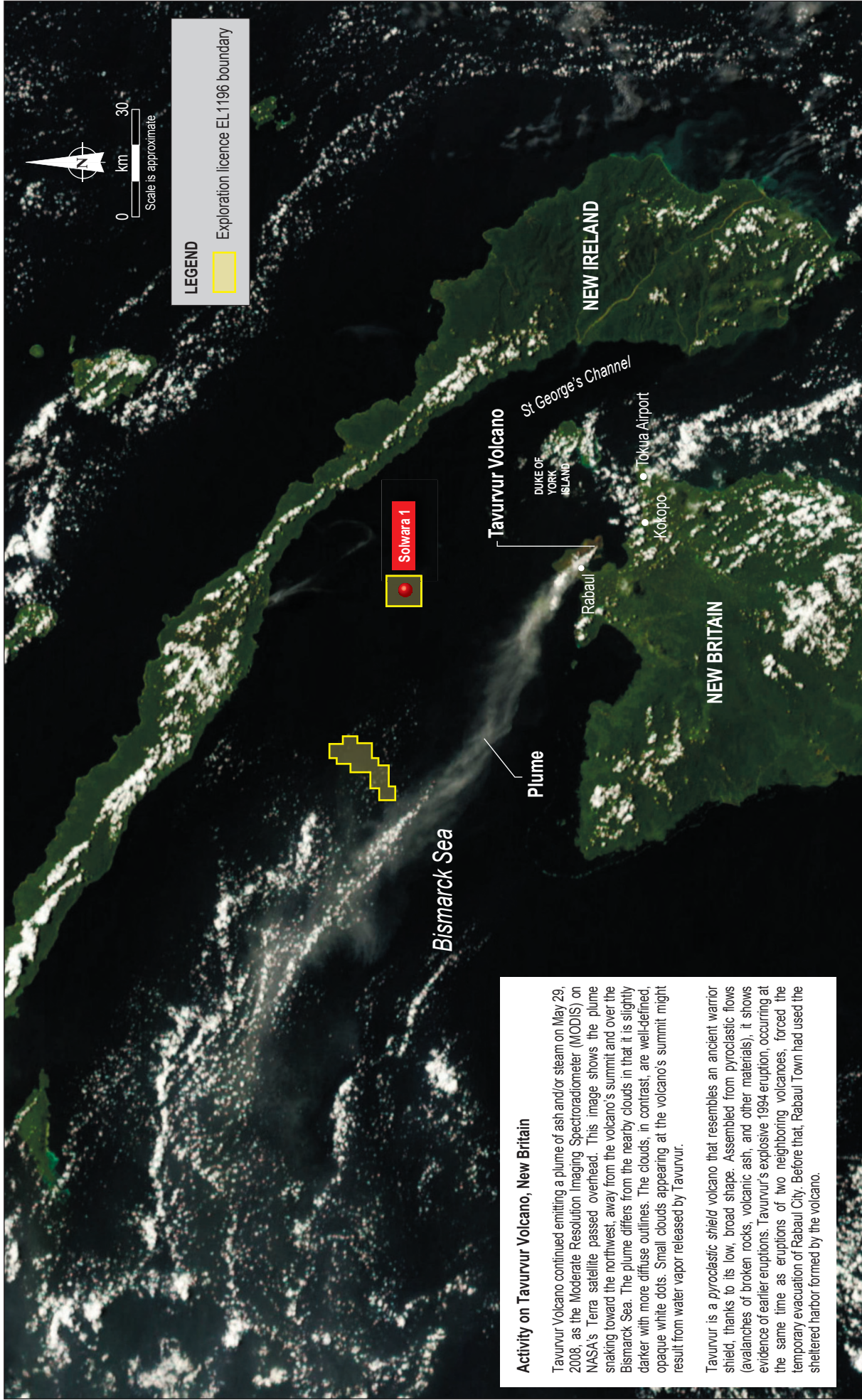


Note:
Percentages show the proportion of time that wind moves in a given direction

LEGEND
Wind speed (knots)

- 0 - 2.5
- 2.5 - 5
- 5 - 7.5
- 7.5 - 10
- >10



Activity on Tavorur Volcano, New Britain

Tavorur Volcano continued emitting a plume of ash and/or steam on May 29, 2008, as the Moderate Resolution Imaging Spectroradiometer (MODIS) on NASA's Terra satellite passed overhead. This image shows the plume snaking toward the northwest, away from the volcano's summit and over the Bismarck Sea. The plume differs from the nearby clouds in that it is slightly darker with more diffuse outlines. The clouds, in contrast, are well-defined, opaque white dots. Small clouds appearing at the volcano's summit might result from water vapor released by Tavorur.

Tavorur is a *pyroclastic shield* volcano that resembles an ancient warrior shield, thanks to its low, broad shape. Assembled from pyroclastic flows (avalanches of broken rocks, volcanic ash, and other materials), it shows evidence of earlier eruptions. Tavorur's explosive 1994 eruption, occurring at the same time as eruptions of two neighboring volcanoes, forced the temporary evacuation of Rabaul City. Before that, Rabaul Town had used the sheltered harbor formed by the volcano.

Source: http://earthobservatory.nasa.gov/NaturalHazards/natural_hazards_v2.php3?img_id=14866



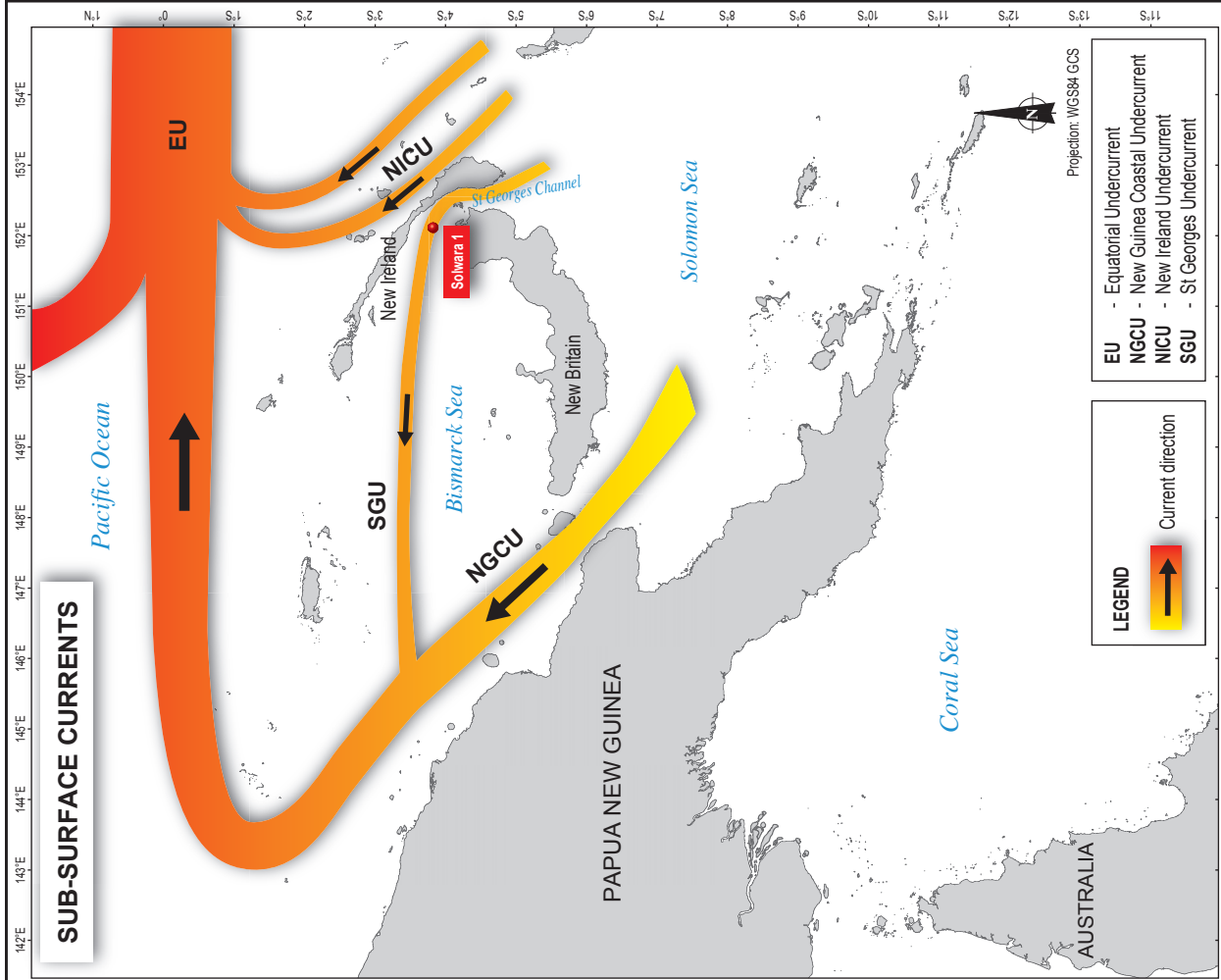
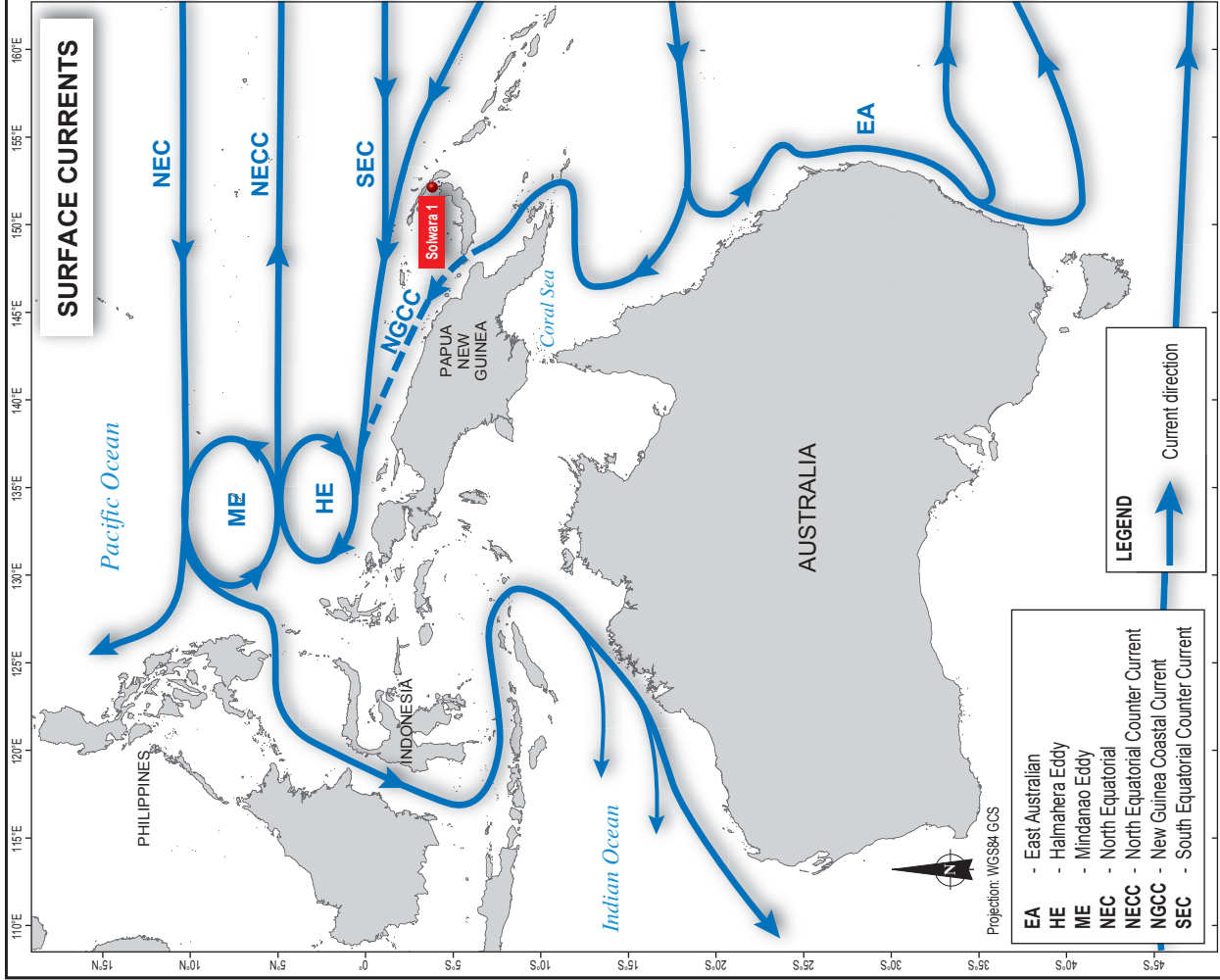
Job No: 7008
File Name: 7008_09_F07.09_HB

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Plume of ash and steam from Tavorur Volcano, 29 May 2008

Figure No: 7.9



Source:
Adapted from Steinberg, 2006.

coffey
natural systems

Job No:
7008
File Name:
7008_09_F07.10_HB

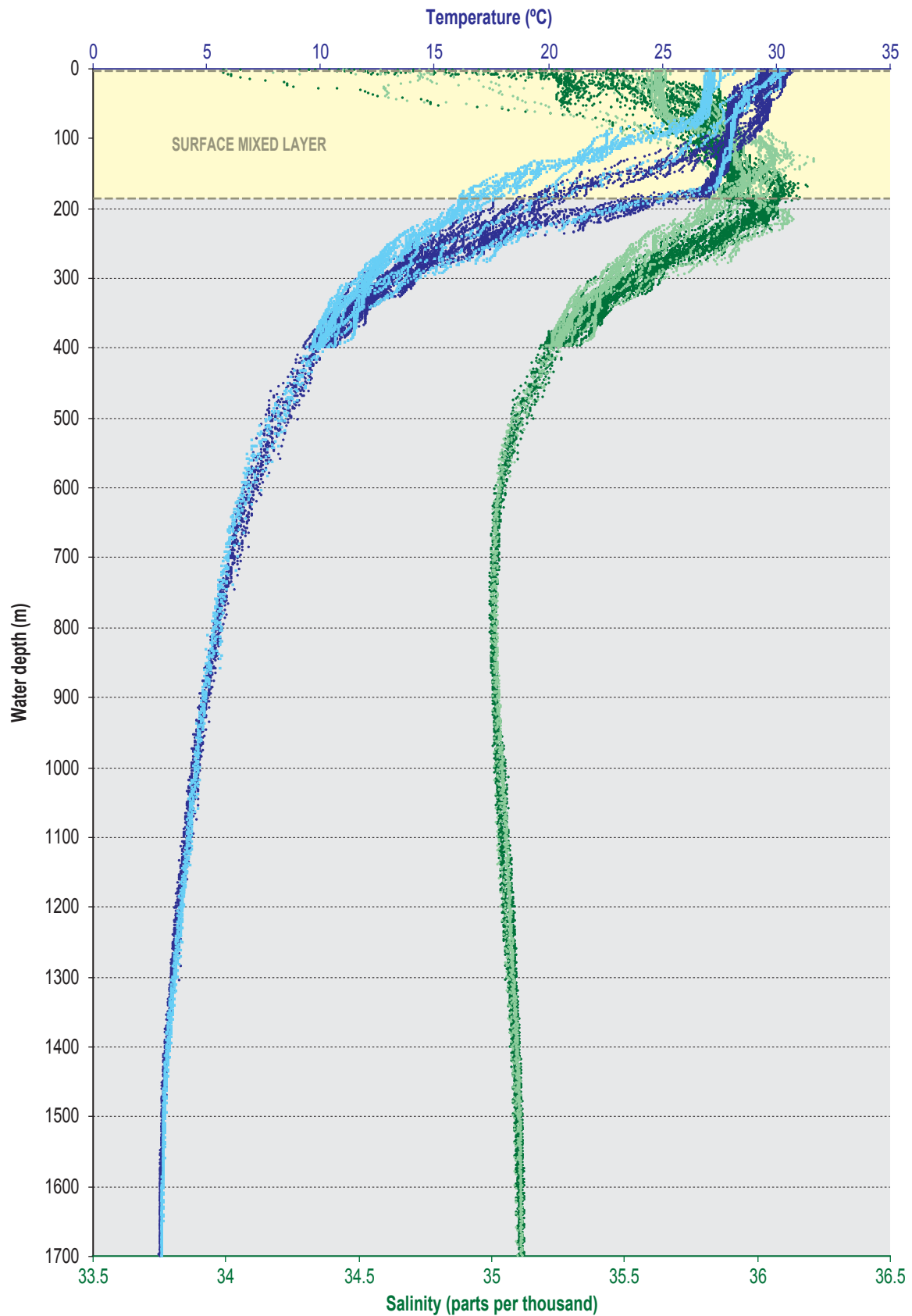
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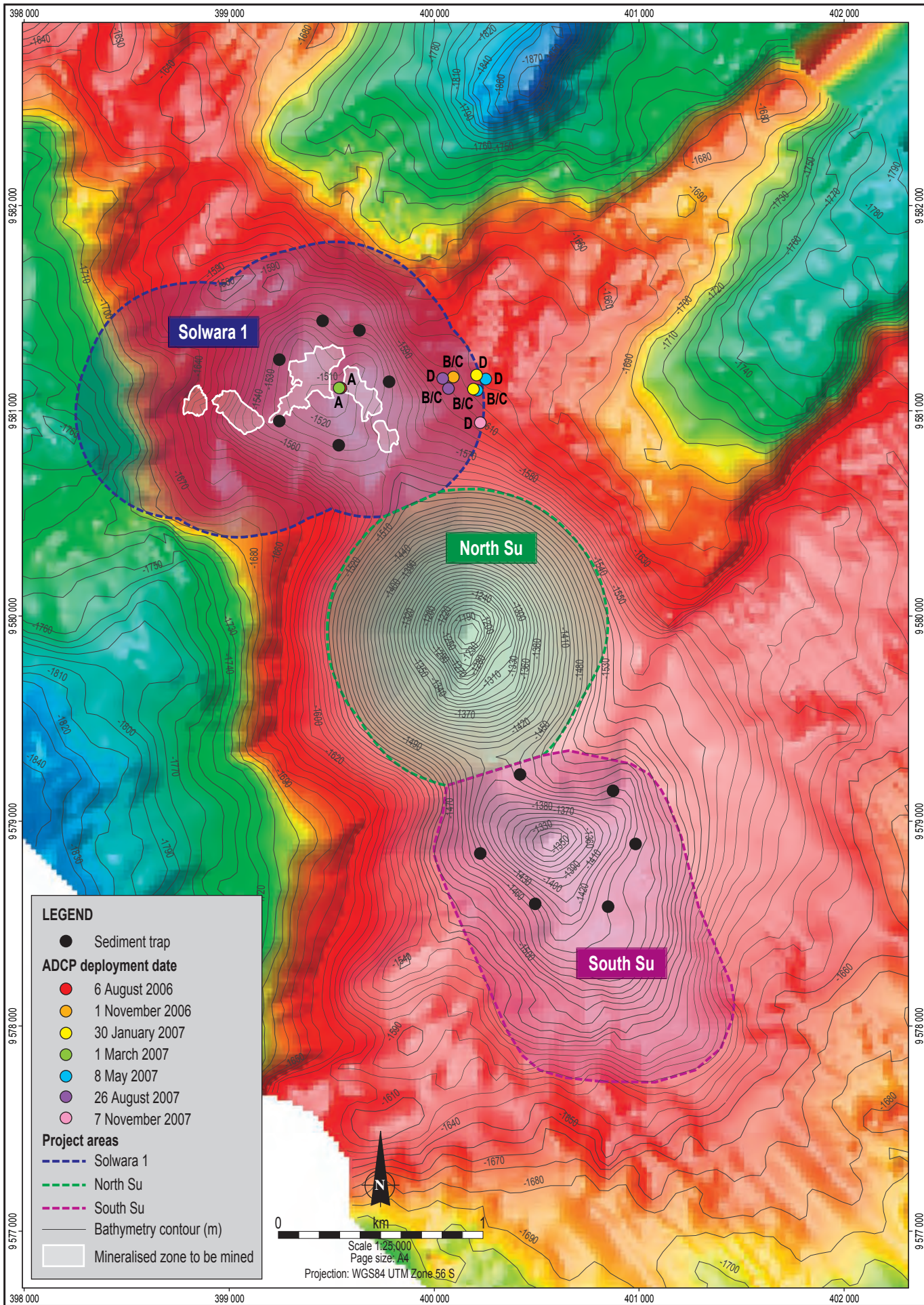
Regional currents

Figure No:

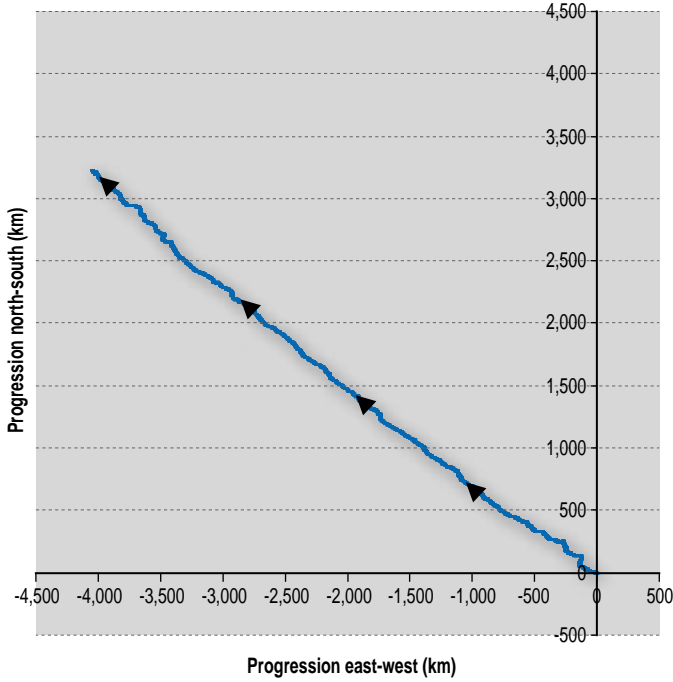
7.10



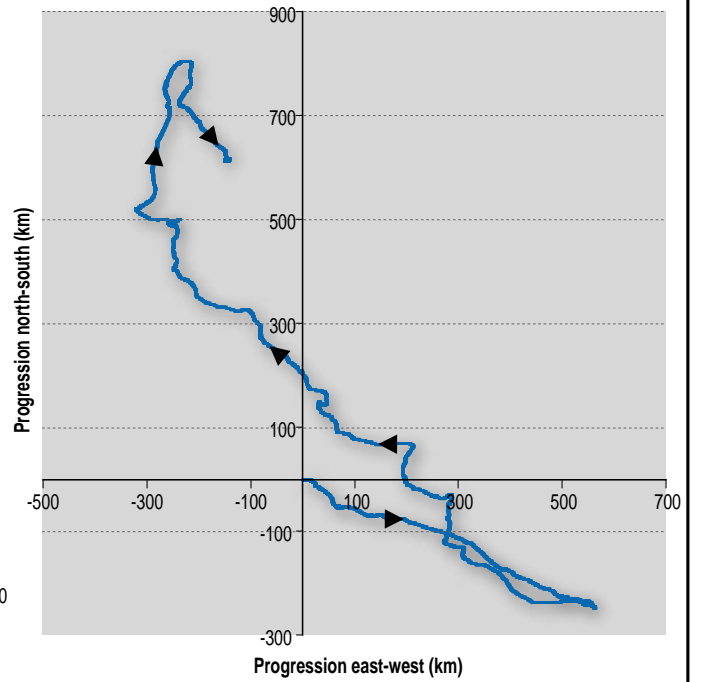
| Temperature | | Salinity | |
|----------------------------|----------------------------|----------------------------|----------------------------|
| ○ Northwest monsoon season | ○ Southeast monsoon season | ○ Southeast monsoon season | ○ Northwest monsoon season |
| ○ Southeast monsoon season | ○ Northwest monsoon season | ○ Northwest monsoon season | ○ Southeast monsoon season |



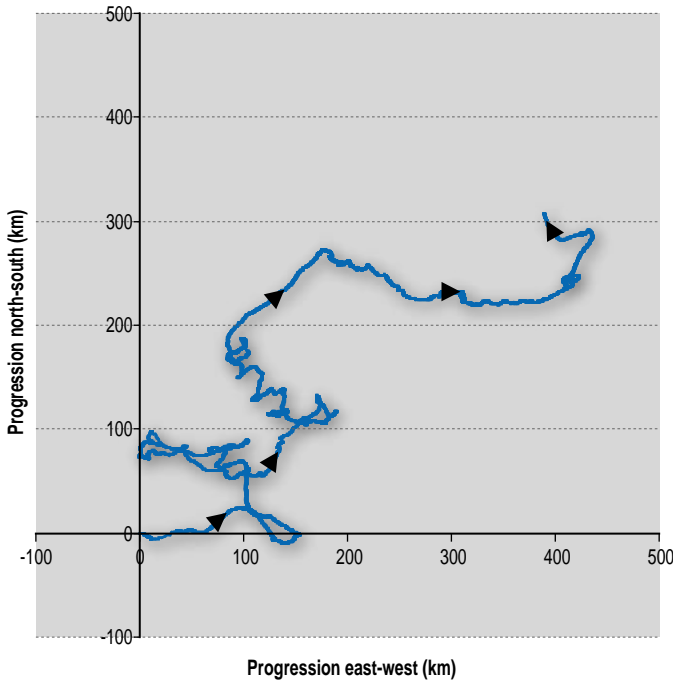
Progressive vector diagram at 243 m water depth



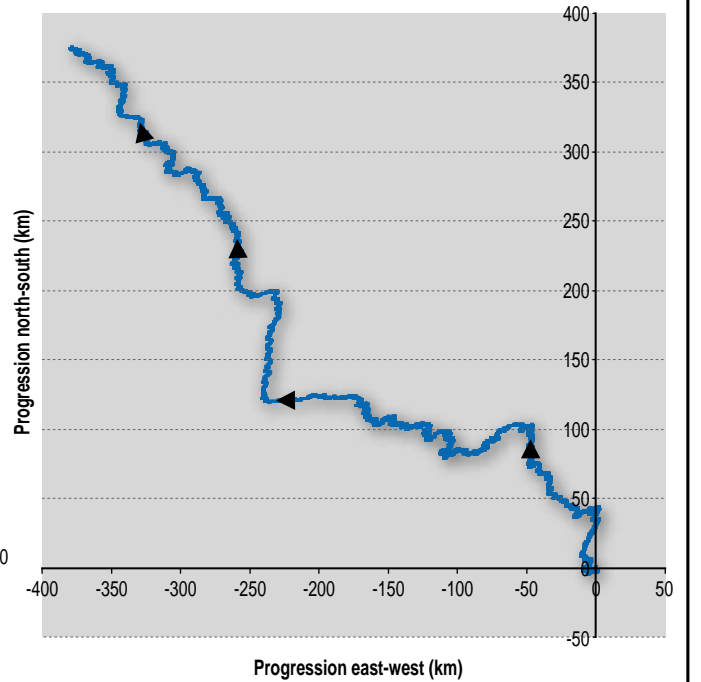
Progressive vector diagram at 598 m water depth



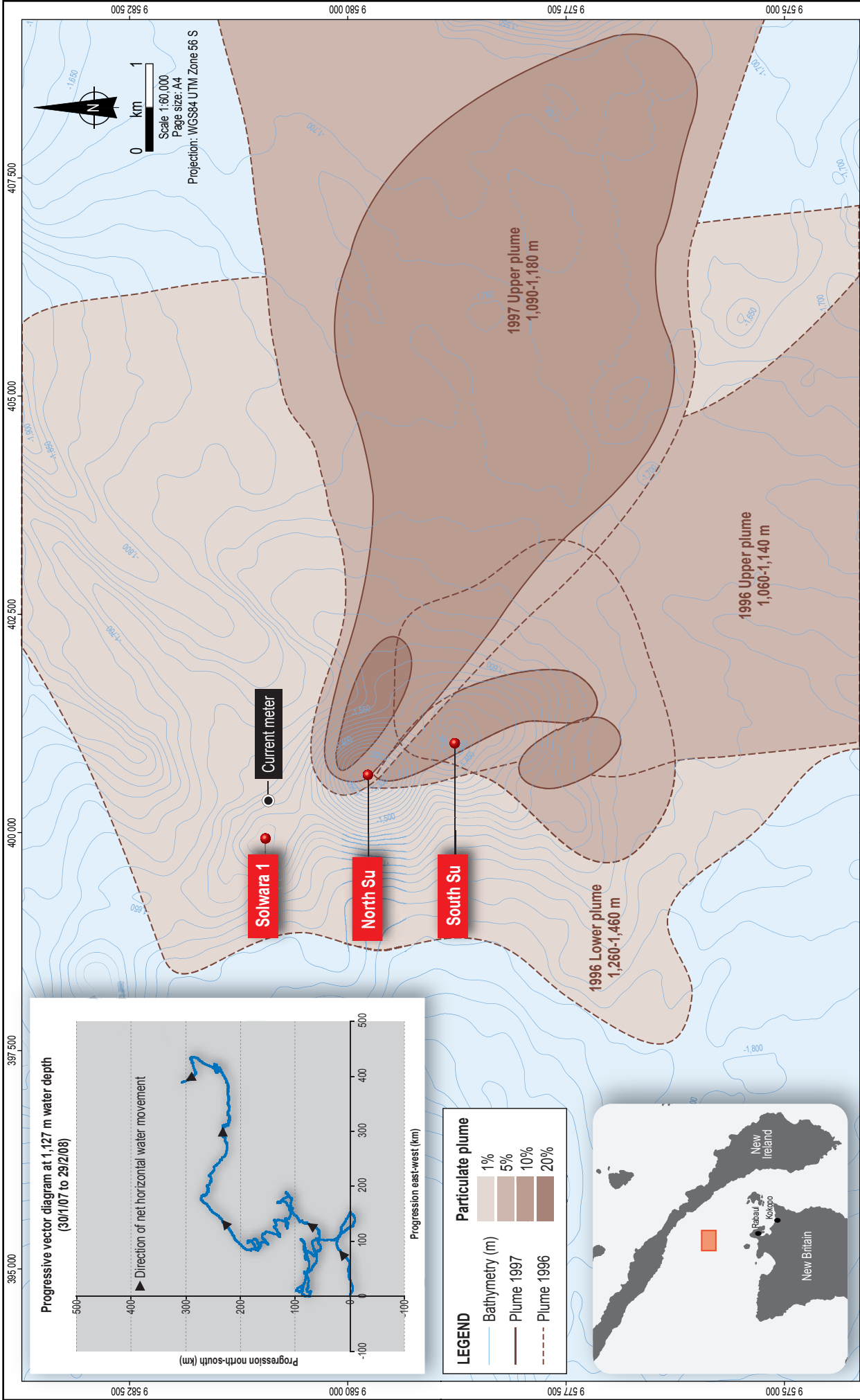
Progressive vector diagram at 1,127 m water depth



Progressive vector diagram at 1,510 m water depth



◀ Direction of net horizontal water movement



Source: Particulate plumes: digitised therefore approximate only (Figure 2 of Department of Geology, University of Toronto report: 'Quality Including Trace Elements of Sediments from the SuSu Knolls, Manus Basin, Bismark' Sea, Papua New Guinea' Solwara 1 monument and bathymetry from Nautilus). Original data from CSIRO.

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Date: 22.09.2008
XXX: 7008 Nautilus Solwara 1
File Name: 7008_09_F0714_GIS_A1

Figure No: 7.14

Naturally occurring particulate plumes in the vicinity of Solwara 1