**NASA ROSES Open Science and Data Management Plan (OSDMP) Template for the Citizen Science Seed Funding Program (CSSFP)**

Last updated November 30, 2023.

See notes below for further explanations. Explanatory text, e.g., that belongs in the Science/Technical/Management Section of the proposal should not be included in the OSDMP. See the new [SMD Open-Source Science Guidance](http://science.nasa.gov/oss-guidance) at <http://science.nasa.gov/oss-guidance> for more information.

**1. Data products to be produced, including all data contributed by Citizen Scientists.**

For each data product, provide: (a) a short description of the product; (b) the scientific importance of the product (one sentence); (c) the type of data (e.g., time series, spectrograms, images); (d) estimated data volume; (e) planned documentation, e.g., for methodology and algorithms used; (f) expected delivery time, in project years; and (g) the archive you plan to work with to make the data available to the public.

For more information on citizen science data, see the NASA ESDS Citizen Science Data Working Group White Paper <https://cdn.earthdata.nasa.gov/conduit/upload/14273/CSDWG-White-Paper.pdf>

**2. Scientific software to be produced. This software could be for data reduction, analysis, or modeling, for example.**

( ) No software development is anticipated for this effort. If software is created it will be made publicly available.

-OR-

( ) Software development is expected:

Describe the software expected to be produced for this proposal, including the purpose of the software, the language(s) to be used, the open-source license expected, the plan for archiving and providing open access to the software, and expected documentation.

**3. Roles and responsibilities of team members for data management**

State which team member(s) would perform data archiving tasks and indicate what those tasks would be.  If there are costs associated with data archiving, those must appear – with explanation – in the proposal budget.

**4. Publication of results**

Seed funding award periods are generally too short to support publications. But if you do anticipate producing publications during your award, describe the types of publications that are expected to be produced from the project, including peer reviewed manuscripts, technical reports, conference materials, and books. Outline the methods expected to be used to make the publications publicly accessible.

**5. Other Open Science activities**

Describe additional open science activities—other than your citizen science investigation—associated with the project. This may include:

* Holding scientific workshops and meetings openly to enable broad participation
* Providing project personnel with open science training or enablement (if not described elsewhere in this proposal)
* Contributions to or involvement in open-science communities

Notes and guidance on points above:

1. Data products include any and all model output, or data products based on other products and/or modeling that are needed to validate and reproduce the scientific conclusions of peer-reviewed articles. Scientific information produced by citizen science activities will follow the same policies as those for Research scientific information.

By default, unless a project requires copyright assignment as a condition of volunteering, a citizen scientist retains ownership of their submitted works (e.g., photos) and could refuse to grant permission for NASA to publish the works. This has the potential to disrupt science processing or prevent the dissemination of data and findings. To avoid such disruption, NASA recommends projects use “Creative Commons” licenses, which allow creators to retain their individual copyrights while permitting NASA to use their works.

Data are assumed to be covered by the Creative Commons Zero license <https://creativecommons.org/publicdomain/zero/1.0/> unless another open license is asserted and justified. Researchers will collaborate with data curation scientists at the archives to develop data products suitable for long-term scientific use.

If the project would produce data that are exempted in the NASA Plan for Increasing Access to the Results of Scientific Research, or no data that are scientifically appropriate for public release, explain why.

Supplemental data that are ancillary to the publication of research results are required by NASA and increasingly by journals to be publicly accessible in a long-term archive. Such supplemental data shall be preserved and given DOIs (possibly as a collection relevant to the all entries in the article) through the use of [Zenodo](https://zenodo.org/) (<https://zenodo.org/>) or equivalent archives. Supplemental data include numerical values needed to produce the specific figures, maps, images, tables, and movies that are required for the presentation of arguments in a journal article or other publication.  It is presumed that these will be produced in accordance with currently applicable NASA and journal policies.  These are not considered to be “data products” from the standpoint of the OSDMP. If only this level of data is to be produced in the project, the project OSDMP should simply be a statement to that effect.

2*.* Software and Models: GitHub (<https://github.com/>) and Zenodo or equivalent tools and archives may be used for archiving and dissemination of software. Licenses should be permissive, allowing free reuse.  The Apache License Version 2.0 (<https://www.apache.org/licenses/LICENSE-2.0>) is strongly recommended. For models to be hosted by the CCMC, see their model onboarding guide (<https://ccmc.gsfc.nasa.gov/model-onboarding/>). If software would be developed but not made available under a permissive license, explain why. All open-source projects on GitHub, Zenodo, or equivalent should contain documentation including but not limited to a README that is the instruction manual that explains to users why the project is useful, how to get started, and how to build and use the software. Posting of software does not imply a requirement to maintain it.

4. Publication: Starting with awards that result from ROSES-2023, the as-accepted manuscript or the version of record of peer-reviewed publications must be made publicly available at the time of publication. There are two options for how to comply with this requirement: Either (1) the manuscript is individually uploaded to [NASA PubSpace](https://sti.nasa.gov/submit-to-pubspace/) by the time of publication, or (2) it is published in a journal that makes it openly available at the time of publication and also it is indexed by either CHORUS or ADS. For more information about meeting the requirements, see the [SMD Open-Source Science Guidance](https://science.nasa.gov/oss-guidance) at <http://science.nasa.gov/oss-guidance>. More information on Public Access can be found on the Scientific and Technical Information (STI) website (<https://sti.nasa.gov/research-access/>). Further guidance on how to make the publication publicly accessible is available at <https://sti.nasa.gov/submit-to-pubspace/>. Publishing the manuscript as Open Access and posting a version on a community recognized preprint server are encouraged.

This document may be downloaded from the SARA web page at: TBD

Questions regarding this template may be directed to Marc Kuchner Marc.Kuchner@nasa.gov.