

2007 APRIL IOTA CANCRI OCCULTATION SUMMARY

(Updated Feb. 21, 2007)

Summary of Event

- **Star Occulted** Iota Cancri **A** (mag. +4.0) by asteroid *411 Xanthe* (mag. +14.7)
- **Date** Evening of April 17, 2007
- **Event Time** 8:56 – 8:57 p.m. EDT (N. Fla.), or abt. one hour after sunset
- **Magnitude Drop** 10.5 magnitudes
- **Max. Duration** 8.3 sec
- **Path Width** 76 km or 47 mi
- **1-Sigma Uncertainty** ± 0.7 path-widths (about 54 km or 33 mi)
- **Predicted Path** North Florida — Center line just N. of Live Oak, Lake City & Starke with Branford, High Springs, Alachua, Gainesville Airport & Hawthorne near southern limit
(Late observations could move path by one or more widths)

Date for 48 Iota One Cancri (48 ι^1 Can)

- **Apparent RA** 08h 47.2m (08.79h)
- **Apparent DEC** +28° 44' (+28.7°)
- **Visual Magnitude** Combined +3.9 (AB separation 30.7 arc sec)
- **Visual Magnitude A** +4.0 (yellowish white, spectral type G7.5 III)
- **Visual Magnitude B** +6.6 (bluish-white, spectral type A3 V)

Data for 2007 April 17 — Gainesville, FL (Lat 26°39'N, Lon 82°21'W)

- **Sunset** 7:57 p.m. EDT
- **Civil Twilight Ends** 8:22 p.m. EDT (Sun 6° below horizon)
- **Moonset** 8:32 p.m. EDT
- **Transit ι Cancri** 8:34 p.m. EDT (Sun 12° below horizon)
- **Transit Zenith Dist.** 89.1°
- **Naut. Twilight Ends** 8:51 p.m. EDT
- **Occultation Time** 8:56 p.m. EDT (approx.)

At Time of Occultation (abt. 8:56 p.m. EDT)

- **New Moon** 2007 April 17, 7:37 a.m. EDT
- **Moon Age** 13.3h
- **Moon Phase** 0.6% (Waxing Crescent)

- **Hour Angle ι Can** 0h 22.5m
- **Azimuth ι Can** 260.8° (9.2° South of West)
- **Altitude ι Can** +85.0°
- **Zenith Distance** 5° (So ι Can is abt. 5° W of Zenith Point)