



Presidents Message – March, 2013

Everyday about one hundred tons of interplanetary material drifts down toward the Earth's surface. Most of the matter that reaches the Earth's surface is dust particles. The majority of the larger material that reaches the Earth's surface is fragments of asteroids that have run into one another some eons ago. With an average interval of about 10,000 years, asteroids larger than about 100 meters would be expected to reach the Earth's surface and cause local disasters or produce the tidal waves. On an average of every several hundred thousand years, asteroids larger than a kilometer could cause global disasters.

Near-Earth Objects (NEOs) are comets and asteroids that have been nudged by the gravitational attraction of nearby planets, usually Jupiter, into orbits that allow them to enter the Earth's neighborhood. The purpose of the Near-Earth Object Program is to coordinate NASA-sponsored efforts to detect, track and characterize potentially hazardous asteroids and comets that could approach the Earth. Those efforts include the work of the Catalina Sky Survey, Spacewatch, Lowell Observatory NEO Search, and others. 9768 Near-Earth Objects have been discovered as of March 8, 2013. Some 861 of these NEOs are asteroids with a diameter of approximately 1 kilometer or larger.

In addition to managing the detection and cataloging of Near-Earth Objects, the NEO Program office is responsible for facilitating communications between the astronomical community and the public should any potentially hazardous objects be discovered. With over 90% of the near-Earth objects larger than one kilometer already discovered, the NEO Program is now focusing on finding 90% of the NEO population larger than 150 meters. To educate yourself on Near Earth Objects, I recommend you checkout NASA's "neo.jpl.nasa.gov" website; which is the information source for this column.

Potentially Hazardous Asteroids (PHAs) are currently defined as asteroids having the potential to make threatening close approaches to the Earth. Specifically, all asteroids that pass the Earth within 4.6 Million miles are at least 150 Meters in diameter. This 'potential' to make close Earth approach does not mean a PHA will impact the Earth; it only means there is a possibility for such a threat. There are currently 1384 known PHAs. So there you are another thing to worry about, as if the fear of Zombies, Mother-in-laws, and the possibility of being kidnapped by aliens weren't enough!

Mike Thomas.

February 2013 Meeting Minutes

- The visit to UNR of theoretical physics professor Michio Kaku was discussed.
- John Dykes gave a report on the marketing of his astrophotography images.
- It was decided that we would host a Messier Marathon on the evening of March 9th.
- Mike gave a lecture on the life of Nikola Tesla.

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Monthly Membership Meeting 7:00PM, Tuesday, March19, 2013

"The History of Astronomy"

This slide-show lecture by Mike Thomas tells the story of mankind's fascination with the mysteries of the heavens. The presentation covers observations of the night sky from early man, to the most recent discoveries.

