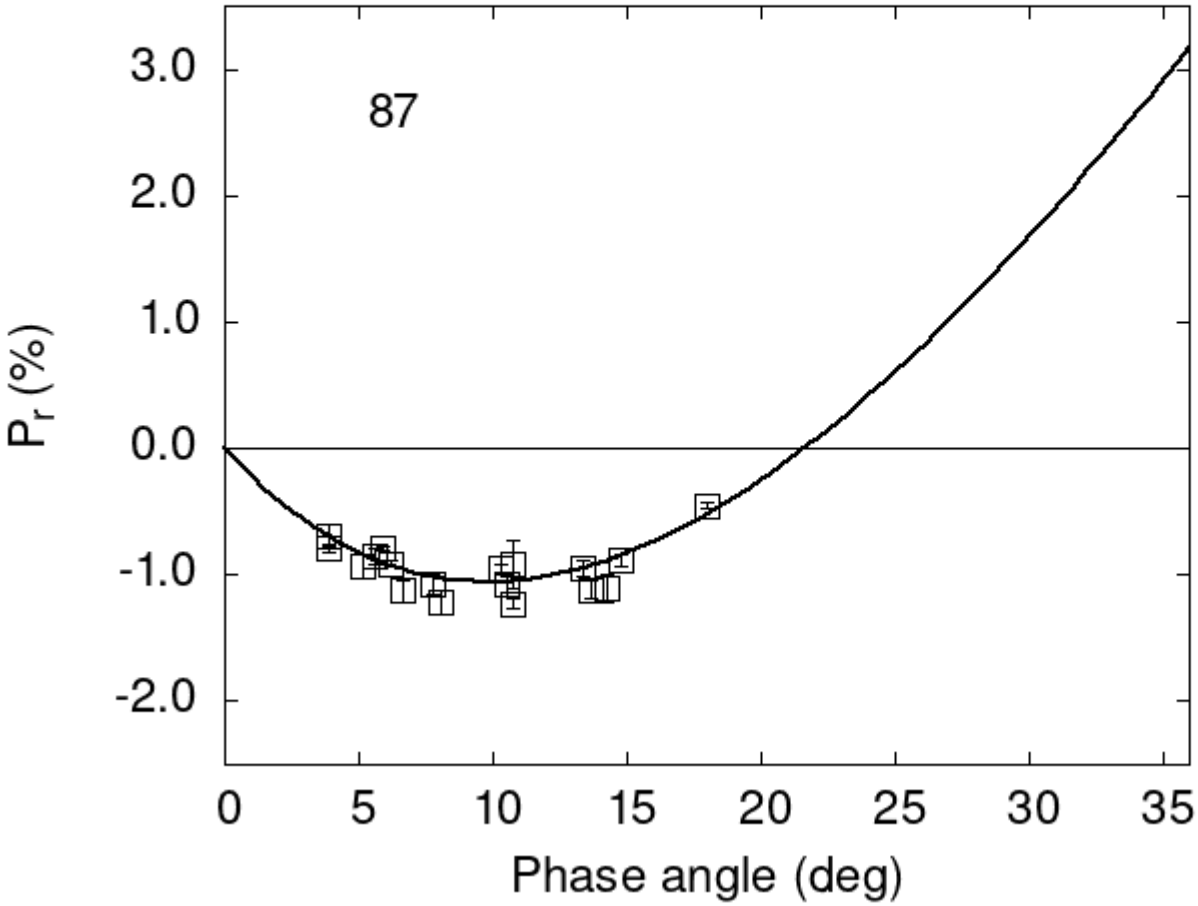
Catalogue of Asteroid Polarization Curves

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.

```
87  3.92 -0.69 0.09 V f
87  5.19 -0.93 0.09 V f
87  6.65 -1.13 0.09 V f
87 10.55 -1.08 0.09 V f
87 14.27 -1.10 0.11 V f
87 10.72 -0.92 0.19 V f
```

```
87 10.72 -1.23 0.04 R f
87 14.80 -0.88 0.05 V a
87  5.60 -0.85 0.06 V a
87 13.40 -0.95 0.06 V a
87 10.32 -0.95 0.04 V a
87  7.80 -1.07 0.08 V a
87 13.70 -1.12 0.07 V a
87 18.00 -0.45 0.03 V a
87  6.20 -0.91 0.02 V a
87  5.90 -0.79 0.02 V a
87  8.10 -1.22 0.09 V a
87  3.90 -0.79 0.03 V a
87 10.72 -0.92 0.19 V b
87 10.72 -1.23 0.04 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
#   11.7666   0.4611  19.7520   0.5517   0.3618   0.0108
#
#     Phmin   err   Pmin    err  Ph0    err    k      err
#      9.85  1.01 -1.057  0.232 21.65  0.25 0.1627 0.0133
```