Catalogue of Asteroid Polarization Curves
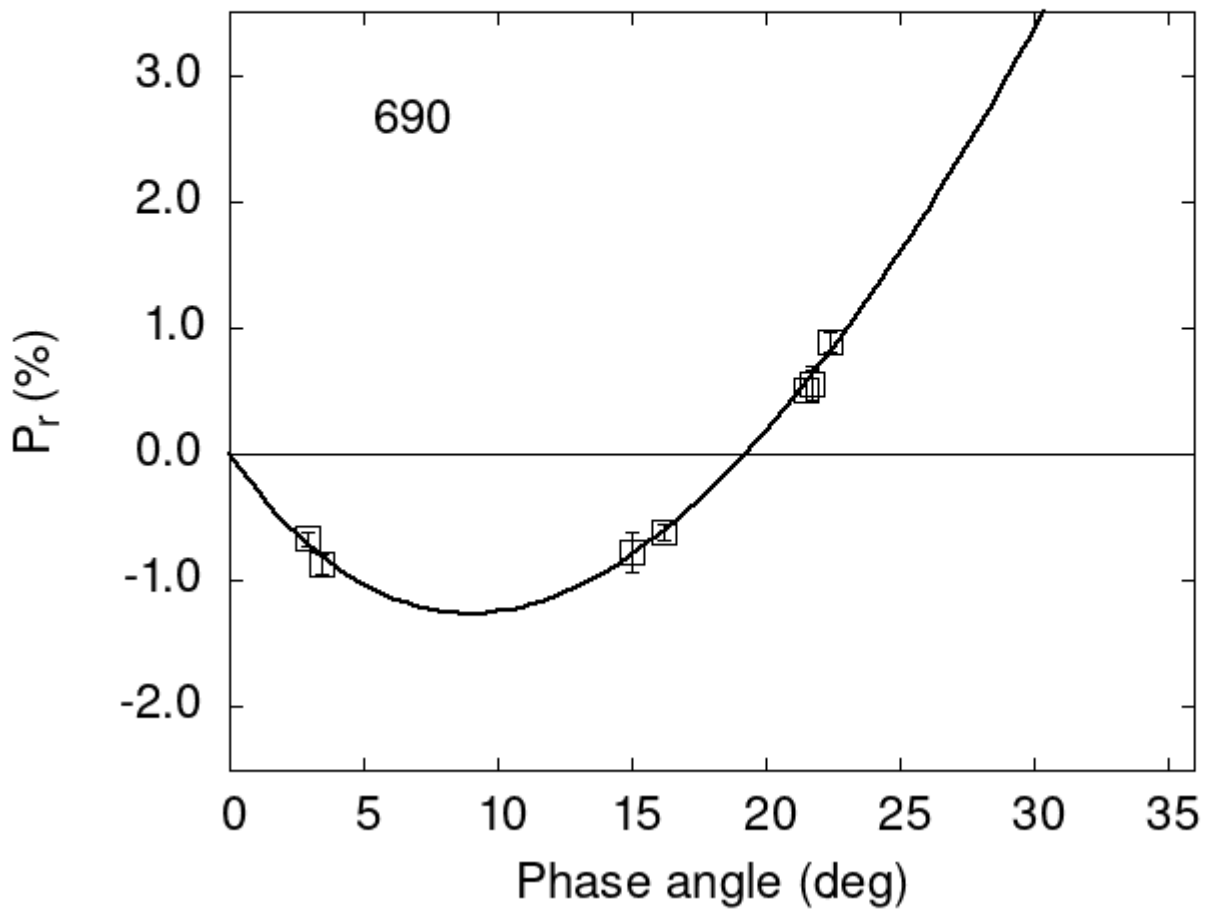
Gil-Hutton (2023)

Polarimetric data:

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

```
690   3.40  -0.87 0.08 V f
690  21.70   0.56 0.13 V f
690  22.42   0.89 0.08 V f
690  16.20  -0.62 0.06 V a
690  21.50   0.51 0.09 V a
690  21.70   0.56 0.10 V a
```

```
690 15.00 -0.78 0.16 V a
690  2.90 -0.67 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
#    21.8365   0.7736   23.2380   0.8917    0.6390    0.0162
#
#     Phmin    err    Pmin     err   Ph0     err    k       err
#      8.96   1.15  -1.261   0.361  19.24   0.18  0.2284  0.0219
```