Understanding Sea-level Rise and Variability Workshop Agenda
Paris, France, 6 - 9 June 2006
Agenda as of 11 May 2006

6 June 2006, Tuesday

8:30 Welcome
Stan Wilson, on behalf of the Steering Committee Co-Chairs
Patricio Bernal, IOC Executive Secretary
Thomas Rosswall, Executive Director, International Council for Science
Ann Henderson-Sellers, Director, World Climate Research Program
John Church, on behalf of the Steering Committee Co-Chairs
Thorkild Aarup, Local Organizing Committee

9:15 Introduction and Overview
Kurt Lambeck, “Paleo- and 20th Century Sea-level Variations” (25 minutes)
Anny Cazenave, “Present Day Sea-level Rise: Assessment and Key Uncertainties” (25 minutes)
Koni Steffen, “Current Cryospheric Contributions to Sea-level Rise and Variability” (25 minutes)

10:45 Break
Jonathan Gregory, “Current Projections and Key Uncertainties” (25 minutes)
Robert Nicholls, “Assessing Potential Impacts and Responses to Sea-level Rise” (25 minutes)
Ralph Rayner, “Assessing the Economic Impact of Uncertainties in Sea-level Rise Projections on Key Industry Sectors” (25 minutes)

12:45 Lunch on site with Poster Session

2:00 What Have We Learned From the Paleo/Historical Records
Session Chair: Kurt Lambeck
Rapporteur: Colin Woodroffe
- Jacques Louis Laborel, “Continuous or Discontinuous: How Field Data on Holocene Sea Level May Help Understand the Future” (20 minutes)
- Marco Anzidei, “Archaeological Indicators of Sea-level Change in the Recent Millenia: Examples From the Mediterranean” (15 minutes)
- Alex Wright, “1500-Year-Long Sea-level Reconstructions from North Carolina to Newfoundland” (15 minutes)
Discussion

3:45 Break

4:15 20th Century Sea-level Rise and Variability Estimates From Tide Gauges and Altimeters
Session Chair: Mark Merrifield and Gary Mitchum
Rapporteur: Simon Holgate
- Gary Mitchum, “Overview” (20 minutes)
- Mark Merrifield, “Estimates from Tide Gauges” (20 minutes)
- Steve Nerem, “Estimates from Altimeters” (20 minutes)
Discussion

6:00 Reception with Poster Session
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7 June 2006, Wednesday

8:30  Ocean Thermal Expansion
Session Chair: Anny Cazenave and John Church
Rapporteur: Pierre-Yves LeTraon
 Dean Roemmich, “Synthesis of Recent Progress” (25 minutes)
 Detlef Stammer, “Synthesis of Steric Rise Estimates from Ocean Reanalysis” (15 minutes)
 Don Chambers, “The Potential to Estimate Ocean Thermal Expansion by Combining GRACE and Satellite Altimeter Data” (15 minutes)

10:15  Break

 Jochem Marotzke, “Review of Modeling Ocean Steric Rise” (15 minutes)
 Tatsuo Suzuki, “Review High Resolution Modeling of Thermal Expansion” (15 minutes)
Discussion

12:00  Lunch on site with Poster Session

1:30  Contributions from the Cryosphere to Sea-level Change
Session Chair: Bob Thomas, Koni Steffen, Mark Dyurgerov, Philippe Huybrechts
Rapporteur: Edward Hanna
 Graham Cogley, “Glaciers and Sub-Polar Ice Caps: Measurement, Uncertainties and Potential Improvements” (30 minutes)
 Robert Thomas, “Polar Ice Sheets and Ice Shelves: Measurement, Uncertainties and Potential Improvements” (30 minutes)

2:35  Break

 Eric Rignot, “Ice Sheets and Glaciers, Recent and Ongoing Rapid Changes” (20 minutes)
 Philippe Huybrechts, “Ice Sheet Modeling: Current Status and Needed Improvements” (20 minutes)
 Sarah Raper, “Glacier Modeling: Current Status and Needed Improvements” (20 minutes)
Discussion

5:15  Poster Session
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8 June 2006, Thursday

8:30 Terrestrial Water Storage
   Session Chair: Anny Cazenave
   Rapporteur: Chris Milly
    Katia Laval, “Model Results (and Associated Uncertainties) of Change in Land Water Storage and Effects on Sea-level” (20 minutes)
    John Wahr, “GRACE Results in Land Hydrology, Current Limitations and Potential for the Future” (20 minutes)
    Dork Sahagian, “Terrestrial Water Storage Change Due to Human Activities” (20 minutes)
   Discussion

10:30 Break

Poster Session

12:00 Lunch on site with Poster Session

1:30 Geodetic Observation and the Precise Reference System for Global and Regional Sea-level Measurements
   Session Chair: Ruth Neilan
   Rapporteur: Paul Tregoning
    Markus Rothacher, “Geodetic Observations: The Foundation for Assessing and Interrelating Sea-level Measurements and Uncertainties” (20 minutes)
    Geoff Blewitt, “Regional and Global Measurements, the Reference Frame for Understanding Observations” (15 minutes)
    Tilo Schoene, “Linking GPS to Tide Gauges and Tide Gauge Benchmarks” (15 minutes)
   Discussion

3:25 Break

Responses to Changes in Surface Mass Loading
   Session Chair: Jerry Mitrovica and Bert Vermeersen
   Rapporteur: Erik Ivins
    Glenn Milne, “GIA Corrections to Tide Gauge and Altimeter Data” (25 minutes)
    Mark Tamisiea, “Sea-level Change Driven By Recent Cryospheric and Hydrological Mass Flux” (25 minutes)
   Discussion

7:00 Dinner on the boat
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9 June 2006, Friday

8:30 Past and Future Changes in Extreme Sea Levels and Waves
Session Chair: Philip Woodworth and Jason Lowe
Rapporteur: Kathleen McInnes
- Phil Woodworth, “Evidence for Changes in Extreme Sea Levels and Waves in the Recent Past” (15 minutes)
- Ruth McDonald, “Mid-latitude Storms / Simulated Changes in Atmospheric Drivers of Extreme Sea Levels” (15 minutes)
- Thomas Knutson, “Tropical Cyclone Intensities: Recent Observation and Simulation Response to CO2-induced Climate Warming” (15 minutes)
- Jason Lowe, “Simulated Changes in Extreme Water Levels” (25 minutes)
Discussion

10:30 Break

11:00 Summary, Integration and Next Steps
Session Chair: John Church, Phil Woodworth and Konrad Steffen

Summary
Review recommendations developed during each plenary session regarding research, technology development and sustained systematic observations.

Integration
Compare and contrast the observational and model estimates and their error bars from different disciplines to see if they add up. Discuss global averages, regional patterns and the probabilities of projections.

12:30 Lunch

1:15 Summary, Integration and Next Steps Continued
Session Chair: John Church, Phil Woodworth and Konrad Steffen
Discuss recommendations, options to pursue them, and agencies to engage in next steps. Should sea-level indices be produced?

Workshop Wrap-Up
Session Chair: John Church
Discuss future meetings, workshop report/book and final comments.

2:15 Adjournment

2:45 Steering Committee Meeting