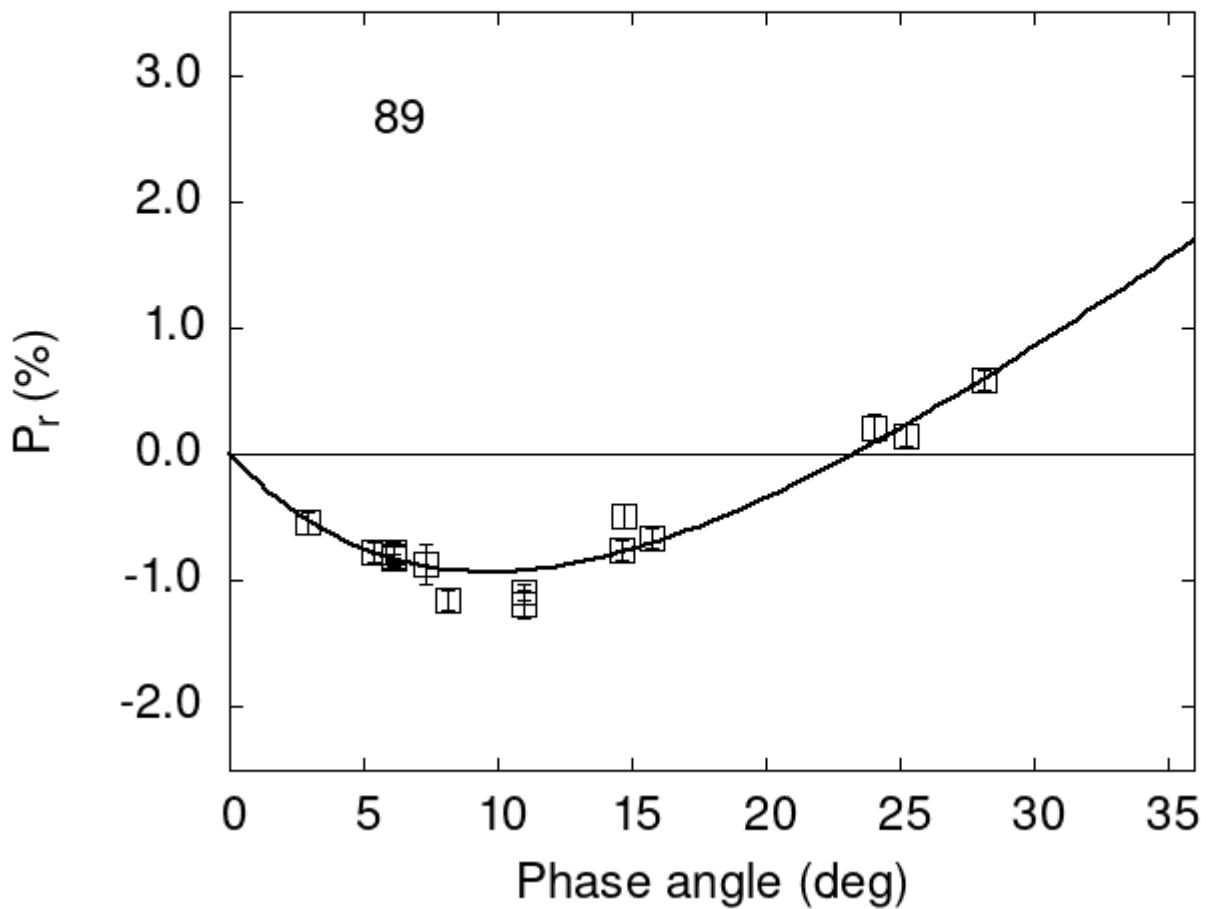


# Catalogue of Asteroid Polarization Curves

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.

89	5.40	-0.77	0.08	V	f
89	6.09	-0.78	0.08	V	f
89	6.09	-0.81	0.08	R	f
89	8.13	-1.15	0.08	V	f
89	14.66	-0.76	0.08	V	f
89	15.78	-0.67	0.08	V	f

```

89 24.03  0.21 0.11 V f
89 25.21  0.15 0.09 V f
89 28.19  0.58 0.08 V f
89  7.32 -0.87 0.16 G a
89  2.89 -0.54 0.09 G a
89 14.70 -0.49 0.09 V a
89 11.00 -1.18 0.11 V a
89 11.00 -1.09 0.07 R a
89  6.09 -0.81 0.02 V a
89  6.09 -0.82 0.03 R a

```

## 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
#      4.2679      0.6406     11.0627     1.3508      0.1609      0.0184
#
#      Phmin     err     Pmin      err     Ph0      err      k      err
#      9.68      2.09    -0.931     0.455    23.28     0.35    0.1139    0.0207

```