





SOLAS Project Integration

Project Aim

To produce global air-sea flux (gas and aerosol) products for SOLAS-relevant compounds and particles.

Why?

These data products can be used to quantify and assess the role of ocean-atmosphere interaction in climate, air quality and ocean biogeochemistry.

The SOLAS Community Data Originator Solas Project Integration Visualisation and Analysis Submission to SOLAS Data Processing Products

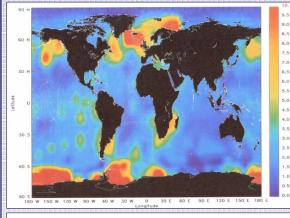
Key questions for SOLAS Project Integration

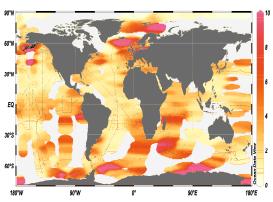
- 1. What compounds or substances are more/less important?
- 2. What information and ancillary data should be submitted (if available) alongside each measurement?
- 3. What problems have people encountered trying to use existing databases (e.g. format issues, data privacy)?

Project Focus – What Compounds/Substances?

- \triangleright Methane (CH₄)
- ➤ Methanol (CH₃OH)
- > Organohalogens
- ➤ Nitrous oxide (N₂O)
- ➤ Alkyl nitrates (RONO₂)
- ➤ Isoprene (C₅H₈)
- > Ammonia (NH₃)
- Aerosol composition
- ➤ Dust
- ➤ Dimethyl Sulphide (DMS)

 See the NOAA database
- Carbon dioxide (CO₂) See the CDIAC database





The Kettle DMS database (top; Kettle et al., 1999) with 15,617 measurements, and the database that it has evolved into (bottom; 31,589 measurements as of Feb. 2007; stored at http://saga.pmel.noaa.gov/dms/).

This work will synthesise concentration data to produce equivalent flux plots for other SOLAS-related compounds.



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