Ice Watch

GLOF Prediction system using deep learning

1. Problem Statement

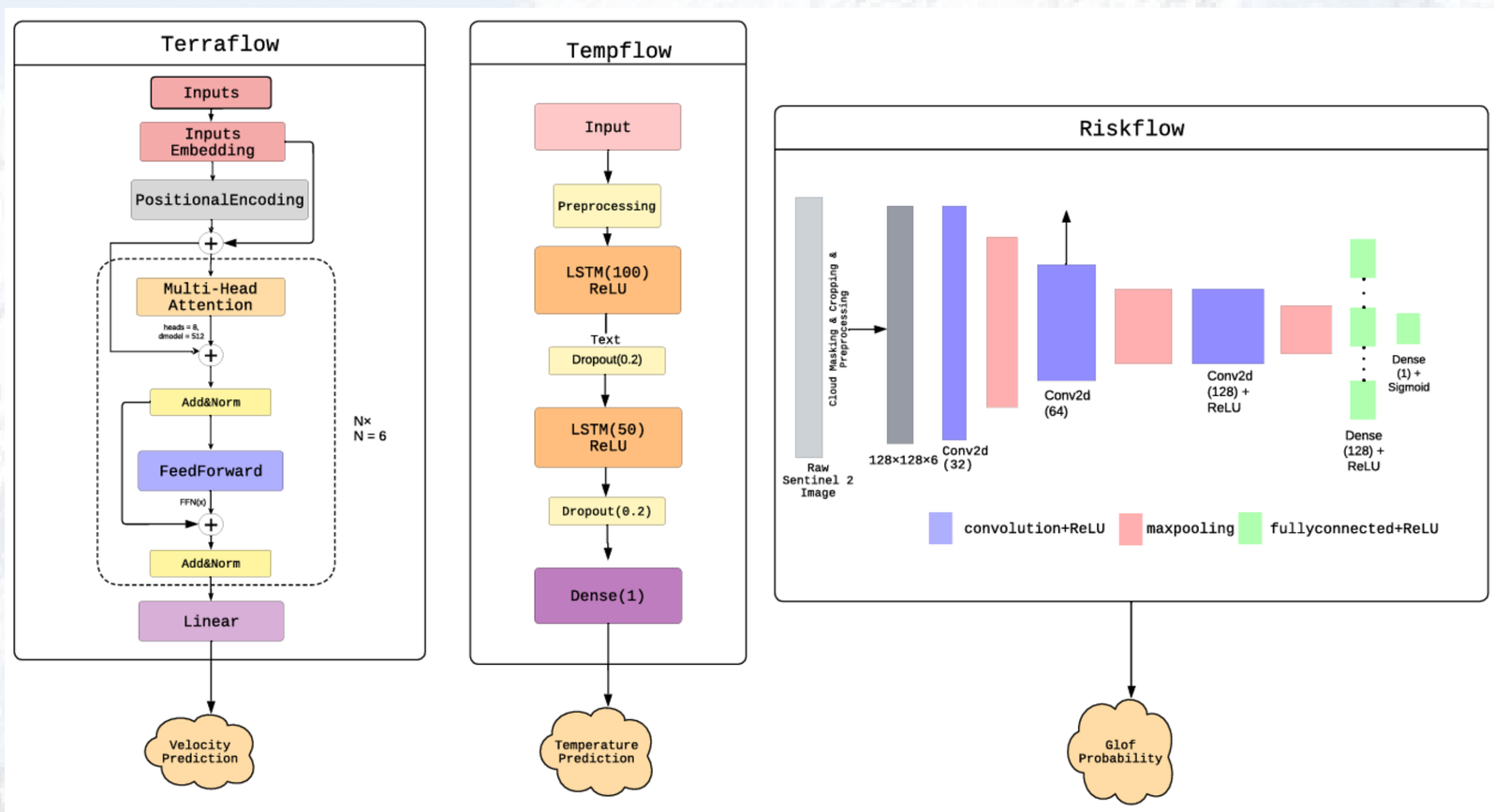
Glacial Lake Outburst Floods (GLOFs) present a significant natural hazard, occurring when water retained by glaciers or moraines is abruptly released, resulting in severe downstream flooding.

2. Objectives

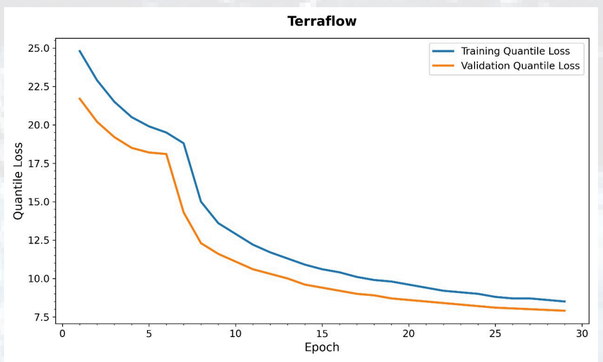
- Develop a predictive system for assessing the likelihood of Glacial Lake Outburst Floods (GLOFs).
- Provide reliable data and insights to help local authorities plan effective disaster response and management strategies.

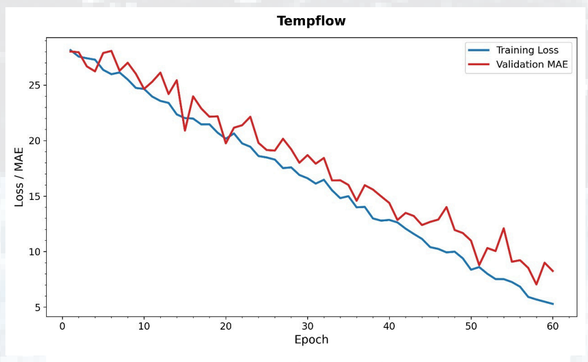
3. Methodology

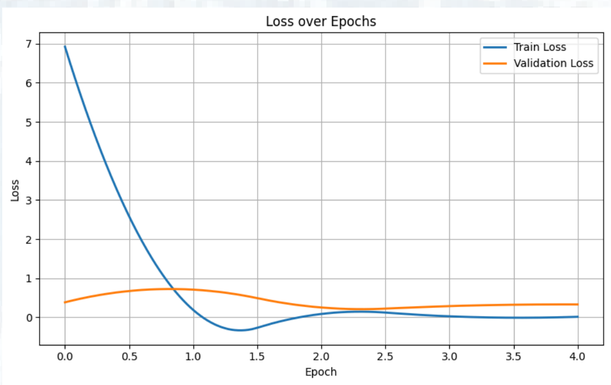
4. Models' Architecture

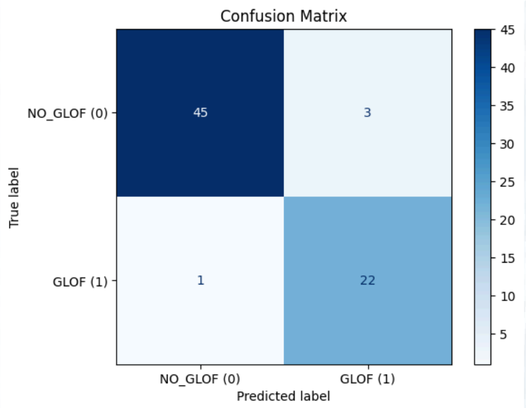


5. Results









6. Features

7. UN SDGs

8. Conclusion

Icewatch predicts GLOFs by successfully integrating deep learning models with geospatial data. By providing access to the results through a web app, this initiative enhances early warning capabilities, supporting community safety and proactive disaster management.

SCAN ME

9. Development Tools

QGIS · aws · JPL

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