Meeting Minutes

28.02.2024

- **European Scale Models**: Copernicus is expanding its range of models at a European scale.
- **Copernicus Emergency Management Services**:
    - **Droughts**: Focused on monitoring and providing early warnings for drought conditions across Europe.
    - **Wildfires**: Offers services for detecting and managing wildfire incidents, leveraging satellite imagery and data.
    - **Floods**: Provides flood forecasting and monitoring services to support emergency response efforts.
- A national geo-registry that serves as a centralized database for geographic data in the Netherlands.
- A comprehensive elevation dataset for the Netherlands, crucial for flood risk assessment and planning.
- Specializes in flood simulations and has developed a **Digital Twin** model for flood management.
- Website: nelen-schuurmans.nl
- **LIWO**: A platform offering key information on flood risks and management strategies.
- Deltares: An independent institute for applied research in the field of water and subsurface. Known for its expertise in managing flood risks and water resources.
- The integration of existing datasets or models with data or models from the CBS (Central Bureau of Statistics). This cross-referencing is not commonly practiced yet and presents a novel approach to data analysis and application.
- **Maastricht Itteren Borgharen**: Identified as areas with insufficiently high river dikes.
- **Germany (Cologne)**: Noted for its narrower rivers which can quickly rise with significant rainfall, posing flood risks.
- **Belgium**:
    - The Meuse River is highlighted as a rain-driven river, where heavy rain in the Ardennes can quickly lead to high water levels that flow into the Netherlands.
    - **VITO (Flemish Institute for Technological Research)**: Government entity focusing on earth observation and has developed the **TerraFlood** model and **TerraScope** platform for flood management and monitoring.
- An examination of various existing models and components related to flood management and risk assessment.
- **Marc Bierkens** - Associated with Deltares, recognized for contributions to hydrological research and flood risk management.

15.04.2024

- Look into Tableau for vizualzations
    - Steer clear of proprietary software if possible
    - R shiny is also a possiblity
- Look into Copernicus dataset
- MHS Level 1B Metop - for data preparation
- AMSU-A dataset - for data preparation
- Show population data from CBS
- Overlay social aspect for overlay
- Be more transparent.
- Inform Barteld of updates

23.04.2024

- Population graphs
- Households data
- Hospital data
- Work on infrastructure
    - Roads
    - Houses
    - Dams
- Geolocaion alignment

29.04.2024

- Data for overflowing rivers
- Look into timeframes for scenarios (SCAPPED)
- Framework + Dashboard - focus on users when creating an overview of info
- Targeting info - policymakers / general public
- Flood scenarios flshing out? (SCRAPPED)
- Aim for Minimum Viable Product
- Choose coordonate system
- SOCIOLOGICAL - “Escape zones” for floods
    - Where to people live
    - Pick digestible info

14.05.2025 (w/ Oskar)

- Look into elderly population plus schools within 3km
- Define critical infrastructure
- Define population at risk
- Definition for layers
- Document choices

- Keep users in mind
- Map info: Legends
    - Definitions
    - Scales
    - Colours
- Focus on functionality
- End user in mind
- How we can share it
- How people can use it

28.05.2025 (w/ Oskar)

- Why is the population at risk?
- Motivate your choices
- What does the dashboard tell me
- Explain flooding bubbles
- Mechanisms that cause floods can be different
- Flood risk indicator index? (SCRAPPED)
- Future risk of flooding?