

Dubai Natural History Group
Astronomy night with Geminids meteor shower

Saturday, 13 December 2014

NEW - Meteo informations on the days before.

If you are interested

Please, register with the trip coordinator, Sonja at lavson@gmail.com

That is the web page with the information.

http://www.jp imagine.com/DNHG/DNHG_Astroeve_2_20141213.html

Details

- **When** : on **Saturday 13 December 2014**
- **To reach the meeting point** : drive on Al Ain Road up to Al Faqa. When you reach Al Faqa, drive through road works, then carry on under the exchange bridge, then immediately keep right to take the side road leading to the petrol station and AL OSHOSH. Meeting point is on the side road just before the right turn to Oshosh (45 minutes from Dubai, around 63 km from Khail Road).
- **Meeting point** : at **4.20** on the side road just before the right turn to Al Oshosh (N. 24 41' 52.6", E 55° 37' 45.8").
Then, we drive in convoy to the site (approximately 8 km).
- **Starts and ends on the site** : from 4.40 pm, up to around 11 pm, *you may leave when you like*. Coordinates of the site gate (N 24° 39' 49.9", E 55° 33 09.6").
- **Approximate duration** : 4 to 5 hours
- **4x4** : preferred but no necessary, if no 4x4, just 500 m to walk to be safe.
- **Evening coordinator** : Sonja Lavrencic
 - Contact for registration : lavson@gmail.com
- **Astronomy evening leader** : Jean-Paul Berger
 - Contact for information - jp.berger@jp imagine.com
- **Food / Dinner** : Have a picnic and may be warm drinks. Barbecue is possible, but away from the telescope and well placed depending on the direction of the wind.
- **Clothes** : warm clothes, comfortable shoes,

- **Equipments :**
 - mats or table and chairs to be comfortable when waiting,
 - camera on tripod,
 - binoculars,
 - **red light** (no white light please, you can adapt your ordinary pocket light adding two coats of red cellophane fixed with rubber band).
 - If you have an Ipad (or an Iphone) take it with you, after downloading Sky Chart and / or SkyQ
- **Group** is limited to 20 participants.
- **No borders or check points crossed**, however it is always good to keep your ID with you, just in case.

Documents

- **Map of the trip**
 - To be used with Google Earth - [Download kmz file](#)
 - Pictures from Google Earth - [Meeting point - Site](#)
- **Telescope Schmidt - Cassegrain CPC 1100**
 - Diagram - [Open](#)

Tools and websites

- **Stellarium** - [Free download](#) (Windows, Linux et Mac) - Highly recommended.
- **Sky Chart** et **SkyQ** from **Celestron** for Ipad via App Store - Both recommended. They use the Ipad 2 compass !
- **Virtual Moon Atlas (AtLun)** - [Read](#) - [Free download](#) (Mac, Linux, Windows). Highly recommended.
- **Moon Atlas** for Ipad via App Store - Easy to use with the telescope (but no information window compared to AtLun).

NEW - "What could be seen" on Saturday the 13th between sunset and 11.00 pm

- **Sunset** - 5:30 pm
- **Geminids meteor shower** - Its peak activity should be on December 13 - 14 after midnight.
The Geminids are associated not with a comet but with an asteroid : the 3200 Phaethon ([NASA science](#)).
Geminids are named as they appear to come from Gemini constellation.
 - The constellation Gemini will rise by 20.00
- **Planets from West to East.** At dusk, after sunset :

- Mars will be low on the horizon towards the west.
- Neptune
- Uranus
- Late by 22.30 : Jupiter

- **Constellations**

- The **Winter Triangle** (Sirius, Procyon, Betelgeuse) and the **Winter Hexagon** (Sirius, Procyon, Pollux, Capella, Aldebaran and Rigel).
- Pisces - [Download chart](#)
 - Fum al-Samakah, massive giant star.
 - Gamma Piscium, the bright yellow
 - M 74 (NGC 628) - Spiral galaxy of 100 billion stars (32 million light-years)
- Triangulum - [Download chart](#)
 - M 33 (NGC 598) Spiral galaxy with inside NGC 604 Nebula (3 million light-years)
- Andromedae - [Download chart](#)
 - Sirrah (Alpheratz), 110 times brighter than our Sun.
 - Almak also called Gamma Andromedae (optic double star, one blue, one yellow) with the blue being triple (difficult to see with average sky) !
 - M 31 (2,5 million light-years), visible to the naked eye, with M 32 and M 110 (elliptic galaxies)
 - NGC 956 and NGC 752 are open clusters
 - NGC 7662 (Blue snow ball Nebula) is a planetary nebula (ionized gas ejected by certain stars late in their life)
- Cassiopeiae - [Download chart](#) - Five stars in a W shape
 - M 103, NGC 457, NGC 7789 are open clusters of respectively 60, 80 and 40 stars
- Perseus - [Download chart](#)
 - NGC 869 and NGC 884, two very close open clusters
 - M 76, Planetary nebula (probably difficult to see)
- Camelopardalis - [Download chart](#)
 - NGC 1502, small open cluster
 - NGC 2403, Spiral galaxy (11 million light-years)
- Auriga - [Download chart](#)
 - Capella (130x brighter than our Sun)
 - M 36, M 37 and M 38 : open clusters
- Taurus - [Download chart](#)
 - Aldebaran, red giant (diameter 65x our Sun)
 - Alcyone (double binary star)
 - M 45 (Pleiades, seven sisters), we see easily the bright blue stars
- Orion - [Download chart](#)
 - Betelgeuse, red supergiant star (15x our Sun diameter, 500 light-years)

- Rigel, brightest star of Orion and the 7th brightest in the sky after Capella, Vega, Alpha Centaurus, Arcturus, Canopus and Sirius
- Mintaka (star of the belt) is multiple (5 components)
- Orion Nebula : M 42 visible to the naked eye, with the Trapezium in its centre prolonged with M 43
- NGC 1977, 1973 and 1981 (cluster).
- Gemini - [Download chart](#)
 - Castor, multiple star (third component visible with a good telescope and a good sky)
 - Pollux, red giant star
 - M35, open cluster
- Canis Minor - [Download chart](#)
 - Procyon, binary system (12 light-years)
- Canis Major - [Download chart](#)
 - Sirius is the brightest star (8 light-years). It belongs to the Winter Triangle and the Winter Hexagon. Sirius has a companion, a white dwarf difficult to see next to this brightest star.
 - Mirzam is a blue supergiant star
 - M 41, open cluster (150 stars in a diameter space of 25 light-years)

🇦🇪 Weather Forecast

- **Wunderground** - [Weather Forecast of Dubai Airport](#) with a updated satellite picture
- **AccuWeather**
 - ▀ [Dubai](#)
 - ▀ Link to the [enlarged satellite picture](#).
- **The Weather Channel** - [United Arab Emirates](#)

