



HyMeX SOPs' Debriefing Workshop

15-17 April 2013, Toulouse, France

Program – 8 April 2013

Monday 15 April
9:00- 9:30 Welcoming and opening address <i>P. Bougeault, Head of Research, Météo-France</i>
Description of the atmospheric, ocean and continental surfaces states during SOP1 & SOP2 <i>Chair: A. Doerenbecher (CNRM-GAME, Météo-France & CNRS, Toulouse, France)</i>
9:30-9:45 Large scale atmospheric conditions from Sep. 2012 to March 2013 (SOP1 & SOP2) <i>C. Calas (ENM, Météo-France, Toulouse, France)</i>
9:45-10:00 Characteristics of heavy rainfall during late summer and autumn 2012 (SOP1) <i>O. Nuissier (CNRM-GAME, Météo-France & CNRS, Toulouse, France)</i>
10:00-10:15 Floods and soil water state during late summer and autumn 2012 (SOP1) <i>I. Braud (IRSTEA, Lyon, France)</i>
10:15-10:30 Characteristics of strong wind events and intense air-sea fluxes from Sep. 2012 to March 2013 (SOP1 & SOP2) <i>C. Lebeaupin-Brossier (CNRM-GAME, Météo-France & CNRS, Toulouse, France)</i>
10:30-10:45 Characteristics of the NW-Med Sea from Sep. 2012 to March 2013 (SOP1 & SOP2) <i>S. Somot (CNRM-GAME, Météo-France & CNRS, Toulouse, France)</i>
<i>10:45-11:15 Break & Database rendez-vous</i>
Overview of the field operations <i>Chair: U. Corsmeier (KIT, Karlsruhe, Germany)</i>
11:15-11:50 SOP1 <i>V. Ducrocq (CNRM-GAME, Météo-France & CNRS, Toulouse, France)</i>
11:50-12:15 SOP2 <i>C. Estournel (LA, CNRS & UPS, Toulouse, France)</i>
<i>12:15-14:00 Lunch</i>
Review of SOP observation datasets <i>Chairs: R. Ferretti (CETEMPS, L'Aquila, Italy), D. Lambert (LA, CNRS & UPS, Toulouse, France)</i>
14:00-14:15 Corsica supersites (Corte, San Giuliano, SOP1) <i>N. Kalthoff (KIT, Karlsruhe, Germany)</i>
14:15-14:30 Central Italy site (atmosphere, hydrology, SOP1) <i>R. Ferretti (CETEMPS, L'Aquila, Italy)</i>
14:30-14:45 Cévennes-Vivarais site (atmosphere, SOP1) <i>B. Boudevillain (LTHE, Grenoble, France)</i>

14:45-15:00 Hydrological measurements in Cévennes-Vivarais (SOP1) <i>C. Bouvier (HSM, Montpellier, France)</i>
15:00-15:15 Radiosoundings (SOP1 & SOP2) <i>J. Campins (AEMET, Palma de Mallorca, Spain)</i>
15:15-15:30 Balloons (SOP1 & SOP2) <i>A. Doerenbecher (CNRM-GAME, Météo-France & CNRS, Toulouse, France)</i>
15:30-15:45 Wind profilers (SOP1 & SOP2) <i>F. Said (LA, CNRS & UPS, Toulouse, France)</i>
<i>15:45-16:15 Break & Database rendez-vous</i>
16:15-16:30 GPS and photometers (SOP1 & SOP2) <i>O. Bock (LAREG, IGN, Paris, France)</i>
16:30-16:45 Ground radars (SOP1) <i>O. Bousquet (CNRM-GAME, Météo-France & CNRS, Toulouse, France)</i>
16:45-17:00 Lightning (SOP1) <i>E. Defer (LERMA, Observatoire de Paris, Paris, France)</i>
17:00-17:15 Ground lidars (SOP1) <i>P. Di Girolamo (DIFA, Univ. of Basilicata, Potenza, Italy)</i>
17:15-17:30 Airborne lidar (SAFIRE/ATR42 SOP1) <i>C. Flamant (LATMOS, IPSL, Paris, France)</i>
17:30-17:45 Airborne RASTA radar (SAFIRE/F20 SOP1) <i>J. Delanoë (LATMOS, IPSL, Paris, France)</i>
17:45-18:00 Airborne microphysics (SAFIRE/F20 SOP1) <i>A. Schwarzenboeck (LaMP, Clermont-Ferrand, France)</i>
Tuesday 16 April
Review of SOP observation datasets (Cont.) <i>Chair: A. Wieser (KIT, Karlsruhe, Germany)</i>
9:00-9:15 Aerosols (airborne and ground, SOP1) <i>E. Freney (LaMP, Clermont-Ferrand, France)</i>
9:15-9:30 KIT/DO128 measurements (SOP1) <i>U. Corsmeier (KIT, Karlsruhe, Germany)</i>
9:30-9:45 SAFIRE/ATR42 air-sea turbulent fluxes (SOP1 & SOP2) <i>P. Durand (LA, CNRS & UPS, Toulouse, France)</i>
9:45-10:00 Argo floats (SOP1 & SOP2) <i>S. Belamari (CNRM-GAME, Météo-France & CNRS, Toulouse, France)</i>
10:00-10:15 Gliders (SOP1 & SOP2) <i>P. Testor (LOCEAN, IPSL, Toulouse, France)</i>
10:15-10:30 Air-sea flux measurements (SOP1 & SOP2) <i>R. Cambra (LATMOS, IPSL, Paris, France)</i>
<i>10:30-11:00 Break & Database rendez-vous</i>

11:15-11:30 Ocean profiles from R/V Urania, Tethys II, Le Suroit, & Le Provence (SOP1 & SOP2) <i>I. Taupier-Letage (MIO, Univ. of Aix-Marseille, La Seyne-sur-Mer, France)</i>
11:30-11:45 Surface buoys, drifters, moorings and sea state (SOP1 & SOP2) <i>M.N. Bouin (CNRM-CMM, Météo-France, Brest, France)</i>
Some insights on the real-time model forecast <i>Chair: J. Campins (AEMET, Palma de Mallorca, Spain)</i>
11:45-12:00 Atmospheric models (SOP1 & SOP2) <i>M. Nuret (CNRM-GAME, Météo-France & CNRS, Toulouse, France)</i>
12:00-12:15 Hydrological models (SOP1) <i>B. Vincendon (CNRM-GAME, Météo-France & CNRS, Toulouse, France)</i>
12:15-12:30 Ocean models (SOP1 & SOP2) <i>J. Beuvier (Mercator-Océan, Toulouse, France)</i>
<i>12:30-14:00 Lunch</i>
IOP overview with some highlights – SOP1 <i>Chair: K. Horvath (Meteorological and Hydrological Service, Zagreb, Croatia)</i>
14:00-14:15 Heavy precipitation and flash-flood events in Spain <i>A. Jansa (AEMET, Palma de Mallorca, Spain)</i>
14:15-14:30 Heavy precipitation and flash-flood events in France <i>E. Richard (LA, CNRS & UPS, Toulouse, France)</i>
14:30-14:45 Heavy precipitation and flash-flood events in Italy <i>S. Davolio (CNR-ISAC, Bologna, Italy)</i>
IOP overview with some highlights – SOP2 <i>Chair: I. Taupier-Letage (Mediterranean Institute of Oceanography, La Seyne-sur-Mer, France)</i>
14:45-15:00 Dense water formation, ocean convection <i>H. Giordani (CNRM-GAME, Météo-France & CNRS, Toulouse, France)</i>
15:00-15:15 Strong winds and sea state <i>G. Canut (CNRM-GAME, Météo-France & CNRS, Toulouse, France)</i>
Working sessions
15:15-15:30 Introduction to working sessions
<i>15:30-16:00 Break & Database rendez-vous</i>
16:00-18:00 Working sessions 1
WS1a Studies of IOPs – precipitation events <i>Chairs: S. Davolio (CNR-ISAC), A. Jansa (AEMET), E. Richard (LA)</i>
WS1b Synergistic use of SOP observations and models for describing at best dense water formation <i>Chairs: J. Chiggiato (CNR-ISMAR), C. Estournel (LA), S. Somot (CNRS-GAME)</i>
<i>Workshop dinner “Au Gascon”</i>

Wednesday 17 April

Working sessions (Cont.)

8:30-10:30 Working Session 2

WS2a Cross-validation studies and synergistic use of SOP1 observations and models in order to provide the best description of the microphysics in precipitating systems

Chairs: J. Delanoë (LATMOS), Y. Dufournet (TU Delft), A. Schwarzenboeck (LaMP)

WS2b Atmospheric data assimilation: reanalyses, impact studies (incl. DTS EUCOS), new observation type assimilation

Chairs: R. Ferretti (CETEMPS), N. Fourrié (CNRM-GAME), V. Homar (UIB)

WS2c Studies of IOPs - Ocean mesoscale processes

Chairs: P. Garreau (IFREMER), H. Giordani (CNRM-GAME), P. Testor (LOCEAN)

10:30-10:45 Break & Database rendez-vous

10:45-12:45 Working sessions 3

WS3a Air-sea fluxes and marine and ocean boundary coupled processes

Chairs: M.N. Bouin (CNRM-CMM), P. Durand (LA), C. Lebeaupin-Brossier (CNRM-GAME)

WS3b Cross-validation studies and synergistic use of SOP observations and models in order to provide the best description of the water vapour flows

Chairs: P. Di Girolamo (DIFA), C. Flamant (LATMOS), N. Kalthoff (KIT)

WS3c Flash-floods incl. process studies, field operations and forecasting

Chairs: I. Braud (IRSTEA), G. Delrieu (LTHE), B. Vincendon (CNRM-GAME)

12:45-14:00 Lunch

14:00-16:00 Outcomes of the working sessions, publications, general discussion and conclusion

Additional information about the sessions

Guidelines for oral presentations

Speakers are invited to prepare a presentation well fitted with the time they are devoted. The duration given to oral presentations in the program includes 3 min. for questions and discussion, e.g. a 15 min. talk should include 12 min. actual presentation + 3 min. discussion. Taking into account the large number of presentations on Monday and Tuesday, chair persons will be asked to open and close the sessions **on time**.

Presentations shall be uploaded during the breaks or at least 10 min. before the session starts.

Presentations reviewing the SOP observation datasets should inform on the status of the instruments during the SOP(s), the parameters measured, the quality of the observations and recommendations about their use, the datasets already available on the HyMeX database and the future datasets to be produced and archived on the HyMeX database with associated deadlines.

Database *Rendez-vous*

Rendez-vous between data providers and the HyMeX database managers, Jean-Luc Boichard (OMP/SEDOO, Toulouse, France) and Karim Ramage (IPSL/ESPRI, Palaiseau, France), will take place during the breaks. Data providers are kindly asked to register at the desk at the beginning of the workshop in order to schedule the *rendez-vous*.

Working sessions

The aim of the working sessions is to foster collaborative work on:

- ✓ instrument analysis methodologies, cross-validation studies, data assimilation
- ✓ multi-scale, multi-compartment modelling using SOP1 and SOP2 data
- ✓ studies of IOPs.

There will be two or three 2-hour round tables in parallel. Participants will be asked at the beginning of the workshop to register for the sessions they plan to attend:

Tuesday 16 April, 16:00-18:00

WS1a Studies of SOP1 IOPs – precipitation events

or

WS1b Synergistic use of SOP observations and models for describing at best dense water formation

Wednesday 17 April, 8:30-10:30

WS2a Cross-validation studies and synergistic use of SOP1 observations and models in order to provide the best description of the microphysics in precipitating systems

or

WS2b Atmospheric data assimilation: reanalyses, impact studies (incl. DTS EUCOS), new observation type assimilation

or

WS2c Studies of SOP2 IOPs - Ocean mesoscale processes

Wednesday 17 April, 10:45-12:45

WS3a Air-sea fluxes and marine and ocean boundary coupled processes

or

WS3b Cross-validation studies and synergistic use of SOP observations and models in order to provide the best description of the water vapour flows

or

WS3c – Flash-floods incl. process studies, field operations and forecasting