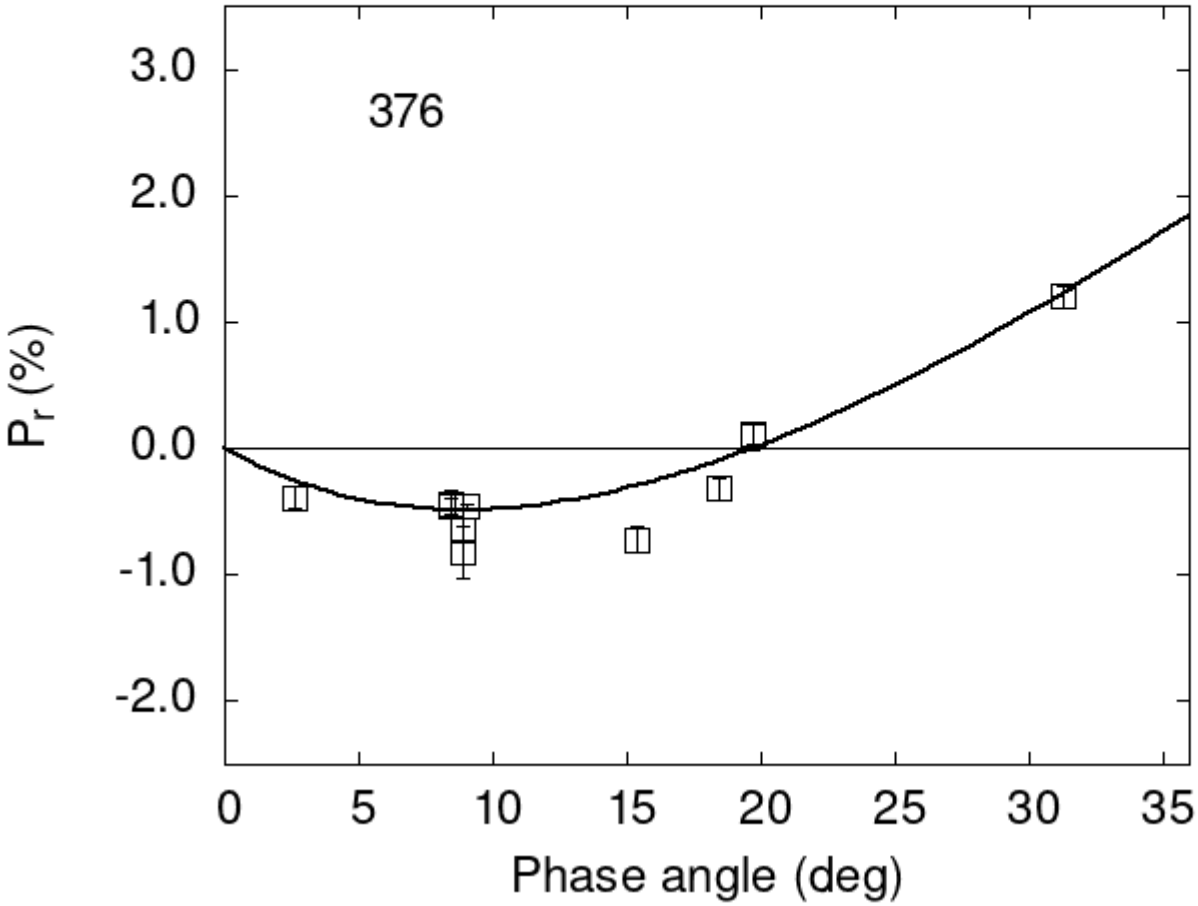
Catalogue of Asteroid Polarization Curves

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.

```
376  2.58 -0.39 0.09 V f
376 18.43 -0.32 0.09 V f
376 19.70  0.11 0.08 V f
376 19.70  0.10 0.11 R f
376  8.47 -0.46 0.06 V f
376  8.47 -0.44 0.11 R f
```

```
376  8.87 -0.82 0.20 V f
376  8.87 -0.64 0.09 R f
376  9.00 -0.46 0.02 V a
376 31.30  1.20 0.09 V a
376 15.40 -0.72 0.10 V a
376  8.86 -0.82 0.20 V b
376  8.86 -0.64 0.09 R b
376  8.47 -0.46 0.06 V b
376  8.47 -0.44 0.11 R b
376 19.70  0.11 0.08 V b
376 19.70  0.10 0.11 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
#    4.8173   0.4297  16.6369   1.1198   0.1696   0.0097
#
#     Phmin   err   Pmin    err  Ph0    err    k      err
#      8.90  1.84 -0.486  0.222 19.71  0.49 0.0811 0.0125
```