

Road Conditions Map

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This project generates an interactive route map with weather-influenced road-condition coloring (green → red). It fetches weather for waypoints along a route and colors each road segment by a computed "badness" score.

- Script: `Scripts/Road_map_report.py`
- Output HTML map: `Results/weather_route_map_<start>-<end>.html`
- Weather results JSON: `Results/weather_results_<start>-<end>.json`

What the script does

- Collects a sequence of addresses from the user (start point, then any number of intermediate points). Type `.` to finish entering points.
- Geocodes each address, downloads OpenStreetMap graphs covering each route segment, and composes a combined routing graph.
- Finds the shortest route (by travel time) visiting the points in order.
- Samples weather at waypoints along the full route using the MET Norway API, evaluates road conditions, computes a numeric badness score, and colors each polyline segment accordingly.
- Saves an interactive HTML map (and a JSON file with weather/condition data) to the `Results/` folder.