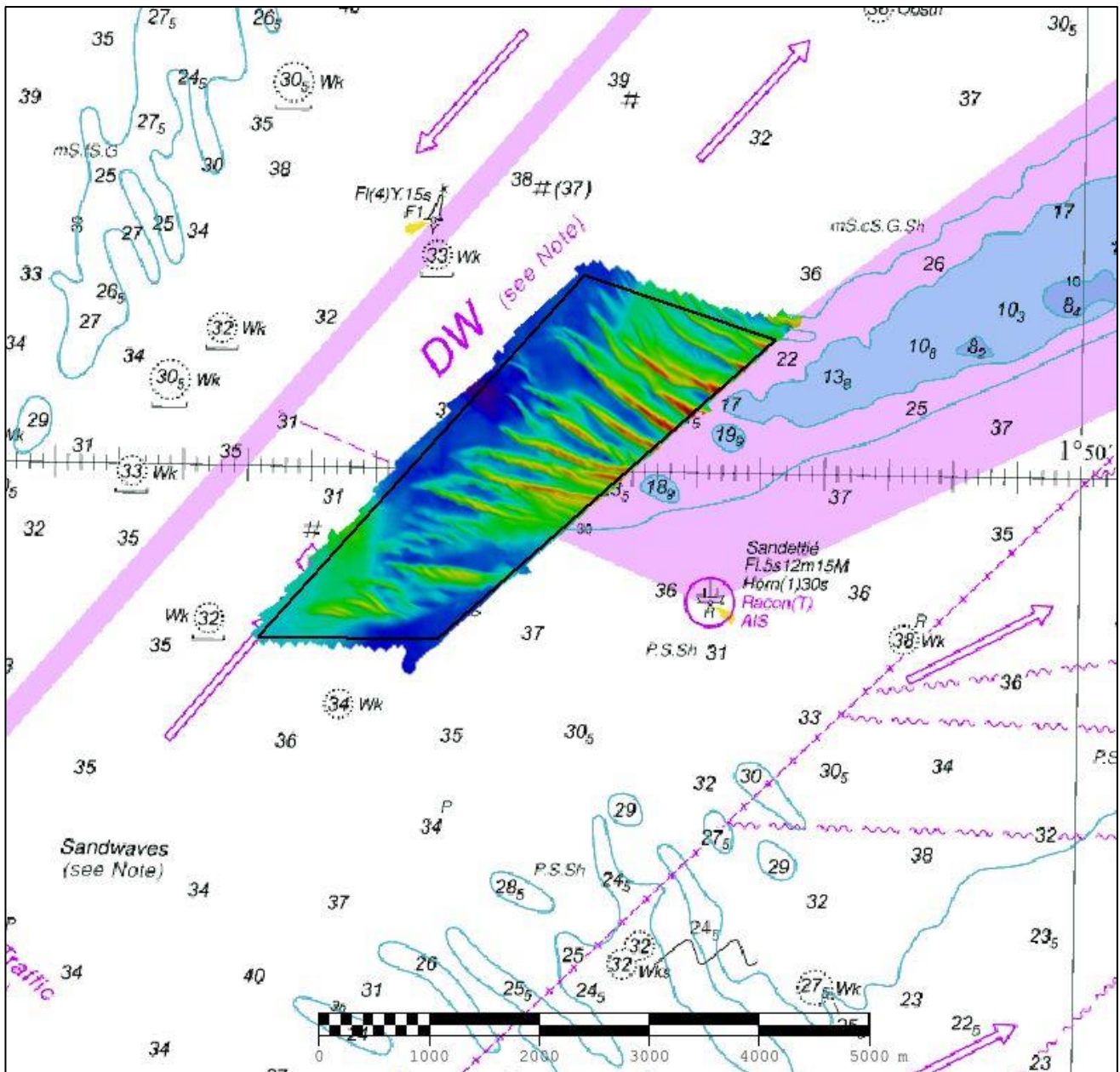




UK Hydrographic Office

DOVER STRAIT SW SANDETTIE (DWR A) 2019 ASSESSMENT

An assessment of the 2019 hydrographic survey of the area DWR A: to monitor recent seabed movement; to identify any implications for shipping; and to make recommendations for future surveys.



CONTENTS

Notes	2
1. SUMMARY	1
2. LOCATION	1
3. REFERENCE SURVEY DETAIL	2
4. NEW SURVEY DETAIL	2
5. DESCRIPTION OF RECENT BATHYMETRIC CHANGE	3
6. RECOMMENDATIONS FOR FUTURE SURVEYS	4

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 DfT (including the MCA) and the MOD (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.

This material is protected by Crown Copyright. It may be downloaded from the UK Hydrographic Office's (UKHO) web site and printed in full for personal or non-commercial internal business use. Extracts may also be reproduced for personal or non-commercial internal business use on the condition that the UK Hydrographic Office is acknowledged as the publisher and the Crown is acknowledged as the copyright owner.

Applications for permission to reproduce the material for any other purpose (including any distribution of the material or extracts to third parties) can be made interactively on the UKHO's web site (www.ukho.gov.uk), by e-mail to intellectualproperty@ukho.gov.uk or in writing to Intellectual Property, UK Hydrographic Office, Admiralty Way, Taunton, Somerset, TA1 2DN.

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

All depths are to Chart Datum, defined using the UKHO VORF Model.

DWR A SW SANDETTIE, 2019

1. SUMMARY

Changes Detected

- 1.1 The area is very mobile with sand waves migrating in both north-easterly and south-westerly directions.
- 1.2 The least depth in the area has changed from 19.8m in 2013 to 20.5m in 2019.

Reasons for Continuing to Resurvey the Area

- 1.3 The area covers large dynamic sandwaves, up to 16 metres in height and covers part of the northeast bound Deep Water Route corridor.

Recommendations

- 1.4 Given the location of the area and the mobility and changes in the seabed which may lead to significant shoaling, DWR A should remain on the 6-year interval.
- 1.5 The survey limits for DWR A are suitable at present

2. LOCATION

- 2.1 Survey interval at time of resurvey: 6 years
- 2.2 Area Covered: 7.01 km²

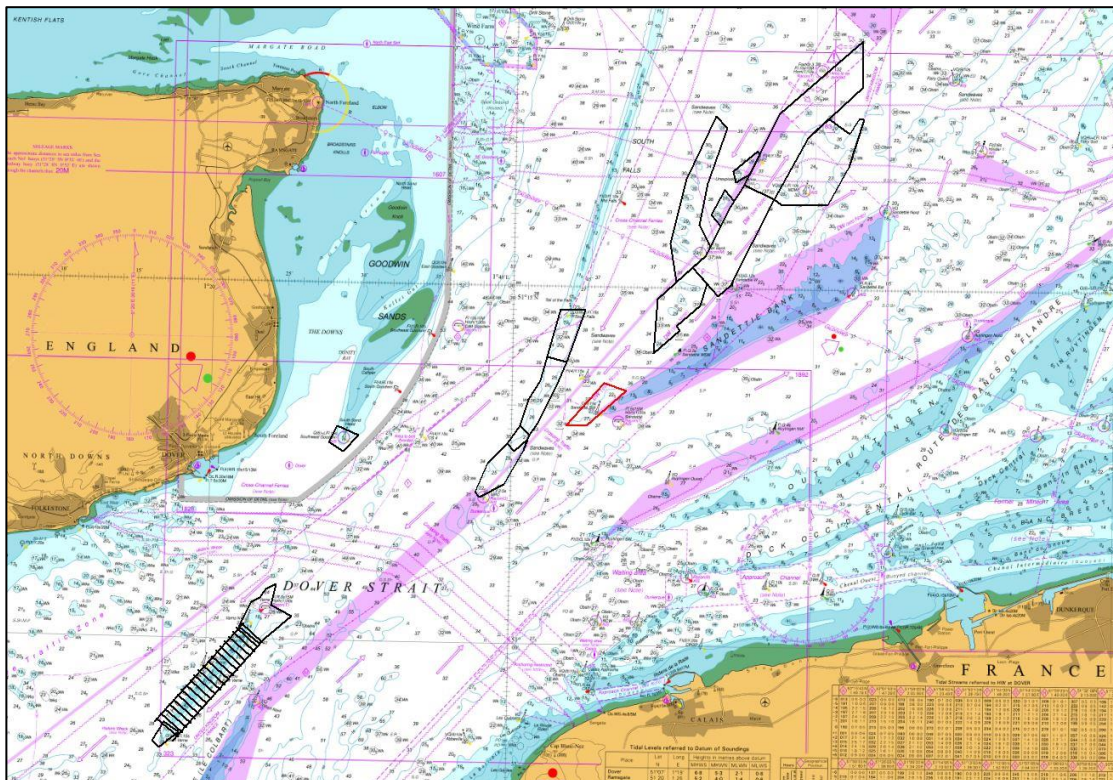


Figure 1: 2019 Dover Strait Routine Resurvey areas overlaid on BA Chart 1610-0 with area DWR A in red

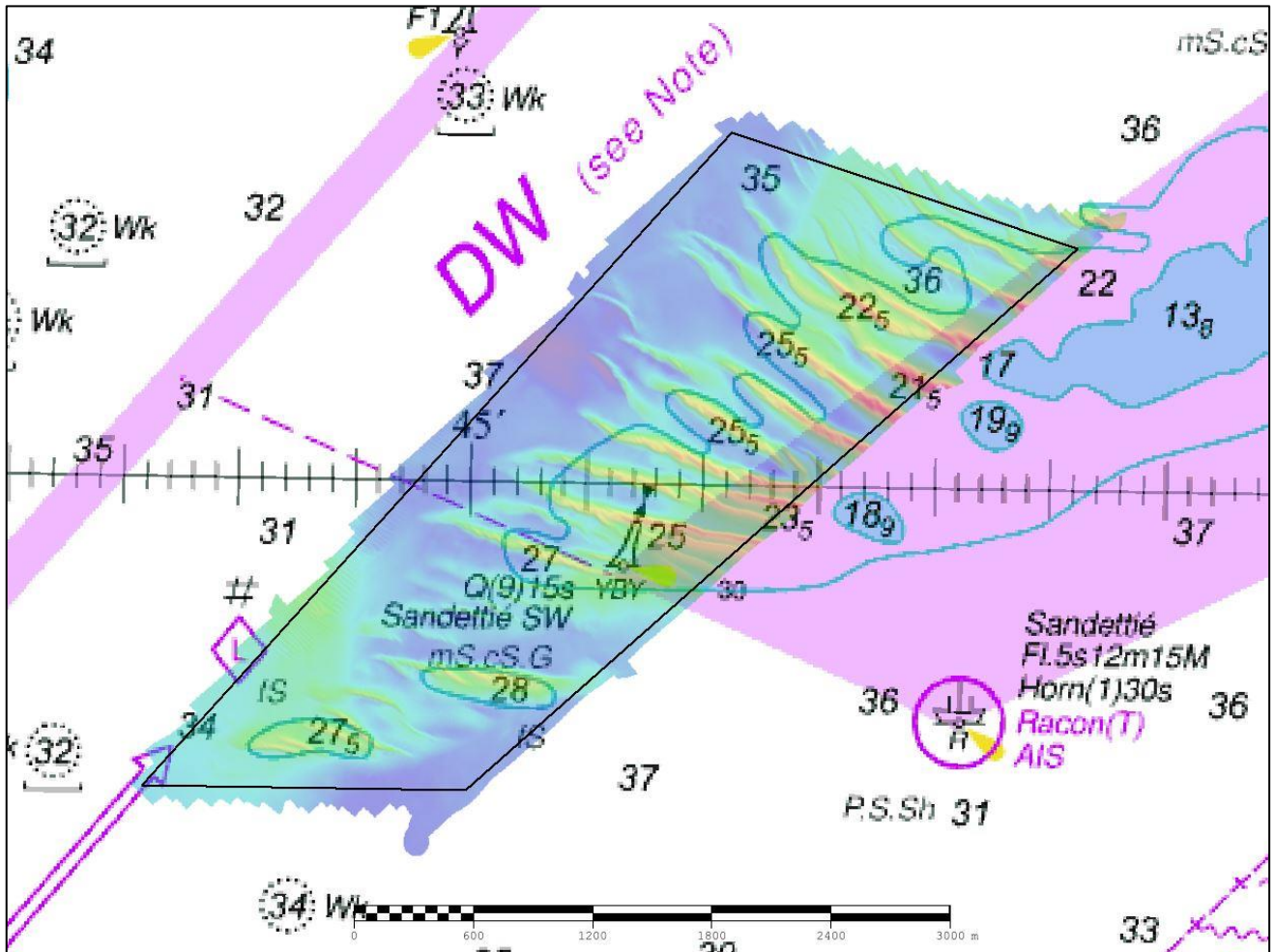


Figure 2: 2019 DWR A survey data overlaid on BA Chart 0323-0

3. REFERENCE SURVEY DETAIL

- 3.1 The previous survey conducted for the Routine Resurvey Programme was conducted in November and December 2013 as part of HI1434.
- 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 the Admiralty Marine Data Portal.

4. NEW SURVEY DETAIL

- 4.1 The latest survey as for the 2019 Routine Resurvey Programme was conducted in June and October 2019 as part of HI1647.
- 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 the Admiralty Marine Data Portal.

5. DESCRIPTION OF RECENT BATHYMETRIC CHANGE

- 5.1 The difference surface in Figure 3 shows that the area is highly mobile, with migration of sandwaves in both north-easterly and south-westerly directions. The majority, especially along the eastern edge of the area, are moving in a north-easterly direction.
- 5.2 The depth plot in Figure 4 shows that the least depth in the 2019 survey is 20.5m compared with 19.8m in the 2013 survey. The shoalest depth in the south of the area has changed from 29.1m in 2013 to 27.8m and the shoalest depth on the largest sandwave in the south-east has changed from 28.1m to 27.6m.
- 5.3 The largest differences shown in Figures 3 and 4, show a difference of +9.4m and -10.5m along the eastern edge of the survey associated with migrating sandwaves.
- 5.4 Outside of the areas of sandwaves the seabed is largely stable with little change since 2013.

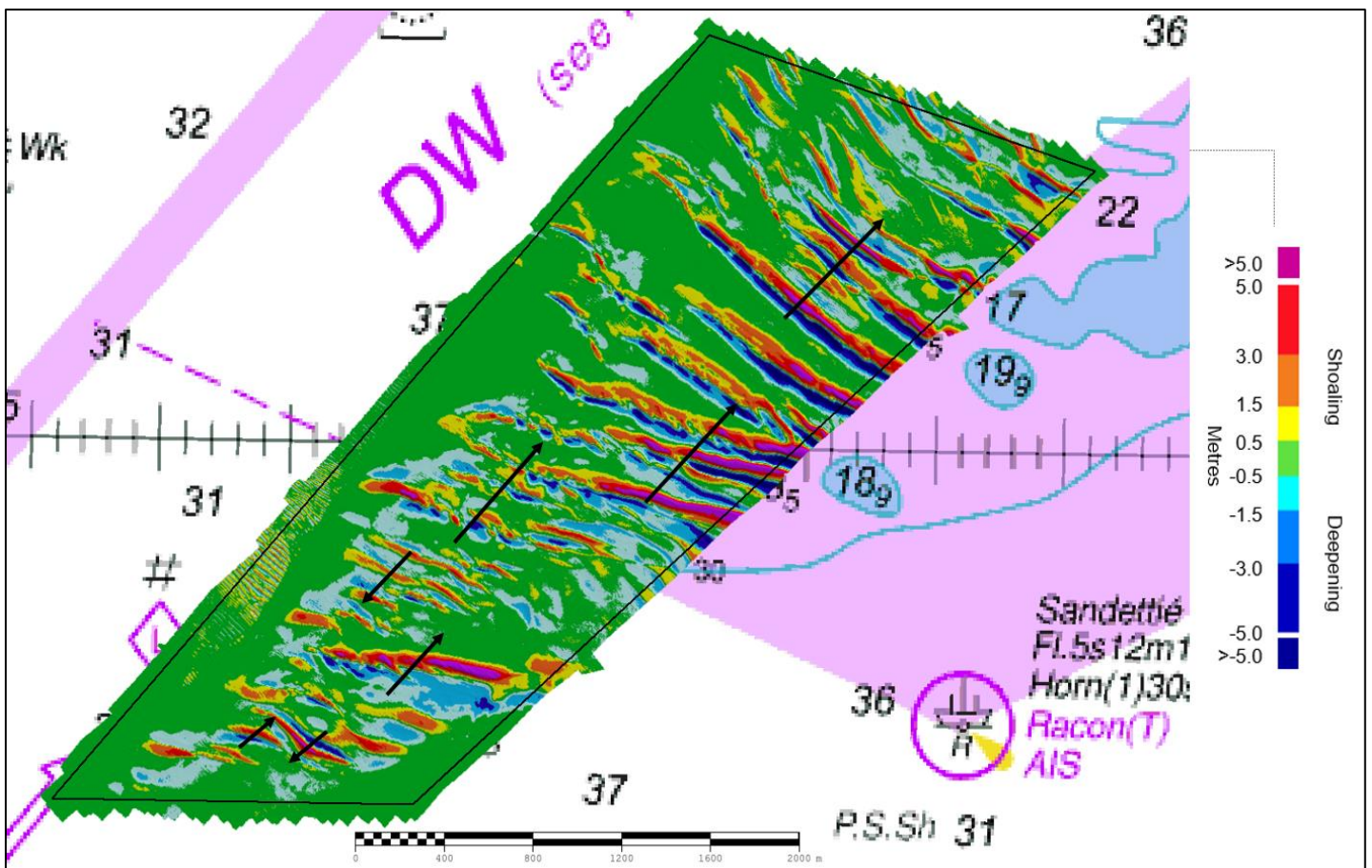


Figure 3: Difference surface showing bathymetric changes between the 2019 and 2013 surveys overlaid on BA Chart 0323_0 (Black arrows represent sandwave migration since 2013 survey)

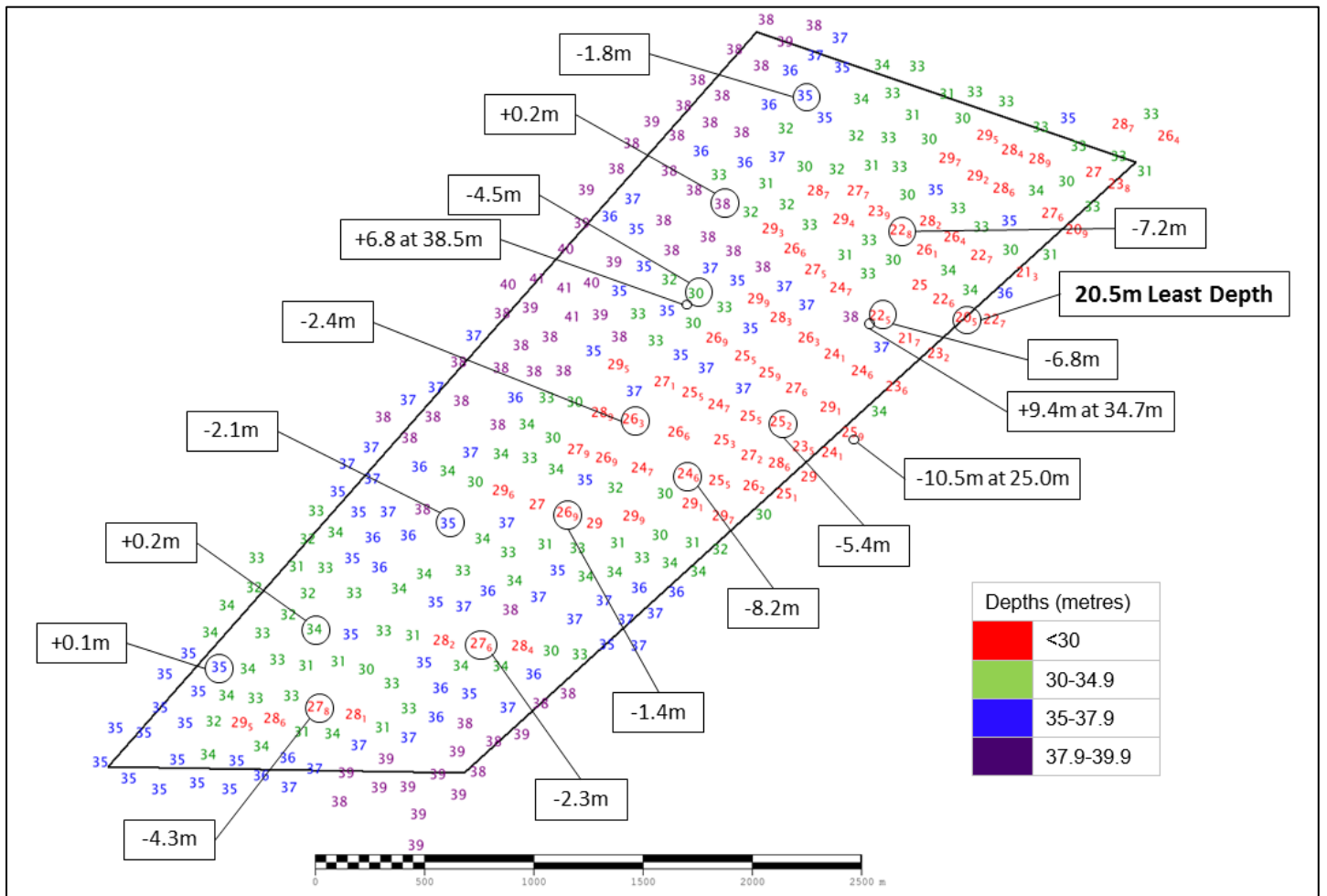


Figure 4: Colour banded depth plot from the 2019 survey with selected depth changes since the 2013 survey. Positive values (+) represent deepening. Negative values (-) represent shoaling.

6. RECOMMENDATIONS FOR FUTURE SURVEYS

Survey Interval

6.1 Given the location of the area and the mobility and changes in the seabed which could lead to significant shoaling, DWR A should remain on the 6-year interval.

Survey Area

6.2 The least depth is right on the edge of the eastern HI limit, but the 2013 routine resurvey report recommended reducing the area by 15% as the shoalest depths considerably deeper than the draughts of the small number of vessels observed using this area. Therefore, no recommendations will be made to extend the area.