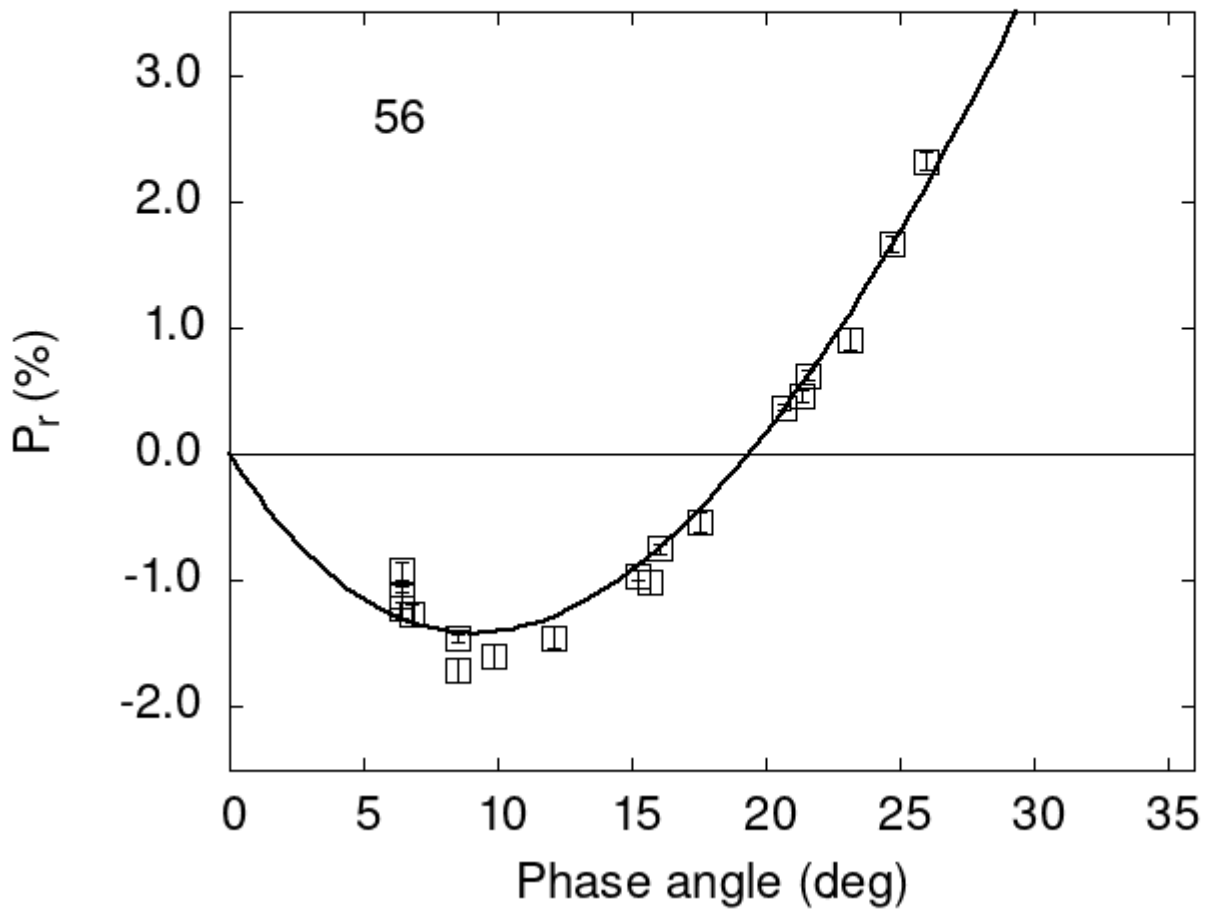


# Catalogue of Asteroid Polarization Curves

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.

56	6.39	-1.21	0.09	V	f
56	6.39	-1.13	0.09	R	f
56	8.52	-1.71	0.09	V	f
56	9.88	-1.60	0.09	V	f
56	12.08	-1.45	0.09	V	f
56	15.66	-1.01	0.09	V	f

```

56 17.57 -0.54 0.08 V f
56 23.12 0.91 0.09 V f
56 25.98 2.32 0.07 G a
56 21.62 0.62 0.04 G a
56 21.34 0.46 0.05 G a
56 8.48 -1.45 0.03 G a
56 15.26 -0.96 0.04 G a
56 16.04 -0.75 0.04 G a
56 20.66 0.37 0.02 G a
56 24.71 1.66 0.06 G a
56 6.80 -1.26 0.07 V a
56 6.39 -0.92 0.07 V a
56 6.39 -1.13 0.04 R 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  $\alpha$  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
# 28.9236  0.5188 25.8920  0.4005  0.7863  0.0078
#
#      Phmin  err  Pmin  err  Ph0  err  k  err
#      9.09  0.59 -1.415  0.202 19.37  0.16 0.2577 0.0124

```