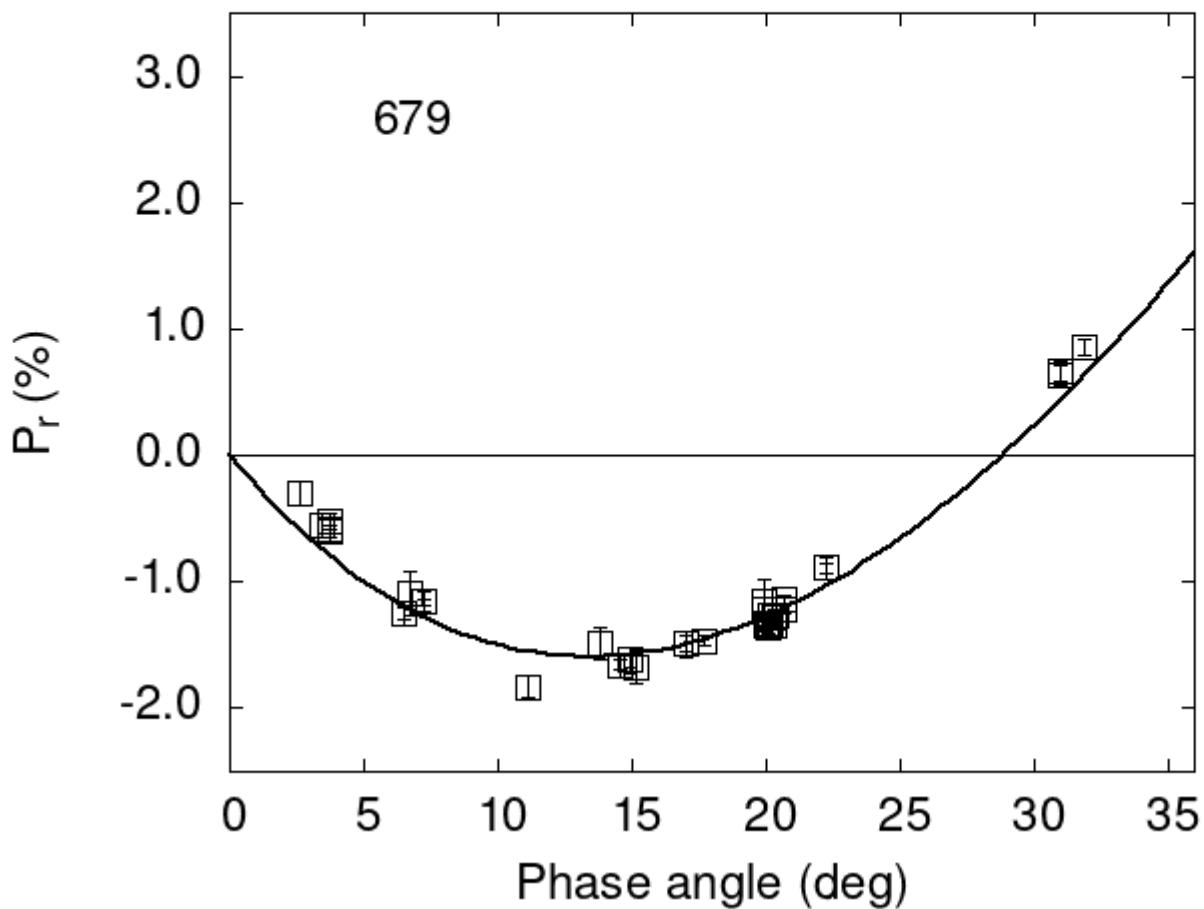


# Catalogue of Asteroid Polarization Curves

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.

679	2.63	-0.30	0.09	V	f
679	3.45	-0.55	0.09	V	f
679	3.72	-0.59	0.09	V	f
679	6.52	-1.25	0.10	V	f
679	6.70	-1.09	0.17	V	f
679	7.26	-1.16	0.08	V	f

```

679 11.16 -1.83 0.09 V f
679 13.81 -1.49 0.13 V f
679 14.57 -1.66 0.09 V f
679 14.94 -1.62 0.10 V f
679 15.19 -1.67 0.13 V f
679 17.01 -1.49 0.10 V f
679 19.92 -1.16 0.18 V f
679 19.96 -1.21 0.09 V f
679 20.39 -1.27 0.10 V f
679 22.27 -0.89 0.09 V f
679 20.00 -1.33 0.04 V a
679 20.00 -1.35 0.04 R a
679 20.10 -1.35 0.06 V a
679 20.10 -1.36 0.02 R a
679 20.20 -1.35 0.07 V a
679 20.20 -1.26 0.03 R a
679 20.30 -1.28 0.07 V a
679 20.30 -1.34 0.03 R a
679 20.70 -1.14 0.04 V a
679 20.70 -1.22 0.03 R a
679 31.00 0.66 0.08 V a
679 31.00 0.63 0.08 R a
679 31.90 0.86 0.06 V a
679 3.72 -0.52 0.06 V a
679 3.72 -0.60 0.04 V a
679 22.27 -0.89 0.04 V a
679 20.39 -1.27 0.06 V a
679 17.01 -1.49 0.06 V a
679 14.94 -1.62 0.05 V a
679 14.57 -1.66 0.04 V a
679 7.26 -1.16 0.02 V a
679 6.52 -1.25 0.05 V a
679 17.70 -1.47 0.04 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  $\alpha$  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
#  26.1100   0.6346  33.6927   0.5614   0.5205   0.0088
#
#      Phmin    err    Pmin    err   Ph0     err     k      err
#      13.41   1.05 -1.593   0.266  28.86   0.21  0.1915  0.0119

```