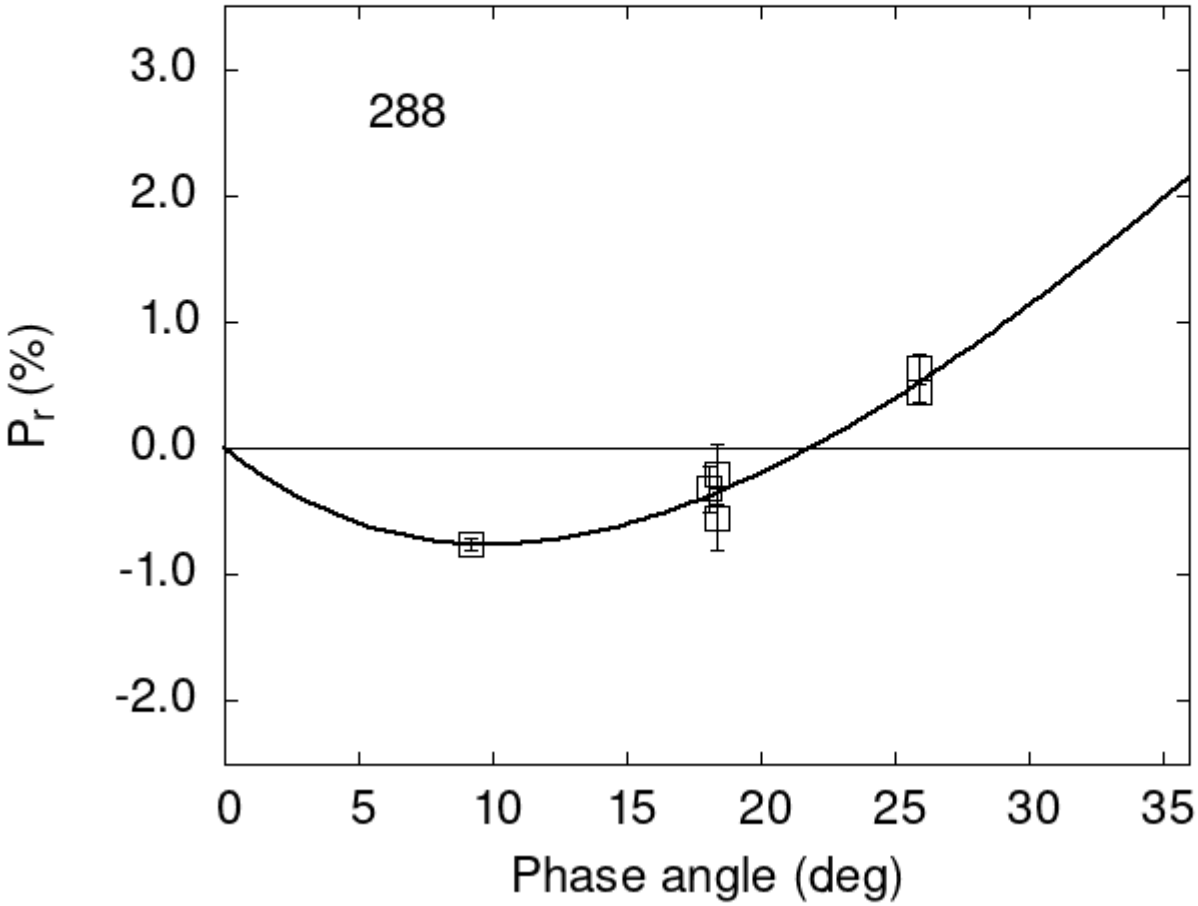
Catalogue of Asteroid Polarization Curves

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.

```
288  9.20 -0.76 0.05 V f
288 18.36 -0.56 0.25 V f
288 18.36 -0.20 0.24 R f
288 25.93  0.63 0.12 V f
288 25.93  0.45 0.09 R f
288  9.20 -0.76 0.05 V a
```

```
288 18.10 -0.32 0.18 V a
288 25.93  0.63 0.12 V b
288 25.93  0.45 0.09 R b
288 18.36 -0.56 0.25 V b
288 18.36 -0.20 0.24 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
#    7.4534   0.1997  18.2945   0.6700   0.2377   0.0050
#
#     Phmin   err   Pmin    err  Ph0    err    k      err
#      9.86  0.70 -0.762  0.129 21.86  0.35 0.1143 0.0061
```