Catalogue of Asteroid Polarization Curves
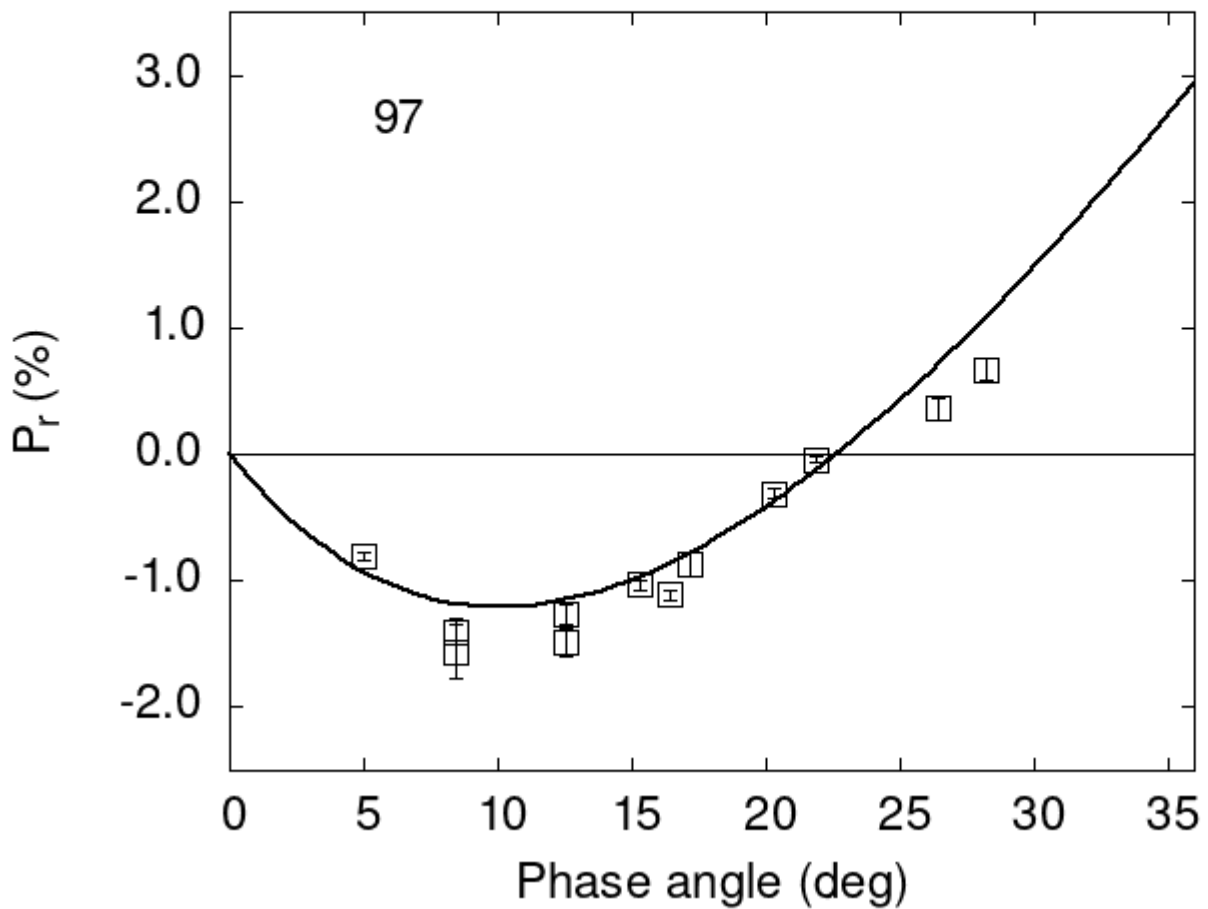
Gil-Hutton (2023)

Polarimetric data:

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

```
97 26.46   0.36 0.09 V f
97 28.23   0.67 0.09 V f
97  8.44  -1.56 0.21 V a
97  8.44  -1.40 0.10 R a
97 12.58  -1.48 0.11 V a
97 12.58  -1.26 0.08 R a
```

```
97 21.90 -0.04 0.02 V a
97  5.00 -0.81 0.03 V a
97 16.40 -1.11 0.04 V a
97 17.20 -0.87 0.10 V a
97 15.30 -1.03 0.04 V a
97 20.30 -0.31 0.04 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
#   10.1855    0.5040  17.1161    0.6605    0.3298    0.0107
#
#    Phmin    err   Pmin     err   Ph0     err    k      err
#    10.10   1.05 -1.209   0.281 22.67   0.23 0.1715 0.0134
```