

ISSI WORKSHOP ON THE EARTH'S CRYOSPHERE AND SEA LEVEL CHANGE

MONDAY 22.03.2010

08:30-08:45	Registration in ISSI Hallerstrasse 6, 1 st floor	
08:45-09:00	Introduction to ISSI and the Workshop	Roger Bonnet / Lennart Bengtsson / Thomas Stocker
	Chairman	Roger Bonnet
09:00- 09:35	Historical Perspective and Background	Hartmut Grassl
	1. Long Term Variations	
	Chairman	Gilles Ramstein
09:35-10:10	Long term variation of the Earth's Cryosphere. Introductory comments	Gilles Ramstein
10:10-10:35	<i>Coffee break</i>	
10:35-11:10	Model simulation of the evolution of climate and ice sheets since the Eemian	Sylvie Charbit
11:10-11:45	Separating fluctuations from trends: the behaviour of the Greenland Ice Sheet in the last millennium	Glenn Milne
11:45-12:20	Holocene climate variations and estimated consequences for the Cryosphere and sea level change	Heinz Wanner
12:20-13:00	Discussion	Gilles Ramstein
13:00-14:30	<i>Lunch</i>	
	2. Observations of Ice Sheets	
	Chairman	Ola M. Johannessen
14:30-15:05	Overview, satellite based mass balance est.	Jay Zwally
15:05-15:40	Present day regional mass loss of Greenland observed with satellite gravimetry	Ernst Schrama
15:40-16:15	Arctic warming, Greenland melt and moulins	Konrad Steffen
16:15-16:45	<i>Coffee break</i>	
16:45-17:20	Interaction between the warm subsurface Atlantic water in the Sermilik Fjord with the Helheim glacier on the South Eastern part of Greenland	Ola M. Johannessen
17:20-18:00	Discussion	Ola M. Johannessen
18:00	<i>Welcome reception</i>	

TUESDAY 23.03.2010

3. Dynamics of Ice sheets

	Chairman	Philippe Huybrechts
09:00-09:35	Role of ice dynamics in the current and future response of the polar ice sheets	Philippe Huybrechts
09:35- 10:10	Understanding contemporary change in West Antarctica: ice dynamics and ocean interactions	Tony Payne
10:10-10:45	Marine ice sheet stability and grounding line modelling	Frank Pattyn
<i>10:45-11:15 Coffee break</i>		
11:15-11:50	Modelling tidewater outlet glacier dynamics	Andreas Vieli
11:50-12:30	Discussion	Philippe Huybrechts
<i>12:30-14:00 Lunch</i>		

4. Modelling of mass balance

14:00-14:35	Chairman	Atsumu Ohmura
14:35-15:10	Large-scale mass balance of land ices from comprehensive atmospheric models	Lennart Bengtsson
15:10-15:45	Greenland ice sheet mass balance (year 1700-2100): observations informing modeling	Jason Box
<i>15:45-16:15 Coffee break</i>		
16:15-16:50	Surface mass balance of the Antarctic ice sheet as presented by contemporary global reanalyses	David Bromwich
16:50-17:25	Modelling the past, present and future surface mass balance of the Greenland and Antarctic ice sheets	Van den Broeke
17:25-18:00	Combined use of a variable resolution GCM and physical downscaling methods for studies of the Antarctic surface mass balance	Gerhard Krinner
18:00-18:30	Discussion	Atsumu Ohmura

WENDESDAY 24.03.2010

5. Glacier Observation and modelling

Chairman

Hans Oerlemans

09:00-09:35	Mass budget of glaciers and climate change – critical issues	Hans Oerlemans
09:35-10:10	Observed mass balance of mountain glaciers and Greenland ice sheet in the 20 th century and the present trends	Atsumu Ohmura
10:10-10:45	Creating a global inventory of glaciers and ice caps from satellite data: Status, challenges and outlook	Frank Paul
10:45-11:15	<i>Coffee break</i>	
11:15-11:50	Global-average mass balance of small glaciers: sampling problems and relationship to forcing factors	Graham Cogley
11:50-12:25	Present state and prospects of ice sheet and glacier modeling	Heinz Blatter
12:25-13:00	Discussion	Hans Oerlemans
14:30-22:00	<i>Excursion: Payerne and Gruyere inc. dinner</i>	

THURSDAY 24.03.2010

6. Sea Level and Geodynamic effects

Chairman		Glenn Milne
09:00-09:35	Introduction and overview	Glenn Milne
09:35- 10:10	Resolving the sea-level budget over decades and its implications	John Church
10:10-10:45	The era of altimetry, problems, assimilation into models	Carl Wunsch
<i>10:45-11:15 Coffee break</i>		
11:15-11:50	Reconciling budgets, including with reference to Grace	Anny Cazenave
11:50-12:25	Extreme vs. mean sea levels	Philip Woodworth
12:25-13:00	Discussion	Glenn Milne
<i>13:00-14:30 Lunch</i>		
Chairman		Philip Woodworth
14:30-15:05	Evolution of ice sheets during glacier cycles: lessons from the past (<i>may be changed</i>)	Kurt Lambeck
15:05-15:40	Isolating cryosphere and hydrological fingerprints	Mark Tamisiea
15:40-16:15	Ocean circulation fingerprints	Detlef Stammer
<i>16:15-16:45 Coffee break</i>		
16:45-17:20	Satellite gravimetry and ice mass balance	Reinhard Rummel
17:20-18:00	Discussion	Philip Woodworth
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FRIDAY 26.03.2010

Remaining items

	Chairman	Einar Herland
09:00- 9:45	Permafrost in Transition: State and Fate of Permafrost in Northern Hemisphere	Vladimir Romanovsky
09:45-10:30	Cryosat 2 – a progress report	Roger Haagmans

10:30-11:00 Coffee break

7. Discussion and summary

	-Chairman	Thomas Stocker
11:00-12:30	- General discussion	-

12:30-14:00 Lunch

Meeting of conveners

14:00-17:00	-	-
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