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**AGREEMENT BETWEEN THE JAPAN AEROSPACE EXPLORATION AGENCY AND
NATIONAL METEOROLOGICAL, HYDROLOGIC AND ENVIRONMENTAL INSTITUTE ON
COOPERATION IN THE ALOS KYOTO AND CARBON INITIATIVE (PHASE 3)**

The Japan Aerospace Exploration Agency (hereinafter referred to as JAXA), whose registered office is located at 7-44-1 Jindaiji Higashimachi, Chofu, Tokyo, Japan, established under the Japan Aerospace Exploration Agency Law of December 13, 2002, represented by Mr. Kazuo Tachi, Director of the Program Management and Integration Department, Space Applications Mission Directorate, located at 2-1-1 Sengen, Tsukuba, Ibaraki, Japan,

on the one part, and

The Institute Of Meteorology, Hydrology, and Environmental Studies (hereinafter referred to as IDEAM), whose registered office is located at Carrera 10 No 20-30 Bogotá Colombia, established on Law 99 of 1993, represented by Ricardo Lozano Picón,

on the other part

Either or both of which may hereinafter be referred to as "the Party" or "the Parties,"

PREAMBLE

Whereas JAXA successfully launched the Advanced Land Observing Satellite (ALOS) in January 2006, which carried three onboard sensors including the Phased Array type L-band Synthetic Aperture Radar (PALSAR), with the aim of day-and-night and all-weather land observation;

Whereas JAXA plans to use ALOS data to contribute to global environmental monitoring, including forest and wetland, and initiated the ALOS Kyoto and Carbon Initiative (hereinafter referred to as "K&C") in 2004 to form the continuation of the Global Rain Forest and Boreal Forest Mapping (GRFM/GBFM) Project, which was successfully conducted using data from the Synthetic Aperture Radar on the Japanese Earth Resources Satellite-1 (JERS-1), and thematic products derived under K&C made available to the science community have been beneficial to gaining knowledge on environmental issues;

Whereas K&C Phase 2 was completed on January 23, 2010, and ALOS ceased its operation in May 12, 2011, JAXA intends to initiate K&C Phase 3 in August 2011 using ALOS archived data (hereinafter referred to as "ALOS data");

Whereas IDEAM intends to join ALOS K&C Phase 3 for the purpose of forest monitoring Using ALOS PALSAR and JERS-1 SAR for REDD activities in Colombia;

Whereas the Parties acknowledge that the K&C activities will be beneficial to supporting information needs posed by the terrestrial carbon cycle science community, environmental conservation, the Ramsar Convention on Wetlands, the UNFCCC Kyoto Protocol, the World Summit on Sustainable Development, and the UN Convention to Combat Desertification;

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HAVE AGREED as follows:

Article 1. PURPOSE

1.1 The purpose of this Agreement is to establish the terms and conditions under which the Parties will cooperate in ALOS K&C Phase 3, an international collaborative project led by JAXA, for generating and disseminating thematic information on forest carbon to support environmental conventions and terrestrial carbon cycle research using ALOS PALSAR data.

1.2 This cooperation is conducted only for peaceful purposes.

Article 2. SCOPE

This Agreement shall apply to joint activities on Deforestation, Degradation and Biomass Monitoring Using ALOS PALSAR and JERS-1 SAR for REDD activities in Colombia.

Article 3. EFFECTIVE TERM

This Agreement shall enter into force upon the date of the last signature of the Parties and remain in force until March 31, 2014.

Article 4. INVESTIGATORS AND COLLABORATORS

4.1 Principal Investigator ("PI") means the employee of IDEAM who was selected to be responsible for the K&C project for IDEAM, and is listed in Appendix A of this Agreement.

4.2 Co-Investigator ("CI") means the employee of IDEAM who supports the PI in performing the K&C project and is listed in Appendix A of this Agreement.

4.3 Collaborator means the non-employee of IDEAM who participates in product generation and is listed in Appendix B of this Agreement.

4.4 In the event that IDEAM intends to select, add, or change the PI, CI(s), or Collaborator(s), IDEAM shall submit to JAXA the revised Appendix(es) for JAXA's approval. If JAXA does not agree to the proposed Appendix(es), then JAXA will send notification to IDEAM within 14 days upon receipt of such Appendix(es).

4.5 IDEAM shall ensure the PI, CI(s), and collaborator(s) comply with the terms and conditions of this Agreement. For avoidance of doubt, the PI, CI(s), and collaborator(s) shall not be deemed to be a third party.

Article 5. RESPONSIBILITIES OF JAXA

JAXA will make reasonable efforts to fulfill the following responsibilities for:

- a. Coordinating and managing the project;
- b. Providing 25m ALOS PALSAR FBD mosaic data from 2007-2011; and if JAXA deems it to be appropriate, JERS-1 SAR data over Colombia.
- c. Providing ALOS data through the ALOS User Interface Gateway (AUIG);

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- d. Providing ALOS value-added products, which are Forest/Non-forest maps over Colombia produced by JAXA, and with IDEAM's assessment as defined in Article 6d), making necessary revisions on such value-added product(s);
- e. Releasing the products or subset of them generated by IDEAM and Summary Report as provided by IDEAM in accordance with Article 6 e) on the project Internet home page; and
- f. Organizing project science meetings twice a year.
- g. Providing training program for the use of L-band SAR images for forest monitoring, classification methods for land cover, land cover change analysis and evaluation with AVNIR-2 in Japan.

Article 6. RESPONSIBILITIES OF IDEAM

IDEAM will make reasonable efforts to fulfill the following responsibilities:

- a. Applying a methodology for analysis of forest change using JERS-1, ALOS PALSAR and field data for a selected verification site of the Colombian Amazon tropical forests.
- b. In accordance with the IDEAM proposal to JAXA for KC-3,
 - Generating digital maps of forest change and carbon stocks for a selected site, using JERS-1 SAR and ALOS PALSAR data;
 - Undertake cross-validation of Landsat based Colombian forest/non forest 30m wall-to-wall map of 2010 with JAXA 2010 forest/non forest map and generation of a technical report of the validation.
- c. Providing at a timing JAXA specifies, after mutual consultation, during the course of the Agreement Term, ground truth data over selected sites in Colombia,
- d. Assessing ALOS value-added product(s) over Colombia, produced by JAXA;
- e. Delivering the ground truth data, reports describing the methodologies and validation procedures employed, and the essence of this cooperation ("Summary Report") as a final report ("Final Report") to JAXA by the end of the Agreement.
- f. Participating in semi-annual project science meetings organized by JAXA; and
- g. Taking necessary measures to ensure the collaborators as defined in Appendix B comply with this Agreement.

Article 7. FUNDING

Each Party will bear the costs of discharging its respective responsibilities for research under this Agreement. The ability of the Parties to carry out their respective responsibilities is subject to their respective funding procedures and the availability of appropriated funds.

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Article 8. ALOS AND JERS-1 DATA RIGHTS

8.1 JAXA will provide IDEAM with ALOS and JERS-1 data, including ALOS PALSAR observation images for this K&C Project, free of charge subject to the following conditions:

- a. Any intellectual property rights relating to the ALOS and JERS-1 data shall belong to JAXA or in the case of PALSAR data, to JAXA and the Ministry of Economy, Trade and Industry (METI);
- b. IDEAM agrees and accepts that JAXA may not provide all the ALOS and JERS-1 data that IDEAM may request;
- c. JAXA does not guarantee a specific quality or the timely provision of the ALOS and JERS-1 data;
- d. The provision of standard product ALOS data through AUIG shall be limited to fifty scenes every fiscal year; and
- e. JAXA reserves the right to curtail or suspend the ALOS and JERS-1 data supply to IDEAM due to limitations on data condition, or any other reasons.

8.2 With respect to the ALOS and JERS-1 data provided by JAXA, IDEAM shall:

- a. Only use the ALOS and JERS-1 data for the singular purpose of advancing the efforts of this K&C Project;
- b. Not duplicate the ALOS and JERS-1 data except to distribute the necessary data backups to authorized CI(s) or collaborator(s);
- c. Not distribute the ALOS and JERS-1 data to any third party without JAXA's prior written consent; and
- d. Return or otherwise appropriately manage the ALOS and JERS-1 data upon completion of this Agreement, according to the directives of JAXA.

Article 9. HANDLING OF TECHNICAL DATA

9.1 To the extent feasible, each party shall disclose all necessary technical data ("Technical Data") to implement any undertakings under this Agreement. For avoidance of doubt, the term "Technical Data" used herein does not include the ALOS and JERS-1 data. The Parties will undertake to handle expeditiously any request for the Technical Data presented by the other party.

9.2 The Technical Data shall be used and/or disclosed by the receiving party only for the purpose of fulfilling the receiving party's responsibilities under this Agreement. The receiving party shall protect any such Technical Data from unauthorized use and/or disclosure.

9.3 The Technical Data shall not be disclosed, duplicated, or used by persons or entities other than the receiving party without the prior consent of the furnishing party.

9.4 In the event a Party finds it necessary in carrying out its responsibilities under this Agreement to transfer Technical Data that are proprietary or export-controlled, and for which protection is to be maintained, such Technical Data and goods shall be marked with a notice indicating that, for export-controlled, they shall be used and/or disclosed by the receiving Party and its contractors and subcontractors only for the purpose of fulfilling the receiving Party's responsibilities under this Agreement, and, for proprietary, the technical data shall not be disclosed or re-transferred to any other entity without prior written permission of the furnishing Party. The receiving Party agrees to abide by the terms of the notice, and to protect any such marked Technical Data from unauthorized use and/or disclosure.

9.5 According to directives of the furnishing party, the receiving party shall return or otherwise dispose of Technical Data provided under the Agreement upon completion of the activities under this Agreement.

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ARTICLE 10. OWNERSHIP AND USAGE OF RESULTS

10.1 In this Agreement, "Results" means all products as defined in Article 6b), JAXA-produced value-added product(s) as defined in Article 5d), the ground truth data as provided by IDEAM according to Article 6c), and other technical results and scientific knowledge derived from the implementation of this Agreement that are incorporated into the Final Report. The Results generated under this cooperation shall be jointly owned by the Parties unless one party reasonably proves that it solely generated the Results in the course of performance of this cooperation. JAXA shall hold royalty-free, non-exclusive, worldwide rights under copyright to use, reproduce, prepare derivative works from, distribute, and modify all the Results generated under this Agreement without any restrictions for its own purposes, including granting to collaborating research organizations the use of such Results. IDEAM will hold royalty-free, non-exclusive, worldwide rights under copyright to use the Results for their own peaceful, non-military, and non-commercial purposes.

10.2 The Parties agree that all partners, meaning organizations taking part in ALOS K&C Phase 3 including IDEAM, will hold royalty-free, non-exclusive, worldwide rights under copyright to use all products as defined in Article 6b) and the Summary Report as defined in Article 6e) for their own peaceful, non-military, and non-commercial purposes.

10.3 In spite of the second sentence of Article 10.1, JAXA-produced value-added product(s) as defined in Article 5d) shall belong to JAXA. IDEAM will have royalty-free, non-exclusive, worldwide rights under copyright to use such value-added product(s) for its own peaceful, non-military, and non-commercial purposes.

10.4 The ground truth data as provided by IDEAM according to Article 6c) shall belong to IDEAM. JAXA agrees not to distribute the ground truth data to any third party.

10.5 A party may grant to any third party a license to use the Jointly Owned Results; provided, however, that the relevant party shall obtain prior written consent of the other party, and determine the licensing terms after discussion with the other party. In this case, the relevant party shall collect the usage fee from such third party as set forth in the separate usage agreement. The usage fee to be collected from the third party shall be distributed between JAXA and IDEAM pro rata in proportion to their respective interests in those rights.

10.6 JAXA or IDEAM shall give the other party prompt written notice of any Intellectual Property Rights generated under this Agreement, and discuss the ownership of such generated Intellectual Property Rights, as well as whether it is necessary to submit an application for registration of such Intellectual Property Rights. JAXA and IDEAM shall enter into a separate joint ownership agreement ("Joint Ownership Agreement") unless they decide not to make an application for the registration of the resulting Intellectual Property Rights. The Joint Ownership Agreement shall provide the allocation of Intellectual Property Rights related to, or the allocation of an interest in, such joint innovation or work. Any expenses, costs, and charges required for the application procedure and protection of the Jointly Owned Intellectual Property Rights shall be borne by JAXA and IDEAM pro rata in proportion to their respective interests. A party may grant to any third party a license to use the Jointly Owned Intellectual Property Rights; provided, however, that the relevant party shall obtain prior written consent of the other party, and determine the licensing terms after discussion with the other party. The usage fee to be collected from the third party shall be distributed between JAXA and IDEAM pro rata in proportion to their respective interests in those rights.

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ARTICLE 11. PUBLICATION OF RESULTS

11.1 If either party intends to publish the Jointly Owned Results, the publishing party shall provide the other party with a written document regarding the description of the subjected Results to be published except in the case of JAXA releasing the products and the Summary Report to fulfill JAXA's responsibility in this Agreement as stated in Article 5e).

11.2 After publishing, the publishing party shall provide the other party with a copy of the publication. Each party is entitled to an irrevocable and royalty-free right to use the provided publication, unless the copyright of such publication is owned or held by an academic society.

11.3 The publishing party shall state in the publication that such Jointly Owned Results have been obtained pursuant to ALOS K&C and identify the owner of the rights to the ALOS data used in such publication (Acknowledgement shall state, "This work has been undertaken within the framework of the JAXA Kyoto & Carbon Initiative;" when using ALOS PALSAR data, "ALOS K&C © JAXA/METI").

ARTICLE 12. PUBLIC INFORMATION

The Parties retain the right to release public information regarding their own activities under this Agreement. The Parties shall coordinate with each other in advance concerning releasing public information that relates to the other Party's responsibilities or performance under this Agreement.

ARTICLE 13. POINTS OF CONTACT

The points of contact for this cooperation are:

For JAXA

Dr. Masanobu Shimada

Associate Principal Researcher

Earth Observation Research Center

Japan Aerospace Exploration Agency

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E-mail: shimada.masanobu@jaxa.jp

For IDEAM

Dr. Maria Claudia Garcia.

Sub-director of Environmental Studies.

The Institute Of Meteorology, Hydrology, and Environmental Studies – IDEAM Carrera 10 No 20-30.

Phone: 057 1 3527160 Ext: 2116.

E-mail: mcgarcia@ideam.gov.co

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ARTICLE 14. CONFIDENTIALITY

14.1 In this Agreement, "Confidential Information" means any information that a party discloses or presents in writing or by other media, which shall be clearly marked as "Confidential," to the other party in the course of this cooperation; provided, however, Confidential Information does not include the following:

- a. Information that is already known to the public when disclosed by the disclosing party;
- b. Information that becomes known to the public after the disclosure by the disclosing party without intentional misconduct or negligence of the receiving party;
- c. Information that the receiving party already had before the disclosure by the disclosing party;
- d. Information that the receiving party acquires from a duly authorized third party not subject to confidentiality obligations;
- e. Information that the receiving party independently develops without utilizing information obtained from the disclosing party;
- f. Information with the prior written consent of the disclosing party for the disclosure and the publication; or
- g. Information that is required to be disclosed by applicable laws, judgment, or order of a competent court. In this case, the receiving party shall promptly notify the disclosing party of the necessity of disclosure.

14.2 The receiving party shall keep the Confidential Information secret, and shall not disclose or divulge any Confidential Information to a third party without prior written consent of the disclosing party.

14.3 The confidentiality obligation under this article shall remain effective for a period of five (5) years after the termination of the Agreement. However this period of keeping confidentiality may be extended or shortened by mutual agreement.

14.4 Considering functions of IDEAM in Colombia as public institution, JAXA will not provide any Confidential Information to IDEAM under this Agreement.

ARTICLE 15. DESIGNATION OF KNOW-HOW

15.1 After mutual agreement by the Parties, JAXA and IDEAM shall promptly designate as know-how the Results which are appropriately to be treated as know-how ("Know-How").

15.2 After designating the Know-How, such Know-How should be kept in confidence, in principle, for five (5) years commencing on the day immediately following the date of the completion of this Agreement; provided, however, that JAXA and IDEAM may extend or shorten that period upon mutual agreement.

ARTICLE 16. GOVERNMENT APPROVALS

Each party shall obtain such permits, licenses, and other government authorizations as are required for it to perform its responsibilities under the Agreement, and shall comply with all respective laws and regulations.

ARTICLE 17. LANGUAGE

All communications between IDEAM and JAXA under this Agreement shall be in English.

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ARTICLE 18. DISPUTES

The Parties agree to put forth their best efforts to solve amicably any dispute, controversy, or difference arising out of, in connection with, or resulting from this Agreement.

ARTICLE 19. ARBITRATION

All disputes that cannot be amicably settled by the method defined in the previous article hereof will be settled under the Rules of Conciliation and Arbitration of the International Chamber of Commerce. Such arbitration shall be held in Bogota, if JAXA is the party that refers the dispute to arbitration and in Tokyo, if IDEAM is the party that refers the dispute to arbitration.

ARTICLE 20. AMENDMENTS, EXTENSION, AND TERMINATION

20.1 This Agreement may be amended or extended upon mutual written agreement of the Parties.

20.2 In the event that either Party wishes to terminate this Agreement, it shall notify the other in writing, in which case this Agreement will terminate ninety (90) days after receipt of such notification.

20.3 Upon termination of the Agreement, IDEAM shall promptly deliver to JAXA all work including, but not limited to, all works in progress and all work that is completed and otherwise ready for delivery.

20.4 Termination of this Agreement shall not affect the rights and obligations of the Parties under the articles 8.1a), 8.2d), 9.5, 10, 11, 12, 14, 15, 16, 18, and 19.

IN WITNESS WHEREOF the Parties have caused their duly authorized representatives to execute two originals of this Agreement in the English language.

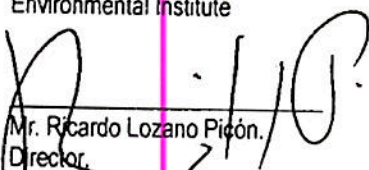
28 FEB 2013

For the
Japan Aerospace Exploration Agency


Mr. Kazuo Tachi,
Director,
Program Management and
Integration Department,
Space Applications Mission Directorate

DATE March 29, 2013

For the
National Meteorological, Hydrologic and
Environmental Institute


Mr. Ricardo Lozano Picon,
Director,
The Institute of Meteorology, Hydrology, and
Environmental Studies-IDEAM.

Revisado y aprobado por:
Maria Claudia Garcia/Subdirectora de Estudios Ambientales
Paola Bernal/ Asesora de Cooperación Internacional
Sandra Vera/ Jefe de la Oficina de Jurídica

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APPENDIX A.

LIST OF PIs AND CIs

PRINCIPAL INVESTIGATOR ("PI")

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CO-INVESTIGATOR ("CI")

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APPENDIX B

COLLABORATORS

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