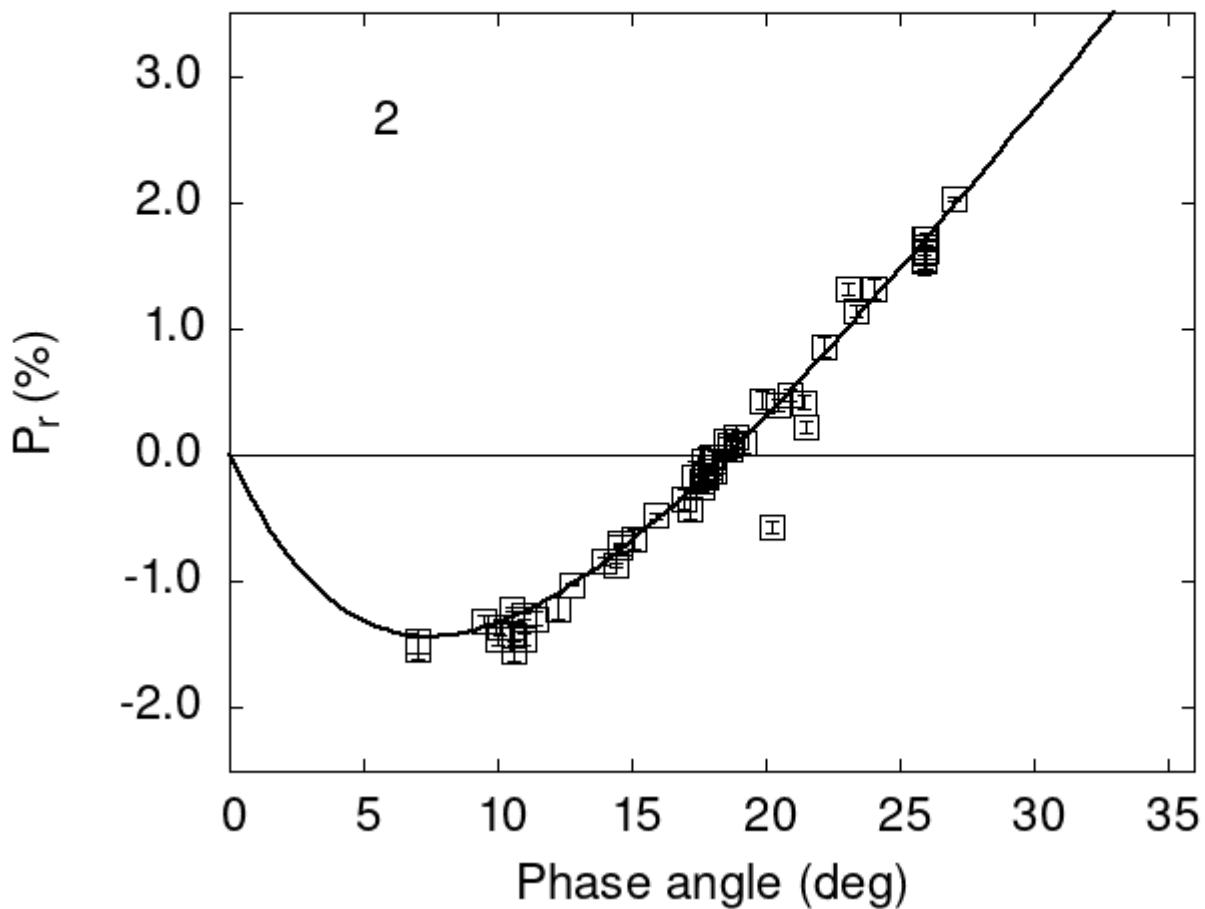


# Catalogue of Asteroid Polarization Curves

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.

2	6.99	-1.53	0.09	V	f
2	7.05	-1.47	0.10	V	f
2	10.61	-1.42	0.08	V	f
2	10.61	-1.55	0.08	V	f
2	12.24	-1.21	0.08	V	f
2	15.09	-0.67	0.08	V	f

2 16.96 -0.34 0.08 V f  
2 17.20 -0.43 0.08 V f  
2 17.67 -0.04 0.10 V f  
2 17.69 -0.16 0.09 V f  
2 18.70 0.05 0.08 V f  
2 18.70 0.08 0.08 R f  
2 19.23 0.10 0.08 V f  
2 22.17 0.86 0.08 V f  
2 24.05 1.32 0.08 V f  
2 17.60 -0.25 0.04 V f  
2 17.60 -0.21 0.04 R f  
2 17.77 -0.16 0.04 V f  
2 17.77 -0.18 0.04 R f  
2 17.93 -0.09 0.02 V f  
2 17.93 -0.13 0.03 R f  
2 18.09 -0.04 0.07 V f  
2 18.09 -0.13 0.03 R f  
2 25.90 1.60 0.10 V f  
2 25.90 1.65 0.10 R f  
2 25.93 1.56 0.14 V f  
2 25.93 1.65 0.06 R f  
2 25.95 1.53 0.05 V f  
2 25.95 1.71 0.04 R f  
2 25.96 1.62 0.14 V f  
2 25.96 1.71 0.04 R f  
2 23.06 1.31 0.05 V a  
2 23.41 1.14 0.05 V a  
2 20.94 0.48 0.05 V a  
2 11.43 -1.29 0.05 V a  
2 20.43 0.40 0.05 V a  
2 20.24 -0.57 0.05 V a  
2 9.52 -1.31 0.05 G a  
2 21.46 0.42 0.05 O a  
2 21.48 0.22 0.05 G a  
2 13.97 -0.84 0.03 G a  
2 19.85 0.43 0.07 G a  
2 18.88 0.15 0.09 G a  
2 18.55 0.12 0.08 G a  
2 17.35 -0.17 0.12 G a  
2 15.93 -0.48 0.02 G a  
2 10.97 -1.26 0.03 G a  
2 12.78 -1.02 0.01 G a  
2 11.00 -1.30 0.05 V a  
2 11.00 -1.46 0.05 R a  
2 10.10 -1.36 0.06 R a  
2 10.00 -1.46 0.05 R a  
2 18.00 -0.01 0.06 V a  
2 27.00 2.03 0.02 V a  
2 14.60 -0.72 0.01 V a  
2 14.60 -0.70 0.01 R a

```

2 14.40 -0.87 0.01 V a
2 10.50 -1.22 0.02 V a
2 18.70 0.05 0.03 V a
2 18.70 0.08 0.04 R a
2 25.90 1.61 0.10 V b
2 25.90 1.65 0.10 R b
2 25.93 1.56 0.14 V b
2 25.93 1.65 0.06 R b
2 25.95 1.53 0.05 V b
2 25.95 1.71 0.04 R b
2 25.96 1.62 0.14 V b
2 25.96 1.71 0.04 R b
2 18.09 -0.04 0.07 V b
2 18.09 -0.13 0.03 R b
2 17.93 -0.09 0.02 V b
2 17.93 -0.13 0.03 R b
2 17.77 -0.16 0.04 V b
2 17.77 -0.18 0.05 R b
2 17.60 -0.25 0.04 V b
2 17.60 -0.21 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  $\alpha$  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
#  5.4756   0.1342   7.5250   0.2452   0.2696   0.0044
#
#      Phmin     err      Pmin     err    Ph0      err      k      err
#    7.47  0.22 -1.433  0.112 18.58  0.19 0.2080 0.0055

```