

Agenda – Southern Ocean Gas Exchange Experiment PI meeting

<http://www.joss.ucar.edu/joss_psg/meetings/Meetings_2007/GasEx>

Hilton Washington D.C./Silver Spring, 8727 Colesville Road, Silver Spring, MD

8 am to 5 pm, Wednesday, September 12, 2007

08:00 Continental Breakfast

08:30 Overview of Meeting: *David Ho (LDEO)*

08:35 Introduction to SO GasEx: *David Ho (LDEO) and Chris Sabine (NOAA/PMEL)*

Background, scientific goals, study location, port of call, etc. of SO GasEx

08:50-09:55 Presentations on individual field projects:

(Chair: *Rik Wanninkhof, NOAA/AOML*)

Lead PIs from each individual project will describe what they will do, and how their projects will contribute to the overall goals of SO GasEx; ca. 5 min + 5 min for Q&A

08:50-09:00	Quantifying air-sea gas exchange at high wind speeds using a dual gas tracer ($^3\text{He}/\text{SF}_6$) technique during the Southern Ocean Gas Exchange Experiment, <i>David Ho (LDEO)</i>
09:00-09:10	Southern Ocean air-sea carbon dioxide exchange, <i>Wade McGillis (LDEO)</i>
09:10-09:20	Measurement and parameterization of air-sea gas transfer over the Southern Ocean in GasEx-III, <i>Chris Fairall (NOAA/ESRL)</i>
09:20-09:30	Measurement and parameterization of air-sea DMS transfer over the Southern Ocean in GasEx-III, <i>Barry Huebert (Univ. of Hawaii)</i>
09:30-09:45	CO ₂ and hydrographic measurements during the GasEx-III Experiment, <i>Dick Feely (NOAA/PMEL)</i>
09:45-09:55	Measurement of nutrients during the Southern Ocean Gas Exchange Experiment (GasEx III), <i>Jia-Zhong Zhang (NOAA/AOML)</i>
09:45-09:55	Gas tracers of productivity and bubble-mediated gas exchange during the SO GasEx Experiment, <i>Roberta Hamme (Univ. of Victoria)</i>

09:55 15 MINUTE BREAK

10:10-11:20 Presentations on individual field projects (cont.)

10:10-10:20	Closing the mixed layer carbon budget during Southern Ocean GasEx, <i>Burke Hales (Univ. of Oregon)</i>
10:20-10:30	Autonomous multi-parameter measurements from a drifting buoy during the SO GasEx Experiment, <i>Chris Sabine (NOAA/PMEL)</i>
10:30-10:40	Quantifying the surface physical controls on CO ₂ transfer during the Southern Ocean Gas Exchange Experiment, <i>Will Drennan (Univ. of Miami)</i>
10:40-10:50	On the distribution of colored dissolved organic matter in the Southern Ocean and the potential for photoproduction of CO ₂ and CO, <i>Carlos del Castillo (Johns Hopkins Univ.)</i>
10:50-11:10	Phytoplankton absorption and carbon dioxide drawdown in the Southern Ocean: A consortium of observations, <i>Bob Vaillancourt (LDEO)</i>
	Optical properties in the Southern Ocean: In situ and satellite observations in support of Southern Ocean Carbon Program, <i>ZhongPing Lee (NRL)</i>
	Optical properties in the Southern Ocean: In situ measurements of phytoplankton absorption using the pFPT-TR instrument in support of the Southern Ocean Carbon Program, <i>Bruce Hargreaves (Lehigh Univ.)</i>
11:10-11:20	Differentiating sources of backscattering in the Southern Ocean: Calcite, bubbles, and other optical constituents, <i>Heidi Dierssen (Univ. of Connecticut)</i>

POST CRUISE ACTIVITIES

11:20 Data distribution and archiving for SO GasEx

Dave Glover, Biological and Chemical Oceanography Data Management Office (BCO-DMO)

11:35-12:00 Discussions about post-cruise plans

(Leads: Wade McGillis and David Ho, LDEO; Rapporteur: Burke Hales, Oregon State Univ.)

- Post cruise workshop to present results and establish collaborations
- SO GasEx session at AGU Meeting
- Special journal issue

12:00-13:00 LUNCH

CRUISE LOGISTICS AND SHIPBOARD OPERATIONS

13:00-14:00 Discussions about logistic and shipboard operations

(Leads: Chris Sabine and Dick Feely, NOAA/PMEL; Rapporteur: Mike DeGrandpre, Univ. of Montana)

- Science priorities
- Personnel
- Shipping and loading
- Tracer injection
- Stationary vs. "lawnmower" survey patterns
- Various deployments and CTD casts
- Water from Niskin rosette
- Other matters

14:00 15 MINUTE BREAK

14:15-15:15 Discussions about logistic and shipboard operations (cont.)

15:15 15 MINUTE BREAK

15:30-17:00 Discussions about logistic and shipboard operations (cont.)

17:00 END MEETING