Catalogue of Asteroid Polarization Curves
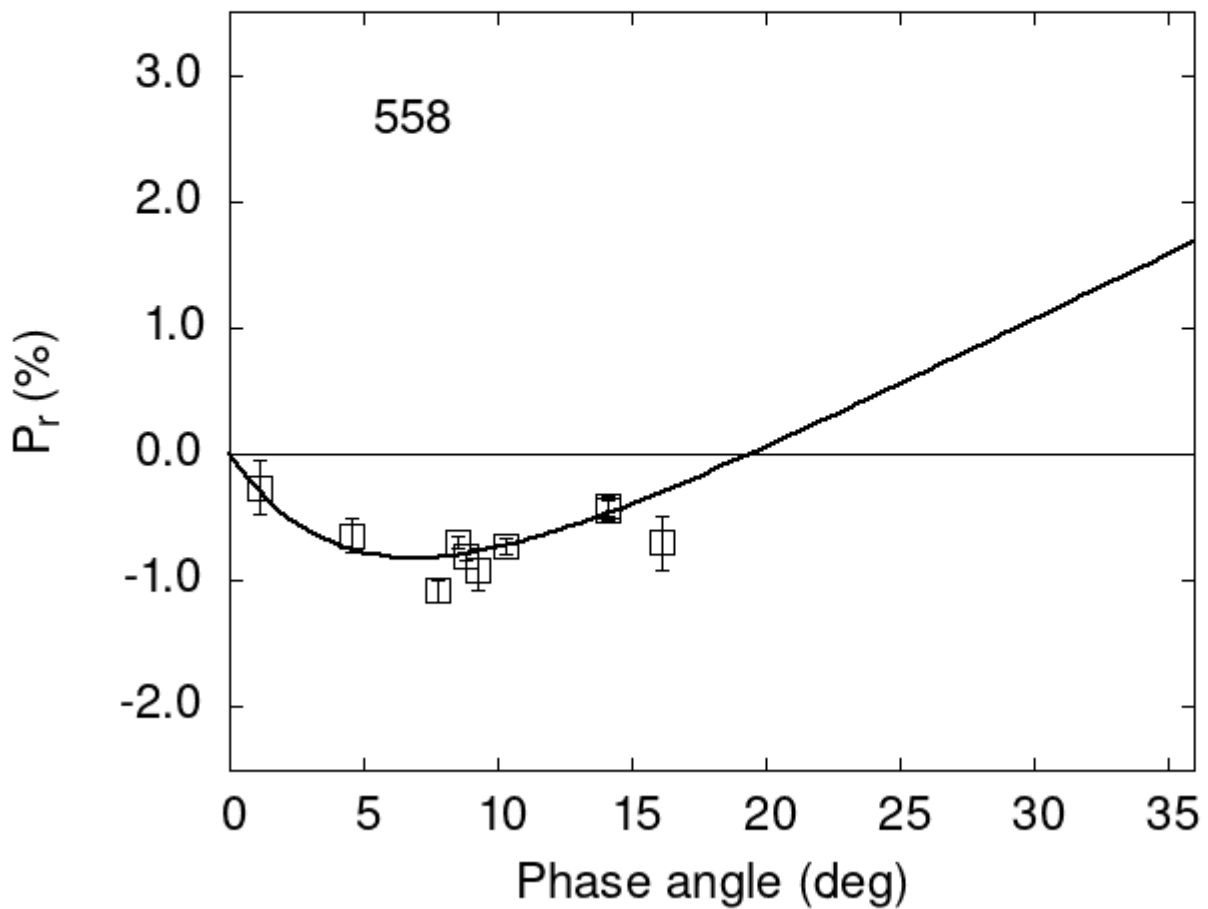
Gil-Hutton (2023)

Polarimetric data:

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

```
558   4.56 -0.64 0.13 V f
558   7.79 -1.08 0.09 V f
558   9.28 -0.91 0.17 V f
558  10.30 -0.73 0.06 V a
558   8.80 -0.80 0.03 V a
558   8.50 -0.69 0.05 V a
```

```
558 14.10 -0.41 0.08 V a
558 14.10 -0.44 0.08 R a
558  1.10 -0.26 0.21 V h
558 16.10 -0.70 0.21 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
#    2.0560    0.2644   5.0191    0.8531    0.1037    0.0147
#
#     Phmin    err    Pmin     err  Ph0      err    k       err
#      6.89   1.01  -0.820   0.253 19.39   0.42 0.0951  0.0153
```