

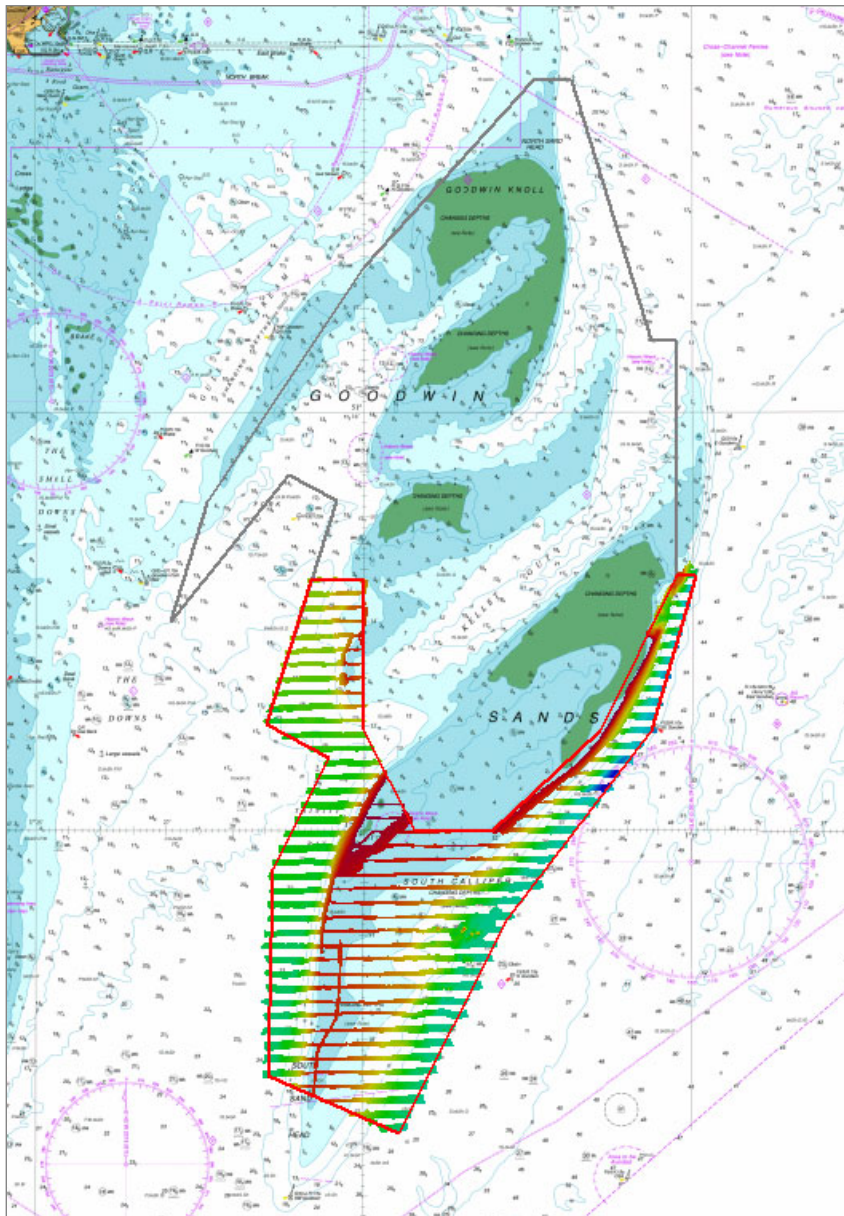


United Kingdom
Hydrographic Office

GOODWIN SANDS

SOUTH CALLIPER

SUMMARY ASSESSMENT ON THE ANALYSIS OF
ROUTINE RESURVEY AREA GS4
FROM THE 2012 SURVEY



July 2013

GOODWIN SANDS

SOUTH CALLIPER

Summary Assessment GS4/2012

A summary assessment of the 2012 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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SOUTH CALLIPER, 2012

1 Introduction

- 1.1 GS4 is fully surveyed every 12 years, with 3 and 6 year check-line surveys run over selected areas. The 2012 survey of the southern part of GS4 was surveyed as a 3 year open spaced check-line survey, with lines run at 250 metres.
- 1.2 For more details on the area, including long-term changes, the more detailed report on the last full 12-year survey of area GS4, conducted in 2009, should be consulted.

2 Description of the Area

- 2.1 The focused area covers the southern part of Goodwin Sands as far south as South Sand Head, which is covered by area GS1. The bank is marked by Southeast Goodwin and Southwest Goodwin buoys. Trinity Bay immediately to the west provides sheltered anchorage for large draught vessels and Trinity Bay and The Downs provides a waiting area for ferry traffic in the event of the Port of Dover being closed.

3 Survey Data

- 3.1 The 2009 survey of all the Goodwin Sands re-survey areas was conducted from 23 July to 1 September. The 2012 survey was mainly conducted on 13 and 14 December, with survey work completed on 16 and 18 December following interruptions due to weather. In both surveys, the Vertical Offshore Reference Frame (VORF) and GPS heighting were used to reduce depths to Chart Datum.

4 Changes since the 2009 Survey

- 4.1 Changes are shown in the Surface Difference plot at [Annex A](#) and 10 metre contour comparison at [Annex B](#). This open-line spaced survey was introduced following significant westward migration of the bank between 1997 and 2009. The area of large scale migration on the western side has seen no further migration since the 2009 survey. However, to the south of this, the bank has extended to the west by up to 344 metres at the 10 metre contour level and reduced in width.
- 4.2 The eastern side of the bank in the north of the area remains in broadly the same position.

5 Implications for Shipping

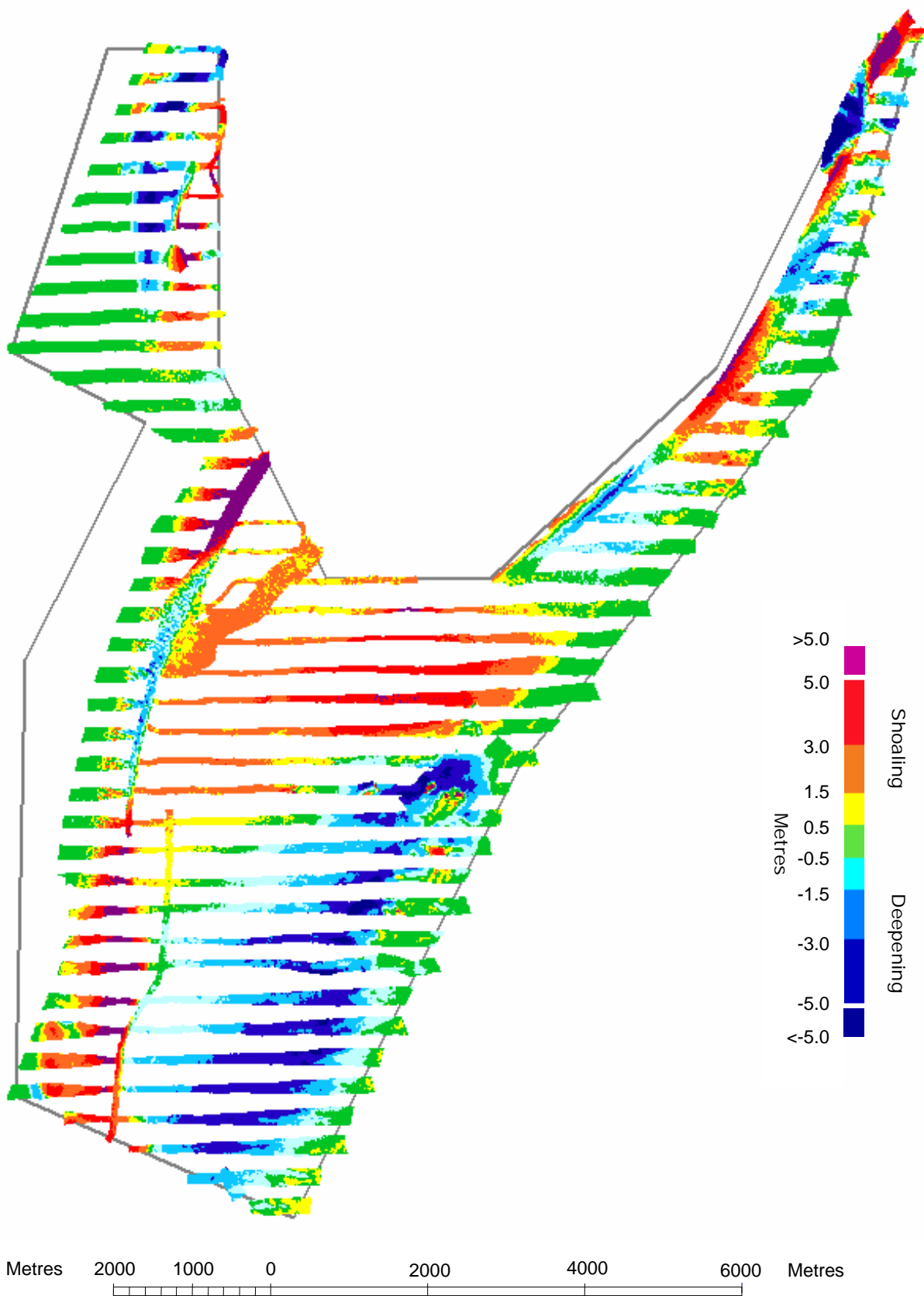
- 5.1 The shoal areas are adequately marked by the current buoyage, and changes are of no direct concern to vessels keeping to the buoyed routes.

6 Recommendations

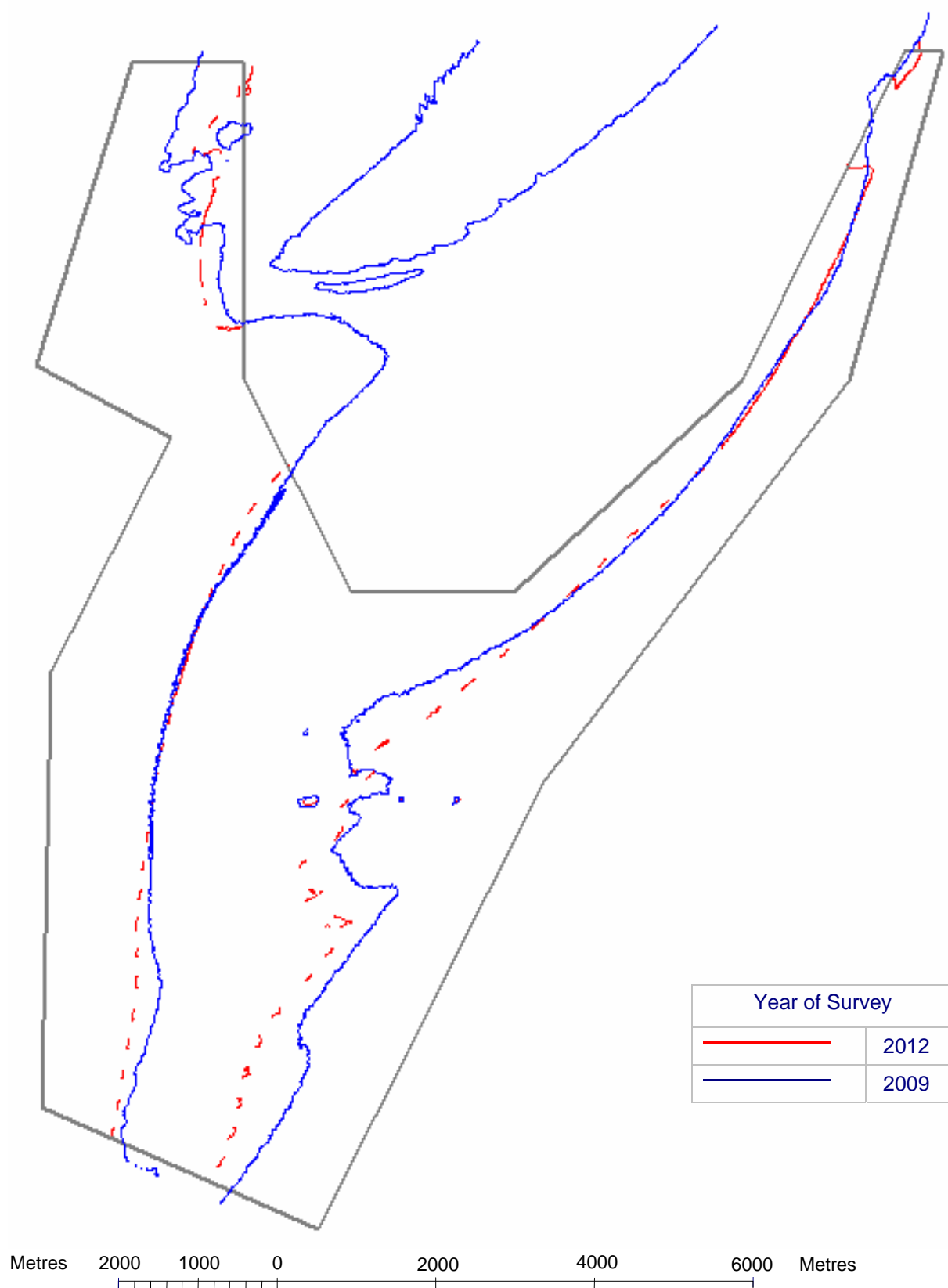
- 6.1 The changes that have occurred support the retention of the 3 year focused survey, but with a reduction in overall extent, removing the northeast area. The southern limit should be extended if the proposed reduction in limits to GS1 is accepted. The proposed limits are shown at [Annex C](#) and detailed below.

	Latitude	Longitude
1	51.200018N	001.513010E
2	51.200000N	001.550000E
3	51.189500N	001.531000E
4	51.146660N	001.500000E
5	51.153333N	001.475000E
6	51.200000N	001.490000E
7	51.228000N	001.490000E
8	51.228000N	001.500000E
9	51.215980N	001.500000E

SURFACE DIFFERENCE PLOT SHOWING BATHYMETRIC CHANGES BETWEEN THE 2009 AND 2012 SURVEYS



COMPOSITE DIAGRAM OF THE 10 METRE CONTOUR
FROM THE 2009 AND 2012 SURVEYS



PROPOSED REVISED LIMITS

