

# Recording Astronomical Observations

Logs, photos & diagrams

Presented by Joe Carr to RASC Victoria's Astro Cafe - June 29, 2020

# Why & How

Why record your observations?  
What's in it for you and others?

- Taking notes and then promptly losing them or promising yourself that you will compose them “later”
- Stay motivated by using media like photos, diagrams, star maps
- Have a plan - use observing lists
- Create a legacy by sharing online
- Share with others to get them involved, attend star parties & events
- Look back on your progress - improve technique & frequency

# Observing Notes

## Evernote or OneNote

- Use a template
- Insert a diagram and/or photo



2019.10.05 First Quarter Moon & Saturn in conjunction, Jupiter at VCO

Date/Time

Start: 2019.10.05 7:30PM PDT

Finish: 2019.10.05 9:15PM PDT

Location: Victoria Center Observatory, Observatory Hill, Victoria, BC, Canada - 48°31'18" N 123°25'13" W - 224m altitude

Observers: Kurt, Randy, Doug, Pedro, Kathy & Nathan, Chris A, Remi, Dan, David and Michel (MIC)

Conditions: Temp: 10°C Dew Point: 8°C Rel. Humidity: 87%; No wind; Stability: 4/5 ; Seeing: 3/5; Darkness: 3.5 mag, First Quarter Moon lit the sky.

20" Obsession - 22mm eyepiece

- Jupiter - major planetary bands, 2+2 moons - Europa, Io, Callisto, Ganymede
- Saturn - yellow colour, planetary bands, 0+4 moons with 3 in a triangle close to planet and Titan well away from the group of 3 Dione, Tethys, Rhea

16" TPO RC - 32mm eyepiece

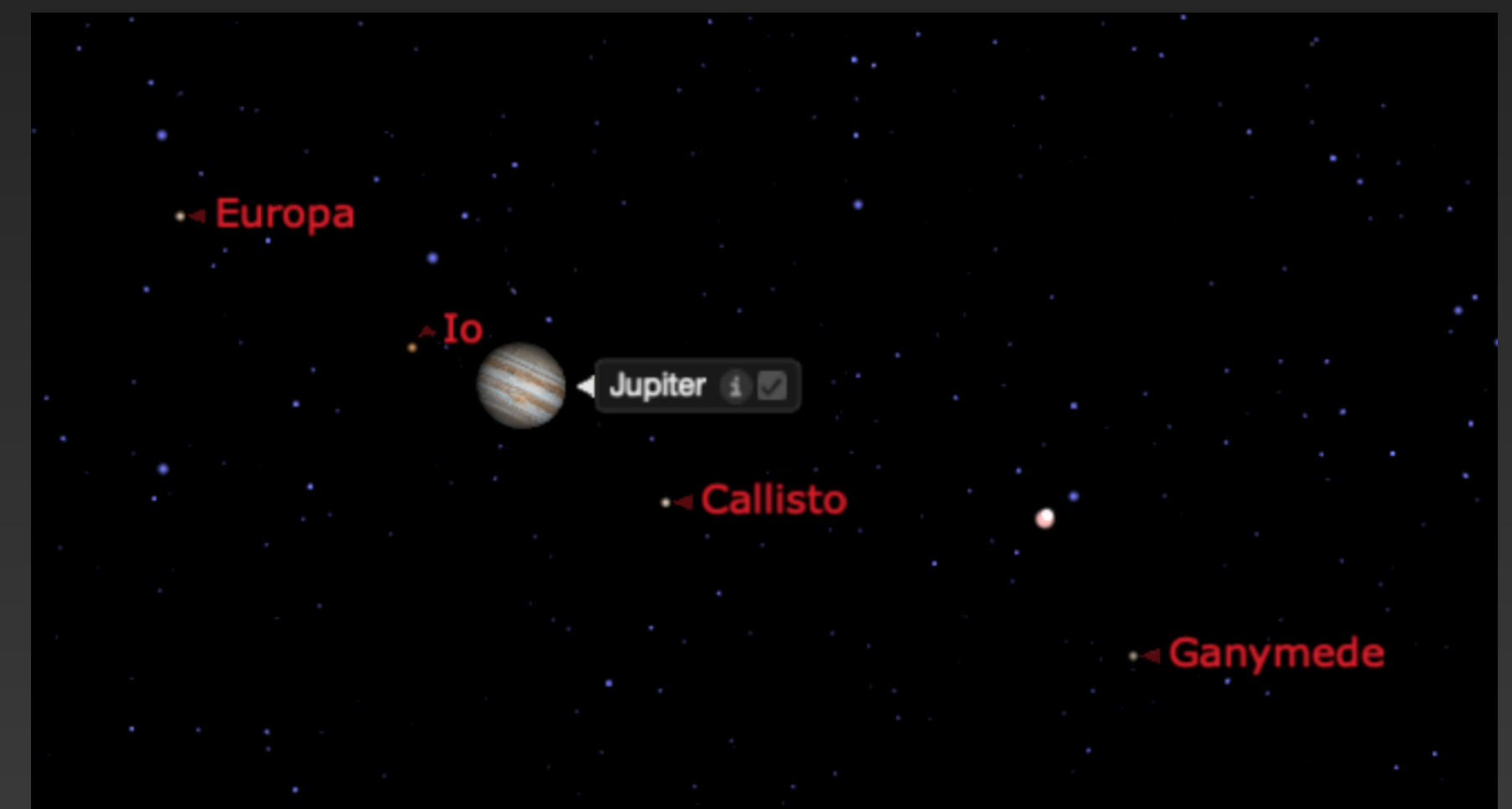
- Jupiter - major planetary bands, 2+2 moons - Europa, Io, Callisto, Ganymede
- Saturn - yellow colour, 0+4 moons with 3 in a triangle close to planet with Titan well away from the group of 3 Dione, Tethys, Rhea

Visual

- Conjunction of Saturn and the Moon (3° 23' separation) in the southern sky with Jupiter off to the west low in the sky
- Cassiopeia and the Big Dipper over the Plaskett dome

Photos - 2019JCa7DSC01757-1783

- Conjunction of Saturn and the Moon in the southern sky with Jupiter off to the west low in the sky
- Cassiopeia, Andromeda and the Big Dipper over the Plaskett dome



# Astrophoto Processing Log

**M31, Andromeda Galaxy & M32 - Sept 2, 2005 10:30pm** - Taken at the [Fifth Annual RASCALS Star Party 2005](#) located at the Victoria Fish & Game, Malahat, BC. For the first couple of hours of observing, the skies rewarded us with inky black and very stable conditions. Everyone was awestruck, and then it ended as the clouds closed 50% of the sky to observing. I have never observed nor photographed M31 with such detail visible before.

Details: Canon Digital Rebel 300D at prime focus behind the LX-90 operating at f/6.3 in polar mode. Exposures of 60 sec and 120 sec, ISO800, 7 out of 14 images stacked, contrast stretched, noise reduced, rotated and cropped, and colour balance adjusted.



Technique & equipment improvement  
over 13 years

2018.08.10 - Island Star Party - Perseids & planets

Start: August 10, 2018 10:00PM PDT...

Today

- Canon 6D DSLR on Astrotrac using L-series zoom lenses
- Cygnus area of the Milky Way - 20 x 1 min - 24-105 at 24mm - clouds drifting through - 2018JCIMG\_8178-8197
  - Southern horizon with Mars - 20 x 1 min - 24-105 at 24mm - mostly clear, some clouds -
    - 2018JCIMG\_8198, 8200-8236.CR2
    - 38 Light Frames
  - M31 11 x 1 min - 70-300 at 300mm - some clouds, star trailing (300mm f/l) - 2018JCIMG\_8241-45, 46-56



# Resources

- The Amateur Astronomer's Notebook - pre-made \$20
- Evernote or OneNote - electronic note taking (all devices & web)
- Starry Night or Stellarium - planetarium apps
- Lightroom or ACDSee Photo - manage photos
- Explore the Universe - RASC observing certificate & online
- *This Week's Sky* from Skynews and *Sky At A Glance* from Sky & Telescope
- RASC Victoria Centre members' photos online galleries
- Astronomy - Joe Carr