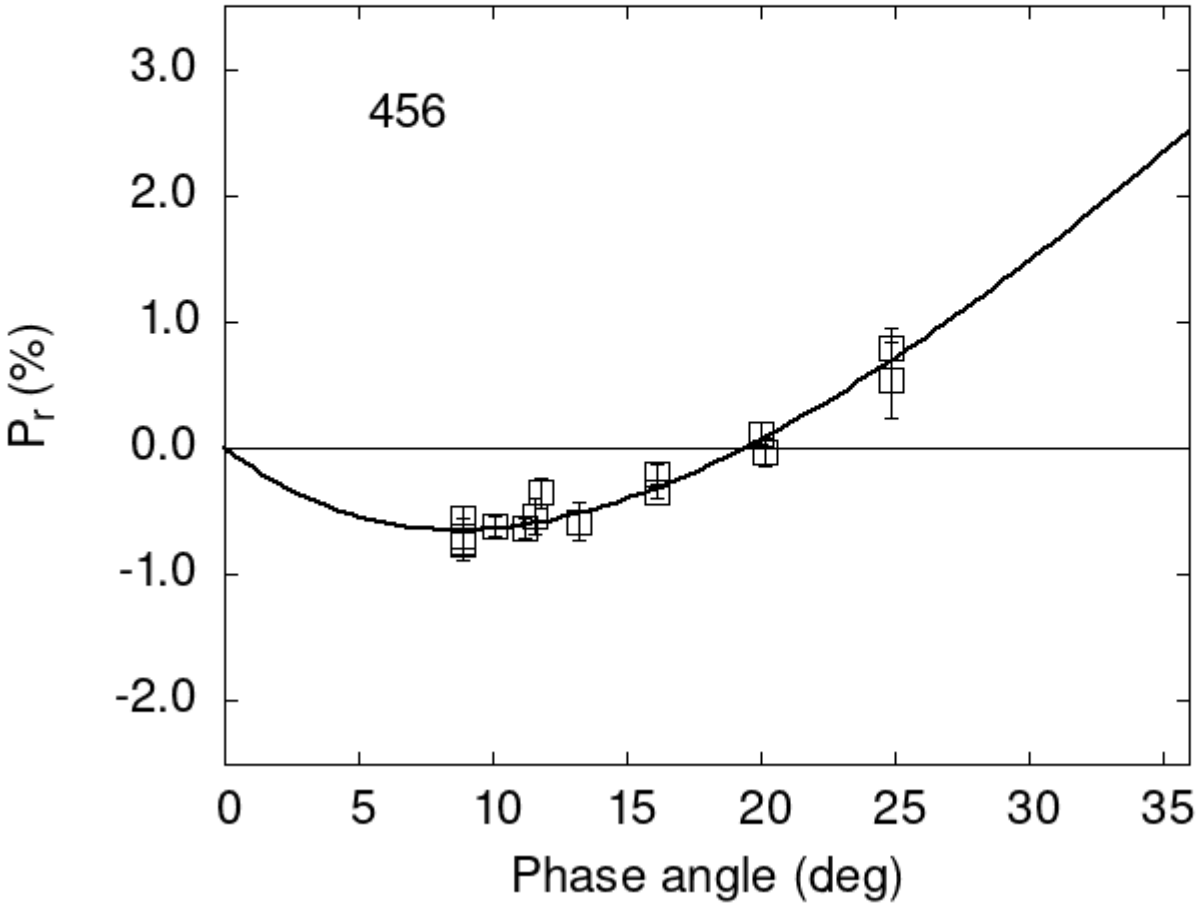
Catalogue of Asteroid Polarization Curves

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.

```
456 11.57 -0.54 0.14 V f
456 11.83 -0.35 0.12 V f
456 13.21 -0.58 0.15 V f
456 19.99  0.12 0.09 V f
456 20.20 -0.03 0.11 V f
456 16.13 -0.21 0.08 V f
```

```
456 16.13 -0.35 0.04 R f
456  8.89 -0.75 0.10 V f
456  8.89 -0.55 0.10 R f
456 11.20 -0.63 0.08 V a
456 10.10 -0.61 0.08 V a
456  8.90 -0.70 0.14 V a
456  8.90 -0.76 0.12 R a
456 24.90  0.54 0.30 V a
456 24.90  0.79 0.16 R a
456 16.13 -0.21 0.08 V b
456 16.13 -0.35 0.04 R b
456  8.89 -0.75 0.10 V b
456  8.89 -0.55 0.10 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
#    6.0128   0.2020  15.6749   0.7140   0.2199   0.0058
#
#     Phmin   err   Pmin    err  Ph0    err    k      err
#      8.72  0.74 -0.648  0.133 19.43  0.37 0.1088 0.0070
```