

Ice Bridge Science Team

Terms of Reference

Draft

October 15, 2010

Intended as a chapter of the Project Plan

1.0 Programmatic Charge to the IceBridge Science Team

The Operation IceBridge project (OIB) is directed from NASA's Goddard Space Flight Center. There are separate management functions for IceBridge Instruments, logistics, data management, and science. Scientific direction is provided by the IceBridge Science team (IST).

The IST reports to the IceBridge Project and Program Scientists to provide expert scientific guidance to the IceBridge project on matters of science objectives and requirements, flight line planning, measurement strategies, data quality control, and data product development. The IST shall assist the Project by providing:

- 1) Final development of the IceBridge Science Definition Document and Level-1 Scientific Requirements Document;
- 2) Evaluation of the IceBridge mission designs in achieving the goals defined by the Science Definition Document and Level-1 Scientific Requirements Document as requested by the NASA Program Scientist; and
- 3) Support to the IceBridge Program Scientist and Project Scientist in the development of the required analyses, documents and reporting during the IceBridge project.

The IST shall contribute to OIB science by:

- 1) Exploiting OIB data in support of a select set of science objectives
- 2) Assuring a level of data and meta data reliability, cross-instrument compatibility and accessibility through use of the data in science investigations
- 3) Encouraging broad use of the data by the science community in fulfillment of the extensive range of OIB science objectives.

- 4) Updating the science requirements and mission deployment plans as needed to make best use of the OIB instrumentation and platform assets.

2.0 Science Team Organization

The science team is composed of experts in glaciers, ice sheets, and sea ice science. The combined team is organized as follows:

- 1) The IST shall be co-led by an ice sheet scientist and a sea ice scientist appointed for one-year rotating terms. Appointments shall be made by the OIB Program Scientist
- 2) Team leaders shall be responsible for consolidating documentation, recommendations, and analyses in support of same from the team, and providing that material to the Project Scientist
- 3) The science team leads shall serve as co-chairs of science team meetings with 2 convened at the Goddard Space Flight Center and 1 at the Jet Propulsion Laboratory. Agendas shall be prepared by the science team leads. Logistical arrangements shall be the responsibility of the local hosts.
- 4) Team members shall participate in meetings and telecons. When there are scheduling conflicts, team members can appoint well qualified alternates (such as co-I's on their OIB proposal).
- 5) Science Team meetings shall include an open session for informing observers about OIB activities. Meetings shall include an executive session for dealing with IST mandated activities such as finalizing flight plans and schedules.
- 6) Meetings shall begin with a review of action items. The action item list shall be maintained by the science team leads.
- 7) Team members are encouraged to participate in project-organized outreach activities such as AGU town hall meetings.
- 8) Team members shall report to the Program Scientist using the usual mechanism of annual renewal proposals and as directed by the Program Scientist.
- 9) In contrast to OIB activities to date, neither the team leaders nor the team members are expected to participate in field deployments unless such work was previously proposed and approved.

3.0 Science Team Deliverables

The science team has specific responsibilities to the project (as outlined in section 1.0). Team members have individual responsibilities as articulated in the science investigation portions of their individual proposals. IST reporting requirements on these responsibilities are as follows:

- 1) The science team shall deliver level-1 science requirements to the Project and annually review and update the requirements as needed
- 2) The science team shall deliver to the project recommended flight lines in support of the science requirements.
- 3) Individual team members will provide brief progress reports before each team meeting to the team leaders in the form of updates to one-page summaries.
- 4) Sub-groups of the IST will prepare reports and present activity summaries at IST meetings.
- 5) Science team members will make a best effort to be aware of OIB related publications by the science community and provide reference information to the project.
- 6) The science team will prepare documents, analyses and other reports as required by the Project and Program scientists.