



## **SPARC Data Assimilation Workshop**

**June 21-23 2010, Headquarters of the Met Office,  
Exeter, UK**

### **SPARC Data Assimilation Workshop Programme and Abstracts**

#### **Monday 21 June**

0900: Welcome (David Jackson)

0910: Overview of SPARC and the SPARC DA Working Group  
(Saroja Polavarapu) Seamless Prediction / Model Error

0925: Model evaluation using seamless assessment (Keith Williams)  
(Invited)

1010: Nudged Version of the Unified Model (Paul Telford)

1040: Tea/coffee break

1110: Covariance modelling and estimation for chemical data  
assimilation (Richard Menard)

1140: Estimation of ozone loss in the winter 2006/07 using a data  
assimilation method (Yvan Orsolini)

1210: Poster adverts (6 x 3 mins (approx))

1230: Poster viewing / lunch (authors in attendance 1230 to 1330)

1400: Weak Constraints 4D-Var for the Stratosphere (Yannick  
Tremolet) (invited)

1445: On the Implementation of an "Outer Loop" for Ensemble-Based  
Data Assimilation (Craig Bishop)

1515: Assimilation of stratospheric temperature and ozone with an ensemble Kalman Filter in a Chemistry-Climate Model (Thomas Milewski)

1545: Discussion on Seamless Prediction / Model Errors Theme

1600: Tea/coffee break Observations and Impacts 1630: Assessing additions to the future observing system: the role of OSSEs (William Lahoz)

1700: Optimizing ADM-Aeolus' vertical sampling for the stratosphere (Heiner Kornich)

1730: Close

## **Tuesday 22 June**

### **Stratosphere / Troposphere Interaction**

0900: Stratosphere / Troposphere Interaction (Adam Scaife) (Invited)

0945: Assimilation of Earth Orientation Parameters into an Atmosphere Model (Lisa Neef)

1015: Large-scale equatorial waves in the middle atmosphere of the ECMWF model (Nedjeljka Zagar)

1045: Tea/coffee break

1115: Mechanisms of stratosphere-troposphere interaction and implications for data assimilation (Andrew Charlton-Perez) (Invited)

1200: The stratospheric influence on the troposphere in the context of operational medium-range weather forecasts (Saroja Polavarapu)

1230: Low Ozone Events in the Southern Polar Summer Stratosphere as Indicated by Met Office Ozone Analyses (David Jackson)

1300: Lunch / poster viewing (authors not in attendance) Stratosphere / Mesosphere

1400: Intrinsic middle atmosphere predictability (Keith Ngan)

1430: The constraint of data assimilation in the stratosphere and troposphere on mesospheric motions (Shuzhan Ren)

1500: Investigations of polar stratopause temperatures using a high-altitude version of GEOS-5 (Lawrence Coy)

1530: Tea/coffee break

1600: Assessment of middle atmosphere representation in GCMs using satellite temperature data (Andrew Bushell)

1630: The Impact of Mesospheric Observations on the 2-day Wave in a Middle Atmosphere Data Assimilation System (Martin Keller)

1700: Discussion on troposphere / stratosphere / mesosphere interactions theme

1730: Close evening: Conference Dinner (time and other details TBA)

## **Wednesday 23 June**

### **Constituents**

0930: Integrating satellite observations of tropospheric ozone and its precursors for improved air quality prediction and assessment (Dylan Jones) (invited)

1015: Routine assimilation of ground-based ozone observations: A case study (Frank Baier)

1045: Tea/coffee break

1115: Can Ozone Assimilation Constrain Inorganic Chlorine in the Stratosphere? (Quentin Errera)

1145: Integrated and near-real time forecasts of atmospheric composition with focus on aerosols (Angela Benedetti) (Invited)

1230: A desert dust forecasting and assimilations scheme (Keith Ngan)

1300: Discussion on aerosol and air quality issues

1330: Date and location of next meeting, other SPARC issues (Saroja Polavarapu)

1345: End of meeting

### **POSTERS**

The Radio Occultation Processing Package (ROPP) - Huw Lewis

Validation of Mesospheric Analyses - David Long

Impact of the representation of the stratosphere on tropospheric weather forecasts - Sana Mahmood

CO<sub>2</sub> fluxes estimated with satellite, aircraft, and surface observations using an ensemble-based 4D data assimilation system - Kazuyuki Miyazaki

Improved assimilation of trace gas retrievals from satellite - Andrea  
Kaiser-Weiss and Stefano Migliorini

**Return to SPARC Meetings Page**