Catalogue of Asteroid Polarization Curves
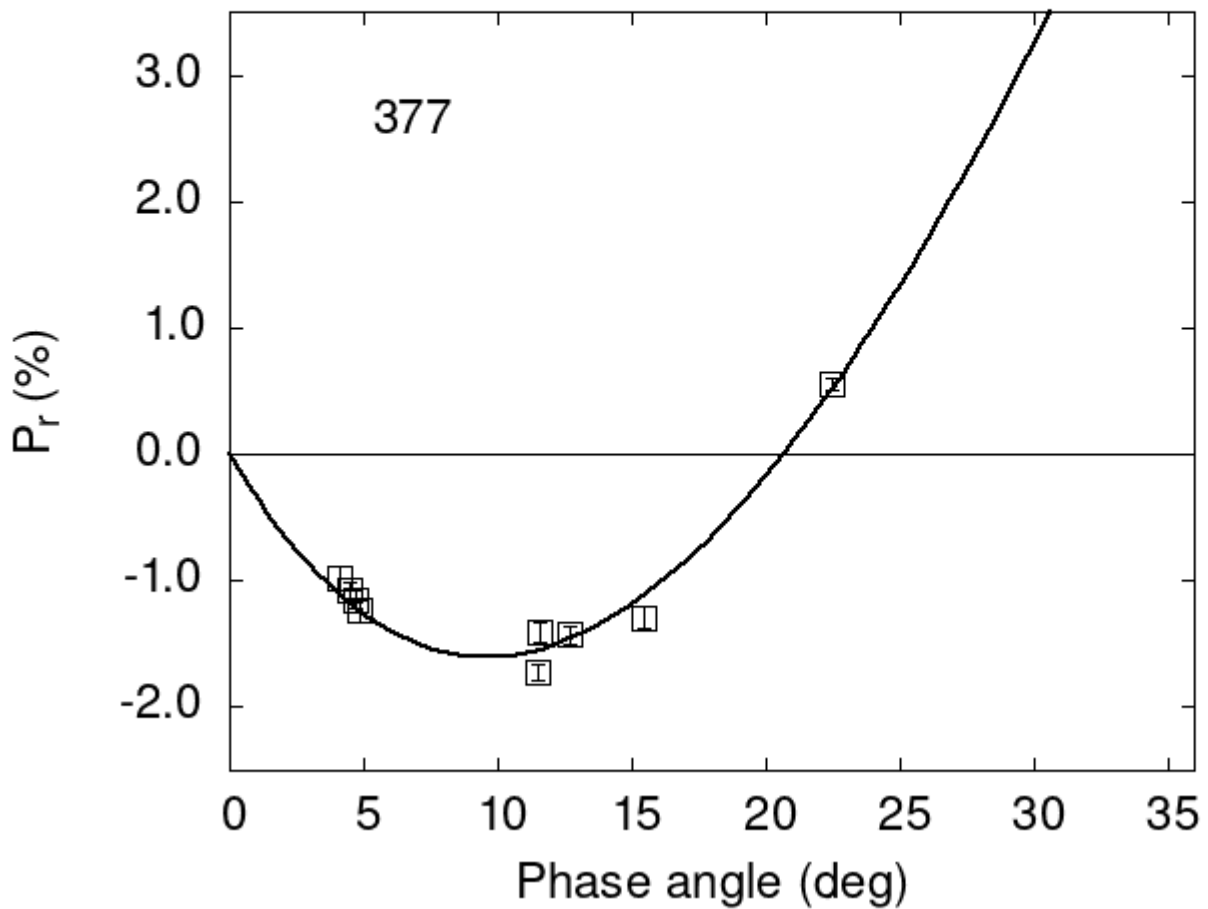
Gil-Hutton (2023)

Polarimetric data:

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

```
377   4.08 -0.98 0.10 V f
377   4.84 -1.24 0.09 V f
377 15.46 -1.29 0.09 V f
377 11.50 -1.72 0.06 V a
377 22.50  0.55 0.05 V a
377 12.70 -1.43 0.07 V a
```

```
377   4.70 -1.15 0.07 V a
377 11.60 -1.41 0.08 V a
377   4.50 -1.08 0.07 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
#   25.2997    0.9368   23.5732    0.6618    0.7145    0.0164
#
#     Phmin    err    Pmin     err   Ph0     err    k        err
#      9.59   1.10  -1.604   0.400 20.69   0.15 0.2682  0.0234
```