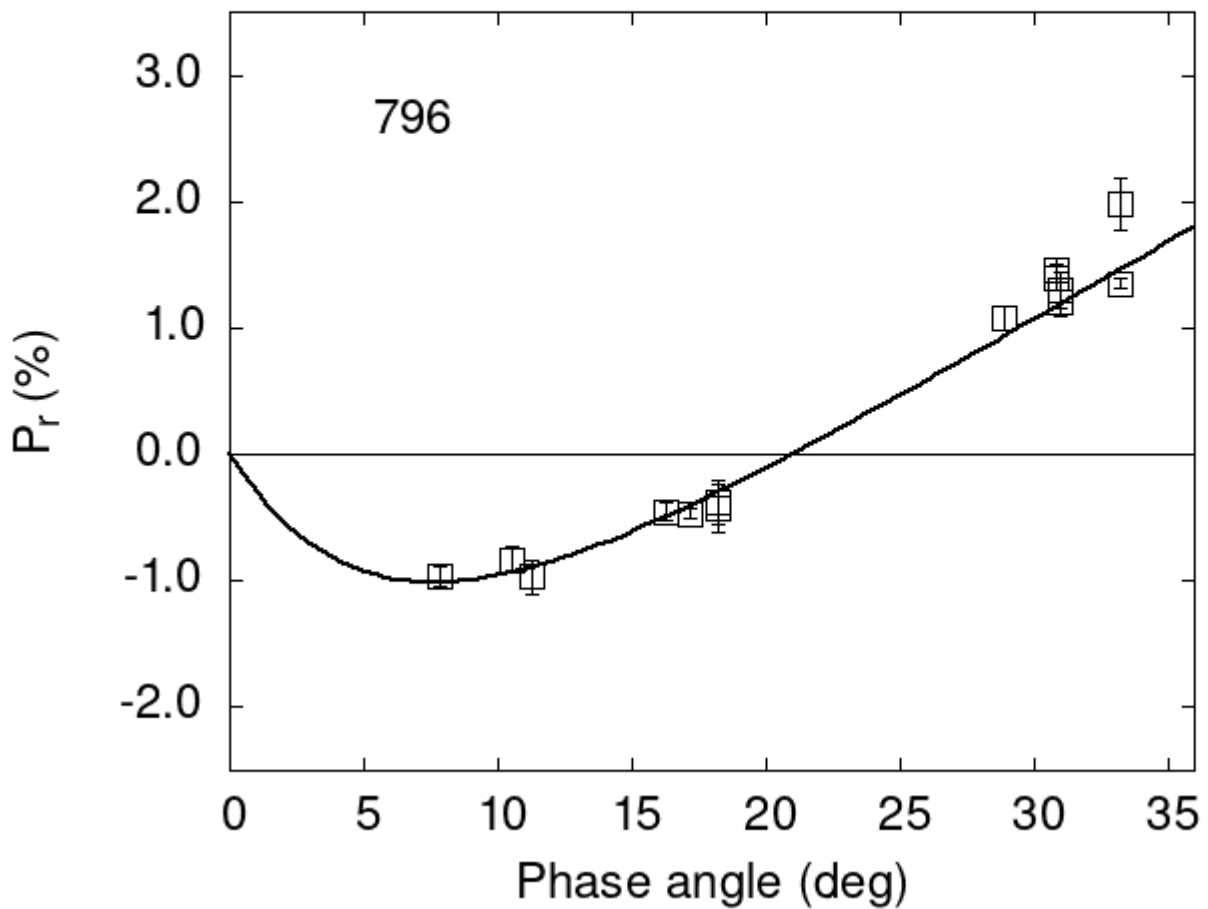# Catalogue of Asteroid Polarization Curves

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.

```
796   7.87 -0.97 0.08 V f
796 10.54 -0.83 0.10 V f
796 28.91  1.08 0.09 V f
796 18.20 -0.42 0.19 V f
796 18.20 -0.38 0.17 R f
796 30.85  1.46 0.10 V f
```

```
796 30.85   1.40 0.10 R f
796 31.00   1.30 0.14 V f
796 31.00   1.20 0.10 R f
796 33.25   1.35 0.04 V f
796 33.25   1.98 0.20 R f
796 11.30  -0.97 0.13 V a
796 16.30  -0.45 0.07 V a
796 17.20  -0.47 0.04 V a
796 30.85   1.46 0.10 V b
796 30.85   1.40 0.10 R b
796 31.00   1.30 0.14 V b
796 31.00   1.20 0.10 R b
796 33.25   1.35 0.04 V b
796 33.25   1.98 0.20 R b
796 18.20  -0.42 0.19 V b
796 18.20  -0.38 0.17 R b
```

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
#    2.6895    0.3348    5.8292    1.3573    0.1245    0.0096
#
#     Phmin    err    Pmin     err   Ph0     err    k        err
#      7.64   0.95  -1.013   0.338 21.01   0.36  0.1119  0.0123
```