Research Announcement on Greenhouse gases Observing SATellite Series

Appendix C-2

Guidelines for research proposal and related forms

1. **Cover sheet**
   1. **Profile of investigators (Form 1a)**

Fill in the following information in its entirety.

* Information about the Principal Investigator (PI): Name, title, department, affiliation, address, nationality, phone number, and e-mail address
* Information about the RA Investigators other than the PI (Co-Is): Name, affiliation, and e-mail address of each RA Investigator
* The PI’s background, experience in the selected research field, research papers, etc.
  1. **Summary of the research proposal (Form 1b)**

Fill in the following information in accordance with the instructions given in parentheses.

* Research field (Select one from the five given fields: Calibration/ Validation/ Processing algorithms/ Carbon balance estimation, atmospheric transport models/ Data application.)
* Research theme (Describe the contents of your proposed research in the most simple and adequate way.)
* Sensor(s) to be mainly used (Select from FTS/CAI/ FTS-2/CAI-2/None.)
* Sensors to be used in combination if necessary (Select from FTS/CAI/FTS-2/CAI-2/ None.)
* New data acquisition request, if necessary. Specify expected number of requesting FTS and FTS-2 observation points.
* Data distribution request (If necessary, select the product name(s) from Table 1 in GOSAT/ GOSAT-2 Data Policy (Appendix A).)
* Abstract of your research proposal (no more than 200 words) (Include the purposes, significance of the research in the selected research field, methods, time schedule, and expected benefits of the proposed research)

1. **Main proposal**

Describe in detail the background, purposes, and technological level of the proposed research, the importance of the research compared with related researches carried out in the other fields, and the details of research activities, in the main body of the proposal. In addition, the details of research activities must include a rough plan of the work and experiments to be performed and an outline of the methods and procedures to be employed in the research. Describe the above-mentioned contents and the following items where necessary within five (5) pages. In addition, attach one to two (1 to 2) slides outlining the proposal.

* Table of contents
* Purpose(s) of the proposed research
* Significance and importance of the proposed research in the selected research field
* Methodology
* Algorithms to be used
* Expected outcomes
* Distribution requests and acquisition plans for the GOSAT/GOSAT-2 data (area of interest, processing level, product name, acquisition window, etc.)
* Requests for the satellite data owned by JAXA (area of interest, processing level, acquisition window, etc.)

1. **Work plan (Research schedule) (Form 2)**

Submit the time schedule for your research activities on Form 2, with an explanation on the major tasks of the proposed research and any associated schedules.

1. **Data distribution request**

Request for JAXA’s satellite data (other than the GOSAT data) (Form 3)

In order to request a provision of datasets of any of the satellites listed below, fill out and submit Form 3. JAXA may provide the observation data of the following satellites.

* Advanced Land Observing Satellite (ALOS) (global)
* Advanced Land Observing Satellite-2 (ALOS-2) (global)

In addition, the satellite data acquired in the past are archived and retrievable on the following website. Investigators who are willing to request for the satellite data are recommended to first check the availability of the requesting data on the website, before submitting a data request form.

* Search site for observation data of JERS, ADEOS, TRMM, etc.:

https://www.gportal.jaxa.jp/gp/top.html

1. **Information about the Investigators**

State the background, research papers or publications, and special skills and qualifications of the PI, as supporting information for the selection of research proposals. Likewise, present the same information about the other RA Investigators (Co-Is).

1. **Data processing and analysis facility**

List up major facilities and equipment available for carrying out the proposed research and additional facilities and equipment that the Investigators may procure. Also, describe the assistance from their organizations/affiliations, if any, for which the RA Investigators are qualified for the purpose of carrying out the proposed research.

Form 1a Proposal No.

(For JAXA/NIES/MOE’s use)

<Cover sheet>

Profile of Investigators

Principal Investigator (PI)

Name:

Title:

Department:

Affiliation:

Address:

Nationality: 　Phone:

E-mail address:

Co-Investigators (Co-I)

Name Affiliation E-mail address

Background, experience in the pertinent research field, theses, etc. of the PI:

Form 1b Proposal No.

(For JAXA/NIES/MOE’s use)

Name of PI:

Summary of Research Proposal

(Check the applicable items.)

1. Research field (Choose one only.) \*

Calibration  Validation  Data processing algorithms

Carbon balance estimation, atmospheric transport models  Data application

\*Your choice of research field will not affect the selection of research proposals.

1. Sensor(s) to be mainly used

FTS  CAI  FTS-2  CAI-2  None

1. Sensors to be used in combination

FTS  CAI  FTS-2  CAI-2  None

1. Observation request (FTS / FTS-2)

Yes　　　  No

🡪If yes, specify the expecting number of observation request points for each instrument below.

1. Request for data distribution

Yes　　  No

🡪 If yes, select from the product name(s) listed below (see Tables 1 and 2 in GOSAT/GOSAT-2 Data Policy (Appendix A)).

GOSAT　 Standard  CAI L1B/L1B+  CAI L2  CAI L3

FTS L1B  FTS L2  FTS L3

L4A/L4B

Research  CAI L2  FTS L2

Internal  CAI L1A  CAI CAL L1A

FTS L1A  FTS CAL L1A/L1B

GOSAT-2 Standard  CAI-2 L1B  CAI-2 L2

FTS-2 L1B  FTS-2 L2

L4A/ L4B

Research  FTS-2 L2

Internal  CAI-2 L1A  CAI-2 CAL L1A

FTS-2 L1A/L1B  FTS-2 CAL L1A/L1B

1. Research theme

1. Research period (Specify in years, up to 5 years at the longest.)

( ) years from the date that the agreement for this RA takes effect.

1. Abstract of the research proposal (no more than 200 words)

Form 2

Proposal No.

Work Plan for the Joint Research (Research Schedule)

Name of PI:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | JFY 2021 | | | | | | JFY 2022 | | | | | |
|  | 5 | 6 | 8 | 10 | 12 | 2 | 4 | 6 | 8 | 10 | 12 | 2 |
| Plan |  |  |  |  |  | Interim Evaluation  or  Progress Report |  |  |  |  |  | Interim Evaluation  or  Progress Report |
| Description |  |  |  |  |  |  |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | JFY 2023 | | | | | | JFY 2024 | | | | | | JFY 2025 | | | | | |
|  | 4 | 6 | 8 | 10 | 12 | 2 | 4 | 6 | 8 | 10 | 12 | 2 | 4 | 6 | 8 | 10 | 12 | 2 |
| Plan |  |  |  |  |  | Interim Evaluation  or  Progress Report |  |  |  |  |  | Interim Evaluation  or  Progress Report |  |  |  |  |  |  |
| Description |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Form 3

Proposal No.

Requests for JAXA’s satellite data

(For ALOS or ALOS-2)

Name of PI:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sensor | Area of Interest  (pass/row or lat./lon.) | Observation window | No. of scenes  (Max. 20 scenes in total a JFY.) | | Processing level |
| Min. | Max. |
|  |  |  |  | |  |
|  |  |  |  | |  |
|  |  |  |  | |  |

* The request for the ALOS and ALOS-2 data distribution shouldn’t exceed 20 scenes in total a Japanese Fiscal Year (JFY).
* The distribution media for providing the requested data will be determined by JAXA according to the data size.
* JAXA’s other EOS data are freely available to general users from G-Portal (Globe-Portal (BETA) on JAXA website: https://www.gportal.jaxa.jp/gp/top.html).