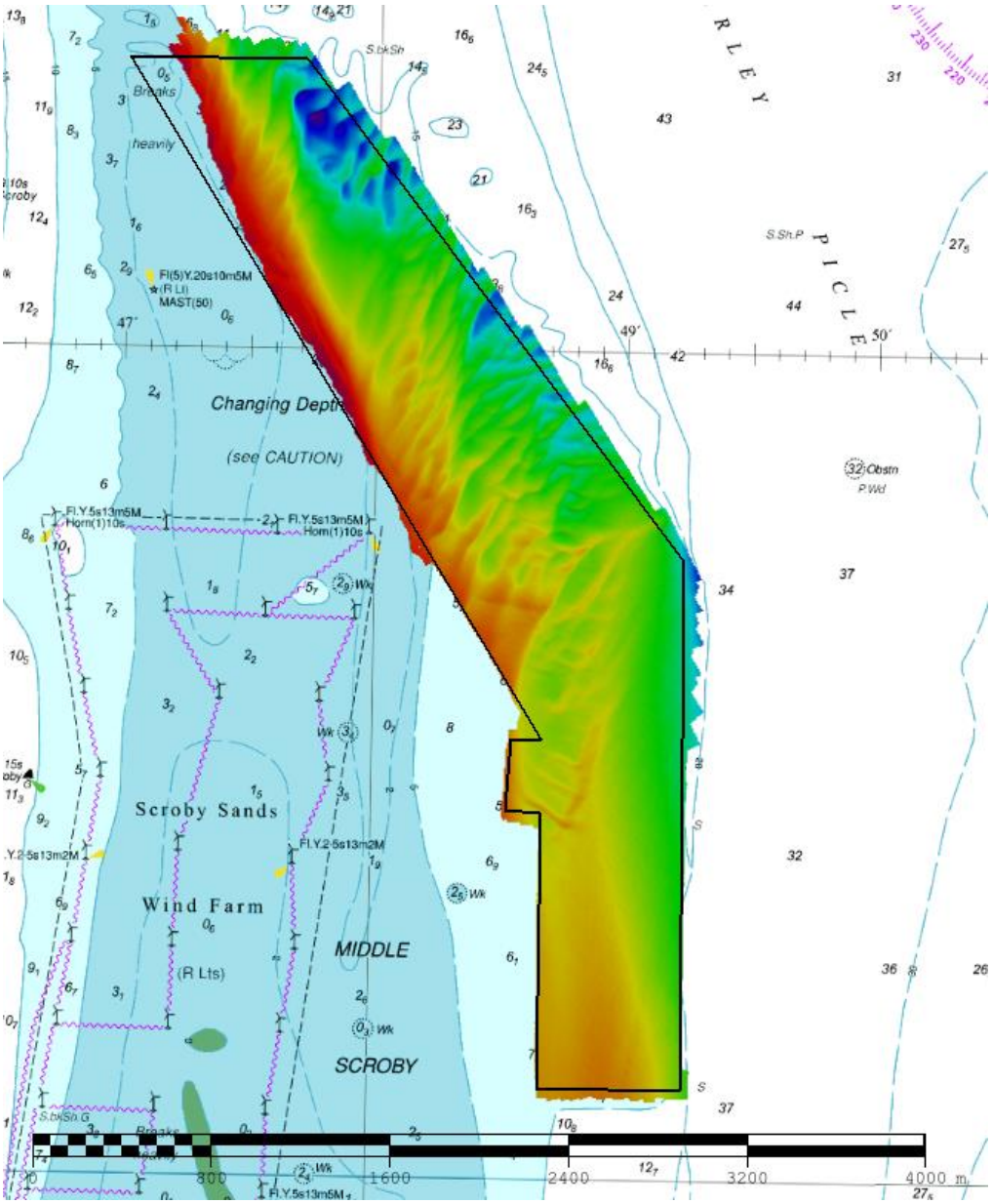
UK Hydrographic Office

EAST ANGLIA

EA5A – SCROBY SANDS FOCUSSED 2017 ASSESSMENT

An assessment of the 2017 hydrographic survey of the area: to monitor recent seabed movement; to identify any implications for shipping; and to make recommendations for future surveys.



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Notes

This Assessment is produced by the UK Hydrographic Office (UKHO) for the Maritime and Coastguard Agency (MCA). Analysis of the Routine Resurvey Areas forms part of the Civil Hydrography Programme and the reports are made available to through the UKHO website and are presented to the Civil Hydrography Working Group. When approved, the recommendations are incorporated into the Routine Resurvey Programme. The report is governed by a Memorandum of Understanding between the Department for Transport (including the MCA) and the Ministry of Defence (including the UKHO).

The Admiralty Chart extracts, other graphics and tables in this Report are included for illustrative purposes only and are NOT TO BE USED FOR NAVIGATION.

No analysis of shipping traffic has been included within this report due to no AIS data being supplied by MCA.

All depths are to local chart datum, defined using the UKHO VORF Model.

EA5 – SCROBY SANDS, 2017

1. SUMMARY

Changes Detected

1.1 Scroby Bank has migrated west causing depths on the western edge of Barley Picle to deepen.

1.2 General depths in the area have become deeper on the western edge and shoaled on the eastern edge.

Reasons for Continuing to Resurvey the Area

1.3 Depths in the area are subject to change and remain potentially hazardous vessels navigating the area and therefore require continued monitoring through 12-year resurveys with 6-year focused surveys.

Recommendations

1.4 Due to the mobile nature of Middle and North Scroby, the 12-year frequency should be maintained, with 6-year focused surveys continued.

1.5 Due to the movement of Middle Scroby towards the deeper water east both the focused area of EA5a and the full area EA5 is recommended to extend north to follow and monitor the shoal depths.

2. LOCATION

2.1 Survey interval at time of resurvey: 12 years full area, 6 years focused.

2.2 Area Covered:

2.2.1 Full 12-year area: 25.14 km^2.

2.2.2 Focused 6-year area: 3.89 km^2.

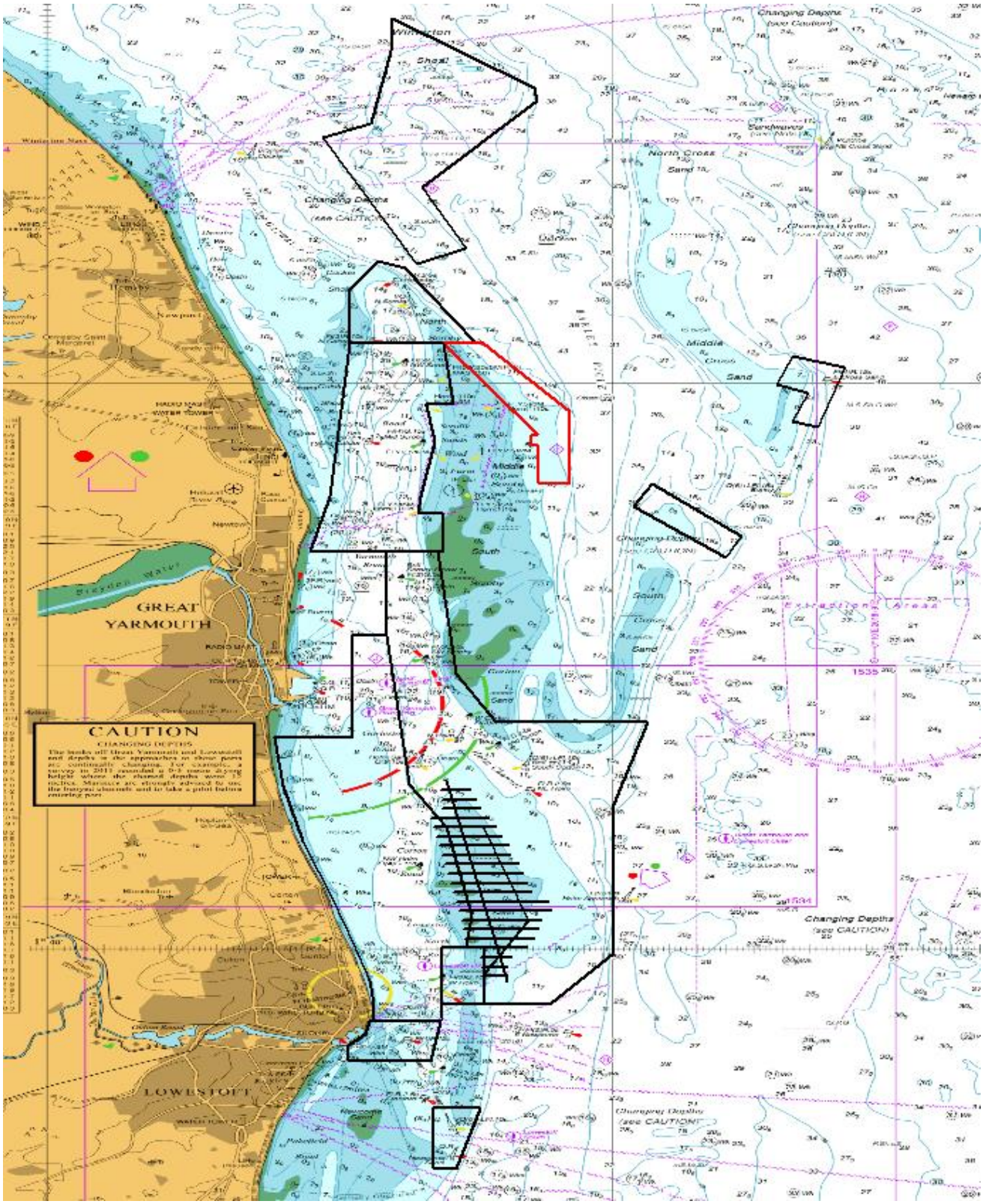


Figure 1 – 2017 East Anglia RRS areas overlaid on BA 1543 with EA5a shown in Red

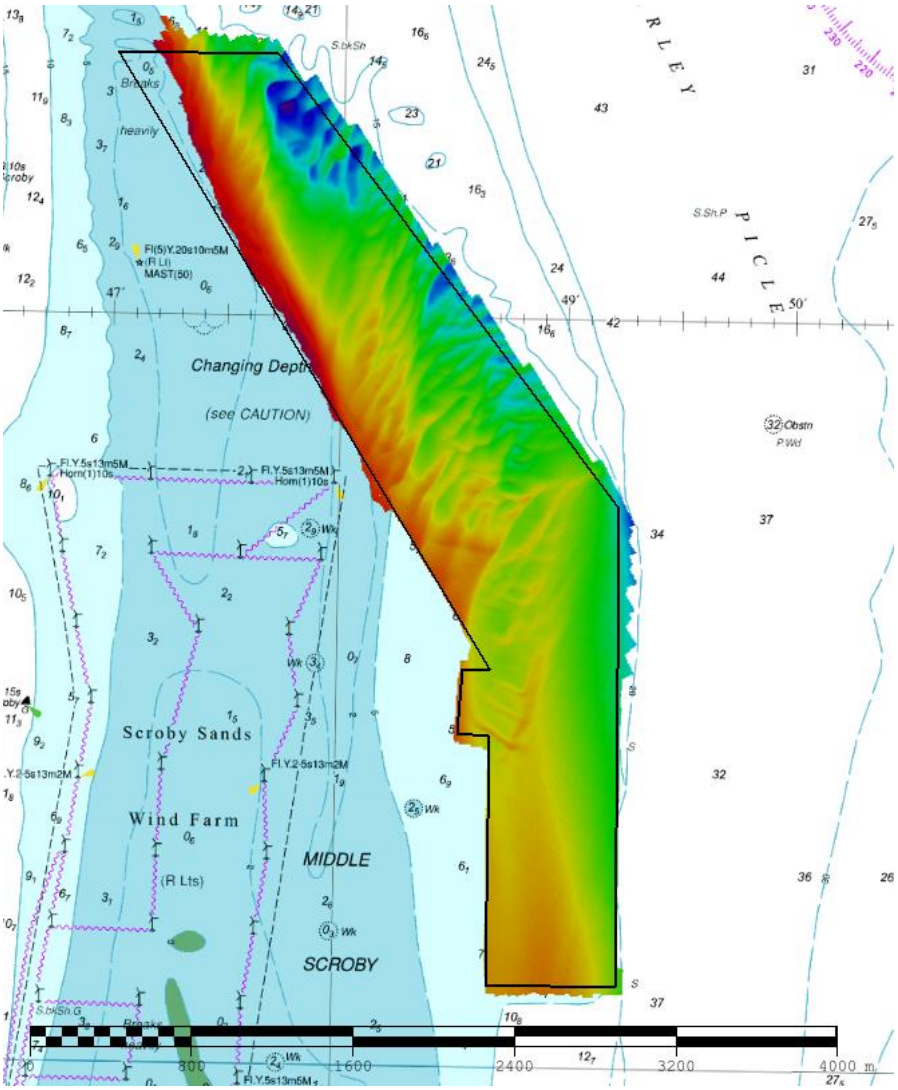


Figure 2 – 2017 survey data sun-illuminated view overlaid on BA Chart 1534

3. REFERENCE SURVEY DETAIL

3.1 Previous survey conducted in May and June of 2011 as part of HI 1367.

3.2 The Report of Survey for this survey is available upon request from the UKHO and the validated bathymetric surfaces are available to download from INSPIRE portal and MEDIN Bathymetry Data Archive Centre.

4. COMPARISON SURVEY DETAIL

4.1 Focused survey was conducted in May, September and November of 2017 as part of HI1545.

4.2 The Report of Survey for this survey is available upon request from the UKHO and the validated bathymetric surfaces are available to download from INSPIRE portal and MEDIN Bathymetry Data Archive Centre.

5. DESCRIPTION OF RECENT BATHYMETRIC CHANGE

5.1 There is a controlling depth of 8.2m in the centre of the EA5a area, and a depth of 7.1 in the south (figure 3), indicating that depths could potentially be hazardous to the navigation of vessels with a draught of 5m or more.

5.2 The difference surface (Figure 4) shows depths becoming deeper (up to 9.3m deeper – figure 5) in the west of area EA5a along the eastern edge of Middle Scroby.

5.3 There is some shoaling of depths on the eastern edge of the survey area on the edge of Barley Picle.

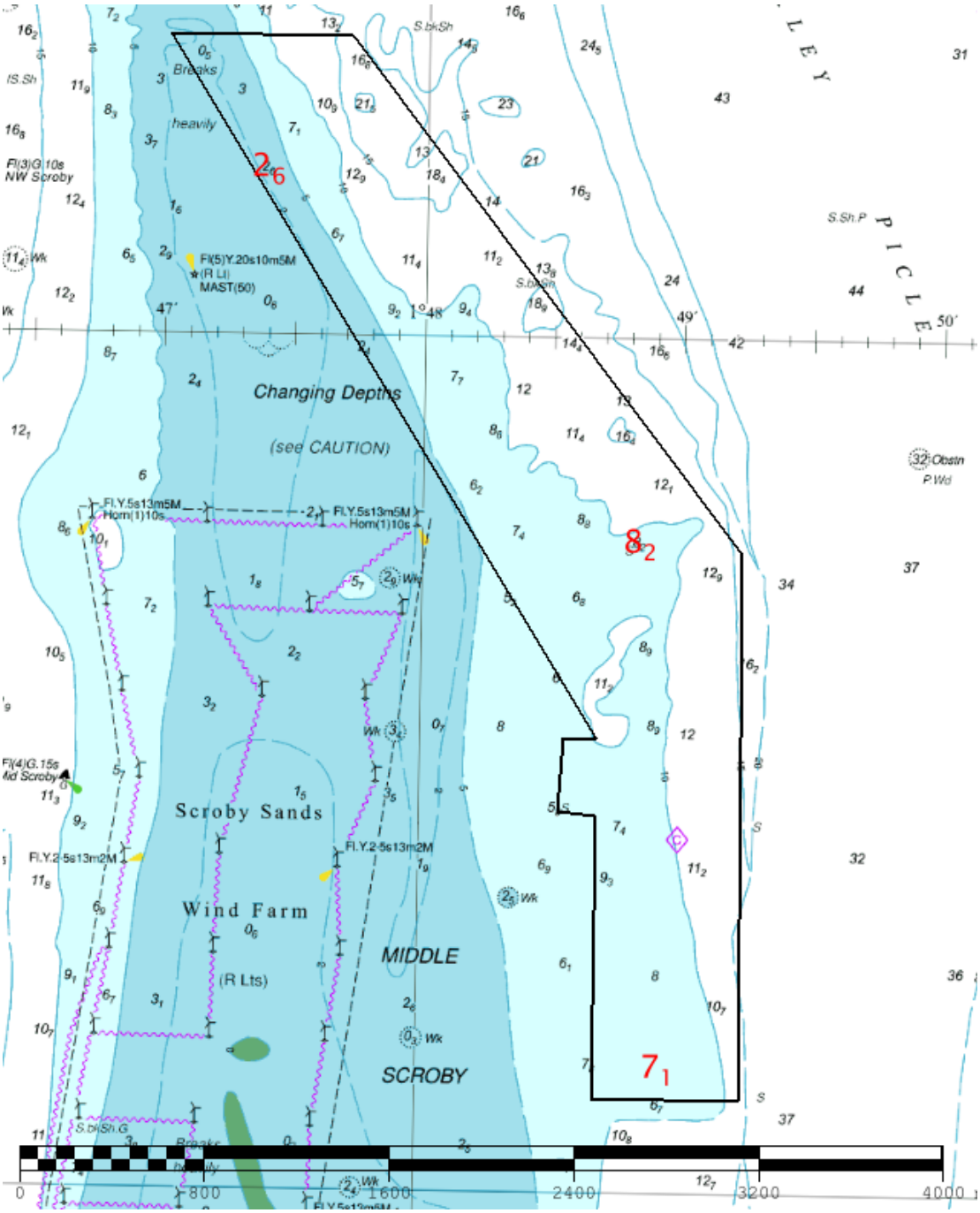


Figure 3 Shoalest and Controlling depths from 2017 survey (shown in red) overlaid on BA Chart 1534

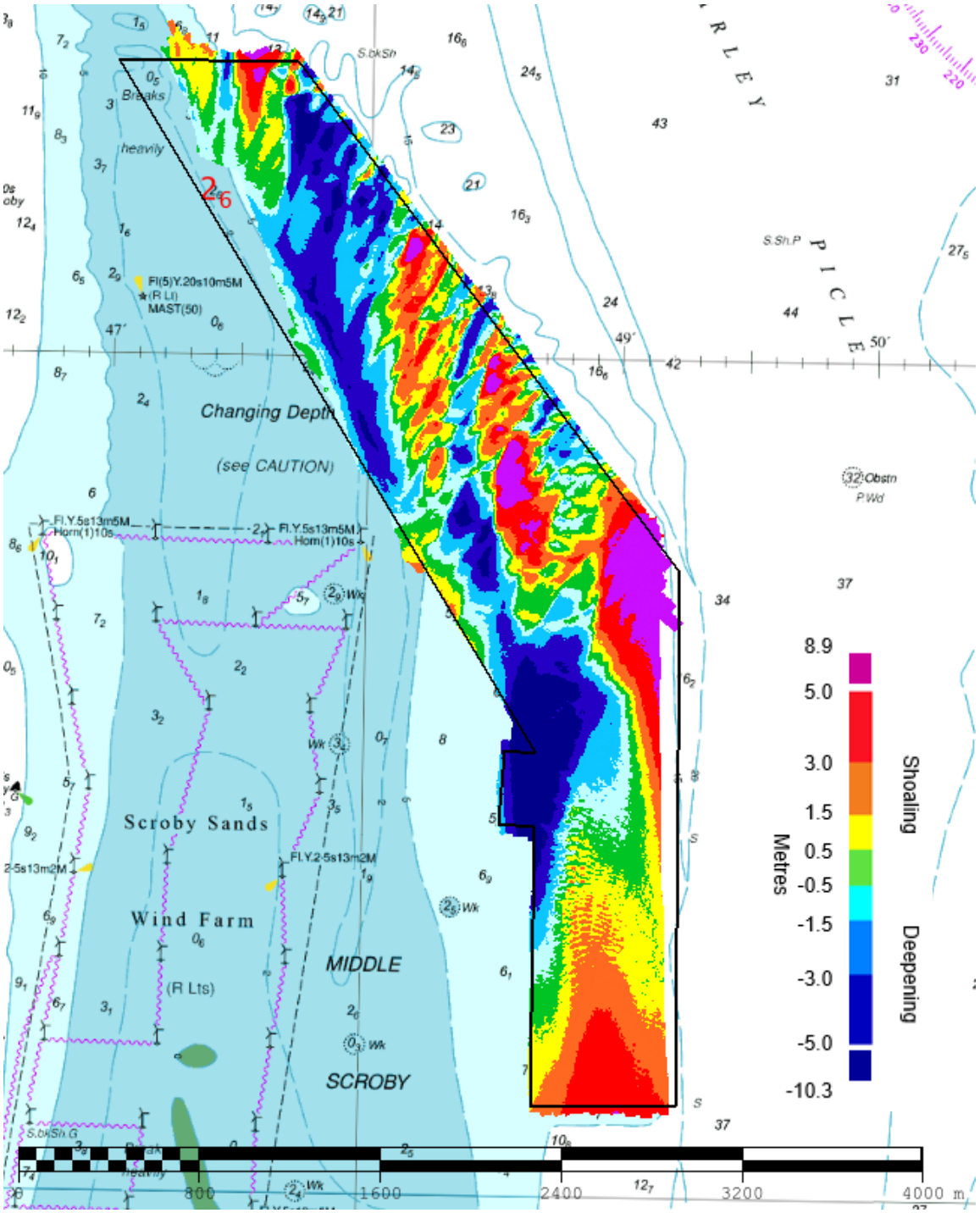
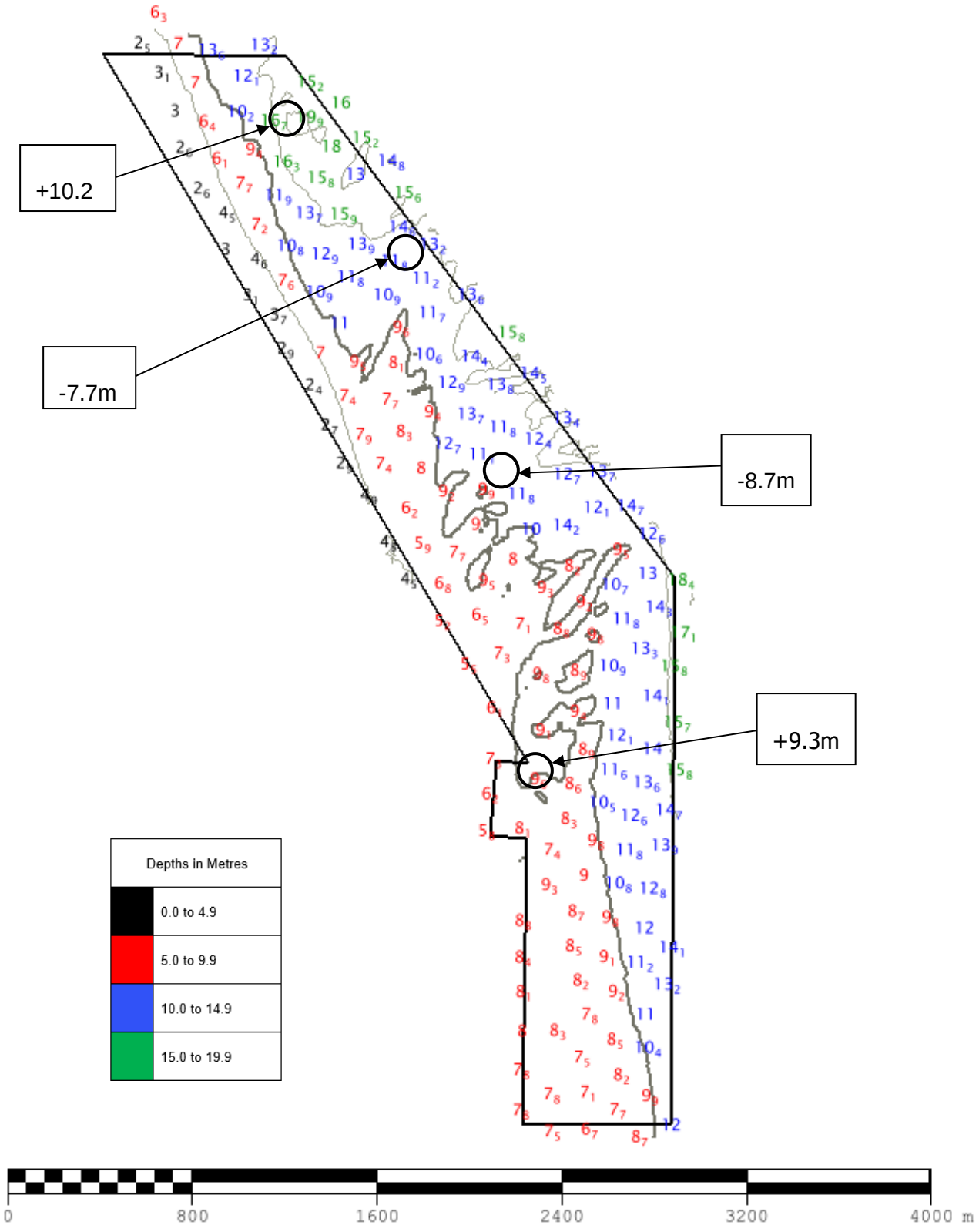


Figure 4 Difference plot 2011 survey vs 2017 survey overlaid on BA Chart 1534



Positive values (+) represent deepening. Negative values (-) represent seabed depths becoming shallower.

Figure 6 – Colour Banded Depth Plot from the 2017 Survey with selected depth changes since the 2011 survey

6. RECOMMENDATIONS FOR FUTURE SURVEYS

Survey Interval

6.1 No change to the survey interval is required.

Survey Area

6.2 Due to the movement of Middle Scroby towards the deeper water east both the focused area of EA5a and the full area EA5 is recommended to extend north to follow and monitor the shoal depths.

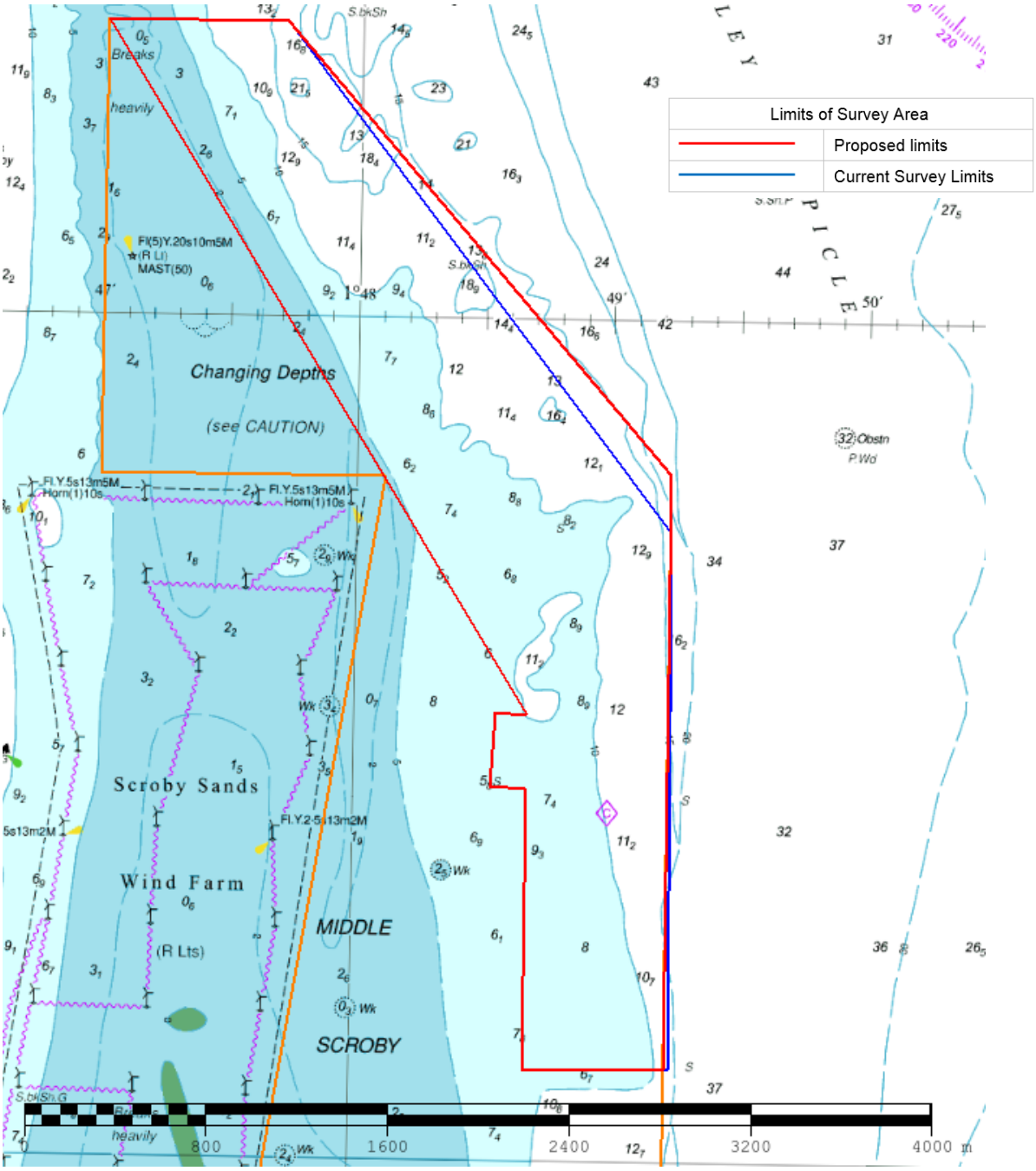


Figure 7 – Future survey limits of area EA5a (current limits given in Blue, future limits given in red, current full survey area in Orange)

The WGS'84 coordinates of the recommended adjusted survey area limits for the 12-year full area EA5 and 6-year focused area EA5a are shown below:

EA5 full total area: 25.34 km^2

A	52.61667	1.78333
B	52.62751	1.78337
C	52.63200	1.79413
D	52.66040	1.80178
E	52.66040	1.78333
F	52.67833	1.78333
G	52.67833	1.79500
H	52.66055	1.82047
I	52.56675	1.82060
J	52.56675	1.79903
K	52.58108	1.78700
L	52.61667	1.77870

EA5a focused total area: 4.08 km^2

A	52.65100	1.81130
B	52.67833	1.78333
C	52.67833	1.79500
D	52.66055	1.82047
E	52.63700	1.82052
F	52.63700	1.81130
G	52.64807	1.81130
H	52.64818	1.80889
I	52.65108	1.80919