



Atmosphere and ocean carbon dioxide monitoring using volunteer observing ship (Pyxis) servicing between Japan and West Coast

1. IDENTIFICATION INFORMATION

Name	Atmosphere and ocean carbon dioxide monitoring using volunteer observing ship (Pyxis) servicing between Japan and West Coast
Metadata Identifier	PYXIS20230727065922-DIAS20221121113753-en

2. CONTACT

2.1 CONTACT on DATASET

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2.2 CONTACT on PROJECT

2.2.1 Data Integration and Analysis System

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5. DATE OF THIS DOCUMENT

2023-07-27

6. DATE OF DATASET

publication : 2014-01-20

7. DATASET OVERVIEW

7.1 Abstract

Data of atmosphere and ocean carbon dioxide monitoring using volunteer observing ship (Pyxis) servicing between Japan and West Coast. This data contains the cruise track, carbon dioxide variables in the lower atmosphere and surface ocean, parameters of atmosphere (temperature, humidity, wind speed, radiation, and air pressure) and ocean (sea surface temperature, sea surface salinity).

7.2 Topic Category(ISO19139)

oceans

7.3 Temporal Extent

Begin Date	2001-11-06
End Date	2013-04-25
Temporal Characteristics	10minute

7.4 Geographic Bounding Box

North latitude	bound	60
West longitude	bound	120
Eastbound longitude		-115
South latitude	bound	-28

7.5 Grid

7.6 Geographic Description

7.7 Keywords

7.7.1 Keywords on Dataset

Keyword Type	Keyword	Keyword thesaurus Name
theme	Oceans > Ocean Chemistry > Carbon Dioxide	GCMD_science
theme	Atmosphere > Atmospheric Chemistry > Carbon and Hydrocarbon Compounds > Carbon Dioxide, Atmosphere > Atmospheric Pressure > Sea Level Pressure	GCMD_science
theme	In Situ Ocean-based Platforms > SHIPS	GCMD_platform
theme	二酸化炭素, CO2分圧, CO2, 貨物船, 海洋表層, 洋上大気CO2	No_Dictionary
theme	Carbon Dioxide Concentration, Carbon Dioxide Partial Pressure, Carbon in Subsurface Ocean, Ocean Salinity, Sea Surface Temperature, Surface Atmospheric Pressure (= surface pressure)	GEO_COP

7.7.2 Keywords on Project

7.7.2.1 Data Integration and Analysis System

Keyword Type	Keyword	Keyword thesaurus Name
theme	DIAS > Data Integration and Analysis System	No_Dictionary

7.8 Online Resource

Discriptin of Pyxis: General discription, Measurement method, discription of measurement instruments, etc. : <http://px.soop.jp/>

variable information : <http://px.soop.jp/data/pub/desc/>

NIES CGER website : http://db.cger.nies.go.jp/gem/moni-e/warm/N_Pacific/jc01.html

Data download : <https://data.diasjp.net/dl/storages/filelist/dataset:205>

7.9 Data Environmental Information

7.10 Distribution Information

name	version	specification
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8. DATA PROCESSING

8.1 Data Processing (1)

8.1.1 General Explanation of the data producer's knowledge about the lineage of a dataset

8.1.2 Data Source

Data Source Citation Name	Description of derived parameters and processing techniques used
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9. DATA REMARKS

10. DATA POLICY

10.1 Data Policy by the Data Provider

Observation data is copyrighted to Center for Global Environmental Research (CGER), National Institute for Environmental Studies (NIES).

You can use the data only for noncommercial purpose. For any publication using data, CGER/NIES must be informed and its approval must be obtained prior to publishing. The data provider may request co-authorship or acknowledgements. Please be informed that we have no concern with your cost by using the data.

10.2 Data Policy by the Project

10.2.1 Data Integration and Analysis System

If data provider does not have data policy, DIAS Terms of Service (<https://diasjp.net/en/terms/>) and DIAS Privacy Policy (<https://diasjp.net/en/privacy/>) apply.

If there is a conflict between DIAS Terms of Service and data provider's policy, the data provider's policy shall prevail.

11. LICENSE

12. DATA SOURCE ACKNOWLEDGEMENT

12.1 Acknowledge the Data Provider

12.2 Acknowledge the Project

12.2.1 Data Integration and Analysis System

If you plan to use this dataset for a conference presentation, paper, journal article, or report etc., please include acknowledgments referred to following examples. If the data provider describes examples of acknowledgments, include them as well.

” In this study, [Name of Dataset] provided by [Name of Data Provider] was utilized. This dataset was also collected and provided under the Data Integration and Analysis System (DIAS), which was developed and operated by a project supported by the Ministry of Education, Culture, Sports, Science and Technology. ”

13. REFERENCES

Murphy, P. P., K. K. Kelly, R. A. Feely, and R. H. Gammon (1995): Carbon dioxide concentrations in surface water and the atmosphere

during 1986-1989 NOAA/PMEL cruises in the Pacific and Indian Oceans (Oak Ridge Natl. Lab., Oak Ridge, TN), Rep. NRNL/CDIAC-75

NDP-047. Murphy, P. P., Y. Nojiri, Y. Fujinuma, C. S. Wong, J. Zeng, T. Kimoto, and H. Kimoto (2001): Measurements of surface seawater fCO₂ from volunteer commercial Ship: Techniques and experiences from Skaugran. *J. Atmospheric and Oceanic Technology*, 18, 1719-1734

Murphy, P. P., Y. Nojiri, Y. Fujinuma, C. S. Wong, J. Zeng, T. Kimoto, and H. Kimoto (2001): Measurements of surface seawater fCO₂ from volunteer commercial Ship: Techniques and experiences from Skaugran. *J. Atmospheric and Oceanic Technology*, 18, 1719-1734.