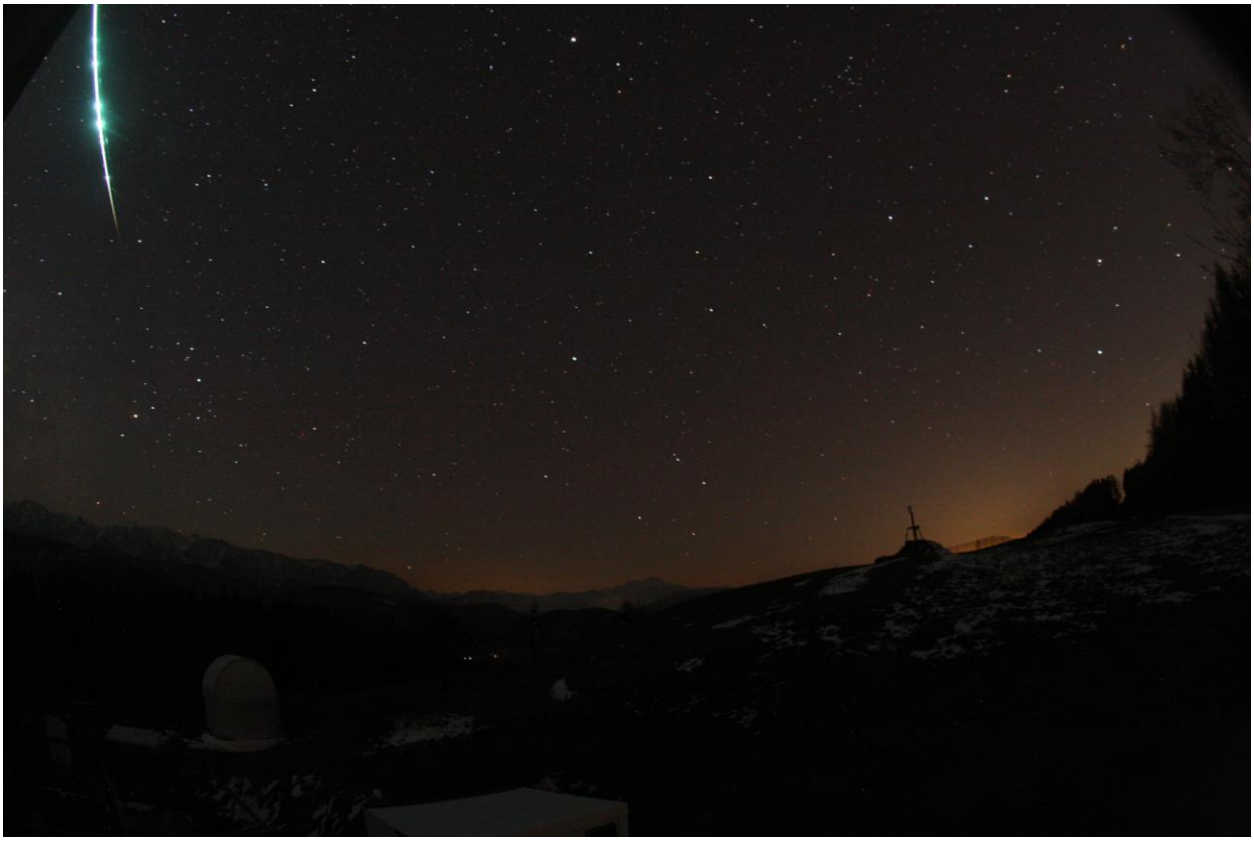
Meteor Activity Outlook for April 11-17, 2020

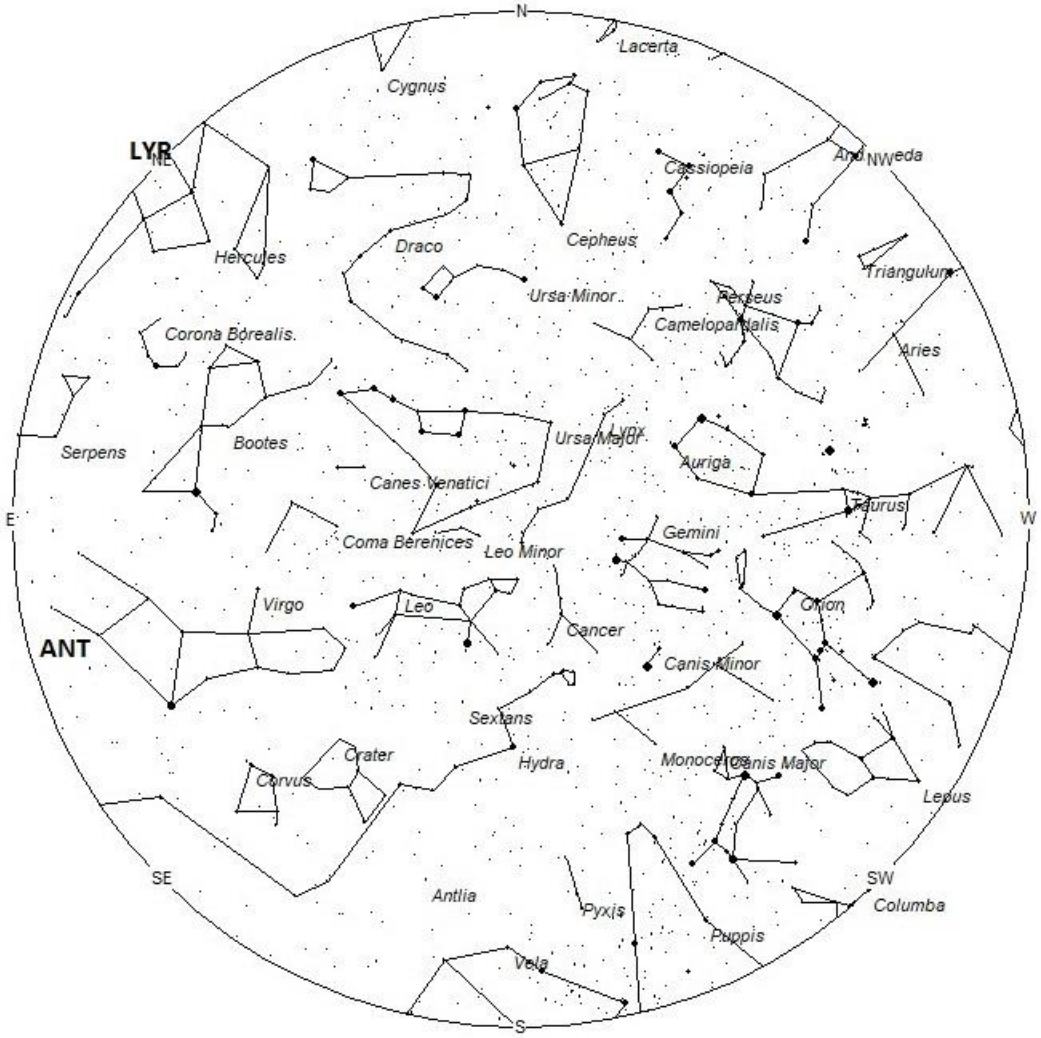


Erwin Filimon captured this bright fireball on the morning of April 2, 2020 at 01:52 Universal Time from Observatory Gahberg , Oberösterreich, Austria. Notice the several bursts along the trail. For more details on this event visit: https://fireball.amsmeteors.org/members/imo_view/event/2020/1544 © Erwin Filimon

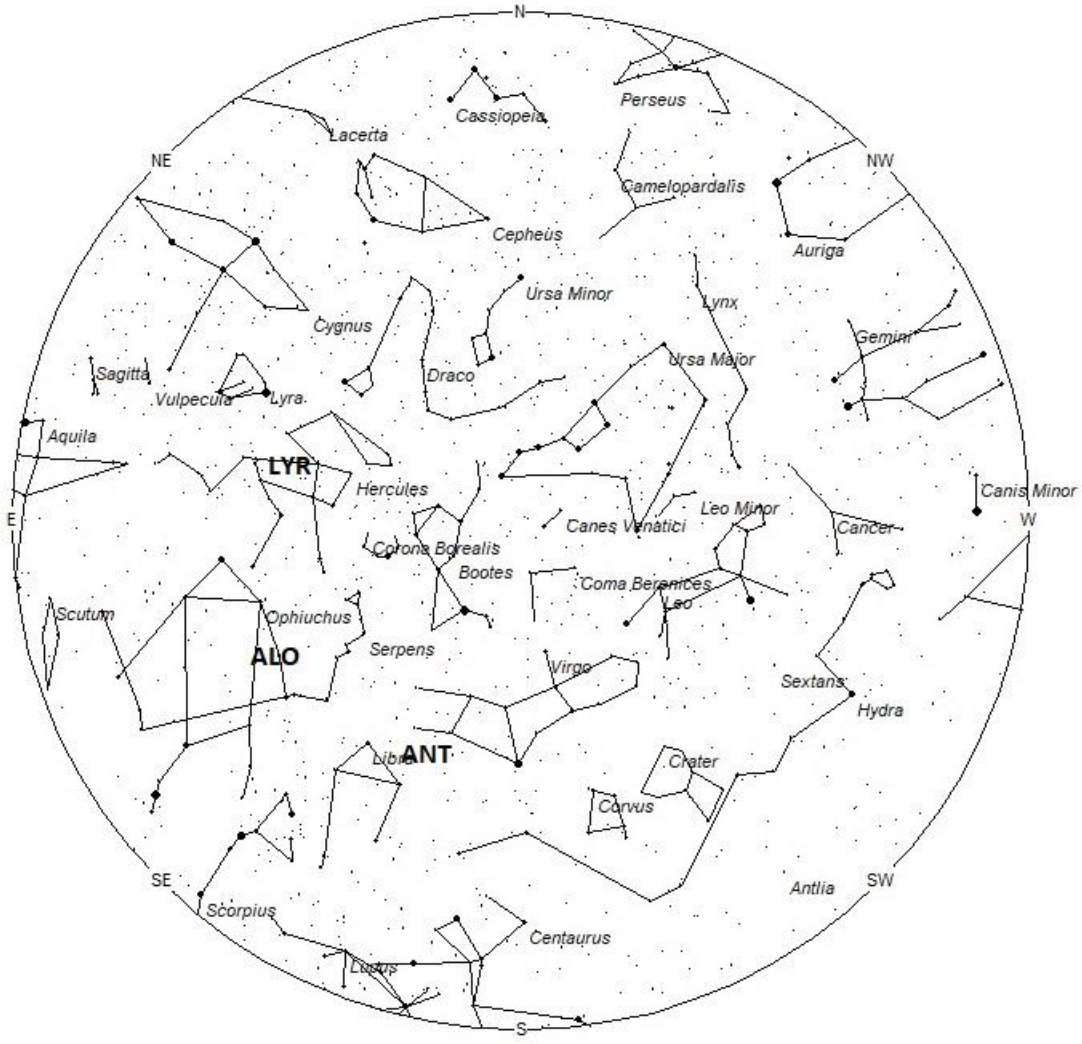
During this period the moon reaches its last quarter phase on Tuesday April 14th. At this time the moon lies 90 degrees west of the sun and will rise near 2:00 local daylight saving time (LDST). This weekend the waning gibbous moon will rise during the late evening hours and will spoil the sky with bright moonlight the remainder of the night. The estimated total hourly meteor rates for evening observers this week is near 2 for those viewing from the northern hemisphere and 3 for those located south of the equator. For morning observers, the estimated total hourly rates should be near 4 as seen from mid-northern latitudes (45N) and 7 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 by moonlight during this period. 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 11/12. 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

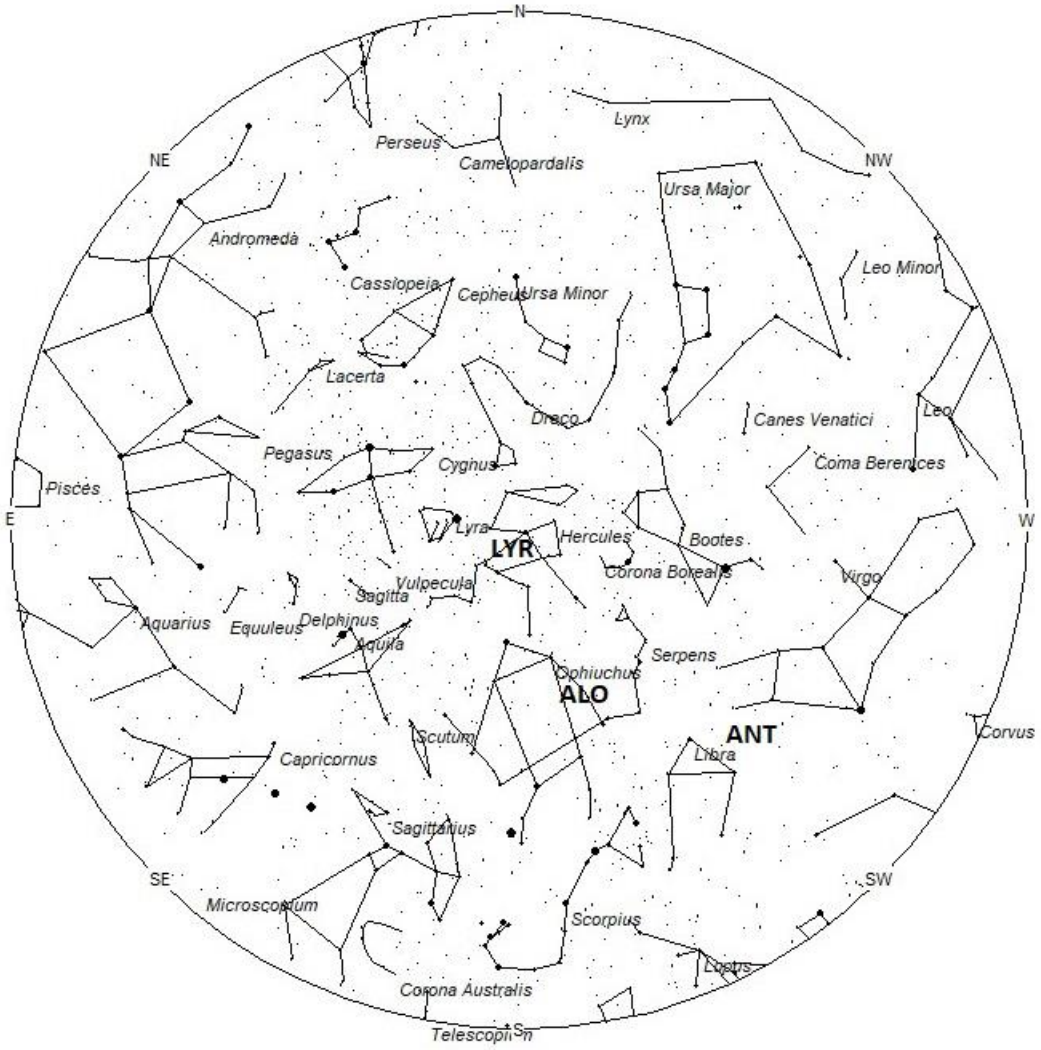
coordinates so that you may find out exactly where these positions are located in the sky. A planisphere or computer planetarium program is also useful in showing the sky at any time of night on any date of the year. Activity from each radiant is best seen when it is positioned highest in the sky, either 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 a sporadic. Meteor activity is not seen from radiants that are located 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 9PM LOCAL DAYLIGHT SAVING TIME



RADIANT POSITIONS AT 1AM LOCAL DAYLIGHT SAVING TIME



RADIANT POSITIONS AT 5AM 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 lunar 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	
Anthelion (ANT)	-	14:20 (215) -14	30	02:00	1 - 1	II
April lambda Ophiuchids (ALO)	Apr 06	16:20 (245) +01	56	04:00	<1 - <1	IV
Lyrids (LYR)	Apr 22	17:42 (266) +33	46	05:00	<1 - <1	I
delta Pavonids (DPA)	Mar 30	21:48 (327) -65	58	09:00	<1 - 1	III