Volume 10, No. 12

December 2024

GeoForAll

Monthly Newsletter

Be part of "Geo for All"

Table of Contents

1. Editorial

Dear colleagues, readers, friends,
Another year has come to an end. You read the last issue of 2024, and the editorial team hopes you will read the next first issue of 2025.
With this issue we close the decade and enter our second decade of our newsletter. Some things, ambitions and goals may have succeeded in this decade with the help of many correspondents and yours that have been supporting us for so many years. We hope in the new decade to achieve even more with your help and of course we hope we will become even better with your ideas, support and suggestions.
Our best wishes for a healthy and prosperous 2025.

Nikos Lambrinos
Editor in Chief

4. Conferences

Europe

February 2025

1. 24-26: GeoPython 2025

Venue: Basel, Switzerland

May 2025

2. 16-17: EUROGEO (details soon)

Venue: Skopje, North Macedonia

South America

December 2024

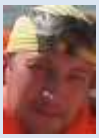
3. 01-08: FOSS4G (stay tuned for more news in the future)

Venue: Belém, state of Pará, Brazil

GeoForAll

Editorial Board

Please refer to the appropriate person according to the following table:

Chief Editor 	Nikos Lambrinos, Professor, Dept. of Primary Education, Aristotle University of Thessaloniki, Greece. President of the Hellenic digital earth Centre of Excellence labrinos@eled.auth.gr	Oceania
Co-editor 	Rizwan Bulbul, Assistant Professor of GIScience Head of Geospatial Research and Education Lab Department of Space Science, Institute of Space Technology, Islamabad, Pakistan bulbul@grel.ist.edu.pk	India, Sri Lanka, Pakistan, Afghanistan, Nepal, Burma, Iran, Iraq, Jordan, Syria, Israel, Lebanon, Turkey, Saudi Arabia, Oman, Yemen, United Arab Emirates, Kuwait and Islands of S. Pacific.
Co-editors  	Pavel Kikin, Senior Lecturer "Department of applied informatics and IT", Siberian State Univer. of Geosystems and Technologies Alexey Kolesnikov, Senior Lecturer "Department of cartography and GIS", Siberian State Univer. of Geosystems and Technologies it-technologies@yandex.ru	Russia, Mongolia, China, Japan, S. Korea, Vietnam, Thailand, Malaysia, Laos, Myanmar, Cambodia, Singapore, Brunei, Indonesia, Philippines, Turkmenistan, Uzbekistan, Tajikistan and Kyrgyzstan.
Co-editor 	Rania Elsayed, Computers & Information Researcher, Division of Scientific Training & Continuous Studies, National Authority for Remote Sensing & Space Sciences, Cairo, Egypt. ranyaalsayed@gmail.com	Africa
Co-editor 	Seraphim Alvanides, Reader (Geographical Information Science) Northumbria University, Newcastle NE1 8ST, United Kingdom. s.alvanides@gmail.com	Scandinavian countries, Denmark, Germany, Austria, Switzerland, UK, Ireland, Iceland
Co-editor 	Antoni Perez Navaro, Associate Professor at Universitat Oberta de Catalunya (UOC) Computer Sciences and Multimedia Department aperezn@uoc.edu	Italy, Malta, Spain, Portugal, France, Belgium, The Netherlands, Luxemburg.
Co-editor 	Emma Strong Planner with Pueblo County, Colorado eestrong118@gmail.com	North and Central America
Co-editor 	Sergio Acosta Y Lara, Departamento de Geomática Dirección, Nacional de Topografía, Ministerio de Transporte y Obras Públicas, URUGUAY sergio.acostaylara@mtop.gub.uy	South America
Co-editor 	Codrina Ilie, PhD student at the Technical University of Civil Engineering, Bucharest, Romania	The Balkans, Ukraine, Moldavia, Estonia, Lithuania, Belarus, Latvia, Hungary, Czech Republic, Slovakia
Production Designer 	Nikos Voudrislis, MSc, PhD in geography education. nvoudris@gmail.com	Design and final formation of the newsletter
	Paulo César Coronado Sánchez, Professor of computer sciences at Universidad Distrital Francisco José de Caldas, Head of GISEPROI and OSGeoLabUD research Group. Bogotá, Colombia paulocoronado@gmail.com	Translator and designer of the Spanish Edition

GeoForAll Themes

- **OpenCity Smart**

  Theme under revision

- **Teacher Training & School Education**

➢ Chairs: Elżbieta Wołoszyńska-Wiśniewska (Poland), Nikos Lambrinos (Greece)

➢ Mail list: geoforall-teachertraining@lists.osgeo.org

➢ Website: http://wiki.osgeo.org/wiki/GeoForAll_TeacherTraining_SchoolEducation

- **CitizenScience**

➢ Chairs: Peter Mooney (Ireland) and Maria Brovelli (Italy)

➢ Mail list: https://lists.osgeo.org/cgi-bin/mailman/listinfo/geoforall-geocrowd

➢ Website: http://wiki.osgeo.org/wiki/Geocrowdsourcing_CitizenScience_FOSS4G

- **AgriGIS**

➢ Chairs: Didier Leibovici (U.K.) and Nobusuke Iwasaki (Japan)

➢ Mail list: https://lists.osgeo.org/cgi-bin/mailman/listinfo/geoforall-agrigis

➢ Website: http://wiki.osgeo.org/wiki/Agrigis

GeoForAll Regional Chairs and Contact Information

North America Region

Chairs: Helena Mitasova (USA), Charles Schweik (USA), Phillip Davis (USA) Subscribe at mail list http://lists.osgeo.org/cgi-bin/mailman/listinfo/geoforall-northamerica

Email: na.gfa.chair@osgeo.org

Iberoamerican Region

Chairs: Sergio Acosta y Lara (Uruguay) and Silvana Camboim (Brazil) and Antoni Pérez Navarro (Spain). Subscribe at mail list: https://lists.osgeo.org/mailman/listinfo/geoforall-iberoamerica

Email: geoforall-iberoamerica@lists.osgeo.org.

Africa Region

Chairs: Msilikale Msilanga (Tanzania), Serena Coetzee (South Africa) and Bridget Fleming (South Africa) Subscribe at mail list http://lists.osgeo.org/cgi-bin/mailman/listinfo/geoforall-africa

Email: africa.gfa.chair@osgeo.org

Asia Region (including Australia)

Chairs: Tuong Thuy Vu (Malaysia/Vietnam) and Venkatesh Raghavan (Japan/India) Subscribe at maillist http://lists.osgeo.org/cgi-bin/mailman/listinfo/geoforall-asiaaustralia

Email: asia.gfa.chair@osgeo.org

Europe Region

Chairs: Maria Brovelli (Italy) and Peter Mooney (Ireland) Subscribe at mail list http://lists.osgeo.org/cgi-bin/mailman/listinfo/geoforall-europe

Email: eu.gfa.chair@osgeo.org

GeoForAll

GeoAmbassador Content table

July 2016, Vol.2, no.7	Prof. Georg Gartner, Vienna University of Technology
Aug 2016, Vol.2, no.8	Prof. Silvana Philippi Camboim, Federal University of Paraná, Brazil
Sep 2016, Vol.2, no.9	Nimalika Fernando, Sri Lanka
Oct 2016, Vol.2, no.10	Sergio Acosta Y Lara, Montevideo Uruguay
Nov 2016, Vol. 2, no. 11	Victoria Rautenbach, Centre of Geoinformation Science Univ. of Pretoria, South Africa
Dec 2016, Vol.2, no.12	Dr. Daria Svidzinska, Taras Shevchenko National University of Kyiv, Ukraine
Jan 2017, Vol.3 no.1	Dr. Mark Ware, University of South Wakes, UK
Feb 2017, Vol.3, no. 2	Dr. Rafael Moreno Sanchez, Department of Geography and Environmental Sciences, University of Colorado Denver, USA
March 2017, Vol.3 no.3	Dr. Tuong Thuy Vu, School of Environmental and Geographical Sciences, University of Nottingham, Malaysia campus
April 2017, Vol.3 no.4	Michael P. Finn, U.S. Geological Survey
May 2017, Vol.3 no.5	Dr. Peter Mooney, Maynooth University, NASA
June 2017, Vol.3 no.6	Patrick Hogan, NASA
July 2017, Vol.3 no.7	Prof. Dr. Josef Strobl, Salzburg
September 2017, Vol.3 no.9	Bridget Fleming, South Africa
October 2017, Vol.3 no.10	Sven Schade, Joint Research Centre, Italy
November 2017, Vol.3 no.11	Luciene Stamato Delazari, Universidade Federal do Paraná in Brazil
December 2017, Vol.3 no.12	Charlie Schweik, Univ. of Massachussets, USA
January 2018, Vol.4 no.1	Julia Wagemann, European Centre for Medium-Range Weather Forecasts
February 2018, Vol.4 no.2	Barend Köbben, Department of Geo-Information ProcessingUniversity of Twente
March 2028, Vol.4 no.3	Kurt Menke, Birds Eye View
April 2018, Vol.4 no.4	Dr. Clous Rinner, Department of Geography and Environmental Studies at Ryerson University, Toronto, Canada
June 2018, Vol.4, no.6	Martin Landa, Department of Geomatics, Faculty of Civil Engineering, Czech Technical University (CTU) in Prague

Lab of the Month, Content table

Aug 2015, Vol.1 no.1	Open Source Geospatial Lab, Kathmandu University, Nepal (Asia)
Sep 2015, Vol.1 no.2	FOSS4G Lab, University of Colarado Denver (USA)
Oct 2015, Vol.1, no.3	Open Source Geospatial Lab, University of Southampton, UK (Europe)
Nov 2015, Vol.1 no.4	The Northeast Institute of Geography and Agroecology of Chinese Academy of Science, China (Asia)
Jan 2016 , Vol.2 no.1	Centre for Geoinformation Science, University of Pretoria, South Africa, (Africa)
Feb 2016, Vol.2 no.2	Open Source Geospatial Lab, University of Newcastle, UK, (Europe)
Mar 2016, Vol.2 no.3	SMART Open Source Geospatial Lab, University of Wollongong, (Australia)
Apr 2016, Vol.2 no.4	Regional Centre for Mapping of Resources for Development, Nairobi, Kenya (Africa)
May 2016, Vol.2 no.5	GeoDa Centre – Arizona State University, (USA)
June 2016, Vol.2 no.6	Direccion Nacional de Topografia – MTOP Montevideo, Uruguay, (South America)
July 2016, Vol.2 no.7	SIGTE – University of Girona, Spain (Europe)
August 2016, Vol.2 no.8	Open Source Geospatial Lab, Department of Geodesy and Surveying, Budapest Univ. of Technology and Economics, Hungary (Europe).
September 2016, Vol.2 no.9	Open Source Geospatial Lab, Faculty of Geodesy, University of Zagreb, Croatia, (Europe)
October 2016, Vol.2 no.10	Hellenic digital earth Centre of Excellence, Aristotle University of Thessaloniki, Greece, (Europe)
November 2016, Vol.2 no.11	Department of Geoinformatics, Palacký University in Olomouc, Czech Republic
December 2016, Vol.2 no.12	Asian Institute of Technology, Bangkog, Thailand
January 2017, Vol.3 no.1	Spatial Lab, Texas A&M, Corpus Christi, USA
February 2017, Vol.3 no.2	Open Source Geospatial Lab, Faculty of Civil Engineering, Belgrade, Serbia
March 2017, Vol.3 no.3	Geomatics and Earth Observation Laboratory (GEOlab) , Politecnico di Milano, Italy
April 2017, Vol.3 no.4	Faculty of Civil Engineering, Department of Geomatics, Czech Technical University in Prague, Czech Republic
May 2017, Vol.3 no.5	the Laboratory of socio-geographical research of the University of Siena, ITALY
June 2017, Vol.3 no.6	A World Bridge program
July 2017, Vol.3 no.7	Department of Civil, Environmental and Mechanical Engineering of the University of Trento, Italy
August 2017, Vol.3 no.8	Institute of Geography, Faculty of Science, Pavol Jozef Šafárik University in Košice, Slovakia
November 2020, Vol.6 no.11	Universitat Oberta de Catalunya (UOC), Spain
January 2021, Vol.7 no.01	gvSIG Uruguay Community, Uruguay

5. Webinars

- If you want to start learning how to use QGIS, there are some excellent free resources at https://www.gislounge.com/free-ways-to-learn-qgis/

7. Training programs

- GeoForAll educational materials have been transferred to our new web site. GeoForAll educational inventory system, a place to search and share educational materials

- Copernicus MOOC

  On going MOOCs in English.

  The course addresses three key topics

  - Chapter 1 – Understanding Copernicus data and services – what they are, and how they can be accessed and used
  - Chapter 2 – Learning from success stories – understanding how existing Copernicus-enabled services and applications have been developed and deployed
  - Chapter 3 – Doing it yourself – acquiring the key skills and knowledge to develop and deploy Copernicus-enabled products and services and to navigate the Copernicus ecosystem.

- Course: Geocomputing for environmental applications: using GDAL and GRASS (2024) (in Spanish)

  Start Date: 19 November

  End Date: 19 December

  This course is an initiative in the framework of NSF-funded POSE project TI-2303651: Growing GRASS OSE for Worldwide Access to Multidisciplinary Geospatial Analytics

  Registration: Free

  Instructor: Giuseppe Amatulli, Ph.D.

  Teaching Assistant: Juana Mercedes Perlaza Rodriguez Ph.D

  Contact email: jperlaza35@gmail.com

11. Free books, educational materials, etc.

- Visit the YouTube QGIS channel at https://www.youtube.com/channel/UCGS162t4hkOA0b35ucf1yng/videos to get videos of QGIS applications, representations and ideas.

12. Article

Acronyms

by **Nikos Lambrinos**, Chief Editor, and **Michael Finn**.

For those who would like to support this effort, please send any acronyms to the Chief Editor (labrinos@eled.auth.gr).

3DEP: 3-D Elevation Program

AAG: Association of American Geographers

AGI: Ambient Geographic Information

AGS: American Geographical Society

AGU: American Geophysical Union

AI: Artificial Intelligence

AM/FM: Automated Mapping/Facilities Management

AOSP: African Open Space Platform

API: Application Programming Interface

ASPRS: American Society for Photogrammetry and Remote Sensing

AURIN: Australian Urban Research Infrastructure Network

BBSRC: Biotechnology and Biological Sciences Research Council

BDS: BeiDou Navigation Satellite Demonstration System

BIM: Building Information Modelling

CAADP: Comprehensive African Agricultural Development Programme

CAD: Computer Aided Design

CaGIS: Cartograhy and Geographic Information Society

CCGI: Collaboratively Contributed Geographic Information

CEGIS: Center of Excellence for Geospatial Information Science

CEOS: Committee on Earth Observation Satellites

CHIRPS - Climate Hazards Group InfraRed Precipitation with Station data

CI: CyberInfrastructure

CLGE: The Council of European Geodetic Surveyors

CODATA: Committee on Data for Science and Technology

COGO: Coordinate geometry

CRC: Census Research Centre

CRS: Coordinate Reference System

CSA: Canadian Space Agency

CSSTEAP: Center for Space Science & Technology Education in Asia and the Pacific

CUDA: Compute Unified Device Architecture

DAAC: Distributed Active Archive Center (of NASA)

DEM: Digital Elevation Model

DSM: Digital Surface Models

DWG: Design file format

DXF: Drawing Interchange File

ECMWF: European Center for Medium range Weather Forecasting

EOS: Earth Observation Science

EOSDIS: Earth Observing System and Data Information System

EPA: Environmental Protection Agency

EPSG: European Petrol Survey Group (used in projection IDs)

ESA: European Space Agency

ESERO: European Space Education Resource Office

EUROGI: European Umbrella Organisation for Geographic Information

EuroSDR: European Spatial Data Research

FDO: FAIR (Find, Access, Interoperate, and Reuse) Digital Objects

FOSS: Free and Open Source Software

FOSS4G: Free and Open Source Software For Geospatial

GCP: Ground Control Point

GDAL: Geospatial Data Abstraction Library

GEO: Group on Earth Observations

GEO: Geosynchronous Earth Orbits

GloFAS: Global Flood Awareness System

GNSS: Global Navigational Satellite System

GODAN: Global Open Data for Agriculture and Nutrition

GPS: Global Positioning System

GPX: GPS Exchange Format

GRACE: Gravity Recovery and Climate Experiment (satellite program)

GRASPgfs: Geospatial Resource for Agricultural Species and Pests and Pathogens with workflow integrated modeling to support Global Food Security

GSoC: Google Summer of Code

HLPF: High Level Political Forum (of UN)

HOT: Humanitarian OpenStreetMap Team

HPC: high-performance computing

ICA: International Cartographic Association

ICIMOD – International Centre for Integrated Mountain Development

ICSU-WDS: International Council for Science – World Data System

IDE: Spatial Data Infrastructure

IFAD – International Fund for Agricultural Development

INSPIRE: Infrastructure for Spatial Information in Europe

IPCC – Intergovernmental Panel on Climate Change

IPGH: Pan American Institute of Geography and History

ISO: International Organization for Standardization

ISPRS: International Society for Photogrammetry and Remote Sensing

ISRO: Indian Space Research Organization

JAXA: Japan Aerospace Exploration Agency

KML: Keyhole Markup Language

LBS: Location-Based Service

LEO: Low Earth Orbits

LiDAR: Light Detection and Ranging

LOC: Local Organizing Committee

LOD: Level Of Detail

MEO: Medium Earth Orbits

MIL: Media and Information Literacy

MoU: Memorandum of Understanding

MSS: Multispectral Scanner

NAD: North American Datum

NARSS: National Authority for Remote Sensing and Space Sciences of Egypt

NCSA: National Center for Supercomputing Applications

NDVI - Normalized Difference Vegetation Index

NDWI - Normalized Difference Water Index

NED: National Elevation Dataset

NEPAD: NEw Partnership for African Development

NGA: National Geospatial Intelligence Agency

NHD: National Hydrologic Dataset

NIR - Near-Infrared

NLCD: National Land Cover Dataset

NOOSA: United Nations Office for Outer Space Affairs

NRSA: Indian National Remote Sensing Agency

NSDI: National Spatial Data Infrastructure

NSF: National Science Foundation

OECD: Organisation for Economic Co-Operation and Development

OER: Open Educational Resources

OGC: Open Geospatial Consortium

OHI: International Hydrographic Office

OSGeo: Open Source Geospatial Foundation

OSM: OpenStreetMap

OTB: Orfeo Tool Box

PPGIS: Public Participation in Geographic Information Systems

PPSR: Public Participation in Scientific Research

RBV: Return Beam Vidicon

RCMRD: Regional Centre for Mapping of Resources for Development

RDA: Research Data Alliance

ROSCOSMOS: Russian Federal Space Agency

ROSHYDROMET: Russian Federal Service for Hydrometeorologyand Enviromental Monitoring

RUFORUM: Regional Universities Forum for capacity building in agriculture

SaaS: Software as a Service

SAR: Synthetic Aperture Radar

SDG: Sustainable Development Goal

SDI: Spatial Data Infrastructure

SIG: Geographic Information System

SIGTE: The GIS and Remote Sensing Service of the University of Girona, Spain

SPIDER: open SPatial data Infrastructure eDucation nEtwoRk

SQL: Structured Query Language

STISA 2024: Science Technology Innovation Strategy for Africa

STSM: Short Term Scientific Missions

SWIR: Short Wave Infrared

TIN: Triangulated Irregular Network

UAV: Unmanned Aerial Vehicle

UML: Unified Modeling Language

UN-GGIM: United Nations Global Geospatial Information Management

USGS: U.S. Geological Survey

USGIF: United States Geospatial Intelligence Foundation

VGI: Volunteered Geographic Information

VNIR: Visible Near Infrared

XSEDE: Extreme Science and Engineering Discovery Environment

WCS: Web Coverage Service

WFS: Web Feature Service

WGCapD: Working Group on Capacity Building and Data Democracy

WGS: World Geodetic System

WISERD: Wales Institute of Social & Economic Research, Data & Methods

WMO: World Meteorological Organization

WMS: Web Map Service

WMTS: Web Map Tiles Services

WOIS: Water Observation Information System

WPS: Web Processing Service

13. Scholarships for students and staff

The Faculty of Humanities, Arts and Social Science at the University of Exeter has scholarship funding of over £1.7m available to support both home and international PhD applicants starting their postgraduate research degree in September 2025.

Exeter is a centre for world-leading research across the Humanities, Arts and Social Sciences. Our departments are consistently placed at the top of national and international rankings. We have a number of opportunities available for excellent candidates with exciting projects across the Humanities, Arts and Social Sciences here at the University of Exeter.

For further information about each studentship is at https://www.exeter.ac.uk/study/pg-research/funding/phdfunding/fundingbyfaculty/hass/
For students interested in Sociotechnical Futures and Digital Methods, this studentship opportunity might be of interest:
https://www.exeter.ac.uk/study/funding/award/?id=5303

The Faculty of Humanities, Arts and Social Sciences is launching its UK Global Majority studentship for 2025/26. We recognise the sector-wide underrepresentation of UK Global Majority – sometimes referred to as Black, Asian and Minority Ethnic (BAME) – students at PhD level in Humanities, Arts and Social Sciences, and the Studentship represents our commitment to expanding the opportunities for the most able students irrespective of background or financial circumstances.

Details at
https://www.exeter.ac.uk/study/funding/award/?id=5318

17. Ideas / Information

1. If you are interested in educational material, then go to https://www.osgeo.org/initiatives/geo-for-all/in-your-classroom/ where you can find software resources for your classroom. Also, go to "Resources" https://www.osgeo.org/resources/ to get a guidance on how to use open source projects and tools.

2. Indian delegate Chandni Raina on Nov. 24 expressed disapproval of the climate aid deal struck at the COP29 Climate Conference in Baku, Azerbaijan. Take a look at the video. It shows a different opinion, followed by many others.

Also, you can read the article https://www.hindustantimes.com/environment/india-makes-history-at-cop29-rejects-ncqg-decision-speaks-up-for-global-south-101732422329955-amp.html which talks about the same thing.

3. By Suchith Anand, Professor of Exeter University, UK

At the 11th World Science Forum in Budapest, scientists issued an urgent call to action through the adoption of the Declaration on the science and policy interface at a time of global transformations. This

landmark Declaration, endorsed on 23 November 2024, reflects the scientific community's collective commitment to confronting pressing global challenges through supporting evidence-based policy-making. https://council.science/news/world-science-forum-declaration/

4. From Suchith Anand, Prof of Exeter University, UK.

On December 4, 2024, Indian Space Research Organisation (ISRO) will launch the Proba-3 mission for the European Space Agency. Proba-3 is scheduled for launch on a PSLV-XL rocket from Satish Dhawan Space Centre in Sriharikota, India. This mission will place ESA's Proba-3 satellites into a unique highly elliptical orbit, reinforcing PSLV's reliability for complex orbital deliveries.

Proba-3 is ESA's – and the world's – first precision formation flying mission. A pair of satellites will fly together relative to the Sun so that one casts a precisely-controlled shadow onto the other, to create a prolonged solar eclipse in orbit. In the process the mission will open up the Sun's faint surrounding coronal atmosphere for sustained study.

https://www.esa.int/Enabling_Support/Space_Engineering_Technology/Proba-3/Watch_eclipse-making_Proba-3_launch

Why India's latest Sun mission finding is crucial for the world

Scientists in India have reported the "first significant result" from Aditya-L1, the country's first solar observation mission in space.
https://www.bbc.co.uk/news/articles/c0qdy5dg7v7o

From humble beginnings in sheds (the equipment was carried on a bicycle and a bullock cart!) to becoming the first country to land near the South Pole on the Moon, to missions to Mars, India's space journey is an epic tale of ingenuity and resourcefulness. Story of India's amazing space journey at
https://www.youtube.com/watch?v=WL94XhNbwQ4

It is important to thank the women scientists who took India into space (from India's Mars mission to Moon mission to Sun mission)
https://www.bbc.com/news/world-asia-india-38253471.amp

India's space mission will inspire millions of students from all over the world (including students from economically poor families in the Global South) to STEM education and space science education.

AzaadiSAT was created to mark India's 75th year of independence. This anniversary was being marked by the Azadi Ka Amrit Mahotsav celebrations throughout the country, and the CubeSat was part of this campaign. AzaadiSAT was built by girl students from 75 schools across India. 10 girl students from each school were involved, for a total of 750 students involved. The mission was created to give girl students from lower-income backgrounds the opportunity to learn the fundamentals of spaceflight.

More details at
https://spacekidzindia.in/azaadisat-1/
https://m.youtube.com/watch?v=Sh1YCJ4m7aE
India's idea of 'One Earth, One Family, One Future' is resonating across the world. This human-centric approach has been welcomed by all. India's space mission is also based on this principle. India's success belongs to all of humanity.