

# Detecting Waterbodies in Sentinel 1 Satellite Images to Support Decision Making in Flood Emergency

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# The project

Flood emergency management

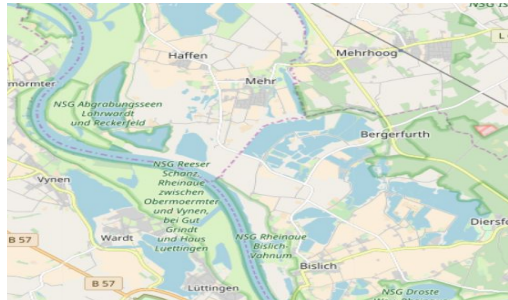


<https://www.stmi.bayern.de/assets/stmi/sus/katastrophenschutz/1605%C3%9F2hochwasser03.jpg>

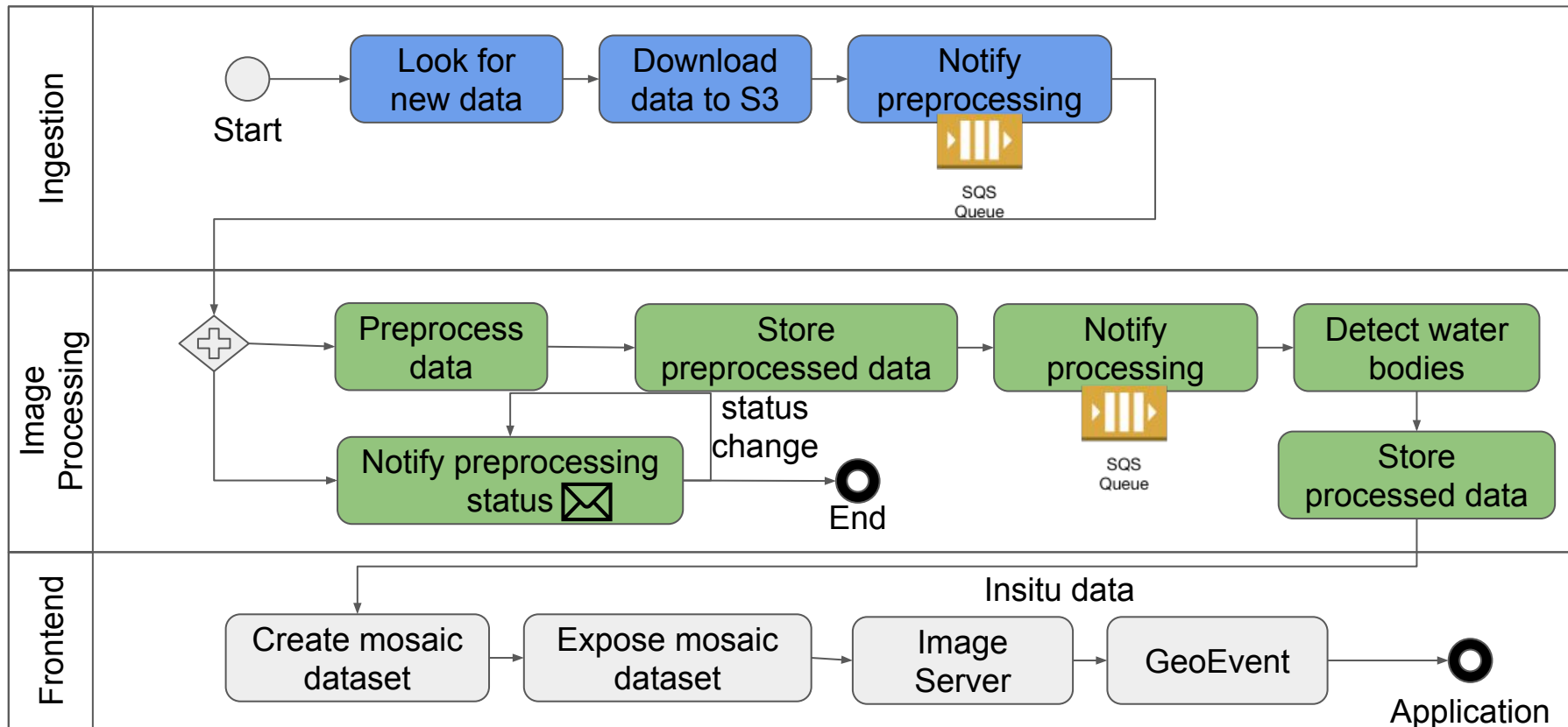
Detection of waterbodies in Sentinel 1 satellite images (Copernicus)

Combination with In Situ-Data (Pegel Online, Open Weather Map)

Amazon Web Services Architecture



# Workflow



# Conclusion

Workflow to automatically ingest and process Sentinel 1 data from the Copernicus SciHub

Frontend serving extracted water bodies

## **Future work**

Increase amount of available data (temporal/spatial)

Homogeneous approach to scaling