Catalogue of Asteroid Polarization Curves
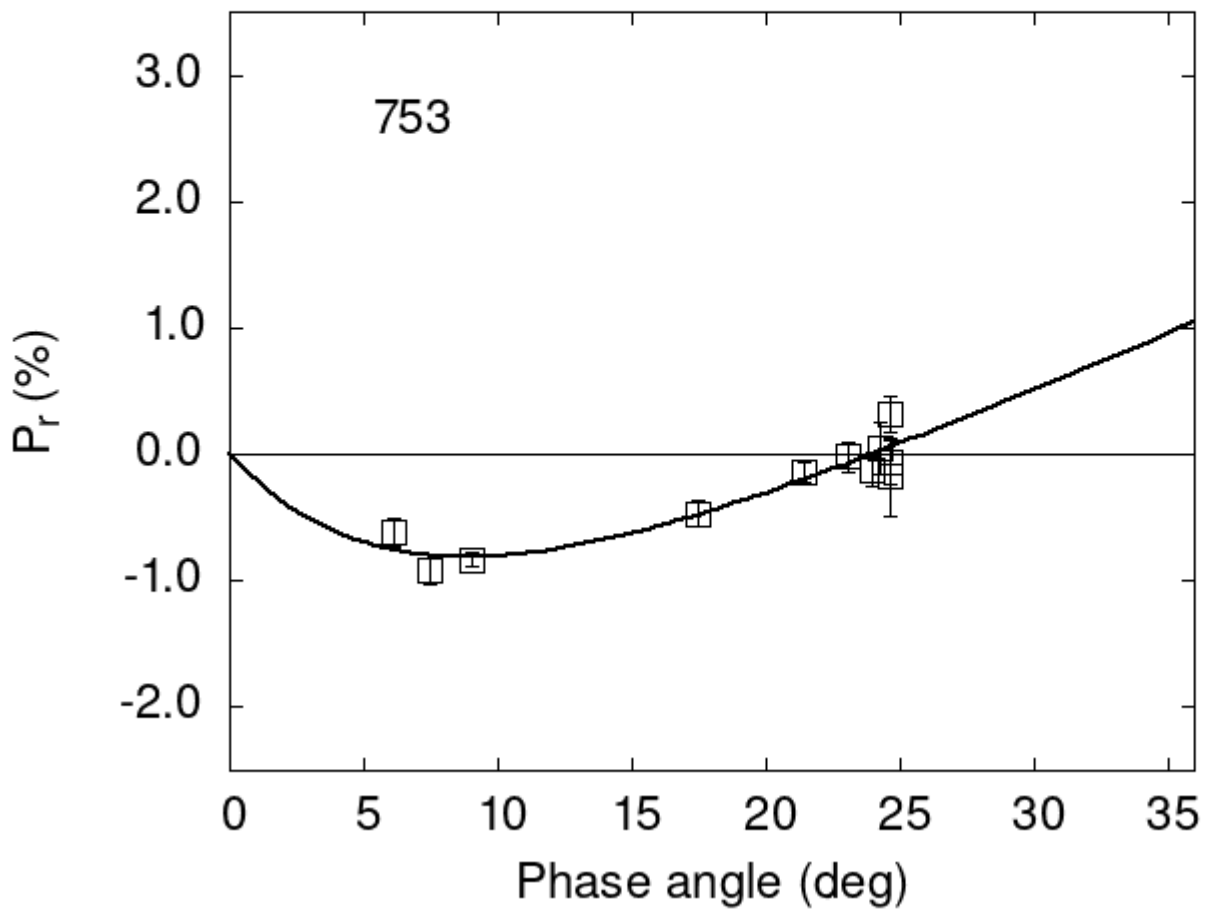
Gil-Hutton (2023)

Polarimetric data:

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

```
753   6.11  -0.61 0.11 V f
753   7.50  -0.91 0.12 V f
753  23.09  -0.02 0.12 V f
753  23.96  -0.12 0.13 V f
753  24.29   0.05 0.20 V f
753  24.65   0.32 0.14 V f
```

```
753 24.68 -0.18 0.31 V f
753 24.68 -0.06 0.17 V f
753 21.40 -0.14 0.08 V a
753  9.00 -0.83 0.05 V a
753 17.50 -0.47 0.10 V a
753 23.96 -0.12 0.10 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
#    2.2783     0.4195    7.0745     1.5271    0.0918     0.0154
#
#     Phmin    err    Pmin     err  Ph0      err    k        err
#      8.88   1.81  -0.814   0.374 23.97    0.49 0.0809   0.0165
```