ERAD2008 Monday 30 June 2008

9:00 Opening of the conference

Petteri Taalas, Director General of Finnish Meteorological Institute
Jarmo Koistinen, Chairman of ERAD 2008

Session 1 Quality of radar data and products I
Chair: Elena Saltikoff

9:15 *Keynote lecture:* Andrea Rossa: Propagation of uncertainty in advanced meteo-hydrological forecast systems as seen by COST 731
9:45 Marion Mittermaier: Using numerical weather prediction model forecasts to assess European radar composite quality and consistency

10:00 News of the Day. Refreshments sponsored by EEC.

Session 2: Quality of radar data and products II
Chair: Uta Gjertsen

10:45 Jonathan Gourley: Estimating Rainfall Uncertainty: Simulations using a Storm-Scale Atmospheric Model
11:00 Pierre Tabary: Unusually Large Attenuation at C-band in Europe : How often does it happen ? What is the origin ? Can we correct for it ?
11:15 Katja Friedrich: Sensitivity of polarimetric quantities to ground clutter and melting layer contamination. Can high-quality measurements still be accomplished?
11:30 Richard Doviak: Theoretical and Practical Considerations in Using Spectrum Width Data
11:45 Daniel Michelson: Possible Extreme Marine Snowfall as seen by BALTRAD
12:00 John Nicol: Operational Testing of Radar Refractivity Retrieval for the UK Radar Network
12:15 Alan Seed: Assessing the Quality of the Radar Data for the B08 Forecast Demonstration Project

12:30 Lunch break

14:00 Poster sessions

P1: Quality assessment and products

P1.1 Markus Peura: On-demand processing architecture for radar image products
P1.2 Kathleen Helmert: DWD's operational tool to enhance radar data quality
P1.3 Jan Szturc: Parameterization of QI scheme for radar-based precipitation data
P1.4 Santiago Gaztelumendi: Product Quality Monitoring of Kapildui Weather Radar During Critical Meteorological Events
P1.5 Jaakko Karppanen: Bridging radar meteorology research and training through international cooperation
P1.6 Mercedes Maruri: Impact of C-Band Polarimetric Weather Radar in the Basque Country. Estimation of Errors.
P1.7 Shinju Park: Retrieval of the lower atmospheric refractivity profile from ground echo patterns
P1.8 Daniel Carbunaru: The Impact of Hail on Radial Velocities for Warning Purposes

P2: Quality or radar variables

P2.1 Leonid Dinevich: Algorithmic System for Identifying Bird Radio-Echo and Plotting Radar Ornithological Charts
P2.2 Jarmo Koistinen: Bird Migration Patterns on Polarimetric Weather Radars
P2.3 Matti Leskinen: Observed Polarimetric Signals of Insects
P2.4 Rashpal Gill: Sea clutter removal using second order texture parameters
P2.5 YoonJung Lee: Investigation of Radar Beam Propagation Conditions over Korean Peninsula
P2.6 Susan Rennie: Utilization of Doppler Radar Wind Measurements From Insect Returns

P2.7 Jörg Seltmann: The observer's view on line-shaped echoes in radar network products
P2.8 Thomas Bövith: Optical Flow-Based Method for Detection and Mitigation of Weather Radar Ground Clutter
P2.9 Vesna Ivkov: Analysis of connection between VIL Density and hail occurrence over north Serbia
P2.10 John Hubbert: Real Time Mitigation of Ground Clutter
P2.11 Valliappa Lakshmanan: Quality Control of Canadian Radar Reflectivity Data
P2.12 Gerhard Greving: Weather Radar and Wind Turbines – Numerical Analysis of the Shadowing Effects and Mitigation Concepts
P2.13 Jan Handwerker: Simultaneous wind measurements with lidar and cloud radar complementarity and quality check
P2.14 Iwan Holleman: Wind observations with Doppler weather radar
P2.15 Petr Pesice: METEOSAT Parallax Correction Using Radar Echotops
P2.16 Adrian Dokter: Quantitative bird migration information from operational weather radars

P3: Networking of radars

P3.1 Joan Bech: An Updated Description of the Radar Network of the Meteorological Service of Catalonia
P3.2 Pierre Tabary: The French Operational Polarimetric Processing Chain
P3.3 Theodor Mammen: New Radar Systems For The DWD Weather Radar Network
P3.4 Paul Kucera: Development of Radar Networks and Evaluation of Precipitation Characteristics in Saudi Arabia and West Africa
P3.5 Gianfranco Vulpiani: The Italian radar network within the national early-warning system for multi-risks management
P3.6 Gordon Hutchinson: The Protection of Weather Radar Networks. The UK experience
P3.7 Katarzyna Osrodka: The MeteoGIS: radar-based system for monitoring severe meteorological phenomena
P3.8 Chiraz Boudjabi: validation of refractivity measurements with a magnetron transmitter radar
P3.9 Tatiana Bazlova: Comparison of Doppler Radar Wind Profiles with AMDAR Data.
P3.10 Aleksander Linev: Scanning strategy optimization for simultaneous reflectivity and velocity data retrieval
P3.12 Norman Donaldson: Development of Wind Turbine Assessments for Canadian Weather Radars
P3.13 YoonJung Lee: Evaluation of Radar Reflectivity at S-band Weather Radar Network
P3.14 Ingemar Carlsson: Weather Information from Surveillance Radar as a Complement to Ordinary Weather Radar
P3.15 Karen Johnson: Black Forest, Niamey and SGP Cloud Climatologies from Continuous 95 GHz Radar and Micropulse Lidar Observations
P3.16 Takeshi Maesaka: Surface Wind Estimation System by X-band Radar Network around Tokyo Metropolitan Area
P3.17 Tatiana Bazlova: Comparison of Doppler radar wind profiles with AMDAR data.

P4: Severe convection

P4.1 K.H. Wong: Determination of the windshear hazard F-factor using the Terminal Doppler Weather Radar (TDWR) data of the Hong Kong International Airport (HKIA)
P4.2 Edwin S.T. Lai: Thunderstorm Downburst and Radar-based Nowcasting of Squalls
P4.3 Kaisa Outinen: Polarimetric radar observations of a tornadic supercell in Finland
P4.4 Hanako Inoue: High resolution X-band Doppler radar observation of low-level misocyclones -First result from the Shonai Area Railroad Weather Project-
P4.5 Laura Lopez: The multicellular hailstorm on 19 July 2006 in Maluenda (Ebro Valley, Spain)
P4.6 Katherine Donner: Non-Classical Structure of a Tornadic Supercell Storm: A Dual-Doppler and Polarimetric Analysis
P4.7 Manuel Ceperuelo: Evaluating the use of boxplot for estimating surface hail size
P4.8 Jenni Teittinen: Radar observations of a tornadic severe frontal rainband
P4.10 Matthew Kumjian: Multi-Platform Analysis of a Tornadic Convective System
P4.11 Aurora Bell: Radar Characteristics of Tropical-like Severe Storms in Romania

15:00 Refreshments served in poster hall (every day this same time)

16:00, Session 3: Networks of radars and other observational systems
Chair: Daniel Michelson

16:00 Alexander Ryzhkov: C-band Polarimetric Observations of Winter Storms in the US Midwest
16:15 Baxter Vieux: On Space-Time Scales of Hydrologic Evaluation and Validation of Radar-derived Precipitation in

Distributed Modeling
16:30 Iwan Holleman: Update on the European Weather Radar Network (OPERA)
16:45 Renzo Bechini: A Transportable X-Band Polarimetric Radar in Italy for Deployment in Complex Terrain: Results of the First Year Measurement Campaign
17:00 V. Chandrasekar: Networked Waveform System for a Weather Radar Network
17:15 Brice Boudevillain: Multi-Radar Rainfall Estimation Based on an Early-Merging Concept
17:30 Masayuki Maki: X-band Polarimetric Radar Network in the Tokyo Meteropolitan Area - X-NET
17:45 Rashpal Gill: Evaluation of the dual polarisation radar in an operational network

Social program

19:00 *Helsinki City reception*

ERAD2008 Tuesday presentations

8:30, Session 4: Severe convection
Chair: Aurora Bell

8:30 *Keynote lecture*: Howard Bluestein: Use of a mobile, phased-array, x-band, Doppler radar to study severe convective storms and tornadoes
9:00 Leslie Lemon: Greensburg, Kansas: Did the WSR-88D Resolve a Very Large Tornado?
9:15 Jenni Teittinen: Lightning and radar reflectivity signatures in tornadic supercell thunderstorms in Finland
9:30 Marco Gabella: Observing an Extreme Convective Events with a (Distant) C-Band Radar and a (Close) X-Band Radar
9:45 Marielle Gosset: Observations in West African Squall Lines with an X-band Polarimetric Radar

10:00 News of the Day. Refreshments sponsored by Gamic.

10:45, Session 5: Quality of data and products
Chair: Sabine Göke

10:45 John Hubbert: Uncertainty of Zdr Calibration Techniques
11:00 Irmeli Markkula and Matti Leskinen: Insect Migration Case Study by Polarimetric Radar
11:15 Joan Bech: Do anomalous propagation conditions occur frequently with precipitation?
11:30 Marco Boscacci: Radar Quality Management in mountainous region

11:45, Session 6: Microphysics of snow and mixed phase precipitation
Chair: Sabine Göke

11:45 Isztar Zawadzki: A Study of Variability of Snow Terminal Fall Velocity
12:00 Sandra Yuter: Forecasting and Characterization of Mixed Precipitation Events using the MicroRainRadar
12:15 Dmitri Moisseev: Dual-polarization spectral observations of winter precipitation during C3VP; comparison to in situ observations

12:30 Lunch break

14:00 Poster sessions

P5: Radar system stability assesment

P5.1 Iwan Holleman: Monitoring of weather radar receivers using solar signals detected in operational scan data
P5.2 Renzo Bechini: Differential Reflectivity Calibration of Operational Radars Based on Properties of Measurements

Collected at Increasing Elevations
P5.3 Sven Åhlen: Real Time Compensation of Radome Attenuation in a Wet or Dirty Radome
P5.4 Jan Handwerker: Intercomparison Of Measurements Obtained By Vertically Pointing Collocated 95 GHz And 35.5 GHz Cloud Radars
P5.5 Erwan Le Bouar: Reflectivity Calibration of a X-Band Polarimetric Radar
P5.6 Jörg E.E. Seltmann: ASTARS dual polarization quality and scan strategy
P5.7 Reino Keränen: Multi season characteristics of channel power balances at a polarimetric weather radar
P5.8 Jorge Trabal: A Method to Correct for Radome Attenuation in CASA Radars by the Use of a Contiguous WSR-88D Radar
P5.9 Ronald Hannesen: Comparison of C- and X-Band Polarimetric Weather Radar Data
P5.10 Giancarlo Ferrauto: Probabilistic Approach To Constrained Techniques For Path Attenuation Compensation: A Numerical Study For C- and X-Band Radars

P6: Microphysics of clouds and precipitation I

P6.1 Alexander Ryzhkov: Exploring Model-based Polarimetric Retrieval of Vertical Profiles of Precipitation
P6.2 Frank S. Marzano: Hydrometeor classification and water content estimation from X-band dual-polarized radars: IHOP case study analysis
P6.3 Giovanni Botta: Backscattering modeling for polarimetric radar observation of ice crystals and aggregates from C to Ka band
P6.5 Reino Keränen: Estimates for Polarimetric Attenuation Coefficients in Rain From Multi Season Statistics of Polarimetric C-band Radar Data at Mid Latitudes, with a Case Comparison to S-band Observations
P6.6 Alexander Ryzhkov: Polarimetric Characteristics of Snow Measured by Radar and 2D Video Disdrometer
P6.7 Leyda Leon: Estimation and Correction of Wet Ice Attenuation at X-band during a convective storm Using the X-band CASA radar network IP1 and WSR-88D KOUN Radar
P6.8 Elke Rusteiemer: Snow Size Distribution Measurements in Southern Ontario, Canada
P6.9 Sandra Yuter: Storm Structure, Freezing Level Height, and Precipitation in the US Pacific Northwest
P6.11 Tuuli Perttula: Hydrometeor Classification Using a Vertically Pointing Doppler Radar and a C-band Polarimetric Radar
P6.12 Leila Konkola: Interpretation of Polarimetric Radar Measurements of the Melting Layer
P6.13 Joel Jaffrain: Experimental investigation of the uncertainty in drop size distribution measurements from optical disdrometers
P6.14 Jani Tyynelä: Modeling polarization radar echoes of hydrometeors using Discrete Dipole Approximation

P7: Microphysics of clouds and precipitation II

P7.1 Alexis Berne: Simulation of 2D fields of raindrop size distributions
P7.2 Matthew Kumjian: Interpretation of Polarimetric Signatures in Supercell Storms Using Explicit Microphysical Modeling
P7.3 Merhala Thurai: C-band polarimetric radar variables calculated using rain microstructure information from 2-D video disdrometer
P7.4 Joel Van Baelen: PREPHIX : PREcipitations and microPhysical studies with a HIgh resolution X-band radar: Calibration with a bin microphysical model and supporting measurements
P7.5 Brenda Dolan: Microphysical and Kinematic Observations of an Ordinary Storm from the CASA IP1 Network of Polarimetric X-band Radars
P7.6 Bronwyn Dolman: Comparison of Drop Size Distribution Retrievals in the Tropics and Mid Latitudes
P7.7 Alexander Khain: Simulation of Polarimetric Radar Parameters using a Cloud Model with Spectral Bin Microphysics
P7.8 Vera Meyer: Comparison Of Total Lightning Evolution And Polarimetric Radar Parameters
P7.9 Siegfried Vogt: Wind Profiler-RASS Measurements During Precipitation
P7.10 Matthew Kumjian: Microphysical Analysis of Supercell Rear-Flank Downdrafts Using Dual-Polarization Radar Observations
P7.11 Ali Tokay: Physical and Climatological based Radar Rainfall Relations in Florida
P7.12 Tobias Gies: Uncertainty in path-averaged drop size distribution retrieval using dual-frequency microwave links
P7.13 Leonid Dinevich: Cloud Modification for Rain Enhancement
P7.14 Mark Pinsky: Retrieval of Turbulent Velocity Parameters in a Cloud Topped Boundary Layer using the Doppler

radar
P7.15 Susanna Lautaportti: Raindrop size distributions derived from a vertically pointing C-band Doppler radar
P7.16 Ondrej Fiser: Mie Versus Point Matching Algorithm for Rain Properties Retrieval from Radar Measurement

P8: Satellite radar measurements

P8.1 Jarkko Koskinen: Global Precipitation Measurement Mission (GPM) - Case Winter precipitation
P8.3 Roberto Calheiros: Reflectivity Fields from Satellite Microwave in the Bauru Radar(BRU) Coverage Area
P8.4 Takahisa Kobayashi: Cloud properties in rain formation process observed by Space-borne active and passive sensors
P8.5 Andreas Danklmayer: Signatures of Extended Meteorological Targets Measured with the Space-Borne Synthetic Aperature Radar TerraSAR-X and Their Comparison with Simultaneous Weather Radar Measurements
P8.6 Akihisa Uematsu: Simulation of Doppler velocity measurement performance for EarthCARE spaceborne cloud profiling radar
P8.7 Oscar David Ãlvarez Villa: Using TRMM data for annual average precipitation fields estimations in Colombia

14:30 Thematic workshop (parallel to poster session)
Progressing towards a European radar composite

- Daniel Michelson: Introduction
- Stuart Matthews: The OPERA Pilot Data Hub and European Composite
- Iwan Holleman: Operational Data Hub Plans and Data Policy Issues
- Chris Collier: Discussion Moderator

16:00, Session 7: Microphysics of clouds and precipitation
Chair: Isztar Zawadzki

16:00 Paul Smith: Estimating Radar Reflectivity from Observations of Raindrop Size Distributions
16:15 GyuWon Lee: Snow Microphysical Processes and Variation of Effective Density and Diameter Relationships
16:30 Niko Tollman or Sabine Göke: Characterizing Rimed Versus Aggregated Snow When Analyzing the Shape of Hydrometeor Size Distributions
16:45 Phillip Chilson: Application of Polarimetric Radar to Improve Wind Profiler-Based Microphysical Retrieval
17:00 Luca Baldini: Drop Size Distribution Estimation from X-band Dual Polarization Radar Measurements in Alpine Basins
17:15 Miklos Szakįll: A Wind Tunnel Study on the Oscillation of Freely Falling Raindrops
17:30 Kenneth Beard: Modeling and Measurement of the Shape of Raindrops
17:45 Joel Van Baelen: Preliminary Results on Convective Cells and Rainfall Studies during COPS 2007

Social program

18:00 Coctails sponsored by Vaisala in Marina Congress Center

ERAD2008 Wednesday presentations

8:30, Session 9 Advances in radar hardware and signal processing

8:30 *Keynote lecture*: Frederic Fabry: Signal processing approaches to clean radar data: bases, strengths and dangers

9:00, Session 8: Satellite radar measurements
Chair: Sandra Yuter

9:00 Tristan L'Ecuyer: Advances In Light Precipitation Retrievals From Spaceborne Cloud Radar
9:15 Saverio Mori: High-resolution rainfall retrieval over land from satellite synthetic aperture radar measurements at X, Ku and Ka band
9.30 Pavlos Kollias: Effect of Cloud Inhomogeneities on Spaceborne 94 GHz Doppler Moment Estimates
9:45 Tristan L'Ecuyer: Flagging profiles burdened by multiple-scattering in the CloudSat rain product over ocean

10:00 News of the Day. Refreshments sponsored by Baron

10:45 Session 9: Advances in radar hardware and signal processing
Chair: Martin Hagen

10:45 Michele Galletti: Degree of Polarization: Theory and Applications for Weather Radars at Hybrid Mode
11:00 Douglas Forsyth: The National Weather Radar Testbed (Phased-Array)
11:15 Jacques Parent-du-Chatelet: A new formulation for a signal reflected from a target using a magnetron radar. Consequences for Doppler and refractivity measurements.
11:30 Svetlana Bachmann: Alteration and performance evaluation of a ground clutter filter for staggered PRT weather radar data
11:45 Jordi Figueras i Ventura: IDRA, a high resolution meteorological radar
12:00 Igor Ivic: Optimizing Coherency Approach to Improve Signal Detection in Polarized Weather Radars
12:15 Beatriz Gallardo: Characterization Approach of Wind Turbine Clutter on the Spanish Weather Radar Network

12:30 Lunch break

14:00 Poster sessions

P9: Advances in radar hardware and signal processing

P9.1 Olivier Pujol: Radar simulations of modeled precipitating systems at various wavelengths
P9.2 Miria Celano: Using Google Earth visualization platform to support the analysis of severe weather case studies
P9.3 Dusan Zrnic: Phase Codes with Equal Spectral Powers for Mitigating Ambiguities in Range and Velocity
P9.4 Dmitri Moisseev: Adaptive clutter filtering using dual-polarization spectral decompositions
P9.5 Christine Unal: A New Doppler Polarimetric Radar Clutter Suppression Tehnique to Enhance Atmospheric Echoes
P9.6 Sebastian Torres: Alternating Dual-Pulse, Dual-Frequency Techniques for Range and Velocity Ambiguity Mitigation on Weather Radars
P9.7 Phillip Chilson: Fuzzy Logic Tornado Detection Using High Resolution Weather Radar
P9.8 V Chandrasekar: Dual-polarization spectral decompositions of weather radar observations
P9.9 Marcus Pool: Performance Comparison of a Compact Weather Radar Featuring Different Antennas
P9.10 Sebastian Torres: Range and Velocity Ambiguity Mitigation on the US NEXRAD Network: Performance and Improvements of the SZ-2 Phase Coding Algorithm
P9.11 Hans Beekhuis: From Pulse to Product. Highlights of the digital-if upgrade of the Dutch national radar network.
P9.12 Phillip Chilson: Investigations of Dynamic Structures in the Boundary Layer Using Range Imaging on a UHF Wind Profiler
P9.13 Timo Puhakka: Evaluation of FM Pulse Compression in Increasing Scan Speed and Sensitivity
P9.14 Pascale Dupuy: An Experimental Assessment of the Influence of the Antenna Rotation Rate on the Quality of Polarimetric Measurements
P9.15 Sergei Panov: Assessment of the polarimetric attenuation correction implementation in the RVP8 signal processor
P9.16 Martin Malkomes: Primary ATC Radar Weather Extractor Weather Signal Processor GWSP; An alternative to weather radar?
P9.17 Martin Malkomes: Limiting factors of Magnetron Radar Stability How to improve Clutter suppression by improved receiver phase stability and precise burst measurement Is a transmitter coherent radar really the only solution?
P9.18 Christine Unal: High Resolution 3D Wind Profiling Using an S-Band Polarimetric FM-CW Radar: Clutter Suppression Techniques
P9.19 Roberto Calheiros: A Free Software Available for Radar Data Display
P9.20 John Kalogiros: Reconstruction of Doppler Spectra of Weather Radars from Irregular Pulse Repetition Time

P10: Hydrological studies employing radar

P10.1 Ali Shakoor: The Role of Hydrology Study and Atmospheric Circulation Patterns Related To Heavy Rainfall and Flood Forming Potential of Water Basins, Case Study: Gorganroud Water Basin in Golestan Province, Iran
P10.2 Carolina Oprea: A Study of Meso-Synoptic Processes Associated with Three Flash Flood Cases in Romania
P10.3 Byung Sik Kim: Radar Rainfall Adjustment by Kalman-Filter Method and Flood Runoff Simulation Using Two Distributed Models
P10.4 Milan Salek: Different methods of adjustment of the nowcasting data from the point of view of the hydrological forecasting
P10.5 Fatih Keskin: Comparison of MM5 Output to Adjusted Radar Rainfall Data for Hydrological modeling
P10.6 Mauricio Agostinho Antonio: Urban Hydrology Using Weather Radar: Flood Events in Central State of Sao Paulo, Brazil
P10.7 Mirela Pancescu: Tecucel River Flash Flood Modelling Using Vflo Programme and RainVieux Application
P10.8 Reinhard Teschl: Weather radar measurements in data-driven models
P10.9 Thomas Einfalt: Analysis of a Damage Producing Flash Flood in the Wupper Area
P10.10 Carmen de Miguel: Utilization of Information from Weather Radars for Hydrology in Guadalquivir River Basin, Spain.
P10.11 Felipe Quintero: A methodology to improve spatially distributed parameterisation for hydrological models based on regionalisation
P10.12 Jörg E.E. Seltmann: Hazard maps derived from radar data statistics
P10.13 Jan Unucka: The Comparison of two Floods in the OlÅ¡e Catchment The Possibilities of Hydrological Forecasting with the Use of Radar Products
P10.14 Lucie Brezkova: The use of COTREC forecast in hydrological prediction systems case study of the extreme flood in the Dyje catchment in June/July 2006
P10.15 Olver Hernandez: Flash Flood Forecast and Warning System Based on Radar Nowcasting and Hydraulic Models
P10.16 Baxter Vieux: Integrated Radar and Hydrologic Modeling for a Bridge Scour Monitoring System

P11: Nowcasting and assimilation

P11.1 Thibaut Montmerle: Assimilation of Doppler winds in the French operational mesoscale model AROME
P11.2 Valliappa Lakshmanan: Automated Real-time Extraction of Storm Properties from Gridded Fields
P11.3 Valliappa Lakshmanan: Nowcasting Aircraft Icing from Polarimetric Radar Observations
P11.4 Zbynek Sokol: Nowcasting of Precipitation by Advective Statistical Models
P11.5 Abdelmalik Sairouni: Impact of Assimilating Radar Data Using Different Z-R Relationships with LAPS System
P11.7 Pirkko Pylkkö: Alarm System for Insect Migration Using Weather Radars
P11.9 Pay-Liam Lin: Impact of Doppler Radial Velocities on the Short-Term Simulation of a Meiyu Front Precipitation System and the Typhoon Aere Case in Taiwan
P11.10 Barbara Tomassetti: Rainfall Radar Nowcasting Using A Neural-Network Cascade Approach
P11.11 Petr Novak: Use of Radar-based Quantitative Precipitation Forecast in Hydrological Modeling
P11.12 Eric Wattrelot: 1D+3DVar assimilation of radar reflectivities in the pre-operational AROME model at Meteo-France.
P11.13 Roberto Vicente Calheiros: The Application of the VxATI Method to Determine Precipitation Volumes in the Central Area of the State of Sao Paulo
P11.14 Nicola Rebora: Ensemble rainfall nowcasting by a stochastic phase-diffusion model
P11.15 SeonYong Lee: Effects of the radial velocity on a storm simulation
P11.16 Jesper Bandsholm Thyme: Real-time SMS Warnings on Expected Basement Flooding based on Now-casting using High-resolution X-Band Radar data
P11.17 Olivier Bousquet: Using operationally synthesized multiple-Doppler winds for nowcasting and high resolution NWP model wind verification
P11.18 Pekka Rossi: A Clustering-Based Tracking Method for Convective Cell Identification and Analysis
P11.19 David Simonin: Doppler Radar Radial Wind Processing and Assimilation at the Met Office
P11.20 Virginia Poli: Assimilation of Radar Derived Surface Rain Rate Into The Regional NWP COSMO Model Through a 1D-Var+Nudging Scheme
P11.21 Nicolas Gaussiat: Variational Retrieval of Temperature and Humidity Profiles from Volume Scan Reflectivities : Results from an Observing System Simulation Experiment (OSSE).
P11.22 Mario Montopoli: An Improved Spectral-Dynamical Technique For Rain Field Nowcasting From Radar Image

Time Series
P11.23 Marc Berenguer: The Effect of the Diurnal Cycle of Precipitation in Radar-Based Short-Term Forecasts
P11.24 Shingo Shimizu: Development for a radar data assimilation procedure using specific differential phase
P11.25 Evan Ruzanski: Analysis of convective storm characteristics relative to the performance of a linear model based nowcasting approach

15:00 Coffee served in poster hall

Social program

17:00 *Sightseeing cruise* sponsored by EEC
19:00 *Conference Dinner* sponsored by Selex – Gematronik

ERAD2008 Thursday presentations

8:30, Session 11
Nowcasting and assimilation

8:30 *Keynote lecture* Alan Seed: On the blending of advection and NWP forecasts: issues and examples

9:00, Session 10 Hydrological studies employing radar
Chair: Remko Uijlenhoet

9:00 Urs Germann: Ensemble Radar Precipitation Estimation for Hydrology in a Mountainous Region
9:15 Jarmo Koistinen: Derivation of Extreme Event Mesoscale Area-intensity Return Periods of Rainfall Based on a Large Sample of Radar Data
9:30 Diss Stephanie: The Flood Estimation Using the Rain Rate by Dual Polarized X-Band Radar
9:45 Dirk Schuttemeyer: Radar-based rainfall estimation for hydrological modeling and flood forecasting

10:00 News of the Day. Refreshments sponsored by FMI.

10:45, Session 11
Nowcasting and assimilation (continues)
Chair: Chris Collier

10:45 Alessandro Hering: Operational Nowcasting of Thunderstorms in the Alps During MAP D-PHASE
11:00 Luca Panziera: Explaining orographic precipitation patterns using Doppler wind and air mass stability
11:15 Daniel Leuenberger: On the Value of Radar-Derived Rainfall Assimilation on High-Resolution QPF
11:30 Philippe Lopez: Experimental Assimilation of Ground-Based Radar Data in ECMWF 4D-Var
11:45 Marion Mittermeier: Impact of assimilating a European radar composite into an NWP model
12:00 Juanzhen Sun: Assimilation and forecasting experiments using radar observations and the 4DVAR technique for two IHOP cases
12:15 Kirsti Salonen: Towards the Operational Use of Doppler Radar Radial Wind Observations in Hirlam at FMI

12:30 Lunch

14:00 Poster sessions

P12: Mesoscale meteorology and severe weather

P12.1 Kenichi Kusunoki: An Overview of the Shonai Area Railroad Weather Project and Early Outcomes
P12.2 Kenichi Kusunoki: A Climatology of Clear-air echoes from the operational C-band Doppler radar in Japan
P12.3 Maria Pilar Sanz: 14th February 2007: Hurricane force winds on the Northern Coast of Spain
P12.4 Shuichi Mori: Nocturnal Re-development of Coastal Convection Propagated from Western Sumatera Island, Indonesia, Observed with JEPP/HARIMAU Radars
P12.5 Marco Preiss: Mesocyclone Detection With Doppler Radar
P12.6 Santiago Gaztelumendi: Use of Kapildui Radar for Analysis and Surveillance in a Storm Case
P12.7 Joseba Egaña: Radar Analysis of Different Meteorological Situations in the Basque Country Area.
P12.8 Namiko Sakurai: Case study on internal sturucture of westward migratory cloud systems with diurnal cycle observed in the west Sumatera on November 10, 2006
P12.9 Maja Rabrenovic: Evolution of Mesoscale Convective System in Southern Serbia
P12.10 Andrea Rossa: Verification and Application of the Storm Cell Identification and Tracking (SCIT) Algorithm in the North-eastern Italian Region Veneto

P13: Quantitative precipitation estimation I

P13.1 Pierre Tabary: Evaluation of Two Integrated Techniques to Estimate the Rainfall Rates from Polarimetric Radar Measurements
P13.2 Marion Mittermaier: Comparing different methods for including uncertainty in radar-rainfall estimates for assessing NWP model forecasts
P13.3 Bernard Mohymont: Analysis of the mean and the variability of the vertical profile of reflectivity over Belgium
P13.4 Francesco Silvestro: Estimation of Rainfall Rate by Using Polarimetric Variables in an Operational Framework
P13.5 Aart Overeem: A 10-year Radar-based Climatology of Rainfall
P13.6 Lesya Borowska: Synthetic retrieval study for polarimetric X-band radars
P13.7 O.Pujol / F.Mesnard: Discrimination Between Convective And Stratiform Precipitation In Radar-Observed Rainfield Using Fuzzy Logic
P13.8 Kurtulus Özturk: The Pixel-based SCR (PSCR) Algorithm Optimizing Cumulative Radar Rainfall Estimates in Northern Turkey
P13.9 Evangelos Tsagalidis: Hail Size Estimation and Prediction using Data Mining Techniques
P13.10 Elmar Weigl: Improvements of the operational composite QPE products (RADOLAN) by the German Meteorological Service (DWD)
P13.11 Laurent Delobbe: Improvement of Quantitative Precipitation Estimates in Belgium.
P13.12 Jan Handwerker: Optimal Determination Of Gamma Function Parameters For Drop Size Spectra
P13.13 Gerhard Peters: Attenuation Correction of Vertically Pointing K-Band Doppler Radars
P13.14 Toon Goormans: Empirical assessment of possible X-band radar installation sites, based on on-site clutter tests
P13.15 Andrieu Herve: Toward A Physically Based VPR Identification
P13.16 Peter Nemeth: Complex Method for Quantitative Precipitation Estimation Using Polarimetric Relationships for C-band Radars
P13.17 Katarzyna Starosta: Precipitation types classification using reflectivity data

P14: Quantitative precipitation estimation II

P14.1 Frank S. Marzano: Bayesian model-supervised classification of hydrometeors: application to C-band polarimetric radar data
P14.2 Iwan Holleman: Integration of commercial microwave link measurements and operational weather radar data to improve operational rainfall products
P14.3 Milan Salek: Experience Gained by Five Years of the Utilization of the Radar-Based Quantitative Precipitation Estimation at the Czech Hydrometeorological Institute
P14.4 Mi-Kyung Suk: Real-time Quantitative Precipitation Estimation by Radar Reflectivities over Korea Peninsula
P14.5 Santiago Gaztelumendi: Checking the Use of Kapildui Disdrometer Data for Improving Precipitation Estimation in Basque Country Area
P14.6 Nadine Jatho: Importance of radar data and alternatives to work with in cases of partial or complete absence of radar data
P14.7 Aitor Atencia: A new non power-law Z/R relation in western Mediterranean area for flash-flood events
P14.8 Markus Jessen: Lessons learnt from the analysis of two years of weather radar data
P14.9 Heikki Pohjola: Adjusting Radar-Derived QPE with Measured Drop-Size Distribution at the Surface

P14.10 Xavier Llort: Characterization of Uncertainty in Radar-based Precipitation Estimates and Ensemble Generation
P14.11 Errico Picciotti: C-band radar precipitation measurements in mountainous region: comparison with raingauge fields and X-band radar data
P14.12 Helmut Paulitsch: Rain rate estimation and hydrometeor classification with a new dual-polarized C-band weather radar in an alpine region
P14.13 Emmanuel Moreau: Rainfall Spatial Variability Observed by an X-Band Weather Radar and its Implication in the Accuracy of Rainfall Estimates.
P14.14 Marios Anagnostou: Statistical Analysis of Video Disdrometer Measurements and Errors of Polarimetric Rainfall Estimators
P14.15 Petr Zacharov: The effect of radar-based QPE on the verification of QPF for convective rainfalls.
P14.16 Maria Franco: Improving Radar Precipitation Estimates by Applying a VPR Correction Method Based on Separating Precipitation Types
P14.17 Carlos Velasco-Forero: Optimal estimation of rainfall fields merging radar and rain gauges data in an operational context

14:30 Thematic workshop (parallel to poster session)
The future of nowcasting by radar

- Aurora Bell: Who needs radar nowcasting and to what accuracy in space-time?
- Urs Germann: The strengths of heuristic radar nowcasting
- Frank Marzano: Integration of data sources and methodologies

16:00, Session 12: Mesoscale meteorology and severe weather
Chair: V. Chandrasekar

16:00 Chris Collier: Radar and Doppler lidar observations of a thunderstorm outflow
16:15 Fadela Kabeche: Detection of turbulence in the vicinity of convective systems by means of an X-Band Doppler Radar
16:30 Elena Saltikoff: Hail in Finland seen with Weather Radar and in Newspapers
16:45 David M. Schultz: Halloween 2007 Cold Front over Southern Finland: Thermal and Precipitation Structure
17:00 Sudesh Boodoo: Observations of the melting layer in Southern Canada with a C-band dual polarized radar.
17:15 Alan Shapiro: Use of the Vorticity Equation for Improved Dual-Doppler Analysis of the Vertical Velocity field in Convective Storms
17:30 P.W. Chan: Dual Doppler radar analysis of 3-dimensional winds for heavy rain events in southern China
17:45 Martin Hagen: Orographic Influence on the Life Cycle of Convection Observations during the COPS Field Campaign

ERAD2008 Friday presentations

8:30, Session 13: Quantitative precipitation estimation
Chair: Marielle Gosset

8:30 *Keynote lecture* Daniel Sempere-Torres: Real-time assessment of accuracy and quality in quantitative precipitation estimation
8:45 Lisbeth Pedersen: Assessment of QPE Results from 4 kW X-band Local Area Weather Radar (LAWR) Evaluated with S-band Radar Data
9:00 Robert Scovell: Local vertical profile corrections using data from multiple scan elevations
9:15 Anna Fornasiero: Radar Quantitative Precipitation Estimation At ARPA-SIM: A Critical Approach To Retrieve The Rainfall Rate At The Ground Level
9:30 Norman Donaldson: Time-Space Interpolation for Radar Data for Rainfall Accumulations

10:00 News of the Day. Refreshments

10:45 Session 14: Quantitative precipitation estimation
Chair: Lisbeth Pedersen

10:45 Viswanathan Bringi: A Methodology to Derive Radar Reflectivity-Liquid Equivalent Snow Rate Relations Using C-Band Radar and a 2D Video Disdrometer
11:00 Gianfranco Vulpiani: Raindrop Size Distribution and rainfall retrieval from S-band radar measurements: validation of a neural network approach
11:15 Silke Troemel: Radar-based Integrated Rainfall Estimates
11:30 Marco Clemens: Identification of temporal stable Z/R relationships using measurements of micro-rain radars
11:45 Mario Montopoli: Rain-Rate Advanced Retrieval Techniques For C-Band And X-Band Polarimetric Radars Tuned By Globally-Distributed Disdrometer Database
12:00 Marios Anagnostou: Rainfall Measurements of Weather Radar in Complex Terrain
12:15 Anthony Illingworth: Implementation and Testing of an Operational System for Deriving more accurate Rainfall Rates from Z and ZDR.
12:30 Remco van de Beek: An intercomparison of X-band radar with rain gauges in The Netherlands
12:45 Marc Berenguer: The Effect of Resolution on the Error Covariance Matrix of Radar Rainfall Estimates

13:00 Young Scientist Award
Chair of the jury: Dmitri Moisseev

Closing of the conference

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