Catalogue of Asteroid Polarization Curves
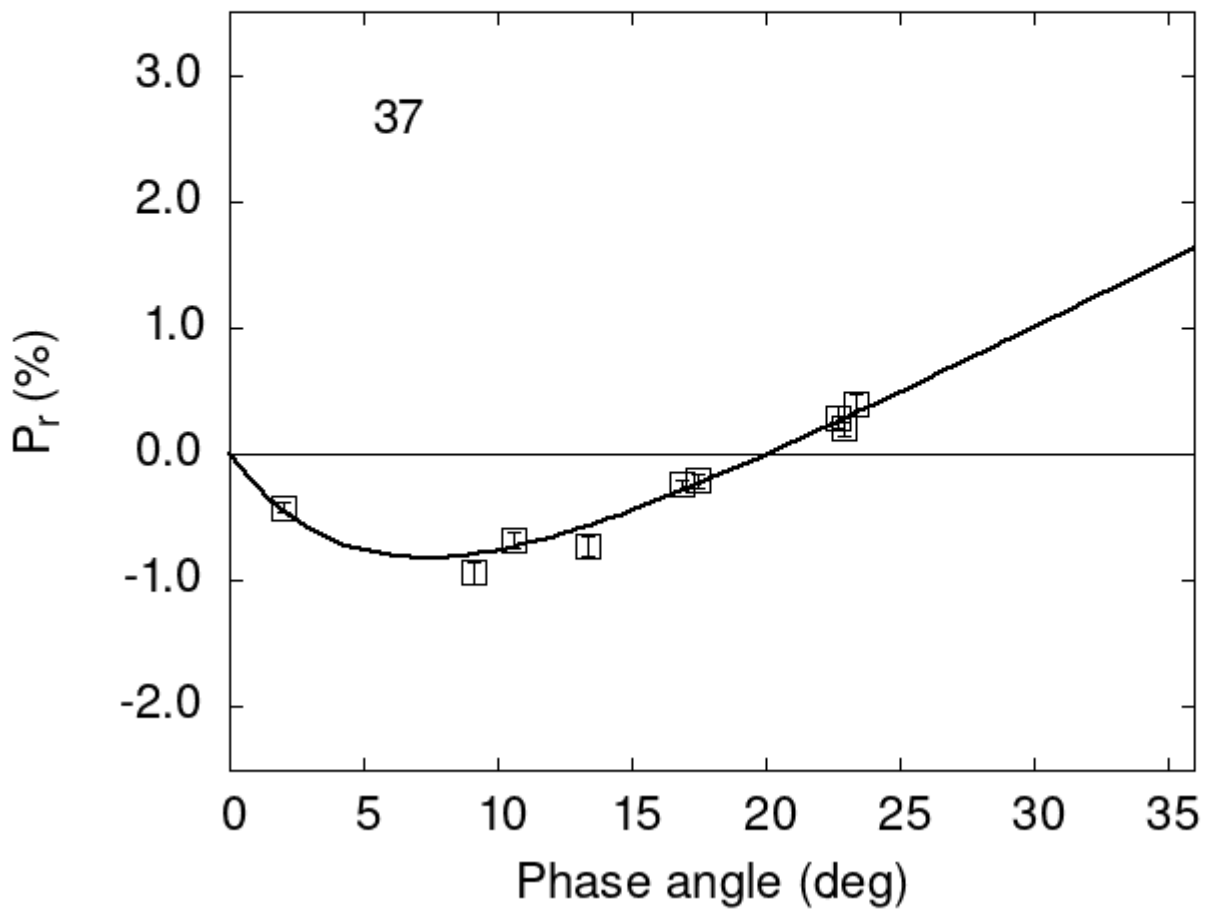
Gil-Hutton (2023)

Polarimetric data:

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

```
37   9.08 -0.94 0.08 V f
37  13.35 -0.73 0.08 V f
37  22.70  0.29 0.09 V f
37  23.40  0.39 0.08 V f
37  10.60 -0.68 0.06 V a
37   2.00 -0.42 0.04 V a
```

```
37 17.50 -0.21 0.06 V a
37 16.90 -0.24 0.04 V a
37 22.90  0.20 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 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
#    2.1852    0.3341    5.6054   1.0201    0.1058    0.0134
#
#     Phmin    err    Pmin     err   Ph0     err    k       err
#      7.31   1.15  -0.819   0.298 20.08   0.42 0.0949 0.0144
```