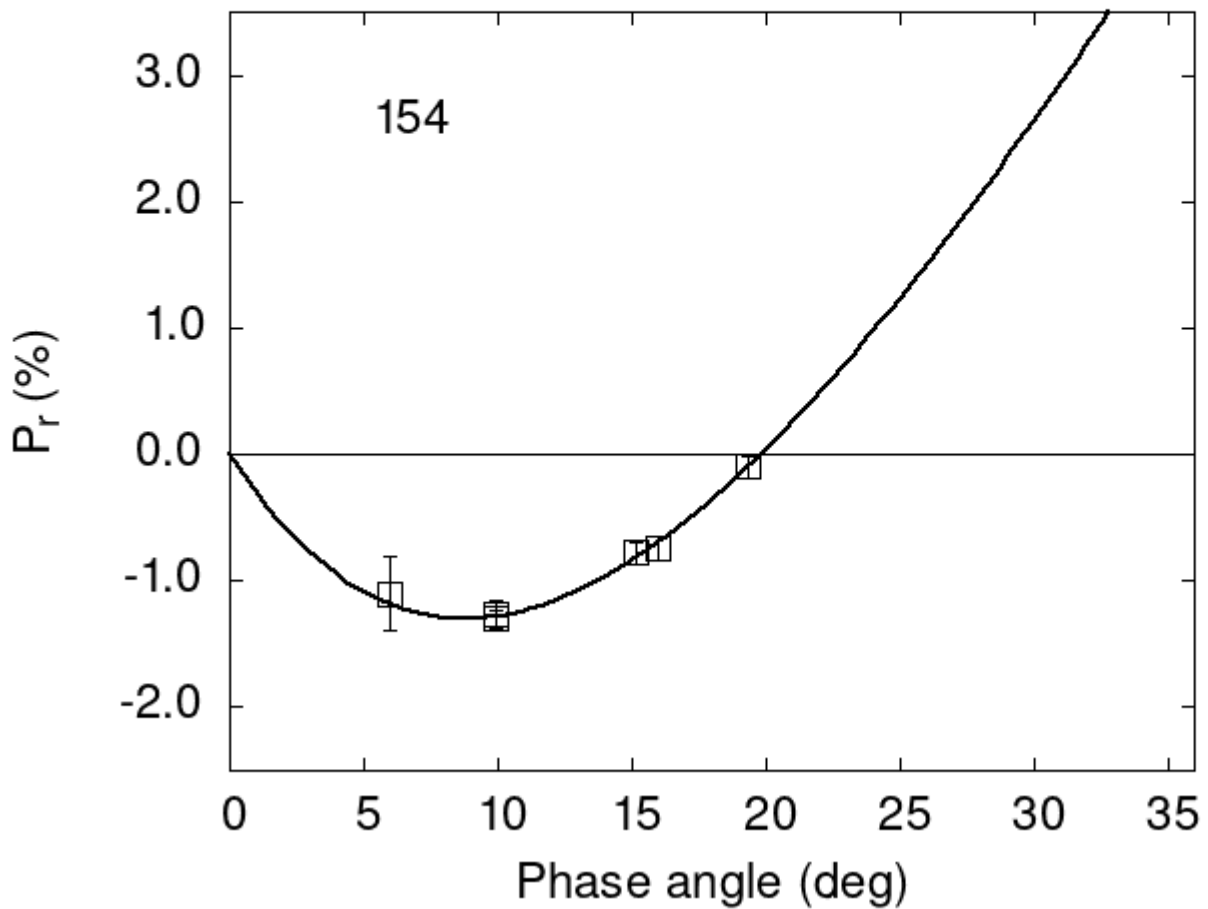# Catalogue of Asteroid Polarization Curves

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.

```
154 15.14 -0.78 0.09 V f
154 19.37 -0.10 0.09 V f
154  9.90 -1.27 0.12 V a
154  9.90 -1.30 0.07 R a
154  6.00 -1.10 0.29 V h
154 16.00 -0.74 0.10 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
#    10.1231    0.3172   14.1757   0.6543    0.3843    0.0142
#
#     Phmin    err    Pmin     err  Ph0      err    k        err
#      8.78   0.73  -1.300   0.248 19.85   0.19 0.2082  0.0156
```