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.

628 8.48 -0.62 0.08 V f 628 13.39 -0.45 0.10 V f 628 20.16 0.60 0.20 V f

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
#	11.9804	0.65	19 20	.9968	1.7834	0.3927		0.0260
#								
#	Phmin	err	Pmin	err	Ph0	err	k	err
#	7.84	2.12	-0.654	0.389	16.80	0.29	0.1363	0.0299