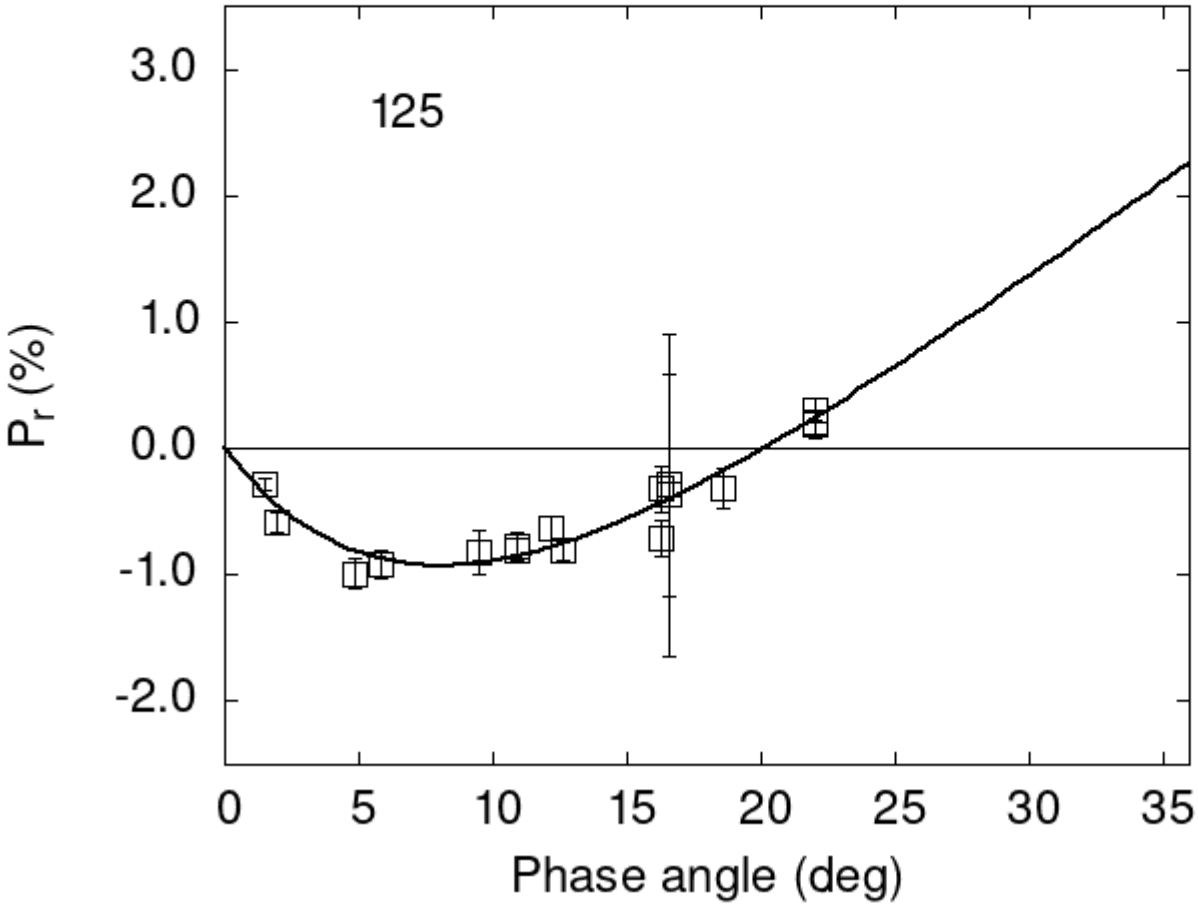
Catalogue of Asteroid Polarization Curves

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.

```
125  1.93 -0.58 0.08 V f
125  4.87 -0.99 0.12 V f
125  5.85 -0.91 0.11 V f
125 12.20 -0.63 0.09 V f
125 12.64 -0.80 0.09 V f
125 18.59 -0.32 0.16 V f
```

```
125 16.29 -0.71 0.14 V f
125 16.29 -0.32 0.18 R f
125 22.04  0.20 0.11 V f
125 22.04  0.31 0.09 R f
125  9.50 -0.82 0.18 V a
125  1.50 -0.28 0.05 V a
125 10.91 -0.80 0.09 V a
125 10.91 -0.78 0.11 R a
125 16.57 -0.37 1.28 V b
125 16.57 -0.29 0.88 R b
125 16.29 -0.71 0.14 V b
125 16.29 -0.32 0.18 R b
125 22.04  0.19 0.11 V b
125 22.04  0.31 0.09 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
#    3.4210   0.5608   7.8856   1.3088   0.1567   0.0211
#
#     Phmin   err   Pmin    err  Ph0    err    k      err
#      8.03  1.67 -0.927  0.448 20.12  0.33 0.1229 0.0235
```