

PROVISIONAL CRUISE REPORT

VESSEL: RV Wessex Explorer

CRUISE LOCATION: Start Bay

CRUISE PERIOD: 25 and 26 April 1982

PERSONNEL: D N Langhorne
P M Hooper
E J Moore

OBJECTIVE: A) To carry out a detailed bathymetric survey of part of the sandwave field on the eastern flank of the Skerries Bank. This area was last surveyed in detail in 1977 and it is intended to compare the two surveys in order to study the long period changes in sandwave morphology (see attached diagram).

B) To carry out survey lines along the track of the SAR 580 float during the studies conducted in July 1982.

PROCEDURE AND METHODS: A) Trisponder remote stations were set up at Start Point and at Strete (the same positions as used on the previous survey). The master aerial was mounted on board close to the echo sounder transducer (<0.5 m). Trisponder ranges were to be recorded by printer at 10 sec intervals and on magnetic tape at 1 sec intervals. Trisponder ranges were also used for the ship's track plotter. Survey tracks were spaced at approximately 12 m intervals.

B) Depth was measured using both a Raytheon (200 KHz) and Atlas (30 + 200 KHz) echo sounders. Transducers were pole mounted on the port side at 1 m depth beneath the surface.

C) Sidescan sonar data was obtained using EG + G equipment with a towed transducer and 100 m range scales.

EQUIPMENT PERFORMANCE: A) Trisponder - good.
On several occasions the track plotter lost lock. This tended to occur in particular locations. The Trisponder printer proved to be unreliable (printing errors in both fix number and time) and its use was discontinued after the first few hours.

Preliminary inspection of the magnetic tape shows that there is some corruption.

B) Raytheon echo sounder - good.

C) Atlas echo sounder - good.

D) Sidescan sonar - good.

SHIP PERFORMANCE: The Wessex Explorer is a well equipped and efficient survey vessel providing adequate lab and deck space for this type of work. Unfortunately, because it is necessary to pole mount the echo sounder transducer, it is not possible to survey at speeds greater than 6 knots. At lower speeds she tends to roll badly which introduces distortions to the echo sounder records.

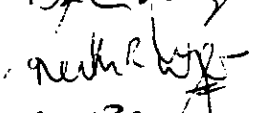
RESULTS: Good. Approximately 40 echo sounding traverses were obtained which gave the necessary high density cover of the area. On both survey days sea conditions were good with light NE winds which decreased during the afternoons and evenings.


ITINERARY: 24.4.82. 0900. Travelled to Start Bay and set up Trisponder remotes. PM Wessex Explorer arrived at Dartmouth and berthed at Kingswear Marina. Set up and tested equipment on board.

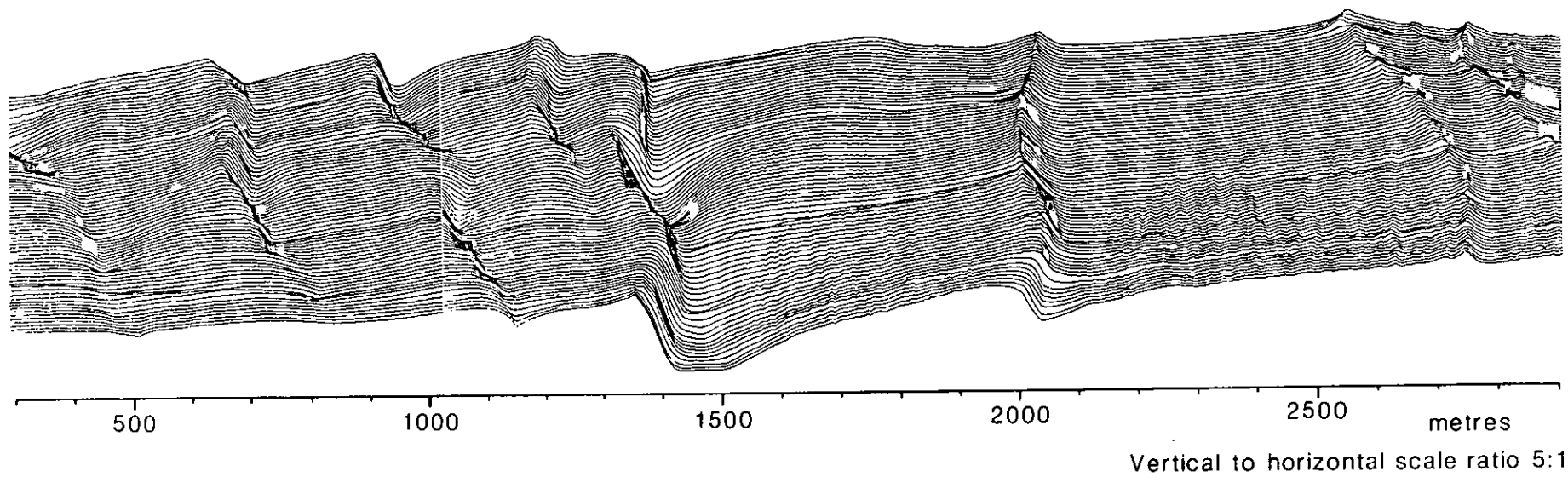
25.4.82. 0840. Sailed for survey area.
1940. Completed surveying. Returned to Dartmouth.

26.4.82. 0850. Sailed for survey area.
1531. Completed main survey. Carried out survey lines for SAR 580 project.
1610. Abandoned survey due to repeated failure of track plotter. Returned to Dartmouth. Stripped down and removed equipment from the ship. Recovered Trisponder remote stations and returned to Taunton.

PREPARED BY:  (D N LANGHORNE)

APPROVED BY:  (K R DYER)

DATE: 29.4.82. 



SANDWAVES IN START BAY, DEVON. JULY 1977