

ERS 97 Programme Details

- Winds and Waves (WWW)
 - ATSR Instrument Performance (TEC)
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 - Sea Ice (SIC)
 - Products and Services (PRS)
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 - Atmospheric Artifacts in SAR Interferometry (INT-W)
 - Ice / Glaciers (ICE)
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 - Geology (GEO)
 - Forestry (FOR)
 - DEMs (DEM)
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 - Observations of Landcover from ERS ATSR data
 - Atmosphere (ATM)
 - Altimeter (ALT)
 - Altimeter Waveforms for Land & Ice Studies (ALT-W)
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Winds and Waves (WWW)

Thursday, 20 March 1997

Chairman: P. Janssen

- 09:00 **Lars-Anders Breivik**
Assimilation of ERS SAR wave spectra in a wave prediction model.
- 09:20 **Eva Bauer**
Comparison of assimilation results from optimal interpolation and Green's function method using ERS-1 SAR wave mode spectra.
- 09:40 **Laurence Wilson**
Impact of the assimilation of ERS-1 and 2 data into a North Atlantic regional version of WAM
- 10:00 **Patrick Heimbach**
A three year global intercomparison of ERS-1 SAR wave mode spectral data with WAM model data.
- 10:40 **Carl Davies**
Altimeter Estimates of wave period
- 11:00 **Peter Challenor**
Characteristics and causes of variability in altimeter measured global wave climate
- 11:20 **P. Janssen**
Impact of ERS-2 Altimeter wave height data on ECMWF wave analysis and forecast
- 11:40 **V. Kerbaol**
A global comparison between AMI scatterometer data and SAR ERS Wave Mode products
- 12:00 **David Lemaire**
Scattering by the ocean surface under non-fully developed state: two scale model validation
- 12:20 **M. Crepon**
Influence of sea surface temperature, air stability and wind waves on the GMFs of ERS1/2 scatterometers.

Chairman: Ad Stoffelen

- 14:00 **Lars-Anders Breivik**
Assimilation of scatterometer wind pairs and altimeter wind speeds in a limited area weather forecast model
- 14:20 **Didier Le Meur**
Impact of ERS-1/ERS-2 scatterometer tandem operations on the ECMWF 3D Var assimilation system
- 14:40 **Lars Isaksen**
Impact of ERS scatterometer data in the ECMWF 4D-Var assimilation system. Preliminary studies
- 15:00 **A. Bentamy**
Wind climatology from ERS scatterometer
- 15:20 **Eva Bauer**
Statistical comparison of winds from ERS-1 scatterometer and ECMWF model in time and wave number domain.
- 15:40 **Renato Santangelo**
Wind field over Mediterranean sea by scatterometer on board of ERS satellites integrated by wind observations at the ground
- 16:00 **Jochen Horstmann**
Wind fields from ERS SAR compared with a mesoscale atmospheric model near to the Coast
- 16:20 **Ad Stoffelen**
In search of the true wind: scatterometer calibration and error modeling
- 16:40 **Erik Korsbakken**
Wind field retrievals from ERS SAR images

Friday, 21 March 1997

Chairman: Ad Stoffelen

- 09:00 **Sylvie Poulquien**
Preliminary results using collocated ERS/NSCAT data
- 09:20 **J Johannessen**
On the use synergy of ERS scatterometer, altimeter and SAR for wind retrievals.
- 09:40 **P. Janssen**
The VIERS-1 scatterometer model
- 10:00 **Harald Schyberg**
A method for two dimensional variational analysis of ocean surface winds based on ERS altimeter and scatterometer data.
- 10:20 **Claudia D'Amelio**
A Fieldwise approach to the wind field retrieval from scatterometer data

Posters (Thursday, 20 March 1997, 17:00)

- D Ballestero**
Remote sensing and modeling primary productivity in upwelling systems, winds retrieval from the ERS-1 scatterometer
- Antonio Bartoloni**
A software package for the quality assessment of the low bit rate Mediterranean scatterometry and altimeter products: ERS-1.WSC.DWP. and ERS-1.ALT.MPR
- M. Crepon**

Wind vector retrieval of ERS1/2

D. Halpern

Uncertainties of ERS Surface winds over the Arabian Sea, with reference to ocean circulation

Patrick Heimbach

Comparison of significant wave heights from the ERS-1 SAR wave mode and the altimeters ERS-1, TOPEX and GEOSAT.

Nirchio

ERS PRI products for wave parameters estimation on the Mediterranean sea

Francisco Ocampo-Torres

Significant wave height from ERS altimeter for shallow water wave studies

Quilfen Yves

High resolution scatterometry for ERS in the perspective of the ASCAT instrument

Harald Schyberg

Optimal scatterometer ambiguity removal using a successive correction method.

ATSR Instrument Performance (TEC)

Friday, 21 March 1997

Chairman: Christopher Mutlow

09:00 Christopher Mutlow
the inflight performance of the ATSR-1 and 2 instruments and their long-term stability

09:20 Isabelle Parkes
the Mutsu Bay Experiment - an investigation into the physical processes of the ocean atmosphere boundary using ATSR data and in situ measurements

09:40 Sumio Tamba
the relationship between SST measured from ATSR to the spatial and temporal behaviour of the ocean skin temperature as observed with an in situ thermal infrared camera

10:00 David Smith
Calibration of the ATSR-2 visible channels using deep convective clouds and desert scenes

Soil Moisture (SMO)

Tuesday, 18 March 1997

Chairman: [Thuy Le Toan](#)

- | | |
|-------|--|
| 09:00 | Ken Blyth
Spatial variability of surface soil moisture in African environments using ERS SAR |
| 09:20 | Kevin James Tansey
Modeling the backscatter response of desert surfaces using ERS SAR data |
| 09:40 | Markus Rombach
Multi-annual analysis of ERS surface soil moisture measurements of different land uses |
| 11:00 | K. Boehnke
Detecting soil thawing in Siberia with ERS Scatterometer and SAR |
| 11:20 | Neil Fox
Development and demonstration of soil moisture determination and INSAR for catchment hydrological modeling |
| 11:40 | U. Wegmuller
Soil Moisture monitoring with ERS SAR Interferometry |
| 12:00 | Benedicte Dousset
Estimation of roughness and moisture availability at the urban surface using ERS SAR images |

Sea Ice (SIC)

Wednesday, 19 March 1997

Chairman: Ola Johannessen

- 09:00 **Ola Johannessen**
ICEWATCH - Sea ice observations of the Northern Sea Route using ERS SAR and Okean SLR data
- 09:20 **Mark Garcia**
Observation of sea-ice and ice free structures in the Bransfield strait and Southern Drake passage with ERS-1 SAR
- 09:40 **Patrik Dammert**
Sea ice displacement measured by ERS-1 SAR interferometry
- 10:00 **V. Lytle**
Ocean/atmospheric heat flux in the east Antarctic Sea Ice Zone estimated using combined SAR and field data
- 10:20 **R.G. Onstott**
Study of temporal nature of Arctic leads during Spring using ERS-1 SAR
- 11:00 **Mohammed Shokr**
Synergistic use of ERS, Radarsat and SSM/I for sea ice information
- 11:20 **Poul Nielsen**
Mapping of sea ice around Greenland using near simultaneous ERS and Radarsat data
- 11:40 **Leif Toudal**
Microwave observation of sea ice in the Greenland sea in 1996
- 12:00 **Klaus Strubing**
ERS SAR documents of the ice season 1995/96 in the western Baltic: experiences and first results in a seasonal ice zone
- 12:20 **Susanne Lehner**
Determination of sea ice and ocean wave parameters using complex ERS SAR data

Posters (Tuesday, 18 March 1997, 18:00)

- G. Chen**
Regional Characteristics of sea level variation in the southern ocean with relation to Antarctic Sea Ice
- T Hirose**
Demonstration of Tandem Mode ERS-1/2 SAR for Mapping Sea Ice Bridges
- R.G. Onstott**
Automated MIZ Ice Classification using ERS-1 SAR
- D Rothrock**
Testing sea ice motions from sequential passive microwave observations with ERS SAR and buoy ice motions
- Ralf Schmidt**
Use of Ocean Wave Imaging to detect the marginal ice zone in ERS SAR Images
- Marcus Thomas**
measuring changes of iceberg attitudes by SAR interferometry
- Marcus Thomas**
Mesoscale sea ice dynamics in the Weddell Sea

Orbits (ORB)

Tuesday, 18 March 1997

Chairman: [Remko Scharroo](#)

11:40 [Stefan Bedrich](#)
PRARE system performance

12:00 [Remko Scharroo](#)
ERS tandem orbits: is 5cm a challenge?

12:20 [C Shum](#)
ERS precision orbit determination and accuracy verification

14:00 [Philip Moore](#)
Analysis of PRARE data for ERS-2

14:20 [Franz-Heinrich Massmann](#)
Quality of D-PAF ERS orbits before and after inclusion of PRARE data

14:40 [Thomas Gruber](#)
D-PAF Global earth gravity models based on ERS data

15:00 [Rene Zandbergen](#)
Progress in ERS orbit and tracking data analysis

Posters (Tuesday, 18 March 1997, 18:00)

[Per Helge Andersen](#)
Orbital analysis of ERS-2 with the GEOSAT software

[Giancarlo Rufino](#)
ERS orbit and attitude modeling for interferometric applications

[Kuldip Singh](#)
Baseline estimation in interferometric SAR

Ocean Circulation (OCL)

Wednesday, 19 March 1997

Chairman: Pierre-Yves Le Traon

- 14:00 **Pierre-Yves Le Traon**
Sea Level variability from ERS-1, ERS -2 and TOPEX/POSEIDON
- 14:20 **John Lillibridge**
Real-time altimetry from ERS-2
- 14:40 **Giovanna Venuti**
Stationary SST estimation using Topex/Poseidon and ERS-1 data
- 15:00 **Giuseppe Manzella**
Potential use of satellite data to infer the circulation dynamics in a marginal area of the Mediterranean Sea
- 15:20 **Daniele Iudicone**
Mediterranean Sea level anomalies and three dimensional structure of the sea from LIWEX and ERS/SYMPLEX
- 16:20 **Paolo Cipollini**
the potential of ERS altimetry for the detection of baroclinic Rossby waves in the North Atlantic
- 16:40 **Karen J. Heywood**
Eddy activity in the South Indian Ocean from ERS-1 altimetry
- 17:00 **Salvatore Marullo**
A combined use of ERS and TOPEX/POSEIDON data to study the mesoscale dynamics in the Mediterranean Sea
- 17:20 **Edzard Romaneessen**
Transport estimates from altimeter data in the south Atlantic Ocean
- 17:40 **Catherine Bouzinac**
CEOF analysis of TOPEX/POSEIDON and ERS-1 combined altimetric data in the region of the Algerian Current

Posters (Thursday, 20 March 1997, 17:00)

- Brian Beckley**
A reanalysis of ERS-1 Radar Altimeter data for ocean circulation studies
- M. Canton**
Ocean mesoscale features identifications in the Canary Basin by means of GEOSAT, ERS-1 and TOPEX/P altimeters
- Chris W Hughes**
Propagation of features in the Southern Ocean, using ATSR and altimetry
- Anuschka Pauluhn**
Principal oscillation pattern analysis of sea surface temperature data
- V Zlotnicki**
The Malvinas Current observed with ERS-1, 2 altimetry

Oceanography (OCE)

Tuesday, 18 March 1997

Chairman: Alain Cavanie

- 09:00 **Ming-Kuang Hsu**
Kuroshio front and oceanic phenomena near Taiwan on ERS SAR images
- 09:20 **David Lyzenga**
Detection and classification of ocean eddies using ERS-1 and aircraft SAR images
- 09:40 **D. Kirby**
Synthetic Aperture Radar remote sensing of wind-driven circulation of the Gulf of Tehuantepec Mexico
- 10:00 **Vibeke Jensen**
Studying the monsoon circulation in the Indian Ocean using altimeter data
- 11:00 **Werner Alpers**
Observations of internal solitons in the Andaman Sea by ERS SAR
- 11:20 **E. Oikonomou**
The effect of wind field in observing internal wave phenomena over the continental slope on SAR ERS-1 and ERS-2 satellite imagery
- 11:40 **Stanislav Ermakov**
ERS SAR imaging of long period internal (tidal) waves
- 12:00 **José da Silva**
The character of short-period IW ERS SAR signatures at very low wind speeds
- 12:20 **A. Liu**
Evolution of Nonlinear Internal Waves in the China Sea

Chairman: David Llewellyn-Jones

- 14:00 **Phillip Watts**
The enhancement of rough sea emissivity by multiple reflections: implications for ATSR SSTs
- 14:20 **Ian Keith Ridley**
Use of ATSR measured ocean skin temperatures in ocean and atmosphere models
- 14:40 **Sean Lawrence**
Use of ATSR data and ocean modelling to investigate instability waves in the tropical Pacific Ocean
- 15:00 **Lei Guan**
Use of ATSR data and in-situ observations to study ocean dynamics near the Kuroshio boundary in the East China Sea
- 15:20 **Geoff Johnson**
Observations of phytoplankton dynamics in Lake Ontario using ATSR-2 data
- 16:20 **Ian Robinson**
Opportunities for combining SAR and ATSR observations of ocean dynamical features during the ERS tandem mission
- 16:40 **Matthew Stephen Jones**
Spatial correlations between ATSR sea surface temperature and altimetric sea surface height.
- 17:00 **Per Knudsen**
Seasonal cycle of ERS-1 Altimetry and ATSR sea surface temperatures
- 17:20 **V. Kerbaol**
Synergetic use of satellite data during the tandem mission
- 17:40 **Marc C. Naeije**
Global analysis of sea surface height and temperature

Wednesday, 19 March 1997

Chairman: Werner Alpers

- 09:00 **Heidi A. Espedal**
ERS-1/2 SAR detection of natural film on the ocean surface
- 09:20 **Paris Vachon**
Comparison of ERS and RADARSAT SARs for wind and wave measurement
- 09:40 **Ming Xia He**
Research and Application of ERS satellite data in the China seas and Northwest Pacific Ocean
- 10:00 **Trevor Guymer**
Remote sensing and in situ measurements of biological variability in a Mediterranean mesoscale system
- 10:20 **Neil Robert Stapleton**
Study of ERS SAR Tandem imagery of the Malin-Hebrides shelf
- 11:00 **J. Boutin**
Air-sea CO₂ fluxes estimated using ERS scatterometer wind speeds
- 11:20 **M. Canton**
Satellite derived scatterometer/ERS wind stress curl in the North East Atlantic
- 11:40 **Andrew R. Birks**
Monitoring the stability of off-shore structures using transponders with the ERS altimeters

Posters (Thursday, 20 March 1997, 17:00)

Oscar Chic

ERS-2 SAR near real time data used in the sampling strategy of an oceanographic cruise in the western Mediterranean

Giovanni Corsini

estimation of directional sea spectra from ERS SAR images of Mediterranean area: a case study

Sverre T. Dokken

Ocean and ice features detection using the ERS SAR browse products

Torill Hamre

Operational use of wind data for slick detection

Harald Johnsen

Experience with SAR ocean image cross spectra

I-I Lin

Computer based algorithm for ship detection from ERS Sar imagery

A. Martinez

Fronts and eddy features in coincident ERS-2 SAR and AVHRR-IR images

Ian Robinson

Sea surface brightness temperature comparisons between ATSR and ATSR-2 during the ERS Tandem Mission

Helen Mary Snaith

ERS, Shipborne and aircraft observations of circulation in the region of the Almeria-Oran front

Marine Geoid (MGE)

Tuesday, 18 March 1997

Chairman: A. Cazenave

16:20 B Tapley
Geodetic and Geodynamic contributions from ERS-1 and ERS-2

16:40 Michael Anzenhofer
Global sea level analysis based on ERS-1 altimeter data

17:00 Seymour William Laxon
Polar marine gravity fields from the ERS-1/2 geodetic and tandem missions

17:20 A. Cazenave
High resolution marine geoid gravit anomalies and seafloor topography derived from ERS-1 and Geosat Geodetic Missions

17:40 Robert Cullen
Global altimetric mean sea surface derived from the geodetic phase of the ESA ERS-1 mission utilising a spectral least squares collocation technique

Posters (Tuesday, 18 March 1997, 17:00)

Per Knudsen
Improved recovery of the marine gravity field from the geodetic mission altimetry

Joana Fernandes
Combining ERS altimetry and surface gravimetry in the Azores region for local geoid determination

David Sandwell
global seafloor topography from dense satellite altimetry and sparse ship soundings

Ole Baltazar Andersen
Global marine gravity field from the ERS-1 and the GEOSAT geodetic mission Altimetry

Pascal Bonnefond
High resolution mean sea surface using ERS-1 and TOPEX/Poseidon Altimeter data in the Mediterranean Sea

Henno Boomkamp
A gravity field solution based on unified ERS-1 and TOPEX/Poseidon altimetry

Meteorology (MET)

Tuesday, 18 March 1997

Chairman: T. Liu

16:00 **Alastair D. Jenkins**
Quantitative estimation of upper ocean and air-sea interaction processes using Tandem ERS-1/2 SAR and synergetic instrument combinations

16:20 **Andrew K. Laing**
ERS Scatterometer observations of airflow around mountainous islands

16:40 **T. Liu**
Application of ERS scatterometer winds to improve our understanding of hurricane, monsoon, wind-driven ocean currents and El Nino

17:00 **Wen-Chung Lin**
Typhoon Wave and Internal Wave Soliton Observed by ERS-1 in the Vicinity of Taiwan

17:20 **Gareth J Marshall**
ERS scatterometer observations of katabatic winds over a polynya

17:40 **John Turner**
The use of ERS Scatterometer data to investigate the surface circulation of Antarctic Mesocyclones

18:00 **Dayalan Kasilingam**
Investigation of tropical rain cells with ERS SAR imagery and ground based weather radar

Posters (Thursday, 20 March 1997, 17:00)

Graham Quartly
Retrieving Rainfall rates from ERS altimeter data

Land Use (LAU)

Wednesday, 19 March 1997

Chairman: Hugo de Groof

- 09:00 **Guido Lemoine**
Methodological advancements in using ERS SAR data for crop area estimation
- 09:20 **Richard Kidd**
Integration of ERS SAR classification products in the MARS activity
- 09:40 **Gilbert Kattenborn**
Classification of ERS-1 SAR data over Seville (Spain) for agricultural statistics
- 10:00 **Eric Auquiere**
ERS SAR time series analysis for maize monitoring using experimental and modeling approaches
- 10:20 **Soo Chin Liew**
Identification of rice cultivating systems in the Mekong Delta using Multi-temporal ERS SAR Images
- 11:00 **Katrina Dabrowska-Zielinska**
Soil moisture investigation for the different agricultural crops using ERS-1 and ERS-2 data
- 11:20 **Andrew Zmuda**
a crop information system incorporating ERS SAR data: applications in the UK and Paraguay
- 11:40 **I. Pons**
Study of ERS data for crop monitoring in the cotton producing area of Senegal
- 12:00 **Eric Mougin**
Use of ERS wind scatterometer data over the Sahel
- 12:20 **Marianne Edwards**
Mapping and monitoring of arid land vegetation in Jordan using ATSR-2 data

Thursday, 20 March 1997

Chairman: Andrew Sowter

- 09:00 **Geoffrey Henebry**
Advantages of principal components analysis for land cover segmentation from SAR image series
- 09:20 **Yifang Ban**
Orbital effects on the ERS-1 temporal backscatter profiles of agricultural crops
- 09:40 **George Mackay**
Comparison of directional reflectance and radar backscatter from desert surfaces, the eastern Badia, Jordan
- 11:00 **Jan Verhoeye**
Research on the capabilities of ERS SAR for monitoring of land use changes in the Neotropics
- 11:20 **Donald Rundquist**
Using ERS-1 data to measure and map conditions related to the production of trace gases in a wetland environment: The Nebraska sandhills
- 11:40 **Roswitha Stolz**
Evaluation of ERS data for biomass estimation of meadows
- 12:00 **Andrew Shepherd**
Angular dependence of radiometric surface temperature for sparse vegetation
- 12:20 **Matthew Perrin**
Mapping and monitoring biomass burning in Bolivia using ATSR-2 data

Posters (Tuesday, 18 March 1997, 18:00)

- Manfred Guenzl**
ERS-SAR data for land information systems
- Giulia Abbate**
Heat island study in the area of Rome by integrated use of ERS SAR and Landsat TM data
- A. Akono**
Classification d'une image radar: application a la cartographie automatique de la mangrove autour de la region de Douala (Cameroun)
- Weng Ang**
Weather effects on radar backscatter from Crops
- Vera De Cauwer**
Potential use of ERS SAR data to discriminate natural and degraded woody vegetation types in Central Africa
- Benedicte Dousset**
Application of ERS ATSR images to urban climatology
- Geoffrey Henebry**
Spatio-temporal analysis of SAR image series from the Brazilian Pantanal
- C. Keithley**
Examining agricultural and wetland vegetation using ERS-1 imagery
- Yann Kerr**
Surface characteristics from ERS-1 WSC: application to periarctic areas
- Detlev Kosmann**
RAPID - a joint proposal using INSAR

A Luckman

Interferometric coherence measurements of tropical, temperate and boreal forests

Eberhard Parlow

Satellite based urban climate analysis of Basle/Switzerland

B. Schieche

Monitoring of intensive and extensive landuse with multi-temporal ERS and TM datasets in the district of Goettingen (Lower Saxony/ Germany)

M. Simard

Sensitivity analysis of the ERS-1 SAR signal to multi-scale structures of the tropical forest by means of the wavelet transform

Y Smara

Multisource ERS-1 and optical data for begetal cover assessment and monitoring in a semi arid region of Algeria

Andrew Sowter

The requirements for the selection and processing of SAR data for operational agricultural applications in Europe

W. Stroobants

An approach to cartographic exploitation of ERS imagery in tropical areas: Principles and first results

Stefania Usai

Long time scale INSAR by means of high coherence features

Guido Lemoine

Regional application of ERS-1/2 SAR data at the Flevoland Agricultural area in the Netherlands

Rogelio de la Vega

Preliminary results of the landcover and land use of Calanda area using ERS1/2 SAR data images and LANDSAT-TM data images

S. Vyas

Leaf area estimation for sugar beet yield prediction using ERS SAR data

Lucien Wald

ERS SAR imagery for urban climate studies

M. Wooster

Observations of vegetation fires with the Along Track Scanning Radiometer-2

Hervé Yesou

Pastures monitoring and landsurfaces characteristics analysis in a sahelian region using multitemporal SAR data

JERS/ERS Synergy (JRS)

Tuesday, 18 March 1997

Chairman: [Ake Rosenqvist](#)

- 15:20 [Hiroyuki Wakabayashi](#)
Ice cover monitoring on Lake Saroma using ERS-1 SAR
- 15:40 [Masanobu Shimada](#)
JERS-1/ERS-1 SAR interferometry comparison - Mt Fuji
- 16:00 [C Schmillius](#)
Advancing North - a Siberian Boreal Forest map with ERS-2 and JERS-1
- 16:20 [Ake Rosenqvist](#)
Monitoring of tropical tree crops by JERS-1 and ERS-1 SAR data
- 16:40 [Paolo Pampaloni](#)
The potential of L and C band SAR in assessing vegetation biomass: ERS-1 and JERS-1 experiment
- 17:00 [Thuy Le Toan](#)
Forest observation by ERS and JERS data
- 17:20 [Josef Kelldorfer](#)
Multi-ecoregion vegetation mapping using combined ERS/JERS SAR imagery
- 17:40 [F. De Grandi](#)
Global Rain Forest mapping for the TREES-GRFM project using the ERS and JERS SAR sensors: an overview and preliminary results over the African continent

Ice / Glaciers (ICE)

Tuesday, 18 March 1997

Chairman: Christopher Doake

09:00 **Richard Goldstein**
Ice motion interferometry

09:20 **Ian Joughin**
Interferometric estimation of ice sheet motion and topography

09:40 **Mark Fahnestock**
Rapid ice flow in central Greenland

10:00 **Dale P. Winebrenner**
Interferometric SAR for observation of glacier motion and firn penetration

11:00 **Johan Jacob Mohr**
ERS Tandem study of glacier dynamics in NE Greenland

11:20 **C. Lingle**
Dynamic behavior of a large glacier system during a surge and other measurements of Alaskan glaciers with ERS SAR imagery

11:40 **Andreas Siegel**
glacier studies in Antarctica and Patagonia by means of ERS SAR interferometry

12:00 **L Gray**
Experiments at CCRS using ERS tandem mode data

12:20 **Neal Young**
Applications of time series of microwave backscatter over Antarctic region

Chairman: Paolo Pampaloni

14:00 **Teruo Furukawa**
Comparison of microwave backscatter measurements with observed roughness of the snow surface in East Queen Maud Land, Antarctica

14:20 **C. Schneider**
Validation of energy balance estimates from snow covered areas of the Antarctic peninsula based on ERS PRI images

14:40 **Eric Rignot**
Ice discharge from North and North East Greenland as observed from ERS radar interferometry

15:00 **Baerbel K. Lucchitta**
Thwaites Glacier and Marie Byrd Land Coast, Antarctica

16:00 **Fumihiko Nishio**
Interferometric study on sea ice, outlet glacier and ice sheet, Antarctica by ERS-1 SAR

16:20 **Martti Hallikainen**
Remote sensing of snow using radar and microwave radiometer

16:40 **Alain Cavanie**
Five years of AMI wind sea ice backscatter grids on a CD ROM

17:00 **Richard Kelly**
Characteristic snow and ice properties on a Norwegian ice cap determined from complex ERS SAR data

17:20 **H Zwally**
Ice sheet topography, flow direction and drainage basins for ERS altimetry

17:40 **M. Stenoien**
Topography estimation in W Antarctica using level 2 radar altimeter data products

18:00 **Jonathan Bamber**
High Resolution Digital Elevation Model of the Greenland Ice Sheet and Validation with Airborne Laser Altimetry

18:20 **Frederique Remy**
Antarctica ice sheet dynamics derived from ERS altimeter

Posters (Tuesday, 18 March 1997, 18:00)

Richard Coleman
Comparison of altimetric and GPS derived elevations of the Amery Ice Shelf, East Antarctica

Christopher Doake
Detecting changes in ice movement over the Antarctic Ice Sheet by SAR Interferometry

Tore Guneriusen
Snow monitoring using ERS SAR data

Helen Le Core
ATSR data and hydrodynamic models to investigate physical processes in Lake Baikal, Siberia

Benoit Legresy
Antarctica ice sheet snow properties derived from ERS altimeter data

Baerbel K. Lucchitta
Antarctica on sequential Landsat and ERS SAR images: King George VI Ice Shelf

Vladimir Melentyev
ERS SAR retrieval of ice cover parameters for some oil and gas fields at the Russian Arctic shelf

Uwe Mueller

SAR data exploitation for monitoring Antarctic ice sheets and Glaciers

Jens Piesbergen

Multi-source snow cover monitoring in Eastern Switzerland

W.G. Rees

Satellite data synergies for monitoring Arctic ice masses

Eric Rignot

ERS Interferometry Studies of Antarctic Ice Shelves

Volkmar R. Wismann

Monitoring snow properties in Greenland with ERS scatterometer and SAR

S. Wunderle

Derivation of glacial Catchments of the Antarctic peninsula by means of interferometric technique

Hydrology (HYD)

Tuesday, 18 March 1997

Chairman: [Wolfram Mauser](#)

14:00 [Robert Brakenridge](#)
Topography enhanced ERS flood mapping

14:20 [Kader Fellah](#)
Potentials and limitations of multi-temporal SAR data in a quantitative approach for multi-scalar hydrological applications. Synthesis of ERS Alsace/Camargue Pilot Project

14:40 [E. Kasischke](#)
Monitoring Hydro-period and Hydro-pattern in South Florida Ecosystems using ERS SAR data

15:00 [Wolfram Mauser](#)
The contribution of microwave data to distributed hydrologic models

15:20 [Hermann-Gregor Mendel](#)
Soil moisture estimation in hydrological mesoscale modeling using ERS SAR data

15:40 [Peter A. Troch](#)
spatial organization of hydrological processes in small catchments derived from advanced SAR image processing - Field work and preliminary results

Posters (Tuesday, 18 March 1997, 18:00)

[Neil Fox](#)
Retrieval of soil moisture content from naturally vegetated upland areas using ERS-1/2 Synthetic Aperture Radar

[W. Klaassen](#)
SAR sensing of vegetation wetness: the first results

[N. Verhoest](#)
Spatial soil moisture mapping through multi-temporal analysis of ERS SAR PRI data

[Edmond Nezry](#)
Retrieval of environmental and geophysical parameters through Bayesian fusion of multi-channel ERS and RADARSAT data

[Paolo Pampaloni](#)
ERS-1 SAR sensitivity to hydrological parameters. A comparison with SIR-C/X-SAR data

[Corinna Prietzsch](#)
Renaturalisation recommendations for north east German peat bog areas based on multitemporal ERS data analysis

[K S Rao](#)
ERS-1 and JERS-1 SAR data analysis for soil moisture studies

[S. Wunderle](#)
Ground truth for soil and snow moisture sensing

Hazards (HAZ)

Wednesday, 19 March 1997

Chairman: J Bodechtel

- 16:40 **Jean Chorowicz**
SAR ERS imagery for the study of relationships between tectonics and volcanism
- 17:00 **G Wadge**
Volcano monitoring using interferometric SAR
- 17:20 **Christophe Delacourt**
Post eruptive deformation associated with the 1986-87 and 1989 lava flows of Etna detected by radar interferometry
- 17:40 **A. Roth**
Observation of the effects of the subglacial volcano eruption underneath the Vatnaajokull glacier in Iceland with ERS SAR data
- 18:00 **Xiaoqing Wu**
ERS Tandem interferometric observation of volcano activity in Iceland
- 18:20 **M. Wooster**
Volcano Monitoring Using data from the ERS Along Track Scanning Radiometer

Thursday, 20 March 1997

- 14:00 **Frederic Adragna**
Probing the ultimate capabilities of radar interferometry for deformation with low gradient
- 14:20 **Ramon Hanssen**
A time series approach for monitoring slow deformation processes
- 14:40 **A. Ozer**
Neotectonic and interferometry in Calabria (Italy) and Dead Sea (Jordan)
- 15:00 **Salvatore Ponte**
ERS tandem data for earthquake prediction: Preliminary results
- 15:20 **Christoph Reigber**
The 1995 Antofagasta Earthquake 3D deformation pattern as observed by GPS and the ERS SAR
- 15:40 **B. Theilen-Willige**
Earthquake hazard zonation in the Lake Constance area based on satellite radar (ERS-1, SIR-C) and LANDSAT TM data
- 16:00 **Charles Werner**
Detection of a seismic creep along the San Andreas Fault near Parkfield, California
- 16:20 **P. Wright**
Application of SAR Interferometry to the Imaging and Measurement of Neotectonic Movement Applied to Mining and Other Subsidence/Downwarp Modelling
- 16:40 **Mancini**
Integration of ERS-1 PRI imagery and digital terrain models for the assessment of flooded areas
- 17:00 **Laurent Marinelli**
Flood mapping using ERS tandem coherence image: a case study in South France

Posters (Wednesday, 19 March 1997, 18:00)

- Gordon Jolly**
Clean Seas: marine pollution monitoring from space
- Mark Haynes**
CivInSAR: further operational applications of ERS SAR differential interferometry for displacement detection
- Claudie Carnec**
Potential of Tandem Mission for detecting and monitoring small terrain movements
- Jean Chorowicz**
Complementary analysis of SAR ERS and SPOT P data for the mapping of Pinatubo lahar and pyroclastic flow deposits.
- P. Clemente-Colon**
Application of a feature tracking shape matching method to multi-spacecraft SAR observations of the 1996 oil slick off the coast of Wales.
- Benedict Fruneau**
Landslide monitoring in South of France with Tandem data
- Geoffrey Hugh Griffiths**
Modeling processes of dryland degradation using ERS ATSR-2 and SAR data
- Francois Kervyn**
contribution of SAR interferometry to tectonic studies in the East African rift
- Olivier Laugier**
High temporal detection and monitoring of flood dynamic using ERS data around catastrophic natural events: the 1993 and 1994 Camargue flood events
- Guido Lemoine**
Flood monitoring using ERS-1 and RADARSAT SAR data in the Jamuna River region of Bangladesh
- U. Munzer**
Recent interdisciplinary research in the neovolcanic zone of Iceland using SAR data

Gilles Peltzer

Crustal deformation in California using SAR interferometry

D Raymond

SAR interferometry: potential and limits for mining subsidence detection, with examples in the mulhouse area (eastern France)

Wolfgang Rosenthal

Use of ERS SAR for detection of threats to the Frisian Islands of the German North Sea Coast

L Smith

Flood monitoring from tandem ERS phase coherence maps: Ob River, Siberia

GOME (GOM)

Wednesday, 19 March 1997

Chairman: John P. Burrows

- 14:00 **John P. Burrows**
The global Ozone monitoring experiment (GOME): Mission, instrument concept and first results (O3 and NO2)
- 14:20 **D. Loyola**
Ground segment for ERS-2 GOME sensor at the German D-PAF
- 14:40 **Claus Zehner**
GOME instrument performance monitoring
- 15:00 **David Pemberton**
GOME diffuser reflectivity analysis
- 15:20 **Kelly Chance**
GOME wavelength calibration using solar and atmospheric spectra
- 16:20 **Ruediger de Beek**
Height Resolved Ozone Information from GOME Satellite Data
- 16:40 **Richard Siddans**
Height-Resolved Ozone Information from GOME
- 17:00 **Robert Spurr**
Development of a prototype algorithm for the operational retrieval of height resolved products from GOME
- 17:20 **Jean-Christopher Lambert**
Pole to pole validation of the ERS-2 GOME level 2 products with the ground SAOZ network
- 17:40 **Hennie Kelder**
comparison of ozone columns calculated with a 3D global model with GOME measurements
- 18:00 **Ankie J.M. Piters**
GOME validation using data assimilation
- 18:20 **William Rathman**
Total ozone measurements from GOME and TOVS - a comparative study

Thursday, 20 March 1997

Chairman: Paul Simon

- 09:00 **D. Perner**
First results on tropospheric observations by the global ozone monitoring experiment
- 09:20 **Maarten C. Krol**
Tropospheric Studies using GOME
- 09:40 **Kelly Chance**
Quantitative spectroscopy for the analysis of GOME data
- 10:00 **Robert B.A. Koelemeijer**
Surface reflectivity spectra derived from GOME data
- 10:20 **Piet Stammes**
GOME reflectivity and polarisation validation study
- 11:20 **M Eisinger**
Retrieval of OC10, BrO and other minor trace gasses from GOME
- 11:40 **E. Hegels**
Global distribution of BRO and OCLO by the global ozone monitoring experiment, GOME, on ERS 2
- 12:00 **Rodolfo Guzzi**
Aerosol optical thickness from GOME data. Methodological approach and preliminary results
- 12:20 **Gijs A.A. Koppers**
Tropospheric aerosol retrieval from GOME data
- 12:40 **Philippe Peeters**
GOME solar irradiance validation using UARS SOLSTICE data

Posters (Thursday, 20 March 1997, 17:00)

- Ilse Aben**
First results on GOME Breadboard measurements on vacuum characteristics and atmospheric radiation (Gobelin project)
- Michael Bittner**
large scale variations in ozone from ERS-2 GOME data
- J Callies**
Global Ozone Monitoring Experiment (GOME) on board of ERS 2
- Kelly Chance**
GOME ozone profiles and tropospheric ozone measurement
- Ruediger de Beek**
Ozone profile retrieval from GOME satellite data: Part I, Algorithm description
- Marcel Dobber**
GOME Moon measurements (including instrument characterisation and moon albedo)
- Robert B.A. Koelemeijer**

Intercomparison of GOME and ATSR-2 reflectivity measurements

Rob Koopman

Analysis of GOME Stray light

Jean-Christopher Lambert

Validation of the ERS-2 GOME ozone products with the NDSC/Alpine stations

Marina Mochi

GOME data processing at I-PAF: the aerosol optical thickness retrieval from GOME spectra

A. Noelle

GOME level 3 data product at the ATMOS user centre

Philippe Peeters

MgII index from high resolution GOME irradiance

Els Schoubs

Validation of GOME with ground based ozone measurements at Uccle (Belgium)

Piet Stammes

Spectral properties of clouds studied with GOME

Demos

Angelika Dehn

GOME instrument performance monitoring results on the ESRIN WWW pages

Claus Zehner

Ozone hole seen by GOME during 1996

Global Change (GLC)

Wednesday, 19 March 1997

Chairman: [Mark Drinkwater](#)

- | | |
|-------|--|
| 09:00 | Brett Candy
The conversion of ATSR sea surface temperatures for use in a climate database |
| 09:20 | Christopher Mutlow
Sea surface temperatures from ATSR-1 and 2 towards a climate data set |
| 09:40 | R. P. Cechet
Investigation of land surface radiation budgets using ATSR/ATSR-2 data |
| 10:00 | Luciana Fenoglio
Geodetic aspects of long term sea level variation in European seas from altimetry and from tide gauge data |
| 11:00 | Mark Drinkwater
ERS satellite microwave radar observations of Antarctic Sea dynamics |
| 11:20 | Andrew Ridout
Change in elevation of the Antarctic Ice Sheet (1992 - 1995) |
| 11:40 | W. Rack
Significant ice retreat in the region Patagonia - Antarctic Peninsula observed by ERS SAR |

Forestry (FOR)

Wednesday, 19 March 1997

Chairman: J-P Malingreau

- 14:00 **Jan Askne**
Interferometric SAR observations of forested areas
- 14:20 **Marcus Engdahl**
forest inventory using interferometric SAR techniques
- 14:40 **Florence Ribbes**
Deforestation monitoring in tropical region using multi-temporal and interferometric ERS1/2 data
- 15:00 **T. Strozzi**
Forestry applications of ERS SAR interferometry
- 15:20 **E. Kasischke**
Monitoring of the effects of Boreal Forest Fires on ERS SAR data
- 15:40 **V Donchenko**
Synergetic use of ERS SAR and other satellite data for the polluted areas identification for Boreal forests of St Petersburg region
- 16:40 **F. De Grandi**
Wither radar global mapping of the tropical forest: new avenues from the TREES ERS-1 Central Africa Mosaic
- 17:00 **Agnes Begue**
Characterization of the deforestation process in the Congo rainforest with optical and microwave data
- 17:20 **Nicolas Stussi**
Landcover classification using ERS SAR INSAR data on tropical forest
- 17:40 **M. Zink**
Microwave remote sensing for monitoring forest vitality

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DEMs (DEM)

Thursday, 20 March 1997

Chairman: [Frederic Adragna](#)

- | | |
|-------|---|
| 09:00 | Jonathan Bamber
Global land topography from the geodetic phase of ERS-1 |
| 09:20 | Philippa A M Berry
Evaluation of potential of geodetic applications of ERS-1 data over land |
| 09:40 | Philippa A M Berry
Retracking ERS-1 Altimeter Waveforms over land: an expert system approach |
| 10:00 | Anita Brenner
Topography over South America from ERS Altimetry |
| 11:00 | Cecilia Svenné Nielsen
Merging of elevations from SAR interferometry, satellite altimetry GPS and Laser Altimetry in Greenland |
| 11:20 | Alessandro Ferretti
3D SAR imaging, multi baseline SAR interferometry for Automatic DEM reconstruction |
| 11:40 | Mike Seymour
INSAR Terrain Height Estimation using low quality sparse DEMS |
| 12:00 | Daniel Carrasco
Ascending-descending orbit combination SAR interferometry assessment |
| 12:20 | Tom Farr
ERS studies of landforms and surface deformation |

Coastal Zones (CST)

Thursday, 20 March 1997

- 14:00 **Werner Alpers**
Study of mesoscale atmospheric phenomena over the ocean by ERS SAR and numerical modeling
- 14:20 **HAJJI Hafedh**
use of SAR images to study coastal processes
- 14:40 **Katrin Hessner**
The Rhine outflow studied by the analyses of ERS SAR data and numerical simulations
- 15:00 **Andrei Yu Ivanov**
Lake Ladoga surface features on the ERS-1 SAR imagery
- 15:20 **Ola Johannessen**
COASTWATCH - using SAR imagery for monitoring coastal circulation features
- 15:40 **Marcus Schwaebisch**
Coastline extraction with interferometric processing of ERS SAR data
- 16:00 **G.J. Wensink**
Mapping of seabed topography to and from Synthetic Aperture Radar
- 16:20 **Volkmar R. Wismann**
Coastal topography derived from ERS SAR imagery
- 16:40 **Kees Mastenbroek**
Satellite based shelf sea climate assesment system

Posters (Wednesday, 19 March 1997, 18:00)

- J-P. Rudant**
Distinction entre formations vegetales littorales et continentales dans leur rapport avec la geomorphologie: Interet des images ERS1
- Harm Greidanus**
Speckle reduction in low-contrast areas by dedicated SAR processing suggested themes: Coastal Zones or Products and Services
- Juerg Lichtenegger**
Integrated use of SAR and Optical data for coastal zone management
- David Lodge**
Land Coastal Ocean Interaction
- David C Mason**
Improving inter-tidal digital elevation models constructed by the waterline technique