



# An Integrated Earth Observing System for Svalbard

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SIOS Steering Board



## The Vision

SIOS is a unique opportunity to establish **a regional integrated and sustained Earth Observing System, building upon an already existing world class range of infrastructures**, in order to better understand global environmental change in an Earth System Science context and Svalbard's regional significance to ESS.

SIOS aims to **bring coordination to science across Svalbard and bring added value to all partners** beyond what can be accrued through their own individual research capabilities. **Its services will benefit the pan-Arctic research community**, and establish SIOS as the leading large-scale polar research infrastructure.



# Builds on Extensive Existing Infrastructure

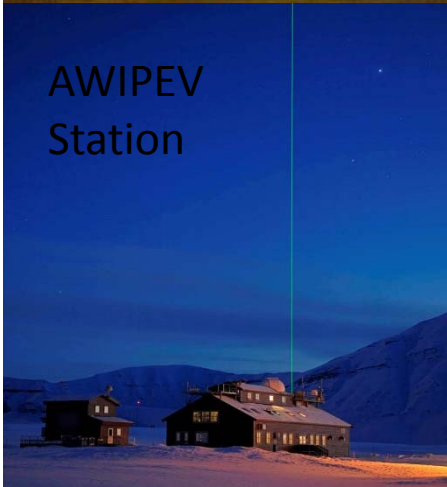
Ny Alesund Research Village



SvalSat – all polar satellites



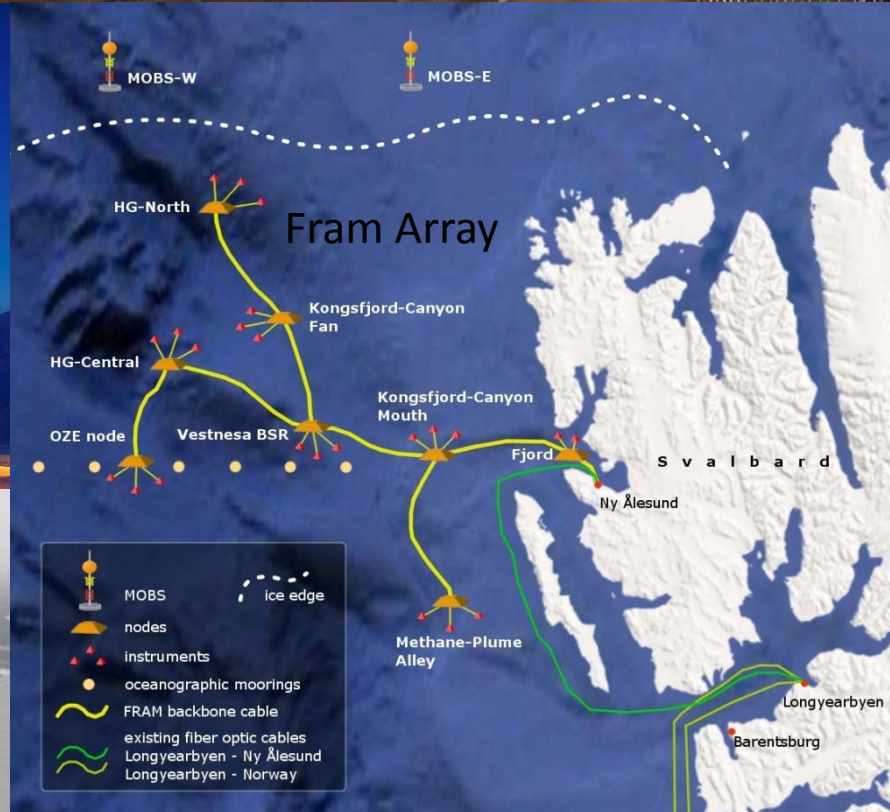
AWIPEV Station



Zepplin Observatory



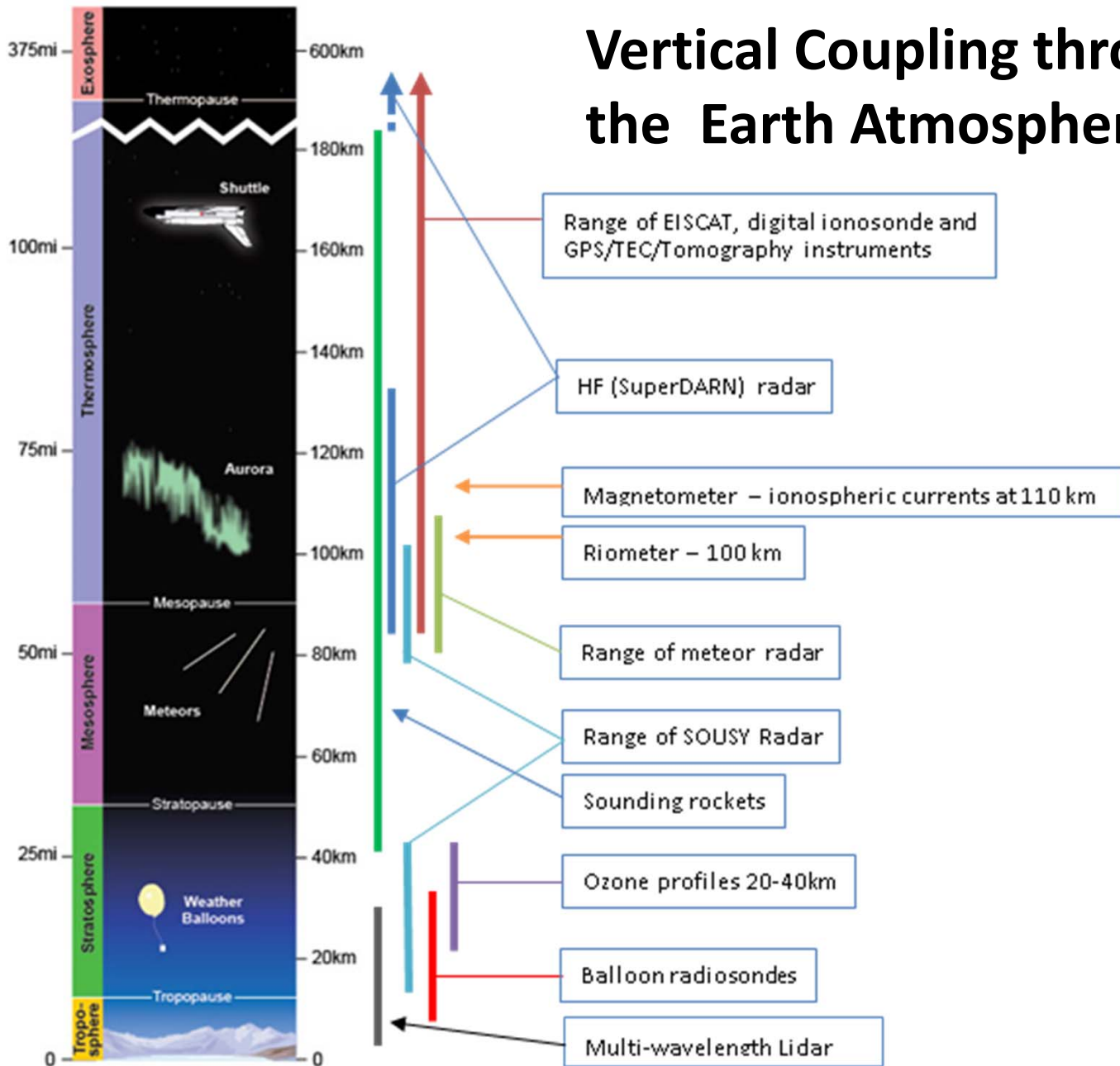
Coastal Workboat



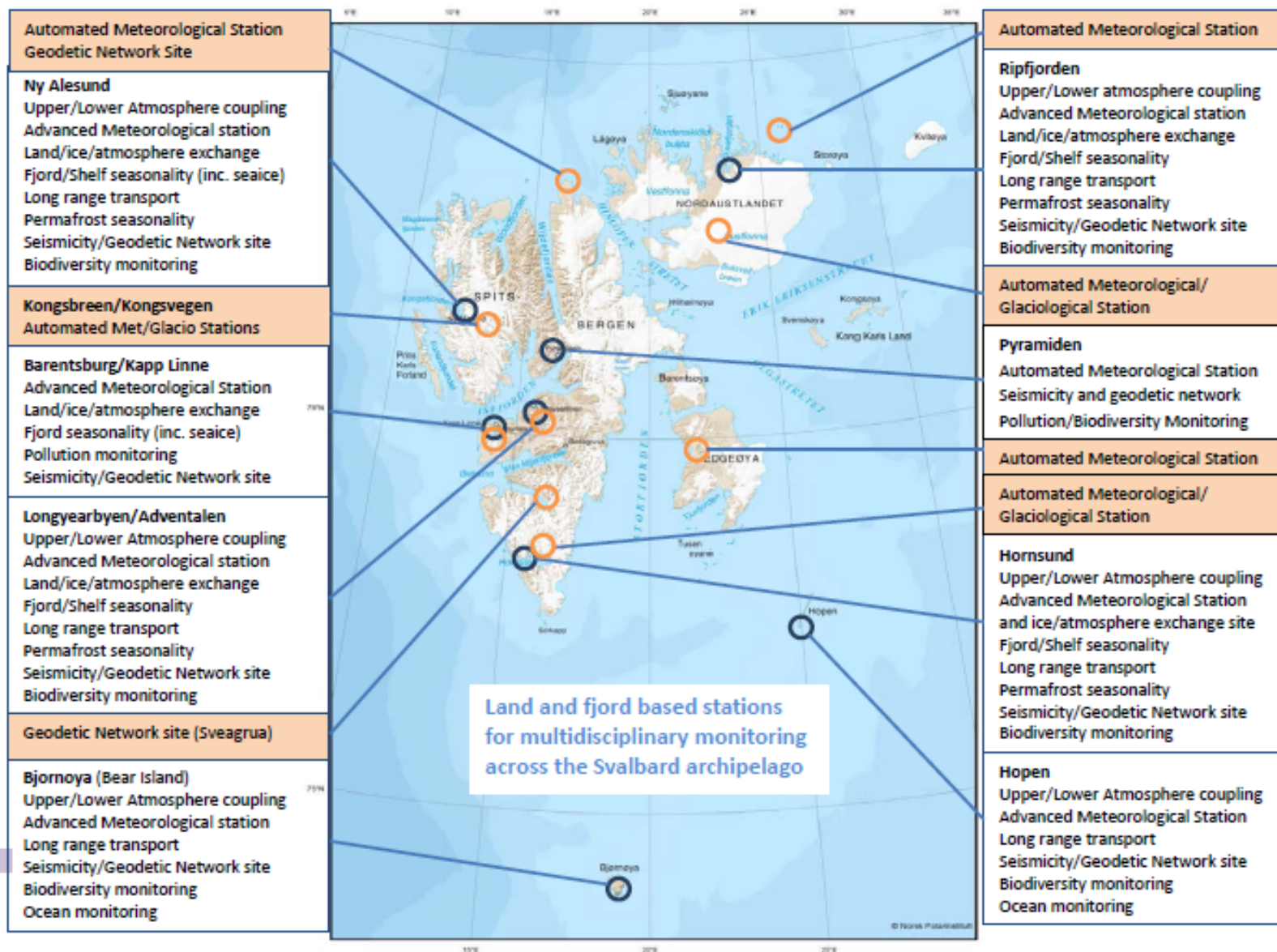
EISCAT Radars



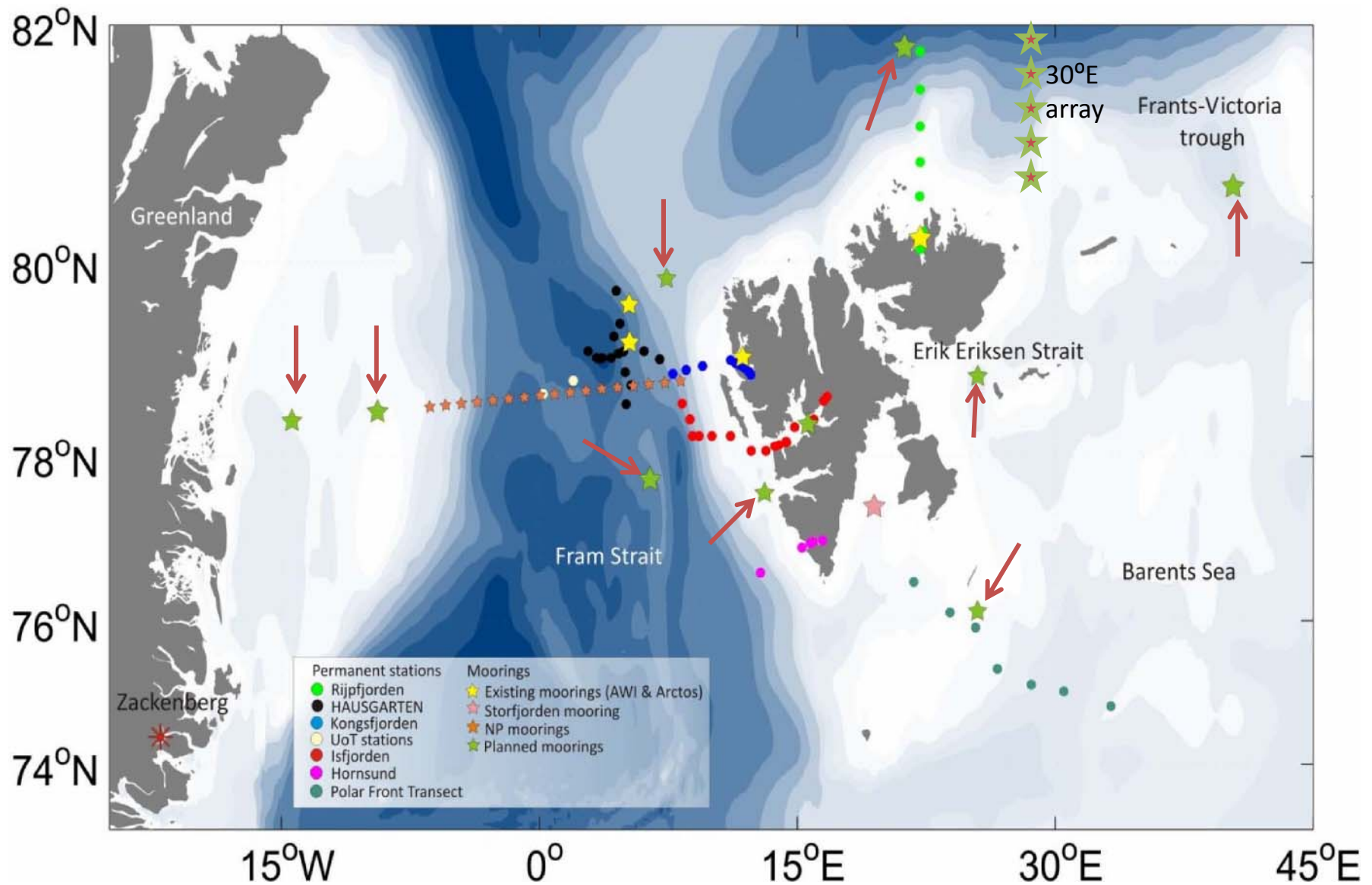
# Vertical Coupling throughout the Earth Atmosphere







# Oceanic Monitoring Sites (not including sea-ice based stations)



# STATUS of SIOS Preparatory Phase

- The Governance WP has developed a SIOS management structure
- Implementation Plans developing for:  
Research Infrastructure, Access, Logistic Services, Data, Education, and the core component - **Knowledge Centre**
- The lead nation, Norway, has announced the scope of its substantial financial contribution. Other nations preparing theirs.
- Establishment of a Knowledge Centre in late 2014 will facilitate development through to a fully operational system in 2021.



# STATUS of SIOS Preparatory Phase

- Formal links forged with:  
INTERACT – trans-national access to Arctic stations
- Links also being developed with pan-Arctic observing:  
SAON – SIOS as a SAON platform
- Links to be further developed with:  
EuroFleets – access to research vessels  
Eur-ARGO – ARGO float coordination  
FIXO3 – access to undersea observatories  
and others.....