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## **Session: T1.2, T1.3, T1.4, T2.1, T2.2, T2.3, T3.1, T3.5, T5.2**

*Wednesday, 26 June 2019 16:30 (4 hours)*

### Topic T1.2 Solid Earth Structure

T1.2-P1 22 New Focal Mechanism Solutions for Shallow Earthquakes and Stress Observations for Bolivia (Plurinational State of).

T1.2-P2 3D Dynamic Earthquake Fracture Simulations Considering the Nonplanar Fault Geometry and Heterogeneous Stress States in the Sea of Marmara

T1.2-P3 A comparative study on the tectogenesis of 2015 Mt. Kinabalu Earthquake of Sabah Malaysia and tsunamigenic 2018 Sulawesi Indonesia Earthquake

T1.2-P4 A computer code for determining composite focal mechanism solutions

T1.2-P124 SALSA3D software tools for model interrogation, event location and travel-time

T1.2-P5 A THREE-DIMENSIONAL CRUSTAL VELOCITY MODEL OF THE JAVAKHETI HIGHLAND FROM LOCAL EARTHQUAKE TOMOGRAPHY

T1.2-P6 African Geodetic Reference Frame and First Results from GNSS Networks in Africa

T1.2-P7 Amplification of Earthquake Magnitude and Sediment Thickness Correlation in Palu Region and Surrounding Areas

T1.2-P8 An active tectonics of the Tien Shan and Dzungaria

T1.2-P9 An improved velocity model for routine hypocenter location in Central Brazil

T1.2-P10 Analysis of Earthquake Swarm around Mamasa, Central Sulawesi, Indonesia Following the Palu Earthquake Mw 7.4 (September 28, 2018)

T1.2-P11 Analysis of Time Domain Airborne Electromagnetic (TDEM) Data for Evaluating Gold Mineralization Potential of Ilesha Schist Belt, Southwestern Nigeria

T1.2-P12 Analysis of unusual seismic events in northwestern Madagascar

T1.2-P13 Are we able to detect viscoelastic inconsistencies in the Earth?

T1.2-P14 Armenian Seismic Network and Earthquake Catalogue

T1.2-P15 Changes of seismic structure beneath Jailolo region during June-July 2017 inferred from P-Wave Tomography

T1.2-P16 Clustering Geometry of Aftershocks in Earthquakes

T1.2-P17 Comoro-Islands, source of May-June 2018 earthquake swarm in the east of Mayotte-Island

T1.2-P18 Comparison of Mainshock and Aftershock Energy Release (Case Study: Earthquake in Sumatera and Java Subduction)

T1.2-P19 Contribution of local, sub-regional and international network to earthquake mapping of Côte d'Ivoire

T1.2-P20 Crustal Composition and Moho Characteristics Beneath Northern African Region: New contribution for seismic Hazard Assessment

T1.2-P21 Crustal seismic structure of Gheshm region, southeast Iran

T1.2-P22 Crustal Structure and Seismogenic Zone of Cameroon: Integrated Seismic, Geological and Geophysical Data

T1.2-P23 Crustal structure of some tectonic regions in west Africa

T1.2-P24 Crustal Structure Study in Mongolian Altai

T1.2-P25 Crustal thickness estimates beneath four seismic stations in Ethiopia inferred from p-wave receiver function studies

T1.2-P26 Data base from a seismic network to monitor the 2018 enhanced geothermal system stimulation in Espoo/Helsinki, Finland.

T1.2-P27 Deformational style in North-Western part of the Punjab Foreland

T1.2-P28 Detailed Hypocenters Relocation With High Resolution Analysis on Tripa Fault

T1.2-P29 Discriminating between induced, triggered and natural seismicity

T1.2-P30 Dissecting hearts of the continent in southern Africa using first P-wave tomography based on local, regional, and mining-induced earthquakes

T1.2-P31 Earthquake and Radioactivity, its Application in Indonesia

T1.2-P32 EARTHQUAKES RE-LOCATION, GT EVENTS IDENTIFICATION AND PSHA IN PARTS OF SUB-SAHARAN AFRICA TO BOOST CTBT'S VERIFICATION CAPABILITY AND ITS SCIENTIFIC APPLICATIONS

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T1.2-P35 Estimation of moho depth under the MDT seismic station (Midelt, Morocco) using receiver function technique.

T1.2-P36 Estimation Sources, Path and Site Effects from 2018 Lombok Earthquakes Sequences

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T1.2-P84 Seismicity along the seismogenic zone of Algarve region (southern Portugal)

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T1.2-P87 Seismicity and Seismotectonics of center Sudan and their Implications

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T1.2-P91 Seismotectonic of the Anker Area, Namibia

T1.2-P92 Seismotectonics of southern Africa

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T1.2-P94 Simultaneous Inversion Of The P Wave Velocity Model And Relocation Of Earthquakes In The Northern Sumatra Region Using SimulPS-12

T1.2-P95 Sinkhole process interpretation based on shear wave seismic reflection results at Ghor Al-Haditha, Dead Sea

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T1.2-P114 The role of geochemical and petrographic properties of rocks on the rheology (viscosity) of magmatic systems: Involvement in wave spread and internal dynamics of the Earth, case of the Nyiragongo volcano field in the Virunga Volcanic Province (East African rift)

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T1.2-P118 Updating the Egyptian Earthquake Source Parameters Database

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T1.2-P120 Upper mantle imaging with surface wave diffraction: AlpArray seismic network and the Cameroon Volcanic Line

T1.2-P121 Use of Microtremor for Site Period Estimation and Seismic Site Hazard Assessment in Bangladesh

T1.2-P122 Using HV method for imaging of fault zones (the Baikal rift)

T1.2-P123 Velocity of seismic waves in the earth's crust and upper mantle of the Siberian platform and Baikal

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#### Topic T1.3 Properties of the Ocean

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T1.3-P2 Climate of the upper ocean layer in stations of Ecuadorian sea

T1.3-P3 IMS discrimination between T-phases originating from volcanic tremors versus H-phases induced by volcanic eruptions in the northwestern Pacific Ocean

T1.3-P4 Long-range ocean sound propagation effects related to the search for the Argentine submarine ARA San Juan.

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T1.3-P6 Simulation of Dahlia Tropical Cyclone Impact on Atmospheric Dynamic and Ocean in Sunda Strait using Delft-3D model

T1.3-P7 Subspace detection of seismic survey signals observed on the IMS hydroacoustic network

T1.3-P8 Suprapodal hydroacoustic observations of earthquakes along the Middle America Trench

T1.3-P9 TECTONIC STRUCTURE IDENTIFICATION AT PIDIE ACEH SEA WITH GEO-MARINE SURVEY

T1.3-P10 Tsunami waveform analysis of the 2018 Caribbean earthquake (Mw7.6) and its implication to the tsunami hazard along the eastern coast of Central America

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T1.4-P3 Anomaly Of Total Electron Content Associated With Earthquakes And Tsunami Observed From GPS Data in Indonesia

T1.4-P4 Combined Electromagnetic (EM) and Electrical Resistivity Tomography (ERT) Geophysical Studies of Environmental Impact of Awotan Dumpsite in Ibadan, Southwestern Nigeria

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T1.4-P6 Can Climate Change Predict and Trigger the Earthquake Activity?

T1.4-P7 Monitoring and Verification Systems for Nuclear Tests with Biological Indices.

T1.4-P8 Monitoring of naturally occurring radionuclides in Santa Cruz - Galapagos Islands, in relation to atmospheric and ocean-atmosphere interaction processes over the Galapagos Islands and the Ecuadorian coast

T1.4-P9 Monitoring Seismic Events and Content of Isotopes on Atmospheric Aerosol of Tajikistan

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T2.1-P1 A Seismo-Acoustic Analysis of the 2017 North Korean Nuclear Test

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T2.1-P8 Comparative analysis of the waveforms of the North Korean nuclear tests obtained by the seismological method at the Alibek station

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- T2.1-P17 Overview of North Korean nuclear tests based on data from modernized Slovak National Network of Seismic Stations
- T2.1-P18 Overview of TIMEtool, a software for nuclear event timing
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- T2.1-P20 Relative Location of DPRK Test Events
- T2.1-P21 Relative location of North Korean nuclear tests using IMS data: how do different techniques compare?
- T2.1-P22 Relocation of seismic events in South Africa for ground truth identification and classification.
- T2.1-P23 Representation of Complex Seismic Sources by Orthogonal Moment Tensor Fields
- T2.1-P24 Seismological Investigations of the 2017 North Korean Nuclear Test
- T2.1-P25 Source depth and characteristics of the DPRK's nuclear tests [2006, 2009, 2013, 2016] (01/06/2016), 2016S (09/09/2016) and 2017] using regional and teleseismic data
- T2.1-P26 Source time functions of North Korean nuclear tests
- T2.1-P27 Space Borne Optical and Radar Data to characterize North Korean Nuclear Test 2017
- T2.1-P28 Summary of Common Exercise (Waveform Portion) at the 6th East Asia Regional NDC Workshop 2018
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- T2.2-P2 Application of the Radionuclide Method Using Tritium as an Indicator for On-Site Inspection
- T2.2-P3 Business Approach to Finish an Unsolved Dilemma of the OSI
- T2.2-P4 Challenges in hosting an On-site Inspection regional course
- T2.2-P5 Challenges of On-Site Inspection in Extreme Climatic Conditions
- T2.2-P6 ESI 2007 Earthquake Intensity Scale in help of CTBT OSI's Verification Regime
- T2.2-P7 Jurisdictional complexities of identifying "Inspected State Party", pertain to sea-bed extension
- T2.2-P8 Studying the Suspected Site of Nuclear Test by Using Microtremor Method
- T2.2-P9 Testing at Sea is a High Probability Event
- T2.2-P10 The family of the OSI
- T2.2-P11 THE IDENTIFICATION OF GROUND ZEROS OF NUCLEAR EVENTS OF THE SEMIPALATINSK TEST SITE
- T2.2-P12 The Use of Geophysical Methods in On-Site Inspections for Disguised Underground Nuclear Explosions
- T2.2-P13 Theoretical signature of a cavern created by an Underground Nuclear Explosion in 2D exploration seismic data.
- T2.2-P15 VNIA major activities related to the CTBT technologies

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- T2.3-P2 A Post Sunda Strait Tsunami Survey of Sunda Strait Tsunami, December 22nd 2018
- T2.3-P3 Analysis and modeling of the infrasound signals from the 2017 DPRK nuclear explosion at IMS station IS45
- T2.3-P4 Analysis of Kosti Meteorite using Infrasound Data: A case Study In Sudan
- T2.3-P5 Analysis of the infrasound signals from a bolide over the Bering Sea
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- T2.3-P13 Estimating seismic source depths using body and surface wave observations
- T2.3-P14 High frequency events detected by I33MG
- T2.3-P15 High-Precision Teleseismic Double-Difference Earthquake Relocation of Palu – Koro Earthquake M 7.4
- T2.3-P16 Hybrid waveform modeling for small-scale source complexity at teleseismic distances
- T2.3-P17 Implications for S wave generation from subsurface chemical explosions using large arrays of sen-

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- T2.3-P18 Infrasonic bulletin to station IS41
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- T2.3-P20 Measurement of Rotational Ground Motions for CTBT
- T2.3-P21 More precise location of Aswan seismicity based on waveform analysis
- T2.3-P22 Seismic Moment Tensor Inversion for Source-Type Identification
- T2.3-P23 Simultaneous relocation of the seismicity of the Pannonian Basin using Bayesloc
- T2.3-P24 Source Models and Scattering Origin of Regional Phases from Coda Spectral Ratios
- T2.3-P25 Study of seismoacoustic signatures of the September 28th 2018 Sulawesi earthquake
- T2.3-P26 The Annual Hungarian Seismo-Acoustic Bulletin of Ground Truth Events
- T2.3-P27 The Baumgarten and Ingolstadt explosions: infrasound observations from ground truth sources in Eastern Austria and Southern Germany
- T2.3-P28 Tropical cyclones monitoring in the Indian Ocean Basin using Seismic and Infrasonic stations
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- T2.3-P30 Waveform and Dispersion Modeling Using DPRK Regional Seismograms Recorded by the High Sensitivity Seismic Network of Japan

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- T3.1-P3 A new process design for compact radioxenon separation system
- T3.1-P4 A new three-component optical accelerometer
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- T3.1-P7 Applying an anti-coincidence system plastic-HPGe to lower the MDA of radioxenon measurement
- T3.1-P8 Atmospheric air radioactivity monitoring at BEO Moussala
- T3.1-P9 Calibration of Infrasound Sensors in a Long-Term Field Study
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- T3.1-P11 Comparison of PSD methods in simultaneous discrimination of alpha-gamma radiations
- T3.1-P12 Deployment of Portable Infrasound Array in Costa Rica
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- T3.1-P15 Development of a new compact photon/electron detector for radioxenon measurement
- T3.1-P16 Development of an Electrostatic Precipitator System for Radionuclide Particle Collection
- T3.1-P17 Distributed Fiber Optic Seismic Sensors with Seismic Noise Floor Performance
- T3.1-P18 Experimental setup and results of xenon sorption characteristics research for a number of adsorbents
- T3.1-P19 Fault Identification using Seismic Data Monitoring in Jakarta, Indonesia
- T3.1-P20 Future of aerosol radionuclide monitoring
- T3.1-P21 Geant4 Monte Carlo radioxenon beta-gamma coincidence efficiency simulation for a SAUNA detector
- T3.1-P22 Hyper-sensitive Gamma spectrometry – approaching the ultimate limit
- T3.1-P23 Improvement of energy resolution of beta detector in radioxenon detection system (INGAS)
- T3.1-P24 Improving sensitivity of Noble Gas cluster without enlargement stationary NG stations .
- T3.1-P25 Investigating New Detection Mediums for Atmospheric Radioxenon Measurements
- T3.1-P26 New Lobular Detection Technology and Possible Applications
- T3.1-P27 Next generation low-power HPGe gamma-ray spectrometer to improve IMS particulate radionuclide station reliability
- T3.1-P28 Project PIM: a low-cost mobile seismo-acoustic sensor for geophysical deployments
- T3.1-P29 PVA nanofibers based microfluidics chip for detection and absorption of nuclear radioactive solutions
- T3.1-P30 Radiation detection for OSI - A study of non-He-3 neutron detectors
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- T3.1-P35 SAUNA-CUBE: The first prototype for a noble gas system adapted for an Array-network
- T3.1-P36 Status of infrasound and seismic metrology at CEA
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- T3.1-P38 Study of materials for improved adsorption of xenon at IMS radionuclide stations
- T3.1-P39 Testing of Cosmic Veto for RASA Background and MDC Reduction
- T3.1-P40 The contribution of micro-gravity in delineating subsurface tunnels and caves
- T3.1-P41 The gas processing system of SAUNA CUBE
- T3.1-P42 The Guralp Affinity as a replacement for the DM24SxAM

T3.1-P43 The radiation dose monitoring network system in a coastal area  
T3.1-P44 Three Future Filters for IMS Radionuclide Particulate Operations  
T3.1-P45 Towards disaster mitigation on Earthquakes and Tsunamis using off shore real time monitoring data  
T3.1-P46 Ultra-sensitive measurements of large-volume radionuclide samples using an ultra-low-background proportional counter  
T3.1-P47 Unmanned Aerial Vehicles in On-site Inspection: New techniques for gamma spectroscopy survey  
T3.1-P48 Updated results from long-term infrasound sensor comparison  
T3.1-P49 Xenon International

Topic T3.5 Data Analysis Algorithms, Artificial Intelligence, Big Data and Deep Learning

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T3.5-P2 A new analysis method for beta-gamma radionuclide spectra, including improved calculation of decision limits  
T3.5-P3 A new approach for calculating 1D local velocity model using Particle Swarm Optimization technique  
T3.5-P4 A new blind deconvolution approach for the separation of seismic waves  
T3.5-P5 A novel approach for signal sparse time-frequency representations  
T3.5-P6 A semi-automatic method for extraction and interpretation of reflection Green's Functions from ambient noise and signal, for IMS seismic station crustal reflector characterization  
T3.5-P7 A simplified Fuzzy ARTMAP neural network based-approach for seismic signal discrimination between earthquakes and quarry blasts  
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T3.5-P57 Sensitivity analysis and disaggregation of recent seismic hazard assessment in Egypt

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T3.5-P77 Toward reliable certainty for seismic processing tasks with deep learning

T3.5-P78 Towards Automatic Noble Gas Data Processing at the Canadian NDC

T3.5-P79 Towards real-time association of infrasound events using full-wave modeling

T3.5-P80 Using spectral ratios to discriminate between low-magnitude earthquakes, explosions and mining events in Canada

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T3.5-P82 When can the combination of seismic and infrasound data improve event location?

T3.5-P83 Application of Nonlinear Echo State Network (Machine Learning) in Daily Streamflow Forecasting

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T5.2-P2 Awareness about the benefits of "Hydroacoustic Technology" for tsunami warnings in coastal areas in India.

T5.2-P3 Contribution to the Global Non-Proliferation and Nuclear Disarmament Regime at the Example of Kazakhstan-Japan Cooperation

T5.2-P4 Contributions to Issues of Global Concern such as Disaster Risk Mitigation

T5.2-P5 CTBT in Global Context: Nepal' Scenario

T5.2-P6 CTBT Technology for securing SDG 6: Ensure availability and sustainable management of Water and



sanitation for all.

- T5.2-P7 Earthquake Preparedness and the University Community Response in Albania
- T5.2-P8 Earthquake tectonics, sustainability of cities and infrastructure, seismic hazard assessment and mitigation. A Case study in north-east of Azerbaijan
- T5.2-P9 Economic uses of previous nuclear test grounds (Semipalatinsk test site)
- T5.2-P10 Five ideas for health and environment deals
- T5.2-P11 Geological controls and Climate change in the Greater Himalayan region
- T5.2-P12 How National Young Academies can Help CTBTO implementing relevant Sustainable Development Goals
- T5.2-P13 Identification of Mass Movements Using the CTBTO IMS Data: Seismo-Acoustic Technology
- T5.2-P14 Integrating the CTBTO IMS and NDC into the NNNREP as a Tool for Enhancing Radiological Emergency Response and Preparedness in Nigeria
- T5.2-P15 Integration of IMS Data and Smart Cities: Mardim Straps - Smart City Istanbul
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- T5.2-P20 Mining and pure uranium in Mexico, its social and environmental implications. Case: Durango
- T5.2-P21 Modeling of atmospheric dispersion and radiation dose for a hypothetical accident in Radioisotope production facility
- T5.2-P22 Modern seismic network development in Iraq
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- T5.2-P24 Operational Readiness of CTBT Hydroacoustic Stations in Achieving Sustainable Development Goal 14
- T5.2-P25 Prediction of Major Earthquakes Using 4-D Seismic Attenuation Tomography
- T5.2-P26 Preventing the Effects of Natural Disasters and Nuclear Test with the CTBT Verification Technologies for Myanmar
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- T5.2-P28 Recent seismic activities in Ghana: The role of the National Data Centre (NDC)
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- T5.2-P30 Scientific Applications of IDC and IMS Products: Earthquake Research and Tsunami Warning in Sri Lanka
- T5.2-P31 Seismic Hazard Assessment for Northern Malawi
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- T5.2-P33 SEISMICITY STUDY OF BOTSWANA FROM 1966 TO 2012
- T5.2-P34 Site Class Analysis for Preparation Due to Measurement ANT using PSD at Jakarta
- T5.2-P35 Strategies to prevent the proliferation of nuclear weapons and create in their place energy to alleviate the energy shortage in the world.
- T5.2-P36 Summer School in Old Nuclear Test Site in Kazakhstan
- T5.2-P37 Sustainable Development and experiences in the nuclear sphere from Serbia, still not member of the European Union
- T5.2-P38 Swedish Biodiversity in Time and Space
- T5.2-P39 The Advances in Scientific Technology and Enforcement of Effective Socio-Political and Economic Policies Will be the Surest Way to Achieve the SDG's
- T5.2-P40 The changes in the wildlife of a region as an indicator of the effect of the radiation caused by the nuclear tests
- T5.2-P41 The CTBTO IMS and NDC Opportunities to Help Detect, Prepare, Respond and Mitigate Disasters from Earthquakes and Tremors in Abuja, Nigeria
- T5.2-P42 The future of nuclear energy in Latin America
- T5.2-P43 The Investigation between the CTBT and the UN Sustainable Development Goals
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- T5.2-P47 Tsunami risk assessment in South-Eastern Mediterranean
- T5.2-P48 Urban Seismic Risk Evaluation for Georgia
- T5.2-P49 Waiting to the eight: Billions people and CTBTO committed for a safer world