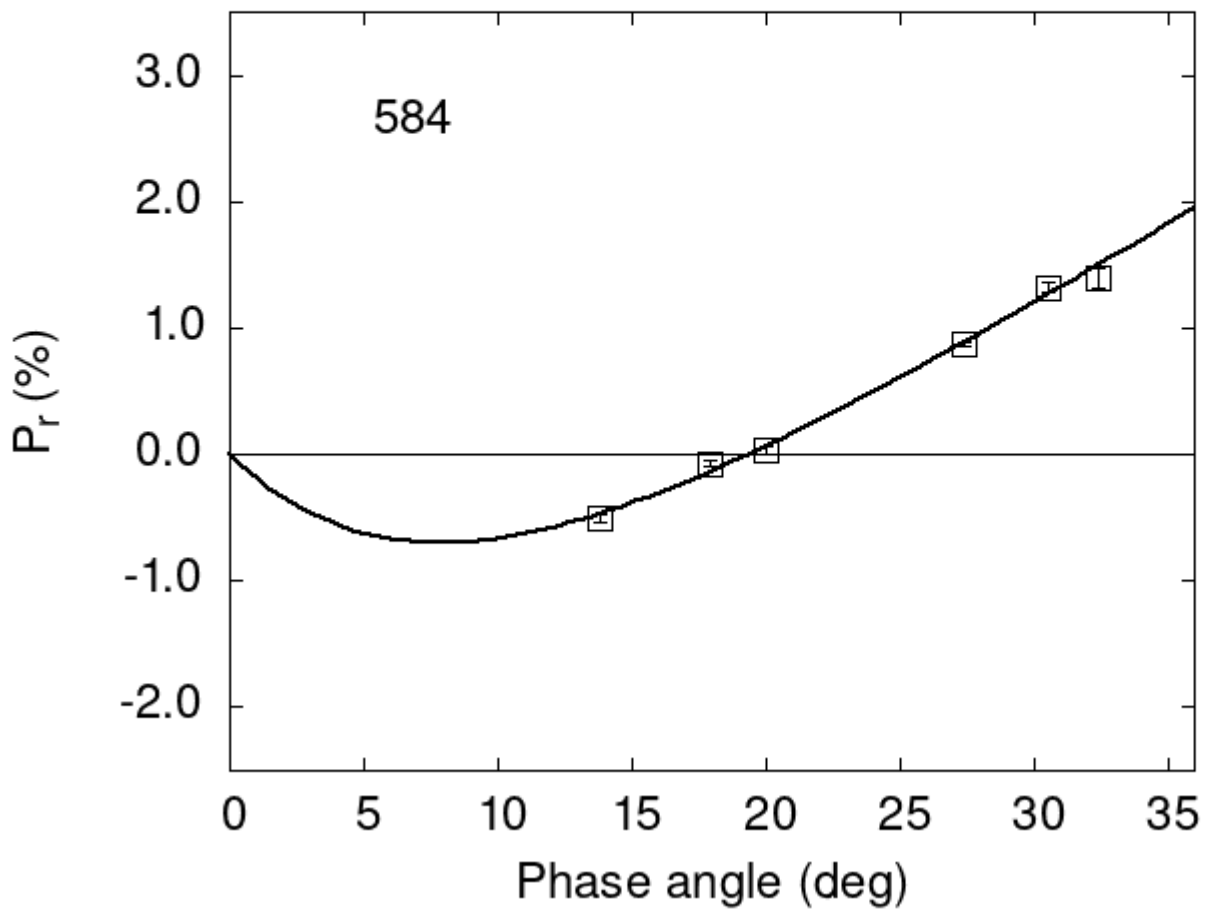# Catalogue of Asteroid Polarization Curves

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.

```
584 32.39   1.40 0.08 G a
584 30.56   1.32 0.04 G a
584 27.42   0.87 0.02 G a
584 19.98   0.03 0.03 G a
584 13.79  -0.51 0.03 G a
584 17.96  -0.07 0.03 G 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
#    2.7994    0.2358   8.1814    1.1137    0.1308    0.0067
#
#     Phmin    err    Pmin     err   Ph0     err    k        err
#      7.87   0.81  -0.700   0.209 19.40   0.40 0.0989  0.0094
```