

A Tour and Guide to Salem's Night Skies

Jed Rembold

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- The Moon
 - Tycho
 - Copernicus
 - Sea of Tranquility
- Planets
 - Jupiter and moons
 - Saturn
 - Venus and Mars
- Deep Sky
 - Pleides
 - Orion Nebula
 - Andromeda Galaxy
 - Hercules Cluster
- Perseid Meteor Shower



- Where to find:
 - Full: highest in sky around midnight
 - New: highest in sky at noon
 - Waxing: up in early evening
 - Waning: up in early morning
- Always see basically the same side of the Moon
 - Rotates on axis at same rate it rotates around Earth
- Near-side has lots of contrast with darker lowlands and brighter highlands
- Looking along the **terminator** where light meets dark, will give the greatest sense of depth and contrast from shadows.



- Named after Tycho Brahe
- Bright crater in Southern hemisphere
- Characterized by many long rays emanating outwards
- Fairly young by crater standards

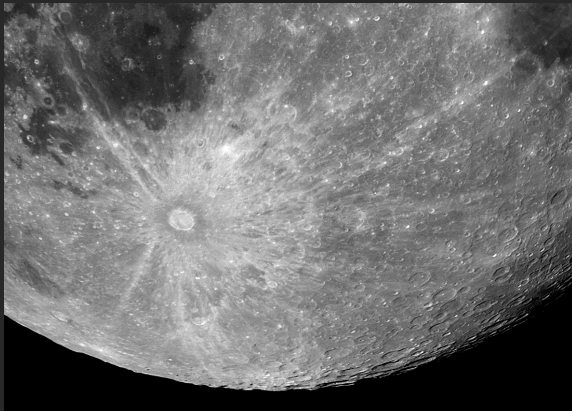




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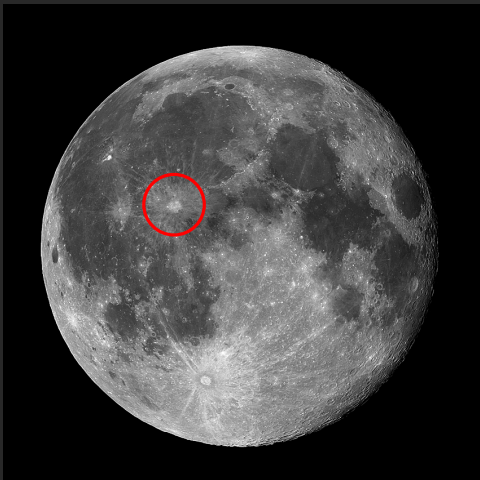


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Sea of Tranquility



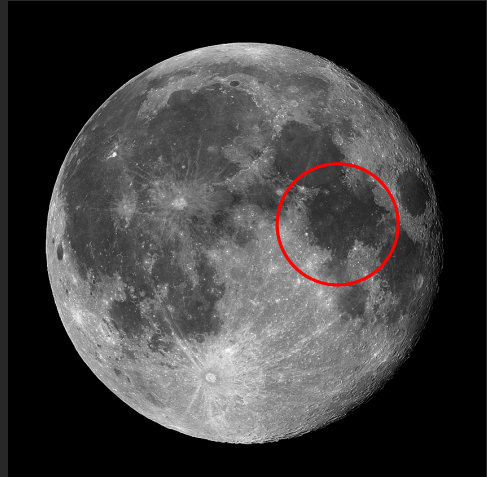
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- Lowlands expose darker rock, giving the distinct shade
- Apollo 11 landing was near the Southwest edge



Sea of Tranquility



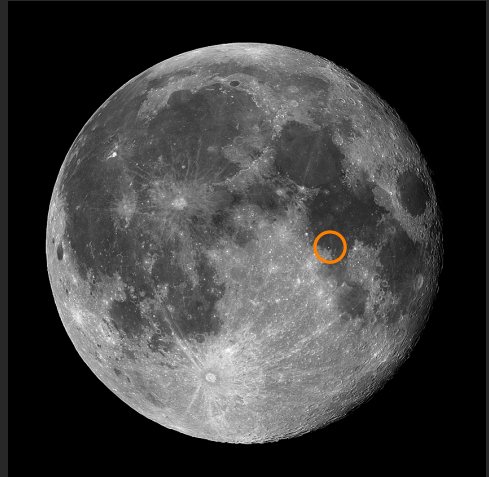
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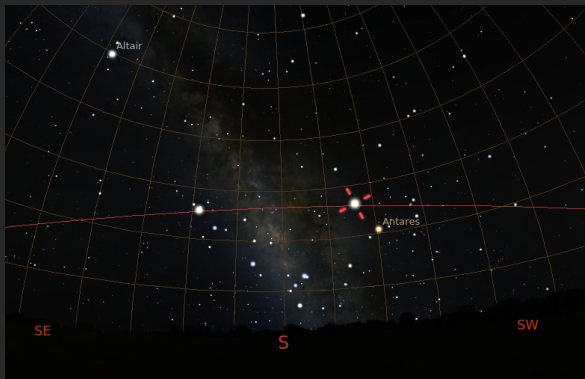


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- Largest of the planets. Will appear as a very large bright star in the sky.
- Look towards the South between 15 and 30 degrees above the horizon.
- If you see two really bright stars, Jupiter is the brighter and is the rightmost one at the moment.
- 4 moons easily visible with just binoculars
 - Io, Europa, Ganymede and Callisto
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- Also appears as a bright star in the sky.
- Currently near Jupiter but is the more leftmost bright point.
- Will just appear oblong in binoculars, really need a **small telescope** to see the rings.
- Can sometimes see its largest moon Titan nearby.



Saturn



- Also appears as a bright star in the sky.
- Currently near Jupiter but is the more leftmost bright point.
- Will just appear oblong in binoculars, really need a [small telescope](#) to see the rings.
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