

International Occultation Timing Association

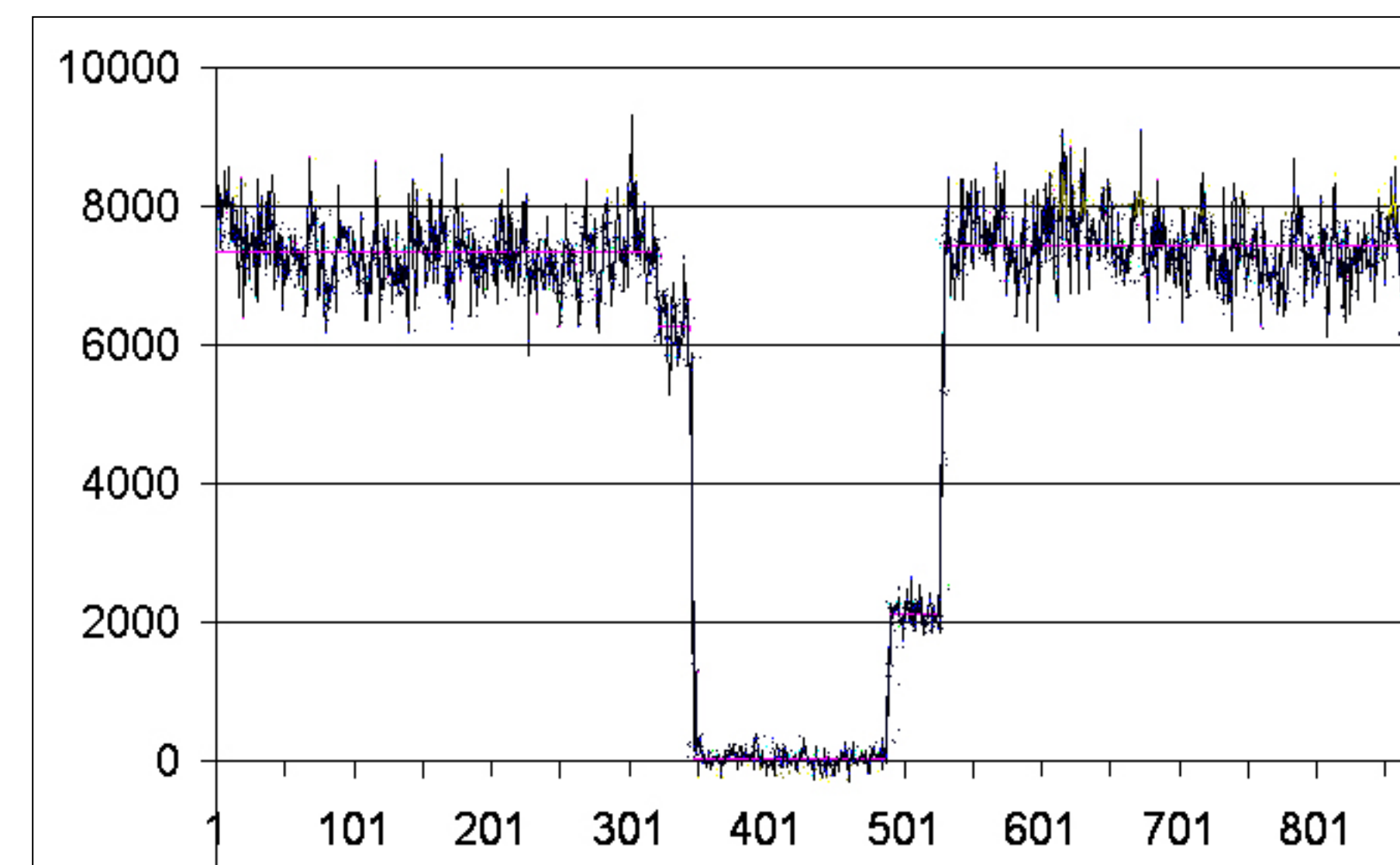
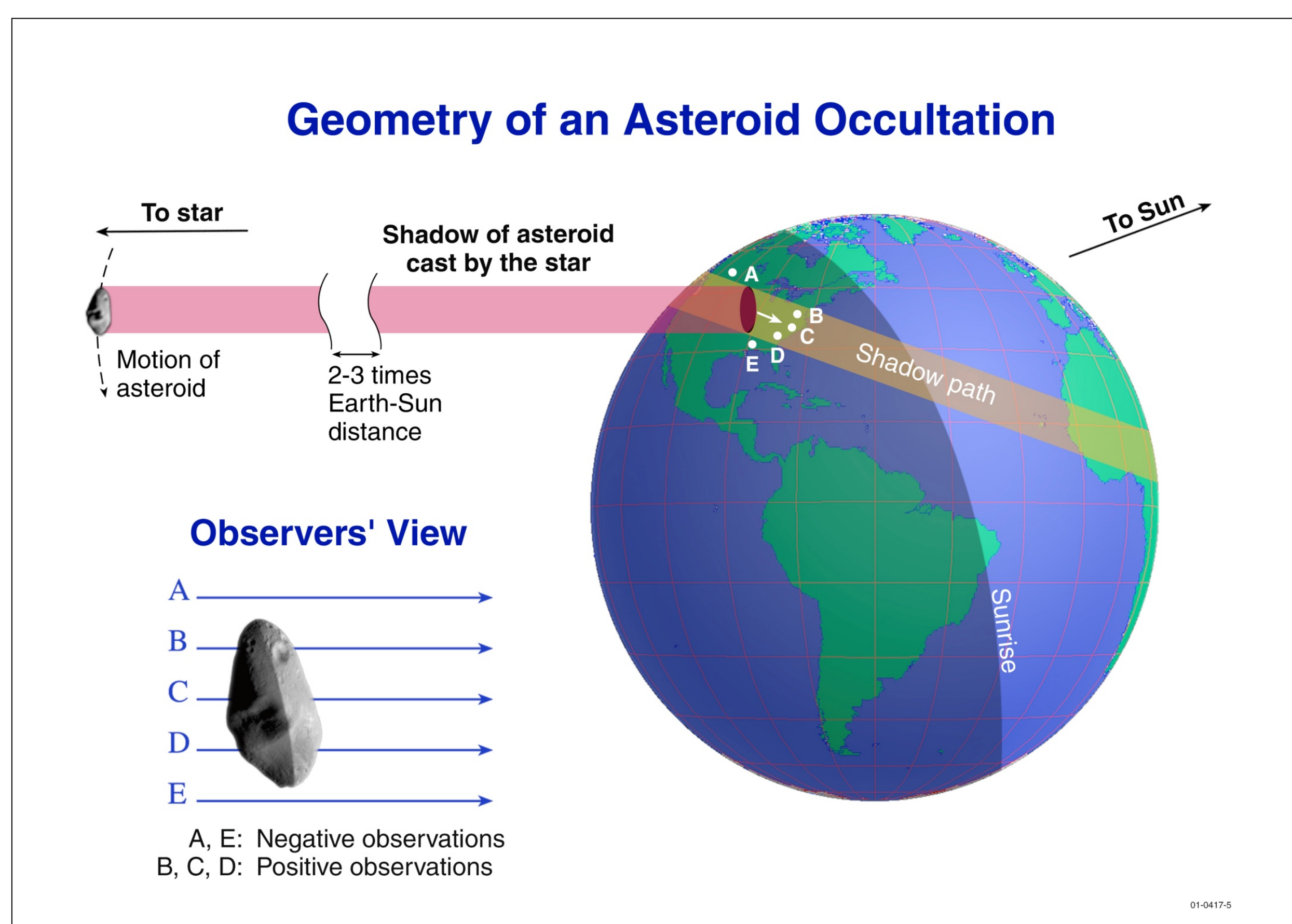
IOTA is the primary scientific organization that predicts, observes and analyzes lunar and asteroid occultations and solar eclipses



Since 1962, **IOTA** members have travelled worldwide to observe and record occultations and eclipses.

As an amateur astronomer, you are welcome to join us in the the hunt for new scientific data as we “chase the shadows!”

Path of asteroid shadow during occultation



Light curve of star during occultation

One person can obtain multiple measurements by deploying multiple telescopes.



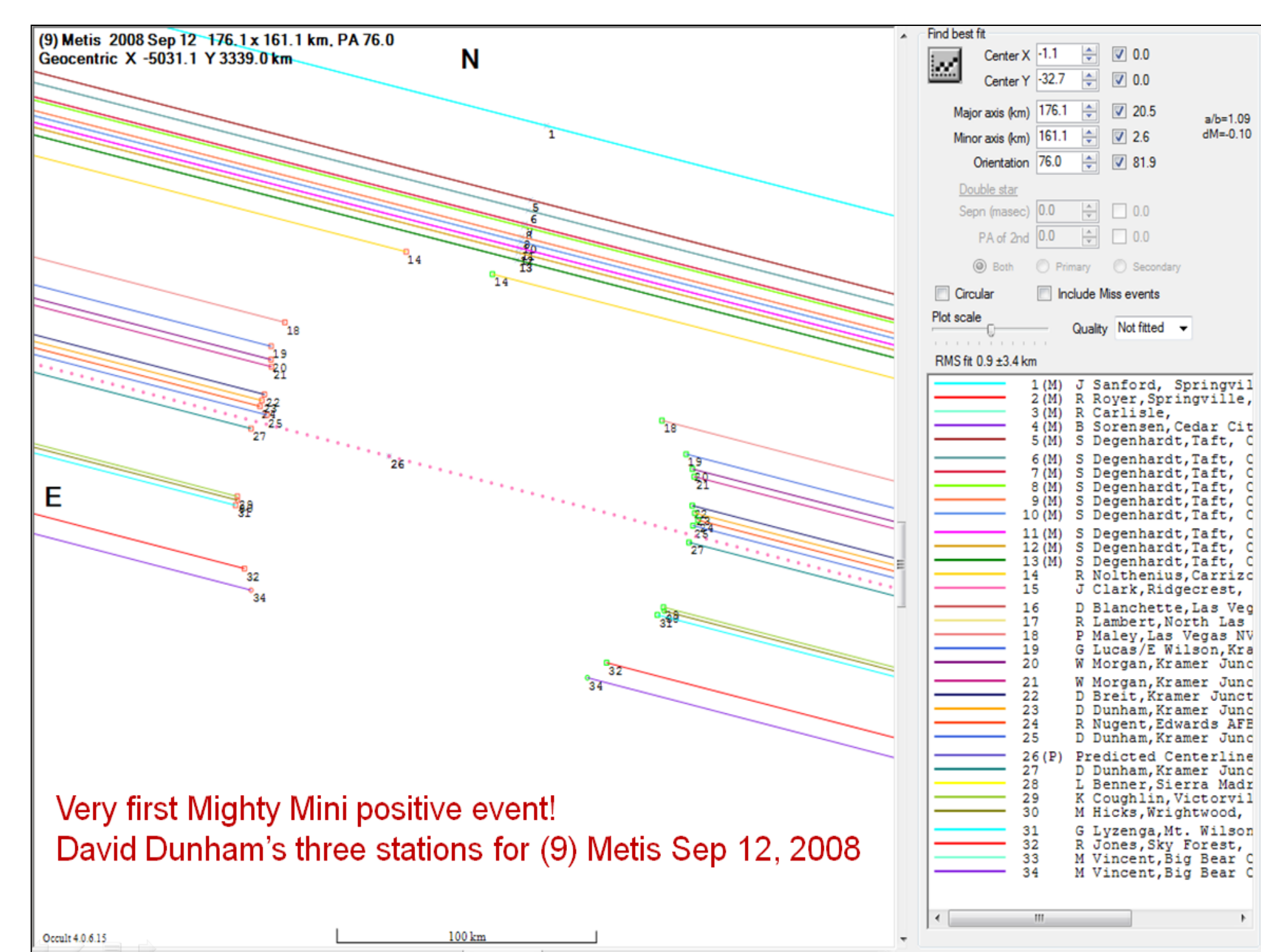
Scott Degenhardt with a Mighty-Mini and 6 80-mm scopes prepared for an early multi-station attempt.



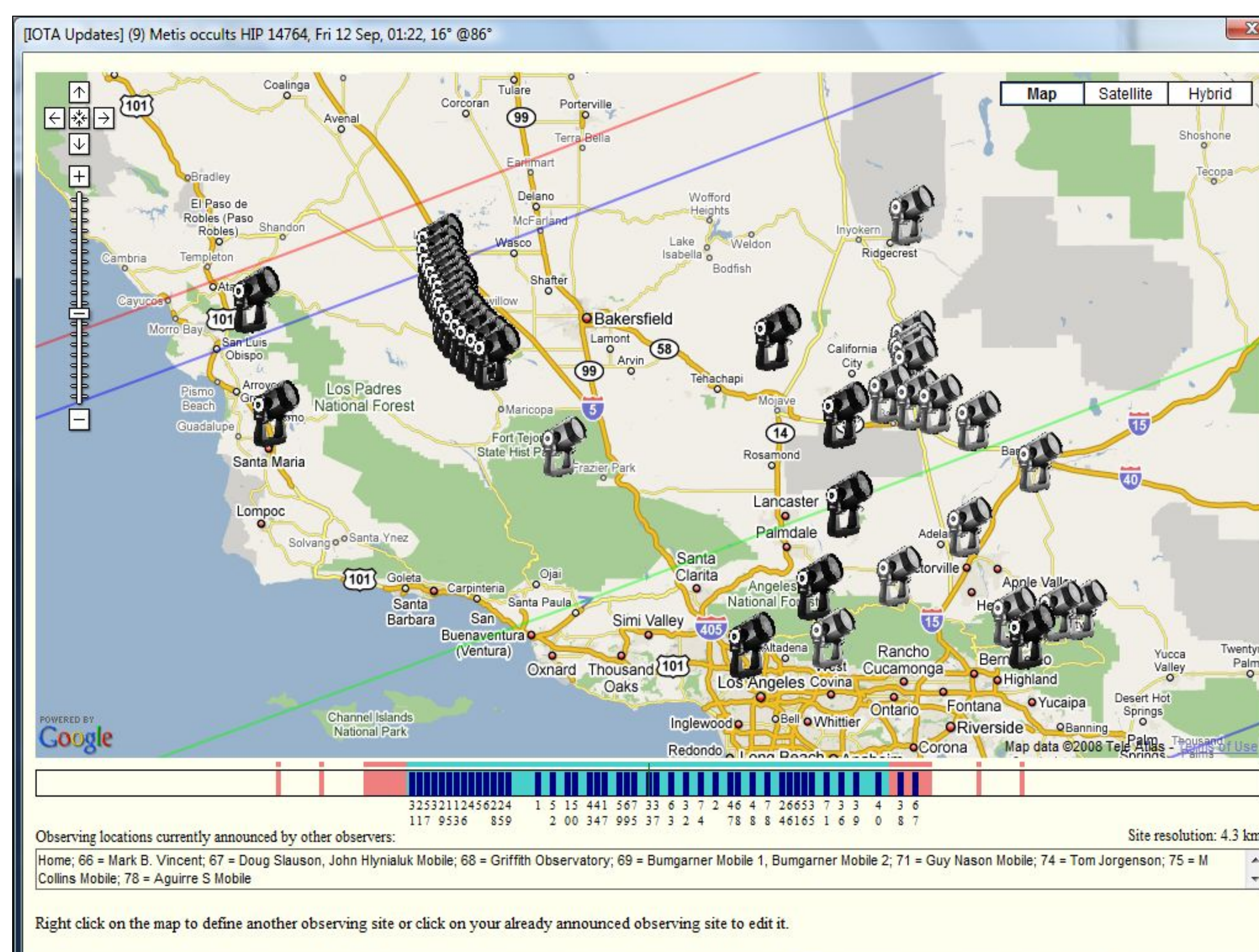
Mighty Mini (half of a 10x50 binoculars plus 3-D printed cylinder and housing)

- RunCam Astro with 0.5 focal reducer
- Limiting magnitude 9.2 with minimal integration

- 80-mm Orion short-tube refractor
- Watec 910HX camera with 0.5 focal reducer
- IOTA VTI GPS time inserter
- StarTech SVID2USB232 digitizer
- GMTEK NUC Win 11 computer
- TalentCell 12V lithium battery to power camera, computer, and VTI (cables not shown)
- Limiting magnitude 10.5 with minimal integration



Estimated shape of an asteroid is obtained by graphing many chords.



Observers coordinate using “Occult Watcher” service to avoid overlap and maximize coverage.