

```

Exit[]

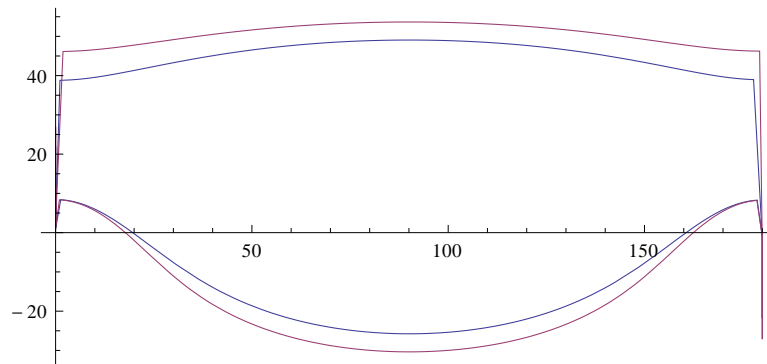
Eklipse = 23.5;

Sonne[Breite_, Tage_] :=
{{1, 0, 0}, {0, Sin[Breite °], -Cos[Breite °]}, {0, Cos[Breite °], Sin[Breite °]}}.
{Cos[ $\frac{\pi \text{Tage}}{180}$ ] Cos[2  $\pi$  Tage] - Cos[° Eklipse] Sin[ $\frac{\pi \text{Tage}}{180}$ ] Sin[2  $\pi$  Tage],
Cos[° Eklipse] Cos[2  $\pi$  Tage] Sin[ $\frac{\pi \text{Tage}}{180}$ ] + Cos[ $\frac{\pi \text{Tage}}{180}$ ] Sin[2  $\pi$  Tage],
Sin[° Eklipse] Sin[ $\frac{\pi \text{Tage}}{180}$ ]}

Winkel[b_, t_] :=
180 / Pi {ArcCos[Sonne[b, t][[1]] / (Sonne[b, t][[1]] ^ 2 + Sonne[b, t][[2]] ^ 2)},
ArcSin[Sonne[b, t][[3]]]}

m = 13; ParametricPlot[
{Winkel[52.5, t + m * 30], Winkel[47.9, t + m * 30]}, {t, 0, 1}, PlotRange -> All]

```



```
m = 10; ParametricPlot3D[{Sonne[52.5, t], Sonne[47.9, t]}, {t, m * 30, m * 30 + 1}]
```

