Project Strength Index Survey Help Guide

This is a brief guide to completing the Project Strength Index (PSI) Survey.

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WHAT IS THE PROJECT STRENGTH INDEX?:

DEVELOP projects have consistently improved and matured over the Program's last 15+ years. A means of assessing project progression and comparing project success has, to date, been subjective. This project strength index provides DEVELOP a means of objectively evaluating projects and tracking progress. The PSI provides a score based on the overall applied science and capacity building doctrine which places an emphasis on partner relationships and building higher capacity for the uses of NASA resources for the betterment of society.

There are two sections of the PSI. The first is Policy and Partner which evaluates how the project did with addressing a policy and how involved the partner(s) were with the project. The second part is the Platform and Science which assesses how the project did with the use of the NASA Earth observations and how rigorous the science was for the project.

ANSWERING THE QUESTIONS:

Project Details – This gives the most basic information about this project

Q1) DEVELOP Node Location – This is to designate which node conducted the project. This question will allow for multiple locations to be selected. Please choose all that apply. Remember: this is the node location(s) the project was conducted, not the study area or project partner locations.

Notes: Check all node locations in which the project was conducted.

Options Available:

- Ames
- FC
- GSFC
- ICIMOD
- IRI
- JPL
- LaRC
- MCHD
- MSFC
- PHB
- NCDC/NCEI
- SSC
- UGA
- WC

Q2) Full Project Short Title – This must include the study area and national application area. This should be the short title that the team has been using all term!

Notes: Write ONLY the project short title. Include the continued number if applicable (Ex: Project App Area III)

Examples:

- Chile Water Resources
- Navajo Nation Climate II
- Colombia Ecological Forecasting III
- **Q3) Project's Term Being Reported** This is for the term the project was conducted. Everyone should be reporting for the term that just finished.

Options:

- Summer 2013
- Fall 2013
- Spring 2014
- Summer 2014
- Fall 2014
- Spring 2015
- **Q4)** Is the project a continuation project? This question is asking if the project was being continued from a previous term. Was it a continuation at the time (term) that you are reporting for?

Example:

Arizona Climate began Spring 2014, the term just ended for Arizona II
Summer 2015, then it would be reported as: Yes, began in the Spring 2014.

Options:

- No, it began in the term being reported
- Yes, began in the Summer 2014
- Yes, began in the Spring 2014
- Yes, began in Fall 2013
- Yes, began in Summer 2013
- Other:

Policy & Partner Section Score

Q5) Does the project address a specific policy topic as identified by a local, state, regional or Federal organization? – For example, does it address an action in the Clean Air Act, the President's Ocean Policy, or the Gulf of Mexico's Alliance's Five Priority Issues?

Options:

- 0=No
- 1=It is indirectly related to a policy topic
- 2=Yes

Q6) Did the end-user directly request this project?

Options:

- 0=No
- 1=Yes

Q7) Does this project introduce end-user(s) to NASA Earth observations to enhance their decision making process?

Options:

- 0=Nothing new was introduced
- 1=End-user is familiar with the NASA Earth observations used and has previously used them
- 2=End-user is familiar with NASA Earth observations, but has never actually applied them in their decision making process
- 3=End-user was introduced to NASA Earth observations and their capabilities to enhance their decision making process for the first time

Q8) How involved was the end-user in the project? – This question is designed to assess how involved with the project the end-user(s) were. This question allows for more than one option to be selected. One point will be awarded for each option that applies.

Notes: Please select all that apply. If an end-user was not involved, please explain why in the comments section.

Options:

- 0= End-user was not involved
- 1= End-user was involved during the term in any of the following: weekly/bi-weekly meetings, data collection, field work, etc.
- 1= End-user sent a letter of support/thank you (before or after)
- 1= End-user attended the close-out presentation
- 1= End-user communication continued contact after the project
- 1= End-user provided leveraged science-advising and/or mentorship

Q9) What type of hand-off was conducted with the partner? – This question seeks to determine if anything was handed off to the project's partner(s) and how it was done. Select the option with the highest point score if multiple types were conducted.

Notes: If a hand-off has not happened at the time of submitting the PSI scores and is set for a later date, then select "None" and note it in the comments sections when this is expected to occur. If the team mailed something to their partner(s), then select "Emailed deliverable" and note in the comments section.

Example:

• A team emailed the end-products to the partners (1 pt.) and did a videoconference with the partners (3 pts.), then the second option of 3 pts. should be selected.

Options:

- 0= None
- 1= Emailed deliverable
- 2= Teleconference
- 3= Videoconference
- 4= In-person

Q10) Was a tutorial or data guide provided to the partner?

Options:

- 0= No
- 1= Yes

Q11) Is the end-user actually using the project products and/or methodologies in their decision-making activities? – This question is trying to gauge how beneficial DEVELOP end-products are to their partners.

Notes: Select "0" if this information is unknown at the time of submitting the PSI survey and note that this information is unknown at this time. When the center lead/team members do receive this information, and then please notify the appropriate Project Coordinator so that this may be changed.

Options:

- 0= There was no end-user or results were not shared with the end-user yet
- 1= End-user sees value in the product and/or methodology but does not plan to apply it to their decision-making process
- 2= End-user sees value in the product and/or methodology and plans to apply it to their decision-making process, but has not at this time
- 3= Project products and/or methodologies were disseminated within the end-user organization and/or published by them
- 4= Project products and/or methodologies used in an official capacity to make a decision, but not sustainably
- 5= End-user incorporated products/methodologies into routine operations and/or continues using DEVELOP project products/methodologies for making decisions

Platform & Science Strength Score

Q12) Did the project culminate in a written publication? – This should be done by the team, not someone else and was outside the DEVELOP VPS and/or website.

Notes: Only select "Not at this time, but is planned" IF one has already been submitted and it is in the review process OR if it is in the process of being written and submitted. If you are thinking about doing a publication and haven't done anything yet, select "No."

Example:

• If someone does a blog post on a science/conference blog about the project, then 1 point may be awarded for the project.

Options:

- 0= No
- 0= Not at this, but it is planned
- 1= Yes, in an online magazine, newsletter, blog, local node publication, partner website, etc. (e.g. Earthzine, Directions, The Earth Observer, etc.)
- 2= Yes, in a conference proceedings paper
- 3= Yes, in a peer-reviewed journal publication

Q13) Was the project presented at a conference? – This question is trying to gauge which projects are presented outside of DEVELOP.

Notes: Unless the project has already been presented, select "No." Email the appropriate Project Coordination YP to have a point added if the project is presented at a later date. The exception to this would be if the project will be presented within a month of the end of term. If this is the case, please note the conference date in the comments section below.

Example:

• If a person gives a poster presentation at a conference a year after the project has been completed, email the appropriate Project Coordination YP to have a point added.

Options:

- 0= No
- 1= Yes, by poster presentation
- 2= Yes, by oral presentation
- 2= Yes, by oral presentation and poster presentation
- 3= Yes, it was invited to give an oral presentation

Q14) Innovation relating to the Earth observations utilized?

Notes: If one of the options does not cover what was achieved with the project, select "None" and note it in the comments section.

Options:

- 1= An under-utilized NASA sensor's data was substantially applied (Underutilized = NOT Landsat, MODIS, or ASTER)
- 1= Data from a newly-launched NASA sensor was substantially applied (launched in last 12 mos.)
- 1= Simulated/proxy data for a future NASA sensor was substantially applied in the project
- 1= A suite of three or more sensors' data were integrated into the project

- 1= A model was used that incorporated NASA Earth observations and successfully produced end products
- 0= None of these were accomplished

Q15) How complex is the scientific process involved in the NASA Earth observation use?

Options:

- 0= The project had no meaningful results
- 1= Relatively simple methodology (ex. Running an NDVI for multiple dates and comparing change or making a LU/LC map or creating a visualization/animation but no analysis of the data)
- 2= Used published methodologies more complicated than listed above for a new study or new application or used methods that are generally accepted within the specific discipline as appropriate and accurate
- 3= Attempted to develop a new methodology or tool that was never done before to partial success – still a few kinks
- 4= Successfully developed a new methodology or tool that has never been done before (e.g. created a totally new drought severity index, using VIIRS data in a unique way, etc.)

Q16) Was an accuracy/uncertainty/error assessment conducted within the project?

Options:

- 0= No
- 1= Yes, but not quantitatively assessed, however results are reasonable (sanity check complete)
- 2= Yes, quantitatively assesses

Q17) Did the project's video place in the Earthzine Virtual Poster Session (VPS) and/or was the project team actively engaged in the VPS?

Notes: If the submission of the PSI survey comes before the announcement of the VPS winner, DO NOT select "Yes." Instead, select "No, but the team was actively engaged." The Project Coordination YP will manually award the point after the winner is announced. Teams that come in second and third place will also receive an additional award, but it will be noted the placement of the project on the node's PSI scores.

Options:

- 0= No
- 1= No, did not place but the team did actively engaged in the VPS dialogue responding to questions and comments
- 2= Yes

Q18) Was scientific guidance given and all deliverables reviewed by a science advisor?

– This question is trying to gauge if the science advisor was actively involved with the teams' final deliverables prior to submission.

Options:

- 0= No
- 1= Yes, but the advisor was not a specialist in the project's topic's field
- 2= Yes, and the advisor was a specialist in the project's topic's field

Comments, Concerns, Suggestions – This section has been added so that you can report any concerns or justifications for your answers. This section can also be used to mention any important dates.

Example:

 You selected that the project was presented at a conference (or will be), but the conference occurs after the PSI survey submission date, please indicate in the comment section the date it will be presented.

Q19) Please feel free to include any additional thoughts, clarifications or justifications related to the project

HOW THE SCORES ARE CALCULATED:

For each section of the PSI, the Policy & Partner and the Platform & Science, there is a potential score of 0-21. After the survey is submitted for a project, the results are scored from each category and then are placed on the index to obtain its current stage.

There are five project stage classifications. Stage 1 is categorized as "Basic Research." This is the lowest possible stage possible for a project. Stage 2 is determined to as "Application Concept Complete." There are two possible ways for a project to receive a Stage 2 ranking. As shown on Figure 1, a project could receive a Stage 2 when the Policy & Partner scores between 7 and 13, but for the Platform & Science side only scores between 0-6. The other possibility is that a project could have scored between 7-13 for the Platform & Science, and a 0-6 for the Policy & Partner.

Stage 3 is considered as "Application Demonstration Successful." Many of DEVELOP's projects will fall into this stage. There are three ways for a project to obtain a Stage 3 ranking. The first is for a project to receive a Policy & Partner score between 14 and 21, but it scored between 0-6 on the Platform & Science side. The second possibility is a project scored between 7 and 13 for both sections of the PSI. The third possibility is for a project to score between 0-6 for the Policy & Partner and 14-21 for the Platform & Science.

Stage 4 is characterized as "Application Verified/End-user Engaged." This stage indicates that a project was strong in both sections of the PSI. There are two ways for a project to get a Stage 4. The first is for the Policy & Partner to get between 14-21 and a 7-13 score for Platform & Science. The other possibility is for the project to score between 14-21 for Platform & Science and 7-13 for Policy & Partner.

The final stage is Stage 5, "Transition to End-User/Decision Enhanced." This stage is the hardest to achieve and is the goal of all projects. This stage encompasses that the project is sustainable for the partner and helps the project's partner(s) make decisions.

Example: If a project scored a 13 in the Policy & Partner section and a 14 in the Platform & Science section, the project would be classified as a Stage 4.

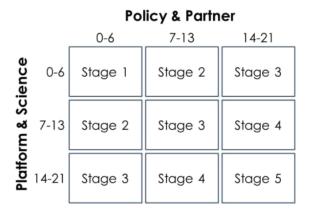


Figure 1: This index is used to determine a project's current stage.

Figure 2 shows an example of how many projects (either from a node or for all of DEVELOP) received a certain score and where on the PSI matrix the projects fall under. This matrix helps determine the distribution of projects overall.

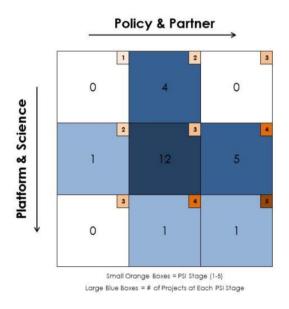


Figure 2: Chart that indicates how many projects, either from a node or nationally, rank in each stage.

DISSEMINATION OF THE SCORES:

Once project scores are calculated for the nodes, the scores are recorded in an Excel document. There are two ways the PSI scores are disseminated – 1) Individual nodes receive only their scores 2) An Excel document compiles all of DEVELOP's PSI scores for a given term.

For the first option, each node receives its own compiled scores document that is broken down into four main tabs.

- 1) List of PSI Questions The first tab provides a list of the PSI Questions along with the possible answers. This is provided in the event that someone from node needs to refer back to the questions and possible answers.
- **2) Summary** The second tab summarizes the PSI scores from the projects reported from that node organized by term and project name. The right-side of the Summary page will also organize the node's scores on the PSI matrix so that the node can see visually where most of the projects fall in the matrix.
- **3)** Continued Projects The third tab displays continued projects from that node bases on project name. This page allows for nodes to track the success of a project from start to completion. Ideally, a continued project should progressively improve on its PSI score rather than decline.
- **4) Report Raw** The fourth and final tab provides a node the reported raw data that was submitted for each project by the center lead. This section includes all previously submitted answers from previous terms; not just the most recent term. This has been provided in the event that a node has any question as to how and why a project received a score that it did. The raw data has also been provided so as to provide a more consistent reporting for continued projects from term to term and center lead to center lead.

The second way of reporting the PSI scores for projects is a compiled list of all of the projects conducted with DEVELOP that is organized by term and by node. This is a growing Excel document that acts as the master copy. For each term that nodes report project scores, another tab is added to the master copy that neatly reports the scores as well as includes the reported raw scores. It should be noted that for the raw scores, any modification to a score is noted with an explanation as to why a score was changed. Most instances of a score being modified are due to a project being reported to have won the VPS session, but didn't win. Once the document has been updated during the interim, it is submitted to NPO to report the scores of the projects.