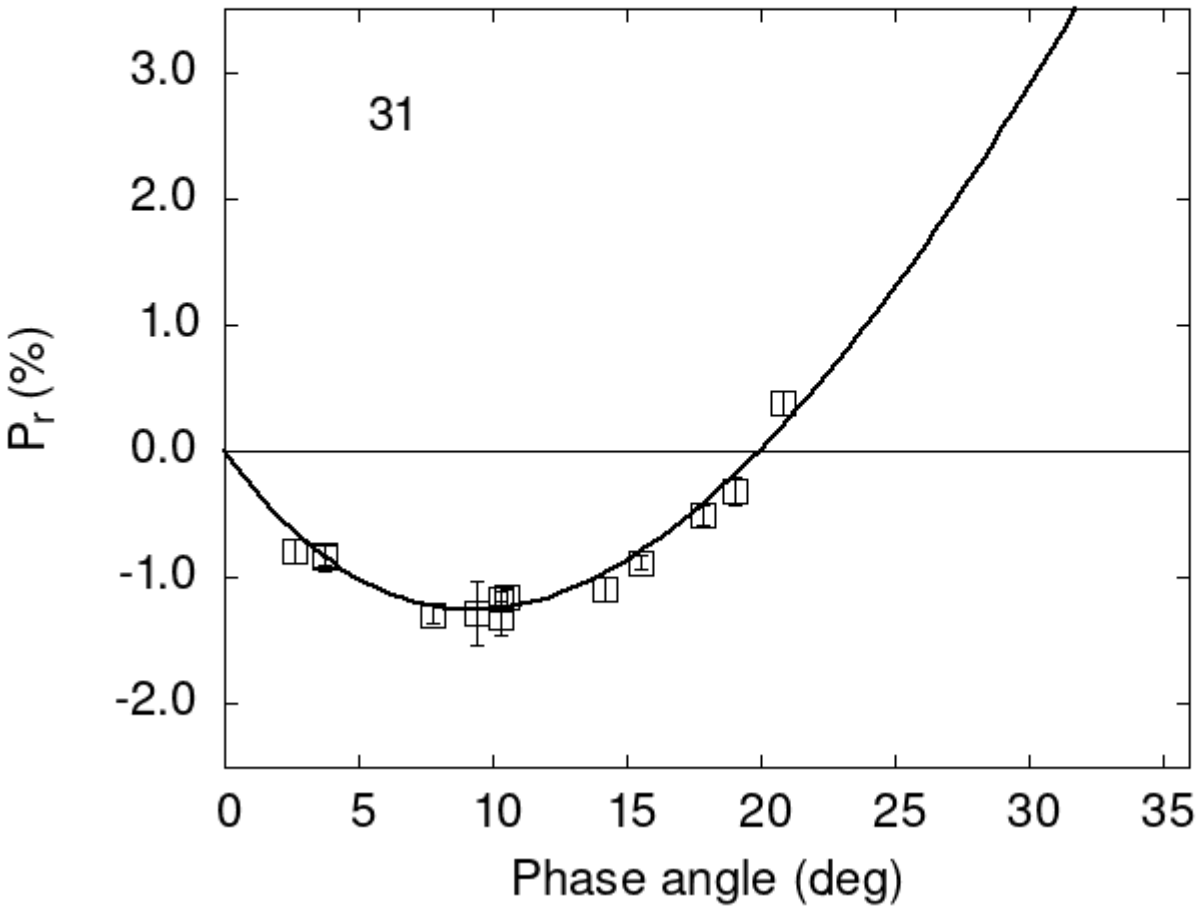
Catalogue of Asteroid Polarization Curves

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.

```
31  2.60 -0.79 0.10 V f
31 17.84 -0.51 0.08 V f
31 19.05 -0.31 0.11 V f
31 20.85  0.38 0.09 V f
31 10.30 -1.32 0.14 V f
31 10.30 -1.17 0.07 R f
```

```
31  9.41 -1.28 0.26 G a
31  7.80 -1.29 0.07 V a
31  3.70 -0.82 0.08 V a
31  3.70 -0.84 0.11 R a
31 14.20 -1.09 0.10 V a
31 10.50 -1.15 0.06 V a
31 15.50 -0.88 0.06 V a
31 10.30 -1.32 0.14 V b
31 10.30 -1.17 0.07 R b
```

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
#   19.3245   0.7916  22.3942   0.7167   0.5711   0.0168
#
#     Phmin   err   Pmin    err  Ph0    err    k      err
#      9.24  1.21 -1.256  0.353 19.95  0.18 0.2170 0.0222
```