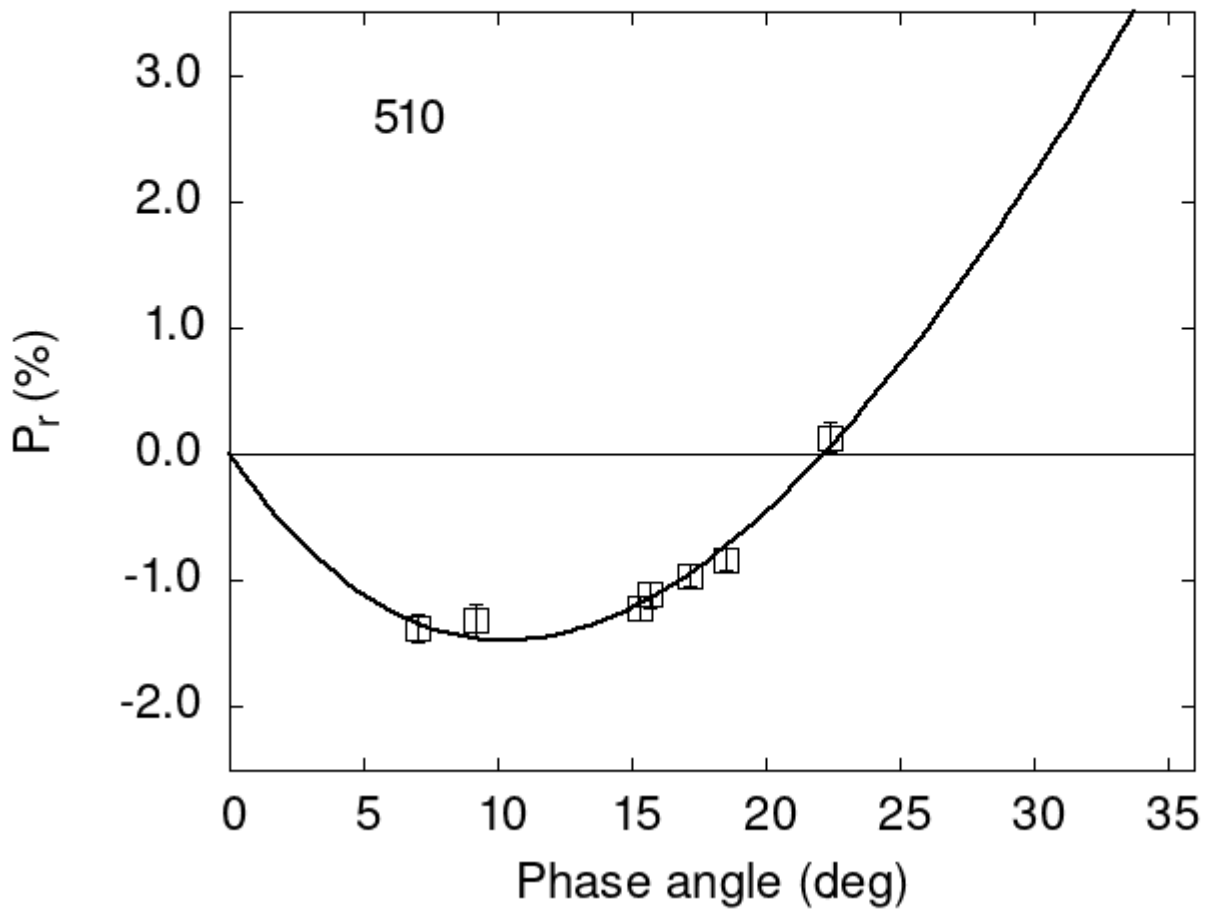# Catalogue of Asteroid Polarization Curves

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.

```
510   7.02 -1.37 0.11 V f
510   9.18 -1.32 0.14 V f
510  15.33 -1.22 0.09 V f
510  15.71 -1.11 0.10 V f
510  17.15 -0.96 0.09 V f
510  18.52 -0.83 0.09 V f
```

510 22.37   0.13 0.12 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     eCoe1     Coe2     eCoe2      Coe3     eCoe3
#    21.8459   0.7831  24.3228   0.9553    0.5892    0.0213
#
#     Phmin    err    Pmin     err   Ph0     err    k       err
#     10.25   1.36  -1.473   0.420 22.18   0.18 0.2283 0.0250
```