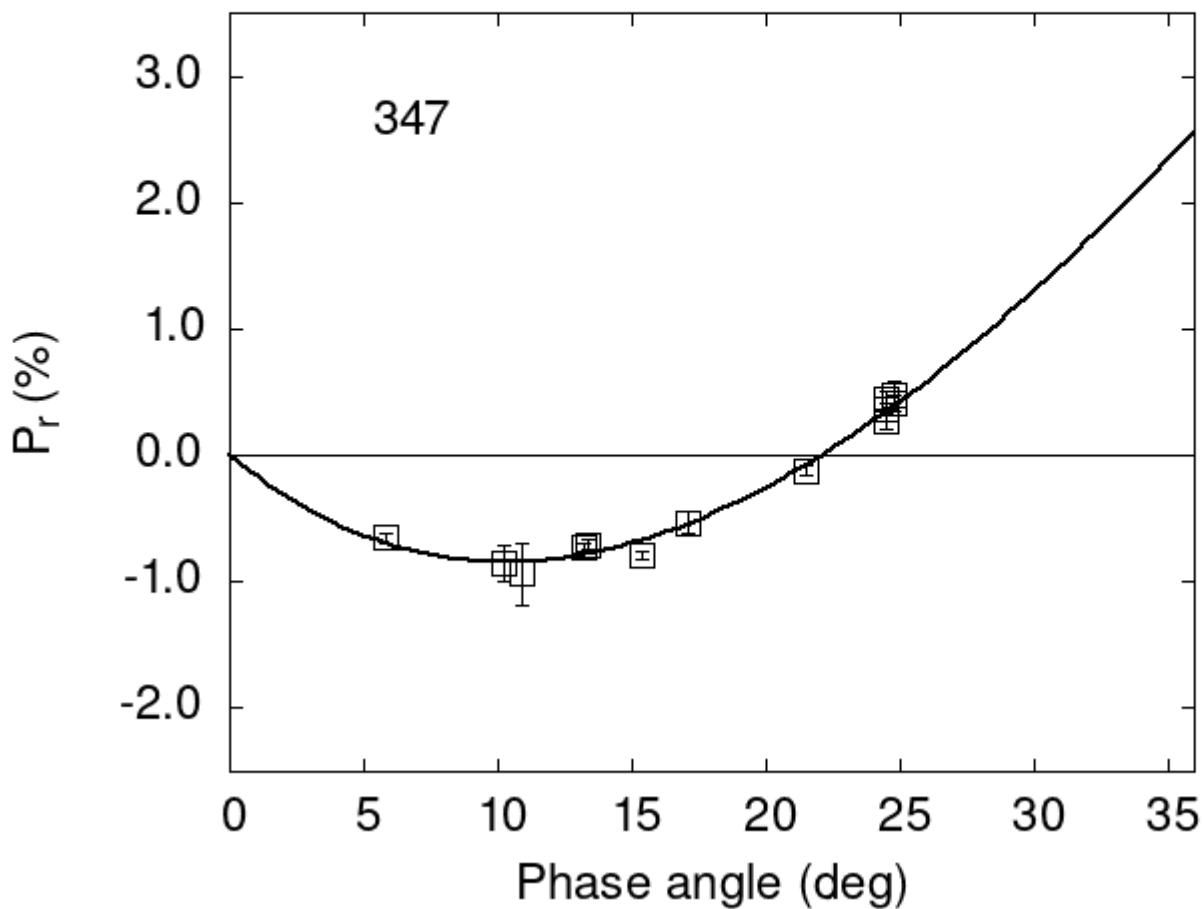


# Catalogue of Asteroid Polarization Curves

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.

|     |       |       |      |   |   |
|-----|-------|-------|------|---|---|
| 347 | 24.80 | 0.48  | 0.10 | V | d |
| 347 | 24.80 | 0.41  | 0.06 | R | d |
| 347 | 24.50 | 0.44  | 0.07 | R | d |
| 347 | 24.50 | 0.27  | 0.07 | V | d |
| 347 | 24.50 | 0.37  | 0.04 | R | d |
| 347 | 17.13 | -0.53 | 0.09 | V | f |

```

347 10.20 -0.85 0.14 V a
347 10.90 -0.94 0.24 V a
347 21.50 -0.12 0.04 V a
347 5.80 -0.65 0.04 V a
347 13.20 -0.73 0.03 V a
347 13.40 -0.71 0.04 V a
347 15.40 -0.79 0.03 V 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
# 13.8879  0.4531  25.8862  0.6448  0.3607  0.0075
#
#      Phmin     err     Pmin     err   Ph0     err      k      err
# 10.27  1.08 -0.843  0.191 22.10  0.30 0.1323 0.0106

```