

ATMO-SEISM (A2-2)

Domain Experts:

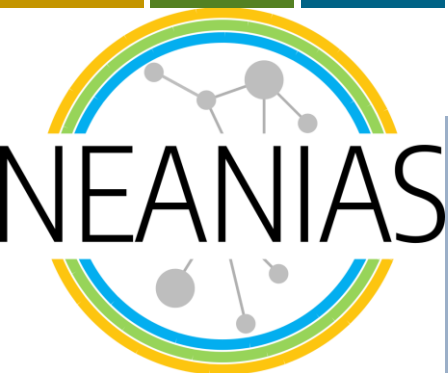
- Alessandro Tibaldi (UNIMIB)
- Fabio Luca Bonali (UNIMIB)
- Noemi Corti (UNIMIB)

Service development:

- Olyna Gounari (NKUA)
- Makis Ntouskos (NKUA)
- Konstantinos Karantzalos (ATHENA)



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Novel EDSC Services for Emerging Atmosphere, Underwater & Space Challenges

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Goals of the service

- Compute regional stress field of a study area starting from local stress tensors, which can derive from different sources:
 - Field geological data;
 - Earthquake focal mechanisms;
 - In-situ geotechnical stress measurements.

Technology

- Based on **LISSAGE** software (Lee & Angelier, 1994)
- It computes **stress trajectories** (2D maps)
- Implemented in **Python**
- **Friendly UI**
- It supports different **data sources** (e.g. field data, focal mechanisms, earthquakes)
- **Compatible** with **modern GIS workspaces**

Atmo-Stress Service: Example

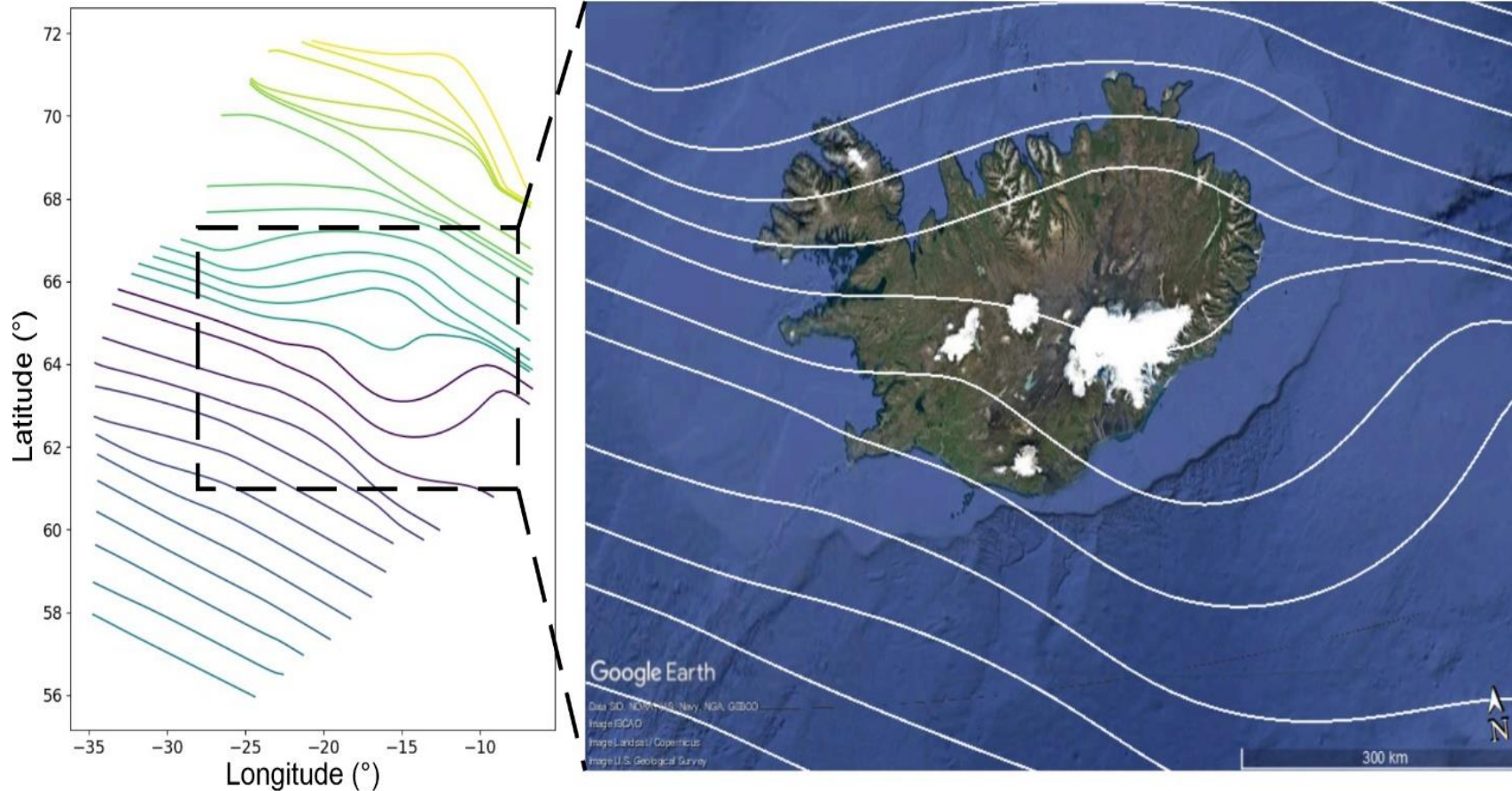
Input: formatted TXT file

Output: ESRI shapefile (.shp) + preview (.png) +
Google Earth file (.kml)

Two kind of outputs:

- Trajectories
- Grid

Trajectories



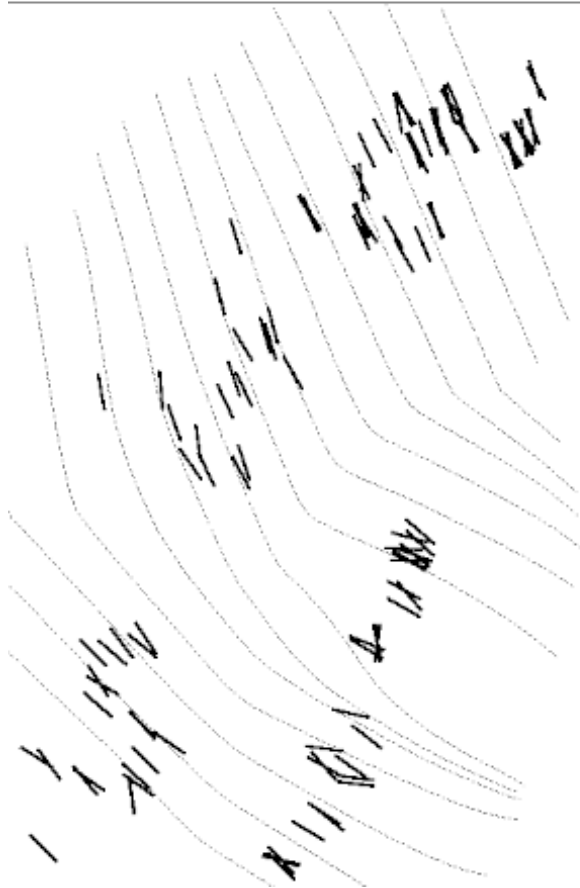
Atmo-Stress Service: Result comparison

LISSAGE.PS

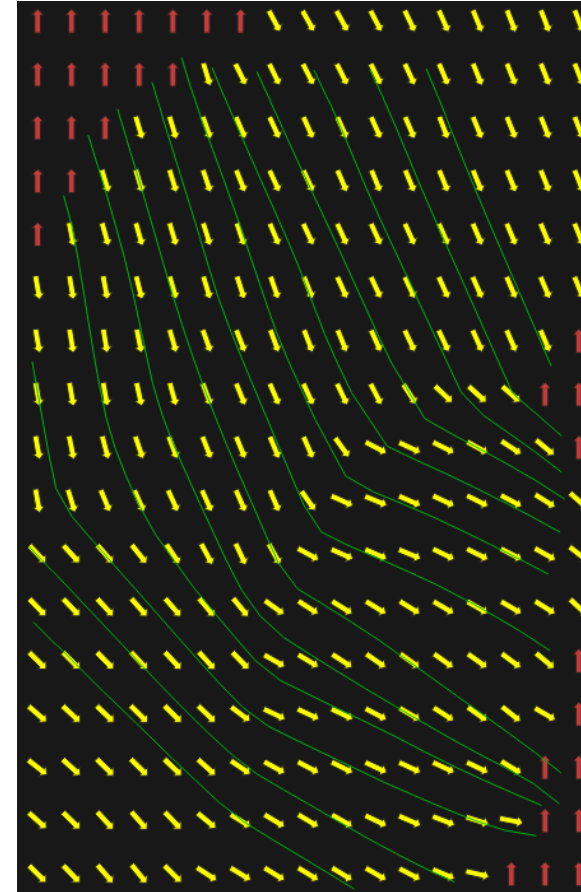
Grid

Data: INDATA.DAT

Weighting Circle Radius: 53
Weighting Power: 4



LISSAGE (1994)



Current version