



GLOBE conference Ohrid

**Implementation of Globe at night
programme in SOU „Orde Copela“,
Prilep, Macedonia**

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Content

- The Globe at night campaign
- 6 easy stars-hunting steps
- Globe at night 2010
- How useful is Globe at night campaign
- The contests
- Using the SQM-L
- Future plans

The Globe at night campaign

- Our school had participate for three years till now
- We started in 2008
- We were the first school from Macedonia which took a part in GaN
- Educational materials - from the Globe at night web site

6 easy stars-hunting steps

1. Find your latitude and longitude
2. Find Orion by going outside an hour after sunset (approximately between 7-10 p.m. local time)
3. Match your nighttime sky to one of our magnitude charts
4. SQM reading
5. Report your observation online
6. Compare your observation

Globe at night 2010

March 3 - March 16, 2010

- We had used Sky Quality Meter
- We were first in Macedonia and widely (in the region)
- Students participants-up to a 100
- The SQMs add a new twist to the Globe at night program
- Much more curious students

How useful is Globe at night

- Using materials for the contests
- Very interesting activity for our students
- The students near the science
- We are the citizens-scientists
- If we tell about the light pollution to everybody we will be very successful
- It increases the level of conscience and IT and language skills of our students

The contests

- 2007 Mondialogo School Contest (Title: Our contribution for healthier environment)
- 2008 Astronomy contest -4th place in Macedonia (Title:Determination of light pollution with matching the brightest stars in the constellation Orion)
- 2009 Astronomy contest -3th place in Macedonia (Title:Stars)
- 2010 Physics contest-1st place in Macedonia (Title: Using Sky Quality Meters to Measure Sky Brightness)

MSC(2007-2008)

For this competition we had used materials from our celebration the Earth day in Prilep and generally from the GLOBE web site





Measurements from Hidrology

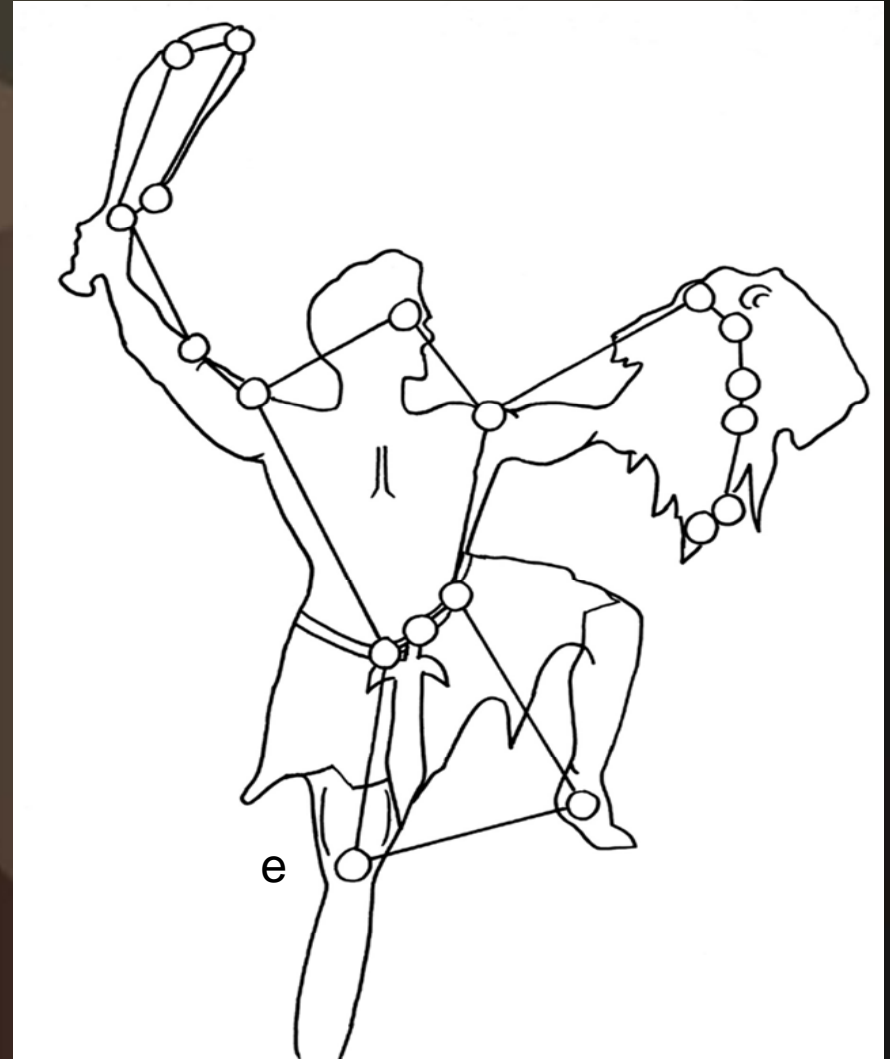


Fashion show in Croatia

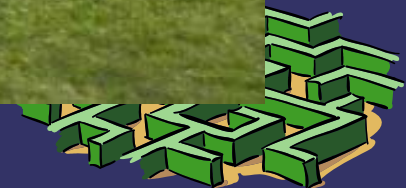


Astronomy contests

We have used materials about constellation Orion from the Windows to the Universe web site and Orion at your fingertips activities



Physics contest





Using the SQM-L



The SQM Model

- Push start button here.
- Light enters here.
- Read out numbers here.

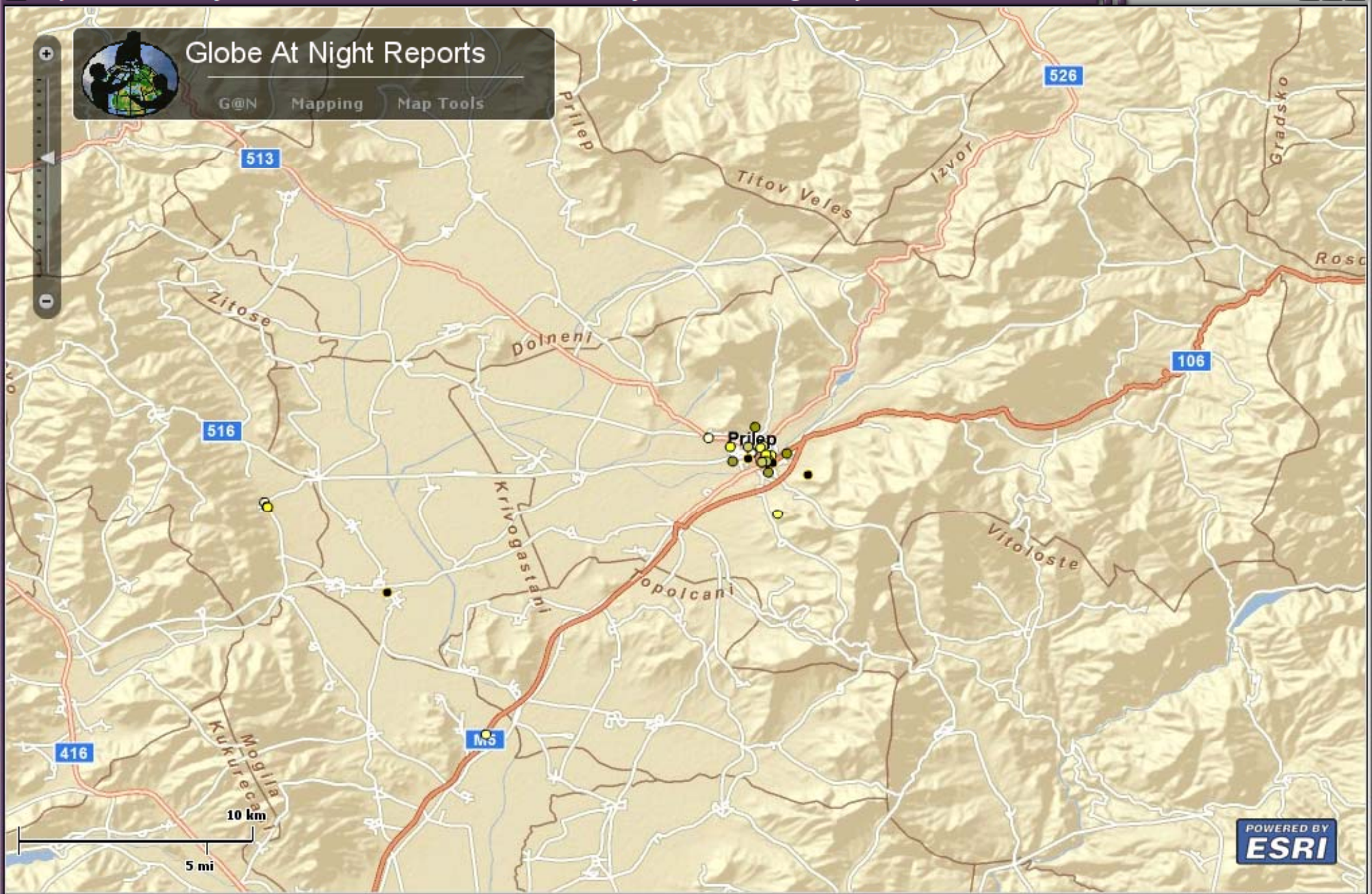


The SQM-L Model

Number of the measurement	Date	Local time	Longitude (E)	Latitude (N)	Magnitude	SQM-L reading (mag/arc sec ²)	Comment of location	Comment of sky condition	Additional comments
1	03.03.2010	20h and 10m	21°33'41''	41°20'40''	Cloudy sky	17,57	There is one street light on distance 30m	No single star, Clouds >50%.	Elevation = 661m
2	06.03.2010	20h and 10m	21°33'41''	41°20'40''	4	19,05	Same location, but different conditions	Orion is clearly seeing	Prilep, urban environment
3	11.03.2010	21h and 20m	21°33'41''	41°20'40''	5	18,52	On the balcony from my house	Clear sky Орион	No clouds at all
4	11.03.2010	21h and 30m	21°33'42''	41°20'39''	4	18,23	Three lights 50m away from my location	In the air there is little smoke	No clouds
5	12.03.2010	19h and 05m	21°32'34''	41°21'07''	4	19,31	In the school yard	Some clouds, but Orion is visible	Elevation of our school is 628,2m.
6	13.03.2010	20h and 18m	21°33'43''	41°20'45''	Cloudy sky	16,55	At the parking lot. Several lamps at a distance 50m.	We do not see Orion. There are many clouds.	Prilep, Macedonia

Globe At Night Reports

G@N Mapping Map Tools

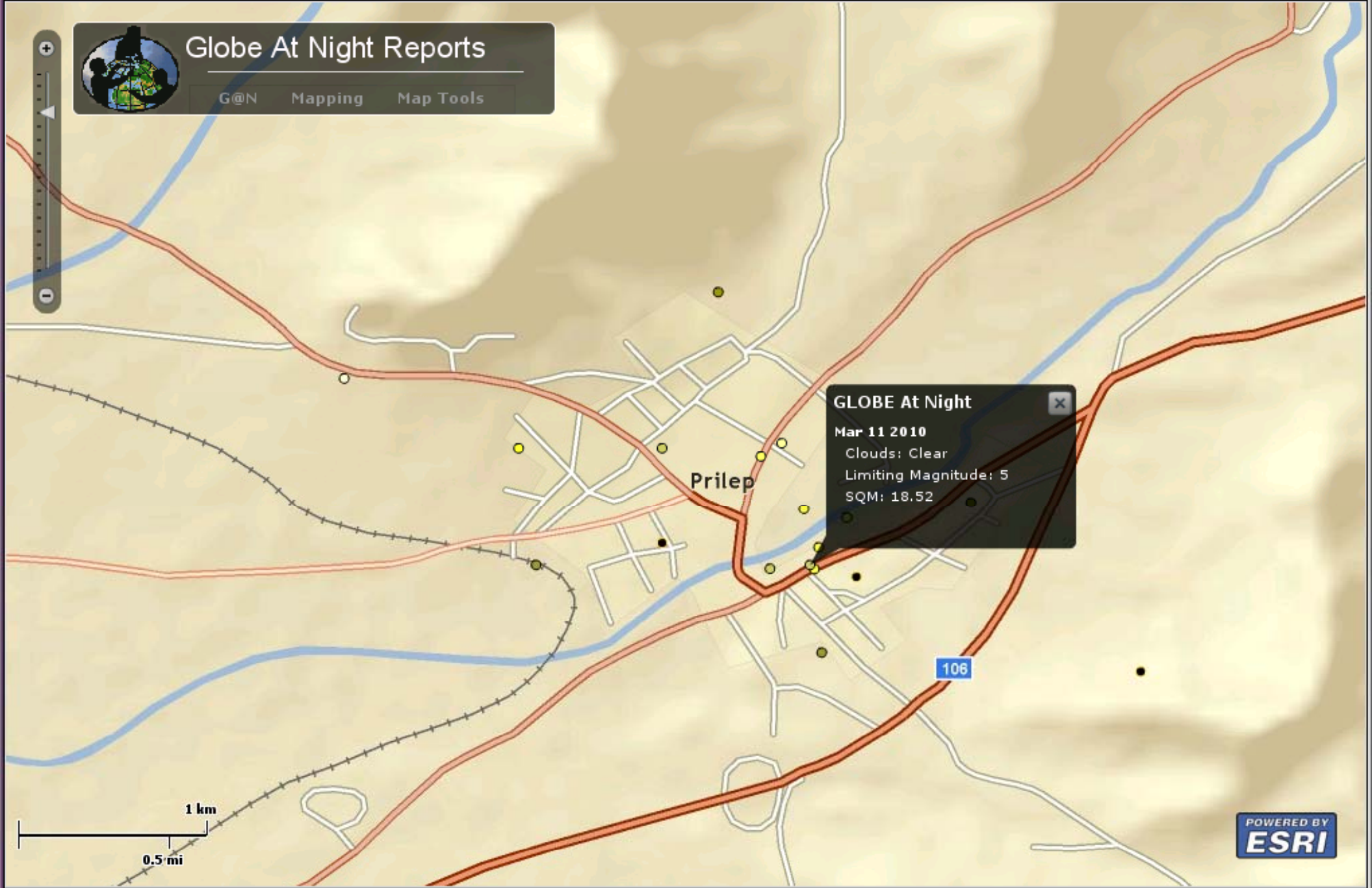


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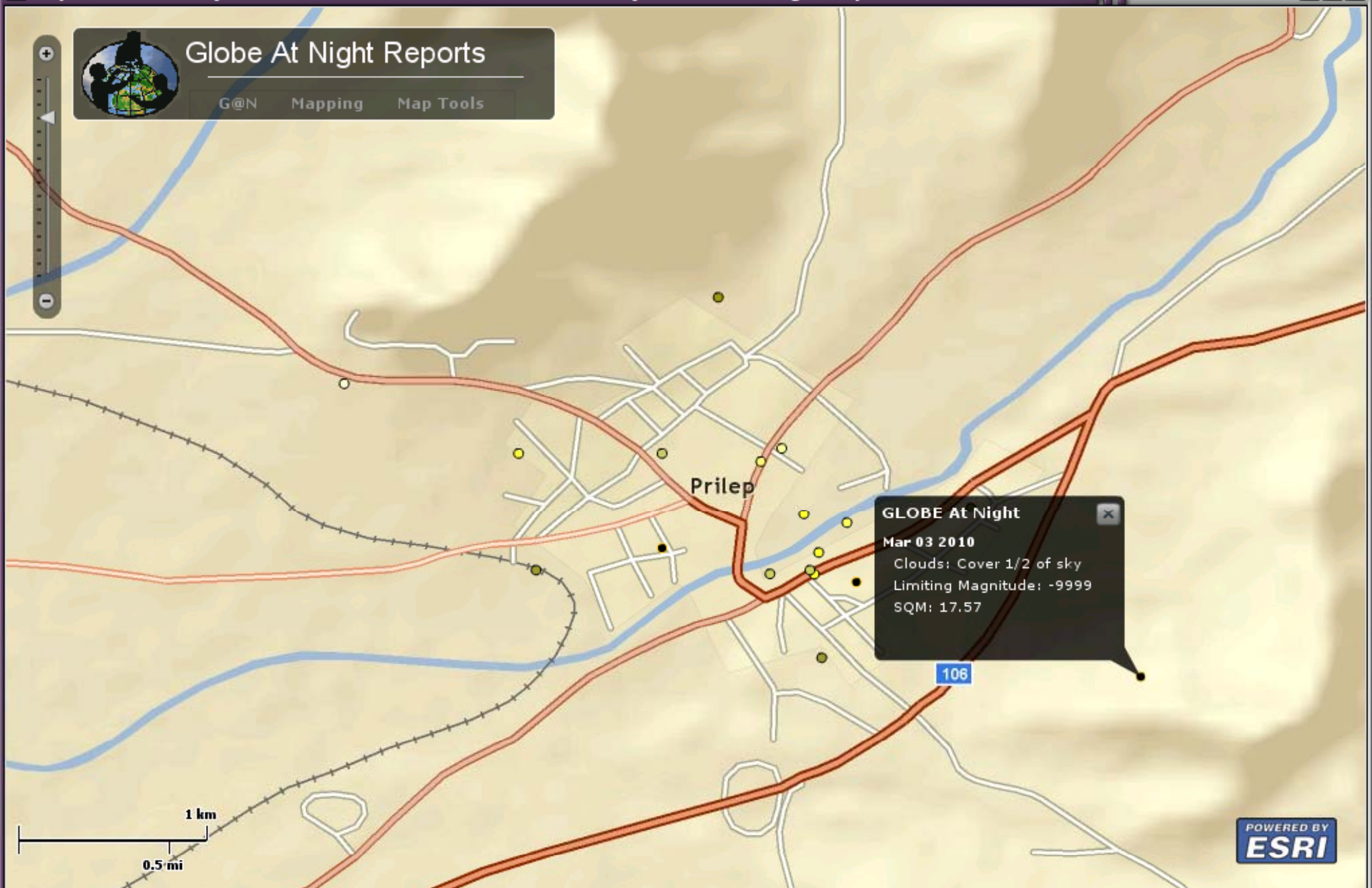
Globe At Night Reports

G@N Mapping Map Tools



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G@N Mapping Map Tools

GLOBE At Night

Mar 15 2010

Clouds: Clear

Limiting Magnitude: 4

SQM: 18.60

Prilep

106



1 km

0.5 mi

Read server.arcgisonline.com

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Future plans with Globe at night campaign and acceptance by students

- We will continue with this program measurements
- We will Include more students
- SQM measurements throught all year
- Creating new projects inspired from the GLOBE program



Thank you for your attention