

## Let's take part in 2 Global Initiatives: "Globe at Night" & "Earth Hour"

### Take part in Globe at Night.

#### Introduction

Globe at Night is a world-wide science campaign to observe and record the magnitude of visible stars as a means of measuring light pollution in a given location.

#### Step 1 – Find the longitude and latitude of the site of your observation.

Use [www.streetmaps.co.za](http://www.streetmaps.co.za) to find your address or exact location or Google Earth or [www.itouchmap.com/latlong.html](http://www.itouchmap.com/latlong.html) or your GPS if you happen to have one.

#### Step 2 – Find Orion (a prominent constellation) in the northwestern sky by going outside an hour after sunset, about 20:30 – 22:00 local time, on any day between 13 and 22 March 2012.

Allow your eyes to get used to the dark for about 20 minutes before you make your observation.

Compare what (how many stars of Orion and his surrounds) you see to the different charts given on the reverse side of this page.

To preserve your night vision use a red light while writing down your observation. (You can make a cheap red light by covering a flashlight with a brown paper bag or red cellophane; secure the bag with a rubber band.)

#### Step 3 – Record your observation

Decide which of the magnitude charts on the pack of this page is closest to your observation. Mark it clearly and complete all the other information asked for.

#### Step 4 – Report your observation at <http://www.globeatnight.org/webapp/>

Or bring this sheet with you on 2 April so that you can do it at Sci-Enza.

### Take part in Earth hour

Switch off your light for 1 hour on Saturday 31 March from 20:30 till 21:30.

Think of something YOU can do to get your friends, family and/or community involved in Earth Hour.

For more information go to the Earth Hour web site: [www.earthhour.org/](http://www.earthhour.org/)

DO IT! Then tell us about it on 2 April 2012.

If you can, take a photo (cityscape or landscape) of the area at about 20:15 and then again at 20:45 and a last one at 21:30. Bring these photos along to the project week of 2 - 5 April 2012.



# GLOBE at Night

Date: \_\_\_\_\_ March 2012

Observation Time: \_\_\_\_:\_\_\_\_ PM local time (HH:MM)

Name: \_\_\_\_\_

Comments on location: (e.g. There is one street light within 50 m that is shielded from my view.)


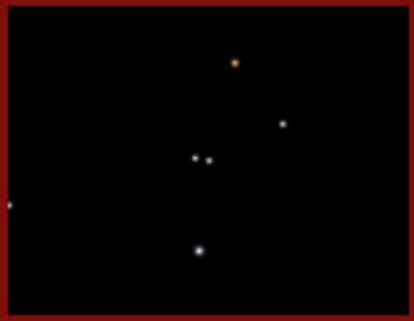




<b>Latitude</b> (in deg/min/sec or decimal degrees):	<b>Longitude</b> (in deg/min/sec or decimal degrees):
____ deg ____ min ____ sec	____ deg ____ min ____ sec
or ____ decimal degrees (South)	or ____ decimal degrees (East)

Country: South Africa

Weather conditions: \_\_\_\_\_

Find Orion by going outside an hour after sunset (about 7-10pm local time).

Match your nighttime sky to one of our magnitude charts :

		
Magnitude 1	Magnitude 2	Magnitude 3
		
Magnitude 4	Magnitude 5	Magnitude 6