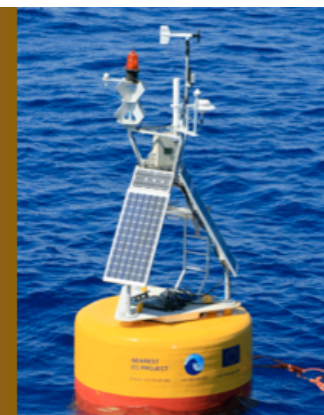




ORFEUS OBSERVATORY COORDINATION WORKSHOP

# INTEGRATING SEAFLOOR AND LAND-BASED SEISMOGRAPHIC OBSERVATIONS

Instituto de Meteorologia, Lisbon, May 25-28, 2011



## SCIENTIFIC PROGRAMME

### May 25, morning (opening session)

08:30 - 09:30 Arrival/Registration

09:30 - 10:30 Opening Ceremony (LOC, SC, ORFEUS, IM, Gov)

10:30 - 11:00 Coffee break

11:00 - 11:20 ESFRI and the European Roadmap of Research Infrastructures

Domenico Giardini

11:20 - 11:40 EPOS- The European Plate Observing System

Massimo Cocco

11:40 - 12:00 EMSO- The European Multidisciplinary Seafloor Observatory

Paolo Favali

**12:00 - 13:00 Luis Mendes Victor Lecture: - Challenges and opportunities in Marine Seismology"**

**Satish Singh, W. Crawford**

13:00 - 14:00 Lunch break

**May 25, afternoon Session 1 - "instrument pools and networks"**

Conveners: A. Brisbourne, L. Matias

<b>14:00 - 14:30</b>	<b>Keynote Lecture: The challenge of comprehensive monitoring of European geodynamics: integrating sea and land seismic datasets towards the EuroArray target</b>	<b>Josep Gallart</b>
14:30 - 14:50	Antares site: a seafloor seismological station integrated in the seismic network in SE France	A. Deschamps, Y. Hello, J. Salichon, P. Dehayes, P. Charvis, C. Gojak
14:50 - 15:10	FOMAR OBS network, ALBORAN Observatory and the WM BB seismic Network: an on land and offshore integration example in the Ibero-Maghrebian area	A. Pazos, J.M. Davila, E. Buforn, A. Udias, W. Hanka, M. Bezzeghoud, M. Harnafi, M.J. Garcia, M. Bullón
15:10 - 15:30	Integrating seafloor and land-based seismic waveform data at ORFEUS Data Center	R. Sleeman, T. vanEck, G.-J. Van den Hazel, A. Spinuso, L. Trani
15:30 - 16:30	Oral introduction to posters	

16:30 - 17:00 Coffee break / poster session

<b>17:00 - 17:30</b>	<b>Keynote Lecture: the German instrument pool for amphibian seismology (DEPAS)</b>	<b>Mechita Schmidt-Aursch</b>
17:30 - 17:50	The Cape Verde Seismic Network and Volcano Monitoring	B. Faria
17:50 - 18:10	The seismological system of Kosovo	N. Hasi, S. Mustafa, B. Bajrami
18:10 - 18:30	Seismologic study on North Moroccan territories, contribution to all seismic projects in west Mediterranean area and alboran sea	M. Harnafi, J. Gallart, G. Humphreys, A. Levander, R. Carbonell, C. Thomas, all teams

18:30 - 19:30 Welcome reception at IM

19:30 Bus departure to hotels

<b>May 26, morning</b>	<b>Session 2 - "Integrated studies"</b>	Conveners: A. Paul, N. Dias
<b>09:00 - 09:30</b>	<b>Keynote Lecture: Earthquake magnitudes based on ocean bottom instrumentation in the case of poorly calibrated sensors</b>	<b>Frederik Tilmann</b>
09:30 - 09:50	Can OBS help constrain moment tensor inversions?	S. Custódio, J. Zahradnik
09:50 - 10:10	When multiparameter data integration is advisable: the GEOSTAR-type seafloor observatory experience	S. Monna, L. Beranzoli, F. Chierici, A. De Santis, D. Embriaco, G. Etiope, P. Favali, F. Frugoni, N. Lobue, G. Marinaro, C. Montuori, L. Pignagnoli, T. Sgroi
10:10 - 10:30	Advances in the extension of the Campi Flegrei geophysical monitoring system to the seafloor	G. Iannacone, S. Guardato, M. Vassallo, L. Elia, M. Orazi, R. Peluso, L. Beranzoli
10:30 - 10:50	Tides, normal modes, tremors and other seismic and non-seismic signals observed onshore and offshore	J. Diaz, A. Becel
10:50 - 11:10	Coffee break / poster session	
<b>11:10 - 11:40</b>	<b>Keynote Lecture: Towards high-resolution imaging of the mantle roots of the Alpine Belt: rationale for a European-scale onshore and off-shore seismic experiment</b>	<b>A. Paul</b>
11:40 - 12:00	Location of Marmara Sea earthquakes using Marmara Sea Bottom Observatory (MSBO) and land stations	C. Gurbuz, D. Kalafat, M. Yilmazer, S. Tunc, S. Guvercin
12:00 - 12:20	Instrumental seismicity in the Gulf of Cadiz based on eleven month monitoring by the NEAREST OBS Network	S. Silva, L. Matias, W. Geissler, M. Romsdorf, N. Dias, P. Terrinha, F. Carrilho and the NEAREST WG
12:20 - 12:40	Kinematic Waveform Inversion: application to SW Iberia seismicity	A. Domingues, S. Custodio, S. Cesca
<b>12:40 - 13:10</b>	<b>Keynote Lecture: A sea-floor and land-based network to study the Western Barents Sea continental margin: experiences, observations,</b>	<b>Myrto Pirli</b>
13:10 - 14:00	Lunch break	

## May 26, afternoon

### Session 3 - Earthquake Early Warning

Conveners: J. Gallart, F. Carrilho

<b>14:00 - 14:30</b>	<b>Keynote Lecture: State of the art in earthquake early warning and implications of real-time OBS deployments on available warning time</b>	<b>Georgia Cua</b>
14:30 - 14:50	Local multiparametric measures: a possible hint for the solution of the tsunami generation puzzle	F. Chierici, L. Pignagnioli, P. Favali, L. Beranzoli, D. Embriaco, G. Marinaro, S. Monna, G. Giovanetti
14:50 - 15:10	The Lisbon tsunami	M.A. Baptista
15:10 - 15:30	Development of a tsunami early warning System (TEWS) prototype for nearshore tsunamigenic areas: an example multidisciplinary land and marine data integration from NEAREST EC Project	N. Zitellini, F. Chierici, NEAREST Team

15:30 - 16:00 Coffee break / poster session

### Session 4 - towards a European vision on the integration of seafloor and land-based seismometry

16:00 - 17:00	Panel	Paolo Favali, Massimo Cocco, Torsten Dahm, Satish Singh, Manuel Pinto de Abreu, Luis Matias
17:00 - 18:30	Debate	

18:30 Bus departure to hotels

## May 27, morning

### Session 6 - Quality control

Conveners: R. Sleeman, S. Custodio

<b>09:00 - 09:30</b>	<b>Keynote lecture: Synchronization of long-term OBS seismic recordings - the NEAREST Experiment</b>	<b>L. Matias, W. Geissler, S. Silva, M. Romsdorf, F. Carrilho, S. Monna, NEAREST Working Group</b>
09:30 - 09:50	Non-seismic ocean-bottom recordings from the Gulf of Cadiz by the NEAREST experiment	L. Matias, W. Geissler, D. Harris, S. Silva, M. Romsdorf, S. Monna, D. Stich, NEAREST Working Group
09:50 - 10:10	A new estimate of the STS-2 self noise	R. Sleeman
10:10 - 10:30	New developments of Seismic Handler	M. Walther, K. Stammer
10:30 - 10:50	Signal and noise levels at seafloor broadband seismological stations	W. Crawford, S. Singh
<b>10:50 - 11:20</b>	<b>Keynote Lecture: The Quality Control Software PQLX</b>	<b>Richard Boaz</b>

11:20 - 11:50 Coffee break / poster session

### Session 7 - Instrument pools and networks 2

Conveners: P. Favali, G. Silveira

<b>11:50 - 12:20</b>	<b>Keynote Lecture: Ocean Bottom Seismic Observation in the Azores</b>	<b>M. Miranda</b>
12:20 - 12:40	The SEIS-UK Pool	A. Bourne
12:40 - 13:00	Guided visit to the Seismology Department of IM	F. Carrilho

13:00 - 14:00 Lunch break

**May 27, afternoon** Session 8: white paper on integration of seafloor and land-based seismometry

14:00 - 15:00	Discussion of a draft white paper on the integration of seafloor and land-based seismometry	Torild vanEck (moderator)
15:00 - 15:30	Conclusions and recommendations	Paolo Favali, Massimo Cocco, Torsten Dahm, Satish Singh, Miguel Miranda, Luis Matias
15:30 - 16:00	Closing session	

**Saturday, May 28, morning:** Technical Tour to downtown Lisbon and Belem

09:00	Assembly at "Terreiro do Paco" metro station exit (downtown waterfront)	
09:15 - 10:00	Visit of Pombaline (post 1755 earthquake) construction techniques in downtown Lisbon	
10:00 - 11:00	in situ discussion of coeval accounts of the Lisbon tsunami (Terreiro do Paco)	
11:00 - 11:30	trip to Belem, western Lisbon (tramway)	
11:30 - 12:00	continuation of the in situ discussion of the Lisbon tsunami	

Note: the trip to Sintra and Cascais (social programme) picks up from here

## Posters:

P1	SHAKEMAP at Instituto de Meteorologia	C. Marreiros, F. Carrilho
P2	Modernization of the Portuguese National Seismic Network	F. Carrilho, P. Alves, J. Pena, G. Madureira, D. Vales
P3	Upper mantle structure of the SW Iberian Margin and Alboran Sea: new insights from 3D teleseismic tomography integrating OBS and land station data	S. Monna, G. Cimini, C. Montuori, W. Geissler, L. Matias, P. Favali
P4	MOIST - Multidisciplinary Oceanic Information SysTem: a data management system for multiparametric observatories	F. Doumaz, S. Beranzoli, P. Favali, G. Marinaro, G. Giovanetti
P5	COBS: a Permanent Ocean Bottom Seismometer Integrated in the Catalan Seismic Network	T. Frontera, C. Olivera, J.A. Jara, X. Goula
P6	The French national pool of mobile instruments SISMOB and its database facility	A. Paul, G. Cougoulat, C. Péquenat, S. Roussel, E. Bourova-Flin, S. Bayle, P. Volcke
P7	Converted phases from teleseismic and local subcrustal earthquakes observed at broadband ocean bottom seismometers in the Gulf of Cadiz, Eastern Atlantic	W. Geissler, F. de L. Mancilla, G. Silveira, L. Matias and D. Stich

**Note: other institutional posters are welcome (no abstract required), but please check space availability with the secretariat via email (patricia.pinheiro@ist.utl.pt)**