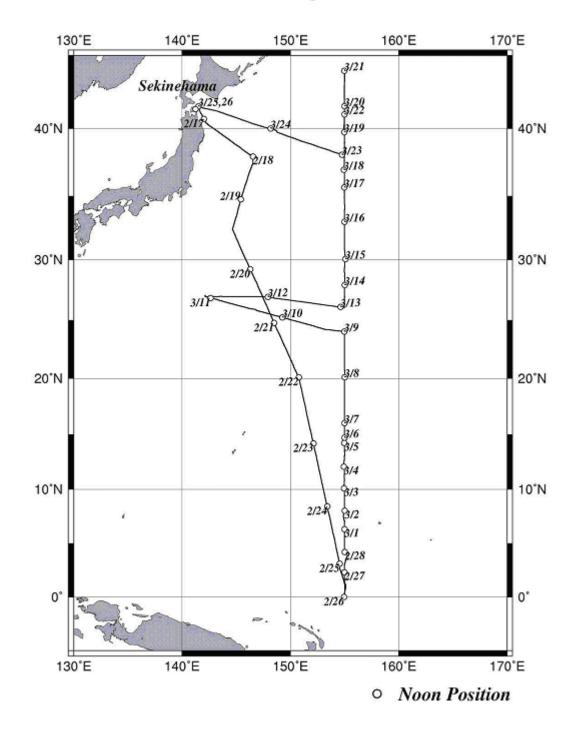
MR07-01 Cruise Summary



1. Cruise information

- 1. Cruise code / ship name MR07-01 / R/V MIRAI
- 2. Title of the cruise Biogeochemical study in the western North Pacific
- 3. Period of the cruise / port of calls
 - 17, February 2007 Sekinehama (departure)
 - 11, March 2007 Chichi-jima (call)
 - 26, March 2007 Sekinehama (arrival)



Cruise Track of MR07-01

2. Objectives

The main objective is to observe the distributions of materials such as carbon dioxide in the western North Pacific for better understanding of ocean's roll in controlling the global environment. Additionally, we have planned the observation for the study of horizontal and vertical transportation of materials and of decadal change in biogeochemistry along 155E

between the equator and 44N.

3. Principal Investigator

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5. Overview of the observations

The hydrocastings by CTD with carousel water sampler were carried out along 155E between the equator and 44N. We conducted the analysis of materials such as carbon species, dissolved oxygen, nutrients, and phytoplankton. We deployed J-KEO buoy at 37.9N, 146.6E to monitor the surface heat flux in the north of Kuroshio Extension. Additionally, 8 ARGO floats were deployed between 3N and 22N, and 33 soundings by radiosonde were carried out at the stations in the north of 30N.