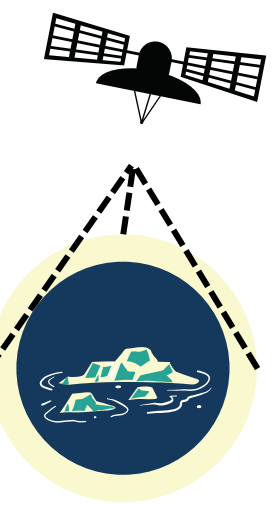
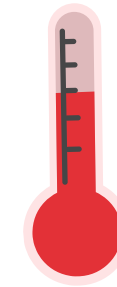
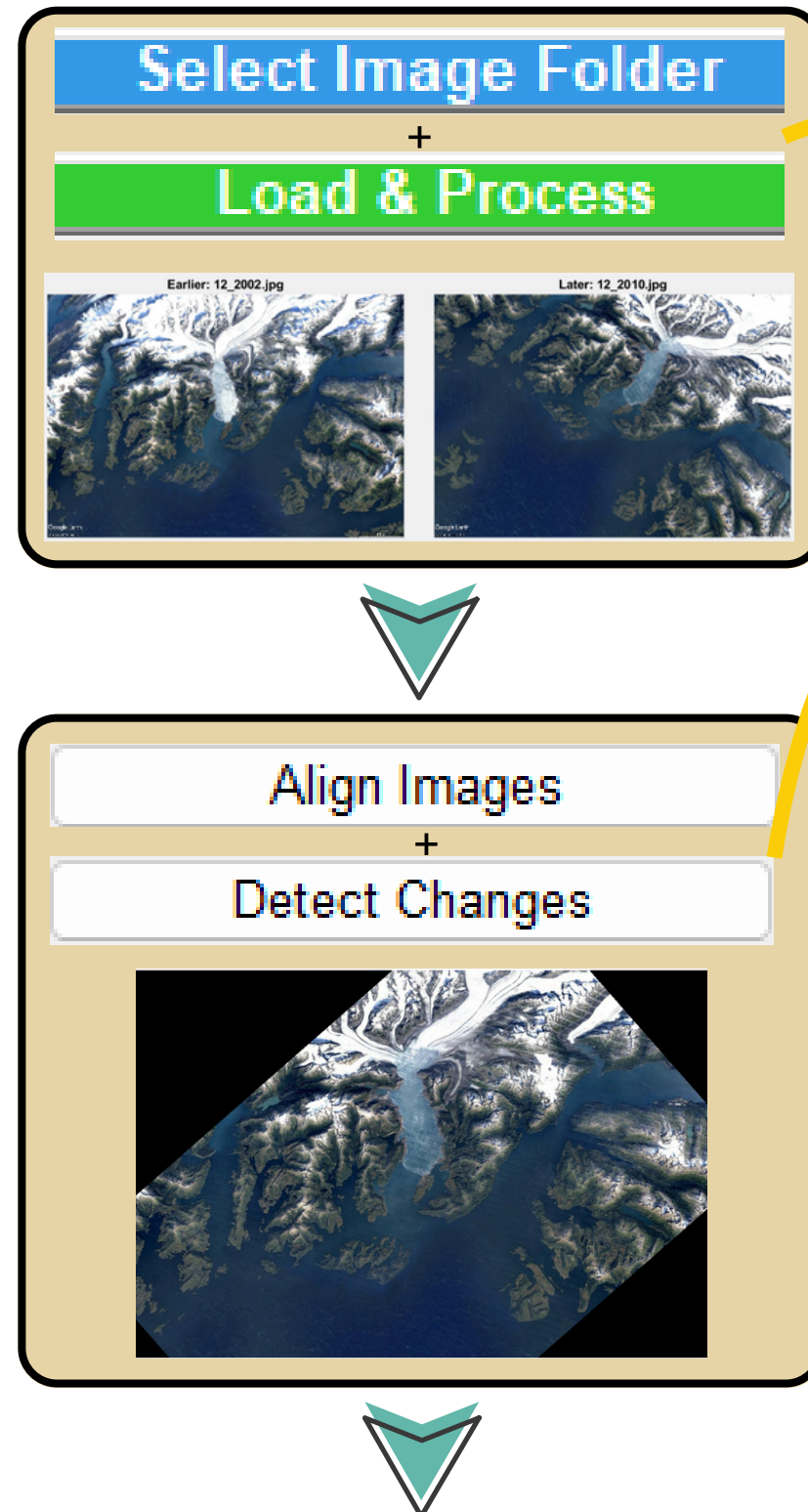




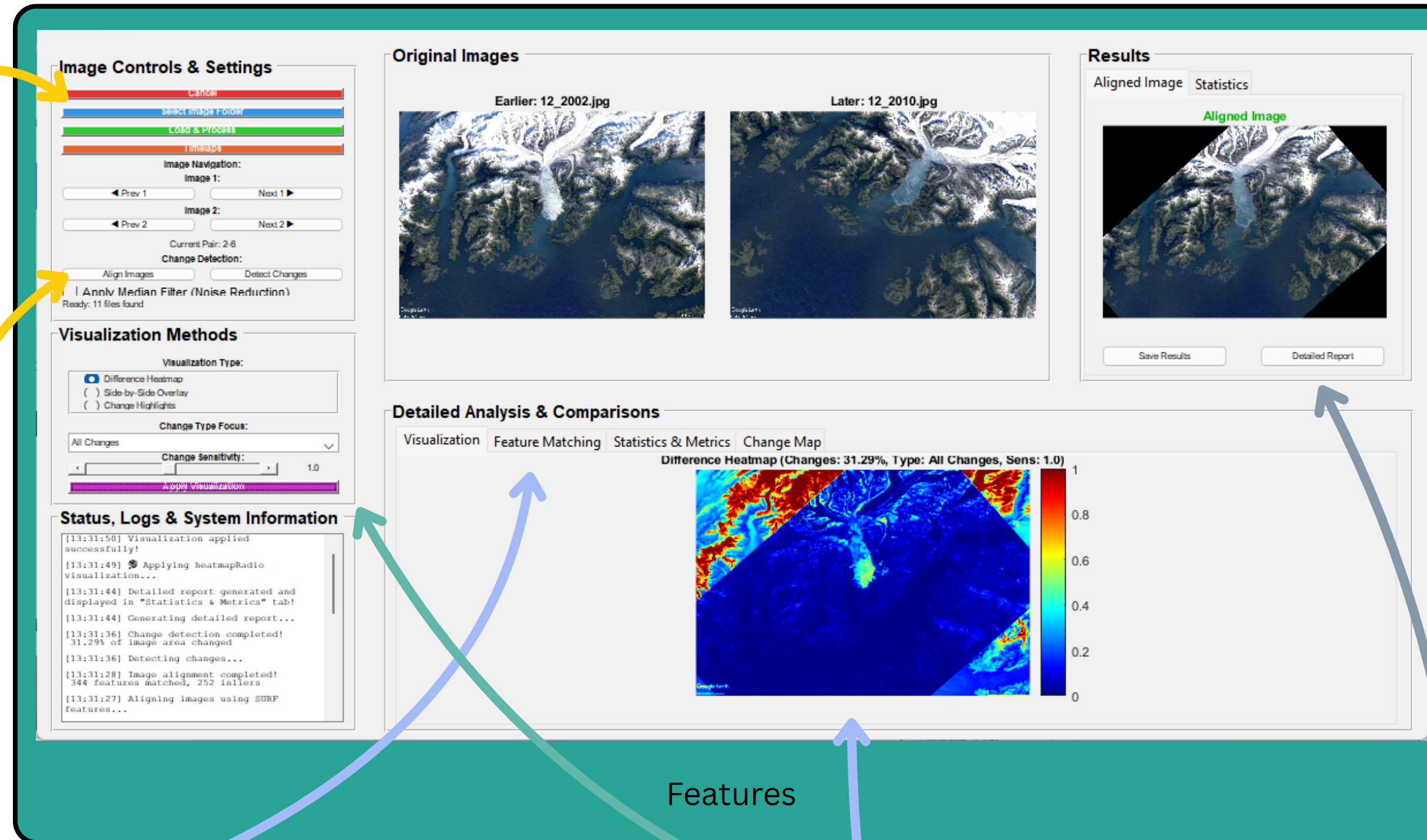
# COMPARE SATELLITE IMAGES OVER TIME TO TRACK CLIMATE WARMING



## Pipeline and results



## GUI



## Methods

- Image preprocessing:** median filter (optional)
- Alignment:** SURF, feature matching, RANSAC, imwarp
- Change detection:** pixel difference, Gaussian filter (optional), thresholding
- Focus:** geometric changes or structural changes

## Problems

- Robustness of the image alignment, especially for images with low texture, strong brightness differences, or complex transformations
- Solution: The parameters of the estimateGeometricTransform2D algorithm were adjusted:
  - MaxNumTrials (maximum number of RANSAC trials) was increased from 1000 to 2000
  - MaxDistance (maximum distance for inlier points) was increased from 1.5 to 3
  - (a picture of a problem here would be better)

## References

