The star chart includes only the brightest stars to avoid cluttering the chart. The constellations are labeled, and the lines connecting their stars will help you find these celestial groupings.

The Planets table gives positions on the sky (in astronomical right ascension and declination), their apparent magnitude, the time they rise, reach culmination (their highest point in the sky), and when they set. Mercury is visible in the evening until about July 21. Venus and Jupiter are visible in the morning sky. Mars and Saturn are visible in the evening. Those with a telescope will be able to see Uranus and Neptune late at night and in the morning.

### July Moon Phases
- **Full Moon**  July 3
- **Last Quarter**  July 10
- **New Moon**  July 18
- **First Quarter**  July 25

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**Object** | **R.A.** | **Dec.** | **Mag.** | **Rise** | **Culmination** | **Set**
---|---|---|---|---|---|---
Mercury | 7h 03m | +24° 40' | -0.4 | 7h 16m | 14h 00m | 20h 4m
Venus | 4h 36m | +20° 04' | 1.2 | 4h 58m | 11h 33m | 18h 09m
Mars | 11h 27m | +04° 21' | 0.7 | 12h 15m | 18h 25m | 0h 34m
Jupiter | 3h 55m | +19° 32' | -2.0 | 4h 17m | 10h 52m | 17h 27m
Saturn | 13h 28m | -06° 23' | 1.0 | 14h 33m | 20h 25m | 2h 17m
Uranus | 0h 31m | +02° 32' | 5.9 | 1h 21m | 7h 28m | 13h 34m
Neptune | 22h 20m | -10° 59' | 7.9 | 23h 33m | 5h 18m | 11h 03

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Monthly activities for the Friends of the Institute for Astronomy can be found at [http://www.ifa.hawaii.edu/friends/](http://www.ifa.hawaii.edu/friends/)

Institute for Astronomy Special Events are announced at [http://www.ifa.hawaii.edu/specialevents/](http://www.ifa.hawaii.edu/specialevents/)