Catalogue of Asteroid Polarization Curves
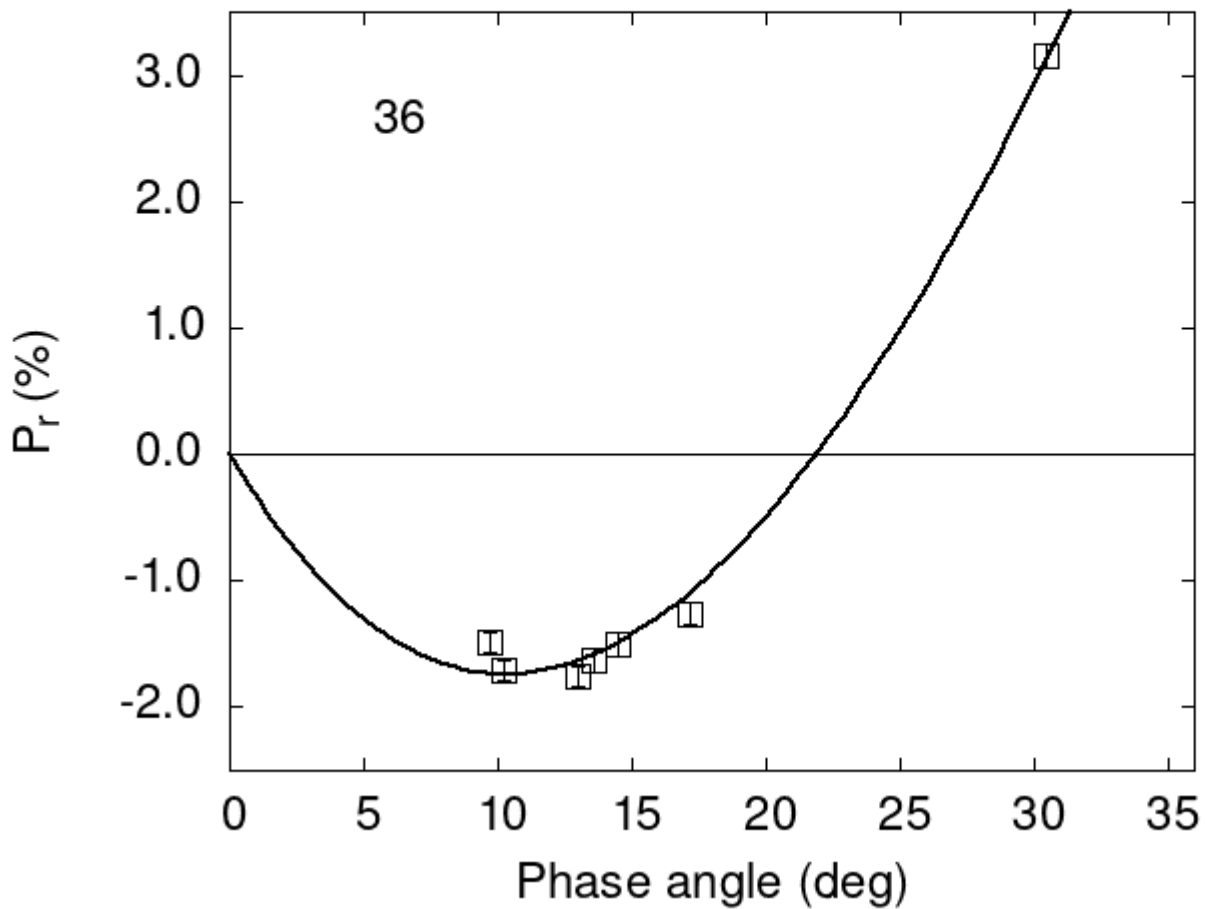
Gil-Hutton (2023)

Polarimetric data:

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

```
36 10.23 -1.71 0.08 V f
36 12.97 -1.75 0.08 V f
36 13.56 -1.63 0.09 V f
36 14.51 -1.50 0.09 V f
36 17.16 -1.26 0.09 V f
36 30.44  3.15 0.10 V f
```

```
   36   9.70 -1.49 0.08 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
#    39.4104   1.5521   31.1242    0.8728    0.9091    0.0213
#
#    Phmin    err    Pmin     err   Ph0     err    k        err
#    10.31   1.54  -1.740   0.556  21.89   0.14  0.2824  0.0330
```