

Fifteen Years of Progress in Radar Altimetry - Programme

Day 1, Monday 13 March 2006

Symposium Plenary Session, Sala Perla

Welcome from the city of Venice	Massimo Cacciari, Mayor of Venice, given by Prof. Luigi Alberotanza
Official Welcome by ESA [MP3] [PDF]	Volker Liebig, Director of Earth Observation, ESA
Official Welcome by CNES	Philippe Goudy, Director of Orbital Projects, CNES
Opening and Keynote Presentations	Chairs: J. Benveniste (ESA) and Y. Ménard (CNES)
Altimetry: Past, Present, and Future	Carl Wunsch (MIT)
Mesoscale Eddy Dynamics observed with 15 years of altimetric data	Rosemary Morrow (LEGOS)
How satellites have improved our knowledge of planetary waves in the oceans	Paolo Cipollini (National Oceanography Centre, Southampton)
The Ebb and Flow of Tidal Science, and the Impact of Satellite Altimetry	Richard Ray (NASA GSFC)
ARGO, the Integrated Approach	Dean Roemmich (Scripps Institute of Oceanography)
Present-day sea level rise: do we understand what we measure?	Anny Cazenave (LEGOS)
15 years of wave height data assimilation	Peter Janssen (ECMWF)
Marine Geoid, Gravity, and Bathymetry: An increasingly clear view with satellite altimetry	David McAdoo (NOAA)
The New Vision of the Cryosphere Thanks to 15 Years of Altimetry Observations	Frédérique Rémy (CNRS-LEGOS)
Two decades of inland water monitoring using satellite radar altimetry	Philippa A. Berry (EAPRS Lab)
Parallel sessions	
Session 1: Oceanography	
Oceanography: High Frequency Session Summary	Chairs: D. Stammer and L. Alberotanza
Progress on Dynamics and Thermodynamics in Western Boundary Currents	Kathryn Kelly (University of Washington)
Improved description of the mesoscale variability by combining four altimeter missions	Ananda Pascual (IMEDEA(CSIC-UIB))
Temporal Changes in Ocean Eddy Transports	Detlef Stammer (University of Hamburg)
Characterizing the variability of the Eastern North Pacific in Time and Space	Robin Tokmakian (Naval Postgraduate School)
Decorrelation scales of high resolution turbulent fluxes at the ocean-surface and a method to fill in gaps in satellite data products	Anastasia Romanou (Columbia University and NASA-GISS)
Session 5: Building the 15-Year Altimetric Record	
Building the 15-Year Altimetric Record/Calibration and validation Session Summary	Chairs: R. Scharroo and J. Lillibridge
20 Years of Improvements to GEOSAT Altimetry	John Lillibridge (NOAA)
Sea state bias – 20 years on	Christine Gommenginger (National Oceanography Centre, Southampton)

Overview of the Improvements Made on the Empirical Determination of the Sea State Bias Correction	Sylvie Labroue (CLS)
Calibration of ERS-2, TOPEX/Poseidon and Jason-1 Microwave Radiometers using GPS and Cold Ocean Brightness Temperatures	Stuart Edwards (Newcastle University)
The Altimetric Wet Tropospheric Correction: Progress since the ERS-1 mission	Laurence Eymard (LOCEAN-IPSL)
Session 2: Cryosphere	
Cryosphere Session Summary	Chairs: F. Rémy and D. Wingham
Satellite radar altimetry over sea ice - from Seasat to CryoSat	Seymour Laxon (University College London)
Mass Balances of the Greenland and Antarctic Ice Sheets from Satellite Radar Altimetry	Jay Zwally (NASA Goddard Space Flight Center)
Combining satellite altimetry (ERS-2 and ENVISAT) with SAR interferometry and SPOT photogrammetry for studies of Austfonna ice cap (Svalbard)	Alexei Kouraev (LEGOS)
Ice Sheet Topography from ERS Radar Altimetry	Jonathan Bamber (University Bristol)
ENVISAT radar altimeter as a sounding radar on the Amery Ice shelf	Pascal Lacroix (LEGOS)
IDS Workshop	
International Doris Service Workshop	
Parallel sessions, continued	
Session 1: Oceanography	
Oceanography: High Frequency	Chairs: D. Stammer and L. Alberotanza
Constraining the mesoscale field	Gregg Jacobs (Naval Research Laboratory)
The Interaction Between the Mesoscale and Gyre-Scale Variabilities of the Argentine Basin	Lee-Lueng Fu (Jet Propulsion Laboratory)
Eddies and Mean Flow in the Antarctic Circumpolar Current	Sarah Gille (University of California San Diego)
Dynamics of the Near-Uniform Basin-Wide Wind-Driven Sea Level Fluctuation of the Mediterranean Sea	Ichiro Fukumori (JPL/Caltech)
Recent advances on the characterization of mesoscale vortices from altimetric maps	Jordi Isern-Fontanet (IFREMER)
Session 5: Building the 15-Year Altimetric Record	
Building the 15-Year Altimetric Record/Calibration and validation	Chairs: R. Scharroo and J. Lillibridge
Lessons Learned for Science Processing	Philip Callahan (Jet Propulsion Laboratory)
Three Decades of Precision Orbit Determination Progress, Achievements, Future Challenges and its Vital Contribution to Oceanography and Climate Research	Scott Luthcke (NASA GSFC)
Geographically correlated errors – problem solved?	Wolfgang Bosch (DGFI)
15 years of improvements in ocean altimetry performance: a review	Joel Dorandeu (CLS)
Absolute Calibration: the Closure Equation to Link Altimetric Missions TOPEX/Poseidon, Jason-1 and Envisat results from Corsica and Harvest Calibration Sites	Pascal Bonnefond (OCA-GEMINI)
Session 2: Cryosphere	
Cryosphere	Chairs: F. Rémy and D. Wingham
Hydrological networks beneath Antarctica: New signals from altimetry	Andrew Shepherd (Scott Polar Research Institute)
Historical understanding of ice sheet dynamics versus evolution of topography	Frédérique Rémy (CNRS)
Arctic Ocean geoid, ice thickness and mean sea level – the ArcGICE project	Rene Forsberg (Danish National Space Center)

Satellite altimetry over ice shelves: tides and grounding lines	Helen Amanda Fricker (Scripps Institution of Oceanography)
Application Of Radar Altimetry To Estimate Sea Ice Extent and Thickness East of Greenland	Lisa Pertusini (Politecnico di Milano)
IDS workshop, continued	
International Doris Service Workshop	
Reception, Sala Laguna	
Day 2, Tuesday 14 March 2006	
Parallel sessions, continued	
Session 1: Oceanography, continued	
Oceanography: Low Frequency	Chairs: C. Wunsch and L. Fu
The seasonal cycle of the South Indian Ocean from model and altimeter data.	Ricardo Matano (Oregon State University)
Rossby wave and eddy in the North Pacific Subtropical Countercurrent	Qinyu Liu (Physical Oceanography Lab.)
Dynamical and thermodynamical signatures of Rossby waves in presence of mean flow and topography	Remi Tailleux (University of Reading)
Causes of large-scale sea level variations in the Southern Ocean: Analyses of sea level and a finite element barotropic model	Frederic Vivier (LOCEAN (ex-LODYC), CNRS)
On the low-frequency variability in the Indian Ocean	Irina Sakova (CSIRO Marine and Atmospheric Research)
Seasonal and interannual variability of the North Pacific Ocean: modeling results and their validation through altimeter data	Stefano Pierini (Università di Napoli Parthenope)
Antarctic Circumpolar Transport Variability from a combination of precise altimetry and GRACE 'bottom pressure' data.	Victor Zlotnicki (Jet Propulsion Laboratory)
Session 5: Building the 15-Year Altimetric Record, continued	
Building the 15-Year Altimetric Record/Calibration and validation	Chairs: R. Scharroo and J. Lillibridge
Fifteen years of ERS satellite orbits and altimetry: An overview	Remko Scharroo (Altimetrics LLC)
High Rate Waveforms Analysis: 10 years of geophysical applications	Jean Tournadre (IFREMER)
ENVISAT S-Band Altimeter Calibration and Validation	Michiel Otten (ESA/ESOC)
The Calibration of ESA Altimeters from ERS-1 to CryoSat	Mònica Roca, et al. (PiLDo Labs, Barcelona)
The 15-Year Altimetric Record/Long time series	Chairs: G. Mitchum and J. Verron
History of Altimetry, 1960–1992	Robert Stewart (Texas A&M University)
Building a Record of Surface Elevations of the Continental Ice Sheets from Satellite Radar Altimetry.	Anita C. Brenner (SSAI)
EKE and circulation variability in the Labrador Sea and the North Atlantic subpolar gyre	Andreas Funk (IFM-GEOMAR)
Session 4: Hydrology and Land Processes	
Hydrology and Land Processes Session Summary	Chairs: Ph. Berry and D. Alsdorf
Global analysis of multi-mission echoes over the earth's land surface from 15 years of altimeter missions	Monica Dowson (De Montfort University)
Use of Topex-Poseidon and Envisat Dual-Frequency Radar Altimeters Data over Continental Surfaces	Fabrice Papa (NASA-GISS)
Two decades of land altimetry – achievements and challenges	Philippa A. Berry (EAPRS Lab)
Altimetry landed - Digital Elevation Data from ICESat, SRTM and Surveying	Georgia Fotopoulos (University of Toronto)

Global Assessment of Multi-Mission Radar Altimeter Performance Over Land	James Garlick (De Montfort University)
Geosat Follow-On Waveforms: Retracking for Hydrology Applications	John Lillibridge (NOAA)
Lake Level Monitoring Based on Satellite Altimetry	Jean-François Crétaux (CNES/LEGOS)
	IDS workshop, continued
International Doris Service Workshop	
Poster sessions	
Session: Posters	
Oceanography: High Frequency	Chairs: D. Stammer and L. Alberotanza
Variation of Sea Surface Height in the South China Sea	Yinglai Jia (Physical Oceanography Lab.)
Combination of NOAA/AVHRR Images and Topex/Poseidon Data to Analyse the Mesoscale Phenomena in the Algerian Basin (in the Western Mediterranean Sea)	Mega Nabil (National Centre for Space Techniques)
Seasonal and Interannual Variability of eddy field and surface circulation in the Gulf of Aden.	Mohammed Al saafani (National Institute of Oceanography)
Formation process of the Kuroshio Large Meander in 2004	Norihisa Usui (Meteorological Research Institute)
Satellite altimetry research at the Institute of Ocean Sciences	Josef Cherniawsky (Institute of Ocean Sciences)
Satellite Altimetry for Indian Ocean Studies	MM Ali (National Remote Sensing Agency)
Velocity statistics inferred from the TOPEX/POSEIDON-JASON Tandem Mission Data	Detlef Stammer (University of Hamburg)
The eddy fields of the Leeuwin and East Australian Currents	David Griffin (CSIRO)
Variability of the MAW vein branching, in the Central Mediterranean, estimated by altimetric data	Slim Gana (Institut National Agronomique de Tunisie)
The greater Agulhas Current System: Intercomparison of altimetry and model results	Bjørn C. Backeberg (Mohn-Sverdrup Center)
Geostrophic Turbulence and Mechanical Energy Budgets from Satellite Altimetry	Robert Scott (The University of Texas at Austin)
What do we know and what can we predict about the timing of Loop Current eddy separation?	Robert Leben (Colorado Center for Astrodynamic Reserach)
Investigation of the oceanic currents and fronts in the Southeastern Pacific Ocean using satellite altimetry data	Alexander Sirota (AtlantNIRO)
Oceanography: Coastal	Chairs: P. Challenor and J. Fernandes
Advances in Coastal Altimetry over the Northwestern Mediterranean	Paolo Cipollini (National Oceanography Centre, Southampton)
Altimetric data to monitor the seasonal and year-to-year variability of the upwelling intensity along the West Africa coasts	Salvatore Marullo (ENEA)
A description of the currents off the eastern and southern boundaries of Australia from fifteen years of Altimetry	Ken Ridgway (CSIRO Marine & Atmospheric Research)
Coastal altimetry and sea level change in selected test areas along the European coast	Luciana Fenoglio-Marc (Darmstadt University of Technology)
Temporal and spatial sea surface height variability in the North Sea - Baltic Sea system from altimetry, tide gauges, and 3D modelling	Madsen Kristine Skovgaard (University of Copenhagen)
Estimation of model error covariance in a nested coastal model for multivariate data assimilation system	Grégoire Broquet (LEGI-CNRS)
Towards using satellite altimetry for the observation of coastal dynamics.	Florence Birol (LEGOS/CTOH)
Influence of Barrier Layer on Sea Surface Height Variability in Bay of Bengal	Kalyani Chikka (C-MMACS)
Observing the short scale ocean variability in the Western Mediterranean Sea	Jérôme Bouffard (LEGOS)

by using a coastal multi-satellite altimetry product and models	
Satellite altimetry of the Caspian Sea	Andrey Kostianoy (P.P. Shirshov Institute of Oceanology)
Evaluation of tandem TOPEX/Poseidon-Jason data in the Newfoundland offshore	Guoqi Han (Fisheries and Oceans Canada)
Oceanography: Low Frequency	Chairs: C. Wunsch and L. Fu
Steric sea level variations inferred from combined Topex/Poseidon altimetry and GRACE gravimetry	David Garcia (University of Alicante)
Interannual and annual variations in the Mediterranean Sea from satellite	David Garcia (University of Alicante)
Inverse estimate of the North Atlantic Circulation:n Influence of the fine resolution GOCINA dynamic topography	Dmitry Sidorenko (Alfred-Wegener-Institute)
Mechanism of Interannual Variation of Meridional Overturning Circulation of the North Atlantic Ocean	Cecile Cabanes (Jet Propulsion Laboratory)
Interannual variation of sea level in the South Atlantic based on satellite altimetry.	Semyon Grodsky (University of Maryland)
Interannual and Seasonal Variation of Axis Position and Intensity of the Antarctic Circumpolar Current by Satellite Altimetry	Sergey Lebedev (Geophysical Center RAS)
Coexistence of the Antarctic Circumpolar Wave and a Southern Annular Type Mode in the Southern Ocean?	Stephanie Artigues (CNRS)
Kelvin waves activity in the eastern tropical Atlantic	Alban Lazar (LOCEAN)
Oceanography: Tropics	Chairs: S. Arnault and T. Busalacchi
The Atlantic North Equatorial Countercurrent	Gustavo Jorge Goni (NOAA/AOML)
Tropical Pacific long waves for the 1997-1998 El Niño-La Niña event from an altimetric data assimilation experiment	Boris Dewitte (LEGOS/IRD)
Application of Satellite Altimetry to Tropical Climate Prediction	Dake Chen (Columbia University)
Equatorial Indian Ocean Sea surface slope changes (Wyrтки Jet extent) using altimeter data	Kalyani Chikka (C-MMACS)
Oceanography: Tides	Chairs: P. Vincent and R. Ray
Toulouse Global and Regional Tidal Atlas : a review on progress and recent result in tidal science and products	Florent Lyard (LEGOS)
Tide Simulation Using Regional Ocean Modeling System (ROMS)	Xiaochun Wang (JPL/Caltech)
Coastal Ocean Tide Modeling Using Multiple Satellite Altimetry	Yu Wang (Laboratory for Space Geodesy and Remote Sensing)
Non-linear tides in shallow water regions from multi-mission satellite altimetry (The Northwest European shelf).	Ole Andersen (Danish National Space Center)
The Observation of SAR, Optical and Altimeter Data to Study the Generation of Internal Waves in Tsushima Strait	Yessy Arvelyna (Tokyo University of Marine Science and Technology)
Ocean Tide Modeling in the Polar Oceans	C.K. Shum (Ohio State University)
Oceanography: Marine Meteorology Session Summary	Chairs: P. Janssen and J.-M. Lefèvre
On the combined assimilation of RA-2 and ASAR wave data for the improvement of wave forecasting	Lotfi Aouf (Meteo France)
The impact of dynamic tropography on the intensification of hurricanes	Remko Scharroo (Altimetrics LLC)
Satellite significant wave height observations in coastal and shelf seas	Jacob Hoeyer (Danish Meteorological Institute (DMI))
Altimeter dual-frequency observations of surface winds, waves, and rain rate	Yves Quilfen (IFREMER)

in tropical cyclones	
Numerical modelling of the 2004 Indonesian tsunami: methodology and results	Florent Lyard (LEGOS)
Comparison of altimetry wave and wind data with model and buoy data	Claus Sølvssteen (Royal Danish Administration of Navigation and Hydrography)
Session: Posters	
Cryosphere	Chairs: F. Rémy and D. Wingham
Extraction of Arctic Sea Ice Thickness from Envisat Altimetry Data	Andrew Ridout (University College London)
Along track repeat altimetry for ice sheets and continental surface	Benoit Legrésy (CNRS)
Validation of altimeter measurements over ice.	Benoit Legrésy (CNRS)
Simulation of radar altimeter waveforms over ocean and ice covered regions	Verena Seufer (GeoForschungszentrum Potsdam)
Marine Geodesy, Gravity, Bathymetry Session Summary	Chairs: D. Sandwell and W. Smith
Determination of the Earth Gravity Field Components in the Persian Gulf and Oman Sea with Satellite Altimetry Data	Seyed Rohallah Emadi (Islamic Azad University, Tehran, South unit)
Progress Toward a Comprehensive Map of the Seafloor	Stephen Miller (Scripps Institution of Oceanography, UCSD)
An overview of spectral methods for the optimal processing of satellite altimetry and other data	Ilias N. Tziavos (Aristotle University of Thessaloniki)
Accuracy of the 2500 m Isobath from Satellite Bathymetry	Karen Marks (NOAA)
Generation of a high resolution grid of gravity anomalies by inversion of altimetric data from Geosat, Topex/Poseidon, ERS1/2 and Jason-1 in the Azores region	joao manuel calvao rodrigues (University of Lisbon, faculty of sciences)
A Mean Ocean Dynamic Topography Derived from Altimetry and the Latest GRACE Geoid Model	Saskia Esselborn (GFZ Potsdam)
Simultaneous Improvement of Large Scale Geoid Height and Mean Sea Surface Topography	Verena Seufer (GeoForschungszentrum Potsdam)
How Satellite Altimetry Contributes to the Vertical Datum Problem	Michael Sideris (University of Calgary)
The DNSCO5 high-resolution global marine gravity field.	Ole Andersen (Danish National Space Center)
High resolution coastal gravity anomalies from retracked Geosat/GM and ERS-1/GM altimetry	Xiaoli Deng (University of Newcastle)
Satellite altimetry and marine gravity data: toward a consistent knowledge of the gravity field.	Marie-Françoise Lequentrec-Lalancette (SHOM)
Comparing the use of ship and satellite data for geodynamic studies	Marcia Maia (CNRS UMR 6538)
ESA's Earth Explorer gravity mission: GOCE	Mark R. Drinkwater (European Space Agency)
Satellite Derived Predicted Bathymetry: Essential Tool for UNCLOS 'article 76' on the extension of the legal continental shelf beyond 200 nautical miles	Walter Roest (Ifremer)
Intraplate seismicity, oceanic basement topography and marine gravity	Louis Geli (Ifremer)
Hydrology and Land Processes	Chairs: Ph. Berry and D. Aisdorf
Ice and snow cover on lakes from radar altimetry and radiometry: case of the lake Baikal	Alexei Kouraev (LEGOS)
Seasonal fluctuations of water storage in the Ob River basin from satellite altimetry and SSM/I measurements	Frédéric Frappart (LEGOS-GRGS/CNES)
Cross-comparisons of radar and laser altimetry, GPS measurements and hydrological modelling for the slope determination of the Rio Negro and Rio Branco	Frédéric Frappart (LEGOS-GRGS/CNES)

Inundated wetlands and floods dynamics from remote sensing: the use of the Topex-Poseidon dual-frequency radar altimeter and its application over the Boreal Regions.	Fabrice Papa (NASA-GISS)
Improvement of the Topex/Poseidon altimetric data processing for hydrological purposes (CASH Project)	Franck MERCIER (CLS)
Assessment and Correction of the Global 3 arc-second SRTM DEM Using Multi-mission Radar Altimetry	James Garlick (De Montfort University)
The Envisat Burst Mode Echoes– a new look from satellite radar altimetry	Philippa A. Berry (EAPRS Lab)
Altimetric data in hydrological models	Frederique Seyler (IRD)
Analysis of Radar Altimeter Waveform Retracking Algorithms for Geodynamics Studies	Hyongki Lee (Ohio State University)
Application of Radar Altimetry in Detecting the Changes of Wetlands and Lakes in the Prairie Pothole Region	Franklin W Schwartz (The Ohio State Univ)
Using Altimetry Waveform Data and Ancillary Information from SRTM and LANDSAT to retrieve River Characteristics	Vivien Enjolras (CNES/LEGOS)
The WatER Mission in Europe: how can it help science?	Vivien Enjolras (CNES/LEGOS)
Building the 15-Year Altimetric Record/Calibration and validation	Chairs: R. Scharroo and J. Lillibridge
Oceanic Water Vapor Derived from TOPEX Microwave Radiometer: Climatology and Variability	Ge Chen (Ocean University of China)
First Three Years Of The Microwave Radiometer Aboard Envisat: In-Flight Calibration, Processing and Validation of the Geophysical Products.	Estelle Obligis (CLS)
Envisat Altimetry Mission Status	Pierre Femenias (ESA)
Cross-calibration of multi-mission altimeter and TRMM PR sigma0 over natural land targets	Susan Bramer (De Montfort University)
RA-2 Bias Determination Using a Transponder	Elena Cristea (Austrian Academy of Sciences)
Corsica: an experiment for long-term altimeter calibration and sea level monitoring	Pascal Bonnefond (OCA-GEMINI)
GPS-equipped buoys – Sea Level Measurements with cm-accuracy	Tilo Schoene (GeoForschungsZentrum Potsdam)
Ocean-bottom pressure measurements for radar altimetry calibration	Tilo Schoene (GeoForschungsZentrum Potsdam)
The IGS Tide Gauge Benchmark Monitoring Project	Tilo Schoene (GeoForschungsZentrum Potsdam)
Altimeter Calibration Campaigns at Ibiza Island and Cape of Begur (Spain)	Juan Jose Martinez-Benjamin (Technical University of Catalonia)
ESA's new range of radar altimeters for the extraction of geophysical parameters from land, sea ice and ocean surfaces	Robert Cullen (ESA)
SSALTO/DUACS, 15 years of precise and consistent multi-mission altimetry data	Gerald Dibarboure (CLS)
Cryosat Level 1 Data Calibration with Transponder	Catherine Bouzinac (ESA)
CLIPPERTON campaign on altimetry side: Ocean observation site exploration	Gwenaële Jan (NOVELTIS)
Impact of the geophysical corrections on studies of sea level variation	M. Joana Fernandes (Faculty of Science, University of Porto)
The use of data-quality information for optimal scientific application of altimetric data	Annalisa Martini (Serco S.p.a.)
ENVISAT Ra-2 Sigma-0 Absolute Calibration, Methods and Results	Annalisa Martini (Serco S.p.a.)
Precise orbits of altimetry satellites ERS-1, ERS-2 and TOPEX/Poseidon	Sergei Rudenko (GeoForschungsZentrum Potsdam (GFZ))
Review of the use of satellite crossover altimetry	Jaroslav Klokocnik (Astronom. Inst. Czech Acad. Sci.)

ERS-1 / ERS-2: a long story of altimeter data and improvements	Françoise Mertz-Ogor (CLS)
Envisat ocean altimetry performance assessment: continuity and improvement of the ERS series	Yannice Faugere (CLS)
Synthesis of the main Features and Evolutions of ESA and CNES/NASA Radar Altimeters, Ocean Ground Processing and Products	Jean-Paul Dumont (CLS)
High standard tide gauge network for scientific studies	Laurent Testut (LEGOS)
The effects of seasonal and atmospherically induced sea level variability in satellite altimeter calibration. Results from the GAVDOS Cal/Val experiment.	Thanassis Papadopoulos (Technical University of Crete)
Absolute calibration of Jason, Topex-Poseidon, GFO and Envisat using GPS buoys on Issykkul lake and Caspian Sea	Jean-Francois Cretaux (CNES/LEGOS)
Comparison between sea height GPS measurements and satellite altimetry data in the New Hebrides Subduction Zone.	Marie-Noelle Bouin (ENSG/LAREG)
Global Land Topography and Ocean Bathymetry from Radar Altimetry	Diane Defrenne (ESA/SERCO)
S-Band Range Cross-Calibration with Ku-Band Range over the Salar de Uyuni	Mercedes Reche (PiLDo Labs)
Building the 15-Year Altimetric Record - Other/Retracking Session Summary	Chairs: A. Brenner and C. Rapley
OSCAR : looking at continental surfaces with radar altimetry.	Benoit Legresy (LEGOS)
The National Oceanography Centre, Southampton Retracking Scheme: Measuring Global Ocean Tracker Bias	Jesus Gomez-Enri (National Oceanography Centre, Southampton)
A comparative analysis of waveform data from seven altimeters	Graham Quartly (National Oceanography Centre, Southampton)
Estimation of the Sea State Bias Effect on the Altimetric Measurements Using a Parametric Model	Ali Rami (National Centre of Space Techniques)
Improvements in geophysical corrections for coastal altimetry using retracked data	E. Lucy Mathers (De Montfort University)
ENVISAT RA-2 S-band Anomaly: Detection and Waveforms Reconstruction	Annalisa Martini (Serco S.p.a.)
Centimeter-Level Cross Calibration of TOPEX and Jason Using Retracking	Ernesto Rodriguez (Jet Propulsion Laboratory)
The 15-Year Altimetric Record/Long time series	Chairs: G. Mitchum and J. Verron
Generation of Climate Data Records from Ocean Radar Altimetry	Brian Beckley (Raytheon)
North-East Atlantic current systems from 10 years of multi-mission satellite altimetry	Clara Lázaro (Faculty of Science, University of Porto)
Inter-Annual Long Equatorial Waves in the Tropical Atlantic (1981-2000)	Serena Illig (LEGOS)
Altimetric Mean Sea Surfaces - and inter-annual ocean variability (DNSCO5-MSS)	Ole Andersen (Danish National Space Center)
Mediterranean Sea Level Analysis from 1992 to 2005	Jorge Del Rio Vera (ESA)
Use of global ocean reanalyses for reconstructing sea level variability patterns over the last 40 years: methods, results and limitations	Philippe Rogel (CERFACS)
Mediterranean Sea Surface Variability during the last 15 years from altimetry	Gilles Larnicol (CLS)
The 15-Year Altimetric Record/Mean sea level	Chairs: A. Cazenave and C.K. Shum
Regional Long-term sea level and sea surface trends from satellite.	Ole Andersen (Danish National Space Agency)
Mean Sea Level trend estimation from multi-mission altimetry and tide gauges	Joel Dorandeu (CLS)
Modeling the global and regional sea level variability in the last decades	Luciana Fenoglio-Marc (Technical University Darmstadt)
Validation of T/P data in the South Indian Ocean	Claire Maraldi (LEGOS)
Comparing Global Sea Level Rise Estimates from Satellite Altimetry and a Global Ocean Reanalysis: 1993-2001	Laury Miller (NOAA)
	Session: Posters

The Integrated Approach/Systems Session Summary	Chairs: J. Gould and D. Roemmich
The Global Observed Ocean Products of the French Mercator project	Gilles Larnicol (CLS)
The U.S. Navy's Real Time Altimetry Data Processing in Ocean Monitoring and Forecasting	Kirk Whitmer (Naval Research Laboratory)
The Integrated Approach/Demonstrations	Chairs: P. Knudsen and P-Y. Letraon
Dispersal Model of Condensate from Malamapaya Deep Water Gas Production	Charina Lyn Amedo (Marine Science Institute)
Recent Progresses in Modelling the Global Ocean/Sea-Ice Circulation at Eddy Permitting Resolution	Bernard Barnier (LEGI/CNRS)
Variability in Southern Hemisphere Interocean Exchanges Part I: The Agulhas Current	Deirdre Byrne (University of Maine)
Understanding of the East (Japan) Sea Circulation by using Altimeter, Argo and SST	Young Jae Ro (Chungnam Natl. Univ., Korea)
Global Surface Currents and Heat Transport : A new product for investigating ocean dynamics	Joel Sudre (LEGOS)
Control of a free-surface barotropic model of the Bay of Biscay by assimilation of sea-level data in presence of atmospheric forcing errors	Julien Lamouroux (POC/LEGOS-NOVELTIS)
15 Years of Oceanography in the Azores; from oceanographic cruises to an integrated approach.	Manuela Juliano (Lamtec, University of The Azores)
Preliminary estimates of the time-variant heat budget in the Tropical Atlantic	Claudia Schmid (NOAA/AOML)
The Integrated Approach/Diagnostics	Chairs: N. Ferry and D. Anderson
Assimilating altimeter sea surface height data in an operational ocean forecasting system - an historical overview	Matt Martin (Met Office)
Controlling the large-scale ocean circulation using a multivariate 3D-Var approach: the complementary role of altimetry and in situ measurements.	Elisabeth Remy (MERCATOR OCEAN)
Assessment and validation of the new multivariate Mercator high resolution forecasting system.	Jean-Michel Lellouche (Mercator-Océan)
Small-scale variability in sea surface heights and surface winds: Implications for errors in ocean models and observations	Alexey Kaplan (Lamont-Doherty Earth Observatory)
Extrapolating oceanic signals from surface data to deeper layers:	Bruno Buongiorno Nardelli (CNR-ISAC)
Comparing Multiyear Altimetry, Drifter, and Satellite Image Derived Surface Currents in the California Current	Dax Matthews (University of Colorado at Boulder - CCAR)
Interest of combining satellite altimeter data with temperature and salinity data on the new assimilation MERCATOR System	Benoît Tranchant (MERCATOR)
Exploration of model errors in terms of Sea Surface Height and Temperature in a $\frac{1}{4}^\circ$ model of the North Atlantic	Nadia Ayoub (CNRS/LEGI)
On an Adaptive Filter Based on Forecast Errors Modelling for SSH Data Assimilation and its Comparison with Optimal Interpolation Method	Hong Son Hoang (SHOM/LEGOS)
Recent advances in data assimilation in the MERSEA project	Sergey Skachko (LEGI, CNRS)
How altimetry can complement in situ observations in the estimation of the upper ocean heat storage	Gustavo Jorge Goni (NOAA/AOML)
On the role of GRACE for the joint assimilation of altimetry and in-situ data	Frederic Castruccio (LEGI - CNRS)
Operational multivariate assimilation of satellite and in situ observations in the Mediterranean Forecasting System	Srdjan Dobricic (Istituto Nazionale di Geofisica e Vulcanologia)
Data Services	Chairs: E. Schrama and Ph. Escudier
Online altimetry service for hydrology: The CASH project	CASH team (IRD/LEGOS/CLS/BRLI/CNES)
Hydrological data base from satellite altimetry	Marie-Claude Gennero (LEGOS)
Aviso Altimetry Products: select your choice!	Vinca Rosmorduc (CLS)

Basic Radar Altimetry Toolbox and Radar Altimetry Tutorial: a new set of tools for all altimetry users	Vinca Rosmorduc (CLS)
Just-In-Time Altimetry: International Collaboration in Provision of Altimetry Datasets	Helen Snaith (National Oceanography Centre, Southampton)
Mersea ocean Portal, Proof of an Integrated System	Frederique Blanc (CLS / Space Oceanography Division)
CTOH – 17 years of altimetric service	Rosemary Morrow (LEGOS)
Mercator Ocean forecasting products: fitting into the users needs	Sophie Baudel (CLS)
NOAA/AOML Altimetric Products	Joaquin Trinanes (University of Miami)
The role of RADS in building the 15-year altimetric record	Marc Naeije (TUDelft)
ADS – A Data and Processing System for Altimetry	Tilo Schoene (GeoForschungsZentrum Potsdam)
Steps towards an Operational Service using Near Real-Time Altimetry Data	Ellis Ash (Satellite Observing Systems Ltd)
An International Altimetry Service – focussing altimetry for global Earth observing systems	Wolfgang Bosch (DGFI)
New Applications Session Summary	Chairs: G. Quartly and O.-Z. Zanife
Movement and accumulation of floating marine debris simulated by surface currents derived from satellite data	Masahisa Kubota (Tokai University)
Application of satellite altimetry for fisheries research	Alexander Sirota (AtlantNIRO)
New scientific applications for ocean, land and ice remote sensing with ENVISAT altimeter individual echoes.	Christine Gommenginger (National Oceanography Centre, Southampton)
EnviSat Radar Altimeter Individual Echoes and S-band New Applications	Ouan-Zan Zanife (CLS)
Outreach Session Summary	Chairs: V. Rosmorduc and M. Srinivasan
Introducing the Real Scientist: Using Outreach to Change Your Persona	Annie Richardson (NASA/Jet Propulsion Laboratory)
African Capacity Building in Satellite Altimetry with the UNESCO-Bilko Programme	Val Byfield (National Oceanography Centre, Southampton)
Outreach at CIOSS – The Cooperative Institute for Oceanographic Satellite Studies	P. Ted Strub (Oregon State University)
The Future of Altimetry, part 1 Session Summary	Chairs: H. Bonekamp and E. Lindstrom
Ka-band altimeter for future AltiKa oceanography missions	Nathalie Steunou (CNES)
ITC and WatER: The Proposed Water Elevation Recovery satellite mission	Remco Dost (ITC)
Contribution of wide-swath altimetric cross-track measurements in the North Sea – Impact of the satellite roll errors	Matthieu Le Hénaff (LEGOS)
Relative performances of WSOA, altimeter constellations and tide gauges in controlling a model of North Sea barotropic dynamics	Baptiste Mourre (ICM)
	IDS workshop, continued
	International Doris Service Workshop
	Session 1: Oceanography, continued
Oceanography: Tropics	Chairs: S. Arnault and T. Busalacchi
Impacts of subtropical upper ocean variability on equatorial Indian Ocean	K V Ramesh (C-MMACS)
Investigating the Tropical Atlantic Ocean Variability from ARAMIS and Altimetry	Sabine Arnault and the ARAMIS Group (LOCEAN UMR CNRS/IRD/UPMC/MNHN)
Comparison between 1997 and 2002 El Niño Events: Role of Initial State versus Forcing	Antonio Busalacchi (University of Maryland)

Oceanography: Coastal	Chairs: P. Challenor and J. Fernandes
A new approach to retracking ocean and coastal zone multi-mission altimetry	Jennifer Freeman (EAPRS Lab)
Eddy-Mediated Transport Along Eastern Boundaries	P. Ted Strub (Oregon State University)
Session 5: Building the 15-Year Altimetric Record, continued	
The 15-Year Altimetric Record/Long time series	Chairs: G. Mitchum and J. Verron
Decadal Variability in the Large-Scale Sea Surface Height Field of the South Pacific Ocean: Observations and Causes	Bo Qiu (University of Hawaii at Manoa)
Large-scale decadal changes of sea level in various parts of the world ocean	Tong Lee (Jet Propulsion Laboratory)
How much of the interannual-to-decadal fluctuations of the Indian Ocean Sea-Level is due to atmospheric forcing and to connections with the other oceans?	Serena Illig (JPL)
The 15-Year Altimetric Record/Mean sea level	Chairs: A. Cazenave and C.K. Shum
A 20th century acceleration in sea level rise and decadal impact on GMSL of volcanic eruptions	John Church (CSIRO Marine and Atmospheric Research)
An Assessment of IPCC 20th Century Climate Simulations Using the 15-year Sea Level Record from Altimetry	Eric Leuliette (University of Colorado)
Session 4: Hydrology and Land Processes, continued	
Hydrology and Land Processes	Chairs: Ph. Berry and D. Alsdorf
Lake level change in China from TOPEX/Poseidon altimetry: climate implications	Cheinway Hwang (National Chiao Tung University)
Caspian Sea water level fluctuation: comparison between ground measurements and altimetry	Mikhael Bolgov (Caspian Sea Laboratory)
Establishment of an Altimetric Reference Network over the Amazon Basin using Satellite Radar Altimetry (Topex Poseidon)	Pascal Kosuth (UMR TETIS (Cemagref-CIRAD-ENGREF))
Using GRACE Gravimetry and Satellite Altimetry for water Storage studies in the Amazon Drainage Region.	Ole Andersen (Danish National Space Center)
IDS workshop, continued	
International Doris Service Workshop	
Session 1: Oceanography	
Session 5: Building the 15-Year Altimetric Record, continued	
The 15-Year Altimetric Record/Mean sea level	Chairs: A. Cazenave and C.K. Shum
Global and regional sea level change from multi-satellite altimeter data	Remko Scharroo (Altimetrics LLC)
Satellite Measurements of Sea Level Change: Where Have We Been and Where Are We Going	R. S. Nerem (University of Colorado)
Why the sea is boiling hot: global warming and sea level rise	James Carton (University of Maryland)
Determination and Quantification of the 20th Century Sea Level Rise	Chung-Yen Kuo (Ohio State University)
Understanding measured sea level rise by data assimilation	Manfred Wenzel (AWI)
Session 4: Hydrology and Land Processes, continued	
Hydrology and Land Processes	Chairs: Ph. Berry and D. Alsdorf
Characterizing the quality of river water level time series derived from satellite radar altimetry: efforts towards a standardized methodology	Nicolas Bercher (UMR TETIS (Cemagref-CIRAD-ENGREF))
Uncertainties in water stages by altmetry assessed by field measurements	Stephane Calmant (IRD/LEGOS/OMP)
Assessment of multi-mission radar altimeter performance over the Amazon basin	James Harrison (DeMontfort University)

Use of satellite altimeter data for validating large scale hydraulic models	Matt Wilson (University of Exeter)
A Decade of Global River and Lake Heights from ESA Altimeter Missions	Philippa A. Berry (EAPRS Lab)
IDS workshop, continued	
IDS Workshop	
Day 3, Wednesday 15 March 2006	
Parallel sessions, continued	
Session 6: The Integrated Approach	
The Integrated Approach/Systems	Chairs: J. Gould and D. Roemmich
The ECCO Near Real-Time Ocean Data Assimilation System	Ichiro Fukumori (JPL/Caltech)
Synergy between ocean observations and numerical simulations : CLIPPER heritage and DRAKKAR perspectives	Thierry Penduff (CNRS)
Ocean Model Analysis and Prediction System (OceanMAPS): operational ocean forecasting based on near real-time satellite altimetry and Argo	Gary Brassington (Bureau of Meteorology Research Centre)
HYCOM Ocean Prediction and Altimeter Data Assimilation	Eric Chassignet (U. of Miami/RSMAS)
Assimilation of altimeter data in the ECMWF ocean analysis system	Arthur Vidard (ECMWF) presented by Magdalena Balmaseda (ECMWF)
The PSY3v1 GODAE/Mercator ocean forecasting system, a global eddy permitting (1/4°) ocean model assimilating altimetry data	Marie Drévillon (Mercator-Ocean)
Session 1: Oceanography	
Oceanography: Marine Meteorology	Chairs: P. Janssen and J.-M. Lefèvre
Satellite altimetry: A revolution in understanding the wave climate	Peter Challenor (National Oceanography Centre, Southampton)
Progress in utilizing altimeter ocean backscatter measurements for sea surface roughness applications	Douglas Vandemark (University of New Hampshire)
Contribution of Satellite Altimetry to Wave Analysis and Forecasting	Jean-Michel Lefevre (Meteo-France)
A wind and wave atlas for the Mediterranean Sea	Luigi Cavaleri (ISMAR)
Altimeter wind and wave data and Ocean Wave Forecasting	Peter Janssen (ECMWF)
Application of multi-mission altimeter measurements to the analysis of wave height time and space variability over the Mediterranean Sea.	Pierre Queffelec (IFREMER)
Session 3: Marine Geodesy, Gravity, Bathymetry	
Marine Geodesy, Gravity, Bathymetry	Chairs: D. Sandwell and W. Smith
High Resolution Global Bathymetry from Satellite Altimetry, with a detailed view of the Arctic Ocean.	Ole Andersen (Danish National Space Center)
Altimetric marine gravity fields in polar regions: History, status and future prospects	David McAdoo (NOAA)
On Combining Bathymetric and Ocean Circulation Altimeter Missions	Frank Monaldo (Johns Hopkins Univ. Applied Physics Lab.)
From the altimetric sea level measurement to the ocean absolute dynamic topography: Mean Sea Surface, Geoid, Mean Dynamic Topography, a three-component challenge	Philippe Schaeffer (CLS)
The benefit of EIGEN gravity field models for altimetry and vice versa	Frank Flechtner (GFZ Potsdam)
A New Global Continental Margin Gravity Model derived from Altimeter Data	J Derek Fairhead (GETECH)
IDS workshop, continued	
IDS Workshop	
Session 6: The Integrated Approach	

The Integrated Approach/Demonstrations	Chairs: P. Knudsen and P-Y. Letraon
Interpreting low frequency sea level signals over the last decade	Rui Ponte (Atmospheric and Environmental Research, Inc.)
Mid-depth Circulation of the World's Oceans: A First Look at the Argo Array	Josh Willis (Jet Propulsion Laboratory)
Altimetry, SST and ocean colour unveil the effects of planetary waves on phytoplankton	Paolo Cipollini (National Oceanography Centre, Southampton)
Mean surface circulation of the global ocean inferred from satellite altimeter and drifter data	Nikolai Maximenko (IPRC/SOEST, University of Hawaii)
Combining Altimetric and All Other Data with a General Circulation Model	Carl Wunsch (MIT)
Session 2: Oceanography, continued	
Oceanography: Marine Meteorology	Chairs: P. Janssen and J.-M. Lefèvre
Surface Wave Field from Altimetry for Mixed Seas (sea and swell) under the Influence of Offshore Winds	Francisco Ocampo-Torres (CICESE)
Analysis of extreme low pressure events like hurricanes and extra-tropical storms thanks to altimetry	Loren Carrere (CLS)
Use of Altimeter and SAR Wave Data at the Met Office and Recent Comparison with Wave Model and Buoys	Martin Holt (Met Office)
The Indian Ocean Tsunami of December 26, 2004, Observed by Multi-satellite Altimetry.	Michaël Ablain (CLS)
Assessment of Tsunami Modeling Using Satellite Altimetry and Tide Gauges	Manman Zhang (Ohio State University)
Session 3: Marine Geodesy, Gravity, Bathymetry, continued	
Marine Geodesy, Gravity, Bathymetry	Chairs: D. Sandwell and W. Smith
Combining Satellite Altimetry, Tide Gauge Observations and an Oceanographic Model to Derive the Baltic Sea Mean Sea Surface Topography	Kristin Novotny (Technische Universität Dresden)
Tests of Geoid Height Skill Through Estimates of the Ocean Circulation	Detlef Stammer (University of Hamburg)
Vertical seafloor deformation in a partially blocked subduction zone from tide gauge, altimetry and GPS data	Valerie Ballu (IPGP)
How Radar Altimetry Discovered Marine Geodynamics	Alexander Braun (University of Calgary)
Sea-level signature of bathymetric errors and their observability by satellite altimetry	Baptiste Mourre (ICM)
IDS workshop, continued	
IDS Workshop	
Session 6: The Integrated Approach, continued	
The Integrated Approach/Demonstrations	Chairs: P. Knudsen and P-Y. Letraon
Chlorophyll Bloom in the Western Equatorial Pacific During the 1998 El Niño / La Niña Transition: the Role of Kiribati Islands as Seen From Satellite, in-situ Data, and a High-Resolution Simulation	Monique Messie (LEGOS)
Basin Scale Mass Variations in the Atlantic Ocean	Saskia Esselborn (GFZ Potsdam)
Results from the GOCINA project. Combining altimetric/gravimetric and ocean model mean dynamic topographies.	Per Knudsen (Danish National Space Center)
The MERSEA Project : Development of a European system for operational monitoring and forecasting of the ocean on global and regional scales.	Yves Desaubies (MERSEA Consortium)
Sea surface salinity from a simplified ocean mixed layer model using global altimeter data	Sylvain MICHEL (IFREMER)
Session 8: The Future of Altimetry	

The Future of Altimetry, part 1	Chairs: H. Bonekamp and E. Lindstrom
Requirements for Future Satellite Altimetry - Recommendations from the EC GAMBLE Project	David Cotton (Satellite Observing Systems)
AltiKa: a Ka-band altimetry system for operational altimetry during the GMES period	Jacques Verron and The AltiKa Mission Group (LEGI)
ESA's Sentinel-3: An Operational Oceanography Mission for GMES	Mark R. Drinkwater (European Space Agency)
Retrieving High Precision River Stages and Slopes from Space	Ernesto Rodriguez (Jet Propulsion Laboratory)
EUMETSAT and Operational Oceanography	Hans Bonekamp (EUMETSAT)
Session 7: Outreach	
New Applications	Chairs: G. Quartly and O.-Z. Zanife
The distribution of bigeye tuna, <i>Thunnus obesus</i>, and three-dimensional thermal structure estimated from satellite altimeter	Akiko Takano (Tokyo University of Marine science and technology)
Altimetry helps understand the behavior of marine animals	Philippe Gaspar (CLS)
Oceanography and yacht racing: a handful of competitors, millions of spectators	David Griffin (CSIRO)
A Role for Altimeter Radars in Gas Exchange Studies	Nelson Frew (Woods Hole Oceanographic Institution)
Development in rain altimetry from Seasat to Envisat and Jason	Graham Quartly (National Oceanography Centre, Southampton)
IDS workshop, continued	
IDS Workshop	
Session 6: The Integrated Approach, continued	
The Integrated Approach/Diagnostics	Chairs: N. Ferry and D. Anderson
Impact of ARGO temperature and salinity measurements in the new ECMWF ocean analysis system, with focus on the interaction with altimeter data.	Magdalena A. Balmaseda (ECMWF)
Using altimeter measurements for quantitative assessment of high resolution ocean models	LuAnne Thompson (University of Washington)
Importance of TOPEX/Poseidon/Jason data to improve the coupled ocean-atmosphere modeling of El Nino	Claire Perigaud (JPL)
Ocean Surface Current Monitoring from Space: Methodology and Progress	Fabrice Bonjean (Earth & Space Research)
The Mercator 1992-2002 PSY1v2 ocean reanalysis for tropical and North Atlantic	Eric Greiner (MERCATOR)
Fifteen Years of Altimetry and Satellite Data: Benefits for Mercator-ocean Operational Forecasting System	Nicolas Ferry (MERCATOR-OCEAN)
Session 8: The Future of Altimetry, continued	
The Future of Altimetry, part 1	Chairs: H. Bonekamp and E. Lindstrom
WaTER: The proposed Water Elevation Recovery satellite mission	Nelly Mognard (CNES)
ABYSS-Lite Science Requirements and Mission Concept	Walter H.F. Smith (NOAA/NESDIS United States)
Is there a future role for altimeters carried on micro platforms for the early warning of surface hazards?	Thomas Donald Allan (Satellite Observing Systems Ltd)
25 years of altimeter developments at Alcatel Alenia Space	Laurent Phalippou (ALCATEL ALENIA SPACE)
Performances study of interferometric radar altimeters: from the instrument to the global mission definition	Vivien Enjolras (CNES)
Session 7: Outreach, continued	
Outreach	Chairs: V. Rosmorduc

		and M. Srinivasan
	(Nearly) Fifteen years of Altimetry Outreach at CNES and NASA/JPL	Vinca Rosmorduc (CLS)
	Developing Ocean Awareness: The Argonautica Educational Project	Danielle de Staerke (CNES)
	Keeping Ocean Altimetry in the Public Eye	Rosemary Sullivant (Jet Propulsion Laboratory)
	Societal Benefits of Ocean Altimetry Data	Margaret Srinivasan (NASA/Jet Propulsion Laboratory)
	Satellite Altimetry Outreach During Hurricane Rita: Lessons Learned	Robert Leben (Colorado Center for Astrodynamic Reserach)
	IDS workshop, continued	
	IDS Workshop	
	Poster session - Cocktail, Sala Adriatico	
20:00	Gala Dinner sponsored by EUMETSAT and NOAA	
Day 4, Thursday 16 March 2006		
8:20	Symposium Plenary Session, Sala Perla	
Closing Keynote Presentations		
The Future of Altimetry, part 2		Chairs: J.-L. Fellous and S. Wilson
	Why a Hydrology Mission Needs Two-Dimensional Acquisitions of Water Surface Elevations	Douglas Alsdorf (Ohio State University)
	Mapping Seafloor Tectonics from Satellite Altimetry: Requirements for a Future Mission	David Sandwell (Scripps Inst. of Oceanography)
	The Cryosphere: A continuing challenge for radar altimetry	Duncan Wingham and Seymour Laxon (University College London)
	Altimetry and the integrated ocean observing system	Pierre-Yves Le Traon (IFREMER)
	Towards Mapping the Ocean Surface Topography at 1 km Resolution	Lee-Lueng Fu (Jet Propulsion Laboratory/Caltech)
	The Future of Altimetry in Measuring Ocean Surface Waves from Space	Jean-Michel Lefèvre (Meteo-France)
Round table: Requirements for the Future of Altimetry		
	Douglas Alsdorf David Sandwell Duncan Wingham Pierre-Yves Letraon Lee-Lueng Fu David Anderson Jean-François Minster Moderators: Jean-Louis Fellous and Stan Wilson	
Concluding Remarks		
	Jérôme Benveniste and Yves Ménard	
OSTST Meeting, Plenary Session, Sala Perla		
	Poster session - Cocktail, Sala Adriatico	
Day 5, Friday 17 March 2006		
OSTST Splinter Meeting		
	Cal/Val and data consistency, Part 1: in-situ and regional	Chairs: P. Bonnefond, B. Haines and S. Nerem
OSTST Splinter Meeting		
	Sea-State Bias and Re-tracking Analysis Splinter	Chairs: P. Callahan, O.Z. Zanife
OSTST Splinter Meeting		

	Tides/high-frequency aliasing splinter	Chairs: R. Ray, R. Ponte, F. Lyard
	ARGO Workshop	
	ARGO Workshop, session 1: Heat and Salt	
	OSTST Splinter Meeting	
	Cal/Val and data consistency, Part 1: in-situ and regional	Chairs: P. Bonnefond, B. Haines and S. Nerem
	OSTST Splinter Meeting	
	Sea-State Bias and Re-tracking Analysis Splinter	Chairs: P. Callahan, O.Z. Zanife
	OSTST Splinter Meeting	
	Tides/high-frequency aliasing splinter	Chairs: R. Ray, R. Ponte, F. Lyard
	ARGO Workshop	
	ARGO Workshop, session 2: Watermass changes	
	OSTST Splinter Meeting	
	Cal/Val and data consistency, Part 2: global	Chairs: S. Desai and N. Picot
	OSTST Splinter Meeting	
	Precise Orbit Determination and Geoid	Chairs: J.P. Berthias, J. Ries
	OSTST Splinter Meeting	
	Precise Orbit Determination and Geoid	Chairs: V. Rosmorduc, M. Srinivasan
	ARGO Workshop	
	ARGO Workshop, Poster Session	
	OSTST Splinter Meeting	
	Cal/Val and data consistency, Part 2: global	Chairs: S. Desai and N. Picot
	OSTST Splinter Meeting	
	Precise Orbit Determination and Geoid	Chairs: J.P. Berthias, J. Ries
	OSTST Splinter Meeting	
	Precise Orbit Determination and Geoid	Chairs: V. Rosmorduc, M. Srinivasanth
	ARGO Workshop	
	ARGO Workshop, session 3: Ocean circulation	
Day 6, Saturday 18 March 2006		
	OSTST Meeting	
	OSTST Meeting, Plenary Session	
	ARGO Workshop	
	ARGO Workshop, Session 4: Climate applications and operational use	
	OSTST Meeting	
	OSTST Meeting, Plenary Session	
	ARGO Workshop	
	ARGO Workshop, Session 5: The upper ocean	
	ARGO Workshop	
	ARGO Workshop	
	ARGO Workshop	
	ARGO Workshop, Session 6: New technologies and future prospects	
Sala Perla, 1750	ARGO Workshop	
	ARGO Workshop, Open discussion and closing remarks	