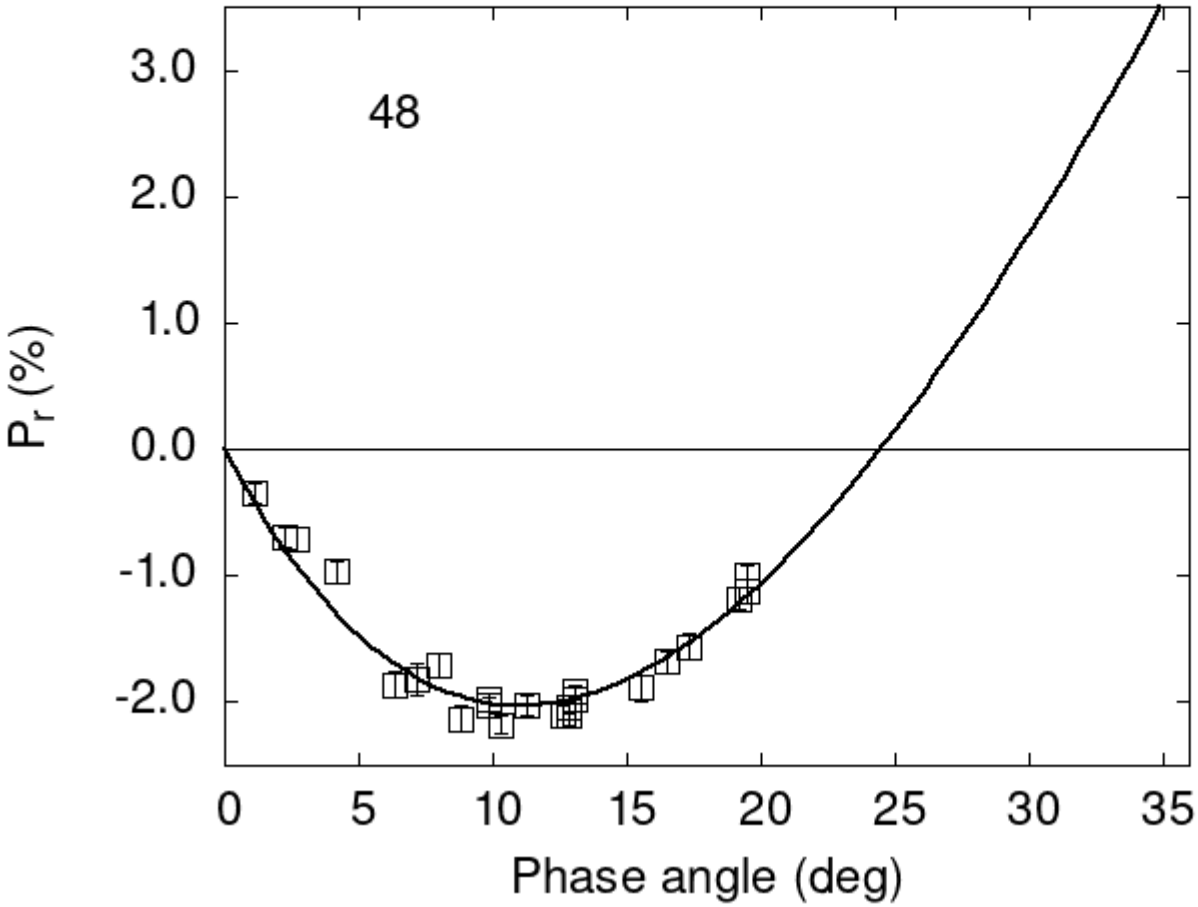
Catalogue of Asteroid Polarization Curves

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.

```
48  2.27 -0.69 0.08 V f
48  2.69 -0.71 0.09 V f
48  6.38 -1.86 0.10 V f
48  7.14 -1.82 0.12 V f
48  7.96 -1.71 0.09 V f
48  8.84 -2.13 0.10 V f
```

```
48 11.25 -2.03 0.08 V f
48 12.65 -2.11 0.09 V f
48 12.83 -2.10 0.09 V f
48 13.04 -1.98 0.09 V f
48 15.52 -1.89 0.10 V f
48 16.50 -1.68 0.09 V f
48 10.33 -2.18 0.07 R f
48  9.83 -2.02 0.06 V f
48  9.83 -1.97 0.04 R f
48 17.30 -1.56 0.10 V a
48 19.50 -1.12 0.09 V a
48 19.50 -1.00 0.09 R a
48  4.20 -0.97 0.09 V a
48 12.83 -2.04 0.05 V a
48 13.04 -1.92 0.05 V a
48  9.83 -2.02 0.06 V b
48  9.83 -1.97 0.04 R b
48 10.33 -2.18 0.07 R b
48 19.20 -1.18 0.09 V h
48  1.10 -0.35 0.08 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 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
#   19.5354   0.6233  20.2730   0.4667   0.5592   0.0144
#
#     Phmin   err   Pmin    err  Ph0    err    k      err
#     11.03  0.86 -2.030  0.338 24.50  0.15 0.2714 0.0172
```