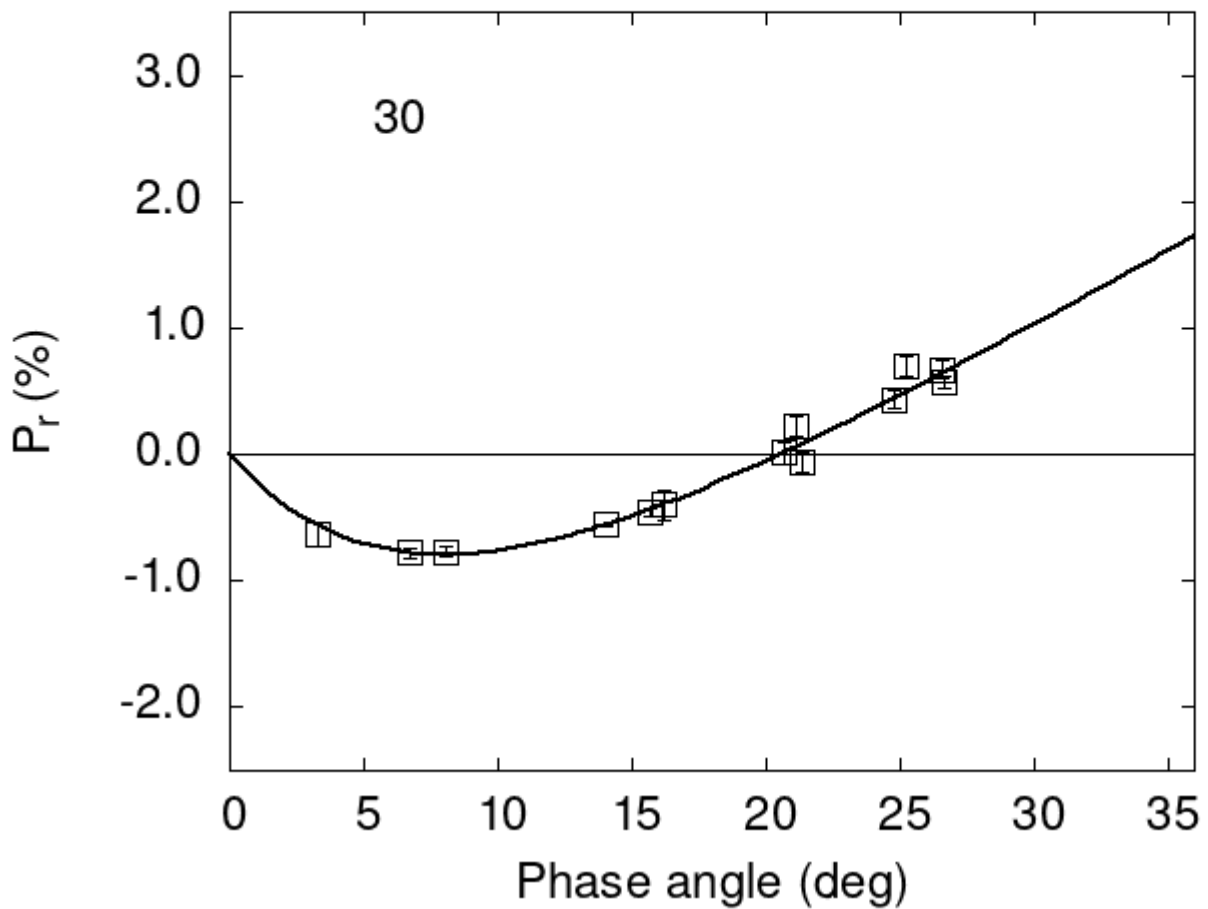# Catalogue of Asteroid Polarization Curves

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.

```
30   3.31 -0.63 0.09 V f
30  16.19 -0.40 0.12 V f
30  21.16  0.23 0.08 V f
30  21.37 -0.06 0.08 V f
30   6.70 -0.78 0.04 G a
30   8.10 -0.77 0.04 G a
```

```
30 14.05 -0.56 0.01 G a
30 15.72 -0.46 0.03 G a
30 24.81  0.43 0.07 G a
30 25.23  0.70 0.08 G a
30 26.62  0.67 0.07 G a
30 26.70  0.57 0.05 V a
30 20.70  0.01 0.08 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
#    2.6414    0.2615    7.2991    0.9187    0.1207    0.0089
#
#    Phmin    err    Pmin     err   Ph0     err    k        err
#     8.02    0.90  -0.793   0.224 20.58   0.40  0.0991   0.0104
```