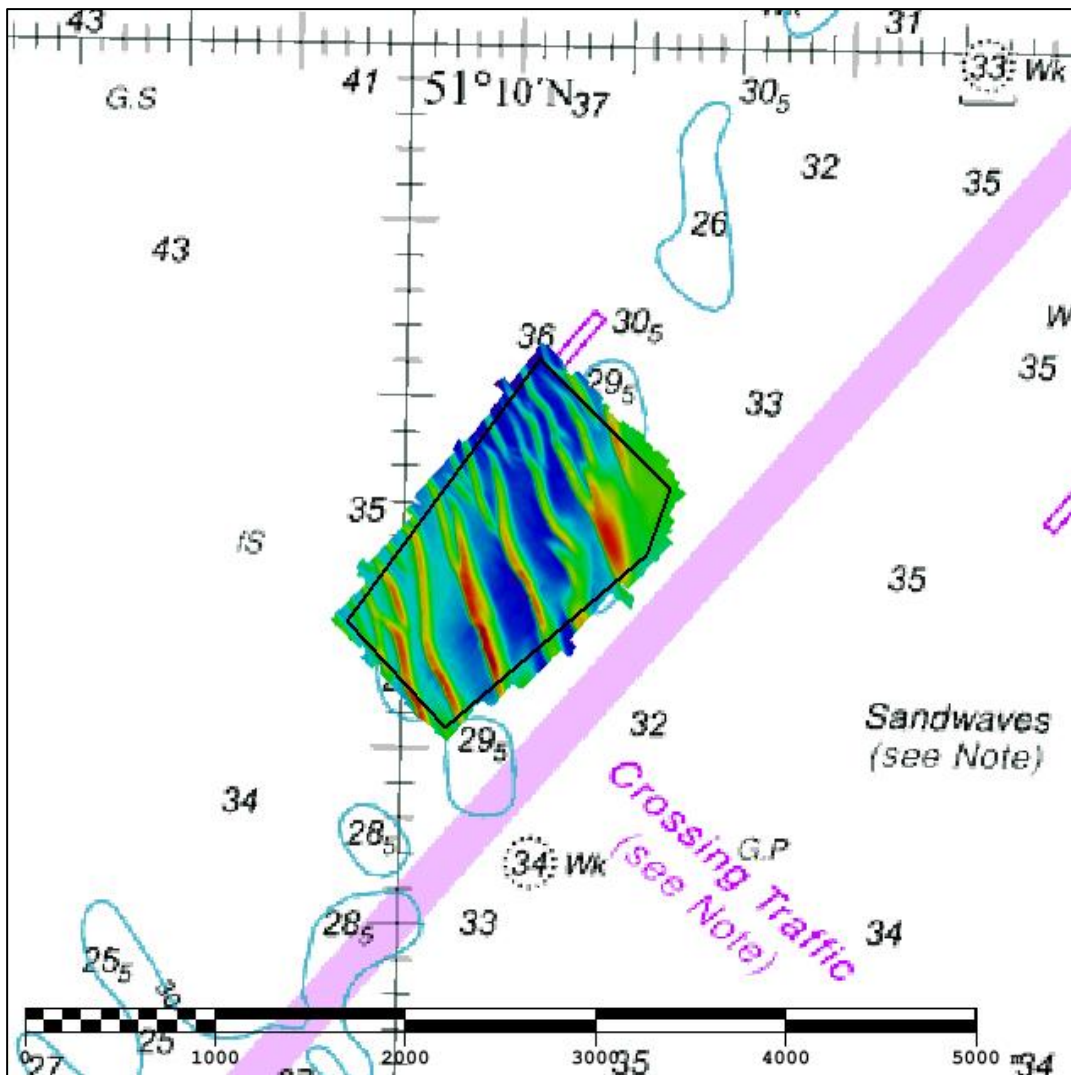




UK Hydrographic
Office

DOVER STRAIT DWR C2 TAIL OF THE FALLS 2019 ASSESSMENT

An assessment of the 2019 hydrographic survey of the area DWR C2 Tail of the Falls: 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 C2 TAIL OF THE FALLS, 2019

1. SUMMARY

Changes Detected

- 1.1 Sand waves have migrated towards the south-west, but the controlling depth in the area has increased slightly to 27.8m.

Reasons for Continuing to Resurvey the Area

- 1.2 Mobility of the seabed means that depths in the area are highly changeable. As the channel is in a deep-water route, continued monitoring through re-surveys is required.

Recommendations

- 1.3 The DWR C2 area should remain on the 6-year survey interval.
- 1.4 The survey limits for DWR C2 are suitable for the present. Suggest reviewing limits after the next RRS survey, due in 2024.

2. LOCATION

- 2.1 Survey interval at time of resurvey: 6 years
- 2.2 Area Covered: 1.61 km²

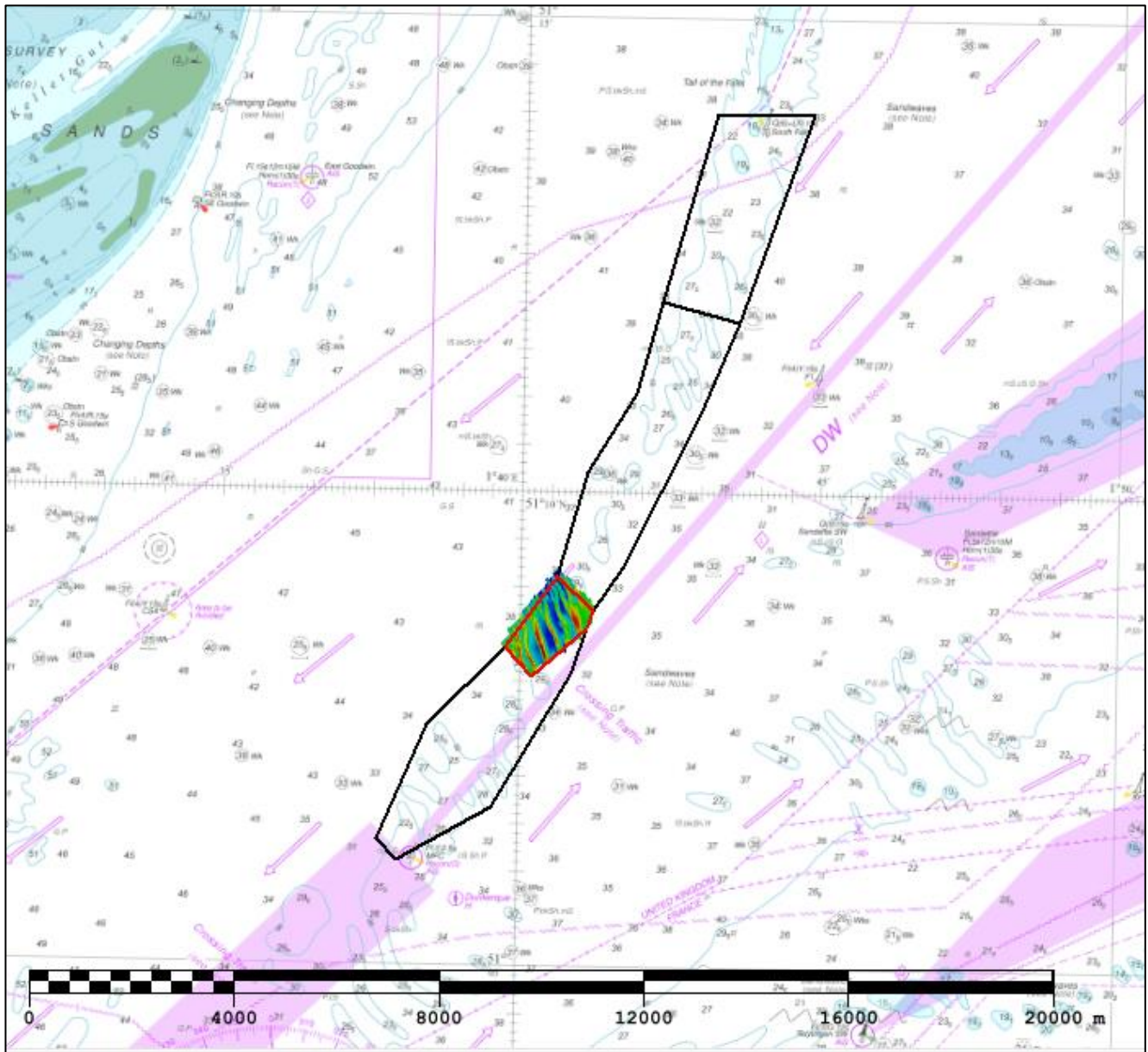


Figure 1: 2019 Dover Strait Routine Resurvey areas overlaid on BA Chart 0323-0 with area DWR C2 Tail of the Falls shown in red.

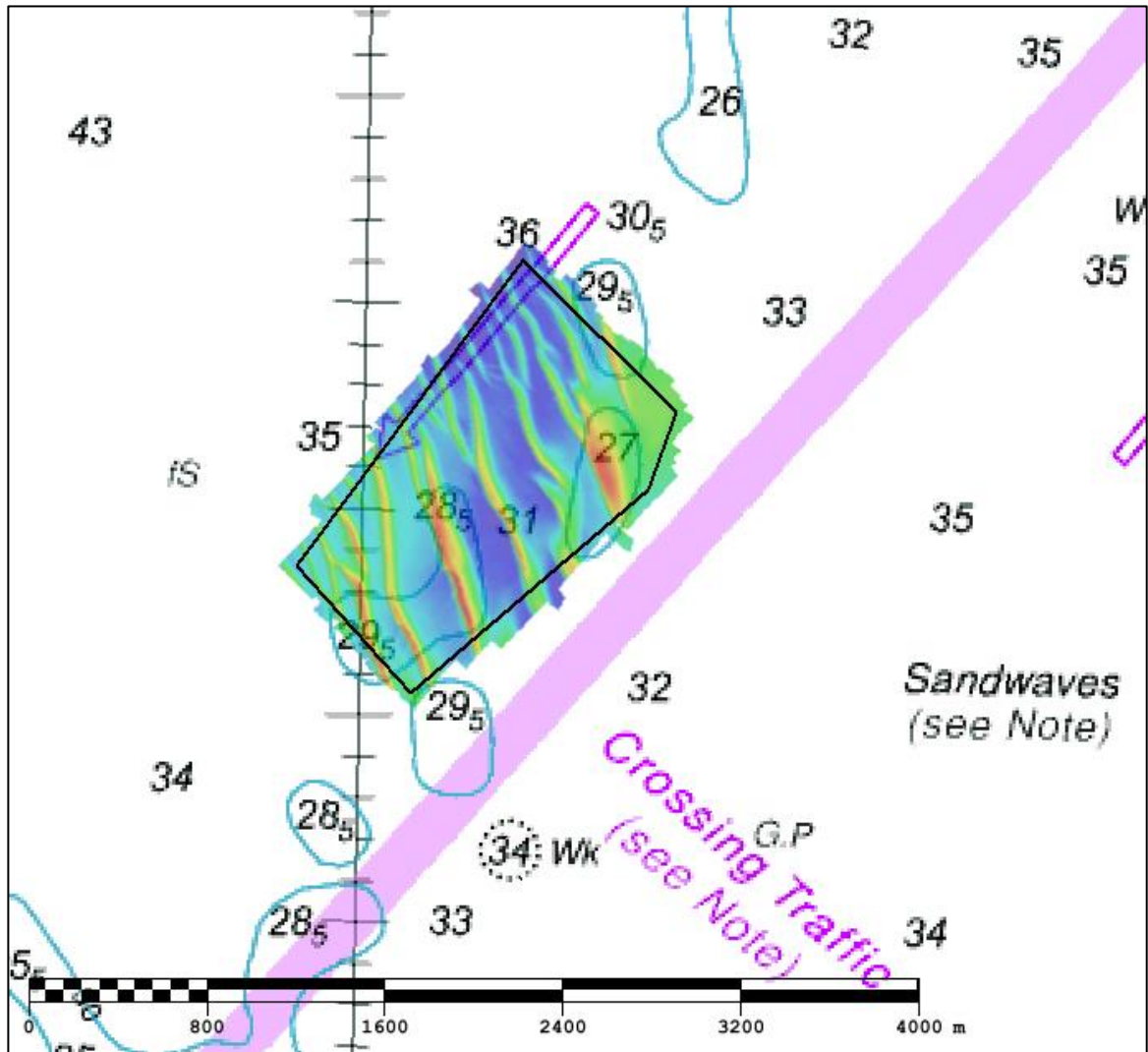


Figure 2: 2019 DWR C2 survey data overlaid on BA Chart 0323-0

3. REFERENCE SURVEY DETAIL

- 3.1 The previous survey (DWR C2) was conducted as part of the 2012 Routine Resurvey Programme in December 2012 as part of HI1399.
- 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 focused survey as part of the 2019 Routine Resurvey Programme was conducted between July and October 2019 as part of HI1650.
- 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 there is significant shoaling towards the southwest, as the sand waves migrate gradually in the direction of the black arrow.
- 5.2 Although the controlling depths have moved, overall, depths in the area have remained similar to the previous survey. The least depth within the block in 2012 was 27.0m, whereas the least depth from the current survey is 27.8m.
- 5.3 The colour banded depth plot in Figure 4 shows the high amount of depth changes around the locations of the sand waves as they have shifted.

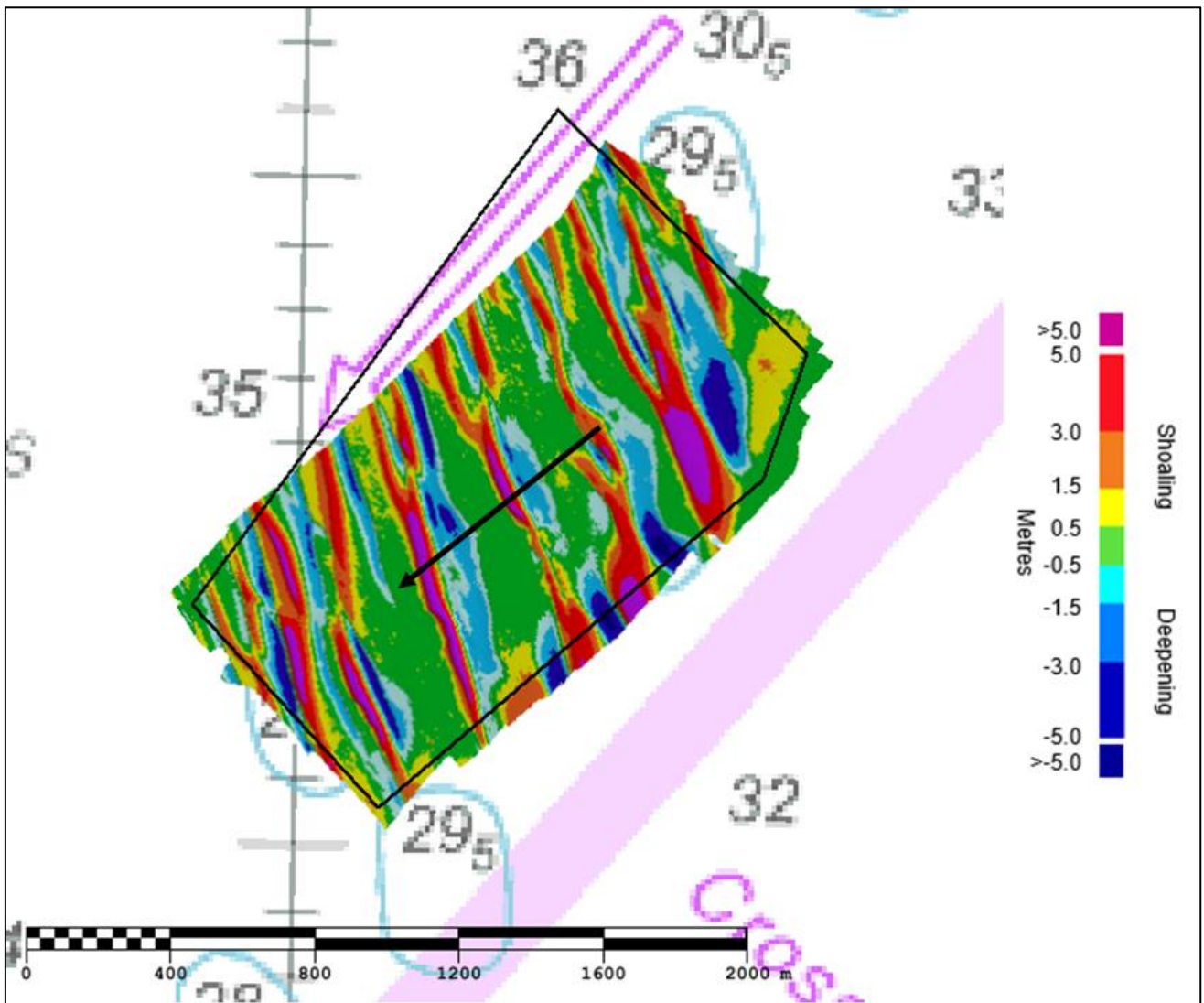


Figure 3: Difference surface showing bathymetric changes between the 2019 and 2012 surveys overlaid on BA Chart 0323-0 (Black arrow represents sand wave migration since 2012 survey).

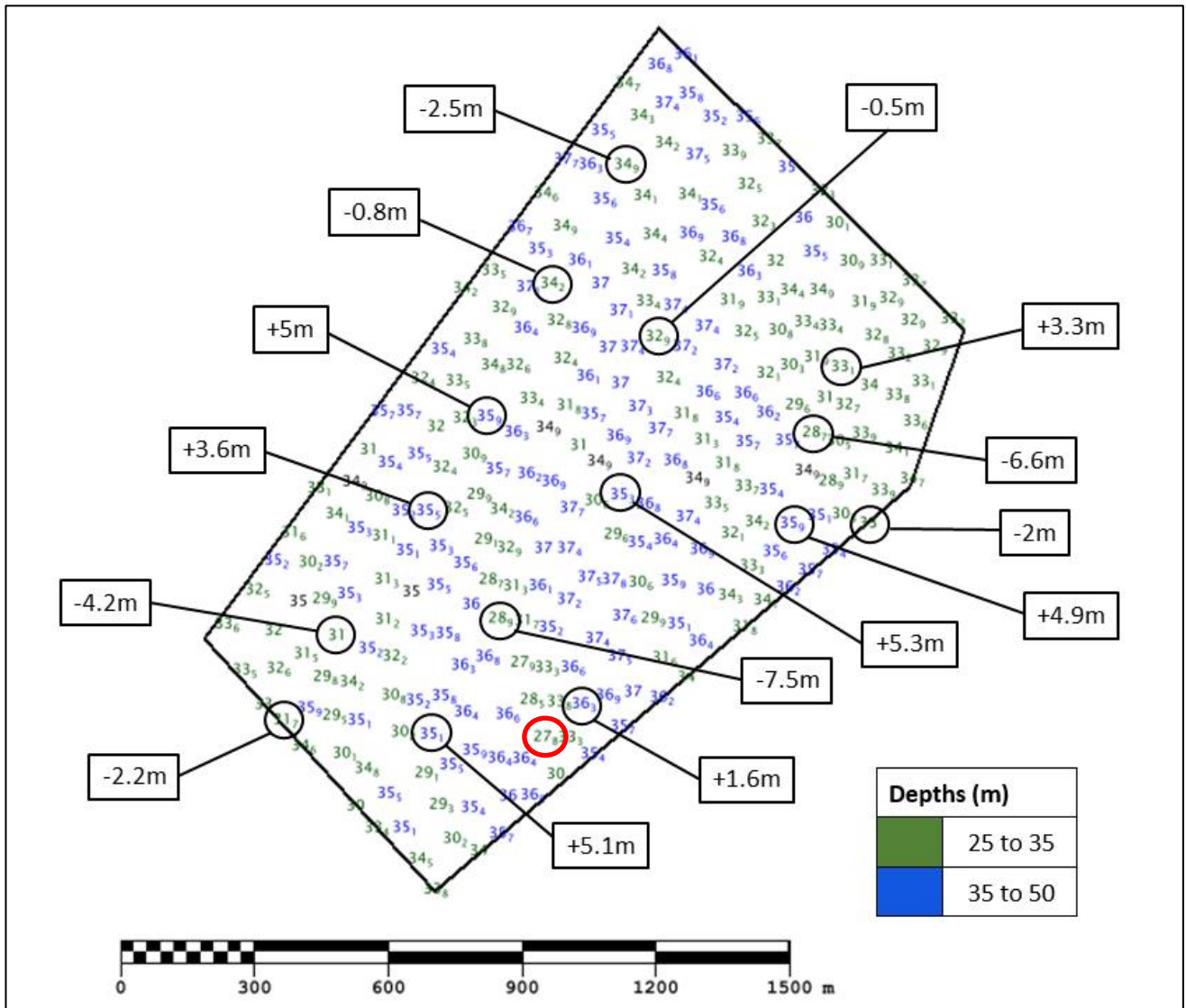


Figure 4: Colour banded depth plot from the 2019 survey with selected depth changes since the 2012 survey. Positive values (+) represent deepening. Negative values (-) represent shoaling. Controlling depth circled red.

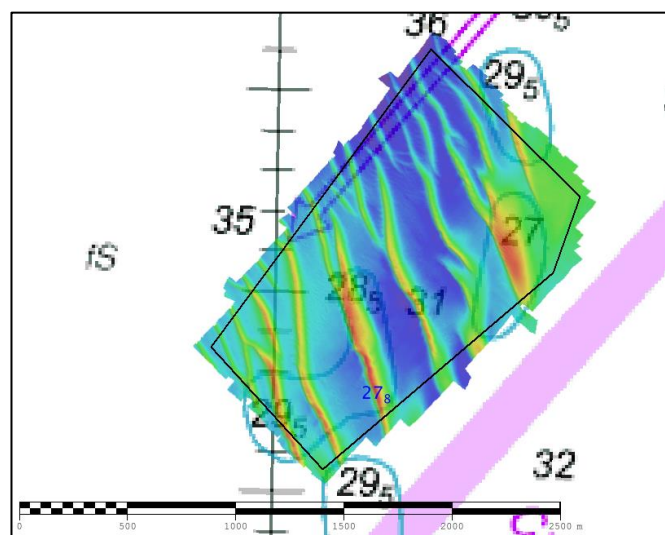


Figure 5: Image showing new location of 27.8m controlling depth for block, compared to the previous 27m sounding shown on existing chart from 2012 survey.

6. RECOMMENDATIONS FOR FUTURE SURVEYS

Survey Interval

- 6.1 Sand waves are mobile in the area and have migrated 50 – 100m south-west, but the least depth found in the area remains fairly constant. The DWR C2 area should remain on the 6-year survey interval.

Survey Area

- 6.2 The survey limits for DWR C2 are suitable for the present. Suggest reviewing limits after the next RRS survey, due in 2024, to see if mobility of the sand waves requires extension of limits. Area DWR C4 is below C2 and will therefore allow continued coverage if sand waves migrate from C2 to C4.