

The First World Conference on Meteotsunamis
Split, Croatia, 8-11 May 2019
Hotel Park, <http://www.hotelpark-split.hr>

Programme

Wednesday, 8 May 2019

08:15-09:00 Registration
09:00-09:20 Opening

Overview presentations

Chair: Chin Wu

09:20-09:50 Alexander B. Rabinovich (solicited): *Meteorological tsunamis in the World Ocean: Overview*
09:50-10:10 Ivica Vilibić, Jadranka Šepić, Sebastian Monserrat, Alexander B. Rabinovich: *Meteorological tsunamis in the Mediterranean region: 40 years of studies*
10:10-10:30 Agusti Jansa, Climent Ramis: *Pioneering research on Balearic Islands „rissagues”*
10:30-11:00 Mirko Orlić (solicited): *The great Adriatic flood of 21 June 1978: a continual source of scientific inspiration*

11:00-11:30 *Coffee break*

Session 1: Meteotsunami observations

Chairs: Alexander B. Rabinovich and Eric J. Anderson

11:30-11:50 Begoña Pérez-Gómez, Javier García-Valdecasas, Rafael Molina, Alberto Rodríguez, David Rodríguez, Álvaro Campos, Pablo Rodríguez Rubio, José María Terrés Nicoli, Enrique Álvarez-Fanjul: *Operational tool for characterization of high frequency sea level oscillations at Spanish harbors*
11:50-12:10 Jadranka Šepić, Hrvoje Mihanović: *Preliminary analysis of 1.5 years of sea level and air pressure measurements at the Adriatic meteotsunami hot spots: Stari Grad (Hvar Island) and Vela Luka (Korčula Island)*
12:10-12:30 Havu Pellikka, Hanna Boman, Kimmo K. Kahma, Anu Karjalainen, Terhi Laurila, Ilari Lehtonen, Jenni Rauhala, Jadranka Šepić, Ivica Vilibić: *Recent studies on Baltic meteotsunamis*
12:30-12:50 Charitha Pattiaratchi, Sarath Wijeratne: *Observations of meteotsunamis in Australia*

12:50-14:00 *Lunch break*

14:00-14:20 Emile Okal, Coenaard de Beer, Amir Salaree, Johan Visser, Reza Mansouri: *Dwarskersbos, South Africa, and Bandar Dayyer, Iran: Surveys and simulations of two tsunamis of meteorological origin*

- 14:20-14:40 Mohammad Heidarzadeh, Jadranka Šepić, Alexander B. Rabinovich: *The 19 March 2017 tsunami-like destructive waves in Dayyer, Persian Gulf analyzed using sea level, air pressure and satellite data*
- 14:40-15:00 Arnaldo Valle-Levinson, Luming Shi, Maitane Olabarrieta: *Flow velocities related to a meteotsunami*
- 15:00-15:20 (cancelled) Alex Sheremet, Chunyan Li, Victor I. Shrira: *High-resolution, long time-scale observations of shoreline surface elevation along Louisiana coast*
- 15:20-15:50 *Coffee break*

Session 2: Atmosphere-ocean modelling for meteotsunamis

Chairs: Jadranka Šepić and Emile Okal

- 15:50-16:10 Kenji Tanaka: *Meteotsunamis propagating along continental slope in the northwestern Pacific Ocean: a case study of the January 2018 event in Shikoku area*
- 16:10-16:30 Eric J. Anderson, Greg E. Mann: *Atmospheric and hydrodynamic simulation of a gravity wave induced meteotsunami in Ludington, Michigan*
- 16:30-16:50 Isaac V. Fine, Richard E. Thomson: *Observation and modeling of the meteotsunami of October 25, 2018 at Port Alberni, Canada*
- 16:50-17:10 (cancelled) Iael Perez, Walter Dragani, Marcos Saucedo, Alejandro Godoy, Bibiana Cerne: *Numerical simulations of meteotsunamis on the Buenos Aires coast, Argentina*
- 17:10-17:30 Maitane Olabarrieta, Luming Shi, David Nolan: *Meteotsunamis in the Gulf of Mexico and Eastern United States during hurricane seasons 2016-2017*
- 17:30-17:50 Ahmet Cevdet Yalçiner, Bora Yalçiner, Alessandro Annunziato, Özge Çabuk, Pamela Probst: *Modeling of storm surge and inundation with respect to pressure and wind fields*

Thursday, 9 May 2019

- 09:00-09:20 Vasily Titov: *Modeling meteotsunamis with real-time data*
- 09:20-09:40 Maja Bubalo, Ivica Janeković, Mirko Orlić: *Simulation of flooding and drying in meteotsunami modelling*
- 09:40-10:00 Baptiste Mourre, Matjaž Ličer, Charles Troupin, Agusti Jansá, Alejandro Orfila, Joaquín Tintoré: *Sensitivity studies of Menorcan meteotsunamis under synthetic gravity wave forcing*
- 10:00-10:20 David Kristovich, Chin Wu, Alvaro Linares, Adam Bechle: *Convective storm evolution over the Laurentian Great Lakes with respect to meteotsunami-producing conditions*
- 10:20-10:40 (cancelled) Victor I. Shrira, Alex Sheremet: *How and when solitary edge waves might be a part of a meteotsunami?*
- 10:40-11:00 Kristian Horvath, Jadranka Šepić, Maja Telišman-Prtenjak, Ivica Vilibić: *Meteorological analysis of an exceptional meteotsunami event of 23-27 June 2014 in the Adriatic and Mediterranean*
- 11:00-11:30 *Coffee break*

11:30-11:50 Xiaojing Niu, Yixiang Chen, Xingyu Gao: *The growth time required for edge waves generated by atmospheric disturbances moving along coastline*

Session 3: Atmosphere-ocean interactions and ocean processes

Chair: Philip Y. Chu

11:50-12:10 Katsutoshi Fukuzawa, Toshiyuki Hibiya: *The amplification mechanism of the meteo-tsunami originating off the western coast of Kyushu Island in Japan in the winter of 2010*

12:10-12:30 Sota Nakajo: *The propagation characteristics of micro-barometric wave estimated from observational data and the response of meteotsunami in the west Kyushu Island*

12:30-12:50 David Williams, Kevin Horsburgh, David Schultz, Chris Hughes: *Examination of generation mechanisms for an English Channel meteotsunami: Combining observations and modeling*

12:50-13:10 Efim Pelinovsky, Ayse Duha Metin, Andrey Zaitsev, Tatiana Talipova, Gülizar Ozyurt Tarakcioglu, Ahmet Cevdet Yalçiner: *Proudman resonance in the channels of arbitrary cross-section*

13:10-13:30 Chin Wu, Alvaro Linares, Adam Bechle, Eric J. Anderson, Dave Kristovich: *Unexpected rip currents induced by a meteotsunami*

13:30-14:40 *Lunch break*

Session 4: Climatology of meteotsunamis

Chair: Charitha Pattiaratchi

14:40-15:00 Petra Zemunik, Ivica Vilibić, Jadranka Šepić: *A global perspective of nonseismic sea level oscillations at tsunami timescales*

15:00-15:20 Richard E. Thomson, Isaac V. Fine: *Statistics of extreme atmospherically-generated seiches in Port Alberni, British Columbia (2009-2018)*

15:20-15:40 Martijn P.C. de Jong, Bas S. P. Reijmerink: *Meteorologically generated long-period waves and their impact on the primary national flooding protection system of The Netherlands*

15:40-16:00 Viacheslav Gusiakov: *Seismically generated tsunamis, meteotsunamis and rogue waves: problems of identification, parameterization and cataloguing*

Poster session

Chair: Ivica Vilibić

16:00-16:40 2-min presentation of posters

16:40-17:45 Coffee and vine poster discussions

18:00-20:00 *City sightseeing tour*

20:00-23:00 *Conference dinner*

Friday, 10 May 2019

Session 5: Meteotsunamis forecasting and developing early warning system

Chair: David Kristovich and Kenji Tanaka

- 09:00-09:20 Baptiste Mourre, Albert Buils, Lola Gautreau, Benjamin Casas, Matjaž Ličer, Agusti Jansá, Bernat Amengual, Joaquín Tintoré: *Evaluation of four years of daily predictions of the SOCIB Balearic Rissaga Forecasting System*
- 09:20-09:40 Romualdo Romero, Maria-del-Mar Vich, Climent Ramis: *A pragmatic approach for the numerical prediction of meteotsunamis in Ciutadella Harbour (Balearic Islands)*
- 09:40-10:00 Cléa Denamiel, Jadranka Šepić, Damir Ivanković, Ivica Vilibić: *The Adriatic Sea and Coast (AdriSC) meteotsunami forecast system*
- 10:00-10:20 Anna Dzvonkovskaya: *Ocean radar as a tool for real-time monitoring of meteotsunamis*
- 10:20-10:40 Myung-Seok Kim, Seung-Buhm Woo, Sung Hyup Yoo, Kun-Young Byun, Hyunmin Eom, Hyunsu Kim, Yoo-Keun Kim, Dong-Hoon Kim: *Accuracy analysis of the real time air-pressure-jump monitoring system in Yellow Sea, Korea: Case study of 2018 March ~ April*
- 10:40-11:10 *Coffee break*
- 11:10-11:30 Hyunmin Eom, Kun-Young Byun, Sung Hyup You, Myung-Seok Kim, Seung-Buhm Woo: *Developing an early warning system for meteotsunami in South Korea (KMA)*
- 11:30-11:50 Michael D. Angove, Lewis Kozlosky: *Meteotsunamis: Working toward an operational forecasting capability for the U.S.*
- 11:50-12:10 Philip Y. Chu, Eric J. Anderson, Chin Wu, Adam Bechle, Alvaro Linares, Michael Angove, Greg Mann: *Develop a reliable detection and early warning system for meteotsunami events in an operational environment*
- 12:10-12:30 Greg Mann, Eric J. Anderson: *High amplitude inertia-gravity wave driven meteotsunami across the Lake Michigan basin during the transition season*
- 12:30-14:00 *Lunch break*
- 14:00-16:00 Ivica Vilibić (moderator), Philip Y. Chu, Charitha Pattiaratchi, Kenji Tanaka, Alexander B. Rabinovich, Chin Wu (panelists): *Round table: A way to go for meteotsunami research and applications*
- 16:00-17:00 *Farewell coffee*

Saturday, 11 May 2019

Full-day excursion

Poster session

1. Frano Matić, Stojan Šoša, Ana Radovčić, Jadranka Šepić, Marko Mlinar, Srđan Čupić, Maja Karlović: *Analysis of the Adriatic storm surge and meteotsunami of 29 October 2018* (Session 1)
2. Aldo Drago: *An observing system for the monitoring of seiches in the Maltese Islands* (Session 1)
3. Martina Tudor, Jadranka Šepić, Ivica Janeković, Mario Hrastinski: *Traveling air pressure disturbances in operational meteorological forecast model* (Session 2)
4. Damir Ivanković, Cléa Denamiel: *AdriSC web page - visualization of data from numerical models and real-time stations network in frame of Adriatic Sea and Coast (AdriSC) Meteotsunami Forecast* (Session 2)
5. Sarath Wijeratne, Charitha Pattiaratchi: *Simulating meteotsunamis along the south-west Australian continental shelf* (Session 2)
6. Kenji Tanaka: *The multiscale meteorological processes in the genesis of the atmospheric pressure disturbances in East Asia* (Session 2)
7. Wei Cheng, Richards Sunny, Bill Knight and Juan Horrillo: *Characterization and identification of meteotsunami-physical parameters for the GOM with application to Panama City and other locations in West Florida* (Session 2)
8. (cancelled) Boyko Ranguelov, Orlin Dimitrov: *A comparative study of the tsunami origin (turbidities or meteotsunami)* (Session 3)
9. Cléa Denamiel, Jadranka Šepić, Ivica Vilibić: *Genesis of the atmospheric internal gravity waves (IGWs) driving eastern Adriatic meteotsunamis* (Session 3)
10. Richard E. Thomson, Alexander B. Rabinovich, Jadranka Šepić: *The extreme typhoon "Songda" event of 14 October 2016 on the coasts of British Columbia and Washington State* (Session 3)
11. David Williams, Kevin Horsburgh, Chris Hughes, David Schultz: *Meteotsunamis produced by precipitating atmospheric systems across the north-west Europe* (Session 3)
12. Ivica Vilibić, Jadranka Šepić, Sebastian Monserrat, Natalija Dunić, Florence Sevault, Gabriel Jorda: *Deriving present and future climate of meteotsunamis from synoptic conditions: the Ciutadella case (the Balearic Islands)* (Session 4)
13. Rachid Omira, Maria Ana Baptista, Alexander B. Rabinovich, Daniela Maxial, Inês Ramalho, Maria Monteiro, Martina Tudor, Pedro Viterbo: *Developing forecast skills for meteotsunamis in the Iberian Shelf – An overview of the FAST project* (Session 5)

14. Chin Wu, Alvaro Linares, Dave Kristovich, Eric J. Anderson, Philip Y. Chu: *Toward the predictability of meteotsunamis in Lake Michigan* (Session 5)
15. Eric J. Anderson, Chin Wu, Alvaro Linares, Philip Y. Chu, Ed Verhamme, Greg Cutrell: *Development of a meteotsunami warning system for the Great Lakes* (Session 5)
16. Dijana Klarić, Lidija Fuštar, Vlasta Tutiš, Igor Horvat: *I-STORMS project and implementation in Croatia* (Session 5)
17. Beatriz Brizuela, Laura Graziani, Alessandra Maramai: *Italian Tsunami Effects Database (ITED): the first database of tsunami effects observed along the Italian coasts* (Session 5)