Select start of calculation:
Date: 29 August 2012
Time: 05 : 30 : 00 Now
Select duration: 1 Hour go!

geipan
grasse, France
Easting: 6.9264
Northing: 43.6601
Time zone: CET/ CEST
Hobby

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 Streams
- ☑ 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 (*7 days*, slow!)

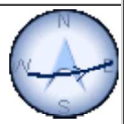
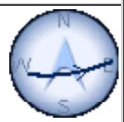
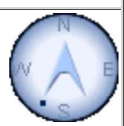
Daily reoccurring events
- ☑ Sun and Moon
- ☑ Planets
- ☑ Asteroids
- ☑ Comets
- ☑ Meteor Streams
- ☐ Polar Star Transits
- ☐ Weather Balloons

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

go!

Wednesday 29 August 2012

Time (24-hour clock)	Object (Link)	Event
	Observer Site	**grasse, France** **WGS84: Lon: +6d55m35.4s Lat: +43d39m36.6s Alt: 339m** **All times in CET or CEST (during summer)**
5.5h	♀ **Venus**	**Magnitude=-4.2mag Best seen from 3.2h - 6.9h (h_{top}=39° at E at 6.9h) (in constellation Gemini)** **RA= 7h28m41s Dec=+19°36.8' (J2000) Distance=0.814AU** **Elongation= 45° Phase k=57% Diameter=20.5"**
5.5h	♃ **Jupiter**	**Magnitude=-2.4mag Best seen from 0.4h - 6.7h (h_{top}=63° at SE at 6.7h) (in constellation Taurus)** **RA= 4h51m25s Dec=+21°42.2' (J2000) Distance=5.068AU** **Elongation= 82° Diameter=38.8"**
5.5h	Deep-Sky Observing	Best time interval for observing dim objects: 4.3h-5.5h
5h45m32s	ERBS (15354 1984-108-B) →Ground track →Star chart	**Appears 5h43m03s** 4.6mag az:242.5° WSW h:19.6° **Culmination 5h45m32s 3.4mag** az:320.1° **NW h:62.6°** distance: 549.3km height above Earth: 492.7km elevation of Sun: -11° angular velocity: 0.77°/s **at Meridian 5h46m01s** 3.9mag az: 0.0° N h:55.9° **Disappears 5h51m28s** 9.8mag az: 46.0° NE horizon 
5h47m	**Sun**	**Dawn**
5h48.2m	☿ **Mercury**	**Rise Azimuth= 68.8°, ENE (in constellation Leo)**
5.9h	☿ **Mercury**	**Magnitude=-1.3mag Best seen from 5.9h - 6.7h (h_{top}=9° at ENE at 6.7h) (in constellation Leo)** **RA= 9h47m59s Dec=+14°49.6' (J2000) Distance=1.220AU** **Elongation= 12° Phase k=87% Diameter=5.5"**
5h52m21s	Cosmos 1271 Rocket (12465 1981-046-B) →Ground track →Star chart	**Appears 5h46m13s** 7.4mag az:348.2° NNW horizon **Culmination 5h52m21s 3.4mag** az:261.4° **W h:79.6°** distance: 561.9km height above Earth: 553.7km elevation of Sun: -10° angular velocity: 0.77°/s **at Meridian 5h53m53s** 4.3mag az:180.0° S h:36.6° **Disappears 5h58m34s** 6.9mag az:174.3° S horizon 
5h54m46s	Shenzhou 9 (79601) →Ground track →Star chart	**Appears 5h53m35s** 4.6mag az:263.3° W h:21.5° **Culmination 5h54m46s 3.2mag** az:183.9° **S h:67.2°** distance: 250.8km height above Earth: 232.3km elevation of Sun: -10° angular velocity: 1.70°/s **at Meridian 5h54m47s** 3.2mag az:180.0° S h:67.1° **Disappears 5h58m43s** 9.7mag az: 97.8° E horizon Time uncertainty of about 121 minutes 
6h00m01s	**Tiangong-1 (37820 2011-053-A)** →Ground track →Star chart	**Appears 5h57m45s 1.8mag az:250.8° WSW h:15.4°** **at Meridian 5h59m57s 0.2mag az:180.0° S h:64.0°** **Culmination 6h00m01s 0.2mag az:170.7° S h:64.3°** **distance: 389.5km height above Earth: 353.3km** **elevation of Sun: -9° angular velocity: 1.08°/s** **Disappears 6h04m59s 7.2mag az: 85.9° E horizon** 
6h02m55s	Lacrosse 5 Rocket (28647 2005-016-B) →Ground track →Star chart	**Appears 5h57m08s** 5.1mag az:305.6° NW horizon **Culmination 6h02m55s 2.5mag** az:230.0° **SW h:35.9°** distance: 843.7km height above Earth: 529.2km elevation of Sun: -9° angular velocity: 0.50°/s **at Meridian 6h04m48s** 3.5mag az:180.0° S h:22.8° **Disappears 6h09m05s** 5.8mag az:155.1° SSE horizon 
6h04m46s	**Iridium 81**	**Flare from solar panels Magnitude= 0.8mag Azimuth=217.6° SW altitude= 21.7° in constellation Cetus** **Flare angle=3.67°** 

		Flare center line, closest point →MapIt: **Longitude=8.724°E Latitude=+43.183° (WGS84)** **Distance=154.4 km Azimuth=109.5° ESE** **Satellite above: longitude=2.1°W latitude=+32.3°** **height above Earth=780.8 km distance to satellite=1754.4 km** **Altitude of Sun=-8.3°**
	6h05m	Sun	Sun 9° below horizon
	6h13m39s	**Iridium 82**	**Flare from solar panels Magnitude=-2.6mag** **Azimuth=221.7° SW altitude= 18.1° in constellation Cetus** **Flare angle=0.05°** **Flare center line, closest point →MapIt:** **Longitude=6.901°E Latitude=+43.667° (WGS84)** **Distance=2.2 km Azimuth=291.1° WNW** **Satellite above: longitude=4.1°W latitude=+32.6°** **height above Earth=781.2 km distance to satellite=1828.1 km** **Altitude of Sun=-6.8°**
	6h23m	Sun	Begin civil twilight

16 Items/Events: Export to Outlook/iCal Print E-mail

Used satellite data set is from 29 August 2012

Show glossary

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Create new default account/Logout

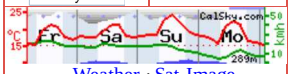
Software Version: 16 October 2012
Database updated 5 min ago
Current Users: 334

19 Oct 2012, 16:07 UTC
597 minutes left for this session / Mode for our sponsors

Select start of calculation:
Date: 29 August 2012
Time: 05 : 55 : 04 Now
Select duration: 10 Minutes
Select interval: 10 Seconds go!

geipan *grasse, France*	
Easting:	6.9264
Northing:	43.6601
Time zone:	CET/ CEST

Hobby



Weather · Sat-Image

Local Sponsors: Your name?

```
Name:          Tiangong-1
Decays:        7 May 2013 (predicted)
Dimensions:    10.3 m x 3.3 m, cylindrical
Brightness:     2.5 mag (at 1000 km, 50% illuminated)
               -0.5 mag (at perigee, full illumination)
USSPACECOM Nr: 37820    Internat. Designator: 2011-053A
Orbit:         346.8 x 357.9 km, 91.6min  Inclination: 42.8°
Age Elements:  0.5 days
```

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

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

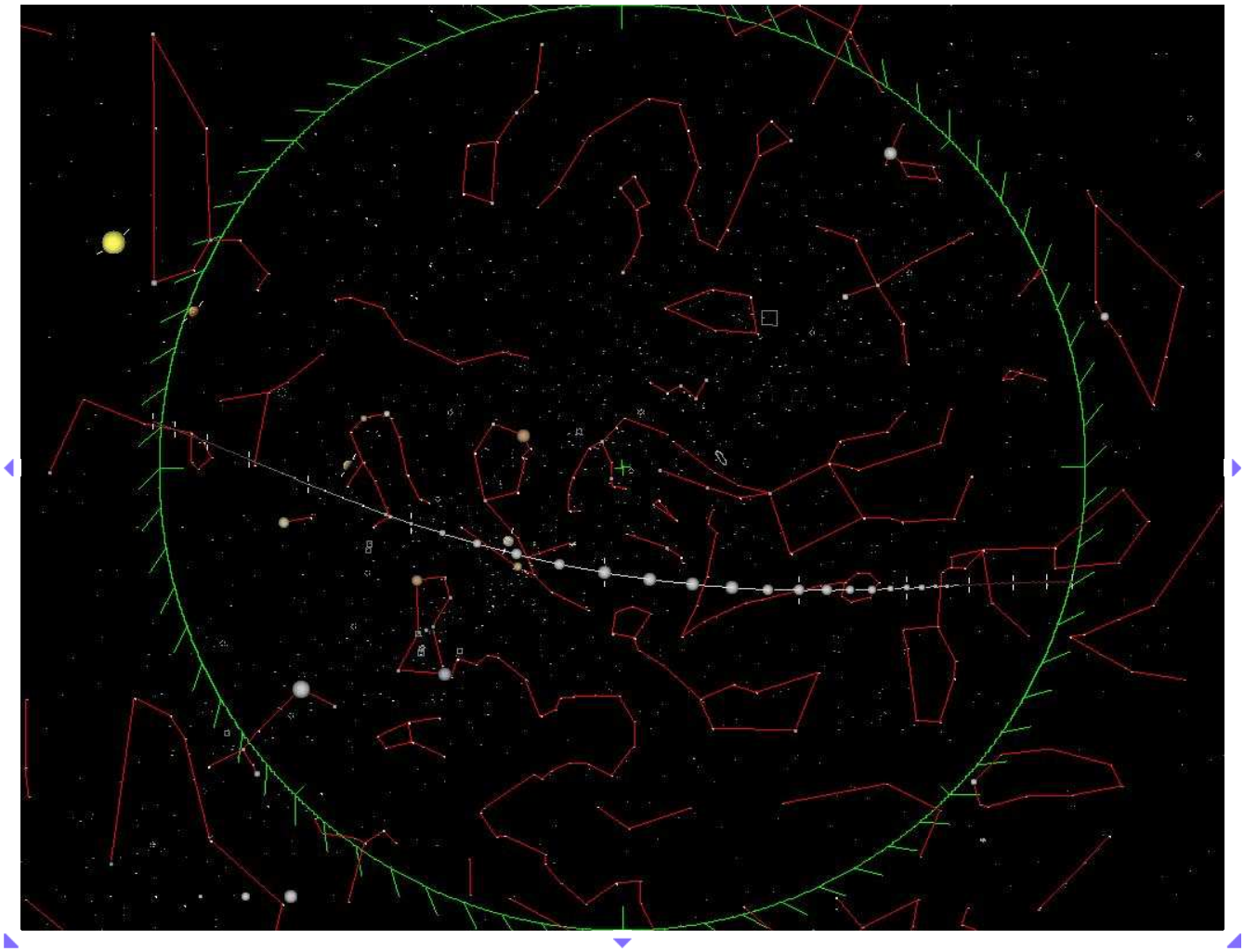
Simulation
- 800 Output size
- ☐ Grid
- ☐ Main lines
- ☑ Constellations
- ☐ Boundaries
- ☐ no line of Horizon
- ☐ Negate colors
- ☐ draw no symbols
- ☑ Realism (e.g., show Planets/Moons)

Telescope
- ☑ Vertex is up
- ☐ Telrad
- ☐ Left-right mirrored image
- ☐ Inverted image
- Digitized Sky Survey
- ☑ photographic plates (supports only equatorial view)
- Auto Limiting Magnitude

Pointing
- Whole Sky
- Center Satellite
- Sky Field of View
- Zenith Direction
- Move the mou Object Name, NGC M PGC Cr Tr B Sh2 PK Abell Mrk ACO SDSS 2QZ / SAO HIP TYC HD FK5 XZ Gl Struve
- 2:53:50.256 Right Ascension
- 43:39:36.551 Declination

go!

Move the mouse pointer to reveal object names



Stars as seen from the observer.
Visual limiting magnitude: 5.5 mag

Time:

2012 August 29 Wednesday, 5h 55m 04s
JD: **2456168.6632407** TDT: 2456168.6640137 deltaT: 66.78 sec
Apparent sidereal time: Local: 2h 53m 50.256s Greenwich: 2h 26m 07.898s
(All times in **CEST, UTC+02:00**, topocentric data for **grasse, France**)

Map Center:

Azimuth direction: 72.39° ENE (East-Northeast)
Altitude: 89.84°
Right Ascension: 2h 54m 42.421s Apparent coordinates
Declination: + 43° 42' 35.38" Apparent coordinates

Right Ascension: 2h 53m 50.256s J2000
Declination: + 43° 39' 36.55" J2000

Rises: 19h 19m
Transit: 5h 55m 56s
Sets: 16h 29m

Opposition in R.A.: 8. November 2012 4h 55m CET Elongation: 153.0°
Conjunction in R.A.: 6. May 2012 8h 15m CEST Elongation: 27.0°

Sun:

Altitude: -9.9°
Azimuth: 66.0°

Print E-mail

Positions are shown in **topocentric astrometric 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: 16 October 2012
Database updated 16 min ago
Current Users: 297, Runtime: 2.4s

19 Oct 2012, 16:18 UTC
586 minutes left for this session / Mode for our sponsors