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.

61 4.77 -0.65 0.09 V f 61 14.13 -0.59 0.10 V f 61 20.17 0.09 0.09 V f 61 23.83 0.32 0.13 V f 61 23.83 0.33 0.05 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	eCo	e1	Coe2	eCoe2	(Coe3	eCoe3
#	2.4104	0.55	69 6.	8925	1.8670	0.2	1124	0.0204
#								
#	Phmin	err	Pmin	err	Ph0	err	k	err
#	7.82	2.04	-0.757	0.474	20.32	0.43	0.0940	0.0229