



**NASA  
Policy  
Directive**

**NPD 2230.1**

Effective Date: January 14, 2016  
 Expiration Date: January 14, 2026

**COMPLIANCE IS MANDATORY FOR NASA EMPLOYEES**

[Printable Format \(PDF\)](#)

**Subject: Research Data and Publication Access (Revalidated w/Change 1)**

**Responsible Office: Office of the Chief Scientist**

Chg#	Approver	Date Approved	Description/Comments
1	Directives Management Team	01/14/2021	Revalidated with minor edits made to comply with NPR 1400.1

**1. POLICY**

a. This NPD sets forth the basic policy for the implementation of processes to ensure public access to scientific peer-reviewed publications (see Attachment A for definition) and unclassified, digital, scientific and technical, development data sets (see Attachment A for definition) arising from NASA-funded research, development and technology (RD&T) programs, unless otherwise restricted by U.S. statute, regulation, or Agency policy.

b. NASA maintains strong investments in fundamental and applied research and technology development across a broad range of topics. Promoting the full and open sharing of data with the research communities, private industry, academia, and the general public is a longstanding core value of NASA, and this policy supports NASA's open access culture to data and publications of all the scientific research that NASA sponsors.

c. It is NASA's policy to:

- (1) Ensure public access to the results of federally funded scientific research;
- (2) Affirm NASA's commitment to public access to information and data arising from technology development programs and projects;
- (3) Ensure access to and reliable preservation of peer-reviewed publications that arise from NASA-funded research and unclassified digital data sets for research, development, commercialization, educational, and related purposes, within available resources;
- (4) Preserve and enable increased use of NASA-funded scientific research results to enhance scientific discovery and application of research results;
- (5) Promote scientific integrity and support the reproducibility of scientific research results;
- (6) Ensure that all extramural researchers receiving NASA-funded grants, cooperative agreements, and contracts for scientific research and intramural researchers develop an appropriate data management plan, describing how they will provide for long-term preservation of, and access to, unclassified scientific data in digital format;
- (7) Optimize for ease of accessibility and use the archiving and dissemination of NASA-funded data and publications, including long-term stewardship;
- (8) Support training, education, and workforce development related to scientific data management, analysis, storage, preservation, and stewardship;
- (9) Support governance of and best practices for managing public access to NASA-funded peer-reviewed scholarly publications and unclassified digital scientific or research data across NASA.

## 2. APPLICABILITY

- a. This NPD is applicable to NASA Headquarters and NASA Centers, including Component Facilities, Technical and Service Support Centers.
- b. This NPD applies to all NASA employees and contractors to the extent provided in their contracts, including part-time and full-time employees.
- c. This NPD also applies to NASA grantees conducting scientific research.
- d. This language applies to the Jet Propulsion Laboratory (JPL), a Federally Funded Research and Development Center.
- e. This NPD applies to awardees from non-NASA organizations and their subcontractors that publish scientific research or compile unclassified digital data sets (excluding excepted data) resulting from RD&T programs funded through a NASA grant, cooperative agreement, contract, or other agreement.
- f. This NPD applies to basic and applied scientific research projects across all NASA organizations implemented after the issuance of this NPD, and to both intramural and extramural research projects regardless of funding mechanism (grants, cooperative agreements, contracts, space act agreements, or internal Agency funding processes).
- g. This NPD does not apply to excepted data, which are data that will not be made public by definition in Attachment A.
- h. In this directive, all mandatory actions (i.e., requirements) are denoted by statements containing the term "shall." The terms: "should" denotes a good practice and is recommended, but not required; "will" denotes expected outcome; and, "are/is" denotes descriptive material.
- i. Nothing in this NPD is intended to replace or supplant the existing NASA Scientific and Technical Information process, including submission of NASA form 1676.
- j. In this directive, all document citations are assumed to be the latest version unless otherwise noted.

## 3. AUTHORITY

- a. The National Aeronautics and Space Act, 51 U.S.C. 20113(a).
- b. Memorandum for the Heads of Executive Departments and Agencies from the Offices of Science and Technology Policy, Executive Office of the President, dated February 22, 2013, and titled Increasing Access to the Results of Federally Funded Scientific Research.
- c. NPD 1000.3, The NASA Organization.

## 4. APPLICABLE DOCUMENTS AND FORMS

NASA Procedural Requirements (NPR) 2200.2, Requirements for Documentation, Approval, and Dissemination of NASA Scientific and Technical Information.

## 5. RESPONSIBILITY

- a. The Office of the Chief Scientist shall:

Help coordinate the implementation of this policy between NASA- funded researchers and the Office of the Chief Information Officer.

- b. The Office of the Chief Information Officer shall:

(1) Establish and manage a team with representation from NASA's research-conducting Mission Directorates, the Offices of the Chief Scientist, the Chief Technologist, and the Office of the General Counsel.

(2) Coordinate the implementation of this NPD with NASA research organizations and the Office of the Administrator.

(3) Provide the architecture and infrastructure for implementation of this policy with other Federal agencies.

- c. Each Mission Directorate Associate Administrator and Center Director shall:

(1) Develop requirements that incorporate this policy as terms and conditions of NASA funding for grants, contracts,

cooperative agreements, directed research projects, and other agreements established after issuance of this NPD.

(2) Comply with this policy within existing budgets and develop long- range plans for sustaining this policy.

(3) Require that their NASA-funded researchers (intramural and extramural) comply with this policy.

## 6. DELEGATION OF AUTHORITY

The NASA Mission Directorate Associate Administrators and Center Directors may delegate the responsibilities listed in paragraph 5.c. to others within their directorates and Center staff as necessary.

## 7. MEASUREMENT/VERIFICATION

Compliance will be verified by technical program officers through continual evaluation of required project reports.

## 8. CANCELLATION

None.

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Revalidated January 14, 2021. Original signed by:

**Charles F. Bolden, Jr.**  
**Administrator**

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## ATTACHMENT A: DEFINITIONS

**Data Management Plan:** A plan submitted by NASA-funded proposers that addresses the data captured by the project. The plan should document how the results of NASA-funded research efforts will be disseminated, and it should also document if there are restrictions that limit or prevent the ability to disseminate data in accordance with NPR 2200.2, Requirements for Documentation, Approval, and Dissemination of NASA Scientific and Technical Information.

**Excepted Data:** Data as a result of NASA-funded research that will not be made public, as stated per the researcher's Data Management Plan, and in accordance with relevant Federal statutes and regulations. This includes, but is not limited to, the following categories: educational grants and grants to individual students; work that is proprietary or may affect U.S. economic competitiveness; work that results in personally identifiable human subjects research data; export controlled data; controlled unclassified information data; national security classified data; and SBIR/STTR contracts.

**Peer-reviewed Publications:** Post peer-reviewed (manuscripts reviewed by independent, qualified scientists and revised by the author per journal editorial process) or as-accepted manuscript version of publications in scientific journals arising from NASA-funded research, including authorship and co-authorship by NASA civil servants or other researchers who perform research and publish results that are funded by NASA directly or indirectly.

**Unclassified Digital Scientific (or Research) Data:** NASA-funded, unclassified data that can be stored digitally and accessed electronically. The recorded factual material commonly accepted in the scientific community as necessary to validate research findings, but not any of the following: preliminary analyses, drafts of scientific papers, plans for future research, peer reviews, or communications with colleagues. This recorded material excludes physical objects (e.g., laboratory samples). Data includes not only the recorded technical information, but also metadata (describing the data), descriptions of the software required to read and use the data, associated software documentation, and associated data (e.g., calibrations).

## ATTACHMENT B: REFERENCES

B.1 Making Open and Machine Readable the New Default for Government Information, Executive Order 13642, May 9, 2013

B.2 Executive Office of the President Memorandum M-13-13, Open Data Policy - Managing Information as an Asset, May 9, 2013

B.3 NASA Policy Directive 1080.1B, Policy for the Conduct of NASA Research and Technology (R&T)

B.4 NASA Policy Directive 2200.1C, Management of NASA Scientific and Technical Information

B.5 NASA Procedural Requirements 1080.1A, Requirements for the Conduct of NASA Research and Technology (R&T)

B.6 NASA Publication NP-2015-05-1796-HQ, NASA Plan for Increasing Access to the Results of Scientific Research

**DISTRIBUTION:**  
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