Catalogue of Asteroid Polarization Curves
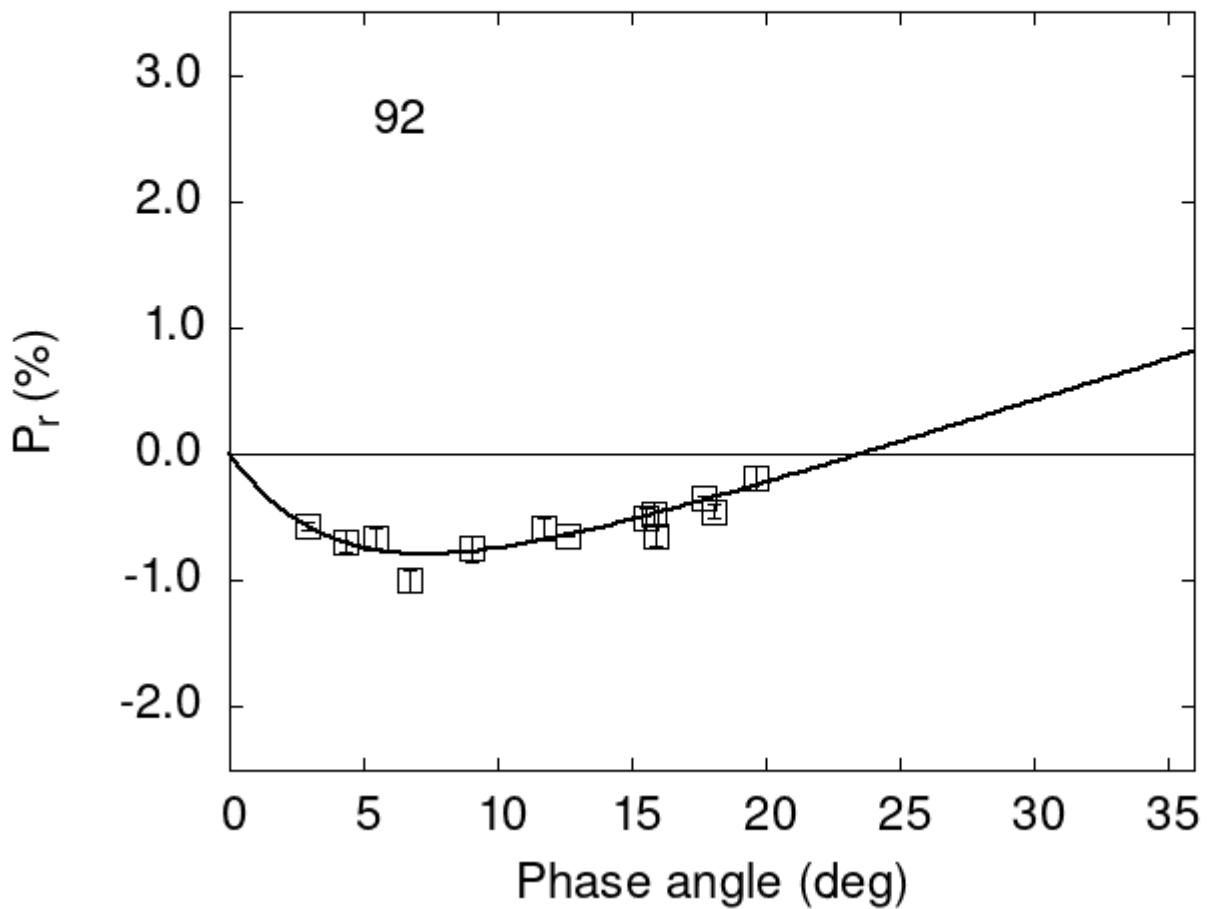
Gil-Hutton (2023)

Polarimetric data:

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

```
92   4.34 -0.69 0.09 V f
92   5.45 -0.66 0.08 V f
92   6.71 -1.00 0.09 V f
92  15.56 -0.51 0.09 V f
92  15.83 -0.47 0.09 V f
92  15.91 -0.64 0.09 V f
```

```
92 19.68 -0.19 0.09 V f
92 18.10 -0.45 0.06 V a
92  2.90 -0.57 0.03 V a
92 12.60 -0.64 0.01 V a
92 17.70 -0.35 0.02 V a
92 11.70 -0.59 0.09 V a
92  9.00 -0.75 0.10 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
#   1.5492    0.1192   4.2934    0.3926    0.0655     0.0069
#
#    Phmin    err    Pmin      err   Ph0      err    k        err
#     7.32   0.62  -0.788    0.118  23.53   0.62  0.0640   0.0069
```