

Accomplishments

- 18 talks
- 6 working groups
 - Iron Sources and Sinks
 - Foodweb Impacts
 - Role of Particulate Iron
 - Process Study Design
 - ~~Sequestration Efficiency~~ (Iron Use Efficiency)
 - Beyond the Southern Ocean: Broader Impacts of Iron Supply

Next Steps

- Meeting Summary
 - EOS? Nature Geoscience (cross site comparison)?
 - Short correspondence or longer review (also consider DSR II)

Supplementary Table 1 - Comparison of CROZEX and KEOPS

	CROZEX ⁴	KEOPS ⁸	BWZ	South Georgia	Pine Island etc
Location	44°S 50°E South of SubAntarctic Front	50°S 73°E South of Polar Front			
Area of bloom	300 km x 400 km	300 km x 400 km			
Water depth	3000 m	500 m			
Temperature in bloom	6°C ³⁴	3.5°C ³⁵			
Circulation	similar ^c , weak ¹³	similar ^c , weak ³⁶			
Peak chl a	6 mg chl a m ⁻³	3 mg chl a m ⁻³			
Bloom duration (> 1 mg chl m ⁻³)	10 weeks 13 Sep - 24 Nov 2004	11 weeks 19 Nov 2004 - 2 Feb 2005			
<i>Phaeocystis</i>	dominated late bloom ¹⁵	ship-board experiments only ³⁶			
Silicate ^d in bloom	0.1 - 2 μM	1 - 2 μM			
Silicate ^d in HNLC area	18 μM (Nov), < 4 μM (Jan)	25 μM ³⁷			
Nitrate ^d in bloom	16 - 24 μM	> 20 μM ³⁷			
Nitrate ^d in HNLC area	23 - 25 μM	29 μM			
Horizontal Fe supply	yes, from Possession and East Islands	probable, from Heard and McDonald Islands ^{28, 29}			
Excess ^a vertical Fe supply under bloom	no, deep water > 2000 m under both +Fe and -Fe areas	yes, from 500 m plateau under +Fe area			
Excess ^a Fe supply to bloom	0.039 mmol m ⁻² y ⁻¹	0.005 mmol m ⁻² y ⁻¹ ^b			
Excess ^a carbon sequestered past 200 m	337 mmol m ⁻² y ⁻¹	3317 mmol m ⁻² y ⁻¹ ^b			
C:Fe sequestration ratio	8640	668000			



Next Steps

- Meeting Summary
 - EOS? Nature Geoscience (cross site comparison)?
 - Short correspondence or longer review (also consider DSR II)
- Meeting Report (White Paper)
 - May need help with citations
- Deep Sea Research II Special Issue (Fall 2011 Deadline)
 - Critical mass of papers already identified from BWZ project
 - Encourage additional papers on cross-program synthesis or unpublished data from earlier programs

Next Steps (continued)

- Future Meetings or Workshops?
 - Despite numerous process studies to date it's apparent we still have much to learn
 - Consider meeting again in 2-3 years (workshop or at least propose a special session at AGU or EGU)

Thank You!

