
# CHANGES SDSS
# Loss and Risk Assessment Module

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# Work Flow

## Step 1: Compute Loss

- Overlay
- compute intensity and spatial probability (Different methods for different EaR types)
- Retrieve vulnerability value
- Loss=vulnerability*spatial probability*value

# Work Flow

**Step 2: Compute Risk**

- Aggregate loss per unit
- Simulate risk curve (exponential) and compute average annual loss (AAL)

# Work Flow

**Step 3: Non spatial risk visualization**

- Display risk curve and AAL value of the whole study area

# Technology

- Client script: ExtJS
- Server script: Python
- Database: PostgreSQL/PostGIS

# Demo

- http://changes.itc.utwente.nl/SDSS/index.html

# Further work

1. Implement functionality for multiple hazards risk assessment
2. Optimize UI
3. Validate results by GIS software
4. Collaboration
5. Incorporate uncertainties of data into loss risk assessment
6. Test and optimization

Thank you!

Questions?