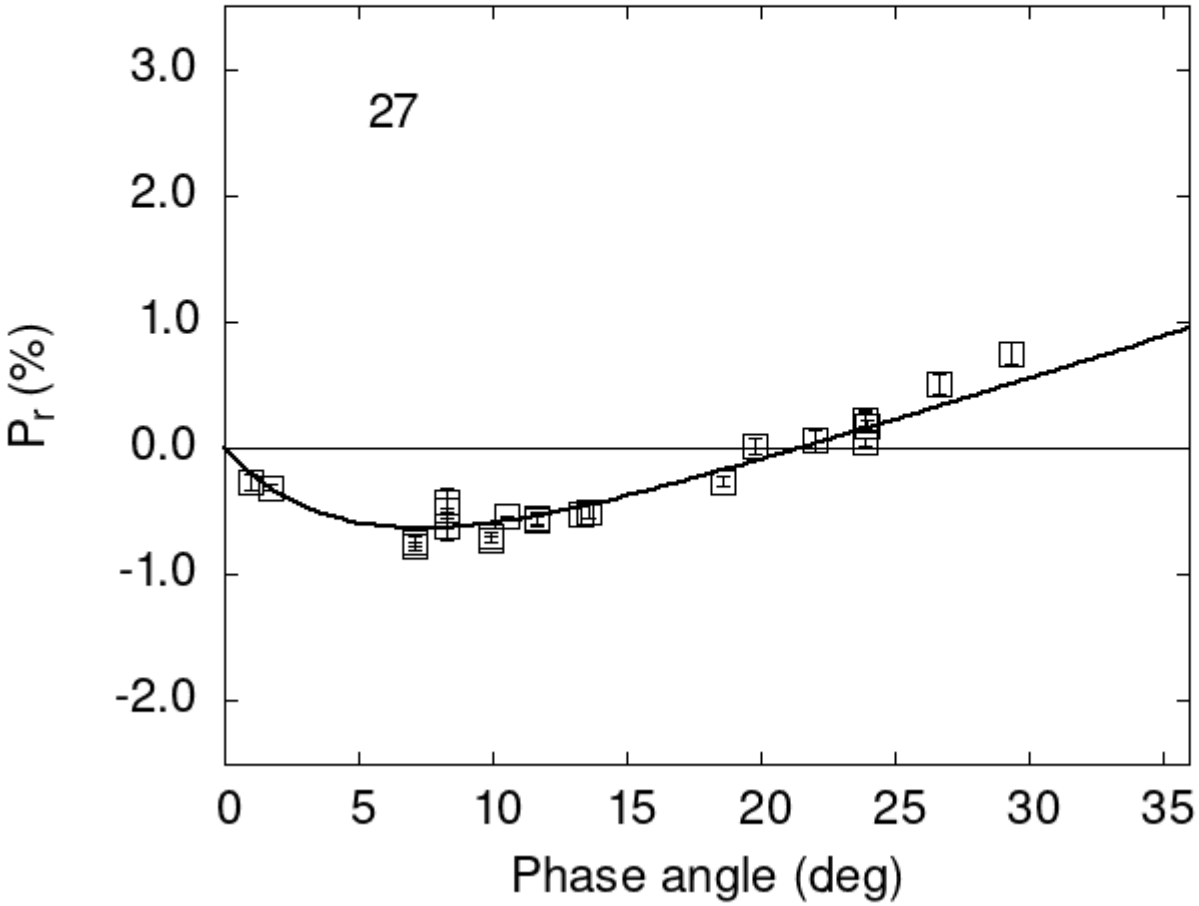
Catalogue of Asteroid Polarization Curves

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.

```
27 13.30 -0.52 0.09 V f
27 22.02  0.06 0.09 V f
27 26.63  0.51 0.08 V f
27 29.34  0.75 0.09 V f
27  8.30 -0.62 0.11 V a
27  8.30 -0.43 0.12 R a
```

```
27  7.10 -0.74 0.04 V a
27  7.10 -0.77 0.03 R a
27 19.80  0.02 0.06 V a
27 13.60 -0.50 0.06 V a
27  1.00 -0.27 0.06 V a
27  9.94 -0.70 0.04 V a
27  9.94 -0.72 0.02 R a
27 11.63 -0.56 0.06 V a
27 11.63 -0.57 0.03 R a
27 23.90  0.22 0.08 V a
27 23.90  0.23 0.06 R a
27 24.00  0.18 0.05 V a
27  8.30 -0.49 0.02 V a
27 10.50 -0.54 0.01 V a
27 18.60 -0.26 0.04 V a
27  1.70 -0.31 0.02 V a
27 23.90  0.05 0.03 V a
```

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
#    1.4395   0.0982   4.8977   0.5108   0.0662   0.0044
#
#     Phmin   err   Pmin    err  Ph0    err    k      err
#      7.30  0.53 -0.632  0.097 21.46  0.64 0.0625 0.0046
```