


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

Introduction · Sat-Library · Selected Satellite · Internat. Space Station ISS · Space Shuttle ·  
 Satellites within interval · Tracking/Identification · (Iridium) Flares · Tumbling Iridium ·  
 Geostationary · Radio Amateurs · GPS/GLONASS | [Star Chart](#) | Decaying Satellites ·  
 Sun/Moon Crossers, Occultations

→ Nightvision-Mode


→ E-mail & Alert Manager

**Select start of calculation:**


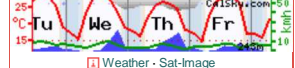
Date:      
 Time:  :  :  


Select duration:  Minutes

Select interval:  Seconds 


geipan  
 Eybens, France 

Easting: 5.7501  
 Northing: 45.1477  
 Time zone: CET/CEST

 Weather · Sat-Image

Local Sponsors: Your name?

Name: ISS  
 Launched: 20 Nov 1998  
 Dimensions: 109 m x 73 m x 27.5 m  
 Brightness: -2.0 mag (at 1000 km, 50% illuminated)  
 -4.7 mag (at perigee, full illumination)  
 Mean magnitude from visual observations  
 RCS: 402m<sup>2</sup> (Radar cross section)  
 USSPACECOM Nr: 25544 Internat. Designator: 1998-067A  
 Orbit: 410.1 x 422.4 Km, 92.9min Inclination: 51.7°  
 Age Elements:  0.1 days

**Satellite Menu**

- Info · Orbit History/Zoom
- Sighting Opportunities
- Data & view of the Earth
- Finder Chart
- Ground Track Map
- Transit Centerline
- Orbit Elements (TLE)

Orbit calculations are based on the valid segment of 3 different orbital segments (orbital data above shown for the beginning of the segment containing the selected start time).

See more/less data and options by changing the user level!

**Simulation**

Output size

Grid

Main lines

Constellations

Boundaries

no line of Horizon

Negate colors

draw no symbols

Realism (e.g., show Planets/Moons)

**Telescope**

Vertex is up

Telrad

Left-right mirrored image

Inverted image

Digitized Sky Survey  
 photographic plates (supports only equatorial view)

Limiting Magnitude

**Pointing**


Field of View

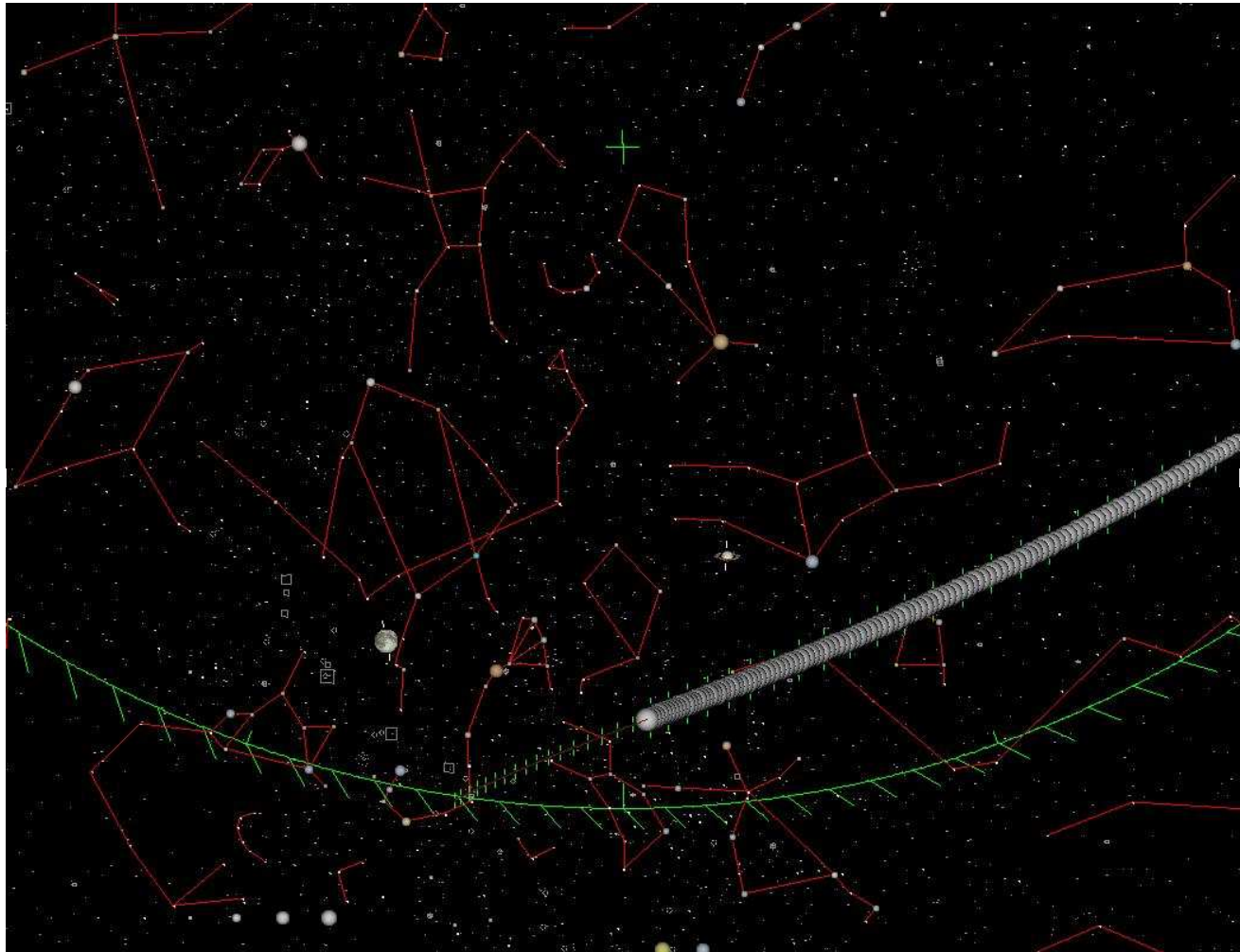
Direction

Object Name,  
 NGC M PGC  
 Cr. Tr. B. Sh2  
 PK Abell Mrk  
 ACO SDSS  
 2QZ / SAO  
 HIP TYC HD  
 FK5 XZ GI  
 Struve

Right Ascension

Declination





Stars as seen from the observer.  
Visual limiting magnitude: 6.5 mag

#### Time:

Saturday, 22 June 2013, 22h 45m 10s  
 JD: **2456466.3646991** TDT: 2456466.3654759 deltaT: 67.12 sec  
 Apparent sidereal time: Local: 15h 12m 56.572s Greenwich: 14h 49m 56.538s  
 (Times in **CEST, UTC+02:00**, topocentric data for **Eybens, France**)

#### Map Center:

Azimuth direction: 179.75° S (South)  
 Altitude: 44.96°  
 Right Ascension: 15h 13m 39.710s Apparent coordinates  
 Declination: + 0° 05' 54.63" Apparent coordinates

Right Ascension: 15h 12m 56.572s J2000  
 Declination: + 0° 08' 51.77" J2000

Elongation from Sun center: 131.83°  
 Elongation from Moon center: 39.59°

**Rises:** 16h 43m (Azimuth: 89.3° E)  
**Transit:** 22h 45m 53s (Altitude: +44.97°)  
**Sets:** 4h 49m on following day (Azimuth: 270.7° W)  
 Time above horizon: 12h 05m

**Opposition in R.A.:** 11. May 2013 11h 22m CEST Elongation: 161.9°  
**Conjunction in R.A.:** 13. November 2013 2h 47m CET Elongation: 18.1°

#### Sun:

Altitude: -10.8°  
 Azimuth: 320.0°

#### Moon:

Altitude: 16.8°  
 Azimuth: 146.5°  
 Phase, illum. fraction: 99.3% (geocentric)

Print E-mail

Positions are shown in **topocentric (for objects within the solar system, geocentric otherwise) astrometric (airfree) equatorial coordinates at equinox J2000.0 (Right Ascension/Declination) and epoch of date given**. Stereoscopic projection is used for the star chart. If you zoom into a field of view in order of minutes of arc, you will get a fantastic photographic background image from the Digitized Sky Survey (DSS) from the Mount Palomar observatory.

Pointing the mouse to targets reveals their names - the higher the selected user level, the more features are labeled. The highest level "Astronomer" displays all object names. You can switch the user level just next to the small Earth icon on top of each page.


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Software Version: 01 July 2013  
Database updated 25 min ago  
Current Users: 119, Runtime: 2.6s

16 Jul 2013, 16:27 UTC  
591 minutes left for this session [\[i\]](#) / Mode for our  
sponsors

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