

Observing Orion & the Pleiades



Nancy Alima Ali, UC Berkeley Space Sciences Lab
“Calendar in the Sky” Webinar 1/31/2014

How to Identify Orion & the Pleiades



Image Credit: Stellarium

Greek Depictions of Orion & Pleiades

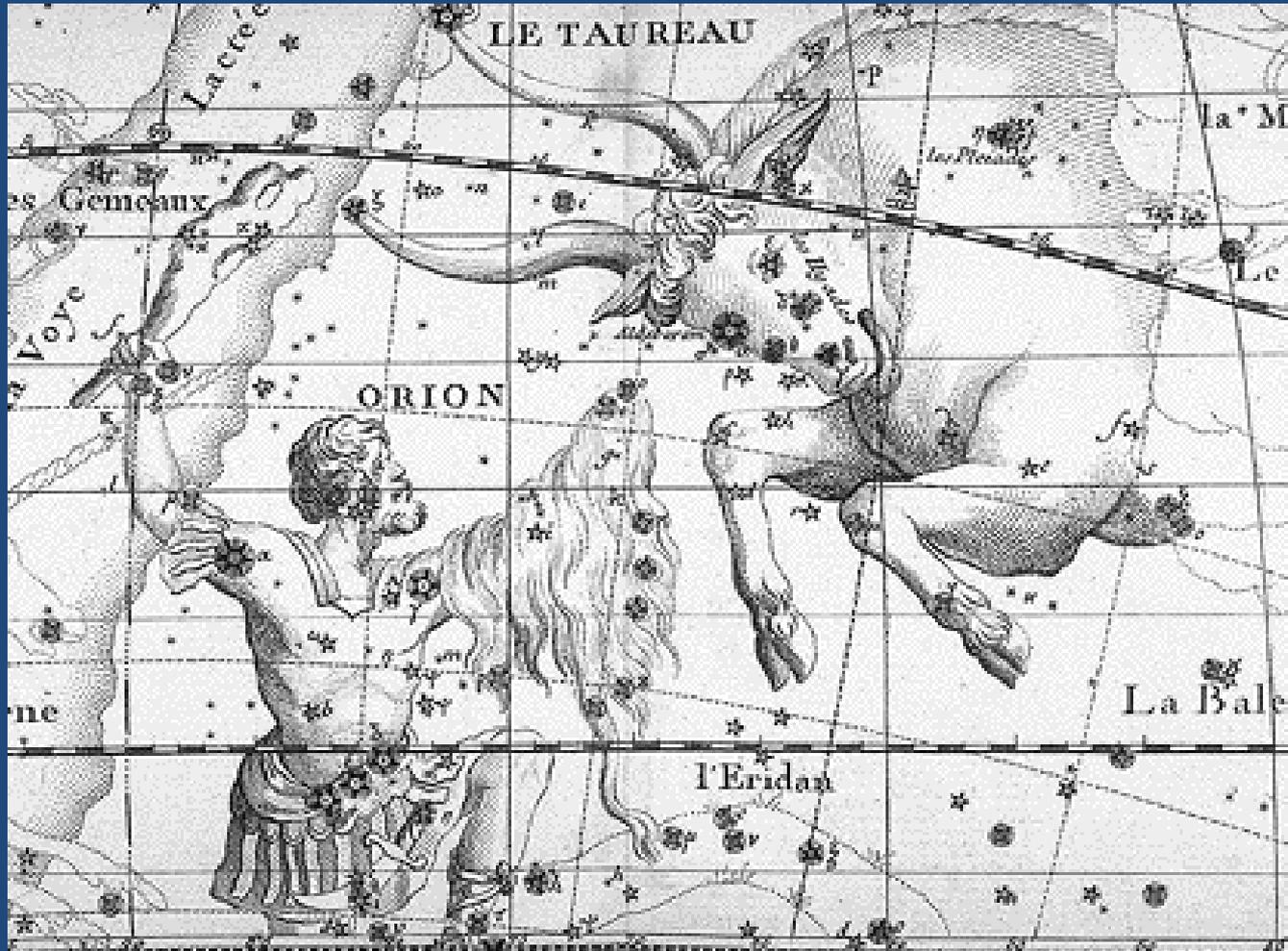


Image Credit: Johann Bode, *Uranographia*

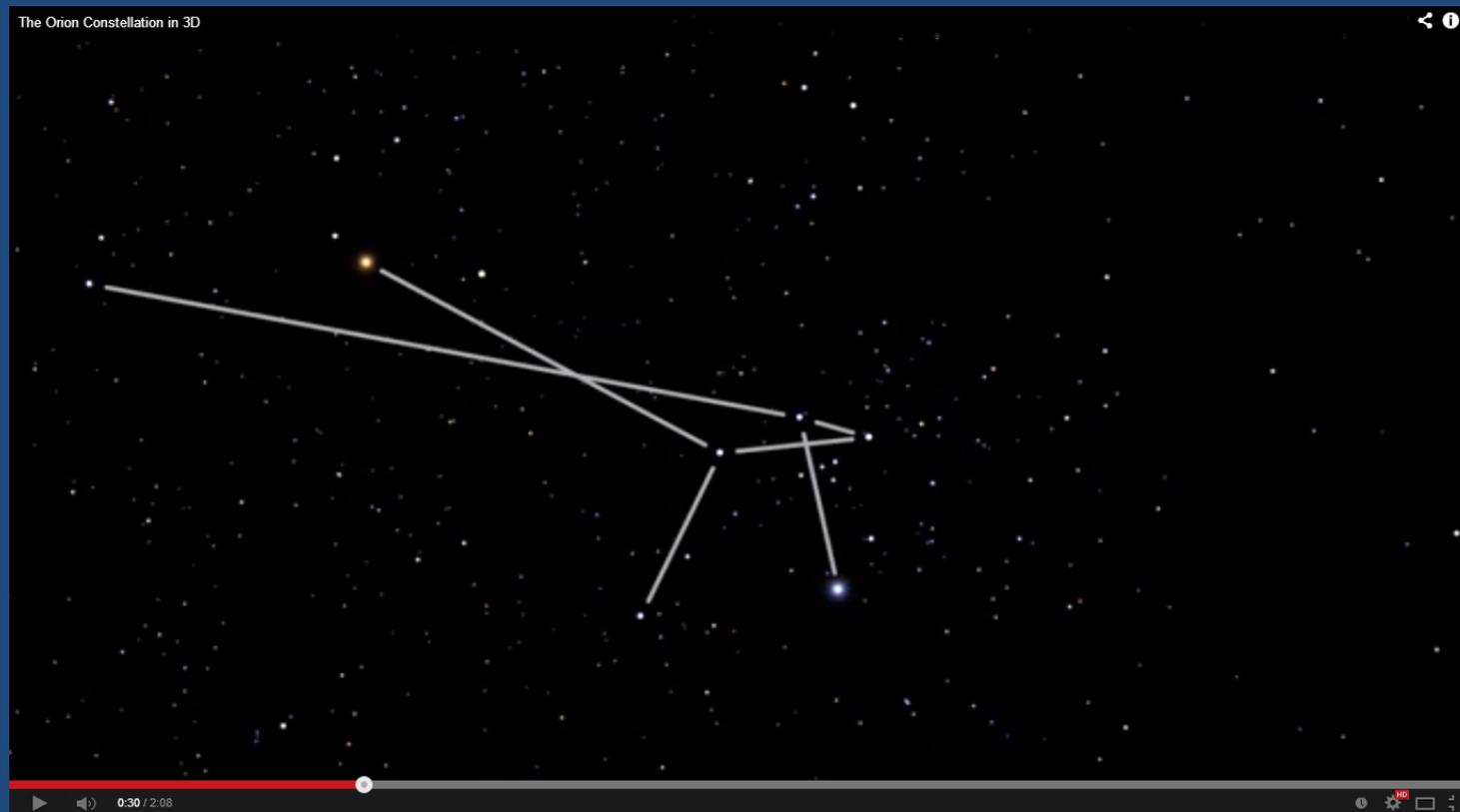
Brightest Stars in Orion

- Pronounced “BAIT-el-jooz”
- 10th century Arabic: yad al-Jauza “hand of the giant”
- European Middle Ages: translated into Latin as bedelgeuze
- 19th Century European: bat al-jauza “armpit of the giant”



Image Credit: Stellarium

Stars in Orion



Space Telescope Science Institute Animation:

<http://youtu.be/ID-5ZOipE48>



Pleiades

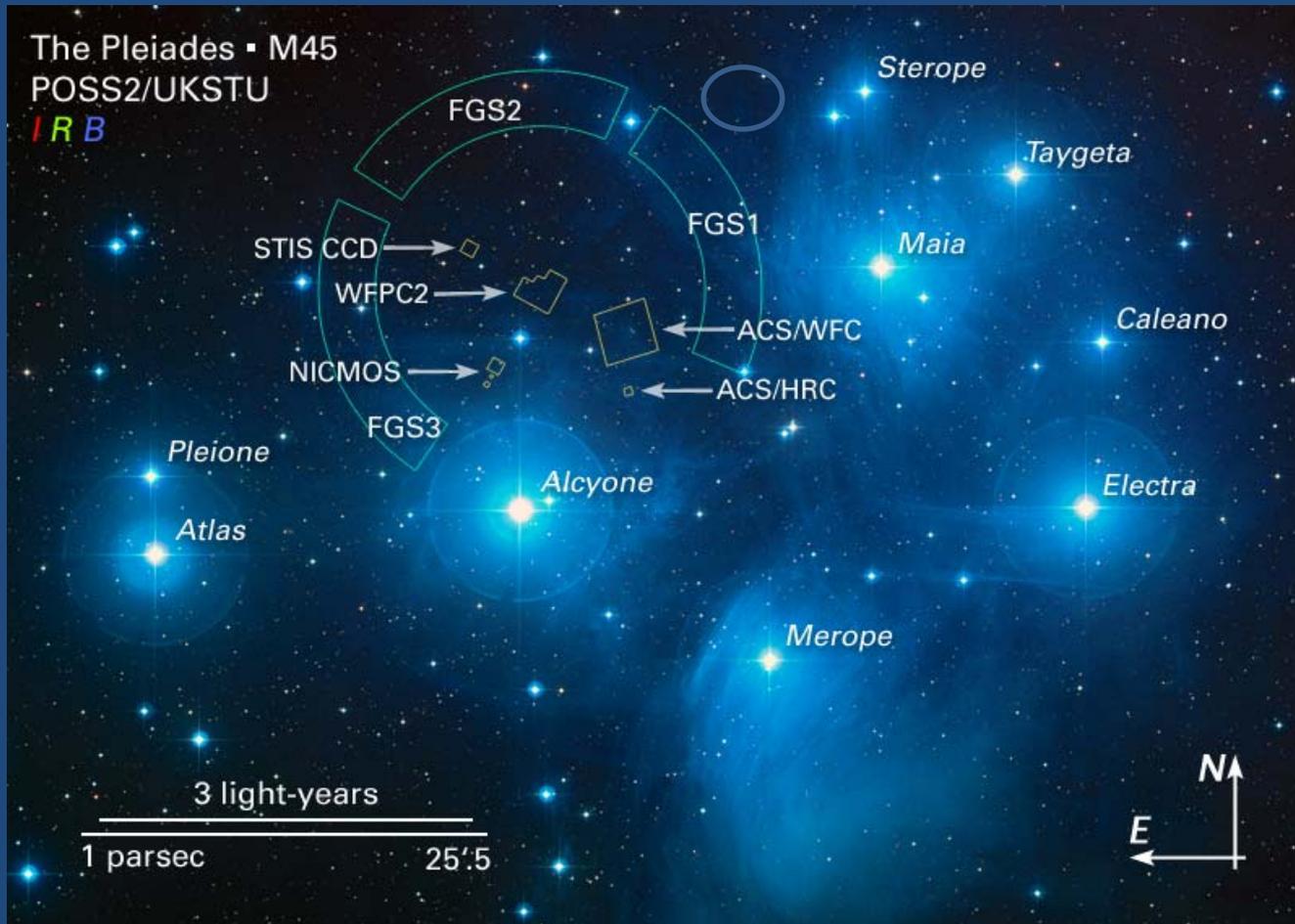


Image Credit: Stellarium



Image Credit: NASA/ESA/AURA/Caltech

Pleiades



Pleiades



Pleiades



Image Credit: Dbackman/Wikipedia



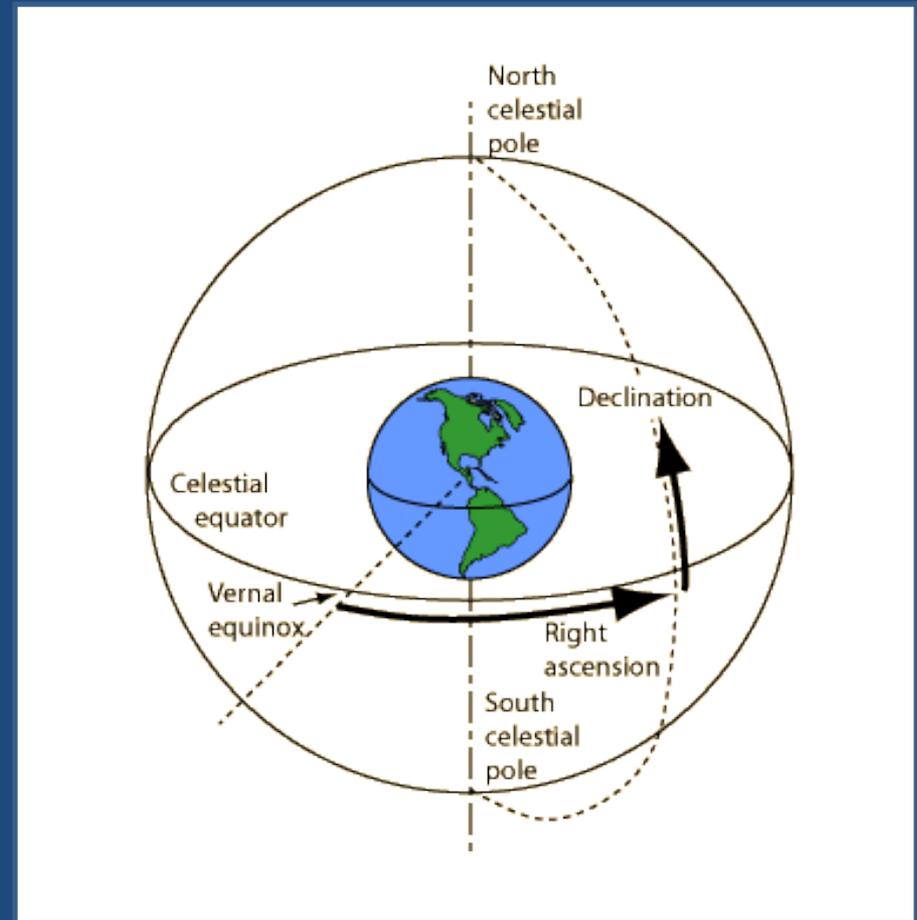
Image Credit: Maui Magazine



Image Credit: Subaru Corporation

Impact of Latitude on Observing

- Latitude –
 - one of two coordinates that identify the location of a specific place on Earth
 - Measured from 0-90° North or South from equator
- Declination -
 - One of two coordinates that identify the location of a specific object on the celestial sphere



Berkeley, California, USA (Latitude: North 37° 52')

January 31, 2014, 9:00 p.m. PST



Declination/Right Ascension:

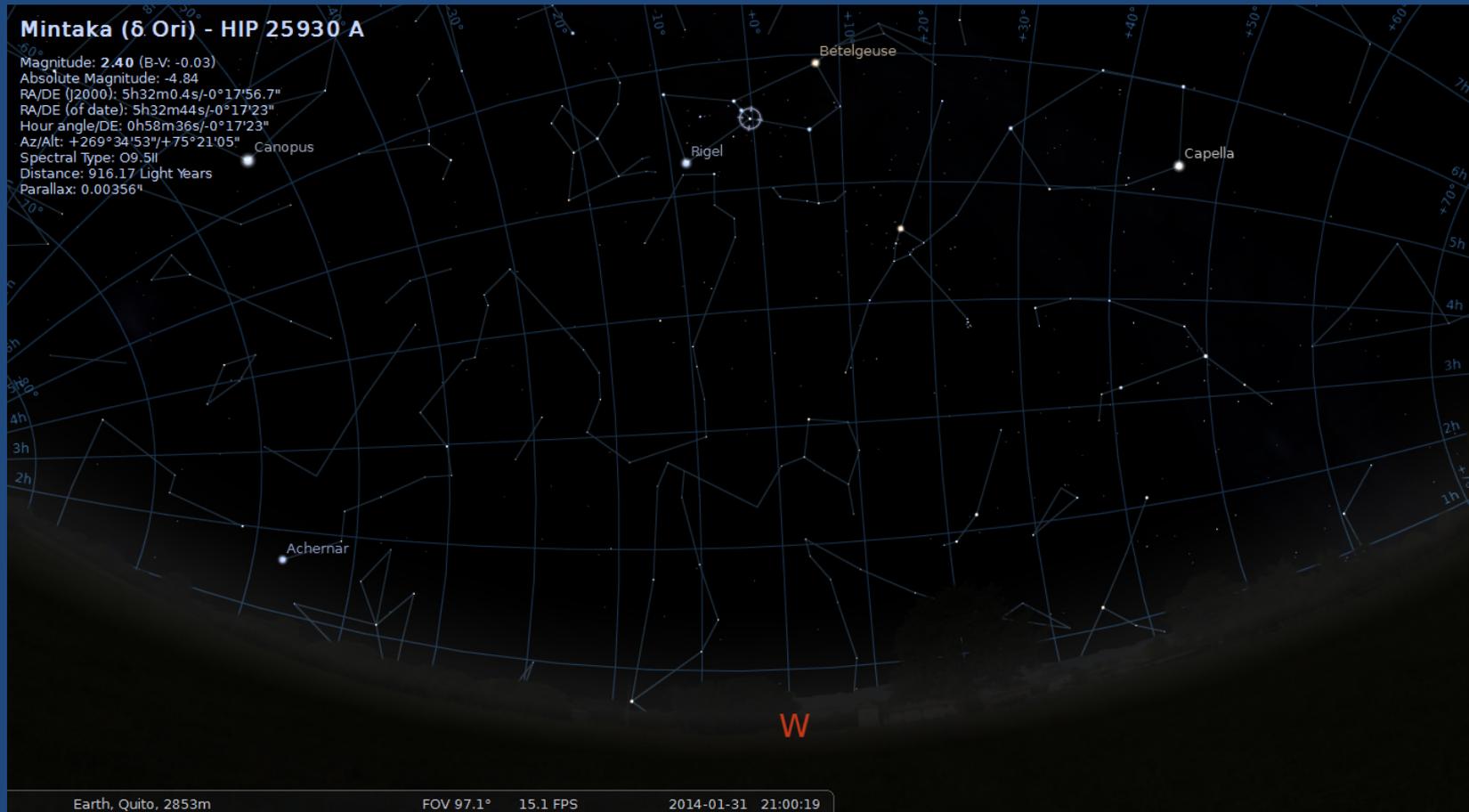
Mintaka -0° 17', 5h 32m Betelgeuse +7° 24', 5h 55m Rigel -8° 11', 5h 15m

Altitude/Azimuth:

Mintaka 138° 01', 43° 22' Betelgeuse 46° 09', 125° 01' Rigel 38° 29', 148° 05'

Quito, Ecuador (Latitude: South 0° 11')

January 31, 2014, 9:00 p.m. ECT



Declination/Right Ascension:

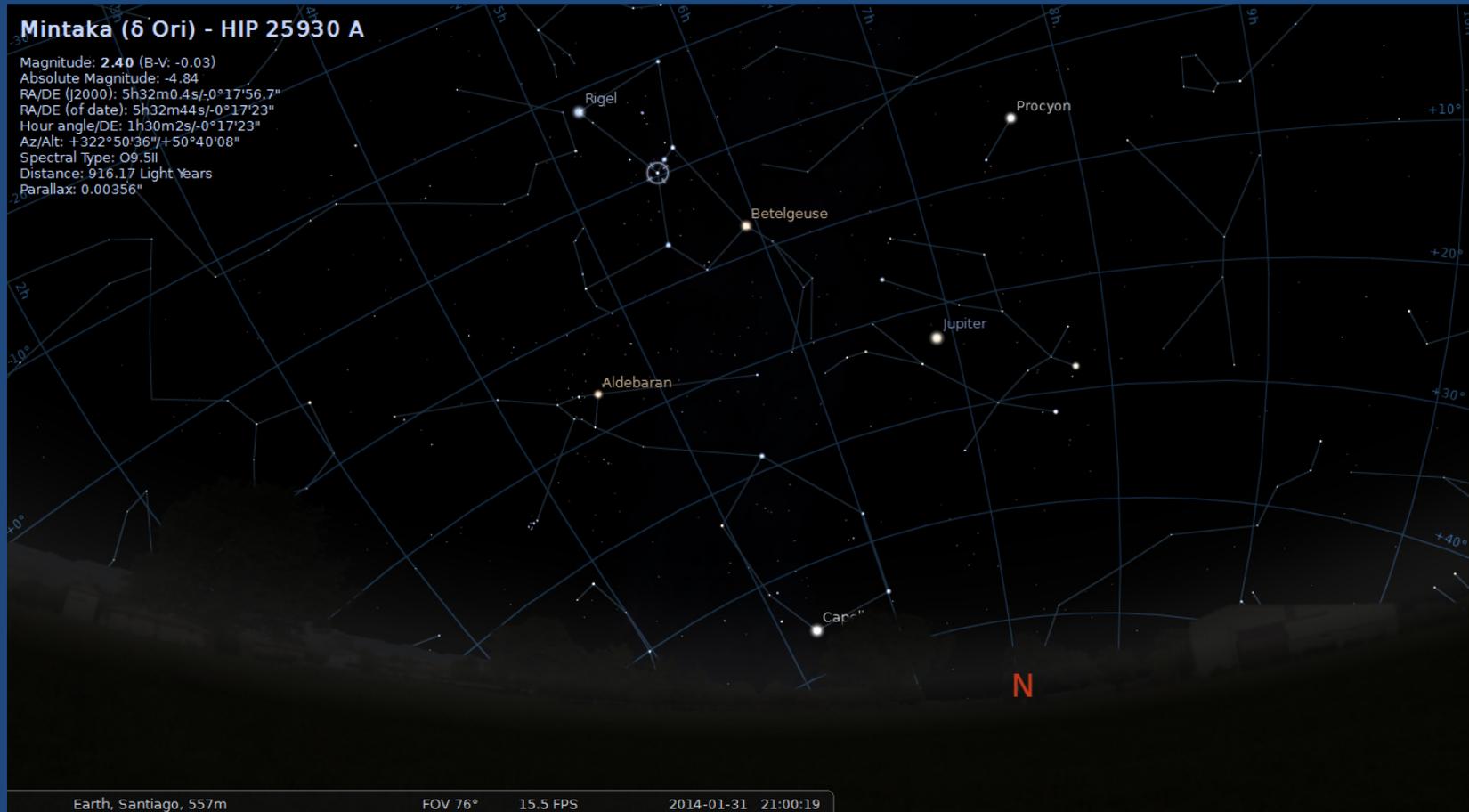
Mintaka -0° 17', 5h 32m Betelgeuse +7° 24', 5h 55m Rigel -8° 11', 5h 15m

Altitude/Azimuth:

Mintaka 75° 18', 269° 34' Betelgeuse 78° 19', 310° 48' Rigel 69° 23', 246° 41'

Santiago, Chile (Latitude: South 33° 27')

January 31, 2014, 9:00 p.m. CLST



Declination/Right Ascension:

Mintaka -0° 17', 5h 32m Betelgeuse +7° 24', 5h 55m Rigel -8° 11', 5h 15m

Altitude/Azimuth:

Mintaka 50° 39', 322° 47' Betelgeuse 46° 08', 335° 38' Rigel 54° 33', 309° 22'