

CRYOSAT 2005 Workshop - Programme

Day 1, Tuesday 8 March, 2005

The Cryosat Mission, Payload, and User Segment	Chair: Pascal Gilles/Guy Ratier
Official Welcome	Volker Liebig
Science Requirements	Duncan Wingham
The CryoSat Payload	Constantin Mavrocortados
The CryoSat Mission	Richard Francis
The CryoSat Ground Segment Design and Operations	Pierre Viau
CryoSat Data Access	Pascal Gilles
System Performance	Richard Francis
Validation Concept	Duncan Wingham
Cryosat validation campaigns implementation	Malcolm Davidson
Poster Session	
Sea ice radar altimeter signature modelling experiments	Rasmus Tonboe
Application of the CryoSat SIRAL instrument for monitoring of mountain glaciers: needs and potential	Andreas Kääh
Comparison of Cryosat sea ice thicknesses with PIPS sea ice model thicknesses	Kim Partington
The Mass Budget of the Lambert Glacier-Amery Ice Shelf (AIS) system	Matt King
INTER-COMPARISON OF AIRBORNE DELAY/DOPPLER PHASE MONOPULSE RADAR ALTIMETER AND LIDAR MEASUREMENTS OVER SVALBARD LAND- AND SEA-ICE	Vivienne Raper
WIND and SNOW: IMPACT ON SURFACE MASS BALANCE OF EAST ANTARCTIC ICE SHEET	Massimo Frezzotti
Use of CRYOSAT data for Continental Ice Monitoring	Benoit Legresy
Improvements in Global Marine Gravity and Bathymetry using CryoSat Multi-looked Waveform Data	David Sandwell
Upgrading Interferometric Models of European Tidewater Glaciers with Altimetry Data	Aleksey Sharov
Evolution of Sea-Ice Cover in the Ross Sea from December 2003 to March 2004 as observed by the Passive Microwave Radiometer AMSR-E	Flavio Parmiggiani
Sea-ice freeboards in the Arctic Ocean from ICESat and airborne laser	Henriette Skourup
Validation of Cryosat level 2 and SARIn level1b data over Antarctica and potential of SARIn level 1b data for mountain glacier mass balance	Yves Arnaud
PROALP: Mapping and Monitoring of Permafrost in the Alps using Differential Radar-Interferometry - First Results	Johannes Zilger
ALTITUDE ACCURACY IMPROVEMENT BY USING A NEW RADAR ALTIMETER SIMULATOR FOR ENVISAT DATA	Batuhan Osmanoglu
On the combination of CryoSat with classical altimeter systems	Wolfgang Bosch
InSAR Data Analysis over Gangotri Glacier for Observing Height Changes	Y.S. Rao
Future use of microwave observations in support of Cryosat	Christian RUIZ
Toward remote sensing of the net sea ice volume flux in the Greenland Sea	Gunnar Spreen

Simulation of radar-altimeter return power and waveforms over ice covered regions	Verena Seufer
Activities within DEOS related to the Cryosat Mission	Ernst Schrama
HIGH FREQUENCY GROUND BASED RADAR MEASUREMENTS IN THE PERCOLATION ZONE OF THE GREENLAND ICE CAP	Julian Scott
ASIRAS LEVEL 2 PROCESSED DATA RESULTS	Catherine Bouzinac
Analysis and interpretation of ENVISAT individual echoes for applications over non-ocean surfaces	Philippa A. M. Berry
The Challenge of Hydrologic Complexity: Extreme variability in the occurrence of water on the land surface	Bo Zhang
CryoSat Internal Calibration: Processing methods and Data examples.	Robert Cullen
L1b SAR/SARIn processor descriptions for CryoSat and ASIRAS.	Robert Cullen
Estimating glacial isostatic adjustment and present-day ice mass balance in Dronning Maud Land, Antarctica	Jaakko Mäkinen
CryoSat swath-mode elevation retrievals for InSAR baseline control	Andrew Shepherd
Simulation of d2p radar echoes from CRYOVEX 2003 scanning laser measurements	David Wallis
Use of CryoSat SIRAL FBR SAR Level 1a data to test Delay-Doppler resolution of ocean surface geophysical signals	Walter Smith
The Everglades wetlands as a laboratory for testing and calibrating the CRYOSAT hydrological applications	Shimon Wdowinski
CNES Toulouse involvement in Cryosat in-orbit mission	Sophie Coutin-Faye
Combined sea ice thickness investigation using in situ observations, moored upward looking sonar and satellite remote sensing	Sebastian Gerland
Validation of satellite images of sea ice using IceCam	Richard Hall
CryoSat Data Processing in Near Real Time for Oceanographic Applications	Jérôme Benveniste
The CryoSat Satellite, Payload Data Processing and Validation Campaigns	CryoSat Project Team
Cryosat L2 Processing Algorithms and Products	Steven Baker
Cryosat: Showing the Way to a Future of Improved Ocean Mapping	Walter Smith

Day 2, Wednesday 9 March 2005

The Cryosat Mission Concept	
CryoSat Data as Delay-Doppler Proof of Concept	R. Keith Raney
Calibration and Validation	Chair: Malcolm Davidson/Duncan Wingham
Results of the CryoSat Validation Experiment - CryoVEx-2003	Sine M. Hvidegaard
ASIRAS campaign 2004b and state of data processing progress	Veit Helm
Investigations of meltwater refreezing and firn density variations in the percolation zone of the Greenland Ice Sheet	Peter Nienow
Spatial and temporal variability in snow accumulation on Austfonna, Svalbard.	Andrea Taurisano
CryoSat Calibration/Validation Experiments on the Devon Ice Cap, Canada	David Burgess
Concept of CryoSat Product Validation in the Region of Schirmacheroase / Antarctica	Reinhard Dietrich
Calibration and validation of Cryosat on the Antarctic Peninsula	Robert Arthern
Cal/val measurements for CryoSat along the EGIG line, Greenland	Elizabeth Morris
Cal/Val on ICESat and Application to Cryosat	Bob Schutz
NASA ATM Applications to ICESat cal/val	William Krabill
SIRAL Beam-formation Verification using Transponders	Mònica Roca

Applications	Chair: Mark Drinkwater/René Forsberg
Arctic Ocean mean-sea surface, geoid and gravity from surface data, ICESAT and GRACE - a reference for Cryosat sea-ice mapping	Rene Forsberg
Sea Level Variations in the Polar Region	C.K. Shum
Sea ice freeboard and thickness as function of snow cover and ice density	Stein Sandven

Day 3, Thursday 10 March 2005

Applications	Chair: Mark Drinkwater/René Forsberg
Greenland ice sheet elevation change derived from ERS-1 and ERS-2 satellite altimeter data and its relation with climate parameters	Kirill Khvorostovsky
What can we learn with a mixed product ERS-Envisat-Cryosat above ice sheet?	Frédérique Rémy
Comparing CryoSat, ICESat, and AMSR-E measurements over Antarctic Sea Ice	Donghui Yi
Overview of the ICESat Mission and Cal/Val Opportunities	Jay Zwally
Arctic Sea Ice freeboard height: Impact of ICESat, CryoSat geoid and tide models	Alexander Braun
The Utilisations of CRYOSAT Data of Assess the Dynamics and Mass Balance of Eastern Weddell Sea Ice Sheet/Ice Shelf Systems	Manfred Lange
Concluding Remarks	