# Aims of the ALPO Comets Section

#### **by Carl Hergenrother (ALPO Comet Section Coordinator)** January 2016

## Introduction

Members of the ALPO Comet Section have a long history of providing quality comet observations. In turn, the section coordinators have done an excellent job in publishing analyses in the ALPO Journal.

## Goals of the ALPO Comets Section

The ALPO Comet Section has a few primary goals. The first is to encourage and coordinate the observations of comets. The second is to share these observations with the wider community by posting all observations on the Section's webpage. The third is to analyze the observations and publish our findings in a timely manner.

Much has changed over the history of the Section. Today the great majority of comets are discovered with CCD imagers. While the era of visual comet discovery may not be over yet, it visual discover of a comet has become a once in a few years event. As for photographic discovery that era is probably over. Amateur astronomers are still able to discover comets though most are using very "professional" methods, i.e., CCD cameras, automated telescopes, and detection software. While professional surveys have always contributed to the discovery of comets, the fraction of comets discovered by professionals has increased.

Comet observation has also changed, but not as much as you'd think. The advent of CCD cameras and all-sky professional surveys may lead one to question the use of visual, or even backyard, observations. As impressive as surveys like Pan-STARRS, SDSS, CSS, ATLAS and others are, they do not cover enough of the sky as often as needed to properly follow most comets. This means that backyard observers are often the first to notice sudden changes and provide the most thorough coverage across an apparition.

All types of observations are welcome including but not restricted to: visual magnitude observations, visual drawings, visual descriptions, CCD images, CCD magnitude measurements, spectroscopy and photographs.

# About the Comet Section Coordinator

I have been interested in astronomy, and especially comets, for nearly as long as I can remember. My first comet observation was of Comet Halley back in November 1985 with an old (1950s era) 60-mm refractor. At that time I was 12 years old. My comet observing kicked into a higher gear in 1989 when my parents bought me a Meade SN6 150-mm Schmidt-Newtonian reflector. In 1991 I moved to Tucson, Arizona to attend the University of Arizona. My first astronomy research job was reducing CCD images taken as part of Steve Larson's comet monitoring program. Tim Spahr and I conducted a photographic comet/asteroid discovery program with the 0.4-m Catalina Schmidt. Over time this program evolved into the CCD-based Catalina Sky Survey. During my time surveying, I discovered comets C/1996 (Hergenrother-Spahr),

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168P/Hergenrother, 175P/Hergenrother and 330P/Catalina. After leaving the Catalina Sky Survey in 2003, I have been involved in the study of rotation properties of small near-Earth asteroids and most recently as a scientist on the OSIRIS-REx asteroid sample return mission. My current work on comets involves visual observing with  $10 \times 50$  and  $30 \times 125$  binoculars and CCD observing with some of the University of Arizona's large aperture telescopes.

## Conclusion

I look forward to working with all contributors to the ALPO Comet Section. I invite all comet observers to submit their observations to the Section.