

Scientific program of the International Conference on the 120th Anniversary of the Bulnay earthquake: Advances in Astronomy and Geophysics

Date & time	Activity	Location
August 11, Monday		
08:30 – 09:00	Registration	Lobby of conf room 1
09:00 – 09:15	Opening remark	Conf room 1
09:15 – 10:15	Plenary session	Conf room 1
09:15 – 09:35	"Seismic network of Mongolia and Seismicity" by Dr. Munkhuu Ulziibat	
09:35 – 09:55	"Along-strike variations in fault geometry and slip distribution along the Bulnay Fault, Mongolia" by Dr. Jin-Hyuck Choi	
09:55 – 10:15	"Late Cenozoic stress-strain state of the earth's crust of the Mongolian Altai based on a set of data" by Dr. Sankov Vladimir	
10:15 – 10:45	Coffee break	Lobby of conf room 1
10:45 – 12:45	Session 1: Observational seismology	Conf room – 1
	Chairs: Adiya Munkhsaikh, PhD & Anna Dobrynina, PhD	
10:45 – 11:00	"Variations in seismicity parameters of the Baikal rift zone during the instrumental observation period" by D.P.D. Sanzhieva	
11:00 – 11:15	"The strong earthquake in Khatanbulag, Dornogovi province" by G.Bolormaa	
11:15 – 11:30	"The Tonkhil strong earthquake" by M.Dolgormaa	
11:30 – 11:45	"Aftershocks of the 2021 Khankh earthquake: analysis of temporal variation of the Omori law p-value" by T.Muldir	
11:45 – 12:00	"Macroseismic intensity of earthquake in Ulan-Ude city in 1992-2021" by L.R.Ochirova	
12:00 – 12:15	"Investigate of seismic regime in Har-Us-Nuur fault zona" by S.Zagdsuren	
12:15 – 12:30	"Relocation tests with iLoc using GT criteria events in Mongolia" by L.Sarantsetseg	
10:45 – 12:30	Session 2: Astronomy	Conf room – 2
	Chairs: Mikhail Demidov, PhD & Namkhai Tungalag, PhD	
10:45 – 11:00	"Large-scale magnetic fields of the Sun according to observations in the Baikal Astrophysical and Sayan solar observatories" by M.L.Demidov	
11:00 – 11:15	"Potentially hazardous celestial objects and their calculations" by B.Nyamsuren	
11:15 – 11:30	"REFOS solar miniature X-ray spectrometer: results and perspectives" by S.Kuzin	
11:30 – 11:45	"Fractal dimension of solar flares" by D.Khongorzul	
11:45 – 12:00	"Observations of astrophysical transients at the Khurel-Togoot observator" by A. Pozanenko	
12:00 – 12:15	"ISON database on space debris objects: observations at the Khureltogoot Observatory" by R.Buyankhishig	
12:15 – 12:30	"Promoting Inclusive Astronomy and Space Science Education through Advanced Technologies: A Digital Transformation and Accessibility Assessment Based on the 11-Year Experience of the Astropark in Mongolia" by B.Gantuya	
12:30 – 13:30	Lunch	Lobby of conf room 1
13:30 – 15:45	Session 3: Earth structure and Seismotectonics	Conf room – 1
	Chairs: Vladimir Sankov, PhD & Tsagaan Baasanbat, PhD	
13:30 – 13:45	"Seismicity and Active Faults in Mongolia: Analysis of Micro-Seismicity and Aftershock sequence" by D.Ganzorig	
13:45 – 14:00	"The resent thrusts of the southern foot of the Khankhukhii mountain chain and the velocities of tectonic movements" by S.A.Sokolov	

14:00 – 14:15	“Stress Field Characterization and Focal Mechanism Analysis in the SHFS, Central Mongolia” by D.Mungunsuren	
14:15 – 14:30	“Segmented structure of the north Khangai fault” by V.A.Sankov	
14:30 – 14:45	“The crustal thickness and Vp/Vs ratio in Mongolia” by Ts.Baasanbat	
14:45 – 15:00	“Integrating geophysical methods: from studying the Arctic to the geothermal water deposits exploration within the Baikal rift zone” by I.Buddo	
15:00 – 15:15	“3D Geophysical Model of the Ulaanbaatar Region from Gravity and Magnetotelluric Data” by B.Buyantogtokh	
15:15 – 15:30	“Study of Mogod dislocations in trench sections” by O.P.Smekalin	
15:30 – 15:45	“Relocation of the seismic sequences along the Mogod fault” by U.Khishigdelger	
13:30 – 15:00	Session 4: Geomagnetic and Ionospheric Phenomena	
	Chairs: Vladimir Mishin, PhD & Bat-Erdene Amarjargal, PhD	
13:30 – 13:45	“Dynamics of distribution of electric fields and currents in the high- and low-latitude ionospheres in two hemispheres during equinox SMC events with a steady IMF” by V.V. Mishin	
13:45 – 14:00	“Analysis of Ionospheric Responses During the Strong Geomagnetic Storm of 2024” by B.Amarjargal	
14:00 – 14:15	“Pc1 hydromagnetic emissions of chevron type” by B.Tsegmed	
14:15 – 14:30	“How do substorms affect the storm-time magnetic variation” by V.V. Mishin	
15:00 – 16:15	Coffee break	Lobby of conf room 1
16:15 – 17:30	Session 5: Environmental hazard analysis & Engineering seismology	
	Chairs: Tserenpil Batsaikhan, PhD & Artem Rybchenko, PhD	
16:15 – 16:30	“Seismic micro zonation and seismic hazard assessment of Dalanzadgad soum, Southern Mongolia” by M.Dembereldulam	
16:30 – 16:45	“Анализ влияния морфодинамических условий на формирование паводков в пределах г. Улаанбаатар” by A.A.Рыбченко	
16:45 – 17:00	“Resonant coincidence of the dominant frequencies of the building, soil and seismic wave” by Ts.Batsaikhan	
17:00 – 17:15	“Spectral characteristics of shear waves of earthquakes of the Baikal rift and microseismic noise” by Ts.Tubarov	
17:15 – 17:30	“Seismo-Acoustic Analysis of the Gas-Filled Vehicle Explosion in Ulaanbaatar on January 23, 2024” by D.Khongor	
18:00 – 21:00	Welcome reception by IAG	At the IAG

Date & time	Activity	Location
August 12, Tuesday		
08:30 – 09:00	Coffee break	Lobby of conf room 1
09:00 – 10:30	Session 6: Multidisciplinary monitoring of the Earth's subsystems	Conf room 1
	Chairs: Dashdondog Mungunsuren, PhD & Aleksy Sankov	
09:00 – 09:15	“An integrated approach to studying seismic activations in the Baikal Rift Zone based on processing emanation monitoring data” By A.Bobrov	
09:15 – 09:30	“Volcanism and expanding seismicity in the Baikal Rift System: assessment of its current state from hydrogeochemical monitoring data” by I.S. Chuvashova	
09:30 – 09:45	“Integrated monitoring of hazardous geological processes in the Baikal rift” by A.V.Sankov	
09:45 – 10:00	“Mongolian National Data center” by S.Odbayar	
10:00 – 10:15	“Debris flow monitoring and emergency warning system” by A.A.Dobrinina	
10:15 – 10:30	“Modern unmanned aerial systems as an effective tool for exploring arctic mineral resources” by I.Shelokhov	
10:30 – 12:30	Poster session with coffee	Lobby of conf room 1
Poster – 1	“Оценка селевой опасности на основе геоморфометрического анализа ЦМР в собственной программной среде (на примере Южного Прибайкалья)” by A.Yuriev	
Poster – 2	“Current GNSS geodetic network and geodynamic study in Mongolia based on GNSS observations” by D.Erdenezul	
Poster – 3	“Structure of the Upper Mantle Beneath Mongolia Based on Surface Waves: Consequences for the Western Edge of the Amurian Plate” by G.Baigalimaa	
Poster – 4	“Seismicity and seismic regime in western region of Mongolia (Altay region)” by S.Zagdsuren	
Poster – 5	“Study of seismic regimes: A Case study of Selenge province” By S.Dolgormaa	
Poster – 6	“Seismic regime study of Dundgovi province” by R.Undarmaa	
Poster – 7	“Seismic activity in the Gobi-Altai province” by B.Dulmaa	
Poster – 8	“Application of Depth Scanning Algorithm in Mogod region” by L.Dagzinmaa	
Poster – 9	“Regional stress fields in the Mogod seismic dislocation zones – preview results” by I.Burzunova	
Poster – 10	“The study on seismicity along Mogod active fault-2024” by Ch.Baldulam	
Poster – 11	“The December 5, 2014 Khankh earthquake, Khuvsgul, Mongolia” by P.Davaadalai	
Poster – 12	“Macroseismic survey results of the Kosh-Agash earthquake, Russia” by T.Altanjuldiz	
Poster – 13	“Earthquake monitoring using PSI and SENTINEL-1 SAR DATA” by E.Bayarsaikhan	
Poster – 14	“A Low-cost seismic sensor network in Umnugovi: the RASPBERRY SHAKE 4D SOLUTION” by M.Mungunshagai	
Poster – 15	“Monitoring Device for an Earthquake Early Warning Station Based on STM32 Controller” by B.Narangii	
Poster – 16	“CTBTO IMS stations in Mongolia” by B.Munkhbayar	
Poster – 17	“Improvements in the Detection Capability of the Mongolian Seismic Network Over the Last 10 Years” by J.Bayaraa	
Poster – 18	“Astrometric observations in Mongolia “Khureltogoot observatory” by B.Batjargal	
Poster – 19	“The operational status of the OWL-NET telescope in Mongolia” by Z.Amarsaikhan	

Poster – 20	“Observations of near-Earth and astrophysical objects at the Khureltogoot observatory” by N.Tungalag
Poster – 21	“The measurement results of aerosol optical properties at the Ulaanbaatar station of the SKYNET network” by B.Tuvshinjargal
Poster – 22	“Long-period fluctuations in the earth rotation and solar activity: since 1600” by D.Baatarkhuu
Poster – 23	“An Evaluation of the Quality of Astronomy Content in the General Education Curriculum” by B.Banzragch
Poster – 24	“Magnetotelluric investigation to understand the formation of the Ulaanbaatar region and to evaluate geothermal potential” by E.Batmagnai
Poster – 25	“Shock-Induced Transient Variations in the Polar Cusp Ionosphere” by B.Amargargal
Poster – 26	“Statistical study of predictive parameters for Geomagnetic Storms during 23-24 solar cycles” by B.Tsegmed
Poster – 27	“Using geophysical mapping to understand the geological formation in the southern part of Ulaanbaatar” by B.Buyantogtokh
Poster – 28	“Analysis of the behavior of soils of various structures and conditions for the territory of Irkutsk based on earthquake registration data” by E.Bryzhak
Poster – 29	“Aftershock sequences of the Busingol earthquakes of 1974, 1976 and 1991” by A.A.Kakourova