

Oral session

Wed, 28 October

Session1 Geomagnetic Observatories and Networks

- 13:30- Invited Talk 1
Seiki Asari, Shingo Nagamachi, Ikuko Fujii
Kakioka Magnetic Observatory: Carrying the Spirit into its Next Century
- 14:00- Session 1-1
MARCK DANIEL SANTOS, PATRICK JOSEPH ROBLES, ALAN JAN CALEB
FALCOTELO, NEAL CHRISTIAN FALLER
The NAMRIA Magnetic Observatory of the Philippines
- 14:15- Session 1-2
Olivia Nghinaundafa Jonas, Emmanuel Nahayo
Tsumeb Magnetic Observatory: Sustaining Long-Term Geomagnetic Observations in Southern Africa
- 14:30- Session 1-3
Gopi Krishna Seemala, Prasant Kumar Tiwari, Ashok Priyadarshan Dimri
Establishment/revival of new IIG observatories in Indian region
- 14:45- Session 1-4
Katie Pogi, Tauvale Luteru, Reti Cherish
Geomagnetic Programme in Samoa
- 15:00- Coffee
- 15:30- Invited Talk 2
Jürgen Matzka
Report from INTERMAGNET
- 16:00- Session 1-5
Shuji Abe, Kirolosse Girgis, Akiko Fujimoto, Akihiro Ikeda, Teiji Uozumi, Yuki Obana,
Takuya Ijuin, Akimasa Yoshikawa
Global Geomagnetic Observations and International Collaboration through the MAGDAS Project
- 16:15- Session 1-6
David Calp
Modernizing Operational Geomagnetic Observatory Systems

Thu, 29 October

09:00- Session 1-7

Jürgen Matzka, Marcos Vinicius da Silva, Joelund Asseng
Update on the geomagnetic observatory Neumayer Station III

09:15- Session 1-8

Nikita Stepanov, Oleg Troshichev
Geomagnetic observations and research in Arctic and Antarctic research institute

Session 2 Data Processing and Distribution

9:30- Session 2-1

enkhzul bayartogtokh, Batmagnai Erdenechimeg, Alexey Kuvshinov, Zagdsuren Sainbayar
RECONSTRUCTION AND QUALITY CONTROL OF LONG-TERM GEOMAGNETIC DATA FROM KHOVD OBSERVATORY, WESTERN MONGOLIA

09:45- Session 2-2

Adam Domjan, Laszlo Merenyi, Csaba Hegymegi
A Review of Absolute Magnetic Measurements Using Real and Synthetic Data – Part I

10:00- Session 2-3

László Merényi, Ádám Domján, Csaba Hegymegi
Review of absolute magnetic measurements using real and synthetic data - Part II - Error-sensitivity analysis

10:15- Coffee

10:45- Session 2-4

Hiroki Nakasako, Takashi Nakamura
Geomagnetic observations conducted by the Geospatial Information Authority of Japan (GSI)

11:00- Session 2-5

Veronika Haberle, Leonhardt Roman, Luspa Mats, Reda Jan
On the Diversity of K-Index Calculation Methods Across Magnetic Observatories

11:15- Session 2-6

Tero Raita, Jenna Penttilä, Liisa Juusola, Kellinsalmi Mirjam, Ari Viljanen
Digital preservation of the geomagnetic observatory data in Finland

11:30- Session 2-7

Raissa Baldez, Keane Sales, Cristiano Martins
New developments on the Tatuoca magnetic observatory magnetogram digitization and data extraction project

11:45- Session 2-8

Kenji Morinaga, Norimichi Mashiko, Shingo Nagamachi, Seiki Asari
Digitization of analog magnetograms at the Kakioka Magnetic Observatory of the Japan Meteorological Agency

12:00- Lunch

Session 4 Data Analysis, Interpretation and Application

- 13:30- Invited Talk 3
Yusuke Ebihara
Geomagnetically induced currents (GIC) around Tokyo: From basic principles to future perspectives
- 14:00- Session 4-1
J. Miquel Torta, Santiago Marsal, Juan J. Curto, Oscar Cid, Miquel Ibañez, J. Germán Solé, Alberto Núñez
Analysis of the geomagnetic storm of May 2024 at the Ebre and Livingston Island Observatories and of the GICs generated in the Spanish power transmission grid
- 14:15- Session 4-2
Santiago Marsal, J. Miquel Torta, Emilio Fernández
Modelling Natural Electromagnetic Induction in the Spanish Gas Pipeline Network
- 14:30- Session 4-3
Jürgen Matzka, Alexander Grayver, Marcos Vinicius da Silva, Ina Rusch
The ESA-Project MagWatch3D
- 14:45- Coffee
- 15:15- Session 4-4
Nurul Shazana Abdul Hamid, Raja Adibah Raja Halim Shah, Mardina Abdullah, Akimasa Yoshikawa, Mohamad Huzaimy Jusoh, Farahana Kamarudin, Roslan Umar, Muhammad Asraf Hairuddin, Siti Harwani Md Yusoff, Idahwati Sarudin, Khairul Adib Yusof, Siti Aminah Bahari, Jin Yao Bryan Choo
Geomagnetic Observations in Malaysia and Their Applications to Space Weather Studies
- 15:30- Session 4-5
Lalaine Anne Asares, Daniel McNamara, Sherdon Niño Uy
Space weather and geophysical applications of geomagnetic data from a single station in the Philippines
- 15:45- Session 4-6
Munkhzul Jargalnemekh, Amarjargal Bat-Erdene, Sukhbaatar Usnekh, Gantsogt Sukhbaatar, Zagdsuren Sainbayar
SOLAR WIND–MAGNETOSPHERE–GROUND MAGNETIC FIELD COUPLING DURING GEOMAGNETIC STORMS: A PRELIMINARY STUDY USING MONGOLIAN GEOMAGNETIC OBSERVATIONS
- 16:00- Session 4-7
Aleksei Moiseev, Vasily Popov, Ilya Varlamov, Akimasa Yoshikawa, Teiji Uozumi, Shuji Abe
Applications of geomagnetic data obtained in the frame of MAGDAS and INTERMAGNET programs in Yakutia
- 16:15- Session 4-8
Masahito Nosé, Kazuo Shiokawa, Yuichi Otsuka, Liejun Wang, Bill Jones, Andrew Lewis, Matthew Gard, Marck Daniel Santos, Patrick Joseph Robles, Viacheslav A. Pilipenko
Pc1 pulsations simultaneously observed at the latitudinal induction magnetometer network and by the Swarm satellites
- 16:30- Session 4-9
Pierdavide Coisson, Frédéric Tournier, Vincent Lesur
Automatic detection of SI/SSC in near-real time using a global network of magnetic observatories: results from 2 years of operations at solar maximum.

Fri, 30 October

09:00- Session 4-10

Marcos Vinicius da Silva, Juergen Matzka

Global analysis of geomagnetic observatories data quality.

09:15- Session 4-11

Sanele Lionel Khanyile, Emmanuel Nahayo, John Bosco Habarulema

Evolution of the South Atlantic Anomaly's First Minimum and Second Minimum between 2014 and 2025 Using Swarm Satellite Data and the CHAOS-8.5 Model

09:30- Session 4-12

Sanele Lionel Khanyile, Emmanuel Nahayo, John Bosco Habarulema

A Study of the Spatial Evolution of the South Atlantic Anomaly's Second Minimum Lobe Using a Regional R-SCHA Main Field Model (2014-2025)

09:45- Session 4-13

Ingo Wardinski, Filipe Terra-Nova, Hagay Amit

Models and forecasts of Earth's magnetic field derived from geomagnetic observatory data

10:00- Session 4-14

Issam Al-Khoubbi

Compass pad Calibration Rose: Winnipeg Airport Case Study

10:15- Coffee

Session 3 Observatory Instrumentation

10:45- Session 3-1

Jean Rasson, Alexandre Gonsette, Marcos Vinicius da Silva

First Fully Automatic Magnetic Declinometer

11:00- Session 3-2

Roman Leonhardt, Richard Mandl, Stephan Bracke, Alexandre Gonsette, Jean Rasson

Ten Years of Automated Absolute Magnetic Observations with an AutoDIF at the Conrad Observatory: Stability, Validity, and Lessons Learned

11:15- Session 3-3

Antoine Poncelet, Alexandre Gonsette, Xavier Gerard, Olivier Hendrickx, Stephan Bracke

A new AutoDIF automatic diflux generation

11:30- Session 3-4

Alexandre Gonsette, Antoine Poncelet, Stephan Bracke

Automation of the Belgian magnetic observatories

11:45- Session 3-5

László Merényi, Ádám Domján, Csaba Hegymegi

Improved baseline control via high-frequency absolute geomagnetic measurements

12:00- Lunch

- 13:30- Session 3-6
András Attila Csontos
Measurement biases caused by local magnetic field inhomogeneity in geomagnetic observatories
- 13:45- Session 3-7
Tatsuya Kanai, Katsuhiko Kawashima, Ryusuke Yamashita, Shunichi Tatematsu
Optimization of Amorphous Wire for Low-Noise MI Sensors
- 14:00 - Session 3-8
Naofumi Murata, Takafumi Shimizu, Hideyuki Hirahara, Seiki Asari, Megumi Kaito
Development of small-sized, single-axis fundamental mode orthogonal fluxgate magnetometer for DI determination in the geomagnetic absolute measurement
- 14:15-- Session 3-9
Lars W. Pedersen, Jan Oechsle
New Fluxgate sensors for the FGM-FGE magnetometer.
- 14:30- Session 3-10
Christoph Amtmann, Martín Agú, Alexander Betzler, Daniel Hipp, Irmgard Jernej, Max Jost, Sunny Laddha, Andreas Pollinger, Roland Lammegger, Werner Magnes
The first performance results of the prototype of a self-calibrating optical vector magnetometer
- 14:45- Session 3-11
Roman Leonhardt, Niko Kompein, Doug Hrvoic, Mike Wilson, Ilya Inozemtsev, Shawn Kovacs, Ivan Hrvoic, Peter Melichar
Geomagnetic Field Measurements with the next-generation Optically Pumped Potassium Sensor