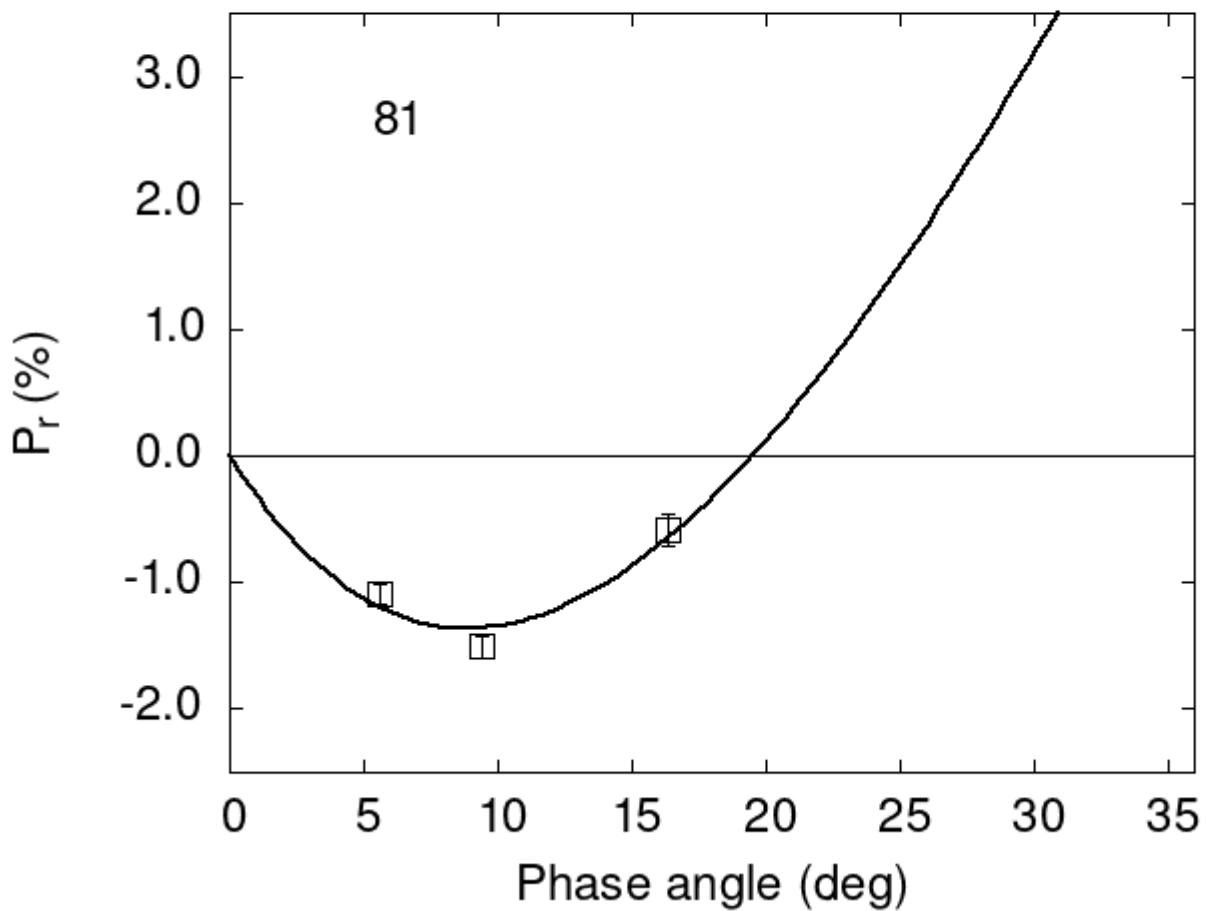# Catalogue of Asteroid Polarization Curves

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.

```
81  5.62 -1.09 0.08 V f
81  9.44 -1.51 0.09 V f
81 16.36 -0.58 0.13 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
#   14.9479    0.8364   17.6246   1.3059    0.5127    0.0293
#
#     Phmin    err    Pmin     err  Ph0      err    k       err
#      8.87   1.55  -1.364   0.539 19.51   0.17 0.2324 0.0333
```