

## **ANNOUNCEMENT OF of the 11th SPARC DATA ASSIMILATION Workshop, 14-16 October 2015 at the Université Pierre et Marie Curie (UPMC), Paris, France**

Dear colleagues,

It is our pleasure to invite you to participate in the Eleventh Stratosphere-troposphere Processes And their Role in Climate (SPARC) Data Assimilation workshop to be held at the Université Pierre et Marie Curie (Paris, France) between 14-16 October 2015. This is one in a series of regular (usually) annual meetings which brings data assimilators and users of assimilation products together with experts in modelling, measurements and process studies. For descriptions of previous SPARC-DA workshops, please check our meeting reports in [SPARC Newsletters](#) No. 26, 28, 30, 34, 36, 38, 40 and 44.

The aim of the workshop is to motivate and better understand data assimilation through the science of the middle atmosphere. Data assimilation requires a knowledge of measurement and model errors which, in turn, require knowledge of the true underlying system - the middle atmosphere. Therefore, advancement of assimilation techniques requires interaction of assimilators with dynamicists, chemists, data providers and users of assimilation products. While contributions from all aspects of middle atmosphere (chemical and dynamical) data assimilation are sought (as in previous years), a few key areas (listed below) will be highlighted. This year, the following experts have been invited to broaden our understanding of the true atmospheric system, highlight issues with assimilated products and help focus discussions in these areas:

- 1) Harmonization of long term data record and bias correction in data assimilation – **Hans Hersbach (ECMWF, UK), Susann Tegtmeier (GEOMAR, Germany)**
- 2) On the added value of chemical data assimilation of upper tropospheric and stratospheric measurements – **Richard Ménard (Environnement Canada)**
- 3) Representation of the stratosphere-mesosphere in model and analysis – **François Lott (Laboratoire de Météorologie Dynamique, France), Scott Osprey (Oxford University, UK)**
- 4) Joint session with the SPARC Reanalyses Intercomparison project (S-RIP) – **Albert Hertzog (Laboratoire de Météorologie Dynamique, France) and the representatives from reanalysis centres responsible for NCEP, MERRA, ERA and JMA reanalyses**

The first theme is motivated by the need of SPARC for reanalysis and in particular of the composition of the atmosphere. The first step toward such a reanalysis is to understand the systematic differences between the different datasets and develop methods to remove these differences. The second theme is motivated by the following questions: “Why, while there have been many limb observations in the stratosphere-lower troposphere since the last 15 years, there have been very few applications of chemical data assimilation product”. And the sub-question is what kind of product may be useful to the SPARC community. With the third theme, we would like to review the current capabilities of model and reanalyses to represent the

stratosphere and mesosphere, in particular the Quasi-Biennial Oscillation (QBO), the Semi-Annual Oscillation (SAO) as well as the temperature.

One SPARC activity that has spun out from the SPARC Data Assimilation Working Group is the SPARC Reanalysis Intercomparison Project (S-RIP). S-RIP will be holding its own progress meeting at UPMC from 12-13 October. On 14 October a joint SPARC Data Assimilation / S-RIP session will be held. The focus of this joint session is information exchange between the two groups and the session will include talks of scientific interest to both groups (for example new data assimilation developments in existing or near-future reanalyses (or analyses)) and overview presentations on S-RIP and the reanalyses being used in S-RIP.

The website for the workshop is: <https://events.oma.be/indico/event/6>. There are a large selection of hotels in the vicinity of UPMC close to amenities, restaurants and local transportation to airports and train stations. Note that the organizer will not block rooms at local hotels and every participant has to take care of his accommodation. Registration for the meeting will be through the website above. Depending on funding, a small meeting fee (up to €100) may be charged. The deadline for abstract submission is June 30, 2015. A small budget has been blocked by SPARC for travel support. Applications for the travel support may be required at the latest on June 30, 2015. Note that the priority order, as stated by SPARC, is to support (1) early career scientist and people from developing countries, (2) chapter leaders and invited speakers and (3) other participants.

As with previous workshops, participants may come from various research communities besides data assimilation: middle atmosphere science, measurements, and users of assimilation products. Because the size of the room is limited, participants who wish to attend but who do not wish to submit an abstract, should still register by August 31.

Abstract submission, registration and application for travel support should be done via the website.

Please forward this invitation to anyone who may be interested.

If you DO NOT wish to receive further information about this workshop, please email [quentin@oma.be](mailto:quentin@oma.be) with 'REMOVE 11<sup>th</sup> SPARC-DA WORKSHOP MAILING LIST' in the subject.

Best wishes,

Quentin Errera, Masatomo Fujiwara, David Tan and Bernard Legras, organizers