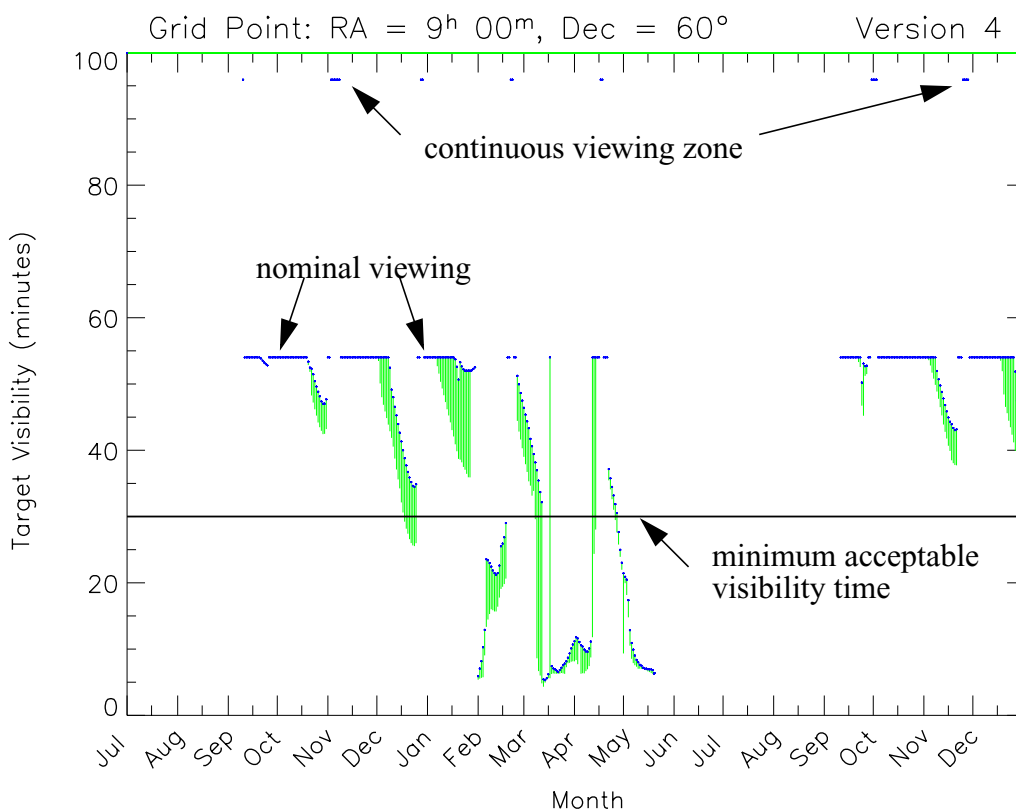


2 Gyro Web Tool Plots

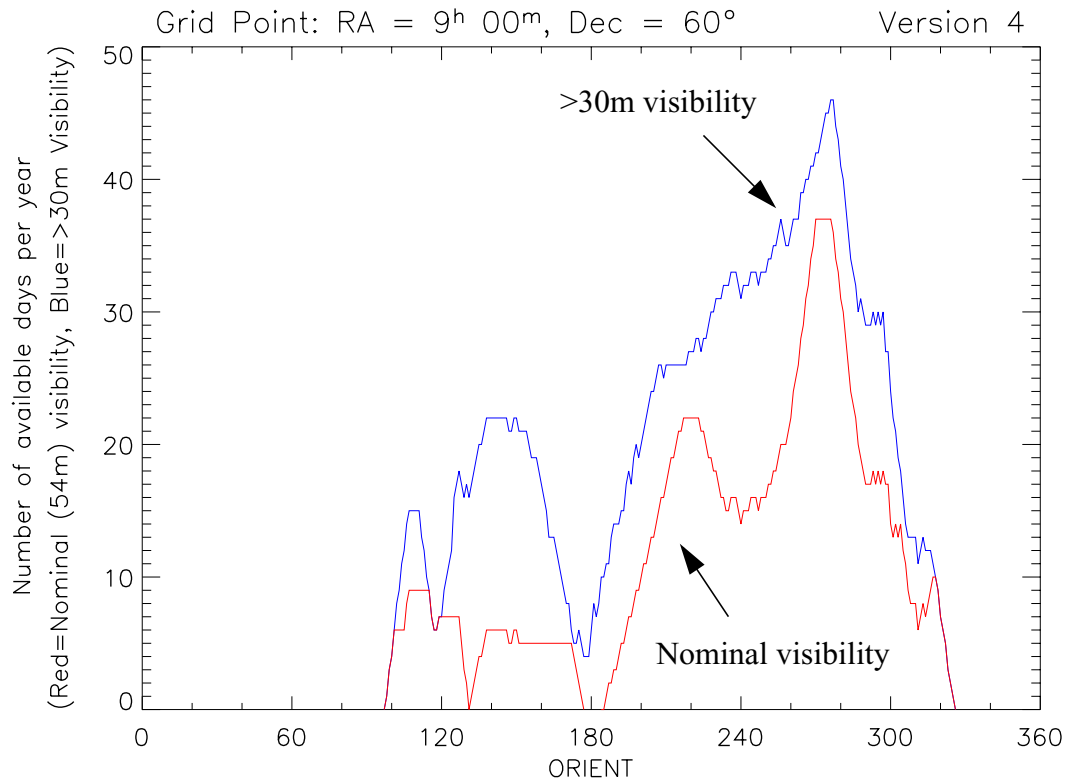
Below are sample plots that are available from tools on the Two Gyro Science Mode web site. The user provides the coordinates for their target, and the tool produces both graphical and tabular data on the schedulability of the nearest $5^\circ \times 5^\circ$ grid point to the target.

Visibility vs. Month Plot



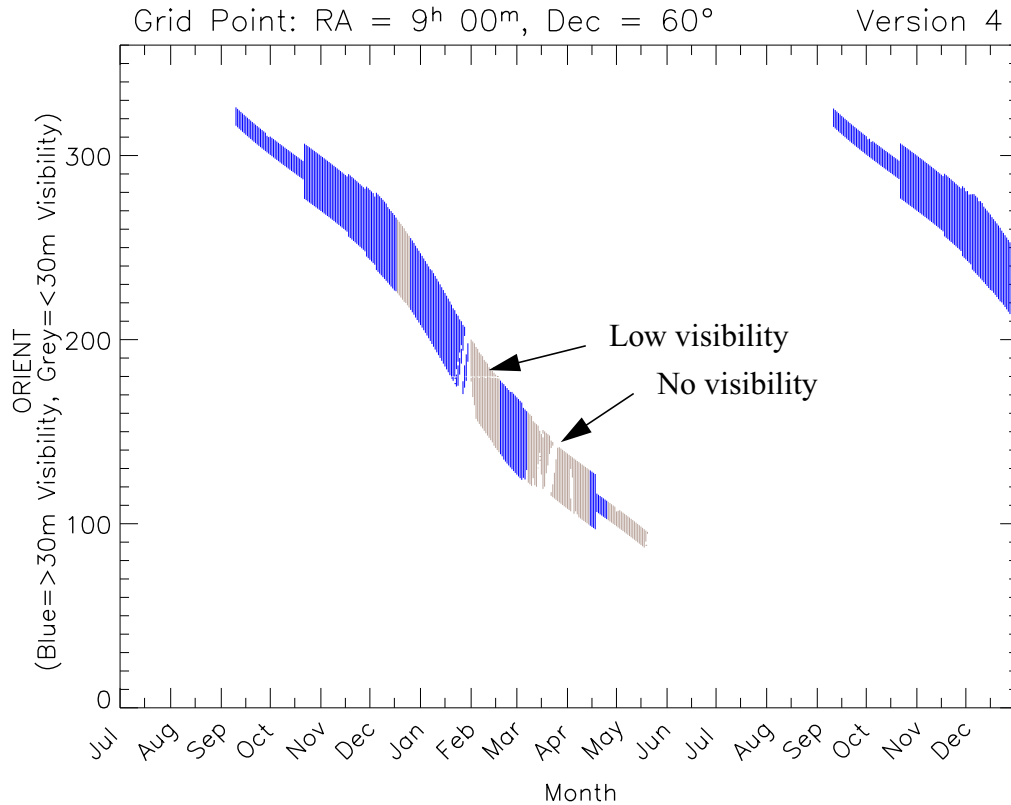
This plot shows the 2-gyro mode orbital visibility as a function of date; a tabular version of the data is also available from the tool. “Orbital Visibility” is the number of minutes per orbit that is available for observations (which include guide star acquisitions as well as science observations). The maximum visibility on any day is indicated in blue, while the vertical green lines illustrate the range of visibilities possible for allowed orientation ranges. In some case, all orientations will have the same visibility, while in other situations the available visibility will depend on orientation. The dark line (at 30 minutes) indicates the minimum allowed orbital visibility; if the science requires that observations to be scheduled during periods with less visibility, a detailed justification should be included in the Description of Observations section of the proposal.

Number of Days vs. Orientation Histogram



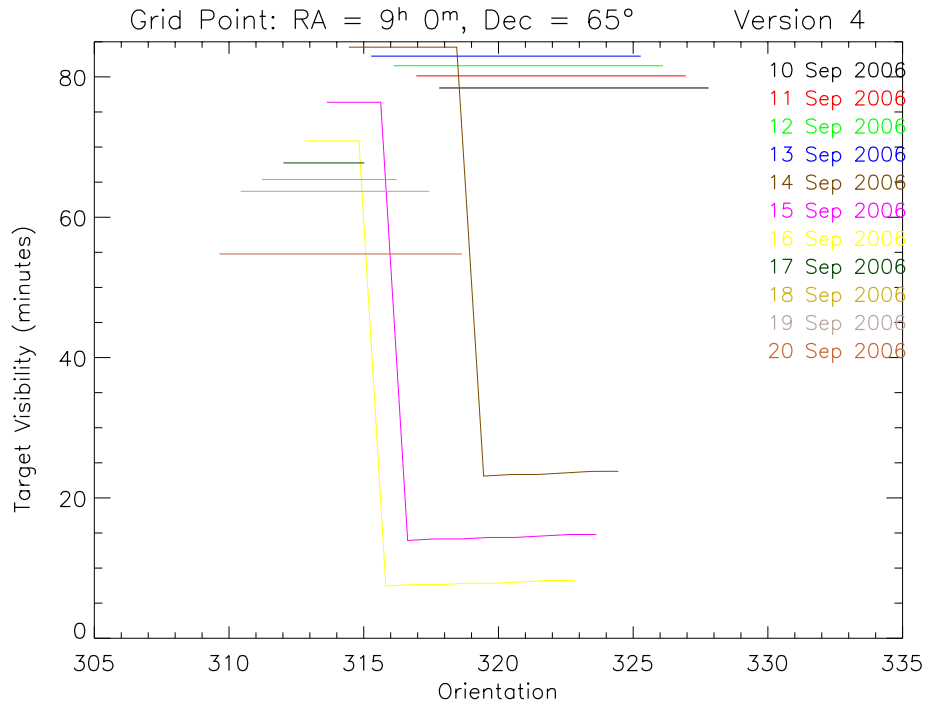
This plot shows the number of days per year that a particular orientation is available for 2-gyro operations; a tabular version of the data is also available from the tool. Blue indicates days when at least 30 minutes of visibility can be achieved, while red indicates orbits with the nominal visibility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

Orientation vs. Month Plot



This plot shows the 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; if the science requires that observations to be scheduled during periods with less visibility, a detailed justification should be included in the Description of Observations section of the proposal.

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.