Data were initially removed for the following reasons:

- If the observer failed to report a magnitude for that date for any reason.
- If the reverse binocular method was used. Notated as ‘r’ and can be found in columns 26 or 75.
- If poor weather conditions were reported in column 33. Notated as ‘:’ in column 33.
- If an improper atmospheric extinction correction was used by the observer. Notated as ‘&’ in column 26 or ‘75’.
- If telescopes were used under 5.4 magnitude or binoculars used under 1.4 magnitude. Instrument type can be found in column 41. Telescopes are listed as one of the following ICQ designated codes: Telescopes = [J, L, R, T, C, D, I, M, q, Q, r, S, U, W, Y] and binoculars as: binoculars = [A, B, N, O].
- Keeping only allowed magnitude methods notated S, B, M, I, or E in column 27.
- As per the ICQ’s 2017 recommended and condemned sources for stellar magnitudes (http://www.icq.eps.harvard.edu/ICQRec.html). Any points in the “unacceptable” category on their webpage were removed. Additionally, some “acceptable” catalogs have restrictions such as “Catalog XX may only be used if the object is brighter than XX.XX magnitude.” In example data the only such catalog with a restriction was SC. So following ICQ guidelines we removed points that used the SC reference catalog with magnitudes dimmer than 8.1.
- If the same observer had two or more measurements on the same date then only one was chosen. Preference are given to the smallest aperture, or those with a magnitude method (column 27) of S or M over any other magnitude method. If two magnitudes were reported by the same observer, on the same date, with the same aperture size, and both had a magnitude method of either S or M then preference was given to the point with S. If both points had magnitude method S or if both points had magnitude method of neither S nor M then the point from later in the night was used.

For our Hale-Bopp data the following infractions occurred:

number of no magnitude reported violations: 31

number of reverse binocular method violations: 13

number of poor weather conditions violations: 93

number of poor extinction correction violations: 15

number of times a telescope was used under m = 5.4: 99

number times binoculars were used under m = 1.4: 94

number of times a method not specified by Greene (i.e. column 27 not being S, B, M, I, or E), prioritizing S then M: 218

number of times SC catalog was used on object dimmer than 8.1: 4

number of duplicated observation dates by same person: 457

Additionally, the following observers failed the stationary test and were removed from the final dataset:

Pre-Perihelion: BOR, CHE03, GRE, HAS02, HOR02, PLS, and KRO02

Post-Perihelion: BOU, GRE, JON, and PEA

Handy references:

http://www.icq.eps.harvard.edu/ICQKeys.html

http://www.icq.eps.harvard.edu/ICQRec.html