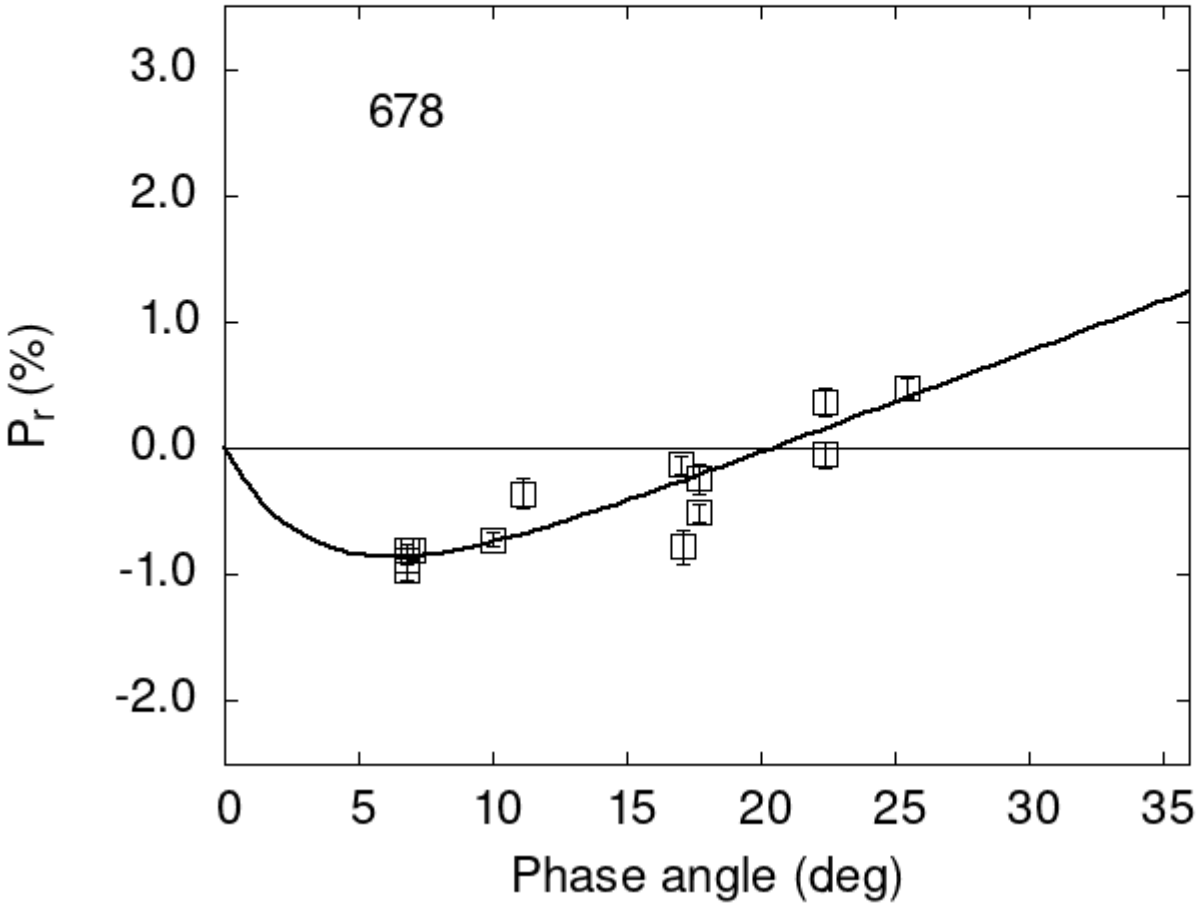
Catalogue of Asteroid Polarization Curves

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.

```
678  6.80 -0.81 0.05 R d
678  6.80 -0.97 0.07 V d
678  6.80 -0.88 0.04 R d
678  6.99 -0.80 0.09 V f
678 25.44  0.47 0.08 V f
678 17.00 -0.13 0.07 V f
```

```
678 22.37 -0.05 0.10 V f
678 22.37  0.36 0.10 R f
678 17.73 -0.24 0.12 V a
678 17.73 -0.51 0.07 R a
678 17.10 -0.78 0.14 V a
678 17.00 -0.13 0.07 V a
678 10.00 -0.72 0.06 V a
678 11.10 -0.36 0.12 V a
678 22.38 -0.05 0.10 V b
678 22.38  0.37 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
#    1.6423   0.2215   3.5458   0.9709   0.0800   0.0103
#
#     Phmin   err   Pmin    err  Ph0    err    k      err
#      6.23  0.99 -0.861  0.237 20.46  0.51 0.0786 0.0105
```