# FRANKLIN CRUISES FR 8/90, 5/92 AND 8/93 DATA DOCUMENTATION JGOFS WESTERN EQUATORIAL PACIFIC PROCESS STUDY

## [1] General:

Parameter: Acoustic Doppler current profiles

Principal Investigator: Denis Mackey

Institute Address: CSIRO Division of Marine Research E-Mail Address: Denis.Mackey@marine.csiro.au

List of Parameters: Current velocity in 8 m depth bins cm sec<sup>-1</sup>

List of Units: Northwards currents positive, southwards negative,

Eastwards currrents positive, westwards negative, all

velocities in cm sec<sup>-1</sup>.

### [2] Sampling:

Gear (e.g. CTD, pump, etc.): RDI hull mounted acoustic doppler current profiler,

150kHz.

Standard Depths: 8 m bins starting ~16 m below the transducer to as

deep as possible.

Chemicals used: None
Special Procedures: See below

Comments and Notes: The data presented is a selection of data at

approximately 50 km intervals (0.5 degrees of latitude) that was presented in Mackey et al.,

(1995, 1998).

### 3] Analysis:

Instrument: RDI acoustic doppler current profiler

Method: Data collected and averaged over 3 minutes, and during

processing avereraged into 20 minute averages.

Precision: +/- 1 cm sec<sup>-1</sup>

Comments: ADCP data available from FR 9008, FR 9205, and FR

9308.

### [4] Results:

Quality of Data: Good.

Known Problems:

#### [5] Brief description of analytical method

E:\JGOFS DATA\Project metadata description.doc

Processing of the raw ADCP files was done according to the methods available at data-requests@marine.csiro.au

### [6] Comments:

The full data set is available on request from the Data Processing Group, CSIRO Division of Marine Research, GPO Box 1538, Hobart, Tasmania, Australia 7001 (email: data-requests@marine.csiro.au).

The data presented is a selection of data at approximately 50 km intervals (0.5 degrees of latitude) that was published in Mackey et al., (1995, 1997).

- Mackey, D. J., Higgins, H. W., Mackey, M. D. and Holdsworth, D. (1998) Algal class abundances in the western equatorial Pacific: estimation from HPLC measurements of chloroplast pigments using CHEMTAX. *Deep-Sea Research*, **45**, 1441-1468.
- Mackey, D. J., Parslow, J. S., Griffiths, F. B., Higgins, H. W. and Tilbrook, B. (1997) Phytoplankton productivity and the carbon cycle in the western equatorial Pacific under ENSO and non-ENSO conditions. *Deep-Sea Research*, 44, 1951-1978.