

# IV Workshop

All Meetings  
organizzazione • venti

Organized by



DIPARTIMENTO DISTART  
ALMA MATER STUDIORUM  
UNIVERSITÀ DI BOLOGNA



Sponsors



**VAISALA**



**BOLOGNA**

# HyMeX

HYdrological cycle in Mediterranean EXperiment

8-10 June 2010

Area della Ricerca CNR

## Bologna, Italy



## WORKSHOP PROGRAMME

(update: 04.June.2010)

Tuesday, 8 June 2010	
08:30 - 09:00	<b>Registration</b>
09:00 - 09:45	<b>Opening session</b> <ul style="list-style-type: none"> <li>♦ Welcome address (ISAC-CNR representative)</li> <li>♦ Workshop introduction (P. Drobinski, V. Ducrocq, P. Lionello, and the HyMeX ISSC)</li> <li>♦ WMO support to HyMeX (S. Nickovic)</li> <li>♦ Practical information (S. Davolio)</li> </ul>
<b>T1 - Plenary session - WG objectives and program strategy (Chair: P.Lionello)</b>	
09:45 - 10:15	<b>T1.1</b> - Water budget of the Mediterranean Sea (WG1) <i>A. Mariotti, S. Somot, W. Ludwig</i>
10:15 - 10:45	<b>T1.2</b> - Continental hydrological cycle and water resources (WG2) <i>I. Braud, A. Chanzy</i>
10:45 - 11:15	<b>Coffee Break</b>
<b>T2 - Plenary session - WG objectives and program strategy (Chair: P. Drobinski)</b>	
11:15 - 11:45	<b>T2.1</b> - Heavy precipitation and flash-flooding (WG3) <i>G. Delrieu, A. Montanari, E. Richard, R. Romero</i>
11:45 - 12:15	<b>T2.2</b> - Intense sea-atmosphere interactions (WG4) <i>K. Beranger, C. Estournel, B. Ivanean-Picek, S. Josey, K. Lagouvardos</i>
12:15 - 12:45	<b>T2.3</b> - Social and vulnerability and adaptation capacity (WG5) <i>M.C. Llasat, C. Lutolf, I. Ruin</i>
12:45 - 14:00	<b>Lunch</b>
<b>T3 - Plenary session - Science talks</b>	
<b>Water budget of the Mediterranean sea (Chair: M. Gacic)</b>	
14:00 - 14:15	<b>T3.1</b> - Recent changes in Mediterranean Sea water cycle <i>A. Mariotti</i>
14:15 - 14:30	<b>T3.2</b> - Calculating the water and heat balances of the Eastern Mediterranean basin using ocean modeling and available meteorological, hydrological and ocean data <i>M. Shaltout, L. Arneborg, A. Omstedt</i>
14:30 - 14:45	<b>T3.3</b> - Numerical estimate of river discharge in the Mediterranean basin <i>M. V. Struglia, G. Pisacane</i>
14:45 - 15:00	<b>T3.4</b> - Lagrangian monitoring of the Mediterranean thermohaline properties and currents: Past results and future plans <i>P.-M. Poulain</i>
<b>Heavy Precipitation, flash-floods and floods (Chair: S. Davolio)</b>	
15:00 - 15:15	<b>T3.5</b> - Cb-TRAM: Tracking and monitoring severe convection over the Mediterranean from onset over rapid development to mature phase using multi-channel Meteosat SEVIRI data <i>A. Tafferner, C. Forster, T. Zinner</i>
15:15 - 15:30	<b>T3.6</b> - Analysis of storm structure, motion and interaction with the drainage basin properties for selected extreme flash floods in the Mediterranean area <i>M. Borga, P. Tarolli, D. Zoccatelli, F. Marra</i>
15:30 - 15:45	<b>T3.7</b> - Measurement of alpine precipitation using an X-band polarimetric radar <i>A. Berne, M. Schneebeli, S. Jolivet</i>
15:45 - 16:00	<b>T3.8</b> - Shallow Orographic Convection contribution to the water resources in Mediterranean <i>A. Godart, S. Anquetin, E. Leblois, J. D. Creutin</i>
<b>16:00 - 17:00</b>	<b>Poster session and coffee break</b>
17:00 - 19:00	<b>PW1 - Parallel Working sessions</b>
	<b>PW1.1</b> - Long-term ocean observations (LOP-EOP): SSO-buoy-gliders- Monitoring R/V cruises - satellite products (Chairs: V. Cardin, L. Coppola, P.-M. Poulain)
	<b>PW1.2</b> - Long-term hydrometeorological observations (LOP-EOP): meteorological and hydrological sites and networks, satellite products (Chairs: E. Anagnostou, G. Delrieu, G. Liberti)
	<b>PW1.3</b> - Societal and economical impacts: science objectives and implementation plan (Chairs: I. Ruin, E. Grunfest)

Wednesday, 9 June 2010	
W1 - Plenary session - Science talks	
Intense air-sea exchanges (Chair: S. Sofianos)	
08:30 - 08:45	<b>W1.1</b> - A refined Cyclogenesis tracking climatology in the Mediterranean for characterisation and predictability perspectives of autumnal intense wind events <i>B. Joly, P. Arbogast</i>
08:45 - 09:00	<b>W1.2</b> - Complex properties of the Bora wind <i>I. Stiperski, B. Ivančan-Picek, V. Grubišić, A. Bajić</i>
09:00 - 09:15	<b>W1.3</b> - Rapid upper ocean responses to intense meteorological events in mesoscale ocean-atmosphere regional modelling <i>C. Lebeaupin Brossier, K. Béranger, P. Drobinski</i>
09:15 - 09:30	<b>W1.4</b> - QuickSCAT Observations of Extreme Wind Events over the Mediterranean and Black Seas during 2000-2008 <i>T. Chronis, V. Papadopoulos</i>
Heavy Precipitation, flash-floods and floods (Chair: V. Grubišić)	
09:30 - 09:45	<b>W1.5</b> - Verification of an integrated meteo-marine modeling chain with quantitative and qualitative methods <i>S. Mariani, M. Casaioli, B. Lastoria, A. Orasi, F. Catini</i>
09:45 - 10:00	<b>W1.6</b> - Collection of witness reports and evaluation of prediction tools for flash flood events <i>J. J. Gourley, J. M. Erlingis, D. P. Jorgensen, Y. Hong</i>
10:00 - 10:15	<b>W1.7</b> - Use of regional distributed hydrological modelling approaches for the design of catchment experimental set up within HyMeX <i>I. Braud, S. Anquetin, H. Roux, O. Vannier, M. M. Maubourgues, P. Viallet, B. Boudevillain, D. Dartus, J. D. Creutin</i>
10:15 - 10:30	<b>W1.8</b> - Atlantic precursors of Mediterranean cyclones: modeling at kilometer scale <i>F. Pantillon, J.-P. Chaboureau, C. Lac, P. Mascart</i>
10:30 - 11:00	<b>Coffee Break</b>
W2 - Plenary session - Science talks	
The continental hydrological cycle and related water resources (Chair: A. Montanari)	
11:00 - 11:15	<b>W2.1</b> - Do regional climate models reproduce the spatial distribution of monthly precipitation in the Mediterranean region better than global models? <i>P. Lionello, L. Congedi</i>
11:15 - 11:30	<b>W2.2</b> - Land biogeophysical variables of the Mediterranean basin: to what extent can ERA-I be used to drive land surface models? <i>C. Szczypta, J.-C. Calvet</i>
11:30 - 11:45	<b>W2.3</b> - Use of HYDROM to assess the Moraca river water potential <i>G. Pejanovic, M. Vujadinovic, S. Nickovic, V. Djurdjevic</i>
11:45 - 12:00	<b>W2.4</b> - Precipitation Retrieval from Satellite within EUMETSAT's H-SAF <i>A. Mugnai, S. Dietrich, V. Levizzani, D. Casella, E. Cattani, F. Di Paola, M. Formenton, S. Laviola, P. Sanò</i>
12:00 - 12:15	<b>W2.5</b> – The Coordinated Energy and water cycle Observations Project (CEOP) <i>S. Williams</i>
Societal and economic impacts (Chair: C. Llasat)	
12:15 - 12:30	<b>W2.6</b> - Prediflood: A French research project aiming at developing a road submersion warning system for flash flood prone areas <i>J.-P. Naulin, O. Payrastre, E. Gaume, G. Delrieu, P. Arnaud, C. Luton, B. Vincendon</i>
12:30 - 12:45	<b>W2.7</b> - Consequences of the climate change on water scarcity in the Mediterranean basin <i>H. Nassopoulos, P. Dumas</i>
12:45 - 14:00	<b>Lunch</b>

<b>W3 - Plenary session – Implementation Plan talks (Chairs: S. Gualdi, E. Anagnostou)</b>	
14:00 - 14:20	<b>W3.1</b> - SOP/EOP Implementation Plan - Overview for the Eastern Mediterranean Target Area <i>E. Anagnostou</i>
14:20 - 14:40	<b>W3.2</b> – SOP/EOP Implementation Plan - Overview for the Adriatic Target Area <i>M. Borga, B.Ivanean-Picek</i>
14:40 - 15:00	<b>W3.3</b> - SOP/EOP Implementation Plan - Overview for the Northwestern Mediterranean area <i>V. Ducrocq, G. Boni, A. Parodi</i>
15:00 - 15:12	<b>W3.4</b> - Boundary layer balloons in the Mediterranean <i>C. Basdevant, A Doerenbecher, P. Drobinski, P. Durand, C. Fesquet, A. Vargas, N. Verdier</i>
15:12 - 15:24	<b>W3.5</b> - Observations and products available from the Lightning Observation Task Team during HyMeX <i>C. Barthe, A. Bennett, H.-D. Betz, P. Blanchet, M. Chong, S. Coquillat, E. Defer, T. Farges, U. Finke, J.-F. Georgis, H. Höller, P. Krehbiel, K. Lagouvardos, P. Lalande, P. Laroche, G. Molinié, P. Ortéga, J.-P. Pinty, W. Rison, W. Schulz, S. Soula</i>
15:24 - 15:36	<b>W3.6</b> - LAM-EPS activities: common scientific interests for HyMeX and TIGGE-LAM. <i>L. Descamps, A. Montani, T.Paccagnella</i>
15:36 - 15:48	<b>W3.7</b> - HyMeX database <i>L. Fleury, K. Ramage, J.-L. Boichard, G. Brissebrat, S. Cloché, L. Mastrolillo</i>
15:48 - 16:00	<b>W3.8</b> - Data Management needs in Hydrometeorological Institutes <i>T. Roschier, J. Ikonen, A. McDonald</i>
16:00 - 17:00	<b>Poster session and coffee break</b>
17:00 - 19:00	<b>PW2 - Parallel Working sessions</b>
	<b>PW2.1</b> - Instrument deployment design over the TAs during SOP/EOP : mobile platforms (aircraft, balloons, radar,...) (Chairs: <i>C. Flamant, A. Vargas, O. Bousquet</i> )
	<b>PW2.2</b> - Instrument deployment design over the TAs during SOP/EOP : ocean and air-sea fluxes (Chairs: <i>I. Taupier-Letage, R. Bozzano, H. Giordani</i> )
	<b>PW2.3</b> - Modelling of the continental surfaces (Chairs: <i>M. Borga, I. Braud, A. Montanari</i> )
20:00	<b>Conference dinner</b>

<b>Thursday, 10 June 2010</b>	
<b>TH1 - Plenary session - Science talks</b>	
<b>Heavy Precipitation, flash-floods and floods (Chair: V. Homar)</b>	
08:30 - 08:45	<b>TH1.1</b> - The DTS-MEDEX-2009 campaign <i>A. Jansa, P. Arbogast, A. Doerenbecher, A. Genovés, S. Klink, D. Richardson, C. Sahin</i>
08:45 - 09:00	<b>TH1.2</b> - A flash flood early warning system based on hydrometeorological simulation of ensemble weather forecasts <i>L. Alfieri, J. Thielen</i>
09:00 - 09:15	<b>TH1.3</b> - Cloud-Resolving Ensemble Simulations of Mediterranean Heavy Precipitating Events: Uncertainty on Meso-Scale Initial Conditions vs Uncertainty on Lateral Boundary Conditions <i>B. Vié, O. Nuissier, V. Ducrocq</i>
09:15 - 09:30	<b>TH1.4</b> - Impact of radar data assimilation on WRF simulations of the Aniene flood <i>I. Maiello, R. Ferretti, S. Gentile, M. Montopoli, E. Picciotti, G. Giuliani, F. S. Marzano</i>
<b>Water budget of the Mediterranean sea (Chair: A. Mariotti)</b>	
09:30 - 09:45	<b>TH1.5</b> - The SMOS mission 6 months after launch: possibilities to study the water cycle in the Mediterranean region <i>J. Font</i>
09:45 - 10:00	<b>TH1.6</b> - A Regional Earth System Perspective on the Water Budget over the Mediterranean Catchment Area <i>S. Calmanti, A. Dell'Aquila, P. M. Ruti, V. Artale, A. Carillo, F. Giorgi, G. Pisacane, G. Sannino, M. V. Struglia</i>
10:00 - 10:15	<b>TH1.7</b> - Climate change in the Mediterranean Region: results from a global AOGCM coupled with an interactive high-resolution model of the Mediterranean Sea <i>S. Gualdi, E. Scoccimarro, A. Bellucci, P. Oddo, A. Sanna, E. Manzini, G. Fogli, A. Navarra</i>
10:15 - 10:30	<b>TH1.8</b> - The impact of climate change on the hydrometeorological extremes in Northeast of Spain <i>M. Turco, M. C. Llasat, P. Quintana Seguí</i>
10:30 - 11:00	<b>Coffee Break</b>
11:00 - 13:00	<b>PW3 - Parallel Working sessions</b>
	<b>PW3.1</b> - Regional climate modelling (Chairs: P. Ruti, S. Somot)
	<b>PW3.2</b> - High-resolution modelling (incl. data assimilation) for intense events (Chairs: C. Estournel, A. Montani, E. Richard)
	<b>PW3.3</b> - Instrument deployment design over the TAs during SOP/EOP : in-situ networks, sites and supersites (Chairs: O. Bock, A. Chanzy, N. Kartholff, A. Jansa)
13:00 - 14:15	<b>Lunch</b>
<b>TH2 - Plenary session - IIP (Chair: J. Font)</b>	
14:15 - 15:45	10' rendering for each of the 9 Parallel Working sessions
15:45 - 16:00	<b>Coffee break</b>
<b>TH3 - Plenary session – general discussion and closing session</b>	
16:00 - 17:00	