

# AAAAnalyser

A tool for calculating climbing and  
AAA points for Audax UK events

A dark blue diagonal gradient bar that starts from the bottom left and extends towards the top right, covering the lower half of the slide.

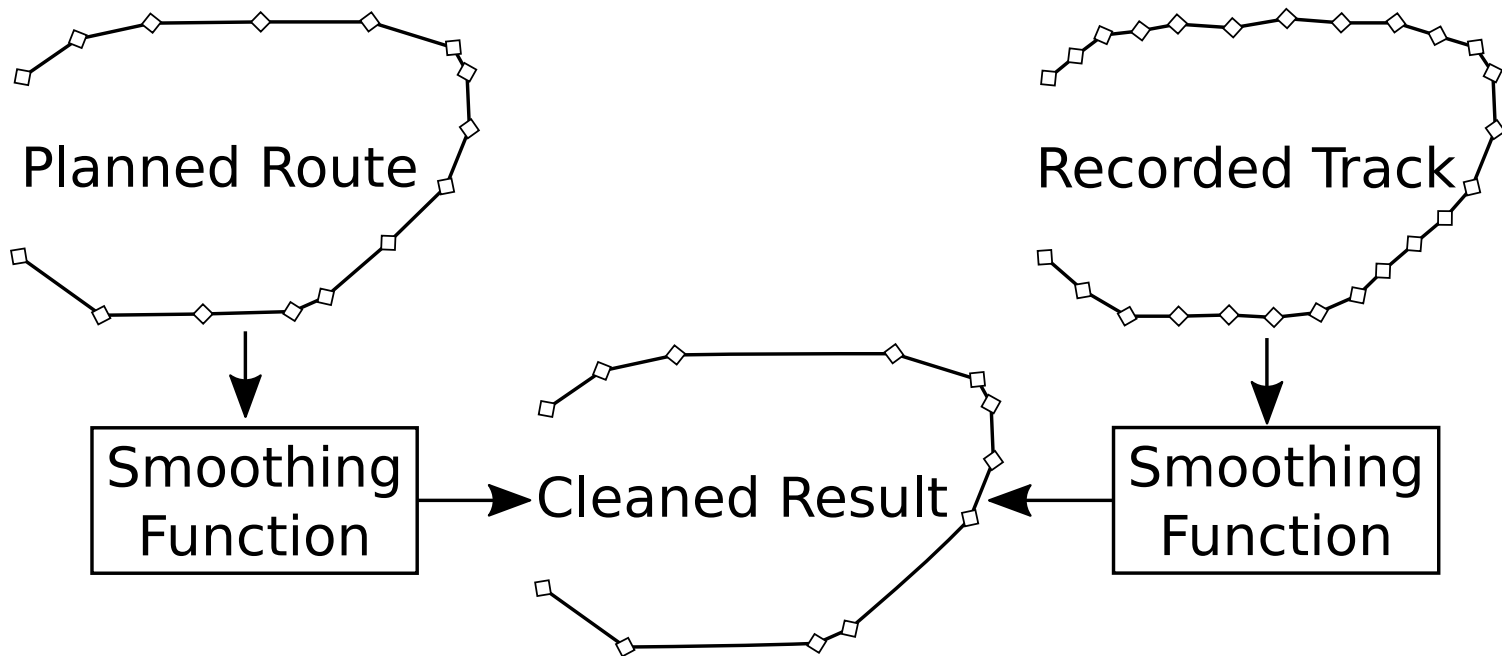
# Historical AAA Calculations

- Contour counting
- Barometric GPSes
- RidewithGPS
- Unknown methods
- Bikehike resampling

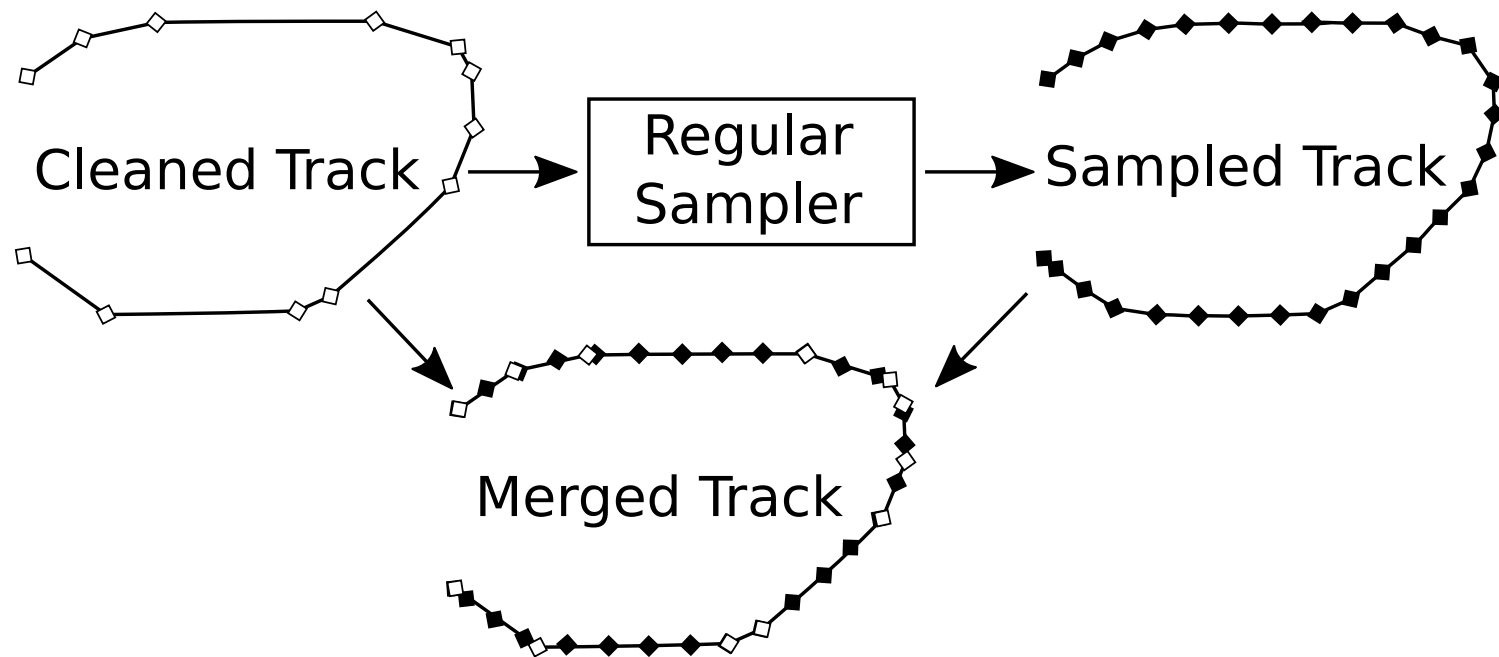
# New Tool Requirements

- Controlled by Audax UK
- No third party dependencies
- Consistent climbing values
- Automatic AAA calculations
- Locate any partial AAA section
- Quick & easy enough for DIY workload
- Usable by riders for planning

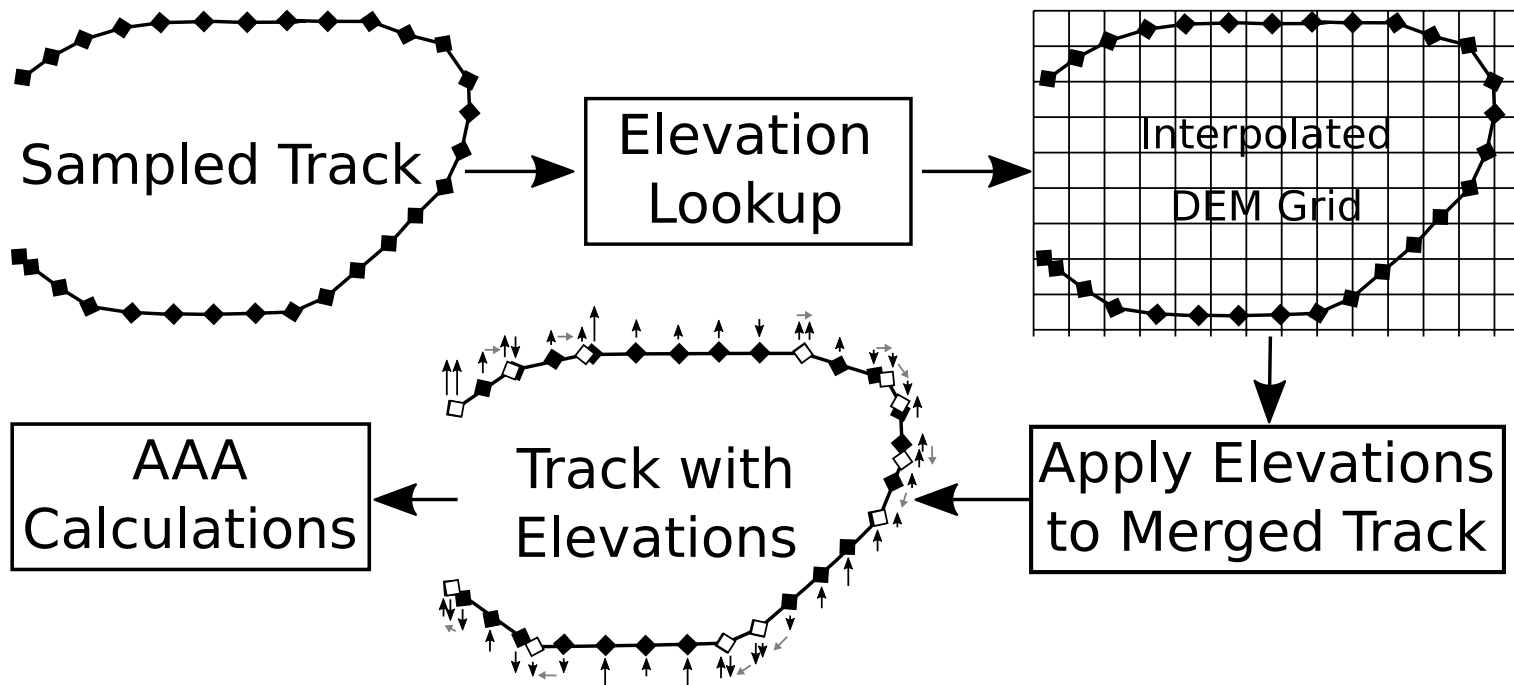
# How It Works: Route vs Track



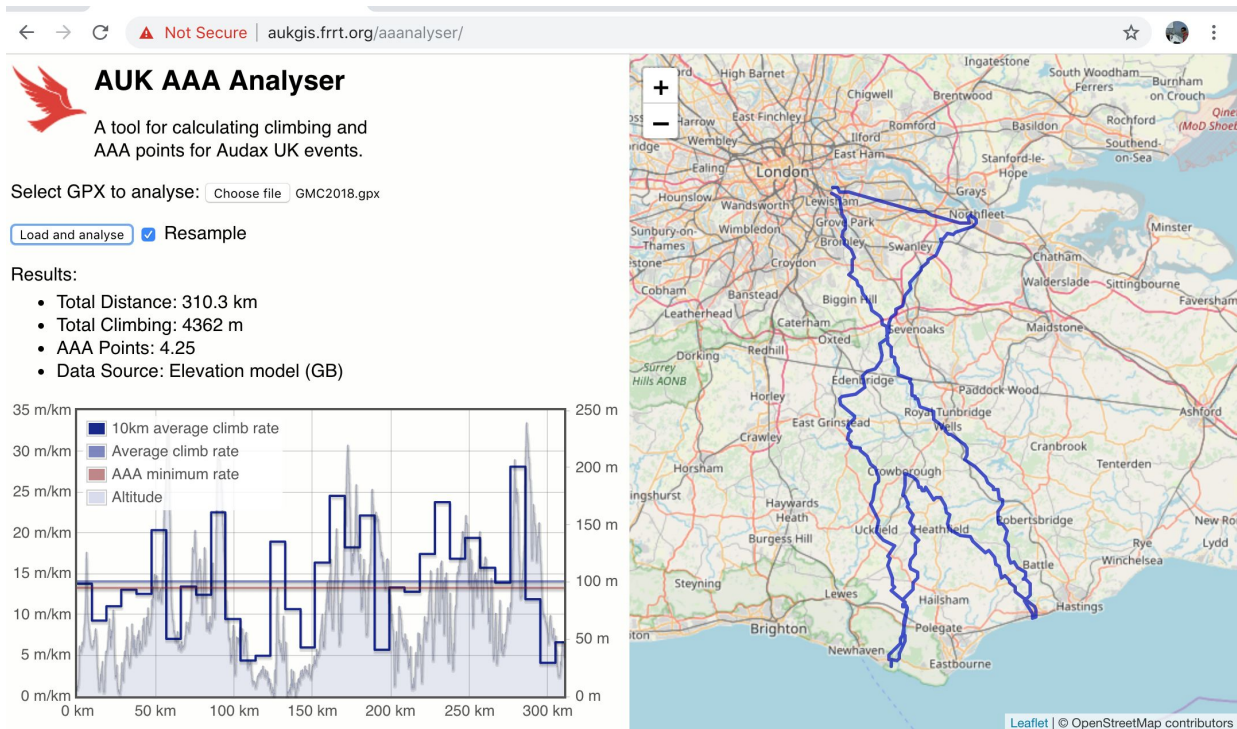
# How It Works: Resampling



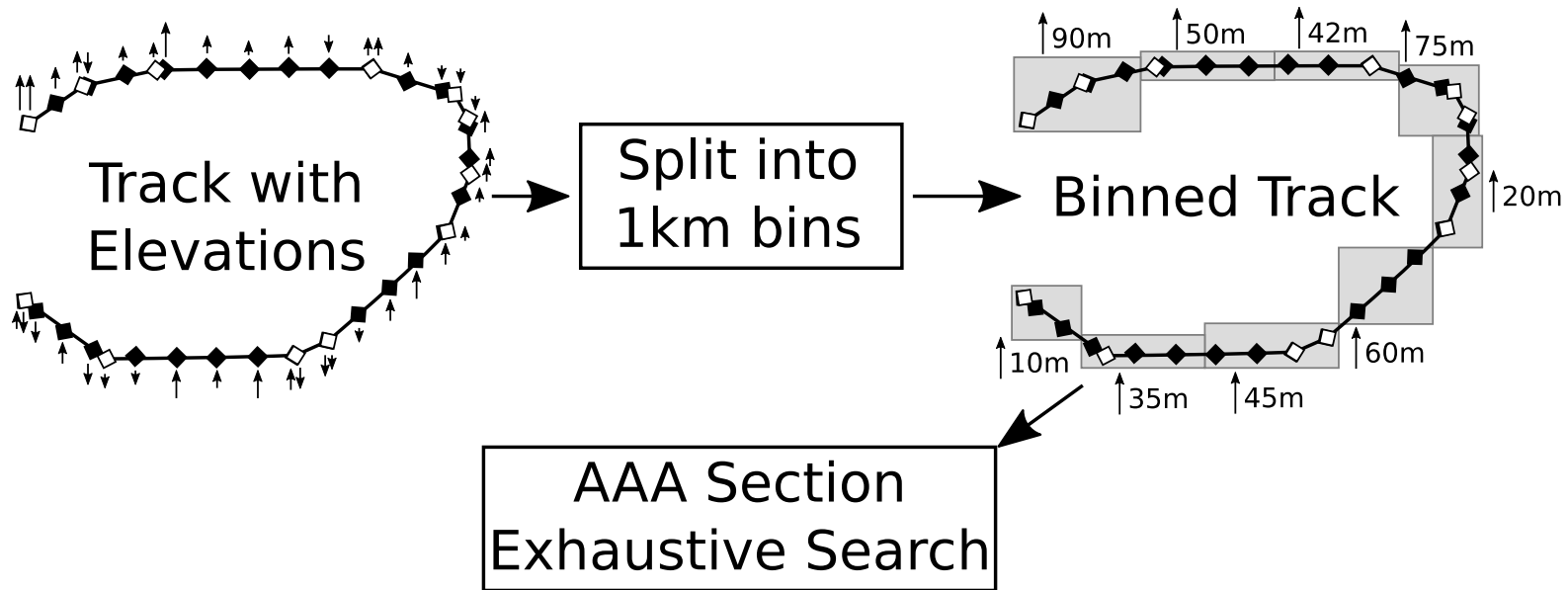
# How It Works: Elevation Lookups



# The Tool in Action

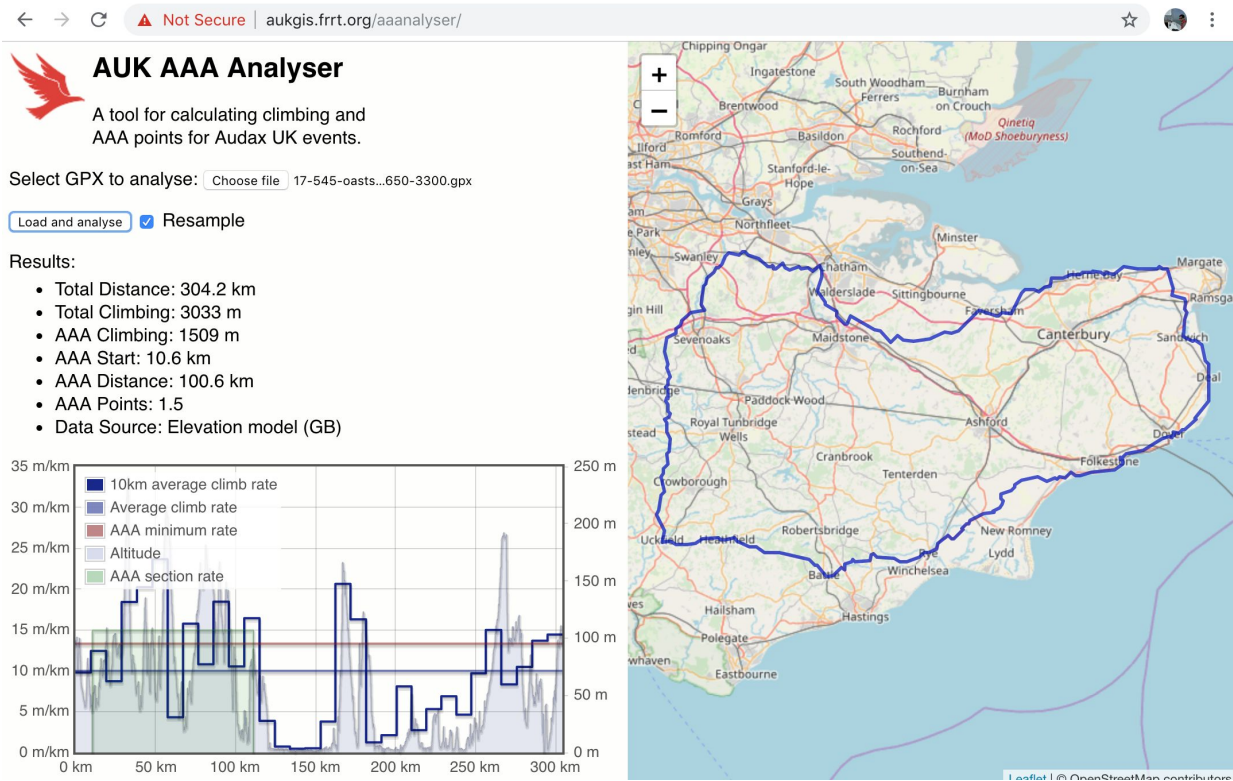


# How It Works: Partial AAA

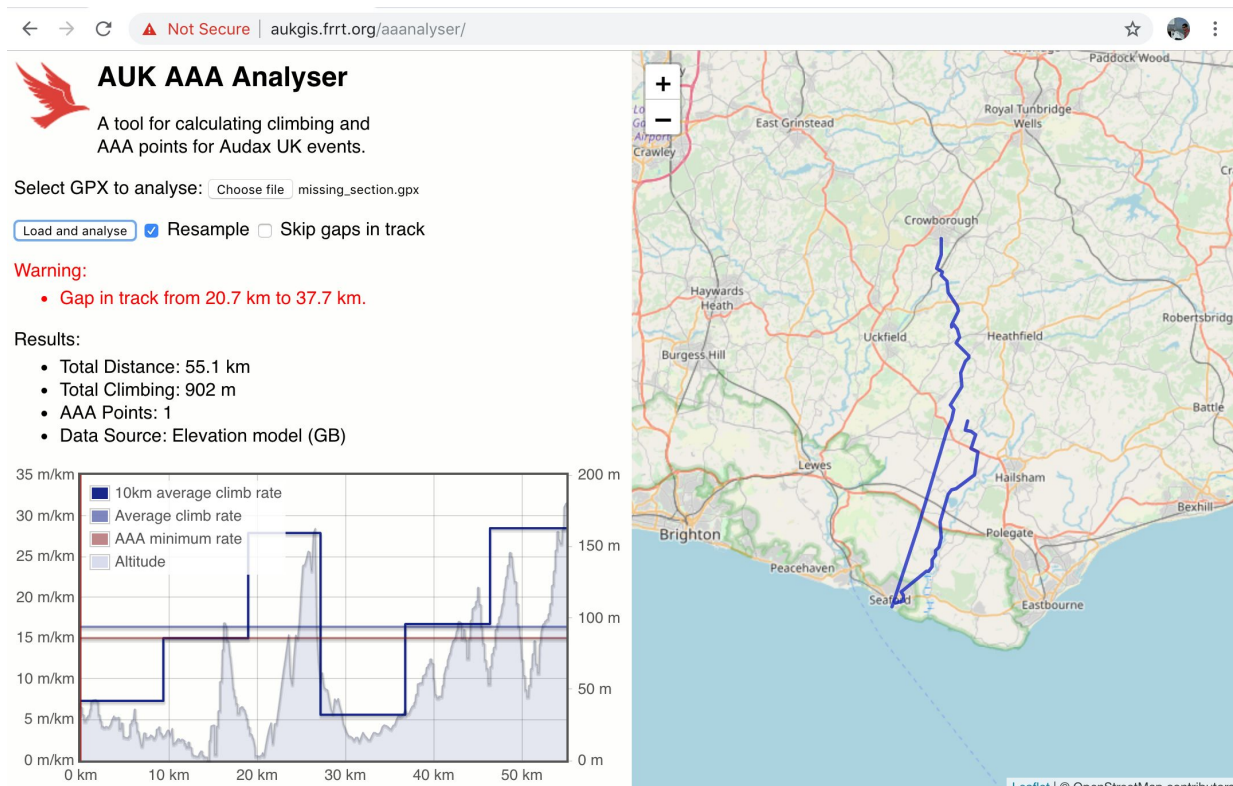




# The Tool: Partial AAA



# The Tool: Gaps in Tracks



# Elevation Sources and Foreign Rides

- Using the public OS50 dataset from Ordnance Survey
  - Terrain Model (from surveying, not remote elevation sensing)
  - Only covers Great Britain ie not Northern Ireland
  - Potential gotchas: The Bridge and Tunnel Crowd
- 
- Testing global SRTM DEM data for foreign rides
  - For now, refer these to AAA Secretary

# More Information

- Debug mode: <http://aukgis.frft.org/?debug=1>
- Autoload track: <http://aukgis.frft.org/aaanalyser/?gpx=<URL>>
- Source code at: <https://github.com/aukgis/aaanalyser>
- Command line available:

```
aukgis@ip-172-31-29-39:~/aaanalyser$ bin/aaanalyser -h
Usage: aaanalyser [options]

Options:
  -j, --json           JSON output
  -n, --no-resampling  Don't resample elevation
  -u, --url <url>      URL to analyse
  -f, --file <file>    File to analyse
  -h, --help           output usage information

aukgis@ip-172-31-29-39:~/aaanalyser$ bin/aaanalyser --url="http://audaxclubhackney.co.uk/GMC2017.gpx" --json
{"warnings":[],"results":{"fields":["Total Distance","Total Climbing","AAA Points","Data Source"],"values":["309.9","4373",4.25,"Elevation model (GB)"],"units":["km","m","",""]}}
aukgis@ip-172-31-29-39:~/aaanalyser$
aukgis@ip-172-31-29-39:~/aaanalyser$ bin/aaanalyser --url="http://audaxclubhackney.co.uk/GMC2017.gpx"
Results:
- Total Distance: 309.9 km
- Total Climbing: 4373 m
- AAA Points: 4.25
- Data Source: Elevation model (GB)
```