

Model Card: Linear Object Detection from Historical Map Images

Model Details

- **Model Name:** Linear Object Detection Transformer v1.0
- **Model Type:** Map Image Processing - Linear Object Detection
- **Developers:**
- **Release Date:** June 6, 2023
- **Model Version:** 1.0
- **License:** MIT License

Intended Use

- **Primary Uses:** This model is intended for use in automated scarp line detection from historical USGS geological maps.
- **Secondary Uses:** It can also be applied to other map archives, provided the desired linear object is represented by solid black lines with black teeth (the same symbol used for scarp lines), and the map style closely resembles that of historical USGS geological maps.
- **Users:** Target users include geospatial analysts, cartographers, and librarians.

Training Data

- **Download Link:** [Link](#)
- **Data Characteristics:**
 - **Size:** 6,000 images
 - **Source:** USGS historical geological maps

Evaluation Data

- **Download Link:** [Link](#)
- **Metrics:**
 - **Avg. Correctness:** 0.8217
 - **Avg. Completeness:** 0.9611
 - **Avg. APLS:** 0.6246

Version Updates

- **Future Plans:** Expand training data to include more diverse map styles.