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**CSIRO Marine Research**

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24 March 2000

Mr John Abernethy  
The Coroner  
1998 Sydney-Hobart Yacht Race Inquest  
Crown Solicitor's Office  
60-70 Elizabeth St  
SYDNEY NSW 2000

Dear Sir

From discussion with Dr Geoff Love of the Bureau of Meteorology I have become aware of your interest in my views concerning the ocean currents affecting the area of the 1998 Sydney-Hobart Yacht Race.

On the basis of the attached maps, and from my own assessments of other sea surface temperature data, I am of the view that the notion of a current of any significance running east to west at the eastern end of Bass Strait, at the time of the Race, is doubtful.

Based on interpretation of several satellite images, and on geostrophic currents calculated from 15 days of satellite-measured sea topography data centred on 30 December, the strongest current flowed around an anti-clockwise eddy centred near 36° 30'S, 152°E. This meant that during late December 1998, for the ocean over the continental slope and outer continental shelf between Ulladulla and Eden, the current was southward. The current then turned to the east, being restricted to the north of 37° 30'S. The maximum current speed around the eddy would have been 3 to 4 knots, peaking near the edge of the eddy.

South of the eddy, at 38°S to 38° 30'S, 149°E to 151°E the currents were much weaker (less than 1 knot) and without a clear pattern.

Yours faithfully

Dr George Cresswell  
CSIRO Division of Marine Research

cc Dr Geoff Love, Bureau of Meteorology  
Mr Tim Mangan, Business Development Manager, C.M.R.

**Queensland**

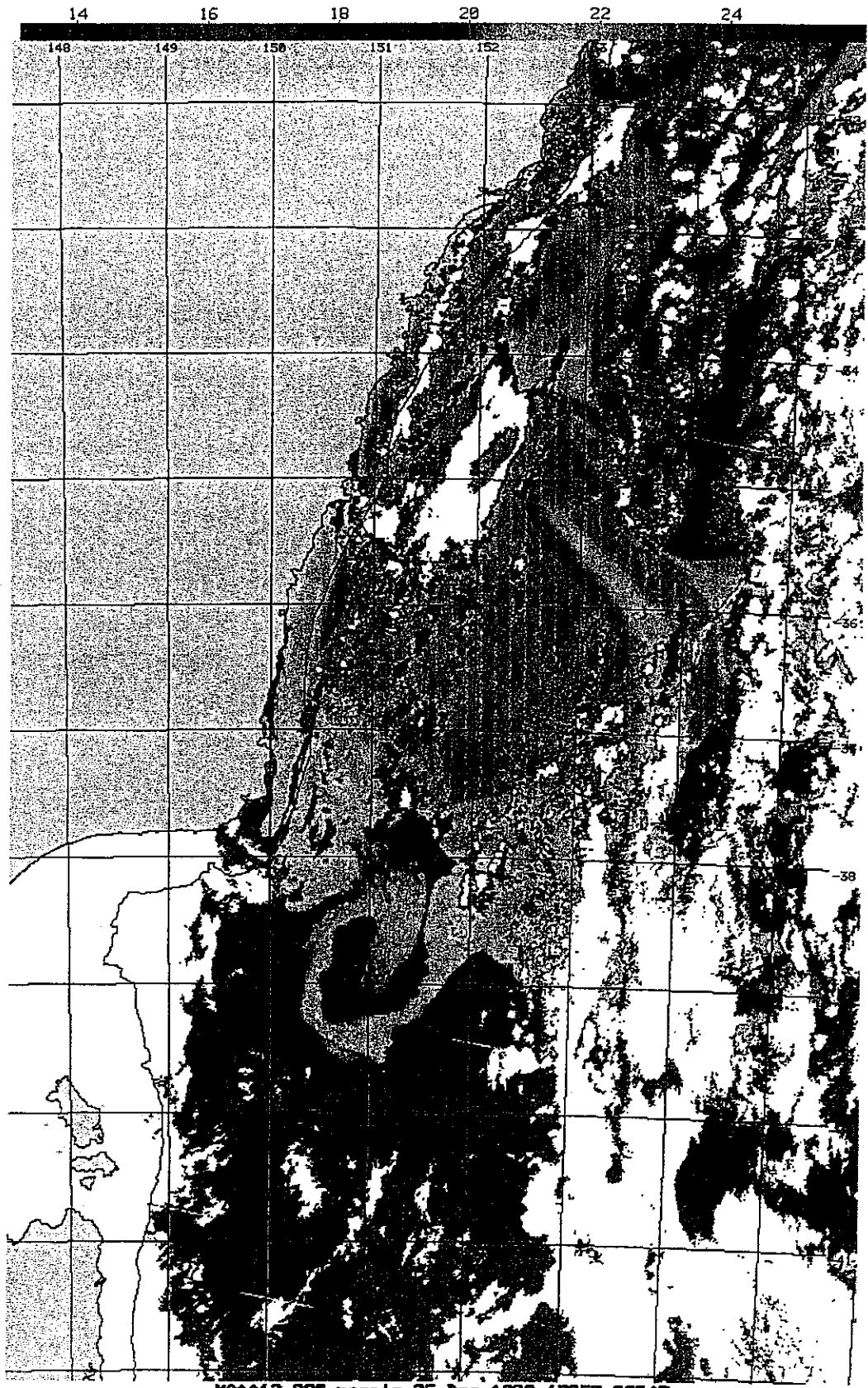
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## CURRENT MAPS

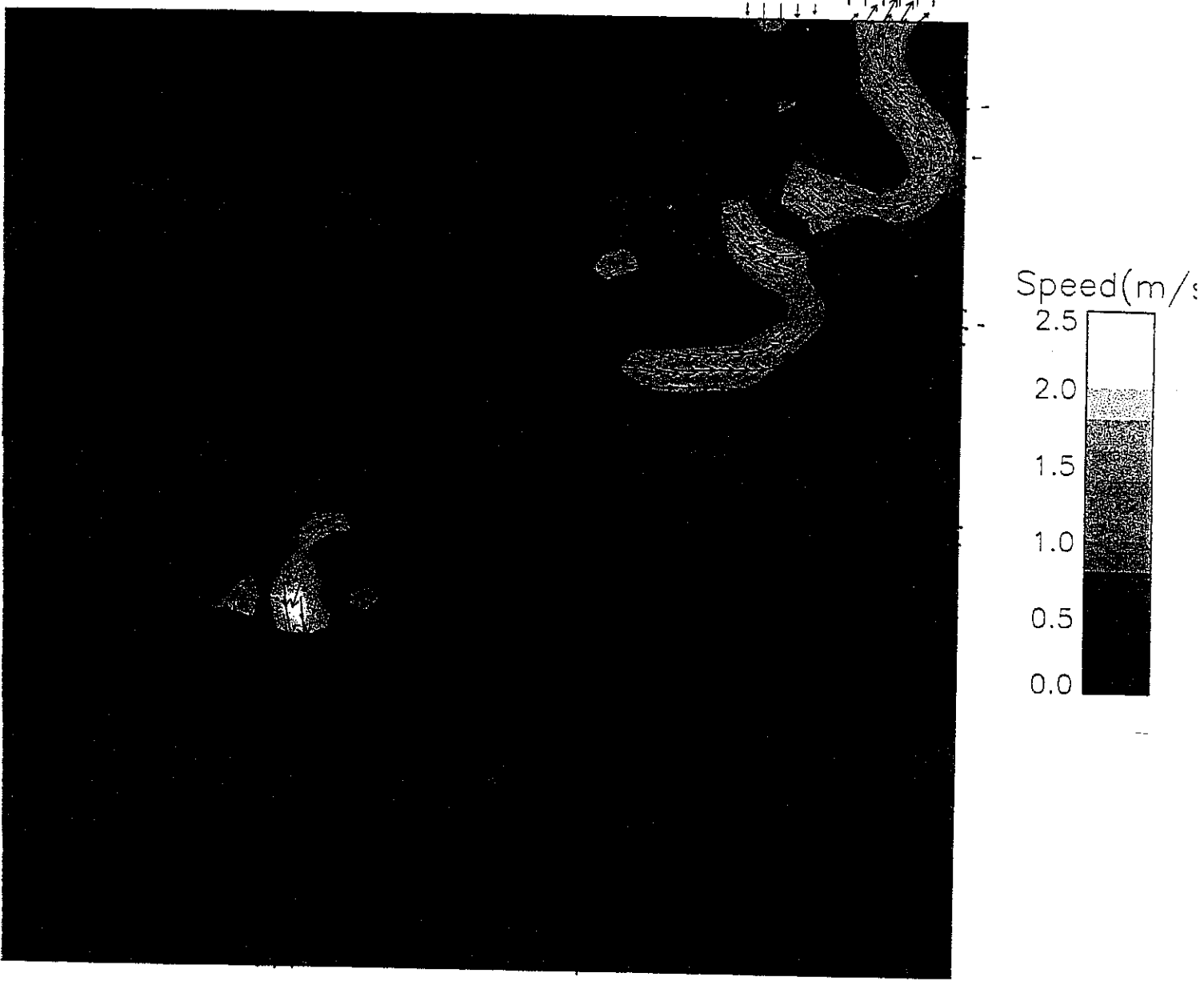
- Map 1: Sea Surface Temperature (SST) maps from NOAA orbiting satellite data. This image is a mosaic made from data acquired on 25 December 1998 between 17.35 UTC and 20.54 UTC (ie. Between 4.35 am and 7.54 am EDST on 26 December). The colours on the map match areas of SST as per the legend on the top of the map.
- Map 2: TOPEX/Poseidon/ERS (TP/ERS) geostrophic surface current map. Map for the 15 days of data centered on 20 December 1998. Current arrows are only shown for currents in excess of 0.25 m/s (or 0.5 knots).
- Map 3: TP/ERS map for the 15 days centred on 30 December (ie. from 23 Dec '98 to 6 Jan '99). Current arrows are only shown for currents in excess of 0.25 m/s (or 0.5 knots).
- Map 4: TOPEX/Poseidon/ERS geostrophic currents (for 23 Dec to 6 Jan) plotted on the SST data for 30 December between 06.00 UTC and 18.00 UTC (ie for 5.00pm 30 Dec to 5.00am 31 Dec).



NOAA12 SST mosaic 25 Dec 1998 1735Z-2854Z  
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Current Map 1

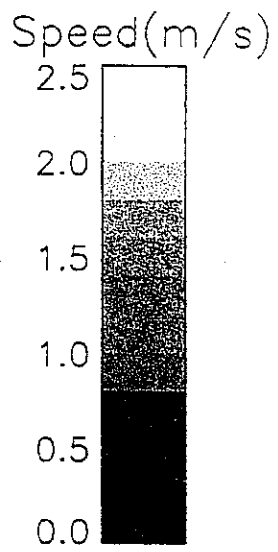
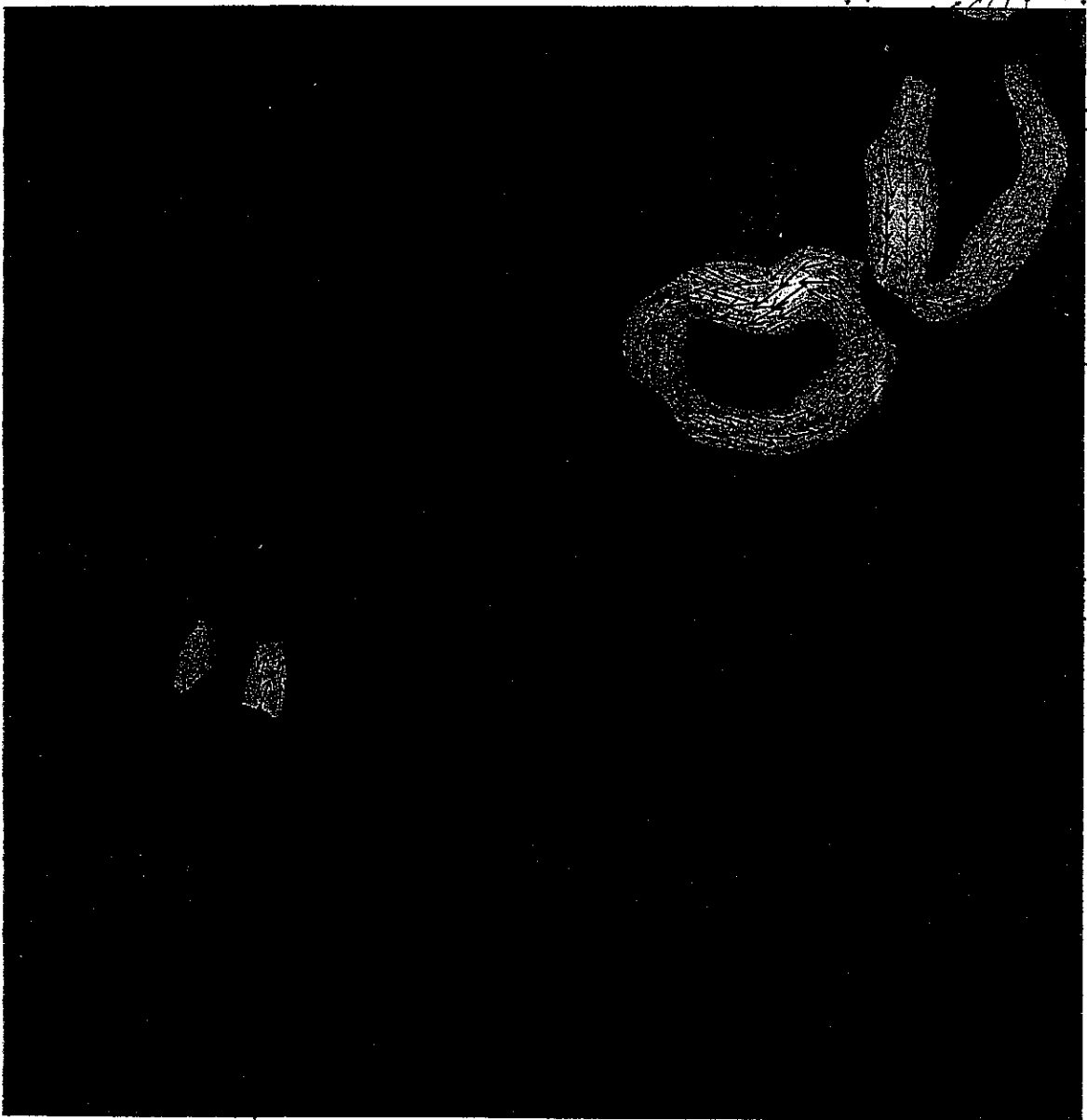
TP/ERS Geostrophic Currents  
20th Dec. 1998



Arrows are plotted if current speed  $> 0.25$  m/s

Current Map 2

TP/ERS Geostrophic Currents  
30th Dec. 1998



Current Map 3

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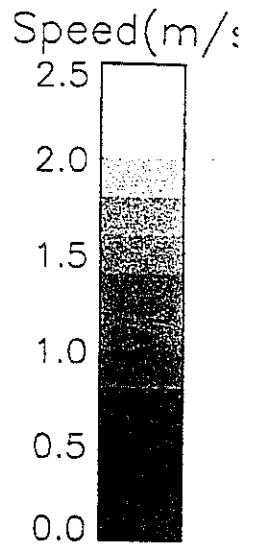
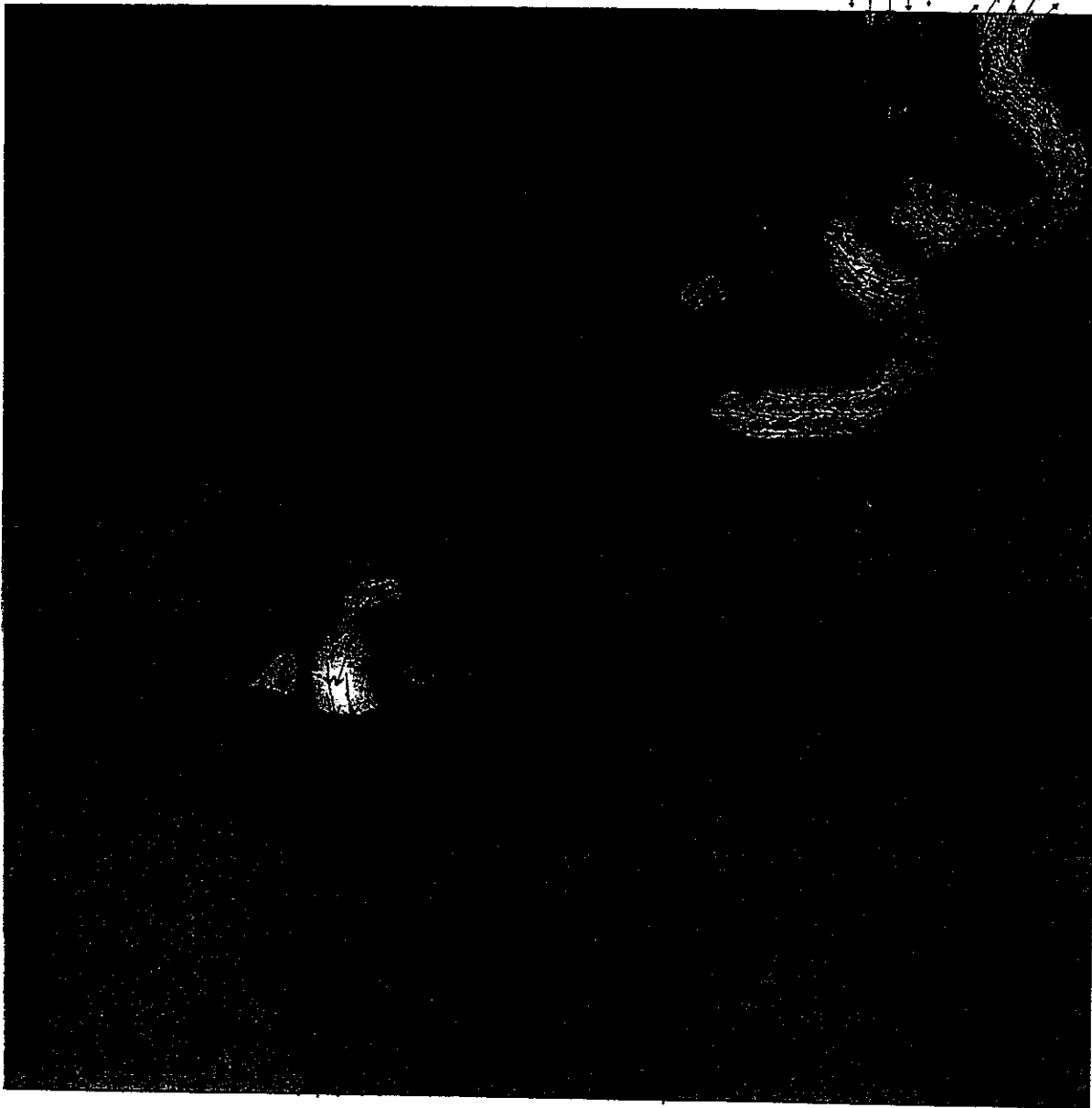
Current Map 4



NOAA12 SST mosaic 25 Dec 1998 1735Z-2054Z  
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Current Map 1

TP/ERS Geostrophic Currents  
20th Dec. 1998

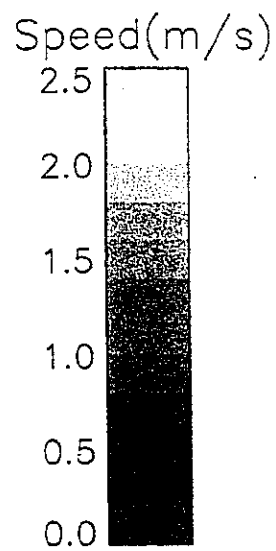
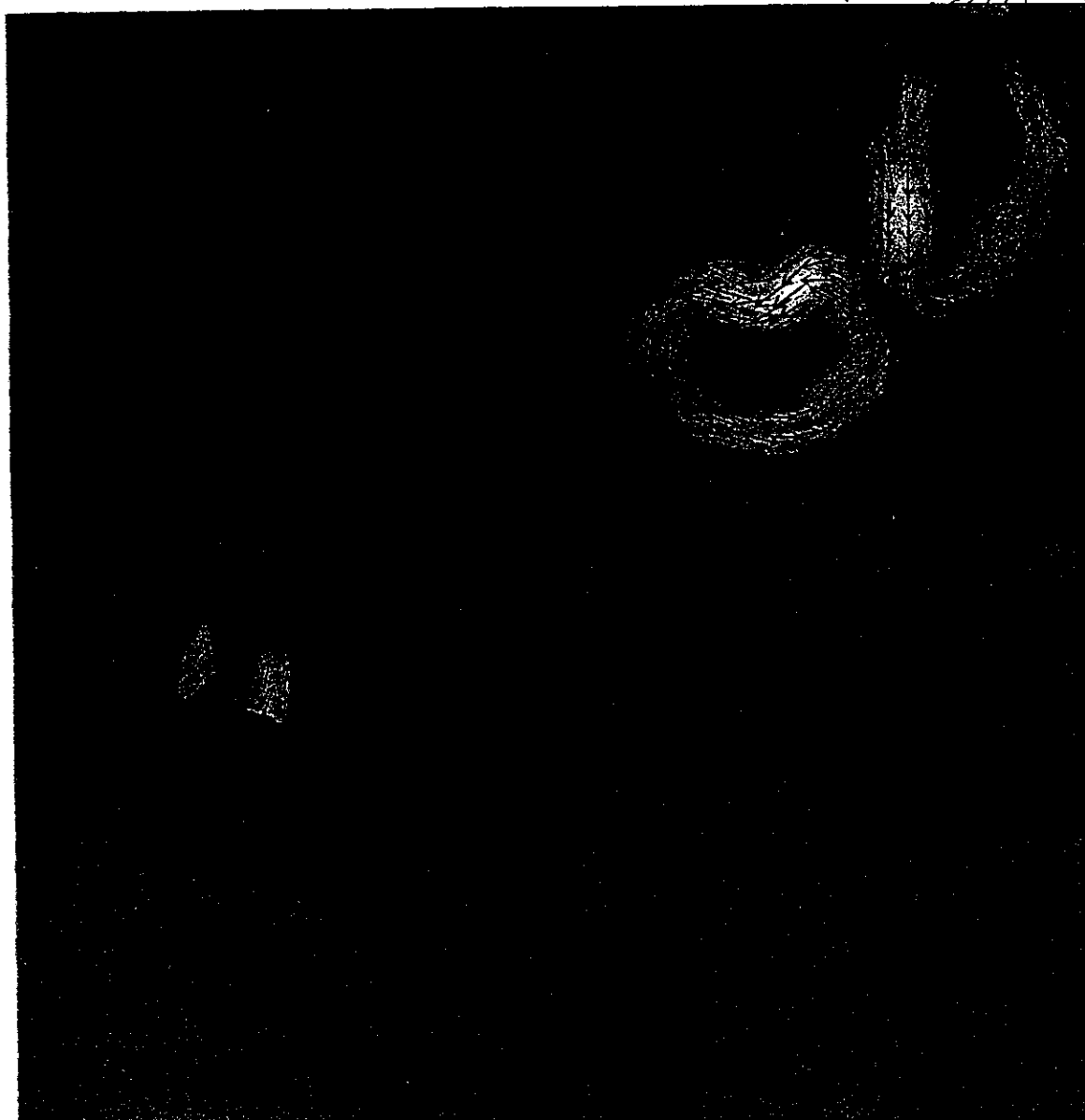


Arrows are plotted if current speed  $> 0.25$  m/s

Current Map 2



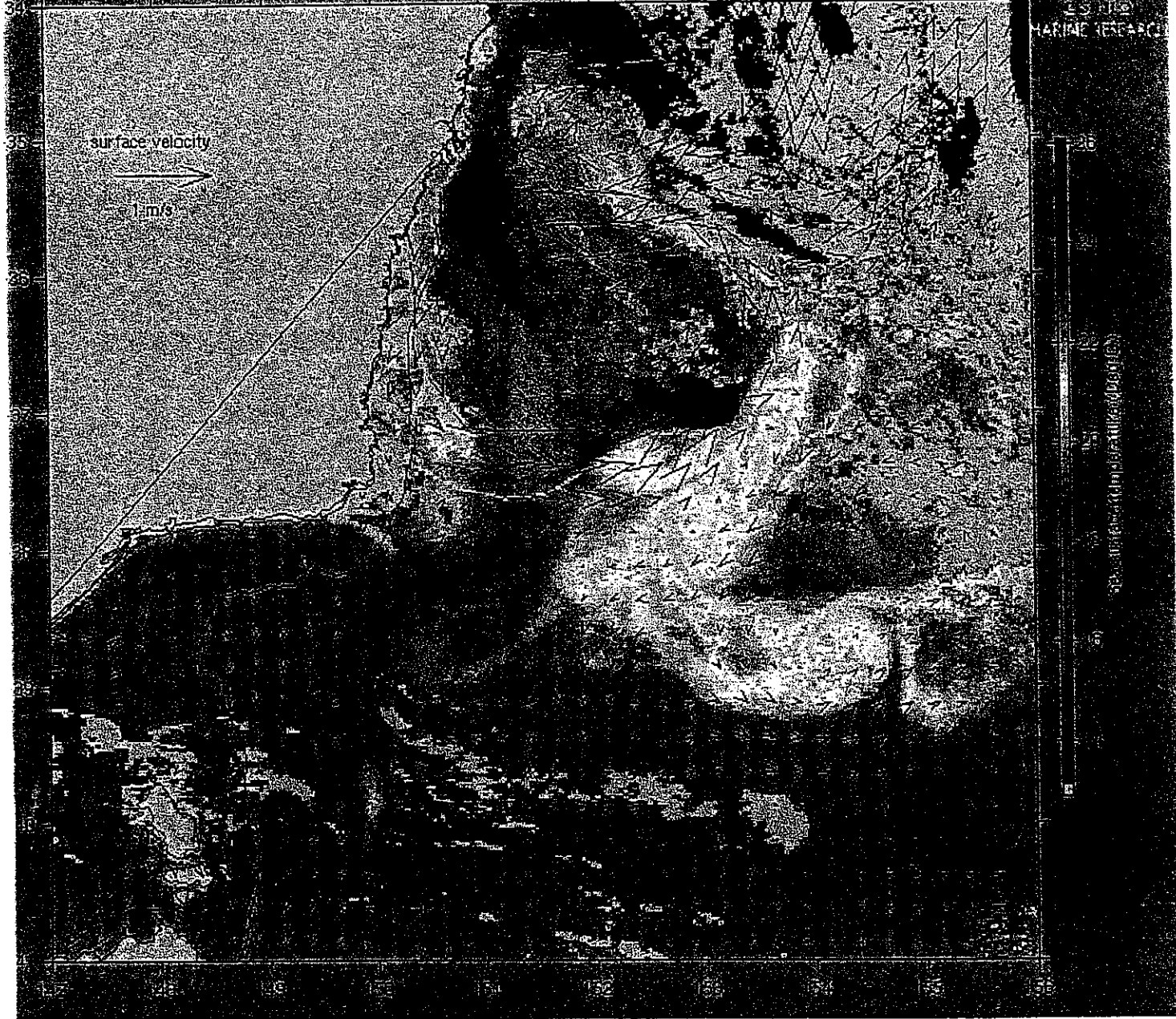
TP/ERS Geostrophic Currents  
30th Dec. 1998



Current Map 3

PREV] [NEXT] [LIST]

Topex/Poseidon/ERS altimetric surface current and  
NOAA sea surface temperature 30-Dec-1998 06:18Z



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Current Map 4