



Evidence for Policy in Disaster Risk Management (DRM) Summer School 2026

Tallinn, 26-28 May 2026

Class No. 4

Leveraging open-source data in crisis management

Class will take place in room M 226 – 2nd floor of the Mare building

Class Coordinator



Ludovica DE GIROLAMO

Scientific Project Officer at the European Commission's Joint Research Centre

Ludovica de Girolamo is a political and social scientist currently serving as a Scientific Project Officer at the European Commission's Joint Research Centre, where she conducts scientific research and analysis to inform EU defence, readiness, and preparedness within the European Crisis Management Laboratory (ECML). Her expertise lies in crisis monitoring, conflict analysis, and geospatial intelligence, with a focus on situational awareness and preparedness to support the European External Action Service (EEAS) and DG ECHO. With a strong background in international relations and geopolitics as well as technical GIS skills, Ludovica has extensive experience in using open-source data and geospatial intelligence to analyse geopolitical and complex crises in multi-risk contexts and providing situational assessments and impact analyses of natural hazard and human-induced disasters in conflict-affected areas.

Class assistant

Stanislav Lissov

Speakers



Ana-Maria DUTA

Conflict and GIS Analyst, European Commission's Joint Research Centre

Ana-Maria Duță is a Conflict and GIS Analyst at the European Commission's Joint Research Centre. She uses her expertise in conflict analysis to drive conflict mapping efforts and provide critical insights and support to inform decision-making and policy development. She is a highly experienced professional with a strong academic background in political and social sciences, holding a PhD in Transborder Policies. With over 20 years of experience in various fields, including conflict analysis, social sciences, humanitarian aid, emergency response, research, migration and demography, she has held roles such as scientific analyst on demography and migration and post-doctoral researcher at the JRC, emergency response officer at DG ECHO, and national coordinator for the Italian UIL Trade Union in Romania. She has also volunteered in international development projects in countries such as Uganda, Tanzania, and Nepal



Valerio SALVITTI

Geologist, GIS Analyst, Cartographer, External Consultant, Joint Research Centre (JRC) European Commission

Valerio Salvitti is a Geologist and a GIS Analyst at the Disaster Risk Management (JRC.E1) Unit of the Joint Research Centre in Ispra (Varese, Italy). Since 2018, he has been responsible for the daily situational awareness activities, including the Daily Map and Daily Flash, which show and report unfolding natural and man-made disasters and major humanitarian crises across Europe and globally. Additionally, he contributes to the development and improvement of the Global Disaster Alert and Coordination System (GDACS), with a particular focus on the volcanic alert section. Previously, Valerio worked as a freelance cartographer for the United Nations in the UNSOS mission and at Roma Tre University where he followed research projects, further strengthening his expertise in geospatial analysis and disaster risk management.

Aim(s) of the Class

This class focuses on using open-source data for analysing natural hazards and/or human induced crises. It will guide the participants through the different steps of the process, from the collection of data to its selection, processing and analysis, and finally the visualisation and integration in analytical products.

While acknowledging the complexities of the science-policy dialogue, the rationale behind the use of open-source data, will be discussed and participants will learn how to evaluate and digest relevant open data sources to assess the impact of ongoing crises. Strategies on how to triangulate data, thereby trying to mitigate the risks of mis- and disinformation, will also be presented.

Recommended readings

Selected resources, readings and materials to be consulted before and during the Class:

General:

- ERCC Portal: <https://erccportal.jrc.ec.europa.eu/#/echo-flash-items/latest>
- EU Civil Protection Mechanism (UCPM): https://civil-protection-humanitarian-aid.ec.europa.eu/what/civil-protection/eu-civil-protection-mechanism_en
- European Crisis management Lab (ECML): https://joint-research-centre.ec.europa.eu/laboratories-z/european-crisis-management-laboratory_en
- GDACS - Virtual OSOCC: <https://vosocc.unocha.org/>
- Copernicus Emergency Management Service (EMS): <https://emergency.copernicus.eu/>
- ReliefWeb: <https://reliefweb.int/>
- Acaps: <https://www.acaps.org/en/>
- Europe Media Monitor (EMM): <https://data.jrc.ec.europa.eu/collection/emm>
- NewsNow: <https://www.newsnw.co.uk/h/>

Open sources:

- What is open data: <https://data.europa.eu/elearning/en/module1/#/id/co-01>
- CRAAP test: <https://guides.lib.uchicago.edu/c.php?g=1241077&p=9082343>

Media sources and press agencies:

- Reuters: <https://www.reuters.com/world/>
- Associated Press: <https://www.apnews.com/>
- Agence France-Presse: <https://www.afp.com/>
- Al Jazeera: <https://www.aljazeera.com/news/>
- BBC: <https://www.bbc.com/news/world>
- The New York Times: <https://www.nytimes.com/international/>
- The Guardian: <https://www.theguardian.com/europe>

Natural hazards:

- GDACS (Global Disaster Awareness and Coordination System):
<https://www.gdacs.org/>
- ERCC portal products:
 - ECHO Daily Flash: <https://erccportal.jrc.ec.europa.eu/ECHO-Products/Echo-Flash#/echo-flash-items?pageIndex=1&pageSize=10&ht=WF&st=Published>
 - ECHO Daily Map: <https://erccportal.jrc.ec.europa.eu/ECHO-Products/Maps#/maps?pageIndex=1&pageSize=10&ht=WF&mt=Daily%20Map>
- CEMS Early Warning Systems:
 - Floods:
 - European Flood Awareness System (EFAS): <https://european-flood.emergency.copernicus.eu/en>
 - Global Flood Awareness System (GloFAS): <https://global-flood.emergency.copernicus.eu/>
 - Drought:
 - European Drought Observatory (EDO): <https://drought.emergency.copernicus.eu/tumbo/edo/map/>
 - Global Drought Observatory (GDO): <https://drought.emergency.copernicus.eu/tumbo/gdo/map/>
- International Federation of Red Cross and Red Crescent Societies (IFRC):
<https://go.ifrc.org/emergencies>
- ASEAN Disaster Information Network (ADINet): <https://adinet.ahacentre.org/>

Conflict/Security:

- Crisis, conflict and security ECML Reports:
<https://science4peace.jrc.ec.europa.eu/Global-Crisis-Atlas#/quarterly>
- Armed Conflict Location and Event Data (ACLED): <https://acleddata.com/>
(creation of free account useful)
- International Crisis Group: <https://www.crisisgroup.org/>
- Conflict Interactive map: <https://liveuamap.com/>
- Institute for the Study of War (ISW): <https://www.understandingwar.org/>

Selected resources, readings and materials in preparation for and to be consulted during the Class interactive session/exercises:

Wildfires:

- European Forest Fire Information System (EFFIS):
 - <https://forest-fire.emergency.copernicus.eu/>
 - <https://forest-fire.emergency.copernicus.eu/apps/effis.csv/>
 - EFFIS - Data Request Form: <https://forest-fire.emergency.copernicus.eu/apps/data.request.form/>
- Global Wildfire Information System (GWIS):
 - <https://gwis.jrc.ec.europa.eu/>
 - https://gwis.jrc.ec.europa.eu/apps/gwis_current_situation/index.html
- National authorities (Portugal): <https://fogos.pt/pt>
- Wildfire Prevention Action Plan: <https://civil-protection-knowledge-network.europa.eu/system/files/2022-12/Wildfire%20Prevention%20Action%20Plan.pdf>

Sudan country specific data:

- UN OCHA – Sudan country page: <https://www.unocha.org/sudan>
- ReliefWeb – Sudan country hub: <https://reliefweb.int/country/sdn>
- ACLED – Sudan conflict data: <https://acleddata.com/country/sudan>
- Humanitarian Data Exchange (HDX) – Sudan-ACLED conflict dataset: <https://data.humdata.org/dataset/sudan-acled-conflict-data>
- Suriak maps - Sahel: [Sahel - Google My Maps](#)
- CFR Global Conflict Tracker: <https://www.cfr.org/global-conflict-tracker/conflict/power-struggle-sudan>
- Sudan Tribune – <https://sudantribune.com/>
- Dabanga Radio TV – <https://www.dabangasudan.org/en>
- Al-Taghyeer – <https://www.altaghyeer.info/en/>
- Sudania 24 TV – <https://www.facebook.com/Sudania24TV/>
- Sudan Bukra TV – <https://sudanbukra.net/>

Further resources, readings and materials for deepening knowledge after the Class:

NATECH, climate change, security:

- Probabilistic Natech risk analysis in the defence sector: <https://publications.jrc.ec.europa.eu/repository/handle/JRC140738>
- Impacts of climate change on defence-related critical energy infrastructure: <https://publications.jrc.ec.europa.eu/repository/handle/JRC130884>

AI:

- Artificial Intelligence in Emergency and Crisis Management: Rapid Evidence Review Report – Scientific Advice Mechanism: <https://scientificadvice.eu/scientific-outputs/artificial-intelligence-in-emergency-and-crisis-management-rapid-evidence-review-report/>

OSINT:

- OSINT Tools and Resources Handbook – i-Intelligence:
<https://www.osinthebook.com/>
- The ICE (Intelligence College in Europe) Bibliography on Intelligence:
<https://www.intelligence-college-europe.org/the-ice-bibliography-on-intelligence/>