



Cometary science after Hale–Bopp, Vols. I & II

by H. Boehnhardt et al. (eds.)

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This two-volume book is a collection of papers presented at an international conference of the same name, held in Tenerife in January 2002. The papers were quickly put together and refereed following the conference and in places it shows. The first volume presents the invited papers, and the second other contributions and research notes. Because it is a collection of papers there is no index, which makes finding specific items somewhat difficult. Overall it is one to dip into in the library, rather than to have on the bookshelf.

As might be expected there is much on the current understanding of the physical properties of the cometary nucleus, chemical processes that go on in the nucleus and coma, and on the orbital dynamics of comets. Some papers look at spacecraft studies, though these suffer from the loss of *Contour* and the delay in launching *Rosetta*.

Some professionals either don't seem to know or understand the present system of comet nomenclature and hence a wide variety of styles is used in the two volumes. It would also be beneficial if SI units were used throughout the publication; for example in places nanometres are used, but there are still many instances of Angstroms.

There are some interesting items for amateurs, particularly for those who carry out CCD imaging of comets. Wide field imaging is one key area, and one where amateurs are generally not doing as much as they used to. With the ever-increasing use of CCD imaging at prime focus, the traditional use of photographic wide field imaging is declining, although some observers do produce excellent wide field CCD views. Amateur CCD magnitudes are being increasingly used by professionals, but have suffered from a lack of standardisation – several papers make suggestions for better techniques. Visual magnitude estimates are still important, and several light curves are presented, for example in an interesting paper on comet splitting that also includes a section on the Kreutz group. Split comets are clearly important targets to aid the understanding of cometary physics, and an area where amateurs can help is to survey theoretically faint comets to catch any that outburst.

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