Research Opportunities in Space and Earth Science (ROSES) – 2023

These slides go with the talk that Max Bernstein gave at Ames Research Center April 2023 recording posted at: https://www.youtube.com/watch?v=UqUc0bh9LhE
Agenda

- Caveat: too many slides
- What is ROSES
- Keeping track of changes after release
- What's new in ROSES-2023:
  - OSDMP (formerly DMP) and New Requirements
  - Inclusion Plans
  - Updated Sections of the SoS
  - Quick Review of Program Elements
- Other (SARA) resources for proposers:
  - FAQs
  - POCs
  - Stats
  - Volunteer for reviews
  - Library of links and PDFs
Caveat

• Far too many slides in this talk for the time allotted.
• More slides in backup after the black ending slide.
• In essence these slides are meant to be a reference for later.
• That means I’ll pass over some very quickly.
• Later, if you have questions don’t hesitate to ask me. You may always write to me or to SARA@nasa.gov
• Slides will be posted in the SARA "Library" at https://science.nasa.gov/researchers/sara/library-and-useful-links
What is ROSES

The 2023 "ROSES" omnibus research solicitation was released February 14 see https://solicitation.nasa.prsrc.com/ROSES2023

ROSES has >100 individual "program elements" each with its own topics, cadence, and due dates. HTML lists of those program elements and due dates are given in Tables 2 and 3 (examples below) with links to the web pages for the program elements.

ROSES is adding opportunities and changing all the time.

Instructions for Google due date calendars here. Blog of amendments, corrections etc. here.
Parts of ROSES You Need to Know

**Table 1** (Check list for proposals)  
**Table 2** (Due dates chronologically)  
**Table 3** (Due dates by Division = Topic)  

Summary of Solicitation (Blah Blah)  
Division Research Overview (A.1, B.1…)  
and…  
The program element(s) to which you will propose (the actual call for proposals, with the technical info) - this is the most important.

ROSES will change over the course of the year
Table 1 of ROSES

Table 1 of ROSES is a check list of the parts of the proposal, listing whether various components are excluded, optional, or mandatory, page limits etc., and here is an excerpt as an example

<table>
<thead>
<tr>
<th>References: Third component of proposal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
</tr>
<tr>
<td>Excluded</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Open Science and Data Management Plan fourth component of proposal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
</tr>
<tr>
<td>Required</td>
</tr>
<tr>
<td>Content</td>
</tr>
</tbody>
</table>
Main ROSES Page on NSPIRES
https://solicitation.nasaprs.com/ROSES2023

Research Opportunities in Space and Earth Sciences 2023 (ROSES-2023)

Number: NNH23ZDA001N  Directorate: Science Mission Directorate  Type: NASA Research Announcement

<table>
<thead>
<tr>
<th>Label</th>
<th>Date</th>
<th>Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>Release</td>
<td>Feb 14, 2023</td>
<td></td>
</tr>
<tr>
<td>Close</td>
<td>Mar 29, 2024</td>
<td></td>
</tr>
</tbody>
</table>

Notices
- ROSES-2023 is an omnibus NASA Research Announcement. It contains over 100 different proposal opportunities. The document 'Summary of Solicitation' describes the common requirements for all ROSES-2023 proposal opportunities. Table 1 presents summary information about generalized proposal content. The documents 'Table 2' and 'Table 3' contain the list of all proposal opportunities and their due dates. Proposers interested in a single proposal opportunity may find the home page for that proposal opportunity by opening 'Table 2' (sorted by proposal due date) or 'Table 3' (sorted by appendix number) to the right and clicking on the appropriate hyperlink. Any amendments to ROSES-2023 may be found by opening 'Amendments'. Any clarifications, or corrections will be tracked in the "Corrections and Clarifications" document. All ROSES documents are kept up to date and incorporate amendments, clarifications, and corrections in a clearly identifiable manner. Persons with NSPIRES accounts can sign up to receive email about all ROSES amendments (and other solicitation opportunities) by accessing 'Account Management', 'Email Subscription lists' and adding the SMD General Subscription list.

Documents

Announcement Documents

Title

- ROSES-2023 Summary of Solicitation (.PDF)
- Table 1 ROSES-23 Proposal Checklist (also included in Summary of Solicitation document) (.PDF)
- DUE DATES: Table 2 lists and links to all program elements in due date order (.HTML)
- DUE DATES: Table 3 lists and links to all program elements in appendix order (.HTML)

Other Documents

Title

- Link to page hosting the NASA Guidebook for Proposers

Program Elements

- List of Open Program Elements
- List of All Program Elements

Summary of Solicitation and Table 1 are downloadable as PDF files
# Table 2 of ROSES (sorted by due date)

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Program element title and hypertext link</th>
<th>NOI/Step-1</th>
<th>Prop/Step-2</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.2</td>
<td>Heliophysics Supporting Research</td>
<td>03/16/2023 (Step-1)</td>
<td>05/16/2023 (Step-2)</td>
</tr>
<tr>
<td>F.17</td>
<td>Economic, Social, and Policy Analyses of Orbital Debris</td>
<td>N/A</td>
<td>05/17/2023</td>
</tr>
<tr>
<td>D.2</td>
<td>Astrophysics Data Analysis</td>
<td>03/31/2023</td>
<td>05/18/2023</td>
</tr>
<tr>
<td>A.33</td>
<td>High Mountain Asia</td>
<td>04/20/2023</td>
<td>05/19/2023</td>
</tr>
<tr>
<td>A.2</td>
<td>Land Cover/Land Use Change</td>
<td>03/23/2023 (Step-1)</td>
<td>05/23/2023 (Step-2)</td>
</tr>
<tr>
<td>B.20</td>
<td>Heliophysics Tools and Methods</td>
<td>No NOI</td>
<td>05/31/2023</td>
</tr>
<tr>
<td>F.3</td>
<td>Exoplanets Research</td>
<td>03/23/2023 (Step-1)</td>
<td>06/01/2023 (Step-2)</td>
</tr>
<tr>
<td>A.28</td>
<td>Global Navigation Satellite System Research</td>
<td>05/04/2023</td>
<td>06/02/2023</td>
</tr>
<tr>
<td>A.31</td>
<td>Science Team for the OCO Missions</td>
<td>05/04/2023</td>
<td>06/06/2023</td>
</tr>
<tr>
<td>A.14</td>
<td>Modeling, Analysis, and Prediction</td>
<td>04/28/2023</td>
<td>06/09/2023</td>
</tr>
<tr>
<td>C.11</td>
<td>Discovery Data Analysis</td>
<td>09/06/2023 (Mandatory NOI)</td>
<td>11/02/2023</td>
</tr>
<tr>
<td>C.3</td>
<td>Solar System Workings</td>
<td>N/A</td>
<td>No Due Date</td>
</tr>
</tbody>
</table>

Step-1s are always Mandatory

NOI Optional

NOI Required

Submit at any time
NOI vs Step-1 Proposal

Whereas an NOI is submitted by you, so it may be dashed off and submitted the evening that its due, a proposal is submitted by your organization, not by you, the Principal Investigator (PI). The PI "releases" a proposal to the organization, but it's an authorized official at the organization who submits a proposal, even a Step-1. Even for a Step-1, follow your organizations rules about how far in advance a proposal must be released to org. The proposal submission cut off is typically 11:59 pm eastern time on the due date, but that’s really just for Hawaii. If you’re on the mainland and release your proposal to your organization >5 pm, your AOR may have gone home and it may not get submitted.
Changes after release

There are a few ways to keep track of changes after release:

- HTML Tables [2] & [3] of ROSES will show bold and red if there are significant changes.
- Subscribe to the SMD NSPIRES mailing list(s).
- Subscribe to the Google Calendars.
- ROSES-23 Blog at [https://science.nasa.gov/researchers/sara/grant-solicitations/roses-2023/]
Changes and Additions to ROSES after release: NSPIRES mailing lists

Any other new program elements added, TBD programs that are finalized, or major changes in scope (or due date) will be announced by an Amendment to ROSES. You will get an email if you subscribe to the SMD mailing list in NSPIRES under "Account Management".

5. Science Mission Directorate

- Astrophysics
- Heliophysics
- Planetary Science
- General Subscription List

- Earth Science
- Physical Sciences
- Space Biology
Psyche Mission IRB Town Hall Meeting Today at Noon

Today, at 12 p.m. Eastern Time, SMD will host a community townhall to discuss the findings and recommendations of a report by the Psyche mission independent review board. The board, initiated by NASA and JPL in July 2022, examined the causes of the Psyche mission missing its planned launch opportunity this year.

SMD – as well as other colleagues, if you wish to forward the invitation – are invited to join the WebEx per the information below.
Example NSPIRES email to SMD General Subscription list

From: "smd@listsrv2.nasaprs.com"
Date: Friday, March 24, 2023 at 9:27 AM
To: "smd@listsrv2.nasaprs.com"

DYNAMIC Draft Announcement of Opportunity Released for Public Comment

Comments Due: April 14, 2023
Short, Direct URL: https://go.nasa.gov/DraftAO2023STP

The National Aeronautics and Space Administration (NASA) Science Mission Directorate (SMD) has released for public comment a Draft Announcement of Opportunity (AO) for Dynamical Neutral Atmosphere-Ionosphere Coupling (DYNAMIC) under the Solar Terrestrial Probes Program. The draft AO was generated by the SMD Heliophysics Division for a science investigation that requires the development and execution of a spaceflight mission. All proposed science investigations must address the high-level science goals recommended by the 2013 Decadal Survey for Solar and Space Physics: A Science for a Technological Society. The 2013 Decadal Survey may be found at: https://nap.nationalacademies.org/catalog/13060/solar-and-space-physics-a-science-for-a-technological-society.

[...]
The Science Office for Mission Assessments (SOMA) hosts the official “DYNAMIC Acquisition Homepage” that provides further information, including a Program Library and Question and Answer (Q&A) pages. SOMA will post inquiry responses at: https://soma.larc.nasa.gov/STP/DYNAMIC/.

Anonymity of persons/institutions who submit questions will be preserved. Proposers are encouraged to send questions and comments early so that they may be fully addressed prior to the release of the final AO. Questions and comments regarding the DYNAMIC Draft AO should be sent no later than April 14, 2023. They should be emailed to both the Solar Terrestrial Probes Lead Program Scientist, Jared Leisner (jared.s.leisner@nasa.gov), and the DYNAMIC Acquisition Manager, Elisabeth Morse (elisabeth.l.morse@nasa.gov). The email subject line must read "DYNAMIC Draft AO" to be properly routed.

You are receiving this email because you have subscribed, through NSPIRES, to the NASA Science Mission Directorate mailing list. If you wish to unsubscribe from this mailing list, access your NSPIRES account, click on Account Management, then click the Email Subscriptions link.
ROSES-2023 Amendments, Clarifications, and Corrections

Welcome to SARA's Research Opportunities in Space and Earth Sciences (ROSES)-2023 Blog, a way to keep track of changes to ROSES-2023. To effectively search this page for changes to ROSES relevant to a certain division or keyword you click on the magnifying glass in the upper right corner and search on "ROSES" and the key word or name of the division (e.g., "ROSES Astrophysics" or "ROSES Flight").

ROSES-23 Amendment 9: B.2 Heliophysics Supporting Research Revised Text and Due Dates.

**SUN**  | Mar 24, 2023

The Heliophysics Supporting Research (HSR) program element (B.2) supports investigations of significant magnitude that are of relevance to the scientific and strategic goals of NASA Heliophysics.

[http://science.nasa.gov/researchers/sara/grant-solicitations/roses-2023/](http://science.nasa.gov/researchers/sara/grant-solicitations/roses-2023/)

ROSES-23 Amendment 8: B.23 Solar Orbiter Guest Investigators Relevance Change

**SUN**  | Mar 23, 2023

B.23 The Solar Orbiter Guest Investigators (SO-GI) Program solicits proposals focused on analysis of data from the Solar Orbiter mission. This program is intended to maximize the scientific return from the mission by providing support for research beyond the scope of work of the mission science... Read More
Changes and Additions to ROSES after release:

How to subscribe to the ROSES Google Due Date Calendar

- NSPIRES team member commitment guide
- Preparing conventional ROSES Proposals for DAPR
- ADAP DAPR Town Hall
- ROSES Dual Anonymous Peer Review Virtual Town Hall Slides
- Hertz 2019 Memo regarding Astrophysics Dual-Anonymous Peer Review
- DRAFT Initiating Contributions to International Partner-led Missions
- SMD Policy on Peer Review Conflicts of Interest (SPD-01A)
- SMD Policy on Late Proposals (SPD-02A)
- SMD Policy on Reconsideration (SPD-09C)
- SPD 15 Center Community Service Policy
- SPD-16 Civil Servant Peer Review Conflict of Interest
- SMD Policy on Peer Review (SPD-22)
- SPD-26B Communications for Missions (updated and signed)
- SPD-29 External Websites, Original with Erratum
- SPD 31 Student Collaboration
- SPD-33 Citizen Science
- Scientific Information policy (SPD-41)
- How to Submit a Step-1 Proposal
- How to Submit a Step-2 Proposal
- How to Subscribe to the ROSES-2023 Due Date Calendars
- ROSES Peer Review plenary example slides 2021
- Example ROSES Panel evaluation

For Researchers

- Advisory Committees
- Announcement of Opportunity
- Community Town Hall Meetings
- OSDMP FAQ (ROSES-2023)
- Old (ROSES-2022) DMP FAQ
- Dual-Anonymous Peer Review
- Solicitations and Announcements
- Grant Stats
- How To Guide
- Library and Useful Links
- NASA Workforce Study
- New PI Resources
- No Due Date Programs
- Program Officers List
- ROSES Blog
- ROSES Budget Redaction
- ROSES FAQ
- Volunteer to Review Proposals
What's New in ROSES

The big change this year is that the requirements regarding release of data, software, and publications that result from ROSES have been substantially strengthened, consistent with SPD-41a. In particular:

1) Publications must be made available at the time of publication
2) Data and software in support of publications must be made available at the time of publication.
3) Useful data and software that was not already made available must be by the end of the award, and
4) PIs and funded Co-Is must provide their digital persistent identifier (e.g., ORCID)

See Section IIc of the ROSES-2023 Summary of Solicitation, and the research program overviews for details. Some overviews have additional requirements, e.g., ESD Open Data, Services and Software Policy in A.1, rules for samples in C.1.
Archiving Publications – Open Access

• For articles published as Open Access by journal publishers participating in the **Clearinghouse for the Open Research of the United States** (CHORUS), the published article will be made publicly available in the STI Repository on behalf of the authors. Authors should verify that their article is available in the STI Repository following its publication, in which case no further action is required by the author. View a list of journal publishers participating in CHORUS.

• For articles published as Open Access that are indexed in the **NASA Astrophysics Data System** (ADS), no further action is required by the researcher to comply with public access requirements for the article at this time.

• For articles published as Open Access that are not covered by CHORUS or ADS, authors must submit at least the accepted manuscript version to the NASA STI Repository via the **PubSpace submission page** no later than the article’s publication date.
Archiving Publications – Not Open Access

See "How to Share Publications" at https://science.nasa.gov/researchers/sara/faqs/OSDMP/

For an article that is not open access, someone must submit at least the accepted manuscript* version to the NASA STI Repository via the PubSpace submission page no later than the article’s publication date. In some cases, archiving without embargo may be done for you by the journal but, in most cases, it must be done by the author. Look on the website of the journal for information about whether they will archive in NASA Pubspace at the time of publication or ask your journal editor. Ultimately, it is on the author to determine what they must do to make at least the manuscript version publicly accessible at the time of publication.

* The accepted final, post peer-reviewed version of the article including the same content as the final published article, just not the publisher’s copyediting, stylistic, or formatting edits that will appear in the final journal publication (i.e., the version of record).
Archiving Software

See my ROSES FAQ at https://science.nasa.gov/researchers/sara/faqs/OSDMP/ and also the science information team’s FAQ at https://science.nasa.gov/researchers/science-data/science-information-policy_faq

Here are answers to some questions I’ve received so far:

1. Even if its in a proprietary language, if its stand-alone and developed under a ROSES-23 grant you must archive

2. Complicated cases like enhancements to existing proprietary software "should" but not must be archived.

3. One may request funding from F.8 Supplemental Open-Source Software Awards for converting to a not proprietary language like python.

4. Duration: We expect it to be archived in a place where we it will persist (I’m glossing over details here)

5. No, you are not required to provide support
ROSES takes precedence over everything else but stuff like regulation/statute. I don’t care what the guidebook says, I don’t care what SPD-41a says. ROSES takes precedence. Please, ask me if you have questions. Not only might I reassure you but, also, I may learn about an important question to ask the experts and add to the FAQ. I’ve learned some subtleties of archiving only after ROSES-23 had been released.

Within ROSES, the program element is highest priority, superseding the Summary of Solicitation which sets default backstop rules. See Section I(g) of the Summary of Solicitation.
ROSES 22 vs. 23 Overlap and Changes

ROSES-23 is out and I’m advertising the new rules, but right now there are still ROSES-22 due dates and those fall under the older less stringent rules. The old DMP page at https://science.nasa.gov/researchers/sara/faqs/dmp-faq-roses/ notes that its for ROSES-2022 only and it points to https://science.nasa.gov/researchers/sara/faqs/OSDMP/ and visa versa.

It won’t hurt if you follow the newer rules, but e.g., the Heliophysics division DMP templates page has two versions of the template, one for ROSES-2022 B.3 Heliophysics Theory, Modeling and Simulations Step-2 proposals due 3/14/23 and another for the ROSES-23 programs, such as ROSES-23 B.2 Heliophysics Supporting Research with Step-2 proposals due on 5/26/23.
What Else is New in ROSES

• More than a dozen programs in ROSES-2023 will require a 2-page "Inclusion Plan" see Section IV(e) of the ROSES-23 Summary of Solicitation.

• More than 30 program elements will employ Dual-Anonymous Peer Review, see Section VI(b)

• TWSC will become a stand-alone solicitation some time this year but don’t panic, the ROSES-2022 TWSC program element will continue to accept proposals until it’s close date and ROSES-2023 will retain a TWSC row in Tables 2 and 3 with a hypertext link to the new TWSC when its released.
What's New: No Due Date

14 programs accept proposals at any time without any preliminary statement such as an NOI or Step-1 proposal. Technically, there are two types: 1) No Due Date (NoDD) programs that will review proposals with a cadence that will depend on the rate at which proposals are submitted and 2) programs that will review quarterly. Any program element of this type will say "No Due Date" in the proposal due date column in Tables 2 and 3, will indicate that its NoDD in the text, and will either provide details or will point to a research overview that gives details.
There are restrictions on "duplicate" proposals and limits on "resubmissions" of proposals to NoDD programs to prohibit immediate resubmission.

Though the NSPIRES page for those programs display a (March next year) "Proposals Due" date, that is simply the end date for the current ROSES, after which proposals may be submitted to the program element with the same name in the next ROSES. NoDD programs will review proposals throughout the year with a cadence that will depend on the rate at which proposals are submitted.

See also https://science.nasa.gov/researchers/NoDD
What's New: Inclusion Plans

>12 programs require an Inclusion Plan, see updated Section IV(e)ii of the ROSES Summary of Solicitation. Default is two pages are allocated for Inclusion Plans, and they are generally placed right after the OSDMP, but see individual program elements for location and page limits for.

The assessment of this plan will not change adjectival ratings or selection recommendations.

Some resources and research that may be useful when formulating an Inclusion Plan, can be found at https://science.nasa.gov/researchers/inclusion
Flight

• Section VIII of the ROSES-23 Summary of Solicitation has been updated slightly for clarity, e.g., regarding CubeSat Launch Initiative vs. the Launch Services Program (LSP) but no policy changes.

• Whether a NASA-provided or a procured flight, the default is that the cost of the flight is not included in the peer reviewed proposal budget, but the budget justification must describe which NASA provided service is to be used.

• New CubeSats POC:
  Rachele Cocks
  Phone: (202) 358-0058
  Email: rachele.b.cocks@nasa.gov
(People’s Republic of) China Restriction Continues

• No NASA $ may be spent on any project that involves bilateral collaboration (coordination, etc.) with PRC.
• This is not about citizenship, it's about the organizations with which the prospective team members are affiliated.
• The NASA international folks and attorneys tell me that any professor employed by a Chinese university counts.
• This applies only to NASA $. A non-governmental Co-I (e.g., a professor at a US university) may have NSF funds to work with someone from PRC in a research area that is also relevant to NASA. You may still work with that professor at the US university.
• see https://science.nasa.gov/researchers/sara/faqs/prc-faq-roses/
Dual-anonymous peer review

More programs than ever are using dual-anonymous peer review (DAPR).

Under DAPR, not only are proposers unaware of the identity the reviewers (normal), also the reviewers are not told the identity of the proposers until after the evaluation of the anonymized proposals.

DAPR improvements/updates this year:
1. Summary no longer need be repeated in the proposal document.
2. Instructions in the program element improved, esp. the table of components
Any program element that is using DAPR:
1) will clearly indicate that this is the case
2) will contain a special section with detailed instructions about how to prepare proposals,
3) the NSPIRES page of any program using DAPR will host "Guidelines for Anonymous Proposals" under "Other documents" and
4) will link to a special web FAQ on this subject, at https://science.nasa.gov/researchers/dual-anonymous-peer-review
What's New: Appendix A (Earth Science)

There are two new program elements: A.32 Earth Surface Mineral Dust Source Investigation (EMIT) Science Team and A.48 Wildland Fires. In Earth Science some program elements are only solicited every few years, e.g., the solicitation of the GLOBE Implementation Office (A.40) is solicited for the first time in many years. A.25 RRNES and A.59 Wildfire Tech (the latter is TBD) At will have no due date, A.24 ESI and A.47 EEJ will be part of the inclusion pilot study (see Section IV(e)ii of the ROSES SoS) and A.15 Cryospheric Science, A.22 Soil Moisture Active-Passive Science Team, A.28 Global Navigation Satellite System Research, A.30 SAGE III/ISS Science Team and A.33 Understanding Changes in High Mountain Asia will evaluate proposals using DAPR (see Section V(b) of the ROSES SoS).
What's New: Appendix B

In Appendix B (Helio) there is a new program element: B.23 Solar Orbiter Guest Investigators. Many opportunities in Appendix B use a “binding” two-step proposal submission process, see Section IV(b)vii. B.15 Heliophysics Innovation in Technology and Science (HITS) has no fixed due date, B.2 Heliophysics Supporting Research (HSR), B.4 Heliophysics Guest Investigator Open (HGIO), and B.16 Heliophysics artificial intelligence/machine learning Ready Data (H-ARD) will evaluate proposals using DAPR, see Section V(b), and B.21 Heliophysics Citizen Science Investigations (H-CSI), TBD at release, will be part of the inclusion pilot study, see Section IV(e)ii. Proposers are strongly encouraged to use the standard Heliophysics template for the Current and Pending Support and the “Open Science and Data Management plan, see https://science.nasa.gov/researchers/templates-heliophysical-division-appendix-b-roses-proposals
In Appendix C (Planetary Science) this year "Tools" return to program element C.4 Planetary Data Archiving, Restoration, and Tools. At the time of release of ROSES-2023, six programs will evaluate proposals using DAPR see Section V(b), and seven programs permit proposal submission at any time. C.11 Discovery Data Analysis (DDAP) does not request budgets with the proposal, just cost category (small, medium, or large); budgets will be requested later for selectable proposals. All proposals to Appendix C are strongly encouraged to use the planetary science template for Table of Personnel and Work Effort and proposals requiring an OSDMP are strongly encouraged to use the PSD OSDMP template. Both templates may be downloaded from: https://science.nasa.gov/researchers/templates-planetary-science-division-appendix-c-roses-proposals
In Appendix D (Astrophysics), there will be a new program element: D.17 Imaging X-ray Polarimetry Explorer (IXPE) General Observer - Cycle 1. At the time of release of ROSES-2023, it is planned that ten programs will evaluate proposals using DAPR, see Section V(b) of the ROSES SoS, and four program element are participating in the inclusion pilot study, see Section IV(e)ii of the ROSES SoS.
In Appendix E (Biological and Physical Sciences), guidance from the National Academies for the upcoming decade will be given by the Decadal Survey to be released in the Summer of 2023 and, as a result, many program elements in Appendix E are TBD placeholders awaiting the release of that report. At the time of release of ROSES, it is planned that two program elements will evaluate proposals using DAPR, see Section V(b) of the ROSES SoS. Space Biology plans to solicit animal and plant research as two separate program elements (E.9 and E.10) in ROSES this year.
What's New: Appendix F (Cross Division)

In Appendix F (Cross-Division) there will be two new program elements and a change to an existing one. The new elements are F.20 SMD Bridge Program and F.21 Artemis Deployed Instruments Program – Second Crewed Landing (both still TBD at the time of release of ROSES). The major change is that F.2 Topical Workshops, Symposia, and Conferences (TWSC) will become a stand-alone funding opportunity. The ROSES-2022 TWSC program element will continue to accept proposals until its response date of May 12, 2023, and ROSES-2023 retains a TWSC row in Tables 2 and 3 that will include a hypertext link to the new TWSC when it is available.

At the time of release of ROSES-2023, many program elements are still TBD, but the intention is that four programs in Appendix F will evaluate proposals using DAPR see Section V(b) of the ROSES-2023 Summary of Solicitation (SoS), four programs permit proposal submission at any time, and five programs require an Inclusion Plan, see Section IV(e) of the ROSES SoS.
Other useful things on the SARA web page at https://sara.nasa.gov

- Links to PDFs of Policies in the Library
- Links to Proposal Writing Talks
- Points of Contact
- Grant Stats
- Volunteer reviewer forms
- FAQs on ROSES, OSDMPs, redacted budgets etc.
SARA "Library" Links Section
Including talks on proposal writing

Links
- Office of Chief Scientist page on Scientific Integrity
- Dual-Anonymous Peer Review (DAPR) Web Page
- Link to 2020 Science Plan and other documents
- JPL proposal writing workshop
- Proposal Writing Seminar at GSFC February 2022
- ORAU NASA Postdoc Program Webinar on the "ROSES" solicitation and writing proposals June 2022
- ROSES Solicitation and Proposal writing advice from the SMD New Hires Orientation Workshop May 2022
- Slides from June 2022 Webinar
- Proposal writing 101 presentation (Adobe Connect Recording)
  https://www.youtube.com/watch?v=R56T457HdDI (March 2020 Ames Research Center)
- Slides from Proposal writing 101 presentation
- The Planetary Data System Data Release calendar
- Link to slides for new proposers to NASA. Presented at the (OSTEM Sponsored) PEM Proposal Development Workshop
- Christina Richey tips on proposal writing:

For Researchers
- Advisory Committees
- Announcement of Opportunity
- Community Town Hall Meetings
- OSDMP FAQ (ROSES-2023)
- Old (ROSES-2022) DMP FAQ
- Dual-Anonymous Peer Review
- Solicitations and Announcements
- Grant Stats
- How To Guide
- Library and Useful Links
- NASA Workforce Study
- New PI Resources
- No Due Date Programs
- Program Officers List
Volunteer to Review Proposals

We are currently seeking reviewers for:

- Modeling Analysis and Prediction (ROSES A.14)
- Plankton, Aerosol, Cloud, ocean Ecosystem (PACE) Mission Validation (ROSES A.38)
- Artemis III Geology Team (ROSES C.25)
- Heliophysics Supporting Research (ROSES B.2)
- Heliophysics Theory, Modeling, and Simulations (ROSES B.3)
- Emerging Worlds (ROSES C.2)
- Solar System Workings (ROSES C.3)
- Planetary Data Archiving, Restoration, and Tools (ROSES C.4)
- Exobiology (ROSES C.5)
- Solar System Observations (ROSES C.6)
- Lunar Data Analysis (ROSES C.8)
- Planetary Instrument Concepts for the Advancement of Solar System Observations (PICASSO) (ROSES C.12)
- MatISSE and C.22 DALI (high-TRL planetary instrument programs)
- Astrophysics Data Analysis Program (Appendix D.2 of the annual ROSES NRA)
- Astrophysics Research and Analysis (ROSES program element D.3)
- Astrophysics Theory (ROSES D.4)
- Exoplanet Research Program (ROSES F.3)
- Habitable Worlds (ROSES F.4)
- Astrophysics Decadal Survey Precursor Science
- Earth Surface and Interior and Space Geodesy Programs
- Ecological Conservation Impact Assessment
We are seeking reviewers for proposals to the PACE Mission Validation ROSES program. Signing up does not commit you to serve, nor is NASA obligated to ask/invite you. If you are a funded team member on proposal, you will not be able to serve on that review panel...

Please select the topics and techniques in your area(s) of expertise. You can choose more than one. Choose "Other" to add something not listed or to further describe your expertise in one of the listed areas (use the comment box below). *

- inherent and apparent optical properties
- carbon stocks and fluxes
- dissolved and particulate organic matter
- phytoplankton pigment concentrations
- phytoplankton physiology
- plankton community structure
- primary productivity
- aerosols (e.g., aerosol optical depth, concentration)
- atmosphere and ocean data products derived from polarimetric observations
- cloud properties (liquid and ice)
- Other (please specify in the box below)
Grant Stats

ROSES Selections Data

You can find abstracts of the awards from each ROSES program posted on NSPIRES by following this procedure: go to http://nspires.nasaprs.com/external/ choose solicitations, then choose “Past Solicitations and Selection Dates” and then choose the year you want from the drop-down menu and click the “find” button. This will give you a list of all of the programs for that year. For each one there is a link to a unique NSPIRES page. On each NSPIRES page there is a link under “Selections” to PDF file you can download with the abstracts of the winners.

*If you are not after the winners from a particular ROSES program but want to search more broadly, you can use the NSSC grant status page at https://www.nssc.nasa.gov/grantstatus and search by the Institution, PI name or words in the title of the award. That will give you lists of awards but not their abstracts. The NSSC database includes only federal assistance awards to non-governmental organizations, it doesn’t include

For Researchers

- Advisory Committees
- Announcement of Opportunity
- Community Town Hall Meetings
- OSDMP FAQ (ROSES-2023)
- Old (ROSES-2022) DMP FAQ
- Dual-Anonymous Peer Review
- Solicitations and Announcements
- Grant Stats
- How To Guide
- Library and Useful Links
- NASA Workforce Study
- New PI Resources
- No Due Date Programs
- Program Officers List
- ROSES Blog
- ROSES Budget Redaction
- ROSES FAQ
- Volunteer to Review Proposals

From https://science.nasa.gov/researchers/sara/grant-stats Last update of the spreadsheet was this past fall. Data is from ROSES before last mostly since we are not yet done with ROSES-22 which still has due dates in 2023.
<table>
<thead>
<tr>
<th>Year</th>
<th>Solicitation or Program Element Title</th>
<th>Submitted</th>
<th>Selected*</th>
<th>% Selected</th>
<th>SMD Division</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2021</td>
<td>Ocean Salinity Science Team</td>
<td>29</td>
<td>12</td>
<td>41%</td>
<td>Earth Science</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>Cryospheric Science</td>
<td>34</td>
<td>11</td>
<td>32%</td>
<td>Earth Science</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>Arctic Radiation-Cloud-Aerosol-Surface Interaction Experiment</td>
<td>33</td>
<td>18</td>
<td>55%</td>
<td>Earth Science</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>Remote Sensing of Water Quality</td>
<td>38</td>
<td>10</td>
<td>26%</td>
<td>Earth Science</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>Earth Surface and Interior</td>
<td>49</td>
<td>18</td>
<td>37%</td>
<td>Earth Science</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>Precipitation Measurement Missions Science Team</td>
<td>114</td>
<td>36</td>
<td>32%</td>
<td>Earth Science</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>DSCOVR Science Team</td>
<td>26</td>
<td>13</td>
<td>50%</td>
<td>Earth Science</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>CloudSat and CALIPSO Science Team Recompete</td>
<td>65</td>
<td>22</td>
<td>34%</td>
<td>Earth Science</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>Rapid Response and Novel Research in Earth Science</td>
<td>7</td>
<td>5</td>
<td>71%</td>
<td>Earth Science</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>Earth Science Applications: Water Resources</td>
<td>67</td>
<td>30</td>
<td>45%</td>
<td>Earth Science</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>SERVIR Applied Sciences Team</td>
<td>49</td>
<td>20</td>
<td>41%</td>
<td>Earth Science</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>Earth Science Applications: Health and Air Quality</td>
<td>68</td>
<td>8</td>
<td>12%</td>
<td>Earth Science</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>Instrument Incubator Program</td>
<td>56</td>
<td>17</td>
<td>30%</td>
<td>Earth Science</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>Decadal Survey Incubation</td>
<td>76</td>
<td>36</td>
<td>47%</td>
<td>Earth Science</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>Advanced Information Systems Technology</td>
<td>66</td>
<td>32</td>
<td>48%</td>
<td>Earth Science</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>Land-Cover/Land-Use Change: SARI Synthesis</td>
<td>19</td>
<td>8</td>
<td>42%</td>
<td>Earth Science</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>Earth Science Applications: Socioeconomic Assessments</td>
<td>10</td>
<td>2</td>
<td>20%</td>
<td>Earth Science</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>Earth Science Applications: Equity and Environmental Justice</td>
<td>72</td>
<td>39</td>
<td>54%</td>
<td>Earth Science</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>Subseasonal-to-Seasonal Hydrometeorological Prediction</td>
<td>57</td>
<td>13</td>
<td>23%</td>
<td>Earth Science</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>Increasing Participation of Minority Serving Institutions in E</td>
<td>22</td>
<td>10</td>
<td>45%</td>
<td>Earth Science</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>Heliophysics Supporting Research</td>
<td>111</td>
<td>24</td>
<td>22%</td>
<td>Heliophysics</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>Heliophysics Guest Investigator Open</td>
<td>75</td>
<td>24</td>
<td>32%</td>
<td>Heliophysics</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>Living With a Star Science</td>
<td>66</td>
<td>20</td>
<td>30%</td>
<td>Heliophysics</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>Living With a Star Science Strategic Capabilities</td>
<td>13</td>
<td>4</td>
<td>31%</td>
<td>Heliophysics</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>Space Weather Science Application Research-to-Operations</td>
<td>14</td>
<td>6</td>
<td>43%</td>
<td>Heliophysics</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>Heliophysics Technology and Instrument Development for E</td>
<td>14</td>
<td>5</td>
<td>36%</td>
<td>Heliophysics</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>Heliophysics Low Cost Access to Space</td>
<td>12</td>
<td>4</td>
<td>33%</td>
<td>Heliophysics</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>Heliophysics Flight Opportunities Studies</td>
<td>5</td>
<td>2</td>
<td>40%</td>
<td>Heliophysics</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>Heliophysics Data Environment Enhancements</td>
<td>4</td>
<td>3</td>
<td>75%</td>
<td>Heliophysics</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>Geospace Dynamics Constellation Interdisciplinary Scientists</td>
<td>10</td>
<td>3</td>
<td>30%</td>
<td>Heliophysics</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>Heliophysics Mission Concept Studies</td>
<td>14</td>
<td>6</td>
<td>43%</td>
<td>Heliophysics</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>Interdisciplinary Science for Eclipse</td>
<td>13</td>
<td>7</td>
<td>54%</td>
<td>Heliophysics</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>Heliophysics Living With a Star Tools and Methods Step-2</td>
<td>39</td>
<td>12</td>
<td>31%</td>
<td>Heliophysics</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>Heliophysics Innovations for Technology and Science</td>
<td>9</td>
<td>6</td>
<td>67%</td>
<td>Heliophysics</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>Heliophysics Living with a Star Infrastructure</td>
<td>1</td>
<td>1</td>
<td>100%</td>
<td>Heliophysics</td>
<td></td>
</tr>
</tbody>
</table>
Points of contact for ROSES at https://science.nasa.gov/researchers/sara/program-officers-list/

Planetary Science Programs

- Planetary Science R&A Lead: Stephen Rinehart, email, 202-358-1884, bio
- Akatsuki Participating Scientist Program: Thomas Wagner, email
- Apollo Next Generation Sample Analysis (ANGSA) Program: Jeffrey Grossman and Sarah Noble, email: HQ-ANGSA@mail.nasa.gov
- BepiColombo Investigators: Shoshana Weider, email, 202-358-1667, bio
- Cassini Data Analysis: Nicholas Lang and Henry Throop, email
- Desert Research and Technology Studies (D-RATS): Sarah Noble, email, 202-358-2492, bio
- The Double Asteroid Redirection Test (DART) mission Participating Scientist program: Thomas Statler, email, 202-358-0272, bio
- Development and Advancement of Lunar Instrumentation (DALI): Erica Montbach, email
- Discovery Data Analysis: Thomas Wagner, email
- Emerging Worlds (EW)
  - Preferred email address for Emerging Worlds: HQ-EMERGINGWORLD@NASA.GOV
  - Kathleen Vander Kaaden, email, 202-779-3088, bio
- Exobiology:
  - Preferred email address for EXO: HQ-EXO@NASA.GOV
  - Lindsay Hays, email, 818-356-3685, bio
- Planetary Science Early Career Awards: Nicholas Lang, email
- Habitable Worlds:
- You are here ➔

For Researchers

- Advisory Committees
- Announcement of Opportunity
- Community Town Hall Meetings
- OSDMP FAQ (ROSES-2023)
- Old (ROSES-2022) DMP FAQ
- Dual-Anonymous Peer Review
- Solicitations and Announcements
- Grant Stats
- How To Guide
- Library and Useful Links
- NASA Workforce Study
- New PI Resources
- No Due Date Programs
- Program Officers List
- ROSES Blog
- ROSES Budget Redaction
Links for Later

• What’s new in ROSES: Section I(d) of the ROSES Summary of Solicitation and FAQ #1 at
  http://science.nasa.gov/researchers/sara/faqs
• Budget FAQ: http://science.nasa.gov/researchers/sara/how-to-guide/nspires-CSlabor/
• Open Science and Data Management Plans FAQ
  https://science.nasa.gov/researchers/sara/faqs/OSDMP/
• Blog of ROSES amendments:
  http://science.nasa.gov/researchers/sara/grant-solicitations/roses-2023/
• Instructions for Google due date calendar and other things:
  https://science.nasa.gov/researchers/sara/library-and-useful-links
• https://www.nasa.gov/open/researchaccess/pubspace
Thank you

Questions?

If you think of a question later, you may always send it to SARA@nasa.gov
Back up slides follow
## Example DAPR Instructions from A.22 SMAP ST

<table>
<thead>
<tr>
<th>Item</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposals Document PDF file</td>
<td>In addition to anonymizing the content, ensure that any PDF bookmarks are anonymous and the document properties do not reveal names of author or organization.</td>
</tr>
<tr>
<td>Science-Technical-Management (S/T/M) section of proposal</td>
<td>The S/T/M section must be anonymized. Omit all names of team members and names of their organizations.</td>
</tr>
<tr>
<td>References</td>
<td>References must be in the [1], [2] format.</td>
</tr>
<tr>
<td>Open Science and Data Management Plan</td>
<td>An anonymized OSDMP is required as a section of up to 2 pages immediately following the references and citations for the S/T/M section. See Section 1.1 of A.1 the Earth Science Research Overview for more information.</td>
</tr>
<tr>
<td>Biographical Sketches</td>
<td>Do not include in main proposal document. Include in separate &quot;Expertise and Resources Not Anonymized&quot; document.</td>
</tr>
<tr>
<td>Table of Personnel and Work Effort</td>
<td>Include in an anonymized fashion (e.g., PI; Co-I#1; Co-I#2) in the main proposal document and in non-anonymized fashion in the separate &quot;Expertise and Resources Not Anonymized&quot; document.</td>
</tr>
<tr>
<td>Current and Pending Support</td>
<td>Do not include in main proposal document. Include in separate &quot;Expertise and Resources Not Anonymized&quot; document.</td>
</tr>
<tr>
<td>Letters or Statements</td>
<td>All Statements of Commitment and Letters of Support, Feasibility or Endorsement are to be included in the separate &quot;Expertise and Resources Not Anonymized&quot; document.</td>
</tr>
<tr>
<td>Redacted Budget and Narrative</td>
<td>Include both redacted budget and narrative in proposal document in an anonymized format.</td>
</tr>
<tr>
<td>Facilities and Equipment</td>
<td>The Facilities and Equipment Section is to be placed only in the separate &quot;Expertise and Resources Not Anonymized&quot; document. However, the S/T/M Section of the anonymized proposal should address the need for and capabilities of facilities and equipment necessary for the proposed research in an anonymized fashion. Any unique/identifying descriptions of facilities and evidence of access to or affiliation with facilities are to be included in the separate &quot;Expertise and Resources Not Anonymized&quot; document.</td>
</tr>
<tr>
<td>Separate &quot;Expertise and Resources Not Anonymized&quot; document</td>
<td>Upload as a separate document in NSPIRES. Choose Attachment Type = &quot;Expertise and Resources Not Anonymized&quot;. This document provides a list of all team members, their roles, institutional affiliations, expertise, and contributions to the work. The document should also discuss any specific resources that are key to completing the proposed work, as well as a summary of work effort. Statements of Current and Pending Support must also be included.</td>
</tr>
</tbody>
</table>
People have told me that this will not work because they will be able to tell who wrote the proposal even without the name on it.
You may be surprised to learn that, according to the folks who ran the Hubble review, in the vast majority of cases (like 90%) the reviewers were not able to correctly identify the authors of the proposal. Please don't assume you have correctly identified the authors of the proposals, because you are wrong 9 times out of 10.
Moreover, social science shows that even just removing the names helps reviewers focus more on the science
Proposers to these programs must provide two separate documents: an anonymized version of the proposal for peer review and a non-anonymized document that contains components of the proposal that would reveal the identities and affiliations of participating researchers, such as expertise, facilities and resources. The latter will be revealed to the panel only after the evaluation of all proposals and only for a subset of selectable proposals (typically the top third). If there are clear, compelling deficiencies in the expertise required to see through the goals of the proposal, the panel may note this in its comments to NASA. This review may not be used to upgrade proposals for having particularly strong team qualifications, nor may it be used to re-evaluate proposals.
DAPR introduced in SMD under ROSES 2020 with a pilot involving 4 ROSES Program Elements

- Astrophysics also converted all its mission Guest Observer/Guest Investigator (GO/GI) programs to DAPR (5 additional program elements)

Growth of DAPR has been steady
- 2020: ~10% of solicited programs
- 2021: ~20% of solicited programs
- 2022: ~30% of solicited programs
- 2023: ? (TBD)
The Impact of DAPR – Example 1

Inferred Gender balance of top-rated proposals in the Astrophysics Data Analysis Program (ADAP), 2018 – 2022.

- Plot shows the percentage of inferred-female-led ADAP proposals among:
  - all submitted proposals
  - the top-two-rated proposals in each panel; and
  - the top-three-rated proposals in each panel
- Data includes the last two ADAP cycles prior to the implementation of DAPR and the three cycles since.
The Impact of DAPR – Example 2

Institutional Success Rates Pre- and Post-DAPR

Plot compares the success rates of proposals from different classes of research institutions before and after the implementation of the DAPR.

Combined data from the Astrophysics Data Analysis, Astrophysics Theory, and Exoplanets Research Programs.

- ~4500 proposals pre-DAPR
  - ADAP, ATP – 9 cycles
  - XRP – 3 cycles
  - Avg. success rate: 19.7%

- ~1000 proposals post-DAPR
  - ADAP – 3 cycles
  - ATP – 1 cycle
  - XRP – 2 cycles
  - Avg. success rate: 18.4%

Data courtesy of Nino Cucchiara and Maire Volz
"I would remind people asking to see quantitative demonstrations of the effects of DAPR that the analysis of data from across SMD conducted before we implemented DAPR did not show any statistically significant evidence for gender bias in our process. Thus, there may very well not be anything to see. The reason we implemented DAPR is:

1. Every human being possesses an array of unconscious biases that filter our view of the world;
2. Unconscious biases provide shortcuts around the rational decision-making process;
3. Everyone’s unconscious biases are influenced by the systemic inequalities that are inextricably interwoven into the fabric of our society;
4. Removing unconscious biases from the peer review can only make the process more rational and objective.

Thus, implementing a process that reduces the impact of subjective factors in the evaluation of proposals can only be a good thing, whether the effect is observable in the selection statistics or not."
Response to DAPR Is Overwhelmingly Positive

DAPR survey of reviewers conducted after the completion of DAPR panels has yielded 450+ responses spanning 14 different programs over 3 years in Astrophysics, Earth Science, Heliophysics, and Planetary Science.

The Dual-Anonymous Peer Review procedure improved the overall quality of the peer review.

- 81% Agree or Strongly Agree

The Dual-Anonymous Peer Review procedure led to panel discussions being focused on the science rather than on the identities of the team members.

- 90% Agree or Strongly Agree

The Dual-Anonymous Peer Review process should be implemented in the future for the program I reviewed this year.

- 84% Agree or Strongly Agree

![Pie charts representing the survey responses](chart1.png)

- Strongly Agree 42%
- Strongly Disagree 1%
- Neither agree nor disagree 15%
- Agree 39%

- Strongly Agree 62%
- Disagree 1%
- Neither agree nor disagree 9%
- Agree 28%

- Strongly Agree 57%
- Strongly Disagree 1%
- Disagree 3%
- Neither agree nor disagree 12%
- Agree 27%
See what won in the past: NSPIRES

D.2 Astrophysics Data Analysis

Number: NNH22ZDA001N-ADAP
Directorate: Science Mission Directorate
Type: NASA Research Announcement

### Dates

<table>
<thead>
<tr>
<th>Label</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Release</td>
<td>Feb 14, 2022</td>
</tr>
<tr>
<td>ADAP22 NOIs Due</td>
<td>Apr 01, 2022</td>
</tr>
<tr>
<td>ADAP22 Proposals Due</td>
<td>May 19, 2022</td>
</tr>
<tr>
<td>Selection</td>
<td>Oct 04, 2022</td>
</tr>
</tbody>
</table>

### Notices

- NOTICE: Corrected March 16, 2022. Vestigial text inconsistent with DAPR has been deleted from the penultimate paragraph in Section 1.2, where deleted text now appears as strikethrough. The due dates are unchanged: Notices of intent are requested by April 1, 2022, and proposals are due May 19, 2022.

- The description of the specific proposal opportunity on this page is contained in the document 'D.2 Astrophysics Data Analysis'. The document 'D.1 Astrophysics Research Program Overview' describes research activities within the NASA science division that is managing the specific proposal opportunity on this page and may impose requirements upon proposals submitted to this program element. The document 'Summary of Solicitation' describes the common requirements for all ROSES-2022 proposal opportunities. The document 'Table 1' contains the proposal check list from the Summary of Solicitation. The documents 'Table 2' and 'Table 3' contain the list of all proposal opportunities and their due dates, sort by (full or Step-2) proposal due date or appendix number, respectively. All of these documents are kept up to date and incorporate amendments, clarifications, and corrections in a clearly identifiable manner.

### Documents

- DUE DATES: Table 2 lists and links to all program elements in due date order as amended (.HTML)
- DUE DATES: Table 3 lists and links to all program elements in appendix order as amended (.HTML)
- Table 1 ROSES-22 Proposal Checklist (also included in Summary of Solicitation and Full ROSES documents) (.PDF)
- ROSES-2022 Summary of Solicitation (SoS) (.PDF)
- Full ROSES-2022 with SoS, all tables, and all program element appendices as amended and clarified February 15, 2023 (.PDF)
- D.1 Astrophysics Research Program Overview (.pdf)
- D.2 Astrophysics Data Analysis Corrections March 16, 2022 (.PDF)

### Other Documents

- Link to page hosting the NASA Guidebook for Proposers
- Guidelines for Anonymous Proposal Preparation (.PDF)

### Selections

<table>
<thead>
<tr>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Astrophysics Data Analysis 2022 Selections (Updated 2/6/23)</td>
</tr>
</tbody>
</table>
See what won in the past NSSC/Grants

But if you don't know of a particular program, you may search the NSSC grant status database to get a list of grants (only) based on key word from the title, university, PI etc., but this is grants only.

https://www.nssc.nasa.gov/grantstatus
There are three lines for Co-Is at other organizations. First, put funds for Co-I government organizations in lines 8 & 9. Put the funds that pass through your organization in line 5.

<table>
<thead>
<tr>
<th>Item</th>
<th>Funds Requested ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Materials and Supplies</td>
<td>1500</td>
</tr>
<tr>
<td>2. Publication Costs</td>
<td>2000</td>
</tr>
<tr>
<td>3. Consultant Services</td>
<td></td>
</tr>
<tr>
<td>4. ADP/Computer Services</td>
<td>300</td>
</tr>
<tr>
<td>5. Subawards/Consortium/Contractual Costs</td>
<td>600000</td>
</tr>
<tr>
<td>6. Equipment or Facility Rental/User Fees</td>
<td></td>
</tr>
<tr>
<td>7. Alterations and Renovations</td>
<td></td>
</tr>
<tr>
<td>8. Portion of award for NRL</td>
<td>150000</td>
</tr>
<tr>
<td>9. Portion of award for GSFC</td>
<td>80000</td>
</tr>
<tr>
<td>10. Don't use this line, it's not redacted</td>
<td></td>
</tr>
</tbody>
</table>

**Total Other Direct Costs:** $833800

**Total Period 1:** $833800

**Total Budget:** $833800

I used Section F line 5, the generic subaward line, for my $60K subcontract to Miskatonic University, not that you can tell, because I could not modify the description of line 5. That this is for M-U will only become apparent later when you read the actual proposal.

Next, I used customizable line 8 for the $150K that will be sent directly to my Co-I at Naval Research Lab and I entered "NRL portion of this award" in the description.

In line 9 I put the GSFC portion of the award and labeled it appropriately.

When the proposal is evaluated by the peer-review panel, they will not see any of the $ numbers in the Personnel Sections or in Section F lines 5, 8 & 9, all of that will be automatically redacted.

From http://science.nasa.gov/researchers/sara/how-to-guide/nspires-CSlabor/
Budget Details/Justification

Include costs of things (including those in a sub award) in the budget detail/justification in the main proposal PDF e.g., explain why does your Co-I need a $3.5K MDO4000C oscilloscope, vs. a $450 TBS1000B? Also, make reference to the subaward e.g., "0.5 FTE are allocated for Co-I Dr. H. West (Miskatonic, Arkham, Mass) as can be seen the summary table of work effort and full costs are in Section F line 5 of the cover page budget and in the separately uploaded Total Budget pdf file. Costs for labor, fringe and overhead are omitted consistent with ROSES instructions."
Ditto consultants, no salary, fringe and overhead costs in the main proposal PDF. In the budget justification in the main proposal PDF you explain only the part that is not labor e.g., "The total cost of the consultants Goldshtik and Whorfin of the Banzai Institute is provided in the NSPIRES cover page budget in Section F line 3. The consultancy includes the cost of the rental of an oscillation overthruster from Professor Tohichi Hikita of Nagoya university at $157/hour. This cost is quite reasonable given that similar facilities are twice as expensive."
The Total Budget PDF is uploaded in exactly the same way that the proposal PDF is uploaded, but by choosing document type "Total Budget", see figure below. This Total Budget file will not be seen by peer reviewers. In general, these budget files are for Step-2 proposals only.
Table of Work Effort

Table of work effort in the main proposal PDF is merely a reporting of the planned work commitment for all participants, funded by NASA or not. A very simple example from Section IV(b)iii of the ROSES summary of Solicitation will appear on the next slide. Note, this table is outside of and is distinct from budget and the page limited main part of proposal, which must describe what work each team member will be doing. That doesn't belong here.

Templates for the planetary science division may be found at [http://tinyurl.com/hbnff8u](http://tinyurl.com/hbnff8u) (refer to #2). And for the Earth Science Division [here](http://example.com/earth-science).
### (Simple) Table of Work Effort

<table>
<thead>
<tr>
<th>Person and/or Role</th>
<th>Time charged to this proposal</th>
<th>Time not charged to this proposal</th>
<th>Total Time per person/year</th>
</tr>
</thead>
<tbody>
<tr>
<td>PI, Edwina Mercer</td>
<td>3 months/year</td>
<td>N/A</td>
<td>3 months/year</td>
</tr>
<tr>
<td>Co-I, Kelley Grayson</td>
<td>4 months/year</td>
<td>N/A</td>
<td>4 months/year</td>
</tr>
<tr>
<td>Co-I, Dr. C. Finn.*</td>
<td>N/A</td>
<td>1.5 months/year</td>
<td>1.5 months/year</td>
</tr>
<tr>
<td>Collaborator, Alara Kitan</td>
<td>N/A</td>
<td>de minimis</td>
<td>de minimis</td>
</tr>
<tr>
<td>Grad Student, P. Bortus°</td>
<td>N/A</td>
<td>12 months/year</td>
<td>12 months/year</td>
</tr>
</tbody>
</table>

* A letter of support is provided from the (foreign organization) Saturnian School of Medical Sciences for Dr. Claire Finn, participating at no cost to this proposal.

° The Graduate student from Moclan College is funded by a FINESST award and thus participating at no cost to this proposal.
Continuing from prior years: HR-HI

- Identification of high-(intellectual) risk high-impact proposals by proposers and peer reviewers will continue.
- high-risk is not technological risk. Think "transformative" or "out of the box" technology ideas or paradigm-shifting research.
- SMD funds HR/HI proposals at a higher rate than other proposals. So don’t be afraid to submit them!