

**Universidad Autónoma de Nuevo León
Facultad de Ciencias Físico Matemáticas
Monterrey-Mexico**

Dr. Ángel E. Sánchez Colín

Curriculum Vitae

1999 Bachelor Degree in physics, UABC-Mexico

2002 Master's Degree in astrophysics, UGR-Spain

2006 Ph Degree in astronomical instrumentation, MPIfR-Germany

Posdoct positions

2006-2010 IFCA, Santander, Spain

2010-2011 IMB, Barcelona, Spain

2012-2013 INAOE, Puebla, Mexico

2013-to present UANL, Monterrey, Mexico

CanSat background (very short)

2014 CanSat course received at UABC-AEM, Mexico, (without launch).

2015 CanSat course taught at FCFM-CIIA-UANL, Mexico;

(three launches, but only one, transmitted some signals).

The Astronomical Observatory of UANL

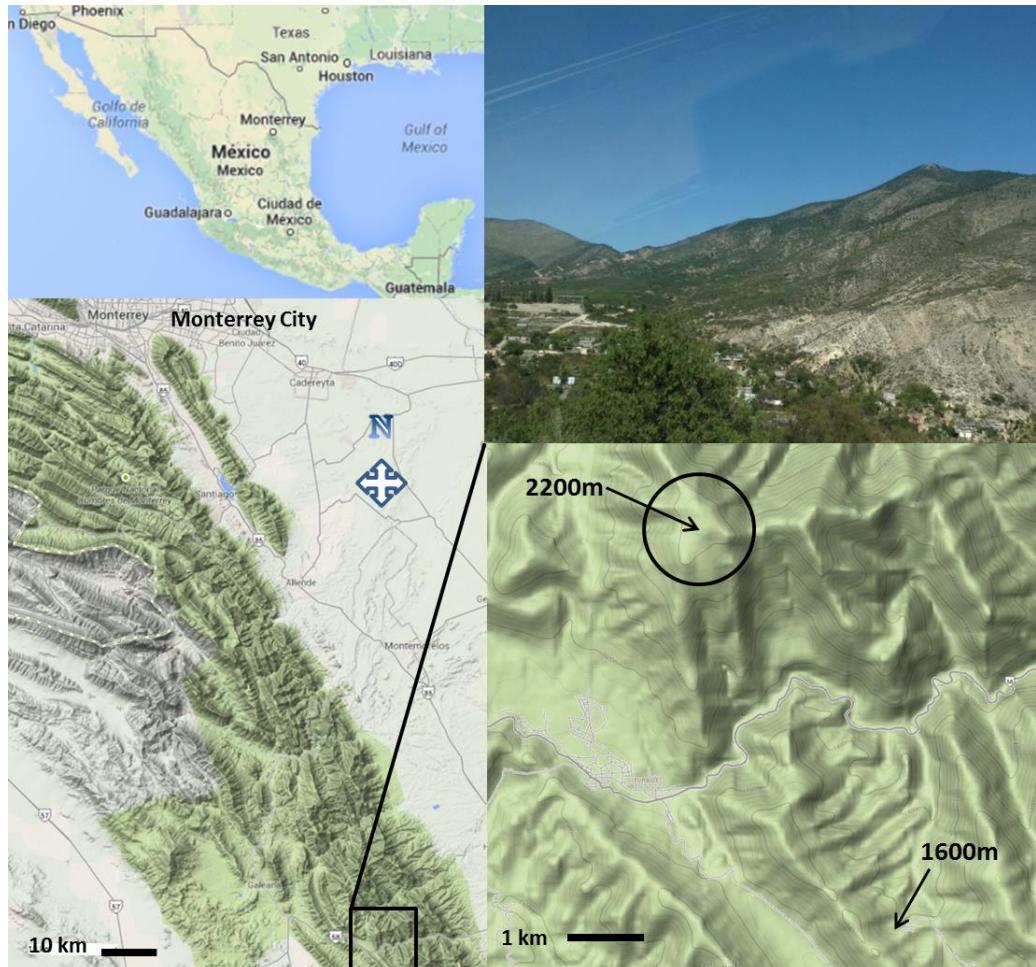
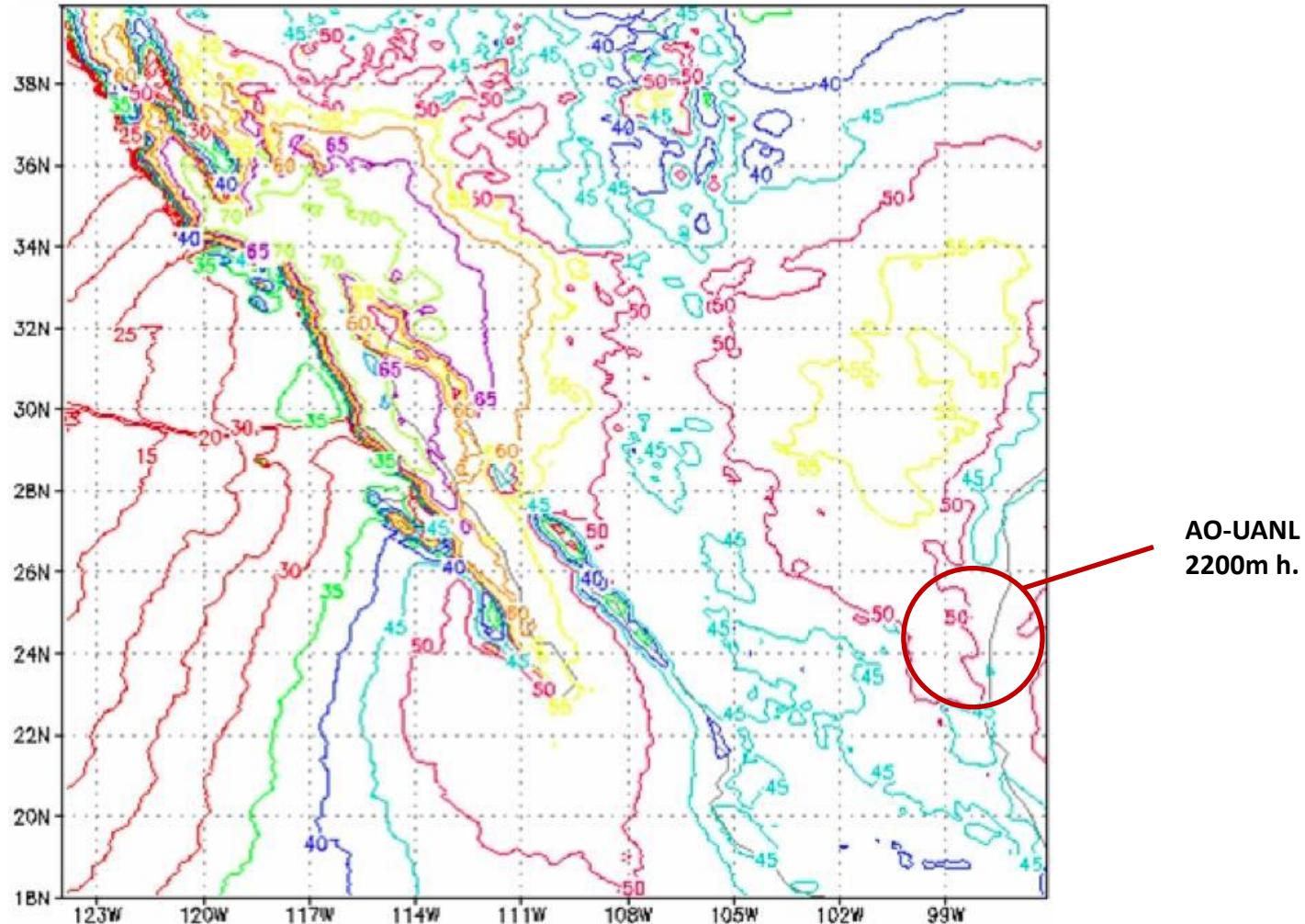


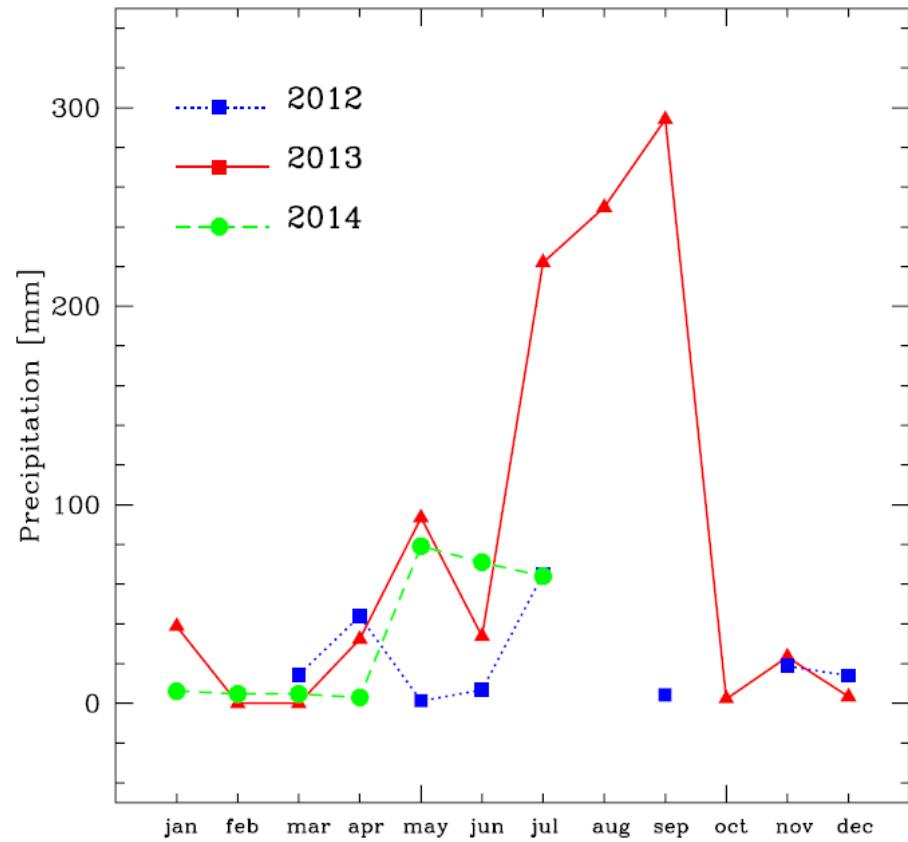
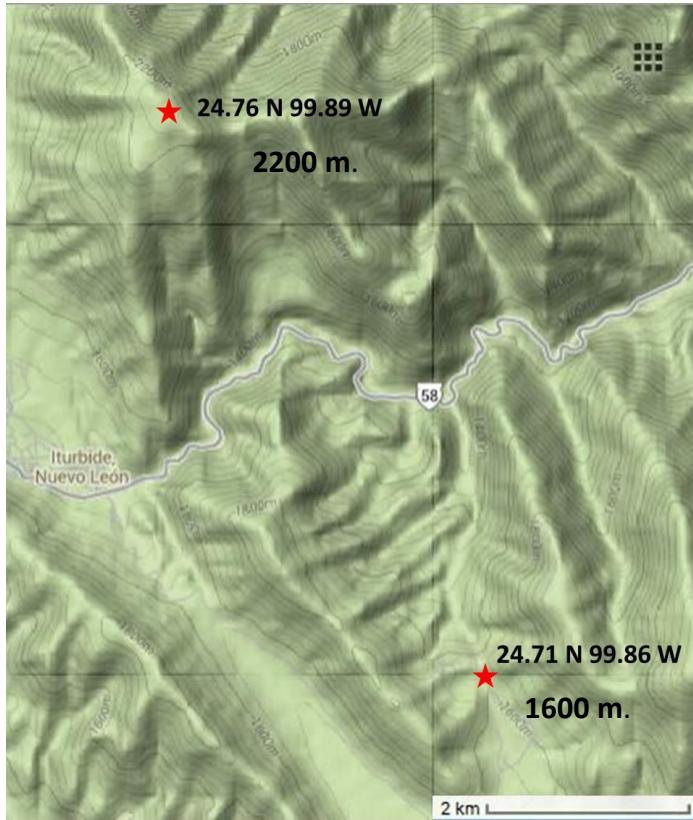
Fig. 1. Location of the Astronomical Observatory of UANL Monterrey-Mexico. Top right: Current view of the site, showing the highest peak in the mountain. Bottom right: The site of the observatory located at 2200m height over the sea level (Latitude: 24.6 N; Longitude: -99.89 E), and the site of the wooden cabins at 1600 m over the sea level. (Map-images taken from: <https://www.google.com/maps>).

Previous satellite study at the Astronomical Observatory of UANL



Contour map showing the clear fraction (%) for observing night over the north of Mexico. The mountains of Baja California and northern Sonora show contours of 70% of clear nights. The north of the Sierra Madre Oriental shows contours between 50% and 60% of clear nights. The map was made using data from METEOSAT-3 and GOES-8 satellites, 1993-1999. (Figure taken from Erasmus & van Staden 2002).

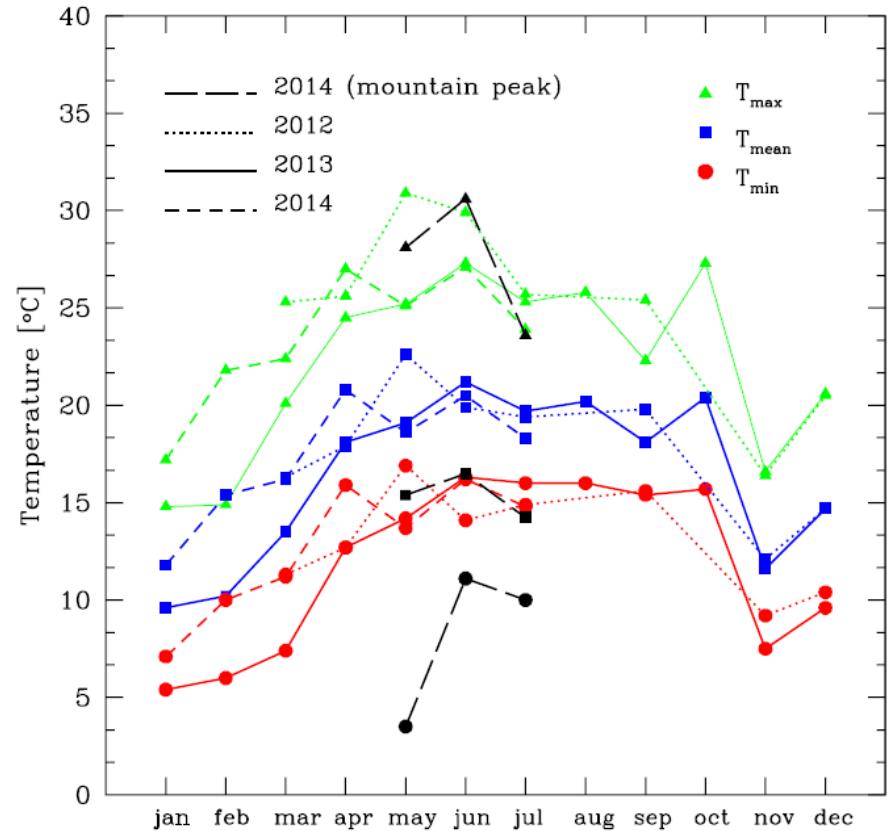
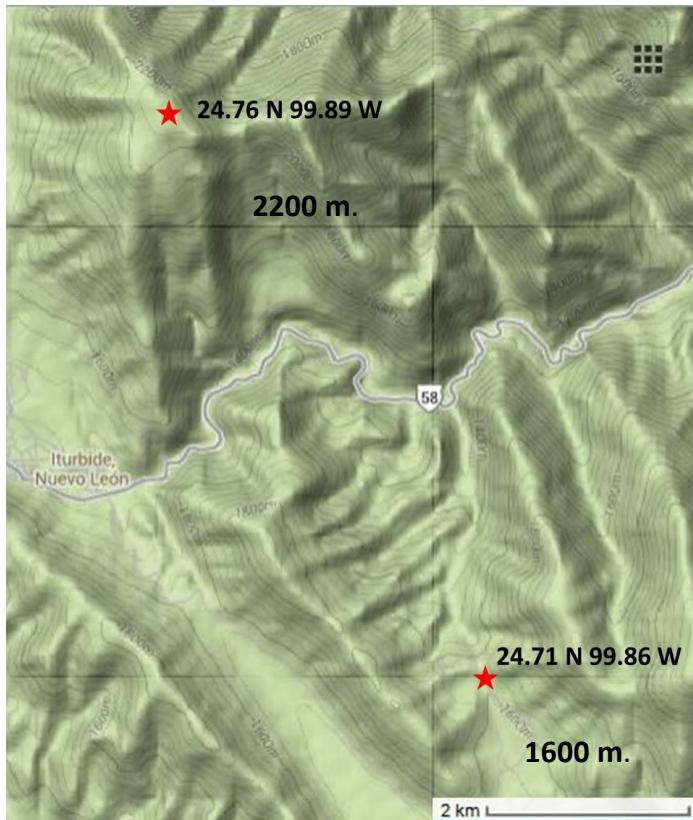
Our current study at the Astronomical Observatory of UANL



Total precipitation of available data, measured with the weather station at the forest school, near to the wooden huts.

Angel Colin, et al., RevMexAA (SC), (In press 2015)

Our current study at the Astronomical Observatory of UANL

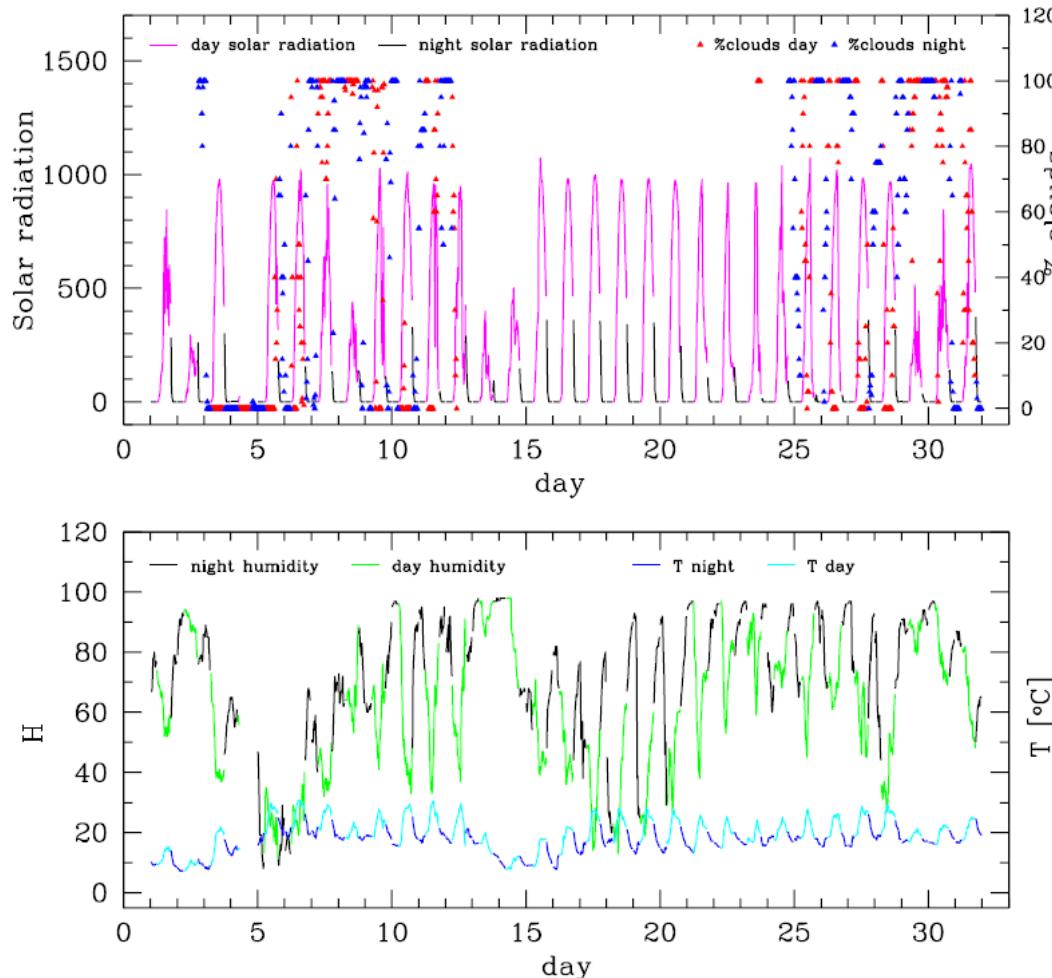


Temperature ranges from the available data, measured with the new temperature/humidity sensors.
Colored points correspond to the forest school. Black points correspond to Mountain Peak location

Angel Colin, et al., RevMexAA (SC), (In press 2015)

Our current study at the Astronomical Observatory of UANL

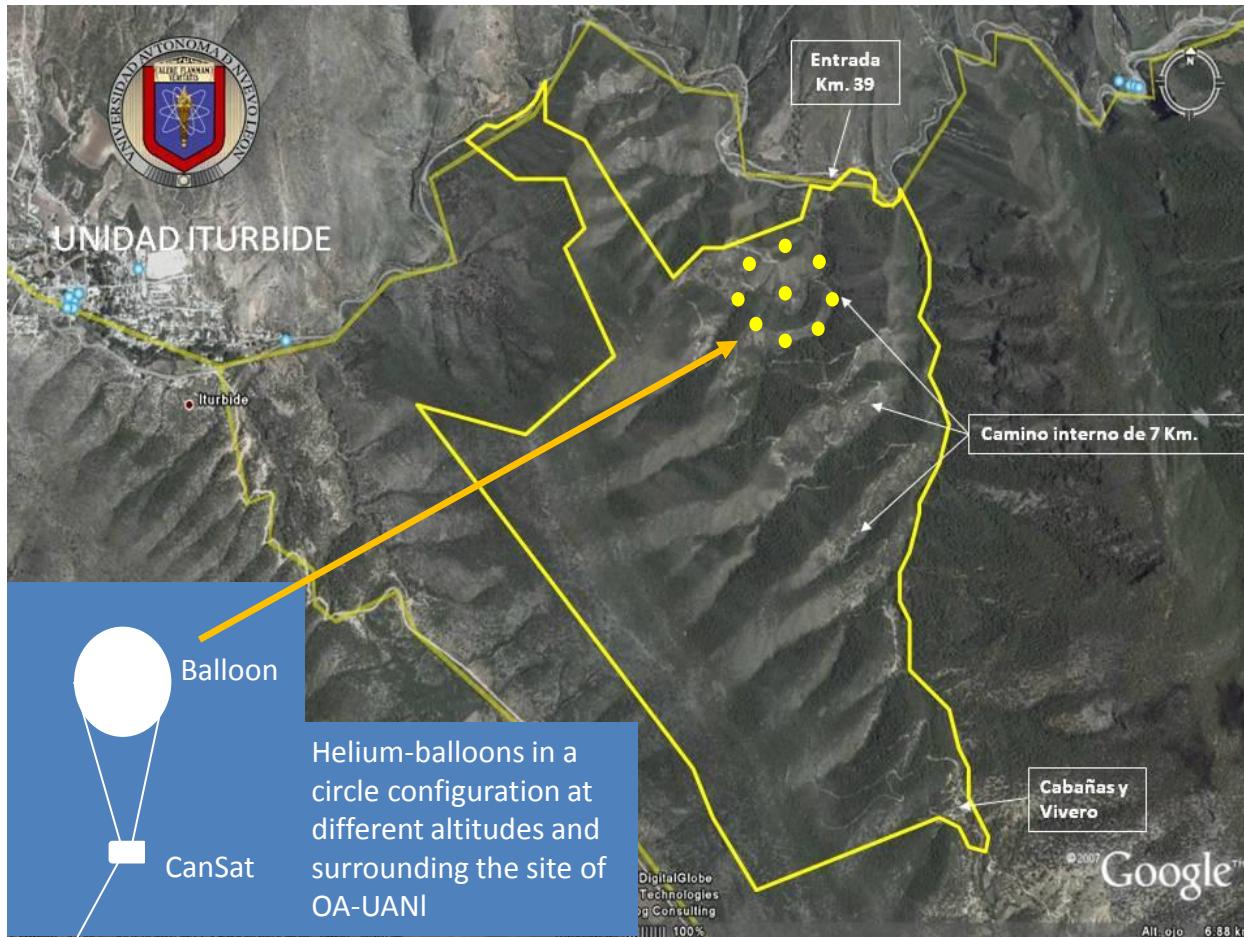
may 2014



Climatic characteristics at the forest school distinguishing day and night. Top panel: solar radiation and fraction of clear sky vs. time. Bottom panel: relative humidity and temperature [$^{\circ}\text{C}$] vs. time. Day hours start at 06:00h and night hours start at 18:00h.

S. Ayala, A. Colin, et al., RevMexAA (SC), (In press 2014)

CanSat application for climate monitoring at the Astronomical Observatory of UANL



Physical area of the Ecological Campus of UANL, where the Astronomical Observatory will be located.

Picture taken from: <http://www.uanl.mx/sites/default/files/dependencias/cpa/iturbide-10.pdf>

Angel Colin, et al., (In preparation 2015)

Thank you!...