Catalogue of Asteroid Polarization Curves Gil-Hutton (2023)



Polarimetric data:

The columns list the object number, the phase angle (degrees), P_r (%), its error, the filter used, and the reference code.

259 5.89 -0.91 0.08 V f 259 9.73 -1.19 0.11 V f 259 19.77 0.08 0.11 V f 259 9.60 -1.29 0.13 V a 259 9.80 -1.20 0.12 V a 259 8.00 -1.22 0.08 V a

Polarization Curve Parameters:

The polarimetric parameters were obtained fitting the observations to a polarization curve using the function:

$$P_r(\alpha) = Coe_1 \times \left[\exp\left(-\frac{\alpha}{Coe_2}\right) - 1 \right] + Coe_3 \times \alpha,$$

where α is the phase angle in degrees. The minimum of the polarization curve is identified by Pmin, Phmin is the phase angle where Pmin is reached, Ph0 is the inversion angle, and k is the slope of the polarization curve at Ph0.

#								
#	Coe1	eCoe1		Coe2	eCoe2	(Coe3	eCoe3
#	16.5977	0.7108	20.	7662	0.7508	0.5	5180	0.0237
#								
#	Phmin	err	Pmin	err	Ph0	err	k	err
#	9.01	1.37 -1	.175	0.369	19.52	0.19	0.2058	0.0272