Intro | Calendar | Sun | Moon | Planets | Comets | Asteroids | Meteors | Deep-Sky | Satellites

Astro-Calendar | User Profile · Space Weather · Ocean Tides · Meteo ·
Graphical Day&Night Calendar · Weather Balloons · Islam. Prayer Times

→ Nightvision-Mode   → E-mail & Alert Manager

Select start of calculation:

Date: 17 | August | 2014

Time: 22 : 30 : 00 . 00   ☐ in TDT   [Now]

Select duration:

15 Minutes   go!

| geipan |
| *Bergerac, France* |
| Easting: 0.4833 |
| Northing: 44.8538 |
| Time zone: CET/CEST |
| Astronomer |

Weather · Sat-Image

Local Sponsors: Your name?

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 Timekeeping

☐ Space Calendar: Birthdays, Rocket Launches
☐ Local Events (Talks, Exhibitions)
☐ NASA TV Guide
☐ Local Telescope Dealers
☐ Public Holidays
☐ Saint's Day
☐ Zodiac of today. Change of Zodiac
☐ Islamic, Indian, Persian and Hebrew Calendar
☐ Week Number
☐ Sundials / GPS Time / Current Time Definitions
☐ Julian Day Number
☐ Sidereal Time
☐ Local Magnetic Field

General events

☐ Lunar Occultations (2 months)
☐ Planetary Conjunctions
☐ Lunar Eclipses
☐ Solar Eclipses and Transits
☐ Meteor Showers
☐ Planetary Phenomena
☐ Lunar Phenomena
☐ The Sun
☐ Asteroids (6 months)
☐ Comets

Earth orbiting satellites

☑ Space Station ISS (1 month)
☐ short duration Flares of Iridium satellites (14 days)
☐ Passes of other bright satellites (*1 day*, slow!)

Daily reoccurring events

☐ Graphical night calendar
☐ Sun and Moon
☐ Planets
☐ Asteroids
☐ Comets
☐ Meteor Showers
☐ Polar Star Transits
☐ Weather Balloons

Dimmer and more difficult objects

☐ Jupiter: Great Red Spot and satellite events
☐ Jupiter's Satellites: position
☐ Saturn: Satellite events and storms
☐ Saturn's Satellites: position
☐ Zodiacal light/Gegenschein
☐ Variable Stars (3 months)
☐ Supernovae
☐ Binary Stars

Deep sky objects

☐ Star chart
☐ Milky Way
☐ Galaxies
☐ Open Star Clusters
☐ Globular Star Clusters
☐ Nebula

go!

Sunday 17 August 2014

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

	Observer Site	Bergerac, France WGS84: Lon: +0d29m00.21s Lat: +44d51m13.70s Alt: 90m All times in CET or CEST (during summer)	
 22h34m58s	ISS →Ground track →Star chart	**Appears 22h29m32s 3.4mag az:300.3° WNW** **horizon** **at Meridian 22h34m41s -3.3mag az: 0.0° N** **h:54.8°** **Culmination 22h34m58s -3.7mag az: 25.3° NNE h:57.5°** distance: 492.6km height above Earth: 420.7km elevation of Sun: -15° angular velocity: 0.89°/s **Disappears 22h36m23s -3.2mag az: 92.6° E h:29.8°**	

2 Items/Events: Export to Outlook/iCal 🖶 Print ✉ E-mail
Used satellite data set is from 16 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.

▲ Top

Create new default account/Logout

Software Version: 30 August 2014
Database updated 19 min ago
Current Users: 213

2 Sep 2014, 16:21 UTC
574 minutes left for this session ⓘ
29 days left in ad-free mode