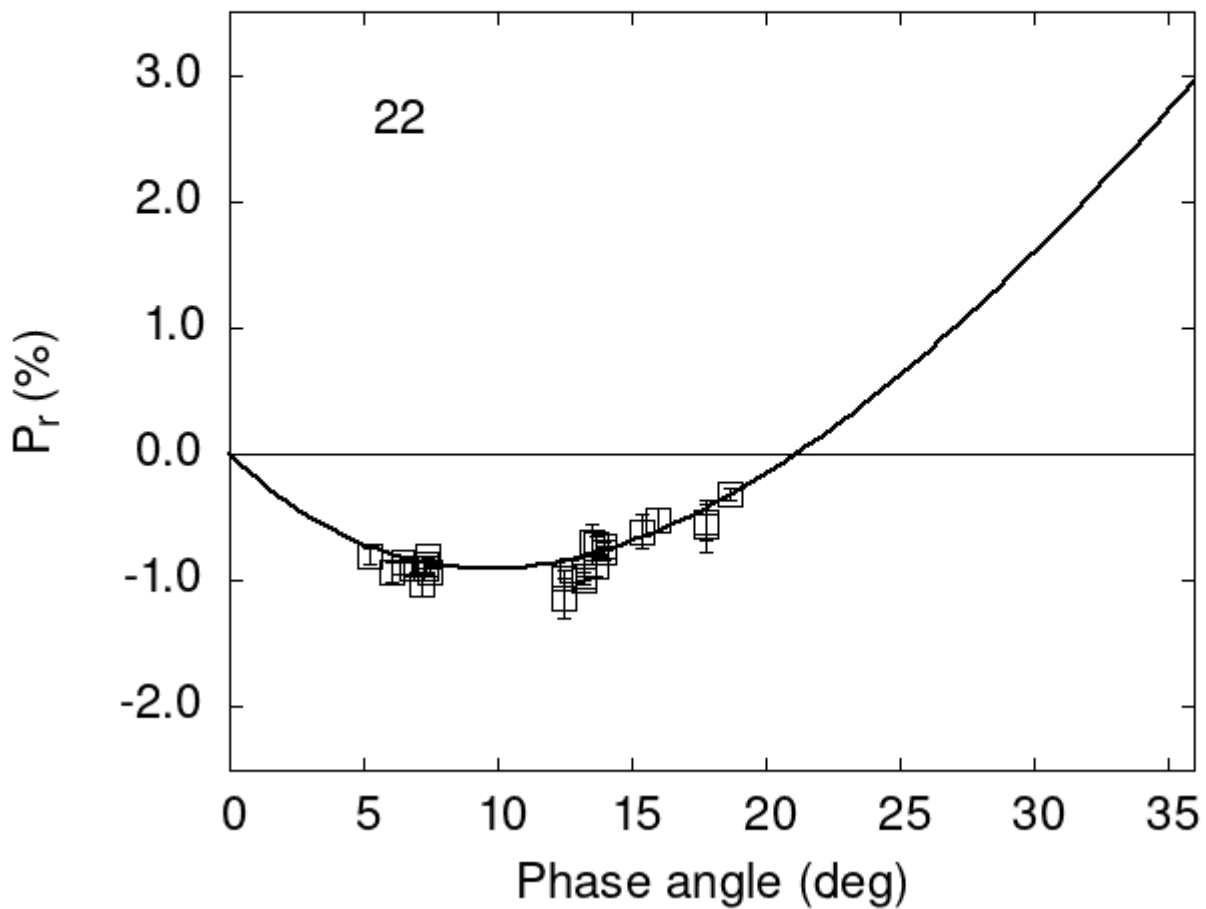


# Catalogue of Asteroid Polarization Curves

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.

```
22 18.70 -0.32 0.05 R d
22 6.04 -0.93 0.08 V f
22 7.18 -1.03 0.10 V f
22 12.79 -0.92 0.09 V f
22 16.02 -0.52 0.09 V f
22 7.48 -0.93 0.04 G a
```

```

22 17.80 -0.57 0.20 V a
22 17.80 -0.54 0.14 R a
22 13.50 -0.70 0.14 V a
22 13.70 -0.71 0.07 V a
22 13.70 -0.89 0.08 R a
22 14.00 -0.77 0.07 V a
22 6.50 -0.85 0.01 V a
22 7.40 -0.81 0.01 V a
22 12.49 -0.98 0.07 V a
22 12.49 -1.14 0.16 R a
22 13.25 -1.00 0.03 V a
22 13.25 -0.96 0.03 R a
22 14.00 -0.73 0.01 V a
22 6.80 -0.90 0.07 V a
22 5.20 -0.81 0.06 V a
22 7.30 -0.87 0.07 V a
22 7.30 -0.90 0.05 V a
22 15.40 -0.61 0.13 V 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  $\alpha$  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
# 10.7404    0.1788    20.1081    0.2526    0.3303    0.0048
#
#      Phmin    err    Pmin    err    Ph0    err    k    err
#      9.67    0.46 -0.906    0.092 21.17    0.28 0.1439 0.0057

```