Catalogue of Asteroid Polarization Curves
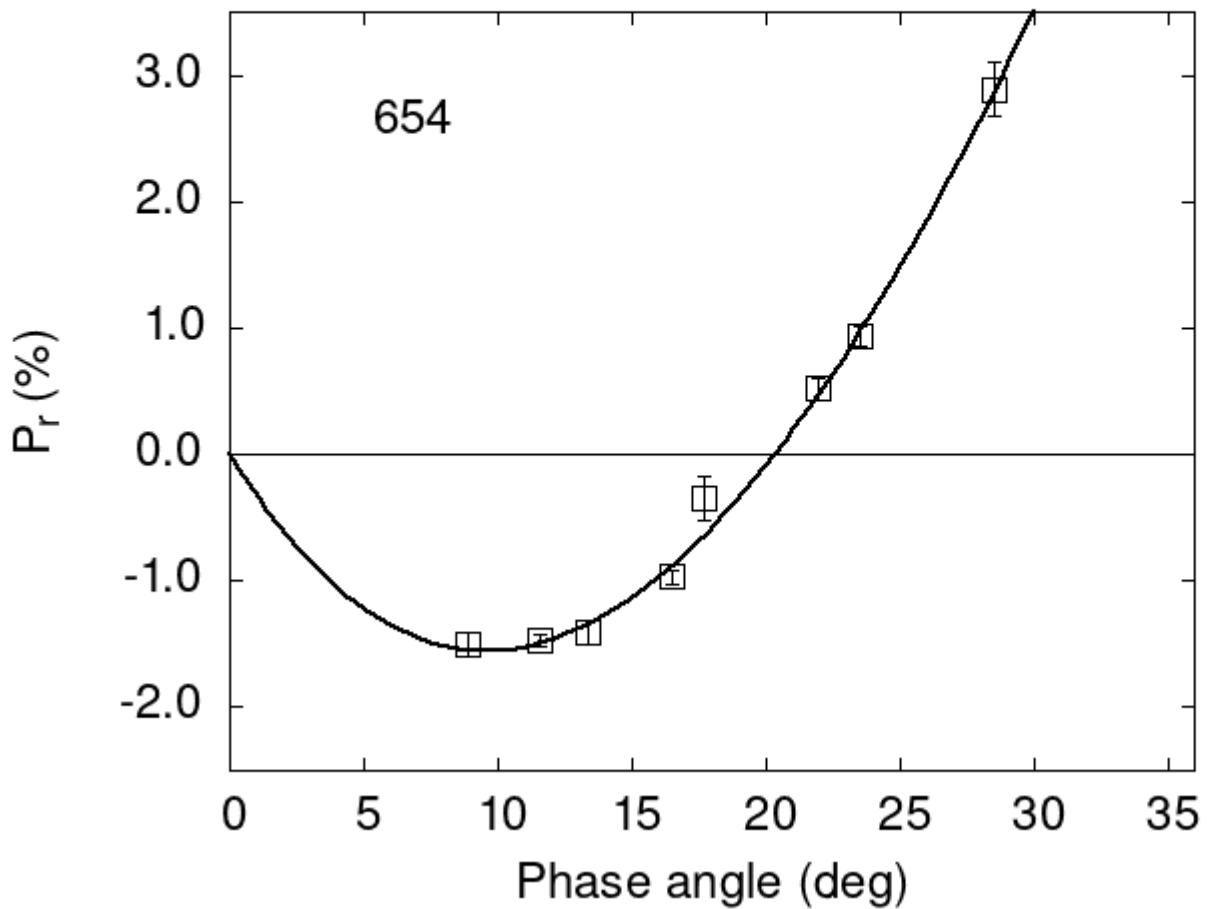
Gil-Hutton (2023)

Polarimetric data:

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

```
654  8.92 -1.50 0.10 V f
654 13.40 -1.41 0.09 V f
654 21.98  0.52 0.09 V f
654 16.51 -0.97 0.06 G a
654 23.56  0.94 0.08 G a
654 28.53  2.89 0.22 G a
```

```
654 17.70 -0.35 0.17 V a
654 11.60 -1.47 0.05 V h
```

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
#    35.3174   0.9803   28.9905    0.7848    0.8750    0.0141
#
#     Phmin    err    Pmin     err   Ph0     err    k       err
#      9.59   1.07  -1.556   0.382  20.38   0.15 0.2717  0.0224
```