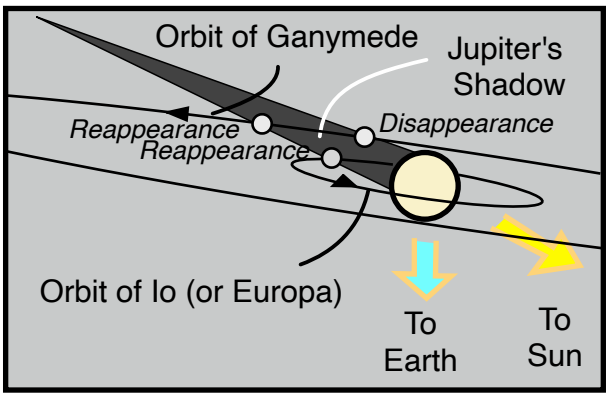

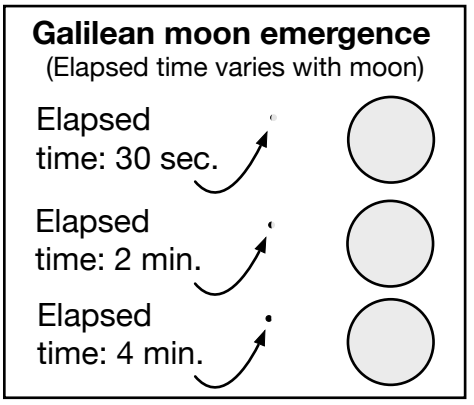

An "Oh! Wow!" moment through your telescope

Imagine seeing a world emerge in the darkness, taking several minutes to fully appear. Such a body is Io, Europa, or Ganymede on multiple occasions this December.

Aim a telescope at Jupiter shining in the south a few minutes before the event is predicted to take place. Look away from the planet's bright disk, about one planet diameter from its eastern edge. At the designated time, a faint speck can be discerned. As the seconds pass, that speck grows brighter and brighter.

This is one of the large Galilean moons, slowly leaving Jupiter's shadow while orbiting the giant planet. December is a good month this year to witness an event like this in the evening sky, because Jupiter's shadow angles to the east of the planet, putting the emerging moon relatively far from the planet's glare. Each moon takes a different time to fully emerge, because of its diameter and of its orbital velocity around the planet.

Note: December 12 and 19 have Ganymede disappearing into the shadow and reappearing.
December 21 and 28 have Io and Europa both disappearing near the same time.

Make sure that Jupiter is sufficiently above the horizon at your location
and that the evening twilight has sufficiently darkened.
Begin viewing a few minutes before the listed times.

Event commencement: (all times CST)

Io	Dec 5, 11:34 pm
Io	Dec 7, 6:04 pm
Ganymede	Dec 12, disappearance 5:41 pm, reappearance 7:48 pm
Io	Dec 13, 1:30 am
Europa	Dec 14, 6:24 pm
Io	Dec 14, 7:58 pm
Ganymede	Dec 19, disappearance 9:45 pm, reappearance 11:49 pm
Europa	Dec 21, 9:03 pm
Io	Dec 21, 9:53 pm
Europa	Dec 28, 11:42 pm
Io	Dec 28, 11:48 pm
Io	Dec 30, 6:18 pm

Use a "high" magnification!