

**Agreement between the  
National Aeronautics and Space Administration (NASA)  
of the United States of America and the  
Universidad de la República (UDELAR), Uruguay for  
Cooperation in the Aerosol Robotic Network**

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## **1. PURPOSE OF COOPERATION**

The scientific goals of the National Aeronautics and Space Administration (NASA) include a more detailed understanding of global atmospheric change phenomena, with a particular emphasis on climate research and the assessment of air quality. To these ends, NASA has established a global network of Sun photometers, and the Aerosol Robotic Network (AERONET) in cooperation with a wide range of international partner agencies and institutions. Sun photometers are used to measure water vapor and aerosol optical properties. AERONET provides the necessary science measurements and are essential for ground-based validation of aerosol, cloud, and other measurements taken by satellites.

For the proposed arrangement, NASA and the Universidad de la República (UDELAR) (hereinafter referred to individually as "Party" or jointly as the "Parties") shall establish one or more Sun photometers at mutually agreed sites. The inclusion of these stations within the global AERONET shall improve the understanding of the properties and concentration of aerosols and clouds, and their impact on both global and regional scales. Another objective of this cooperation is to encourage scientists from both NASA and Uruguay to develop research programs using data collected by UDELAR along with data available from the global AERONET database located at NASA's Goddard Space Flight Center in Greenbelt, Maryland.

## **2. AUTHORITY**

NASA enters into this Agreement in accordance with the National Aeronautics and Space Act (51 U.S.C. §§ 20102(d)(7) and 20115). UDELAR enters into this Agreement in accordance with its applicable laws.

## **3. RELATED ENTITY**

### **1. The term "Related Entity":**

For the purpose of this Agreement means:

- (a) A contractor, subcontractor, user, or customer of a Party at any tier;
- (b) A contractor or subcontractor, including suppliers of any kind, of a user or customer of a Party at any tier;
- (c) A grantee or any other cooperating entity or investigator of a Party at any tier;
- (d) A contractor or subcontractor of a grantee or any other cooperating entity or investigator of a Party at any tier; or

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- (e) Another State, or agency or institution of another State, where such State, agency, or institution is an entity described above or is otherwise involved in the activities undertaken pursuant to this Agreement.

2. The term "Contributing Entity" means:

- (a) A contractor or a subcontractor of a Party at any tier engaged in activities related to the performance of this Agreement.

#### **4. RESPONSIBILITIES**

1. NASA shall use reasonable efforts to carry out the following responsibilities:

- (a) Provide to UDELAR, on a long-term basis, one or more Sun photometer systems and/or associated equipment for continuous operation at mutually agreed sites;
- (b) Provide technical installation support, major maintenance, training, and spare parts for the NASA Sun photometer and software;
- (c) Provide for automated data retrieval by all participants in the AERONET program of all processed Sun photometer data from an open global data bank accessible through the Internet (Information on the system is available on the project homepage (<http://aeronet.gsfc.nasa.gov>));
- (d) Provide, upon mutual agreement, upgrade of AERONET analysis software for UDELAR servers, the database browser developed by NASA, and any software to be used in the operation of the stations;
- (e) Encourage scientific collaboration between NASA and UDELAR scientists in the areas of Sun photometry, aerosol and cloud research, and related sciences;
- (f) Coordinate with investigators globally for a cooperative program of continuous Sun photometer systems measurements for the determination of global aerosol and cloud properties and concentration; and
- (g) Assist in integration of ground-based aerosol concentrations and properties for Earth Observation System-era validation of satellite aerosol retrievals by making available NASA civil service and/or contractor personnel for mutually agreed time periods.

2. UDELAR shall use reasonable efforts to carry out the following responsibilities:

- (a) Provide utilities (electricity and communications), security, and housing for the stations at mutually agreed locations;
- (b) Provide personnel necessary for the installation, full-time operation, and nominal maintenance of the stations;
- (c) Use any NASA-provided property only for the purpose described in this Agreement, receive permission from NASA prior to altering, loaning, or relocating any NASA-owned property, and maintain suitable records for property management, as mutually agreed by the Parties;
- (d) Encourage scientific collaboration between U.S. and UDELAR scientists in the area of Sun photometry, aerosol and cloud research, and related sciences;
- (e) Return the provided equipment to NASA, at NASA's expense, on a twelve-month rotation for Sun photometers for maintenance and calibration, and at

- the end of this cooperation return the loaned equipment in as good a condition as received, except for normal equipment use and aging; and
- (f) Cooperate with investigators globally in the AERONET programs.

## **5. FINANCIAL ARRANGEMENTS**

1. Each Party shall bear the costs of discharging its respective responsibilities, including travel and subsistence of personnel and transportation of all goods and other items for which it is responsible. There shall be no exchange of funds between the Parties under this Agreement.
2. The ability of the Parties to carry out their obligations is subject to the availability of appropriated funds and each Party's respective funding procedures. Should either Party encounter budgetary problems that may affect the activities to be carried out under this Agreement, the Party encountering the problems shall notify and consult with the other Party as soon as possible.

## **6. POINTS OF CONTACT**

The points of contact responsible for the coordination and execution of this agreement are:

For NASA:

Mr. Brent Holben  
Project Manager  
NASA/GSFC Code 923  
Greenbelt Road  
Greenbelt, MD 20771  
Phone: 301-614-6658  
Fax: 301-614-6695  
E-mail: [brent@aeronet.gsfc.nasa.gov](mailto:brent@aeronet.gsfc.nasa.gov)

For UDELAR:

Dr. Erna Frins  
Associate Professor  
Applied Optics Group  
Physics Institute, School of Engineering  
J. Herrera y Reissig 565,  
11300 Montevideo, Uruguay  
Phone: (598) 2711 0905  
Fax: (598) 2711 1630  
E-mails: [efrins@fing.edu.uy](mailto:efrins@fing.edu.uy)

Any change in a Party's respective contact information shall be communicated in writing to the other Party.

## **7. LIABILITY AND RISK OF LOSS**

1. For purposes of this Article "Damage" means:

- (a) Bodily injury to, or impairment of health of, or death of, any person;
  - (b) Damage to, loss of, or loss of use of any property;
  - (c) Loss of revenue or profits; or
  - (d) Other direct, indirect, or consequential damage.
2. Each Party hereby waives any claim against the other Party, employees of the other Party, the other Party's Related Entities or employees of the other Party's Related Entities for Damage arising from or related to activities conducted under this Agreement.
3. Each Party further agrees to extend this cross-waiver to its Related Entities by requiring them, by contract or otherwise, to waive all claims against the other Party, Related Entities of the other Party, and employees of the other Party or of its Related Entities for Damage arising from or related to activities conducted under this Agreement. Additionally, each Party shall require that their Related Entities extend this cross-waiver to their Related Entities by requiring them, by contract or otherwise, to waive all claims against the other Party, Related Entities of the other Party, and employees of the other Party or its Related Entities for Damage arising from or related to activities conducted under this Agreement.
4. Notwithstanding the other provisions of this Article, this cross-waiver of liability shall not be applicable to:
- (a) Claims between a Party and its own Related Entity or between its own Related Entities;
  - (b) Claims made by a natural person, his/her estate, survivors, or subrogees (except when a subrogee is a Party to this Agreement or is otherwise bound by the terms of this cross-waiver) for bodily injury, other impairment of health or death of such natural person;
  - (c) Intellectual property claims;
  - (d) Claims for Damage caused by willful misconduct;
  - (e) Claims for Damage resulting from a failure of a Party to extend the cross-waiver of liability to its Related Entities pursuant to paragraph 2 above; or
  - (f) Claims by a Party arising out of or relating to the other Party's failure to perform its obligations under this Agreement.
5. In the event of third-party claims, the Parties shall consult promptly on any potential liability, on any apportionment of such liability and on the defense of such claim.
6. Nothing in this Article shall be construed to create the basis for a claim or suit where none would exist.

## **8. TRANSFER OF GOODS AND TECHNICAL DATA**

The Parties are obligated to transfer only those goods and technical data (including software) necessary to fulfill their respective responsibilities under this Agreement, in accordance with the provisions in this Article, notwithstanding any other provisions of this Agreement:

1. All activities under this Agreement shall be carried out in accordance with the Parties' national laws and regulations, including those laws and regulations pertaining to export control.
2. The transfer of technical data for the purpose of discharging the Parties' responsibilities with regard to interface, integration, and safety shall normally be made without restriction, except as required by paragraph 1, above.
3. All transfers of goods and proprietary or export-controlled technical data are subject to the following provisions.
  - (a) In the event a Party or its Related Entity finds it necessary to transfer such goods or data, for which protection is to be maintained, such goods shall be specifically identified and such data shall be marked.
  - (b) The identification for such goods and the marking on such data shall indicate that the goods and data shall be used by the receiving Party and its Related Entities only for the purposes of fulfilling the receiving Party's or Related Entities' responsibilities under this Agreement, and that such goods and data shall not be disclosed or retransferred to any other entity without the prior written permission of the furnishing Party.
  - (c) The receiving Party and its Related Entities shall abide by the terms of the notice and protect any such goods and data from unauthorized use and disclosure.
  - (d) The Parties to this Agreement shall cause their Related Entities to be bound by the provisions of this Article through contractual mechanisms or equivalent measures.
4. All goods and marked proprietary or export-controlled technical data exchanged in the performance of this Agreement shall be used by the receiving Party or Related Entity exclusively for the purposes of the Agreement. Upon completion of the activities under this Agreement, the receiving Party or Related Entity shall return or otherwise dispose of all goods and marked proprietary or export-controlled technical data provided under this Agreement, as directed by the furnishing Party or its Related Entity.

## **9. INTELLECTUAL PROPERTY RIGHTS**

1. Nothing in this Agreement shall be construed as granting, either expressly or by implication, to the other Party any rights to, or interest in, any inventions or works of a Party or its Related Entities made prior to the entry into force of, or outside the scope of, this Agreement, including any patents (or similar forms of protection in any country) corresponding to such inventions or any copyrights corresponding to such works.
2. Any rights to, or interest in, any invention or work made in the performance of this Agreement solely by one Party or any of its Related Entities, including any patents (or similar forms of protection in any country) corresponding to such invention or any copyright corresponding to such work, shall be owned by such Party or Related Entity. Allocation of rights to, or interest in, such invention or work between such

Party and its Related Entities shall be determined by applicable laws, rules, regulations, and contractual obligations.

3. It is not anticipated that there shall be any joint inventions made in the performance of this Agreement. Nevertheless, in the event that an invention is jointly made by the Parties in the performance of this Agreement, the Parties will, in good faith, consult and agree within 30 calendar days as to:
  - (a) The allocation of rights to, or interest in, such joint invention, including any patents (or similar forms of protection in any country) corresponding to such joint invention;
  - (b) The responsibilities, costs, and actions to be taken to establish and maintain patents (or similar forms of protection in any country) for each such joint invention; and
  - (c) The terms and conditions of any license or other rights to be exchanged between the Parties or granted by one Party to the other Party.
4. For any jointly authored work by the Parties, should the Parties decide to register the copyright in such work, they will, in good faith, consult and agree as to the responsibilities, costs, and actions to be taken to register copyrights and maintain copyright protection (in any country).
5. Subject to the provisions of Article 7 (Transfer of Goods and Technical Data) and Article 9 (Release of Results and Public Information), each Party shall have an irrevocable royalty-free right to reproduce, prepare derivative works, distribute, and present publicly, and authorize others to do so on its behalf, any copyrighted work resulting from activities undertaken in the performance of this Agreement for its own purposes, regardless of whether the work was created solely by, or on behalf of, the other Party or jointly with the other Party.

## **10. RELEASE OF RESULTS AND PUBLIC INFORMATION**

1. 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 to the public information that relates to the other Party's responsibilities or performance under this Agreement.
2. The Parties shall make the results available to the general scientific community, as appropriate and agreed between the Parties, in a timely manner.
3. The Parties acknowledge that the following data or information does not constitute public information and that such data or information shall not be included in any publication or presentation by a Party under this article without the other Party's prior written permission:
  - (a) Data furnished by the other Party in accordance with the Transfer of Goods and Technical Data Article which is identified as export-controlled or proprietary; or
  - (b) Information about an invention of the other Party before an application for a patent (or similar form of protection in any country) corresponding to such

invention has been filed covering the same, or a decision not to file has been made.

## **11. EXCHANGE OF PERSONNEL AND ACCESS TO FACILITIES**

1. To facilitate implementation of the activities conducted under this Agreement, the Parties may support the exchange of a limited number of personnel from each Party, at an appropriate time and under conditions mutually agreed between the Parties.
2. Access by the Parties to each other's facilities or property, or to each other's Information Technology (IT) systems or applications, is contingent upon compliance with each other's respective security and safety policies and guidelines including, but not limited to: standards on badging, credentials, and facility and IT system application/access.

## **12. CUSTOMS CLEARANCE AND MOVEMENT OF GOODS**

1. Each Party shall facilitate free customs clearance and waiver of all applicable customs duties and taxes for goods necessary for the implementation of this Agreement. In the event that any customs duties or taxes of any kind are nonetheless levied on such goods, such customs duties or taxes shall be borne by the Party of the country levying such customs duties or taxes.
2. Each of the Parties shall also facilitate the movement of goods into and out of its territory as necessary to comply with this Agreement.

## **13. OWNERSHIP OF EQUIPMENT**

Unless otherwise agreed in writing, each Party shall retain ownership of all goods and data it provides to the other Party under the terms of this Agreement, without prejudice to any individual rights of ownership of the Parties' respective Related Entities. To the extent feasible and recognizing that goods integrated into the other Party's goods cannot be returned, each Party agrees to return the other Party's equipment in its possession at the conclusion of activities under this Agreement.

## **14. CONSULTATION AND DISPUTE RESOLUTION**

The Parties agree to consult promptly with each other on all issues involving interpretation, implementation, or performance of the Agreement. Such issues shall first be referred to the points of contact named above for the Parties. If they are unable to come to agreement, then the issue shall be referred to the signatories of this Agreement or their designated representatives for joint resolution.

## **15. CHOICE OF LAW**

U.S. Federal law governs this Agreement for all purposes, including, but not limited to, determining the validity of the agreement, the meaning of its provisions, and the rights, obligations and remedies of the Parties.

## **15. FINAL PROVISIONS**

1. This Agreement shall enter into force upon signature by the Parties.
2. This Agreement shall remain in force for 10 years.
3. This Agreement shall automatically extend for further five-year periods.
4. The Parties may amend this Agreement in writing.
5. Either Party may terminate this Agreement at any time by giving the other Party at least 60 days' written notice of its intent to terminate. In the event of termination, the terminating Party shall endeavor to minimize any negative impact of such termination on the other Party.
6. Termination or expiration of this Agreement shall not affect a Party's continuing obligations under Article 6 (Liability and Risk of Loss), Article 7 (Transfer of Goods and Technical Data), Article 8 (Intellectual Property Rights), and Article 9 (Release of Results and Public Information), unless otherwise agreed by the Parties.



For NASA:



Gilbert R. Kirkham  
Director, Science Division  
Office of International and Interagency  
Relations

09 OCT 2018  
Date

For UDELAR:



Dr. Roberto Markarian  
Rector  
Universidad de la República



04 OCT. 2018  
Date