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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)

 $T1.2-P19\ Contribution\ of\ local, sub-regional\ and\ international\ network\ to\ earthquake\ mapping\ of\ C\^{o}te\ d'Ivoire$ 

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 Radioctivity, 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
- T1.2-P33 Estimation of 2D and 3D shear wave velocity structure of crust and upper mantle of Northern part of Iranian plateaus
- T1.2-P34 Estimation of Local Site Effects Using Microtremor Testing in Erdenet City
- 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
- T1.2-P37 Flow plane orientation in the upper mantle under the United States from SKS shear-wave splitting
- T1.2-P38 Fractal analysis applied to the seismicity of Azerbaijan
- T1.2-P39 Geomagnetic Calculator over the Indonesian Region Based on Geomagnetic BMKG Data
- T1.2-P40 Geometrical definition of the Boconó fault in the sector Las Gonzalez Mérida, from the simultaneous relocation of seismic events occurring in a burst of seismicity during 2015-16
- T1.2-P41 Gravity Derived Crustal Thickness Map of Botswana: Implication to the Mw 6.5 April 3, 2017, Botswana Earthquake
- T1.2-P42 Ground response of Kathmandu Valley Sediments during 2015 Gorkha Earthquake
- T1.2-P43 Heterogeneities of short-period S wave attenuation field in the earth's crust and uppermost mantle of the Eastern Tien Shan
- T1.2-P44 How complex is seismically active "Deren" area, 180km south of Ulaanbaatar?
- T1.2-P45 Imaging the crustal and mantle structure of the Baikal Rift from receiver functions
- T1.2-P46 Implication of Volcano-Tectonic and Fluid Movements on Seismic Activity in the Paka Geothermal Prospect
- T1.2-P47 Interdependence among earthquake magnitude, ground motion attenuation and consequences for the Central Asia derived from Pamir-Hindu Kush deep earthquakes data
- T1.2-P48 Investigate Seismic Sites Using Microtremor Studies and Elliptical Curve Inversion of Horizontal-to-Vertical Spectral Ratio in Sleman, Yogyakarta
- T1.2-P49 Investigate subsurface structure beneath Sunda Straith
- T1.2-P50 Investigations of the 2018 earthquake swarm in Mamasa (Sulawesi), Indonesia
- T1.2-P51 Jordan Seismological Networks
- T1.2-P52 Kinematics of the Suez-Sinai area from combined GPS velocity field
- T1.2-P53 Lithospheric scattering and structure from teleseismic P waveforms
- T1.2-P54 Local magnitude Formula Determination of Seismic Swarm at The Long-Dormant Jailolo Volcano, West Halmahera, Indonesia
- T1.2-P55 Long-term Stability Evaluation of Foundation Material at Nuclear Power Stations
- T1.2-P56 Mikroearthquake Monitoring and Ambient Noise Tomography to Verify the Burried Faulths Beneath Jakarta
- T1.2-P57 Moment tensor solutions of earthquakes in south of Sumba Island (Indonesia)
- T1.2-P58 Monitoring of crustal activities using oceanfloor network system for disaster resilience
- T1.2-P59 Multi-disciplinary views on seismic hazard analysis in the eastern Caucasus (Azerbaijan)
- T1.2-P60 On the relationship between floods and earthquake in Southern Africa
- T1.2-P61 P and S wave tomography of the central Tien Shan from inversion of local earthquake arrival time data
- T1.2-P62 Possible relationship between electromagnetic signals of non-anthropic origin and seismic events, in the Sabana de Bogotá and surroundings
- T1.2-P63 Prediction of Earthquake Hazard in the northeast India Himalaya
- T1.2-P64 Preliminary Results from Ambient Noise Tomography across Africa
- T1.2-P65 Preliminary Results of Continuous Monitoring and Surface Condition of An Active Fault In The Southeast Aceh
- T1.2-P66 Preliminary study of seismic hazard along the Cameroon Volcanic Line (CVL)
- $T1.2-P67\ Preliminary\ Study\ the\ Impact\ of\ Directivity\ for\ Strong-Motion\ Effective\ Duration\ on\ High-Rise\ Building$
- $T1.2-P68\ Present-day\ stress\ field\ in\ NW\ Himalaya\ and\ surrounding\ regions\ based\ on\ inversion\ of\ earthquake\ focal\ mechanisms$
- T1.2-P69 Probabilistic Seismic Hazard Assessment in Kenya and Its Vicinity
- T1.2-P70 Probing the stress regimen at Bolivian south Subandean belt by Focal mechanism computation: Villa Serrano earthquake, 4.7 Mw 2018.
- T1.2-P71 Properties of the high-frequency ambient seismic field recorded on a large-N (N=10,530) seismic deployment in the Vienna Basin
- T1.2-P72 Receiver Function Analysis of the IMS stations located in Africa
- T1.2-P73 Recent seismicity along the the Davie Ridge/Fracture zone

- T1.2-P74 Relevance of National Data Centres Established in Southern Africa, the case study for Zambia
- T1.2-P75 Revisiting The 2018 Kalibening Earthquake Sequence In Central Java: Call for the Revision of Earthquake Hazard
- T1.2-P76 S-wave Velocity Structure beneath PS14-ROSC Station using Microtremor Arrays
- T1.2-P77 Seismic Geohazard Monitoring in the Baringo Silali Geothermal Prospect in Northern Kenya
- T1.2-P78 Seismic hazard assessment for Madagascar
- T1.2-P79 SEISMIC HAZARD ASSESSMENT, LUSAKA AND COPPERBELT PROVINCES OF ZAMBIA
- T1.2-P80 Seismic Hazard Scenario in Western Himalaya, India
- T1.2-P81 Seismic Impact from Earthquakes of Different Distance upon the Territory of Belarus
- T1.2-P82 Seismic study to support PSHA in Greater Caucasus (Azerbaijan)
- T1.2-P83 Seismic Wave Attenuation Model of the Lithosphere and Upper Mantle of the Northeastern Part of the Baikal Rift System
- T1.2-P84 Seismicity along the seismogenic zone of Algarve region (southern Portugal)
- T1.2-P85 Seismicity and GPS Observations for studying crustal deformation and Geodynamics in and around Egypt
- T1.2-P86 Seismicity and seismogenic structure of the Emeelt fault, Mongolia
- T1.2-P87 Seismicity and Seismotectonics of center Sudan and their Implications
- T1.2-P88 Seismicity of the Okavango Delta Region: Contribution of IMS and Local stations
- T1.2-P89 SEISMO-TECTONIC EVALUATION OF DECEMBER 13, 2009 CHITTAGONG EARTHQUAKE
- T1.2-P90 Seismological and tectonics Of Jordan
- T1.2-P91 Seismotectonic of the Anker Area, Namibia
- T1.2-P92 Seismotectonics of southern Africa
- T1.2-P93 Shale rheology and its relationship to the variation of VP and VS to identify nuclear waste storage sites.
- $T1.2-P94 \, Simultaneous \, Inversion \, Of \, The \, P \, Wave \, Velocity \, Model \, And \, Relocation \, Of \, Earthquakes \, In \, The \, Northern \, Sumatra \, Region \, Using \, SimulPS-12$
- T1.2-P95 Sinkhole process interpretation based on shear wave seismic reflection results at Ghor Al-Haditha,
- T1.2-P96 Some Regularities of Seismicity of Western and Central Uzbekistan
- T1.2-P97 Source parameters and focal mechanism of local earthquakes in Albania
- $T1.2-P98 \, Source \, Process \, Analysis \, of \, the \, 28 \, September \, 2018 \, Palu \, Earthquake \, (Mw \, 7.4) \, Using \, Teleseismic \, Waveform$
- T1.2-P99 Sources of P-wave Microseisms Detected with the TA Array in Alaska
- T1.2-P100 Static Stress Drop and Strain Rate Analysis of the Palu Earthquake Mw 7.4 (September 28, 2018)
- T1.2-P101 Statistical analysis of the seismicity around the capital of Mongolia
- T1.2-P102 Stress/strain state colouring method for IMS data imaging
- T1.2-P103 Structure of the Ulaanbaatar Region from Gravity Data
- T1.2-P104 Study of Activities in Local Segments of the Bengkulu Area for the Year 2017
- T1.2-P105 Study the seismic activity along the Dead Sea Transform Fault System and Surrounding Area during 2010-2016
- T1.2-P106 Tectonic activity and its influence in the increase of earthquakes in Iraq
- T1.2-P107 Tectonic Plates Interactions and Detection Capabilities of the IMS Seismic Stations in the Africa Region
- T1.2-P108 The aftershock sequence of the 22 September 2016, Mozambique earthquake (ML 5.2)
- T1.2-P109 The b-value of local seismicity around Seymareh Dam (Zagros region-Iran), before and after impoundment
- T1.2-P110 The Caucasus Seismic Hazard
- T1.2-P111 The Lushnje-Elbasan-Diber Fautl: Crustal Structure and Seismic Activity
- T1.2-P112 The Minimum 1-D P-wave velocity model for a local earthquake data with precise and consistent earthquake locations in the southern Hangay region
- T1.2-P113 The Relationships of Subparallel Synthetic Faults and Pre-existing structures in the Central Malawi Rift
- 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)
- T1.2-P115 The Seismic Network of Zambia
- T1.2-P116 The Statistical Data Analysis of Zambian Seismicity Outlook
- T1.2-P117 Understanding Pamir-Hindukush Seismicity
- T1.2-P118 Updating the Egyptian Earthquake Source Parameters Database
- T1.2-P119 Upper crustal structure at the KTB drilling site from ambient noise tomography
- 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)
- $T1.2-P123\ Velocity\ of\ seismic\ waves\ in\ the\ earth's\ crust\ and\ upper\ mantle\ of\ the\ Siberian\ platform\ and\ Baikal$

folded region according to underground nuclear explosions

Topic T1.3 Properties of the Ocean

T1.3-P1 Acoustic presence of blue, fin and minke whales recorded at the CTBT HA03 hydroacoustic station, 2007-2016

T1.3-P2 Climate of the upper ocean layer in statons 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.

T1.3-P5 Scenario-Based Tsunami Hazard Assessment for Karpathos Island, Southeastern Aegean Sea

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

Topic T1.4 Interaction Among the Earth's Subsystems

T1.4-P1 7Be in South America: detection by IMS radionuclide stations and possible applications for climate and environmental studies

T1.4-P2 An Earthquake Precursor Using The Anomalous Radon Concentration: Study Case Palu Earthquake, Indonesia, Magnitude 7.2, September 28, 2019

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

T1.4-P5 Detection of Traveling Ionospheric Disturbances from an Earthquake and a Volcano Eruption: Case Study

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

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

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

T1.4-P10 Observations of Interactions Among Earth's Subsystems from the EarthScope Transportable Array

T1.4-P11 Optimistic Monitoring earthquake Precursor in Sumatra

T1.4-P12 Seasonal variations of microseisms in the Baikal rift

T1.4-P13 Seismo-acoustic observation of the ocean swell sources at BURAR site

T1.4-P14 Seismologically determined features of the Arshan debris flow, June 27-29, 2014 (Russia)

T1.4-P15 ThunderSeis: Seismic analysis of thunder infrasound

T1.4-P16 Use of MSM facilities for monitoring hazardous geophysical phenomena and climate change in the Antarctic Peninsula region

Topic T2.1 Characterization of Treaty-Relevant Events

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

T2.1-P2 Analysis of macro-seismic effects of UNE and large chemical explosions conducted in Asia

T2.1-P3 Analysis of Moment Magnitude (Mw) to Compare The Energy of Six North Korea's Nuclear Test with Plutonium-240

T2.1-P4 Applying radioxenon isotopic ratios for nuclear explosion monitoring

T2.1-P5 Automatic computation of MSVMAX magnitude at the French National Data Center

T2.1-P6 Candidate methods for the implementation of OSI Resonance Seismometry

T2.1-P7 Cloud Computing Earth-Observation Remote Sensing Characterization of Nuclear Test Site: A Data Fusion Approach

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

T2.1-P9 Comparison of the DPRK aftershocks observed in 2019 with the aftershocks between September 2016 and April 2018

T2.1-P10 Data History from Nuclear power

T2.1-P11 Detection of nuclear explosions by remote regional seismic network

T2.1-P12 Determination of Body-wave Magnitudes of the North Korean Underground Nuclear Tests

T2.1-P13 Explosion Monitoring Research at the Nevada National Security Site

T2.1-P14 Focal mechanism of 2017 DPRK nuclear explosion and its collapse event

T2.1-P15 Identification of quarry blasts near BRMAR seismic array: An application of Multichannel Cross-Correlation detector.

T2.1-P16 Infrasound Signals from the 2017 North Korean Underground Nuclear Explosion and the Subsequent

Collapse Event

- 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
- T2.1-P19 Radionuclide signatures of molten salt reactors
- 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
- T2.1-P29 The detection of underground nuclear explosions by natural signatures
- T2.1-P30 Three-dimensional space analysis of radioxenon isotopic activity ratios for characterizing a nuclear event
- T2.1-P31 Towards an Improved Catalogue of Shallow Ground Truth Events in Eastern North America
- T2.1-P32 Underground Nuclear Explosions on the North Korean Test Site According to the KNET Network
- T2.1-P33 Utilization of radionuclide IMS data and IDC products in Belarus NDC
- T2.1-P34 Yield estimates for the DPRK's sixth nuclear test with radar and seismic analysis
- T2.1-P35 Yield estimation of DPRK3 test with radionuclide IMS stations measurements
- Topic T2.2 Challenges of On-Site Inspection
- T2.2-P1 Application of Complex Geopyhsical Research for the On-Site Inspection of Nuclear Tests
- 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 VNIIA major activities related to the CTBT technologies
- Topic T2.3 Seismoacoustic Sources in Theory and Practice
- T2.3-P1 A new GT5 event in a previously aseismic region of the Brazilian Phanerozoic Parnaiba Basin
- 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
- T2.3-P6 Complex seismological investigations near Bulgarian Antarctic Base
- T2.3-P7 Contribution to numerical modeling of site effect by linear equivalent and nonlinear approaches.
- T2.3-P8 Deployment of temporal infrasound array in Ecuador
- T2.3-P9 Detection and interpretation of Seismoacoustic and Seismic events at NDC Iraq
- T2.3-P10 Determine the relationship between seismic and acoustic signals
- T2.3-P11 Discrimination between quarry blasts and local earthquakes in Aswan, Egypt
- T2.3-P12 Distributed acoustic sensing observations and modeling of the DAG series of chemical explosions
- 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-

- T2.3-P18 Infrasonic bulletin to station IS41
- T2.3-P19 Infrasound monitoring of deorbiting Soyuz crafts on the territory of Central Kazakhstan
- 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
- T2.3-P29 UNDERSTANDING SEISMICITY CATALOG AND THEIR PROBLEMS IN ZAMBIA
- T2.3-P30 Waveform and Dispersion Modeling Using DPRK Regional Seismograms Recorded by the High Sensitivity Seismic Network of Japan
- Topic T3.1 Design of Sensor Systems and Advanced Sensor Technologies
- T3.1-P1 A Differential Highly Sensitivity Sensor for Accounting of Seismic Devices Instrumental Thermal
- T3.1-P2 A New Gamma Camcorder
- T3.1-P3 A new process design for compact radioxenon separation system
- T3.1-P4 A new three-component optical accelerometer
- T3.1-P5 Antineutrino detectors: an evaluation of their use for monitoring of nuclear explosions
- T3.1-P6 Application of Optimal Filtering to Take into Account the Influence of Baric and Temperature Fluctuations of the Seismic Instrument and the Environment
- 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
- T3.1-P10 Characterization of the microbarometer's sensitivity to the environment
- 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
- T3.1-P13 Development and optimization of the infrasound observation system of the NDC of Ukraine
- T3.1-P14 Development of a Mobile Radiation Detection System
- 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
- T3.1-P31 Radioactive gas metrology at NPL and the development of short-lived gas standards
- T3.1-P32 Radioxenon collection using synthetized xenon-adsorbing material for Nuclear Test Monitoring
- T3.1-P33 Report on SPALAX-NG validation tests and performances
- T3.1-P34 Results from a 6-month acceptance test of the SAUNA III- prototype
- 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
- T3.1-P37 Status of the stack monitor for the STAX project
- 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 Güralp 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 radioxenon 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

T3.5-P1 A Demonstration of the RKF Solution Method for Multi-physics Analysis of Radionuclides Evolved in Nuclear Testing

T3.5-P2 A new analysis method for beta-gamma radioxenon 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

T3.5-P8 An Integrated Study of Vp/Vs and Ultra Low Frequency (ULF) Anomalies Before Lombok Earthquake (M 6.8)

T3.5-P9 Analyzing seismic explosion records using SEISAN

T3.5-P10 Application of Butterworth High Pass Filter as an Approximation of Wood Anderson Seismometer Frequency Response to Earthquake Signal Recording

T3.5-P11 Applying waveform correlation to aftershock sequences using a global sparse network

T3.5-P12 Automatic characterization of phase type at three-component seismic stations using neural networks

T3.5-P13 Automatic machine learning methods for analyzing radioxenon isotopes spectra

T3.5-P14 Automatic Systems for Accurate Tracking of Aftershock Sequences

T3.5-P15 Bayesian Approach to Localization of Atmospheric Release with Demonstration on the Case of Ruthenium-106 Release in 2017

T3.5-P16 Can artificial intelligence help detect nuclear explosions?

T3.5-P17 Coherent Detection on Networks

T3.5-P18 Comparing REB and SSEB (IDC products) with other Seismic Data Centers

T3.5-P19 Comparison of pick-based and waveform-based event detectors for local to near-regional distance data from Utah

T3.5-P20 Contribution of Kazakhstan's Stations of the International Monitoring System into Global and Regional Monitoring

T3.5-P21 Data Processing Modular Software for real-time Stack Monitor

T3.5-P22 Detecting low magnitude seismic events using Convolutional Neural Networks

T3.5-P23 Detection algorithm based on the fourth order cumulant

T3.5-P24 Detection and classification of lightning events

T3.5-P25 Detection performance of dynamic correlation processors using de-noised signal space-spanning templates

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T3.5-P27 Discrimination Between Earthquakes and Explosions by Using scaling parameter Hurst Parameter

T3.5-P28 Discrimination between nuclear explosions and natural earthquakes

T3.5-P29 Disturbing Incidents Signal Character Analysis in Nuclear Explosion Infrasound Detection

T3.5-P30 Dynamic and Agnostic State of Health (SOH) Analysis Tools for Noble Gas Systems

T3.5-P31 Enhancement on the algorithm of characterization limits of the net count calculation method for low counts of IMS beta-gamma coincidence noble gas samples

T3.5-P32 Exploiting Bayesian inference priors to form synthetic waveform events or to validate events formed by automatic processing

T3.5-P33 Global and local scale high-resolution seismic event catalogs for algorithm development and testing

T3.5-P34 Implementation of a Fast Infrasonic Spectrum Sensing System Based on Fisher-Statistics Detection Method

T3.5-P35 Improvements of phase detection and identification using 3C array processing

T3.5-P36 InfraPy - An Open Source Signal Analysis Toolkit for Infrasound Research

T3.5-P37 iNSPIRE: iNtegrated Software Platform for the Interactive REview - The first release features for beta-gamma coincidence based noble gas data

T3.5-P38 Joint Processing of Seismic and Infrasound Signals from Mining Blasts

T3.5-P39 Learning about small-scale atmospheric structures through recurrent infrasound events

T3.5-P40 Leveraging Powerful Artificial Intelligence Abstractions of IMS Data

T3.5-P41 Long-term infrasound monitoring of volcanic activities of Kyushu region in Japan

T3.5-P43 Matrix operation of the net count calculation method for beta-gamma coincidence spectrum analysis of IMS noble gas samples

T3.5-P44 Mel Cepstrum techniques for event identification

T3.5-P45 Multilayer neural network architecture optimization and performance amelioration for seismic signal classification using genetic algorithms

T3.5-P46 Optimization algorithm for synergy of CTBT verification techniques in addressing IMS and OSI tasks

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T3.5-P49 Recent Advances and Status of Generative Modeling for Network Processing at the CTBTO

T3.5-P50 Reduction of wind noise impact based on the use of data from a weather station in recording infrasound signals at IS43

T3.5-P51 RNIAC: A cloud-based approach of the Radionuclide National Data Centre (NDC) in a Box software (RNIAB)

T3.5-P52 RSTT validation studies in the Middle East, Central Asia and the Caucasus

T3.5-P53 Scientific evaluation of the benefits of increase in resolution for IDC's ATM tools and launching interface

T3.5-P54 SeisComP3 iLoc integration applied to array processing

T3.5-P55 Seismic instrument response representation using poles and zeros in Laplace domain.

T3.5-P56 Seismic Phase Identification with Deep Learning in Frequency Domain

 $T3.5\text{-P57 Sensitivity analysis and disaggregation of recent seismic hazard assessment in Egypt\\$ 

T3.5-P58 Sensitivity of a Bayesian source-term estimation model to spatiotemporal sensor resolution

T3.5-P59 Signal Character Analysis of Lightning in Nuclear Explosion Infrasound Detection

T3.5-P60 Simulations of gamma ray spectra of fission samples

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T3.5-P66 Spectrum Analysis of Digital Seismic Data in Indonesia

T3.5-P67 Stack data processing pipeline

T3.5-P68 Study of variants for seismic data pre-processing which are not leading to significant losses of information that may be needed

T3.5-P69 SVM classification of explosions and earthquakes using seismic features

T3.5-P70 Testing IMS/CTBT Verification Capability Using July 2013 Lake Albert Seismic Activity in Western Rift. Uganda

T3.5-P71 The application of multi-criteria synthetic method in discrimination of nuclear explosions from earthquakes

T3.5-P72 The challenge of quantitative comparison and quality assessment of IDC waveform bulletins

T3.5-P73 The Identification and Determination of Small Peaks and the False Positive Alarm in RN Particulate Spectra Analysis

T3.5-P74 The iterative processing framework: a new paradigm for automatic event building

T3.5-P75 THE STAX PROJECT. A NEW DATA SOURCE TO AID IN TREATY MONITORING

T3.5-P76 The Wind Influence to the Detection Ability of Permanent and Mobile Infrasound Stations in Mongolia

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

T3.5-P81 Weather support and application of ATM during an OSI: development perspectives

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

 $T5.2\text{-P4}\ Contributions\ to\ Issues\ of\ Global\ Concern\ such\ as\ Disaster\ Risk\ Mitigation$ 

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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 Streps - Smart City Istanbul

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T5.2-P17 Integration of the IMS waveform technologies for Tsunami Early Warning: A perspective from Venezuela and the Caribbean

T5.2-P18 Investigation of the Catchments Sensitivity on the Observed Climate Change Signal

T5.2-P19 Microgravity Survey to Evaluate Earthquake Effects on a Dam Site in Iraq

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

T5.2-P23 Nuclear energy and nuclear bombs effect on the environment.

T5.2-P24 Operational Readiness of CTBT Hydroacoustic Stations in Achieving Sustainable Development Goal

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

T5.2-P27 Promotion of Civil and Scientific Applications of Data and Techniques used for Nuclear-Test-Ban Verification

T5.2-P28 Recent seismic activities in Ghana: The role of the National Data Centre (NDC)

T5.2-P29 Remote sensing earthquake ground motions using seismo-acoustic coupled signals

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

T5.2-P32 Seismic Intensity Map of 5.5 Mozambique Earthquake

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

T5.2-P44 The role of NDCs and NDC cooperation to promote the additional use and understanding of IMS data to benefit civil applications

T5.2-P45 The WHO and the CTBTO: joint initiatives to address air pollution in the cities

T5.2-P46 Tsunami Evacuation Map in Padang, West Sumatra for Disaster Risk Mitigation

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