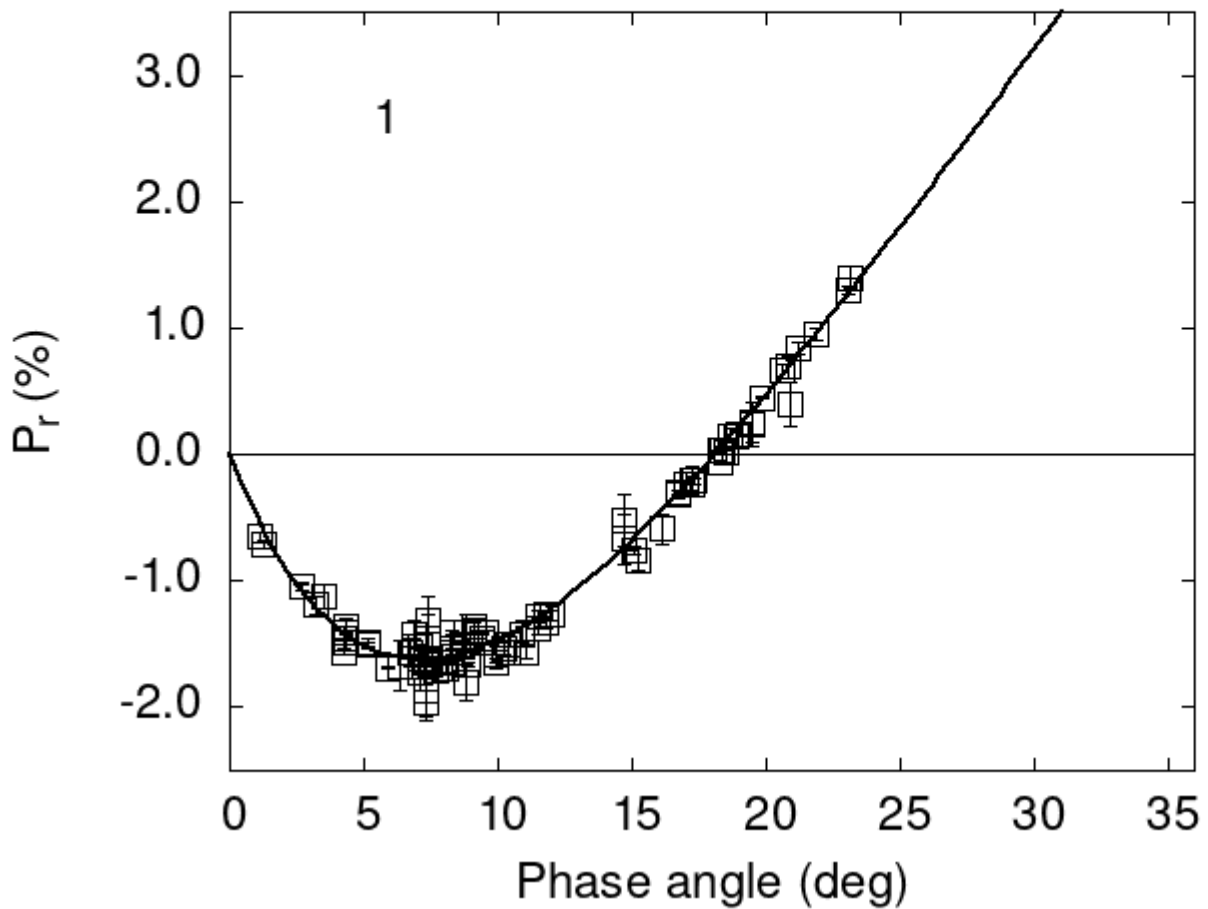


Catalogue of Asteroid Polarization Curves

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.

1	9.53	-1.40	0.09	V	f
1	15.24	-0.83	0.08	V	f
1	16.15	-0.59	0.12	V	f
1	17.02	-0.23	0.09	V	f
1	18.39	0.03	0.09	V	f
1	18.53	0.01	0.09	V	f

1 18.89 0.15 0.09 V f
1 19.00 0.16 0.09 V f
1 20.85 0.69 0.08 V f
1 23.12 1.40 0.09 V f
1 16.75 -0.31 0.03 V f
1 16.75 -0.30 0.02 R f
1 5.15 -1.49 0.03 V f
1 5.15 -1.51 0.03 R f
1 21.85 0.95 0.05 V a
1 11.07 -1.56 0.05 V a
1 21.23 0.84 0.05 V a
1 20.91 0.40 0.17 O a
1 4.24 -1.56 0.02 G a
1 4.22 -1.45 0.09 O a
1 23.08 1.30 0.03 G a
1 18.67 0.15 0.05 G a
1 17.31 -0.21 0.02 G a
1 15.11 -0.76 0.03 G a
1 12.05 -1.26 0.06 G a
1 9.95 -1.65 0.04 G a
1 8.88 -1.66 0.02 G a
1 8.08 -1.69 0.04 G a
1 7.69 -1.71 0.05 G a
1 1.11 -0.65 0.04 G a
1 1.30 -0.71 0.03 G a
1 4.33 -1.48 0.07 G a
1 9.96 -1.58 0.06 G a
1 20.60 0.66 0.05 G a
1 19.88 0.45 0.01 G a
1 5.93 -1.69 0.01 G a
1 7.50 -1.66 0.02 V a
1 7.50 -1.61 0.01 R a
1 11.50 -1.28 0.05 V a
1 11.50 -1.37 0.05 R a
1 14.70 -0.52 0.20 V a
1 14.70 -0.67 0.20 R a
1 10.40 -1.56 0.04 R a
1 10.40 -1.51 0.08 R a
1 7.40 -1.46 0.20 V a
1 7.40 -1.32 0.20 R a
1 7.10 -1.73 0.14 V a
1 7.10 -1.72 0.14 R a
1 6.90 -1.52 0.07 V a
1 6.90 -1.43 0.11 R a
1 6.70 -1.57 0.10 V a
1 6.70 -1.57 0.11 R a
1 7.30 -1.96 0.14 V a
1 7.30 -1.87 0.20 R a
1 8.30 -1.54 0.11 V a
1 8.30 -1.65 0.14 R a

```

1  8.80 -1.80 0.14 V a
1  8.80 -1.40 0.14 R a
1  7.10 -1.61 0.02 V a
1  7.10 -1.52 0.01 R a
1  8.30 -1.56 0.02 V a
1  8.30 -1.41 0.02 R a
1  9.40 -1.49 0.06 V a
1  9.40 -1.45 0.05 R a
1  9.10 -1.36 0.07 V a
1  9.10 -1.39 0.06 R a
1  8.70 -1.51 0.04 V a
1  8.70 -1.52 0.04 R a
1 10.20 -1.53 0.05 R a
1 10.90 -1.42 0.06 V a
1 10.90 -1.42 0.10 R a
1 11.80 -1.33 0.05 V a
1 11.80 -1.27 0.03 R a
1  2.71 -1.04 0.03 V a
1  2.71 -1.05 0.03 R a
1 17.29 -0.20 0.11 V a
1 17.29 -0.23 0.06 R a
1  7.30 -1.64 0.04 V a
1  7.30 -1.63 0.04 R a
1 19.46  0.24 0.18 V a
1 19.46  0.26 0.16 R a
1  4.30 -1.40 0.10 V a
1  4.30 -1.36 0.06 V a
1  3.20 -1.19 0.07 V a
1  3.50 -1.12 0.09 V a
1  6.37 -1.67 0.20 R a
1 18.30  0.04 0.02 V a
1 18.30 -0.06 0.02 R a
1 16.75 -0.31 0.03 V b
1 16.75 -0.30 0.02 R b
1  5.15 -1.49 0.03 V b
1  5.15 -1.51 0.03 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

```

```
# 5.7904 0.1518 6.8541 0.1683 0.2969 0.0062
#
# Phmin err Pmin err Ph0 err k err
# 7.17 0.23 -1.627 0.120 18.10 0.17 0.2367 0.0069
```