

Workshop module “Data management as a tool for scientists”

Svalbard Integrated Arctic Earth Observing System (SIOS) supports one additional day during a funded SSG workshop or other collaborative activity. The aim of this workshop module is to make scientists familiar with the concepts of data management, discuss opportunities and challenges, and develop skills to plan, collect and prepare their data in such a way that they easily can be deposited in data centres and preserved for the future.

Content

The importance of scientific data management has become increasingly recognised in recent years. Many funding agencies now require data management plans to be part of project proposals and integrated into project management. These plans describe the data produced by a project, delegate responsibilities and show how data publication, sharing and preservation will be implemented in practise. In order to provide free and open sharing of data and long-term data preservation, it is important that concepts like data documentation, metadata and data interoperability, data life cycle management etc. are fully understood and implemented. Within the scientific community, there are concerns around free and open sharing of data and proper credit to data providers which must also be addressed.

[SIOS](#) is a distributed world-class research infrastructure with a strong data management component. The SIOS Data Policy promotes free and open access to data. Scientists and projects utilising the SIOS Infrastructure must adhere to the SIOS Data Policy and deposit data in a data centre contributing to the SIOS Data Management System (SDMS). In addition, several associated projects have adopted the SIOS data policy (e.g. Nansen Legacy and GCI Cusp).

The workshop module will address scientific data management with emphasis on the SIOS Data Management System. The programme will be developed in cooperation between the SIOS Data Management and the applicant in order to streamline the content to the needs of the participants.

In more detail, the module will give an introduction to:

- the necessity and benefits of standardised data documentation in relation to the Data, Information, Knowledge and Wisdom chain;
- the pathway of [FAIR guiding principles](#) towards [Findable, Accessible, Interoperable and Reusable data](#);
- how to document data for data sharing/publication and long-term preservation with emphasis on the reuse of data;
- perspectives of scientific transparency and quality control;
- scientists as data providers and consumers;
- the 5Ps matter (Prior Planning Prevents Poor Performance) and how to create a data management plan

The module will be held by a SIOS data expert with expertise in the scientific topic of the SSG activity. It will have a theoretical section, followed by practical exercises based on data provided by the participants. It is a prerequisite that the organiser of the SSG activity is

actively contributing to the development of the programme in order to make best use of the training for the participants.

Eligibility and evaluation criteria

In order to be considered for support, the proposal must meet the following criteria:

- The activity must receive funding from SSG.
- The activity must be generating, using or having relevance for long-term data sets or process studies supporting SIOS Earth System Science efforts.
- Priority will be given to activities with at least one party from a SIOS member institution.

Submitted proposals, once approved for SSG funding, will be evaluated by the SIOS Knowledge Centre according to the eligibility criteria. SIOS will support up to four workshop modules and ranking will be based on relevance to the SIOS observing system and SIOS internal availability of data experts in the specific scientific fields of the activities.

Costs covered

Each successful proposal will be funded with up to 50 000 NOK to cover the direct costs incurred for extending the planned activity funded by SSG with one extra day. This includes:

- room and board for the participants who attend the SIOS module (1 night and 1 day);
- rent of the venue (1 day);

How to apply

Please attach a separate application as a pdf-document to the SSG application. The application must contain the following elements:

- A description how the addition of the SIOS module will give added value to the workshop/activity and how the acquired knowledge will be used in future work.
- Information on what kind of data you collect, how your data currently are managed and stored and what challenges you face.
- A description of how the module will be integrated in the workshop programme/activity in order to ensure active participation. Please note that at least 6 hours need to be allocated to the SIOS module in order to qualify for a full day of SIOS funding.
- A brief budget.