

**A SMALL OBSERVATORY WITH BIG PROJECTS.** A. Q. Vodniza<sup>1</sup>, <sup>1</sup>University of Nariño Observatory, Nariño, Colombia, [aquijanov@gmail.com](mailto:aquijanov@gmail.com)

**History:** The Astronomical Observatory of the University of Nariño was founded on March 2002 by Alberto Quijano Vodniza (Master's Degree in Physics of the University of Puerto Rico), and built thanks to the immense support given by Dr. Pedro Vicente Obando (Rector of the University of Nariño from 1995 to 2004). It has a dome of approximately 4.5 meters of diameter and a capacious auditorium. At this point in time we own the following equipment: A newtonian reflecting telescope Meade f/4 of 16 inches, one CGE Pro 1400 Celestron telescope (equatorial/14"-f/11), a 14 inches Meade robotic telescope LX200GPS, two 8 inches Meade robotic telescopes LX200GPS, a newtonian reflecting telescope Celestron of 8 inches – Dobsonian type, and a Coronado solar telescope. We have several digital cameras and also a digital spectrometer SBIG, a high resolution spectrometer Shelyak and a "Jove" receptor for analyzing the radio signals emitted by Jupiter and the Sun. Electronic Engineering students from the University of Nariño have completed the robotization of the 16" Meade f/4 telescope. The images obtained are processed through specialized software with the purpose of getting correct photometric and astrometric measurements. The observatory is destined for professors and students' scientific research. At present we have an internal club and we open our doors to all the educational institutions in Nariño (Colombia). The Astronomical Observatory's Director is a member of the AMERICAN ASTRONOMICAL SOCIETY since 2007.

**Observatory's Achievements.** As a result of our research, we have published several books: "Obtaining of the Luminous Curve of Comet Hale-Bopp and Measuring of the Rotation Period Through the CCD Camera"; "Digital Astronomy"; "Design of An Experimental Method for Measuring Stellar Temperatures Through the CCD Camera and Spectrometry"; "Obtaining of the Luminous Curve of the Comets C/2002T7 Linear, C/2001Q4 Neat, and Spectrometry of C/2001 Q4 Neat". We have participated on several international meetings as speakers [1].

Our Observatory participated in the project "Deep Impact" of NASA. The Astronomical Observatory of the University of Nariño took part on the "Small Telescope Science Program", associated program to the project "Deep Impact". As a result of this scientific event, a book was published in Germany. The research

we presented in this important meeting in 2006, was published in October 2008 in Germany by the internationally recognized publishing company "Springer-Verlag" on the meeting's namesake book "Deep Impact as a World Observatory Event: Synergies in Space, Time, and Wavelength". Our work appears with the name "The Deep Impact Event As Seen From The University Of Nariño Observatory" [2].

Our Astronomical Observatory has also been distinguished for having photographed a lot of Asteroids, many of them supremely weak in brightness. In the year 2008 our Observatory received the international code "H78" from the *MINOR PLANET CENTER* of USA and our data also appears at the web page of NEODyS-2 [3].

One of the most important goals of our Observatory is having actively participated in the project with the Hubble Space Telescope: "Magnetospheric Accretion in Close Pre-Main-Sequence Binaries" [4].

#### References:

- [1] [http://adsabs.harvard.edu/cgi-bin/basic\\_connect?qsearch=vodniza&version=1](http://adsabs.harvard.edu/cgi-bin/basic_connect?qsearch=vodniza&version=1)
- [2] [http://link.springer.com/chapter/10.1007%2F978-3-540-76959-0\\_11](http://link.springer.com/chapter/10.1007%2F978-3-540-76959-0_11)
- [3] <http://newton.dm.unipi.it/neodys/index.php?pc=2.1.2&o=H78&ab=0>
- [4] <http://iopscience.iop.org/article/10.1088/0004-637X/811/2/131/meta;jsessionid=339B3B29A47ED6CFE2349146D69C3315.c5.iopscience.cld.iop.org>