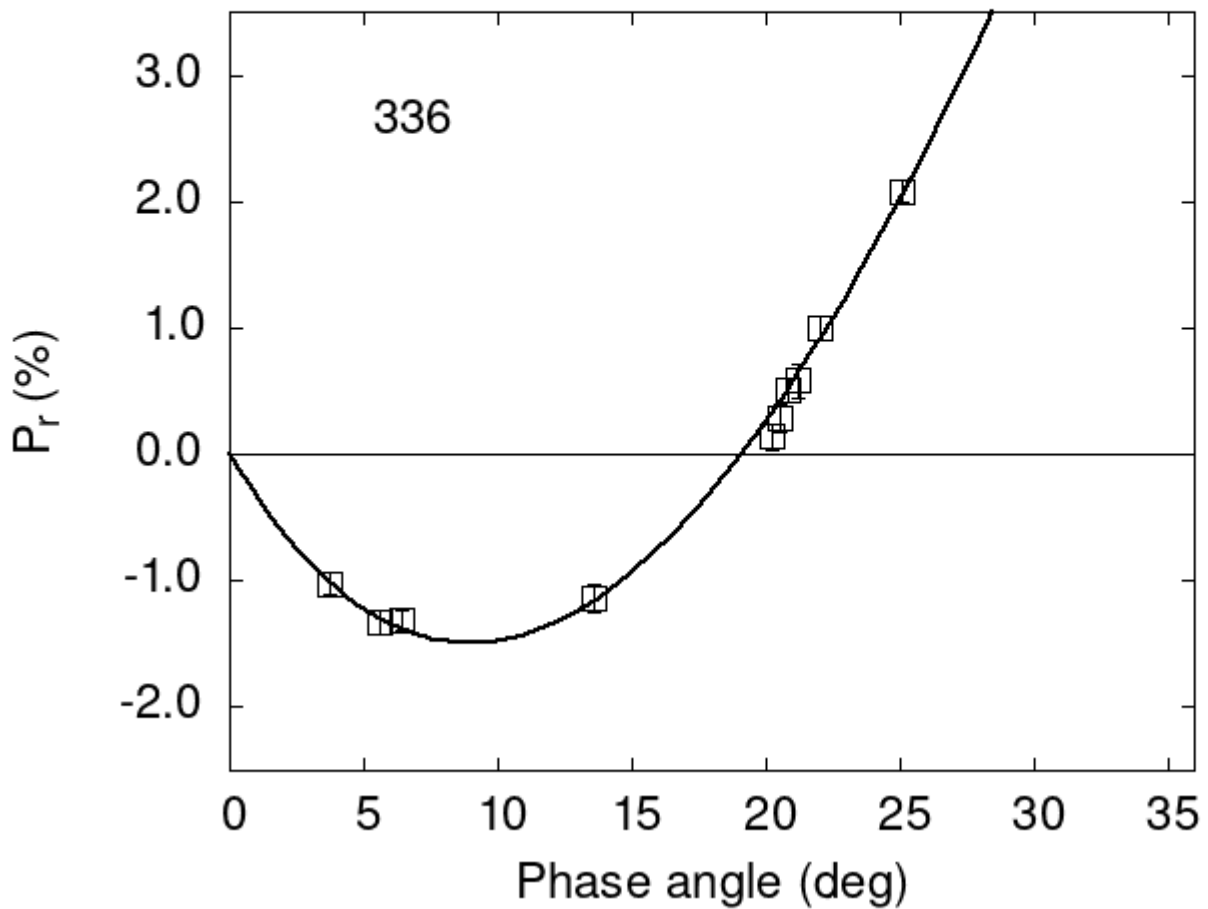# Catalogue of Asteroid Polarization Curves

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.

```
336   3.75  -1.02 0.08 V f
336   5.61  -1.33 0.09 V f
336  20.22   0.14 0.10 V f
336  20.55   0.28 0.11 V f
336  20.87   0.51 0.09 V f
336  21.19   0.58 0.13 V f
```

```
336 22.06   1.00 0.10 V f
336 25.06   2.08 0.09 V f
336 13.60 -1.14 0.11 V a
336  6.40 -1.31 0.08 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 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
#   33.0445   1.2453   26.7637   0.8454   0.8825   0.0197
#
#    Phmin    err    Pmin     err   Ph0     err    k       err
#     8.99   1.30  -1.494   0.469  19.10   0.14  0.2776  0.0306
```