

**Station Name:**

137°E line (P9)

**Type of Station (moored / ship-based) and Location (geographic region / latitude and longitude coordinates):**

ship-based, western N. Pacific:137°E, 34°N-3°N

**Carbon and biogeochemistry measurements at the station (indicate the frequency of observations, the year measurements began, and if they are surface / full water column, etc.):**

Underway  $p\text{CO}_2$  : annual 1983-; biannual 1989-; seasonal 2003-.

$\text{TCO}_2$  : 3 years intervals 1994-; seasonal 2003- (0- 2000m at 5° intervals and surface at 1° intervals.

pH (spectrophotometric) : seasonal 2003- (0- 2000m at 5° intervals and surface at 1° intervals.

**Principle Investigators / Contact Points:**

Masao Ishii, Geochemical Research Dept, Meteorological Research Institute  
(mishii@mri-jma.go.jp)

Akira Nakadate, Global Environment and Marine Department, Japan Meteorological Agency (a\_nakadate@met.kishou.go.jp)

**Affiliation of this station with national, regional, or global research programs and process studies:**

Japan Meteorological Agency's operational monitoring program in the western N. Pacific

**Web-site or links to other information:**

## Changing Times Station Information

Please fill out the information below and send to Maria Hood at [m.hood@unesco.org](mailto:m.hood@unesco.org). This information will be used during the breakout sessions of the meeting and to develop an information database.

<b>Station Name:</b>
165°E line (P13)

<b>Type of Station (moored / ship-based) and Location (geographic region / latitude and longitude coordinates):</b>
ship-based, western N. Pacific: 165°E, 50°N-3°S

<b>Carbon and biogeochemistry measurements at the station (indicate the frequency of observations, the year measurements began, and if they are surface / full water column, etc.):</b>
Underway $p\text{CO}_2$ : annual or biannual, 1997- TCO <sub>2</sub> : annual or biannual 2003- (0- 2000m at 2-3° intervals) TA: irregular

<b>Principle Investigators / Contact Points:</b>
Masao Ishii, Geochemical Research Dept, Meteorological Research Institute (mishii@mri-jma.go.jp)  Akira Nakadate, Global Environment and Marine Department, Japan Meteorological Agency (a_nakadate@met.kishou.go.jp)

<b>Affiliation of this station with national, regional, or global research programs and process studies:</b>
Japan Meteorological Agency's operational monitoring program in the western N. Pacific

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<b>Station Name:</b>
Eq Pacific

<b>Type of Station (moored / ship-based) and Location (geographic region / latitude and longitude coordinates):</b>
ship-based, western Eq. Pacific: 142°E - 165 °E, 0°

<b>Carbon and biogeochemistry measurements at the station (indicate the frequency of observations, the year measurements began, and if they are surface / full water column, etc.):</b>
Underway $p\text{CO}_2$ : annual or biannual, 2003- TCO <sub>2</sub> : annual or biannual, 2003- (0- 2000m at mostly 5° intervals) pH: irregular

<b>Principle Investigators / Contact Points:</b>
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<b>Affiliation of this station with national, regional, or global research programs and process studies:</b>
Japan Meteorological Agency's operational monitoring program in the western N. Pacific

<b>Web-site or links to other information:</b>