

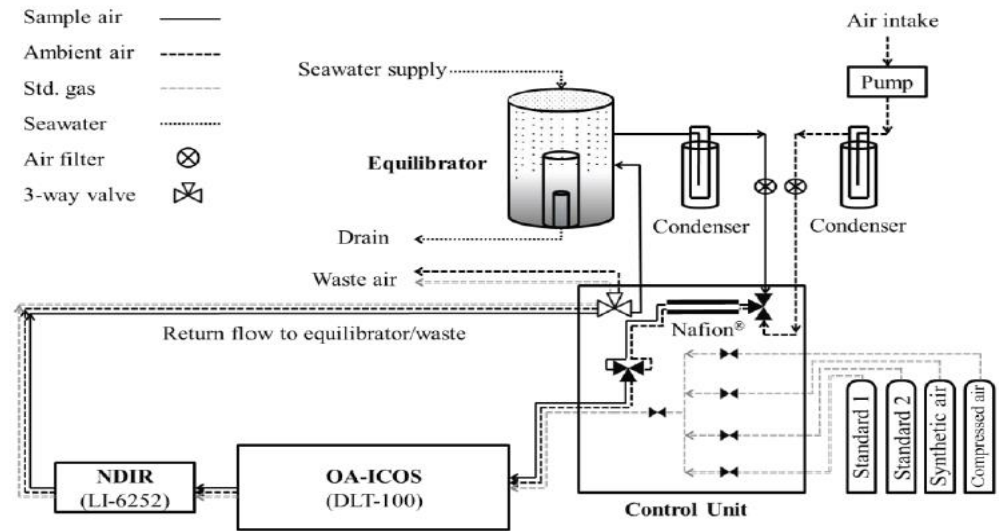
About the inclusion of other surface measurements in SOCAT

Tobias Steinhoff, Annette Kock,
Hermann Bange, Benjamin Pfeil



CO₂ meets other gases

CO₂ is not alone



Arevalo-Martinez, Biogeosciences, 2013

- New sensors made it possible to measure N₂O and CH₄ with the same frequency as CO₂
- These sensors can be easily coupled to existing underway equilibration systems

This results in huge amount of surface N₂O/CH₄ data being recorded together with surface pCO₂ data.

SOCAT meets MEMENTO

- Underway surface N_2O and CH_4 data in a uniform format
- Vertical profile data of N_2O and CH_4
- Data were measured by different methods
- Database is available on request



MEMENTO
Marine CH_4 - N_2O database



- Existing infrastructure for surface ocean data
- Well known data product
- ...



MEMENTO
Marine CH₄ - N₂O database

- General agreement in combining the datasets
- SOCAT and MEMENTO will **both** be visible
- Infrastructure needs to get ready for inclusion of MEMEMTO data
- How is the QCing harmonized
- ...

- What is with other parameters?
 - Oxygen
 - DIC
 - Alkalinity
 - ...