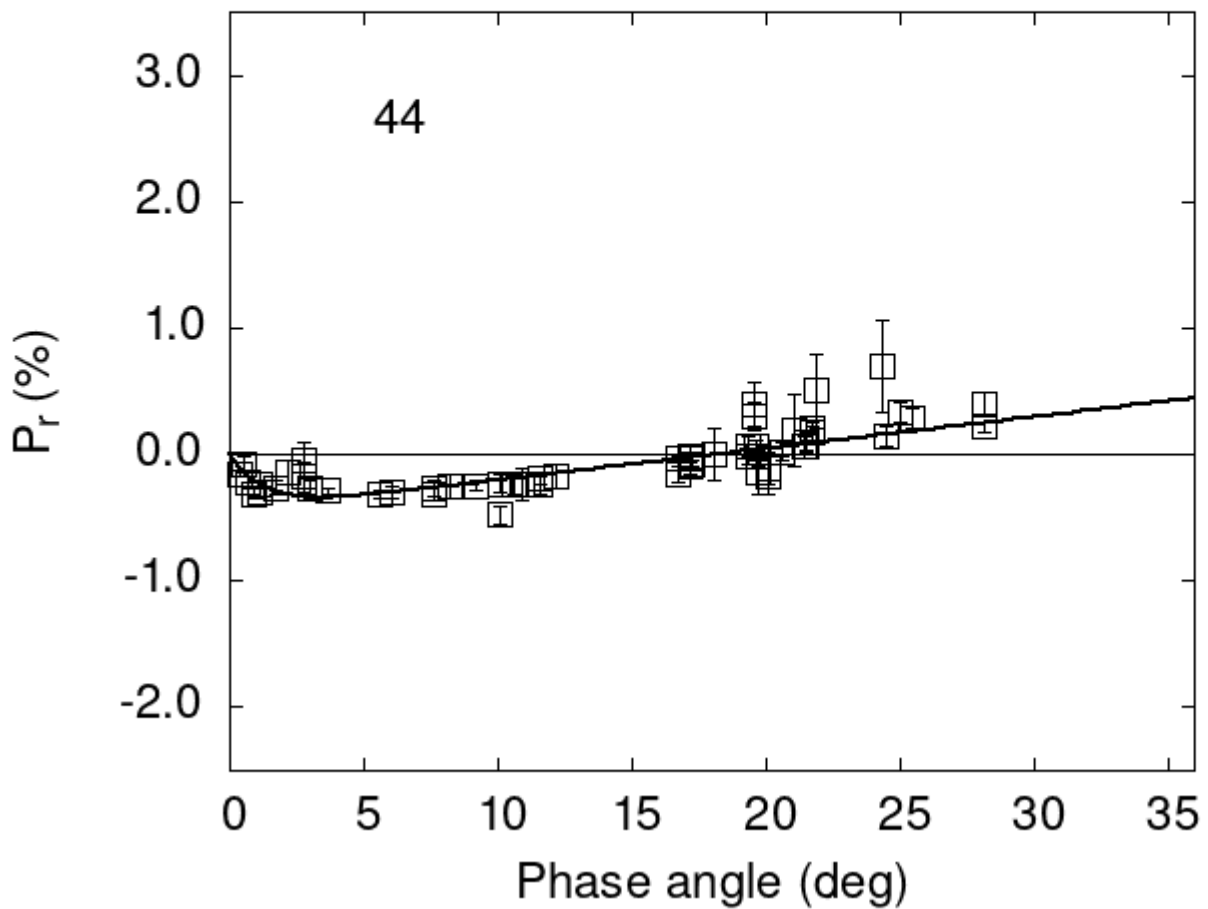


# Catalogue of Asteroid Polarization Curves

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.

44	2.18	-0.14	0.09	V	f
44	8.20	-0.25	0.09	V	f
44	10.88	-0.24	0.13	V	f
44	12.16	-0.17	0.09	V	f
44	17.17	-0.07	0.08	V	f
44	17.17	-0.10	0.08	R	f

44 21.53 0.09 0.08 V f  
44 21.85 0.50 0.29 V f  
44 24.53 0.14 0.08 V f  
44 25.00 0.33 0.08 V f  
44 25.48 0.28 0.08 V f  
44 19.37 0.07 0.09 V f  
44 19.37 -0.01 0.06 R f  
44 19.57 0.40 0.17 V f  
44 19.57 0.30 0.11 R f  
44 19.75 -0.14 0.17 V f  
44 19.75 -0.01 0.09 R f  
44 20.10 -0.17 0.15 V f  
44 20.10 -0.11 0.13 R f  
44 20.58 0.02 0.07 V f  
44 20.58 0.02 0.04 R f  
44 24.34 0.70 0.36 V f  
44 2.77 -0.18 0.12 V f  
44 2.77 -0.04 0.14 R f  
44 3.01 -0.27 0.08 V f  
44 3.01 -0.26 0.06 R f  
44 21.06 0.19 0.29 G a  
44 18.09 0.00 0.20 G a  
44 6.08 -0.30 0.05 G a  
44 3.69 -0.29 0.03 G a  
44 5.63 -0.32 0.03 G a  
44 19.64 0.07 0.05 G a  
44 21.46 0.06 0.09 G a  
44 21.75 0.17 0.06 G a  
44 21.74 0.21 0.04 G a  
44 10.10 -0.23 0.07 V a  
44 10.10 -0.48 0.07 R a  
44 7.60 -0.27 0.06 V a  
44 7.60 -0.31 0.06 R a  
44 9.20 -0.25 0.04 R a  
44 10.60 -0.24 0.08 V a  
44 24.34 0.70 0.36 V a  
44 1.73 -0.26 0.05 V a  
44 0.89 -0.31 0.04 V a  
44 0.51 -0.08 0.06 V a  
44 0.41 -0.15 0.03 V a  
44 16.76 -0.03 0.02 V a  
44 16.76 -0.16 0.06 R a  
44 17.26 -0.07 0.03 V a  
44 17.26 -0.02 0.03 R a  
44 28.18 0.22 0.04 V a  
44 28.18 0.40 0.09 R a  
44 11.60 -0.19 0.05 V a  
44 11.60 -0.23 0.08 R a  
44 1.10 -0.30 0.05 V a  
44 1.10 -0.24 0.02 R a

```

44  0.70 -0.22 0.04 V a
44 17.17 -0.03 0.03 V a
44 17.17 -0.02 0.02 R a
44 21.53  0.06 0.03 V a
44  3.01 -0.27 0.08 V b
44  3.01 -0.26 0.06 R b
44  2.77 -0.18 0.12 V b
44  2.77 -0.05 0.14 R b
44 19.37  0.06 0.09 V b
44 19.37 -0.01 0.06 R b
44 19.57  0.40 0.17 V b
44 19.57  0.30 0.11 R b
44 19.75 -0.14 0.17 V b
44 19.75 -0.01 0.09 R b
44 20.10 -0.17 0.15 V b
44 20.10 -0.11 0.13 R b
44 20.58  0.02 0.07 V b
44 20.58  0.02 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
#      0.4560    0.0270    1.2631    0.1576    0.0250    0.0015
#
#      Phmin    err  Pmin    err  Ph0    err  k      err
#      3.37    0.28 -0.340  0.028 18.25  1.60 0.0250 0.0015

```