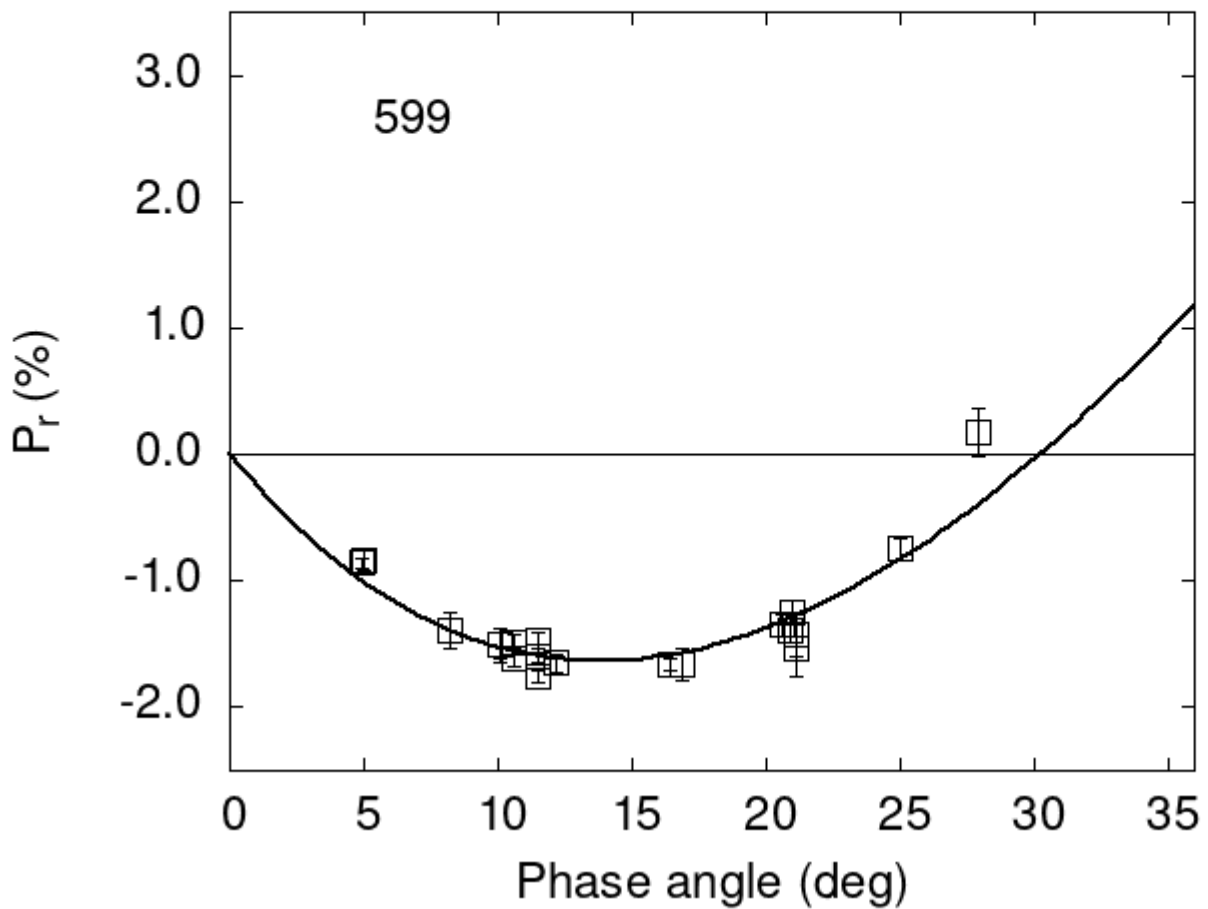


# Catalogue of Asteroid Polarization Curves

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.

599	4.98	-0.83	0.09	V	f
599	8.25	-1.39	0.14	V	f
599	10.09	-1.51	0.13	V	f
599	16.89	-1.66	0.12	V	f
599	20.58	-1.35	0.09	V	f
599	20.88	-1.39	0.09	V	f

```

599 20.98 -1.25 0.09 V f
599 16.40 -1.66 0.05 V a
599 12.20 -1.65 0.07 V a
599 10.09 -1.51 0.10 V a
599 4.90 -0.86 0.04 V a
599 11.50 -1.47 0.07 V a
599 11.50 -1.76 0.05 R a
599 11.50 -1.59 0.05 V a
599 10.60 -1.48 0.06 V a
599 10.60 -1.61 0.06 R a
599 21.10 -1.53 0.23 V a
599 21.10 -1.43 0.16 R a
599 25.00 -0.75 0.08 V h
599 27.90 0.17 0.19 V h

```

## 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
# 20.1745  0.6687 29.4932  0.8788  0.4277  0.0095
#
#      Phmin  err  Pmin  err  Ph0  err  k      err
# 13.85  1.27 -1.636  0.334 30.25  0.22 0.1825 0.0125

```