Catalogue of Asteroid Polarization Curves
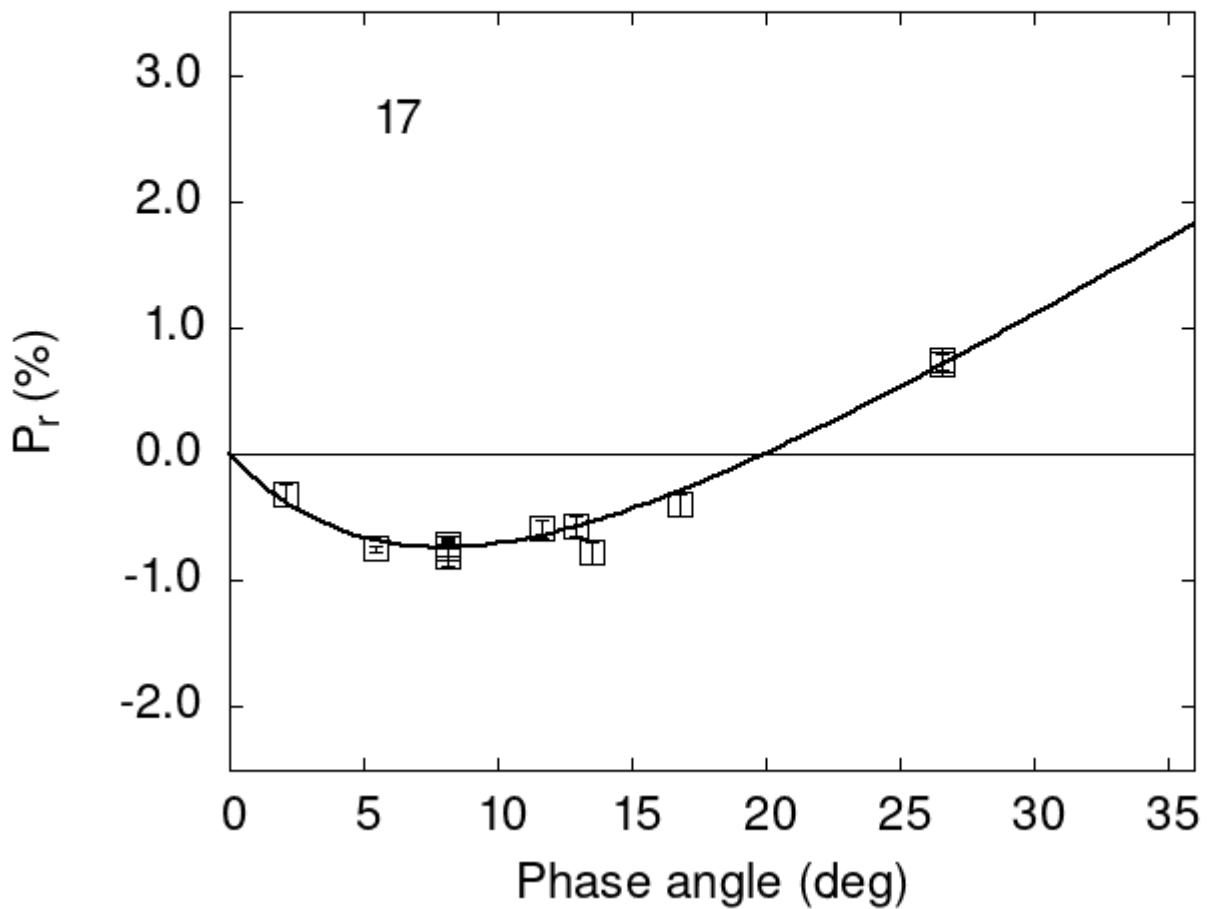
Gil-Hutton (2023)

Polarimetric data:

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

```
17   2.11 -0.32 0.09 V f
17   8.14 -0.80 0.08 V f
17   8.14 -0.75 0.08 R f
17  12.93 -0.57 0.08 V f
17  13.50 -0.78 0.09 V f
17  16.78 -0.40 0.09 V f
```

```
17 11.64 -0.59 0.07 G a
17  5.46 -0.75 0.03 G a
17 26.60  0.71 0.09 V a
17 26.60  0.75 0.09 R a
17  8.14 -0.71 0.03 V a
17  8.14 -0.71 0.02 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
#    2.6947   0.5138   7.7524   1.4817    0.1246    0.0168
#
#    Phmin    err    Pmin     err  Ph0     err    k      err
#     7.95   1.81  -0.738   0.403 19.99   0.41 0.0982 0.0193
```