SPARC - Reanalysis Intercomparison Project (S-RIP) Workshops
and
SPARC Data Assimilation (DA)

October 12-16, 2015
Université Pierre et Marie Curie (UPMC)
Paris, France

SPARC Reanalysis Intercomparison Project 2015 Workshop
Monday, October 12, 2015

0830-0900 ***Arrival, Registration (and Co-Leads Meeting)***

0900-0915 Greetings and Introduction (Fujiwara, Legras)

Morning Session – Chair: Masatomo Fujiwara

0915-0945 Masatomo Fujiwara *S-RIP Overview / Chapter 1: Introduction (Rapporteur: Homeyer)*

0945-1015 Jonathon Wright *Chapter 2: Description of the Reanalysis Systems (Rapporteur: Santee)*

1015-1045 Craig Long *Chapter 3: Climatology and Interannual Variability of Dynamical Variables (Rapporteur: Anstey)*

1045-1115 ***Break and Poster Viewing (with very short poster introduction by MF)***

1115-1145 Sean Davis *Chapter 4: Climatology and Interannual Variability of Ozone and Water Vapour (Rapporteur: Gray)*

1145-1330 ***Lunch***

Afternoon Session – Chair: Sean Davis

1330-1400 Masatomo Fujiwara *Discussion on the S-RIP 2015 Report (Rapporteur: Tegtmeier)*

1400-1450 Martineau *Chapter 6: Stratosphere–Troposphere Coupling (Rapporteur: Harvey)*

1450-1520 ***Break and Poster Viewing***

1520-1610 Monge-Sanz & Birner (remote) *Chapter 5: Brewer–Dobson Circulation (Rapporteurs: Wright)*

1610-1700 Fujiwara *General Discussion*

Adjourn for Monday

SPARC Reanalysis Intercomparison Project 2015 Workshop
Tuesday, October 13, 2015

0830-0900 ***Arrival, Registration (and Co-Leads Meeting)***

Morning Session – Chair: Craig Long

0900-0950 Homeyer *Chapter 7: Extratropical Upper Troposphere and Lower Stratosphere (Rapporteur: Long)*

0950-1040 Tegtmeier *Chapter 8: Tropical Tropopause Layer (Rapporteur: Davis)*

1040-1110 ***Break and Poster Viewing***

1110-1200 Anstey & Gray *Chapter 9: Quasi-Biennial Oscillation and Tropical Variability (Rapporteur: Monge-Sanz)*

1200-1330 ***Lunch***

Afternoon Session – Chair: Lesley Gray

1330-1420 Santee *Chapter 10: Polar Processes (Rapporteur: Martineau)*

1420-1510 Harvey *Chapter 11: Upper Stratosphere and Lower Mesosphere (Rapporteur: Sakazaki)*

1510-1540 ***Break and Poster Viewing***

1540-1640 Rapporteurs *Review of Chapters 1-11*

1640-1800 Fujiwara *General Discussion*

Adjourn for Tuesday
Leave for Dinner at ***

S-RIP/SPARC-DA Joint Session
Wednesday October 14, 2015

0830-0900		***Arrival, Registration***
0900-0910	Bernard Legras	***Welcome, announcements, …***
0910-0930	Quentin Errera, Masatomo Fujiwara	*Introduction to SPARC-DA and S-RIP, joint session, poster intro*
	Theme	***S-RIP/SPARC-DA joint session on reanalysis*** Chair: B. Legras
0930-0950	Larry Coy	*NASA Activities Update*
0950-1010	Hans Hersbach	*ECMWF Activities Update*
1010-1030	Craig Long	*NOAA Activities Update*
1030-1115		***Break and poster viewing***
1115-1135	Chiaki Kobayashi	*JRA Activities Update*
1135-1200	Tianbao Zhao	*Evaluation of Atmospheric Precipitable Water from Reanalysis Products Using Homogenized Radiosonde Observations over China*
1200-1225	Yayoi Harada	*Extraordinary features of the planetary wave propagation during the boreal winter 2013/2014 and the zonal wavenumber two predominance*
1225-1235		***Group Photo***
1235-1405		***Lunch*** Chair: M. Fujiwara
1405-1450	Albert Hertzog (invited)	*Long-duration balloon experiments in the lower stratosphere and validation of the dynamics in ECMWF operational analyses*
1450-1515	Jianjun Xu	*Application of the stratospheric hyper-spectral satellite data in weather forecasts with GSI/WRF regional data assimilation system*
1515-1540	Craig Long	*Improvements in the stratosphere for the next NCEP reanalysis*
1540-1625		***Break and poster viewing***
1625-1650	Siddarth S. Das	*A comparison of thermal structure between reanalysis and observation in the tropical atmosphere*
1650-1715	Felix Ploeger	*Trends of stratospheric mean age of air, and the effects of residual circulation and mixing in ERA-Interim and JRA-55*
1715-1740	Bernard Legras	*Age of air in three reanalysis*
1740-1805	Luis Millan	*Dynamical Ozone Variability from Satellite Data and Reanalyzes: Low Ozone Events and Stratospheric-Tropospheric Exchange*
		Adjourn of Wednesday

SPARC-DA

Thursday October 15, 2015

0830-0900		***Arrival, Registration*** Chair: R. Ménard
0900-0925	Jingwei Liu	*Comparisons of China operational analysis data with two reanalysis datasets*
	Theme	***Harmonization of long term data record and bias correction in data assimilation***
0925-1010	Hans Hersbach (invited)	*Harmonization of long term data record and bias correction in data assimilation*
1010-1040	Quentin Errera	*Characterization of MIPAS CH4 and N2O and MLS N2O using data assimilation*
1040-1110		***Break***
1110-1155	Susann Tegtmeier (invited)	*The SPARC Data Initiative*
	Theme	***On the added value of chemical data assimilation of upper tropospheric and stratospheric measurements***
1155-1240	Richard Ménard (invited)	*The study group on the added-value of chemical data assimilation in the stratosphere and upper-troposphere*
1240-1410		***Lunch*** Chair: Y. Orsolini
1410-1440	Frank Baier	*Derivation of wind fields from stratospheric trace gas observations*
	Theme	***Representation of the stratosphere-mesosphere in model and analysis***
1440-1525	François Lott (invited)	*Stochastic parameterization of gravity waves from convection and fronts: theory, validation, and impacts on the middle atmosphere climate*
1525-1610	Scott Osprey (invited)	*Representation of the stratosphere-mesosphere in models and Analyses*
1610		***Adjourn of Thursday***
2000		***Dinner meeting***

SPARC-DA

Friday October 16, 2015

0830-0900		***Arrival, Registration***
	Theme	***Representation of the stratosphere-mesosphere in model and analysis (cont.)*** Chair: S. Tegtmeier
0900-0930	Krzysztof Wargan	*Strengthening of the tropopause inversion layer during the 2009 sudden stratospheric warming in the MERRA-2 analysis*
0930-1000	Yvan Orsolini	*Mesosphere-Stratosphere Coupling during Stratospheric Sudden Warmings*
1000-1030	Valery Yudin	*Data analysis in the whole atmosphere models*
1030-1100		***Break***
1130-1200	Sergey Skachko	*Ozone deficit in the BASCOE CTM*
1100-1130	Johannes Flemming	*Stratospheric ozone-temperature radiative feedback in the Integrated Forecasting System (IFS) of ECMWF*
1200-1230	Quentin Errera	*Discussion on future directions of SPARC DAWG, next year's workshop, etc.*
1230		***Adjourn of workshop***

Poster Presentations

Poster size is A0 portrait

Marta Abalos	*Interannual variability of effective diffusivity in ERA-Interim (1980-2012)*
Marta Abalos	*Evaluating the advective Brewer-Dobson circulation in three reanalyses for the period 1979-2012*
Yoshio Kawatani	*Comparison of zonal wind in the equatorial stratosphere among several reanalysis data*
Chiaki Kobayashi	*Comparison of the stratospheric and tropospheric circulations among the JRA-55 family members*
Paul Konopka	*How robust are stratospheric H2O trends derived from different re-analysis products?*
Patrick Martineau	*Dynamical consistency of reanalysis data sets in the extratropical stratosphere*
Aurélien Podglajen	*Comparison of vertical velocities in the lower stratosphere between different reanalyses and long-duration stratospheric balloon observations*
Takatoshi Sakazaki	*Diurnal tides in reanalysis data sets*
Xiaoyi Sun	*A Preliminary Intercomparison of Reanalysis Cloud Variables in the Tropical Upper Troposphere and Tropopause Layer*
Krzysztof Wargan	*Validation of the MERRA-2 ozone product*
Jonathon Wright	*Effects of Madden–Julian Oscillation Propagation Characteristics on Stratospheric Water Vapor Entry Mixing Ratio*
Peter Hitchcock	*Evaluating pre-1979 polar-cap variability*

List of participants

Anstey	James	Oxford University	UK
Baier	Frank	DLR	Germany
Coy	Lawrence	NASA GFSC	USA
Das	Siddarth Shankar	Indian Space Research Organisation	India
Davis	Sean	NOAA ESRL	USA
Errera	Quentin	BIRA-IASB	Belgium
Flemming	Johannes	ECMWF	UK
Fujiwara	Masatomo	Hokkaido University	Japan
Gray	Lesley	Oxford University	UK
Harada	Yayoi	Meteorological Research Institute	Japan
Harvey	Lynn	Colorado University	USA
Hersbach	Hans	ECMWF	UK
Hertzog	Albert	LMD	France
Hitchcock	Peter	Cambridge University	UK
Homeyer	Cameron	Oklahoma University	USA
Kawatani	Yoshio	JAMSTEC	Japan
Kobayashi	Chiaki	Meteorological Research Institute	Japan
Legras	Bernard	LMD	France
Liu	Jingwei	CMA	China
Long	Craig	NOAA NCEP	USA
Lott	Francois	LMD	France
Martineau	Patrick	McGill University	Canada
Ménard	Richard	Environement Canada	Canada
Millan	Luis	JPL	USA
Monge-Sanz	Beatriz	ECMWF	UK
Orsolini	Yvan	NILU	Norway
Osprey	Scott	Oxford University	UK
Ploeger	Felix	FZ-Jülich	Germany
Podglajen	Aurélien	LMD	France
Sakazaki	Takatoshi	Kyoto University	Japan
Santee	Michelle	JPL	USA
Skachko	Sergey	BIRA-IASB	Belgium
Sun	Xiaoyi	Tsinghua University	China
Tegtmeier	Susann	GEOMAR	Germany
Tissier	Ann'Sophie	LMD	France
Wargan	Krzysztof	NASA GFSC	USA
Wright	Jonathon	Tsinghua University	China
Xu	Jianjun	George Mason University	USA
Yudin	Valery	NOAA SWPC	USA
Zhao	Tianbao	Institute of Atmospheric Physics, Chinese Academy of Sciences	China

Map and direction

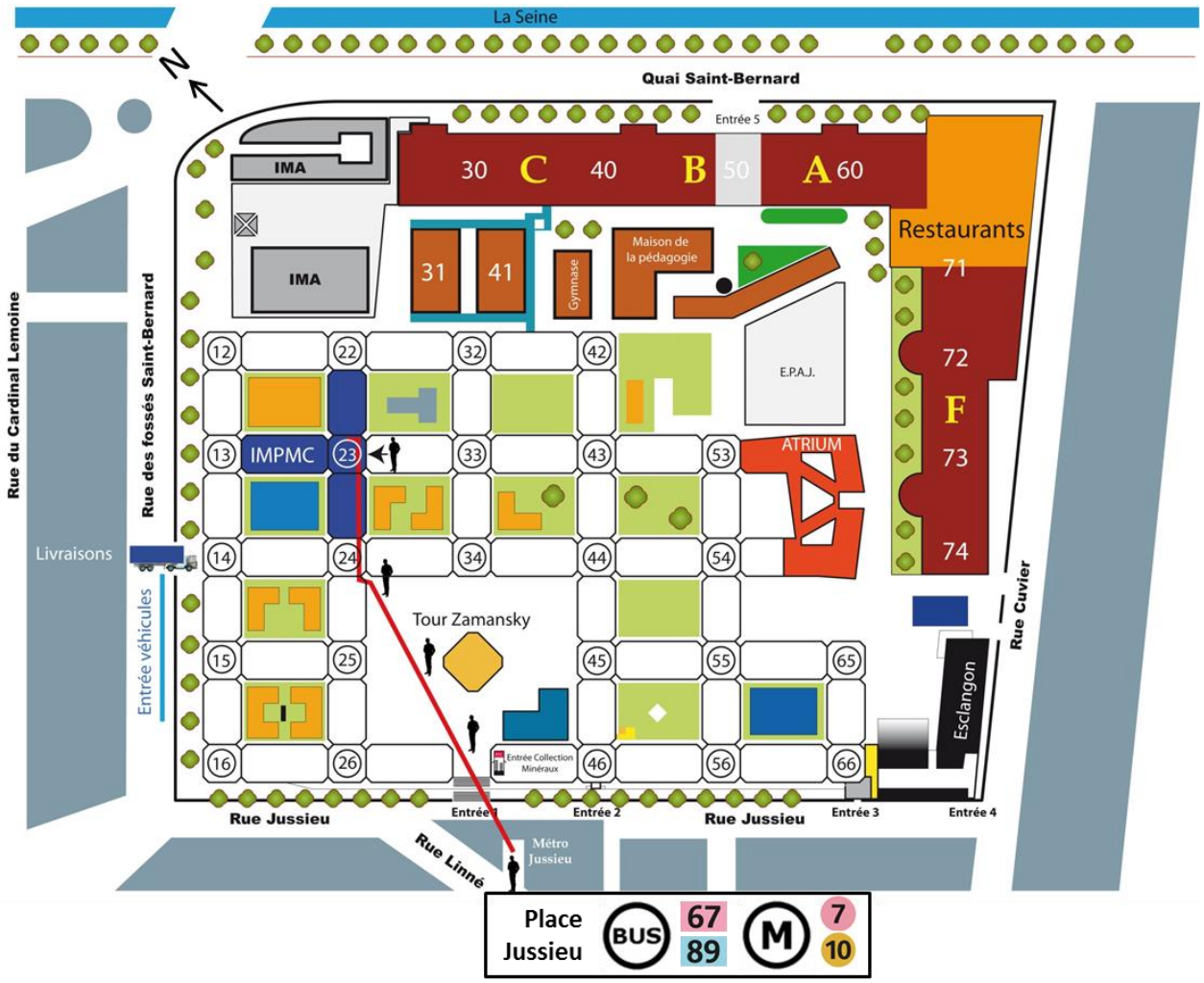
The meeting will take place at the University Pierre and Marie Curie, at the Jussieu Campus, 4 place Jussieu 75252 Paris, in the IMPMC lab (Institut de minéralogie, de physique des matériaux et de cosmochimie), on the 4th floor of the tower 22-23 (access via tower 23) .

Bus line 67 and 89, bus stop 'Institut du Monde Arabe' or 'Place Jussieu'

Subway line 7 and 10, station 'Jussieu'

For those that have a smart phone, the application 'RATP' provide useful information about bus and subway.

Note also that there might be some security check at the entrance of the university, especially for people entering with a luggage.



Workshop fee

A fee of €25/day (€15 for Friday) will asked to cover the coffee breaks and the organization. This fee will be collected at the meeting on Monday and Wednesday morning and must be paid cash. In order to prepare the receipt in advance, please, fill the doodle (http://doodle.com/poll/hgyemrsp2zuxeqyc) to tell us the days where you will be present. Note that participants that received travel support do not need to pay the fee but must fill the doodle.