# 23 September 2025 - Pre-conference workshop day

### version of 3 July 2025

09:00 - 09:30 Registration and coffee - in Statistics Norway lobby and Meeting Centre

09:30 - 09:50 Welcome and Information - in "Anders Kiærs Auditorium"

	Room: TBC	Room: TBC	Room: TBC	Room: TBC	Room: TBC
10:00 – 10:50	Python in GIS, part 1 - by Statistics Poland	GeoNode, part 1 - Overview, by CGI	GSGF (Europe) in Action, part 1: How to assess your maturity for statistical- geospatial data integration - by GSGF-CARE project	Earth Observation- workshop, part 1: Using EO for operational statistics - by EARSC / ESA	Deus ex Geomachina, part 1: GeoAI - Learn how to gain geospatial superpowers with Large Language Models - by Norkart AS
10:50 - 11:00	Coffee break	Coffee break	Coffee break	Coffee break	Coffee break
11:00 – 12:00	Python in GIS, part 2 - by Statistics Poland	GeoNode, part 2 - End Users and Platform administration, by CGI	GSGF (Europe) in Action, part 2: How to implement GSGF (Europe). The European step-by-step approach - by GSGF-CARE project	Earth Observation- workshop, part 2: Using EO for operational statistics - by EARSC / ESA	Deus ex Geomachina, part 2: GeoAI - Learn how to gain geospatial superpowers with Large Language Models - by Norkart AS
12:00 – 13:00 – LUNCH in the Meeting Centre					
13:00 – 13:50	Python in GIS, part 3 - by Statistics Poland	GeoNode, part 1 - Overview, by CGI	Tentative: How to apply GeoAI to satellite imagery, part 1 - by ESRI	Earth Observation- workshop, part 3: Using EO for operational statistics - by EARSC / ESA	Tentative: Deus ex Geomachina, part 1: GeoAI Learn how to gain geospatial superpowers with Large Language Models - by Norkart AS
13:50 – 14:00	Coffee break	Coffee break	Coffee break	Coffee break	Coffee break
14:00 – 15:00	Python in GIS, part 4 - by Statistics Poland	GeoNode, part 2 - End Users and Platform administration, by CGI	Tentative: How to apply GeoAI to satellite imagery, part 2 - by ESRI	GSGF (Europe) in Action, part 3: How GSGF has been implemented in Finland. The GSGF Finnish experience - by GSGF-CARE project	Tentative: Deus ex Geomachina, part 2: GeoAI Learn how to gain geospatial superpowers with Large Language Models - by Norkart AS

Evening, 23 September, 16:00 – 17:30: Reception at Oslo City Hall (a 20-minute walk from Statistics Norway).

Alexander S. Nossum, PhD, Innovation manager, Norkart AS, Norway Mathilde Ørstavik, MSc, Head of AI, Norkart AS, Norway

# Deus ex Geomachina: Learn How to Gain Geospatial Superpowers with Language Models

Join our practical workshop and learn to combine the power of modern AI with geographic data and analysis. During this session, you will: Learn how Large Language Models (LLMs) can transform and streamline geographic analyses.

Get hands-on experience connecting ChatGPT-like models to PostGIS databases.

Explore how to ask complex geographic questions using natural language.

Build interactive maps and visualizations controlled by AI.

This workshop is designed for both beginners and experienced geomaticians who want to explore the analytical tools of the future.

Bring your laptop and join us to discover where artificial intelligence meets geographic intelligence!

No prior Al experience is necessary – just bring your geomatics knowledge, a laptop, and a good dose of curiosity!

### Pascal Coulon, Vice-President Consulting Expert, CGI, UK

# Implementation of GeoNode

I propose to deliver a series of two one-hour workshops centred around the implementation of GeoNode, each tailored to a specific perspective:

1 Overview of the Product

This session will introduce the capabilities and architecture of GeoNode, providing a high-level understanding of its components, use cases, and benefits.

2 End Users and Platform Administrator

A practical session designed for those interacting with GeoNode for data consumption and basic data publishing.

This will include hands-on activities such as navigating the interface, searching and visualising data, and uploading content.

It will also focus on, user rights, system configuration, and basic maintenance

### **Technical Requirements:**

Attendees must bring a laptop with a reliable internet connection.

Sessions will require access to an externally hosted GeoNode instance (e.g., https://cgi-geonode-wks.uksouth.cloudapp.azure.com/).

#### **Support Requirements:**

Each session should have at least one helper with an understanding of GeoNode or training script (training can be provided the day before), basic geospatial principles, and familiarity with tools like GeoServer.

Mirosław Migacz, Statistics Poland Amelia Wardzińska-Sharif, Statistics Poland

## **Python in GIS**

A workshop to demonstrate the possibilities of GIS programming in Python, using QGIS.

See how to integrate statistics with geospatial data and visualize results solely by writing code.

You will get to know Geopandas - the easiest GIS Python module. Basic Python skills recommended, but not essential.

### **Technical Requirements:**

Attendees must bring a laptop with QGIS installed. Needs also internet connection.

### GSGF-CARE project consortium

# **GSGF** (Europe) in Action

An activity group where small hands-on exercises will be done, and discussions will enable deeper dives into key topics of interest, as the floor will be open for participants to express their reflections. It will help to cross-reference information, find overlaps and synergies, design common solutions for common problems, define future strategies and targeted actions to strengthen statistical-geospatial capacity. Three main thematic sections:

- 1. How to assess your maturity for statistical-geospatial data integration? (X minutes)
  - 1.1. GSGF Self-assessment Tool (UN EG ISGI + GSGF-CARE)
    - 1.1.1. Instructions
    - 1.1.2. Dimensions of maturity
    - 1.1.3. Questions
    - 1.1.4. Results and Maturity Score
  - 1.2. Analyse and interpret the results and maturity score
  - 1.3. Q&A and Discussion
- 2. How to implement GSGF (Europe)? The European step-by-step approach (X minutes)
  - 2.1. GSGF Europe Information Service
    - 2.1.1. Requirements and Recommendations
    - 2.1.2. Business cases
    - 2.1.3. Other resources and materials
  - 2.2. Q&A and Discussion
- 3. How has GSGF been implemented in Finland? The GSGF Finnish experience (X minutes)
  - 3.1. GSGF in Finland (GSFI)
  - 3.2. (...)

#### Wrap-up and the way forward

Conclusions, key points ("one key takeaway") and lessons learned

#### Kate Hess, ESRI

# Tentative: How to apply GeoAl to satellite imagery

Training session on how to apply GeoAl to satellite imagery.

Teaching attendees how to perform geospatial analysis on their data using machine learning with hands on exercises.

### Phillip Harwood, Evenflow SRL

# Earth Observation-workshop, part 1-3: Using EO for operational statistics - by EARSC / ESA

- **1** Basics of EO (available sensors, data types, pros and cons, etc).
- **2** Getting started with EO: how to access online platforms and tools.
- 3 Key examples of EO in use: e.g. agricultural statistics, ecosystem accounting, water quality.