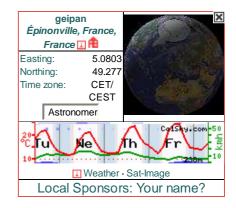


Select start of calculation:

Date: 10 August 2014 Time: 23: 20: 00. 00 in TDT Now

Select duration: 15 Minutes



The Calendar-Sky

The astronomical calendar contains **thousands of events per day** for every point on Earth. We know that you only care for a very few of these events and hence we let you personalize your own Astro-Calendar. You may primarily do so by switching to your appropriate user level, and by selecting some of the three dozens categories.

In parentheses are forced limits for the maximum calculation interval. The celestial calendar is to be found further below on this page and will appear within some seconds after pressing the *Go!*-Button (depending on the complexity of your selections). The calendar is created especially for you. The higher your user level, the more complex objects you selected, the longer it does take to calculate. *Please do not press the reload-button*; the calculations will take significantly longer.

Calendar and		General events		Earth orbiting satellites		Dimmer and more		
Time	ekeeping Space Calendar: Birthdays, Rocket Launches Local Events (Talks, Exhibitions) NASA TV Guide Local Telescope Dealers	Lunar Occultations (2 months) Planetary Conjunctions Lunar Eclipses Solar Eclipses and Transits Meteor Showers Planetary Phenomena	\ \ \ \	Space Station ISS (1 month) short duration Flares of Iridium satellites (14 days) Passes of other bright satellites (1 day, slow!)		Jupiter: Great Red Spot and satellite events Jupiter's Satellites: position Saturn: Satellite events and storms Saturn's Satellites: position		
	Public Holidays Saint's Day	□ Lunar Phenomena□ The Sun		Graphical night calendar		Zodiacal light/Gegenschein		
	Zodiac of today. Change of Zodiac Islamic, Indian,	Asteroids (6 months) Comets		Sun and Moon Planets		Variable Stars (3 months) Supernovae		
	Persian and Hebrew Calendar			Asteroids Comets		Binary Stars		
	Week Number			Meteor Showers	Dee	p sky objects		
	Sundials / GPS Time / Current Time Definitions			Polar Star Transits Weather Balloons		Star chart Milky Way		
	Julian Day Number			Troduitor Damostio		Galaxies		
	Sidereal Time					Open Star Clusters		
	Local Magnetic Field					Globular Star Clusters		
						Nebula		
					go!			

Sunday 10 August 2014

Time (24-hour clock)	Object (Link)	Event

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%		Observer Site	Épinonville, France, France WGS84: Lon: +5d04m49.35s Lat: +49d16m37.23s Alt: 285m All times in CET or CEST (during summer)
89	23h20m00s	USA 160/NOSS 3-1A (26905 2001-040-A) →Ground track →Star chart	Appears 23h03m27s 10.5mag az:309.3° NW horizon at Meridian 23h11m07s 6.6mag az: 0.0° N h:31.0° Culmination 23h12m39s 6.1mag az: 23.0° NNE h:33.6° distance: 1839.2km height above Earth: 1174.8km elevation of Sun: -17° angular velocity: 0.23°/s Disappears 23h21m10s 6.8mag az: 91.3° E h:4.8°
89	23h20m00s	Yaogan 16C (39013 2012-066-C) →Ground track →Star chart	Appears 23h12m39s 6.2mag az:142.3° SE h:25.1° Culmination 23h14m41s 6.1mag az:113.6° ESE h:29.4° distance: 1828.2km height above Earth: 1069.7km elevation of Sun: -17° angular velocity: 0.24°/s Disappears 23h23m28s 8.6mag az: 46.8° NE horizon
S	23h20m00s	Yaogan 16A (39011 2012-066-A) →Ground track →Star chart	Appears 23h12m49s 6.3mag az:137.2° SE h:25.0° Culmination 23h14m33s 6.2mag az:112.9° ESE h:28.1° distance: 1877.5km height above Earth: 1069.1km elevation of Sun: -17° angular velocity: 0.23°/s Disappears 23h23m16s 8.6mag az: 47.1° NE horizon
89	23h20m00s	Yaogan 16B (39012 2012-066-B) →Ground track →Star chart	Appears 23h13m09s 6.3mag az:137.4° SE h:25.1° Culmination 23h14m54s 6.2mag az:113.0° ESE h:28.2° distance: 1873.2km height above Earth: 1069.3km elevation of Sun: -17° angular velocity: 0.23°/s Disappears 23h23m37s 8.6mag az: 47.0° NE horizon
89	23h20m00s	Yaogan 10 LM Rocket (36835 2010-038-B) →Ground track →Star chart	Appears 23h19m00s 2.9mag az:104.6° ESE h:42.2° Culmination 23h19m34s 3.0mag az: 71.4° ENE h:47.6° distance: 595.9km height above Earth: 452.2km elevation of Sun: -18° angular velocity: 0.75°/s at Meridian 23h22m17s 6.4mag az: 0.0° N h:14.5° Disappears 23h25m03s 8.5mag az:351.7° N horizon Time uncertainty of about 1 seconds
89	23h23m15s	Yaogan 12 (37875 2011-066-B) →Ground track →Star chart	Appears 23h22m17s 4.4mag az:153.1° SSE h:46.6° Culmination 23h23m15s 4.2mag az: 75.4° ENE h:79.0° distance: 499.6km height above Earth: 491.3km elevation of Sun: -18° angular velocity: 0.89°/s at Meridian 23h24m03s 5.2mag az: 0.0° N h:51.4° Disappears 23h28m55s 10.2mag az:348.6° NNW horizon
(S)	23h25m54s	ATV-5 (40103 2014-044-A) →Ground track →Star chart	Appears 23h20m24s 6.4mag az:281.1° W horizon at Meridian 23h25m50s 1.9mag az: 0.0° N h:57.5° Culmination 23h25m54s 1.9mag az: 6.1° N h:57.6° distance: 505.2km height above Earth: 432.3km elevation of Sun: -18° angular velocity: 0.88°/s

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			Disappears	23h27m25s	2.4mag	az: 74.4	° ENE	h:28.7°
		ISS	Appears horizon at Meridian	23h20m44s 23h26m06s	· ·	az:281.2 az: 0.0		N E
(S)	23h26m10s	→Ground track →Star chart	h:56.9° Culmination distance: 49 of Sun: -18° Disappears	95.6km hei	ght above elocity:	Earth: 4 0.90°/s	21.7km	elevation
		32/Singlet	Appears horizon	23h20m21s				(V) E
(5)	23h27m55s	(19460 1988-078-A) →Ground track →Star chart	Culmination h:58.8° distance: 90 of Sun: -19° Disappears	95.9km heig angular ve	ght above elocity:	Earth: 7	90.8km	
		USA 77/NOSS 2-2C	Appears h:36.0° Culmination	23h28m39s 23h29m46s	J	az:153.8 az:119.9		N N
89	23h29m46s	(21809 1991-076-E) →Ground track →Star chart	h:41.9° distance: 10 of Sun: -19° Disappears		elocity:			m elevation
		IGS 7A Rocket	Appears h:37.8° Culmination h:38.4°	23h30m21s 23h30m35s		az: 82.2 az: 71.0		W S
89	23h30m35s	(37955 2011-075-B) →Ground track →Star chart	distance: 68 of Sun: -19° at Meridian Disappears Time uncertai	angular ve 23h34m01s 23h35m49s	elocity: 6.8mag 8.1mag	0.65°/s az: 0.0 az:354.1	° N	elevation h:8.3° horizon
8	23h30m48s	SJ 11-03 Rocket (37731 2011-030-B) →Ground track →Star chart	Appears h:34.2° at Meridian h:39.3°	23h28m58s 23h29m15s	_			W S
			Culmination distance: 65 of Sun: -19° Disappears	6.3km hei	ght above elocity:	Earth: 6	36.8km	elevation
89	23h31m18s	Fengyun 3C Rocket (39261 2013-052-B) →Ground track →Star chart	Appears h:33.4° Culmination h:66.5°	23h29m00s 23h31m18s	J	az:142.0		W S
			distance: 86 of Sun: -19° at Meridian Disappears	angular ve	elocity: 5.7mag	0.50°/s az: 0.0	° N	h:34.4°
%	23h32m48s	USA 76/NOSS 2-2B (21808	Anneans	23h32m05s	4.9mag	az:142.2	° SE	N E
		1991-076-D) →Ground track →Star chart	distance: 10 of Sun: -19° Disappears		elocity:	0.44°/s		m elevation horizon

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Melios 1B (25977 1999-064-A) →Ground track →Star chart **Appears 23h32m43s** 4.6mag az:136.2° SE h:41.2°

Culmination 23h34m04s 4.3mag az: 72.1° ENE h:64.6°

distance: 695.5km height above Earth: 634.7km elevation of Sun: -19° angular velocity: 0.63°/s

 at Meridian
 23h36m07s
 6.6mag
 az:
 0.0° N
 h:29.9°

 Disappears
 23h40m37s
 10.1mag
 az:348.9° N
 horizon

16 Items/Events: S Export to Outlook/iCal ☐ Print ► E-mail Used satellite data set is from 9 August 2014

Hide glossary

Glossary:

Appears

Local time at which the satellite appears visually. The first figure indicates the **visual brightness** of the object. The smaller the number, the brighter and more eye-catching it appears to an observer. The units are astronomical magnitudes [m]. **Azimuth** is given in degrees counting from geographic north clockwise to the east direction. The three-character direction code is given as well. In case the satellite exits from the Earth shadow and comes into the glare of the Sun, the elevation above horizon is given in degrees for this event. If this figure is omitted, the satellite is visible straight from the horizon.

at Meridian

Time of the transit of the meridian, i.e. the satellite is due South or due North. At this time, the satellite will not reach its highest point of the pass. Look for culmination.

Azimuth/az

Azimuth direction of the object is given in degrees counting from geographic north (0°) clockwise to the east direction. East is 90°, south 180°, and west 270°. The three-character direction code is given as well. For example, NNW stands for north-north-west.



Culmination

Time at which the satellite reaches his highest point in the sky as seen from the observer. For description of the figures see **Appears**.

Visually "better" passes of satellites are indicated by highlighting the information. The selection within the list of all possible transits is coupled with the observer level, the daylight, and several other conditions.

Disappears

Local time of visual disappearance of the satellite. This may either be the time at which the satellite moves below the observer's horizon or the entry of the object in the shadow of Earth (the elevation is given for this event). The low Earth orbiting (LEO) satellites are usually visible for about 10 seconds more than the listed time, when they start fading rapidly.

International Space Station ISS

The manned ISS is according to NASA the biggest and most complex scientific project in history. During twilight passed, the space station is easily seen by everyone as a strikingly bright and silently running star. It crosses the sky in a few minutes basically from west to east.

Time and Date

Date of validity of calculated output in local time and date, taking into account daylight saving time as well (see the current time zone on the left of the Earth icon on top right of almost all pages). The time is given as hours:minutes:seconds, or 00h00m00s. The time may also be rounded and given in decimal form, in order to correspond to the accuracy of the calculation: e.g., 10.1h means that the event will take place at about 5 minutes past 10 o'clock. This may also happen for days: 4.3d corresponds to the fourth day at around 7 o'clock. The start time is taken as selected by you, i.e., this is *not* necessarily at midnight. For intervals shorter than one day, decimal days are given. Times are given in 24 hour format (0h00m is midnight, 12h: noon, 18h: 6 pm.)

WGS84 / Geographical Coordinates

Geographical coordinates are given by the angles longitude (Lon), latitude (Lat), and altitude in meters (Alt). A place north of the equator at marked by N or +, places south of the equator by S or -. The longitude from the meridian of Greenwich is counted positive towards east (E). Places west from Greenwich are marked W or by -. The geographical coordinates refer to an ellipsoid, which fits the true shape of the Earth (geoid). The geoid corresponds to calm sea surface. The keyword "Geographic:" uses the local ellipsoid as reference system. WGS84 mark coordinates referring to the WGS84 ellipsoid. The difference in altitude to the geoid sums up to 100 meters and is called geoid undulation. This is corrected for when tagged "MSL" (mean sea level), such that the origin of the height system is at sea level.

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Software Version: 30 August 2014 Database updated 9 min ago Current Users: 208

2 Sep 2014, 16:11 UTC 584 minutes left for this session 🗓 29 days left in ad-free mode

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