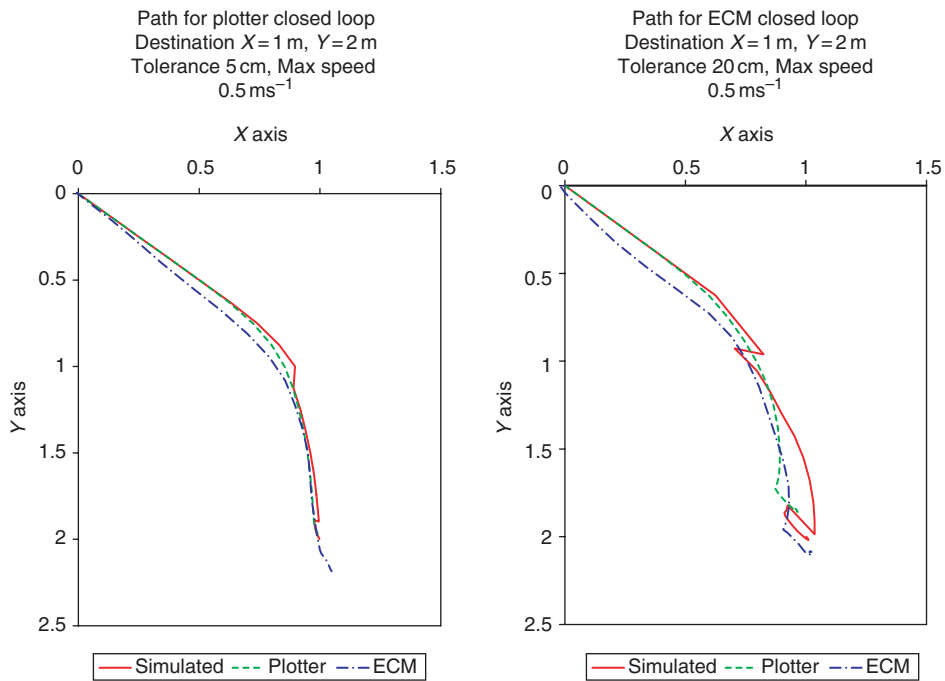


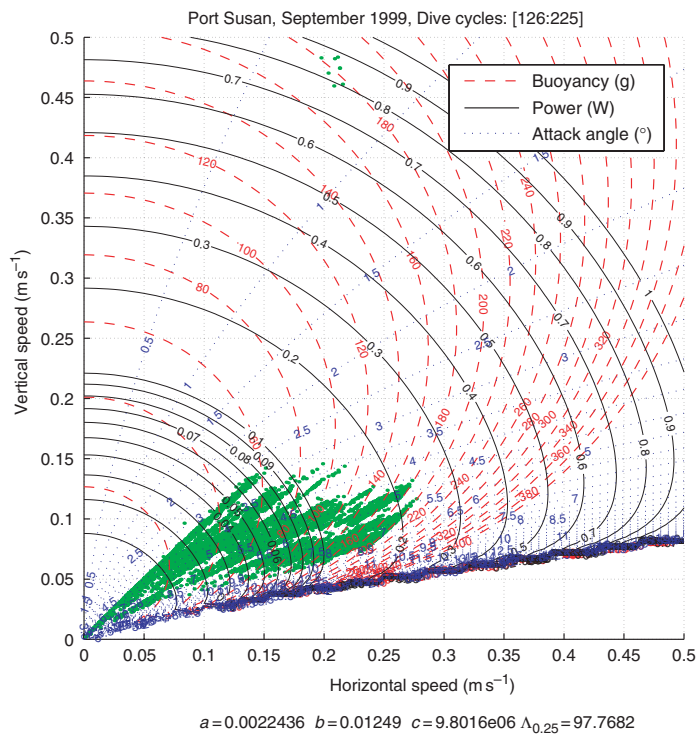
Color Plate 1 Speed in X direction during positioning – simulated, Cartesian robot, current meter and thrust. *See* page 10.



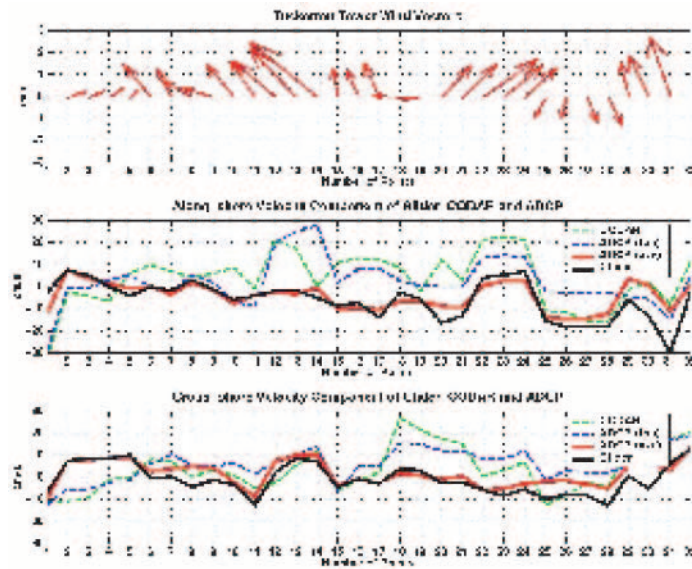
Color Plate 2 Varying UUV trajectory with varying time-slicing rollback error threshold. *See* page 11.



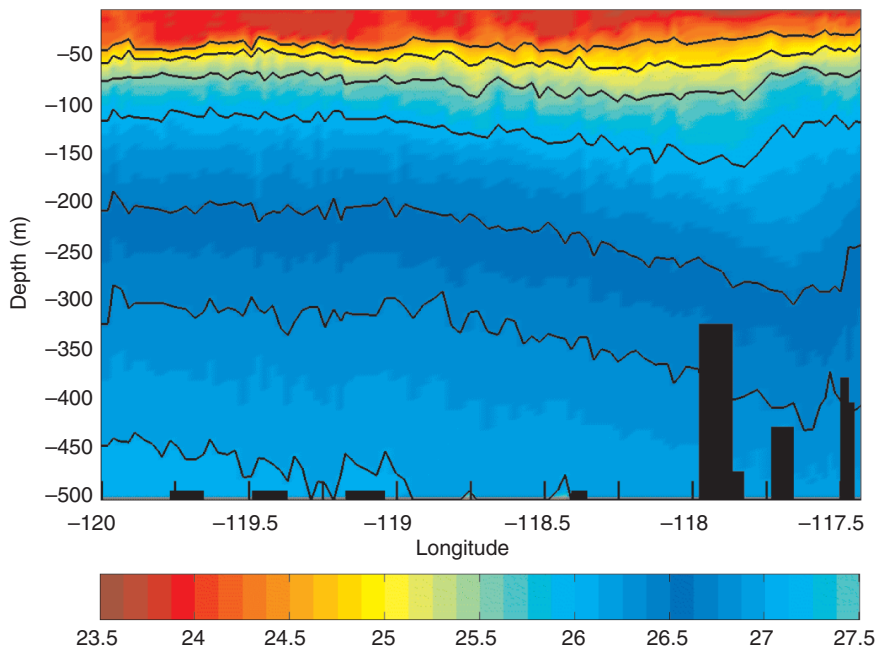
Color Plate 3 Photographs of both Slocum Battery (above) and Slocum Thermal (below). See page 45.



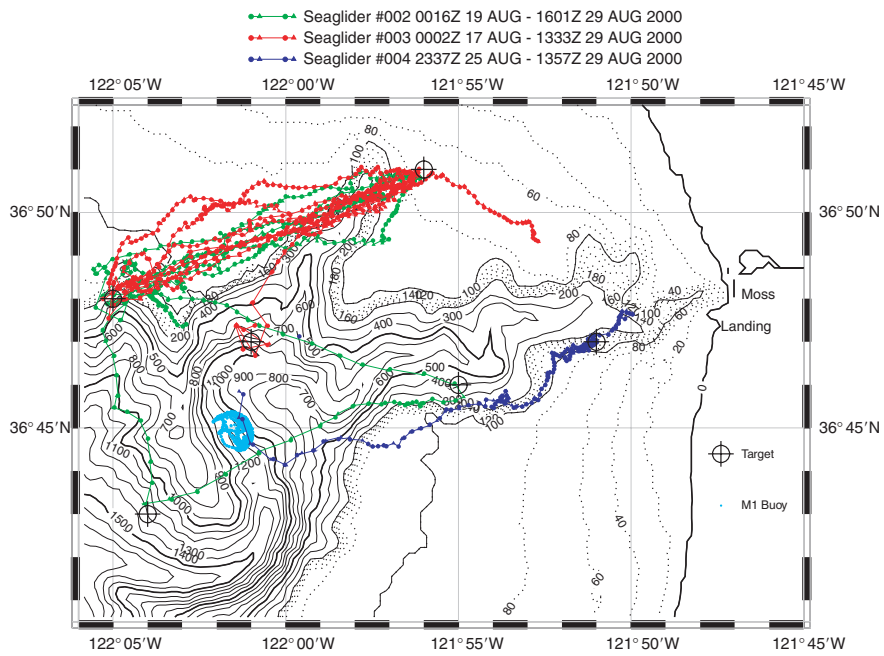
Color Plate 4 Glider performance diagram showing the buoyancy and power required to maintain a given speed and glide angle. This curve is for Seaglider but the behavior is similar for all designs. Note how at a given buoyancy, horizontal velocity U is maximized at a glide angle near 40° , whereas at fixed power U is maximized nearer a 14° glide. Green marks show observed Seaglider operating points. See page 49.



Color Plate 5 Time series of wind, depth-average ocean velocity from Slocum (black), depth-average ADCP velocity (red), and near-surface velocities from CODAR (dashed green) and ADCP (dashed black) from the LEO-15 site during July 2000. *See* page 53.



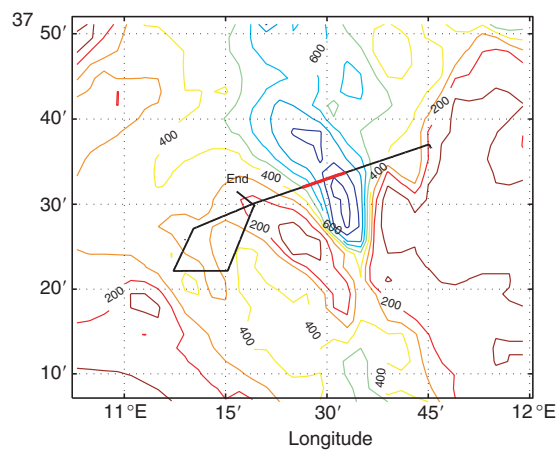
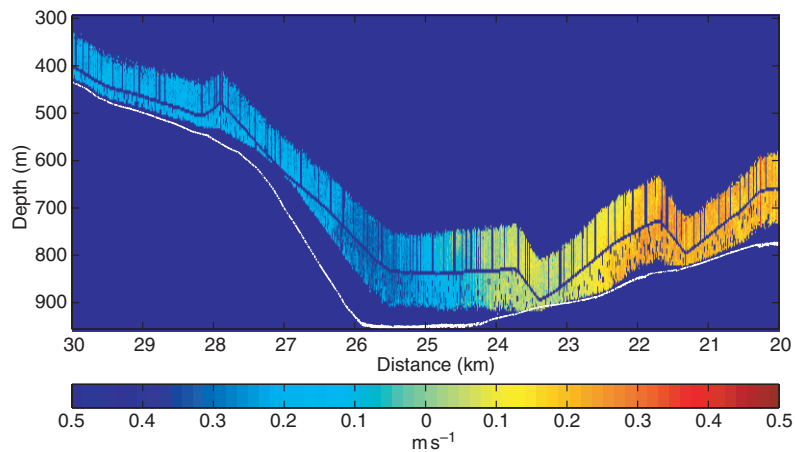
Color Plate 6 Density from the Spray section in Figure 3.10. Spacing of the temperature and conductivity profiles is about 3 km. The broad isopycnal slope downward to the east indicates the geostrophic shear of the California Current. The nearshore upward slope is associated with a near shore countercurrent. *See* page 55.



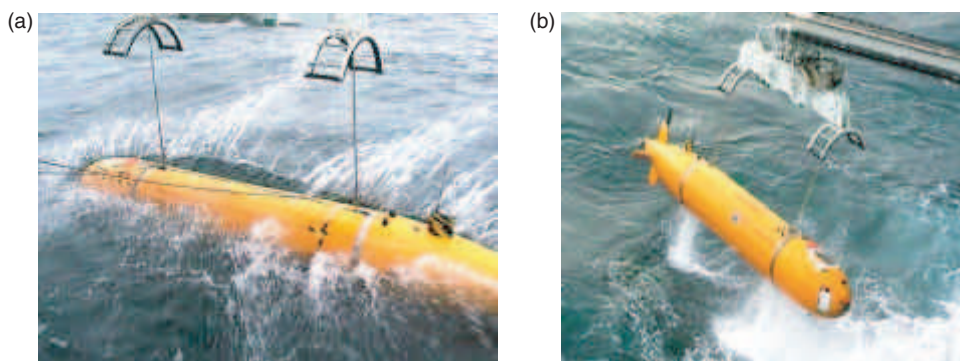
Color Plate 7 Tracks of three Seagliders in Monterey Bay (depth contours in meters). Two gliders made a total of 13 sections along the north rim of Monterey Canyon. At the end of the exercise, one of these (track in red) remained near a target about 2 miles north of a surface mooring (buoy positions shown in cyan). See page 56.



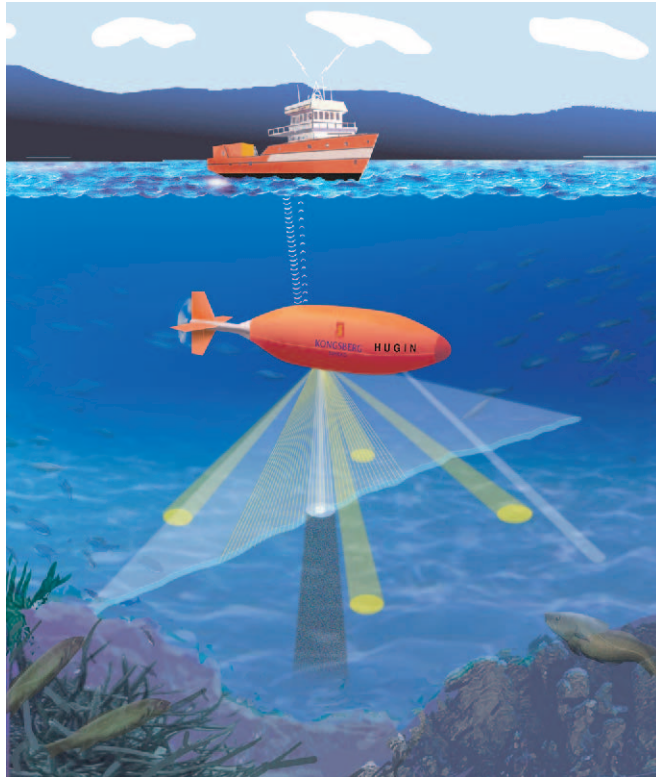
Color Plate 8 Prototype SAUV. See page 60.



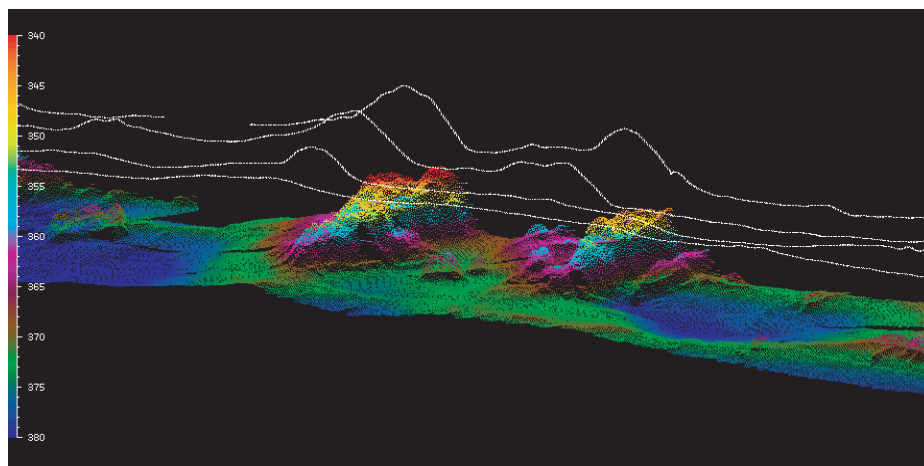
Color Plate 9 Autosub mission 239 in the Strait of Sicily used both upward- and downward-looking ADCPs to study the near-bottom velocity structure across the sill between the eastern and western Mediterranean. Upper panel shows the north component of velocity along the red section of the track shown in the bottom panel. *See page 157.*



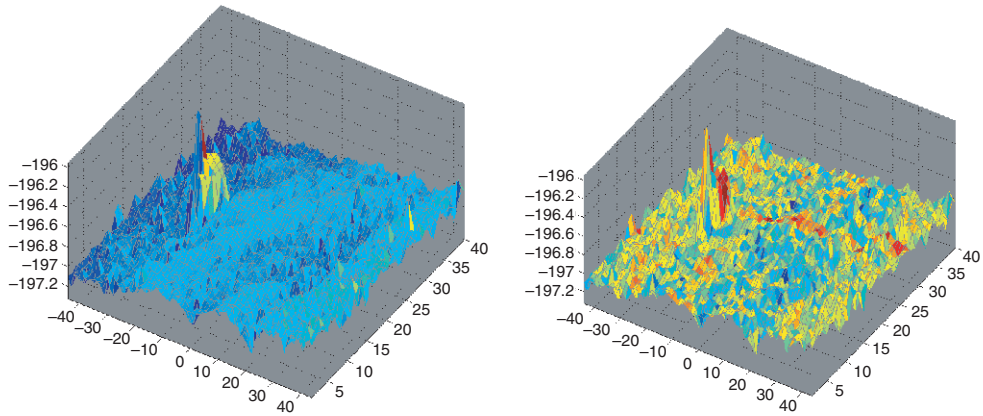
Color Plate 10 Launch (left) and recovery (right) of the Autosub vehicle from its purpose-built gantry as installed on the FRV *Scotia* in July 1999. *See page 283.*



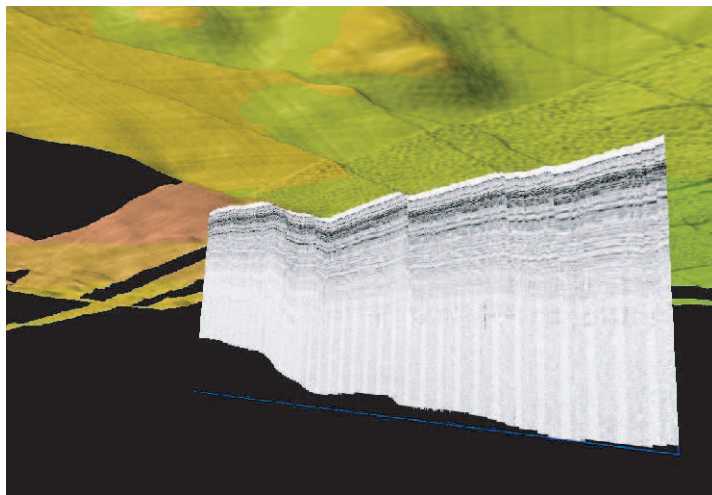
Color Plate 11 Illustration of HUGIN 3000 operating scenario in UUV mode. *See* page 183.



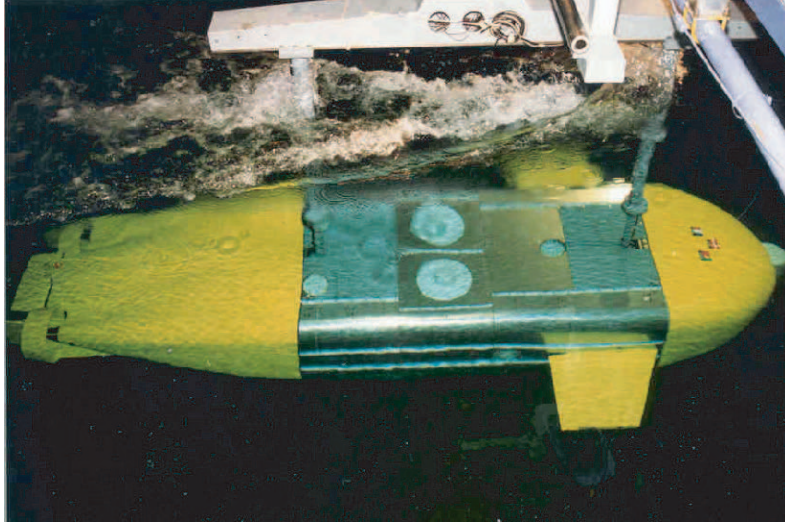
Color Plate 12 Bathymetry of an area with cold-water coral reefs off the West Coast of Norway. The vertical (depth) scale is exaggerated by a factor of 2. The white lines show the trajectory of HUGIN. *See* page 198.



Color Plate 13 Mine countermeasures research EM3000 response from Manta mine dummy: Left, Depth colour coded. Right, Backscatter (echo strength) colour coded. *See* page 199.



Color Plate 14 Combined swath bathymetry and sub-seabed imagery, data from the Gulf of Mexico. *See* page 200.



Color Plate 15 Hydrodynamic tank test of the 4.5 m long flat-shaped AUV 'MARIUS' in 1993. The test was carried out in a 240 m long towing tank at the Danish Maritime Institute. See page 204.



Color Plate 16 *Theseus* under the sea ice. See page 225.

Annotations from Plate.pdf

Page 3

Annotation 1; Label: Newgen; Date: 05-08-2002 10:39:56 AM

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