Catalogue of Asteroid Polarization Curves
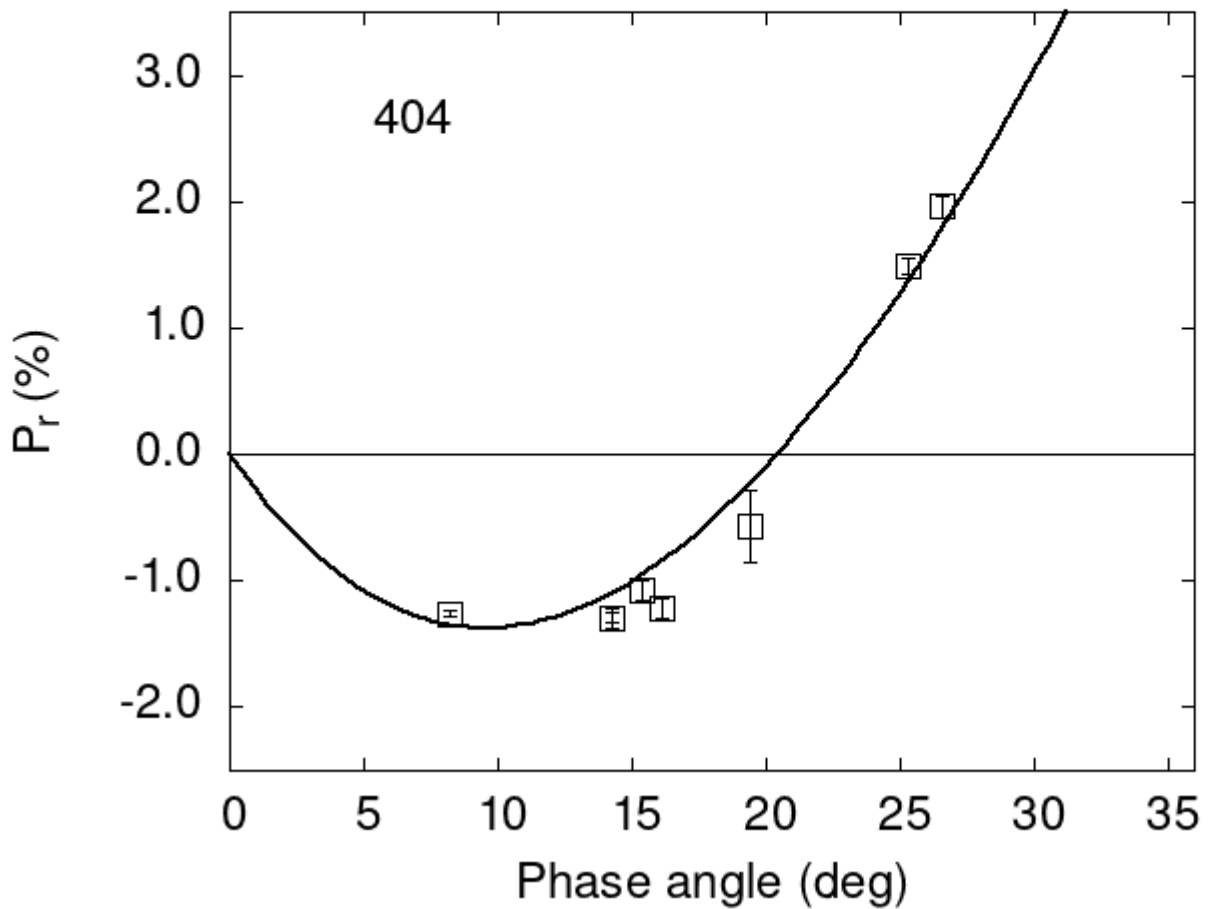
Gil-Hutton (2023)

Polarimetric data:

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

```
404 15.38 -1.07 0.08 V f
404 16.17 -1.22 0.08 V f
404 26.57  1.96 0.09 V f
404 19.40 -0.57 0.28 V f
404 25.30  1.49 0.06 V a
404 14.30 -1.29 0.04 V a
```

```
404  8.20 -1.26 0.02 V a
404 14.30 -1.29 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
#   29.0806    1.0433   27.8892    0.6450    0.7391    0.0166
#
#    Phmin    err    Pmin     err  Ph0     err    k       err
#     9.60   1.25  -1.373   0.380 20.42   0.17 0.2378 0.0247
```