

# 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 thrust fault 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 black lines with black slide triangles (the same symbol used for thrust fault 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:** 9,000 images
  - **Source:** USGS historical geological maps

## Evaluation Data

- **Download Link:** [Link](#)
- **Metrics:**
  - **Avg. Correctness:** 0.8872
  - **Avg. Completeness:** 0.9459
  - **Avg. APLS:** 0.6191

## Version Updates

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