

## **Fourth International Verification Methods Workshop**

## Monday - 8 June 2009

- **8:30 Registration** (FMI, Dynamicum Building Entrance Hall)
- 9:00 Opening and Welcome (Exactum Building Auditorium)

# Session 1: User-oriented Verification Chair: Pertti Nurmi 9:10 1.1 Juhani Damski and Laurence Wilson: What Is A Good Forecast: The importance of user-orientation in verification. 9:50 1.2 Clive Wilson: Do key performance targets work? 10:10 1.3 Tressa Fowler: Wind forecast verification 10:30 1.4 Robert Maisha: UM model and Kalman Filter forecast verification at SAWS

#### 10:50 - 11:20 Tea/Coffee

Session 2:	Verification Tools and Systems Chair: Matt Pocernich
11:20 2.1	Tressa Fowler: The Model Evaluation (MET 2.0),
	Overview and Recent Enhancements
11:40 2.2	Barbara Brown: MODE-3D: Incorporation of the time dimension
12:00 2.3	James Brown: The Ensemble Verification System (EVS): A software tool for verifying ensemble forecasts of hydrometeorological and hydrologic variables at point locations.
12:20 2.4	Yin Kong Leung: Objective verification of weather forecast in Hong Kong
12:40 2.5	Marcus Paulat: COSMO-DE-EPS – construction and verification of a limited-area ensemble prediction system on the convective scale

#### 13:00 - 14:00 Lunch

Sessio	on 3:	Coping with Uncertainty in Verification Data Chair: Chiara Marsigli
14:00	3.1	Carlos Santos: Introducing observational uncertainty in the scoring of a multi-model limited area model over the European area
14:20	3.2	Otto Hyvärinen: Visualising verification results when no true reference is available
14:40	3.3	Theresa Gorgas: The Challenge of Finding "Good" Reference Data for Verification
15:00	3.4	Benedikt Bica: High resolution precipitation analysis and forecast validation over complex terrain using an inverse VERA approach
15:20	3.5	Laurence Wilson: Verification of multi-model ensemble forecasts using the TIGGE data
15:40	3.6	Matthew Pocernich: Feature-oriented verification of wind speed forecasts

**Session 4: Properties of Verification Methods** 

Chair: Chris Ferro

16:30 4.1 Ian Jolliffe: Probability forecasts with observation error:

Is the Brier score proper?

16:50 4.2 Lovro Kalin: Is ETSS Really Equitable?

Session P: Poster Introductions (one-minute each)

Chair: Laurie Wilson

17:15 -

- P01. Julie Demargne and James Brown: Communicating hydrologic verification information for operational forecasting and real-time decision making in the U.S. National Weather Service
- P02. James McGregor: The value of GFS data for precipitation forecasting for the Waikato River catchment, New Zealand
- P03. Guenther Mahringer: TAF Verification in the MET Alliance
- P04. Sultan Al-Yahyai: Development of a portable verification Package
- P05. Adriano Raspanti: VERSUS: Unified Verification Package in COSMO
- P06. Yasutaka Ikuta: Evaluation of hydrometeors of a high-resolution model using a radar simulator
- P07. Kristian Pagh Nielsen: Verification of cloud physical properties
- P08. Robert Fawcett and Elizabeth Ebert: Base rates and skill scores
- P09. Marek Jerczynski: Some robust scale separation methods at work
- P10. Marion Mittermaier: Time-series analysis of scale-selective verification: Can we use it for operational forecast monitoring?
- P11. Pertti Nurmi: SAL Verification in Hydrological Catchments
- P12. Juan Bazo: Verification of Seasonal Rainfall Prediction in the Rimac River Basin
- P13. Jonathan Eden: Assessing the skill of GCM-simulated precipitation
- P14. David Mendes: Improving Meteorological Downscaling Methods with Neural Network Models: South America Rainfall
- P15. David Mendes: Artificial Neural Network (ANN) Application for South America Rainfall
- P16. Gezu Mengistu: Long range Ethiopian Weather forecast
- P17. Marcel Vallee: A block bootstrapping method for the Canadian NWP model
- P18. Ewan J. O'Connor: Cloud verification using radar: What is the half-life of a cloud-fraction forecast?
- P19. Pascal Mailier: Assessing the operational skill of predictions of forecast error
- P20. Petra Roiha: Analysis of Marine Seasonal Ensemble Forecasts for the Baltic Sea

- P21. Petr Zacharov: An estimation of QPF uncertainty by forecasting the radar-based ensemble skill
- P22. Matias Armanini : Extreme temperatures verifications on Argentina forecast by NWP GFS NCEP
- P23. Monika Bailey: Verification of nowcasting methods in the context of high-impact weather events for the Canadian Airport Nowcasting (CAN-Now) project
- P24. Kadarsah Binsukandar Riadi: Reliability Evaluation of HyBMG by Using the ROC Curve
- P25. Girmaw Bogale: Rainfall prediction performance of WRF model over complex terrain of Ethiopia
- P26. Kalle Eerola: Verification of the Hirlam NWP forecasts and the connection between the scores and improvements in the model.
- P27. Ata Hussain: High resolution Regional Model (HRM) performance as NWP tool in Pakistan
- P28. Oluseun Idowu: Verification of numerical weather predictions for the western Sahel by the United Kingdom Met Office Limited Area Model over Africa
- P29. Anna Lindenberg: Applicability of Common Verification Methods for Comparisons between Measured Wind Data and Simulated Wind Field
- P30. Jordi More: The Impact of Applying Different Verification Techniques and Precipitation Analyses in QPF Verification
- P31. Maria Stefania Tesini: Verification and Statistical properties of COSMO-17 QPF
- P32. Marco Turco: The forecaster's added value in QPF
- P33. Daan Vogelezang: Verification of statistical forecasts of low visibility at the Amsterdam Airport
- P34. Ji-Won Yoon: Verification of ensemble forecast using the physical parameterization schemes of WRF model during the Changma period over Korea
- P35. Xiaoli Li: Comparisons of global and regional ensemble prediction systems at NMC
- P36. Joel Stein and Marielle Amodei: Another look at the contingency tables: Scores based on Manhattan distances in the error space

18:00 – 19:30 Ice-breaker and Poster Session (FMI, Dynamicum Building)



# **Fourth International Verification Methods Workshop**

## Tuesday – 9 June 2009

15:00 7.1

15:20 7.2

15:40 7.3

Session 5:	Verification of Weather Warnings Chair: Tressa Fowler	
9:00 5.1	David Stephenson: The Verification of Weather Warnings: Did the Boy Cry Wolf or Was It Just a Sheep? (invited)	
9:40 5.2	Martin Göber: Approaches to process and event oriented verification of warnings	
10:00 5.3	Michael Sharpe: The challenge of verifying severe weather warnings	
10:20 5.4	Clive Wilson: A critical look at the verification of Met Office "Flash" Warnings	
10:40 5.5	Marion Mittermaier: Verifying extreme rainfall alerts for surface water flooding	
11:00 – 11:20 Tea/Coffee		
Session 6:	Spatial and Scale-sensitive Methods Chair: Francis Schubiger	
11:20 6.1	Barbara Brown: Spatial Verification Methods	
12:00 6.2	Eric Gilleland: Spatial Forecast Verification: The Image Warp	
12:20 6.3	Chermelle Engel: A scale-based distortion metric	
12.20 0.0	for mesoscale weather verification	
12:40 6.4	Stefano Mariani: On evaluating the applicability of CRA	
12110 011	over small verification domains	
	13:00 – 14:00 Lunch	
Session 6:	Spatial and Scale-sensitive Methods (cont'd) Chair: Johannes Jenkner	
14:00 6.5	Marion Mittermaier: Identifying skillful spatial scales using the Fraction skill Score	
14:20 6.6	Barbara Casati: New Developments of the Intensity Scale Verification Technique within the Special Verification Methods Intercomparison	
14:40 6.7	Elizabeth Ebert: Feature-specific verification of ensemble forecasts	
Session 7:	Spatial and Scale-sensitive Methods: High-resolution Models Chair: Marcus Paulat	

Kees Kok: Valuing information from high resolution forecasts

forecasts using fuzzy techniques

High Resolution operational models

Ulrich Damrath: Some experiences during verification of precipitation

Marielle Amodei: Deterministic and fuzzy verification of the cloudiness of

Session 7:	Spatial and Scale-sensitive Methods: High-resolution Models (cont'd) Chair: Stefano Mariani
16:20 7.4	Chiara Marsigli: QPF Verification of Limited Area Ensemble Systems during the MAP D-PHASE OP
16:40 7.5	Francis Schubiger: Verification of precipitation forecasts of the MAP D-PHASE data set with fuzzy methods
17:00 7.6	Sami Niemelä: Verification of High resolution Precipitation forecasts by Using the SAL Method
17:20 7.7	Mathias Zimmer: Towards Evaluating Timing Errors of Quantitative Precipitation Forecasts with the Feature-Based Technique SAL

# 17:40 – 18:30 Poster Session (FMI, Dynamicum Building)

20:00 WORKSHOP DINNER (Restaurant "Töölönranta"; self transportation)



# **Fourth International Verification Methods Workshop**

## Wednesday - 10 June 2009

Session 8:		Seasonal and Climate Forecast Verification Chair: Marcel Vallée	
9:00	8.1	Simon Mason: Towards Standardized verification of seasonal climate forecasts (invited)	
9:40	8.2	Barbara Casati: Extreme Value theory to Analyze, Validate and Improve Extreme Climate Projections	
10:00	8.3	Pascal Mailier: Can you really trust long-range weather predictions? Confessions of a rogue forecaster.	

#### 10:20 - 11:00 Tea/Coffee

**Session 9: Tutorial Presentations** 

Chair: Anna Ghelli

11:00 - 13:00

#### 13:00 - 14:00 Lunch

Session 10:	New Ideas in Verification Chair: Theresa Gorgas
14:00 10.1 14:20 10.2	Christopher Ferro: Verification measures for rare-event forecasts Deborah Glueck: Bias in trials comparing paired continuous tests can cause researchers to choose the wrong screening modality
14:40 10.3 15:00 10.4	Zoran Pasaric: Polychoric correlation coefficient in forecast verification Johannes Jenkner: Verification of Probabilistic Calibrations for Deterministic GFS Precipitation Forecasts

### 15:20 General Discussion

## 16:00 END OF WORKSHOP