

## SCIENTIFIC DATA INVENTORY

### TOPICS

1. Shipboard research

SHIP'S NAME  
CRUISE IDENTIFICATION  
AGENCY  
DATES AND CRUISE DETAILS  
STUDY AREA  
CRUISE OBJECTIVE  
SCIENTIFIC OBJECTIVES  
SAMPLING PROGRAM  
DATA REDUCTION AND ANALYSIS  
AVAILABILITY OF DATA  
REQUESTS FOR DATA  
CRUISE TRACK

2. Shorebased and other research

PROJECT TITLE  
AGENCY  
DATES  
STUDY AREA  
SCIENTIFIC OBJECTIVES  
SAMPLING PROGRAM  
DATA REDUCTION AND ANALYSIS  
AVAILABILITY OF DATA  
REQUESTS FOR DATA

## EXAMPLE

M.V. Nella Dan      #1 FIBEX (First International BIOMASS Experiment)  
Agency              Antarctic Division, Department of Science & Technology

Dates and Cruise Details      Departed Melbourne              9    January 1981  
   Arrived study area              18    January  
   Departed study area              13    March  
   Arrived Melbourne              28    March  
Marine research undertaken over 28 days between 18  
January and 13 March.

Study Area                      South of 60°S to the Antarctic continent between 60°E and  
90°E.

Cruise objectives              Participate in First International BIOMASS Experiment.  
Deliver cargo and passenger to Davis and Mawson.

Scientific objectives              - Accoustic survey for quantitative estimation of krill and  
   other zooplankton.  
   - Trawling for target identification and assessment.  
   - Oceanography, circulation patterns, geostrophic flow.  
   - Survey of phytoplankton.  
   - Seabird distribution and abundance.

Sampling Program              - Midwater trawls for zooplankton.  
   Rectangular Midwater Trawl (8m<sup>2</sup>) blind (36) and aimed  
   (23) hauls.  
   Bongo net and conical nets (61 oblique tows).  
   - Hydrographic stations (52 CTD stations to 2000m or  
   bottom).  
   Conductivity, temperature, depth.  
   Expendable bathy thermographs (86 probes to 450m).  
   - Phytoplankton – Rosette water sampling at 52 CTD +  
   6 other stations.  
   - Seabirds – observed 10 mins/hour for all daylight hours.  
   - Accoustic survey 9000 n miles. Quantitative  
   echosounding 0–250 m at 120 KHz and 38 KHz.

Trawling and hydrographic stations taken at approximately same position and time and as close as possible to solar noon and solar midnight.

#### Data Reduction and Analysis

Zooplankton. Catch weighed then sorted into major groups and then to species wherever possible. *E. superba* was sub-sampled and sorted for sex and maturity. Length frequency determined on separate sub-samples.

Phytoplankton. Light microscopy on material for enumeration and identification. Preservation of material for later analysis and taxonomic studies by electron microscopy. Quantitative chemical analysis for pigments including chlorophyll.

Oceanography. Full set salinity and temperature data at standard depths for each station. Continuous CTD data available. XBT data for each drop available for standard depths.

Seawater analysis.

Sea birds. Distribution and abundance of all species observed.

#### Availability of Data

Published data – Full zooplankton data available, Williams et al. (1983). Oceanographic data available on request for each station and standard depths.

Magnetic tape – Full FIBEX data set including acoustic, trawling and oceanographic data recorded on magnetic tape in the formats required for the Post-FIBEX data workshop in Hamburg. Partial data set on phytoplankton.

These data as a general principle are available to scientific organisations on an exchange basis.

## Requests for Data

Published data, data reports etc. are available on request. Data stored on magnetic tape will in general be made available on request providing proprietary rights of the Antarctic Division and the appropriate scientists are respected.

Requests for data should be made to the –

Director  
Antarctic Division  
Channel Highway  
KINGSTON TAS. 7150

## Cruise Track

To be attached.