Catalogue of Asteroid Polarization Curves
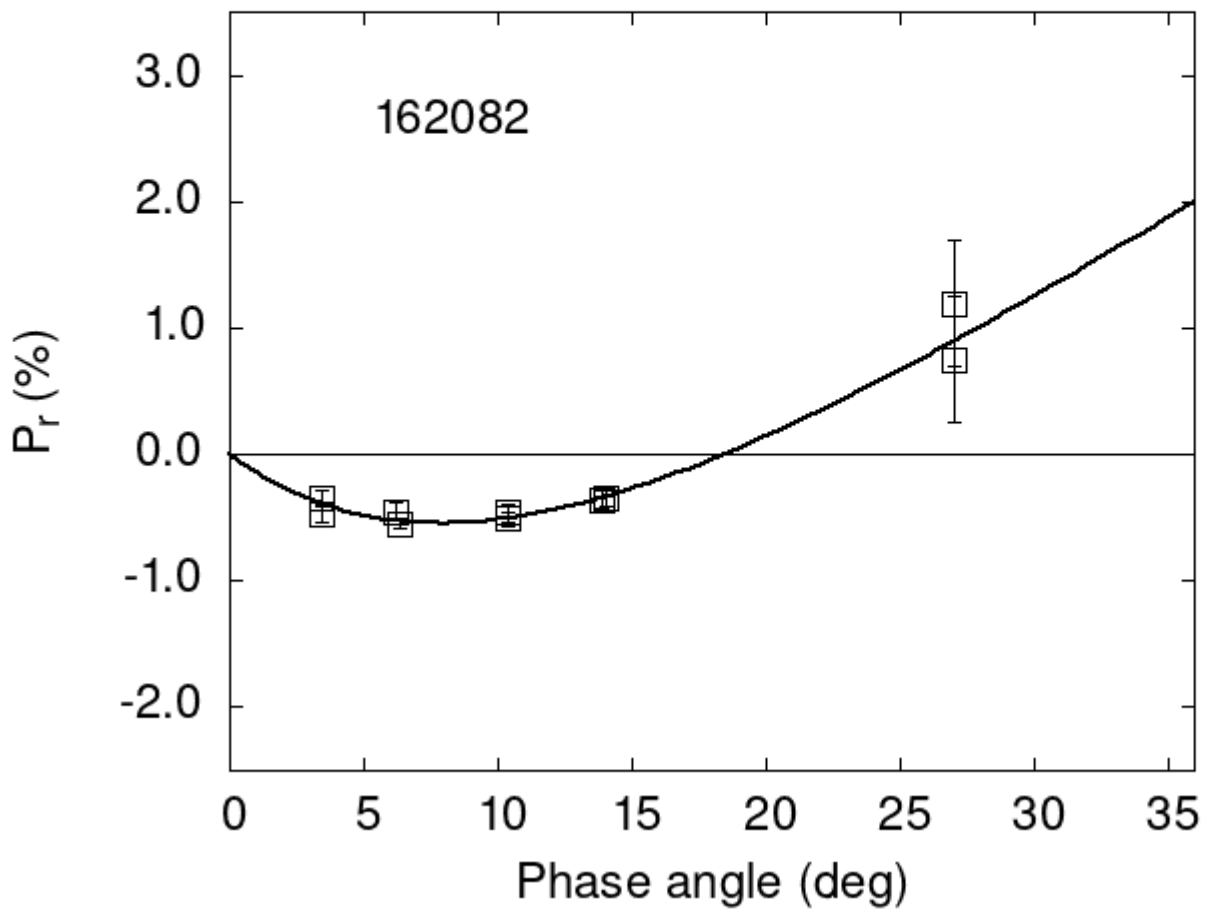
Gil-Hutton (2023)

Polarimetric data:

The columns list the object number, the phase angle (degrees), P_r (%), its error, the filter used, and the reference code.

```
162082 14.07 -0.35 0.06 R a
162082 13.88 -0.36 0.07 V a
162082  6.35 -0.55 0.04 R a
162082  6.23 -0.45 0.07 V a
162082  3.46 -0.34 0.06 V a
162082  3.47 -0.47 0.06 R a
```

```
162082 10.38 -0.46 0.07 V a
162082 10.38 -0.51 0.06 R a
162082 27.06  1.19 0.50 V a
162082 27.06  0.75 0.50 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 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
#    3.0616    0.3796  10.3490    0.8858    0.1379    0.0166
#
#     Phmin    err    Pmin     err  Ph0      err    k        err
#      7.90   1.80  -0.545   0.259 18.46   0.45 0.0882 0.0181
```