



# S00

## Main South Down

### Document Status

Version #	Date Reviewed	Prepared by	Reviewed by	Endorsed	Approved
3.0	10 Nov 23	Operations Standards	Stakeholders	Operations Standards Manager	Head of Operations Standards 18/12/2023

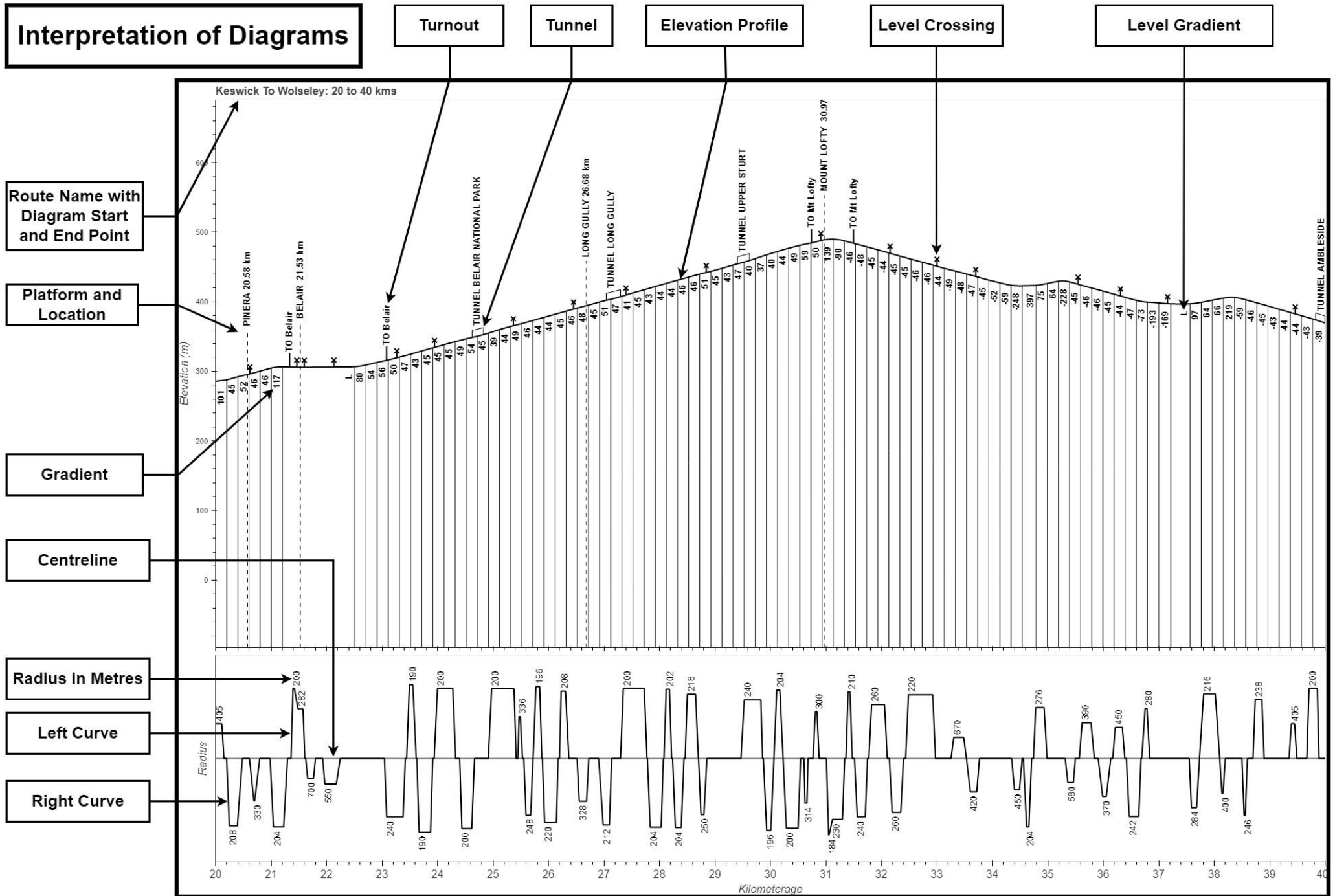
## Curve and Gradient Diagrams – Data Sources and Descriptions

Data Type	Data Source	Data Description
Grade	ARTC Asset Register	Horizontal and vertical geometry obtained using Reigl LiDAR, GPS, IMU and Gyroscope fitted to ARTC Hi-Rail vehicle.
Curvature	ARTC Asset Register	Curvature data measured using AK car and verified against track design specifications.
Platforms	ARTC Asset Register	Asset locations obtained through TrackData.
Tunnels		
Turnouts		
Level Crossings		

### DISCLAIMER:

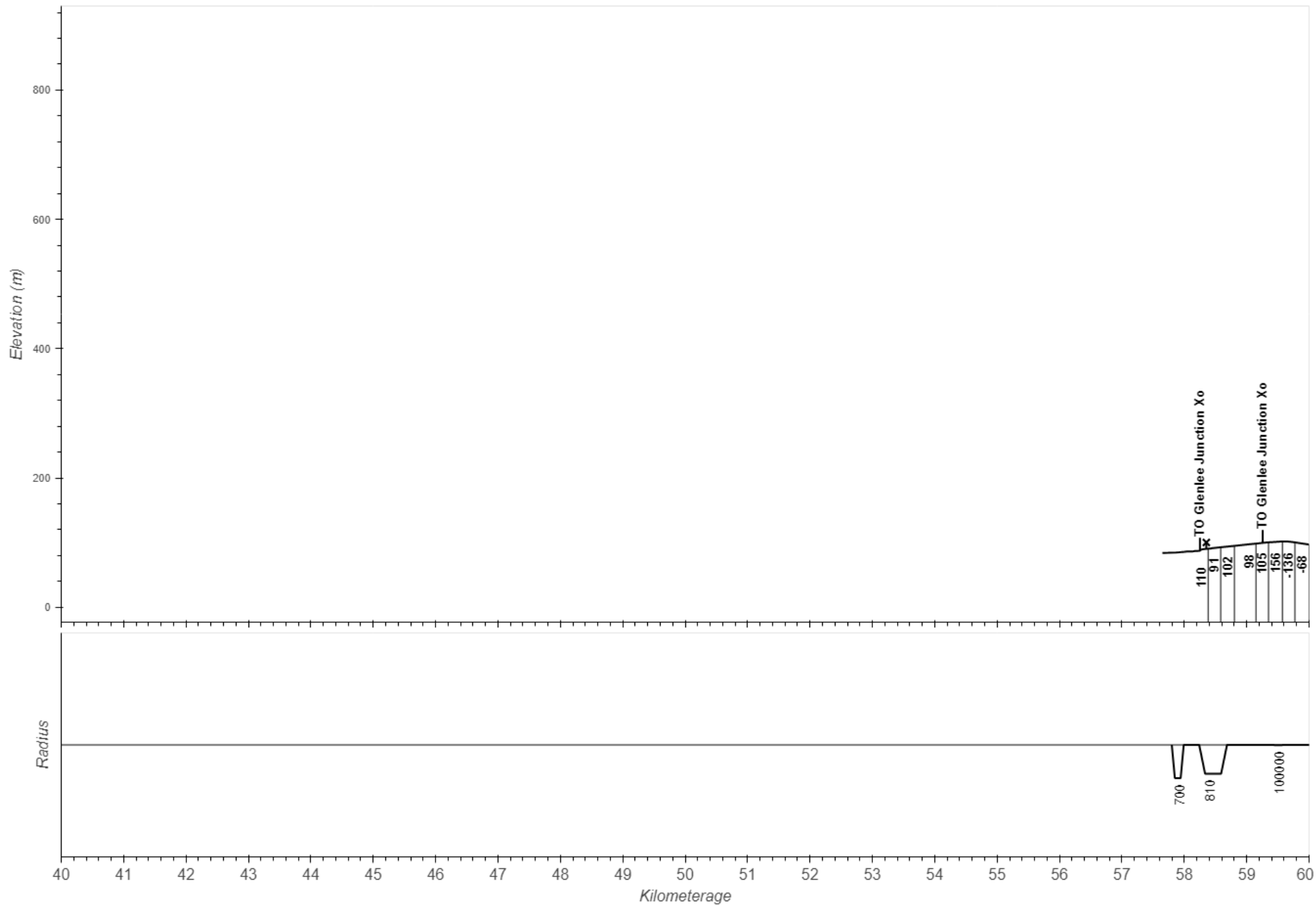
1. The following diagrams are a representation only.
2. Refer to the Curvature Master for controlled curvature data.
3. Refer to ARTC Network Information Books diagrams for detailed information.
4. This document is uncontrolled when printed.

# Interpretation of Diagrams

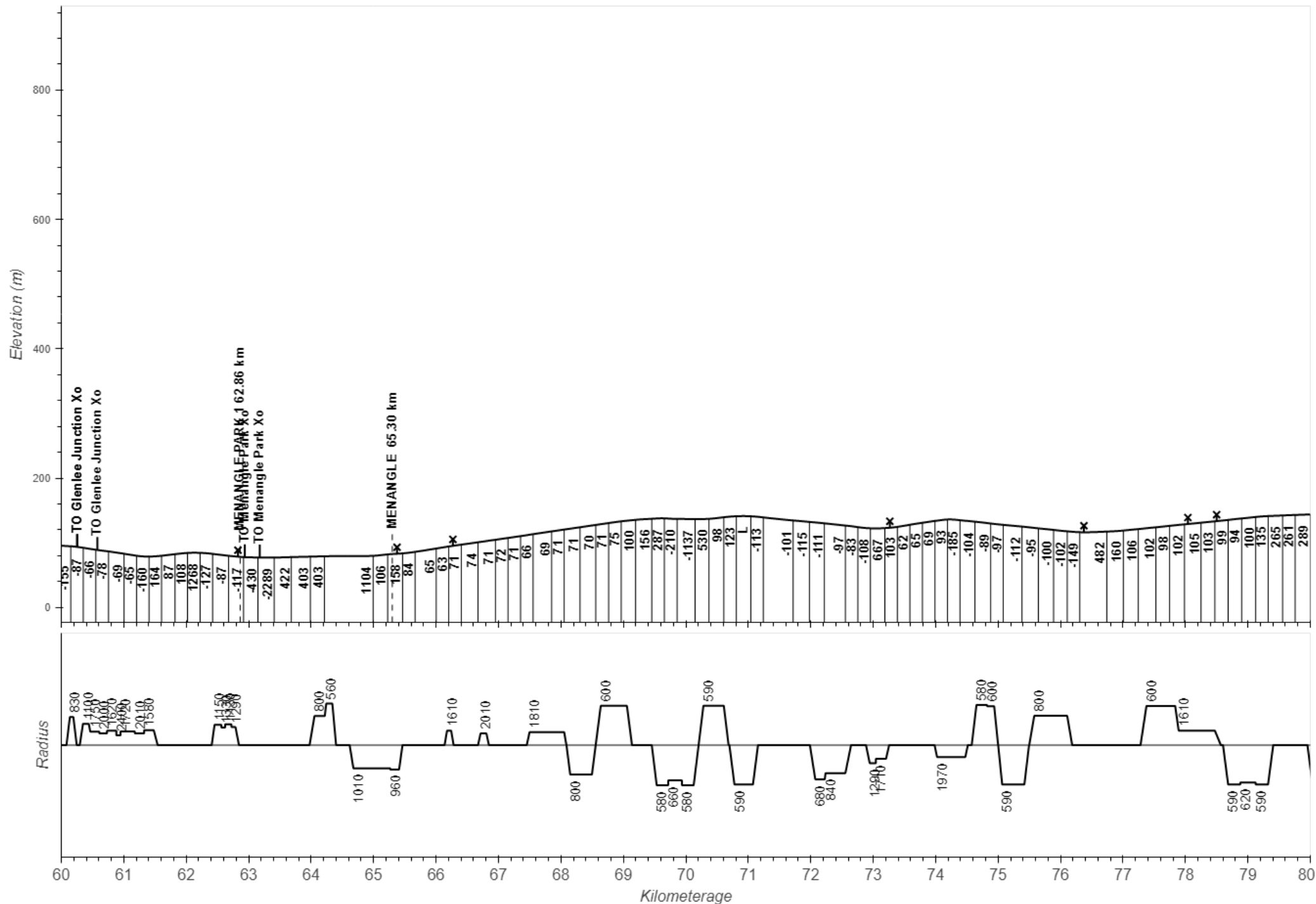


<b>Turnout</b>	Turnouts are denoted by a small vertical lines along the elevation profile, with a TO (turnout) prefix. A suffix of XO means that there is a crossover. These turnouts are toe of blades locations, and therefore should not be used to estimate standing length.
<b>Tunnel</b>	Tunnels are denoted by a step above the elevation profile. The length of the step is the length of the tunnel. The above label is the name of the tunnel.
<b>Elevation Profile</b>	The elevation line shows the elevation against distance. This elevation is relative to sea level, and the vertical range across an entire basecode is fixed and will not change from diagram to diagram.
<b>Level Crossing</b>	Level crossings are denoted by a cross on top of a vertical line above the elevation profile. This marker indicates the centre of the level crossing. Level crossings can be subject to change, so these are provided as a guide only.
<b>Level Gradient</b>	A level gradient is a gradient with an absolute value greater or equal to 1:2500. Level gradients are denoted by an “L”.
<b>Route Name with Start and End Point Platform and Location</b>	<p>This is the title of the diagram. The route name is the start and finish point of the basecode. The stand and end points represent the distance covered by the diagram below.</p> <p>Platforms are denoted by a dashed vertical line leading up to a vertical label. Within the label, the platform name is indicated, followed by the kilometerage at platform centre. Both active and inactive platforms are included.</p>
<b>Gradient</b>	The gradient is shown as a “1 in” number. A positive gradient indicates an increase in elevation and a negative gradient gradient indicates a decrease in direction. The gradients are calculated between the solid vertical lines which are approximate vertical intersection points.
<b>Radius in Metres</b>	The curvature is represented by the radius, in metres. The curvature line is represented as the “inverse radius”. This means that tighter curves have more deviation from the centreline. The radius labels are not inverted however, and show the radius in metres. Compound curves are stepped. The radius values are rounded depending on magnitude. < 250 is rounded to the nearest 2m, < 350 to the nearest 5m and >500 to the nearest 10m.
<b>Centreline</b>	The gray line on the radius plot incidicates a radius of 0. This line is included to increase the readability of curvature values.
<b>Left Curve</b>	Curves above the centreline indicate a left hand direction.
<b>Right Curve</b>	Curves below the centreline indicate a right hand direction.

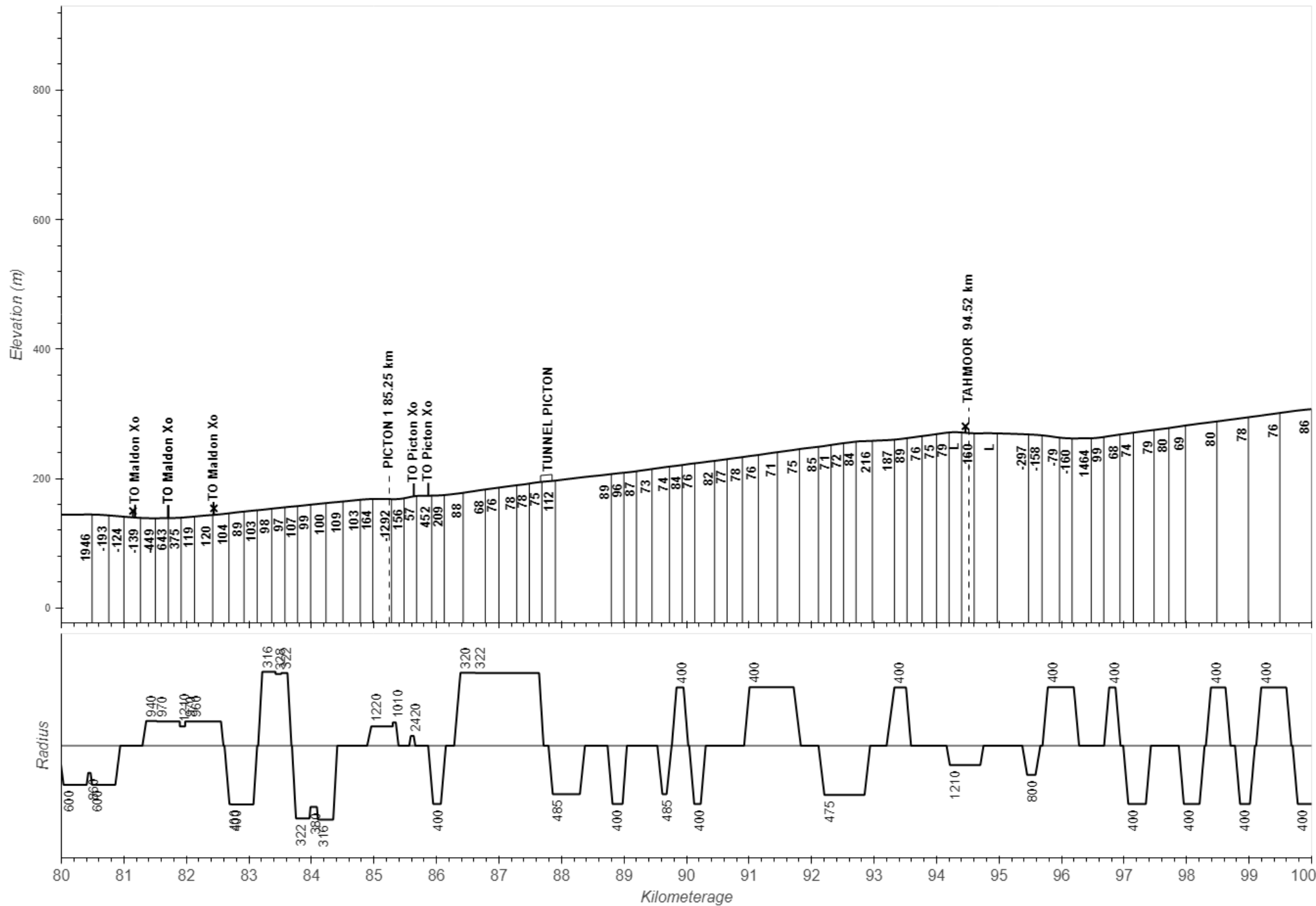
# S00 - Main South: 40 to 60 kms



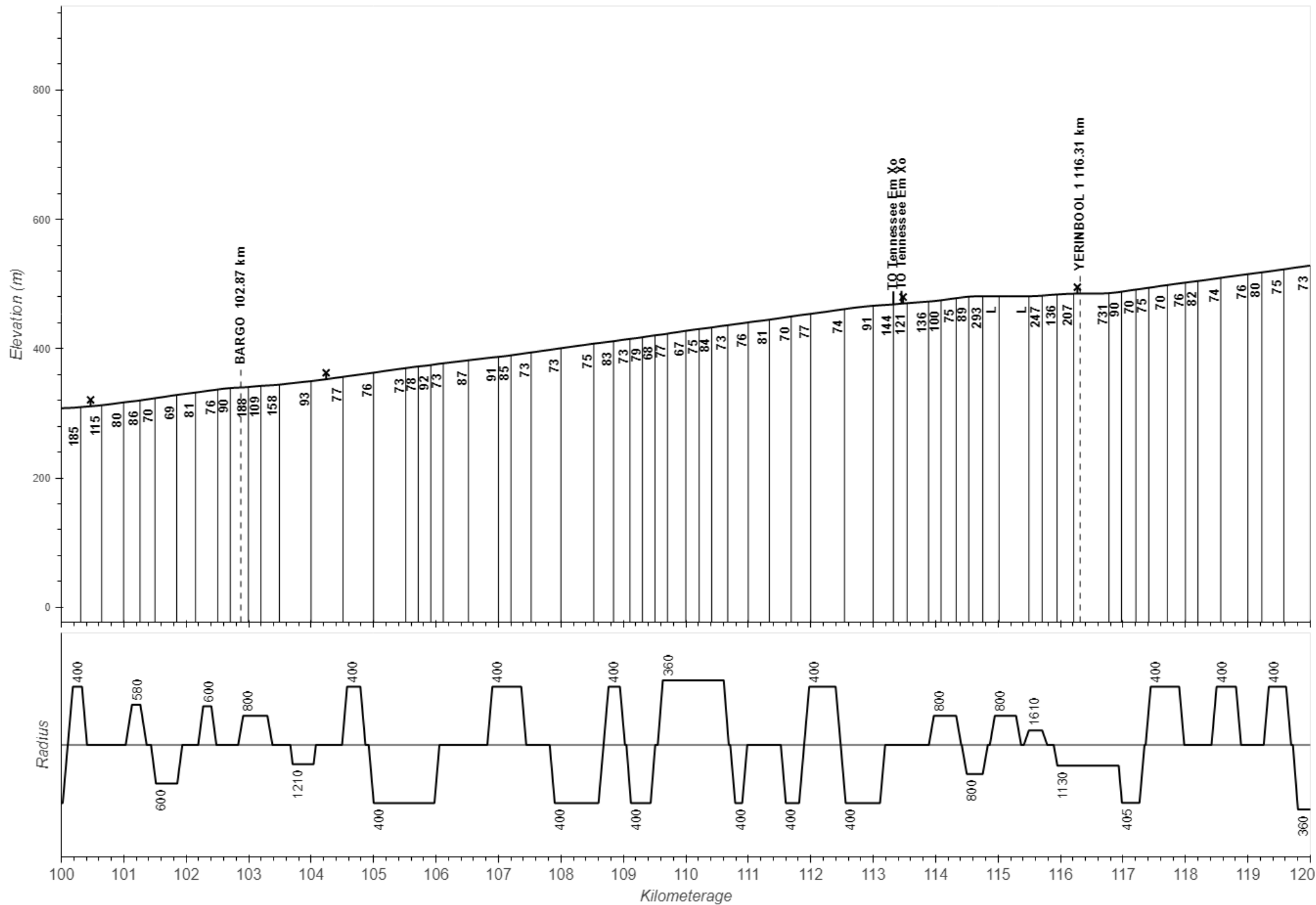
# S00 - Main South: 60 to 80 kms



# S00 - Main South: 80 to 100 kms

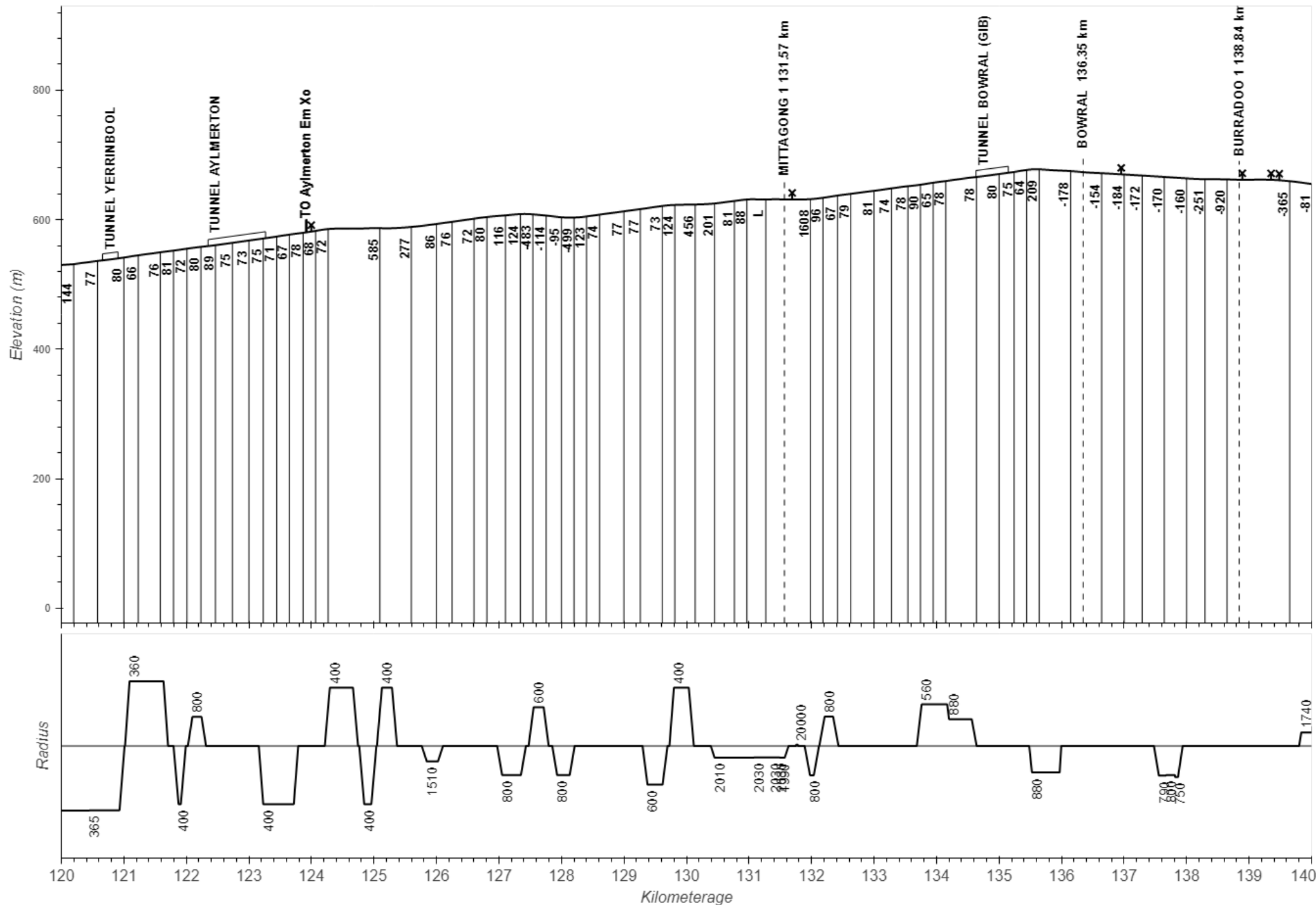


S00 - Main South: 100 to 120 kms

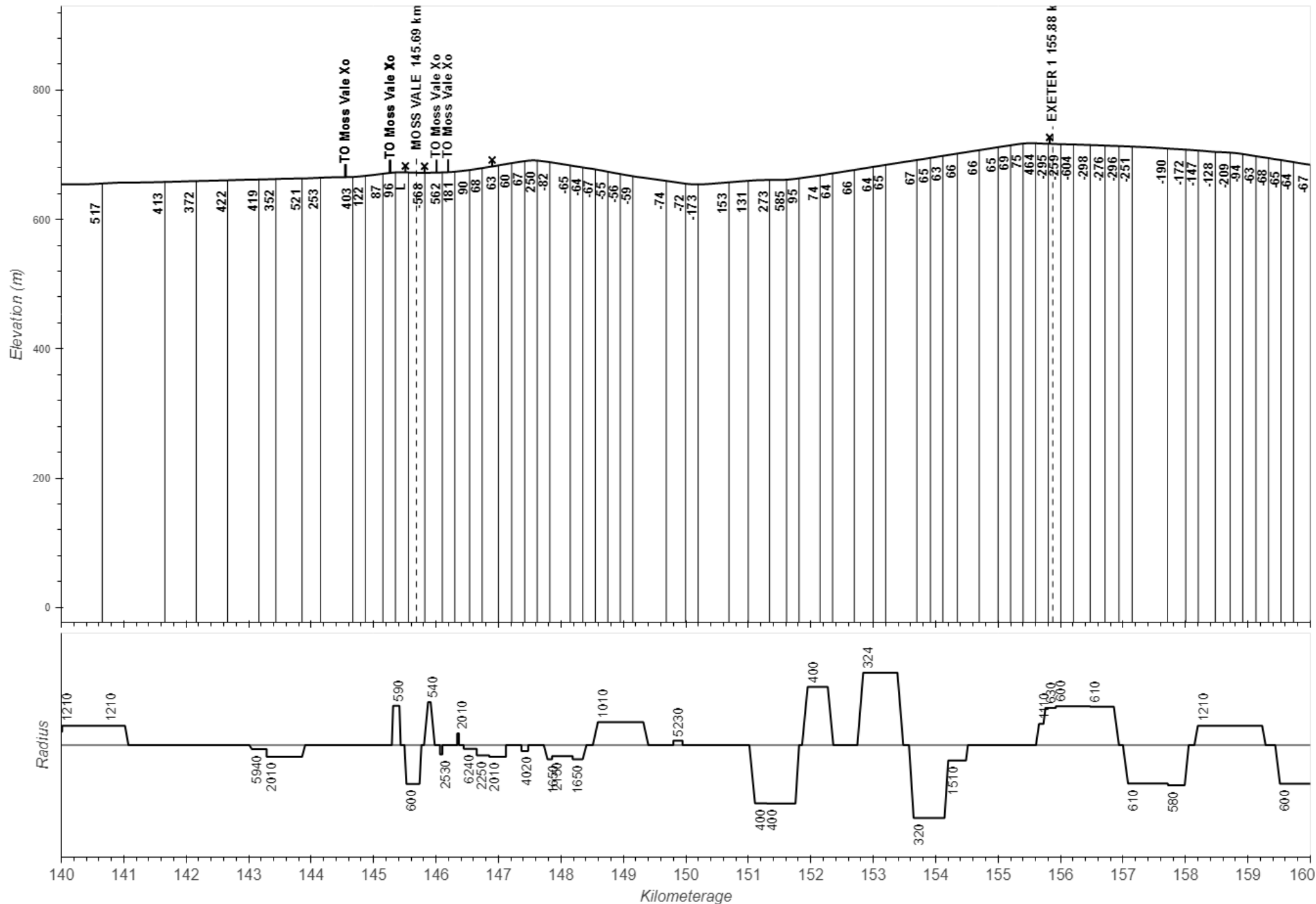




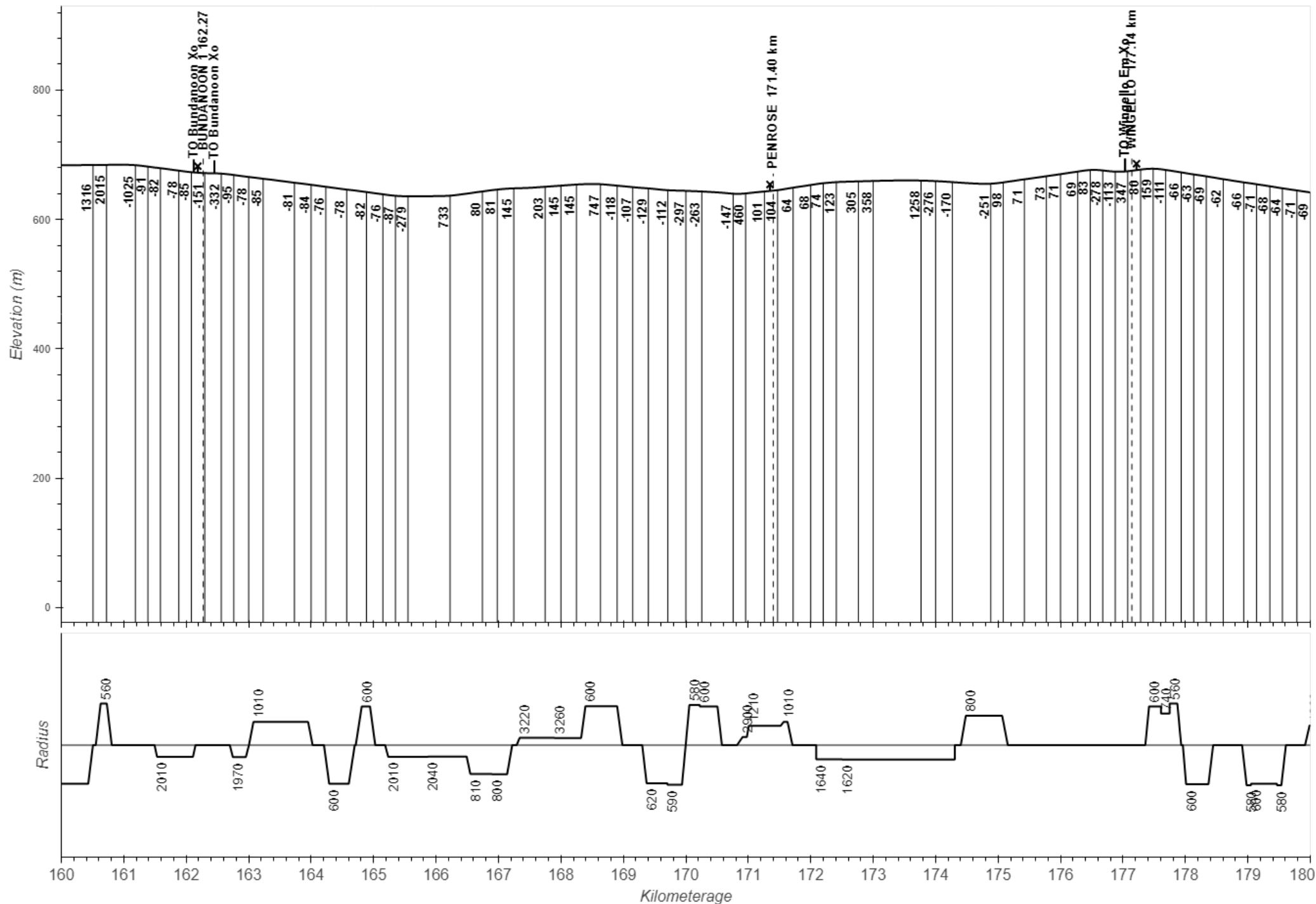
# S00 - Main South: 120 to 140 kms



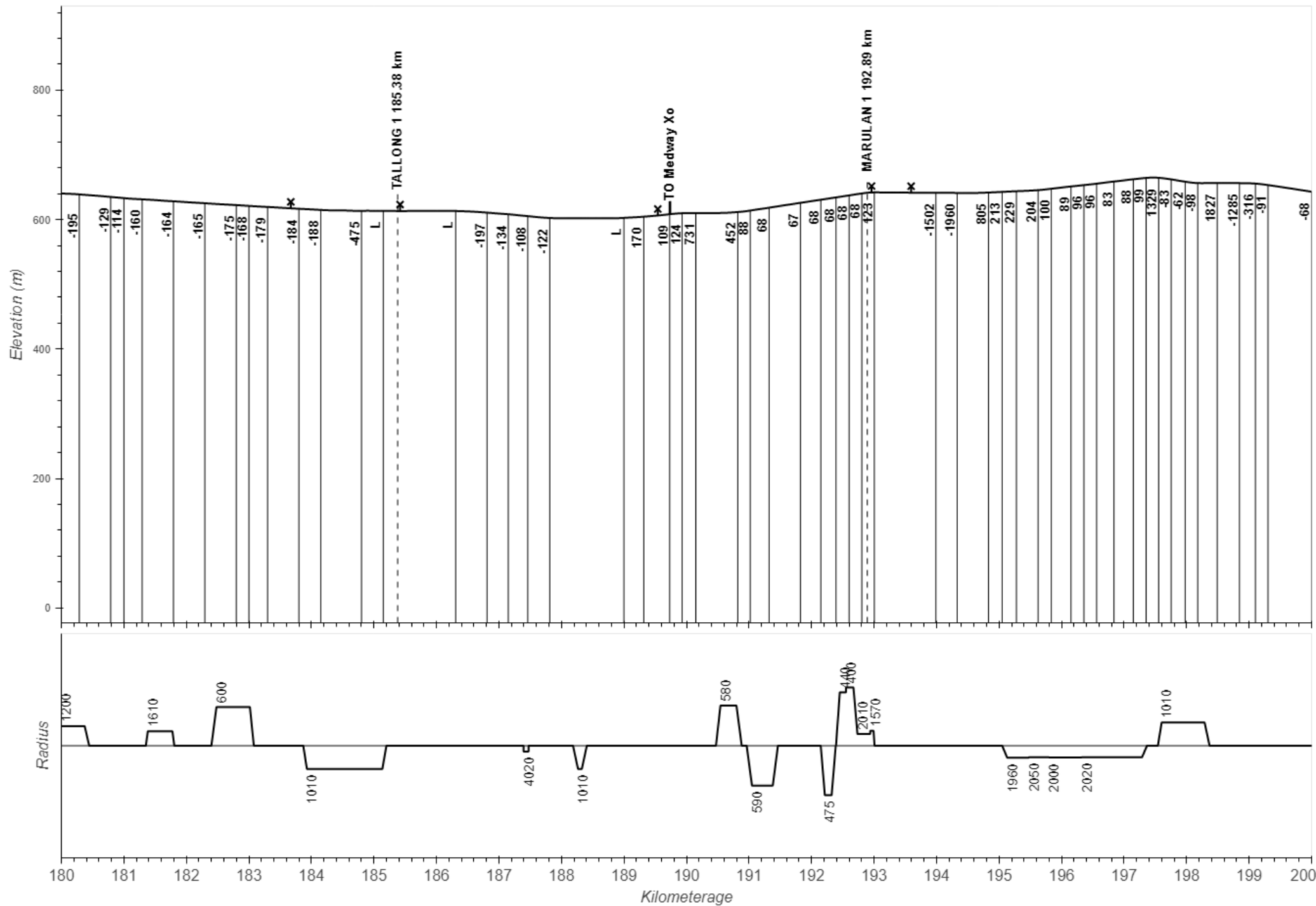
# S00 - Main South: 140 to 160 kms



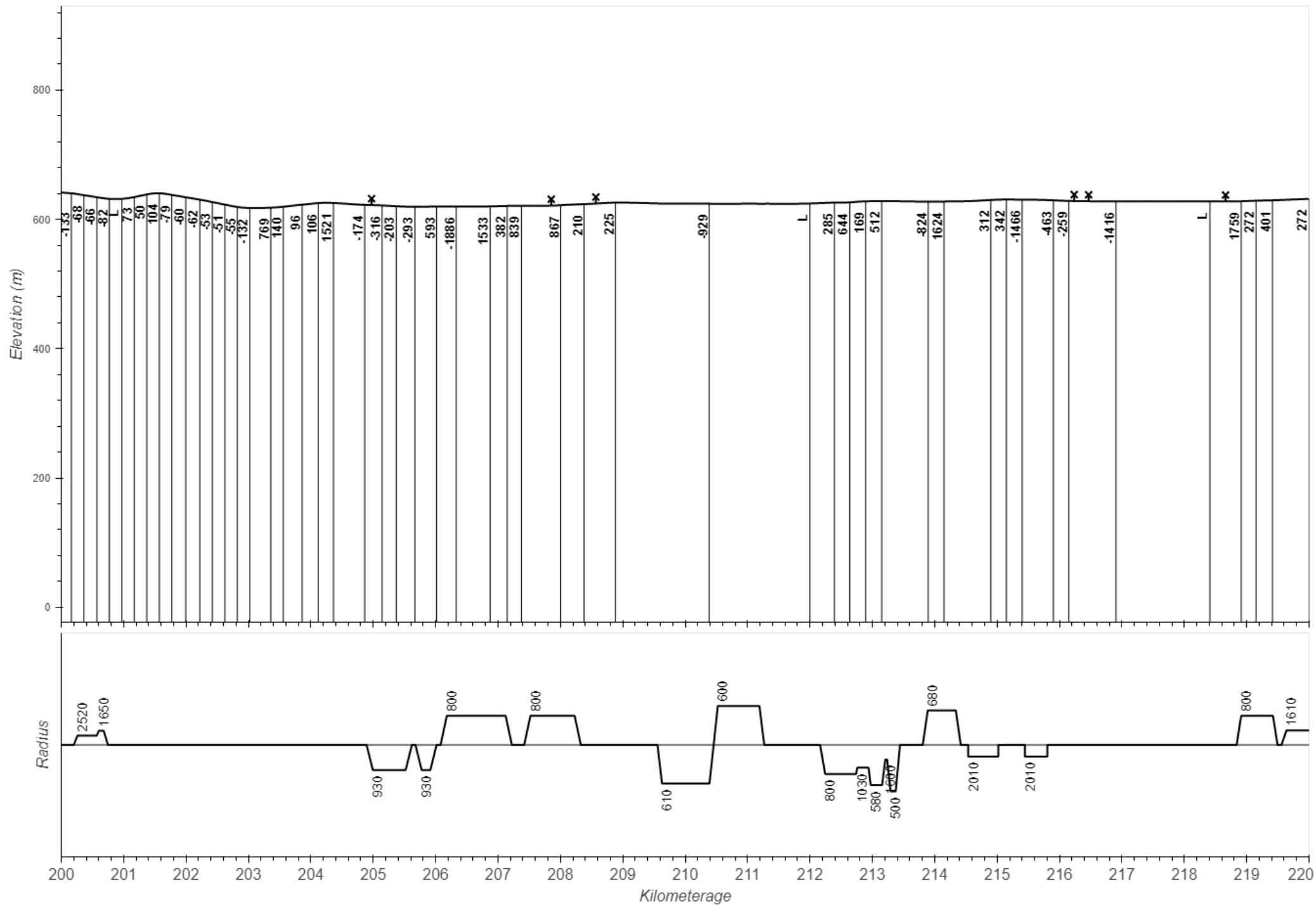
# S00 - Main South: 160 to 180 kms



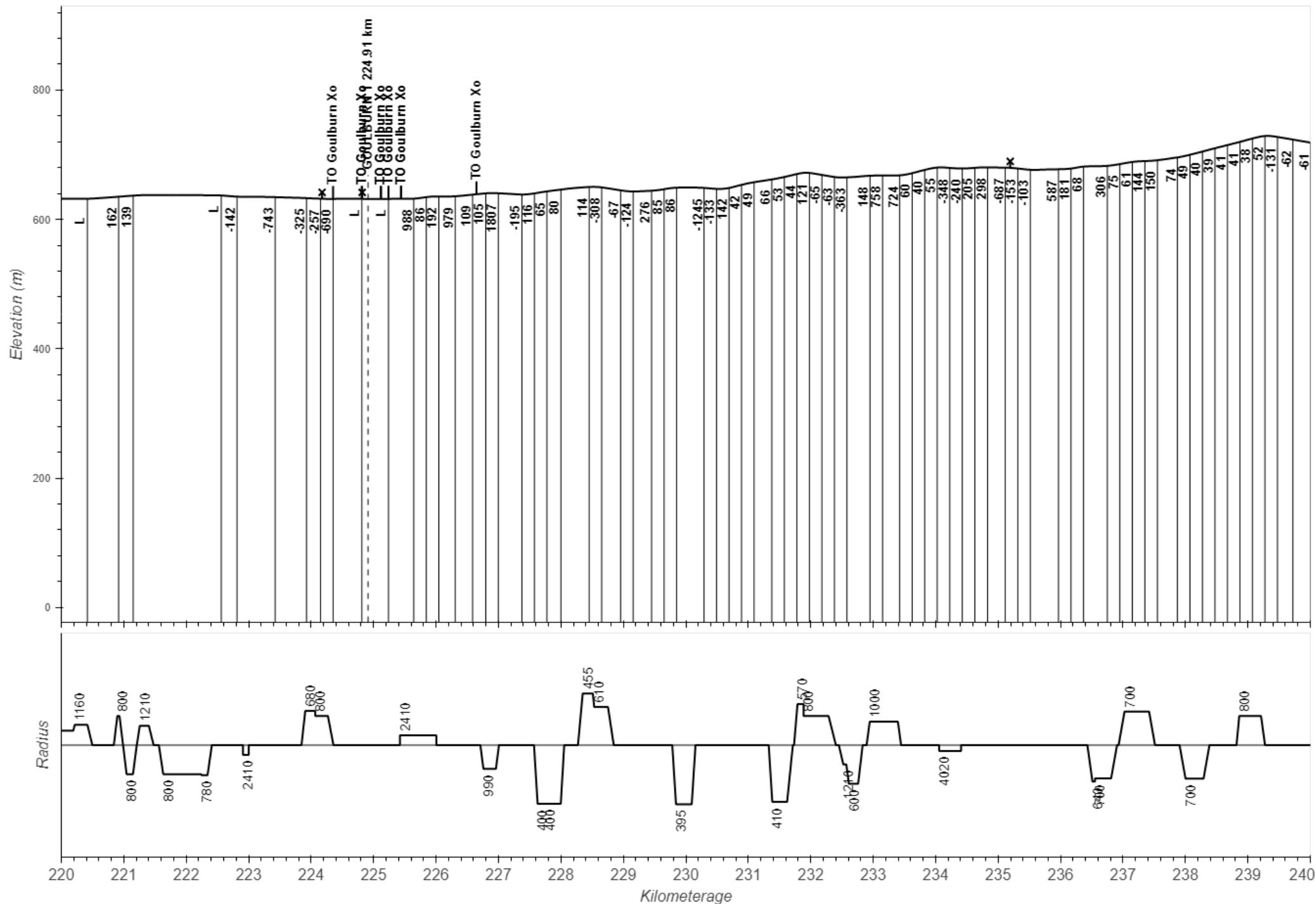
# S00 - Main South: 180 to 200 kms



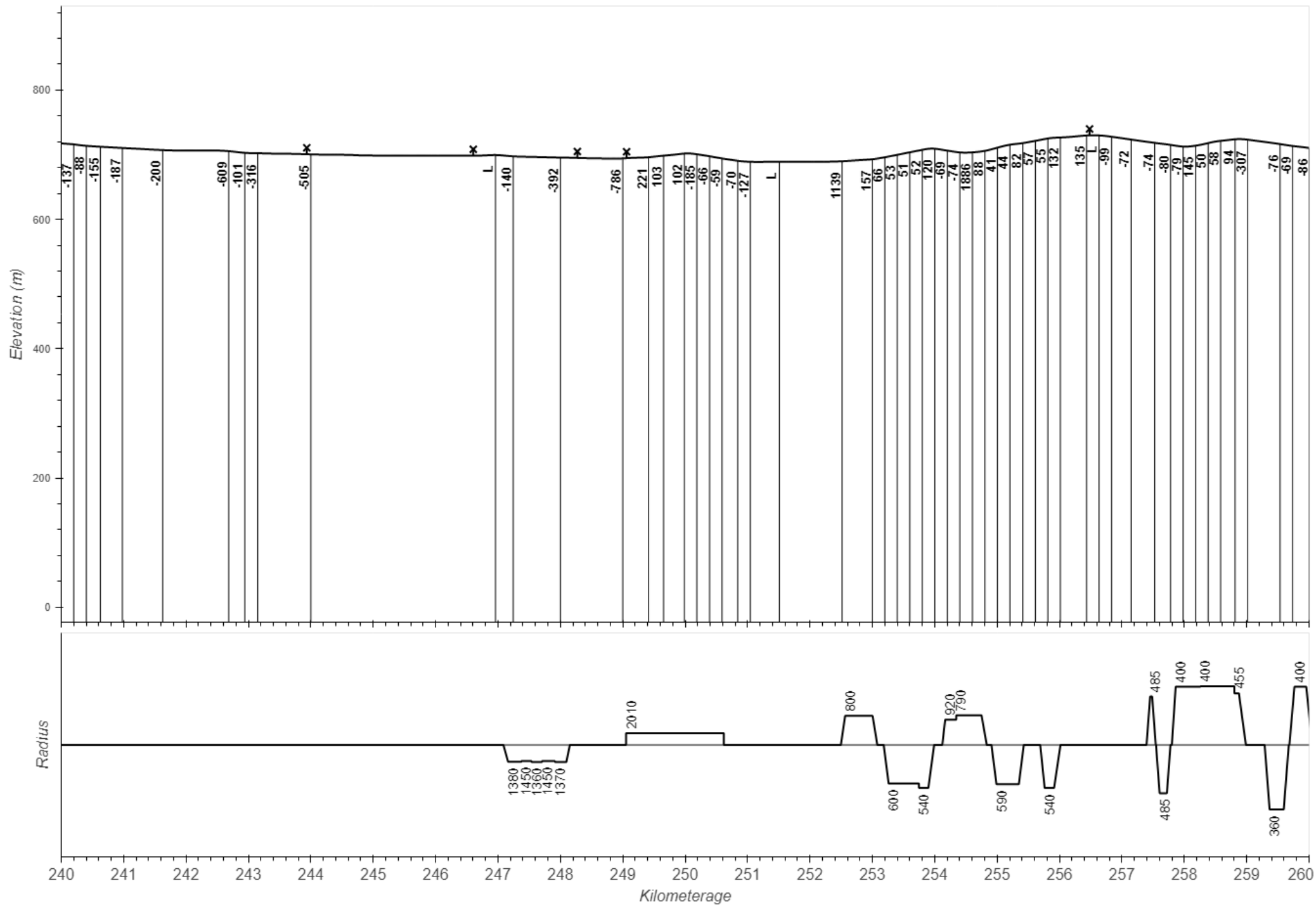
S00 - Main South: 200 to 220 kms



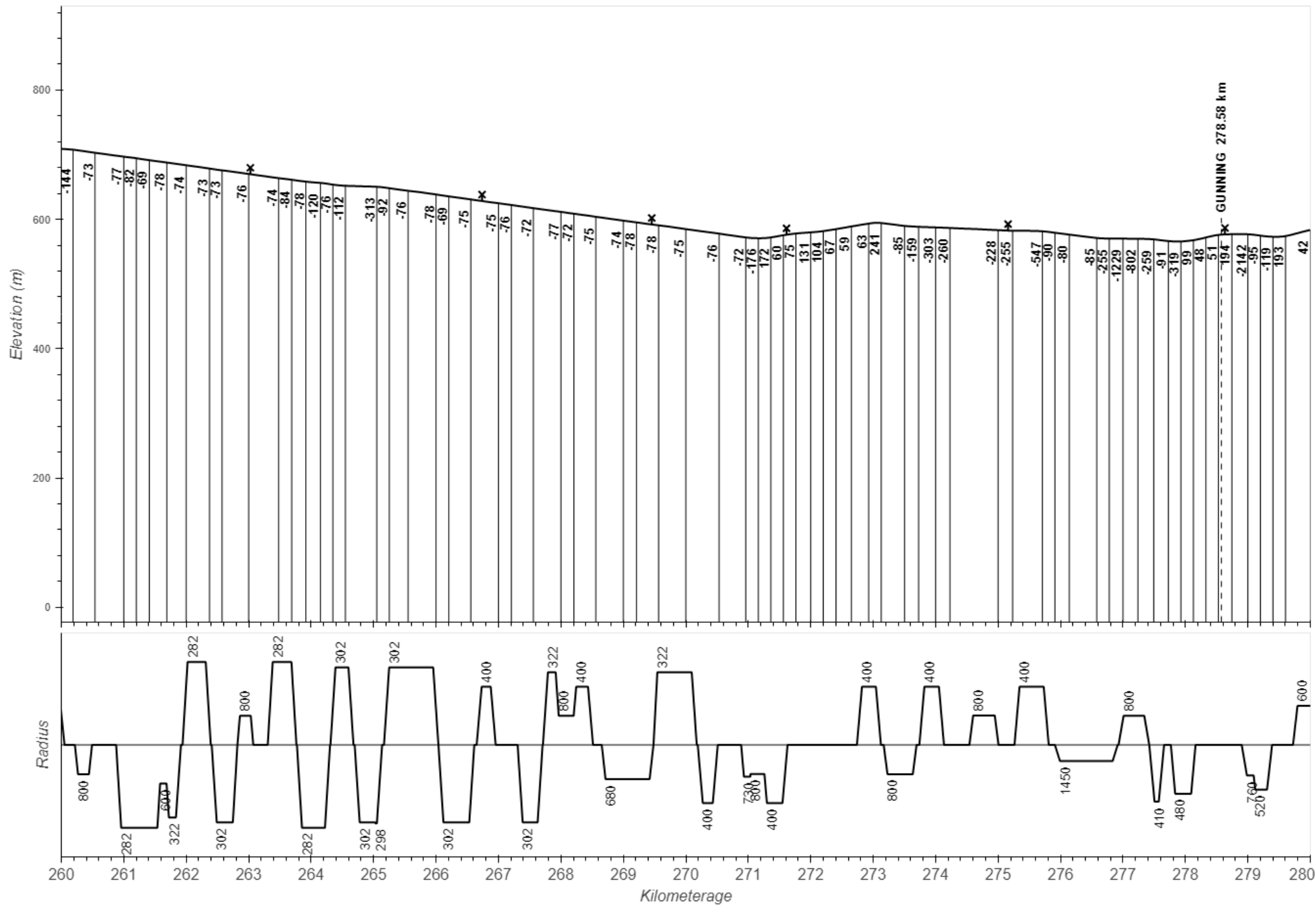
# S00 - Main South: 220 to 240 kms



# S00 - Main South: 240 to 260 kms

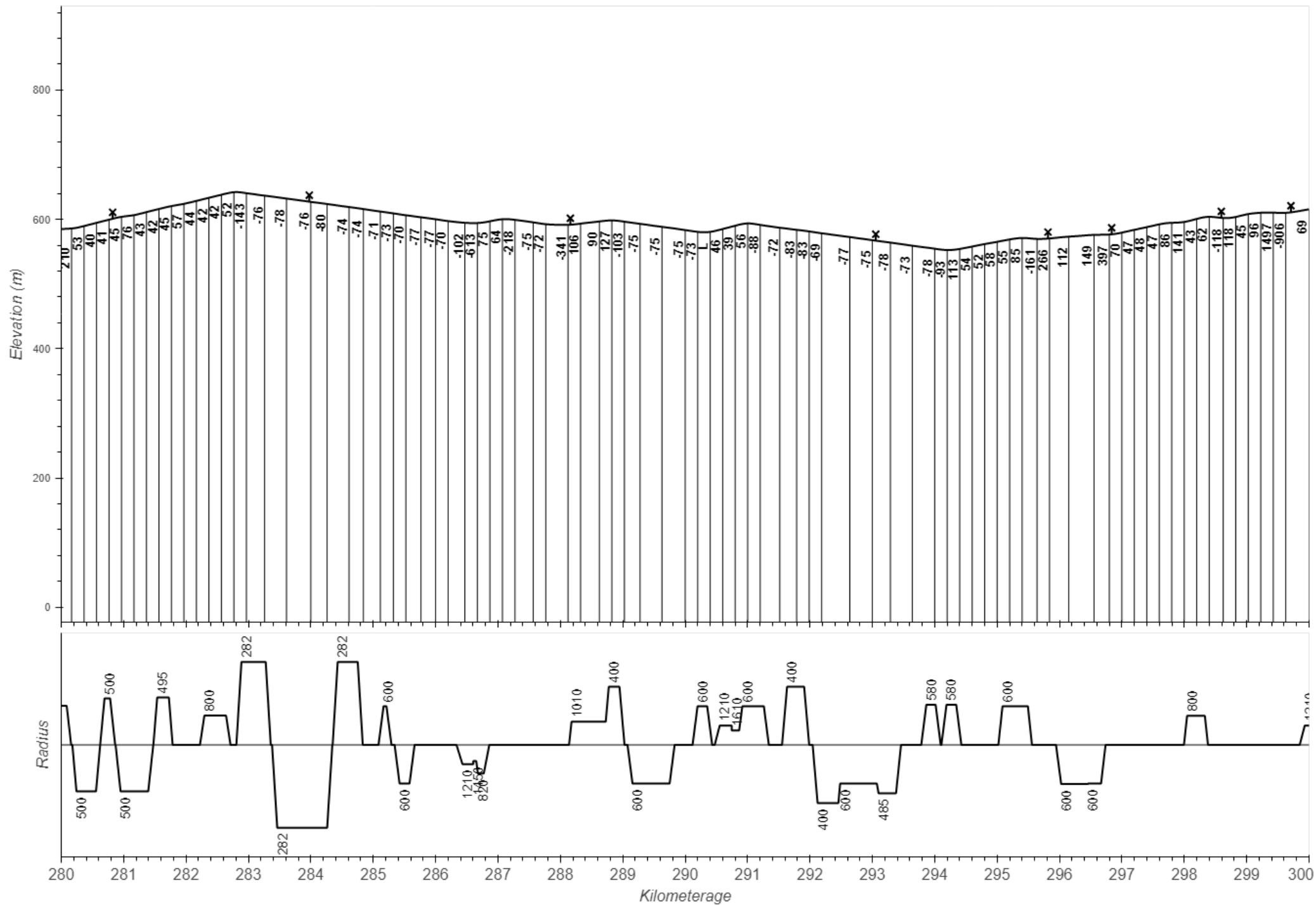


S00 - Main South: 260 to 280 kms

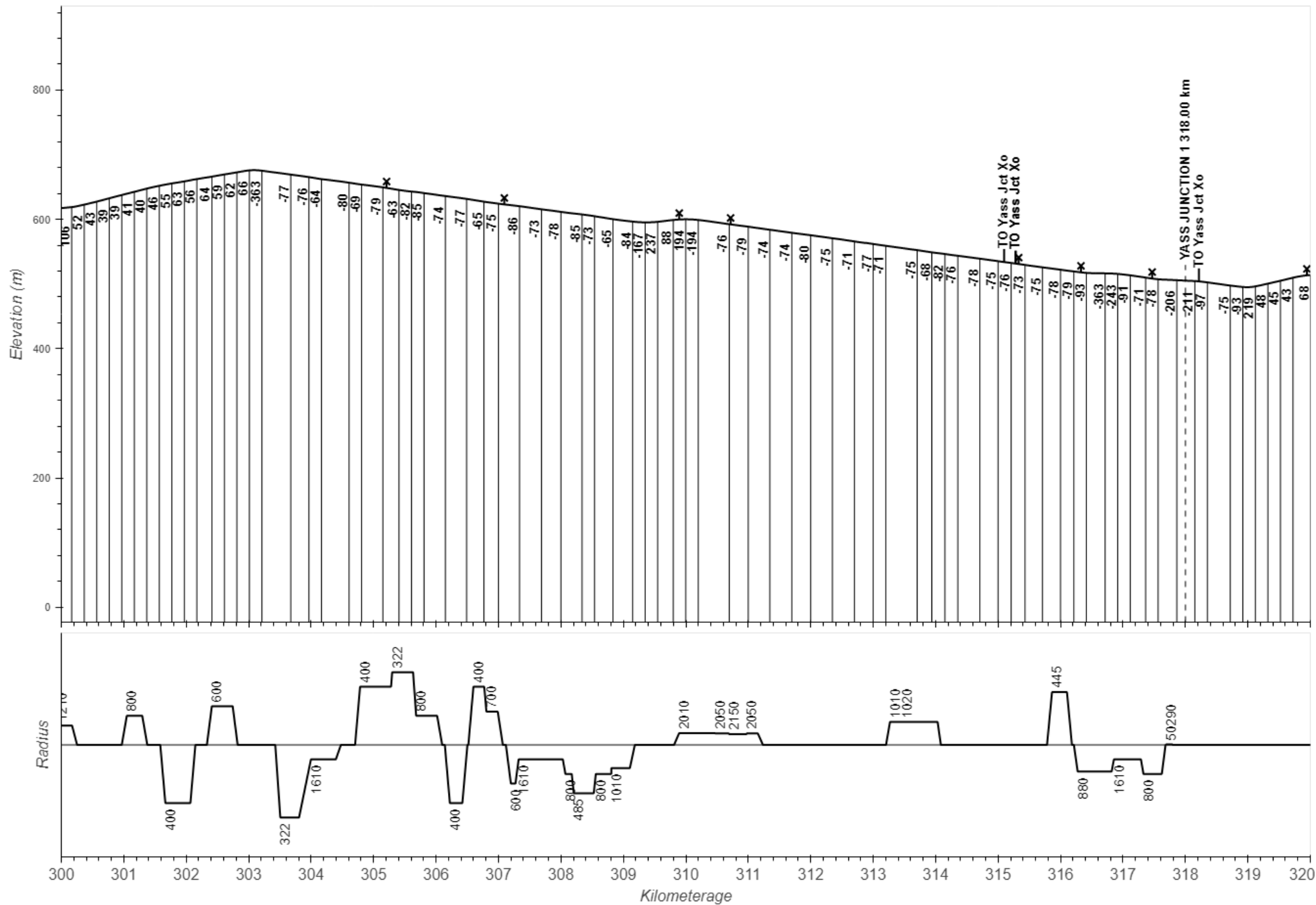




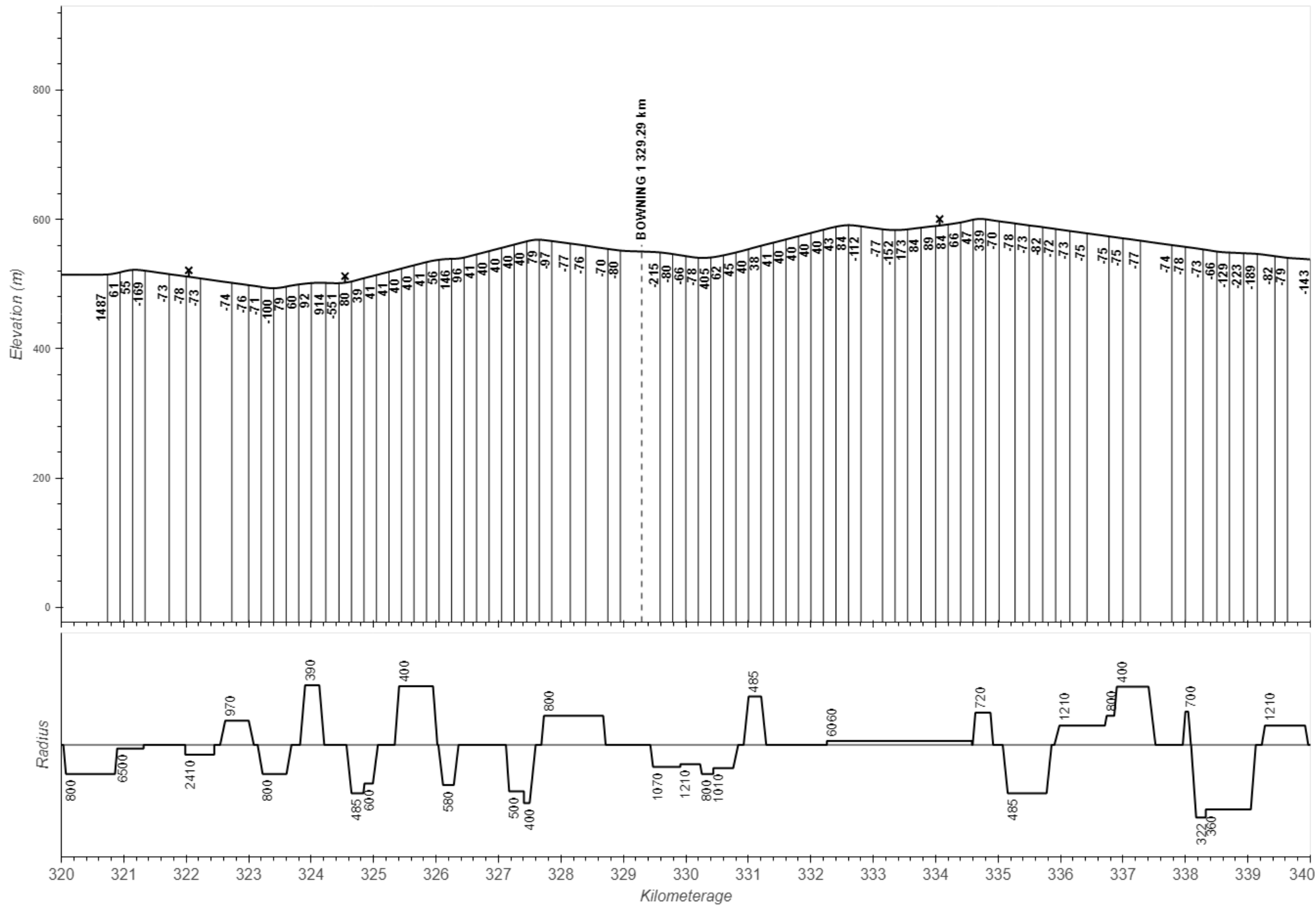
S00 - Main South: 280 to 300 kms



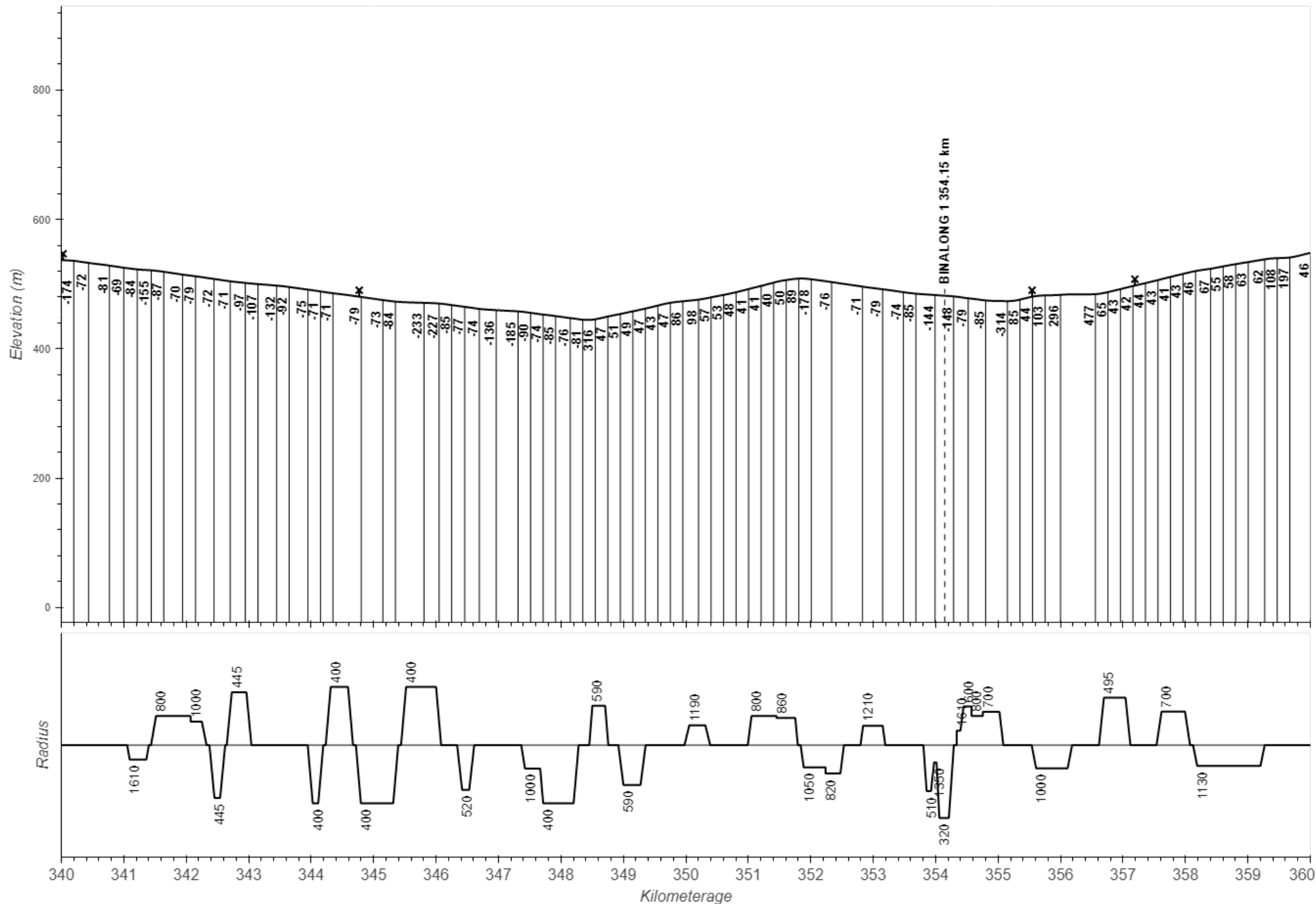
# S00 - Main South: 300 to 320 kms



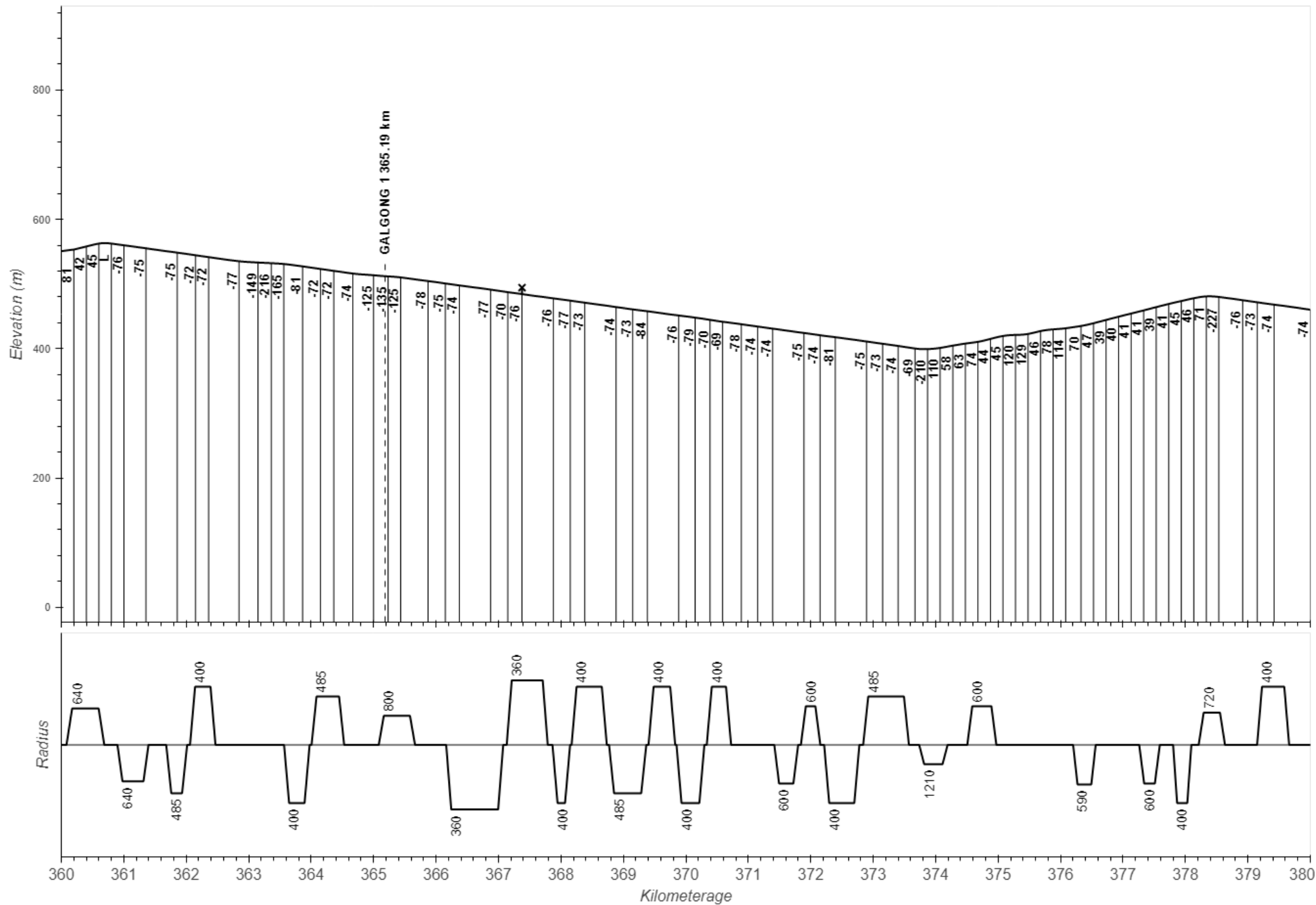
# S00 - Main South: 320 to 340 kms



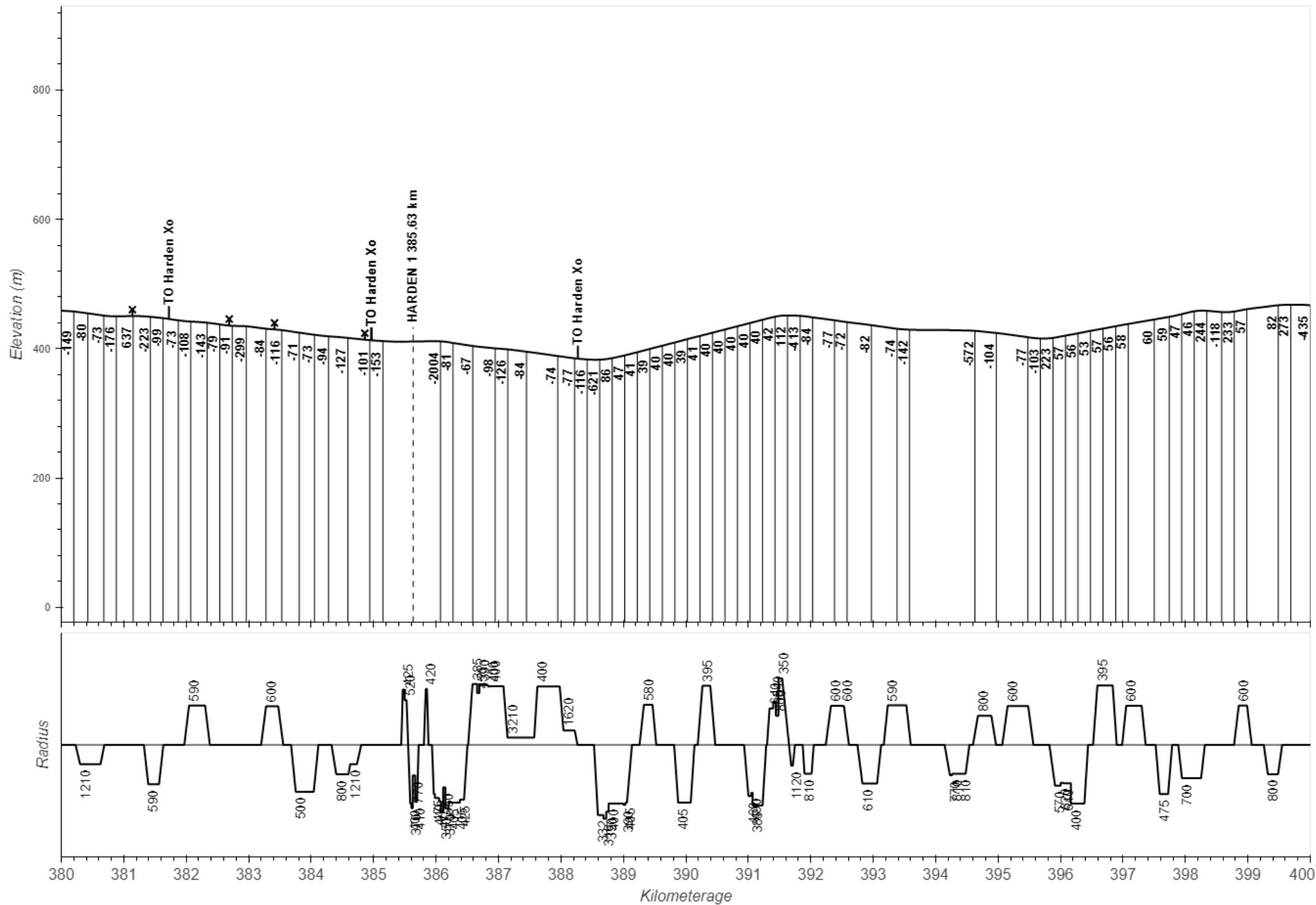
# S00 - Main South: 340 to 360 kms



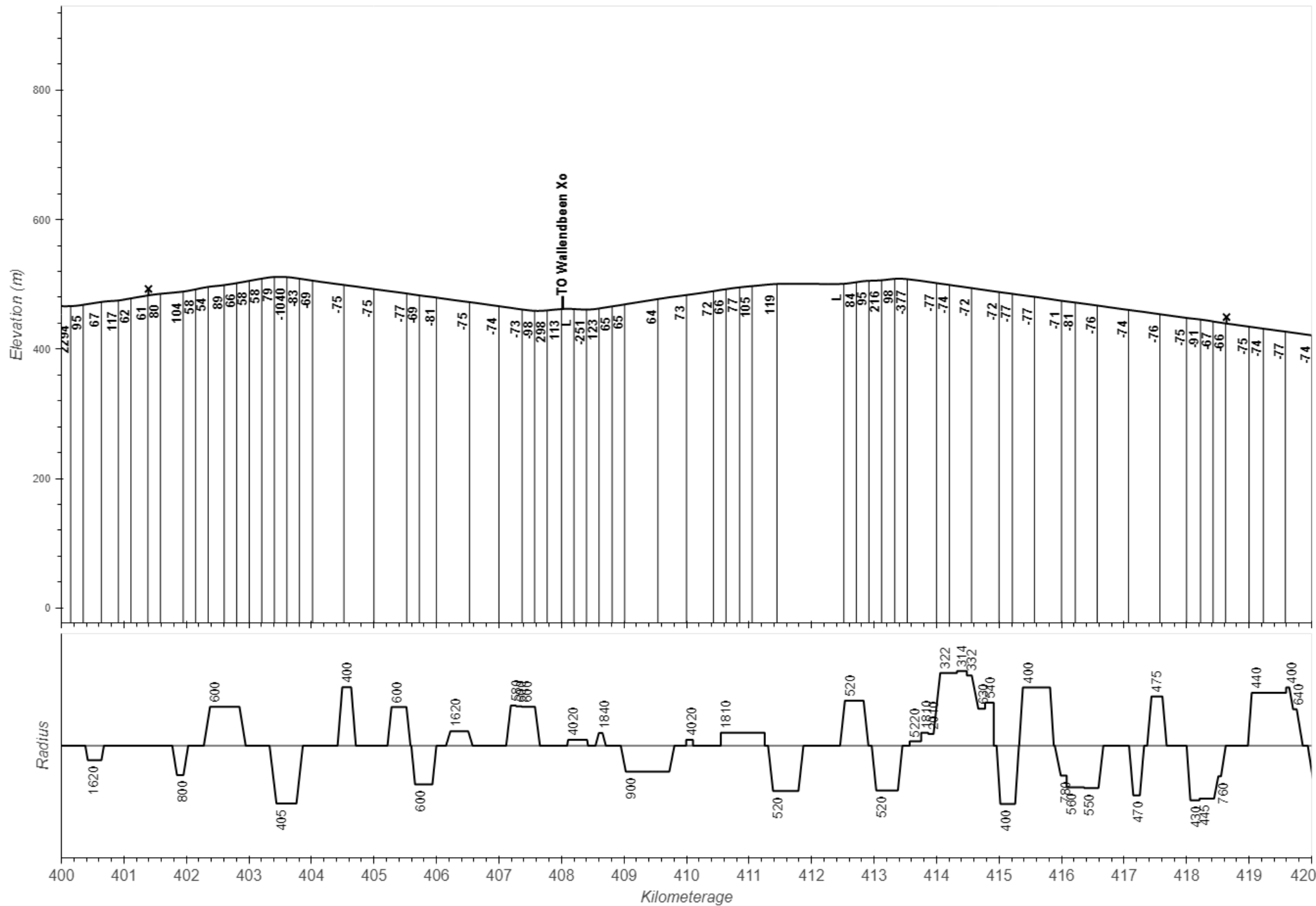
# S00 - Main South: 360 to 380 kms



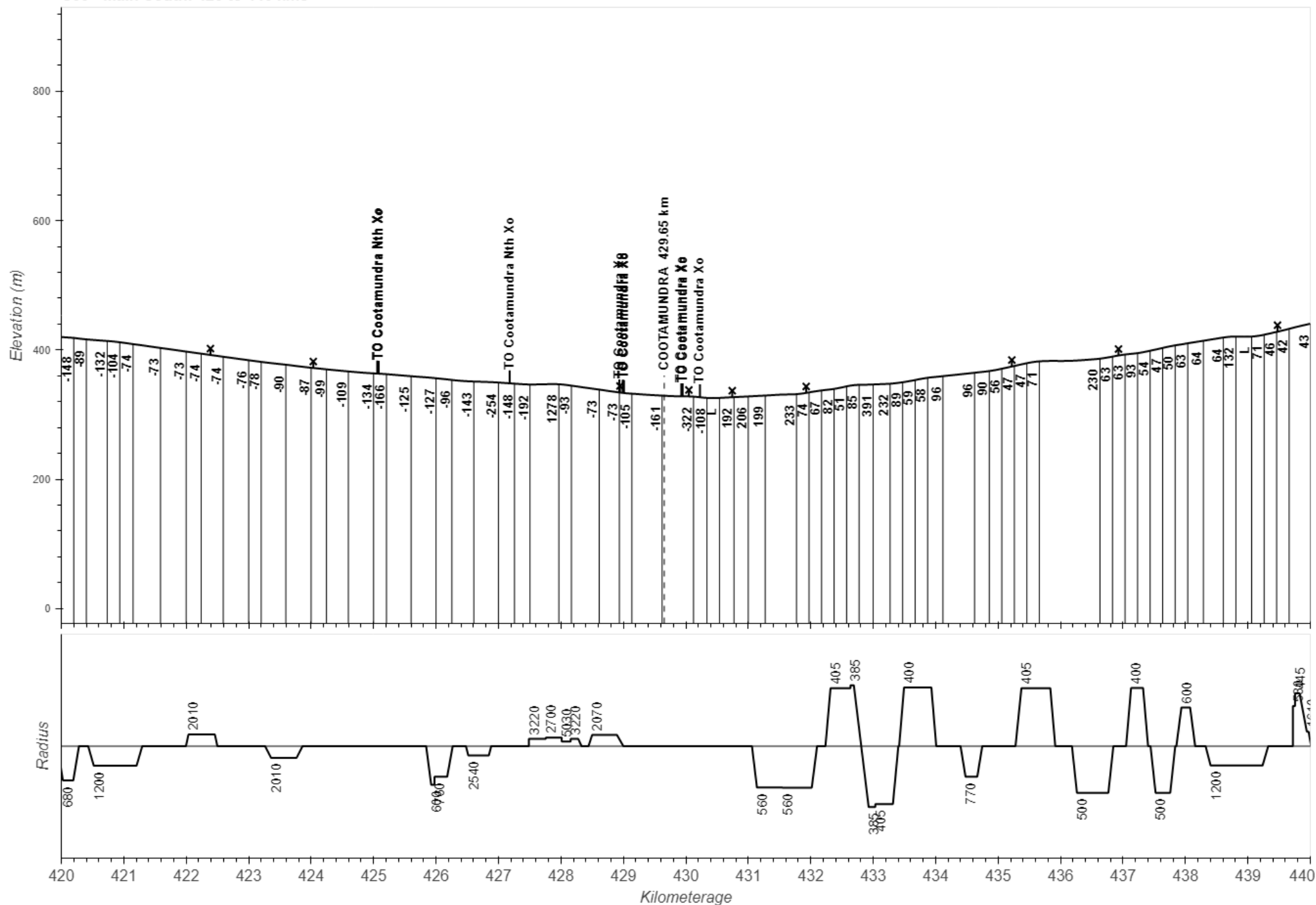
# S00 - Main South: 380 to 400 kms



# S00 - Main South: 400 to 420 kms

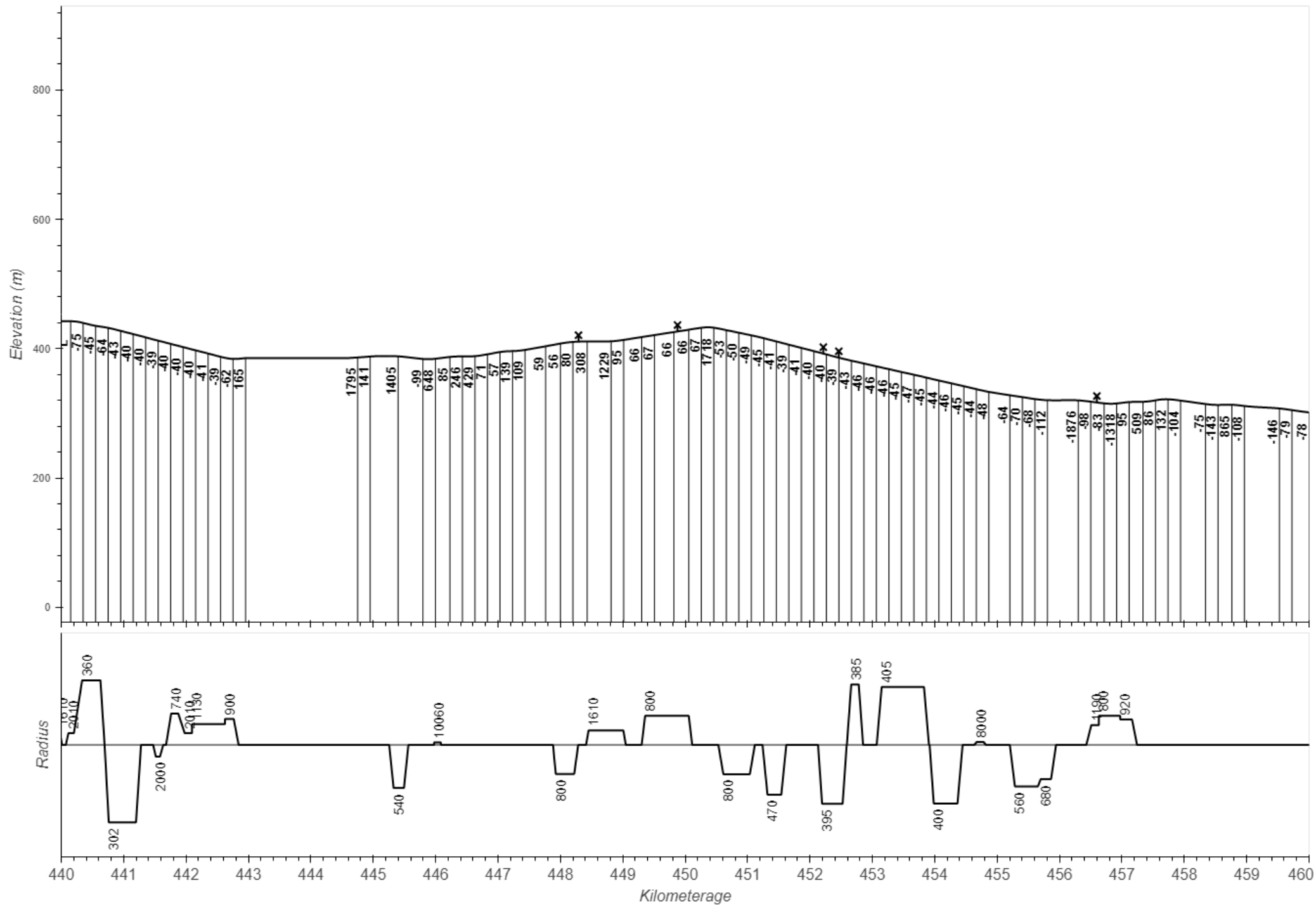


# S00 - Main South: 420 to 440 kms

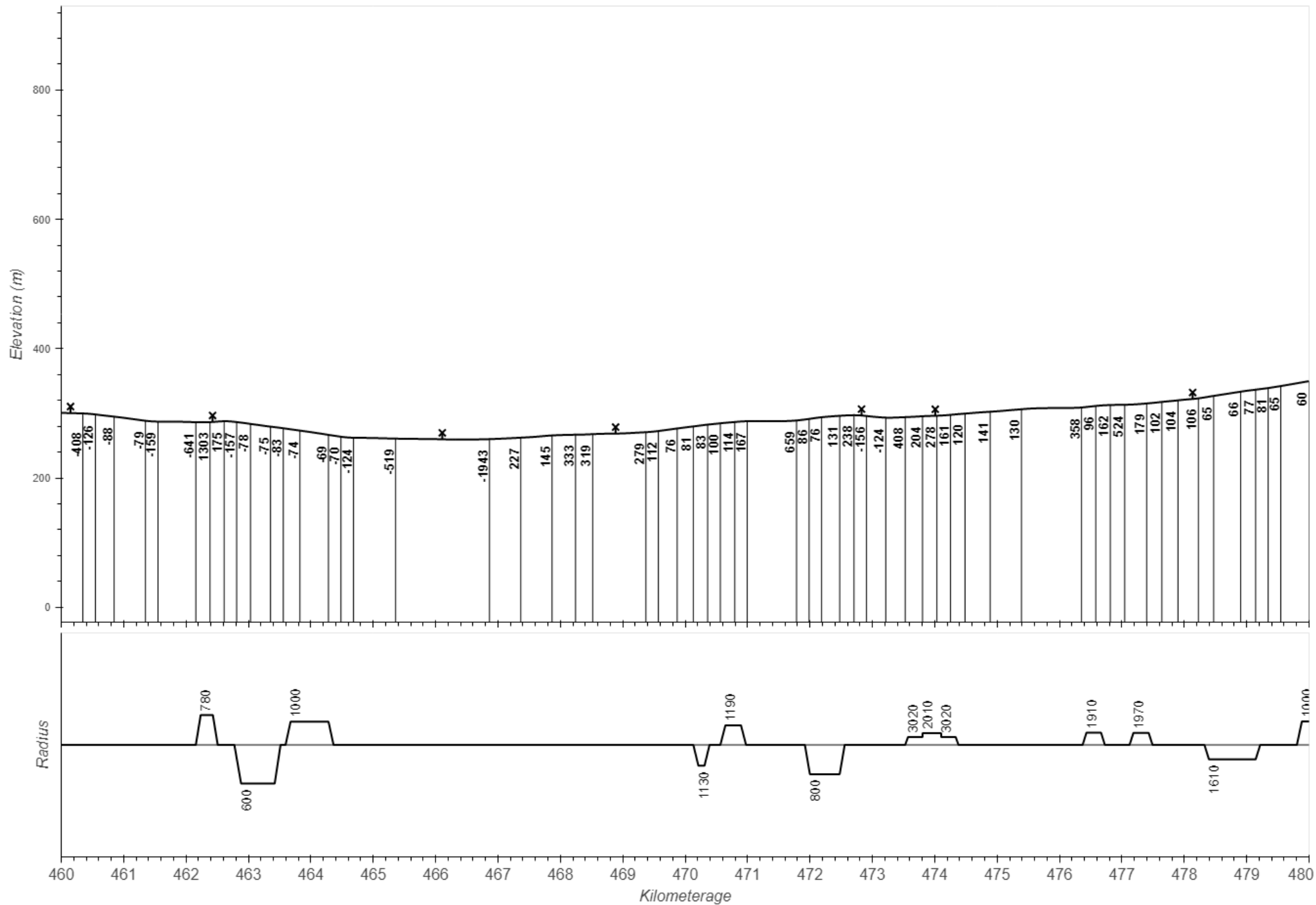




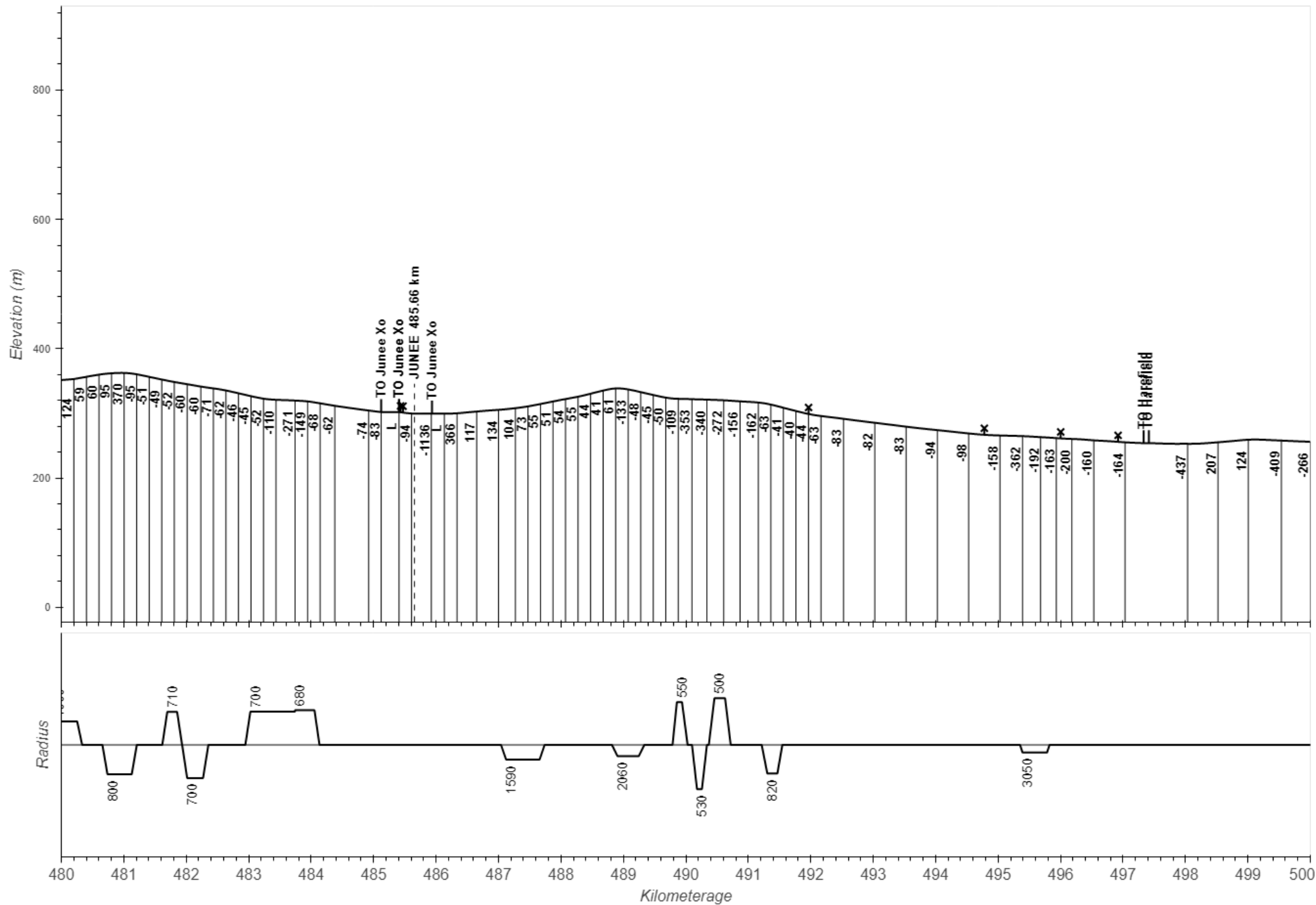
S00 - Main South: 440 to 460 kms



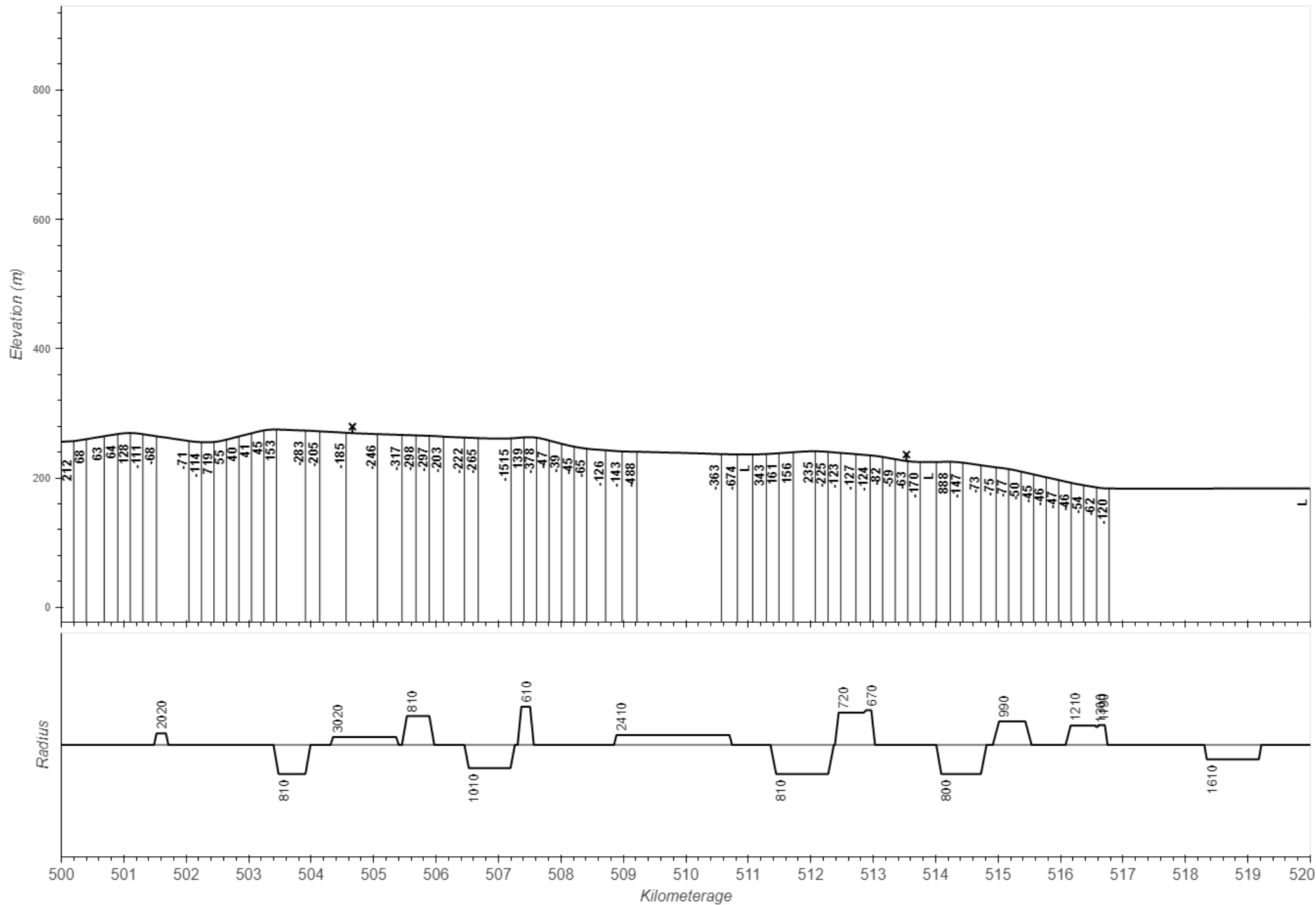
S00 - Main South: 460 to 480 kms



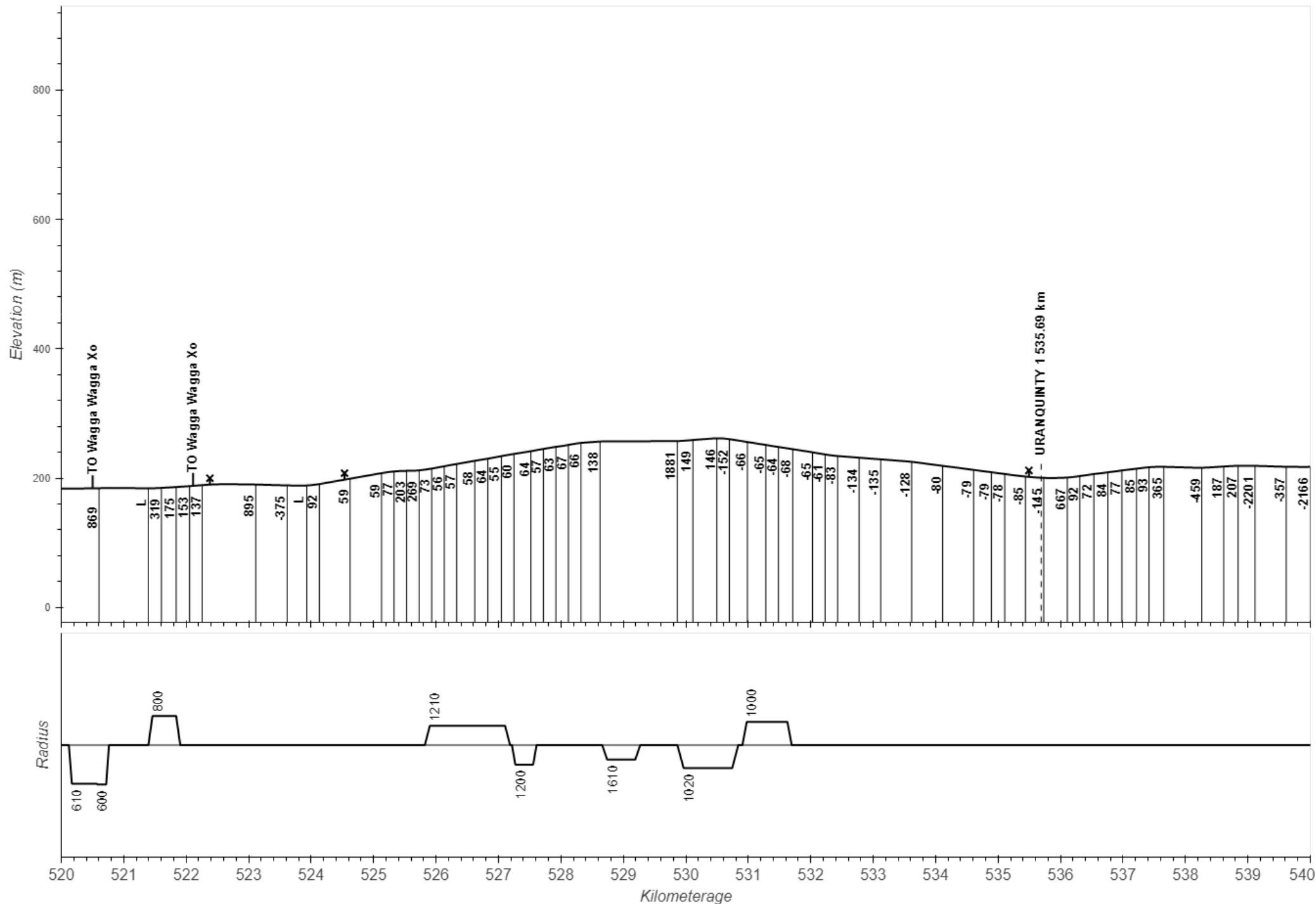
# S00 - Main South: 480 to 500 kms



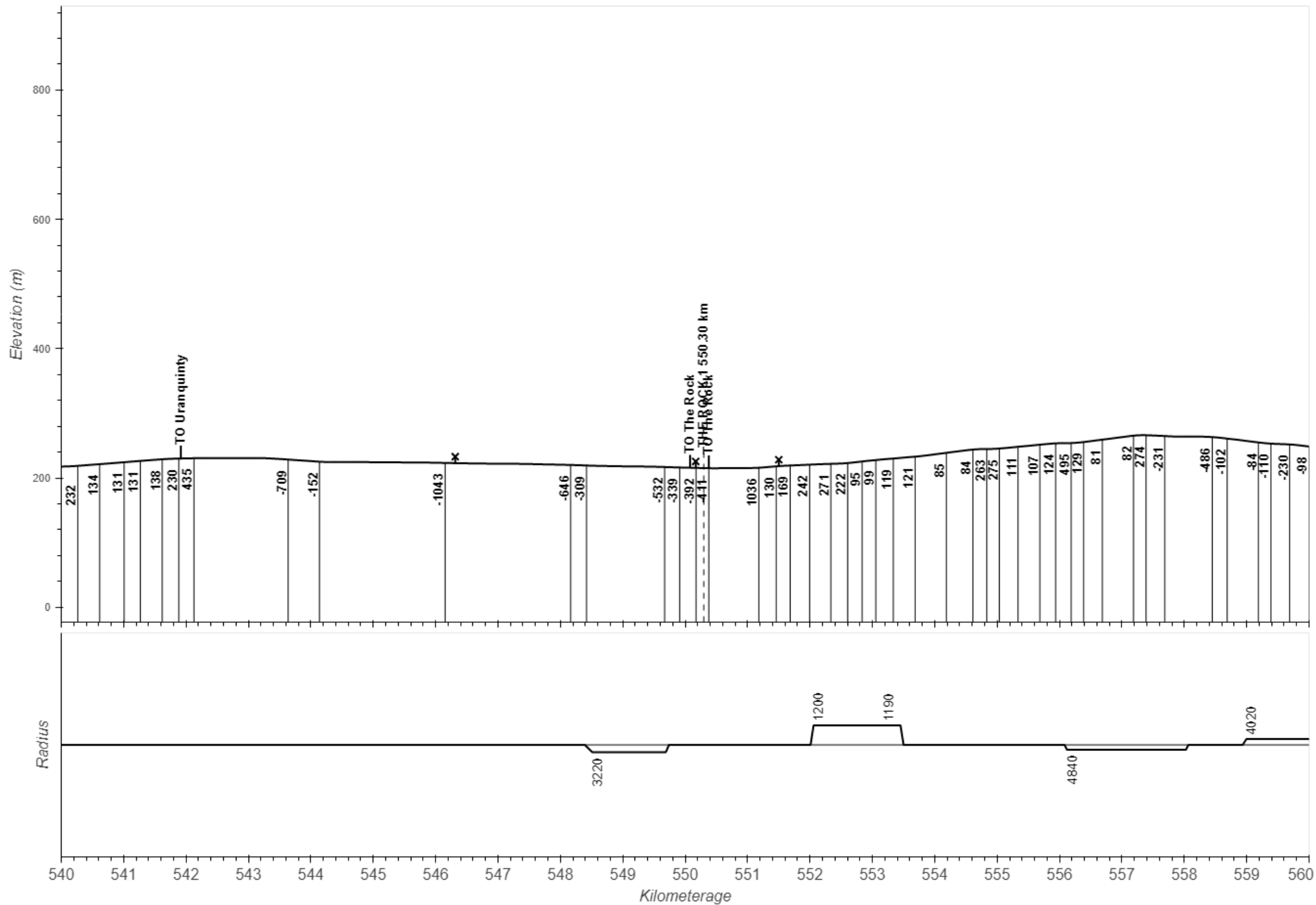
# S00 - Main South: 500 to 520 kms



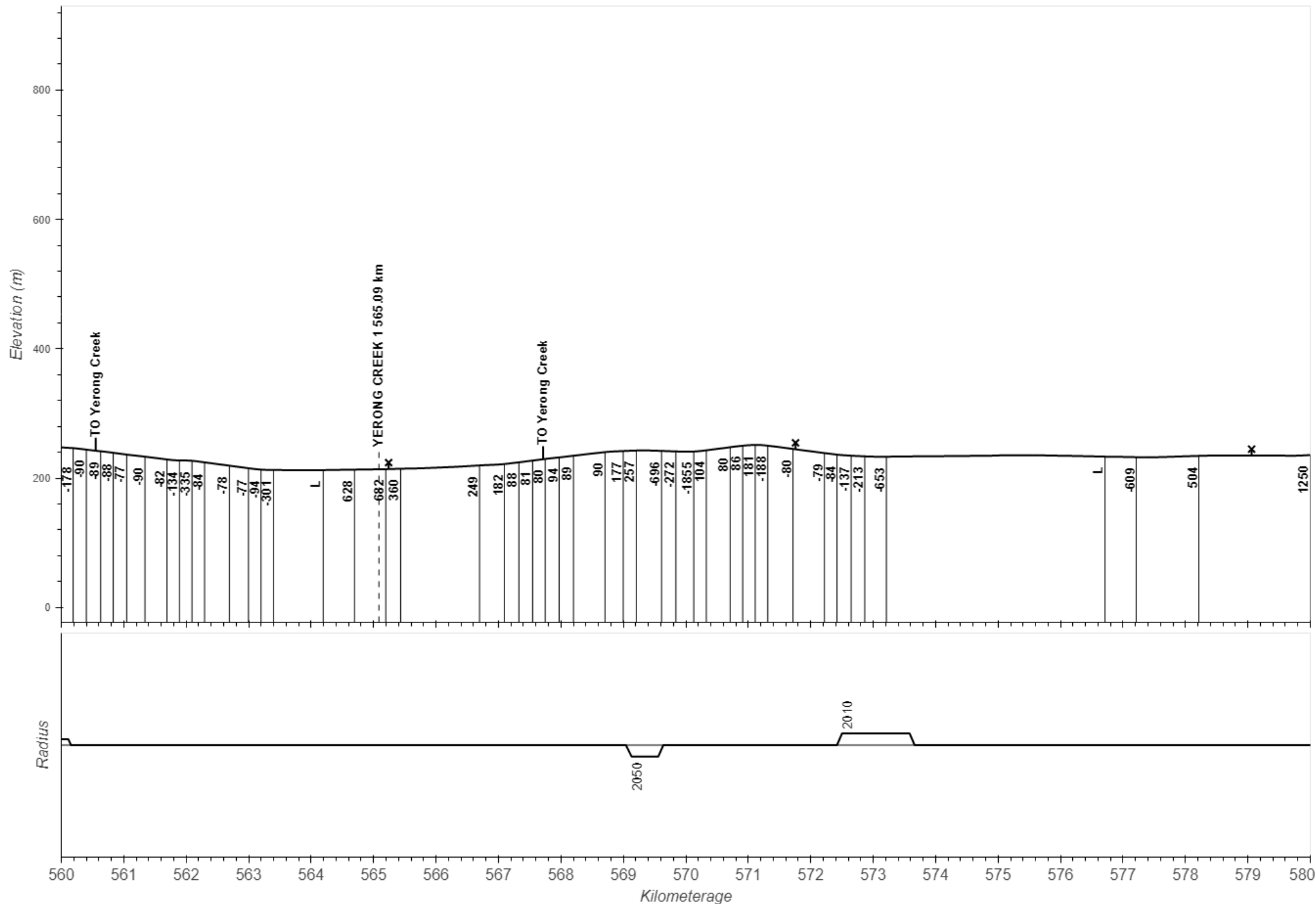
# S00 - Main South: 520 to 540 kms



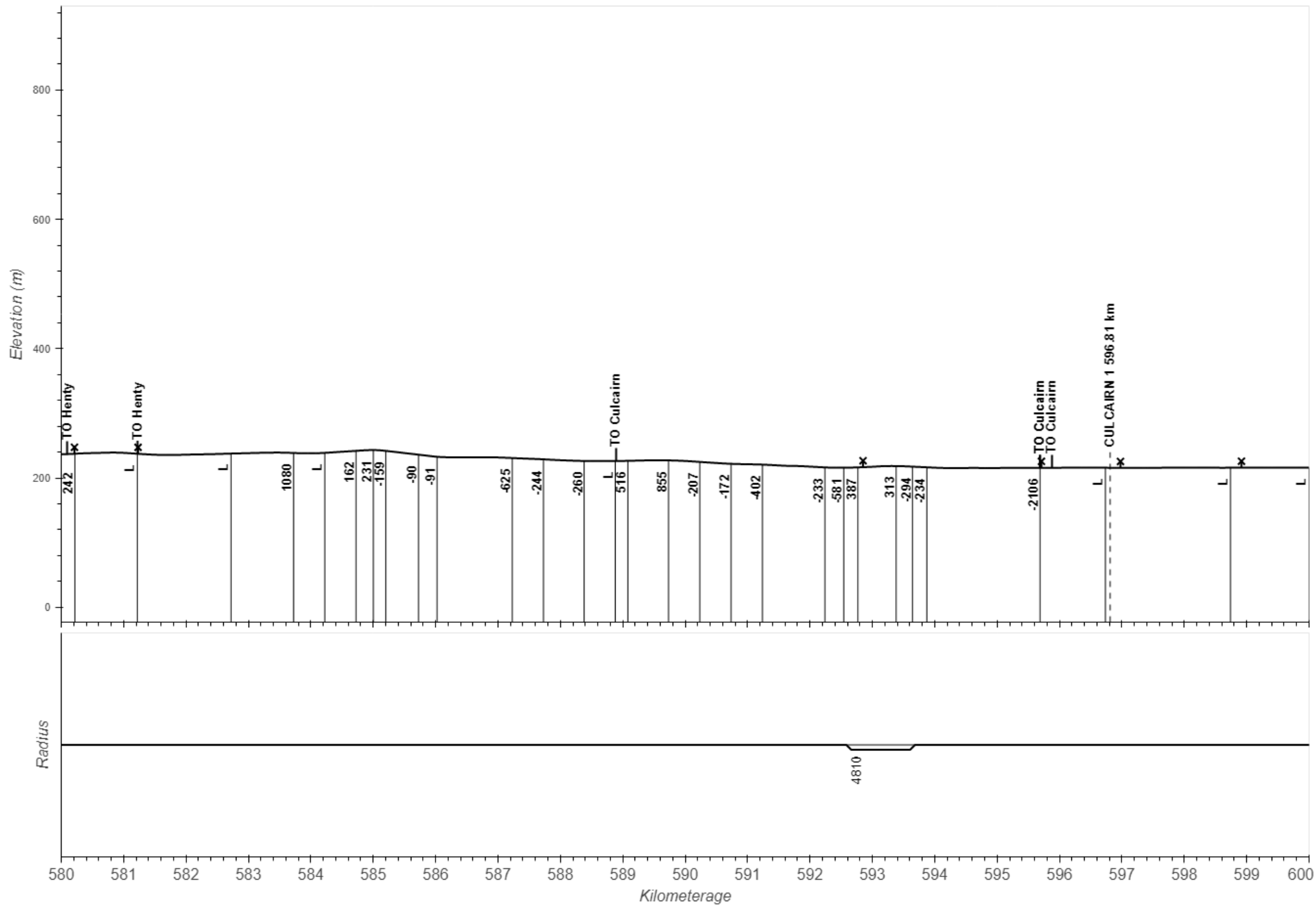
# S00 - Main South: 540 to 560 kms



# S00 - Main South: 560 to 580 kms

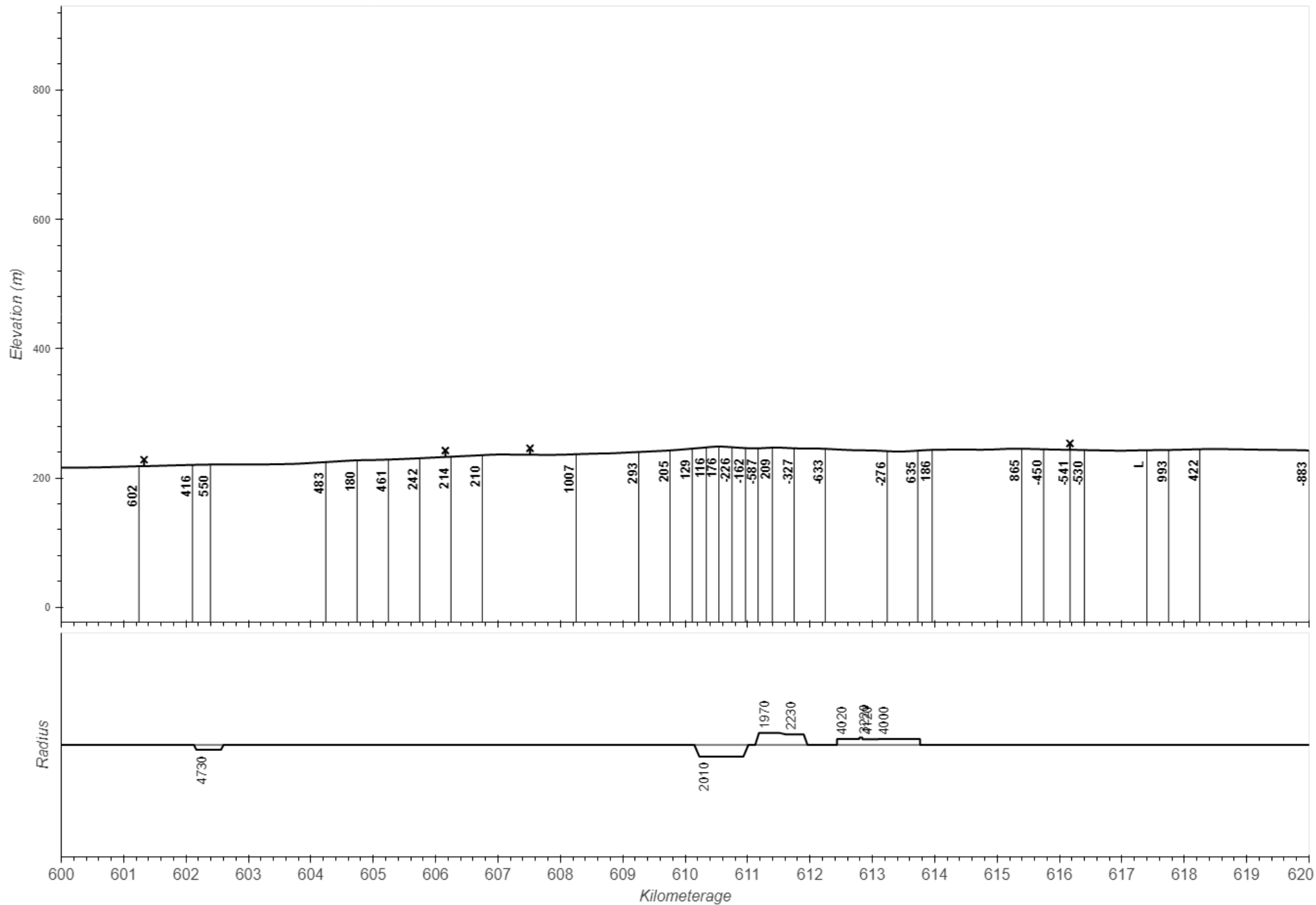


# S00 - Main South: 580 to 600 kms

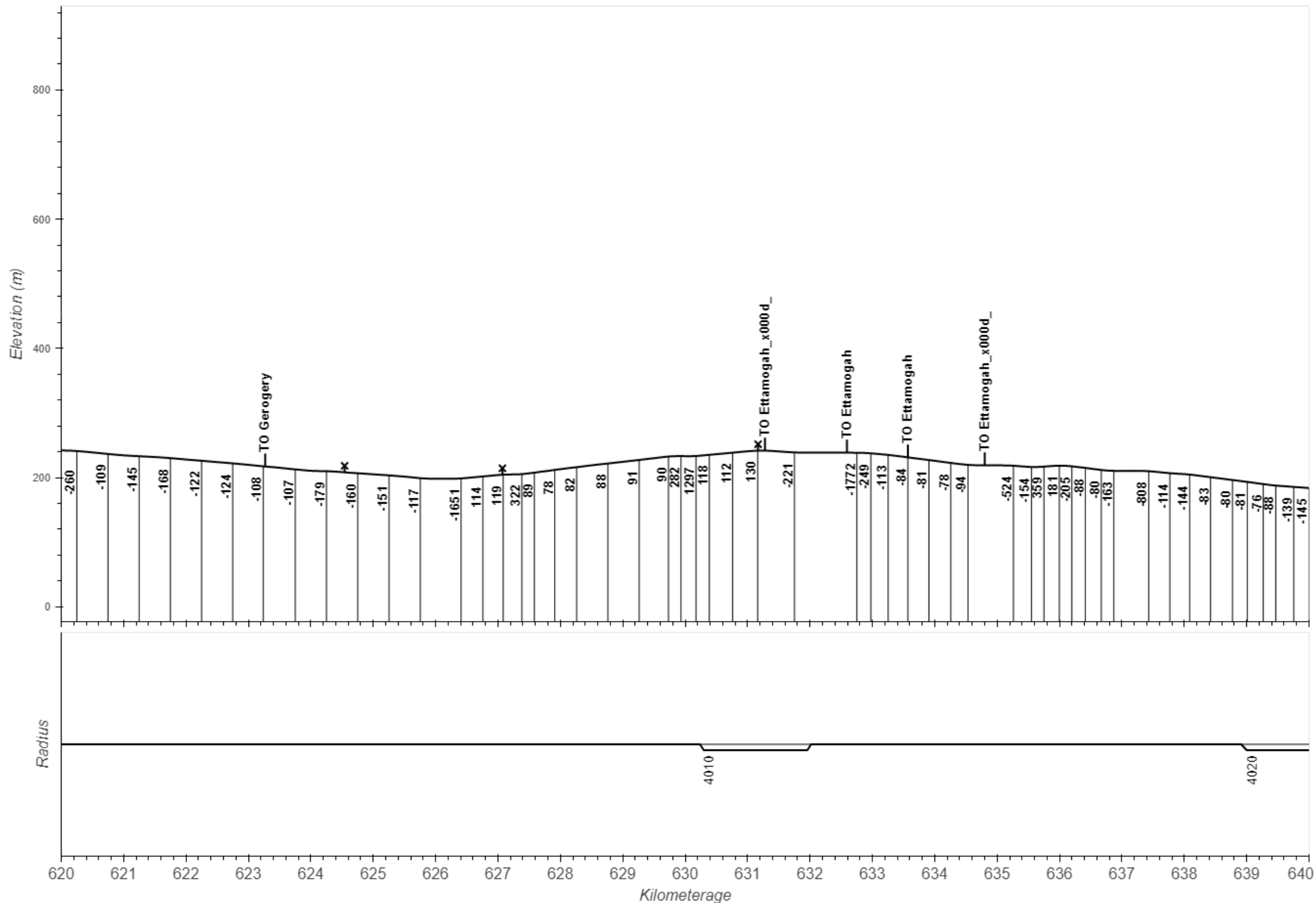




# S00 - Main South: 600 to 620 kms



# S00 - Main South: 620 to 640 kms



# S00 - Main South: 640 to 660 kms

