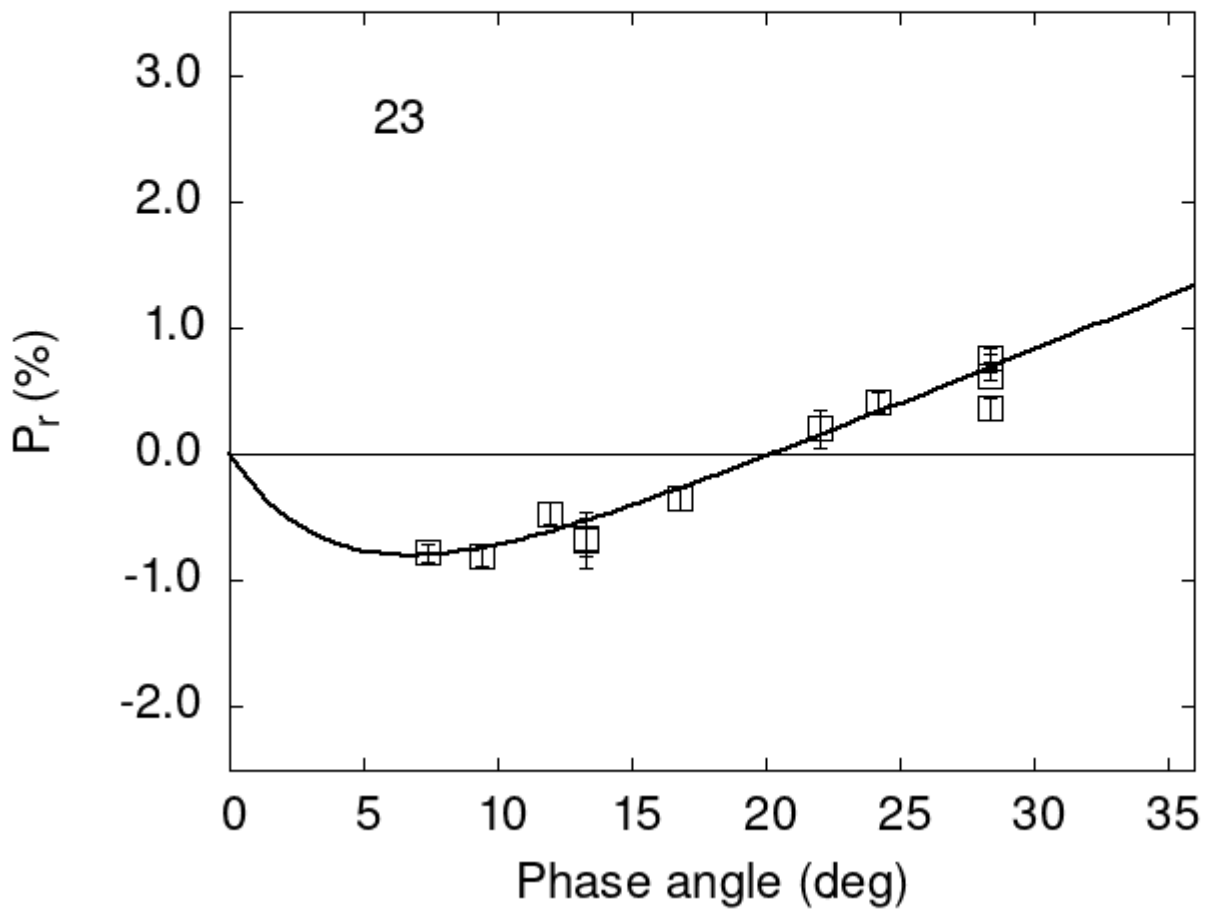


# Catalogue of Asteroid Polarization Curves

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.

|    |       |       |      |   |   |
|----|-------|-------|------|---|---|
| 23 | 9.44  | -0.80 | 0.08 | V | f |
| 23 | 11.97 | -0.47 | 0.09 | V | f |
| 23 | 24.20 | 0.41  | 0.08 | V | f |
| 23 | 28.37 | 0.76  | 0.08 | V | f |
| 23 | 28.37 | 0.36  | 0.09 | R | f |
| 23 | 7.37  | -0.78 | 0.07 | G | a |

```

23 16.82 -0.35 0.09 G a
23 22.04 0.20 0.15 G a
23 13.30 -0.66 0.15 V a
23 13.30 -0.68 0.22 R a
23 28.37 0.62 0.03 V a
23 28.37 0.76 0.03 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
#      1.7486      0.3046      4.3568      1.6614      0.0856      0.0100
#
#      Phmin      err      Pmin      err      Ph0      err      k      err
#      6.73      1.29 -0.800      0.332      20.23      0.49 0.0817 0.0114

```