

# RPPR Guide for NSF Antarctic Principal Investigators

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29 July 2014

The following guide has been developed for NSF Antarctic principal investigators (PIs) to assist in completing annual and final reports in the new Research Performance Progress Report (RPPR) system. The project reporting service meets the federal government's requirement that research agencies implement a new reporting format for research and research-related projects called the Research Performance Progress Report (RPPR). The RPPR is the result of a government-wide effort to create greater consistency in the administration of federal research awards by streamlining and standardizing reporting formats. In general, the system has many of the features included in the NSF FastLane reporting system. However, much of the information will now be provided in structured fields. PDF attachments of annual reports will no longer be accepted.

This guide is designed to provide suggestions and examples for each question within the new system, tailored to the activities conducted under the Antarctic program. However, all Antarctic projects that receive funding under a cooperative agreement should follow the reporting requirements stated in the cooperative agreement.

## General Notes:

- Any questions on login information and passwords should still be directed to the NSF Helpdesk at 1-800-381-1532. Passwords reset online may take up to five minutes.
- Project Reports Frequently Asked Questions and other useful information can be found by logging into Research.gov and clicking on the **Project Reports Information Page** link under **Project Reports Guidance**.
- Annual reports are intended to focus on activities in the reporting year *only*. **Information on prior years should not be included.** However, if your answer has not changed from the annual report submitted during the previous year, you may repeat that answer and indicate it has not changed.
- The final report is to be treated as the final award-year's annual report. **Information on prior years should not be included.**
- The new system does **not** allow for PDF uploads of full reports. All report information must be contained within the text boxes provided. PDF uploads are allowed for images and graphics in the Accomplishments and Products sections *only*.
- You may find that answers to different questions in the RPPR system reference similar information. If you provide similar information in multiple locations in the report, please ensure that you reference back to the original source of information (e.g., "As I previously described in detail in the Significant Results section..."). The guidance is designed to indicate where certain information should be described in detail versus briefly mentioned.

- Previous annual reports submitted through FastLane will be available for viewing within RPPR but the system will not be prepopulated from previous reports submitted through FastLane. Beginning in March 2014, Research.gov will pre-populate portions of the “Participants” and “Products” sections from the prior annual report.
- Project Outcomes Reports (PORs) will also be prepared and submitted through the RPPR system within Research.gov. PORs are simplified reports available to the public completed in conjunction with your final project report summarizing the activities and outcomes of your project. This document does not address PORs.
- Please include a link to the website to which you have submitted your data for inclusion in the Antarctic data repository. If your data reside on another public database than usap-data.org, include a link to that other database on your usap-data.org page and in this report.
- Any questions on this guide should be referred to your NSF program officer.

# RPPR Questions

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## **A. Accomplishments**

NSF is interested in understanding the major achievements and successes of your project over the reporting period. Please provide narrative descriptions and quantitative metrics where possible to provide the program officers with a holistic view of your activities. Each text box allows for a maximum of 8,000 characters (approximately 2 ½ pages of single-spaced, size 12 text). PIs are encouraged to review all questions in the “Accomplishments” section before writing in order to determine where particular information should be placed throughout this section given the character limitations requiring concise statements.

### **1. What are the major goals of the project?**

In your first annual report submitted via the RPPR system, please discuss the major goals of the project and indicate if any of the goals are new or modified from the original proposal. A copy/paste version of your proposal abstract does not appropriately answer this question. In subsequent annual report submissions in RPPR, please use this text box to indicate new or modified goals only. If the major goals have not changed, check “Nothing to report.”

#### Examples:

1. Numbered lists of goals are helpful for ease of reading. Each goal should be described in a few sentences.

Do Not Include: Discussion of initial findings or results. This information should be provided in the “Significant Results” section below.

### **2. What was accomplished under these goals?**

Please discuss the broad achievements completed during the reporting year. Use this section to provide context for your accomplishments and broadly discuss how the work completed during the reporting year will help to achieve the overall goals of your project.

Do Not Include: Detailed discussions of specific objectives achieved. This information should be discussed in the “Significant Results” section.

#### **a. Major Activities**

Discuss the major activities of the award over the past year, providing narrative and descriptive information. Where possible, use detailed metrics to provide context for the narrative. Please indicate where each activity occurred (i.e. in the field, at a station or at your home institution).

Do Not Include: Findings or results of these activities. Report results in the “Significant Results” text box below.

#### **b. Specific Objectives**

Please discuss the specific objectives you undertook during this reporting period to achieve your major goals. Specific Objectives are concise statements that describe interim steps taken to achieve the major goals and change with every reporting period. Please provide these objectives in a numbered list for easier cross-referencing to the “Significant Results” box below.

Examples:

1. New Weather Monitoring Station

1.1. Install new weather monitor at site X by DATE for the purpose of...

1.2. Collect and transmit data to STATION with specific measurements of DATA ELEMENT1, DATA ELEMENT 2, etc.

**c. Significant Results**

Discuss the outcomes of your specific objectives for the reporting year. Please reference objective numbers listed in the previous text box. Any graphics or images useful for explaining significant results should be attached as PDF files. The system allows for up to 4 PDF documents of 5MB each. PDFs can include multiple images if necessary. If you upload graphics, please appropriately reference them within your narrative and label them on the PDF file. No other text should be included in the PDF.

Do Not Include: Detailed information on significant challenges to achieving your objectives. Specific challenges (e.g., harsh weather conditions, broken equipment, etc.) should be listed in the “Changes/Problems” section. If objectives could not be met, briefly explain and reference detailed information in “Changes/Problems.”

**d. Key Outcomes or Other Achievements**

Use this text box to provide an NSF Highlight-type narrative description of your most significant accomplishment(s) during this reporting year. It is expected that this information will also be described in the “Significant Results” or “Major Activities” sections. Antarctic program officers may contact you to use your story as an NSF Highlight, so please provide a detailed and compelling story that provides context around your project and successes over the past year.

**3. What opportunities for training and professional development has the project provided?**

Please provide information on workshops, conferences, seminars, study groups, training sessions or individual study opportunities offered to funded personnel who worked on the grant. *Funded* personnel include anyone listed in the “Participants” section later in the report such as undergraduate students, graduate students, post-docs, technicians, and college faculty who were paid through the award for at least one person-month during the reporting period. You may, at your discretion, provide information on all participants who worked for at least one person-month even if they were compensated by other sources of funding.

**4. How have the results been disseminated to communities of interest?**

Provide narrative detail describing your dissemination efforts in this year. Responses should focus on direct knowledge transfer activities such as conference presentations, training events, recruitment activities, etc. The dissemination products (e.g., presentations, publications, webinars, etc.) will be catalogued in the “Products” section. Use this question to broadly discuss how the project has disseminated its results. Indirect knowledge transfer (e.g., through open websites where people can seek out information) should be reported in D.6. “Impact”: “What is the impact on the information resources that form infrastructure?”

Do Not Include: Discussions of indirect or “trickle-down” dissemination activities discussed in the “Impact” section.

## **5. What do you plan to do during the next reporting period to accomplish the goals?**

Please discuss the activities you plan on conducting over the next reporting year and how they fit into the larger project goals. If the planned activities deviate from the original project proposal, please *briefly* indicate why you have chosen to alter your plans; however, you should provide a longer narrative and explanation in the “Changes/Problems” section. Note: You are required to obtain prior written approval from the NSF whenever there are significant changes in the project or its direction. Prior approval must be requested through the Notifications and Request section in FastLane. Please refer to Exhibit II-1 of the Award and Administration Guide (AAG). Reporting a change or problem in an annual, final, or interim report does not constitute proper prior approval.

Do Not Include: Lengthy discussions explaining why the proposed activities deviate from the original project plan. This information should be provided in the “Changes/Problems” section.

## **B. Products**

The new RPPR format will allow program to access information on publications and other products in a structured, analyzable format. Please list all products developed during the reporting year including publications, databases developed, and new technologies. Please only include products that were created, updated, altered, or published during the reporting year.

### **1. Publications**

RPPR allows for PIs to search for publications within the Thomson Reuters database. If your publication is not in this database then you must enter publication information manually or upload a BibText file. Please include the digital object identifier (DOI) number for all publications entered manually. DOI numbers will assist program officers and any future program evaluators.

Please also report any accepted and in-press articles developed through this award. If your previous annual report listed any pre-publications, please update the status of these articles for this report. Articles published in a prior award year do not need to be included in this report since it is not intended to be cumulative.

Conference papers (including abstracts) and presentations, books, book chapters, and theses should also be reported in this section. Posters should also be included as “Conference Papers and Presentations.”

Do Not Include: Newsletters, newspaper/magazine articles, or other non-peer-reviewed publications. Non-peer reviewed articles can be discussed in the previous “Accomplishments” section if important or include in the “Other Products” section below.

### **2. Technologies or Techniques**

Describe any technologies or techniques that have been developed or altered by the project team during the reporting year other than technologies that have been patented or licensed.

Examples: New statistical methods for analyzing volcanic activity, advanced algorithm development for analyzing astronomical phenomena, adapting scientific equipment for use in Antarctica

*Do Not Include:* Any technologies or techniques that have been patented or licensed, software, curricula, assessment, and surveys.

### **3. Inventions, Patent Applications, and Licenses**

Please include relevant dates for patent applications and licenses. Licensed software should be included in this section.

*Do Not Include:* Software that has not been licensed.

### **4. Websites**

Please include any websites (or web pages) developed or enhanced under the award in this reporting period. In the description of the website, please include what types of information are provided, the intended audience, and the frequency of updates.

*Do Not Include:* Web traffic information.

### **5. Other Products**

Please enter information on software, tools, databases or data sets developed as an “Other product.” In the description of the product, discuss how it was developed, the functions of the product, current audience using the product and potential future audiences. Please also include any software/database updates; if the product was previously recorded as a new product, simply update the description to indicate that it has been updated. Please note that only non-final products from the previous reporting period should be updated.

Principal Investigators of Antarctic Science awards are required to submit metadata files for all data sets and derived data products in the form of a Directory Interchange Format (DIF) entry, to the Antarctic Master Directory, via the USAP Data Coordination Center (<http://www.usap-data.org/>). Further information on DIF generation can be found on the Global Change Master Directory website (<http://gcmd.gsfc.nasa.gov/>). This metadata requirement is needed to meet U.S. Antarctic Program obligations under the Antarctic Treaty. Proof of the metadata entry must be included in the Final Project Report to NSF in this section of the report.

You may include the web link to your page on [usap-data.org](http://www.usap-data.org) here.

Other products can also include any outreach materials such as documentary specials or educational curricula developed through this project.

Please note, the “Products” section only allows 4 PDF uploads (max individual file size of 5MB). If you have more than 4 new product images for this reporting period, please upload 4 instruments and indicate in the description of the other products without PDFs that you were unable to upload a PDF of those instruments.

## **C. Participants**

NSF is interested in understanding the personnel and organizations that have worked and collaborated on the award over the past year. NSF is interested in participant information for researchers (faculty, undergraduates, post-docs, teachers, etc.) who have worked on the progress of the award rather than participants who were served by the award. Please do not include individuals who participated in outreach activities.

### **1. What individuals have worked on the project?**

The RPPR format for entering in participant information is similar to the FastLane format. However, demographic information on participants will no longer be gathered from the PI and only participants who have worked at least one person-month during the reporting period (e.g., 160 hours) should be reported. Please do not include information on individuals who have worked less than 1 person-month. You may, at your discretion, provide information on all participants who worked for at least one person-month even if they were compensated by other sources of funding. PIs are required to provide a unique email address for each participant so that the RPPR system can contact participants individually to solicit demographic information. Providing demographic information is voluntary.

In the personnel description, include where work was primary done (e.g., field, station or academic lab) and the amount of days spent on ice if applicable.

*Do Not Include:* Please do not include individuals who participated only in outreach activities.

### **2. What other organizations have been involved as partners?**

Please include partnerships with academic institutions, non-profits, industry, state or local governments and foreign governments. Partnerships can represent financial, logistical, or programmatic support as well as collaborations with other researchers. Location information should include city and state (also country if international). In the description of the partnership, indicate whether this is a new partnership developed through this project or an ongoing collaboration and any significant contributors within that organization. Also indicate if the organization provided additional logistical support. If financial support was provided, please include the amount of support and duration. Also list any related, active NSF award numbers.

### **3. Have other collaborators or contacts been involved?**

Please indicate whether your project has other collaborators that are not listed as funded participants and do not represent an entire organization. Other collaborators or contacts may come from other departments within your own institution or advisors who assist as individuals rather than on behalf of a larger entity.

## **D. Impact**

Discuss any relevant impacts on knowledge creation and dissemination; personnel and capacity building; and larger societal and institutional changes. Do not include activities and short-term outcomes previously discussed in the “Accomplishments” section. This section should focus on larger-scale impacts than individual project successes.

### **1. What is the impact on the development of the principal discipline(s) of the project?**

Describe the impact or potential impact of your project on your discipline. Discuss how the knowledge generated, data collected, instruments built, or techniques developed will lead to further progress of the field.

*Do Not Include:* A listing of publications, a description of activities carried out, or the specific results of those activities.

**2. What is the impact on other disciplines?**

Describe the impact of your project on other disciplines, including any impact on other projects conducted in Antarctica. Discuss any findings, techniques, instrumentation, or data that could be used by researchers outside your discipline to advance their own science.

**3. What is the impact on the development of human resources?**

All PIs should discuss how their project has helped lead to a larger, more diverse, or better trained workforce during the reporting period. Please also discuss how your NSF-defined participants (e.g., graduate and undergraduate students) have been affected through working on this award.

**4. What is the impact on physical resources that form infrastructure?**

If your project helped to develop physical resources such as labs, permanent field camps, new or modified instrumentation or other equipment then discuss the impact of these infrastructure developments. If your project did not address physical capacity building, check “Nothing to report.”

**5. What is the impact on institutional resources that form infrastructure?**

Discuss any organizations or collaborations that have formed due to work on this project that will persist beyond the lifetime of the award. Also describe any data services or systems developed under this award that will be available to other researchers beyond the lifetime of the award. If your project did not form organizations or develop data systems, check “Nothing to report.”

**6. What is the impact on information resources that form infrastructure?**

Describe any efforts to create guides or manuals for other scientists to use data collected during your project, instrumentation developed through your project or information on how to generally conduct science in the Antarctic. If not applicable, check “Nothing to report.”

**7. What is the impact on technology transfer?**

If your project involved developing software or tools, discuss the diffusion of those tools to a wider audience, whether through licensing, open source sharing, limited dissemination to colleagues, etc. Please provide information on any start-up companies formed through work on this award. If appropriate, please describe how the products listed in Section B.3 are being transferred into a wider audience; please do not merely copy information from Section B.3 here.

**8. What is the impact on society beyond science and technology?**

Please describe how your work may do one of the following: improve public knowledge, attitudes, skills or abilities; change behavior or social actions; or improve social, economic, civil, or environmental conditions. Discuss any outreach activities and include the purpose, date, venue, and audience for the outreach event.

**E. Changes/Problems**

The Antarctic program is interested in understanding how logistical issues including processes and availability of resources impact and influence the science being conducted on the ice. This section will focus on

changes to project plans due to logistical or weather issues. In particular, NSF is interested in understanding opportunities for logistics improvement and vital resources that should not be eliminated due to their impact on conducting science. NSF recognizes that conducting science in a remote region is difficult on multiple levels but asks PIs to focus on issues that impact the science rather than discuss issues related to living on the ice. Projects that do not involve working in Antarctica should examine the questions below and check “Nothing to report” for non-relevant questions.

*Note:* Any significant changes to the direction of the work must be approved by NSF in writing.

### **1. Changes in approach and reasons for change**

Describe any minor issues or challenges faced within the project, even those that did not warrant discussion with your program officer and how it caused you to change your approach. If the research direction needed to be altered from your original proposal, please describe the change and how the new direction will resolve the issue. If discussing multiple changes, please number each issue for clarity.

*Do Not Include:* Detailed descriptions of IRB interactions. Use the “Significant changes in use or care of human subjects” or “Significant changes in use or care of vertebrate animals” text box for this information.

### **2. Actual or anticipated problems or delays and actions or plans to resolve them**

Describe problems and delays with conducting research, whether in the field or not. Number each issue and indicate any steps NSF could take to mitigate this problem or delay in the future. When discussing weather-related delays, please indicate if the delay was expected (e.g., weather typically only allows for working outside about 40% of time). Also indicate which specific objectives, listed in the “Accomplishments” section, were impacted.

*Do Not Include:* Detailed descriptions of IRB interactions. Use the “Significant changes in use or care of human subjects” or “Significant changes in use or care of vertebrate animals” text box for this information.

### **3. Changes that have significant impact on expenditures**

Describe changes during the reporting period that may have a significant impact on expenditures, for example, broken equipment requiring repair or favorable developments such as completing data collection early requiring fewer trips to Antarctica than planned. If the change is due to a complication please discuss the nature of the change, how NSF could assist in mitigating future complications, and the impact on the entire project. Quantify complications if possible through indicating number of days lost, cost to the project or through other quantitative metrics. If there is nothing to report, check “Nothing to report.”

### **4. Significant changes in use or care of human subjects**

If your project does not require interaction with your Institutional Review Board (IRB) then check “Nothing to report.” If you were required to submit protocols to your IRB, include the rationale for creating or changing the protocol, conclusions and approval dates by the IRB, and if applicable, discuss how these changes have improved your project.

*Do Not Include:* Discussions of project changes that did not involve consultation with the IRB.

## **5. Significant changes in use or care of vertebrate animals**

Check “Nothing to report” if your project does not involve vertebrate animals or your team was not physically on ice during the past season. If you conduct research with vertebrate animals, discuss any project plan changes with involving physical interactions with vertebrate animals and the rationale for the change. Please indicate if weather or logistical reasons led to the change in interaction with vertebrate animals. For your first annual report, indicate if any changes have been made between your proposal and current research plans.

*Do Not Include:* Information on using dog sleds to travel to sites. It is not necessary to include information on changes to use and analysis of data collected.

## **6. Significant changes in use or care of biohazards**

Check “Nothing to report” if your project does not use bio hazardous materials. If bio hazardous materials are used, please indicate any changes involving biohazards and the rationale for the changes. Please indicate if weather or logistical reasons led to the change in interaction with biohazards. For your first annual report, indicate if any changes have been made between your proposal and current research plans.

*Do Not Include:* Information on standard materials used for camp sites (e.g., fuel for cooking).

## **F. Special Reporting Requirements**

The project reporting system has a section labeled “Special Requirements.” In most cases, this section will not be displayed on screen because no special reporting requirements have been developed. If the tab is visible, check “Nothing to report.” In the future, special reporting requirements may be added for projects that are on the ice to assess the interaction between logistics support and conducting science on site.