Catalogue of Asteroid Polarization Curves
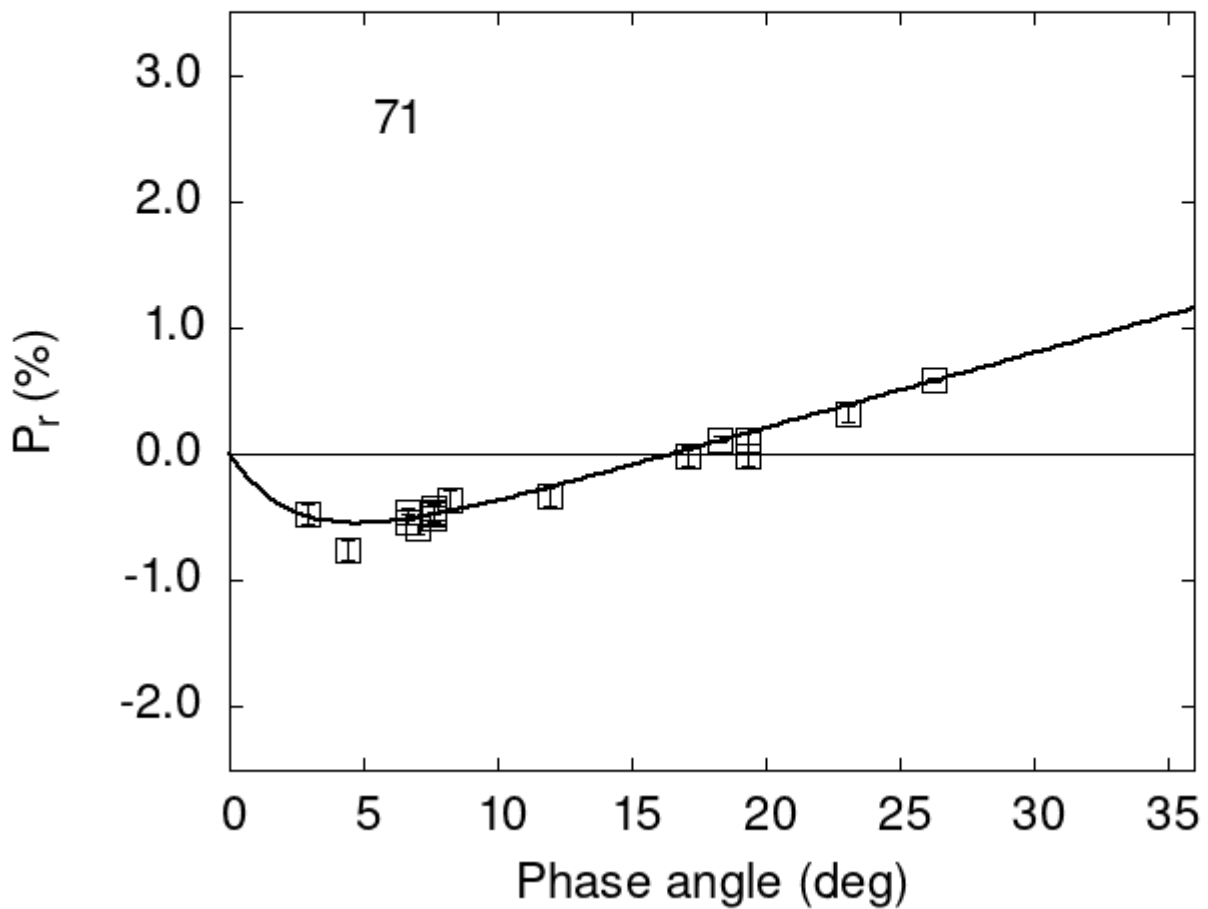
Gil-Hutton (2023)

Polarimetric data:

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

```
71  2.90 -0.47 0.08 V f
71  4.43 -0.76 0.08 V f
71  7.64 -0.48 0.08 V f
71  7.64 -0.46 0.08 R f
71 11.94 -0.33 0.08 V f
71 17.09 -0.01 0.08 V f
```

```
71 19.35  0.11 0.09 V f
71 19.35 -0.01 0.09 V f
71  7.03 -0.59 0.04 G a
71  8.20 -0.37 0.09 V a
71 18.30  0.12 0.03 V a
71  6.66 -0.54 0.02 V a
71  6.66 -0.45 0.02 R a
71 23.10  0.32 0.06 V a
71 26.30  0.59 0.02 V a
71  7.64 -0.50 0.03 V a
71  7.64 -0.42 0.05 R 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
#    0.9821    0.0736    2.5694    0.6990    0.0593    0.0032
#
#     Phmin    err    Pmin     err  Ph0     err    k       err
#      4.79   0.65  -0.546   0.100 16.52   0.68 0.0587  0.0034
```