Catalogue of Asteroid Polarization Curves
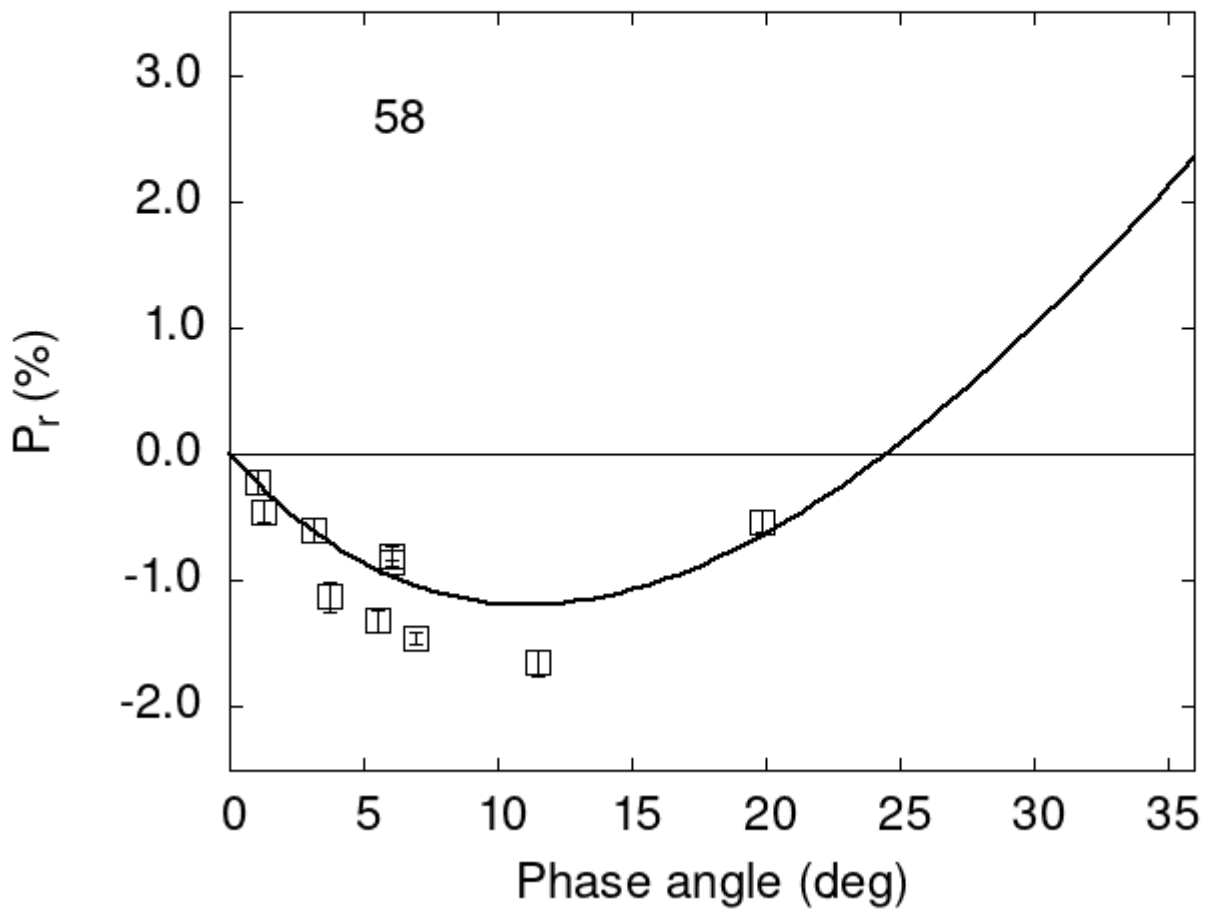
Gil-Hutton (2023)

Polarimetric data:

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

```
58   1.08  -0.22 0.09 V f
58   1.29  -0.45 0.08 V f
58   3.70  -1.13 0.12 V f
58   5.56  -1.32 0.09 V f
58   6.05  -0.81 0.09 V f
58  11.52  -1.65 0.10 V f
```

```
58 19.88 -0.53 0.09 V f
58  6.97 -1.45 0.05 G a
58  6.05 -0.86 0.02 V a
58  3.10 -0.60 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
#    12.6270    0.4620   21.6167    0.6678   0.3494    0.0126
#
#     Phmin    err    Pmin     err  Ph0     err    k        err
#     11.11   1.16  -1.192   0.262 24.50   0.25 0.1614  0.0144
```