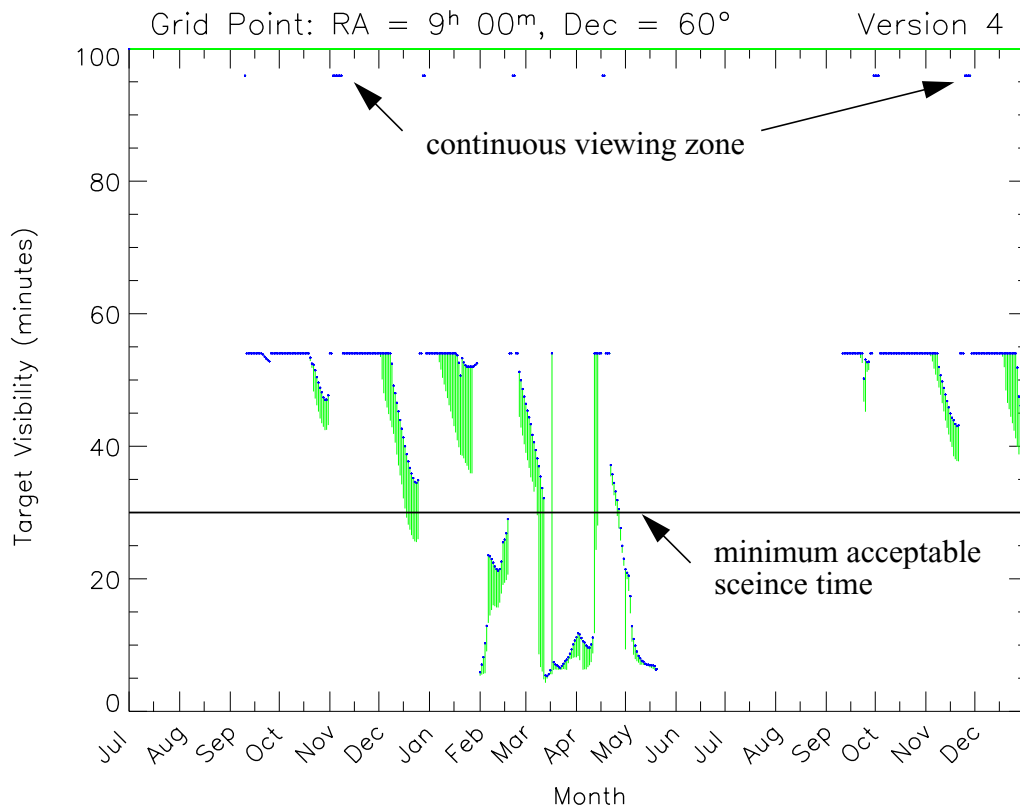


## 2 Gyro Web Tool Plots

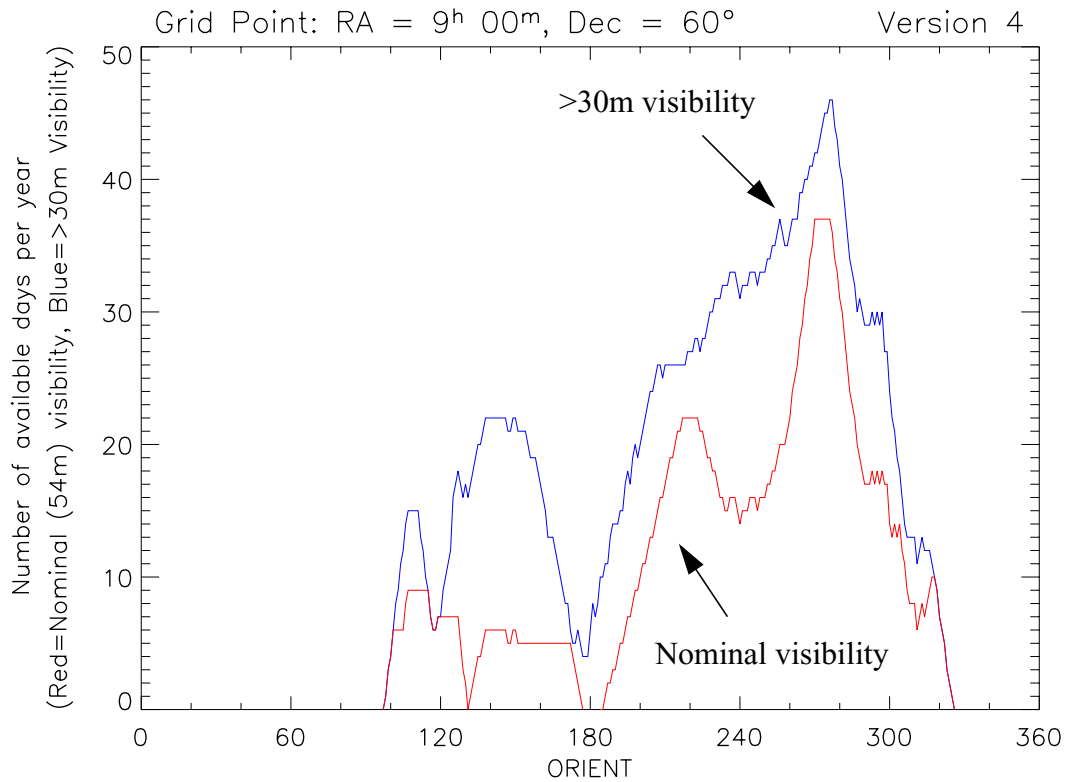
Below are sample plots that are available from tools on the Two Gyro Science Mode web site. The user provides the coordinates for their target, and the tool produces both graphical and tabular data on the schedulability of the nearest  $5^\circ \times 5^\circ$  grid point to the target.

### Orbital Visibility Plot



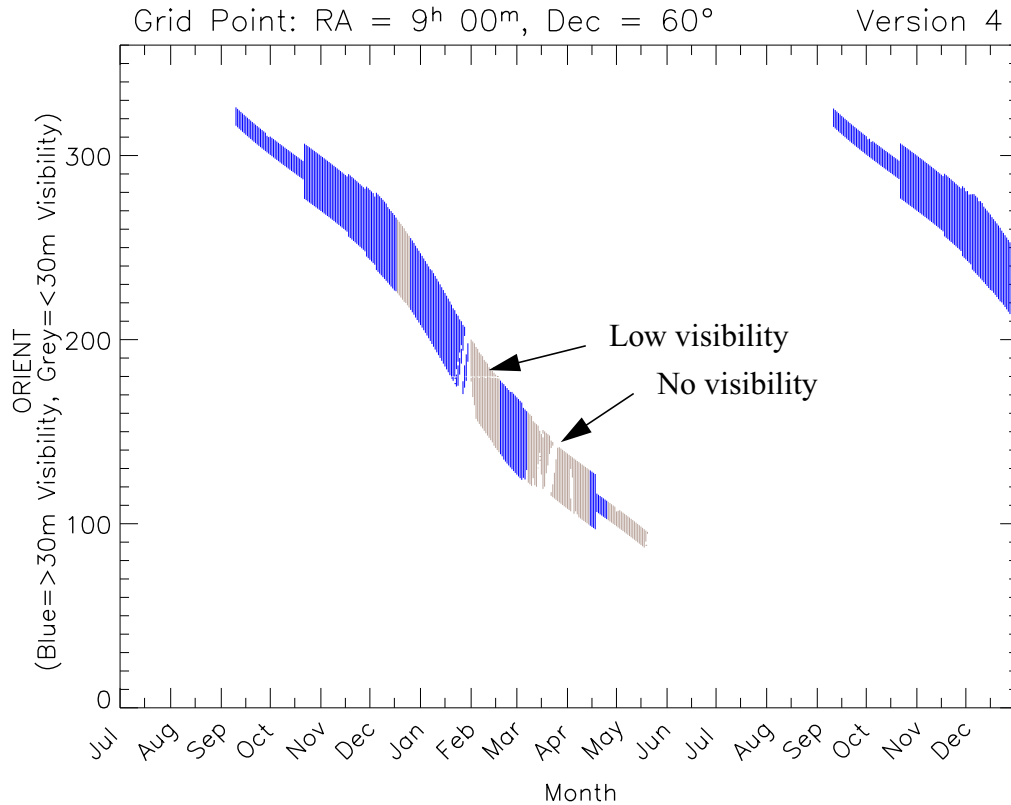
This plot shows the 2-gyro mode orbital visibility as a function of date; a tabular version of the data is also available from the tool. The maximum visibility is indicated in blue, while the vertical green lines illustrate the range of visibilities possible for allowed orientation ranges.

## Roll Range (Orientation) Availability Histogram



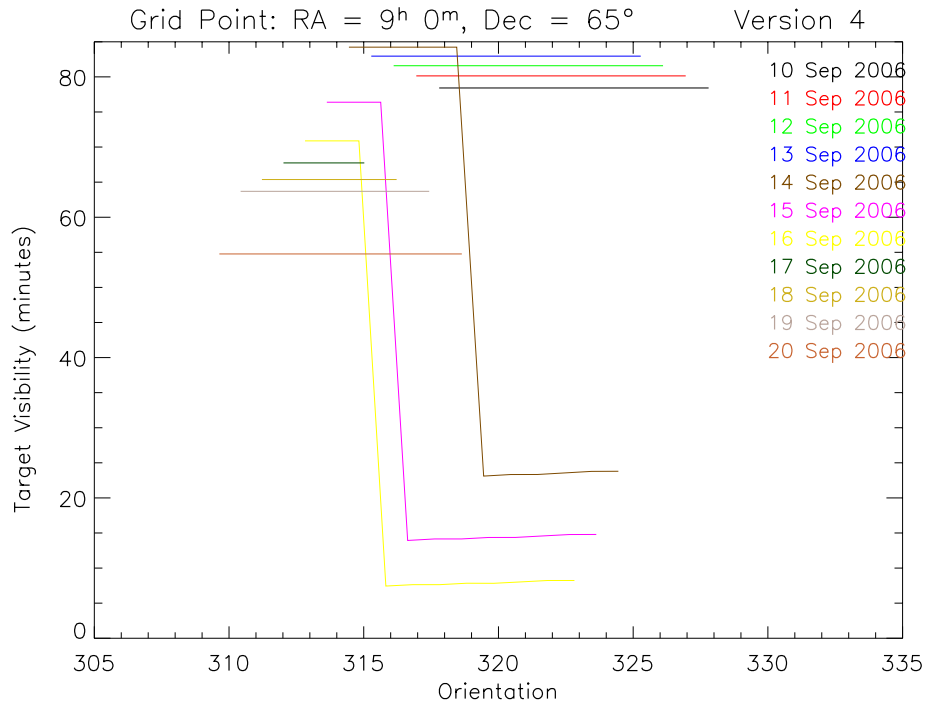
This plot shows the number of days per year that a particular orientation is available for 2-gyro operations; a tabular version of the data is also available from the tool. Blue indicates orbits with at least 30 minutes of visibility, while red indicates orbits with the nominal visibility (for the target declination). For most science programs, the nominal visibility will be required.

## Available Roll Angle (Orientation) Plot



This plot shows the 2-gyro roll angles (ORIENTs) available as a function of date; a tabular version of the data is also available from the tool. Blue indicates dates with at least one orbit with 30 minutes of visibility, while gold indicates dates with orbits with less than 30 minutes of visibility.

## Detailed Visibility Plot



This plot shows the 2-gyro mode orbital visibility as a function of orientation for an 11-day period in Cycle 15; a tabular version of the data is also available from the tool. Observers requiring a specific orientation on a specific date should use these plots to determine their target visibility.