

D. Koschny/NEOCC

What kind of information should we use for the physical properties information in our databases?

Background:

In a previous IAWN meeting, we had agreed on albedos to use for estimating sizes from absolute magnitudes (use an albedo range of 0.05 to 0.25, or use 0.14 if one value is required). In some cases, we may have other information available however, e.g. a spectral class. Should we (are you?) using this info to constrain this range? E.g. say 'if spectral class C, use 0.05 to 0.10'? If yes, can we agree on values. If no, let's agree on this explicitly too.

Vice versa: In some cases, we may not know the H magnitude, but do have a good diameter value e.g. from WISE. Should we (are you) then using this to derive an H magnitude? Or is it better to leave the magnitude field empty in our database.

Table 1: The assumptions of the EARN database of DLR/G. Hahn for albedos. 'Dark', 'medium', 'high' can be linked to the spectral class e.g. via Wikipedia.

File	Field	Accepted values	Meaning
diameter.txt	Albedo	d	Dark 0.06
		m	"medium" (0.15) or in the case of no taxonomic information
		mh	"medium high" (0.18)
		h	"high" (0.30)