

MEMORANDUM OF UNDERSTANDING
BETWEEN
-
THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
AND
THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
FOR
EARTH OBSERVATIONS REMOTELY SENSED DATA PROCESSING,
DISTRIBUTION, ARCHIVING, AND RELATED SCIENCE SUPPORT

I. BACKGROUND

Since the 1960's, both the National Aeronautics and Space Administration (NASA) and the National Oceanic and Atmospheric Administration (NOAA) have observed, monitored, and studied the Earth's surface and environment from a variety of vantage points. As part of their overall mandates, both agencies play a major role in understanding the Earth's environment. NASA's enabling legislation (the National Aeronautics and Space Act of 1958 and the supplemental Appropriations Act of 1962), and later amendments to this legislation, direct the agency to carry out a broad range of environmental observations, as well as space-based research, technology, monitoring, and other activities directed to understand the physics and chemistry of the upper atmosphere. Various statutes, including the Weather Service Organic Act, the Federal Aviation Act, the Land Remote Sensing Commercialization Act of 1984, the Coast and Geodetic Survey Act, and the Clean Air Act as amended, direct NOAA to make environmental observations; to monitor, understand, and predict climate conditions, and, as part of this mandate; to acquire, maintain and distribute long-term data bases, and to process and archive space-based data,

II. PURPOSE AND SCOPE OF THE MEMORANDUM OF UNDERSTANDING

The purpose of this MOU is to establish the terms and conditions under which NASA and NOAA will cooperate as partners in the Earth Observing System (Eos). Such cooperation will encompass management of Earth observation remotely sensed data from spacecraft and aircraft, including processing of data, derived products, model results, distribution and archiving, and other related science activities and support.

III. NASA RESPONSIBILITIES

NASA will use its best efforts to:

1. Include, as appropriate, NOAA representatives in the planning, development, and implementation activities for experimental Earth observation data and information systems, including the Eos Data and Information System (EosDIS).

2. Develop and implement, in coordination with NOAA, the United States Geological Survey (USGS), and others, the EosDIS active short-term and long-term archives, which will include a distributed system providing data management, processing, access, distribution, and user interface capabilities for the Eos program. A major part of the EosDIS will be located in a facility at Goddard Space Flight Center (GSFC). The active short and long-term archives for data from the Eos program will be placed in the EosDIS facilities at GSFC and other facilities to be determined under terms of this and other MOUs.
3. Provide funding for the development, implementation, and operation of the active short-term archives, and appropriate science support activities, for the experimental remotely sensed data from the Eos program and other current and future experimental systems as agreed.
4. Transfer to NOAA, at a time to be determined, responsibility for active long-term archiving and appropriate science support activities for atmosphere and oceans data, as defined in accordance with approved coordinated program definition, development, and implementation activities and plans to be developed under this MOU (see V.2 and V.3).
5. Provide the necessary information and procedures to NOAA to permit NOAA to submit information about its holdings of data, including that from instruments on the NOAA Polar Orbiting Operational Environmental Satellites [POES(s)], the NOAA Geostationary Operational Environmental Satellites [GOES(s)], and European Polar-Orbiting Platforms [EPOP(s)], for entry into the EosDIS Information Management Center (IMC), in a format to be agreed, in accordance with a plan to be developed under section V.2 and V.3.
6. upon request and according to terms to be agreed, provide to NOAA other data, including data collected through programs conducted by NASA independently or with other domestic or foreign organizations, to support calibration analyses, system upgrades or other activities related to NOAA's operational mission. Such activities will be conducted within the constraints imposed by any external agreements.
7. When requested by NOAA, include in the EosDIS contract(s) additional capabilities to support NOAA requirements at NOAA expense.

IV. NOAA RESPONSIBILITIES

NOAA will use its best efforts to:

1. Participate with NASA in planning, development, and implementation of experimental Earth observation data and information systems, including the EosDIS.
2. Develop, implement, and manage an active archive *for* operational data, potentially collocated with a discipline-related EosDIS active archive, with access through a joint NASA/NOAA IMC, that will process and store data from the NOAA POES(s), the operational meteorological payload on the EPOP(s), and future NOAA operational satellites and platforms.
3. Assume responsibility at a time to be agreed upon for active long-term archiving and appropriate science support ~~activities for atmosphere and oceans data from the Eos program, as defined in accordance with approved coordinated program definition, development, and implementation activities and plans to be developed under this MOU (see V.2 and V.3).~~
4. Provide information about NOAA's holdings of data, including that from instruments on the NOAA POES(s), GOES(s) and EPOP(s), for entry in the EosDIS IMC, in a format to be agreed, in accordance with a plan to be developed under section V.2 and v.3.
5. Define at NOAA expense any additional capabilities which *it* wishes included at NOAA expense in EosDIS contract(s) in a timely fashion, and so inform NASA.

V. JOINT RESPONSIBILITIES

NASA and NOAA will use their best efforts to:

1. Define an overall strategy for a cooperative program in Earth system science data management which identifies the important complementary roles of the Eos program and other experimental Earth observation systems, and NOAA's ~~operational Earth observation and data and information systems,~~
2. Develop a joint plan for coordinated development of the short- and long-term archives, the IMC, and associated science support activities described in this MOU in accordance with a schedule to be agreed.

3. Prepare by an agreed date an initial Program Definition and Implementation Plan. The plan will identify and describe the scope of the major elements covered by this agreement, including estimated funding requirements by each agency and implementation schedules.
4. Define a strategy for potentially collocating some part of NOAA's operational central data handling capability, data access and distribution system, and related functions and activities with an EosDIS facility to be located at GSFC.
5. Ensure that catalog systems for NASA and NOAA data from the Eos program, including data from NOAA POES(s), GOES(s) and operational data from EPOP(s), are interoperable.
6. participate in joint presentations to NASA, DOC, NOAA, OMB, and the Congress, as necessary, to explain the essential roles of each organization and funding needs for the elements of cooperation covered by this MOU.
7. Designate policy and technical points of contact in each agency for the implementation of this agreement.

VI. DATA ACCESS POLICY

1. Data from the NASA Eos prototype operational instruments will be made available to NOAA, in near real time and at no cost, for use in NOAA's operational mission.
2. Level 1b environmental data from NOAA instruments on NOAA POES(s) and EPOP(s) will be made available to NASA in near real time and at no cost. Near real time access to other NOAA environmental data and products will be made available to NASA for its mission through arrangements to be agreed as part of the Program Definition and Implementation Plan (See V.2 and V.3). Access to and use of non-real-time archive data and products under NOAA's responsibility will be in accordance with legislative mandates.
3. Derived products from NASA Eos prototype operational instruments which result from NOAA operational activities may be used and distributed as part of NOAA's mission.
4. Data from NASA Eos program instruments, other than those from NASA Eos prototype operational instruments, will be made available to NOAA for use in its operational mission through arrangements to be agreed as part of the Program Definition and Implementation Plan (see V.2 and V.3). Access to and use of Eos research payload data by NOAA for research purposes will be the same as for other researchers from participating Eos entities.

VII. FUNDING AND RESOURCES

1. NOAA and NASA will each be responsible for obtaining the resources for implementing their responsibilities under this MOU. Any commitment of resources is subject to the availability of appropriated funds.
2. Unless negotiated separately, joint and complementary activities between NOAA and NASA will be undertaken on a no-exchange-of-funds basis.

VIII. MANAGEMENT AND COORDINATION

1. If major changes are made in program schedules and progress that will affect the data management plans covered by this MOU, NASA and NOAA will consult and develop plans for appropriate action.
2. Both NASA and NOAA may freely release information regarding their own activities under this MOU; and may release information regarding the activities of the other agency after its approval. This item includes attribution of data sources by each party.
3. Responsibility for implementing the provisions of this MOU are assigned to the Director, Earth Science and Applications Division, NASA and the Deputy Assistant Administrator for Satellite, Data, and Information Services, NOAA/NESDIS.
4. This MOU will enter into force as of the latter date of signature below. The agreement may be modified by mutual agreement of the parties and may be terminated by either party upon 180 days written notice. It will remain in force for the duration of the activities governed by the agreement.

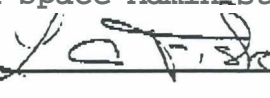
For the National Oceanic and Atmospheric Administration

By: 

Date: 7/27/89

Place: Washington, DC

For the National Aeronautics and Space Administration

By: 

Date: JUL 21 1989

Place: Washington, DC