Catalogue of Asteroid Polarization Curves
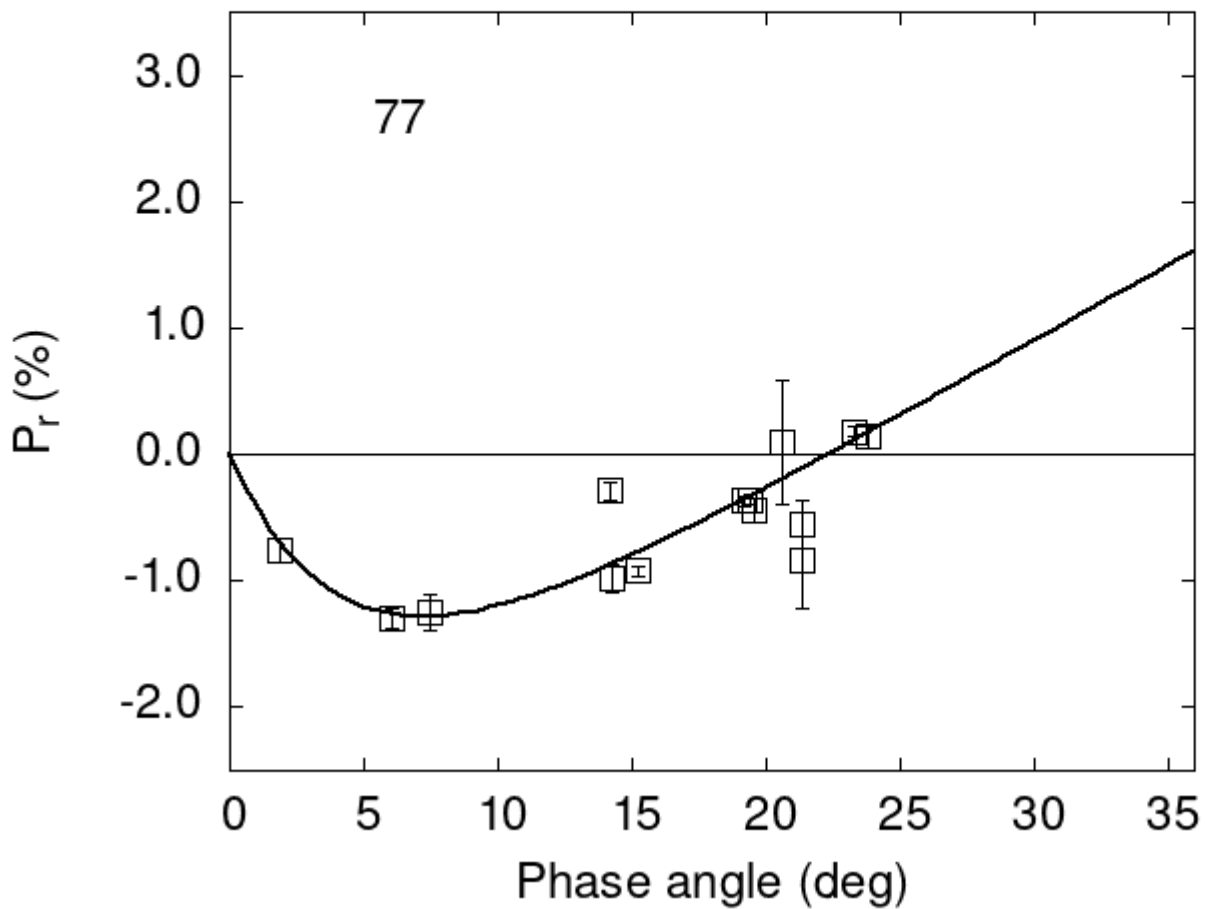
Gil-Hutton (2023)

Polarimetric data:

The columns list the object number, the phase angle (degrees), P_r (%), its error, the filter used, and the reference code.

```
77 23.30   0.18 0.04 R d
77  6.04  -1.29 0.08 V f
77 19.57  -0.44 0.09 V f
77 20.62   0.09 0.49 V f
77 23.82   0.14 0.09 V f
77 21.33  -0.84 0.38 V a
```

```
77 21.33 -0.55 0.19 R a
77 15.20 -0.92 0.04 V a
77  7.50 -1.25 0.14 V a
77 19.20 -0.37 0.04 V a
77 19.40 -0.36 0.04 V a
77 14.20 -0.29 0.07 V a
77  1.90 -0.76 0.10 V a
77 14.30 -0.98 0.11 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
#    2.6789    0.1751    4.4946    0.4545    0.1190    0.0081
#
#    Phmin    err    Pmin     err   Ph0    err    k       err
#     7.24   0.51  -1.282   0.175 22.33   0.35 0.1149  0.0083
```