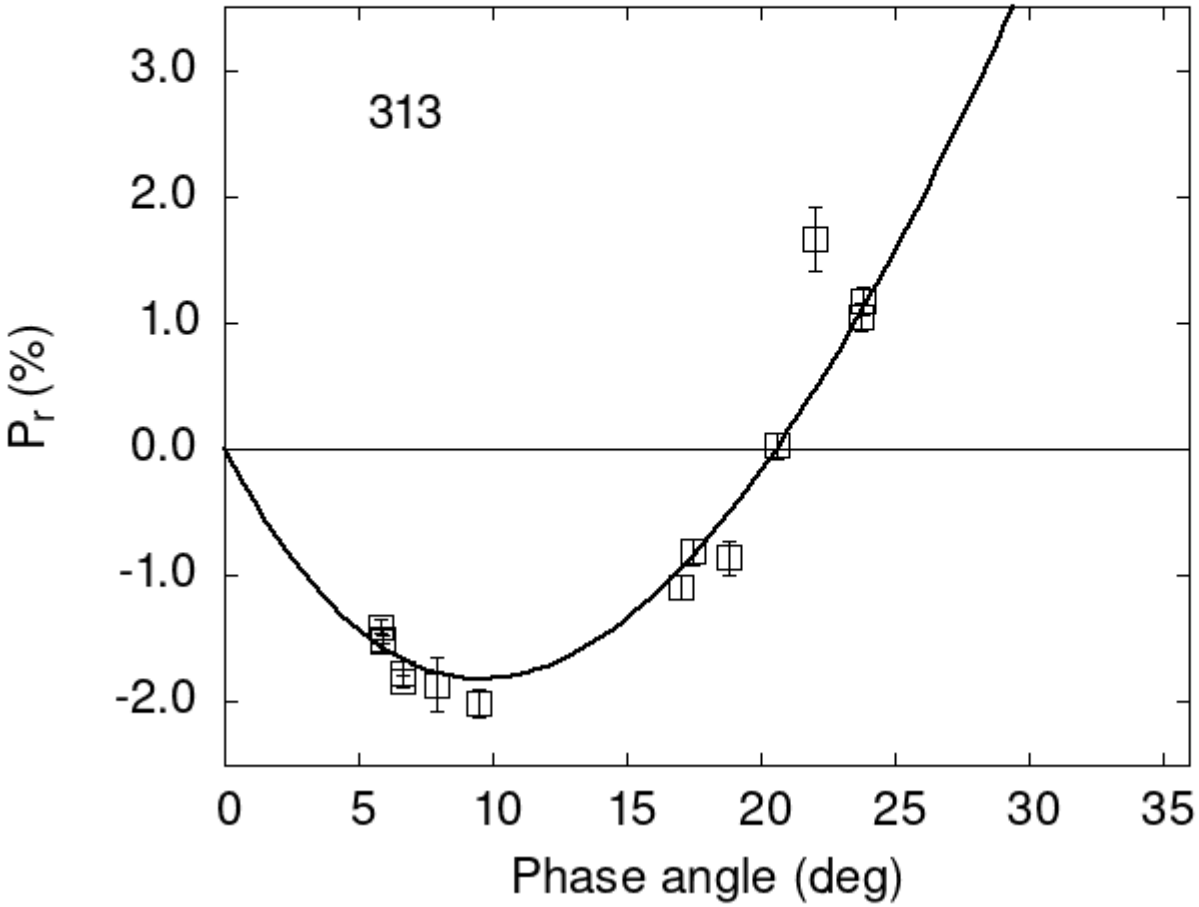
Catalogue of Asteroid Polarization Curves

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.

```
313  5.89 -1.52 0.10 V f
313  6.67 -1.77 0.09 V f
313  9.48 -2.01 0.11 V f
313 17.02 -1.09 0.10 V f
313 17.45 -0.81 0.10 V f
313 20.60  0.03 0.10 V f
```

```
313 23.78  1.04 0.11 V f
313 23.85  1.17 0.11 V f
313  6.67 -1.84 0.05 V a
313  5.89 -1.50 0.03 V a
313  5.80 -1.40 0.06 V a
313  7.90 -1.86 0.22 V a
313 22.00  1.66 0.25 V a
313 18.80 -0.86 0.13 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
#   31.0724   1.0950  24.6808   0.5624   0.8537   0.0197
#
#     Phmin   err   Pmin    err  Ph0    err    k      err
#      9.59  1.10 -1.818  0.441 20.59  0.13 0.3070 0.0276
```