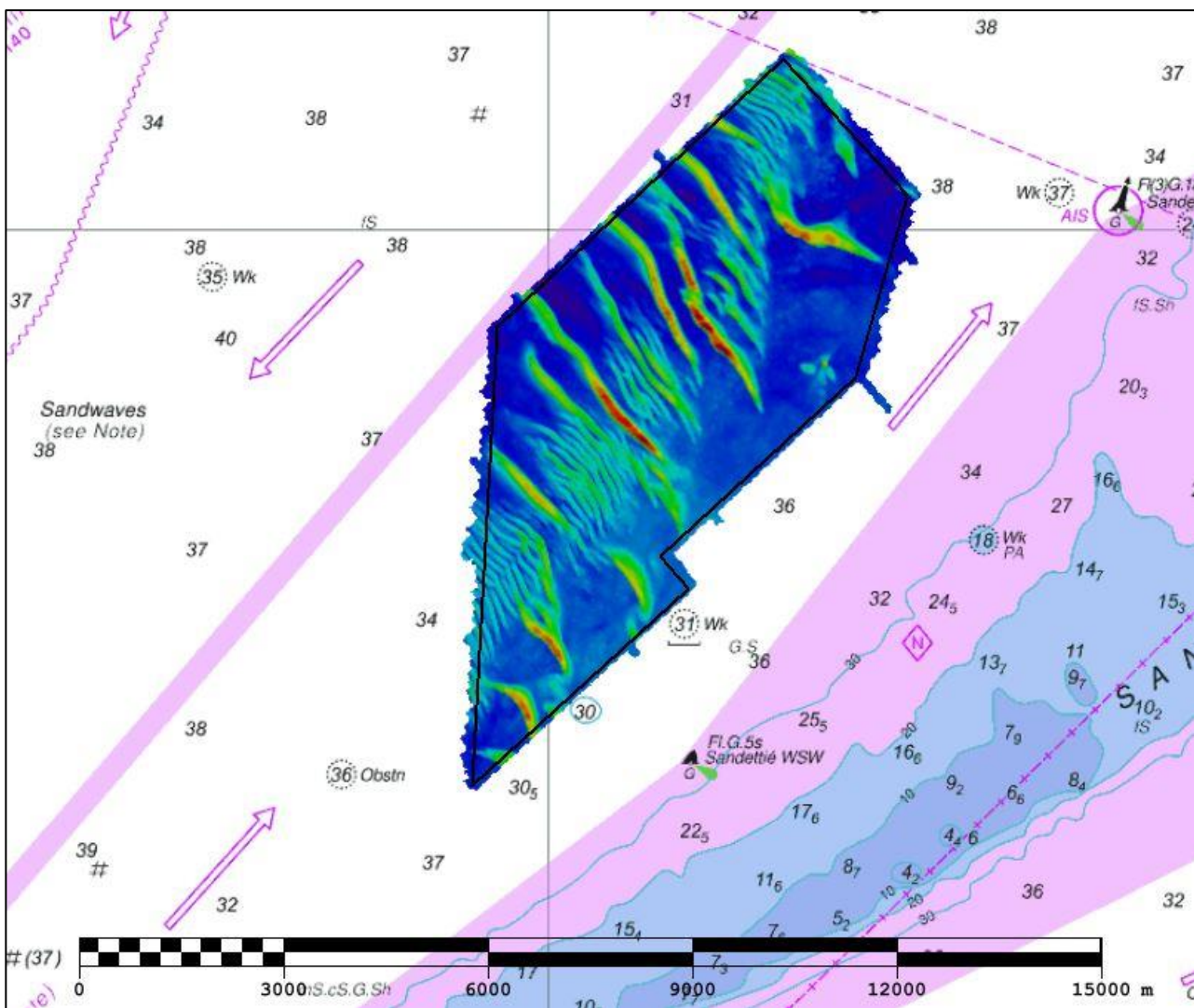




UK Hydrographic Office

DOVER STRAIT DWR T 2019 ASSESSMENT

An assessment of the 2019 hydrographic survey of the area DWR T: 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 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.

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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 T, 2019

1. SUMMARY

Changes Detected

- 1.1 The controlling depth is 0.8m deeper than currently charted.
- 1.2 Sandwaves have shown gradual movement south-west direction since the 2016 focused survey. Outside of sandwave areas, the seafloor has shown stability.
- 1.3 Significant depths changes are noted from the 2016 focused area survey due to sandwave migration.

Reasons for Continuing to Resurvey the Area

- 1.4 Survey area covers a major shipping route in the Dover Strait. The seafloor has mobile sand wave features which should be monitored for continued safety of maritime traffic. Continued resurveying is therefore recommended.

Recommendations

- 1.5 Controlling depth has not shifted a significant distance since the last full survey in 2004. Sand waves have also not migrated a great distance in this time. DWR T Full Area can remain on 6-year survey interval.
- 1.6 Major sand wave features and the least and controlling depth is monitored within the 3-year focus survey and has remained inside the full survey area. Full survey area is therefore sufficient.

2. LOCATION

- 2.1 Survey interval at time of resurvey: Full DWR T area is surveyed every 6 years. Focused area survey is conducted every 3 years.
- 2.2 Area Covered: 36.66 km²

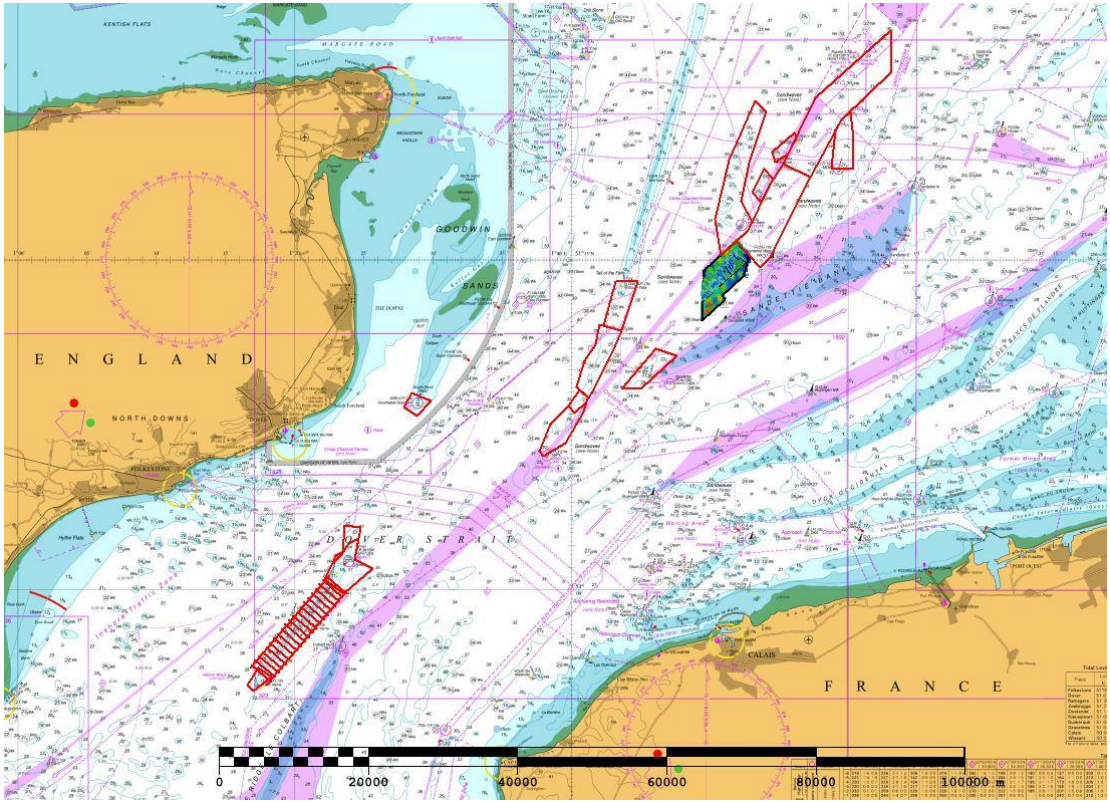


Figure 1: 2019 Dover Strait Routine Resurvey areas overlaid on BA Chart 2449 with area DWR T in black

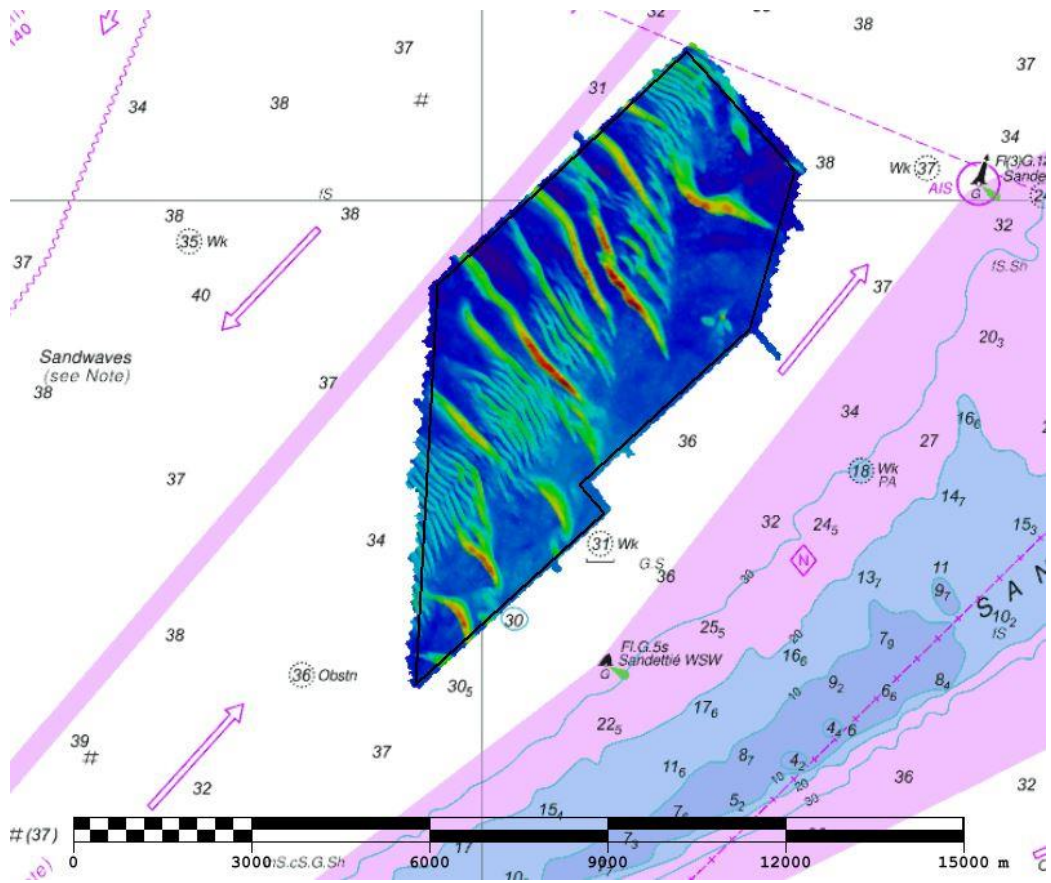


Figure 2: 2019 survey data overlaid on BA Chart 0323

3. REFERENCE SURVEY DETAIL

- 3.1 The previous full survey was conducted as part of the 2013 Routine Resurvey Programme between November and December 2013 as part of HI1434. The previous focused survey was conducted as part of the 2016 Routine Resurvey Programme between July and August as part of HI523.
- 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 full survey as part of the 2019 Routine Resurvey Programme was conducted between June and July 2019 as part of HI1658.
- 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 controlling depth seen in Figure 3 is located within the centre of the full survey limits and has deepened by 0.8m from the charted depth seen on BA chart 0323.
- 5.2 The difference surface in Figure 4 shows a gradual sand wave migration in a south-west direction since the 2016 survey. Outside of the sand wave areas, the seafloor has shown stability.
- 5.3 Figure 5 is a colour banded depth plot, with changes since the 2016 focused survey labelled. Several larger sand waves show significant depths changes as the sand waves have changed position.
- 5.4 The least depth is also the controlling depth in this survey, seen in Figure 3.

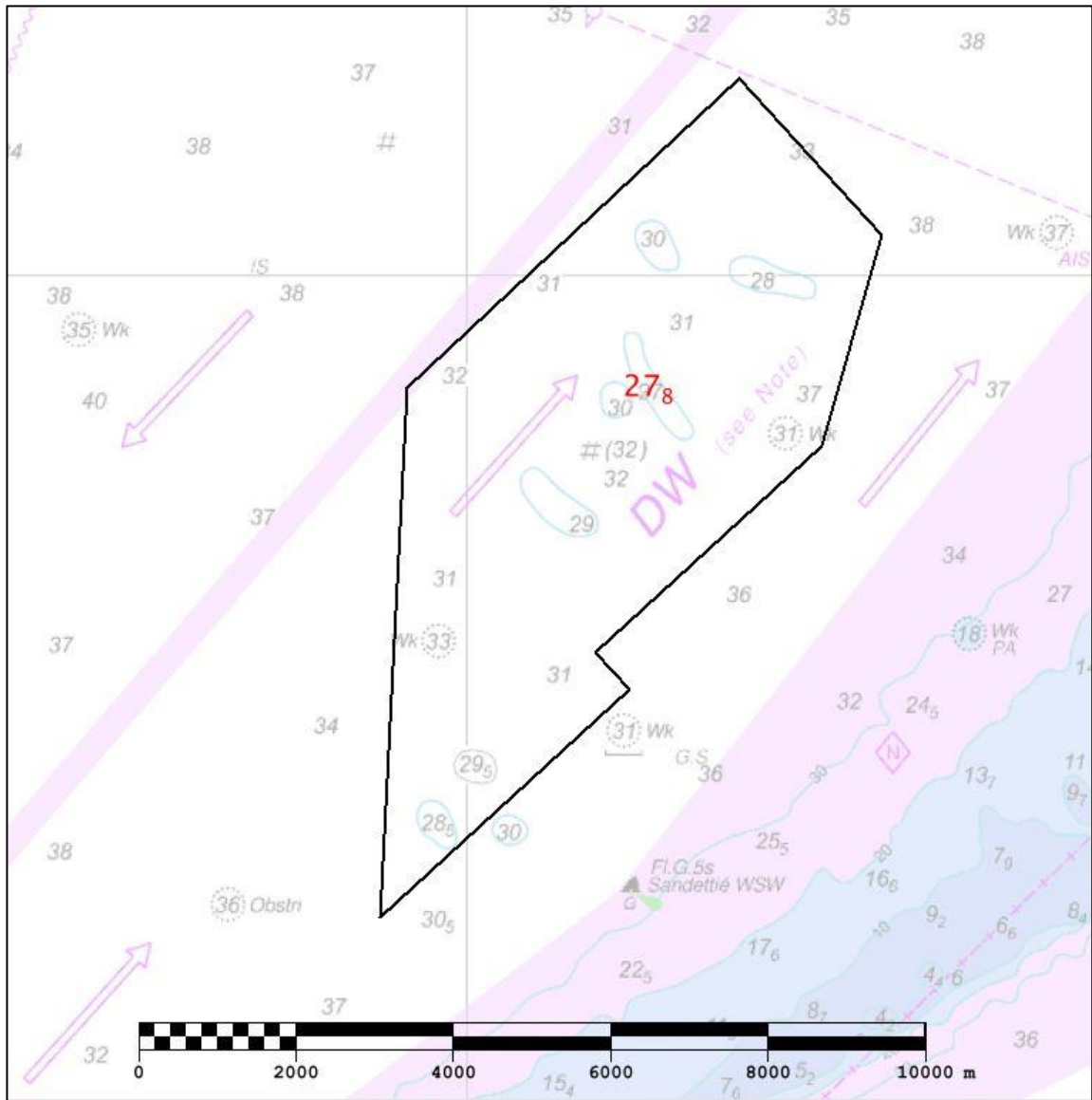


Figure 3: Controlling depth (shown in red) from 2019 survey.

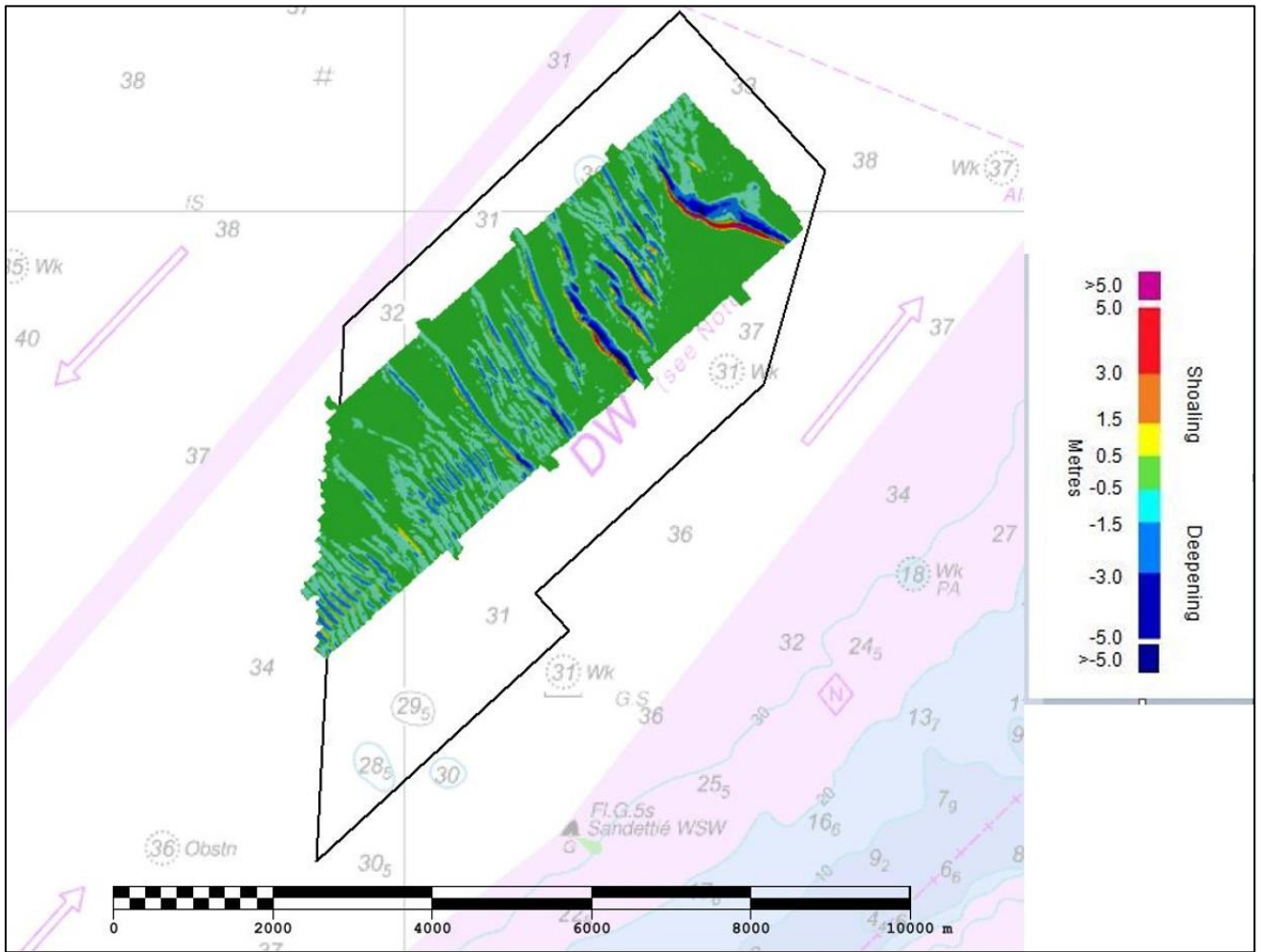


Figure 4: Difference surface showing bathymetric changes between the 2016 and 2019 surveys overlaid on BA Chart 0323.

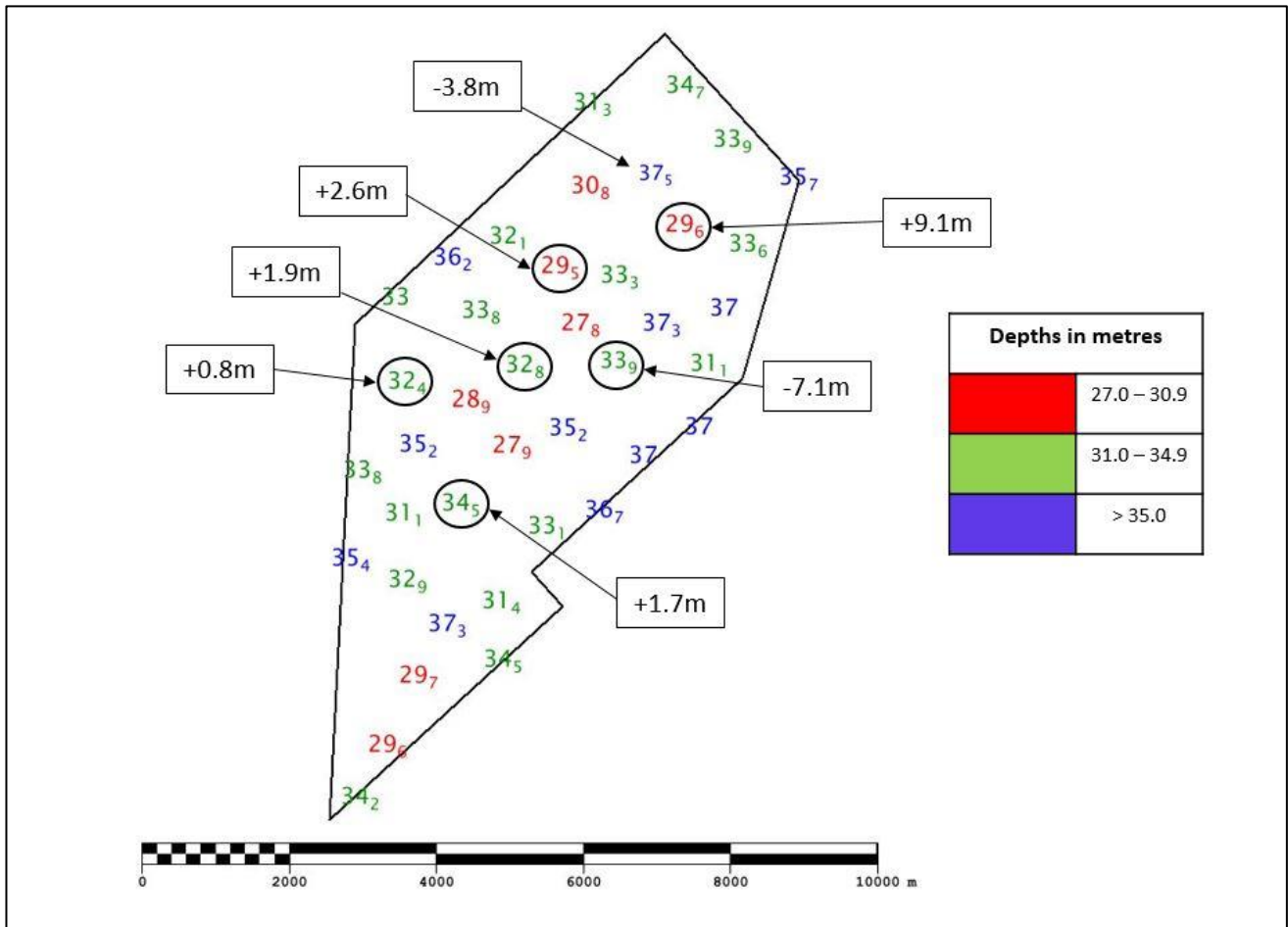


Figure 5: Colour banded depth plot from the 2019 survey with selected depth changes since the 2016 survey. Positive values (+) represent deepening. Negative values (-) represent shoaling.

6. RECOMMENDATIONS FOR FUTURE SURVEYS

Survey Interval

6.1 Major sand waves have not migrated far since the last survey in 2016, and the controlling depth has remained within the main survey boundaries in that period. Therefore, DWR T full area can remain on the 6-year survey interval with the 3-year focused surveys.

Survey Area

6.2 Controlling depth as well as the main sand wave features are within the main survey boundaries and within the confines of the focused area survey limits. The full survey area is therefore satisfactory to monitor these features.