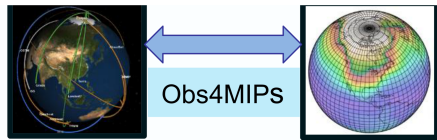


SOCAT-Obs4MIPs integration: general lessons



Target Quantities

Model
Output
Variables

Satellite
Retrieval
Variables

Modelers

Observation
Experts

Analysis
Community

Initial Target
Community



WMO



IOC



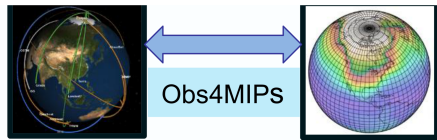
ICSU

International Council for Science



World Climate Research Programme

SOCAT-Obs4MIPs integration: general lessons



Target Quantities

Model
Output
Variables

Satellite
Retrieval
Variables

+in-situ

Modelers

Observation
Experts

Analysis
Community

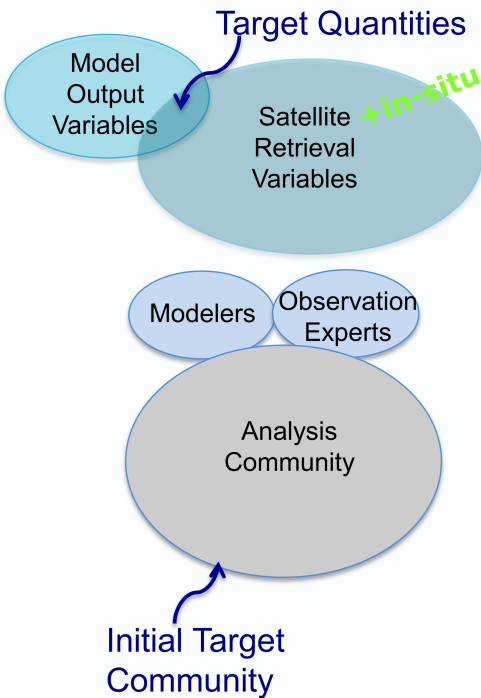
Initial Target
Community



ICSU
International Council for Science

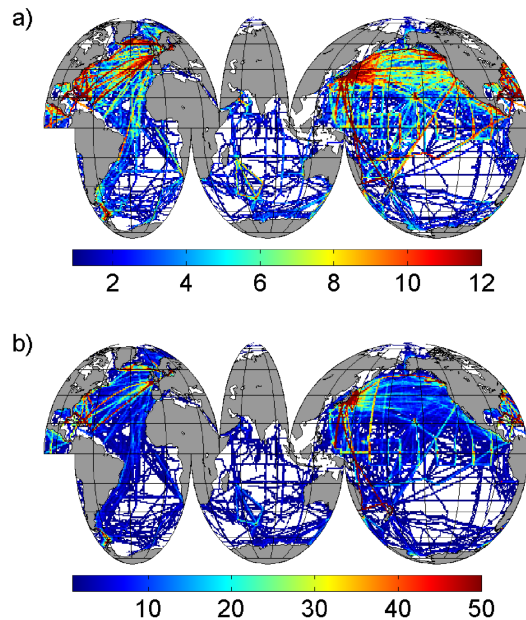
WCRP
World Climate Research Programme

SOCAT-Obs4MIPs integration: general lessons

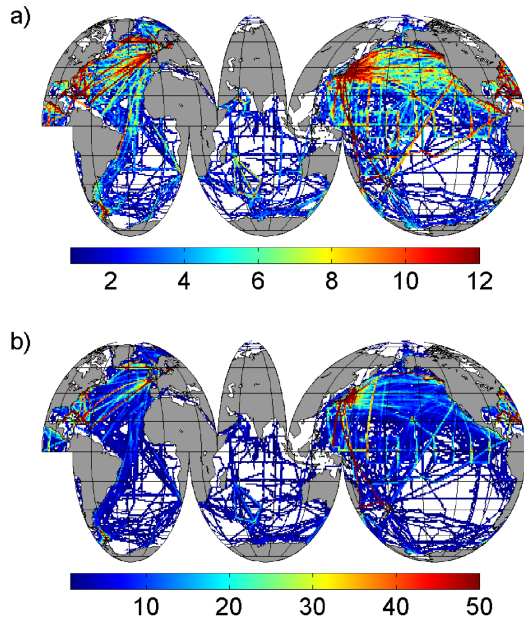


- Process & requirements well-documented by O4M
- Obs4MIPs tools/procedure much matured in 2016
- In general, data migration achievable with reasonable effort for a person who:
 - knows the dataset, its science and use in model-data comparison studies
 - has basic-to-good knowledge of Python, netCDF (+ basic CF- and CMIP-conventions)
- And if in general data properties not “too esoteric”
- Plus last step: ESGF node hosting (assisted)

SOCAT-Obs4MIPs integration: specific lessons



SOCAT-Obs4MIPs integration: specific lessons



- Interpolation (gap-filling): Different views in community. Conservative/cautious approach: Unless product unambiguously fills its own gaps, exclude until science & methodology fully matured
- Ancillary fields (NObs, StdErr): Be prepared for the devil being in the details
- Access to experts is key:
 - ❖ Good knowledge of literature, in particular model-data comparisons; and of data genesis
 - ❖ Scientific basis for inevitable key decisions
- Knowledge preservation for future updates, etc.