

For Using Data

Data Policy	JAMSTEC
Principal Investigator	Akihiko Murata (JAMSTEC)
Use Constraints	See Terms and Conditions about constrain of use.
Data Citation	See Terms and Conditions about data citation.

Quality level

PI-Processed

Instrument

TCO₂ measurement system (MR09-04 -)

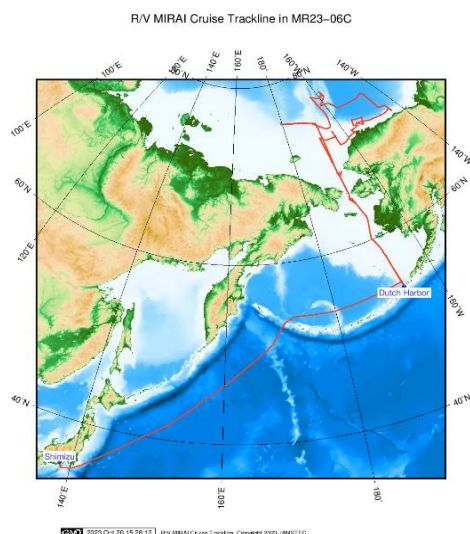
Measurement System

Instrument :	Underway TCO ₂ measuring system
Method :	Coulometric
Manufacturer :	Nihon ANS Ltd

About this data

Unusual values were excluded by examining time-series plots, property-property plots, etc.

Related Information



MR23-06C

Ship Name:	MIRAI
Period:	2023/08/25 - 2023/10/04
Chief Scientist:	Amane Fujiwara (JAMSTEC)
Proposal:	Arctic Expedition for Environmental Studies Observational study of the Arctic environmental changes: Pacific-Arctic interaction, biogeochemical transport, mixing and marine ecosystem
	Research and development of under-ice observation technology
	Quantification of the microplastic inventory in the waters of the western Arctic Ocean and microplastic influx from the Pacific Ocean
	Changes in clouds and aerosols over the ice-free Arctic Ocean
	Possibility of the expanding distribution in plankton and fishes associated with sea ice reduction in the Pacific sector of the Arctic Ocean
	Observation of air-sea-wave-ice interaction over the Pacific Arctic region
	Investigating the physical and ecophysiological basis of fall phytoplankton blooms in the Chukchi and Beaufort seas
	Nitrogen Fixation in a Changing Arctic Ocean An Overlooked Source of Nitrogen
	Exploring microplankton interactions and their functional roles in a changing Arctic
	Determining the contribution of siphonophores to mesopelagic backscatter in the Arctic
	Better understanding of climate-driven changes of biogeochemical dynamics in the western Arctic Ocean via R/V Mirai 2023 Cruise A perspective of stable carbon isotope
	Temporal variations of the carbonate chemical components the Arctic Ocean within summertime
	Observation of water vapor isotopic ratios Observation of atmospheric greenhouse gases and related species in the North Pacific region

Format Description for TCO₂

The file is in variable length, comma separated text file (csv) format.

No.	Content	Unit
1	Year, Month, Day	UTC
2	Hour, Minute, Second	UTC
3	Latitude	degree
4	Longitude	degree
5	Sea surface temperature	degree-C
6	Sea surface salinity	
7	DIC	μmol kg ⁻¹