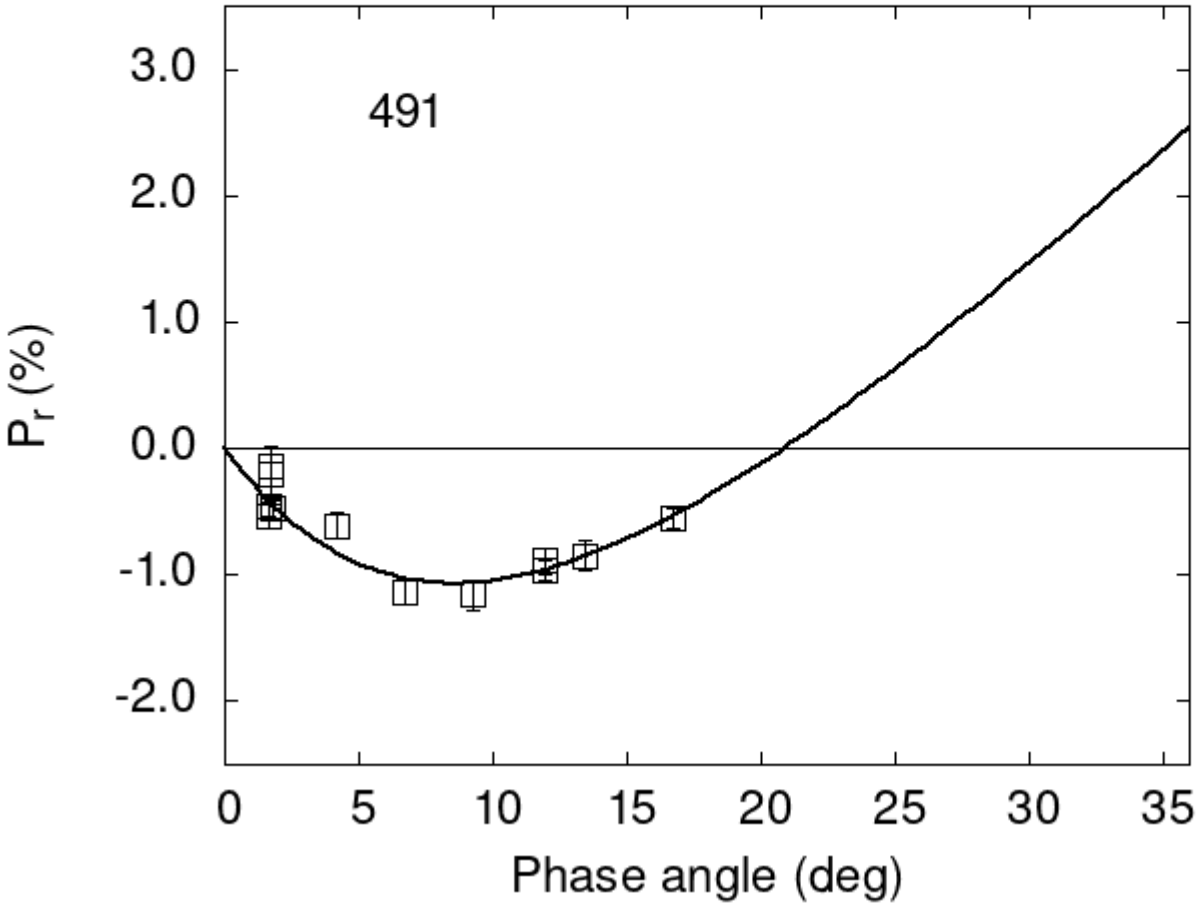
# Catalogue of Asteroid Polarization Curves

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.

```
491  6.69 -1.14 0.10 V f
491  9.29 -1.16 0.12 V f
491 11.93 -0.89 0.10 V f
491 13.44 -0.85 0.12 V f
491  1.67 -0.53 0.10 V f
491  1.67 -0.46 0.08 R f
```

```
491  1.69 -0.14 0.16 V f
491  1.69 -0.21 0.17 R f
491  1.80 -0.48 0.07 V f
491  1.80 -0.48 0.09 R f
491 11.93 -0.96 0.08 V a
491  1.67 -0.53 0.10 V b
491  1.67 -0.46 0.08 R b
491  1.69 -0.14 0.16 V b
491  1.69 -0.21 0.17 R b
491  1.80 -0.48 0.07 V b
491  1.80 -0.48 0.09 R b
491  4.20 -0.61 0.10 V h
491 16.70 -0.55 0.08 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 $\alpha$ 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
#    4.4824   0.5968   9.2043   1.0066   0.1923   0.0229
#
#     Phmin   err   Pmin    err  Ph0    err    k      err
#      8.55  1.65 -1.068  0.448 20.90  0.28 0.1420 0.0248
```