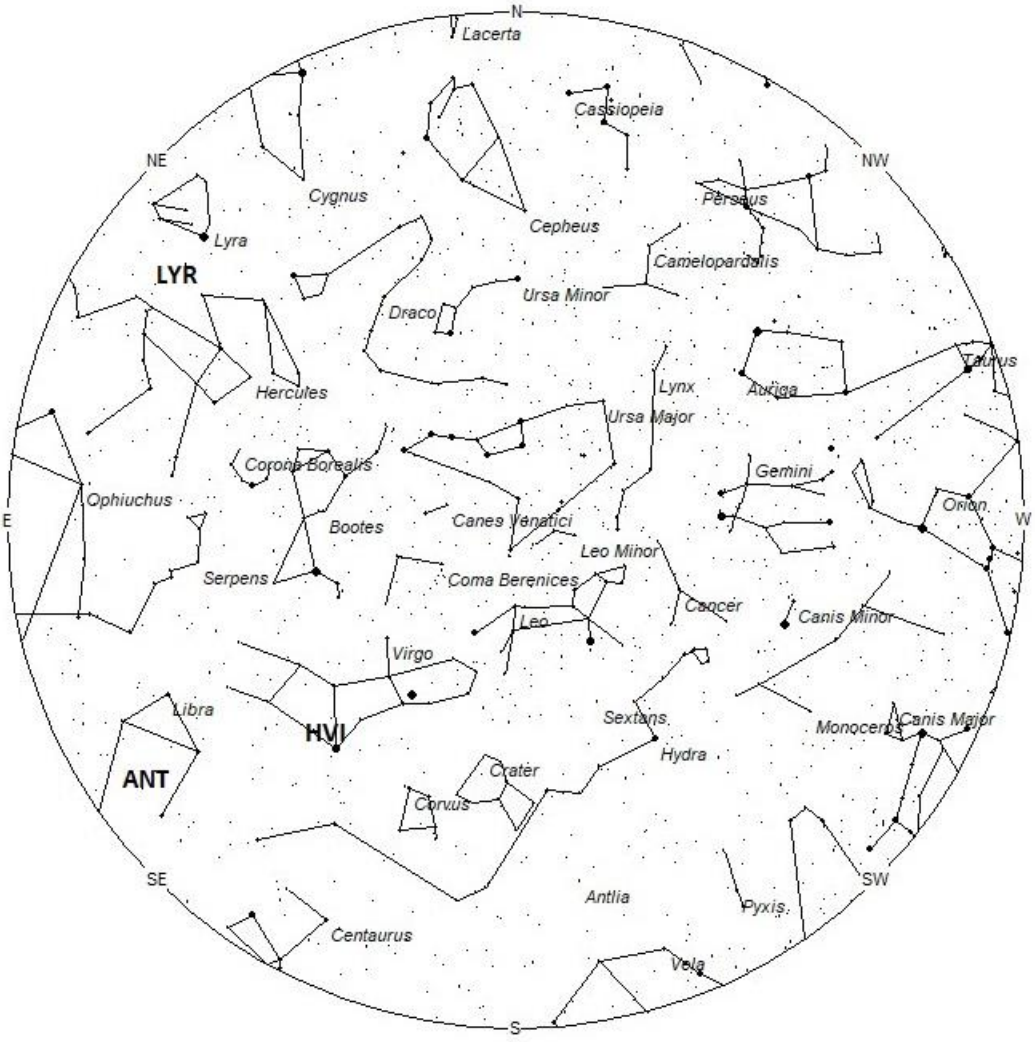
Meteor Activity Outlook for April 24-30, 2021

Blake Huovie captured this fireball while photographing aurora on March 12, 2021, from Bear Head Lake State Park, Minnesota, USA

During this period the moon reaches its full phase on Monday April 26th. On this date the moon is located opposite the sun and remains above the horizon all night long. During this entire period the moon remains above the horizon while the sky is dark, severely limiting the opportunity to view meteor activity. The estimated total hourly meteor rates for evening observers this week is near 1 as seen from mid-northern latitudes (45N) and 2 as seen from tropical southern locations (25S). For morning observers, the estimated total hourly rates should be near 4 as seen from mid-northern latitudes (45N) and 6 as seen from tropical southern locations (25S). The actual rates will also depend on factors such as personal light and motion perception, local weather conditions, alertness, and experience in watching meteor activity. Rates are reduced during this period due to moonlight. Note that the hourly rates listed below are estimates as viewed from dark sky sites away from urban light sources. Observers viewing from urban areas will see less activity as only the brighter meteors will be visible from such locations.

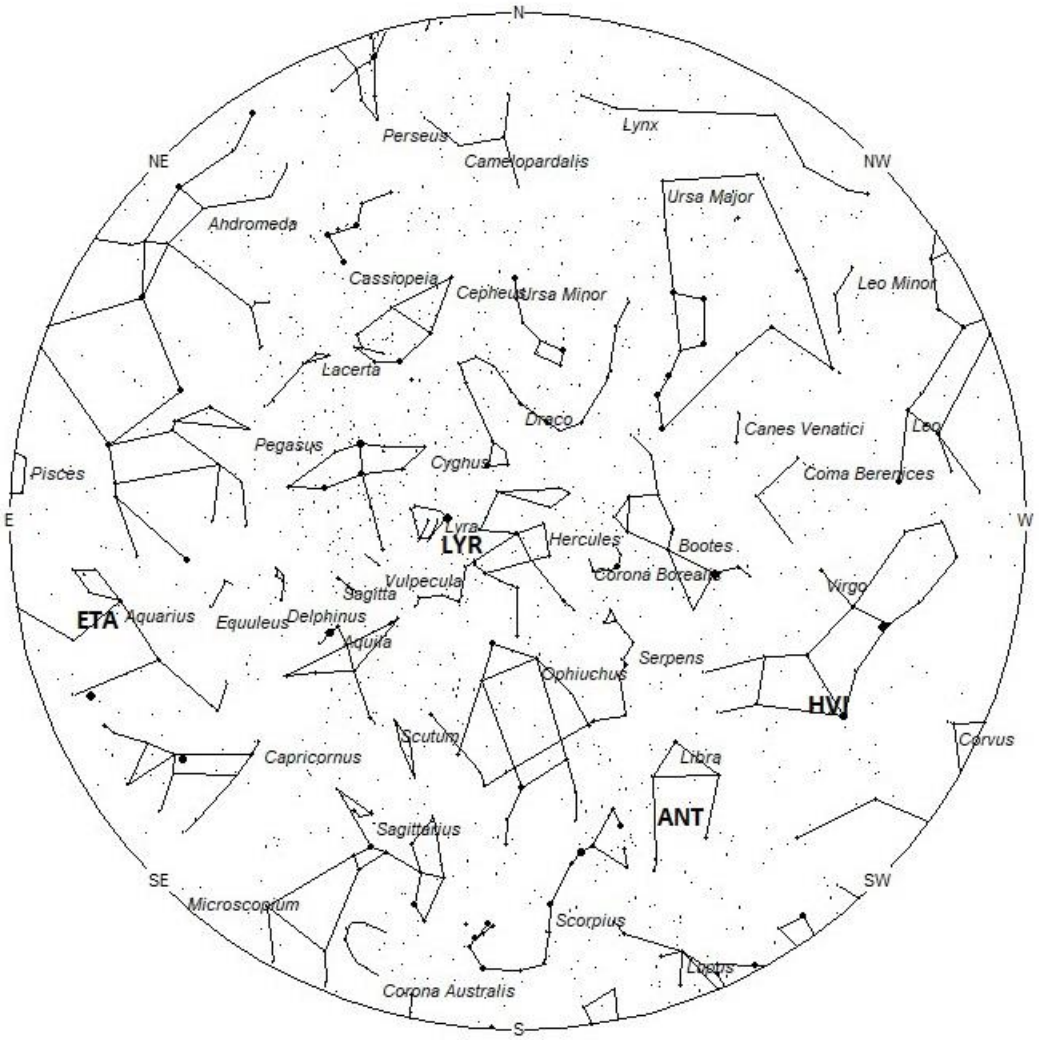
The radiant (the area of the sky where meteors appear to shoot from) positions and rates listed below are exact for Saturday night/Sunday morning April 24/25. These positions do not change greatly day to day so the listed coordinates may be used during this entire period. Most star atlases (available at science stores and planetariums) will provide maps with grid lines of the celestial coordinates so that you may find out exactly where these positions are located in the sky. A

planisphere or computer planetarium program is also useful in showing the sky at any time of night on any date of the year. Activity from each radiant is best seen when it is positioned highest in the sky, either due north or south along the meridian, depending on your latitude. It must be remembered that meteor activity is rarely seen at the radiant position. Rather they shoot outwards from the radiant, so it is best to center your field of view so that the radiant lies at the edge and not the center. Viewing there will allow you to easily trace the path of each meteor back to the radiant (if it is a shower member) or in another direction if it is sporadic. Meteor activity is not seen from radiants that are located far below the horizon. The positions below are listed in a west to east manner in order of right ascension (celestial longitude). The positions listed first are located further west therefore are accessible earlier in the night while those listed further down the list rise later in the night.



Radiant Positions at 10pm Local Daylight Saving Time

Radiant Positions at 1am Local Daylight Saving Time



Radiant Positions at 4am Local Daylight Saving Time

These sources of meteoric activity are expected to be active this week.

Details of each source will continue next week when viewing conditions are more favorable.

SHOWER	DATE OF MAXIMUM ACTIVITY	CELESTIAL POSITION	ENTRY VELOCITY	CULMINATION	HOURLY RATE	CLASS
		RA (RA in Deg.) DEC	Km/Sec	Local Daylight Saving Time	North-South	
pi Puppids (PPU)	Apr 23	07:26 (112) -45	15	18:00	<1 - <1	III
h Virginids (HVI)	May 01	13:30 (202) -11	19	00:00	<1 - <1	IV
Anthelion (ANT)	-	15:08 (227) -18	30	02:00	1 - 2	II
Lyrids (LYR)	Apr 22	18:22 (275) +33	48	06:00	<1 - <1	I
eta Aquariids (ETA)	May 05	22:02 (331) -04	65	09:00	<1 - 1	I