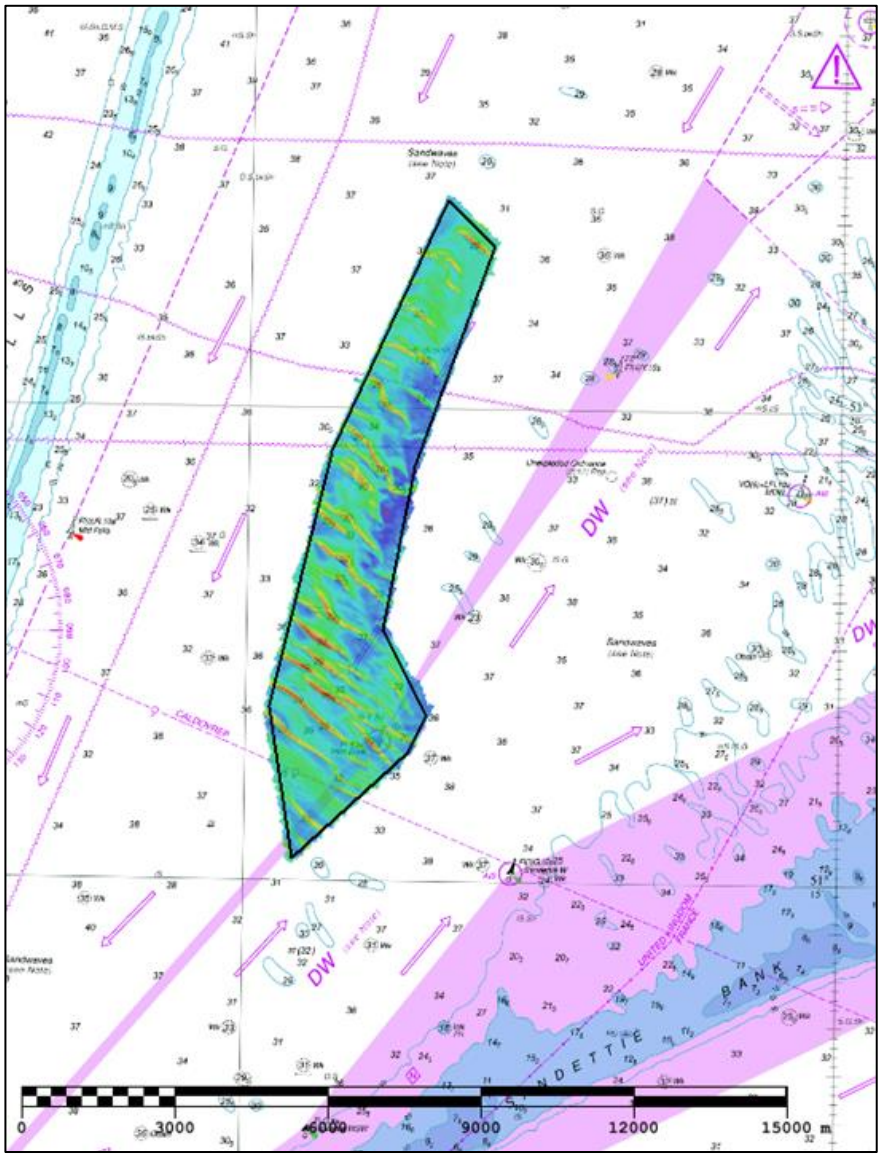
UK Hydrographic Office

DOVER STRAIT
DWR SOUTH WEST BOUND (AREA B)
2019 ASSESSMENT

An assessment of the 2019 hydrographic survey of the area DWR SWB Area B: 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.

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 SWB AREA B, 2019

1. SUMMARY

Changes Detected

1.1 2019 Least Depth is +0.2 m deeper than the charted least depth.

1.2 Since 2007 sandwaves have migrated slightly south-west, but areas of flatter seafloor have remained relatively stable. The position of the least depth has also changed since 2007 and is now 1.1km further south.

Reasons for Continuing to Resurvey the Area

1.3 Key shipping route in an area of sandwaves, and therefore requires continued monitoring through resurveys.

Recommendations

1.4 Sandwave features have not migrated a great distance since the last survey in 2007, and the least depth is still within the area limits. Area B can remain on the 15-year survey interval.

1.5 Both the least depth and the sandwave features remain well within the main survey boundaries and are unlikely to move into surrounding areas. The survey area is therefore satisfactory to monitor these features.

2. LOCATION

2.1 Survey interval at time of resurvey: 15 years

2.2 Area Covered: 24.3 km^2

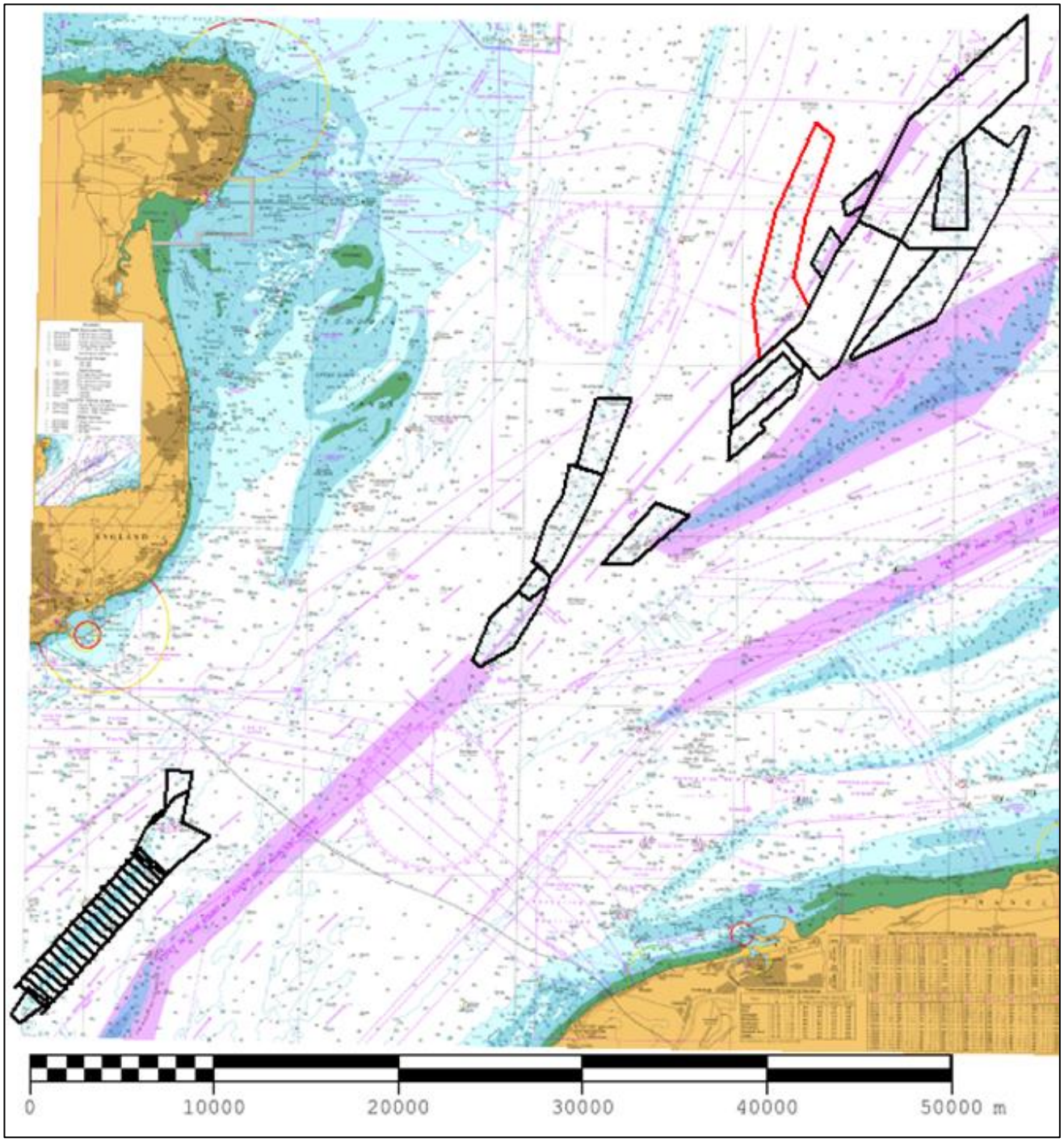

Figure 1: 2019 Dover Strait Routine Resurvey areas overlaid on BA Chart 0323-0 with SWB Area B in red.

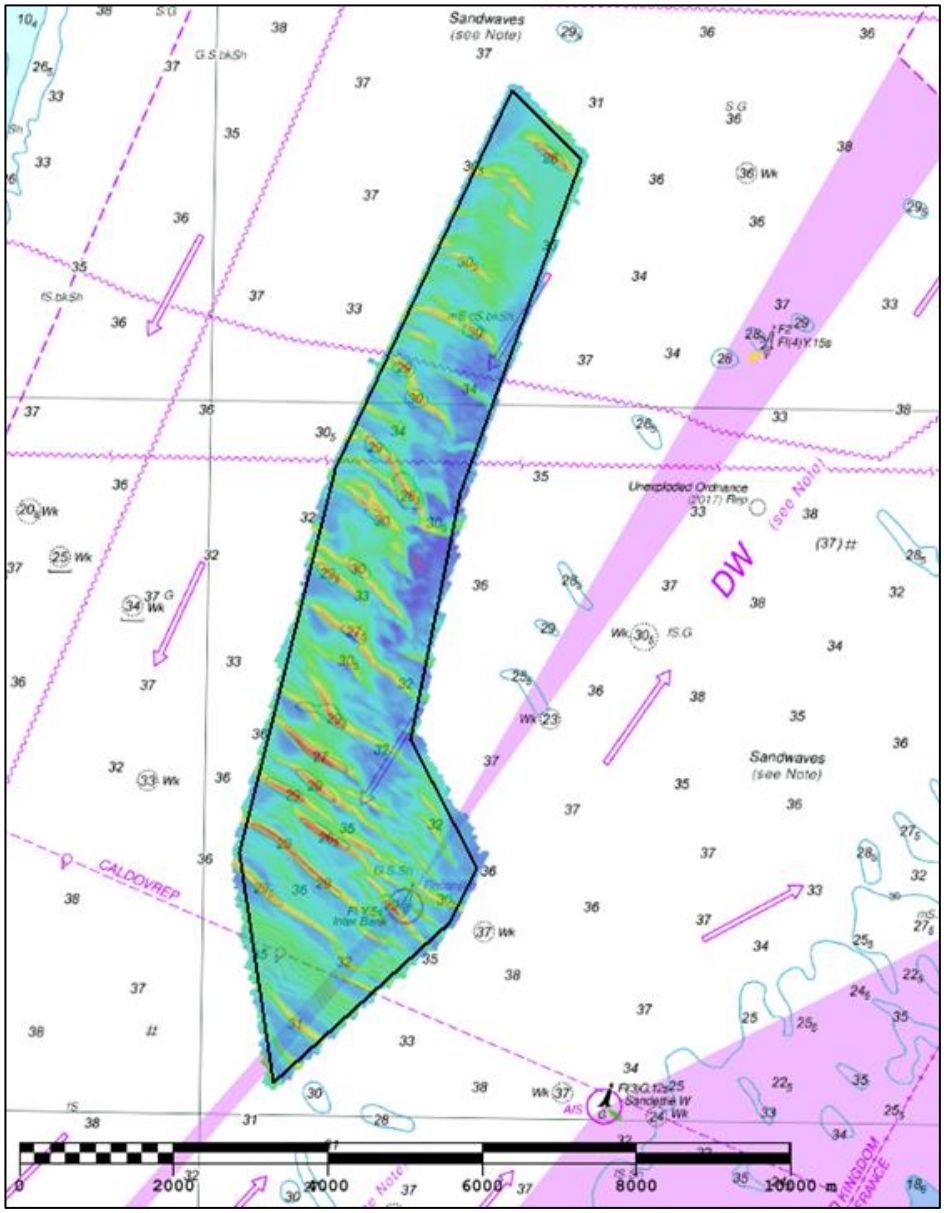

Figure 2: 2019 survey data overlaid on BA Chart 0323-0.

3. REFERENCE SURVEY DETAIL

3.1 The previous full survey was conducted as part of the 2007 Routine Resurvey Programme between September 2006 and July 2007 as part of HI1159. Another full survey was conducted as part of the 2004 Routine Resurvey Programme in July 2004 as part of HI1081.

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 September and October 2019 as part of HI1660.

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 current least depth is 26.7m (shown in red in Figure 3). It is +0.2m deeper than the charted least depth (Chart 0323-0).

5.2 Figure 3 shows the 2007 and 2019 least depths in Area B. The 2019 least depth is now located 1.09km further south than the 2004 survey showed, closer to the Inter Bank Buoy.

5.3 The difference surfaces in Figures 4 and 5 show that there has been some sandwave migration south-west, as indicated by the black arrows. Outside of the sandwave areas, the seafloor has remained relatively stable.

5.4 Figure 6 is a colour-banded depth plot, with changes since 2007 labelled. Sandwave areas show larger depth changes due to the migration in position, but the remaining changes are relatively small as the seafloor is more stable.

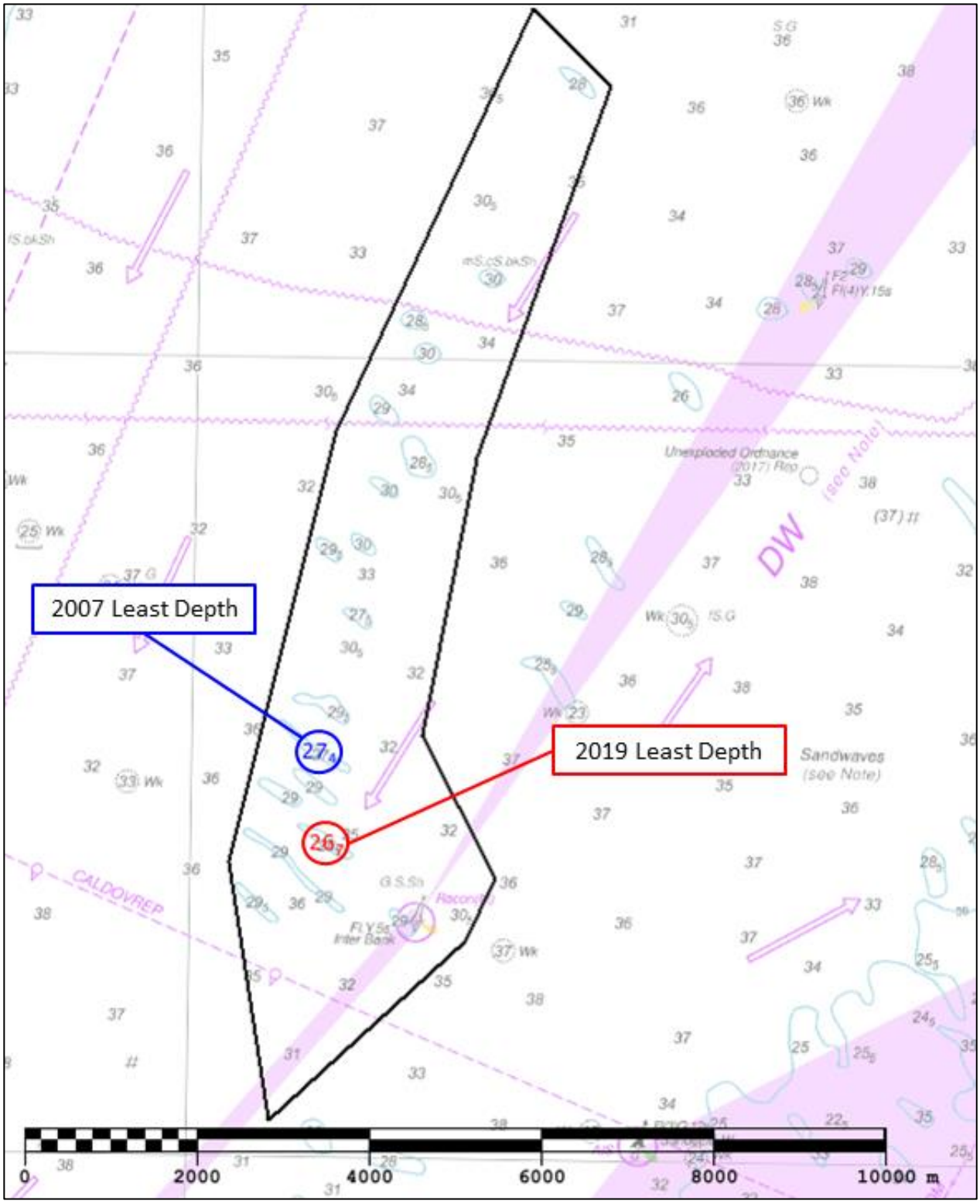

Figure 3 – Least Depth Diagram with 2019 Least Depth in Red and 2007 in Blue.

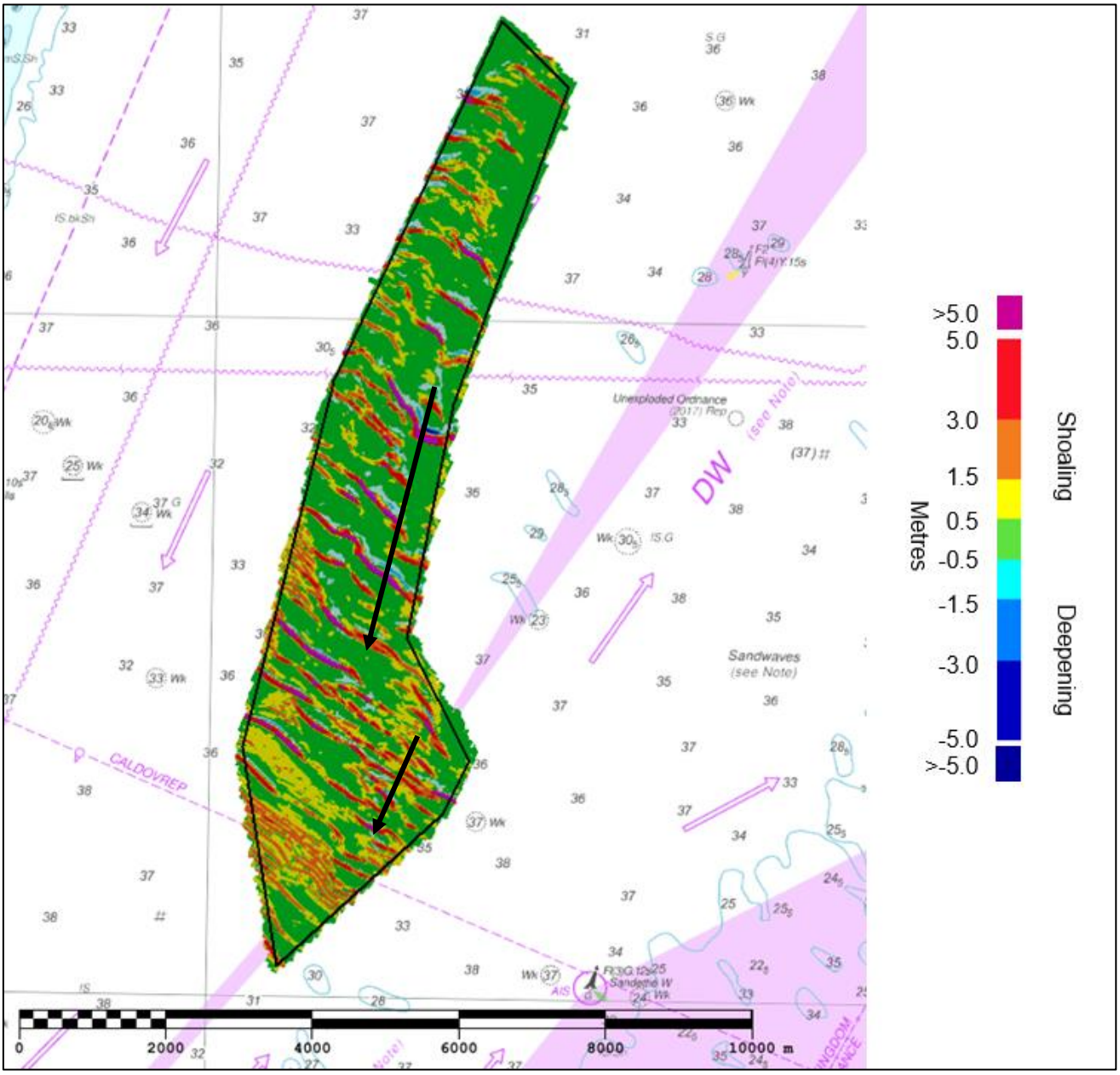

Figure 4: Difference surface showing bathymetric changes between the 2019 and 2004 surveys overlaid on BA Chart 0323-0 (Black arrows represent sandwave migration since 2004 survey).

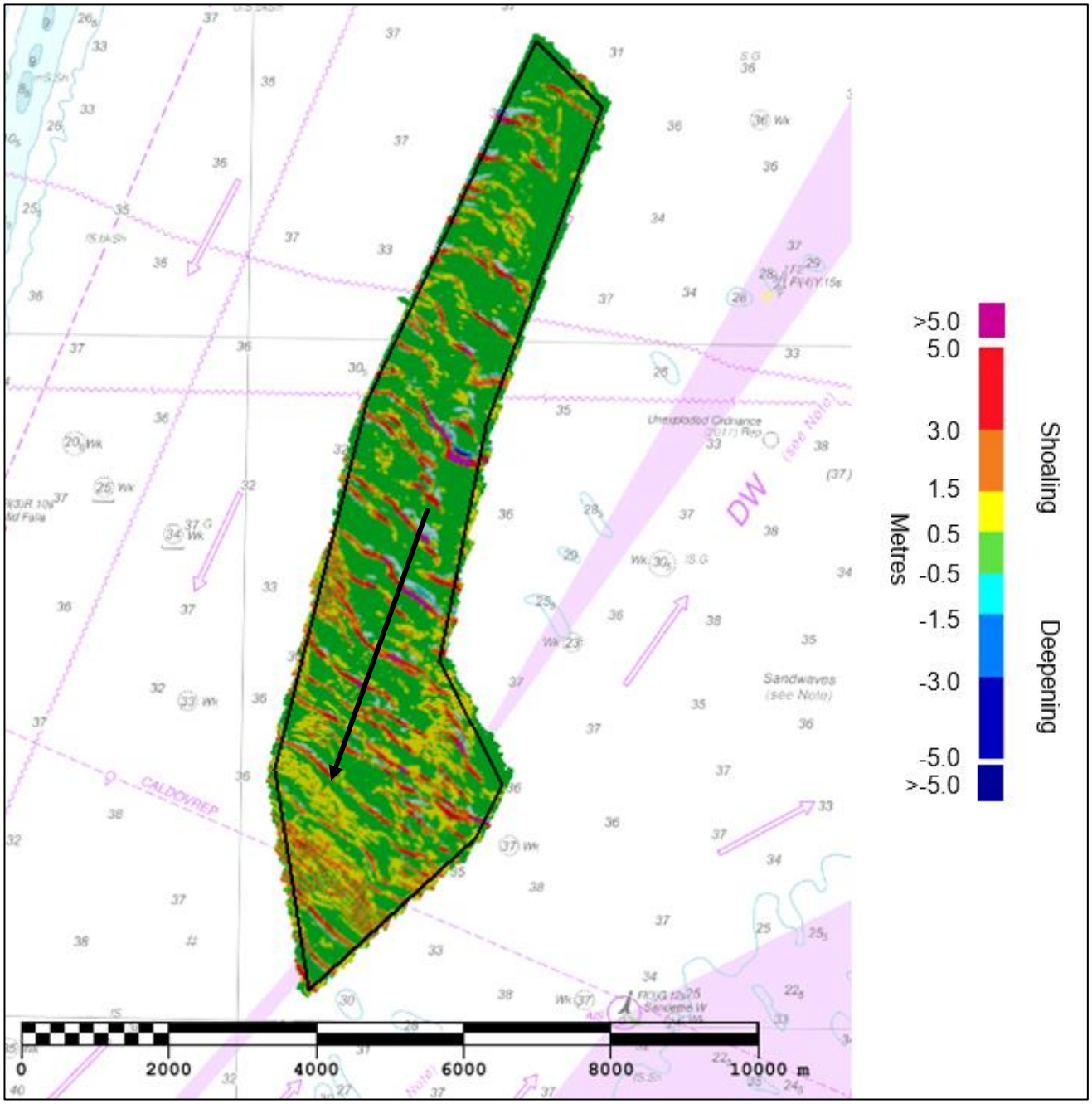

Figure 5: Difference surface showing bathymetric changes between the 2019 and 2007 surveys overlaid on BA Chart 0323-0 (Black arrows represent sandwave migration since 2007 survey).

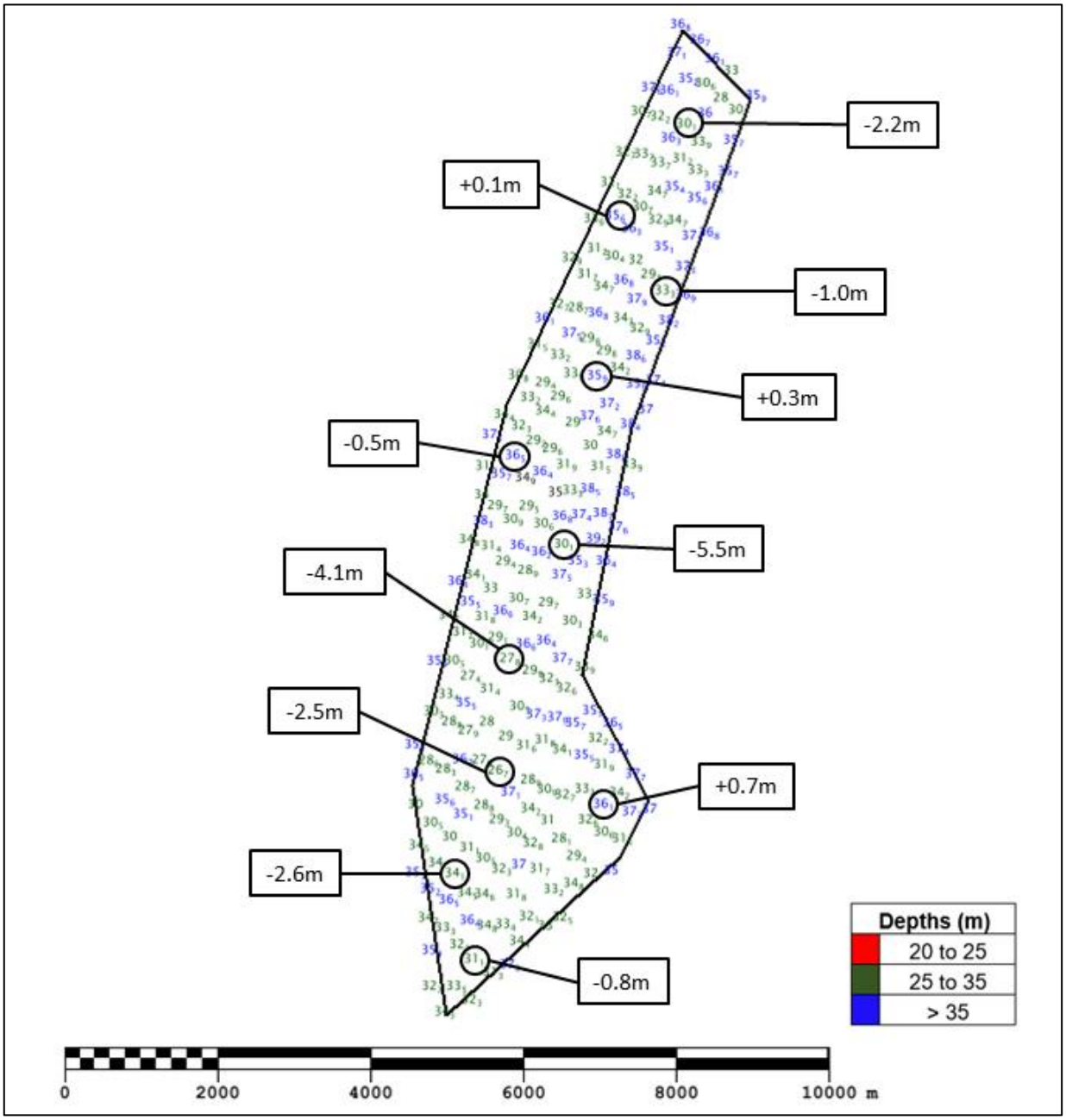

Figure 6: Colour banded depth plot from the 2019 survey with selected depth changes since the 2007 survey. Positive values (+) represent deepening. Negative values (-) represent shoaling.

6. RECOMMENDATIONS FOR FUTURE SURVEYS

Survey Interval

6.1 As major sandwaves have not migrated far since the last survey in 2007, and the least depth is still within the main survey boundaries, Area B can remain on the 15-year survey interval.

Survey Area

6.2 Both the controlling depths and the sandwave features remain well within the main survey boundaries and are unlikely to move into surrounding areas. The survey area is therefore satisfactory to monitor these features.