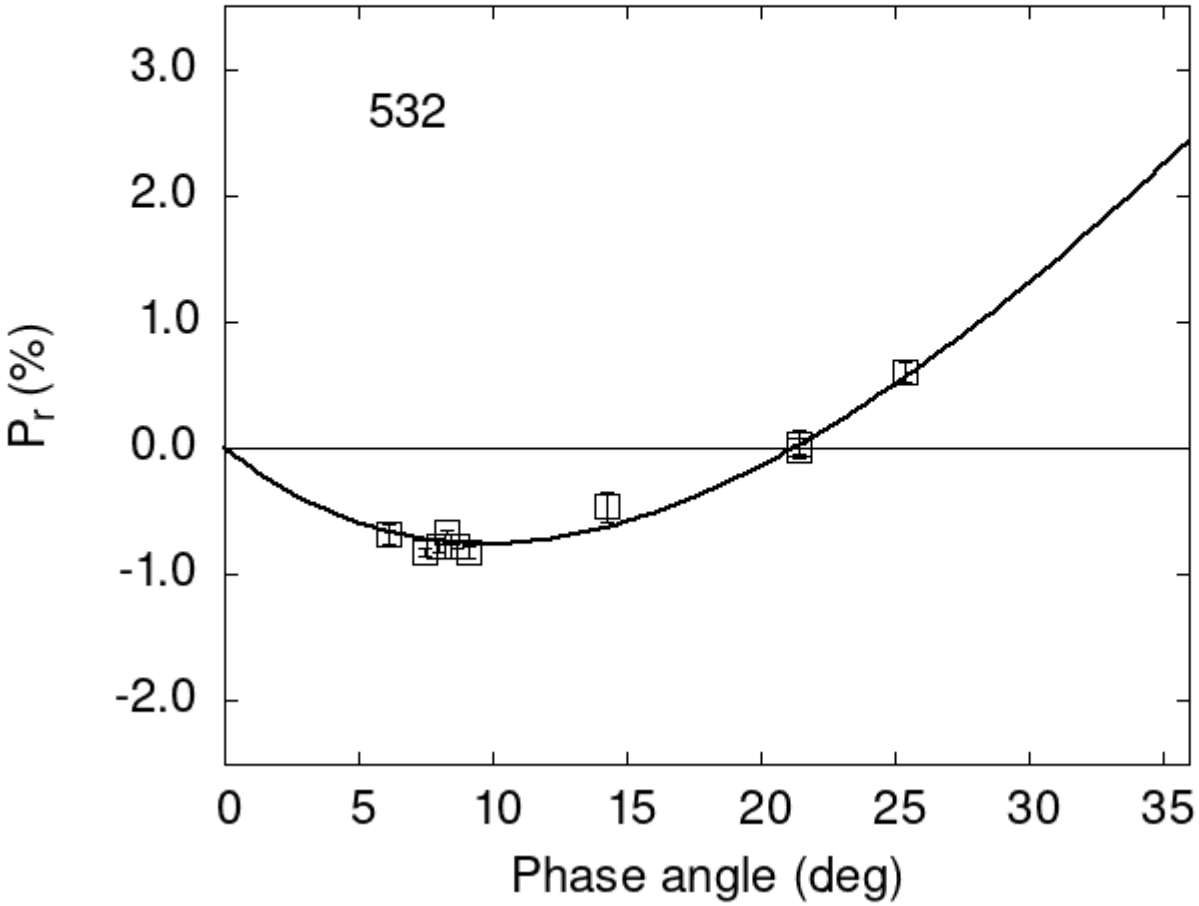
Catalogue of Asteroid Polarization Curves

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.

```
532  6.13 -0.68 0.08 V f
532 21.44  0.04 0.11 V f
532 25.37  0.60 0.08 V f
532  8.30 -0.66 0.02 V f
532  7.98 -0.77 0.05 V a
532  9.09 -0.82 0.05 V a
```

```
532  7.47 -0.82 0.03 G a
532  8.63 -0.77 0.02 G a
532 21.44 -0.01 0.04 V a
532 14.30 -0.46 0.12 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
#    9.1377   0.3000  20.4750   0.5715   0.2776   0.0060
#
#     Phmin   err   Pmin    err  Ph0    err    k      err
#      9.72  0.86 -0.755  0.148 21.27  0.33 0.1196 0.0079
```