




2nd International Training School on

“Convective and volcanic clouds detection, monitoring and modeling”

Tarquinia, Italy, 19 –28 October, 2016

<p>Keynote lecturers</p> <p><i>Francesco Cairo</i> (ISAC-CNR, Italy) <i>Roy Gordon Grainger</i> (Univ. of Oxford, UK) <i>Fred Prata</i> (Nicarnica Aviation, Norway) <i>Klaus Sievers</i> (German Air Line Pilots' Association) <i>Dorinel Visoiu</i> (Romanian Air Traffic Services Administration)</p>	<p>Lecturers</p> <p><i>Riccardo Biondi</i> (ISAC-CNR, Italy) <i>Tatjana Bolic</i> (Univ. of Trieste, Italy) <i>Hugues Brenot</i> (BIRA, Belgium) <i>Elisa Carboni</i> (Univ. of Oxford, UK) <i>Stefano Corradini</i> (INGV, Italy) <i>Guergana Guerova</i> (Univ. of Sofia, Bulgaria) <i>Claire Witham</i> (MetOffice, UK) <i>Lorenzo Labrador</i> (MetOffice, UK) <i>Marcello Miglietta</i> (ISAC-CNR, Italy) <i>Mario Montopoli</i> (ISAC-CNR, Italy) <i>Giuseppe Salerno</i> (INGV, Italy) <i>Mark Woodhouse</i> (Univ. of Bristol, UK)</p>
<p>Organizing committee</p> <p>Riccardo Biondi (ISAC-CNR, Italy) Elisa Carboni (Univ. of Oxford, UK) Stefano Corradini (INGV, Italy) Nina Iren Kristiansen (NILU, Norway) Rita Nogherotto (ICTP, UNESCO)</p>	<p>Local Organization</p> <p>Island Of Meetings by ER srls Phone: +39 3931302769 Email: info@islandofmeetings.com www.islandofmeetings.com</p> 



Program

	Wednesday 19	Thursday 20	Friday 21	Saturday 22	Sunday 23
Early morning			jogging		jogging
8.50-9.40	Intro	F. Prata (4)	M. Montopoli (8)	C. Witham* (10)	H. Brenot (13)
09.50-10.40	Round the table	F. Prata (4)	M. Montopoli (8)	C. Witham* (10)	H. Brenot (13)
	Coffee break	Coffee break	Coffee break	Coffee break	Coffee break
11.00-11.50	F. Prata (1)	G. Grainger (5)	G. Salerno** (9)	M. Woodhouse (11)	T. Bolic (14)
12.00-12.50	F. Prata (1)	G. Grainger (5)	G. Salerno** (9)	Woodhouse (12)	T. Bolic (14)
lunch					
14.30-15.20	G. Grainger (2)	E. Carboni (6)	Students present. (°)	Woodhouse (12)	Panel (15)
15.30-16.20	G. Grainger (2)	E. Carboni (6)	Students present. (°)	NECROPOLI (+)	Panel (15)
	Coffee break	Coffee break	Coffee break	NECROPOLI (+)	Coffee break
16.40-17.30	S. Corradini (3)	S. Corradini (7)	Poster Session	NECROPOLI (+)	Intro
17.40-18.30	S. Corradini (3)	S. Corradini (7)	Poster session	NECROPOLI (+)	Round the table
Dinner		Social dinner			

	Monday 24	Tuesday 25	Wednesday 26	Thursday 27	Friday 28
Early morning		jogging		jogging	
8.50-9.40	K. Sievers (16)	M. Miglietta (20)	M. Miglietta (24)	D. Visoiu (26)	R. Biondi (28)
09.50-10.40	K. Sievers (16)	M. Miglietta (20)	M. Miglietta (24)	D. Visoiu (26)	R. Biondi (28)
	Coffee break	Coffee break	Coffee break	Coffee break	Coffee break
11.00-11.50	K. Sievers (17)	H. Brenot (21)	G. Guerova (25)	L. Labrador (27)	L. Labrador (29)
12.00-12.50	K. Sievers (17)	H: Brenot (21)	G. Guerova (25)	L. Labrador (27)	L. Labrador (29)
lunch					
14.30-15.20	T. Bolic (18)	M. Miglietta (22)	Students present. (°°)	LACOST (++)	R. Biondi (30)
15.30-16.20	T. Bolic (18)	M. Miglietta (22)	Students present. (°°)	LACOST (++)	R. Biondi (30)
	Coffee break	Coffee break	Coffee break	LACOST (++)	
16.40-17.30	D. Visoiu (19)	F. Cairo (23)	Poster session	LACOST (++)	
17.40-18.30	D. Visoiu (19)	F. Cairo (23)	Poster session	LACOST (++)	
Dinner		Social dinner			



Free time	Student's time	Labs
Keynotes	Lectures	Meals

- (1) Hazardous volcanic clouds: challenges, techniques and future (*F. Prata*)
- (2) Light and ash (*G. Grainger*)
- (3) Volcanic clouds detection and retrievals by using multispectral satellite data (*S. Corradini*)
- (4) Volcanic clouds from and hyper-spectral satellite instruments (*F. Prata*)
- (5) Light and ash (*G. Grainger*)
- (6) Retrieval theory and applications with satellite spectrometers (*E. Carboni*)
- (7) Satellite volcanic clouds Lab (*S. Corradini*)
- (8) Volcanic cloud detection and monitoring from ground based radars (*M. Montopoli*)
- (9) Volcanic degassing and ash emission (*G. Salerno*)
- (10) Volcanic clouds transport and inverse modeling (*C. Witham*)
- (11) Volcanic plumes modeling (*M. Woodhouse*)
- (12) Volcanic clouds modeling Lab (*M. Woodhouse and C. Witham*)
- (13) Volcanic clouds early warning systems (*H. Brenot*)
- (14) ATM and Airlines' Operations in Volcanic Ash - what happens? What's all the fuss about? (*T. Bolic*)
- (15) Discussion Panel: Bolic (air traffic manager), Visoiu (meteorologist), Prata (all), Brenot (early warning manager), Biondi (scientist), Woodhouse (modeler)
- (16) Encounters of aircrafts and volcanic clouds (*K. Sievers*)
- (17) Convective weather products for air safety (*K. Sievers*)
- (18) Convective weather decision support tools for ATM (*T. Bolic*)
- (19) Provision of early warnings on severe convection for aviation – current practices and future challenges (*D. Visoiu*)
- (20) Convection and Stability - Thermodynamic Diagrams (*M. Miglietta*)
- (21) GNSS tomography and its impact on nowcasting (*H. Brenot*)
- (22) Orographic Convection (*M. Miglietta*)
- (23) Platforms and instruments: from the balloons to the satellites (*F. Cairo*)
- (24) Practical Experiences and Examples of deep convection: Mediterranean cyclones and supercells (*M. Miglietta*)
- (25) Convection from ground based sensors (*G. Guerova*)
- (26) The use of the equivalent isothermal layer method in convection forecasting (*D. Visoiu*)
- (27) Overshooting and deep convection (*L. Labrador*)
- (28) The use of GNSS Radio Occultations for sounding the atmosphere and extreme atmospheric events (*R. Biondi*)



(29) Convection and atmospheric transport (*L. Labrador*)

(30) Extreme atmospheric events Datasets, data access and special archives (*R. Biondi*)

(°) D. Stelitano, M. Poret, S. Yang

(°°) T. Schubert, D. Hernandez-Deckers, M. Alvarez Imaz

Poster Session: K. Megahed, L. Western, O. Kira, G. Nerobelov, M. Baidu, M. Sedeeva, I. Kudzotsa, S. Bancalá, T. Dhar, H. K. Alladi, A. Brandi, S. Randall, D. Barakova, M. Osborne.

(+) Guided tour (with professional guides) to the Tarquinia Necropolis and the national archeological museum

<http://www.tarquinia-cerveteri.it/en/museum-and-necropolis-of-tarquinia/necropolis>

(++) Escursion to the Laboratorio Atmosferico COstiero Saline Tarquinia (LACOST) funded by the Consorzio per la Gestione dell' Osservatorio Ambientale di Civitavecchia with *S. Argentini* (ISAC-CNR, Italy) and free time at the Natural Public Reserve "Saline di Tarquinia"

<http://lacost.artov.isac.cnr.it/>

<http://www.lifegopark.it/en/park/2457>