

Aurora Australis JGOFS Cruises in the Southern Ocean

Cruise Summary: AU9604

Oceanographic measurements were conducted along a series of meridional and zonal sections along the Antarctic continental shelf and slope region between 80°E and 150°E from January to March 1996. A total of 147 vertical profile stations were taken, most to near bottom. Water bottle samples were collected for the measurement of salinity, dissolved oxygen, nutrients, fluorocarbons, oxygen-18, primary productivity, and biological parameters using both a 24 bottle rosette sampler. Measurement and data processing techniques are summarised in Rosenberg et al, 1997. The expedition designation was Cruise AU9604 (cruise Acronym "BROKE"), encompassing MARGINEX.

Dissolved oxygen profiles made using an oxygen electrode on the CTD are available on some of the CTD casts. The fluorometer flooded early in the cruise, and no PAR and fluorometer profiles were available.

Data included in this JGOFS data report include CTD, nutrients, HPLC chlorophyll-a, photosynthetic parameters determined using a production vs irradiance technique, and modelled water column primary production along the SR3 transect.

References:

Rosenberg, M., Bray, S., Bindoff, N., Rintoul, S., Johnston, N., Bell, S., and Towler, P. 1997. *Aurora Australis marine Science cruises AU9501, AU9604, and AU9601 – oceanographic field measurements and analysis, intercruise comparisons and data quality notes*. Antarctic Cooperative Marine Research Centre, Research Report No. 12, September 1997. 150 pp.