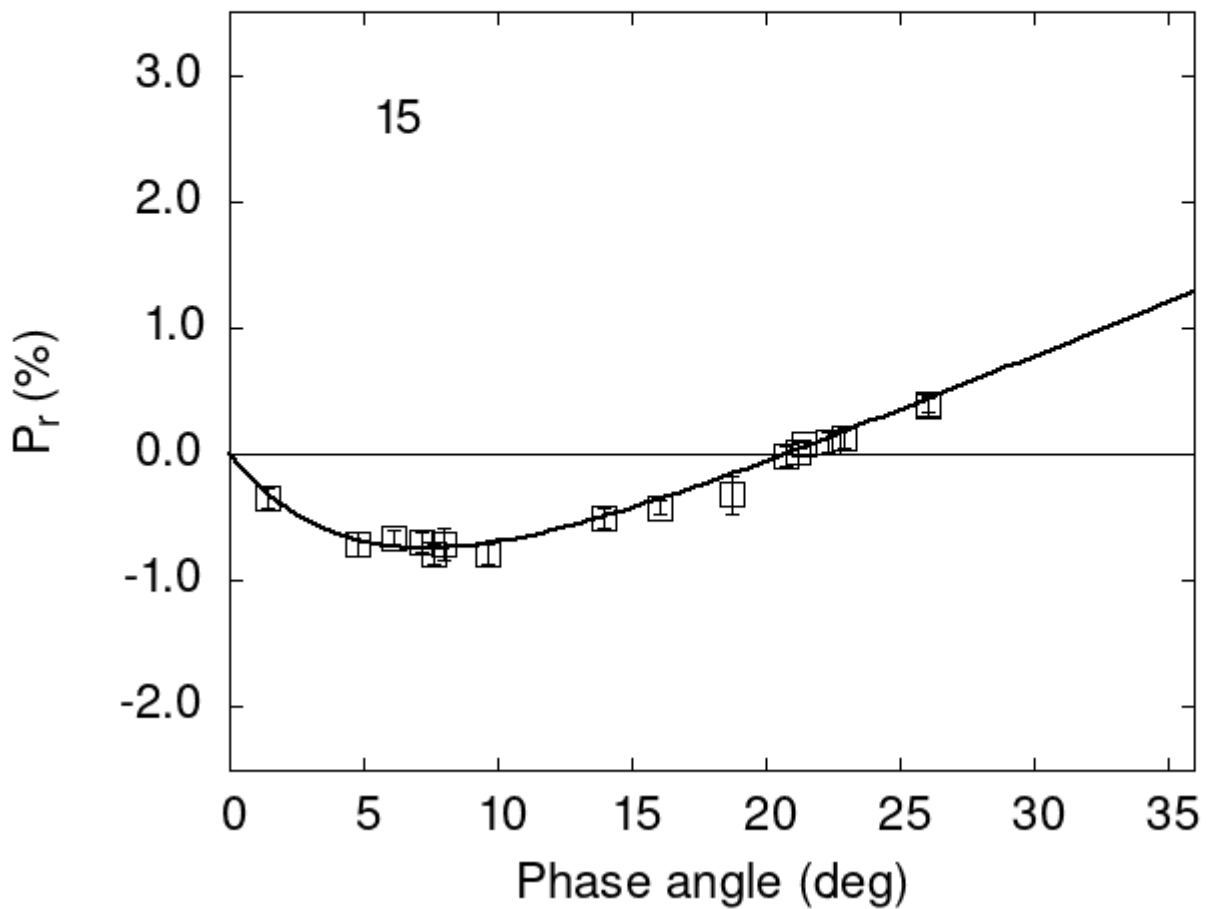


# Catalogue of Asteroid Polarization Curves

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.

|    |       |       |      |   |   |
|----|-------|-------|------|---|---|
| 15 | 1.40  | -0.34 | 0.08 | V | f |
| 15 | 4.77  | -0.71 | 0.09 | V | f |
| 15 | 7.19  | -0.69 | 0.08 | V | f |
| 15 | 7.60  | -0.79 | 0.08 | V | f |
| 15 | 9.60  | -0.79 | 0.08 | V | f |
| 15 | 20.73 | -0.01 | 0.08 | V | f |

```

15 21.21  0.01 0.08 V f
15 22.36  0.09 0.08 V f
15 22.94  0.13 0.08 V f
15 26.05  0.38 0.08 V f
15  8.01 -0.71 0.13 G a
15 13.97 -0.51 0.08 G a
15 16.06 -0.42 0.05 G a
15 18.76 -0.32 0.15 G a
15 21.40  0.08 0.02 V a
15  6.10 -0.66 0.06 V a
15 26.05  0.39 0.05 V 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
#      1.8301    0.2145    5.2638    0.7846    0.0864    0.0088
#
#      Phmin    err  Pmin    err  Ph0    err  k      err
#      7.33    0.87 -0.742  0.198 20.77 0.50 0.0796 0.0093

```