Open Science and Data Management Plans (OSDMP)

- Required for most ROSES program elements, starting in 2023

- Describes how proposed work will comply with SMD's open science requirements (details on next slide)

- Replaces requirement for Data Management Plan

- OSDMP includes plans for sharing data, software, and publications, as well as other open science activities

- Included in evaluation of proposal's intrinsic merit

- The costs for the activities described in the OSDMP should be included in the proposal budget. SMD *will support* reasonable costs associated with open science for future awards.

- See SMD Open-Source Science Guidance & ROSES OSDMP page for more.

Open Science Requirements in ROSES-2023

These requirements were incorporated into ROSES-2023 Summary of Solicitations to align with SPD-41a: Scientific Information Policy for the Science Mission Directorate

1) As-accepted manuscript versions of publications that derive from ROSES-2023 awards must be publicly available at the time of publication (publication guidance)

2) Data and software developed using ROSES funding in support of a peer-reviewed publication shall be made publicly available at the time of publication (data guidance; software guidance)

3) Scientifically useful data and software developed during the award that was not already published must be made publicly available by the end of the award

4) PIs and Co-Is must provide their digital persistent identifier (e.g., ORCID) via NSPIRES (PID guidance)

5) Unless otherwise stated, proposals must include an "Open Science and Data Management Plan" (OSDMP guidance)

OSDMP Format and Components

- Solicitations may specify a [template](#)

- 2 page limit is typical; not included in page limit for S/T/M section

- OSDMP is anonymized for program elements using [Dual-Anonymous Peer Review (DAPR)](#)

- Minimum Components

  - Data Management Plan

  - Software Management Plan

  - Open Science Plan (sharing publications; other open science activities)

[OSDMP guidance on GitHub](#)

Example of an OSDMP Evaluation Checklist (part 1)

- ❑ General Considerations
  - ❑ Within page limit (typically 2 pages)
  - ❑ Follows template specified by solicitation, if applicable
  - ❑ Anonymized, if DAPR
- ❑ Data Management Plan
  - ❑ Expected data types, formats, volumes, and standards
  - ❑ Method for archiving data and providing public access
  - ❑ Timeline for sharing data (no later than time of peer-reviewed publication, or by end of performance period)
  - ❑ Data types exempt from sharing requirements

Example of an OSDMP Evaluation Checklist (part 2)

- ❑ Software Management Plan
  - ❑ Expected software types
  - ❑ Method for archiving and providing public access *(for ROSES23, this can be considered a strength but not a weakness)*
  - ❑ Timeline for sharing software (no later than time of peer-reviewed publication, or by end of performance period)
  - ❑ Software exempt from sharing requirements
- ❑ Open Science Plan
  - ❑ Types of publications to be produced and methods for providing public access
  - ❑ Other open science activities, if applicable

Examples of possible OSDMP Strengths and Weakness

Strengths

- Publications will be shared as preprints

- Contributing to an existing open-source project

Weakness

- Data will be shared upon request

- Publishing in a predatory or vanity journal

Neutral

- Programming language used or use of commercial software

- Publications in a high impact journal

Resources for ROSES Panelists

- SMD Open-Source Science Guidance: available in PDF and on GitHub

  - OSDMP Guidance

- ROSES OSDMP page

- SMD Scientific Information Policy FAQ

- For feedback on these slides or the Open-Source Science Guidance, contact the SMD Office of the Chief Science Data Officer at HQ-SMD-SPD41@mail.nasa.gov.