# Using Svalbard as show case of environmental changes in the High Arctic

## - The State of Environmental Science in Svalbard (SESS) report



www.sios-svalbard.org

The Svalbard Integrated Arctic Earth Observing System (SIOS) is a distributed international research infrastructure for Arctic Earth System Science, coordinating a regional observing system for long-term measurements in and around Svalbard.





An example of the popular science summaries of the SESS report

The annual SESS report summarises the current state of Earth System Science in Svalbard, highlights research needs, and recommends future investments in the Observing System.

The target audience is researchers, policy makers and other stakeholders.

The first report was released in January 2019 during the SIOS Polar Night Week in Longyearbyen, Norway. Issue 2 is due January 2020



#### Core objectives:

- Interdisciplinary studies
- Harmonised observations
- Interoperable data
- Joint scientific priorities
- Optimised research infrastructure

### The SESS report leads to:

- Joint prioritisation for future investments
- Increased scientific impact
- Efficient use of resources
- Increased international cooperation
- New or improved data products
- New research infrastructure

#### Global relevance of the SESS report:

- Summarises long-term monitoring to understand Arctic and global changes
- Showcases Svalbard as ideal location for monitoring gradients and fluxes
- Provides condensed knowledge for international decision makers

SIOS is a consortium of institutions with research infrastructure in and around Svalbard, building bridges across disciplines and national borders.





































































