Poster presentations
Session 1 (day 1, 17:00-17:55)

P1-01 Hirokazu Moriya et al., Large localized damage structures detected by acoustic emissions at an active mining front in South Africa gold mine.

P1-02 Suguru Yabe and Satoshi Ide, Foreshock seismicity on the frictionally heterogeneous fault

P1-03 Hiroyuki Noda and Takane Hori, Condition for aseismic transients in a seismogenic patch modelled by rate- and state-dependent friction

P1-04 Shiro Hirano et al., Objective matched-filter analysis for detecting small events

P1-05 Ryu Ohtani et al., Project of the Impact Assessment of the Uncertainties of Earthquake Forecasting Information on Societal and Individual Disaster Preparedness

P1-06 Naoki Uchida, Periodic slow slip and interplate earthquakes in Tohoku subduction zone

P1-07 Yoshiyuki Tanaka, The lunar perigee and the occurrence of historical large earthquake along the Japan Trench

P1-08 Fumiaki Tsunomori, Radon Concentration Anomalies at Nakaizu Observation Station and Current Situation of Geochemical Monitoring for Seismic Activity

P1-09 Chihiro Yamanaka et al., Computer simulation of Heki-TEC disturbance assuming surface charge polarization

P1-10 Sho Morita et al., Statistical evaluation of anomalous propagation of VHF-band radio wave and reliability of the anomaly that immediately preceded the 2016 Kumamoto Earthquake

P1-11 Xiaocan Liu et al., Possible geomagnetic $Sq$ abnormal related to great earthquake

P1-12 Sanaka Saito et al., Statistical analysis of pre-seismic ionospheric electron density anomalies using ionosonde data, over Japan

P1-13 Junpei Omura et al., Characteristics of Atmospheric Parameter Changes at Boso Peninsula, Japan ~ Observational Study to Understand Lithosphere-Atmosphere-Ionosphere Coupling ~

P1-14 Xuhui Shen, Preliminary Result of CSES-01 onboard during its commission test phase
**Session 2 (day 2, 13:10-14:10)**

**P2-01**  
*Makoto Naoi et al.*, Possible precursors implied from acoustic emissions and strain records in deep gold mines in South Africa

**P2-02**  
*Takeo Ishibe et al.*, Asperity as an undividable unit of earthquake rupture

**P2-03**  
*Makiko Ohtani et al.*, Nucleation of the characteristic earthquake in simulated cycles involving huge SSEs on the deeper extension

**P2-04**  
*Kazuyoshi Nanjo*, A global model of earthquake forecasting using spatiotemporal variation of $b$-value

**P2-05**  
*Takahiro Omi et al.*, Real-time short-term earthquake forecasting after a large earthquake in Japan

**P2-06**  
*Min-Chien Tsai et al.*, Using the CWB geophysical data to study pre-seismic anomalous signals preceding large earthquakes in Taiwan

**P2-07**  
*Taku Ueda and Aitaro Kato*, Seasonal variation of seismicity in San-in district, SW Japan

**P2-08**  
*Ayaka Ishikawa et al.*, Experimental Study on the Electro-Kinetic Effect; Self-potential approach to monitor groundwater condition under the slope for rainfall-induced landslide forecast

**P2-09**  
*Yoshiharu Saito*, Anomaly prior to 2018/4/9 Tottori West M5.8 and other earthquakes appeared on Ionosphere Perturbation observed by Terminator Time of AM Broadcasting Wave

**P2-10**  
*Yoshiki Sue*, Phenomena observed before slow slip events starting on 29 January 2011 prior to the 2011 Tohoku-Oki earthquake

**P2-11**  
*Yongxin Gao et al.*, Induced electromagnetic field by seismic wave in earth’s magnetic field: a 2D layered case

**P2-12**  
*Toru Mogi et al.*, MT survey in the source reason of SSEs in Boso peninsula, Central Japan - improving noisy data by ICA and three dimensional resistivity modeling -

**P2-13**  
*Shih-Sian Yang*, Stratospheric Gravity Wave Activity before the 2018 Hualien Earthquakes

**P2-14**  
*Michel Parrot*, Statistical analysis performed with the DEMETER satellite in relation with seismic activity
Session 3 (day 2, 17:10-18:10)

P3-01 Yasuo Yabe et al., Foreshock activity of Mw2.2 earthquake in a South African deep mine

P3-02 Weiyun Xie et al., Decrease in b-value prior to the 2003 Tokachi-oki earthquake (M8.0), Japan and the 2008 Wenchuan earthquake (M8.0), China

P3-03 Tomoaki Nishikawa and Satoshi Ide, Recurring slow slip events and earthquake nucleation in the source region of the M 7 Ibaraki-Oki earthquakes revealed by earthquake swarm and foreshock activity

P3-04 Chieh-Hung Chen et al., Potential mechanisms of ground vibration before earthquakes

P3-05 Kei Katsumata and Massao Nakatani, Long-term earthquake forecast based on the seismic quiescence: trials in the Kurile, the Tohoku, and the Izu-Bonin subduction zones

P3-06 Keisuke Yoshida, Detailed view of earthquake swarms in northeastern Japan triggered by fluid migration associated with the 2011 Tohoku-Oki earthquake

P3-07 Daichi Iwata et al., Statistical analysis of the correlation between earthquakes and atmospheric radon concentration

P3-08 Yuji Enomoto et al., Potential mechanisms that produced the pre-seismic electromagnetic phenomena that immediately preceded the 2011 Tohoku-Oki earthquake and other strong inter-plate earthquake

P3-09 Kuniyuki Motojima et al., Detection of anomalous VHF radio wave propagation associated with earthquake by artificial intelligence

P3-10 Motoaki Mouri et al., A Study on Unsupervised HMM Based Anomalous Signal Detection from Waveform Images of ELF Magnetic Signals

P3-11 Katsumi Hattori et al., Spatial and Temporal Characteristics of the Pre-Seismic Ionospheric Anomaly over Japan: Case study for the 2011 Off the Pacific Coast of Tohoku Earthquake (Mw9.0) and statistical study

P3-12 Hiroyuki Nakata, The ionospheric disturbances associated with the natural hazards using HFD and GPS-TEC

P3-13 Koichiro Oyama et al., Satellite Constellation to study ionosphere disturbance before large earthquakes

P3-14 Masashi Kamogawa et al., Origin of pre-seismic whistler wave intensity attenuation - Comparison between DEMETER satellite and global lightning data -