On September 28, 2018 at 6:03 pm local time (10:03 am UTC) a magnitude 7.5 earthquake ruptured ~80 km north of Palu along the Minahasa peninsula of Sulawesi, Indonesia. The subsequent tsunami struck nearby coasts, resulting in severe damage to infrastructure and a death toll of more than one thousand victims. This event clearly shows that strike-slip earthquakes of this magnitude have the potential to cause damaging tsunamis, at least locally, as result of coseismic displacement, tsunamigenic landslides, and/or local amplifying conditions. Whatever the mechanism, this tsunami has been an important wake up call and emphasizes the need to better understand the tsunami hazard to all coastlines and not only those along major subduction zones. This event serves as a reminder of the importance of continuously updating tsunami forecasting tools, infrastructure, and standard operation procedures, as well as the need for improved community awareness and preparedness. We invite abstracts dealing with analysis and observations of this earthquake and tsunami, including its source and impact, past events in the region, and related earthquake and tsunami risk reduction measures.
OSPA Liaison

Stefano Lorito
National Institute of Geophysics and Volcanology

Papers

NH23F-3541 Rapid Survey on the Aftermath of Palu-Indonesia Tsunami 28 Sept. 2018 and the Plausible Genesis of Tsunami

Widjo Kongko

Widjo Kongko, Indonesian Agency for the Assessment and Application of Technology (BPPT), Port Infrastructures & Coastal Dynamics Laboratory (BTIPDP), Yogyakarta, Indonesia, Prihartanto Prihartanto, Indonesian Agency for the Assessment & Application of Technology (BPPT), Technology Center for Disaster Risk Reduction (PTRRB), Jakarta, Indonesia, Yudhicara Yudhicara, Geological Agency, Ministry of Energy and Mineral Resources (ESDM), Center for Volcano & Geological Disaster Mitigation (PVMBG), Bandung, Indonesia, Purna Putra, Indonesian Institute of Sciences (LIPI), Research Center for Geo-technology (Geotek), Bandung, Indonesia and Budi Santoso, Indonesian Agency for the Assessment & Application of Technology (BPPT), Port Infrastructures & Coastal Dynamics Laboratory (BTIPDP), Yogyakarta, Indonesia

NH23F-3542 TSUNAMI ON 28 SEPTEMBER 2018 IN PALU BAY ~ AN EYEWITNESSES ACCOUNT AT WANI, TANJUNG KARANG-DONGGALA AND TIDE GAUGE MEASUREMENT AT PANTOLOAN PORT, CENTRAL SULAWESI, INDONESIA

Gegar Sapt Prasetya

Gegar Sapt Prasetya, Tsunami Research Foundation Indonesia, Indonesian Tsunami Scientific Community, Jakarta Selatan, Indonesia, Widjo Kongko, BPPT-BPDP, Yogyakarta, Indonesia, Semeidi Husrin, The Marine Research Centre, Ministry of Marine Affairs and Fisheries (KKP) - Indonesia, Jakarta, Indonesia and Rahman Hidayat, Directorate of Infrastructures for Shipping, Fishery, and Tourism, Coordinating Ministry for Maritime Affairs - Republic of Indonesia, Jakarta Pusat, Indonesia

NH23F-3543 Field Survey on the Coastal Impacts of the September 28, 2018 Palu, Indonesia Tsunami

Ahmet C Yalciner

**NH23F-3544** Preliminary Findings of the GEER-HATTi Reconnaissance Investigation of the Palu Earthquake  
*Jack Montgomery*

**ABSTRACT WITHDRAWN**

**NH23F-3545** The 28 September 2018 Mw 7.5 Sulawesi (Indonesia) earthquake and its implication for tsunami early warning  
*Y Tony Song*

*Y Tony Song*, Kejie Chen, Zhen Liu, Kevin Roback, and Jean-Philippe Avouac, (1)Jet Propulsion Laboratory, Pasadena, CA, United States; (2)Caltech, Pasadena, United States; (3)California Institute of Technology, Division of Geological and Planetary Sciences, Pasadena, CA, United States

**NH23F-3546** Physics-based Coupled Models of the 2018 Sulawesi Earthquake and Tsunami  
*Elizabeth H Madden*

*Elizabeth H Madden*, Thomas Ulrich, Leonhard Rannabauer, Stefan Vater, Alice-Agnes Gabriel, Joern-Behrens, Duo Li, Taufiqurrahman Taufiqurrahman, Yagna van Dinther, Michael Bader, Carsten Uphoff, Stephanie Wollherr, and Iris van Zelst, (1)Ludwig Maximilians University of Munich, Department of Earth and Environmental Sciences, Munich, Germany; (2)Technical University of Munich (TUM), Munich, Germany; (3)University of Hamburg, Hamburg, Germany; (4)ETH Swiss Federal Institute of Technology Zurich, Department of Earth Sciences, Zurich, Switzerland

**NH23F-3547** Tsunami Generation From Coseismic Deformation During the 2018 M$_{\text{w}}$ 7.5 Palu Earthquake  
*Amy Williamson*

*Amy Williamson*, University of Oregon, Eugene, OR, United States, Dr. Diego Melgar, University of Oregon, Department of Earth Sciences, Eugene, OR, United States, Xiaohua Xu, Scripps Institution of Oceanography, La Jolla, CA, United States and Christopher William Douglas Milliner, University of Southern California, Venice, CA, United States

**NH23F-3548** A first look of poor study area in the Sulawesi subduction zone and its implications  
*Haekal Azief Haridhi*

*Chao-Shing Lee*, NTOU National Taiwan Ocean University, Keelung, Taiwan and *Haekal Azief Haridhi*, Taiwan International Graduate Program - Earth System Science Program, Academia Sinica and National Central University, Taiwan, Taipei, Taiwan

**NH23F-3549** Multiple source sensitivity study to model the 28 September Sulawesi tsunami – landslide and strike slip sources  
*Finn Løvholt*

*Finn Løvholt*, Haider Hasan, Stefano Lorito, Fabrizio Romano, Beatriz Brizuela, Alessio Piatanesi, and Geir Kleivstul Pedersen, (1)Norwegian Geotechnical Institute, Oslo, Norway; (2)NED University, Karachi, Pakistan; (3)National Institute of Geophysics and Volcanology, Rome, Italy; (4)INGV National Institute of Geophysics and Volcanology, Rome, Italy; (5)Istituto Nazionale di Geofisica e Vulcanologia, Rome, Italy; (6)University of Oslo, Oslo, Norway
**NH23F-3550**  The 2018 Mw7.5 Palu earthquake, a gradually accelerating super-shear rupture stopped by stress shadows in a complex fault system

Shengji Wei  

**NH23F-3551**  What we do and don’t know about the 2018 Palu Tsunami – A future plan

Philip L-F. Liu  
Philip L-F. Liu, National University of Singapore, Department of Civil and Environmental Engineering, Singapore, Singapore, Ignacio Barranco, National University of Singapore, Singapore, Singapore, Hermann M Fritz, Georgia Institute of Technology, School of Civil and Environmental Engineering, Atlanta, United States, Jennifer Susan Haase, UCSD, La Jolla, CA, United States, Ignacio Sepulveda, Scripps Institution of Oceanography, La Jolla, CA, United States, Philip L-F. Liu, National University of Singapore, Department of Civil and Environmental Engineering, Singapore, Singapore and Xiaohua Xu, Scripps Institution of Oceanography, La Jolla, CA, United States

**NH23F-3552**  On the contribution of co-seismic displacements to the 2018 Palu Tsunami

Jennifer Susan Haase  
Ignacio Sepulveda, Scripps Institution of Oceanography, Cecil H. and Ida M. Green Institute of Geophysics and Planetary Physics, La Jolla, CA, United States, Jennifer Susan Haase, UCSD, La Jolla, CA, United States, Philip L-F. Liu, National University of Singapore, Department of Civil and Environmental Engineering, Singapore, Singapore and Xiaohua Xu, Scripps Institution of Oceanography, La Jolla, CA, United States

**NH23F-3553**  Tsunami potential of the 2018 Sulawesi earthquake from GNSS constrained source mechanism

Riccardo Riva  
**NH23F-3554** Large Shallow Slip Along the Palu-Koro Fault Associated with Supershear Rupture  
*Rishav Mallick*  

**NH23F-3555** The 2018 Sulawesi tsunami warning of need for tsunami early warning system updated after the 2011 Tohoku tsunami  
*Megumi Sugimoto*  
*Megumi Sugimoto*, Kyushu University, Fukuoka, Japan

**NH23F-3556** Possible cause of tsunami excitation for the Sep. 28, 2018, M 7.5 strike-slip Sulawesi Earthquake, Indonesia  
*Sidao Ni*  
*Sidao Ni*, Xin Lin, Feng Ling, Risheng Chu and Xiaobin Cai, State Key Laboratory of Geodesy and Earth's Dynamics, Institute of Geodesy and Geophysics, Chinese Academy of Sciences, Wuhan, China

**NH23F-3557** Traveling ionospheric tsunami disturbances of GPS total electron content induced by the 2018 Mw 7.5 Sulawesi Indonesia earthquake  
*Jann-Yenq G Liu*  
*Jann-Yenq G Liu*, National Central University, Institute of Space Science, Taoyuan City, Taiwan and Chi Yen Lin, Institute of Space Science National Central University, Taoyuan, Taiwan

**NH23F-3558** Atmospheric Control on the Infrasound Observations from the September 28th 2018 Mw 7.5 Sulawesi Indonesian Earthquake and Tsunami  
*Benoit Taisne*  
*Benoit Taisne*, Anna B Perttu, Dorianne Tailpied, Yizhou Luo and David Whildin, (1)Earth Observatory of Singapore, Singapore, Singapore, (2)Nanyang Technological University, Singapore, Singapore

**NH23F-3559** How Access to Daily Medium-Resolution Satellite Imagery Can Aid the Global Disaster Response Community  
*Brittany N Zajic*  
*Brittany N Zajic*, Robert Simmon, Joseph Mascaro, Joe D Kington IV and Kelsey A Jordahl, (1)Planet Labs, San Francisco, CA, United States, (2)Planet, San Francisco, United States

**NH23F-3560** Implications of UAV-based 3D mapping solutions for advanced disaster management: A case study of Palu City, Indonesia  
*Jooyeon Moon*  
*Jooyeon Moon*, Duk-woo Jup Dr, Won-nyoung Park, Yusuf S Djajadihardja, Zulfikar Yurnaidi, Yong Woon Chung, Ji-ae Kim, Jorng-su Jeong and Kyung-nam Shin, (1)Green Technology Center Korea, Seoul, South Korea, (2)Angelswing, Seoul, South Korea, (3)Agency for the Assessment and Application of Technology (BPPT), Jakarta, Indonesia
Transient Effects in Atmosphere and Ionosphere Associated with 2018 Mw 7.5 Sulawesi Indonesia Earthquake and Tsunami

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