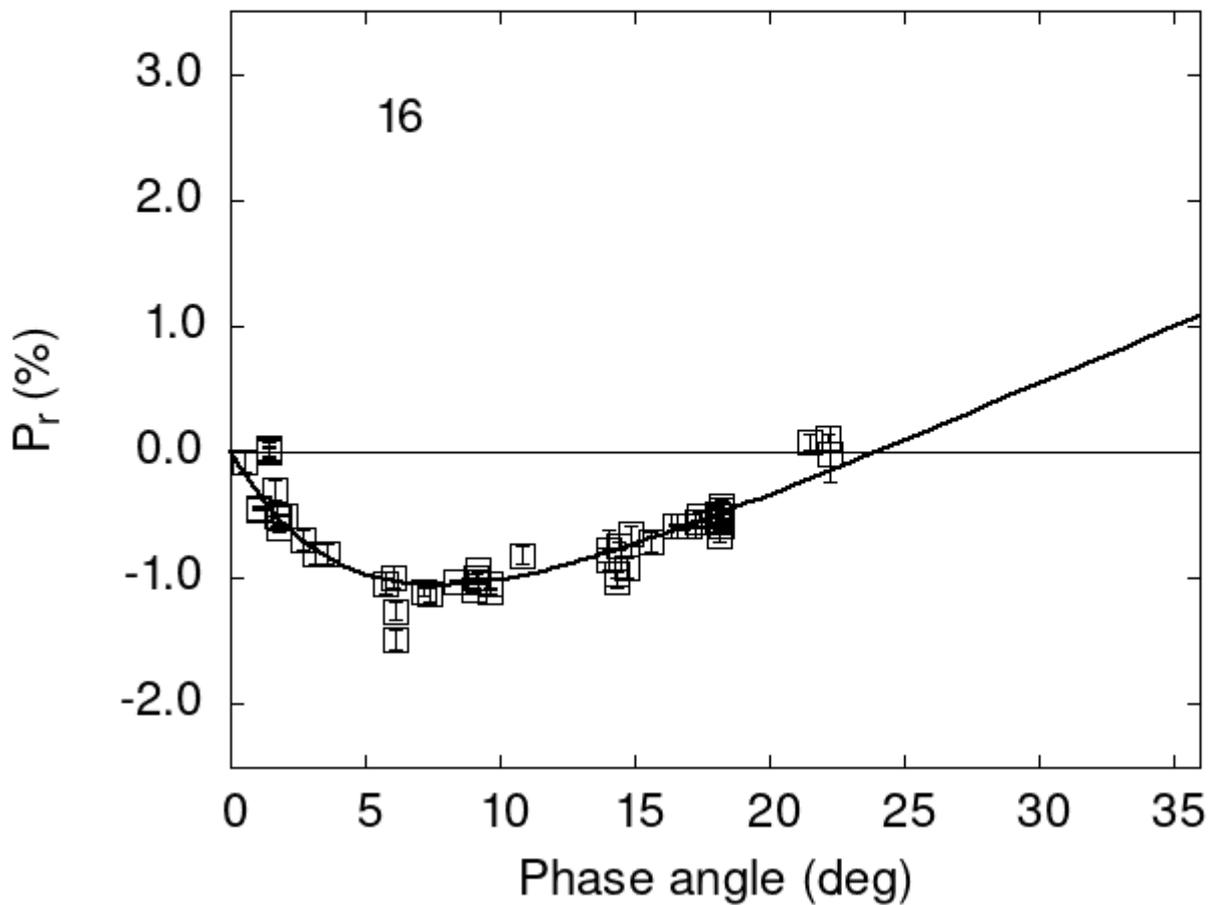


# Catalogue of Asteroid Polarization Curves

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.

16	0.51	-0.08	0.08	V	f
16	1.68	-0.30	0.08	V	f
16	1.73	-0.51	0.08	V	f
16	2.72	-0.70	0.08	V	f
16	3.15	-0.80	0.08	V	f
16	3.56	-0.81	0.08	V	f

16 5.75 -1.04 0.09 V f  
16 6.03 -0.99 0.09 V f  
16 14.74 -0.92 0.08 V f  
16 15.58 -0.71 0.08 V f  
16 1.03 -0.44 0.02 V f  
16 1.03 -0.45 0.01 R f  
16 14.04 -0.78 0.16 V f  
16 14.04 -0.85 0.08 R f  
16 1.41 0.01 0.04 V f  
16 1.41 0.04 0.04 R f  
16 14.31 -0.97 0.02 V f  
16 14.31 -1.03 0.04 R f  
16 1.78 -0.52 0.03 V f  
16 1.78 -0.60 0.03 R f  
16 18.06 -0.53 0.02 V f  
16 18.06 -0.49 0.06 R f  
16 18.12 -0.56 0.04 V f  
16 18.12 -0.66 0.05 R f  
16 18.18 -0.51 0.05 V f  
16 18.18 -0.51 0.05 R f  
16 18.22 -0.46 0.07 V f  
16 18.22 -0.43 0.04 R f  
16 16.50 -0.58 0.01 V c  
16 16.80 -0.59 0.02 V c  
16 17.00 -0.58 0.01 V c  
16 17.30 -0.56 0.02 V c  
16 17.39 -0.51 0.03 G a  
16 14.89 -0.65 0.07 G a  
16 9.19 -1.02 0.03 G a  
16 9.09 -0.99 0.02 G a  
16 14.40 -0.74 0.03 G a  
16 22.23 -0.01 0.22 G a  
16 9.60 -1.04 0.05 V a  
16 9.60 -1.10 0.02 R a  
16 6.10 -1.26 0.07 V a  
16 6.10 -1.49 0.08 R a  
16 9.00 -1.09 0.02 V a  
16 7.40 -1.13 0.06 V a  
16 7.20 -1.11 0.03 V a  
16 2.00 -0.50 0.01 V a  
16 8.40 -1.02 0.01 V a  
16 9.20 -0.94 0.01 V a  
16 10.80 -0.82 0.07 V a  
16 21.50 0.08 0.07 V a  
16 22.20 0.11 0.03 V a  
16 1.03 -0.44 0.02 V b  
16 1.03 -0.45 0.01 R b  
16 1.41 0.00 0.04 V b  
16 1.41 0.04 0.04 R b  
16 1.78 -0.52 0.03 V b

```

16  1.78 -0.60 0.03 R b
16 18.22 -0.46 0.08 V b
16 18.22 -0.43 0.04 R b
16 18.22 -0.58 0.04 V b
16 18.22 -0.45 0.08 R b
16 18.18 -0.51 0.05 V b
16 18.18 -0.50 0.05 R b
16 18.12 -0.56 0.04 V b
16 18.12 -0.66 0.05 R b
16 18.06 -0.53 0.02 V b
16 18.06 -0.49 0.06 R b
16 14.31 -0.97 0.02 V b
16 14.31 -1.03 0.04 R b
16 14.04 -0.78 0.16 V b
16 14.04 -0.85 0.08 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
#      2.1849    0.0542    4.7540    0.1387    0.0906    0.0028
#
#      Phmin    err   Pmin    err   Ph0    err    k      err
#      7.72    0.21 -1.054  0.053 23.94  0.46 0.0877 0.0028

```