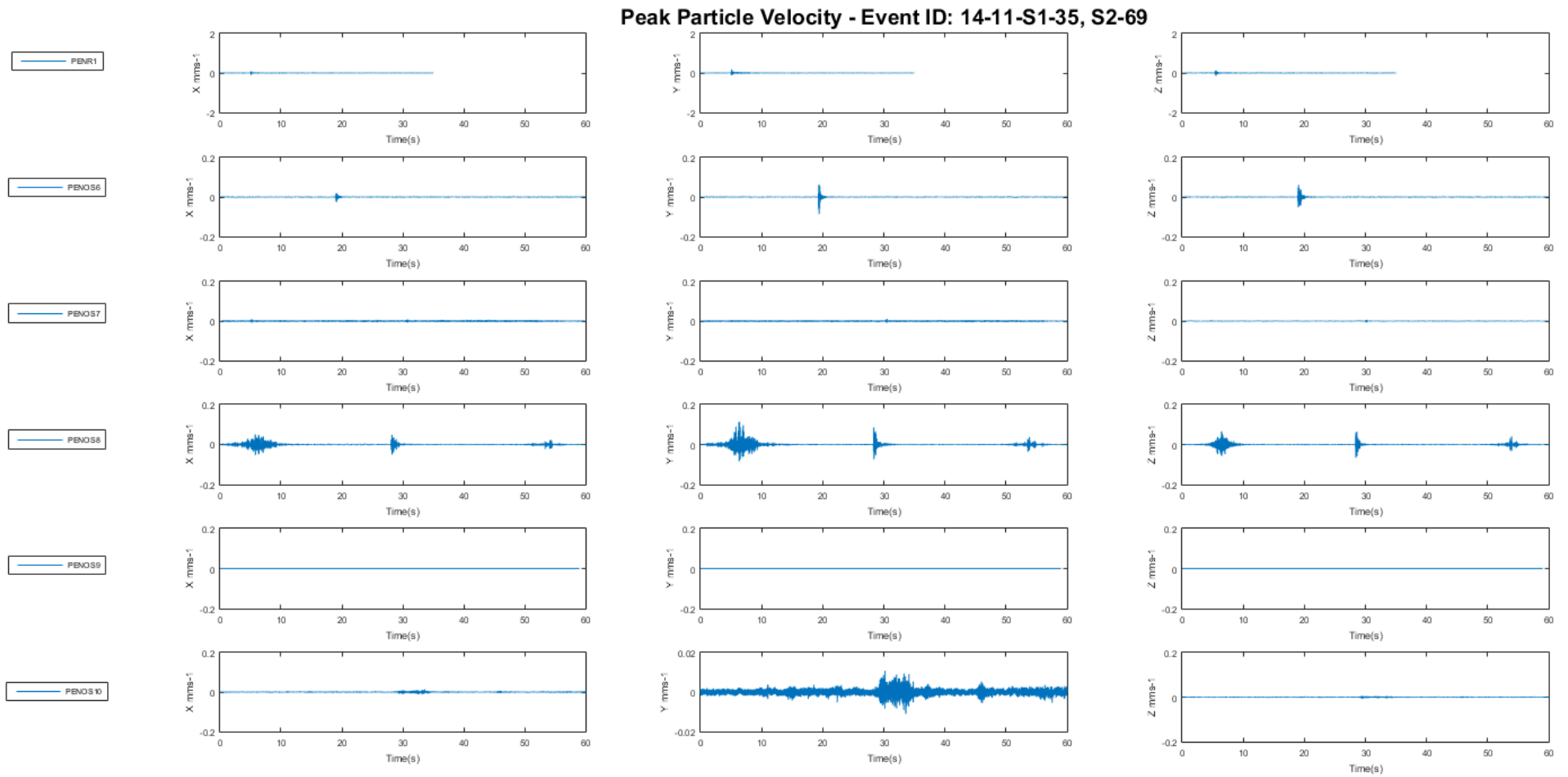


FIGURE 3.13: PEN\_OS 1 - 5 14-11-S1-35, S2-69



**FIGURE 3.14: PEN\_OS 6 - 10 14-11-S1-35, S2-69**

### Event ID: 14-11-S1-35, S2-69

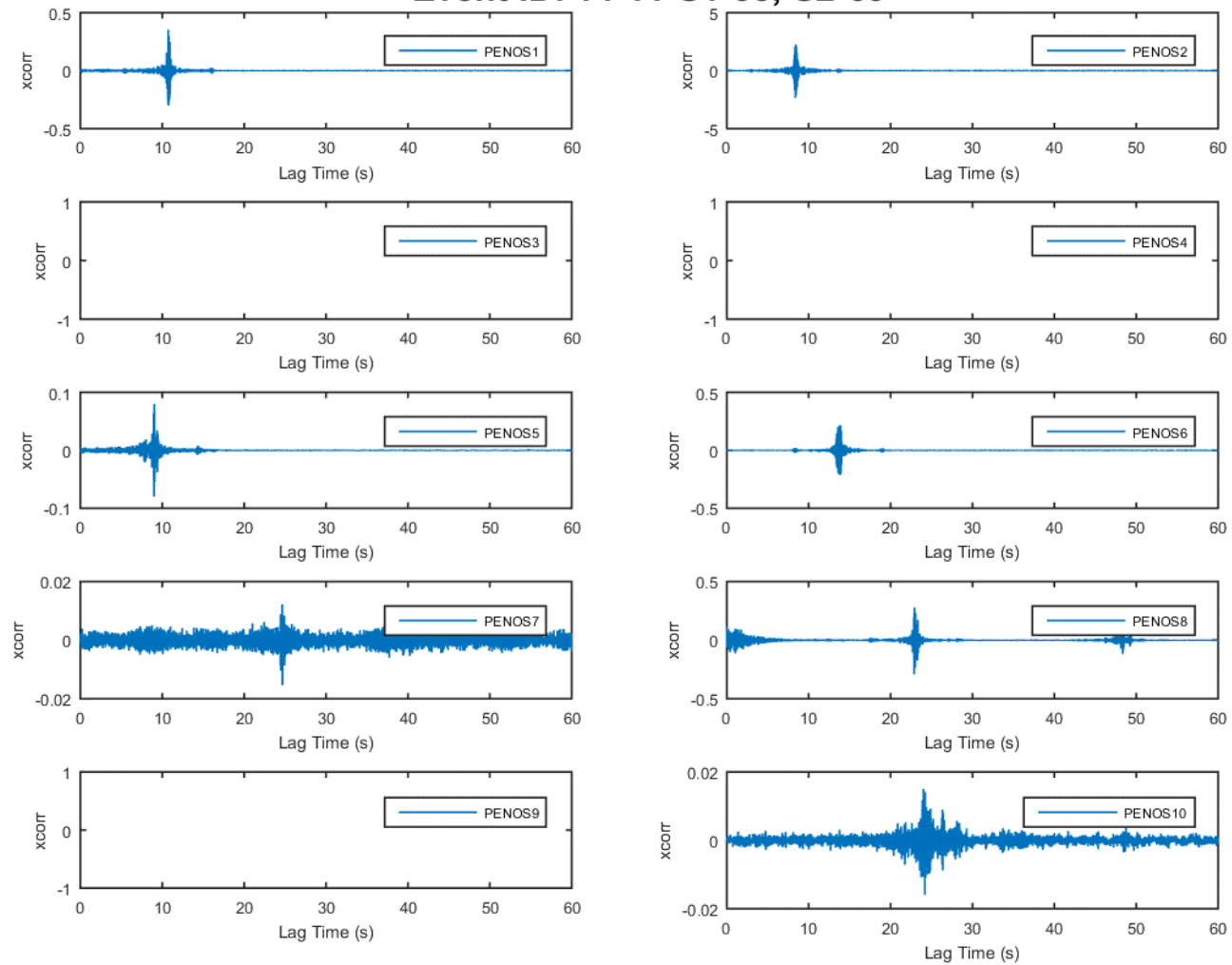


FIGURE 3.15: CROSS CORRELATION PEN\_OS 1 - 10 14-11-S1-35, S2-69

Peak Particle Velocity - Event ID: 14-11-S1-35, S2-69

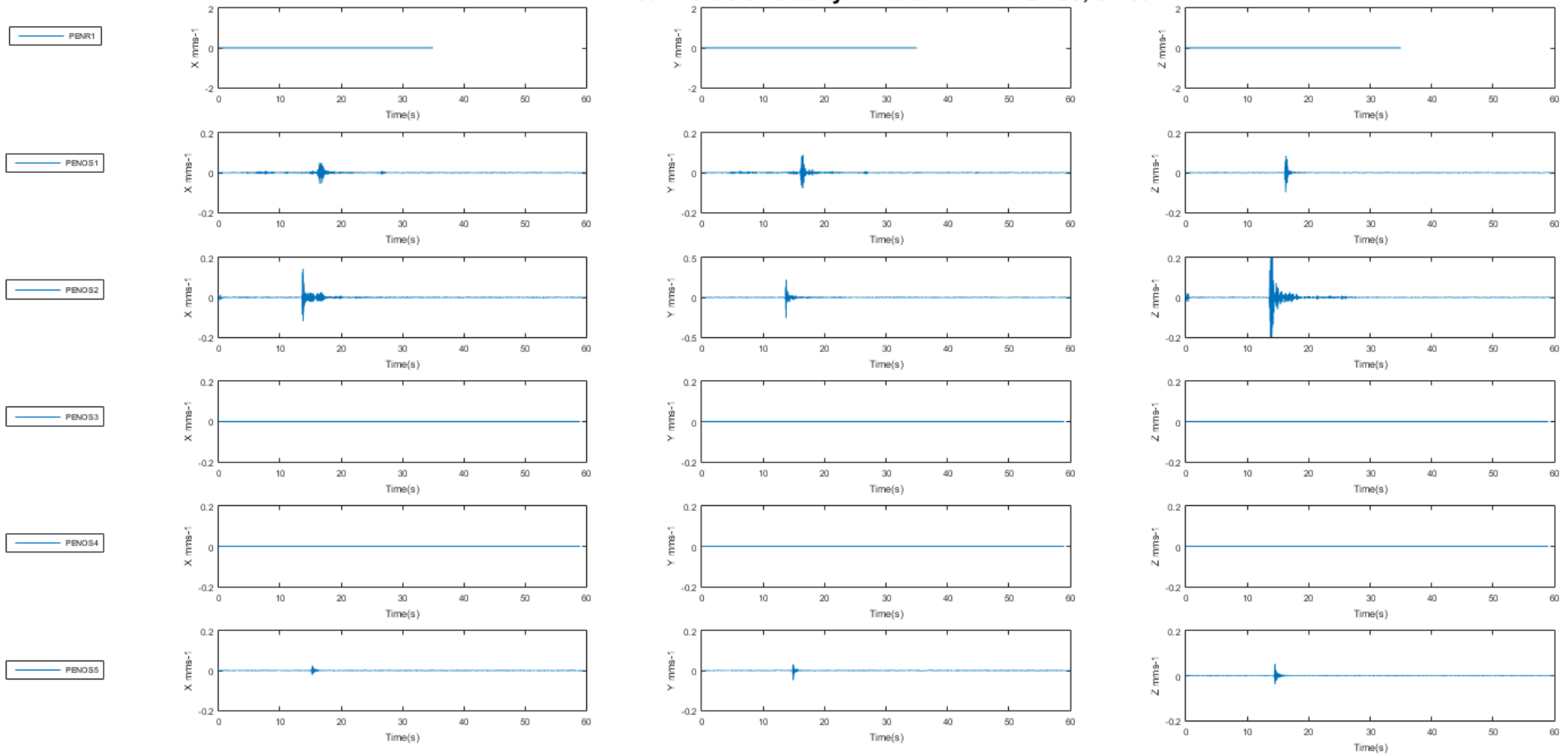
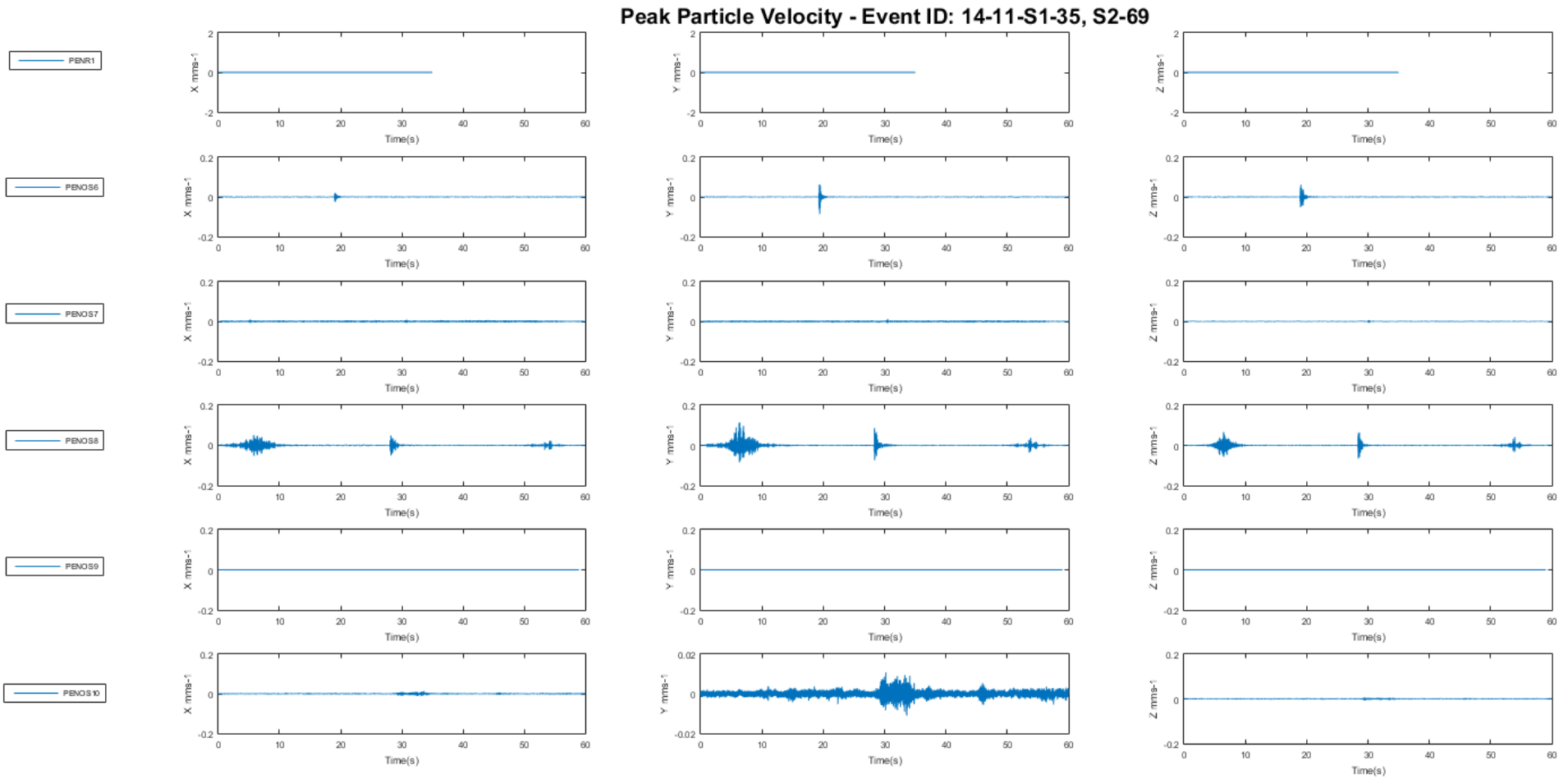


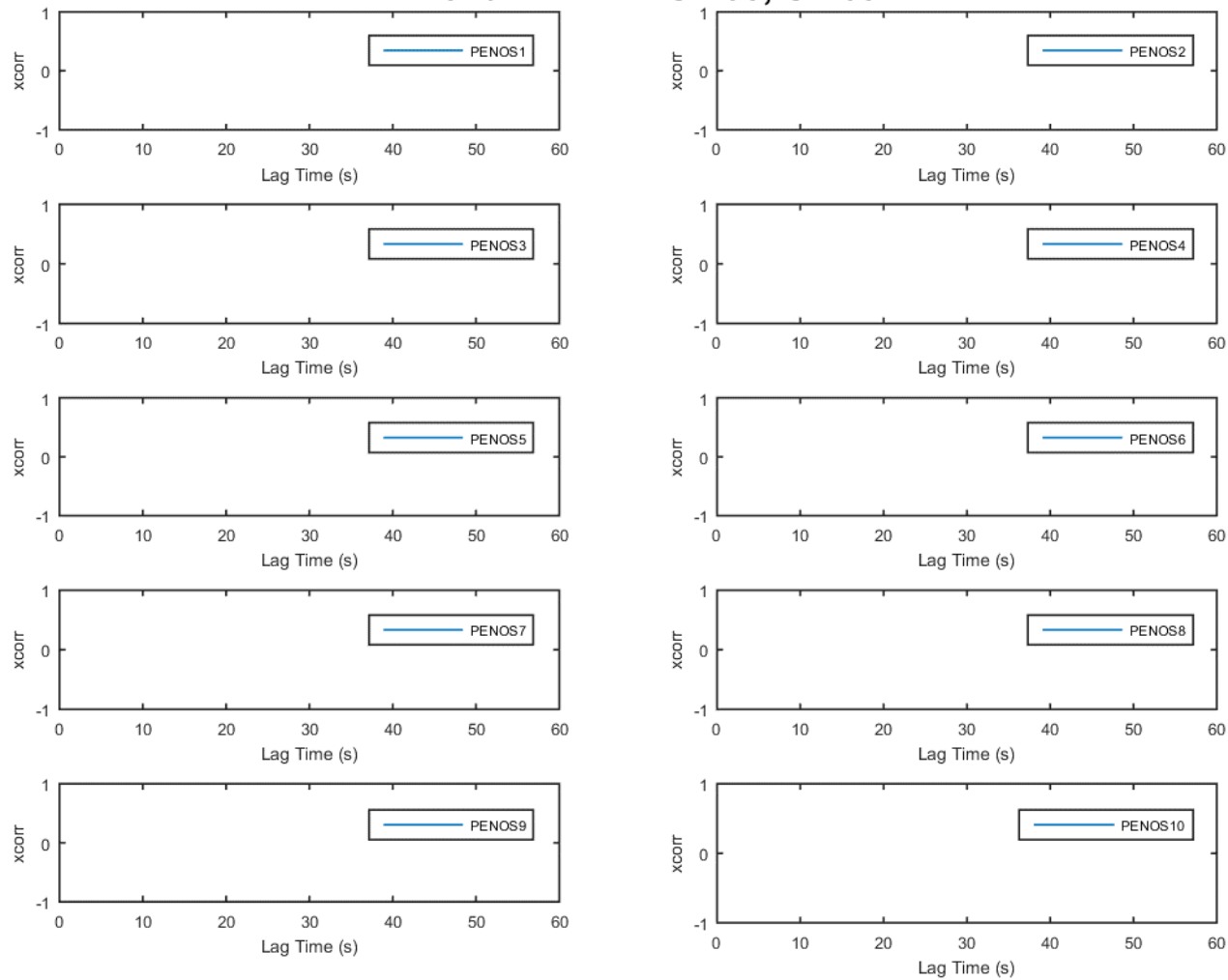
FIGURE 3.16: PEN\_OS 1 - 5 14-11-S1-35, S2-69



**FIGURE 3.17: PEN\_OS 6 - 10 14-11-S1-35, S2-69**



### Event ID: 14-11-S1-35, S2-69



**FIGURE 3.18: CROSS CORRELATION PEN\_OS 1 - 10 14-11-S1-35, S2-69**

Peak Particle Velocity - Event ID: 14-11-S1-36, S2-70

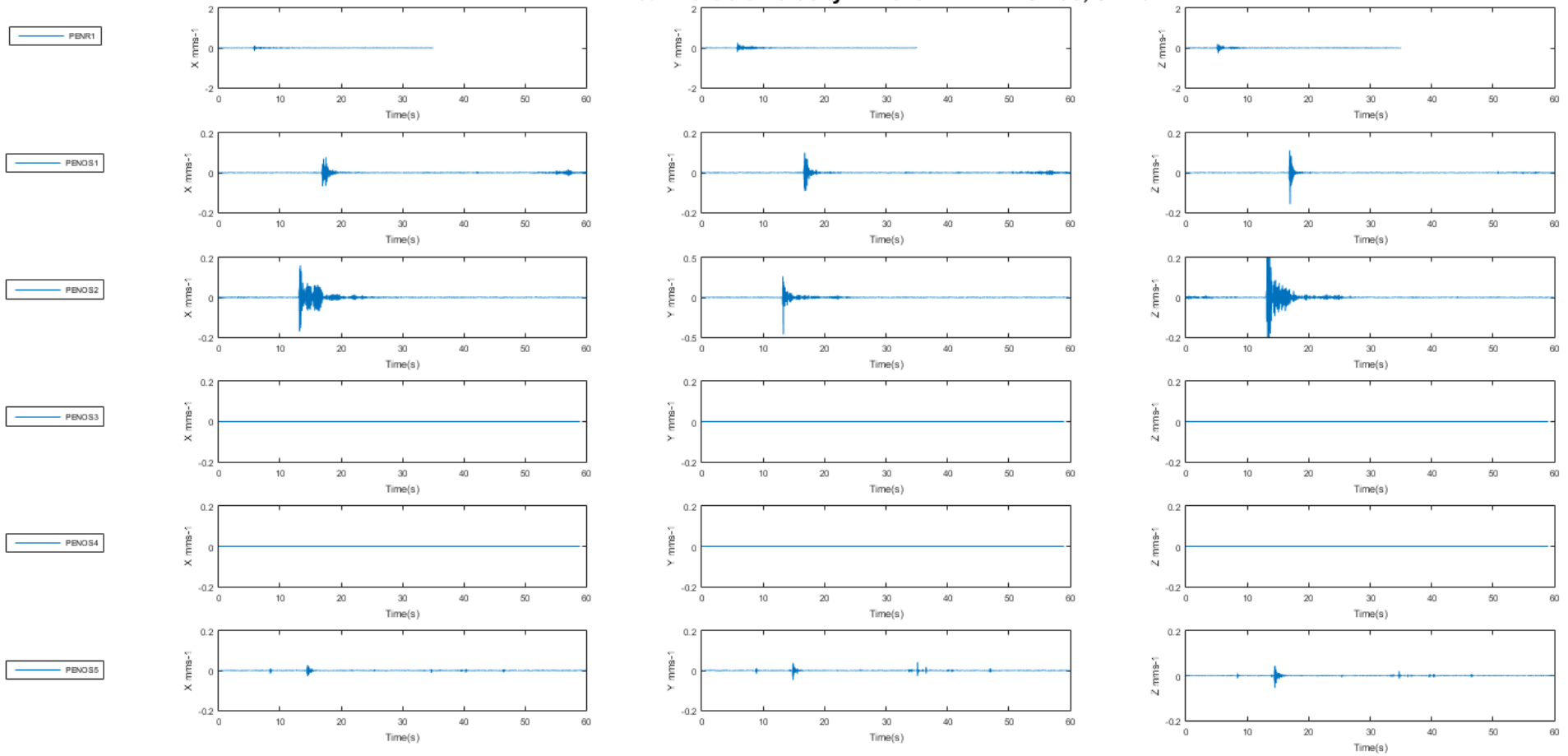


FIGURE 3.19: PEN\_OS 1 - 5 14-11-S1-36, S2-70

Peak Particle Velocity - Event ID: 14-11-S1-36, S2-70

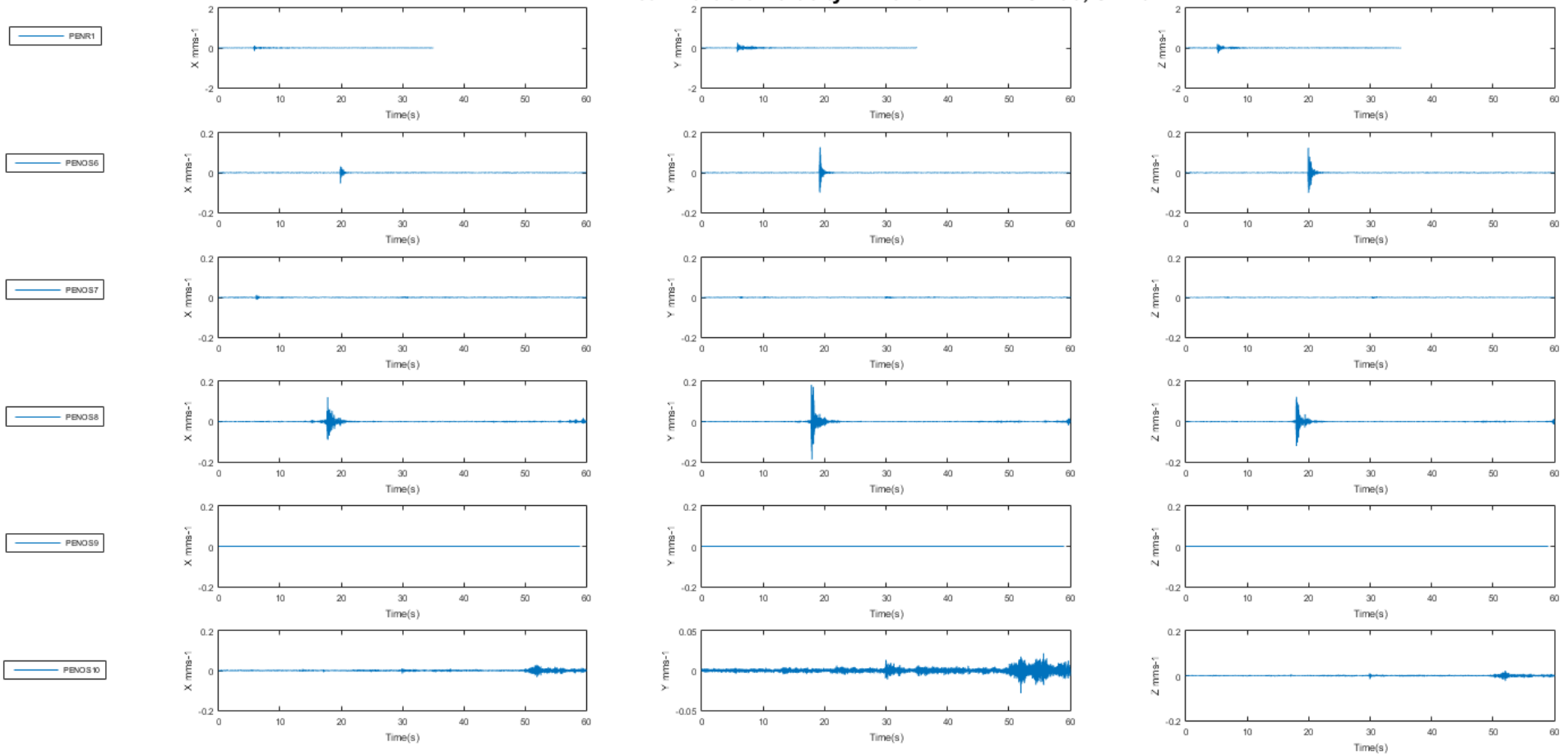


FIGURE 3.20: PEN\_OS 6 - 10 14-11-S1-36, S2-70

### Event ID: 14-11-S1-36, S2-70

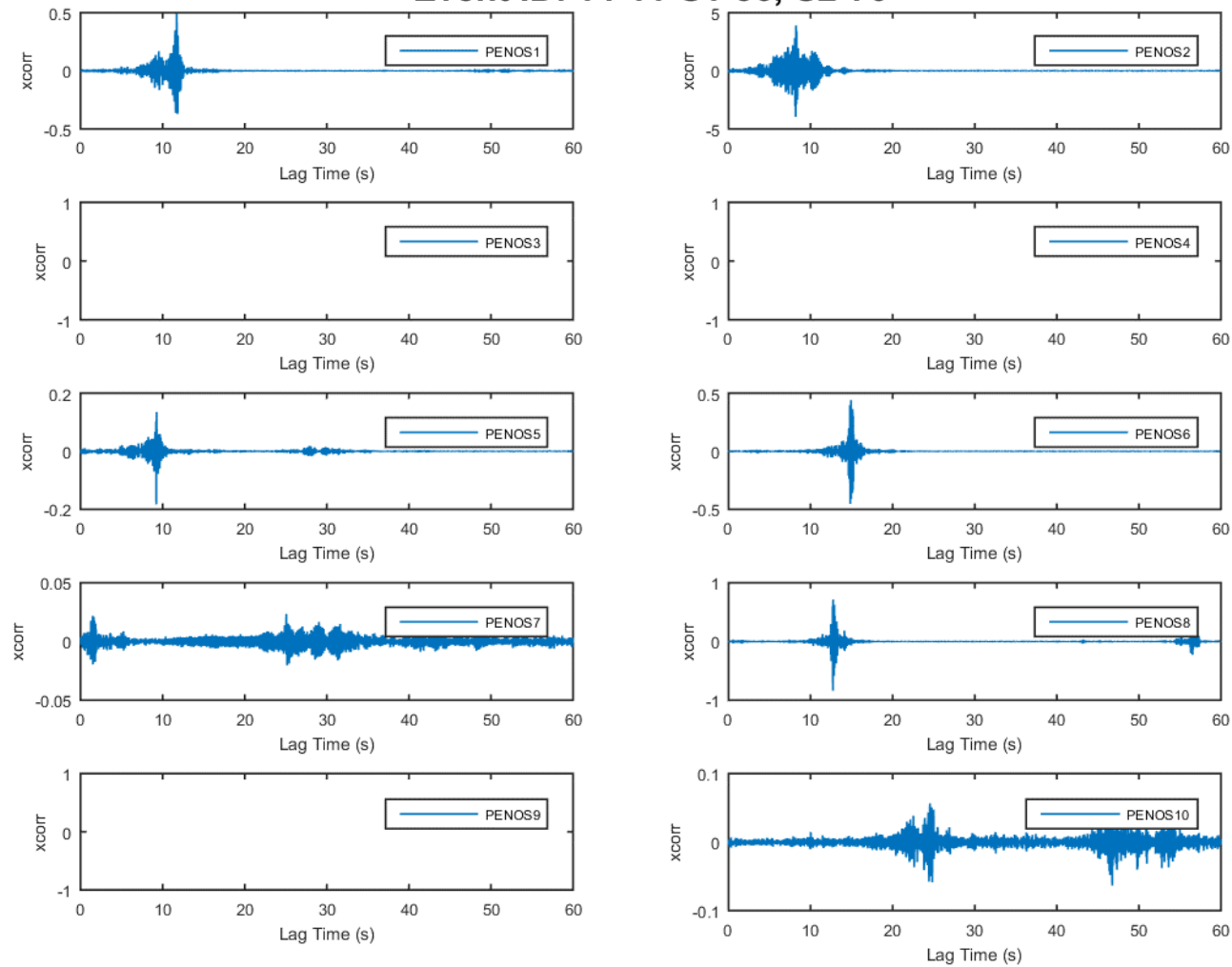


FIGURE 3.21: CROSS CORRELATION PEN\_OS 1 - 10 14-11-S1-36, S2-70

Peak Particle Velocity - Event ID: 14-11-S1-36, S2-70

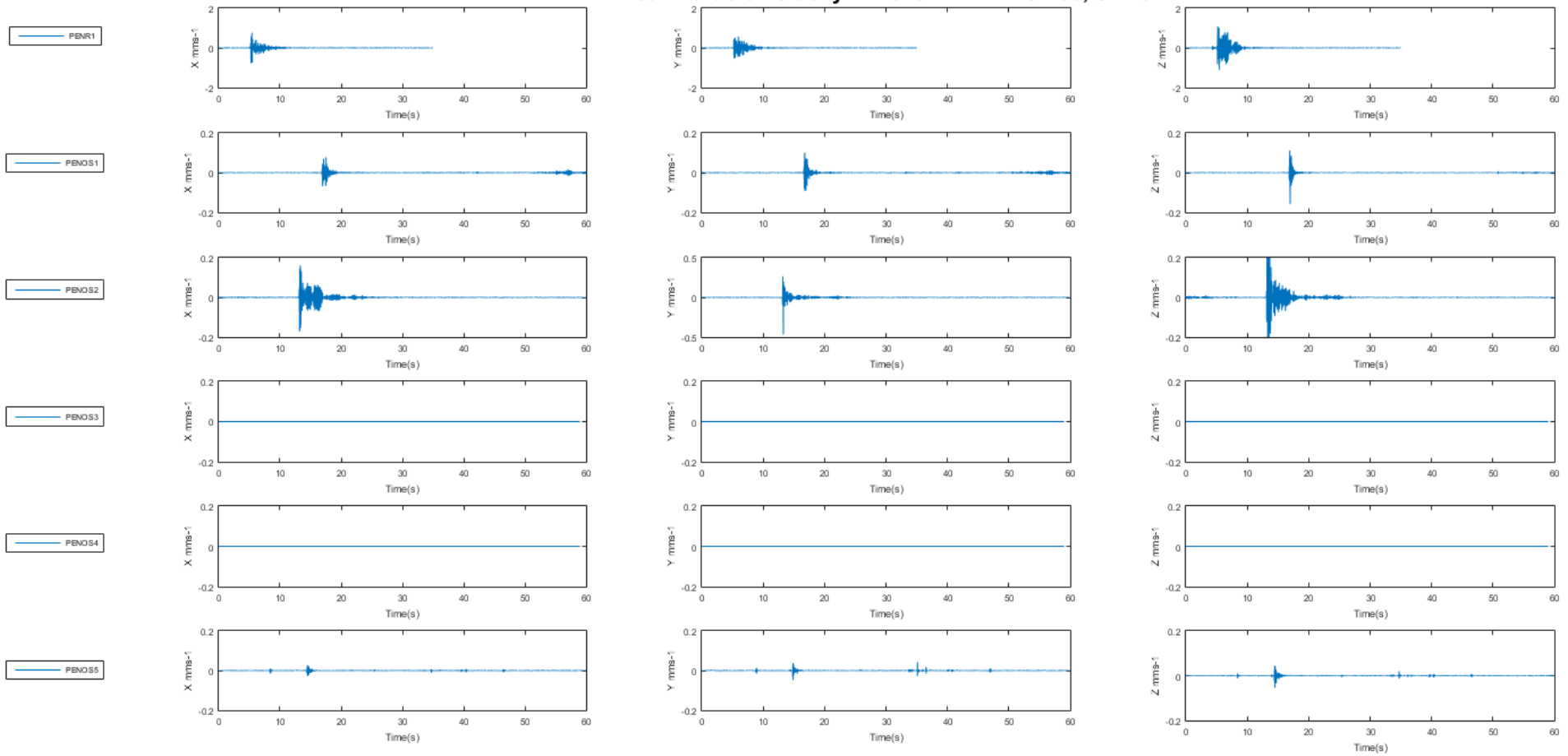


FIGURE 3.22: PEN\_OS 1 - 5 14-11-S1-36, S2-70

Peak Particle Velocity - Event ID: 14-11-S1-36, S2-70

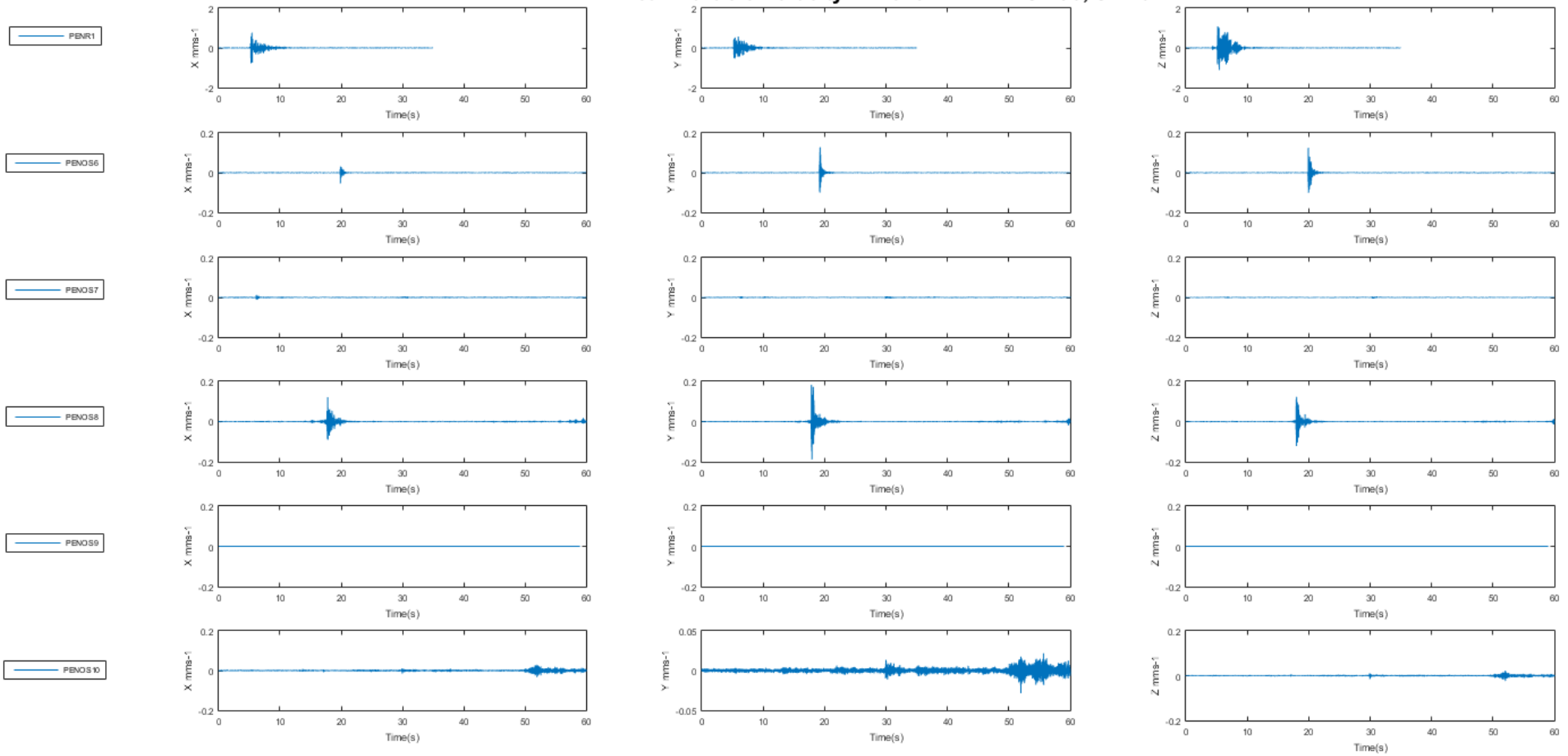


FIGURE 3.23: PEN\_OS 6 - 10 14-11-S1-36, S2-70

### Event ID: 14-11-S1-36, S2-70

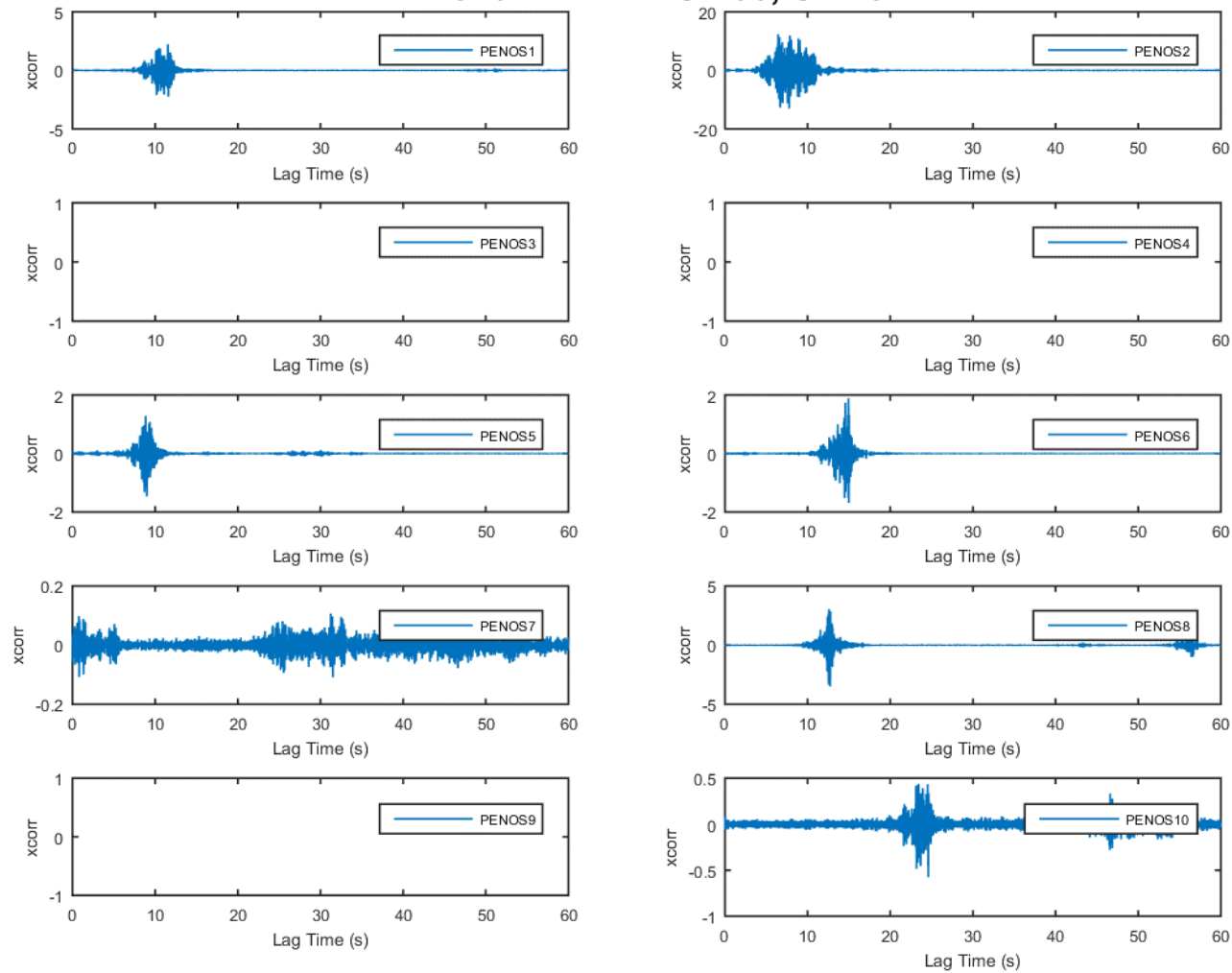
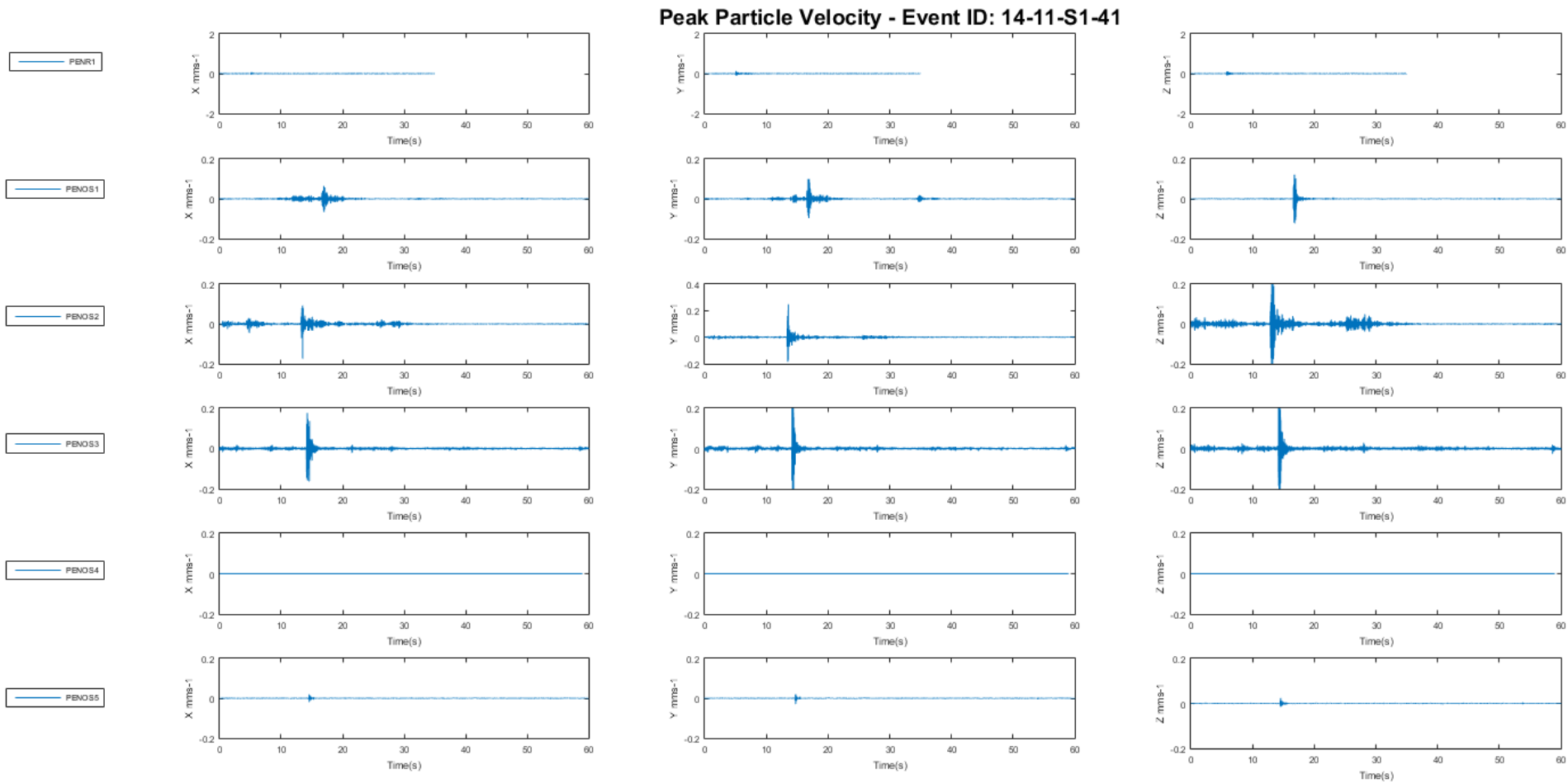


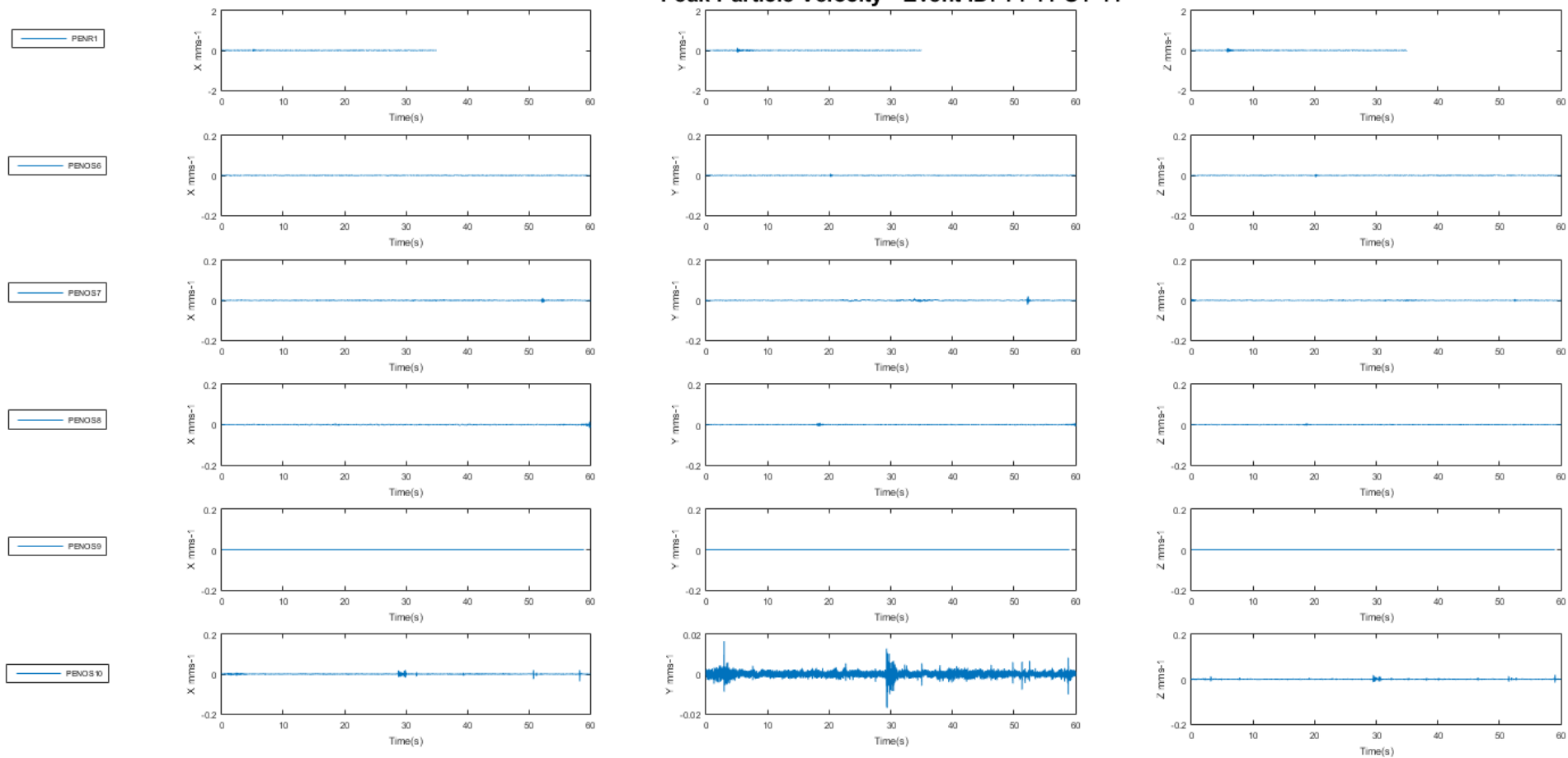
FIGURE 3.24: CROSS CORRELATION PEN\_OS 1 - 10 14-11-S1-36, S2-70



**FIGURE 3.25: PEN\_OS 1 - 5 14-11-S1-41**



**Peak Particle Velocity - Event ID: 14-11-S1-41**



**FIGURE 3.26: PEN\_OS 6 - 10 14-11-S1-41**

### Event ID: 14-11-S1-41

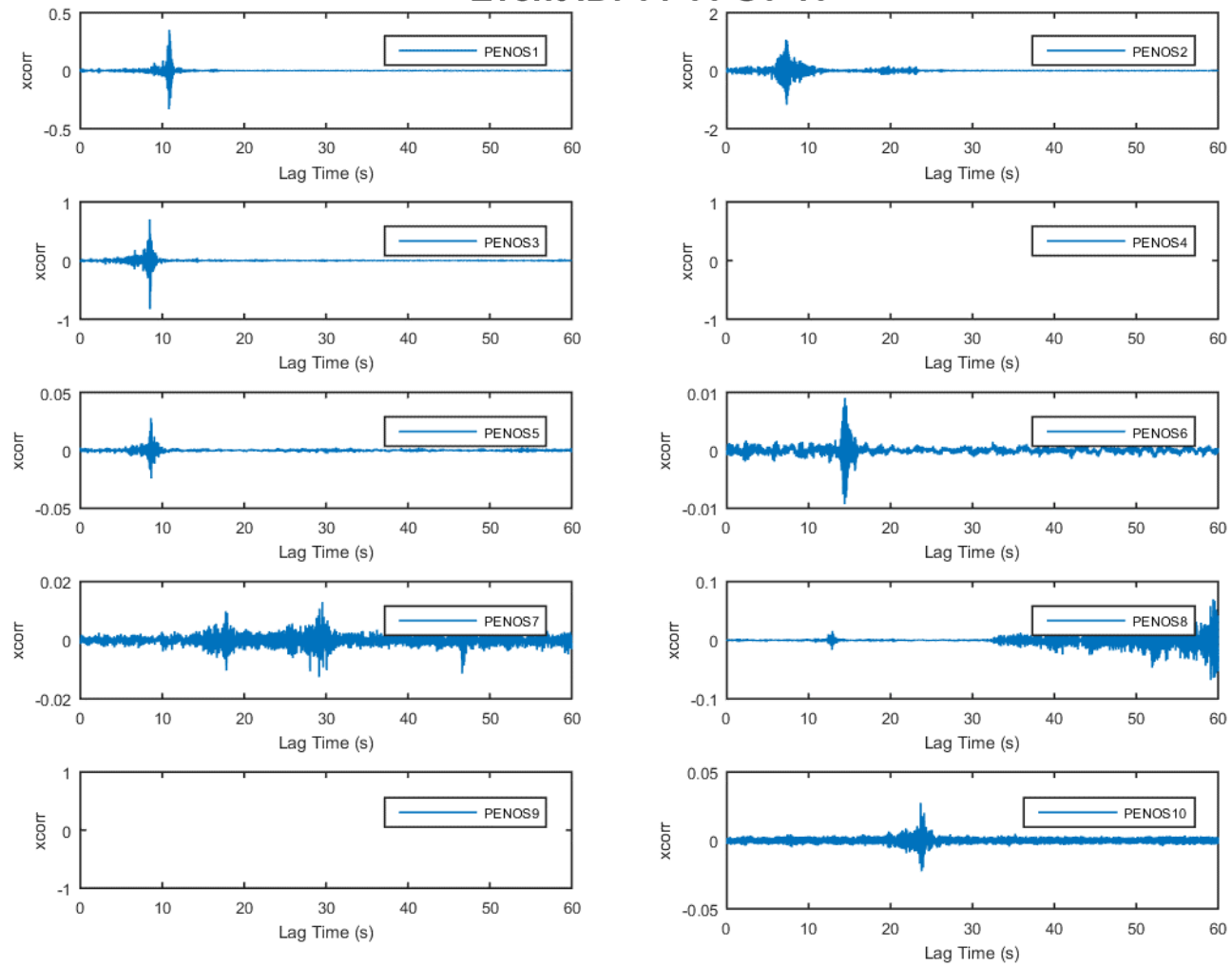
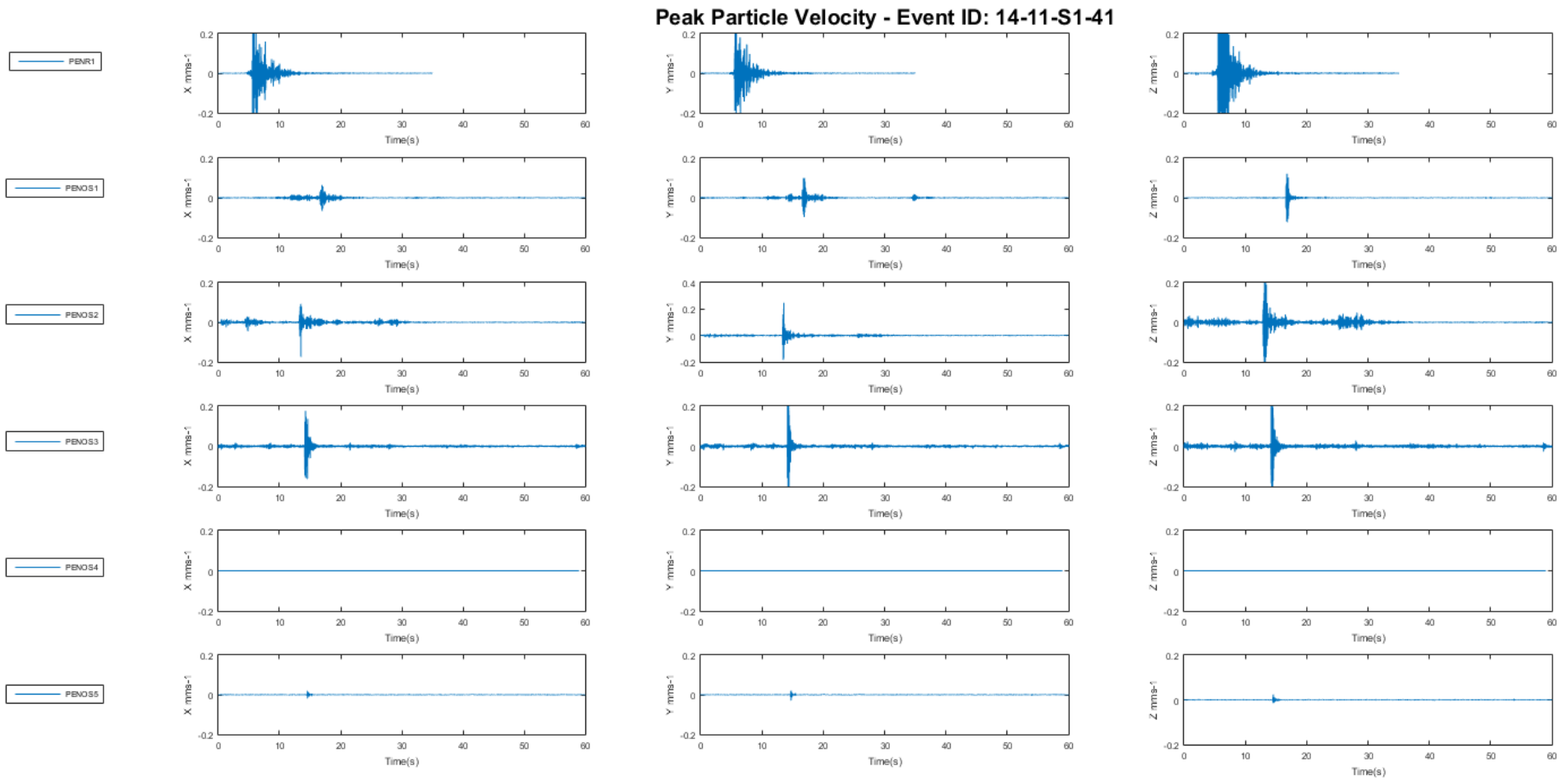
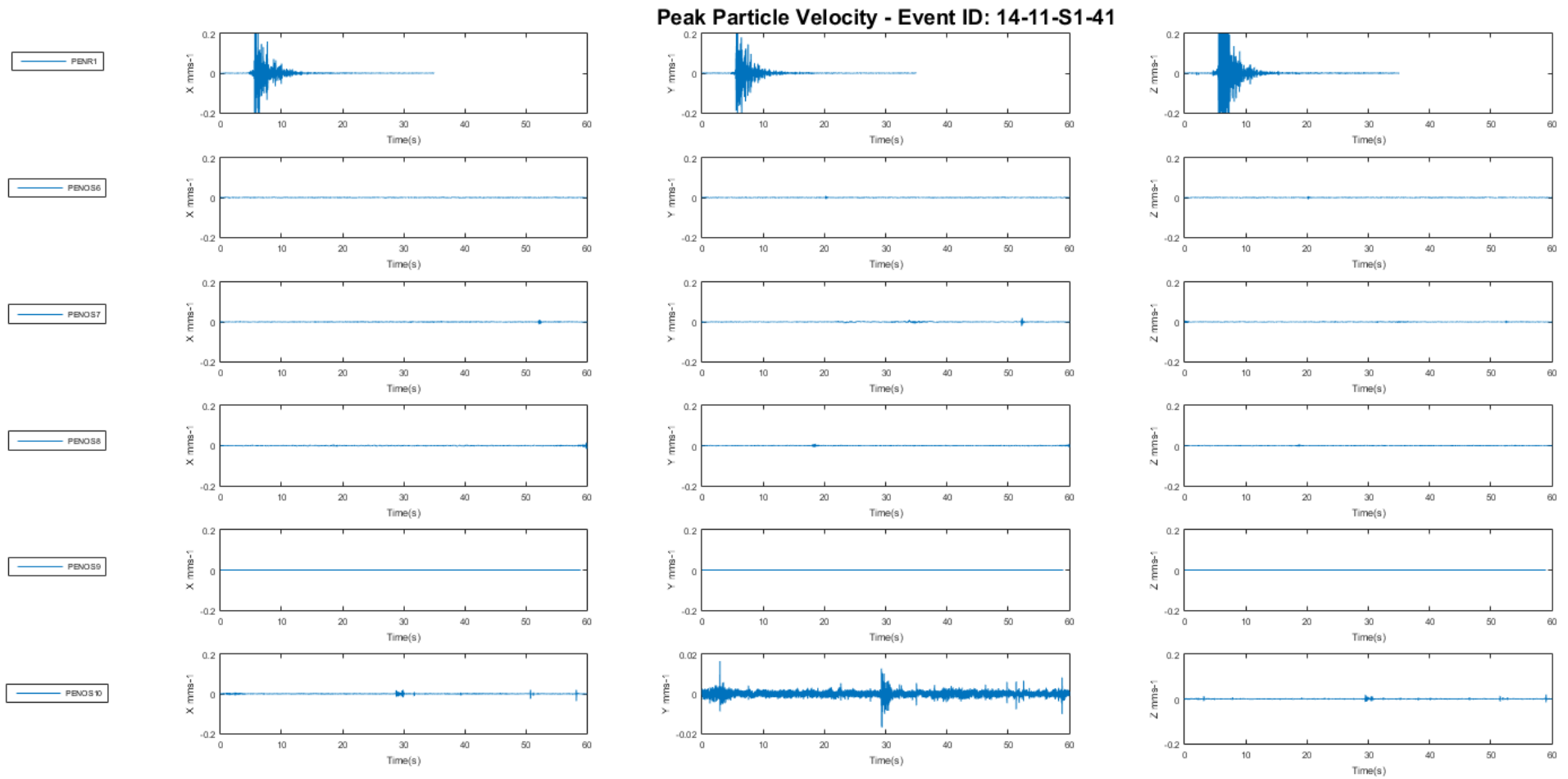


FIGURE 3.27: CROSS CORRELATION PEN\_OS 1 - 10 14-11-S1-41



**FIGURE 3.28: PEN\_OS 1 - 5 14-11-S1-41**



**FIGURE 3.29: PEN\_OS 6 - 10 14-11-S1-41**

### Event ID: 14-11-S1-41

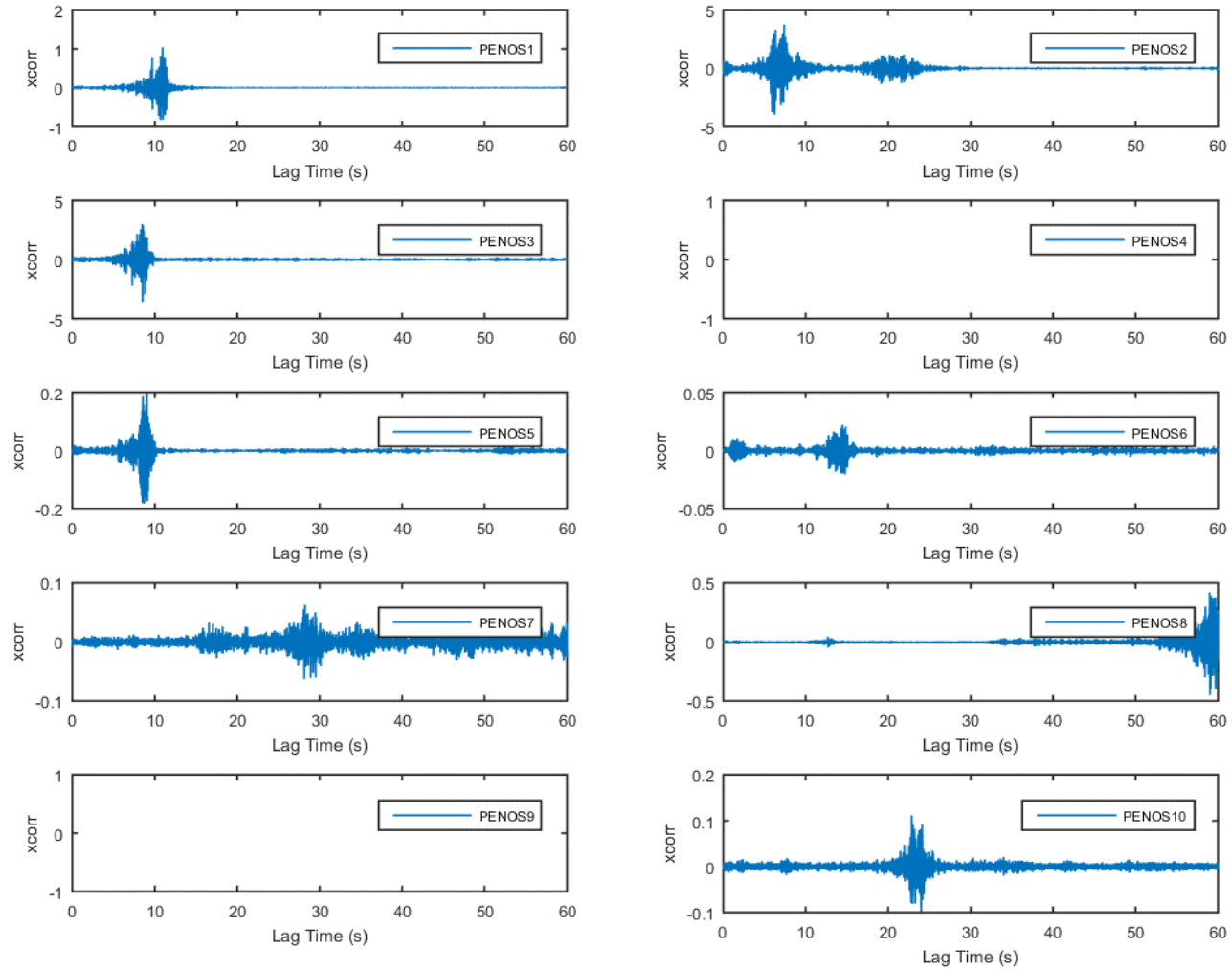
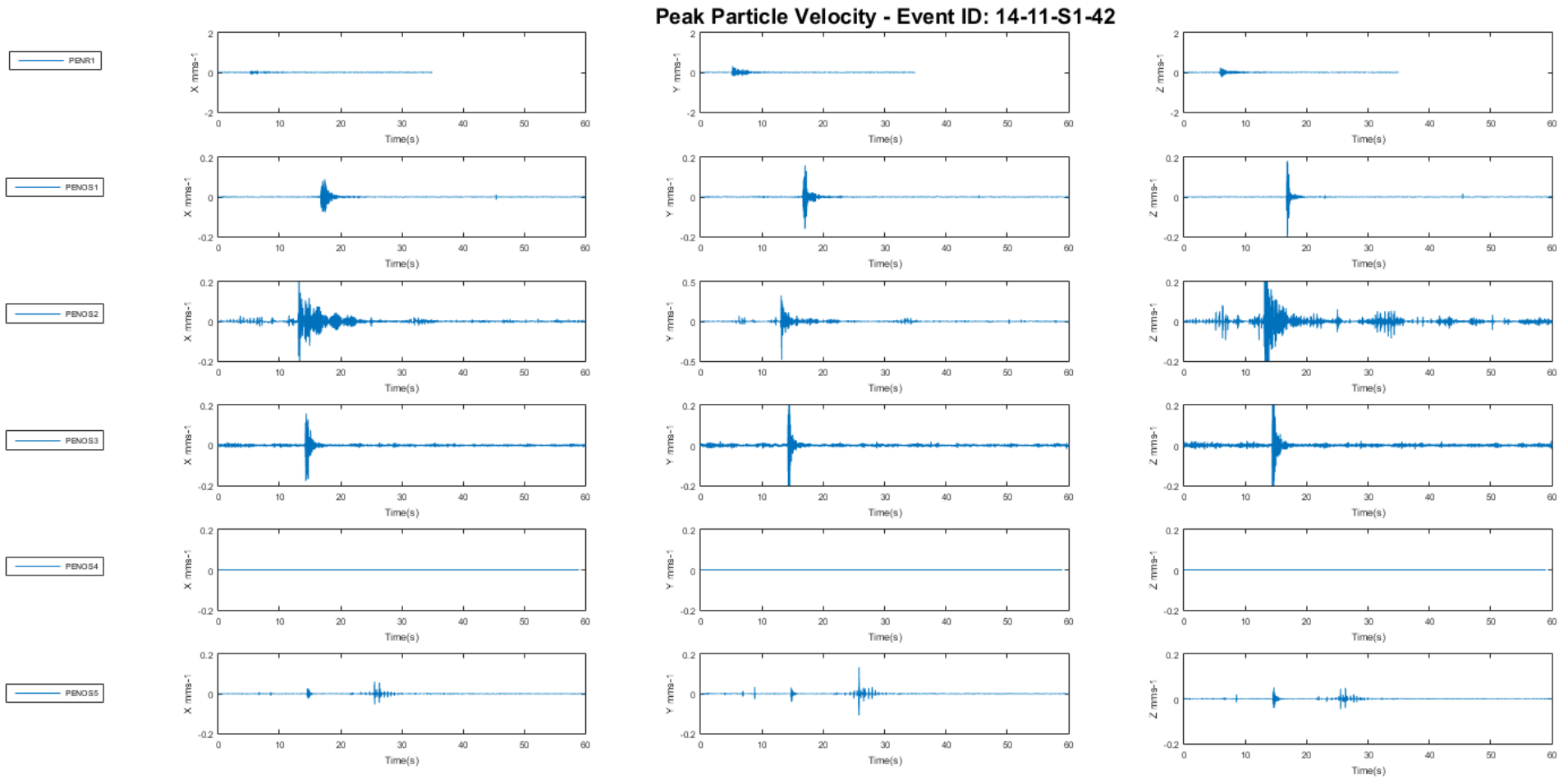
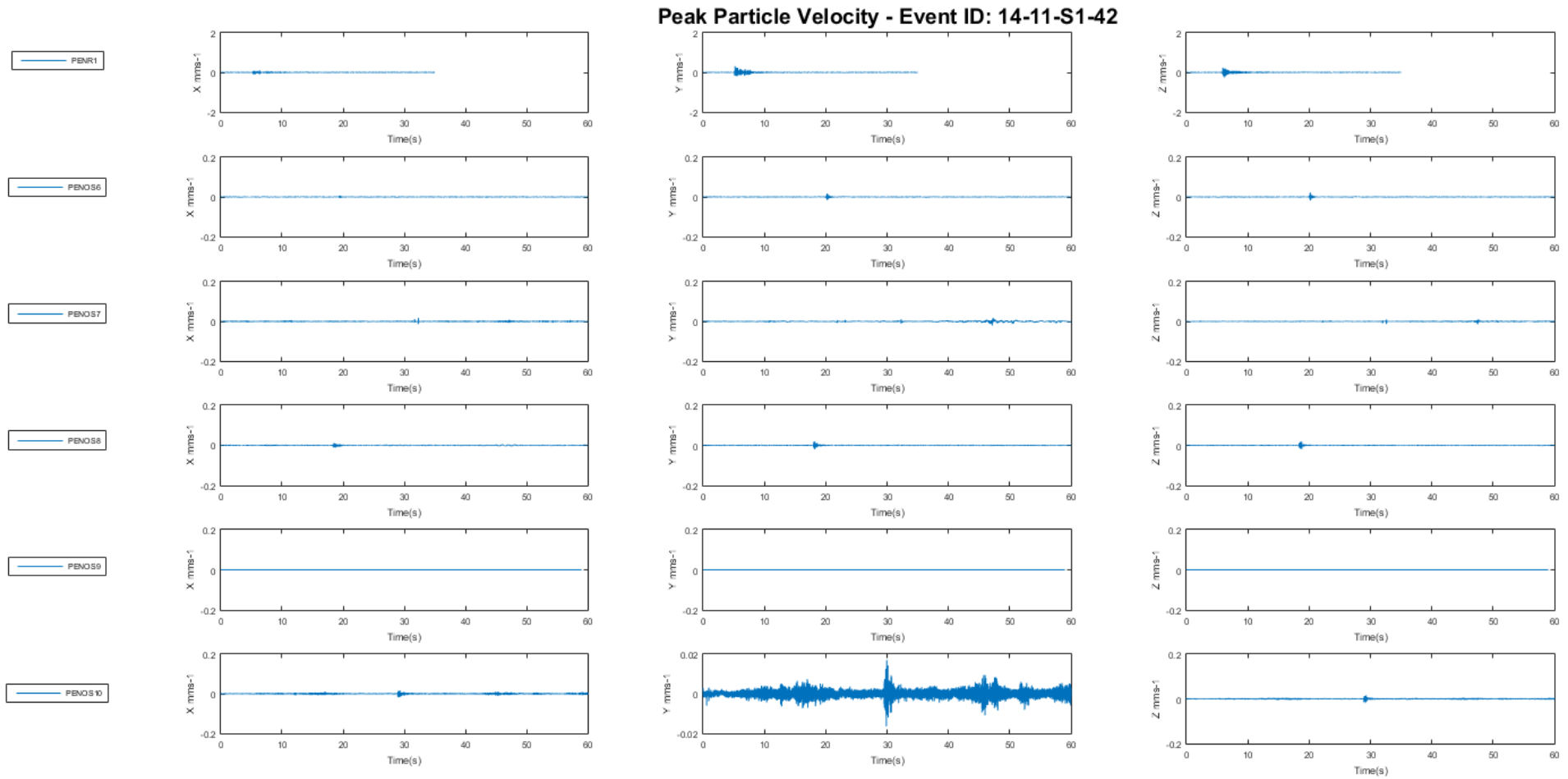


FIGURE 3.30: CROSS CORRELATION PEN\_OS 1 - 10 14-11-S1-41



**FIGURE 3.31: PEN\_OS 1 - 5 14-11-S1-42**



**FIGURE 3.32: PEN\_OS 6 - 10 14-11-S1-42**

### Event ID: 14-11-S1-42

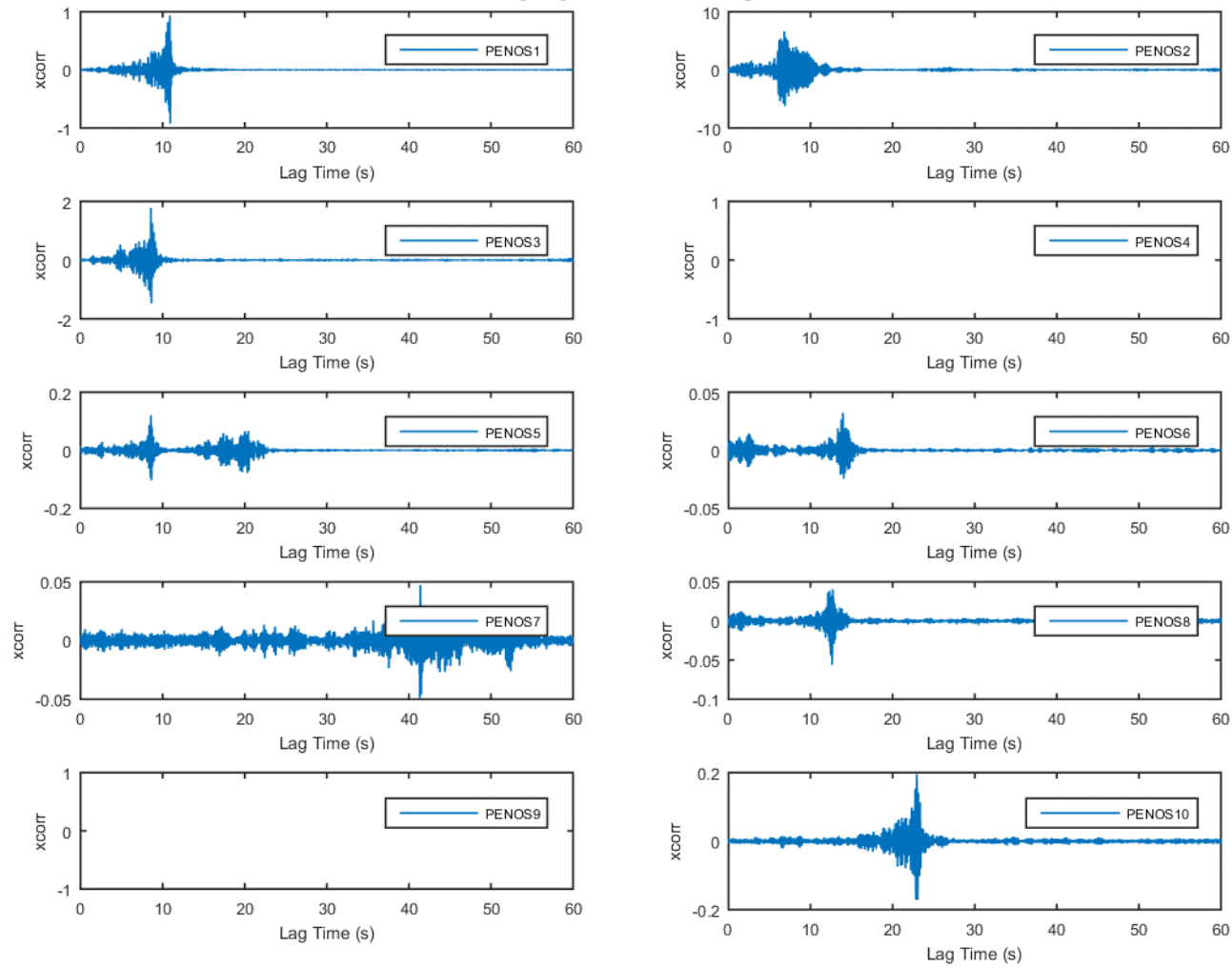
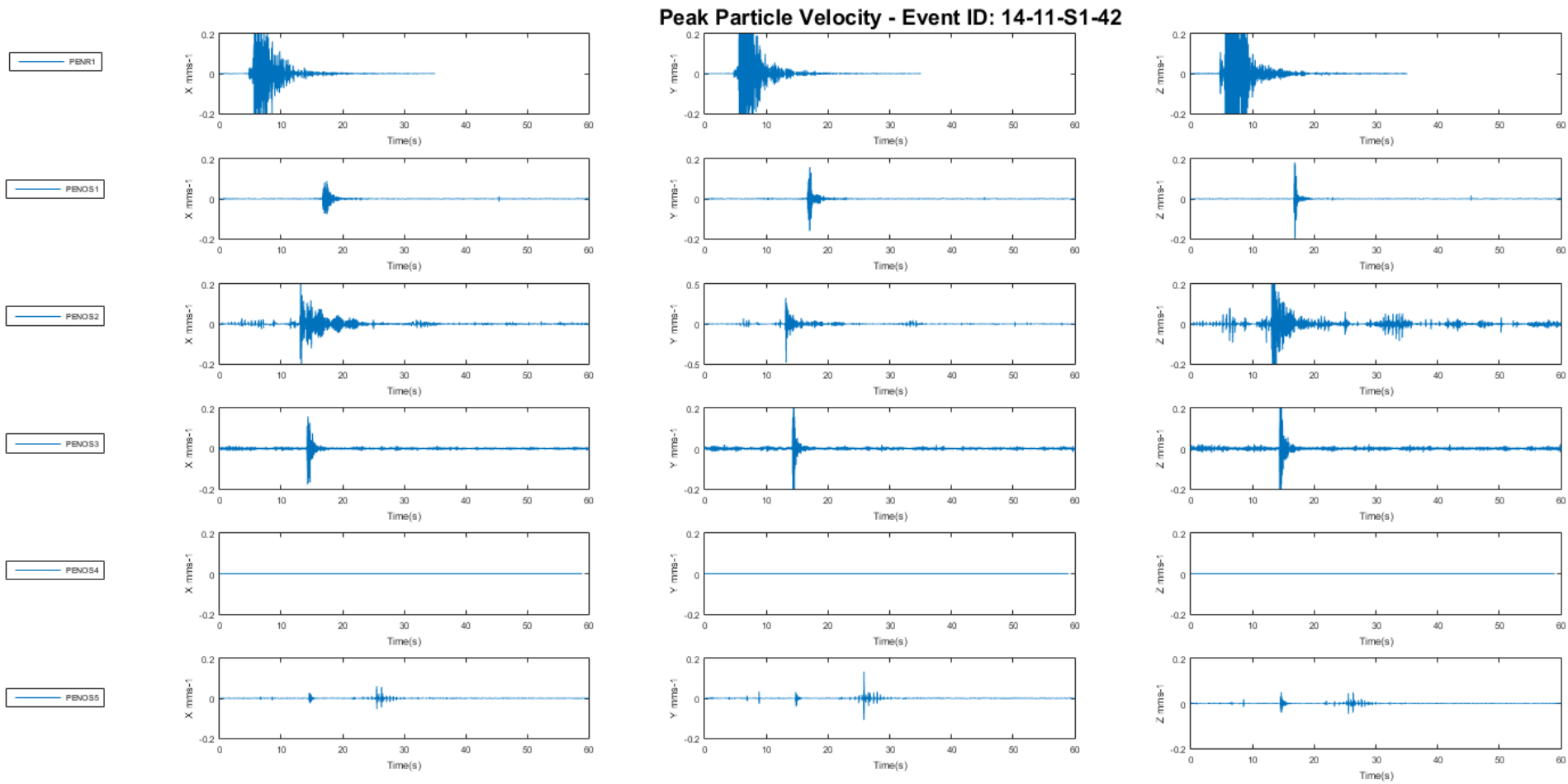
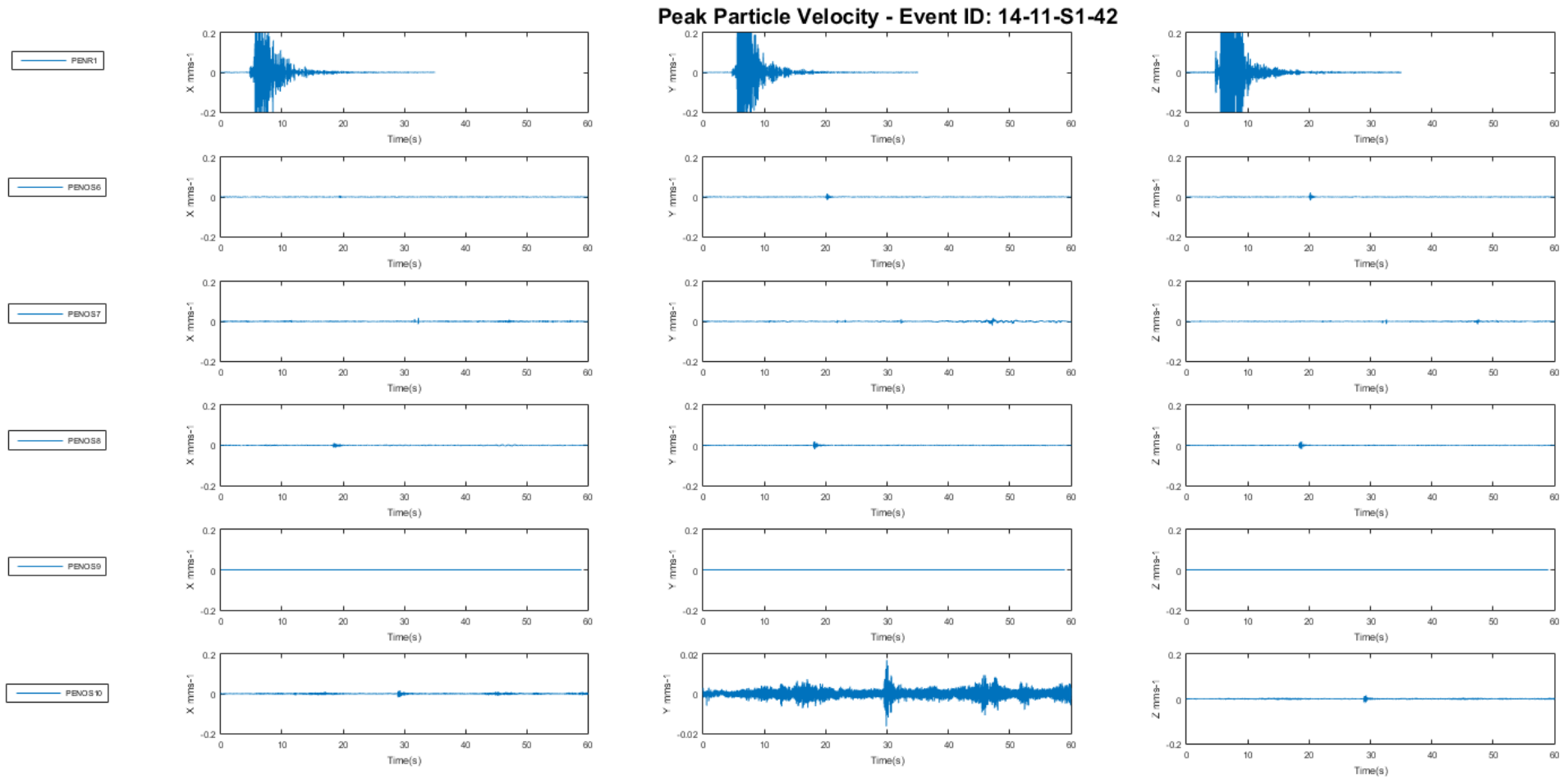


FIGURE 3.33: CROSS CORRELATION PEN\_OS 1 - 10 14-11-S1-42





**FIGURE 3.34: PEN\_OS 1 - 5 14-11-S1-42**



**FIGURE 3.35: PEN\_OS 6 - 10 14-11-S1-42**

### Event ID: 14-11-S1-42

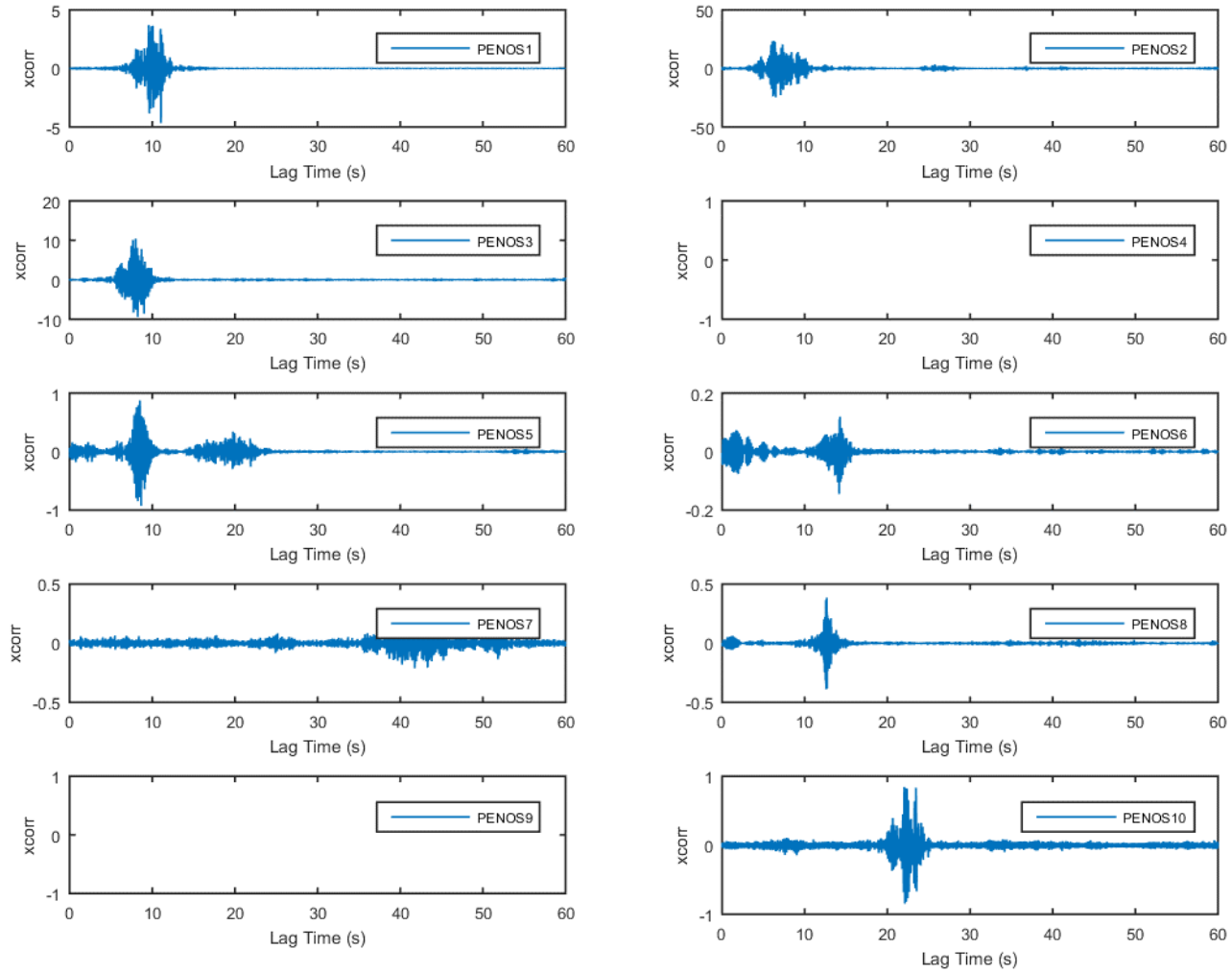


FIGURE 3.36: CROSS CORRELATION PEN\_OS 1 - 10 14-11-S1-42

Peak Particle Velocity - Event ID: 14-11-S1-49, S2-118

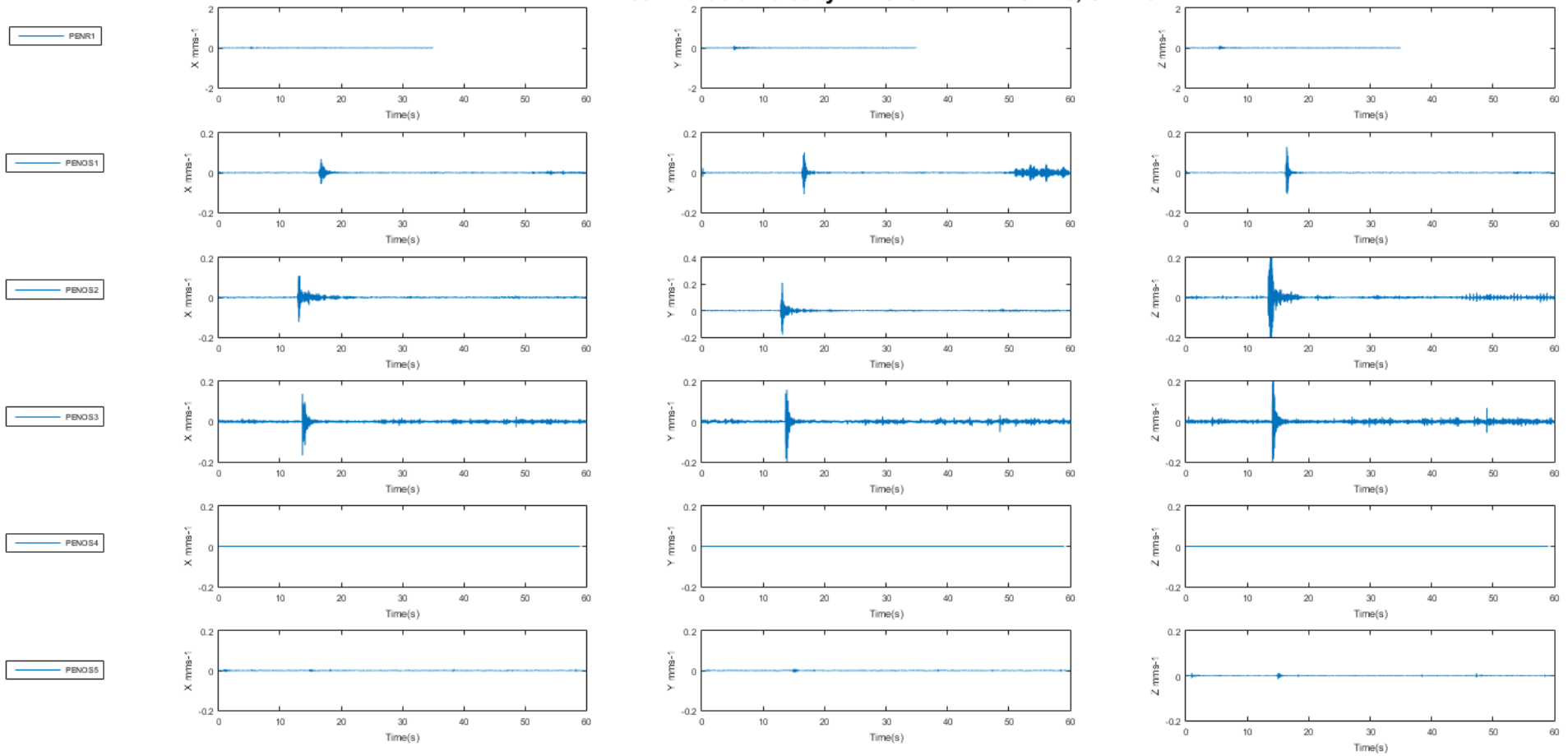


FIGURE 3.37: PEN\_OS 1 - 5 14-11-S1-49, S2-118

Peak Particle Velocity - Event ID: 14-11-S1-49, S2-118

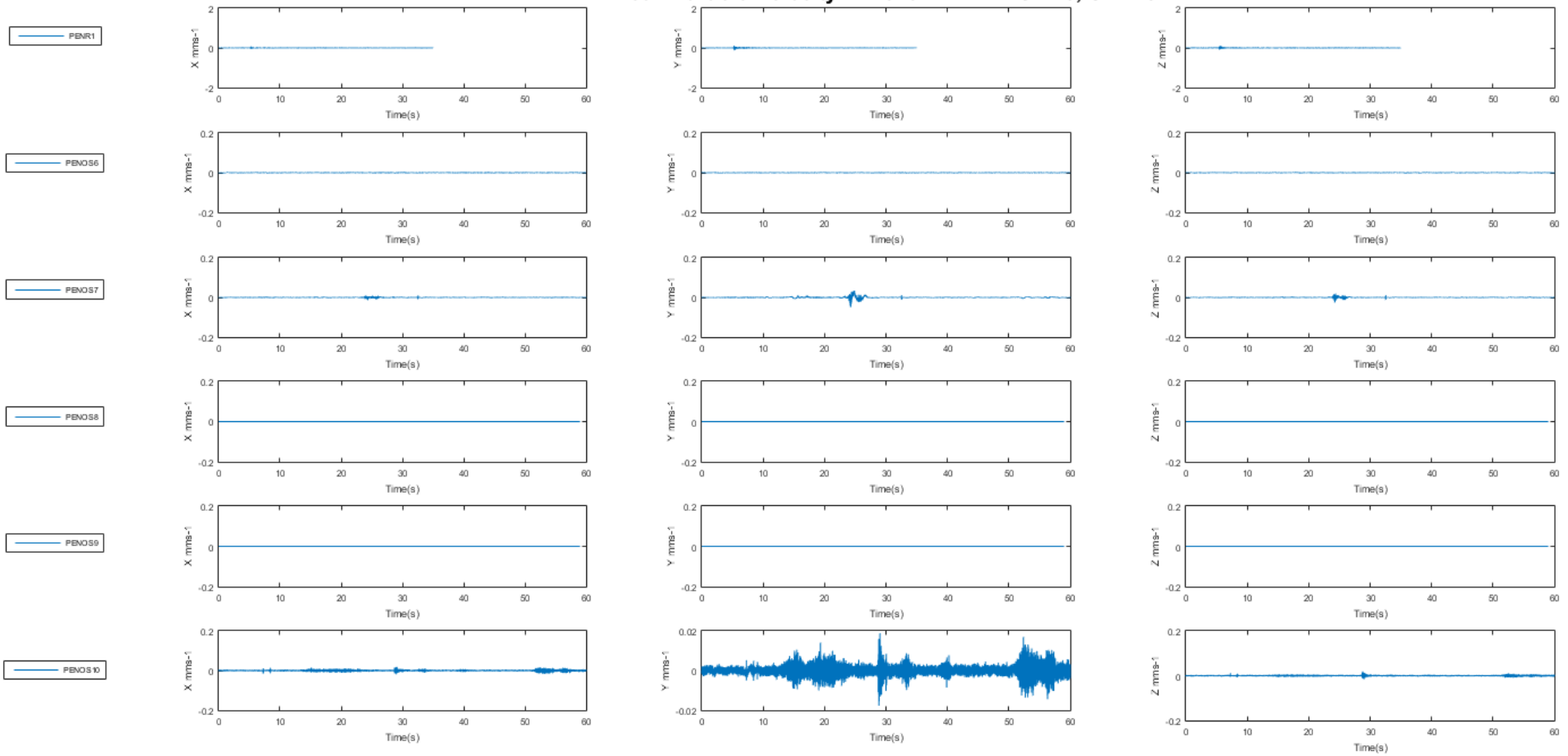


FIGURE 3.38: PEN\_OS 6 - 10 14-11-S1-49, S2-118

### Event ID: 14-11-S1-49, S2-118

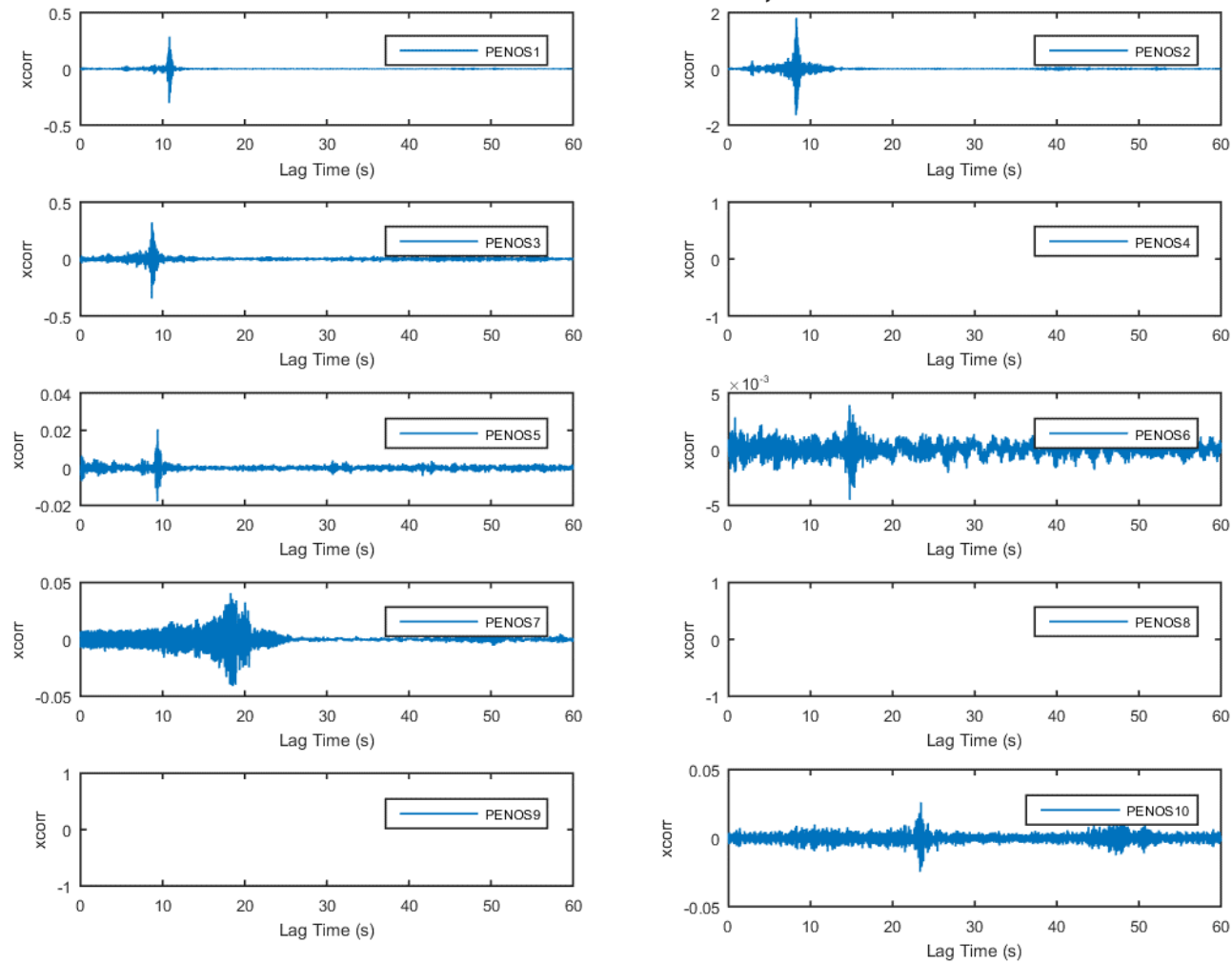


FIGURE 3.39: CROSS CORRELATION PEN\_OS 1 - 10 14-11-S1-49, S2-118

Peak Particle Velocity - Event ID: 14-11-S1-49, S2-118

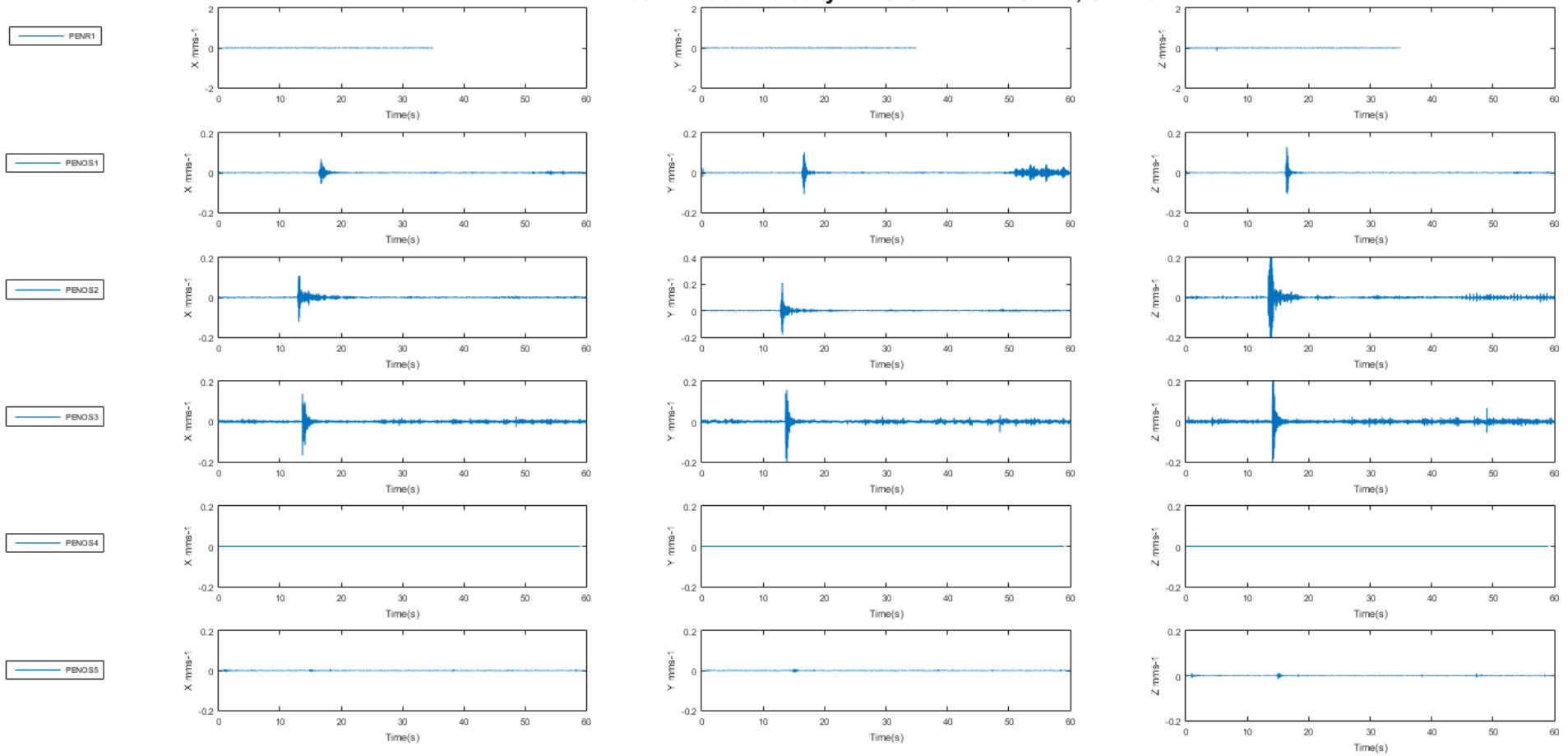


FIGURE 3.40: PEN\_OS 1 - 5 14-11-S1-49, S2-118

Peak Particle Velocity - Event ID: 14-11-S1-49, S2-118

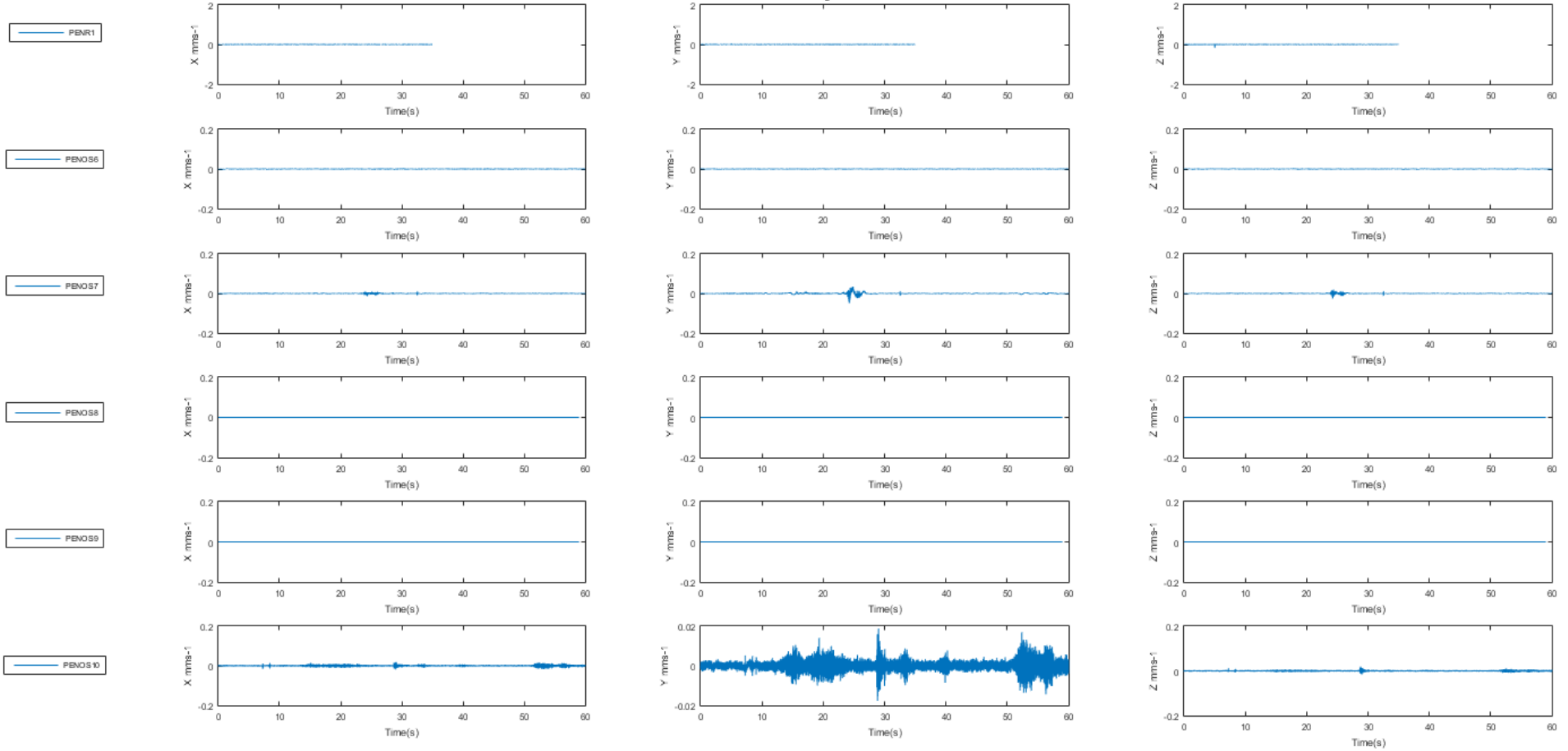


FIGURE 3.41: PEN\_OS 6 - 10 14-11-S1-49, S2-118



### Event ID: 14-11-S1-49, S2-118

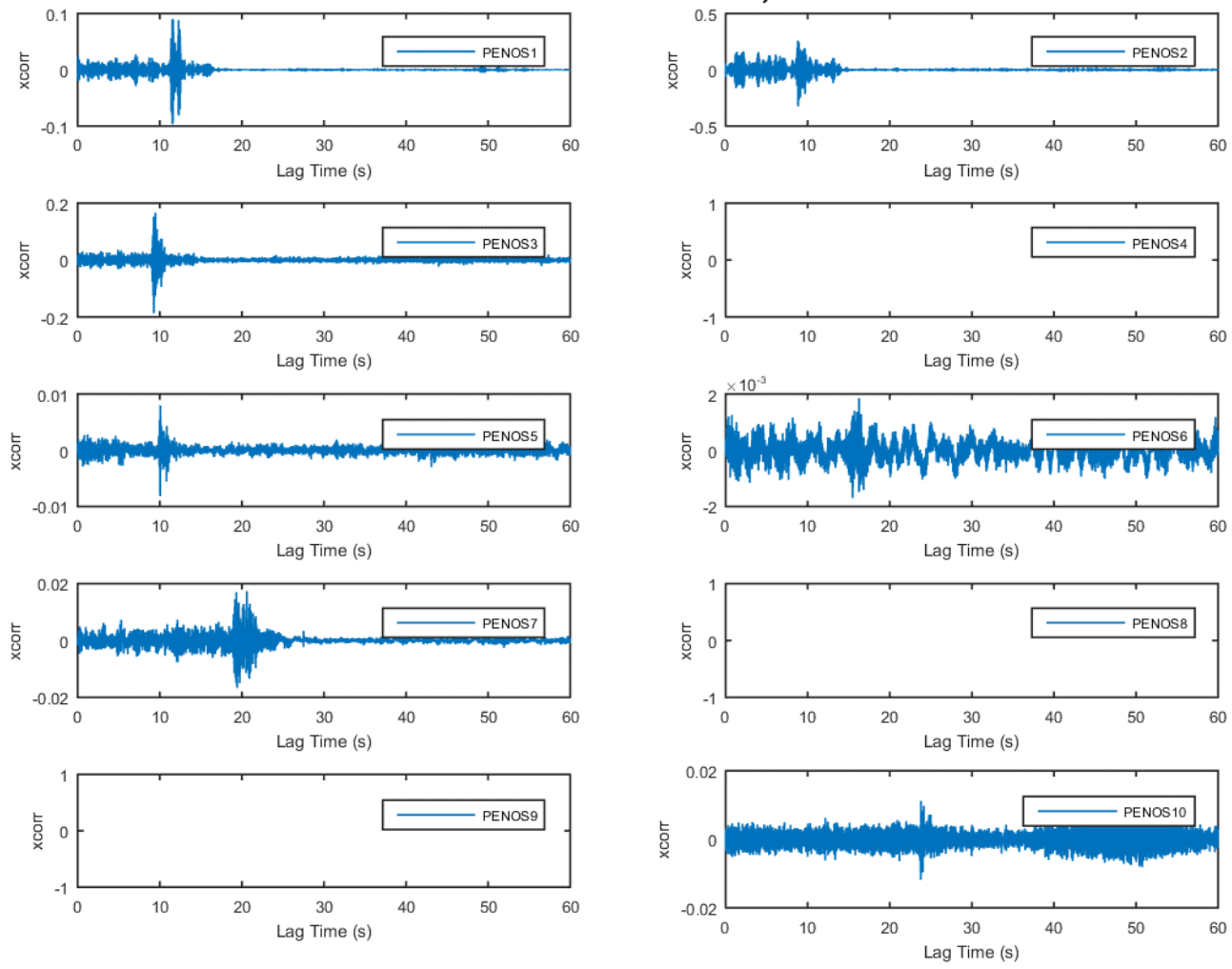


FIGURE 3.42: CROSS CORRELATION PEN\_OS 1 - 10 14-11-S1-49, S2-118

Peak Particle Velocity - Event ID: 14-11-S1-50, S2-122

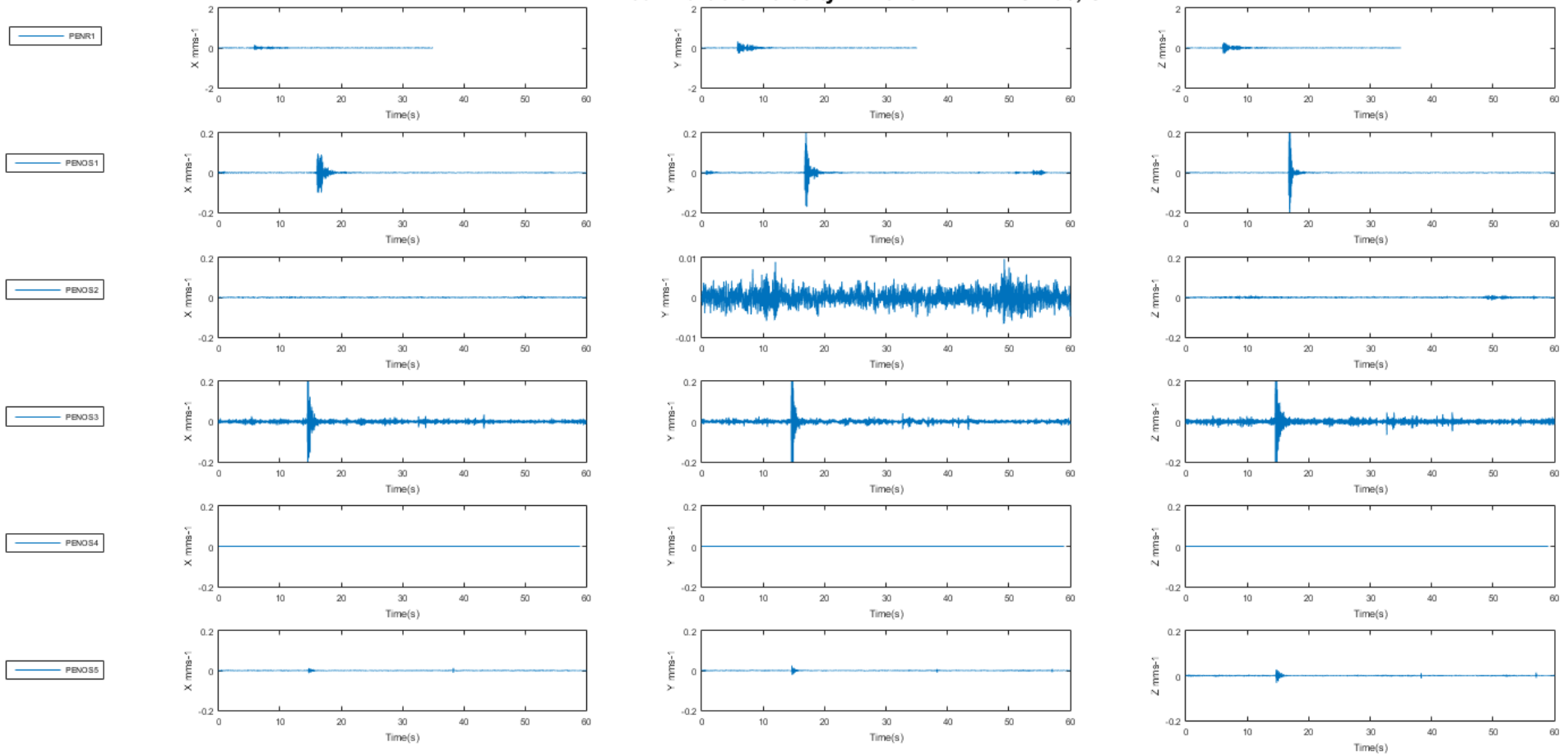


FIGURE 3.43: PEN\_OS 1 - 5 14-11-S1-50, S2-122

Peak Particle Velocity - Event ID: 14-11-S1-50, S2-122

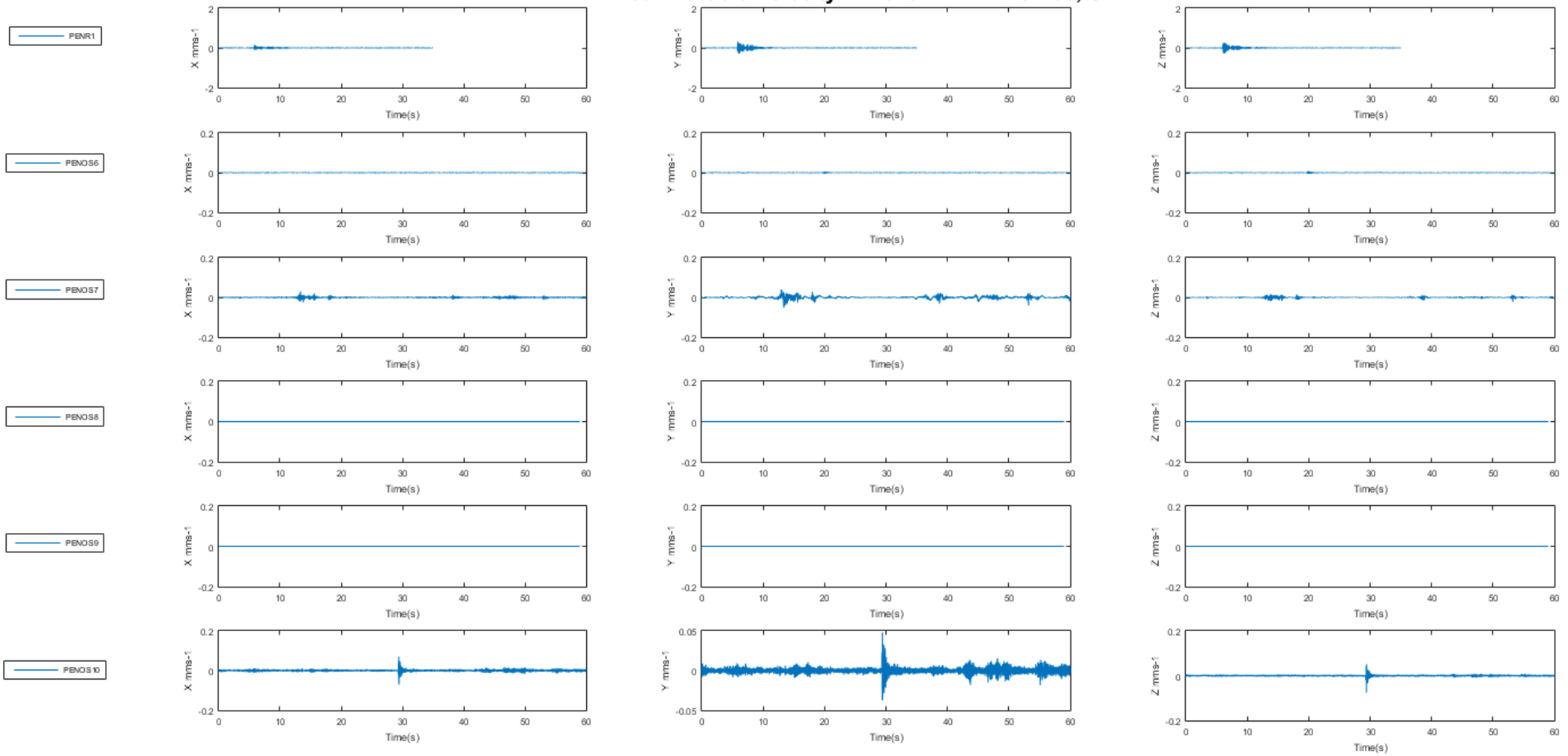


FIGURE 3.44: PEN\_OS 6 - 10 14-11-S1-50, S2-122

### Event ID: 14-11-S1-50, S2-122

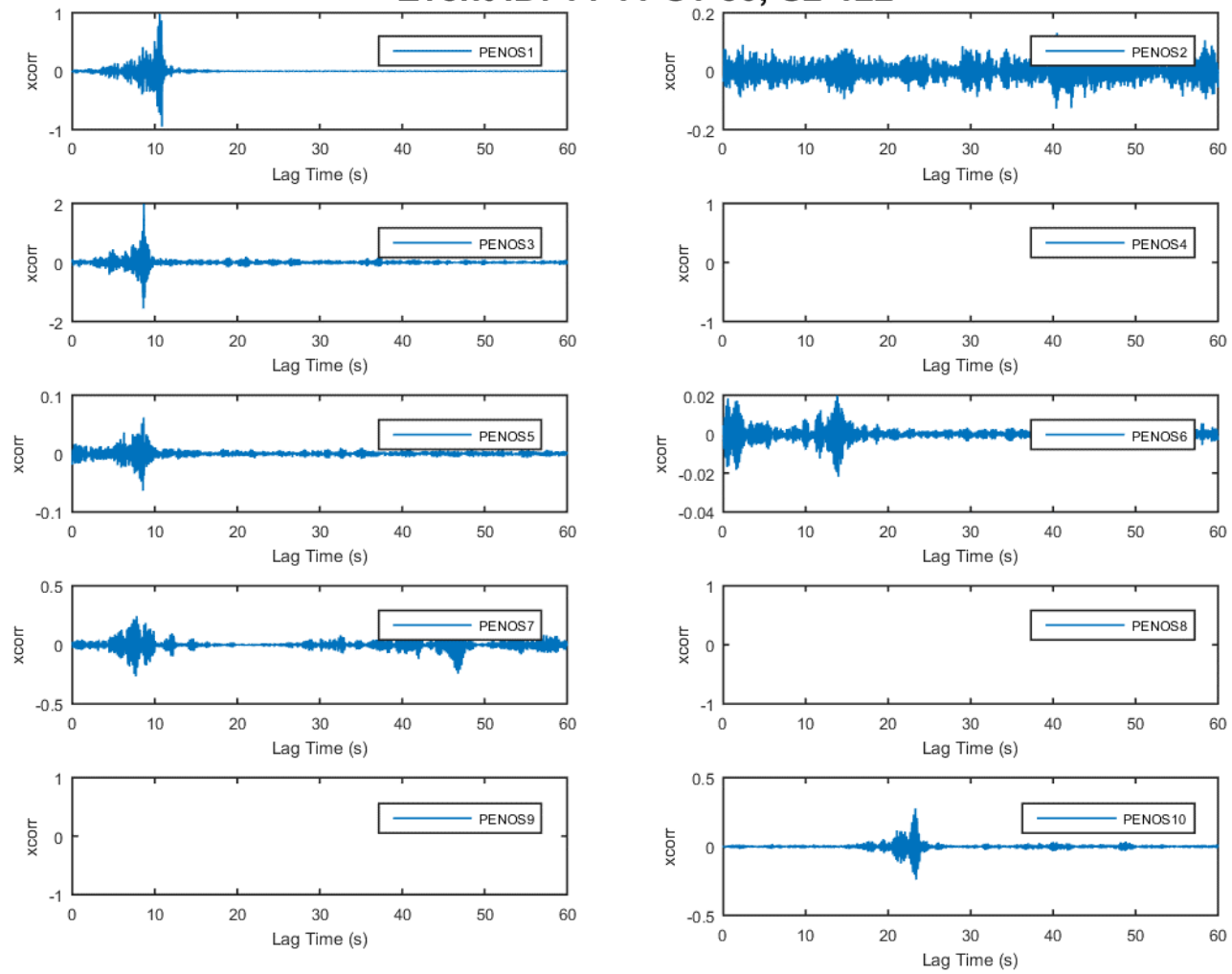


FIGURE 3.45: CROSS CORRELATION PEN\_OS 1 - 10 14-11-S1-50, S2-122

Peak Particle Velocity - Event ID: 14-11-S1-50, S2-122

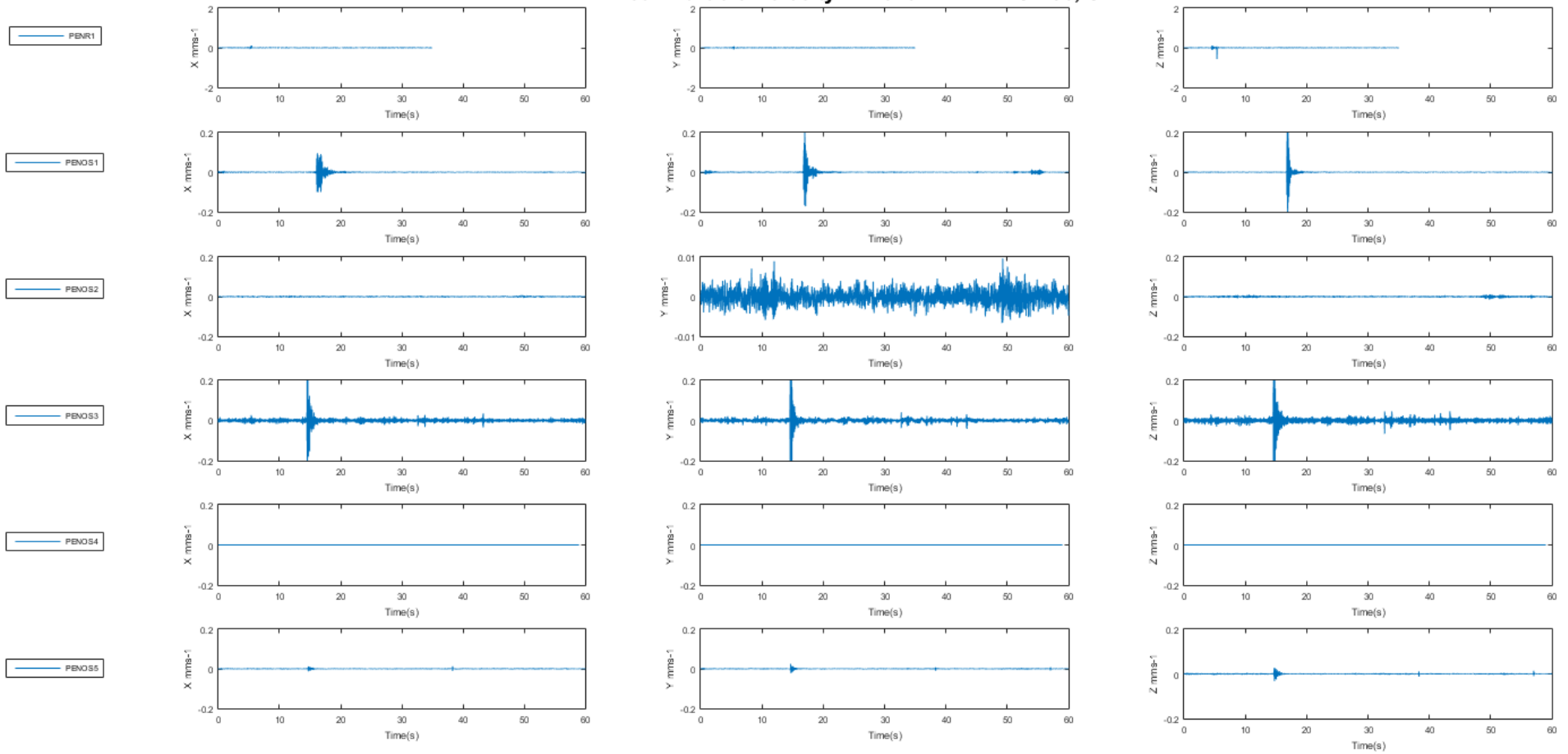


FIGURE 3.46: PEN\_OS 1 - 5 14-11-S1-50, S2-122

Peak Particle Velocity - Event ID: 14-11-S1-50, S2-122

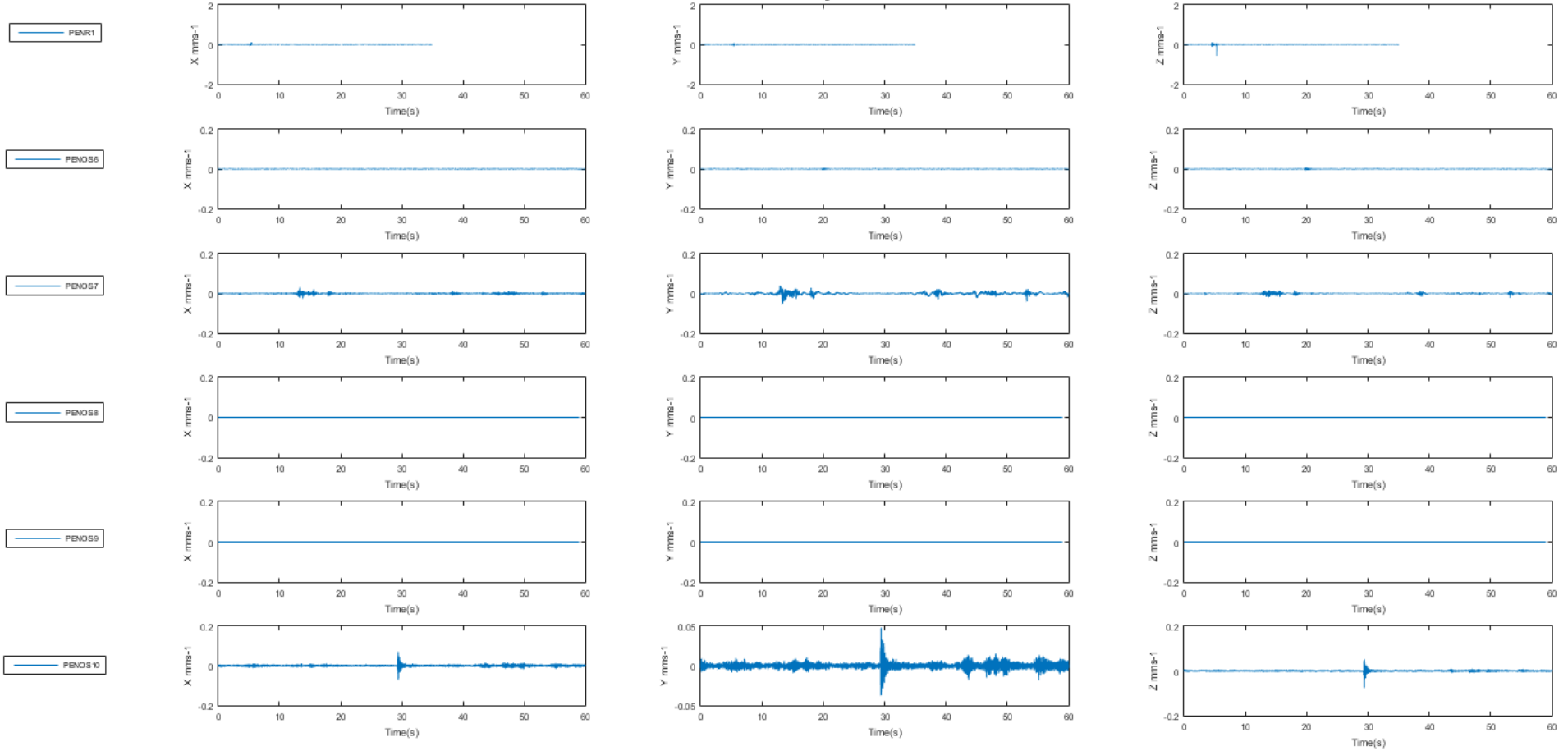


FIGURE 3.47: PEN\_OS 6 - 10 14-11-S1-50, S2-122

### Event ID: 14-11-S1-50, S2-122

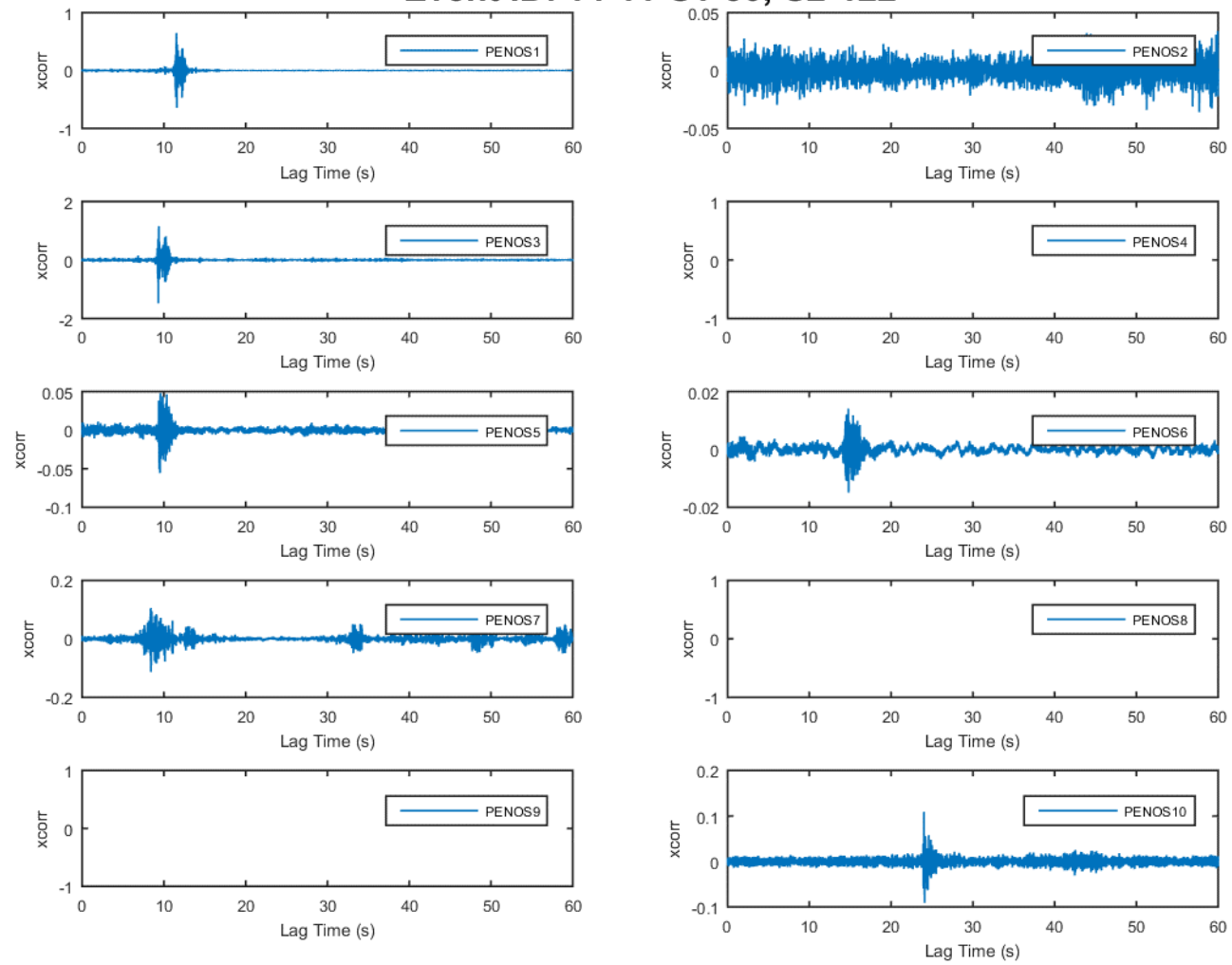


FIGURE 3.48: CROSS CORRELATION PEN\_OS 1 - 10 14-11-S1-50, S2-122

Peak Particle Velocity - Event ID: 14-11-S1-65

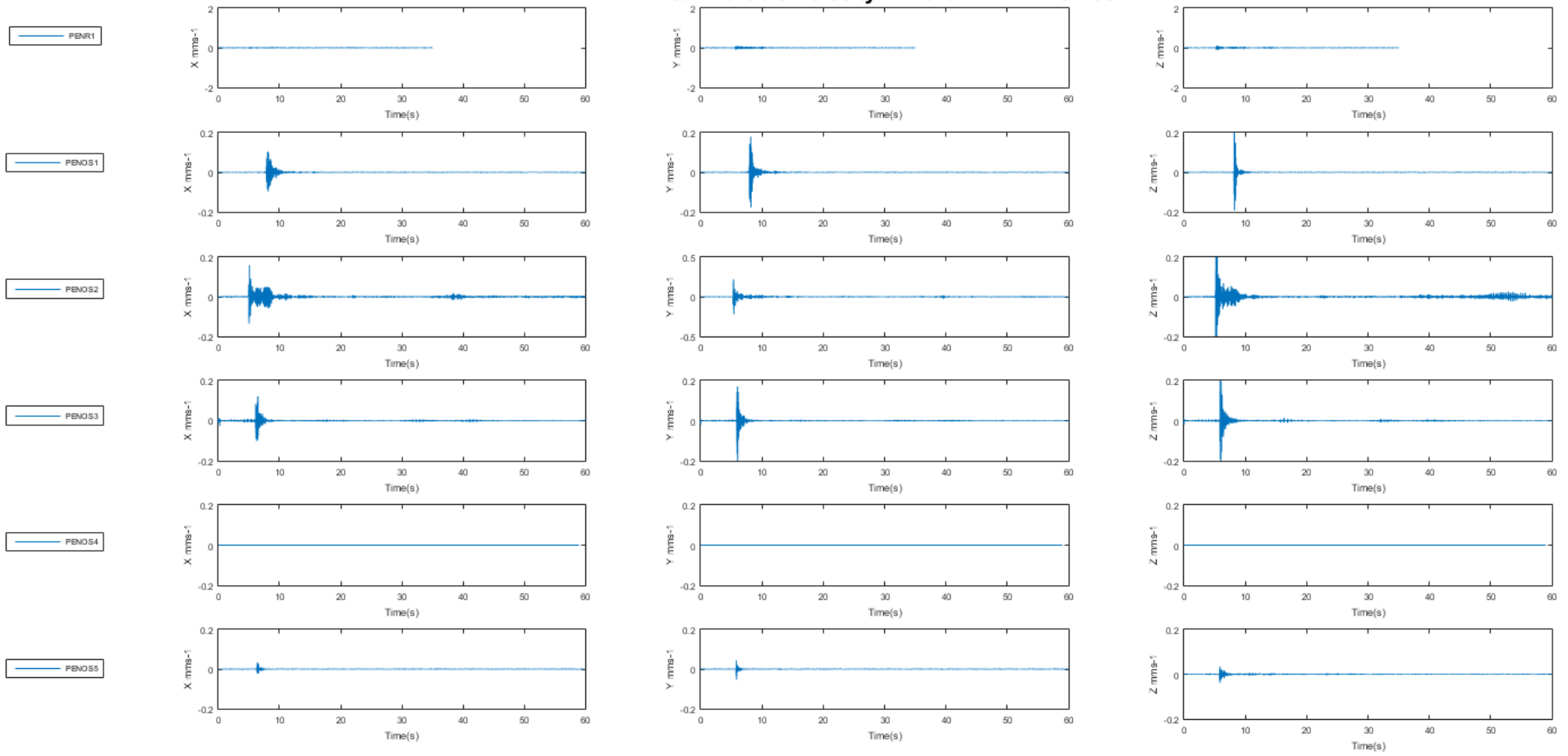


FIGURE 3.49: PEN\_OS 1 - 5 14-11-S1-65



Peak Particle Velocity - Event ID: 14-11-S1-65

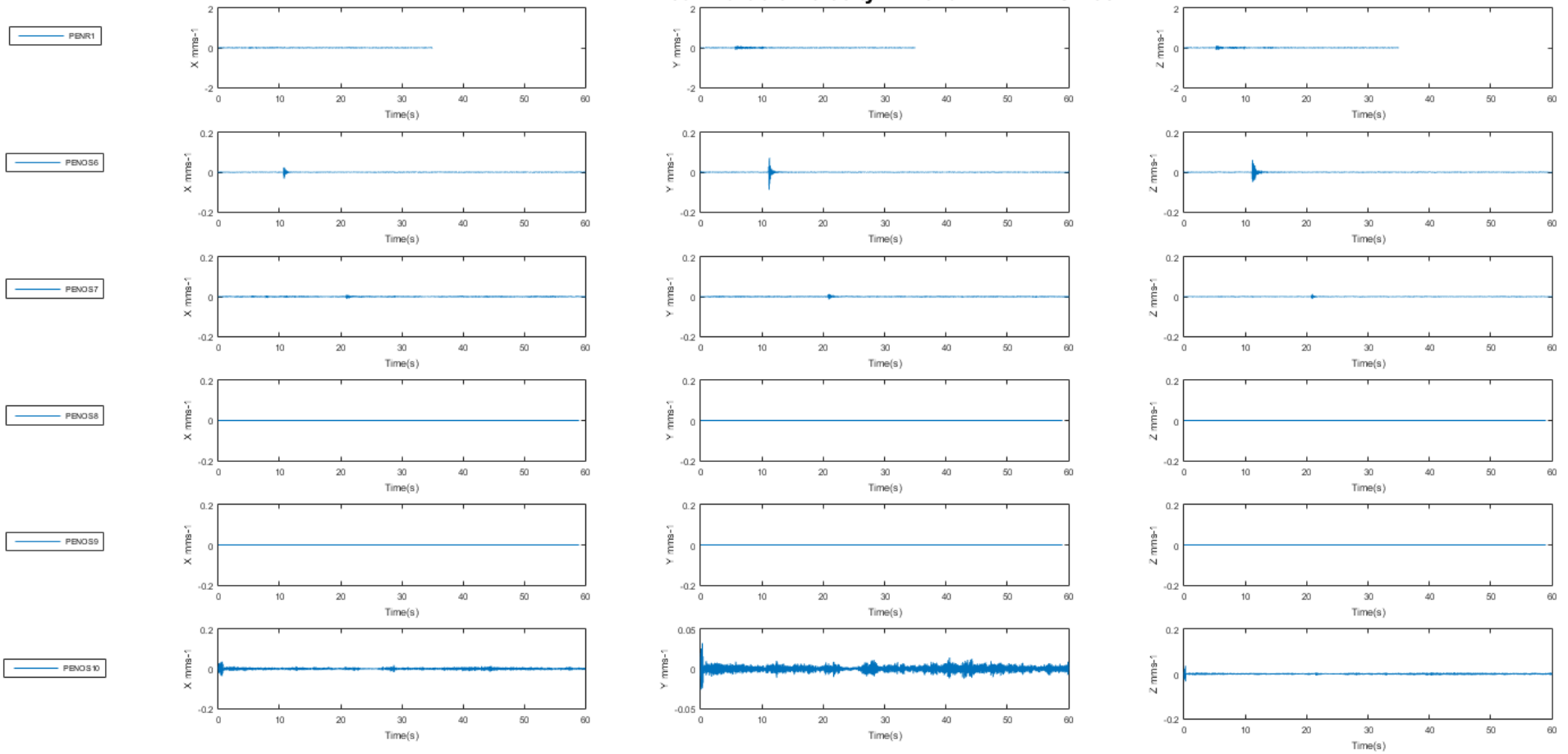


FIGURE 3.50: PEN\_OS 6 - 10 14-11-S1-65

### Event ID: 14-11-S1-65

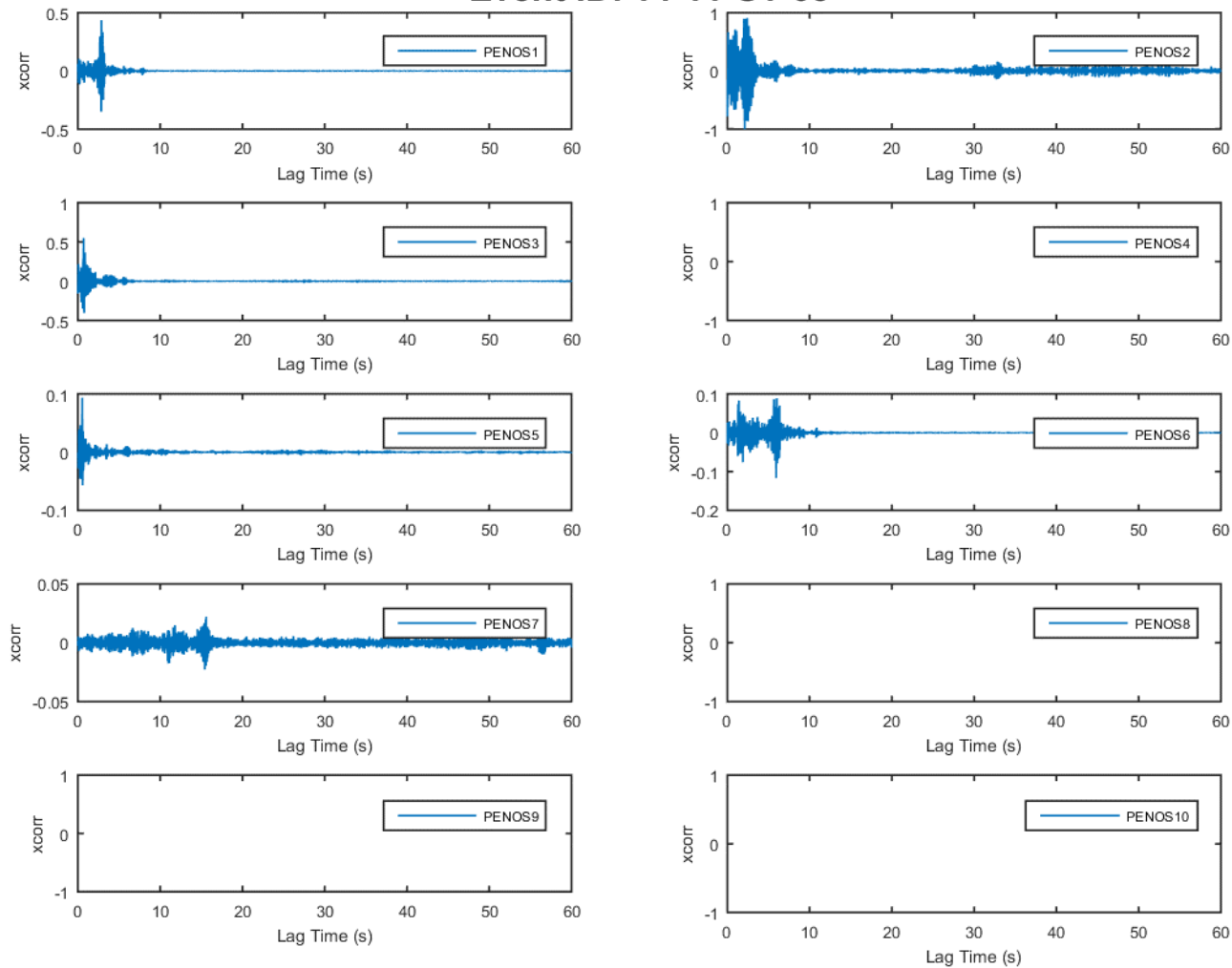


FIGURE 3.51: CROSS CORRELATION PEN\_OS 1 - 10 14-11-S1-65

Peak Particle Velocity - Event ID: 14-11-S1-66

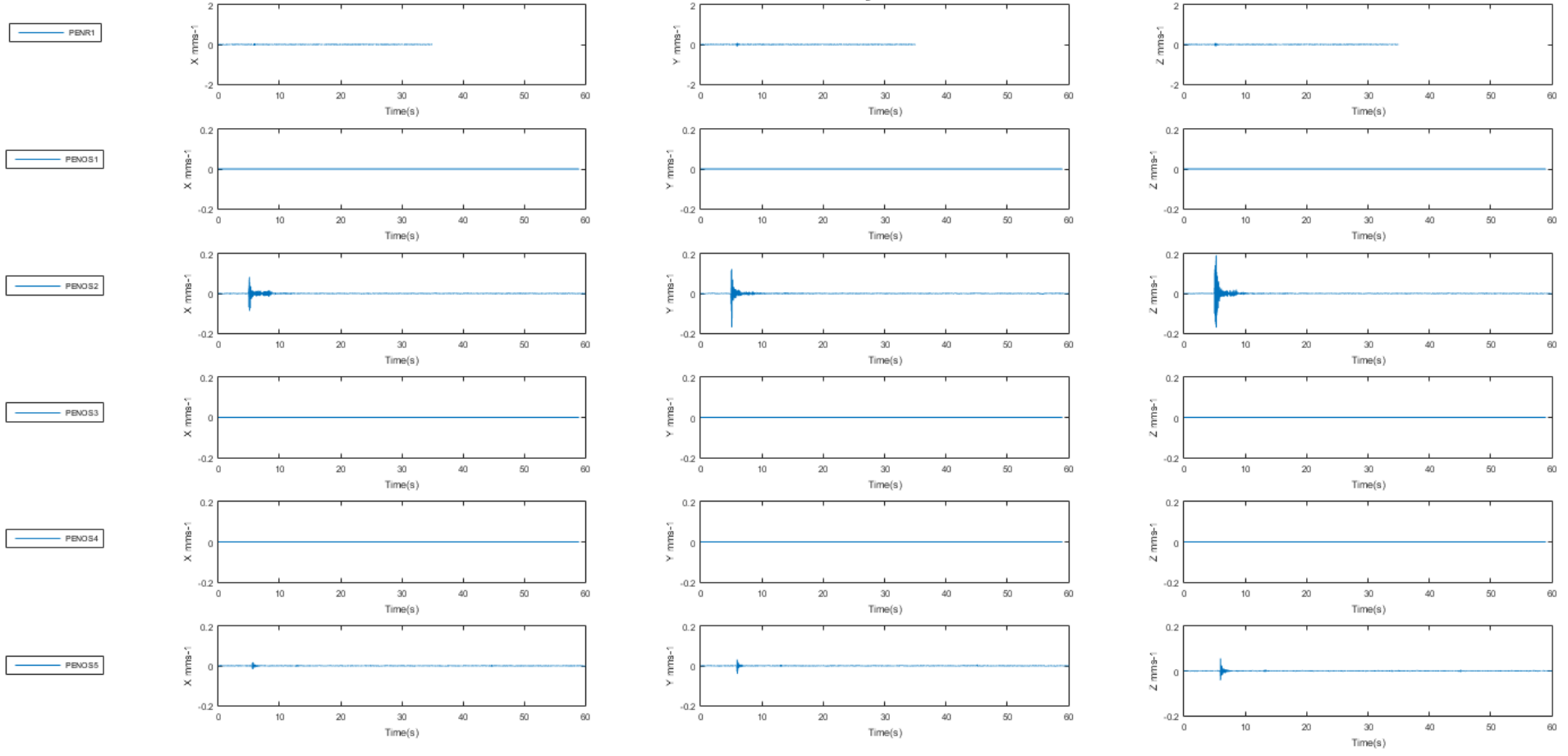


FIGURE 3.52: PEN\_OS 1 - 5 14-11-S1-66

Peak Particle Velocity - Event ID: 14-11-S1-66

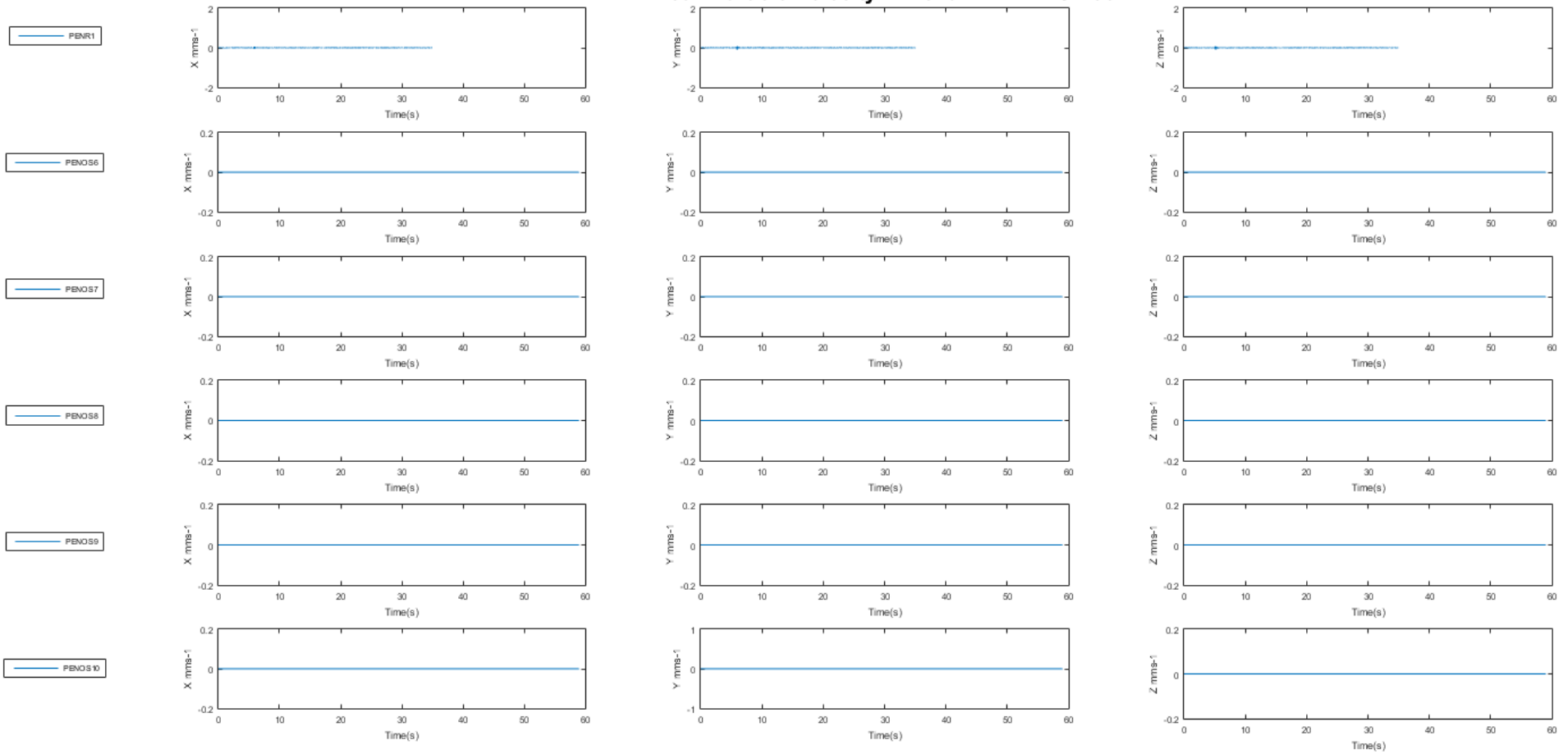


FIGURE 3.53: PEN\_OS 6 - 10 14-11-S1-66

### Event ID: 14-11-S1-66

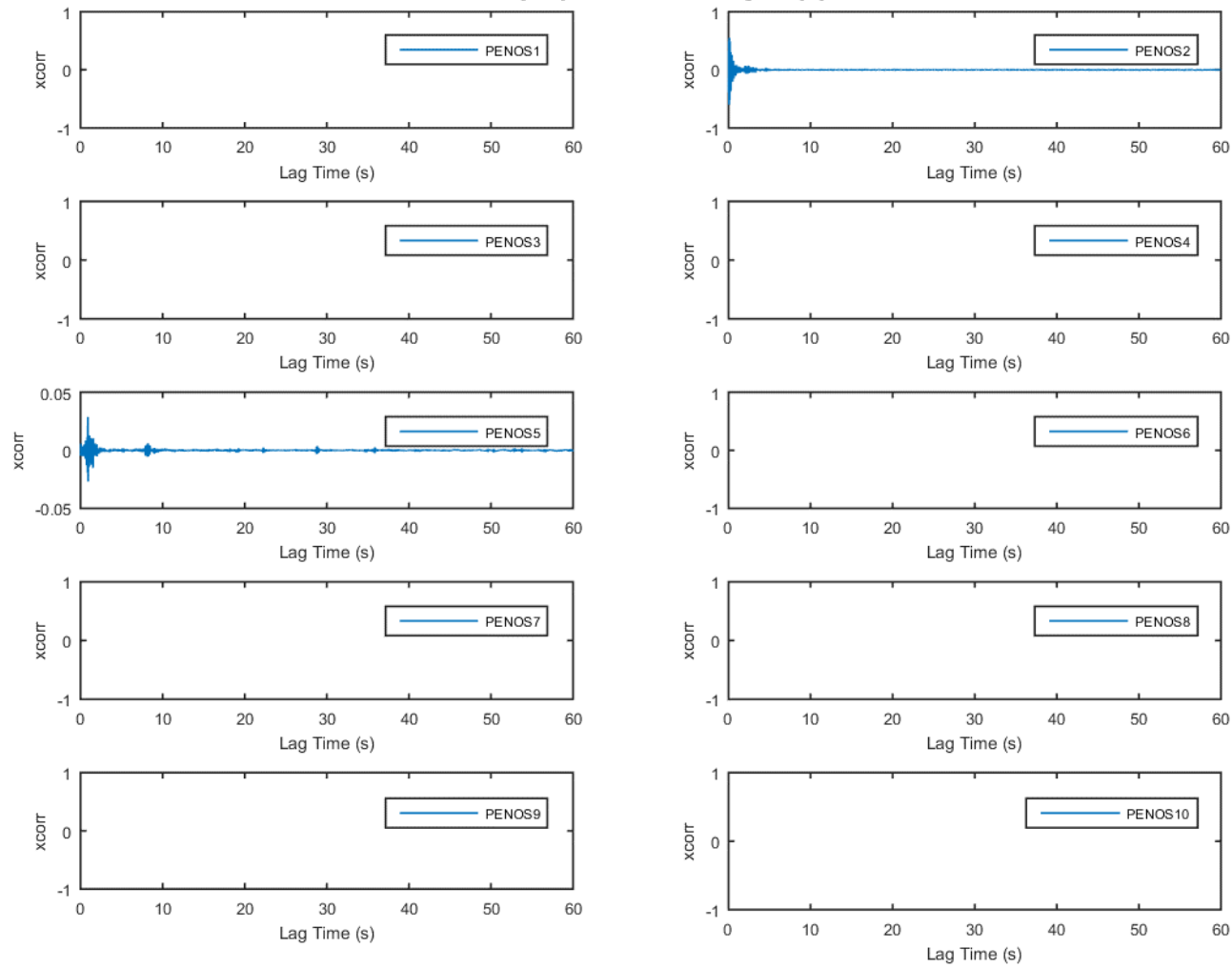
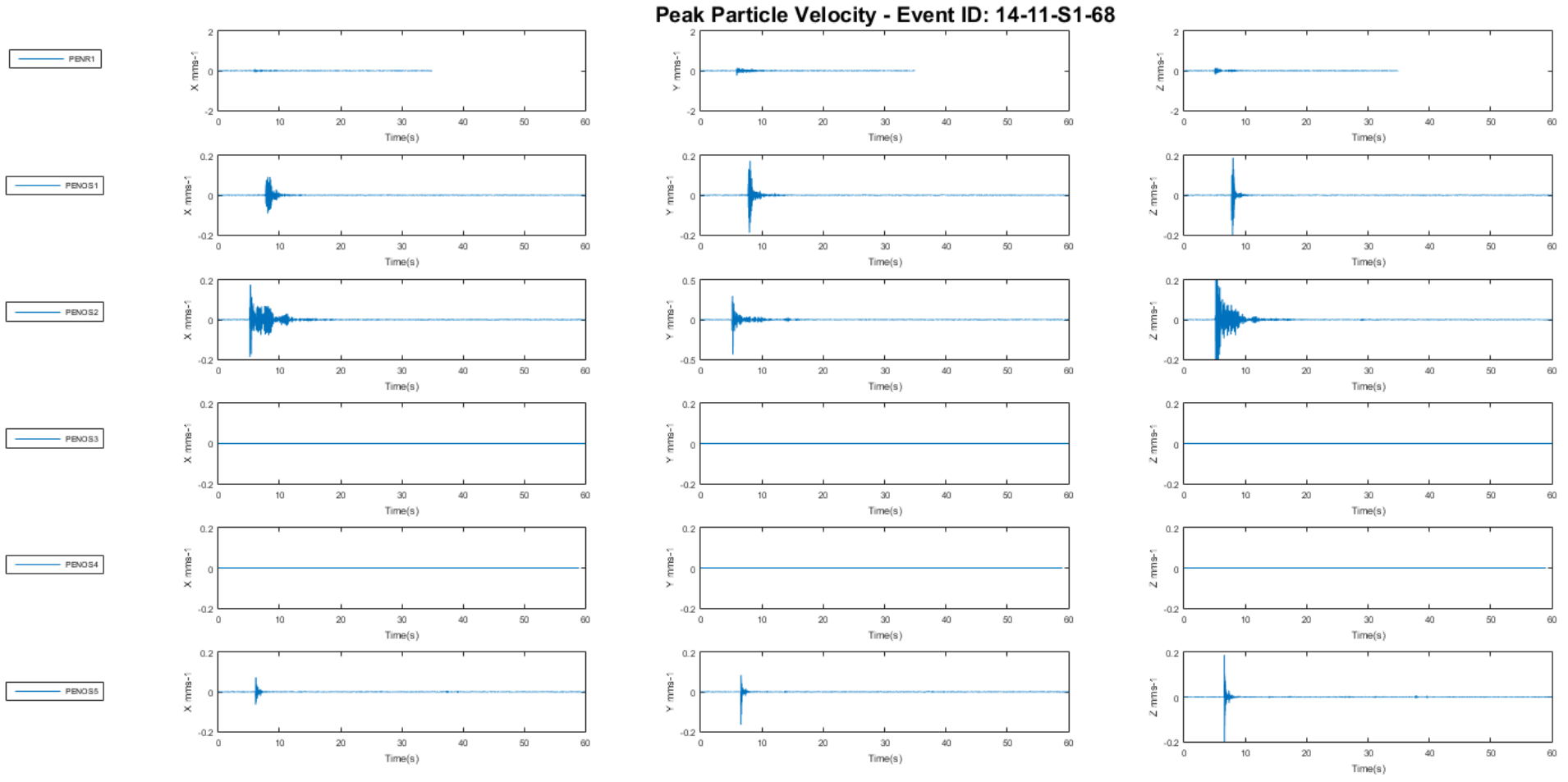


FIGURE 3.54: CROSS CORRELATION PEN\_OS 1 - 10 14-11-S1-66



**FIGURE 3.55: PEN\_OS 1 - 5 14-11-S1-68**

Peak Particle Velocity - Event ID: 14-11-S1-68

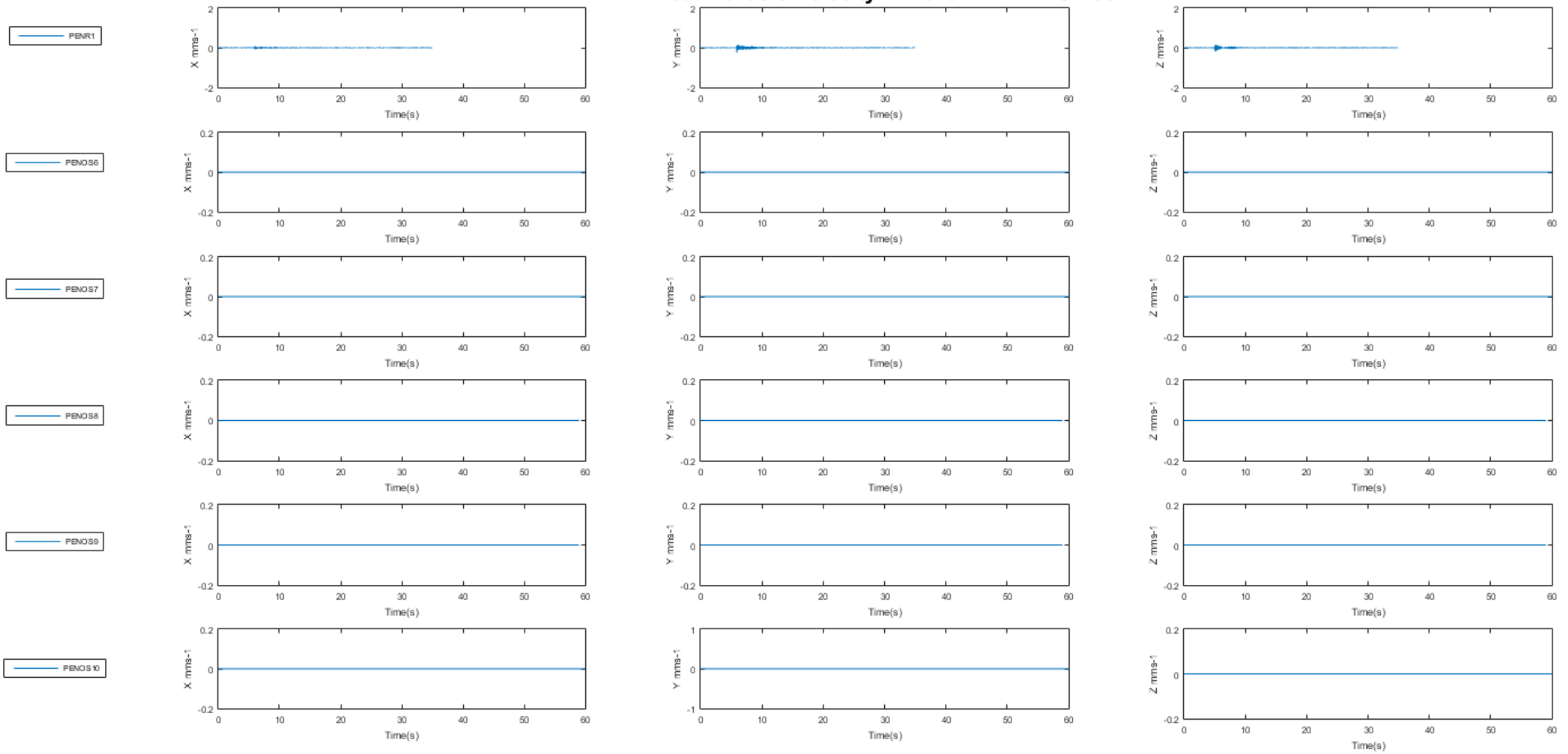


FIGURE 3.56: PEN\_OS 6 - 10 14-11-S1-68

### Event ID: 14-11-S1-68

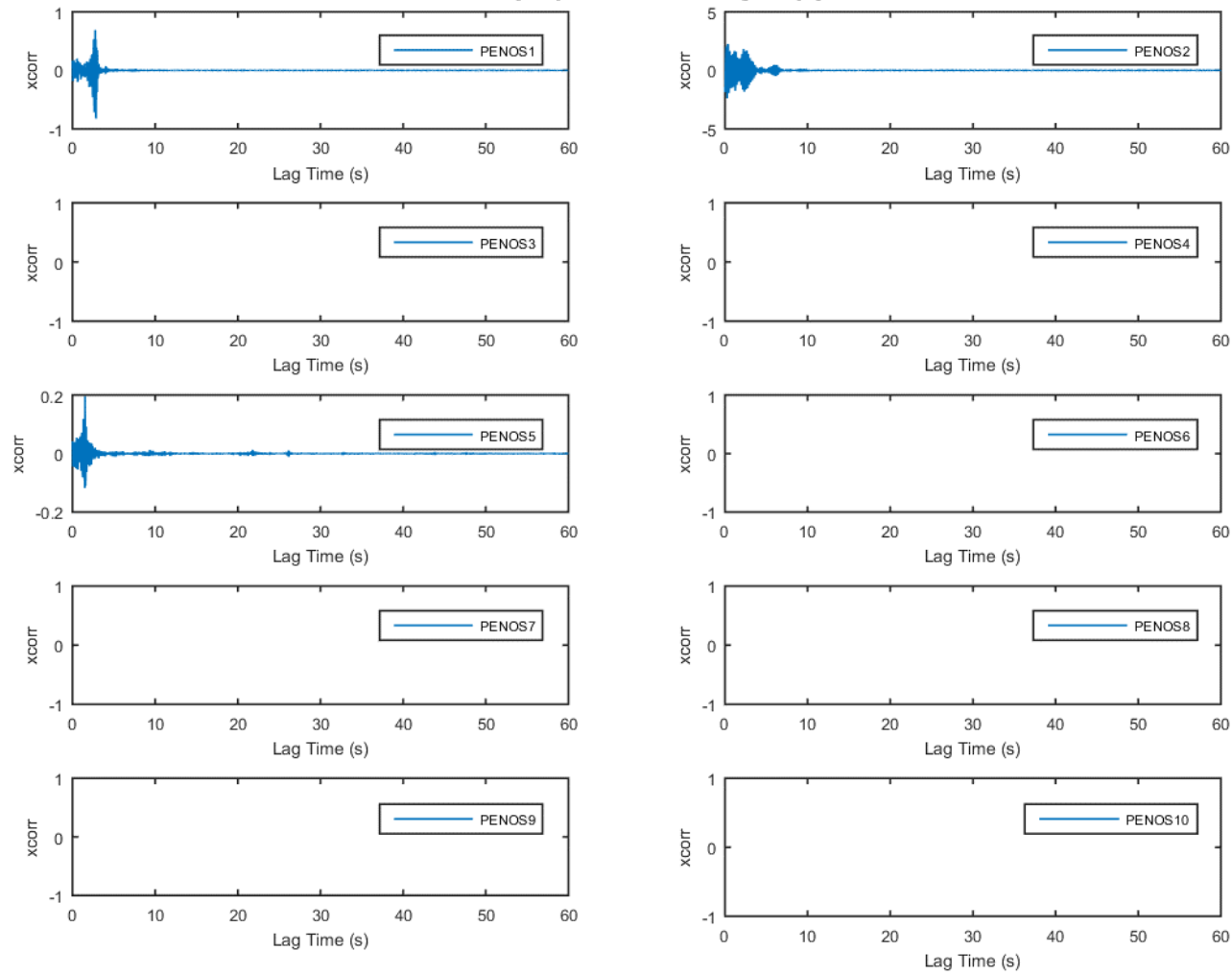


FIGURE 3.57: CROSS CORRELATION PEN\_OS 1 - 10 14-11-S1-68



Peak Particle Velocity - Event ID: 14-11-S2-104

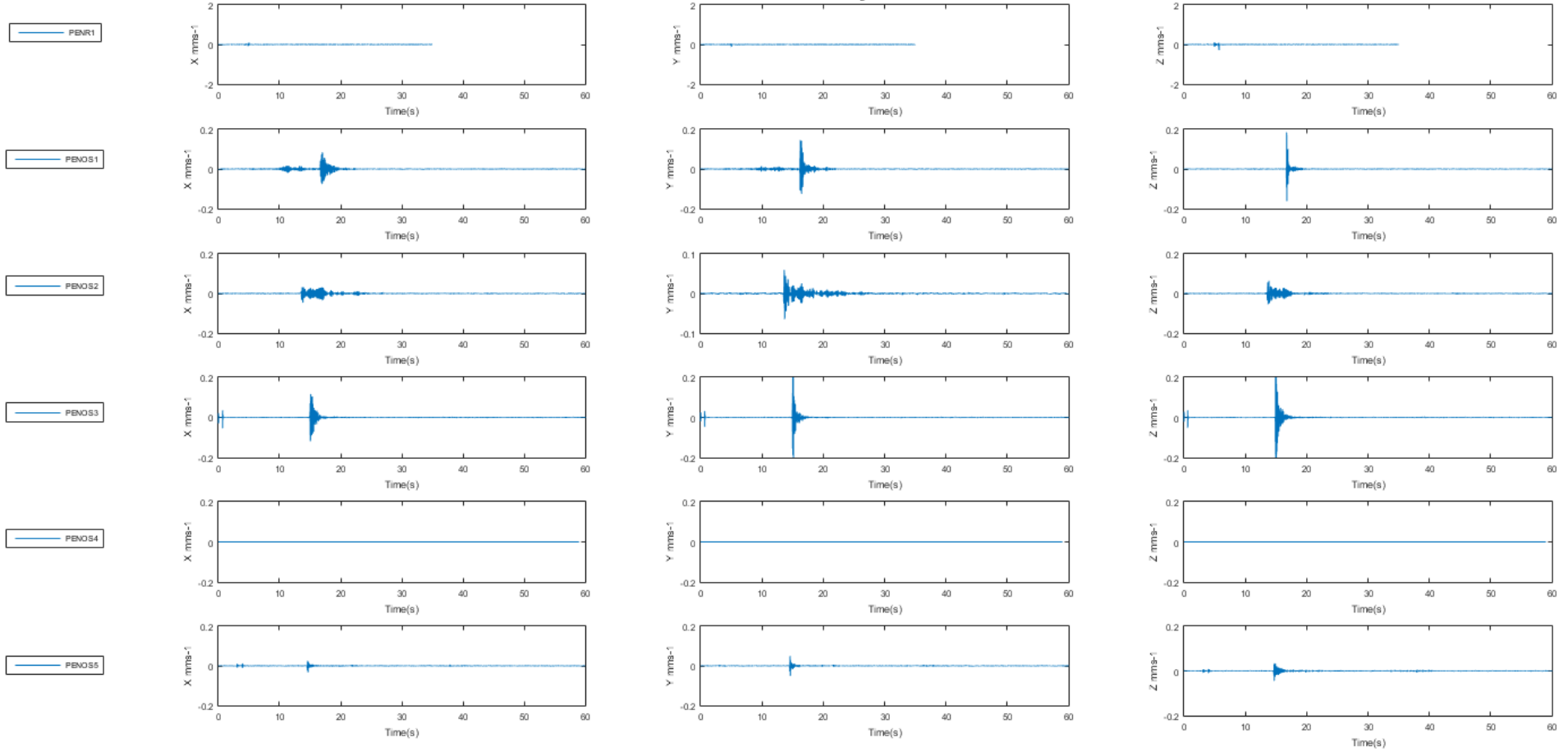


FIGURE 3.58: PEN\_OS 1 - 5 14-11-S2-104

Peak Particle Velocity - Event ID: 14-11-S2-104

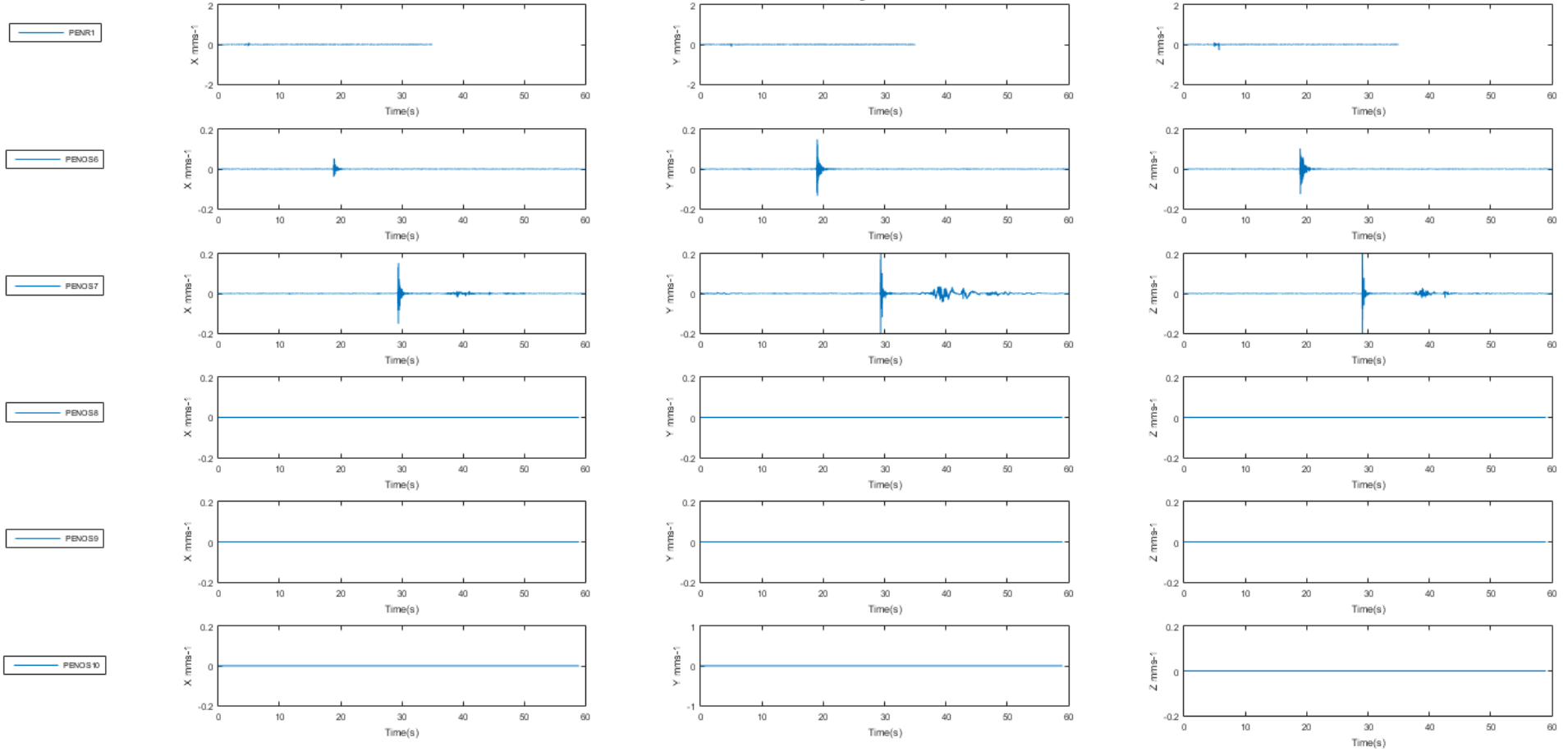


FIGURE 3.59: PEN\_OS 6 - 10 14-11-S2-104

### Event ID: 14-11-S2-104

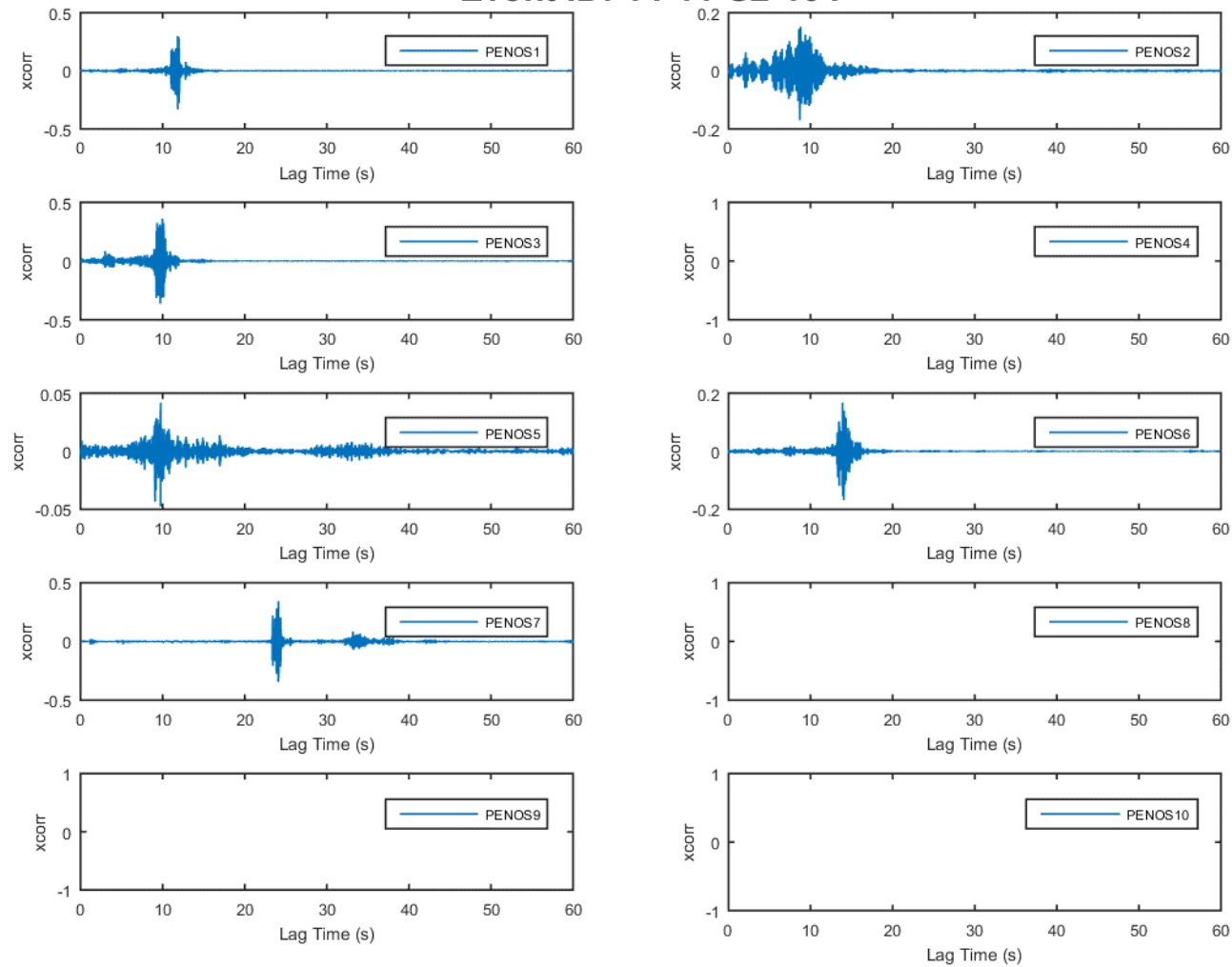


FIGURE 3.60: CROSS CORRELATION PEN\_OS 1 - 10 14-11-S2-104

Peak Particle Velocity - Event ID: 14-11-S2-111

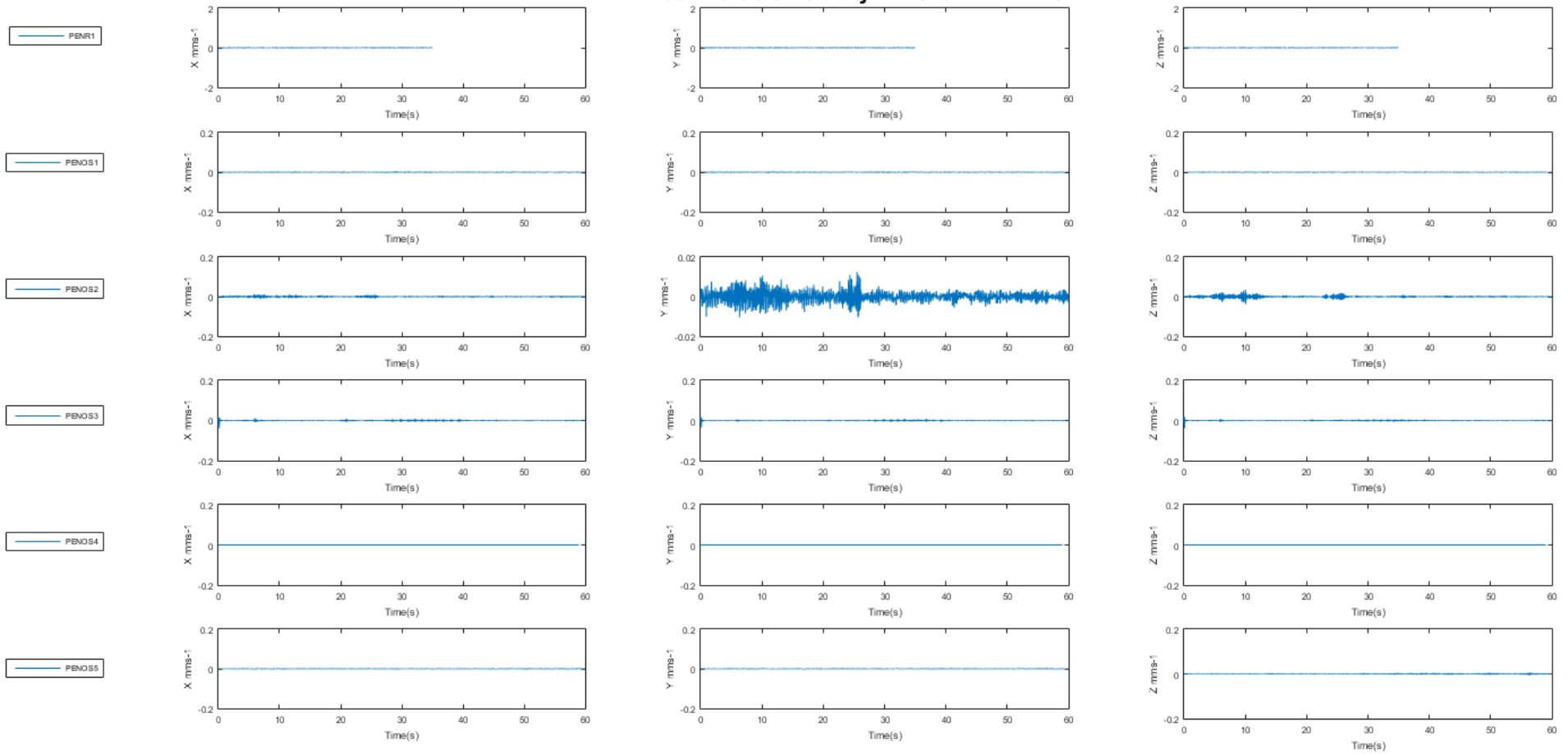


FIGURE 3.61: PEN\_OS 1 - 5 14-11-S2-111

Peak Particle Velocity - Event ID: 14-11-S2-111

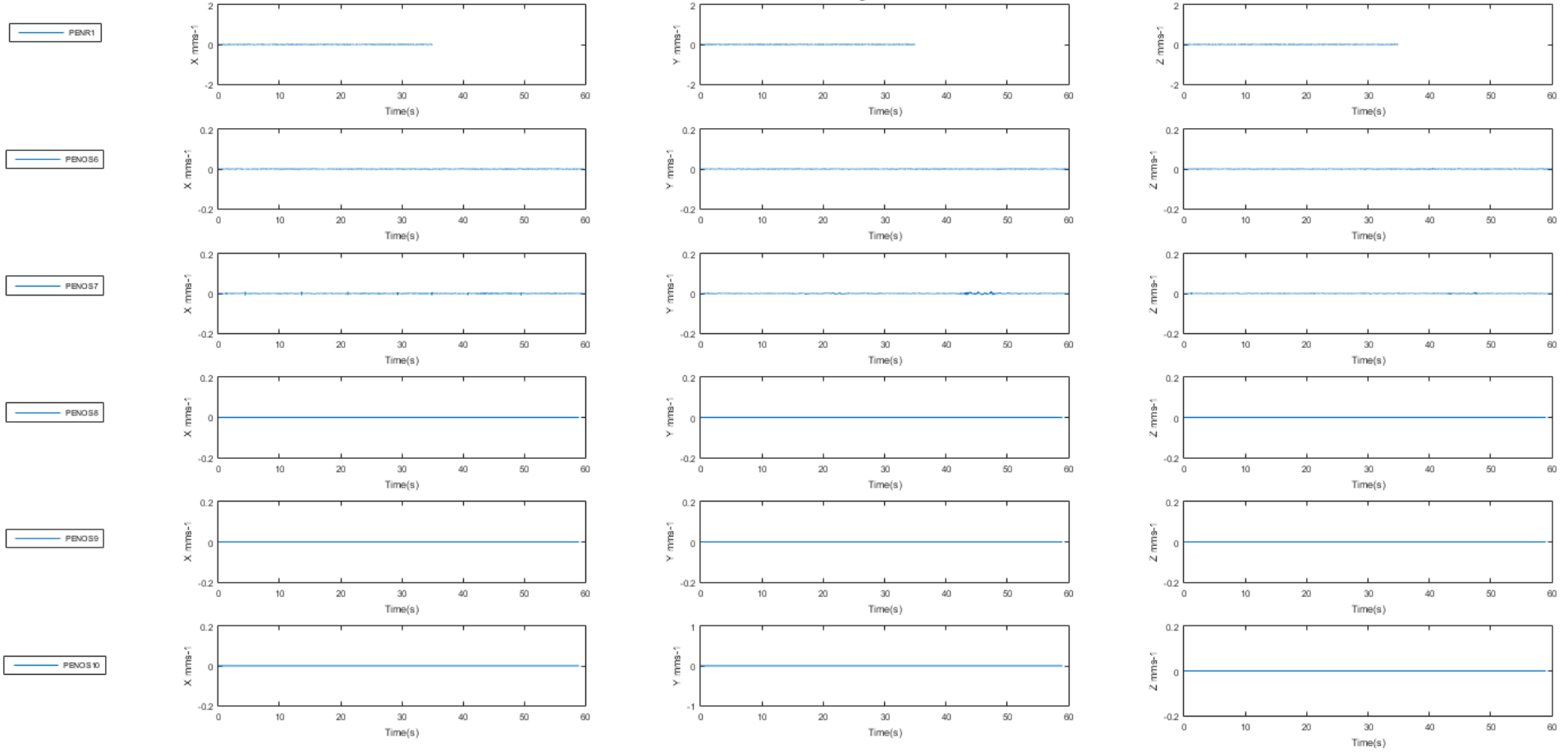


FIGURE 3.62: PEN\_OS 6 - 10 14-11-S2-111

### Event ID: 14-11-S2-111

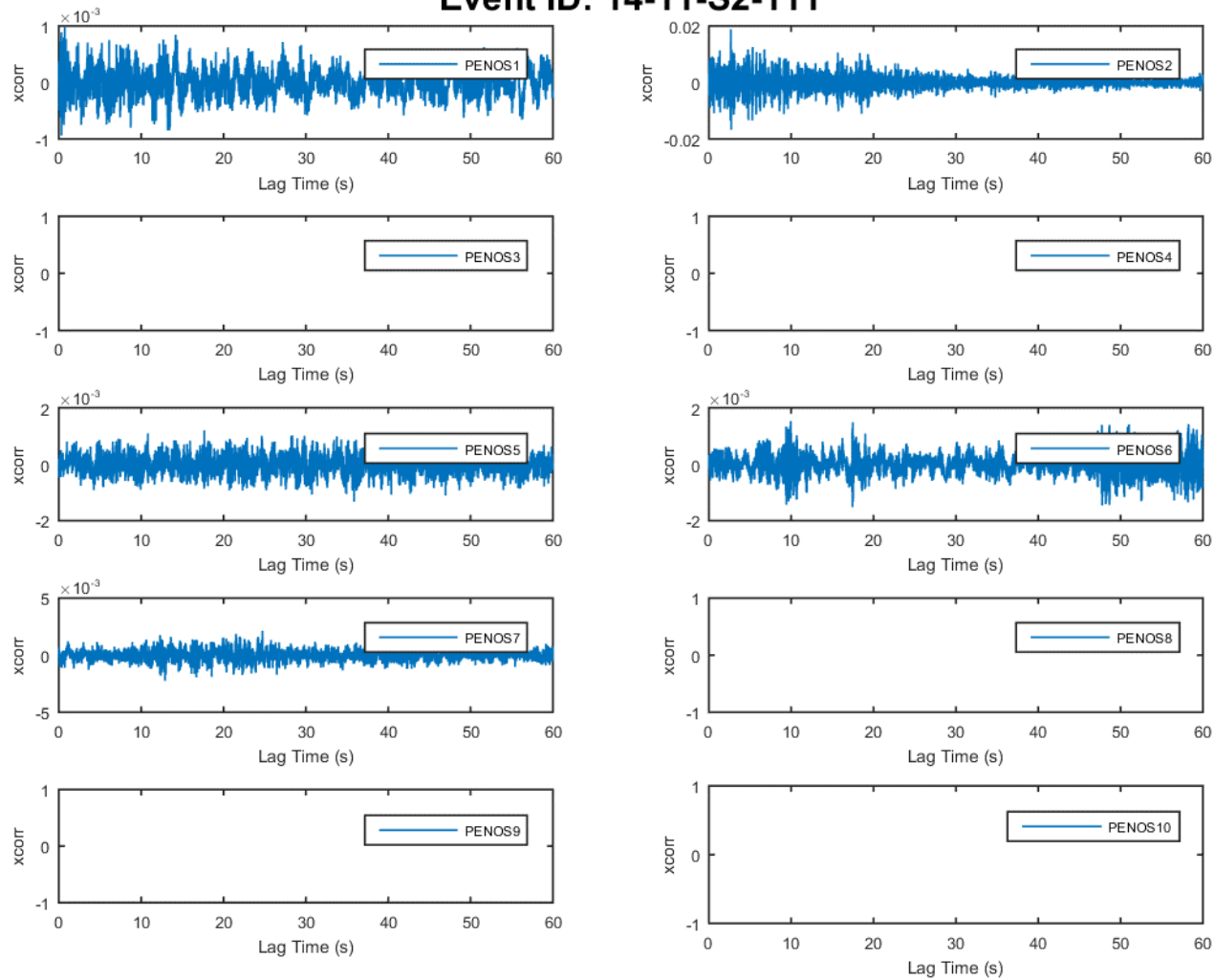


FIGURE 3.63: CROSS CORRELATION PEN\_OS 1 - 10 14-11-S2-111

Peak Particle Velocity - Event ID: 14-12-S1-22; S2-45

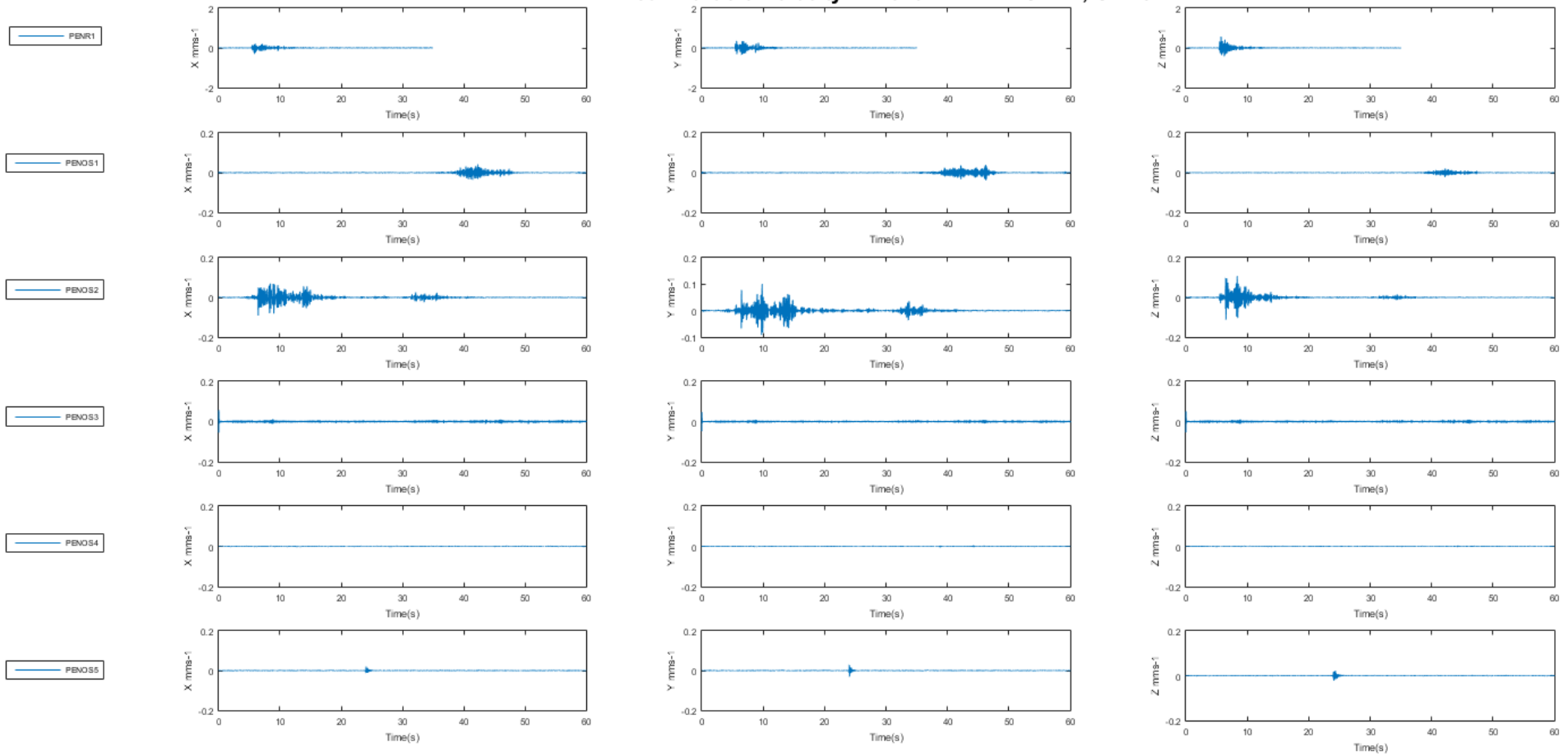


FIGURE 3.64: PEN\_OS 1 - 5 14-12-S1-22; S2-45

Peak Particle Velocity - Event ID: 14-12-S1-22; S2-45

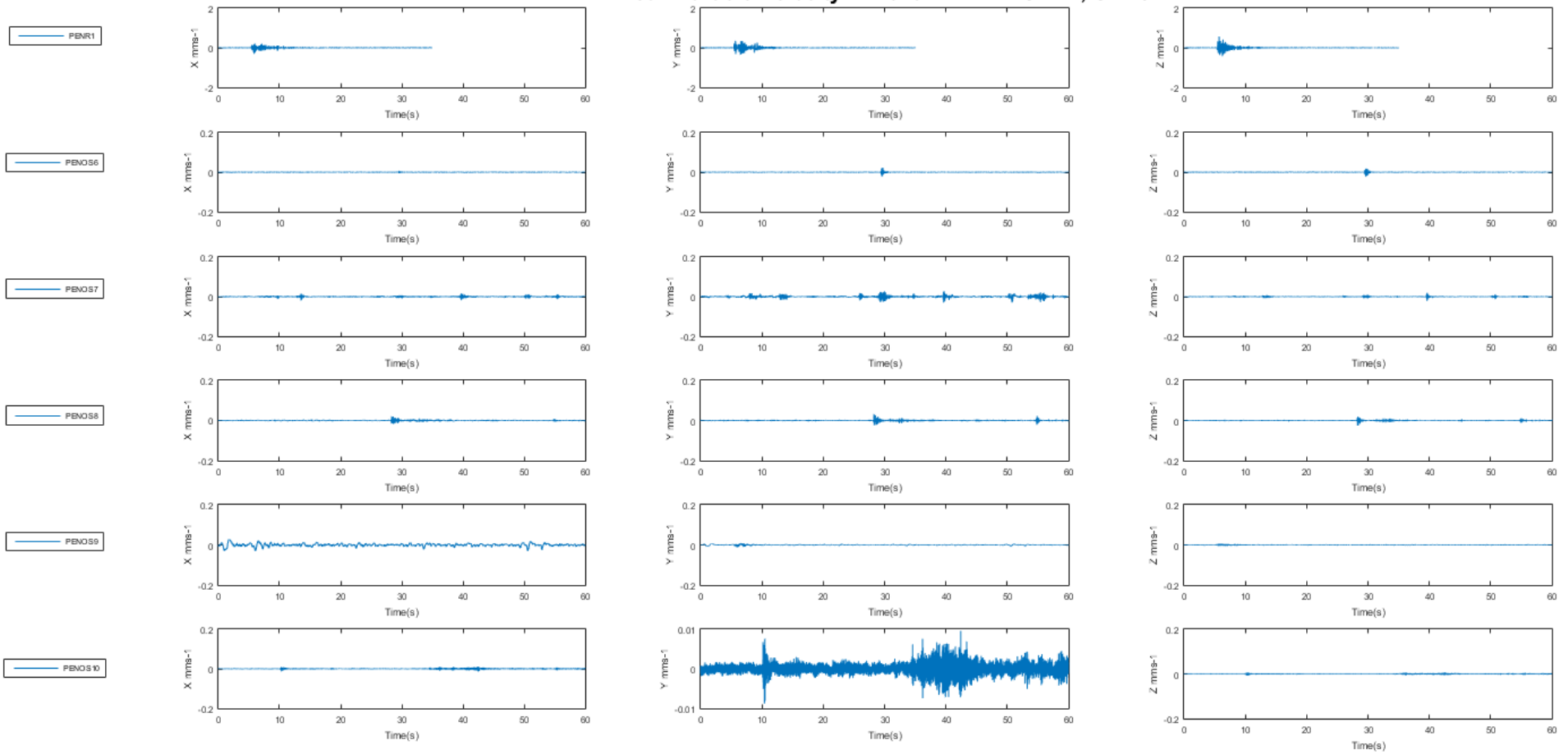
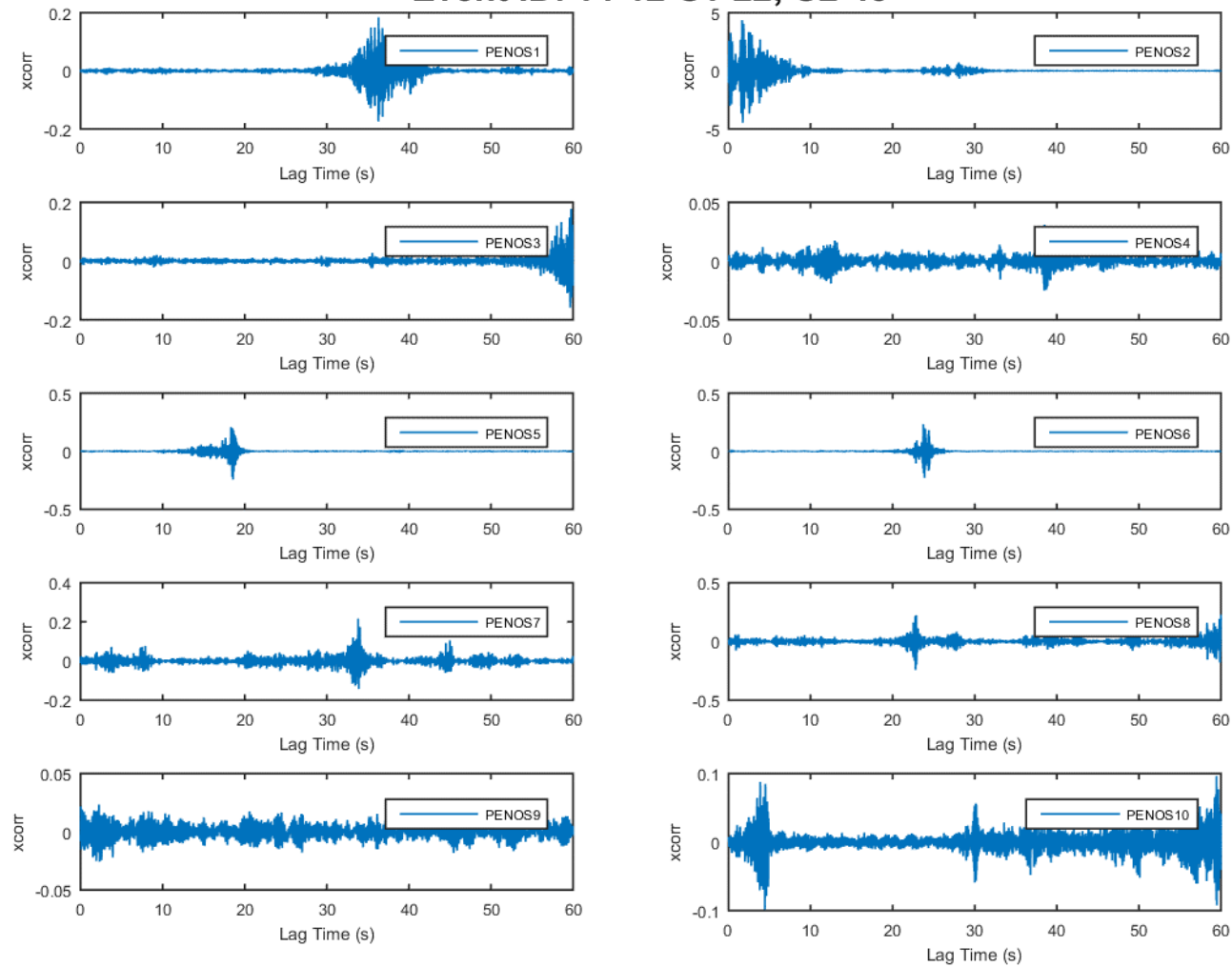


FIGURE 3.65: PEN\_OS 6 - 10 14-12-S1-22; S2-45



**Event ID: 14-12-S1-22; S2-45**



**FIGURE 3.66: CROSS CORRELATION PEN\_OS 1 - 10 14-12-S1-22; S2-45**

Peak Particle Velocity - Event ID: 14-12-S1-22; S2-45

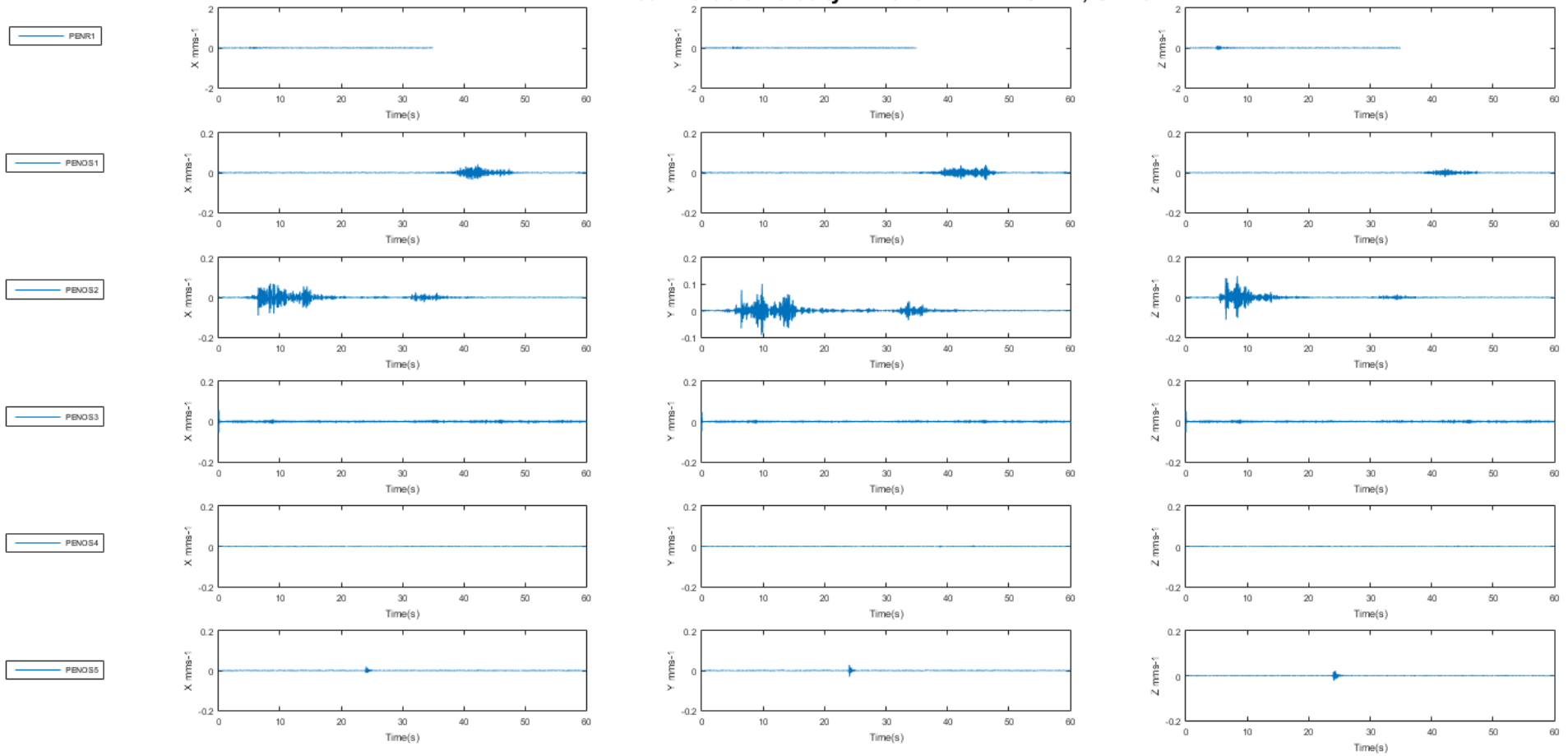


FIGURE 3.67: PEN\_OS 1 - 5 14-12-S1-22; S2-45

Peak Particle Velocity - Event ID: 14-12-S1-22; S2-45

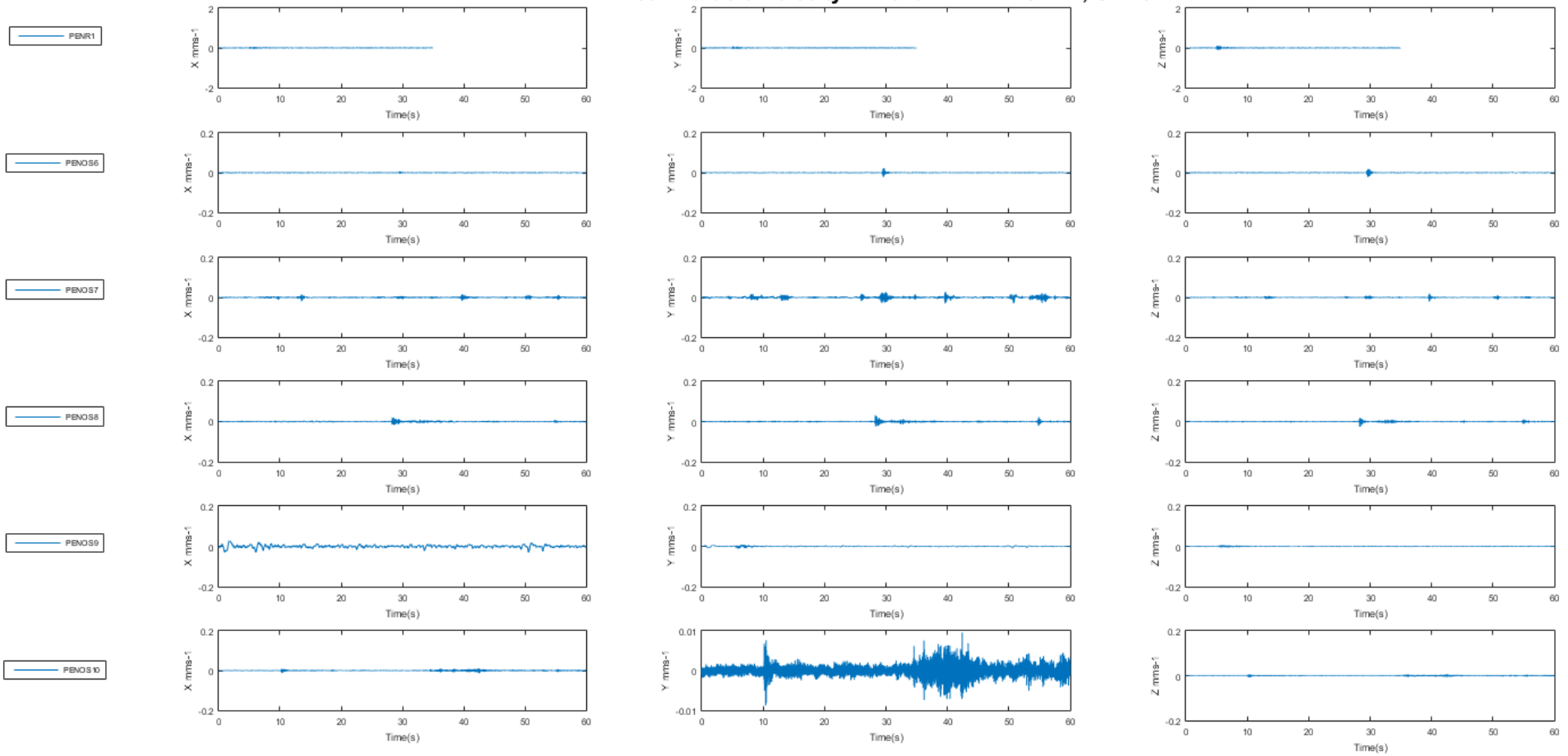


FIGURE 3.68: PEN\_OS 6 - 10 14-12-S1-22; S2-45

### Event ID: 14-12-S1-22; S2-45

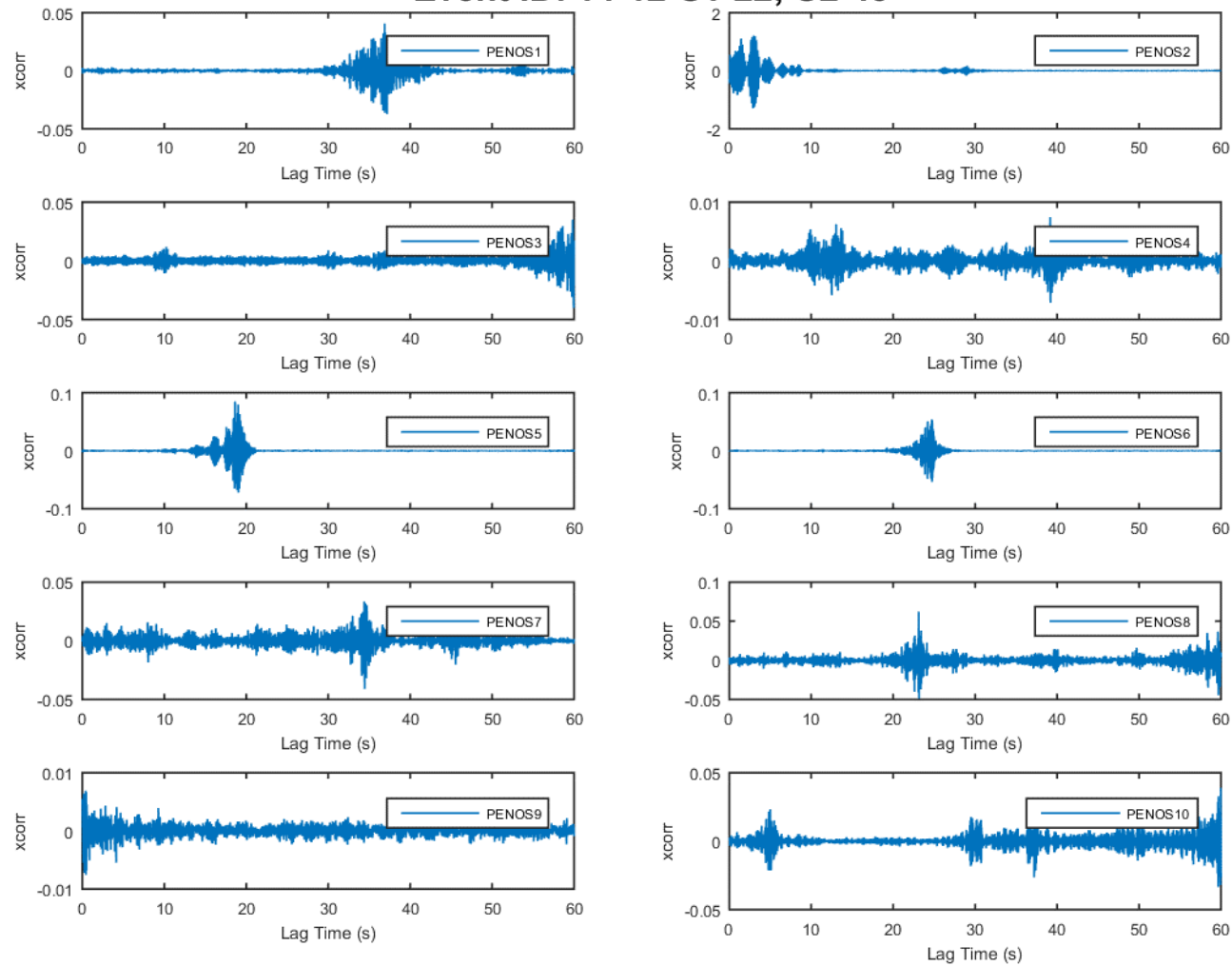


FIGURE 3.69: CROSS CORRELATION PEN\_OS 1 - 10 14-12-S1-22; S2-45

Peak Particle Velocity - Event ID: 14-12-S1-2; S2-9

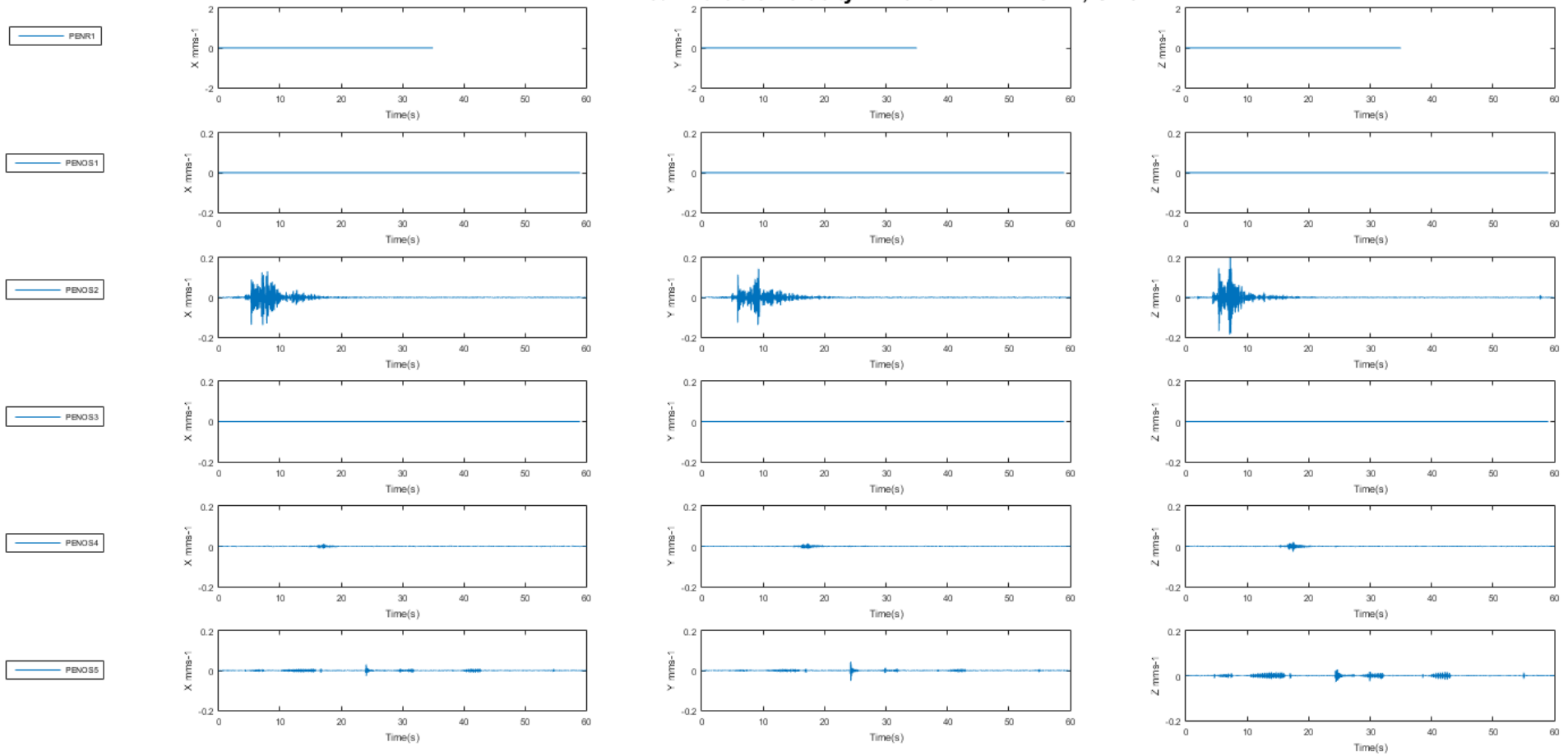
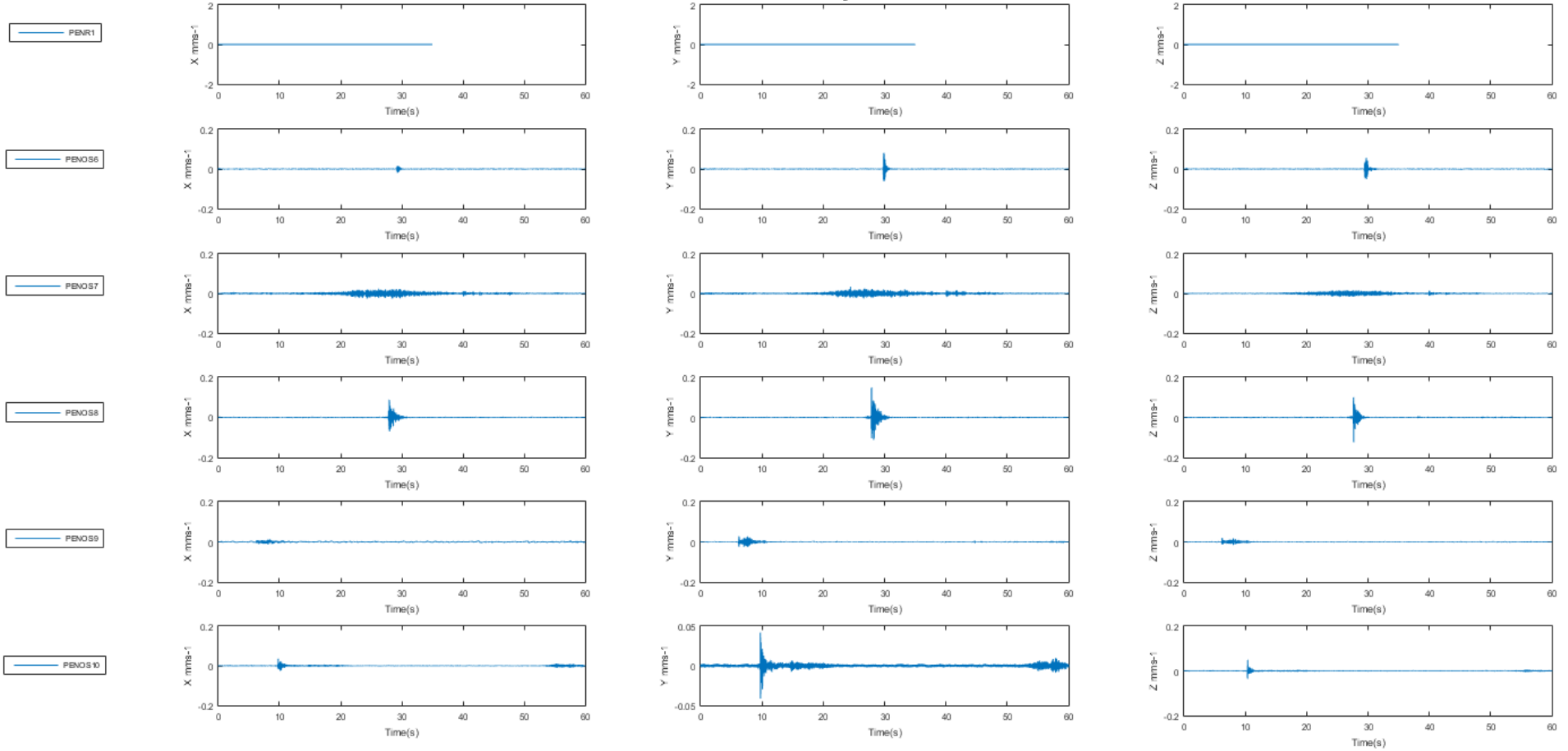


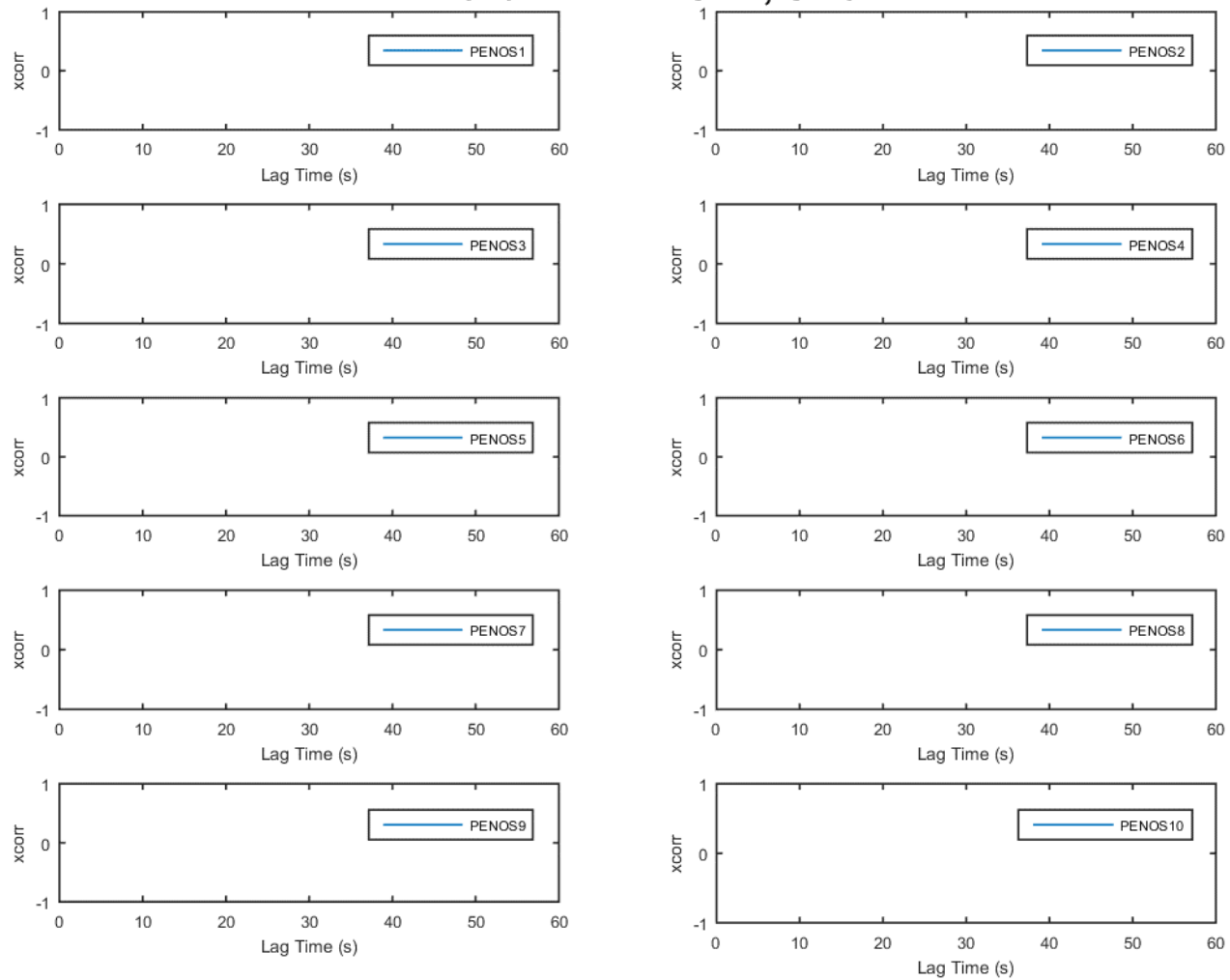
FIGURE 3.70: PEN\_OS 1 - 5 14-12-S1-2; S2-9

**Peak Particle Velocity - Event ID: 14-12-S1-2; S2-9**



**FIGURE 3.71: PEN\_OS 6 - 10 14-12-S1-2; S2-9**

### Event ID: 14-12-S1-2; S2-9



**FIGURE 3.72: CROSS CORRELATION PEN\_OS 1 - 10 14-12-S1-2; S2-9**

Peak Particle Velocity - Event ID: 14-12-S1-2; S2-9

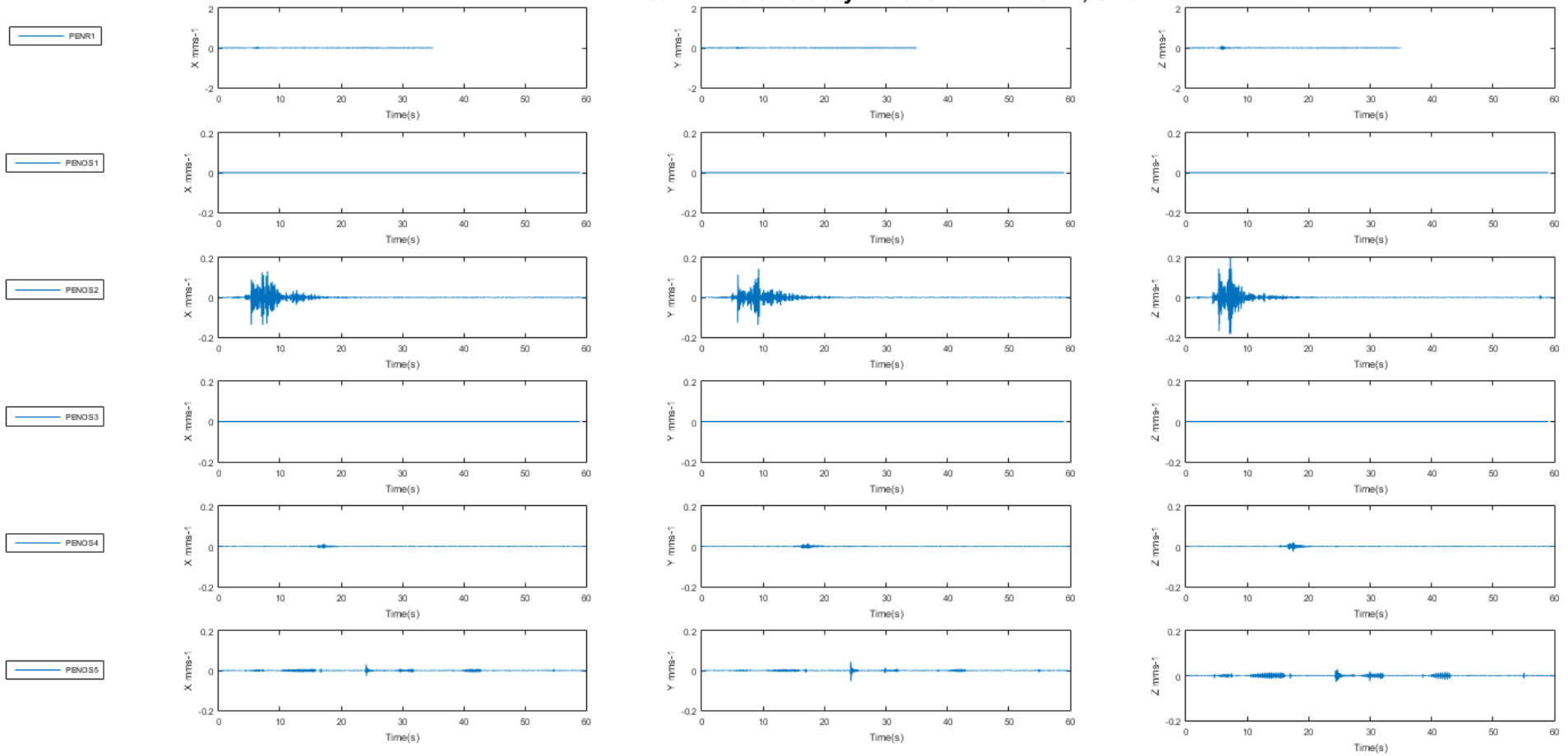
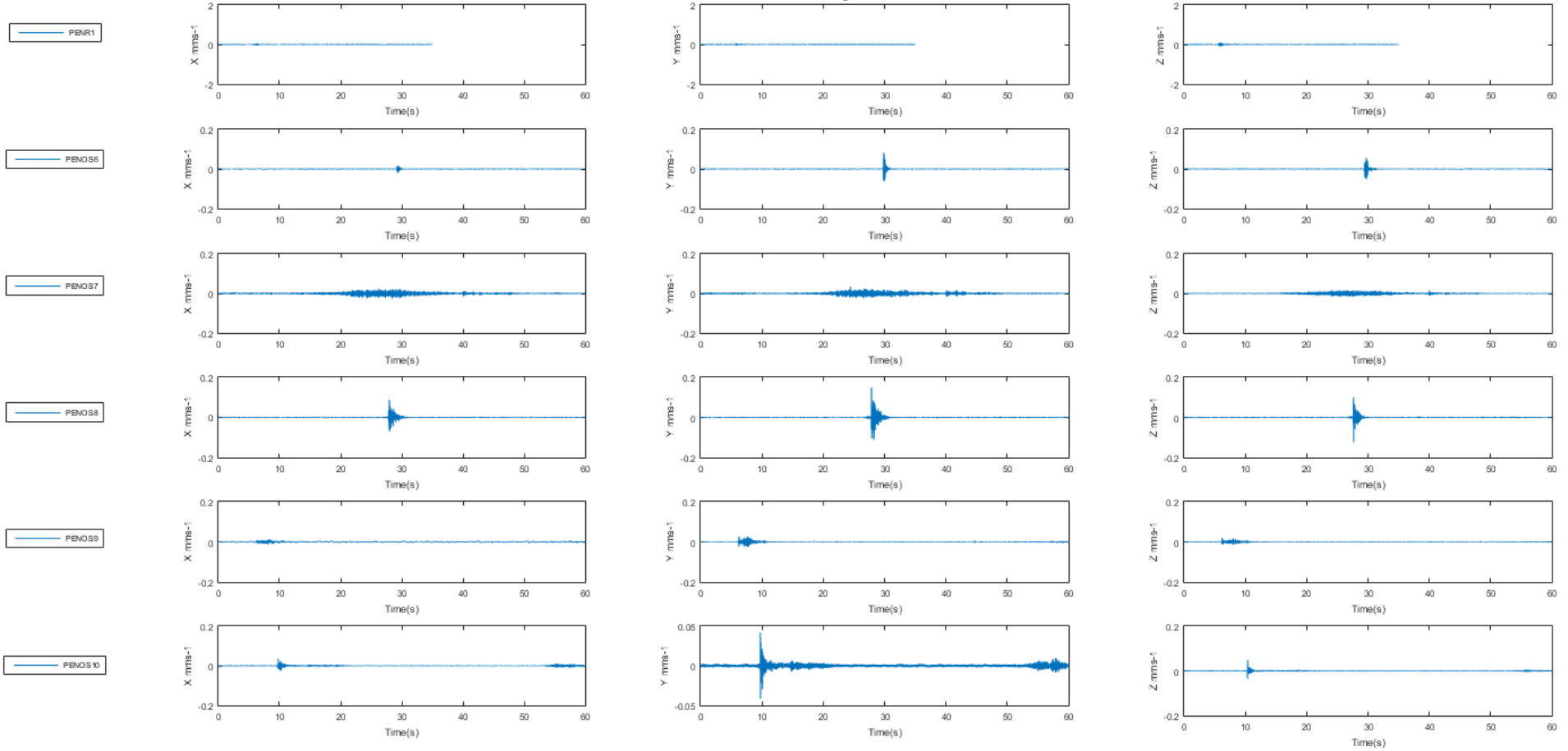


FIGURE 3.73: PEN\_OS 1 - 5 14-12-S1-2; S2-9

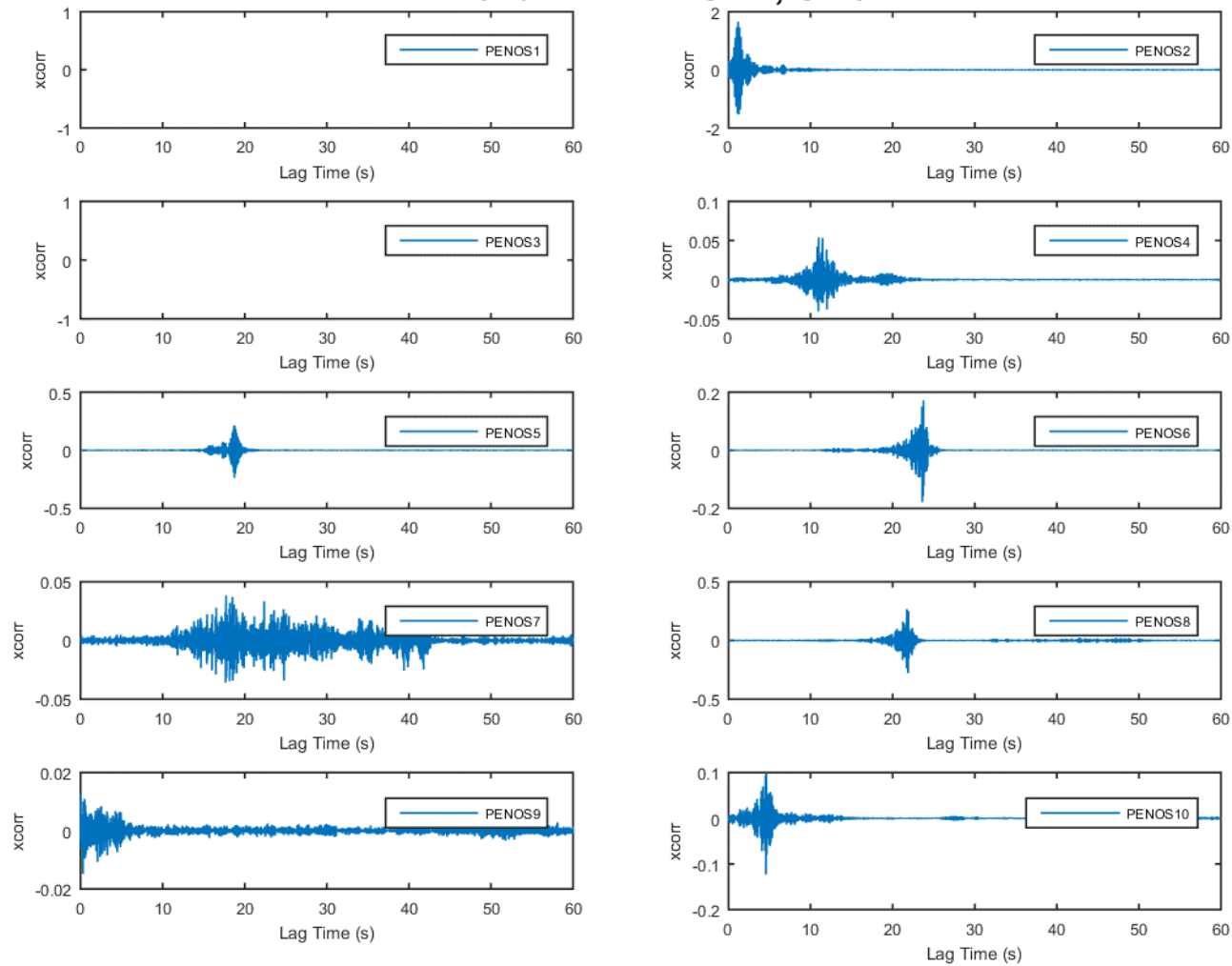


**Peak Particle Velocity - Event ID: 14-12-S1-2; S2-9**



**FIGURE 3.74: PEN\_OS 6 - 10 14-12-S1-2; S2-9**

**Event ID: 14-12-S1-2; S2-9**



**FIGURE 3.75: CROSS CORRELATION PEN\_OS 1 - 10 14-12-S1-2; S2-9**

Peak Particle Velocity - Event ID: 14-12-S2-110

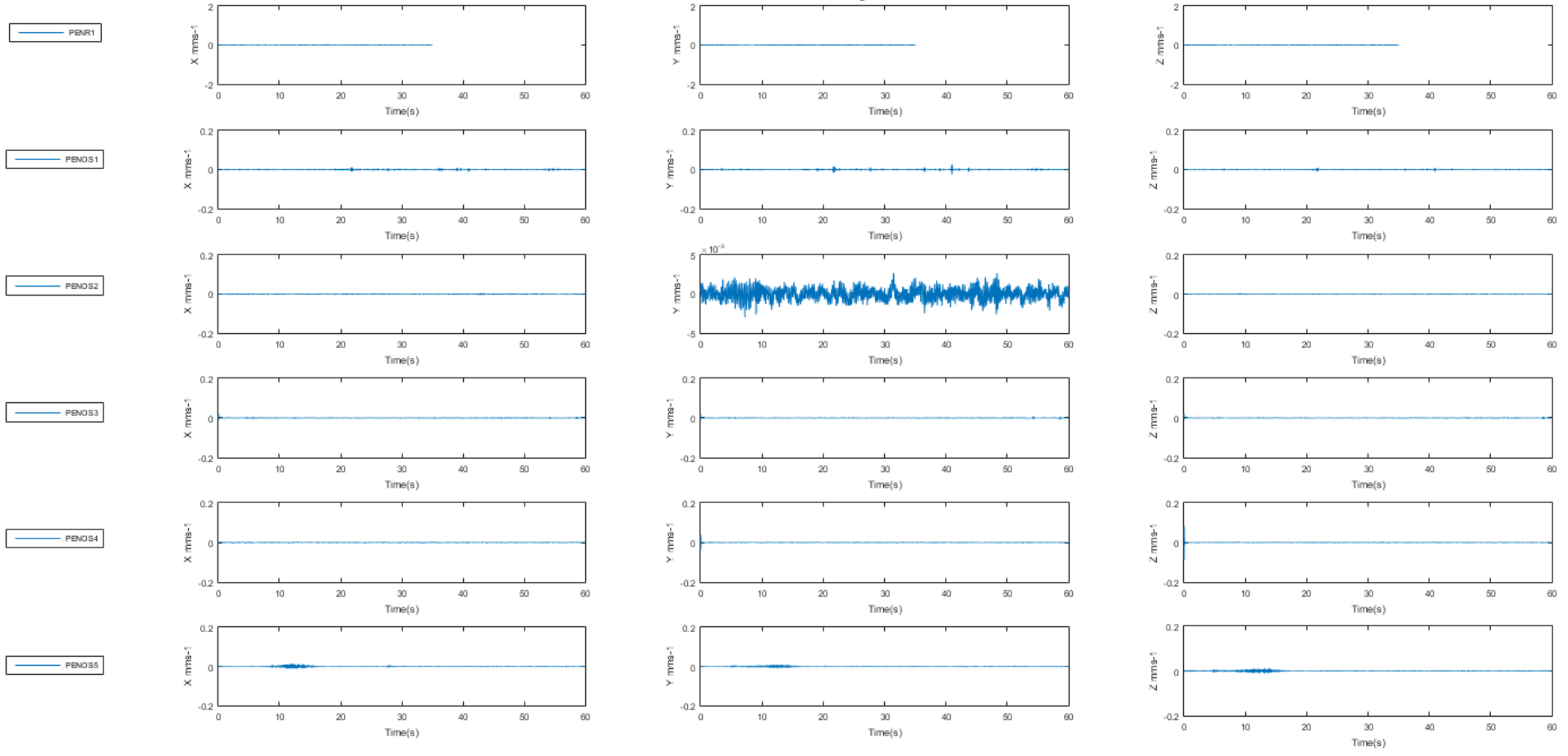


FIGURE 3.76: PEN\_OS 1 - 5 14-12-S2-110

Peak Particle Velocity - Event ID: 14-12-S2-110

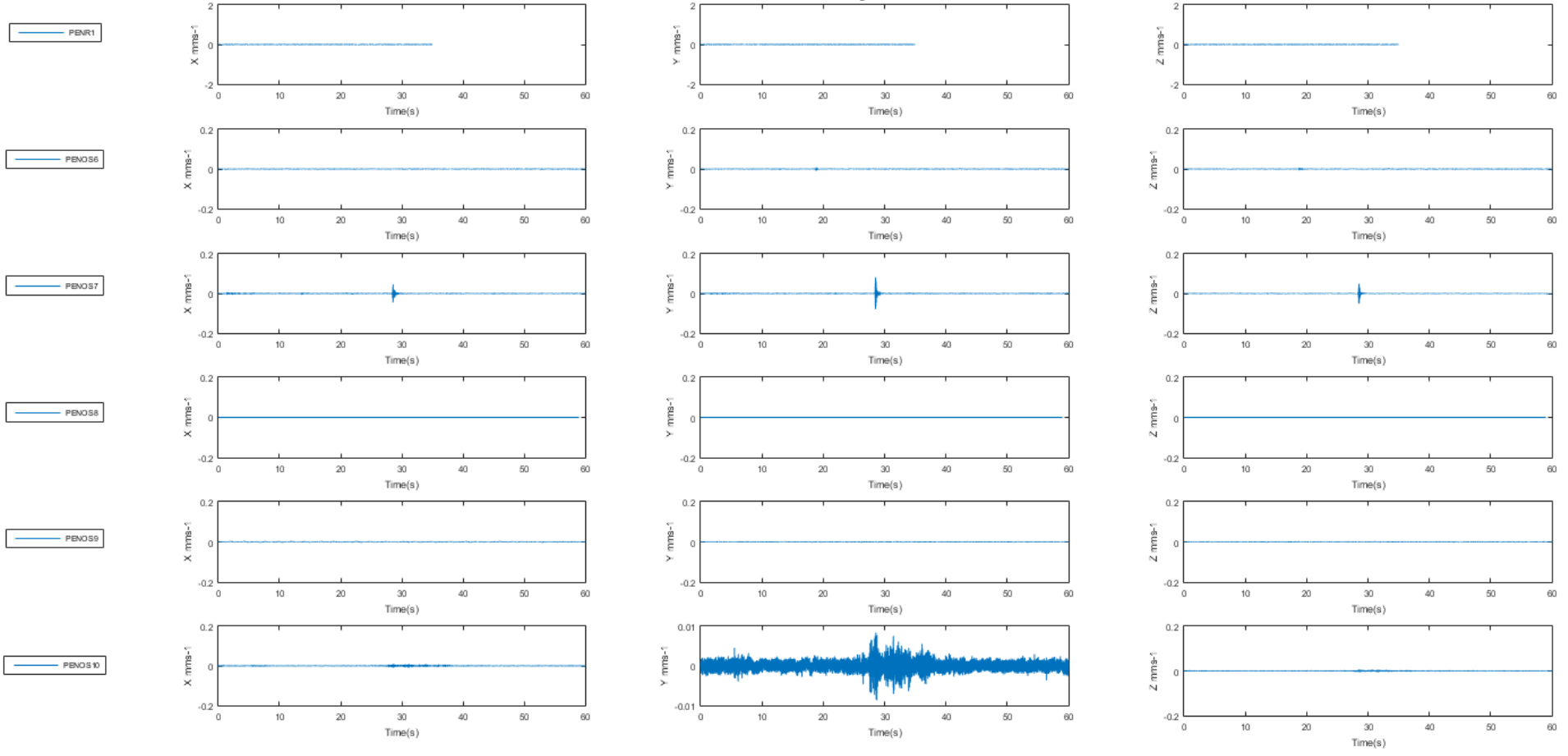


FIGURE 3.77: PEN\_OS 6 - 10 14-12-S2-110

### Event ID: 14-12-S2-110

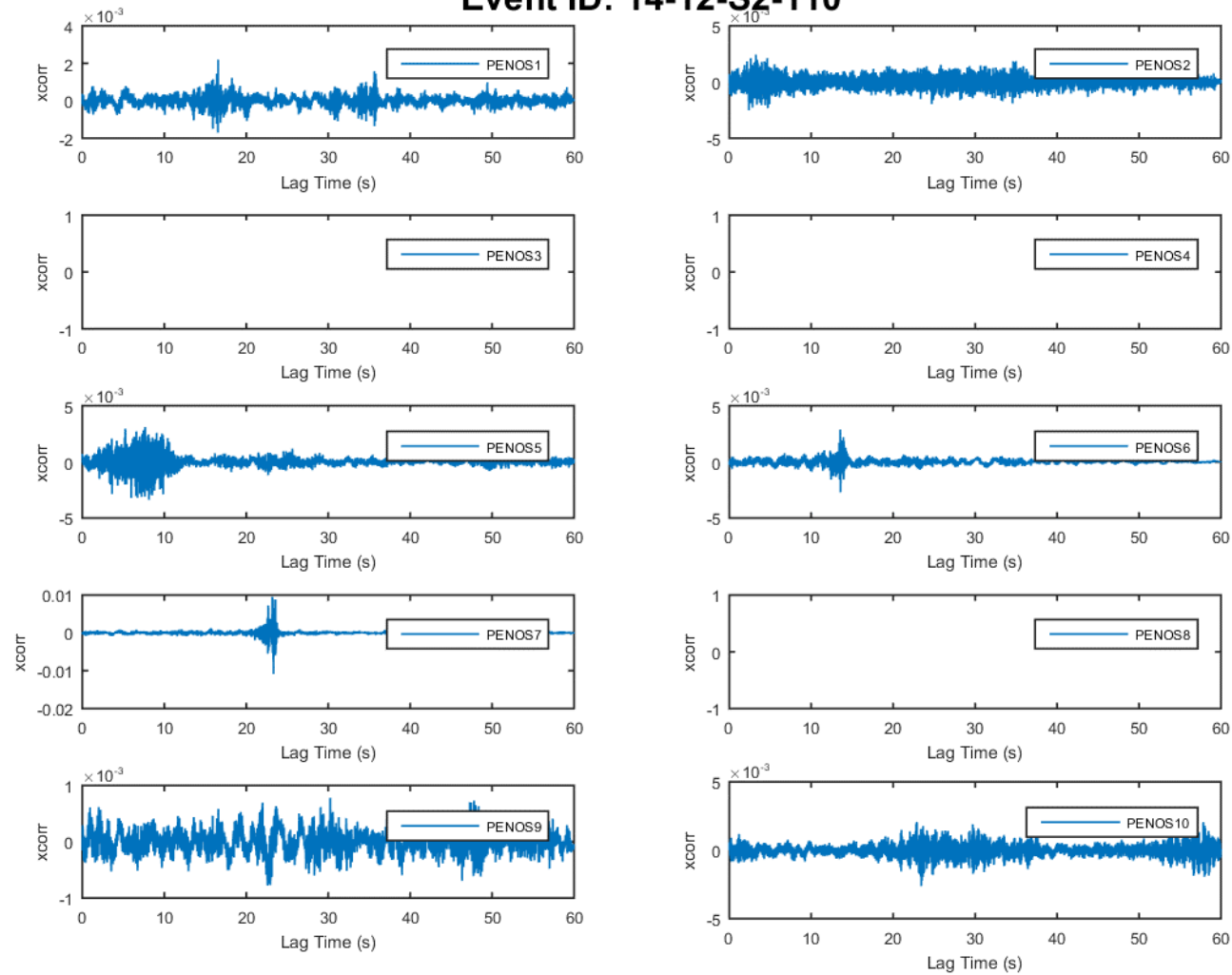


FIGURE 3.78: CROSS CORRELATION PEN\_OS 1 - 10 14-12-S2-110

Peak Particle Velocity - Event ID: 14-12-S2-111

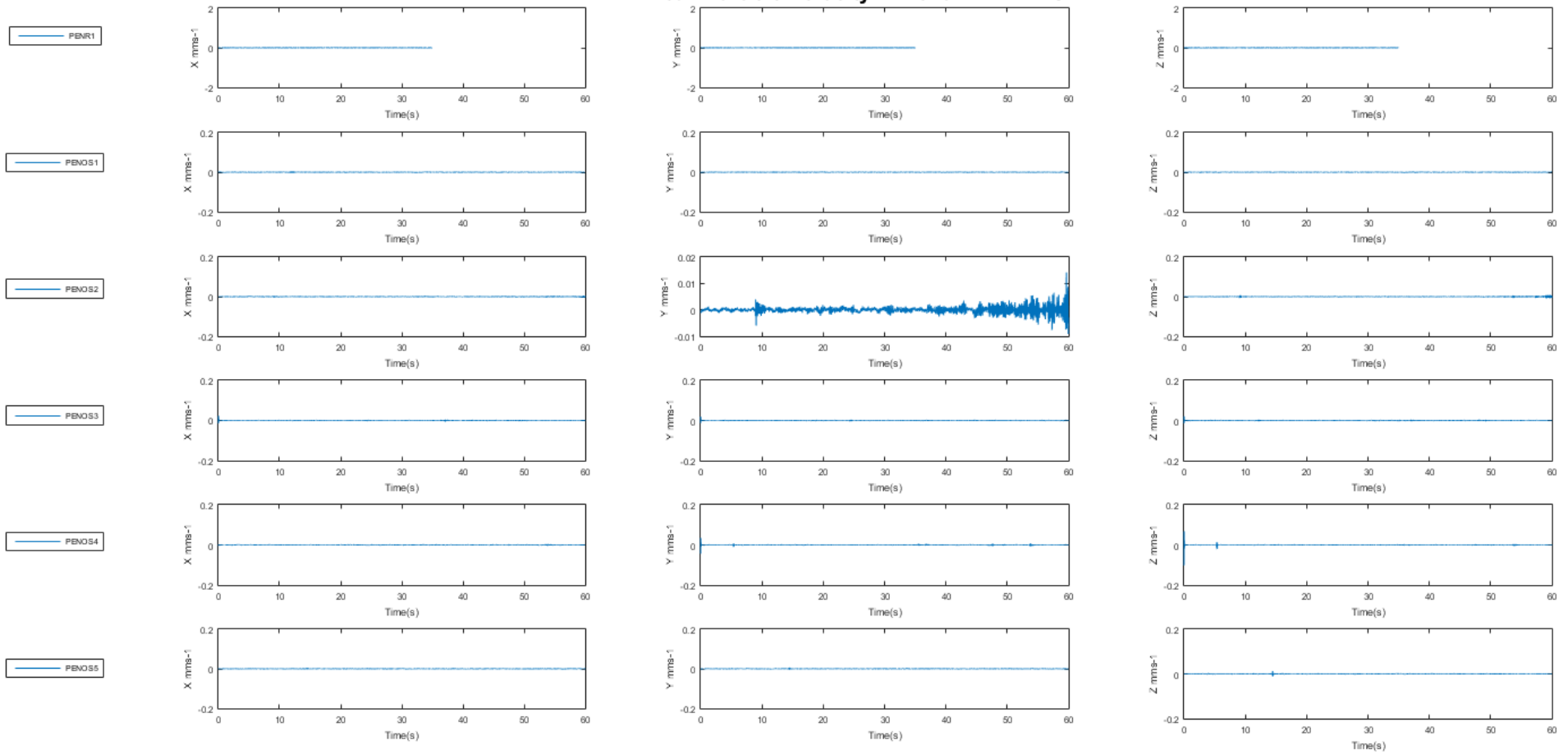


FIGURE 3.79: PEN\_OS 1 - 5 14-12-S2-111

Peak Particle Velocity - Event ID: 14-12-S2-111

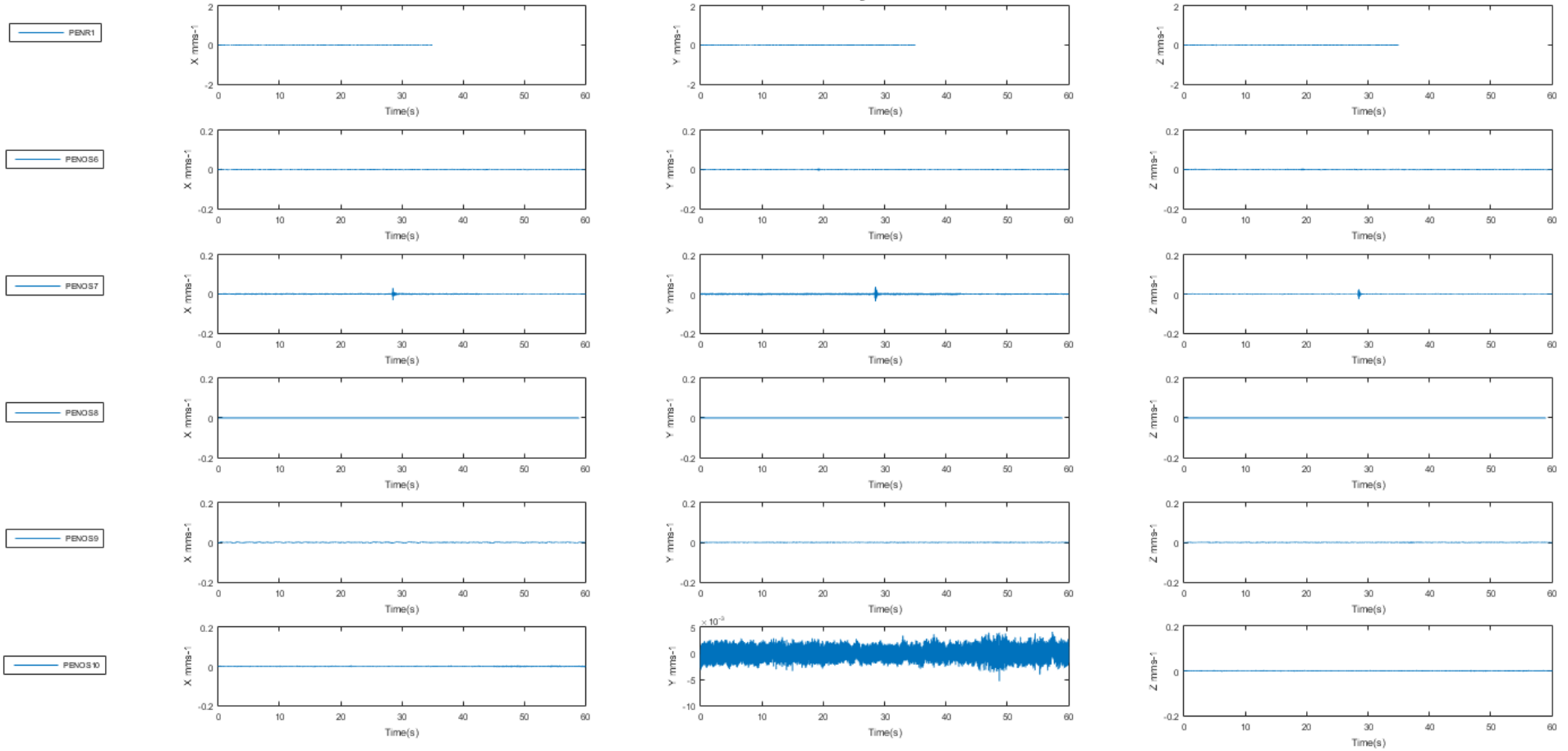


FIGURE 3.80: PEN\_OS 6 - 10 14-12-S2-111

### Event ID: 14-12-S2-111

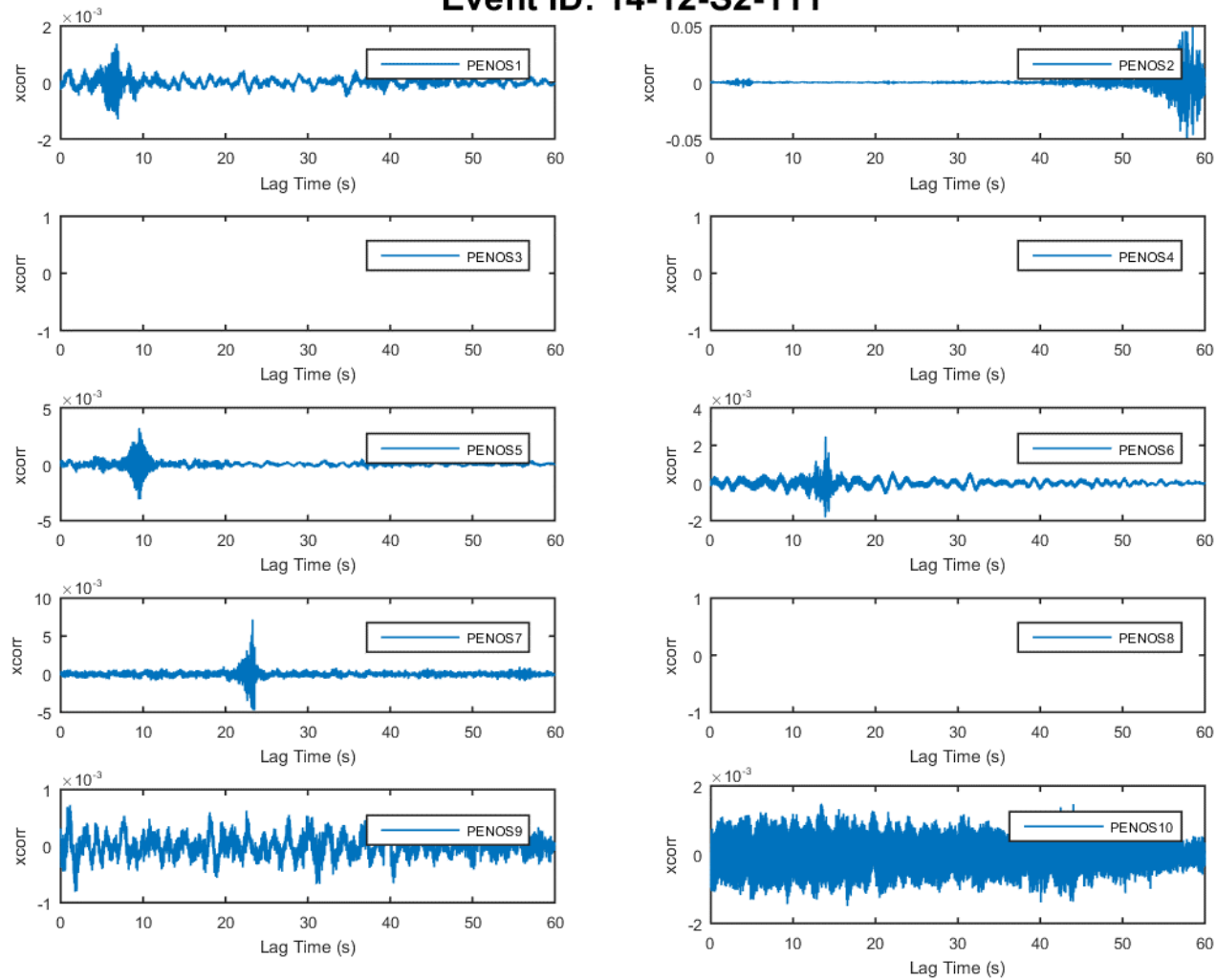


FIGURE 3.81: CROSS CORRELATION PEN\_OS 1 - 10 14-12-S2-111



Peak Particle Velocity - Event ID: 14-12-S2-116

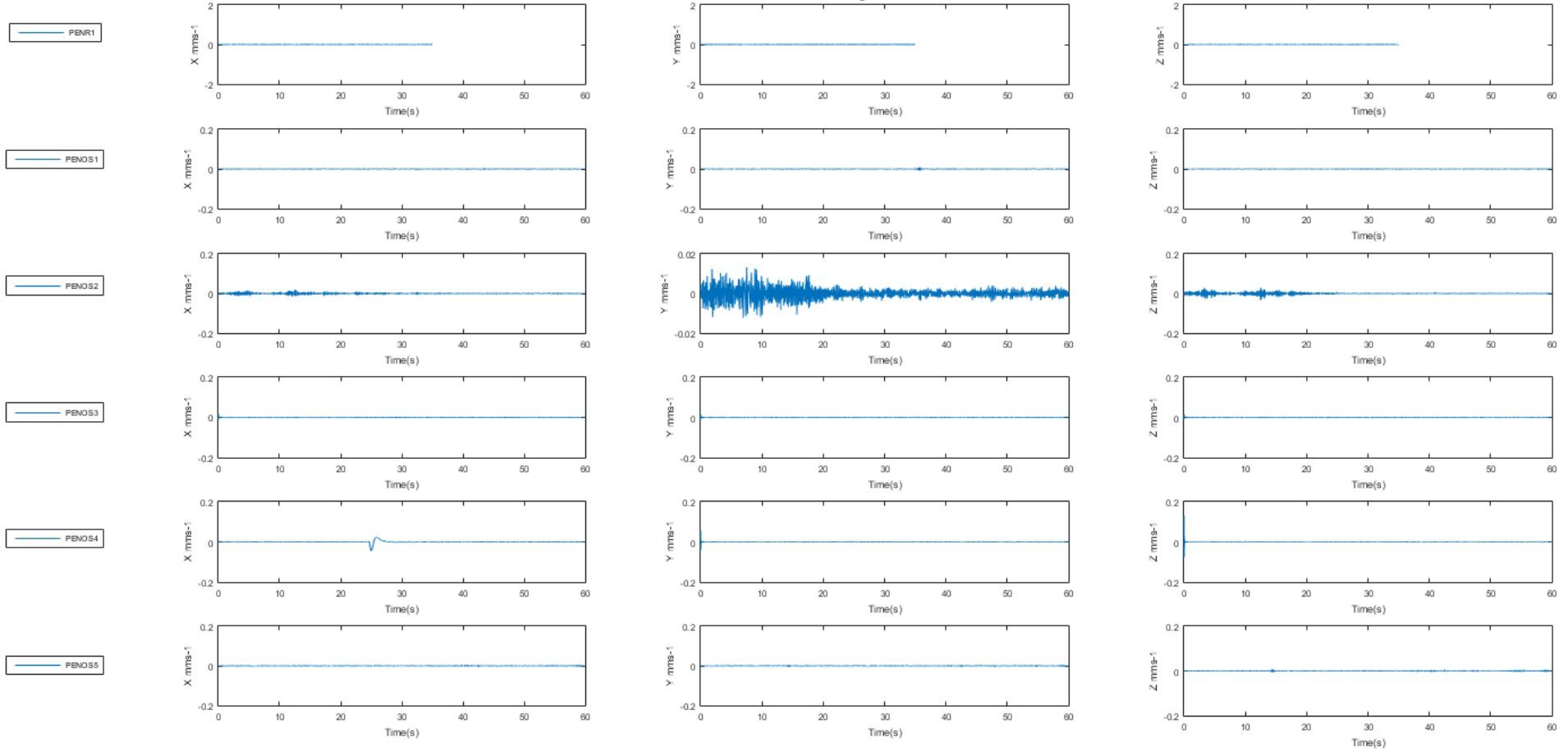


FIGURE 3.82: PEN\_OS 1 - 5 14-12-S2-116

Peak Particle Velocity - Event ID: 14-12-S2-116

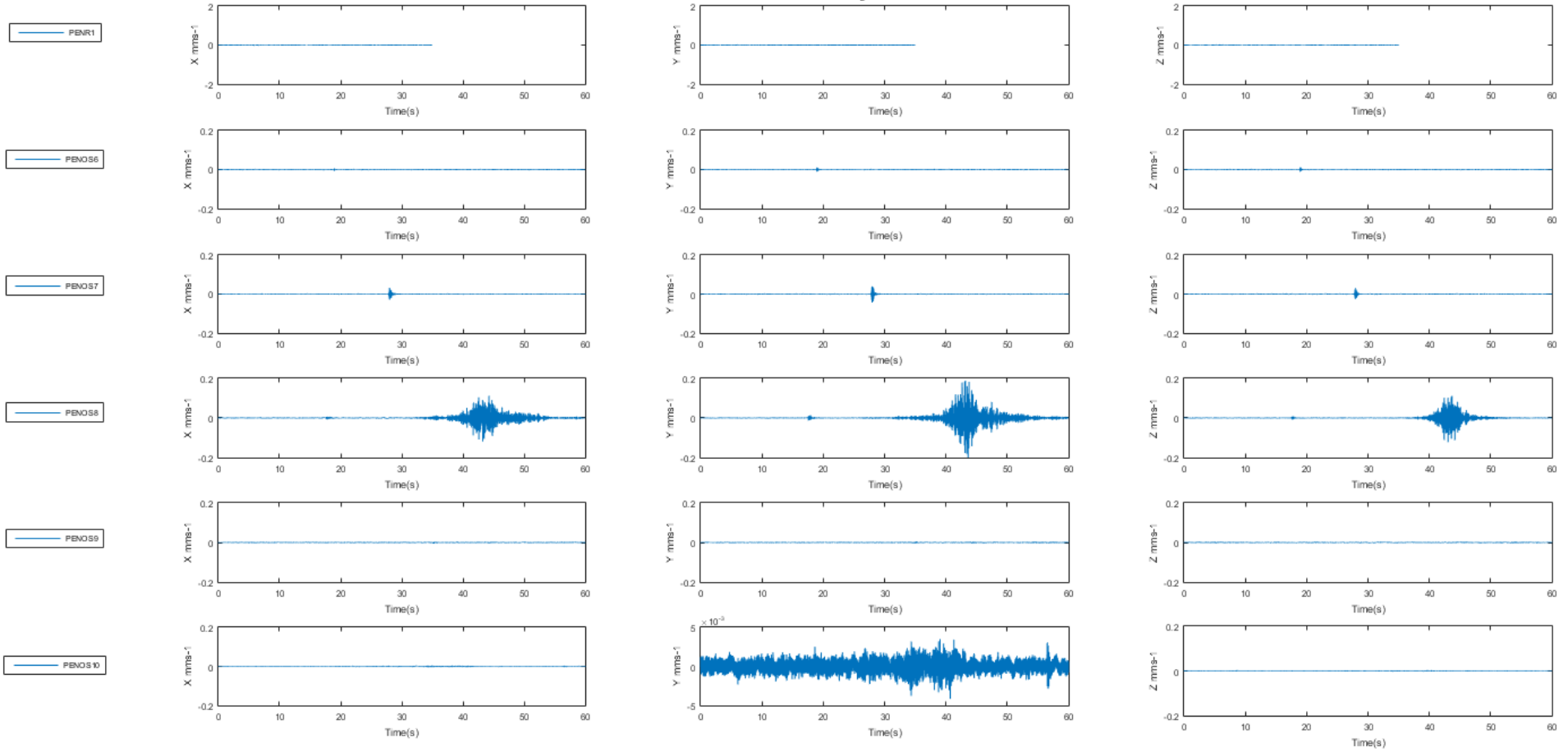


FIGURE 3.83: PEN\_OS 6 - 10 14-12-S2-116

### Event ID: 14-12-S2-116

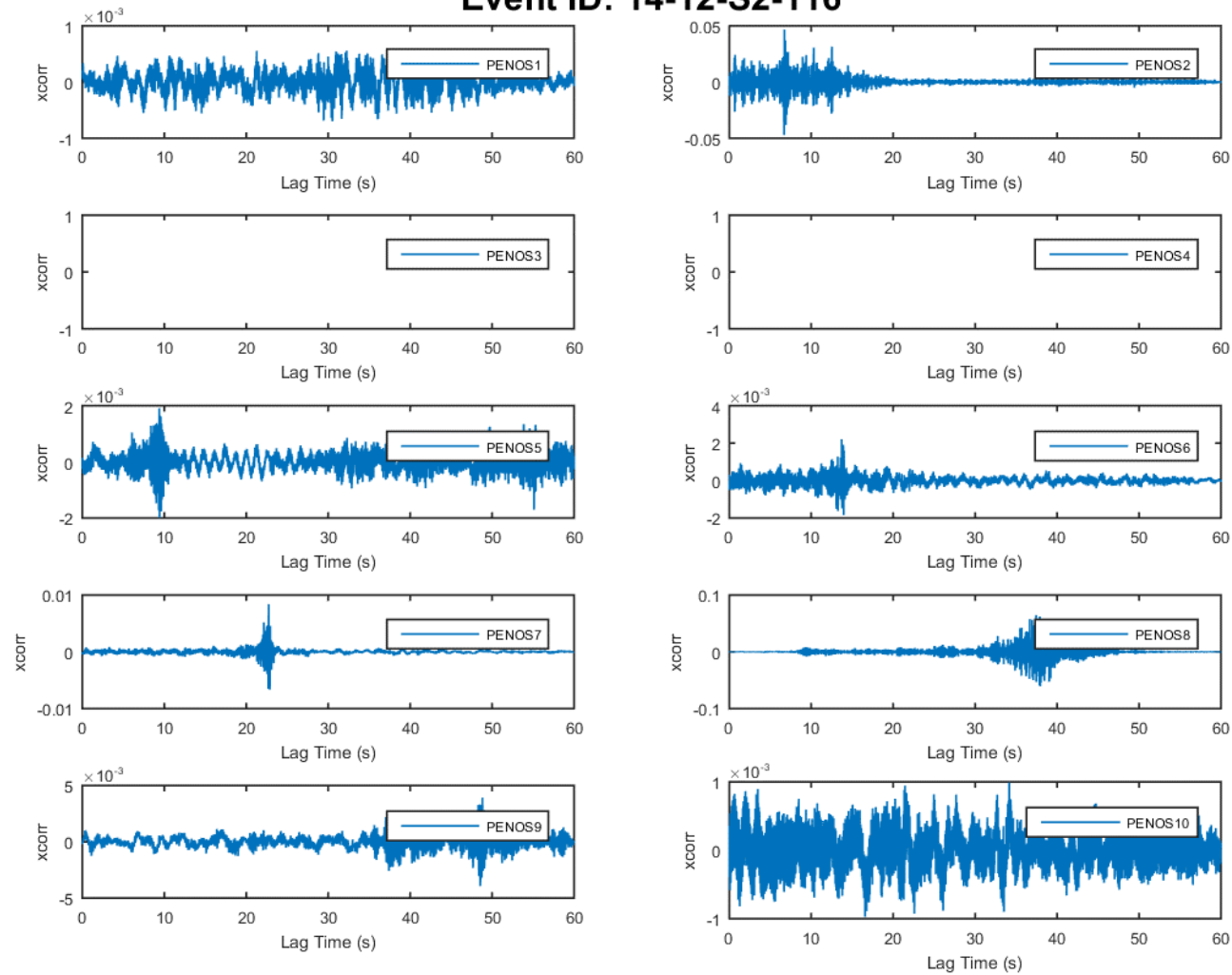
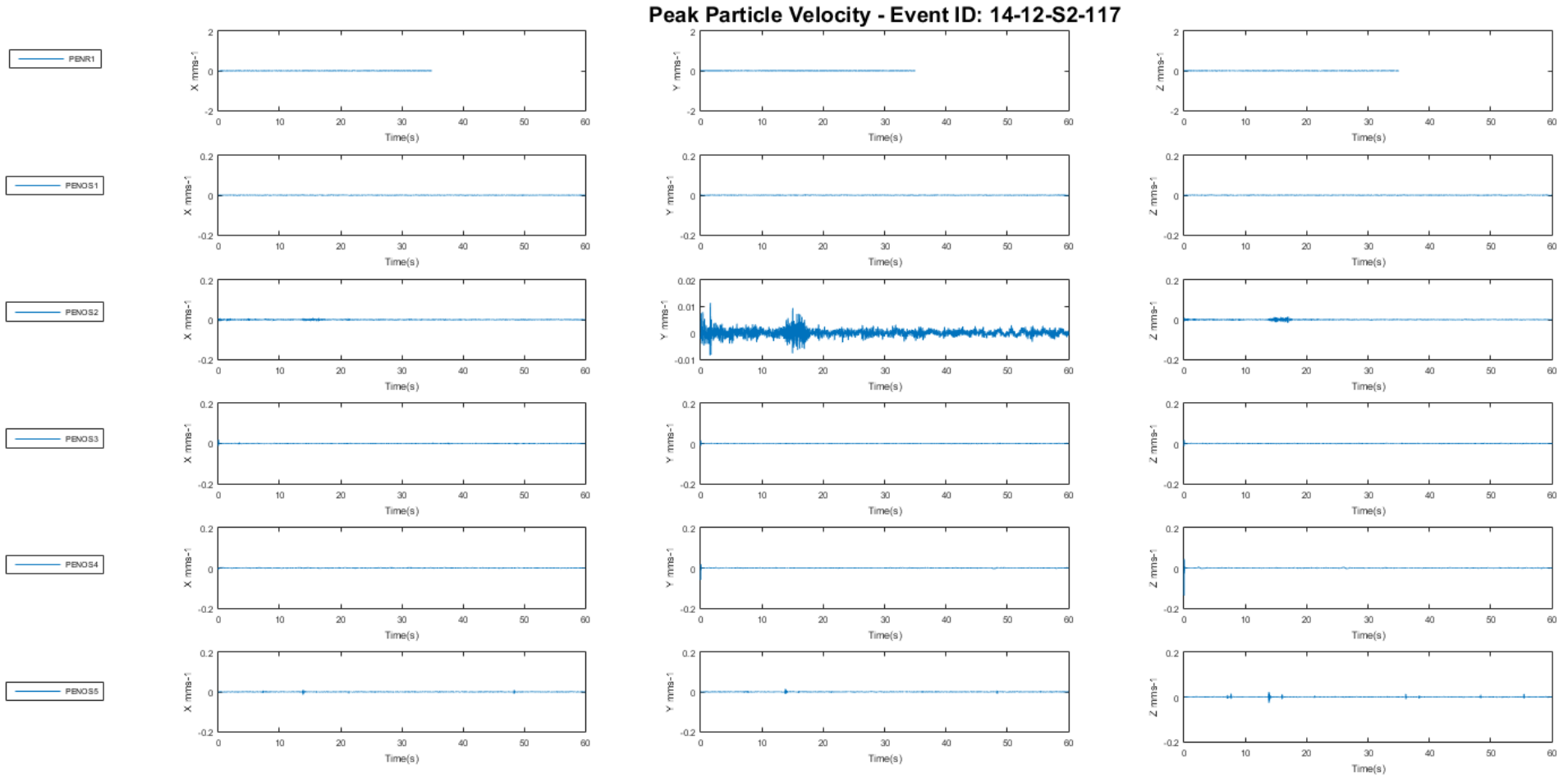


FIGURE 3.84: CROSS CORRELATION PEN\_OS 1 - 10 14-12-S2-116



**FIGURE 3.85: PEN\_OS 1 - 5 14-12-S2-117**

Peak Particle Velocity - Event ID: 14-12-S2-117

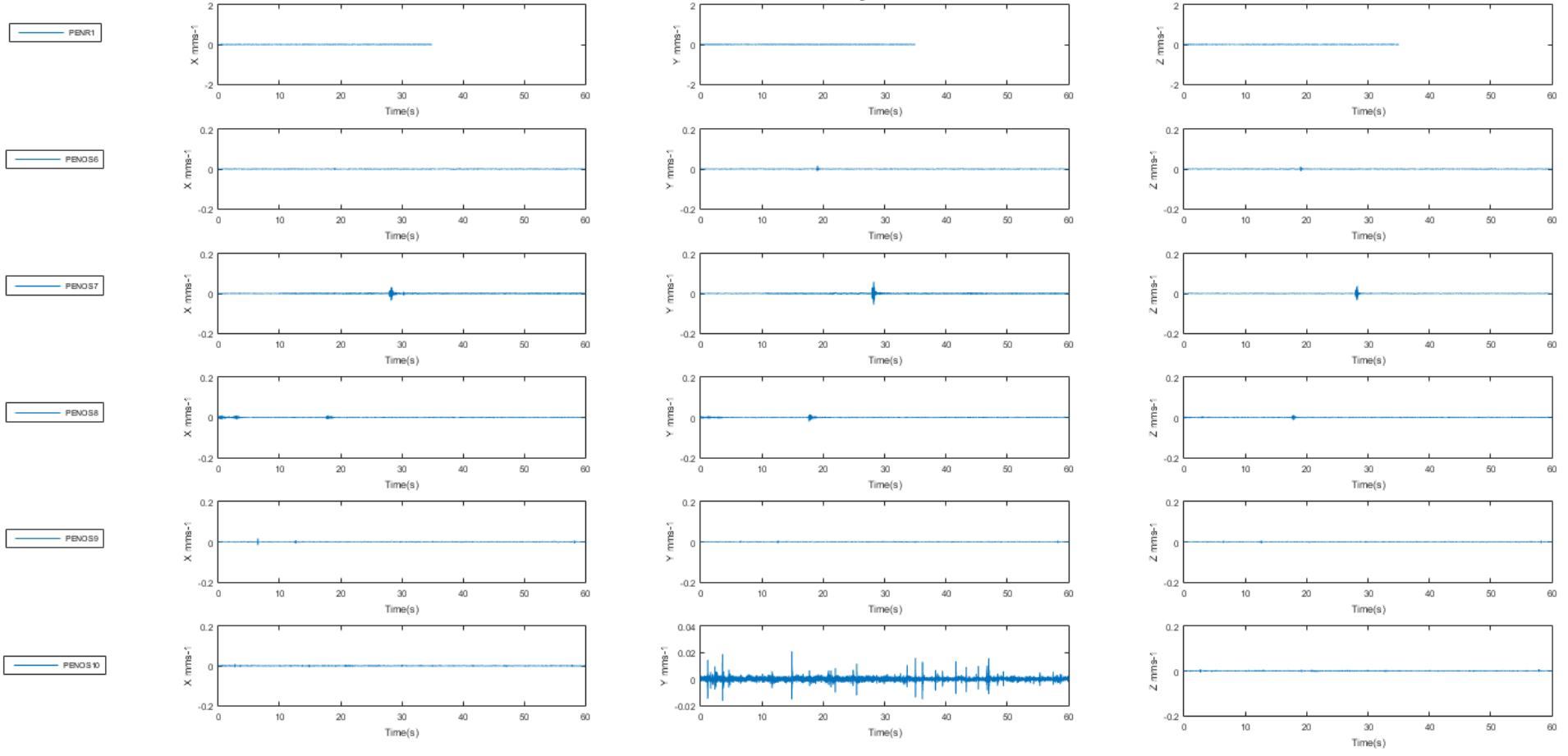


FIGURE 3.86: PEN\_OS 6 - 10 14-12-S2-117

### Event ID: 14-12-S2-117

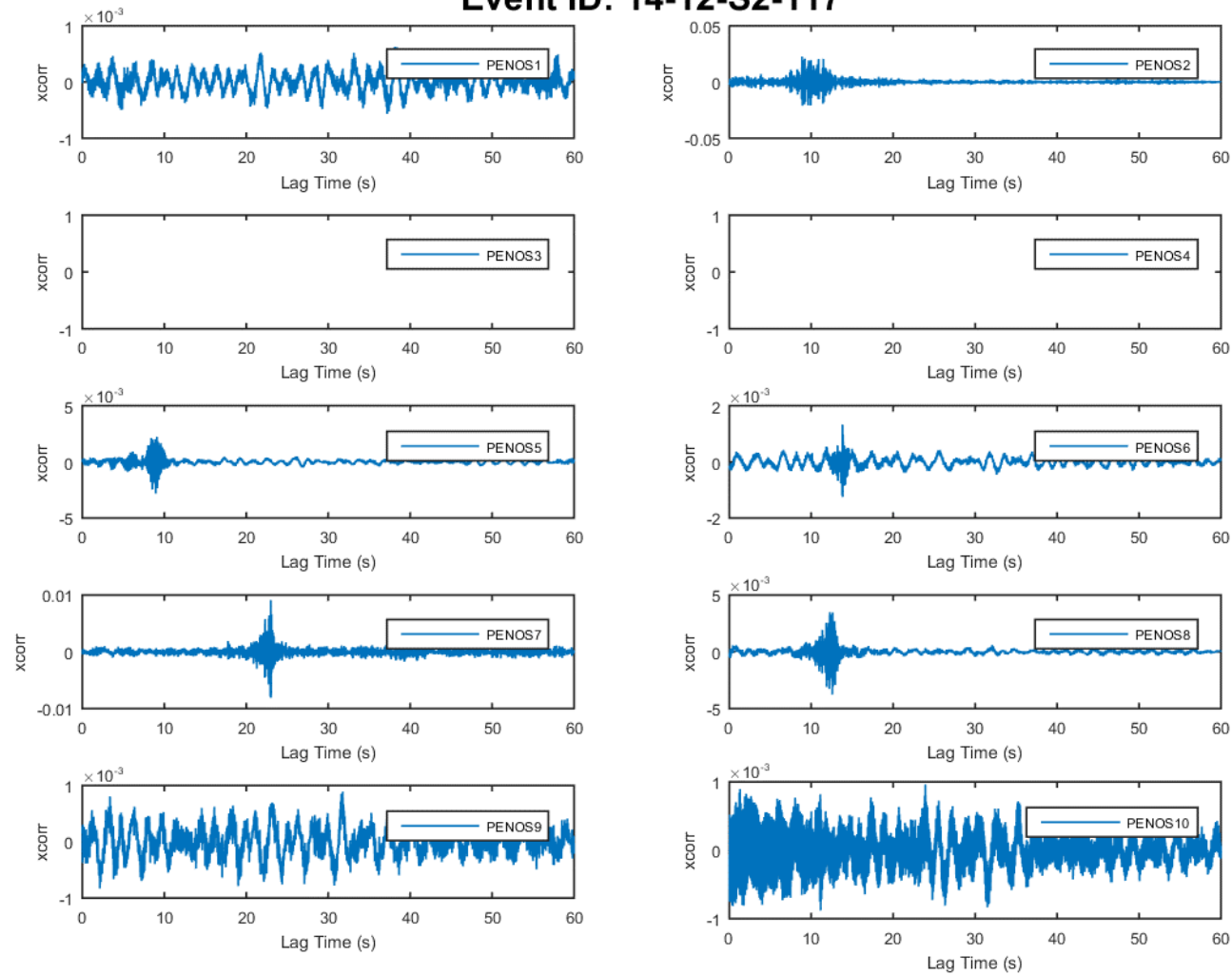


FIGURE 3.87: CROSS CORRELATION PEN\_OS 1 - 10 14-12-S2-117

Peak Particle Velocity - Event ID: 14-12-S2-124

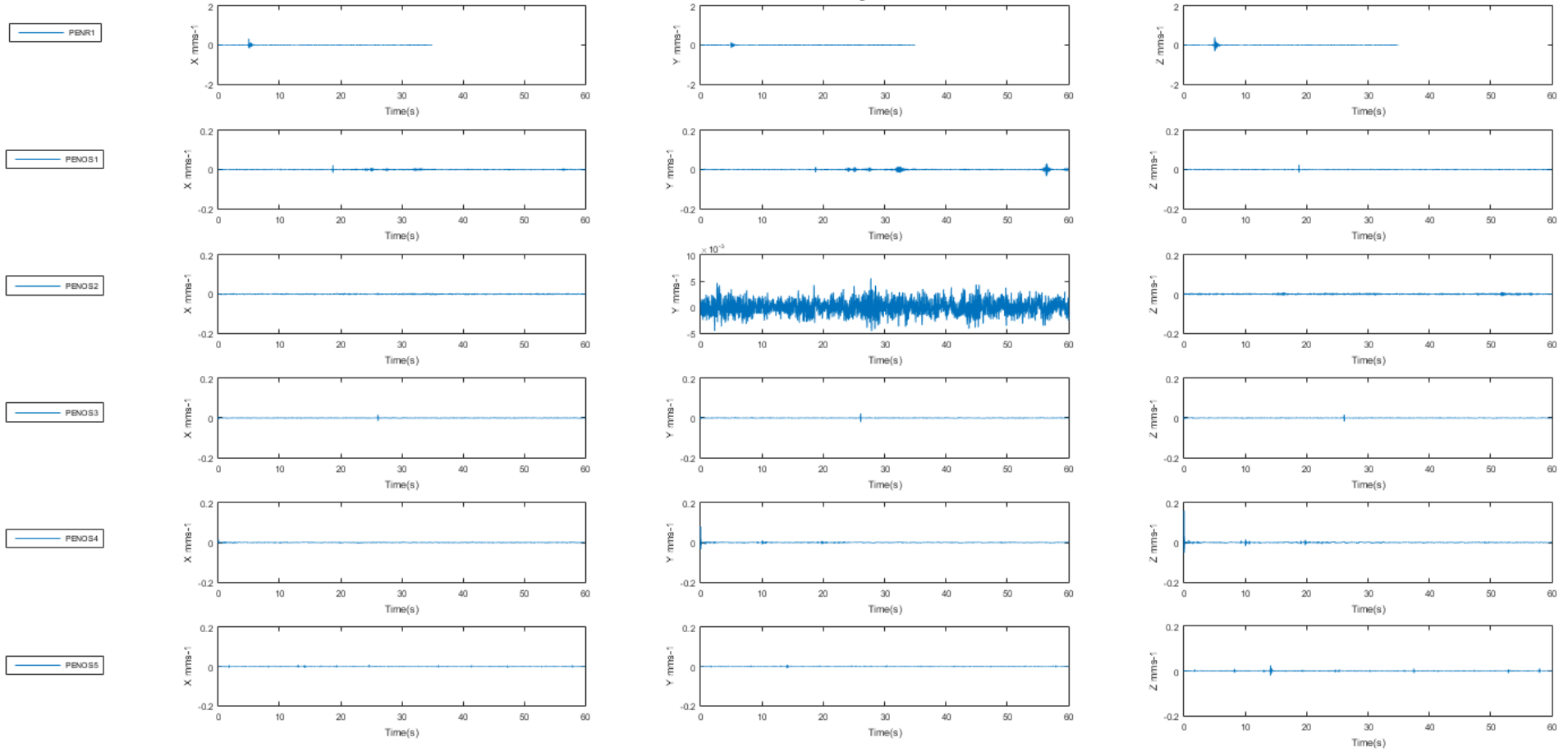


FIGURE 3.88: PEN\_OS 1 - 5 14-12-S2-124

Peak Particle Velocity - Event ID: 14-12-S2-124

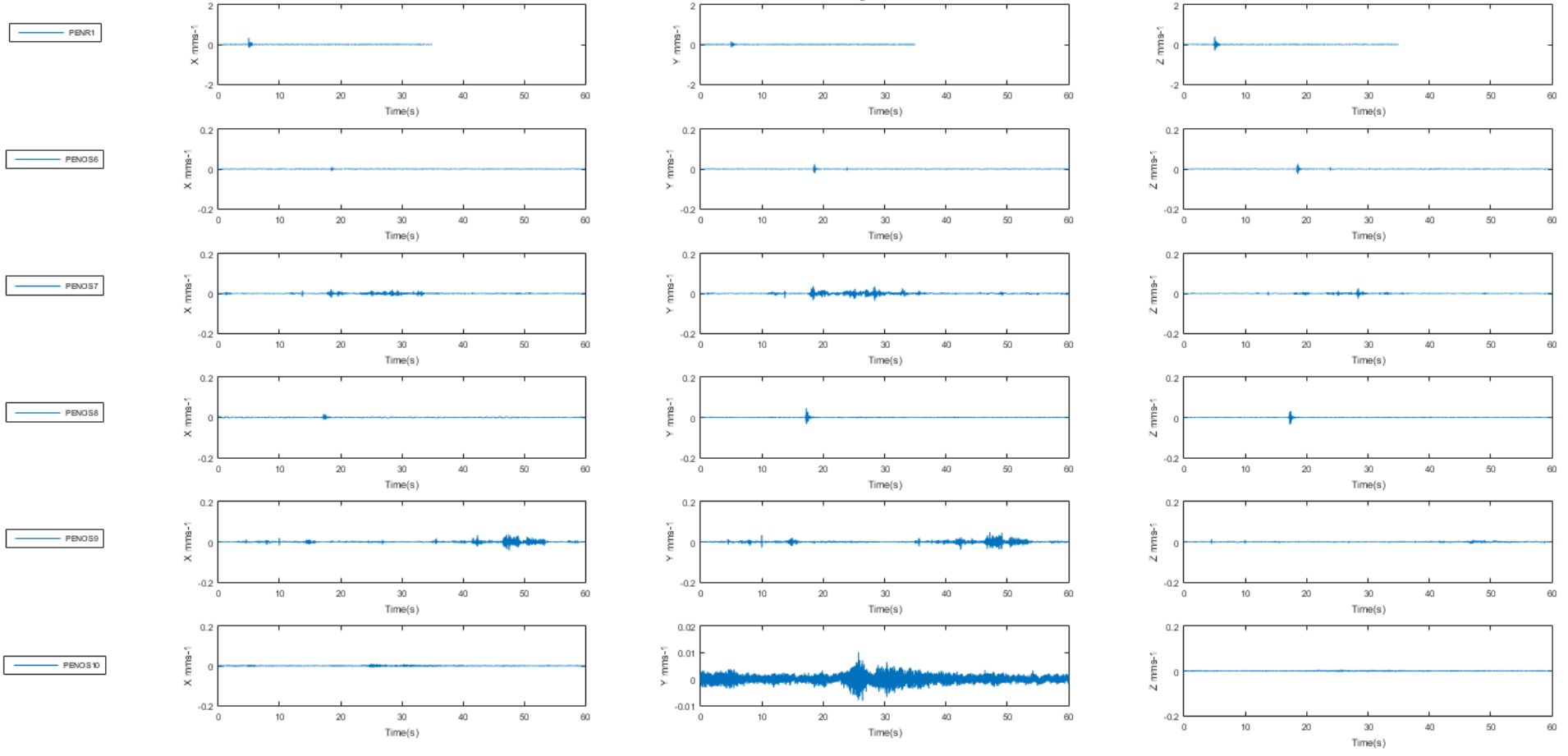


FIGURE 3.89: PEN\_OS 6 - 10 14-12-S2-124



### Event ID: 14-12-S2-124

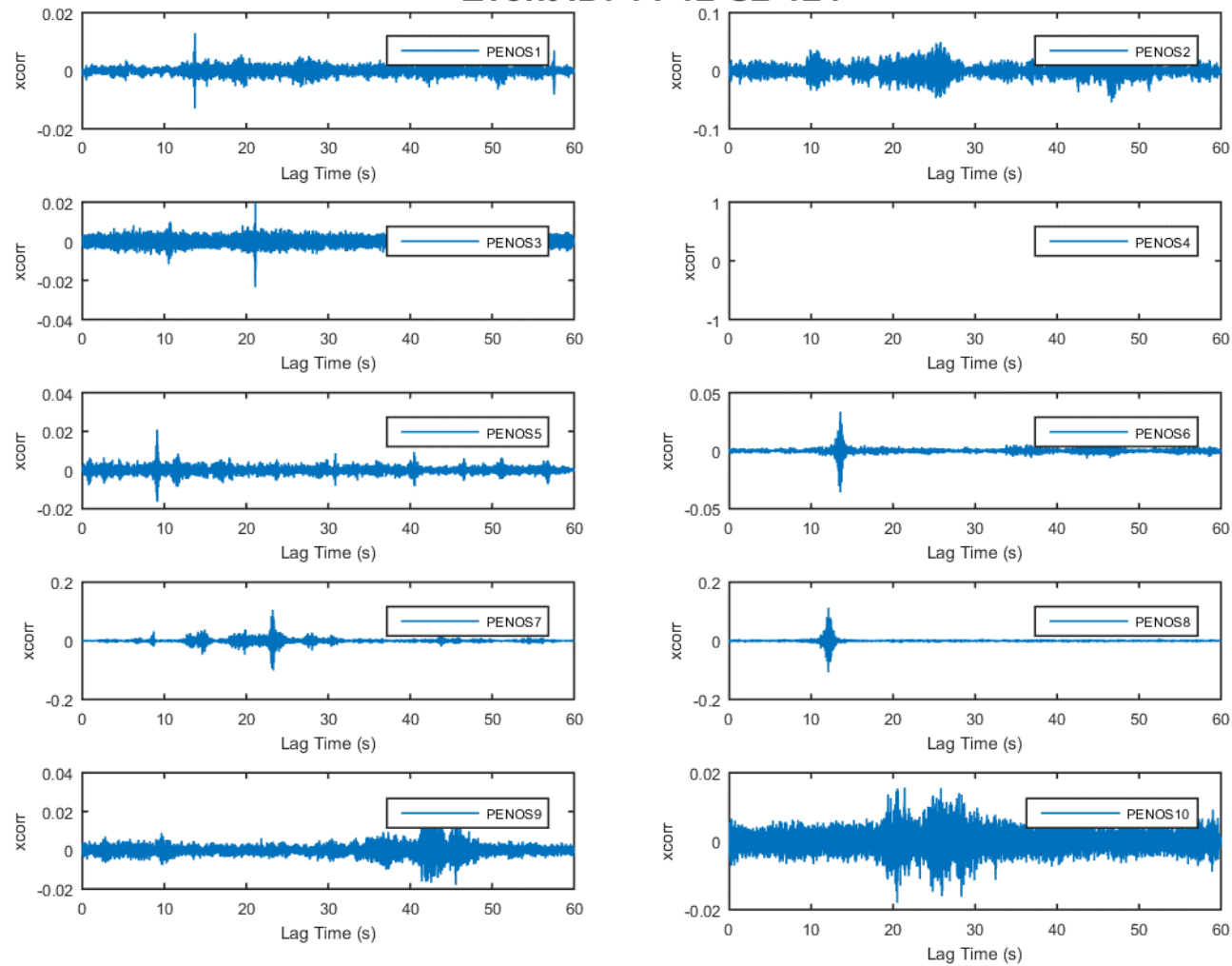
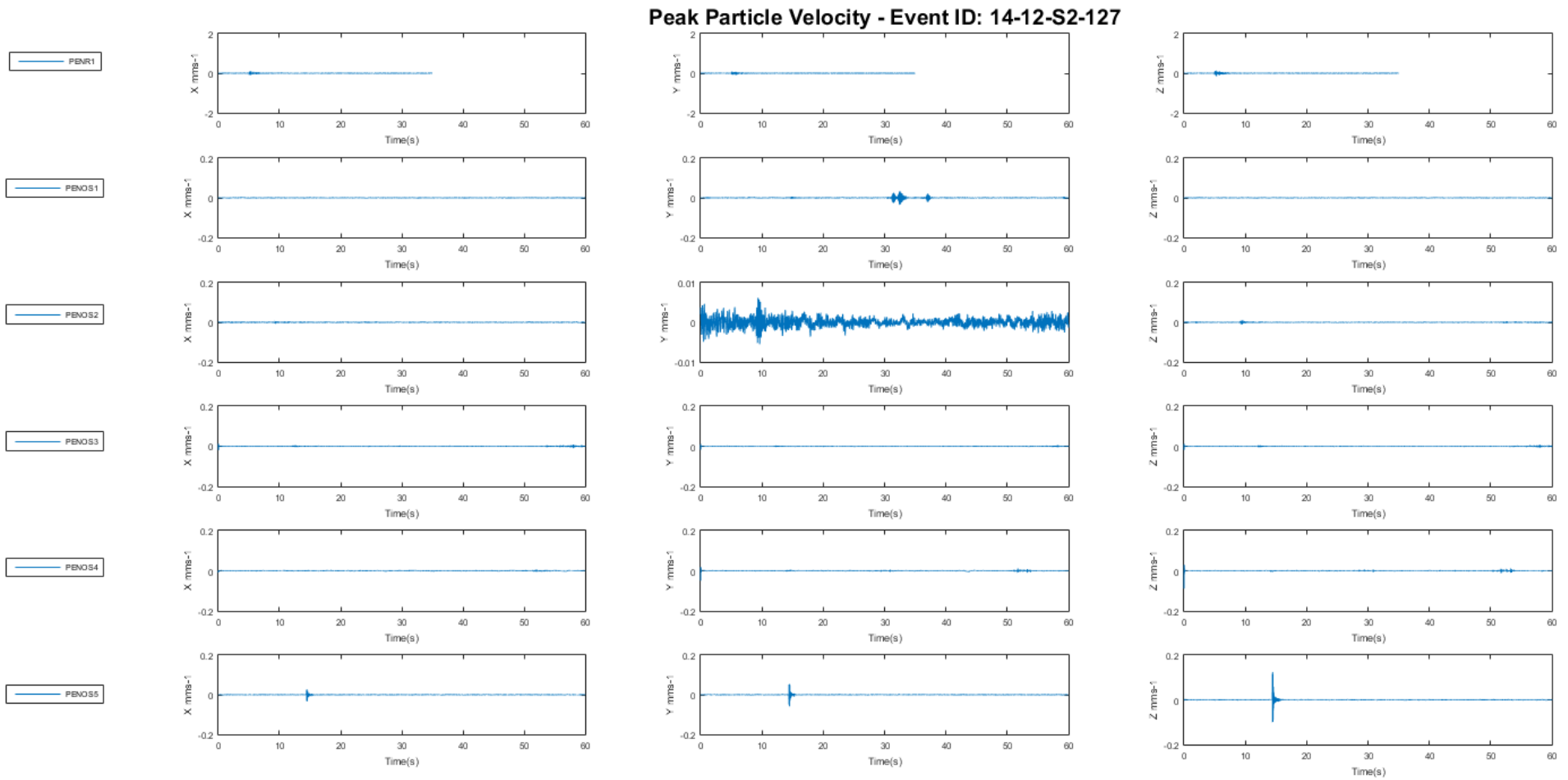
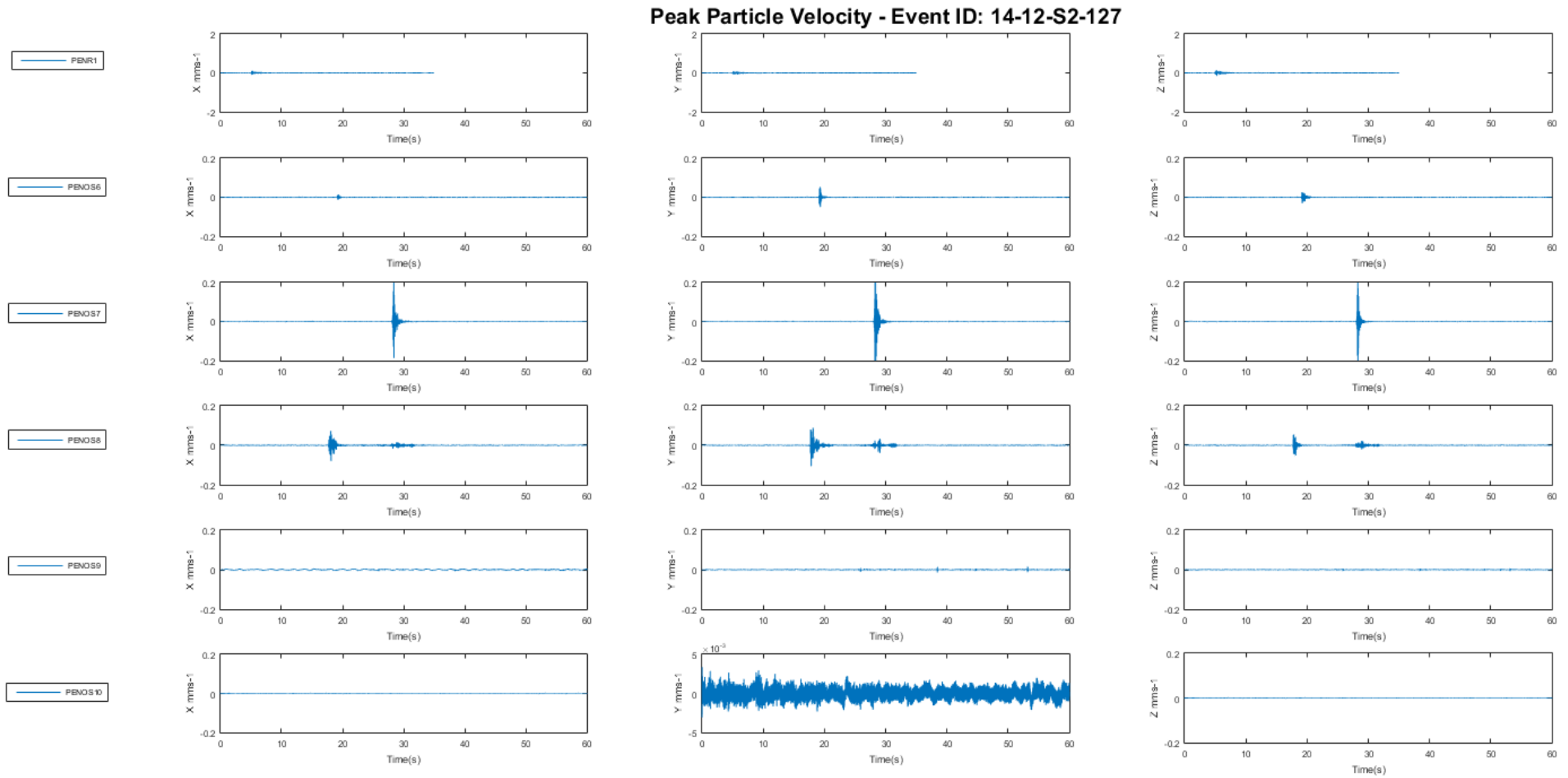


FIGURE 3.90: CROSS CORRELATION PEN\_OS 1 - 10 14-12-S2-124



**FIGURE 3.91: PEN\_OS 1 - 5 14-12-S2-127**



**FIGURE 3.92: PEN\_OS 6 - 10 14-12-S2-127**

### Event ID: 14-12-S2-127

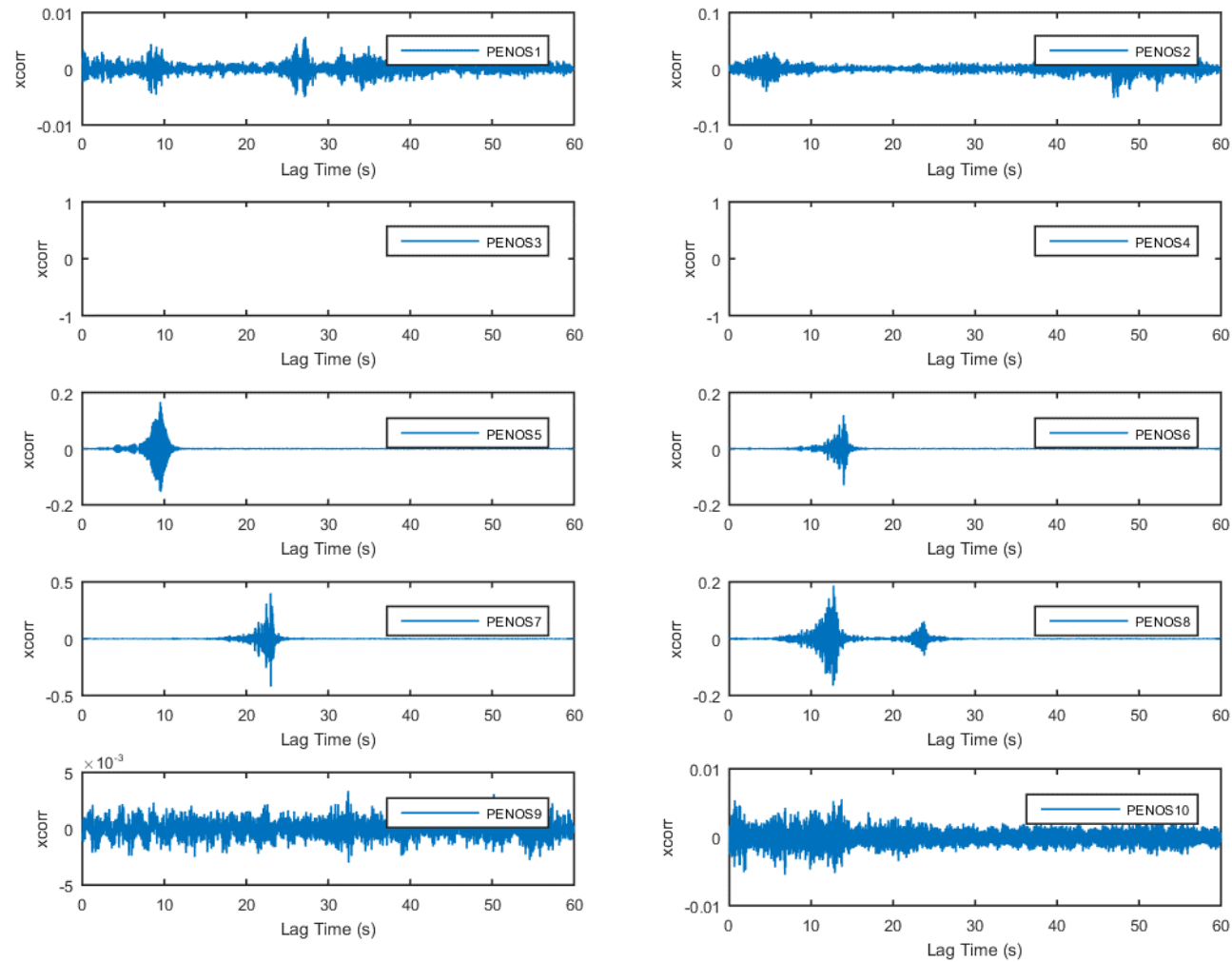


FIGURE 3.93: CROSS CORRELATION PEN\_OS 1 - 10 14-12-S2-127

Peak Particle Velocity - Event ID: 14-12-S2-204

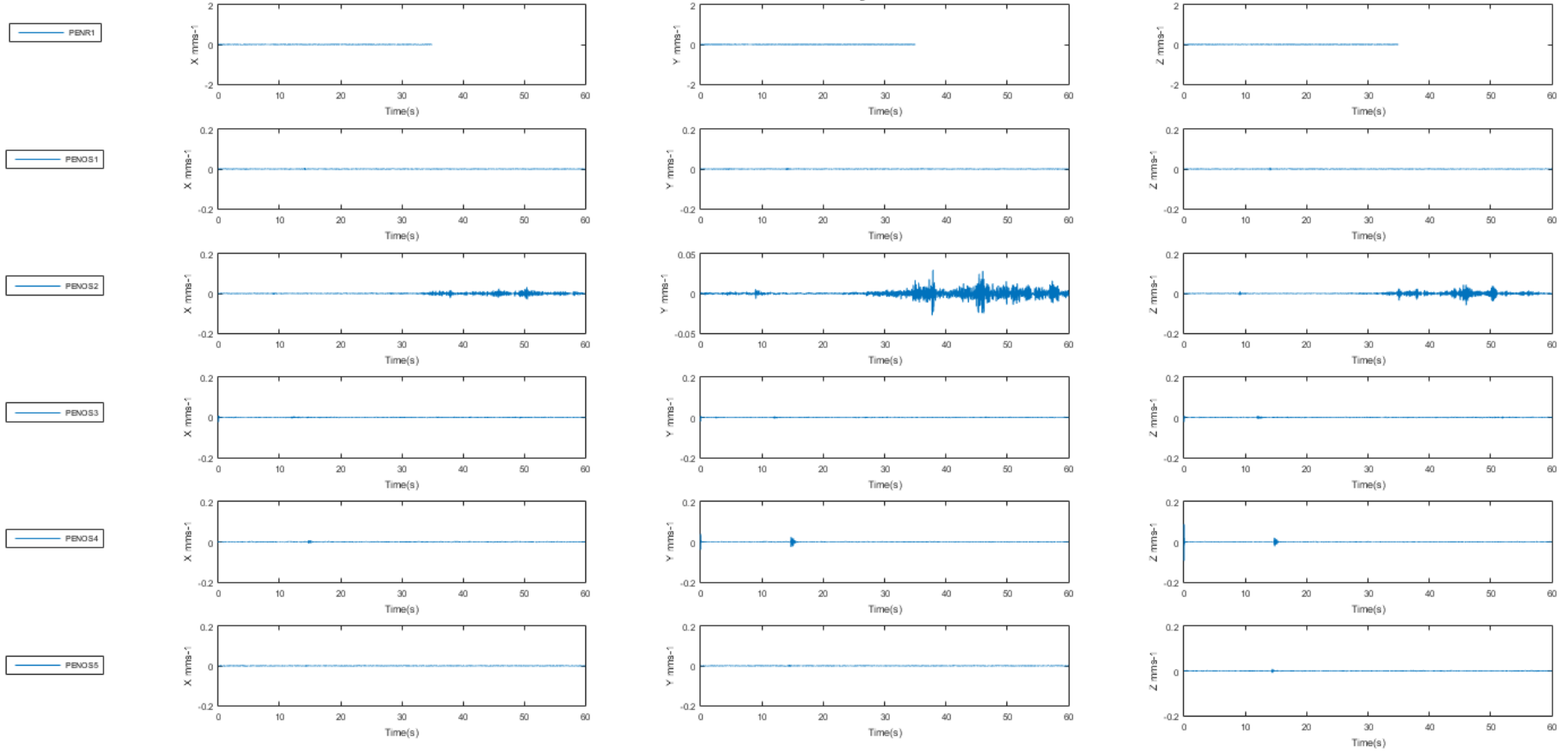


FIGURE 3.94: PEN\_OS 1 - 5 14-12-S2-204

Peak Particle Velocity - Event ID: 14-12-S2-204

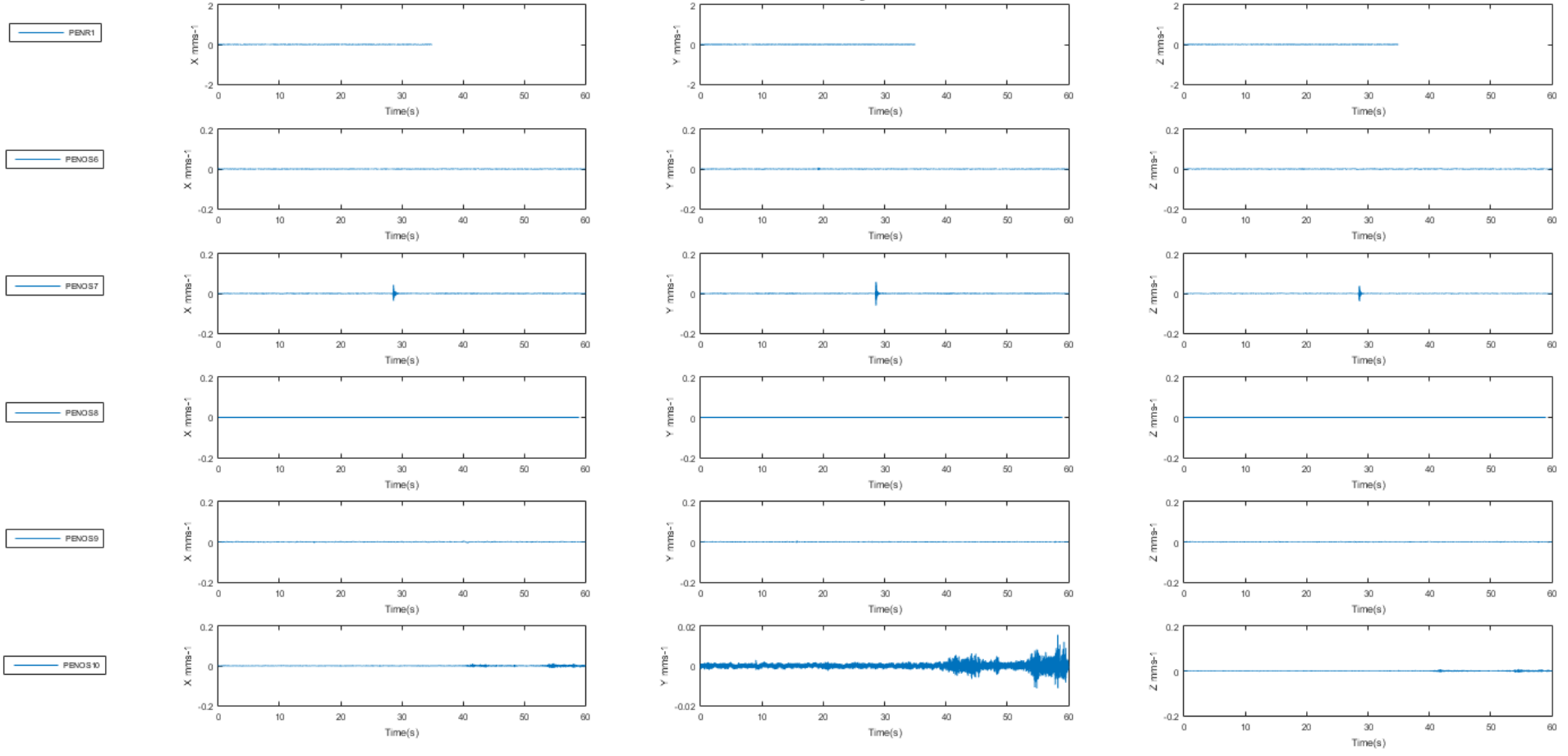


FIGURE 3.95: PEN\_OS 6 - 10 14-12-S2-204

### Event ID: 14-12-S2-204

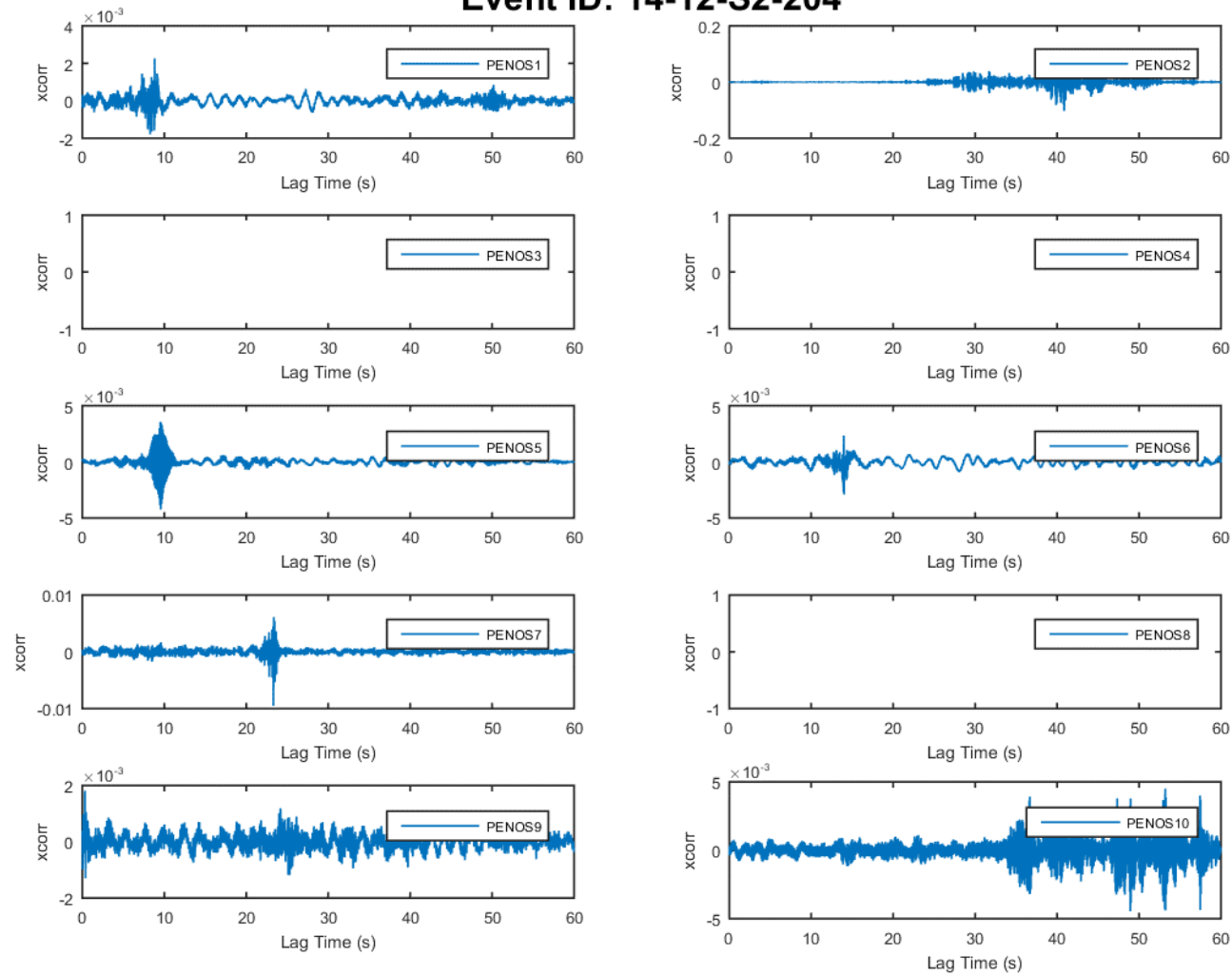
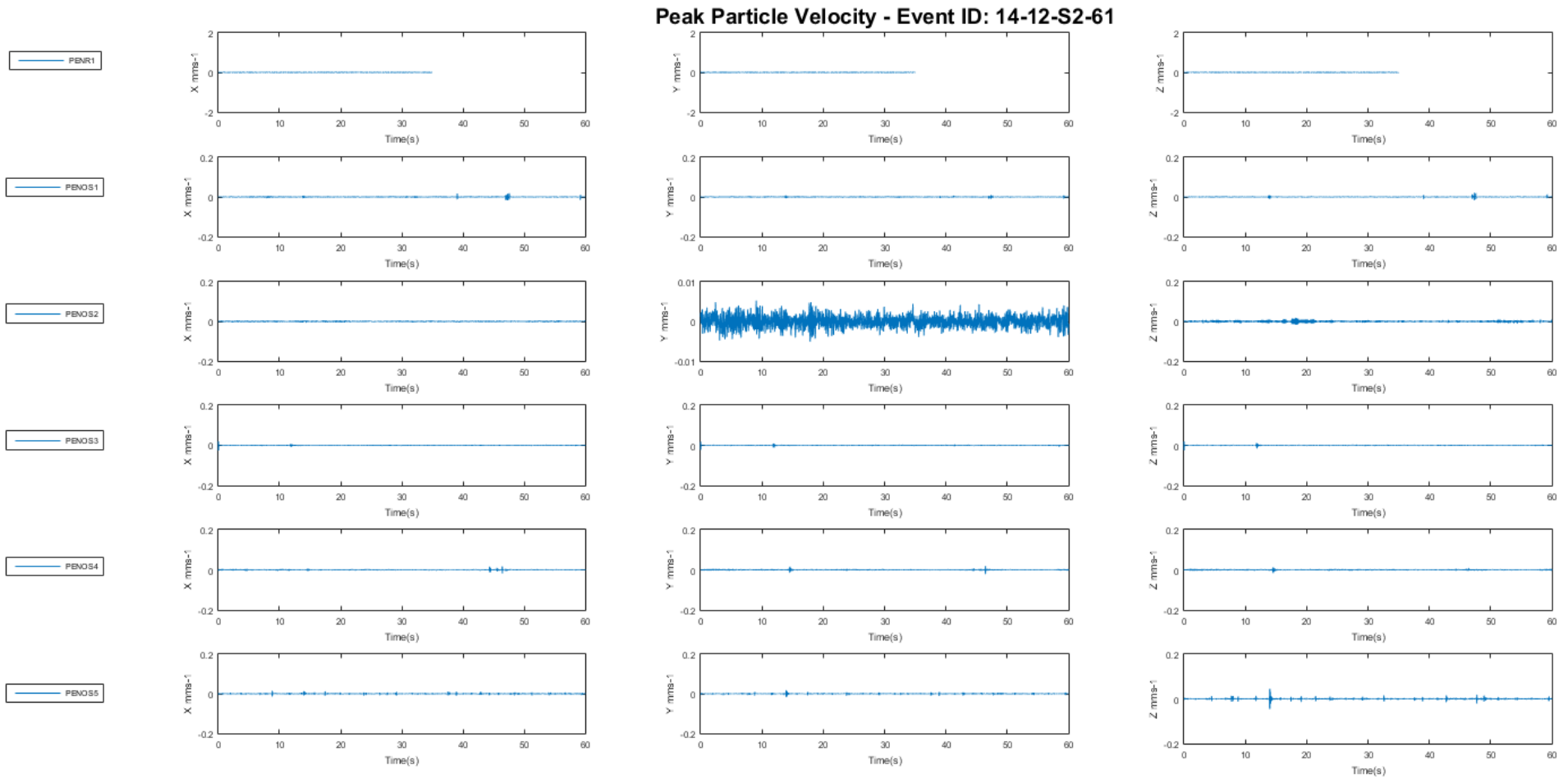
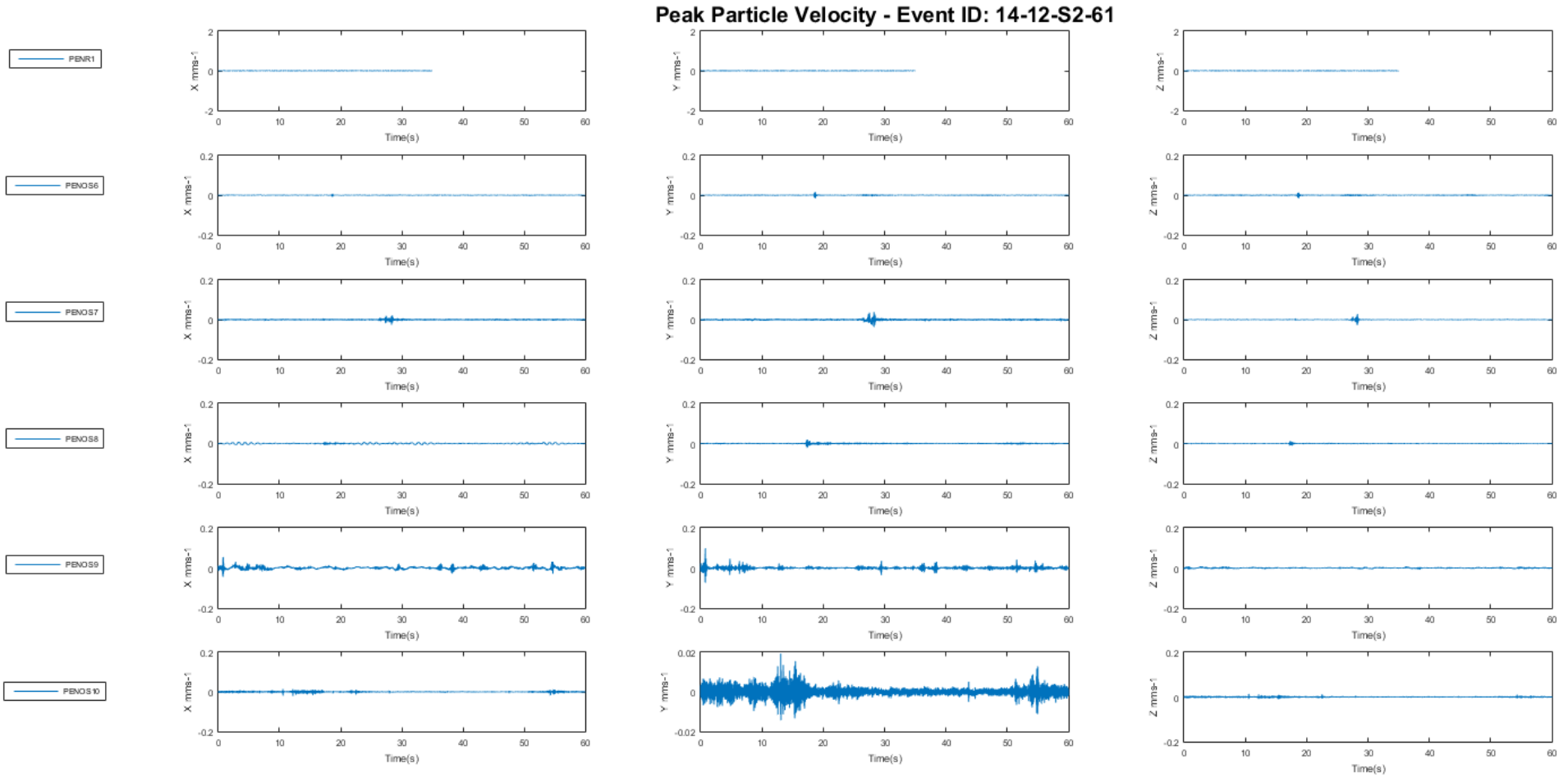


FIGURE 3.96: CROSS CORRELATION PEN\_OS 1 - 10 14-12-S2-204



**FIGURE 3.97: PEN\_OS 1 - 5 14-12-S2-61**





**FIGURE 3.98: PEN\_OS 6 - 10 14-12-S2-61**

### Event ID: 14-12-S2-61

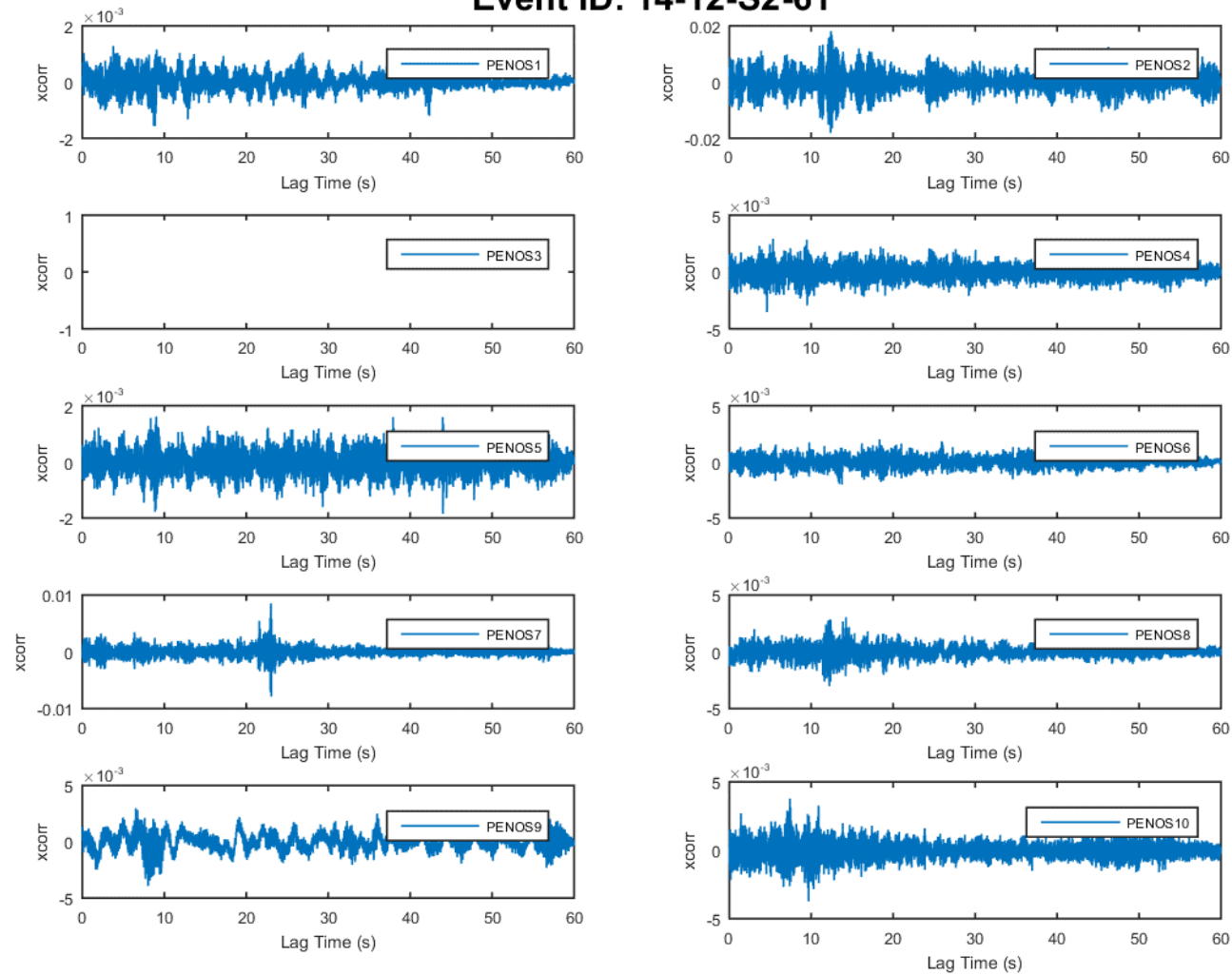


FIGURE 3.99: CROSS CORRELATION PEN\_OS 1 - 10 14-12-S2-61

Peak Particle Velocity - Event ID: 14-12-S2-82

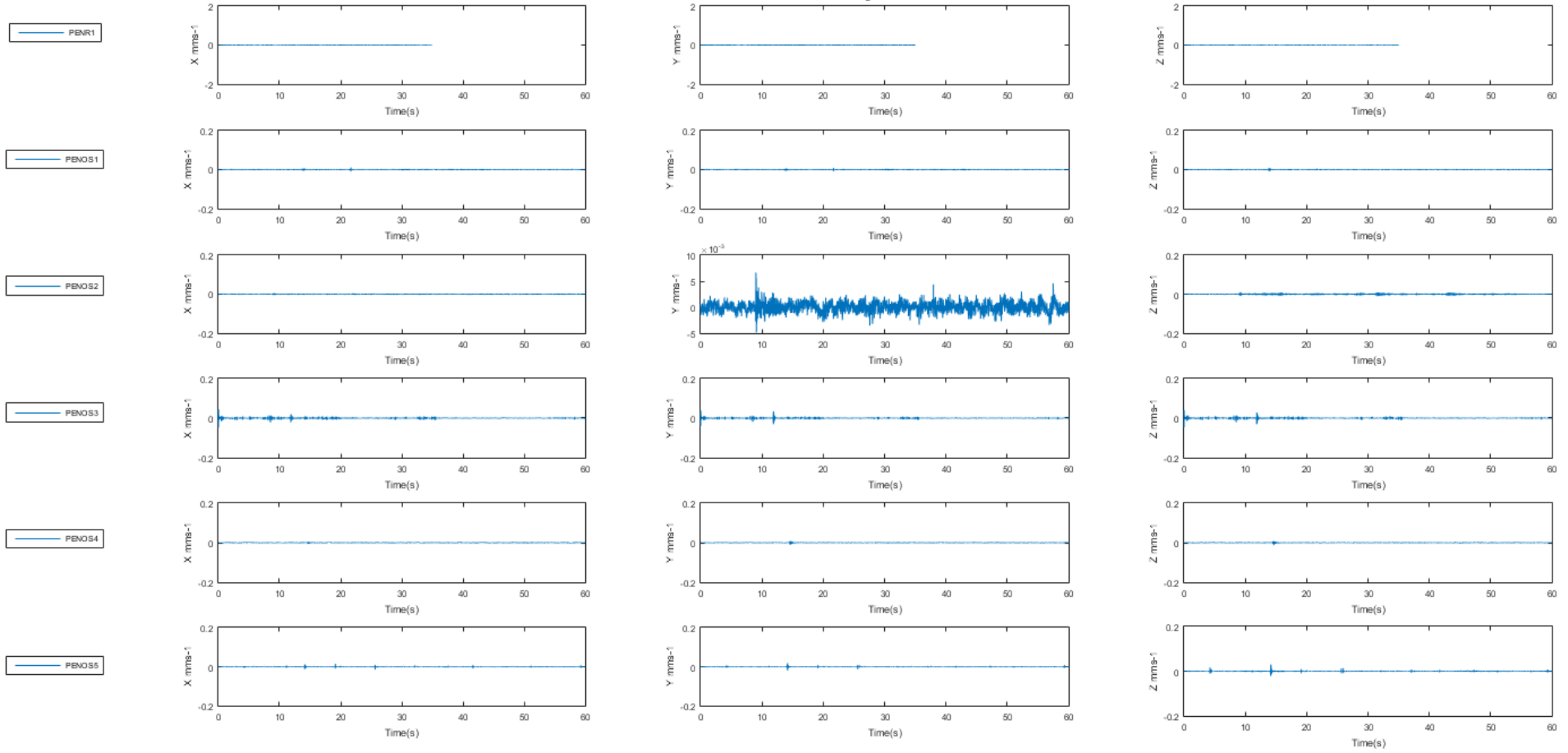
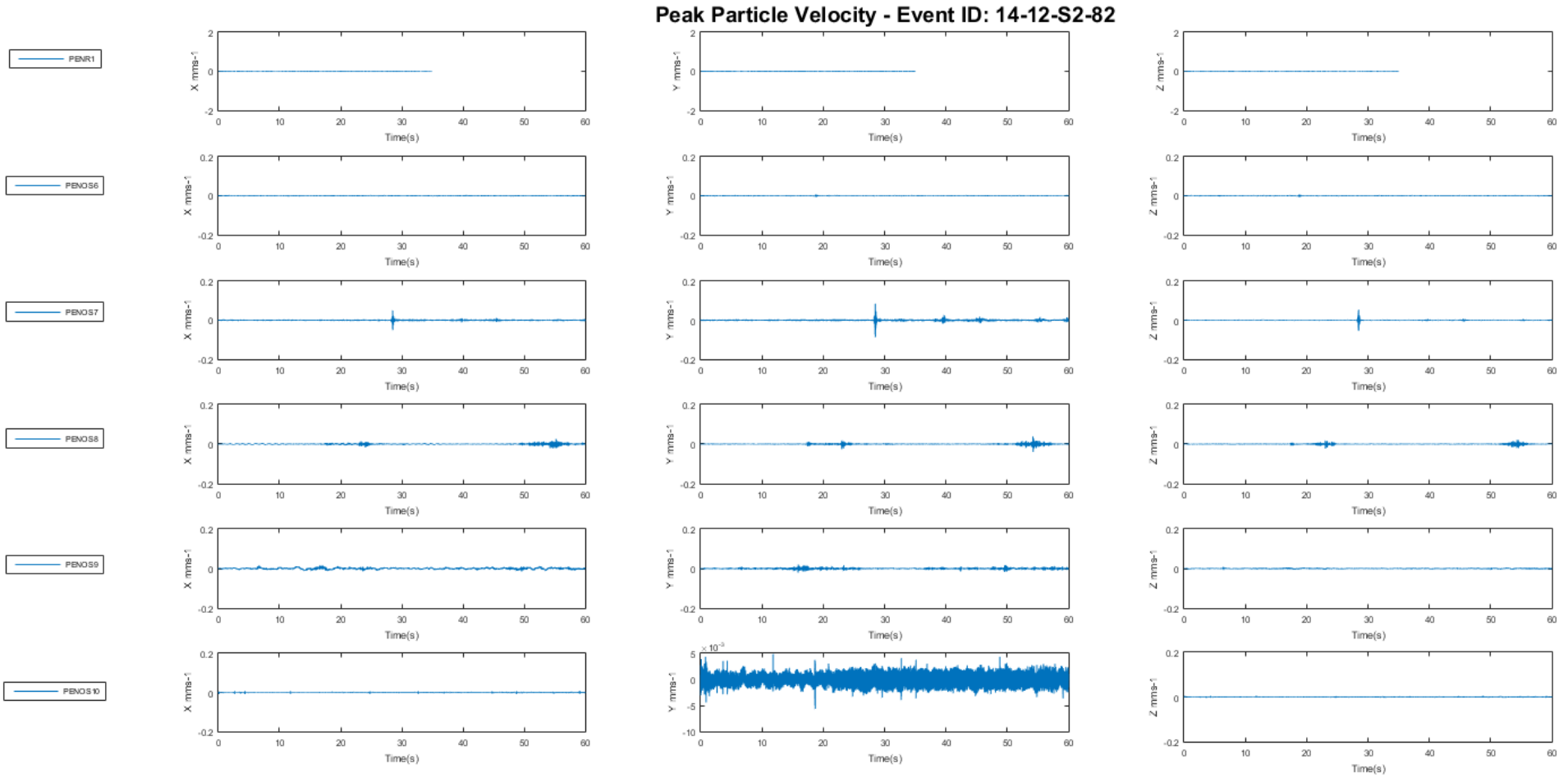


FIGURE 3.100: PEN\_OS 1 - 5 14-12-S2-82



**FIGURE 3.101: PEN\_OS 6 - 10 14-12-S2-82**

### Event ID: 14-12-S2-82

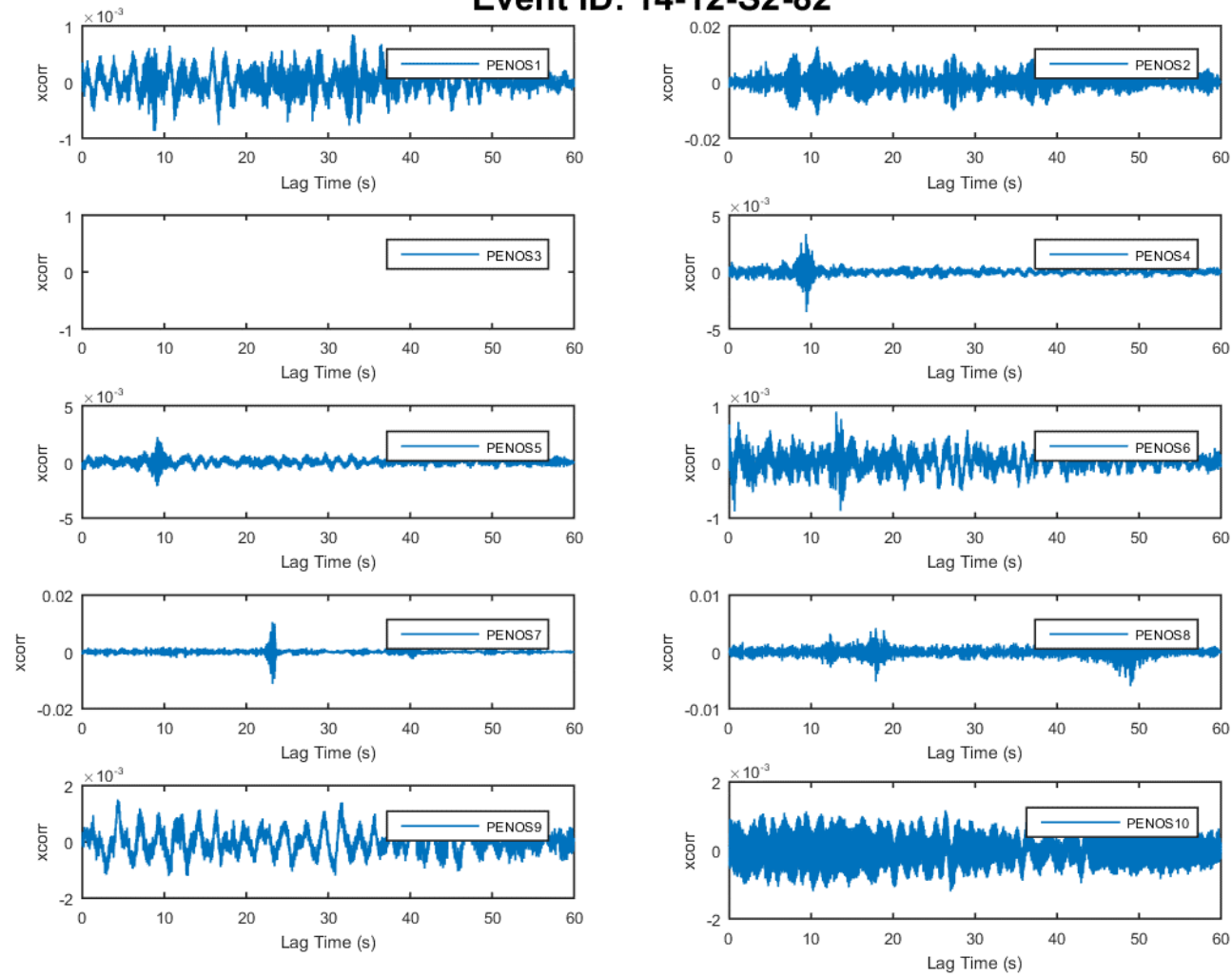


FIGURE 3.102: CROSS CORRELATION PEN\_OS 1 - 10 14-12-S2-82

Peak Particle Velocity - Event ID: 15-01-S1-124

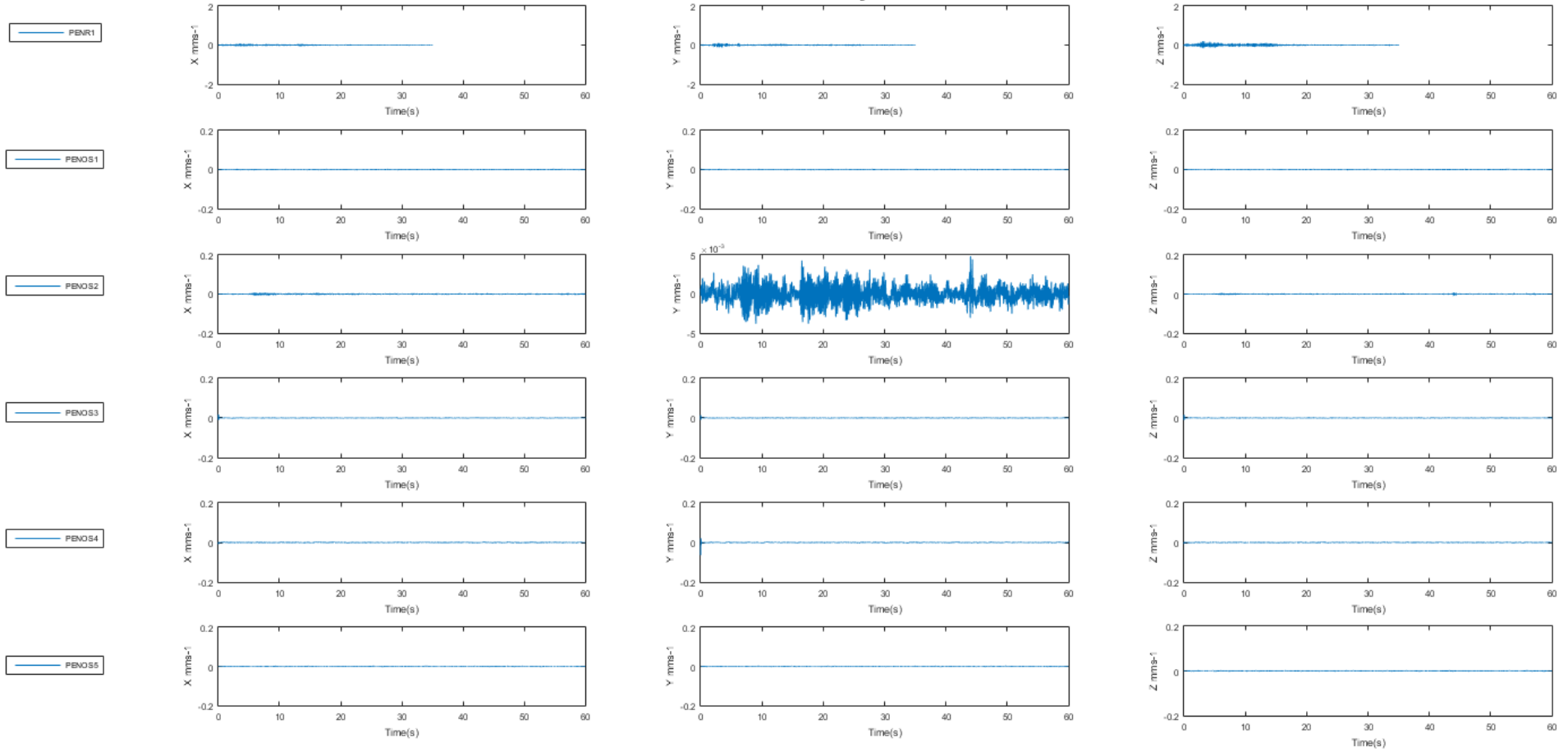


FIGURE 3.103: PEN\_OS 1 - 5 15-01-S1-124

Peak Particle Velocity - Event ID: 15-01-S1-124

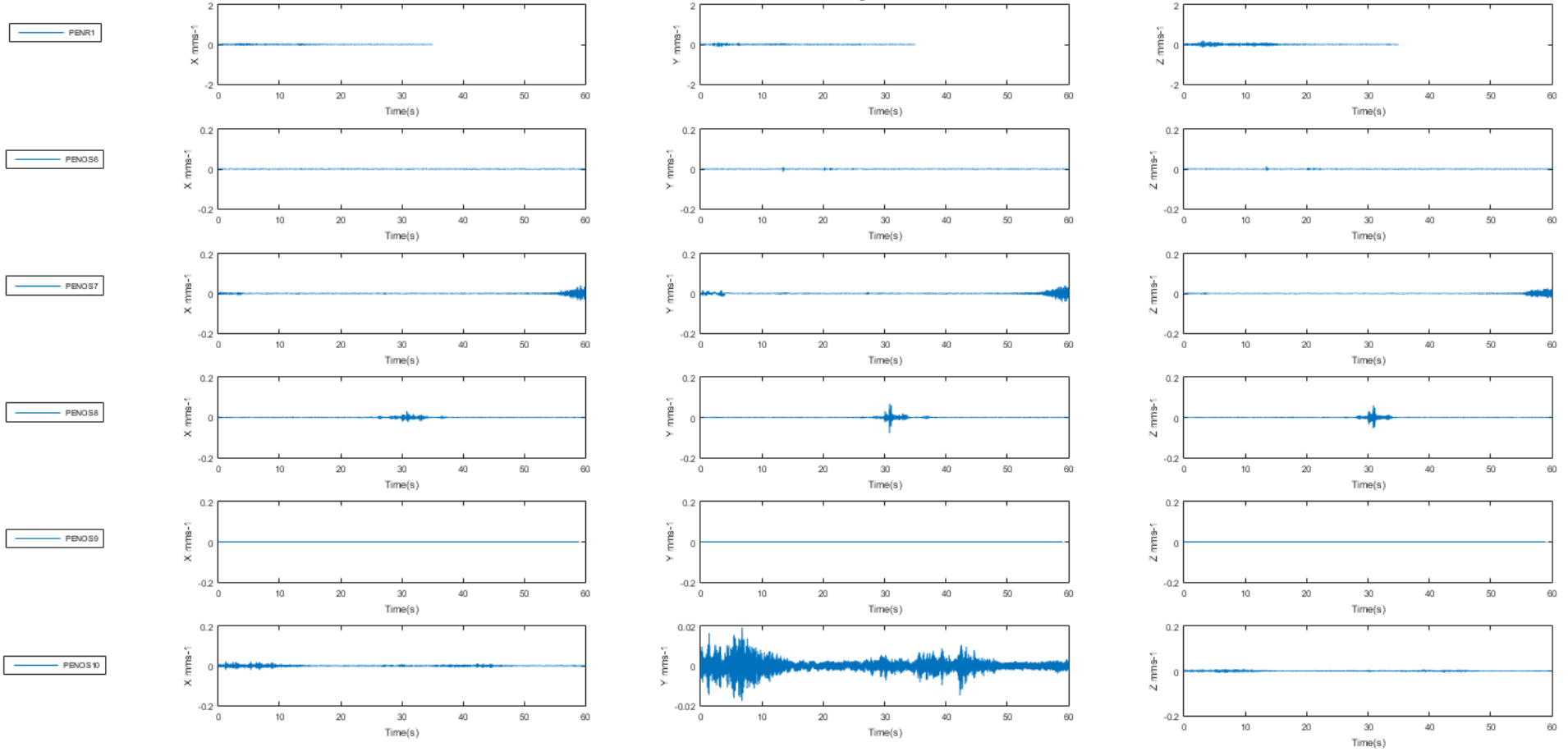


FIGURE 3.104: PEN\_OS 6 - 10 15-01-S1-124

### Event ID: 15-01-S1-124

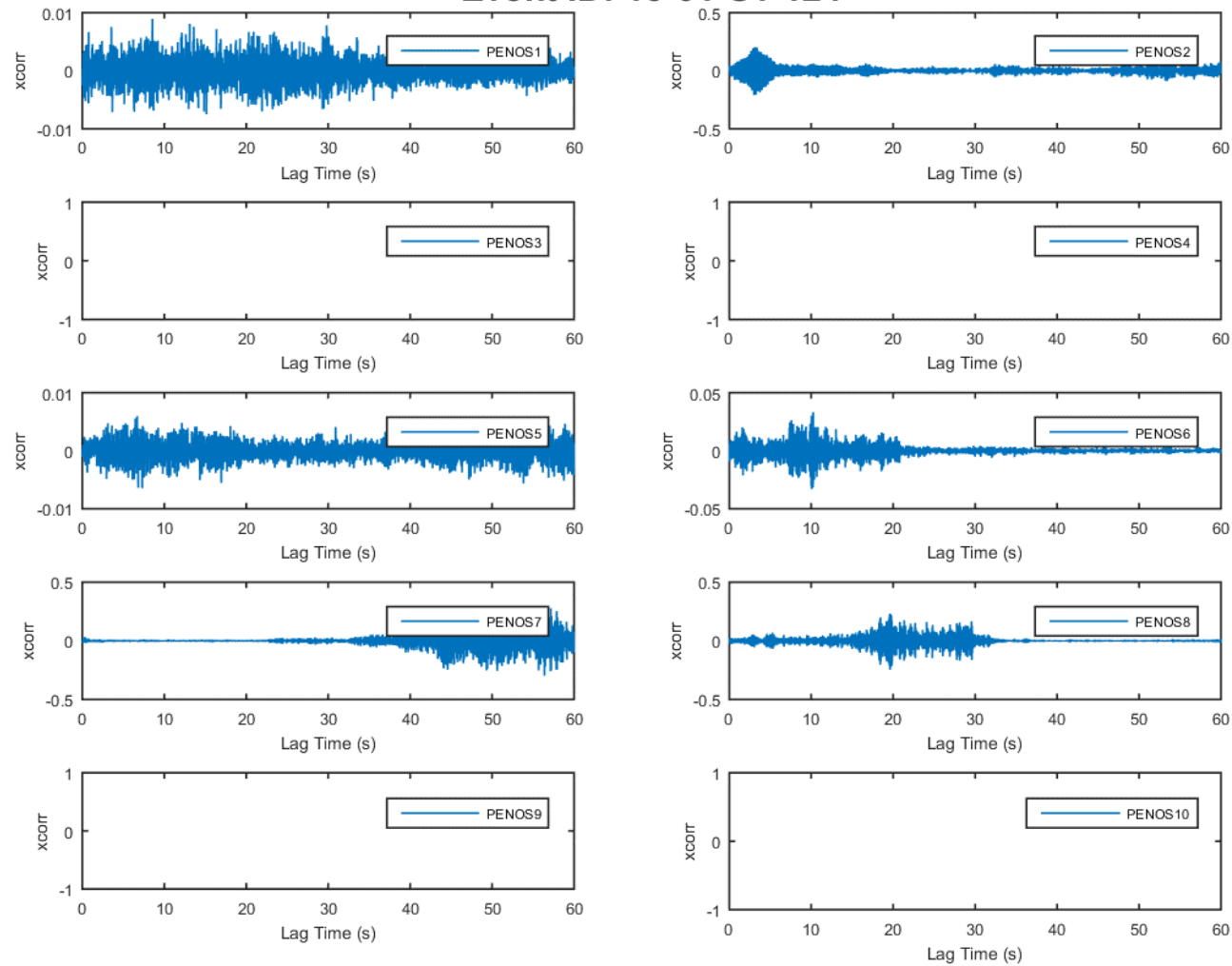
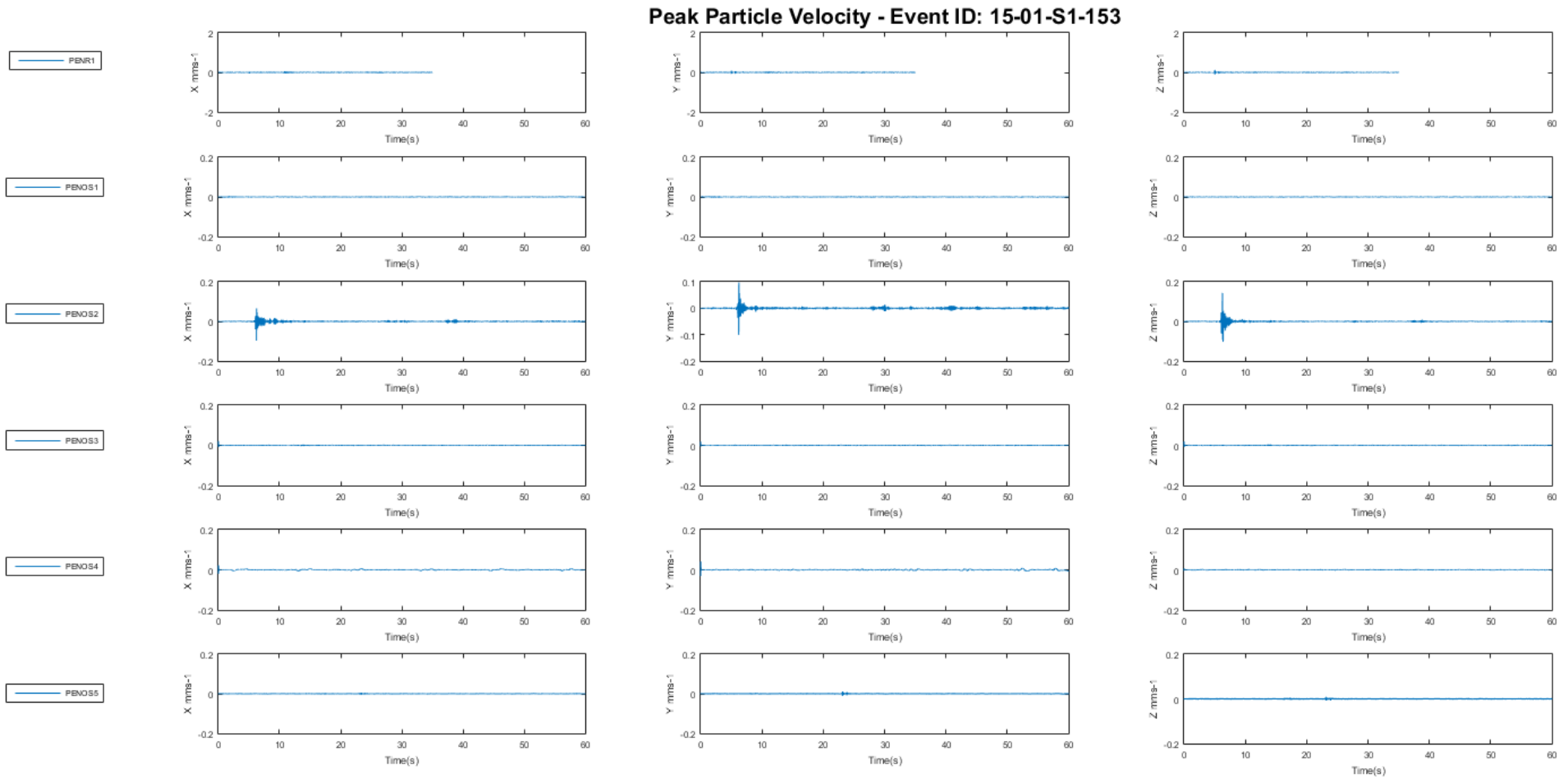


FIGURE 3.105: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S1-124





**FIGURE 3.106: PEN\_OS 1 - 5 15-01-S1-153**

Peak Particle Velocity - Event ID: 15-01-S1-153

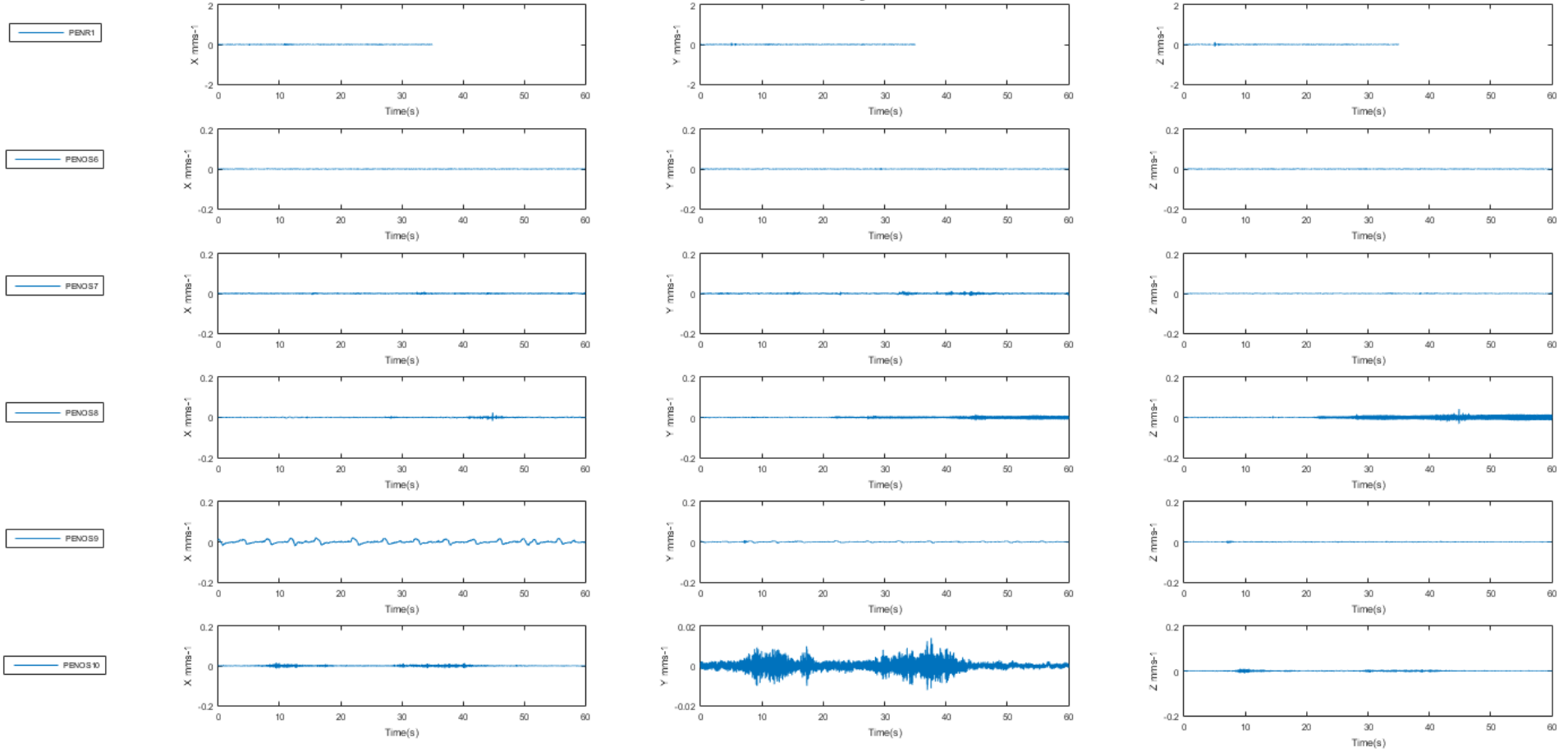


FIGURE 3.107: PEN\_OS 6 - 10 15-01-S1-153

### Event ID: 15-01-S1-153

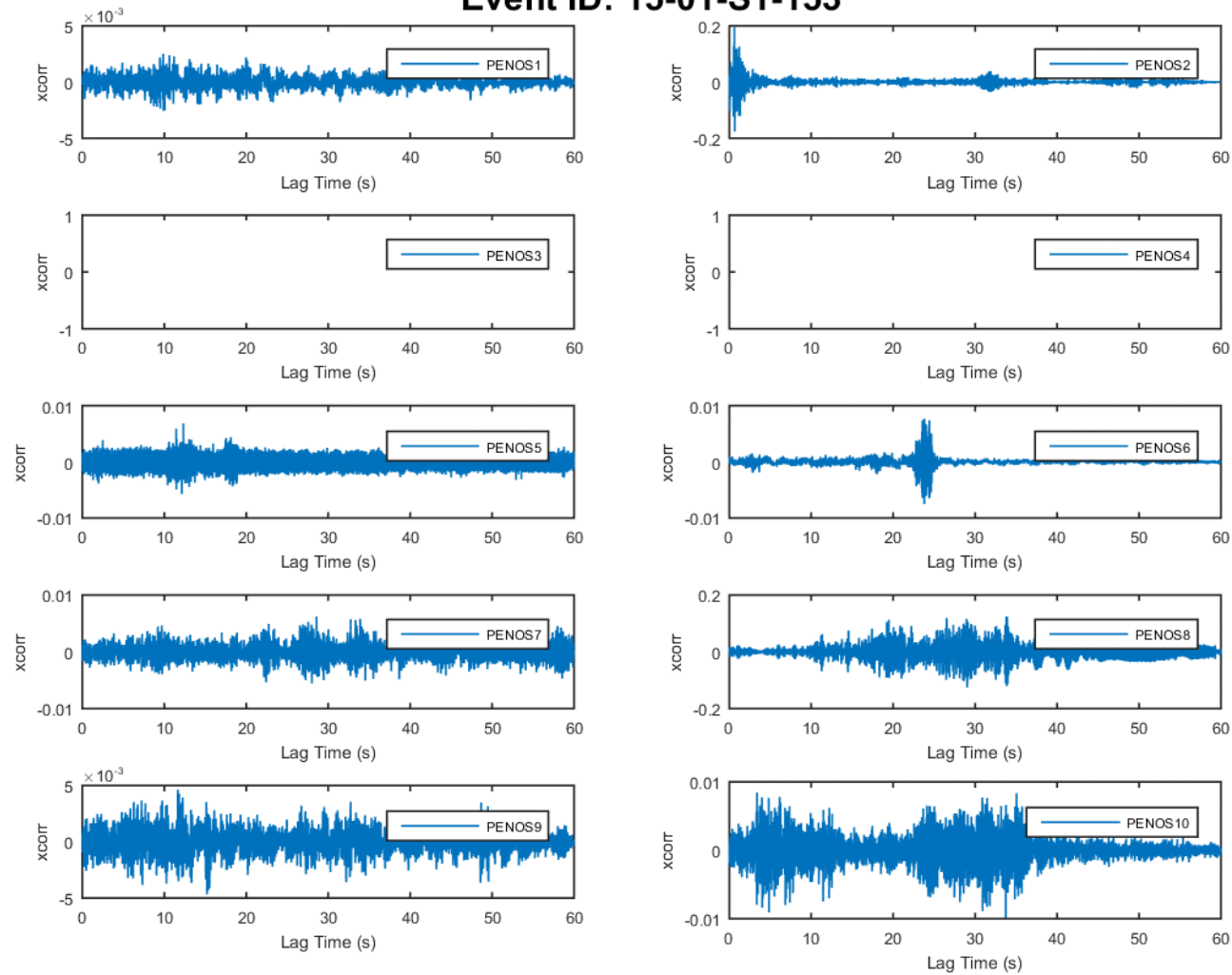


FIGURE 3.108: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S1-153

Peak Particle Velocity - Event ID: 15-01-S2-100

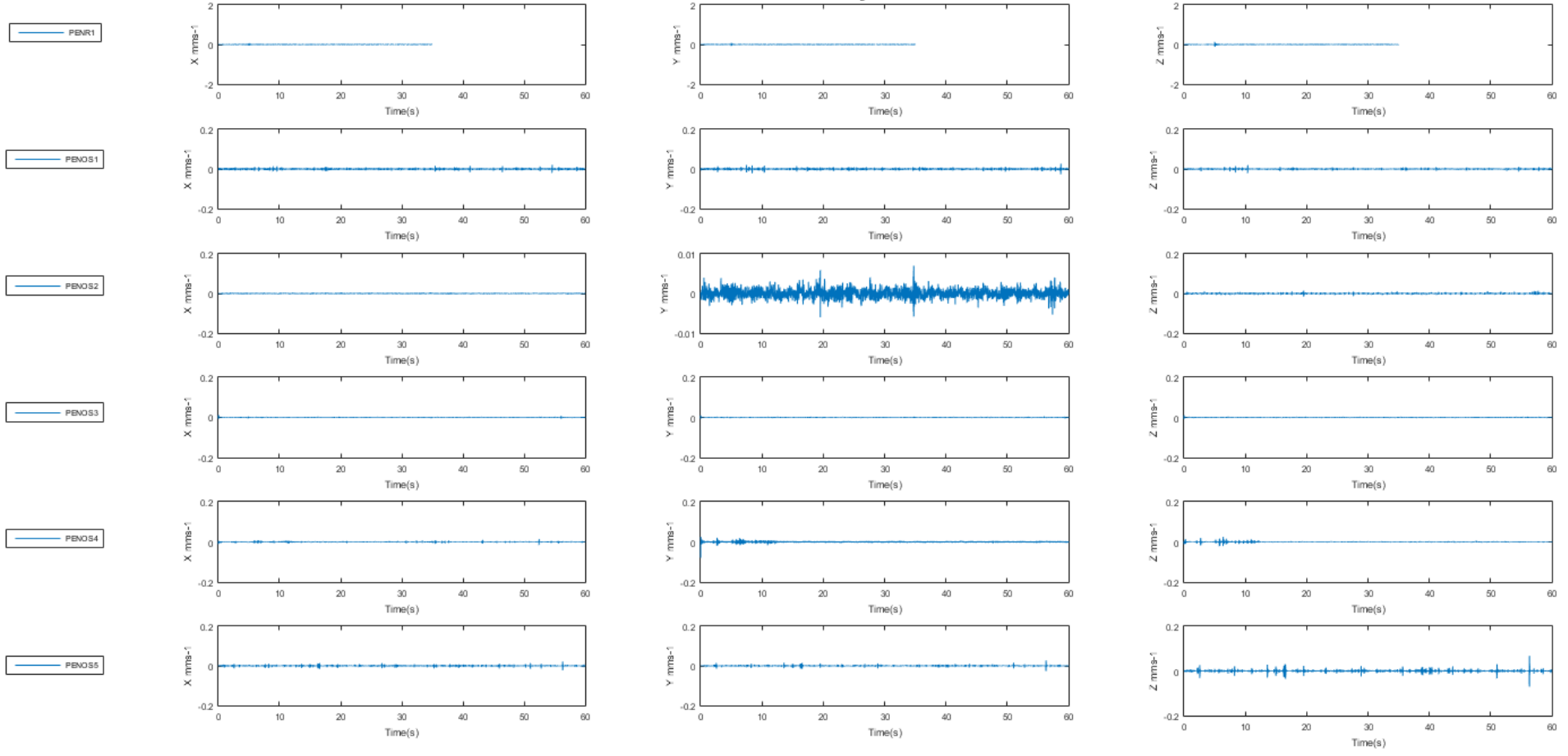


FIGURE 3.109: PEN\_OS 1 - 5 15-01-S2-100

Peak Particle Velocity - Event ID: 15-01-S2-100

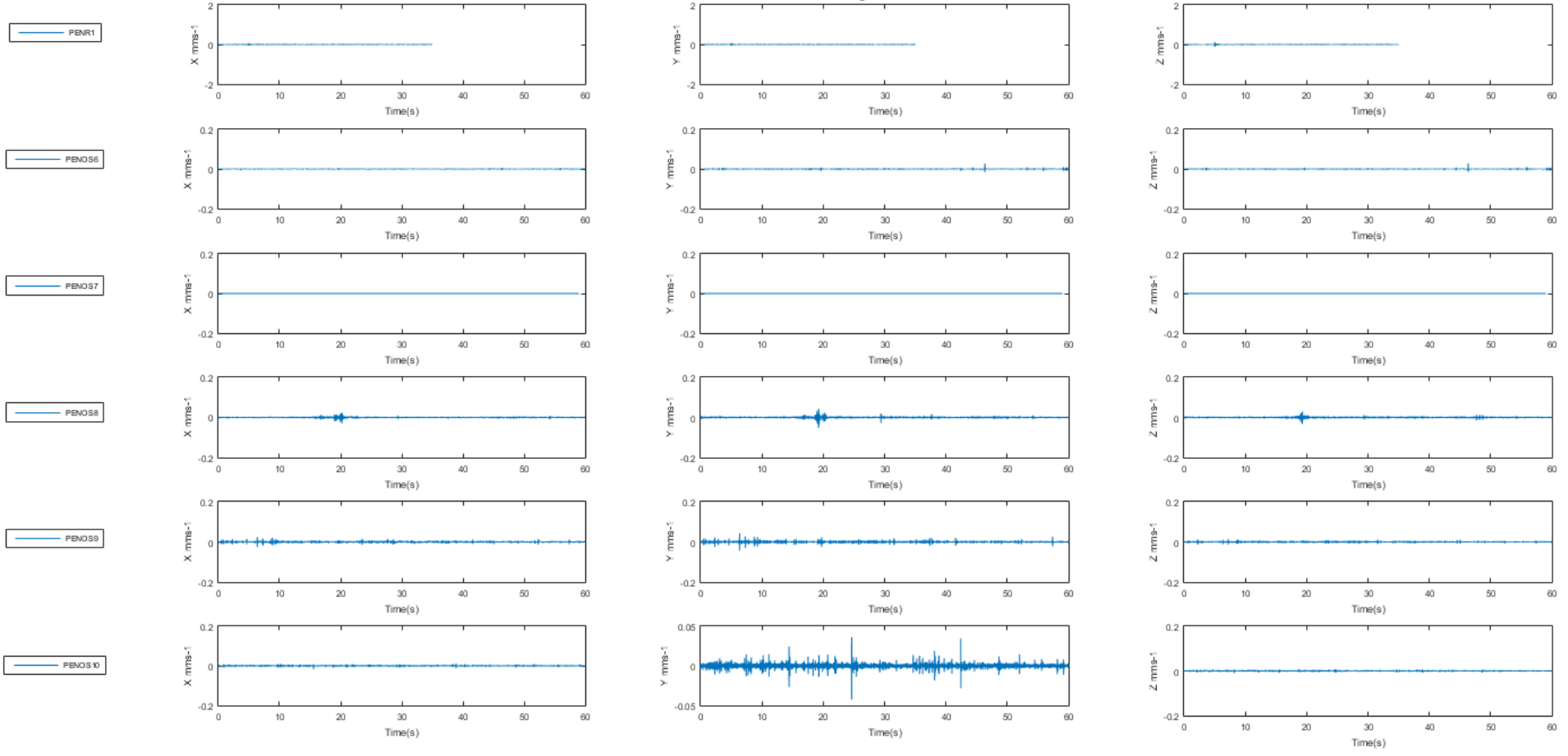


FIGURE 3.110: PEN\_OS 6 - 10 15-01-S2-100

### Event ID: 15-01-S2-100

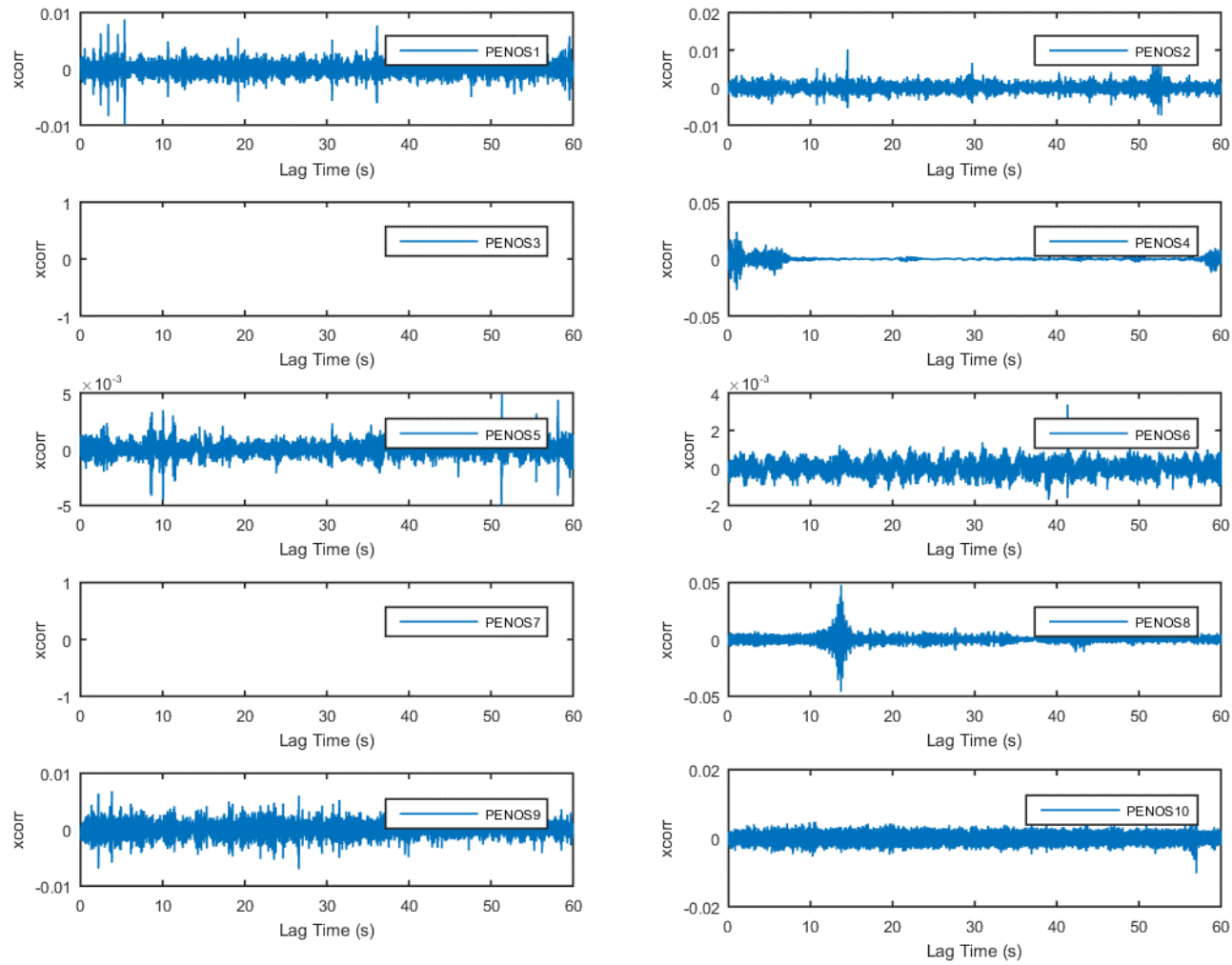


FIGURE 3.111: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-100

Peak Particle Velocity - Event ID: 15-01-S2-101

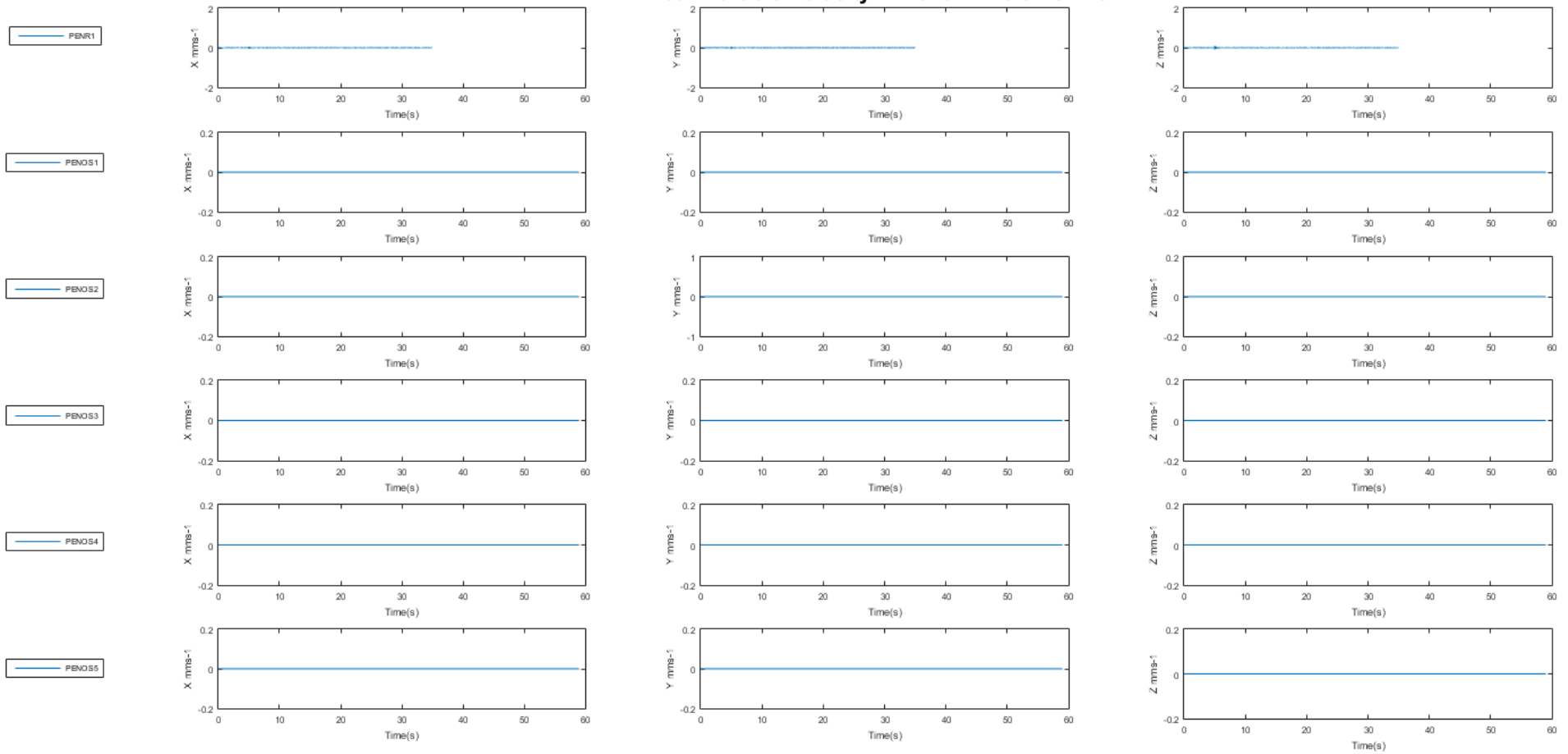


FIGURE 3.112: PEN\_OS 1 - 5 15-01-S2-101

Peak Particle Velocity - Event ID: 15-01-S2-101

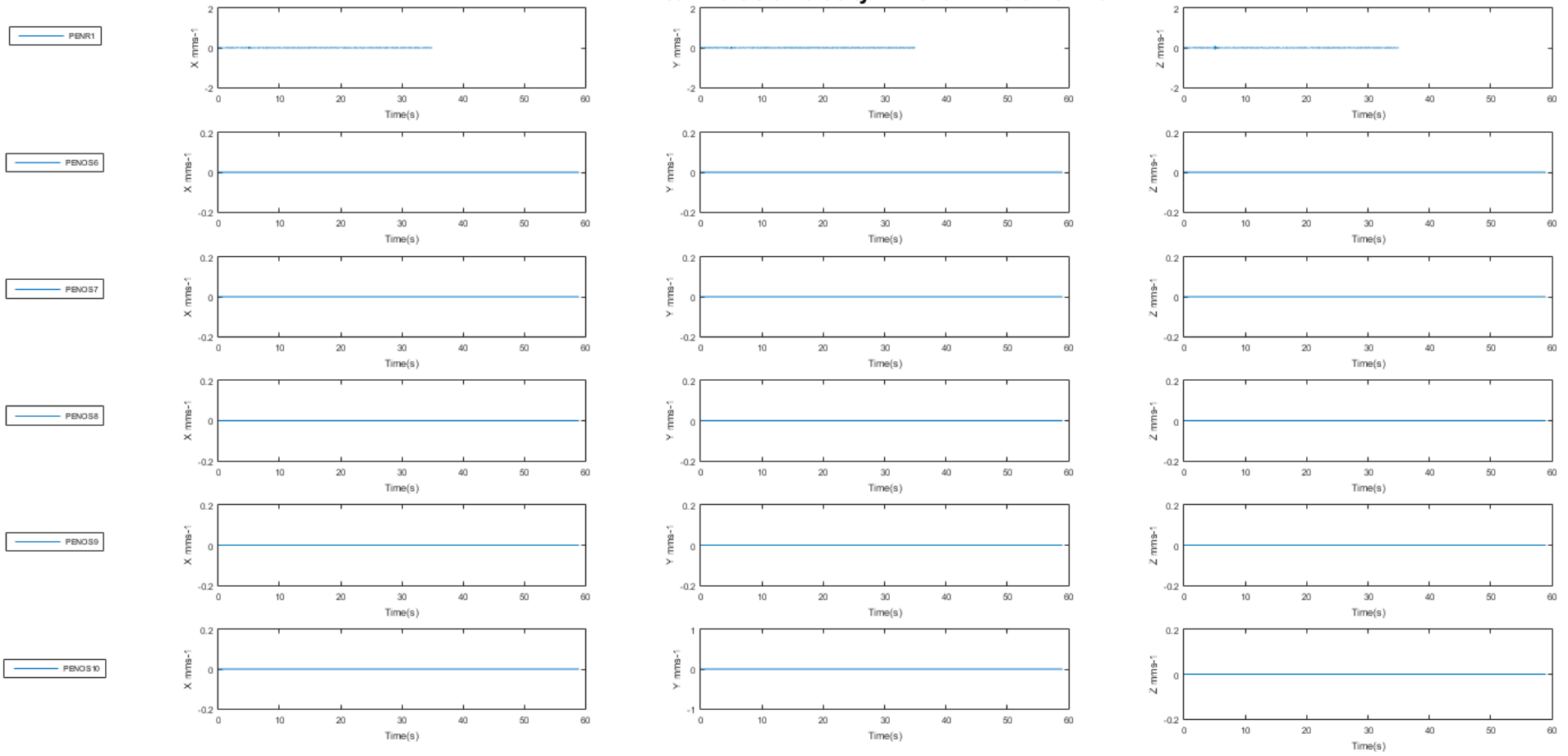
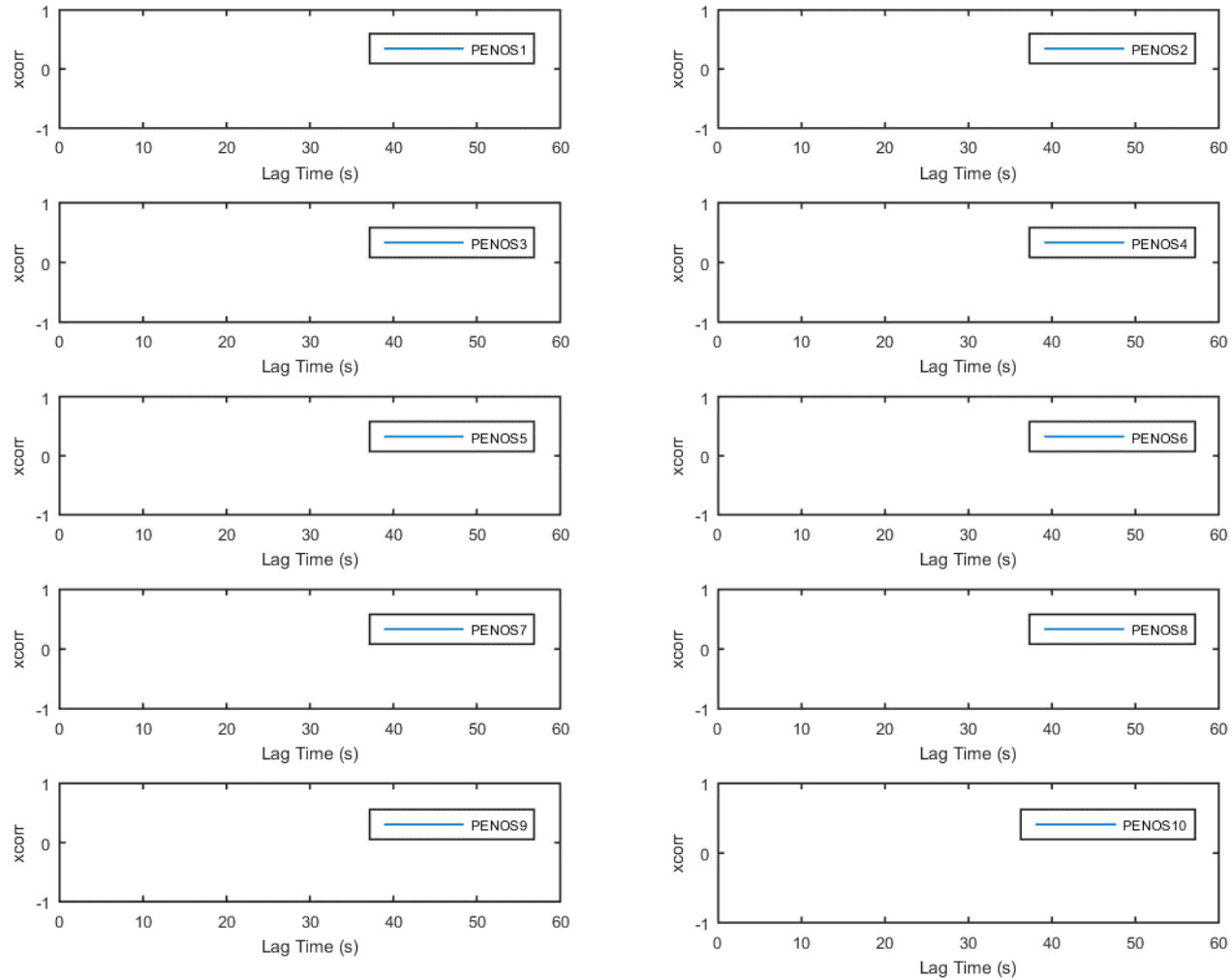


FIGURE 3.113: PEN\_OS 6 - 10 15-01-S2-101



### Event ID: 15-01-S2-101



**FIGURE 3.114: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-101**

Peak Particle Velocity - Event ID: 15-01-S2-102

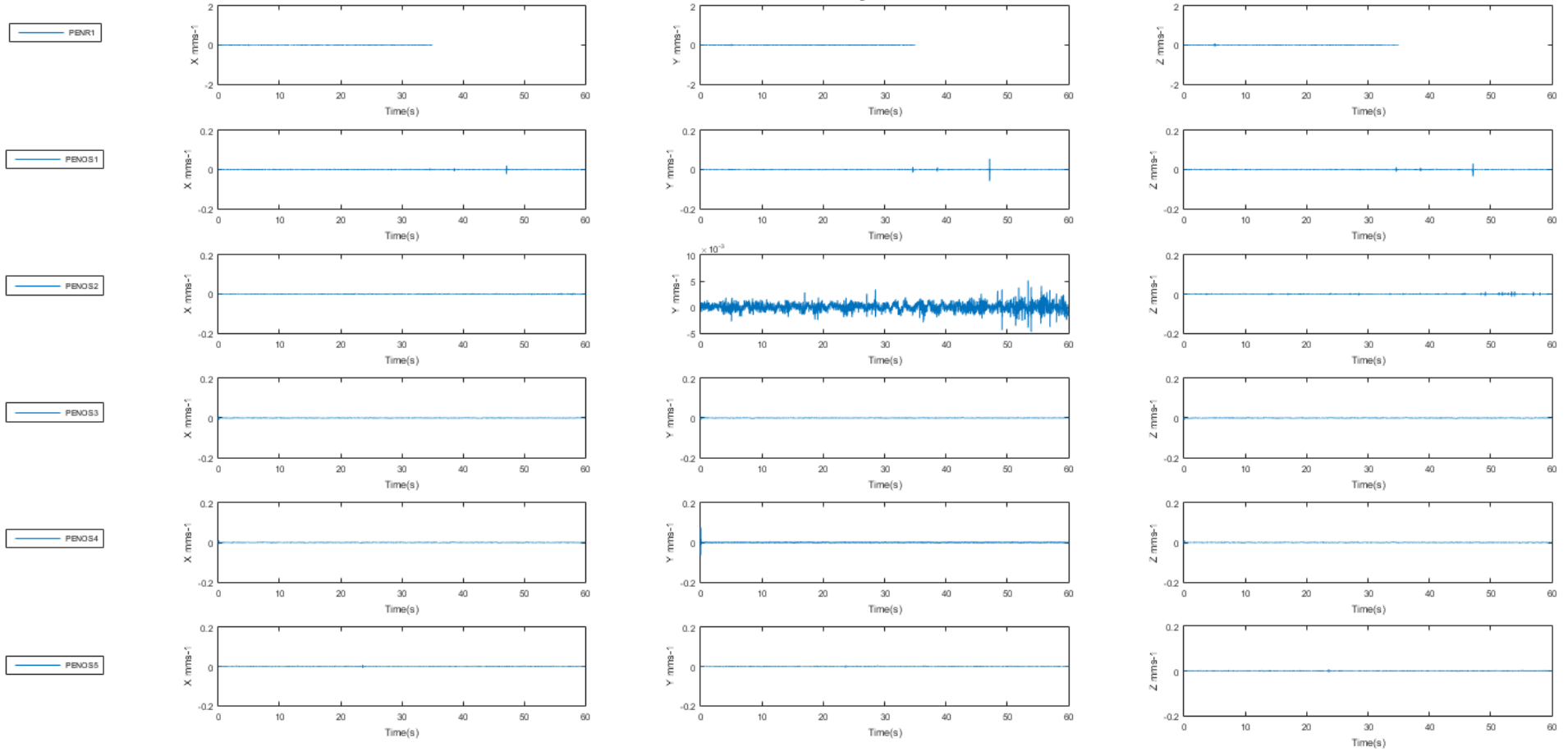


FIGURE 3.115: PEN\_OS 1 - 5 15-01-S2-102

Peak Particle Velocity - Event ID: 15-01-S2-102

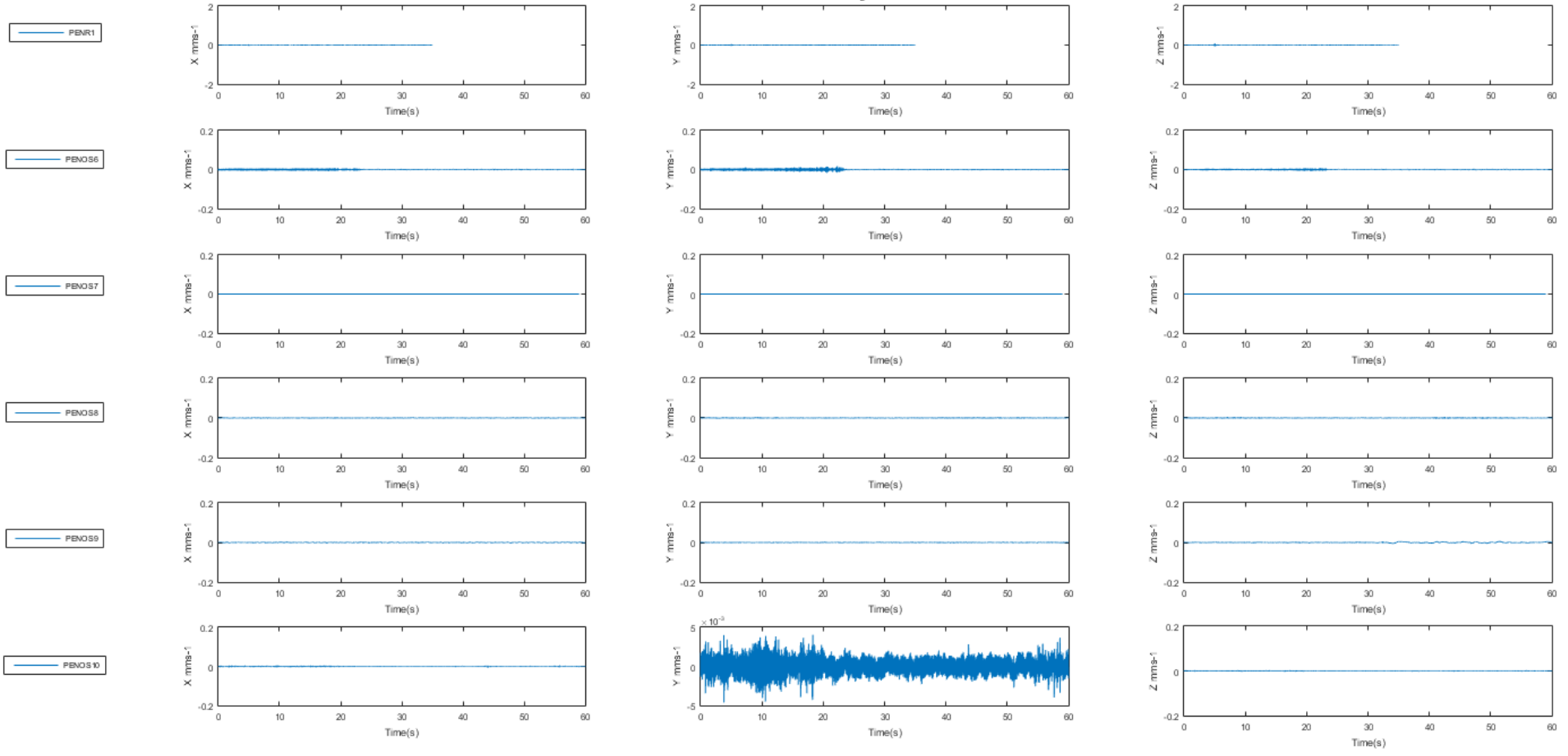


FIGURE 3.116: PEN\_OS 6 - 10 15-01-S2-102

### Event ID: 15-01-S2-102

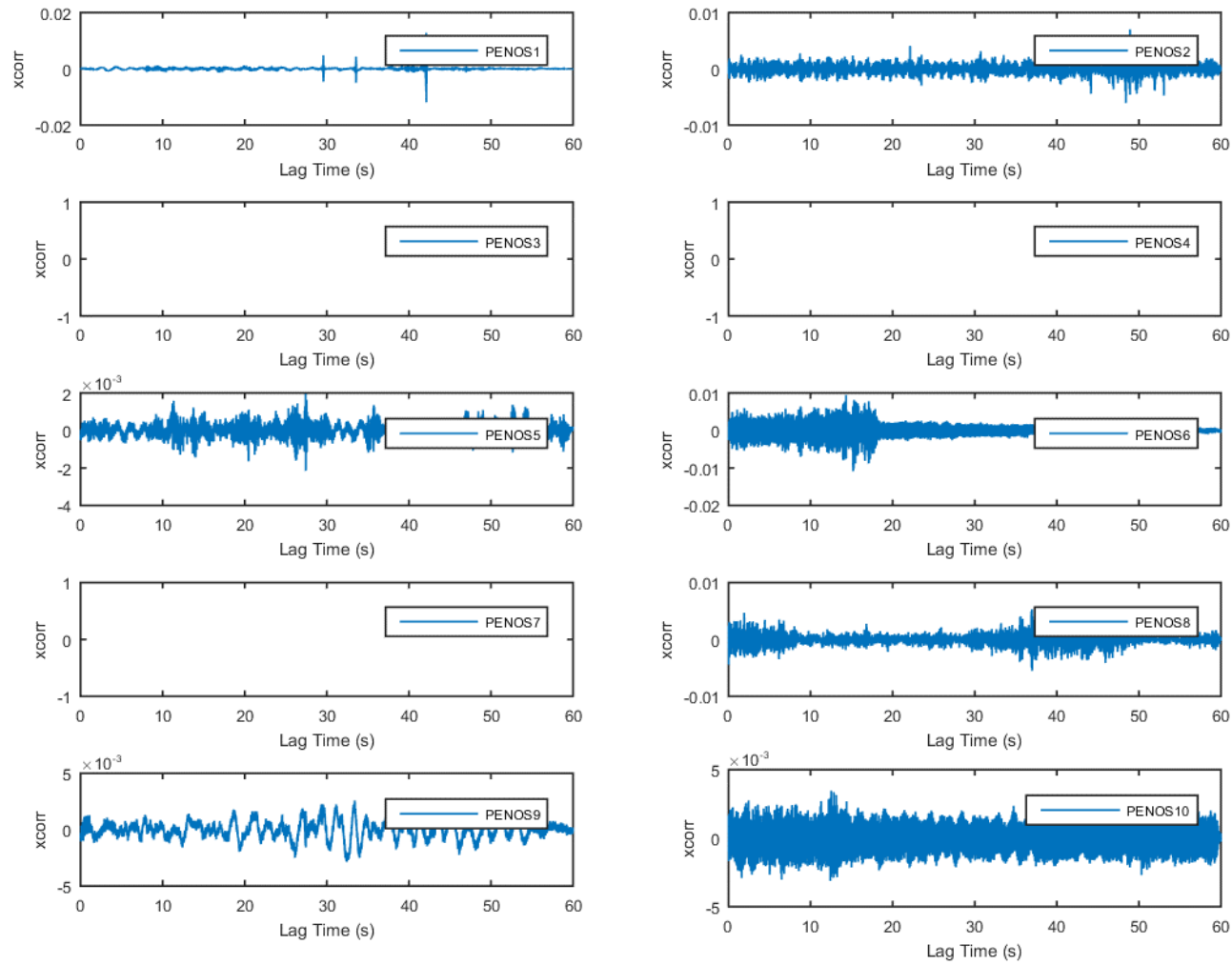
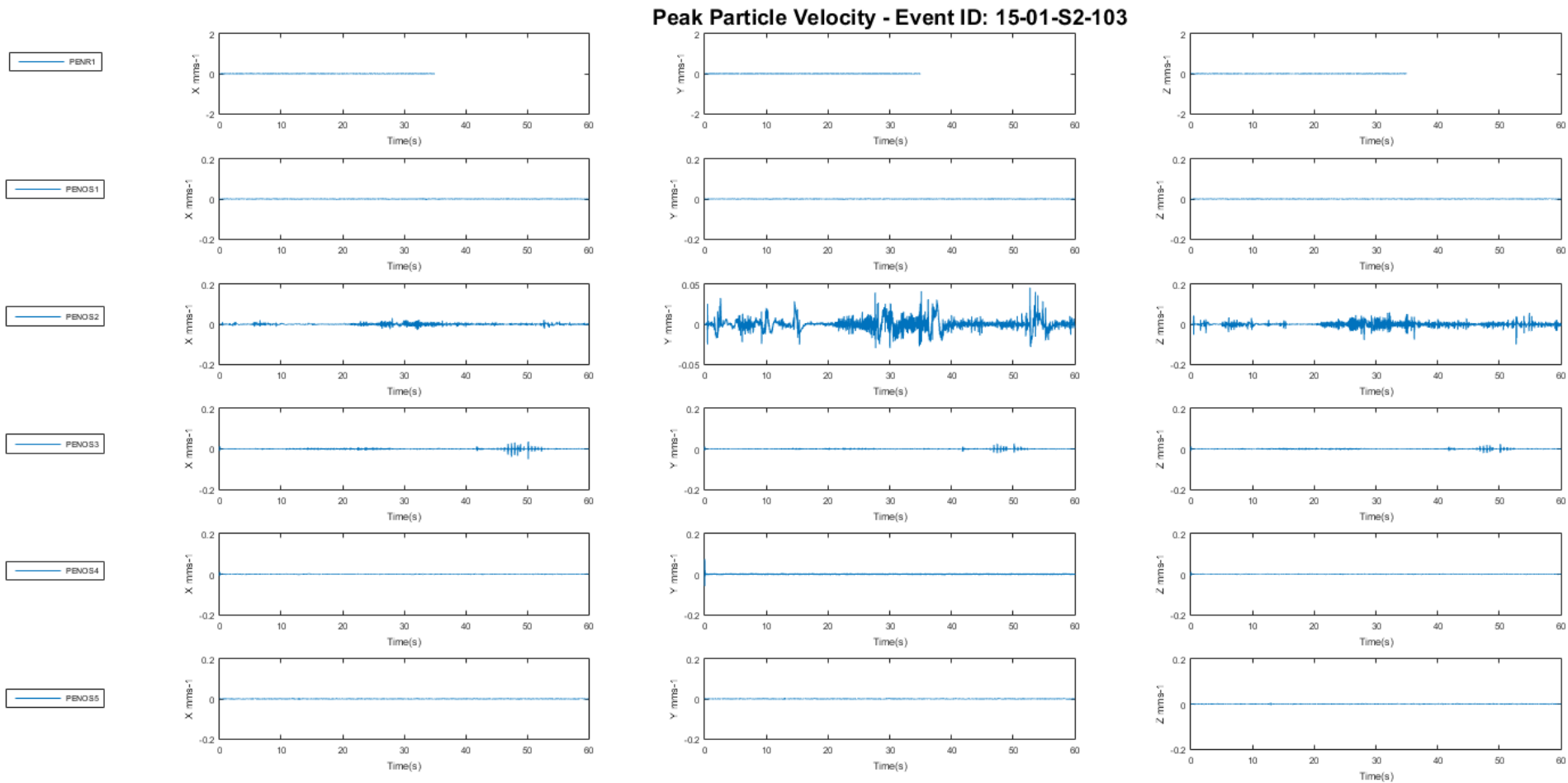


FIGURE 3.117: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-102



**FIGURE 3.118: PEN\_OS 1 - 5 15-01-S2-103**

Peak Particle Velocity - Event ID: 15-01-S2-103

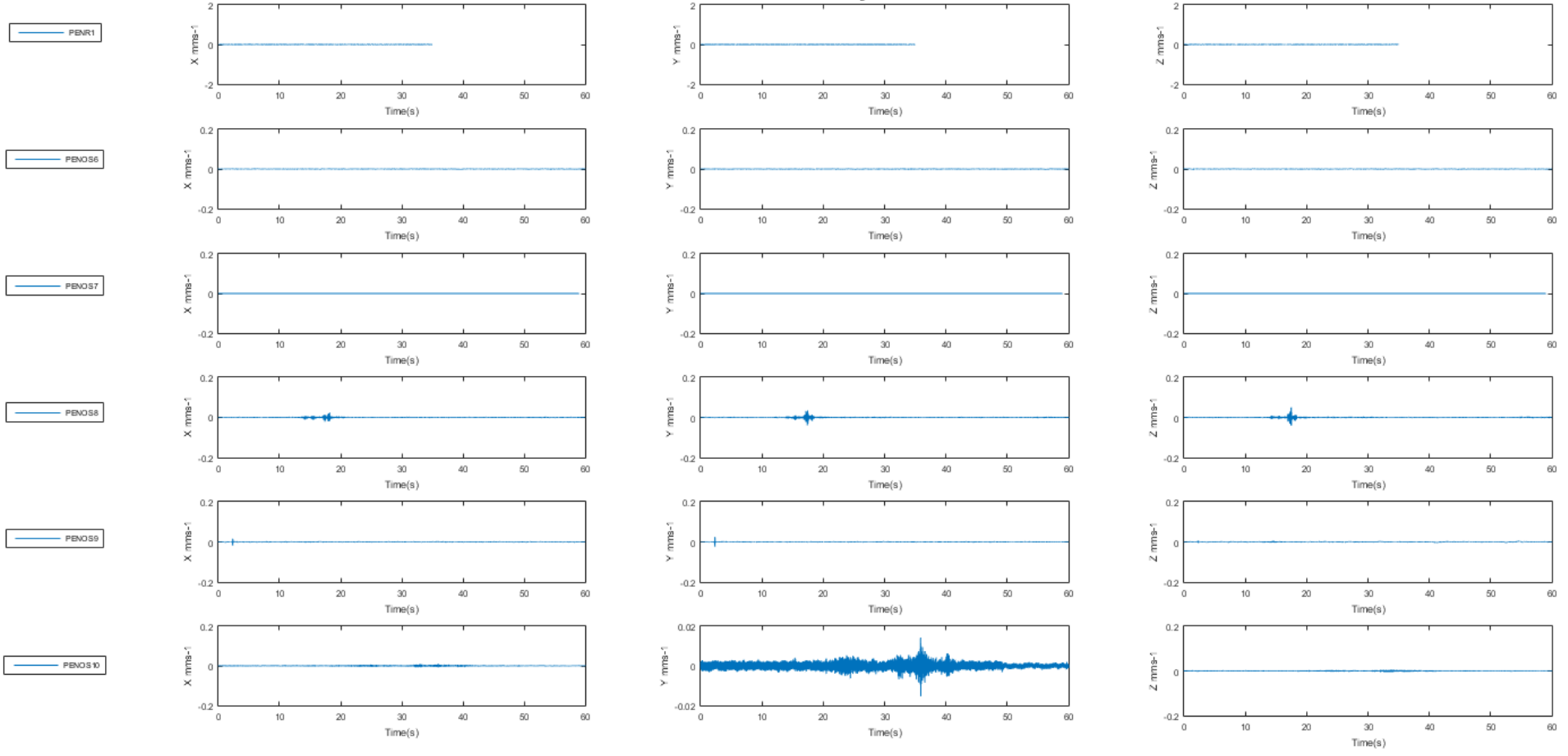


FIGURE 3.119: PEN\_OS 6 - 10 15-01-S2-103

### Event ID: 15-01-S2-103

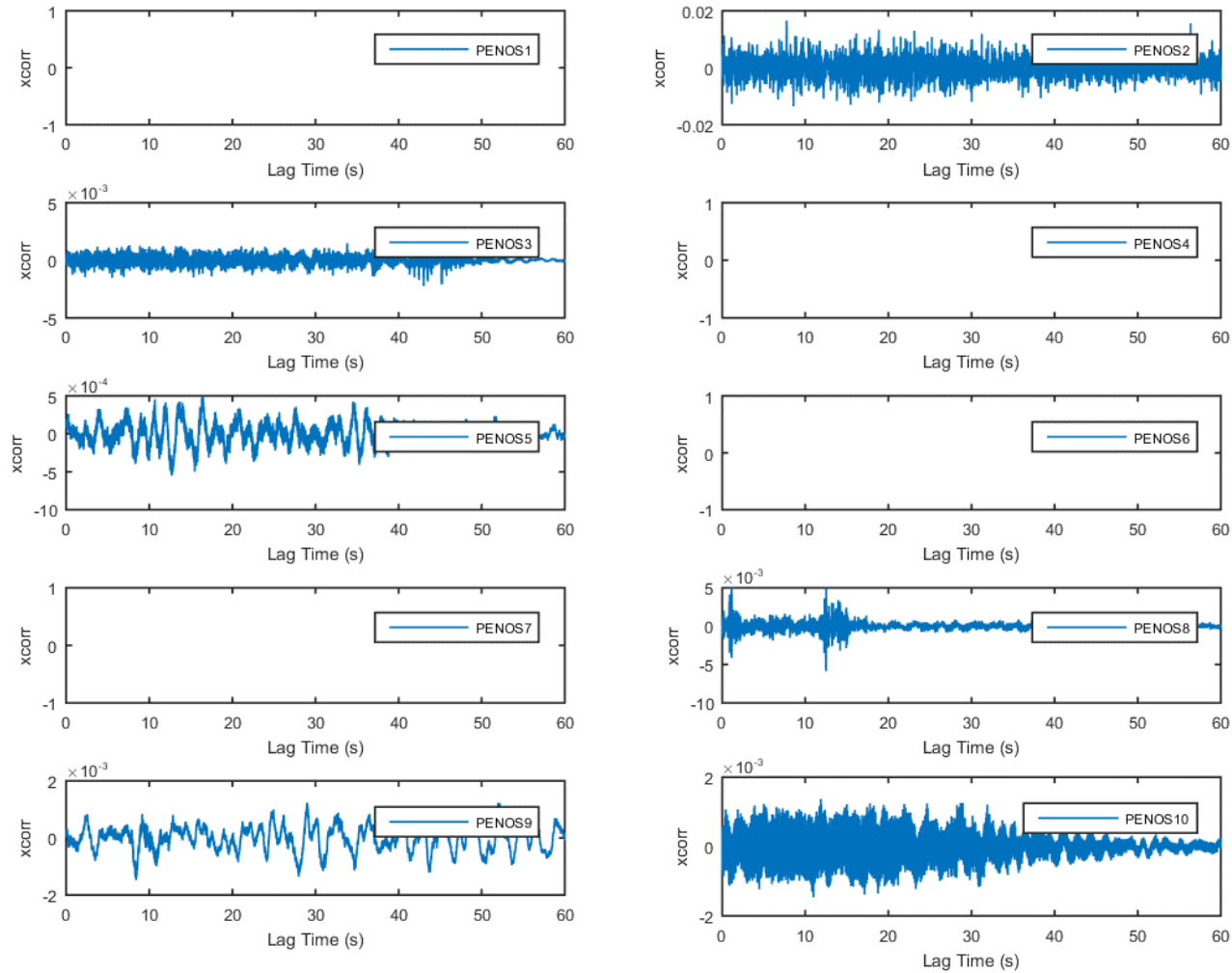


FIGURE 3.120: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-103

Peak Particle Velocity - Event ID: 15-01-S2-104

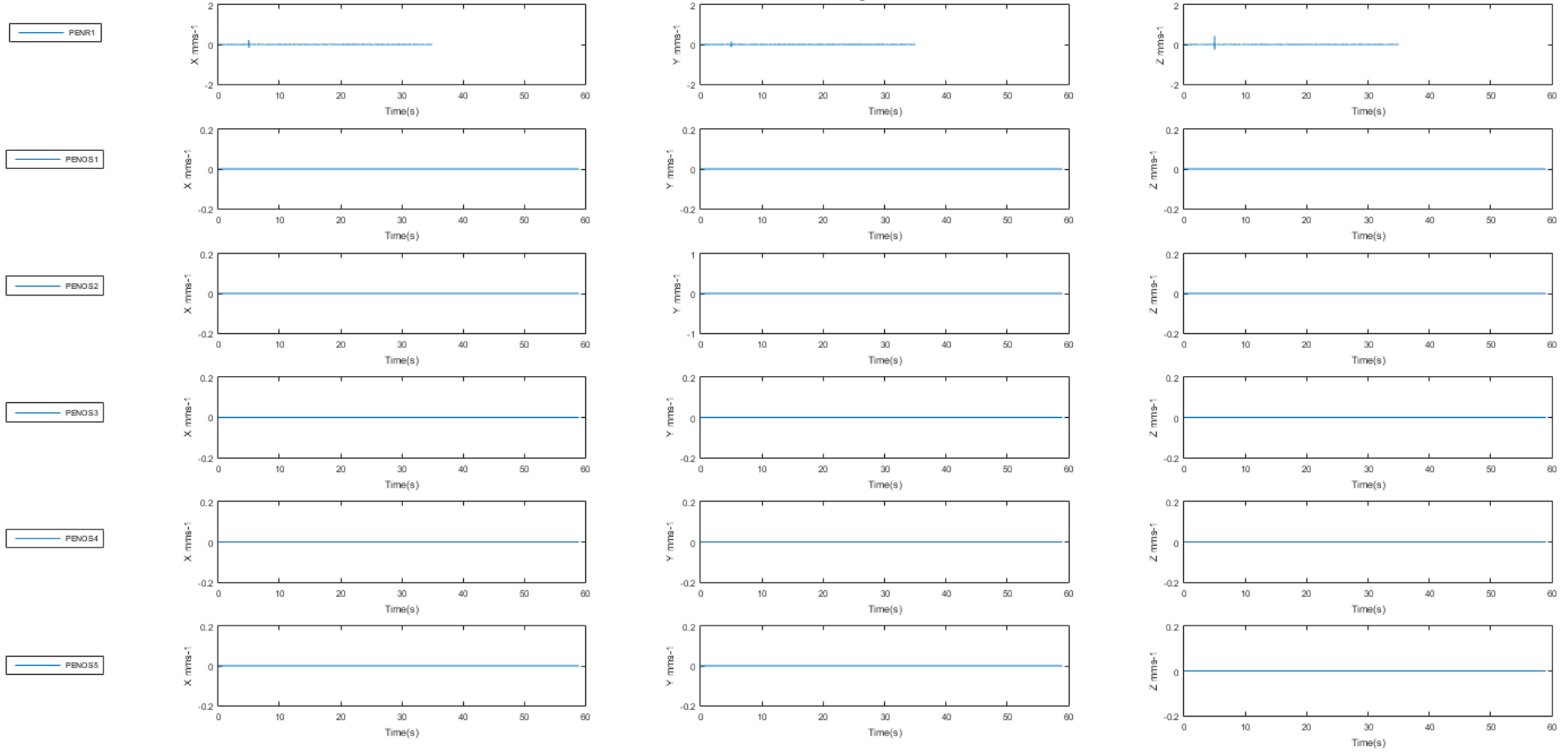


FIGURE 3.121: PEN\_OS 1 - 5 15-01-S2-104



Peak Particle Velocity - Event ID: 15-01-S2-104

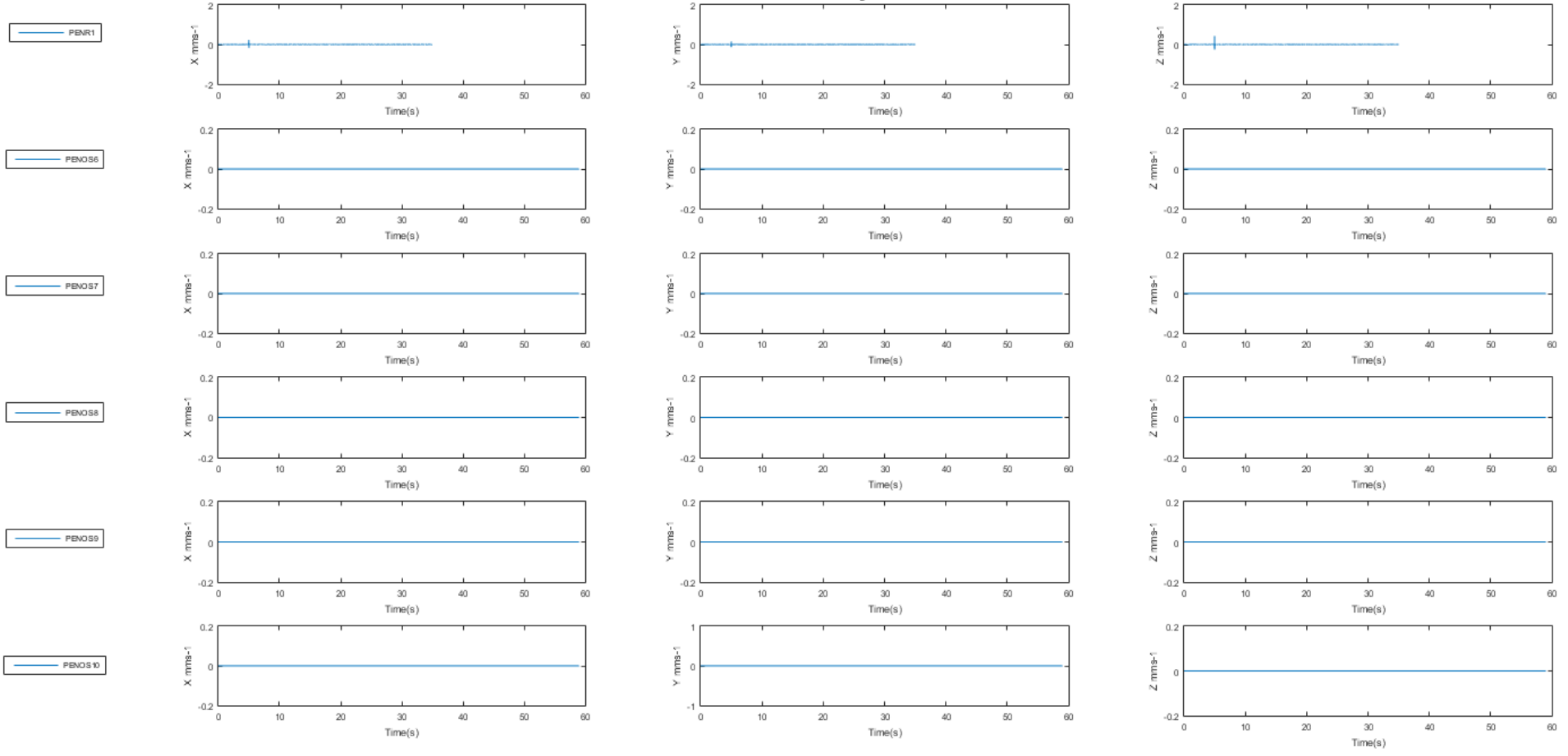
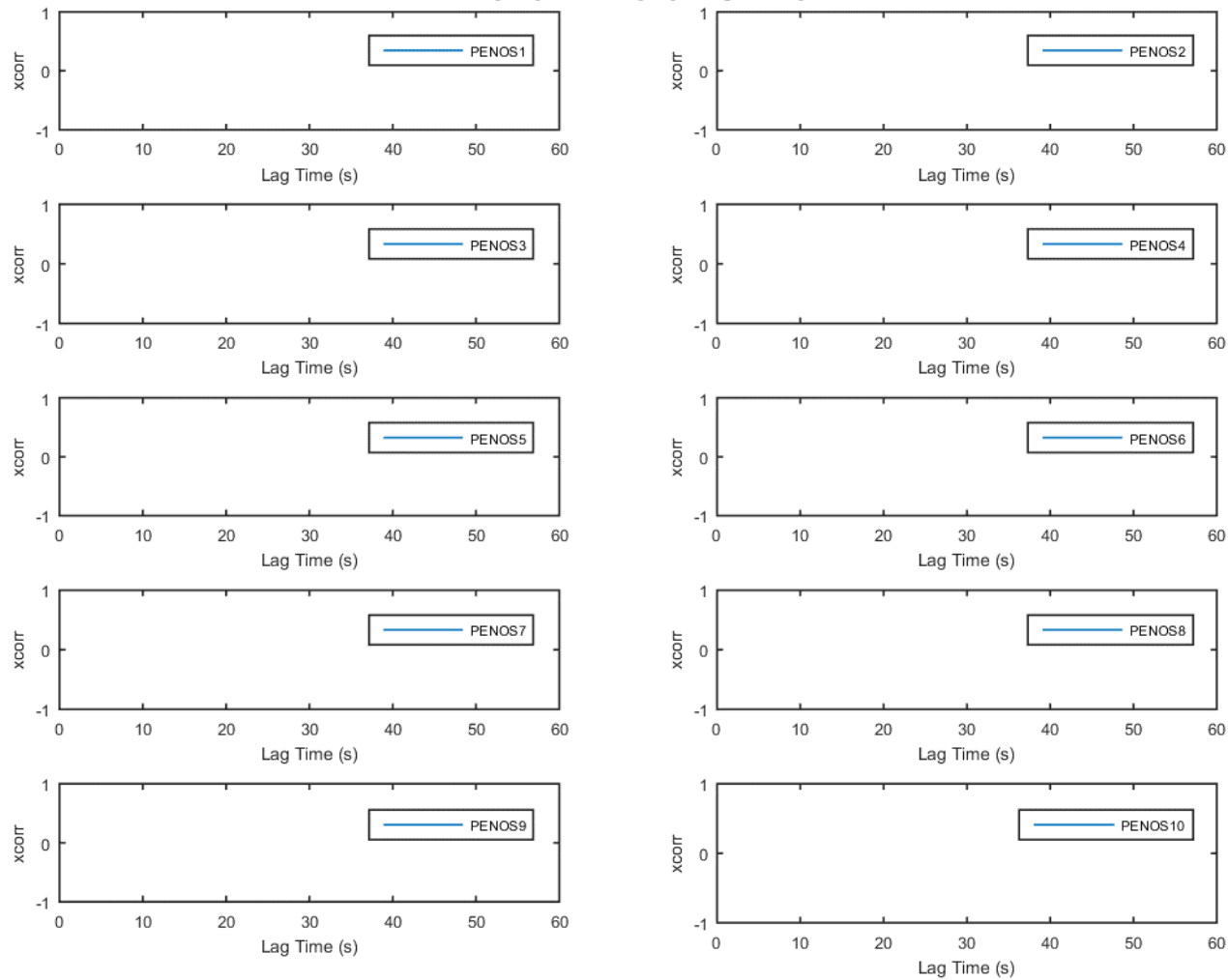


FIGURE 3.122: PEN\_OS 6 - 10 15-01-S2-104

### Event ID: 15-01-S2-104



**FIGURE 3.123: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-104**

Peak Particle Velocity - Event ID: 15-01-S2-105

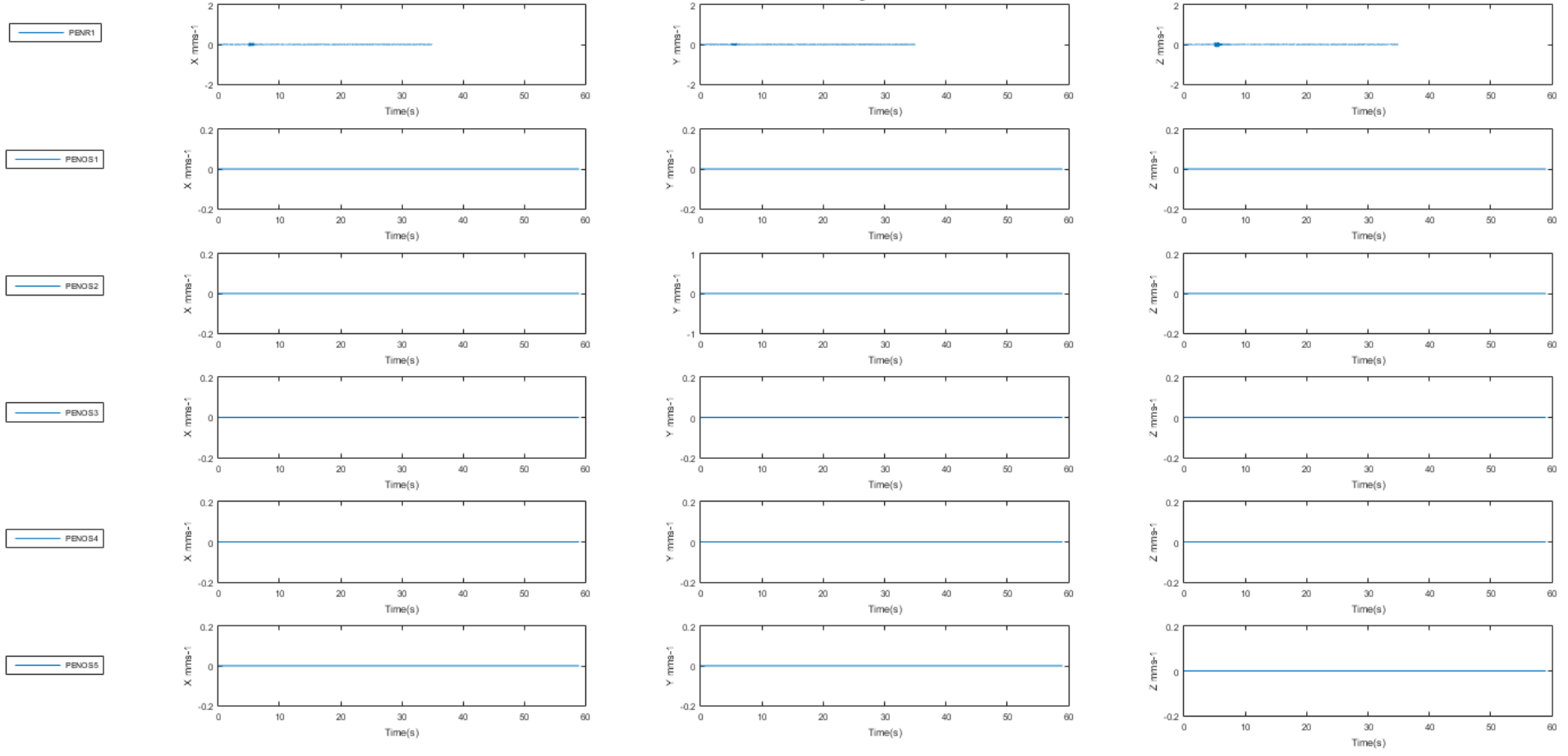


FIGURE 3.124: PEN\_OS 1 - 5 15-01-S2-105

Peak Particle Velocity - Event ID: 15-01-S2-105

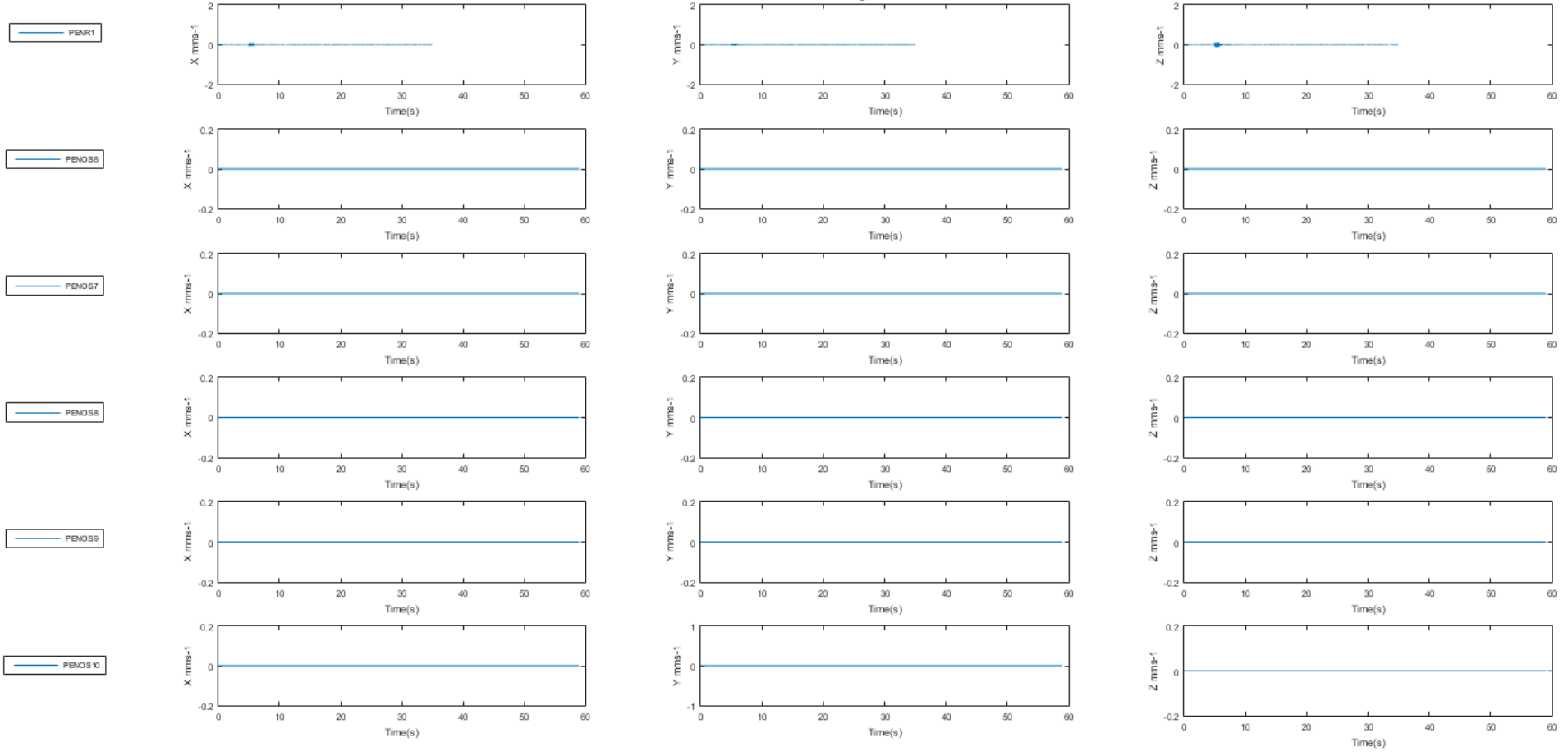
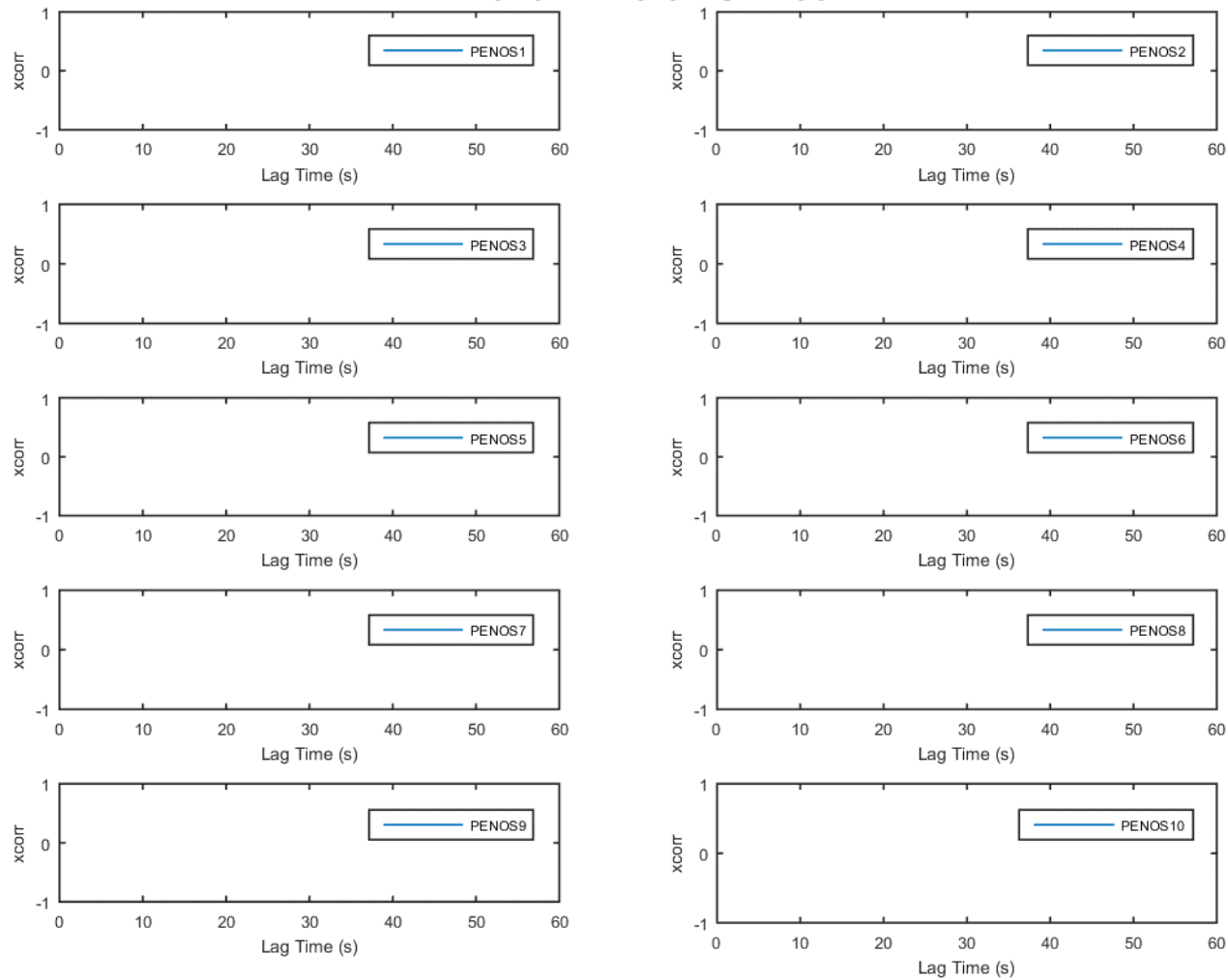


FIGURE 3.125: PEN\_OS 6 - 10 15-01-S2-105

### Event ID: 15-01-S2-105



**FIGURE 3.126: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-105**

Peak Particle Velocity - Event ID: 15-01-S2-123

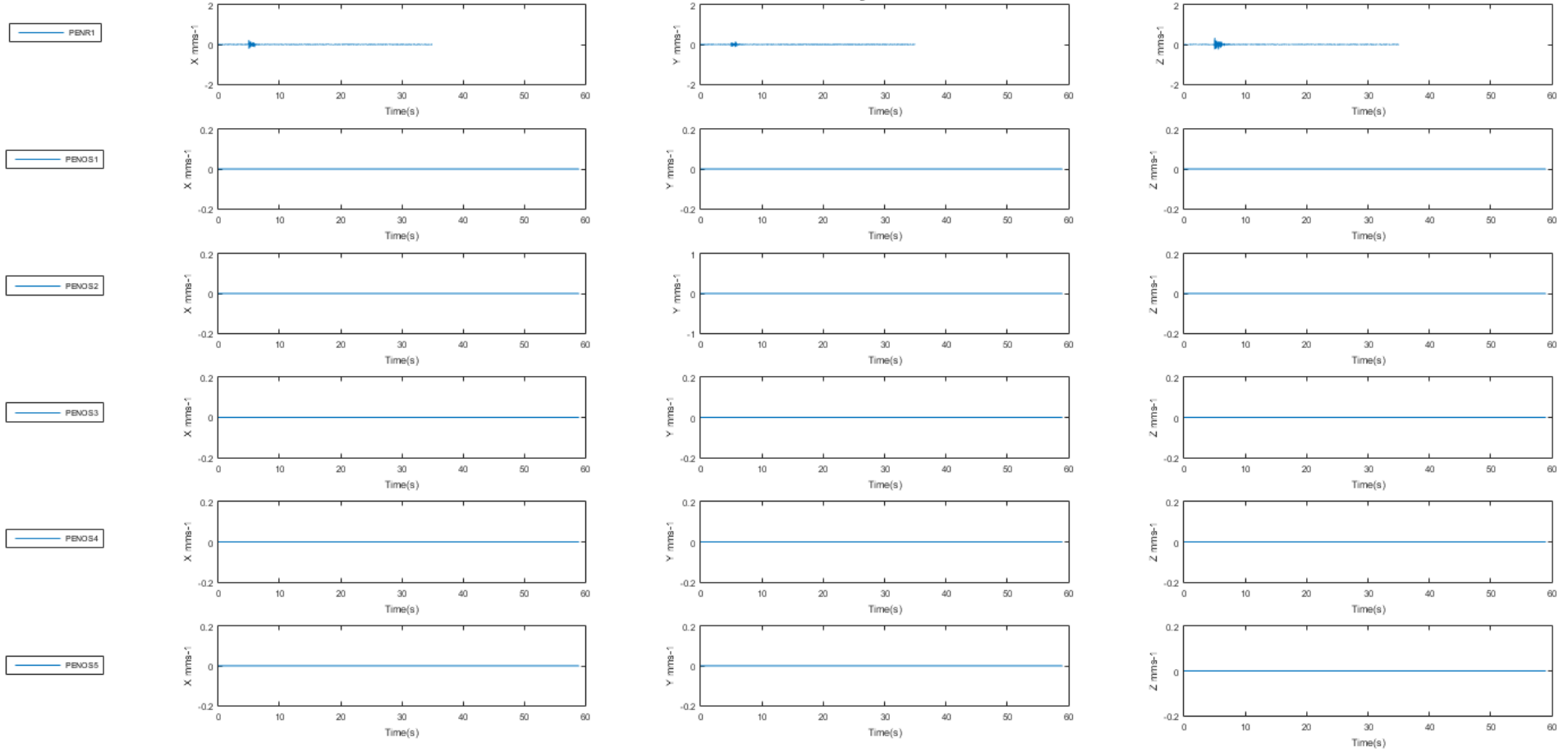


FIGURE 3.127: PEN\_OS 1 - 5 15-01-S2-123

Peak Particle Velocity - Event ID: 15-01-S2-123

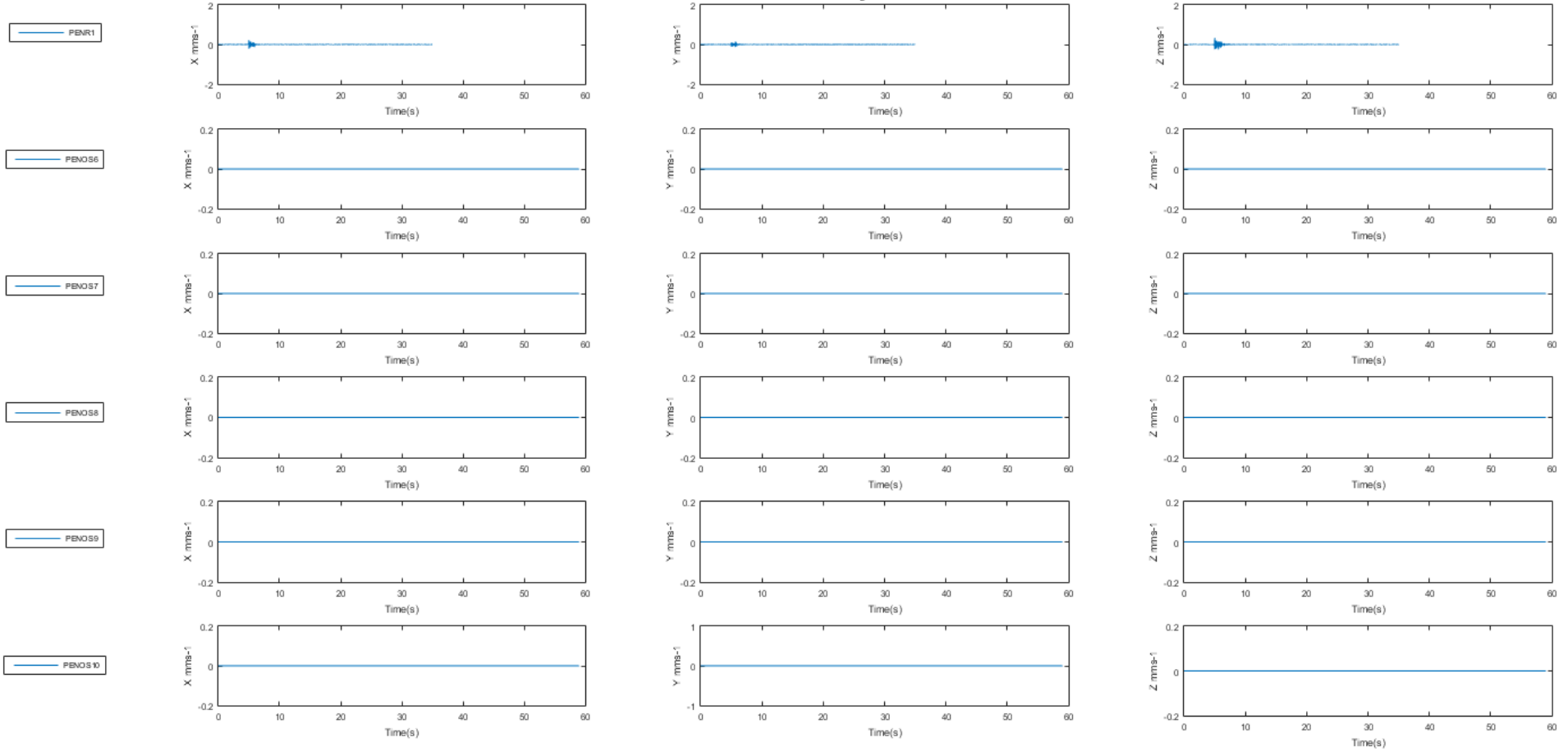
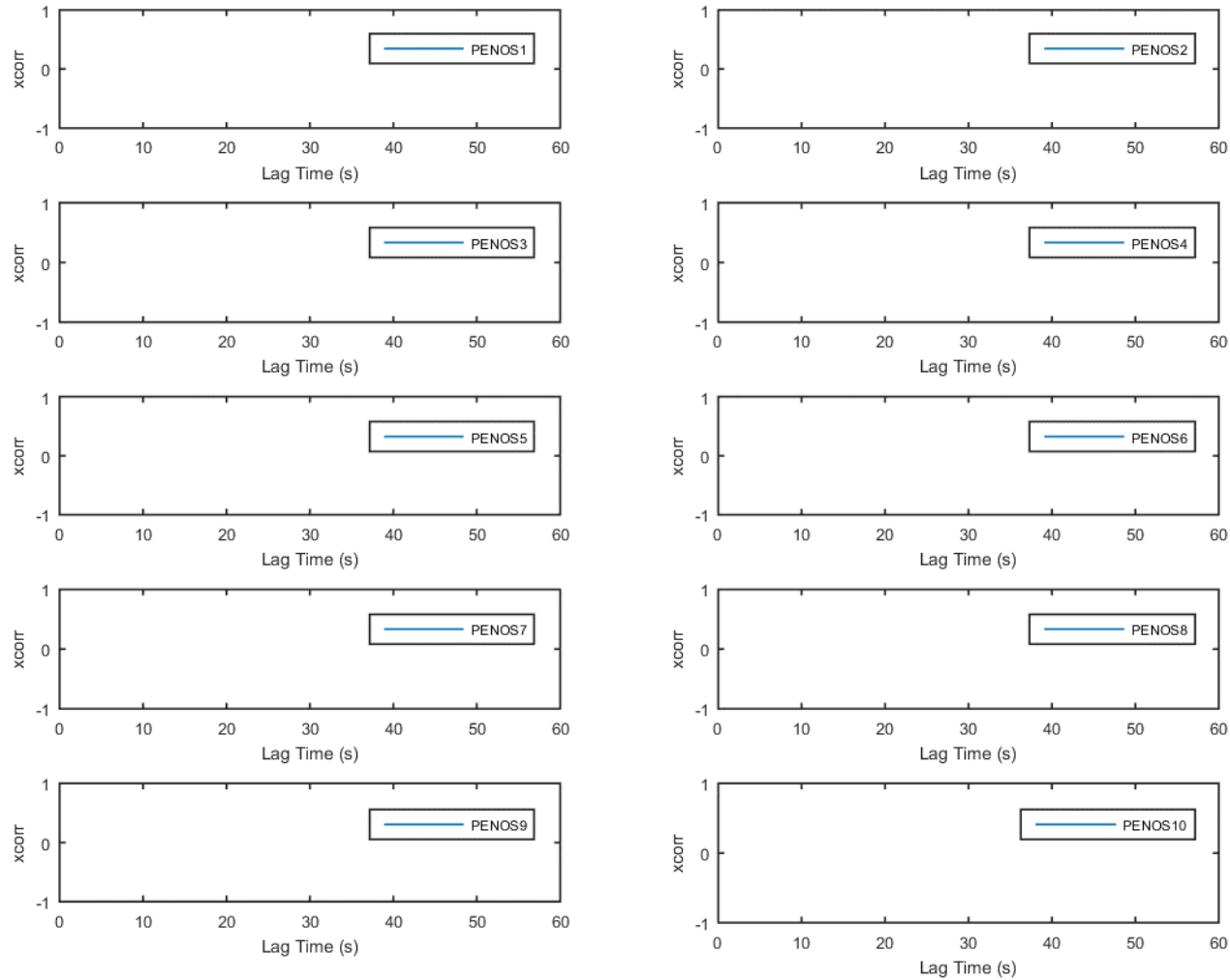


FIGURE 3.128: PEN\_OS 6 - 10 15-01-S2-123

### Event ID: 15-01-S2-123



**FIGURE 3.129: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-123**



Peak Particle Velocity - Event ID: 15-01-S2-126

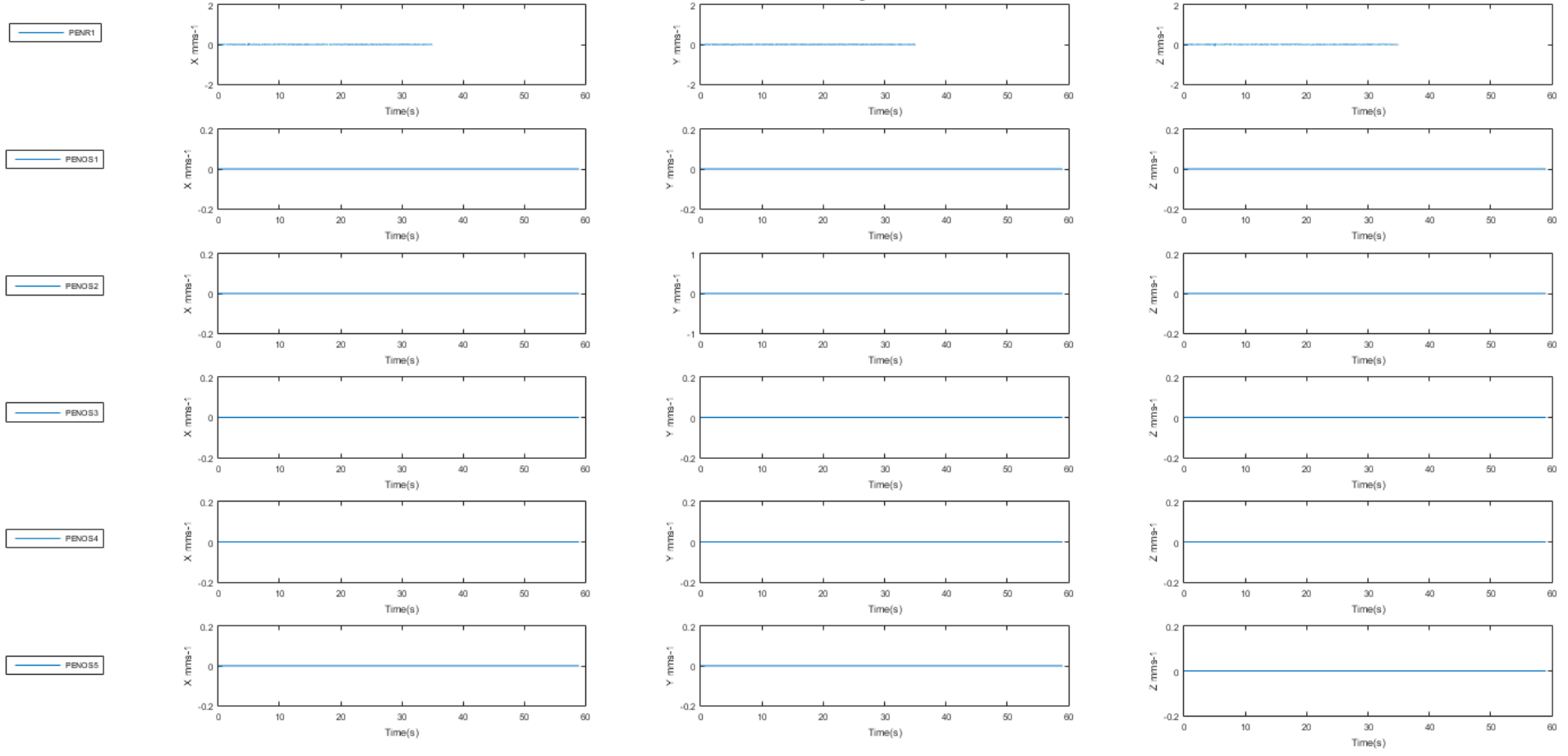


FIGURE 3.130: PEN\_OS 1 - 5 15-01-S2-126

Peak Particle Velocity - Event ID: 15-01-S2-126

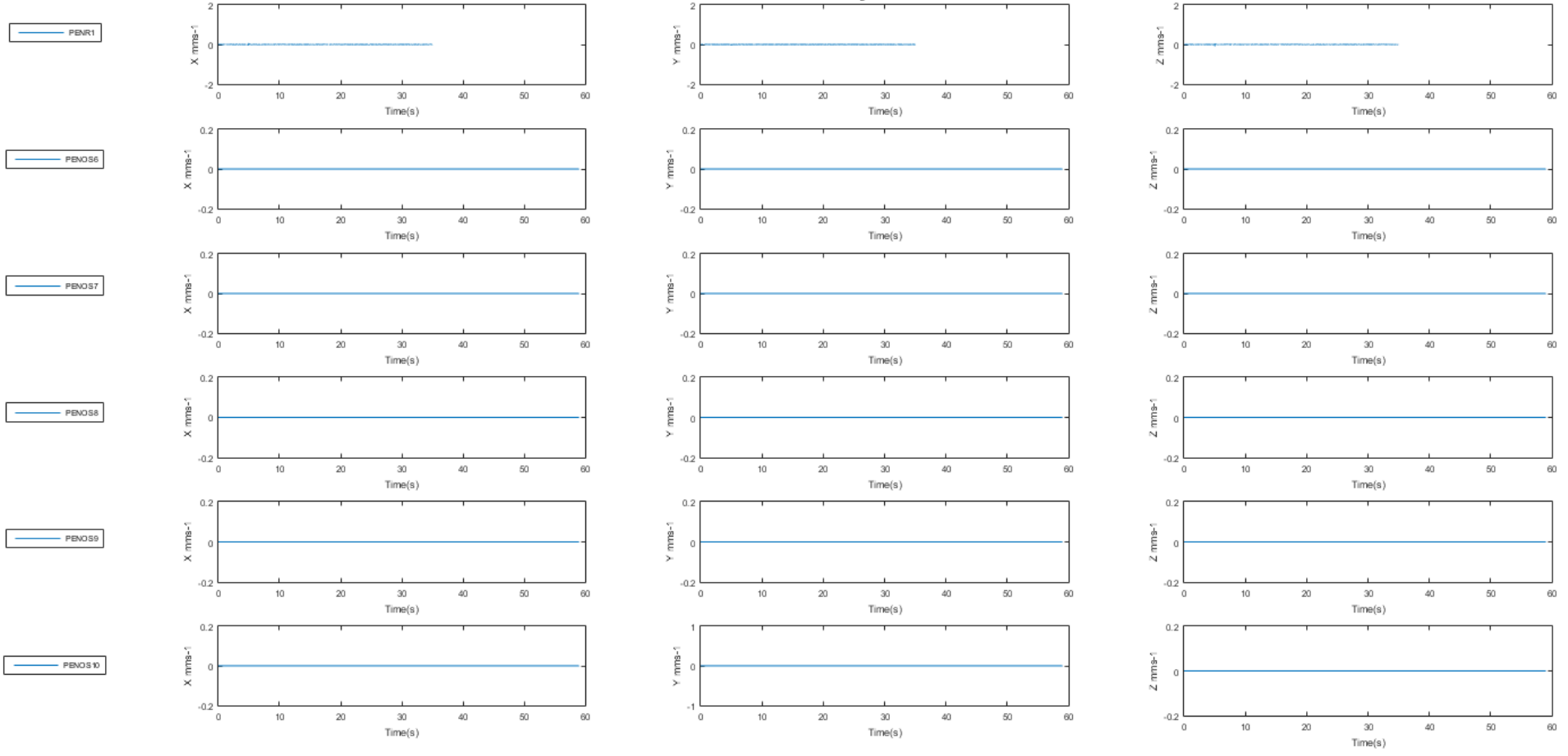


FIGURE 3.131: PEN\_OS 6 - 10 15-01-S2-126

### Event ID: 15-01-S2-126

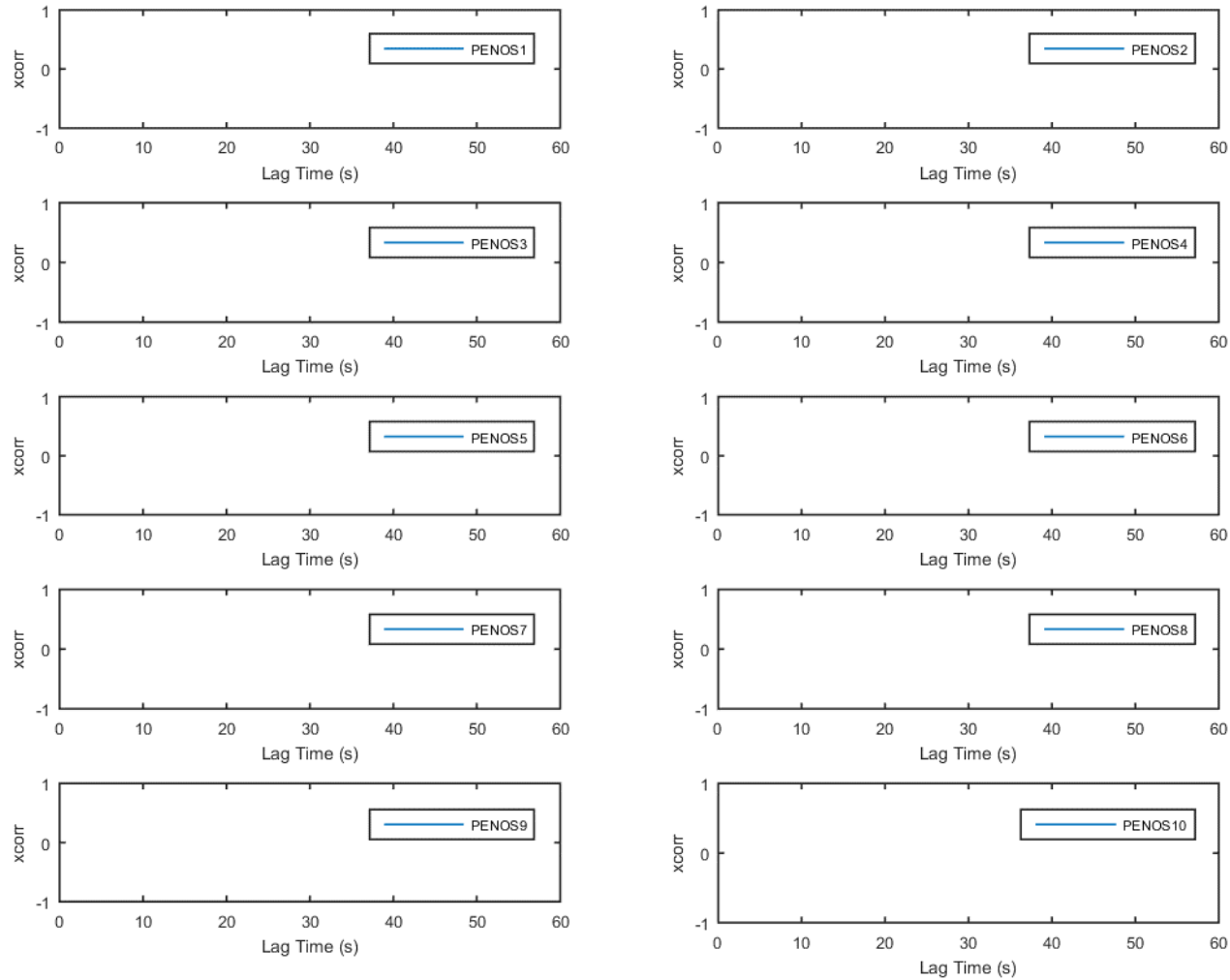


FIGURE 3.132: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-126

Peak Particle Velocity - Event ID: 15-01-S2-127

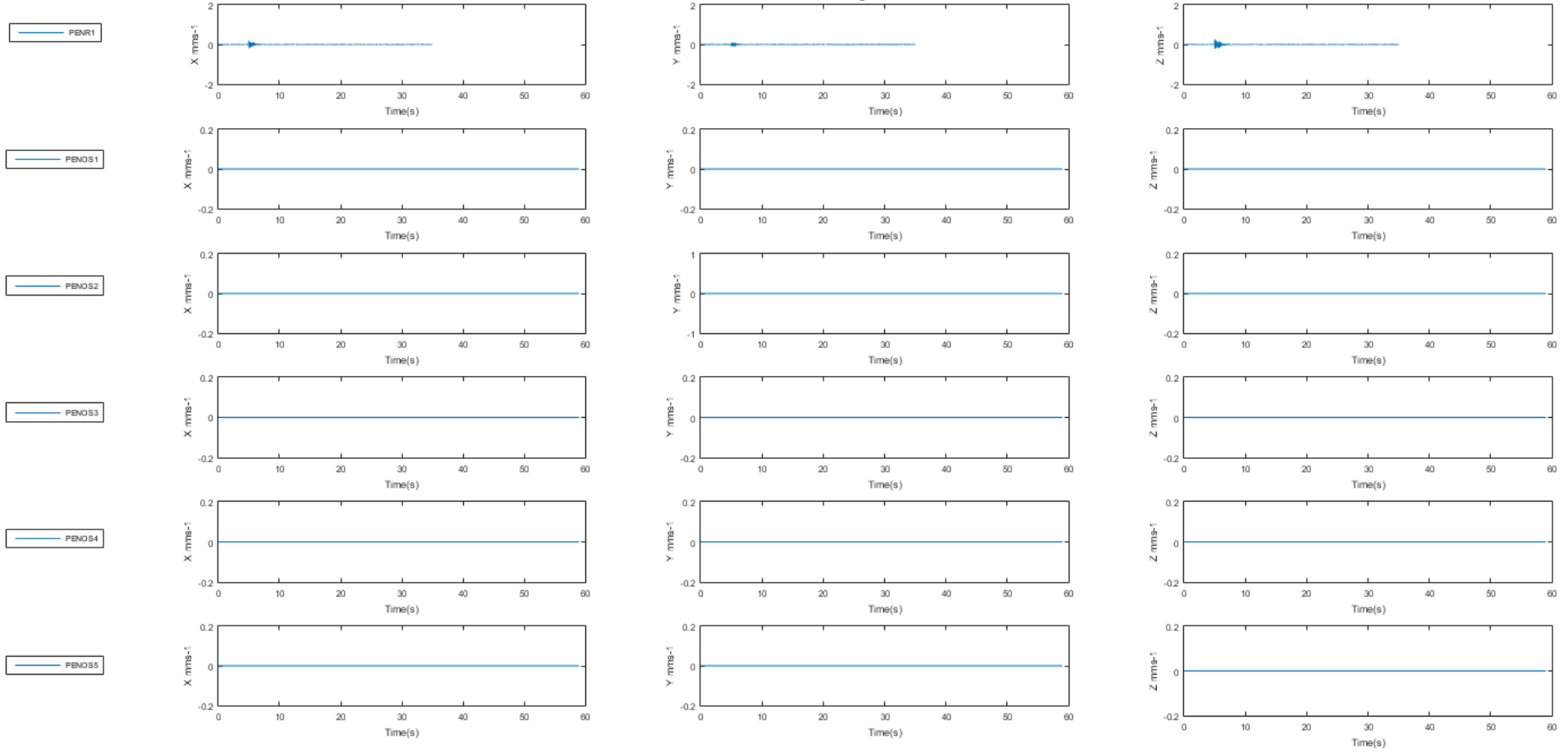


FIGURE 3.133: PEN\_OS 1 - 5 15-01-S2-127

Peak Particle Velocity - Event ID: 15-01-S2-127

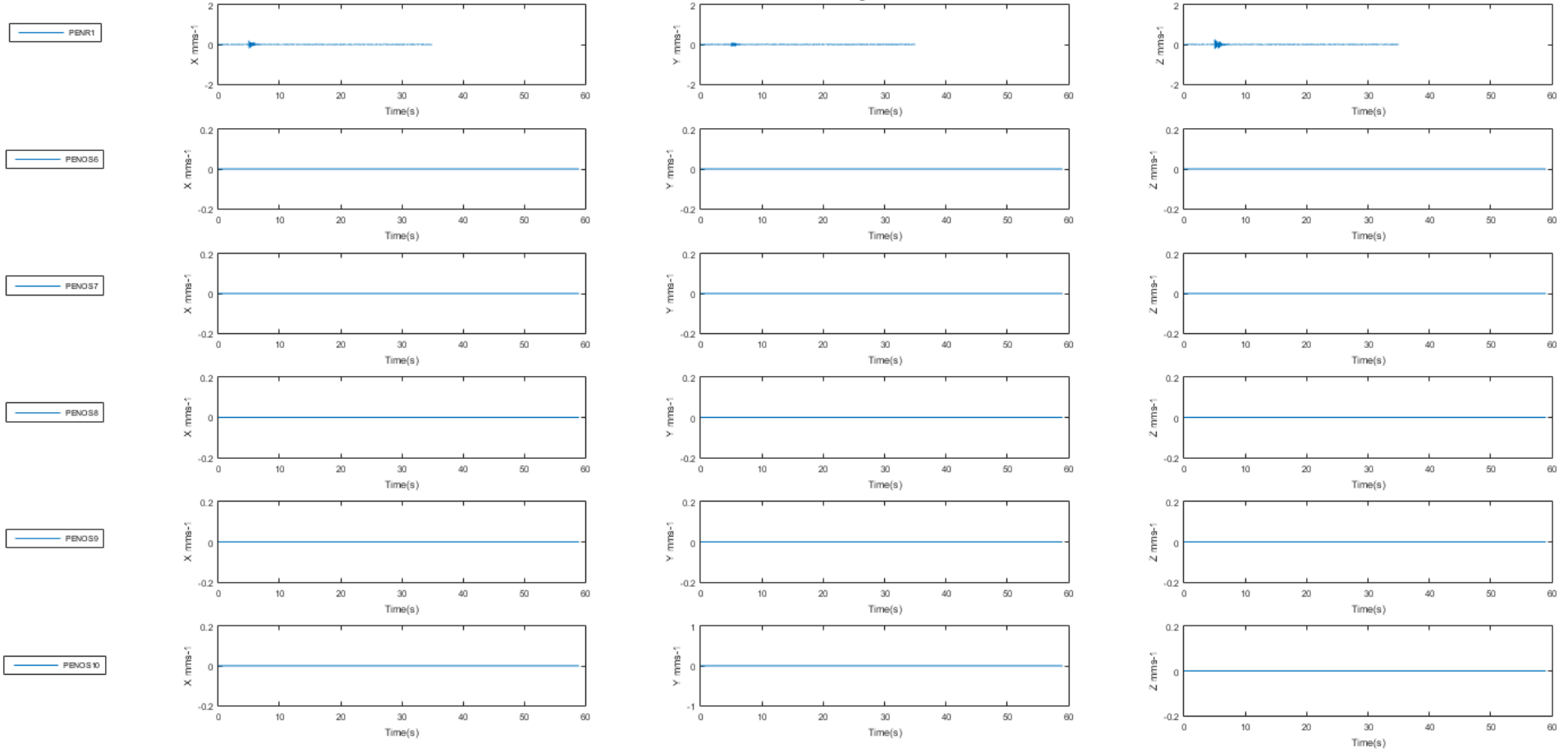


FIGURE 3.134: PEN\_OS 6 - 10 15-01-S2-127

### Event ID: 15-01-S2-127

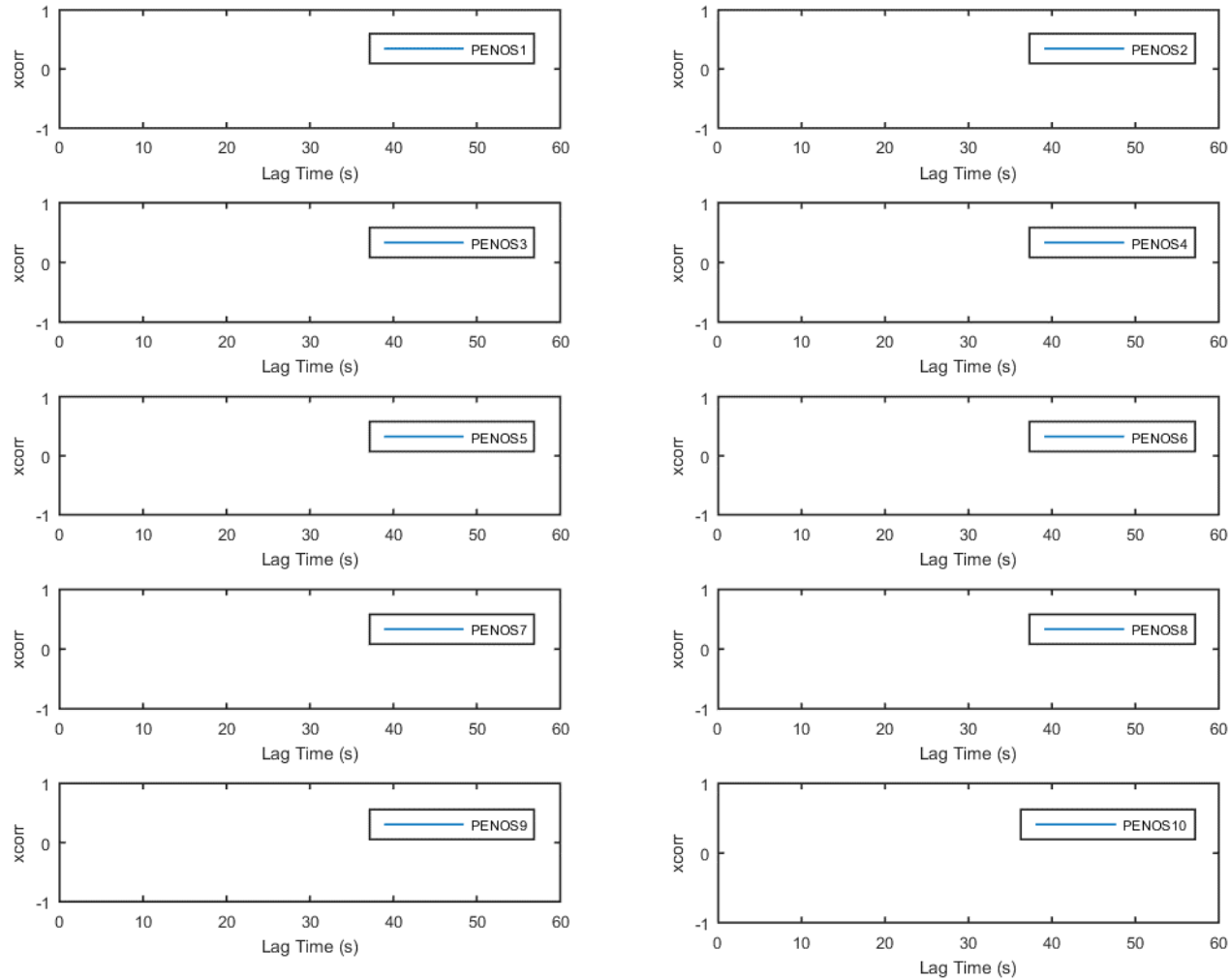


FIGURE 3.135: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-127

Peak Particle Velocity - Event ID: 15-01-S2-130

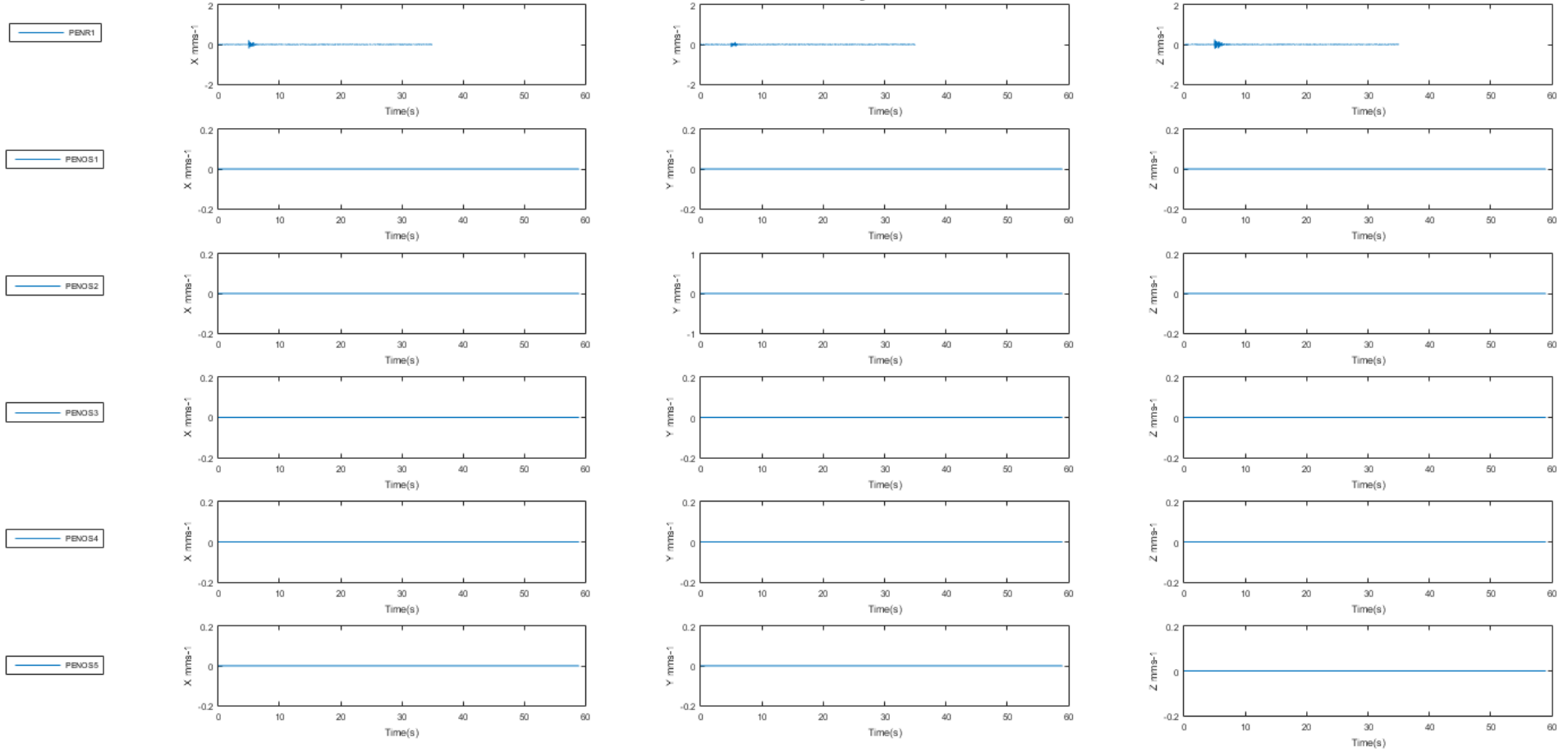


FIGURE 3.136: PEN\_OS 1 - 5 15-01-S2-130

Peak Particle Velocity - Event ID: 15-01-S2-130

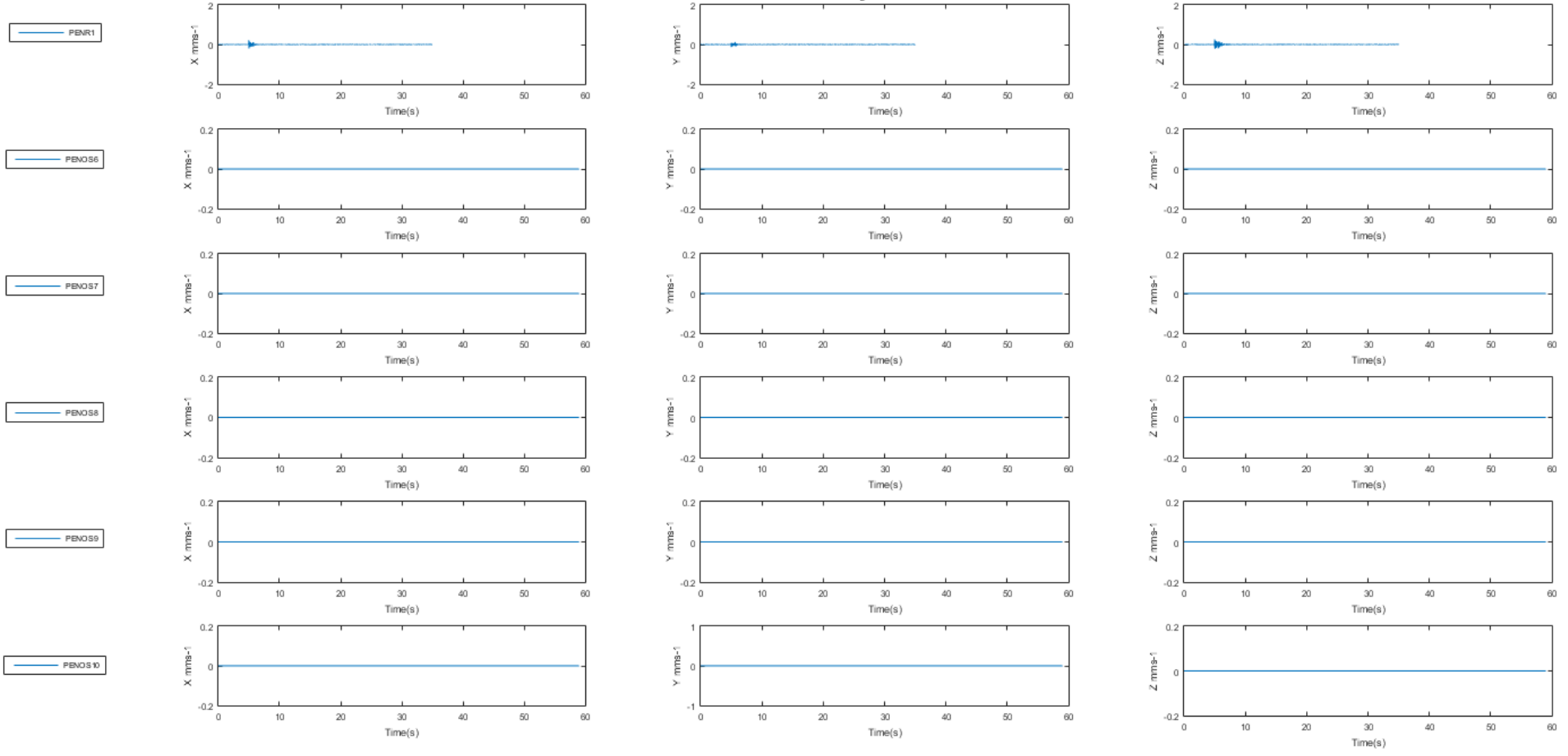


FIGURE 3.137: PEN\_OS 6 - 10 15-01-S2-130



### Event ID: 15-01-S2-130

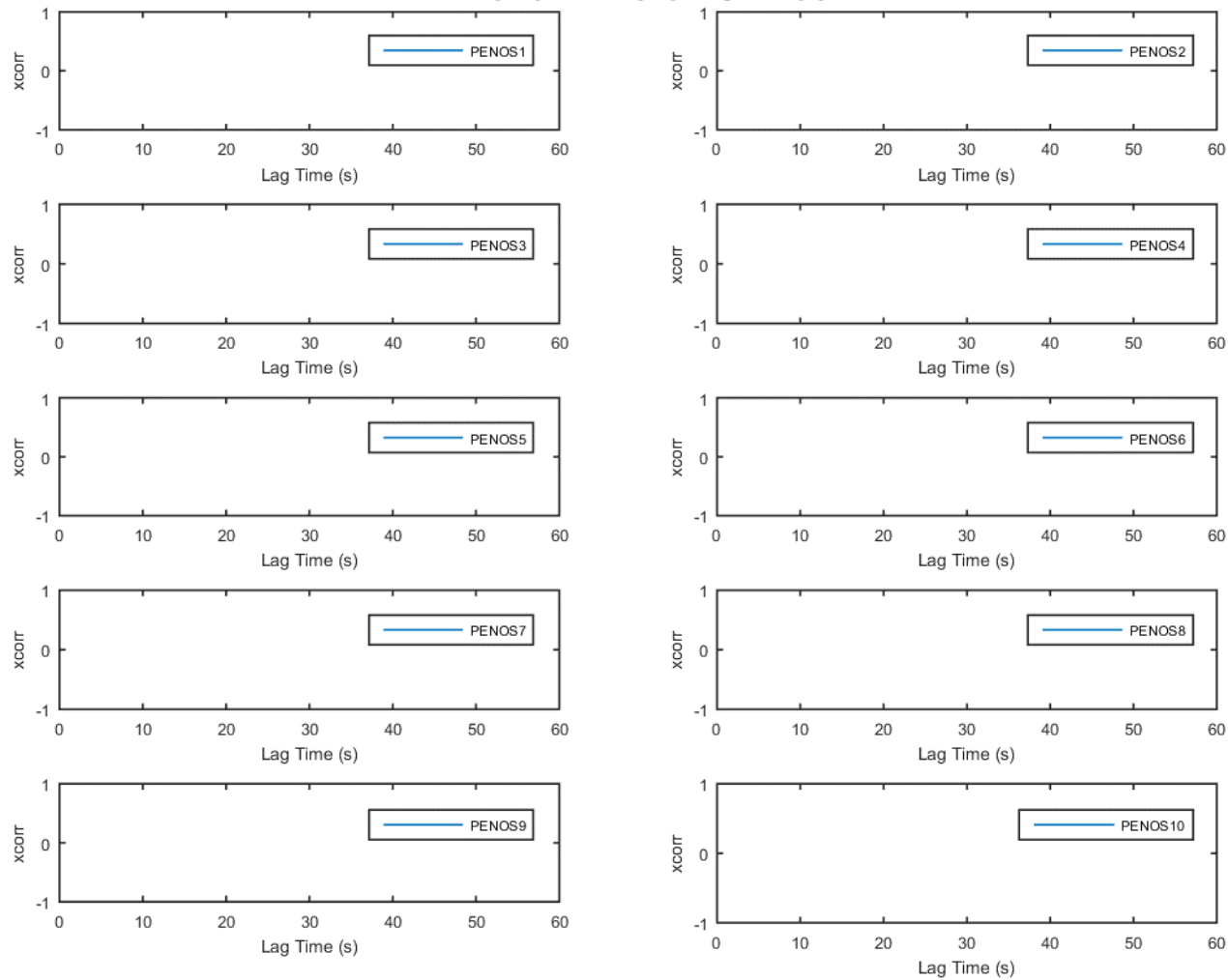


FIGURE 3.138: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-130

Peak Particle Velocity - Event ID: 15-01-S2-138

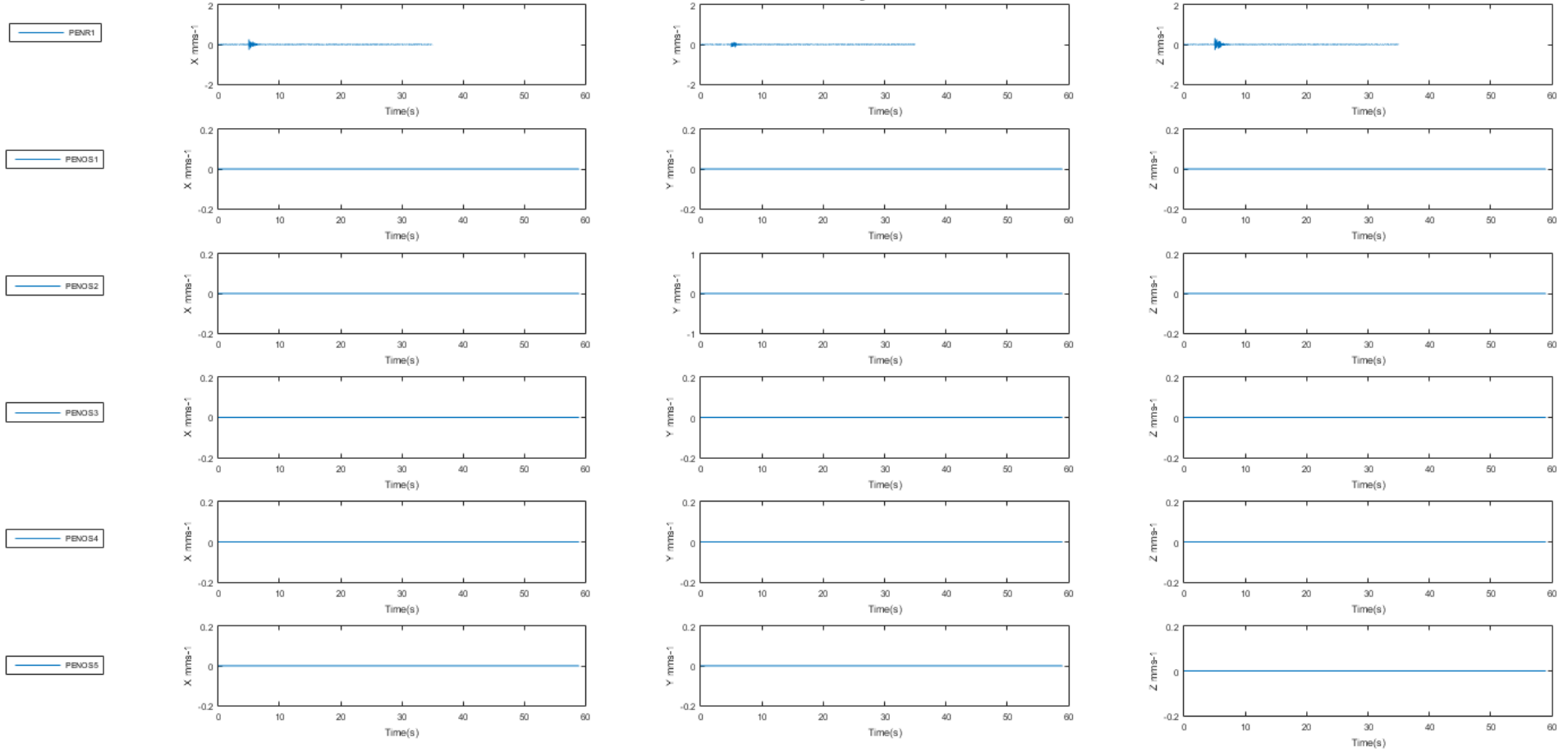


FIGURE 3.139: PEN\_OS 1 - 5 15-01-S2-138

Peak Particle Velocity - Event ID: 15-01-S2-138

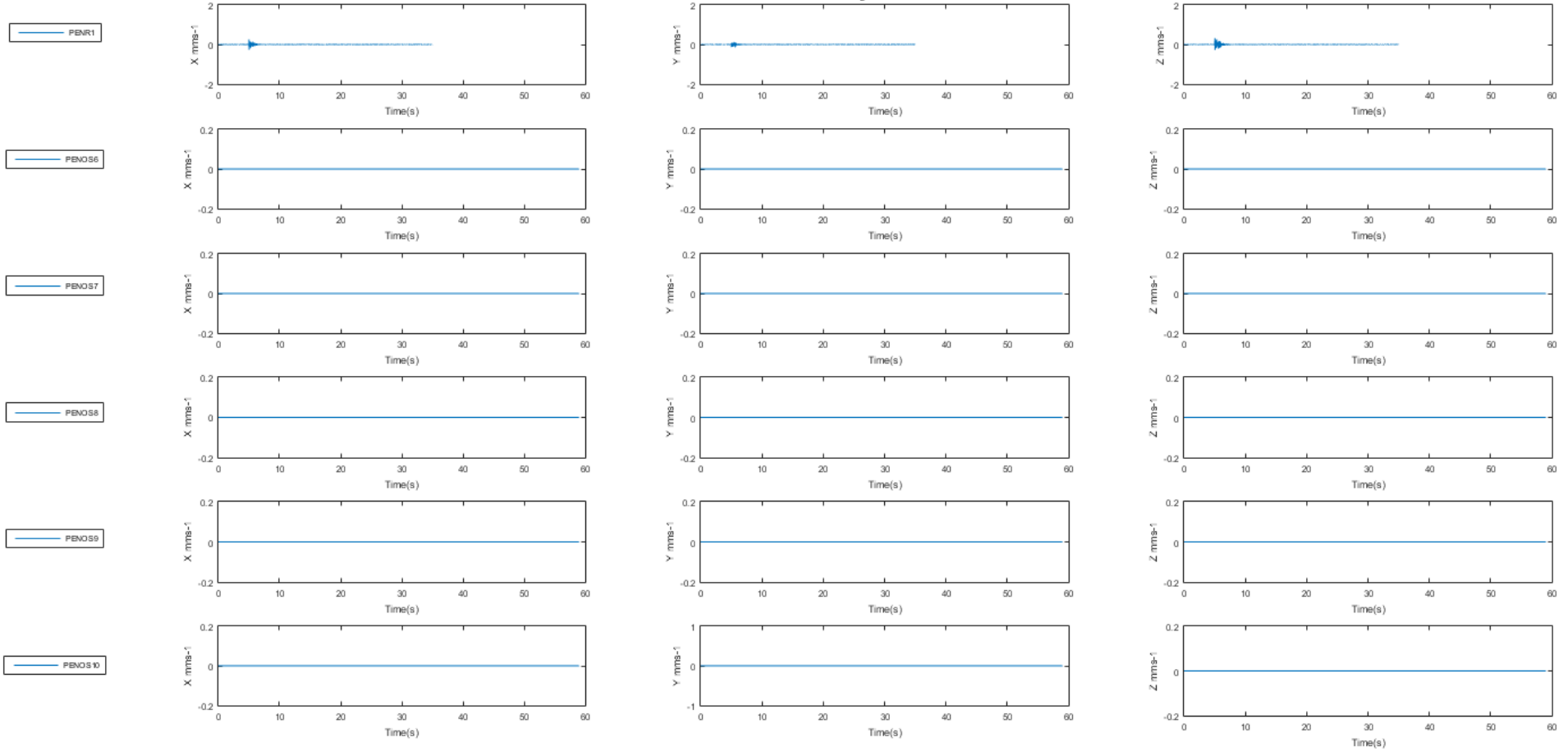
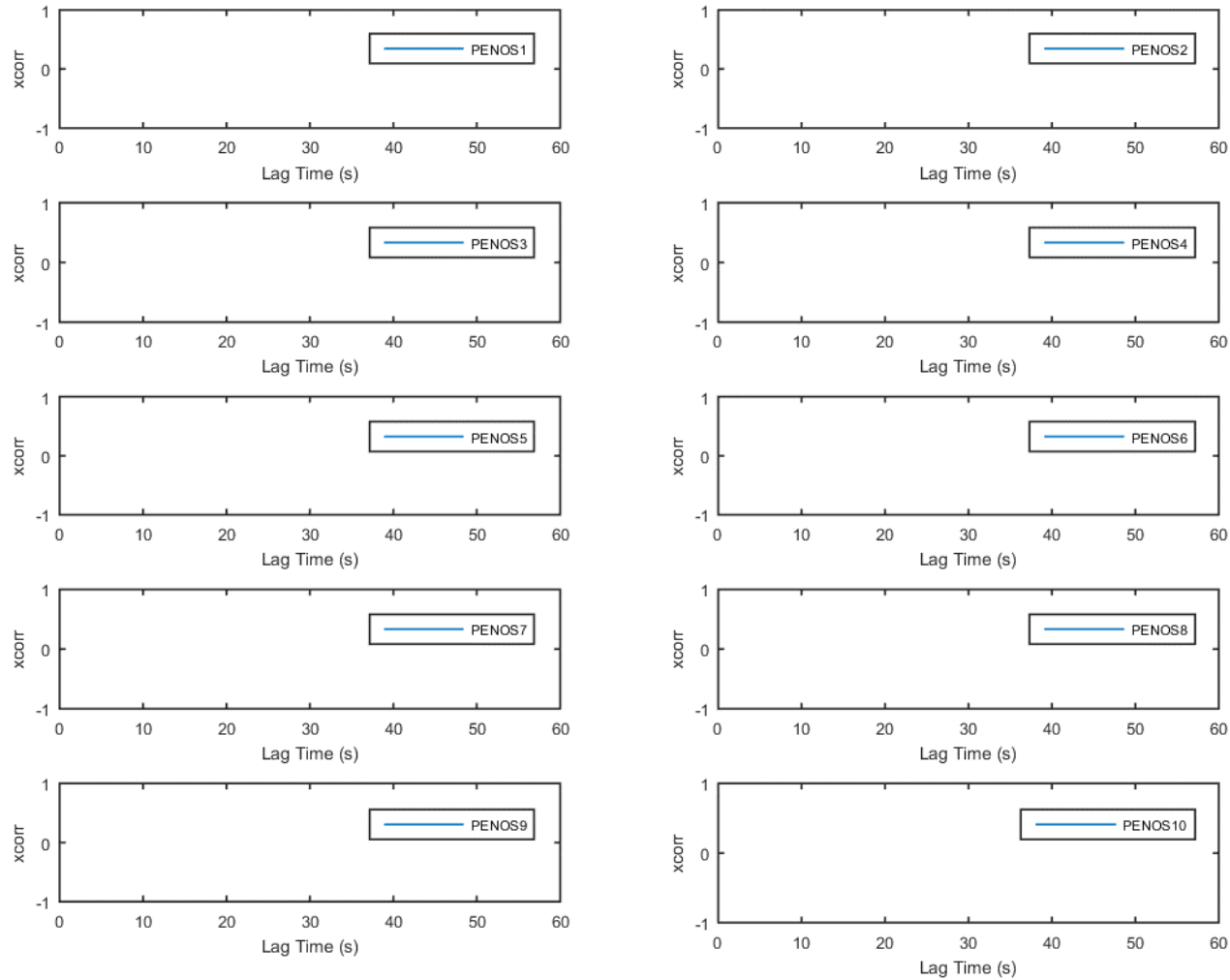


FIGURE 3.140: PEN\_OS 6 - 10 15-01-S2-138

### Event ID: 15-01-S2-138



**FIGURE 3.141: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-138**

Peak Particle Velocity - Event ID: 15-01-S2-143

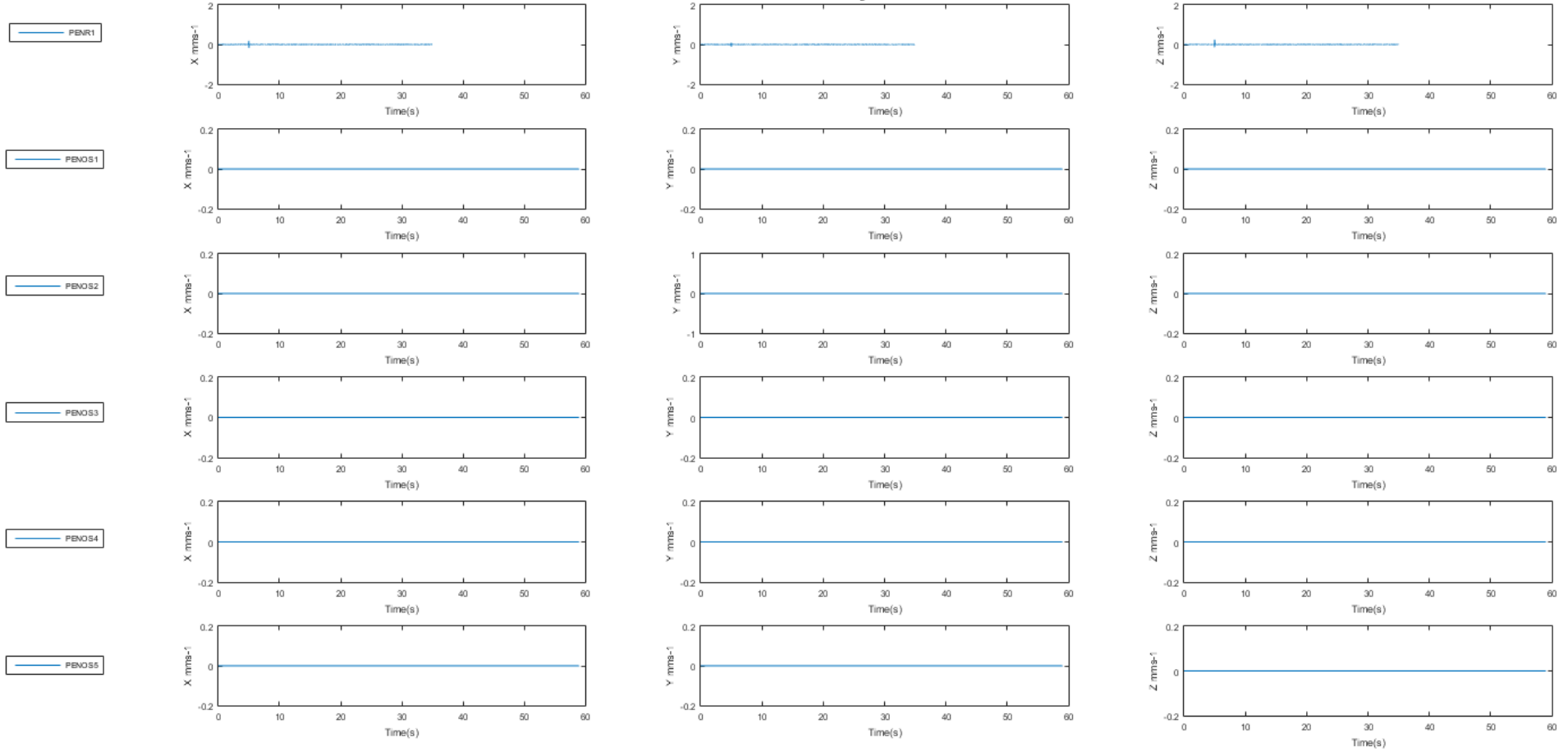


FIGURE 3.142: PEN\_OS 1 - 5 15-01-S2-143

Peak Particle Velocity - Event ID: 15-01-S2-143

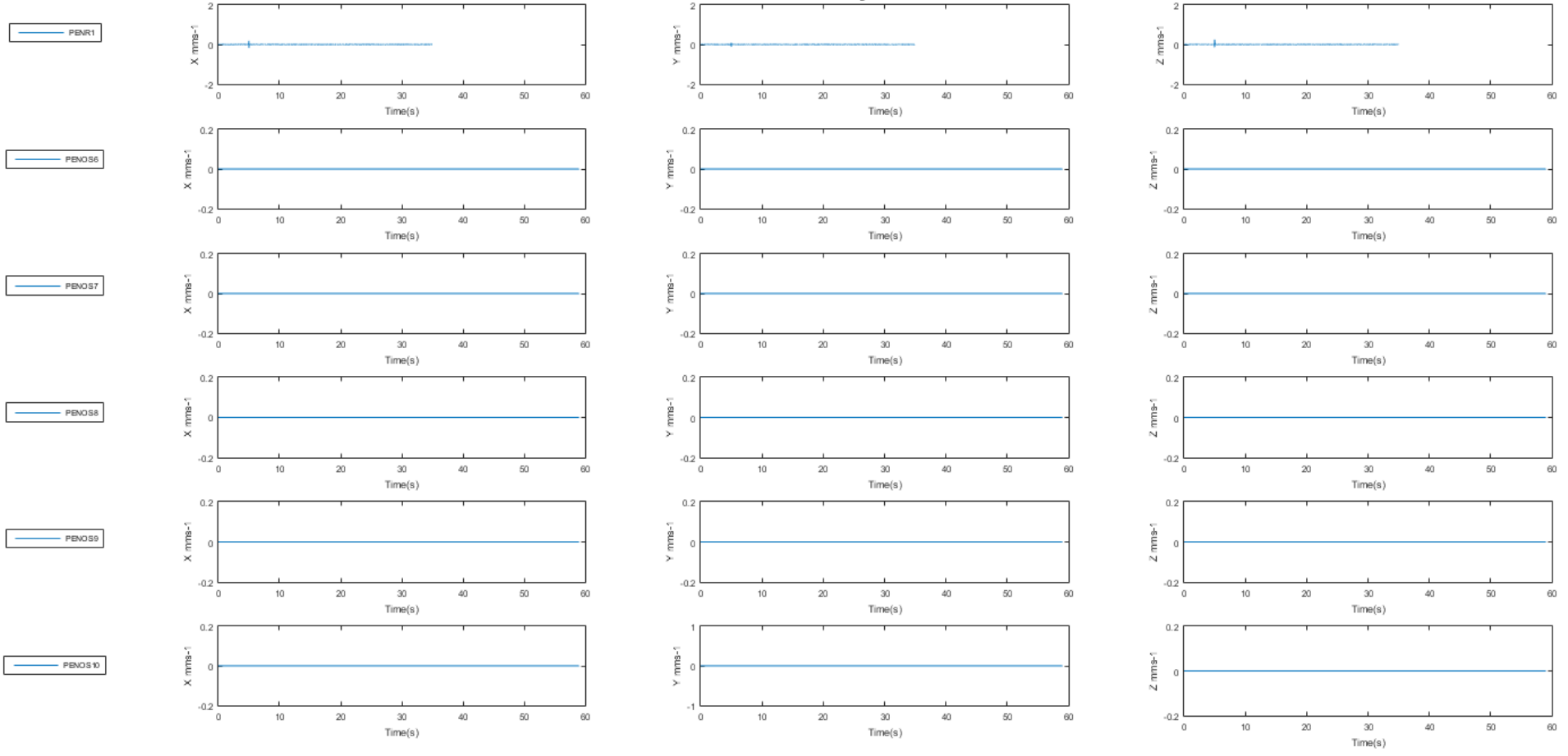
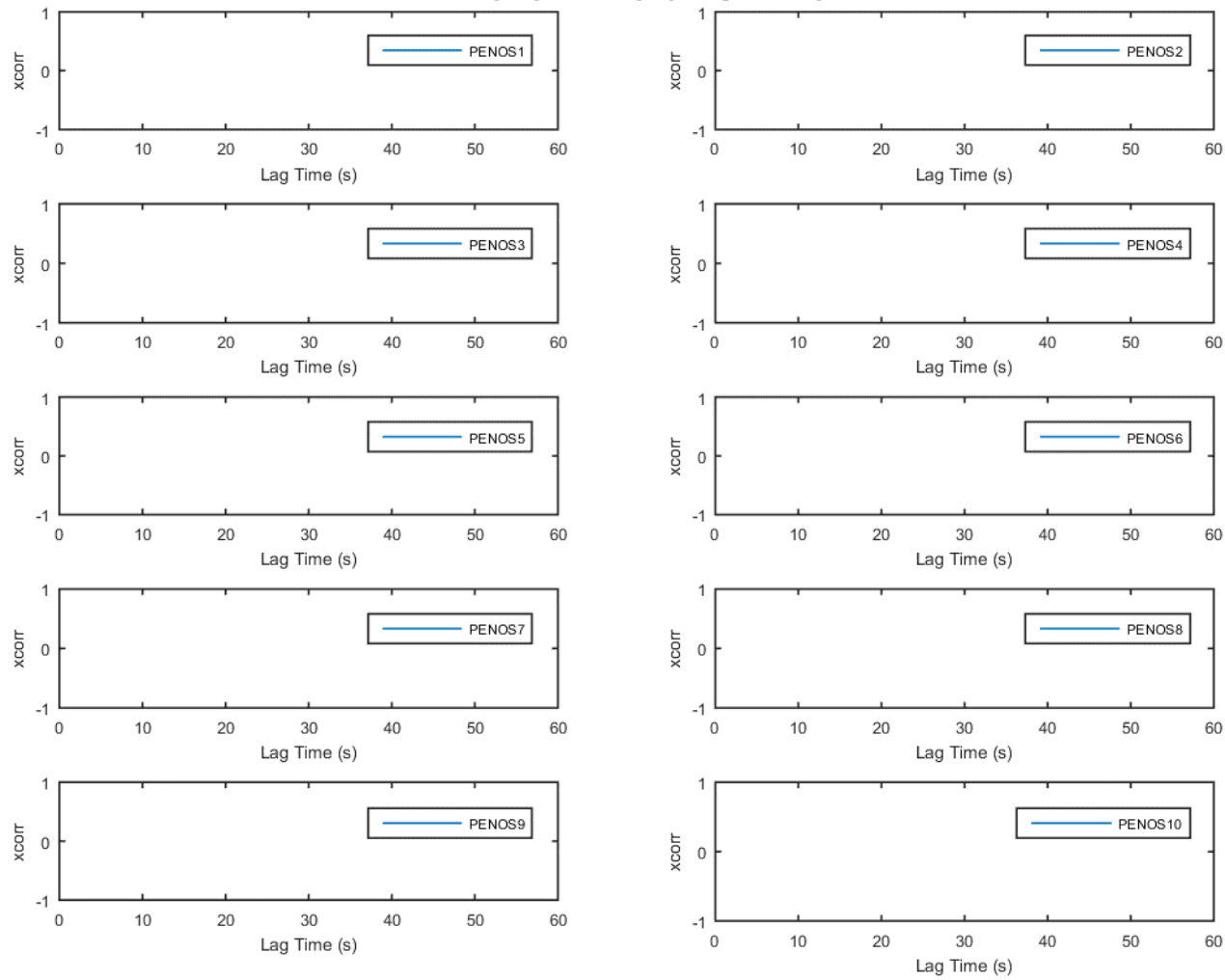


FIGURE 3.143: PEN\_OS 6 - 10 15-01-S2-143

### Event ID: 15-01-S2-143



**FIGURE 3.144: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-143**

Peak Particle Velocity - Event ID: 15-01-S2-144

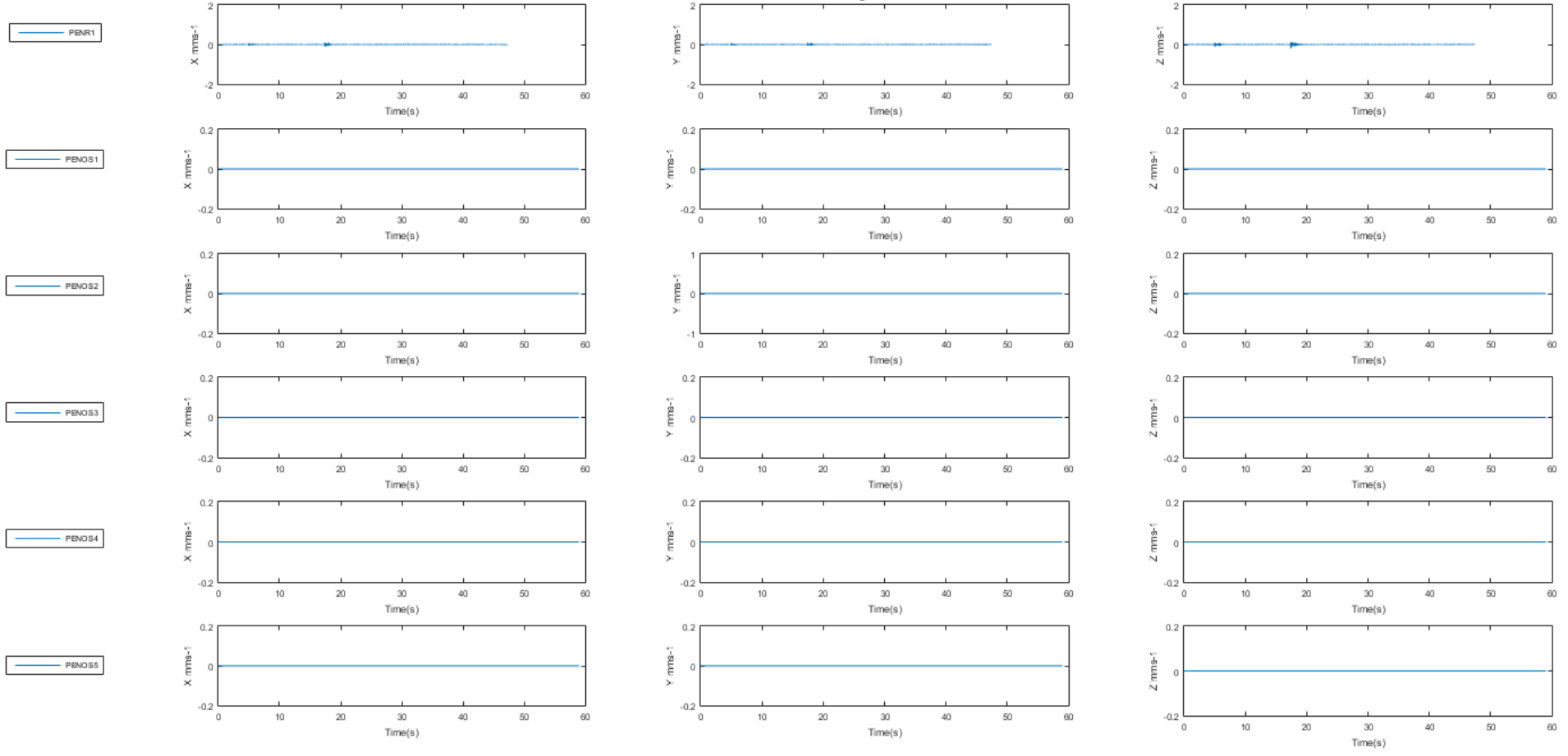


FIGURE 3.145: PEN\_OS 1 - 5 15-01-S2-144



Peak Particle Velocity - Event ID: 15-01-S2-144

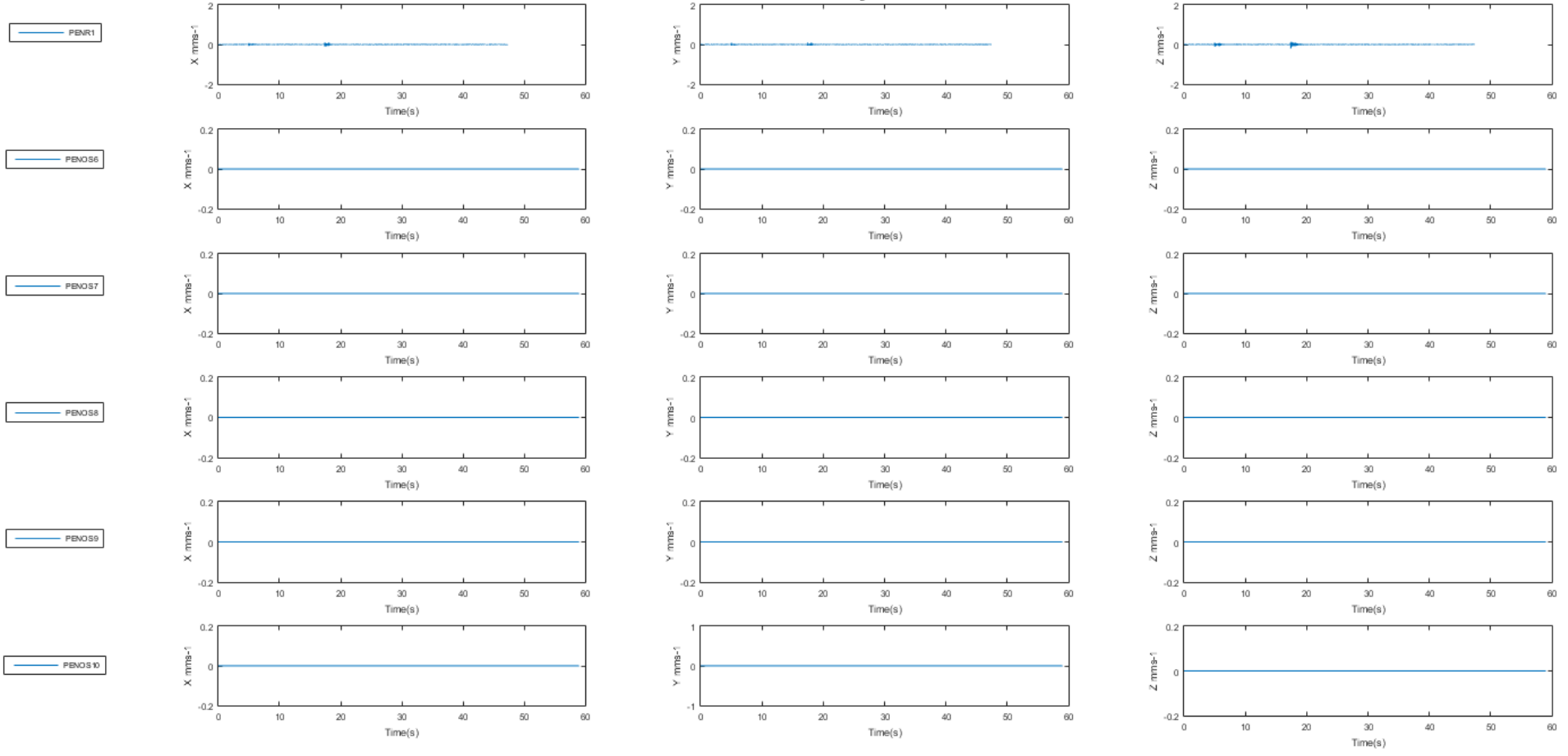


FIGURE 3.146: PEN\_OS 6 - 10 15-01-S2-144

### Event ID: 15-01-S2-144

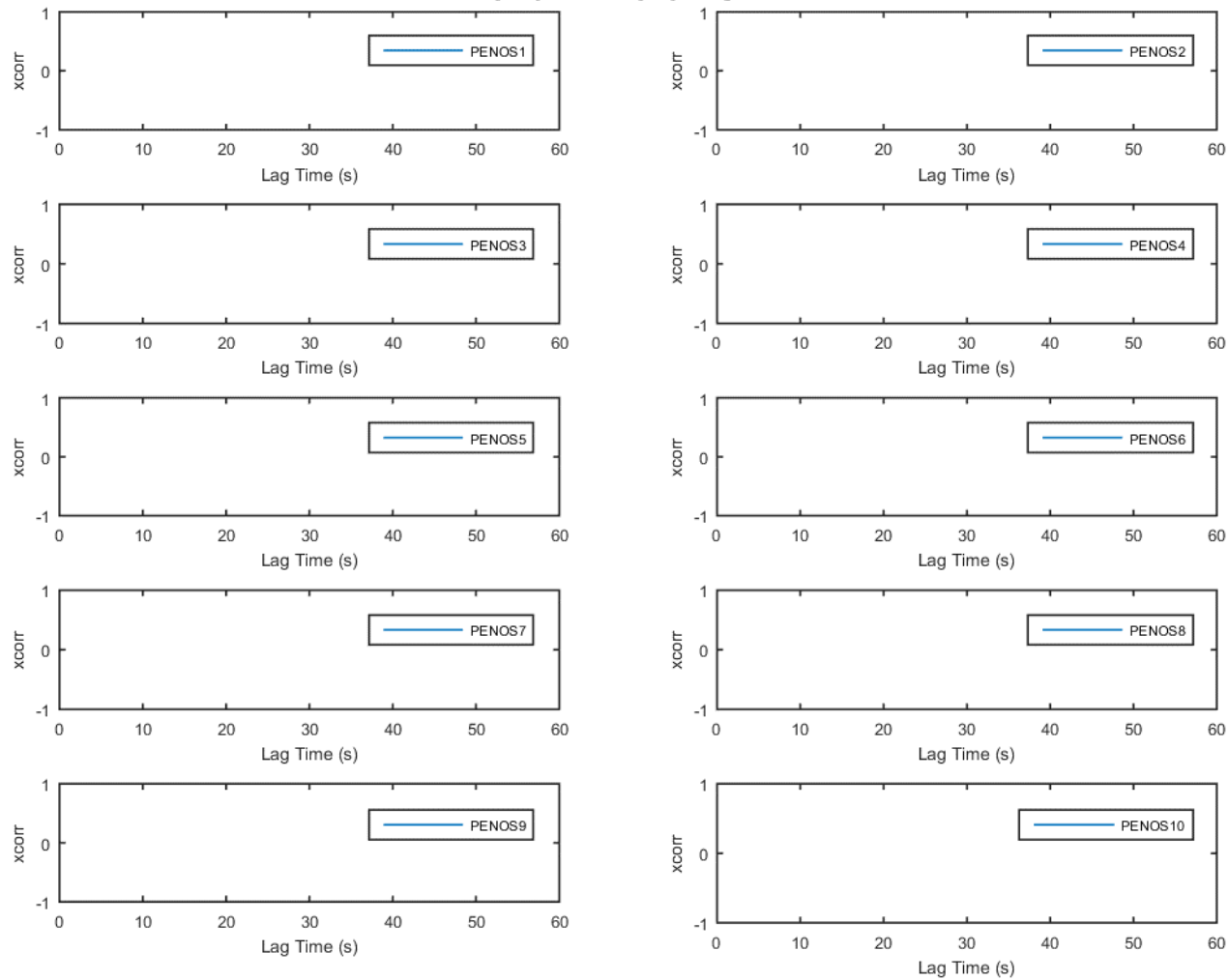


FIGURE 3.147: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-144

Peak Particle Velocity - Event ID: 15-01-S2-214

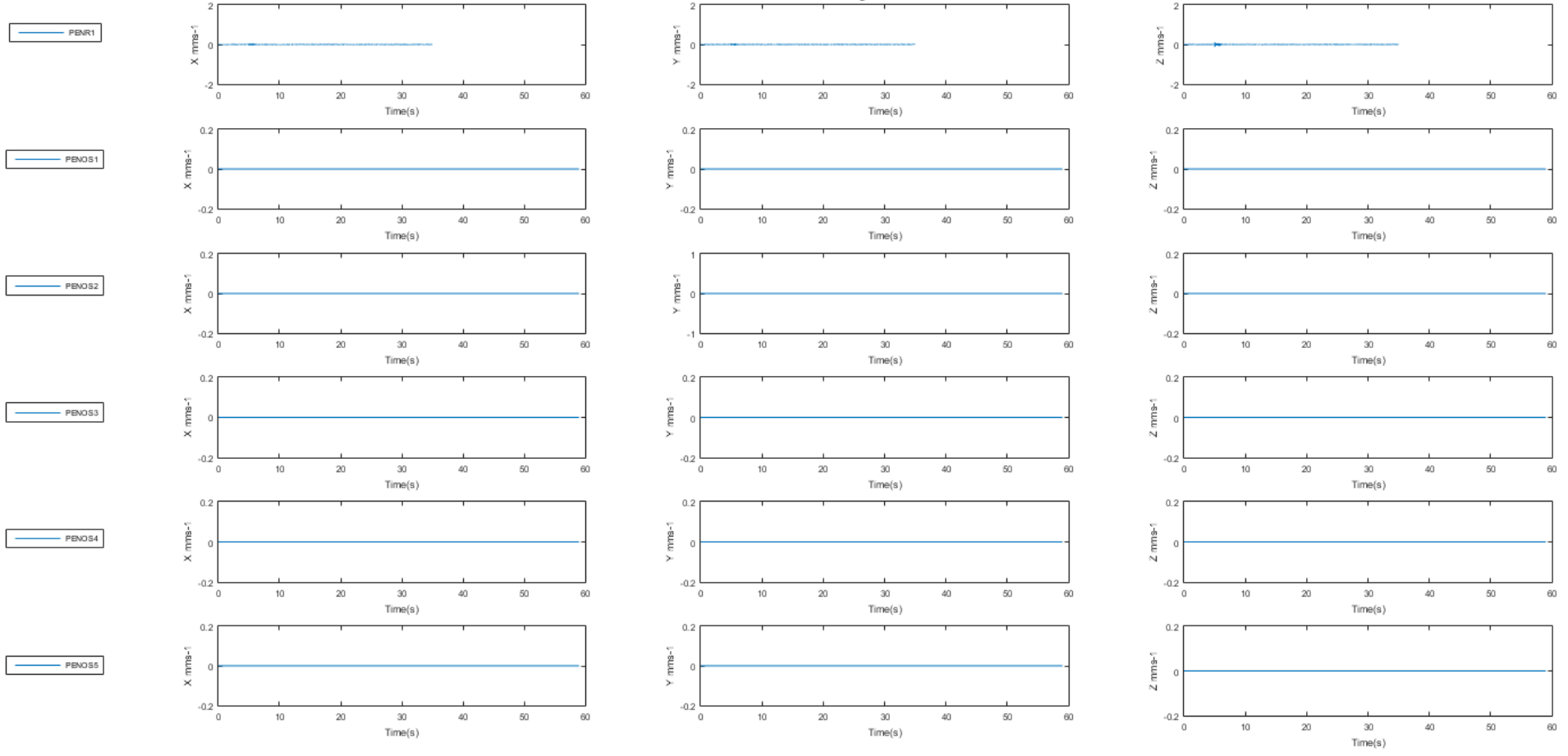


FIGURE 3.148: PEN\_OS 1 - 5 15-01-S2-214

Peak Particle Velocity - Event ID: 15-01-S2-214

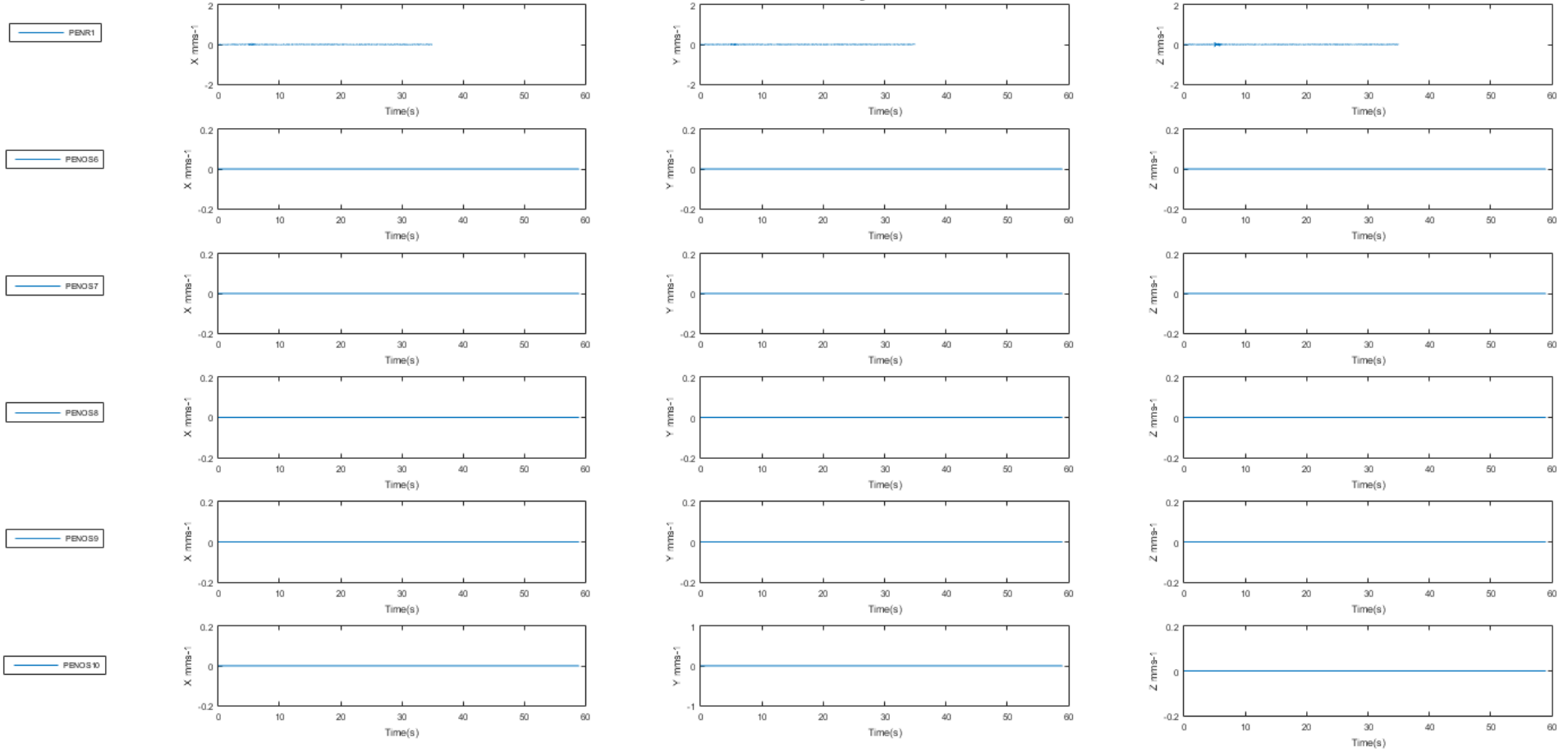
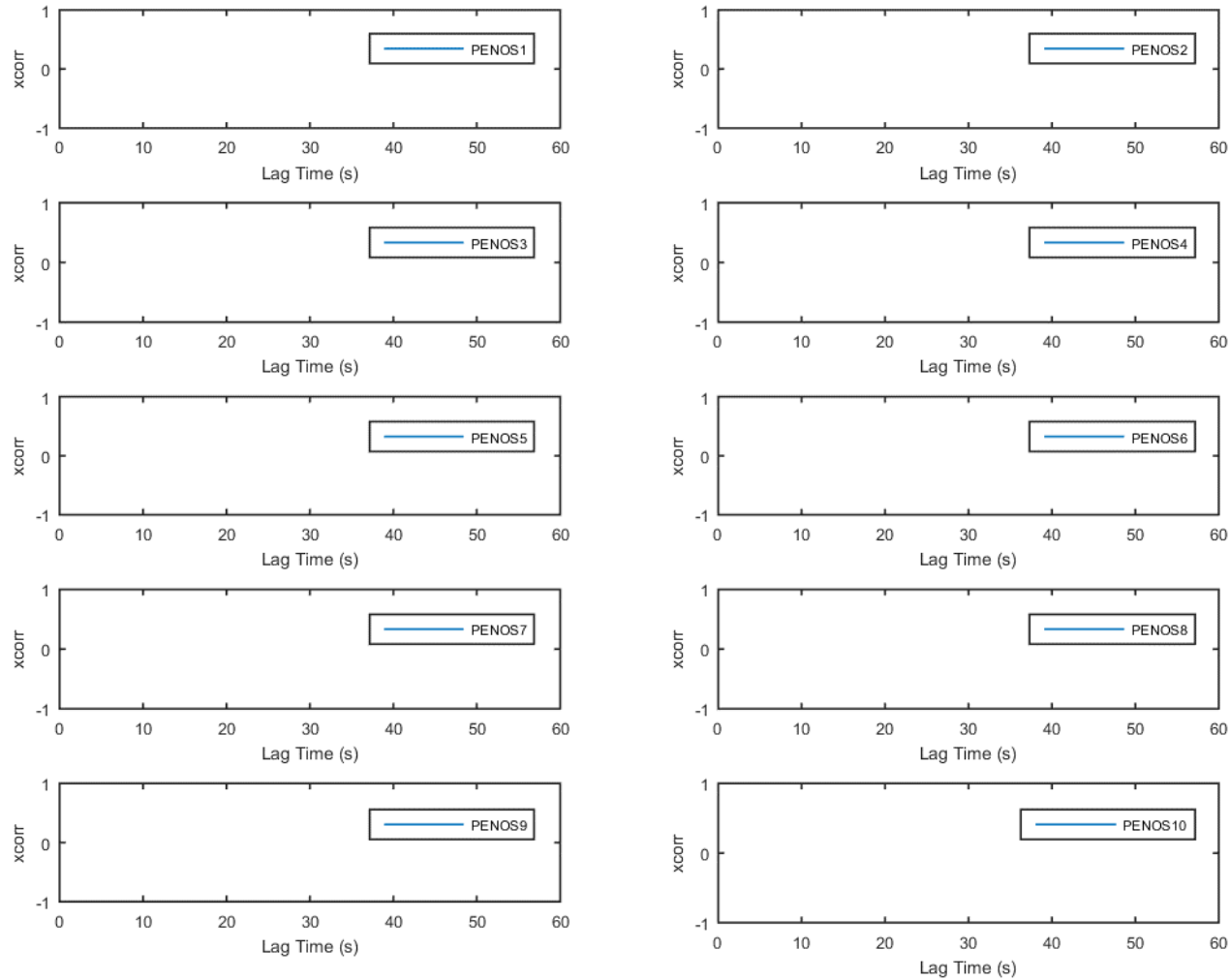


FIGURE 3.149: PEN\_OS 6 - 10 15-01-S2-214

### Event ID: 15-01-S2-214



**FIGURE 3.150: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-214**

Peak Particle Velocity - Event ID: 15-01-S2-223

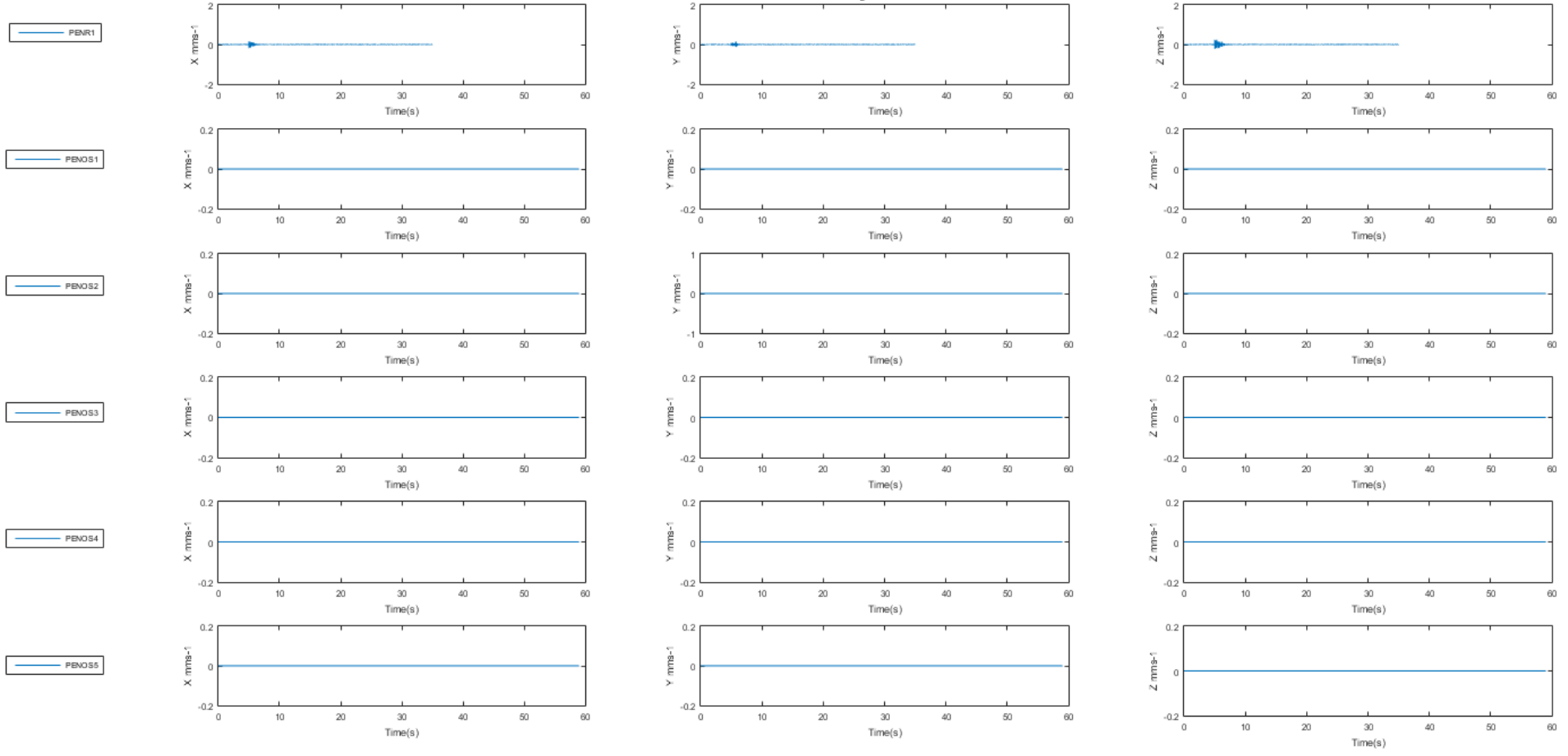


FIGURE 3.151: PEN\_OS 1 - 5 15-01-S2-223

Peak Particle Velocity - Event ID: 15-01-S2-223

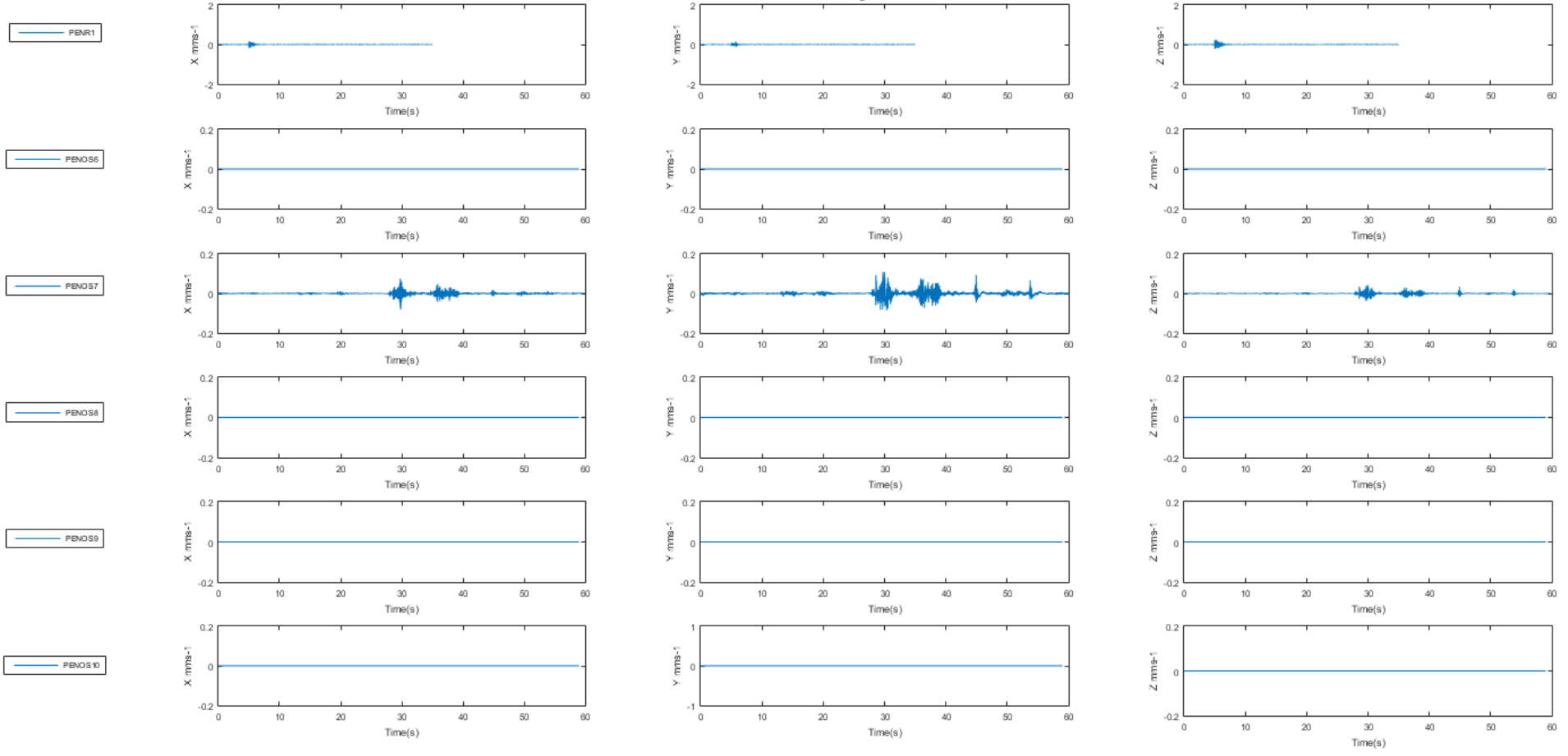


FIGURE 3.152: PEN\_OS 6 - 10 15-01-S2-223

### Event ID: 15-01-S2-223

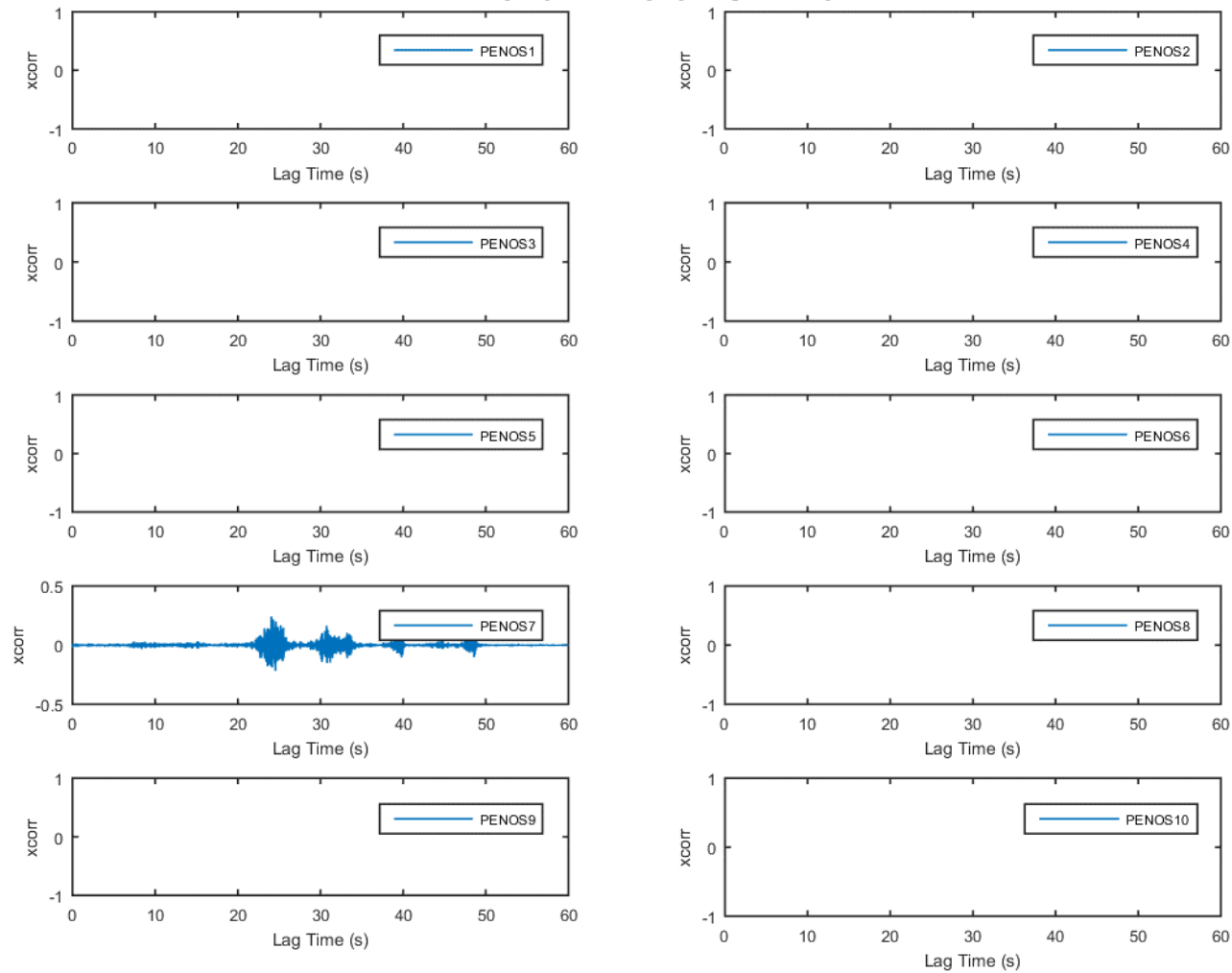


FIGURE 3.153: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-223



Peak Particle Velocity - Event ID: 15-01-S2-243

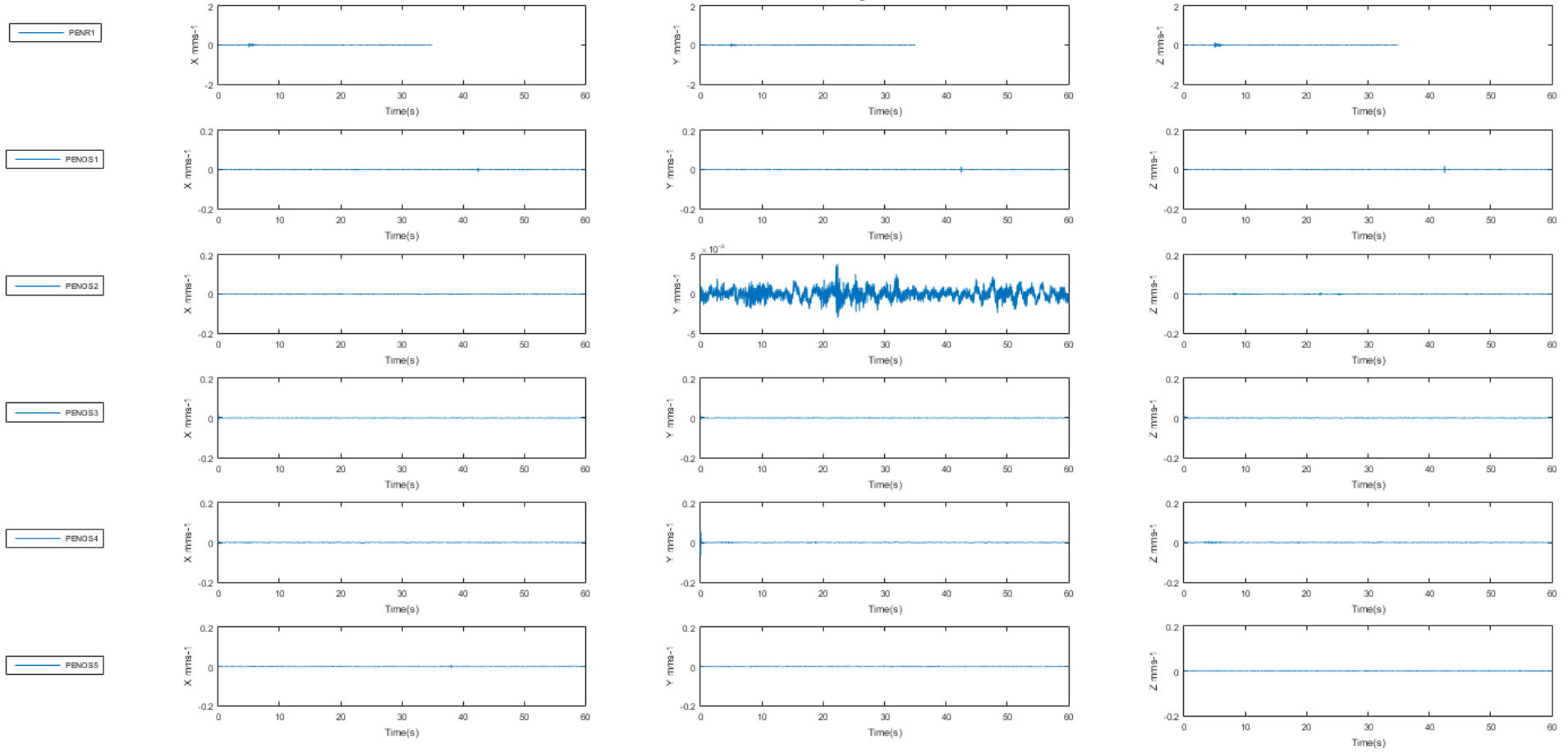


FIGURE 3.154: PEN\_OS 1 - 5 15-01-S2-243

Peak Particle Velocity - Event ID: 15-01-S2-243

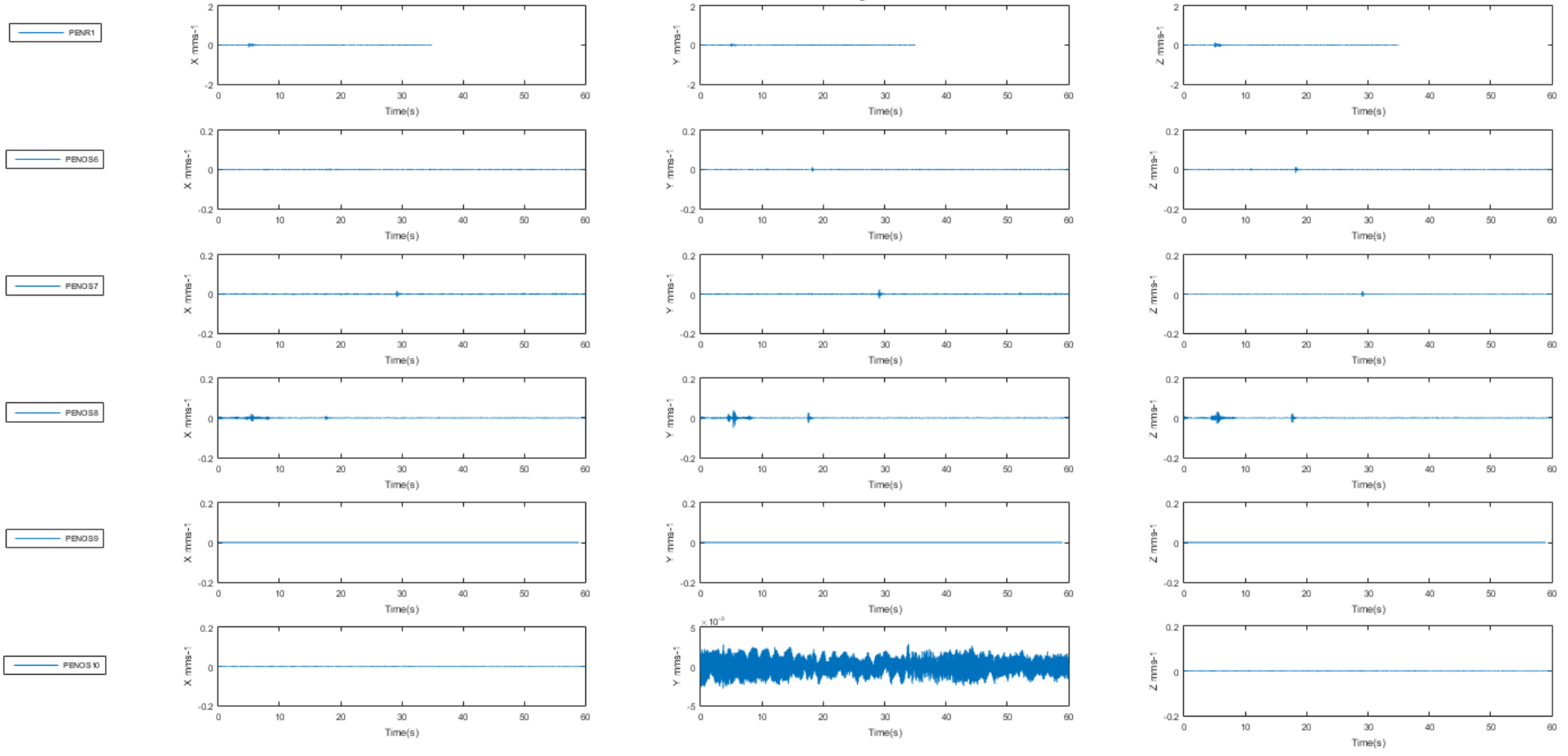


FIGURE 3.155: PEN\_OS 6 - 10 15-01-S2-243

### Event ID: 15-01-S2-243

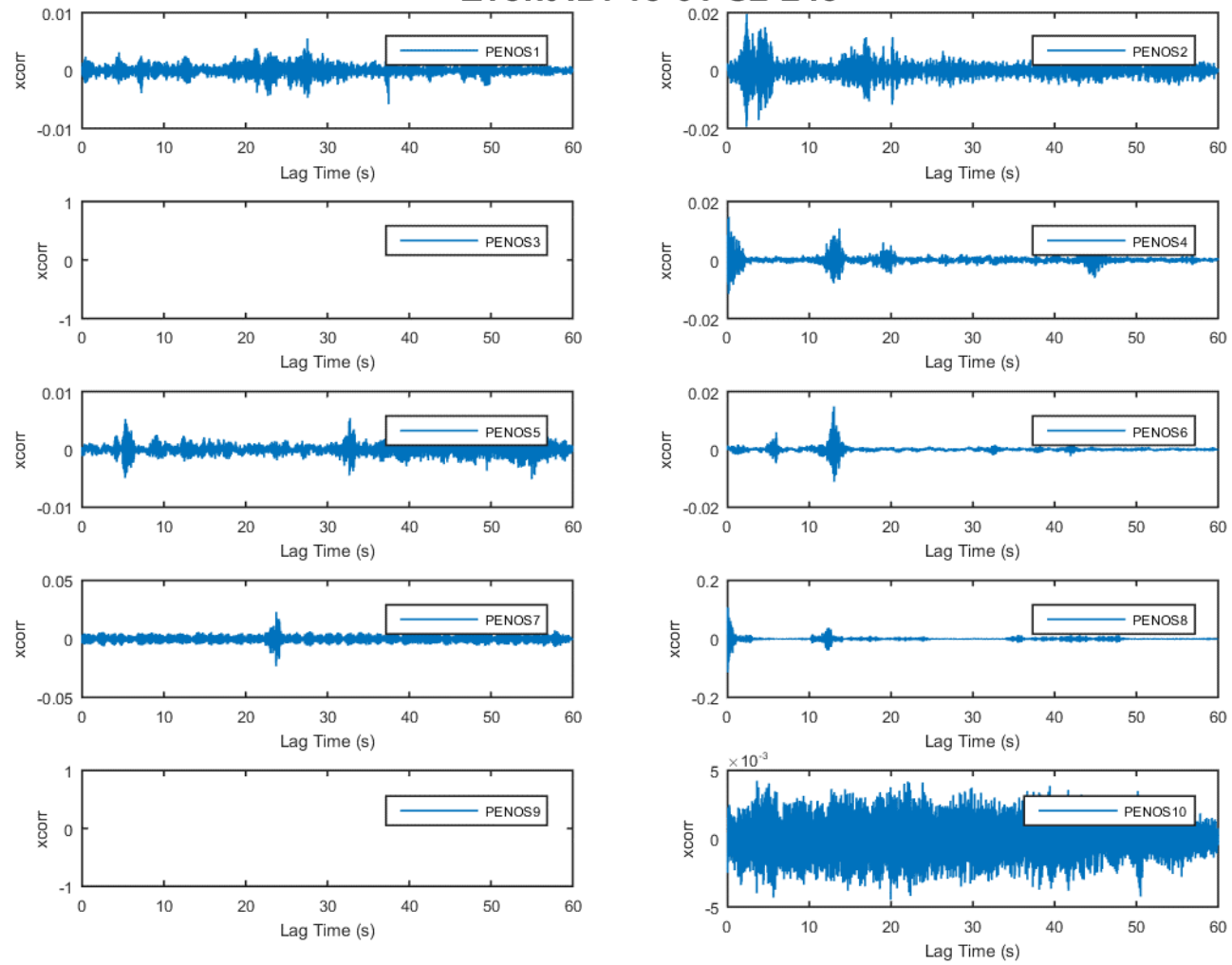


FIGURE 3.156: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-243

Peak Particle Velocity - Event ID: 15-01-S2-244

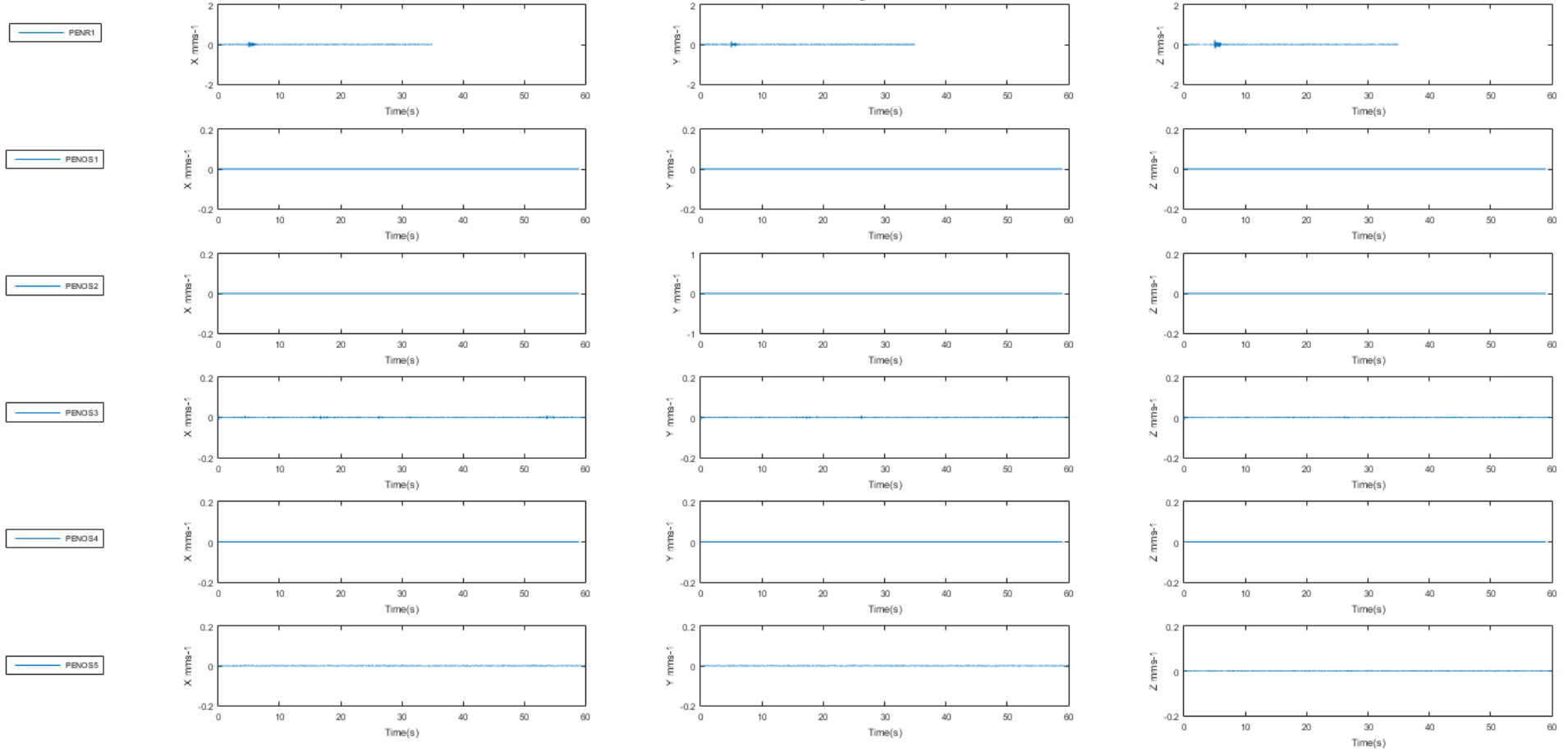


FIGURE 3.157: PEN\_OS 1 - 5 15-01-S2-244

Peak Particle Velocity - Event ID: 15-01-S2-244

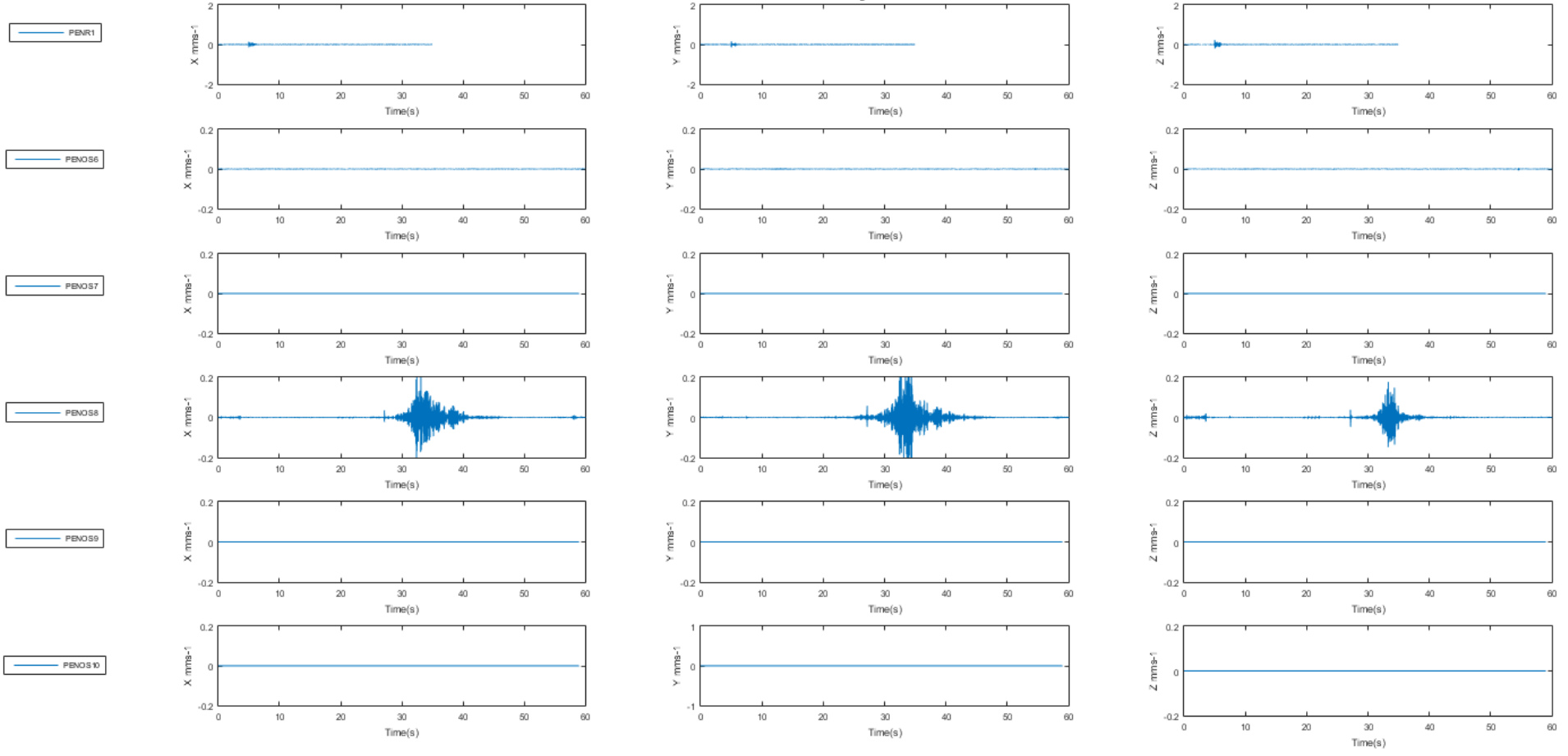


FIGURE 3.158: PEN\_OS 6 - 10 15-01-S2-244

### Event ID: 15-01-S2-244

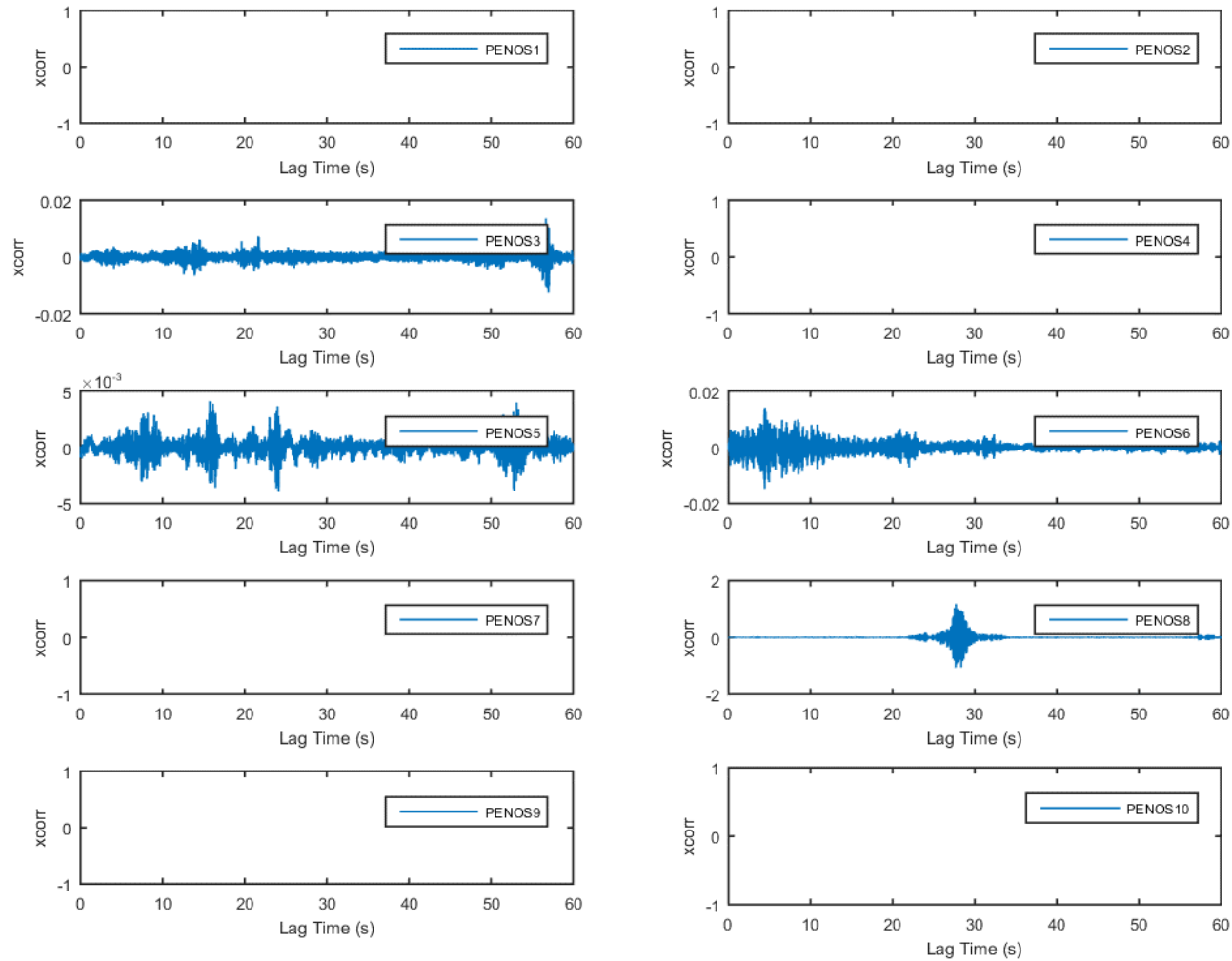


FIGURE 3.159: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-244

Peak Particle Velocity - Event ID: 15-01-S2-246

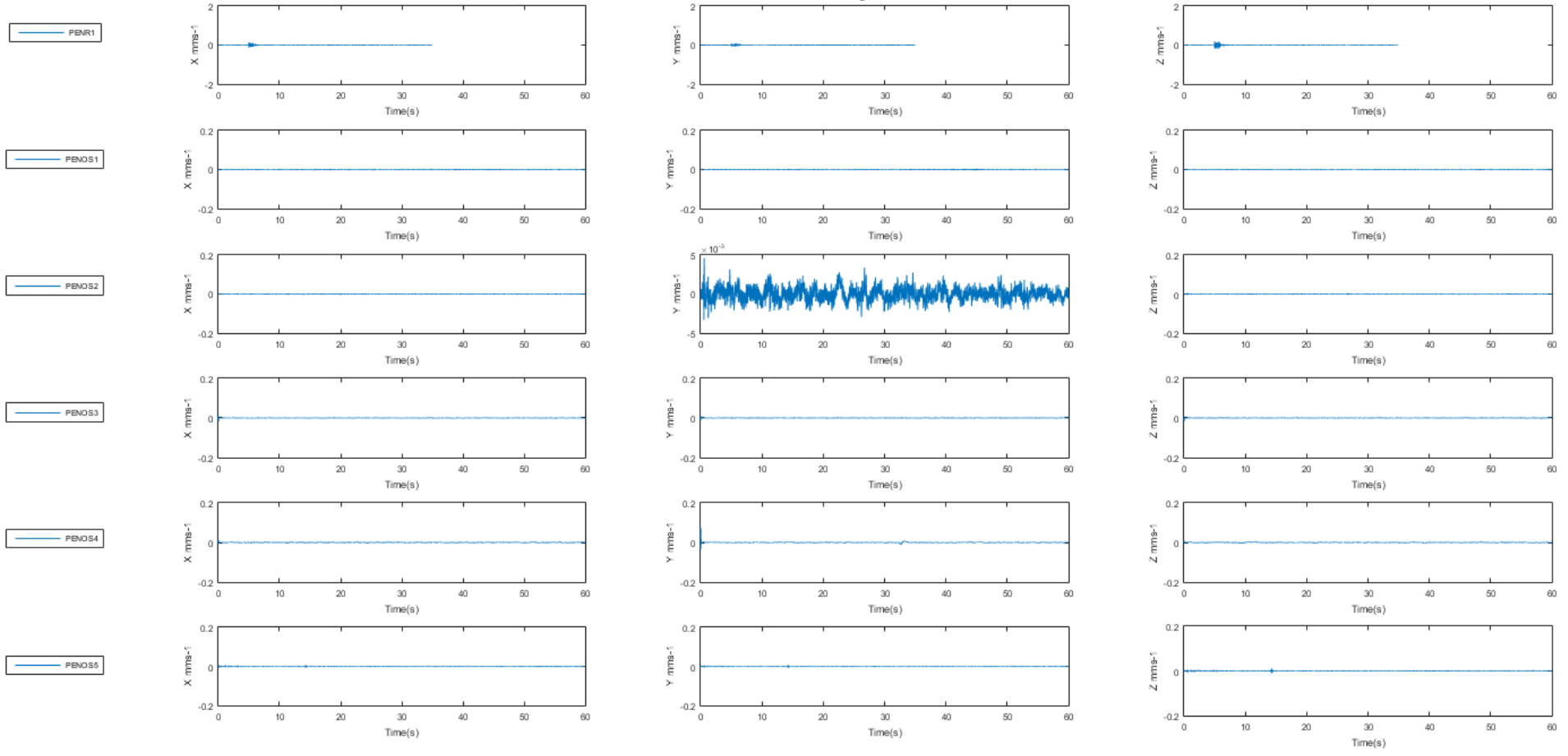


FIGURE 3.160: PEN\_OS 1 - 5 15-01-S2-246

Peak Particle Velocity - Event ID: 15-01-S2-246

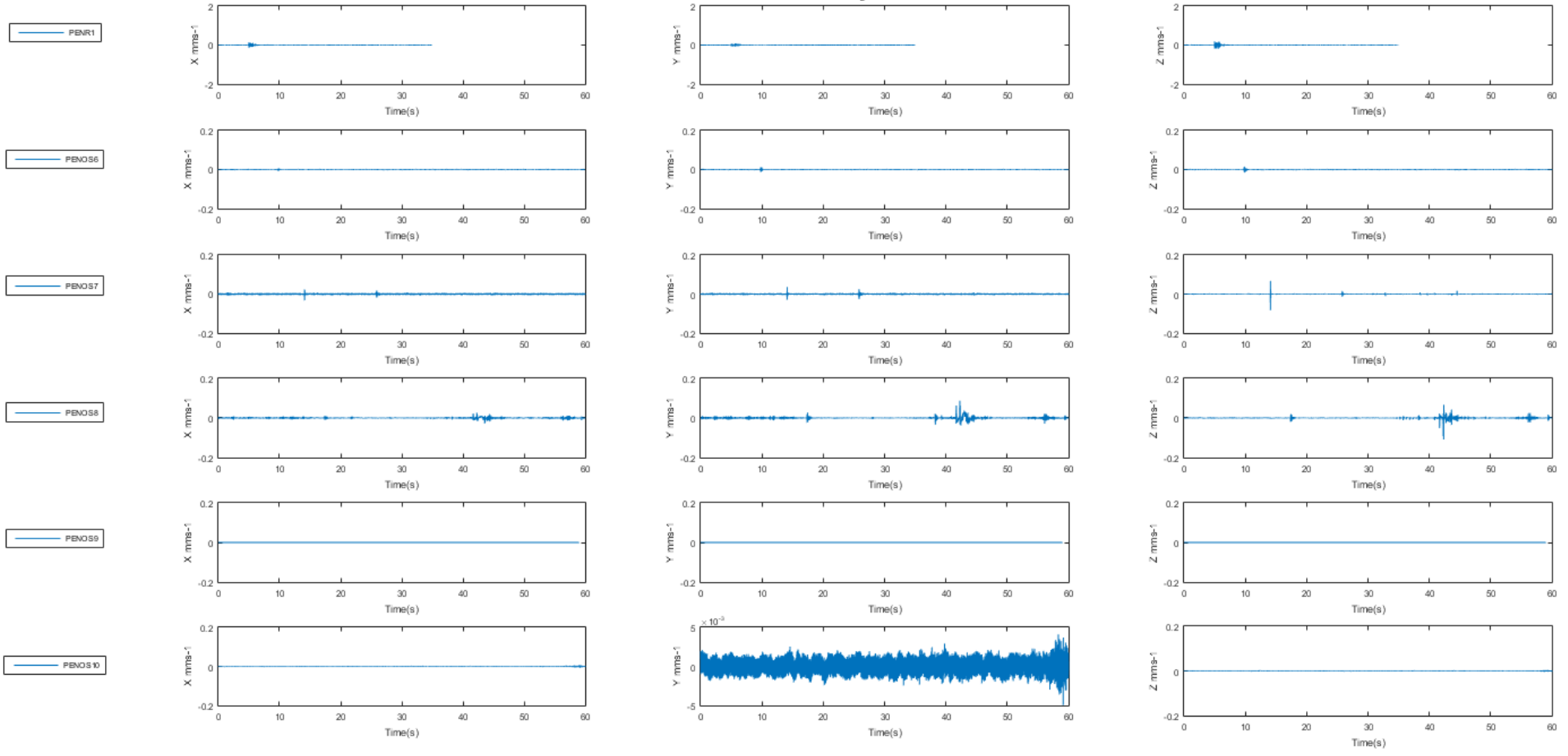


FIGURE 3.161: PEN\_OS 6 - 10 15-01-S2-246



### Event ID: 15-01-S2-246

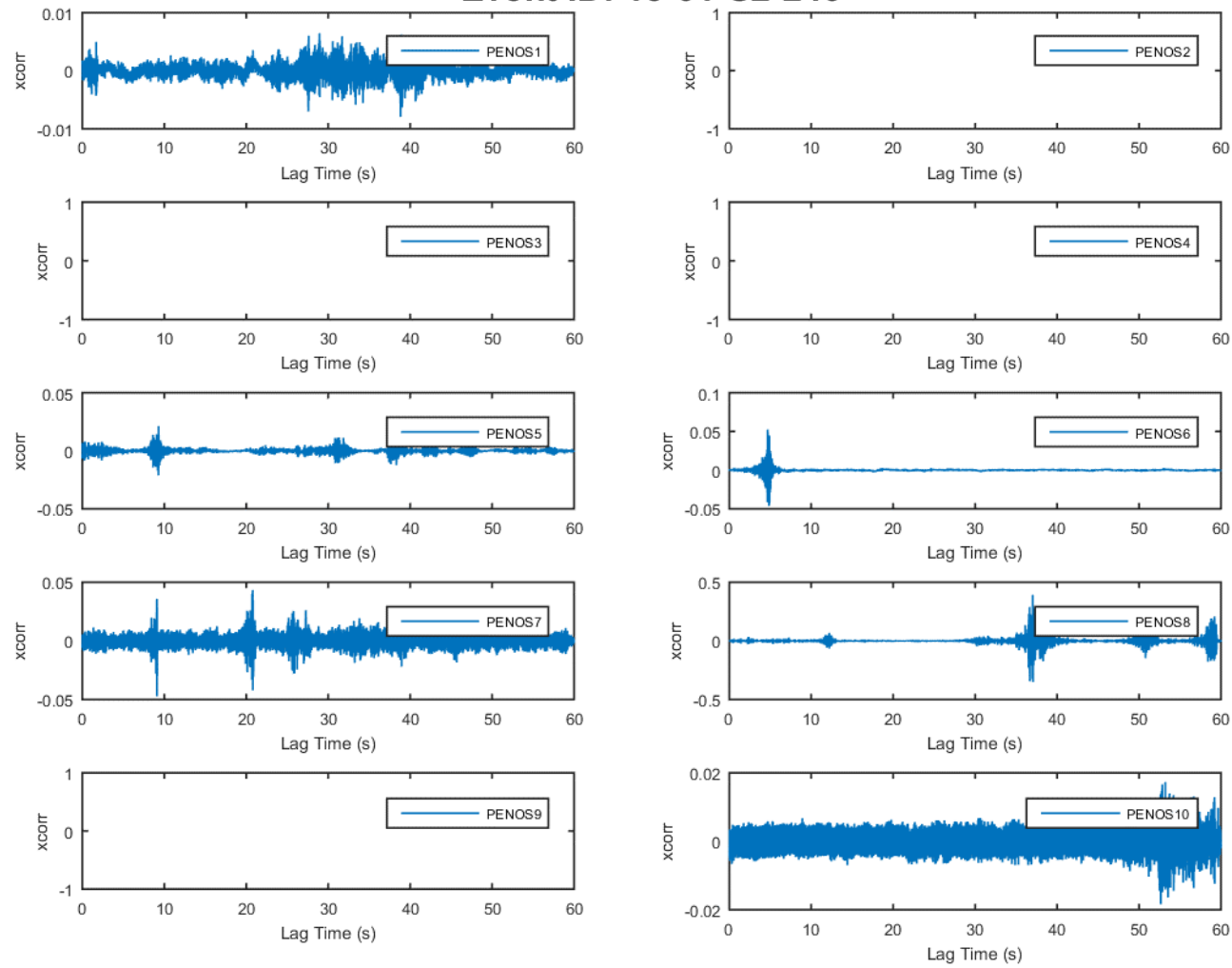


FIGURE 3.162: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-246

Peak Particle Velocity - Event ID: 15-01-S2-249

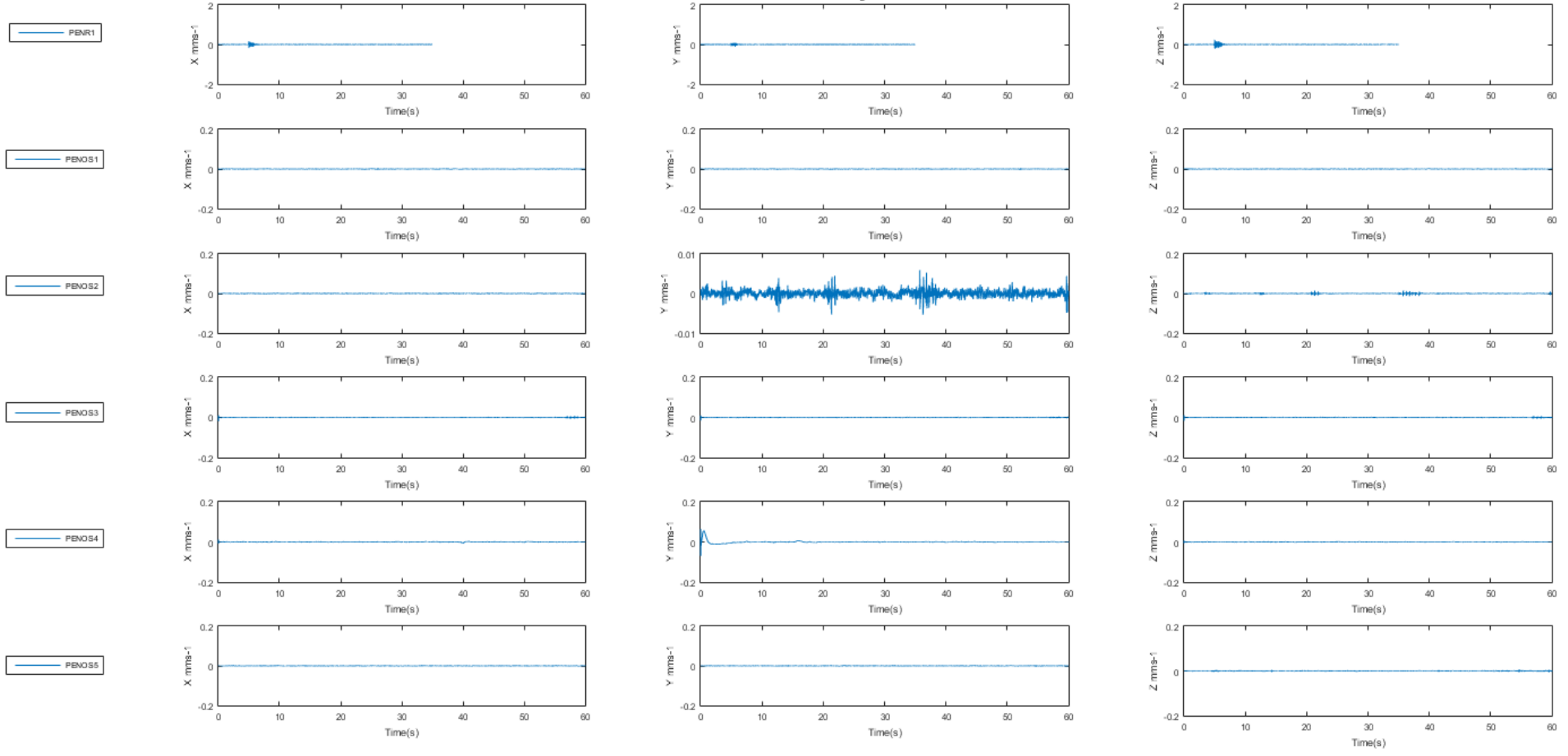


FIGURE 3.163: PEN\_OS 1 - 5 15-01-S2-249

Peak Particle Velocity - Event ID: 15-01-S2-249

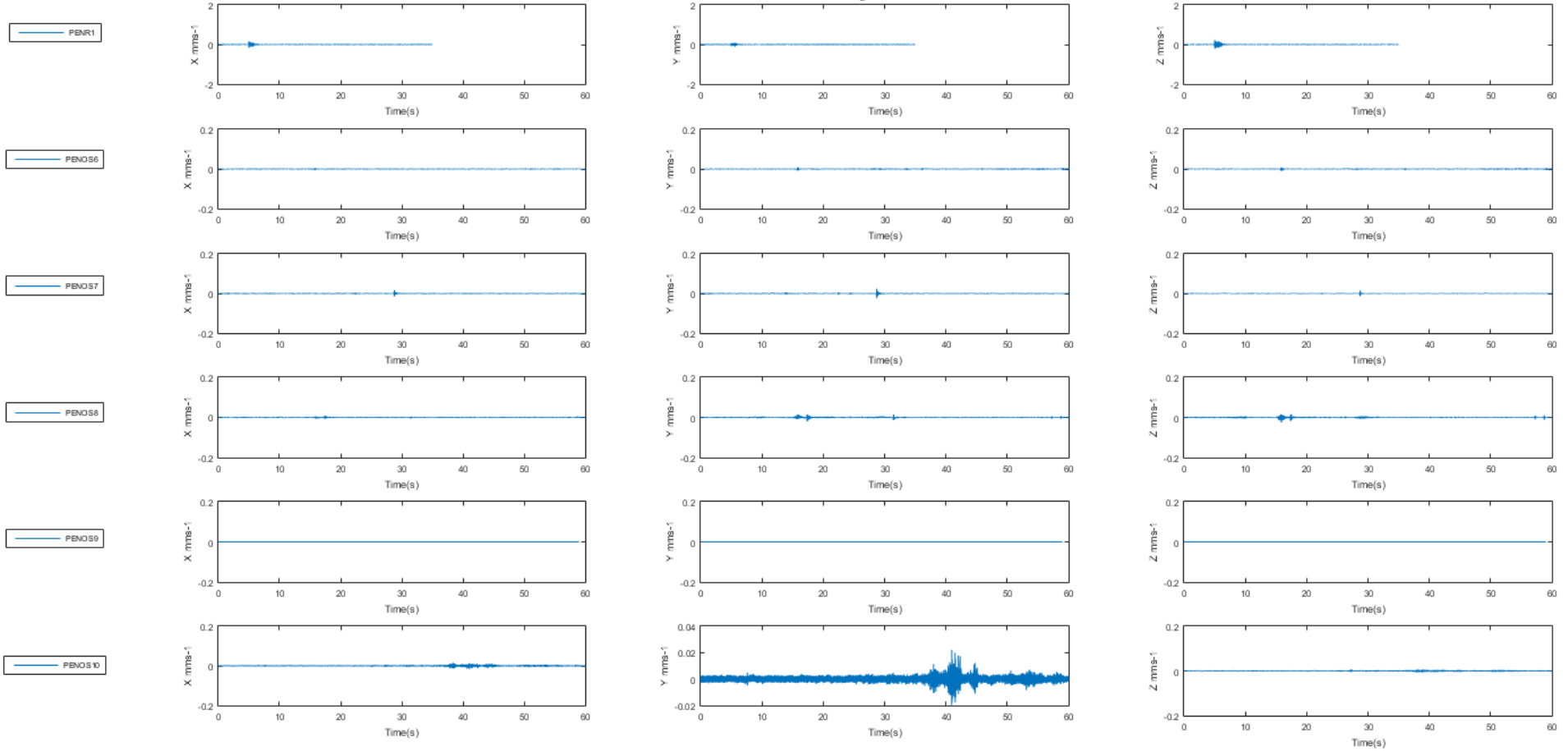
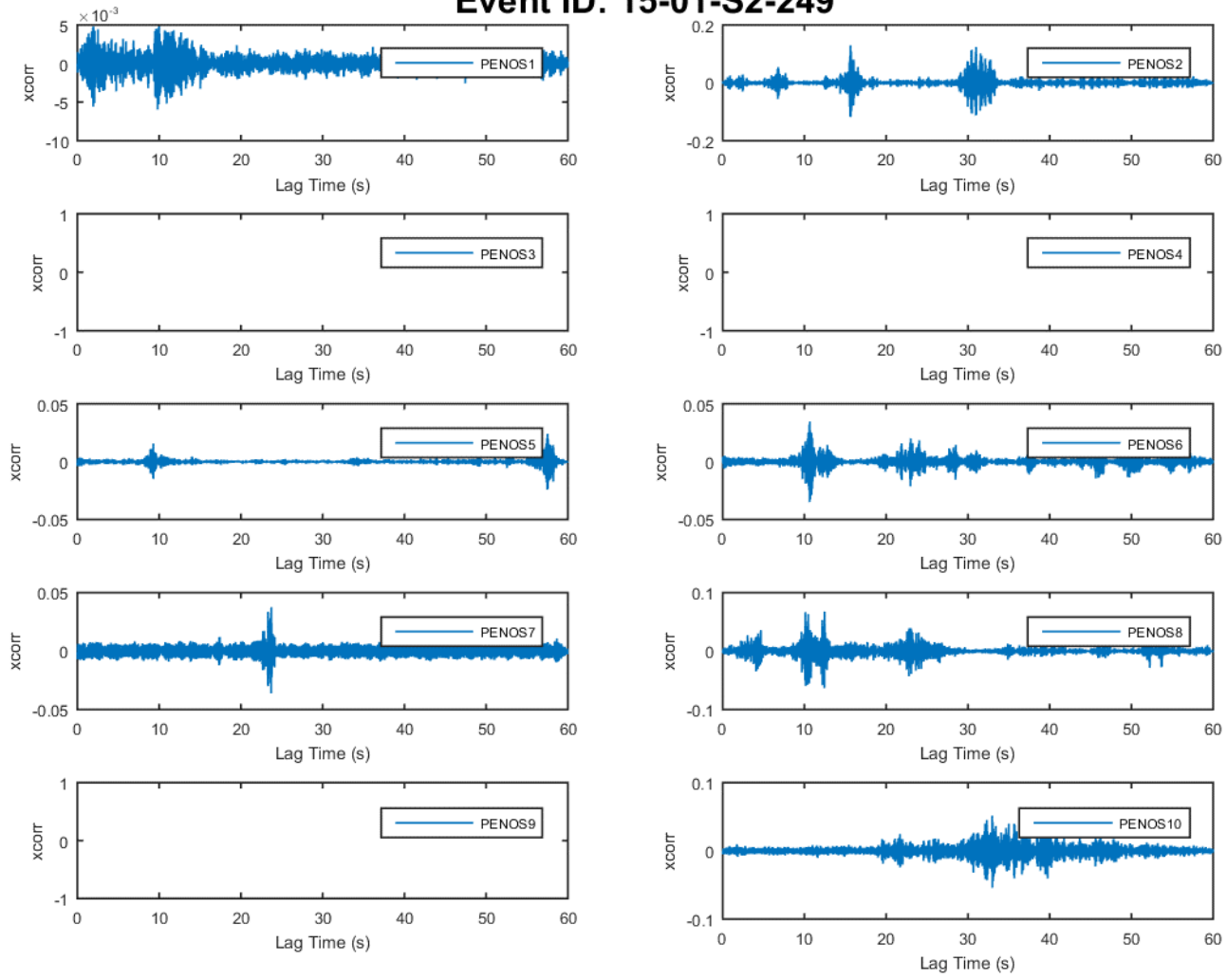
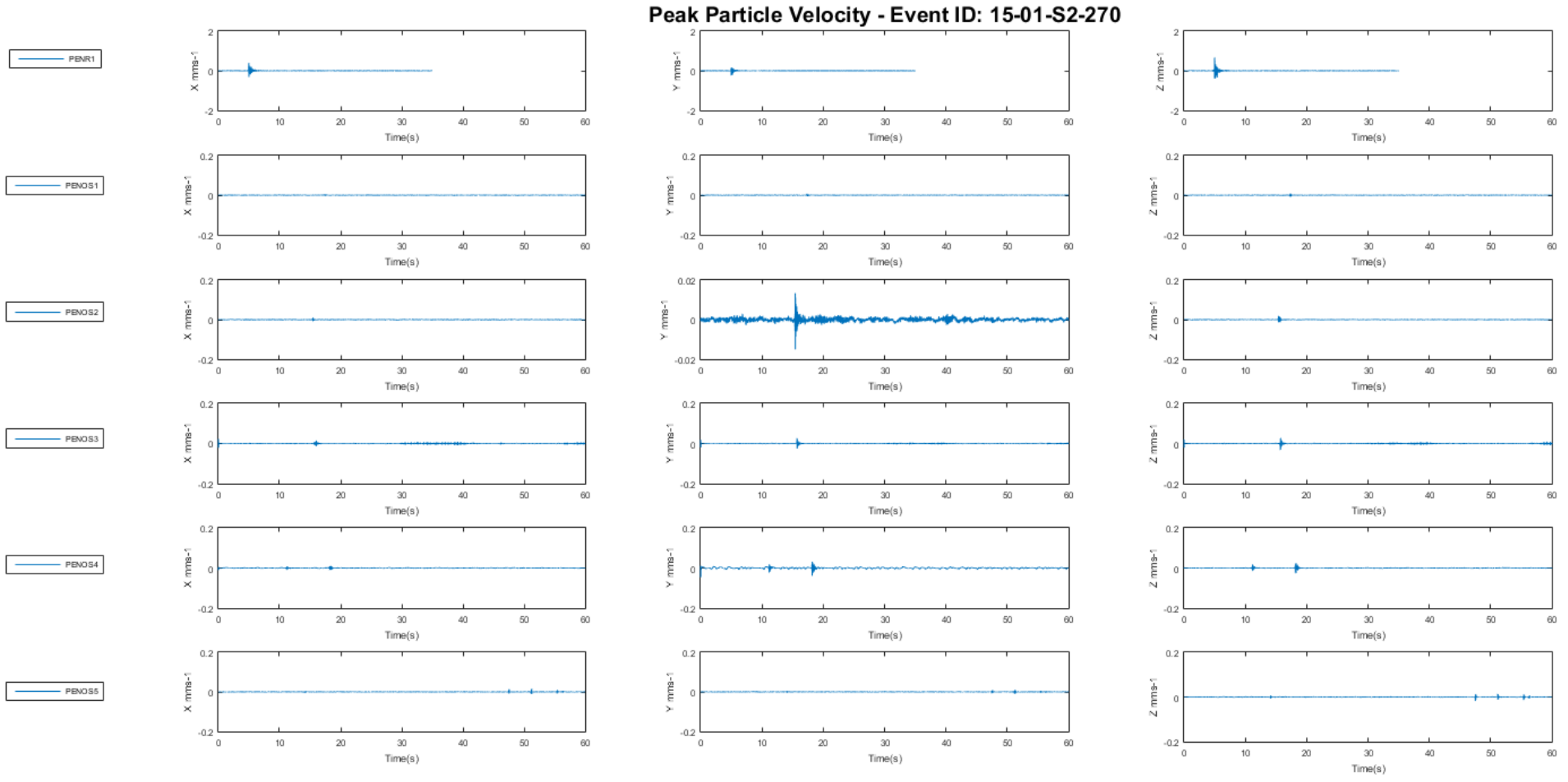


FIGURE 3.164: PEN\_OS 6 - 10 15-01-S2-249

**Event ID: 15-01-S2-249**



**FIGURE 3.165: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-249**



**FIGURE 3.166: PEN\_OS 1 - 5 15-01-S2-270**

Peak Particle Velocity - Event ID: 15-01-S2-270

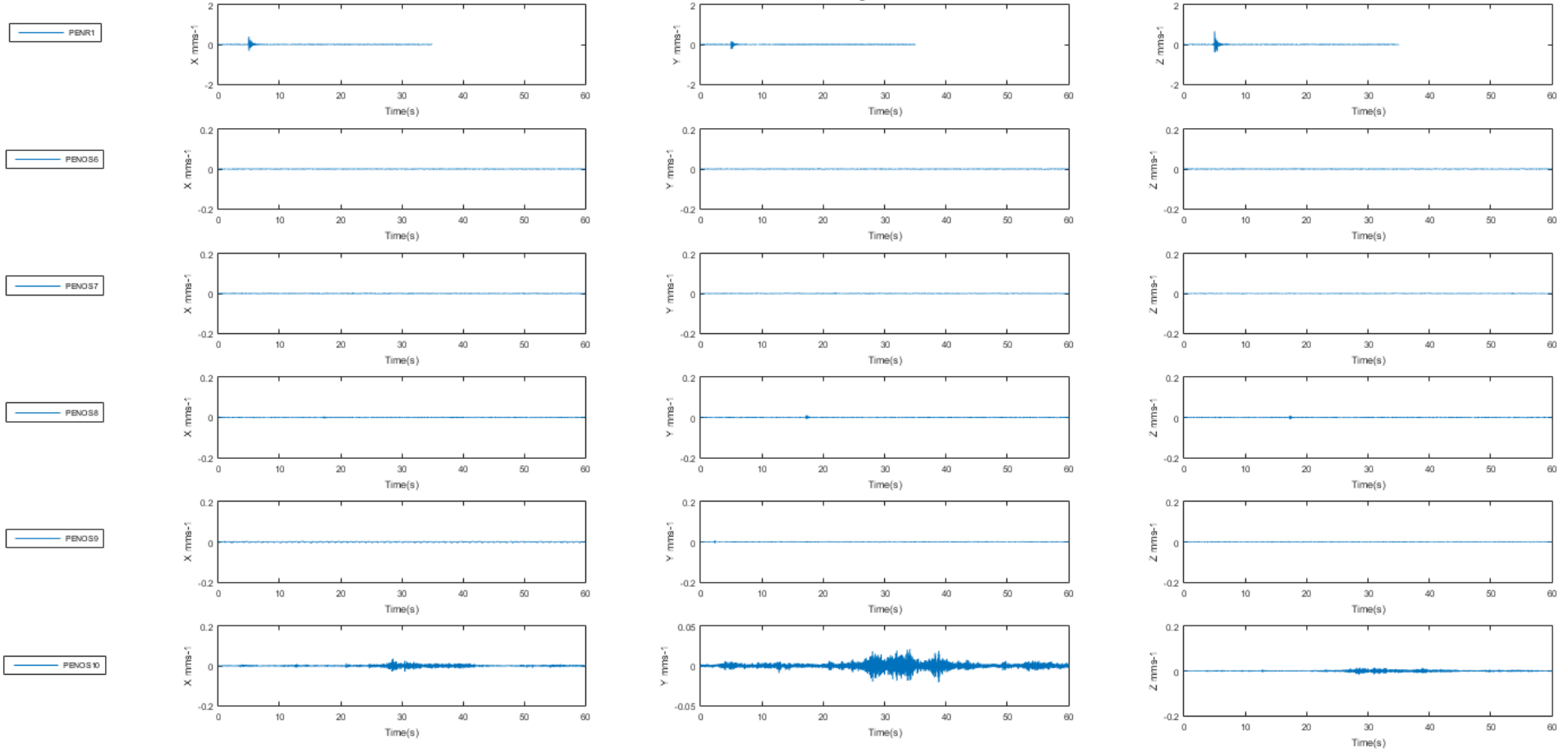


FIGURE 3.167: PEN\_OS 6 - 10 15-01-S2-270

### Event ID: 15-01-S2-270

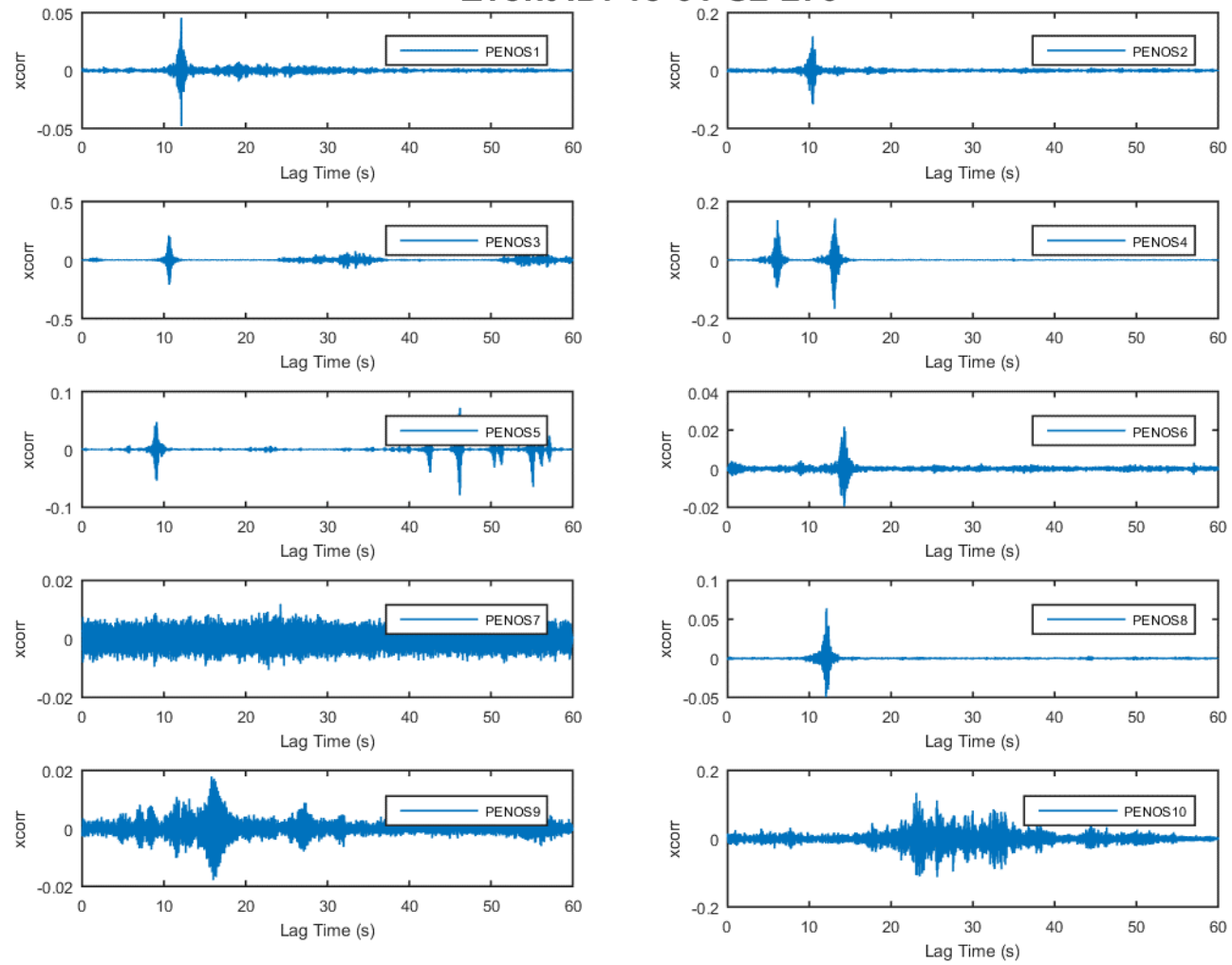
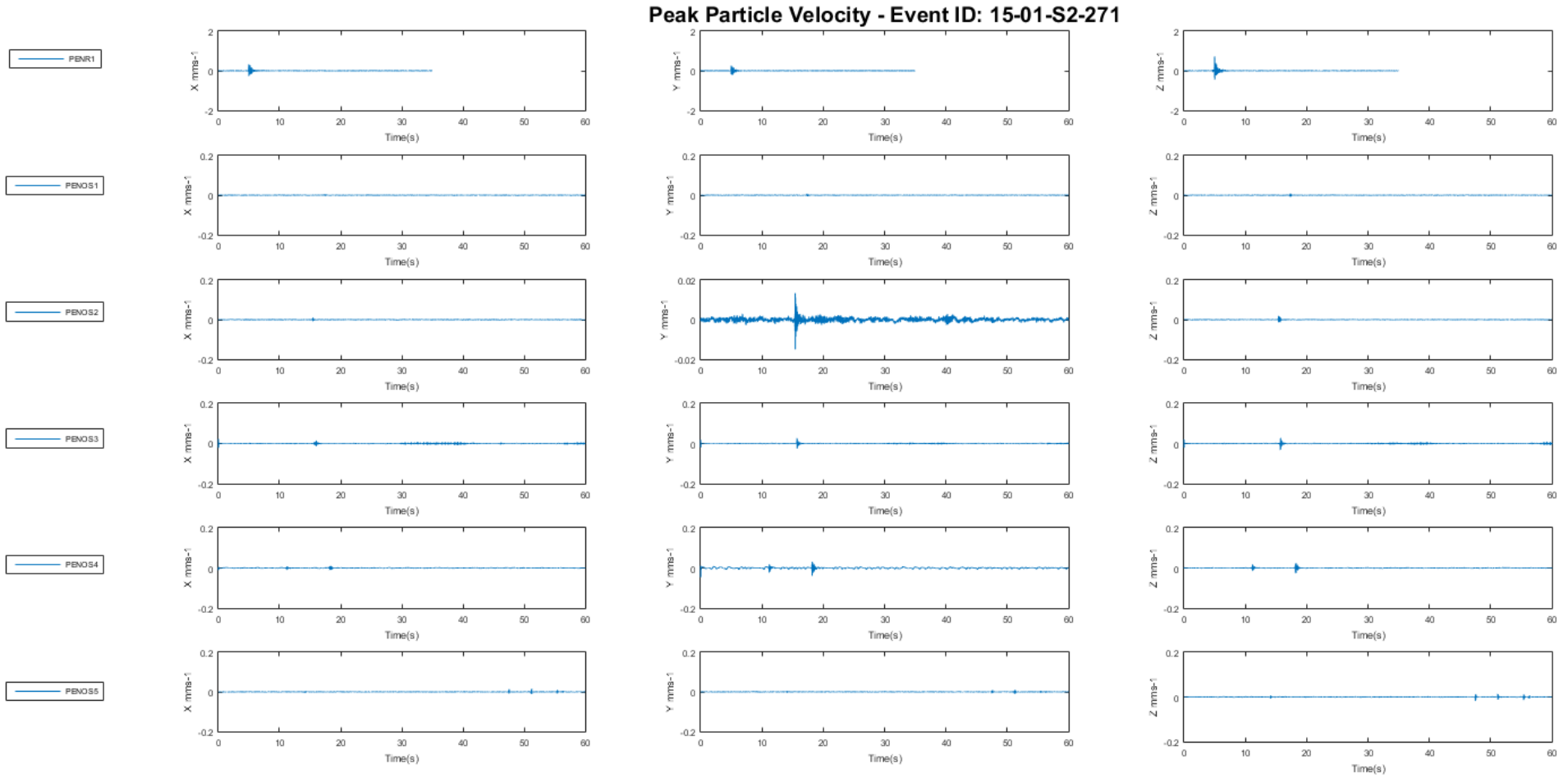


FIGURE 3.168: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-270



**FIGURE 3.169: PEN\_OS 1 - 5 15-01-S2-271**



Peak Particle Velocity - Event ID: 15-01-S2-271

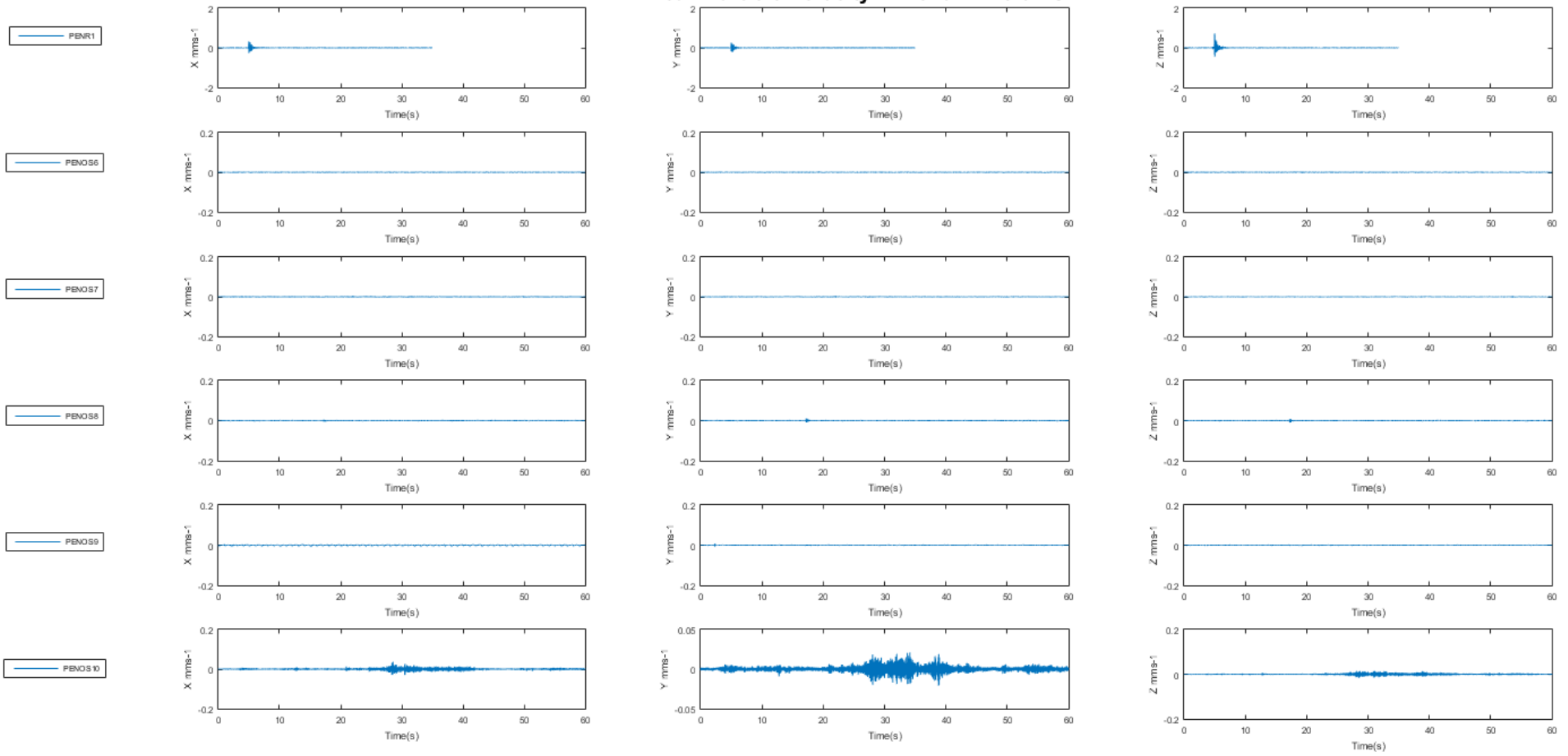


FIGURE 3.170: PEN\_OS 6 - 10 15-01-S2-271

### Event ID: 15-01-S2-271

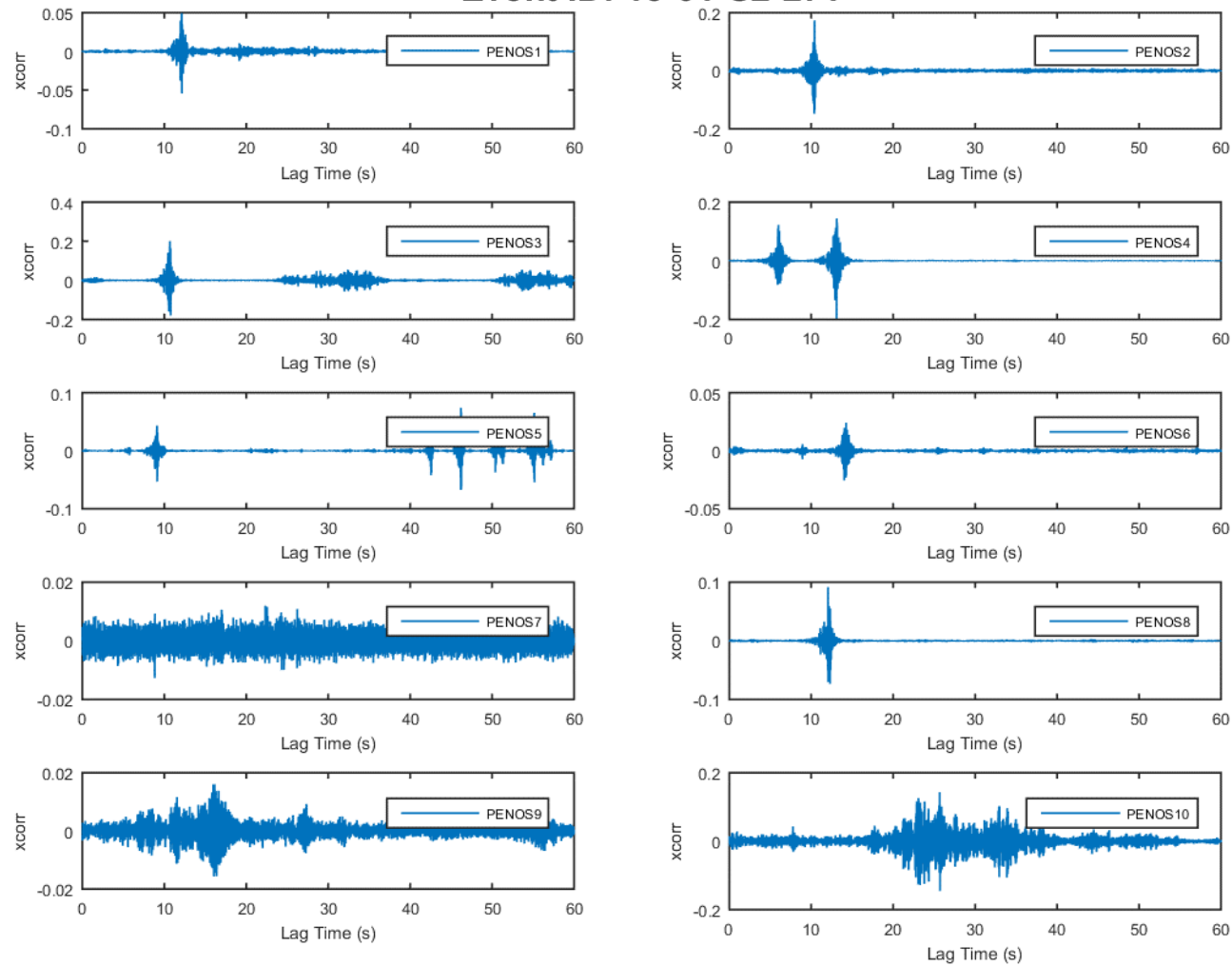
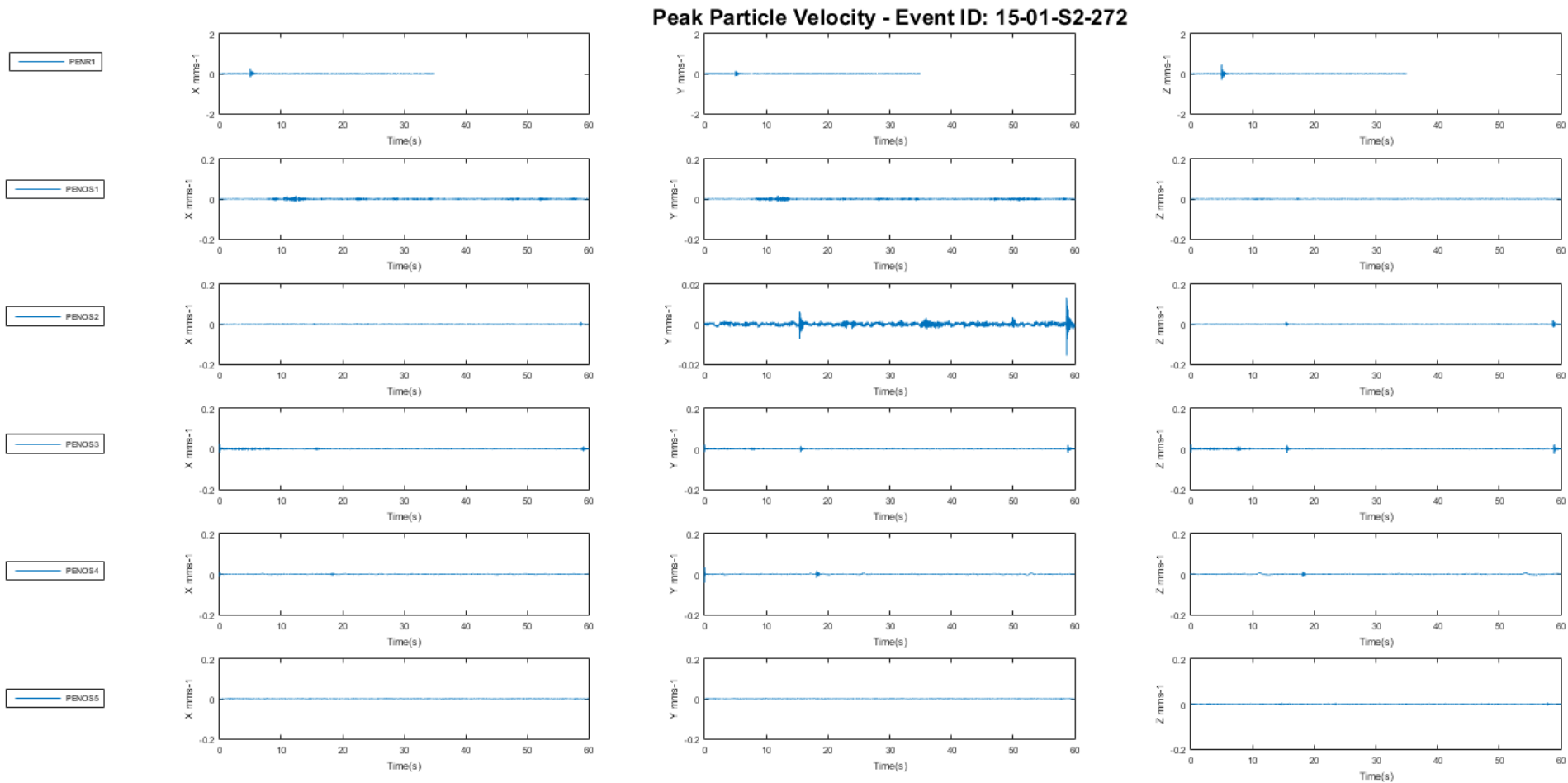


FIGURE 3.171: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-271



**FIGURE 3.172: PEN\_OS 1 - 5 15-01-S2-272**

Peak Particle Velocity - Event ID: 15-01-S2-272

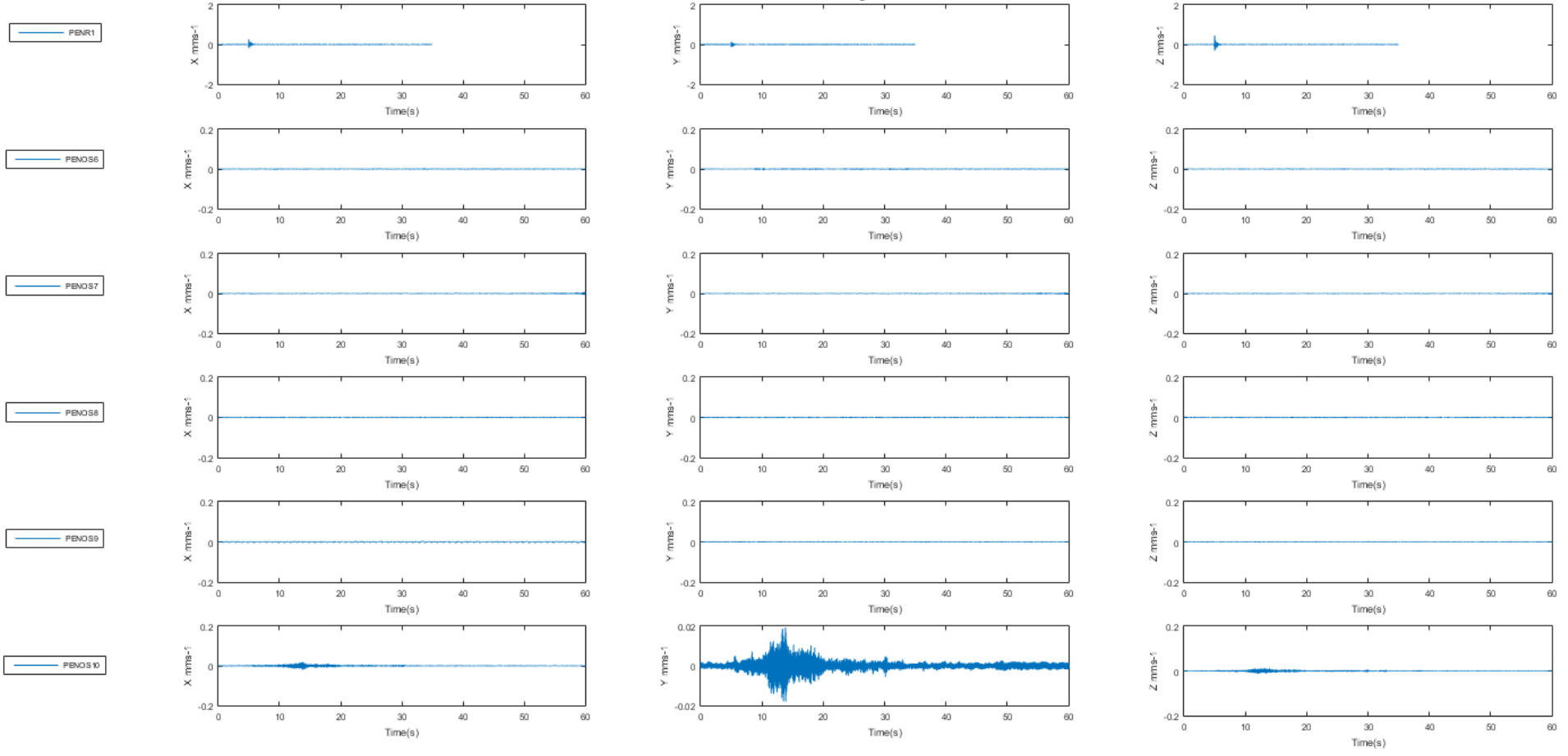
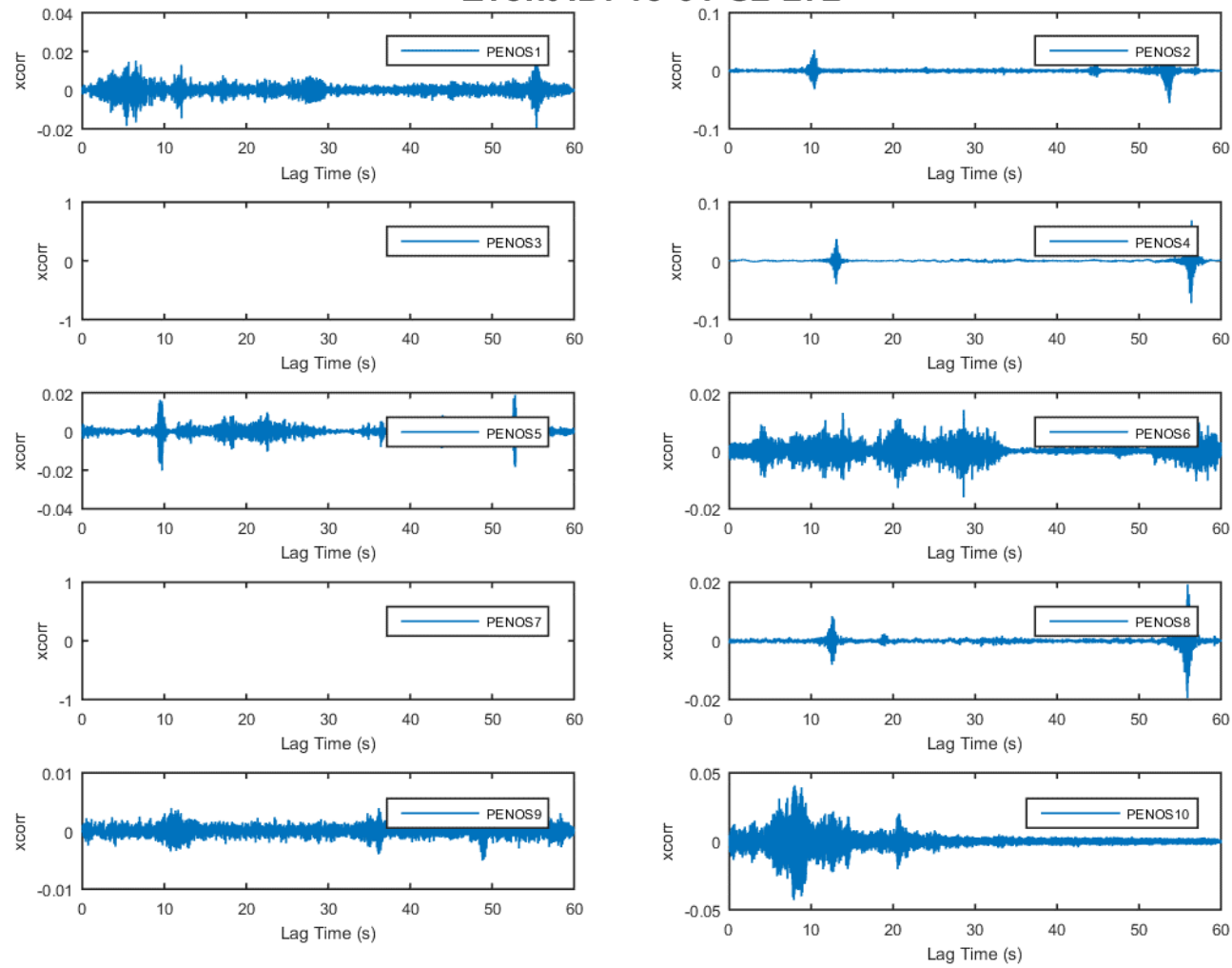
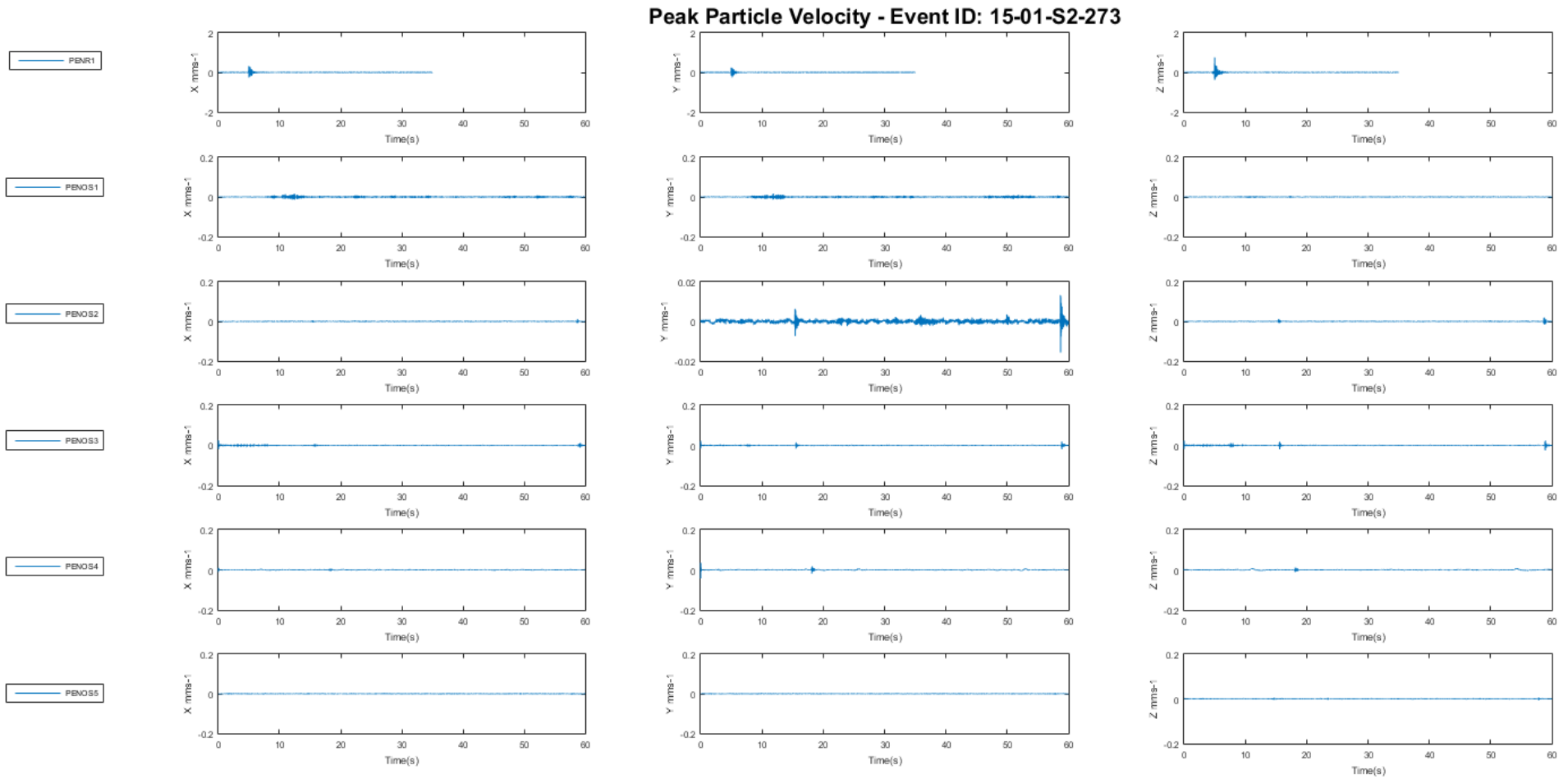


FIGURE 3.173: PEN\_OS 6 - 10 15-01-S2-272

**Event ID: 15-01-S2-272**



**FIGURE 3.174: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-272**



**FIGURE 3.175: PEN\_OS 1 - 5 15-01-S2-273**

Peak Particle Velocity - Event ID: 15-01-S2-273

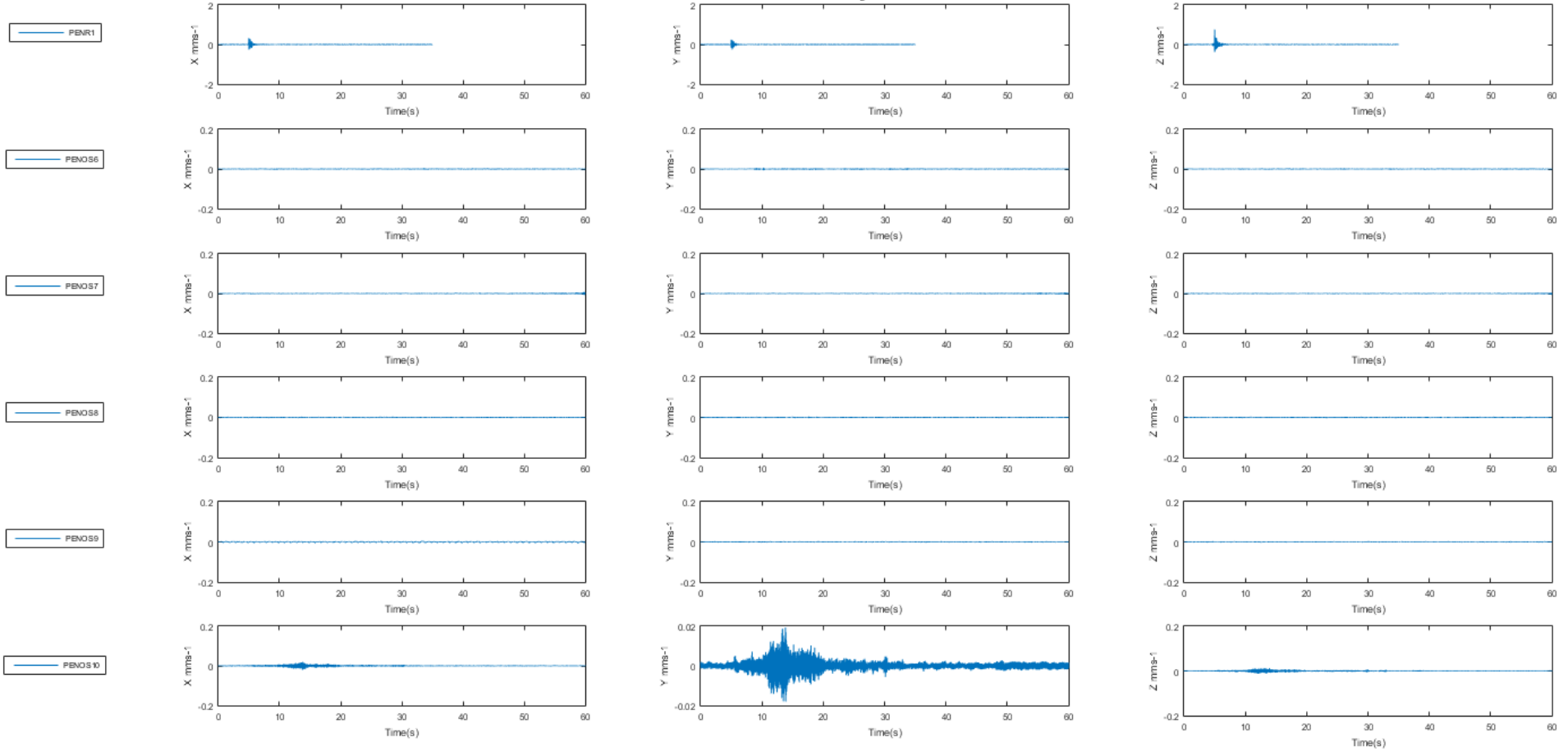
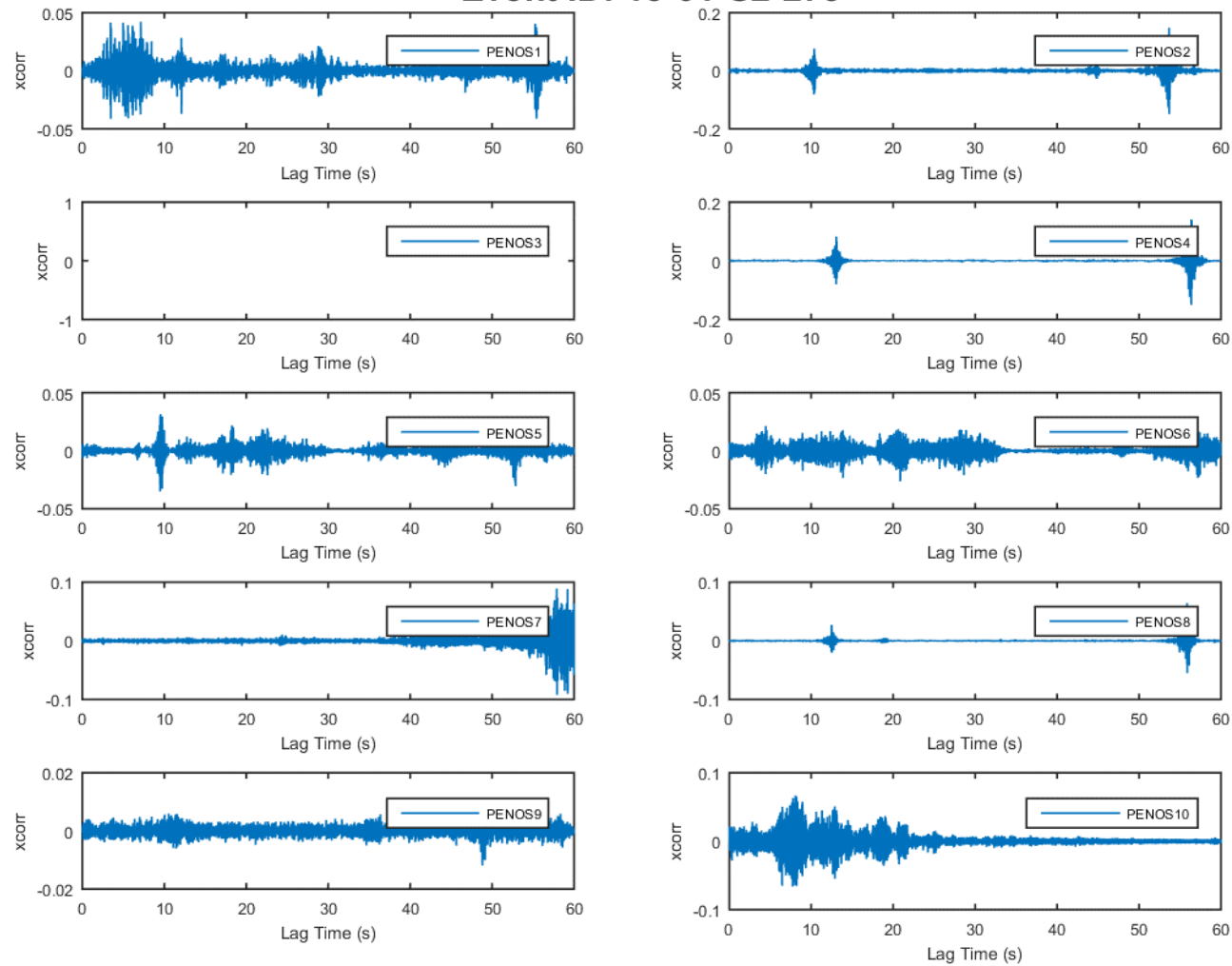


FIGURE 3.176: PEN\_OS 6 - 10 15-01-S2-273

**Event ID: 15-01-S2-273**



**FIGURE 3.177: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-273**



Peak Particle Velocity - Event ID: 15-01-S2-282

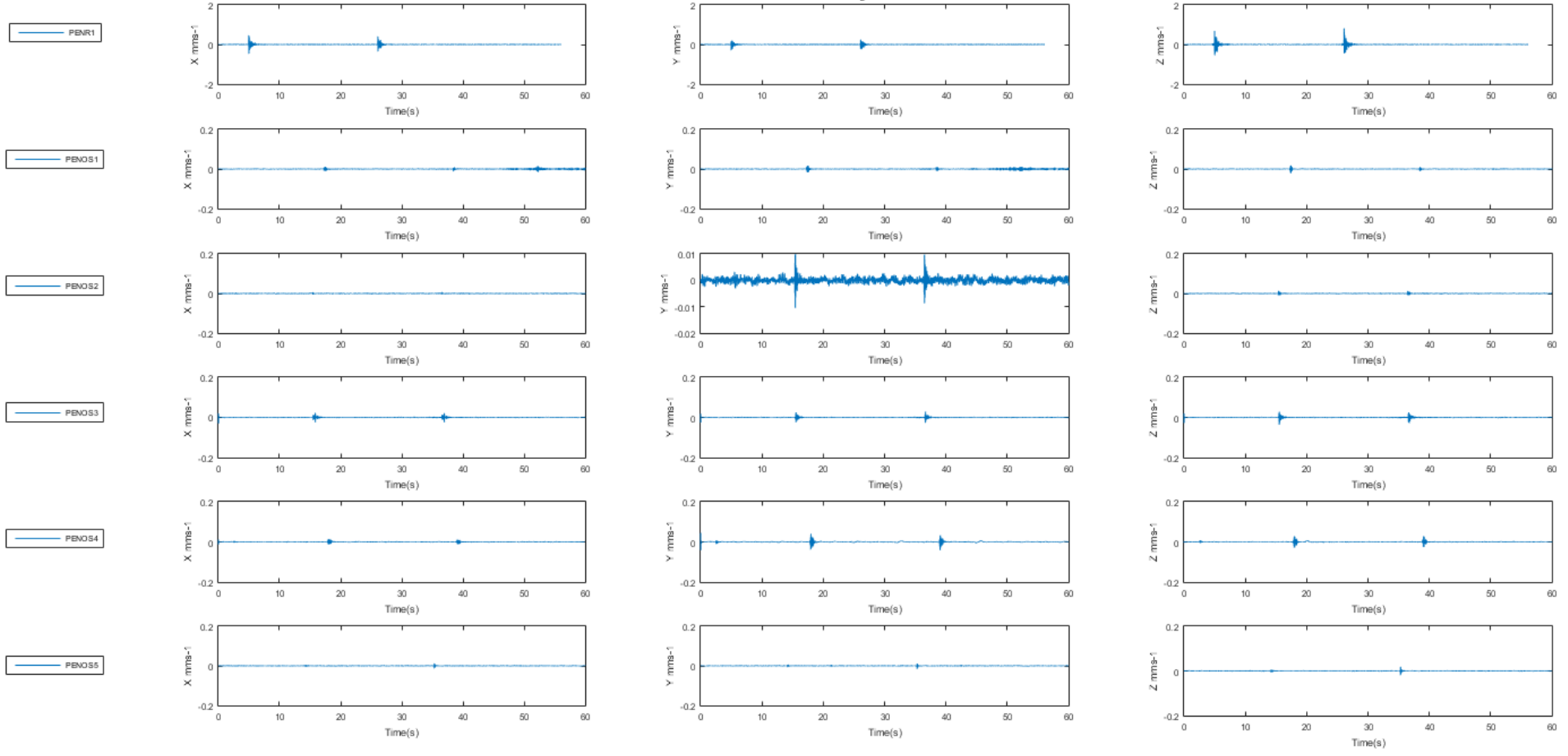
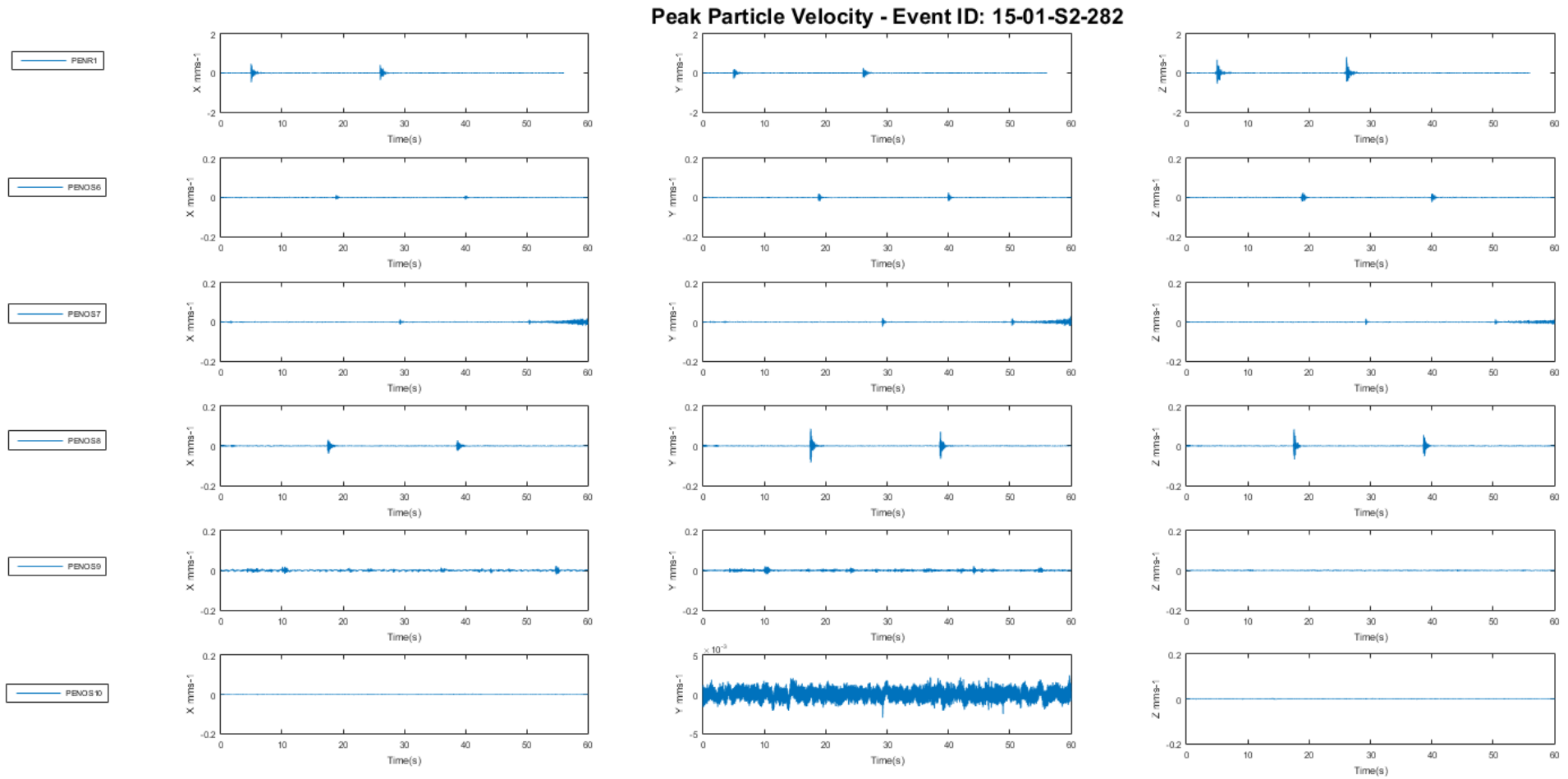


FIGURE 3.178: PEN\_OS 1 - 5 15-01-S2-282



**FIGURE 3.179: PEN\_OS 6 - 10 15-01-S2-282**

### Event ID: 15-01-S2-282

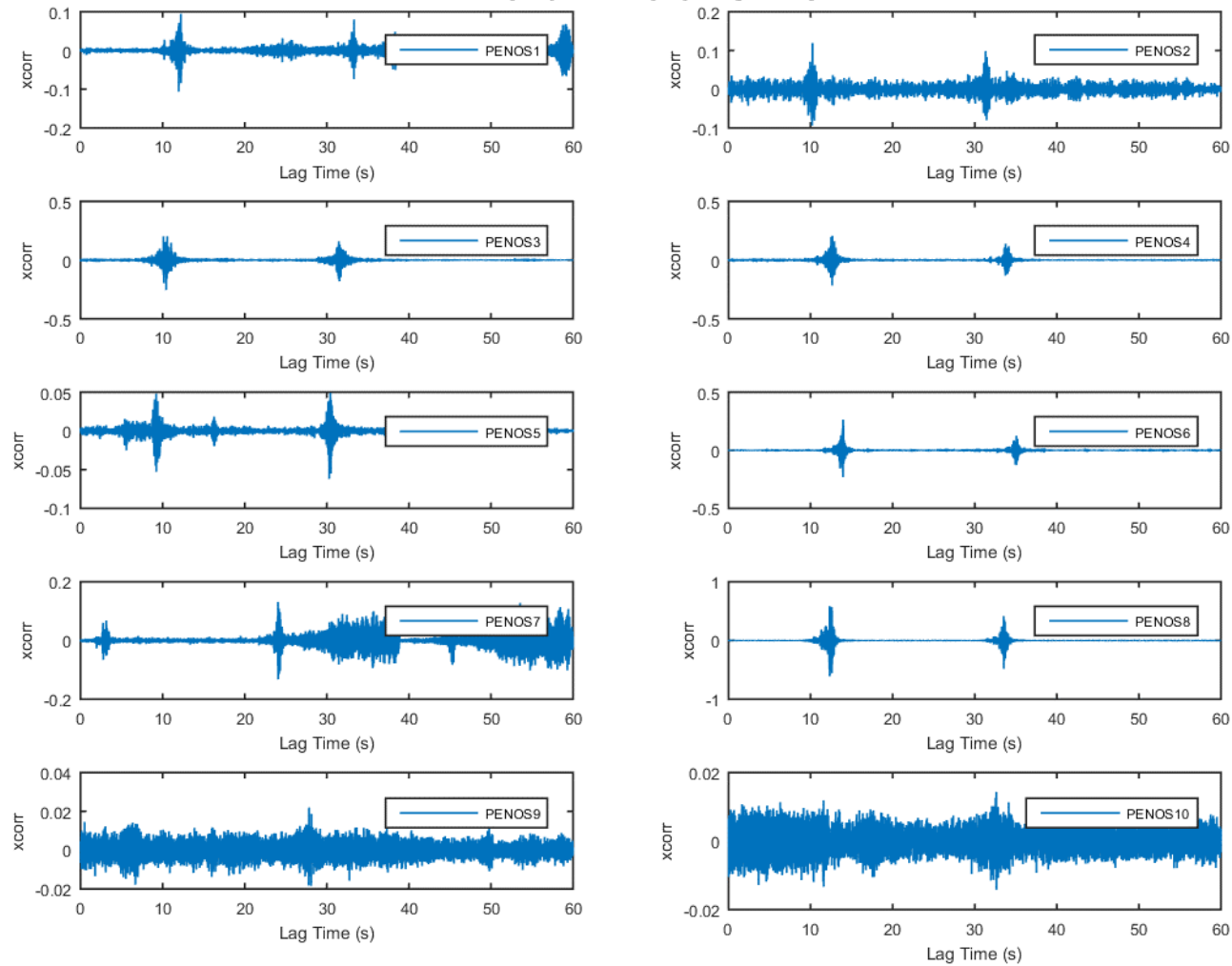
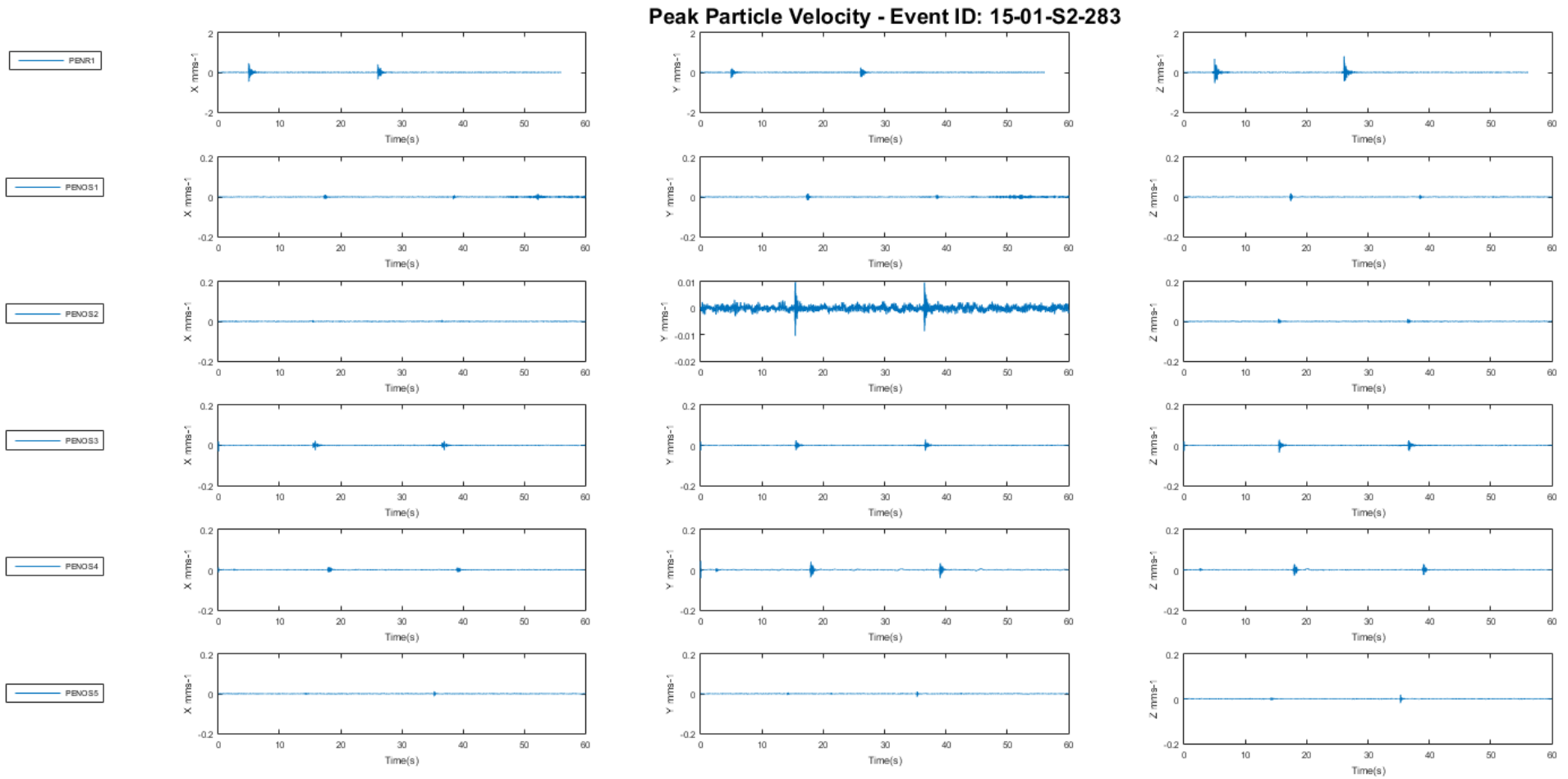
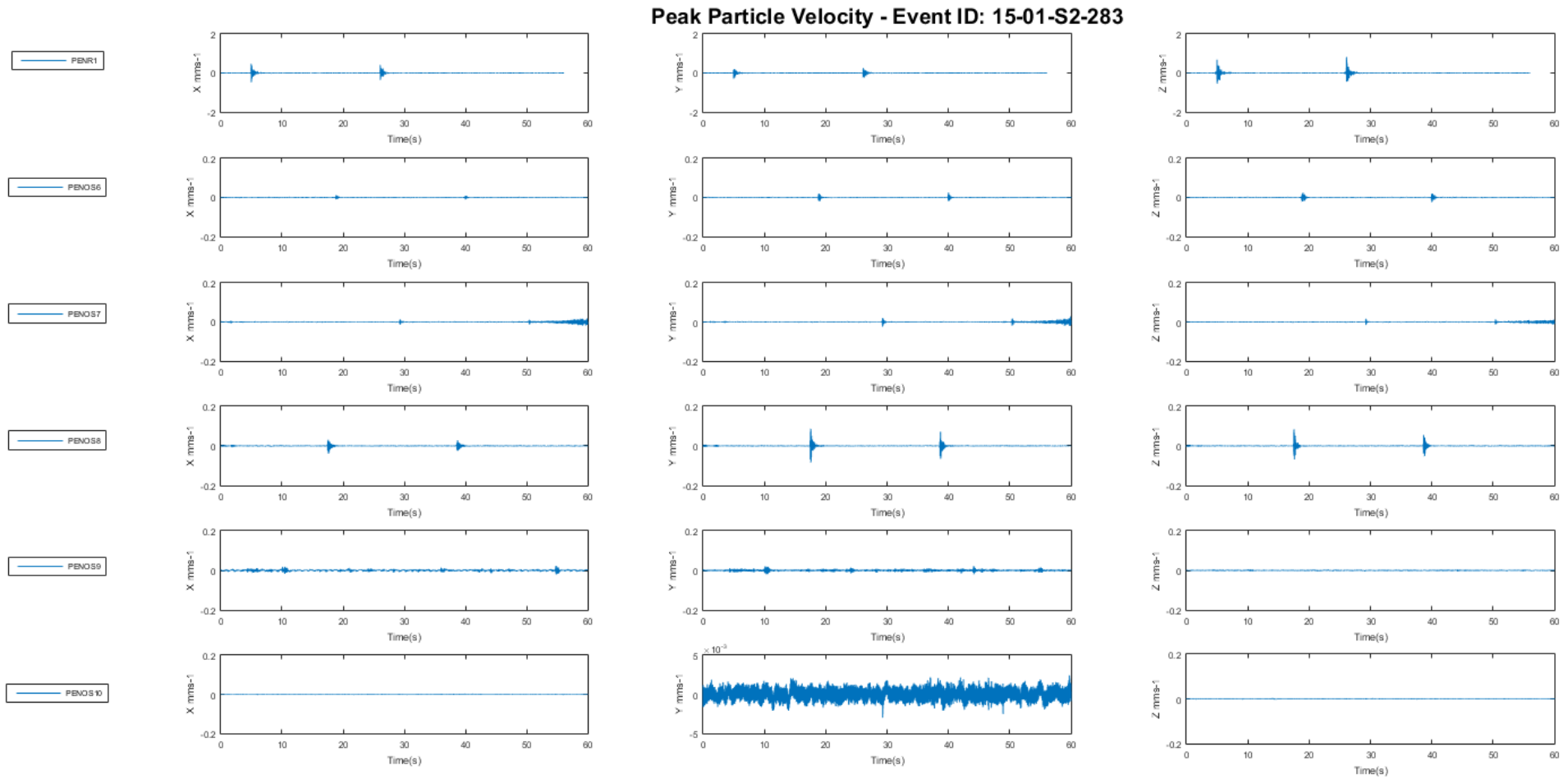


FIGURE 3.180: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-282

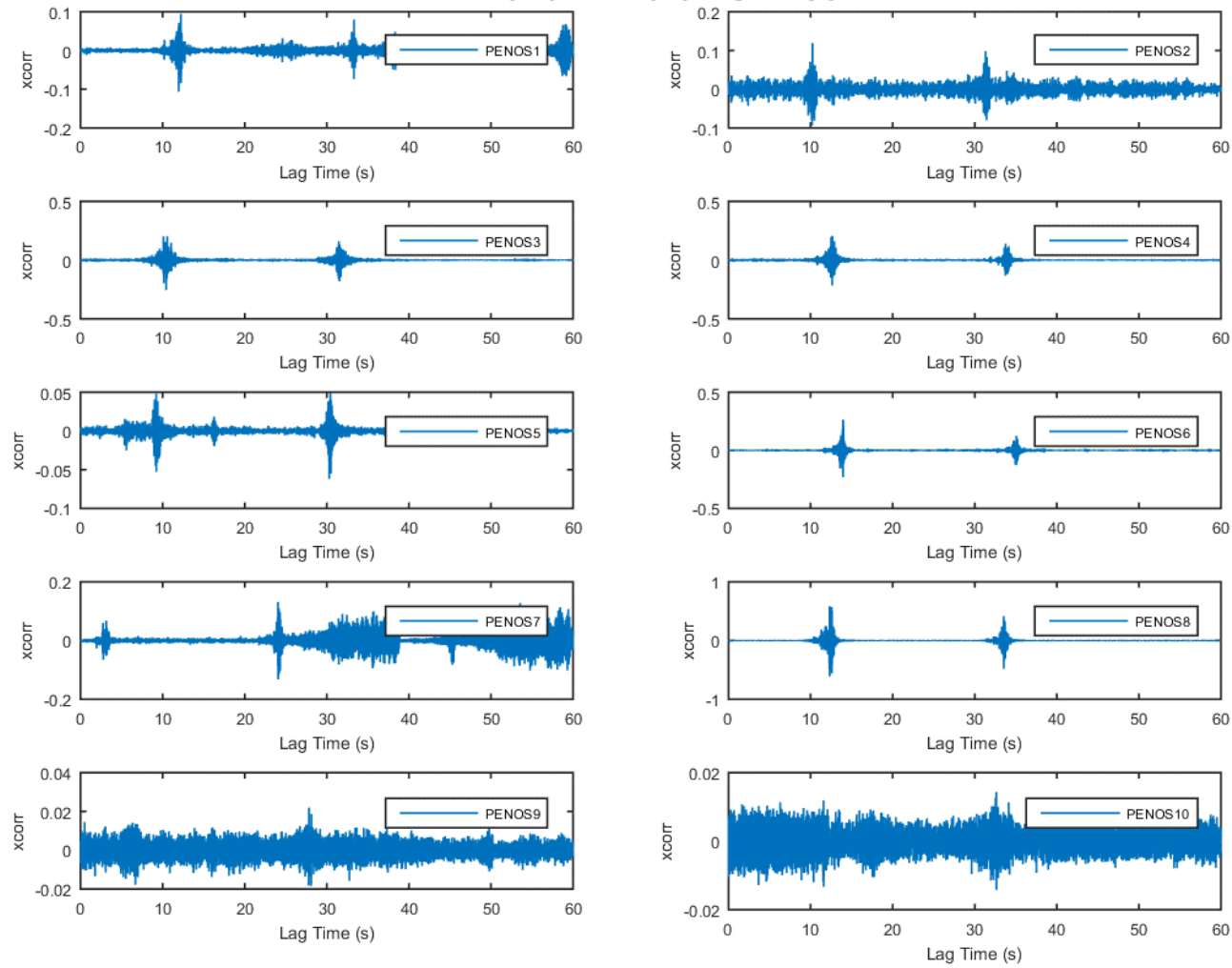


**FIGURE 3.181: PEN\_OS 1 - 5 15-01-S2-283**

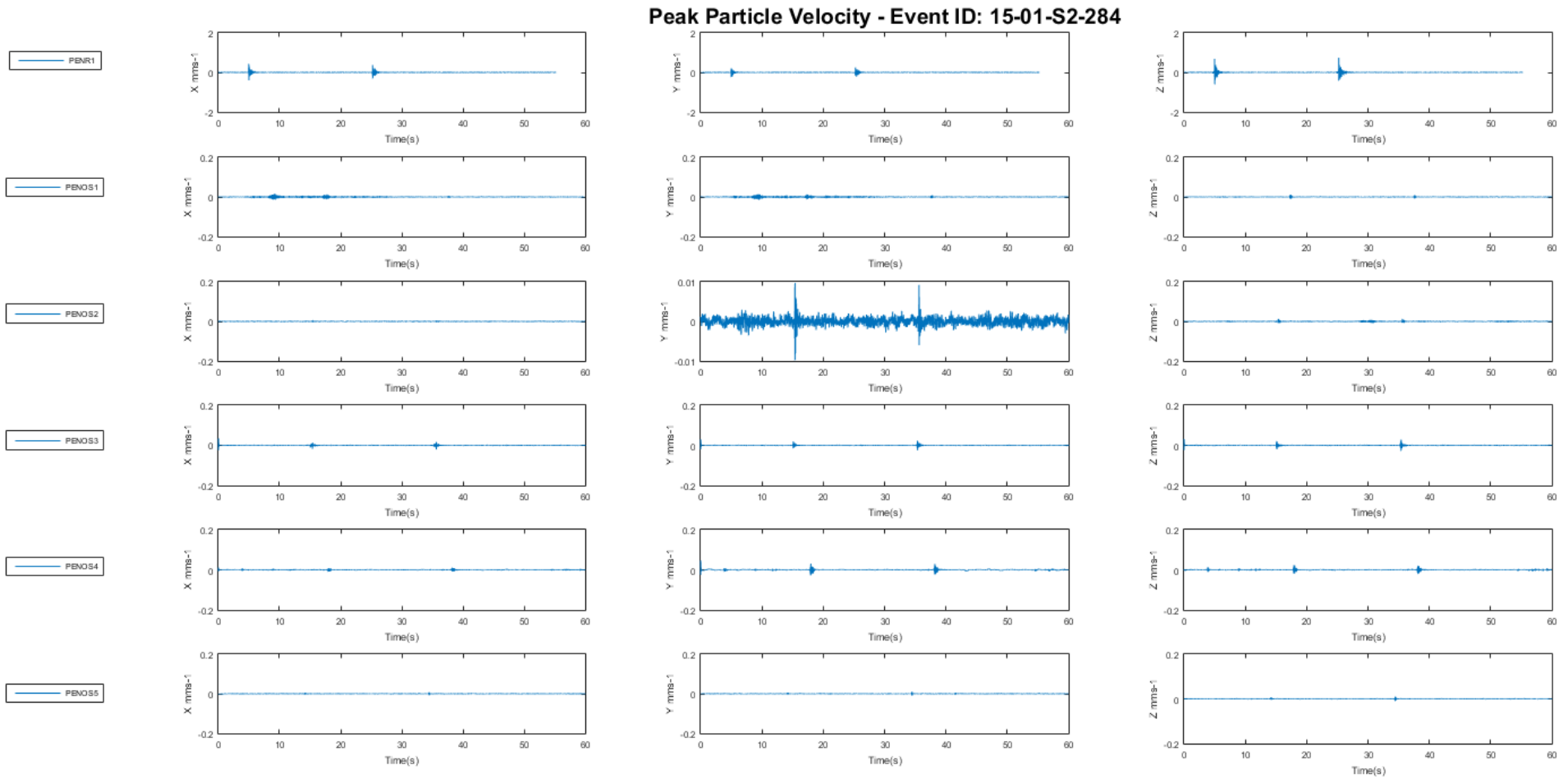


**FIGURE 3.182: PEN\_OS 6 - 10 15-01-S2-283**

**Event ID: 15-01-S2-283**



**FIGURE 3.183: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-283**



**FIGURE 3.184: PEN\_OS 1 - 5 15-01-S2-284**

Peak Particle Velocity - Event ID: 15-01-S2-284

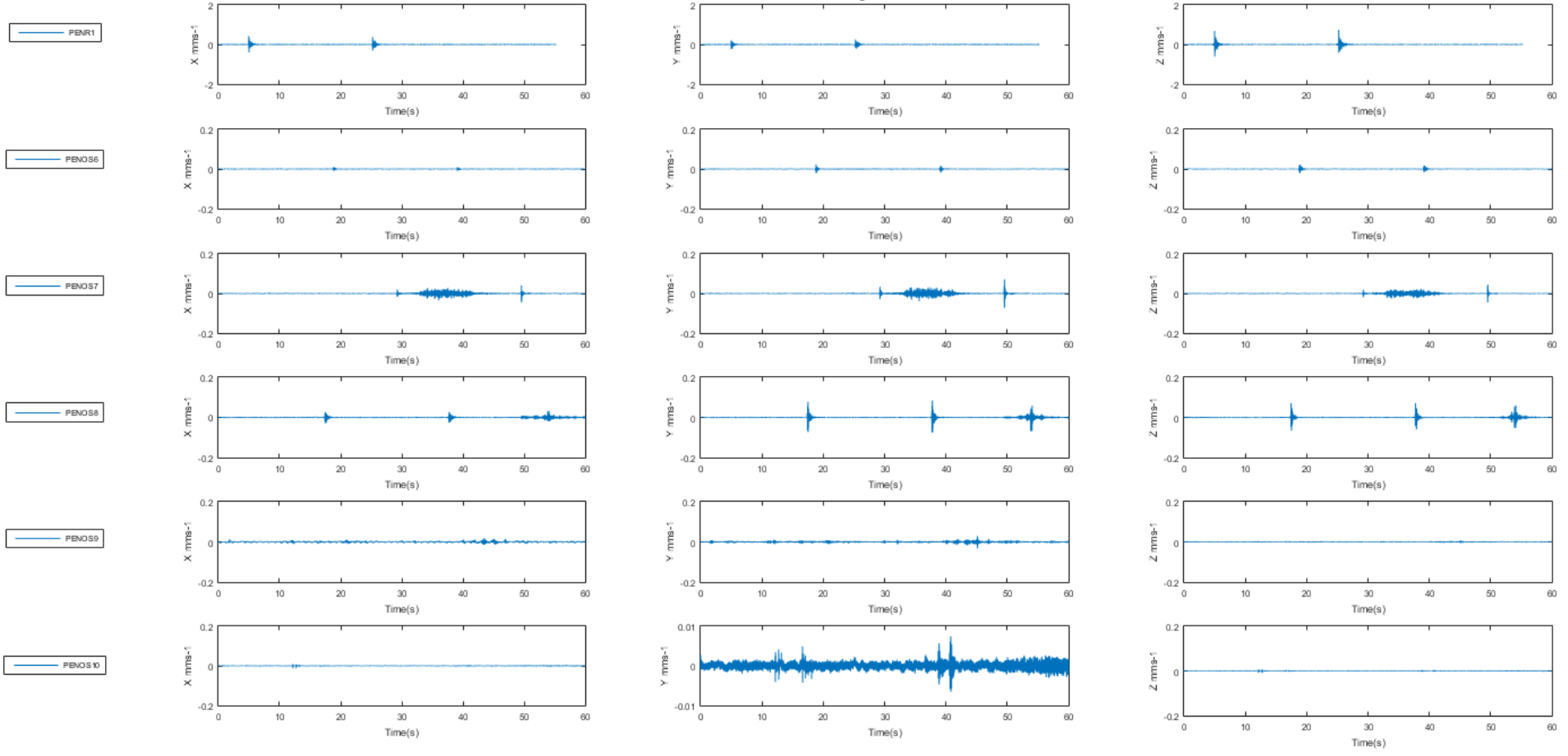
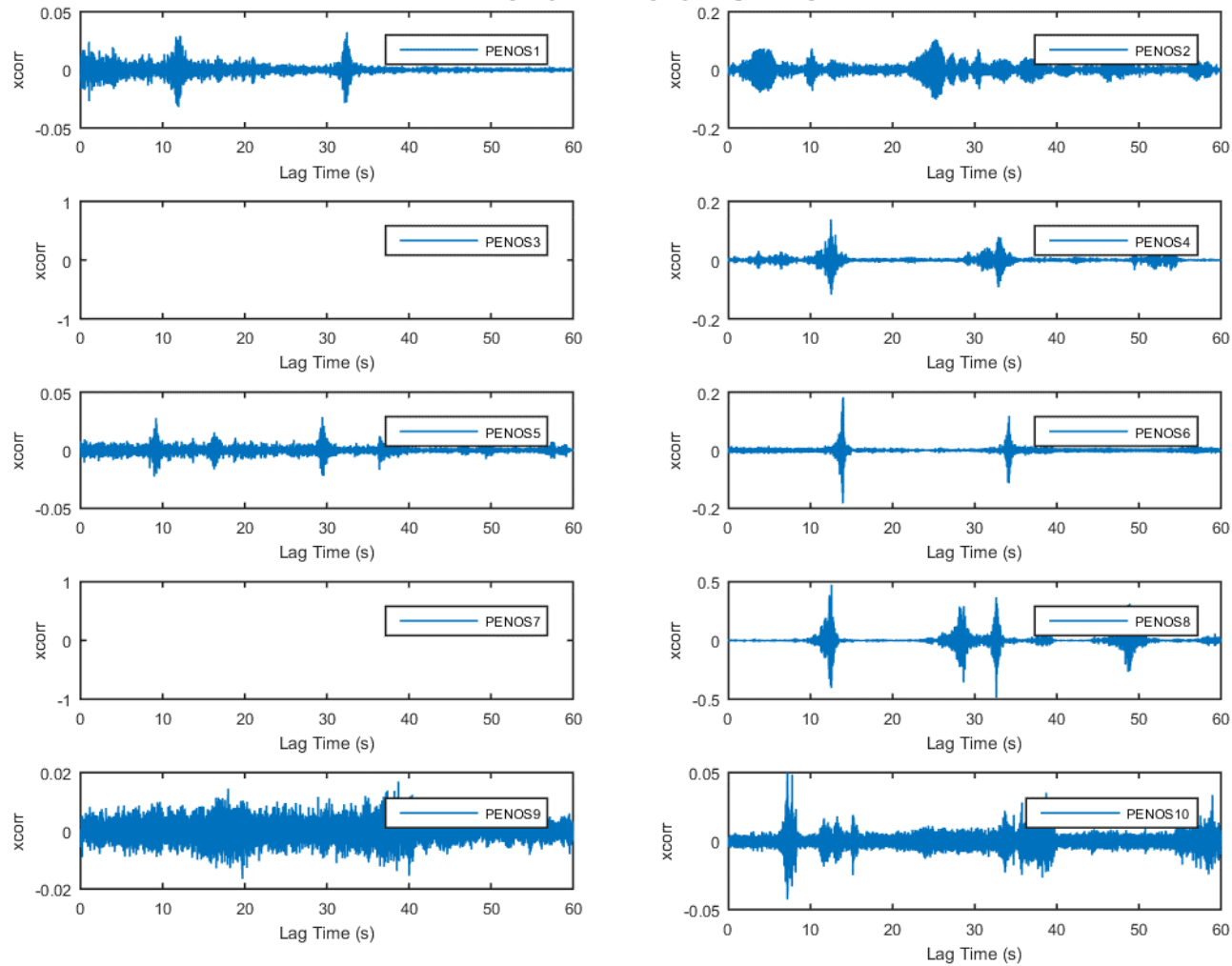


FIGURE 3.185: PEN\_OS 6 - 10 15-01-S2-284



**Event ID: 15-01-S2-284**



**FIGURE 3.186: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-284**

Peak Particle Velocity - Event ID: 15-01-S2-352

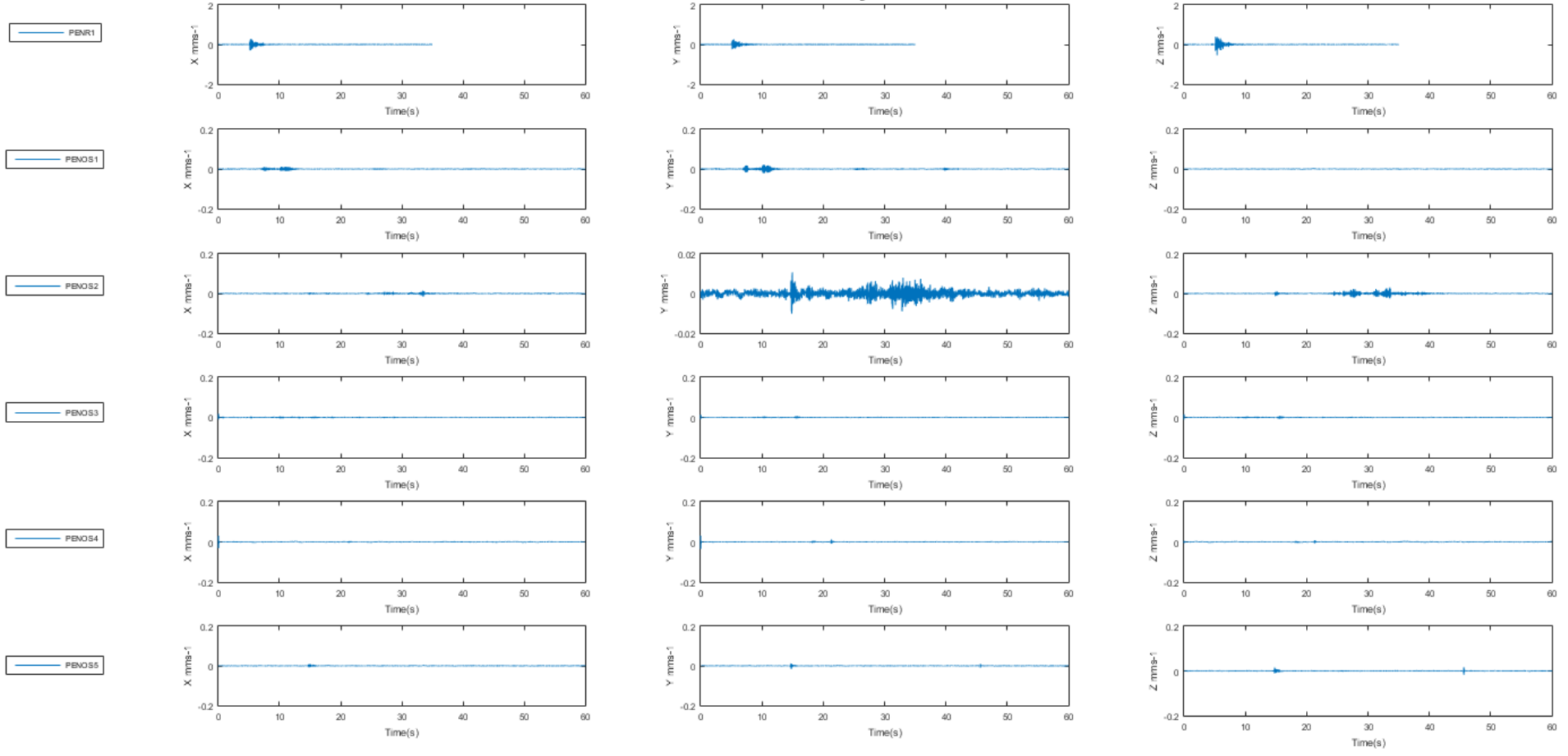
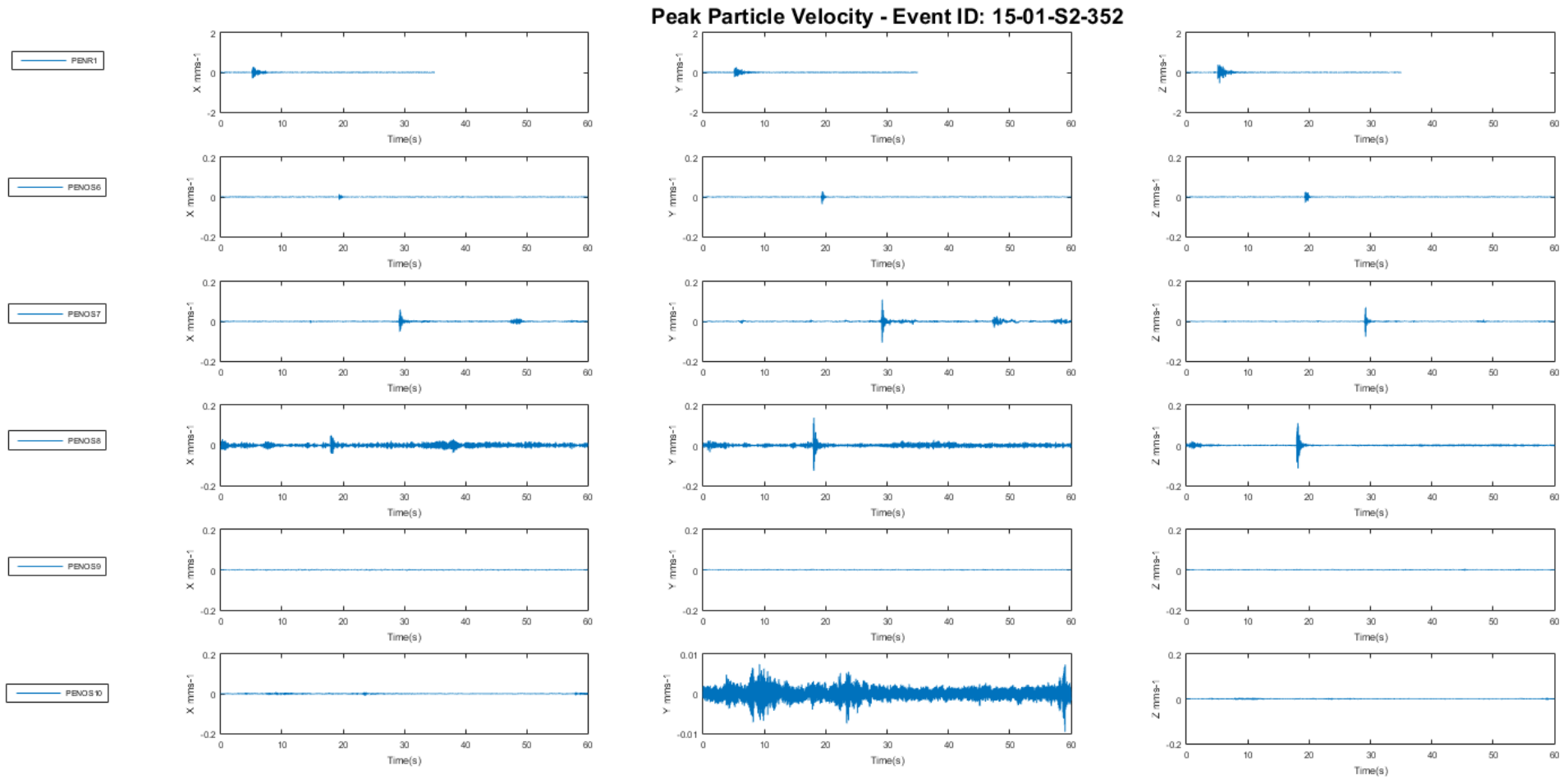


FIGURE 3.187: PEN\_OS 1 - 5 15-01-S2-352



**FIGURE 3.188: PEN\_OS 6 - 10 15-01-S2-352**

### Event ID: 15-01-S2-352

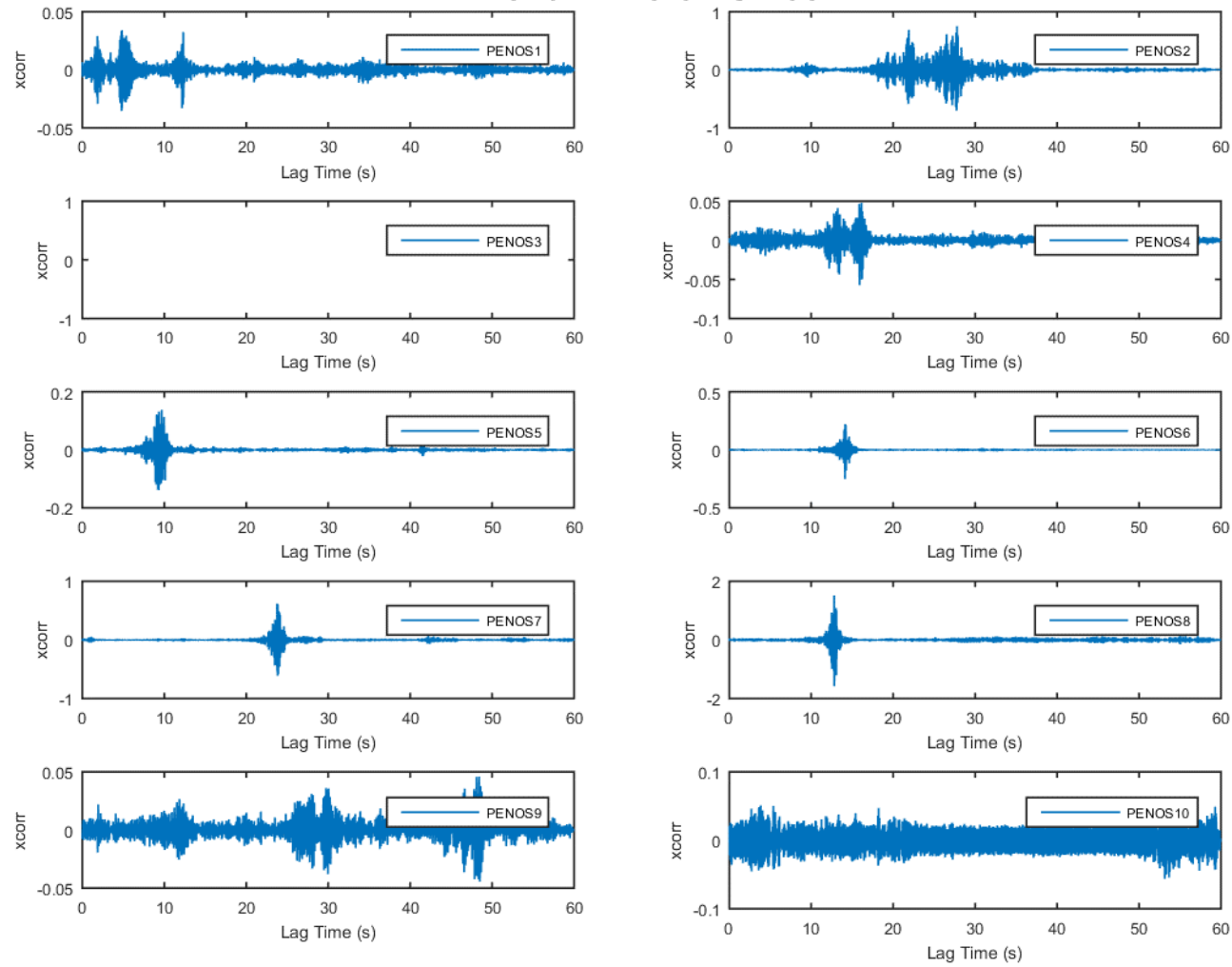
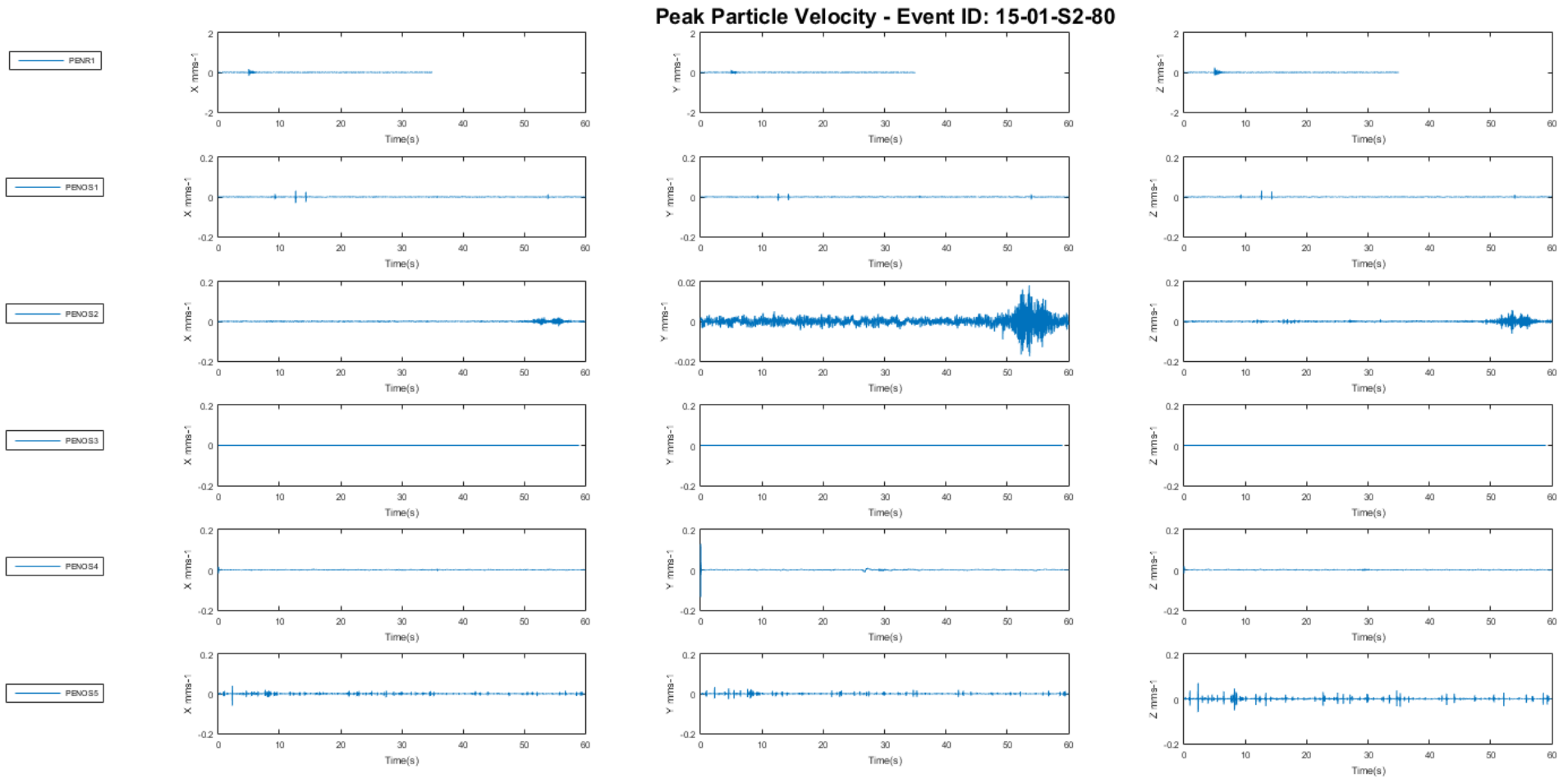
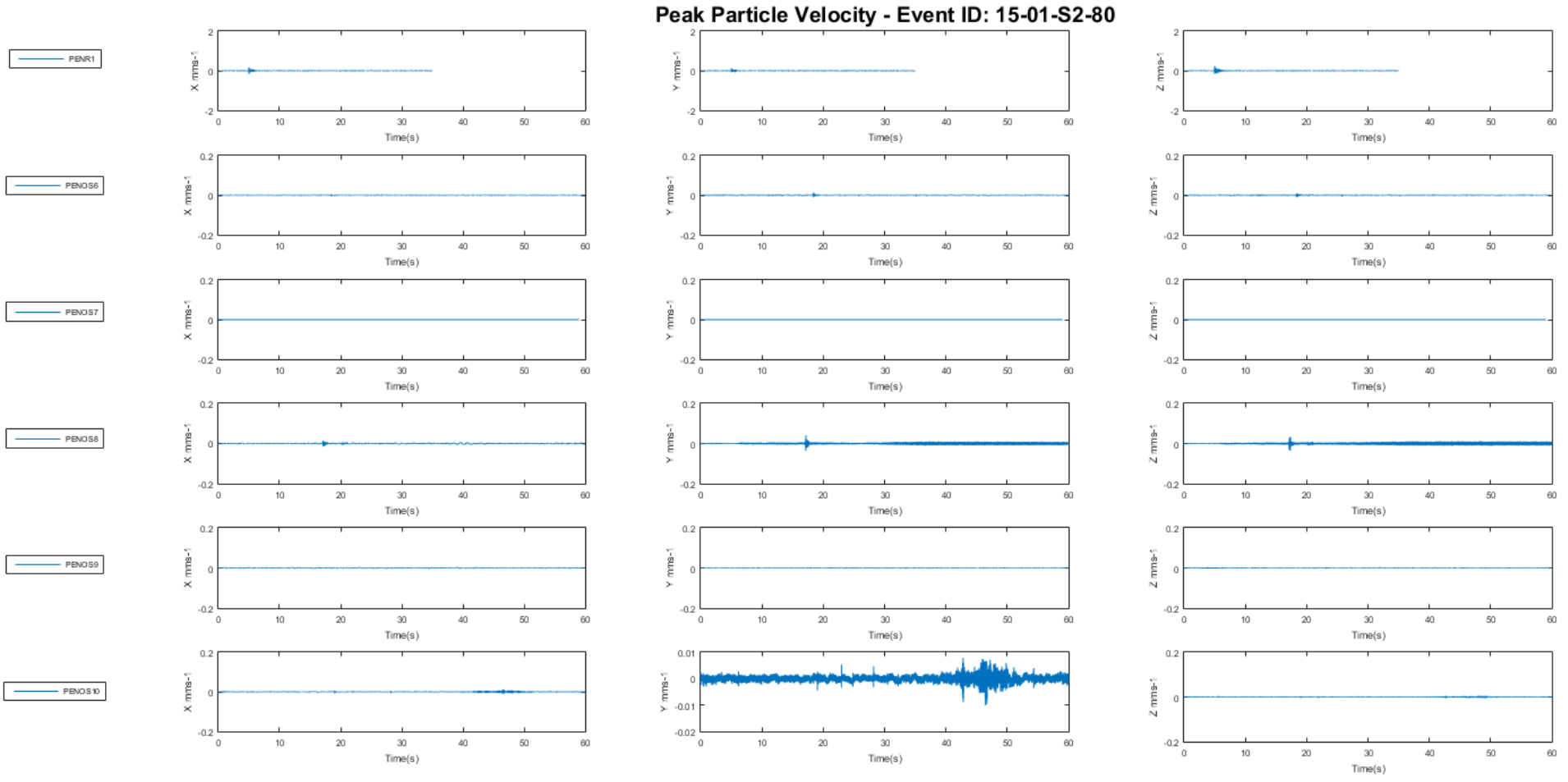


FIGURE 3.189: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-352

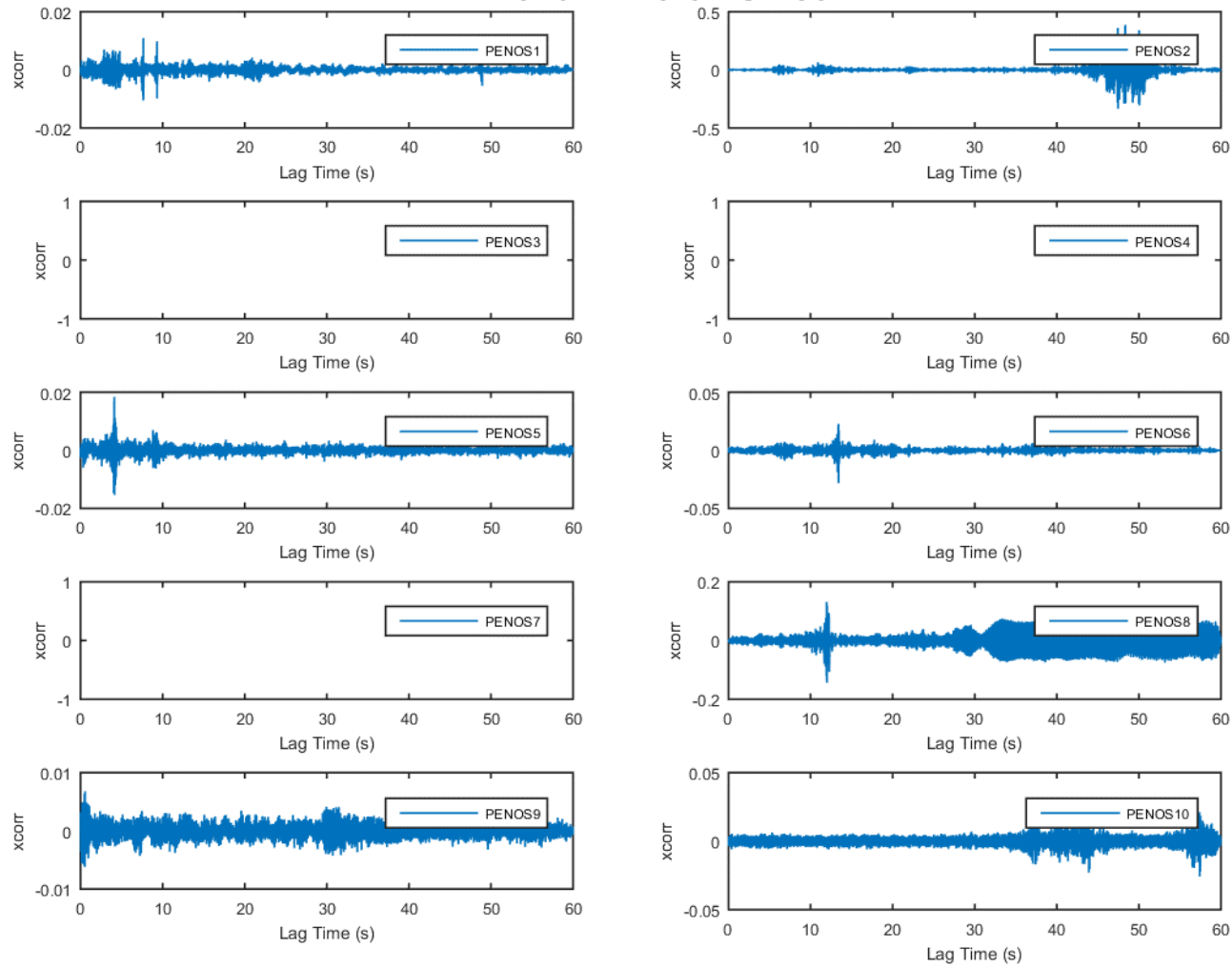


**FIGURE 3.190: PEN\_OS 1 - 5 15-01-S2-80**



**FIGURE 3.191: PEN\_OS 6 - 10 15-01-S2-80**

**Event ID: 15-01-S2-80**



**FIGURE 3.192: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-80**

Peak Particle Velocity - Event ID: 15-01-S2-84

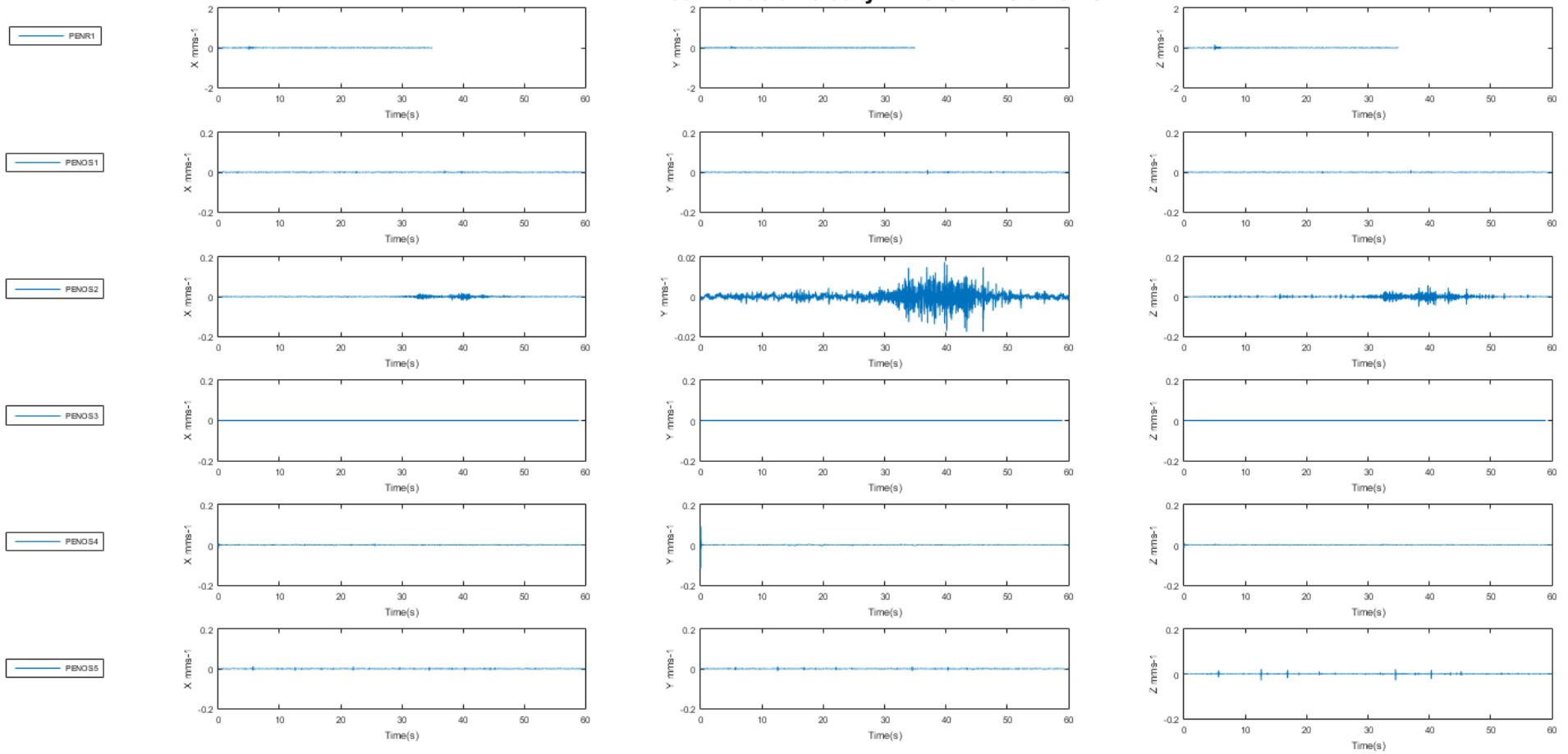


FIGURE 3.193: PEN\_OS 1 - 5 15-01-S2-84



Peak Particle Velocity - Event ID: 15-01-S2-84

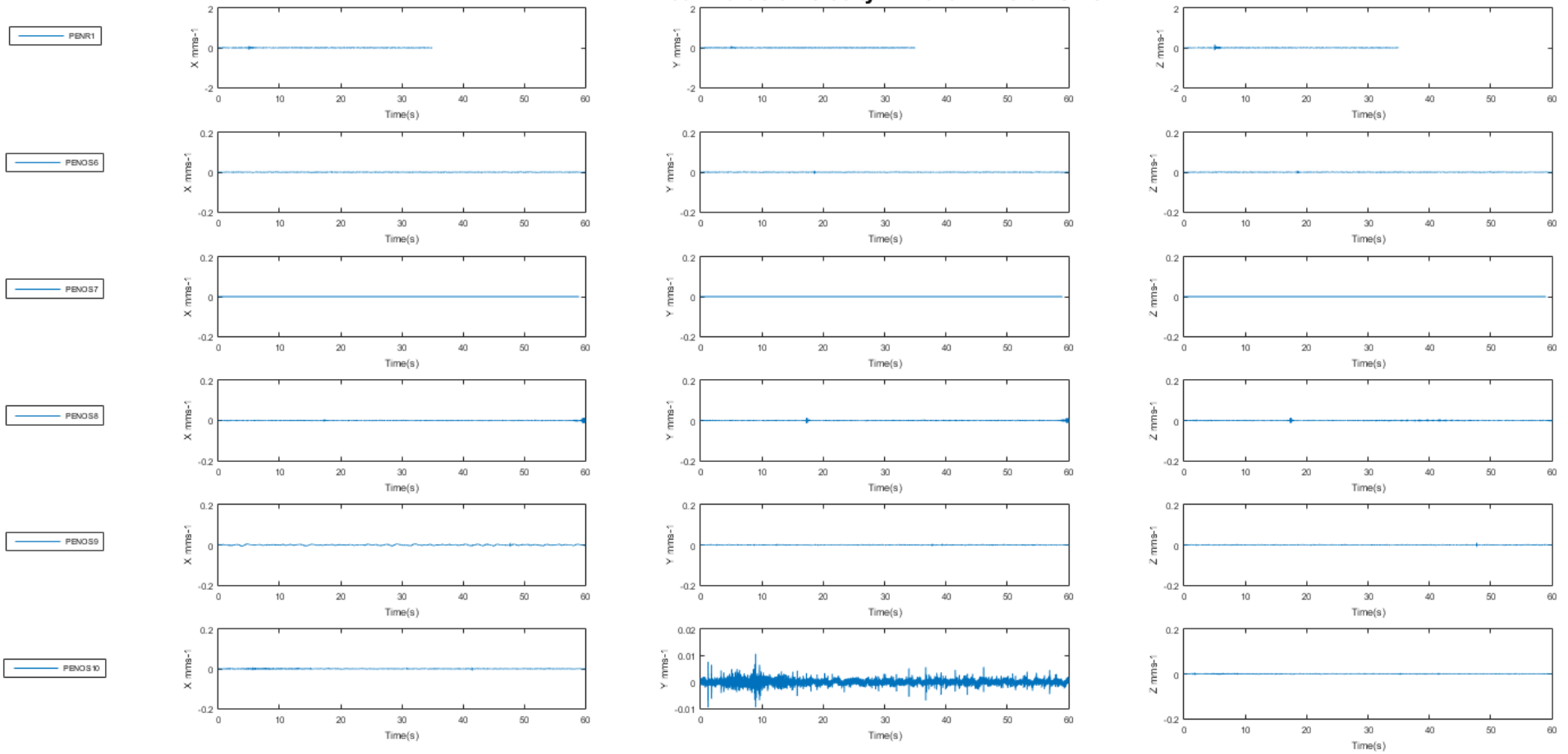


FIGURE 3.194: PEN\_OS 6 - 10 15-01-S2-84

### Event ID: 15-01-S2-84

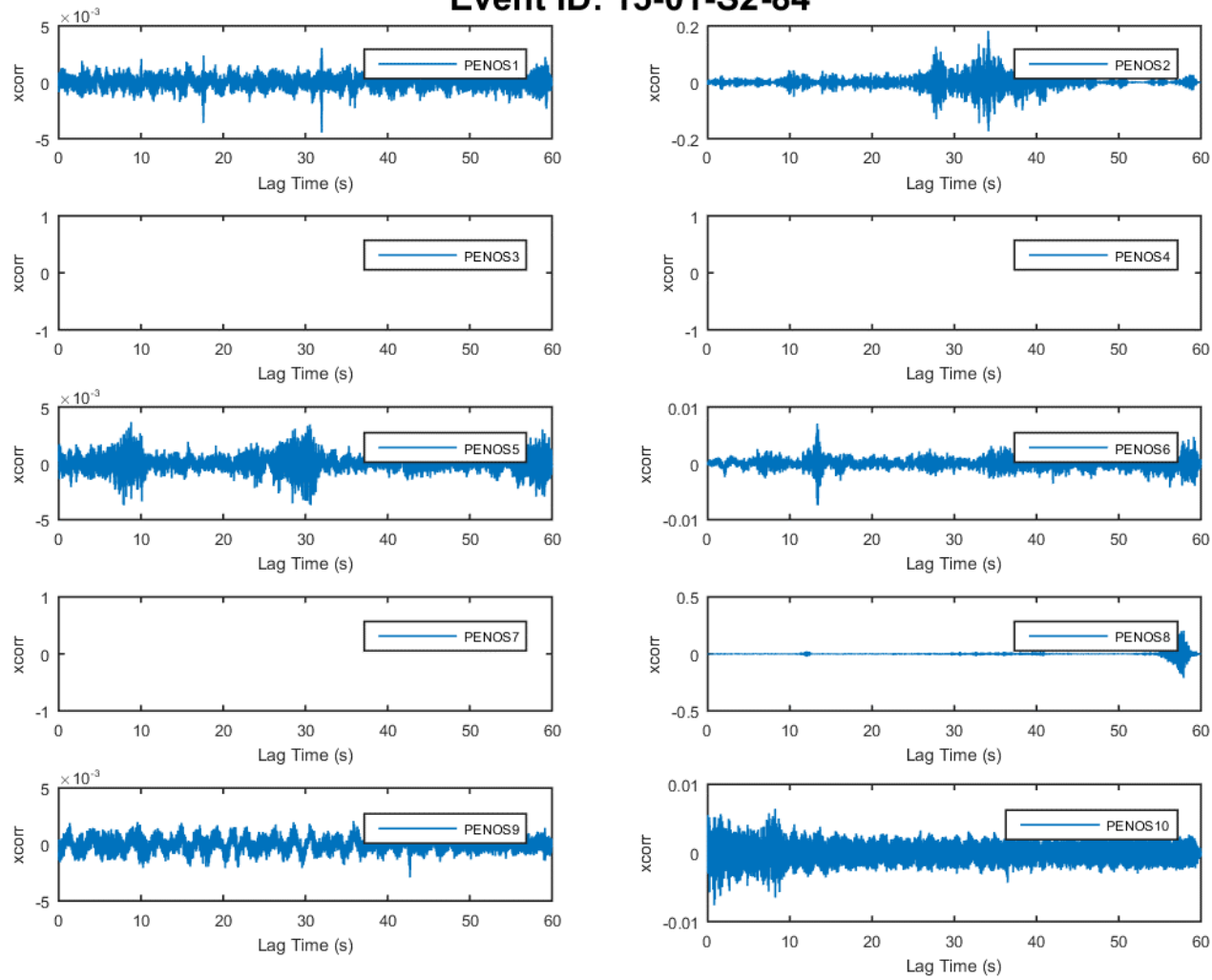
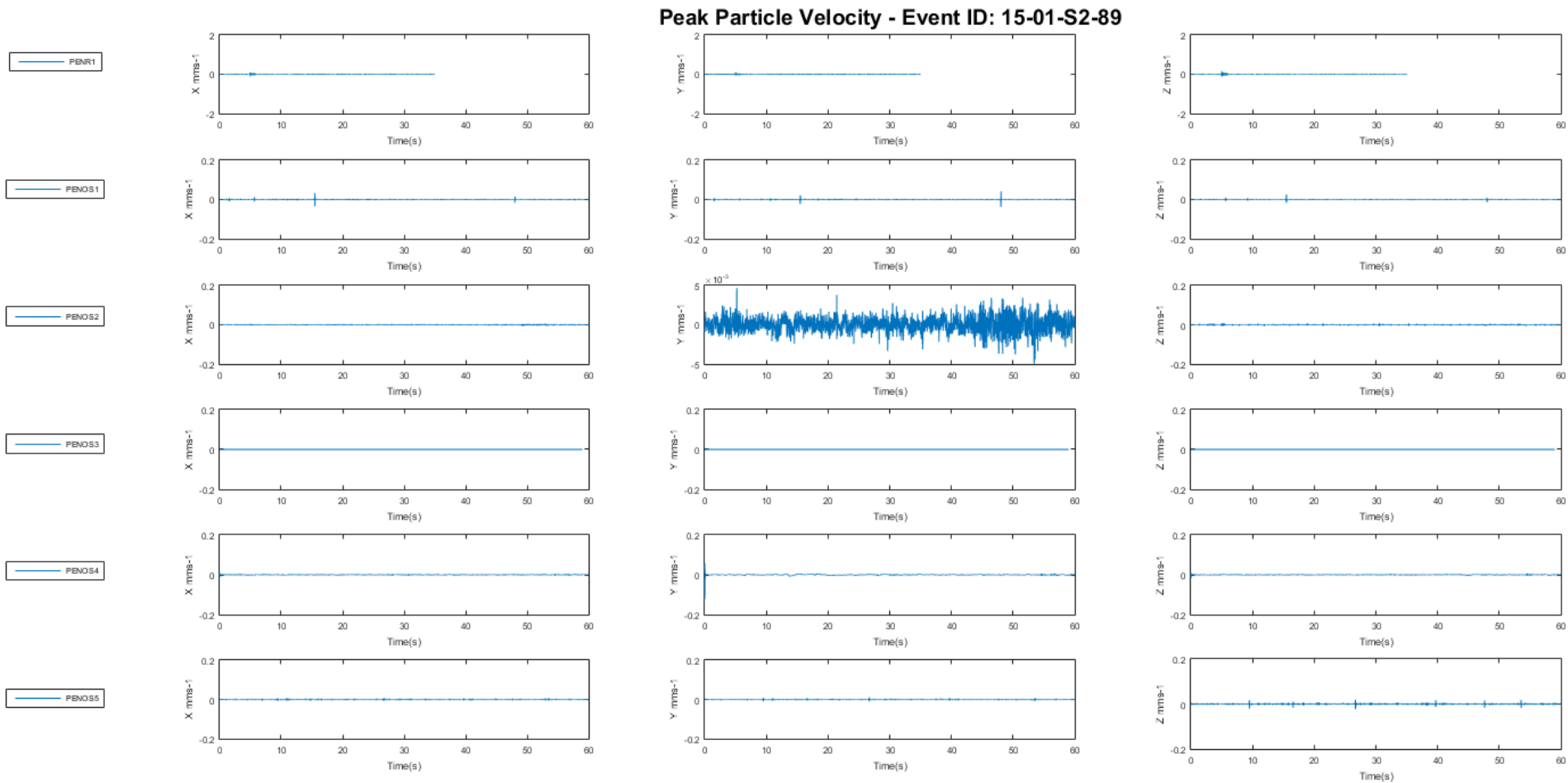


FIGURE 3.195: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-84



**FIGURE 3.196: PEN\_OS 1 - 5 15-01-S2-89**

Peak Particle Velocity - Event ID: 15-01-S2-89

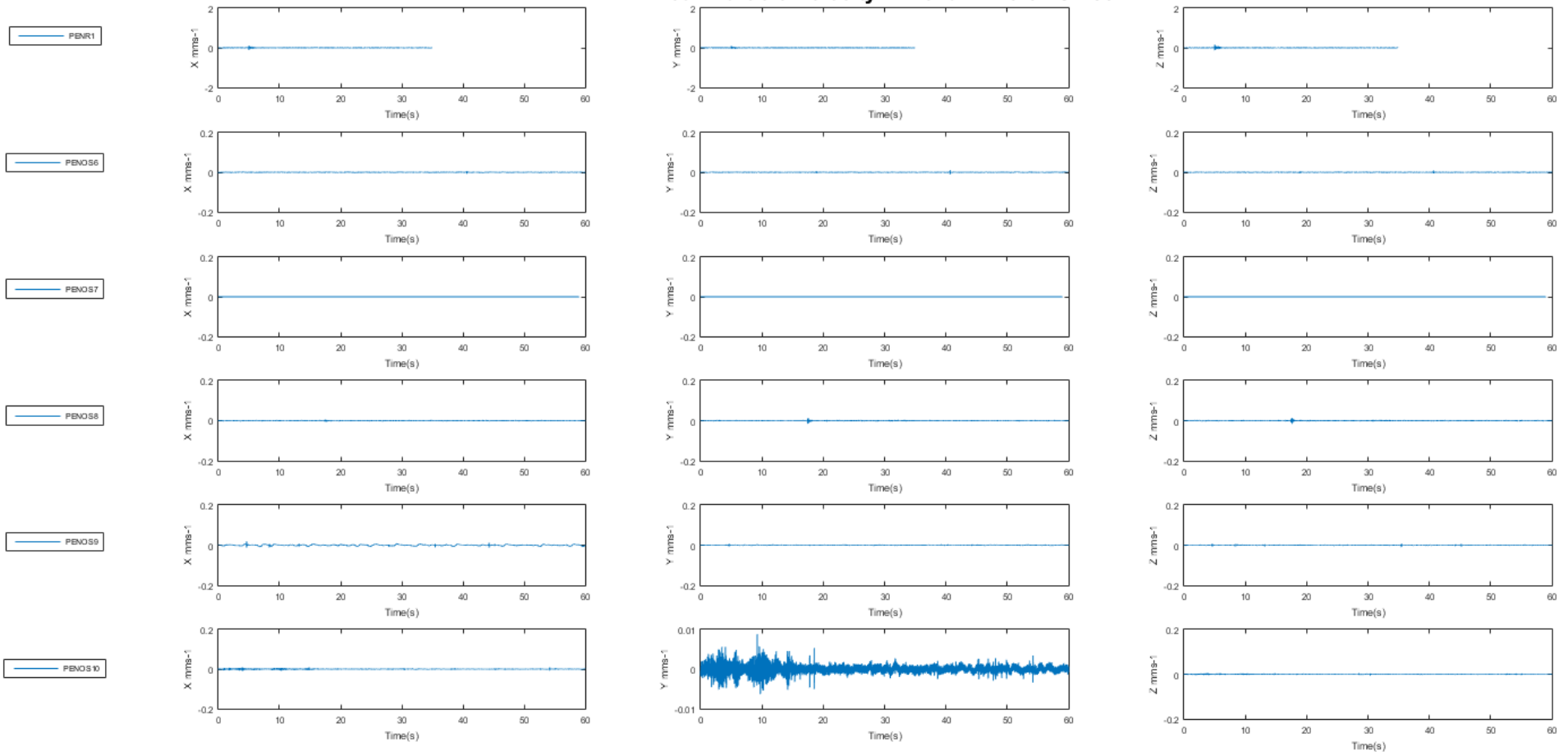


FIGURE 3.197: PEN\_OS 6 - 10 15-01-S2-89

### Event ID: 15-01-S2-89

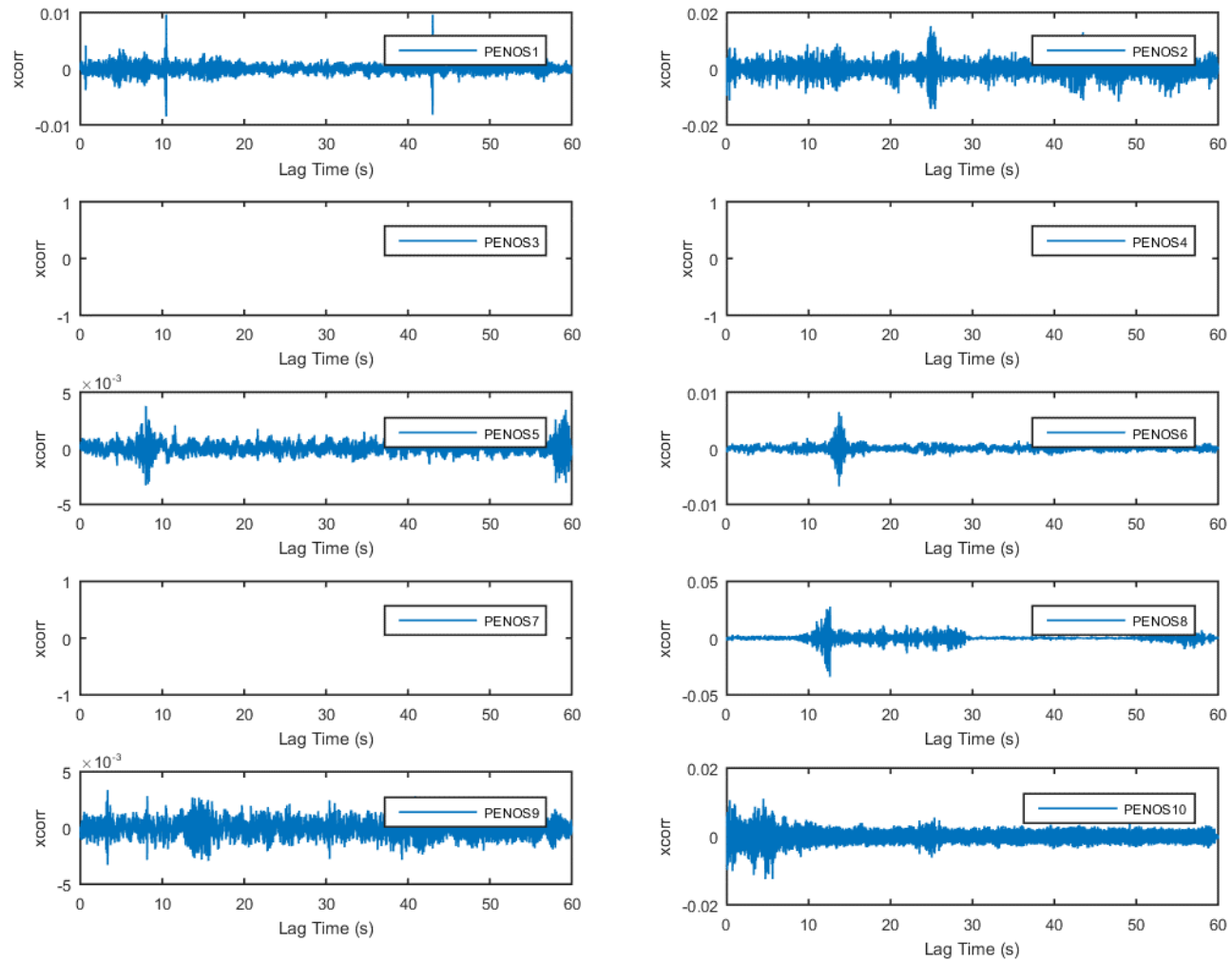
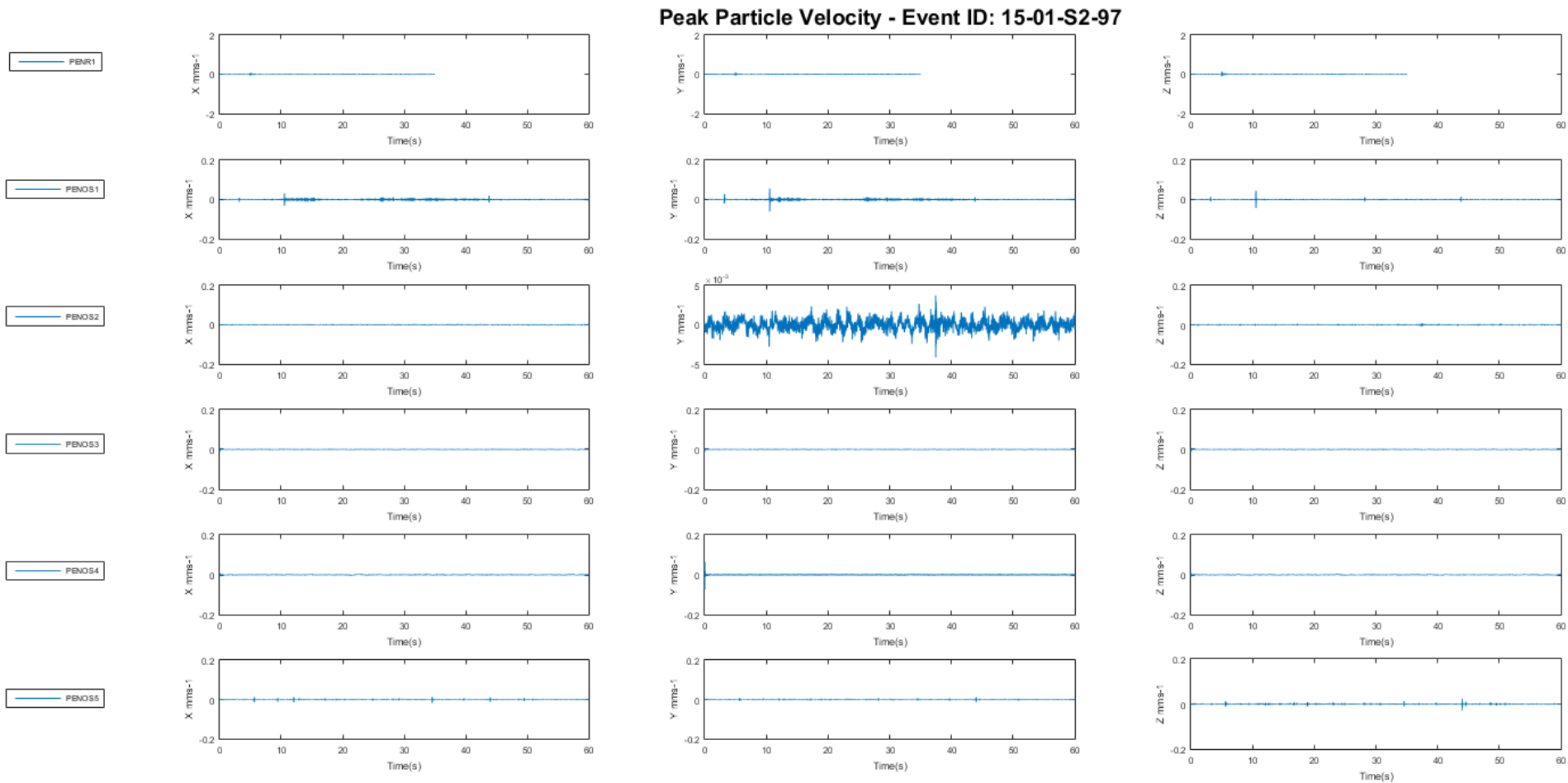
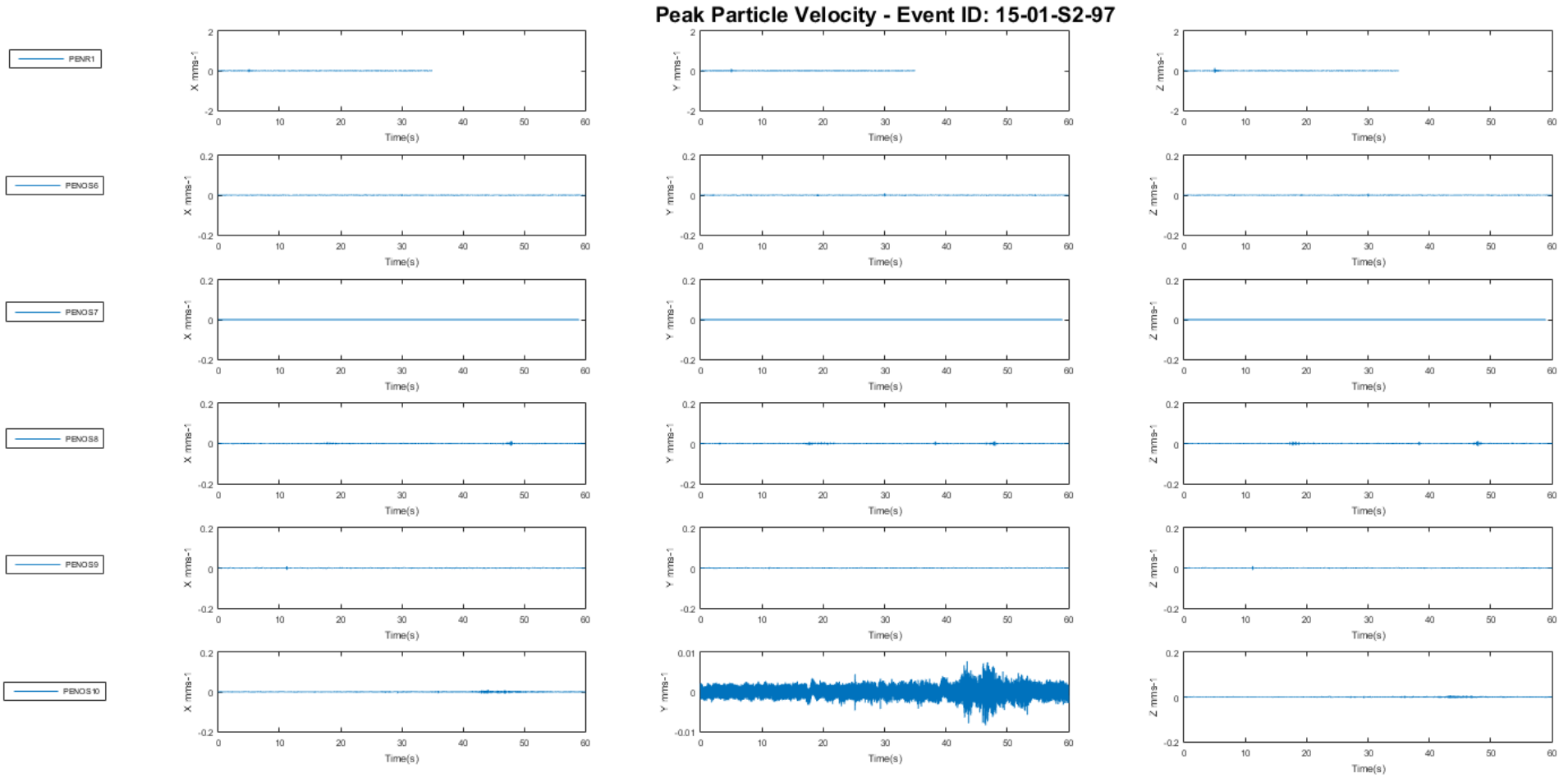


FIGURE 3.198: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-89



**FIGURE 3.199: PEN\_OS 1 - 5 15-01-S2-97**



**FIGURE 3.200: PEN\_OS 6 - 10 15-01-S2-97**

### Event ID: 15-01-S2-97

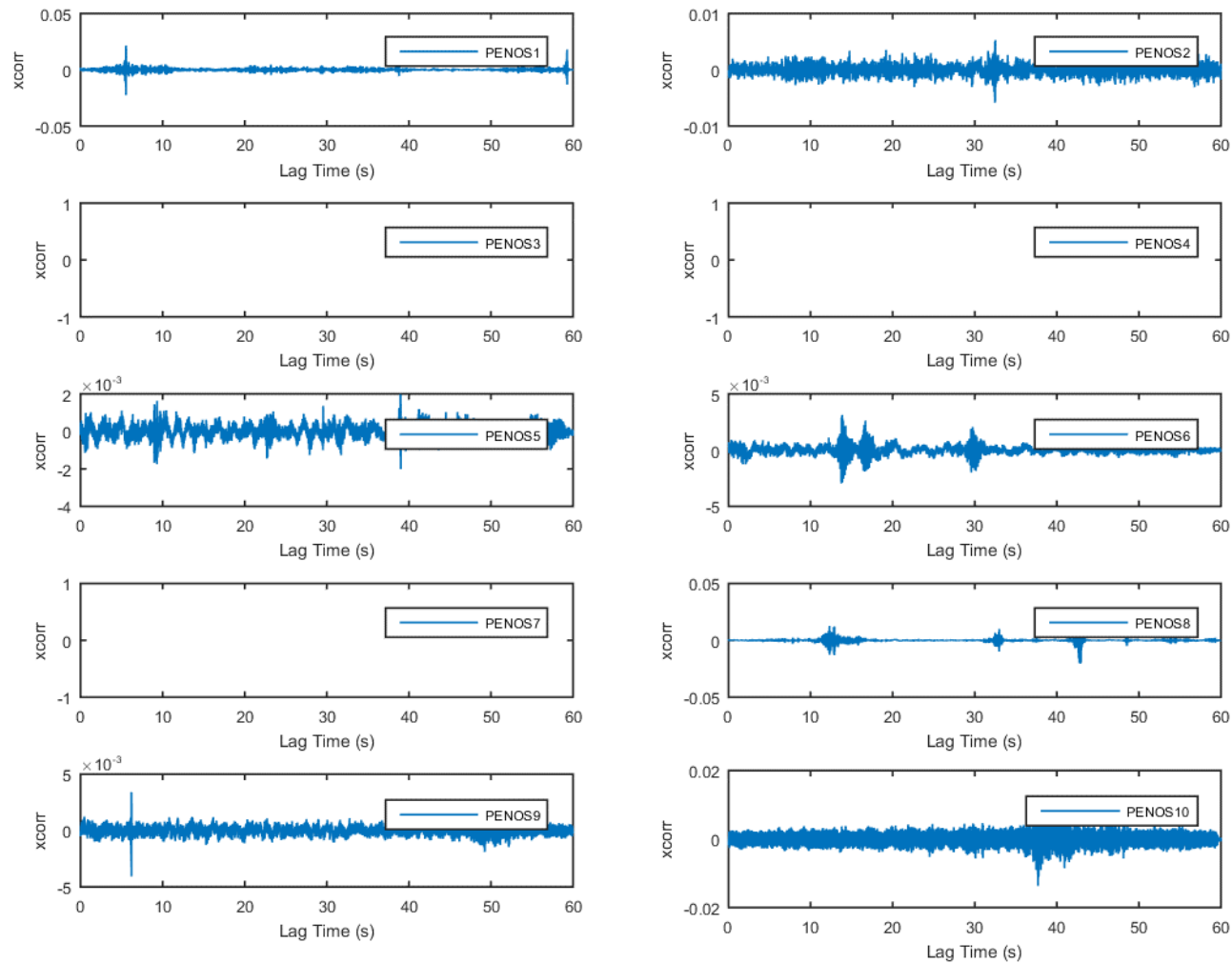
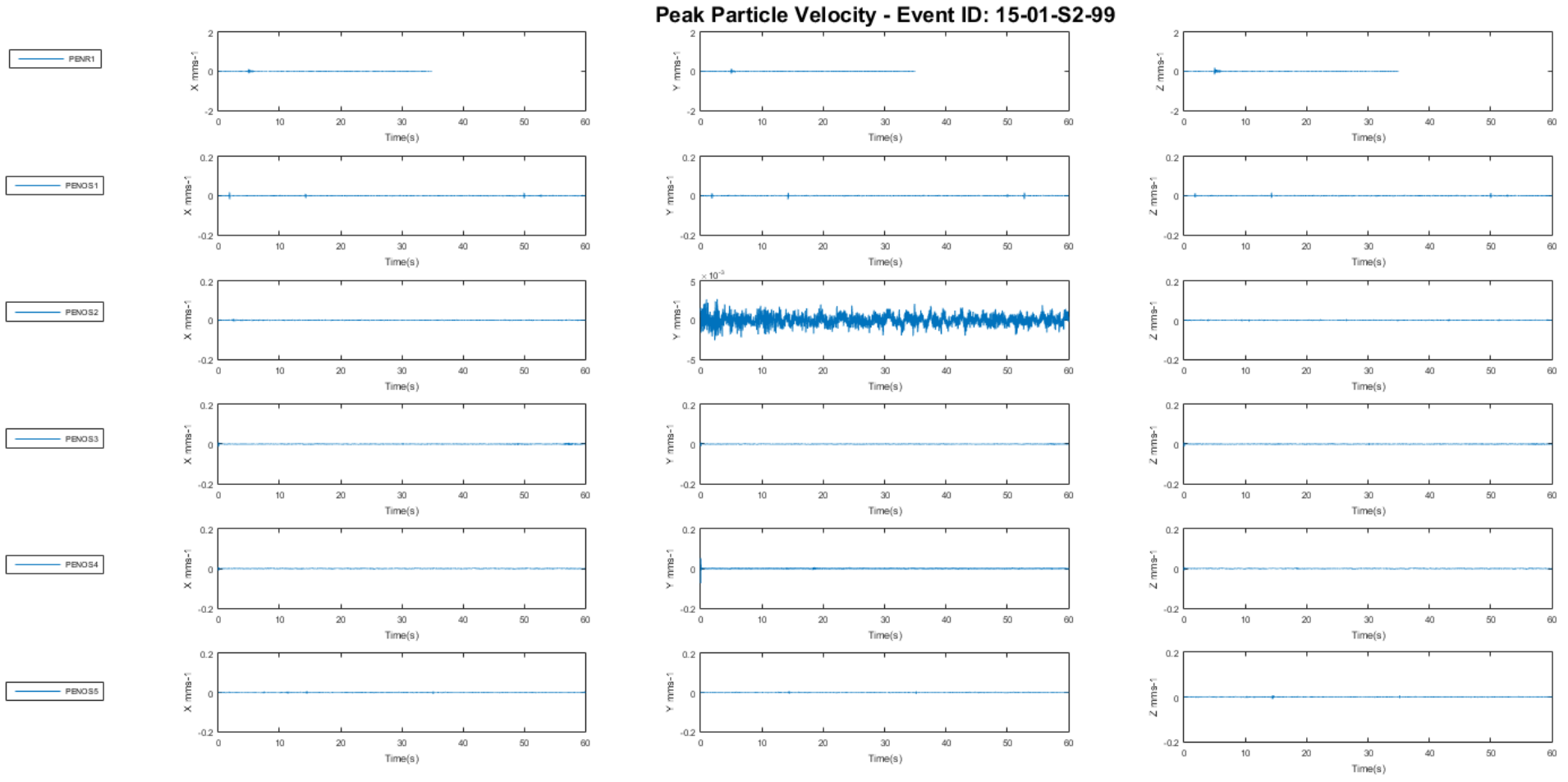


FIGURE 3.201: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-97





**FIGURE 3.202: PEN\_OS 1 - 5 15-01-S2-99**

Peak Particle Velocity - Event ID: 15-01-S2-99

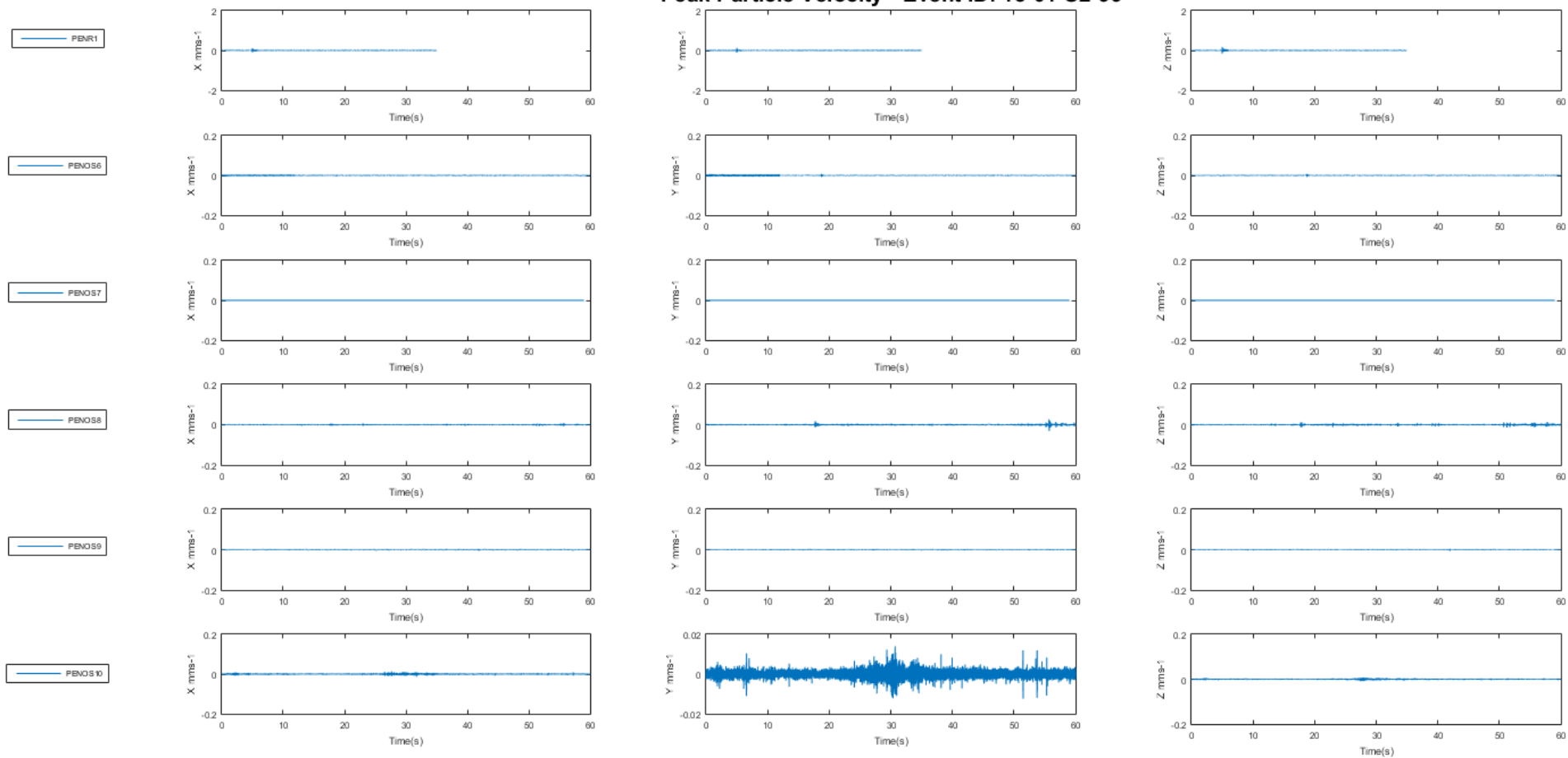


FIGURE 3.203: PEN\_OS 6 - 10 15-01-S2-99

### Event ID: 15-01-S2-99

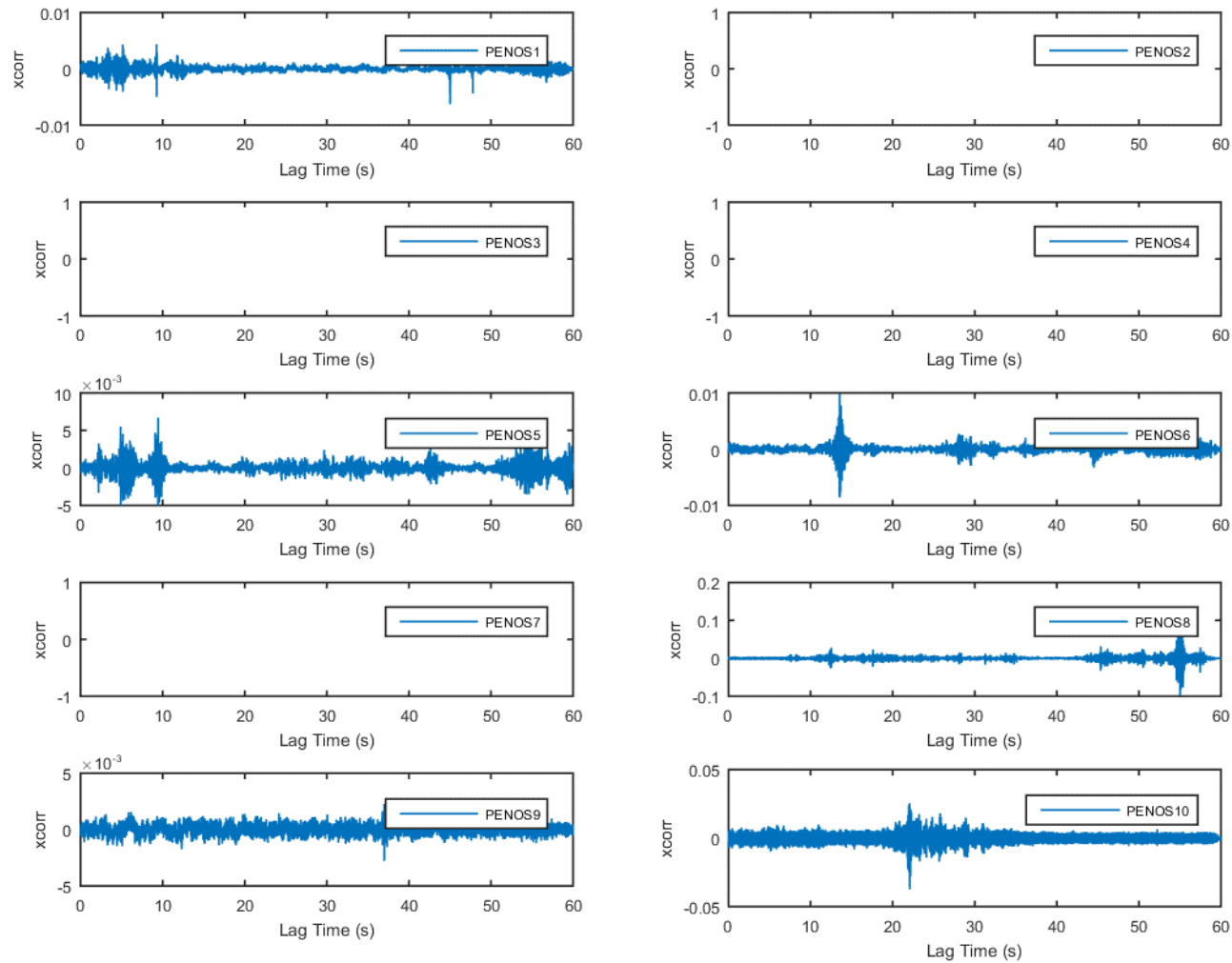


FIGURE 3.204: CROSS CORRELATION PEN\_OS 1 - 10 15-01-S2-99

Peak Particle Velocity - Event ID: 15-02-S1-10 & S2-13

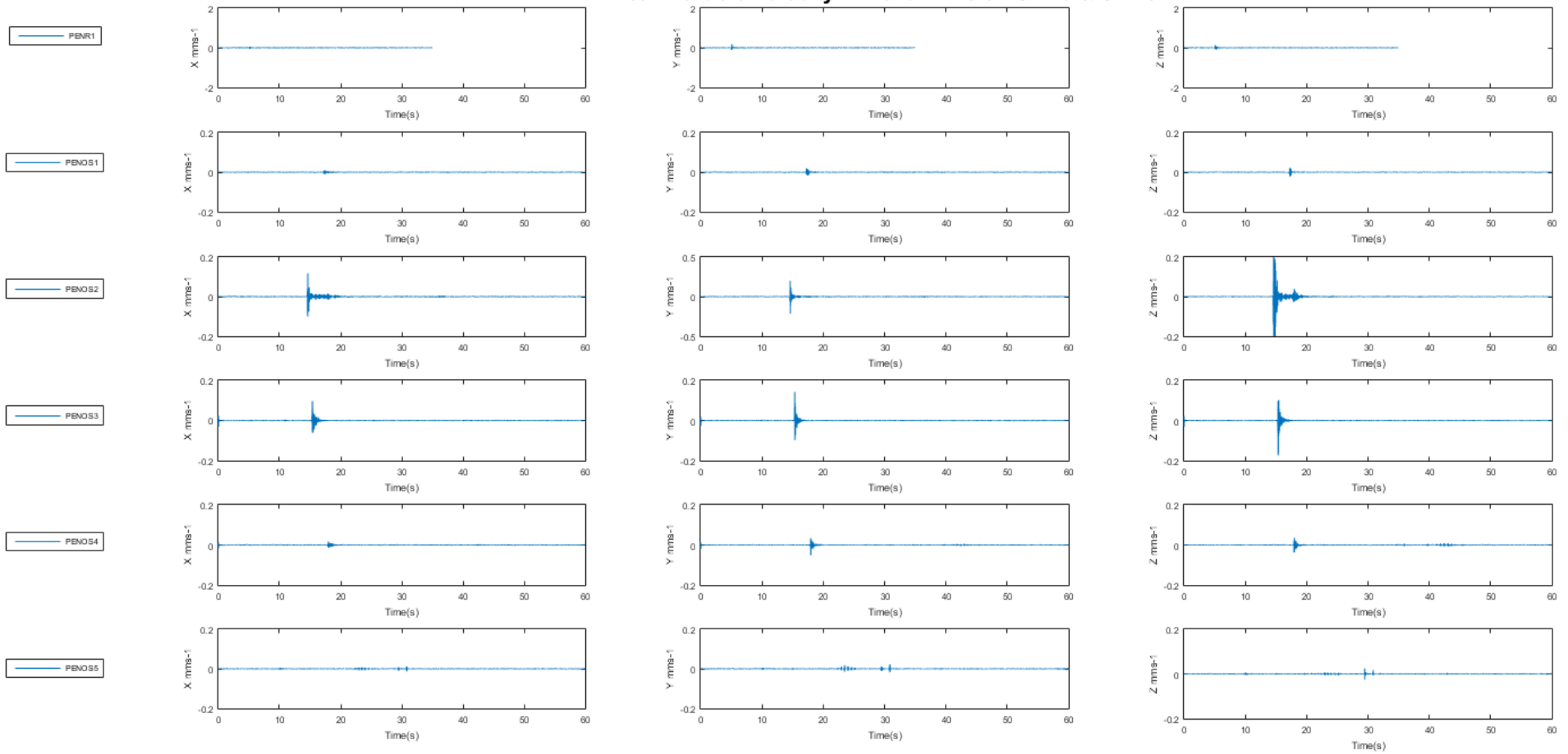


FIGURE 3.205: PEN\_OS 1 - 5 15-02-S1-10 & S2-13

Peak Particle Velocity - Event ID: 15-02-S1-10 & S2-13

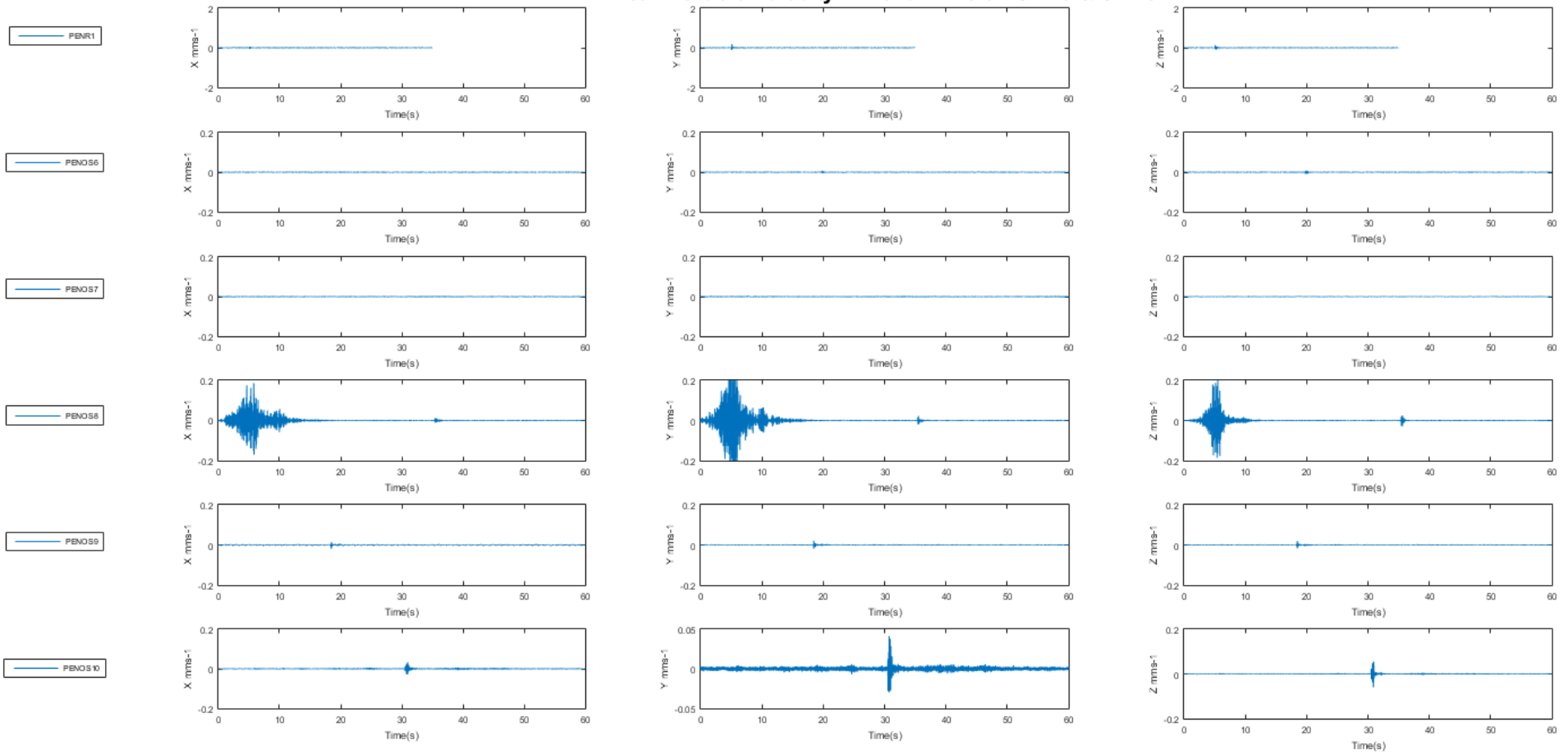


FIGURE 3.206: PEN\_OS 6 - 10 15-02-S1-10 & S2-13

### Event ID: 15-02-S1-10 & S2-13

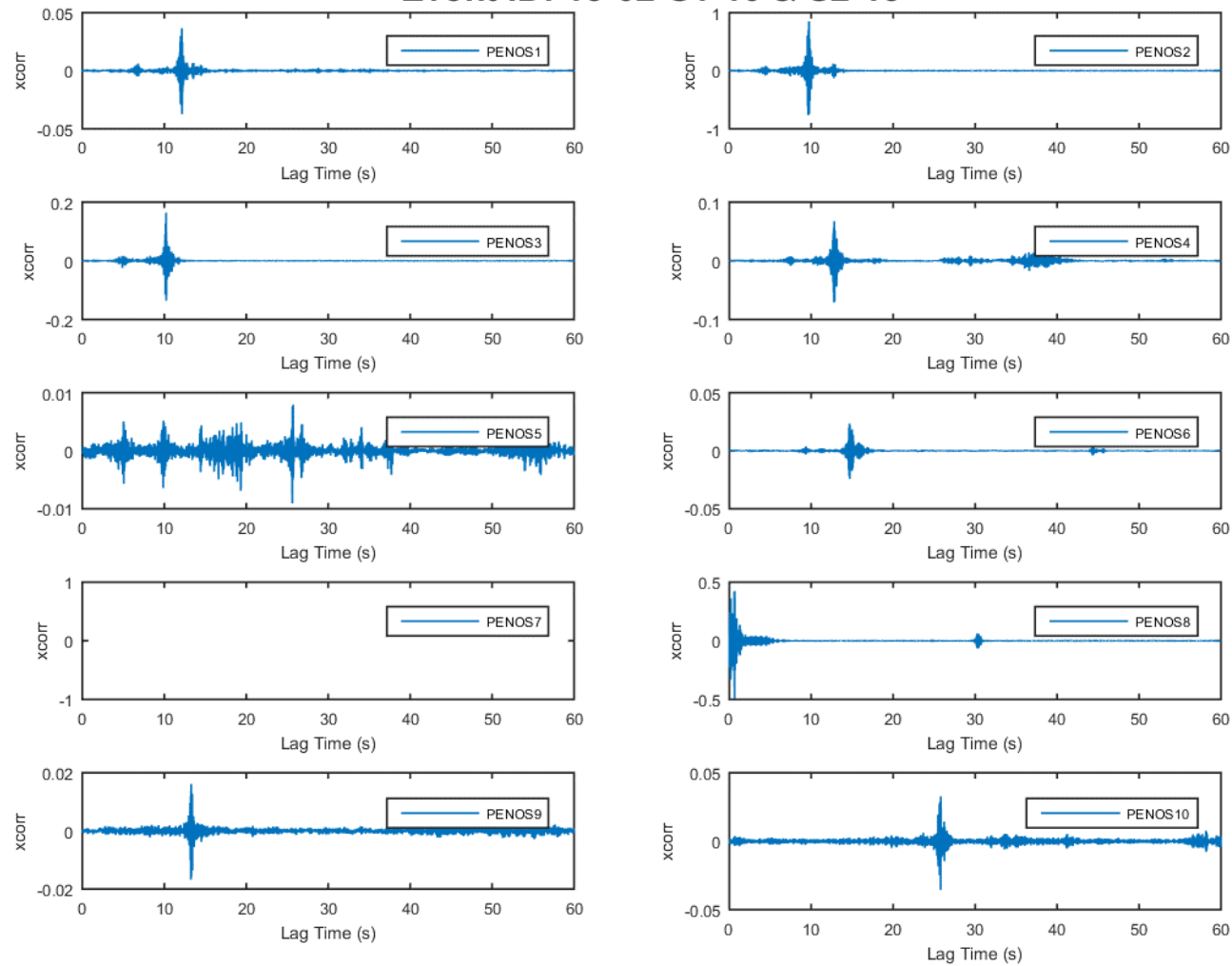


FIGURE 3.207: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S1-10 & S2-13

Peak Particle Velocity - Event ID: 15-02-S1-10 & S2-13

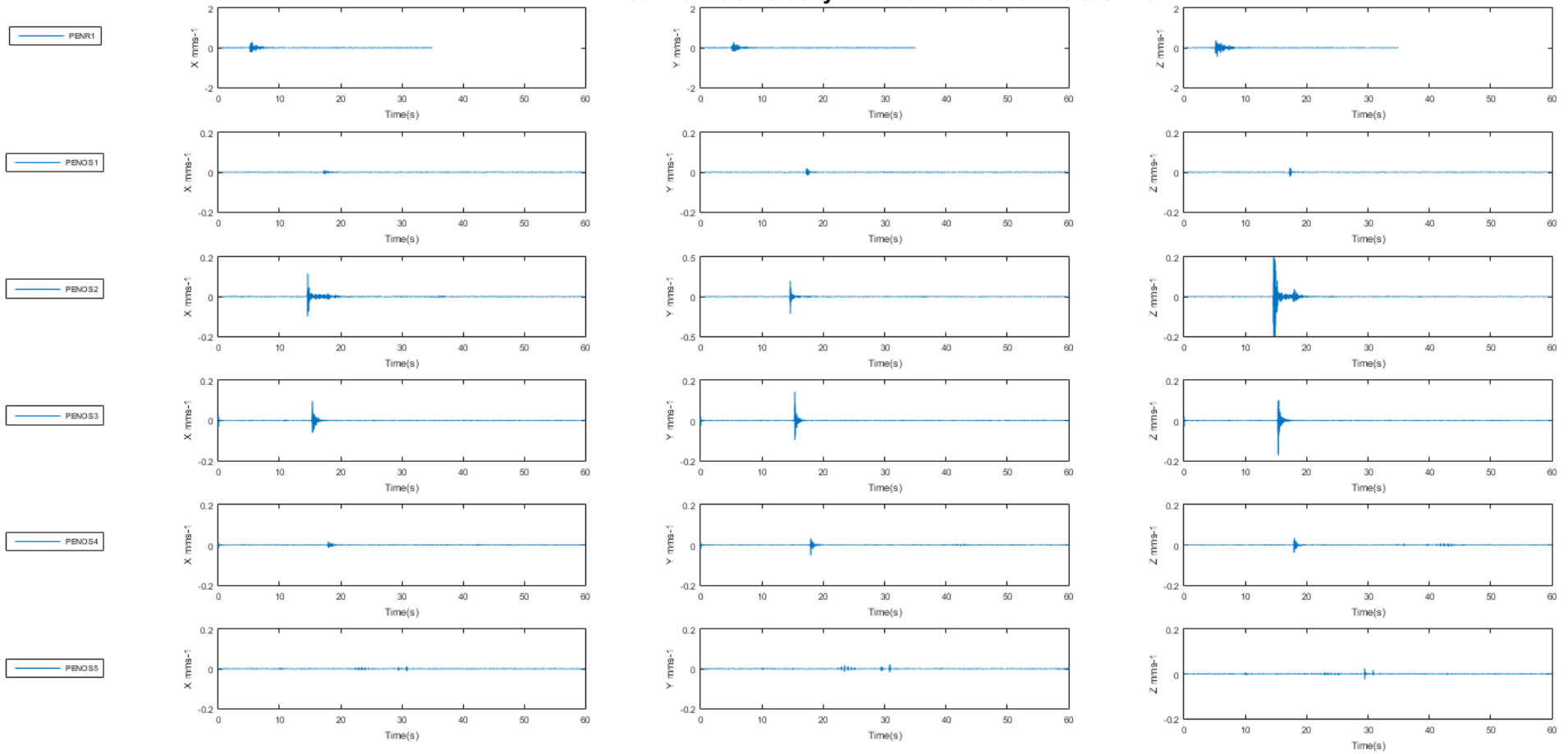


FIGURE 3.208: PEN\_OS 1 - 5 15-02-S1-10 & S2-13

Peak Particle Velocity - Event ID: 15-02-S1-10 & S2-13

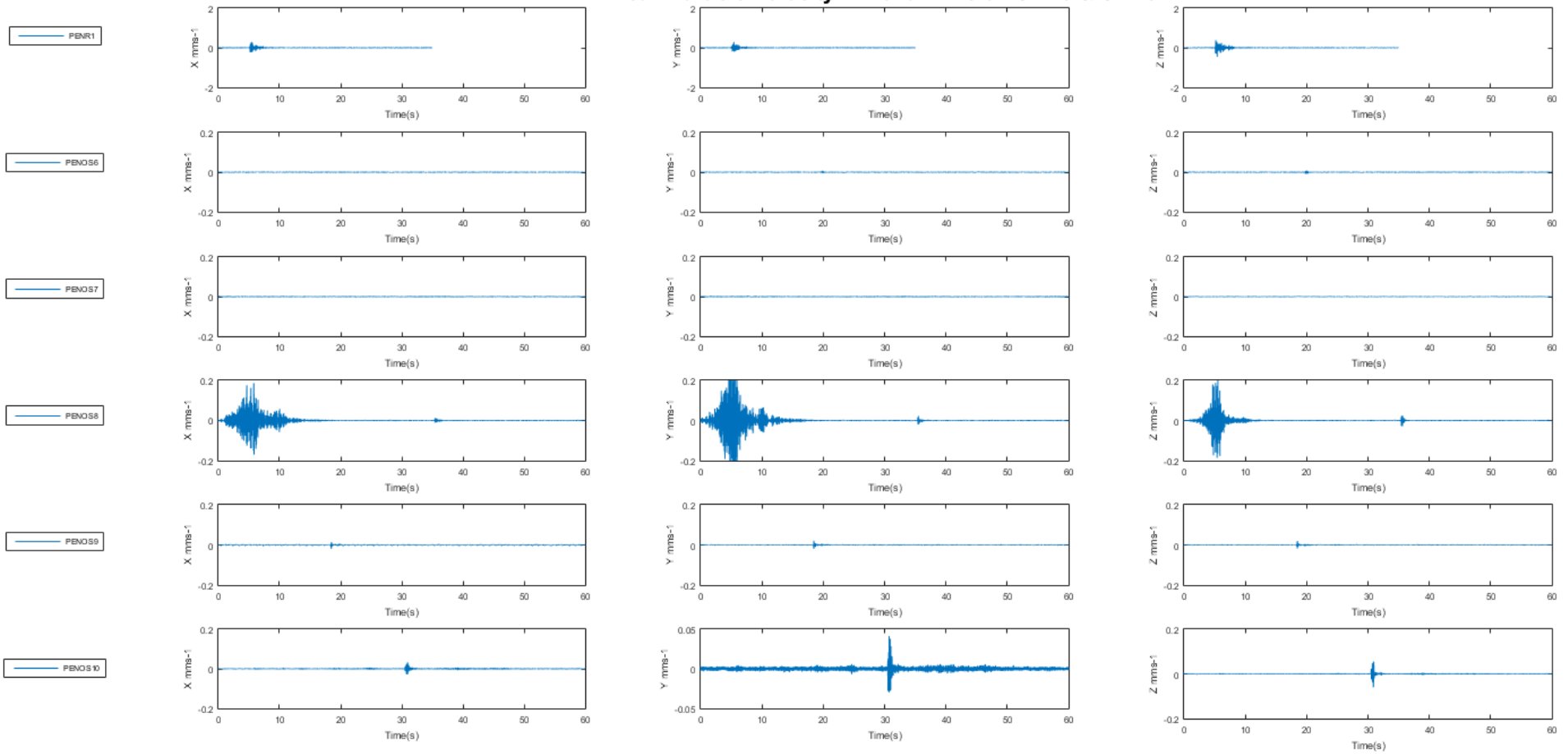
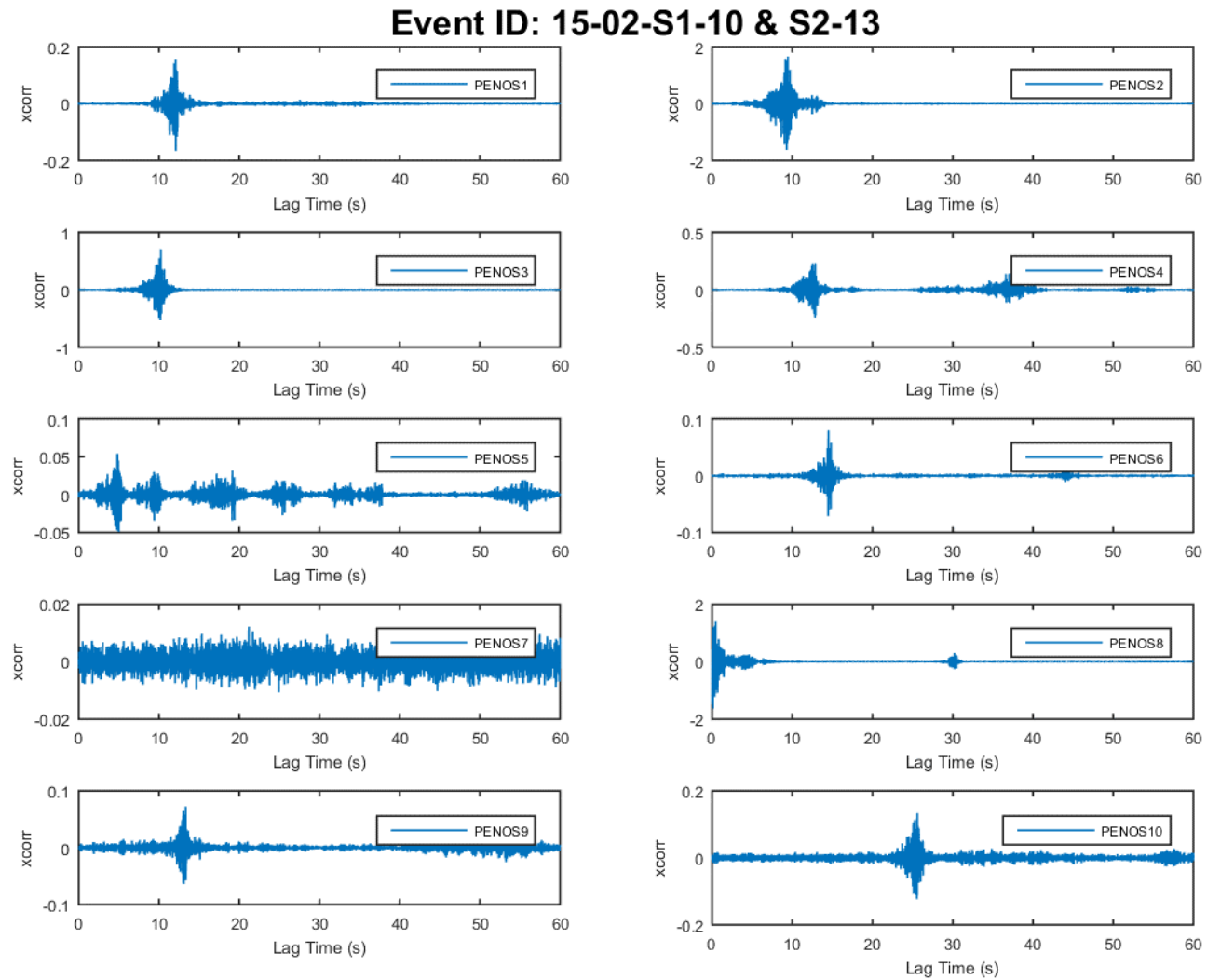


FIGURE 3.209: PEN\_OS 6 - 10 15-02-S1-10 & S2-13





**FIGURE 3.210: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S1-10 & S2-13**

Peak Particle Velocity - Event ID: 15-02-S1-100 & S2-94

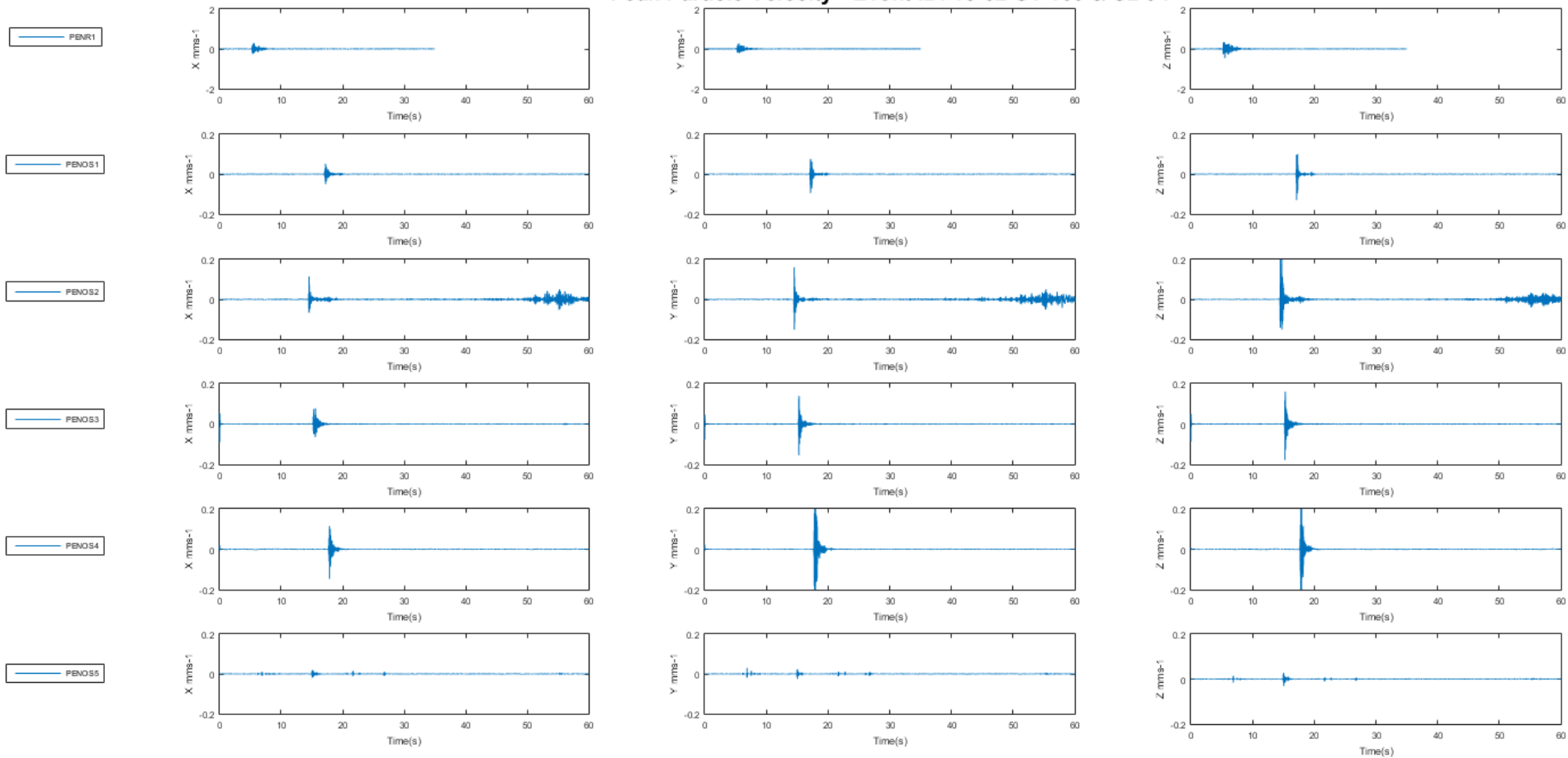


FIGURE 3.211: PEN\_OS 1 - 5 15-02-S1-100 & S2-94

Peak Particle Velocity - Event ID: 15-02-S1-100 & S2-94

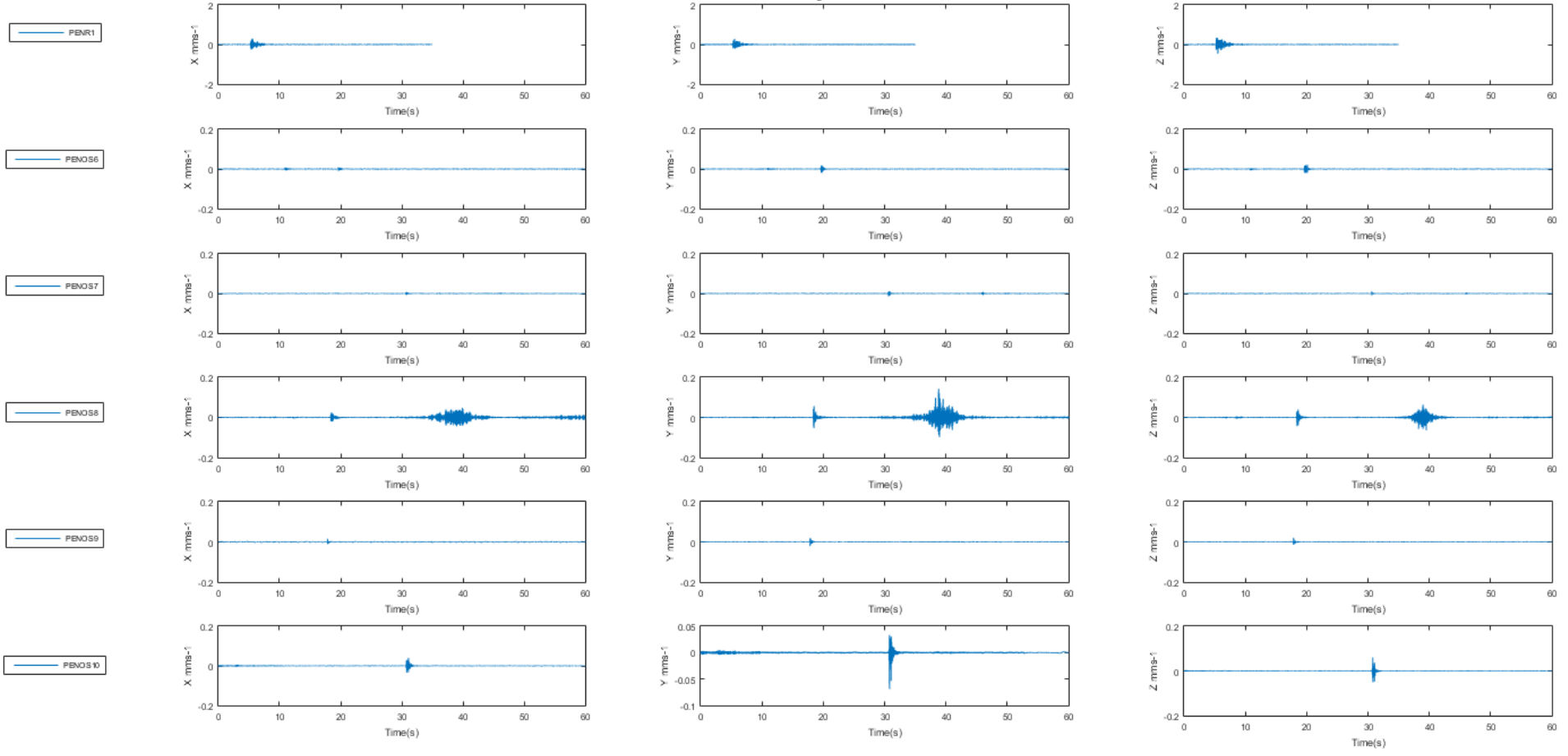


FIGURE 3.212: PEN\_OS 6 - 10 15-02-S1-100 & S2-94

### Event ID: 15-02-S1-100 & S2-94

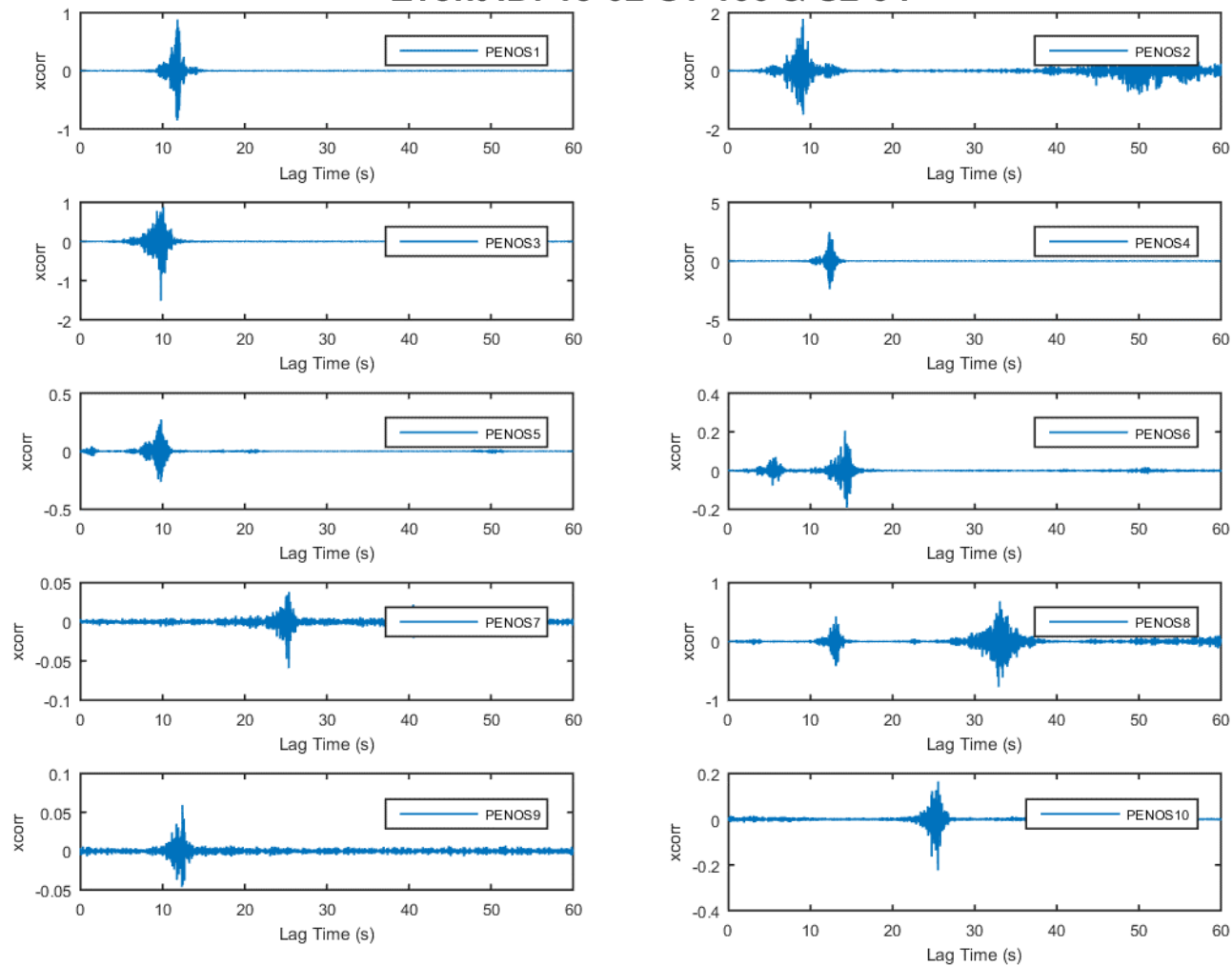


FIGURE 3.213: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S1-100 & S2-94

Peak Particle Velocity - Event ID: 15-02-S1-103 & S2-100

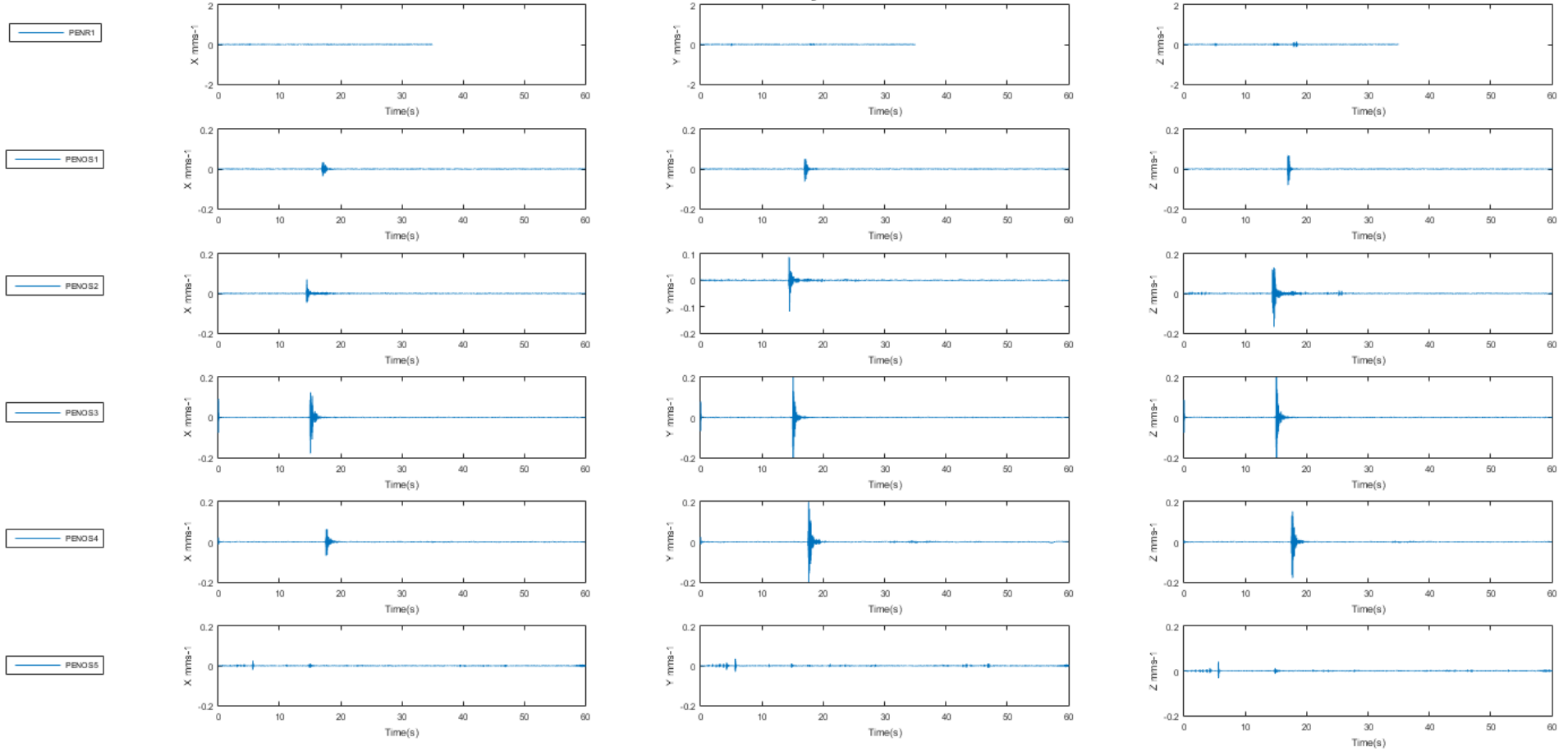


FIGURE 3.214: PEN\_OS 1 - 5 15-02-S1-103 & S2-100

Peak Particle Velocity - Event ID: 15-02-S1-103 & S2-100

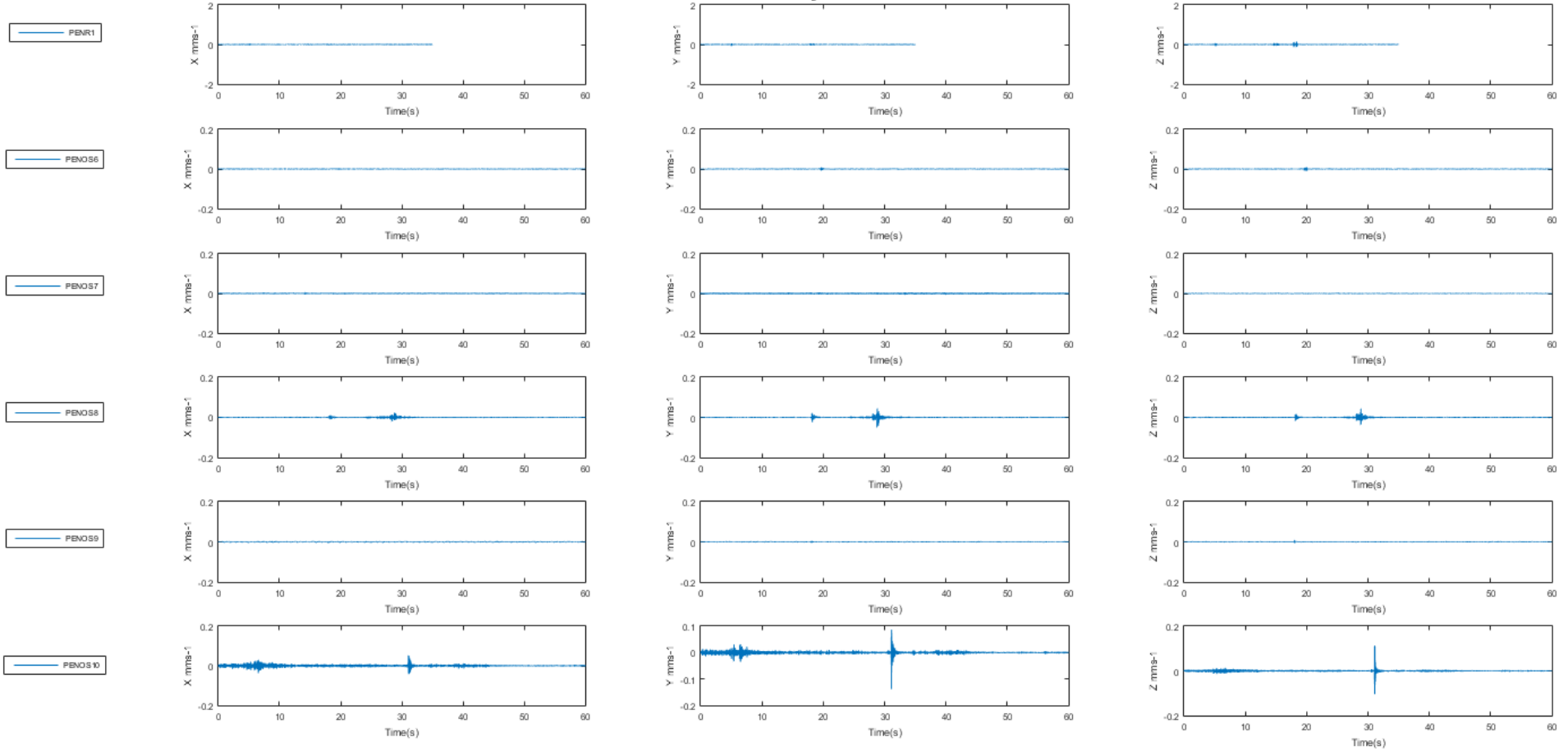


FIGURE 3.215: PEN\_OS 6 - 10 15-02-S1-103 & S2-100

### Event ID: 15-02-S1-103 & S2-100

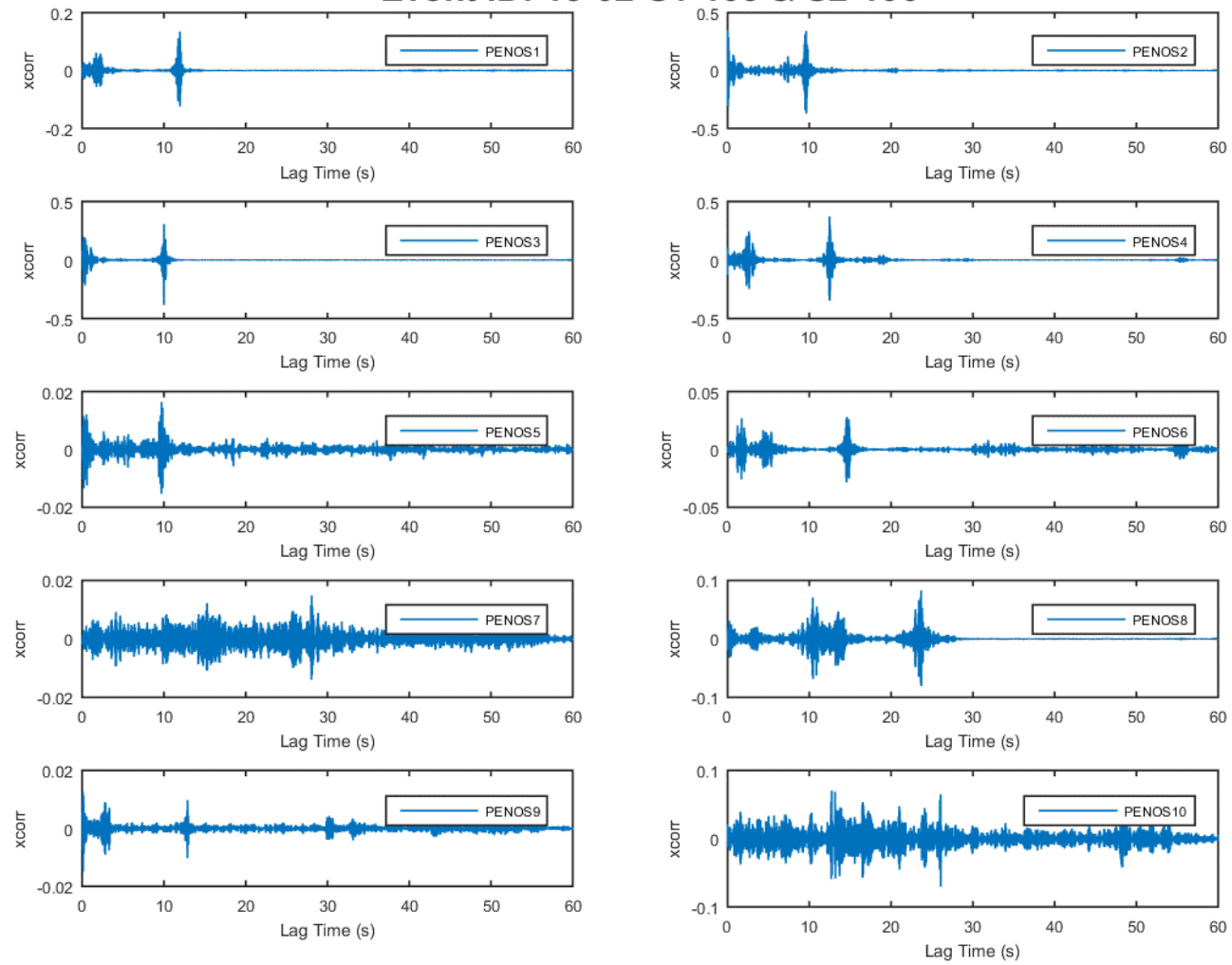


FIGURE 3.216: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S1-103 & S2-100

Peak Particle Velocity - Event ID: 15-02-S1-103 & S2-100

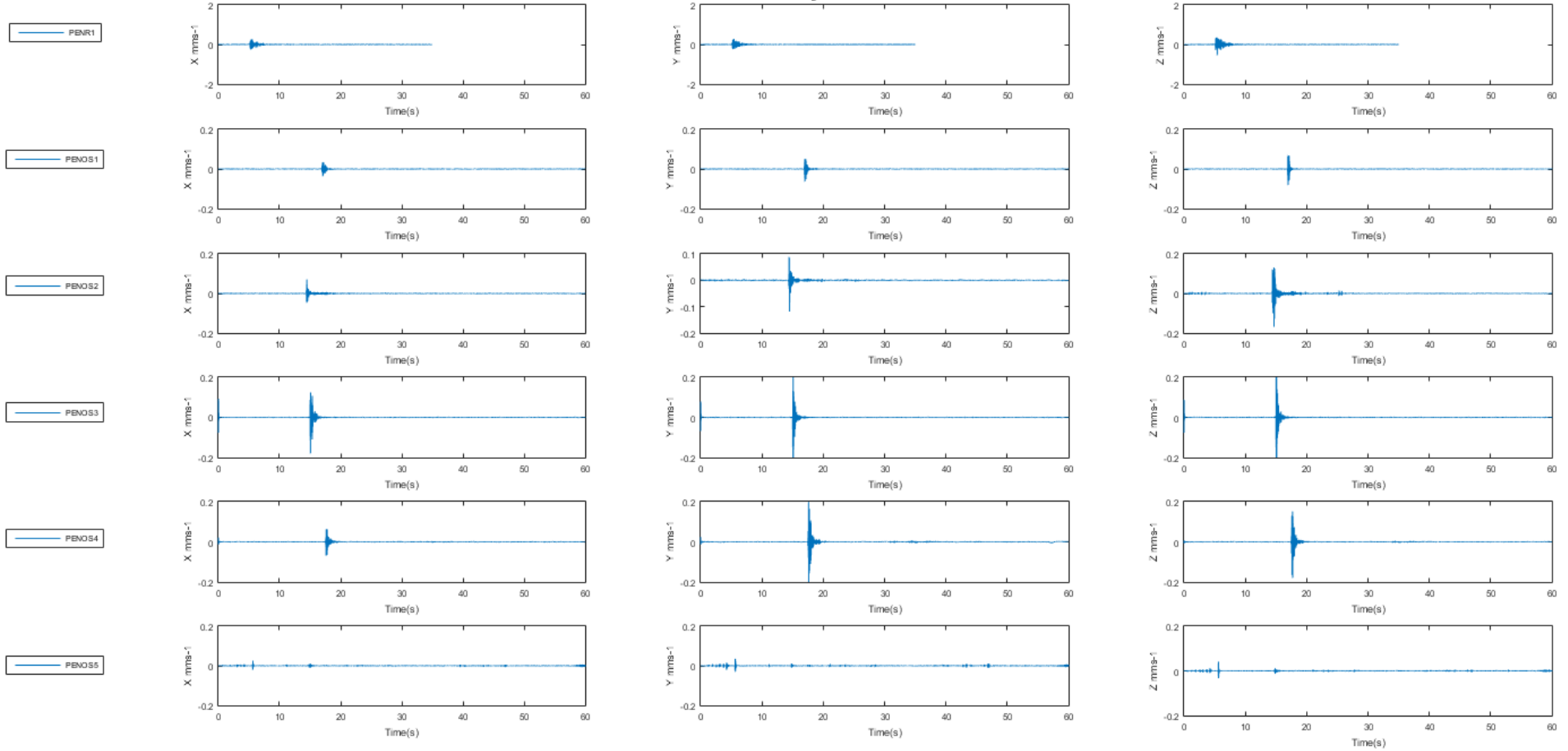


FIGURE 3.217: PEN\_OS 1 - 5 15-02-S1-103 & S2-100



Peak Particle Velocity - Event ID: 15-02-S1-103 & S2-100

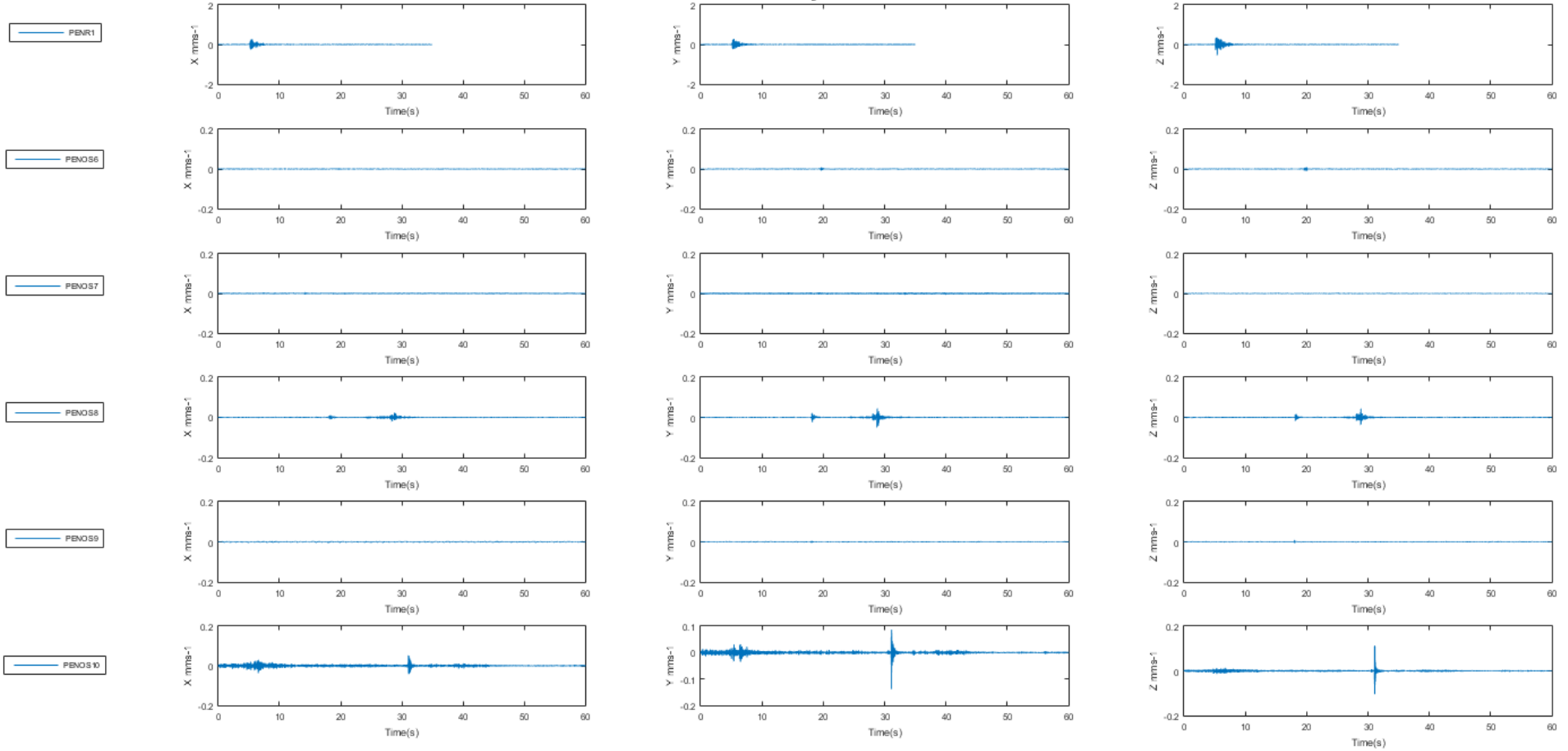


FIGURE 3.218: PEN\_OS 6 - 10 15-02-S1-103 & S2-100

### Event ID: 15-02-S1-103 & S2-100

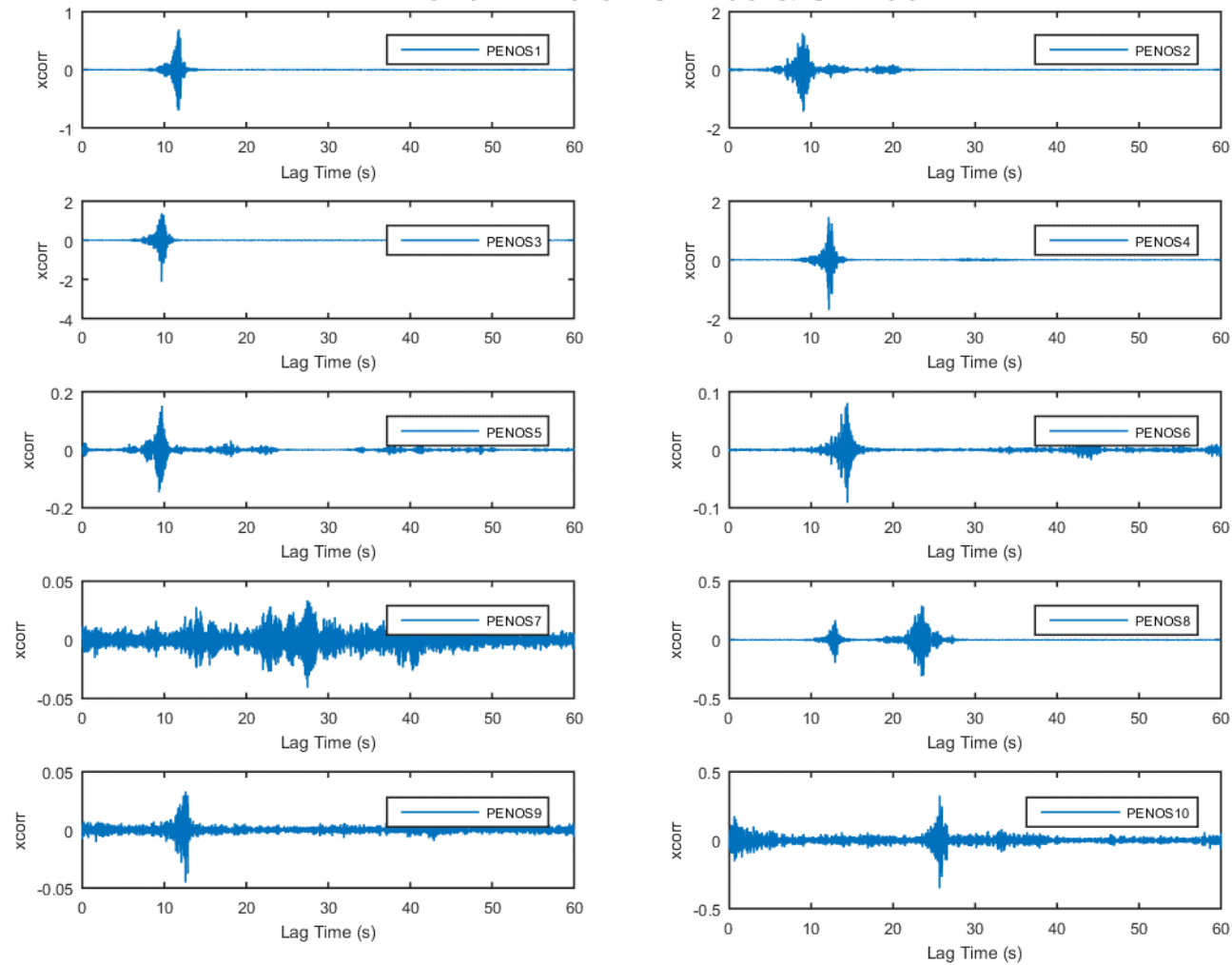
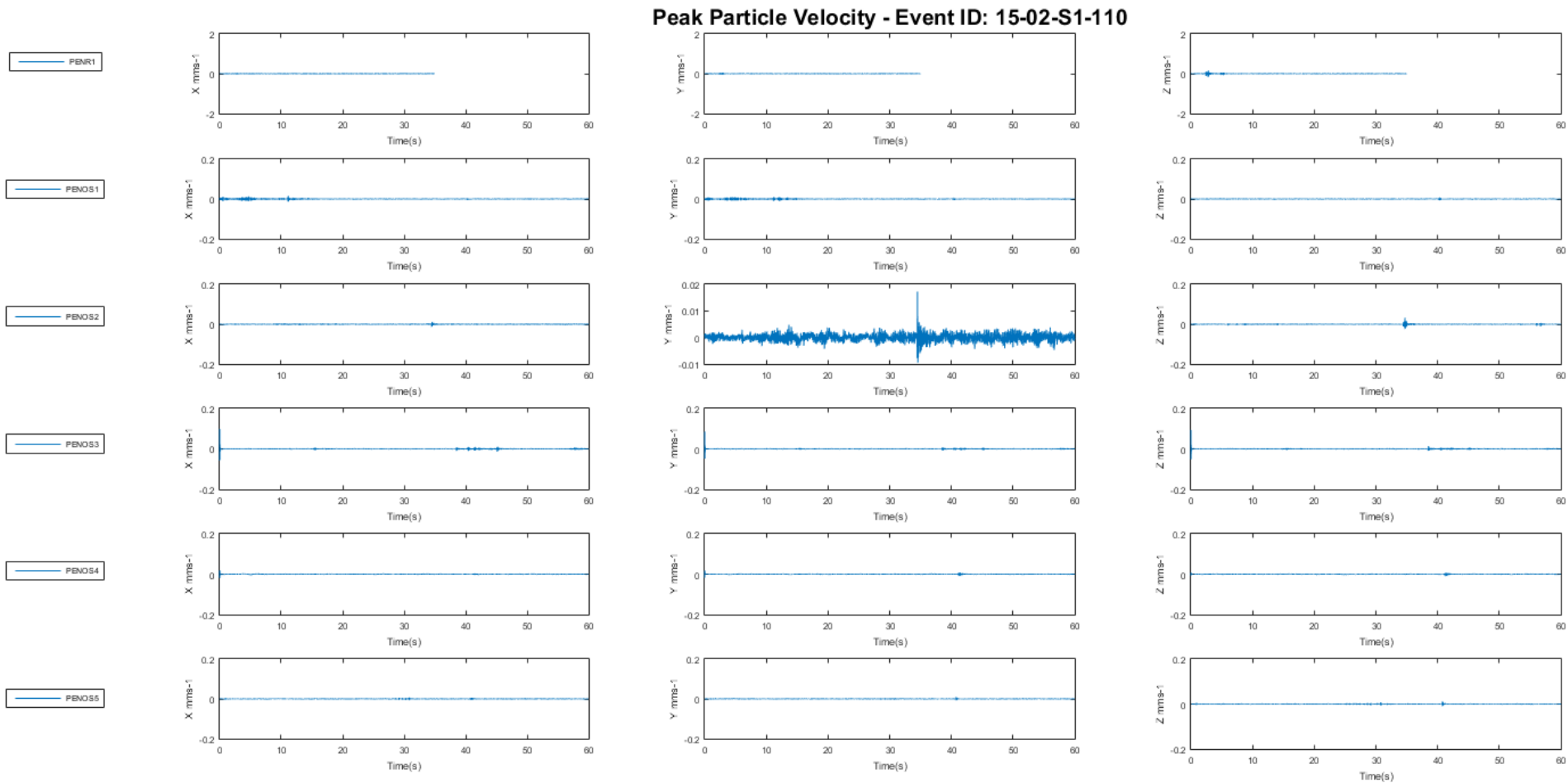


FIGURE 3.219: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S1-103 & S2-100



**FIGURE 3.220: PEN\_OS 1 - 5 15-02-S1-110**

Peak Particle Velocity - Event ID: 15-02-S1-110

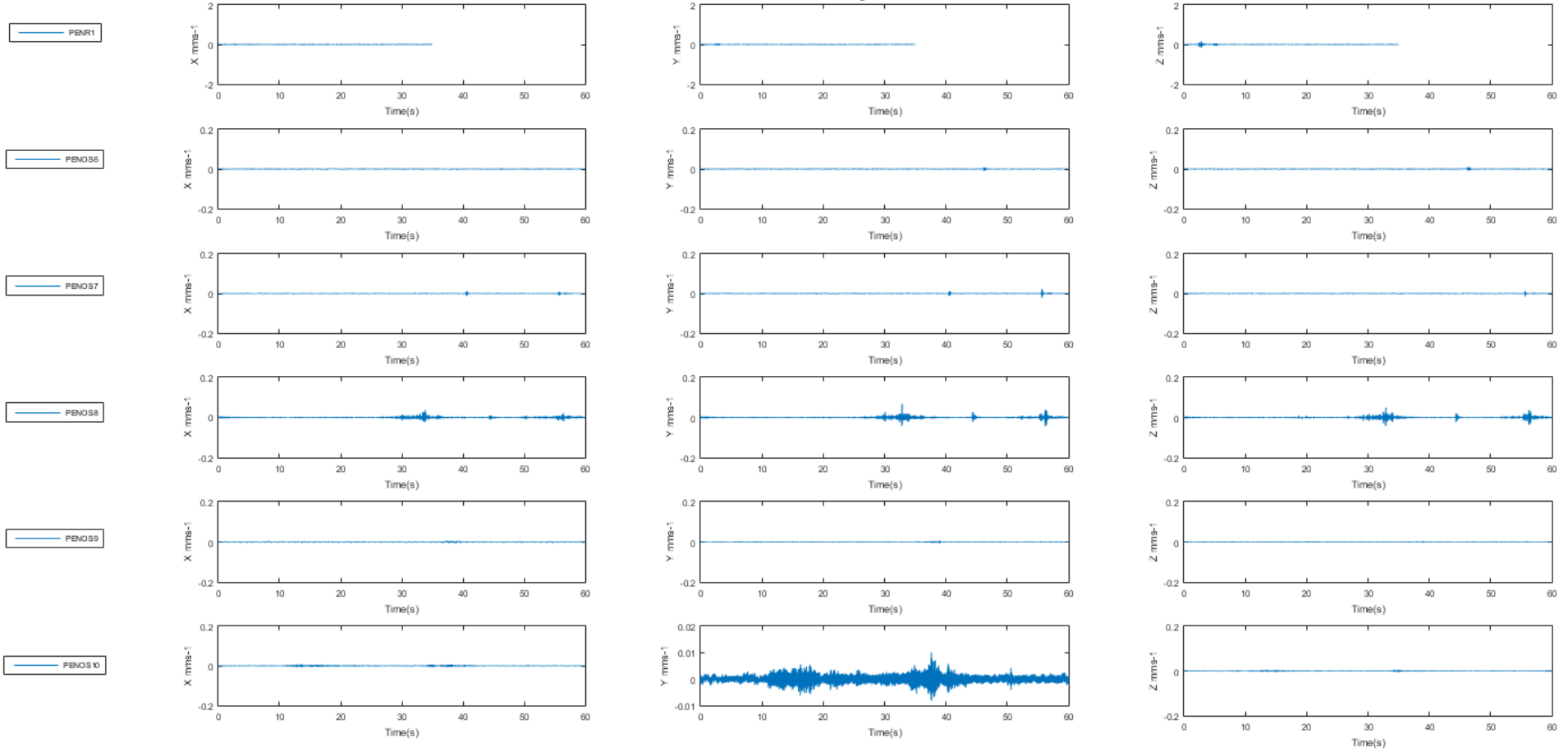


FIGURE 3.221: PEN\_OS 6 - 10 15-02-S1-110

### Event ID: 15-02-S1-110

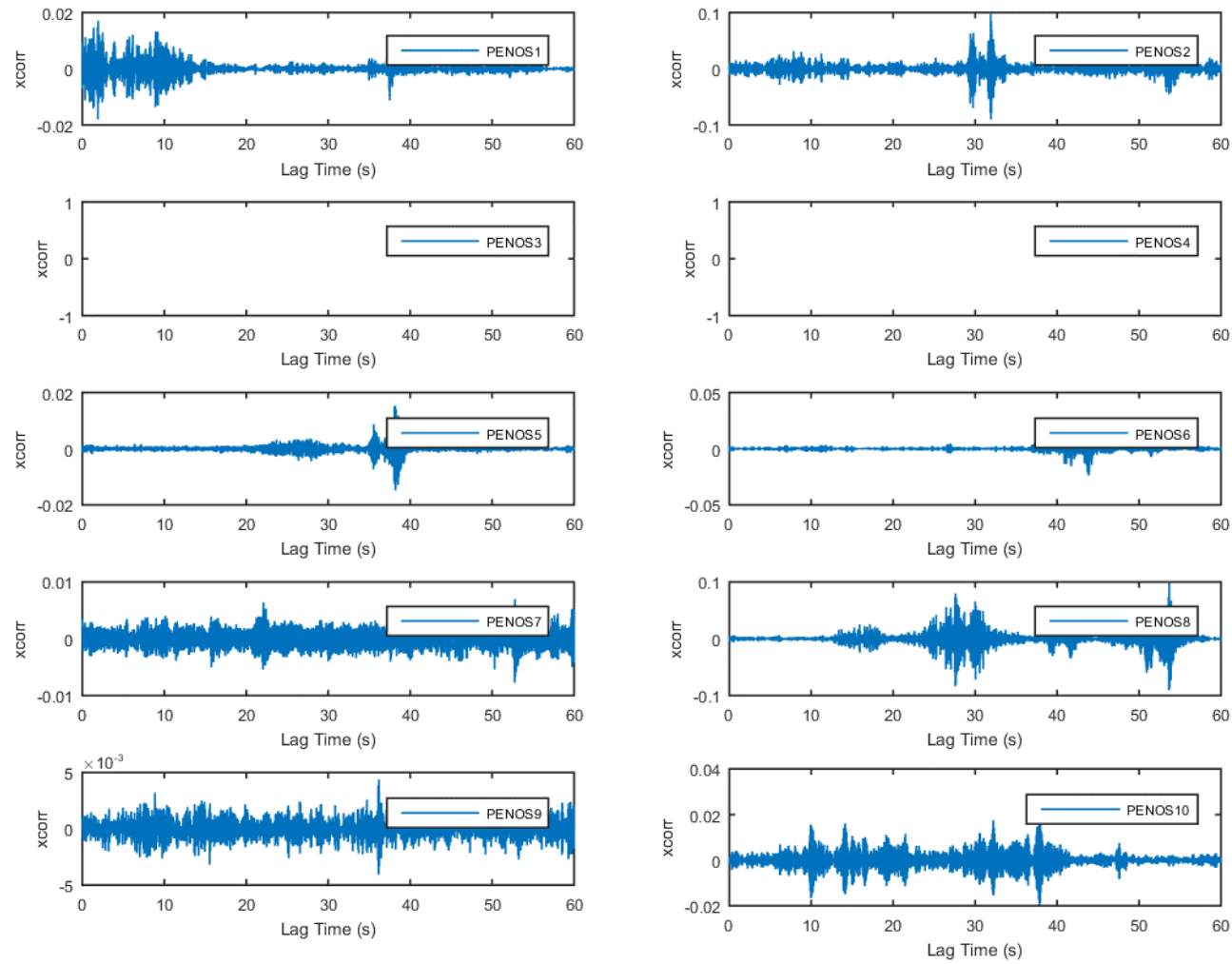
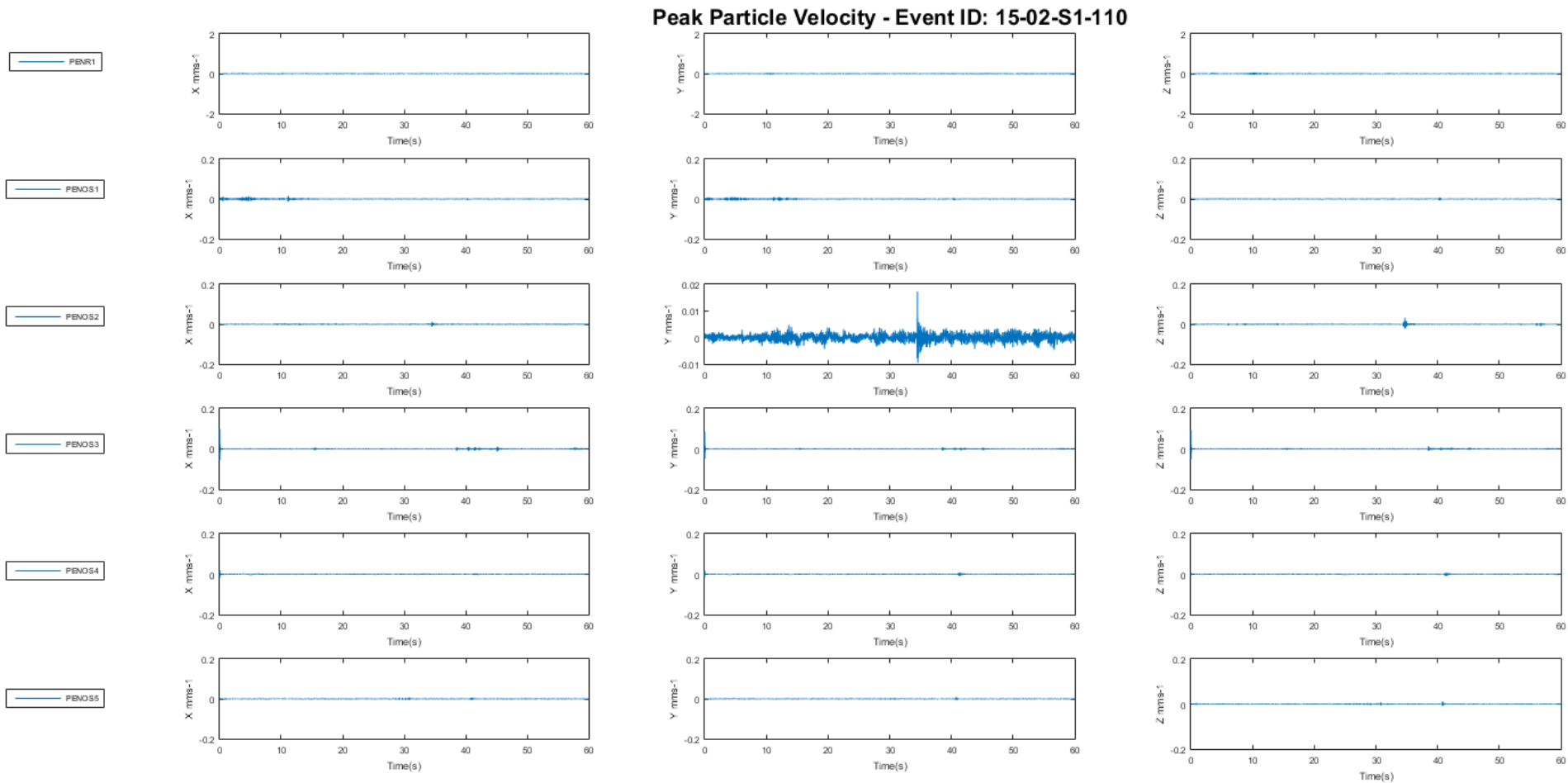


FIGURE 3.222: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S1-110



**FIGURE 3.223: PEN\_OS 1 - 5 15-02-S1-110**

Peak Particle Velocity - Event ID: 15-02-S1-110

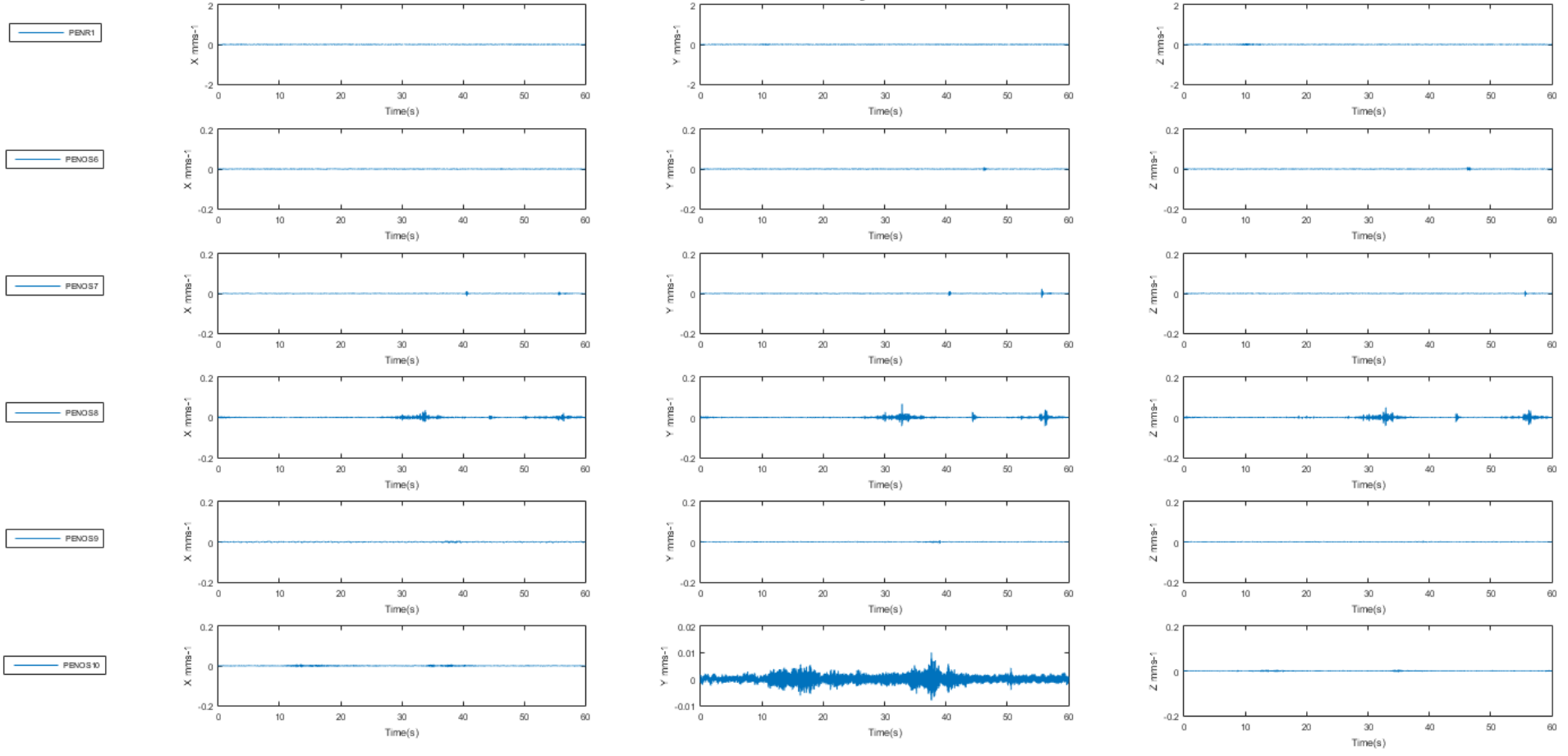


FIGURE 3.224: PEN\_OS 6 - 10 15-02-S1-110

### Event ID: 15-02-S1-110

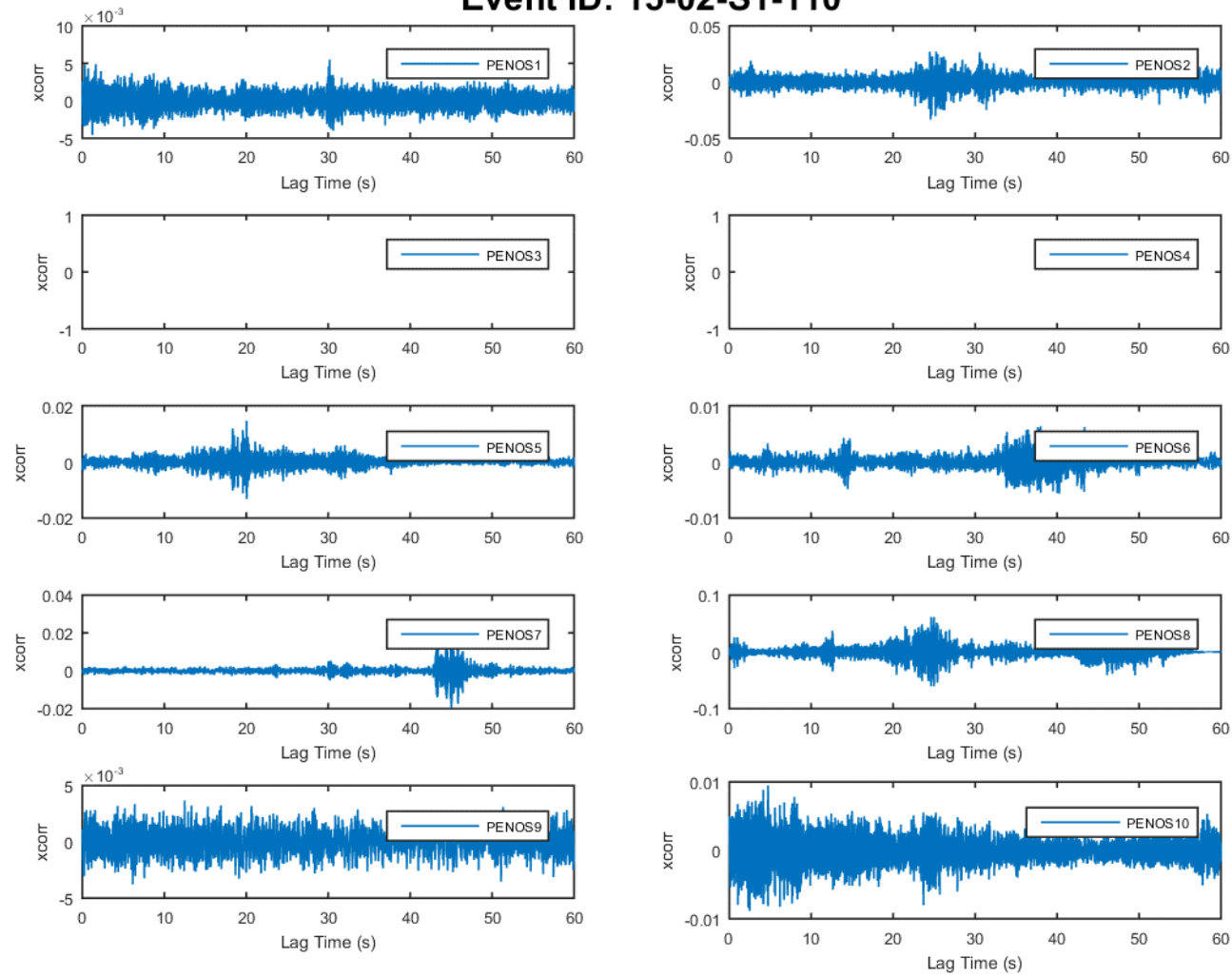


FIGURE 3.225: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S1-110



Peak Particle Velocity - Event ID: 15-02-S1-12 & S2-19

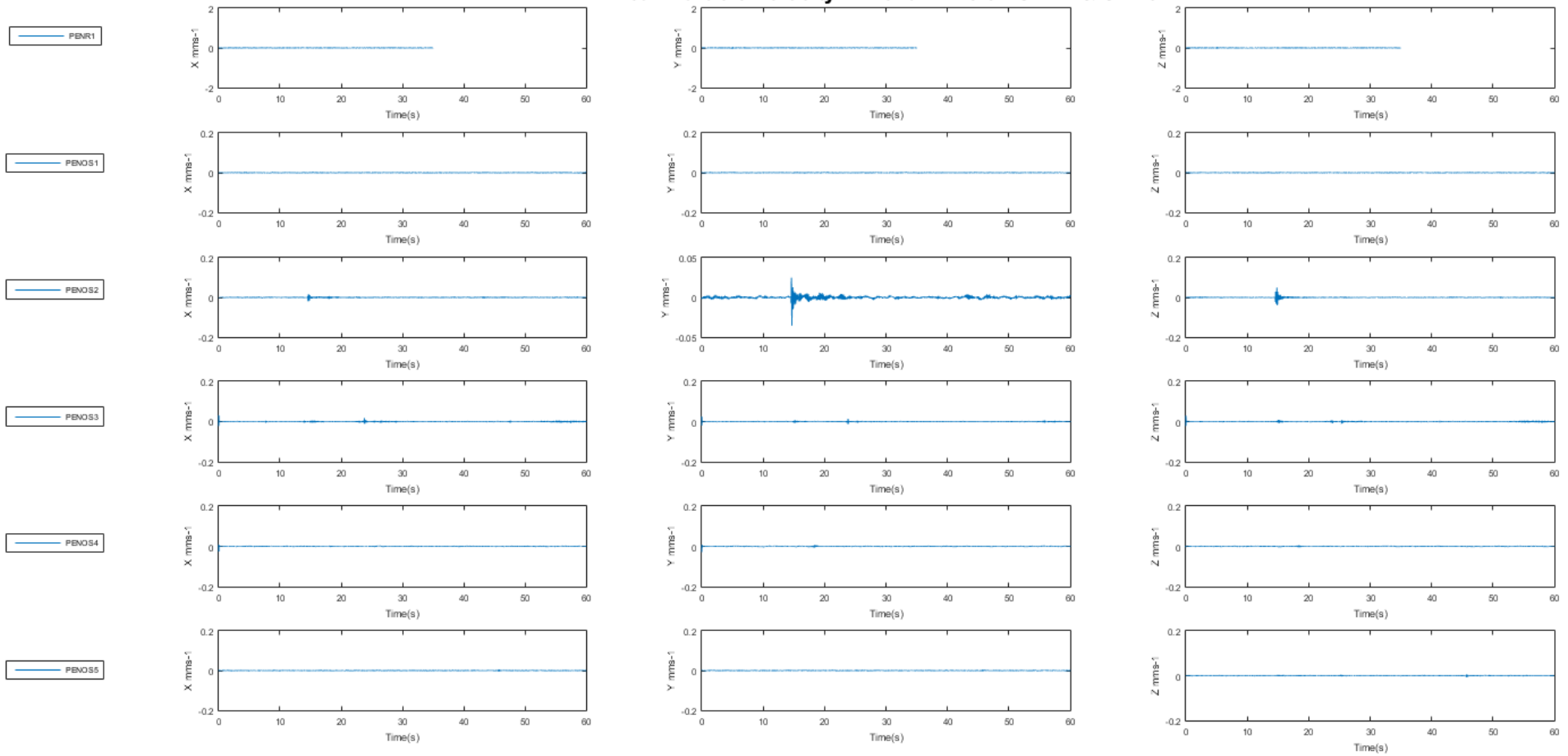


FIGURE 3.226: PEN\_OS 1 - 5 15-02-S1-12 & S2-19

Peak Particle Velocity - Event ID: 15-02-S1-12 & S2-19

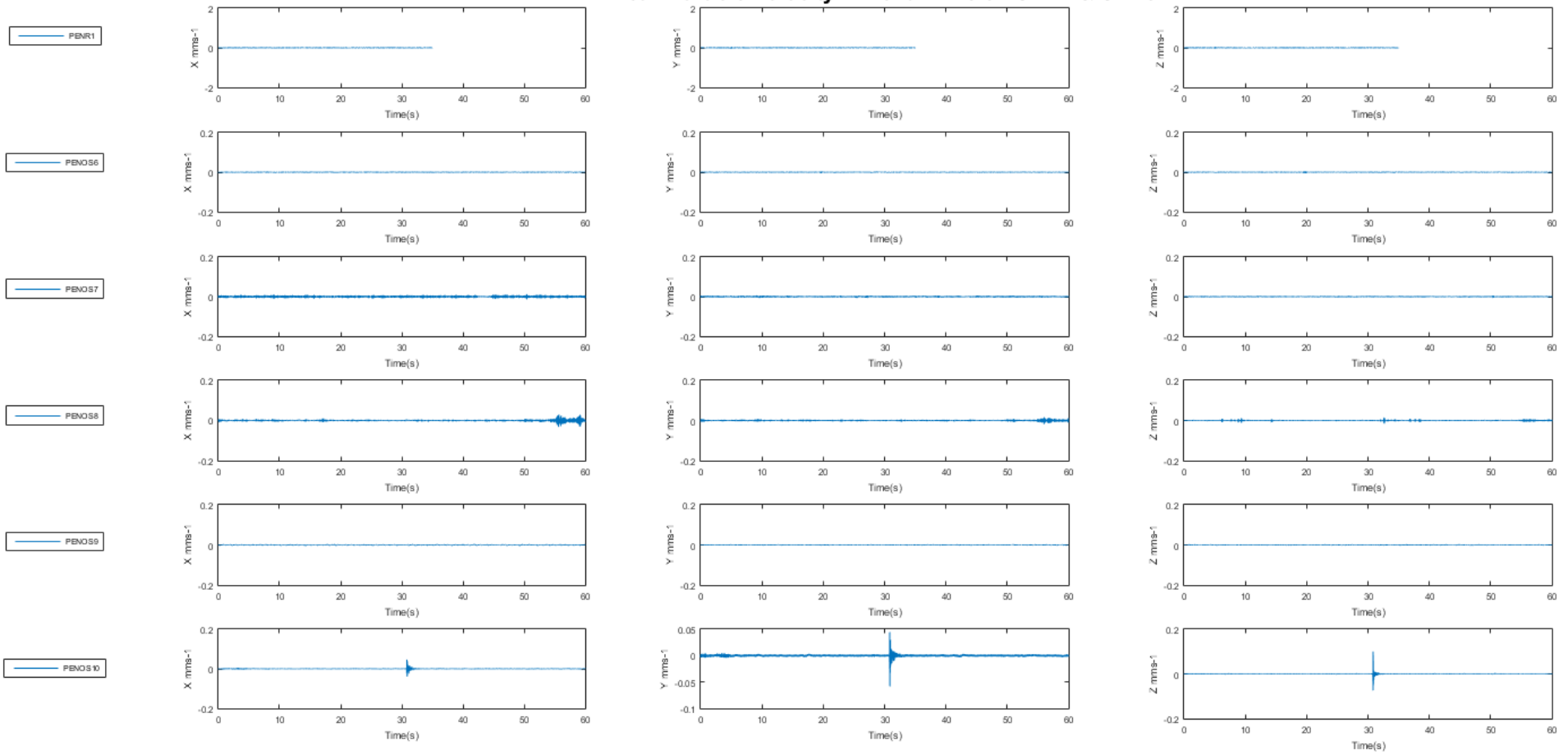
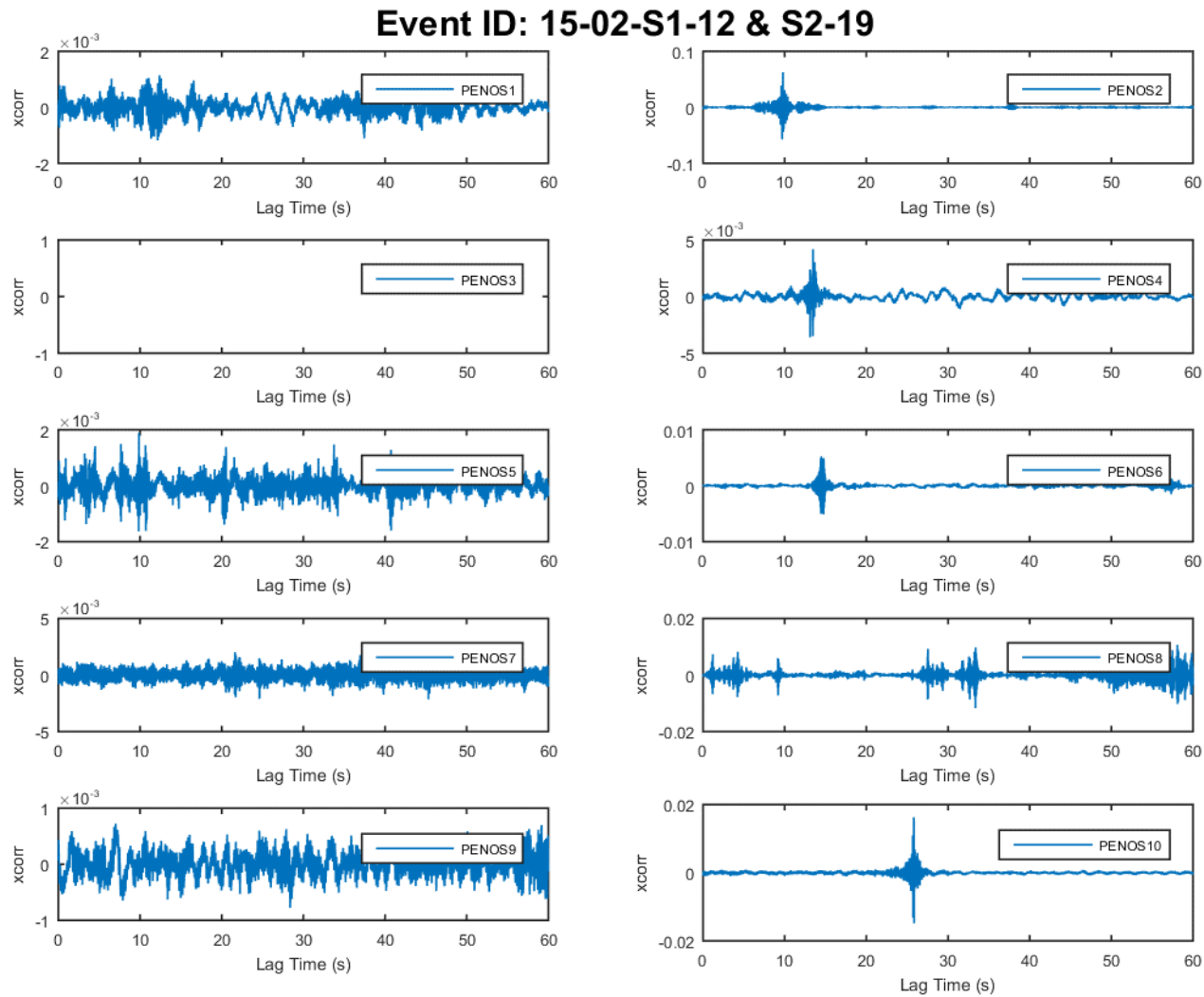


FIGURE 3.227: PEN\_OS 6 - 10 15-02-S1-12 & S2-19



**FIGURE 3.228: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S1-12 & S2-19**

Peak Particle Velocity - Event ID: 15-02-S1-12 & S2-19

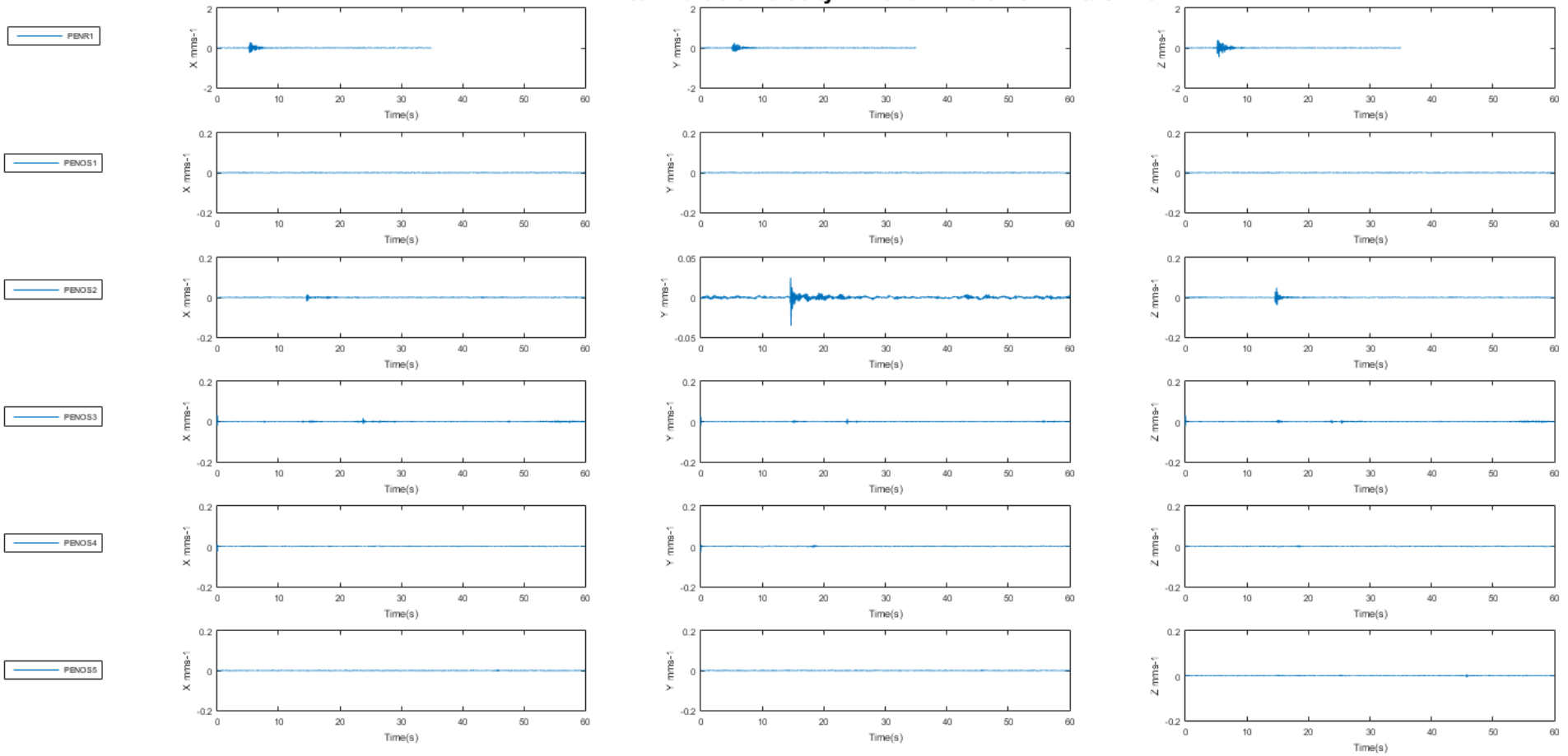


FIGURE 3.229: PEN\_OS 1 - 5 15-02-S1-12 & S2-19

Peak Particle Velocity - Event ID: 15-02-S1-12 & S2-19

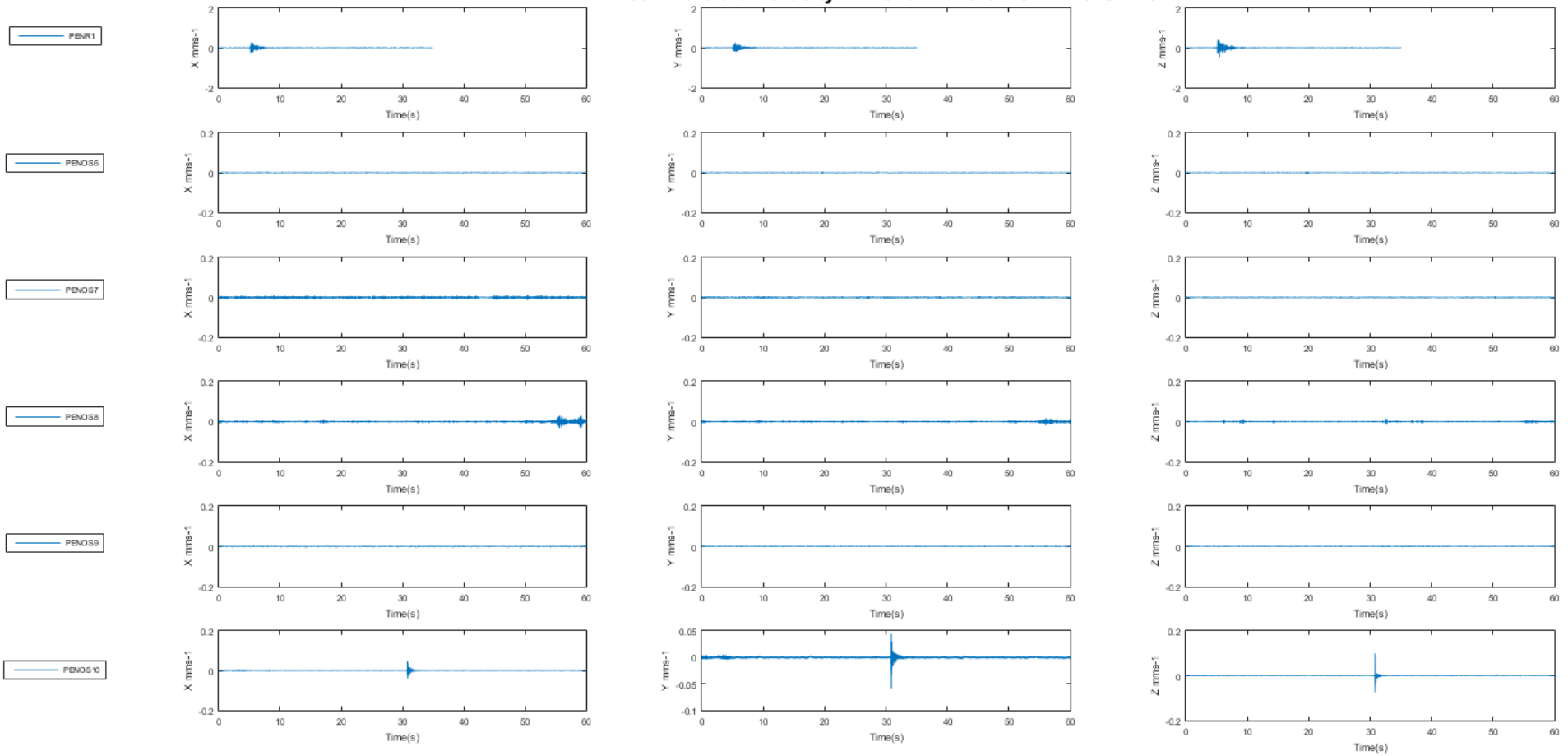
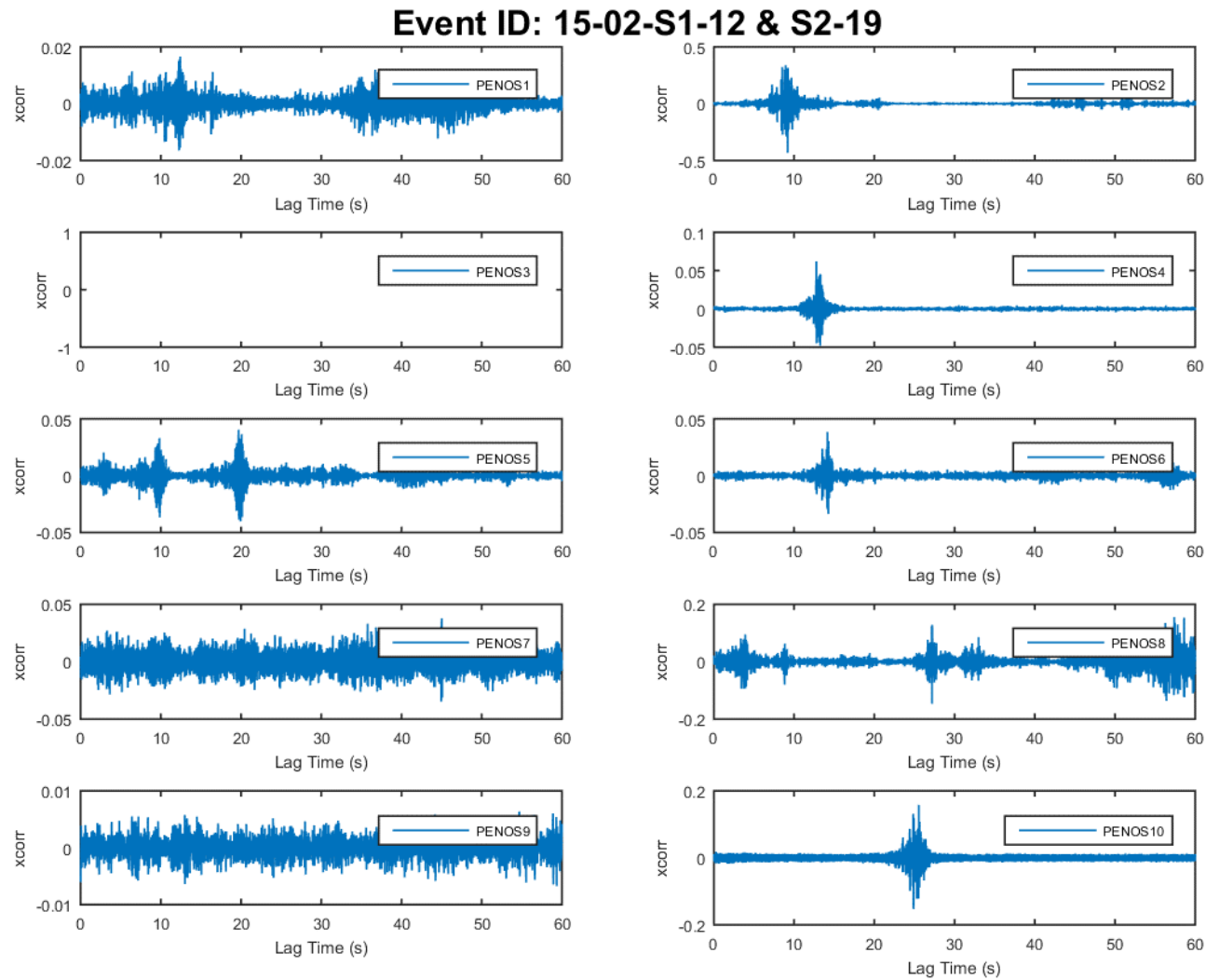


FIGURE 3.230: PEN\_OS 6 - 10 15-02-S1-12 & S2-19



**FIGURE 3.231: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S1-12 & S2-19**

Peak Particle Velocity - Event ID: 15-02-S1-13 & S2-22

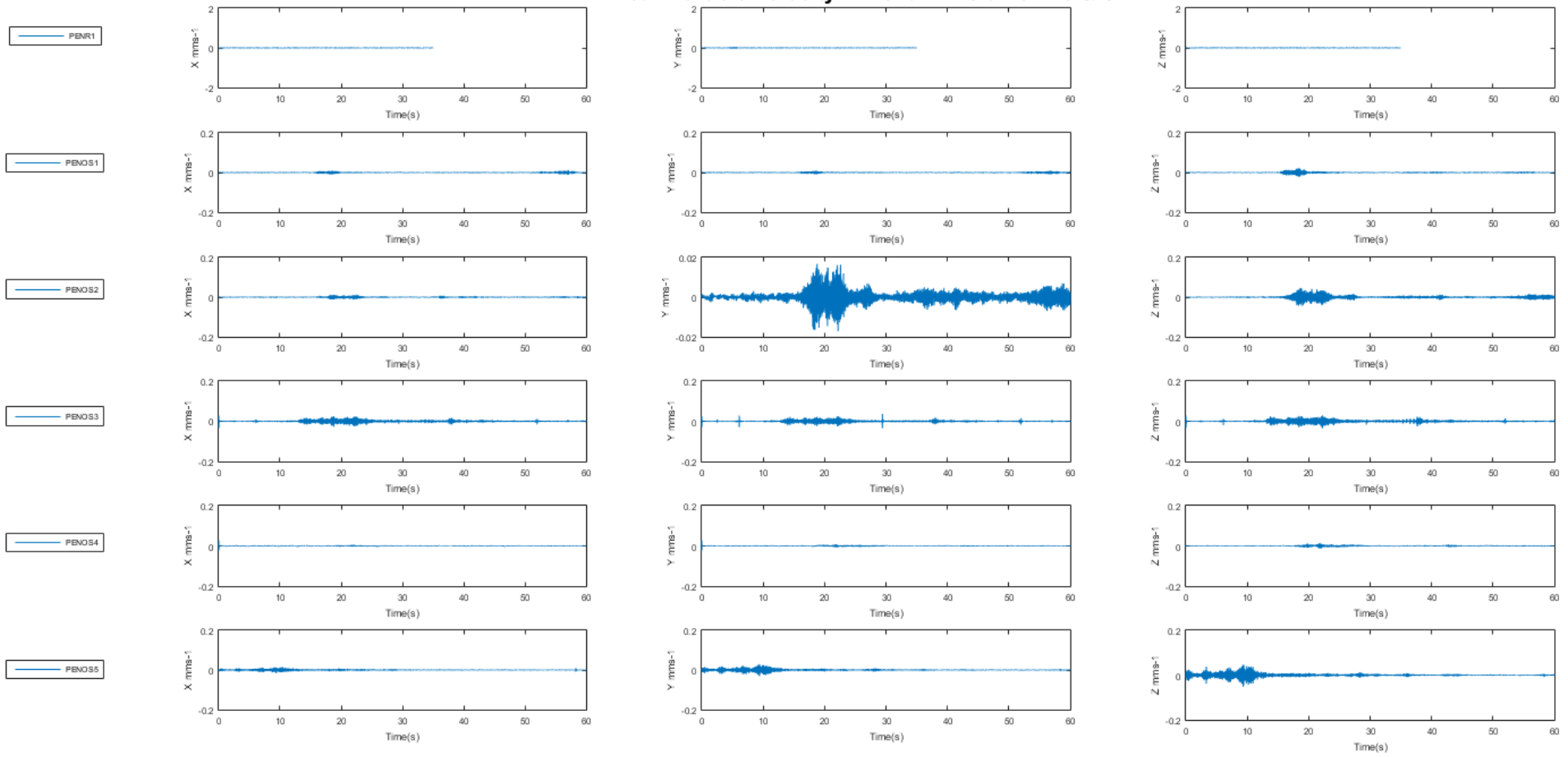


FIGURE 3.232: PEN\_OS 1 - 5 15-02-S1-13 & S2-22

Peak Particle Velocity - Event ID: 15-02-S1-13 & S2-22

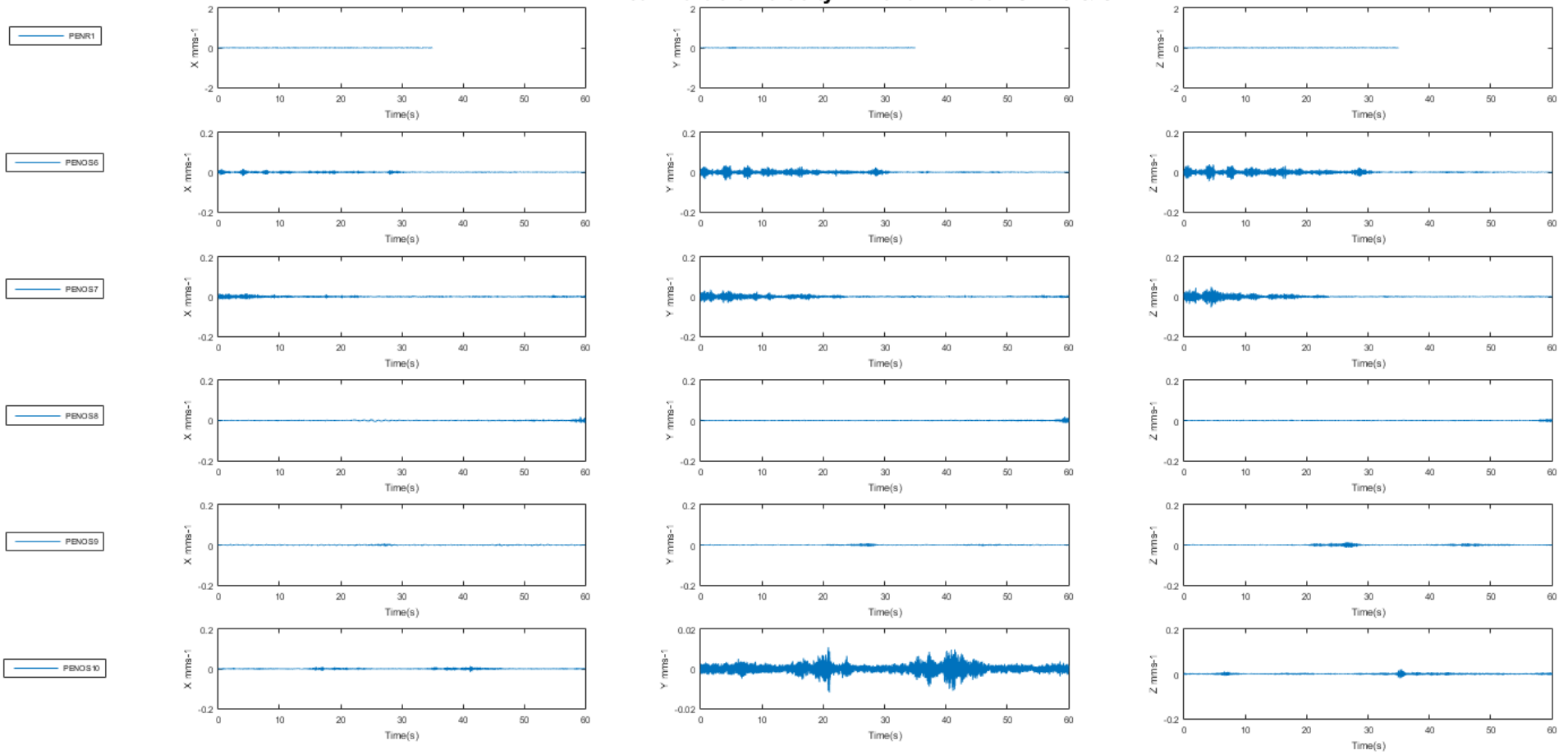


FIGURE 3.233: PEN\_OS 6 - 10 15-02-S1-13 & S2-22



### Event ID: 15-02-S1-13 & S2-22

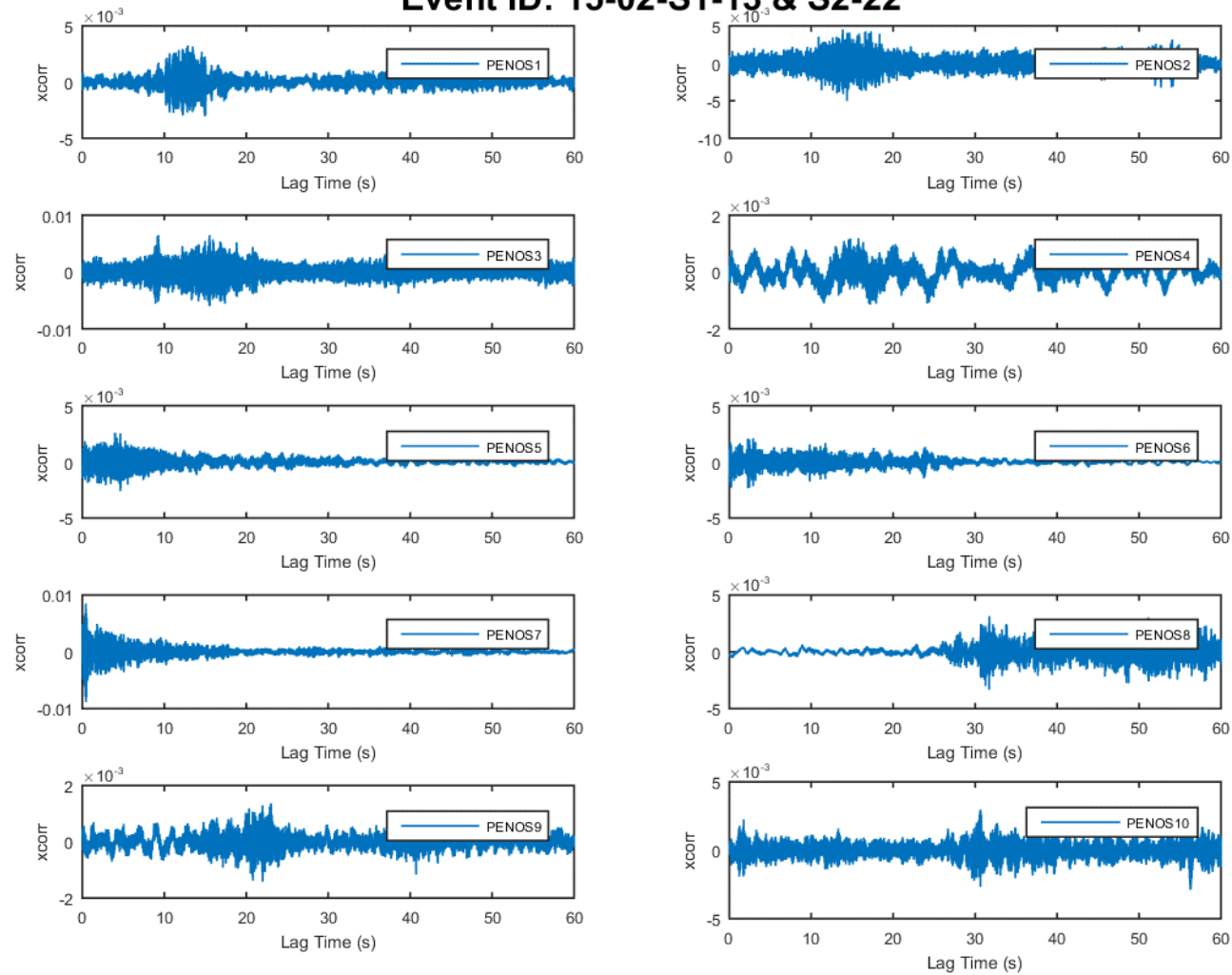


FIGURE 3.234: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S1-13 & S2-22

Peak Particle Velocity - Event ID: 15-02-S1-13 & S2-22

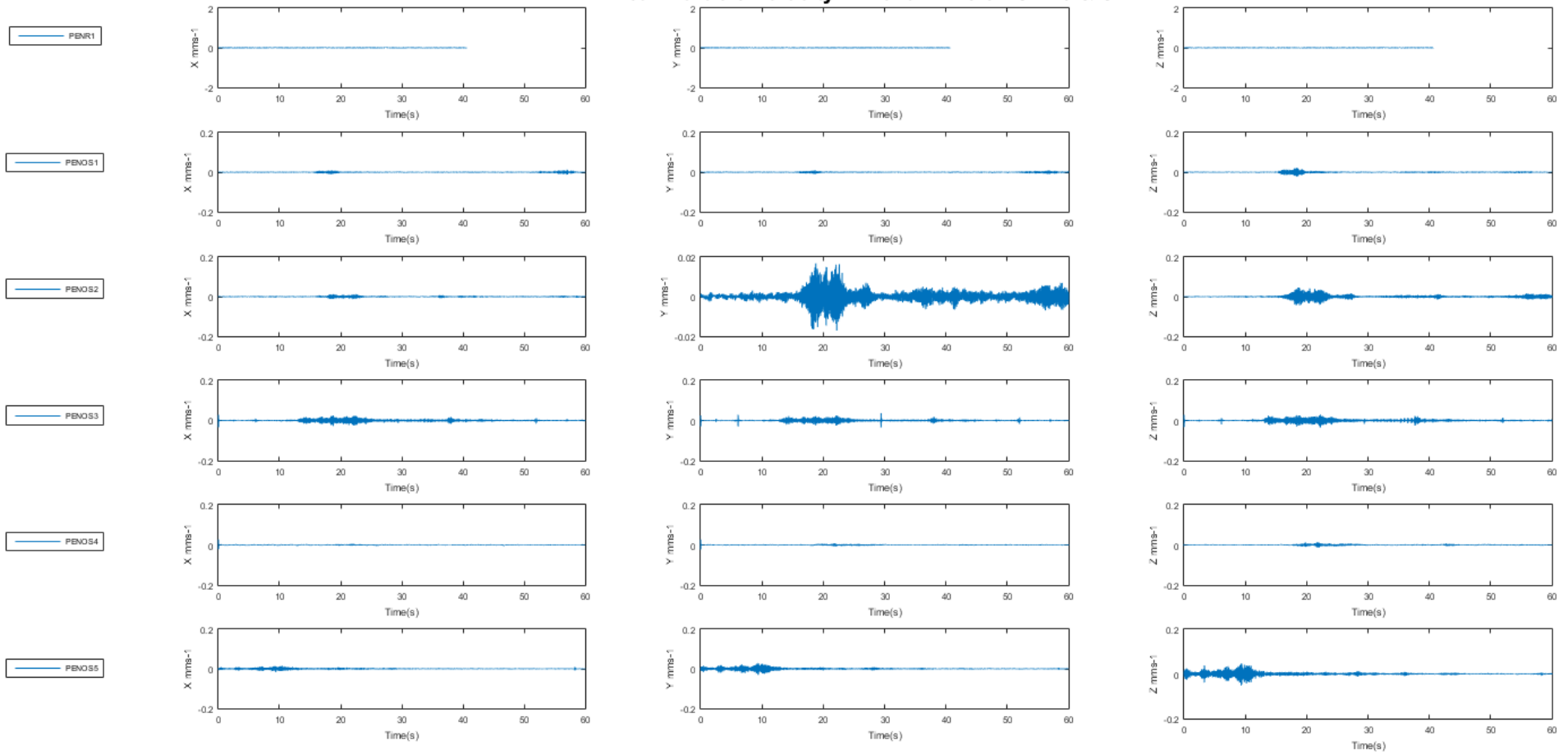


FIGURE 3.235: PEN\_OS 1 - 5 15-02-S1-13 & S2-22

Peak Particle Velocity - Event ID: 15-02-S1-13 & S2-22

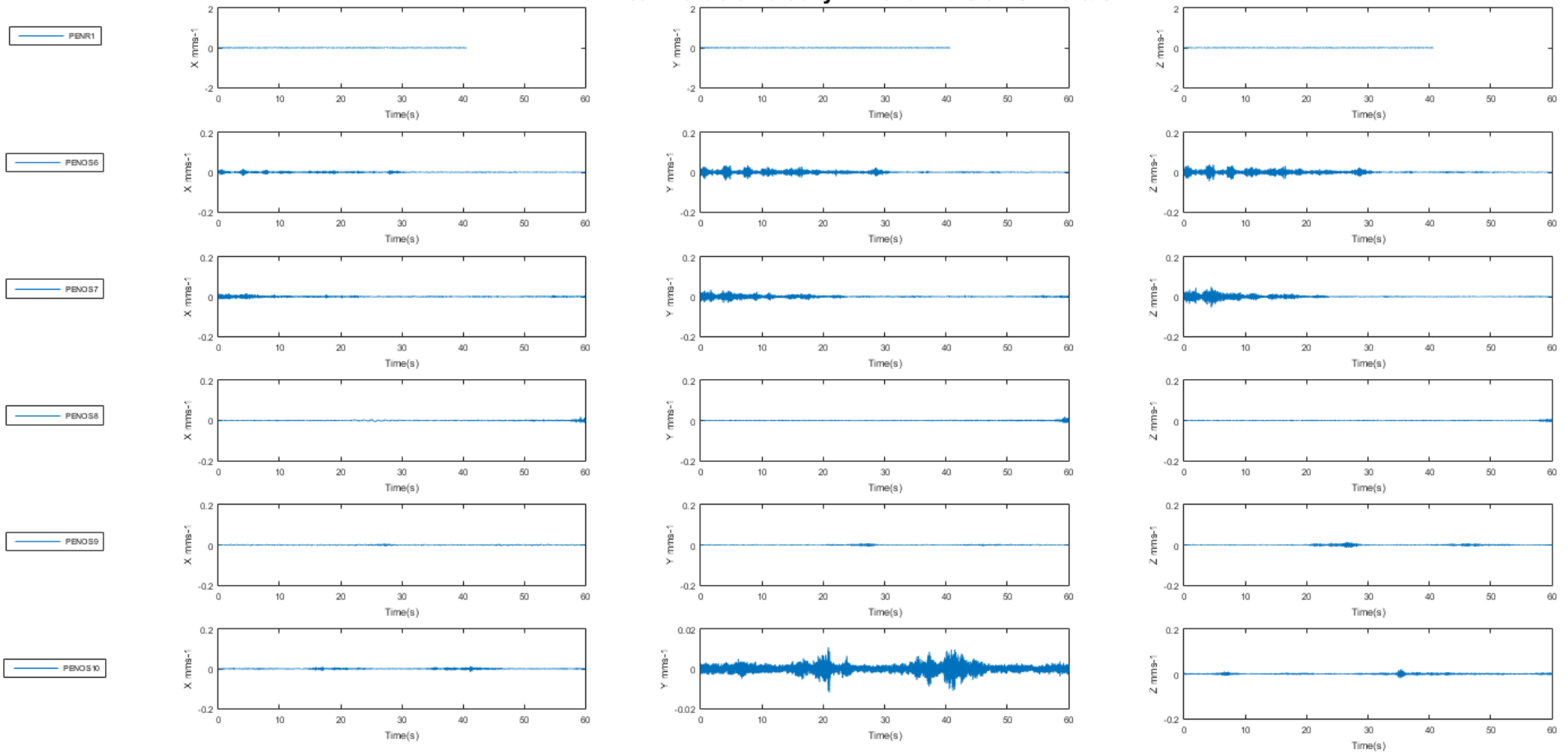
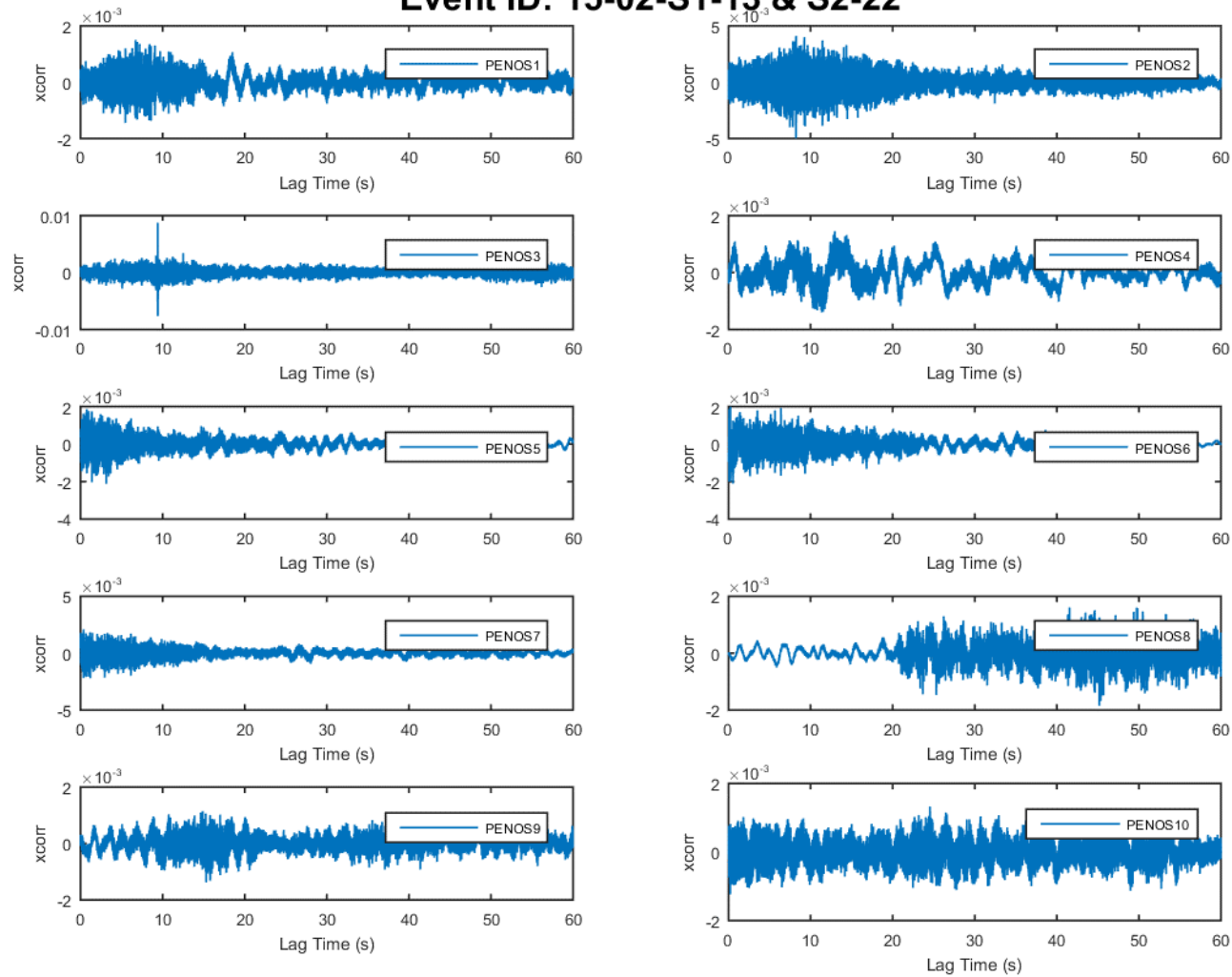


FIGURE 3.236: PEN\_OS 6 - 10 15-02-S1-13 & S2-22

### Event ID: 15-02-S1-13 & S2-22



**FIGURE 3.237: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S1-13 & S2-22**

Peak Particle Velocity - Event ID: 15-02-S1-22 & S2-32

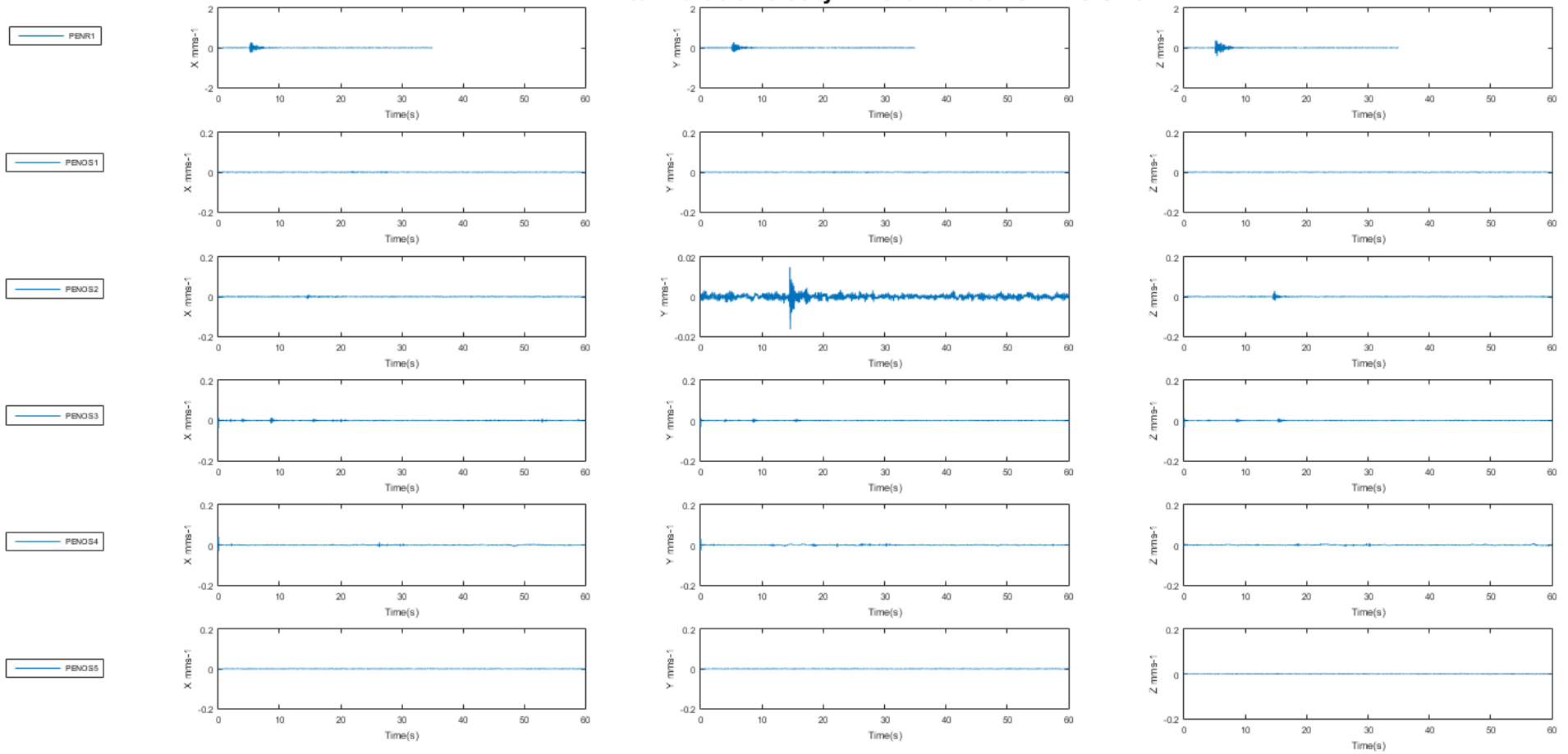


FIGURE 3.238: PEN\_OS 1 - 5 15-02-S1-22 & S2-32

Peak Particle Velocity - Event ID: 15-02-S1-22 & S2-32

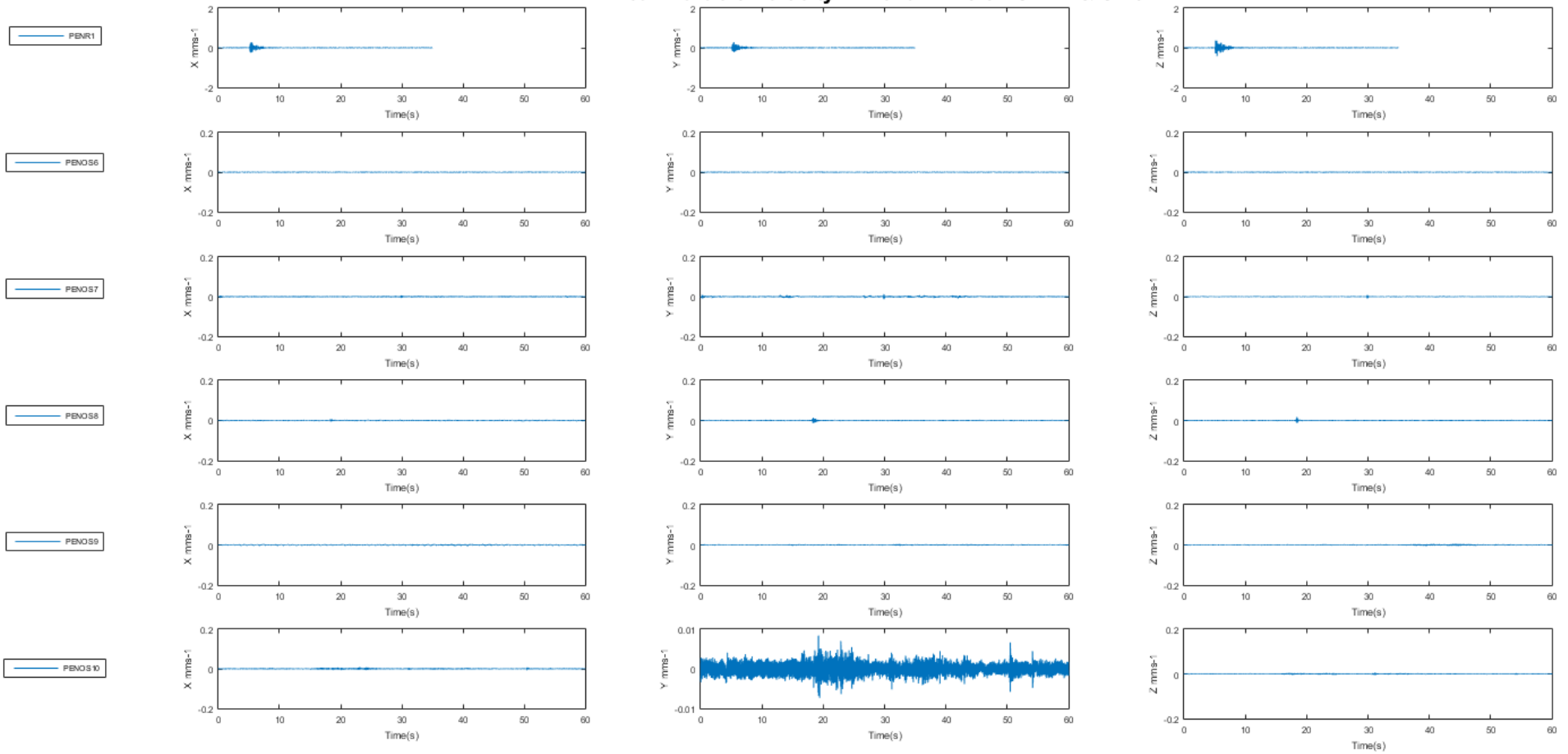


FIGURE 3.239: PEN\_OS 6 - 10 15-02-S1-22 & S2-32

### Event ID: 15-02-S1-22 & S2-32

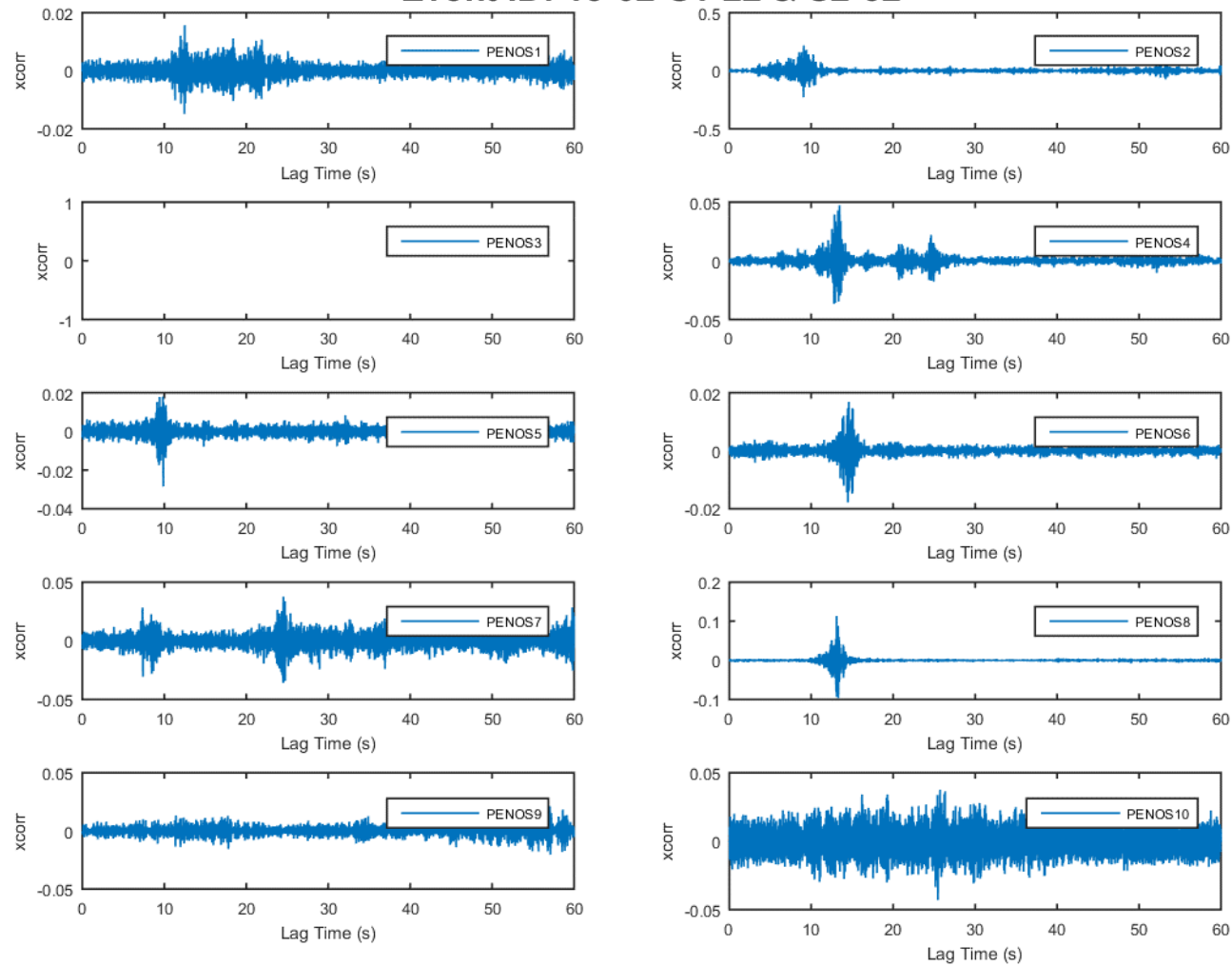


FIGURE 3.240: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S1-22 & S2-32

Peak Particle Velocity - Event ID: 15-02-S1-29 & S2-47

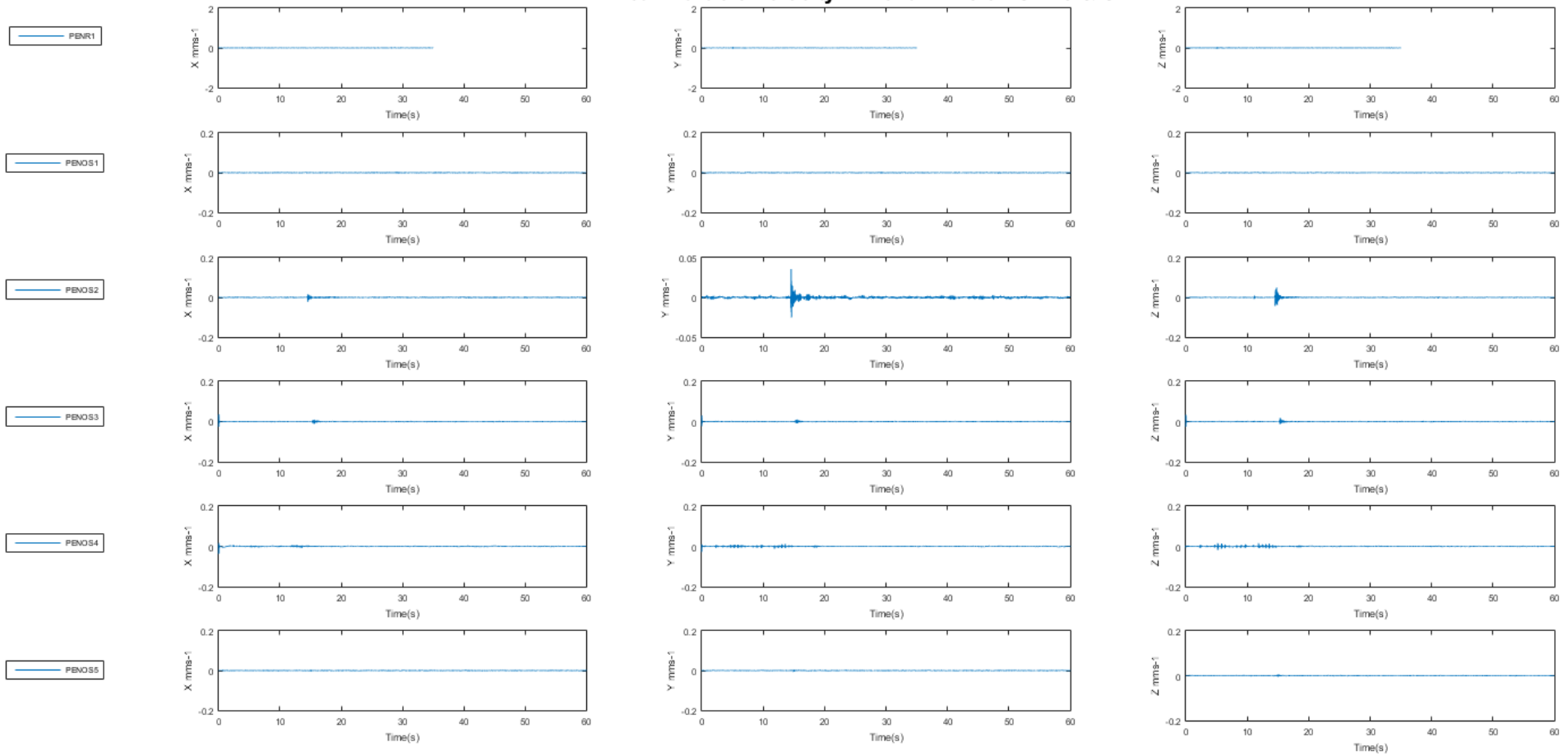


FIGURE 3.241: PEN\_OS 1 - 5 15-02-S1-29 & S2-47



Peak Particle Velocity - Event ID: 15-02-S1-29 & S2-47

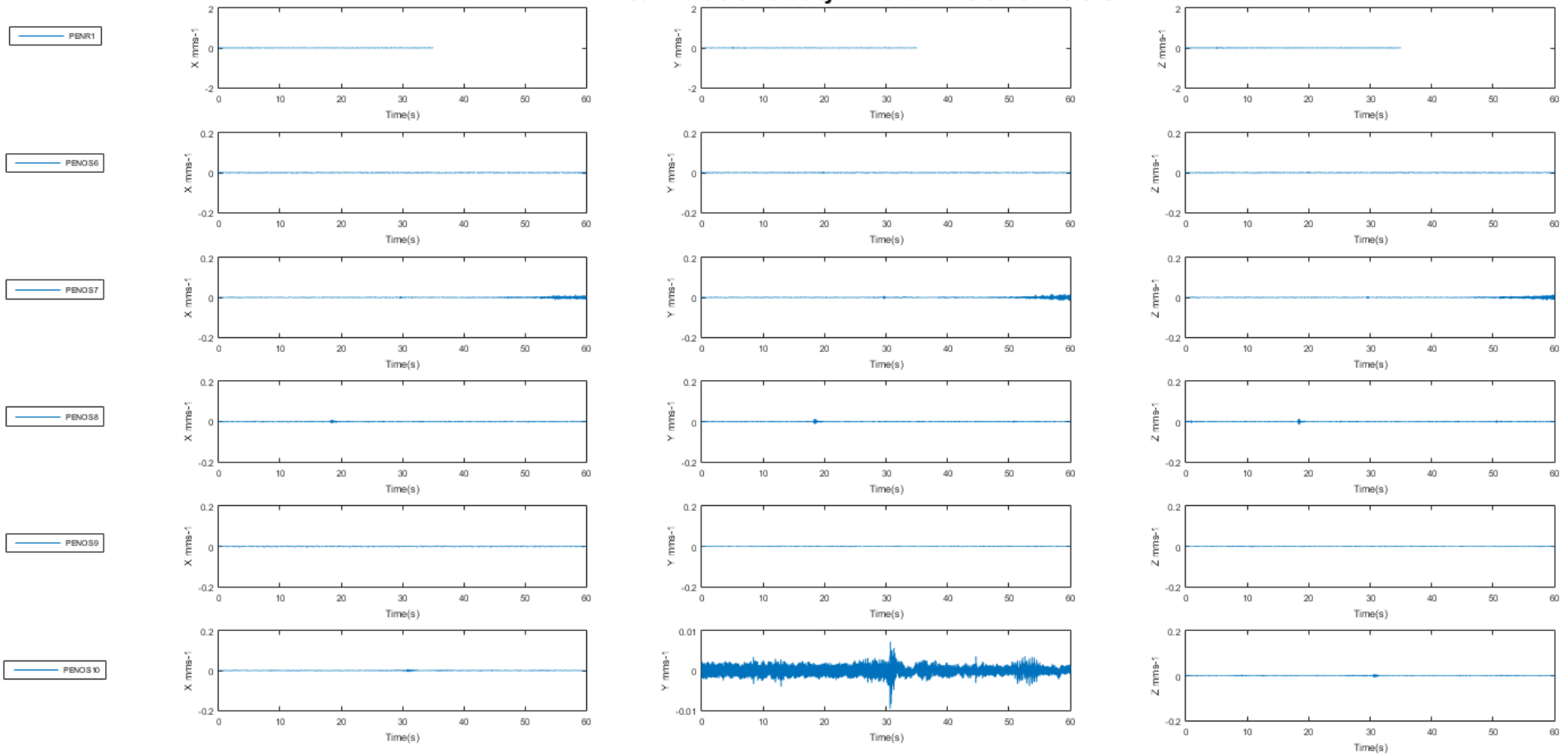


FIGURE 3.242: PEN\_OS 6 - 10 15-02-S1-29 & S2-47

### Event ID: 15-02-S1-29 & S2-47

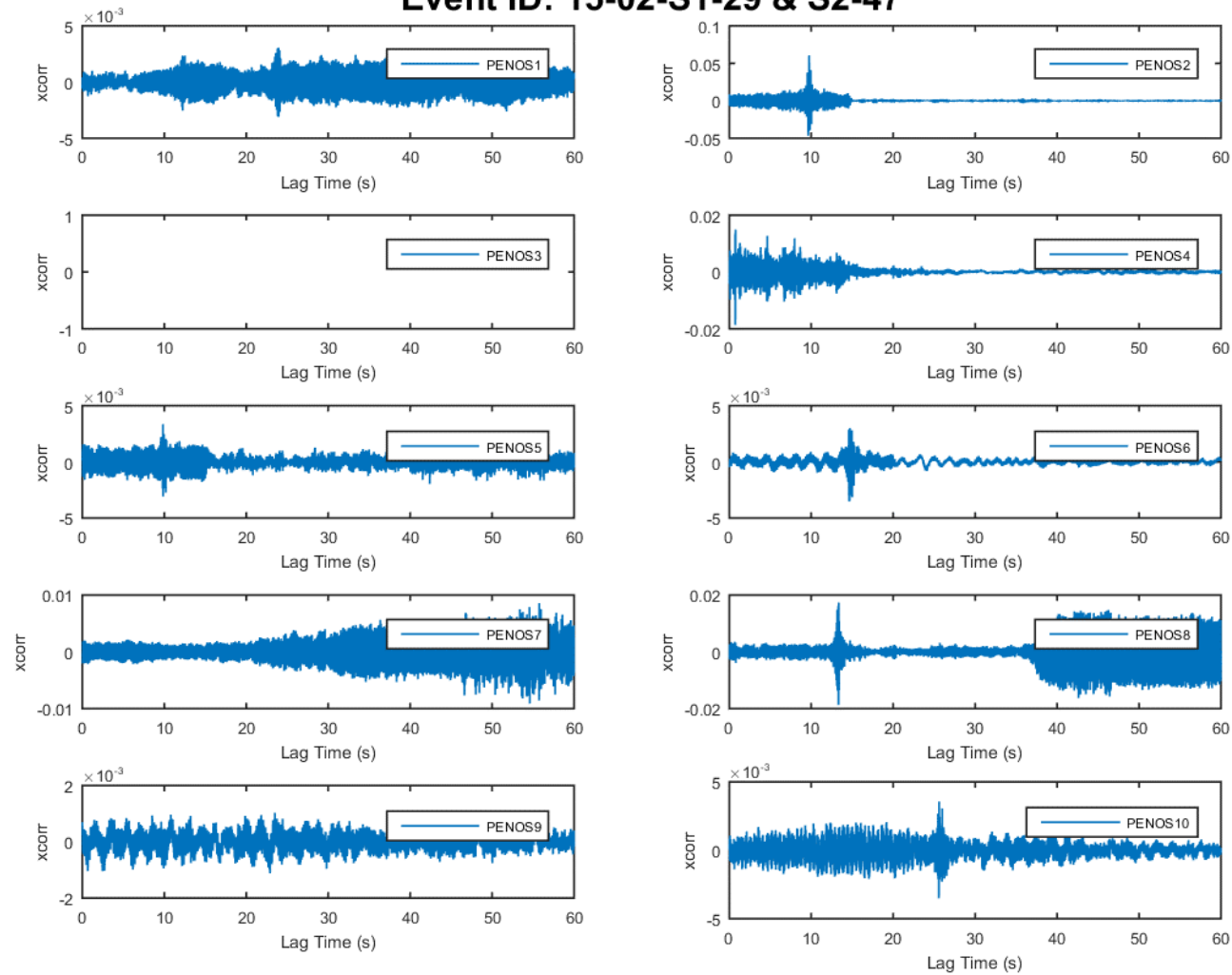


FIGURE 3.243: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S1-29 & S2-47

Peak Particle Velocity - Event ID: 15-02-S1-29 & S2-47

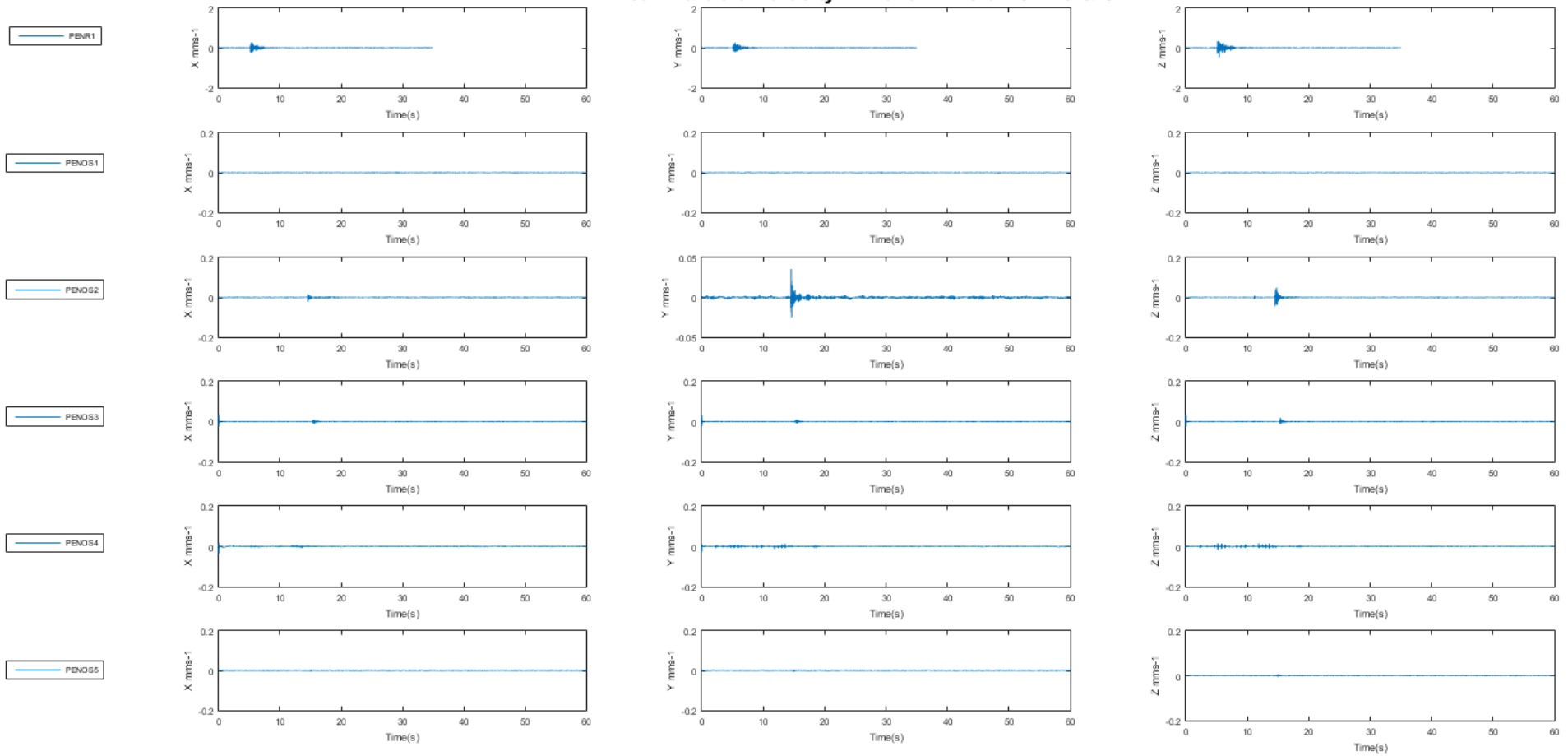


FIGURE 3.244: PEN\_OS 1 - 5 15-02-S1-29 & S2-47

Peak Particle Velocity - Event ID: 15-02-S1-29 & S2-47

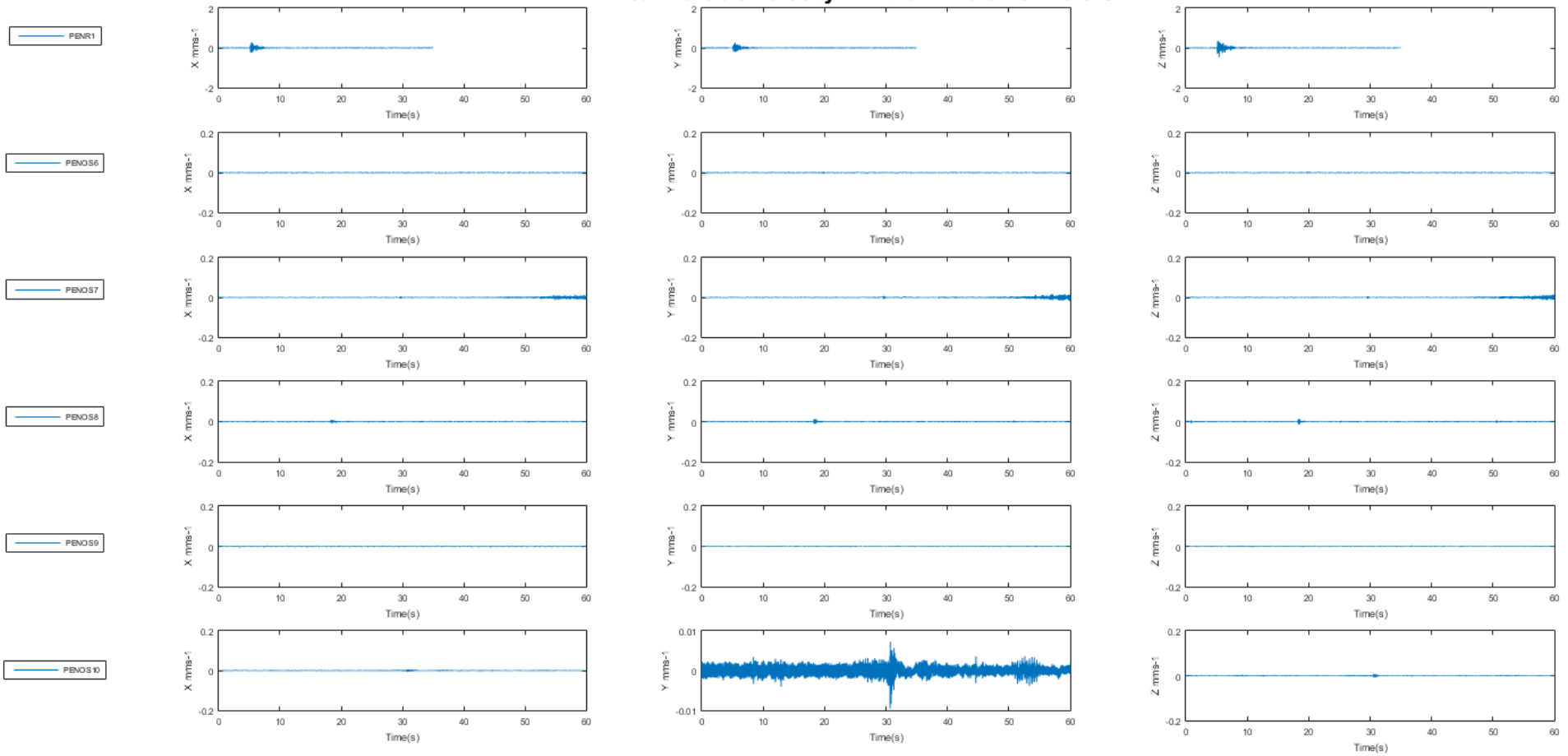
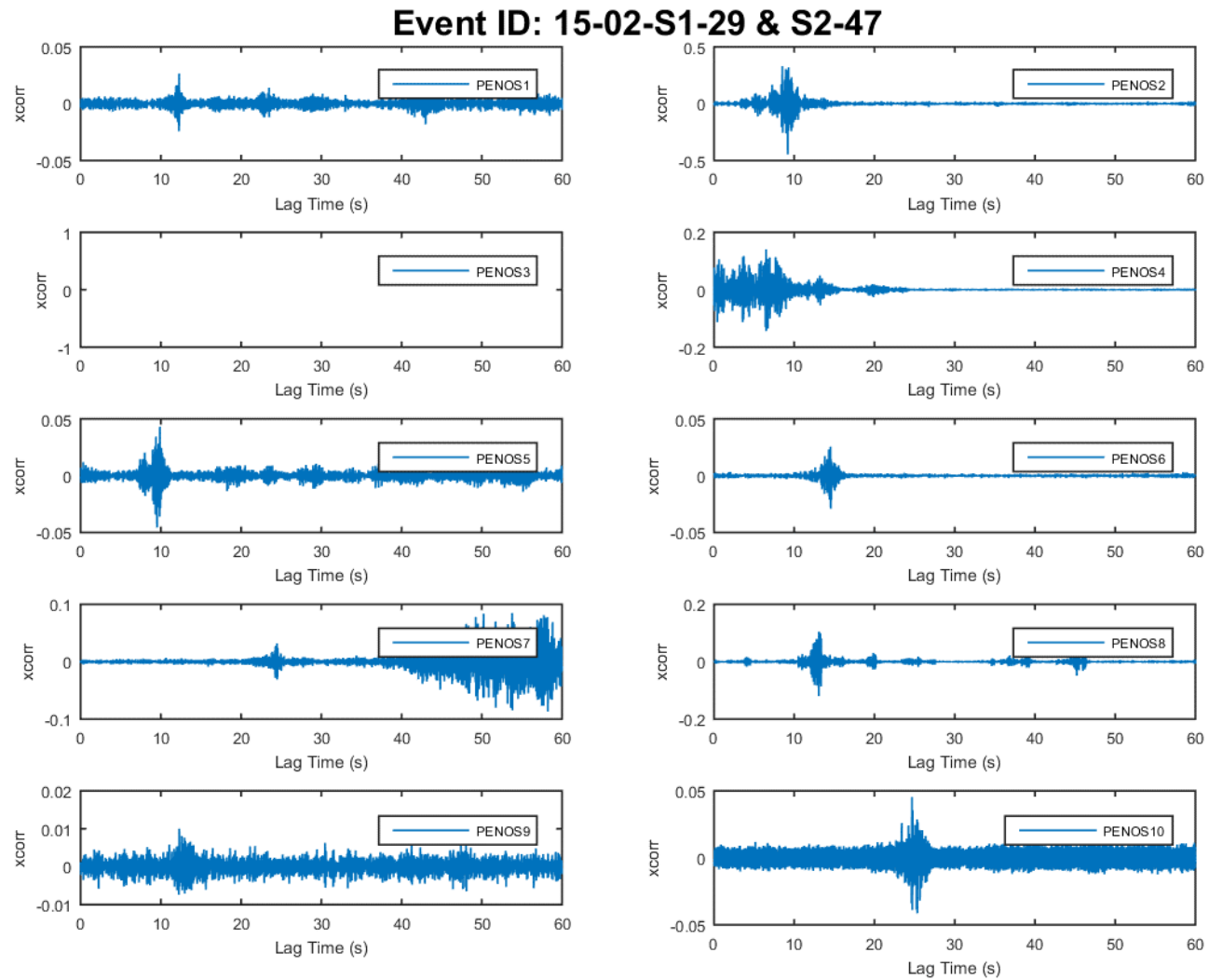


FIGURE 3.245: PEN\_OS 6 - 10 15-02-S1-29 & S2-47



**FIGURE 3.246: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S1-29 & S2-47**

Peak Particle Velocity - Event ID: 15-02-S1-30 & S2-50

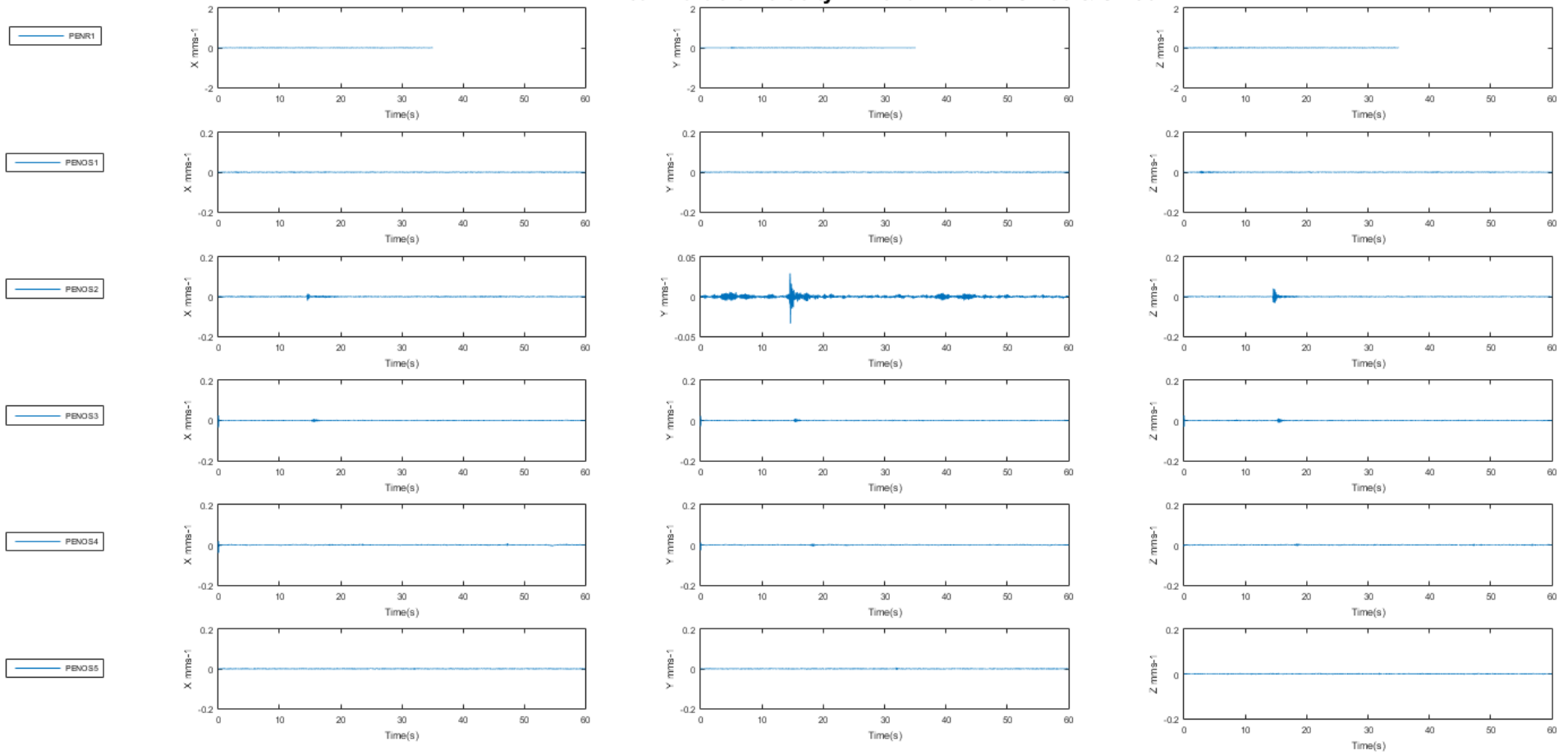


FIGURE 3.247: PEN\_OS 1 - 5 15-02-S1-30 & S2-50

Peak Particle Velocity - Event ID: 15-02-S1-30 & S2-50

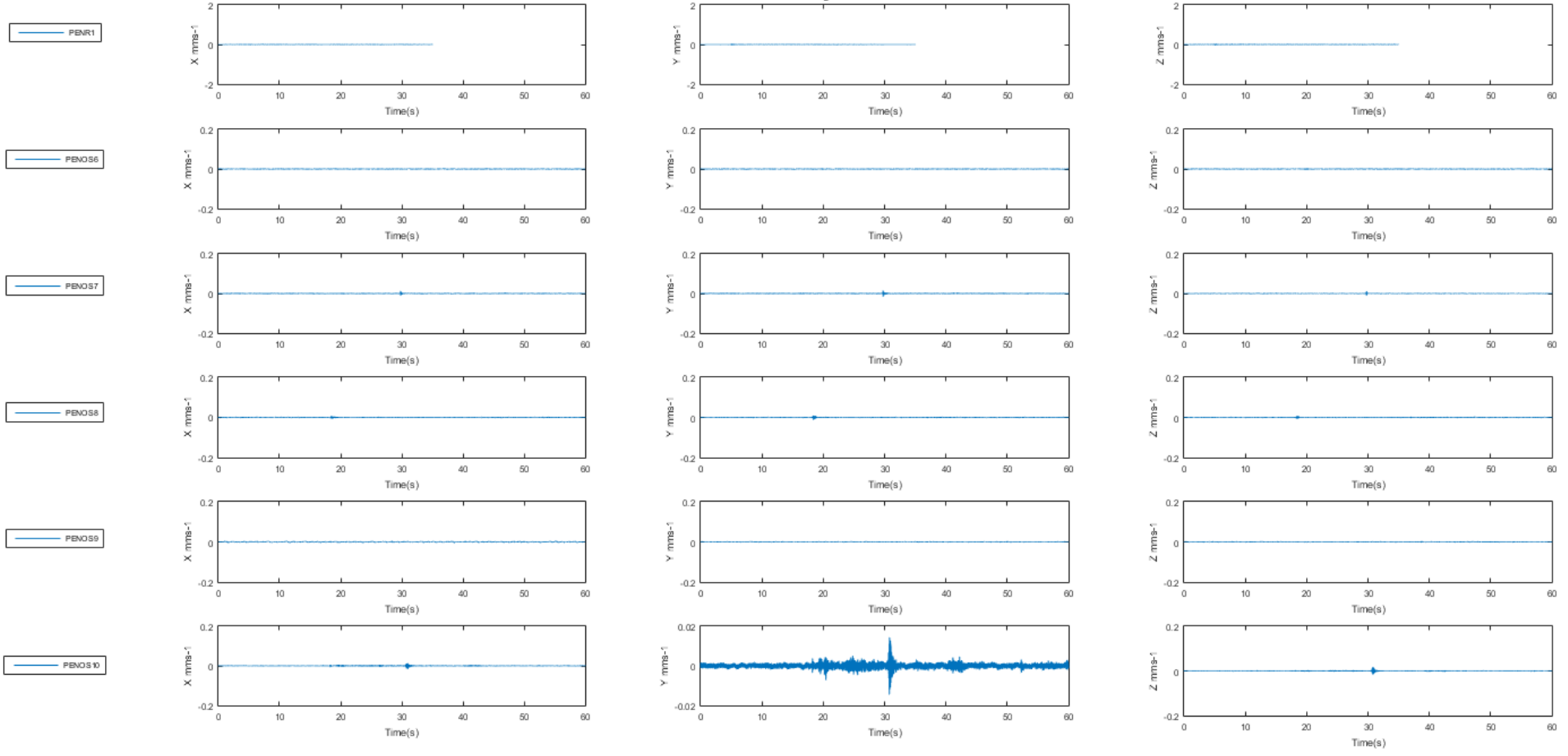


FIGURE 3.248: PEN\_OS 6 - 10 15-02-S1-30 & S2-50

### Event ID: 15-02-S1-30 & S2-50

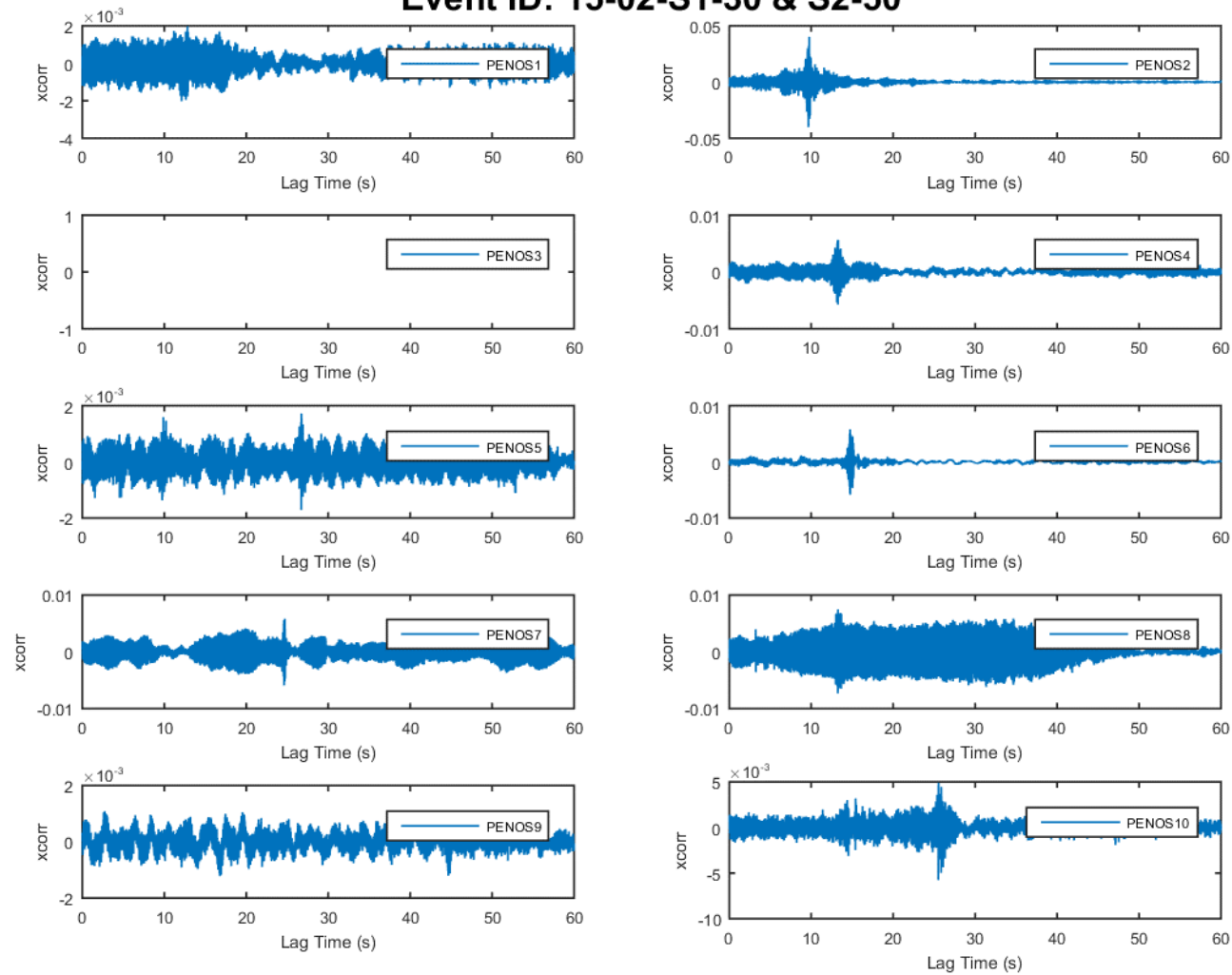


FIGURE 3.249: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S1-30 & S2-50



Peak Particle Velocity - Event ID: 15-02-S1-30 & S2-50

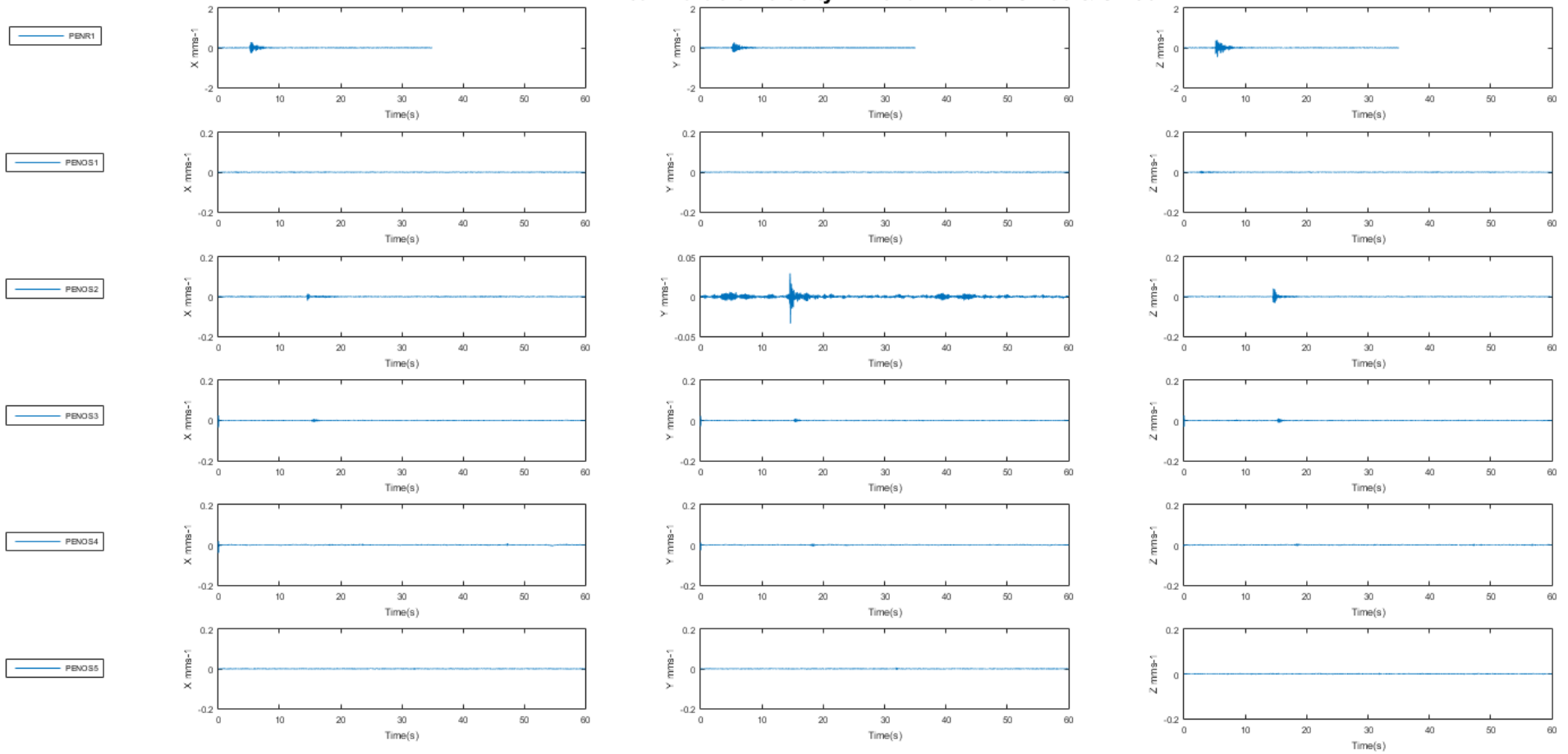


FIGURE 3.250: PEN\_OS 1 - 5 15-02-S1-30 & S2-50

Peak Particle Velocity - Event ID: 15-02-S1-30 & S2-50

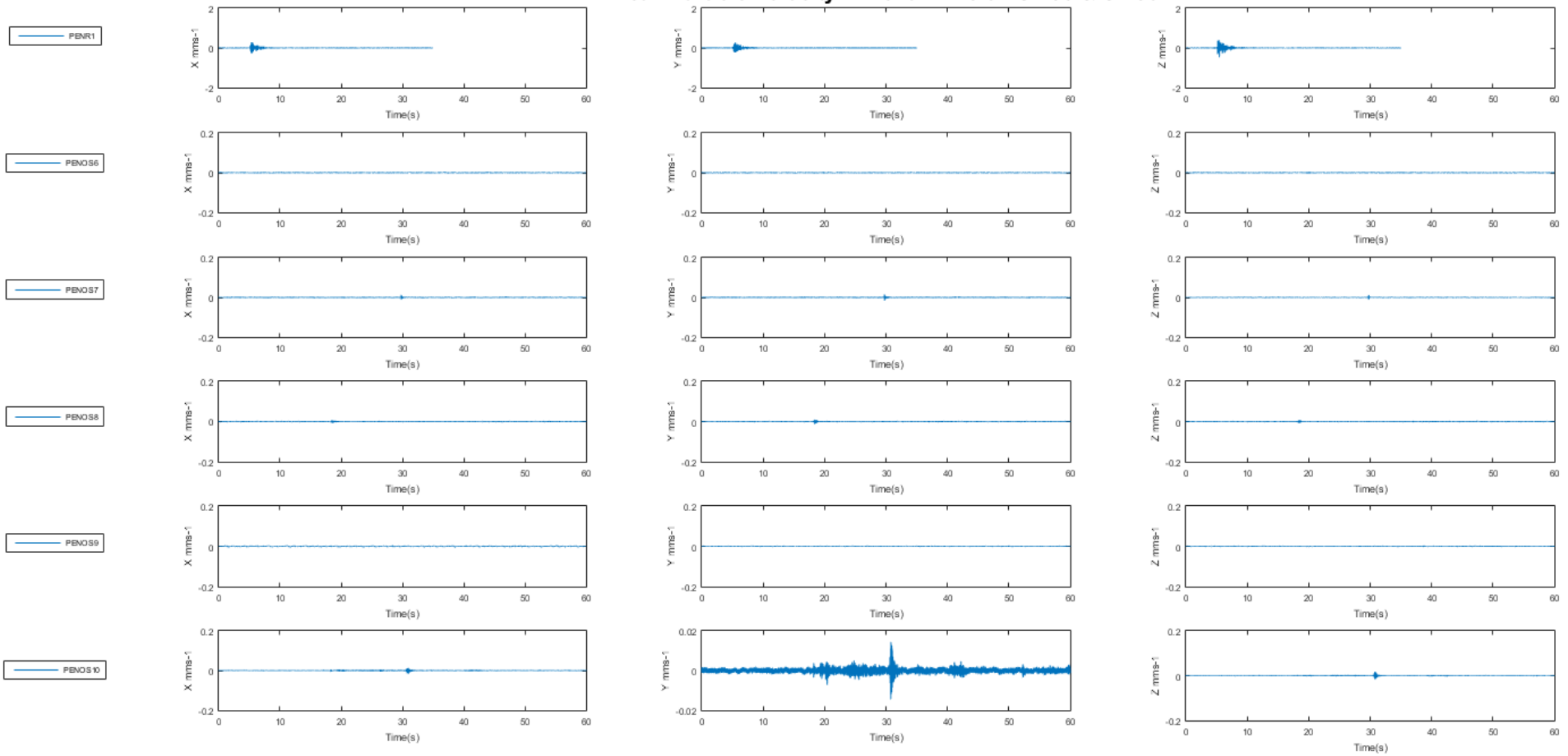
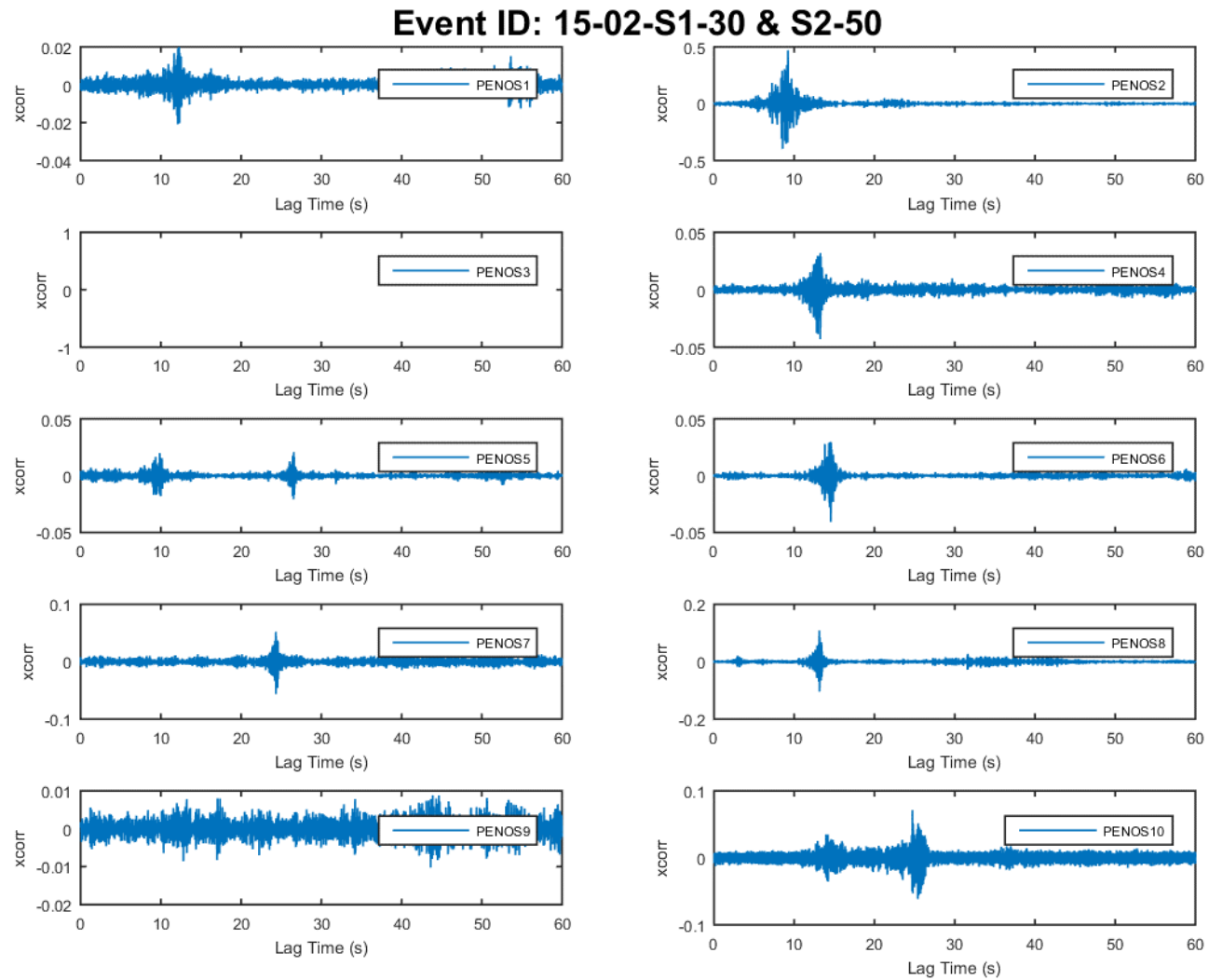
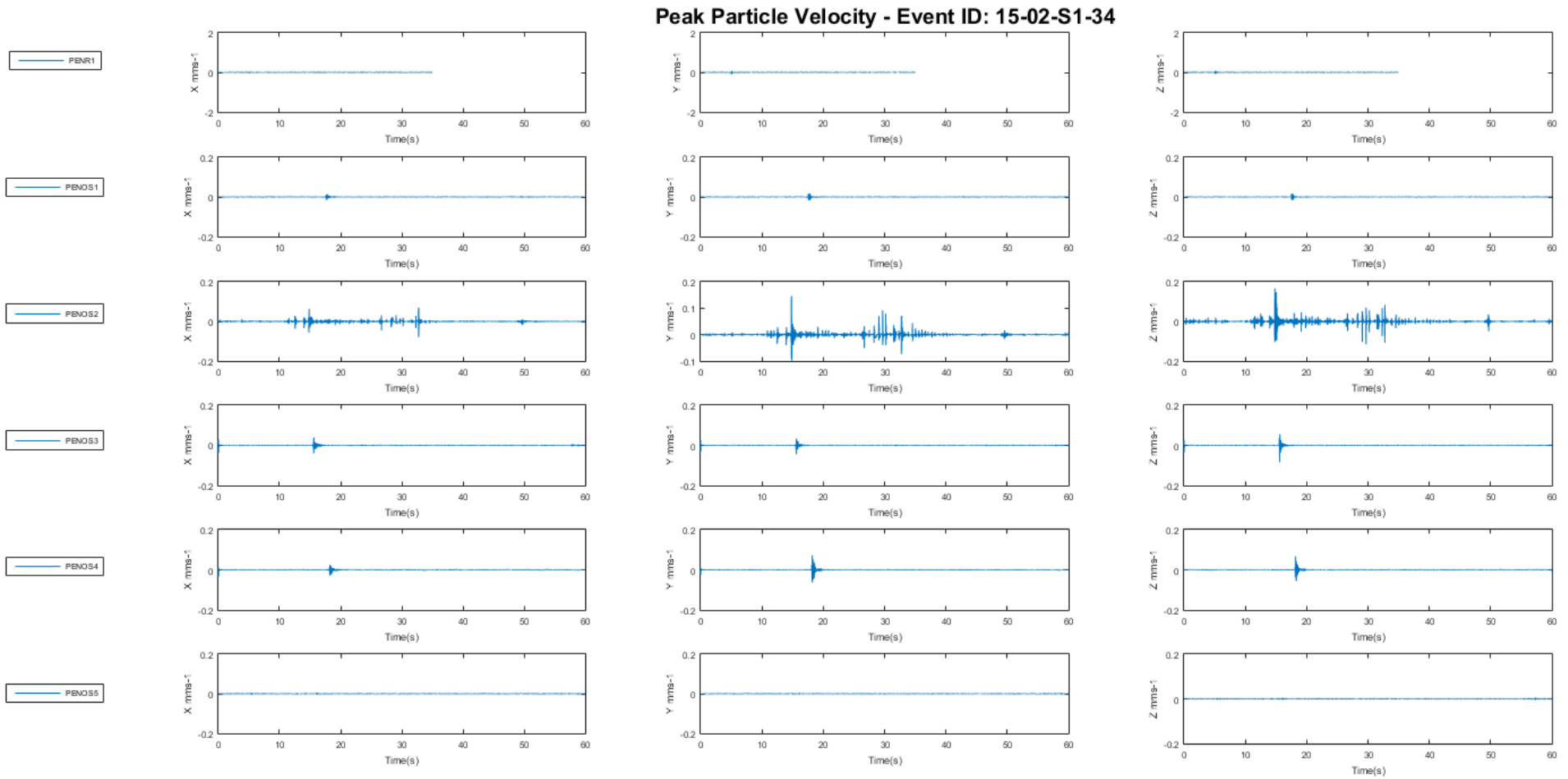


FIGURE 3.251: PEN\_OS 6 - 10 15-02-S1-30 & S2-50



**FIGURE 3.252: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S1-30 & S2-50**



**FIGURE 3.253: PEN\_OS 1 - 5 15-02-S1-34**

Peak Particle Velocity - Event ID: 15-02-S1-34

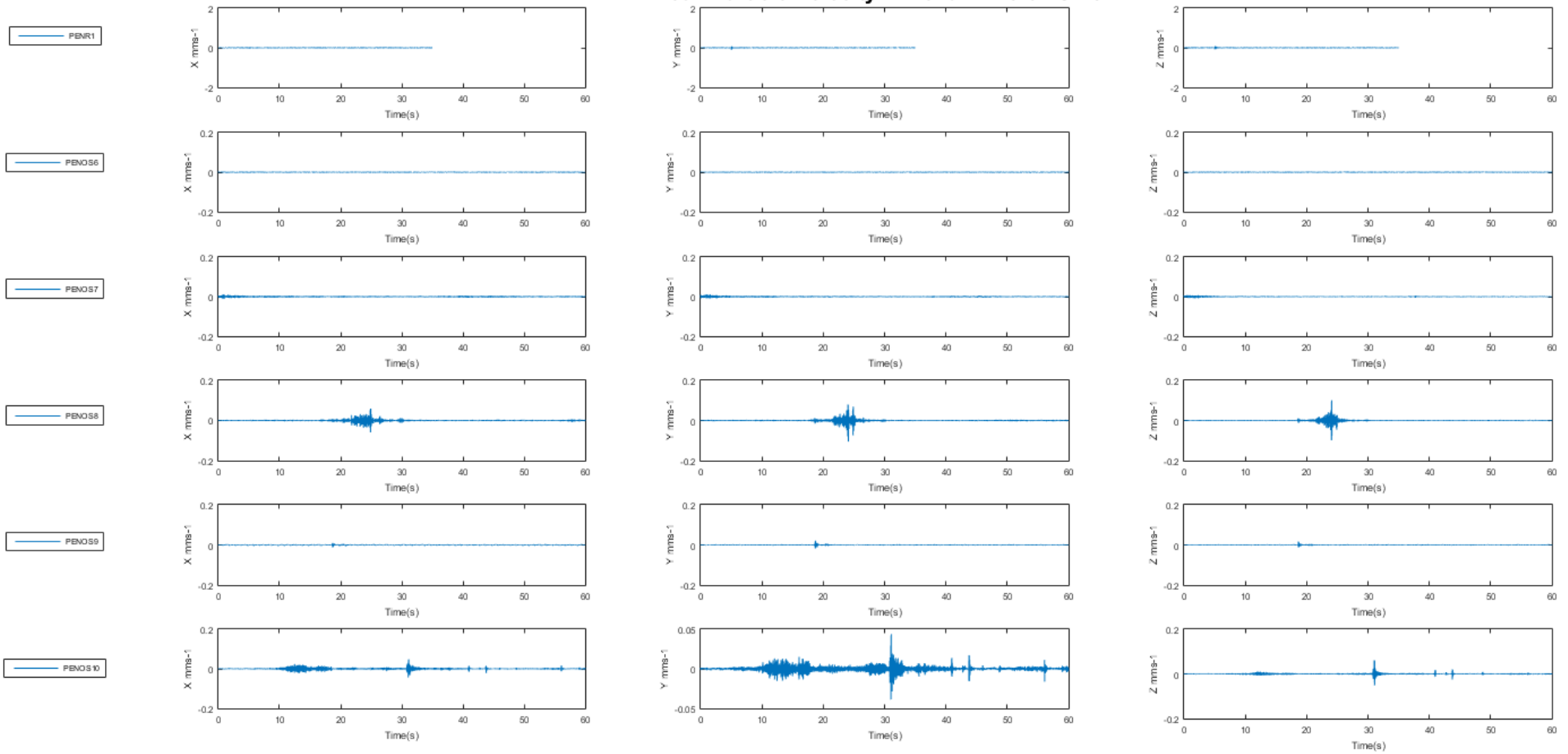


FIGURE 3.254: PEN\_OS 6 - 10 15-02-S1-34

### Event ID: 15-02-S1-34

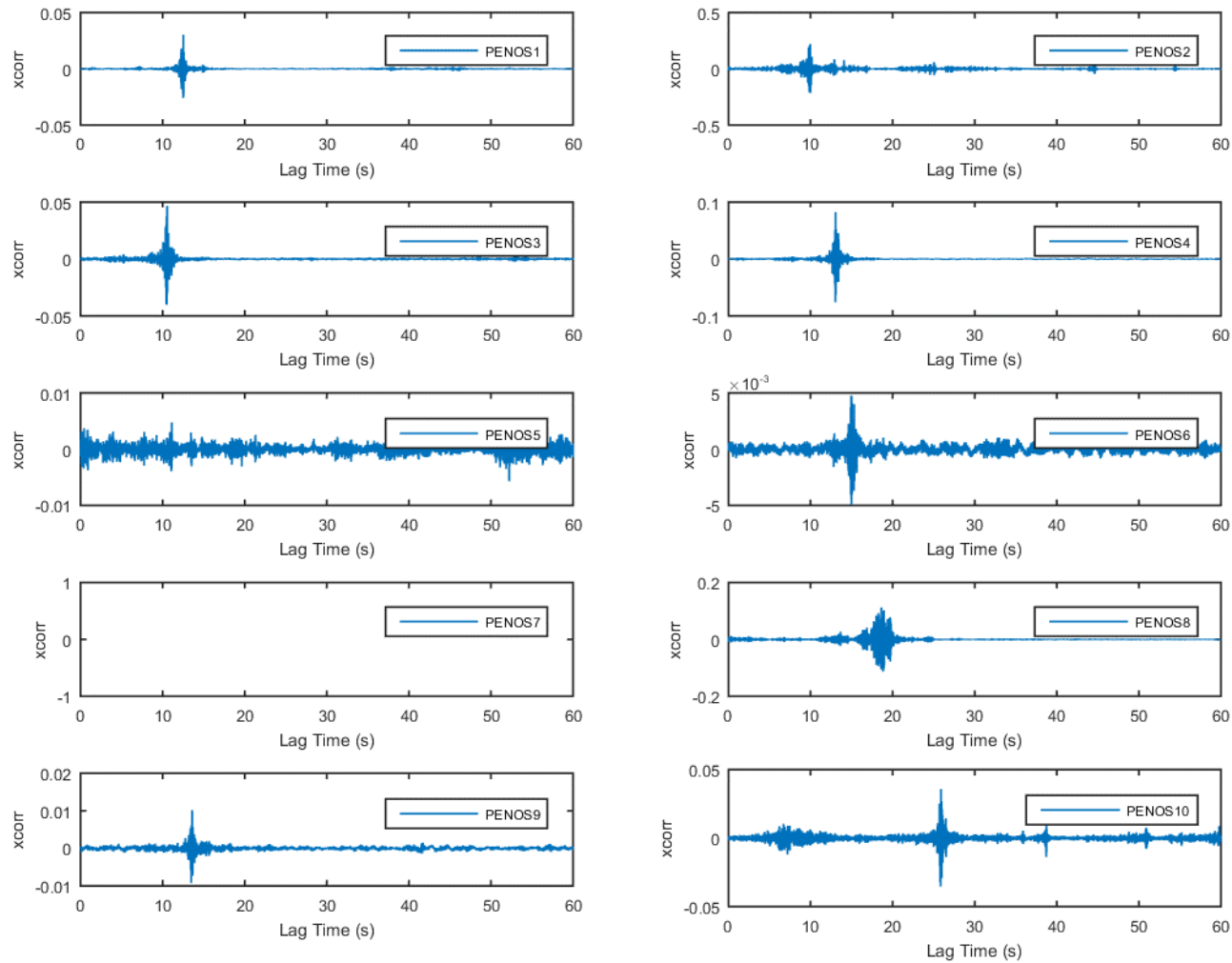
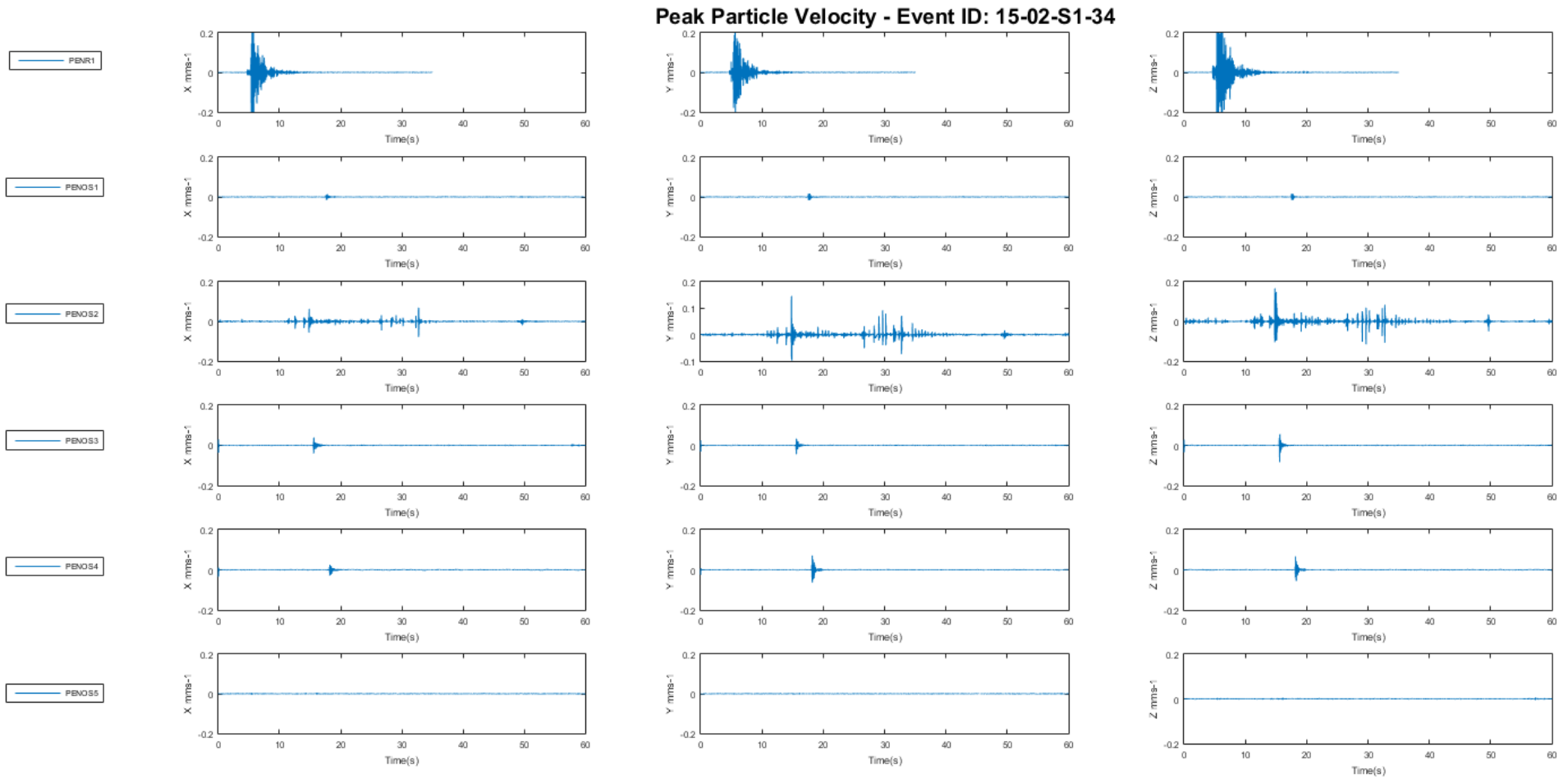
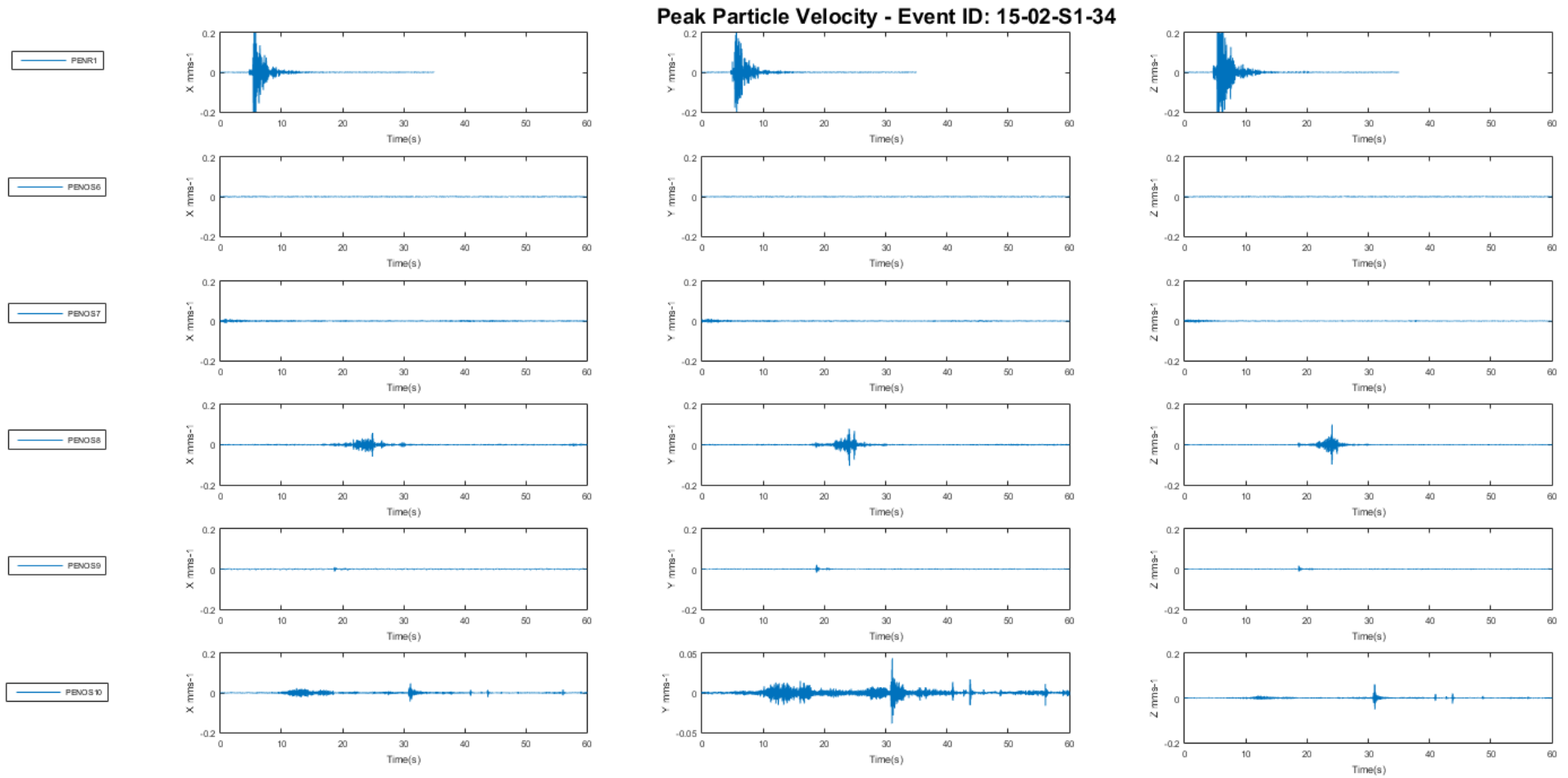


FIGURE 3.255: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S1-34



**FIGURE 3.256: PEN\_OS 1 - 5 15-02-S1-34**



**FIGURE 3.257: PEN\_OS 6 - 10 15-02-S1-34**



### Event ID: 15-02-S1-34

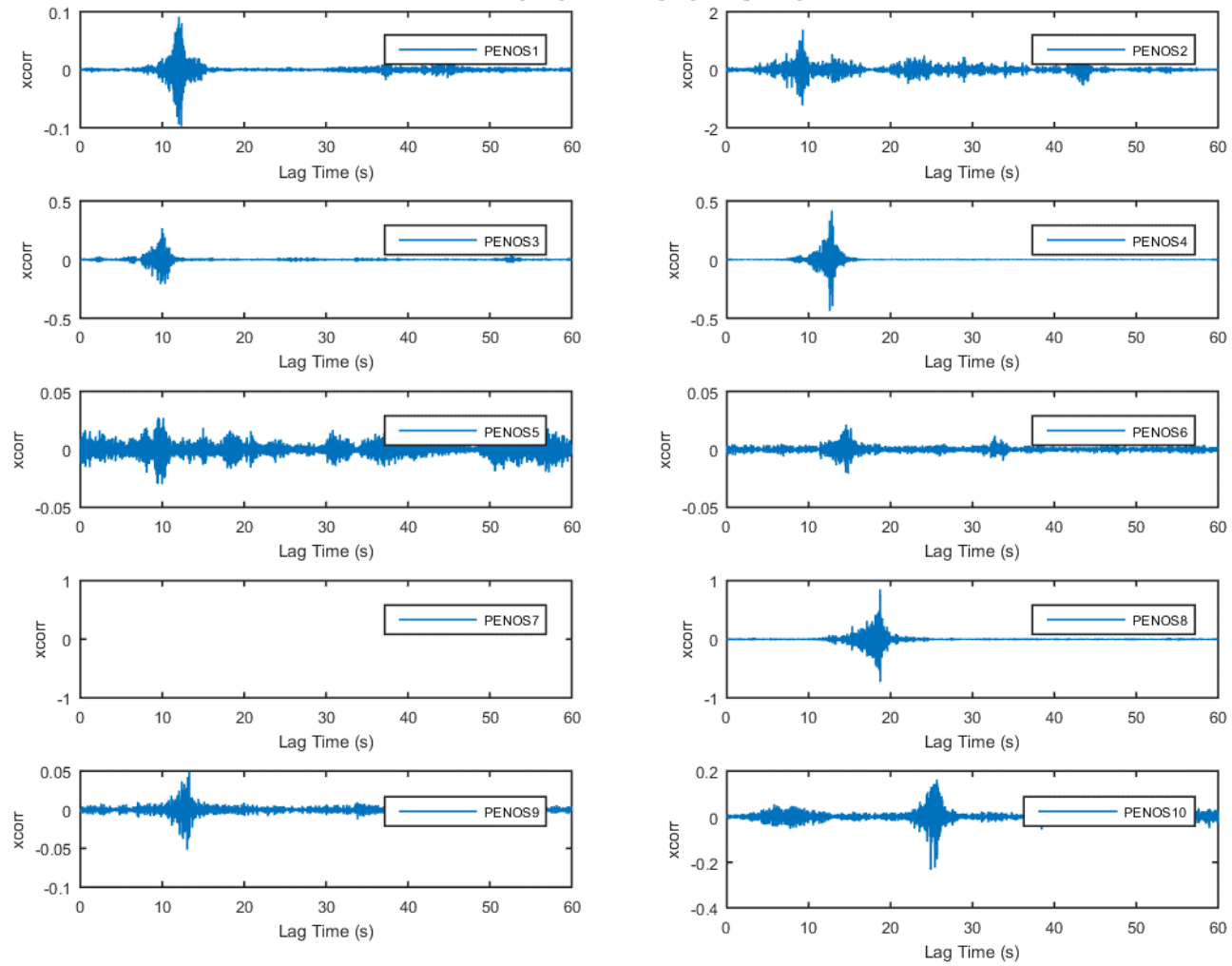


FIGURE 3.258: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S1-34

Peak Particle Velocity - Event ID: 15-02-S1-92 & S2-82

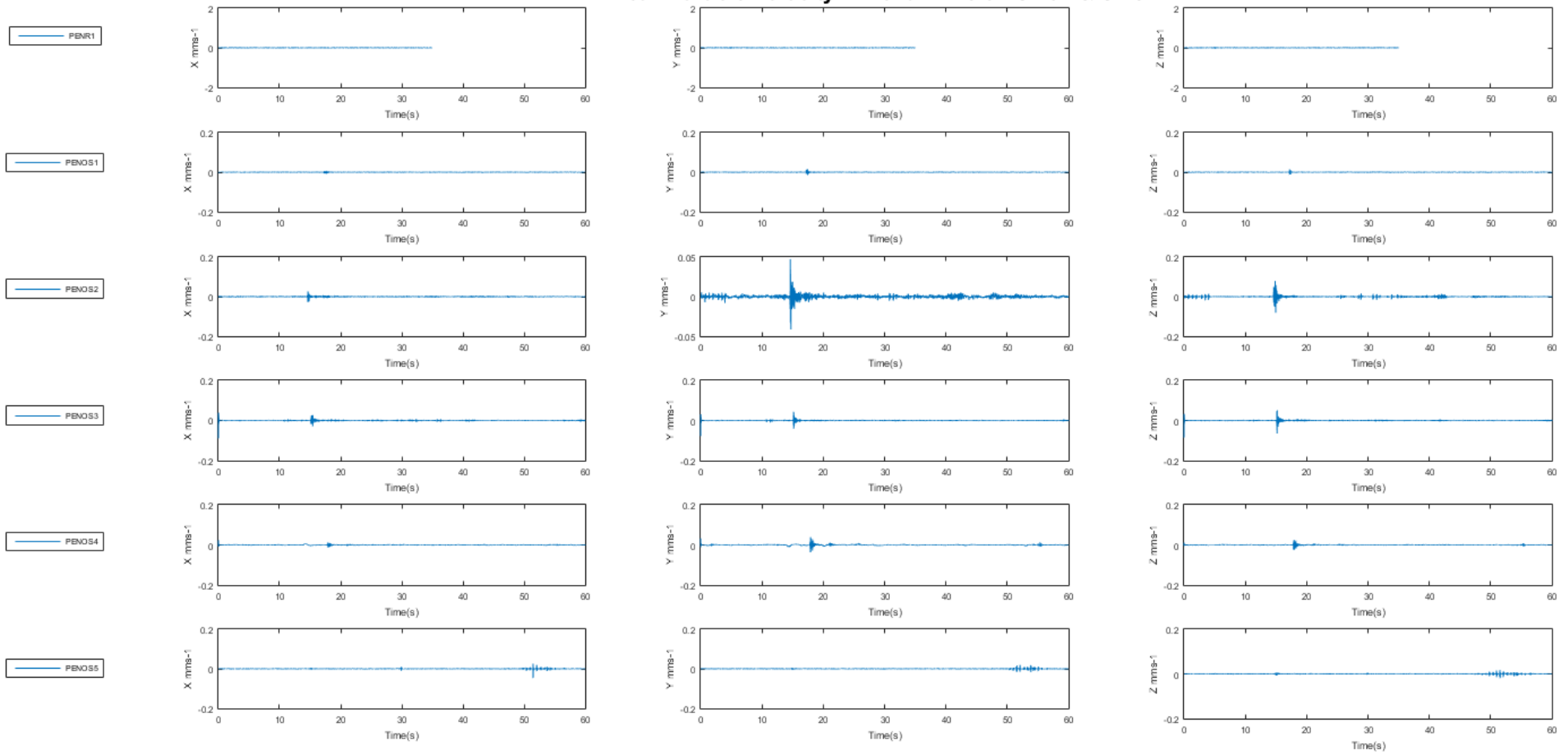


FIGURE 3.259: PEN\_OS 1 - 5 15-02-S1-92 & S2-82

Peak Particle Velocity - Event ID: 15-02-S1-92 & S2-82

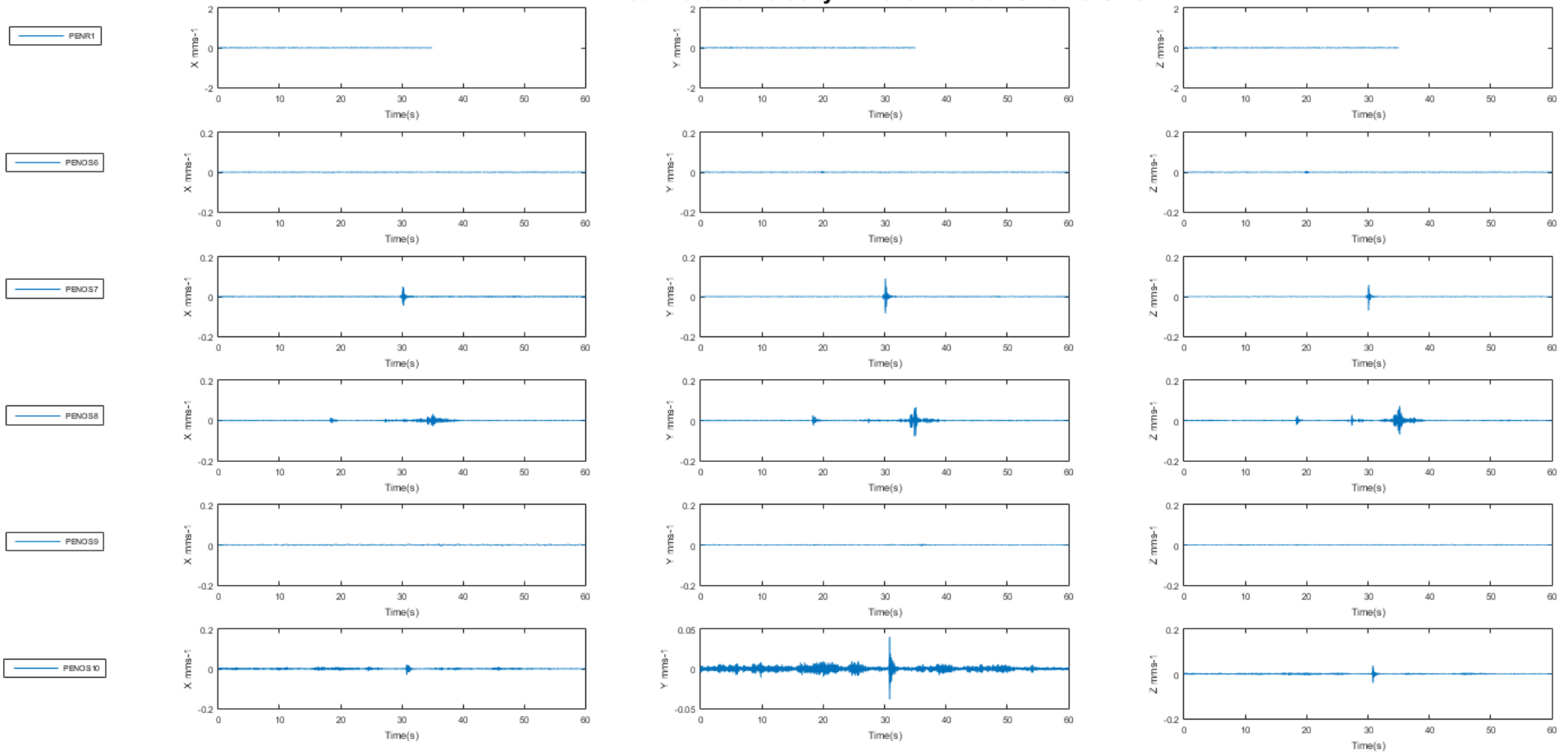


FIGURE 3.260: PEN\_OS 6 - 10 15-02-S1-92 & S2-82

### Event ID: 15-02-S1-92 & S2-82

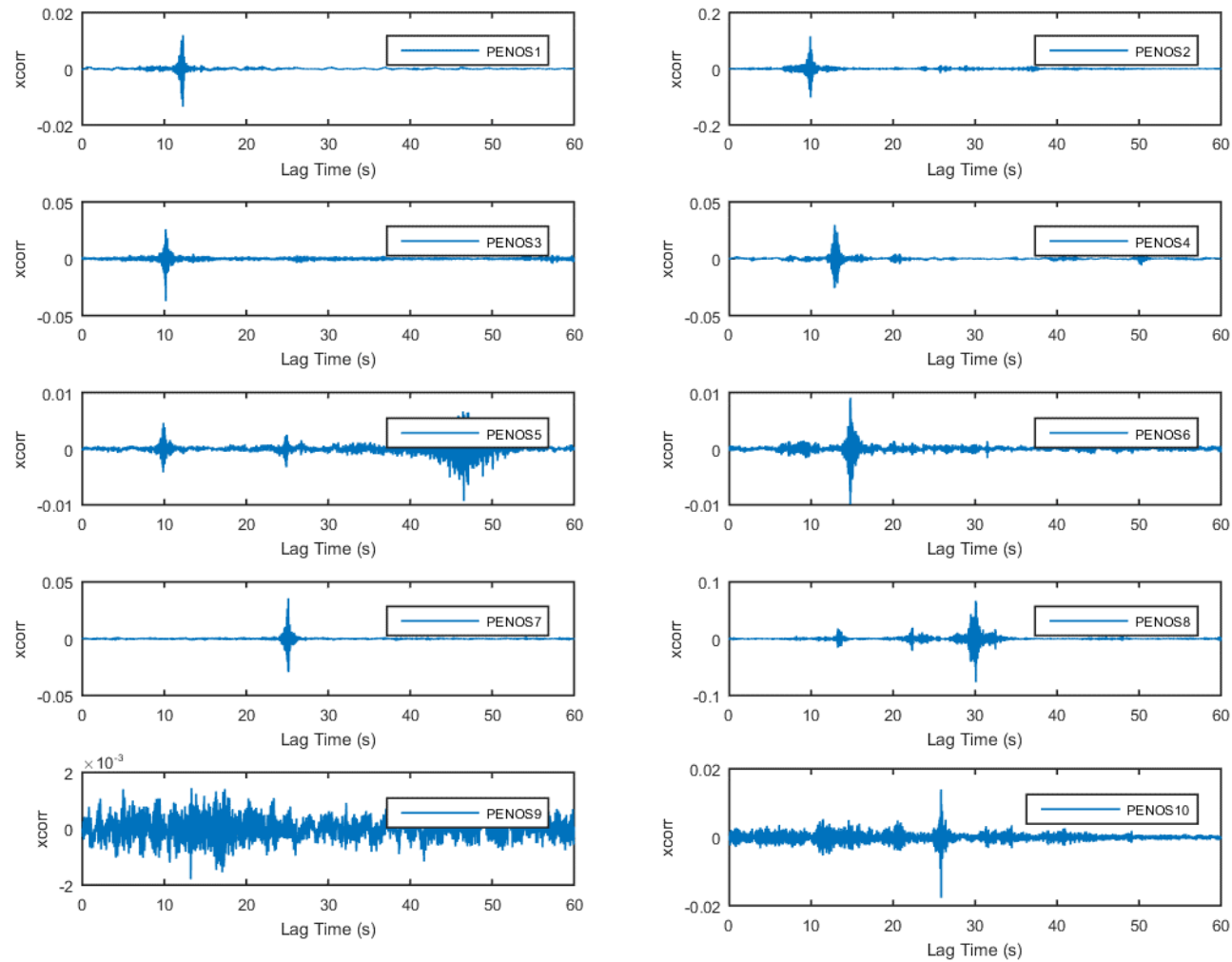


FIGURE 3.261: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S1-92 & S2-82

Peak Particle Velocity - Event ID: 15-02-S1-92 & S2-82

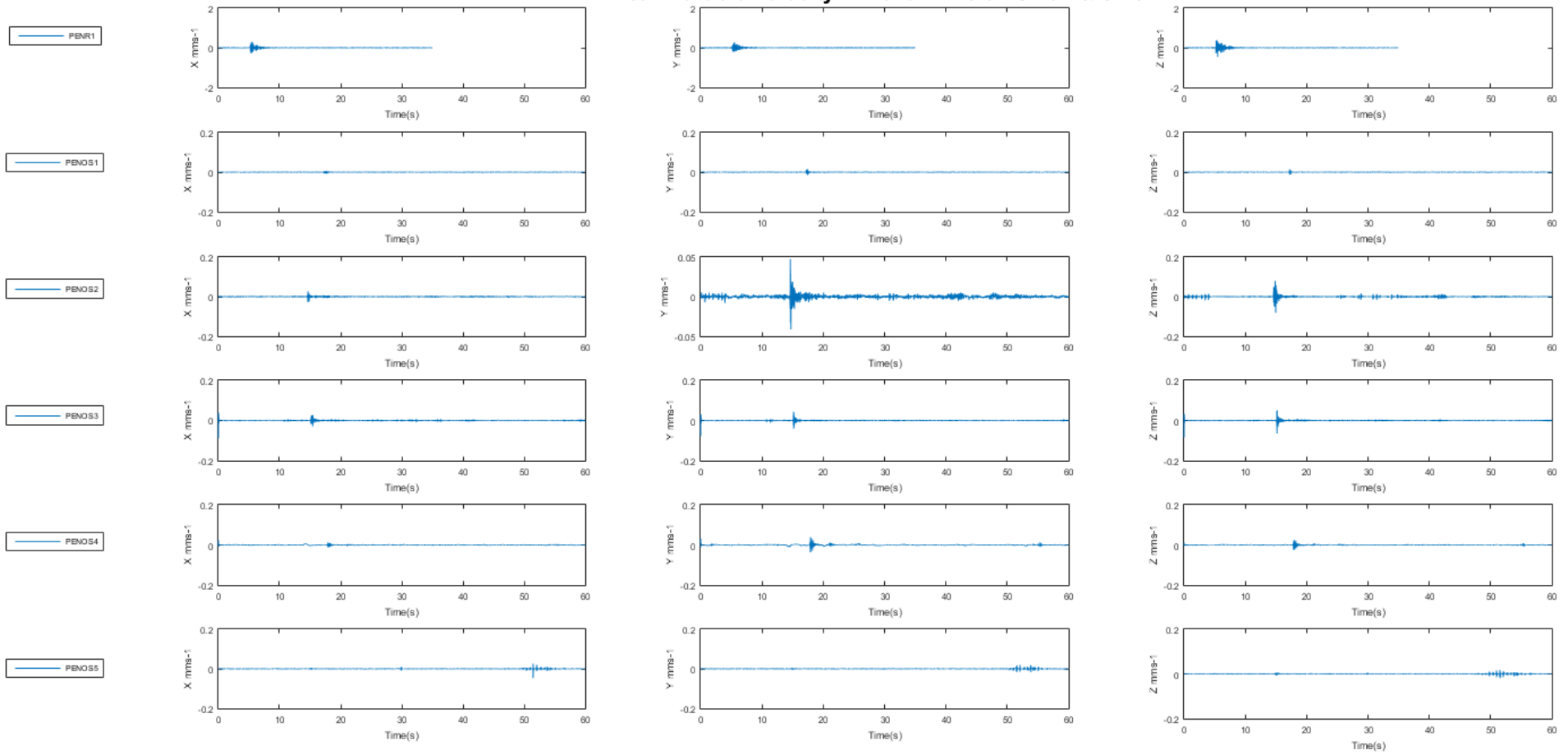


FIGURE 3.262: PEN\_OS 1 - 5 15-02-S1-92 & S2-82

Peak Particle Velocity - Event ID: 15-02-S1-92 & S2-82

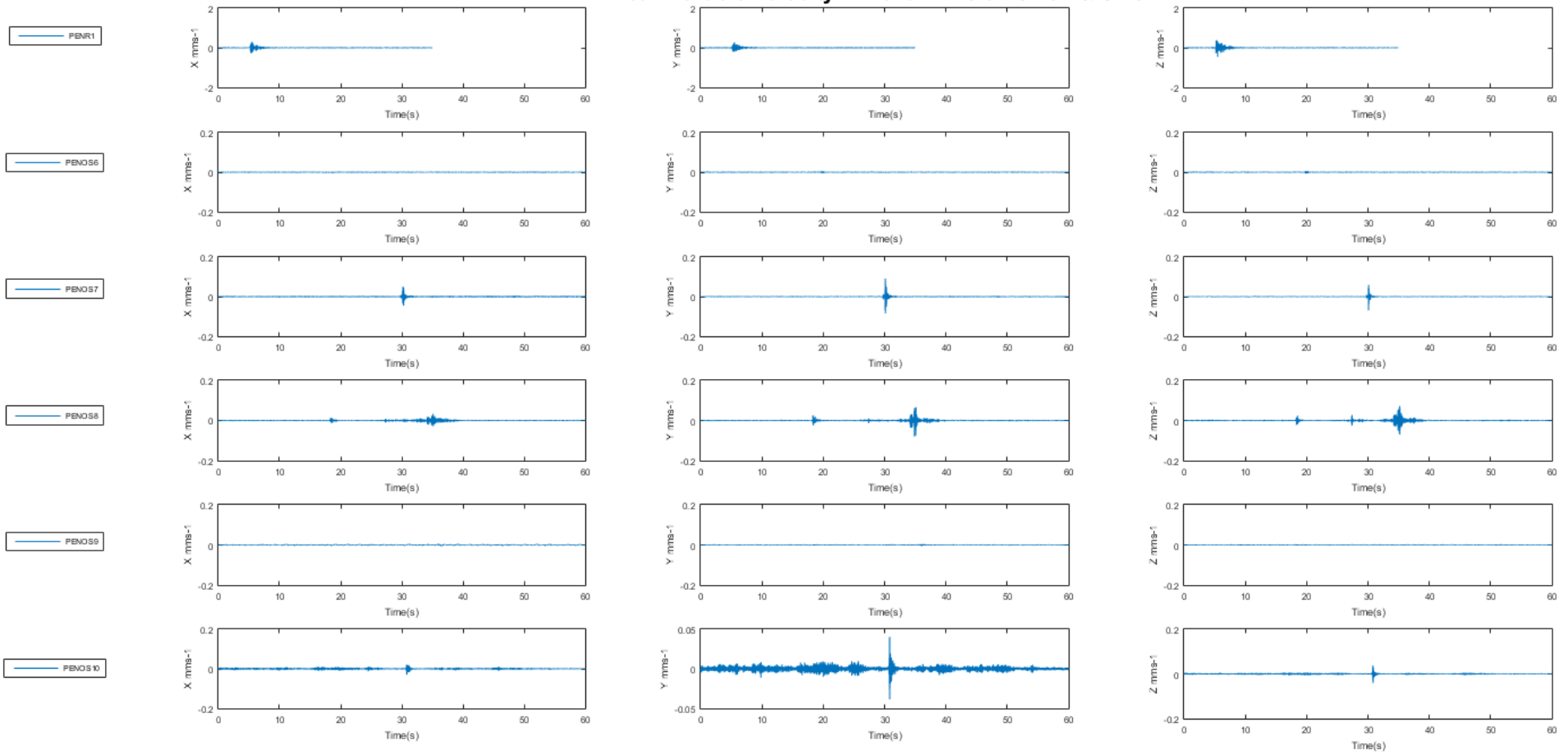


FIGURE 3.263: PEN\_OS 6 - 10 15-02-S1-92 & S2-82

### Event ID: 15-02-S1-92 & S2-82

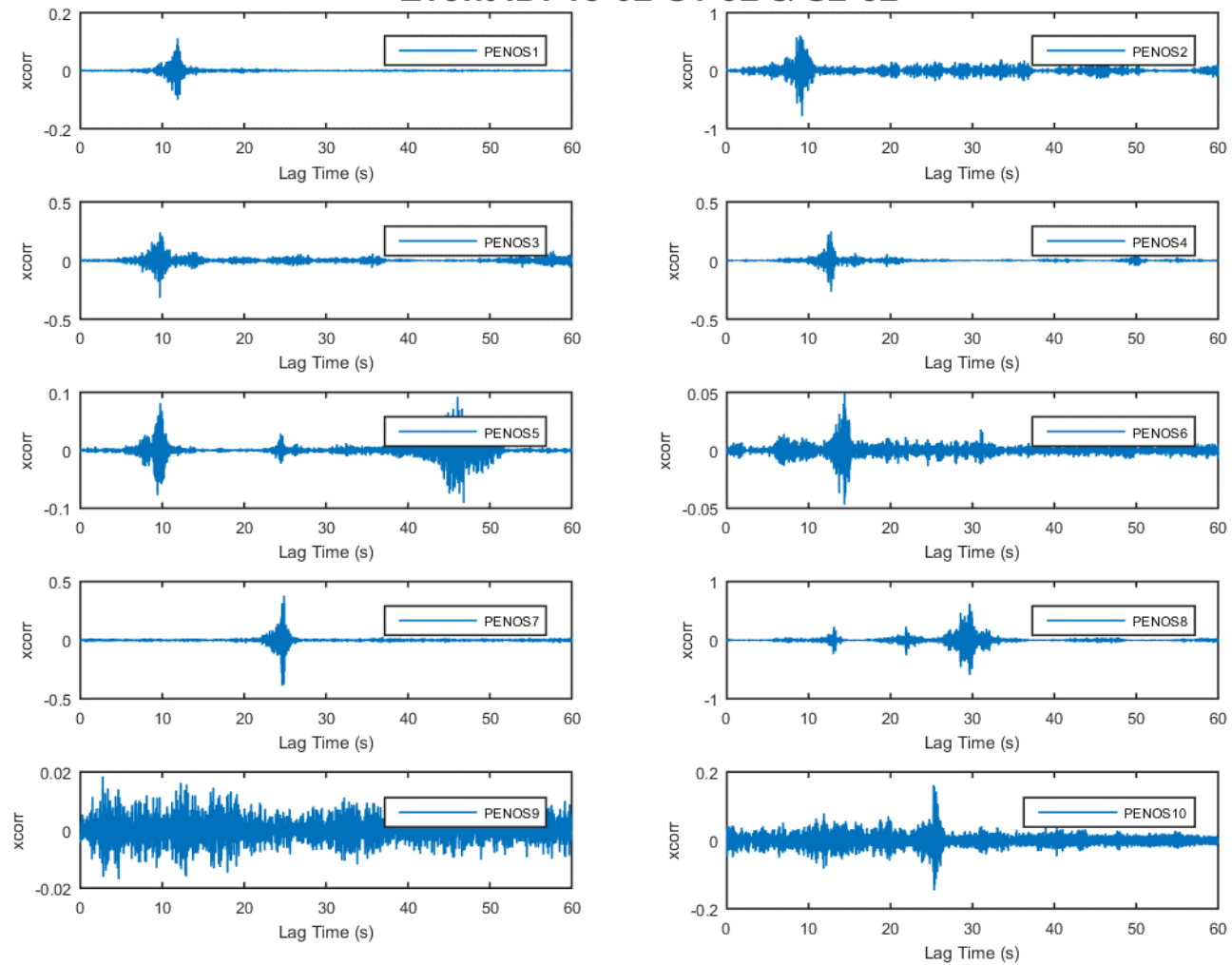


FIGURE 3.264: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S1-92 & S2-82

Peak Particle Velocity - Event ID: 15-02-S1-99 & S2-88

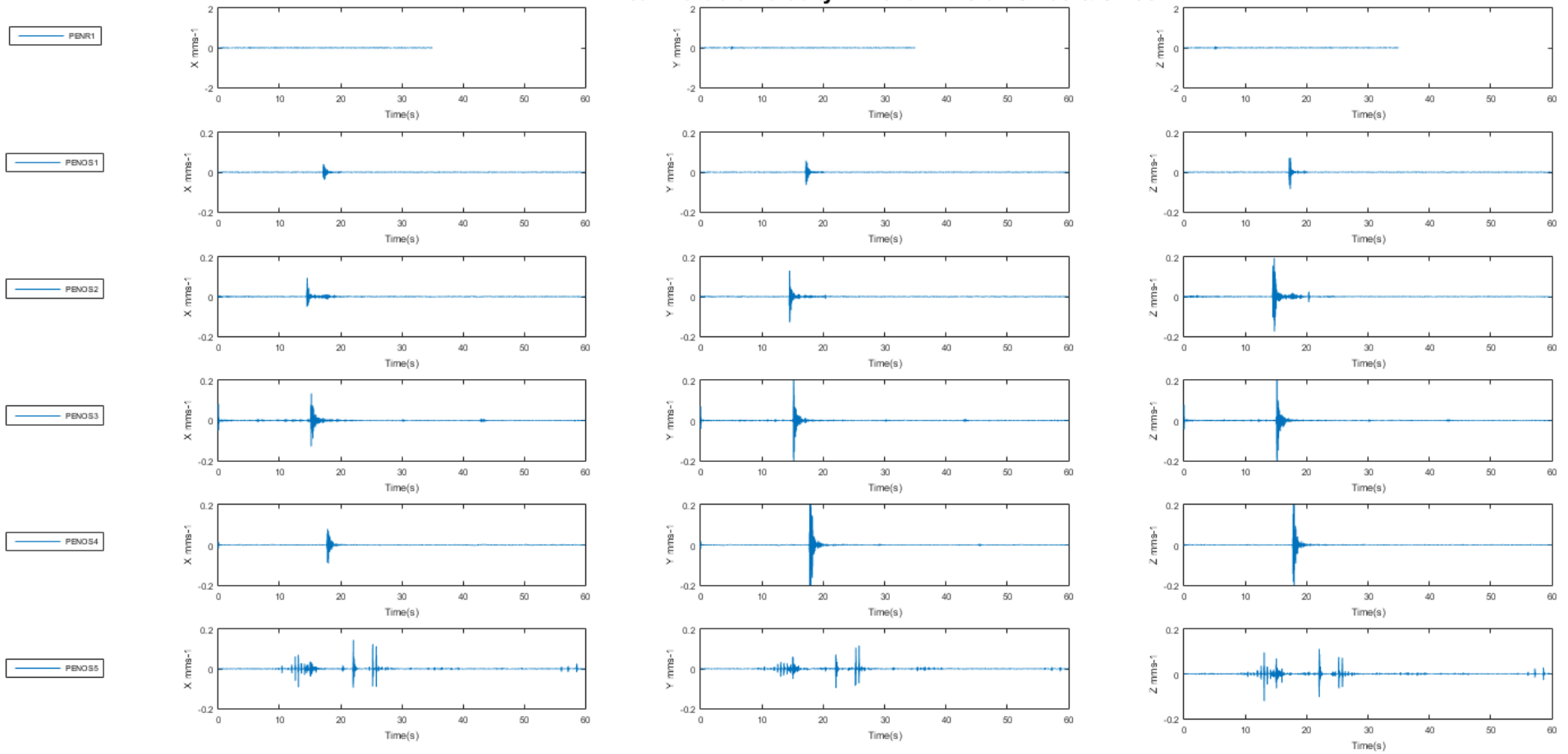


FIGURE 3.265: PEN\_OS 1 - 5 15-02-S1-99 & S2-88



Peak Particle Velocity - Event ID: 15-02-S1-99 & S2-88

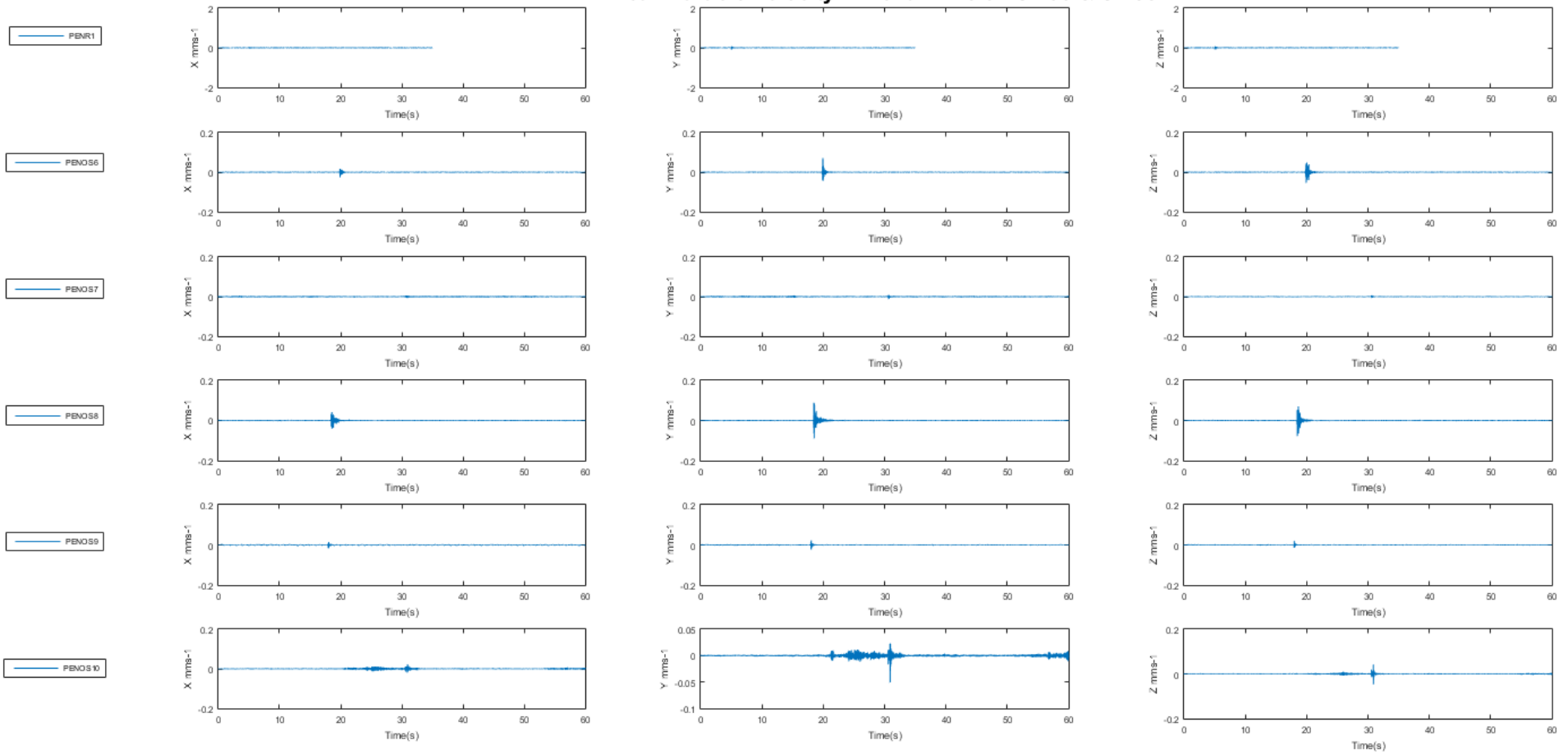


FIGURE 3.266: PEN\_OS 6 - 10 15-02-S1-99 & S2-88

### Event ID: 15-02-S1-99 & S2-88

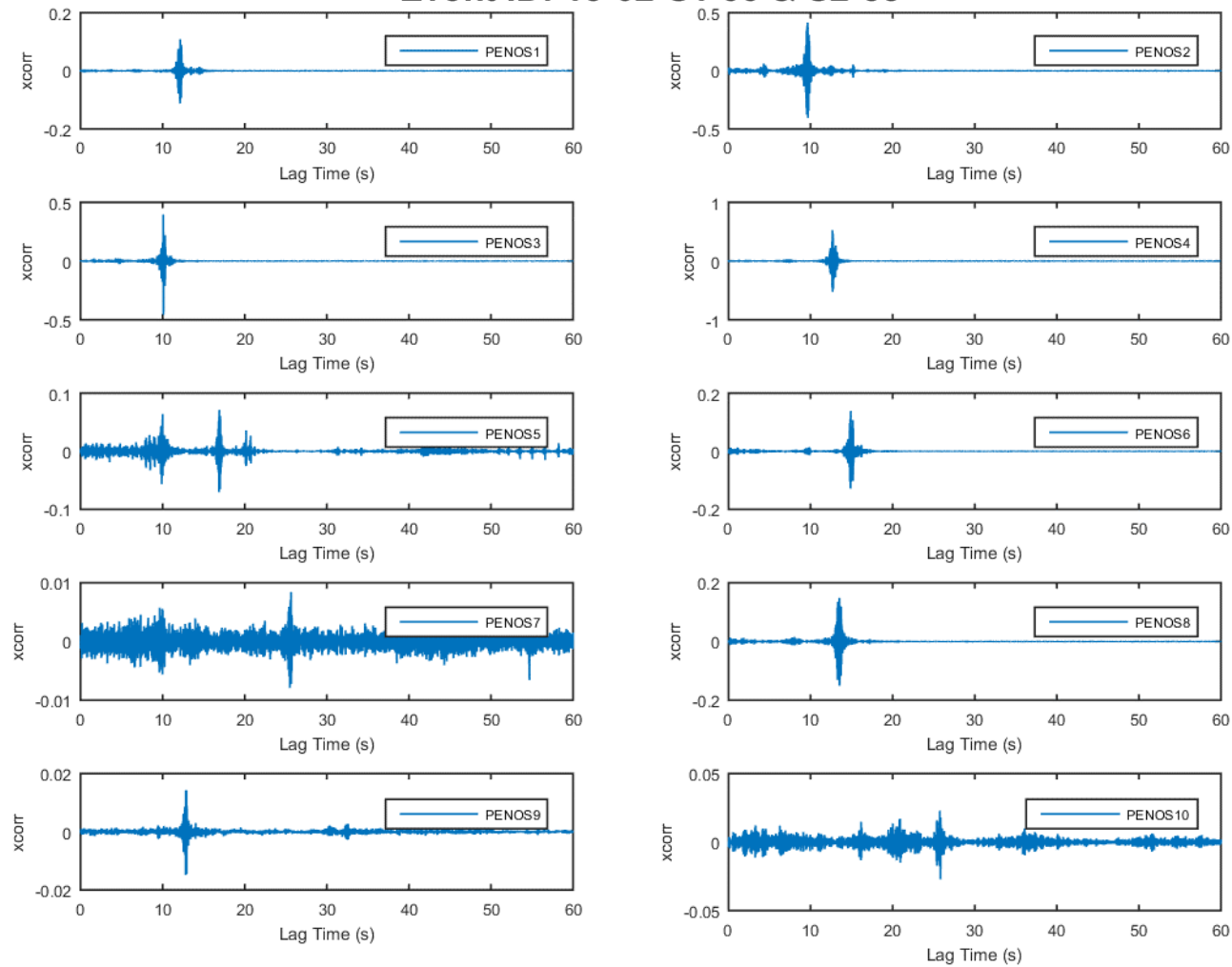


FIGURE 3.267: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S1-99 & S2-88

Peak Particle Velocity - Event ID: 15-02-S1-99 & S2-88

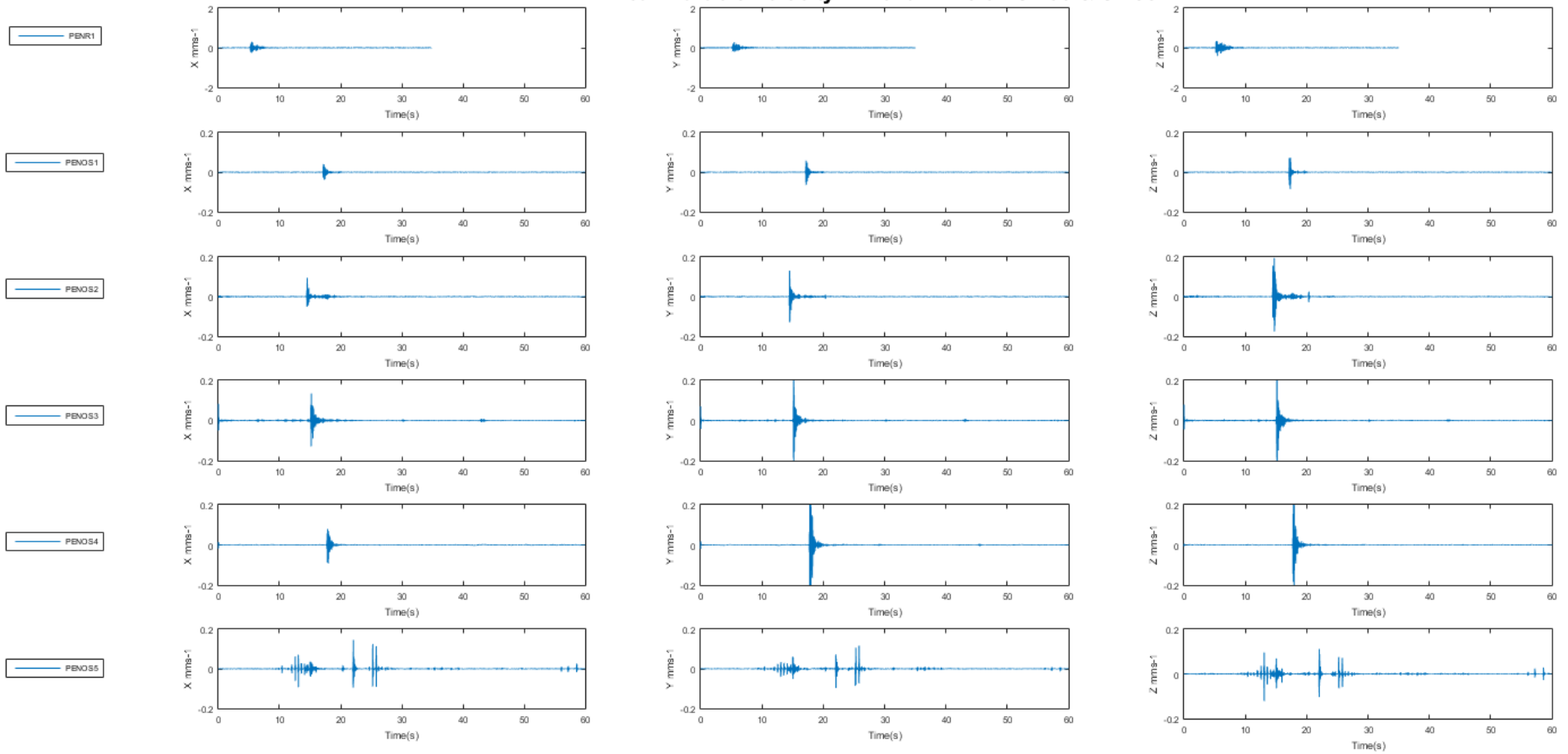


FIGURE 3.268: PEN\_OS 1 - 5 15-02-S1-99 & S2-88

Peak Particle Velocity - Event ID: 15-02-S1-99 & S2-88

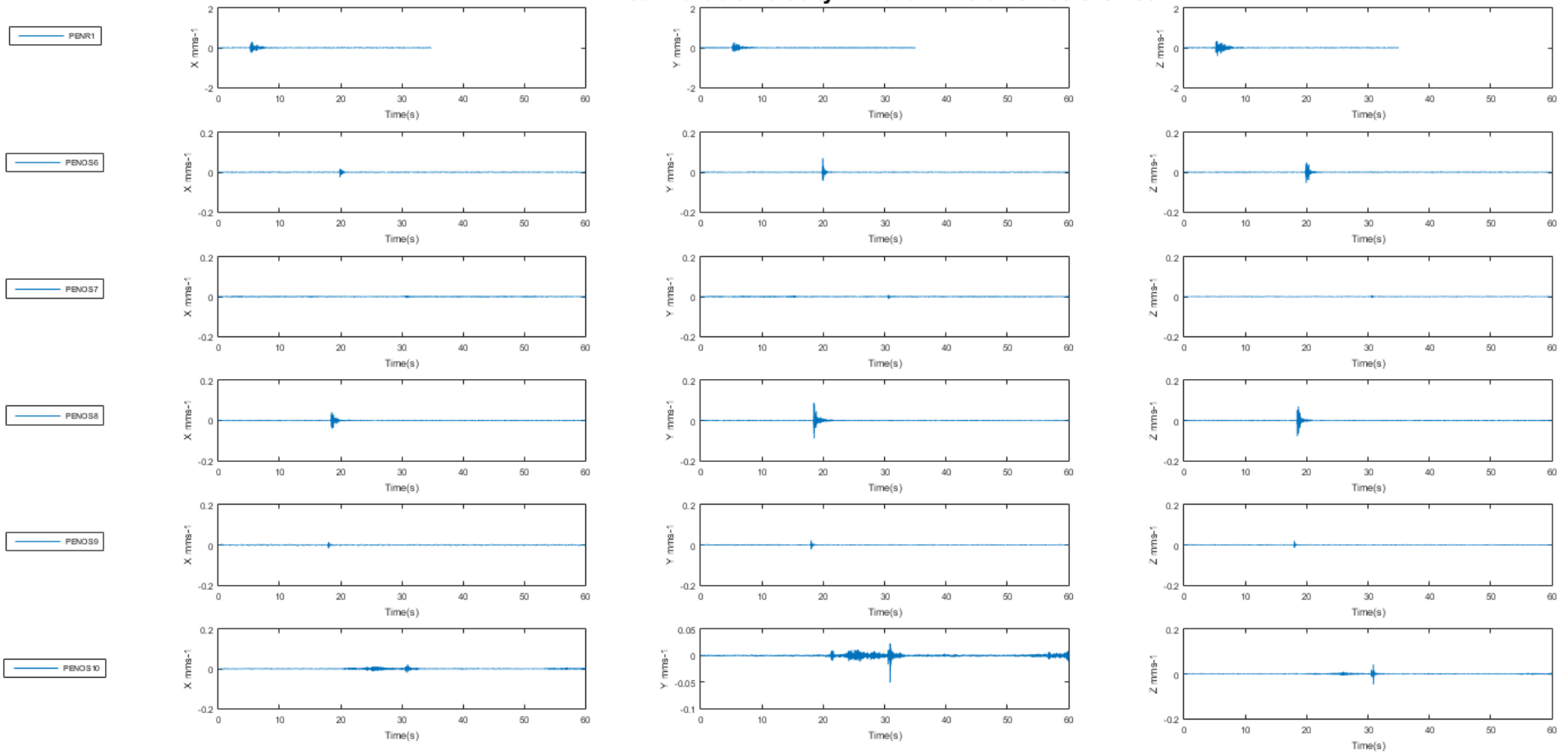


FIGURE 3.269: PEN\_OS 6 - 10 15-02-S1-99 & S2-88

### Event ID: 15-02-S1-99 & S2-88

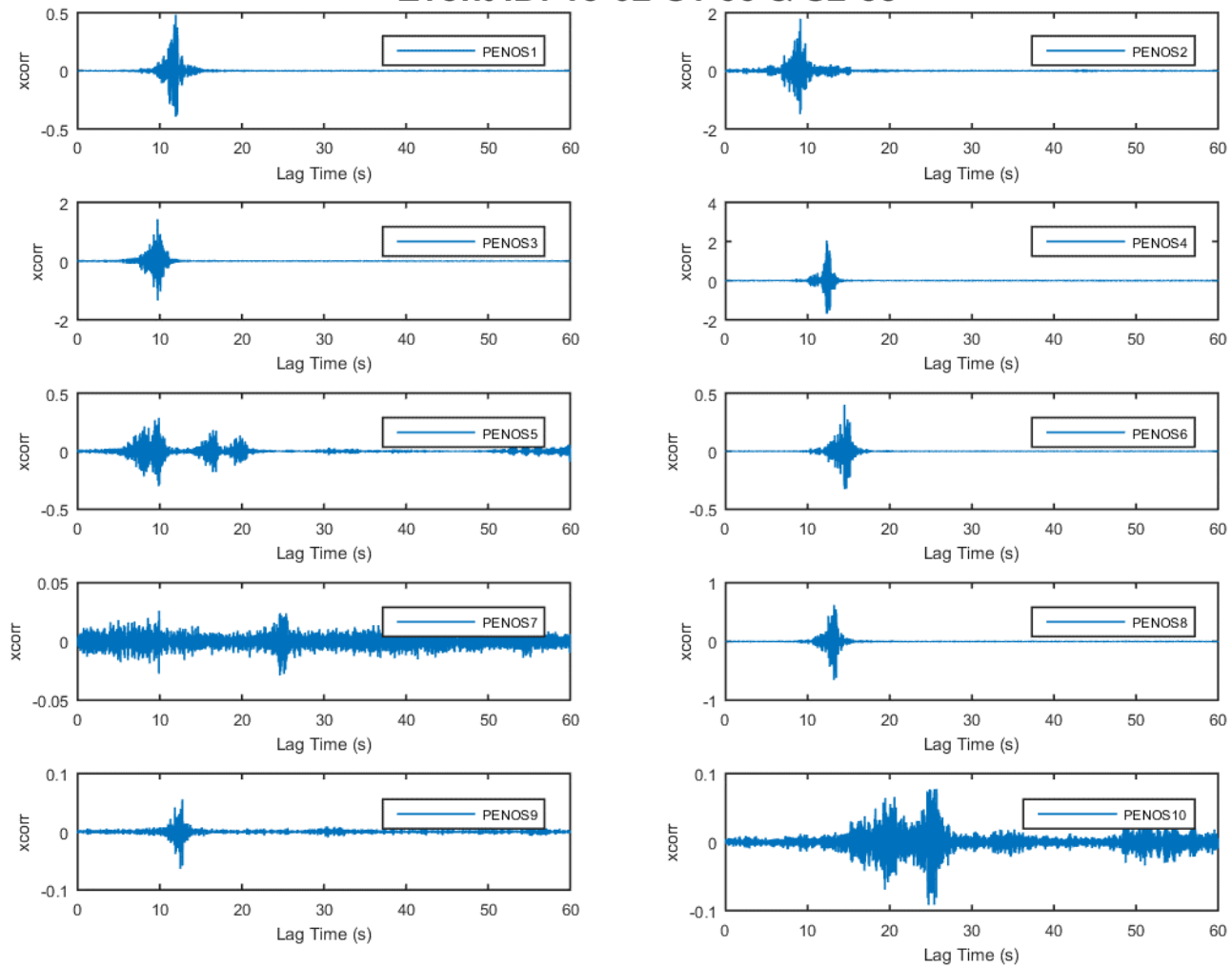
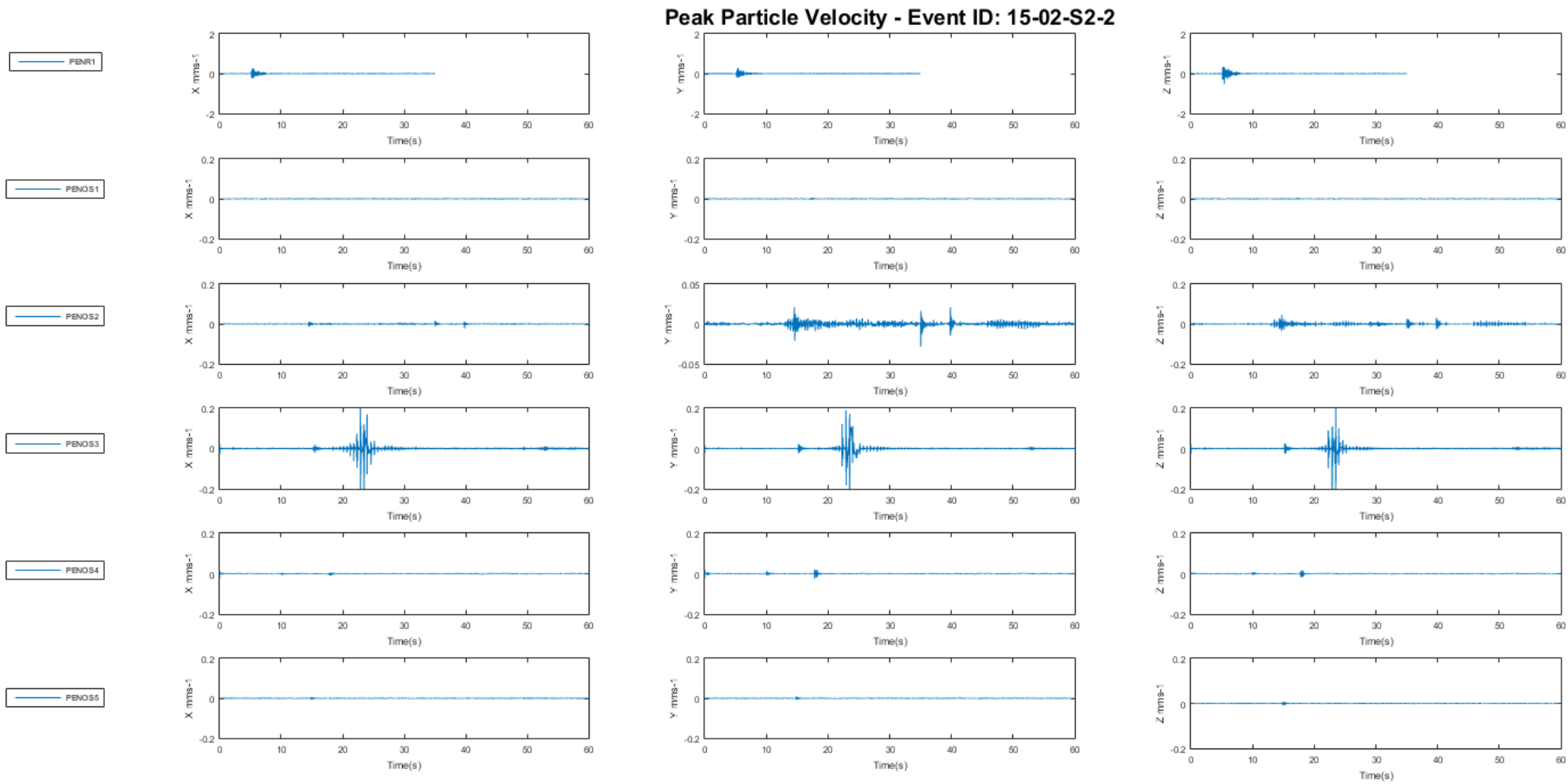
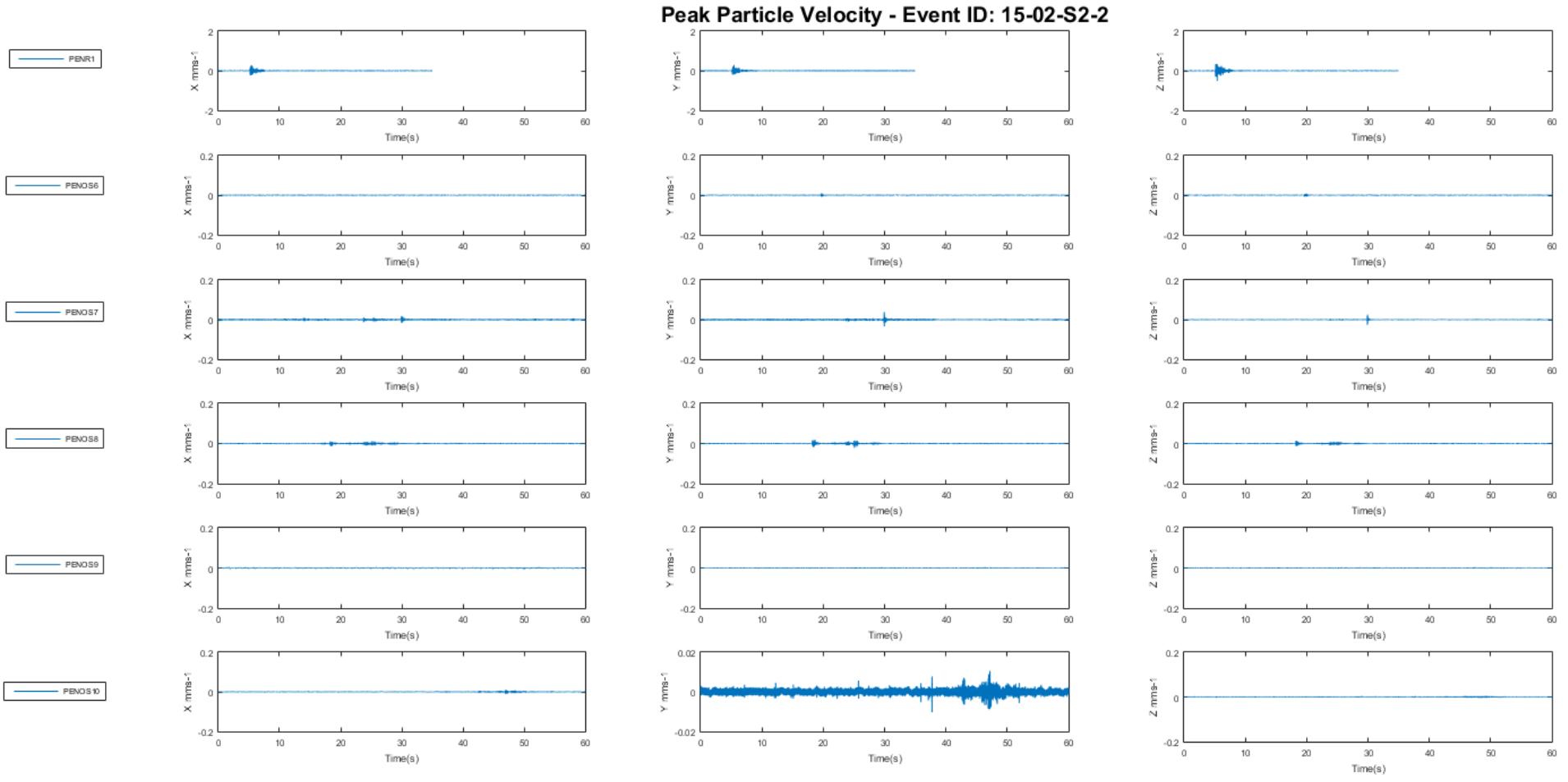


FIGURE 3.270: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S1-99 & S2-88



**FIGURE 3.271: PEN\_OS 1 - 5 15-02-S2-2**



**FIGURE 3.272: PEN\_OS 6 - 10 15-02-S2-2**

### Event ID: 15-02-S2-2

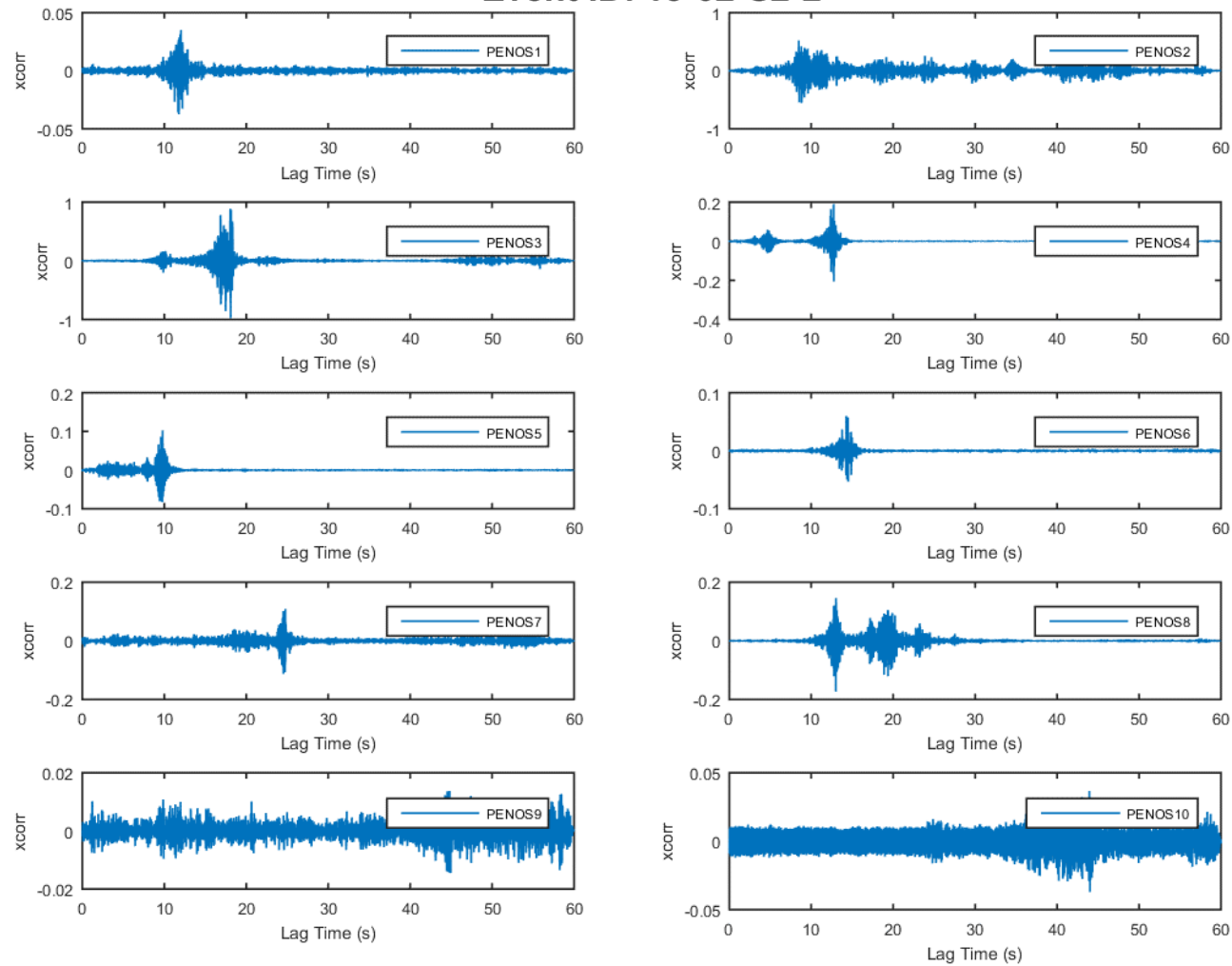
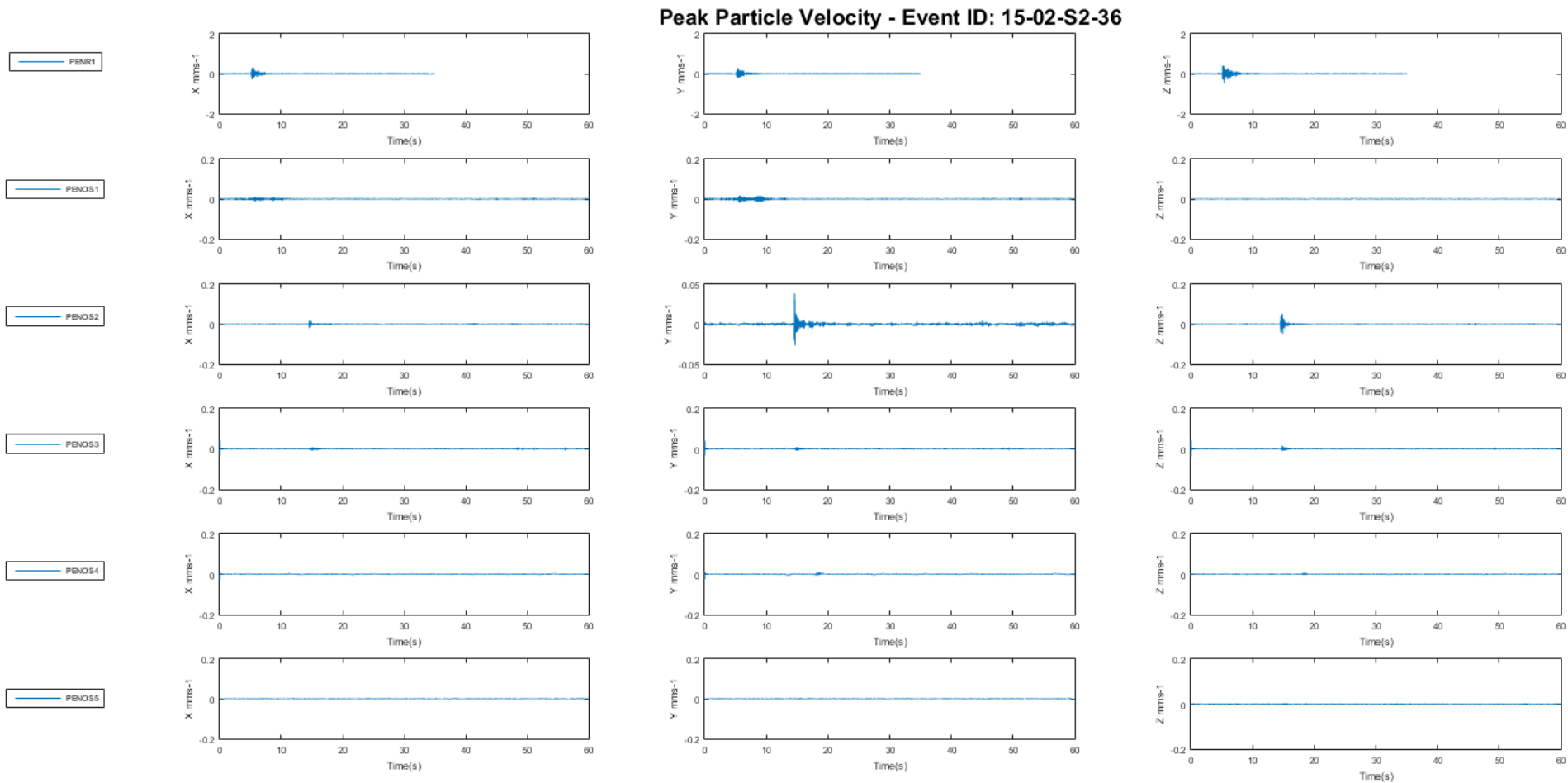
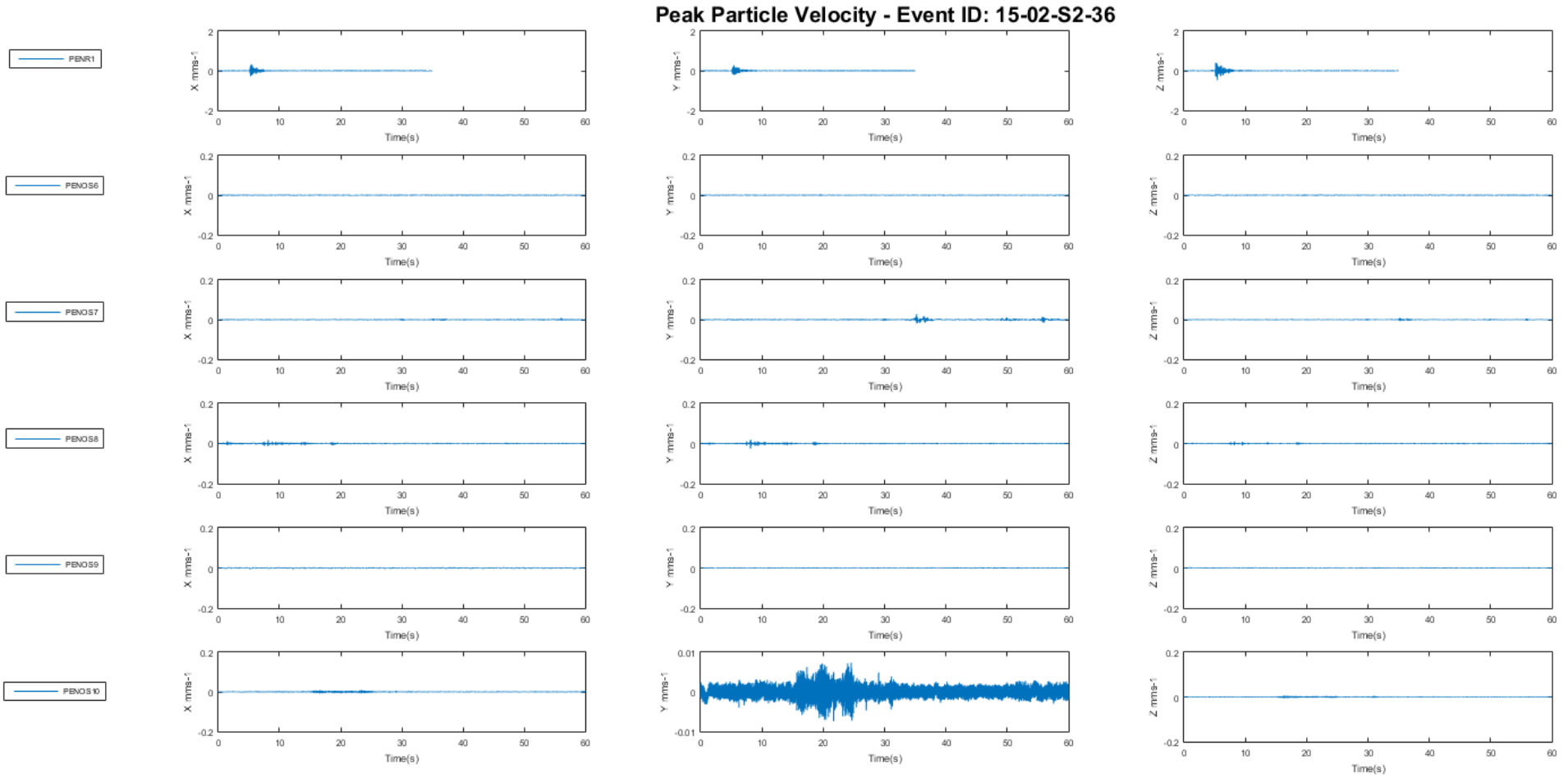


FIGURE 3.273: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S2-2



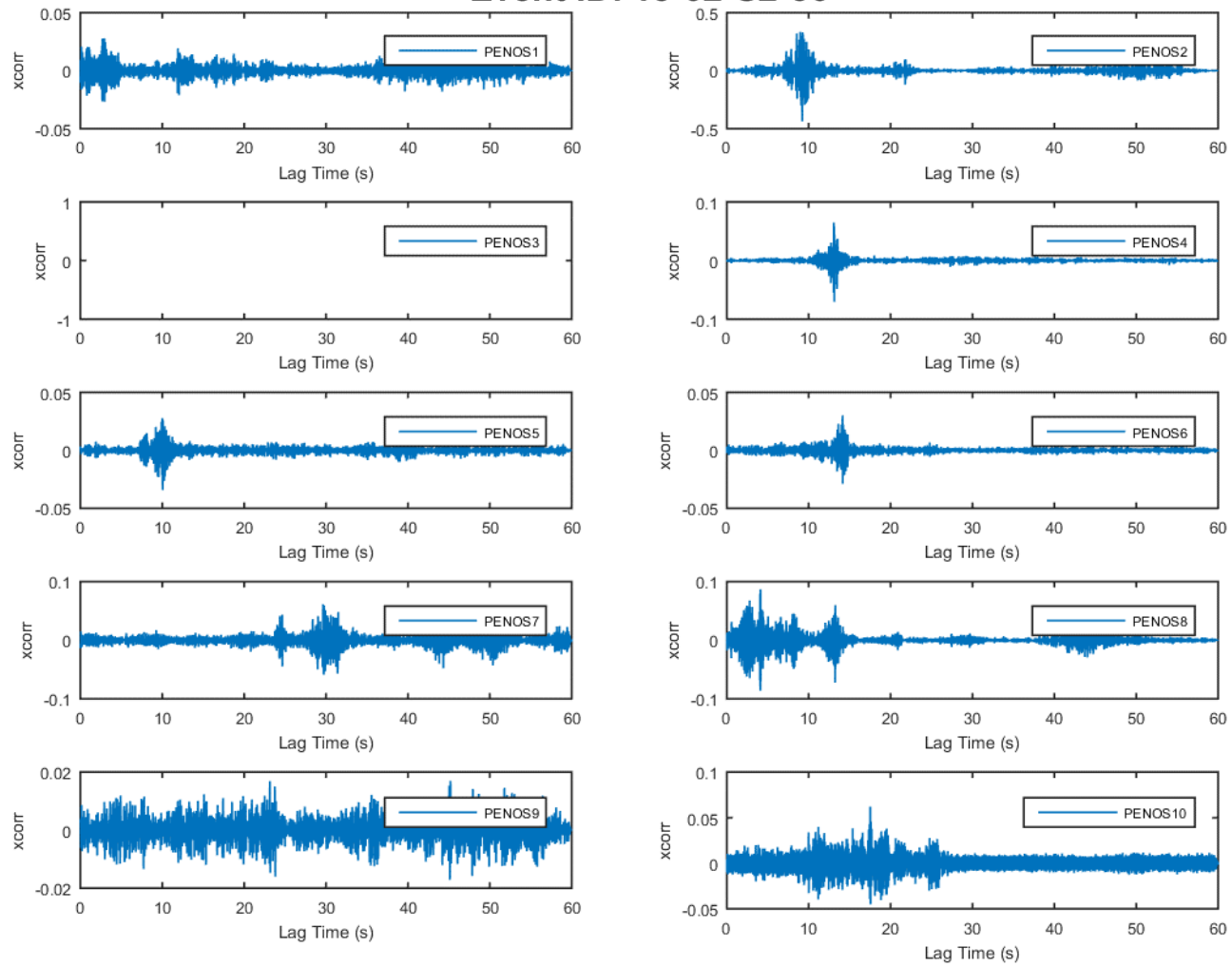


**FIGURE 3.274: PEN\_OS 1 - 5 15-02-S2-36**

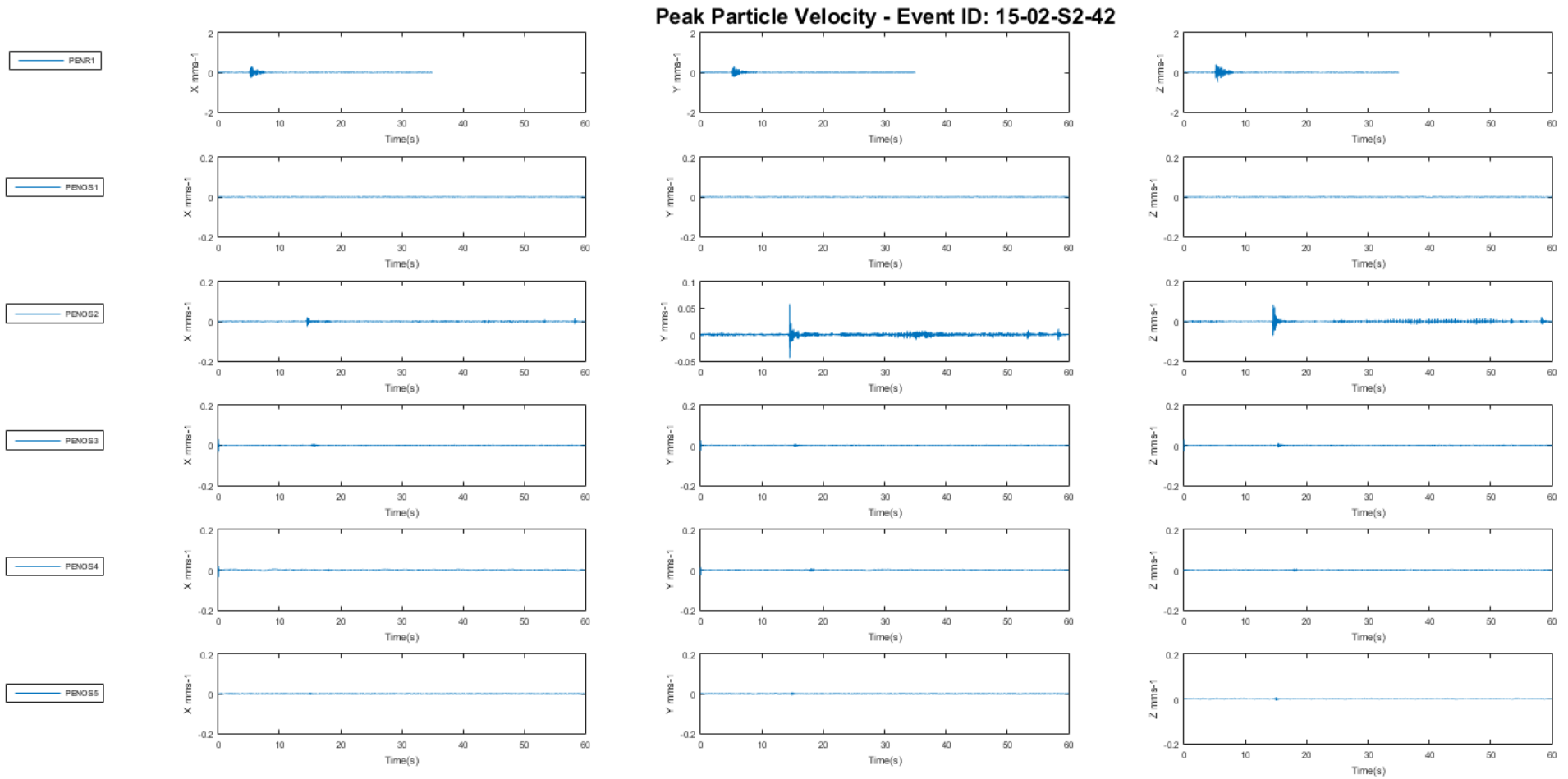


**FIGURE 3.275: PEN\_OS 6 - 10 15-02-S2-36**

**Event ID: 15-02-S2-36**



**FIGURE 3.276: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S2-36**



**FIGURE 3.277: PEN\_OS 1 - 5 15-02-S2-42**

Peak Particle Velocity - Event ID: 15-02-S2-42

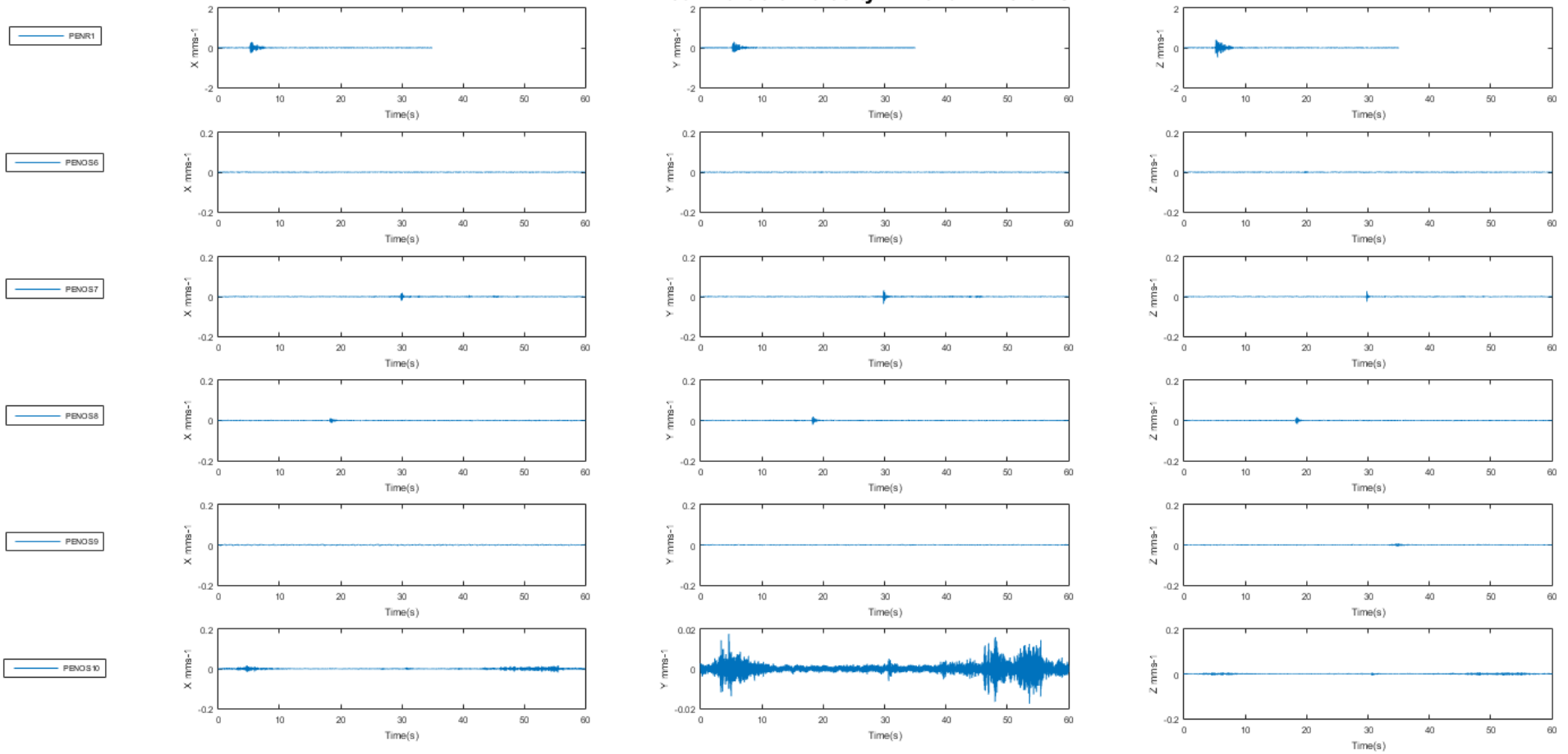


FIGURE 3.278: PEN\_OS 6 - 10 15-02-S2-42

### Event ID: 15-02-S2-42

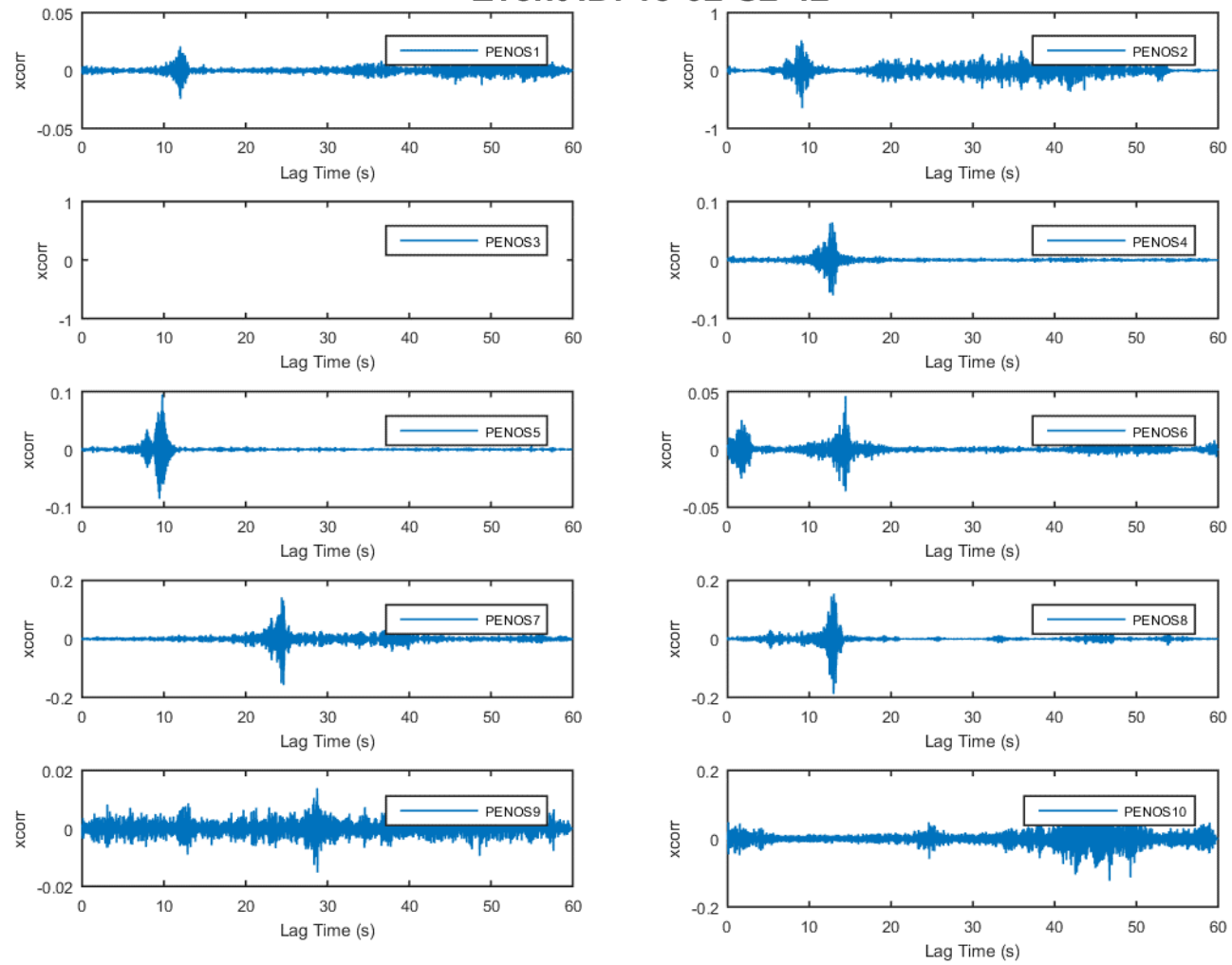
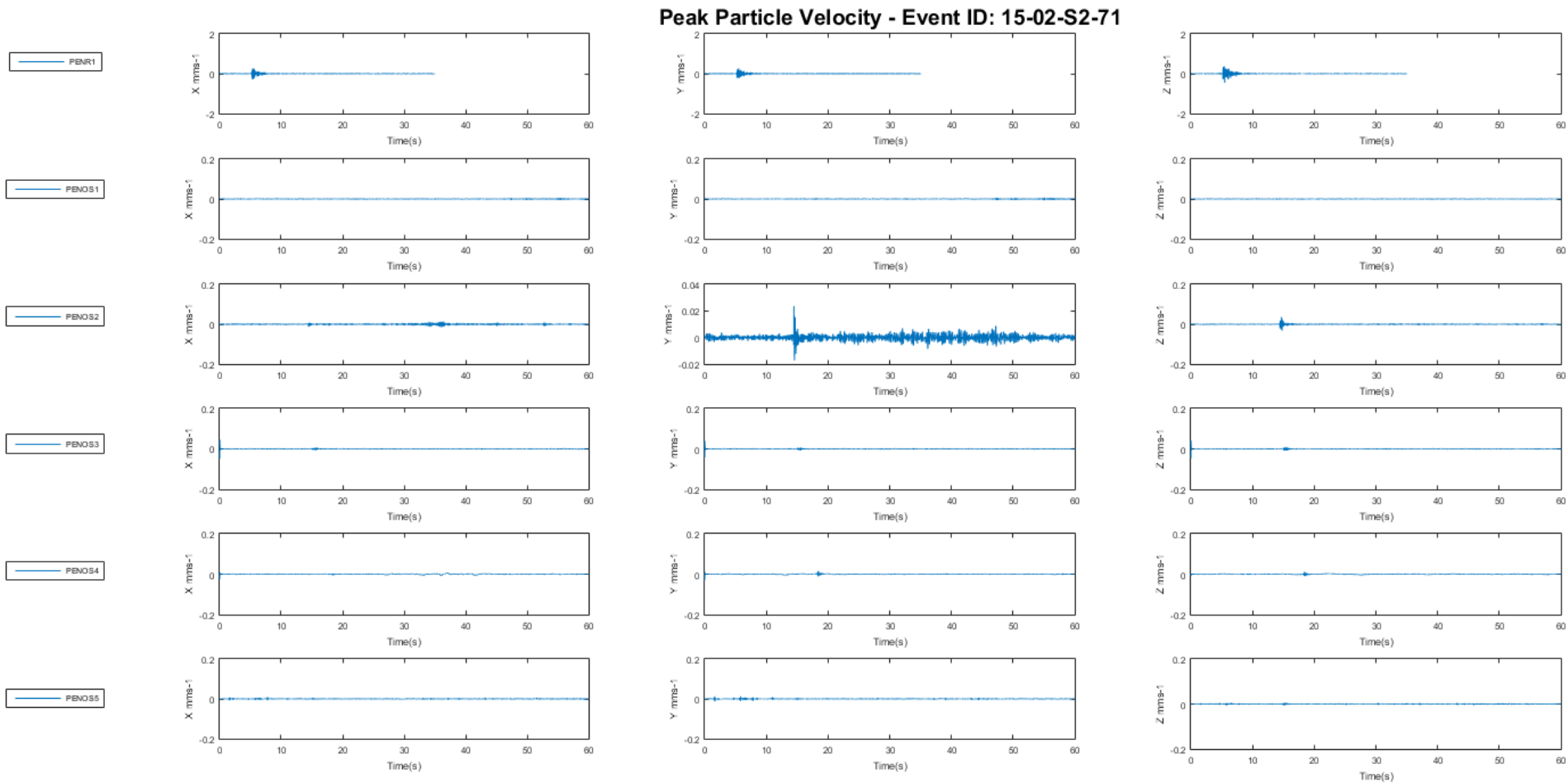
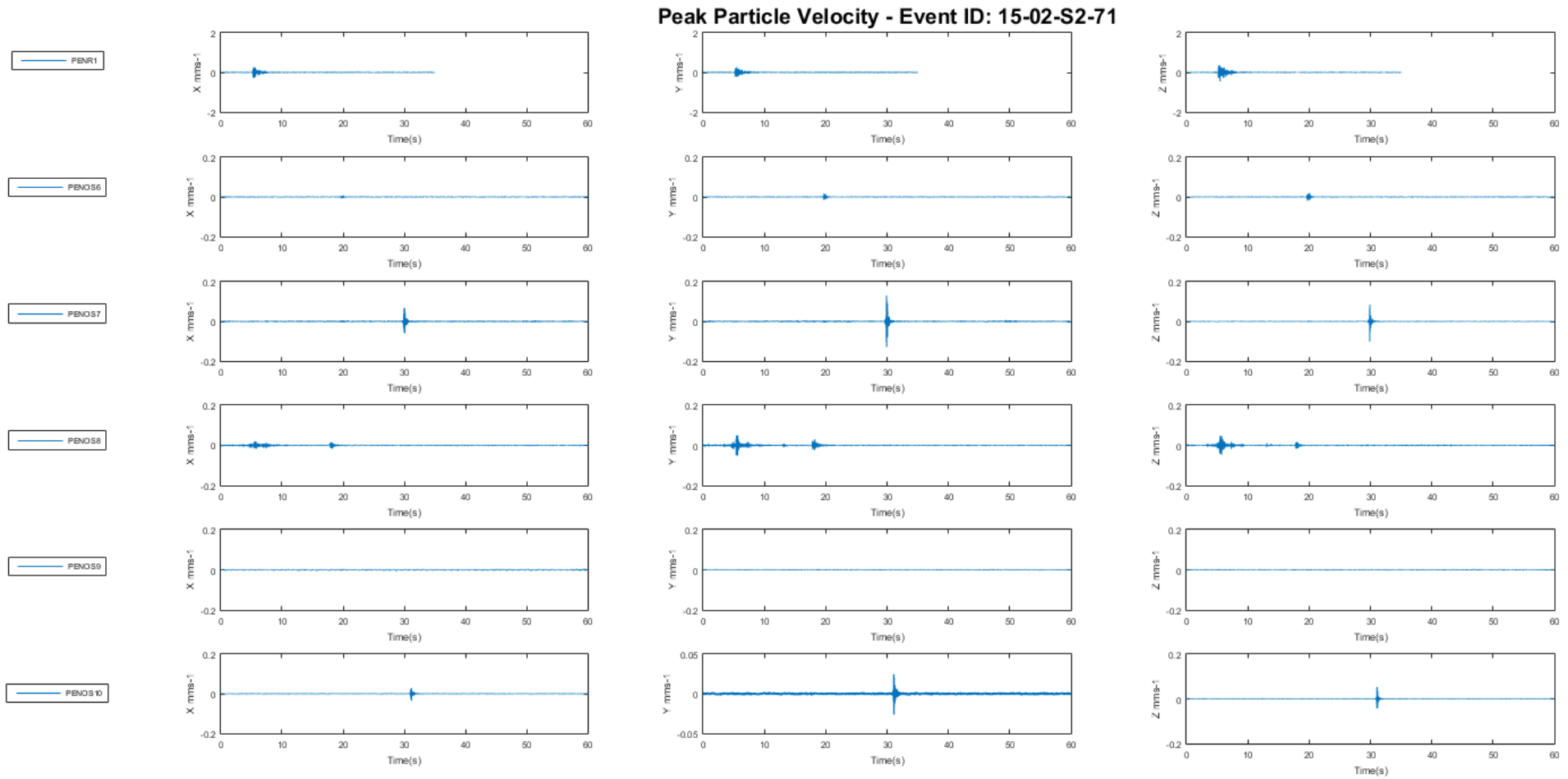


FIGURE 3.279: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S2-42



**FIGURE 3.280: PEN\_OS 1 - 5 15-02-S2-71**



**FIGURE 3.281: PEN\_OS 6 - 10 15-02-S2-71**



### Event ID: 15-02-S2-71

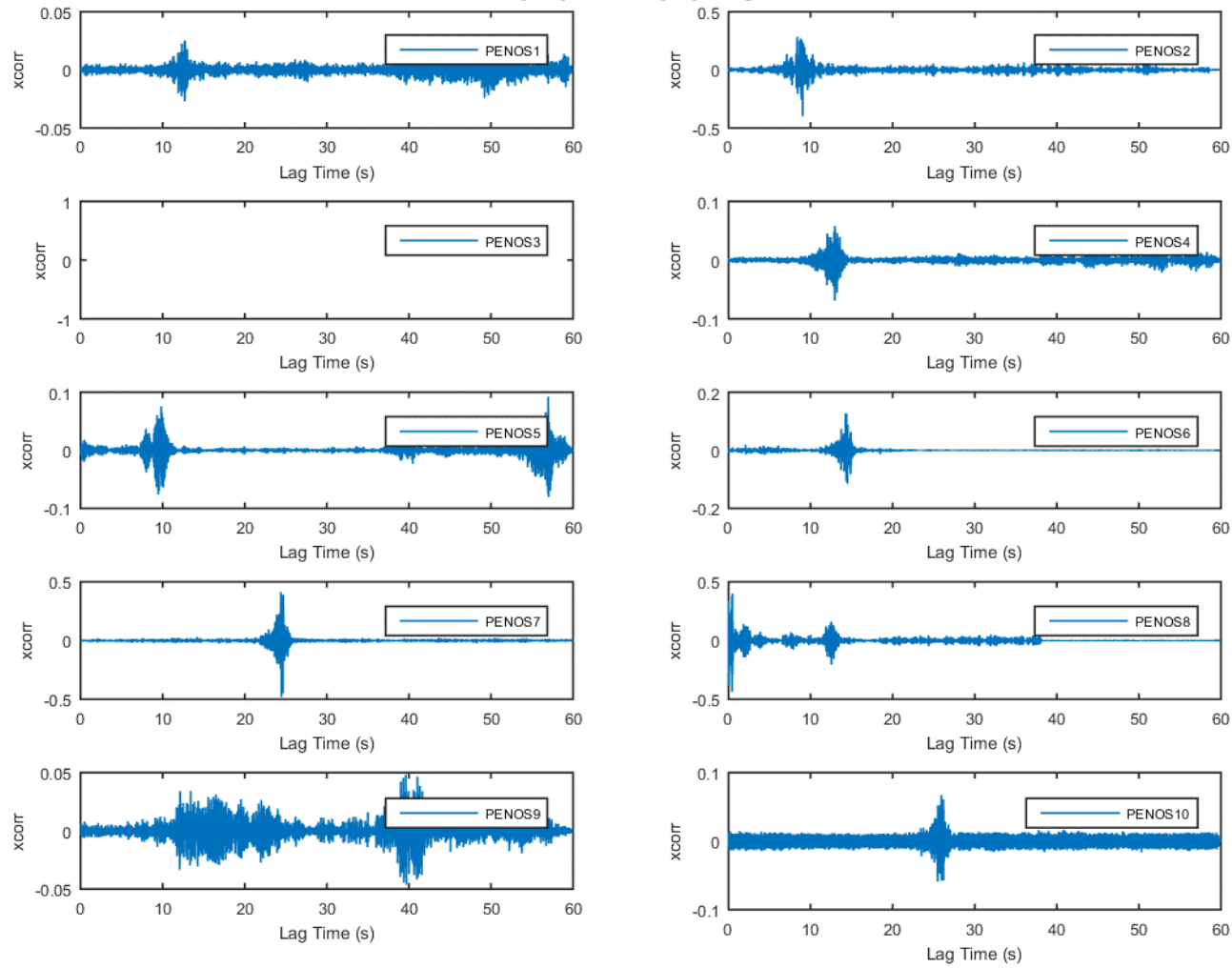


FIGURE 3.282: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S2-71

Peak Particle Velocity - Event ID: 15-02-S2-104

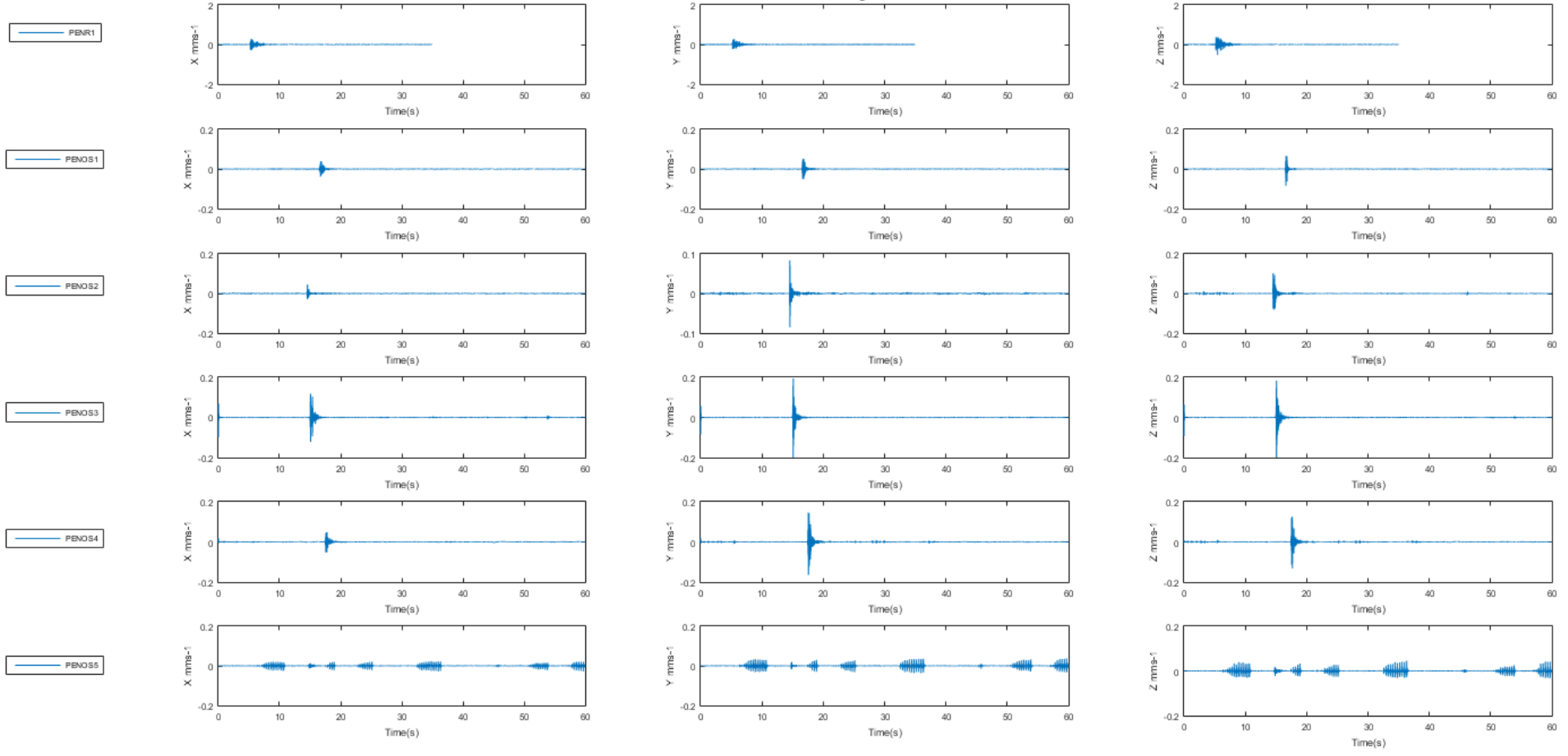


FIGURE 3.283: PEN\_OS 1 - 5 15-02-S2-104

Peak Particle Velocity - Event ID: 15-02-S2-104

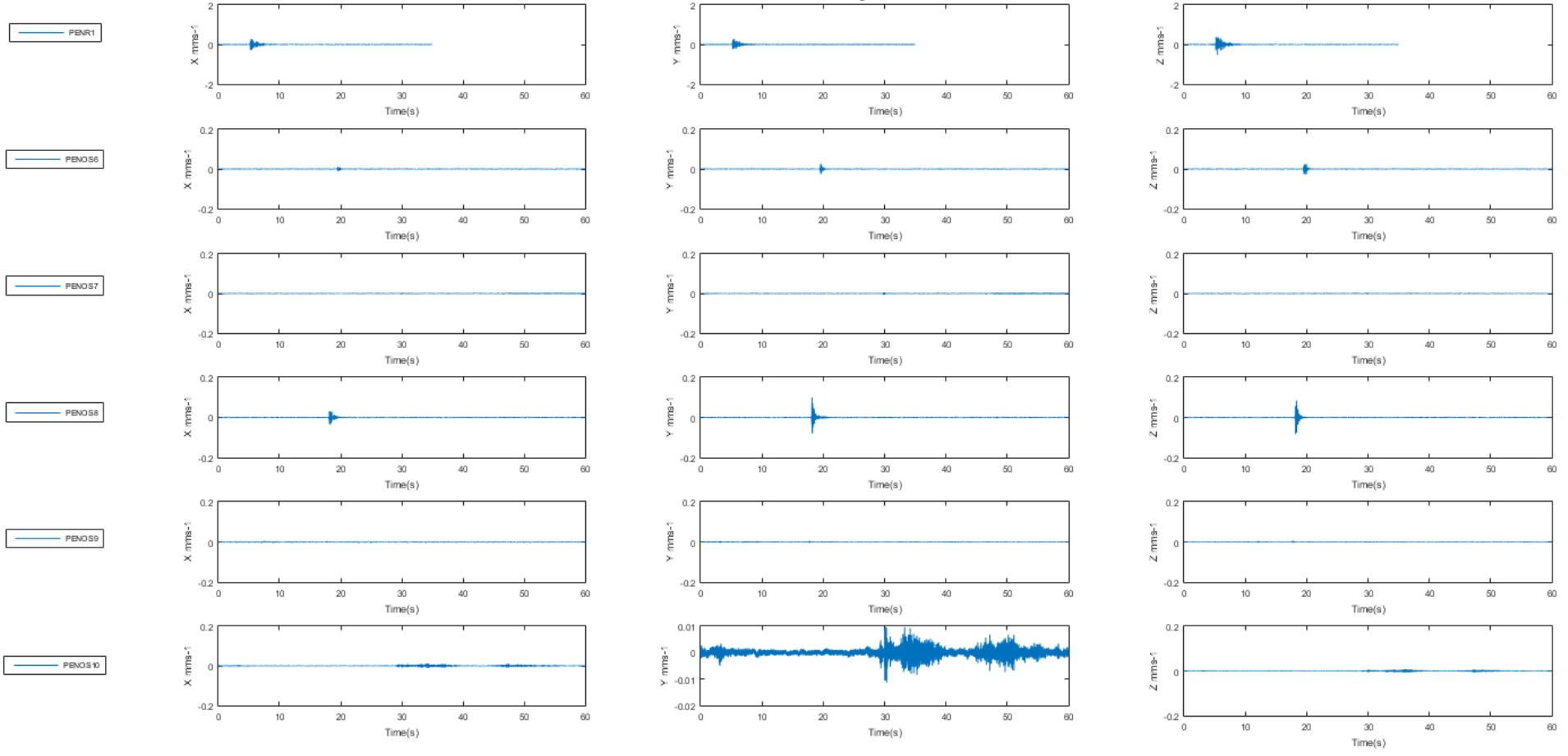


FIGURE 3.284: PEN\_OS 6 - 10 15-02-S2-104

### Event ID: 15-02-S2-104

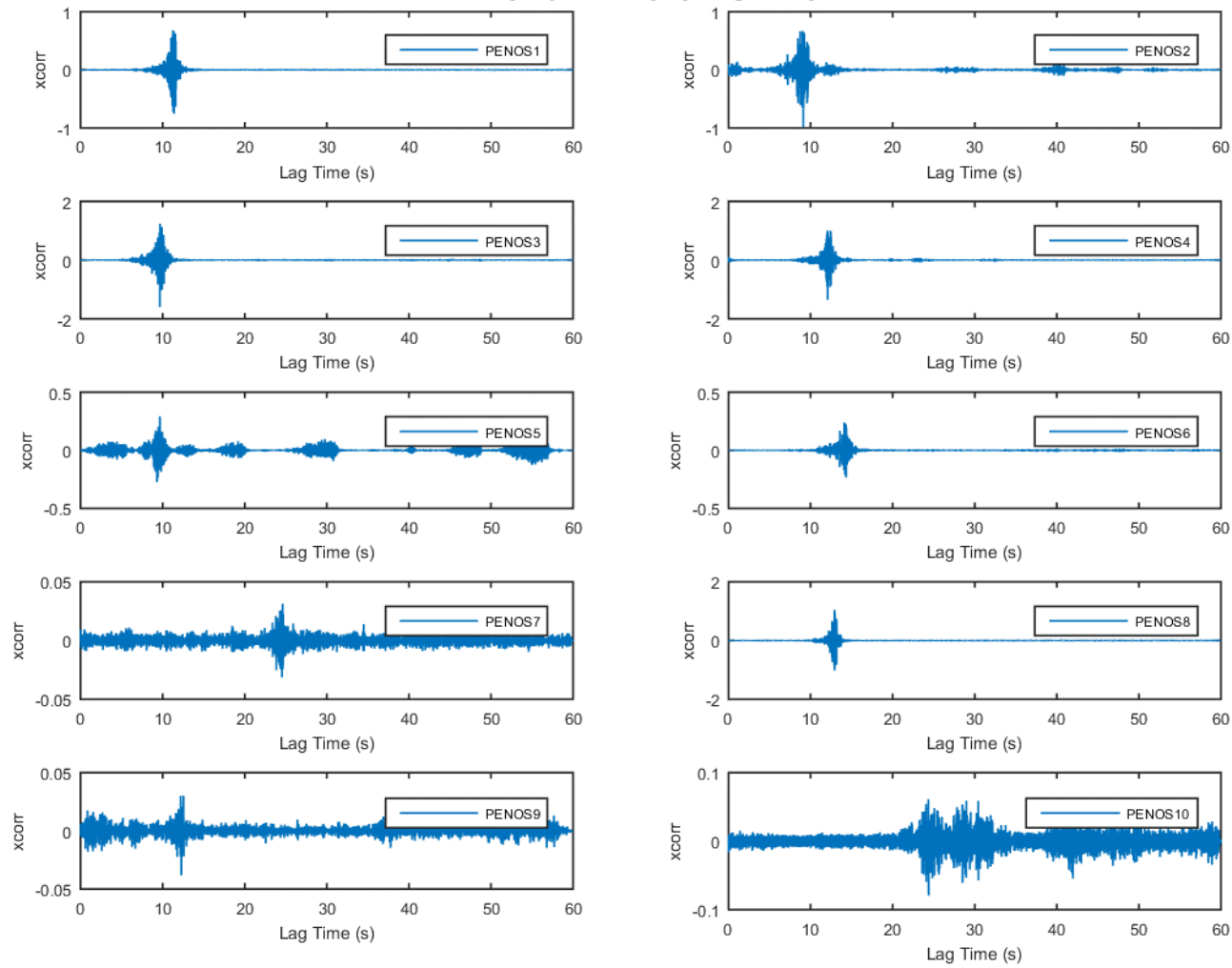
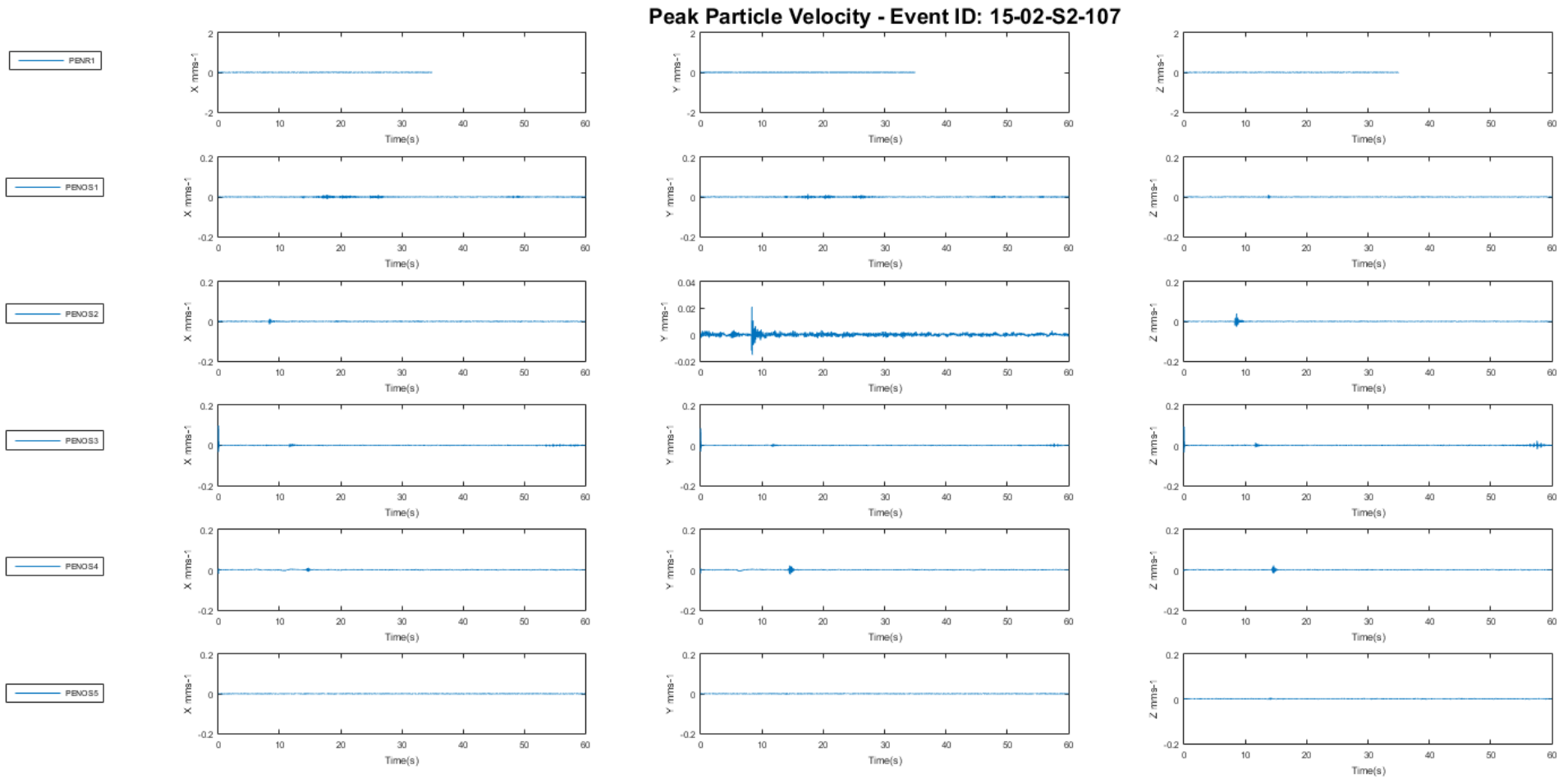


FIGURE 3.285: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S2-104



**FIGURE 3.286: PEN\_OS 1 - 5 15-02-S2-107**

Peak Particle Velocity - Event ID: 15-02-S2-107

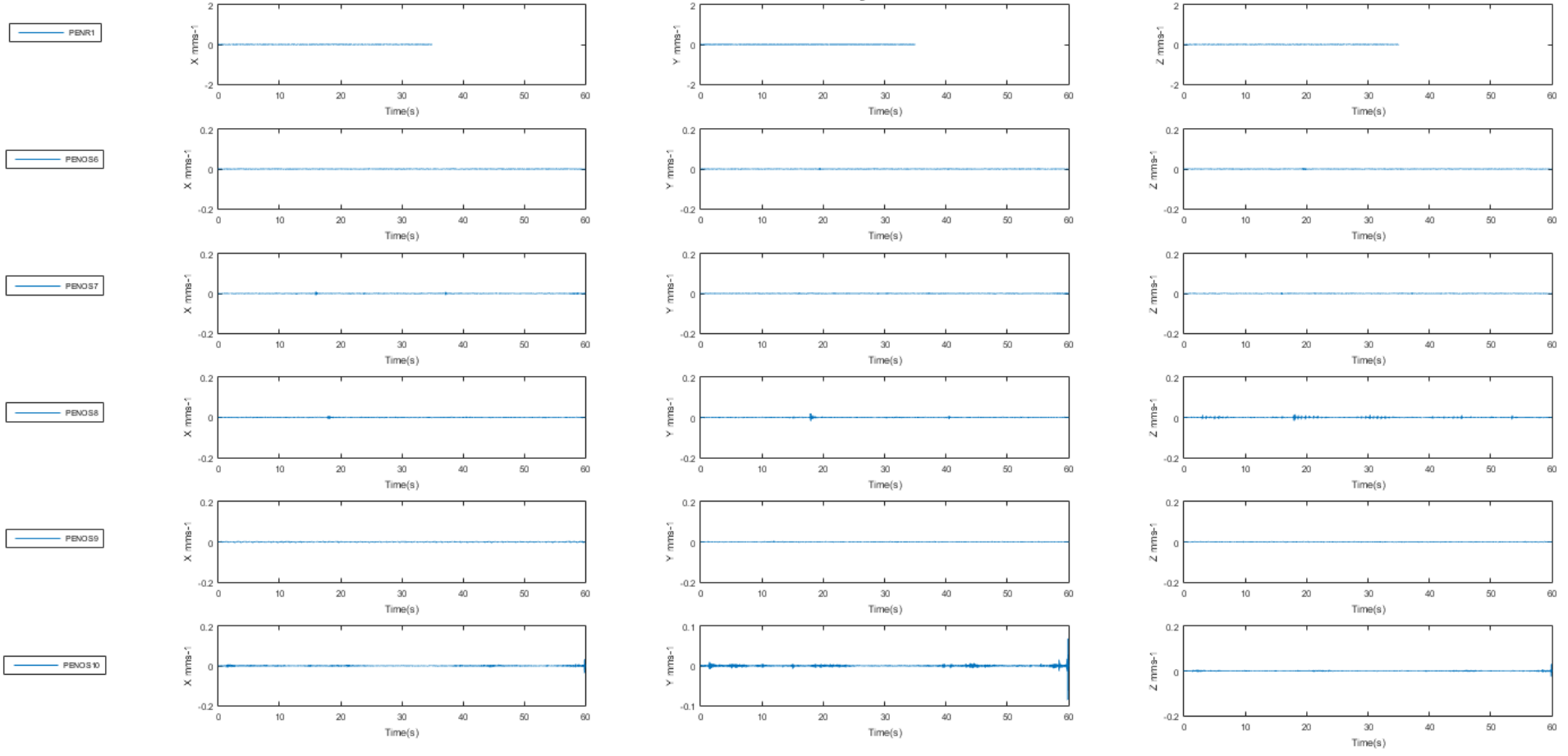


FIGURE 3.287: PEN\_OS 6 - 10 15-02-S2-107

Event ID: 15-02-S2-107

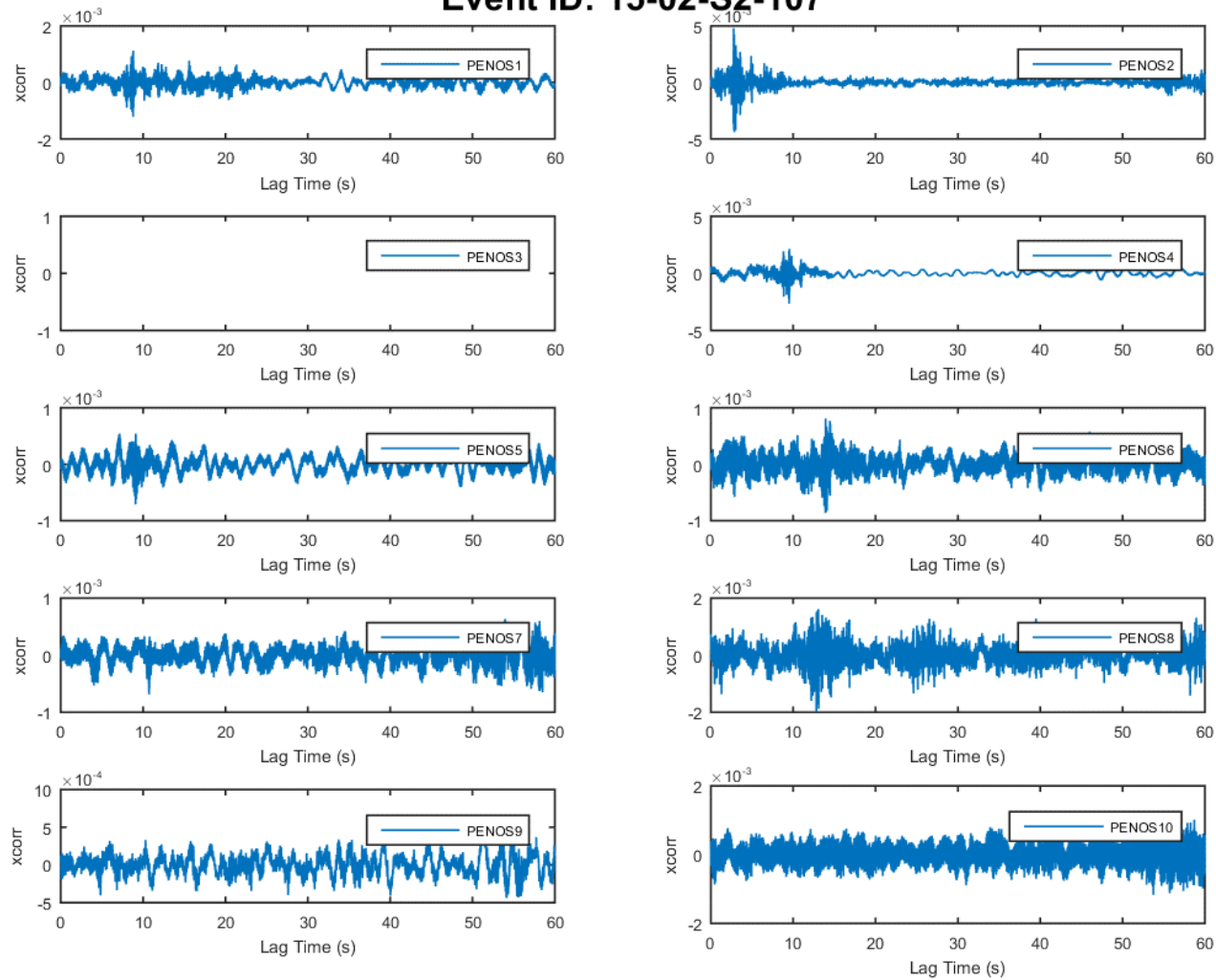
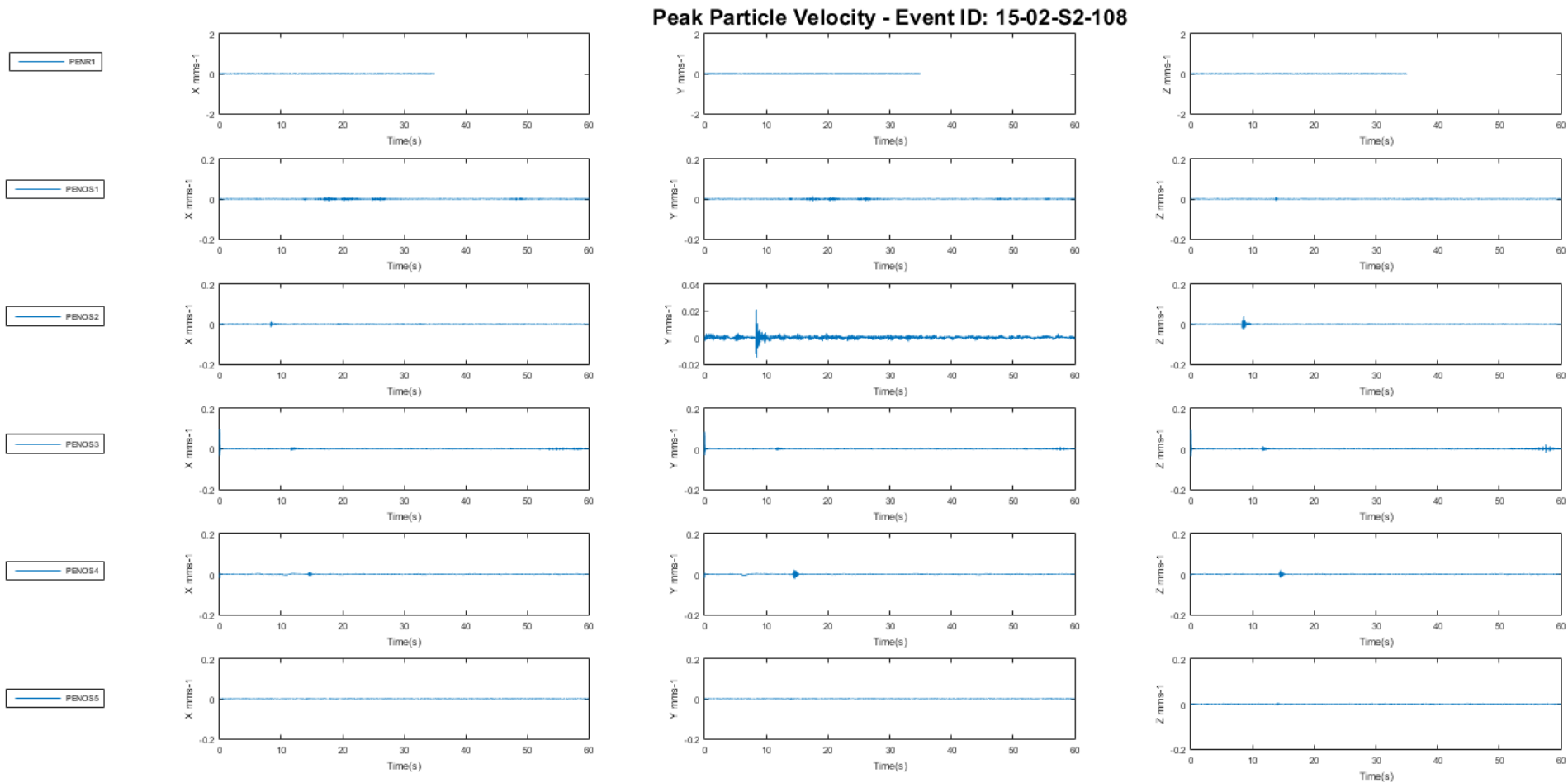


FIGURE 3.288: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S2-107



**FIGURE 3.289: PEN\_OS 1 - 5 15-02-S2-108**



Peak Particle Velocity - Event ID: 15-02-S2-108

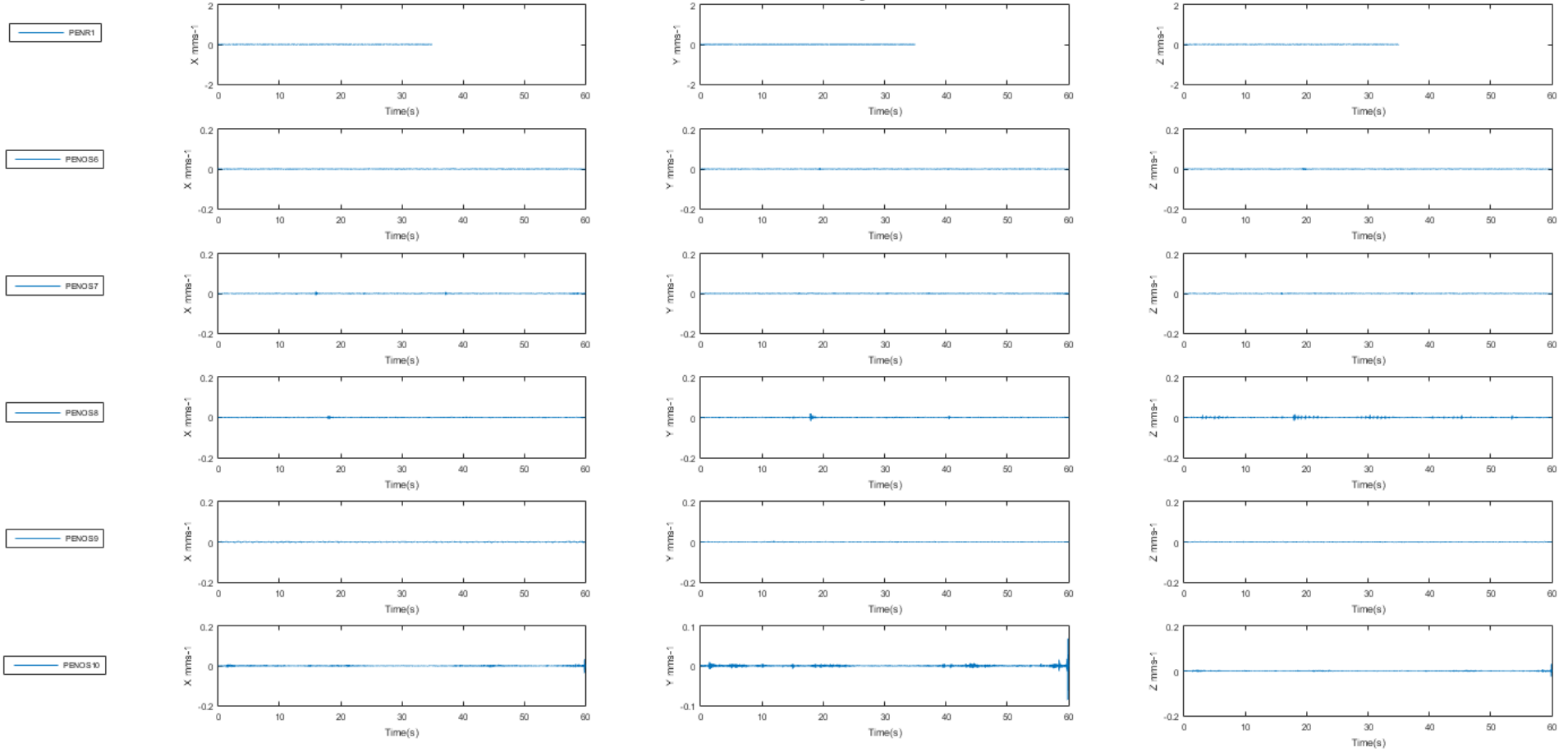


FIGURE 3.290: PEN\_OS 6 - 10 15-02-S2-108

### Event ID: 15-02-S2-108

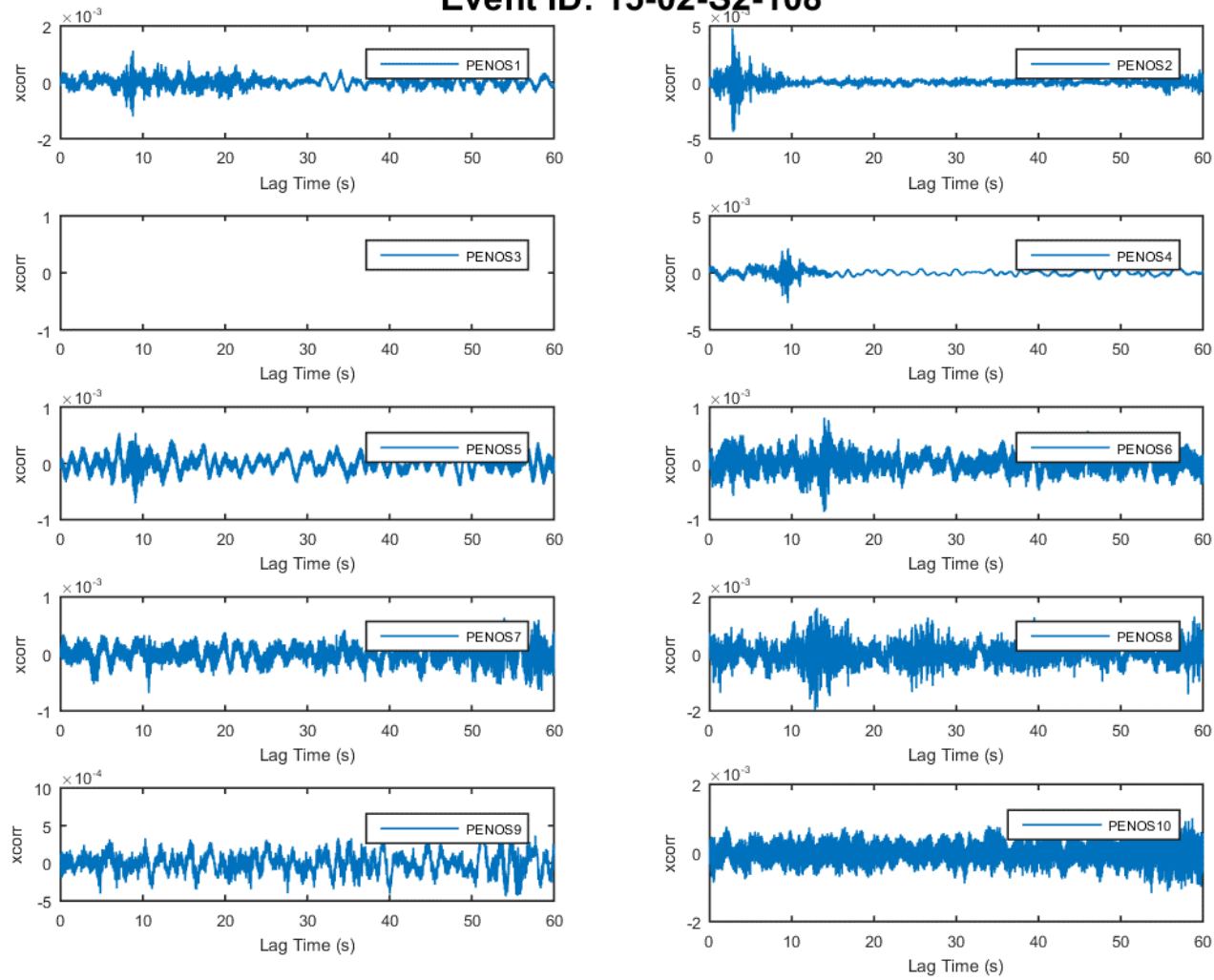
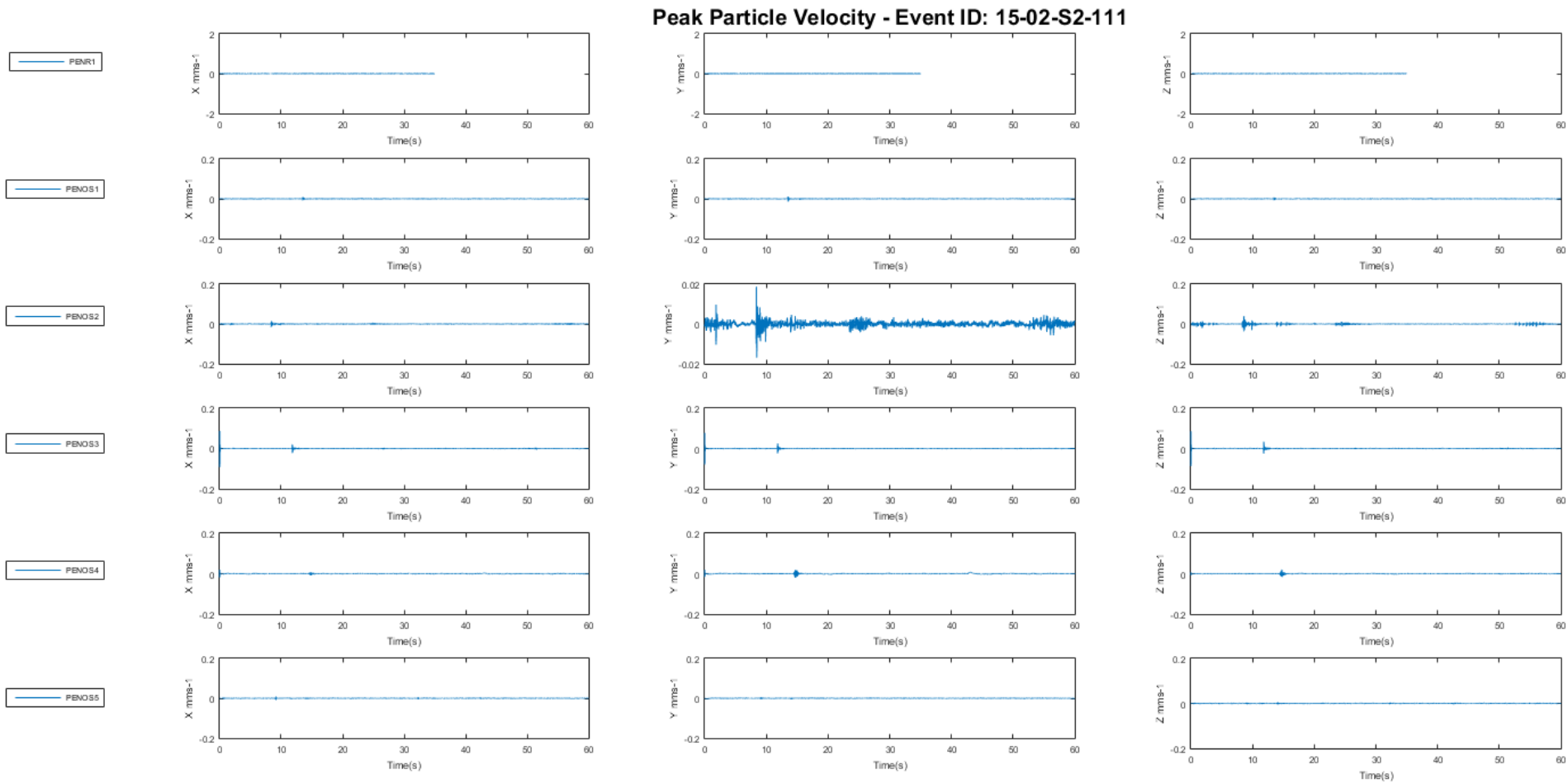


FIGURE 3.291: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S2-108



**FIGURE 3.292: PEN\_OS 1 - 5 15-02-S2-111**

Peak Particle Velocity - Event ID: 15-02-S2-111

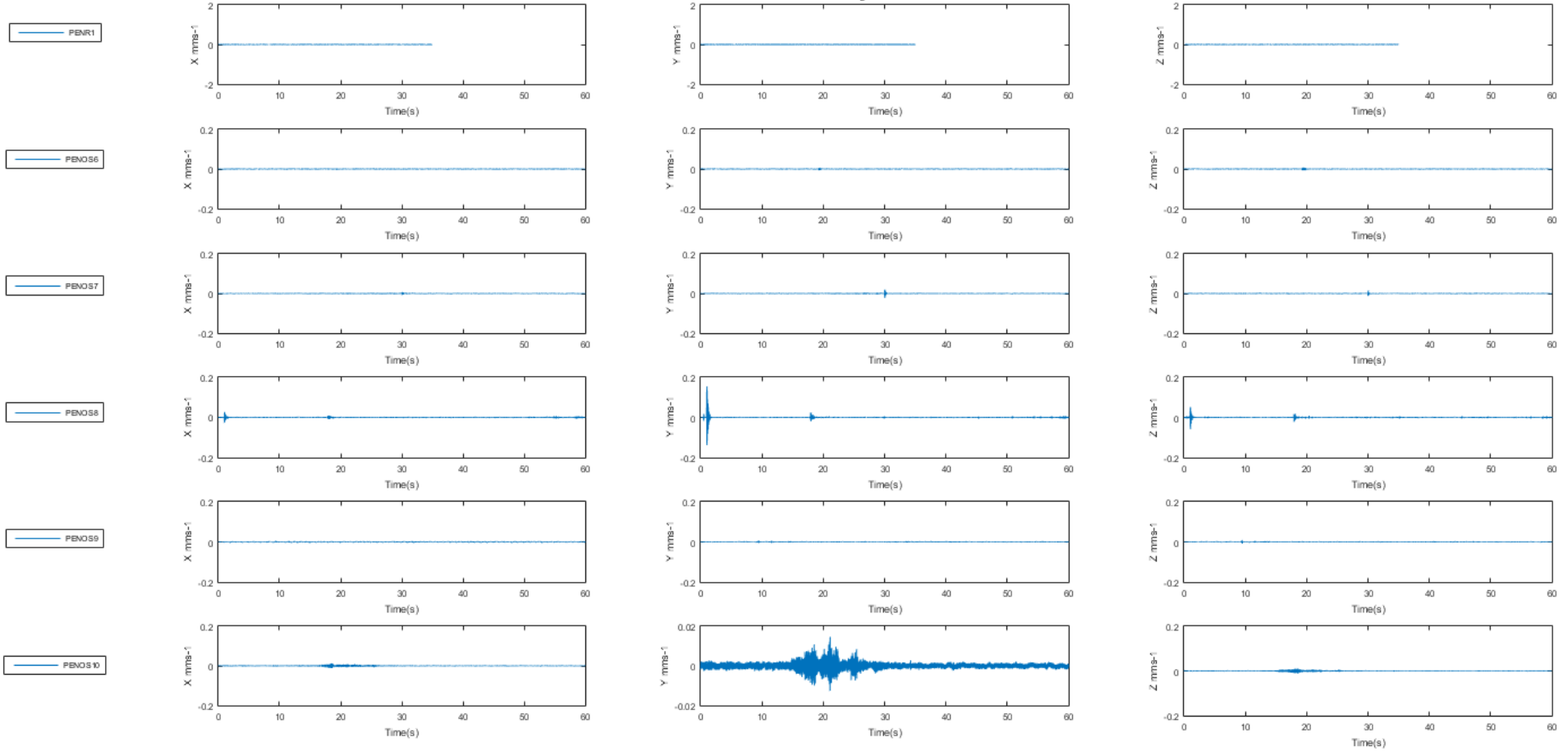


FIGURE 3.293: PEN\_OS 6 - 10 15-02-S2-111

### Event ID: 15-02-S2-111

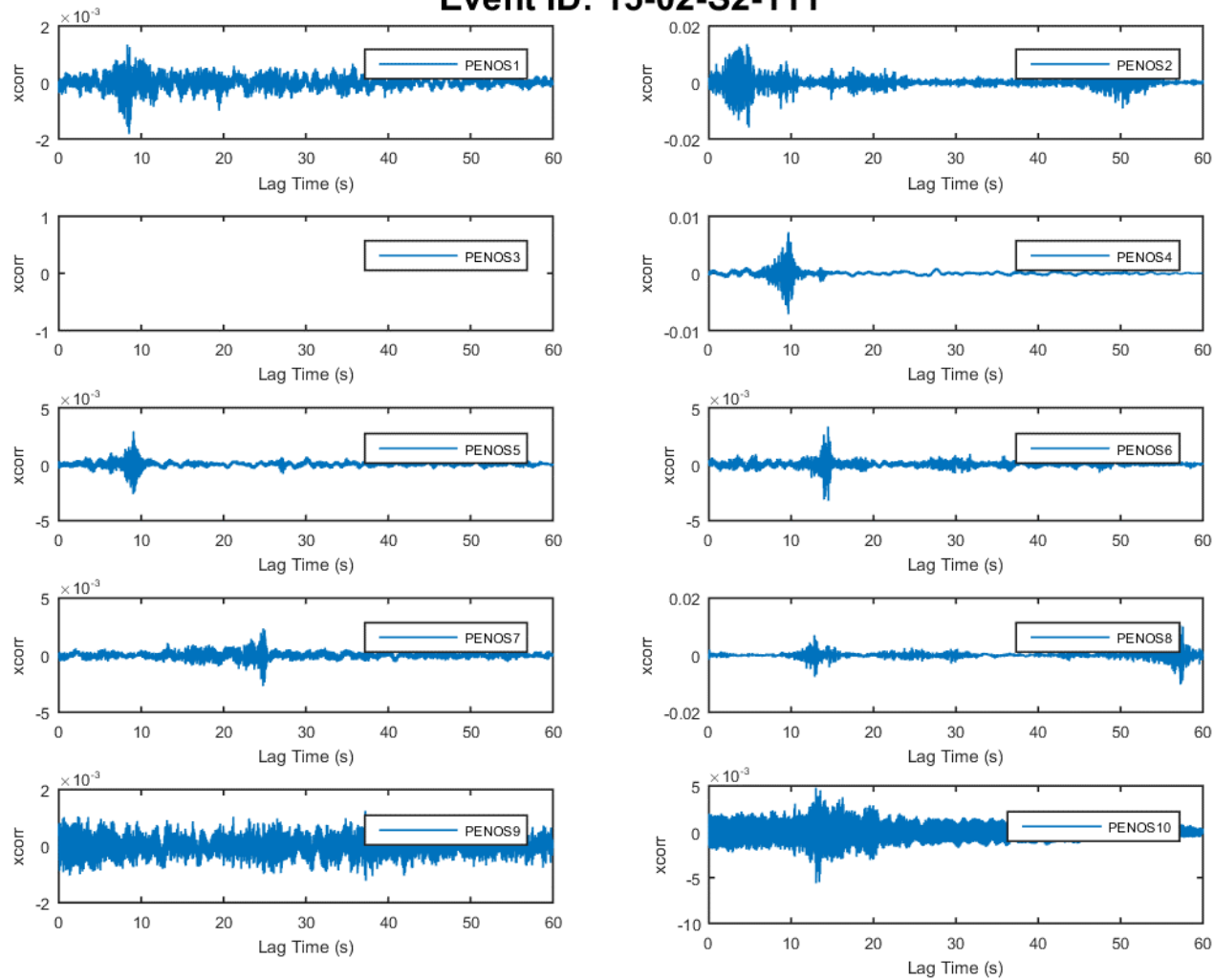
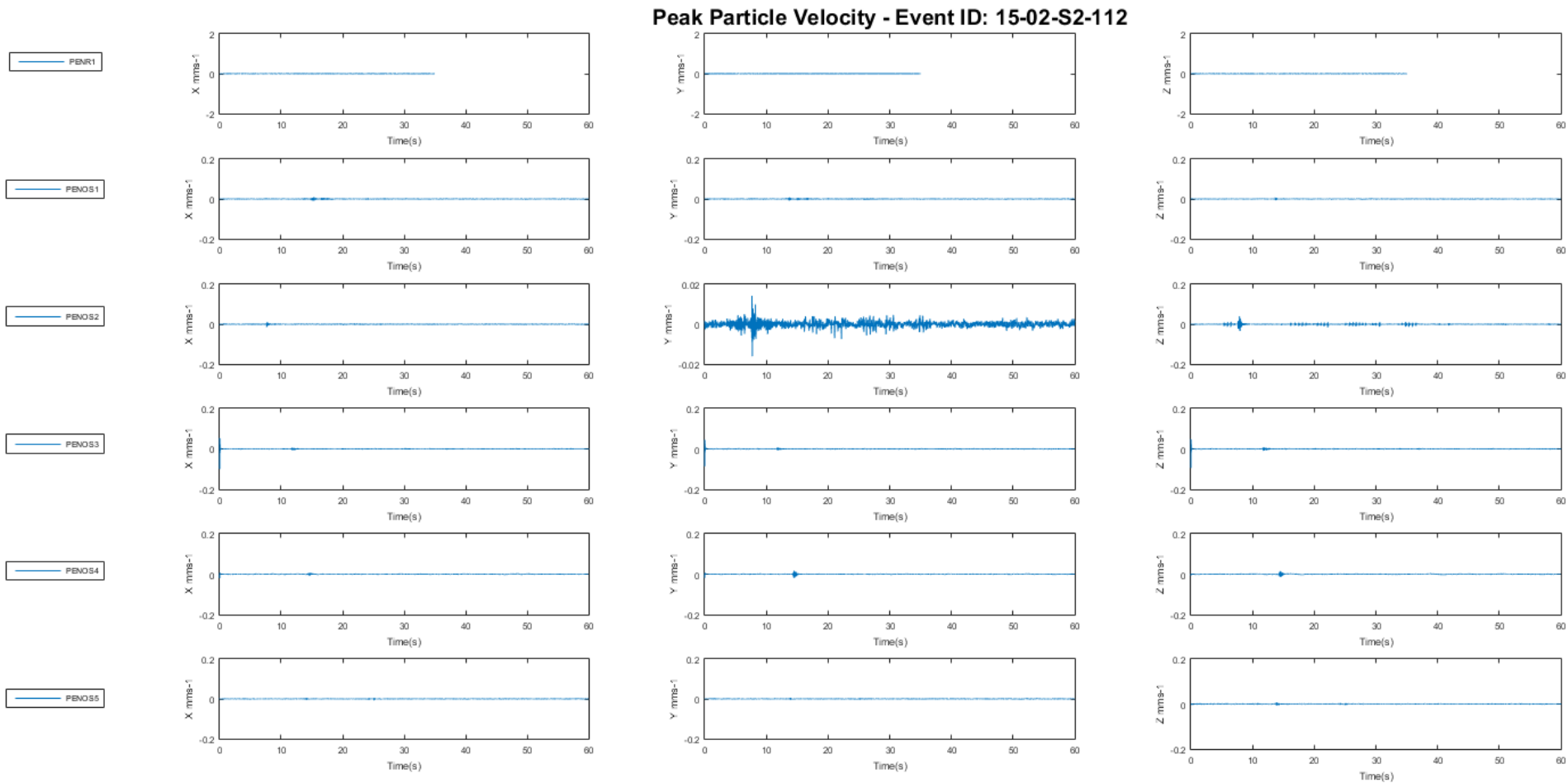


FIGURE 3.294: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S2-111



**FIGURE 3.295: PEN\_OS 1 - 5 15-02-S2-112**

Peak Particle Velocity - Event ID: 15-02-S2-112

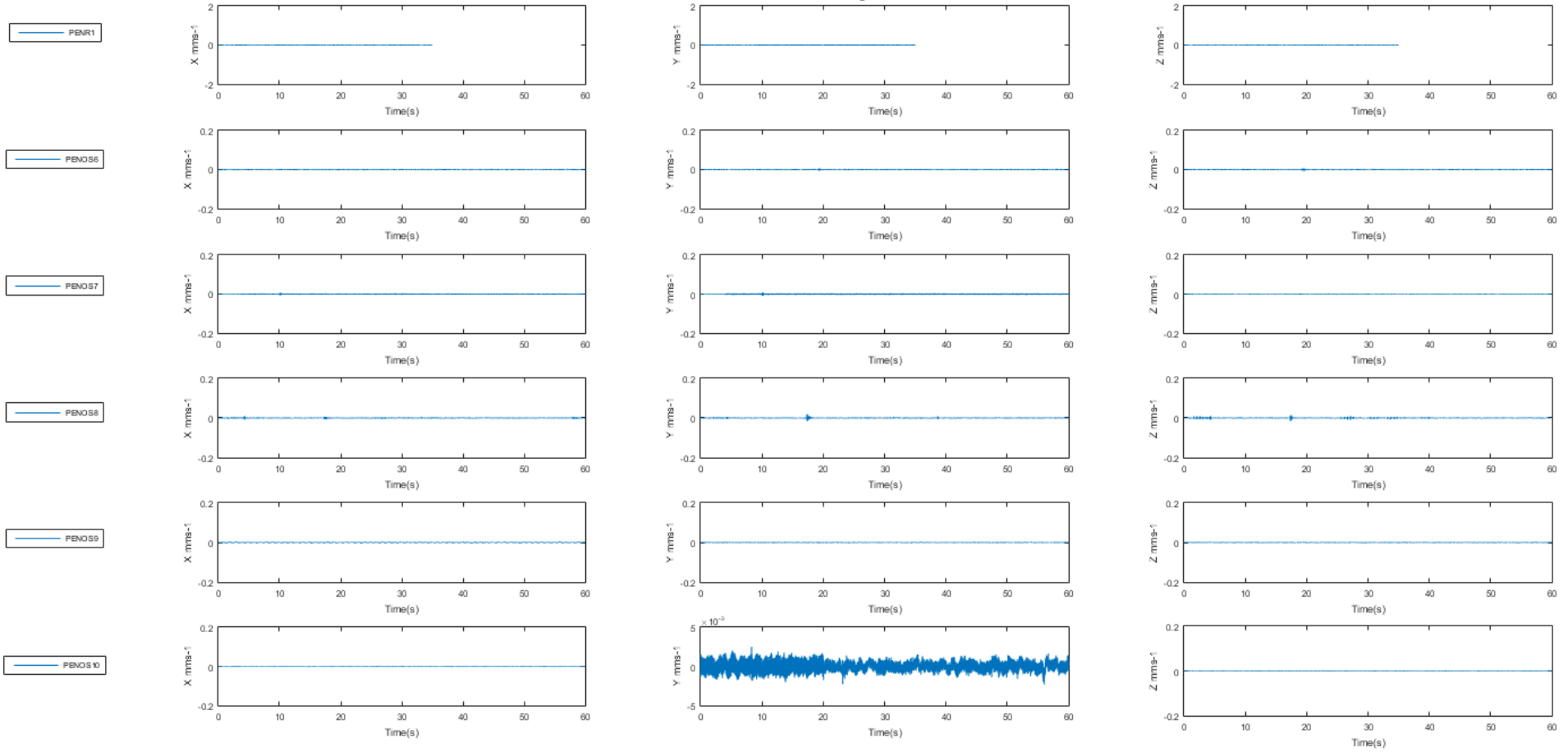


FIGURE 3.296: PEN\_OS 6 - 10 15-02-S2-112

### Event ID: 15-02-S2-112

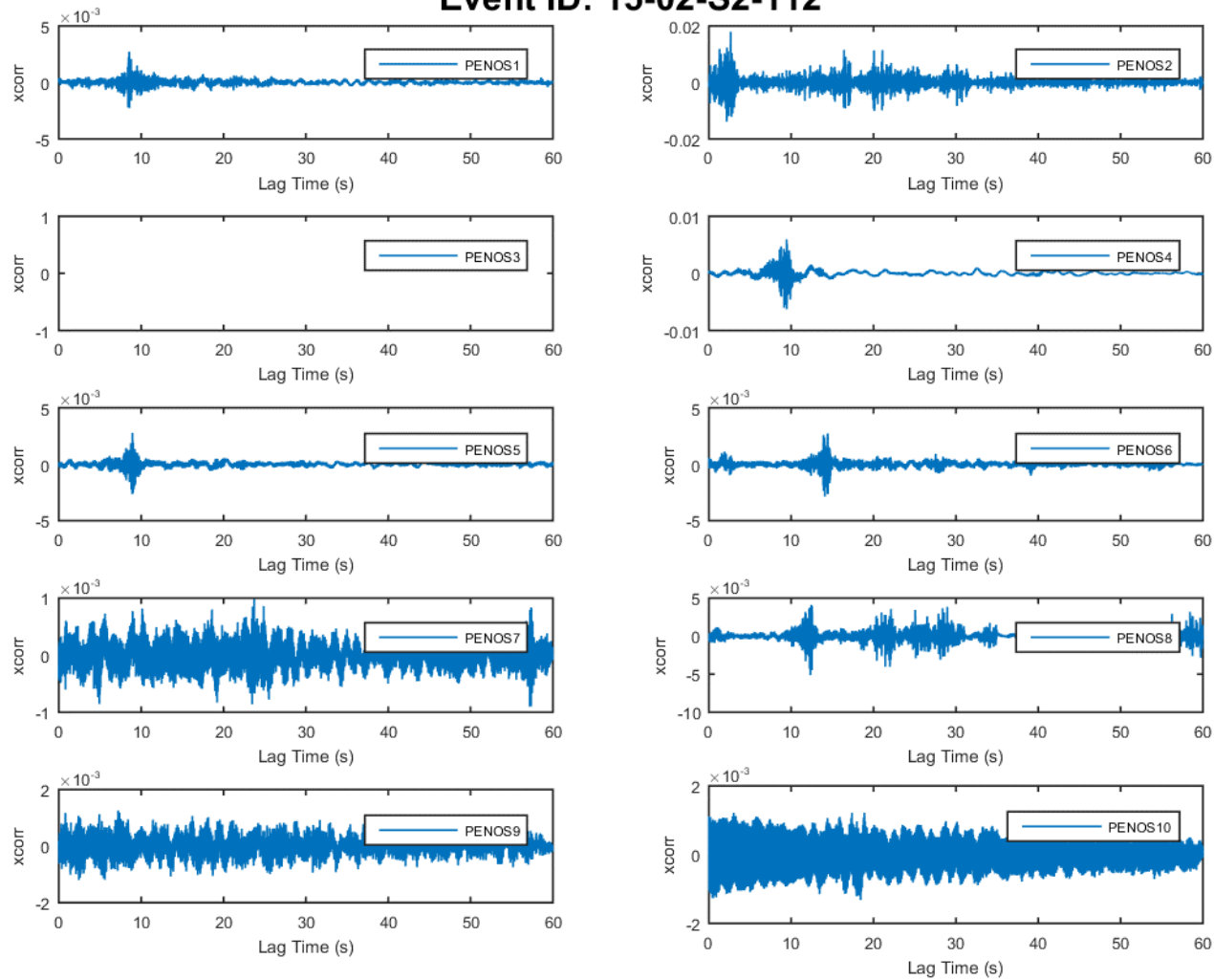
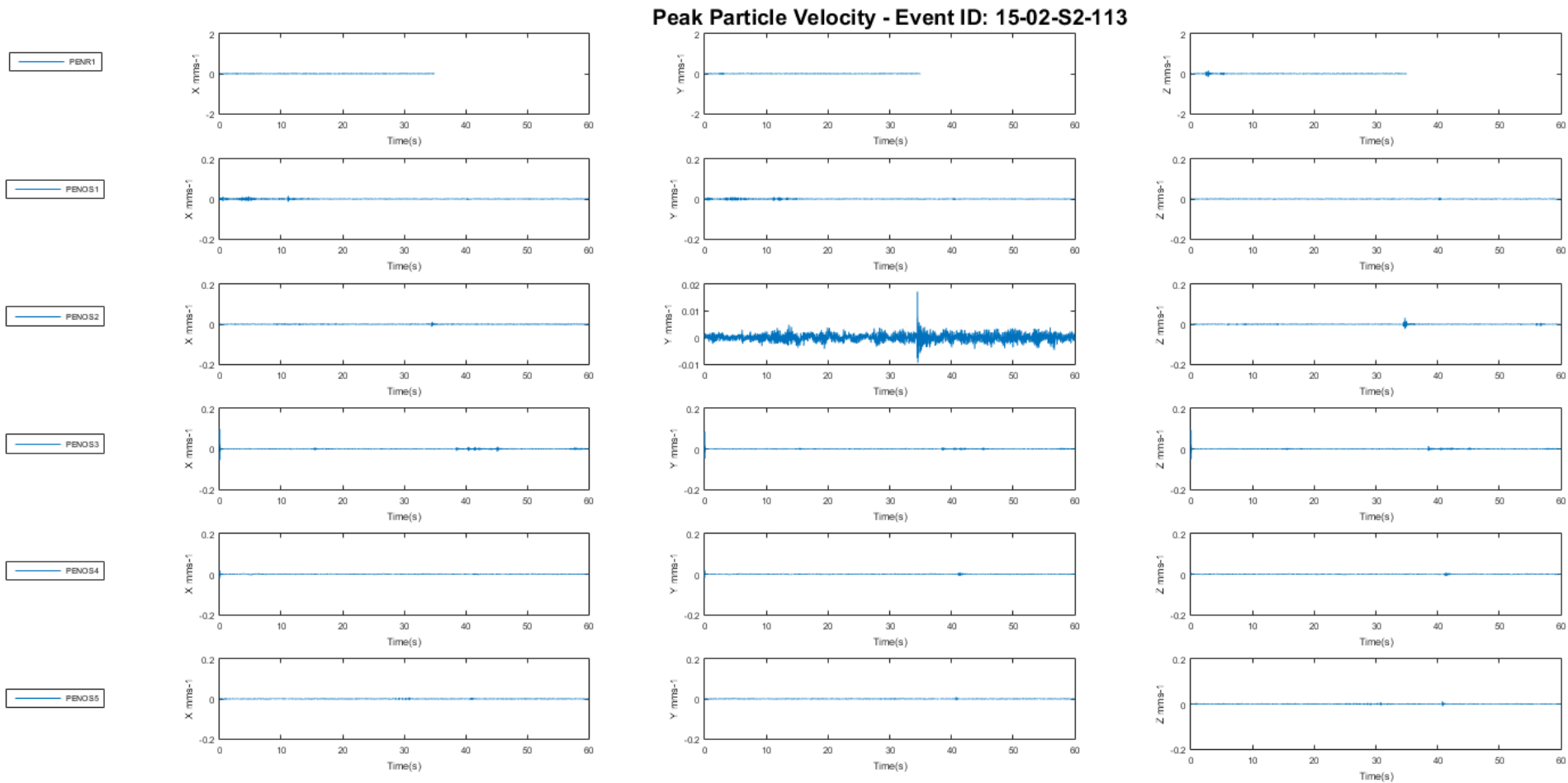


FIGURE 3.297: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S2-112





**FIGURE 3.298: PEN\_OS 1 - 5 15-02-S2-113**

Peak Particle Velocity - Event ID: 15-02-S2-113

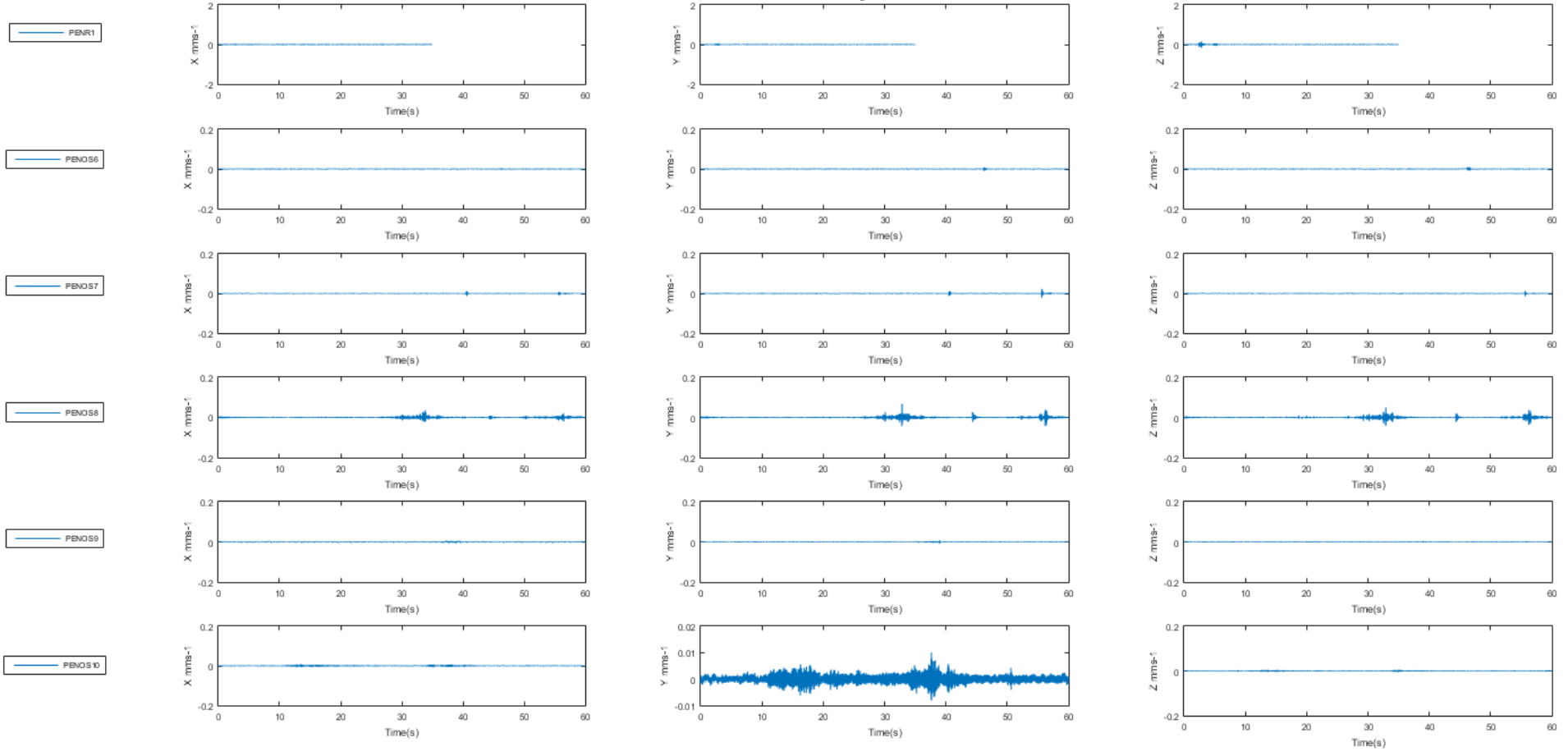


FIGURE 3.299: PEN\_OS 6 - 10 15-02-S2-113

### Event ID: 15-02-S2-113

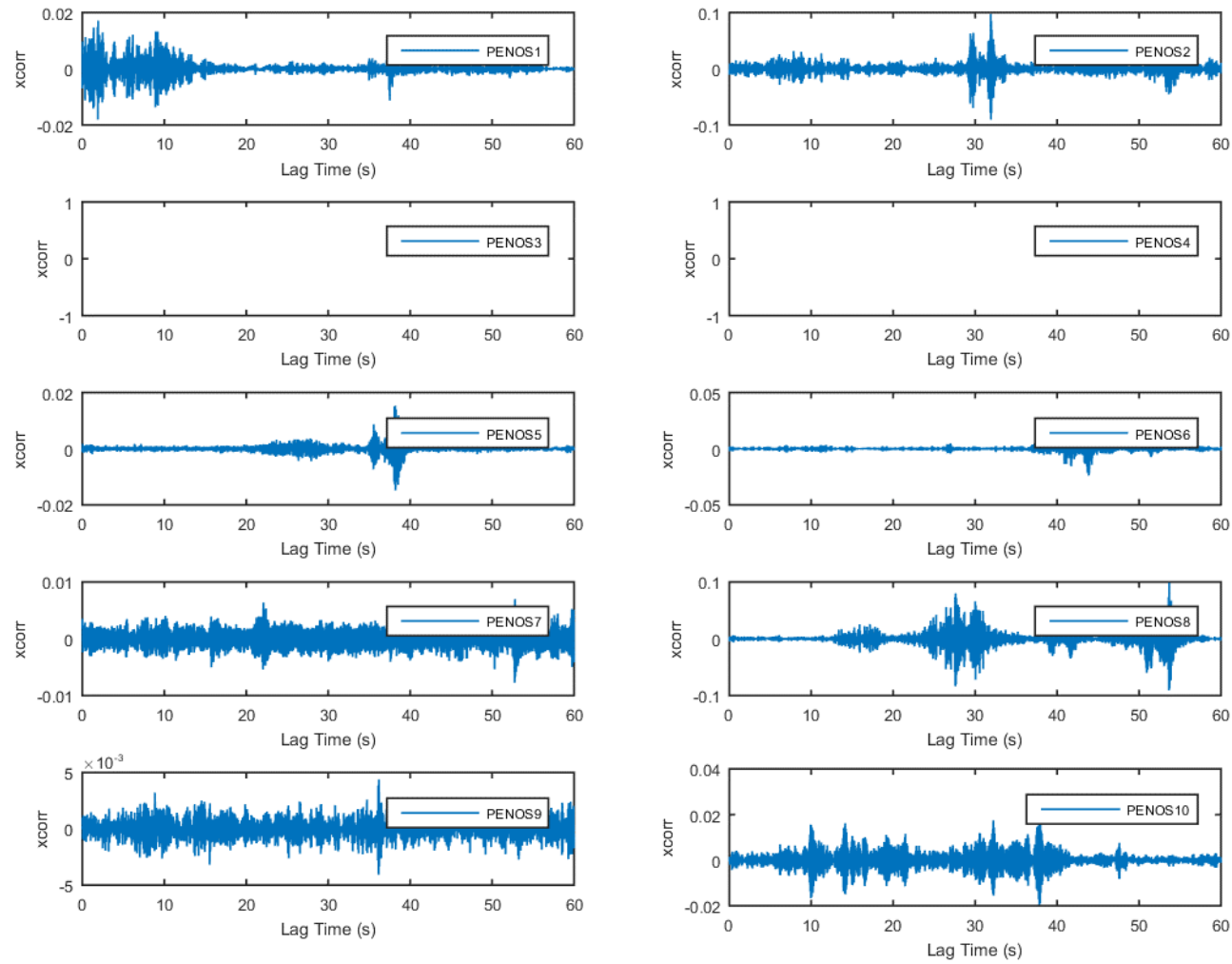
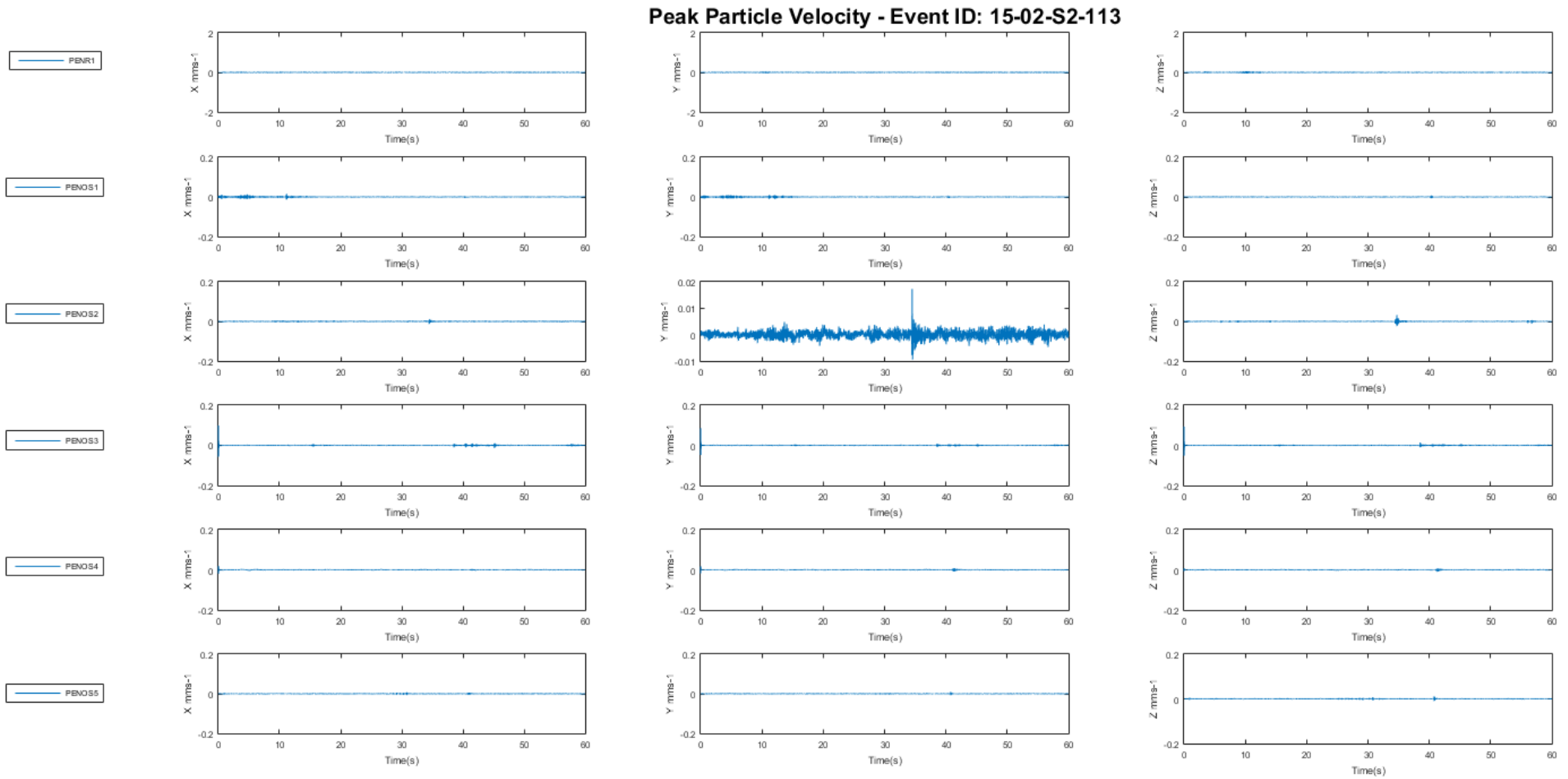


FIGURE 3.300: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S2-113



**FIGURE 3.301: PEN\_OS 1 - 5 15-02-S2-113**

Peak Particle Velocity - Event ID: 15-02-S2-113

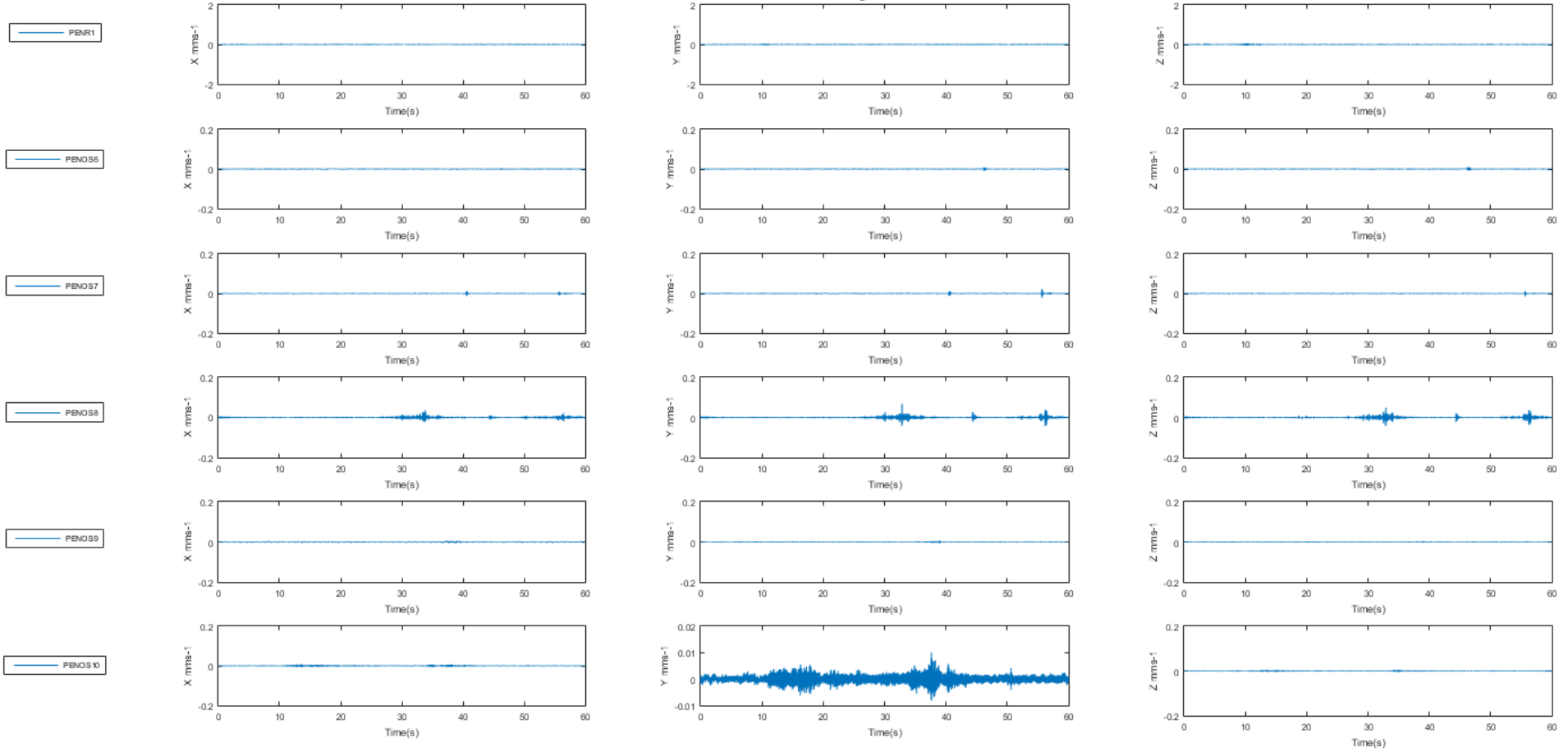


FIGURE 3.302: PEN\_OS 6 - 10 15-02-S2-113

### Event ID: 15-02-S2-113

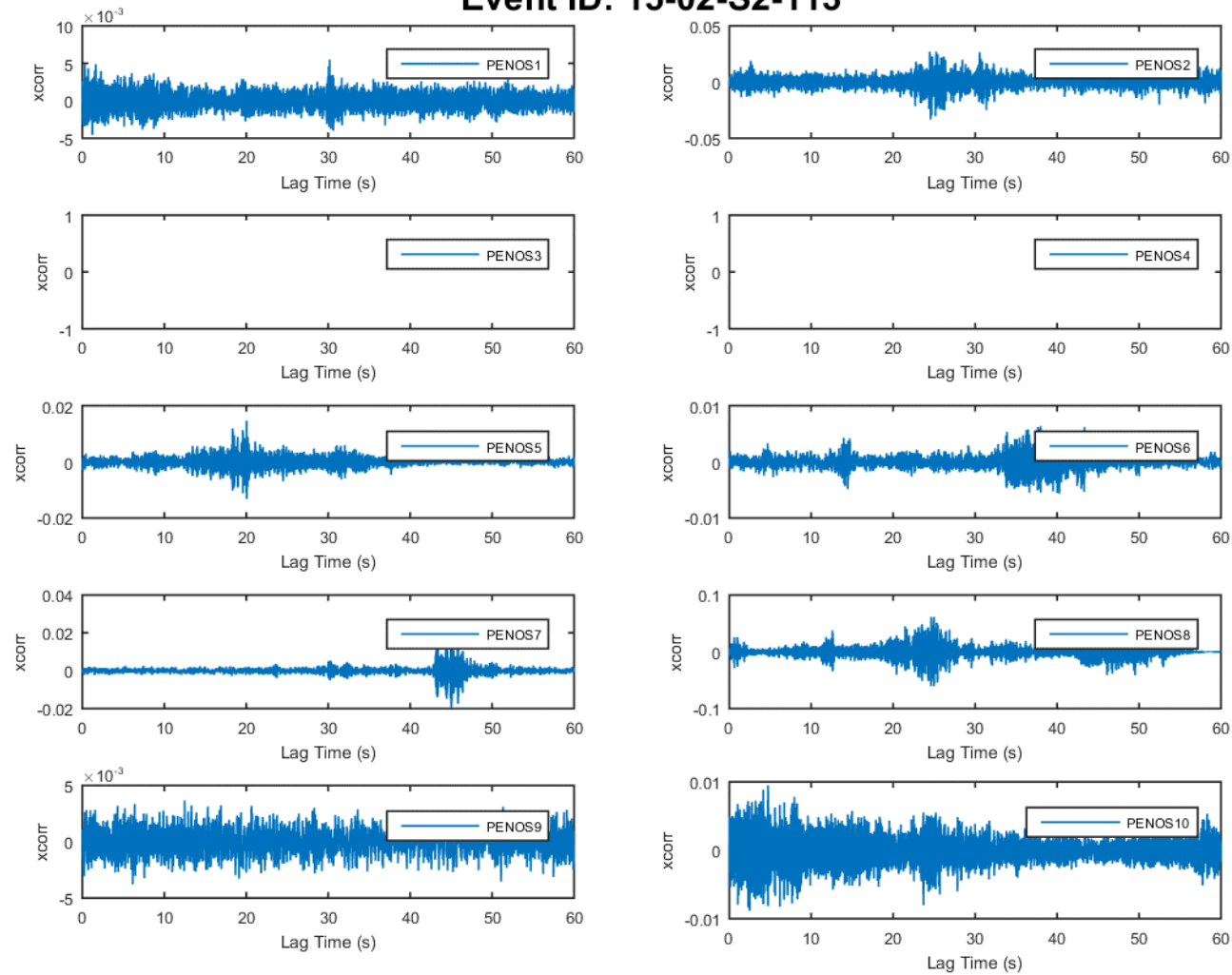
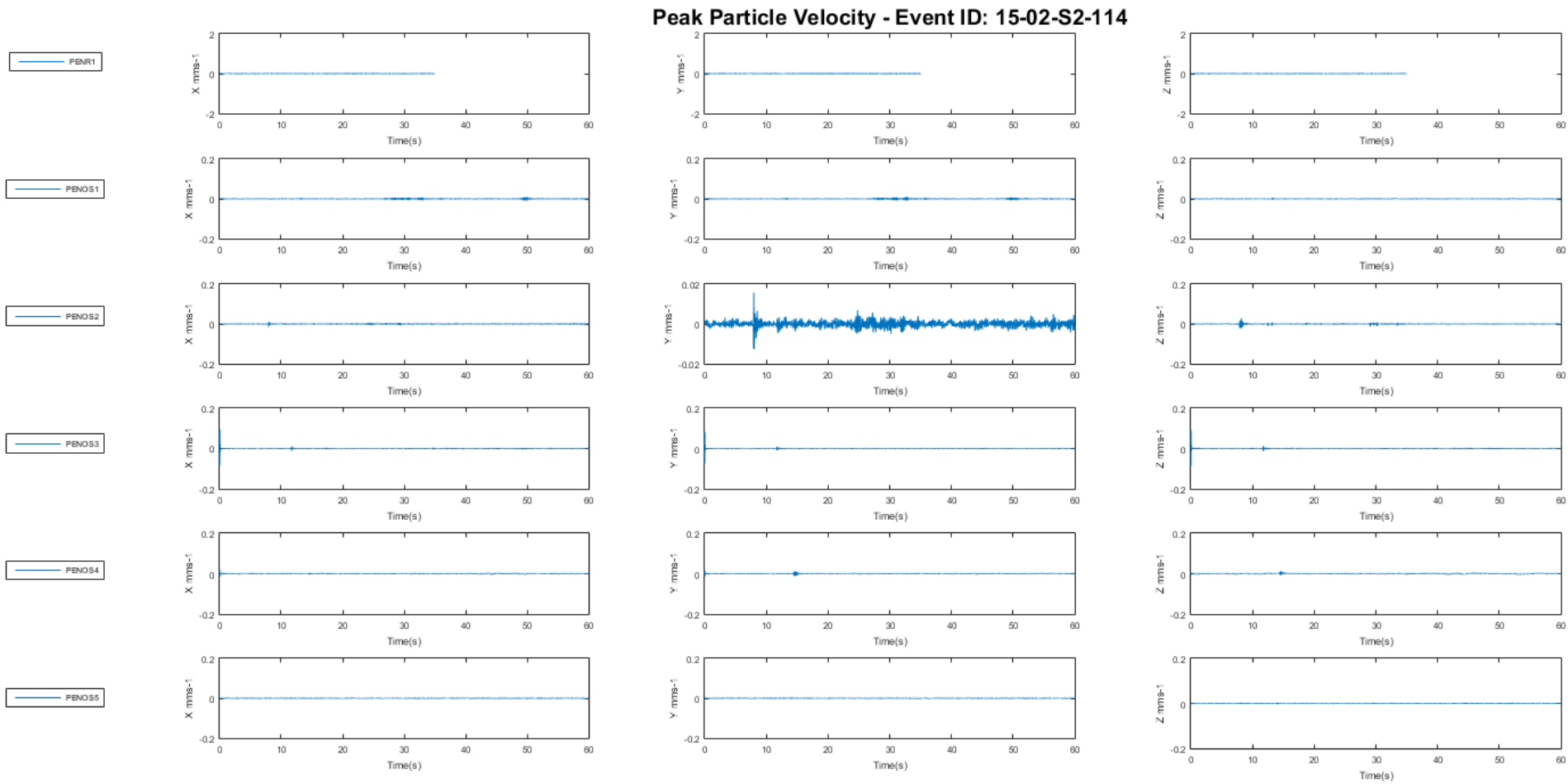


FIGURE 3.303: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S2-113



**FIGURE 3.304: PEN\_OS 1 - 5 15-02-S2-114**

Peak Particle Velocity - Event ID: 15-02-S2-114

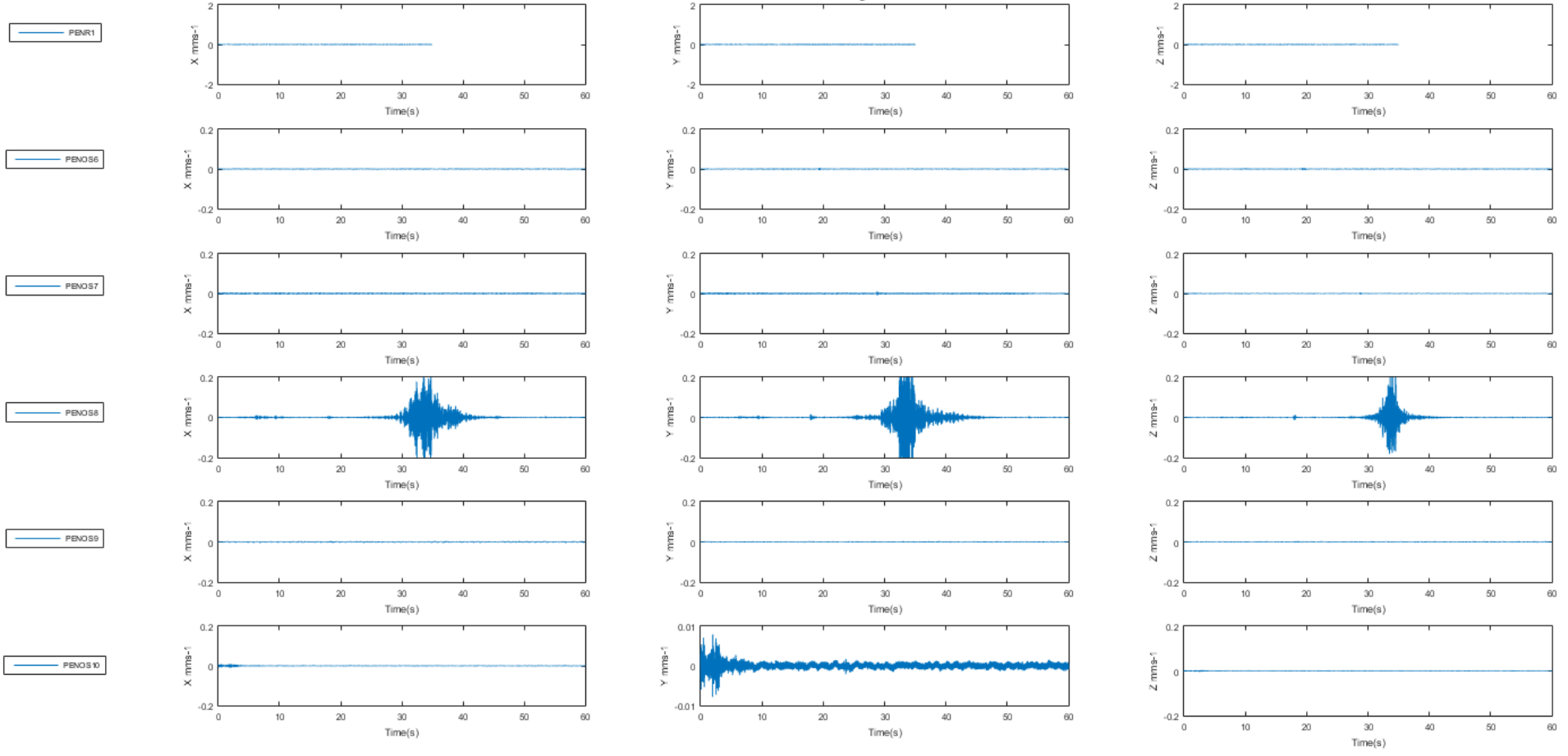


FIGURE 3.305: PEN\_OS 6 - 10 15-02-S2-114



### Event ID: 15-02-S2-114

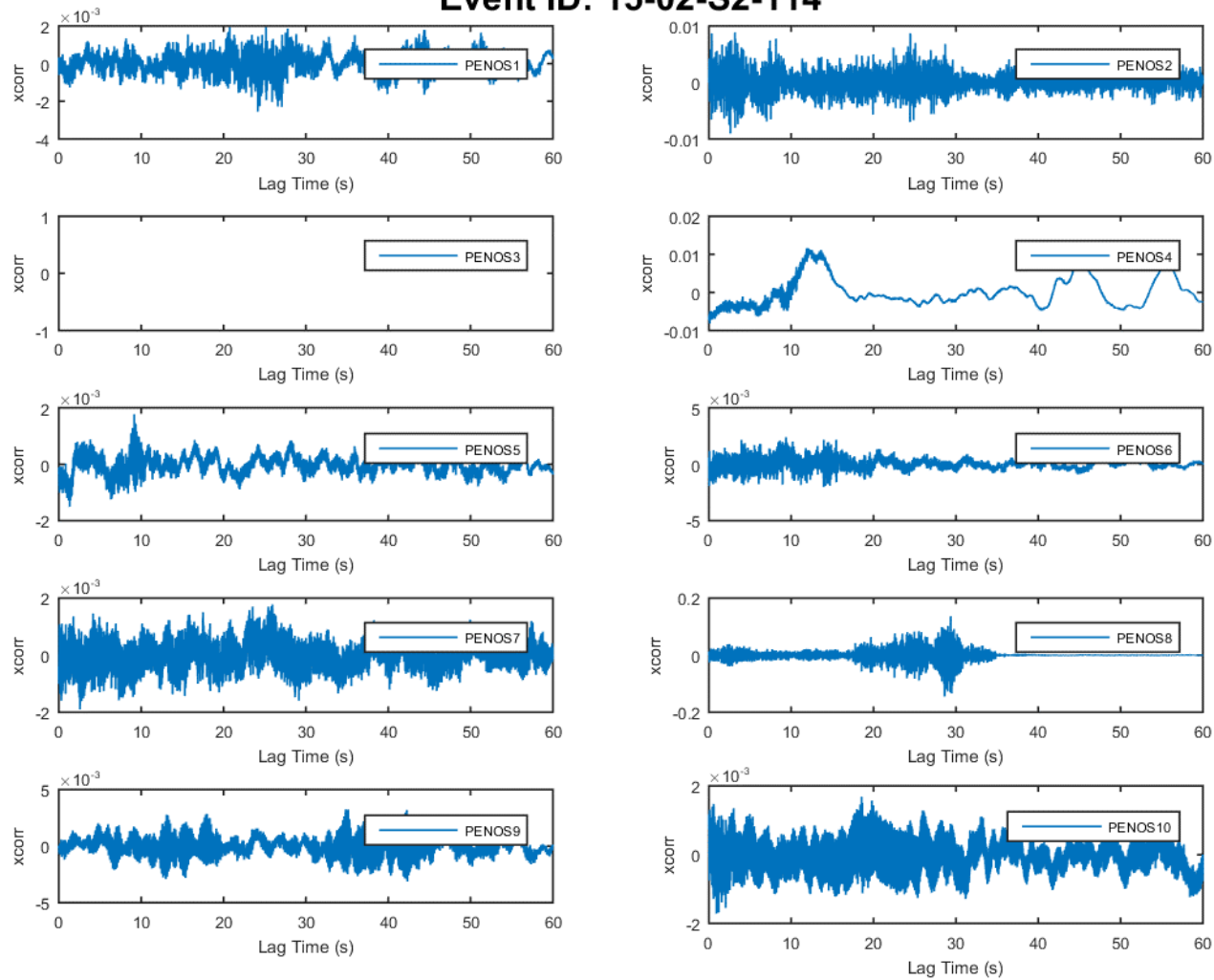
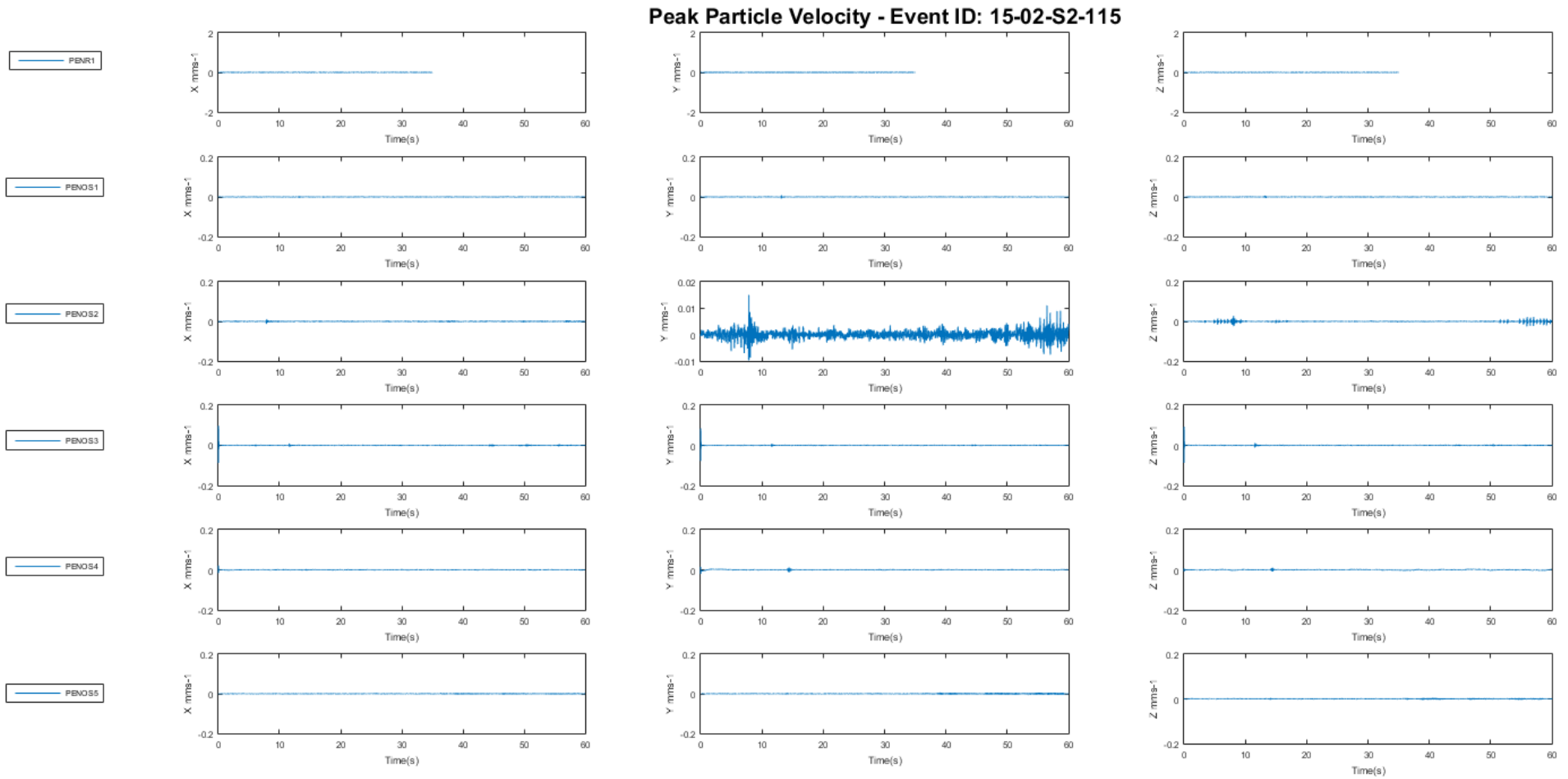


FIGURE 3.306: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S2-114



**FIGURE 3.307: PEN\_OS 1 - 5 15-02-S2-115**

Peak Particle Velocity - Event ID: 15-02-S2-115

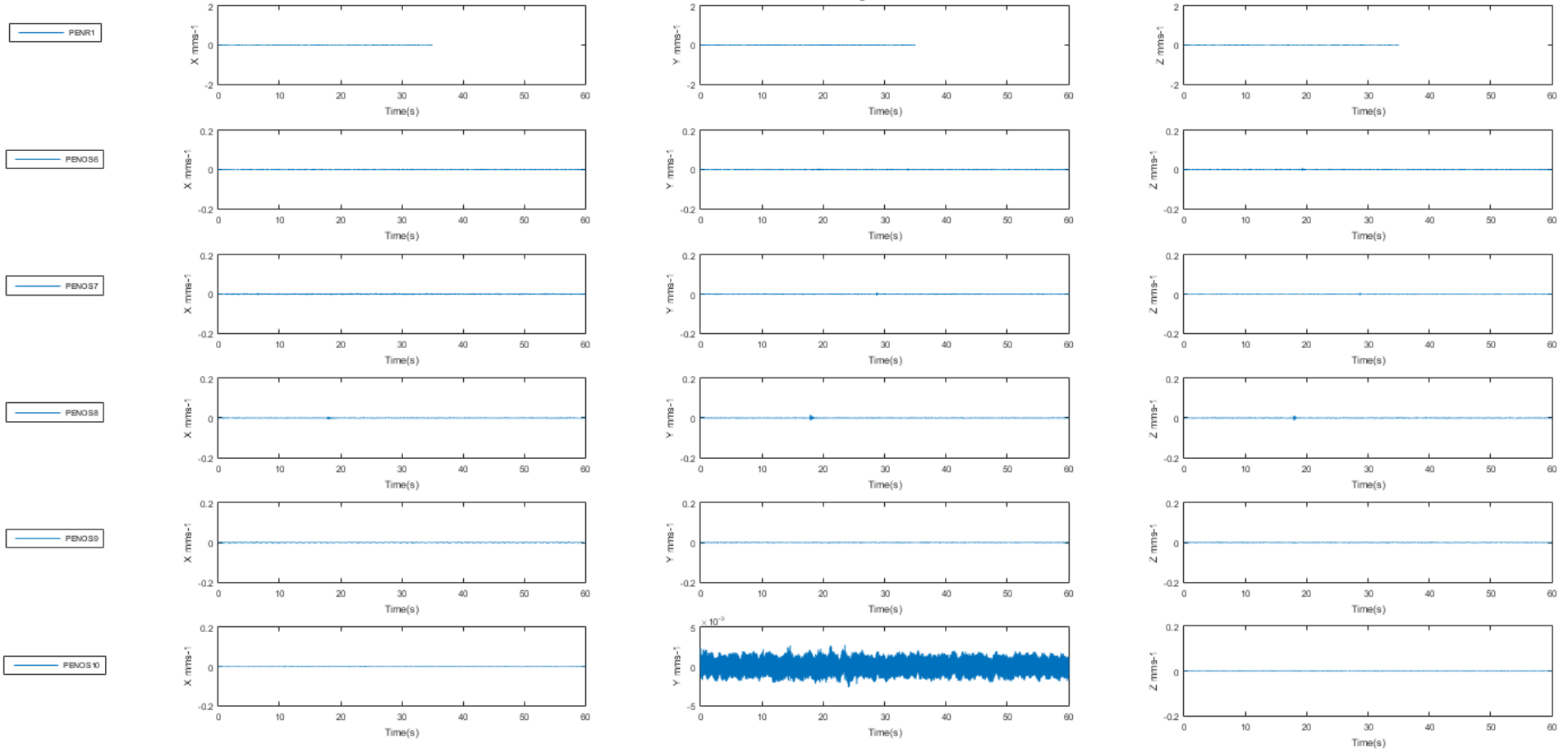


FIGURE 3.308: PEN\_OS 6 - 10 15-02-S2-115

### Event ID: 15-02-S2-115

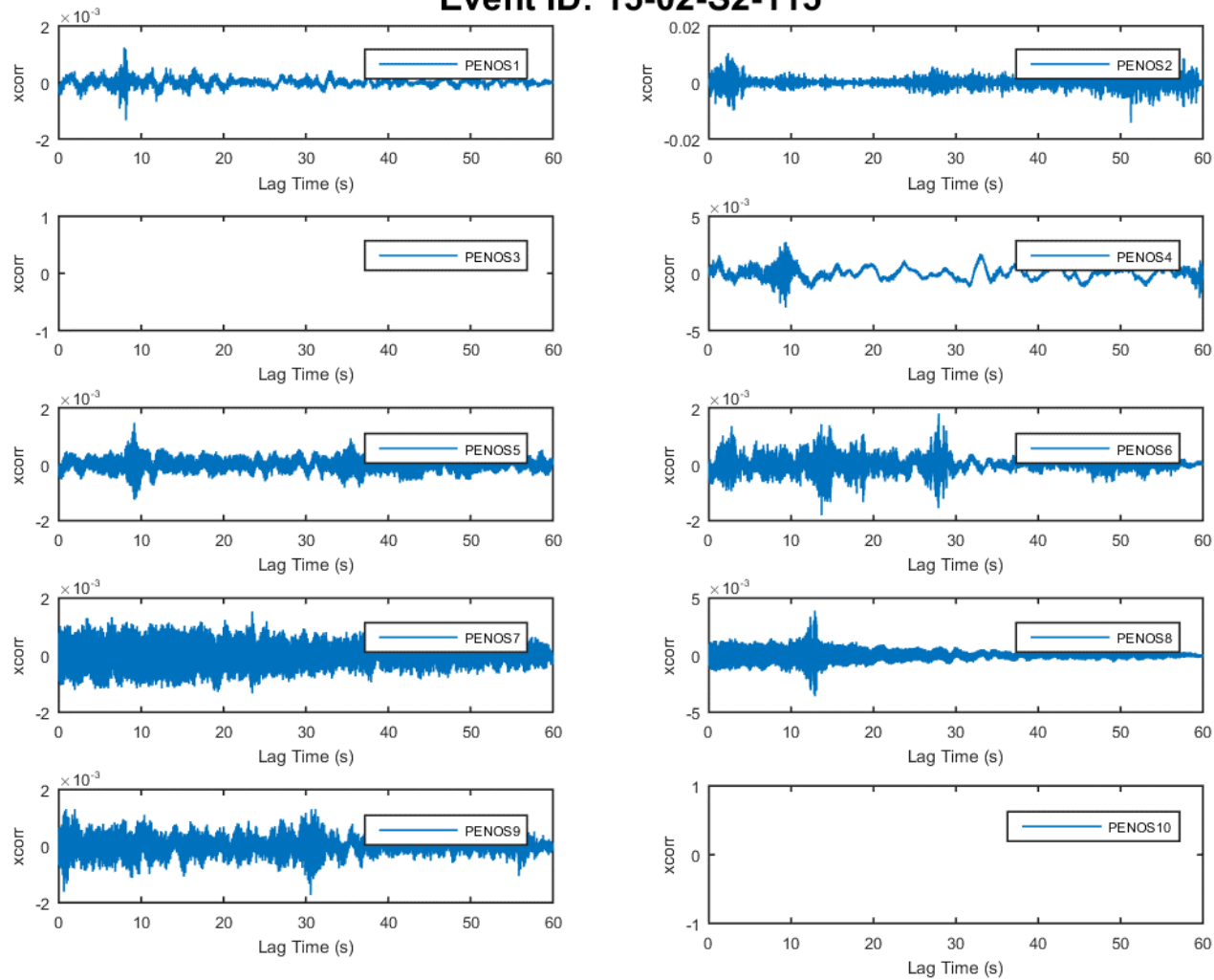
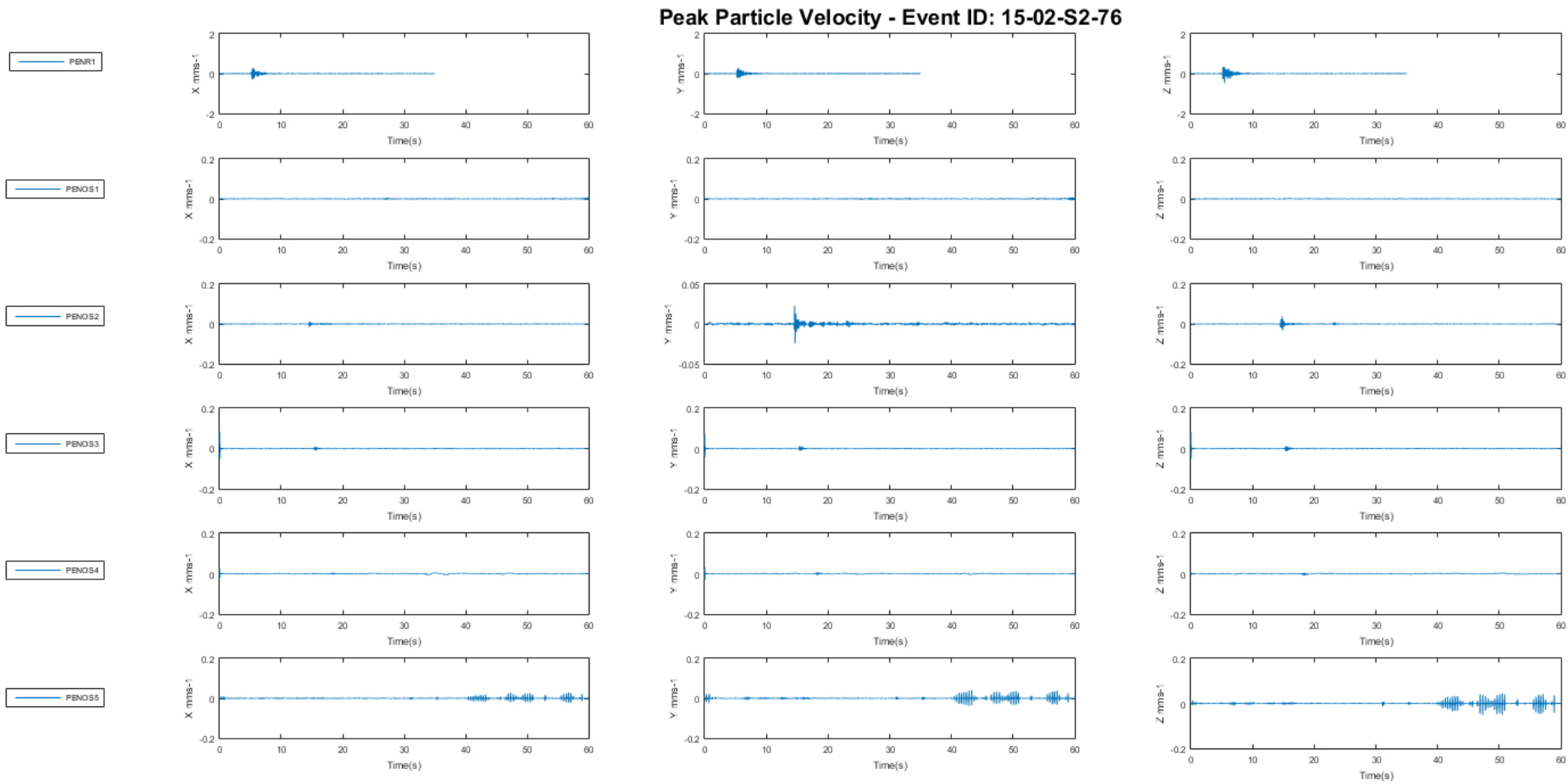
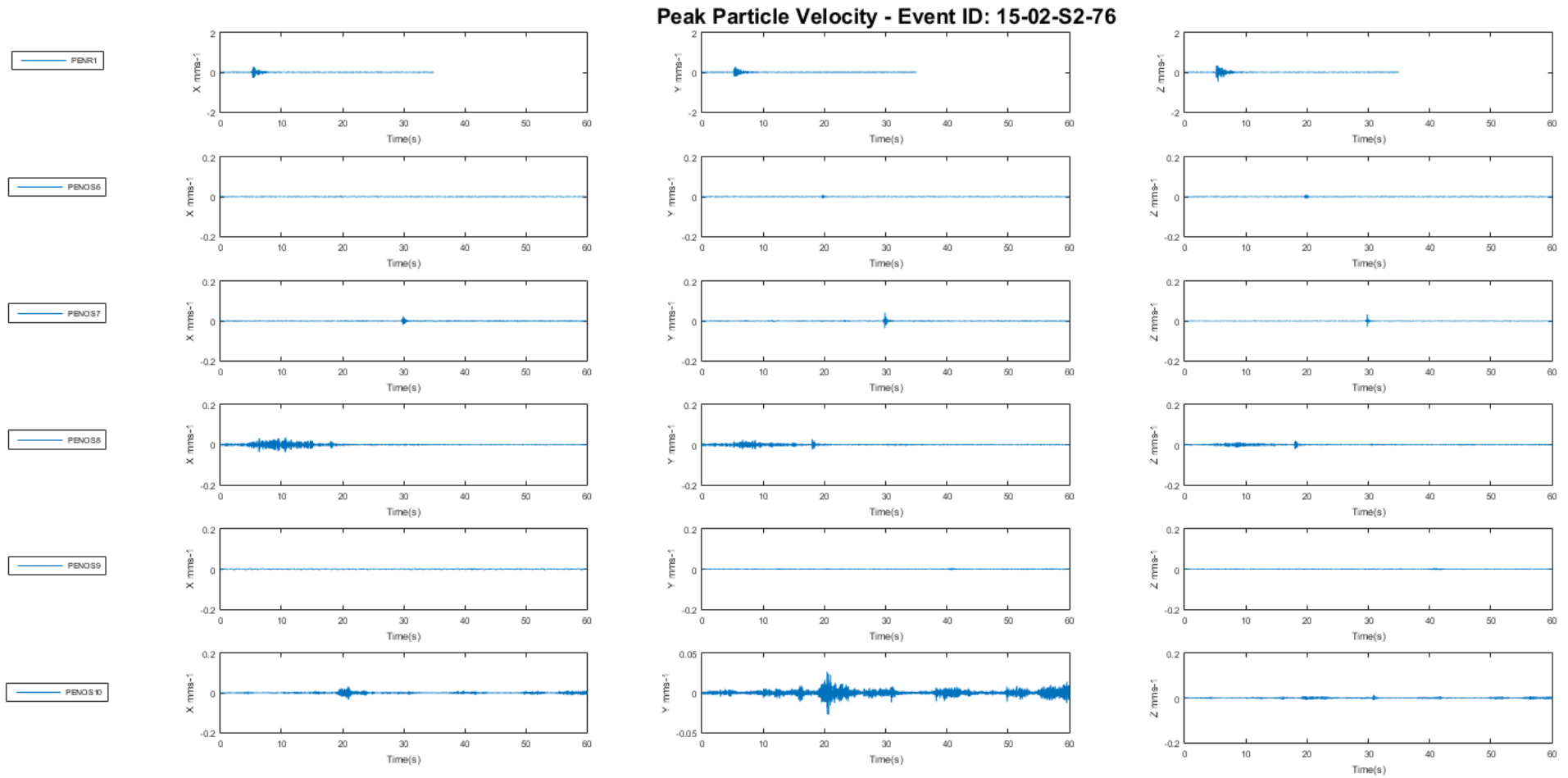


FIGURE 3.309: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S2-115



**FIGURE 3.310: PEN\_OS 1 - 5 15-02-S2-76**



**FIGURE 3.311: PEN\_OS 6 - 10 15-02-S2-76**

### Event ID: 15-02-S2-76

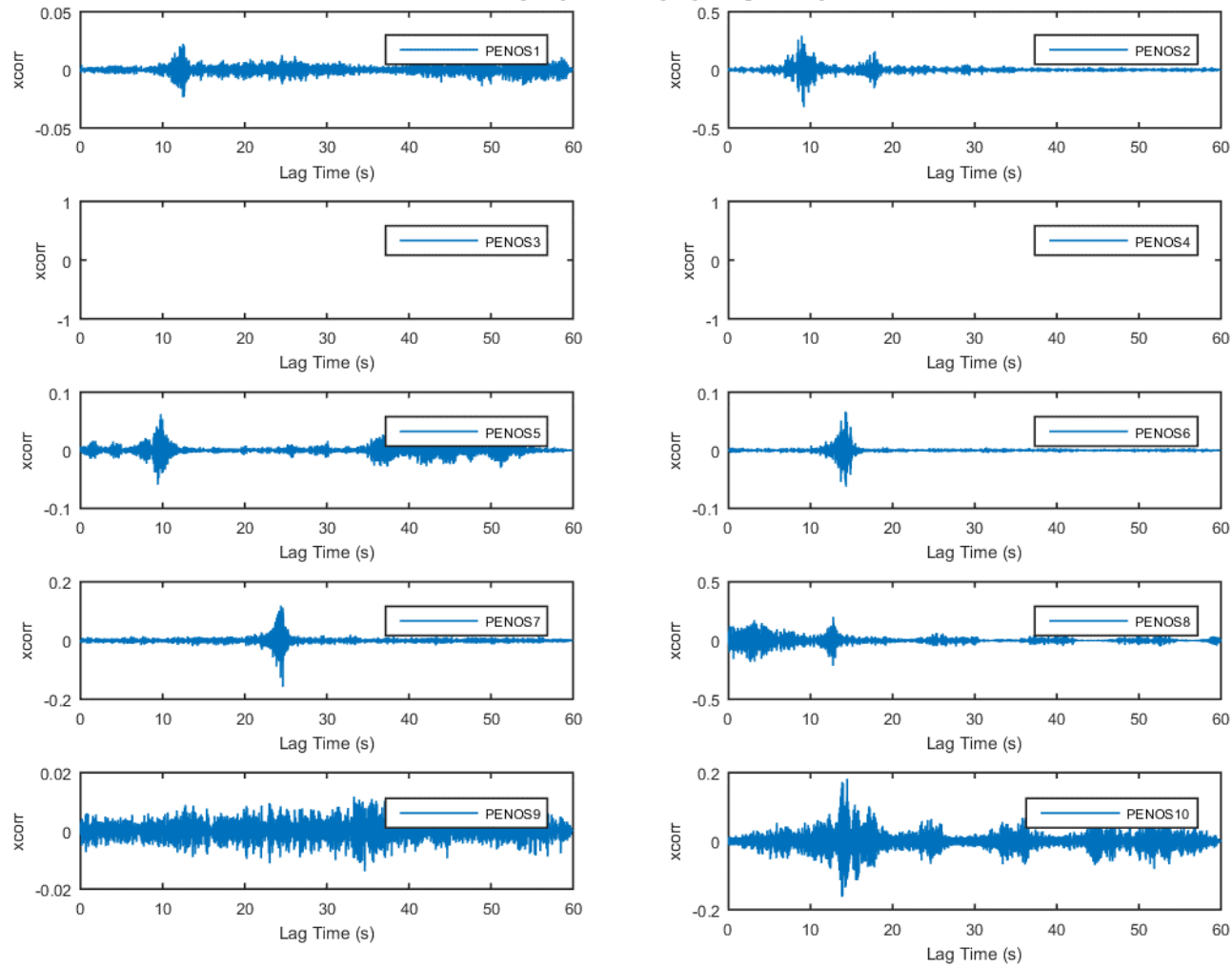
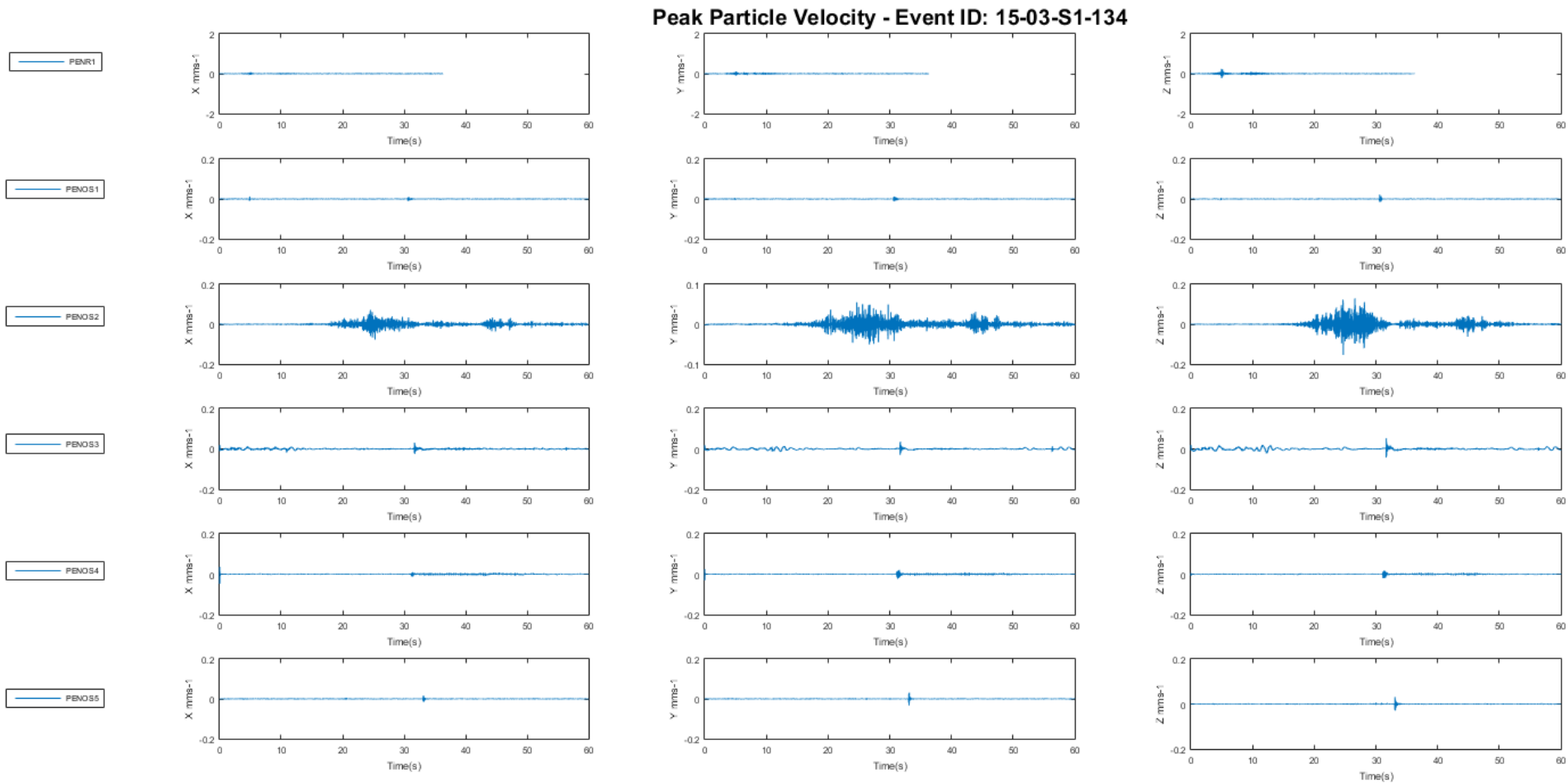
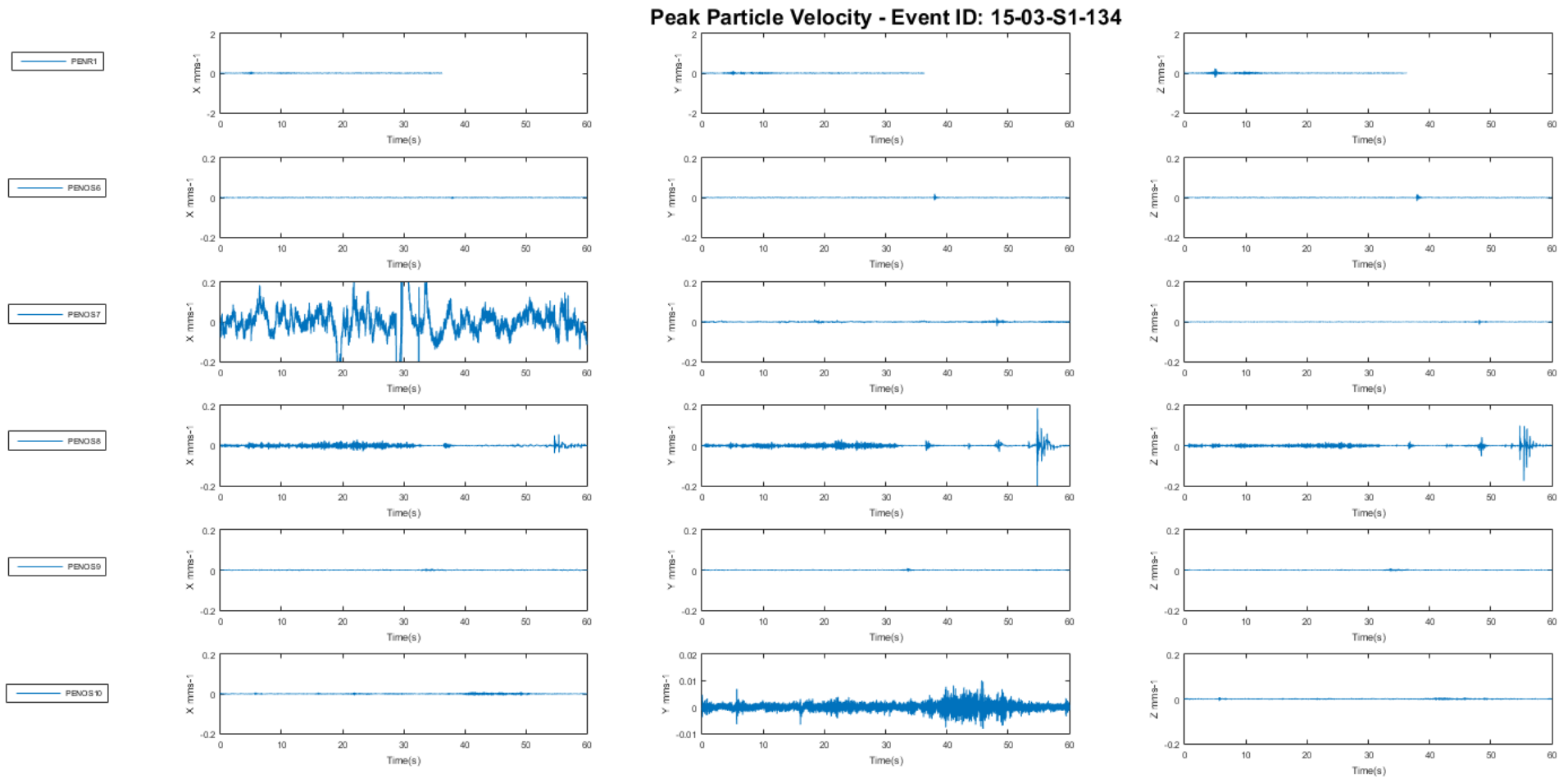


FIGURE 3.312: CROSS CORRELATION PEN\_OS 1 - 10 15-02-S2-76



**FIGURE 3.313: PEN\_OS 1 - 5 15-03-S1-134**





**FIGURE 3.314: PEN\_OS 6 - 10 15-03-S1-134**

### Event ID: 15-03-S1-134

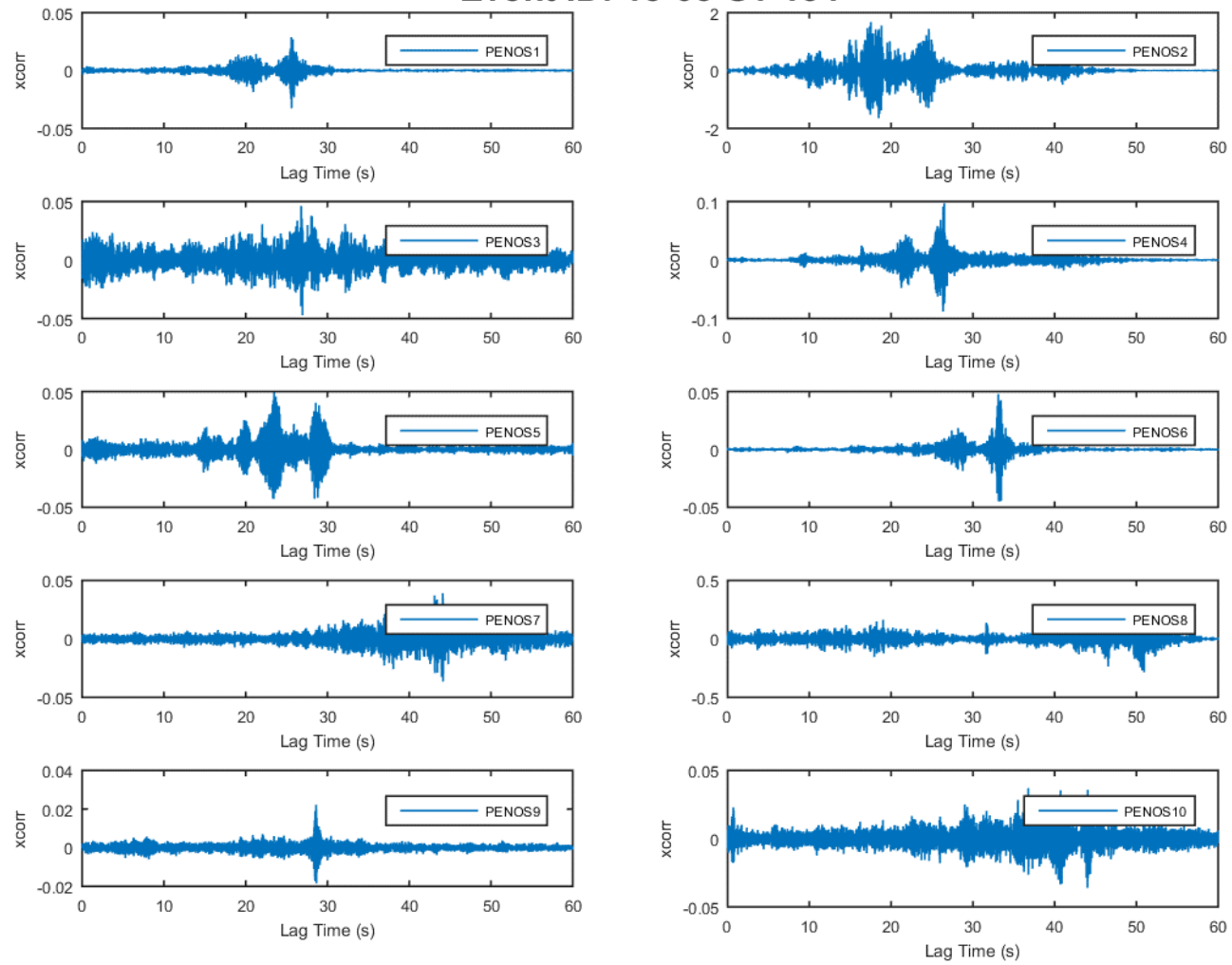
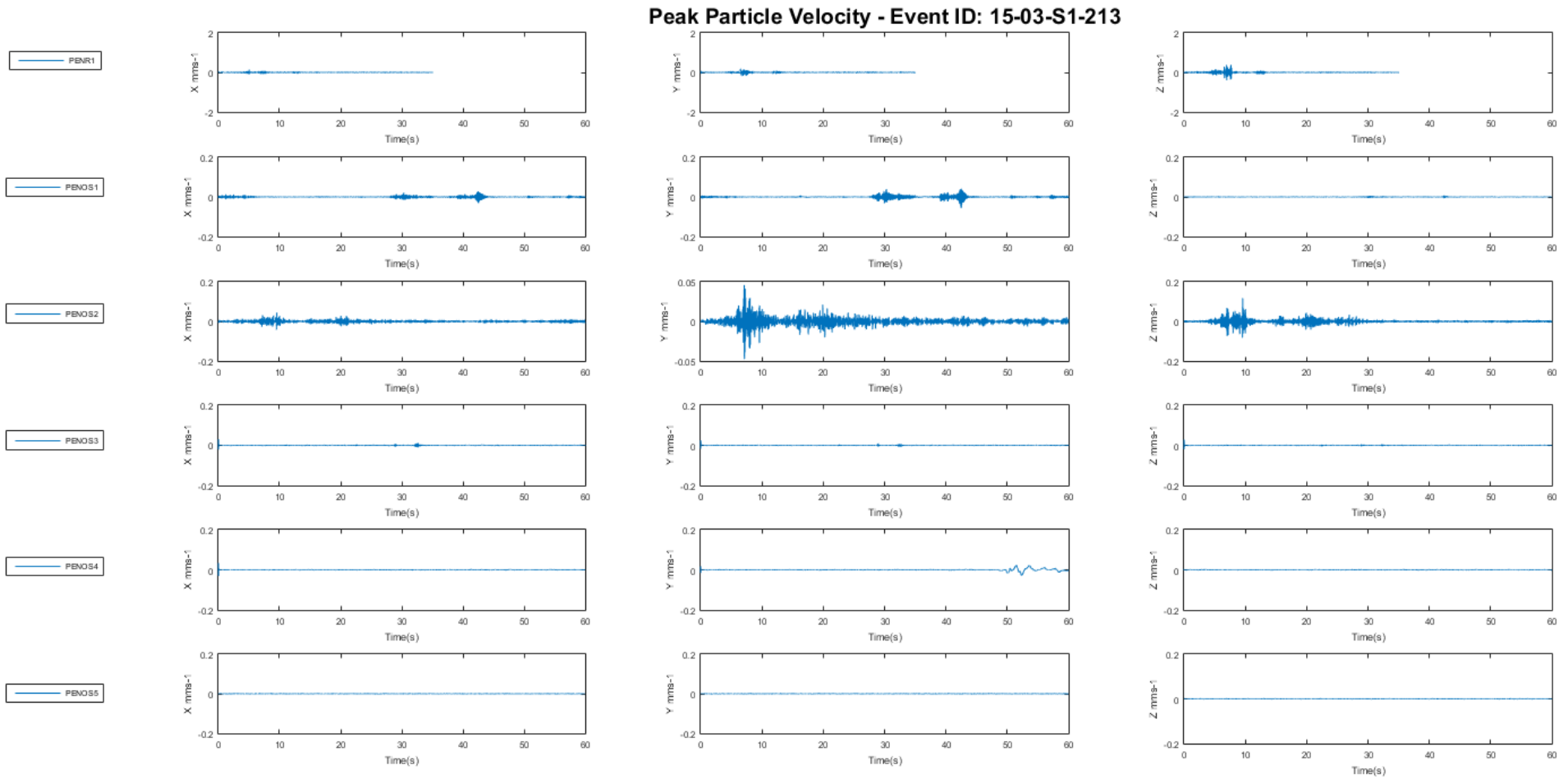


FIGURE 3.315: CROSS CORRELATION PEN\_OS 1 - 10 15-03-S1-134



**FIGURE 3.316: PEN\_OS 1 - 5 15-03-S1-213**

Peak Particle Velocity - Event ID: 15-03-S1-213

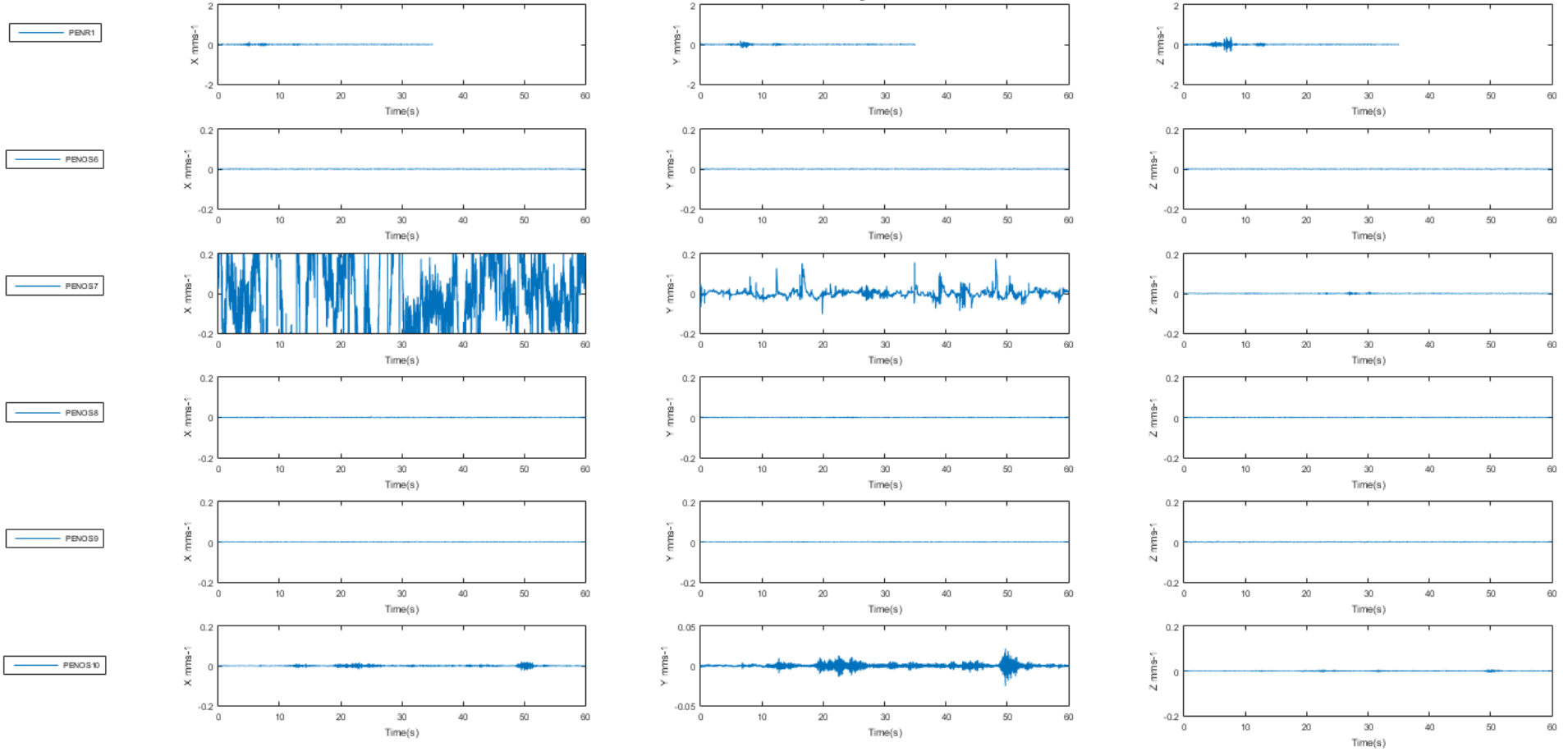


FIGURE 3.317: PEN\_OS 6 - 10 15-03-S1-213

### Event ID: 15-03-S1-213

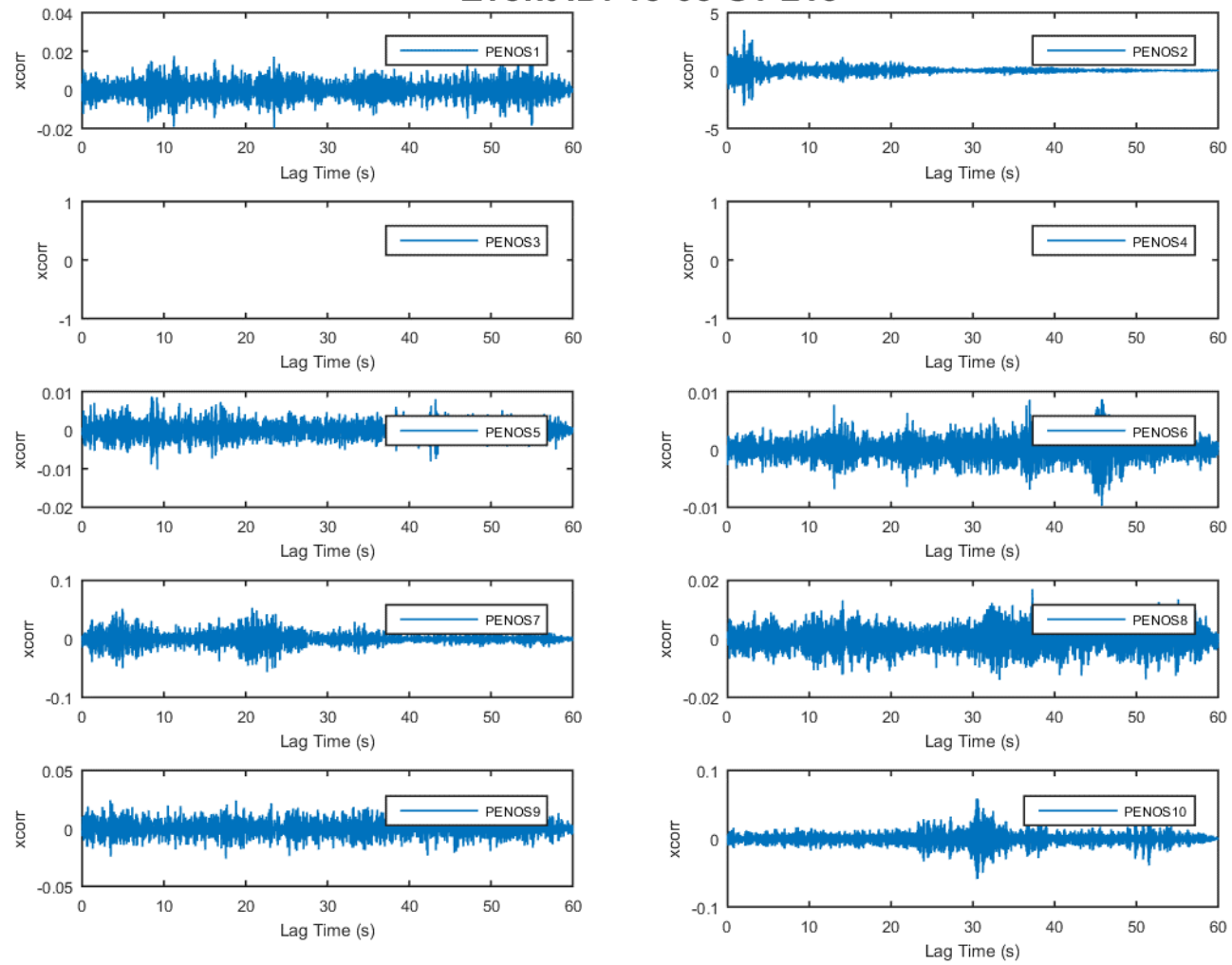
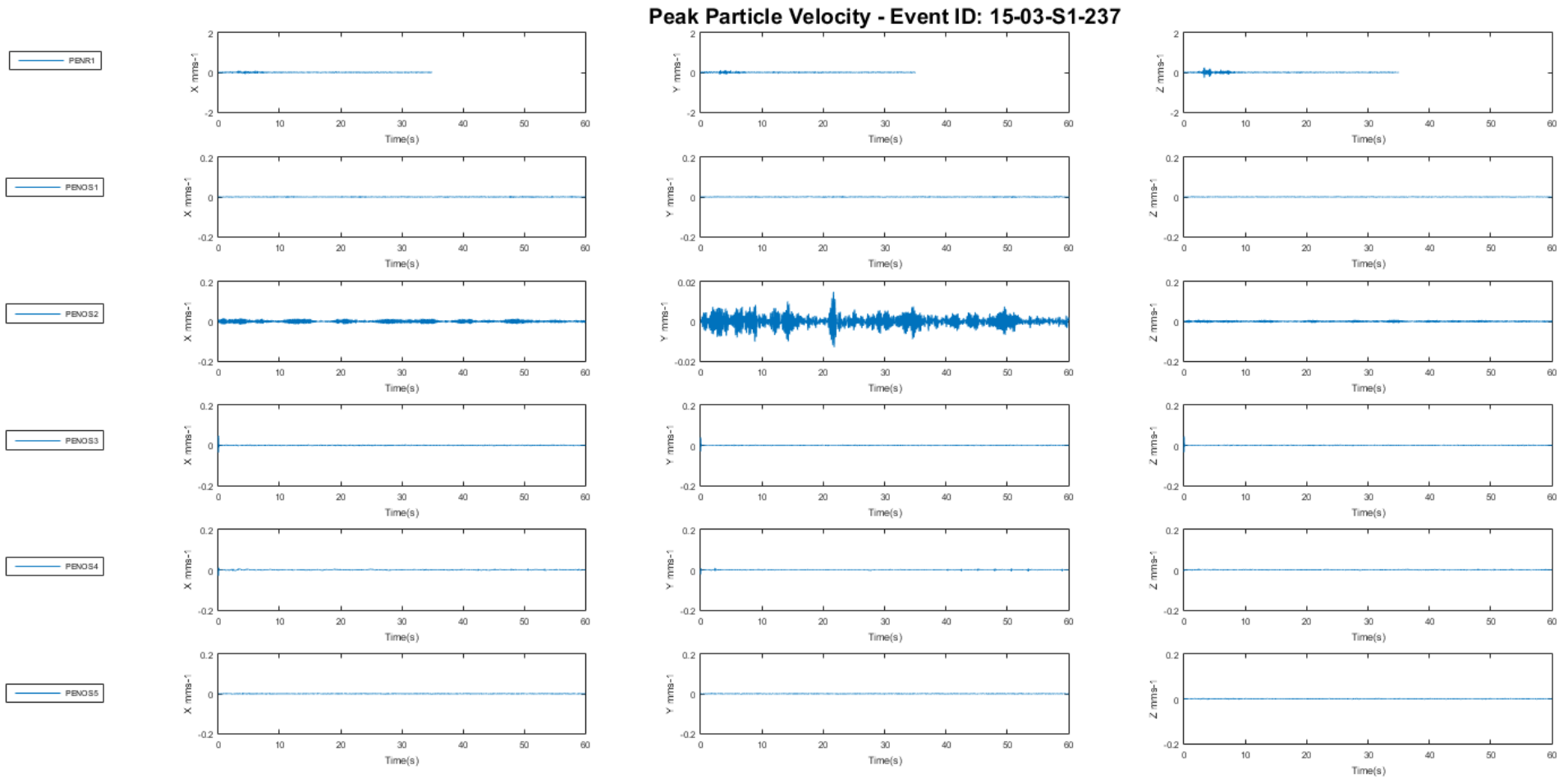


FIGURE 3.318: CROSS CORRELATION PEN\_OS 1 - 10 15-03-S1-213



**FIGURE 3.319: PEN\_OS 1 - 5 15-03-S1-237**

Peak Particle Velocity - Event ID: 15-03-S1-237

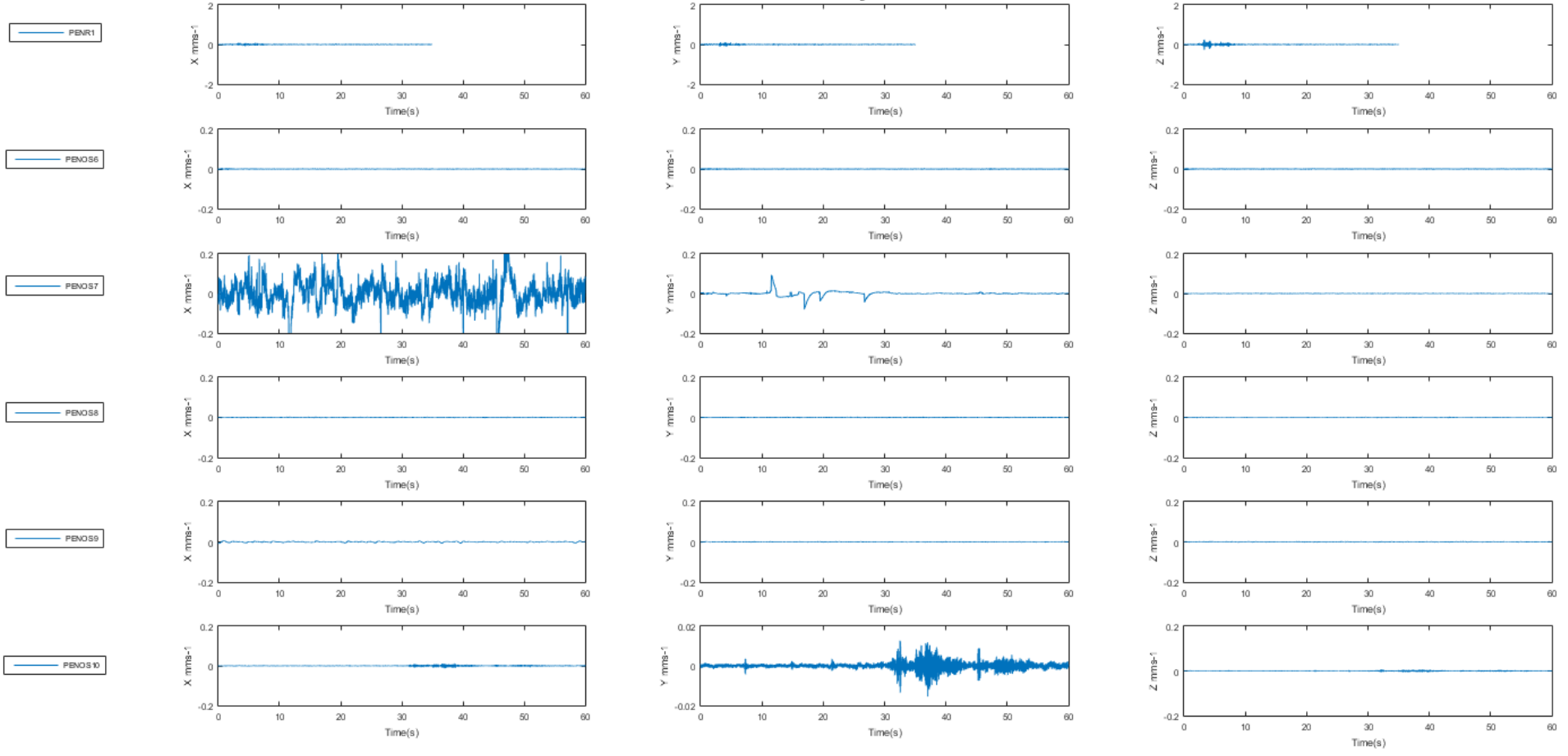
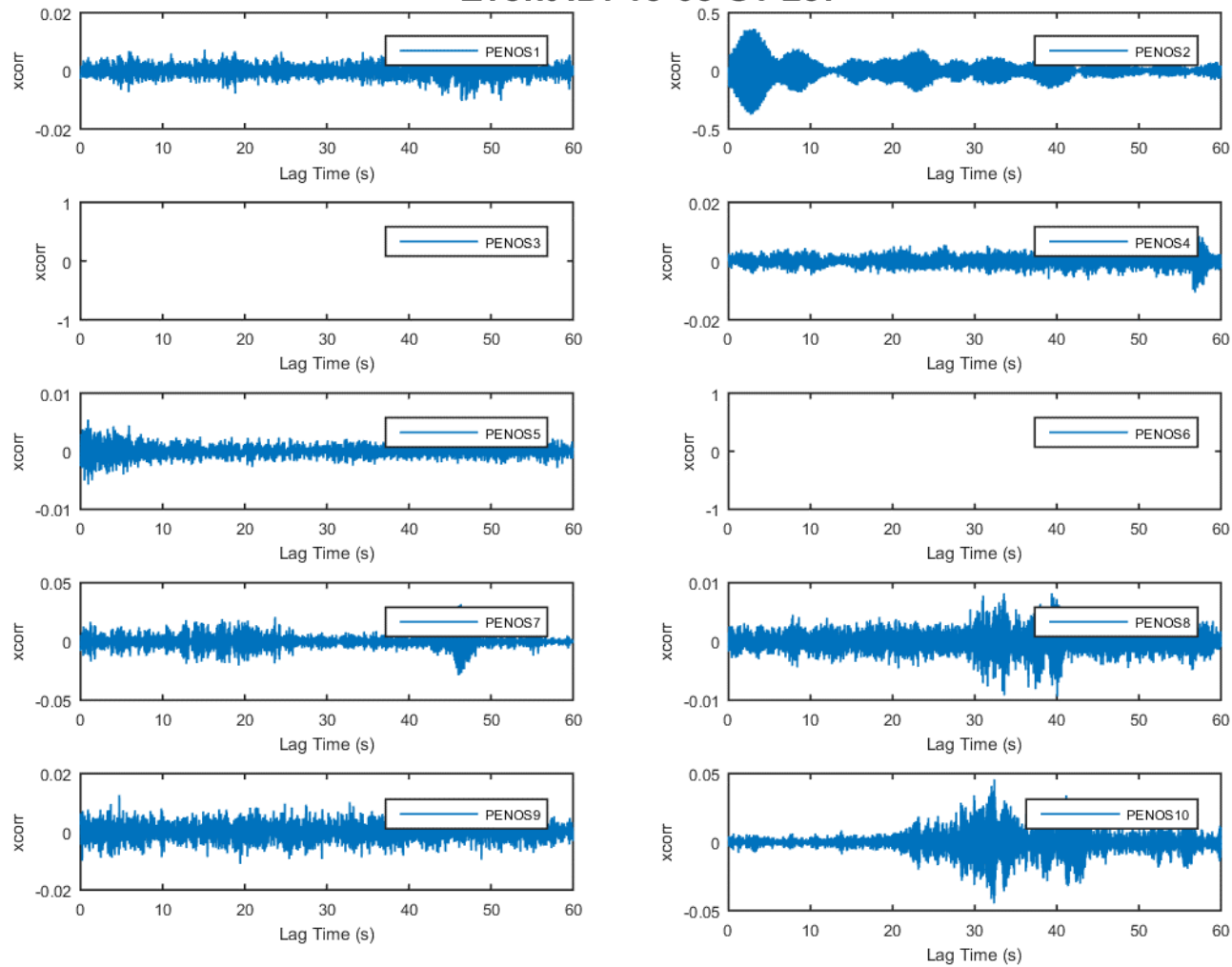


FIGURE 3.320: PEN\_OS 6 - 10 15-03-S1-237

**Event ID: 15-03-S1-237**



**FIGURE 3.321: CROSS CORRELATION PEN\_OS 1 - 10 15-03-S1-237**



Peak Particle Velocity - Event ID: 15-03-S2-142

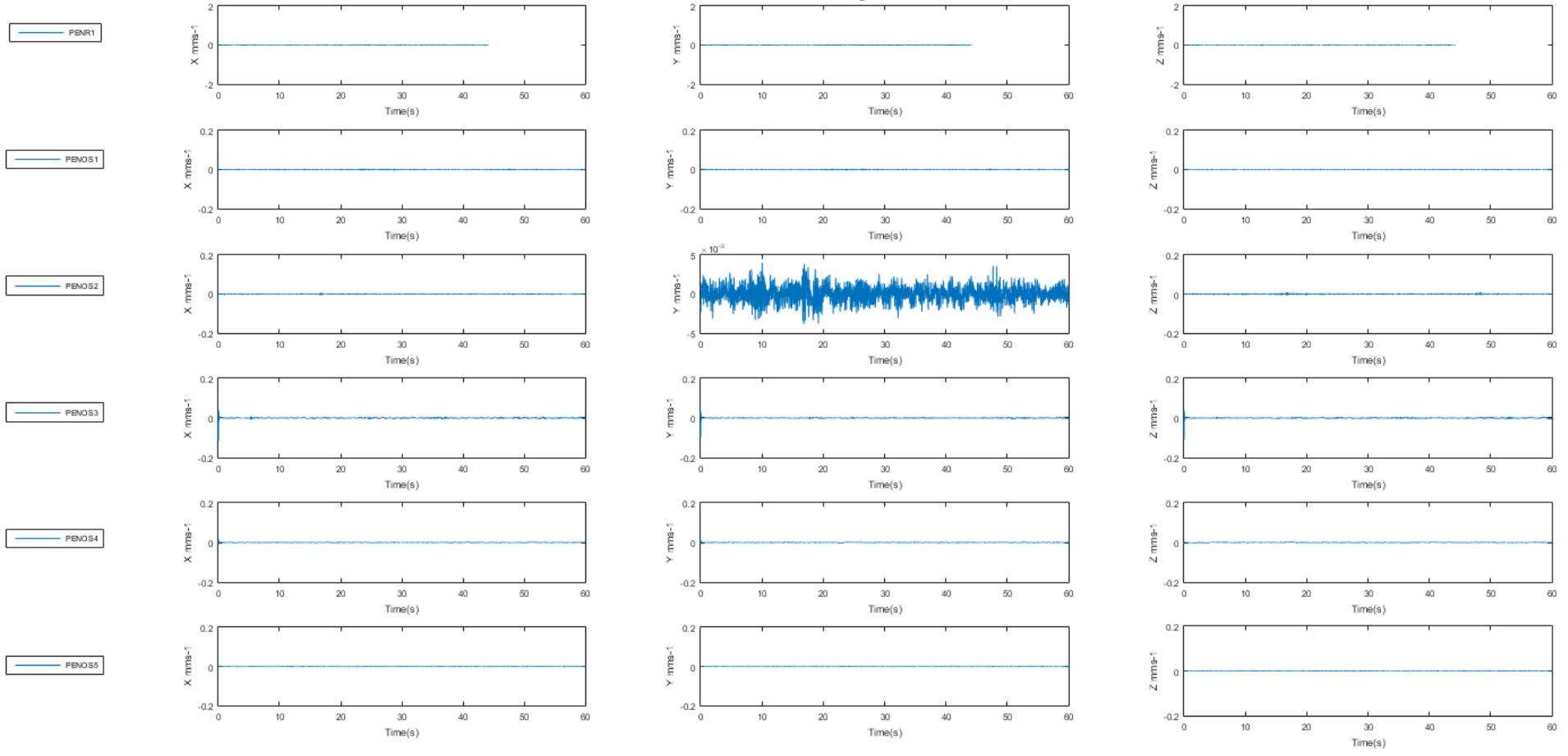


FIGURE 3.322: PEN\_OS 1 - 5 15-03-S2-142

Peak Particle Velocity - Event ID: 15-03-S2-142

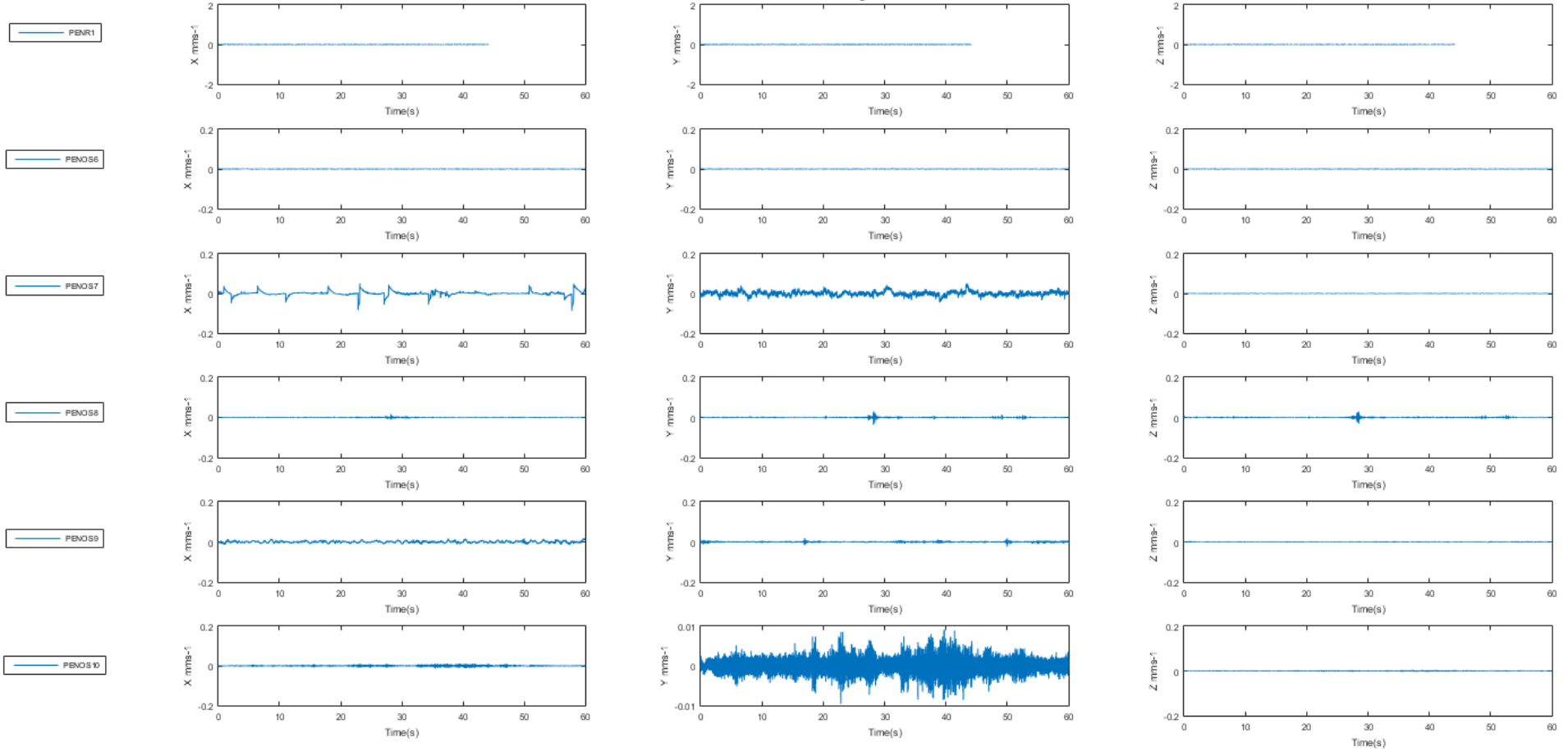


FIGURE 3.323: PEN\_OS 6 - 10 15-03-S2-142

### Event ID: 15-03-S2-142

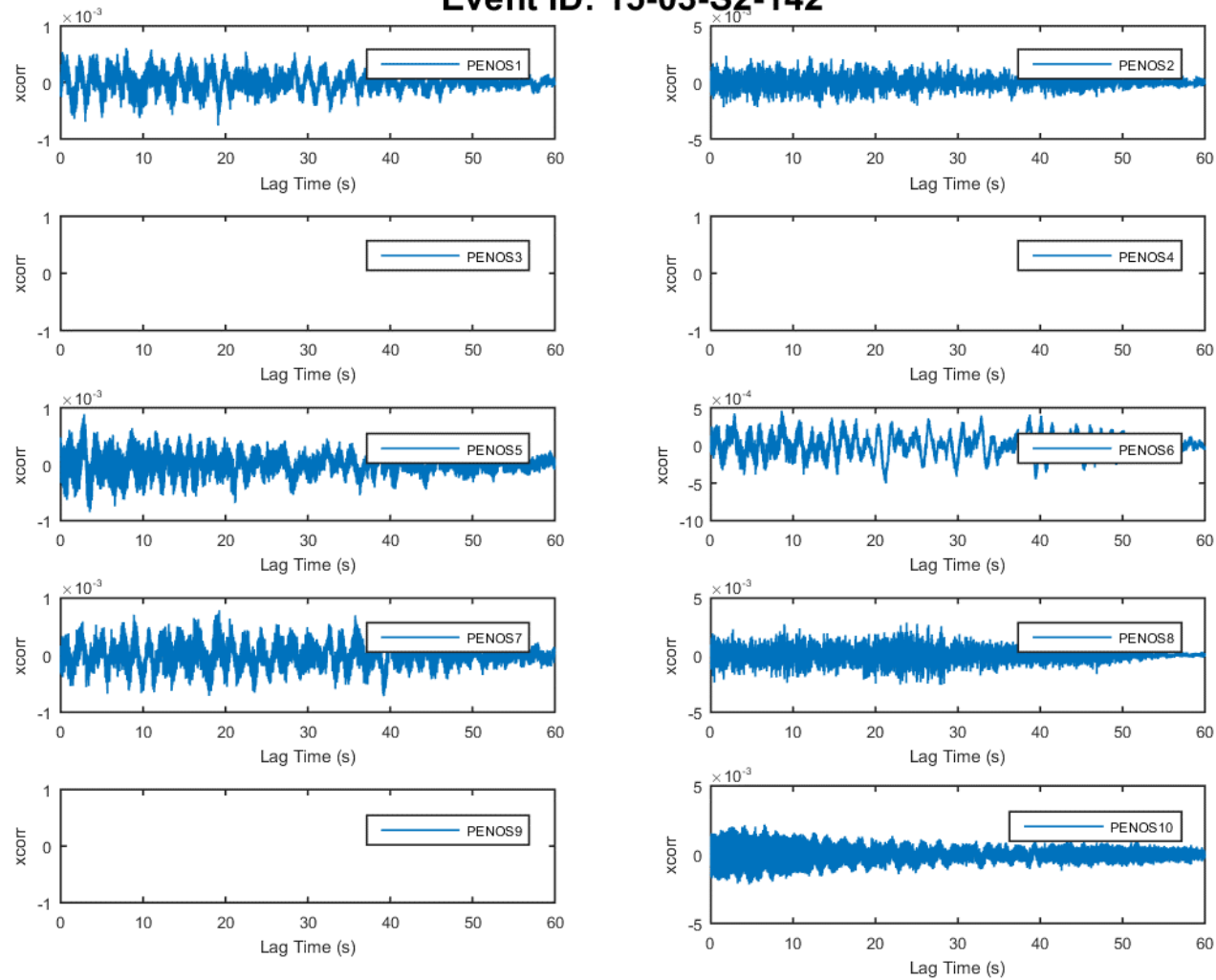


FIGURE 3.324: CROSS CORRELATION PEN\_OS 1 - 10 15-03-S2-142

Peak Particle Velocity - Event ID: 15-03-S2-168

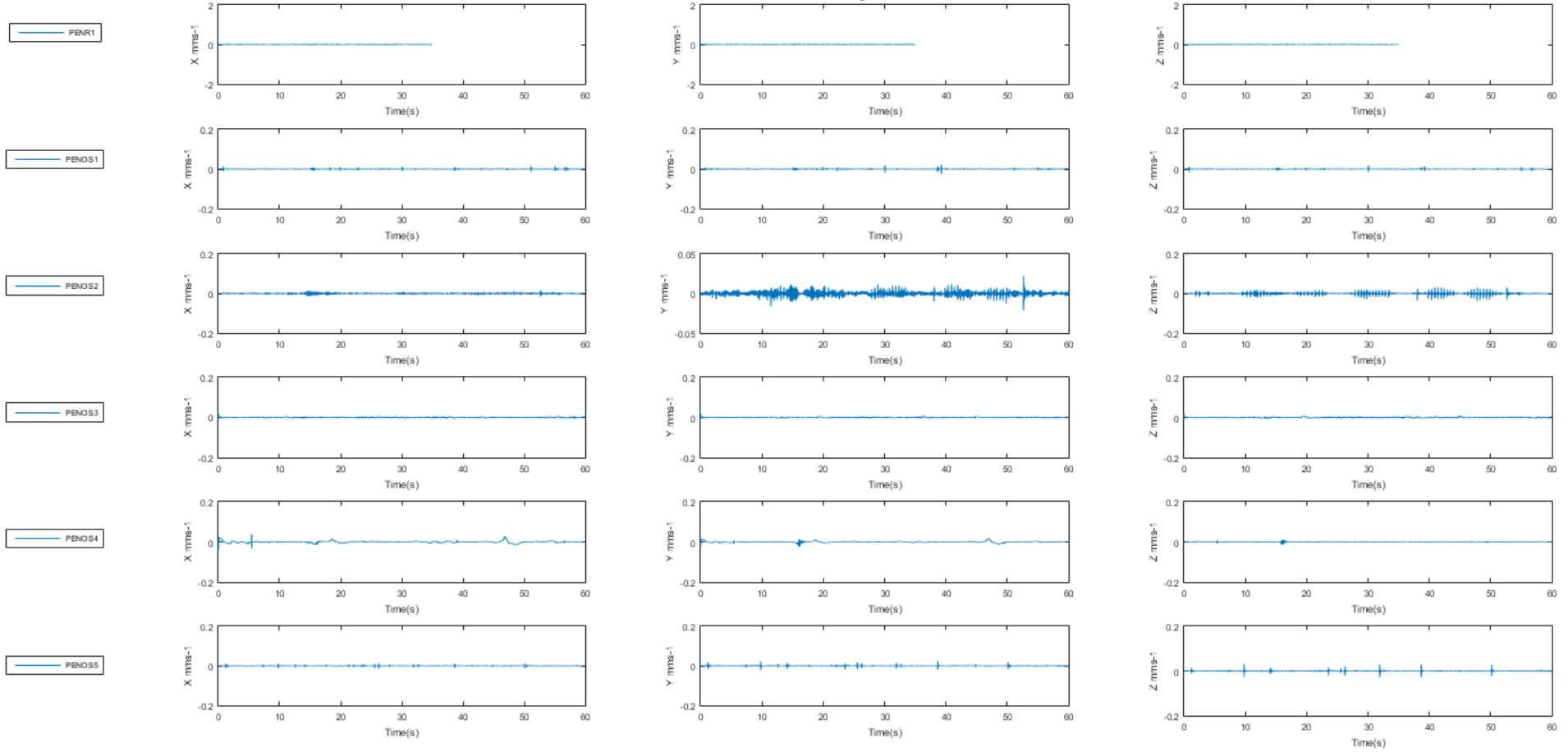
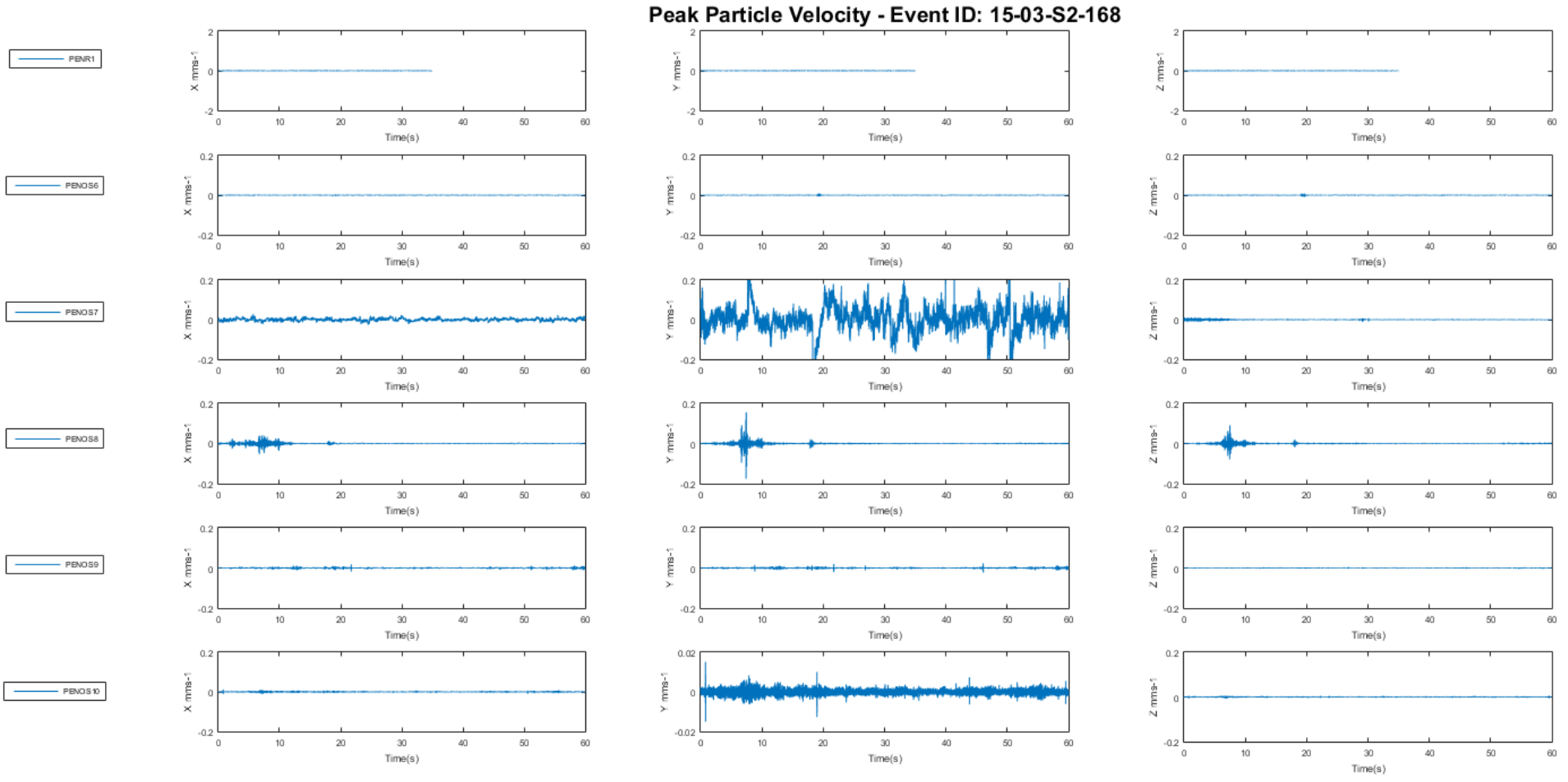


FIGURE 3.325: PEN\_OS 1 - 5 15-03-S2-168



**FIGURE 3.326: PEN\_OS 6 - 10 15-03-S2-168**

### Event ID: 15-03-S2-168

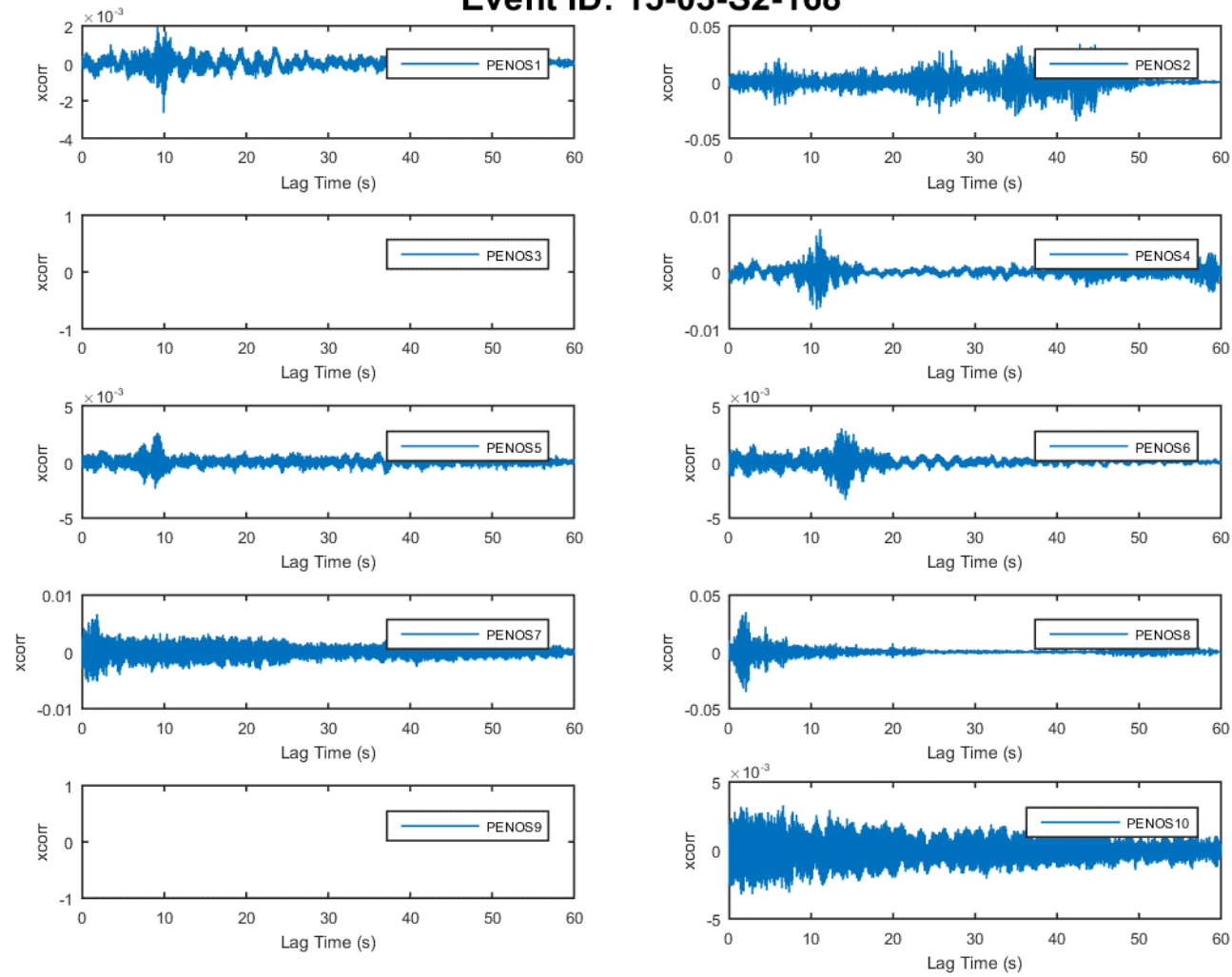


FIGURE 3.327: CROSS CORRELATION PEN\_OS 1 - 10 15-03-S2-168

Peak Particle Velocity - Event ID: 15-03-S2-178

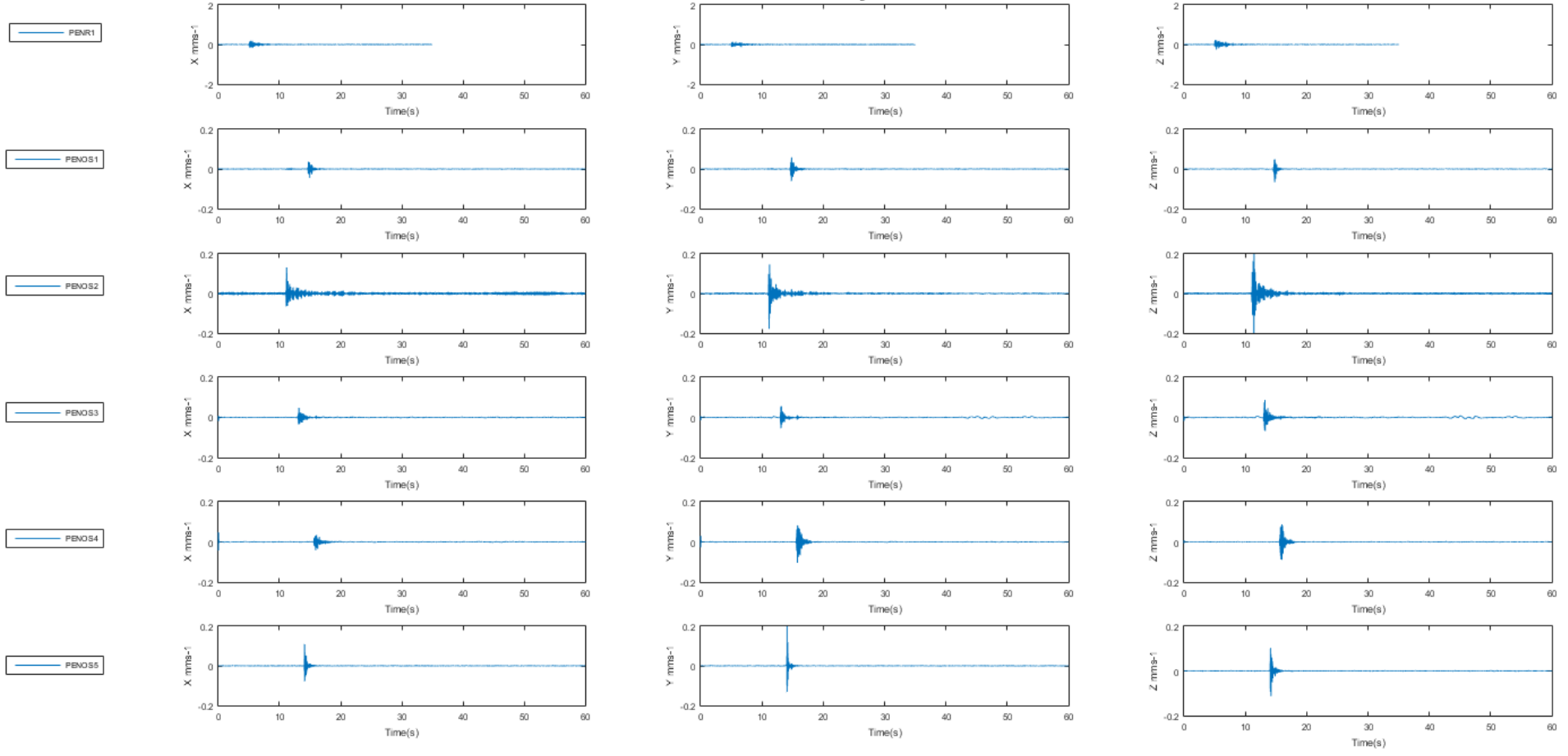


FIGURE 3.328: PEN\_OS 1 - 5 15-03-S2-178

Peak Particle Velocity - Event ID: 15-03-S2-178

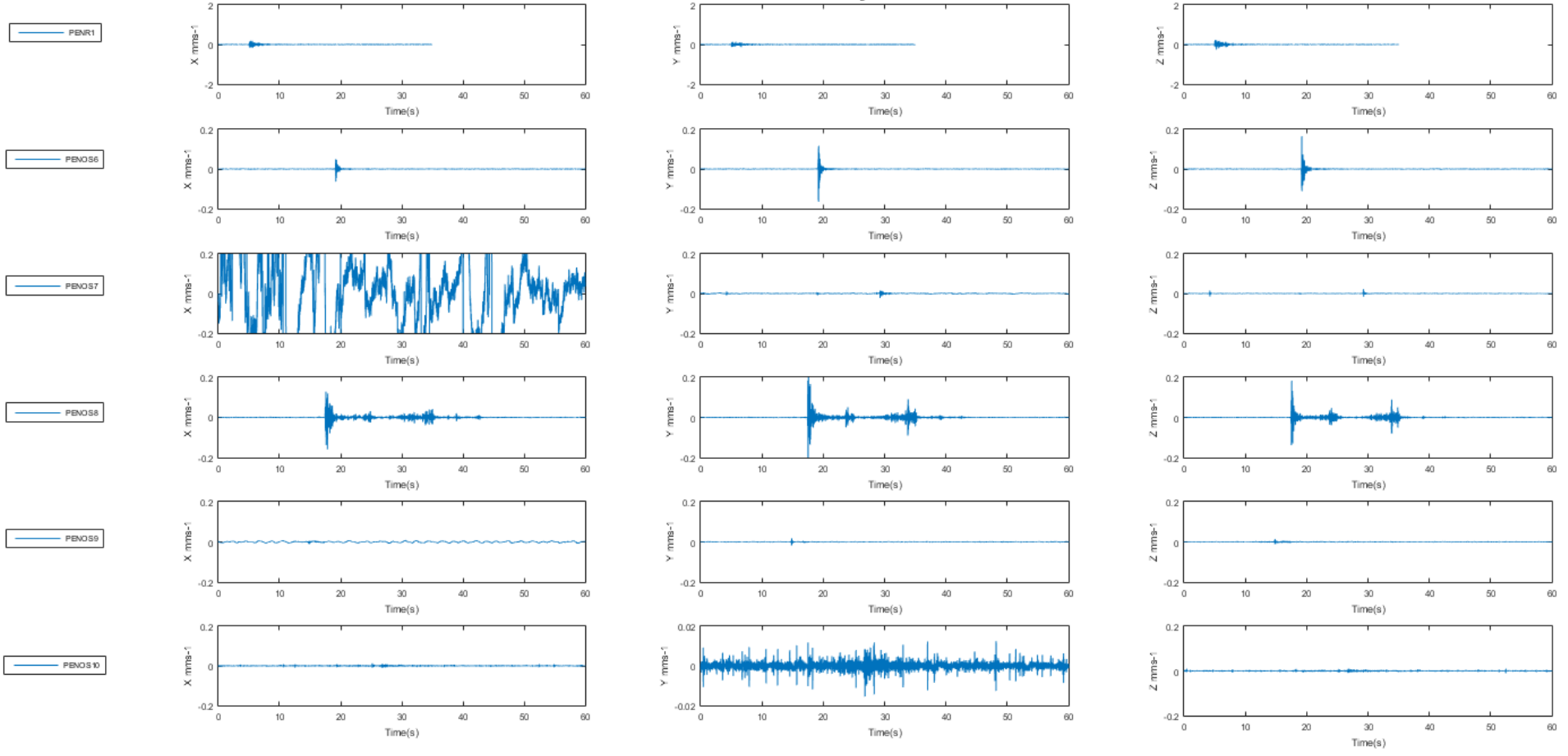


FIGURE 3.329: PEN\_OS 6 - 10 15-03-S2-178



### Event ID: 15-03-S2-178

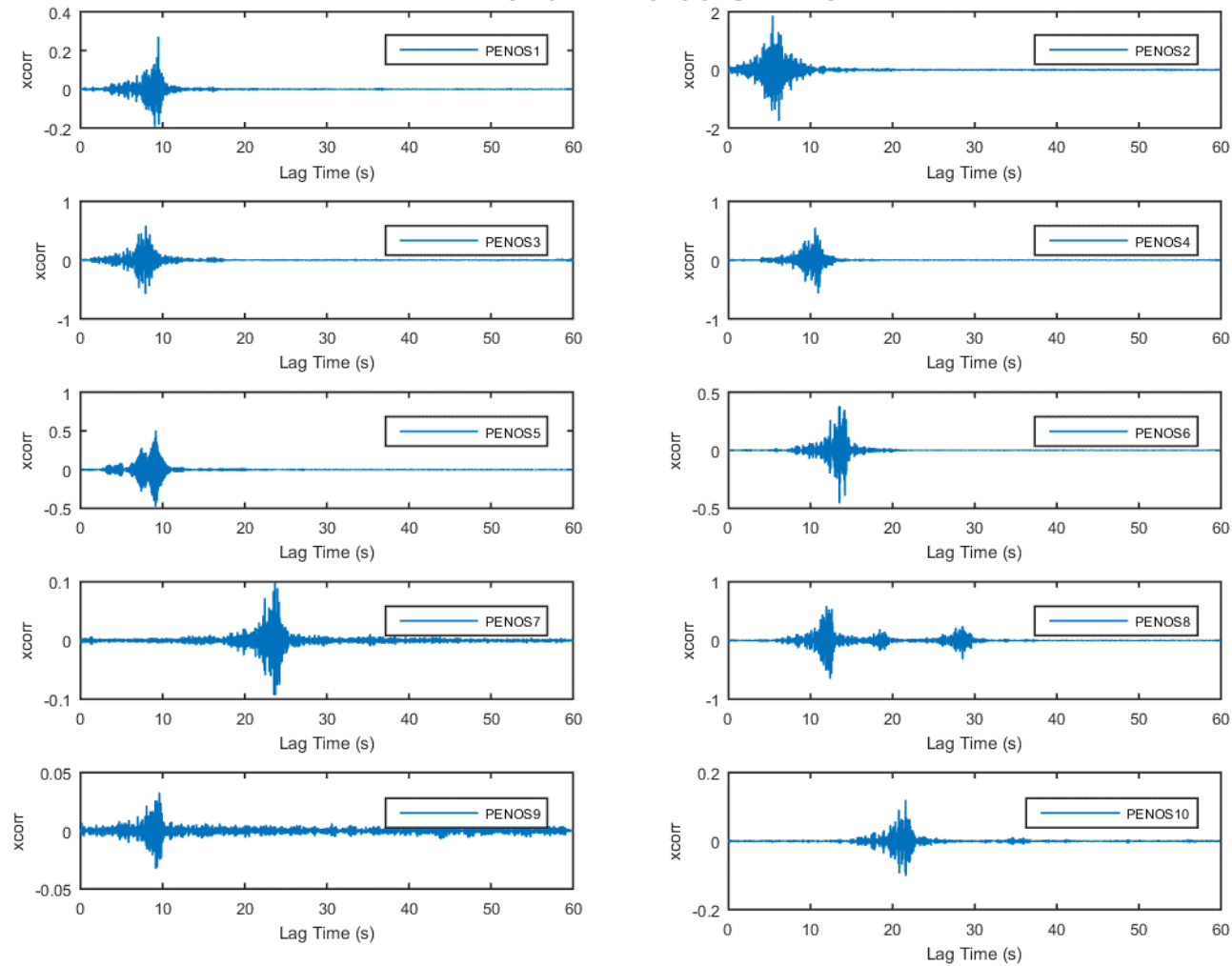


FIGURE 3.330: CROSS CORRELATION PEN\_OS 1 - 10 15-03-S2-178

Peak Particle Velocity - Event ID: 15-03-S2-198

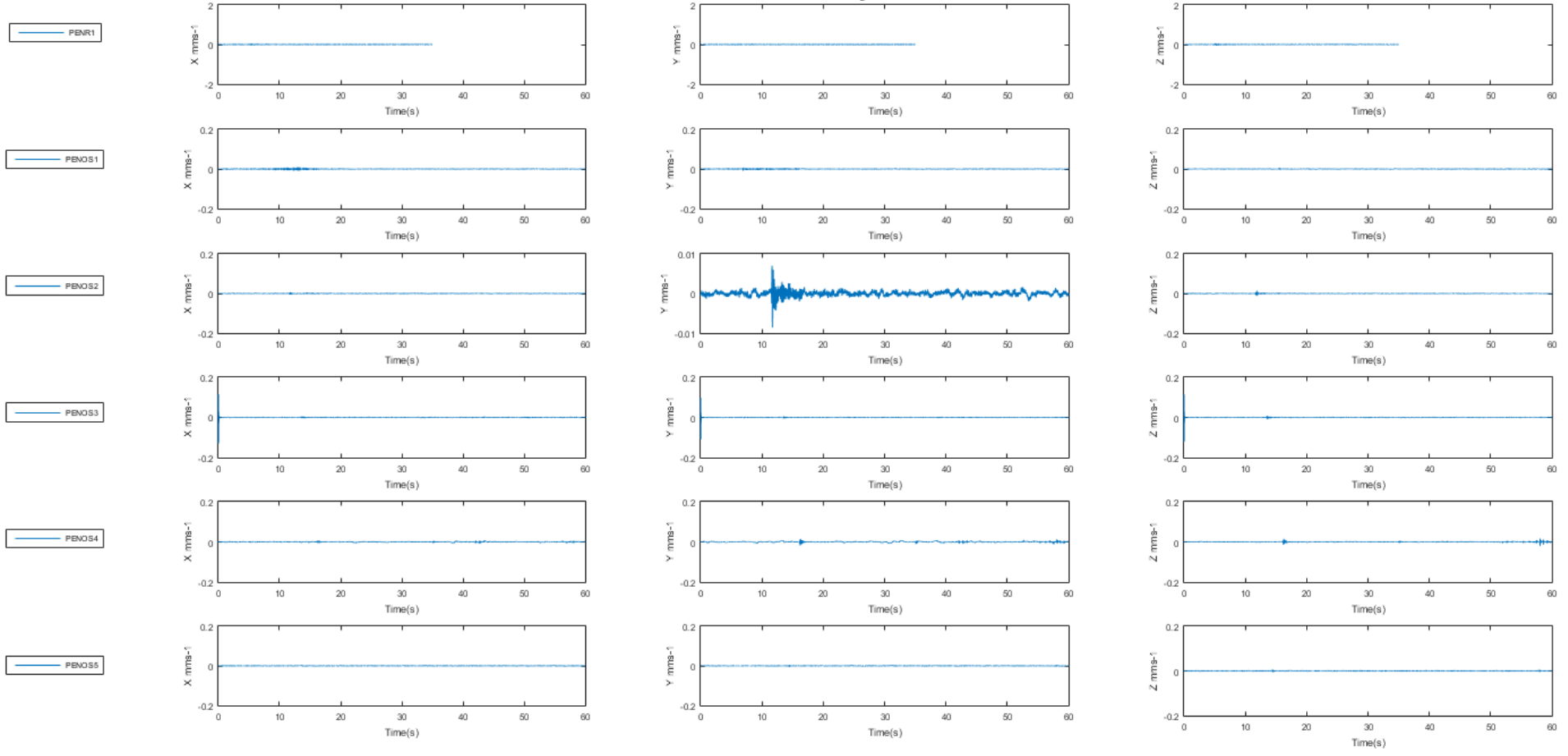


FIGURE 3.331: PEN\_OS 1 - 5 15-03-S2-198

Peak Particle Velocity - Event ID: 15-03-S2-198

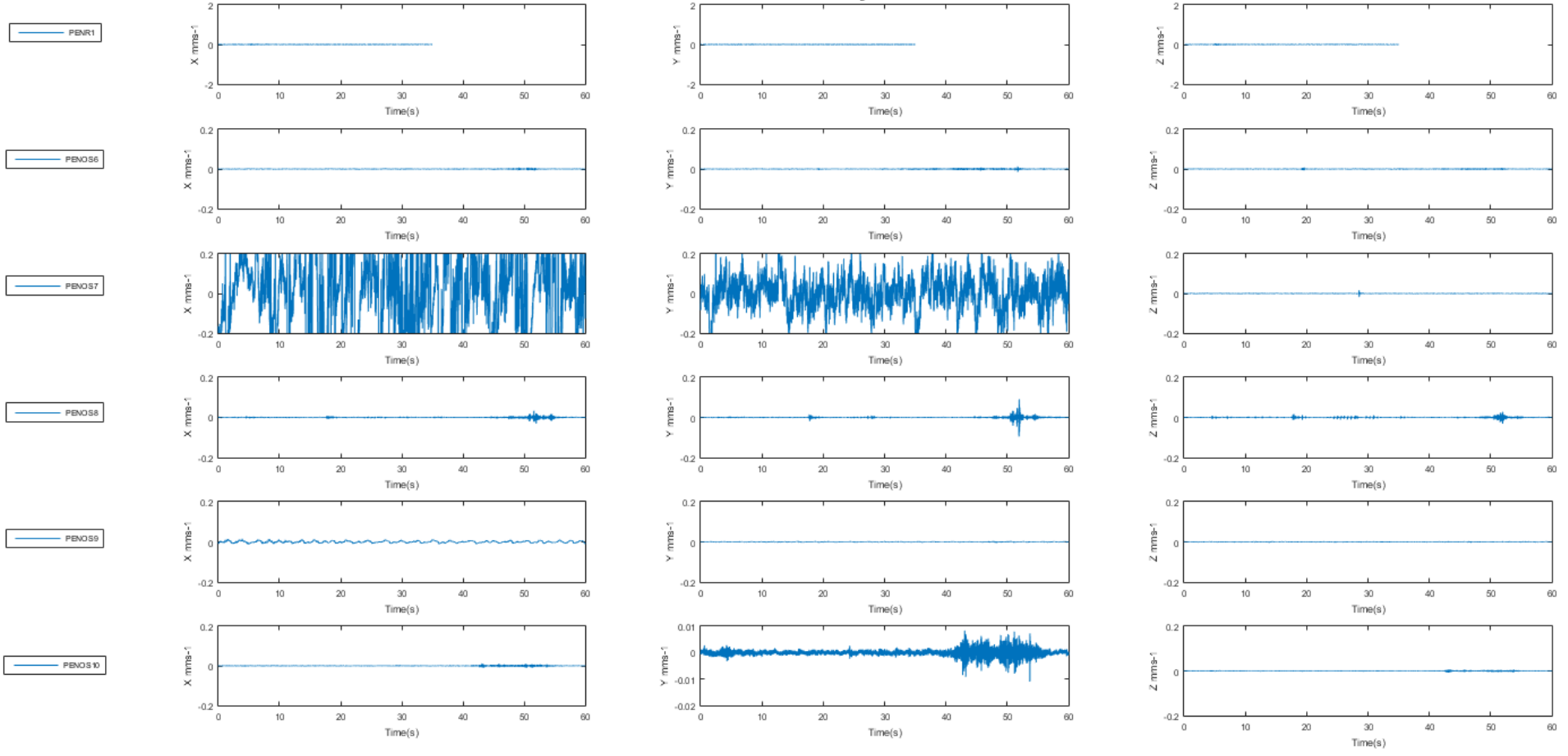


FIGURE 3.332: PEN\_OS 6 - 10 15-03-S2-198

### Event ID: 15-03-S2-198

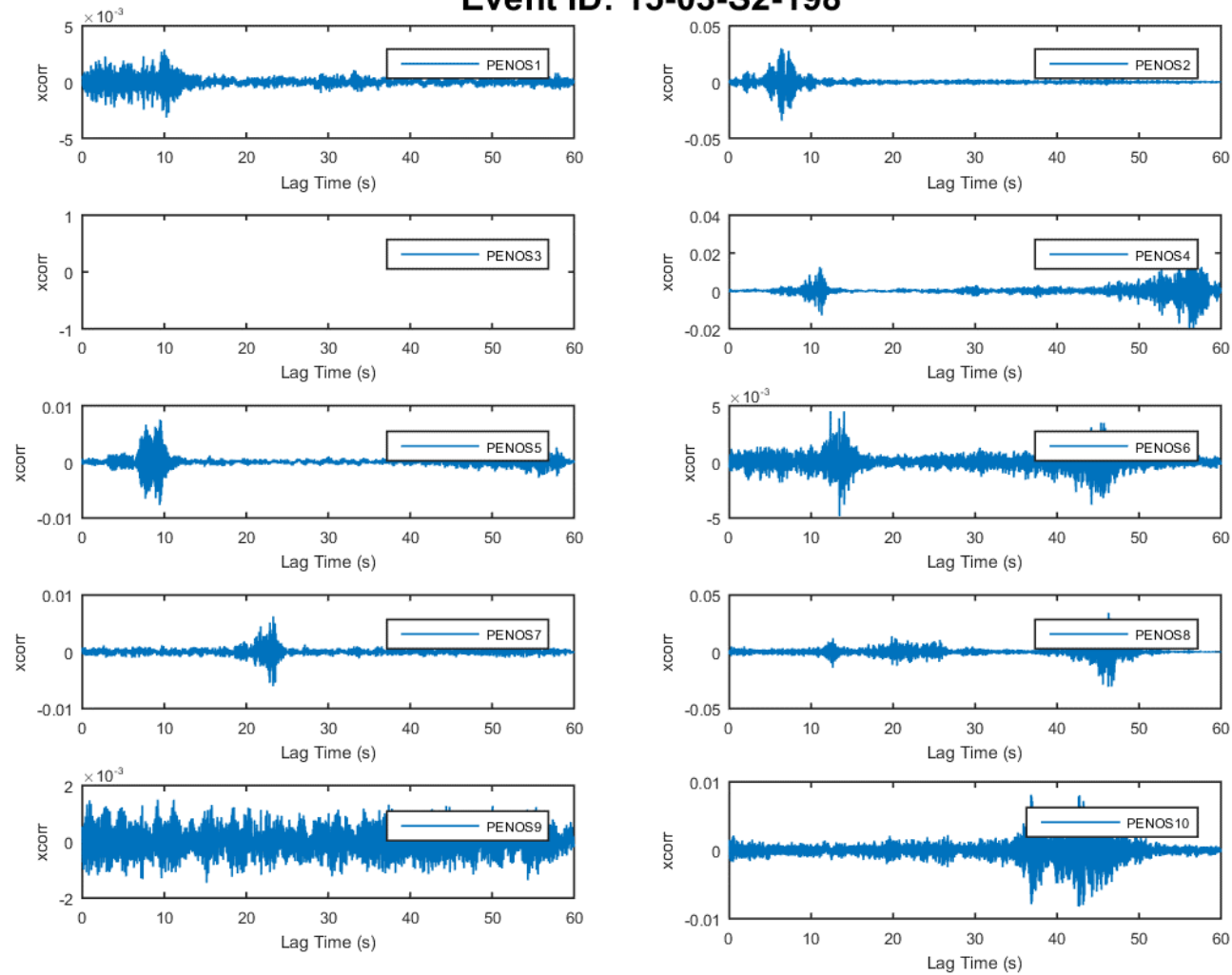


FIGURE 3.333: CROSS CORRELATION PEN\_OS 1 - 10 15-03-S2-198

Peak Particle Velocity - Event ID: 15-03-S2-208

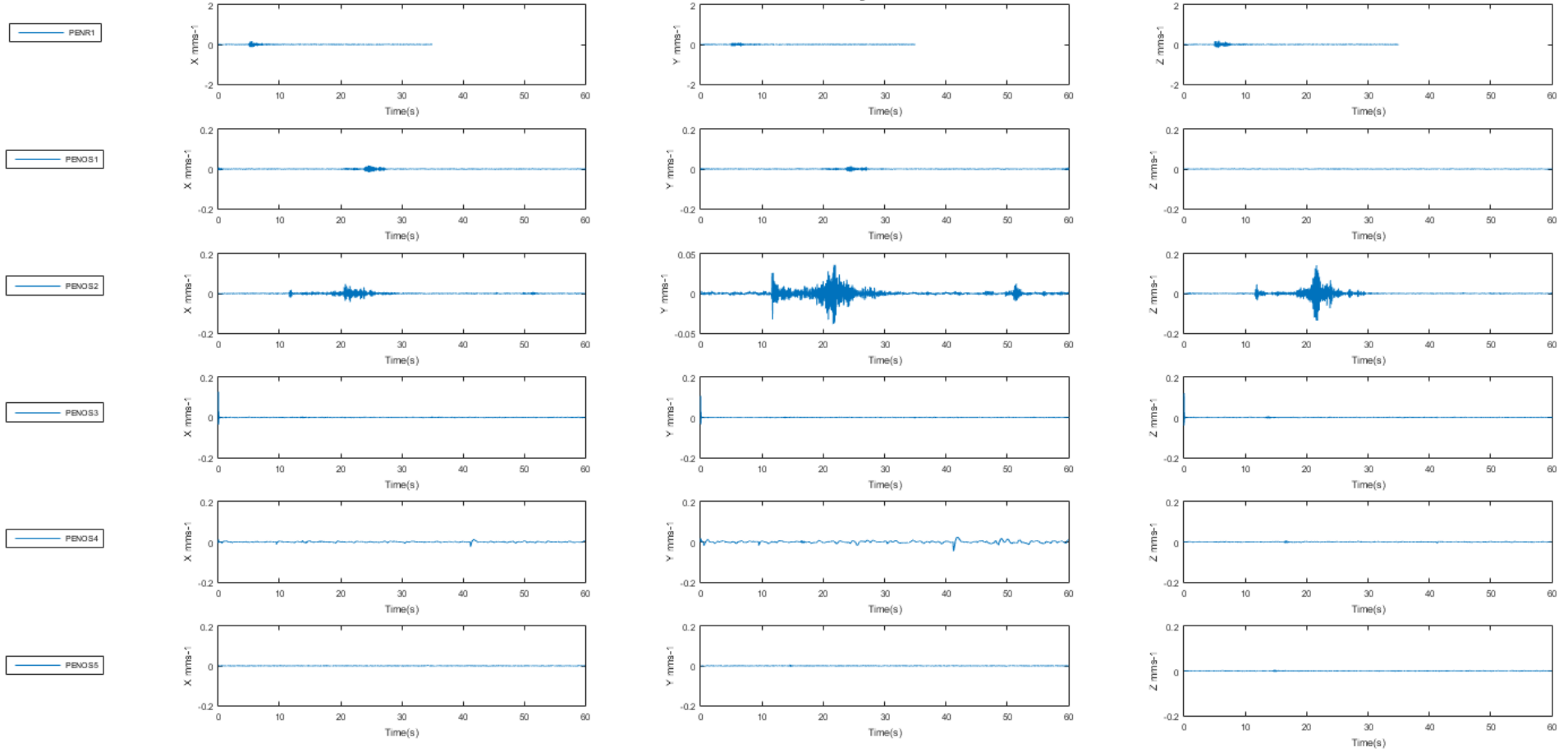


FIGURE 3.334: PEN\_OS 1 - 5 15-03-S2-208

Peak Particle Velocity - Event ID: 15-03-S2-208

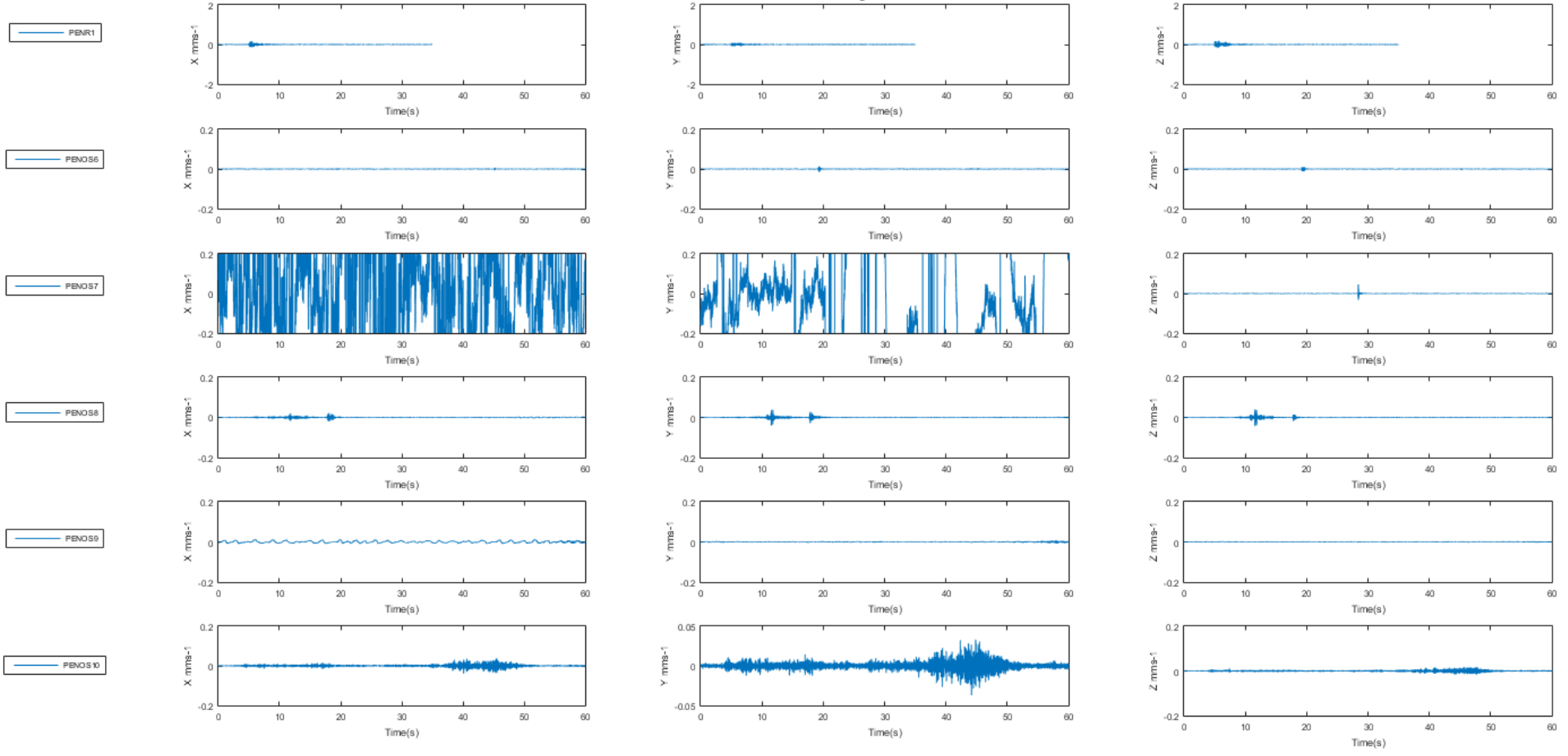
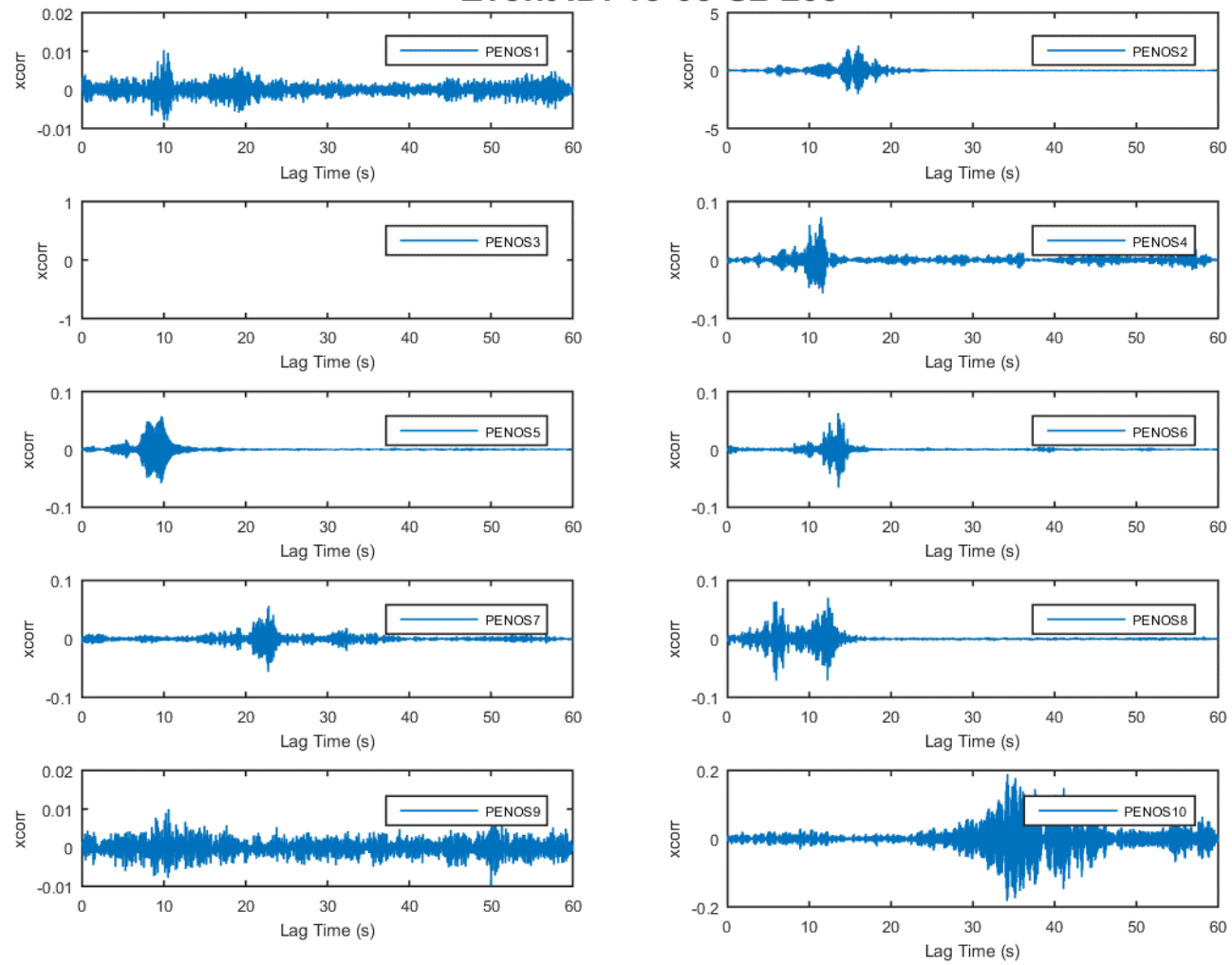


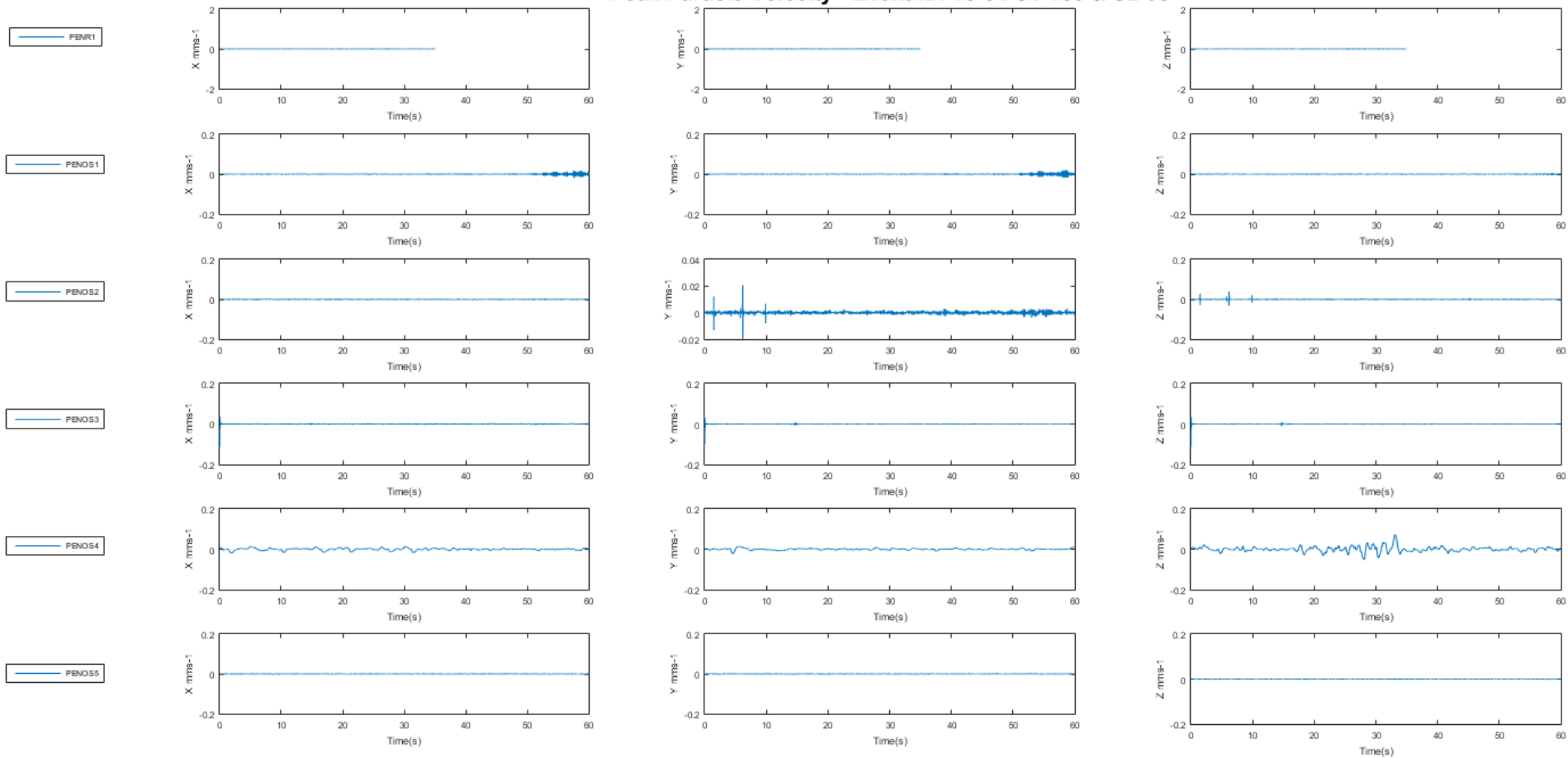
FIGURE 3.335: PEN\_OS 6 - 10 15-03-S2-208

**Event ID: 15-03-S2-208**



**FIGURE 3.336: CROSS CORRELATION PEN\_OS 1 - 10 15-03-S2-208**

### Peak Particle Velocity - Event ID: 15-04-S1-136 & S2-68



**FIGURE 3.337: PEN\_OS 1 - 5 15-04-S1-136 & S2-68**



Peak Particle Velocity - Event ID: 15-04-S1-136 & S2-68

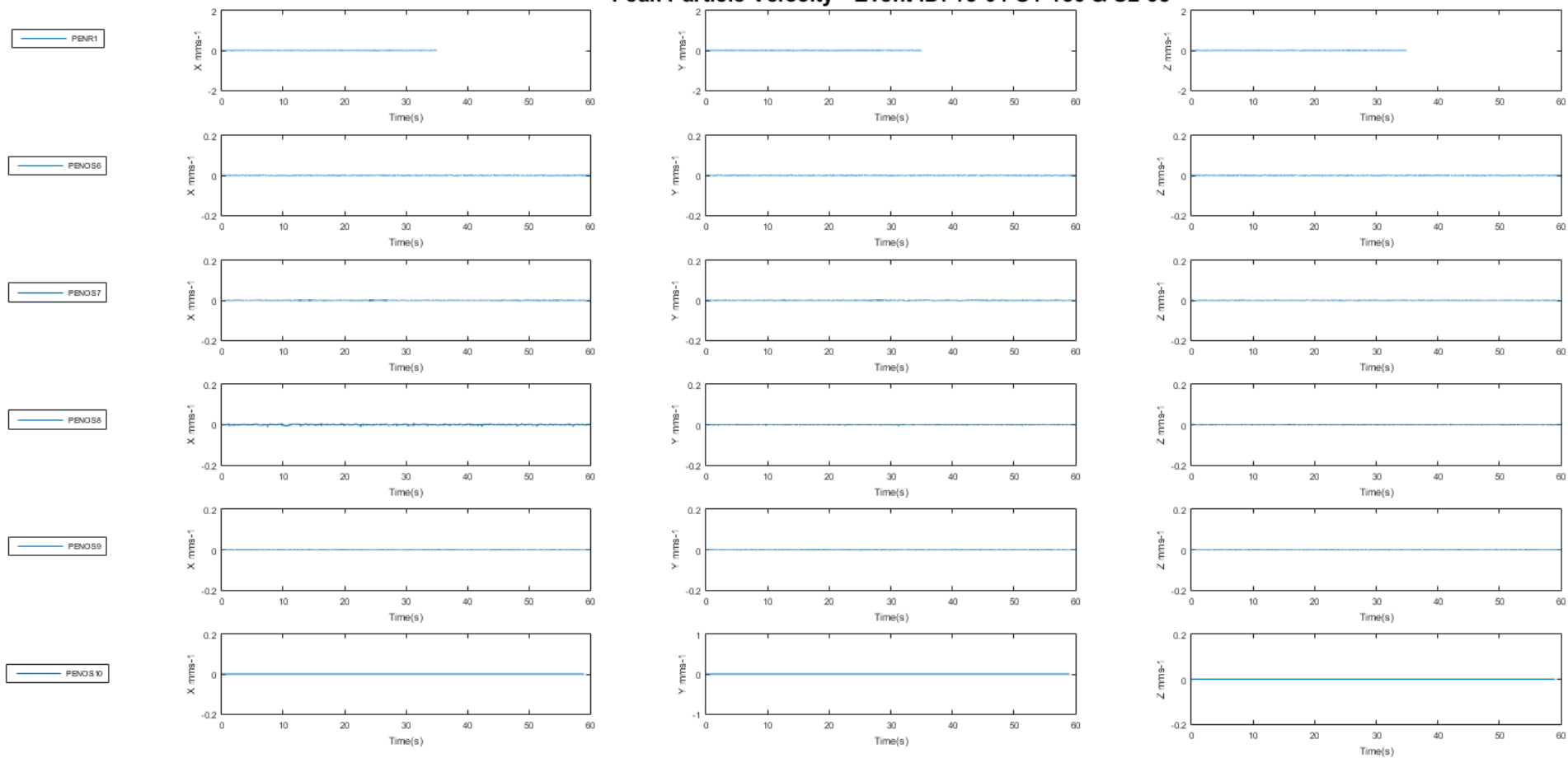
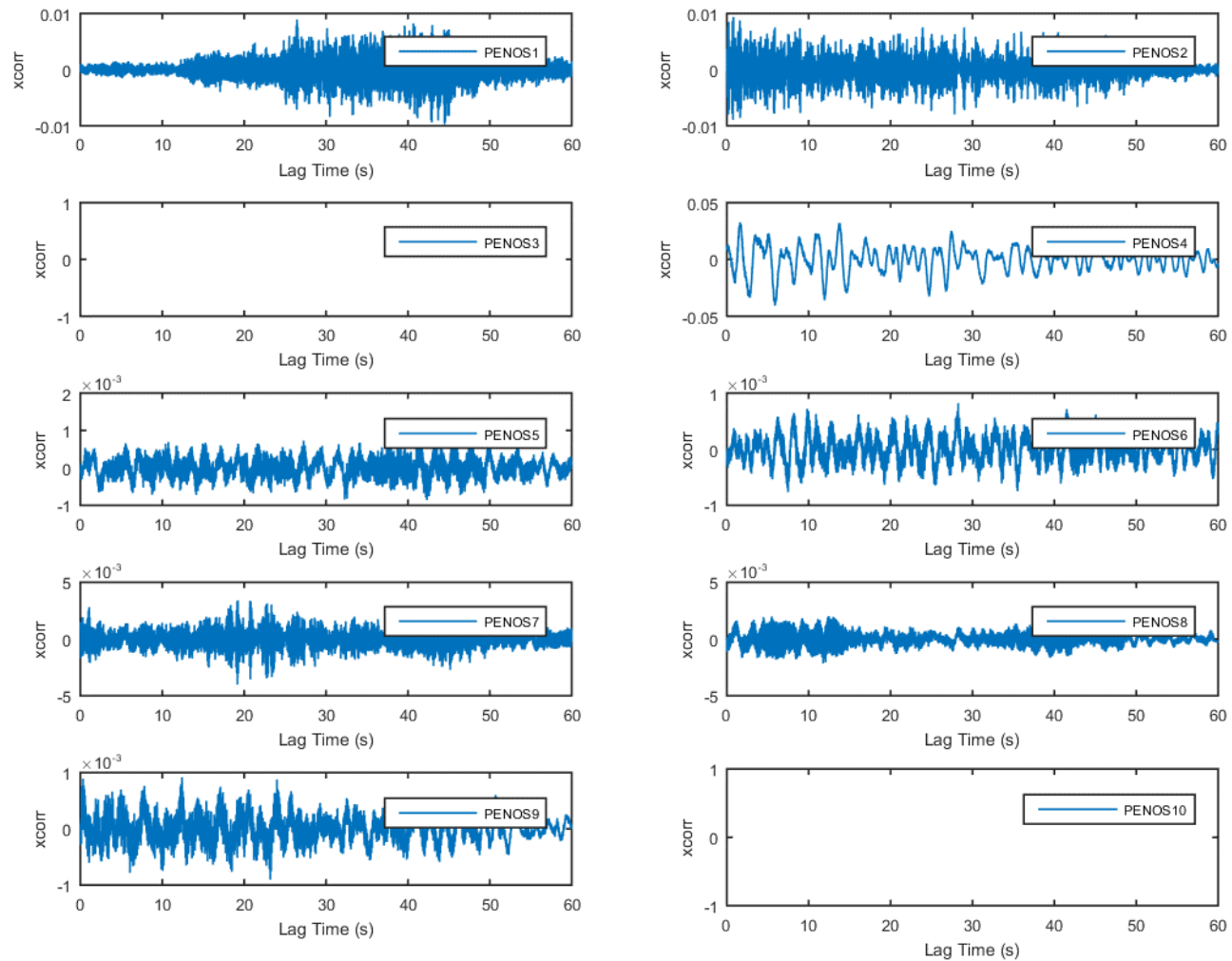


FIGURE 3.338: PEN\_OS 6 - 10 15-04-S1-136 & S2-68

**Event ID: 15-04-S1-136 & S2-68**



**FIGURE 3.339: CROSS CORRELATION PEN\_OS 1 - 10 15-04-S1-136 & S2-68**

Peak Particle Velocity - Event ID: 15-04-S1-136 & S2-68

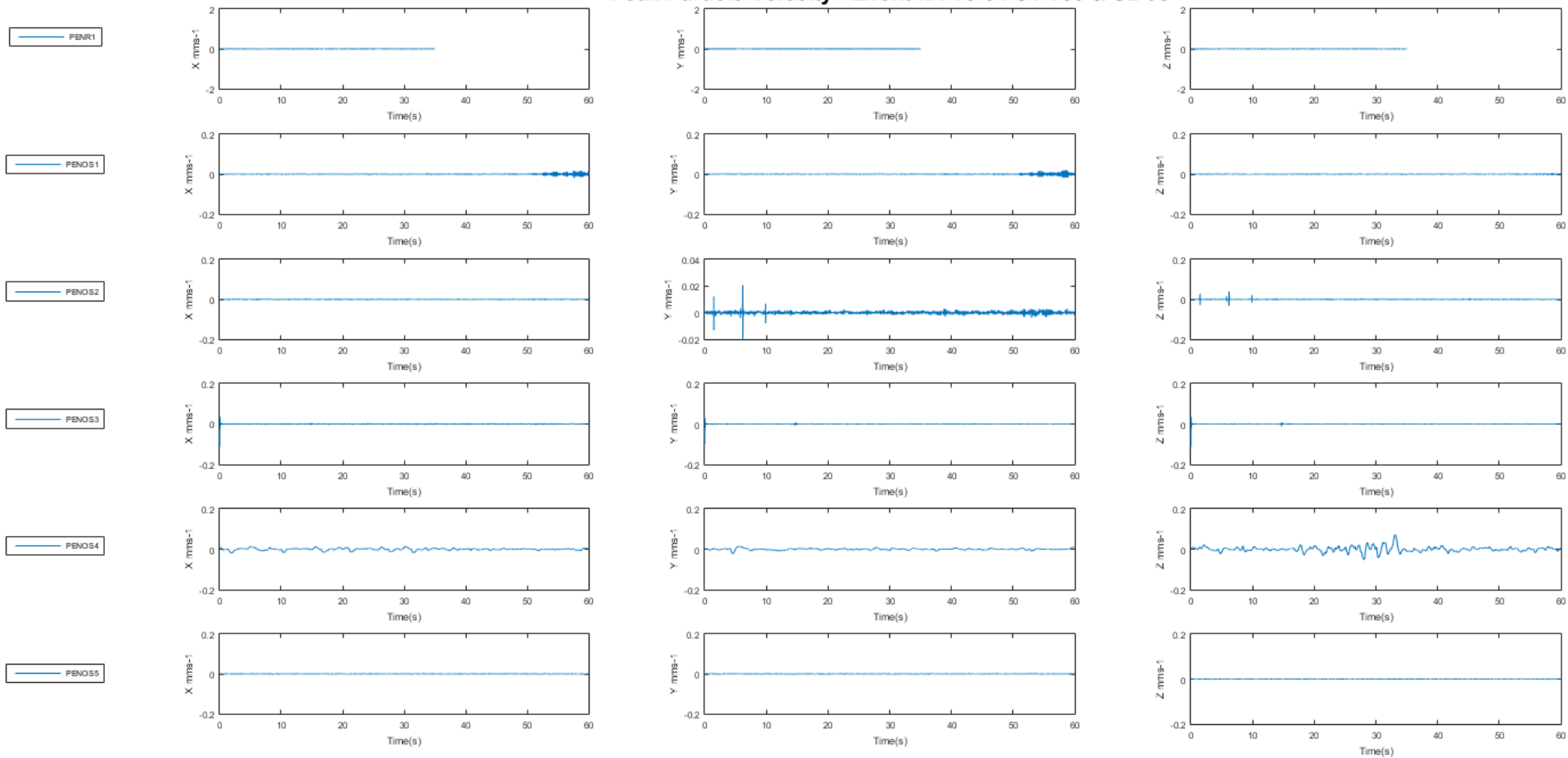


FIGURE 3.340: PEN\_OS 1 - 5 15-04-S1-136 & S2-68

Peak Particle Velocity - Event ID: 15-04-S1-136 & S2-68

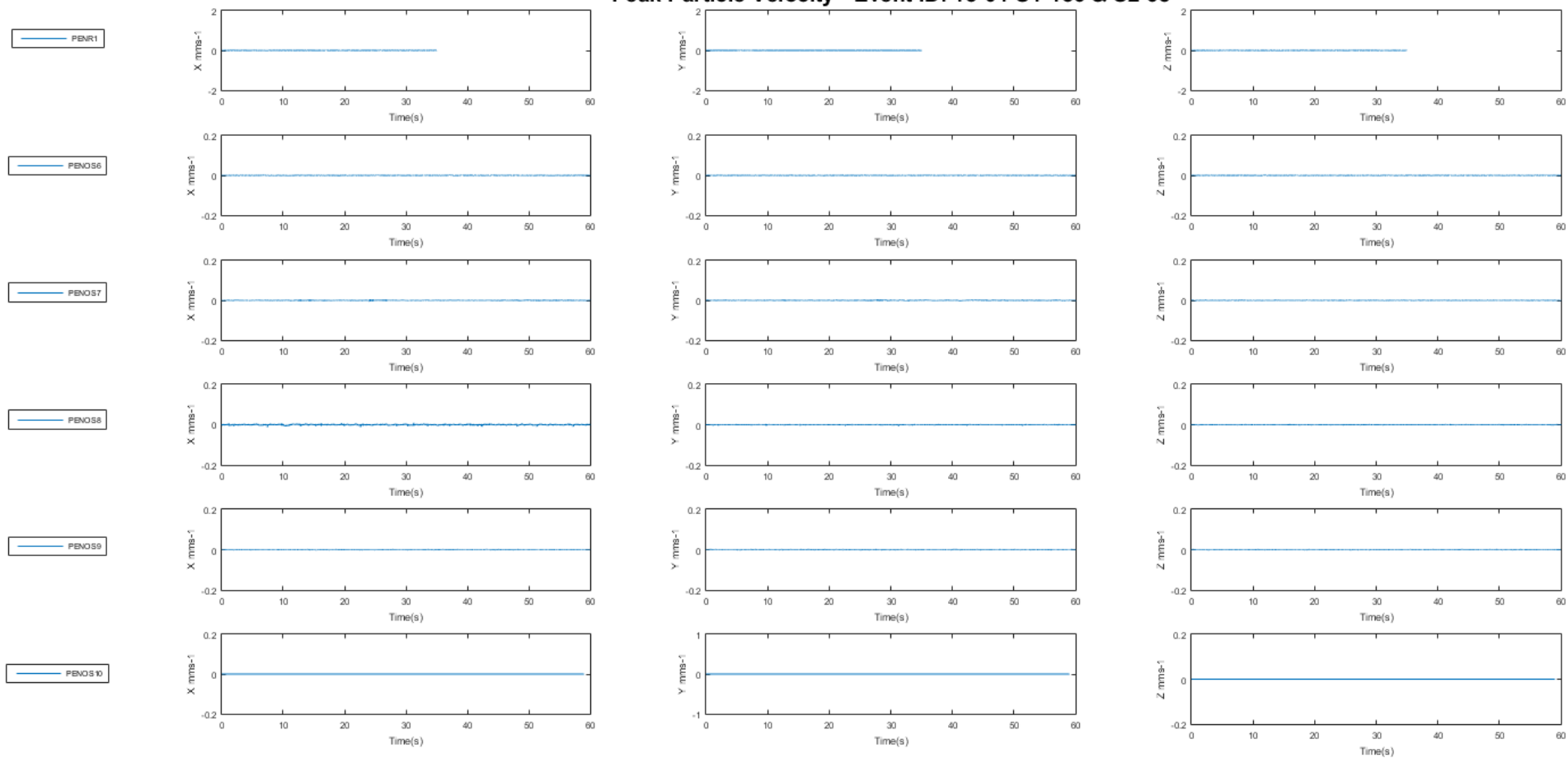


FIGURE 3.341: PEN\_OS 6 - 10 15-04-S1-136 & S2-68

### Event ID: 15-04-S1-136 & S2-68

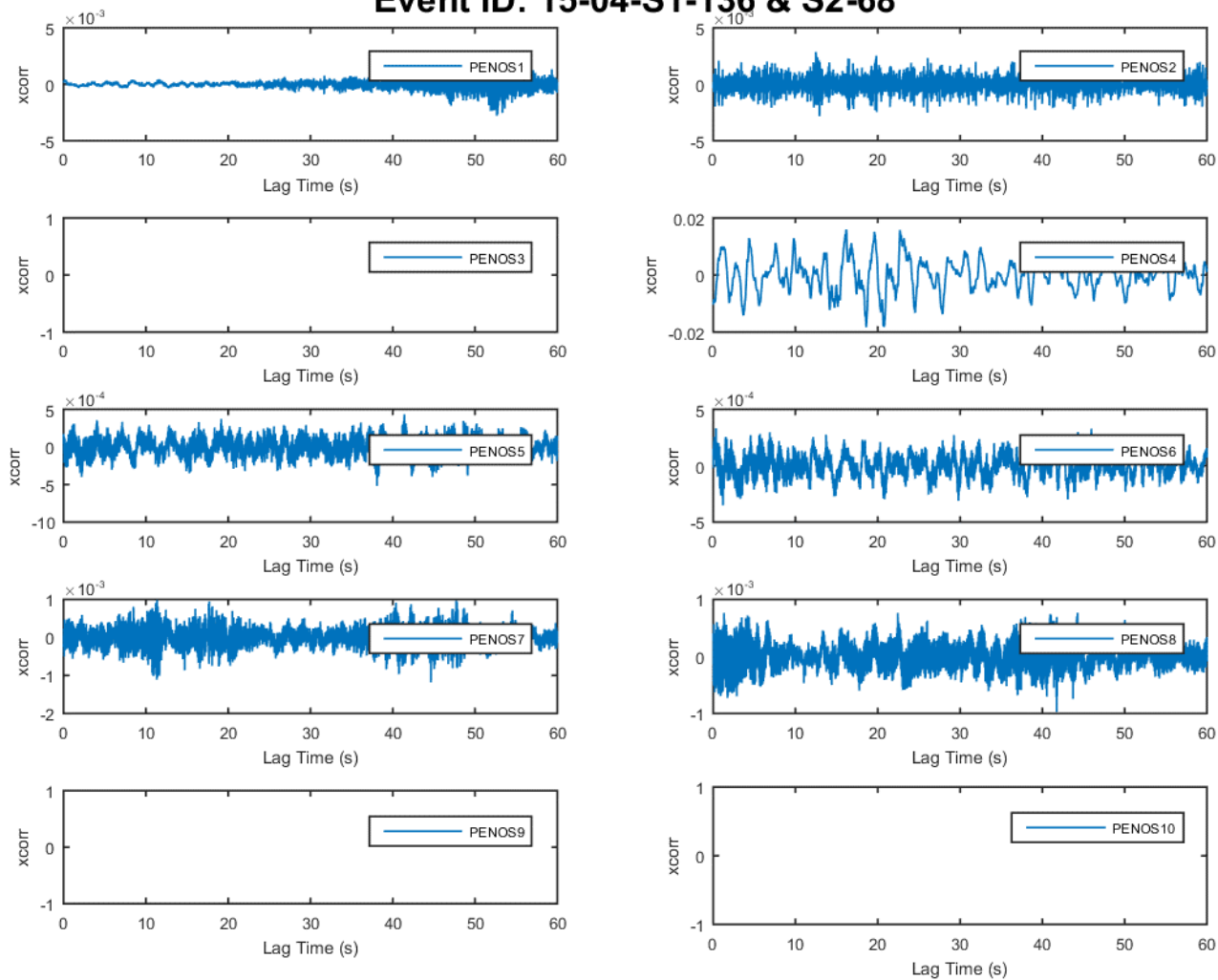
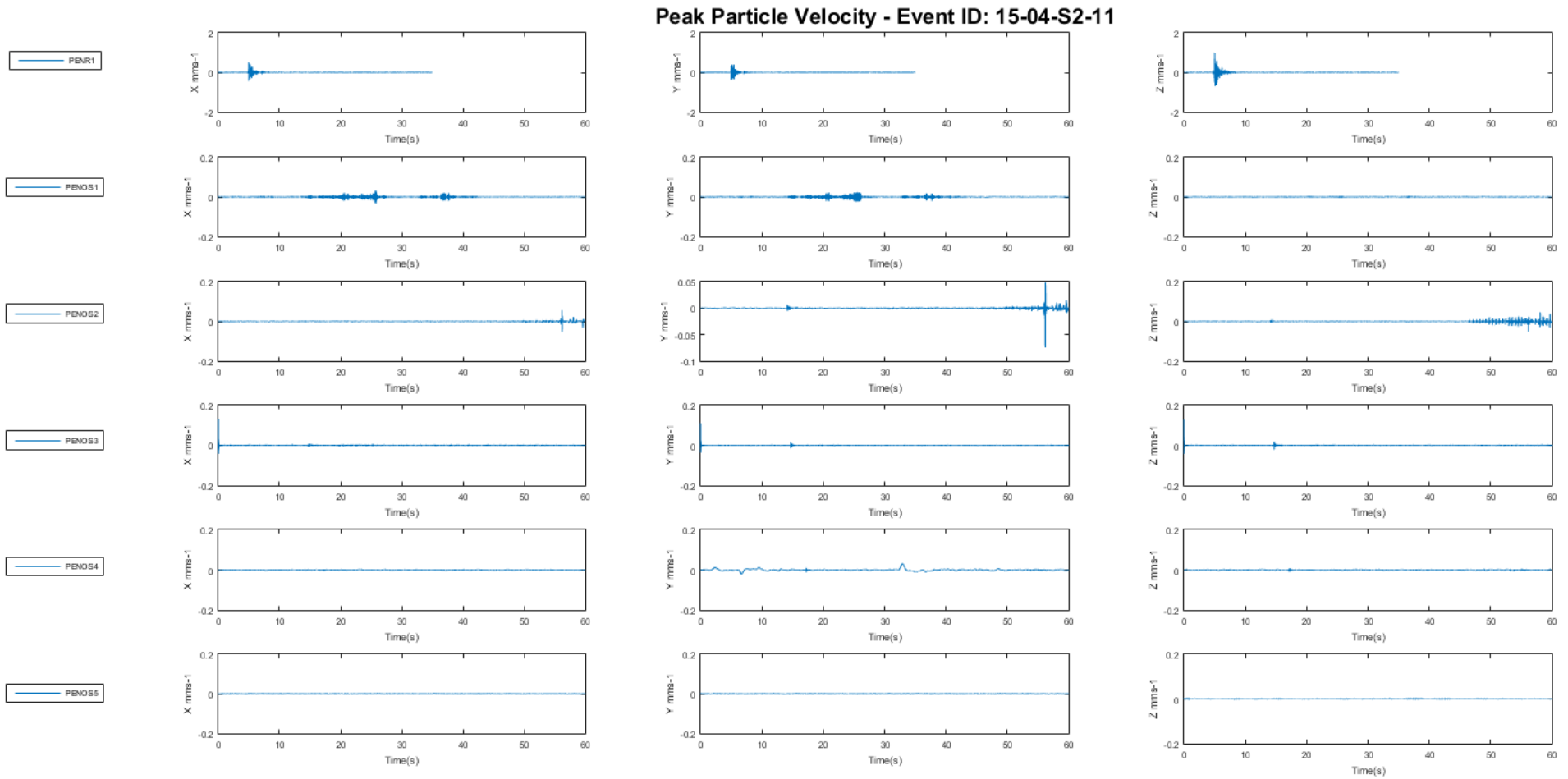
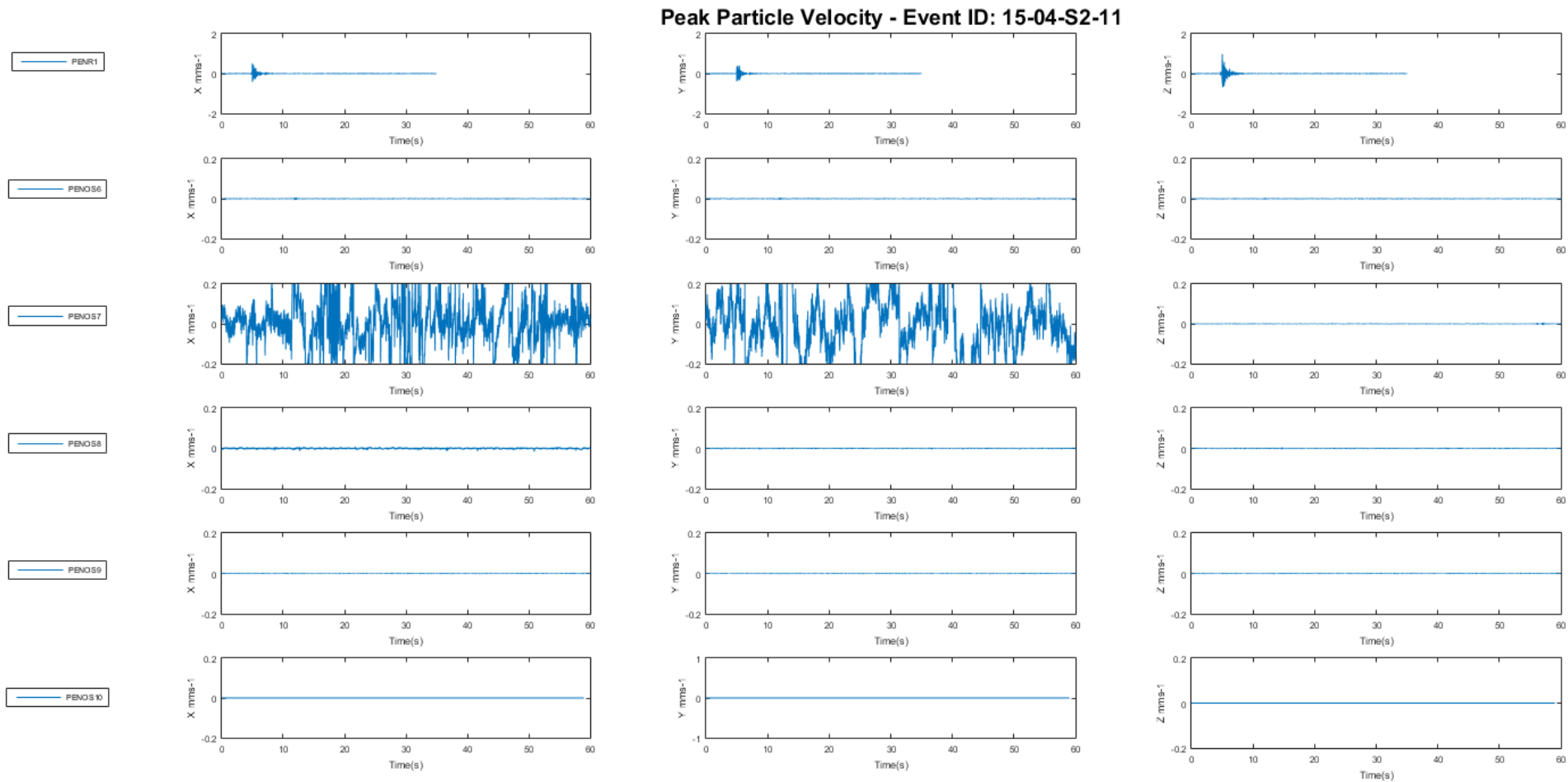


FIGURE 3.342: CROSS CORRELATION PEN\_OS 1 - 10 15-04-S1-136 & S2-68

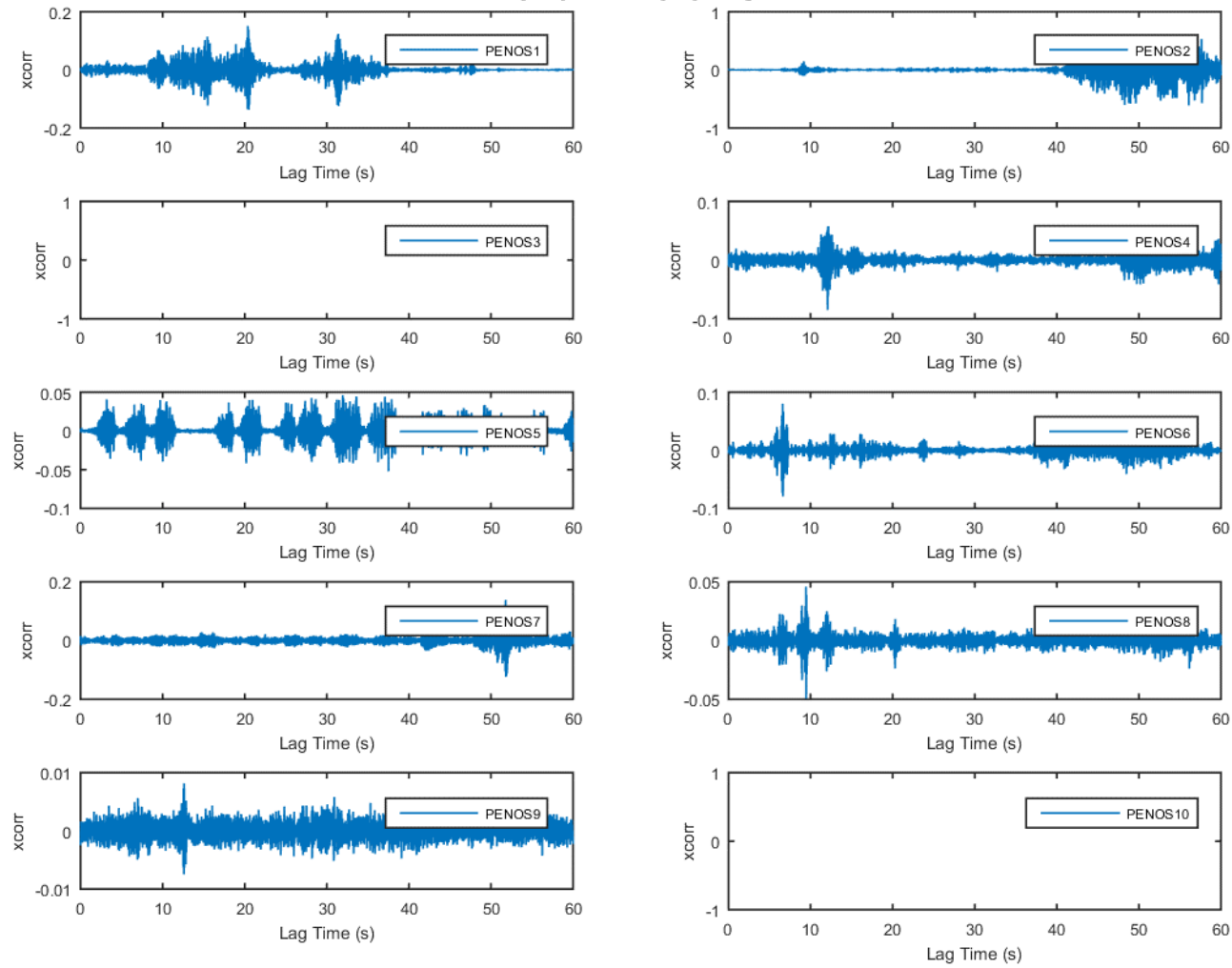


**FIGURE 3.343: PEN\_OS 1 - 5 15-04-S2-11**



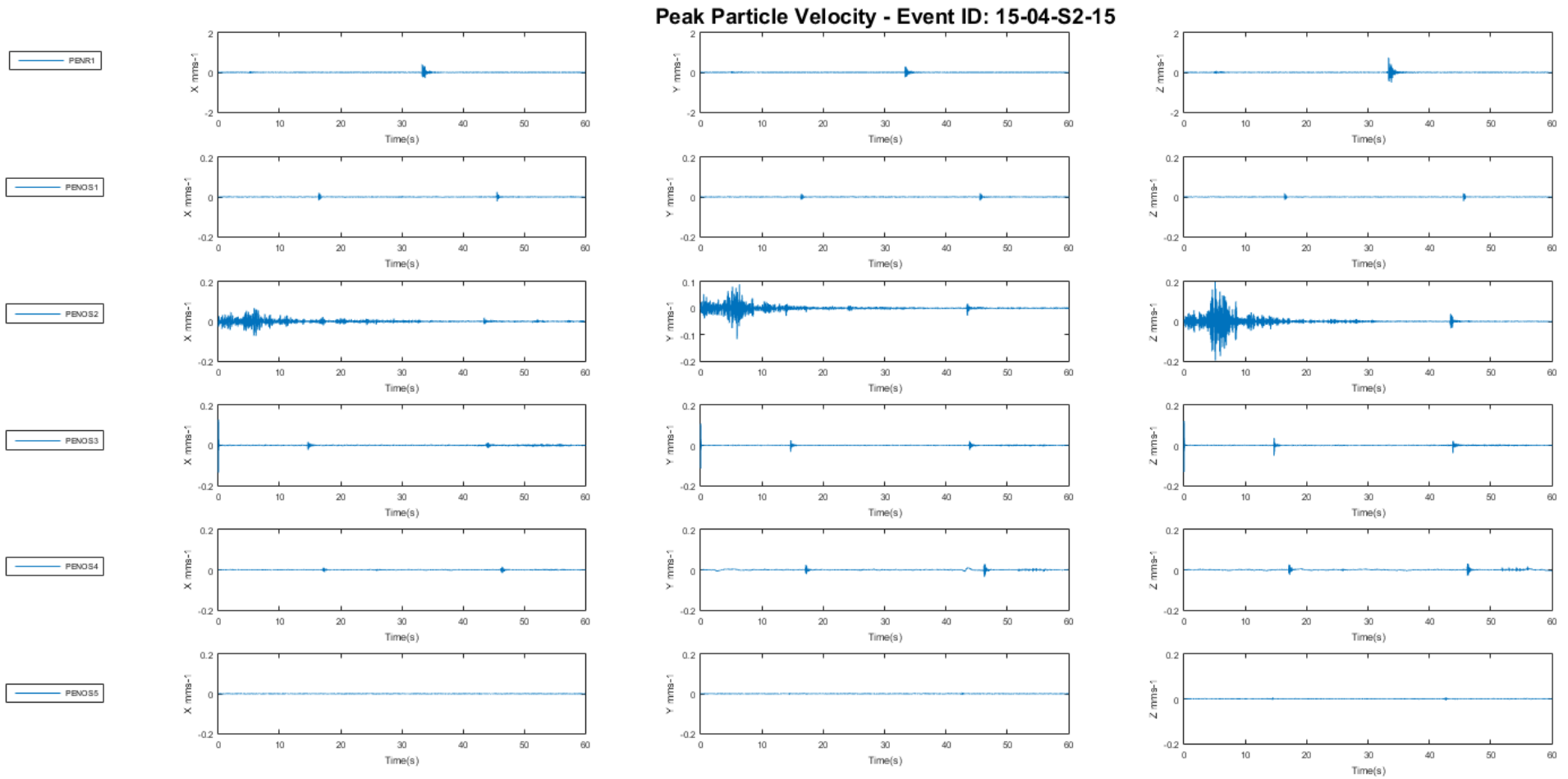
**FIGURE 3.344: PEN\_OS 6 - 10 15-04-S2-11**

**Event ID: 15-04-S2-11**



**FIGURE 3.345: CROSS CORRELATION PEN\_OS 1 - 10 15-04-S2-11**





**FIGURE 3.346: PEN\_OS 1 - 5 15-04-S2-15**

Peak Particle Velocity - Event ID: 15-04-S2-15

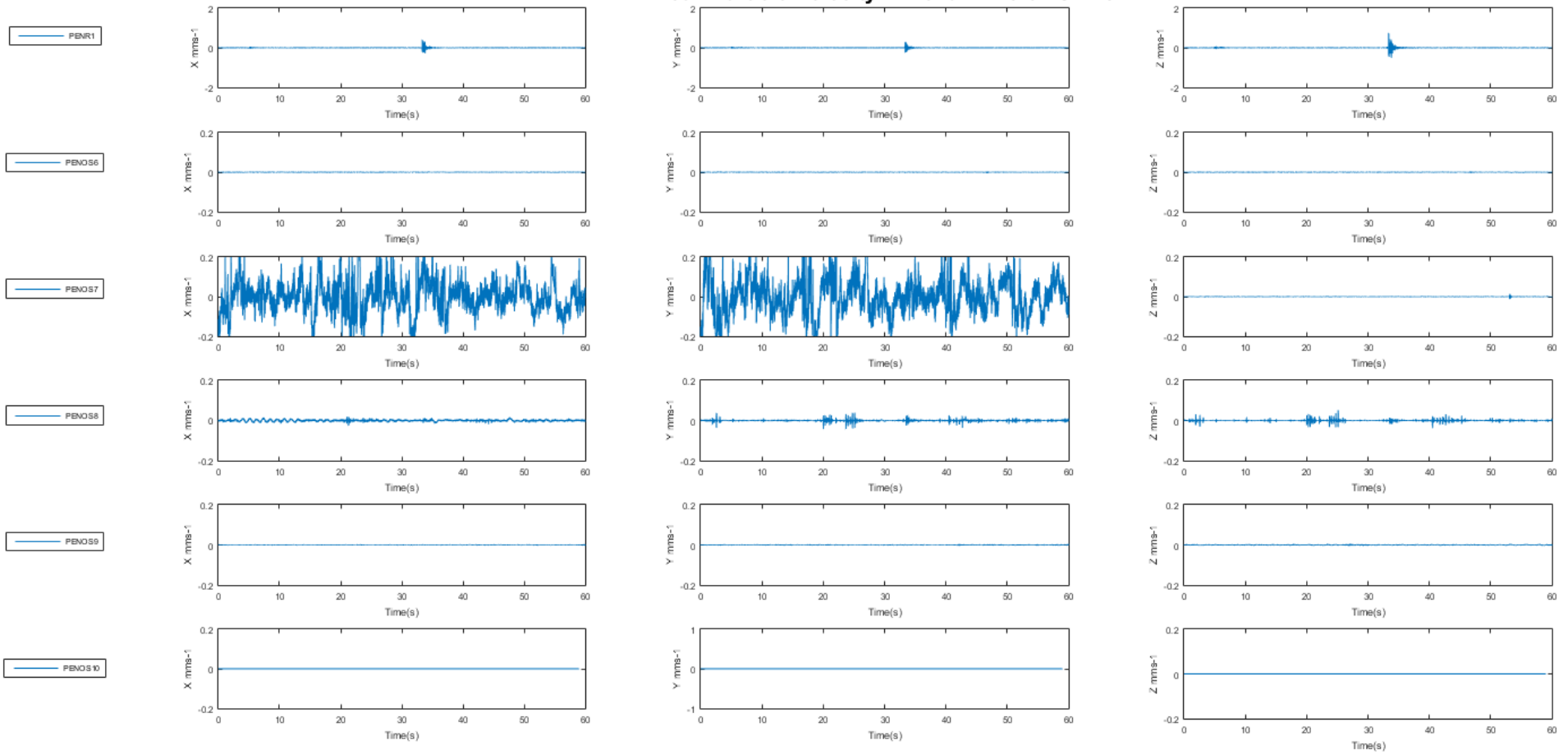


FIGURE 3.347: PEN\_OS 6 - 10 15-04-S2-15

### Event ID: 15-04-S2-15

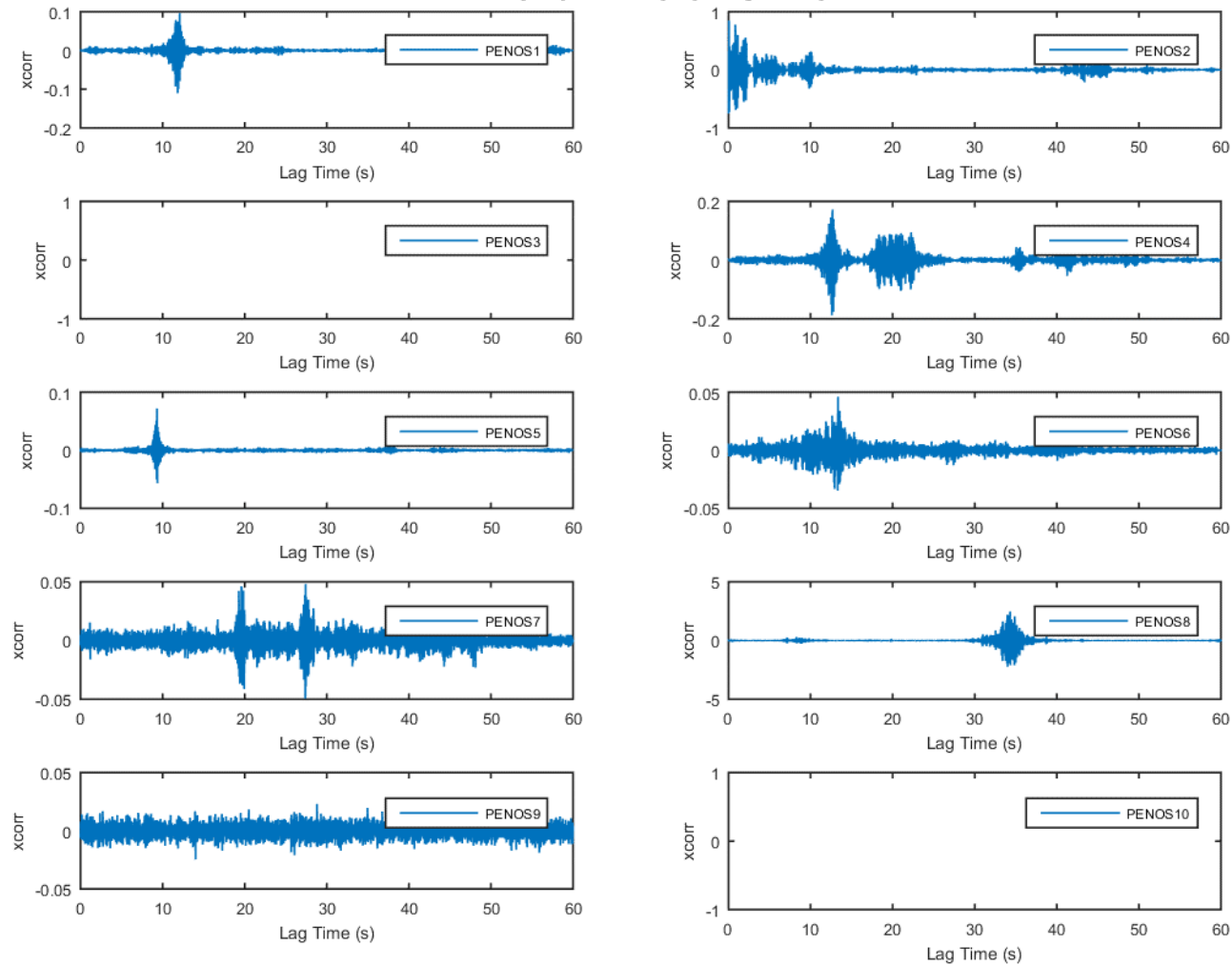
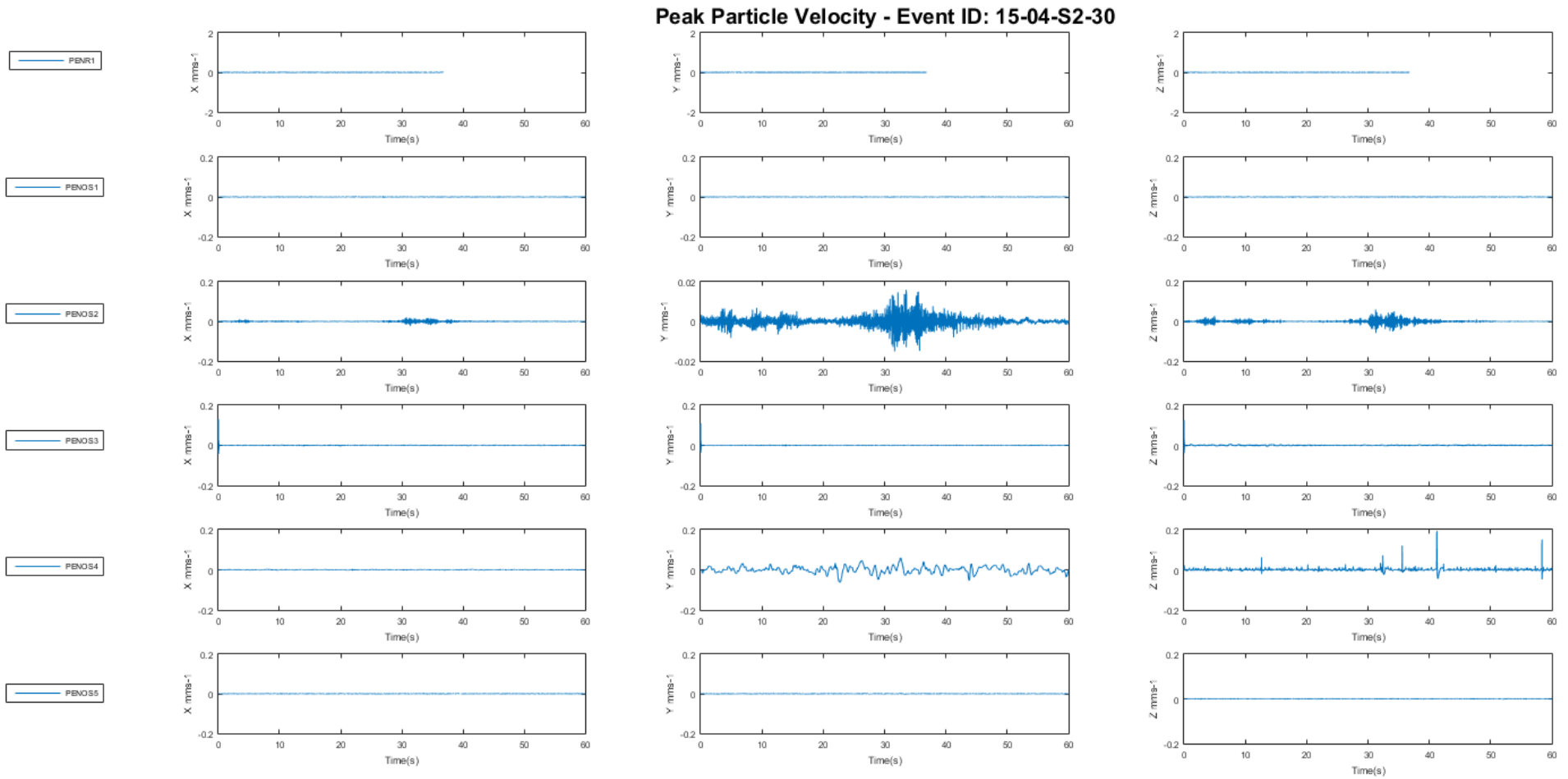


FIGURE 3.348: CROSS CORRELATION PEN\_OS 1 - 10 15-04-S2-15



**FIGURE 3.349: PEN\_OS 1 - 5 15-04-S2-30**

Peak Particle Velocity - Event ID: 15-04-S2-30

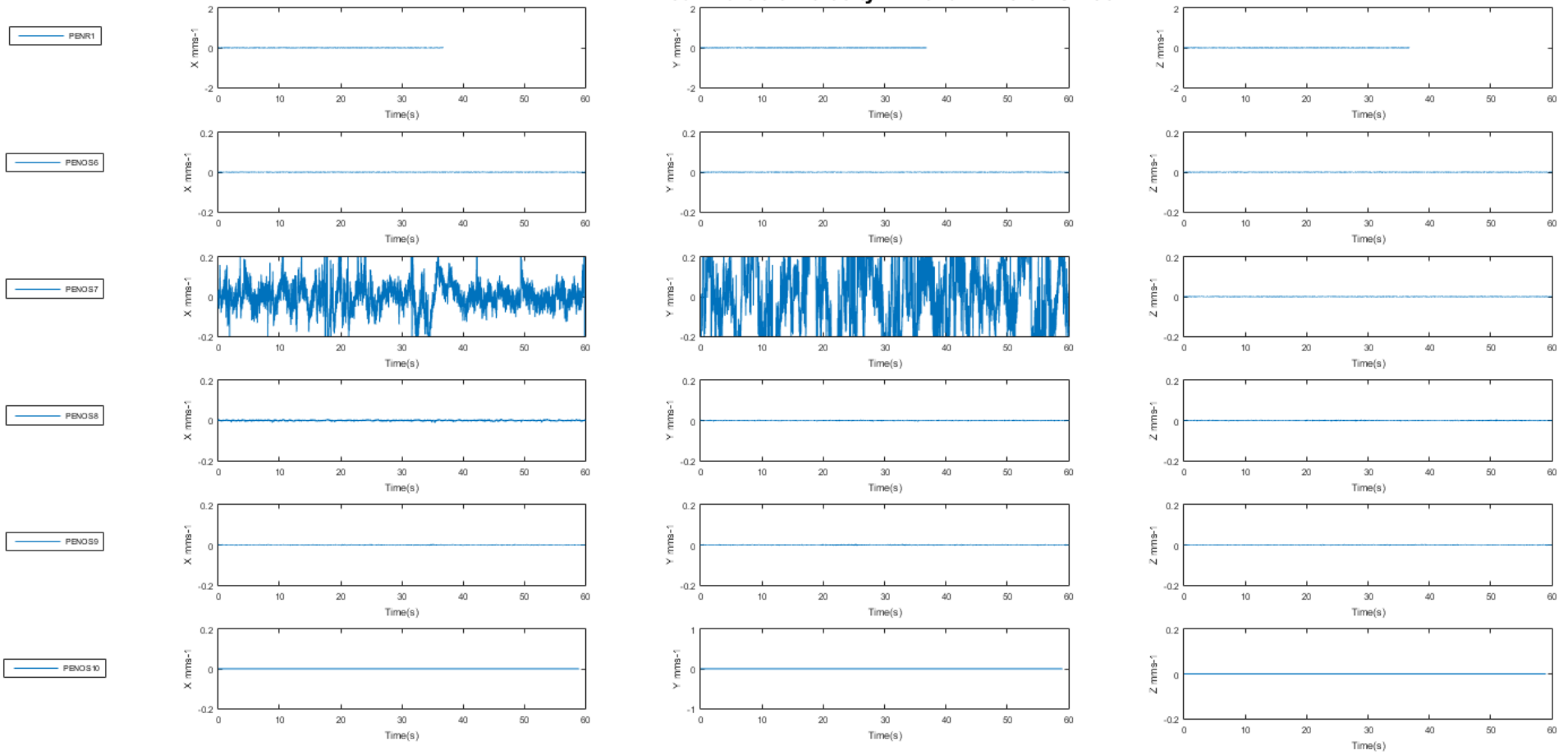


FIGURE 3.350: PEN\_OS 6 - 10 15-04-S2-30

### Event ID: 15-04-S2-30

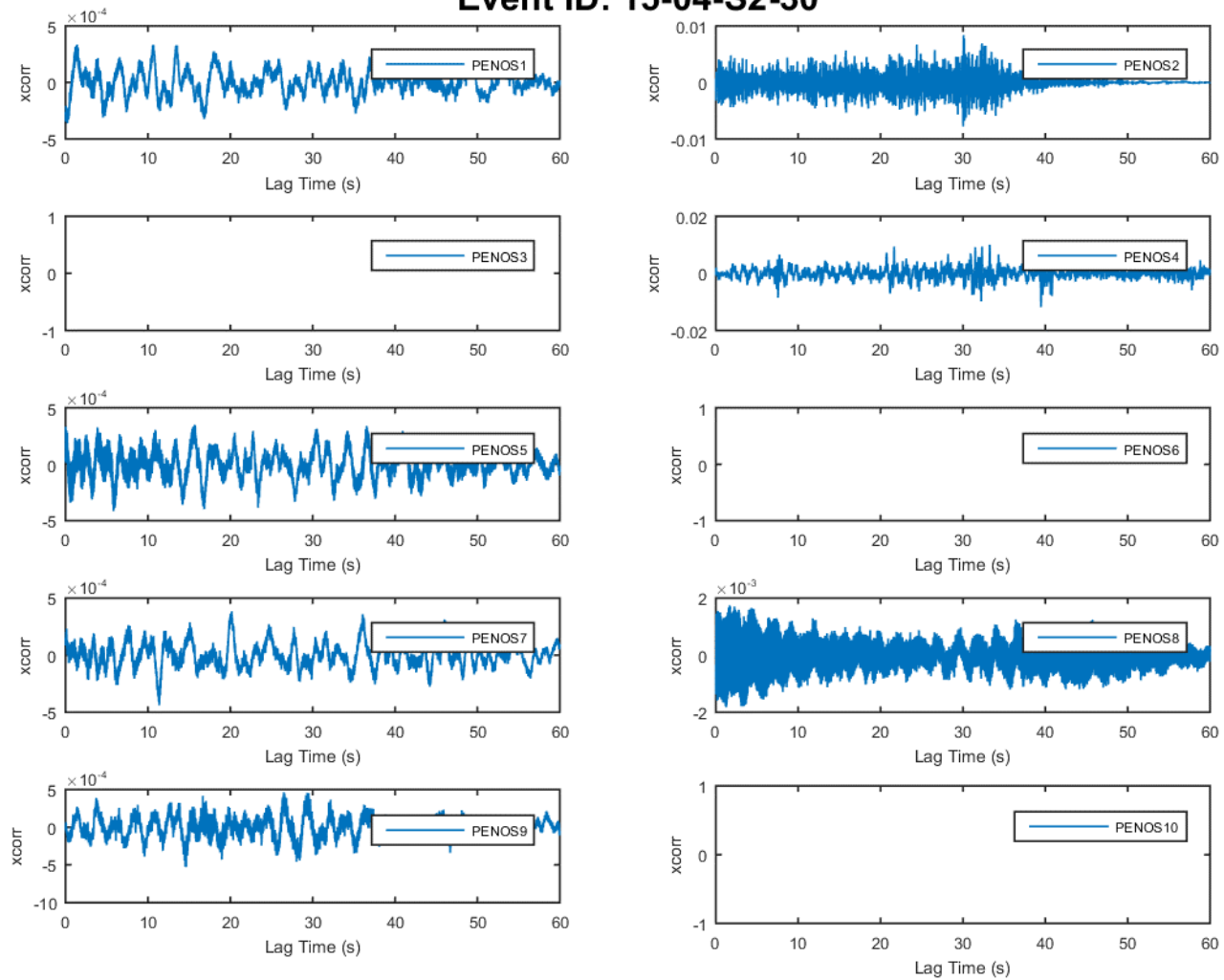


FIGURE 3.351: CROSS CORRELATION PEN\_OS 1 - 10 15-04-S2-30

Peak Particle Velocity - Event ID: 15-04-S2-58

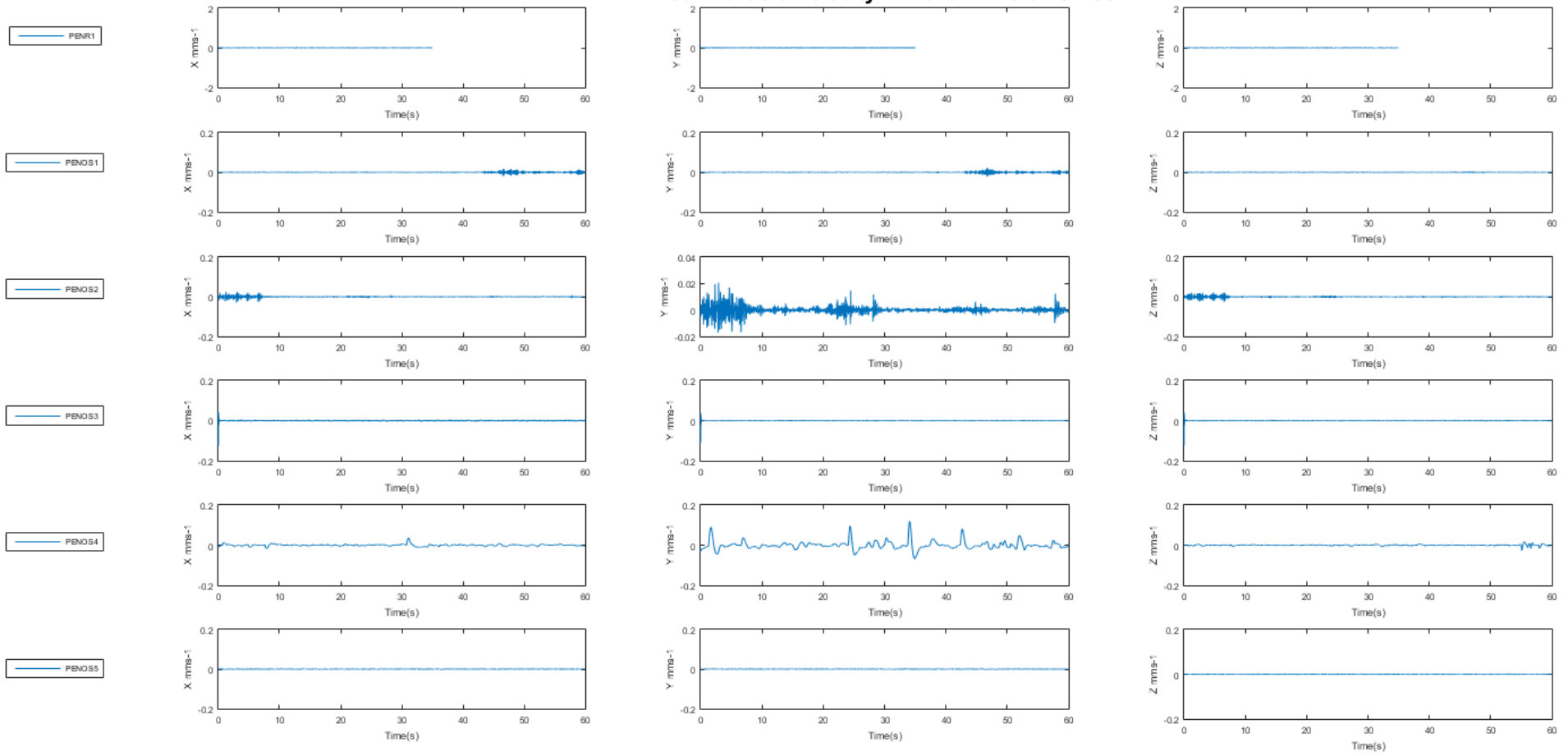
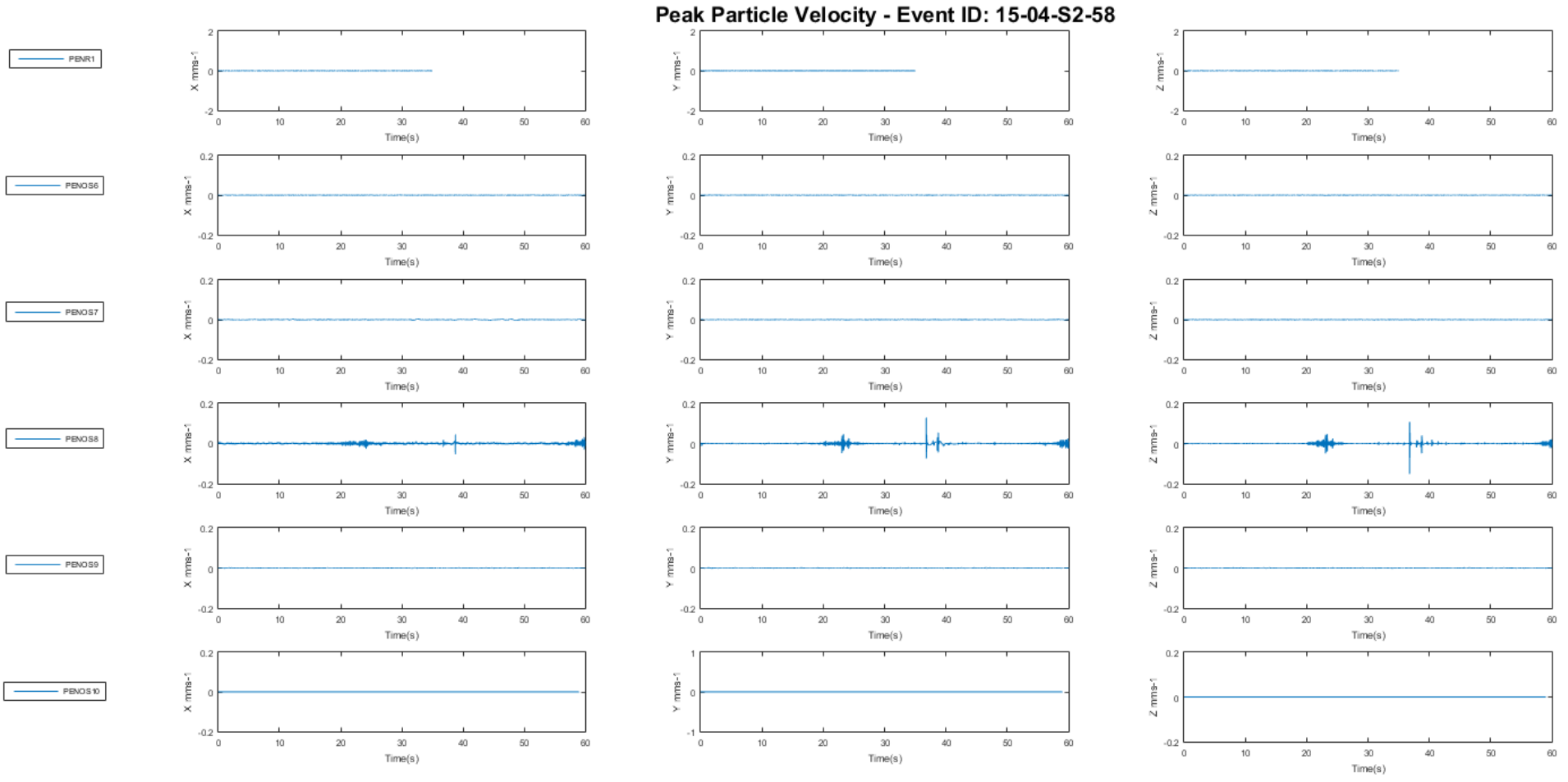


FIGURE 3.352: PEN\_OS 1 - 5 15-04-S2-58



**FIGURE 3.353: PEN\_OS 6 - 10 15-04-S2-58**



### Event ID: 15-04-S2-58

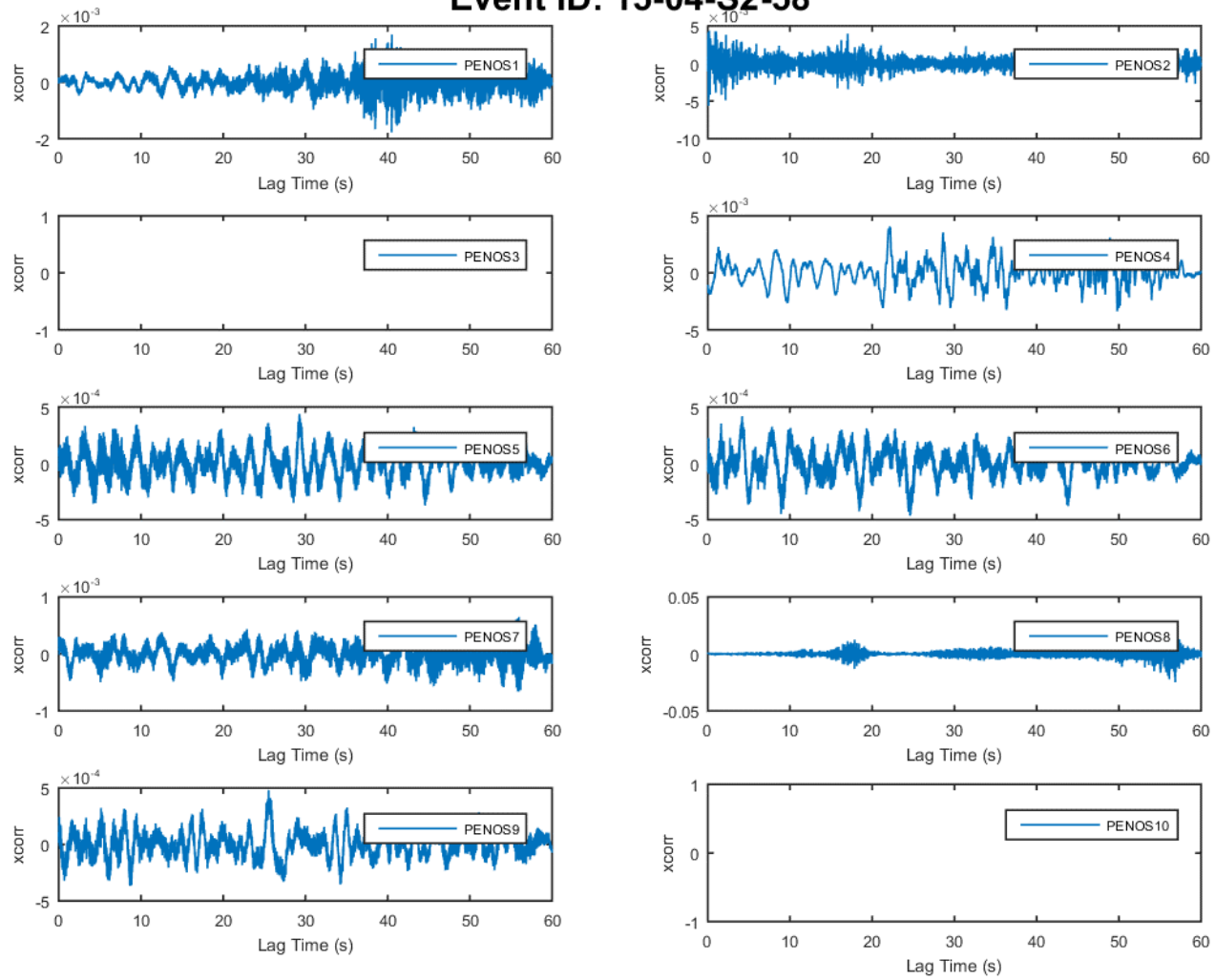
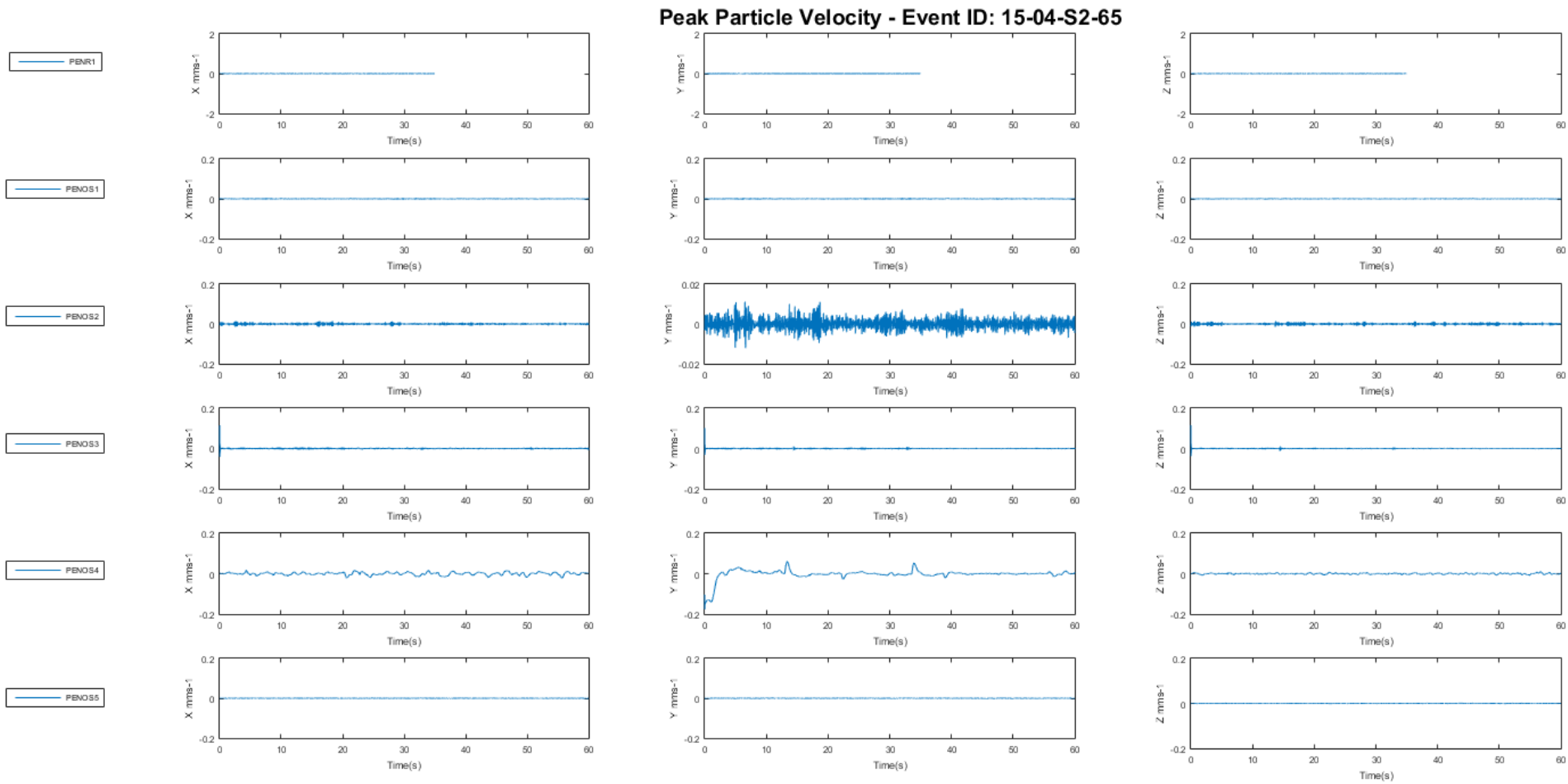


FIGURE 3.354: CROSS CORRELATION PEN\_OS 1 - 10 15-04-S2-58



**FIGURE 3.355: PEN\_OS 1 - 5 15-04-S2-65**

Peak Particle Velocity - Event ID: 15-04-S2-65

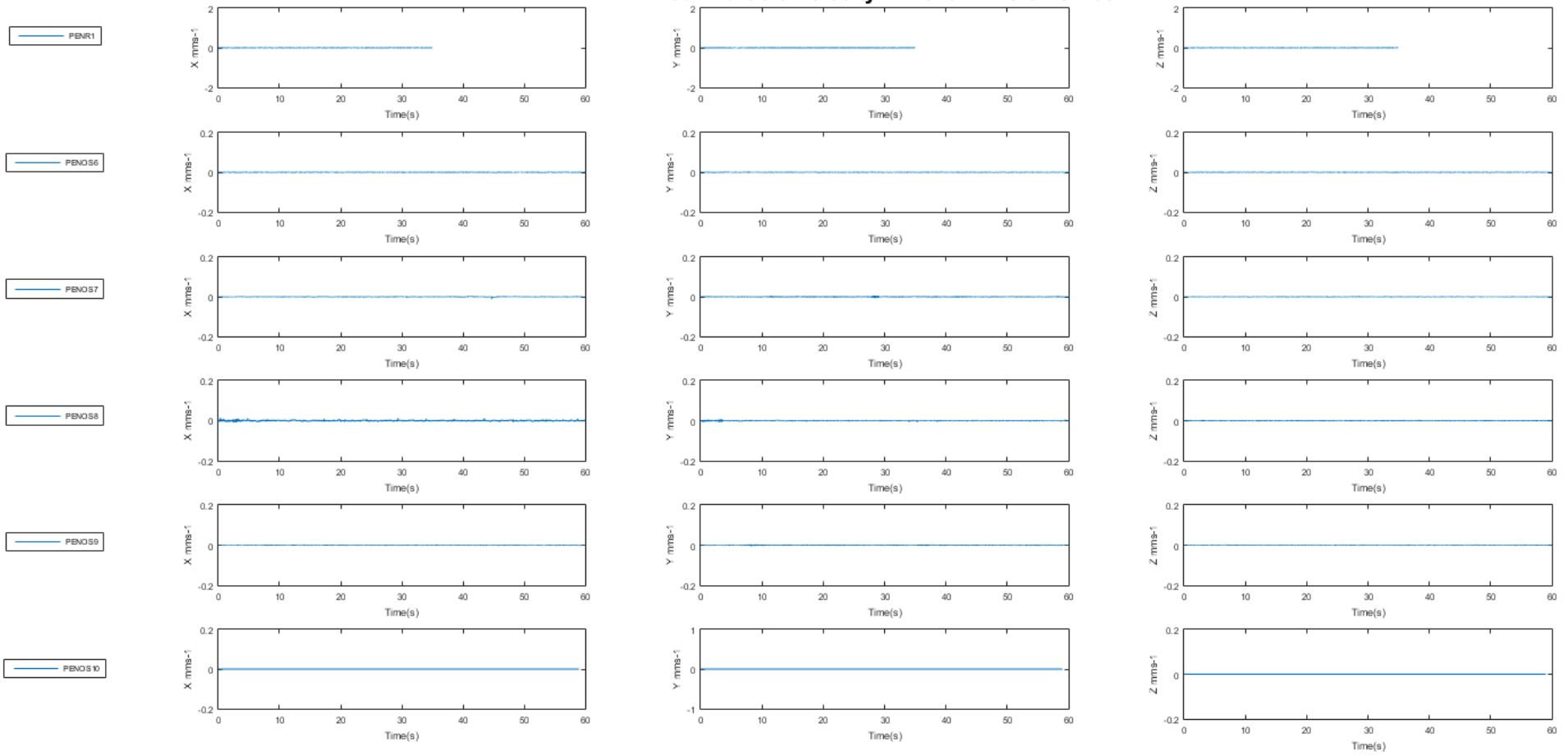


FIGURE 3.356: PEN\_OS 6 - 10 15-04-S2-65

### Event ID: 15-04-S2-65

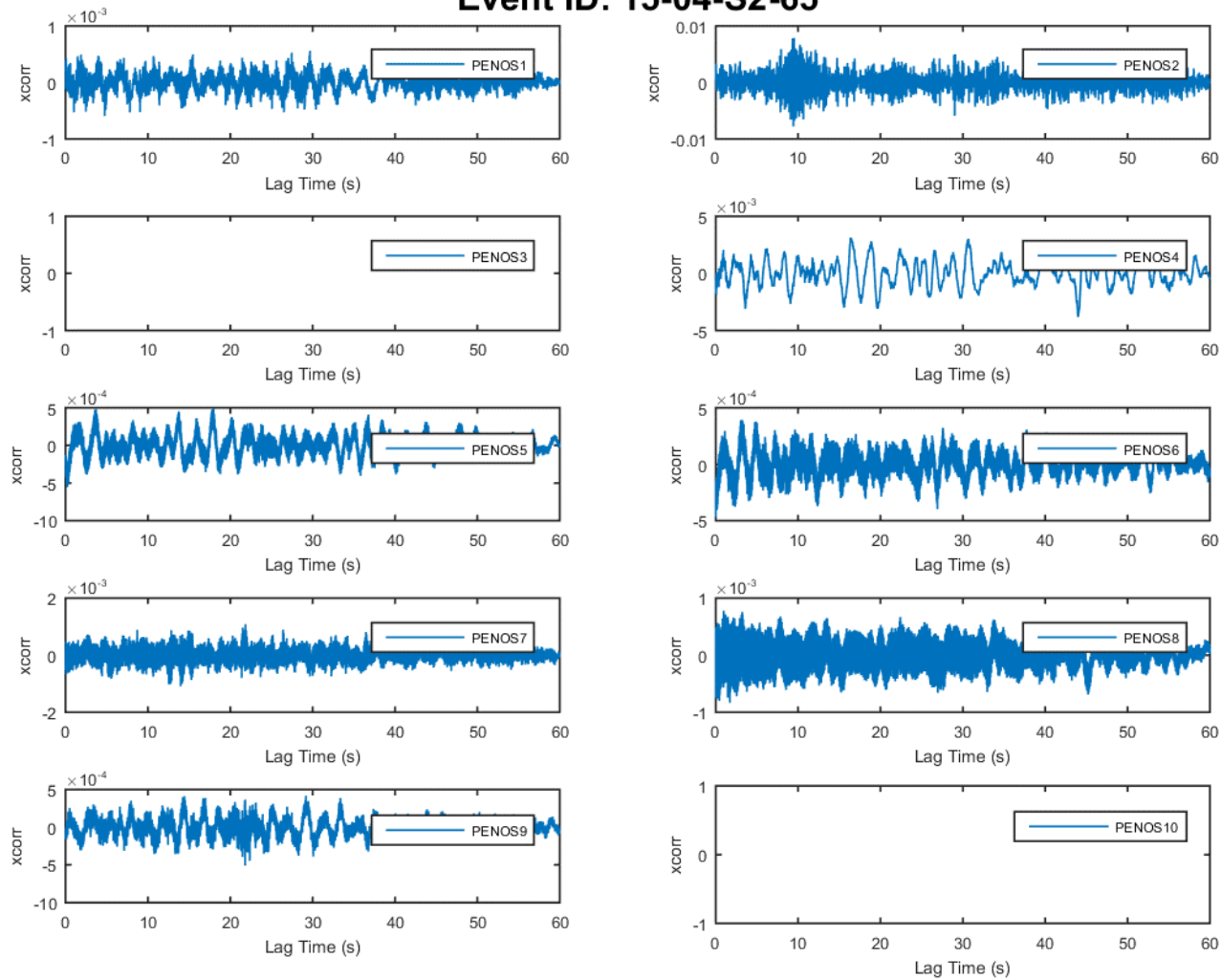
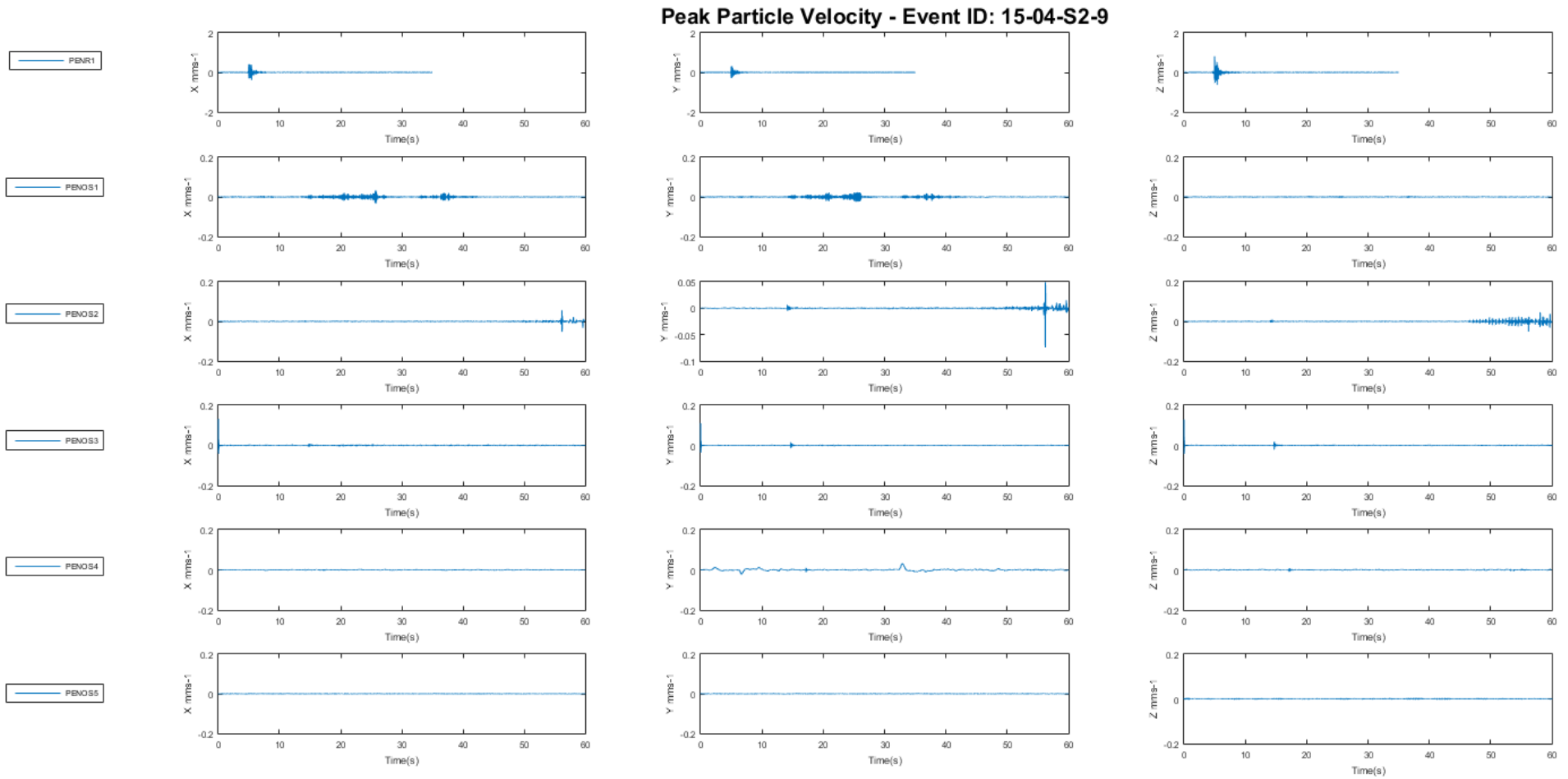


FIGURE 3.357: CROSS CORRELATION PEN\_OS 1 - 10 15-04-S2-65



**FIGURE 3.358: PEN\_OS 1 - 5 15-04-S2-9**

Peak Particle Velocity - Event ID: 15-04-S2-9

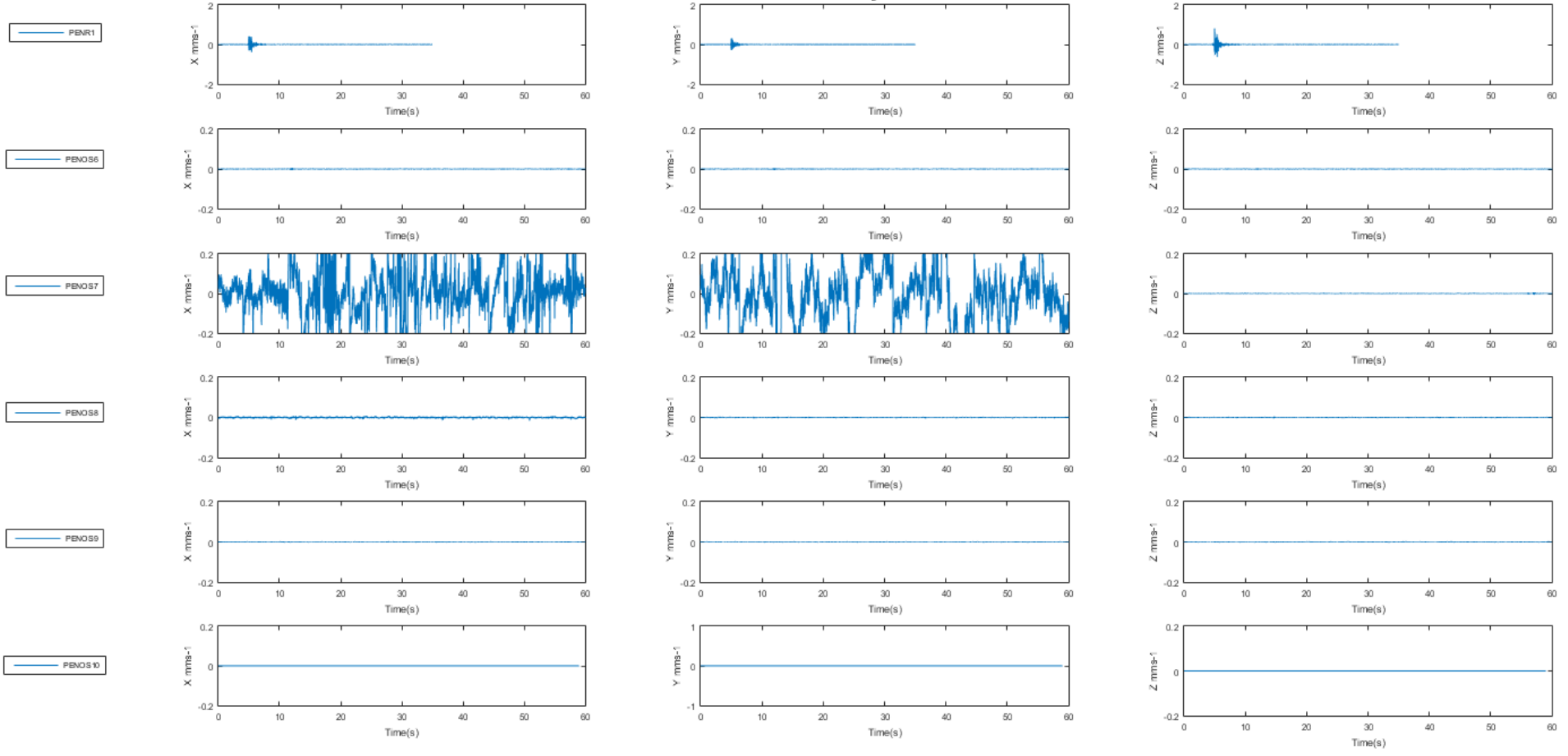


FIGURE 3.359: PEN\_OS 6 - 10 15-04-S2-9

### Event ID: 15-04-S2-9

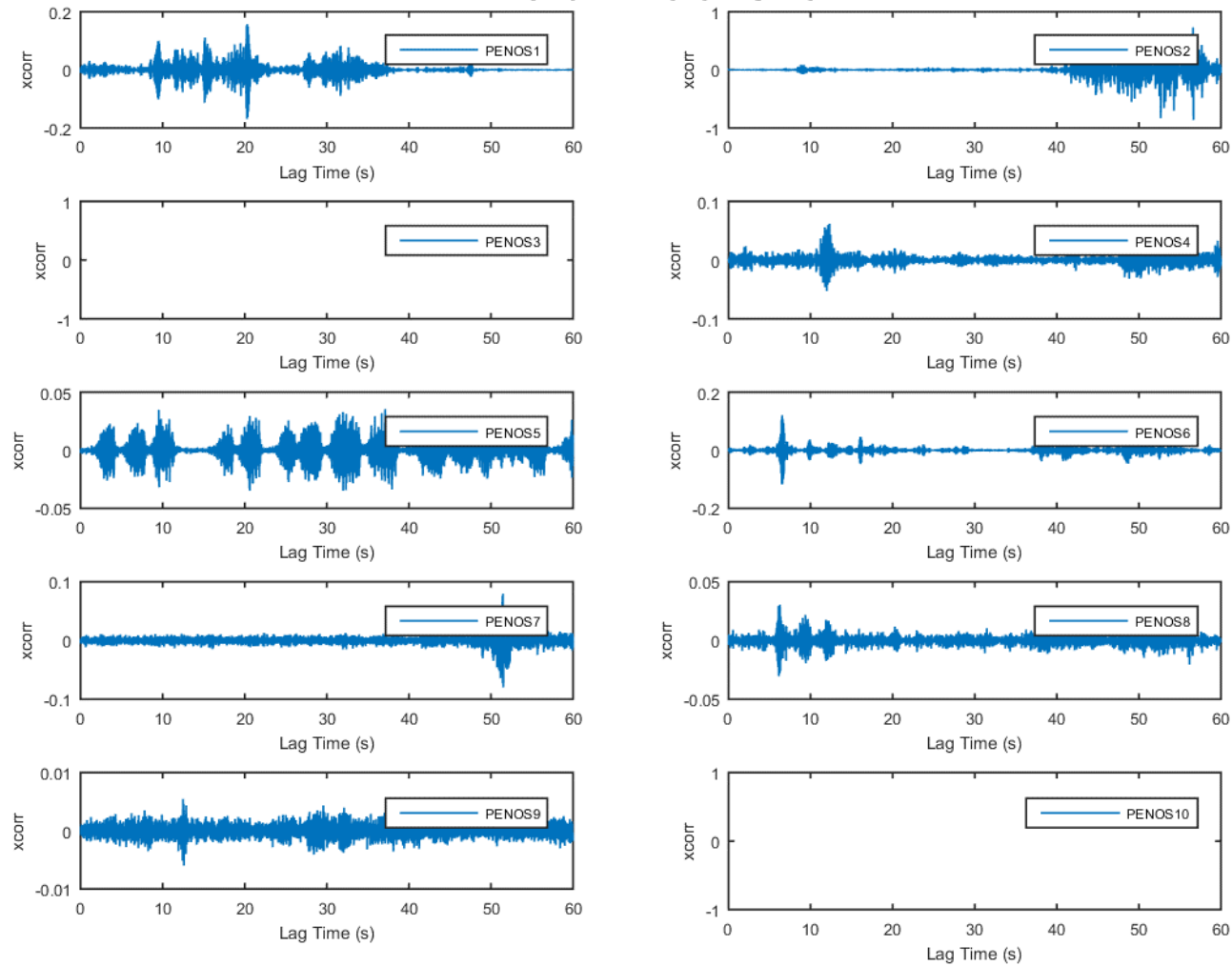


FIGURE 3.360: CROSS CORRELATION PEN\_OS 1 - 10 15-04-S2-9

**VOLUME 3: TECHNICAL APPENDICES – RESULTS**  
**CHAPTER : FULL MONITORING RESULTS – OFF RANGE**  
**MONITORS**



Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
05/11/2014	16:36	148	147	119	0.88	0.97	1.04
05/11/2014	16:10	148	147	119	0.01	0.01	0.00
12/11/2014	14:24	148	147	119	0.01	0.02	0.01
14/11/2014	20:24	148	147	119	0.08	0.14	0.08
14/11/2014	20:34	147	147	119	0.03	0.06	0.05
05/12/2014	11:44	108	108	94	0.05	0.02	0.07
10/12/2014	12:07	148	147	119	0.01	0.03	0.01
25/12/2014	13:09	98	98	92	1.00	0.91	0.30
25/12/2014	17:37	136	134	111	0.07	0.06	0.17
25/12/2014	17:40	131	131	117	0.32	0.22	0.71
31/12/2014	19:39	113	113	87	0.06	0.07	0.18
01/12/2014	08:39	100	100	87	0.02	0.02	0.05
03/12/2014	09:01	104	104	91	0.10	0.14	0.39
03/12/2014	09:03	101	101	87	0.02	0.01	0.03
03/12/2014	18:35	105	105	92	0.04	0.10	0.14
04/12/2014	09:06	104	104	91	0.22	0.32	0.81
04/12/2014	16:22	98	99	87	0.06	0.07	0.17
05/12/2014	18:20	107	107	94	0.02	0.03	0.04
05/12/2014	18:55	101	101	85	0.00	0.00	0.01
06/12/2014	07:42	98	98	85	0.02	0.02	0.02
06/12/2014	07:43	107	107	92	0.04	0.03	0.06
07/12/2014	14:19	102	102	89	0.04	0.05	0.07
07/12/2014	16:24	106	106	94	0.03	0.11	0.13
08/12/2014	08:53	103	102	89	0.05	0.05	0.10
08/12/2014	09:58	106	106	90	0.04	0.03	0.04
10/12/2014	08:53	105	105	90	0.05	0.09	0.27
10/12/2014	16:07	106	106	92	0.04	0.06	0.11
12/12/2014	14:20	101	101	87	0.04	0.15	0.19
12/12/2014	21:43	102	102	88	0.01	0.01	0.03
15/12/2014	09:16	101	101	88	0.01	0.01	0.03
15/12/2014	09:25	99	100	88	0.04	0.07	0.11
16/12/2014	15:57	104	104	92	0.02	0.04	0.05
16/12/2014	20:46	103	103	91	0.01	0.01	0.02
17/12/2014	11:46	106	106	92	0.13	0.09	0.11
17/12/2014	15:02	103	103	91	0.50	0.70	1.68
17/12/2014	16:22	99	96	86	0.00	0.00	0.00
19/12/2014	09:03	96	95	89	0.04	0.03	0.07
19/12/2014	15:04	103	103	89	0.03	0.06	0.07
19/12/2014	15:49	109	109	97	0.05	0.11	0.13
20/12/2014	16:40	108	108	97	0.05	0.07	0.29
22/12/2014	14:45	101	101	88	0.02	0.01	0.03
24/12/2014	09:52	100	100	88	0.24	0.45	1.11
24/12/2014	09:56	101	101	86	0.01	0.02	0.03
24/12/2014	09:58	101	101	87	0.01	0.01	0.02
24/12/2014	10:00	101	101	86	0.01	0.01	0.02
24/12/2014	21:41	104	104	93	0.02	0.02	0.03
25/12/2014	08:52	101	101	86	0.01	0.01	0.02
25/12/2014	08:54	100	100	85	0.00	0.00	0.01
25/12/2014	14:30	98	98	85	0.01	0.01	0.02
25/12/2014	21:51	99	99	87	0.01	0.02	0.07
25/12/2014	21:52	103	103	92	0.02	0.03	0.04
26/12/2014	08:46	100	100	86	0.01	0.01	0.02

**TABLE 4.1: PEN\_OS1 LOCALLY TRIGGERED EVENTS**

Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
27/12/2014	08:41	100	100	86	0.01	0.01	0.02
30/12/2014	08:10	99	99	85	0.01	0.02	0.02
30/12/2014	10:05	101	101	88	0.15	0.32	1.05
30/12/2014	11:57	104	103	85	0.03	0.05	0.08
30/12/2014	16:28	103	103	89	0.01	0.03	0.06
30/12/2014	16:46	100	100	88	0.04	0.09	0.12
30/12/2014	17:01	103	103	89	0.01	0.01	0.03
01/01/2015	08:53	103	103	87	0.00	0.01	0.01
03/01/2015	12:54	147	146	119	0.00	0.00	0.00
18/01/2015	13:02	147	146	118	0.02	0.02	0.02
29/01/2015	09:21	146	147	120	0.37	0.51	0.06
30/01/2015	12:31	103	103	88	0.02	0.01	0.04
02/02/2015	14:58	147	146	118	0.00	0.00	0.00
16/03/2015	13:44	106	106	87	0.01	0.01	0.01
18/03/2015	15:47	147	146	119	0.01	0.01	0.00
20/03/2015	12:39	112	108	92	3.16	1.64	1.27
25/03/2015	13:08	147	146	119	0.01	0.01	0.00
06/04/2015	13:41	147	147	118	0.01	0.02	0.00
06/04/2015	13:47	147	146	118	0.00	0.00	0.00
07/04/2015	15:10	114	112	88	0.07	0.10	0.06
07/04/2015	19:04	103	103	86	0.80	0.79	0.36
07/04/2015	19:11	103	102	85	0.24	0.33	0.16
07/04/2015	19:21	102	101	85	0.15	0.17	0.07
08/04/2015	12:52	99	94	86	0.02	0.03	0.01
08/04/2015	16:50	148	146	119	0.01	0.00	0.00
11/04/2015	13:54	147	146	119	0.01	0.01	0.01
11/04/2015	14:39	148	146	119	0.01	0.01	0.00
11/04/2015	17:35	148	146	119	0.00	0.00	0.00
14/04/2015	17:50	147	146	118	0.00	0.00	0.00
20/04/2015	21:52	106	106	94	0.02	0.02	0.01
20/04/2015	22:24	98	98	86	0.08	0.05	0.05
21/04/2015	09:16	108	105	90	0.31	0.41	0.24
21/04/2015	09:48	101	101	85	0.94	0.79	0.43
21/04/2015	20:45	101	101	89	0.01	0.01	0.01
22/04/2015	19:25	109	109	96	0.01	0.03	0.01
22/04/2015	19:35	105	105	93	0.03	0.03	0.01
27/04/2015	13:24	147	146	119	0.01	0.01	0.01
27/04/2015	14:45	147	147	118	0.00	0.00	0.00
27/04/2015	16:17	148	146	119	0.00	0.00	0.00
27/04/2015	17:30	147	146	119	0.02	0.01	0.00
28/04/2015	12:08	147	146	118	0.01	0.02	0.00
28/04/2015	13:35	147	147	118	0.01	0.01	0.00
29/04/2015	12:37	147	147	119	0.00	0.00	0.00
29/04/2015	14:43	147	146	117	0.02	0.02	0.01
29/04/2015	16:00	147	146	116	0.02	0.02	0.00
29/04/2015	17:15	148	146	119	0.00	0.00	0.00

**TABLE 4.1 CTD: PEN\_OS1 LOCALLY TRIGGERED EVENTS**

Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
04/11/2014	08:44	102	102	89	0.03	0.03	0.05
05/11/2014	09:57	99	98	87	0.05	0.07	0.04
05/11/2014	10:12	99	99	87	0.03	0.02	0.05
05/11/2014	14:15	114	111	86	0.03	0.03	0.08
05/11/2014	14:21	107	106	86	0.24	0.15	0.48
05/11/2014	15:05	103	103	89	0.04	0.04	0.05
06/11/2014	08:02	106	105	92	0.05	0.04	0.10
06/11/2014	17:03	107	106	93	0.02	0.02	0.04
09/11/2014	08:48	98	98	85	0.00	0.00	0.01
12/11/2014	10:29	102	102	89	0.04	0.04	0.13
13/11/2014	10:30	127	118	87	0.09	0.15	0.31
13/11/2014	11:20	132	124	95	0.27	0.39	0.42
13/11/2014	13:34	103	102	90	0.04	0.09	0.19
13/11/2014	20:18	102	102	87	0.00	0.01	0.02
14/11/2014	16:55	98	98	85	0.02	0.09	0.14
14/11/2014	17:10	109	110	99	0.18	0.17	0.48
14/11/2014	11:12	125	122	86	0.11	0.16	0.23
15/11/2014	08:57	99	99	86	0.03	0.03	0.07
15/11/2014	16:50	104	104	92	0.04	0.03	0.05
16/11/2014	08:31	105	105	93	0.04	0.08	0.20
17/11/2014	10:16	106	106	94	0.25	0.22	0.32
18/11/2014	17:05	106	106	95	0.08	0.11	0.12
18/11/2014	17:20	102	102	85	0.01	0.01	0.04
19/11/2014	07:14	105	105	90	0.05	0.07	0.10
19/11/2014	07:21	104	104	91	0.07	0.08	0.12
19/11/2014	17:19	106	106	92	0.05	0.07	0.12
19/11/2014	17:29	106	105	88	0.05	0.07	0.09
20/11/2014	07:13	108	108	97	0.13	0.20	0.43
20/11/2014	09:14	95	94	88	0.04	0.03	0.11
20/11/2014	16:47	104	104	92	0.59	1.00	1.86
20/11/2014	16:58	100	100	86	0.02	0.02	0.03
21/11/2014	07:08	101	101	86	0.02	0.02	0.06
21/11/2014	07:17	102	102	90	0.07	0.07	0.20
22/11/2014	20:58	100	100	87	0.01	0.01	0.01
23/11/2014	14:40	104	104	91	0.02	0.02	0.04
23/11/2014	14:48	106	106	94	0.02	0.03	0.04
23/11/2014	15:00	100	100	86	0.01	0.01	0.01
25/11/2014	07:17	101	101	88	0.03	0.08	0.12
25/11/2014	18:51	101	101	87	0.02	0.02	0.04
26/11/2014	09:57	100	100	85	0.01	0.01	0.02
26/11/2014	10:58	105	105	91	0.05	0.07	0.15
26/11/2014	16:17	102	102	93	0.16	0.28	0.63
27/11/2014	14:06	100	100	87	0.01	0.01	0.02
27/11/2014	15:19	106	106	93	0.06	0.15	0.17
29/11/2014	09:06	98	98	85	0.01	0.01	0.03

**TABLE 4.2: PEN\_OS2 LOCALLY TRIGGERED EVENTS**

Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
29/11/2014	09:07	100	100	86	0.02	0.02	0.06
29/11/2014	09:28	102	102	87	0.01	0.01	0.03
29/11/2014	14:00	101	101	88	0.01	0.01	0.02
29/11/2014	14:07	105	105	93	0.28	0.16	0.44
29/11/2014	14:09	99	99	86	0.01	0.01	0.03
29/11/2014	14:41	105	105	85	0.01	0.02	0.02
29/11/2014	14:49	114	114	97	0.02	0.03	0.04
30/11/2014	16:32	105	105	93	0.14	0.20	0.62
01/12/2014	08:39	100	100	87	0.02	0.02	0.05
03/01/2015	12:54	147	146	119	0.00	0.00	0.00
18/01/2015	13:02	147	146	118	0.02	0.02	0.02
29/01/2015	09:21	146	147	120	0.37	0.51	0.06
30/01/2015	12:31	103	103	88	0.02	0.01	0.04
03/02/2015	08:04	101	101	87	0.01	0.01	0.02
03/02/2015	10:12	104	104	89	0.00	0.01	0.01
03/02/2015	14:52	101	101	85	0.02	0.02	0.04
03/02/2015	17:29	98	98	87	0.01	0.01	0.03
04/02/2015	17:07	106	106	92	0.21	0.47	1.40
05/02/2015	17:22	100	100	87	0.00	0.00	0.01
06/02/2015	09:22	106	106	93	0.04	0.03	0.04
06/02/2015	09:24	100	99	87	0.05	0.05	0.08
07/02/2015	08:37	99	99	85	0.01	0.01	0.02
07/02/2015	10:52	105	105	93	0.04	0.02	0.03
07/02/2015	10:55	103	103	88	0.03	0.07	0.07
08/02/2015	09:34	101	101	86	0.01	0.02	0.03
08/02/2015	09:52	104	104	91	0.03	0.04	0.06
09/02/2015	10:30	104	104	89	0.02	0.02	0.05
10/02/2015	15:48	97	97	85	0.02	0.04	0.08
10/02/2015	16:37	101	101	88	0.01	0.01	0.01
10/02/2015	16:39	105	105	90	0.03	0.03	0.10
10/02/2015	17:06	109	109	96	0.03	0.02	0.06
11/02/2015	13:51	101	101	88	0.03	0.02	0.03
12/02/2015	08:06	98	98	85	0.00	0.01	0.01
12/02/2015	14:00	100	100	85	0.00	0.00	0.01
13/02/2015	20:59	100	100	86	0.00	0.01	0.01
14/02/2015	15:05	105	105	90	0.02	0.01	0.03
14/02/2015	15:09	102	102	89	0.03	0.04	0.09
14/02/2015	16:50	107	107	93	0.06	0.02	0.06
15/02/2015	12:57	99	99	86	0.00	0.01	0.02
15/02/2015	13:05	103	103	88	0.01	0.01	0.03
15/02/2015	13:11	102	102	87	0.02	0.03	0.07
16/02/2015	11:32	105	105	91	0.01	0.03	0.02
17/02/2015	11:04	103	103	87	0.01	0.00	0.01
17/02/2015	11:06	98	98	85	0.02	0.02	0.03
17/02/2015	11:48	107	107	93	0.01	0.01	0.02
18/02/2015	13:17	109	109	98	0.02	0.01	0.04
18/02/2015	13:35	100	100	86	0.01	0.00	0.01
18/02/2015	14:15	103	103	90	0.01	0.02	0.02
18/02/2015	17:14	103	103	88	0.06	0.06	0.08
20/02/2015	16:12	100	100	87	0.12	0.10	0.15

**TABLE 4.2 CTD: PEN\_OS2 LOCALLY TRIGGERED EVENTS**

Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
23/02/2015	09:53	99	99	87	0.05	0.03	0.08
24/02/2015	08:35	102	102	87	0.00	0.01	0.01
24/02/2015	08:38	105	105	91	0.04	0.03	0.04
25/02/2015	16:00	99	99	86	0.03	0.10	0.12
25/02/2015	16:05	100	100	87	0.03	0.02	0.06
26/02/2015	08:49	104	103	95	0.03	0.02	0.04
26/02/2015	15:59	101	101	87	0.02	0.03	0.07
27/02/2015	08:08	102	102	90	0.03	0.03	0.05
27/02/2015	08:31	101	101	87	0.03	0.02	0.04
27/02/2015	09:13	103	103	89	0.01	0.02	0.04
27/02/2015	12:32	101	101	86	0.00	0.01	0.01
27/02/2015	12:38	101	101	85	0.03	0.04	0.11
27/02/2015	13:38	104	104	91	0.03	0.03	0.05
28/02/2015	08:54	102	102	88	0.01	0.01	0.01
28/02/2015	09:03	100	100	85	0.02	0.01	0.03
28/02/2015	12:59	103	103	89	0.01	0.03	0.04
28/02/2015	13:43	102	102	88	0.01	0.01	0.03
28/02/2015	14:40	105	105	90	0.01	0.01	0.03
28/02/2015	14:49	103	103	88	0.01	0.02	0.04
28/02/2015	14:59	109	109	97	0.02	0.01	0.03
28/02/2015	15:07	104	104	90	0.01	0.01	0.02
02/03/2015	13:50	101	100	86	0.01	0.01	0.02
03/03/2015	12:56	103	103	87	0.01	0.01	0.01
03/03/2015	14:33	101	101	87	0.01	0.01	0.02
04/03/2015	07:52	103	103	88	0.01	0.02	0.02
04/03/2015	07:55	101	100	85	0.03	0.03	0.06
04/03/2015	09:11	99	99	88	0.14	0.11	0.33
04/03/2015	09:17	101	101	87	0.00	0.00	0.01
04/03/2015	17:41	103	103	90	0.01	0.01	0.02
04/03/2015	17:45	100	100	85	0.01	0.01	0.02
04/03/2015	17:57	99	98	85	0.03	0.04	0.10
04/03/2015	22:05	101	101	85	0.01	0.00	0.01
05/03/2015	17:17	102	102	90	0.06	0.07	0.08
06/03/2015	07:13	97	97	85	0.00	0.01	0.01
07/03/2015	13:16	100	100	86	0.01	0.01	0.02
07/03/2015	13:46	100	100	86	0.02	0.03	0.06
07/03/2015	13:48	98	98	85	0.01	0.01	0.02
08/03/2015	15:59	107	107	93	0.01	0.01	0.02
08/03/2015	16:21	101	101	87	0.01	0.01	0.01
08/03/2015	16:30	100	100	87	0.00	0.00	0.01
08/03/2015	16:32	101	101	86	0.01	0.00	0.01
08/03/2015	16:35	101	101	87	0.00	0.01	0.02
08/03/2015	16:36	100	100	85	0.00	0.00	0.01
08/03/2015	16:46	101	101	86	0.02	0.04	0.04
10/03/2015	12:24	102	102	88	0.02	0.02	0.03
10/03/2015	14:07	98	98	85	0.02	0.02	0.04
10/03/2015	14:29	102	102	86	0.01	0.01	0.02
10/03/2015	16:51	109	109	95	0.01	0.02	0.04
10/03/2015	16:54	105	105	91	0.02	0.02	0.05

**TABLE 4.2 CTD: PEN\_OS2 LOCALLY TRIGGERED EVENTS**

Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV <sub>Y</sub> s <sup>-1</sup>	PPV s <sup>-1</sup>
10/03/2015	17:10	105	105	92	0.02	0.02	0.05
12/03/2015	08:10	100	100	88	0.01	0.01	0.03
12/03/2015	16:09	101	101	90	0.02	0.02	0.04
14/03/2015	20:13	100	100	85	0.00	0.00	0.01
15/03/2015	18:40	101	100	88	0.02	0.02	0.05
15/03/2015	18:54	99	99	87	0.03	0.03	0.07
16/03/2015	06:20	103	103	91	0.03	0.02	0.05
16/03/2015	16:56	104	104	89	0.02	0.02	0.03
16/03/2015	17:01	102	102	88	0.01	0.01	0.02
16/03/2015	17:04	100	99	86	0.01	0.01	0.01
16/03/2015	18:39	101	101	89	0.03	0.10	0.12
17/03/2015	18:42	101	101	88	0.05	0.09	0.10
17/03/2015	18:44	100	99	88	0.03	0.03	0.05
18/03/2015	06:42	102	102	88	0.01	0.01	0.01
18/03/2015	18:55	102	102	88	0.00	0.00	0.01
18/03/2015	19:02	99	99	85	0.00	0.00	0.01
18/03/2015	19:05	103	103	87	0.00	0.00	0.01
18/03/2015	19:15	101	101	87	0.00	0.00	0.01
18/03/2015	19:50	100	100	86	0.00	0.00	0.01
19/03/2015	06:21	104	104	89	0.00	0.00	0.01
19/03/2015	06:46	101	101	87	0.00	0.01	0.01
19/03/2015	19:37	103	103	91	0.02	0.06	0.12
20/03/2015	06:20	104	104	90	0.02	0.02	0.04
20/03/2015	06:22	100	100	92	0.02	0.01	0.03
20/03/2015	19:37	101	101	91	0.02	0.06	0.06
21/03/2015	08:10	102	102	88	0.06	0.06	0.05
21/03/2015	14:40	102	102	88	0.03	0.02	0.08
21/03/2015	16:54	104	104	89	0.01	0.02	0.03
21/03/2015	16:58	100	100	86	0.01	0.00	0.01
22/03/2015	07:38	97	97	86	0.02	0.03	0.04
22/03/2015	18:42	98	98	85	0.01	0.01	0.02
22/03/2015	18:44	100	100	87	0.01	0.01	0.02
22/03/2015	19:00	101	101	87	0.00	0.00	0.01
23/03/2015	06:16	102	101	86	0.03	0.02	0.09
23/03/2015	07:05	105	105	91	0.03	0.03	0.06
23/03/2015	18:49	98	98	86	0.01	0.01	0.04
23/03/2015	18:54	102	102	87	0.00	0.00	0.01
23/03/2015	19:29	102	102	88	0.00	0.00	0.01
23/03/2015	19:40	101	101	88	0.04	0.04	0.06
24/03/2015	06:06	106	106	91	0.04	0.03	0.05
24/03/2015	06:17	101	101	87	0.00	0.01	0.02
25/03/2015	06:24	102	102	86	0.00	0.00	0.01
25/03/2015	17:58	100	100	86	0.01	0.01	0.02
25/03/2015	18:16	101	101	87	0.01	0.01	0.03
25/03/2015	18:26	101	101	86	0.00	0.00	0.01
25/03/2015	18:35	99	99	86	0.02	0.01	0.03
25/03/2015	18:59	101	101	87	0.02	0.02	0.07
25/03/2015	19:08	102	102	86	0.00	0.00	0.01

**TABLE 4.2 CTD: PEN\_OS2 LOCALLY TRIGGERED EVENTS**

Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
25/03/2015	19:10	104	104	88	0.00	0.00	0.01
25/03/2015	19:18	101	100	86	0.00	0.00	0.01
25/03/2015	19:26	103	103	87	0.00	0.00	0.01
25/03/2015	19:49	100	100	86	0.00	0.00	0.01
25/03/2015	19:57	101	101	89	0.04	0.02	0.05
26/03/2015	06:15	104	104	91	0.03	0.02	0.03
26/03/2015	06:28	103	103	89	0.01	0.01	0.02
26/03/2015	15:26	105	105	89	0.02	0.02	0.04
26/03/2015	17:38	100	100	86	0.02	0.01	0.02
26/03/2015	17:48	104	104	91	0.04	0.03	0.04
27/03/2015	06:13	102	102	89	0.03	0.05	0.06
27/03/2015	18:53	100	100	86	0.11	0.10	0.09
28/03/2015	20:52	103	100	86	0.01	0.01	0.01
29/03/2015	09:56	111	102	86	0.03	0.04	0.07
30/03/2015	06:27	99	99	87	0.04	0.04	0.06
31/03/2015	17:55	103	103	88	0.01	0.01	0.03
31/03/2015	18:14	105	100	88	0.00	0.01	0.01
31/03/2015	18:50	104	104	91	0.01	0.01	0.02
01/04/2015	17:12	101	100	87	0.01	0.01	0.04
01/04/2015	19:06	101	101	88	0.04	0.03	0.04
03/04/2015	10:12	100	100	86	0.03	0.02	0.04
03/04/2015	11:04	104	103	89	0.01	0.01	0.02
03/04/2015	11:06	102	102	89	0.02	0.02	0.04
03/04/2015	11:09	103	103	89	0.01	0.01	0.02
03/04/2015	18:03	102	102	86	0.02	0.02	0.03
03/04/2015	18:08	101	101	86	0.00	0.00	0.01
04/04/2015	08:36	102	102	87	0.00	0.00	0.01
04/04/2015	08:42	99	99	86	0.00	0.01	0.01
04/04/2015	08:50	102	102	87	0.02	0.02	0.05
04/04/2015	08:52	100	99	87	0.06	0.05	0.21
04/04/2015	09:01	100	100	86	0.00	0.00	0.01
04/04/2015	09:15	98	98	86	0.00	0.00	0.01
04/04/2015	10:53	104	104	90	0.01	0.01	0.03
04/04/2015	10:54	102	102	88	0.01	0.00	0.01
04/04/2015	11:15	98	98	85	0.00	0.00	0.01
04/04/2015	16:08	107	106	87	0.02	0.02	0.05
04/04/2015	16:12	106	106	86	0.01	0.02	0.03
04/04/2015	16:13	108	108	89	0.02	0.02	0.06
04/04/2015	16:16	105	106	86	0.02	0.03	0.05
04/04/2015	16:17	106	105	88	0.01	0.02	0.03
04/04/2015	16:19	106	106	85	0.02	0.02	0.04
04/04/2015	16:21	108	109	90	0.02	0.02	0.06
04/04/2015	16:25	108	108	87	0.02	0.01	0.03
04/04/2015	16:26	102	102	85	0.01	0.01	0.01
04/04/2015	16:28	105	106	86	0.01	0.02	0.03
04/04/2015	16:45	98	97	86	0.03	0.02	0.07
05/04/2015	07:35	99	99	86	0.00	0.01	0.02
05/04/2015	07:37	103	103	88	0.00	0.00	0.01
05/04/2015	09:15	102	102	87	0.01	0.01	0.02

**TABLE 4.2 CTD: PEN\_OS2 LOCALLY TRIGGERED EVENTS**

Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
05/04/2015	09:18	101	101	87	0.00	0.00	0.01
05/04/2015	09:23	101	101	86	0.00	0.00	0.01
05/04/2015	09:38	101	101	86	0.01	0.02	0.02
05/04/2015	09:54	101	101	85	0.01	0.01	0.03
05/04/2015	10:31	100	100	86	0.02	0.02	0.04
05/04/2015	12:10	100	100	88	0.00	0.00	0.01
05/04/2015	14:02	100	100	87	0.01	0.01	0.03
05/04/2015	14:05	101	101	87	0.00	0.01	0.01
05/04/2015	14:08	100	100	85	0.03	0.04	0.03
05/04/2015	14:10	103	103	89	0.01	0.01	0.02
05/04/2015	14:12	98	98	85	0.47	0.10	0.48
05/04/2015	14:18	101	101	88	0.01	0.02	0.03
05/04/2015	14:37	100	100	87	0.01	0.01	0.02
05/04/2015	14:43	102	102	89	0.02	0.02	0.04
05/04/2015	14:49	97	97	87	0.02	0.02	0.07
05/04/2015	15:00	106	104	85	0.01	0.01	0.02
05/04/2015	15:19	104	104	89	0.00	0.01	0.01
05/04/2015	15:39	104	104	88	0.00	0.01	0.02
05/04/2015	15:46	104	104	90	0.14	0.35	0.74
05/04/2015	15:55	107	107	94	0.01	0.01	0.01
05/04/2015	16:19	108	108	93	0.01	0.02	0.03
05/04/2015	16:20	106	106	97	0.01	0.01	0.03
05/04/2015	16:22	104	104	92	0.02	0.02	0.04
05/04/2015	16:29	102	102	88	0.00	0.00	0.01
05/04/2015	16:40	103	103	89	0.01	0.01	0.02
06/04/2015	08:08	99	100	85	0.00	0.00	0.01
06/04/2015	08:20	102	102	87	0.00	0.00	0.01
06/04/2015	08:39	101	101	86	0.02	0.01	0.04
06/04/2015	09:37	98	98	86	0.02	0.02	0.05
06/04/2015	09:40	103	103	90	0.01	0.01	0.03
06/04/2015	09:44	100	100	86	0.01	0.02	0.03
06/04/2015	09:47	100	100	86	0.00	0.00	0.01
06/04/2015	09:53	100	100	87	0.02	0.02	0.07
06/04/2015	09:54	102	102	87	0.01	0.01	0.02
06/04/2015	09:56	103	103	88	0.00	0.00	0.01
06/04/2015	10:08	103	103	87	0.01	0.00	0.01
06/04/2015	10:19	101	101	88	0.01	0.02	0.03
06/04/2015	10:27	103	103	87	0.04	0.02	0.11
06/04/2015	10:33	100	100	86	0.01	0.00	0.01
06/04/2015	10:37	100	100	87	0.00	0.00	0.01
06/04/2015	10:41	99	99	86	0.03	0.03	0.05
06/04/2015	10:44	102	102	89	0.02	0.02	0.05
06/04/2015	10:45	101	101	88	0.07	0.04	0.07
06/04/2015	13:41	104	105	90	0.01	0.01	0.02
06/04/2015	14:19	101	101	88	0.01	0.01	0.02
06/04/2015	14:25	105	105	92	0.00	0.00	0.01
06/04/2015	14:30	102	102	89	0.01	0.01	0.03
06/04/2015	14:47	101	101	87	0.01	0.01	0.01
06/04/2015	15:40	106	105	92	0.01	0.01	0.04
06/04/2015	18:31	101	101	86	0.01	0.02	0.05

**TABLE 4.2 CTD: PEN\_OS2 LOCALLY TRIGGERED EVENTS**



Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
06/04/2015	19:12	100	100	86	0.00	0.00	0.01
07/04/2015	09:19	99	99	85	0.02	0.02	0.05
07/04/2015	10:45	102	102	88	0.01	0.01	0.02
07/04/2015	16:14	99	99	91	0.02	0.02	0.03
07/04/2015	16:19	103	103	90	0.02	0.02	0.03
07/04/2015	16:23	103	103	92	0.02	0.02	0.05
07/04/2015	17:32	100	100	87	0.04	0.04	0.04
07/04/2015	17:35	104	103	89	0.00	0.00	0.01
07/04/2015	17:38	99	99	86	0.03	0.02	0.10
07/04/2015	18:54	102	102	88	0.00	0.00	0.01
08/04/2015	17:16	101	101	87	0.01	0.01	0.03
08/04/2015	17:22	104	104	91	0.01	0.01	0.02
08/04/2015	17:26	101	101	90	0.00	0.00	0.01
08/04/2015	17:34	100	100	86	0.02	0.02	0.04
08/04/2015	18:15	99	99	85	0.03	0.02	0.08
08/04/2015	18:22	105	105	90	0.04	0.06	0.11
08/04/2015	18:41	106	106	91	0.01	0.02	0.03
08/04/2015	18:46	100	100	87	0.01	0.01	0.03
08/04/2015	18:53	100	100	86	0.01	0.01	0.02
09/04/2015	11:15	98	99	85	0.01	0.02	0.03
09/04/2015	11:18	102	102	88	0.02	0.01	0.03
09/04/2015	16:21	99	99	87	0.01	0.01	0.04
09/04/2015	16:48	105	105	90	0.01	0.01	0.03
09/04/2015	17:12	109	109	94	0.02	0.02	0.04
09/04/2015	18:02	102	102	89	0.00	0.00	0.01
09/04/2015	18:23	105	105	91	0.01	0.01	0.02
10/04/2015	08:48	99	99	86	0.01	0.01	0.02
11/04/2015	08:59	100	100	85	0.01	0.01	0.01
11/04/2015	10:19	102	102	87	0.00	0.01	0.01
11/04/2015	11:04	103	103	91	0.02	0.01	0.04
11/04/2015	12:29	100	100	88	0.01	0.01	0.06
11/04/2015	12:31	106	106	93	0.01	0.01	0.02
11/04/2015	13:03	103	103	94	0.01	0.01	0.02
11/04/2015	13:22	102	101	88	0.00	0.01	0.02
11/04/2015	14:29	102	102	87	0.00	0.00	0.01
11/04/2015	14:55	101	101	87	0.02	0.02	0.04
12/04/2015	07:01	103	103	91	0.00	0.01	0.01
12/04/2015	07:05	99	99	85	0.01	0.01	0.03
13/04/2015	17:05	101	101	87	0.00	0.00	0.01
14/04/2015	08:25	103	103	87	0.02	0.02	0.07
14/04/2015	15:53	107	108	91	0.02	0.02	0.05
14/04/2015	15:55	106	107	91	0.02	0.01	0.02
14/04/2015	15:57	107	106	90	0.03	0.02	0.06
14/04/2015	15:58	106	107	91	0.02	0.01	0.03
14/04/2015	16:01	106	106	90	0.03	0.02	0.05
14/04/2015	16:05	108	107	90	0.03	0.03	0.08
14/04/2015	20:12	101	101	87	0.03	0.02	0.04
15/04/2015	09:45	99	99	85	0.03	0.02	0.06

**TABLE 4.2 CTD: PEN\_OS2 LOCALLY TRIGGERED EVENTS**

Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
16/04/2015	10:32	110	110	96	0.03	0.01	0.02
16/04/2015	10:34	104	104	89	0.01	0.00	0.01
16/04/2015	10:56	105	105	93	0.02	0.03	0.03
17/04/2015	11:32	105	105	89	0.02	0.03	0.06
17/04/2015	11:55	103	103	88	0.02	0.02	0.03
17/04/2015	16:57	105	105	91	0.03	0.01	0.02
17/04/2015	17:01	99	99	86	0.03	0.03	0.07
17/04/2015	17:13	101	101	88	0.03	0.02	0.06
17/04/2015	17:18	100	100	86	0.00	0.00	0.01
17/04/2015	17:38	101	101	86	0.02	0.02	0.04
17/04/2015	18:22	101	101	87	0.01	0.01	0.03
17/04/2015	19:27	103	103	89	0.01	0.02	0.03
18/04/2015	08:28	99	99	85	0.00	0.00	0.01
18/04/2015	09:37	98	98	86	0.01	0.01	0.03
18/04/2015	09:43	101	101	87	0.01	0.01	0.03
18/04/2015	09:44	100	100	86	0.01	0.01	0.02
18/04/2015	10:05	107	102	87	0.01	0.01	0.03
18/04/2015	10:06	106	106	91	0.02	0.02	0.03
18/04/2015	10:27	102	102	89	0.01	0.01	0.02
18/04/2015	14:57	100	100	86	0.00	0.00	0.01
18/04/2015	15:05	100	100	86	0.02	0.02	0.07
18/04/2015	17:07	102	102	87	0.00	0.00	0.01
18/04/2015	17:17	99	99	88	0.00	0.00	0.01
18/04/2015	17:19	100	100	91	0.01	0.01	0.02
18/04/2015	17:22	102	102	92	0.02	0.03	0.05
18/04/2015	17:29	101	101	86	0.01	0.01	0.02
18/04/2015	18:07	100	101	86	0.01	0.01	0.02
19/04/2015	09:13	102	102	88	0.01	0.01	0.03
19/04/2015	10:54	104	104	87	0.01	0.01	0.02
19/04/2015	11:53	103	102	87	0.03	0.02	0.07
19/04/2015	11:57	101	101	87	0.01	0.01	0.02
19/04/2015	12:13	103	103	89	0.01	0.01	0.01
19/04/2015	13:55	100	100	87	0.02	0.02	0.06
19/04/2015	14:10	104	104	92	0.08	0.07	0.09
19/04/2015	14:13	105	105	92	0.01	0.01	0.01
19/04/2015	14:17	104	104	92	0.01	0.01	0.02
19/04/2015	14:35	101	101	89	0.01	0.01	0.03
19/04/2015	15:58	102	102	91	0.01	0.01	0.03
19/04/2015	16:00	107	106	94	0.01	0.01	0.02
19/04/2015	16:07	102	100	86	0.05	0.02	0.05
19/04/2015	16:28	106	106	91	0.01	0.01	0.03
20/04/2015	12:24	102	102	88	0.06	0.04	0.09
20/04/2015	12:32	104	104	89	0.01	0.02	0.05
20/04/2015	12:53	98	98	87	0.02	0.02	0.04
20/04/2015	13:41	105	105	88	0.00	0.01	0.02
20/04/2015	14:25	108	108	93	0.01	0.01	0.02
20/04/2015	15:20	100	100	87	0.02	0.02	0.05
20/04/2015	15:24	101	101	86	0.01	0.02	0.03
20/04/2015	16:35	102	102	91	0.00	0.00	0.01
20/04/2015	16:45	101	101	88	0.01	0.01	0.03

**TABLE 4.2 CTD: PEN\_OS2 LOCALLY TRIGGERED EVENTS**

Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
20/04/2015	17:56	103	103	89	0.02	0.01	0.03
20/04/2015	17:59	100	100	86	0.01	0.01	0.01
20/04/2015	18:01	101	101	86	0.02	0.01	0.03
20/04/2015	18:04	99	99	88	0.01	0.01	0.01
20/04/2015	18:09	102	102	87	0.02	0.02	0.05
20/04/2015	18:21	100	100	86	0.00	0.00	0.01
21/04/2015	09:17	102	102	89	0.16	0.12	0.50
21/04/2015	10:26	99	99	86	0.10	0.06	0.11
21/04/2015	12:22	107	107	93	0.03	0.04	0.05
21/04/2015	14:00	98	98	86	0.01	0.01	0.03
21/04/2015	14:07	105	105	90	0.02	0.01	0.05
22/04/2015	09:07	104	104	88	0.00	0.00	0.01
22/04/2015	09:12	99	99	87	0.03	0.01	0.02
22/04/2015	09:16	103	103	89	0.00	0.00	0.01
22/04/2015	17:36	106	106	93	0.00	0.00	0.01
22/04/2015	18:20	104	104	90	0.04	0.03	0.05
22/04/2015	18:35	100	100	87	0.01	0.01	0.03
22/04/2015	21:03	101	101	87	0.00	0.00	0.01
23/04/2015	08:31	100	100	87	0.02	0.01	0.03
23/04/2015	16:52	98	98	86	0.03	0.03	0.07
23/04/2015	16:55	106	106	93	0.01	0.02	0.03
24/04/2015	14:23	102	102	88	0.01	0.02	0.02
24/04/2015	17:31	101	101	86	0.01	0.01	0.01
24/04/2015	17:52	102	102	87	0.01	0.01	0.01
25/04/2015	12:08	100	100	86	0.03	0.02	0.04
25/04/2015	12:10	100	100	86	0.02	0.01	0.03
25/04/2015	12:12	103	103	88	0.02	0.02	0.05
26/04/2015	08:45	101	102	87	0.02	0.02	0.03
26/04/2015	11:43	104	104	90	0.02	0.02	0.04
26/04/2015	12:06	101	101	90	0.01	0.01	0.02
26/04/2015	12:34	102	102	89	0.02	0.01	0.03
26/04/2015	12:50	107	107	92	0.01	0.02	0.04
26/04/2015	12:53	99	99	85	0.01	0.01	0.01
26/04/2015	13:51	102	102	89	0.00	0.01	0.01
26/04/2015	13:59	105	105	91	0.01	0.01	0.04
26/04/2015	14:19	106	106	94	0.03	0.01	0.03
26/04/2015	14:25	104	104	91	0.00	0.00	0.01
26/04/2015	14:29	107	107	91	0.02	0.02	0.03
26/04/2015	14:50	100	100	87	0.03	0.04	0.05
26/04/2015	14:51	104	104	93	0.02	0.03	0.07
26/04/2015	14:53	96	96	88	0.01	0.01	0.02
26/04/2015	15:00	105	105	91	0.01	0.02	0.04
26/04/2015	15:08	100	100	89	0.04	0.16	0.56
26/04/2015	15:09	104	104	92	0.03	0.07	0.23
26/04/2015	17:59	99	99	86	0.04	0.06	0.14
29/04/2015	08:08	110	109	102	0.00	0.00	0.00
29/04/2015	11:32	99	98	86	0.00	0.00	0.01
29/04/2015	18:22	100	100	85	0.01	0.01	0.02
30/04/2015	18:42	99	99	87	0.03	0.02	0.05

**TABLE 4.2 CTD: PEN\_OS2 LOCALLY TRIGGERED EVENTS**

Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
03/11/2014	18:33	99	99	87	0.03	0.02	0.03
05/11/2014	18:11	102	102	90	0.07	0.07	0.07
05/11/2014	18:14	102	102	91	0.06	0.05	0.06
11/11/2014	16:59	104	104	94	0.02	0.01	0.02
11/11/2014	17:04	104	102	90	0.04	0.05	0.06
12/11/2014	13:35	128	122	86	0.11	0.18	0.19
12/11/2014	14:02	103	103	89	0.12	0.14	0.08
12/11/2014	14:07	131	123	89	0.11	0.16	0.26
13/11/2014	10:30	127	120	88	0.13	0.18	0.21
13/11/2014	11:26	133	125	94	0.27	0.32	0.54
14/11/2014	11:13	130	121	86	0.10	0.18	0.20
14/11/2014	16:39	99	99	89	0.05	0.04	0.05
15/11/2014	13:48	103	103	90	0.07	0.06	0.06
16/11/2014	10:48	103	103	89	0.06	0.05	0.06
18/11/2014	15:42	104	104	88	0.11	0.09	0.12
20/11/2014	15:29	102	102	90	0.13	0.12	0.13
20/11/2014	15:45	102	102	89	0.10	0.09	0.10
20/11/2014	16:00	102	102	90	0.10	0.09	0.10
27/11/2014	21:26	104	104	94	0.08	0.07	0.08
04/12/2014	21:56	107	107	97	0.10	0.08	0.09
04/12/2014	22:06	102	102	90	0.10	0.08	0.09
05/12/2014	12:08	107	107	93	0.07	0.06	0.07
11/12/2014	00:25	104	103	92	0.09	0.08	0.09
11/12/2014	16:50	107	106	92	0.05	0.05	0.05
12/12/2014	17:47	104	104	92	0.04	0.05	0.05
12/12/2014	17:49	101	101	91	0.04	0.03	0.04
12/12/2014	17:51	102	102	91	0.04	0.03	0.04
12/12/2014	17:53	103	103	91	0.07	0.07	0.07
12/12/2014	23:09	103	103	92	0.05	0.05	0.05
12/12/2014	23:12	107	107	97	0.06	0.06	0.06
14/12/2014	21:40	106	106	91	0.02	0.02	0.03
14/12/2014	21:43	102	102	91	0.02	0.02	0.03
14/12/2014	21:45	106	106	92	0.03	0.03	0.04
14/12/2014	21:49	105	105	95	0.03	0.03	0.04
15/12/2014	22:01	107	107	95	0.03	0.03	0.03
17/12/2014	23:07	105	104	91	0.03	0.02	0.03
29/12/2014	12:22	109	109	98	0.05	0.04	0.05
31/12/2014	21:45	118	117	91	0.07	0.08	0.11
04/12/2014	21:56	107	107	97	0.10	0.08	0.09
04/12/2014	22:06	102	102	90	0.10	0.08	0.09
05/12/2014	12:08	107	107	93	0.07	0.06	0.07
11/12/2014	00:25	104	103	92	0.09	0.08	0.09
11/12/2014	16:50	107	106	92	0.05	0.05	0.05
12/12/2014	17:47	104	104	92	0.04	0.05	0.05
12/12/2014	17:49	101	101	91	0.04	0.03	0.04
12/12/2014	17:51	102	102	91	0.04	0.03	0.04
12/12/2014	17:53	103	103	91	0.07	0.07	0.07

**TABLE 4.3: PEN\_OS3 LOCALLY TRIGGERED EVENTS**

Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
12/12/2014	23:09	103	103	92	0.05	0.05	0.05
12/12/2014	23:12	107	107	97	0.06	0.06	0.06
14/12/2014	21:40	106	106	91	0.02	0.02	0.03
14/12/2014	21:43	102	102	91	0.02	0.02	0.03
14/12/2014	21:45	106	106	92	0.03	0.03	0.04
14/12/2014	21:49	105	105	95	0.03	0.03	0.04
15/12/2014	22:01	107	107	95	0.03	0.03	0.03
17/12/2014	23:07	105	104	91	0.03	0.02	0.03
29/12/2014	12:22	109	109	98	0.05	0.04	0.05
31/12/2014	21:45	118	117	91	0.07	0.08	0.11
02/01/2015	19:08	105	105	91	0.06	0.05	0.06
14/01/2015	18:18	108	107	86	0.10	0.15	0.09
16/01/2015	13:40	105	105	91	0.04	0.04	0.04
17/01/2015	10:05	102	102	94	0.02	0.02	0.02
22/01/2015	10:44	104	104	91	0.04	0.04	0.04
25/01/2015	19:03	103	103	90	0.04	0.04	0.05
26/01/2015	13:56	102	102	91	0.05	0.09	0.08
28/01/2015	14:55	103	103	91	0.06	0.06	0.07
29/01/2015	15:46	148	149	122	0.07	0.08	0.08
29/01/2015	15:50	107	102	93	0.03	0.03	0.03
29/01/2015	15:51	111	106	93	0.04	0.04	0.04
29/01/2015	15:52	109	107	93	0.04	0.04	0.04
29/01/2015	15:54	115	107	93	0.04	0.04	0.04
29/01/2015	15:55	120	116	85	0.04	0.04	0.06
30/01/2015	14:53	101	100	90	0.05	0.05	0.06
04/02/2015	15:47	107	106	87	0.11	0.12	0.09
06/02/2015	13:13	99	99	85	0.06	0.05	0.06
06/02/2015	14:24	98	98	85	0.06	0.06	0.06
06/02/2015	16:23	100	100	85	0.06	0.05	0.06
08/02/2015	15:12	94	93	86	0.07	0.06	0.07
08/02/2015	15:53	97	96	88	0.07	0.06	0.07
09/02/2015	15:31	102	102	88	0.10	0.08	0.10
09/02/2015	15:37	105	106	92	0.12	0.11	0.13
11/02/2015	02:57	99	99	87	0.16	0.12	0.12
11/02/2015	16:32	107	106	85	0.17	0.17	0.14
12/02/2015	11:43	98	98	86	0.11	0.12	0.14
12/02/2015	15:04	104	104	91	0.17	0.15	0.15
13/02/2015	09:37	107	106	86	0.11	0.12	0.08
15/02/2015	14:21	98	98	85	0.05	0.04	0.05
16/02/2015	15:13	101	101	86	0.04	0.03	0.04
16/02/2015	15:28	104	104	90	0.11	0.39	0.38
16/02/2015	16:15	100	100	86	0.06	0.06	0.06
16/02/2015	16:22	105	103	86	0.09	0.09	0.10
17/02/2015	11:03	102	102	89	0.04	0.04	0.04
17/02/2015	15:17	97	97	85	0.05	0.05	0.05
17/02/2015	19:09	100	100	87	0.06	0.05	0.06
17/02/2015	19:22	104	102	85	0.11	0.12	0.11
21/02/2015	09:11	106	105	89	0.06	0.06	0.06
24/02/2015	10:34	118	116	85	0.13	0.11	0.12

**TABLE 4.3 CTD: PEN\_OS3 LOCALLY TRIGGERED EVENTS**

Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV <sub>Y</sub> s <sup>-1</sup>	PPV s <sup>-1</sup>
24/02/2015	10:51	118	115	88	0.14	0.12	0.13
24/02/2015	10:53	120	117	87	0.26	0.24	0.18
24/02/2015	10:55	117	115	86	0.14	0.11	0.13
24/02/2015	10:57	117	116	86	0.13	0.11	0.13
24/02/2015	11:06	119	116	89	0.14	0.12	0.13
24/02/2015	11:08	119	117	88	0.14	0.12	0.13
24/02/2015	11:12	118	116	87	0.14	0.12	0.13
24/02/2015	11:14	118	116	86	0.13	0.11	0.13
24/02/2015	11:16	121	119	87	0.14	0.12	0.13
24/02/2015	11:19	118	116	86	0.34	0.27	0.30
24/02/2015	11:21	118	116	88	0.13	0.11	0.13
24/02/2015	11:32	114	112	85	0.13	0.11	0.13
24/02/2015	11:33	115	114	86	0.13	0.11	0.13
24/02/2015	11:34	116	113	86	0.13	0.11	0.12
24/02/2015	11:40	118	115	88	0.13	0.11	0.12
24/02/2015	11:42	119	116	86	0.13	0.11	0.13
24/02/2015	11:45	120	117	87	0.13	0.11	0.13
24/02/2015	11:52	117	114	86	0.14	0.12	0.13
24/02/2015	11:56	114	112	85	0.14	0.12	0.13
24/02/2015	11:58	121	119	89	0.14	0.12	0.13
24/02/2015	12:03	119	117	87	0.13	0.11	0.13
24/02/2015	12:06	119	116	87	0.14	0.12	0.13
24/02/2015	12:08	117	115	86	0.14	0.12	0.13
24/02/2015	12:13	120	118	87	0.14	0.12	0.14
24/02/2015	12:17	120	117	86	0.14	0.12	0.14
24/02/2015	12:24	118	116	87	0.15	0.12	0.14
24/02/2015	12:29	119	117	90	0.15	0.12	0.14
24/02/2015	12:32	119	115	89	0.16	0.13	0.14
24/02/2015	12:34	117	116	85	0.16	0.13	0.15
24/02/2015	12:36	122	119	89	0.15	0.12	0.14
24/02/2015	12:39	121	119	88	0.15	0.12	0.14
24/02/2015	12:59	117	115	85	0.15	0.13	0.14
24/02/2015	13:06	117	115	86	0.16	0.13	0.15
24/02/2015	13:07	121	119	89	0.15	0.13	0.14
24/02/2015	13:20	120	118	89	0.15	0.12	0.14
24/02/2015	13:23	117	115	86	0.15	0.12	0.14
24/02/2015	13:25	120	117	89	0.15	0.13	0.14
24/02/2015	13:28	115	113	86	0.15	0.13	0.15
24/02/2015	13:36	117	114	87	0.15	0.13	0.15
24/02/2015	13:40	118	116	87	0.15	0.13	0.14
24/02/2015	13:44	120	118	89	0.15	0.13	0.14
24/02/2015	13:45	124	121	89	0.15	0.13	0.15
24/02/2015	13:59	102	101	88	2.39	5.71	4.62
24/02/2015	14:03	125	122	90	0.17	0.14	0.16
24/02/2015	14:05	120	117	87	0.16	0.14	0.16
24/02/2015	14:10	119	117	87	0.16	0.14	0.16
24/02/2015	14:11	118	116	88	0.16	0.13	0.15
24/02/2015	14:14	120	118	88	0.16	0.13	0.15
24/02/2015	14:16	121	119	91	0.16	0.13	0.15

**TABLE 4.3 CTD: PEN\_OS3 LOCALLY TRIGGERED EVENTS**

Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
24/02/2015	14:17	118	115	87	0.16	0.13	0.15
24/02/2015	14:23	118	115	88	0.16	0.14	0.16
24/02/2015	14:25	118	115	87	0.16	0.14	0.16
24/02/2015	14:27	119	117	87	0.16	0.14	0.16
24/02/2015	14:39	122	119	90	0.16	0.14	0.16
24/02/2015	14:44	122	120	90	0.17	0.14	0.16
24/02/2015	16:04	120	117	86	0.16	0.14	0.15
26/02/2015	18:51	106	104	85	0.12	0.14	0.11
27/02/2015	12:30	104	104	92	0.05	0.04	0.05
27/02/2015	18:14	105	104	86	0.11	0.12	0.10
28/02/2015	13:18	108	108	88	0.35	0.60	0.62
03/03/2015	14:37	104	103	88	0.09	0.08	0.09
03/03/2015	15:39	103	102	89	0.10	0.11	0.13
03/03/2015	16:49	105	104	85	0.15	0.15	0.15
04/03/2015	12:29	116	113	86	0.12	0.10	0.11
04/03/2015	17:09	101	100	87	0.45	0.29	0.22
08/03/2015	13:04	102	100	92	0.04	0.04	0.04
10/03/2015	11:23	101	101	87	0.04	0.03	0.04
10/03/2015	18:46	107	106	87	0.12	0.12	0.10
11/03/2015	15:24	108	108	87	0.10	0.11	0.08
15/03/2015	10:47	102	102	88	0.05	0.04	0.04
15/03/2015	10:49	102	102	88	0.05	0.04	0.05
15/03/2015	11:00	100	100	85	0.05	0.04	0.04
16/03/2015	13:02	103	103	90	0.05	0.04	0.05
16/03/2015	16:15	105	105	89	0.07	0.07	0.09
17/03/2015	15:37	99	99	85	0.05	0.05	0.05
17/03/2015	16:44	101	101	87	0.11	0.07	0.07
17/03/2015	18:29	102	102	90	0.11	0.10	0.14
18/03/2015	05:49	93	93	86	0.09	0.08	0.09
18/03/2015	05:52	93	93	85	0.09	0.08	0.09
18/03/2015	12:29	99	99	87	0.05	0.05	0.05
18/03/2015	14:50	100	100	87	0.05	0.04	0.05
18/03/2015	14:57	99	98	86	0.05	0.04	0.05
19/03/2015	05:49	93	93	89	0.10	0.08	0.09
19/03/2015	09:54	99	99	89	0.05	0.05	0.05
19/03/2015	10:09	101	101	87	0.05	0.04	0.05
19/03/2015	10:42	102	101	87	0.05	0.05	0.05
19/03/2015	16:46	100	100	85	0.14	0.13	0.13
20/03/2015	10:44	105	105	91	0.11	0.09	0.11
20/03/2015	14:19	98	98	86	0.13	0.12	0.13
20/03/2015	17:51	105	104	88	0.20	0.19	0.17
22/03/2015	05:38	92	92	86	0.14	0.12	0.13
22/03/2015	12:03	102	102	89	0.14	0.11	0.13
23/03/2015	05:44	94	93	87	0.14	0.11	0.13
23/03/2015	07:00	100	99	89	0.13	0.11	0.13
23/03/2015	15:07	103	103	88	0.14	0.12	0.13
23/03/2015	16:12	95	95	85	0.14	0.12	0.14
24/03/2015	14:33	102	102	92	0.13	0.12	0.13
24/03/2015	14:39	102	102	91	0.13	0.11	0.13

**TABLE 4.3 CTD: PEN\_OS3 LOCALLY TRIGGERED EVENTS**

Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV <sub>Y</sub> s <sup>-1</sup>	PPV s <sup>-1</sup>
24/03/2015	14:40	101	101	90	0.13	0.12	0.13
24/03/2015	14:44	98	98	86	0.14	0.12	0.14
24/03/2015	16:22	100	100	86	0.32	0.23	0.21
24/03/2015	16:27	108	108	94	0.20	0.27	0.15
24/03/2015	16:33	107	106	88	0.27	0.19	0.15
25/03/2015	14:20	102	102	91	0.14	0.12	0.13
25/03/2015	15:06	100	100	85	0.16	0.15	0.15
25/03/2015	21:50	117	115	87	0.13	0.11	0.12
25/03/2015	21:57	118	115	86	0.17	0.18	0.13
26/03/2015	16:05	103	100	87	0.11	0.09	0.10
27/03/2015	07:04	97	95	89	0.13	0.11	0.12
27/03/2015	07:06	98	96	89	0.13	0.11	0.12
27/03/2015	13:49	98	98	85	0.12	0.10	0.11
27/03/2015	16:44	106	105	86	0.18	0.21	0.17
29/03/2015	11:34	112	103	87	0.04	0.03	0.05
31/03/2015	15:40	106	101	86	0.12	0.10	0.12
31/03/2015	16:42	111	105	86	0.14	0.12	0.15
01/04/2015	10:24	102	102	87	0.13	0.11	0.12
01/04/2015	14:45	100	100	86	0.14	0.12	0.14
01/04/2015	18:47	99	99	86	0.14	0.15	0.13
02/04/2015	10:41	100	100	90	0.13	0.11	0.12
03/04/2015	14:04	93	92	86	0.03	0.03	0.03
03/04/2015	14:10	96	94	89	0.04	0.03	0.03
04/04/2015	10:33	100	100	85	0.07	0.06	0.06
04/04/2015	11:38	103	103	88	0.30	0.36	0.37
04/04/2015	11:41	105	105	88	0.55	0.44	0.48
06/04/2015	18:42	101	101	87	0.12	0.11	0.13
07/04/2015	10:25	104	104	89	0.13	0.11	0.13
07/04/2015	10:27	101	101	89	0.13	0.11	0.13
07/04/2015	12:21	105	105	92	0.14	0.12	0.14
07/04/2015	13:13	102	102	89	0.14	0.11	0.14
07/04/2015	16:41	104	104	90	0.12	0.11	0.12
07/04/2015	16:55	103	103	86	0.12	0.11	0.12
07/04/2015	17:01	101	101	88	0.13	0.11	0.12
07/04/2015	17:50	102	102	87	0.12	0.11	0.12
08/04/2015	10:09	100	100	85	0.14	0.12	0.13
08/04/2015	10:13	99	99	86	0.14	0.12	0.13
08/04/2015	11:23	102	102	91	0.14	0.12	0.13
08/04/2015	11:47	102	102	86	0.14	0.12	0.14
08/04/2015	12:09	101	101	89	0.13	0.12	0.13
08/04/2015	12:10	101	101	86	0.14	0.12	0.13
08/04/2015	12:39	100	100	86	0.14	0.16	0.15
08/04/2015	17:30	99	98	86	0.14	0.12	0.13
08/04/2015	18:21	100	100	86	0.14	0.12	0.14
08/04/2015	19:07	102	102	86	0.14	0.12	0.14
09/04/2015	10:16	99	99	86	0.15	0.13	0.16
09/04/2015	13:26	100	100	87	0.14	0.12	0.14
09/04/2015	15:47	101	101	89	0.15	0.12	0.14
10/04/2015	19:09	101	100	86	0.24	0.31	0.27

**TABLE 4.3 CTD: PEN\_OS3 LOCALLY TRIGGERED EVENTS**



Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
11/04/2015	19:38	102	102	88	0.14	0.12	0.14
12/04/2015	20:01	109	107	87	0.17	0.21	0.17
13/04/2015	09:57	102	102	87	0.13	0.12	0.14
13/04/2015	14:25	101	101	87	0.14	0.14	0.14
13/04/2015	14:28	103	103	90	0.14	0.12	0.13
13/04/2015	14:41	100	100	90	0.14	0.11	0.13
13/04/2015	17:08	109	108	87	0.21	0.19	0.17
14/04/2015	14:34	103	103	87	0.22	0.24	0.21
14/04/2015	14:45	109	108	90	0.27	0.22	0.18
14/04/2015	16:12	100	100	86	0.14	0.13	0.13
15/04/2015	14:46	101	101	90	0.14	0.12	0.13
15/04/2015	17:36	104	104	91	0.13	0.11	0.13
15/04/2015	19:49	106	106	85	0.16	0.18	0.18
16/04/2015	08:39	101	101	88	0.17	0.16	0.15
16/04/2015	10:31	101	101	85	0.20	0.18	0.24
16/04/2015	10:32	101	101	87	0.15	0.12	0.14
16/04/2015	10:34	104	103	90	0.14	0.12	0.14
16/04/2015	11:10	99	99	87	0.16	0.16	0.15
18/04/2015	10:52	103	100	86	0.16	0.13	0.14
19/04/2015	18:37	105	104	91	0.14	0.14	0.15
19/04/2015	19:05	103	103	90	0.13	0.11	0.14
19/04/2015	19:07	101	101	87	0.13	0.11	0.13
19/04/2015	19:12	105	104	89	0.17	0.16	0.15
20/04/2015	12:47	98	98	85	0.15	0.13	0.15
21/04/2015	09:52	101	101	88	0.14	0.12	0.14
21/04/2015	11:57	99	99	87	0.14	0.12	0.13
21/04/2015	20:50	97	97	85	0.12	0.10	0.12
22/04/2015	07:56	99	99	86	0.13	0.11	0.12
22/04/2015	13:57	101	101	88	0.14	0.12	0.13
22/04/2015	16:16	100	100	87	0.12	0.10	0.12
22/04/2015	22:37	97	97	86	0.14	0.12	0.13
22/04/2015	22:40	100	100	85	0.14	0.12	0.13
22/04/2015	22:42	103	103	91	0.14	0.12	0.13
23/04/2015	05:18	95	95	89	0.14	0.12	0.13
23/04/2015	15:41	99	99	86	0.12	0.10	0.12
23/04/2015	17:02	108	104	88	0.12	0.11	0.12
23/04/2015	18:07	94	94	87	0.12	0.11	0.13
24/04/2015	13:23	103	102	94	0.12	0.10	0.11
24/04/2015	19:05	101	101	87	0.06	0.05	0.06
25/04/2015	14:51	99	99	87	0.12	0.10	0.12
25/04/2015	16:04	100	100	86	0.14	0.15	0.16
25/04/2015	19:51	99	99	86	0.26	0.39	0.41
26/04/2015	07:23	99	99	86	0.13	0.11	0.13
26/04/2015	07:24	103	103	90	0.13	0.11	0.13
26/04/2015	07:29	101	101	87	0.13	0.11	0.12
26/04/2015	07:31	105	105	92	0.13	0.11	0.13
26/04/2015	10:00	100	100	86	0.17	0.19	0.18
26/04/2015	11:06	104	104	90	0.15	0.16	0.16
26/04/2015	21:44	99	99	86	0.12	0.10	0.11

**TABLE 4.3 CTD: PEN\_OS3 LOCALLY TRIGGERED EVENTS**

Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
26/04/2015	21:46	101	101	85	0.12	0.10	0.11
27/04/2015	09:48	101	101	87	0.13	0.11	0.12
27/04/2015	17:13	106	106	96	0.13	0.11	0.13
28/04/2015	09:33	98	98	85	0.13	0.11	0.12
28/04/2015	16:49	104	104	90	0.13	0.11	0.12
28/04/2015	20:11	100	100	87	0.14	0.13	0.14
30/04/2015	09:57	99	99	86	0.14	0.12	0.13

**TABLE 4.3 CTD: PEN\_OS3 LOCALLY TRIGGERED EVENTS**

Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
02/11/2014	02:14	148	147	118	0.01	0.00	0.01
03/11/2014	15:42	105	105	87	0.03	0.03	0.02
05/11/2014	15:09	104	104	89	0.05	0.04	0.04
11/11/2014	15:09	96	95	89	0.01	0.02	0.01
01/12/2014	12:47	98	97	85	0.00	0.00	0.00
01/12/2014	13:00	99	97	86	0.00	0.00	0.00
01/12/2014	14:26	97	95	86	0.01	0.01	0.00
01/12/2014	16:22	103	101	86	0.00	0.00	0.00
05/12/2014	14:27	98	96	85	0.00	0.00	0.00
05/12/2014	14:44	98	96	86	0.00	0.00	0.00
11/12/2014	07:50	106	103	88	0.05	0.08	0.06
11/12/2014	11:52	95	95	85	0.00	0.00	0.01
12/12/2014	08:00	105	104	90	0.04	0.06	0.05
29/12/2014	11:25	104	103	86	0.00	0.00	0.00
29/12/2014	15:09	100	98	87	0.02	0.01	0.01
05/01/2015	08:15	102	102	89	0.09	0.05	0.05
07/01/2015	08:06	108	108	93	0.07	0.05	0.05
23/01/2015	08:04	107	107	93	0.12	0.12	0.11
08/02/2015	11:01	97	96	89	0.00	0.00	0.00
09/02/2015	11:12	102	102	85	0.06	0.06	0.06
09/02/2015	11:51	98	98	86	0.03	0.05	0.05
09/02/2015	12:00	115	115	91	0.02	0.03	0.03
09/02/2015	13:04	97	97	86	0.04	0.08	0.07
10/02/2015	13:35	106	104	87	0.02	0.02	0.02
10/02/2015	13:51	107	105	93	0.07	0.07	0.05
10/02/2015	14:58	108	106	94	0.01	0.02	0.02
10/02/2015	15:02	104	102	91	0.02	0.02	0.02
10/02/2015	15:09	105	103	92	0.01	0.01	0.02
11/02/2015	07:23	105	102	87	0.00	0.00	0.00
11/02/2015	11:22	97	96	86	0.01	0.02	0.02
11/02/2015	12:46	108	108	87	0.06	0.06	0.04
11/02/2015	13:32	108	107	88	0.05	0.07	0.04
11/02/2015	14:00	108	107	86	0.06	0.07	0.04
11/02/2015	14:23	110	110	86	0.15	0.15	0.07
11/02/2015	14:50	108	107	86	0.06	0.07	0.04
12/02/2015	08:25	118	117	101	0.05	0.06	0.07
12/02/2015	08:39	106	105	89	0.04	0.06	0.03
12/02/2015	09:52	100	99	85	0.02	0.05	0.04
12/02/2015	09:56	99	97	86	0.04	0.06	0.03
12/02/2015	10:00	101	101	86	0.03	0.04	0.03
12/02/2015	10:01	99	98	85	0.02	0.03	0.02
12/02/2015	10:04	107	107	85	0.03	0.02	0.02
12/02/2015	12:39	99	98	89	0.06	0.08	0.04
12/02/2015	13:53	109	108	87	0.06	0.05	0.04
12/02/2015	14:06	108	107	86	0.04	0.04	0.05
12/02/2015	14:13	104	104	86	0.03	0.04	0.04
12/02/2015	15:45	104	104	87	0.04	0.03	0.03
12/02/2015	15:47	109	109	92	0.05	0.03	0.05

**TABLE 4.4: PEN\_OS4 LOCALLY TRIGGERED EVENTS**

Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
02/11/2014	02:14	148	147	118	0.01	0.00	0.01
03/11/2014	15:42	105	105	87	0.03	0.03	0.02
05/11/2014	15:09	104	104	89	0.05	0.04	0.04
11/11/2014	15:09	96	95	89	0.01	0.02	0.01
01/12/2014	12:47	98	97	85	0.00	0.00	0.00
01/12/2014	13:00	99	97	86	0.00	0.00	0.00
01/12/2014	14:26	97	95	86	0.01	0.01	0.00
01/12/2014	16:22	103	101	86	0.00	0.00	0.00
05/12/2014	14:27	98	96	85	0.00	0.00	0.00
05/12/2014	14:44	98	96	86	0.00	0.00	0.00
11/12/2014	07:50	106	103	88	0.05	0.08	0.06
11/12/2014	11:52	95	95	85	0.00	0.00	0.01
12/12/2014	08:00	105	104	90	0.04	0.06	0.05
29/12/2014	11:25	104	103	86	0.00	0.00	0.00
29/12/2014	15:09	100	98	87	0.02	0.01	0.01
05/01/2015	08:15	102	102	89	0.09	0.05	0.05
07/01/2015	08:06	108	108	93	0.07	0.05	0.05
23/01/2015	08:04	107	107	93	0.12	0.12	0.11
08/02/2015	11:01	97	96	89	0.00	0.00	0.00
09/02/2015	11:12	102	102	85	0.06	0.06	0.06
09/02/2015	11:51	98	98	86	0.03	0.05	0.05
09/02/2015	12:00	115	115	91	0.02	0.03	0.03
09/02/2015	13:04	97	97	86	0.04	0.08	0.07
10/02/2015	13:35	106	104	87	0.02	0.02	0.02
10/02/2015	13:51	107	105	93	0.07	0.07	0.05
10/02/2015	14:58	108	106	94	0.01	0.02	0.02
10/02/2015	15:02	104	102	91	0.02	0.02	0.02
10/02/2015	15:09	105	103	92	0.01	0.01	0.02
11/02/2015	07:23	105	102	87	0.00	0.00	0.00
11/02/2015	11:22	97	96	86	0.01	0.02	0.02
11/02/2015	12:46	108	108	87	0.06	0.06	0.04
11/02/2015	13:32	108	107	88	0.05	0.07	0.04
11/02/2015	14:00	108	107	86	0.06	0.07	0.04
11/02/2015	14:23	110	110	86	0.15	0.15	0.07
11/02/2015	14:50	108	107	86	0.06	0.07	0.04
12/02/2015	08:25	118	117	101	0.05	0.06	0.07
12/02/2015	08:39	106	105	89	0.04	0.06	0.03
12/02/2015	09:52	100	99	85	0.02	0.05	0.04
12/02/2015	09:56	99	97	86	0.04	0.06	0.03
12/02/2015	10:00	101	101	86	0.03	0.04	0.03
12/02/2015	10:01	99	98	85	0.02	0.03	0.02
12/02/2015	10:04	107	107	85	0.03	0.02	0.02
12/02/2015	12:39	99	98	89	0.06	0.08	0.04
12/02/2015	13:53	109	108	87	0.06	0.05	0.04
12/02/2015	14:06	108	107	86	0.04	0.04	0.05
12/02/2015	14:13	104	104	86	0.03	0.04	0.04
12/02/2015	15:45	104	104	87	0.04	0.03	0.03
12/02/2015	15:47	109	109	92	0.05	0.03	0.05

**TABLE 4.5: PEN\_OS5 LOCALLY TRIGGERED EVENTS**

Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
12/02/2015	15:49	110	110	91	0.05	0.04	0.05
12/02/2015	15:52	108	108	90	0.05	0.07	0.05
12/02/2015	15:54	103	103	86	0.02	0.02	0.03
12/02/2015	16:01	110	110	89	0.02	0.02	0.05
12/02/2015	16:05	112	112	88	0.02	0.02	0.04
12/02/2015	16:27	107	106	88	0.10	0.07	0.05
13/02/2015	08:19	104	103	86	0.07	0.07	0.05
13/02/2015	08:22	107	106	85	0.05	0.04	0.06
13/02/2015	08:26	106	105	86	0.07	0.06	0.11
13/02/2015	08:43	108	108	86	0.04	0.04	0.03
13/02/2015	08:45	111	111	87	0.05	0.09	0.10
13/02/2015	10:27	108	107	86	0.01	0.02	0.01
13/02/2015	14:37	103	101	90	0.15	0.07	0.09
15/02/2015	12:17	102	102	86	0.13	0.16	0.07
15/02/2015	12:30	91	90	86	0.02	0.02	0.03
16/02/2015	08:08	105	104	87	0.04	0.04	0.05
16/02/2015	08:23	103	101	87	0.06	0.03	0.05
16/02/2015	08:25	104	101	88	0.03	0.05	0.03
16/02/2015	08:33	106	104	88	0.02	0.04	0.04
16/02/2015	08:46	106	105	86	0.02	0.03	0.03
16/02/2015	08:53	100	99	86	0.01	0.03	0.02
16/02/2015	09:11	107	105	86	0.02	0.02	0.03
16/02/2015	09:14	101	100	85	0.02	0.04	0.04
16/02/2015	09:28	105	102	88	0.02	0.02	0.02
16/02/2015	09:52	105	101	87	0.02	0.02	0.03
16/02/2015	10:06	105	104	86	0.09	0.05	0.06
16/02/2015	10:16	102	100	85	0.02	0.03	0.04
16/02/2015	10:18	103	102	86	0.02	0.03	0.04
16/02/2015	10:24	103	101	85	0.02	0.03	0.03
16/02/2015	10:54	101	100	86	0.02	0.03	0.01
16/02/2015	11:24	108	107	88	0.02	0.03	0.02
16/02/2015	11:38	103	100	86	0.02	0.03	0.01
16/02/2015	11:46	105	103	86	0.02	0.02	0.02
16/02/2015	12:44	109	108	85	0.02	0.03	0.02
16/02/2015	12:52	103	99	86	0.02	0.02	0.02
16/02/2015	12:57	103	100	87	0.02	0.03	0.02
16/02/2015	13:15	107	106	86	0.03	0.02	0.03
16/02/2015	13:19	102	100	85	0.03	0.07	0.04
16/02/2015	13:30	103	100	85	0.02	0.05	0.03
16/02/2015	13:40	103	99	85	0.03	0.05	0.05
16/02/2015	13:55	104	103	85	0.04	0.04	0.06
16/02/2015	14:01	106	104	85	0.04	0.05	0.09
16/02/2015	14:05	101	98	85	0.03	0.04	0.04
16/02/2015	14:17	104	100	86	0.12	0.07	0.07
16/02/2015	14:19	104	101	85	0.10	0.09	0.06
16/02/2015	14:20	102	100	86	0.04	0.09	0.05
16/02/2015	14:32	103	101	86	0.02	0.03	0.03

**TABLE 4.5 CTD: PEN\_OS5 LOCALLY TRIGGERED EVENTS**

Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
16/02/2015	14:33	102	99	85	0.02	0.03	0.04
16/02/2015	14:35	102	101	86	0.02	0.03	0.03
16/02/2015	14:36	105	102	86	0.02	0.03	0.04
16/02/2015	14:48	104	102	86	0.01	0.02	0.03
16/02/2015	14:52	105	102	85	0.02	0.03	0.04
16/02/2015	15:03	105	103	86	0.01	0.01	0.01
16/02/2015	15:06	108	107	85	0.02	0.03	0.02
16/02/2015	15:25	104	98	85	0.02	0.05	0.03
18/02/2015	10:08	102	101	86	0.02	0.02	0.01
18/02/2015	15:12	102	100	87	0.01	0.01	0.01
18/02/2015	15:14	103	100	88	0.00	0.01	0.01
18/02/2015	15:15	104	102	90	0.01	0.01	0.01
18/02/2015	15:17	104	101	91	0.05	0.04	0.03
20/02/2015	08:27	106	106	88	0.01	0.02	0.02
20/02/2015	09:18	109	109	86	0.02	0.03	0.03
20/02/2015	11:11	105	104	85	0.04	0.08	0.04
20/02/2015	13:30	99	98	85	0.03	0.06	0.04
20/02/2015	14:32	105	103	85	0.02	0.03	0.03
23/02/2015	15:32	117	116	92	0.01	0.02	0.02
23/02/2015	15:34	115	113	98	11.69	4.64	7.86
23/02/2015	16:14	103	102	86	0.01	0.01	0.02
24/02/2015	08:05	111	111	96	0.14	0.12	0.07
24/02/2015	08:27	103	103	89	0.01	0.02	0.01
26/02/2015	15:25	108	107	85	0.06	0.10	0.11
27/02/2015	08:53	98	98	86	0.08	0.08	0.06
27/02/2015	08:58	100	98	86	0.03	0.05	0.04
27/02/2015	08:59	104	100	86	0.03	0.04	0.03
27/02/2015	10:27	102	100	85	0.02	0.05	0.04
02/03/2015	08:16	109	108	86	0.02	0.02	0.02
02/03/2015	09:23	115	113	88	0.03	0.02	0.03
02/03/2015	09:46	107	105	86	0.02	0.03	0.04
02/03/2015	10:50	113	111	91	0.03	0.02	0.03
03/03/2015	12:26	99	98	87	0.02	0.02	0.02
09/03/2015	19:36	93	92	86	0.01	0.01	0.02
12/03/2015	08:02	94	93	86	0.02	0.01	0.02
15/03/2015	10:42	94	94	86	0.02	0.03	0.06
22/03/2015	07:30	99	99	87	0.08	0.09	0.08
26/03/2015	14:06	102	102	87	0.07	0.06	0.06
30/03/2015	23:51	113	109	86	0.01	0.01	0.02
31/03/2015	10:35	108	101	87	0.01	0.01	0.02
31/03/2015	16:04	103	103	88	0.18	0.25	0.22
31/03/2015	16:06	107	103	87	0.19	0.25	0.18
31/03/2015	16:11	111	101	87	0.08	0.15	0.12
31/03/2015	16:48	106	103	86	0.11	0.17	0.16
31/03/2015	16:52	102	102	86	0.18	0.18	0.14
31/03/2015	17:29	106	106	89	0.03	0.03	0.05
04/04/2015	10:56	113	111	98	0.26	0.19	0.25
04/04/2015	13:39	100	100	86	0.02	0.02	0.02
04/04/2015	14:53	107	107	93	0.01	0.01	0.01
09/04/2015	17:27	107	107	93	0.03	0.02	0.02

**TABLE 4.5 CTD: PEN\_OS5 LOCALLY TRIGGERED EVENTS**

Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
10/04/2015	10:13	100	100	87	0.05	0.04	0.06
14/04/2015	11:09	92	91	87	0.01	0.01	0.02
15/04/2015	12:35	96	96	86	0.02	0.02	0.03
16/04/2015	18:49	100	100	88	0.02	0.02	0.02
19/04/2015	15:00	111	109	86	0.01	0.02	0.01
20/04/2015	18:15	101	101	87	0.02	0.02	0.05
20/04/2015	18:16	102	102	89	0.01	0.01	0.01
20/04/2015	18:18	101	101	87	0.02	0.02	0.02
20/04/2015	18:26	102	102	87	0.01	0.02	0.01
26/04/2015	17:19	100	99	87	0.02	0.02	0.01
26/04/2015	17:22	104	104	89	0.07	0.05	0.10
26/04/2015	17:25	98	98	85	0.01	0.05	0.06
26/04/2015	17:38	106	106	91	0.03	0.01	0.02
29/04/2015	10:37	109	109	87	0.09	0.05	0.07
29/04/2015	11:52	99	98	87	0.02	0.03	0.03
29/04/2015	11:55	100	100	88	0.13	0.19	0.11

**TABLE 4.5 CTD: PEN\_OS5 LOCALLY TRIGGERED EVENTS**

Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
05/11/2014	18:31	114	114	87	0.01	0.05	0.05
05/11/2014	18:36	117	117	89	0.01	0.06	0.06
12/11/2014	14:07	124	114	86	0.05	0.12	0.10
17/11/2014	11:51	99	99	87	0.01	0.02	0.02
24/11/2014	17:06	108	107	89	0.01	0.01	0.02
07/12/2014	06:36	111	111	91	0.01	0.01	0.02
22/12/2014	08:41	107	107	89	0.02	0.05	0.03
27/12/2014	11:29	106	106	86	0.00	0.00	0.01
29/12/2014	08:01	110	110	85	0.01	0.03	0.02
16/01/2015	11:34	105	105	90	0.01	0.01	0.01
18/01/2015	09:43	105	103	85	0.00	0.00	0.00
20/01/2015	10:31	111	111	87	0.00	0.00	0.00
24/01/2015	02:14	148	149	123	0.00	0.00	0.00
25/01/2015	11:57	112	110	86	0.01	0.03	0.03
25/01/2015	13:23	106	106	91	0.01	0.01	0.01
30/01/2015	13:27	148	148	121	0.00	0.00	0.00
30/01/2015	13:30	148	147	120	0.00	0.00	0.00
04/03/2015	09:59	103	103	87	0.04	0.06	0.03
04/03/2015	10:00	106	105	87	0.02	0.07	0.03
06/03/2015	11:23	105	105	85	0.01	0.03	0.02
13/03/2015	09:45	102	102	86	0.01	0.01	0.02
19/03/2015	11:21	101	102	87	0.01	0.02	0.02
20/03/2015	12:04	105	105	91	0.02	0.02	0.02
30/03/2015	17:16	112	111	86	0.01	0.02	0.03
15/04/2015	08:37	102	101	86	0.01	0.01	0.01
23/04/2015	20:15	148	149	120	0.00	0.00	0.00
23/04/2015	20:16	132	125	87	0.00	0.00	0.00
27/04/2015	09:06	132	126	87	0.01	0.01	0.01
29/04/2015	02:31	131	127	91	0.00	0.01	0.01
30/04/2015	17:11	130	129	94	0.00	0.00	0.00

**TABLE 4.6: PEN\_OS6 LOCALLY TRIGGERED EVENTS**



Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV <sub>Y</sub> s <sup>-1</sup>	PPV s <sup>-1</sup>
03/11/2014	17:18	97	97	88	0.02	0.02	0.01
05/11/2014	21:20	117	116	89	0.03	0.05	0.05
08/11/2014	20:47	115	115	90	0.02	0.05	0.04
08/11/2014	20:53	118	118	91	0.03	0.06	0.06
08/11/2014	20:56	115	115	89	0.03	0.05	0.05
08/11/2014	21:00	119	119	91	0.03	0.06	0.06
09/11/2014	19:13	112	110	88	0.05	0.10	0.09
12/11/2014	09:37	101	101	85	0.03	0.03	0.02
20/11/2014	12:16	98	98	92	0.04	0.04	0.04
24/11/2014	14:09	103	103	90	0.01	0.02	0.01
24/11/2014	14:11	107	107	94	0.01	0.01	0.01
03/12/2014	10:55	114	115	98	0.05	0.11	0.11
15/12/2014	10:43	106	105	97	0.03	0.03	0.02
23/12/2014	21:52	119	119	91	0.05	0.09	0.13
31/12/2014	23:59	120	119	90	0.01	0.02	0.02
01/01/2015	00:00	118	117	92	0.02	0.03	0.03
01/01/2015	00:19	118	118	92	0.01	0.03	0.02
12/02/2015	12:15	107	107	90	0.01	0.02	0.02
13/02/2015	17:53	104	103	96	0.02	0.03	0.01
16/02/2015	14:02	113	113	98	0.11	0.23	0.07
16/02/2015	16:02	106	107	94	0.04	0.06	0.02
17/02/2015	12:51	108	108	96	0.01	0.01	0.01
17/02/2015	14:03	110	110	94	0.02	0.05	0.04
17/02/2015	14:05	105	105	92	0.02	0.03	0.03
17/02/2015	14:09	104	105	90	0.01	0.02	0.02
17/02/2015	14:10	117	117	100	0.03	0.08	0.07
26/02/2015	12:10	111	111	94	0.68	0.13	0.05
26/02/2015	12:12	112	111	94	0.85	0.06	0.05
26/02/2015	12:14	111	111	94	0.84	0.07	0.05
26/02/2015	12:36	119	119	100	0.68	0.22	0.08
06/03/2015	11:29	104	104	86	0.09	0.37	0.02
06/03/2015	11:31	105	105	91	0.06	0.06	0.03
26/03/2015	15:49	111	111	91	1.27	1.51	0.04
02/04/2015	12:20	98	98	93	1.60	1.98	0.01
02/04/2015	12:26	99	99	91	1.26	1.17	0.03
02/04/2015	12:28	99	99	92	0.79	1.22	0.06
02/04/2015	12:34	98	98	92	0.49	4.17	0.02
20/04/2015	16:50	104	104	90	0.01	0.03	0.03
29/04/2015	09:41	106	104	96	0.01	0.01	0.00
30/04/2015	07:36	103	102	94	0.00	0.01	0.00
30/04/2015	08:34	110	109	101	0.01	0.02	0.01
30/04/2015	12:52	105	104	97	0.01	0.01	0.00
30/04/2015	13:38	106	105	100	0.01	0.01	0.00

**TABLE 4.7: PEN\_OS7 LOCALLY TRIGGERED EVENTS**

Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
02/11/2014	22:54	105	103	89	0.08	0.16	0.11
02/11/2014	23:08	104	103	88	0.09	0.14	0.09
02/11/2014	23:37	111	110	91	0.20	0.51	0.29
03/11/2014	00:34	102	102	86	0.07	0.15	0.12
03/11/2014	03:13	109	108	94	0.15	0.17	0.13
03/11/2014	04:03	108	107	90	0.18	0.39	0.22
03/11/2014	06:38	108	107	90	0.21	0.65	0.33
03/11/2014	07:44	103	102	85	0.16	0.20	0.14
03/11/2014	08:25	99	99	86	0.05	0.14	0.06
03/11/2014	08:29	101	101	86	0.08	0.15	0.10
03/11/2014	10:40	103	102	90	0.12	0.16	0.12
03/11/2014	12:33	101	98	85	0.04	0.10	0.05
03/11/2014	12:42	104	103	90	0.10	0.18	0.11
03/11/2014	14:30	101	100	87	0.04	0.14	0.07
03/11/2014	14:38	106	104	91	0.12	0.18	0.14
03/11/2014	14:51	104	104	92	0.12	0.18	0.15
03/11/2014	16:32	99	100	87	0.04	0.11	0.06
03/11/2014	16:40	102	102	90	0.10	0.18	0.11
03/11/2014	18:41	104	103	91	0.11	0.18	0.12
03/11/2014	19:01	100	101	87	0.08	0.24	0.10
03/11/2014	20:09	100	99	88	0.03	0.10	0.05
03/11/2014	21:12	105	105	87	0.08	0.23	0.11
03/11/2014	21:28	99	99	89	0.08	0.16	0.08
03/11/2014	21:59	103	102	87	0.19	0.31	0.17
03/11/2014	22:54	103	102	88	0.09	0.14	0.10
04/11/2014	00:25	101	100	87	0.05	0.13	0.06
04/11/2014	01:08	105	104	88	0.10	0.25	0.12
04/11/2014	01:12	108	107	91	0.22	0.44	0.28
04/11/2014	03:12	105	105	93	0.13	0.21	0.10
04/11/2014	03:40	100	100	87	0.05	0.13	0.07
04/11/2014	04:22	104	103	92	0.11	0.19	0.12
04/11/2014	04:54	106	105	92	0.14	0.21	0.13
04/11/2014	06:38	107	106	90	0.24	0.59	0.33
04/11/2014	07:44	102	103	86	0.20	0.25	0.12
04/11/2014	08:30	100	100	86	0.07	0.11	0.10
04/11/2014	08:40	107	106	92	0.21	0.39	0.26
04/11/2014	10:40	105	105	92	0.13	0.21	0.12
04/11/2014	12:33	100	99	87	0.04	0.12	0.06
04/11/2014	12:46	103	102	89	0.10	0.25	0.11
04/11/2014	14:31	101	98	87	0.04	0.11	0.06
04/11/2014	14:47	106	106	93	0.10	0.16	0.11
04/11/2014	16:14	102	102	85	0.13	0.22	0.13
04/11/2014	16:35	100	100	87	0.04	0.15	0.09
04/11/2014	16:40	104	103	91	0.10	0.18	0.11
04/11/2014	18:09	99	99	86	0.03	0.07	0.06
04/11/2014	18:41	104	104	91	0.11	0.18	0.11
04/11/2014	19:06	102	101	88	0.07	0.13	0.08

**TABLE 4.8: PEN\_OS8 LOCALLY TRIGGERED EVENTS**

Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
04/11/2014	19:28	103	102	93	0.05	0.08	0.07
04/11/2014	20:11	100	99	87	0.03	0.11	0.05
04/11/2014	21:07	98	98	85	0.09	0.19	0.08
04/11/2014	21:38	104	103	89	0.24	0.27	0.19
04/11/2014	22:55	103	103	87	0.07	0.11	0.07
04/11/2014	23:47	111	109	91	0.21	0.39	0.31
06/11/2014	00:19	98	98	85	0.04	0.10	0.05
06/11/2014	01:00	106	105	88	0.09	0.22	0.10
06/11/2014	01:53	107	106	88	0.09	0.21	0.09
06/11/2014	03:12	103	103	90	0.11	0.17	0.13
06/11/2014	03:15	105	104	89	0.08	0.20	0.11
06/11/2014	04:41	103	102	89	0.09	0.16	0.13
06/11/2014	04:54	105	105	93	0.11	0.15	0.12
06/11/2014	05:13	101	101	89	0.10	0.16	0.11
06/11/2014	06:20	101	101	90	0.04	0.13	0.06
06/11/2014	06:40	109	107	89	0.24	0.72	0.40
06/11/2014	07:44	102	101	86	0.12	0.19	0.16
06/11/2014	08:12	106	105	89	0.11	0.18	0.10
06/11/2014	08:29	103	102	89	0.10	0.17	0.11
06/11/2014	08:38	107	107	92	0.23	0.44	0.27
06/11/2014	10:40	106	105	93	0.11	0.18	0.12
06/11/2014	12:15	100	101	85	0.17	0.25	0.18
06/11/2014	12:23	104	99	86	0.04	0.12	0.06
06/11/2014	12:34	102	100	87	0.04	0.10	0.05
06/11/2014	12:57	105	104	92	0.10	0.17	0.12
06/11/2014	14:29	109	102	87	0.04	0.12	0.05
06/11/2014	14:37	105	102	89	0.15	0.21	0.15
06/11/2014	14:47	104	104	92	0.13	0.20	0.12
06/11/2014	15:18	105	99	86	0.05	0.13	0.07
06/11/2014	16:40	105	105	93	0.10	0.22	0.18
06/11/2014	18:09	102	99	86	0.04	0.11	0.04
06/11/2014	18:18	112	112	102	0.08	0.14	0.11
06/11/2014	18:41	104	104	91	0.10	0.16	0.11
06/11/2014	19:01	102	102	88	0.08	0.13	0.10
06/11/2014	20:18	98	98	91	0.05	0.12	0.08
06/11/2014	21:53	102	101	87	0.18	0.27	0.17
06/11/2014	22:55	102	102	89	0.09	0.14	0.10
08/11/2014	20:58	105	103	89	0.12	0.14	0.09
08/11/2014	21:36	100	100	86	0.09	0.19	0.09
08/11/2014	22:11	104	104	88	0.25	0.26	0.18
11/11/2014	00:06	110	108	91	0.22	0.40	0.28
11/11/2014	00:20	100	100	88	0.04	0.11	0.06
11/11/2014	00:56	104	103	89	0.09	0.22	0.10
11/11/2014	02:57	105	105	88	0.09	0.18	0.09
11/11/2014	03:12	105	105	93	0.19	0.19	0.10
11/11/2014	03:27	102	101	87	0.24	0.49	0.21
11/11/2014	06:45	101	101	86	0.08	0.17	0.08
11/11/2014	07:44	103	103	88	0.19	0.26	0.17
11/11/2014	08:29	101	101	87	0.08	0.11	0.08

**TABLE 4.8 CTD: PEN\_OS8 LOCALLY TRIGGERED EVENTS**

Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
11/11/2014	08:38	107	106	90	0.24	0.36	0.21
11/11/2014	10:40	102	103	89	0.12	0.17	0.10
11/11/2014	12:32	100	99	87	0.04	0.13	0.07
11/11/2014	12:42	101	101	89	0.10	0.14	0.11
11/11/2014	14:38	103	103	91	0.11	0.20	0.12
11/11/2014	16:16	104	103	89	0.12	0.21	0.13
11/11/2014	16:40	103	103	91	0.11	0.19	0.09
11/11/2014	18:10	101	100	88	0.03	0.09	0.05
11/11/2014	18:42	101	101	88	0.12	0.41	0.13
11/11/2014	19:08	101	101	87	0.07	0.11	0.08
11/11/2014	21:36	103	104	88	0.26	0.28	0.19
11/11/2014	22:56	100	100	86	0.06	0.13	0.07
14/11/2014	21:39	104	104	91	0.23	0.27	0.17
14/11/2014	22:34	102	102	85	0.26	0.43	0.30
14/11/2014	23:00	102	103	89	0.09	0.15	0.11
15/11/2014	00:25	98	99	87	0.04	0.12	0.06
15/11/2014	02:36	104	103	88	0.07	0.22	0.10
15/11/2014	02:54	106	106	93	0.16	0.22	0.12
15/11/2014	08:29	101	102	87	0.07	0.12	0.10
15/11/2014	08:38	107	105	91	0.26	0.37	0.23
15/11/2014	09:46	103	102	88	0.24	0.27	0.19
15/11/2014	10:38	102	102	88	0.17	0.14	0.15
15/11/2014	12:40	103	103	90	0.13	0.18	0.11
15/11/2014	14:15	106	106	91	0.14	0.18	0.19
15/11/2014	14:24	98	99	87	0.04	0.11	0.05
15/11/2014	14:35	102	102	88	0.12	0.15	0.13
15/11/2014	14:44	105	104	92	0.12	0.15	0.12
15/11/2014	16:42	103	102	90	0.14	0.19	0.16
15/11/2014	18:48	102	102	90	0.10	0.17	0.11
16/11/2014	19:13	107	106	91	0.26	0.30	0.18
16/11/2014	19:32	101	97	85	0.08	0.26	0.09
16/11/2014	20:14	100	99	86	0.06	0.14	0.06
16/11/2014	20:34	101	101	88	0.07	0.12	0.09
16/11/2014	21:24	105	104	92	0.09	0.23	0.10
16/11/2014	22:36	104	104	88	0.07	0.18	0.11
16/11/2014	23:06	103	102	87	0.10	0.13	0.10
16/11/2014	23:17	103	104	87	0.17	0.20	0.15
17/11/2014	19:00	102	101	88	0.08	0.15	0.09
17/11/2014	19:03	105	103	86	0.07	0.20	0.10
17/11/2014	20:14	105	105	92	0.10	0.16	0.13
17/11/2014	21:43	104	103	87	0.21	0.32	0.18
17/11/2014	22:14	106	105	89	0.27	0.65	0.39
17/11/2014	23:01	100	100	86	0.07	0.13	0.08
17/11/2014	03:12	104	103	92	0.19	0.20	0.12
17/11/2014	03:49	106	105	90	0.17	0.29	0.24
17/11/2014	06:39	108	107	91	0.22	0.51	0.30
17/11/2014	06:42	100	99	86	0.08	0.14	0.08
17/11/2014	07:44	105	105	88	0.19	0.24	0.14
17/11/2014	08:33	101	100	87	0.07	0.14	0.11

**TABLE 4.8 CTD: PEN\_OS8 LOCALLY TRIGGERED EVENTS**

Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
17/11/2014	10:40	106	105	91	0.13	0.21	0.12
17/11/2014	11:51	104	104	90	0.01	0.01	0.01
17/11/2014	12:33	100	100	88	0.05	0.14	0.07
17/11/2014	12:43	102	102	89	0.12	0.21	0.12
17/11/2014	14:30	100	99	87	0.04	0.12	0.06
17/11/2014	14:37	103	103	90	0.14	0.15	0.19
17/11/2014	14:47	104	104	92	0.13	0.29	0.11
17/11/2014	16:35	100	99	87	0.07	0.19	0.13
17/11/2014	16:40	103	102	90	0.13	0.20	0.12
17/11/2014	18:40	105	104	90	0.09	0.16	0.13
18/11/2014	00:17	99	99	86	0.05	0.15	0.06
18/11/2014	00:57	106	105	90	0.09	0.22	0.10
18/11/2014	01:45	102	101	87	0.07	0.18	0.08
18/11/2014	03:08	105	105	89	0.08	0.19	0.09
18/11/2014	03:11	105	105	93	0.15	0.21	0.13
18/11/2014	04:42	105	105	91	0.38	0.43	0.27
18/11/2014	05:58	100	99	86	0.08	0.11	0.09
18/11/2014	07:44	104	103	87	0.21	0.31	0.14
18/11/2014	08:38	107	106	92	0.23	0.43	0.24
18/11/2014	10:40	102	101	86	0.16	0.17	0.17
18/11/2014	12:43	107	107	90	0.17	0.17	0.15
18/11/2014	14:30	100	99	87	0.04	0.13	0.07
18/11/2014	14:37	103	103	91	0.13	0.19	0.12
18/11/2014	14:47	105	102	89	0.14	0.21	0.11
18/11/2014	16:41	101	102	87	0.11	0.18	0.16
19/11/2014	19:01	100	101	87	0.08	0.13	0.09
22/11/2014	02:57	103	103	91	0.09	0.20	0.11
22/11/2014	08:48	110	109	95	0.24	0.37	0.23
22/11/2014	14:15	103	103	91	0.11	0.18	0.14
22/11/2014	14:43	103	103	91	0.12	0.17	0.12
24/11/2014	19:44	105	104	90	0.08	0.22	0.10
24/11/2014	03:13	109	109	97	0.16	0.26	0.13
24/11/2014	06:40	110	109	90	0.25	0.77	0.35
24/11/2014	10:47	103	103	90	0.11	0.22	0.12
24/11/2014	12:43	103	103	91	0.12	0.22	0.13
24/11/2014	14:50	104	104	91	0.12	0.25	0.12
24/11/2014	16:39	103	102	90	0.11	0.18	0.12
24/11/2014	18:43	104	105	92	0.11	0.23	0.14
25/11/2014	01:07	108	107	91	0.28	0.42	0.27
25/11/2014	03:17	105	105	92	0.14	0.22	0.12
25/11/2014	10:41	103	103	91	0.12	0.19	0.13
25/11/2014	14:37	104	105	91	0.15	0.19	0.16
25/11/2014	16:42	105	105	92	0.12	0.16	0.12
25/11/2014	18:41	104	104	91	0.13	0.18	0.15
27/11/2014	19:24	109	107	91	0.10	0.20	0.13
27/11/2014	23:29	104	104	90	0.23	0.43	0.27
28/11/2014	03:13	105	105	92	0.16	0.24	0.13
28/11/2014	10:40	103	103	90	0.10	0.16	0.12
28/11/2014	14:38	105	105	92	0.14	0.19	0.18

**TABLE 4.8 CTD: PEN\_OS8 LOCALLY TRIGGERED EVENTS**

Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
28/11/2014	14:47	105	105	92	0.12	0.21	0.13
28/11/2014	16:41	104	104	91	0.10	0.20	0.11
30/11/2014	16:42	105	105	90	0.08	0.12	0.08
19/11/2014	20:11	97	98	85	0.04	0.10	0.05
19/11/2014	20:20	101	100	88	0.09	0.13	0.07
19/11/2014	21:38	104	104	91	0.22	0.28	0.18
19/11/2014	22:54	102	103	88	0.08	0.15	0.09
20/11/2014	00:16	111	109	92	0.27	0.56	0.30
20/11/2014	01:22	106	103	88	0.09	0.26	0.11
20/11/2014	02:16	101	100	86	0.06	0.15	0.08
20/11/2014	03:11	106	106	94	0.16	0.21	0.13
20/11/2014	06:39	109	107	90	0.22	0.65	0.37
20/11/2014	07:43	105	104	86	0.21	0.29	0.16
20/11/2014	08:30	102	101	87	0.08	0.13	0.11
20/11/2014	08:49	108	107	91	0.22	0.38	0.23
20/11/2014	10:40	106	105	93	0.11	0.21	0.12
20/11/2014	12:33	99	98	86	0.04	0.12	0.05
20/11/2014	12:42	106	105	92	0.10	0.19	0.13
20/11/2014	14:14	101	101	85	0.18	0.29	0.17
20/11/2014	14:29	101	101	88	0.03	0.11	0.06
20/11/2014	14:37	104	103	89	0.15	0.19	0.13
20/11/2014	14:47	104	104	91	0.10	0.15	0.13
20/11/2014	16:33	99	98	87	0.05	0.11	0.05
20/11/2014	16:40	103	103	91	0.09	0.16	0.13
20/11/2014	18:40	105	104	91	0.11	0.18	0.13
02/11/2014	00:47	103	103	91	0.05	0.12	0.07
02/11/2014	11:04	104	103	89	0.08	0.15	0.07
02/11/2014	13:31	99	99	85	0.07	0.10	0.07
02/11/2014	13:38	100	99	86	0.04	0.10	0.06
02/11/2014	14:06	101	101	87	0.08	0.19	0.09
02/11/2014	14:40	102	102	90	0.12	0.17	0.13
02/11/2014	15:05	107	107	92	0.22	0.32	0.20
02/11/2014	15:10	102	101	88	0.03	0.08	0.05
02/11/2014	15:52	99	98	86	0.06	0.10	0.08
02/11/2014	16:43	100	100	86	0.06	0.12	0.11
02/11/2014	17:20	105	105	89	0.27	0.27	0.22
02/11/2014	18:16	101	102	87	0.10	0.18	0.09
02/11/2014	18:27	103	103	89	0.08	0.12	0.11
02/11/2014	19:13	110	110	93	0.25	0.30	0.18
02/11/2014	20:16	101	101	88	0.04	0.12	0.07
02/11/2014	20:34	101	101	86	0.08	0.12	0.07
02/11/2014	21:18	102	101	87	0.04	0.09	0.08
02/11/2014	21:26	109	106	92	0.09	0.21	0.09
09/11/2014	09:34	100	100	86	0.04	0.14	0.06
09/11/2014	09:47	101	102	86	0.05	0.09	0.07
09/11/2014	13:29	102	102	87	0.06	0.11	0.09
09/11/2014	13:39	100	100	86	0.04	0.13	0.08
09/11/2014	14:41	103	103	91	0.11	0.19	0.12
09/11/2014	15:51	100	100	86	0.08	0.12	0.08

**TABLE 4.8 CTD: PEN\_OS8 LOCALLY TRIGGERED EVENTS**

Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
09/11/2014	16:43	104	104	90	0.07	0.12	0.09
09/11/2014	17:20	104	103	88	0.27	0.29	0.24
09/11/2014	18:18	100	100	85	0.08	0.20	0.08
09/11/2014	18:29	99	99	86	0.07	0.11	0.08
09/11/2014	19:14	105	104	90	0.24	0.28	0.17
09/11/2014	20:18	102	102	88	0.06	0.15	0.07
09/11/2014	20:36	101	100	86	0.07	0.12	0.08
09/11/2014	21:24	103	103	90	0.09	0.26	0.08
09/11/2014	22:58	103	102	85	0.08	0.18	0.11
09/11/2014	23:06	102	102	87	0.07	0.11	0.08
12/11/2014	02:47	105	104	88	0.07	0.20	0.07
12/11/2014	02:58	103	102	88	0.06	0.12	0.12
12/11/2014	03:13	104	104	91	0.11	0.22	0.12
12/11/2014	06:02	106	102	89	0.08	0.14	0.10
12/11/2014	06:39	106	106	89	0.24	0.59	0.37
12/11/2014	06:44	100	100	87	0.07	0.18	0.08
12/11/2014	07:45	105	106	89	0.18	0.32	0.15
12/11/2014	09:11	107	107	91	0.30	0.43	0.28
01/11/2014	00:21	101	100	89	0.04	0.10	0.04
01/11/2014	01:00	110	108	89	0.08	0.19	0.09
01/11/2014	02:28	107	106	91	0.10	0.19	0.11
01/11/2014	02:53	105	105	93	0.11	0.17	0.14
01/11/2014	04:36	110	109	90	0.29	0.56	0.31
01/11/2014	06:05	101	101	88	0.07	0.13	0.10
01/11/2014	08:38	111	111	93	0.27	0.43	0.24
01/11/2014	08:51	99	98	86	0.08	0.15	0.08
01/11/2014	09:45	104	102	89	0.25	0.33	0.17
01/11/2014	10:37	104	103	88	0.15	0.20	0.16
01/11/2014	11:36	102	101	86	0.05	0.12	0.07
01/11/2014	12:40	105	104	91	0.11	0.18	0.14
01/11/2014	14:15	102	102	89	0.10	0.22	0.13
01/11/2014	14:19	112	102	87	0.04	0.15	0.07
01/11/2014	14:47	105	105	92	0.15	0.17	0.15
01/11/2014	16:46	104	102	88	0.15	0.16	0.14
01/11/2014	17:15	102	101	88	0.08	0.11	0.09
01/11/2014	18:49	105	104	91	0.10	0.19	0.14
01/11/2014	19:11	110	104	85	0.10	0.15	0.21
01/11/2014	20:59	103	102	88	0.10	0.15	0.09
01/11/2014	22:06	108	104	88	0.19	0.28	0.16
20/11/2014	19:01	101	101	87	0.08	0.13	0.10
20/11/2014	19:24	108	107	89	0.09	0.23	0.12
20/11/2014	21:08	100	99	88	0.07	0.17	0.08
20/11/2014	21:40	105	104	90	0.24	0.25	0.15
20/11/2014	22:56	100	101	86	0.07	0.14	0.08
20/11/2014	23:08	107	107	89	0.22	0.43	0.22
21/11/2014	00:03	109	107	90	0.25	0.62	0.34
21/11/2014	00:59	105	104	89	0.11	0.23	0.10
21/11/2014	02:21	106	104	88	0.08	0.24	0.10
21/11/2014	03:13	104	105	92	0.17	0.24	0.12

**TABLE 4.8 CTD: PEN\_OS8 LOCALLY TRIGGERED EVENTS**

Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
21/11/2014	06:39	108	109	91	0.24	0.50	0.31
21/11/2014	07:20	106	106	91	0.21	0.36	0.23
21/11/2014	07:44	102	102	87	0.19	0.29	0.13
21/11/2014	10:41	105	106	92	0.11	0.21	0.13
21/11/2014	12:42	104	104	91	0.14	0.17	0.25
21/11/2014	14:48	104	103	90	0.10	0.19	0.11
21/11/2014	16:41	105	104	92	0.10	0.18	0.11
21/11/2014	18:41	105	104	92	0.12	0.19	0.11
05/11/2014	10:40	103	103	90	0.11	0.19	0.11
05/11/2014	12:42	105	105	91	0.11	0.19	0.10
05/11/2014	14:30	100	99	86	0.04	0.11	0.06
05/11/2014	14:37	104	105	91	0.17	0.21	0.12
05/11/2014	14:47	101	102	89	0.10	0.18	0.12
05/11/2014	16:16	107	107	94	0.13	0.21	0.14
05/11/2014	16:32	98	98	86	0.08	0.11	0.05
05/11/2014	16:40	106	106	92	0.10	0.15	0.11
05/11/2014	18:12	99	99	86	0.04	0.09	0.08
05/11/2014	18:30	132	132	106	0.16	0.25	0.28
05/11/2014	18:40	105	105	92	0.11	0.17	0.12
05/11/2014	19:02	102	101	87	0.09	0.13	0.11
05/11/2014	20:07	114	113	88	0.03	0.11	0.05
05/11/2014	20:11	116	115	88	0.02	0.02	0.02
05/11/2014	21:35	102	102	88	0.27	0.30	0.19
05/11/2014	22:47	107	107	91	0.22	0.77	0.41
07/11/2014	10:41	103	102	89	0.09	0.17	0.09
07/11/2014	11:15	102	102	86	0.08	0.16	0.11
07/11/2014	12:34	100	100	87	0.03	0.10	0.06
07/11/2014	12:43	102	102	89	0.14	0.18	0.15
07/11/2014	14:38	102	101	89	0.14	0.18	0.13
07/11/2014	14:48	107	107	94	0.15	0.19	0.11
07/11/2014	16:18	102	101	86	0.20	0.30	0.20
07/11/2014	16:33	101	101	89	0.05	0.13	0.06
07/11/2014	16:41	104	104	92	0.10	0.17	0.11
07/11/2014	17:41	99	99	85	0.04	0.10	0.07
07/11/2014	18:40	102	102	89	0.11	0.15	0.12
07/11/2014	19:02	101	100	87	0.06	0.11	0.07
07/11/2014	21:07	99	99	86	0.08	0.17	0.07
07/11/2014	21:35	105	105	90	0.28	0.28	0.19
07/11/2014	22:58	103	103	89	0.10	0.13	0.11
26/11/2014	00:00	109	108	95	0.26	0.40	0.23
26/11/2014	01:14	109	107	91	0.11	0.20	0.10
26/11/2014	03:12	103	103	91	0.17	0.21	0.12
26/11/2014	06:42	110	108	91	0.25	0.79	0.35
26/11/2014	18:41	105	104	90	0.12	0.17	0.11
26/11/2014	22:26	108	107	93	0.22	0.53	0.23
27/11/2014	03:13	107	107	97	0.18	0.27	0.11
27/11/2014	04:08	107	106	91	0.33	0.50	0.40
27/11/2014	16:41	103	102	91	0.11	0.19	0.11
27/11/2014	18:41	103	103	90	0.10	0.16	0.11

**TABLE 4.8 CTD: PEN\_OS8 LOCALLY TRIGGERED EVENTS**



Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
10/11/2014	00:39	100	100	86	0.03	0.10	0.06
10/11/2014	01:46	104	105	89	0.08	0.20	0.10
10/11/2014	03:13	106	106	93	0.15	0.16	0.12
10/11/2014	03:44	107	107	91	0.24	0.49	0.26
10/11/2014	06:39	106	106	90	0.21	0.67	0.29
10/11/2014	08:29	100	99	86	0.06	0.13	0.10
10/11/2014	10:40	104	105	92	0.11	0.21	0.12
10/11/2014	12:32	105	101	90	0.04	0.13	0.06
10/11/2014	12:43	101	101	89	0.09	0.15	0.11
10/11/2014	14:29	114	107	88	0.05	0.11	0.05
10/11/2014	14:37	104	104	89	0.12	0.15	0.13
10/11/2014	14:47	103	102	91	0.10	0.14	0.10
10/11/2014	16:33	98	97	85	0.05	0.14	0.08
10/11/2014	16:40	106	106	94	0.11	0.18	0.11
10/11/2014	18:10	101	100	90	0.05	0.10	0.05
10/11/2014	18:41	106	106	92	0.10	0.16	0.11
10/11/2014	19:03	102	103	89	0.07	0.12	0.09
10/11/2014	21:05	101	100	86	0.07	0.14	0.08
10/11/2014	21:33	106	106	90	0.21	0.31	0.17
10/11/2014	22:56	102	102	88	0.06	0.12	0.08
08/11/2014	00:06	110	107	89	0.21	0.61	0.32
08/11/2014	00:29	102	102	91	0.04	0.11	0.06
08/11/2014	01:07	105	104	87	0.08	0.22	0.12
08/11/2014	02:53	106	105	93	0.14	0.18	0.11
08/11/2014	04:05	105	104	87	0.08	0.16	0.08
08/11/2014	06:20	102	100	87	0.07	0.10	0.08
08/11/2014	06:45	108	106	89	0.20	0.59	0.35
08/11/2014	08:51	107	106	91	0.22	0.47	0.24
08/11/2014	09:45	101	102	88	0.25	0.26	0.19
08/11/2014	10:36	105	104	92	0.16	0.17	0.17
08/11/2014	12:22	109	105	85	0.03	0.08	0.05
08/11/2014	12:41	115	109	85	0.07	0.13	0.09
08/11/2014	14:14	110	103	89	0.13	0.17	0.18
08/11/2014	14:19	101	100	87	0.07	0.22	0.11
08/11/2014	14:42	105	104	92	0.19	0.23	0.14
08/11/2014	15:13	103	102	86	0.09	0.34	0.11
08/11/2014	15:49	101	100	85	0.07	0.13	0.06
08/11/2014	16:38	106	101	90	0.04	0.09	0.08
08/11/2014	16:42	106	105	93	0.15	0.16	0.18
08/11/2014	18:47	104	104	91	0.10	0.18	0.12
08/11/2014	19:06	103	102	88	0.08	0.13	0.14
18/11/2014	19:47	105	105	93	0.09	0.25	0.08
18/11/2014	20:12	100	99	86	0.04	0.11	0.08
18/11/2014	21:43	102	102	88	0.19	0.28	0.16
18/11/2014	22:06	105	104	90	0.26	0.43	0.23
18/11/2014	22:56	100	99	87	0.07	0.13	0.09
19/11/2014	00:04	108	108	91	0.27	0.50	0.30
19/11/2014	00:18	98	97	85	0.04	0.14	0.07
19/11/2014	03:03	105	104	89	0.09	0.21	0.10

**TABLE 4.8 CTD: PEN\_OS8 LOCALLY TRIGGERED EVENTS**

Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
19/11/2014	03:16	105	105	93	0.18	0.24	0.13
19/11/2014	06:39	108	108	91	0.25	0.65	0.30
19/11/2014	06:43	99	99	85	0.10	0.19	0.08
19/11/2014	07:44	105	105	88	0.21	0.29	0.15
19/11/2014	08:30	102	100	86	0.06	0.10	0.09
19/11/2014	08:42	106	106	91	0.21	0.41	0.23
19/11/2014	10:40	105	105	91	0.12	0.21	0.13
19/11/2014	12:33	100	101	87	0.05	0.13	0.06
19/11/2014	12:42	105	105	92	0.11	0.20	0.13
19/11/2014	14:37	104	103	88	0.12	0.17	0.14
19/11/2014	14:47	104	103	91	0.12	0.20	0.12
19/11/2014	16:33	100	99	87	0.05	0.14	0.06
19/11/2014	16:40	107	106	92	0.11	0.23	0.13
19/11/2014	18:11	102	101	88	0.03	0.12	0.06
19/11/2014	18:41	108	108	98	0.12	0.20	0.12
29/11/2014	01:10	104	103	92	0.09	0.14	0.08
29/11/2014	14:43	103	103	90	0.11	0.20	0.12
29/11/2014	16:42	106	105	93	0.12	0.17	0.12
01/12/2014	12:43	106	106	93	0.15	0.18	0.12
01/12/2014	16:41	105	105	92	0.13	0.21	0.13
01/12/2014	18:41	106	106	92	0.10	0.18	0.13
01/12/2014	22:08	108	107	91	0.24	0.48	0.28
02/12/2014	03:12	105	105	93	0.14	0.22	0.14
02/12/2014	04:34	105	105	93	0.12	0.21	0.14
02/12/2014	05:34	105	104	92	0.11	0.18	0.12
02/12/2014	10:40	105	105	93	0.12	0.21	0.13
02/12/2014	12:47	105	104	92	0.13	0.20	0.12
02/12/2014	14:47	105	105	91	0.14	0.23	0.14
02/12/2014	16:40	104	104	91	0.11	0.18	0.14
02/12/2014	19:47	108	104	92	0.10	0.18	0.08
03/12/2014	00:01	109	107	92	0.28	0.34	0.31
03/12/2014	03:10	107	106	92	0.13	0.25	0.12
03/12/2014	05:39	105	104	91	0.11	0.23	0.13
03/12/2014	10:41	103	103	90	0.12	0.16	0.15
03/12/2014	14:52	103	102	90	0.10	0.22	0.14
03/12/2014	16:15	107	107	93	0.13	0.22	0.14
03/12/2014	16:40	103	103	91	0.11	0.19	0.14
03/12/2014	22:21	110	110	92	0.23	0.54	0.31
04/12/2014	04:32	104	103	91	0.11	0.21	0.13
04/12/2014	06:37	108	106	91	0.26	0.72	0.33
04/12/2014	08:40	108	105	91	0.34	0.44	0.26
04/12/2014	12:45	104	103	92	0.12	0.20	0.14
04/12/2014	14:48	104	104	91	0.19	0.24	0.14
05/12/2014	00:56	109	107	92	0.24	0.34	0.23
05/12/2014	03:12	104	104	92	0.14	0.20	0.13
05/12/2014	04:34	105	105	92	0.13	0.18	0.12
05/12/2014	05:40	104	102	90	0.15	0.21	0.14
05/12/2014	06:39	108	106	91	0.24	0.60	0.30
05/12/2014	10:40	106	105	91	0.15	0.24	0.13

**TABLE 4.8 CTD: PEN\_OS8 LOCALLY TRIGGERED EVENTS**

Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
05/12/2014	12:43	104	103	91	0.13	0.19	0.30
05/12/2014	14:47	105	104	92	0.15	0.24	0.11
05/12/2014	16:42	103	102	91	0.13	0.21	0.13
05/12/2014	18:41	104	104	92	0.14	0.20	0.16
06/12/2014	02:53	104	103	91	0.13	0.22	0.13
06/12/2014	05:27	106	105	91	0.23	0.32	0.22
07/12/2014	21:26	105	105	91	0.11	0.17	0.11
07/12/2014	23:21	109	108	92	0.22	0.38	0.27
08/12/2014	03:12	104	105	91	0.19	0.19	0.12
08/12/2014	12:42	104	104	92	0.12	0.16	0.14
08/12/2014	14:37	105	103	91	0.14	0.17	0.15
08/12/2014	18:41	104	104	92	0.14	0.19	0.13
08/12/2014	22:34	110	108	92	0.24	0.47	0.32
09/12/2014	01:01	108	106	98	0.09	0.13	0.09
09/12/2014	03:12	104	104	92	0.19	0.29	0.12
09/12/2014	10:40	109	106	93	0.13	0.22	0.13
09/12/2014	12:42	107	106	91	0.12	0.19	0.13
09/12/2014	14:47	111	105	91	0.11	0.19	0.14
09/12/2014	16:40	109	105	93	0.11	0.16	0.14
09/12/2014	18:42	104	103	90	0.12	0.18	0.12
09/12/2014	21:08	115	114	103	0.07	0.13	0.09
09/12/2014	23:22	108	109	92	0.22	0.53	0.32
10/12/2014	01:11	107	105	92	0.10	0.23	0.09
10/12/2014	03:12	105	104	92	0.20	0.18	0.16
10/12/2014	06:38	108	107	94	0.21	0.57	0.35
10/12/2014	10:40	104	104	91	0.12	0.27	0.13
10/12/2014	18:40	103	103	91	0.15	0.19	0.13
11/12/2014	21:45	105	103	90	0.05	0.09	0.06
12/12/2014	00:10	110	110	92	0.22	0.41	0.24
12/12/2014	00:17	108	99	87	0.05	0.11	0.05
12/12/2014	01:16	121	114	93	0.07	0.25	0.08
12/12/2014	03:12	105	106	93	0.22	0.23	0.12
12/12/2014	12:42	104	104	90	0.12	0.22	0.11
12/12/2014	14:37	104	102	90	0.11	0.15	0.12
12/12/2014	14:47	105	104	92	0.14	0.25	0.12
12/12/2014	16:40	105	105	92	0.17	0.22	0.13
12/12/2014	18:50	104	104	91	0.12	0.26	0.12
13/12/2014	01:04	108	108	92	0.11	0.25	0.14
13/12/2014	02:55	105	105	92	0.12	0.23	0.12
13/12/2014	06:44	112	112	93	0.23	0.62	0.31
13/12/2014	12:40	104	103	91	0.18	0.25	0.14
13/12/2014	18:47	105	104	92	0.16	0.23	0.11
14/12/2014	19:22	103	102	92	0.04	0.07	0.05
14/12/2014	21:24	105	105	92	0.14	0.23	0.12
14/12/2014	23:02	112	111	93	0.21	0.46	0.29
15/12/2014	01:14	111	108	96	0.10	0.23	0.09
15/12/2014	03:12	106	106	96	0.16	0.22	0.12
15/12/2014	06:40	110	110	91	0.21	0.51	0.31
15/12/2014	10:40	104	103	91	0.11	0.25	0.13

**TABLE 4.8 CTD: PEN\_OS8 LOCALLY TRIGGERED EVENTS**

Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
15/12/2014	14:48	103	104	91	0.11	0.21	0.12
15/12/2014	16:15	107	107	92	0.15	0.18	0.12
15/12/2014	18:43	102	102	90	0.20	0.19	0.34
16/12/2014	01:11	108	107	90	0.10	0.22	0.08
16/12/2014	01:11	108	107	90	0.10	0.22	0.08
16/12/2014	03:11	106	105	93	0.15	0.17	0.13
16/12/2014	03:11	106	105	93	0.15	0.17	0.13
16/12/2014	04:00	107	105	91	0.27	0.28	0.23
16/12/2014	04:00	107	105	91	0.27	0.28	0.23
16/12/2014	06:40	111	110	92	0.22	0.57	0.30
16/12/2014	06:40	111	110	92	0.22	0.57	0.30
16/12/2014	10:40	104	104	91	0.12	0.22	0.13
16/12/2014	10:40	104	104	91	0.12	0.22	0.13
16/12/2014	12:43	106	106	93	0.12	0.19	0.13
16/12/2014	12:43	106	106	93	0.12	0.19	0.13
16/12/2014	14:38	104	103	90	0.15	0.18	0.17
16/12/2014	14:38	104	103	90	0.15	0.18	0.17
16/12/2014	14:47	105	105	92	0.11	0.20	0.13
16/12/2014	14:47	105	105	92	0.11	0.20	0.13
16/12/2014	16:40	104	104	92	0.10	0.19	0.12
16/12/2014	16:40	104	104	92	0.10	0.19	0.12
16/12/2014	18:43	106	106	94	0.13	0.17	0.11
16/12/2014	18:43	106	106	94	0.13	0.17	0.11
16/12/2014	22:07	112	109	92	0.23	0.42	0.29
17/12/2014	00:07	110	108	91	0.22	0.42	0.25
17/12/2014	03:12	106	106	94	0.18	0.17	0.12
17/12/2014	10:40	106	106	92	0.11	0.17	0.13
17/12/2014	16:41	104	104	92	0.10	0.15	0.14
17/12/2014	18:40	105	105	90	0.11	0.18	0.12
17/12/2014	19:24	107	105	91	0.07	0.14	0.12
17/12/2014	23:07	110	109	92	0.23	0.42	0.29
18/12/2014	01:36	108	108	93	0.08	0.22	0.08
18/12/2014	03:11	105	104	91	0.16	0.23	0.13
18/12/2014	06:39	111	108	91	0.25	0.60	0.39
18/12/2014	10:40	106	106	92	0.15	0.18	0.14
18/12/2014	14:47	106	104	91	0.11	0.15	0.13
18/12/2014	16:41	105	104	93	0.13	0.20	0.13
18/12/2014	19:29	112	110	91	0.08	0.20	0.10
19/12/2014	00:04	114	112	94	0.24	0.41	0.27
19/12/2014	01:06	107	107	93	0.08	0.20	0.09
19/12/2014	03:12	106	105	94	0.18	0.21	0.12
19/12/2014	10:40	104	104	93	0.13	0.17	0.12
19/12/2014	12:42	103	103	90	0.12	0.21	0.12
19/12/2014	14:38	105	105	92	0.13	0.22	0.12
19/12/2014	14:47	104	104	92	0.11	0.17	0.15
19/12/2014	16:40	108	107	95	0.11	0.15	0.13
19/12/2014	19:33	107	104	91	0.09	0.20	0.11
19/12/2014	23:23	107	108	91	0.27	0.49	0.30
20/12/2014	01:04	106	104	91	0.06	0.15	0.06

**TABLE 4.8 CTD: PEN\_OS8 LOCALLY TRIGGERED EVENTS**

Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
20/12/2014	02:53	106	105	93	0.12	0.18	0.12
20/12/2014	06:44	109	108	91	0.23	0.66	0.32
20/12/2014	11:34	107	103	92	0.04	0.11	0.06
20/12/2014	12:40	104	104	91	0.13	0.21	0.14
20/12/2014	14:15	104	103	92	0.12	0.18	0.14
20/12/2014	14:33	103	103	91	0.10	0.23	0.12
20/12/2014	18:48	104	104	90	0.12	0.18	0.16
20/12/2014	22:03	105	105	90	0.28	0.24	0.19
21/12/2014	15:37	115	115	101	0.27	0.28	0.17
21/12/2014	19:51	104	104	93	0.06	0.13	0.08
22/12/2014	01:02	110	106	90	0.08	0.20	0.10
22/12/2014	03:12	105	105	93	0.14	0.14	0.15
22/12/2014	08:30	108	108	99	0.08	0.12	0.07
22/12/2014	10:40	107	107	94	0.14	0.27	0.13
22/12/2014	12:00	111	111	92	0.07	0.17	0.06
22/12/2014	12:42	104	104	91	0.12	0.21	0.12
22/12/2014	14:37	105	105	93	0.13	0.18	0.17
22/12/2014	14:47	105	104	93	0.10	0.17	0.13
22/12/2014	16:40	105	105	94	0.10	0.17	0.14
22/12/2014	18:40	105	104	92	0.12	0.21	0.12
22/12/2014	22:27	105	104	90	0.25	0.28	0.18
23/12/2014	01:04	105	104	91	0.05	0.14	0.07
23/12/2014	03:12	106	106	94	0.16	0.15	0.15
23/12/2014	04:19	109	108	91	0.27	0.33	0.30
23/12/2014	06:39	111	109	90	0.23	0.61	0.35
23/12/2014	14:38	105	106	91	0.14	0.24	0.13
23/12/2014	14:47	104	104	91	0.11	0.16	0.15
23/12/2014	19:41	106	104	91	0.09	0.19	0.08
24/12/2014	00:01	109	109	93	0.24	0.49	0.30
24/12/2014	00:16	103	102	91	0.04	0.13	0.05
24/12/2014	00:54	105	104	95	0.06	0.14	0.07
24/12/2014	03:12	106	106	93	0.16	0.22	0.14
24/12/2014	03:27	108	107	93	0.26	0.35	0.26
24/12/2014	10:41	106	106	94	0.12	0.24	0.12
24/12/2014	12:43	103	103	91	0.11	0.28	0.13
24/12/2014	14:37	106	106	94	0.15	0.23	0.15
24/12/2014	14:47	105	105	93	0.17	0.28	0.16
24/12/2014	16:40	105	105	93	0.12	0.21	0.12
24/12/2014	19:06	107	105	92	0.10	0.22	0.09
24/12/2014	21:58	110	110	91	0.25	0.45	0.30
27/12/2014	10:38	102	102	90	0.12	0.24	0.13
27/12/2014	10:46	104	104	91	0.31	0.26	0.17
27/12/2014	12:41	104	103	90	0.16	0.19	0.20
27/12/2014	14:44	105	105	93	0.15	0.28	0.13
27/12/2014	16:42	104	104	91	0.12	0.23	0.12
27/12/2014	18:49	104	103	90	0.16	0.27	0.22
28/12/2014	21:26	105	104	91	0.16	0.22	0.10
28/12/2014	23:46	107	106	91	0.19	0.56	0.33
29/12/2014	03:12	105	104	91	0.17	0.24	0.13

**TABLE 4.8 CTD: PEN\_OS8 LOCALLY TRIGGERED EVENTS**

Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
29/12/2014	06:39	111	111	92	0.26	0.59	0.32
29/12/2014	14:40	104	104	92	0.20	0.27	0.13
29/12/2014	14:51	105	105	92	0.12	0.21	0.13
29/12/2014	16:40	104	104	92	0.12	0.18	0.13
29/12/2014	18:40	105	105	91	0.12	0.23	0.14
29/12/2014	22:31	111	110	92	0.22	0.50	0.33
30/12/2014	00:59	106	105	90	0.09	0.17	0.08
30/12/2014	03:12	106	106	93	0.17	0.22	0.16
30/12/2014	04:14	108	107	92	0.27	0.36	0.25
30/12/2014	06:39	112	110	93	0.21	0.54	0.33
30/12/2014	12:42	104	104	92	0.12	0.23	0.12
30/12/2014	14:37	105	106	93	0.16	0.26	0.16
30/12/2014	14:47	105	105	92	0.13	0.39	0.19
30/12/2014	16:40	106	106	94	0.10	0.23	0.12
30/12/2014	17:43	108	103	91	0.03	0.10	0.05
30/12/2014	18:40	104	104	91	0.11	0.15	0.14
30/12/2014	19:08	103	103	90	0.10	0.19	0.08
30/12/2014	22:27	108	108	92	0.24	0.42	0.25
31/12/2014	01:07	108	104	92	0.09	0.14	0.07
31/12/2014	03:27	104	105	91	0.12	0.23	0.14
31/12/2014	03:53	110	110	93	0.30	0.48	0.33
31/12/2014	04:20	105	105	92	0.12	0.19	0.13
31/12/2014	10:41	104	104	91	0.13	0.18	0.15
31/12/2014	12:44	103	103	90	0.11	0.16	0.14
31/12/2014	14:37	105	104	92	0.18	0.23	0.16
31/12/2014	14:47	105	105	92	0.14	0.19	0.19
31/12/2014	16:40	105	104	92	0.12	0.19	0.12
31/12/2014	18:40	104	103	91	0.10	0.17	0.11
31/12/2014	19:24	107	104	92	0.09	0.16	0.08
31/12/2014	22:14	106	105	90	0.28	0.37	0.32
01/01/2015	08:38	108	105	93	0.17	0.23	0.17
01/01/2015	10:40	104	104	91	0.12	0.19	0.13
01/01/2015	12:42	105	104	92	0.10	0.15	0.14
01/01/2015	14:37	106	104	92	0.13	0.20	0.14
01/01/2015	16:42	106	104	90	0.12	0.19	0.12
01/01/2015	18:40	110	106	93	0.10	0.19	0.12
01/01/2015	22:04	112	111	93	0.22	0.41	0.29
02/01/2015	03:12	105	105	92	0.15	0.19	0.13
02/01/2015	04:17	110	109	90	0.22	0.60	0.31
02/01/2015	10:40	105	104	91	0.10	0.17	0.14
02/01/2015	12:43	104	104	91	0.13	0.23	0.12
02/01/2015	14:37	104	104	93	0.15	0.21	0.13
02/01/2015	14:47	104	103	91	0.13	0.26	0.14
02/01/2015	16:41	103	103	91	0.10	0.20	0.13
02/01/2015	18:41	118	118	108	0.17	0.25	0.17
02/01/2015	19:25	108	105	91	0.10	0.17	0.09
02/01/2015	21:59	106	106	91	0.31	0.52	0.36
03/01/2015	00:58	105	104	91	0.08	0.18	0.08
03/01/2015	02:53	105	104	91	0.12	0.21	0.14

**TABLE 4.8 CTD: PEN\_OS8 LOCALLY TRIGGERED EVENTS**

Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
03/01/2015	04:23	106	106	90	0.24	0.29	0.16
03/01/2015	12:41	104	105	92	0.14	0.26	0.14
03/01/2015	14:16	104	103	90	0.14	0.19	0.16
03/01/2015	14:41	106	106	94	0.13	0.16	0.17
03/01/2015	14:49	105	104	92	0.12	0.19	0.14
03/01/2015	18:51	106	106	92	0.13	0.25	0.14
04/01/2015	19:21	107	106	99	0.05	0.08	0.05
04/01/2015	21:26	107	107	92	0.13	0.16	0.13
04/01/2015	23:01	113	111	93	0.27	0.45	0.27
05/01/2015	03:12	106	106	96	0.18	0.24	0.13
05/01/2015	10:40	103	103	91	0.12	0.19	0.11
05/01/2015	12:42	104	104	92	0.11	0.19	0.14
05/01/2015	14:37	106	106	93	0.11	0.19	0.14
05/01/2015	14:47	106	105	93	0.17	0.22	0.14
05/01/2015	16:41	105	104	92	0.13	0.18	0.12
05/01/2015	18:44	106	106	93	0.11	0.18	0.13
06/01/2015	01:51	109	108	90	0.08	0.21	0.09
06/01/2015	03:13	106	105	92	0.15	0.19	0.14
06/01/2015	06:38	113	111	94	0.19	0.61	0.29
06/01/2015	10:40	106	106	95	0.19	0.20	0.16
06/01/2015	12:42	107	107	95	0.15	0.24	0.14
06/01/2015	14:42	105	105	93	0.12	0.21	0.12
06/01/2015	14:49	105	105	92	0.12	0.19	0.14
06/01/2015	16:40	106	105	93	0.15	0.20	0.13
06/01/2015	18:40	106	106	93	0.12	0.22	0.13
06/01/2015	19:24	103	103	91	0.08	0.16	0.06
06/01/2015	23:36	108	106	91	0.25	0.46	0.30
07/01/2015	01:06	104	103	91	0.08	0.14	0.08
07/01/2015	03:13	104	103	91	0.16	0.16	0.14
07/01/2015	10:40	109	105	92	0.12	0.21	0.12
07/01/2015	12:43	106	104	90	0.12	0.22	0.12
07/01/2015	14:42	105	105	90	0.12	0.15	0.12
07/01/2015	16:40	104	104	91	0.12	0.19	0.12
07/01/2015	18:40	104	104	91	0.13	0.22	0.12
08/01/2015	01:13	103	103	91	0.07	0.14	0.08
08/01/2015	01:36	106	105	91	0.09	0.22	0.10
08/01/2015	03:16	107	107	94	0.14	0.19	0.14
08/01/2015	06:40	112	110	90	0.22	0.59	0.29
08/01/2015	10:40	104	104	93	0.15	0.25	0.13
08/01/2015	12:42	104	104	91	0.14	0.25	0.12
08/01/2015	14:36	104	104	92	0.12	0.21	0.13
08/01/2015	14:47	105	104	92	0.11	0.22	0.11
08/01/2015	16:40	105	105	92	0.12	0.24	0.13
08/01/2015	18:40	105	104	92	0.10	0.20	0.12
08/01/2015	19:45	109	105	92	0.08	0.16	0.06
09/01/2015	00:07	105	104	90	0.21	0.40	0.25
09/01/2015	01:03	108	103	90	0.08	0.21	0.07
09/01/2015	03:12	104	104	90	0.15	0.16	0.13
09/01/2015	06:40	109	108	91	0.24	0.62	0.30

**TABLE 4.8 CTD: PEN\_OS8 LOCALLY TRIGGERED EVENTS**

Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
09/01/2015	10:40	104	103	91	0.11	0.24	0.14
09/01/2015	14:47	103	103	90	0.12	0.15	0.12
09/01/2015	16:40	105	103	91	0.10	0.16	0.12
09/01/2015	18:40	104	104	91	0.10	0.15	0.13
09/01/2015	23:19	111	110	92	0.23	0.37	0.24
10/01/2015	02:56	107	104	91	0.11	0.17	0.13
10/01/2015	10:37	104	103	91	0.13	0.23	0.14
10/01/2015	12:41	106	106	93	0.13	0.21	0.12
10/01/2015	14:15	104	104	91	0.16	0.22	0.18
10/01/2015	14:33	106	106	92	0.14	0.25	0.20
10/01/2015	14:43	104	104	91	0.10	0.21	0.12
10/01/2015	16:42	106	105	92	0.12	0.26	0.13
10/01/2015	18:56	105	104	93	0.10	0.16	0.13
11/01/2015	21:24	104	103	91	0.11	0.18	0.14
12/01/2015	03:12	106	105	92	0.16	0.24	0.15
12/01/2015	04:00	106	104	91	0.06	0.14	0.08
12/01/2015	06:19	112	106	86	0.03	0.07	0.07
12/01/2015	10:40	106	104	91	0.10	0.17	0.14
12/01/2015	14:48	105	105	92	0.13	0.21	0.13
12/01/2015	16:41	103	103	91	0.11	0.20	0.13
13/01/2015	00:14	112	111	93	0.24	0.41	0.24
13/01/2015	02:02	105	104	91	0.08	0.13	0.07
13/01/2015	06:39	113	111	91	0.24	0.66	0.29
13/01/2015	10:40	105	105	92	0.14	0.22	0.14
13/01/2015	12:42	103	103	90	0.12	0.24	0.11
13/01/2015	14:38	105	104	92	0.21	0.26	0.17
13/01/2015	14:47	106	105	93	0.12	0.23	0.12
13/01/2015	16:40	104	104	91	0.13	0.24	0.13
13/01/2015	18:40	103	103	91	0.12	0.19	0.12
13/01/2015	21:39	105	104	90	0.09	0.16	0.07
14/01/2015	00:52	112	110	93	0.20	0.41	0.28
14/01/2015	00:59	104	104	91	0.08	0.14	0.07
14/01/2015	03:12	108	108	95	0.17	0.17	0.13
14/01/2015	06:40	112	109	90	0.20	0.62	0.32
14/01/2015	10:40	104	104	91	0.12	0.20	0.14
14/01/2015	12:42	103	103	90	0.11	0.19	0.14
14/01/2015	14:47	113	103	90	0.12	0.20	0.13
14/01/2015	18:40	109	107	91	0.10	0.19	0.13
15/01/2015	19:27	106	104	91	0.06	0.13	0.05
16/01/2015	12:42	104	104	92	0.12	0.26	0.12
16/01/2015	14:47	105	104	93	0.22	0.26	0.15
16/01/2015	16:41	105	105	93	0.14	0.25	0.12
16/01/2015	18:40	105	105	92	0.12	0.21	0.13
17/01/2015	01:00	110	109	90	0.21	0.45	0.18
17/01/2015	02:53	104	104	91	0.17	0.23	0.12
17/01/2015	07:05	112	110	91	0.28	0.39	0.23
17/01/2015	09:45	104	104	88	0.29	0.29	0.17
17/01/2015	12:45	106	105	92	0.11	0.23	0.15
17/01/2015	18:46	107	107	94	0.15	0.26	0.12

**TABLE 4.8 CTD: PEN\_OS8 LOCALLY TRIGGERED EVENTS**



Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
18/01/2015	14:21	108	107	91	0.29	0.33	0.23
18/01/2015	14:36	104	105	91	0.11	0.23	0.12
18/01/2015	16:22	108	108	91	0.30	0.32	0.22
18/01/2015	19:09	106	106	92	0.34	0.32	0.20
19/01/2015	03:12	104	103	92	0.18	0.25	0.14
19/01/2015	12:43	104	105	92	0.14	0.32	0.12
19/01/2015	14:47	104	103	91	0.14	0.21	0.15
19/01/2015	16:49	105	104	91	0.12	0.27	0.13
19/01/2015	18:47	106	106	93	0.15	0.24	0.12
19/01/2015	20:23	105	104	93	0.13	0.24	0.14
20/01/2015	00:37	108	106	90	0.22	0.50	0.34
20/01/2015	01:00	112	107	95	0.05	0.11	0.06
20/01/2015	05:12	106	105	93	0.12	0.22	0.11
20/01/2015	10:40	105	104	92	0.13	0.21	0.13
20/01/2015	12:44	105	105	94	0.14	0.22	0.12
20/01/2015	14:45	105	105	91	0.15	0.18	0.16
20/01/2015	14:53	106	107	92	0.11	0.18	0.15
20/01/2015	16:40	104	104	92	0.15	0.19	0.13
20/01/2015	18:40	105	104	92	0.12	0.16	0.13
21/01/2015	03:12	105	104	92	0.19	0.19	0.13
21/01/2015	10:40	105	104	93	0.19	0.24	0.15
21/01/2015	12:43	105	105	93	0.13	0.25	0.14
21/01/2015	14:37	104	103	91	0.13	0.23	0.16
21/01/2015	14:47	106	106	94	0.11	0.16	0.15
21/01/2015	16:34	102	102	90	0.10	0.15	0.15
21/01/2015	16:39	107	106	94	0.14	0.21	0.13
21/01/2015	18:40	106	106	93	0.13	0.21	0.12
21/01/2015	19:24	113	108	98	0.06	0.12	0.07
21/01/2015	21:32	105	105	91	0.33	0.39	0.19
21/01/2015	23:24	105	105	90	0.24	0.49	0.25
22/01/2015	01:41	105	104	92	0.07	0.14	0.09
22/01/2015	03:13	107	106	94	0.16	0.26	0.17
22/01/2015	10:40	104	104	91	0.12	0.26	0.12
22/01/2015	12:42	104	103	92	0.12	0.20	0.15
22/01/2015	14:38	103	104	92	0.13	0.23	0.14
22/01/2015	16:39	103	102	91	0.11	0.26	0.13
22/01/2015	17:27	100	100	90	0.07	0.15	0.07
22/01/2015	18:41	105	104	92	0.12	0.24	0.15
22/01/2015	20:36	106	103	90	0.08	0.15	0.06
23/01/2015	00:52	110	108	94	0.28	0.41	0.33
23/01/2015	03:12	105	105	92	0.17	0.26	0.15
23/01/2015	06:47	105	104	91	0.20	0.27	0.17
23/01/2015	14:37	105	105	91	0.14	0.23	0.13
23/01/2015	14:47	107	107	94	0.14	0.19	0.13
23/01/2015	16:40	104	103	90	0.09	0.16	0.15
25/01/2015	19:28	104	104	90	0.07	0.13	0.08
25/01/2015	23:03	106	105	91	0.25	0.43	0.28
26/01/2015	03:12	106	107	94	0.15	0.24	0.14
26/01/2015	10:40	105	105	94	0.10	0.18	0.13

**TABLE 4.8 CTD: PEN\_OS8 LOCALLY TRIGGERED EVENTS**

Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
26/01/2015	12:43	104	104	91	0.13	0.21	0.13
26/01/2015	14:37	104	103	90	0.16	0.17	0.16
26/01/2015	14:48	105	106	93	0.16	0.22	0.13
26/01/2015	16:40	106	106	93	0.11	0.18	0.14
26/01/2015	18:41	103	103	90	0.10	0.18	0.16
26/01/2015	22:27	109	108	91	0.22	0.39	0.25
27/01/2015	01:00	107	105	90	0.09	0.18	0.11
27/01/2015	02:04	110	107	97	0.04	0.10	0.08
27/01/2015	03:12	107	107	94	0.16	0.25	0.13
27/01/2015	04:31	105	104	93	0.16	0.25	0.13
27/01/2015	04:55	104	104	92	0.12	0.23	0.12
27/01/2015	10:41	103	103	90	0.10	0.16	0.15
27/01/2015	12:42	103	103	90	0.13	0.21	0.14
27/01/2015	14:47	106	106	96	0.12	0.21	0.13
27/01/2015	16:41	103	102	90	0.11	0.17	0.16
27/01/2015	17:49	111	110	94	0.03	0.07	0.05
27/01/2015	20:28	107	107	90	0.09	0.16	0.09
27/01/2015	22:09	113	113	98	0.26	0.47	0.25
28/01/2015	00:19	112	110	90	0.23	0.50	0.26
28/01/2015	04:31	103	104	90	0.11	0.16	0.12
28/01/2015	04:57	105	104	91	0.12	0.17	0.13
28/01/2015	06:38	113	110	90	0.23	0.59	0.37
28/01/2015	10:39	107	106	94	0.12	0.23	0.13
28/01/2015	12:32	105	105	91	0.04	0.09	0.05
28/01/2015	14:38	105	104	92	0.10	0.23	0.13
28/01/2015	14:49	103	102	90	0.09	0.13	0.11
28/01/2015	16:41	108	108	95	0.12	0.18	0.14
28/01/2015	18:40	103	103	90	0.11	0.12	0.16
28/01/2015	19:02	103	103	90	0.07	0.12	0.10
28/01/2015	19:25	108	104	92	0.07	0.10	0.07
28/01/2015	20:17	103	103	90	0.12	0.20	0.16
28/01/2015	21:36	103	104	90	0.22	0.28	0.15
28/01/2015	23:25	108	107	91	0.23	0.45	0.26
29/01/2015	00:59	110	107	93	0.07	0.15	0.13
29/01/2015	01:46	111	108	98	0.05	0.11	0.07
29/01/2015	03:12	104	104	91	0.13	0.20	0.14
29/01/2015	04:28	105	105	92	0.15	0.28	0.12
29/01/2015	08:47	102	101	90	0.04	0.09	0.05
29/01/2015	12:43	105	106	91	0.17	0.13	0.20
29/01/2015	18:40	104	105	91	0.16	0.23	0.19
29/01/2015	20:34	108	106	92	0.09	0.16	0.06
30/01/2015	00:15	110	108	91	0.24	0.51	0.30
30/01/2015	03:14	109	104	92	0.11	0.19	0.14
30/01/2015	04:32	106	103	92	0.12	0.23	0.12
30/01/2015	04:56	104	104	91	0.13	0.26	0.12
30/01/2015	10:40	104	104	91	0.11	0.18	0.13
30/01/2015	13:40	147	148	121	0.01	0.02	0.02
30/01/2015	13:41	99	98	93	0.01	0.01	0.01
30/01/2015	13:42	99	98	93	0.00	0.00	0.00

**TABLE 4.8 CTD: PEN\_OS8 LOCALLY TRIGGERED EVENTS**

Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
30/01/2015	13:43	103	100	93	0.03	0.06	0.05
30/01/2015	13:43	123	122	95	0.01	0.02	0.02
30/01/2015	14:15	106	105	90	0.16	0.18	0.20
30/01/2015	14:37	106	105	93	0.12	0.25	0.13
30/01/2015	14:48	105	105	91	0.10	0.17	0.14
30/01/2015	16:40	106	106	92	0.12	0.27	0.13
30/01/2015	18:40	104	103	91	0.12	0.25	0.12
30/01/2015	20:36	107	105	94	0.08	0.17	0.16
31/01/2015	00:14	105	103	90	0.20	0.24	0.18
31/01/2015	01:39	112	109	92	0.09	0.21	0.09
31/01/2015	05:14	104	103	90	0.14	0.18	0.19
31/01/2015	05:27	110	108	91	0.22	0.62	0.33
31/01/2015	10:36	107	106	92	0.16	0.18	0.18
31/01/2015	12:40	104	103	91	0.15	0.23	0.11
31/01/2015	14:35	102	101	90	0.15	0.16	0.16
31/01/2015	16:41	103	103	90	0.16	0.17	0.19
31/01/2015	18:46	103	103	90	0.13	0.25	0.11
01/02/2015	14:35	105	105	93	0.14	0.26	0.15
01/02/2015	17:07	103	103	91	0.26	0.25	0.16
01/02/2015	21:25	106	106	91	0.14	0.21	0.13
02/02/2015	03:12	106	105	95	0.16	0.25	0.15
02/02/2015	12:43	103	103	91	0.12	0.27	0.13
02/02/2015	16:43	103	103	90	0.11	0.23	0.12
02/02/2015	18:42	104	104	91	0.11	0.15	0.15
03/02/2015	00:45	112	111	92	0.26	0.43	0.22
03/02/2015	03:13	105	104	92	0.21	0.23	0.15
03/02/2015	06:39	112	111	90	0.27	0.62	0.36
03/02/2015	12:44	103	103	90	0.12	0.21	0.14
03/02/2015	16:41	105	105	92	0.13	0.23	0.15
03/02/2015	18:42	104	104	91	0.14	0.26	0.12
03/02/2015	20:53	106	104	91	0.09	0.18	0.08
03/02/2015	22:03	109	108	91	0.29	0.38	0.25
04/02/2015	00:16	112	111	91	0.24	0.43	0.26
04/02/2015	01:12	104	104	90	0.09	0.17	0.08
04/02/2015	03:12	105	105	93	0.16	0.23	0.15
04/02/2015	10:41	103	103	90	0.14	0.26	0.14
04/02/2015	14:47	104	103	92	0.14	0.25	0.12
04/02/2015	16:40	103	103	91	0.12	0.24	0.13
04/02/2015	18:40	106	106	94	0.14	0.25	0.13
04/02/2015	21:35	105	104	91	0.25	0.28	0.15
05/02/2015	00:12	108	108	90	0.27	0.59	0.28
05/02/2015	01:13	109	108	97	0.09	0.14	0.10
05/02/2015	01:45	104	102	91	0.07	0.15	0.08
05/02/2015	03:12	104	104	90	0.16	0.19	0.15
05/02/2015	06:40	105	106	90	0.25	0.31	0.19
05/02/2015	07:44	102	102	86	0.12	0.18	0.12
05/02/2015	10:40	104	103	91	0.14	0.27	0.15
05/02/2015	12:42	108	108	98	0.16	0.24	0.15
05/02/2015	14:37	105	104	92	0.14	0.17	0.19

**TABLE 4.8 CTD: PEN\_OS8 LOCALLY TRIGGERED EVENTS**

Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
05/02/2015	14:47	105	105	92	0.15	0.21	0.18
05/02/2015	16:40	105	105	92	0.13	0.23	0.14
05/02/2015	18:40	105	105	93	0.15	0.18	0.14
06/02/2015	00:11	112	111	92	0.22	0.48	0.27
06/02/2015	01:10	109	105	93	0.08	0.13	0.08
06/02/2015	03:13	108	108	94	0.21	0.25	0.17
06/02/2015	10:40	105	105	92	0.13	0.19	0.15
06/02/2015	13:15	104	104	91	0.13	0.26	0.14
06/02/2015	14:47	105	105	93	0.15	0.26	0.14
06/02/2015	16:40	106	105	92	0.16	0.29	0.15
06/02/2015	19:30	110	105	95	0.10	0.19	0.10
07/02/2015	01:04	110	104	92	0.07	0.15	0.08
07/02/2015	01:39	103	102	90	0.05	0.11	0.07
07/02/2015	02:52	104	104	92	0.12	0.23	0.15
07/02/2015	04:58	106	106	91	0.28	0.66	0.30
07/02/2015	12:12	106	102	91	0.04	0.11	0.05
07/02/2015	12:41	103	103	91	0.17	0.23	0.19
07/02/2015	14:14	103	103	90	0.15	0.19	0.18
07/02/2015	14:33	103	104	90	0.17	0.19	0.14
07/02/2015	14:42	104	104	91	0.12	0.26	0.15
07/02/2015	18:48	105	105	92	0.16	0.24	0.18
08/02/2015	13:28	107	107	91	0.08	0.17	0.08
08/02/2015	14:34	105	105	92	0.13	0.17	0.15
08/02/2015	21:25	104	105	92	0.12	0.18	0.14
09/02/2015	03:13	105	104	92	0.19	0.23	0.13
09/02/2015	04:25	104	103	90	0.09	0.16	0.08
09/02/2015	14:48	103	103	91	0.12	0.22	0.14
09/02/2015	16:33	107	101	89	0.05	0.09	0.08
09/02/2015	16:40	104	104	91	0.11	0.21	0.16
09/02/2015	18:41	104	105	91	0.11	0.23	0.14
09/02/2015	23:53	105	104	90	0.27	0.30	0.18
10/02/2015	03:14	104	103	91	0.21	0.18	0.15
10/02/2015	06:40	113	110	91	0.23	0.64	0.37
10/02/2015	10:41	103	103	90	0.13	0.22	0.14
10/02/2015	14:47	106	105	93	0.13	0.23	0.19
10/02/2015	16:41	104	104	91	0.14	0.22	0.14
10/02/2015	18:41	105	105	92	0.12	0.24	0.14
10/02/2015	20:03	106	105	91	0.09	0.15	0.08
10/02/2015	21:33	106	106	93	0.30	0.33	0.21
10/02/2015	22:03	106	105	91	0.23	0.33	0.21
11/02/2015	00:04	105	104	91	0.23	0.30	0.19
11/02/2015	01:25	107	104	91	0.07	0.15	0.08
11/02/2015	03:13	105	104	92	0.19	0.24	0.15
11/02/2015	06:40	109	108	91	0.23	0.70	0.40
11/02/2015	10:40	103	103	90	0.11	0.20	0.15
11/02/2015	14:37	103	104	91	0.14	0.20	0.19
11/02/2015	14:47	103	102	91	0.11	0.20	0.15
11/02/2015	23:22	105	106	91	0.20	0.28	0.18
12/02/2015	00:56	108	105	91	0.10	0.16	0.08

**TABLE 4.8 CTD: PEN\_OS8 LOCALLY TRIGGERED EVENTS**

Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
12/02/2015	01:36	103	102	91	0.09	0.14	0.09
12/02/2015	03:13	104	103	91	0.17	0.21	0.16
12/02/2015	06:39	105	104	90	0.27	0.32	0.17
12/02/2015	10:40	103	102	90	0.11	0.21	0.15
12/02/2015	14:37	105	103	92	0.12	0.20	0.16
12/02/2015	14:47	104	104	92	0.12	0.20	0.16
12/02/2015	19:23	110	105	93	0.08	0.15	0.07
13/02/2015	00:48	107	103	91	0.07	0.13	0.07
13/02/2015	03:13	104	105	92	0.22	0.22	0.13
13/02/2015	07:21	108	108	94	0.27	0.29	0.22
13/02/2015	10:40	103	103	92	0.15	0.22	0.14
13/02/2015	14:49	103	103	90	0.12	0.18	0.15
13/02/2015	16:41	104	103	91	0.12	0.21	0.13
13/02/2015	18:40	103	103	91	0.12	0.23	0.14
14/02/2015	00:07	105	105	90	0.18	0.29	0.15
14/02/2015	02:55	103	104	90	0.11	0.20	0.12
14/02/2015	09:45	106	105	92	0.28	0.29	0.20
14/02/2015	11:32	100	99	86	0.05	0.08	0.05
14/02/2015	12:12	107	102	92	0.04	0.08	0.07
14/02/2015	12:40	104	105	92	0.12	0.20	0.15
14/02/2015	14:43	111	111	98	0.12	0.17	0.14
14/02/2015	18:47	105	105	91	0.11	0.20	0.14
16/02/2015	03:57	104	104	90	0.07	0.13	0.07
16/02/2015	10:40	103	103	91	0.12	0.27	0.14
16/02/2015	12:43	104	103	90	0.12	0.21	0.13
16/02/2015	14:37	104	104	91	0.16	0.18	0.13
16/02/2015	14:49	104	104	92	0.13	0.22	0.12
16/02/2015	16:40	105	104	93	0.11	0.23	0.14
16/02/2015	18:40	103	103	91	0.14	0.21	0.16
16/02/2015	19:05	112	107	96	0.06	0.11	0.05
16/02/2015	19:46	105	104	91	0.06	0.13	0.08
16/02/2015	20:39	108	107	95	0.22	0.34	0.23
17/02/2015	01:13	108	104	93	0.08	0.13	0.07
17/02/2015	03:13	107	107	93	0.18	0.26	0.14
17/02/2015	10:40	105	104	91	0.13	0.22	0.15
17/02/2015	12:52	103	102	91	0.10	0.16	0.17
17/02/2015	14:37	109	108	95	0.17	0.19	0.17
17/02/2015	14:51	105	104	92	0.11	0.22	0.14
17/02/2015	16:40	105	106	93	0.13	0.22	0.14
17/02/2015	19:39	107	105	91	0.14	0.12	0.09
17/02/2015	22:12	107	107	91	0.28	0.37	0.28
18/02/2015	00:04	104	104	91	0.21	0.30	0.17
18/02/2015	01:26	105	103	94	0.03	0.08	0.03
18/02/2015	03:13	105	105	92	0.15	0.22	0.17
18/02/2015	10:40	104	104	91	0.11	0.23	0.16
18/02/2015	14:38	103	103	90	0.11	0.16	0.18
18/02/2015	16:40	105	104	91	0.11	0.20	0.14
18/02/2015	20:16	108	103	92	0.06	0.13	0.08
18/02/2015	23:46	106	105	91	0.20	0.28	0.18

**TABLE 4.8 CTD: PEN\_OS8 LOCALLY TRIGGERED EVENTS**

Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
19/02/2015	01:24	106	105	95	0.04	0.09	0.06
19/02/2015	06:39	105	104	90	0.22	0.25	0.17
19/02/2015	12:43	104	104	92	0.12	0.20	0.12
19/02/2015	14:51	106	105	92	0.12	0.22	0.15
20/02/2015	00:07	111	109	91	0.23	0.46	0.27
20/02/2015	03:13	106	105	93	0.18	0.24	0.14
20/02/2015	10:41	104	103	91	0.12	0.20	0.14
20/02/2015	12:43	104	104	91	0.11	0.22	0.13
20/02/2015	14:47	104	104	91	0.12	0.20	0.16
20/02/2015	16:41	105	105	92	0.11	0.30	0.17
20/02/2015	18:40	104	104	91	0.13	0.22	0.16
20/02/2015	20:22	104	103	90	0.11	0.18	0.07
21/02/2015	00:05	108	105	91	0.21	0.26	0.16
21/02/2015	01:00	109	105	93	0.07	0.15	0.07
21/02/2015	01:44	107	106	96	0.05	0.10	0.09
21/02/2015	02:54	104	105	90	0.12	0.24	0.14
21/02/2015	12:41	103	103	92	0.12	0.22	0.13
21/02/2015	14:34	103	103	91	0.19	0.20	0.19
21/02/2015	14:42	104	104	92	0.11	0.24	0.15
21/02/2015	18:47	105	105	93	0.13	0.25	0.14
22/02/2015	17:05	106	106	93	0.34	0.27	0.21
22/02/2015	23:25	106	105	91	0.23	0.42	0.24
23/02/2015	01:21	105	103	90	0.08	0.25	0.09
23/02/2015	03:12	103	103	90	0.16	0.24	0.12
23/02/2015	06:44	108	107	90	0.21	0.60	0.32
23/02/2015	08:30	103	102	91	0.08	0.10	0.09
23/02/2015	10:41	106	106	95	0.11	0.21	0.13
23/02/2015	14:47	109	105	91	0.11	0.21	0.14
23/02/2015	14:55	105	102	90	0.10	0.19	0.14
23/02/2015	16:40	104	104	92	0.12	0.20	0.13
24/02/2015	00:04	108	107	92	0.28	0.45	0.21
24/02/2015	01:14	106	105	92	0.09	0.21	0.10
24/02/2015	02:19	106	105	93	0.08	0.14	0.11
24/02/2015	03:12	102	102	90	0.10	0.24	0.14
24/02/2015	03:46	102	101	90	0.04	0.09	0.05
24/02/2015	04:31	105	105	92	0.14	0.23	0.15
24/02/2015	05:36	103	103	91	0.16	0.23	0.15
24/02/2015	10:41	104	104	91	0.13	0.23	0.15
24/02/2015	12:43	103	103	90	0.12	0.16	0.15
24/02/2015	14:37	104	103	90	0.14	0.18	0.18
24/02/2015	16:41	104	103	91	0.12	0.19	0.14
24/02/2015	20:21	106	105	96	0.05	0.07	0.05
24/02/2015	22:11	105	104	91	0.20	0.43	0.27
25/02/2015	00:00	107	105	90	0.22	0.42	0.27
25/02/2015	03:12	104	104	91	0.11	0.23	0.13
25/02/2015	04:24	105	104	91	0.12	0.23	0.13
25/02/2015	05:41	104	105	92	0.16	0.21	0.13
25/02/2015	06:38	107	107	90	0.21	0.56	0.31
25/02/2015	10:41	104	103	91	0.13	0.22	0.14

**TABLE 4.8 CTD: PEN\_OS8 LOCALLY TRIGGERED EVENTS**

Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
25/02/2015	12:42	104	104	91	0.12	0.26	0.20
25/02/2015	14:37	105	105	93	0.13	0.22	0.14
25/02/2015	16:41	105	105	93	0.13	0.22	0.15
25/02/2015	18:40	104	103	92	0.10	0.17	0.15
25/02/2015	19:23	104	105	91	0.08	0.14	0.09
25/02/2015	22:40	105	104	90	0.25	0.32	0.25
26/02/2015	01:07	104	104	91	0.09	0.19	0.07
26/02/2015	03:12	103	103	90	0.10	0.23	0.13
26/02/2015	04:24	105	105	90	0.10	0.22	0.13
26/02/2015	05:33	103	103	90	0.12	0.22	0.12
26/02/2015	12:43	105	104	91	0.12	0.21	0.13
26/02/2015	14:38	111	104	91	0.15	0.18	0.15
26/02/2015	14:49	105	104	91	0.11	0.24	0.14
26/02/2015	16:41	103	103	92	0.11	0.21	0.13
26/02/2015	18:41	104	104	91	0.12	0.18	0.14
26/02/2015	22:46	103	103	90	0.01	0.02	0.01
27/02/2015	01:21	109	105	92	0.08	0.15	0.06
27/02/2015	03:11	104	103	91	0.13	0.22	0.15
27/02/2015	04:30	104	103	91	0.12	0.21	0.15
27/02/2015	12:42	106	105	92	0.11	0.24	0.14
27/02/2015	14:37	105	104	90	0.11	0.17	0.16
27/02/2015	14:47	105	105	92	0.14	0.22	0.13
27/02/2015	18:43	105	104	92	0.11	0.24	0.16
04/03/2015	14:37	106	105	93	0.14	0.23	0.14
04/03/2015	14:47	103	103	90	0.12	0.21	0.12
04/03/2015	18:40	105	105	92	0.11	0.23	0.15
04/03/2015	20:19	104	103	92	0.15	0.22	0.15
05/03/2015	12:42	103	103	91	0.12	0.17	0.18
05/03/2015	14:37	104	104	91	0.19	0.21	0.17
05/03/2015	14:47	106	106	92	0.11	0.20	0.13
05/03/2015	16:41	103	103	91	0.12	0.21	0.14
05/03/2015	18:40	104	104	91	0.12	0.22	0.15
05/03/2015	19:43	107	105	93	0.07	0.14	0.06
05/03/2015	22:08	108	107	92	0.20	0.45	0.26
06/03/2015	00:05	107	107	92	0.21	0.26	0.15
06/03/2015	01:08	108	103	91	0.09	0.11	0.06
06/03/2015	03:12	107	108	93	0.16	0.24	0.15
06/03/2015	06:38	111	109	91	0.23	0.67	0.33
06/03/2015	10:41	103	103	90	0.11	0.22	0.15
06/03/2015	12:19	105	105	91	0.14	0.15	0.19
06/03/2015	12:43	103	103	90	0.11	0.20	0.25
06/03/2015	14:48	105	104	91	0.15	0.20	0.14
06/03/2015	16:42	104	103	91	0.12	0.23	0.18
06/03/2015	18:40	104	104	91	0.10	0.16	0.14
06/03/2015	20:55	108	105	92	0.09	0.18	0.09
07/03/2015	00:20	104	104	90	0.18	0.27	0.17
07/03/2015	01:03	106	103	91	0.07	0.13	0.08
07/03/2015	01:40	109	108	100	0.06	0.11	0.06
07/03/2015	02:53	104	103	90	0.13	0.17	0.17

**TABLE 4.8 CTD: PEN\_OS8 LOCALLY TRIGGERED EVENTS**

Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
07/03/2015	11:34	111	105	95	0.04	0.08	0.05
07/03/2015	12:45	104	102	90	0.12	0.17	0.15
07/03/2015	14:14	104	103	91	0.17	0.24	0.16
07/03/2015	14:33	104	103	91	0.16	0.19	0.15
07/03/2015	18:46	105	103	90	0.12	0.18	0.15
09/03/2015	06:39	111	108	90	0.22	0.61	0.36
09/03/2015	10:41	104	103	91	0.11	0.23	0.15
09/03/2015	12:42	106	103	91	0.13	0.24	0.14
09/03/2015	14:48	106	105	93	0.11	0.18	0.15
09/03/2015	16:40	105	104	92	0.12	0.24	0.13
09/03/2015	18:41	104	104	91	0.12	0.18	0.15
09/03/2015	19:01	108	104	91	0.06	0.14	0.08
10/03/2015	01:02	110	109	94	0.09	0.19	0.10
10/03/2015	03:12	105	105	93	0.16	0.25	0.13
10/03/2015	06:40	110	108	91	0.26	0.68	0.35
10/03/2015	12:43	105	104	91	0.11	0.21	0.15
10/03/2015	14:38	104	105	92	0.12	0.19	0.15
10/03/2015	14:47	104	103	91	0.12	0.24	0.15
10/03/2015	16:41	105	104	92	0.12	0.18	0.13
10/03/2015	18:40	104	104	91	0.11	0.15	0.15
10/03/2015	20:21	107	102	95	0.05	0.11	0.06
10/03/2015	21:09	108	107	92	0.27	0.38	0.25
11/03/2015	00:07	110	108	92	0.23	0.61	0.36
11/03/2015	01:31	106	102	90	0.07	0.11	0.06
11/03/2015	03:12	104	104	91	0.16	0.17	0.16
11/03/2015	06:40	105	105	90	0.23	0.29	0.21
11/03/2015	12:41	104	104	91	0.12	0.22	0.14
11/03/2015	14:50	107	107	96	0.13	0.18	0.15
11/03/2015	16:42	104	104	91	0.10	0.16	0.15
11/03/2015	18:41	105	105	92	0.11	0.16	0.14
12/03/2015	01:53	107	106	90	0.23	0.30	0.19
12/03/2015	03:12	106	106	94	0.19	0.22	0.15
12/03/2015	06:40	111	108	91	0.22	0.71	0.36
12/03/2015	16:41	105	106	93	0.11	0.24	0.13
12/03/2015	18:40	105	104	92	0.10	0.20	0.13
12/03/2015	22:36	107	106	92	0.26	0.38	0.24
13/03/2015	03:12	105	105	93	0.17	0.24	0.13
13/03/2015	03:25	107	106	90	0.20	0.35	0.23
13/03/2015	06:38	110	109	90	0.23	0.67	0.30
13/03/2015	08:30	101	101	88	0.06	0.11	0.08
13/03/2015	10:40	104	105	92	0.11	0.24	0.14
13/03/2015	12:52	105	104	92	0.12	0.24	0.14
13/03/2015	14:47	103	103	92	0.13	0.22	0.13
13/03/2015	15:06	105	104	91	0.15	0.21	0.20
13/03/2015	16:40	104	104	92	0.10	0.22	0.12
13/03/2015	18:41	106	105	93	0.11	0.21	0.14
14/03/2015	01:47	108	107	92	0.24	0.45	0.30
14/03/2015	02:53	105	105	93	0.18	0.29	0.13
14/03/2015	05:27	112	110	91	0.23	0.63	0.31

**TABLE 4.8 CTD: PEN\_OS8 LOCALLY TRIGGERED EVENTS**



Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
14/03/2015	08:29	112	112	102	0.07	0.09	0.08
14/03/2015	10:36	105	105	92	0.15	0.25	0.15
14/03/2015	12:42	106	106	93	0.14	0.36	0.14
14/03/2015	14:15	104	104	92	0.15	0.20	0.12
14/03/2015	14:33	110	110	101	0.15	0.19	0.20
14/03/2015	14:42	105	105	93	0.13	0.26	0.11
14/03/2015	16:42	105	104	92	0.14	0.21	0.14
14/03/2015	18:46	105	103	93	0.12	0.23	0.14
15/03/2015	19:32	107	103	93	0.10	0.13	0.08
15/03/2015	21:24	103	104	91	0.12	0.18	0.17
15/03/2015	23:02	110	108	90	0.25	0.39	0.23
16/03/2015	01:22	108	105	93	0.07	0.13	0.07
16/03/2015	03:12	105	105	93	0.18	0.27	0.18
16/03/2015	06:38	106	104	91	0.20	0.26	0.17
16/03/2015	08:29	102	101	86	0.07	0.11	0.10
16/03/2015	10:34	108	104	93	0.04	0.10	0.06
16/03/2015	10:40	105	105	93	0.12	0.25	0.15
16/03/2015	12:43	105	103	93	0.11	0.18	0.17
16/03/2015	14:47	105	105	91	0.12	0.24	0.14
16/03/2015	16:41	104	104	92	0.11	0.22	0.15
16/03/2015	18:44	105	105	92	0.14	0.21	0.16
16/03/2015	22:44	104	104	90	0.20	0.25	0.17
17/03/2015	01:06	106	103	92	0.08	0.13	0.06
17/03/2015	01:44	106	106	95	0.04	0.10	0.07
17/03/2015	03:12	106	106	94	0.19	0.26	0.15
17/03/2015	12:43	104	104	92	0.13	0.19	0.15
17/03/2015	14:38	105	104	92	0.12	0.18	0.16
17/03/2015	14:47	103	102	90	0.14	0.21	0.14
17/03/2015	18:41	104	104	93	0.12	0.22	0.14
17/03/2015	20:39	109	106	95	0.09	0.18	0.09
17/03/2015	21:33	106	105	92	0.27	0.33	0.25
18/03/2015	00:17	109	107	91	0.24	0.60	0.38
18/03/2015	01:10	108	104	92	0.10	0.16	0.09
18/03/2015	03:11	105	104	92	0.19	0.28	0.16
18/03/2015	06:42	105	105	91	0.23	0.29	0.18
18/03/2015	10:40	105	105	91	0.12	0.17	0.16
18/03/2015	12:42	105	104	91	0.14	0.28	0.16
18/03/2015	13:27	108	107	89	0.02	0.03	0.03
18/03/2015	14:38	107	105	93	0.16	0.18	0.22
18/03/2015	14:47	103	102	92	0.13	0.17	0.17
18/03/2015	16:41	104	105	92	0.12	0.19	0.15
18/03/2015	18:40	103	103	90	0.12	0.16	0.15
18/03/2015	23:20	105	105	91	0.20	0.31	0.18
19/03/2015	01:02	106	103	90	0.08	0.14	0.07
19/03/2015	03:12	106	105	92	0.21	0.25	0.16
19/03/2015	10:40	106	106	92	0.15	0.22	0.15
19/03/2015	12:14	105	105	91	0.12	0.18	0.18
19/03/2015	12:42	104	104	92	0.13	0.22	0.15
19/03/2015	14:37	104	104	91	0.15	0.21	0.18

**TABLE 4.8 CTD: PEN\_OS8 LOCALLY TRIGGERED EVENTS**

Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
19/03/2015	14:47	115	115	104	0.12	0.23	0.16
19/03/2015	16:41	104	104	91	0.11	0.16	0.17
19/03/2015	18:40	107	106	93	0.12	0.22	0.16
19/03/2015	21:07	101	100	91	0.04	0.07	0.04
20/03/2015	01:03	108	108	91	0.22	0.68	0.32
20/03/2015	03:12	104	104	92	0.17	0.24	0.16
20/03/2015	10:40	104	103	91	0.12	0.23	0.14
20/03/2015	12:42	104	103	91	0.13	0.20	0.15
20/03/2015	14:52	104	104	91	0.14	0.21	0.14
20/03/2015	16:41	103	102	90	0.11	0.17	0.14
20/03/2015	18:40	105	105	92	0.12	0.22	0.16
20/03/2015	20:29	110	103	91	0.08	0.14	0.07
21/03/2015	00:03	104	104	90	0.22	0.34	0.18
21/03/2015	01:13	108	106	90	0.08	0.15	0.09
21/03/2015	02:54	104	103	91	0.13	0.22	0.15
21/03/2015	05:47	111	109	91	0.24	0.61	0.33
21/03/2015	11:34	112	107	95	0.05	0.08	0.07
21/03/2015	12:41	103	103	92	0.13	0.22	0.15
21/03/2015	14:15	104	104	91	0.18	0.23	0.18
21/03/2015	14:42	103	102	91	0.13	0.16	0.15
21/03/2015	16:14	106	106	93	0.12	0.23	0.14
21/03/2015	18:46	104	104	92	0.12	0.19	0.15
22/03/2015	10:16	110	110	91	0.01	0.03	0.02
22/03/2015	13:46	106	104	92	0.05	0.08	0.06
22/03/2015	21:25	104	104	92	0.11	0.18	0.16
22/03/2015	23:05	106	104	90	0.19	0.47	0.29
23/03/2015	01:35	107	102	90	0.10	0.14	0.09
23/03/2015	03:12	104	103	90	0.16	0.21	0.16
23/03/2015	12:42	104	104	91	0.13	0.23	0.18
23/03/2015	14:47	103	103	91	0.13	0.22	0.14
23/03/2015	16:40	104	103	91	0.11	0.23	0.14
23/03/2015	18:40	103	103	91	0.12	0.17	0.16
24/03/2015	08:29	105	105	96	0.07	0.10	0.09
24/03/2015	10:40	103	103	92	0.16	0.25	0.16
24/03/2015	12:15	103	102	90	0.12	0.23	0.14
24/03/2015	14:37	104	104	92	0.15	0.19	0.22
24/03/2015	16:40	104	104	91	0.12	0.25	0.17
24/03/2015	23:53	106	105	91	0.24	0.28	0.17
25/03/2015	01:29	103	102	92	0.06	0.16	0.08
25/03/2015	06:40	110	108	91	0.24	0.64	0.37
25/03/2015	14:37	104	103	90	0.15	0.18	0.22
25/03/2015	14:47	104	104	92	0.11	0.23	0.15
02/04/2015	03:13	109	109	99	0.14	0.20	0.15
02/04/2015	06:42	106	106	91	0.32	0.57	0.31
02/04/2015	10:41	104	103	91	0.11	0.19	0.14
02/04/2015	12:25	111	106	96	0.04	0.09	0.11
02/04/2015	12:43	114	114	102	0.13	0.19	0.17
02/04/2015	14:37	103	103	91	0.15	0.16	0.15
02/04/2015	16:40	105	104	92	0.11	0.23	0.14

**TABLE 4.8 CTD: PEN\_OS8 LOCALLY TRIGGERED EVENTS**

Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
02/04/2015	18:41	108.0	107.9	96.5	0.111	0.199	0.181
02/04/2015	20:26	106.3	103.4	94.7	0.071	0.124	0.112
02/04/2015	23:08	109.0	108.3	90.6	0.244	0.409	0.253
03/04/2015	03:12	104.8	104.7	92.7	0.157	0.229	0.144
03/04/2015	05:13	104.6	103.8	90.4	0.101	0.192	0.123
03/04/2015	10:40	107.6	107.1	96.9	0.104	0.216	0.169
03/04/2015	12:45	106.3	103.8	91.3	0.119	0.180	0.137
03/04/2015	14:48	103.1	101.8	90.1	0.084	0.126	0.066
03/04/2015	15:20	110.8	106.0	95.2	0.042	0.088	0.062
03/04/2015	16:44	108.6	104.6	92.3	0.107	0.208	0.165
03/04/2015	18:20	108.4	108.1	95.1	0.074	0.115	0.104
03/04/2015	18:40	104.5	103.8	91.2	0.109	0.228	0.147
03/04/2015	23:02	105.7	100.9	90.1	0.028	0.086	0.040
04/04/2015	00:49	101.5	99.9	90.3	0.041	0.056	0.032
04/04/2015	02:52	105.6	104.6	92.7	0.121	0.226	0.153
04/04/2015	04:19	105.1	104.5	90.2	0.238	0.268	0.156
04/04/2015	12:12	107.0	103.0	92.3	0.049	0.088	0.046
04/04/2015	14:14	103.9	103.0	90.9	0.159	0.175	0.137
04/04/2015	14:34	104.3	103.7	93.3	0.160	0.214	0.173
04/04/2015	14:43	104.8	104.5	91.0	0.106	0.185	0.127
05/04/2015	21:24	104.2	103.9	90.4	0.110	0.151	0.160
05/04/2015	23:07	105.1	104.4	90.8	0.188	0.292	0.204
06/04/2015	03:12	104.1	104.9	91.3	0.135	0.194	0.152
06/04/2015	13:40	98.7	98.5	90.1	0.028	0.058	0.058
06/04/2015	14:47	104.9	104.5	91.8	0.122	0.237	0.148
06/04/2015	15:46	103.7	103.6	91.0	0.050	0.072	0.122
06/04/2015	16:48	105.7	105.0	90.8	0.116	0.227	0.166
06/04/2015	18:01	101.1	101.1	93.8	0.043	0.032	0.028
06/04/2015	18:05	101.5	101.0	93.4	0.043	0.060	0.036
06/04/2015	18:11	102.8	102.2	91.9	0.039	0.017	0.017
06/04/2015	18:15	100.0	100.0	90.4	0.037	0.032	0.023
06/04/2015	18:23	98.7	98.3	90.8	0.039	0.185	0.220
06/04/2015	20:34	103.8	101.6	85.3	0.153	0.252	0.174
06/04/2015	23:40	111.7	109.4	91.1	0.249	0.569	0.360
07/04/2015	03:12	105.5	105.3	90.7	0.144	0.169	0.182
07/04/2015	06:38	105.5	105.1	90.8	0.256	0.332	0.342
08/04/2015	10:40	104.1	104.4	90.2	0.118	0.175	0.144
08/04/2015	14:38	103.0	102.7	90.5	0.155	0.190	0.198
08/04/2015	22:11	110.5	108.6	91.6	0.256	0.442	0.276
09/04/2015	01:15	108.0	105.3	94.7	0.073	0.157	0.078
09/04/2015	03:13	104.1	103.9	91.8	0.173	0.236	0.172
09/04/2015	06:38	110.0	109.0	90.2	0.232	0.635	0.369
09/04/2015	10:40	102.9	103.0	90.2	0.113	0.202	0.165
09/04/2015	12:42	103.5	102.9	90.9	0.128	0.219	0.151
09/04/2015	14:37	108.3	107.6	94.8	0.188	0.187	0.153
09/04/2015	18:19	104.6	104.1	90.4	0.072	0.117	0.112
09/04/2015	18:41	103.4	103.5	90.3	0.127	0.183	0.150
09/04/2015	22:35	107.4	104.4	92.2	0.075	0.128	0.079
10/04/2015	01:16	107.7	102.9	91.1	0.079	0.144	0.082

**TABLE 4.8 CTD: PEN\_OS8 LOCALLY TRIGGERED EVENTS**

Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
10/04/2015	01:57	107	107	92	0.25	0.49	0.36
10/04/2015	03:12	104	103	92	0.18	0.23	0.16
10/04/2015	06:39	110	109	91	0.22	0.55	0.33
10/04/2015	10:40	104	103	91	0.12	0.20	0.14
10/04/2015	12:42	103	103	90	0.13	0.19	0.17
10/04/2015	14:37	104	103	90	0.13	0.19	0.21
10/04/2015	16:40	104	103	91	0.13	0.20	0.15
11/04/2015	02:53	103	103	90	0.11	0.23	0.16
11/04/2015	12:40	105	104	93	0.14	0.19	0.14
11/04/2015	13:14	105	105	95	0.07	0.11	0.09
11/04/2015	16:42	107	107	93	0.18	0.16	0.19
12/04/2015	12:37	109	108	94	0.20	0.34	0.19
12/04/2015	19:53	102	102	91	0.05	0.13	0.06
12/04/2015	22:58	110	109	91	0.30	0.41	0.30
13/04/2015	03:13	106	106	91	0.17	0.24	0.17
13/04/2015	06:40	106	106	91	0.26	0.34	0.21
13/04/2015	12:42	104	104	91	0.12	0.21	0.18
13/04/2015	14:38	103	103	90	0.17	0.17	0.19
13/04/2015	14:47	104	104	90	0.14	0.21	0.17
13/04/2015	18:40	103	103	90	0.10	0.21	0.18
13/04/2015	22:25	105	104	90	0.20	0.28	0.18
14/04/2015	01:09	107	107	92	0.08	0.18	0.13
14/04/2015	03:11	105	105	92	0.18	0.26	0.18
14/04/2015	04:14	106	105	91	0.29	0.33	0.26
14/04/2015	06:41	108	107	91	0.22	0.55	0.36
14/04/2015	10:41	103	102	90	0.12	0.18	0.18
14/04/2015	12:43	103	103	91	0.13	0.19	0.17
14/04/2015	16:41	104	105	92	0.12	0.20	0.17
14/04/2015	18:40	104	104	91	0.11	0.21	0.17
14/04/2015	23:46	108	107	92	0.24	0.43	0.30
15/04/2015	03:12	104	104	91	0.18	0.25	0.18
15/04/2015	07:43	102	102	86	0.15	0.33	0.14
15/04/2015	12:42	103	102	90	0.14	0.25	0.17
15/04/2015	14:38	107	107	96	0.18	0.20	0.16
15/04/2015	18:41	105	104	91	0.13	0.20	0.16
15/04/2015	20:56	108	101	91	0.05	0.10	0.08
16/04/2015	00:55	106	107	91	0.24	0.36	0.19
16/04/2015	03:12	103	104	91	0.16	0.26	0.18
16/04/2015	06:10	105	105	91	0.25	0.34	0.20
16/04/2015	12:42	102	103	91	0.13	0.19	0.17
16/04/2015	14:39	105	104	91	0.15	0.19	0.20
16/04/2015	14:48	103	103	90	0.14	0.18	0.18
16/04/2015	18:41	104	103	91	0.12	0.19	0.17
16/04/2015	21:35	105	104	91	0.26	0.30	0.18
17/04/2015	01:40	108	106	92	0.27	0.48	0.28
17/04/2015	03:17	107	107	93	0.18	0.21	0.18
17/04/2015	06:37	108	107	92	0.23	0.33	0.24
17/04/2015	10:41	103	103	91	0.14	0.19	0.15
17/04/2015	14:47	102	102	90	0.11	0.18	0.16

**TABLE 4.8 CTD: PEN\_OS8 LOCALLY TRIGGERED EVENTS**

Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
17/04/2015	16:41	104	104	91	0.12	0.19	0.17
17/04/2015	17:09	107	107	93	0.06	0.08	0.05
17/04/2015	19:11	105	103	91	0.08	0.13	0.07
17/04/2015	22:38	108	108	91	0.27	0.54	0.38
18/04/2015	01:13	107	106	91	0.10	0.18	0.09
18/04/2015	02:52	103	103	90	0.11	0.24	0.16
18/04/2015	04:10	105	104	91	0.29	0.41	0.29
18/04/2015	06:43	106	105	91	0.25	0.32	0.21
18/04/2015	08:52	102	100	91	0.02	0.03	0.04
18/04/2015	10:35	114	114	92	0.03	0.09	0.07
18/04/2015	14:33	105	104	91	0.20	0.20	0.18
18/04/2015	14:41	103	103	91	0.12	0.19	0.18
18/04/2015	16:14	103	103	91	0.12	0.19	0.17
19/04/2015	16:31	106	106	94	0.07	0.10	0.11
19/04/2015	19:35	110	106	92	0.08	0.17	0.09
19/04/2015	19:52	104	104	94	0.05	0.13	0.08
19/04/2015	23:26	108	107	93	0.18	0.37	0.37
20/04/2015	01:40	106	104	91	0.07	0.14	0.09
20/04/2015	03:15	105	105	92	0.15	0.26	0.19
20/04/2015	06:40	106	104	90	0.22	0.30	0.22
20/04/2015	09:51	101	101	91	0.02	0.03	0.04
20/04/2015	14:37	103	104	91	0.14	0.17	0.16
20/04/2015	16:43	104	104	92	0.19	0.19	0.16
20/04/2015	18:40	104	103	91	0.11	0.22	0.18
20/04/2015	22:06	106	105	92	0.27	0.32	0.22
21/04/2015	01:02	108	104	91	0.10	0.18	0.08
21/04/2015	03:11	104	105	92	0.11	0.22	0.15
21/04/2015	04:48	105	105	91	0.13	0.21	0.16
21/04/2015	06:40	112	111	93	0.30	0.56	0.37
21/04/2015	12:42	105	103	91	0.11	0.19	0.14
21/04/2015	14:38	104	104	90	0.13	0.20	0.24
21/04/2015	14:47	103	103	90	0.12	0.14	0.19
21/04/2015	16:33	106	101	90	0.04	0.09	0.07
21/04/2015	16:40	103	103	90	0.11	0.19	0.17
21/04/2015	18:40	103	102	90	0.11	0.17	0.16
21/04/2015	20:55	105	104	91	0.09	0.14	0.08
22/04/2015	00:52	111	110	93	0.25	0.38	0.32
22/04/2015	02:11	102	100	92	0.15	0.14	0.11
22/04/2015	03:11	105	105	93	0.12	0.19	0.18
22/04/2015	12:42	105	105	92	0.13	0.20	0.15
22/04/2015	14:37	105	104	94	0.12	0.16	0.17
22/04/2015	14:47	103	104	91	0.12	0.23	0.18
22/04/2015	18:40	103	103	90	0.12	0.19	0.15
22/04/2015	19:38	123	122	94	0.02	0.00	0.00
22/04/2015	22:12	106	106	92	0.30	0.31	0.21
23/04/2015	03:11	102	102	90	0.10	0.19	0.17
23/04/2015	04:51	104	104	91	0.10	0.17	0.17
23/04/2015	06:40	105	104	91	0.24	0.38	0.25
23/04/2015	10:40	103	102	90	0.12	0.18	0.17

**TABLE 4.8 CTD: PEN\_OS8 LOCALLY TRIGGERED EVENTS**

Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
23/04/2015	14:48	104	104	93	0.13	0.16	0.17
23/04/2015	18:40	102	102	90	0.11	0.19	0.17
23/04/2015	20:18	105	104	96	0.06	0.08	0.06
23/04/2015	21:06	101	101	92	0.06	0.18	0.09
24/04/2015	01:01	108	103	91	0.08	0.17	0.08
24/04/2015	03:11	104	105	93	0.10	0.17	0.15
24/04/2015	04:28	103	103	91	0.10	0.17	0.16
24/04/2015	06:38	107	107	91	0.25	0.39	0.34
24/04/2015	10:45	103	103	90	0.11	0.24	0.15
24/04/2015	14:48	104	102	90	0.14	0.19	0.18
24/04/2015	22:09	106	105	91	0.29	0.43	0.22
25/04/2015	01:04	105	103	91	0.08	0.14	0.09
25/04/2015	02:57	104	104	91	0.12	0.19	0.15
25/04/2015	06:43	107	107	91	0.28	0.30	0.20
25/04/2015	12:15	103	103	91	0.13	0.19	0.17
25/04/2015	14:14	104	103	91	0.12	0.17	0.21
25/04/2015	14:44	107	106	93	0.11	0.19	0.17
26/04/2015	11:05	108	108	96	0.06	0.10	0.08
26/04/2015	14:34	104	103	91	0.18	0.20	0.23
26/04/2015	19:31	105	105	92	0.08	0.15	0.09
26/04/2015	21:24	104	104	91	0.13	0.24	0.18
26/04/2015	22:59	108	106	91	0.26	0.34	0.24
27/04/2015	03:12	105	105	92	0.19	0.26	0.17
27/04/2015	05:12	104	105	91	0.26	0.24	0.25
27/04/2015	06:40	111	110	92	0.27	0.54	0.34
28/04/2015	03:12	111	111	95	0.17	0.26	0.16
28/04/2015	05:13	104	103	90	0.19	0.20	0.19
28/04/2015	06:39	106	105	91	0.23	0.39	0.22
28/04/2015	14:37	105	105	91	0.16	0.19	0.22
28/04/2015	16:41	103	102	90	0.13	0.15	0.16
28/04/2015	19:51	106	104	91	0.09	0.14	0.12
28/04/2015	23:17	109	109	93	0.26	0.43	0.24
29/04/2015	00:12	105	104	91	0.25	0.30	0.19
29/04/2015	06:38	106	105	90	0.25	0.55	0.36
29/04/2015	12:43	104	104	92	0.11	0.20	0.18
29/04/2015	14:30	107	102	91	0.04	0.13	0.07
29/04/2015	18:40	109	108	98	0.10	0.22	0.17

**TABLE 4.8 CTD: PEN\_OS8 LOCALLY TRIGGERED EVENTS**

Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
12/12/2014	00:46	121	114	86	0.31	0.33	0.05
12/12/2014	00:49	121	114	86	0.31	0.33	0.05
23/01/2015	18:43	101	94	86	0.02	0.03	0.00
09/03/2015	15:55	142	141	111	0.04	0.01	0.00
01/04/2015	11:14	109	107	85	0.49	0.74	0.75
11/04/2015	20:00	102	102	88	0.01	0.02	0.02
16/04/2015	12:23	106	101	85	1.68	3.13	1.42
19/04/2015	17:38	95	95	85	0.00	0.00	0.00
21/04/2015	13:44	104	104	90	0.01	0.01	0.01
24/04/2015	11:17	102	99	87	2.14	1.37	0.60
28/04/2015	16:22	99	98	86	0.01	0.01	0.00
29/04/2015	14:03	104	100	87	0.07	0.08	0.12

**TABLE 4.9: PEN\_OS9 LOCALLY TRIGGERED EVENTS**

Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
05/11/2014	09:31	102	103	86	0.16	0.07	0.13
05/11/2014	19:21	131	130	104	0.45	0.22	0.75
07/11/2014	10:36	105	105	92	0.04	0.02	0.02
10/11/2014	20:45	113	106	88	0.03	0.02	0.02
15/11/2014	13:07	101	101	92	0.02	0.02	0.02
16/11/2014	09:10	105	105	88	0.06	0.02	0.05
16/11/2014	09:14	107	107	89	0.05	0.02	0.04
16/11/2014	09:22	106	106	86	0.04	0.02	0.03
16/11/2014	10:29	103	102	86	0.04	0.02	0.03
16/11/2014	11:04	99	99	86	0.02	0.01	0.02
16/11/2014	11:11	102	102	85	0.03	0.02	0.02
16/11/2014	11:31	103	102	87	0.03	0.01	0.02
14/12/2014	11:30	94	93	87	0.01	0.01	0.01
18/12/2014	12:01	109	107	86	0.17	0.16	0.22
25/12/2014	10:10	96	93	85	0.01	0.01	0.01
25/12/2014	10:41	101	99	91	0.01	0.01	0.01
27/12/2014	10:12	112	109	103	0.01	0.01	0.01
27/12/2014	13:16	107	104	95	0.01	0.01	0.01
01/01/2015	00:00	109	109	86	0.02	0.01	0.05
02/01/2015	15:38	110	109	101	0.01	0.01	0.01
03/01/2015	10:07	107	106	100	0.01	0.01	0.00
05/01/2015	16:45	106	106	98	0.01	0.01	0.01
28/01/2015	14:44	94	94	86	0.01	0.01	0.01
29/01/2015	12:29	126	126	105	0.04	0.03	0.02
29/01/2015	12:32	147	148	120	0.01	0.01	0.01
29/01/2015	12:33	98	97	93	0.00	0.00	0.00
29/01/2015	12:34	97	97	93	0.01	0.01	0.01
29/01/2015	12:34	103	101	93	1.82	1.69	1.54
29/01/2015	12:35	103	100	93	0.01	0.01	0.01
29/01/2015	12:36	110	106	93	0.02	0.01	0.02
29/01/2015	12:37	103	101	93	0.01	0.01	0.01
29/01/2015	12:38	101	99	93	0.00	0.00	0.00
29/01/2015	12:39	101	98	93	0.01	0.01	0.01
29/01/2015	12:40	98	97	93	0.00	0.01	0.00
29/01/2015	12:41	112	109	85	0.02	0.02	0.02
06/02/2015	11:27	105	105	90	0.06	0.04	0.03
07/02/2015	11:42	111	111	92	0.02	0.02	0.01
07/02/2015	13:33	104	104	85	0.01	0.01	0.01
07/02/2015	15:32	107	107	88	0.04	0.01	0.01
07/02/2015	15:39	110	109	90	0.03	0.01	0.01
07/02/2015	15:42	112	110	92	0.01	0.01	0.01
07/02/2015	15:52	109	109	89	0.02	0.02	0.01
07/02/2015	15:55	103	102	86	0.02	0.03	0.01
07/02/2015	16:00	110	110	92	0.01	0.01	0.01
08/02/2015	11:11	101	101	86	0.02	0.01	0.01

**TABLE 4.10: PEN\_OS10 LOCALLY TRIGGERED EVENTS**

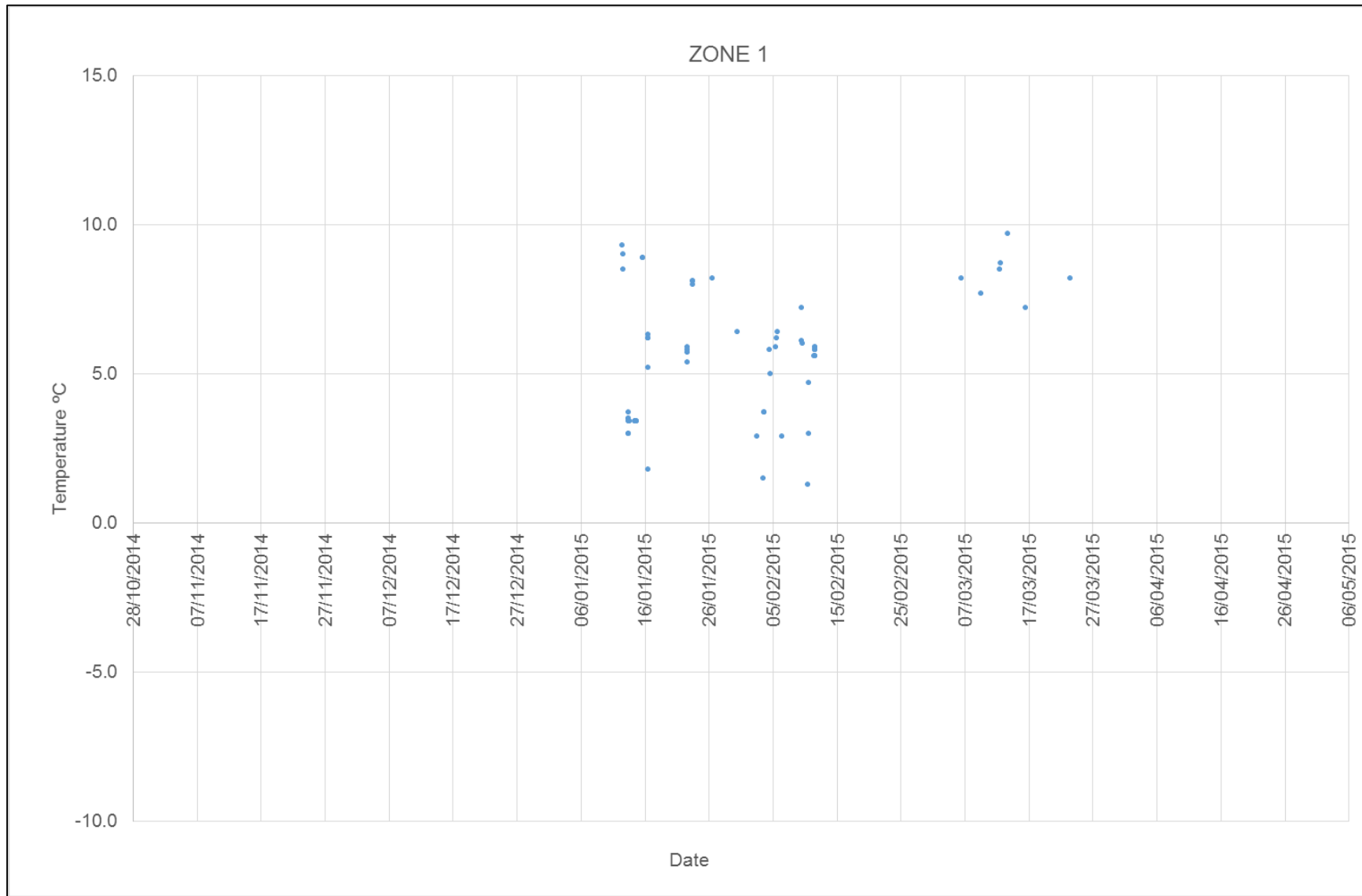


Date	Time	L <sub>peak</sub>	L <sub>Cpeak</sub>	L <sub>A a F</sub>	PPV s <sup>-1</sup>	PPV Y s <sup>-1</sup>	PPV s <sup>-1</sup>
08/02/2015	14:13	107	106	89	0.05	0.04	0.02
08/02/2015	16:14	105	105	88	0.02	0.02	0.03
09/02/2015	09:32	106	105	86	0.01	0.01	0.01
09/02/2015	09:45	105	104	86	0.27	0.12	0.08
18/02/2015	15:53	104	104	86	0.01	0.01	0.01
18/02/2015	16:07	109	108	85	0.20	0.18	0.07
20/02/2015	14:24	117	116	91	0.05	0.05	0.01
20/02/2015	14:26	116	115	94	0.04	0.05	0.02
20/02/2015	14:49	106	105	87	0.07	0.05	0.07
10/03/2015	07:10	99	99	89	0.00	0.00	0.00
13/03/2015	13:19	107	100	91	0.02	0.03	0.01
16/03/2015	11:54	114	113	90	0.01	0.02	0.03
16/03/2015	11:58	112	112	90	0.04	0.03	0.06
16/03/2015	12:08	108	107	87	0.01	0.02	0.02
19/03/2015	12:55	107	107	87	0.27	0.16	0.17
20/03/2015	16:02	109	109	90	0.05	0.04	0.02
23/03/2015	09:02	109	109	88	0.03	0.03	0.03

**TABLE 4.10 CTD: PEN\_OS10 LOCALLY TRIGGERED EVENTS**

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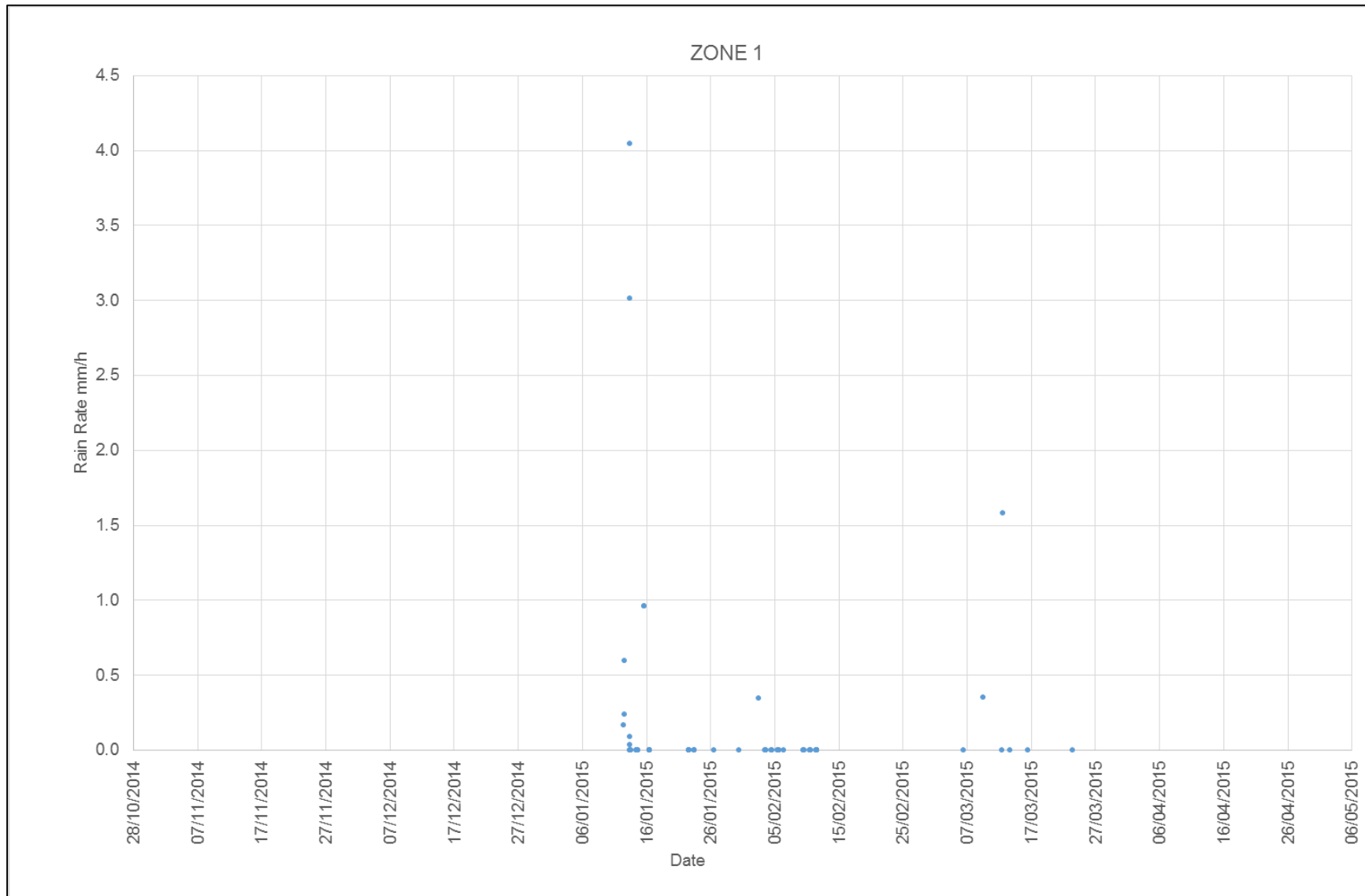




**FIGURE 5.2: ZONE 1, SUMMARY OF MEASURED TEMPERATURE (°C) 3<sup>RD</sup> NOVEMBER – 3<sup>RD</sup> MAY 2015**

Notes:

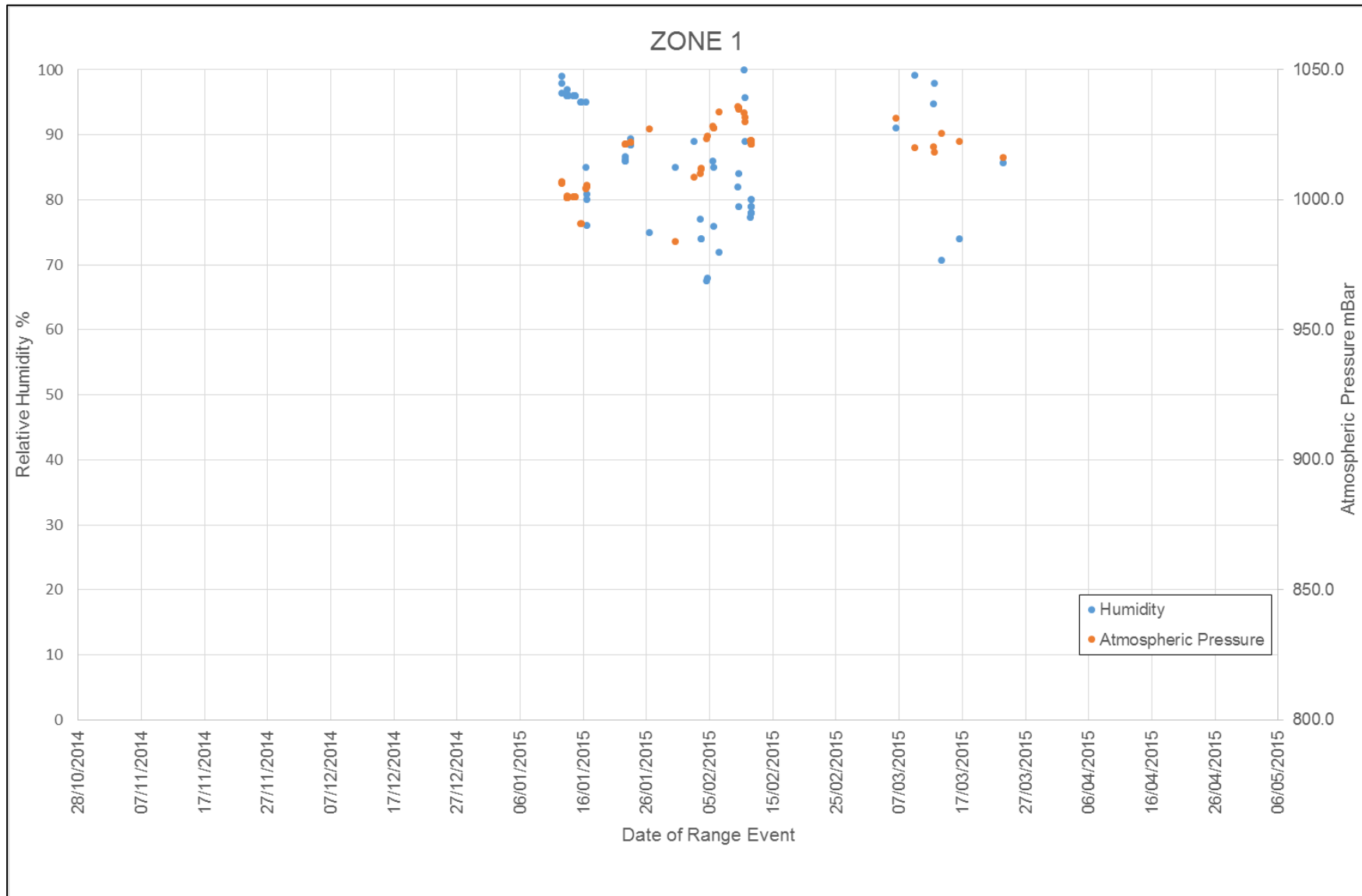
[1] Presentation of weather data captured during Range firing events as presented in Volume 3 - Chapter 1.



**FIGURE 5.3: ZONE 1, SUMMARY OF MEASURED RAIN RATE (MM/HR) 3<sup>RD</sup> NOVEMBER – 3<sup>RD</sup> MAY 2015**

Notes:

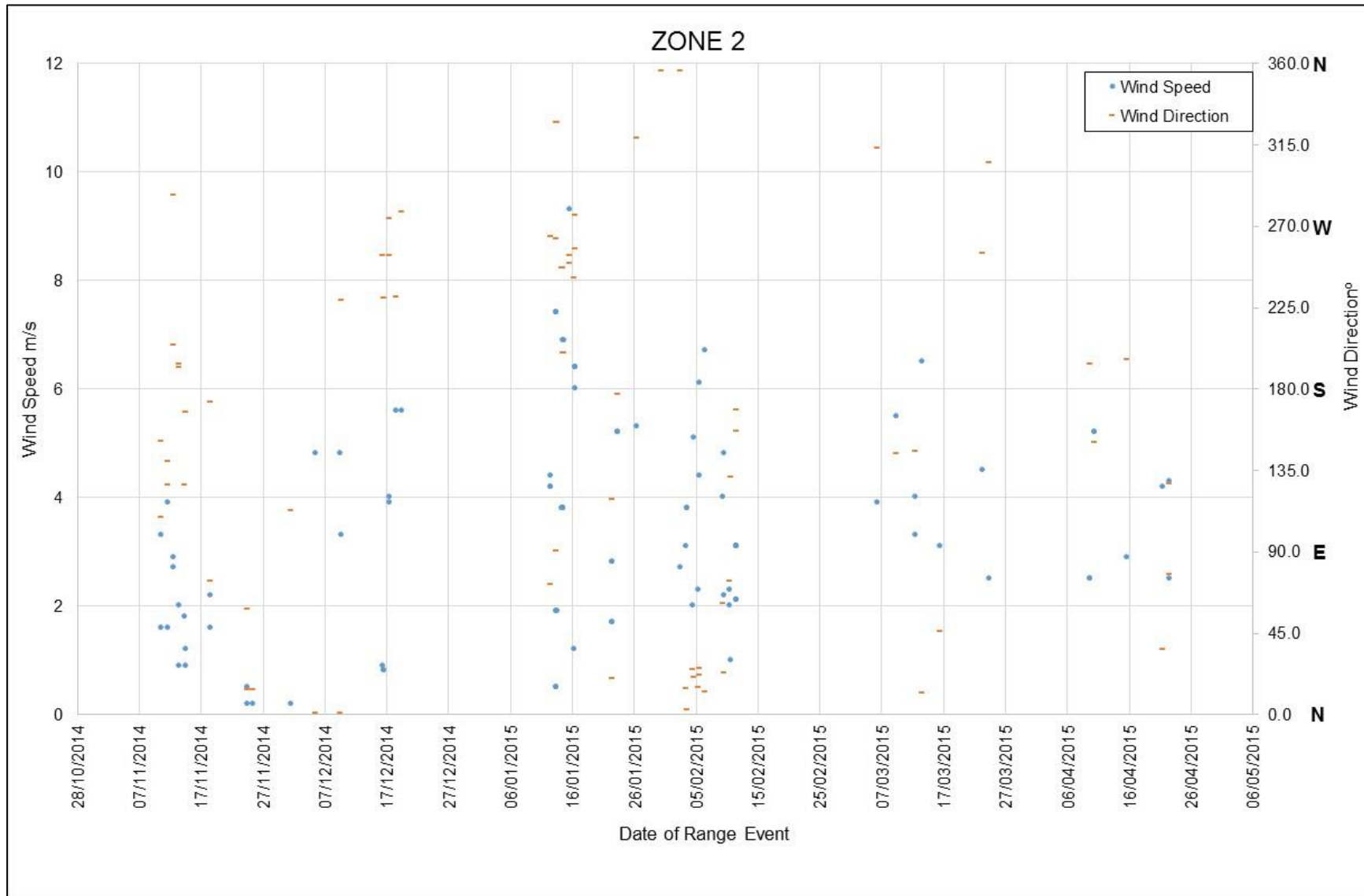
[1] Presentation of weather data captured during Range firing events as presented in Volume 3 - Chapter 1.



**FIGURE 5.4: ZONE 1, SUMMARY OF MEASURED HUMIDITY (%) AND PRESSURE (mBAR) 3<sup>RD</sup> NOVEMBER – 3<sup>RD</sup> MAY 2015**

Notes:

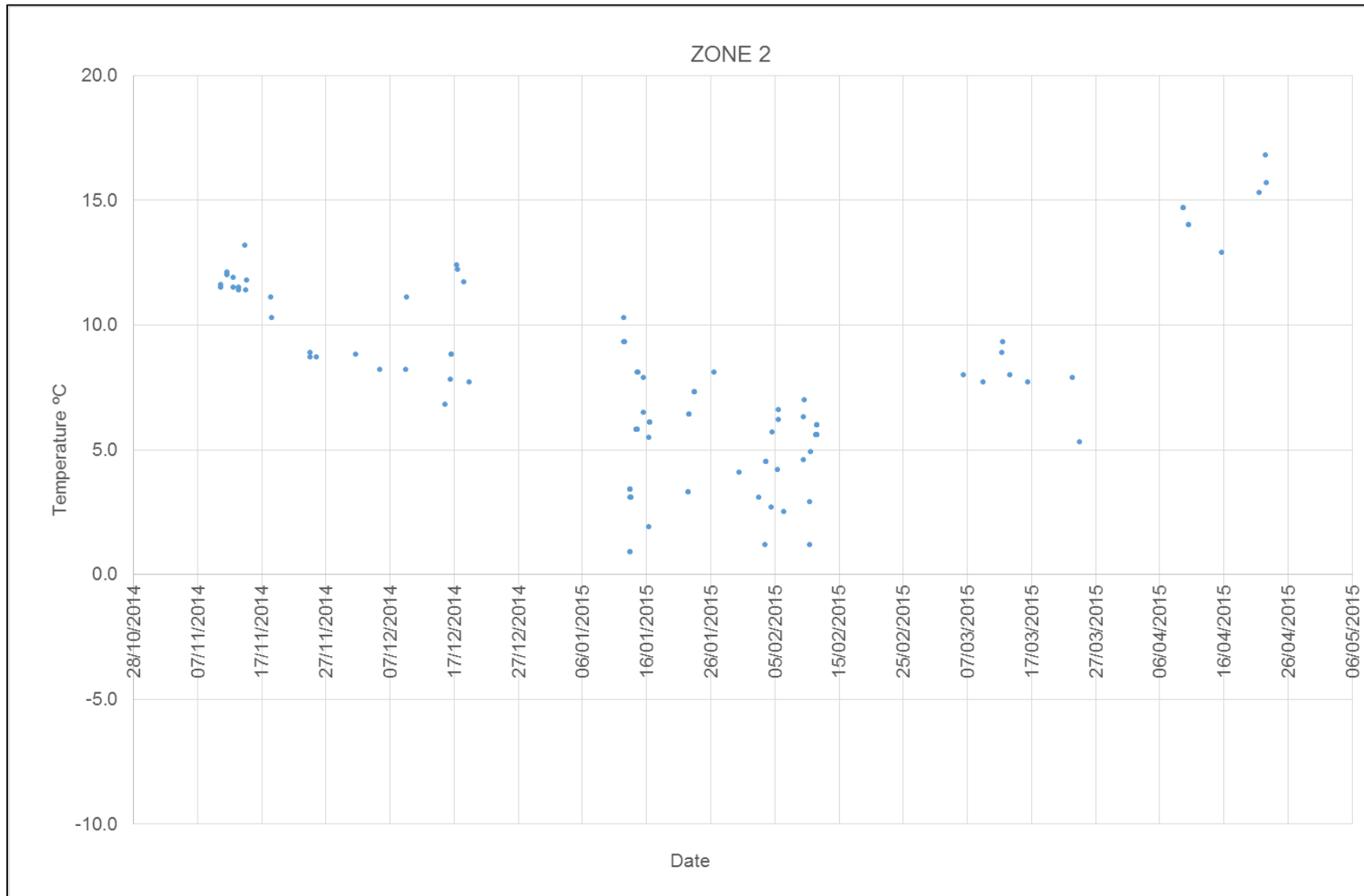
[1] Presentation of weather data captured during Range firing events as presented in Volume 3 - Chapter 1.



**FIGURE 5.5: ZONE 2, SUMMARY OF MEASURED WIND SPEED (M/S) AND WIND DIRECTION 3<sup>RD</sup> NOVEMBER – 3<sup>RD</sup> MAY 2015**

Notes:

[1] Presentation of weather data captured during Range firing events as presented in Volume 3 - Chapter 1.

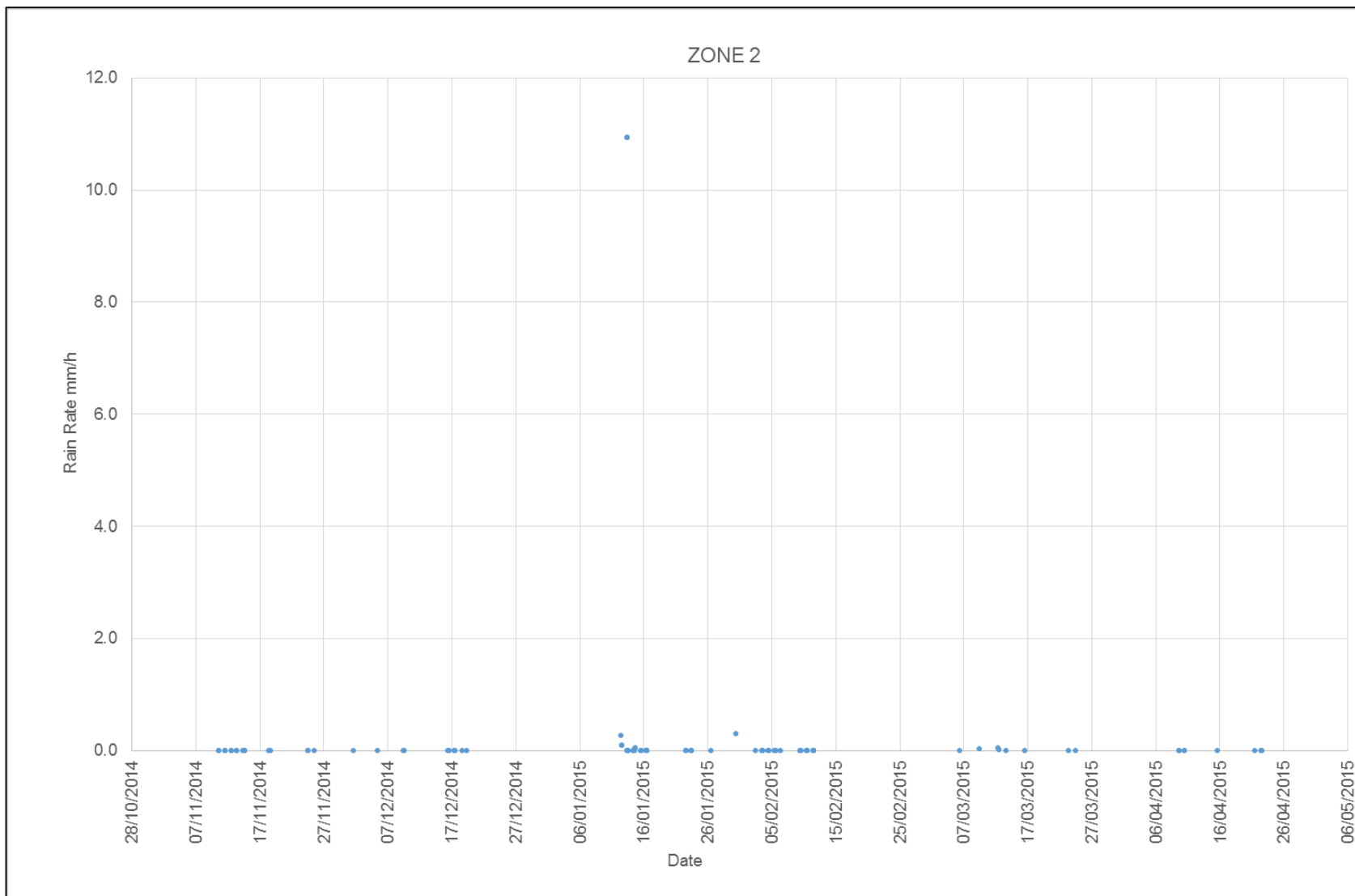


**FIGURE 5.6: ZONE 2, SUMMARY OF MEASURED TEMPERATURE (°C) 3<sup>RD</sup> NOVEMBER – 3<sup>RD</sup> MAY 2015**

Notes:

[1] Presentation of weather data captured during Range firing events as presented in Volume 3 - Chapter 1.

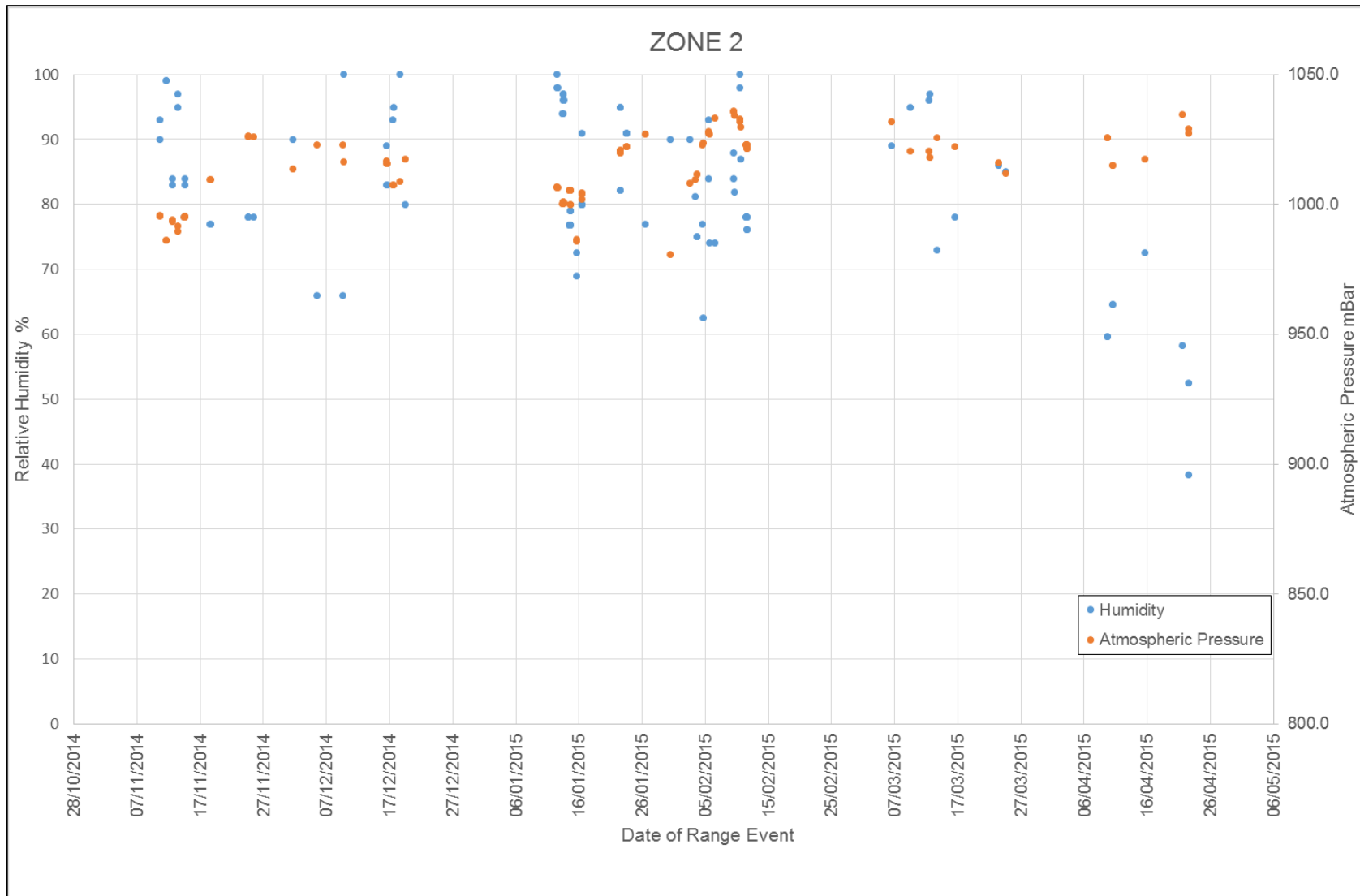




**FIGURE 5.7: ZONE 2, SUMMARY OF MEASURED RAIN RATE (MM/HR) 3<sup>RD</sup> NOVEMBER – 3<sup>RD</sup> MAY 2015**

Notes:

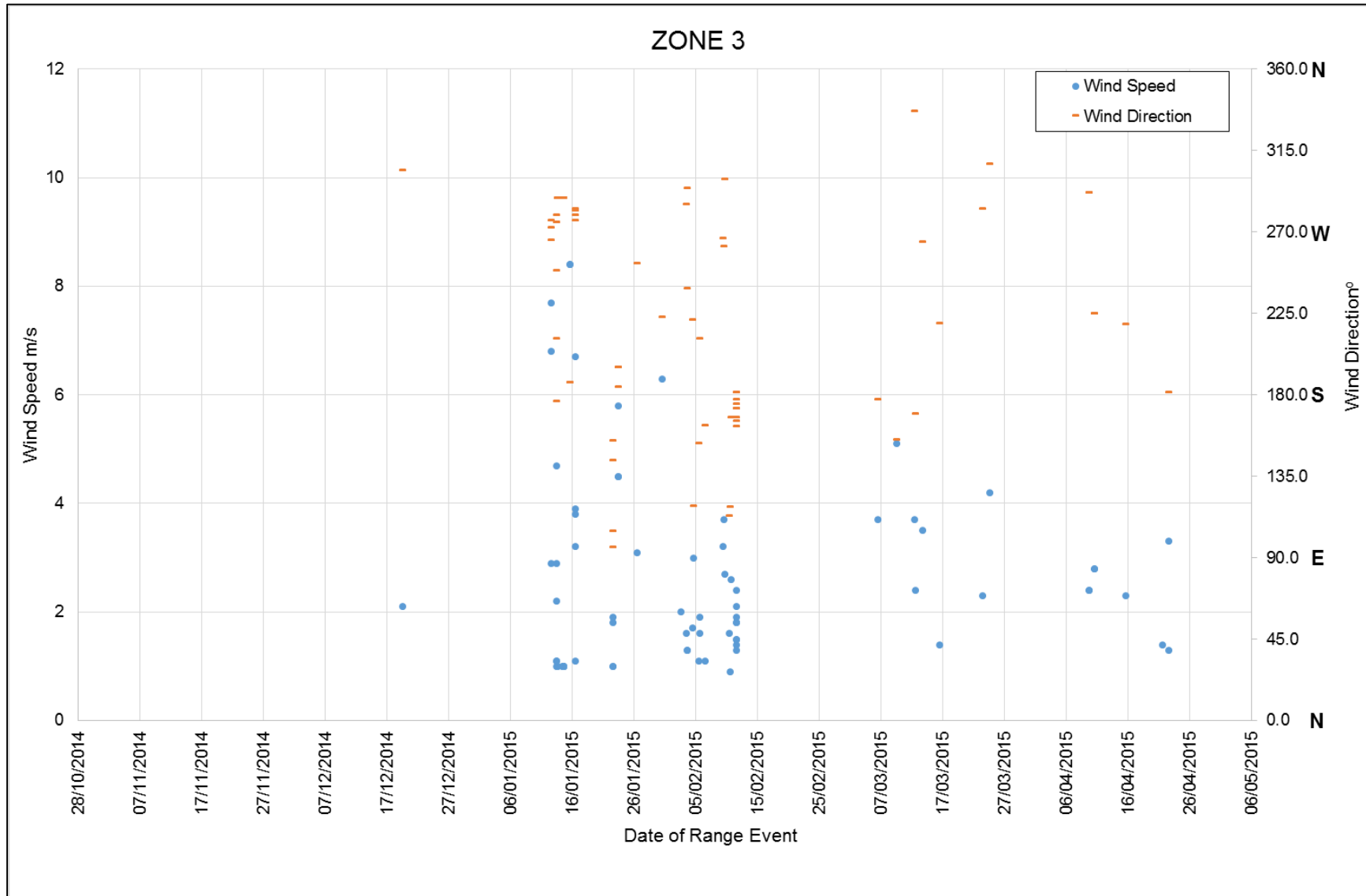
[1] Presentation of weather data captured during Range firing events as presented in Volume 3 - Chapter 1.



**FIGURE 5.8: ZONE 2, SUMMARY OF MEASURED HUMIDITY (%) AND PRESSUE (mBAR) 3<sup>RD</sup> NOVEMBER – 3<sup>RD</sup> MAY 2015**

Notes:

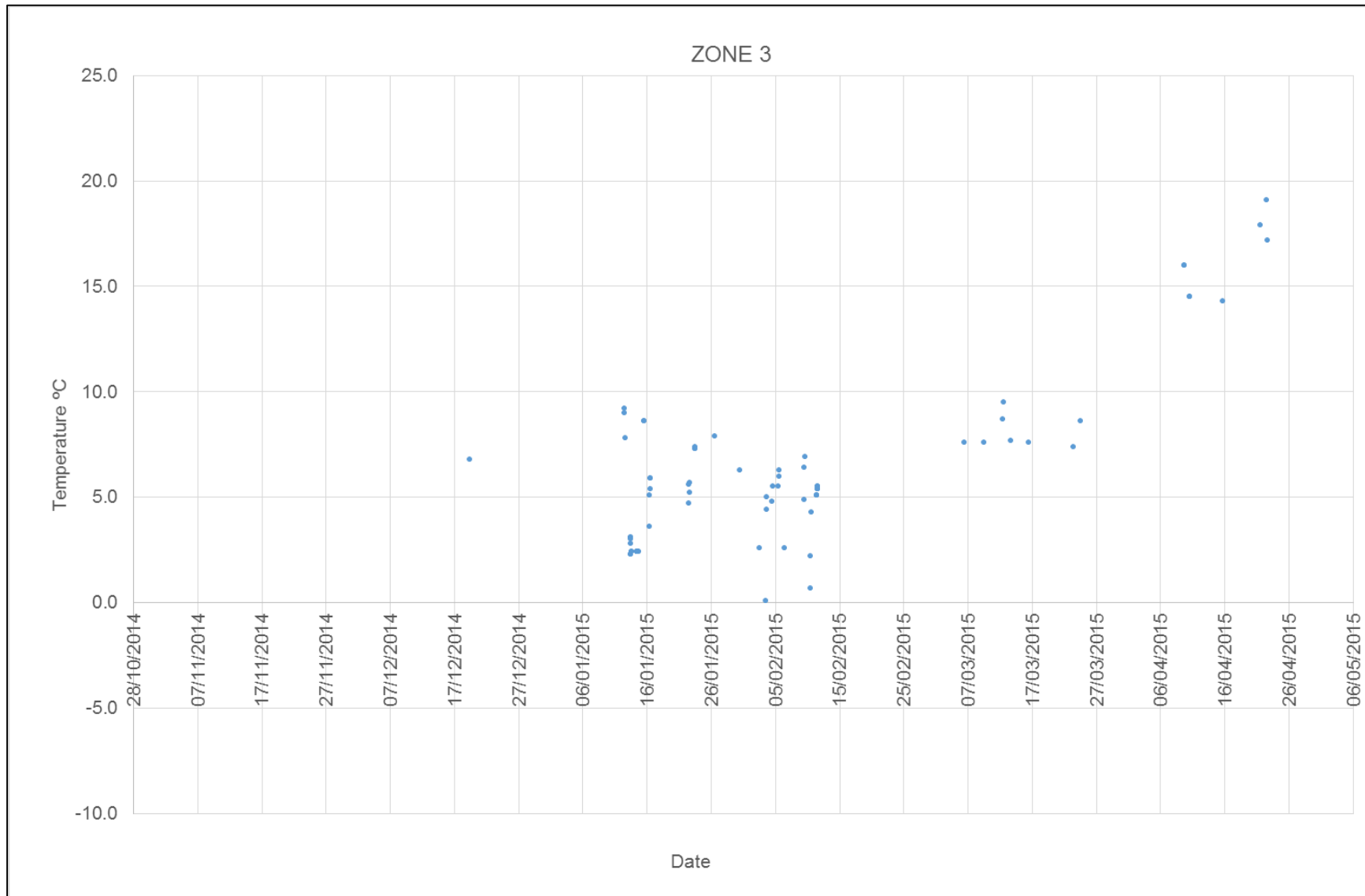
[1] Presentation of weather data captured during Range firing events as presented in Volume 3 - Chapter 1.



**FIGURE 5.9: ZONE 3, SUMMARY OF MEASURED WIND SPEED (M/S) AND DIRECTION 3<sup>RD</sup> NOVEMBER – 3<sup>RD</sup> MAY 2015**

Notes:

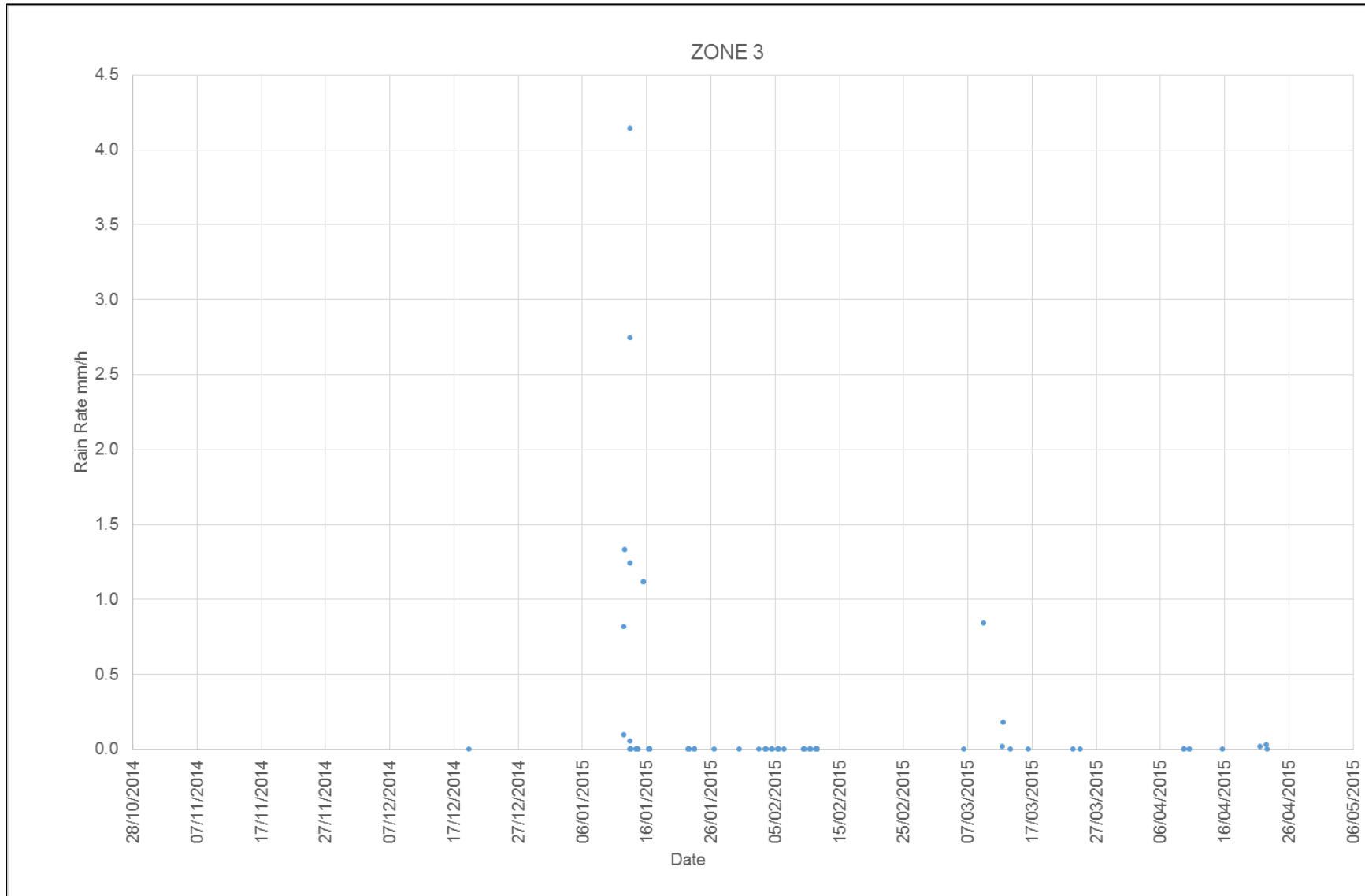
[1] Presentation of weather data captured during Range firing events as presented in Volume 3 - Chapter 1.



**FIGURE 5.10: ZONE 3, SUMMARY OF MEASURED TEMPERATURE (°C) 3<sup>RD</sup> NOVEMBER – 3<sup>RD</sup> MAY 2015**

Notes:

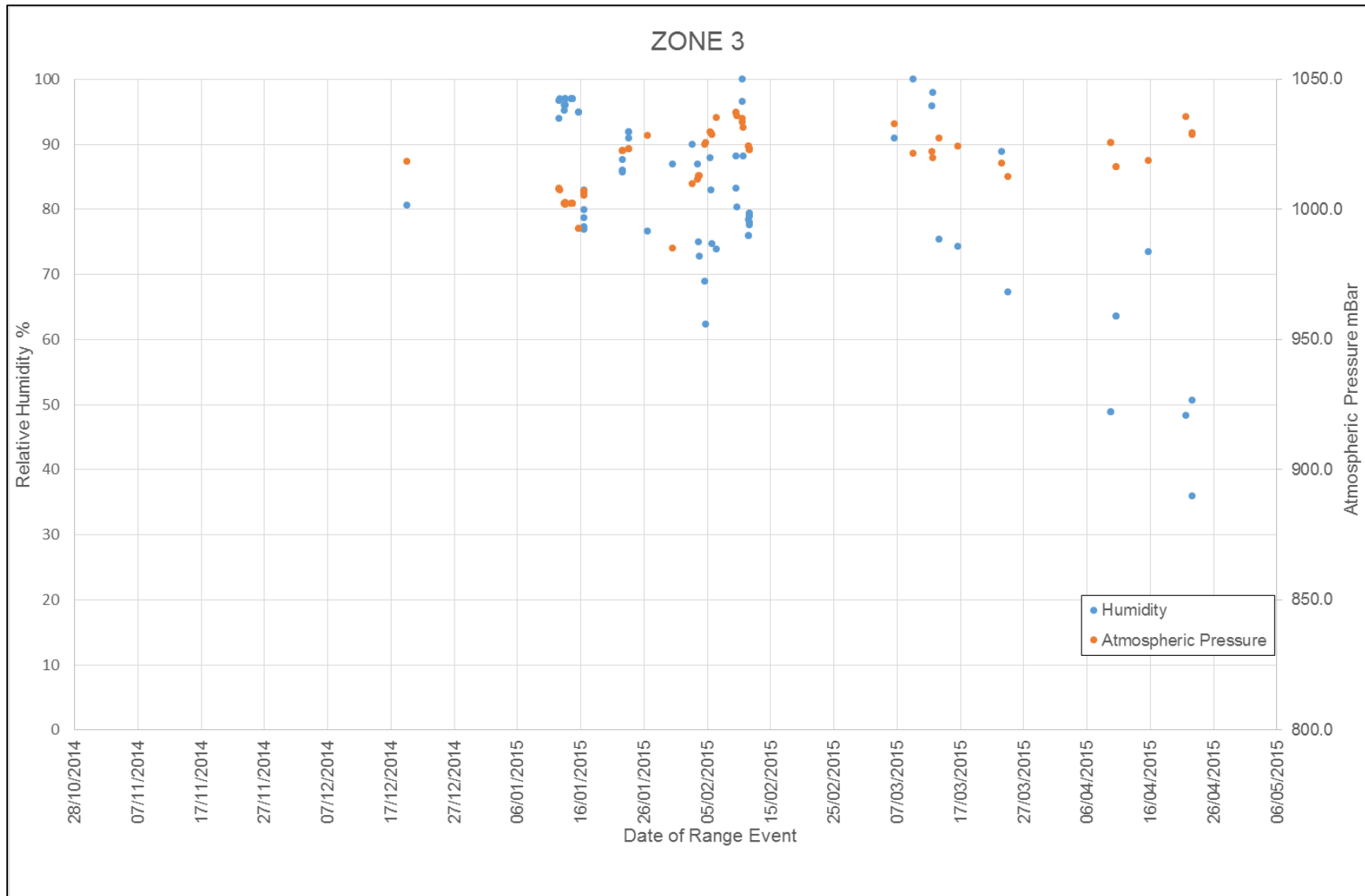
[1] Presentation of weather data captured during Range firing events as presented in Volume 3 - Chapter 1.



**FIGURE 5.11: ZONE 3, SUMMARY OF MEASURED RAIN RATE (MM/HR) 3<sup>RD</sup> NOVEMBER – 3<sup>RD</sup> MAY 2015**

Notes:

[1] Presentation of weather data captured during Range firing events as presented in Volume 3 - Chapter 1.

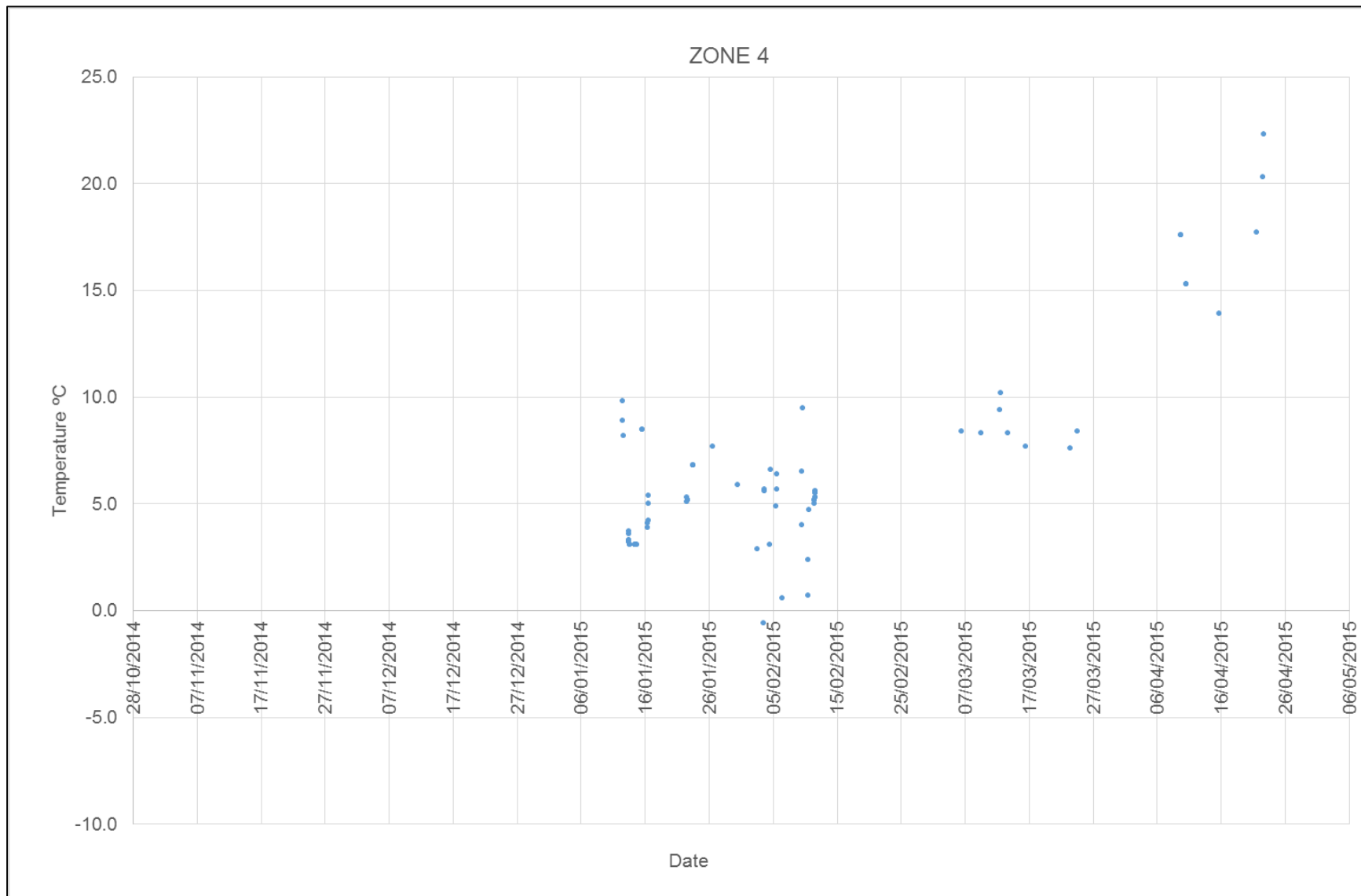


**FIGURE 5.12: ZONE 3 SUMMARY OF MEASURED PRESSUE (MBar) AND PRESSUE (MBar) 3RD NOVEMBER – 3RD MAY 2015**

Notes:

[1] Presentation of weather data captured during Range firing events as presented in Volume 3 - Chapter 1.



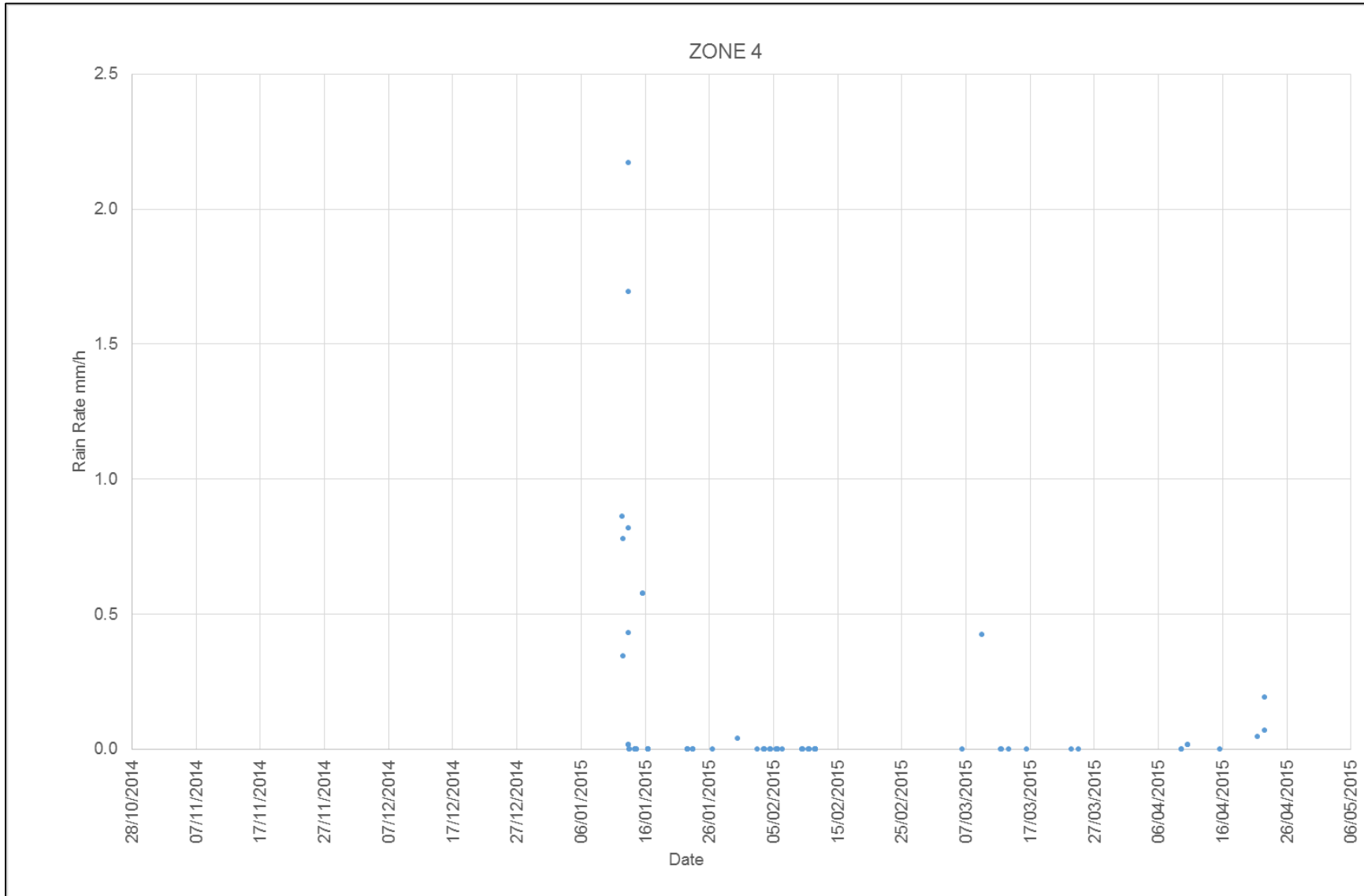


**FIGURE 5.14: ZONE 4, SUMMARY OF MEASURED TEMPERATURE (°C) 3<sup>RD</sup> NOVEMBER – 3<sup>RD</sup> MAY 2015**

Notes:

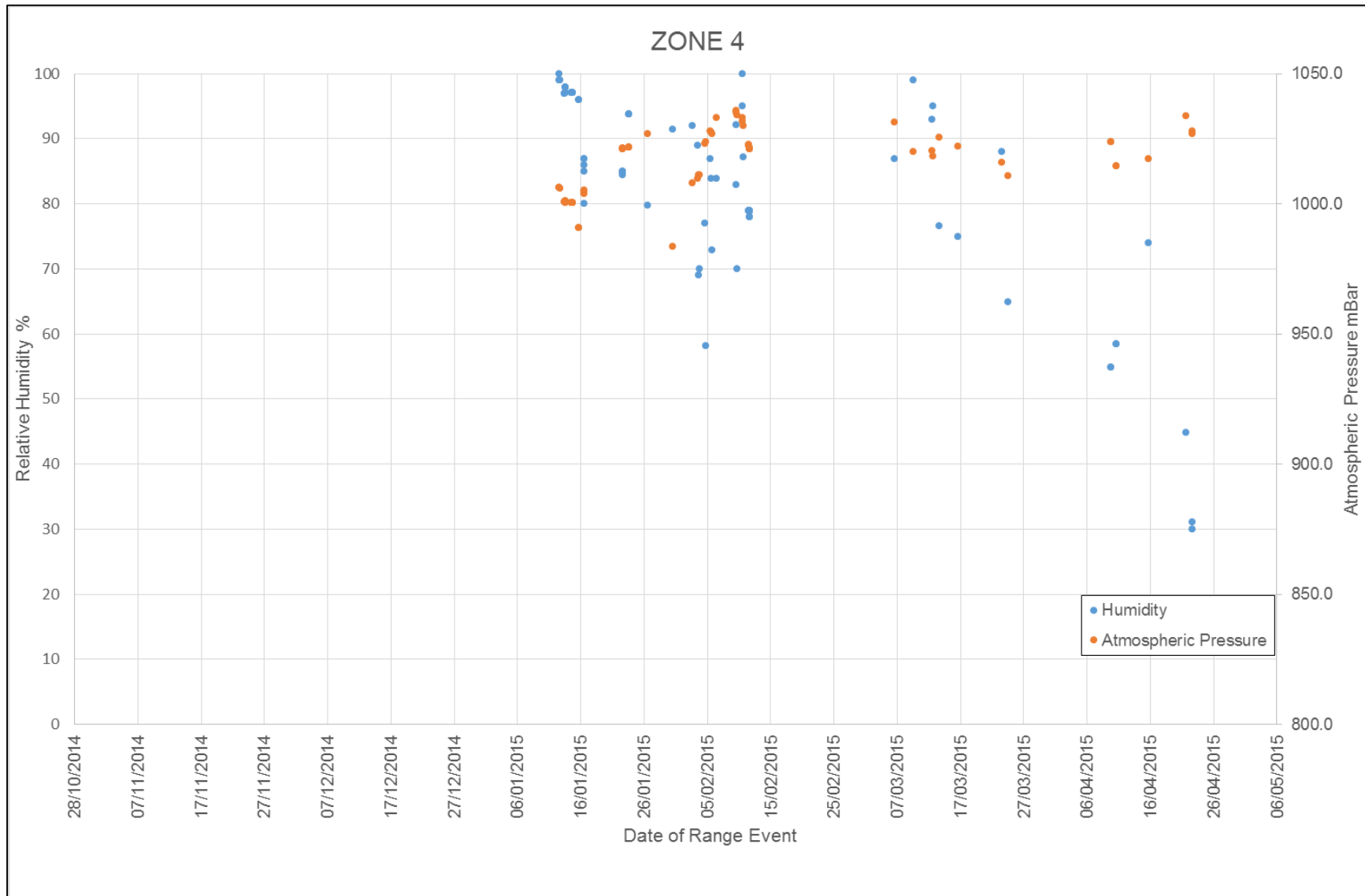
[1] Presentation of weather data captured during Range firing events as presented in Volume 3 - Chapter 1.





**FIGURE 5.15: ZONE 4, SUMMARY OF MEASURED RAIN RATE (MM/HR) 3<sup>RD</sup> NOVEMBER – 3<sup>RD</sup> MAY 2015**

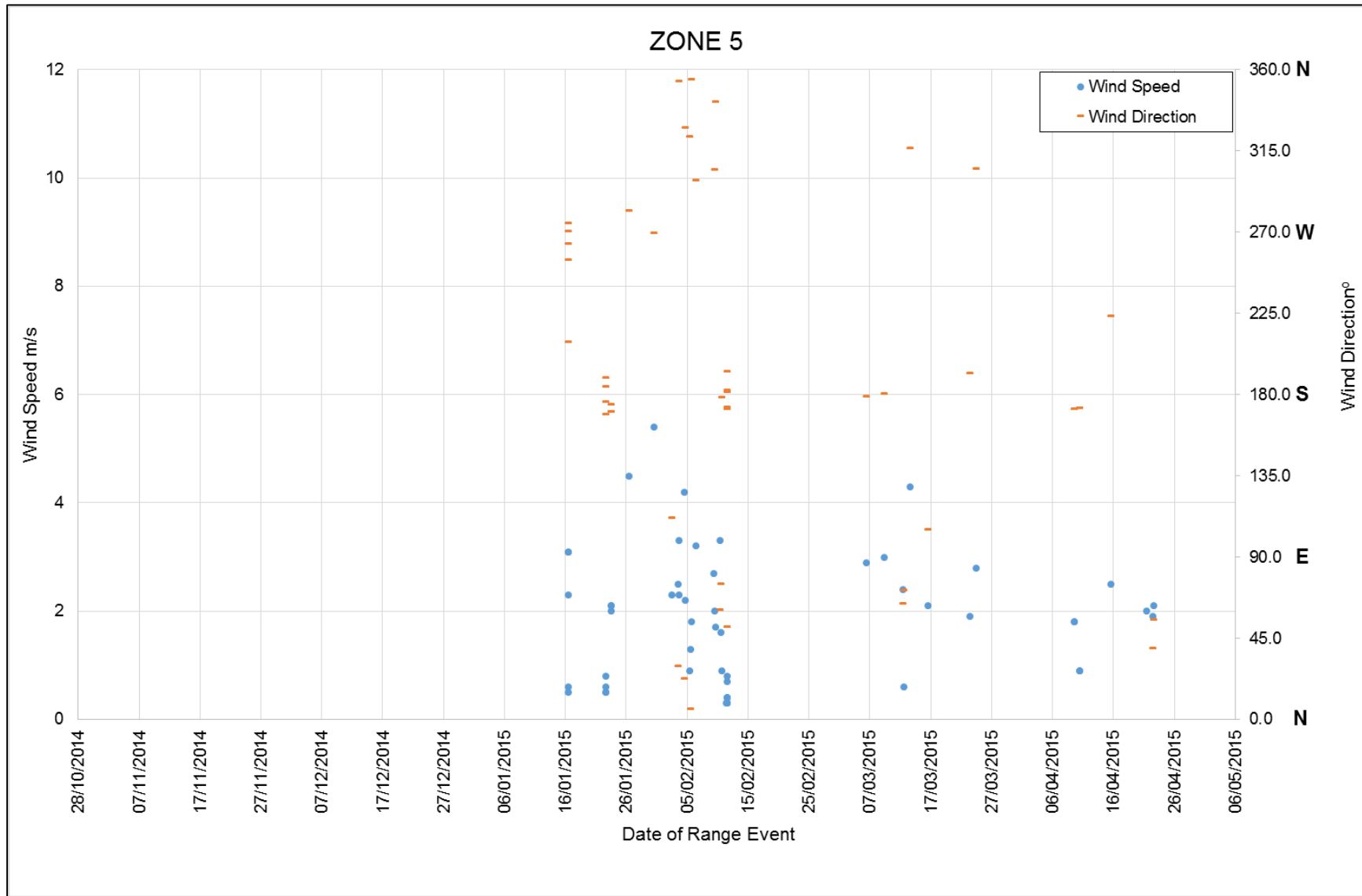
Notes:  
 [1] Presentation of weather data captured during Range firing events as presented in Volume 3 - Chapter 1.



**FIGURE 5.16: ZONE 4, SUMMARY OF MEASURED HUMIDITY (%) AND PRESSUE (mBAR) 3<sup>RD</sup> NOVEMBER – 3<sup>RD</sup> MAY 2015**

Notes:

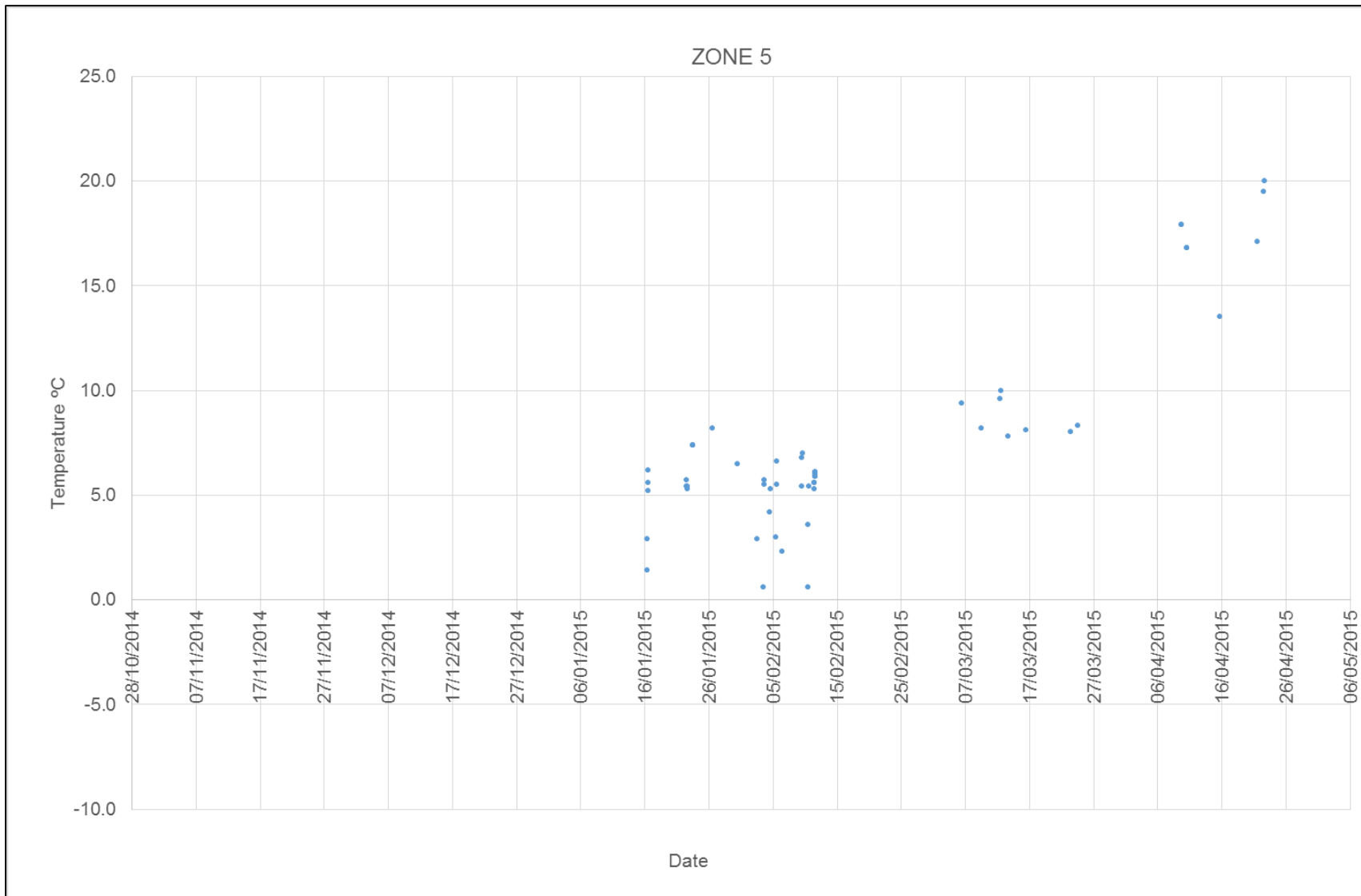
[1] Presentation of weather data captured during Range firing events as presented in Volume 3 - Chapter 1.



**FIGURE 5.17: ZONE 5, SUMMARY OF MEASURED WIND SPEED (M/S) AND DIRECTION 3<sup>RD</sup> NOVEMBER – 3<sup>RD</sup> MAY 2015**

Notes:

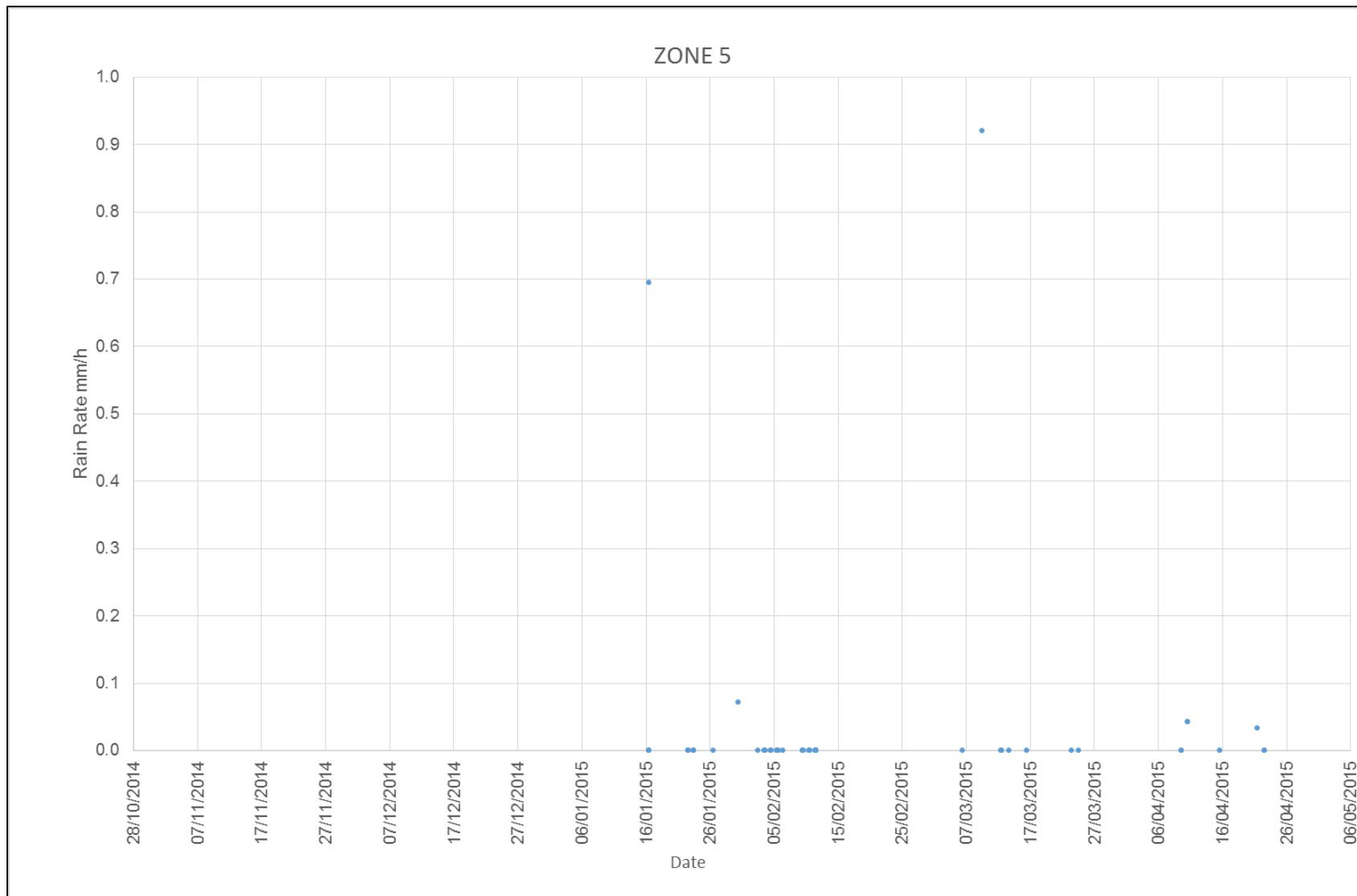
[1] Presentation of weather data captured during Range firing events as presented in Volume 3 - Chapter 1.



**FIGURE 5.18: ZONE 5, SUMMARY OF MEASURED TEMPERATURE (°C) 3<sup>RD</sup> NOVEMBER – 3<sup>RD</sup> MAY 2015**

Notes:

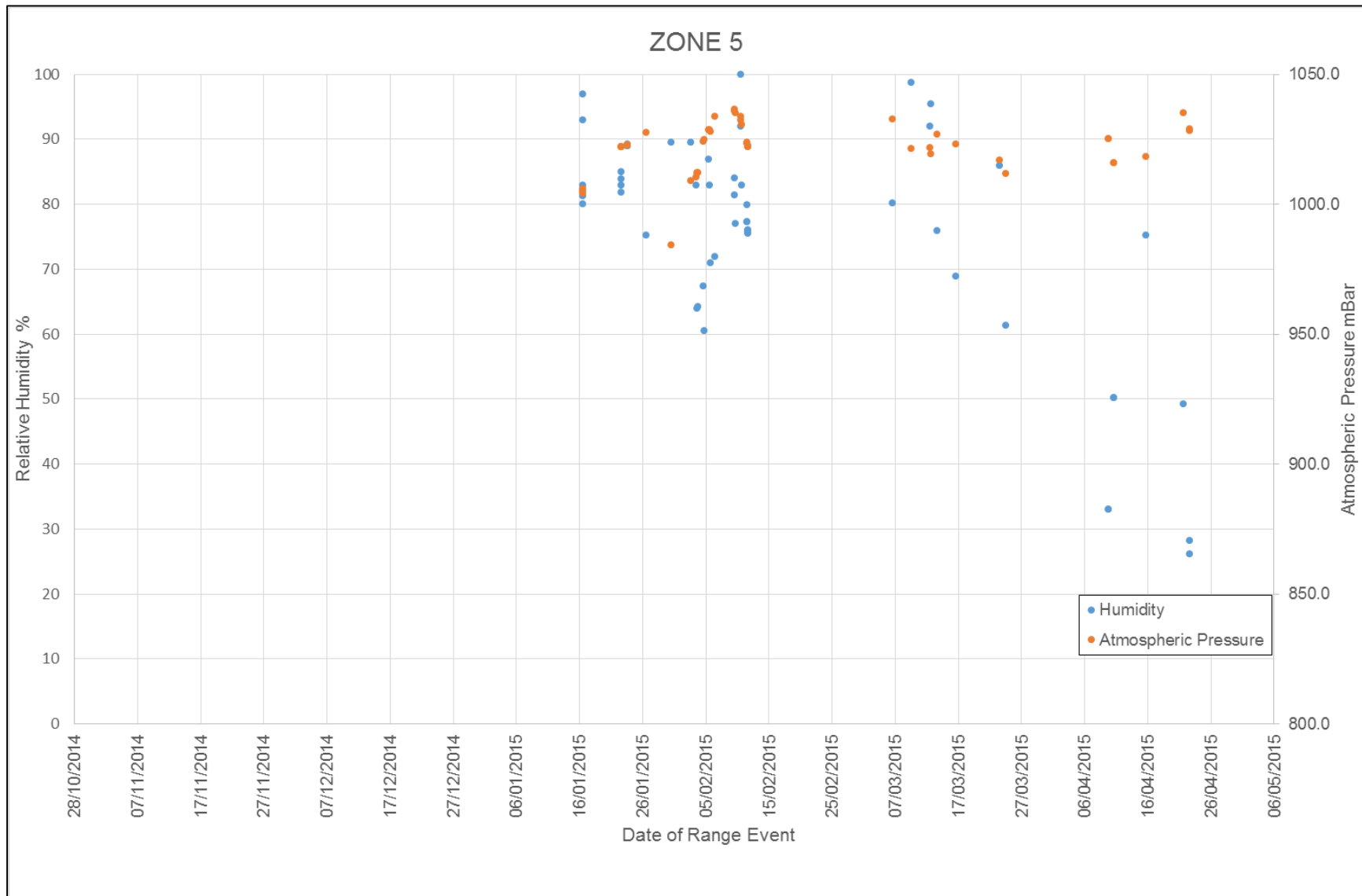
[1] Presentation of weather data captured during Range firing events as presented in Volume 3 - Chapter 1.



**FIGURE 5.19: ZONE 5, SUMMARY OF MEASURED RAIN RATE (MM/HR) 3<sup>RD</sup> NOVEMBER – 3<sup>RD</sup> MAY 2015**

Notes:

[1] Presentation of weather data captured during Range firing events as presented in Volume 3 - Chapter 1.



**FIGURE 5.20: ZONE 5, SUMMARY OF MEASURED HUMIDITY (%) AND PRESSUE (mBAR) 3<sup>RD</sup> NOVEMBER – 3<sup>RD</sup> MAY 2015**

Notes:

[1] Presentation of weather data captured during Range firing events as presented in Volume 3 - Chapter 1.