

# EarthCARE Orbit Monitoring Report

## Orbit Scenario File vs Predicted Orbit Files

Report Generation Date: 2024-06-17T08:00:00

Mission and System Analysis Section (ESTEC/EOP-PES)

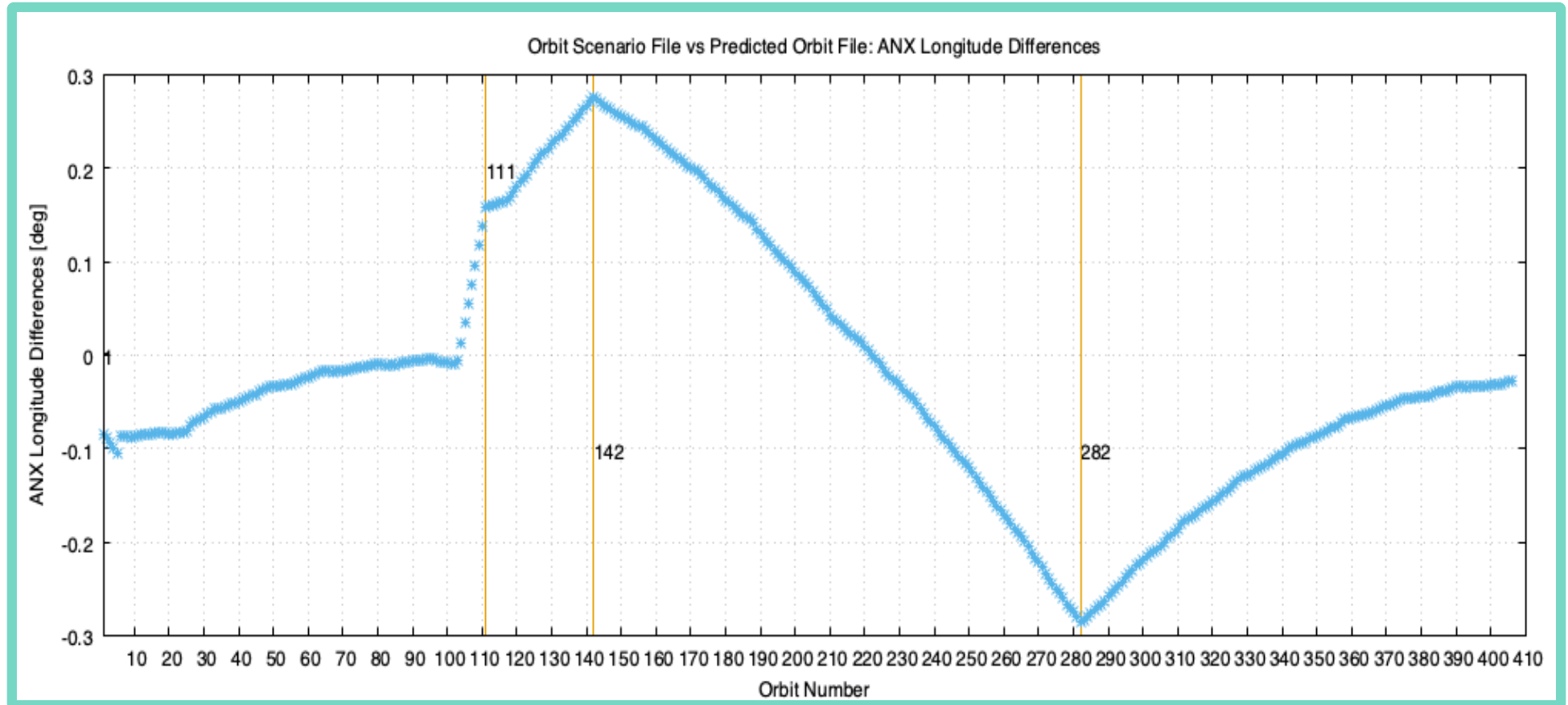
### Orbit Scenario File

|                 |   |
|-----------------|---|
| <b>Filename</b> | ECA_EXAA_MPL_ORBSCT_20240528T214917Z_99999999T9999999Z_0004.EOF |
|-----------------|---|

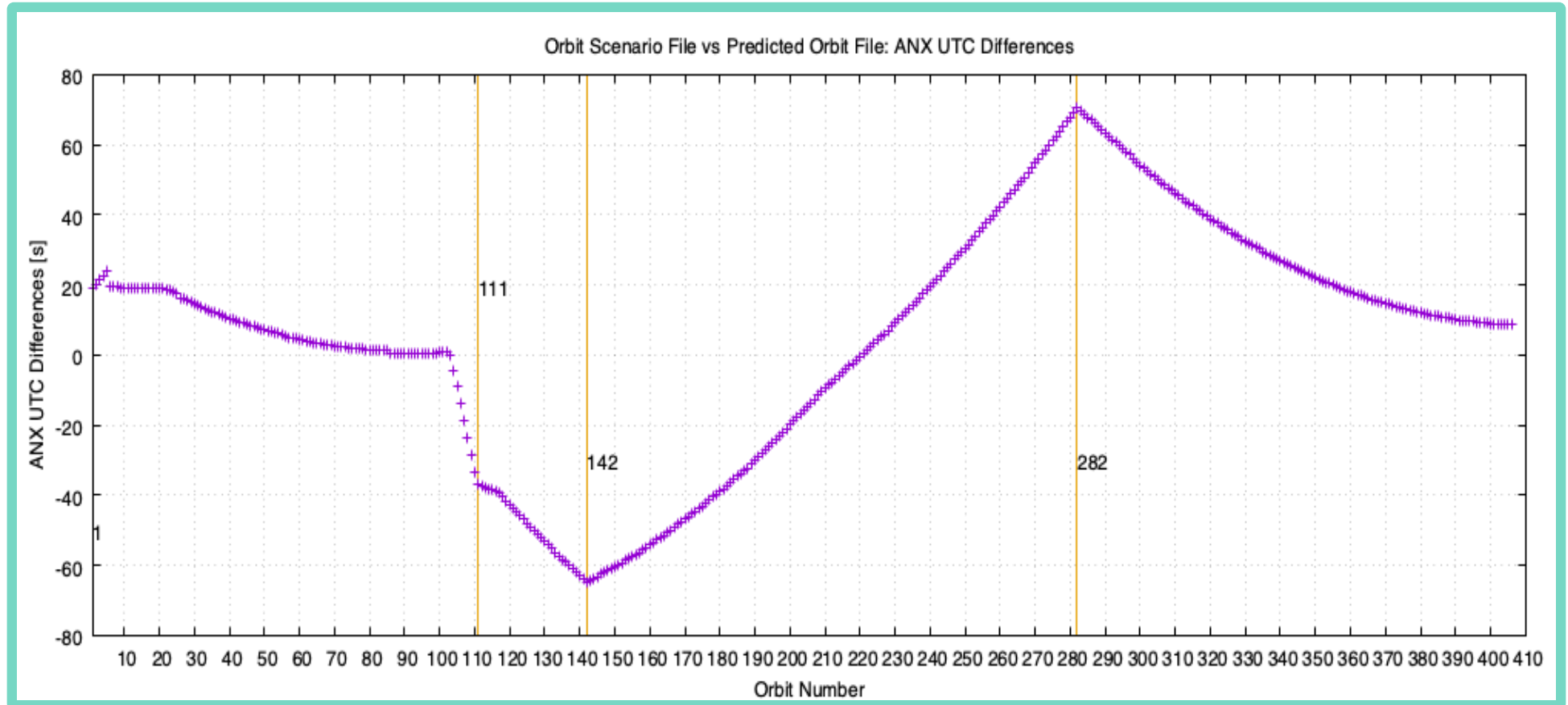
### Reported Time Interval

|                             |                            |
|-----------------------------|----------------------------|
| <b>Begin UTC Time</b>       | 2024-05-28T21:48:58.069953 |
| <b>Begin Absolute Orbit</b> | 1                          |
| <b>End UTC Time</b>         | 2024-06-23T23:35:41.352792 |
| <b>End Absolute Orbit</b>   | 406                        |

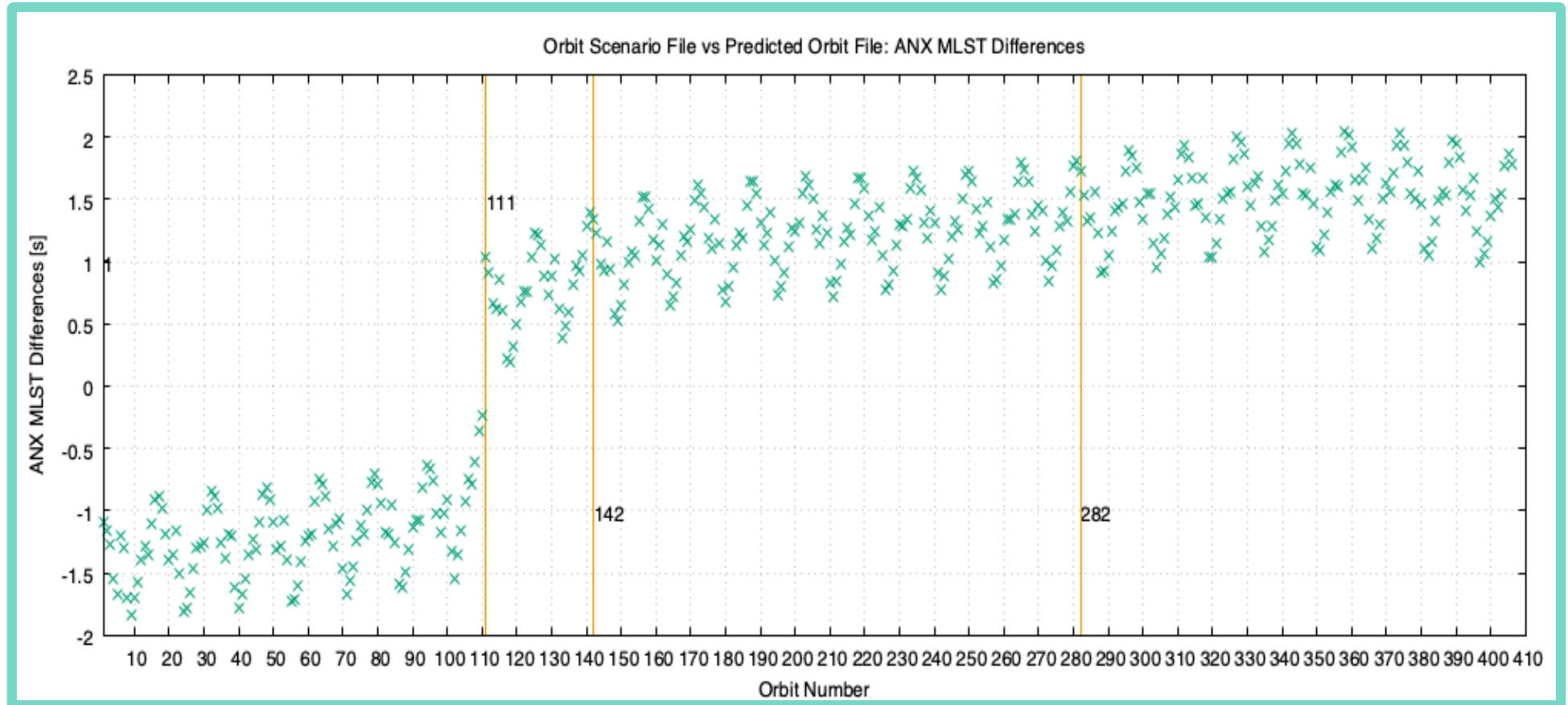
# Differences in ANX Longitude



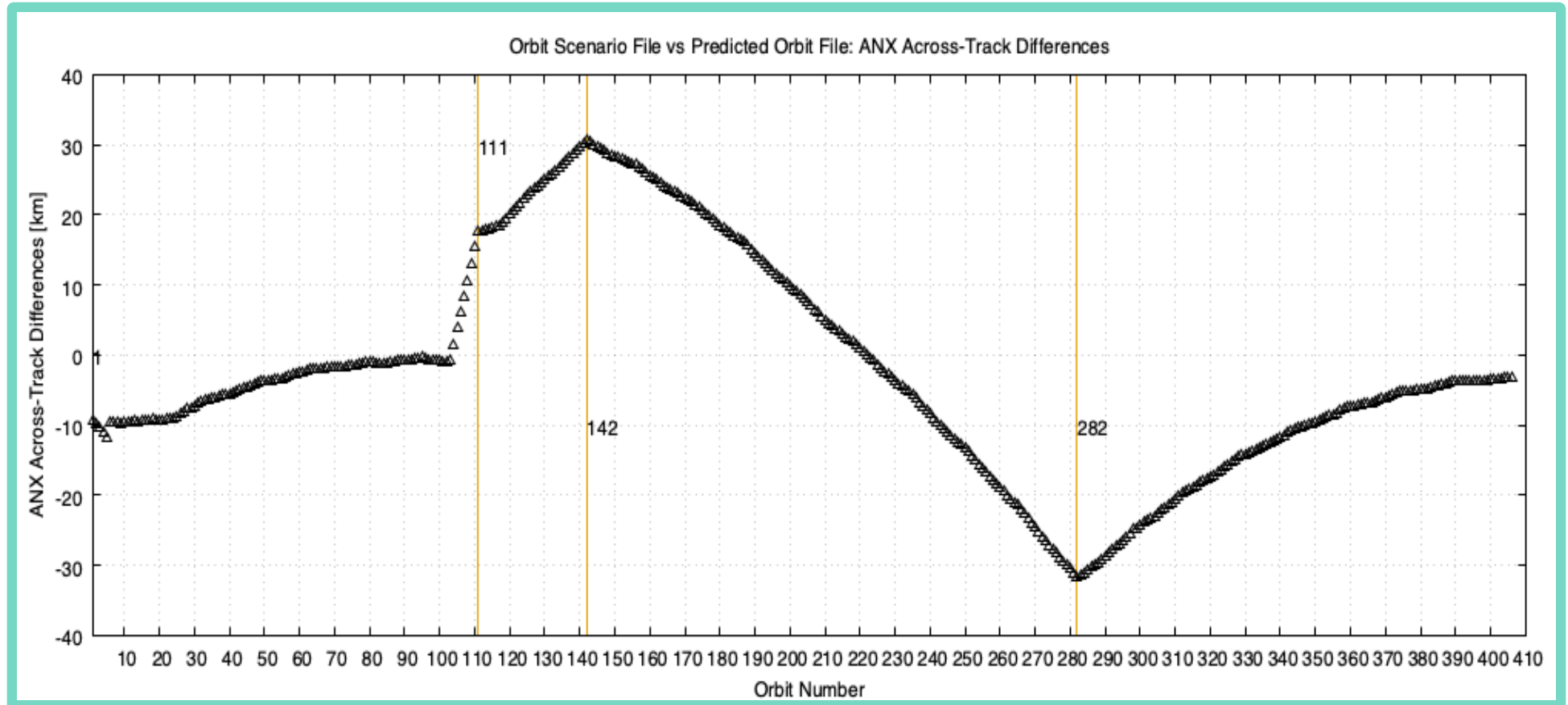
# Differences in ANX UTC Time



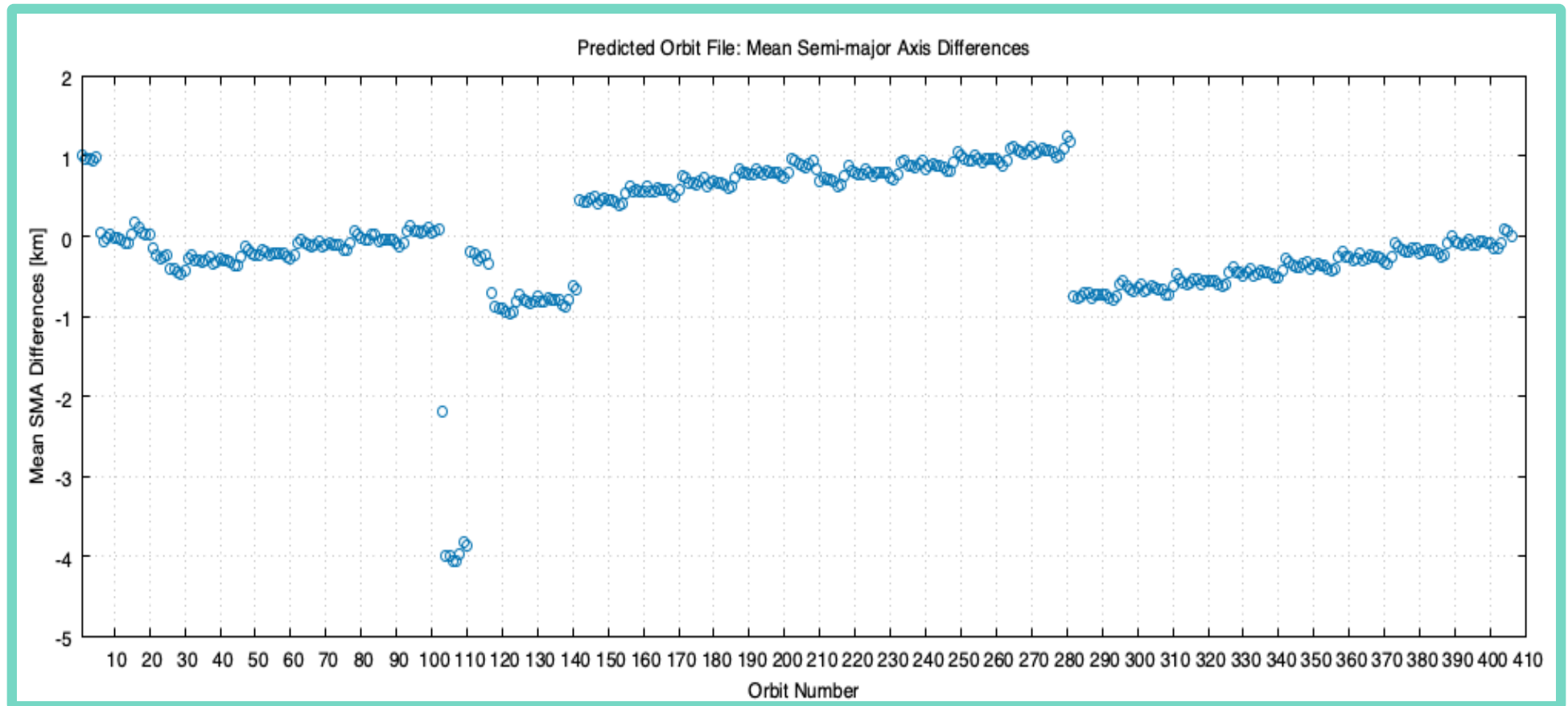
# Differences in ANX Mean Local Solar Time



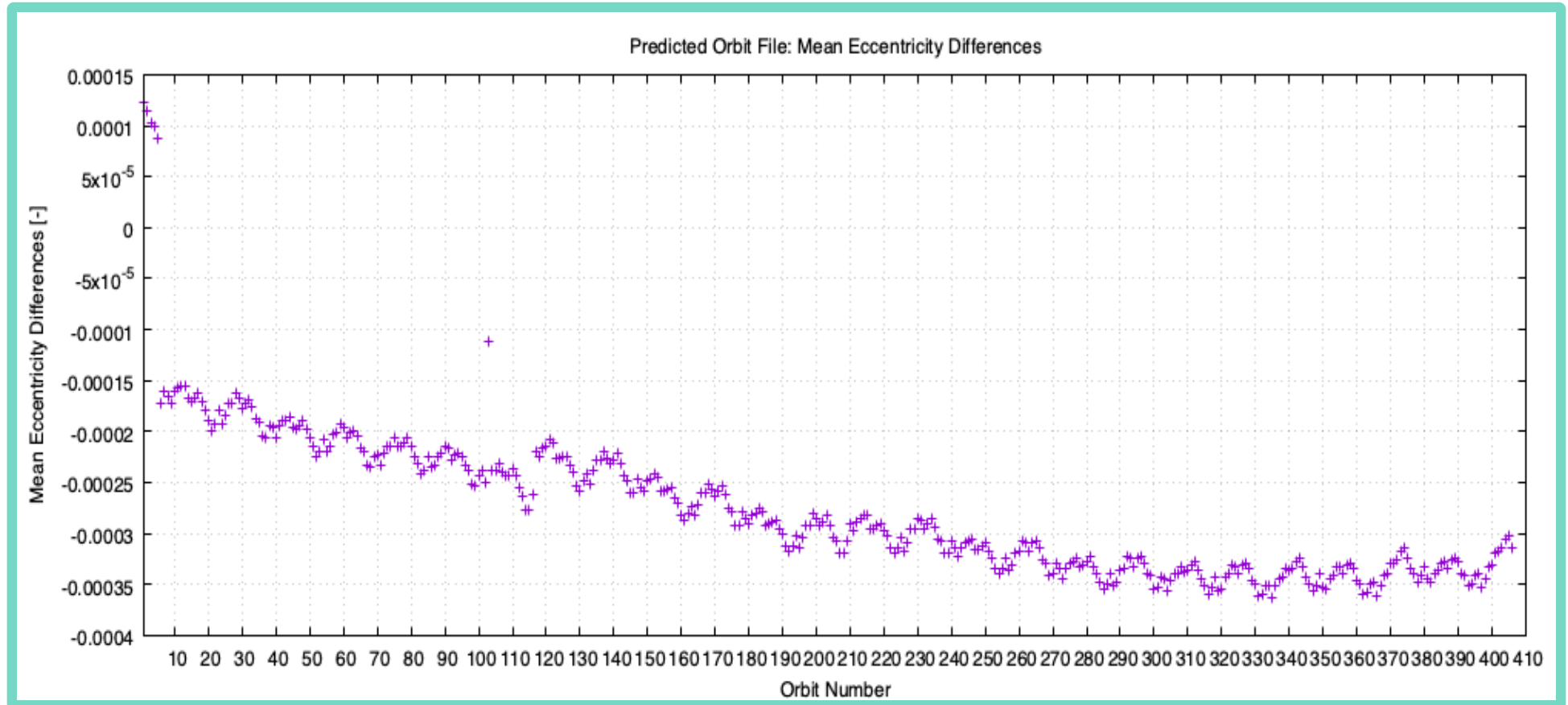
# Differences in ANX Across-track



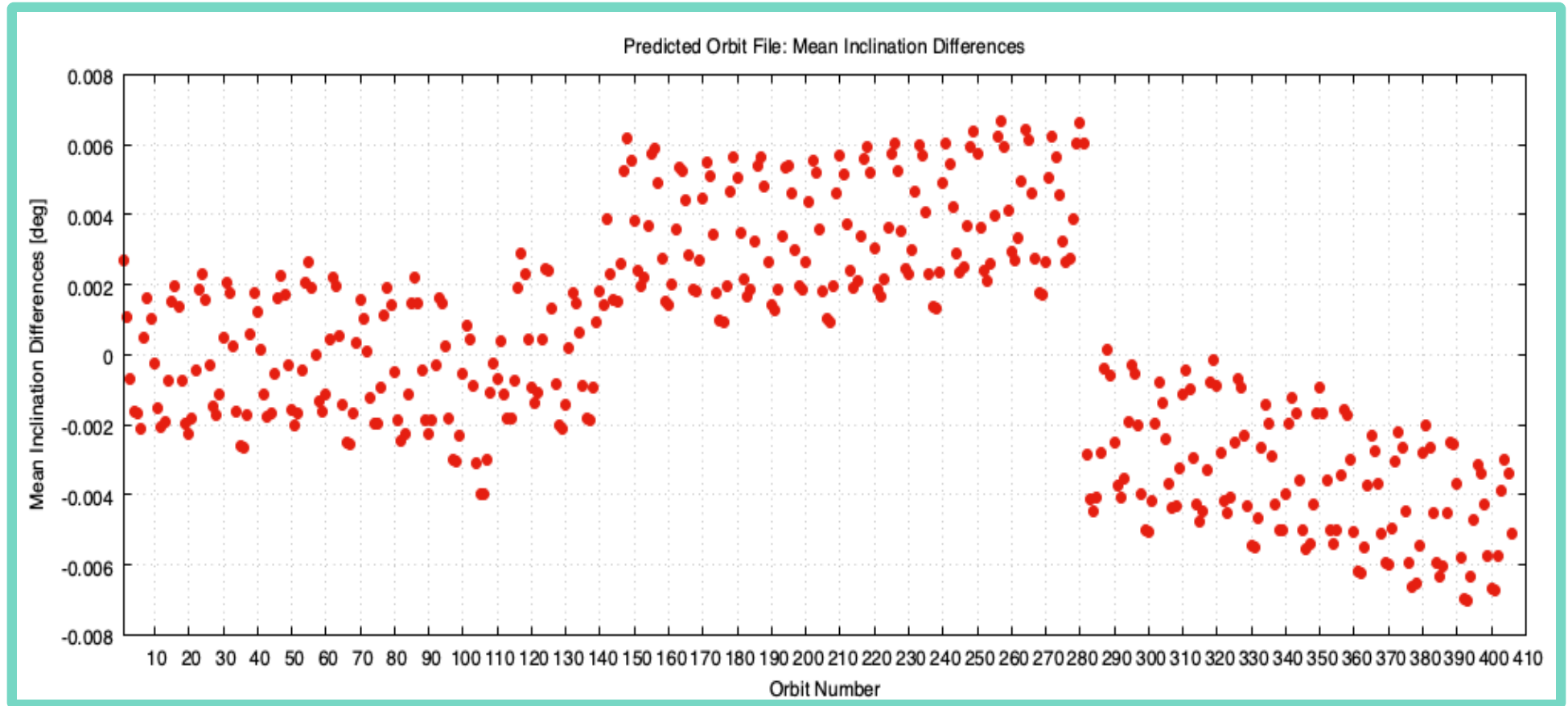
# Differences in Mean Semi-major Axis



# Differences in Eccentricity

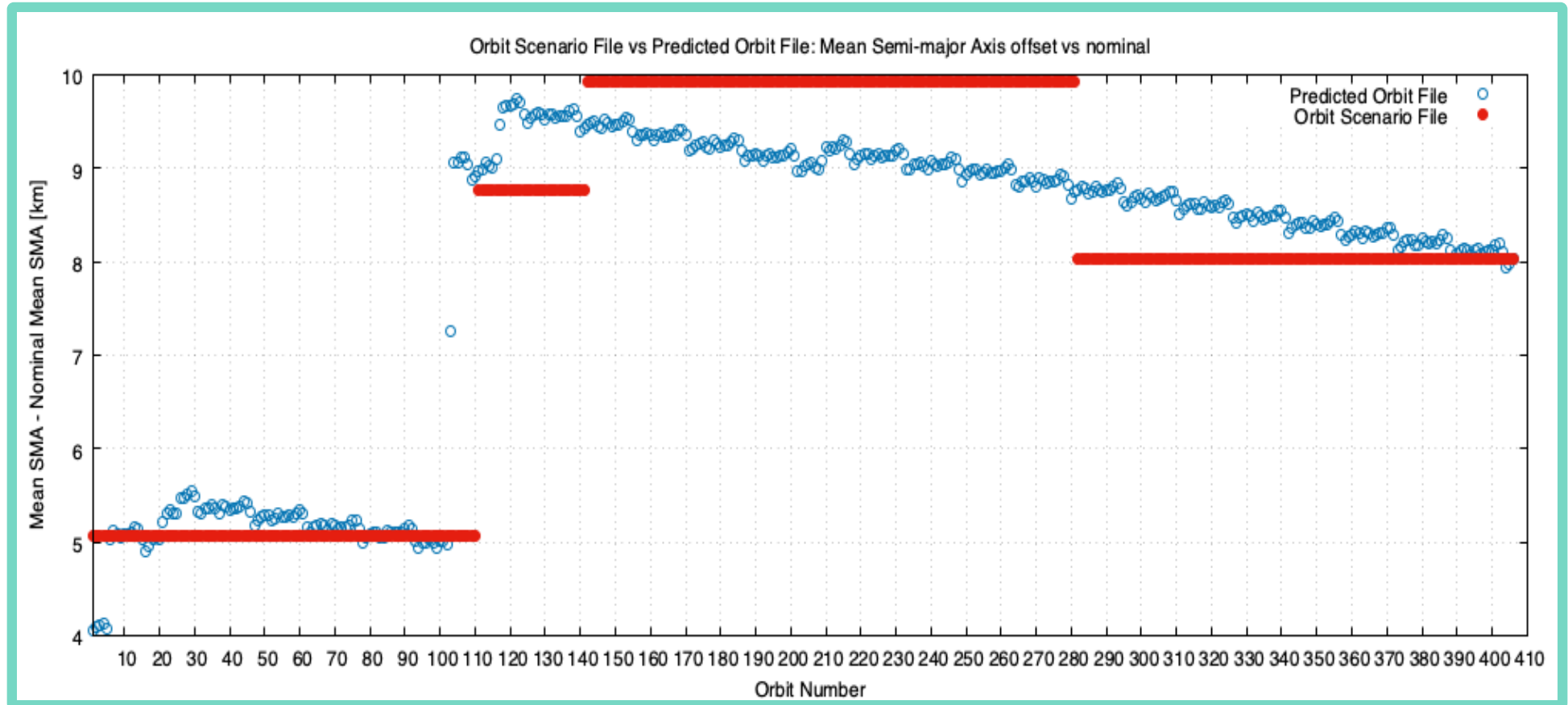


# Differences in Mean Inclination

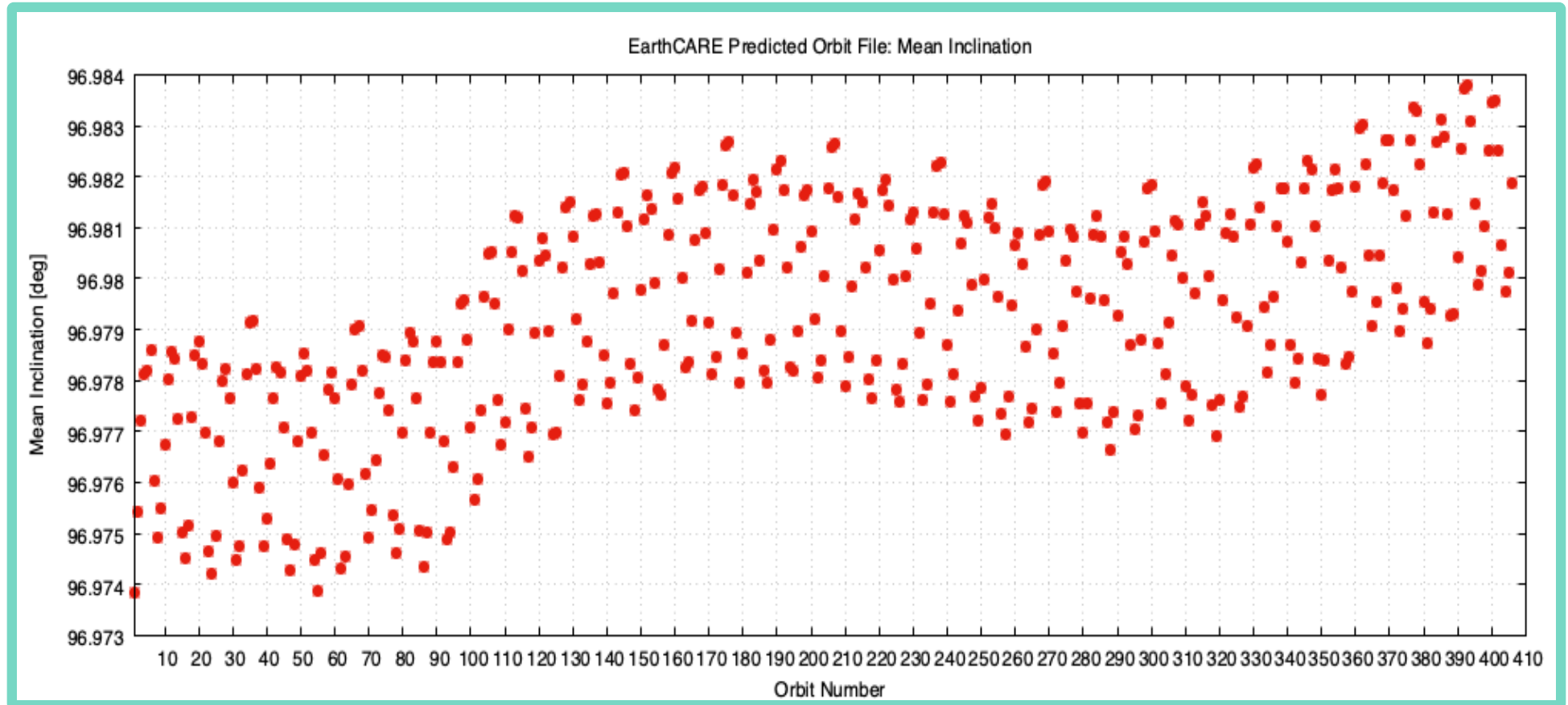




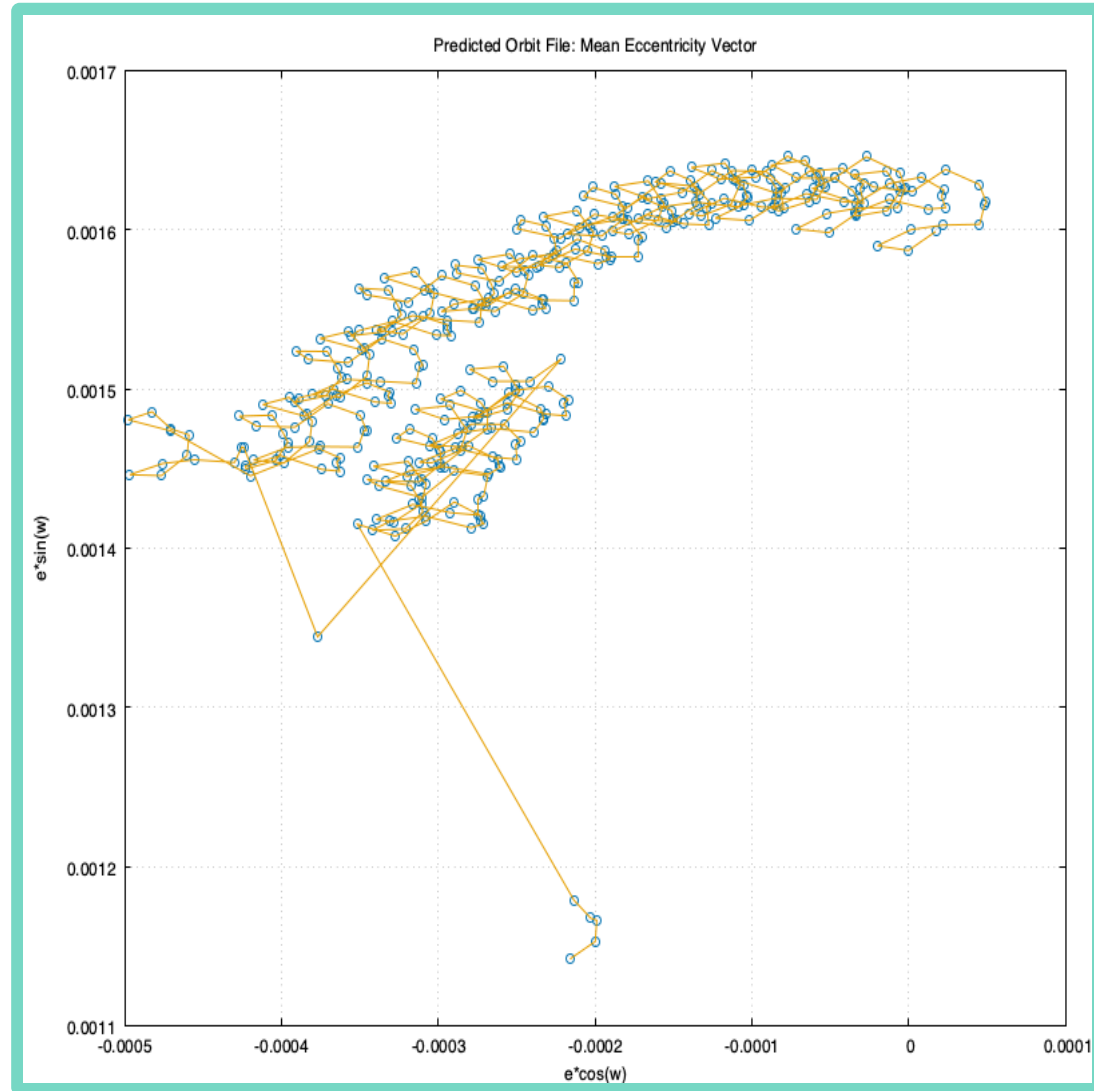
# Evolution of Mean Semi-major Axis: Offset vs Nominal SMA



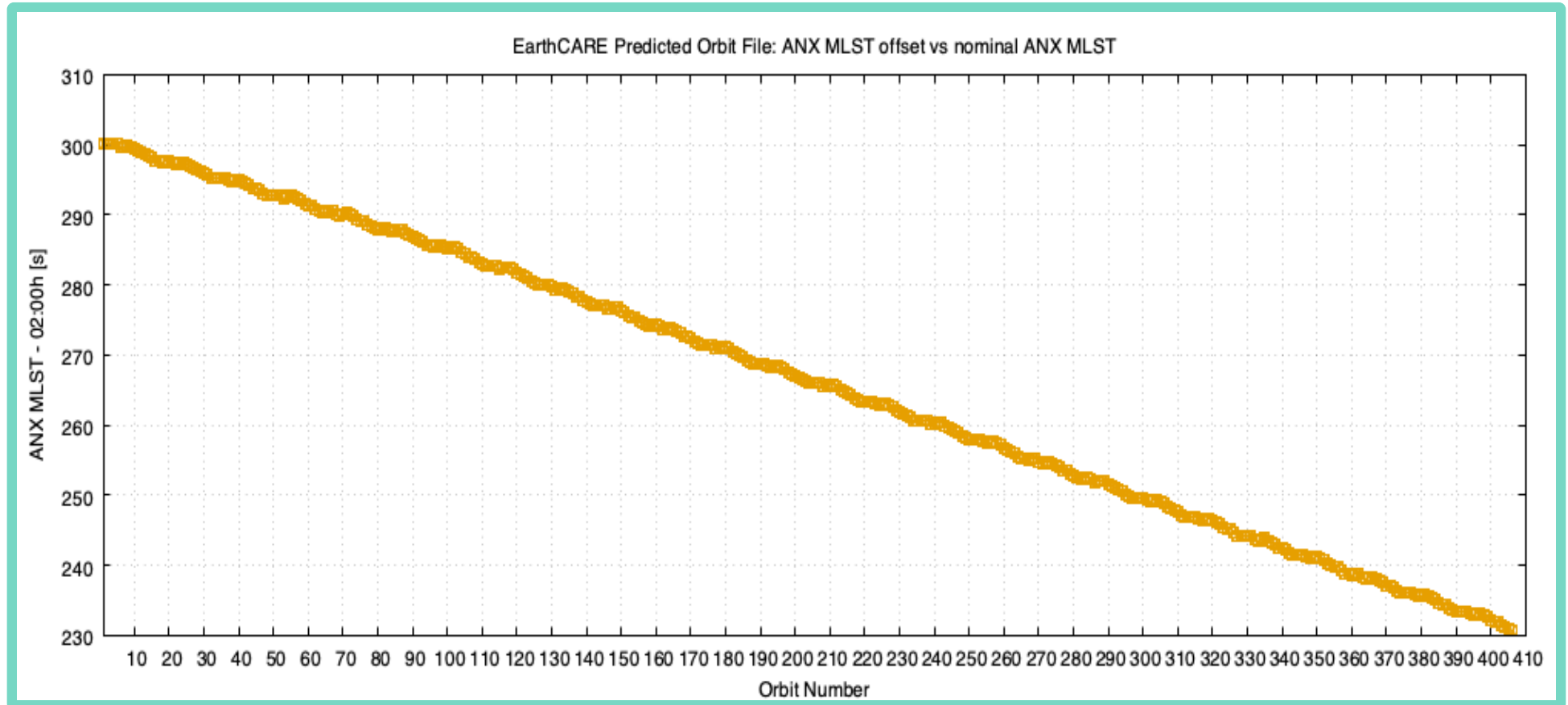
# Evolution of Mean Inclination (Predicted Orbit Files)



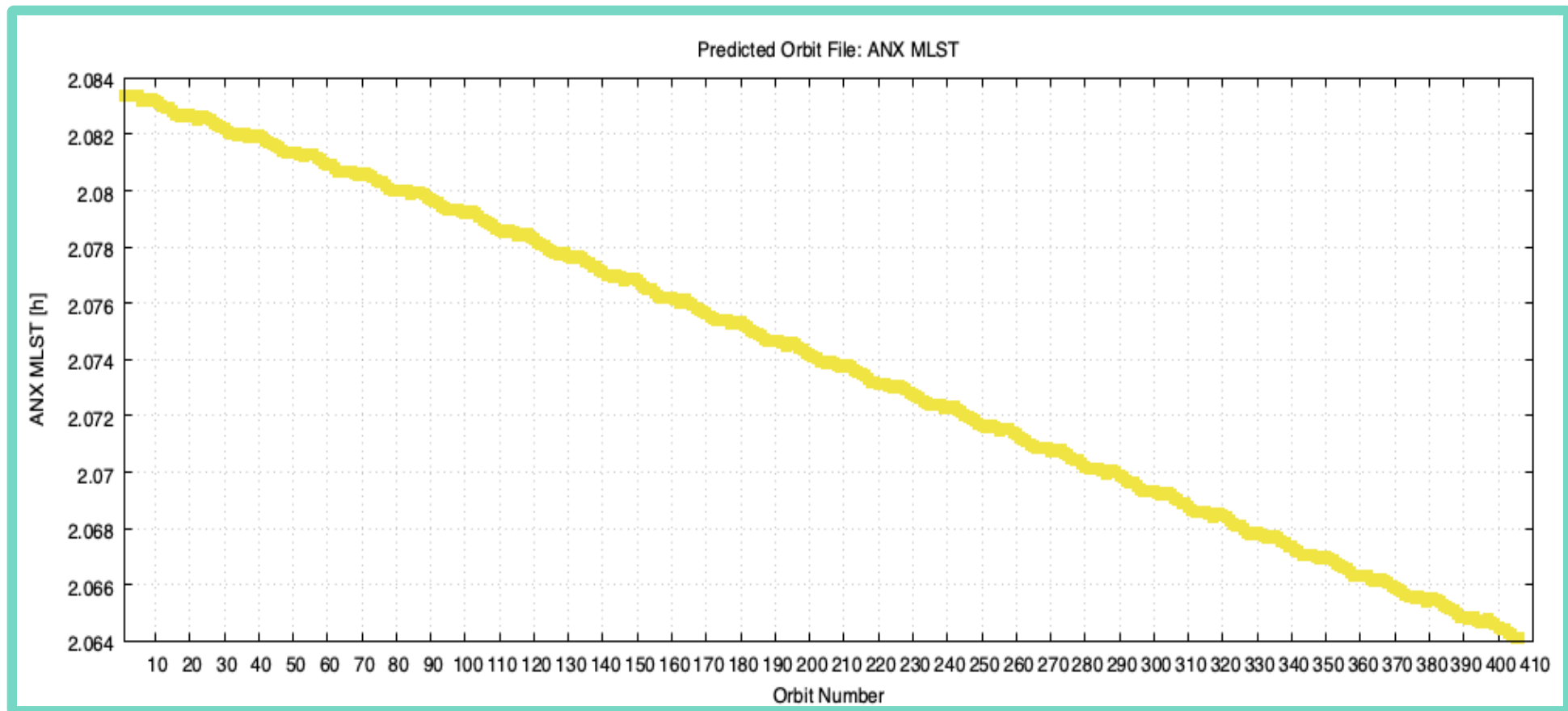
# Evolution of Eccentricity Vector (Predicted Orbit Files)



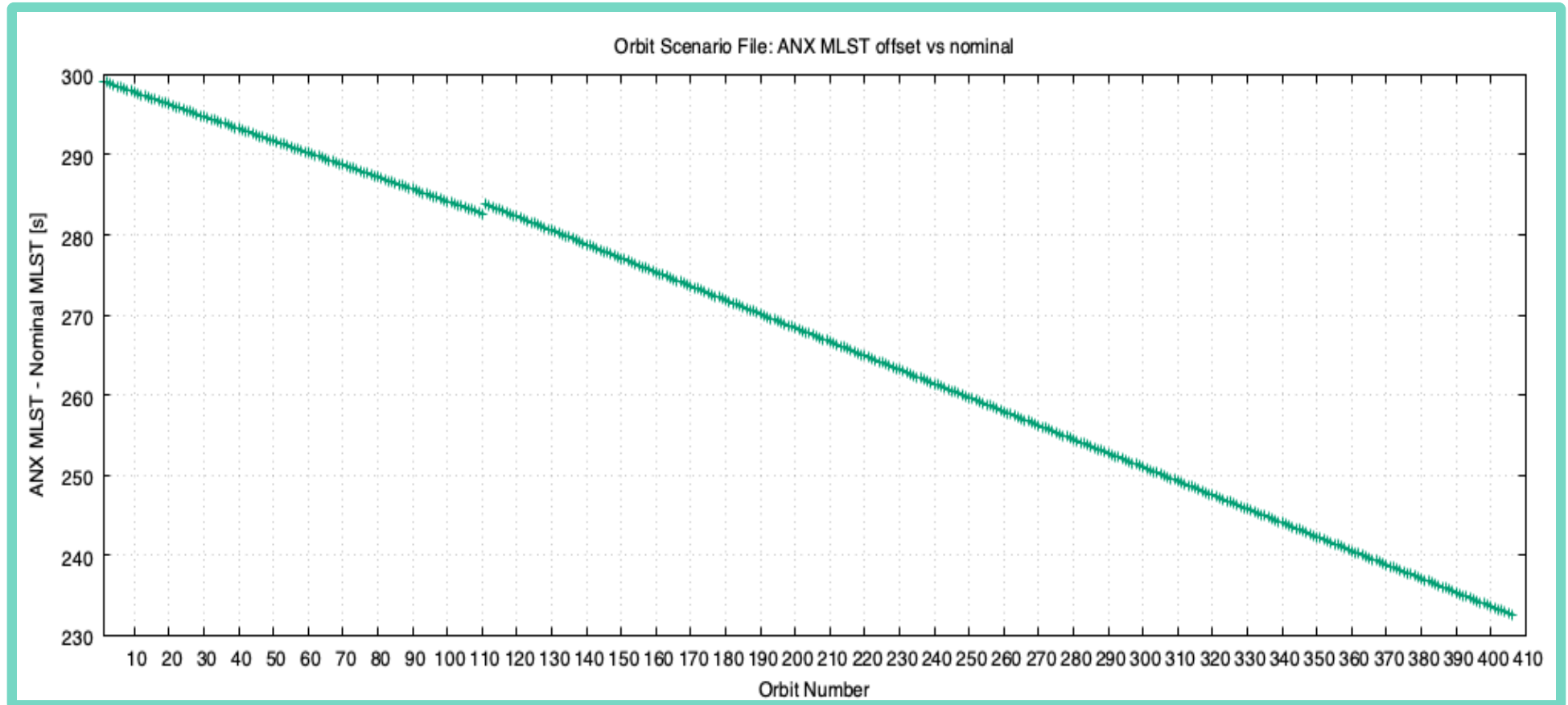
# Evolution of ANX Mean Local Solar Time (Predicted Orbit Files): Offset vs Nominal ANX MLST



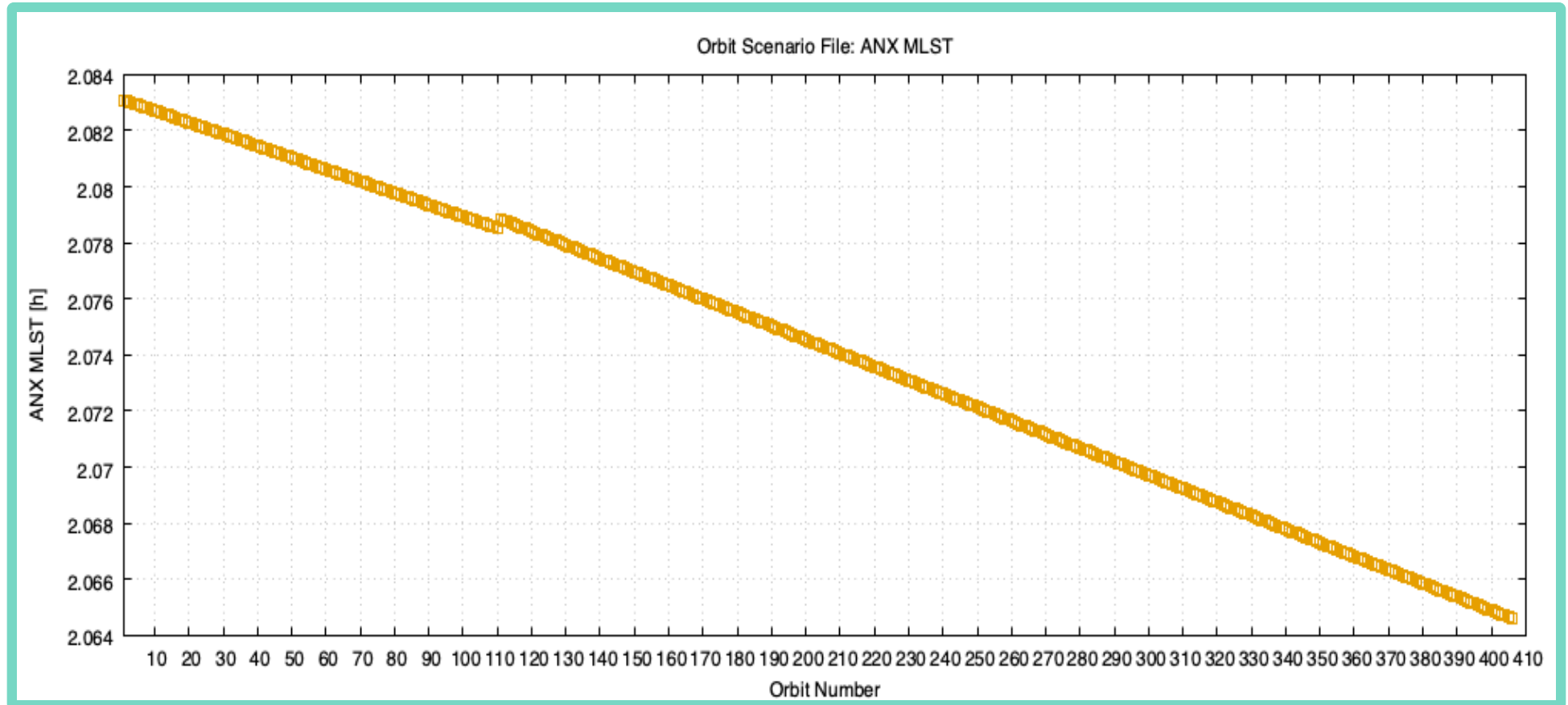
# Evolution of ANX Mean Local Solar Time (Predicted Orbit Files): ANX MLST



# Long-Term Evolution of ANX Mean Local Solar Time (Orbit Scenario File): Offset vs Nominal ANX MLST



# Long-Term Evolution of ANX Mean Local Solar Time (Orbit Scenario File): ANX MLST



# Long-Term Evolution of Mean Semi-major Axis (Orbit Scenario File): Nominal SMA vs Mean SMA

