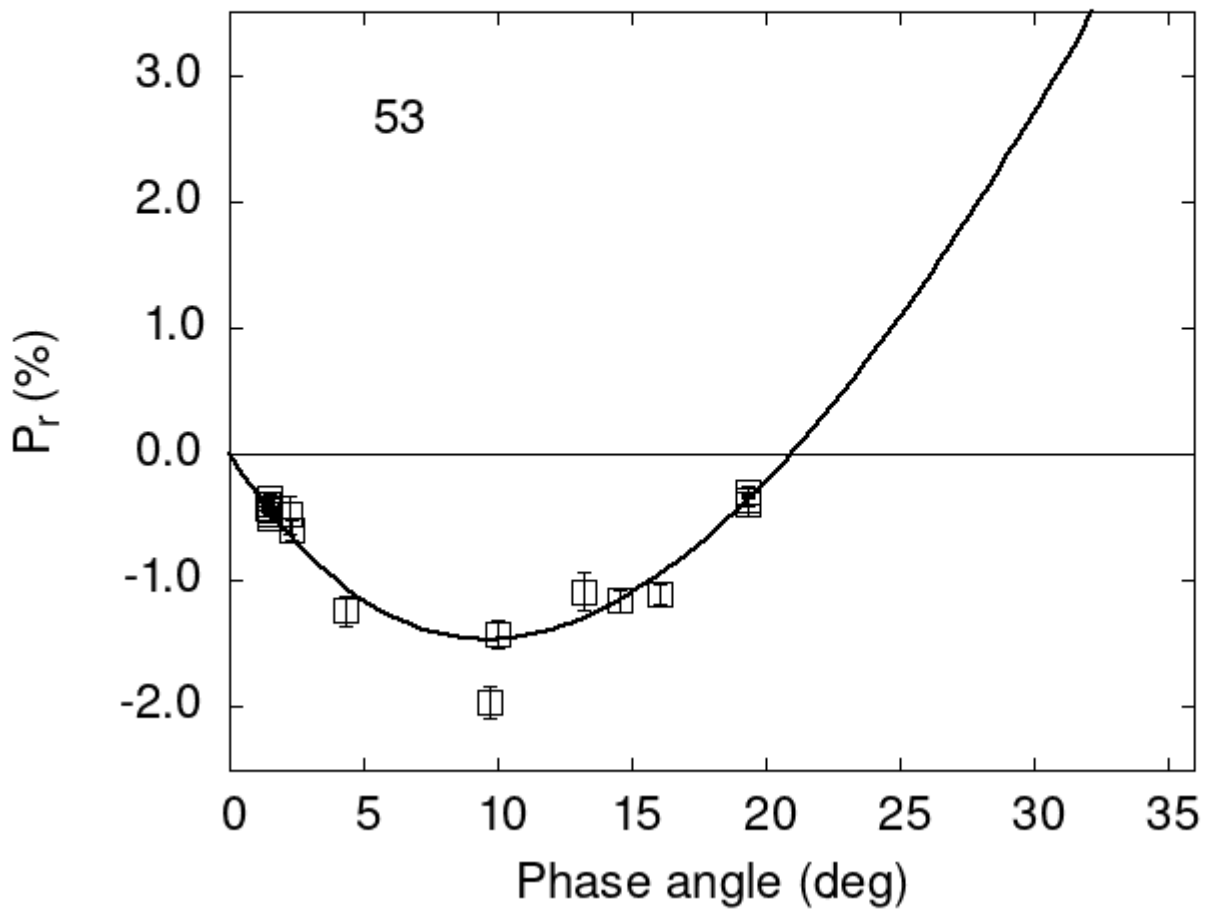


Catalogue of Asteroid Polarization Curves

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.

53	2.27	-0.48	0.15	V	f
53	2.30	-0.60	0.08	V	f
53	4.36	-1.24	0.12	V	f
53	9.68	-1.96	0.13	V	f
53	13.23	-1.09	0.15	V	f
53	14.58	-1.16	0.09	V	f

```

53 16.07 -1.11 0.08 V f
53 19.32 -0.36 0.09 V f
53 19.32 -0.40 0.09 R f
53 1.40 -0.40 0.03 V f
53 1.40 -0.42 0.03 R f
53 1.47 -0.44 0.02 V f
53 1.47 -0.35 0.03 R f
53 1.52 -0.47 0.02 V f
53 1.52 -0.51 0.03 R f
53 19.32 -0.30 0.05 V a
53 19.32 -0.37 0.04 R a
53 1.49 -0.44 0.02 V b
53 1.49 -0.35 0.03 R b
53 1.41 -0.40 0.03 V b
53 1.41 -0.42 0.03 R b
53 1.53 -0.47 0.02 V b
53 1.53 -0.51 0.03 R b
53 10.00 -1.43 0.11 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 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
# 18.0914    0.7581    20.4503    0.5406    0.5534    0.0165
#
#      Phmin    err    Pmin    err    Ph0    err    k    err
#      9.59    1.09 -1.465    0.354 20.95    0.17 0.2358 0.0212

```