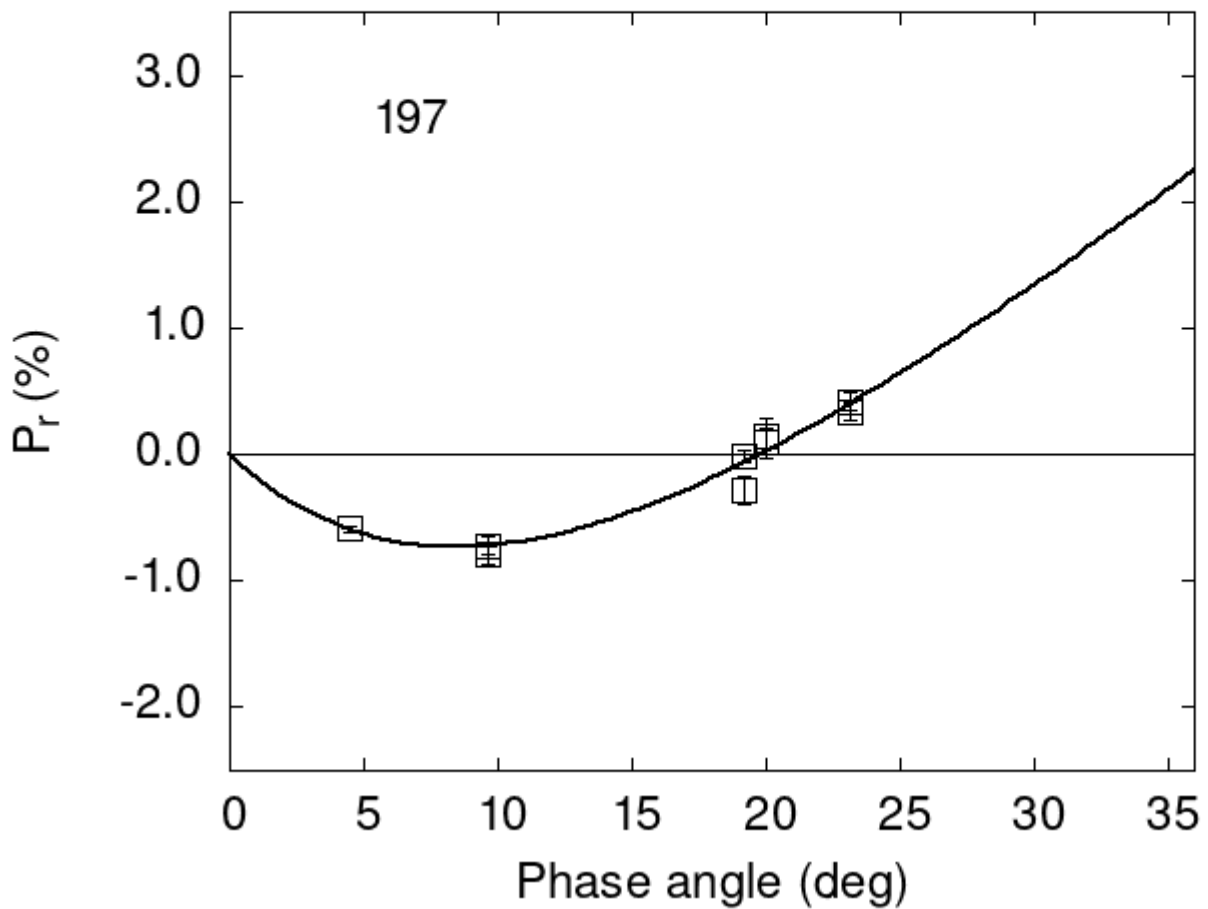


# Catalogue of Asteroid Polarization Curves

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.

197	23.17	0.42	0.07	V	f
197	23.17	0.34	0.07	R	f
197	9.61	-0.79	0.08	V	f
197	9.61	-0.72	0.07	R	f
197	19.99	0.14	0.14	V	a
197	19.99	0.09	0.12	R	a

```

197 19.19 -0.28 0.11 V a
197 19.19 -0.01 0.05 R a
197 4.50 -0.59 0.02 V a
197 9.61 -0.79 0.08 V b
197 9.61 -0.72 0.07 R b
197 23.17 0.42 0.07 V b
197 23.17 0.34 0.07 R b

```

## 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
#      4.0259    0.3751    10.9084    0.8717    0.1700    0.0109
#
#      Phmin    err    Pmin    err    Ph0    err    k    err
#      8.46    1.25 -0.734    0.250  19.83    0.36  0.1101  0.0128

```