In[1]:=
```
ProductHermitian[v1_, v2_, α_, ω_, τ_] :=
 Conjugate[v1].{{Cos[α - ω * τ]^2 + Sin[ω * τ]^2, -2 i Sin[α] Sin[ω * τ]^2},
    {2 i Sin[α] Sin[ω * τ]^2, Cos[α + ω * τ]^2 + Sin[ω * τ]^2}}.Transpose[v2] Sec[α]^2
Evolution = {{Cos[ω * τ - α], -i * Sin[ω * τ]}, {-i * Sin[ω * τ], Cos[α + ω * τ]}} * Sec[α]
EvolutionConjugated =
 Transpose[{{Cos[ω * τ - α], i * Sin[ω * τ]}, {i * Sin[ω * τ], Cos[α + ω * τ]}} * Sec[α]]
v1Ref = {{Cos[1/4 (π - 2 σ)], -i Sin[1/4 (π - 2 σ)]}}
v2Ref = {{Cos[1/4 (π + 2 σ)], -i Sin[1/4 (π + 2 σ)]}}
v1Probe = {{Cos[1/4 (π + 2 δ)], -i Sin[1/4 (π + 2 δ)]}}
v2Probe = {{Cos[1/4 (π + σ)], -i * Sin[1/4 (π + σ)] * Exp[I * ϕ]}}
v3Probe = {{Cos[1/4 (π + σ/2)], -i * Sin[1/4 (π + σ/2)] * Exp[I * ϕ]}}
```

Out[2]=
$$\{\{\cos[\alpha-\tau\,\omega]\sec[\alpha],\ -i\sec[\alpha]\sin[\tau\,\omega]\},\ \{-i\sec[\alpha]\sin[\tau\,\omega],\ \cos[\alpha+\tau\,\omega]\sec[\alpha]\}\}$$

Out[3]=
$$\{\{\cos[\alpha-\tau\,\omega]\sec[\alpha],\ i\sec[\alpha]\sin[\tau\,\omega]\},\ \{i\sec[\alpha]\sin[\tau\,\omega],\ \cos[\alpha+\tau\,\omega]\sec[\alpha]\}\}$$

Out[4]=
$$\left\{\left\{\cos\left[\frac{1}{4}(\pi-2\sigma)\right],\ -i\sin\left[\frac{1}{4}(\pi-2\sigma)\right]\right\}\right\}$$

Out[5]=
$$\left\{\left\{\cos\left[\frac{1}{4}(\pi+2\sigma)\right],\ -i\sin\left[\frac{1}{4}(\pi+2\sigma)\right]\right\}\right\}$$

Out[6]=
$$\left\{\left\{\cos\left[\frac{1}{4}(\pi+2\delta)\right],\ -i\sin\left[\frac{1}{4}(\pi+2\delta)\right]\right\}\right\}$$

Out[7]=
$$\left\{\left\{\cos\left[\frac{\pi+\sigma}{4}\right],\ -i\,e^{i\phi}\sin\left[\frac{\pi+\sigma}{4}\right]\right\}\right\}$$

Out[8]=
$$\left\{\left\{\cos\left[\frac{1}{4}\left(\pi+\frac{\sigma}{2}\right)\right],\ -i\,e^{i\phi}\sin\left[\frac{1}{4}\left(\pi+\frac{\sigma}{2}\right)\right]\right\}\right\}$$

In[9]:=
```
cosFirst = (Abs[ProductHermitian[v1Ref, v1Probe, α, ω, τ]])^2 /
   (ProductHermitian[v1Ref, v1Ref, α, ω, τ] * ProductHermitian[v1Probe, v1Probe, α, ω, τ])
cosSecond = (Abs[ProductHermitian[v1Ref, v2Probe, α, ω, τ]])^2 /
   (ProductHermitian[v1Ref, v1Ref, α, ω, τ] * ProductHermitian[v2Probe, v2Probe, α, ω, τ])
cosThird = (Abs[ProductHermitian[v1Ref, v3Probe, α, ω, τ]])^2 /
   (ProductHermitian[v1Ref, v1Ref, α, ω, τ] * ProductHermitian[v3Probe, v3Probe, α, ω, τ])
```

Out[9]=

$$\left\{\left\{\left(\text{Abs}\left[\text{Sec}[\alpha]^2\left(\text{Cos}\left[\frac{1}{4}(\pi+2\delta)\right]\left(\text{Cos}\left[\frac{1}{4}(\pi-2\,\text{Conjugate}[\sigma])\right]\left(\text{Cos}[\alpha-\tau\omega]^2+\text{Sin}[\tau\omega]^2\right)-2\,\text{Sin}[\alpha]\,\text{Sin}[\tau\omega]^2\,\text{Sin}\left[\frac{1}{4}(\pi-2\,\text{Conjugate}[\sigma])\right]\right)-\right.\right.\right.\right.$$
$$\left.\left.\left.\left.i\,\text{Sin}\left[\frac{1}{4}(\pi+2\delta)\right]\left(-2\,i\,\text{Cos}\left[\frac{1}{4}(\pi-2\,\text{Conjugate}[\sigma])\right]\text{Sin}[\alpha]\,\text{Sin}[\tau\omega]^2+i\left(\text{Cos}[\alpha+\tau\omega]^2+\text{Sin}[\tau\omega]^2\right)\text{Sin}\left[\frac{1}{4}(\pi-2\,\text{Conjugate}[\sigma])\right]\right)\right)\right]^2\text{Cos}[\alpha]^4\right)\Big/$$
$$\left(\left(\text{Cos}\left[\frac{1}{4}(\pi+2\delta)\right]\left(\text{Cos}\left[\frac{1}{4}(\pi+2\,\text{Conjugate}[\delta])\right]\left(\text{Cos}[\alpha-\tau\omega]^2+\text{Sin}[\tau\omega]^2\right)-2\,\text{Sin}[\alpha]\,\text{Sin}[\tau\omega]^2\,\text{Sin}\left[\frac{1}{4}(\pi+2\,\text{Conjugate}[\delta])\right]\right)-\right.\right.$$
$$\left.\left.i\,\text{Sin}\left[\frac{1}{4}(\pi+2\delta)\right]\left(-2\,i\,\text{Cos}\left[\frac{1}{4}(\pi+2\,\text{Conjugate}[\delta])\right]\text{Sin}[\alpha]\,\text{Sin}[\tau\omega]^2+i\left(\text{Cos}[\alpha+\tau\omega]^2+\text{Sin}[\tau\omega]^2\right)\text{Sin}\left[\frac{1}{4}(\pi+2\,\text{Conjugate}[\delta])\right]\right)\right)$$
$$\left(\text{Cos}\left[\frac{1}{4}(\pi-2\sigma)\right]\left(\text{Cos}\left[\frac{1}{4}(\pi-2\,\text{Conjugate}[\sigma])\right]\left(\text{Cos}[\alpha-\tau\omega]^2+\text{Sin}[\tau\omega]^2\right)-2\,\text{Sin}[\alpha]\,\text{Sin}[\tau\omega]^2\,\text{Sin}\left[\frac{1}{4}(\pi-2\,\text{Conjugate}[\sigma])\right]\right)-\right.$$
$$\left.\left.\left.i\,\text{Sin}\left[\frac{1}{4}(\pi-2\sigma)\right]\left(-2\,i\,\text{Cos}\left[\frac{1}{4}(\pi-2\,\text{Conjugate}[\sigma])\right]\text{Sin}[\alpha]\,\text{Sin}[\tau\omega]^2+i\left(\text{Cos}[\alpha+\tau\omega]^2+\text{Sin}[\tau\omega]^2\right)\text{Sin}\left[\frac{1}{4}(\pi-2\,\text{Conjugate}[\sigma])\right]\right)\right)\right)\right\}\right\}$$

Out[10]=

$$\left\{\left\{\left(\text{Abs}\left[\text{Sec}[\alpha]^2\left(\text{Cos}\left[\frac{\pi+\sigma}{4}\right]\left(\text{Cos}\left[\frac{1}{4}\left(\pi-2\,\text{Conjugate}[\sigma]\right)\right]\left(\text{Cos}[\alpha-\tau\,\omega]^2+\text{Sin}[\tau\,\omega]^2\right)-\right.\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\left.2\,\text{Sin}[\alpha]\,\text{Sin}[\tau\,\omega]^2\,\text{Sin}\left[\frac{1}{4}\left(\pi-2\,\text{Conjugate}[\sigma]\right)\right]\right)-\right.\right.\right.\right.$$
$$\left.\left.\left.\left.i\,e^{i\phi}\,\text{Sin}\left[\frac{\pi+\sigma}{4}\right]\left(-2\,i\,\text{Cos}\left[\frac{1}{4}\left(\pi-2\,\text{Conjugate}[\sigma]\right)\right]\text{Sin}[\alpha]\,\text{Sin}[\tau\,\omega]^2+\right.\right.\right.\right.$$
$$\left.\left.\left.\left.i\left(\text{Cos}[\alpha+\tau\,\omega]^2+\text{Sin}[\tau\,\omega]^2\right)\text{Sin}\left[\frac{1}{4}\left(\pi-2\,\text{Conjugate}[\sigma]\right)\right]\right)\right)\right]^2\text{Cos}[\alpha]^4\right)\Big/$$
$$\left(\left(\text{Cos}\left[\frac{1}{4}\left(\pi-2\,\sigma\right)\right]\left(\text{Cos}\left[\frac{1}{4}\left(\pi-2\,\text{Conjugate}[\sigma]\right)\right]\left(\text{Cos}[\alpha-\tau\,\omega]^2+\text{Sin}[\tau\,\omega]^2\right)-\right.\right.\right.$$
$$\left.\left.\left.2\,\text{Sin}[\alpha]\,\text{Sin}[\tau\,\omega]^2\,\text{Sin}\left[\frac{1}{4}\left(\pi-2\,\text{Conjugate}[\sigma]\right)\right]\right)-\right.$$
$$\left.i\,\text{Sin}\left[\frac{1}{4}\left(\pi-2\,\sigma\right)\right]\left(-2\,i\,\text{Cos}\left[\frac{1}{4}\left(\pi-2\,\text{Conjugate}[\sigma]\right)\right]\text{Sin}[\alpha]\,\text{Sin}[\tau\,\omega]^2+\right.$$
$$\left.\left.i\left(\text{Cos}[\alpha+\tau\,\omega]^2+\text{Sin}[\tau\,\omega]^2\right)\text{Sin}\left[\frac{1}{4}\left(\pi-2\,\text{Conjugate}[\sigma]\right)\right]\right)\right)$$
$$\left(\text{Cos}\left[\frac{\pi+\sigma}{4}\right]\left(\text{Cos}\left[\frac{1}{4}\left(\pi+\text{Conjugate}[\sigma]\right)\right]\left(\text{Cos}[\alpha-\tau\,\omega]^2+\text{Sin}[\tau\,\omega]^2\right)-\right.\right.$$
$$\left.\left.2\,e^{-i\,\text{Conjugate}[\phi]}\,\text{Sin}[\alpha]\,\text{Sin}[\tau\,\omega]^2\,\text{Sin}\left[\frac{1}{4}\left(\pi+\text{Conjugate}[\sigma]\right)\right]\right)-\right.$$
$$\left.i\,e^{i\phi}\,\text{Sin}\left[\frac{\pi+\sigma}{4}\right]\left(-2\,i\,\text{Cos}\left[\frac{1}{4}\left(\pi+\text{Conjugate}[\sigma]\right)\right]\text{Sin}[\alpha]\,\text{Sin}[\tau\,\omega]^2+\right.$$
$$\left.\left.\left.i\,e^{-i\,\text{Conjugate}[\phi]}\left(\text{Cos}[\alpha+\tau\,\omega]^2+\text{Sin}[\tau\,\omega]^2\right)\text{Sin}\left[\frac{1}{4}\left(\pi+\text{Conjugate}[\sigma]\right)\right]\right)\right)\right)\right\}\right\}$$

Out[11]=
$$\left\{\left\{\left(\text{Abs}\left[\text{Sec}[\alpha]^2\left(\text{Cos}\left[\frac{1}{4}\left(\pi+\frac{\sigma}{2}\right)\right]\left(\text{Cos}\left[\frac{1}{4}\left(\pi-2\,\text{Conjugate}[\sigma]\right)\right]\left(\text{Cos}[\alpha-\tau\,\omega]^2+\text{Sin}[\tau\,\omega]^2\right)-2\,\text{Sin}[\alpha]\,\text{Sin}[\tau\,\omega]^2\,\text{Sin}\left[\frac{1}{4}\left(\pi-2\,\text{Conjugate}[\sigma]\right)\right]\right)-\right.\right.\right.\right.$$
$$\left.\left.\left.\left.i\,e^{i\phi}\,\text{Sin}\left[\frac{1}{4}\left(\pi+\frac{\sigma}{2}\right)\right]\left(-2\,i\,\text{Cos}\left[\frac{1}{4}\left(\pi-2\,\text{Conjugate}[\sigma]\right)\right]\text{Sin}[\alpha]\,\text{Sin}[\tau\,\omega]^2+i\left(\text{Cos}[\alpha+\tau\,\omega]^2+\text{Sin}[\tau\,\omega]^2\right)\text{Sin}\left[\frac{1}{4}\left(\pi-2\,\text{Conjugate}[\sigma]\right)\right]\right)\right]^2\text{Cos}[\alpha]^4\right)\Big/$$
$$\left(\left(\text{Cos}\left[\frac{1}{4}\left(\pi-2\,\sigma\right)\right]\left(\text{Cos}\left[\frac{1}{4}\left(\pi-2\,\text{Conjugate}[\sigma]\right)\right]\left(\text{Cos}[\alpha-\tau\,\omega]^2+\text{Sin}[\tau\,\omega]^2\right)-2\,\text{Sin}[\alpha]\,\text{Sin}[\tau\,\omega]^2\,\text{Sin}\left[\frac{1}{4}\left(\pi-2\,\text{Conjugate}[\sigma]\right)\right]\right)-\right.\right.$$
$$\left.\left.i\,\text{Sin}\left[\frac{1}{4}\left(\pi-2\,\sigma\right)\right]\left(-2\,i\,\text{Cos}\left[\frac{1}{4}\left(\pi-2\,\text{Conjugate}[\sigma]\right)\right]\text{Sin}[\alpha]\,\text{Sin}[\tau\,\omega]^2+i\left(\text{Cos}[\alpha+\tau\,\omega]^2+\text{Sin}[\tau\,\omega]^2\right)\text{Sin}\left[\frac{1}{4}\left(\pi-2\,\text{Conjugate}[\sigma]\right)\right]\right)\right)$$
$$\left(\text{Cos}\left[\frac{1}{4}\left(\pi+\frac{\sigma}{2}\right)\right]\left(\text{Cos}\left[\frac{1}{4}\left(\pi+\frac{\text{Conjugate}[\sigma]}{2}\right)\right]\left(\text{Cos}[\alpha-\tau\,\omega]^2+\text{Sin}[\tau\,\omega]^2\right)-2\,e^{-i\,\text{Conjugate}[\phi]}\,\text{Sin}[\alpha]\,\text{Sin}[\tau\,\omega]^2\,\text{Sin}\left[\frac{1}{4}\left(\pi+\frac{\text{Conjugate}[\sigma]}{2}\right)\right]\right)-\right.$$
$$\left.i\,e^{i\phi}\,\text{Sin}\left[\frac{1}{4}\left(\pi+\frac{\sigma}{2}\right)\right]\left(-2\,i\,\text{Cos}\left[\frac{1}{4}\left(\pi+\frac{\text{Conjugate}[\sigma]}{2}\right)\right]\text{Sin}[\alpha]\,\text{Sin}[\tau\,\omega]^2+i\,e^{-i\,\text{Conjugate}[\phi]}\left(\text{Cos}[\alpha+\tau\,\omega]^2+\text{Sin}[\tau\,\omega]^2\right)\text{Sin}\left[\frac{1}{4}\left(\pi+\frac{\text{Conjugate}[\sigma]}{2}\right)\right]\right)\right)\right)\right\}\right\}$$

In[12]:=
```
cosFirstFunction[δ_, σ_, α_, ω_] :=
 (Abs[Sec[α]^2 (Cos[1/4 (π + 2 δ)] (Cos[1/4 (π - 2 Conjugate[σ])] (Cos[α - ArcSin[
          Sqrt[(Cos[α]^2 Cos[σ])/(2 Sin[α] - 2 Cos[σ] Sin[α]^2)]]^2 + (Cos[α]^2 Cos[σ])/(2 Sin[α] - 2 Cos[σ] Sin[α]^2)) -
       (2 Cos[α]^2 Cos[σ] Sin[α] Sin[1/4 (π - 2 Conjugate[σ])])/(2 Sin[α] - 2 Cos[σ] Sin[α]^2)) -
    i Sin[1/4 (π + 2 δ)] (-((2 i Cos[α]^2 Cos[σ] Cos[1/4 (π - 2 Conjugate[σ])] Sin[α])/(2 Sin[α] - 2 Cos[σ] Sin[α]^2)) +
       i (Cos[α + ArcSin[Sqrt[(Cos[α]^2 Cos[σ])/(2 Sin[α] - 2 Cos[σ] Sin[α]^2)]]]^2 +
          (Cos[α]^2 Cos[σ])/(2 Sin[α] - 2 Cos[σ] Sin[α]^2)) Sin[1/4 (π - 2 Conjugate[σ])])]^2
```

```
Cos[α]^4) / (((Cos[1/4 (π + 2 δ)] (Cos[1/4 (π + 2 Conjugate[δ])]
(Cos[α - ArcSin[Sqrt[(Cos[α]^2 Cos[σ])/(2 Sin[α] - 2 Cos[σ] Sin[α]^2)]]^2 + (Cos[α]^2 Cos[σ])/(2 Sin[α] - 2 Cos[σ] Sin[α]^2)) -
(2 Cos[α]^2 Cos[σ] Sin[α] Sin[1/4 (π + 2 Conjugate[δ])])/(2 Sin[α] - 2 Cos[σ] Sin[α]^2)) -
i Sin[1/4 (π + 2 δ)] (-(2 i Cos[α]^2 Cos[σ] Cos[1/4 (π + 2 Conjugate[δ])] Sin[α])/(2 Sin[α] - 2 Cos[σ] Sin[α]^2) +
i (Cos[α + ArcSin[Sqrt[(Cos[α]^2 Cos[σ])/(2 Sin[α] - 2 Cos[σ] Sin[α]^2)]]^2 + (Cos[α]^2 Cos[σ])/(2 Sin[α] - 2 Cos[σ] Sin[α]^2))
Sin[1/4 (π + 2 Conjugate[δ])])))
(Cos[1/4 (π - 2 σ)] (Cos[1/4 (π - 2 Conjugate[σ])]
(Cos[α - ArcSin[Sqrt[(Cos[α]^2 Cos[σ])/(2 Sin[α] - 2 Cos[σ] Sin[α]^2)]]^2 + (Cos[α]^2 Cos[σ])/(2 Sin[α] - 2 Cos[σ] Sin[α]^2)) -
(2 Cos[α]^2 Cos[σ] Sin[α] Sin[1/4 (π - 2 Conjugate[σ])])/(2 Sin[α] - 2 Cos[σ] Sin[α]^2)) -
i Sin[1/4 (π - 2 σ)] (-(2 i Cos[α]^2 Cos[σ] Cos[1/4 (π - 2 Conjugate[σ])] Sin[α])/(2 Sin[α] - 2 Cos[σ] Sin[α]^2) +
i (Cos[α + ArcSin[Sqrt[(Cos[α]^2 Cos[σ])/(2 Sin[α] - 2 Cos[σ] Sin[α]^2)]]^2 + (Cos[α]^2 Cos[σ])/(2 Sin[α] - 2 Cos[σ] Sin[α]^2))
Sin[1/4 (π - 2 Conjugate[σ])])))
```

In[13]:=
```
cosSecondFunction[ϕ_, σ_, α_, ω_] :=
(Abs[Sec[α]^2 (Cos[(π + σ)/4] (Cos[1/4 (π - 2 Conjugate[σ])] (Cos[α - ArcSin[
```

$$\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,]]^2+\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\Bigg)-$$

$$\frac{2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]\,\text{Sin}\left[\frac{1}{4}\left(\pi-2\,\text{Conjugate}[\sigma]\right)\right]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\Bigg)-$$

$$i\,e^{i\phi}\,\text{Sin}\left[\frac{\pi+\sigma}{4}\right]\left(-\frac{2\,i\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\,\text{Cos}\left[\frac{1}{4}\left(\pi-2\,\text{Conjugate}[\sigma]\right)\right]\text{Sin}[\alpha]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}+\right.$$

$$i\left(\text{Cos}\left[\alpha+\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,]\right]^2+\right.$$

$$\left.\left.\left.\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\right)\text{Sin}\left[\frac{1}{4}\left(\pi-2\,\text{Conjugate}[\sigma]\right)\right]\right)\right]^2$$

$$\text{Cos}[\alpha]^4\Bigg)\Big/\Bigg(\Bigg(\Bigg(\text{Cos}\left[\frac{1}{4}\left(\pi-2\,\sigma\right)\right]\left(\text{Cos}\left[\frac{1}{4}\left(\pi-2\,\text{Conjugate}[\sigma]\right)\right]\right.$$

$$\left(\text{Cos}\left[\alpha-\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,]\right]^2+\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\right)-$$

$$\frac{2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]\,\text{Sin}\left[\frac{1}{4}\left(\pi-2\,\text{Conjugate}[\sigma]\right)\right]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\Bigg)-$$

$$i\,\text{Sin}\left[\frac{1}{4}\left(\pi-2\,\sigma\right)\right]\left(-\frac{2\,i\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\,\text{Cos}\left[\frac{1}{4}\left(\pi-2\,\text{Conjugate}[\sigma]\right)\right]\text{Sin}[\alpha]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}+\right.$$

$$i\left(\text{Cos}\left[\alpha+\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,]\right]^2+\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\right)$$

$$\left.\text{Sin}\left[\frac{1}{4}\left(\pi-2\,\text{Conjugate}[\sigma]\right)\right]\right)\Bigg)\Bigg(\text{Cos}\left[\frac{\pi+\sigma}{4}\right]\left(\text{Cos}\left[\frac{1}{4}\left(\pi+\text{Conjugate}[\sigma]\right)\right]\right.$$

$$\left(\text{Cos}\left[\alpha-\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,]\right]^2+\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\right)-$$

$$\frac{2\,e^{-i\,\text{Conjugate}[\phi]}\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]\,\text{Sin}\left[\frac{1}{4}\left(\pi+\text{Conjugate}[\sigma]\right)\right]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\Bigg)-$$

$$i\, e^{i\phi}\, \text{Sin}\left[\frac{\pi+\sigma}{4}\right]\left(-\frac{2\, i\, \text{Cos}[\alpha]^2\, \text{Cos}[\sigma]\, \text{Cos}\left[\frac{1}{4}\left(\pi+\text{Conjugate}[\sigma]\right)\right]\text{Sin}[\alpha]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}+\right.$$

$$i\, e^{-i\,\text{Conjugate}[\phi]}\left(\text{Cos}\left[\alpha+\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]^2+\right.$$

$$\left.\left.\left.\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\right)\text{Sin}\left[\frac{1}{4}\left(\pi+\text{Conjugate}[\sigma]\right)\right]\right)\right)\right)$$

In[14]:=
```
cosThirdFunction[ϕ_, σ_, α_, ω_] :=
```

$$\left(\text{Abs}\left[\text{Sec}[\alpha]^2\left(\text{Cos}\left[\frac{1}{4}\left(\pi+\frac{\sigma}{2}\right)\right]\left(\text{Cos}\left[\frac{1}{4}\left(\pi-2\,\text{Conjugate}[\sigma]\right)\right]\left(\text{Cos}\left[\alpha-\text{ArcSin}\left[\right.\right.\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\left.\left.\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]^2+\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\right)-\right.\right.\right.$$

$$\left.\left.\left.\frac{2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]\,\text{Sin}\left[\frac{1}{4}\left(\pi-2\,\text{Conjugate}[\sigma]\right)\right]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\right)-i\, e^{i\phi}\right.\right.$$

$$\text{Sin}\left[\frac{1}{4}\left(\pi+\frac{\sigma}{2}\right)\right]\left(-\frac{2\, i\, \text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\,\text{Cos}\left[\frac{1}{4}\left(\pi-2\,\text{Conjugate}[\sigma]\right)\right]\text{Sin}[\alpha]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}+\right.$$

$$i\left(\text{Cos}\left[\alpha+\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]^2+\right.$$

$$\left.\left.\left.\left.\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\right)\text{Sin}\left[\frac{1}{4}\left(\pi-2\,\text{Conjugate}[\sigma]\right)\right]\right)\right]^2$$

$$\left.\text{Cos}[\alpha]^4\right)\Big/\left(\left(\left(\text{Cos}\left[\frac{1}{4}\left(\pi-2\,\sigma\right)\right]\left(\text{Cos}\left[\frac{1}{4}\left(\pi-2\,\text{Conjugate}[\sigma]\right)\right]\right.\right.\right.\right.$$

$$\left.\left.\left.\left(\text{Cos}\left[\alpha-\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]^2+\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\right)-\right.\right.\right.$$

$$\left.\left.\left.\frac{2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]\,\text{Sin}\left[\frac{1}{4}\left(\pi-2\,\text{Conjugate}[\sigma]\right)\right]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\right)-\right.\right.$$

$$i\,\text{Sin}\left[\frac{1}{4}\left(\pi-2\,\sigma\right)\right]\left(-\frac{2\, i\, \text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\,\text{Cos}\left[\frac{1}{4}\left(\pi-2\,\text{Conjugate}[\sigma]\right)\right]\text{Sin}[\alpha]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}+\right.$$

$$i\left(\text{Cos}\left[\alpha+\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]^2+\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\right)$$

$$\text{Sin}\left[\frac{1}{4}\left(\pi-2\,\text{Conjugate}[\sigma]\right)\right]\Bigg)\Bigg)\left(\text{Cos}\left[\frac{1}{4}\left(\pi+\frac{\sigma}{2}\right)\right]\left(\text{Cos}\left[\frac{1}{4}\left(\pi+\frac{\text{Conjugate}[\sigma]}{2}\right)\right]\right.\right.$$

$$\left(\text{Cos}\left[\alpha-\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]^2+\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\right)-$$

$$\left.\frac{2\,e^{-i\,\text{Conjugate}[\phi]}\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]\,\text{Sin}\left[\frac{1}{4}\left(\pi+\frac{\text{Conjugate}[\sigma]}{2}\right)\right]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\right)-$$

$$i\,e^{i\phi}\,\text{Sin}\left[\frac{1}{4}\left(\pi+\frac{\sigma}{2}\right)\right]\left(-\frac{2\,i\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\,\text{Cos}\left[\frac{1}{4}\left(\pi+\frac{\text{Conjugate}[\sigma]}{2}\right)\right]\text{Sin}[\alpha]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}+\right.$$

$$i\,e^{-i\,\text{Conjugate}[\phi]}\left(\text{Cos}\left[\alpha+\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]^2+\right.$$

$$\left.\left.\left.\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\right)\text{Sin}\left[\frac{1}{4}\left(\pi+\frac{\text{Conjugate}[\sigma]}{2}\right)\right]\right)\right)\right)$$

In[15]:=
```
EvolutionMT =
 {{Cos[α + ω * τ] Sec[α], i Sec[α] Sin[ω * τ]}, {i Sec[α] Sin[ω * τ], Cos[α - ω * τ] Sec[α]}}
```

Out[15]= $\{\{\text{Cos}[\alpha+\tau\,\omega]\,\text{Sec}[\alpha],\ i\,\text{Sec}[\alpha]\,\text{Sin}[\tau\,\omega]\},\{i\,\text{Sec}[\alpha]\,\text{Sin}[\tau\,\omega],\ \text{Cos}[\alpha-\tau\,\omega]\,\text{Sec}[\alpha]\}\}$

In[16]:=
```
LeftEvolutionMT = {{Cos[α + ω * τ] Sec[α], -i * Sec[α] Sin[ω * τ]},
   {-i * Sec[α] Sin[ω * τ], Sec[α] Cos[α - ω * τ]}}
```

Out[16]= $\{\{\text{Cos}[\alpha+\tau\,\omega]\,\text{Sec}[\alpha],\ -i\,\text{Sec}[\alpha]\,\text{Sin}[\tau\,\omega]\},\{-i\,\text{Sec}[\alpha]\,\text{Sin}[\tau\,\omega],\ \text{Cos}[\alpha-\tau\,\omega]\,\text{Sec}[\alpha]\}\}$

In[17]:=
```
Unit = {{1, 0}, {0, 1}}
```

Out[17]= $\{\{1,\ 0\},\{0,\ 1\}\}$

In[18]:=
```
MatrixForm[FullSimplify[LeftEvolutionMT.EvolutionMT]]
```

Out[18]//MatrixForm=

$$\begin{pmatrix}\text{Sec}[\alpha]^2\left(\text{Cos}[\alpha+\tau\,\omega]^2+\text{Sin}[\tau\,\omega]^2\right) & -2\,i\,\text{Sec}[\alpha]\,\text{Sin}[\tau\,\omega]^2\,\text{Tan}[\alpha]\\ 2\,i\,\text{Sec}[\alpha]\,\text{Sin}[\tau\,\omega]^2\,\text{Tan}[\alpha] & \text{Sec}[\alpha]^2\left(\text{Cos}[\alpha-\tau\,\omega]^2+\text{Sin}[\tau\,\omega]^2\right)\end{pmatrix}$$

In[21]:=
```
Nm = (N0 * FullSimplify[LeftEvolutionMT.EvolutionMT])
ZetaF = MatrixPower[Nm - Unit, 1 / 2]
```

Out[21]= $\left\{\left\{N0\,\text{Sec}[\alpha]^2\left(\text{Cos}[\alpha+\tau\,\omega]^2+\text{Sin}[\tau\,\omega]^2\right),\ -2\,i\,N0\,\text{Sec}[\alpha]\,\text{Sin}[\tau\,\omega]^2\,\text{Tan}[\alpha]\right\},\right.$
$\left.\left\{2\,i\,N0\,\text{Sec}[\alpha]\,\text{Sin}[\tau\,\omega]^2\,\text{Tan}[\alpha],\ N0\,\text{Sec}[\alpha]^2\left(\text{Cos}[\alpha-\tau\,\omega]^2+\text{Sin}[\tau\,\omega]^2\right)\right\}\right\}$

Out[22]= $\left\{\left\{\left(\left(-4\,N0+2\,N0\,\text{Cos}[2\,\tau\,\omega]-N0\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]-N0\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]+\right.\right.\right.\right.$

$$2\,N0\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2+2\,N0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2+2\,N0\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+$$
$$2\,N0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+2\sqrt{2}\,\sqrt{\left(-N0^2\,\left(-6-2\,\text{Cos}[2\,\alpha]+\right.\right.}$$
$$\left.\left.2\,\text{Cos}[2\,\tau\,\omega]-\text{Cos}[2\,\alpha-2\,\tau\,\omega]-\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)}$$
$$\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,N0-2\,\text{Cos}[2\,\alpha]-2\,N0\,\text{Cos}[2\,\tau\,\omega]+N0\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\right.\right.}$$
$$N0\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]-2\sqrt{2}\,\sqrt{\left(N0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\right.\right.}$$
$$\left.\left.\left.\left.\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\right)\Big)\Big/$$
$$\left(8\sqrt{N0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2}\right)+$$
$$\left(\left(4\,N0-2\,N0\,\text{Cos}[2\,\tau\,\omega]+N0\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+N0\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]-2\,N0\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2-\right.\right.$$
$$2\,N0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2-2\,N0\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2-$$
$$2\,N0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+2\sqrt{2}\,\sqrt{\left(-N0^2\,\left(-6-2\,\text{Cos}[2\,\alpha]+\right.\right.}$$
$$\left.\left.2\,\text{Cos}[2\,\tau\,\omega]-\text{Cos}[2\,\alpha-2\,\tau\,\omega]-\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)}$$
$$\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,N0-2\,\text{Cos}[2\,\alpha]-2\,N0\,\text{Cos}[2\,\tau\,\omega]+N0\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\right.\right.}$$
$$N0\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]+2\sqrt{2}\,\sqrt{\left(N0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\right.\right.}$$
$$\left.\left.\left.\left.\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\right)\Big)\Big/$$
$$\left(8\sqrt{N0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2}\right),$$
$$\left(i\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[\tau\,\omega]^2\,\left(-4\,N0+2\,N0\,\text{Cos}[2\,\tau\,\omega]-N0\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]-\right.\right.$$
$$N0\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]+2\,N0\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2+2\,N0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2+$$
$$2\,N0\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+2\,N0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+2\sqrt{2}\,\sqrt{\left(-N0^2\,\left(-6-2\,\text{Cos}[2\,\alpha]+\right.\right.}$$
$$\left.\left.2\,\text{Cos}[2\,\tau\,\omega]-\text{Cos}[2\,\alpha-2\,\tau\,\omega]-\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)}$$
$$\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,N0-2\,\text{Cos}[2\,\alpha]-2\,N0\,\text{Cos}[2\,\tau\,\omega]+N0\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\right.\right.}$$
$$N0\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]-2\sqrt{2}\,\sqrt{\left(N0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\right.\right.}$$
$$\left.\left.\left.\left.\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\right)\Big)$$
$$\left(4\,N0-2\,N0\,\text{Cos}[2\,\tau\,\omega]+N0\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+N0\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]-\right.$$
$$2\,N0\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2-2\,N0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2-$$
$$2\,N0\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2-2\,N0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+$$
$$2\sqrt{2}\,\sqrt{\left(N0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\right.}$$
$$\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\right)\Big/\left(32\,N0\,\left(1+\text{Cos}[2\,\alpha]\right)\right.$$
$$\left.\sqrt{N0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2}\right)-$$
$$\left(i\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[\tau\,\omega]^2\,\left(4\,N0-2\,N0\,\text{Cos}[2\,\tau\,\omega]+N0\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+N0\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]-\right.\right.$$
$$2\,N0\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2-2\,N0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2-2\,N0\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2-$$

$$2\,N0\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\omega]^2+2\sqrt{2}\,\sqrt{\left(-N0^2\,\left(-6-2\,\text{Cos}[2\alpha]+2\,\text{Cos}[2\tau\omega]-\text{Cos}[2\alpha-2\tau\omega]-\text{Cos}[2\alpha+2\tau\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)}\Bigg)$$

$$\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\left(-2+4\,N0-2\,\text{Cos}[2\alpha]-2\,N0\,\text{Cos}[2\tau\omega]+N0\,\text{Cos}[2\alpha-2\tau\omega]+N0\,\text{Cos}[2\alpha+2\tau\omega]+2\sqrt{2}\,\sqrt{\left(N0^2\,\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)}\right)\right)}$$

$$\Bigg(-4\,N0+2\,N0\,\text{Cos}[2\tau\omega]-N0\,\text{Cos}[2\alpha-2\tau\omega]-N0\,\text{Cos}[2\alpha+2\tau\omega]+2\,N0\,\text{Cos}[\alpha-\tau\omega]^2\,\text{Sec}[\alpha]^2+2\,N0\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-\tau\omega]^2\,\text{Sec}[\alpha]^2+2\,N0\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\omega]^2+2\,N0\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\omega]^2+2\sqrt{2}\,\sqrt{\left(N0^2\,\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)}\Bigg)\Bigg/\Bigg(32\,N0\,\left(1+\text{Cos}[2\alpha]\right)$$

$$\sqrt{N0^2\,\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2}\Bigg)\Bigg\},$$

$$\Bigg\{-\Bigg(\Bigg(i\,N0\,\left(1+\text{Cos}[2\alpha]\right)\,\text{Sec}[\alpha]\,\text{Sin}[\tau\omega]^2\,\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\left(-2+4\,N0-2\,\text{Cos}[2\alpha]-2\,N0\,\text{Cos}[2\tau\omega]+N0\,\text{Cos}[2\alpha-2\tau\omega]+N0\,\text{Cos}[2\alpha+2\tau\omega]-2\sqrt{2}\,\sqrt{\left(N0^2\,\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)}\right)\right)}\,\text{Tan}[\alpha]\Bigg)\Bigg/\Bigg(2$$

$$\sqrt{N0^2\,\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2}\Bigg)\Bigg)+\Bigg(i\,N0\,\left(1+\text{Cos}[2\alpha]\right)\,\text{Sec}[\alpha]\,\text{Sin}[\tau\omega]^2$$

$$\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\left(-2+4\,N0-2\,\text{Cos}[2\alpha]-2\,N0\,\text{Cos}[2\tau\omega]+N0\,\text{Cos}[2\alpha-2\tau\omega]+N0\,\text{Cos}[2\alpha+2\tau\omega]+2\sqrt{2}\,\sqrt{\left(N0^2\,\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)}\right)\right)}\,\text{Tan}[\alpha]\Bigg)\Bigg/$$

$$\Bigg(2\sqrt{N0^2\,\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2}\Bigg),$$

$$\Bigg(\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\left(-2+4\,N0-2\,\text{Cos}[2\alpha]-2\,N0\,\text{Cos}[2\tau\omega]+N0\,\text{Cos}[2\alpha-2\tau\omega]+N0\,\text{Cos}[2\alpha+2\tau\omega]-2\sqrt{2}\,\sqrt{\left(N0^2\,\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)}\right)\right)}$$

$$\Bigg(4\,N0-2\,N0\,\text{Cos}[2\tau\omega]+N0\,\text{Cos}[2\alpha-2\tau\omega]+N0\,\text{Cos}[2\alpha+2\tau\omega]-2\,N0\,\text{Cos}[\alpha-\tau\omega]^2\,\text{Sec}[\alpha]^2-2\,N0\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-\tau\omega]^2\,\text{Sec}[\alpha]^2-2\,N0\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\omega]^2-2\,N0\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\omega]^2+2\sqrt{2}\,\sqrt{\left(N0^2\,\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)}\Bigg)\Bigg/$$

$$\Bigg(8\sqrt{N0^2\,\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2}\Bigg)+$$

$$\left(\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\left(-2+4\,\text{N0}-2\,\text{Cos}[2\alpha]-2\,\text{N0}\,\text{Cos}[2\tau\omega]+\text{N0}\,\text{Cos}[2\alpha-2\tau\omega]+\right.\right.\right.$$
$$\left.\left.\left.\text{N0}\,\text{Cos}[2\alpha+2\tau\omega]+2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\right.\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\left.\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)\right)$$
$$\left(-4\,\text{N0}+2\,\text{N0}\,\text{Cos}[2\tau\omega]-\text{N0}\,\text{Cos}[2\alpha-2\tau\omega]-\text{N0}\,\text{Cos}[2\alpha+2\tau\omega]+\right.$$
$$2\,\text{N0}\,\text{Cos}[\alpha-\tau\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{N0}\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-\tau\omega]^2\,\text{Sec}[\alpha]^2+$$
$$2\,\text{N0}\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\omega]^2+2\,\text{N0}\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\omega]^2+$$
$$2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\right.}$$
$$\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)\Big/\left(8\right.$$
$$\left.\sqrt{\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2}\right)\Big\}$$
$$\Big\}$$

In[23]:=
```
EvolvedFirst = Evolution.Transpose[v1Probe]
EvolvedSecond = Evolution.Transpose[v2Probe]
EvolvedThird = Evolution.Transpose[v3Probe]
```

Out[23]=
$$\left\{\left\{\text{Cos}\left[\frac{1}{4}\left(\pi+2\,\delta\right)\right]\text{Cos}[\alpha-\tau\omega]\,\text{Sec}[\alpha]-\text{Sec}[\alpha]\,\text{Sin}\left[\frac{1}{4}\left(\pi+2\,\delta\right)\right]\text{Sin}[\tau\omega]\right\},\right.$$
$$\left.\left\{-\text{i}\,\text{Cos}[\alpha+\tau\omega]\,\text{Sec}[\alpha]\,\text{Sin}\left[\frac{1}{4}\left(\pi+2\,\delta\right)\right]-\text{i}\,\text{Cos}\left[\frac{1}{4}\left(\pi+2\,\delta\right)\right]\text{Sec}[\alpha]\,\text{Sin}[\tau\omega]\right\}\right\}$$

Out[24]=
$$\left\{\left\{\text{Cos}\left[\frac{\pi+\sigma}{4}\right]\text{Cos}[\alpha-\tau\omega]\,\text{Sec}[\alpha]-e^{\text{i}\,\phi}\,\text{Sec}[\alpha]\,\text{Sin}\left[\frac{\pi+\sigma}{4}\right]\text{Sin}[\tau\omega]\right\},\right.$$
$$\left.\left\{-\text{i}\,e^{\text{i}\,\phi}\,\text{Cos}[\alpha+\tau\omega]\,\text{Sec}[\alpha]\,\text{Sin}\left[\frac{\pi+\sigma}{4}\right]-\text{i}\,\text{Cos}\left[\frac{\pi+\sigma}{4}\right]\text{Sec}[\alpha]\,\text{Sin}[\tau\omega]\right\}\right\}$$

Out[25]=
$$\left\{\left\{\text{Cos}\left[\frac{1}{4}\left(\pi+\frac{\sigma}{2}\right)\right]\text{Cos}[\alpha-\tau\omega]\,\text{Sec}[\alpha]-e^{\text{i}\,\phi}\,\text{Sec}[\alpha]\,\text{Sin}\left[\frac{1}{4}\left(\pi+\frac{\sigma}{2}\right)\right]\text{Sin}[\tau\omega]\right\},\right.$$
$$\left.\left\{-\text{i}\,e^{\text{i}\,\phi}\,\text{Cos}[\alpha+\tau\omega]\,\text{Sec}[\alpha]\,\text{Sin}\left[\frac{1}{4}\left(\pi+\frac{\sigma}{2}\right)\right]-\text{i}\,\text{Cos}\left[\frac{1}{4}\left(\pi+\frac{\sigma}{2}\right)\right]\text{Sec}[\alpha]\,\text{Sin}[\tau\omega]\right\}\right\}$$

In[26]:=
```
ZetaEvolvedFirst = ZetaF.Evolution.Transpose[v1Probe]
ZetaEvolvedSecond = ZetaF.Evolution.Transpose[v2Probe]
ZetaEvolvedThird = ZetaF.Evolution.Transpose[v3Probe]
```

Out[26]=
$$\left\{\left\{-\text{i}\,\text{Sin}\left[\frac{1}{4}\left(\pi+2\,\delta\right)\right]\right.\right.$$
$$\left(-\text{i}\,\text{Sec}[\alpha]\,\text{Sin}[\tau\omega]\right)\left(\left(\left(-4\,\text{N0}+2\,\text{N0}\,\text{Cos}[2\tau\omega]-\text{N0}\,\text{Cos}[2\alpha-2\tau\omega]-\text{N0}\,\text{Cos}[2\alpha+2\tau\omega]+\right.\right.\right.$$
$$2\,\text{N0}\,\text{Cos}[\alpha-\tau\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{N0}\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-\tau\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{N0}\,\text{Sec}[\alpha]^2$$
$$\text{Sin}[\tau\omega]^2+2\,\text{N0}\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\omega]^2+2\sqrt{2}\,\sqrt{\left(-\text{N0}^2\left(-6-2\,\text{Cos}[2\alpha]+\right.\right.}$$
$$\left.\left.\left.\left.2\,\text{Cos}[2\tau\omega]-\text{Cos}[2\alpha-2\tau\omega]-\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)$$
$$\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\left(-2+4\,\text{N0}-2\,\text{Cos}[2\alpha]-2\,\text{N0}\,\text{Cos}[2\tau\omega]+\text{N0}\,\text{Cos}[2\alpha-2\tau\omega]+\right.\right.}$$
$$\left.\left.\text{N0}\,\text{Cos}[2\alpha+2\tau\omega]-2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\right.\right.\right.\right.$$

$$\cos[2\alpha - 2\tau\omega] + \cos[2\alpha + 2\tau\omega]\big)\,\sin[\alpha]^2\,\sin[\tau\omega]^2\big)\big)\Big)\Big/$$
$$\Big(8\sqrt{\big(N0^2\,\big(6 + 2\cos[2\alpha] - 2\cos[2\tau\omega] + \cos[2\alpha - 2\tau\omega] + \cos[2\alpha + 2\tau\omega]\big)\,\sin[\alpha]^2\,\sin[\tau\omega]^2\big)\big)} +$$
$$\Big(\Big(4\,N0 - 2\,N0\cos[2\tau\omega] + N0\cos[2\alpha - 2\tau\omega] + N0\cos[2\alpha + 2\tau\omega] - 2\,N0\cos[\alpha - \tau\omega]^2\,\sec[\alpha]^2 - 2\,N0\cos[2\alpha]\cos[\alpha - \tau\omega]^2\,\sec[\alpha]^2 - 2\,N0\sec[\alpha]^2\sin[\tau\omega]^2 - 2\,N0\cos[2\alpha]\sec[\alpha]^2\sin[\tau\omega]^2 + 2\sqrt{2}\,\sqrt{\big(-N0^2\,\big(-6 - 2\cos[2\alpha] + 2\cos[2\tau\omega] - \cos[2\alpha - 2\tau\omega] - \cos[2\alpha + 2\tau\omega]\big)\,\sin[\alpha]^2\,\sin[\tau\omega]^2\big)}\Big)\Big/$$
$$\sqrt{\Big(\frac{1}{1 + \cos[2\alpha]}\big(-2 + 4\,N0 - 2\cos[2\alpha] - 2\,N0\cos[2\tau\omega] + N0\cos[2\alpha - 2\tau\omega] + N0\cos[2\alpha + 2\tau\omega] + 2\sqrt{2}\,\sqrt{\big(N0^2\,\big(6 + 2\cos[2\alpha] - 2\cos[2\tau\omega] + \cos[2\alpha - 2\tau\omega] + \cos[2\alpha + 2\tau\omega]\big)\,\sin[\alpha]^2\,\sin[\tau\omega]^2\big)}\big)\Big)\Big/$$
$$\Big(8\sqrt{\big(N0^2\,\big(6 + 2\cos[2\alpha] - 2\cos[2\tau\omega] + \cos[2\alpha - 2\tau\omega] + \cos[2\alpha + 2\tau\omega]\big)\,\sin[\alpha]^2\,\sin[\tau\omega]^2\big)\big)}\Big) +$$
$$\cos[\alpha + \tau\omega]\,\sec[\alpha]\,\Big(\Big(\Big(i\cos[\alpha]\cot[\alpha]\csc[\tau\omega]^2\,\big(-4\,N0 + 2\,N0\cos[2\tau\omega] - N0\cos[2\alpha - 2\tau\omega] - N0\cos[2\alpha + 2\tau\omega] + 2\,N0\cos[\alpha - \tau\omega]^2\,\sec[\alpha]^2 + 2\,N0\cos[2\alpha]\cos[\alpha - \tau\omega]^2\,\sec[\alpha]^2 + 2\,N0\sec[\alpha]^2\sin[\tau\omega]^2 + 2\,N0\cos[2\alpha]\sec[\alpha]^2\sin[\tau\omega]^2 + 2\sqrt{2}\,\sqrt{\big(-N0^2\,\big(-6 - 2\cos[2\alpha] + 2\cos[2\tau\omega] - \cos[2\alpha - 2\tau\omega] - \cos[2\alpha + 2\tau\omega]\big)\,\sin[\alpha]^2\,\sin[\tau\omega]^2\big)}\big)\Big)\Big/$$
$$\sqrt{\Big(\frac{1}{1 + \cos[2\alpha]}\big(-2 + 4\,N0 - 2\cos[2\alpha] - 2\,N0\cos[2\tau\omega] + N0\cos[2\alpha - 2\tau\omega] + N0\cos[2\alpha + 2\tau\omega] - 2\sqrt{2}\,\sqrt{\big(N0^2\,\big(6 + 2\cos[2\alpha] - 2\cos[2\tau\omega] + \cos[2\alpha - 2\tau\omega] + \cos[2\alpha + 2\tau\omega]\big)\,\sin[\alpha]^2\,\sin[\tau\omega]^2\big)}\big)\Big)}$$
$$\Big(4\,N0 - 2\,N0\cos[2\tau\omega] + N0\cos[2\alpha - 2\tau\omega] + N0\cos[2\alpha + 2\tau\omega] - 2\,N0\cos[\alpha - \tau\omega]^2\,\sec[\alpha]^2 - 2\,N0\cos[2\alpha]\cos[\alpha - \tau\omega]^2\,\sec[\alpha]^2 - 2\,N0\sec[\alpha]^2\sin[\tau\omega]^2 - 2\,N0\cos[2\alpha]\sec[\alpha]^2\sin[\tau\omega]^2 + 2\sqrt{2}\,\sqrt{\big(N0^2\,\big(6 + 2\cos[2\alpha] - 2\cos[2\tau\omega] + \cos[2\alpha - 2\tau\omega] + \cos[2\alpha + 2\tau\omega]\big)\,\sin[\alpha]^2\,\sin[\tau\omega]^2\big)}\Big)\Big)\Big/$$
$$\Big(32\,N0\,\big(1 + \cos[2\alpha]\big)\,\sqrt{\big(N0^2\,\big(6 + 2\cos[2\alpha] - 2\cos[2\tau\omega] + \cos[2\alpha - 2\tau\omega] + \cos[2\alpha + 2\tau\omega]\big)\,\sin[\alpha]^2\,\sin[\tau\omega]^2\big)\big)} -$$
$$\Big(i\cos[\alpha]\cot[\alpha]\csc[\tau\omega]^2\,\big(4\,N0 - 2\,N0\cos[2\tau\omega] + N0\cos[2\alpha - 2\tau\omega] + N0\cos[2\alpha + 2\tau\omega] - 2\,N0\cos[\alpha - \tau\omega]^2\,\sec[\alpha]^2 - 2\,N0\cos[2\alpha]\cos[\alpha - \tau\omega]^2\,\sec[\alpha]^2 - 2\,N0\sec[\alpha]^2\sin[\tau\omega]^2 - 2\,N0\cos[2\alpha]\sec[\alpha]^2\sin[\tau\omega]^2 + 2\sqrt{2}\,\sqrt{\big(-N0^2\,\big(-6 - 2\cos[2\alpha] + 2\cos[2\tau\omega] - \cos[2\alpha - 2\tau\omega] - \cos[2\alpha + 2\tau\omega]\big)\,\sin[\alpha]^2\,\sin[\tau\omega]^2\big)}\big)\Big)\Big/$$
$$\sqrt{\Big(\frac{1}{1 + \cos[2\alpha]}\big(-2 + 4\,N0 - 2\cos[2\alpha] - 2\,N0\cos[2\tau\omega] + N0\cos[2\alpha - 2\tau\omega] +$$

$$\begin{aligned}
&\mathrm{N0}\,\mathrm{Cos}[2\alpha+2\tau\omega]+2\sqrt{2}\,\sqrt{\left(\mathrm{N0}^2\left(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2\tau\omega]+\right.\right.}\\
&\qquad\left.\left.\mathrm{Cos}[2\alpha-2\tau\omega]+\mathrm{Cos}[2\alpha+2\tau\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\right)}\Bigg)\Bigg)\Bigg/\\
&\Bigg(\left(-4\,\mathrm{N0}+2\,\mathrm{N0}\,\mathrm{Cos}[2\tau\omega]-\mathrm{N0}\,\mathrm{Cos}[2\alpha-2\tau\omega]-\mathrm{N0}\,\mathrm{Cos}[2\alpha+2\tau\omega]+\right.\\
&\quad 2\,\mathrm{N0}\,\mathrm{Cos}[\alpha-\tau\omega]^2\,\mathrm{Sec}[\alpha]^2+2\,\mathrm{N0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Cos}[\alpha-\tau\omega]^2\,\mathrm{Sec}[\alpha]^2+2\,\mathrm{N0}\,\mathrm{Sec}[\alpha]^2\\
&\quad\left.\mathrm{Sin}[\tau\omega]^2+2\,\mathrm{N0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2+2\sqrt{2}\,\sqrt{\left(\mathrm{N0}^2\left(6+2\,\mathrm{Cos}[2\alpha]-\right.\right.\right.\right.\\
&\qquad\left.\left.\left.\left.2\,\mathrm{Cos}[2\tau\omega]+\mathrm{Cos}[2\alpha-2\tau\omega]+\mathrm{Cos}[2\alpha+2\tau\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\right)}\right)\Bigg)\Bigg/\\
&\left(32\,\mathrm{N0}\left(1+\mathrm{Cos}[2\alpha]\right)\sqrt{\left(\mathrm{N0}^2\left(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2\tau\omega]+\mathrm{Cos}[2\alpha-2\tau\omega]+\right.\right.\right.\\
&\qquad\left.\left.\left.\mathrm{Cos}[2\alpha+2\tau\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\right)}\right)\Bigg)\Bigg)+\\
&\mathrm{Cos}\left[\frac{1}{4}\left(\pi+2\,\delta\right)\right]\Bigg(\mathrm{Cos}[\alpha-\tau\omega]\,\mathrm{Sec}[\alpha]\Bigg(\Bigg(\Bigg(\left(-4\,\mathrm{N0}+2\,\mathrm{N0}\,\mathrm{Cos}[2\tau\omega]-\mathrm{N0}\,\mathrm{Cos}[2\alpha-2\tau\omega]-\right.\\
&\quad\mathrm{N0}\,\mathrm{Cos}[2\alpha+2\tau\omega]+2\,\mathrm{N0}\,\mathrm{Cos}[\alpha-\tau\omega]^2\,\mathrm{Sec}[\alpha]^2+\\
&\quad 2\,\mathrm{N0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Cos}[\alpha-\tau\omega]^2\,\mathrm{Sec}[\alpha]^2+2\,\mathrm{N0}\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2+\\
&\quad 2\,\mathrm{N0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2+2\sqrt{2}\,\sqrt{\left(-\mathrm{N0}^2\left(-6-2\,\mathrm{Cos}[2\alpha]+\right.\right.}\\
&\qquad\left.\left.2\,\mathrm{Cos}[2\tau\omega]-\mathrm{Cos}[2\alpha-2\tau\omega]-\mathrm{Cos}[2\alpha+2\tau\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\right)}\Bigg)\\
&\quad\sqrt{\left(\frac{1}{1+\mathrm{Cos}[2\alpha]}\left(-2+4\,\mathrm{N0}-2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{N0}\,\mathrm{Cos}[2\tau\omega]+\mathrm{N0}\,\mathrm{Cos}[2\alpha-2\tau\omega]+\right.\right.\\
&\qquad\mathrm{N0}\,\mathrm{Cos}[2\alpha+2\tau\omega]-2\sqrt{2}\,\sqrt{\left(\mathrm{N0}^2\left(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2\tau\omega]+\right.\right.}\\
&\qquad\left.\left.\left.\left.\mathrm{Cos}[2\alpha-2\tau\omega]+\mathrm{Cos}[2\alpha+2\tau\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\right)}\right)\Bigg)\Bigg)\Bigg/\\
&\left(8\sqrt{\left(\mathrm{N0}^2\left(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2\tau\omega]+\mathrm{Cos}[2\alpha-2\tau\omega]+\mathrm{Cos}[2\alpha+2\tau\omega]\right)\right.}\right.\\
&\qquad\left.\left.\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\right)}\right)+\\
&\Bigg(\Bigg(\left(4\,\mathrm{N0}-2\,\mathrm{N0}\,\mathrm{Cos}[2\tau\omega]+\mathrm{N0}\,\mathrm{Cos}[2\alpha-2\tau\omega]+\mathrm{N0}\,\mathrm{Cos}[2\alpha+2\tau\omega]-2\,\mathrm{N0}\,\mathrm{Cos}[\alpha-\tau\omega]^2\right.\\
&\quad\mathrm{Sec}[\alpha]^2-2\,\mathrm{N0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Cos}[\alpha-\tau\omega]^2\,\mathrm{Sec}[\alpha]^2-2\,\mathrm{N0}\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2-\\
&\quad 2\,\mathrm{N0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2+2\sqrt{2}\,\sqrt{\left(-\mathrm{N0}^2\left(-6-2\,\mathrm{Cos}[2\alpha]+\right.\right.}\\
&\qquad\left.\left.2\,\mathrm{Cos}[2\tau\omega]-\mathrm{Cos}[2\alpha-2\tau\omega]-\mathrm{Cos}[2\alpha+2\tau\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\right)}\Bigg)\\
&\quad\sqrt{\left(\frac{1}{1+\mathrm{Cos}[2\alpha]}\left(-2+4\,\mathrm{N0}-2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{N0}\,\mathrm{Cos}[2\tau\omega]+\mathrm{N0}\,\mathrm{Cos}[2\alpha-2\tau\omega]+\right.\right.}\\
&\qquad\mathrm{N0}\,\mathrm{Cos}[2\alpha+2\tau\omega]+2\sqrt{2}\,\sqrt{\left(\mathrm{N0}^2\left(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2\tau\omega]+\right.\right.}\\
&\qquad\left.\left.\left.\left.\mathrm{Cos}[2\alpha-2\tau\omega]+\mathrm{Cos}[2\alpha+2\tau\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\right)}\right)\Bigg)\Bigg)\Bigg/\\
&\left(8\sqrt{\left(\mathrm{N0}^2\left(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2\tau\omega]+\mathrm{Cos}[2\alpha-2\tau\omega]+\mathrm{Cos}[2\alpha+2\tau\omega]\right)\right.}\right.\\
&\qquad\left.\left.\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\right)}\right)\Bigg)-\\
&\mathrm{i}\,\mathrm{Sec}[\alpha]\,\mathrm{Sin}[\tau\omega]\Bigg(\Bigg(\Bigg(\mathrm{i}\,\mathrm{Cos}[\alpha]\,\mathrm{Cot}[\alpha]\,\mathrm{Csc}[\tau\omega]^2\left(-4\,\mathrm{N0}+2\,\mathrm{N0}\,\mathrm{Cos}[2\tau\omega]-\right.\\
&\quad\mathrm{N0}\,\mathrm{Cos}[2\alpha-2\tau\omega]-\mathrm{N0}\,\mathrm{Cos}[2\alpha+2\tau\omega]+2\,\mathrm{N0}\,\mathrm{Cos}[\alpha-\tau\omega]^2\,\mathrm{Sec}[\alpha]^2+\\
&\quad 2\,\mathrm{N0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Cos}[\alpha-\tau\omega]^2\,\mathrm{Sec}[\alpha]^2+2\,\mathrm{N0}\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2+\\
&\quad 2\,\mathrm{N0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2+2\sqrt{2}\,\sqrt{\left(-\mathrm{N0}^2\left(-6-2\,\mathrm{Cos}[2\alpha]+\right.\right.}\\
&\qquad\left.\left.2\,\mathrm{Cos}[2\tau\omega]-\mathrm{Cos}[2\alpha-2\tau\omega]-\mathrm{Cos}[2\alpha+2\tau\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\right)}\Bigg)
\end{aligned}$$

$$\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,\text{N0}-2\,\text{Cos}[2\,\alpha]-2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\right.\right.}$$
$$\left.\left.\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]-2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\right)\right)$$
$$\left(4\,\text{N0}-2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]-\right.$$
$$2\,\text{N0}\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{N0}\,\text{Sec}[\alpha]^2$$
$$\text{Sin}[\tau\,\omega]^2-2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\,\alpha]-\right.\right.}$$
$$\left.\left.\left.2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\right)\Big/$$
$$\left(32\,\text{N0}\left(1+\text{Cos}[2\,\alpha]\right)\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\right.\right.\right.$$
$$\left.\left.\left.\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\right)-$$
$$\left(\mathrm{i}\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[\tau\,\omega]^2\left(4\,\text{N0}-2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\right.\right.$$
$$\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]-2\,\text{N0}\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2-$$
$$2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{N0}\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2-$$
$$2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+2\sqrt{2}\,\sqrt{\left(-\text{N0}^2\left(-6-2\,\text{Cos}[2\,\alpha]+\right.\right.}$$
$$\left.\left.\left.2\,\text{Cos}[2\,\tau\,\omega]-\text{Cos}[2\,\alpha-2\,\tau\,\omega]-\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\right)$$
$$\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,\text{N0}-2\,\text{Cos}[2\,\alpha]-2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\right.\right.}$$
$$\left.\left.\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]+2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\right)\right)$$
$$\left(-4\,\text{N0}+2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]-\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]-\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]+\right.$$
$$2\,\text{N0}\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{N0}\,\text{Sec}[\alpha]^2$$
$$\text{Sin}[\tau\,\omega]^2+2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\,\alpha]-\right.\right.}$$
$$\left.\left.\left.2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\right)\Big/$$
$$\left(32\,\text{N0}\left(1+\text{Cos}[2\,\alpha]\right)\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\right.\right.\right.$$
$$\left.\left.\left.\left.\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\right)\right)\Big\},$$

$$\left\{\text{Cos}\left[\frac{1}{4}\left(\pi+2\,\delta\right)\right]\left(-\mathrm{i}\,\text{Sec}[\alpha]\,\text{Sin}[\tau\,\omega]\left(\left(\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,\text{N0}-2\,\text{Cos}[2\,\alpha]-2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]+\right.\right.\right.\right.\right.}$$
$$\left.\left.\left.\left.\left.\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]-2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\,\alpha]-\right.\right.\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\left.\left.2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\right)\right)\right)$$
$$\left(4\,\text{N0}-2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]-\right.$$
$$2\,\text{N0}\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{N0}\,\text{Sec}[\alpha]^2$$
$$\text{Sin}[\tau\,\omega]^2-2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\,\alpha]-\right.\right.}$$
$$\left.\left.\left.2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\right)\Big/$$
$$\left(8\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\right.\right.}$$
$$\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\right)+$$

$$\left(\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\left(-2+4\,\text{N0}-2\,\text{Cos}[2\alpha]-2\,\text{N0}\,\text{Cos}[2\tau\omega]+\text{N0}\,\text{Cos}[2\alpha-2\tau\omega]+\right.\right.\right.$$
$$\left.\left.\left.\text{N0}\,\text{Cos}[2\alpha+2\tau\omega]+2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\right.\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\left.\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)\right)$$
$$\left(-4\,\text{N0}+2\,\text{N0}\,\text{Cos}[2\tau\omega]-\text{N0}\,\text{Cos}[2\alpha-2\tau\omega]-\text{N0}\,\text{Cos}[2\alpha+2\tau\omega]+\right.$$
$$2\,\text{N0}\,\text{Cos}[\alpha-\tau\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{N0}\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-\tau\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{N0}\,\text{Sec}[\alpha]^2$$
$$\text{Sin}[\tau\omega]^2+2\,\text{N0}\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\omega]^2+2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-\right.\right.}$$
$$\left.\left.\left.2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)\Big/$$
$$\left(8\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\right.\right.$$
$$\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)+$$
$$\text{Cos}[\alpha-\tau\omega]\,\text{Sec}[\alpha]\left(-\left(\left(\text{i}\,\text{N0}\left(1+\text{Cos}[2\alpha]\right)\text{Sec}[\alpha]\,\text{Sin}[\tau\omega]^2\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\right.}\right.\right.\right.$$
$$\left(-2+4\,\text{N0}-2\,\text{Cos}[2\alpha]-2\,\text{N0}\,\text{Cos}[2\tau\omega]+\text{N0}\,\text{Cos}[2\alpha-2\tau\omega]+\right.$$
$$\text{N0}\,\text{Cos}[2\alpha+2\tau\omega]-2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\right.\right.}$$
$$\left.\left.\left.\left.\left.\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)\right)\text{Tan}[\alpha]\Big)\Big/$$
$$\left(2\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\right.\right.$$
$$\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)+$$
$$\left(\text{i}\,\text{N0}\left(1+\text{Cos}[2\alpha]\right)\text{Sec}[\alpha]\,\text{Sin}[\tau\omega]^2\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\left(-2+4\,\text{N0}-2\,\text{Cos}[2\alpha]-\right.\right.\right.$$
$$2\,\text{N0}\,\text{Cos}[2\tau\omega]+\text{N0}\,\text{Cos}[2\alpha-2\tau\omega]+\text{N0}\,\text{Cos}[2\alpha+2\tau\omega]+$$
$$2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\right.\right.}$$
$$\left.\left.\left.\left.\left.\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)\right)\text{Tan}[\alpha]\Big)\Big/$$
$$\left(2\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\right.\right.$$
$$\left.\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)\right)-\text{i}\,\text{Sin}\left[\frac{1}{4}\left(\pi+2\,\delta\right)\right]$$
$$\left(\text{Cos}[\alpha+\tau\omega]\,\text{Sec}[\alpha]\left(\left(\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\left(-2+4\,\text{N0}-2\,\text{Cos}[2\alpha]-2\,\text{N0}\,\text{Cos}[2\tau\omega]+\right.\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\left.\text{N0}\,\text{Cos}[2\alpha-2\tau\omega]+\text{N0}\,\text{Cos}[2\alpha+2\tau\omega]-2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-\right.\right.\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\left.\left.2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)\right)\right)$$
$$\left(4\,\text{N0}-2\,\text{N0}\,\text{Cos}[2\tau\omega]+\text{N0}\,\text{Cos}[2\alpha-2\tau\omega]+\text{N0}\,\text{Cos}[2\alpha+2\tau\omega]-\right.$$
$$2\,\text{N0}\,\text{Cos}[\alpha-\tau\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{N0}\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-\tau\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{N0}\,\text{Sec}[\alpha]^2$$
$$\text{Sin}[\tau\omega]^2-2\,\text{N0}\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\omega]^2+2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-\right.\right.}$$
$$\left.\left.\left.2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)\Big/$$
$$\left(8\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\right.\right.$$
$$\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)+$$

$$\left(\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\left(-2+4\,\text{N0}-2\,\text{Cos}[2\alpha]-2\,\text{N0}\,\text{Cos}[2\tau\omega]+\text{N0}\,\text{Cos}[2\alpha-2\tau\omega]+\right.\right.\right.$$
$$\left.\left.\left.\text{N0}\,\text{Cos}[2\alpha+2\tau\omega]+2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\right.\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\left.\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)\right)$$
$$\left(-4\,\text{N0}+2\,\text{N0}\,\text{Cos}[2\tau\omega]-\text{N0}\,\text{Cos}[2\alpha-2\tau\omega]-\text{N0}\,\text{Cos}[2\alpha+2\tau\omega]+\right.$$
$$2\,\text{N0}\,\text{Cos}[\alpha-\tau\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{N0}\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-\tau\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{N0}\,\text{Sec}[\alpha]^2$$
$$\text{Sin}[\tau\omega]^2+2\,\text{N0}\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\omega]^2+2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-\right.\right.}$$
$$\left.\left.\left.\left.2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)\Bigg)\Bigg/$$
$$\left(8\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\right.\right.$$
$$\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)\Bigg)-$$
$$i\,\text{Sec}[\alpha]\,\text{Sin}[\tau\omega]\left(-\left(\left(i\,\text{N0}\left(1+\text{Cos}[2\alpha]\right)\text{Sec}[\alpha]\,\text{Sin}[\tau\omega]^2\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\right.}\right.\right.\right.$$
$$\left(-2+4\,\text{N0}-2\,\text{Cos}[2\alpha]-2\,\text{N0}\,\text{Cos}[2\tau\omega]+\text{N0}\,\text{Cos}[2\alpha-2\tau\omega]+\right.$$
$$\text{N0}\,\text{Cos}[2\alpha+2\tau\omega]-2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\right.\right.}$$
$$\left.\left.\left.\left.\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)\text{Tan}[\alpha]\Bigg)\Bigg/$$
$$\left(2\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\right.\right.$$
$$\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)\Bigg)+$$
$$\left(i\,\text{N0}\left(1+\text{Cos}[2\alpha]\right)\text{Sec}[\alpha]\,\text{Sin}[\tau\omega]^2\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\left(-2+4\,\text{N0}-2\,\text{Cos}[2\alpha]-\right.\right.\right.$$
$$2\,\text{N0}\,\text{Cos}[2\tau\omega]+\text{N0}\,\text{Cos}[2\alpha-2\tau\omega]+\text{N0}\,\text{Cos}[2\alpha+2\tau\omega]+$$
$$2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\right.\right.}$$
$$\left.\left.\left.\left.\left.\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)\text{Tan}[\alpha]\Bigg)\Bigg/$$
$$\left(2\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\right.\right.$$
$$\left.\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)\Bigg)\Bigg)\Bigg\}\Bigg\}$$

Out[27]=
$$\left\{\left\{-i\,e^{i\phi}\,\text{Sin}\left[\frac{\pi+\sigma}{4}\right]\right.\right.$$
$$\left(-i\,\text{Sec}[\alpha]\,\text{Sin}[\tau\omega]\left(\left(\left(-4\,\text{N0}+2\,\text{N0}\,\text{Cos}[2\tau\omega]-\text{N0}\,\text{Cos}[2\alpha-2\tau\omega]-\text{N0}\,\text{Cos}[2\alpha+2\tau\omega]+\right.\right.\right.\right.$$
$$2\,\text{N0}\,\text{Cos}[\alpha-\tau\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{N0}\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-\tau\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{N0}\,\text{Sec}[\alpha]^2$$
$$\text{Sin}[\tau\omega]^2+2\,\text{N0}\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\omega]^2+2\sqrt{2}\,\sqrt{\left(-\text{N0}^2\left(-6-2\,\text{Cos}[2\alpha]+\right.\right.}$$
$$\left.\left.\left.\left.2\,\text{Cos}[2\tau\omega]-\text{Cos}[2\alpha-2\tau\omega]-\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)$$
$$\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\left(-2+4\,\text{N0}-2\,\text{Cos}[2\alpha]-2\,\text{N0}\,\text{Cos}[2\tau\omega]+\text{N0}\,\text{Cos}[2\alpha-2\tau\omega]+\right.\right.}$$
$$\text{N0}\,\text{Cos}[2\alpha+2\tau\omega]-2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\right.\right.}$$
$$\left.\left.\left.\left.\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)\Bigg)\Bigg/$$

$$\left(8\sqrt{\left(N0^2\left(6+2\cos[2\alpha]-2\cos[2\tau\omega]+\cos[2\alpha-2\tau\omega]+\cos[2\alpha+2\tau\omega]\right)\sin[\alpha]^2\sin[\tau\omega]^2\right)}+\left(\left(4N0-2N0\cos[2\tau\omega]+N0\cos[2\alpha-2\tau\omega]+N0\cos[2\alpha+2\tau\omega]-2N0\cos[\alpha-\tau\omega]^2\sec[\alpha]^2-2N0\cos[2\alpha]\cos[\alpha-\tau\omega]^2\sec[\alpha]^2-2N0\sec[\alpha]^2\sin[\tau\omega]^2-2N0\cos[2\alpha]\sec[\alpha]^2\sin[\tau\omega]^2+2\sqrt{2}\sqrt{\left(-N0^2\left(-6-2\cos[2\alpha]+2\cos[2\tau\omega]-\cos[2\alpha-2\tau\omega]-\cos[2\alpha+2\tau\omega]\right)\sin[\alpha]^2\sin[\tau\omega]^2\right)}\right)\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4N0-2\cos[2\alpha]-2N0\cos[2\tau\omega]+N0\cos[2\alpha-2\tau\omega]+N0\cos[2\alpha+2\tau\omega]+2\sqrt{2}\sqrt{\left(N0^2\left(6+2\cos[2\alpha]-2\cos[2\tau\omega]+\cos[2\alpha-2\tau\omega]+\cos[2\alpha+2\tau\omega]\right)\sin[\alpha]^2\sin[\tau\omega]^2\right)}\right)\right)}\Big/\left(8\sqrt{\left(N0^2\left(6+2\cos[2\alpha]-2\cos[2\tau\omega]+\cos[2\alpha-2\tau\omega]+\cos[2\alpha+2\tau\omega]\right)\sin[\alpha]^2\sin[\tau\omega]^2\right)}\right)\right)+\cos[\alpha+\tau\omega]\sec[\alpha]\left(\left(i\cos[\alpha]\cot[\alpha]\csc[\tau\omega]^2\left(-4N0+2N0\cos[2\tau\omega]-N0\cos[2\alpha-2\tau\omega]-N0\cos[2\alpha+2\tau\omega]+2N0\cos[\alpha-\tau\omega]^2\sec[\alpha]^2+2N0\cos[2\alpha]\cos[\alpha-\tau\omega]^2\sec[\alpha]^2+2N0\sec[\alpha]^2\sin[\tau\omega]^2+2N0\cos[2\alpha]\sec[\alpha]^2\sin[\tau\omega]^2+2\sqrt{2}\sqrt{\left(-N0^2\left(-6-2\cos[2\alpha]+2\cos[2\tau\omega]-\cos[2\alpha-2\tau\omega]-\cos[2\alpha+2\tau\omega]\right)\sin[\alpha]^2\sin[\tau\omega]^2\right)}\right)\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4N0-2\cos[2\alpha]-2N0\cos[2\tau\omega]+N0\cos[2\alpha-2\tau\omega]+N0\cos[2\alpha+2\tau\omega]-2\sqrt{2}\sqrt{\left(N0^2\left(6+2\cos[2\alpha]-2\cos[2\tau\omega]+\cos[2\alpha-2\tau\omega]+\cos[2\alpha+2\tau\omega]\right)\sin[\alpha]^2\sin[\tau\omega]^2\right)}\right)\right)}\left(4N0-2N0\cos[2\tau\omega]+N0\cos[2\alpha-2\tau\omega]+N0\cos[2\alpha+2\tau\omega]-2N0\cos[\alpha-\tau\omega]^2\sec[\alpha]^2-2N0\cos[2\alpha]\cos[\alpha-\tau\omega]^2\sec[\alpha]^2-2N0\sec[\alpha]^2\sin[\tau\omega]^2-2N0\cos[2\alpha]\sec[\alpha]^2\sin[\tau\omega]^2+2\sqrt{2}\sqrt{\left(N0^2\left(6+2\cos[2\alpha]-2\cos[2\tau\omega]+\cos[2\alpha-2\tau\omega]+\cos[2\alpha+2\tau\omega]\right)\sin[\alpha]^2\sin[\tau\omega]^2\right)}\right)\Big/\left(32N0\left(1+\cos[2\alpha]\right)\sqrt{\left(N0^2\left(6+2\cos[2\alpha]-2\cos[2\tau\omega]+\cos[2\alpha-2\tau\omega]+\cos[2\alpha+2\tau\omega]\right)\sin[\alpha]^2\sin[\tau\omega]^2\right)}-\left(i\cos[\alpha]\cot[\alpha]\csc[\tau\omega]^2\left(4N0-2N0\cos[2\tau\omega]+N0\cos[2\alpha-2\tau\omega]+N0\cos[2\alpha+2\tau\omega]-2N0\cos[\alpha-\tau\omega]^2\sec[\alpha]^2-2N0\cos[2\alpha]\cos[\alpha-\tau\omega]^2\sec[\alpha]^2-2N0\sec[\alpha]^2\sin[\tau\omega]^2-2N0\cos[2\alpha]\sec[\alpha]^2\sin[\tau\omega]^2+2\sqrt{2}\sqrt{\left(-N0^2\left(-6-2\cos[2\alpha]+2\cos[2\tau\omega]-\cos[2\alpha-2\tau\omega]-\cos[2\alpha+2\tau\omega]\right)\sin[\alpha]^2\sin[\tau\omega]^2\right)}\right)\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4N0-2\cos[2\alpha]-2N0\cos[2\tau\omega]+N0\cos[2\alpha-2\tau\omega]+N0\cos[2\alpha+2\tau\omega]+2\sqrt{2}\sqrt{\left(N0^2\left(6+2\cos[2\alpha]-2\cos[2\tau\omega]+\right.\right.\right.\right.$$

$$\text{Cos}[2\alpha - 2\tau\omega] + \text{Cos}[2\alpha + 2\tau\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\big)\big)\Big)$$

$$\Big(-4\,\text{N0} + 2\,\text{N0}\,\text{Cos}[2\tau\omega] - \text{N0}\,\text{Cos}[2\alpha - 2\tau\omega] - \text{N0}\,\text{Cos}[2\alpha + 2\tau\omega] +$$
$$2\,\text{N0}\,\text{Cos}[\alpha - \tau\omega]^2\,\text{Sec}[\alpha]^2 + 2\,\text{N0}\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha - \tau\omega]^2\,\text{Sec}[\alpha]^2 + 2\,\text{N0}\,\text{Sec}[\alpha]^2$$
$$\text{Sin}[\tau\omega]^2 + 2\,\text{N0}\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\omega]^2 + 2\sqrt{2}\,\sqrt{\big(\text{N0}^2\,\big(6 + 2\,\text{Cos}[2\alpha] -$$
$$2\,\text{Cos}[2\tau\omega] + \text{Cos}[2\alpha - 2\tau\omega] + \text{Cos}[2\alpha + 2\tau\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\big)\big)\Big)\Big/$$
$$\Big(32\,\text{N0}\,\big(1 + \text{Cos}[2\alpha]\big)\,\sqrt{\big(\text{N0}^2\,\big(6 + 2\,\text{Cos}[2\alpha] - 2\,\text{Cos}[2\tau\omega] + \text{Cos}[2\alpha - 2\tau\omega] +$$
$$\text{Cos}[2\alpha + 2\tau\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\big)\big)\Big)\Big) +$$

$$\text{Cos}\Big[\frac{\pi + \sigma}{4}\Big]\,\Big(\text{Cos}[\alpha - \tau\omega]\,\text{Sec}[\alpha]\,\Big(\Big(\Big(-4\,\text{N0} + 2\,\text{N0}\,\text{Cos}[2\tau\omega] - \text{N0}\,\text{Cos}[2\alpha - 2\tau\omega] -$$
$$\text{N0}\,\text{Cos}[2\alpha + 2\tau\omega] + 2\,\text{N0}\,\text{Cos}[\alpha - \tau\omega]^2\,\text{Sec}[\alpha]^2 +$$
$$2\,\text{N0}\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha - \tau\omega]^2\,\text{Sec}[\alpha]^2 + 2\,\text{N0}\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\omega]^2 +$$
$$2\,\text{N0}\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\omega]^2 + 2\sqrt{2}\,\sqrt{\big(-\text{N0}^2\,\big(-6 - 2\,\text{Cos}[2\alpha] +$$
$$2\,\text{Cos}[2\tau\omega] - \text{Cos}[2\alpha - 2\tau\omega] - \text{Cos}[2\alpha + 2\tau\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\big)\Big)$$
$$\sqrt{\Big(\frac{1}{1 + \text{Cos}[2\alpha]}\Big(-2 + 4\,\text{N0} - 2\,\text{Cos}[2\alpha] - 2\,\text{N0}\,\text{Cos}[2\tau\omega] + \text{N0}\,\text{Cos}[2\alpha - 2\tau\omega] +$$
$$\text{N0}\,\text{Cos}[2\alpha + 2\tau\omega] - 2\sqrt{2}\,\sqrt{\big(\text{N0}^2\,\big(6 + 2\,\text{Cos}[2\alpha] - 2\,\text{Cos}[2\tau\omega] +$$
$$\text{Cos}[2\alpha - 2\tau\omega] + \text{Cos}[2\alpha + 2\tau\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\big)\big)\Big)\Big)\Big/$$
$$\Big(8\,\sqrt{\big(\text{N0}^2\,\big(6 + 2\,\text{Cos}[2\alpha] - 2\,\text{Cos}[2\tau\omega] + \text{Cos}[2\alpha - 2\tau\omega] + \text{Cos}[2\alpha + 2\tau\omega]\big)$$
$$\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\big)\big) +$$
$$\Big(\Big(4\,\text{N0} - 2\,\text{N0}\,\text{Cos}[2\tau\omega] + \text{N0}\,\text{Cos}[2\alpha - 2\tau\omega] + \text{N0}\,\text{Cos}[2\alpha + 2\tau\omega] - 2\,\text{N0}\,\text{Cos}[\alpha - \tau\omega]^2$$
$$\text{Sec}[\alpha]^2 - 2\,\text{N0}\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha - \tau\omega]^2\,\text{Sec}[\alpha]^2 - 2\,\text{N0}\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\omega]^2 -$$
$$2\,\text{N0}\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\omega]^2 + 2\sqrt{2}\,\sqrt{\big(-\text{N0}^2\,\big(-6 - 2\,\text{Cos}[2\alpha] +$$
$$2\,\text{Cos}[2\tau\omega] - \text{Cos}[2\alpha - 2\tau\omega] - \text{Cos}[2\alpha + 2\tau\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\big)\Big)$$
$$\sqrt{\Big(\frac{1}{1 + \text{Cos}[2\alpha]}\Big(-2 + 4\,\text{N0} - 2\,\text{Cos}[2\alpha] - 2\,\text{N0}\,\text{Cos}[2\tau\omega] + \text{N0}\,\text{Cos}[2\alpha - 2\tau\omega] +$$
$$\text{N0}\,\text{Cos}[2\alpha + 2\tau\omega] + 2\sqrt{2}\,\sqrt{\big(\text{N0}^2\,\big(6 + 2\,\text{Cos}[2\alpha] - 2\,\text{Cos}[2\tau\omega] +$$
$$\text{Cos}[2\alpha - 2\tau\omega] + \text{Cos}[2\alpha + 2\tau\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\big)\big)\Big)\Big)\Big/$$
$$\Big(8\,\sqrt{\big(\text{N0}^2\,\big(6 + 2\,\text{Cos}[2\alpha] - 2\,\text{Cos}[2\tau\omega] + \text{Cos}[2\alpha - 2\tau\omega] + \text{Cos}[2\alpha + 2\tau\omega]\big)$$
$$\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\big)\big)\Big)\Big) -$$

$$\mathrm{i}\,\text{Sec}[\alpha]\,\text{Sin}[\tau\omega]\,\Big(\Big(\mathrm{i}\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[\tau\omega]^2\,\Big(-4\,\text{N0} + 2\,\text{N0}\,\text{Cos}[2\tau\omega] -$$
$$\text{N0}\,\text{Cos}[2\alpha - 2\tau\omega] - \text{N0}\,\text{Cos}[2\alpha + 2\tau\omega] + 2\,\text{N0}\,\text{Cos}[\alpha - \tau\omega]^2\,\text{Sec}[\alpha]^2 +$$
$$2\,\text{N0}\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha - \tau\omega]^2\,\text{Sec}[\alpha]^2 + 2\,\text{N0}\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\omega]^2 +$$
$$2\,\text{N0}\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\omega]^2 + 2\sqrt{2}\,\sqrt{\big(-\text{N0}^2\,\big(-6 - 2\,\text{Cos}[2\alpha] +$$
$$2\,\text{Cos}[2\tau\omega] - \text{Cos}[2\alpha - 2\tau\omega] - \text{Cos}[2\alpha + 2\tau\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\big)\Big)$$

$$\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,\text{N0}-2\,\text{Cos}[2\,\alpha]-2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\right.\right.}$$
$$\left.\left.\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]-2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\right)\right)$$
$$\left(4\,\text{N0}-2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]-\right.$$
$$2\,\text{N0}\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{N0}\,\text{Sec}[\alpha]^2$$
$$\text{Sin}[\tau\,\omega]^2-2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\,\alpha]-\right.\right.}$$
$$\left.\left.\left.2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\right)\Big/$$
$$\left(32\,\text{N0}\left(1+\text{Cos}[2\,\alpha]\right)\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\right.\right.\right.$$
$$\left.\left.\left.\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\right)-$$
$$\left(\text{i}\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[\tau\,\omega]^2\left(4\,\text{N0}-2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\right.\right.$$
$$\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]-2\,\text{N0}\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2-$$
$$2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{N0}\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2-$$
$$2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+2\sqrt{2}\,\sqrt{\left(-\text{N0}^2\left(-6-2\,\text{Cos}[2\,\alpha]+\right.\right.}$$
$$\left.\left.\left.\left.2\,\text{Cos}[2\,\tau\,\omega]-\text{Cos}[2\,\alpha-2\,\tau\,\omega]-\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\right)$$
$$\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,\text{N0}-2\,\text{Cos}[2\,\alpha]-2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\right.\right.}$$
$$\left.\left.\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]+2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\right)\right)$$
$$\left(-4\,\text{N0}+2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]-\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]-\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]+\right.$$
$$2\,\text{N0}\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{N0}\,\text{Sec}[\alpha]^2$$
$$\text{Sin}[\tau\,\omega]^2+2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\,\alpha]-\right.\right.}$$
$$\left.\left.\left.2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\right)\Big/$$
$$\left(32\,\text{N0}\left(1+\text{Cos}[2\,\alpha]\right)\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\right.\right.\right.$$
$$\left.\left.\left.\left.\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\right)\right)\Bigg\},$$

$$\left\{\text{Cos}\left[\frac{\pi+\sigma}{4}\right]\left(-\text{i}\,\text{Sec}[\alpha]\,\text{Sin}[\tau\,\omega]\left(\left(\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,\text{N0}-2\,\text{Cos}[2\,\alpha]-2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]+\right.\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]-2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\,\alpha]-\right.\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\left.2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\right)\right)$$
$$\left(4\,\text{N0}-2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]-\right.$$
$$2\,\text{N0}\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{N0}\,\text{Sec}[\alpha]^2$$
$$\text{Sin}[\tau\,\omega]^2-2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\,\alpha]-\right.\right.}$$
$$\left.\left.\left.2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\right)\Big/$$
$$\left(8\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\right.\right.}$$
$$\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\right)+$$

$$\left(\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\left(-2+4\,\text{N0}-2\,\text{Cos}[2\alpha]-2\,\text{N0}\,\text{Cos}[2\tau\omega]+\text{N0}\,\text{Cos}[2\alpha-2\tau\omega]+\right.\right.\right.$$
$$\left.\left.\left.\text{N0}\,\text{Cos}[2\alpha+2\tau\omega]+2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\right.\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\left.\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)\right)$$
$$\left(-4\,\text{N0}+2\,\text{N0}\,\text{Cos}[2\tau\omega]-\text{N0}\,\text{Cos}[2\alpha-2\tau\omega]-\text{N0}\,\text{Cos}[2\alpha+2\tau\omega]+\right.$$
$$2\,\text{N0}\,\text{Cos}[\alpha-\tau\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{N0}\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-\tau\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{N0}\,\text{Sec}[\alpha]^2$$
$$\text{Sin}[\tau\omega]^2+2\,\text{N0}\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\omega]^2+2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-\right.\right.}$$
$$\left.\left.\left.2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)\Big/$$
$$\left(8\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\right.\right.$$
$$\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)\Bigg)+$$

$$\text{Cos}[\alpha-\tau\omega]\,\text{Sec}[\alpha]\left(-\left(\left(\left(\mathrm{i}\,\text{N0}\left(1+\text{Cos}[2\alpha]\right)\text{Sec}[\alpha]\,\text{Sin}[\tau\omega]^2\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\right.\right.\right.\right.$$
$$\left(-2+4\,\text{N0}-2\,\text{Cos}[2\alpha]-2\,\text{N0}\,\text{Cos}[2\tau\omega]+\text{N0}\,\text{Cos}[2\alpha-2\tau\omega]+\right.$$
$$\left.\left.\text{N0}\,\text{Cos}[2\alpha+2\tau\omega]-2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\left.\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)\right)\text{Tan}[\alpha]\Big)\Big/$$
$$\left(2\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\right.\right.$$
$$\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)\Bigg)+$$

$$\left(\mathrm{i}\,\text{N0}\left(1+\text{Cos}[2\alpha]\right)\text{Sec}[\alpha]\,\text{Sin}[\tau\omega]^2\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\left(-2+4\,\text{N0}-2\,\text{Cos}[2\alpha]-\right.\right.\right.$$
$$2\,\text{N0}\,\text{Cos}[2\tau\omega]+\text{N0}\,\text{Cos}[2\alpha-2\tau\omega]+\text{N0}\,\text{Cos}[2\alpha+2\tau\omega]+$$
$$2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\right.\right.\right.$$
$$\left.\left.\left.\left.\left.\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)\right)\text{Tan}[\alpha]\Big)\Big/$$
$$\left(2\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\right.\right.$$
$$\left.\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)\right)-\mathrm{i}\,\mathrm{e}^{\mathrm{i}\phi}\,\text{Sin}\left[\frac{\pi+\sigma}{4}\right]$$

$$\left(\text{Cos}[\alpha+\tau\omega]\,\text{Sec}[\alpha]\left(\left(\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\left(-2+4\,\text{N0}-2\,\text{Cos}[2\alpha]-2\,\text{N0}\,\text{Cos}[2\tau\omega]+\right.\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\left.\text{N0}\,\text{Cos}[2\alpha-2\tau\omega]+\text{N0}\,\text{Cos}[2\alpha+2\tau\omega]-2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-\right.\right.\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\left.\left.2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)\right)\right)$$
$$\left(4\,\text{N0}-2\,\text{N0}\,\text{Cos}[2\tau\omega]+\text{N0}\,\text{Cos}[2\alpha-2\tau\omega]+\text{N0}\,\text{Cos}[2\alpha+2\tau\omega]-\right.$$
$$2\,\text{N0}\,\text{Cos}[\alpha-\tau\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{N0}\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-\tau\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{N0}\,\text{Sec}[\alpha]^2$$
$$\text{Sin}[\tau\omega]^2-2\,\text{N0}\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\omega]^2+2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-\right.\right.}$$
$$\left.\left.\left.2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)\Big/$$
$$\left(8\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\right.\right.$$
$$\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)+$$

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(Sqrt[(1/(1 + Cos[2 α]))(-2 + 4 N0 - 2 Cos[2 α] - 2 N0 Cos[2 τ ω] + N0 Cos[2 α - 2 τ ω] +
        N0 Cos[2 α + 2 τ ω] + 2 Sqrt[2] Sqrt[N0^2 (6 + 2 Cos[2 α] - 2 Cos[2 τ ω] +
            Cos[2 α - 2 τ ω] + Cos[2 α + 2 τ ω]) Sin[α]^2 Sin[τ ω]^2])]
    (-4 N0 + 2 N0 Cos[2 τ ω] - N0 Cos[2 α - 2 τ ω] - N0 Cos[2 α + 2 τ ω] +
      2 N0 Cos[α - τ ω]^2 Sec[α]^2 + 2 N0 Cos[2 α] Cos[α - τ ω]^2 Sec[α]^2 + 2 N0 Sec[α]^2
       Sin[τ ω]^2 + 2 N0 Cos[2 α] Sec[α]^2 Sin[τ ω]^2 + 2 Sqrt[2] Sqrt[N0^2 (6 + 2 Cos[2 α] -
          2 Cos[2 τ ω] + Cos[2 α - 2 τ ω] + Cos[2 α + 2 τ ω]) Sin[α]^2 Sin[τ ω]^2])) /
  (8 Sqrt[N0^2 (6 + 2 Cos[2 α] - 2 Cos[2 τ ω] + Cos[2 α - 2 τ ω] + Cos[2 α + 2 τ ω])
      Sin[α]^2 Sin[τ ω]^2]) -
 i Sec[α] Sin[τ ω] (-((i N0 (1 + Cos[2 α]) Sec[α] Sin[τ ω]^2 Sqrt[(1/(1 + Cos[2 α]))
        (-2 + 4 N0 - 2 Cos[2 α] - 2 N0 Cos[2 τ ω] + N0 Cos[2 α - 2 τ ω] +
          N0 Cos[2 α + 2 τ ω] - 2 Sqrt[2] Sqrt[N0^2 (6 + 2 Cos[2 α] - 2 Cos[2 τ ω] +
              Cos[2 α - 2 τ ω] + Cos[2 α + 2 τ ω]) Sin[α]^2 Sin[τ ω]^2])] Tan[α]) /
    (2 Sqrt[N0^2 (6 + 2 Cos[2 α] - 2 Cos[2 τ ω] + Cos[2 α - 2 τ ω] + Cos[2 α + 2 τ ω])
        Sin[α]^2 Sin[τ ω]^2]) +
  (i N0 (1 + Cos[2 α]) Sec[α] Sin[τ ω]^2 Sqrt[(1/(1 + Cos[2 α]))(-2 + 4 N0 - 2 Cos[2 α] -
        2 N0 Cos[2 τ ω] + N0 Cos[2 α - 2 τ ω] + N0 Cos[2 α + 2 τ ω] +
        2 Sqrt[2] Sqrt[N0^2 (6 + 2 Cos[2 α] - 2 Cos[2 τ ω] + Cos[2 α - 2 τ ω] +
            Cos[2 α + 2 τ ω]) Sin[α]^2 Sin[τ ω]^2])] Tan[α]) /
    (2 Sqrt[N0^2 (6 + 2 Cos[2 α] - 2 Cos[2 τ ω] + Cos[2 α - 2 τ ω] + Cos[2 α + 2 τ ω])
        Sin[α]^2 Sin[τ ω]^2])}}
```

Out[28]=

```
{{-i E^(i ϕ) Sin[(1/4)(π + σ/2)]
   (-i Sec[α] Sin[τ ω] (((-4 N0 + 2 N0 Cos[2 τ ω] - N0 Cos[2 α - 2 τ ω] - N0 Cos[2 α + 2 τ ω] +
          2 N0 Cos[α - τ ω]^2 Sec[α]^2 + 2 N0 Cos[2 α] Cos[α - τ ω]^2 Sec[α]^2 + 2 N0 Sec[α]^2
           Sin[τ ω]^2 + 2 N0 Cos[2 α] Sec[α]^2 Sin[τ ω]^2 + 2 Sqrt[2] Sqrt[-N0^2 (-6 - 2 Cos[2 α] +
              2 Cos[2 τ ω] - Cos[2 α - 2 τ ω] - Cos[2 α + 2 τ ω]) Sin[α]^2 Sin[τ ω]^2])
       Sqrt[(1/(1 + Cos[2 α]))(-2 + 4 N0 - 2 Cos[2 α] - 2 N0 Cos[2 τ ω] + N0 Cos[2 α - 2 τ ω] +
          N0 Cos[2 α + 2 τ ω] - 2 Sqrt[2] Sqrt[N0^2 (6 + 2 Cos[2 α] - 2 Cos[2 τ ω] +
              Cos[2 α - 2 τ ω] + Cos[2 α + 2 τ ω]) Sin[α]^2 Sin[τ ω]^2])] /
      (2 Sqrt[N0^2 (6 + 2 Cos[2 α] - 2 Cos[2 τ ω] + Cos[2 α - 2 τ ω] + Cos[2 α + 2 τ ω])
          Sin[α]^2 Sin[τ ω]^2]) -
     (i N0 (1 + Cos[2 α]) Sec[α] Sin[τ ω]^2 Sqrt[(1/(1 + Cos[2 α]))(-2 + 4 N0 - 2 Cos[2 α] -
          2 N0 Cos[2 τ ω] + N0 Cos[2 α - 2 τ ω] + N0 Cos[2 α + 2 τ ω] +
          2 Sqrt[2] Sqrt[N0^2 (6 + 2 Cos[2 α] - 2 Cos[2 τ ω] + Cos[2 α - 2 τ ω] +
              Cos[2 α + 2 τ ω]) Sin[α]^2 Sin[τ ω]^2])] Tan[α]) /
      (2 Sqrt[N0^2 (6 + 2 Cos[2 α] - 2 Cos[2 τ ω] + Cos[2 α - 2 τ ω] + Cos[2 α + 2 τ ω])
          Sin[α]^2 Sin[τ ω]^2])
```

$$\mathrm{Cos}[2\alpha-2\tau\omega]+\mathrm{Cos}[2\alpha+2\tau\omega]\Big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\Big)\Big)\Big)\Big)\Big/$$

$$\Big(8\sqrt{\Big(\mathrm{N0}^2\,\Big(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2\tau\omega]+\mathrm{Cos}[2\alpha-2\tau\omega]+\mathrm{Cos}[2\alpha+2\tau\omega]\Big)}$$

$$\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\Big)\Big)+$$

$$\Big(\Big(4\,\mathrm{N0}-2\,\mathrm{N0}\,\mathrm{Cos}[2\tau\omega]+\mathrm{N0}\,\mathrm{Cos}[2\alpha-2\tau\omega]+\mathrm{N0}\,\mathrm{Cos}[2\alpha+2\tau\omega]-2\,\mathrm{N0}\,\mathrm{Cos}[\alpha-\tau\omega]^2$$

$$\mathrm{Sec}[\alpha]^2-2\,\mathrm{N0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Cos}[\alpha-\tau\omega]^2\,\mathrm{Sec}[\alpha]^2-2\,\mathrm{N0}\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2-$$

$$2\,\mathrm{N0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2+2\sqrt{2}\sqrt{\Big(-\mathrm{N0}^2\,\Big(-6-2\,\mathrm{Cos}[2\alpha]+}$$

$$2\,\mathrm{Cos}[2\tau\omega]-\mathrm{Cos}[2\alpha-2\tau\omega]-\mathrm{Cos}[2\alpha+2\tau\omega]\Big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\Big)\Big)$$

$$\sqrt{\Big(\frac{1}{1+\mathrm{Cos}[2\alpha]}\Big(-2+4\,\mathrm{N0}-2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{N0}\,\mathrm{Cos}[2\tau\omega]+\mathrm{N0}\,\mathrm{Cos}[2\alpha-2\tau\omega]+}$$

$$\mathrm{N0}\,\mathrm{Cos}[2\alpha+2\tau\omega]+2\sqrt{2}\sqrt{\Big(\mathrm{N0}^2\,\Big(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2\tau\omega]+}$$

$$\mathrm{Cos}[2\alpha-2\tau\omega]+\mathrm{Cos}[2\alpha+2\tau\omega]\Big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\Big)\Big)\Big)\Big/$$

$$\Big(8\sqrt{\Big(\mathrm{N0}^2\,\Big(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2\tau\omega]+\mathrm{Cos}[2\alpha-2\tau\omega]+\mathrm{Cos}[2\alpha+2\tau\omega]\Big)}$$

$$\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\Big)\Big)\Big)+$$

$$\mathrm{Cos}[\alpha+\tau\omega]\,\mathrm{Sec}[\alpha]\,\Big(\Big(\mathbb{i}\,\mathrm{Cos}[\alpha]\,\mathrm{Cot}[\alpha]\,\mathrm{Csc}[\tau\omega]^2\,\Big(-4\,\mathrm{N0}+2\,\mathrm{N0}\,\mathrm{Cos}[2\tau\omega]-$$

$$\mathrm{N0}\,\mathrm{Cos}[2\alpha-2\tau\omega]-\mathrm{N0}\,\mathrm{Cos}[2\alpha+2\tau\omega]+2\,\mathrm{N0}\,\mathrm{Cos}[\alpha-\tau\omega]^2\,\mathrm{Sec}[\alpha]^2+$$

$$2\,\mathrm{N0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Cos}[\alpha-\tau\omega]^2\,\mathrm{Sec}[\alpha]^2+2\,\mathrm{N0}\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2+$$

$$2\,\mathrm{N0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2+2\sqrt{2}\sqrt{\Big(-\mathrm{N0}^2\,\Big(-6-2\,\mathrm{Cos}[2\alpha]+}$$

$$2\,\mathrm{Cos}[2\tau\omega]-\mathrm{Cos}[2\alpha-2\tau\omega]-\mathrm{Cos}[2\alpha+2\tau\omega]\Big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\Big)\Big)$$

$$\sqrt{\Big(\frac{1}{1+\mathrm{Cos}[2\alpha]}\Big(-2+4\,\mathrm{N0}-2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{N0}\,\mathrm{Cos}[2\tau\omega]+\mathrm{N0}\,\mathrm{Cos}[2\alpha-2\tau\omega]+}$$

$$\mathrm{N0}\,\mathrm{Cos}[2\alpha+2\tau\omega]-2\sqrt{2}\sqrt{\Big(\mathrm{N0}^2\,\Big(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2\tau\omega]+}$$

$$\mathrm{Cos}[2\alpha-2\tau\omega]+\mathrm{Cos}[2\alpha+2\tau\omega]\Big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\Big)\Big)\Big)$$

$$\Big(4\,\mathrm{N0}-2\,\mathrm{N0}\,\mathrm{Cos}[2\tau\omega]+\mathrm{N0}\,\mathrm{Cos}[2\alpha-2\tau\omega]+\mathrm{N0}\,\mathrm{Cos}[2\alpha+2\tau\omega]-$$

$$2\,\mathrm{N0}\,\mathrm{Cos}[\alpha-\tau\omega]^2\,\mathrm{Sec}[\alpha]^2-2\,\mathrm{N0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Cos}[\alpha-\tau\omega]^2\,\mathrm{Sec}[\alpha]^2-2\,\mathrm{N0}\,\mathrm{Sec}[\alpha]^2$$

$$\mathrm{Sin}[\tau\omega]^2-2\,\mathrm{N0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2+2\sqrt{2}\sqrt{\Big(\mathrm{N0}^2\,\Big(6+2\,\mathrm{Cos}[2\alpha]-}$$

$$2\,\mathrm{Cos}[2\tau\omega]+\mathrm{Cos}[2\alpha-2\tau\omega]+\mathrm{Cos}[2\alpha+2\tau\omega]\Big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\Big)\Big)\Big)\Big/$$

$$\Big(32\,\mathrm{N0}\,\Big(1+\mathrm{Cos}[2\alpha]\Big)\sqrt{\Big(\mathrm{N0}^2\,\Big(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2\tau\omega]+\mathrm{Cos}[2\alpha-2\tau\omega]+}$$

$$\mathrm{Cos}[2\alpha+2\tau\omega]\Big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\Big)\Big)-$$

$$\Big(\mathbb{i}\,\mathrm{Cos}[\alpha]\,\mathrm{Cot}[\alpha]\,\mathrm{Csc}[\tau\omega]^2\,\Big(4\,\mathrm{N0}-2\,\mathrm{N0}\,\mathrm{Cos}[2\tau\omega]+\mathrm{N0}\,\mathrm{Cos}[2\alpha-2\tau\omega]+$$

$$\mathrm{N0}\,\mathrm{Cos}[2\alpha+2\tau\omega]-2\,\mathrm{N0}\,\mathrm{Cos}[\alpha-\tau\omega]^2\,\mathrm{Sec}[\alpha]^2-$$

$$2\,\mathrm{N0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Cos}[\alpha-\tau\omega]^2\,\mathrm{Sec}[\alpha]^2-2\,\mathrm{N0}\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2-$$

$$2\,\mathrm{N0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2+2\sqrt{2}\sqrt{\Big(-\mathrm{N0}^2\,\Big(-6-2\,\mathrm{Cos}[2\alpha]+}$$

$$2\,\mathrm{Cos}[2\tau\omega]-\mathrm{Cos}[2\alpha-2\tau\omega]-\mathrm{Cos}[2\alpha+2\tau\omega]\Big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\Big)\Big)$$

$$\sqrt{\Big(\frac{1}{1+\mathrm{Cos}[2\alpha]}\Big(-2+4\,\mathrm{N0}-2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{N0}\,\mathrm{Cos}[2\tau\omega]+\mathrm{N0}\,\mathrm{Cos}[2\alpha-2\tau\omega]+}$$

$$\begin{aligned}
&\mathrm{N0}\,\mathrm{Cos}[2\alpha+2\tau\omega]+2\sqrt{2}\,\sqrt{\left(\mathrm{N0}^2\left(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2\tau\omega]+\right.\right.}\\
&\qquad\left.\left.\mathrm{Cos}[2\alpha-2\tau\omega]+\mathrm{Cos}[2\alpha+2\tau\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\right)}\Bigg)\\
&\Bigg(-4\,\mathrm{N0}+2\,\mathrm{N0}\,\mathrm{Cos}[2\tau\omega]-\mathrm{N0}\,\mathrm{Cos}[2\alpha-2\tau\omega]-\mathrm{N0}\,\mathrm{Cos}[2\alpha+2\tau\omega]+\\
&\quad 2\,\mathrm{N0}\,\mathrm{Cos}[\alpha-\tau\omega]^2\,\mathrm{Sec}[\alpha]^2+2\,\mathrm{N0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Cos}[\alpha-\tau\omega]^2\,\mathrm{Sec}[\alpha]^2+2\,\mathrm{N0}\,\mathrm{Sec}[\alpha]^2\\
&\quad \mathrm{Sin}[\tau\omega]^2+2\,\mathrm{N0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2+2\sqrt{2}\,\sqrt{\left(\mathrm{N0}^2\left(6+2\,\mathrm{Cos}[2\alpha]-\right.\right.}\\
&\qquad\left.\left.2\,\mathrm{Cos}[2\tau\omega]+\mathrm{Cos}[2\alpha-2\tau\omega]+\mathrm{Cos}[2\alpha+2\tau\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\right)}\Bigg)\Bigg/\\
&\Big(32\,\mathrm{N0}\left(1+\mathrm{Cos}[2\alpha]\right)\sqrt{\left(\mathrm{N0}^2\left(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2\tau\omega]+\mathrm{Cos}[2\alpha-2\tau\omega]+\right.\right.}\\
&\qquad\left.\left.\mathrm{Cos}[2\alpha+2\tau\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\right)}\Big)\Bigg)+\\
&\mathrm{Cos}\left[\frac{1}{4}\left(\pi+\frac{\sigma}{2}\right)\right]\Bigg(\mathrm{Cos}[\alpha-\tau\omega]\,\mathrm{Sec}[\alpha]\Bigg(\Bigg(\Big(-4\,\mathrm{N0}+2\,\mathrm{N0}\,\mathrm{Cos}[2\tau\omega]-\mathrm{N0}\,\mathrm{Cos}[2\alpha-2\tau\omega]-\\
&\quad \mathrm{N0}\,\mathrm{Cos}[2\alpha+2\tau\omega]+2\,\mathrm{N0}\,\mathrm{Cos}[\alpha-\tau\omega]^2\,\mathrm{Sec}[\alpha]^2+\\
&\quad 2\,\mathrm{N0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Cos}[\alpha-\tau\omega]^2\,\mathrm{Sec}[\alpha]^2+2\,\mathrm{N0}\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2+\\
&\quad 2\,\mathrm{N0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2+2\sqrt{2}\,\sqrt{\left(-\mathrm{N0}^2\left(-6-2\,\mathrm{Cos}[2\alpha]+\right.\right.}\\
&\qquad\left.\left.2\,\mathrm{Cos}[2\tau\omega]-\mathrm{Cos}[2\alpha-2\tau\omega]-\mathrm{Cos}[2\alpha+2\tau\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\right)}\Big)\\
&\quad\sqrt{\left(\frac{1}{1+\mathrm{Cos}[2\alpha]}\left(-2+4\,\mathrm{N0}-2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{N0}\,\mathrm{Cos}[2\tau\omega]+\mathrm{N0}\,\mathrm{Cos}[2\alpha-2\tau\omega]+\right.\right.}\\
&\qquad\left.\left.\mathrm{N0}\,\mathrm{Cos}[2\alpha+2\tau\omega]-2\sqrt{2}\,\sqrt{\left(\mathrm{N0}^2\left(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2\tau\omega]+\right.\right.\right.\right.}\\
&\qquad\left.\left.\left.\left.\mathrm{Cos}[2\alpha-2\tau\omega]+\mathrm{Cos}[2\alpha+2\tau\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\right)}\right)\Bigg)\Bigg/\\
&\Big(8\sqrt{\left(\mathrm{N0}^2\left(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2\tau\omega]+\mathrm{Cos}[2\alpha-2\tau\omega]+\mathrm{Cos}[2\alpha+2\tau\omega]\right)\right.}\\
&\qquad\left.\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\right)}\Big)+\\
&\Bigg(\Big(4\,\mathrm{N0}-2\,\mathrm{N0}\,\mathrm{Cos}[2\tau\omega]+\mathrm{N0}\,\mathrm{Cos}[2\alpha-2\tau\omega]+\mathrm{N0}\,\mathrm{Cos}[2\alpha+2\tau\omega]-2\,\mathrm{N0}\,\mathrm{Cos}[\alpha-\tau\omega]^2\\
&\quad \mathrm{Sec}[\alpha]^2-2\,\mathrm{N0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Cos}[\alpha-\tau\omega]^2\,\mathrm{Sec}[\alpha]^2-2\,\mathrm{N0}\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2-\\
&\quad 2\,\mathrm{N0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2+2\sqrt{2}\,\sqrt{\left(-\mathrm{N0}^2\left(-6-2\,\mathrm{Cos}[2\alpha]+\right.\right.}\\
&\qquad\left.\left.2\,\mathrm{Cos}[2\tau\omega]-\mathrm{Cos}[2\alpha-2\tau\omega]-\mathrm{Cos}[2\alpha+2\tau\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\right)}\Big)\\
&\quad\sqrt{\left(\frac{1}{1+\mathrm{Cos}[2\alpha]}\left(-2+4\,\mathrm{N0}-2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{N0}\,\mathrm{Cos}[2\tau\omega]+\mathrm{N0}\,\mathrm{Cos}[2\alpha-2\tau\omega]+\right.\right.}\\
&\qquad\left.\left.\mathrm{N0}\,\mathrm{Cos}[2\alpha+2\tau\omega]+2\sqrt{2}\,\sqrt{\left(\mathrm{N0}^2\left(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2\tau\omega]+\right.\right.\right.\right.}\\
&\qquad\left.\left.\left.\left.\mathrm{Cos}[2\alpha-2\tau\omega]+\mathrm{Cos}[2\alpha+2\tau\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\right)}\right)\Bigg)\Bigg/\\
&\Big(8\sqrt{\left(\mathrm{N0}^2\left(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2\tau\omega]+\mathrm{Cos}[2\alpha-2\tau\omega]+\mathrm{Cos}[2\alpha+2\tau\omega]\right)\right.}\\
&\qquad\left.\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\right)}\Big)\Bigg)-\\
&\mathrm{i}\,\mathrm{Sec}[\alpha]\,\mathrm{Sin}[\tau\omega]\Bigg(\Bigg(\Big(\mathrm{i}\,\mathrm{Cos}[\alpha]\,\mathrm{Cot}[\alpha]\,\mathrm{Csc}[\tau\omega]^2\left(-4\,\mathrm{N0}+2\,\mathrm{N0}\,\mathrm{Cos}[2\tau\omega]-\right.\\
&\quad \mathrm{N0}\,\mathrm{Cos}[2\alpha-2\tau\omega]-\mathrm{N0}\,\mathrm{Cos}[2\alpha+2\tau\omega]+2\,\mathrm{N0}\,\mathrm{Cos}[\alpha-\tau\omega]^2\,\mathrm{Sec}[\alpha]^2+\\
&\quad 2\,\mathrm{N0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Cos}[\alpha-\tau\omega]^2\,\mathrm{Sec}[\alpha]^2+2\,\mathrm{N0}\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2+\\
&\quad 2\,\mathrm{N0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2+2\sqrt{2}\,\sqrt{\left(-\mathrm{N0}^2\left(-6-2\,\mathrm{Cos}[2\alpha]+\right.\right.}\\
&\qquad\left.\left.2\,\mathrm{Cos}[2\tau\omega]-\mathrm{Cos}[2\alpha-2\tau\omega]-\mathrm{Cos}[2\alpha+2\tau\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\right)}\Big)
\end{aligned}$$

$$\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\left(-2+4\,\text{N0}-2\,\text{Cos}[2\alpha]-2\,\text{N0}\,\text{Cos}[2\tau\omega]+\text{N0}\,\text{Cos}[2\alpha-2\tau\omega]+\right.\right.}$$
$$\text{N0}\,\text{Cos}[2\alpha+2\tau\omega]-2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\right.\right.}$$
$$\left.\left.\left.\left.\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)\Big)$$
$$\left(4\,\text{N0}-2\,\text{N0}\,\text{Cos}[2\tau\omega]+\text{N0}\,\text{Cos}[2\alpha-2\tau\omega]+\text{N0}\,\text{Cos}[2\alpha+2\tau\omega]-\right.$$
$$2\,\text{N0}\,\text{Cos}[\alpha-\tau\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{N0}\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-\tau\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{N0}\,\text{Sec}[\alpha]^2$$
$$\text{Sin}[\tau\omega]^2-2\,\text{N0}\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\omega]^2+2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-\right.\right.}$$
$$\left.\left.\left.\left.2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)\Big)\Big/$$
$$\left(32\,\text{N0}\left(1+\text{Cos}[2\alpha]\right)\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\right.\right.\right.}$$
$$\left.\left.\left.\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)-$$
$$\left(\mathrm{i}\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[\tau\omega]^2\left(4\,\text{N0}-2\,\text{N0}\,\text{Cos}[2\tau\omega]+\text{N0}\,\text{Cos}[2\alpha-2\tau\omega]+\right.\right.$$
$$\text{N0}\,\text{Cos}[2\alpha+2\tau\omega]-2\,\text{N0}\,\text{Cos}[\alpha-\tau\omega]^2\,\text{Sec}[\alpha]^2-$$
$$2\,\text{N0}\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-\tau\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{N0}\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\omega]^2-$$
$$2\,\text{N0}\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\omega]^2+2\sqrt{2}\,\sqrt{\left(-\text{N0}^2\left(-6-2\,\text{Cos}[2\alpha]+\right.\right.}$$
$$\left.\left.\left.\left.2\,\text{Cos}[2\tau\omega]-\text{Cos}[2\alpha-2\tau\omega]-\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)\Big)$$
$$\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\left(-2+4\,\text{N0}-2\,\text{Cos}[2\alpha]-2\,\text{N0}\,\text{Cos}[2\tau\omega]+\text{N0}\,\text{Cos}[2\alpha-2\tau\omega]+\right.\right.}$$
$$\text{N0}\,\text{Cos}[2\alpha+2\tau\omega]+2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\right.\right.}$$
$$\left.\left.\left.\left.\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)\Big)$$
$$\left(-4\,\text{N0}+2\,\text{N0}\,\text{Cos}[2\tau\omega]-\text{N0}\,\text{Cos}[2\alpha-2\tau\omega]-\text{N0}\,\text{Cos}[2\alpha+2\tau\omega]+\right.$$
$$2\,\text{N0}\,\text{Cos}[\alpha-\tau\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{N0}\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-\tau\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{N0}\,\text{Sec}[\alpha]^2$$
$$\text{Sin}[\tau\omega]^2+2\,\text{N0}\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\omega]^2+2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-\right.\right.}$$
$$\left.\left.\left.\left.2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)\Big)\Big/$$
$$\left(32\,\text{N0}\left(1+\text{Cos}[2\alpha]\right)\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\right.\right.\right.}$$
$$\left.\left.\left.\left.\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)\right)\Big\},$$
$$\left\{\text{Cos}\left[\frac{1}{4}\left(\pi+\frac{\sigma}{2}\right)\right]\left(-\mathrm{i}\,\text{Sec}[\alpha]\,\text{Sin}[\tau\omega]\left(\left(\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\left(-2+4\,\text{N0}-2\,\text{Cos}[2\alpha]-2\,\text{N0}\,\text{Cos}[2\tau\omega]+\right.\right.\right.\right.\right.}$$
$$\text{N0}\,\text{Cos}[2\alpha-2\tau\omega]+\text{N0}\,\text{Cos}[2\alpha+2\tau\omega]-2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-\right.\right.}$$
$$\left.\left.\left.\left.\left.\left.2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)\Big)\right.\right.$$
$$\left(4\,\text{N0}-2\,\text{N0}\,\text{Cos}[2\tau\omega]+\text{N0}\,\text{Cos}[2\alpha-2\tau\omega]+\text{N0}\,\text{Cos}[2\alpha+2\tau\omega]-\right.$$
$$2\,\text{N0}\,\text{Cos}[\alpha-\tau\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{N0}\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-\tau\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{N0}\,\text{Sec}[\alpha]^2$$
$$\text{Sin}[\tau\omega]^2-2\,\text{N0}\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\omega]^2+2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-\right.\right.}$$
$$\left.\left.\left.\left.2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)\Big)\Big/$$
$$\left(8\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\right.}\right.$$
$$\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)+$$

$$\left(\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\left(-2+4\,\text{N0}-2\,\text{Cos}[2\alpha]-2\,\text{N0}\,\text{Cos}[2\tau\omega]+\text{N0}\,\text{Cos}[2\alpha-2\tau\omega]+\right.\right.\right.$$
$$\left.\left.\left.\text{N0}\,\text{Cos}[2\alpha+2\tau\omega]+2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\right.\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\left.\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)\right)$$
$$\left(-4\,\text{N0}+2\,\text{N0}\,\text{Cos}[2\tau\omega]-\text{N0}\,\text{Cos}[2\alpha-2\tau\omega]-\text{N0}\,\text{Cos}[2\alpha+2\tau\omega]+\right.$$
$$2\,\text{N0}\,\text{Cos}[\alpha-\tau\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{N0}\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-\tau\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{N0}\,\text{Sec}[\alpha]^2$$
$$\text{Sin}[\tau\omega]^2+2\,\text{N0}\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\omega]^2+2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-\right.\right.}$$
$$\left.\left.\left.2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)\Big/$$
$$\left(8\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\right.\right.$$
$$\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)+$$
$$\text{Cos}[\alpha-\tau\omega]\,\text{Sec}[\alpha]\left(-\left(\left(\text{i}\,\text{N0}\left(1+\text{Cos}[2\alpha]\right)\text{Sec}[\alpha]\,\text{Sin}[\tau\omega]^2\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\right.}\right.\right.\right.$$
$$\left(-2+4\,\text{N0}-2\,\text{Cos}[2\alpha]-2\,\text{N0}\,\text{Cos}[2\tau\omega]+\text{N0}\,\text{Cos}[2\alpha-2\tau\omega]+\right.$$
$$\left.\text{N0}\,\text{Cos}[2\alpha+2\tau\omega]-2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\right.\right.\right.$$
$$\left.\left.\left.\left.\left.\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)\right)\text{Tan}[\alpha]\Big)\Big/$$
$$\left(2\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\right.\right.$$
$$\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)+$$
$$\left(\text{i}\,\text{N0}\left(1+\text{Cos}[2\alpha]\right)\text{Sec}[\alpha]\,\text{Sin}[\tau\omega]^2\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\left(-2+4\,\text{N0}-2\,\text{Cos}[2\alpha]-\right.\right.\right.$$
$$2\,\text{N0}\,\text{Cos}[2\tau\omega]+\text{N0}\,\text{Cos}[2\alpha-2\tau\omega]+\text{N0}\,\text{Cos}[2\alpha+2\tau\omega]+$$
$$2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\right.\right.\right.$$
$$\left.\left.\left.\left.\left.\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)\right)\text{Tan}[\alpha]\Big)\Big/$$
$$\left(2\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\right.\right.$$
$$\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)\Bigg)-\text{i}\,\text{e}^{\text{i}\,\phi}\,\text{Sin}\left[\frac{1}{4}\left(\pi+\frac{\sigma}{2}\right)\right]$$
$$\left(\text{Cos}[\alpha+\tau\omega]\,\text{Sec}[\alpha]\left(\left(\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\left(-2+4\,\text{N0}-2\,\text{Cos}[2\alpha]-2\,\text{N0}\,\text{Cos}[2\tau\omega]+\right.\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\left.\text{N0}\,\text{Cos}[2\alpha-2\tau\omega]+\text{N0}\,\text{Cos}[2\alpha+2\tau\omega]-2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-\right.\right.\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\left.\left.2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)\right)\right)$$
$$\left(4\,\text{N0}-2\,\text{N0}\,\text{Cos}[2\tau\omega]+\text{N0}\,\text{Cos}[2\alpha-2\tau\omega]+\text{N0}\,\text{Cos}[2\alpha+2\tau\omega]-\right.$$
$$2\,\text{N0}\,\text{Cos}[\alpha-\tau\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{N0}\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-\tau\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{N0}\,\text{Sec}[\alpha]^2$$
$$\text{Sin}[\tau\omega]^2-2\,\text{N0}\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\omega]^2+2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-\right.\right.}$$
$$\left.\left.\left.2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)\Big/$$
$$\left(8\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\right.\right.$$
$$\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)+$$

$$\left(\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\left(-2+4\,\text{N0}-2\,\text{Cos}[2\alpha]-2\,\text{N0}\,\text{Cos}[2\tau\omega]+\text{N0}\,\text{Cos}[2\alpha-2\tau\omega]+\right.\right.\right.$$
$$\left.\left.\left.\text{N0}\,\text{Cos}[2\alpha+2\tau\omega]+2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\right.\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\left.\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)\right)$$
$$\left(-4\,\text{N0}+2\,\text{N0}\,\text{Cos}[2\tau\omega]-\text{N0}\,\text{Cos}[2\alpha-2\tau\omega]-\text{N0}\,\text{Cos}[2\alpha+2\tau\omega]+\right.$$
$$2\,\text{N0}\,\text{Cos}[\alpha-\tau\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{N0}\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-\tau\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{N0}\,\text{Sec}[\alpha]^2$$
$$\text{Sin}[\tau\omega]^2+2\,\text{N0}\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\omega]^2+2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-\right.\right.}$$
$$\left.\left.\left.\left.2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)\Big/$$
$$\left(8\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\right.}\right.$$
$$\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)-$$
$$i\,\text{Sec}[\alpha]\,\text{Sin}[\tau\omega]\left(-\left(\left(i\,\text{N0}\left(1+\text{Cos}[2\alpha]\right)\text{Sec}[\alpha]\,\text{Sin}[\tau\omega]^2\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\right.}\right.\right.\right.$$
$$\left(-2+4\,\text{N0}-2\,\text{Cos}[2\alpha]-2\,\text{N0}\,\text{Cos}[2\tau\omega]+\text{N0}\,\text{Cos}[2\alpha-2\tau\omega]+\right.$$
$$\text{N0}\,\text{Cos}[2\alpha+2\tau\omega]-2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\right.\right.\right.}$$
$$\left.\left.\left.\left.\left.\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)\right)\text{Tan}[\alpha]\Big)\Big/$$
$$\left(2\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\right.}\right.$$
$$\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)+$$
$$\left(i\,\text{N0}\left(1+\text{Cos}[2\alpha]\right)\text{Sec}[\alpha]\,\text{Sin}[\tau\omega]^2\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\left(-2+4\,\text{N0}-2\,\text{Cos}[2\alpha]-\right.\right.\right.$$
$$2\,\text{N0}\,\text{Cos}[2\tau\omega]+\text{N0}\,\text{Cos}[2\alpha-2\tau\omega]+\text{N0}\,\text{Cos}[2\alpha+2\tau\omega]+$$
$$\left.\left.2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\left.\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)\right)\text{Tan}[\alpha]\Big)\Big/$$
$$\left(2\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\right.}\right.$$
$$\left.\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)\right)\right)\Big\}\Big\}$$

In[29]:=
```
EvolvedFirstNormSq = Abs[EvolvedFirst[[1]][[1]]]^2 + Abs[EvolvedFirst[[2]][[1]]]^2
```

Out[29]=
$$\text{Abs}\left[-i\,\text{Cos}[\alpha+\tau\omega]\,\text{Sec}[\alpha]\,\text{Sin}\left[\frac{1}{4}\left(\pi+2\delta\right)\right]-i\,\text{Cos}\left[\frac{1}{4}\left(\pi+2\delta\right)\right]\text{Sec}[\alpha]\,\text{Sin}[\tau\omega]\right]^2+$$
$$\text{Abs}\left[\text{Cos}\left[\frac{1}{4}\left(\pi+2\delta\right)\right]\text{Cos}[\alpha-\tau\omega]\,\text{Sec}[\alpha]-\text{Sec}[\alpha]\,\text{Sin}\left[\frac{1}{4}\left(\pi+2\delta\right)\right]\text{Sin}[\tau\omega]\right]^2$$

In[30]:=
```
ZetaEvolvedFirstNormSq =
 Abs[ZetaEvolvedFirst[[1]][[1]]]^2 + Abs[ZetaEvolvedFirst[[2]][[1]]]^2
```

Out[30]=
$$\text{Abs}\left[-i\,\text{Sin}\left[\frac{1}{4}\left(\pi+2\delta\right)\right]\right.$$
$$\left(-i\,\text{Sec}[\alpha]\,\text{Sin}[\tau\omega]\left(\left(\left(-4\,\text{N0}+2\,\text{N0}\,\text{Cos}[2\tau\omega]-\text{N0}\,\text{Cos}[2\alpha-2\tau\omega]-\text{N0}\,\text{Cos}[2\alpha+2\tau\omega]+\right.\right.\right.\right.$$

$$2\,N0\,\text{Cos}[\alpha-\tau\omega]^2\,\text{Sec}[\alpha]^2+2\,N0\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-\tau\omega]^2\,\text{Sec}[\alpha]^2+2\,N0\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\omega]^2+2\,N0\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\omega]^2+2\sqrt{2}\,\sqrt{\left(-N0^2\left(-6-2\,\text{Cos}[2\alpha]+2\,\text{Cos}[2\tau\omega]-\text{Cos}[2\alpha-2\tau\omega]-\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)}\Bigg)}\Bigg/\Bigg(\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\left(-2+4\,N0-2\,\text{Cos}[2\alpha]-2\,N0\,\text{Cos}[2\tau\omega]+N0\,\text{Cos}[2\alpha-2\tau\omega]+N0\,\text{Cos}[2\alpha+2\tau\omega]-2\sqrt{2}\,\sqrt{\left(N0^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)}\right)\right)}\Bigg)\Bigg/\left(8\sqrt{\left(N0^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)}\right)+\left(\left(4\,N0-2\,N0\,\text{Cos}[2\tau\omega]+N0\,\text{Cos}[2\alpha-2\tau\omega]+N0\,\text{Cos}[2\alpha+2\tau\omega]-2\,N0\,\text{Cos}[\alpha-\tau\omega]^2\,\text{Sec}[\alpha]^2-2\,N0\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-\tau\omega]^2\,\text{Sec}[\alpha]^2-2\,N0\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\omega]^2-2\,N0\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\omega]^2+2\sqrt{2}\,\sqrt{\left(-N0^2\left(-6-2\,\text{Cos}[2\alpha]+2\,\text{Cos}[2\tau\omega]-\text{Cos}[2\alpha-2\tau\omega]-\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)}\Bigg)\Bigg/\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\left(-2+4\,N0-2\,\text{Cos}[2\alpha]-2\,N0\,\text{Cos}[2\tau\omega]+N0\,\text{Cos}[2\alpha-2\tau\omega]+N0\,\text{Cos}[2\alpha+2\tau\omega]+2\sqrt{2}\,\sqrt{\left(N0^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)}\right)\right)}\Bigg)\Bigg/\left(8\sqrt{\left(N0^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)}\right)\Bigg)+$$

$$\text{Cos}[\alpha+\tau\omega]\,\text{Sec}[\alpha]\left(\left(i\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[\tau\omega]^2\left(-4\,N0+2\,N0\,\text{Cos}[2\tau\omega]-N0\,\text{Cos}[2\alpha-2\tau\omega]-N0\,\text{Cos}[2\alpha+2\tau\omega]+2\,N0\,\text{Cos}[\alpha-\tau\omega]^2\,\text{Sec}[\alpha]^2+2\,N0\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-\tau\omega]^2\,\text{Sec}[\alpha]^2+2\,N0\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\omega]^2+2\,N0\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\omega]^2+2\sqrt{2}\,\sqrt{\left(-N0^2\left(-6-2\,\text{Cos}[2\alpha]+2\,\text{Cos}[2\tau\omega]-\text{Cos}[2\alpha-2\tau\omega]-\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)}\Bigg)\Bigg/\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\left(-2+4\,N0-2\,\text{Cos}[2\alpha]-2\,N0\,\text{Cos}[2\tau\omega]+N0\,\text{Cos}[2\alpha-2\tau\omega]+N0\,\text{Cos}[2\alpha+2\tau\omega]-2\sqrt{2}\,\sqrt{\left(N0^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)}\right)\right)}\Bigg)\Bigg/\left(32\,N0\left(1+\text{Cos}[2\alpha]\right)\sqrt{\left(N0^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)}\right)-\left(i\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[\tau\omega]^2\left(4\,N0-2\,N0\,\text{Cos}[2\tau\omega]+N0\,\text{Cos}[2\alpha-2\tau\omega]+$$

$$\begin{aligned}
&\mathrm{N0}\,\mathrm{Cos}[2\alpha+2\tau\omega]-2\,\mathrm{N0}\,\mathrm{Cos}[\alpha-\tau\omega]^2\,\mathrm{Sec}[\alpha]^2-\\
&2\,\mathrm{N0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Cos}[\alpha-\tau\omega]^2\,\mathrm{Sec}[\alpha]^2-2\,\mathrm{N0}\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2-\\
&2\,\mathrm{N0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2+2\sqrt{2}\,\sqrt{\left(-\mathrm{N0}^2\left(-6-2\,\mathrm{Cos}[2\alpha]+\right.\right.}\\
&\left.\left.2\,\mathrm{Cos}[2\tau\omega]-\mathrm{Cos}[2\alpha-2\tau\omega]-\mathrm{Cos}[2\alpha+2\tau\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\right)}\Bigg)\\
&\sqrt{\left(\frac{1}{1+\mathrm{Cos}[2\alpha]}\left(-2+4\,\mathrm{N0}-2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{N0}\,\mathrm{Cos}[2\tau\omega]+\mathrm{N0}\,\mathrm{Cos}[2\alpha-2\tau\omega]+\right.\right.}\\
&\mathrm{N0}\,\mathrm{Cos}[2\alpha+2\tau\omega]+2\sqrt{2}\,\sqrt{\left(\mathrm{N0}^2\left(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2\tau\omega]+\right.\right.}\\
&\left.\left.\left.\left.\mathrm{Cos}[2\alpha-2\tau\omega]+\mathrm{Cos}[2\alpha+2\tau\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\right)\right)\Bigg)\\
&\left(-4\,\mathrm{N0}+2\,\mathrm{N0}\,\mathrm{Cos}[2\tau\omega]-\mathrm{N0}\,\mathrm{Cos}[2\alpha-2\tau\omega]-\mathrm{N0}\,\mathrm{Cos}[2\alpha+2\tau\omega]+\right.\\
&2\,\mathrm{N0}\,\mathrm{Cos}[\alpha-\tau\omega]^2\,\mathrm{Sec}[\alpha]^2+2\,\mathrm{N0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Cos}[\alpha-\tau\omega]^2\,\mathrm{Sec}[\alpha]^2+2\,\mathrm{N0}\,\mathrm{Sec}[\alpha]^2\\
&\mathrm{Sin}[\tau\omega]^2+2\,\mathrm{N0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2+2\sqrt{2}\,\sqrt{\left(\mathrm{N0}^2\left(6+2\,\mathrm{Cos}[2\alpha]-\right.\right.}\\
&\left.\left.\left.\left.2\,\mathrm{Cos}[2\tau\omega]+\mathrm{Cos}[2\alpha-2\tau\omega]+\mathrm{Cos}[2\alpha+2\tau\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\right)\right)}\Bigg)\Bigg/\\
&\left(32\,\mathrm{N0}\left(1+\mathrm{Cos}[2\alpha]\right)\sqrt{\left(\mathrm{N0}^2\left(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2\tau\omega]+\mathrm{Cos}[2\alpha-2\tau\omega]+\right.\right.\right.\\
&\left.\left.\left.\mathrm{Cos}[2\alpha+2\tau\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\right)}\right)+\\
&\mathrm{Cos}\left[\frac{1}{4}\left(\pi+2\delta\right)\right]\left(\mathrm{Cos}[\alpha-\tau\omega]\,\mathrm{Sec}[\alpha]\left(\left(\left(-4\,\mathrm{N0}+2\,\mathrm{N0}\,\mathrm{Cos}[2\tau\omega]-\mathrm{N0}\,\mathrm{Cos}[2\alpha-2\tau\omega]-\right.\right.\right.\right.\\
&\mathrm{N0}\,\mathrm{Cos}[2\alpha+2\tau\omega]+2\,\mathrm{N0}\,\mathrm{Cos}[\alpha-\tau\omega]^2\,\mathrm{Sec}[\alpha]^2+\\
&2\,\mathrm{N0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Cos}[\alpha-\tau\omega]^2\,\mathrm{Sec}[\alpha]^2+2\,\mathrm{N0}\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2+\\
&2\,\mathrm{N0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2+2\sqrt{2}\,\sqrt{\left(-\mathrm{N0}^2\left(-6-2\,\mathrm{Cos}[2\alpha]+\right.\right.}\\
&\left.\left.2\,\mathrm{Cos}[2\tau\omega]-\mathrm{Cos}[2\alpha-2\tau\omega]-\mathrm{Cos}[2\alpha+2\tau\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\right)}\Bigg)\\
&\sqrt{\left(\frac{1}{1+\mathrm{Cos}[2\alpha]}\left(-2+4\,\mathrm{N0}-2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{N0}\,\mathrm{Cos}[2\tau\omega]+\mathrm{N0}\,\mathrm{Cos}[2\alpha-2\tau\omega]+\right.\right.}\\
&\mathrm{N0}\,\mathrm{Cos}[2\alpha+2\tau\omega]-2\sqrt{2}\,\sqrt{\left(\mathrm{N0}^2\left(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2\tau\omega]+\right.\right.}\\
&\left.\left.\left.\left.\mathrm{Cos}[2\alpha-2\tau\omega]+\mathrm{Cos}[2\alpha+2\tau\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\right)\right)\Bigg)\Bigg/\\
&\left(8\sqrt{\left(\mathrm{N0}^2\left(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2\tau\omega]+\mathrm{Cos}[2\alpha-2\tau\omega]+\mathrm{Cos}[2\alpha+2\tau\omega]\right)\right.}\right.\\
&\left.\left.\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\right)\right)+\\
&\left(\left(4\,\mathrm{N0}-2\,\mathrm{N0}\,\mathrm{Cos}[2\tau\omega]+\mathrm{N0}\,\mathrm{Cos}[2\alpha-2\tau\omega]+\mathrm{N0}\,\mathrm{Cos}[2\alpha+2\tau\omega]-\right.\right.\\
&2\,\mathrm{N0}\,\mathrm{Cos}[\alpha-\tau\omega]^2\,\mathrm{Sec}[\alpha]^2-2\,\mathrm{N0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Cos}[\alpha-\tau\omega]^2\,\mathrm{Sec}[\alpha]^2-2\,\mathrm{N0}\,\mathrm{Sec}[\alpha]^2\\
&\mathrm{Sin}[\tau\omega]^2-2\,\mathrm{N0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2+2\sqrt{2}\,\sqrt{\left(-\mathrm{N0}^2\left(-6-2\,\mathrm{Cos}[2\alpha]+\right.\right.}\\
&\left.\left.2\,\mathrm{Cos}[2\tau\omega]-\mathrm{Cos}[2\alpha-2\tau\omega]-\mathrm{Cos}[2\alpha+2\tau\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\right)}\Bigg)\\
&\sqrt{\left(\frac{1}{1+\mathrm{Cos}[2\alpha]}\left(-2+4\,\mathrm{N0}-2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{N0}\,\mathrm{Cos}[2\tau\omega]+\mathrm{N0}\,\mathrm{Cos}[2\alpha-2\tau\omega]+\right.\right.}\\
&\mathrm{N0}\,\mathrm{Cos}[2\alpha+2\tau\omega]+2\sqrt{2}\,\sqrt{\left(\mathrm{N0}^2\left(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2\tau\omega]+\right.\right.}\\
&\left.\left.\left.\left.\mathrm{Cos}[2\alpha-2\tau\omega]+\mathrm{Cos}[2\alpha+2\tau\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\right)\right)\Bigg)\Bigg/\\
&\left(8\sqrt{\left(\mathrm{N0}^2\left(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2\tau\omega]+\mathrm{Cos}[2\alpha-2\tau\omega]+\mathrm{Cos}[2\alpha+2\tau\omega]\right)\right.}\right.\\
&\left.\left.\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\right)\right)-
\end{aligned}$$

$$
\begin{aligned}
&i\,\mathrm{Sec}[\alpha]\,\mathrm{Sin}[\tau\,\omega]\,\Bigg(\Bigg(i\,\mathrm{Cos}[\alpha]\,\mathrm{Cot}[\alpha]\,\mathrm{Csc}[\tau\,\omega]^2\,\Big(-4\,N0+2\,N0\,\mathrm{Cos}[2\,\tau\,\omega]-\\
&\quad N0\,\mathrm{Cos}[2\,\alpha-2\,\tau\,\omega]-N0\,\mathrm{Cos}[2\,\alpha+2\,\tau\,\omega]+2\,N0\,\mathrm{Cos}[\alpha-\tau\,\omega]^2\,\mathrm{Sec}[\alpha]^2+\\
&\quad 2\,N0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Cos}[\alpha-\tau\,\omega]^2\,\mathrm{Sec}[\alpha]^2+2\,N0\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\tau\,\omega]^2+\\
&\quad 2\,N0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\tau\,\omega]^2+2\,\sqrt{2}\,\sqrt{\Big(-N0^2\,\Big(-6-2\,\mathrm{Cos}[2\,\alpha]+\\
&\qquad 2\,\mathrm{Cos}[2\,\tau\,\omega]-\mathrm{Cos}[2\,\alpha-2\,\tau\,\omega]-\mathrm{Cos}[2\,\alpha+2\,\tau\,\omega]\Big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\,\omega]^2\Big)}\Big)\Bigg)\\
&\quad\sqrt{\Bigg(\frac{1}{1+\mathrm{Cos}[2\,\alpha]}\Big(-2+4\,N0-2\,\mathrm{Cos}[2\,\alpha]-2\,N0\,\mathrm{Cos}[2\,\tau\,\omega]+N0\,\mathrm{Cos}[2\,\alpha-2\,\tau\,\omega]+\\
&\qquad N0\,\mathrm{Cos}[2\,\alpha+2\,\tau\,\omega]-2\,\sqrt{2}\,\sqrt{\Big(N0^2\,\Big(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,\tau\,\omega]+\\
&\qquad\quad \mathrm{Cos}[2\,\alpha-2\,\tau\,\omega]+\mathrm{Cos}[2\,\alpha+2\,\tau\,\omega]\Big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\,\omega]^2\Big)}\Big)\Bigg)}\\
&\quad\Big(4\,N0-2\,N0\,\mathrm{Cos}[2\,\tau\,\omega]+N0\,\mathrm{Cos}[2\,\alpha-2\,\tau\,\omega]+N0\,\mathrm{Cos}[2\,\alpha+2\,\tau\,\omega]-\\
&\qquad 2\,N0\,\mathrm{Cos}[\alpha-\tau\,\omega]^2\,\mathrm{Sec}[\alpha]^2-2\,N0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Cos}[\alpha-\tau\,\omega]^2\,\mathrm{Sec}[\alpha]^2-2\,N0\,\mathrm{Sec}[\alpha]^2\\
&\qquad \mathrm{Sin}[\tau\,\omega]^2-2\,N0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\tau\,\omega]^2+2\,\sqrt{2}\,\sqrt{\Big(N0^2\,\Big(6+2\,\mathrm{Cos}[2\,\alpha]-\\
&\qquad\quad 2\,\mathrm{Cos}[2\,\tau\,\omega]+\mathrm{Cos}[2\,\alpha-2\,\tau\,\omega]+\mathrm{Cos}[2\,\alpha+2\,\tau\,\omega]\Big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\,\omega]^2\Big)}\Big)\Big)\Big/\\
&\quad\Big(32\,N0\,\Big(1+\mathrm{Cos}[2\,\alpha]\Big)\,\sqrt{\Big(N0^2\,\Big(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,\tau\,\omega]+\mathrm{Cos}[2\,\alpha-2\,\tau\,\omega]+\\
&\qquad \mathrm{Cos}[2\,\alpha+2\,\tau\,\omega]\Big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\,\omega]^2\Big)}\Big)-\\
&\quad\Bigg(i\,\mathrm{Cos}[\alpha]\,\mathrm{Cot}[\alpha]\,\mathrm{Csc}[\tau\,\omega]^2\,\Big(4\,N0-2\,N0\,\mathrm{Cos}[2\,\tau\,\omega]+N0\,\mathrm{Cos}[2\,\alpha-2\,\tau\,\omega]+\\
&\qquad N0\,\mathrm{Cos}[2\,\alpha+2\,\tau\,\omega]-2\,N0\,\mathrm{Cos}[\alpha-\tau\,\omega]^2\,\mathrm{Sec}[\alpha]^2-\\
&\qquad 2\,N0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Cos}[\alpha-\tau\,\omega]^2\,\mathrm{Sec}[\alpha]^2-2\,N0\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\tau\,\omega]^2-\\
&\qquad 2\,N0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\tau\,\omega]^2+2\,\sqrt{2}\,\sqrt{\Big(-N0^2\,\Big(-6-2\,\mathrm{Cos}[2\,\alpha]+\\
&\qquad\quad 2\,\mathrm{Cos}[2\,\tau\,\omega]-\mathrm{Cos}[2\,\alpha-2\,\tau\,\omega]-\mathrm{Cos}[2\,\alpha+2\,\tau\,\omega]\Big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\,\omega]^2\Big)}\Big)\Bigg)\\
&\quad\sqrt{\Bigg(\frac{1}{1+\mathrm{Cos}[2\,\alpha]}\Big(-2+4\,N0-2\,\mathrm{Cos}[2\,\alpha]-2\,N0\,\mathrm{Cos}[2\,\tau\,\omega]+N0\,\mathrm{Cos}[2\,\alpha-2\,\tau\,\omega]+\\
&\qquad N0\,\mathrm{Cos}[2\,\alpha+2\,\tau\,\omega]+2\,\sqrt{2}\,\sqrt{\Big(N0^2\,\Big(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,\tau\,\omega]+\\
&\qquad\quad \mathrm{Cos}[2\,\alpha-2\,\tau\,\omega]+\mathrm{Cos}[2\,\alpha+2\,\tau\,\omega]\Big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\,\omega]^2\Big)}\Big)\Bigg)}\\
&\quad\Big(-4\,N0+2\,N0\,\mathrm{Cos}[2\,\tau\,\omega]-N0\,\mathrm{Cos}[2\,\alpha-2\,\tau\,\omega]-N0\,\mathrm{Cos}[2\,\alpha+2\,\tau\,\omega]+\\
&\qquad 2\,N0\,\mathrm{Cos}[\alpha-\tau\,\omega]^2\,\mathrm{Sec}[\alpha]^2+2\,N0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Cos}[\alpha-\tau\,\omega]^2\,\mathrm{Sec}[\alpha]^2+2\,N0\,\mathrm{Sec}[\alpha]^2\\
&\qquad \mathrm{Sin}[\tau\,\omega]^2+2\,N0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\tau\,\omega]^2+2\,\sqrt{2}\,\sqrt{\Big(N0^2\,\Big(6+2\,\mathrm{Cos}[2\,\alpha]-\\
&\qquad\quad 2\,\mathrm{Cos}[2\,\tau\,\omega]+\mathrm{Cos}[2\,\alpha-2\,\tau\,\omega]+\mathrm{Cos}[2\,\alpha+2\,\tau\,\omega]\Big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\,\omega]^2\Big)}\Big)\Big)\Big/\\
&\quad\Big(32\,N0\,\Big(1+\mathrm{Cos}[2\,\alpha]\Big)\,\sqrt{\Big(N0^2\,\Big(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,\tau\,\omega]+\mathrm{Cos}[2\,\alpha-2\,\tau\,\omega]+\\
&\qquad \mathrm{Cos}[2\,\alpha+2\,\tau\,\omega]\Big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\,\omega]^2\Big)}\Big)\Bigg)\Bigg)\Bigg]^2+\\
&\mathrm{Abs}\Big[\mathrm{Cos}\Big[\frac{1}{4}\,(\pi+2\,\delta)\Big]\Big]\,\Bigg(-i\,\mathrm{Sec}[\alpha]\,\mathrm{Sin}[\tau\,\omega]\,\Bigg(\Bigg(\sqrt{\Bigg(\frac{1}{1+\mathrm{Cos}[2\,\alpha]}\Big(-2+4\,N0-2\,\mathrm{Cos}[2\,\alpha]-\\
&\qquad 2\,N0\,\mathrm{Cos}[2\,\tau\,\omega]+N0\,\mathrm{Cos}[2\,\alpha-2\,\tau\,\omega]+N0\,\mathrm{Cos}[2\,\alpha+2\,\tau\,\omega]-\\
&\qquad 2\,\sqrt{2}\,\sqrt{\Big(N0^2\,\Big(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,\tau\,\omega]+\mathrm{Cos}[2\,\alpha-2\,\tau\,\omega]+\mathrm{Cos}[2\,\alpha+2\,\tau\,\omega]\Big)\\
&\qquad\quad \mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\,\omega]^2\Big)}\Big)\Bigg)}\Big)\,\Big(4\,N0-2\,N0\,\mathrm{Cos}[2\,\tau\,\omega]+\\
&\qquad N0\,\mathrm{Cos}[2\,\alpha-2\,\tau\,\omega]+N0\,\mathrm{Cos}[2\,\alpha+2\,\tau\,\omega]-2\,N0\,\mathrm{Cos}[\alpha-\tau\,\omega]^2\,\mathrm{Sec}[\alpha]^2-
\end{aligned}
$$

$$2\,N0\,\cos[2\alpha]\,\cos[\alpha-\tau\omega]^2\,\sec[\alpha]^2-2\,N0\,\sec[\alpha]^2\,\sin[\tau\omega]^2-$$
$$2\,N0\,\cos[2\alpha]\,\sec[\alpha]^2\,\sin[\tau\omega]^2+2\sqrt{2}\,\sqrt{\left(N0^2\,\left(6+2\cos[2\alpha]-2\cos[2\tau\omega]+\right.\right.}$$
$$\left.\left.\cos[2\alpha-2\tau\omega]+\cos[2\alpha+2\tau\omega]\right)\,\sin[\alpha]^2\,\sin[\tau\omega]^2\right)}\Bigg)\Bigg/$$
$$\left(8\sqrt{\left(N0^2\,\left(6+2\cos[2\alpha]-2\cos[2\tau\omega]+\cos[2\alpha-2\tau\omega]+\cos[2\alpha+2\tau\omega]\right)\right.}\right.$$
$$\left.\left.\sin[\alpha]^2\,\sin[\tau\omega]^2\right)}\right)+$$
$$\left(\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4\,N0-2\cos[2\alpha]-2\,N0\cos[2\tau\omega]+N0\cos[2\alpha-2\tau\omega]+\right.\right.\right.}$$
$$N0\cos[2\alpha+2\tau\omega]+2\sqrt{2}\,\sqrt{\left(N0^2\,\left(6+2\cos[2\alpha]-2\cos[2\tau\omega]+\right.\right.}$$
$$\left.\left.\left.\left.\cos[2\alpha-2\tau\omega]+\cos[2\alpha+2\tau\omega]\right)\,\sin[\alpha]^2\,\sin[\tau\omega]^2\right)}\right)\right)$$
$$\left(-4\,N0+2\,N0\cos[2\tau\omega]-N0\cos[2\alpha-2\tau\omega]-N0\cos[2\alpha+2\tau\omega]+\right.$$
$$2\,N0\,\cos[\alpha-\tau\omega]^2\,\sec[\alpha]^2+2\,N0\cos[2\alpha]\,\cos[\alpha-\tau\omega]^2\,\sec[\alpha]^2+2\,N0\,\sec[\alpha]^2$$
$$\sin[\tau\omega]^2+2\,N0\cos[2\alpha]\,\sec[\alpha]^2\,\sin[\tau\omega]^2+2\sqrt{2}\,\sqrt{\left(N0^2\,\left(6+2\cos[2\alpha]-\right.\right.}$$
$$\left.\left.\left.2\cos[2\tau\omega]+\cos[2\alpha-2\tau\omega]+\cos[2\alpha+2\tau\omega]\right)\,\sin[\alpha]^2\,\sin[\tau\omega]^2\right)}\right)\Bigg)\Bigg/$$
$$\left(8\sqrt{\left(N0^2\,\left(6+2\cos[2\alpha]-2\cos[2\tau\omega]+\cos[2\alpha-2\tau\omega]+\cos[2\alpha+2\tau\omega]\right)\right.}\right.$$
$$\left.\left.\sin[\alpha]^2\,\sin[\tau\omega]^2\right)}\right)\Bigg)+$$
$$\cos[\alpha-\tau\omega]\,\sec[\alpha]\,\left(-\left(\left(i\,N0\,\left(1+\cos[2\alpha]\right)\,\sec[\alpha]\,\sin[\tau\omega]^2\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\right.}\right.\right.\right.$$
$$\left(-2+4\,N0-2\cos[2\alpha]-2\,N0\cos[2\tau\omega]+N0\cos[2\alpha-2\tau\omega]+\right.$$
$$N0\cos[2\alpha+2\tau\omega]-2\sqrt{2}\,\sqrt{\left(N0^2\,\left(6+2\cos[2\alpha]-2\cos[2\tau\omega]+\right.\right.}$$
$$\left.\left.\left.\left.\cos[2\alpha-2\tau\omega]+\cos[2\alpha+2\tau\omega]\right)\,\sin[\alpha]^2\,\sin[\tau\omega]^2\right)}\right)\right)$$
$$\left.\left.\left.\left.\tan[\alpha]\right)\Bigg/\left(2\sqrt{\left(N0^2\,\left(6+2\cos[2\alpha]-2\cos[2\tau\omega]+\cos[2\alpha-2\tau\omega]+\right.\right.}\right.\right.\right.$$
$$\left.\left.\left.\left.\cos[2\alpha+2\tau\omega]\right)\,\sin[\alpha]^2\,\sin[\tau\omega]^2\right)}\right)\right)+$$
$$\left(i\,N0\,\left(1+\cos[2\alpha]\right)\,\sec[\alpha]\,\sin[\tau\omega]^2\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4\,N0-2\cos[2\alpha]-\right.\right.}\right.$$
$$2\,N0\cos[2\tau\omega]+N0\cos[2\alpha-2\tau\omega]+N0\cos[2\alpha+2\tau\omega]+$$
$$2\sqrt{2}\,\sqrt{\left(N0^2\,\left(6+2\cos[2\alpha]-2\cos[2\tau\omega]+\cos[2\alpha-2\tau\omega]+\right.\right.}$$
$$\left.\left.\left.\left.\cos[2\alpha+2\tau\omega]\right)\,\sin[\alpha]^2\,\sin[\tau\omega]^2\right)}\right)\right)\tan[\alpha]\Bigg)\Bigg/$$
$$\left(2\sqrt{\left(N0^2\,\left(6+2\cos[2\alpha]-2\cos[2\tau\omega]+\cos[2\alpha-2\tau\omega]+\cos[2\alpha+2\tau\omega]\right)\right.}\right.$$
$$\left.\left.\sin[\alpha]^2\,\sin[\tau\omega]^2\right)}\right)\Bigg)\Bigg)-i\,\sin\left[\frac{1}{4}\,\left(\pi+2\,\delta\right)\right]$$
$$\left(\cos[\alpha+\tau\omega]\,\sec[\alpha]\,\left(\left(\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4\,N0-2\cos[2\alpha]-2\,N0\cos[2\tau\omega]+\right.\right.\right.\right.}\right.$$
$$\left.\left.N0\cos[2\alpha-2\tau\omega]+N0\cos[2\alpha+2\tau\omega]-2\sqrt{2}\,\sqrt{\left(N0^2\,\left(6+2\cos[2\alpha]-\right.\right.}\right.$$
$$\left.\left.\left.\left.\left.2\cos[2\tau\omega]+\cos[2\alpha-2\tau\omega]+\cos[2\alpha+2\tau\omega]\right)\,\sin[\alpha]^2\,\sin[\tau\omega]^2\right)}\right)\right)\right)$$

$$\Big(4\,N0 - 2\,N0\,\text{Cos}[2\,\tau\,\omega] + N0\,\text{Cos}[2\,\alpha - 2\,\tau\,\omega] + N0\,\text{Cos}[2\,\alpha + 2\,\tau\,\omega] - 2\,N0\,\text{Cos}[\alpha - \tau\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,N0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - \tau\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,N0\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2 - 2\,N0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2 + 2\sqrt{2}\,\sqrt{\Big(N0^2\,\Big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] + \text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\Big)}\Big)\Big/$$

$$\Big(8\,\sqrt{\Big(N0^2\,\Big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] + \text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\Big)}\Big) + \Big(\sqrt{\Big(\frac{1}{1 + \text{Cos}[2\,\alpha]}\Big(-2 + 4\,N0 - 2\,\text{Cos}[2\,\alpha] - 2\,N0\,\text{Cos}[2\,\tau\,\omega] + N0\,\text{Cos}[2\,\alpha - 2\,\tau\,\omega] + N0\,\text{Cos}[2\,\alpha + 2\,\tau\,\omega] + 2\sqrt{2}\,\sqrt{\Big(N0^2\,\Big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] + \text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\Big)}\Big)\Big)$$

$$\Big(-4\,N0 + 2\,N0\,\text{Cos}[2\,\tau\,\omega] - N0\,\text{Cos}[2\,\alpha - 2\,\tau\,\omega] - N0\,\text{Cos}[2\,\alpha + 2\,\tau\,\omega] + 2\,N0\,\text{Cos}[\alpha - \tau\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,N0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - \tau\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,N0\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2 + 2\,N0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2 + 2\sqrt{2}\,\sqrt{\Big(N0^2\,\Big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] + \text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\Big)}\Big)\Big/$$

$$\Big(8\,\sqrt{\Big(N0^2\,\Big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] + \text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\Big)}\Big)\Big) -$$

$$i\,\text{Sec}[\alpha]\,\text{Sin}[\tau\,\omega]\,\Big(-\Big(\Big(i\,N0\,\Big(1 + \text{Cos}[2\,\alpha]\Big)\,\text{Sec}[\alpha]\,\text{Sin}[\tau\,\omega]^2\,\sqrt{\Big(\frac{1}{1 + \text{Cos}[2\,\alpha]}\Big(-2 + 4\,N0 - 2\,\text{Cos}[2\,\alpha] - 2\,N0\,\text{Cos}[2\,\tau\,\omega] + N0\,\text{Cos}[2\,\alpha - 2\,\tau\,\omega] + N0\,\text{Cos}[2\,\alpha + 2\,\tau\,\omega] - 2\sqrt{2}\,\sqrt{\Big(N0^2\,\Big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] + \text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\Big)}\Big)\Big)$$

$$\text{Tan}[\alpha]\Big)\Big/\Big(2\,\sqrt{\Big(N0^2\,\Big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] + \text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\Big)}\Big)\Big) +$$

$$\Big(i\,N0\,\Big(1 + \text{Cos}[2\,\alpha]\Big)\,\text{Sec}[\alpha]\,\text{Sin}[\tau\,\omega]^2\,\sqrt{\Big(\frac{1}{1 + \text{Cos}[2\,\alpha]}\Big(-2 + 4\,N0 - 2\,\text{Cos}[2\,\alpha] - 2\,N0\,\text{Cos}[2\,\tau\,\omega] + N0\,\text{Cos}[2\,\alpha - 2\,\tau\,\omega] + N0\,\text{Cos}[2\,\alpha + 2\,\tau\,\omega] + 2\sqrt{2}\,\sqrt{\Big(N0^2\,\Big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] + \text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\Big)}\Big)\Big)\,\text{Tan}[\alpha]\Big)\Big/$$

$$\Big(2\,\sqrt{\Big(N0^2\,\Big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] + \text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\Big)}\Big)\Big)\Big)\Big]^2$$

In[31]:= **DecisivenessFirst = EvolvedFirstNormSq / (EvolvedFirstNormSq + ZetaEvolvedFirstNormSq)**

Out[31]= $$\Big(\text{Abs}\Big[-i\,\text{Cos}[\alpha + \tau\,\omega]\,\text{Sec}[\alpha]\,\text{Sin}\Big[\frac{1}{4}\,(\pi + 2\,\delta)\Big] - i\,\text{Cos}\Big[\frac{1}{4}\,(\pi + 2\,\delta)\Big]\,\text{Sec}[\alpha]\,\text{Sin}[\tau\,\omega]\Big]^2 +$$

$$\text{Abs}\left[\text{Cos}\left[\frac{1}{4}\left(\pi+2\delta\right)\right]\text{Cos}\left[\alpha-\tau\,\omega\right]\text{Sec}\left[\alpha\right]-\text{Sec}\left[\alpha\right]\text{Sin}\left[\frac{1}{4}\left(\pi+2\delta\right)\right]\text{Sin}\left[\tau\,\omega\right]\right]^2\Bigg/$$

$$\Bigg(\text{Abs}\left[-\text{i}\,\text{Cos}\left[\alpha+\tau\,\omega\right]\text{Sec}\left[\alpha\right]\text{Sin}\left[\frac{1}{4}\left(\pi+2\delta\right)\right]-\text{i}\,\text{Cos}\left[\frac{1}{4}\left(\pi+2\delta\right)\right]\text{Sec}\left[\alpha\right]\text{Sin}\left[\tau\,\omega\right]\right]^2+$$

$$\text{Abs}\left[\text{Cos}\left[\frac{1}{4}\left(\pi+2\delta\right)\right]\text{Cos}\left[\alpha-\tau\,\omega\right]\text{Sec}\left[\alpha\right]-\text{Sec}\left[\alpha\right]\text{Sin}\left[\frac{1}{4}\left(\pi+2\delta\right)\right]\text{Sin}\left[\tau\,\omega\right]\right]^2+$$

$$\text{Abs}\left[-\text{i}\,\text{Sin}\left[\frac{1}{4}\left(\pi+2\delta\right)\right]\right.$$

$$\Bigg(-\text{i}\,\text{Sec}\left[\alpha\right]\text{Sin}\left[\tau\,\omega\right]\Bigg(\Bigg(\Big(-4\,\text{N0}+2\,\text{N0}\,\text{Cos}\left[2\,\tau\,\omega\right]-\text{N0}\,\text{Cos}\left[2\,\alpha-2\,\tau\,\omega\right]-\text{N0}\,\text{Cos}\left[2\,\alpha+2\,\tau\,\omega\right]+$$

$$2\,\text{N0}\,\text{Cos}\left[\alpha-\tau\,\omega\right]^2\text{Sec}\left[\alpha\right]^2+2\,\text{N0}\,\text{Cos}\left[2\,\alpha\right]\text{Cos}\left[\alpha-\tau\,\omega\right]^2\text{Sec}\left[\alpha\right]^2+2\,\text{N0}\,\text{Sec}\left[\alpha\right]^2$$

$$\text{Sin}\left[\tau\,\omega\right]^2+2\,\text{N0}\,\text{Cos}\left[2\,\alpha\right]\text{Sec}\left[\alpha\right]^2\text{Sin}\left[\tau\,\omega\right]^2+2\sqrt{2}\,\sqrt{\left(-\text{N0}^2\left(-6-2\,\text{Cos}\left[2\,\alpha\right]+\right.\right.$$

$$\left.\left.2\,\text{Cos}\left[2\,\tau\,\omega\right]-\text{Cos}\left[2\,\alpha-2\,\tau\,\omega\right]-\text{Cos}\left[2\,\alpha+2\,\tau\,\omega\right]\right)\text{Sin}\left[\alpha\right]^2\text{Sin}\left[\tau\,\omega\right]^2\right)}\Big)$$

$$\sqrt{\Bigg(\frac{1}{1+\text{Cos}\left[2\,\alpha\right]}\Big(-2+4\,\text{N0}-2\,\text{Cos}\left[2\,\alpha\right]-2\,\text{N0}\,\text{Cos}\left[2\,\tau\,\omega\right]+\text{N0}\,\text{Cos}\left[2\,\alpha-2\,\tau\,\omega\right]+$$

$$\text{N0}\,\text{Cos}\left[2\,\alpha+2\,\tau\,\omega\right]-2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}\left[2\,\alpha\right]-2\,\text{Cos}\left[2\,\tau\,\omega\right]+\right.\right.$$

$$\left.\left.\text{Cos}\left[2\,\alpha-2\,\tau\,\omega\right]+\text{Cos}\left[2\,\alpha+2\,\tau\,\omega\right]\right)\text{Sin}\left[\alpha\right]^2\text{Sin}\left[\tau\,\omega\right]^2\right)}\Big)\Bigg)\Bigg)\Bigg/$$

$$\Bigg(8\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}\left[2\,\alpha\right]-2\,\text{Cos}\left[2\,\tau\,\omega\right]+\text{Cos}\left[2\,\alpha-2\,\tau\,\omega\right]+\text{Cos}\left[2\,\alpha+2\,\tau\,\omega\right]\right)\right.}$$

$$\left.\text{Sin}\left[\alpha\right]^2\text{Sin}\left[\tau\,\omega\right]^2\right)}+\Bigg(\Big(4\,\text{N0}-2\,\text{N0}\,\text{Cos}\left[2\,\tau\,\omega\right]+\text{N0}\,\text{Cos}\left[2\,\alpha-2\,\tau\,\omega\right]+$$

$$\text{N0}\,\text{Cos}\left[2\,\alpha+2\,\tau\,\omega\right]-2\,\text{N0}\,\text{Cos}\left[\alpha-\tau\,\omega\right]^2\text{Sec}\left[\alpha\right]^2-2\,\text{N0}\,\text{Cos}\left[2\,\alpha\right]\text{Cos}\left[\alpha-\tau\,\omega\right]^2$$

$$\text{Sec}\left[\alpha\right]^2-2\,\text{N0}\,\text{Sec}\left[\alpha\right]^2\text{Sin}\left[\tau\,\omega\right]^2-2\,\text{N0}\,\text{Cos}\left[2\,\alpha\right]\text{Sec}\left[\alpha\right]^2\text{Sin}\left[\tau\,\omega\right]^2+2\sqrt{2}$$

$$\sqrt{\left(-\text{N0}^2\left(-6-2\,\text{Cos}\left[2\,\alpha\right]+2\,\text{Cos}\left[2\,\tau\,\omega\right]-\text{Cos}\left[2\,\alpha-2\,\tau\,\omega\right]-\text{Cos}\left[2\,\alpha+2\,\tau\,\omega\right]\right)\right.}$$

$$\left.\text{Sin}\left[\alpha\right]^2\text{Sin}\left[\tau\,\omega\right]^2\right)}\Bigg)\sqrt{\Bigg(\frac{1}{1+\text{Cos}\left[2\,\alpha\right]}\Big(-2+4\,\text{N0}-2\,\text{Cos}\left[2\,\alpha\right]-$$

$$2\,\text{N0}\,\text{Cos}\left[2\,\tau\,\omega\right]+\text{N0}\,\text{Cos}\left[2\,\alpha-2\,\tau\,\omega\right]+\text{N0}\,\text{Cos}\left[2\,\alpha+2\,\tau\,\omega\right]+2\sqrt{2}$$

$$\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}\left[2\,\alpha\right]-2\,\text{Cos}\left[2\,\tau\,\omega\right]+\text{Cos}\left[2\,\alpha-2\,\tau\,\omega\right]+\text{Cos}\left[2\,\alpha+2\,\tau\,\omega\right]\right)\right.}$$

$$\left.\text{Sin}\left[\alpha\right]^2\text{Sin}\left[\tau\,\omega\right]^2\right)}\Big)\Bigg)\Bigg)\Bigg/\Bigg(8\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}\left[2\,\alpha\right]-2\,\text{Cos}\left[2\,\tau\,\omega\right]+\right.\right.}$$

$$\left.\left.\text{Cos}\left[2\,\alpha-2\,\tau\,\omega\right]+\text{Cos}\left[2\,\alpha+2\,\tau\,\omega\right]\right)\text{Sin}\left[\alpha\right]^2\text{Sin}\left[\tau\,\omega\right]^2\right)}\Big)\Bigg)+$$

$$\text{Cos}\left[\alpha+\tau\,\omega\right]\text{Sec}\left[\alpha\right]\Bigg(\Bigg(\Big(\text{i}\,\text{Cos}\left[\alpha\right]\text{Cot}\left[\alpha\right]\text{Csc}\left[\tau\,\omega\right]^2\Big(-4\,\text{N0}+2\,\text{N0}\,\text{Cos}\left[2\,\tau\,\omega\right]-$$

$$\text{N0}\,\text{Cos}\left[2\,\alpha-2\,\tau\,\omega\right]-\text{N0}\,\text{Cos}\left[2\,\alpha+2\,\tau\,\omega\right]+2\,\text{N0}\,\text{Cos}\left[\alpha-\tau\,\omega\right]^2\text{Sec}\left[\alpha\right]^2+$$

$$2\,\text{N0}\,\text{Cos}\left[2\,\alpha\right]\text{Cos}\left[\alpha-\tau\,\omega\right]^2\text{Sec}\left[\alpha\right]^2+2\,\text{N0}\,\text{Sec}\left[\alpha\right]^2\text{Sin}\left[\tau\,\omega\right]^2+$$

$$2\,\text{N0}\,\text{Cos}\left[2\,\alpha\right]\text{Sec}\left[\alpha\right]^2\text{Sin}\left[\tau\,\omega\right]^2+2\sqrt{2}\,\sqrt{\left(-\text{N0}^2\left(-6-2\,\text{Cos}\left[2\,\alpha\right]+\right.\right.}$$

$$\left.\left.2\,\text{Cos}\left[2\,\tau\,\omega\right]-\text{Cos}\left[2\,\alpha-2\,\tau\,\omega\right]-\text{Cos}\left[2\,\alpha+2\,\tau\,\omega\right]\right)\text{Sin}\left[\alpha\right]^2\text{Sin}\left[\tau\,\omega\right]^2\right)}\Big)$$

$$\sqrt{\Bigg(\frac{1}{1+\text{Cos}\left[2\,\alpha\right]}\Big(-2+4\,\text{N0}-2\,\text{Cos}\left[2\,\alpha\right]-2\,\text{N0}\,\text{Cos}\left[2\,\tau\,\omega\right]+\text{N0}\,\text{Cos}\left[2\,\alpha-2\,\tau\,\omega\right]+$$

$$\text{N0}\,\text{Cos}\left[2\,\alpha+2\,\tau\,\omega\right]-2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}\left[2\,\alpha\right]-2\,\text{Cos}\left[2\,\tau\,\omega\right]+\right.\right.}$$

$$\left.\left.\text{Cos}\left[2\,\alpha-2\,\tau\,\omega\right]+\text{Cos}\left[2\,\alpha+2\,\tau\,\omega\right]\right)\text{Sin}\left[\alpha\right]^2\text{Sin}\left[\tau\,\omega\right]^2\right)}\Big)\Bigg)\Bigg)$$

$$\Big(4\,N0 - 2\,N0\,\text{Cos}[2\,\tau\,\omega] + N0\,\text{Cos}[2\,\alpha - 2\,\tau\,\omega] + N0\,\text{Cos}[2\,\alpha + 2\,\tau\,\omega] - 2\,N0\,\text{Cos}[\alpha - \tau\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,N0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - \tau\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,N0\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2 - 2\,N0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2 + 2\sqrt{2}\,\sqrt{\big(N0^2\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] + \text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)}\Big)\Big/\Big(32\,N0\,\big(1 + \text{Cos}[2\,\alpha]\big)\,\sqrt{\big(N0^2\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] + \text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)}\Big) -$$

$$\Bigg(i\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[\tau\,\omega]^2\,\Big(4\,N0 - 2\,N0\,\text{Cos}[2\,\tau\,\omega] + N0\,\text{Cos}[2\,\alpha - 2\,\tau\,\omega] + N0\,\text{Cos}[2\,\alpha + 2\,\tau\,\omega] - 2\,N0\,\text{Cos}[\alpha - \tau\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,N0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - \tau\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,N0\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2 - 2\,N0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2 + 2\sqrt{2}\,\sqrt{\big(-N0^2\,\big(-6 - 2\,\text{Cos}[2\,\alpha] + 2\,\text{Cos}[2\,\tau\,\omega] - \text{Cos}[2\,\alpha - 2\,\tau\,\omega] - \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)}\Big)$$

$$\sqrt{\Big(\frac{1}{1 + \text{Cos}[2\,\alpha]}\Big(-2 + 4\,N0 - 2\,\text{Cos}[2\,\alpha] - 2\,N0\,\text{Cos}[2\,\tau\,\omega] + N0\,\text{Cos}[2\,\alpha - 2\,\tau\,\omega] + N0\,\text{Cos}[2\,\alpha + 2\,\tau\,\omega] + 2\sqrt{2}\,\sqrt{\big(N0^2\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] + \text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)}\Big)\Big)}$$

$$\Big(-4\,N0 + 2\,N0\,\text{Cos}[2\,\tau\,\omega] - N0\,\text{Cos}[2\,\alpha - 2\,\tau\,\omega] - N0\,\text{Cos}[2\,\alpha + 2\,\tau\,\omega] + 2\,N0\,\text{Cos}[\alpha - \tau\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,N0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - \tau\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,N0\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2 + 2\,N0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2 + 2\sqrt{2}\,\sqrt{\big(N0^2\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] + \text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)}\Big)\Big/\Big(32\,N0\,\big(1 + \text{Cos}[2\,\alpha]\big)\,\sqrt{\big(N0^2\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] + \text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)}\Big)\Bigg)\Bigg) +$$

$$\text{Cos}\Big[\frac{1}{4}\,(\pi + 2\,\delta)\Big]\,\Bigg(\text{Cos}[\alpha - \tau\,\omega]\,\text{Sec}[\alpha]\,\Bigg(\Bigg(\Big(-4\,N0 + 2\,N0\,\text{Cos}[2\,\tau\,\omega] - N0\,\text{Cos}[2\,\alpha - 2\,\tau\,\omega] - N0\,\text{Cos}[2\,\alpha + 2\,\tau\,\omega] + 2\,N0\,\text{Cos}[\alpha - \tau\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,N0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - \tau\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,N0\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2 + 2\,N0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2 + 2\sqrt{2}\,\sqrt{\big(-N0^2\,\big(-6 - 2\,\text{Cos}[2\,\alpha] + 2\,\text{Cos}[2\,\tau\,\omega] - \text{Cos}[2\,\alpha - 2\,\tau\,\omega] - \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)}\Big)$$

$$\sqrt{\Big(\frac{1}{1 + \text{Cos}[2\,\alpha]}\Big(-2 + 4\,N0 - 2\,\text{Cos}[2\,\alpha] - 2\,N0\,\text{Cos}[2\,\tau\,\omega] + N0\,\text{Cos}[2\,\alpha - 2\,\tau\,\omega] + N0\,\text{Cos}[2\,\alpha + 2\,\tau\,\omega] - 2\sqrt{2}\,\sqrt{\big(N0^2\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] + \text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)}\Big)\Big)}\Bigg)\Bigg)\Big/$$

$$\Big(8\,\sqrt{\big(N0^2\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] + \text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)}\Big) +$$

$$\Bigg(\Big(4\,N0 - 2\,N0\,\text{Cos}[2\,\tau\,\omega] + N0\,\text{Cos}[2\,\alpha - 2\,\tau\,\omega] + N0\,\text{Cos}[2\,\alpha + 2\,\tau\,\omega] - 2\,N0\,\text{Cos}[\alpha - \tau\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,N0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - \tau\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,N0\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2 - 2\,N0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2 + 2\sqrt{2}\,\sqrt{\big(-N0^2\,\big(-6 - 2\,\text{Cos}[2\,\alpha] +$$

$$2\,\text{Cos}[2\,\tau\,\omega] - \text{Cos}[2\,\alpha - 2\,\tau\,\omega] - \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\Big)\Big)$$

$$\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\Big(-2 + 4\,\text{N0} - 2\,\text{Cos}[2\,\alpha] - 2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega] + \text{N0}\,\text{Cos}[2\,\alpha - 2\,\tau\,\omega] +$$

$$\text{N0}\,\text{Cos}[2\,\alpha + 2\,\tau\,\omega] + 2\sqrt{2}\,\sqrt{\Big(\text{N0}^2\,\Big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] +$$

$$\text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\Big)\Big)\Big)\Big/$$

$$\Big(8\sqrt{\Big(\text{N0}^2\,\Big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] + \text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\Big)$$

$$\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\Big)\Big)\Big) -$$

$$\text{i}\,\text{Sec}[\alpha]\,\text{Sin}[\tau\,\omega]\,\Big(\Big(\text{i}\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[\tau\,\omega]^2\,\Big(-4\,\text{N0} + 2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega] -$$

$$\text{N0}\,\text{Cos}[2\,\alpha - 2\,\tau\,\omega] - \text{N0}\,\text{Cos}[2\,\alpha + 2\,\tau\,\omega] + 2\,\text{N0}\,\text{Cos}[\alpha - \tau\,\omega]^2\,\text{Sec}[\alpha]^2 +$$
$$2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - \tau\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,\text{N0}\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2 +$$
$$2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2 + 2\sqrt{2}\,\sqrt{\Big(-\text{N0}^2\,\Big(-6 - 2\,\text{Cos}[2\,\alpha] +$$

$$2\,\text{Cos}[2\,\tau\,\omega] - \text{Cos}[2\,\alpha - 2\,\tau\,\omega] - \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\Big)\Big)$$

$$\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\Big(-2 + 4\,\text{N0} - 2\,\text{Cos}[2\,\alpha] - 2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega] + \text{N0}\,\text{Cos}[2\,\alpha - 2\,\tau\,\omega] +$$

$$\text{N0}\,\text{Cos}[2\,\alpha + 2\,\tau\,\omega] - 2\sqrt{2}\,\sqrt{\Big(\text{N0}^2\,\Big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] +$$

$$\text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\Big)\Big)\Big)$$

$$\Big(4\,\text{N0} - 2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega] + \text{N0}\,\text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{N0}\,\text{Cos}[2\,\alpha + 2\,\tau\,\omega] -$$
$$2\,\text{N0}\,\text{Cos}[\alpha - \tau\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - \tau\,\omega]^2\,\text{Sec}[\alpha]^2 -$$
$$2\,\text{N0}\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2 - 2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2 +$$
$$2\sqrt{2}\,\sqrt{\Big(\text{N0}^2\,\Big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] + \text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\Big)$$

$$\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\Big)\Big)\Big/\Big(32\,\text{N0}\,\Big(1 + \text{Cos}[2\,\alpha]\Big)\,\sqrt{\Big(\text{N0}^2\,\Big(6 + 2\,\text{Cos}[2\,\alpha] -$$

$$2\,\text{Cos}[2\,\tau\,\omega] + \text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\Big)\Big) -$$

$$\Big(\text{i}\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[\tau\,\omega]^2\,\Big(4\,\text{N0} - 2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega] + \text{N0}\,\text{Cos}[2\,\alpha - 2\,\tau\,\omega] +$$

$$\text{N0}\,\text{Cos}[2\,\alpha + 2\,\tau\,\omega] - 2\,\text{N0}\,\text{Cos}[\alpha - \tau\,\omega]^2\,\text{Sec}[\alpha]^2 -$$
$$2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - \tau\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,\text{N0}\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2 -$$
$$2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2 + 2\sqrt{2}\,\sqrt{\Big(-\text{N0}^2\,\Big(-6 - 2\,\text{Cos}[2\,\alpha] +$$

$$2\,\text{Cos}[2\,\tau\,\omega] - \text{Cos}[2\,\alpha - 2\,\tau\,\omega] - \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\Big)\Big)$$

$$\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\Big(-2 + 4\,\text{N0} - 2\,\text{Cos}[2\,\alpha] - 2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega] + \text{N0}\,\text{Cos}[2\,\alpha - 2\,\tau\,\omega] +$$

$$\text{N0}\,\text{Cos}[2\,\alpha + 2\,\tau\,\omega] + 2\sqrt{2}\,\sqrt{\Big(\text{N0}^2\,\Big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] +$$

$$\text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\Big)\Big)\Big)$$

$$\Big(-4\,\text{N0} + 2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega] - \text{N0}\,\text{Cos}[2\,\alpha - 2\,\tau\,\omega] - \text{N0}\,\text{Cos}[2\,\alpha + 2\,\tau\,\omega] +$$
$$2\,\text{N0}\,\text{Cos}[\alpha - \tau\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - \tau\,\omega]^2\,\text{Sec}[\alpha]^2 +$$
$$2\,\text{N0}\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2 + 2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2 +$$
$$2\sqrt{2}\,\sqrt{\Big(\text{N0}^2\,\Big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] + \text{Cos}[2\,\alpha - 2\,\tau\,\omega] +$$

$$\text{Cos}[2\alpha+2\tau\omega]\big)\ \text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\big)\big)\Big)\Big/$$

$$\Big(32\,\text{N0}\,\big(1+\text{Cos}[2\alpha]\big)\sqrt{\Big(\text{N0}^2\,\big(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\Big)}\Big)\Big)\Big]^2+$$

$$\text{Abs}\Big[\text{Cos}\Big[\frac{1}{4}\,(\pi+2\delta)\Big]\Big(-\mathrm{i}\,\text{Sec}[\alpha]\,\text{Sin}[\tau\omega]\,\Big(\Big(\sqrt{\Big(\frac{1}{1+\text{Cos}[2\alpha]}\Big(-2+4\,\text{N0}-2\,\text{Cos}[2\alpha]-}$$

$$2\,\text{N0}\,\text{Cos}[2\tau\omega]+\text{N0}\,\text{Cos}[2\alpha-2\tau\omega]+\text{N0}\,\text{Cos}[2\alpha+2\tau\omega]-$$

$$2\sqrt{2}\sqrt{\Big(\text{N0}^2\,\big(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\Big)}\Big)\Big)$$

$$\Big(4\,\text{N0}-2\,\text{N0}\,\text{Cos}[2\tau\omega]+\text{N0}\,\text{Cos}[2\alpha-2\tau\omega]+\text{N0}\,\text{Cos}[2\alpha+2\tau\omega]-$$

$$2\,\text{N0}\,\text{Cos}[\alpha-\tau\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{N0}\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-\tau\omega]^2\,\text{Sec}[\alpha]^2-$$

$$2\,\text{N0}\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\omega]^2-2\,\text{N0}\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\omega]^2+$$

$$2\sqrt{2}\sqrt{\Big(\text{N0}^2\,\big(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\Big)}\Big)\Big/\Big(8\sqrt{\Big(\text{N0}^2\,\big(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+$$

$$\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\Big)}\Big)+$$

$$\Big(\sqrt{\Big(\frac{1}{1+\text{Cos}[2\alpha]}\Big(-2+4\,\text{N0}-2\,\text{Cos}[2\alpha]-2\,\text{N0}\,\text{Cos}[2\tau\omega]+\text{N0}\,\text{Cos}[2\alpha-2\tau\omega]+}$$

$$\text{N0}\,\text{Cos}[2\alpha+2\tau\omega]+2\sqrt{2}\sqrt{\Big(\text{N0}^2\,\big(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+$$

$$\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\Big)}\Big)\Big)$$

$$\Big(-4\,\text{N0}+2\,\text{N0}\,\text{Cos}[2\tau\omega]-\text{N0}\,\text{Cos}[2\alpha-2\tau\omega]-\text{N0}\,\text{Cos}[2\alpha+2\tau\omega]+$$

$$2\,\text{N0}\,\text{Cos}[\alpha-\tau\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{N0}\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-\tau\omega]^2\,\text{Sec}[\alpha]^2+$$

$$2\,\text{N0}\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\omega]^2+2\,\text{N0}\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\omega]^2+$$

$$2\sqrt{2}\sqrt{\Big(\text{N0}^2\,\big(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\Big)}\Big)\Big/\Big(8\sqrt{\Big(\text{N0}^2\,\big(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+$$

$$\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\Big)}\Big)\Big)+$$

$$\text{Cos}[\alpha-\tau\omega]\,\text{Sec}[\alpha]\,\Big(-\Big(\Big(\mathrm{i}\,\text{N0}\,\big(1+\text{Cos}[2\alpha]\big)\,\text{Sec}[\alpha]\,\text{Sin}[\tau\omega]^2\sqrt{\Big(\frac{1}{1+\text{Cos}[2\alpha]}}$$

$$\Big(-2+4\,\text{N0}-2\,\text{Cos}[2\alpha]-2\,\text{N0}\,\text{Cos}[2\tau\omega]+\text{N0}\,\text{Cos}[2\alpha-2\tau\omega]+$$

$$\text{N0}\,\text{Cos}[2\alpha+2\tau\omega]-2\sqrt{2}\sqrt{\Big(\text{N0}^2\,\big(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\Big)}\Big)\Big)\,\text{Tan}[\alpha]\Big)\Big/$$

$$\Big(2\sqrt{\Big(\text{N0}^2\,\big(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\Big)}\Big)+\Big(\mathrm{i}\,\text{N0}\,\big(1+\text{Cos}[2\alpha]\big)\,\text{Sec}[\alpha]\,\text{Sin}[\tau\omega]^2$$

$$\sqrt{\Big(\frac{1}{1+\text{Cos}[2\alpha]}\Big(-2+4\,\text{N0}-2\,\text{Cos}[2\alpha]-2\,\text{N0}\,\text{Cos}[2\tau\omega]+\text{N0}\,\text{Cos}[2\alpha-2\tau\omega]+}$$

$$\text{N0}\,\text{Cos}[2\alpha+2\tau\omega]+2\sqrt{2}\sqrt{\Big(\text{N0}^2\,\big(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+$$

$$\left(\text{Cos}[2\alpha - 2\tau\omega] + \text{Cos}[2\alpha + 2\tau\omega]\right)\text{Sin}[\alpha]^2\text{Sin}[\tau\omega]^2\Big)\Big)\Big)\text{Tan}[\alpha]\Big)\Big/$$
$$\Big(2\sqrt{\Big(\text{N0}^2\left(6 + 2\text{Cos}[2\alpha] - 2\text{Cos}[2\tau\omega] + \text{Cos}[2\alpha - 2\tau\omega] + \text{Cos}[2\alpha + 2\tau\omega]\right)$$
$$\text{Sin}[\alpha]^2\text{Sin}[\tau\omega]^2\Big)\Big)\Big) - \text{i}\,\text{Sin}\Big[\frac{1}{4}\left(\pi + 2\delta\right)\Big]$$
$$\Big(\text{Cos}[\alpha + \tau\omega]\,\text{Sec}[\alpha]\,\Big(\Big(\sqrt{\Big(\frac{1}{1 + \text{Cos}[2\alpha]}\Big(-2 + 4\,\text{N0} - 2\text{Cos}[2\alpha] - 2\,\text{N0}\,\text{Cos}[2\tau\omega] +$$
$$\text{N0}\,\text{Cos}[2\alpha - 2\tau\omega] + \text{N0}\,\text{Cos}[2\alpha + 2\tau\omega] - 2\sqrt{2}\,\sqrt{\Big(\text{N0}^2\left(6 + 2\text{Cos}[2\alpha] - 2\text{Cos}[\right.$$
$$\left.2\tau\omega] + \text{Cos}[2\alpha - 2\tau\omega] + \text{Cos}[2\alpha + 2\tau\omega]\right)\text{Sin}[\alpha]^2\text{Sin}[\tau\omega]^2\Big)\Big)\Big)$$
$$\Big(4\,\text{N0} - 2\,\text{N0}\,\text{Cos}[2\tau\omega] + \text{N0}\,\text{Cos}[2\alpha - 2\tau\omega] + \text{N0}\,\text{Cos}[2\alpha + 2\tau\omega] -$$
$$2\,\text{N0}\,\text{Cos}[\alpha - \tau\omega]^2\,\text{Sec}[\alpha]^2 - 2\,\text{N0}\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha - \tau\omega]^2\,\text{Sec}[\alpha]^2 -$$
$$2\,\text{N0}\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\omega]^2 - 2\,\text{N0}\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\omega]^2 +$$
$$2\sqrt{2}\,\sqrt{\Big(\text{N0}^2\left(6 + 2\text{Cos}[2\alpha] - 2\text{Cos}[2\tau\omega] + \text{Cos}[2\alpha - 2\tau\omega] + \text{Cos}[2\alpha + 2\tau\omega]\right)$$
$$\text{Sin}[\alpha]^2\text{Sin}[\tau\omega]^2\Big)\Big)\Big/\Big(8\sqrt{\Big(\text{N0}^2\left(6 + 2\text{Cos}[2\alpha] - 2\text{Cos}[2\tau\omega] +$$
$$\text{Cos}[2\alpha - 2\tau\omega] + \text{Cos}[2\alpha + 2\tau\omega]\right)\text{Sin}[\alpha]^2\text{Sin}[\tau\omega]^2\Big)\Big) +$$
$$\Big(\sqrt{\Big(\frac{1}{1 + \text{Cos}[2\alpha]}\Big(-2 + 4\,\text{N0} - 2\text{Cos}[2\alpha] - 2\,\text{N0}\,\text{Cos}[2\tau\omega] + \text{N0}\,\text{Cos}[2\alpha - 2\tau\omega] +$$
$$\text{N0}\,\text{Cos}[2\alpha + 2\tau\omega] + 2\sqrt{2}\,\sqrt{\Big(\text{N0}^2\left(6 + 2\text{Cos}[2\alpha] - 2\text{Cos}[2\tau\omega] +$$
$$\text{Cos}[2\alpha - 2\tau\omega] + \text{Cos}[2\alpha + 2\tau\omega]\right)\text{Sin}[\alpha]^2\text{Sin}[\tau\omega]^2\Big)\Big)\Big)$$
$$\Big(-4\,\text{N0} + 2\,\text{N0}\,\text{Cos}[2\tau\omega] - \text{N0}\,\text{Cos}[2\alpha - 2\tau\omega] - \text{N0}\,\text{Cos}[2\alpha + 2\tau\omega] +$$
$$2\,\text{N0}\,\text{Cos}[\alpha - \tau\omega]^2\,\text{Sec}[\alpha]^2 + 2\,\text{N0}\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha - \tau\omega]^2\,\text{Sec}[\alpha]^2 +$$
$$2\,\text{N0}\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\omega]^2 + 2\,\text{N0}\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\omega]^2 +$$
$$2\sqrt{2}\,\sqrt{\Big(\text{N0}^2\left(6 + 2\text{Cos}[2\alpha] - 2\text{Cos}[2\tau\omega] + \text{Cos}[2\alpha - 2\tau\omega] + \text{Cos}[2\alpha + 2\tau\omega]\right)$$
$$\text{Sin}[\alpha]^2\text{Sin}[\tau\omega]^2\Big)\Big)\Big/\Big(8\sqrt{\Big(\text{N0}^2\left(6 + 2\text{Cos}[2\alpha] - 2\text{Cos}[2\tau\omega] +$$
$$\text{Cos}[2\alpha - 2\tau\omega] + \text{Cos}[2\alpha + 2\tau\omega]\right)\text{Sin}[\alpha]^2\text{Sin}[\tau\omega]^2\Big)\Big)\Big) -$$
$$\text{i}\,\text{Sec}[\alpha]\,\text{Sin}[\tau\omega]\,\Big(-\Big(\Big(\text{i}\,\text{N0}\left(1 + \text{Cos}[2\alpha]\right)\text{Sec}[\alpha]\,\text{Sin}[\tau\omega]^2\sqrt{\Big(\frac{1}{1 + \text{Cos}[2\alpha]}$$
$$\Big(-2 + 4\,\text{N0} - 2\text{Cos}[2\alpha] - 2\,\text{N0}\,\text{Cos}[2\tau\omega] + \text{N0}\,\text{Cos}[2\alpha - 2\tau\omega] +$$
$$\text{N0}\,\text{Cos}[2\alpha + 2\tau\omega] - 2\sqrt{2}\,\sqrt{\Big(\text{N0}^2\left(6 + 2\text{Cos}[2\alpha] - 2\text{Cos}[2\tau\omega] + \text{Cos}[\right.$$
$$\left.2\alpha - 2\tau\omega] + \text{Cos}[2\alpha + 2\tau\omega]\right)\text{Sin}[\alpha]^2\text{Sin}[\tau\omega]^2\Big)\Big)\Big)\text{Tan}[\alpha]\Big)\Big/$$
$$\Big(2\sqrt{\Big(\text{N0}^2\left(6 + 2\text{Cos}[2\alpha] - 2\text{Cos}[2\tau\omega] + \text{Cos}[2\alpha - 2\tau\omega] + \text{Cos}[\right.$$
$$\left.2\alpha + 2\tau\omega]\right)\text{Sin}[\alpha]^2\text{Sin}[\tau\omega]^2\Big)\Big)\Big) +$$
$$\Big(\text{i}\,\text{N0}\left(1 + \text{Cos}[2\alpha]\right)\text{Sec}[\alpha]\,\text{Sin}[\tau\omega]^2\sqrt{\Big(\frac{1}{1 + \text{Cos}[2\alpha]}\Big(-2 + 4\,\text{N0} -$$
$$2\,\text{Cos}[2\alpha] - 2\,\text{N0}\,\text{Cos}[2\tau\omega] + \text{N0}\,\text{Cos}[2\alpha - 2\tau\omega] + \text{N0}\,\text{Cos}[2\alpha + 2\tau\omega] +$$
$$2\sqrt{2}\,\sqrt{\Big(\text{N0}^2\left(6 + 2\text{Cos}[2\alpha] - 2\text{Cos}[2\tau\omega] + \text{Cos}[2\alpha - 2\tau\omega] +$$

```
                Cos[2 α + 2 τ ω]) Sin[α]^2 Sin[τ ω]^2)) Tan[α]) /
  (2 √(N0^2 (6 + 2 Cos[2 α] - 2 Cos[2 τ ω] + Cos[2 α - 2 τ ω] + Cos[2 α + 2 τ ω])
      Sin[α]^2 Sin[τ ω]^2)))]^2)
```

In[32]:=
```
DecisivenessFirstFunction[δ_, σ_, α_, M0_] :=
 (Abs[-i Cos[1/4 (π + 2 δ)]] Sec[α] Sqrt[(Cos[α]^2 Cos[σ])/(2 Sin[α] - 2 Cos[σ] Sin[α]^2)] -
    i Cos[α + ArcSin[Sqrt[(Cos[α]^2 Cos[σ])/(2 Sin[α] - 2 Cos[σ] Sin[α]^2)]]] Sec[α] Sin[1/4 (π + 2 δ)]]^2 +
  Abs[Cos[1/4 (π + 2 δ)]] Cos[α - ArcSin[Sqrt[(Cos[α]^2 Cos[σ])/(2 Sin[α] - 2 Cos[σ] Sin[α]^2)]]] Sec[α] -
  Sec[α] Sqrt[(Cos[α]^2 Cos[σ])/(2 Sin[α] - 2 Cos[σ] Sin[α]^2)] Sin[1/4 (π + 2 δ)]]^2) /
 (Abs[-i Cos[1/4 (π + 2 δ)]] Sec[α] Sqrt[(Cos[α]^2 Cos[σ])/(2 Sin[α] - 2 Cos[σ] Sin[α]^2)] -
    i Cos[α + ArcSin[Sqrt[(Cos[α]^2 Cos[σ])/(2 Sin[α] - 2 Cos[σ] Sin[α]^2)]]] Sec[α] Sin[1/4 (π + 2 δ)]]^2 +
  Abs[Cos[1/4 (π + 2 δ)]] Cos[α - ArcSin[Sqrt[(Cos[α]^2 Cos[σ])/(2 Sin[α] - 2 Cos[σ] Sin[α]^2)]]] Sec[α] -
  Sec[α] Sqrt[(Cos[α]^2 Cos[σ])/(2 Sin[α] - 2 Cos[σ] Sin[α]^2)] Sin[1/4 (π + 2 δ)]]^2 +
 Abs[Cos[1/4 (π + 2 δ)]] (Cos[α - ArcSin[Sqrt[(Cos[α]^2 Cos[σ])/(2 Sin[α] - 2 Cos[σ] Sin[α]^2)]]] Sec[α]
    (-(((i M0 (1 + Cos[2 α]) Cos[σ] Sin[α] Sqrt[(1/(1 + Cos[2 α])) (-2 + 4 M0 - 2 Cos[2 α] +
          M0 Cos[2 α - 2 ArcSin[Sqrt[(Cos[α]^2 Cos[σ])/(2 Sin[α] - 2 Cos[σ] Sin[α]^2)]]] -
```

$$2\,M0\,\cos\left[2\,\text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+$$

$$M0\,\cos\left[2\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-$$

$$2\sqrt{2}\,\sqrt{\left(\frac{1}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}M0^2\cos[\alpha]^2\right.}$$

$$\cos[\sigma]\left(6+2\cos[2\alpha]+\cos\left[2\alpha-2\,\text{ArcSin}\left[\right.\right.\right.$$

$$\left.\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\Big]-2\cos\left[2\,\text{ArcSin}\left[\right.$$

$$\left.\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\Big]+\cos\left[2\alpha+2\,\text{ArcSin}\left[\right.$$

$$\left.\left.\left.\left.\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\Big]\right)\sin[\alpha]^2\right)\right)\Big)\Big)\Big)\Big/$$

$$\left(2\sqrt{\left(\frac{1}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}M0^2\cos[\alpha]^2\cos[\sigma]\left(6+2\cos[\right.\right.\right.$$

$$\left.2\alpha]+\cos\left[2\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-\right.$$

$$2\cos\left[2\,\text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+$$

$$\left.\left.\cos\left[2\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\right)\sin[\alpha]^2\right)$$

$$\left.\left.\left(2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2\right)\right)\right)+\left(i\,M0\,\left(1+\cos[2\alpha]\right)\right.$$

$$\cos[\sigma]\sin[\alpha]\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4\,M0-2\cos[2\alpha]+\right.\right.}$$

$$M0 \cos\left[2\alpha - 2 \arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] -$$

$$2 M0 \cos\left[2 \arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] +$$

$$M0 \cos\left[2\alpha + 2 \arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] + 2\sqrt{2}$$

$$\sqrt{\left(\frac{1}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2} M0^2 \cos[\alpha]^2 \cos[\sigma] \left(6 + 2\cos[2\alpha] + \right.\right.}$$

$$\cos\left[2\alpha - 2 \arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] -$$

$$2\cos\left[2 \arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] + \cos\left[2\alpha + \right.$$

$$\left.\left.\left.\left.\left.2 \arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\right) \sin[\alpha]^2\right)\right)\right)\Big/$$

$$\left(2\sqrt{\left(\frac{1}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2} M0^2 \cos[\alpha]^2 \cos[\sigma] \left(6 + 2\cos[2\alpha] + \right.\right.\right.$$

$$\cos\left[2\alpha - 2 \arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] -$$

$$2\cos\left[2 \arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] +$$

$$\left.\left.\left.\cos\left[2\alpha + 2 \arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\right) \sin[\alpha]^2\right) \left(2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2\right)\right)\right) -$$

$$i \sec[\alpha] \sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}} \left(\left(\sqrt{\left(\frac{1}{1 + \cos[2\alpha]} \left(-2 + 4 M0 - \right.\right.\right.\right.$$

$$2\cos[2\alpha] + M0\cos\left[2\alpha - 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] -$$

$$2\,M0\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] +$$

$$M0\cos\left[2\alpha + 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] - 2\sqrt{2}$$

$$\sqrt{\left(\frac{1}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}M0^2\cos[\alpha]^2\cos[\sigma]\left(6 + 2\cos[2\alpha] +\right.\right.}$$

$$\cos\left[2\alpha - 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] -$$

$$2\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] + \cos\left[$$

$$\left.\left.\left.2\alpha + 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\right)\sin[\alpha]^2\right)\right)\Bigg)$$

$$\left(4\,M0 + M0\cos\left[2\alpha - 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] -\right.$$

$$2\,M0\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] +$$

$$M0\cos\left[2\alpha + 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] -$$

$$2\,M0\cos\left[\alpha - \arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2\sec[\alpha]^2 -$$

$$2\,M0\cos[2\alpha]\cos\left[\alpha - \arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2\sec[\alpha]^2 +$$

$$2\sqrt{2}\sqrt{\left(\frac{1}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}M0^2\cos[\alpha]^2\cos[\sigma]\left(6 + 2\cos[2\alpha] +\right.\right.}$$

$$\cos\left[2\alpha - 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] -$$

$$2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+$$

$$\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]\text{Sin}[\alpha]^2\Bigg)-$$

$$\frac{2\,\text{M0}\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}-\frac{2\,\text{M0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\Bigg)\Bigg)\Bigg/$$

$$\Bigg(8\sqrt{\Bigg(\frac{1}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\,\text{M0}^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\,\Bigg(6+2\,\text{Cos}[2\,\alpha]+$$

$$\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-$$

$$2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+$$

$$\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]\text{Sin}[\alpha]^2\Bigg)\Bigg)+$$

$$\Bigg(\sqrt{\Bigg(\frac{1}{1+\text{Cos}[2\,\alpha]}\,\Bigg(-2+4\,\text{M0}-2\,\text{Cos}[2\,\alpha]+\text{M0}\,\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\right.\right.$$

$$\left.\left.\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-$$

$$2\,\text{M0}\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+$$

$$\text{M0}\,\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+2\sqrt{2}$$

$$\sqrt{\Bigg(\frac{1}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\,\text{M0}^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\,\Bigg(6+2\,\text{Cos}[2\,\alpha]+$$

$$\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-$$

$$2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]\text{Sin}[\alpha]^2\Bigg)\Bigg)$$

$$\Bigg(-4\,M0-M0\,\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+$$

$$2\,M0\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-$$

$$M0\,\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+$$

$$2\,M0\,\text{Cos}\left[\alpha-\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]^2\text{Sec}[\alpha]^2+$$

$$2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}\left[\alpha-\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]^2\text{Sec}[\alpha]^2+$$

$$2\sqrt{2}\,\sqrt{\Bigg(\frac{1}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}M0^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\Bigg(6+2\,\text{Cos}[2\,\alpha]+$$

$$\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-$$

$$2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+$$

$$\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]\text{Sin}[\alpha]^2\Bigg)+$$

$$\frac{2\,M0\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}+\frac{2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\Bigg)\Bigg)\Bigg/$$

$$\Bigg(8\,\sqrt{\Bigg(\frac{1}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}M0^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\Bigg(6+2\,\text{Cos}[2\,\alpha]+$$

$$\text{Cos}\left[2\,\alpha - 2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right] -$$

$$2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right] +$$

$$\text{Cos}\left[2\,\alpha + 2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]\Bigg)\,\text{Sin}[\alpha]^2\Bigg)\Bigg)\Bigg) -$$

$$\dot{\imath}\left(-\dot{\imath}\,\text{Sec}[\alpha]\,\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\left(-\left(\left(\dot{\imath}\,M0\,\left(1 + \text{Cos}[2\,\alpha]\right)\,\text{Cos}[\sigma]\right.\right.\right.\right.$$

$$\text{Sin}[\alpha]\,\sqrt{\left(\frac{1}{1 + \text{Cos}[2\,\alpha]}\left(-2 + 4\,M0 - 2\,\text{Cos}[2\,\alpha] +\right.\right.\right.$$

$$M0\,\text{Cos}\left[2\,\alpha - 2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right] -$$

$$2\,M0\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right] +$$

$$M0\,\text{Cos}\left[2\,\alpha + 2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right] -$$

$$2\,\sqrt{2}\,\sqrt{\left(\frac{1}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\,M0^2\,\text{Cos}[\alpha]^2\right.$$

$$\text{Cos}[\sigma]\left(6 + 2\,\text{Cos}[2\,\alpha] + \text{Cos}\left[2\,\alpha - 2\,\text{ArcSin}\left[\right.\right.\right.$$

$$\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\Big]\Big] - 2\,\text{Cos}\left[2\,\text{ArcSin}\left[\right.\right.$$

$$\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\Big]\Big] + \text{Cos}\left[2\,\alpha + 2\,\text{ArcSin}\left[\right.\right.$$

$$\left.\left.\left.\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\Big]\Big]\right)\,\text{Sin}[\alpha]^2\right)\Big)\Big)\Big)\Big/$$

$$\left(2\sqrt{\left(\frac{1}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\,\text{M0}^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\left(6+2\,\text{Cos}[2\,\alpha]+\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]\right)\text{Sin}[\alpha]^2\right)\Big/\left(2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2\right)\right)\right)+\left(\dot{\imath}\,\text{M0}\left(1+\text{Cos}[2\,\alpha]\right)\text{Cos}[\sigma]\,\text{Sin}[\alpha]\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,\text{M0}-2\,\text{Cos}[2\,\alpha]+\text{M0}\,\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-2\,\text{M0}\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+\text{M0}\,\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+2\sqrt{2}\sqrt{\left(\frac{1}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\,\text{M0}^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\left(6+2\,\text{Cos}[2\,\alpha]+\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]\right)\text{Sin}[\alpha]^2\right)\Big/\left(2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2\right)\right)\right)\Big/$$

$$\left(2\sqrt{\left(\frac{1}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\,\text{M0}^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\left(6+2\,\text{Cos}[2\,\alpha]+\right.\right.\right.$$

$$\left.\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-$$

$$2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+$$

$$\left.\left.\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]\right)\right.$$

$$\left.\left.\text{Sin}[\alpha]^2\right)\left(2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2\right)\right)\right)+$$

$$\text{Cos}\left[\alpha+\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]\text{Sec}[\alpha]$$

$$\left(\left(\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,\text{M0}-2\,\text{Cos}[2\,\alpha]+\right.\right.\right.\right.$$

$$\text{M0}\,\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-$$

$$2\,\text{M0}\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+$$

$$\text{M0}\,\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-2\sqrt{2}$$

$$\sqrt{\left(\frac{1}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\,\text{M0}^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\left(6+2\,\text{Cos}[2\,\alpha]+\right.\right.}$$

$$\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-$$

$$2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+\text{Cos}\left[\right.$$

$$2\,\alpha + 2\,\text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\,\right]\Bigg]\sin[\alpha]^2\Bigg)\Bigg)\Bigg)$$

$$\Bigg(4\,M0 + M0\cos\Big[2\,\alpha - 2\,\text{ArcSin}\Big[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\,\Big]\Big] -$$

$$2\,M0\cos\Big[2\,\text{ArcSin}\Big[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\,\Big]\Big] +$$

$$M0\cos\Big[2\,\alpha + 2\,\text{ArcSin}\Big[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\,\Big]\Big] -$$

$$2\,M0\cos\Big[\alpha - \text{ArcSin}\Big[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\,\Big]\Big]^2\sec[\alpha]^2 -$$

$$2\,M0\cos[2\,\alpha]\cos\Big[\alpha - \text{ArcSin}\Big[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\,\Big]\Big]^2\sec[\alpha]^2 +$$

$$2\sqrt{2}\,\sqrt{\Bigg(\frac{1}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}M0^2\cos[\alpha]^2\cos[\sigma]\Bigg(6 + 2\cos[2\,\alpha] +$$

$$\cos\Big[2\,\alpha - 2\,\text{ArcSin}\Big[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\,\Big]\Big] -$$

$$2\cos\Big[2\,\text{ArcSin}\Big[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\,\Big]\Big] +$$

$$\cos\Big[2\,\alpha + 2\,\text{ArcSin}\Big[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\,\Big]\Big]\Bigg)\sin[\alpha]^2\Bigg) -$$

$$\frac{2\,M0\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2} - \frac{2\,M0\cos[2\,\alpha]\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}\Bigg)\Bigg)\Bigg/$$

$$\Bigg(8\sqrt{\Bigg(\frac{1}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}M0^2\cos[\alpha]^2\cos[\sigma]\Bigg(6 + 2\cos[2\,\alpha] +$$

$$\cos\Big[2\,\alpha - 2\,\text{ArcSin}\Big[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\,\Big]\Big] -$$

$$2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+$$

$$\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]\text{Sin}[\alpha]^2\Bigg)\Bigg)+$$

$$\Bigg(\sqrt{\Bigg(\frac{1}{1+\text{Cos}[2\,\alpha]}\Bigg(-2+4\,\text{M0}-2\,\text{Cos}[2\,\alpha]+\text{M0}\,\text{Cos}\Big[2\,\alpha-2\,\text{ArcSin}\Big[$$

$$\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\Big]\Big]-$$

$$2\,\text{M0}\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+$$

$$\text{M0}\,\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+2\sqrt{2}$$

$$\sqrt{\Bigg(\frac{1}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\,\text{M0}^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\Bigg(6+2\,\text{Cos}[2\,\alpha]+$$

$$\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-$$

$$2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+\text{Cos}\Big[$$

$$2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\Big]\text{Sin}[\alpha]^2\Bigg)\Bigg)\Bigg)$$

$$\Bigg(-4\,\text{M0}-\text{M0}\,\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+$$

$$2\,\text{M0}\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-$$

$$\text{M0}\,\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+$$

$$2\,M0\,\cos\left[\alpha-\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2\sec[\alpha]^2+$$

$$2\,M0\,\cos[2\alpha]\,\cos\left[\alpha-\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2\sec[\alpha]^2+$$

$$2\sqrt{2}\sqrt{\left(\frac{1}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}M0^2\cos[\alpha]^2\cos[\sigma]\left(6+2\cos[2\alpha]+\right.\right.$$

$$\cos\left[2\alpha-2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-$$

$$2\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+$$

$$\left.\left.\cos\left[2\alpha+2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\right)\sin[\alpha]^2\right)+$$

$$\left.\left.\frac{2\,M0\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}+\frac{2\,M0\cos[2\alpha]\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}\right)\right)\Big/$$

$$\left(8\sqrt{\left(\frac{1}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}M0^2\cos[\alpha]^2\cos[\sigma]\left(6+2\cos[2\alpha]+\right.\right.\right.$$

$$\cos\left[2\alpha-2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-$$

$$2\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+$$

$$\left.\left.\left.\cos\left[2\alpha+2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\right)\sin[\right.\right.$$

$$\left.\left.\left.\left.\alpha]^2\right)\right)\right)\right)\sin\left[\frac{1}{4}(\pi+2\delta)\right]\right]^2+$$

$$\mathrm{Abs}\left[\cos\left[\frac{1}{4}(\pi+2\delta)\right]\right]\left(\cos\left[\alpha-\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\sec[\alpha]\right.$$

$$\left(\left(\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4\,M0-2\cos[2\alpha]+\right.\right.\right.\right.$$

$$M0\cos\left[2\alpha-2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-$$

$$2\,M0\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+$$

$$M0\cos\left[2\alpha+2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+2\sqrt{2}$$

$$\sqrt{\left(\frac{1}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}M0^2\cos[\alpha]^2\cos[\sigma]\left(6+2\cos[2\alpha]+\right.\right.}$$

$$\cos\left[2\alpha-2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-$$

$$2\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+\cos\left[$$

$$\left.\left.\left.\left.2\alpha+2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\right)\sin[\alpha]^2\right)\right)\right)$$

$$\left(4\,M0+M0\cos\left[2\alpha-2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-\right.$$

$$2\,M0\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+$$

$$M0\cos\left[2\alpha+2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-$$

$$2\,M0\cos\left[\alpha-\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2\sec[\alpha]^2-$$

$$2\,M0\cos[2\alpha]\cos\left[\alpha-\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2\sec[\alpha]^2+$$

$$2\sqrt{2}\sqrt{\left(-\frac{1}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}M0^2\cos[\alpha]^2\cos[\sigma]\left(-6-2\cos[2\alpha]-\cos\left[2\alpha-2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+2\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-\cos\left[2\alpha+2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\sin[\alpha]^2\right)-\frac{2M0\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}-\frac{2M0\cos[2\alpha]\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}\right)\Bigg/\left(8\sqrt{\left(\frac{1}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}M0^2\cos[\alpha]^2\cos[\sigma]\left(6+2\cos[2\alpha]+\cos\left[2\alpha-2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-2\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+\cos\left[2\alpha+2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\sin[\alpha]^2\right)+\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4M0-2\cos[2\alpha]+M0\cos\left[2\alpha-2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-2M0\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+M0\cos\left[2\alpha+2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-2\sqrt{2}\right.\right.\right.$$

$$\sqrt{\left(\frac{1}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\,\text{M0}^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\left(6+2\,\text{Cos}[2\,\alpha]+\right.\right.$$

$$\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-$$

$$2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+\text{Cos}\left[$$

$$\left.\left.2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]\right)\text{Sin}[\alpha]^2\right)\Bigg)\Bigg)$$

$$\left(-4\,\text{M0}-\text{M0}\,\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+\right.$$

$$2\,\text{M0}\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-$$

$$\text{M0}\,\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+$$

$$2\,\text{M0}\,\text{Cos}\left[\alpha-\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]^2\text{Sec}[\alpha]^2+$$

$$2\,\text{M0}\,\text{Cos}[2\,\alpha]\,\text{Cos}\left[\alpha-\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]^2\text{Sec}[\alpha]^2+$$

$$2\sqrt{2}\,\sqrt{\left(-\frac{1}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\,\text{M0}^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\left(-6-\right.\right.$$

$$2\,\text{Cos}[2\,\alpha]-\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+$$

$$2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-$$

$$\left.\left.\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]\right)\text{Sin}[\alpha]^2\right)+$$

$$\frac{2\,M0\,\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}+\frac{2\,M0\cos[2\alpha]\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}\Bigg)\Bigg)\Bigg/$$

$$\Bigg(8\sqrt{\Bigg(\frac{1}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}M0^2\cos[\alpha]^2\cos[\sigma]\Bigg(6+2\cos[2\alpha]+$$

$$\cos\Big[2\alpha-2\arcsin\Big[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\Big]\Big]-$$

$$2\cos\Big[2\arcsin\Big[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\Big]\Big]+$$

$$\cos\Big[2\alpha+2\arcsin\Big[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\Big]\Big]\Bigg)\sin[\alpha]^2\Bigg)\Bigg)\Bigg)-$$

$$i\sec[\alpha]\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\Bigg(\Bigg(i\csc[\alpha]\sec[\sigma]\,\big(2\sin[\alpha]-$$

$$2\cos[\sigma]\sin[\alpha]^2\big)\sqrt{\Bigg(\frac{1}{1+\cos[2\alpha]}\Bigg(-2+4\,M0-2\cos[2\alpha]+$$

$$M0\cos\Big[2\alpha-2\arcsin\Big[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\Big]\Big]-$$

$$2\,M0\cos\Big[2\arcsin\Big[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\Big]\Big]+$$

$$M0\cos\Big[2\alpha+2\arcsin\Big[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\Big]\Big]-2\sqrt{2}$$

$$\sqrt{\Bigg(\frac{1}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}M0^2\cos[\alpha]^2\cos[\sigma]\Bigg(6+2\cos[2\alpha]+$$

$$\cos\Big[2\alpha-2\arcsin\Big[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\Big]\Big]-$$

$$2\cos\Big[2\arcsin\Big[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\Big]\Big]+\cos\Big[$$

$$2\,\alpha + 2\,\text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\,\right]\Bigg]\sin[\alpha]^2\Bigg)\Bigg)\Bigg)$$

$$\Bigg(4\,M0 + M0\cos\Big[2\,\alpha - 2\,\text{ArcSin}\Big[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\,\Big]\Big] -$$

$$2\,M0\cos\Big[2\,\text{ArcSin}\Big[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\,\Big]\Big] +$$

$$M0\cos\Big[2\,\alpha + 2\,\text{ArcSin}\Big[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\,\Big]\Big] -$$

$$2\,M0\cos\Big[\alpha - \text{ArcSin}\Big[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\,\Big]\Big]^2\sec[\alpha]^2 -$$

$$2\,M0\cos[2\,\alpha]\cos\Big[\alpha - \text{ArcSin}\Big[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\,\Big]\Big]^2\sec[\alpha]^2 +$$

$$2\sqrt{2}\,\sqrt{\Bigg(\frac{1}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}M0^2\cos[\alpha]^2\cos[\sigma]\Bigg(6 + 2\cos[2\,\alpha] +$$

$$\cos\Big[2\,\alpha - 2\,\text{ArcSin}\Big[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\,\Big]\Big] -$$

$$2\cos\Big[2\,\text{ArcSin}\Big[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\,\Big]\Big] +$$

$$\cos\Big[2\,\alpha + 2\,\text{ArcSin}\Big[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\,\Big]\Big]\Bigg)\sin[\alpha]^2\Bigg) -$$

$$\frac{2\,M0\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2} - \frac{2\,M0\cos[2\,\alpha]\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}\Bigg)$$

$$\Bigg(-4\,M0 - M0\cos\Big[2\,\alpha - 2\,\text{ArcSin}\Big[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\,\Big]\Big] +$$

$$2\,M0\cos\Big[2\,\text{ArcSin}\Big[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\,\Big]\Big] -$$

$$M0 \cos\left[2\alpha + 2 \arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] +$$

$$2 M0 \cos\left[\alpha - \arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2 \sec[\alpha]^2 +$$

$$2 M0 \cos[2\alpha] \cos\left[\alpha - \arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2 \sec[\alpha]^2 +$$

$$2\sqrt{2}\sqrt{\left(-\frac{1}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2} M0^2 \cos[\alpha]^2 \cos[\sigma]\left(-6 - 2\cos[2\alpha] - \cos\left[2\alpha - 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] + 2\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] - \cos\left[2\alpha + 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\right)\sin[\alpha]^2\right) + \frac{2 M0 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2} + \frac{2 M0 \cos[2\alpha]\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}\right)\Bigg/$$

$$\left(32 M0 \left(1 + \cos[2\alpha]\right)\sqrt{\left(\frac{1}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2} M0^2 \cos[\alpha]^2 \cos[\sigma]\left(6 + 2\cos[2\alpha] + \cos\left[2\alpha - 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] - 2\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] + \cos\left[2\alpha + 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\right)\sin[\alpha]^2\right)\right) -$$

$$\left(i \csc[\alpha]\sec[\sigma]\left(2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2\right)\sqrt{\left(\frac{1}{1 + \cos[2\alpha]}\left(-2 + 4 M0 -\right.\right.\right.$$

$$2\cos[2\alpha] + M0\cos\left[2\alpha - 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] -$$

$$2\,M0\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] +$$

$$M0\cos\left[2\alpha + 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] + 2\sqrt{2}$$

$$\sqrt{\left(\frac{1}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}M0^2\cos[\alpha]^2\cos[\sigma]\left(6 + 2\cos[2\alpha] +\right.\right.}$$

$$\cos\left[2\alpha - 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] -$$

$$2\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] + \cos\left[$$

$$\left.\left.\left.2\alpha + 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\right)\sin[\alpha]^2\right)\right)\Bigg)$$

$$\left(4\,M0 + M0\cos\left[2\alpha - 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] -\right.$$

$$2\,M0\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] +$$

$$M0\cos\left[2\alpha + 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] -$$

$$2\,M0\cos\left[\alpha - \arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2\sec[\alpha]^2 -$$

$$2\,M0\cos[2\alpha]\cos\left[\alpha - \arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2\sec[\alpha]^2 +$$

$$2\sqrt{2}\sqrt{\left(-\frac{1}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}M0^2\cos[\alpha]^2\cos[\sigma]\left(-6 -\right.\right.}$$

$$2\cos[2\alpha] - \cos\left[2\alpha - 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] +$$

$$2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-$$

$$\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]\text{Sin}[\alpha]^2\Bigg)-$$

$$\frac{2\,\text{M0}\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}-\frac{2\,\text{M0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\Bigg)$$

$$\Bigg(-4\,\text{M0}-\text{M0}\,\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+$$

$$2\,\text{M0}\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-$$

$$\text{M0}\,\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+$$

$$2\,\text{M0}\,\text{Cos}\left[\alpha-\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]^2\text{Sec}[\alpha]^2+$$

$$2\,\text{M0}\,\text{Cos}[2\,\alpha]\,\text{Cos}\left[\alpha-\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]^2\text{Sec}[\alpha]^2+$$

$$2\sqrt{2}\,\sqrt{\Bigg(\frac{1}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\,\text{M0}^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\,\Bigg(6+2\,\text{Cos}[2\,\alpha]+$$

$$\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-$$

$$2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+$$

$$\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]\text{Sin}[\alpha]^2\Bigg)+$$

$$\frac{2\,\text{M0}\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}+\frac{2\,\text{M0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\Bigg)\Bigg)\Bigg/$$

$$\left(32\,M0\,\left(1+\cos[2\alpha]\right)\sqrt{\left(\frac{1}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}M0^2\cos[\alpha]^2\cos[\sigma]\right.}\right.$$
$$\left(6+2\cos[2\alpha]+\cos\left[2\alpha-2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-\right.$$
$$2\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+$$
$$\left.\left.\left.\cos\left[2\alpha+2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\right)\sin[\alpha]^2\right)\right)\right)\right)-$$
$$i\left(-i\sec[\alpha]\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\left(\left(\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4\,M0-\right.\right.\right.\right.$$
$$2\cos[2\alpha]+M0\cos\left[2\alpha-2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-$$
$$2\,M0\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+$$
$$M0\cos\left[2\alpha+2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+2\sqrt{2}$$
$$\sqrt{\left(\frac{1}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}M0^2\cos[\alpha]^2\cos[\sigma]\right.}\left(6+2\cos[2\alpha]+\right.$$
$$\cos\left[2\alpha-2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-$$
$$2\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+\cos\left[\right.$$
$$\left.\left.\left.\left.2\alpha+2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\right)\sin[\alpha]^2\right)\right)\right)$$
$$\left(4\,M0+M0\cos\left[2\alpha-2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-\right.$$

$$2\,M0\,\cos\left[2\,\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+$$

$$M0\,\cos\left[2\alpha+2\,\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-$$

$$2\,M0\,\cos\left[\alpha-\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2\sec[\alpha]^2-$$

$$2\,M0\,\cos[2\alpha]\,\cos\left[\alpha-\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2\sec[\alpha]^2+$$

$$2\sqrt{2}\,\sqrt{\left(-\frac{1}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}M0^2\cos[\alpha]^2\cos[\sigma]\left(-6-\right.\right.}$$

$$2\cos[2\alpha]-\cos\left[2\alpha-2\,\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+$$

$$2\cos\left[2\,\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-$$

$$\left.\left.\cos\left[2\alpha+2\,\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\right)\sin[\alpha]^2\right)-$$

$$\left.\left.\frac{2\,M0\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}-\frac{2\,M0\cos[2\alpha]\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}\right)\right)\Big/$$

$$\left(8\sqrt{\left(\frac{1}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}M0^2\cos[\alpha]^2\cos[\sigma]\left(6+2\cos[2\alpha]+\right.\right.\right.$$

$$\cos\left[2\alpha-2\,\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-$$

$$2\cos\left[2\,\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+$$

$$\left.\left.\left.\cos\left[2\alpha+2\,\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\right)\sin[\alpha]^2\right)\right)+$$

$$\left(\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4\,M0-2\cos[2\alpha]+M0\cos\left[2\alpha-2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-2\,M0\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+M0\cos\left[2\alpha+2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-2\sqrt{2}\sqrt{\left(\frac{1}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}M0^2\cos[\alpha]^2\cos[\sigma]\left(6+2\cos[2\alpha]+\cos\left[2\alpha-2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-2\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+\cos\left[2\alpha+2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\right)\sin[\alpha]^2\right)\right)\right)\left(-4\,M0-M0\cos\left[2\alpha-2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+2\,M0\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-M0\cos\left[2\alpha+2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+2\,M0\cos\left[\alpha-\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2\sec[\alpha]^2+2\,M0\cos[2\alpha]\cos\left[\alpha-\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2\sec[\alpha]^2+$$

$$2\sqrt{2}\sqrt{\left(-\frac{1}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}M0^2\cos[\alpha]^2\cos[\sigma]\left(-6-2\cos[2\alpha]-\cos\left[2\alpha-2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+2\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-\cos\left[2\alpha+2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\sin[\alpha]^2\right)+\frac{2M0\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}+\frac{2M0\cos[2\alpha]\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}\right)}\Big/\left(8\sqrt{\left(\frac{1}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}M0^2\cos[\alpha]^2\cos[\sigma]\left(6+2\cos[2\alpha]+\cos\left[2\alpha-2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-2\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+\cos\left[2\alpha+2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\sin[\alpha]^2\right)\right)}+\cos\left[\alpha+\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\sec[\alpha]\left(\left(i\csc[\alpha]\sec[\sigma]\left(2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2\right)\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4M0-2\cos[2\alpha]+M0\cos\left[2\alpha-2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-\right.\right.\right.$$

$$2\,M0\,\cos\left[2\,\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+$$

$$M0\,\cos\left[2\alpha+2\,\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-2\sqrt{2}$$

$$\sqrt{\left(\frac{1}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}M0^2\cos[\alpha]^2\cos[\sigma]\left(6+2\cos[2\alpha]+\right.\right.}$$

$$\cos\left[2\alpha-2\,\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-$$

$$2\cos\left[2\,\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+\cos\left[$$

$$\left.\left.\left.2\alpha+2\,\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\right)\sin[\alpha]^2\right)\right)\Bigg)$$

$$\left(4\,M0+M0\,\cos\left[2\alpha-2\,\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-\right.$$

$$2\,M0\,\cos\left[2\,\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+$$

$$M0\,\cos\left[2\alpha+2\,\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-$$

$$2\,M0\,\cos\left[\alpha-\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2\sec[\alpha]^2-$$

$$2\,M0\,\cos[2\alpha]\,\cos\left[\alpha-\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2\sec[\alpha]^2+$$

$$2\sqrt{2}\sqrt{\left(\frac{1}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}M0^2\cos[\alpha]^2\cos[\sigma]\left(6+2\cos[2\alpha]+\right.\right.}$$

$$\cos\left[2\alpha-2\,\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-$$

$$2\cos\left[2\,\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+$$

$$\mathrm{Cos}\left[2\,\alpha+2\,\mathrm{ArcSin}\left[\sqrt{\frac{\mathrm{Cos}[\alpha]^2\,\mathrm{Cos}[\sigma]}{2\,\mathrm{Sin}[\alpha]-2\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]^2}}\right]\right]\Bigg)\,\mathrm{Sin}[\alpha]^2\Bigg)-$$

$$\frac{2\,\mathrm{M0}\,\mathrm{Cos}[\sigma]}{2\,\mathrm{Sin}[\alpha]-2\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]^2}-\frac{2\,\mathrm{M0}\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Cos}[\sigma]}{2\,\mathrm{Sin}[\alpha]-2\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]^2}\Bigg)$$

$$\Bigg(-4\,\mathrm{M0}-\mathrm{M0}\,\mathrm{Cos}\left[2\,\alpha-2\,\mathrm{ArcSin}\left[\sqrt{\frac{\mathrm{Cos}[\alpha]^2\,\mathrm{Cos}[\sigma]}{2\,\mathrm{Sin}[\alpha]-2\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]^2}}\right]\right]+$$

$$2\,\mathrm{M0}\,\mathrm{Cos}\left[2\,\mathrm{ArcSin}\left[\sqrt{\frac{\mathrm{Cos}[\alpha]^2\,\mathrm{Cos}[\sigma]}{2\,\mathrm{Sin}[\alpha]-2\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]^2}}\right]\right]-$$

$$\mathrm{M0}\,\mathrm{Cos}\left[2\,\alpha+2\,\mathrm{ArcSin}\left[\sqrt{\frac{\mathrm{Cos}[\alpha]^2\,\mathrm{Cos}[\sigma]}{2\,\mathrm{Sin}[\alpha]-2\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]^2}}\right]\right]+$$

$$2\,\mathrm{M0}\,\mathrm{Cos}\left[\alpha-\mathrm{ArcSin}\left[\sqrt{\frac{\mathrm{Cos}[\alpha]^2\,\mathrm{Cos}[\sigma]}{2\,\mathrm{Sin}[\alpha]-2\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]^2}}\right]\right]^2\mathrm{Sec}[\alpha]^2+$$

$$2\,\mathrm{M0}\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Cos}\left[\alpha-\mathrm{ArcSin}\left[\sqrt{\frac{\mathrm{Cos}[\alpha]^2\,\mathrm{Cos}[\sigma]}{2\,\mathrm{Sin}[\alpha]-2\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]^2}}\right]\right]^2\mathrm{Sec}[\alpha]^2+$$

$$2\,\sqrt{2}\,\sqrt{\Bigg(\Bigg(-\frac{1}{2\,\mathrm{Sin}[\alpha]-2\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]^2}\,\mathrm{M0}^2\,\mathrm{Cos}[\alpha]^2\,\mathrm{Cos}[\sigma]\,\Bigg(-6-}$$

$$2\,\mathrm{Cos}[2\,\alpha]-\mathrm{Cos}\left[2\,\alpha-2\,\mathrm{ArcSin}\left[\sqrt{\frac{\mathrm{Cos}[\alpha]^2\,\mathrm{Cos}[\sigma]}{2\,\mathrm{Sin}[\alpha]-2\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]^2}}\right]\right]+$$

$$2\,\mathrm{Cos}\left[2\,\mathrm{ArcSin}\left[\sqrt{\frac{\mathrm{Cos}[\alpha]^2\,\mathrm{Cos}[\sigma]}{2\,\mathrm{Sin}[\alpha]-2\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]^2}}\right]\right]-$$

$$\mathrm{Cos}\left[2\,\alpha+2\,\mathrm{ArcSin}\left[\sqrt{\frac{\mathrm{Cos}[\alpha]^2\,\mathrm{Cos}[\sigma]}{2\,\mathrm{Sin}[\alpha]-2\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]^2}}\right]\right]\Bigg)\,\mathrm{Sin}[\alpha]^2\Bigg)+$$

$$\frac{2\,\mathrm{M0}\,\mathrm{Cos}[\sigma]}{2\,\mathrm{Sin}[\alpha]-2\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]^2}+\frac{2\,\mathrm{M0}\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Cos}[\sigma]}{2\,\mathrm{Sin}[\alpha]-2\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]^2}\Bigg)\Bigg)\Bigg/$$

$$\Bigg(32\,\mathrm{M0}\,\left(1+\mathrm{Cos}[2\,\alpha]\right)\,\sqrt{\Bigg(\Bigg(\frac{1}{2\,\mathrm{Sin}[\alpha]-2\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]^2}\,\mathrm{M0}^2\,\mathrm{Cos}[\alpha]^2\,\mathrm{Cos}[\sigma]}$$

$$\left(6+2\cos[2\alpha]+\cos\left[2\alpha-2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-2\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+\cos\left[2\alpha+2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\sin[\alpha]^2\right)-\left(i\csc[\alpha]\sec[\sigma]\left(2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2\right)\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4M0-2\cos[2\alpha]+M0\cos\left[2\alpha-2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-2M0\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+M0\cos\left[2\alpha+2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+2\sqrt{2}\sqrt{\left(\frac{1}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}M0^2\cos[\alpha]^2\cos[\sigma]\left(6+2\cos[2\alpha]+\cos\left[2\alpha-2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-2\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+\cos\left[2\alpha+2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\sin[\alpha]^2\right)\right)}\left(4M0+M0\cos\left[2\alpha-2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-2M0\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+\right.\right.\right.$$

$$M0 \cos\left[2\alpha + 2 \arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] -$$

$$2 M0 \cos\left[\alpha - \arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2 \sec[\alpha]^2 -$$

$$2 M0 \cos[2\alpha] \cos\left[\alpha - \arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2 \sec[\alpha]^2 +$$

$$2\sqrt{2} \sqrt{\left(-\frac{1}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2} M0^2 \cos[\alpha]^2 \cos[\sigma] \left(-6 - 2\cos[2\alpha] - \cos\left[2\alpha - 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] + 2\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] - \cos\left[2\alpha + 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\right) \sin[\alpha]^2\right) -$$

$$\frac{2 M0 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2} - \frac{2 M0 \cos[2\alpha] \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}\Bigg)$$

$$\left(-4 M0 - M0 \cos\left[2\alpha - 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] + 2 M0 \cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] - M0 \cos\left[2\alpha + 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] + 2 M0 \cos\left[\alpha - \arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2 \sec[\alpha]^2 + 2 M0 \cos[2\alpha] \cos\left[\alpha - \arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2 \sec[\alpha]^2 +$$

$$2\sqrt{2} \sqrt{\left(\frac{1}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2} M0^2 \cos[\alpha]^2 \cos[\sigma] \left(6 + 2\cos[2\alpha] +\right.\right.$$

$$\text{Cos}\left[2\alpha - 2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right] -$$

$$2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right] +$$

$$\text{Cos}\left[2\alpha + 2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right)\text{Sin}[\alpha]^2\Bigg) +$$

$$\frac{2\,\text{M0}\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2} + \frac{2\,\text{M0}\,\text{Cos}[2\alpha]\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\Bigg)\Bigg)\Bigg/$$

$$\Bigg(32\,\text{M0}\,\left(1 + \text{Cos}[2\alpha]\right)\sqrt{\Bigg(\frac{1}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\,\text{M0}^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]$$

$$\Bigg(6 + 2\,\text{Cos}[2\alpha] + \text{Cos}\left[2\alpha - 2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right] -$$

$$2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right] +$$

$$\text{Cos}\left[2\alpha + 2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right)\text{Sin}[$$

$$\alpha]^2\Bigg)\Bigg)\Bigg)\Bigg)\,\text{Sin}\left[\frac{1}{4}\left(\pi + 2\,\delta\right)\right]\Bigg]^2\Bigg)$$

In[33]:=
```
EvolvedSecondNormSq = Abs[EvolvedSecond[[1]][[1]]]^2 + Abs[EvolvedSecond[[2]][[1]]]^2
ZetaEvolvedSecondNormSq =
  Abs[ZetaEvolvedSecond[[1]][[1]]]^2 + Abs[ZetaEvolvedSecond[[2]][[1]]]^2
DecisivenessSecond = EvolvedSecondNormSq / (EvolvedSecondNormSq + ZetaEvolvedSecondNormSq)
```

Out[33]=
$$\text{Abs}\left[-i\,e^{i\,\phi}\,\text{Cos}[\alpha + \tau\,\omega]\,\text{Sec}[\alpha]\,\text{Sin}\left[\frac{\pi + \sigma}{4}\right] - i\,\text{Cos}\left[\frac{\pi + \sigma}{4}\right]\text{Sec}[\alpha]\,\text{Sin}[\tau\,\omega]\right]^2 +$$
$$\text{Abs}\left[\text{Cos}\left[\frac{\pi + \sigma}{4}\right]\text{Cos}[\alpha - \tau\,\omega]\,\text{Sec}[\alpha] - e^{i\,\phi}\,\text{Sec}[\alpha]\,\text{Sin}\left[\frac{\pi + \sigma}{4}\right]\text{Sin}[\tau\,\omega]\right]^2$$

Out[34]=
$$\text{Abs}\left[-i\,e^{i\,\phi}\,\text{Sin}\left[\frac{\pi + \sigma}{4}\right]\right.$$
$$\Bigg(-i\,\text{Sec}[\alpha]\,\text{Sin}[\tau\,\omega]\,\Bigg(\Bigg(\Big(-4\,\text{N0} + 2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega] - \text{N0}\,\text{Cos}[2\,\alpha - 2\,\tau\,\omega] - \text{N0}\,\text{Cos}[2\,\alpha + 2\,\tau\,\omega] +$$
$$2\,\text{N0}\,\text{Cos}[\alpha - \tau\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - \tau\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,\text{N0}\,\text{Sec}[\alpha]^2$$
$$\text{Sin}[\tau\,\omega]^2 + 2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2 + 2\sqrt{2}\,\sqrt{\Big(-\text{N0}^2\,\Big(-6 - 2\,\text{Cos}[2\,\alpha] +$$
$$2\,\text{Cos}[2\,\tau\,\omega] - \text{Cos}[2\,\alpha - 2\,\tau\,\omega] - \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\Big)}\Big)\Big)$$

$$\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,\text{N0}-2\,\text{Cos}[2\,\alpha]-2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\right.\right.}$$
$$\left.\left.\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]-2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\right)\right)\Big/$$
$$\left(8\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\right.\right.}$$
$$\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\right)+$$
$$\left(\left(4\,\text{N0}-2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]-\right.\right.$$
$$2\,\text{N0}\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{N0}\,\text{Sec}[\alpha]^2$$
$$\text{Sin}[\tau\,\omega]^2-2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+2\sqrt{2}\,\sqrt{\left(-\text{N0}^2\left(-6-2\,\text{Cos}[2\,\alpha]+\right.\right.}$$
$$\left.\left.\left.2\,\text{Cos}[2\,\tau\,\omega]-\text{Cos}[2\,\alpha-2\,\tau\,\omega]-\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\right)$$
$$\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,\text{N0}-2\,\text{Cos}[2\,\alpha]-2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\right.\right.}$$
$$\left.\left.\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]+2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\right)\right)\Big/$$
$$\left(8\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\right.\right.}$$
$$\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\right)\Bigg)+$$
$$\text{Cos}[\alpha+\tau\,\omega]\,\text{Sec}[\alpha]\left(\left(\left(\text{i}\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[\tau\,\omega]^2\left(-4\,\text{N0}+2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]-\right.\right.\right.\right.$$
$$\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]-\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]+2\,\text{N0}\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2+$$
$$2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{N0}\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+$$
$$2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+2\sqrt{2}\,\sqrt{\left(-\text{N0}^2\left(-6-2\,\text{Cos}[2\,\alpha]+\right.\right.}$$
$$\left.\left.\left.2\,\text{Cos}[2\,\tau\,\omega]-\text{Cos}[2\,\alpha-2\,\tau\,\omega]-\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\right)$$
$$\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,\text{N0}-2\,\text{Cos}[2\,\alpha]-2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\right.\right.}$$
$$\left.\left.\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]-2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\right)\right)$$
$$\left(4\,\text{N0}-2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]-\right.$$
$$2\,\text{N0}\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{N0}\,\text{Sec}[\alpha]^2$$
$$\text{Sin}[\tau\,\omega]^2-2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\,\alpha]-\right.\right.}$$
$$\left.\left.\left.\left.2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\right)\right)\Big/$$
$$\left(32\,\text{N0}\left(1+\text{Cos}[2\,\alpha]\right)\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\right.\right.\right.}$$
$$\left.\left.\left.\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\right)-$$
$$\left(\text{i}\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[\tau\,\omega]^2\left(4\,\text{N0}-2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\right.\right.$$
$$\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]-2\,\text{N0}\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2-$$
$$2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{N0}\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2-$$
$$2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+2\sqrt{2}\,\sqrt{\left(-\text{N0}^2\left(-6-2\,\text{Cos}[2\,\alpha]+\right.\right.}$$

$$2\,\text{Cos}[2\,\tau\,\omega] - \text{Cos}[2\,\alpha - 2\,\tau\,\omega] - \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)\big)$$

$$\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2 + 4\,\text{N0} - 2\,\text{Cos}[2\,\alpha] - 2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega] + \text{N0}\,\text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \right.\right.}$$

$$\text{N0}\,\text{Cos}[2\,\alpha + 2\,\tau\,\omega] + 2\sqrt{2}\,\sqrt{\big(\text{N0}^2\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] +$$

$$\left.\left.\text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)\big)\right)$$

$$\Big(-4\,\text{N0} + 2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega] - \text{N0}\,\text{Cos}[2\,\alpha - 2\,\tau\,\omega] - \text{N0}\,\text{Cos}[2\,\alpha + 2\,\tau\,\omega] +$$

$$2\,\text{N0}\,\text{Cos}[\alpha - \tau\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - \tau\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,\text{N0}\,\text{Sec}[\alpha]^2$$

$$\text{Sin}[\tau\,\omega]^2 + 2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2 + 2\sqrt{2}\,\sqrt{\big(\text{N0}^2\,\big(6 + 2\,\text{Cos}[2\,\alpha] -$$

$$2\,\text{Cos}[2\,\tau\,\omega] + \text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)\big)\Big)\Big/$$

$$\Big(32\,\text{N0}\,\big(1 + \text{Cos}[2\,\alpha]\big)\,\sqrt{\big(\text{N0}^2\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] + \text{Cos}[2\,\alpha - 2\,\tau\,\omega] +$$

$$\text{Cos}[2\,\alpha + 2\,\tau\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)\big)\Big) +$$

$$\text{Cos}\Big[\frac{\pi + \sigma}{4}\Big]\,\Big(\text{Cos}[\alpha - \tau\,\omega]\,\text{Sec}[\alpha]\,\Big(\Big(\big(-4\,\text{N0} + 2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega] - \text{N0}\,\text{Cos}[2\,\alpha - 2\,\tau\,\omega] -$$

$$\text{N0}\,\text{Cos}[2\,\alpha + 2\,\tau\,\omega] + 2\,\text{N0}\,\text{Cos}[\alpha - \tau\,\omega]^2\,\text{Sec}[\alpha]^2 +$$

$$2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - \tau\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,\text{N0}\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2 +$$

$$2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2 + 2\sqrt{2}\,\sqrt{\big(-\text{N0}^2\,\big(-6 - 2\,\text{Cos}[2\,\alpha] +$$

$$2\,\text{Cos}[2\,\tau\,\omega] - \text{Cos}[2\,\alpha - 2\,\tau\,\omega] - \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)\big)$$

$$\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2 + 4\,\text{N0} - 2\,\text{Cos}[2\,\alpha] - 2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega] + \text{N0}\,\text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \right.\right.}$$

$$\text{N0}\,\text{Cos}[2\,\alpha + 2\,\tau\,\omega] - 2\sqrt{2}\,\sqrt{\big(\text{N0}^2\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] +$$

$$\left.\left.\text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)\big)\right)\Big)\Big/$$

$$\Big(8\,\sqrt{\big(\text{N0}^2\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] + \text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\big)$$

$$\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)\big) +$$

$$\Big(\Big(4\,\text{N0} - 2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega] + \text{N0}\,\text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{N0}\,\text{Cos}[2\,\alpha + 2\,\tau\,\omega] -$$

$$2\,\text{N0}\,\text{Cos}[\alpha - \tau\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - \tau\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,\text{N0}\,\text{Sec}[\alpha]^2$$

$$\text{Sin}[\tau\,\omega]^2 - 2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2 + 2\sqrt{2}\,\sqrt{\big(-\text{N0}^2\,\big(-6 - 2\,\text{Cos}[2\,\alpha] +$$

$$2\,\text{Cos}[2\,\tau\,\omega] - \text{Cos}[2\,\alpha - 2\,\tau\,\omega] - \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)\big)$$

$$\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2 + 4\,\text{N0} - 2\,\text{Cos}[2\,\alpha] - 2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega] + \text{N0}\,\text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \right.\right.}$$

$$\text{N0}\,\text{Cos}[2\,\alpha + 2\,\tau\,\omega] + 2\sqrt{2}\,\sqrt{\big(\text{N0}^2\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] +$$

$$\left.\left.\text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)\big)\right)\Big)\Big/$$

$$\Big(8\,\sqrt{\big(\text{N0}^2\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] + \text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\big)$$

$$\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)\big)\Big) -$$

$$\text{i}\,\text{Sec}[\alpha]\,\text{Sin}[\tau\,\omega]\,\Big(\Big(\big(\text{i}\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[\tau\,\omega]^2\,\big(-4\,\text{N0} + 2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega] -$$

$$\text{N0}\,\text{Cos}[2\,\alpha - 2\,\tau\,\omega] - \text{N0}\,\text{Cos}[2\,\alpha + 2\,\tau\,\omega] + 2\,\text{N0}\,\text{Cos}[\alpha - \tau\,\omega]^2\,\text{Sec}[\alpha]^2 +$$

$$
\begin{aligned}
&2\,N0\,\cos[2\alpha]\,\cos[\alpha-\tau\omega]^2\sec[\alpha]^2+2\,N0\,\sec[\alpha]^2\sin[\tau\omega]^2+\\
&2\,N0\,\cos[2\alpha]\,\sec[\alpha]^2\sin[\tau\omega]^2+2\sqrt{2}\,\sqrt{\left(-N0^2\left(-6-2\cos[2\alpha]+\right.\right.}\\
&\left.\left.2\cos[2\tau\omega]-\cos[2\alpha-2\tau\omega]-\cos[2\alpha+2\tau\omega]\right)\sin[\alpha]^2\sin[\tau\omega]^2\right)}\Bigg)\\
&\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4\,N0-2\cos[2\alpha]-2\,N0\cos[2\tau\omega]+N0\cos[2\alpha-2\tau\omega]+\right.\right.}\\
&N0\cos[2\alpha+2\tau\omega]-2\sqrt{2}\,\sqrt{\left(N0^2\left(6+2\cos[2\alpha]-2\cos[2\tau\omega]+\right.\right.}\\
&\left.\left.\left.\left.\cos[2\alpha-2\tau\omega]+\cos[2\alpha+2\tau\omega]\right)\sin[\alpha]^2\sin[\tau\omega]^2\right)}\right)\Bigg)}\\
&\left(4\,N0-2\,N0\cos[2\tau\omega]+N0\cos[2\alpha-2\tau\omega]+N0\cos[2\alpha+2\tau\omega]-\right.\\
&2\,N0\cos[\alpha-\tau\omega]^2\sec[\alpha]^2-2\,N0\cos[2\alpha]\cos[\alpha-\tau\omega]^2\sec[\alpha]^2-2\,N0\sec[\alpha]^2\\
&\sin[\tau\omega]^2-2\,N0\cos[2\alpha]\sec[\alpha]^2\sin[\tau\omega]^2+2\sqrt{2}\,\sqrt{\left(N0^2\left(6+2\cos[2\alpha]-\right.\right.}\\
&\left.\left.\left.2\cos[2\tau\omega]+\cos[2\alpha-2\tau\omega]+\cos[2\alpha+2\tau\omega]\right)\sin[\alpha]^2\sin[\tau\omega]^2\right)}\right)\Bigg/\\
&\left(32\,N0\left(1+\cos[2\alpha]\right)\sqrt{\left(N0^2\left(6+2\cos[2\alpha]-2\cos[2\tau\omega]+\cos[2\alpha-2\tau\omega]+\right.\right.\right.\\
&\left.\left.\left.\cos[2\alpha+2\tau\omega]\right)\sin[\alpha]^2\sin[\tau\omega]^2\right)}\right)-\\
&\left(i\cos[\alpha]\cot[\alpha]\csc[\tau\omega]^2\left(4\,N0-2\,N0\cos[2\tau\omega]+N0\cos[2\alpha-2\tau\omega]+\right.\right.\\
&N0\cos[2\alpha+2\tau\omega]-2\,N0\cos[\alpha-\tau\omega]^2\sec[\alpha]^2-\\
&2\,N0\cos[2\alpha]\cos[\alpha-\tau\omega]^2\sec[\alpha]^2-2\,N0\sec[\alpha]^2\sin[\tau\omega]^2-\\
&2\,N0\cos[2\alpha]\sec[\alpha]^2\sin[\tau\omega]^2+2\sqrt{2}\,\sqrt{\left(-N0^2\left(-6-2\cos[2\alpha]+\right.\right.}\\
&\left.\left.2\cos[2\tau\omega]-\cos[2\alpha-2\tau\omega]-\cos[2\alpha+2\tau\omega]\right)\sin[\alpha]^2\sin[\tau\omega]^2\right)}\Bigg)\\
&\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4\,N0-2\cos[2\alpha]-2\,N0\cos[2\tau\omega]+N0\cos[2\alpha-2\tau\omega]+\right.\right.}\\
&N0\cos[2\alpha+2\tau\omega]+2\sqrt{2}\,\sqrt{\left(N0^2\left(6+2\cos[2\alpha]-2\cos[2\tau\omega]+\right.\right.}\\
&\left.\left.\left.\left.\cos[2\alpha-2\tau\omega]+\cos[2\alpha+2\tau\omega]\right)\sin[\alpha]^2\sin[\tau\omega]^2\right)}\right)\Bigg)}\\
&\left(-4\,N0+2\,N0\cos[2\tau\omega]-N0\cos[2\alpha-2\tau\omega]-N0\cos[2\alpha+2\tau\omega]+\right.\\
&2\,N0\cos[\alpha-\tau\omega]^2\sec[\alpha]^2+2\,N0\cos[2\alpha]\cos[\alpha-\tau\omega]^2\sec[\alpha]^2+2\,N0\sec[\alpha]^2\\
&\sin[\tau\omega]^2+2\,N0\cos[2\alpha]\sec[\alpha]^2\sin[\tau\omega]^2+2\sqrt{2}\,\sqrt{\left(N0^2\left(6+2\cos[2\alpha]-\right.\right.}\\
&\left.\left.\left.2\cos[2\tau\omega]+\cos[2\alpha-2\tau\omega]+\cos[2\alpha+2\tau\omega]\right)\sin[\alpha]^2\sin[\tau\omega]^2\right)}\right)\Bigg/\\
&\left(32\,N0\left(1+\cos[2\alpha]\right)\sqrt{\left(N0^2\left(6+2\cos[2\alpha]-2\cos[2\tau\omega]+\cos[2\alpha-2\tau\omega]+\right.\right.\right.\\
&\left.\left.\left.\cos[2\alpha+2\tau\omega]\right)\sin[\alpha]^2\sin[\tau\omega]^2\right)}\right)\Bigg)\Bigg)\Bigg)\Bigg]^2+\\
&\mathrm{Abs}\left[\cos\left[\frac{\pi+\sigma}{4}\right]\right]\left(-i\sec[\alpha]\sin[\tau\omega]\left(\left(\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4\,N0-2\cos[2\alpha]-2\,N0\cos[2\tau\omega]+\right.\right.\right.\right.\\
&N0\cos[2\alpha-2\tau\omega]+N0\cos[2\alpha+2\tau\omega]-2\sqrt{2}\,\sqrt{\left(N0^2\left(6+2\cos[2\alpha]-\right.\right.}\\
&\left.\left.\left.\left.\left.2\cos[2\tau\omega]+\cos[2\alpha-2\tau\omega]+\cos[2\alpha+2\tau\omega]\right)\sin[\alpha]^2\sin[\tau\omega]^2\right)}\right)\Bigg)\\
&\left(4\,N0-2\,N0\cos[2\tau\omega]+N0\cos[2\alpha-2\tau\omega]+N0\cos[2\alpha+2\tau\omega]-\right.\\
&2\,N0\cos[\alpha-\tau\omega]^2\sec[\alpha]^2-2\,N0\cos[2\alpha]\cos[\alpha-\tau\omega]^2\sec[\alpha]^2-2\,N0\sec[\alpha]^2\\
&\sin[\tau\omega]^2-2\,N0\cos[2\alpha]\sec[\alpha]^2\sin[\tau\omega]^2+2\sqrt{2}\,\sqrt{\left(N0^2\left(6+2\cos[2\alpha]-\right.\right.}
\end{aligned}
$$

$$2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)\big)\Big)\Big/$$

$$\big(8\sqrt{\big(\text{N0}^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)\big)+$$

$$\Big(\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\big(-2+4\,\text{N0}-2\,\text{Cos}[2\,\alpha]-2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+$$

$$\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]+2\sqrt{2}\,\sqrt{\big(\text{N0}^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+$$

$$\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)\big)\Big)$$

$$\Big(-4\,\text{N0}+2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]-\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]-\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]+$$

$$2\,\text{N0}\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{N0}\,\text{Sec}[\alpha]^2$$

$$\text{Sin}[\tau\,\omega]^2+2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+2\sqrt{2}\,\sqrt{\big(\text{N0}^2\,\big(6+2\,\text{Cos}[2\,\alpha]-$$

$$2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)\big)\Big)\Big/$$

$$\big(8\sqrt{\big(\text{N0}^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\big)$$

$$\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)\big)\Big)+$$

$$\text{Cos}[\alpha-\tau\,\omega]\,\text{Sec}[\alpha]\,\Big(-\Big(\Big(\text{i}\,\text{N0}\,\big(1+\text{Cos}[2\,\alpha]\big)\,\text{Sec}[\alpha]\,\text{Sin}[\tau\,\omega]^2\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}$$

$$\big(-2+4\,\text{N0}-2\,\text{Cos}[2\,\alpha]-2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+$$

$$\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]-2\sqrt{2}\,\sqrt{\big(\text{N0}^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+$$

$$\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)\big)\Big)$$

$$\text{Tan}[\alpha]\Big)\Big/\big(2\sqrt{\big(\text{N0}^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+$$

$$\text{Cos}[2\,\alpha+2\,\tau\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)\big)\Big)+$$

$$\Big(\text{i}\,\text{N0}\,\big(1+\text{Cos}[2\,\alpha]\big)\,\text{Sec}[\alpha]\,\text{Sin}[\tau\,\omega]^2\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\big(-2+4\,\text{N0}-2\,\text{Cos}[2\,\alpha]-$$

$$2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]+$$

$$2\sqrt{2}\,\sqrt{\big(\text{N0}^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+$$

$$\text{Cos}[2\,\alpha+2\,\tau\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)\big)\Big)\,\text{Tan}[\alpha]\Big)\Big/$$

$$\big(2\sqrt{\big(\text{N0}^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\big)$$

$$\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)\big)\Big)\Big)-\text{i}\,\text{e}^{\text{i}\,\phi}\,\text{Sin}\Big[\frac{\pi+\sigma}{4}\Big]$$

$$\Big(\text{Cos}[\alpha+\tau\,\omega]\,\text{Sec}[\alpha]\,\Big(\Big(\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\big(-2+4\,\text{N0}-2\,\text{Cos}[2\,\alpha]-2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]+$$

$$\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]-2\sqrt{2}\,\sqrt{\big(\text{N0}^2\,\big(6+2\,\text{Cos}[2\,\alpha]-$$

$$2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)\big)\Big)$$

$$\big(4\,\text{N0}-2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]-$$

$$2\,\text{N0}\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{N0}\,\text{Sec}[\alpha]^2$$

$$\text{Sin}[\tau\,\omega]^2 - 2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2 + 2\sqrt{2}\,\sqrt{\left(\text{N0}^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] + \text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)}\Bigg)\Bigg/$$
$$\left(8\,\sqrt{\left(\text{N0}^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] + \text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)}\right) +$$
$$\Bigg(\sqrt{\Bigg(\frac{1}{1 + \text{Cos}[2\,\alpha]}\Big(-2 + 4\,\text{N0} - 2\,\text{Cos}[2\,\alpha] - 2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega] + \text{N0}\,\text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{N0}\,\text{Cos}[2\,\alpha + 2\,\tau\,\omega] + 2\sqrt{2}\,\sqrt{\left(\text{N0}^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] + \text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)}\Big)\Bigg)}$$
$$\Big(-4\,\text{N0} + 2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega] - \text{N0}\,\text{Cos}[2\,\alpha - 2\,\tau\,\omega] - \text{N0}\,\text{Cos}[2\,\alpha + 2\,\tau\,\omega] + 2\,\text{N0}\,\text{Cos}[\alpha - \tau\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - \tau\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,\text{N0}\,\text{Sec}[\alpha]^2$$
$$\text{Sin}[\tau\,\omega]^2 + 2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2 + 2\sqrt{2}\,\sqrt{\left(\text{N0}^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] + \text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)}\Bigg)\Bigg/$$
$$\left(8\,\sqrt{\left(\text{N0}^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] + \text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)}\right)\Bigg) -$$
$$\text{i}\,\text{Sec}[\alpha]\,\text{Sin}[\tau\,\omega]\,\Bigg(-\Bigg(\Bigg(\text{i}\,\text{N0}\,\left(1 + \text{Cos}[2\,\alpha]\right)\,\text{Sec}[\alpha]\,\text{Sin}[\tau\,\omega]^2\sqrt{\Bigg(\frac{1}{1 + \text{Cos}[2\,\alpha]}\Big(-2 + 4\,\text{N0} - 2\,\text{Cos}[2\,\alpha] - 2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega] + \text{N0}\,\text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{N0}\,\text{Cos}[2\,\alpha + 2\,\tau\,\omega] - 2\sqrt{2}\,\sqrt{\left(\text{N0}^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] + \text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)}\Big)\Bigg)}$$
$$\text{Tan}[\alpha]\Bigg)\Bigg/\left(2\,\sqrt{\left(\text{N0}^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] + \text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)}\right)\Bigg) +$$
$$\Bigg(\text{i}\,\text{N0}\,\left(1 + \text{Cos}[2\,\alpha]\right)\,\text{Sec}[\alpha]\,\text{Sin}[\tau\,\omega]^2\sqrt{\Bigg(\frac{1}{1 + \text{Cos}[2\,\alpha]}\Big(-2 + 4\,\text{N0} - 2\,\text{Cos}[2\,\alpha] - 2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega] + \text{N0}\,\text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{N0}\,\text{Cos}[2\,\alpha + 2\,\tau\,\omega] + 2\sqrt{2}\,\sqrt{\left(\text{N0}^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] + \text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)}\Big)\Bigg)}\,\text{Tan}[\alpha]\Bigg)\Bigg/$$
$$\left(2\,\sqrt{\left(\text{N0}^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] + \text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)}\right)\Bigg)\Bigg)\Bigg]^2$$

Out[35]=
$$\left(\text{Abs}\left[-\text{i}\,e^{\text{i}\,\phi}\,\text{Cos}[\alpha + \tau\,\omega]\,\text{Sec}[\alpha]\,\text{Sin}\left[\frac{\pi + \sigma}{4}\right] - \text{i}\,\text{Cos}\left[\frac{\pi + \sigma}{4}\right]\,\text{Sec}[\alpha]\,\text{Sin}[\tau\,\omega]\right]^2 + \text{Abs}\left[\text{Cos}\left[\frac{\pi + \sigma}{4}\right]\,\text{Cos}[\alpha - \tau\,\omega]\,\text{Sec}[\alpha] - e^{\text{i}\,\phi}\,\text{Sec}[\alpha]\,\text{Sin}\left[\frac{\pi + \sigma}{4}\right]\,\text{Sin}[\tau\,\omega]\right]^2\right)\Bigg/$$
$$\left(\text{Abs}\left[-\text{i}\,e^{\text{i}\,\phi}\,\text{Cos}[\alpha + \tau\,\omega]\,\text{Sec}[\alpha]\,\text{Sin}\left[\frac{\pi + \sigma}{4}\right] - \text{i}\,\text{Cos}\left[\frac{\pi + \sigma}{4}\right]\,\text{Sec}[\alpha]\,\text{Sin}[\tau\,\omega]\right]^2 +\right.$$

$$\text{Abs}\left[\text{Cos}\left[\frac{\pi+\sigma}{4}\right]\text{Cos}[\alpha-\tau\,\omega]\,\text{Sec}[\alpha]-e^{i\,\phi}\,\text{Sec}[\alpha]\,\text{Sin}\left[\frac{\pi+\sigma}{4}\right]\text{Sin}[\tau\,\omega]\right]^2+$$

$$\text{Abs}\left[-i\,e^{i\,\phi}\,\text{Sin}\left[\frac{\pi+\sigma}{4}\right]\right]\left(-i\,\text{Sec}[\alpha]\,\text{Sin}[\tau\,\omega]\right.$$

$$\left(\left(\left(-4\,N0+2\,N0\,\text{Cos}[2\,\tau\,\omega]-N0\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]-N0\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]+2\,N0\,\text{Cos}[\alpha-\tau\,\omega]^2\right.\right.\right.$$

$$\text{Sec}[\alpha]^2+2\,N0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2+2\,N0\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+$$

$$2\,N0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+2\sqrt{2}\,\sqrt{\left(-N0^2\,\left(-6-2\,\text{Cos}[2\,\alpha]+\right.\right.\right.$$

$$\left.\left.\left.2\,\text{Cos}[2\,\tau\,\omega]-\text{Cos}[2\,\alpha-2\,\tau\,\omega]-\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)}\Big)$$

$$\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,N0-2\,\text{Cos}[2\,\alpha]-2\,N0\,\text{Cos}[2\,\tau\,\omega]+N0\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\right.\right.$$

$$N0\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]-2\sqrt{2}\,\sqrt{\left(N0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\right.\right.\right.$$

$$\left.\left.\left.\left.\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)}\right)\Big)\Big)\Big/$$

$$\left(8\sqrt{\left(N0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\right.}\right.$$

$$\left.\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\Big)+\Big(\Big(4\,N0-2\,N0\,\text{Cos}[2\,\tau\,\omega]+N0\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+$$

$$N0\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]-2\,N0\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2-2\,N0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-\tau\,\omega]^2$$

$$\text{Sec}[\alpha]^2-2\,N0\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2-2\,N0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+2\sqrt{2}$$

$$\sqrt{\left(-N0^2\,\left(-6-2\,\text{Cos}[2\,\alpha]+2\,\text{Cos}[2\,\tau\,\omega]-\text{Cos}[2\,\alpha-2\,\tau\,\omega]-\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\right.}$$

$$\left.\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\Big)\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,N0-2\,\text{Cos}[2\,\alpha]-\right.\right.$$

$$2\,N0\,\text{Cos}[2\,\tau\,\omega]+N0\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+N0\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]+2\sqrt{2}$$

$$\sqrt{\left(N0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\right.}$$

$$\left.\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\right)\right)\Big/\Big(8\sqrt{\left(N0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\right.\right.}$$

$$\left.\left.\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\Big)\Big)+$$

$$\text{Cos}[\alpha+\tau\,\omega]\,\text{Sec}[\alpha]\,\left(\left(i\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[\tau\,\omega]^2\,\left(-4\,N0+2\,N0\,\text{Cos}[2\,\tau\,\omega]-\right.\right.\right.$$

$$N0\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]-N0\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]+2\,N0\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2+$$

$$2\,N0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2+2\,N0\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+$$

$$2\,N0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+2\sqrt{2}\,\sqrt{\left(-N0^2\,\left(-6-2\,\text{Cos}[2\,\alpha]+\right.\right.\right.$$

$$\left.\left.\left.2\,\text{Cos}[2\,\tau\,\omega]-\text{Cos}[2\,\alpha-2\,\tau\,\omega]-\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)}\Big)$$

$$\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,N0-2\,\text{Cos}[2\,\alpha]-2\,N0\,\text{Cos}[2\,\tau\,\omega]+N0\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\right.\right.$$

$$N0\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]-2\sqrt{2}\,\sqrt{\left(N0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\right.\right.\right.$$

$$\left.\left.\left.\left.\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)}\right)\Big)\Big)$$

$$\left(4\,N0-2\,N0\,\text{Cos}[2\,\tau\,\omega]+N0\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+N0\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]-\right.$$

$$2\,N0\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2-2\,N0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2-$$

$$2\,N0\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2-2\,N0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+$$

$$2\sqrt{2}\,\sqrt{\left(N0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\right.}$$

$$\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)\Big)\Big/\Big(32\,\text{N0}\,\big(1+\text{Cos}[2\,\alpha]\big)\,\sqrt{\big(\text{N0}^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)}\Big)-$$

$$\Big(\text{i}\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[\tau\,\omega]^2\Big(4\,\text{N0}-2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]-2\,\text{N0}\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{N0}\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2-2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+2\sqrt{2}\,\sqrt{\big(-\text{N0}^2\,\big(-6-2\,\text{Cos}[2\,\alpha]+2\,\text{Cos}[2\,\tau\,\omega]-\text{Cos}[2\,\alpha-2\,\tau\,\omega]-\text{Cos}[2\,\alpha+2\,\tau\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)}\Big)\Big/$$

$$\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\Big(-2+4\,\text{N0}-2\,\text{Cos}[2\,\alpha]-2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]+2\sqrt{2}\,\sqrt{\big(\text{N0}^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)}\Big)\Big)}$$

$$\Big(-4\,\text{N0}+2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]-\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]-\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]+2\,\text{N0}\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{N0}\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+2\sqrt{2}\,\sqrt{\big(\text{N0}^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)}\Big)\Big/$$

$$\Big(32\,\text{N0}\,\big(1+\text{Cos}[2\,\alpha]\big)\,\sqrt{\big(\text{N0}^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)}\Big)\Big)\Big)+$$

$$\text{Cos}\Big[\frac{\pi+\sigma}{4}\Big]\Big(\text{Cos}[\alpha-\tau\,\omega]\,\text{Sec}[\alpha]\Big(\Big(\Big(-4\,\text{N0}+2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]-\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]-\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]+2\,\text{N0}\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{N0}\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+2\sqrt{2}\,\sqrt{\big(-\text{N0}^2\,\big(-6-2\,\text{Cos}[2\,\alpha]+2\,\text{Cos}[2\,\tau\,\omega]-\text{Cos}[2\,\alpha-2\,\tau\,\omega]-\text{Cos}[2\,\alpha+2\,\tau\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)}\Big)\Big/$$

$$\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\Big(-2+4\,\text{N0}-2\,\text{Cos}[2\,\alpha]-2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]-2\sqrt{2}\,\sqrt{\big(\text{N0}^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)}\Big)\Big)}\Big)\Big)\Big/$$

$$\Big(8\,\sqrt{\big(\text{N0}^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)}\Big)+$$

$$\Big(\Big(4\,\text{N0}-2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]-2\,\text{N0}\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{N0}\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2-2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+2\sqrt{2}\,\sqrt{\big(-\text{N0}^2\,\big(-6-2\,\text{Cos}[2\,\alpha]+2\,\text{Cos}[2\,\tau\,\omega]-\text{Cos}[2\,\alpha-2\,\tau\,\omega]-\text{Cos}[2\,\alpha+2\,\tau\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)}\Big)\Big/$$

$$\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\Big(-2+4\,\text{N0}-2\,\text{Cos}[2\,\alpha]-2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]+2\sqrt{2}\,\sqrt{\big(\text{N0}^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+$$

$$\mathrm{Cos}[2\alpha-2\tau\omega]+\mathrm{Cos}[2\alpha+2\tau\omega])\ \mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2)))) \Big/$$
$$(8\surd(\mathrm{N0}^2\ (6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2\tau\omega]+\mathrm{Cos}[2\alpha-2\tau\omega]+\mathrm{Cos}[2\alpha+2\tau\omega])$$
$$\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2)))-$$
$$i\ \mathrm{Sec}[\alpha]\ \mathrm{Sin}[\tau\omega]\ (((i\ \mathrm{Cos}[\alpha]\ \mathrm{Cot}[\alpha]\ \mathrm{Csc}[\tau\omega]^2\ (-4\,\mathrm{N0}+2\,\mathrm{N0}\,\mathrm{Cos}[2\tau\omega]-$$
$$\mathrm{N0}\,\mathrm{Cos}[2\alpha-2\tau\omega]-\mathrm{N0}\,\mathrm{Cos}[2\alpha+2\tau\omega]+2\,\mathrm{N0}\,\mathrm{Cos}[\alpha-\tau\omega]^2\,\mathrm{Sec}[\alpha]^2+$$
$$2\,\mathrm{N0}\,\mathrm{Cos}[2\alpha]\ \mathrm{Cos}[\alpha-\tau\omega]^2\,\mathrm{Sec}[\alpha]^2+2\,\mathrm{N0}\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2+$$
$$2\,\mathrm{N0}\,\mathrm{Cos}[2\alpha]\ \mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2+2\sqrt{2}\ \surd(-\mathrm{N0}^2\ (-6-2\,\mathrm{Cos}[2\alpha]+$$
$$2\,\mathrm{Cos}[2\tau\omega]-\mathrm{Cos}[2\alpha-2\tau\omega]-\mathrm{Cos}[2\alpha+2\tau\omega])\ \mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2))$$
$$\surd(\frac{1}{1+\mathrm{Cos}[2\alpha]}\ (-2+4\,\mathrm{N0}-2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{N0}\,\mathrm{Cos}[2\tau\omega]+\mathrm{N0}\,\mathrm{Cos}[2\alpha-2\tau\omega]+$$
$$\mathrm{N0}\,\mathrm{Cos}[2\alpha+2\tau\omega]-2\sqrt{2}\ \surd(\mathrm{N0}^2\ (6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2\tau\omega]+$$
$$\mathrm{Cos}[2\alpha-2\tau\omega]+\mathrm{Cos}[2\alpha+2\tau\omega])\ \mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2)))$$
$$(4\,\mathrm{N0}-2\,\mathrm{N0}\,\mathrm{Cos}[2\tau\omega]+\mathrm{N0}\,\mathrm{Cos}[2\alpha-2\tau\omega]+\mathrm{N0}\,\mathrm{Cos}[2\alpha+2\tau\omega]-$$
$$2\,\mathrm{N0}\,\mathrm{Cos}[\alpha-\tau\omega]^2\,\mathrm{Sec}[\alpha]^2-2\,\mathrm{N0}\,\mathrm{Cos}[2\alpha]\ \mathrm{Cos}[\alpha-\tau\omega]^2\,\mathrm{Sec}[\alpha]^2-$$
$$2\,\mathrm{N0}\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2-2\,\mathrm{N0}\,\mathrm{Cos}[2\alpha]\ \mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2+$$
$$2\sqrt{2}\ \surd(\mathrm{N0}^2\ (6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2\tau\omega]+\mathrm{Cos}[2\alpha-2\tau\omega]+\mathrm{Cos}[2\alpha+2\tau\omega])$$
$$\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2)))\Big/\ (32\,\mathrm{N0}\ (1+\mathrm{Cos}[2\alpha])\ \surd(\mathrm{N0}^2\ (6+2\,\mathrm{Cos}[2\alpha]-$$
$$2\,\mathrm{Cos}[2\tau\omega]+\mathrm{Cos}[2\alpha-2\tau\omega]+\mathrm{Cos}[2\alpha+2\tau\omega])\ \mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2))-$$
$$(i\ \mathrm{Cos}[\alpha]\ \mathrm{Cot}[\alpha]\ \mathrm{Csc}[\tau\omega]^2\ (4\,\mathrm{N0}-2\,\mathrm{N0}\,\mathrm{Cos}[2\tau\omega]+\mathrm{N0}\,\mathrm{Cos}[2\alpha-2\tau\omega]+$$
$$\mathrm{N0}\,\mathrm{Cos}[2\alpha+2\tau\omega]-2\,\mathrm{N0}\,\mathrm{Cos}[\alpha-\tau\omega]^2\,\mathrm{Sec}[\alpha]^2-$$
$$2\,\mathrm{N0}\,\mathrm{Cos}[2\alpha]\ \mathrm{Cos}[\alpha-\tau\omega]^2\,\mathrm{Sec}[\alpha]^2-2\,\mathrm{N0}\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2-$$
$$2\,\mathrm{N0}\,\mathrm{Cos}[2\alpha]\ \mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2+2\sqrt{2}\ \surd(-\mathrm{N0}^2\ (-6-2\,\mathrm{Cos}[2\alpha]+$$
$$2\,\mathrm{Cos}[2\tau\omega]-\mathrm{Cos}[2\alpha-2\tau\omega]-\mathrm{Cos}[2\alpha+2\tau\omega])\ \mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2))$$
$$\surd(\frac{1}{1+\mathrm{Cos}[2\alpha]}\ (-2+4\,\mathrm{N0}-2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{N0}\,\mathrm{Cos}[2\tau\omega]+\mathrm{N0}\,\mathrm{Cos}[2\alpha-2\tau\omega]+$$
$$\mathrm{N0}\,\mathrm{Cos}[2\alpha+2\tau\omega]+2\sqrt{2}\ \surd(\mathrm{N0}^2\ (6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2\tau\omega]+$$
$$\mathrm{Cos}[2\alpha-2\tau\omega]+\mathrm{Cos}[2\alpha+2\tau\omega])\ \mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2)))$$
$$(-4\,\mathrm{N0}+2\,\mathrm{N0}\,\mathrm{Cos}[2\tau\omega]-\mathrm{N0}\,\mathrm{Cos}[2\alpha-2\tau\omega]-\mathrm{N0}\,\mathrm{Cos}[2\alpha+2\tau\omega]+$$
$$2\,\mathrm{N0}\,\mathrm{Cos}[\alpha-\tau\omega]^2\,\mathrm{Sec}[\alpha]^2+2\,\mathrm{N0}\,\mathrm{Cos}[2\alpha]\ \mathrm{Cos}[\alpha-\tau\omega]^2\,\mathrm{Sec}[\alpha]^2+$$
$$2\,\mathrm{N0}\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2+2\,\mathrm{N0}\,\mathrm{Cos}[2\alpha]\ \mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2+$$
$$2\sqrt{2}\ \surd(\mathrm{N0}^2\ (6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2\tau\omega]+\mathrm{Cos}[2\alpha-2\tau\omega]+$$
$$\mathrm{Cos}[2\alpha+2\tau\omega])\ \mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2)))\Big/$$
$$(32\,\mathrm{N0}\ (1+\mathrm{Cos}[2\alpha])\ \surd(\mathrm{N0}^2\ (6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2\tau\omega]+\mathrm{Cos}[$$
$$2\alpha-2\tau\omega]+\mathrm{Cos}[2\alpha+2\tau\omega])\ \mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2))))]^2+$$

$$\text{Abs}\left[\text{Cos}\left[\frac{\pi+\sigma}{4}\right]\right]\left(-\text{i}\,\text{Sec}[\alpha]\,\text{Sin}[\tau\,\omega]\left(\left(\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,\text{N0}-2\,\text{Cos}[2\,\alpha]-2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]-2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)}\right)\right)}\right)\right.\right.$$
$$\left(4\,\text{N0}-2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]-2\,\text{N0}\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{N0}\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2-2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)}\right)\Big/$$
$$\left(8\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)}\right)+$$
$$\left(\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,\text{N0}-2\,\text{Cos}[2\,\alpha]-2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]+2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)}\right)\right)}\right)$$
$$\left(-4\,\text{N0}+2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]-\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]-\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]+2\,\text{N0}\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{N0}\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)}\right)\Big/$$
$$\left.\left(8\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)}\right)\right)+$$
$$\text{Cos}[\alpha-\tau\,\omega]\,\text{Sec}[\alpha]\left(-\left(\left(\text{i}\,\text{N0}\left(1+\text{Cos}[2\,\alpha]\right)\text{Sec}[\alpha]\,\text{Sin}[\tau\,\omega]^2\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,\text{N0}-2\,\text{Cos}[2\,\alpha]-2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]-2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)}\right)\right)}\right)\text{Tan}[\alpha]\right)\Big/$$
$$\left(2\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)}\right)+\left(\text{i}\,\text{N0}\left(1+\text{Cos}[2\,\alpha]\right)\text{Sec}[\alpha]\,\text{Sin}[\tau\,\omega]^2\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,\text{N0}-2\,\text{Cos}[2\,\alpha]-2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]+2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)}\right)\right)}\right)\text{Tan}[\alpha]\right)\Big/$$
$$\left.\left.\left(2\sqrt{\left(\text{N0}^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)}\right)\right)\right)-\text{i}\,\text{e}^{\text{i}\,\phi}\,\text{Sin}\left[\frac{\pi+\sigma}{4}\right]$$

$$\left(\text{Cos}[\alpha+\tau\,\omega]\ \text{Sec}[\alpha]\ \left(\left(\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,\text{N0}-2\,\text{Cos}[2\,\alpha]-2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]+\right.\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\left.\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]-2\sqrt{2}\ \sqrt{\left(\text{N0}^2\ \left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[\right.\right.\right.\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\left.\left.\left.2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\ \text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\right)\right)\right)\right)$$
$$\left(4\,\text{N0}-2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]-\right.$$
$$2\,\text{N0}\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2-$$
$$2\,\text{N0}\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2-2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+$$
$$2\sqrt{2}\ \sqrt{\left(\text{N0}^2\ \left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\right.}$$
$$\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\right)\Big/\left(8\sqrt{\left(\text{N0}^2\ \left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\right.\right.}\right.$$
$$\left.\left.\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\ \text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\Big)+$$
$$\left(\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,\text{N0}-2\,\text{Cos}[2\,\alpha]-2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\right.\right.\right.$$
$$\left.\left.\left.\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]+2\sqrt{2}\ \sqrt{\left(\text{N0}^2\ \left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\right.\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\left.\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\ \text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\right)\right)\right)$$
$$\left(-4\,\text{N0}+2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]-\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]-\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]+\right.$$
$$2\,\text{N0}\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2+$$
$$2\,\text{N0}\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+$$
$$2\sqrt{2}\ \sqrt{\left(\text{N0}^2\ \left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\right.}$$
$$\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\right)\Big/\left(8\sqrt{\left(\text{N0}^2\ \left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\right.\right.}\right.$$
$$\left.\left.\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\ \text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\Big)\Bigg)-$$
$$\text{i}\,\text{Sec}[\alpha]\,\text{Sin}[\tau\,\omega]\ \left(-\left(\left(\text{i}\,\text{N0}\ \left(1+\text{Cos}[2\,\alpha]\right)\ \text{Sec}[\alpha]\,\text{Sin}[\tau\,\omega]^2\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\right.}\right.\right.\right.$$
$$\left(-2+4\,\text{N0}-2\,\text{Cos}[2\,\alpha]-2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\right.$$
$$\left.\left.\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]-2\sqrt{2}\ \sqrt{\left(\text{N0}^2\ \left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\left.2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\ \text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\right)\right)\ \text{Tan}[\alpha]\Bigg)\Big/$$
$$\left(2\sqrt{\left(\text{N0}^2\ \left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[\right.\right.}\right.$$
$$\left.\left.\left.2\,\alpha+2\,\tau\,\omega]\right)\ \text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\right)\Bigg)+$$
$$\left(\text{i}\,\text{N0}\ \left(1+\text{Cos}[2\,\alpha]\right)\ \text{Sec}[\alpha]\,\text{Sin}[\tau\,\omega]^2\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,\text{N0}-\right.\right.\right.$$
$$2\,\text{Cos}[2\,\alpha]-2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]+$$
$$2\sqrt{2}\ \sqrt{\left(\text{N0}^2\ \left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\right.\right.}$$
$$\left.\left.\left.\left.\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\ \text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\right)\Bigg)\ \text{Tan}[\alpha]\Bigg)\Big/$$
$$\left(2\sqrt{\left(\text{N0}^2\ \left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\right.}\right.$$

$$\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\Big)\Big)\Big)\Big]^2\Big)$$

In[37]:=
```
DecisivenessSecondFunction[ϕ_, σ_, α_, M0_] :=
 (Abs[-i Cos[(π + σ)/4] Sec[α] Sqrt[(Cos[α]^2 Cos[σ])/(2 Sin[α] - 2 Cos[σ] Sin[α]^2)] -
      i e^(i ϕ) Cos[α + ArcSin[Sqrt[(Cos[α]^2 Cos[σ])/(2 Sin[α] - 2 Cos[σ] Sin[α]^2)]]] Sec[α] Sin[(π + σ)/4]]^2 +
   Abs[Cos[(π + σ)/4] Cos[α - ArcSin[Sqrt[(Cos[α]^2 Cos[σ])/(2 Sin[α] - 2 Cos[σ] Sin[α]^2)]]] Sec[α] -
      e^(i ϕ) Sec[α] Sqrt[(Cos[α]^2 Cos[σ])/(2 Sin[α] - 2 Cos[σ] Sin[α]^2)] Sin[(π + σ)/4]]^2)/
 (Abs[-i Cos[(π + σ)/4] Sec[α] Sqrt[(Cos[α]^2 Cos[σ])/(2 Sin[α] - 2 Cos[σ] Sin[α]^2)] -
      i e^(i ϕ) Cos[α + ArcSin[Sqrt[(Cos[α]^2 Cos[σ])/(2 Sin[α] - 2 Cos[σ] Sin[α]^2)]]] Sec[α] Sin[(π + σ)/4]]^2 +
   Abs[Cos[(π + σ)/4] Cos[α - ArcSin[Sqrt[(Cos[α]^2 Cos[σ])/(2 Sin[α] - 2 Cos[σ] Sin[α]^2)]]] Sec[α] -
      e^(i ϕ) Sec[α] Sqrt[(Cos[α]^2 Cos[σ])/(2 Sin[α] - 2 Cos[σ] Sin[α]^2)] Sin[(π + σ)/4]]^2 +
   Abs[Cos[(π + σ)/4]] (Cos[α - ArcSin[Sqrt[(Cos[α]^2 Cos[σ])/(2 Sin[α] - 2 Cos[σ] Sin[α]^2)]]] Sec[α]
      (-(((((i M0 (1 + Cos[2 α]) Cos[σ] Sin[α] Sqrt[(1/(1 + Cos[2 α])) (-2 + 4 M0 - 2 Cos[2 α] +
                  M0 Cos[2 α - 2 ArcSin[Sqrt[(Cos[α]^2 Cos[σ])/(2 Sin[α] - 2 Cos[σ] Sin[α]^2)]]] -
                  2 M0 Cos[2 ArcSin[Sqrt[(Cos[α]^2 Cos[σ])/(2 Sin[α] - 2 Cos[σ] Sin[α]^2)]]] +
```

$$M0 \cos\left[2\alpha + 2 \operatorname{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2 \sin[\alpha] - 2 \cos[\sigma] \sin[\alpha]^2}}\right]\right] -$$

$$2\sqrt{2} \sqrt{\left(\left(M0^2 \cos[\alpha]^2 \cos[\sigma] \left(6 + 2 \cos[2\alpha] + \right.\right.\right.$$

$$\left.\cos\left[2\alpha - 2 \operatorname{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2 \sin[\alpha] - 2 \cos[\sigma] \sin[\alpha]^2}}\right]\right] -$$

$$2 \cos\left[2 \operatorname{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2 \sin[\alpha] - 2 \cos[\sigma] \sin[\alpha]^2}}\right]\right] +$$

$$\left.\left.\cos\left[2\alpha + 2 \operatorname{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2 \sin[\alpha] - 2 \cos[\sigma] \sin[\alpha]^2}}\right]\right]\right)$$

$$\left.\left.\left.\sin[\alpha]^2\right) \Big/ \left(2 \sin[\alpha] - 2 \cos[\sigma] \sin[\alpha]^2\right)\right)\right)\right)\Big/$$

$$\left(2 \sqrt{\left(\left(\frac{1}{2 \sin[\alpha] - 2 \cos[\sigma] \sin[\alpha]^2} M0^2 \cos[\alpha]^2 \cos[\sigma] \left(6 + 2 \cos[\right.\right.\right.\right.$$

$$\left.2\alpha] + \cos\left[2\alpha - 2 \operatorname{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2 \sin[\alpha] - 2 \cos[\sigma] \sin[\alpha]^2}}\right]\right] -$$

$$2 \cos\left[2 \operatorname{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2 \sin[\alpha] - 2 \cos[\sigma] \sin[\alpha]^2}}\right]\right] +$$

$$\left.\left.\left.\cos\left[2\alpha + 2 \operatorname{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2 \sin[\alpha] - 2 \cos[\sigma] \sin[\alpha]^2}}\right]\right] \sin[\alpha]^2\right)\right.\right.$$

$$\left.\left.\left(2 \sin[\alpha] - 2 \cos[\sigma] \sin[\alpha]^2\right)\right)\right) + \left(i\, M0 \left(1 + \cos[2\alpha]\right)\right.$$

$$\cos[\sigma] \sin[\alpha] \sqrt{\left(\frac{1}{1 + \cos[2\alpha]} \left(-2 + 4\, M0 - 2 \cos[2\alpha] + \right.\right.$$

$$M0 \cos\left[2\alpha - 2 \operatorname{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2 \sin[\alpha] - 2 \cos[\sigma] \sin[\alpha]^2}}\right]\right] -$$

$$2\,M0\,\cos\left[2\,\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+$$

$$M0\,\cos\left[2\alpha+2\,\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+$$

$$2\sqrt{2}\sqrt{\left(\left(M0^2\cos[\alpha]^2\cos[\sigma]\left(6+2\cos[2\alpha]+\right.\right.\right.$$

$$\left.\cos\left[2\alpha-2\,\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-$$

$$2\cos\left[2\,\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+$$

$$\left.\left.\cos\left[2\alpha+2\,\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\right)$$

$$\left.\left.\left.\sin[\alpha]^2\right)\Big/\left(2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2\right)\right)\right)\Big/$$

$$\left(2\sqrt{\left(\frac{1}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}M0^2\cos[\alpha]^2\cos[\sigma]\left(6+2\cos[2\alpha]+\right.\right.\right.$$

$$\left.\cos\left[2\alpha-2\,\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-$$

$$2\cos\left[2\,\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+$$

$$\left.\left.\cos\left[2\alpha+2\,\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\right)$$

$$\left.\left.\sin[\alpha]^2\right)\left(2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2\right)\right)\Bigg)-$$

$$i\,\sec[\alpha]\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\left(\left(\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4\,M0-\right.\right.\right.\right.$$

$$2\cos[2\alpha] + M0\cos\left[2\alpha - 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] -$$

$$2M0\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] +$$

$$M0\cos\left[2\alpha + 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] -$$

$$2\sqrt{2}\sqrt{\left(\left(M0^2\cos[\alpha]^2\cos[\sigma]\left(6 + 2\cos[2\alpha] + \right.\right.\right.$$

$$\cos\left[2\alpha - 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] -$$

$$2\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] +$$

$$\left.\cos\left[2\alpha + 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\right)$$

$$\left.\left.\left.\sin[\alpha]^2\right) \Big/ \left(2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2\right)\right)\right)\right)$$

$$\left(4M0 + M0\cos\left[2\alpha - 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] -\right.$$

$$2M0\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] +$$

$$M0\cos\left[2\alpha + 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] -$$

$$2M0\cos\left[\alpha - \arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2\sec[\alpha]^2 -$$

$$2M0\cos[2\alpha]\cos\left[\alpha - \arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2\sec[\alpha]^2 +$$

$$2\sqrt{2}\sqrt{\left(\frac{1}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}M0^2\cos[\alpha]^2\cos[\sigma]\left(6 + 2\cos[2\alpha] + \right.\right.}$$

$$\cos\left[2\alpha - 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] -$$

$$2\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] +$$

$$\cos\left[2\alpha + 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\sin[\alpha]^2\Bigg) -$$

$$\frac{2\,M0\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2} - \frac{2\,M0\cos[2\alpha]\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}\Bigg)\Bigg) \Bigg/$$

$$\Bigg(8\sqrt{\Bigg(\frac{1}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}M0^2\cos[\alpha]^2\cos[\sigma]\Bigg(6 + 2\cos[2\alpha] +$$

$$\cos\left[2\alpha - 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] -$$

$$2\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] +$$

$$\cos\left[2\alpha + 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\sin[\alpha]^2\Bigg)\Bigg) +$$

$$\Bigg(\sqrt{\Bigg(\frac{1}{1 + \cos[2\alpha]}\Bigg(-2 + 4\,M0 - 2\cos[2\alpha] + M0\cos\Big[2\alpha - 2\arcsin\Big[$$

$$\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\Big]\Big] -$$

$$2\,M0\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] +$$

$$M0\cos\left[2\alpha + 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] +$$

$$2\sqrt{2}\sqrt{\Bigg(\Bigg(\Bigg(M0^2\cos[\alpha]^2\cos[\sigma]\Bigg(6 + 2\cos[2\alpha] +$$

$$\text{Cos}\left[2\,\alpha - 2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right] -$$

$$2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right] +$$

$$\text{Cos}\left[2\,\alpha + 2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]\Bigg)$$

$$\text{Sin}[\alpha]^2\Bigg) \Big/ \left(2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2\right)\Bigg)\Bigg)\Bigg)$$

$$\Bigg(-4\,\text{M0} - \text{M0}\,\text{Cos}\left[2\,\alpha - 2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right] +$$

$$2\,\text{M0}\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right] -$$

$$\text{M0}\,\text{Cos}\left[2\,\alpha + 2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right] +$$

$$2\,\text{M0}\,\text{Cos}\left[\alpha - \text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]^2\,\text{Sec}[\alpha]^2 +$$

$$2\,\text{M0}\,\text{Cos}[2\,\alpha]\,\text{Cos}\left[\alpha - \text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]^2\,\text{Sec}[\alpha]^2 +$$

$$2\sqrt{2}\,\sqrt{\left(\frac{1}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\,\text{M0}^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\left(6 + 2\,\text{Cos}[2\,\alpha] +\right.\right.$$

$$\text{Cos}\left[2\,\alpha - 2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right] -$$

$$2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right] +$$

$$\left.\left.\text{Cos}\left[2\,\alpha + 2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]\right)\text{Sin}[\alpha]^2\right) +$$

$$\frac{2\,M0\,\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}+\frac{2\,M0\cos[2\alpha]\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}\Bigg)\Bigg)\Bigg/$$

$$\Bigg(8\sqrt{\Bigg(\frac{1}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}M0^2\cos[\alpha]^2\cos[\sigma]\Bigg(6+2\cos[2\alpha]+$$

$$\cos\Big[2\alpha-2\arcsin\Big[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\Big]\Big]-$$

$$2\cos\Big[2\arcsin\Big[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\Big]\Big]+$$

$$\cos\Big[2\alpha+2\arcsin\Big[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\Big]\Big]\Bigg)\sin[\alpha]^2\Bigg)\Bigg)\Bigg)-$$

$$i\,e^{i\phi}\Bigg(-i\sec[\alpha]\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\Bigg(-\Bigg(\Bigg(i\,M0\,\big(1+\cos[2\alpha]\big)$$

$$\cos[\sigma]\sin[\alpha]\sqrt{\Bigg(\frac{1}{1+\cos[2\alpha]}\Bigg(-2+4\,M0-2\cos[2\alpha]+$$

$$M0\cos\Big[2\alpha-2\arcsin\Big[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\Big]\Big]-$$

$$2\,M0\cos\Big[2\arcsin\Big[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\Big]\Big]+$$

$$M0\cos\Big[2\alpha+2\arcsin\Big[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\Big]\Big]-$$

$$2\sqrt{2}\sqrt{\Bigg(\Bigg(M0^2\cos[\alpha]^2\cos[\sigma]\Bigg(6+2\cos[2\alpha]+$$

$$\cos\Big[2\alpha-2\arcsin\Big[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\Big]\Big]-$$

$$2\cos\Big[2\arcsin\Big[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\Big]\Big]+$$

$$\cos\left[2\alpha + 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right]$$

$$\sin[\alpha]^2\Big) \Big/ \left(2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2\right)\Big)\Big)\Big)\Big) \Big/$$

$$\Bigg(2\sqrt{\Bigg(\frac{1}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2} M0^2\cos[\alpha]^2\cos[\sigma]\Bigg(6 + 2\cos[$$

$$2\alpha] + \cos\left[2\alpha - 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] -$$

$$2\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] +$$

$$\cos\left[2\alpha + 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\Bigg) \sin[\alpha]^2\Bigg)$$

$$\left(2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2\right)\Bigg)\Bigg) + \Bigg(i\,M0\left(1 + \cos[2\alpha]\right)$$

$$\cos[\sigma]\sin[\alpha]\sqrt{\Bigg(\frac{1}{1 + \cos[2\alpha]}\Bigg(-2 + 4M0 - 2\cos[2\alpha] +$$

$$M0\cos\left[2\alpha - 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] -$$

$$2M0\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] +$$

$$M0\cos\left[2\alpha + 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] +$$

$$2\sqrt{2}\sqrt{\Bigg(\Bigg(\Bigg(M0^2\cos[\alpha]^2\cos[\sigma]\Bigg(6 + 2\cos[2\alpha] +$$

$$\cos\left[2\alpha - 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] -$$

$$2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+$$

$$\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]\Bigg)$$

$$\text{Sin}[\alpha]^2\Bigg)\Big/\left(2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2\right)\Bigg)\Bigg)\Bigg)\Bigg)\Big/$$

$$\Bigg(2\sqrt{\Bigg(\frac{1}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\,\text{M0}^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\,\Bigg(6+2\,\text{Cos}[2\,\alpha]+$$

$$\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-$$

$$2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+$$

$$\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]\Bigg)$$

$$\text{Sin}[\alpha]^2\Bigg)\left(2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2\right)\Bigg)\Bigg)+$$

$$\text{Cos}\left[\alpha+\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]\text{Sec}[\alpha]$$

$$\Bigg(\Bigg(\sqrt{\Bigg(\frac{1}{1+\text{Cos}[2\,\alpha]}\,\Bigg(-2+4\,\text{M0}-2\,\text{Cos}[2\,\alpha]+$$

$$\text{M0}\,\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-$$

$$2\,\text{M0}\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+$$

$$\text{M0}\,\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-$$

$$2\sqrt{2}\sqrt{\left(\left(\left(M0^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\left(6+2\,\text{Cos}[2\,\alpha]+\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]-2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]+\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]\right)\text{Sin}[\alpha]^2\right)\Big/\left(2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2\right)\right)\right)\left(4\,M0+M0\,\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]-2\,M0\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]+M0\,\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]-2\,M0\,\text{Cos}\left[\alpha-\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]^2\text{Sec}[\alpha]^2-2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}\left[\alpha-\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]^2\text{Sec}[\alpha]^2+2\sqrt{2}\sqrt{\left(\frac{1}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}M0^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\left(6+2\,\text{Cos}[2\,\alpha]+\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]-2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]+$$

$$\text{Cos}\left[2\alpha + 2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right)\,\text{Sin}[\alpha]^2\Bigg) -$$

$$\frac{2\,\text{M0}\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2} - \frac{2\,\text{M0}\,\text{Cos}[2\alpha]\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\Bigg)\Bigg) \Big/$$

$$\Bigg(8\sqrt{\Bigg(\Bigg(\frac{1}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\,\text{M0}^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\,\Bigg(6 + 2\,\text{Cos}[2\alpha] +}$$

$$\text{Cos}\left[2\alpha - 2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right] -$$

$$2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right] +$$

$$\text{Cos}\left[2\alpha + 2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right)\,\text{Sin}[\alpha]^2\Bigg)\Bigg) +$$

$$\Bigg(\sqrt{\Bigg(\Bigg(\frac{1}{1 + \text{Cos}[2\alpha]}\,\Bigg(-2 + 4\,\text{M0} - 2\,\text{Cos}[2\alpha] + \text{M0}\,\text{Cos}\Big[2\alpha - 2\,\text{ArcSin}\Big[}$$

$$\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\Big]\Big] -$$

$$2\,\text{M0}\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right] +$$

$$\text{M0}\,\text{Cos}\left[2\alpha + 2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right] +$$

$$2\sqrt{2}\,\sqrt{\Bigg(\Bigg(\Bigg(\text{M0}^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\,\Bigg(6 + 2\,\text{Cos}[2\alpha] +}$$

$$\text{Cos}\left[2\alpha - 2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right] -$$

$$2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right] +$$

$$\mathrm{Cos}\left[2\,\alpha + 2\,\mathrm{ArcSin}\left[\sqrt{\frac{\mathrm{Cos}[\alpha]^2\,\mathrm{Cos}[\sigma]}{2\,\mathrm{Sin}[\alpha] - 2\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]^2}}\,\right]\right]\Bigg)$$

$$\mathrm{Sin}[\alpha]^2\Bigg) \Big/ \left(2\,\mathrm{Sin}[\alpha] - 2\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]^2\right)\Bigg)\Bigg)\Bigg)$$

$$\Bigg(-4\,\mathrm{M0} - \mathrm{M0}\,\mathrm{Cos}\left[2\,\alpha - 2\,\mathrm{ArcSin}\left[\sqrt{\frac{\mathrm{Cos}[\alpha]^2\,\mathrm{Cos}[\sigma]}{2\,\mathrm{Sin}[\alpha] - 2\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]^2}}\,\right]\right] +$$

$$2\,\mathrm{M0}\,\mathrm{Cos}\left[2\,\mathrm{ArcSin}\left[\sqrt{\frac{\mathrm{Cos}[\alpha]^2\,\mathrm{Cos}[\sigma]}{2\,\mathrm{Sin}[\alpha] - 2\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]^2}}\,\right]\right] -$$

$$\mathrm{M0}\,\mathrm{Cos}\left[2\,\alpha + 2\,\mathrm{ArcSin}\left[\sqrt{\frac{\mathrm{Cos}[\alpha]^2\,\mathrm{Cos}[\sigma]}{2\,\mathrm{Sin}[\alpha] - 2\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]^2}}\,\right]\right] +$$

$$2\,\mathrm{M0}\,\mathrm{Cos}\left[\alpha - \mathrm{ArcSin}\left[\sqrt{\frac{\mathrm{Cos}[\alpha]^2\,\mathrm{Cos}[\sigma]}{2\,\mathrm{Sin}[\alpha] - 2\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]^2}}\,\right]\right]^2\,\mathrm{Sec}[\alpha]^2 +$$

$$2\,\mathrm{M0}\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Cos}\left[\alpha - \mathrm{ArcSin}\left[\sqrt{\frac{\mathrm{Cos}[\alpha]^2\,\mathrm{Cos}[\sigma]}{2\,\mathrm{Sin}[\alpha] - 2\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]^2}}\,\right]\right]^2\,\mathrm{Sec}[\alpha]^2 +$$

$$2\,\sqrt{2}\,\sqrt{\Bigg(\Bigg(\frac{1}{2\,\mathrm{Sin}[\alpha] - 2\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]^2}\,\mathrm{M0}^2\,\mathrm{Cos}[\alpha]^2\,\mathrm{Cos}[\sigma]\,\Bigg(6 + 2\,\mathrm{Cos}[2\,\alpha] +}$$

$$\mathrm{Cos}\left[2\,\alpha - 2\,\mathrm{ArcSin}\left[\sqrt{\frac{\mathrm{Cos}[\alpha]^2\,\mathrm{Cos}[\sigma]}{2\,\mathrm{Sin}[\alpha] - 2\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]^2}}\,\right]\right] -$$

$$2\,\mathrm{Cos}\left[2\,\mathrm{ArcSin}\left[\sqrt{\frac{\mathrm{Cos}[\alpha]^2\,\mathrm{Cos}[\sigma]}{2\,\mathrm{Sin}[\alpha] - 2\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]^2}}\,\right]\right] +$$

$$\mathrm{Cos}\left[2\,\alpha + 2\,\mathrm{ArcSin}\left[\sqrt{\frac{\mathrm{Cos}[\alpha]^2\,\mathrm{Cos}[\sigma]}{2\,\mathrm{Sin}[\alpha] - 2\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]^2}}\,\right]\right]\Bigg)\,\mathrm{Sin}[\alpha]^2\Bigg) +$$

$$\frac{2\,\mathrm{M0}\,\mathrm{Cos}[\sigma]}{2\,\mathrm{Sin}[\alpha] - 2\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]^2} + \frac{2\,\mathrm{M0}\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Cos}[\sigma]}{2\,\mathrm{Sin}[\alpha] - 2\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]^2}\Bigg)\Bigg) \Big/$$

$$\Bigg(8\,\sqrt{\Bigg(\Bigg(\frac{1}{2\,\mathrm{Sin}[\alpha] - 2\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]^2}\,\mathrm{M0}^2\,\mathrm{Cos}[\alpha]^2\,\mathrm{Cos}[\sigma]\,\Bigg(6 + 2\,\mathrm{Cos}[2\,\alpha] +}$$

$$\cos\left[2\alpha - 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] -$$

$$2\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] + \cos\left[2\alpha + 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\sin[\alpha]^2\Bigg)\Bigg)\Bigg)\Bigg)\sin\left[\frac{\pi+\sigma}{4}\right]\Bigg]^2 +$$

$$\mathrm{Abs}\left[\cos\left[\frac{\pi+\sigma}{4}\right]\right]\left(\cos\left[\alpha - \arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\sec[\alpha]\right.$$

$$\left(\left(\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2 + 4\,M0 - 2\cos[2\alpha] +\right.\right.\right.\right.$$

$$M0\cos\left[2\alpha - 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] -$$

$$2\,M0\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] +$$

$$M0\cos\left[2\alpha + 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] +$$

$$2\sqrt{2}\sqrt{\left(\left(\left(M0^2\cos[\alpha]^2\cos[\sigma]\left(6 + 2\cos[2\alpha] +\right.\right.\right.\right.$$

$$\cos\left[2\alpha - 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] -$$

$$2\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] +$$

$$\left.\left.\left.\left.\cos\left[2\alpha + 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\right)\right.\right.\right.$$

$$\left.\left.\left.\left.\sin[\alpha]^2\right) \Big/ \left(2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2\right)\right)\right)\right)$$

$$\left(4\,M0+M0\,\cos\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-2\,M0\,\cos\left[2\,\text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+M0\,\cos\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-2\,M0\,\cos\left[\alpha-\text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2\sec[\alpha]^2-2\,M0\,\cos[2\,\alpha]\,\cos\left[\alpha-\text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2\sec[\alpha]^2+2\sqrt{2}\sqrt{\left(-\left(\left(\left(M0^2\cos[\alpha]^2\cos[\sigma]\left(-6-2\cos[2\,\alpha]-\cos\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+2\cos\left[2\,\text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-\cos\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\right)\sin[\alpha]^2\right)\Big/\left(2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2\right)\right)\right)-\frac{2\,M0\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}-\frac{2\,M0\cos[2\,\alpha]\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}\right)\Big/\left(8\sqrt{\left(\frac{1}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}M0^2\cos[\alpha]^2\cos[\sigma]\left(6+2\cos[2\,\alpha]+\cos\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-\right.\right.\right.$$

$$2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+$$

$$\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]\text{Sin}[\alpha]^2\Bigg)\Bigg)+$$

$$\Bigg(\sqrt{\Bigg(\frac{1}{1+\text{Cos}[2\,\alpha]}\Bigg(-2+4\,\text{M0}-2\,\text{Cos}[2\,\alpha]+\text{M0}\,\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-$$

$$2\,\text{M0}\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+$$

$$\text{M0}\,\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-$$

$$2\sqrt{2}\,\sqrt{\Bigg(\Bigg(\Bigg(\text{M0}^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\Bigg(6+2\,\text{Cos}[2\,\alpha]+$$

$$\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-$$

$$2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+$$

$$\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]\Bigg)$$

$$\text{Sin}[\alpha]^2\Bigg)\Big/\left(2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2\right)\Bigg)\Bigg)\Bigg)$$

$$\Bigg(-4\,\text{M0}-\text{M0}\,\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+$$

$$2\,\text{M0}\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-$$

$$M0 \cos\left[2\alpha + 2 \operatorname{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] +$$

$$2 M0 \cos\left[\alpha - \operatorname{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2 \sec[\alpha]^2 +$$

$$2 M0 \cos[2\alpha] \cos\left[\alpha - \operatorname{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2 \sec[\alpha]^2 +$$

$$2\sqrt{2}\sqrt{\left(-\left(\left(\left(M0^2 \cos[\alpha]^2 \cos[\sigma]\left(-6 - 2\cos[2\alpha] - \cos\left[2\alpha - 2\operatorname{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] + 2\cos\left[2\operatorname{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] - \cos\left[2\alpha + 2\operatorname{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\right)\sin[\alpha]^2\right) \Big/ \left(2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2\right)\right)\right) + \frac{2 M0 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2} + \frac{2 M0 \cos[2\alpha]\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}\right)\Bigg) \Bigg/$$

$$\left(8\sqrt{\left(\frac{1}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2} M0^2 \cos[\alpha]^2 \cos[\sigma]\left(6 + 2\cos[2\alpha] + \cos\left[2\alpha - 2\operatorname{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] - 2\cos\left[2\operatorname{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] + \cos\left[2\alpha + 2\operatorname{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\right)\sin[\alpha]^2\right)\right)\right) -$$

$$\dot{\imath}\,\text{Sec}[\alpha]\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\left(\left(\dot{\imath}\,\text{Csc}[\alpha]\,\text{Sec}[\sigma]\,\left(2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2\right)\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,\text{M0}-2\,\text{Cos}[2\,\alpha]+\text{M0}\,\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]-2\,\text{M0}\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]+\text{M0}\,\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]-2\sqrt{2}\sqrt{\left(\left(\text{M0}^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\left(6+2\,\text{Cos}[2\,\alpha]+\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]-2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]+\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]\right)\text{Sin}[\alpha]^2\right)\Big/\left(2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2\right)\right)\right)}\left(4\,\text{M0}+\text{M0}\,\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]-2\,\text{M0}\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]+\text{M0}\,\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]-\right.$$

$$2\,M0\,\cos\left[\alpha-\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2\sec[\alpha]^2-$$

$$2\,M0\,\cos[2\alpha]\,\cos\left[\alpha-\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2\sec[\alpha]^2+$$

$$2\sqrt{2}\sqrt{\left(\frac{1}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}M0^2\cos[\alpha]^2\cos[\sigma]\left(6+2\cos[2\alpha]+\right.\right.}$$

$$\cos\left[2\alpha-2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-$$

$$2\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+$$

$$\left.\left.\cos\left[2\alpha+2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\right)\sin[\alpha]^2\right)-$$

$$\left.\frac{2\,M0\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}-\frac{2\,M0\cos[2\alpha]\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}\right)$$

$$\left(-4\,M0-M0\cos\left[2\alpha-2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+\right.$$

$$2\,M0\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-$$

$$M0\cos\left[2\alpha+2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+$$

$$2\,M0\cos\left[\alpha-\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2\sec[\alpha]^2+$$

$$2\,M0\cos[2\alpha]\cos\left[\alpha-\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2\sec[\alpha]^2+$$

$$2\sqrt{2}\sqrt{\left(-\left(\left(\left(M0^2\cos[\alpha]^2\cos[\sigma]\left(-6-2\cos[2\alpha]-\right.\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\left.\cos\left[2\alpha-2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+\right.\right.\right.\right.\right.$$

$$2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-$$

$$\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right)$$

$$\text{Sin}[\alpha]^2\Big)\Big/\left(2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2\right)\Big)\Big)+$$

$$\frac{2\,\text{M0}\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}+\frac{2\,\text{M0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\Big)\Big)\Big/$$

$$\Bigg(32\,\text{M0}\,\left(1+\text{Cos}[2\,\alpha]\right)\sqrt{\Bigg(\frac{1}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\,\text{M0}^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]$$

$$\left(6+2\,\text{Cos}[2\,\alpha]+\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-\right.$$

$$2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+$$

$$\left.\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]\right)\text{Sin}[\alpha]^2\Bigg)\Bigg)-$$

$$\Bigg(\dot{\imath}\,\text{Csc}[\alpha]\,\text{Sec}[\sigma]\,\left(2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2\right)\sqrt{\Bigg(\frac{1}{1+\text{Cos}[2\,\alpha]}\,\Bigg(-2+4\,\text{M0}-$$

$$2\,\text{Cos}[2\,\alpha]+\text{M0}\,\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-$$

$$2\,\text{M0}\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+$$

$$\text{M0}\,\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+$$

$$2\sqrt{2}\,\sqrt{\Bigg(\Bigg(\text{M0}^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\,\Bigg(6+2\,\text{Cos}[2\,\alpha]+$$

$$\text{Cos}\left[2\,\alpha - 2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right] -$$

$$2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right] +$$

$$\text{Cos}\left[2\,\alpha + 2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]\Bigg)$$

$$\text{Sin}[\alpha]^2\Bigg) \Big/ \left(2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2\right)\Bigg)\Bigg)\Bigg)$$

$$\Bigg(4\,\text{M0} + \text{M0}\,\text{Cos}\left[2\,\alpha - 2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right] -$$

$$2\,\text{M0}\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right] +$$

$$\text{M0}\,\text{Cos}\left[2\,\alpha + 2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right] -$$

$$2\,\text{M0}\,\text{Cos}\left[\alpha - \text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]^2\,\text{Sec}[\alpha]^2 -$$

$$2\,\text{M0}\,\text{Cos}[2\,\alpha]\,\text{Cos}\left[\alpha - \text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]^2\,\text{Sec}[\alpha]^2 +$$

$$2\sqrt{2}\,\sqrt{\Bigg(-\Bigg(\Bigg(\Big(\text{M0}^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\,\Big(-6 - 2\,\text{Cos}[2\,\alpha] -$$

$$\text{Cos}\left[2\,\alpha - 2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right] +$$

$$2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right] -$$

$$\text{Cos}\left[2\,\alpha + 2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]\Bigg)$$

$$\text{Sin}[\alpha]^2\Big)\Big/\left(2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2\right)\Big)\Big)-$$

$$\left(\frac{2\,M0\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}-\frac{2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\right)$$

$$\left(-4\,M0-M0\,\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+\right.$$

$$2\,M0\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-$$

$$M0\,\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+$$

$$2\,M0\,\text{Cos}\left[\alpha-\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]^2\text{Sec}[\alpha]^2+$$

$$2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}\left[\alpha-\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]^2\text{Sec}[\alpha]^2+$$

$$2\sqrt{2}\,\sqrt{\left(\frac{1}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}M0^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\left(6+2\,\text{Cos}[2\,\alpha]+\right.\right.$$

$$\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-$$

$$2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+$$

$$\left.\left.\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]\right)\text{Sin}[\alpha]^2\right)+$$

$$\left.\left.\left(\frac{2\,M0\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}+\frac{2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\right)\right)\Big/\right.$$

$$\left(32\,M0\,\left(1+\text{Cos}[2\,\alpha]\right)\sqrt{\left(\frac{1}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}M0^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\right.\right.$$

$$\left(6+2\,\text{Cos}[2\,\alpha]+\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]-\right.$$

$$2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]+$$

$$\left.\left.\left.\left.\left.\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]\right)\text{Sin}[\alpha]^2\right)\right)\right)\right)-$$

$$i\,e^{i\,\phi}\left(-i\,\text{Sec}[\alpha]\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\left(\left(\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,\text{M0}-\right.\right.}\right.\right.\right.$$

$$2\,\text{Cos}[2\,\alpha]+\text{M0}\,\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]-$$

$$2\,\text{M0}\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]+$$

$$\text{M0}\,\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]+$$

$$2\sqrt{2}\sqrt{\left(\left(\text{M0}^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\left(6+2\,\text{Cos}[2\,\alpha]+\right.\right.\right.}$$

$$\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]-$$

$$2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]+$$

$$\left.\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]\right)$$

$$\left.\left.\left.\left.\text{Sin}[\alpha]^2\right)\Big/\left(2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2\right)\right)\right)\right)$$

$$\left(4\,\text{M0}+\text{M0}\,\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]-\right.$$

$$2\,M0\,\cos\left[2\,\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+$$

$$M0\,\cos\left[2\alpha+2\,\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-$$

$$2\,M0\,\cos\left[\alpha-\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2\sec[\alpha]^2-$$

$$2\,M0\,\cos[2\alpha]\,\cos\left[\alpha-\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2\sec[\alpha]^2+$$

$$2\sqrt{2}\,\sqrt{\left(-\left(\left(M0^2\cos[\alpha]^2\cos[\sigma]\left(-6-2\cos[2\alpha]-\right.\right.\right.\right.$$

$$\left.\cos\left[2\alpha-2\,\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+\right.$$

$$\left.2\cos\left[2\,\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-\right.$$

$$\left.\left.\left.\cos\left[2\alpha+2\,\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\right)\right.$$

$$\left.\left.\left.\sin[\alpha]^2\right)\Big/\left(2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2\right)\right)\right)-$$

$$\left.\left.\frac{2\,M0\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}-\frac{2\,M0\cos[2\alpha]\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}\right)\right)\Big/$$

$$\left(8\sqrt{\left(\frac{1}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}M0^2\cos[\alpha]^2\cos[\sigma]\left(6+2\cos[2\alpha]+\right.\right.\right.$$

$$\left.\cos\left[2\alpha-2\,\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-\right.$$

$$\left.2\cos\left[2\,\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+\right.$$

$$\cos\left[2\alpha + 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\sin[\alpha]^2\Bigg)\Bigg) +$$

$$\Bigg(\sqrt{\Bigg(\frac{1}{1+\cos[2\alpha]}\Bigg(-2 + 4\,M0 - 2\cos[2\alpha] + M0\cos\left[2\alpha - 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] -$$

$$2\,M0\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] +$$

$$M0\cos\left[2\alpha + 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] -$$

$$2\sqrt{2}\sqrt{\Bigg(\Bigg(\Bigg(M0^2\cos[\alpha]^2\cos[\sigma]\Bigg(6 + 2\cos[2\alpha] +$$

$$\cos\left[2\alpha - 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] -$$

$$2\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] +$$

$$\cos\left[2\alpha + 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\Bigg)$$

$$\sin[\alpha]^2\Bigg)\Big/\left(2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2\right)\Bigg)\Bigg)\Bigg)$$

$$\Bigg(-4\,M0 - M0\cos\left[2\alpha - 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] +$$

$$2\,M0\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] -$$

$$M0\cos\left[2\alpha + 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] +$$

$$2\,M0\,\cos\left[\alpha-\text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\,\right]\right]^2\sec[\alpha]^2+$$

$$2\,M0\,\cos[2\,\alpha]\,\cos\left[\alpha-\text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\,\right]\right]^2\sec[\alpha]^2+$$

$$2\sqrt{2}\,\sqrt{\left(-\left(\left(\left(M0^2\cos[\alpha]^2\cos[\sigma]\left(-6-2\cos[2\,\alpha]-\right.\right.\right.\right.\right.$$

$$\left.\cos\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\,\right]\right]+\right.$$

$$\left.2\cos\left[2\,\text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\,\right]\right]-\right.$$

$$\left.\left.\left.\cos\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\,\right]\right]\right)\right.$$

$$\left.\left.\left.\sin[\alpha]^2\right)\Big/\left(2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2\right)\right)\right)+$$

$$\left.\left.\frac{2\,M0\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}+\frac{2\,M0\cos[2\,\alpha]\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}\right)\right)\Big/$$

$$\left(8\sqrt{\left(\frac{1}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}M0^2\cos[\alpha]^2\cos[\sigma]\left(6+2\cos[2\,\alpha]+\right.\right.\right.$$

$$\left.\cos\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\,\right]\right]-\right.$$

$$\left.2\cos\left[2\,\text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\,\right]\right]+\right.$$

$$\left.\left.\left.\cos\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\,\right]\right]\right)\sin[\alpha]^2\right)\right)\right)+$$

$$\cos\left[\alpha+\text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\,\right]\right]\sec[\alpha]$$

$$\left(\left(i \operatorname{Csc}[\alpha] \operatorname{Sec}[\sigma] \left(2 \operatorname{Sin}[\alpha] - 2 \operatorname{Cos}[\sigma] \operatorname{Sin}[\alpha]^2\right)\right.\right.$$

$$\sqrt{\left(\frac{1}{1+\operatorname{Cos}[2\alpha]}\left(-2 + 4\,M0 - 2\operatorname{Cos}[2\alpha] + \right.\right.}$$

$$M0 \operatorname{Cos}\left[2\alpha - 2\operatorname{ArcSin}\left[\sqrt{\frac{\operatorname{Cos}[\alpha]^2 \operatorname{Cos}[\sigma]}{2\operatorname{Sin}[\alpha] - 2\operatorname{Cos}[\sigma]\operatorname{Sin}[\alpha]^2}}\right]\right] -$$

$$2\,M0 \operatorname{Cos}\left[2\operatorname{ArcSin}\left[\sqrt{\frac{\operatorname{Cos}[\alpha]^2 \operatorname{Cos}[\sigma]}{2\operatorname{Sin}[\alpha] - 2\operatorname{Cos}[\sigma]\operatorname{Sin}[\alpha]^2}}\right]\right] +$$

$$M0 \operatorname{Cos}\left[2\alpha + 2\operatorname{ArcSin}\left[\sqrt{\frac{\operatorname{Cos}[\alpha]^2 \operatorname{Cos}[\sigma]}{2\operatorname{Sin}[\alpha] - 2\operatorname{Cos}[\sigma]\operatorname{Sin}[\alpha]^2}}\right]\right] -$$

$$2\sqrt{2}\sqrt{\left(\left(\left(M0^2 \operatorname{Cos}[\alpha]^2 \operatorname{Cos}[\sigma]\left(6 + 2\operatorname{Cos}[2\alpha] + \right.\right.\right.\right.$$

$$\operatorname{Cos}\left[2\alpha - 2\operatorname{ArcSin}\left[\sqrt{\frac{\operatorname{Cos}[\alpha]^2 \operatorname{Cos}[\sigma]}{2\operatorname{Sin}[\alpha] - 2\operatorname{Cos}[\sigma]\operatorname{Sin}[\alpha]^2}}\right]\right] -$$

$$2\operatorname{Cos}\left[2\operatorname{ArcSin}\left[\sqrt{\frac{\operatorname{Cos}[\alpha]^2 \operatorname{Cos}[\sigma]}{2\operatorname{Sin}[\alpha] - 2\operatorname{Cos}[\sigma]\operatorname{Sin}[\alpha]^2}}\right]\right] +$$

$$\left.\left.\operatorname{Cos}\left[2\alpha + 2\operatorname{ArcSin}\left[\sqrt{\frac{\operatorname{Cos}[\alpha]^2 \operatorname{Cos}[\sigma]}{2\operatorname{Sin}[\alpha] - 2\operatorname{Cos}[\sigma]\operatorname{Sin}[\alpha]^2}}\right]\right]\right)$$

$$\left.\left.\left.\operatorname{Sin}[\alpha]^2\right) \Big/ \left(2\operatorname{Sin}[\alpha] - 2\operatorname{Cos}[\sigma]\operatorname{Sin}[\alpha]^2\right)\right)\right)\right)$$

$$\left(4\,M0 + M0 \operatorname{Cos}\left[2\alpha - 2\operatorname{ArcSin}\left[\sqrt{\frac{\operatorname{Cos}[\alpha]^2 \operatorname{Cos}[\sigma]}{2\operatorname{Sin}[\alpha] - 2\operatorname{Cos}[\sigma]\operatorname{Sin}[\alpha]^2}}\right]\right] -\right.$$

$$2\,M0 \operatorname{Cos}\left[2\operatorname{ArcSin}\left[\sqrt{\frac{\operatorname{Cos}[\alpha]^2 \operatorname{Cos}[\sigma]}{2\operatorname{Sin}[\alpha] - 2\operatorname{Cos}[\sigma]\operatorname{Sin}[\alpha]^2}}\right]\right] +$$

$$M0 \operatorname{Cos}\left[2\alpha + 2\operatorname{ArcSin}\left[\sqrt{\frac{\operatorname{Cos}[\alpha]^2 \operatorname{Cos}[\sigma]}{2\operatorname{Sin}[\alpha] - 2\operatorname{Cos}[\sigma]\operatorname{Sin}[\alpha]^2}}\right]\right] -$$

$$2\,M0\,\cos\left[\alpha-\text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2\sec[\alpha]^2-$$

$$2\,M0\,\cos[2\alpha]\,\cos\left[\alpha-\text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2\sec[\alpha]^2+$$

$$2\sqrt{2}\sqrt{\left(\frac{1}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}M0^2\cos[\alpha]^2\cos[\sigma]\left(6+2\cos[2\alpha]+\right.\right.}$$

$$\cos\left[2\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-$$

$$2\cos\left[2\,\text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+$$

$$\left.\left.\cos\left[2\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\right)\sin[\alpha]^2\right)-$$

$$\left.\frac{2\,M0\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}-\frac{2\,M0\cos[2\alpha]\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}\right)$$

$$\left(-4\,M0-M0\cos\left[2\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+\right.$$

$$2\,M0\cos\left[2\,\text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-$$

$$M0\cos\left[2\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+$$

$$2\,M0\cos\left[\alpha-\text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2\sec[\alpha]^2+$$

$$2\,M0\,\cos[2\alpha]\,\cos\left[\alpha-\text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2\sec[\alpha]^2+$$

$$2\sqrt{2}\sqrt{\left(-\left(\left(\left(M0^2\cos[\alpha]^2\cos[\sigma]\left(-6-2\cos[2\alpha]-\right.\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\left.\cos\left[2\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+\right.\right.\right.\right.\right.$$

$$2\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-\cos\left[2\alpha+2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right)\sin[\alpha]^2\Big)\Big/\left(2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2\right)\Big)+\frac{2M0\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}+\frac{2M0\cos[2\alpha]\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}\Big)\Big)\Big/\left(32M0\left(1+\cos[2\alpha]\right)\sqrt{\left(\frac{1}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}M0^2\cos[\alpha]^2\cos[\sigma]\left(6+2\cos[2\alpha]+\cos\left[2\alpha-2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-2\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+\cos\left[2\alpha+2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\right)\sin[\alpha]^2\Big)\Big)-\Big(i\csc[\alpha]\sec[\sigma]\left(2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2\right)\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4M0-2\cos[2\alpha]+M0\cos\left[2\alpha-2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-2M0\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+M0\cos\left[2\alpha+2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+2\sqrt{2}\sqrt{\left(\left(M0^2\cos[\alpha]^2\cos[\sigma]\left(6+2\cos[2\alpha]+$$

$$\cos\left[2\alpha - 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] -$$

$$2\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] +$$

$$\cos\left[2\alpha + 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\Bigg)$$

$$\sin[\alpha]^2\Bigg) \Big/ \left(2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2\right)\Bigg)\Bigg)\Bigg)$$

$$\Bigg(4\,M0 + M0\cos\left[2\alpha - 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] -$$

$$2\,M0\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] +$$

$$M0\cos\left[2\alpha + 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] -$$

$$2\,M0\cos\left[\alpha - \arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2\sec[\alpha]^2 -$$

$$2\,M0\cos[2\alpha]\cos\left[\alpha - \arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2\sec[\alpha]^2 +$$

$$2\sqrt{2}\sqrt{\Bigg(-\Bigg(\Bigg(M0^2\cos[\alpha]^2\cos[\sigma]\left(-6 - 2\cos[2\alpha] -\right.$$

$$\cos\left[2\alpha - 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] +$$

$$2\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] -$$

$$\left.\cos\left[2\alpha + 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\right)$$

$$\text{Sin}[\alpha]^2\Big) \Big/ \left(2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2\right)\Big)\Big) -$$

$$\frac{2\,\text{M0}\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2} - \frac{2\,\text{M0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\Bigg)$$

$$\Bigg(-4\,\text{M0} - \text{M0}\,\text{Cos}\Big[2\,\alpha - 2\,\text{ArcSin}\Big[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\Big]\Big] +$$

$$2\,\text{M0}\,\text{Cos}\Big[2\,\text{ArcSin}\Big[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\Big]\Big] -$$

$$\text{M0}\,\text{Cos}\Big[2\,\alpha + 2\,\text{ArcSin}\Big[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\Big]\Big] +$$

$$2\,\text{M0}\,\text{Cos}\Big[\alpha - \text{ArcSin}\Big[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\Big]\Big]^2\,\text{Sec}[\alpha]^2 +$$

$$2\,\text{M0}\,\text{Cos}[2\,\alpha]\,\text{Cos}\Big[\alpha - \text{ArcSin}\Big[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\Big]\Big]^2\,\text{Sec}[\alpha]^2 +$$

$$2\sqrt{2}\,\sqrt{\Bigg(\frac{1}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\,\text{M0}^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\,\Big(6 + 2\,\text{Cos}[2\,\alpha] +$$

$$\text{Cos}\Big[2\,\alpha - 2\,\text{ArcSin}\Big[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\Big]\Big] -$$

$$2\,\text{Cos}\Big[2\,\text{ArcSin}\Big[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\Big]\Big] +$$

$$\text{Cos}\Big[2\,\alpha + 2\,\text{ArcSin}\Big[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\Big]\Big]\Big)\,\text{Sin}[\alpha]^2\Big) +$$

$$\frac{2\,\text{M0}\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2} + \frac{2\,\text{M0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\Bigg)\Bigg) \Big/$$

$$\Bigg(32\,\text{M0}\,\left(1 + \text{Cos}[2\,\alpha]\right)\sqrt{\Bigg(\frac{1}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\,\text{M0}^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]$$

$$\left(6 + 2\,\text{Cos}[2\,\alpha] + \text{Cos}\left[2\,\alpha - 2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right] - 2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right] + \text{Cos}\left[2\,\alpha + 2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]\right)\text{Sin}[\alpha]^2\Bigg)\Bigg)\Bigg)\text{Sin}\left[\frac{\pi+\sigma}{4}\right]\Bigg]^2\Bigg)$$

In[38]:=
```
EvolvedThirdNormSq = Abs[EvolvedThird[[1]][[1]]]^2 + Abs[EvolvedThird[[2]][[1]]]^2
ZetaEvolvedThirdNormSq =
  Abs[ZetaEvolvedThird[[1]][[1]]]^2 + Abs[ZetaEvolvedThird[[2]][[1]]]^2
DecisivenessThird = EvolvedThirdNormSq / (EvolvedThirdNormSq + ZetaEvolvedThirdNormSq)
```

Out[38]=
$$\text{Abs}\left[-i\,e^{i\,\phi}\,\text{Cos}[\alpha+\tau\,\omega]\,\text{Sec}[\alpha]\,\text{Sin}\left[\frac{1}{4}\left(\pi+\frac{\sigma}{2}\right)\right] - i\,\text{Cos}\left[\frac{1}{4}\left(\pi+\frac{\sigma}{2}\right)\right]\text{Sec}[\alpha]\,\text{Sin}[\tau\,\omega]\right]^2 + \text{Abs}\left[\text{Cos}\left[\frac{1}{4}\left(\pi+\frac{\sigma}{2}\right)\right]\text{Cos}[\alpha-\tau\,\omega]\,\text{Sec}[\alpha] - e^{i\,\phi}\,\text{Sec}[\alpha]\,\text{Sin}\left[\frac{1}{4}\left(\pi+\frac{\sigma}{2}\right)\right]\text{Sin}[\tau\,\omega]\right]^2$$

Out[39]=
$$\text{Abs}\left[-i\,e^{i\,\phi}\,\text{Sin}\left[\frac{1}{4}\left(\pi+\frac{\sigma}{2}\right)\right]\left(-i\,\text{Sec}[\alpha]\,\text{Sin}[\tau\,\omega]\left(\left(\left(-4\,\text{N0} + 2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega] - \text{N0}\,\text{Cos}[2\,\alpha - 2\,\tau\,\omega] - \text{N0}\,\text{Cos}[2\,\alpha + 2\,\tau\,\omega] + 2\,\text{N0}\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,\text{N0}\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2 + 2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2 + 2\sqrt{2}\,\sqrt{\left(-\text{N0}^2\left(-6 - 2\,\text{Cos}[2\,\alpha] + 2\,\text{Cos}[2\,\tau\,\omega] - \text{Cos}[2\,\alpha - 2\,\tau\,\omega] - \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)}\right)\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2 + 4\,\text{N0} - 2\,\text{Cos}[2\,\alpha] - 2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega] + \text{N0}\,\text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{N0}\,\text{Cos}[2\,\alpha + 2\,\tau\,\omega] - 2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] + \text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)}\right)\right)}\Bigg)\Bigg/\left(8\sqrt{\left(\text{N0}^2\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] + \text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)}\right) + \left(\left(4\,\text{N0} - 2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega] + \text{N0}\,\text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{N0}\,\text{Cos}[2\,\alpha + 2\,\tau\,\omega] - 2\,\text{N0}\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,\text{N0}\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2 - 2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2 + 2\sqrt{2}\,\sqrt{\left(-\text{N0}^2\left(-6 - 2\,\text{Cos}[2\,\alpha] + 2\,\text{Cos}[2\,\tau\,\omega] - \text{Cos}[2\,\alpha - 2\,\tau\,\omega] - \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)}\right)\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2 + 4\,\text{N0} - 2\,\text{Cos}[2\,\alpha] - 2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega] + \text{N0}\,\text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{N0}\,\text{Cos}[2\,\alpha + 2\,\tau\,\omega] + 2\sqrt{2}\,\sqrt{\left(\text{N0}^2\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] + \text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)}\right)\right)}\Bigg)\Bigg/\left(8\sqrt{\left(\text{N0}^2\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] + \text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\right)\right.\right.\right.\right.$$

$$\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\Big)\Big)\Big) +$$

$$\text{Cos}[\alpha+\tau\,\omega]\,\text{Sec}[\alpha]\Big(\Big(\Big(\text{i}\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[\tau\,\omega]^2\Big(-4\,\text{N0}+2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]-$$
$$\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]-\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]+2\,\text{N0}\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2+$$
$$2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{N0}\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+$$
$$2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+2\sqrt{2}\,\sqrt{\Big(-\text{N0}^2\Big(-6-2\,\text{Cos}[2\,\alpha]+$$
$$2\,\text{Cos}[2\,\tau\,\omega]-\text{Cos}[2\,\alpha-2\,\tau\,\omega]-\text{Cos}[2\,\alpha+2\,\tau\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\Big)}\Big)$$
$$\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\Big(-2+4\,\text{N0}-2\,\text{Cos}[2\,\alpha]-2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+$$
$$\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]-2\sqrt{2}\,\sqrt{\Big(\text{N0}^2\Big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+$$
$$\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\Big)}\Big)\Big)}$$
$$\Big(4\,\text{N0}-2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]-$$
$$2\,\text{N0}\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{N0}\,\text{Sec}[\alpha]^2$$
$$\text{Sin}[\tau\,\omega]^2-2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+2\sqrt{2}\,\sqrt{\Big(\text{N0}^2\Big(6+2\,\text{Cos}[2\,\alpha]-$$
$$2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\Big)}\Big)\Big)\Big/$$
$$\Big(32\,\text{N0}\,\Big(1+\text{Cos}[2\,\alpha]\Big)\,\sqrt{\Big(\text{N0}^2\Big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+$$
$$\text{Cos}[2\,\alpha+2\,\tau\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\Big)}\Big)-$$
$$\Big(\text{i}\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[\tau\,\omega]^2\Big(4\,\text{N0}-2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+$$
$$\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]-2\,\text{N0}\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2-$$
$$2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{N0}\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2-$$
$$2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+2\sqrt{2}\,\sqrt{\Big(-\text{N0}^2\Big(-6-2\,\text{Cos}[2\,\alpha]+$$
$$2\,\text{Cos}[2\,\tau\,\omega]-\text{Cos}[2\,\alpha-2\,\tau\,\omega]-\text{Cos}[2\,\alpha+2\,\tau\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\Big)}\Big)$$
$$\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\Big(-2+4\,\text{N0}-2\,\text{Cos}[2\,\alpha]-2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+$$
$$\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]+2\sqrt{2}\,\sqrt{\Big(\text{N0}^2\Big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+$$
$$\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\Big)}\Big)\Big)}$$
$$\Big(-4\,\text{N0}+2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]-\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]-\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]+$$
$$2\,\text{N0}\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{N0}\,\text{Sec}[\alpha]^2$$
$$\text{Sin}[\tau\,\omega]^2+2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+2\sqrt{2}\,\sqrt{\Big(\text{N0}^2\Big(6+2\,\text{Cos}[2\,\alpha]-$$
$$2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\Big)}\Big)\Big)\Big/$$
$$\Big(32\,\text{N0}\,\Big(1+\text{Cos}[2\,\alpha]\Big)\,\sqrt{\Big(\text{N0}^2\Big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+$$
$$\text{Cos}[2\,\alpha+2\,\tau\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\Big)}\Big)\Big)\Big) +$$

$$\text{Cos}\Big[\frac{1}{4}\Big(\pi+\frac{\sigma}{2}\Big)\Big]\Big(\text{Cos}[\alpha-\tau\,\omega]\,\text{Sec}[\alpha]\Big(\Big(\Big(-4\,\text{N0}+2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]-\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]-$$
$$\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]+2\,\text{N0}\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2+$$
$$2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{N0}\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+$$
$$2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+2\sqrt{2}\,\sqrt{\Big(-\text{N0}^2\Big(-6-2\,\text{Cos}[2\,\alpha]+$$

$$2\,\text{Cos}[2\,\tau\,\omega] - \text{Cos}[2\,\alpha - 2\,\tau\,\omega] - \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)\big)$$

$$\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\Big(-2 + 4\,\text{N0} - 2\,\text{Cos}[2\,\alpha] - 2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega] + \text{N0}\,\text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{N0}\,\text{Cos}[2\,\alpha + 2\,\tau\,\omega] - 2\sqrt{2}\,\sqrt{\big(\text{N0}^2\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] + \text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)\big)\Big)\Big)\Big/$$

$$\big(8\,\sqrt{\big(\text{N0}^2\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] + \text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)\big) +$$

$$\Big(\big(4\,\text{N0} - 2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega] + \text{N0}\,\text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{N0}\,\text{Cos}[2\,\alpha + 2\,\tau\,\omega] - 2\,\text{N0}\,\text{Cos}[\alpha - \tau\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - \tau\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,\text{N0}\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2 - 2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2 + 2\sqrt{2}\,\sqrt{\big(-\text{N0}^2\,\big(-6 - 2\,\text{Cos}[2\,\alpha] + 2\,\text{Cos}[2\,\tau\,\omega] - \text{Cos}[2\,\alpha - 2\,\tau\,\omega] - \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)\big)\,\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\Big(-2 + 4\,\text{N0} - 2\,\text{Cos}[2\,\alpha] - 2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega] + \text{N0}\,\text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{N0}\,\text{Cos}[2\,\alpha + 2\,\tau\,\omega] + 2\sqrt{2}\,\sqrt{\big(\text{N0}^2\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] + \text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)\big)\Big)\Big)\Big/$$

$$\big(8\,\sqrt{\big(\text{N0}^2\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] + \text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)\big)\Big) -$$

$$\text{i}\,\text{Sec}[\alpha]\,\text{Sin}[\tau\,\omega]\,\Big(\Big(\text{i}\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[\tau\,\omega]^2\,\big(-4\,\text{N0} + 2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega] - \text{N0}\,\text{Cos}[2\,\alpha - 2\,\tau\,\omega] - \text{N0}\,\text{Cos}[2\,\alpha + 2\,\tau\,\omega] + 2\,\text{N0}\,\text{Cos}[\alpha - \tau\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - \tau\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,\text{N0}\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2 + 2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2 + 2\sqrt{2}\,\sqrt{\big(-\text{N0}^2\,\big(-6 - 2\,\text{Cos}[2\,\alpha] + 2\,\text{Cos}[2\,\tau\,\omega] - \text{Cos}[2\,\alpha - 2\,\tau\,\omega] - \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)\big)\,\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\Big(-2 + 4\,\text{N0} - 2\,\text{Cos}[2\,\alpha] - 2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega] + \text{N0}\,\text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{N0}\,\text{Cos}[2\,\alpha + 2\,\tau\,\omega] - 2\sqrt{2}\,\sqrt{\big(\text{N0}^2\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] + \text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)\big)\Big)\Big)$$

$$\big(4\,\text{N0} - 2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega] + \text{N0}\,\text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{N0}\,\text{Cos}[2\,\alpha + 2\,\tau\,\omega] - 2\,\text{N0}\,\text{Cos}[\alpha - \tau\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - \tau\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,\text{N0}\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2 - 2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2 + 2\sqrt{2}\,\sqrt{\big(\text{N0}^2\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] + \text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)\big)\Big)\Big/$$

$$\big(32\,\text{N0}\,\big(1 + \text{Cos}[2\,\alpha]\big)\,\sqrt{\big(\text{N0}^2\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] + \text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)\big) -$$

$$\Big(\text{i}\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[\tau\,\omega]^2\,\big(4\,\text{N0} - 2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega] + \text{N0}\,\text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{N0}\,\text{Cos}[2\,\alpha + 2\,\tau\,\omega] - 2\,\text{N0}\,\text{Cos}[\alpha - \tau\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - \tau\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,\text{N0}\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2 -$$

$$2\,N0\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\omega]^2+2\sqrt{2}\,\sqrt{\left(-N0^2\left(-6-2\,\text{Cos}[2\alpha]+2\,\text{Cos}[2\tau\omega]-\text{Cos}[2\alpha-2\tau\omega]-\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)}\Bigg)$$

$$\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\left(-2+4\,N0-2\,\text{Cos}[2\alpha]-2\,N0\,\text{Cos}[2\tau\omega]+N0\,\text{Cos}[2\alpha-2\tau\omega]+N0\,\text{Cos}[2\alpha+2\tau\omega]+2\sqrt{2}\,\sqrt{\left(N0^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)}\right)\right)}$$

$$\left(-4\,N0+2\,N0\,\text{Cos}[2\tau\omega]-N0\,\text{Cos}[2\alpha-2\tau\omega]-N0\,\text{Cos}[2\alpha+2\tau\omega]+2\,N0\,\text{Cos}[\alpha-\tau\omega]^2\,\text{Sec}[\alpha]^2+2\,N0\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-\tau\omega]^2\,\text{Sec}[\alpha]^2+2\,N0\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\omega]^2+2\,N0\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\omega]^2+2\sqrt{2}\,\sqrt{\left(N0^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)}\right)\Bigg/$$

$$\left(32\,N0\left(1+\text{Cos}[2\alpha]\right)\sqrt{\left(N0^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)}\right)\Bigg]^2+$$

$$\text{Abs}\left[\text{Cos}\left[\frac{1}{4}\left(\pi+\frac{\sigma}{2}\right)\right]\right]\left(-i\,\text{Sec}[\alpha]\,\text{Sin}[\tau\omega]\left(\left(\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\left(-2+4\,N0-2\,\text{Cos}[2\alpha]-2\,N0\,\text{Cos}[2\tau\omega]+N0\,\text{Cos}[2\alpha-2\tau\omega]+N0\,\text{Cos}[2\alpha+2\tau\omega]-2\sqrt{2}\,\sqrt{\left(N0^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)}\right)\right)}\right)\left(4\,N0-2\,N0\,\text{Cos}[2\tau\omega]+N0\,\text{Cos}[2\alpha-2\tau\omega]+N0\,\text{Cos}[2\alpha+2\tau\omega]-2\,N0\,\text{Cos}[\alpha-\tau\omega]^2\,\text{Sec}[\alpha]^2-2\,N0\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-\tau\omega]^2\,\text{Sec}[\alpha]^2-2\,N0\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\omega]^2-2\,N0\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\omega]^2+2\sqrt{2}\,\sqrt{\left(N0^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)}\right)\Bigg/\left(8\sqrt{\left(N0^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)}\right)+\left(\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\left(-2+4\,N0-2\,\text{Cos}[2\alpha]-2\,N0\,\text{Cos}[2\tau\omega]+N0\,\text{Cos}[2\alpha-2\tau\omega]+N0\,\text{Cos}[2\alpha+2\tau\omega]+2\sqrt{2}\,\sqrt{\left(N0^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)}\right)\right)}\right)\left(-4\,N0+2\,N0\,\text{Cos}[2\tau\omega]-N0\,\text{Cos}[2\alpha-2\tau\omega]-N0\,\text{Cos}[2\alpha+2\tau\omega]+2\,N0\,\text{Cos}[\alpha-\tau\omega]^2\,\text{Sec}[\alpha]^2+2\,N0\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-\tau\omega]^2\,\text{Sec}[\alpha]^2+2\,N0\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\omega]^2+2\,N0\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\omega]^2+2\sqrt{2}\,\sqrt{\left(N0^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)}\right)\Bigg/\left(8\sqrt{\left(N0^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\tau\omega]+\text{Cos}[2\alpha-2\tau\omega]+\text{Cos}[2\alpha+2\tau\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[\tau\omega]^2\right)}\right)+$$

$$\text{Cos}[\alpha-\tau\omega]\,\text{Sec}[\alpha]\left(-\left(\left(i\,N0\left(1+\text{Cos}[2\alpha]\right)\text{Sec}[\alpha]\,\text{Sin}[\tau\omega]^2\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\right.\right.\right.\right.$$

$$\Big(-2+4\,N0-2\,\text{Cos}[2\,\alpha]-2\,N0\,\text{Cos}[2\,\tau\,\omega]+N0\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+ N0\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]-2\,\sqrt{2}\,\sqrt{\big(N0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+ \text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)}\Big)$$

$$\text{Tan}[\alpha]\Big)\Big/\Big(2\,\sqrt{\big(N0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+ \text{Cos}[2\,\alpha+2\,\tau\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)}\Big)\Big)+$$

$$\Big(i\,N0\,\big(1+\text{Cos}[2\,\alpha]\big)\,\text{Sec}[\alpha]\,\text{Sin}[\tau\,\omega]^2\,\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\Big(-2+4\,N0-2\,\text{Cos}[2\,\alpha]- 2\,N0\,\text{Cos}[2\,\tau\,\omega]+N0\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+N0\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]+ 2\,\sqrt{2}\,\sqrt{\big(N0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+ \text{Cos}[2\,\alpha+2\,\tau\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)}\Big)\,\text{Tan}[\alpha]\Big)\Big/ \Big(2\,\sqrt{\big(N0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\big) \text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)}\Big)\Big)\Big)-i\,e^{i\,\phi}\,\text{Sin}\Big[\frac{1}{4}\Big(\pi+\frac{\sigma}{2}\Big)\Big]$$

$$\Big(\text{Cos}[\alpha+\tau\,\omega]\,\text{Sec}[\alpha]\,\Big(\Big(\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\Big(-2+4\,N0-2\,\text{Cos}[2\,\alpha]-2\,N0\,\text{Cos}[2\,\tau\,\omega]+ N0\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+N0\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]-2\,\sqrt{2}\,\sqrt{\big(N0^2\,\big(6+2\,\text{Cos}[2\,\alpha]- 2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)}\Big)\Big)}\Big)$$

$$\Big(4\,N0-2\,N0\,\text{Cos}[2\,\tau\,\omega]+N0\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+N0\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]- 2\,N0\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2-2\,N0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2-2\,N0\,\text{Sec}[\alpha]^2 \text{Sin}[\tau\,\omega]^2-2\,N0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+2\,\sqrt{2}\,\sqrt{\big(N0^2\,\big(6+2\,\text{Cos}[2\,\alpha]- 2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)}\Big)\Big)\Big/$$

$$\Big(8\,\sqrt{\big(N0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\big) \text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)}\Big)+$$

$$\Big(\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\Big(-2+4\,N0-2\,\text{Cos}[2\,\alpha]-2\,N0\,\text{Cos}[2\,\tau\,\omega]+N0\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+ N0\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]+2\,\sqrt{2}\,\sqrt{\big(N0^2\,\big(6+2\,\text{Cos}[2\,\alpha]- \text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)}\Big)\Big)}\Big)$$

$$\Big(-4\,N0+2\,N0\,\text{Cos}[2\,\tau\,\omega]-N0\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]-N0\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]+ 2\,N0\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2+2\,N0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2+2\,N0\,\text{Sec}[\alpha]^2 \text{Sin}[\tau\,\omega]^2+2\,N0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+2\,\sqrt{2}\,\sqrt{\big(N0^2\,\big(6+2\,\text{Cos}[2\,\alpha]- 2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)}\Big)\Big)\Big/$$

$$\Big(8\,\sqrt{\big(N0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\big) \text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\big)}\Big)\Big)-$$

$$
\begin{aligned}
&i\,\mathrm{Sec}[\alpha]\,\mathrm{Sin}[\tau\omega]\,\Bigg(-\Bigg(\Bigg(\Big(i\,N0\,\big(1+\mathrm{Cos}[2\alpha]\big)\,\mathrm{Sec}[\alpha]\,\mathrm{Sin}[\tau\omega]^2\sqrt{\Big(\frac{1}{1+\mathrm{Cos}[2\alpha]}\\
&\Big(-2+4\,N0-2\,\mathrm{Cos}[2\alpha]-2\,N0\,\mathrm{Cos}[2\tau\omega]+N0\,\mathrm{Cos}[2\alpha-2\tau\omega]+\\
&N0\,\mathrm{Cos}[2\alpha+2\tau\omega]-2\sqrt{2}\,\sqrt{\big(N0^2\,\big(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2\tau\omega]+\\
&\mathrm{Cos}[2\alpha-2\tau\omega]+\mathrm{Cos}[2\alpha+2\tau\omega]\big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\big)\Big)\Big)\\
&\mathrm{Tan}[\alpha]\Big)\Big/\Big(2\sqrt{\big(N0^2\,\big(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2\tau\omega]+\mathrm{Cos}[2\alpha-2\tau\omega]+\\
&\mathrm{Cos}[2\alpha+2\tau\omega]\big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\big)}\Big)\Big)+\\
&\Big(i\,N0\,\big(1+\mathrm{Cos}[2\alpha]\big)\,\mathrm{Sec}[\alpha]\,\mathrm{Sin}[\tau\omega]^2\sqrt{\Big(\frac{1}{1+\mathrm{Cos}[2\alpha]}\Big(-2+4\,N0-2\,\mathrm{Cos}[2\alpha]-\\
&2\,N0\,\mathrm{Cos}[2\tau\omega]+N0\,\mathrm{Cos}[2\alpha-2\tau\omega]+N0\,\mathrm{Cos}[2\alpha+2\tau\omega]+\\
&2\sqrt{2}\,\sqrt{\big(N0^2\,\big(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2\tau\omega]+\mathrm{Cos}[2\alpha-2\tau\omega]+\\
&\mathrm{Cos}[2\alpha+2\tau\omega]\big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\big)}\Big)\,\mathrm{Tan}[\alpha]\Big)\Big/\\
&\Big(2\sqrt{\big(N0^2\,\big(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2\tau\omega]+\mathrm{Cos}[2\alpha-2\tau\omega]+\mathrm{Cos}[2\alpha+2\tau\omega]\big)\\
&\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\big)}\Big)\Big)\Big)\Big]^2
\end{aligned}
$$

Out[40]=

$$
\begin{aligned}
&\Big(\mathrm{Abs}\Big[-i\,e^{i\phi}\,\mathrm{Cos}[\alpha+\tau\omega]\,\mathrm{Sec}[\alpha]\,\mathrm{Sin}\Big[\frac{1}{4}\Big(\pi+\frac{\sigma}{2}\Big)\Big]-i\,\mathrm{Cos}\Big[\frac{1}{4}\Big(\pi+\frac{\sigma}{2}\Big)\Big]\,\mathrm{Sec}[\alpha]\,\mathrm{Sin}[\tau\omega]\Big]^2+\\
&\mathrm{Abs}\Big[\mathrm{Cos}\Big[\frac{1}{4}\Big(\pi+\frac{\sigma}{2}\Big)\Big]\,\mathrm{Cos}[\alpha-\tau\omega]\,\mathrm{Sec}[\alpha]-e^{i\phi}\,\mathrm{Sec}[\alpha]\,\mathrm{Sin}\Big[\frac{1}{4}\Big(\pi+\frac{\sigma}{2}\Big)\Big]\,\mathrm{Sin}[\tau\omega]\Big]^2\Big)\Big/\\
&\Big(\mathrm{Abs}\Big[-i\,e^{i\phi}\,\mathrm{Cos}[\alpha+\tau\omega]\,\mathrm{Sec}[\alpha]\,\mathrm{Sin}\Big[\frac{1}{4}\Big(\pi+\frac{\sigma}{2}\Big)\Big]-i\,\mathrm{Cos}\Big[\frac{1}{4}\Big(\pi+\frac{\sigma}{2}\Big)\Big]\,\mathrm{Sec}[\alpha]\,\mathrm{Sin}[\tau\omega]\Big]^2+\\
&\mathrm{Abs}\Big[\mathrm{Cos}\Big[\frac{1}{4}\Big(\pi+\frac{\sigma}{2}\Big)\Big]\,\mathrm{Cos}[\alpha-\tau\omega]\,\mathrm{Sec}[\alpha]-e^{i\phi}\,\mathrm{Sec}[\alpha]\,\mathrm{Sin}\Big[\frac{1}{4}\Big(\pi+\frac{\sigma}{2}\Big)\Big]\,\mathrm{Sin}[\tau\omega]\Big]^2+\\
&\mathrm{Abs}\Big[-i\,e^{i\phi}\,\mathrm{Sin}\Big[\frac{1}{4}\Big(\pi+\frac{\sigma}{2}\Big)\Big]\\
&\Big(-i\,\mathrm{Sec}[\alpha]\,\mathrm{Sin}[\tau\omega]\,\Big(\Big(\Big(-4\,N0+2\,N0\,\mathrm{Cos}[2\tau\omega]-N0\,\mathrm{Cos}[2\alpha-2\tau\omega]-N0\,\mathrm{Cos}[2\alpha+2\tau\omega]+\\
&2\,N0\,\mathrm{Cos}[\alpha-\tau\omega]^2\,\mathrm{Sec}[\alpha]^2+2\,N0\,\mathrm{Cos}[2\alpha]\,\mathrm{Cos}[\alpha-\tau\omega]^2\,\mathrm{Sec}[\alpha]^2+2\,N0\,\mathrm{Sec}[\alpha]^2\\
&\mathrm{Sin}[\tau\omega]^2+2\,N0\,\mathrm{Cos}[2\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2+2\sqrt{2}\,\sqrt{\big(-N0^2\,\big(-6-2\,\mathrm{Cos}[2\alpha]+\\
&2\,\mathrm{Cos}[2\tau\omega]-\mathrm{Cos}[2\alpha-2\tau\omega]-\mathrm{Cos}[2\alpha+2\tau\omega]\big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\big)}\Big)\\
&\sqrt{\Big(\frac{1}{1+\mathrm{Cos}[2\alpha]}\Big(-2+4\,N0-2\,\mathrm{Cos}[2\alpha]-2\,N0\,\mathrm{Cos}[2\tau\omega]+N0\,\mathrm{Cos}[2\alpha-2\tau\omega]+\\
&N0\,\mathrm{Cos}[2\alpha+2\tau\omega]-2\sqrt{2}\,\sqrt{\big(N0^2\,\big(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2\tau\omega]+\\
&\mathrm{Cos}[2\alpha-2\tau\omega]+\mathrm{Cos}[2\alpha+2\tau\omega]\big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\big)}\Big)\Big)\Big)\Big/\\
&\Big(8\sqrt{\big(N0^2\,\big(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2\tau\omega]+\mathrm{Cos}[2\alpha-2\tau\omega]+\mathrm{Cos}[2\alpha+2\tau\omega]\big)\\
&\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\big)}+\Big(\Big(4\,N0-2\,N0\,\mathrm{Cos}[2\tau\omega]+N0\,\mathrm{Cos}[2\alpha-2\tau\omega]+\\
&N0\,\mathrm{Cos}[2\alpha+2\tau\omega]-2\,N0\,\mathrm{Cos}[\alpha-\tau\omega]^2\,\mathrm{Sec}[\alpha]^2-2\,N0\,\mathrm{Cos}[2\alpha]\,\mathrm{Cos}[\alpha-\tau\omega]^2
\end{aligned}
$$

$$\begin{aligned}
&\text{Sec}[\alpha]^2 - 2\,\text{N0}\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2 - 2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2 + 2\sqrt{2}\\
&\sqrt{\left(-\text{N0}^2\,\left(-6 - 2\,\text{Cos}[2\,\alpha] + 2\,\text{Cos}[2\,\tau\,\omega] - \text{Cos}[2\,\alpha - 2\,\tau\,\omega] - \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\right)\right.}\\
&\left.\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)}\Bigg)\sqrt{\Bigg(\frac{1}{1+\text{Cos}[2\,\alpha]}\Big(-2 + 4\,\text{N0} - 2\,\text{Cos}[2\,\alpha] -\\
&2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega] + \text{N0}\,\text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{N0}\,\text{Cos}[2\,\alpha + 2\,\tau\,\omega] + 2\sqrt{2}\\
&\sqrt{\left(\text{N0}^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] + \text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\right)\right.}\\
&\left.\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)}\Big)\Bigg)\Bigg/\Big(8\sqrt{\Big(\text{N0}^2\,\Big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] +\\
&\text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\Big)}\Big)\Bigg) +\\
&\text{Cos}[\alpha + \tau\,\omega]\,\text{Sec}[\alpha]\,\Bigg(\Bigg(\Big(\text{i}\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[\tau\,\omega]^2\,\Big(-4\,\text{N0} + 2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega] -\\
&\text{N0}\,\text{Cos}[2\,\alpha - 2\,\tau\,\omega] - \text{N0}\,\text{Cos}[2\,\alpha + 2\,\tau\,\omega] + 2\,\text{N0}\,\text{Cos}[\alpha - \tau\,\omega]^2\,\text{Sec}[\alpha]^2 +\\
&2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - \tau\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,\text{N0}\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2 +\\
&2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2 + 2\sqrt{2}\,\sqrt{\left(-\text{N0}^2\,\left(-6 - 2\,\text{Cos}[2\,\alpha] +\right.\right.}\\
&\left.\left.2\,\text{Cos}[2\,\tau\,\omega] - \text{Cos}[2\,\alpha - 2\,\tau\,\omega] - \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)}\Big)\\
&\sqrt{\Bigg(\frac{1}{1+\text{Cos}[2\,\alpha]}\Big(-2 + 4\,\text{N0} - 2\,\text{Cos}[2\,\alpha] - 2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega] + \text{N0}\,\text{Cos}[2\,\alpha - 2\,\tau\,\omega] +\\
&\text{N0}\,\text{Cos}[2\,\alpha + 2\,\tau\,\omega] - 2\sqrt{2}\,\sqrt{\Big(\text{N0}^2\,\Big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] +\\
&\text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\Big)}\Big)\Bigg)\\
&\Big(4\,\text{N0} - 2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega] + \text{N0}\,\text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{N0}\,\text{Cos}[2\,\alpha + 2\,\tau\,\omega] -\\
&2\,\text{N0}\,\text{Cos}[\alpha - \tau\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - \tau\,\omega]^2\,\text{Sec}[\alpha]^2 -\\
&2\,\text{N0}\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2 - 2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2 +\\
&2\sqrt{2}\,\sqrt{\left(\text{N0}^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] + \text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\right)\right.}\\
&\left.\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)}\Bigg)\Bigg/\Big(32\,\text{N0}\,\left(1 + \text{Cos}[2\,\alpha]\right)\,\sqrt{\Big(\text{N0}^2\,\Big(6 + 2\,\text{Cos}[2\,\alpha] -\\
&2\,\text{Cos}[2\,\tau\,\omega] + \text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\Big)}\Big) -\\
&\Bigg(\text{i}\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[\tau\,\omega]^2\,\Big(4\,\text{N0} - 2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega] + \text{N0}\,\text{Cos}[2\,\alpha - 2\,\tau\,\omega] +\\
&\text{N0}\,\text{Cos}[2\,\alpha + 2\,\tau\,\omega] - 2\,\text{N0}\,\text{Cos}[\alpha - \tau\,\omega]^2\,\text{Sec}[\alpha]^2 -\\
&2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - \tau\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,\text{N0}\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2 -\\
&2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2 + 2\sqrt{2}\,\sqrt{\left(-\text{N0}^2\,\left(-6 - 2\,\text{Cos}[2\,\alpha] +\right.\right.}\\
&\left.\left.2\,\text{Cos}[2\,\tau\,\omega] - \text{Cos}[2\,\alpha - 2\,\tau\,\omega] - \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)}\Big)\\
&\sqrt{\Bigg(\frac{1}{1+\text{Cos}[2\,\alpha]}\Big(-2 + 4\,\text{N0} - 2\,\text{Cos}[2\,\alpha] - 2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega] + \text{N0}\,\text{Cos}[2\,\alpha - 2\,\tau\,\omega] +\\
&\text{N0}\,\text{Cos}[2\,\alpha + 2\,\tau\,\omega] + 2\sqrt{2}\,\sqrt{\Big(\text{N0}^2\,\Big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] +\\
&\text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\Big)}\Big)\Bigg)\\
&\Big(-4\,\text{N0} + 2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega] - \text{N0}\,\text{Cos}[2\,\alpha - 2\,\tau\,\omega] - \text{N0}\,\text{Cos}[2\,\alpha + 2\,\tau\,\omega] +\\
&2\,\text{N0}\,\text{Cos}[\alpha - \tau\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - \tau\,\omega]^2\,\text{Sec}[\alpha]^2 +\\
&2\,\text{N0}\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2 + 2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2 +\\
&2\sqrt{2}\,\sqrt{\left(\text{N0}^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,\tau\,\omega] + \text{Cos}[2\,\alpha - 2\,\tau\,\omega] + \text{Cos}[2\,\alpha + 2\,\tau\,\omega]\right)\right.}
\end{aligned}$$

$$\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\Big)\Big)\Big/\Big(32\,\text{N0}\,\Big(1+\text{Cos}[2\,\alpha]\Big)\,\sqrt{\Big(\text{N0}^2\,\Big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\Big)}\Big)\Big)+$$

$$\text{Cos}\Big[\frac{1}{4}\Big(\pi+\frac{\sigma}{2}\Big)\Big]\,\Big(\text{Cos}[\alpha-\tau\,\omega]\,\text{Sec}[\alpha]\,\Big(\Big(\Big(-4\,\text{N0}+2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]-\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]-\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]+2\,\text{N0}\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{N0}\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+2\sqrt{2}\,\sqrt{\Big(-\text{N0}^2\,\Big(-6-2\,\text{Cos}[2\,\alpha]+2\,\text{Cos}[2\,\tau\,\omega]-\text{Cos}[2\,\alpha-2\,\tau\,\omega]-\text{Cos}[2\,\alpha+2\,\tau\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\Big)}\Big)\Big)\Big/\Big(\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\Big(-2+4\,\text{N0}-2\,\text{Cos}[2\,\alpha]-2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]-2\sqrt{2}\,\sqrt{\Big(\text{N0}^2\,\Big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\Big)}\Big)\Big)\Big/\Big(8\,\sqrt{\Big(\text{N0}^2\,\Big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\Big)}\Big)+\Big(\Big(4\,\text{N0}-2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]-2\,\text{N0}\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{N0}\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2-2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+2\sqrt{2}\,\sqrt{\Big(-\text{N0}^2\,\Big(-6-2\,\text{Cos}[2\,\alpha]+2\,\text{Cos}[2\,\tau\,\omega]-\text{Cos}[2\,\alpha-2\,\tau\,\omega]-\text{Cos}[2\,\alpha+2\,\tau\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\Big)}\Big)\Big)\Big/\Big(\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\Big(-2+4\,\text{N0}-2\,\text{Cos}[2\,\alpha]-2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]+2\sqrt{2}\,\sqrt{\Big(\text{N0}^2\,\Big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\Big)}\Big)\Big)\Big/\Big(8\,\sqrt{\Big(\text{N0}^2\,\Big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\Big)}\Big)\Big)-$$

$$\mathrm{i}\,\text{Sec}[\alpha]\,\text{Sin}[\tau\,\omega]\,\Big(\Big(\mathrm{i}\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[\tau\,\omega]^2\,\Big(-4\,\text{N0}+2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]-\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]-\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]+2\,\text{N0}\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{N0}\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+2\sqrt{2}\,\sqrt{\Big(-\text{N0}^2\,\Big(-6-2\,\text{Cos}[2\,\alpha]+2\,\text{Cos}[2\,\tau\,\omega]-\text{Cos}[2\,\alpha-2\,\tau\,\omega]-\text{Cos}[2\,\alpha+2\,\tau\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\Big)}\Big)\Big)\Big/\Big(\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\Big(-2+4\,\text{N0}-2\,\text{Cos}[2\,\alpha]-2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]-2\sqrt{2}\,\sqrt{\Big(\text{N0}^2\,\Big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\Big)}\Big)\Big)\Big/\Big(4\,\text{N0}-2\,\text{N0}\,\text{Cos}[2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{N0}\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]-2\,\text{N0}\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{N0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2-$$

$$
\begin{aligned}
&2\,N0\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2 - 2\,N0\,\mathrm{Cos}[2\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2 + \\
&2\sqrt{2}\,\sqrt{\left(N0^2\,\left(6 + 2\,\mathrm{Cos}[2\alpha] - 2\,\mathrm{Cos}[2\tau\omega] + \mathrm{Cos}[2\alpha - 2\tau\omega] + \mathrm{Cos}[2\alpha + 2\tau\omega]\right)\right.} \\
&\left.\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\right)\Big)\Big/\Big(32\,N0\,\left(1 + \mathrm{Cos}[2\alpha]\right)\,\sqrt{\left(N0^2\,\left(6 + 2\,\mathrm{Cos}[2\alpha] -\right.\right.} \\
&\left.\left.2\,\mathrm{Cos}[2\tau\omega] + \mathrm{Cos}[2\alpha - 2\tau\omega] + \mathrm{Cos}[2\alpha + 2\tau\omega]\right)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\right)\Big) - \\
&\Bigg(\mathrm{i}\,\mathrm{Cos}[\alpha]\,\mathrm{Cot}[\alpha]\,\mathrm{Csc}[\tau\omega]^2\,\Big(4\,N0 - 2\,N0\,\mathrm{Cos}[2\tau\omega] + N0\,\mathrm{Cos}[2\alpha - 2\tau\omega] + \\
&N0\,\mathrm{Cos}[2\alpha + 2\tau\omega] - 2\,N0\,\mathrm{Cos}[\alpha - \tau\omega]^2\,\mathrm{Sec}[\alpha]^2 - \\
&2\,N0\,\mathrm{Cos}[2\alpha]\,\mathrm{Cos}[\alpha - \tau\omega]^2\,\mathrm{Sec}[\alpha]^2 - 2\,N0\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2 - \\
&2\,N0\,\mathrm{Cos}[2\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2 + 2\sqrt{2}\,\sqrt{\left(-N0^2\,\left(-6 - 2\,\mathrm{Cos}[2\alpha] +\right.\right.} \\
&\left.\left.2\,\mathrm{Cos}[2\tau\omega] - \mathrm{Cos}[2\alpha - 2\tau\omega] - \mathrm{Cos}[2\alpha + 2\tau\omega]\right)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\right)}\Big) \\
&\sqrt{\Bigg(\frac{1}{1 + \mathrm{Cos}[2\alpha]}\,\Big(-2 + 4\,N0 - 2\,\mathrm{Cos}[2\alpha] - 2\,N0\,\mathrm{Cos}[2\tau\omega] + N0\,\mathrm{Cos}[2\alpha - 2\tau\omega] + \\
&N0\,\mathrm{Cos}[2\alpha + 2\tau\omega] + 2\sqrt{2}\,\sqrt{\left(N0^2\,\left(6 + 2\,\mathrm{Cos}[2\alpha] - 2\,\mathrm{Cos}[2\tau\omega] + \right.\right.} \\
&\left.\left.\mathrm{Cos}[2\alpha - 2\tau\omega] + \mathrm{Cos}[2\alpha + 2\tau\omega]\right)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\right)}\Big)\Bigg)} \\
&\Big(-4\,N0 + 2\,N0\,\mathrm{Cos}[2\tau\omega] - N0\,\mathrm{Cos}[2\alpha - 2\tau\omega] - N0\,\mathrm{Cos}[2\alpha + 2\tau\omega] + \\
&2\,N0\,\mathrm{Cos}[\alpha - \tau\omega]^2\,\mathrm{Sec}[\alpha]^2 + 2\,N0\,\mathrm{Cos}[2\alpha]\,\mathrm{Cos}[\alpha - \tau\omega]^2\,\mathrm{Sec}[\alpha]^2 + \\
&2\,N0\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2 + 2\,N0\,\mathrm{Cos}[2\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2 + \\
&2\sqrt{2}\,\sqrt{\left(N0^2\,\left(6 + 2\,\mathrm{Cos}[2\alpha] - 2\,\mathrm{Cos}[2\tau\omega] + \mathrm{Cos}[2\alpha - 2\tau\omega] + \right.\right.} \\
&\left.\left.\mathrm{Cos}[2\alpha + 2\tau\omega]\right)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\right)}\Big)\Big/ \\
&\Big(32\,N0\,\left(1 + \mathrm{Cos}[2\alpha]\right)\,\sqrt{\left(N0^2\,\left(6 + 2\,\mathrm{Cos}[2\alpha] - 2\,\mathrm{Cos}[2\tau\omega] + \mathrm{Cos}[\right.\right.} \\
&\left.\left.2\alpha - 2\tau\omega] + \mathrm{Cos}[2\alpha + 2\tau\omega]\right)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\right)}\Big)\Bigg)\Bigg]^2 + \\
&\mathrm{Abs}\Big[\mathrm{Cos}\Big[\frac{1}{4}\,\left(\pi + \frac{\sigma}{2}\right)\Big]\Big]\,\Bigg(-\mathrm{i}\,\mathrm{Sec}[\alpha]\,\mathrm{Sin}[\tau\omega]\,\Bigg(\Bigg(\sqrt{\Bigg(\frac{1}{1 + \mathrm{Cos}[2\alpha]}\,\Big(-2 + 4\,N0 - 2\,\mathrm{Cos}[2\alpha] - \\
&2\,N0\,\mathrm{Cos}[2\tau\omega] + N0\,\mathrm{Cos}[2\alpha - 2\tau\omega] + N0\,\mathrm{Cos}[2\alpha + 2\tau\omega] - \\
&2\sqrt{2}\,\sqrt{\left(N0^2\,\left(6 + 2\,\mathrm{Cos}[2\alpha] - 2\,\mathrm{Cos}[2\tau\omega] + \mathrm{Cos}[2\alpha - 2\tau\omega] + \right.\right.} \\
&\left.\left.\mathrm{Cos}[2\alpha + 2\tau\omega]\right)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\right)}\Big)\Bigg)} \\
&\Big(4\,N0 - 2\,N0\,\mathrm{Cos}[2\tau\omega] + N0\,\mathrm{Cos}[2\alpha - 2\tau\omega] + N0\,\mathrm{Cos}[2\alpha + 2\tau\omega] - \\
&2\,N0\,\mathrm{Cos}[\alpha - \tau\omega]^2\,\mathrm{Sec}[\alpha]^2 - 2\,N0\,\mathrm{Cos}[2\alpha]\,\mathrm{Cos}[\alpha - \tau\omega]^2\,\mathrm{Sec}[\alpha]^2 - \\
&2\,N0\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2 - 2\,N0\,\mathrm{Cos}[2\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2 + \\
&2\sqrt{2}\,\sqrt{\left(N0^2\,\left(6 + 2\,\mathrm{Cos}[2\alpha] - 2\,\mathrm{Cos}[2\tau\omega] + \mathrm{Cos}[2\alpha - 2\tau\omega] + \mathrm{Cos}[2\alpha + 2\tau\omega]\right)\right.} \\
&\left.\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\right)}\Big)\Big)\Big/\Big(8\,\sqrt{\left(N0^2\,\left(6 + 2\,\mathrm{Cos}[2\alpha] - 2\,\mathrm{Cos}[2\tau\omega] + \right.\right.} \\
&\left.\left.\mathrm{Cos}[2\alpha - 2\tau\omega] + \mathrm{Cos}[2\alpha + 2\tau\omega]\right)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\right)}\Big) + \\
&\Bigg(\sqrt{\Bigg(\frac{1}{1 + \mathrm{Cos}[2\alpha]}\,\Big(-2 + 4\,N0 - 2\,\mathrm{Cos}[2\alpha] - 2\,N0\,\mathrm{Cos}[2\tau\omega] + N0\,\mathrm{Cos}[2\alpha - 2\tau\omega] + \\
&N0\,\mathrm{Cos}[2\alpha + 2\tau\omega] + 2\sqrt{2}\,\sqrt{\left(N0^2\,\left(6 + 2\,\mathrm{Cos}[2\alpha] - 2\,\mathrm{Cos}[2\tau\omega] + \right.\right.} \\
&\left.\left.\mathrm{Cos}[2\alpha - 2\tau\omega] + \mathrm{Cos}[2\alpha + 2\tau\omega]\right)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[\tau\omega]^2\right)}\Big)\Bigg)} \\
&\Big(-4\,N0 + 2\,N0\,\mathrm{Cos}[2\tau\omega] - N0\,\mathrm{Cos}[2\alpha - 2\tau\omega] - N0\,\mathrm{Cos}[2\alpha + 2\tau\omega] +
\end{aligned}
$$

$$
\begin{aligned}
&2\,N0\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2+2\,N0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2+\\
&2\,N0\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+2\,N0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+\\
&2\sqrt{2}\,\sqrt{\left(N0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\right.}\\
&\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\right)\Big/\left(8\,\sqrt{\left(N0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\right.\right.\right.}\\
&\left.\left.\left.\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\right)+\\
&\text{Cos}[\alpha-\tau\,\omega]\,\text{Sec}[\alpha]\,\left(-\left(\left(\dot{\imath}\,N0\,\left(1+\text{Cos}[2\,\alpha]\right)\,\text{Sec}[\alpha]\,\text{Sin}[\tau\,\omega]^2\,\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\right.\right.\right.\right.\\
&\left.\left.\left.\left.\left(-2+4\,N0-2\,\text{Cos}[2\,\alpha]-2\,N0\,\text{Cos}[2\,\tau\,\omega]+N0\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\right.\right.\right.\right.\\
&\left.\left.\left.\left.N0\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]-2\,\sqrt{2}\,\sqrt{\left(N0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[\right.\right.\right.\right.\right.\right.\\
&\left.\left.\left.\left.\left.\left.2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\right)\right)\,\text{Tan}[\alpha]\right)\Big/\\
&\left(2\,\sqrt{\left(N0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\right.}\right.\\
&\left.\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\right)\right)+\left(\dot{\imath}\,N0\,\left(1+\text{Cos}[2\,\alpha]\right)\,\text{Sec}[\alpha]\,\text{Sin}[\tau\,\omega]^2\right.\\
&\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,N0-2\,\text{Cos}[2\,\alpha]-2\,N0\,\text{Cos}[2\,\tau\,\omega]+N0\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\right.\right.}\\
&\left.\left.N0\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]+2\,\sqrt{2}\,\sqrt{\left(N0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\right.\right.\right.\right.\\
&\left.\left.\left.\left.\left.\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\right)\right)\,\text{Tan}[\alpha]\right)\Big/\\
&\left(2\,\sqrt{\left(N0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\right.}\right.\\
&\left.\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\right)\right)\Bigg)-\dot{\imath}\,e^{\dot{\imath}\,\phi}\,\text{Sin}\left[\frac{1}{4}\left(\pi+\frac{\sigma}{2}\right)\right]\\
&\left(\text{Cos}[\alpha+\tau\,\omega]\,\text{Sec}[\alpha]\,\left(\left(\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,N0-2\,\text{Cos}[2\,\alpha]-2\,N0\,\text{Cos}[2\,\tau\,\omega]+\right.\right.\right.\right.\\
&\left.\left.\left.\left.N0\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+N0\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]-2\,\sqrt{2}\,\sqrt{\left(N0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[\right.\right.\right.\right.\right.\right.\\
&\left.\left.\left.\left.\left.\left.2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\right)\right)\right.\\
&\left(4\,N0-2\,N0\,\text{Cos}[2\,\tau\,\omega]+N0\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+N0\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]-\right.\\
&2\,N0\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2-2\,N0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2-\\
&2\,N0\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2-2\,N0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2+\\
&2\sqrt{2}\,\sqrt{\left(N0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\right.}\\
&\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\right)\Big/\left(8\,\sqrt{\left(N0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\right.\right.\right.}\\
&\left.\left.\left.\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\right)+\\
&\left(\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,N0-2\,\text{Cos}[2\,\alpha]-2\,N0\,\text{Cos}[2\,\tau\,\omega]+N0\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\right.\right.}\right.\\
&\left.\left.N0\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]+2\,\sqrt{2}\,\sqrt{\left(N0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,\tau\,\omega]+\right.\right.\right.\right.\\
&\left.\left.\left.\left.\left.\text{Cos}[2\,\alpha-2\,\tau\,\omega]+\text{Cos}[2\,\alpha+2\,\tau\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[\tau\,\omega]^2\right)\right)\right)\right)\\
&\left(-4\,N0+2\,N0\,\text{Cos}[2\,\tau\,\omega]-N0\,\text{Cos}[2\,\alpha-2\,\tau\,\omega]-N0\,\text{Cos}[2\,\alpha+2\,\tau\,\omega]+\right.\\
&2\,N0\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2+2\,N0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-\tau\,\omega]^2\,\text{Sec}[\alpha]^2+
\end{aligned}
$$

```
2 N0 Sec[α]^2 Sin[τ ω]^2 + 2 N0 Cos[2 α] Sec[α]^2 Sin[τ ω]^2 +
2 √2 √(N0^2 (6 + 2 Cos[2 α] - 2 Cos[2 τ ω] + Cos[2 α - 2 τ ω] + Cos[2 α + 2 τ ω])
Sin[α]^2 Sin[τ ω]^2)) / (8 √(N0^2 (6 + 2 Cos[2 α] - 2 Cos[2 τ ω] +
Cos[2 α - 2 τ ω] + Cos[2 α + 2 τ ω]) Sin[α]^2 Sin[τ ω]^2)) -
i Sec[α] Sin[τ ω] (-((i N0 (1 + Cos[2 α]) Sec[α] Sin[τ ω]^2 √(1/(1 + Cos[2 α])
(-2 + 4 N0 - 2 Cos[2 α] - 2 N0 Cos[2 τ ω] + N0 Cos[2 α - 2 τ ω] +
N0 Cos[2 α + 2 τ ω] - 2 √2 √(N0^2 (6 + 2 Cos[2 α] - 2 Cos[2 τ ω] + Cos[
2 α - 2 τ ω] + Cos[2 α + 2 τ ω]) Sin[α]^2 Sin[τ ω]^2)))) Tan[α]) /
(2 √(N0^2 (6 + 2 Cos[2 α] - 2 Cos[2 τ ω] + Cos[2 α - 2 τ ω] + Cos[
2 α + 2 τ ω]) Sin[α]^2 Sin[τ ω]^2)) +
(i N0 (1 + Cos[2 α]) Sec[α] Sin[τ ω]^2 √(1/(1 + Cos[2 α]) (-2 + 4 N0 -
2 Cos[2 α] - 2 N0 Cos[2 τ ω] + N0 Cos[2 α - 2 τ ω] + N0 Cos[2 α + 2 τ ω] +
2 √2 √(N0^2 (6 + 2 Cos[2 α] - 2 Cos[2 τ ω] + Cos[2 α - 2 τ ω] +
Cos[2 α + 2 τ ω]) Sin[α]^2 Sin[τ ω]^2)))) Tan[α]) /
(2 √(N0^2 (6 + 2 Cos[2 α] - 2 Cos[2 τ ω] + Cos[2 α - 2 τ ω] + Cos[2 α + 2 τ ω])
Sin[α]^2 Sin[τ ω]^2))]^2)
```

In[41]:=
```
DecisivenessThirdFunction[ϕ_, σ_, α_, M0_] :=
(Abs[-i Cos[1/4 (π + σ/2)]] Sec[α] √(Cos[α]^2 Cos[σ] / (2 Sin[α] - 2 Cos[σ] Sin[α]^2)) -
i e^(i ϕ) Cos[α + ArcSin[√(Cos[α]^2 Cos[σ] / (2 Sin[α] - 2 Cos[σ] Sin[α]^2))]] Sec[α] Sin[1/4 (π + σ/2)]]^2 +
Abs[Cos[1/4 (π + σ/2)]] Cos[α - ArcSin[√(Cos[α]^2 Cos[σ] / (2 Sin[α] - 2 Cos[σ] Sin[α]^2))]] Sec[α] -
e^(i ϕ) Sec[α] √(Cos[α]^2 Cos[σ] / (2 Sin[α] - 2 Cos[σ] Sin[α]^2)) Sin[1/4 (π + σ/2)]]^2) /
(Abs[-i Cos[1/4 (π + σ/2)]] Sec[α] √(Cos[α]^2 Cos[σ] / (2 Sin[α] - 2 Cos[σ] Sin[α]^2)) -
```

$$\begin{aligned}
&i\, e^{i\phi} \cos\left[\alpha + \arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] \sec[\alpha] \sin\left[\frac{1}{4}\left(\pi + \frac{\sigma}{2}\right)\right]\Big]^2 + \\
&\mathrm{Abs}\left[\cos\left[\frac{1}{4}\left(\pi + \frac{\sigma}{2}\right)\right] \cos\left[\alpha - \arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] \sec[\alpha] - \right. \\
&\left. e^{i\phi} \sec[\alpha] \sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\, \sin\left[\frac{1}{4}\left(\pi + \frac{\sigma}{2}\right)\right]\right]^2 + \\
&\mathrm{Abs}\left[\cos\left[\frac{1}{4}\left(\pi + \frac{\sigma}{2}\right)\right]\right. \left(\cos\left[\alpha - \arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] \sec[\alpha]\right. \\
&\left(-\left(\left(\left(i\, M0\, \left(1 + \cos[2\alpha]\right) \cos[\sigma] \sin[\alpha] \sqrt{\left(\frac{1}{1 + \cos[2\alpha]}\right.\right.\right.\right.\right. \\
&\left.\left.\left.\left.\left.\left(-2 + 4\, M0 - 2\cos[2\alpha] + \right.\right.\right.\right.\right. \\
&\left.\left.\left.\left.\left.M0 \cos\left[2\alpha - 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] - \right.\right.\right.\right.\right. \\
&\left.\left.\left.\left.\left.2\, M0 \cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] + \right.\right.\right.\right.\right. \\
&\left.\left.\left.\left.\left.M0 \cos\left[2\alpha + 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] - \right.\right.\right.\right.\right. \\
&\left.\left.\left.\left.\left.2\sqrt{2} \sqrt{\left(\left(\left(M0^2 \cos[\alpha]^2 \cos[\sigma]\right.\right.\right.\right.\right.\right. \\
&\left.\left.\left.\left.\left.\left.\left(6 + 2\cos[2\alpha] + \right.\right.\right.\right.\right.\right. \\
&\left.\left.\left.\left.\left.\left.\cos\left[2\alpha - 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] - \right.\right.\right.\right.\right.\right. \\
&\left.\left.\left.\left.\left.\left.2\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] + \right.\right.\right.\right.\right.\right. \\
&\left.\left.\left.\left.\left.\left.\cos\left[2\alpha + 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\right)\right.\right.\right.\right.\right. \\
&\left.\left.\left.\left.\left.\left.\sin[\alpha]^2\right) \Big/ \left(2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2\right)\right)\right)\right)\right) \Big/
\end{aligned}$$

$$\left(2\sqrt{\left(\left(\left(M0^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\,\left(6+2\,\text{Cos}[2\,\alpha]+\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]\right)\text{Sin}[\alpha]^2\right)\Big/\left(2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2\right)\right)\left(2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2\right)\right)\right)+\left(i\,M0\,\left(1+\text{Cos}[2\,\alpha]\right)\text{Cos}[\sigma]\,\text{Sin}[\alpha]\sqrt{\left(\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,M0-2\,\text{Cos}[2\,\alpha]+M0\,\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-2\,M0\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+M0\,\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+2\sqrt{2}\sqrt{\left(\left(\left(M0^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\,\left(6+2\,\text{Cos}[2\,\alpha]+\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]\right)\text{Sin}[\alpha]^2\right)\Big/$$

$$\left(2 \sin[\alpha] - 2 \cos[\sigma] \sin[\alpha]^2\right)\Big)\Big)\Big)\Big)\Big) \Big/ \left(2 \sqrt{\left(\left(\left(M0^2 \cos[\alpha]^2 \cos[\sigma]\right.\right.\right.\right.$$

$$\left(6 + 2 \cos[2\alpha] + \cos\left[2\alpha - 2 \arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2 \sin[\alpha] - 2 \cos[\sigma] \sin[\alpha]^2}}\right]\right] -\right.$$

$$2 \cos\left[2 \arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2 \sin[\alpha] - 2 \cos[\sigma] \sin[\alpha]^2}}\right]\right] +$$

$$\left.\cos\left[2\alpha + 2 \arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2 \sin[\alpha] - 2 \cos[\sigma] \sin[\alpha]^2}}\right]\right] \sin[\alpha]^2\right) \Big/$$

$$\left.\left(2 \sin[\alpha] - 2 \cos[\sigma] \sin[\alpha]^2\right)\right) \left(2 \sin[\alpha] - 2 \cos[\sigma] \sin[\alpha]^2\right)\Big)\Big) -$$

$$i \sec[\alpha] \sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2 \sin[\alpha] - 2 \cos[\sigma] \sin[\alpha]^2}} \left(\left(\sqrt{\left|\left(\frac{1}{1 + \cos[2\alpha]} \left(-2 + 4 M0 -\right.\right.\right.\right.$$

$$2 \cos[2\alpha] + M0 \cos\left[2\alpha - 2 \arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2 \sin[\alpha] - 2 \cos[\sigma] \sin[\alpha]^2}}\right]\right] -$$

$$2 M0 \cos\left[2 \arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2 \sin[\alpha] - 2 \cos[\sigma] \sin[\alpha]^2}}\right]\right] +$$

$$M0 \cos\left[2\alpha + 2 \arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2 \sin[\alpha] - 2 \cos[\sigma] \sin[\alpha]^2}}\right]\right] -$$

$$2 \sqrt{2} \sqrt{\left(\left(\left(M0^2 \cos[\alpha]^2 \cos[\sigma]\right.\right.\right.\right.\left(6 + 2 \cos[2\alpha] +\right.$$

$$\cos\left[2\alpha - 2 \arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2 \sin[\alpha] - 2 \cos[\sigma] \sin[\alpha]^2}}\right]\right] -$$

$$2 \cos\left[2 \arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2 \sin[\alpha] - 2 \cos[\sigma] \sin[\alpha]^2}}\right]\right] +$$

$$\left.\left.\cos\left[2\alpha + 2 \arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2 \sin[\alpha] - 2 \cos[\sigma] \sin[\alpha]^2}}\right]\right]\right)$$

$$\text{Sin}[\alpha]^2\Big) \Big/ \left(2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2\right)\Big)\Big)\Big)$$

$$\Bigg(4\,M0 + M0\,\text{Cos}\Big[2\,\alpha - 2\,\text{ArcSin}\Big[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\Big]\Big] -$$

$$2\,M0\,\text{Cos}\Big[2\,\text{ArcSin}\Big[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\Big]\Big] +$$

$$M0\,\text{Cos}\Big[2\,\alpha + 2\,\text{ArcSin}\Big[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\Big]\Big] -$$

$$2\,M0\,\text{Cos}\Big[\alpha - \text{ArcSin}\Big[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\Big]\Big]^2\,\text{Sec}[\alpha]^2 -$$

$$2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}\Big[\alpha - \text{ArcSin}\Big[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\Big]\Big]^2\,\text{Sec}[\alpha]^2 +$$

$$2\sqrt{2}\,\sqrt{\Bigg(\Bigg(M0^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\,\Big(6 + 2\,\text{Cos}[2\,\alpha] +$$

$$\text{Cos}\Big[2\,\alpha - 2\,\text{ArcSin}\Big[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\Big]\Big] -$$

$$2\,\text{Cos}\Big[2\,\text{ArcSin}\Big[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\Big]\Big] +$$

$$\text{Cos}\Big[2\,\alpha + 2\,\text{ArcSin}\Big[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\Big]\Big]\Big)\,\text{Sin}[\alpha]^2\Big) \Big/$$

$$\left(2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2\right)\Big) - \frac{2\,M0\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2} -$$

$$\frac{2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\Big)\Big) \Big/ \Bigg(8\sqrt{\Bigg(\Bigg(M0^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]$$

$$\Big(6 + 2\,\text{Cos}[2\,\alpha] + \text{Cos}\Big[2\,\alpha - 2\,\text{ArcSin}\Big[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\Big]\Big] -$$

$$2\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+\cos\left[2\alpha+2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right)\sin[\alpha]^2\Bigg)\Big/\left(2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2\right)\Bigg)\Bigg)+\Bigg(\sqrt{\Bigg(\frac{1}{1+\cos[2\alpha]}\Bigg(-2+4\,M0-2\cos[2\alpha]+M0\cos\left[2\alpha-2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-2\,M0\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+M0\cos\left[2\alpha+2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+2\sqrt{2}\sqrt{\Bigg(\Bigg(M0^2\cos[\alpha]^2\cos[\sigma]\Bigg(6+2\cos[2\alpha]+\cos\left[2\alpha-2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-2\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+\cos\left[2\alpha+2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right)\sin[\alpha]^2\Bigg)\Big/\left(2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2\right)\Bigg)\Bigg)\Bigg)\Bigg)\Bigg(-4\,M0-M0\cos\left[2\alpha-2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+2\,M0\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-$$

$$M0 \cos\left[2\alpha + 2 \arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] +$$

$$2 M0 \cos\left[\alpha - \arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2 \sec[\alpha]^2 +$$

$$2 M0 \cos[2\alpha] \cos\left[\alpha - \arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2 \sec[\alpha]^2 +$$

$$2\sqrt{2}\sqrt{\left(\left(M0^2 \cos[\alpha]^2 \cos[\sigma]\left(6 + 2\cos[2\alpha] + \cos\left[2\alpha - 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] - 2\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] + \cos\left[2\alpha + 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\right)\sin[\alpha]^2\right)\Big/\left(2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2\right)\right) + \frac{2 M0 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2} + \frac{2 M0 \cos[2\alpha]\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}\right)\Big/\left(8\sqrt{\left(\left(M0^2 \cos[\alpha]^2 \cos[\sigma]\left(6 + 2\cos[2\alpha] + \cos\left[2\alpha - 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] - 2\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] + \cos\left[2\alpha + 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\right)\sin[\alpha]^2\right)\Big/\left(2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2\right)\right)\right)\right)} -$$

$$i\, e^{i\phi}\left(-i\,\text{Sec}[\alpha]\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\left(-\left(\left(\left(i\,M0\,\left(1+\text{Cos}[2\,\alpha]\right)\right.\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\left.\text{Cos}[\sigma]\,\text{Sin}[\alpha]\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,M0-2\,\text{Cos}[2\,\alpha]+\right.\right.\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\left.\left.M0\,\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-\right.\right.\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\left.\left.2\,M0\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+\right.\right.\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\left.\left.M0\,\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-\right.\right.\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\left.\left.2\sqrt{2}\sqrt{\left(\left(\left(M0^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\left(6+2\,\text{Cos}[2\,\alpha]+\right.\right.\right.\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\left.\left.\left.\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-\right.\right.\right.\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\left.\left.\left.2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+\right.\right.\right.\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\left.\left.\left.\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]\right)\right.\right.\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\left.\left.\text{Sin}[\alpha]^2\right)\Big/\left(2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2\right)\right)\right)\right)\right)\Big/$$

$$\left(2\sqrt{\left(\left(\left(M0^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\left(6+2\,\text{Cos}[2\,\alpha]+\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\right.\right.\right.\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\left.\left.\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-\right.\right.\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\left.\left.2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+\right.\right.\right.\right.\right.\right.$$

$$\mathrm{Cos}\Big[2\,\alpha + 2\,\mathrm{ArcSin}\Big[\sqrt{\frac{\mathrm{Cos}[\alpha]^2\,\mathrm{Cos}[\sigma]}{2\,\mathrm{Sin}[\alpha] - 2\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]^2}}\,\Big]\Big]\Big)\;\mathrm{Sin}[\alpha]^2\Big)\Big/$$

$$\big(2\,\mathrm{Sin}[\alpha] - 2\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]^2\big)\Big)\;\big(2\,\mathrm{Sin}[\alpha] - 2\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]^2\big)\Big)\Big) +$$

$$\Big(\mathrm{i}\,\mathrm{M0}\,\big(1 + \mathrm{Cos}[2\,\alpha]\big)\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]\;\surd\Big(\Big(\frac{1}{1 + \mathrm{Cos}[2\,\alpha]}\;\Big(-2 + 4\,\mathrm{M0} -$$

$$2\,\mathrm{Cos}[2\,\alpha] + \mathrm{M0}\,\mathrm{Cos}\Big[2\,\alpha - 2\,\mathrm{ArcSin}\Big[\sqrt{\frac{\mathrm{Cos}[\alpha]^2\,\mathrm{Cos}[\sigma]}{2\,\mathrm{Sin}[\alpha] - 2\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]^2}}\,\Big]\Big] -$$

$$2\,\mathrm{M0}\,\mathrm{Cos}\Big[2\,\mathrm{ArcSin}\Big[\sqrt{\frac{\mathrm{Cos}[\alpha]^2\,\mathrm{Cos}[\sigma]}{2\,\mathrm{Sin}[\alpha] - 2\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]^2}}\,\Big]\Big] +$$

$$\mathrm{M0}\,\mathrm{Cos}\Big[2\,\alpha + 2\,\mathrm{ArcSin}\Big[\sqrt{\frac{\mathrm{Cos}[\alpha]^2\,\mathrm{Cos}[\sigma]}{2\,\mathrm{Sin}[\alpha] - 2\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]^2}}\,\Big]\Big] +$$

$$2\,\sqrt{2}\;\surd\Big(\Big(\Big(\mathrm{M0}^2\,\mathrm{Cos}[\alpha]^2\,\mathrm{Cos}[\sigma]\;\Big(6 + 2\,\mathrm{Cos}[2\,\alpha] +$$

$$\mathrm{Cos}\Big[2\,\alpha - 2\,\mathrm{ArcSin}\Big[\sqrt{\frac{\mathrm{Cos}[\alpha]^2\,\mathrm{Cos}[\sigma]}{2\,\mathrm{Sin}[\alpha] - 2\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]^2}}\,\Big]\Big] -$$

$$2\,\mathrm{Cos}\Big[2\,\mathrm{ArcSin}\Big[\sqrt{\frac{\mathrm{Cos}[\alpha]^2\,\mathrm{Cos}[\sigma]}{2\,\mathrm{Sin}[\alpha] - 2\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]^2}}\,\Big]\Big] +$$

$$\mathrm{Cos}\Big[2\,\alpha + 2\,\mathrm{ArcSin}\Big[\sqrt{\frac{\mathrm{Cos}[\alpha]^2\,\mathrm{Cos}[\sigma]}{2\,\mathrm{Sin}[\alpha] - 2\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]^2}}\,\Big]\Big]\Big)$$

$$\mathrm{Sin}[\alpha]^2\Big)\Big/\;\big(2\,\mathrm{Sin}[\alpha] - 2\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]^2\big)\Big)\Big)\Big)\Big)\Big/$$

$$\Big(2\;\surd\Big(\Big(\Big(\mathrm{M0}^2\,\mathrm{Cos}[\alpha]^2\,\mathrm{Cos}[\sigma]\;\Big(6 + 2\,\mathrm{Cos}[2\,\alpha] + \mathrm{Cos}\Big[2\,\alpha - 2\,\mathrm{ArcSin}\Big[$$

$$\sqrt{\frac{\mathrm{Cos}[\alpha]^2\,\mathrm{Cos}[\sigma]}{2\,\mathrm{Sin}[\alpha] - 2\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]^2}}\,\Big]\Big] -$$

$$2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+$$

$$\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]\text{Sin}[\alpha]^2\Bigg)\Bigg/$$

$$\left(2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2\right)\Bigg)\left(2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2\right)\Bigg)\Bigg)+$$

$$\text{Cos}\left[\alpha+\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]\text{Sec}[\alpha]$$

$$\Bigg(\Bigg(\sqrt{\Bigg(\frac{1}{1+\text{Cos}[2\,\alpha]}\Bigg(-2+4\,\text{M0}-2\,\text{Cos}[2\,\alpha]+$$

$$\text{M0}\,\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-$$

$$2\,\text{M0}\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+$$

$$\text{M0}\,\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-$$

$$2\sqrt{2}\,\sqrt{\Bigg(\Bigg(\Bigg(\text{M0}^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\Bigg(6+2\,\text{Cos}[2\,\alpha]+$$

$$\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-$$

$$2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+$$

$$\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]\Bigg)$$

$$\text{Sin}[\alpha]^2\Bigg)\Big/\left(2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2\right)\Bigg)\Bigg)\Bigg)\Bigg)$$

$$\left(4\,M0+M0\,\cos\left[2\,\alpha-2\,\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-\right.$$

$$2\,M0\,\cos\left[2\,\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+$$

$$M0\,\cos\left[2\,\alpha+2\,\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-$$

$$2\,M0\,\cos\left[\alpha-\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2\sec[\alpha]^2-$$

$$2\,M0\,\cos[2\,\alpha]\,\cos\left[\alpha-\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2\sec[\alpha]^2+$$

$$2\sqrt{2}\,\sqrt{\left(\left(M0^2\cos[\alpha]^2\cos[\sigma]\left(6+2\cos[2\,\alpha]+\right.\right.\right.$$

$$\cos\left[2\,\alpha-2\,\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-$$

$$2\cos\left[2\,\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+$$

$$\left.\left.\cos\left[2\,\alpha+2\,\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\right)\sin[\alpha]^2\Big)\Big/$$

$$\left.\left.\left(2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2\right)\right)-\frac{2\,M0\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}-\right.$$

$$\left.\frac{2\,M0\cos[2\,\alpha]\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}\right)\Big)\Big/\left(8\sqrt{\left(\left(M0^2\cos[\alpha]^2\cos[\sigma]\right.\right.\right.$$

$$\left(6+2\cos[2\,\alpha]+\cos\left[2\,\alpha-2\,\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-\right.$$

$$2\cos\left[2\,\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+$$

$$\text{Cos}\left[2\,\alpha + 2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]\Bigg)\,\text{Sin}[\alpha]^2\Bigg) \Bigg/$$

$$\left(2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2\right)\Bigg)\Bigg) + \Bigg(\sqrt{\Bigg(\frac{1}{1 + \text{Cos}[2\,\alpha]}\Bigg(-2 + 4\,\text{M0} -}$$

$$2\,\text{Cos}[2\,\alpha] + \text{M0}\,\text{Cos}\left[2\,\alpha - 2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right] -$$

$$2\,\text{M0}\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right] +$$

$$\text{M0}\,\text{Cos}\left[2\,\alpha + 2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right] +$$

$$2\,\sqrt{2}\,\sqrt{\Bigg(\Bigg(\Bigg(\text{M0}^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\,\Bigg(6 + 2\,\text{Cos}[2\,\alpha] +}$$

$$\text{Cos}\left[2\,\alpha - 2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right] -$$

$$2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right] +$$

$$\text{Cos}\left[2\,\alpha + 2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]\Bigg)$$

$$\text{Sin}[\alpha]^2\Bigg) \Bigg/ \left(2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2\right)\Bigg)\Bigg)\Bigg)$$

$$\Bigg(-4\,\text{M0} - \text{M0}\,\text{Cos}\left[2\,\alpha - 2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right] +$$

$$2\,\text{M0}\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right] -$$

$$\text{M0}\,\text{Cos}\left[2\,\alpha + 2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right] +$$

$$2\,M0\,\cos\left[\alpha-\text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2\sec[\alpha]^2+$$

$$2\,M0\,\cos[2\alpha]\,\cos\left[\alpha-\text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2\sec[\alpha]^2+$$

$$2\sqrt{2}\sqrt{\left(\left(M0^2\cos[\alpha]^2\cos[\sigma]\left(6+2\cos[2\alpha]+\right.\right.\right.$$

$$\cos\left[2\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-$$

$$2\cos\left[2\,\text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+$$

$$\left.\left.\cos\left[2\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\right)\sin[\alpha]^2\Big)\Big/$$

$$\left.\left(2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2\right)\right)+\frac{2\,M0\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}+$$

$$\left.\frac{2\,M0\cos[2\alpha]\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}\right)\Big)\Big/\left(8\sqrt{\left(\left(M0^2\cos[\alpha]^2\cos[\sigma]\right.\right.\right.$$

$$\left(6+2\cos[2\alpha]+\cos\left[2\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-\right.$$

$$2\cos\left[2\,\text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+$$

$$\left.\left.\cos\left[2\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\right)\sin[\alpha]^2\Big)\Big/$$

$$\left.\left.\left.\left.\left(2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2\right)\right)\right)\right)\right)\sin\left[\frac{1}{4}\left(\pi+\frac{\sigma}{2}\right)\right]\Big]^2+$$

$$\text{Abs}\left[\cos\left[\frac{1}{4}\left(\pi+\frac{\sigma}{2}\right)\right]\right]\left(\cos\left[\alpha-\text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\sec[\alpha]\right.$$

$$\left(\left(\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4\,M0-2\cos[2\alpha]+\right.\right.\right.\right.$$

$$M0\cos\left[2\alpha-2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-$$

$$2\,M0\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+$$

$$M0\cos\left[2\alpha+2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+$$

$$2\sqrt{2}\sqrt{\left(\left(M0^2\cos[\alpha]^2\cos[\sigma]\left(6+2\cos[2\alpha]+\right.\right.\right.$$

$$\cos\left[2\alpha-2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-$$

$$2\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+$$

$$\left.\left.\cos\left[2\alpha+2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\right)$$

$$\left.\left.\left.\sin[\alpha]^2\right)\Big/\left(2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2\right)\right)\right)\right)$$

$$\left(4\,M0+M0\cos\left[2\alpha-2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-\right.$$

$$2\,M0\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+$$

$$M0\cos\left[2\alpha+2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-$$

$$2\,M0\cos\left[\alpha-\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2\sec[\alpha]^2-$$

$$2\,M0\cos[2\alpha]\cos\left[\alpha-\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2\sec[\alpha]^2+$$

$$2\sqrt{2}\sqrt{\left(-\left(\left(\left(M0^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\left(-6-2\,\text{Cos}[2\,\alpha]-\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]+2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]-\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]\right)\text{Sin}[\alpha]^2\Big)\Big/\left(2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2\right)\Big)\Big)-\frac{2\,M0\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}-\frac{2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\Big)\Big)\Big/\Big(8\sqrt{\Big(\Big(M0^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\left(6+2\,\text{Cos}[2\,\alpha]+\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]-2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]+\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]\right)\text{Sin}[\alpha]^2\Big)\Big/\left(2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2\right)\Big)\Big)+\Big(\sqrt{\Big(\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,M0-2\,\text{Cos}[2\,\alpha]+M0\,\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]-2\,M0\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]+M0\,\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]-$$

$$2\sqrt{2}\sqrt{\left(\left(\left(M0^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\left(6+2\,\text{Cos}[2\,\alpha]+\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]-2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]+\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]\right)\text{Sin}[\alpha]^2\right)\Big/\left(2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2\right)\right)\right)\left(-4\,M0-M0\,\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]+2\,M0\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]-M0\,\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]+2\,M0\,\text{Cos}\left[\alpha-\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]^2\text{Sec}[\alpha]^2+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}\left[\alpha-\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]^2\text{Sec}[\alpha]^2+2\sqrt{2}\sqrt{\left(-\left(\left(\left(M0^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\left(-6-2\,\text{Cos}[2\,\alpha]-\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]+2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]-$$

$$\cos\left[2\alpha + 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right]$$

$$\sin[\alpha]^2\Big) \Big/ \left(2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2\right)\Big)\Big) +$$

$$\frac{2\,M0\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2} + \frac{2\,M0\cos[2\alpha]\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}\Big)\Big) \Big/$$

$$\Bigg(8\sqrt{\Bigg(\Bigg(M0^2\cos[\alpha]^2\cos[\sigma]\left(6 + 2\cos[2\alpha] + \cos\left[2\alpha - 2\arcsin\left[\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] -$$

$$2\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] +$$

$$\cos\left[2\alpha + 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\Bigg)$$

$$\sin[\alpha]^2\Big) \Big/ \left(2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2\right)\Big)\Big)\Big) -$$

$$i\sec[\alpha]\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\Bigg(\Bigg(i\csc[\alpha]\sec[\sigma]\left(2\sin[\alpha] -\right.$$

$$\left.2\cos[\sigma]\sin[\alpha]^2\right)\sqrt{\Bigg(\frac{1}{1 + \cos[2\alpha]}\Bigg(-2 + 4\,M0 - 2\cos[2\alpha] +$$

$$M0\cos\left[2\alpha - 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] -$$

$$2\,M0\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] +$$

$$M0\cos\left[2\alpha + 2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] -$$

$$2\sqrt{2}\sqrt{\left(\left(\left(M0^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\left(6+2\,\text{Cos}[2\,\alpha]+\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]-2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]+\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]\right)\text{Sin}[\alpha]^2\right)\Big/\left(2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2\right)\right)\right)\left(4\,M0+M0\,\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]-2\,M0\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]+M0\,\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]-2\,M0\,\text{Cos}\left[\alpha-\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]^2\text{Sec}[\alpha]^2-2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}\left[\alpha-\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]^2\text{Sec}[\alpha]^2+2\sqrt{2}\sqrt{\left(\left(\left(M0^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\left(6+2\,\text{Cos}[2\,\alpha]+\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]-2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]+\right.\right.\right.\right.$$

$$\left(\text{Cos}\left[2\,\alpha + 2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]\right.$$

$$\left.\text{Sin}[\alpha]^2\right) \Big/ \left(2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2\right) -$$

$$\left.\frac{2\,\text{M0}\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2} - \frac{2\,\text{M0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\right)$$

$$\left(-4\,\text{M0} - \text{M0}\,\text{Cos}\left[2\,\alpha - 2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right] +\right.$$

$$2\,\text{M0}\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right] -$$

$$\text{M0}\,\text{Cos}\left[2\,\alpha + 2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right] +$$

$$2\,\text{M0}\,\text{Cos}\left[\alpha - \text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]^2\,\text{Sec}[\alpha]^2 +$$

$$2\,\text{M0}\,\text{Cos}[2\,\alpha]\,\text{Cos}\left[\alpha - \text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]^2\,\text{Sec}[\alpha]^2 +$$

$$2\sqrt{2}\,\sqrt{\left(-\left(\left(\left(\text{M0}^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\,\left(-6 - 2\,\text{Cos}[2\,\alpha] -\right.\right.\right.\right.\right.$$

$$\text{Cos}\left[2\,\alpha - 2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right] +$$

$$2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right] -$$

$$\left.\left.\left.\left.\left.\text{Cos}\left[2\,\alpha + 2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]\right)\right.\right.\right.$$

$$\left.\left.\left.\text{Sin}[\alpha]^2\right) \Big/ \left(2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2\right)\right)\right) +$$

$$\left(\frac{2\,M0\,\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}+\frac{2\,M0\cos[2\alpha]\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}\right)\Bigg)\Bigg/$$

$$\left(32\,M0\,(1+\cos[2\alpha])\sqrt{\left(\left(M0^2\cos[\alpha]^2\cos[\sigma]\left(6+2\cos[2\alpha]+\right.\right.\right.\right.$$

$$\left.\cos\left[2\alpha-2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-$$

$$2\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+$$

$$\left.\cos\left[2\alpha+2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\right)$$

$$\left.\left.\sin[\alpha]^2\right)\Big/\left(2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2\right)\right)\Bigg)-$$

$$\left(i\csc[\alpha]\sec[\sigma]\left(2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2\right)\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4\,M0-\right.\right.\right.$$

$$2\cos[2\alpha]+M0\cos\left[2\alpha-2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-$$

$$2\,M0\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+$$

$$M0\cos\left[2\alpha+2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+$$

$$2\sqrt{2}\sqrt{\left(\left(M0^2\cos[\alpha]^2\cos[\sigma]\left(6+2\cos[2\alpha]+\right.\right.\right.\right.$$

$$\left.\cos\left[2\alpha-2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-$$

$$2\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+$$

$$\left(\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]\right.$$

$$\left.\text{Sin}[\alpha]^2\right)\Big/\left(2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2\right)\Big)\Big)\Big)$$

$$\Bigg(4\,\text{M0}+\text{M0}\,\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-$$

$$2\,\text{M0}\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+$$

$$\text{M0}\,\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-$$

$$2\,\text{M0}\,\text{Cos}\left[\alpha-\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]^2\text{Sec}[\alpha]^2-$$

$$2\,\text{M0}\,\text{Cos}[2\,\alpha]\,\text{Cos}\left[\alpha-\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]^2\text{Sec}[\alpha]^2+$$

$$2\sqrt{2}\,\sqrt{\Bigg(-\Bigg(\Bigg(\Bigg(\text{M0}^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\,\Bigg(-6-2\,\text{Cos}[2\,\alpha]-$$

$$\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+$$

$$2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-$$

$$\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]\Bigg)$$

$$\text{Sin}[\alpha]^2\Bigg)\Big/\left(2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2\right)\Bigg)\Bigg)-$$

$$\left.\frac{2\,\text{M0}\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}-\frac{2\,\text{M0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\right)$$

$$\left(-4\,M0 - M0\,\cos\left[2\alpha - 2\,\text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] + 2\,M0\,\cos\left[2\,\text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] - M0\,\cos\left[2\alpha + 2\,\text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] + 2\,M0\,\cos\left[\alpha - \text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2\sec[\alpha]^2 + 2\,M0\,\cos[2\alpha]\,\cos\left[\alpha - \text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2\sec[\alpha]^2 + 2\sqrt{2}\sqrt{\left(\left(M0^2\cos[\alpha]^2\cos[\sigma]\left(6 + 2\cos[2\alpha] + \cos\left[2\alpha - 2\,\text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] - 2\cos\left[2\,\text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] + \cos\left[2\alpha + 2\,\text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\right)\sin[\alpha]^2\right)\Big/\left(2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2\right) + \frac{2\,M0\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2} + \frac{2\,M0\cos[2\alpha]\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}\right)\right)\Big/\left(32\,M0\,\left(1 + \cos[2\alpha]\right)\sqrt{\left(\left(M0^2\cos[\alpha]^2\cos[\sigma]\left(6 + 2\cos[2\alpha] + \cos\left[2\alpha - 2\,\text{ArcSin}\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] -\right.\right.\right.\right.$$

$$2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+$$

$$\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]$$

$$\text{Sin}[\alpha]^2\Big)\Big/\left(2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2\right)\Big)\Big)\Big)\Big)\Big)-$$

$$i\,e^{i\,\phi}\left(-i\,\text{Sec}[\alpha]\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\left(\left(\sqrt{\left|\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,M0-\right.\right.\right.\right.\right.$$

$$2\,\text{Cos}[2\,\alpha]+M0\,\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-$$

$$2\,M0\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+$$

$$M0\,\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+$$

$$2\sqrt{2}\sqrt{\left|\left(\left(\left(M0^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\left(6+2\,\text{Cos}[2\,\alpha]+\right.\right.\right.\right.\right.$$

$$\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-$$

$$2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+$$

$$\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]\Big)$$

$$\text{Sin}[\alpha]^2\Big)\Big/\left(2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2\right)\Big)\Big)\Big)\Big)$$

$$\left(4\,M0+M0\,\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-\right.$$

$$2\,M0\,\cos\left[2\,\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+$$

$$M0\,\cos\left[2\,\alpha+2\,\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-$$

$$2\,M0\,\cos\left[\alpha-\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2\sec[\alpha]^2-$$

$$2\,M0\,\cos[2\,\alpha]\,\cos\left[\alpha-\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2\sec[\alpha]^2+$$

$$2\sqrt{2}\,\sqrt{\left(-\left(\left(\left(M0^2\cos[\alpha]^2\cos[\sigma]\left(-6-2\cos[2\,\alpha]-\right.\right.\right.\right.\right.$$

$$\left.\cos\left[2\,\alpha-2\,\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+\right.$$

$$\left.2\cos\left[2\,\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-\right.$$

$$\left.\left.\left.\left.\cos\left[2\,\alpha+2\,\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\right)\right.\right.$$

$$\left.\left.\left.\sin[\alpha]^2\right)\Big/\left(2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2\right)\right)\right)-$$

$$\left.\left.\frac{2\,M0\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}-\frac{2\,M0\cos[2\,\alpha]\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}\right)\right)\Big/$$

$$\left(8\sqrt{\left(\left(\left(M0^2\cos[\alpha]^2\cos[\sigma]\left(6+2\cos[2\,\alpha]+\cos\left[2\,\alpha-2\,\arcsin\left[\right.\right.\right.\right.\right.\right.$$

$$\left.\left.\left.\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-\right.$$

$$\left.2\cos\left[2\,\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+\right.$$

$$\mathrm{Cos}\Big[2\,\alpha + 2\,\mathrm{ArcSin}\Big[\sqrt{\frac{\mathrm{Cos}[\alpha]^2\,\mathrm{Cos}[\sigma]}{2\,\mathrm{Sin}[\alpha] - 2\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]^2}}\,\Big]\Big]\Big)\,\mathrm{Sin}[\alpha]^2\Big)\Big/$$

$$\big(2\,\mathrm{Sin}[\alpha] - 2\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]^2\big)\Big)\Big) + \Big(\sqrt{\Big(\Big(\frac{1}{1 + \mathrm{Cos}[2\,\alpha]}\Big(-2 + 4\,\mathrm{M0} -}$$

$$2\,\mathrm{Cos}[2\,\alpha] + \mathrm{M0}\,\mathrm{Cos}\Big[2\,\alpha - 2\,\mathrm{ArcSin}\Big[\sqrt{\frac{\mathrm{Cos}[\alpha]^2\,\mathrm{Cos}[\sigma]}{2\,\mathrm{Sin}[\alpha] - 2\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]^2}}\,\Big]\Big] -$$

$$2\,\mathrm{M0}\,\mathrm{Cos}\Big[2\,\mathrm{ArcSin}\Big[\sqrt{\frac{\mathrm{Cos}[\alpha]^2\,\mathrm{Cos}[\sigma]}{2\,\mathrm{Sin}[\alpha] - 2\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]^2}}\,\Big]\Big] +$$

$$\mathrm{M0}\,\mathrm{Cos}\Big[2\,\alpha + 2\,\mathrm{ArcSin}\Big[\sqrt{\frac{\mathrm{Cos}[\alpha]^2\,\mathrm{Cos}[\sigma]}{2\,\mathrm{Sin}[\alpha] - 2\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]^2}}\,\Big]\Big] -$$

$$2\sqrt{2}\,\sqrt{\Big(\Big(\Big(\mathrm{M0}^2\,\mathrm{Cos}[\alpha]^2\,\mathrm{Cos}[\sigma]\,\Big(6 + 2\,\mathrm{Cos}[2\,\alpha] +}$$

$$\mathrm{Cos}\Big[2\,\alpha - 2\,\mathrm{ArcSin}\Big[\sqrt{\frac{\mathrm{Cos}[\alpha]^2\,\mathrm{Cos}[\sigma]}{2\,\mathrm{Sin}[\alpha] - 2\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]^2}}\,\Big]\Big] -$$

$$2\,\mathrm{Cos}\Big[2\,\mathrm{ArcSin}\Big[\sqrt{\frac{\mathrm{Cos}[\alpha]^2\,\mathrm{Cos}[\sigma]}{2\,\mathrm{Sin}[\alpha] - 2\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]^2}}\,\Big]\Big] +$$

$$\mathrm{Cos}\Big[2\,\alpha + 2\,\mathrm{ArcSin}\Big[\sqrt{\frac{\mathrm{Cos}[\alpha]^2\,\mathrm{Cos}[\sigma]}{2\,\mathrm{Sin}[\alpha] - 2\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]^2}}\,\Big]\Big]\Big)$$

$$\mathrm{Sin}[\alpha]^2\Big)\Big/\big(2\,\mathrm{Sin}[\alpha] - 2\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]^2\big)\Big)\Big)\Big)$$

$$\Big(-4\,\mathrm{M0} - \mathrm{M0}\,\mathrm{Cos}\Big[2\,\alpha - 2\,\mathrm{ArcSin}\Big[\sqrt{\frac{\mathrm{Cos}[\alpha]^2\,\mathrm{Cos}[\sigma]}{2\,\mathrm{Sin}[\alpha] - 2\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]^2}}\,\Big]\Big] +$$

$$2\,\mathrm{M0}\,\mathrm{Cos}\Big[2\,\mathrm{ArcSin}\Big[\sqrt{\frac{\mathrm{Cos}[\alpha]^2\,\mathrm{Cos}[\sigma]}{2\,\mathrm{Sin}[\alpha] - 2\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]^2}}\,\Big]\Big] -$$

$$\mathrm{M0}\,\mathrm{Cos}\Big[2\,\alpha + 2\,\mathrm{ArcSin}\Big[\sqrt{\frac{\mathrm{Cos}[\alpha]^2\,\mathrm{Cos}[\sigma]}{2\,\mathrm{Sin}[\alpha] - 2\,\mathrm{Cos}[\sigma]\,\mathrm{Sin}[\alpha]^2}}\,\Big]\Big] +$$

$$2\,M0\,\text{Cos}\left[\alpha-\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]^2\text{Sec}[\alpha]^2+$$

$$2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}\left[\alpha-\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]^2\text{Sec}[\alpha]^2+$$

$$2\sqrt{2}\,\sqrt{\left(-\left(\left(\left(M0^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\,\left(-6-2\,\text{Cos}[2\,\alpha]-\right.\right.\right.\right.\right.$$

$$\left.\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+$$

$$2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-$$

$$\left.\left.\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]\right)$$

$$\left.\left.\left.\text{Sin}[\alpha]^2\right)\Big/\left(2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2\right)\right)\right)+$$

$$\left.\left.\frac{2\,M0\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}+\frac{2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\right)\right)\Big/$$

$$\left(8\sqrt{\left(\left(\left(M0^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\,\left(6+2\,\text{Cos}[2\,\alpha]+\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\right.\right.\right.\right.\right.\right.$$

$$\left.\left.\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-$$

$$2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+$$

$$\left.\left.\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]\right)$$

$$\left.\left.\left.\left.\text{Sin}[\alpha]^2\right)\Big/\left(2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2\right)\right)\right)\right)+$$

$$\cos\left[\alpha+\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\sec[\alpha]$$

$$\left(\left(i\csc[\alpha]\sec[\sigma]\left(2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2\right)\right.\right.$$

$$\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4M0-2\cos[2\alpha]+\right.\right.\right.$$

$$M0\cos\left[2\alpha-2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-$$

$$2M0\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+$$

$$M0\cos\left[2\alpha+2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-$$

$$2\sqrt{2}\sqrt{\left(\left(\left(M0^2\cos[\alpha]^2\cos[\sigma]\left(6+2\cos[2\alpha]+\right.\right.\right.\right.$$

$$\cos\left[2\alpha-2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-$$

$$2\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+$$

$$\left.\left.\left.\cos\left[2\alpha+2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\right)\right.$$

$$\left.\left.\left.\left.\sin[\alpha]^2\right)\Big/\left(2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2\right)\right)\right)\right)$$

$$\left(4M0+M0\cos\left[2\alpha-2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]-\right.$$

$$2M0\cos\left[2\arcsin\left[\sqrt{\frac{\cos[\alpha]^2\cos[\sigma]}{2\sin[\alpha]-2\cos[\sigma]\sin[\alpha]^2}}\right]\right]+$$

$$M0 \cos\left[2\alpha + 2 \arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] -$$

$$2 M0 \cos\left[\alpha - \arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2 \sec[\alpha]^2 -$$

$$2 M0 \cos[2\alpha] \cos\left[\alpha - \arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2 \sec[\alpha]^2 +$$

$$2\sqrt{2} \sqrt{\left(\left(\left(M0^2 \cos[\alpha]^2 \cos[\sigma] \left(6 + 2\cos[2\alpha] + \right.\right.\right.\right.$$

$$\left.\cos\left[2\alpha - 2 \arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] -$$

$$2\cos\left[2 \arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] +$$

$$\left.\left.\cos\left[2\alpha + 2 \arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right]\right)$$

$$\left.\left.\sin[\alpha]^2\right) \Big/ \left(2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2\right)\right) -$$

$$\left.\left.\frac{2 M0 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2} - \frac{2 M0 \cos[2\alpha] \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}\right)\right)$$

$$\left(-4 M0 - M0 \cos\left[2\alpha - 2 \arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] +\right.$$

$$2 M0 \cos\left[2 \arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] -$$

$$M0 \cos\left[2\alpha + 2 \arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right] +$$

$$2 M0 \cos\left[\alpha - \arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2 \sec[\alpha]^2 +$$

$$2 M0 \cos[2\alpha] \cos\left[\alpha - \arcsin\left[\sqrt{\frac{\cos[\alpha]^2 \cos[\sigma]}{2\sin[\alpha] - 2\cos[\sigma]\sin[\alpha]^2}}\right]\right]^2 \sec[\alpha]^2 +$$

$$2\sqrt{2}\sqrt{\left(-\left(\left(\left(M0^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\left(-6-2\,\text{Cos}[2\alpha]-\text{Cos}\left[2\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]+2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]-\text{Cos}\left[2\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]\right)\text{Sin}[\alpha]^2\right)\Big/\left(2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2\right)\right)+\frac{2\,M0\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}+\frac{2\,M0\,\text{Cos}[2\alpha]\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\right)\Big/\left(32\,M0\,\left(1+\text{Cos}[2\alpha]\right)\sqrt{\left(\left(M0^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\left(6+2\,\text{Cos}[2\alpha]+\text{Cos}\left[2\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]-2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]+\text{Cos}\left[2\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]\right)\text{Sin}[\alpha]^2\right)\Big/\left(2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2\right)\right)-\left(i\,\text{Csc}[\alpha]\,\text{Sec}[\sigma]\left(2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2\right)\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\left(-2+4\,M0-2\,\text{Cos}[2\alpha]+M0\,\text{Cos}\left[2\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\right]\right]-\right.\right.\right.$$

$$2\,M0\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+$$

$$M0\,\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+$$

$$2\sqrt{2}\,\sqrt{\left(\left(M0^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\,\left(6+2\,\text{Cos}[2\,\alpha]+\right.\right.\right.$$

$$\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-$$

$$2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+$$

$$\left.\left.\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]\right)$$

$$\left.\text{Sin}[\alpha]^2\right)\Big/\left(2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2\right)\Big)\Big)\Big)$$

$$\left(4\,M0+M0\,\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-\right.$$

$$2\,M0\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+$$

$$M0\,\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-$$

$$2\,M0\,\text{Cos}\left[\alpha-\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]^2\,\text{Sec}[\alpha]^2-$$

$$2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}\left[\alpha-\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]^2\,\text{Sec}[\alpha]^2+$$

$$2\sqrt{2}\,\sqrt{\left(-\left(\left(M0^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\,\left(-6-2\,\text{Cos}[2\,\alpha]-\right.\right.\right.\right.$$

$$\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+$$

$$2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-$$

$$\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right)$$

$$\text{Sin}[\alpha]^2\Big)\Big/\left(2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2\right)\Big)\Big)-$$

$$\frac{2\,\text{M0}\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}-\frac{2\,\text{M0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\Bigg)$$

$$\left(-4\,\text{M0}-\text{M0}\,\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+\right.$$

$$2\,\text{M0}\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-$$

$$\text{M0}\,\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+$$

$$2\,\text{M0}\,\text{Cos}\left[\alpha-\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]^2\text{Sec}[\alpha]^2+$$

$$2\,\text{M0}\,\text{Cos}[2\,\alpha]\,\text{Cos}\left[\alpha-\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]^2\text{Sec}[\alpha]^2+$$

$$2\sqrt{2}\,\sqrt{\Bigg(\Bigg(\Bigg(\text{M0}^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\,\Bigg(6+2\,\text{Cos}[2\,\alpha]+$$

$$\text{Cos}\left[2\,\alpha-2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]-$$

$$2\,\text{Cos}\left[2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]+$$

$$\text{Cos}\left[2\,\alpha+2\,\text{ArcSin}\left[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha]-2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\right]\right]\Bigg)$$

$$\text{Sin}[\alpha]^2\Big) \Big/ \left(2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2\right) +$$

$$\frac{2\,M0\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2} + \frac{2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}\Big)\Big) \Big/$$

$$\Bigg(32\,M0\,\left(1 + \text{Cos}[2\,\alpha]\right) \sqrt{\Big(\Big(\Big(M0^2\,\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]\,\Big(6 + 2\,\text{Cos}[2\,\alpha] +$$

$$\text{Cos}\Big[2\,\alpha - 2\,\text{ArcSin}\Big[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\Big]\Big] -$$

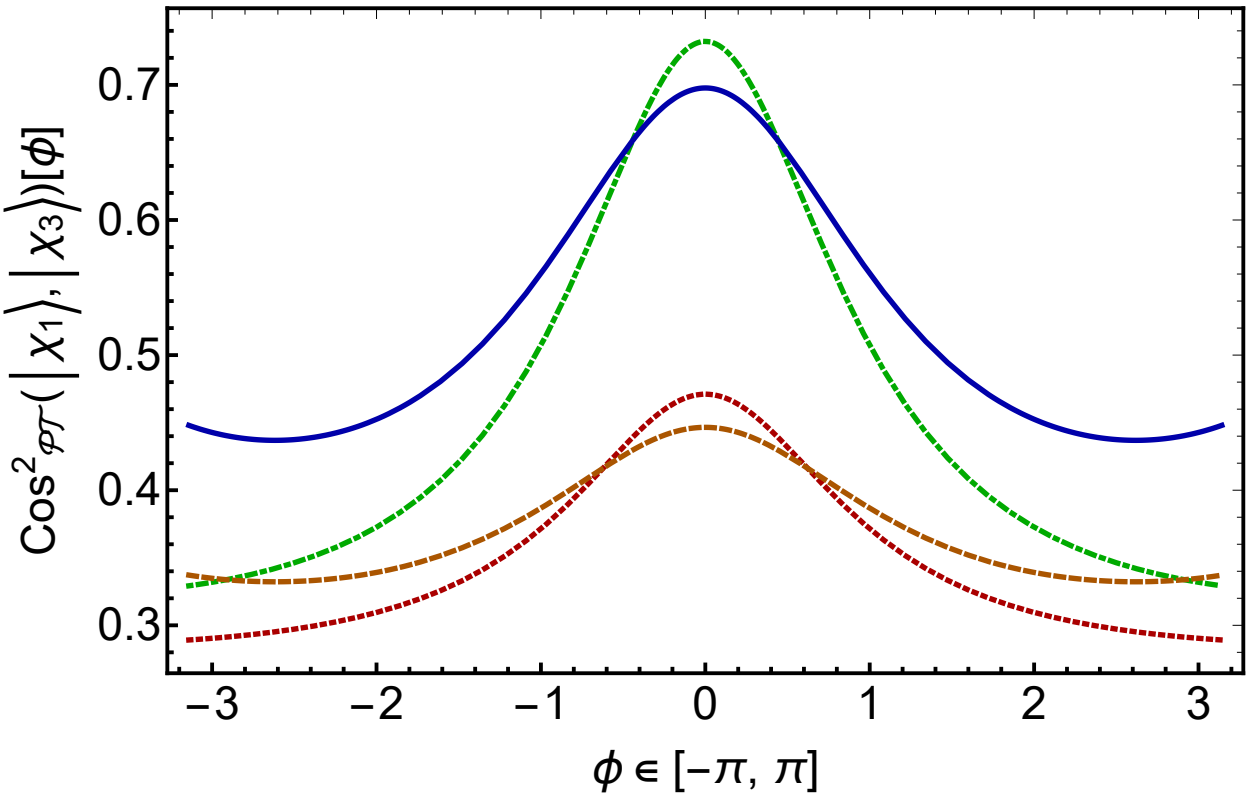
$$2\,\text{Cos}\Big[2\,\text{ArcSin}\Big[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\Big]\Big] +$$

$$\text{Cos}\Big[2\,\alpha + 2\,\text{ArcSin}\Big[\sqrt{\frac{\text{Cos}[\alpha]^2\,\text{Cos}[\sigma]}{2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2}}\,\Big]\Big]\Big)\,\text{Sin}[\alpha]^2\Big) \Big/$$

$$\left(2\,\text{Sin}[\alpha] - 2\,\text{Cos}[\sigma]\,\text{Sin}[\alpha]^2\right)\Big)\Big)\Big)\Big)\,\text{Sin}\Big[\frac{1}{4}\left(\pi + \frac{\sigma}{2}\right)\Big]\Big]^2\Bigg)$$

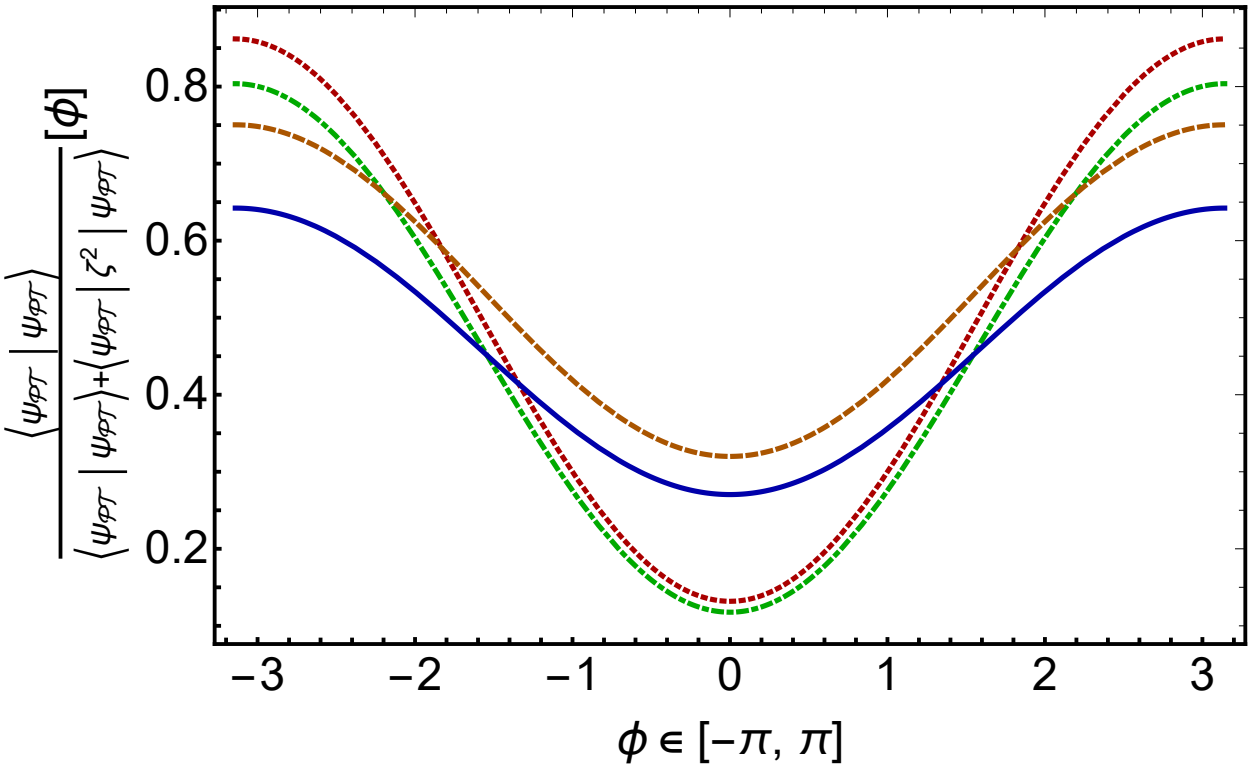
In[47]:=
```
p1 = Plot[{1 - N[cosSecondFunction[-x * 4 / 5, 4 / 5, π/2 - 1, 1]],
   1 - N[cosThirdFunction[-x * 4 / 5, 4 / 5, π/2 - 1, 1]],
   1 - N[cosSecondFunction[-x * 6 / 5, 6 / 5, π/2 - 1, 1]],
   1 - N[cosThirdFunction[-x * 6 / 5, 6 / 5, π/2 - 1, 1]]}, {x, -π, π}, PlotRange → All,
  PlotStyle → {Directive[Darker[Green], Thickness[0.005], DotDashed],
    Directive[Darker[Red], Thickness[0.005], Dotted], Directive[Darker[Blue],
     Thickness[0.005], Dashed[1]], Directive[Darker[Orange], Thickness[0.005], Dashed]},
  Frame → True, FrameStyle → Directive[Black, Thick], LabelStyle → Large,
  Frame → True, FrameStyle → Directive[Black, Thick], LabelStyle → Large,
  PlotStyle → {Directive[Darker[Green], Thickness[0.007]]},
  Axes → False, FrameLabel → {"ϕ ∈ [-π, π]", "Cos²ₚ𝒯(|χ1⟩, |χ3⟩)[ϕ]"},
  LabelStyle → {FontWeight → "Bold", FontSize → 25},
  ImageSize → 650, GridLinesStyle → Directive[Thick, Gray]]
```

Out[47]=



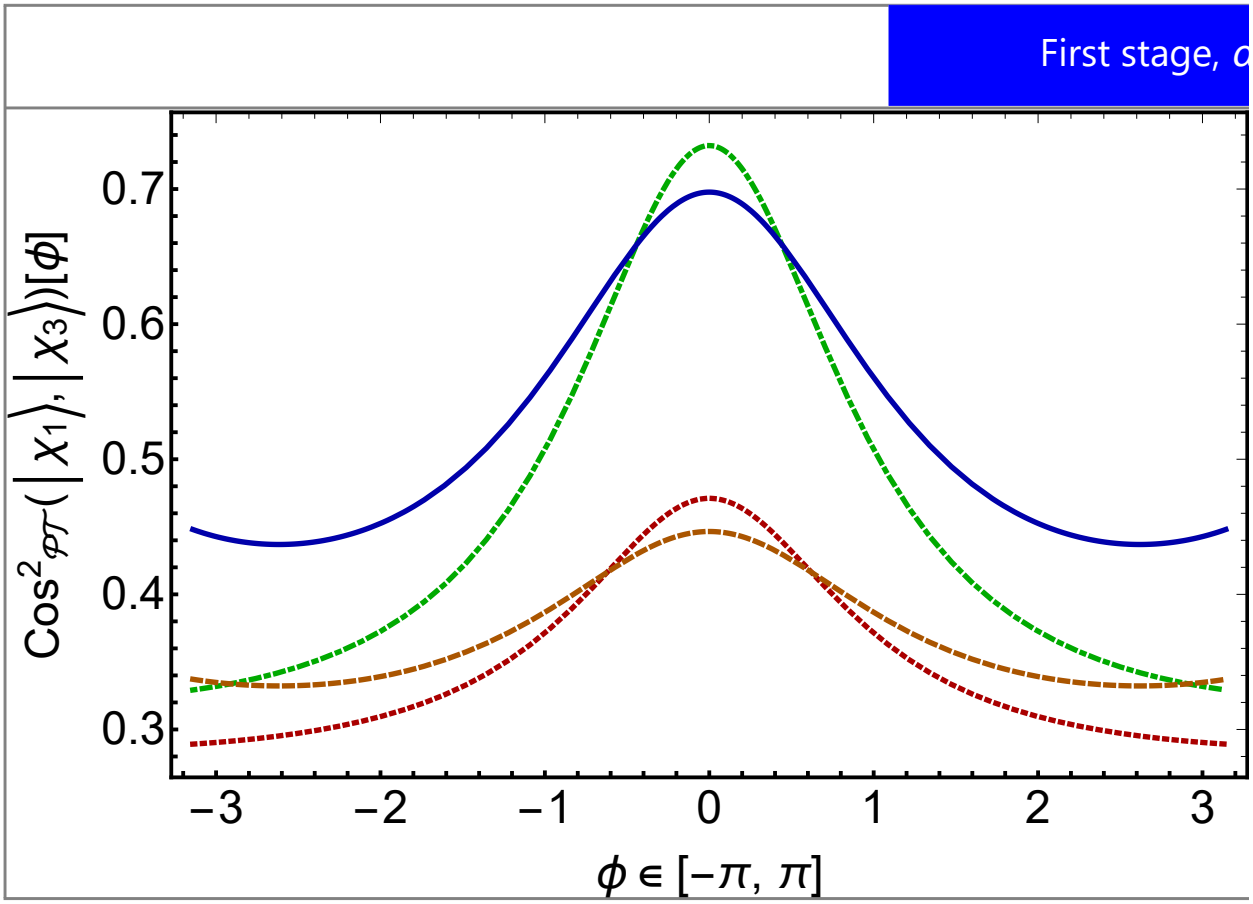
In[48]:=
```
p2 = Plot[{N[DecisivenessSecondFunction[-x, 4 / 5, π/2 - 1, 3]],
   N[DecisivenessThirdFunction[-x, 4 / 5, π/2 - 1, 3]],
   N[DecisivenessSecondFunction[-x, 6 / 5, π/2 - 1, 2]],
   N[DecisivenessThirdFunction[-x, 6 / 5, π/2 - 1, 2]]}, {x, -π, π}, PlotRange → All,
  PlotStyle → {Directive[Darker[Green], Thickness[0.005], DotDashed],
    Directive[Darker[Red], Thickness[0.005], Dotted], Directive[Darker[Blue],
     Thickness[0.005], Dashed[1]], Directive[Darker[Orange], Thickness[0.005], Dashed]},
  Frame → True, FrameStyle → Directive[Black, Thick], LabelStyle → Large,
  PlotLegends → LineLegend[{"Δ = σ/2, σ = 4/5", "Δ = σ/4, σ = 4/5",
     "Δ = σ/2, σ = 6/5", "Δ = σ/4, σ = 6/5"}, LegendFunction → Framed], Axes → False,
  Frame → True, FrameStyle → Directive[Black, Thick], LabelStyle → Large,
  PlotStyle → {Directive[Darker[Green], Thickness[0.007]]},
  FrameLabel → {"ϕ ∈ [-π, π]", "⟨ψ_PT | ψ_PT⟩ / (⟨ψ_PT | ψ_PT⟩ + ⟨ψ_PT | ξ² | ψ_PT⟩) [ϕ]"},
  LabelStyle → {FontWeight → "Bold", FontSize → 25},
  ImageSize → 650, GridLinesStyle → Directive[Thick, Gray]]
```

Out[48]=



In[49]:=
```
title = Panel[Style["First stage, α = π/2 - 1, 𝒩(0) ≈ 𝒩min, ϕ dependence", White, 20],
    ImageSize → 600, Background → Blue, Alignment → Center];
DependenceVariation = Deploy@Grid[{{title, SpanFromLeft}, {p1, p2}},
    Dividers → Gray, Spacings → {0, 0}]
```

Out[50]=

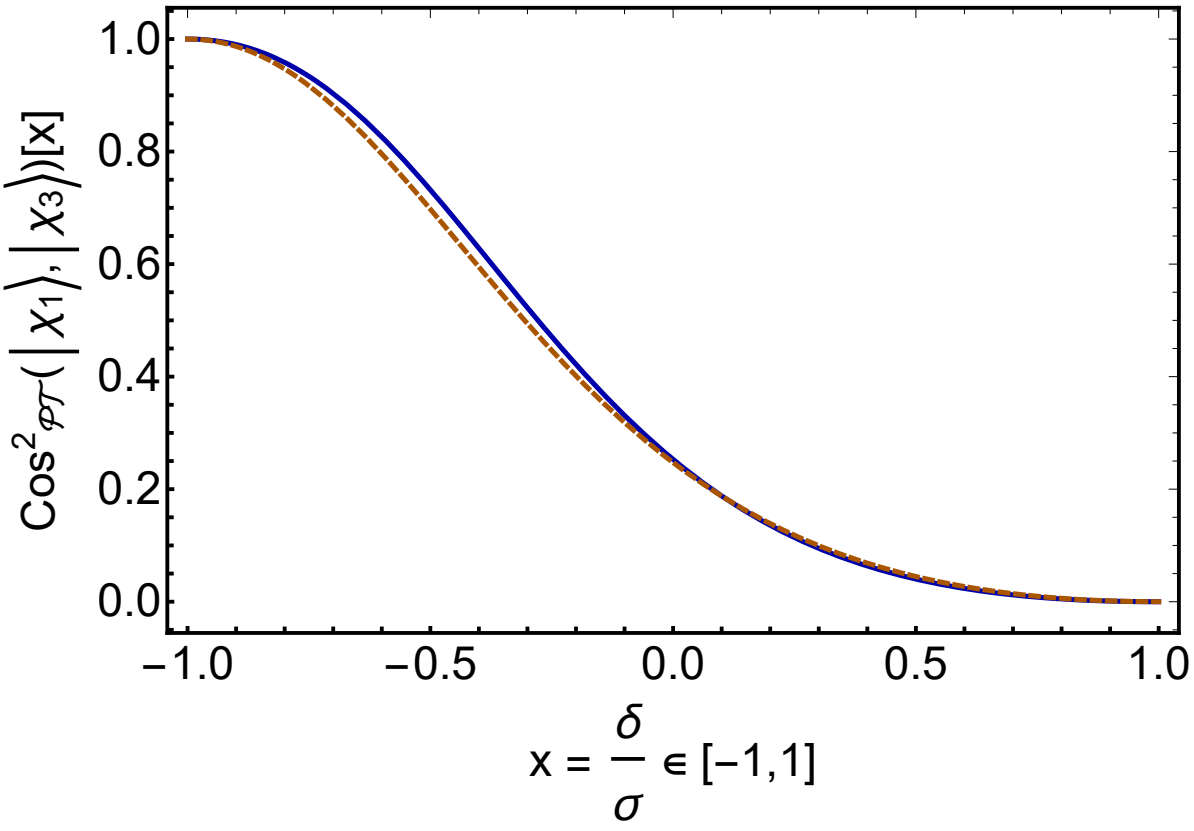


In[51]:=
```
Export["DependenceVariationFirst_PhiDependence.png", DependenceVariation]
```

Out[51]= DependenceVariationFirst_PhiDependence.png

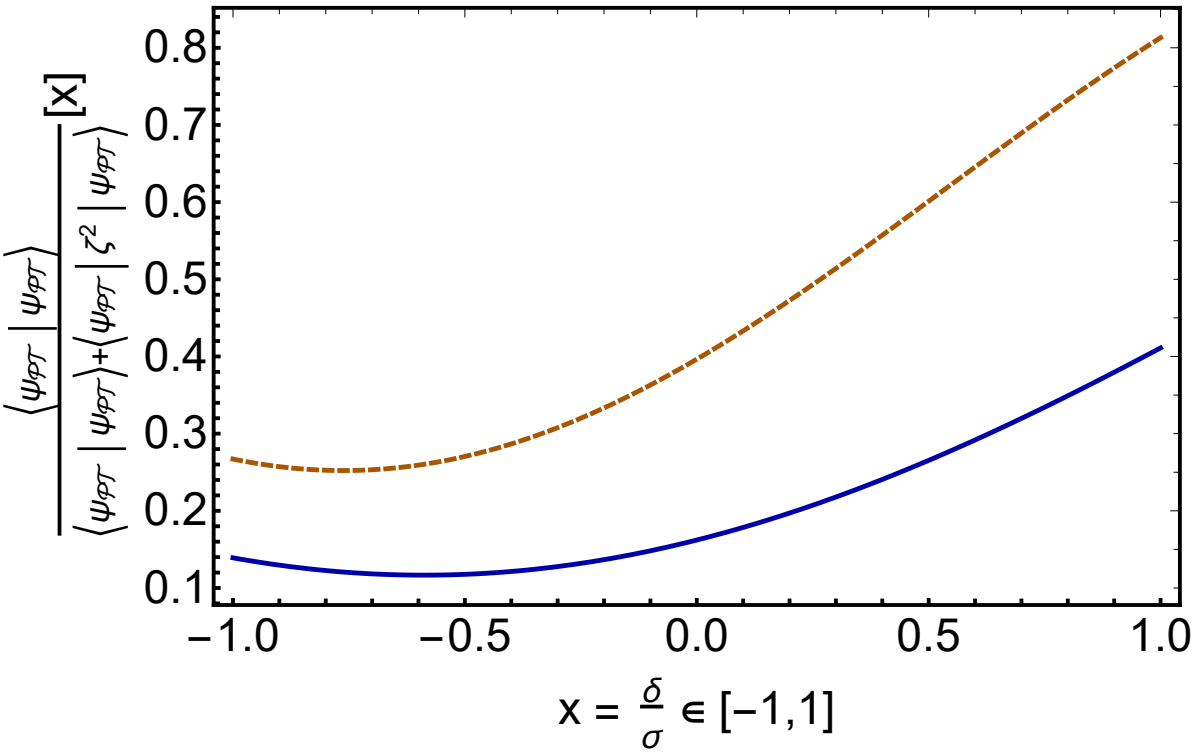
In[52]:=
```
p1 = Plot[{1 - N[cosFirstFunction[-x * 4 / 5, 4 / 5, π / 2 - 1, 1]],
    1 - N[cosFirstFunction[-x * 6 / 5, 6 / 5, π / 2 - 1, 1]]}, {x, -1, 1}, PlotRange → All,
  PlotStyle → {Directive[Darker[Blue], Thickness[0.005], Dashed[1]],
    Directive[Darker[Orange], Thickness[0.005], Dashed]}, Frame → True,
  FrameStyle → Directive[Black, Thick], LabelStyle → Large, Frame → True,
  FrameStyle → Directive[Black, Thick], LabelStyle → Large,
  PlotStyle → {Directive[Darker[Green], Thickness[0.007]]}, Axes → False,
  FrameLabel → {{"Cos²_PT(|χ1⟩,|χ3⟩)[x]",}, {"x = δ/σ ∈ [-1,1]", ""}},
  LabelStyle → {FontWeight → "Bold", FontSize → 25},
  ImageSize → 650, GridLinesStyle → Directive[Thick, Gray]]
```

Out[52]=



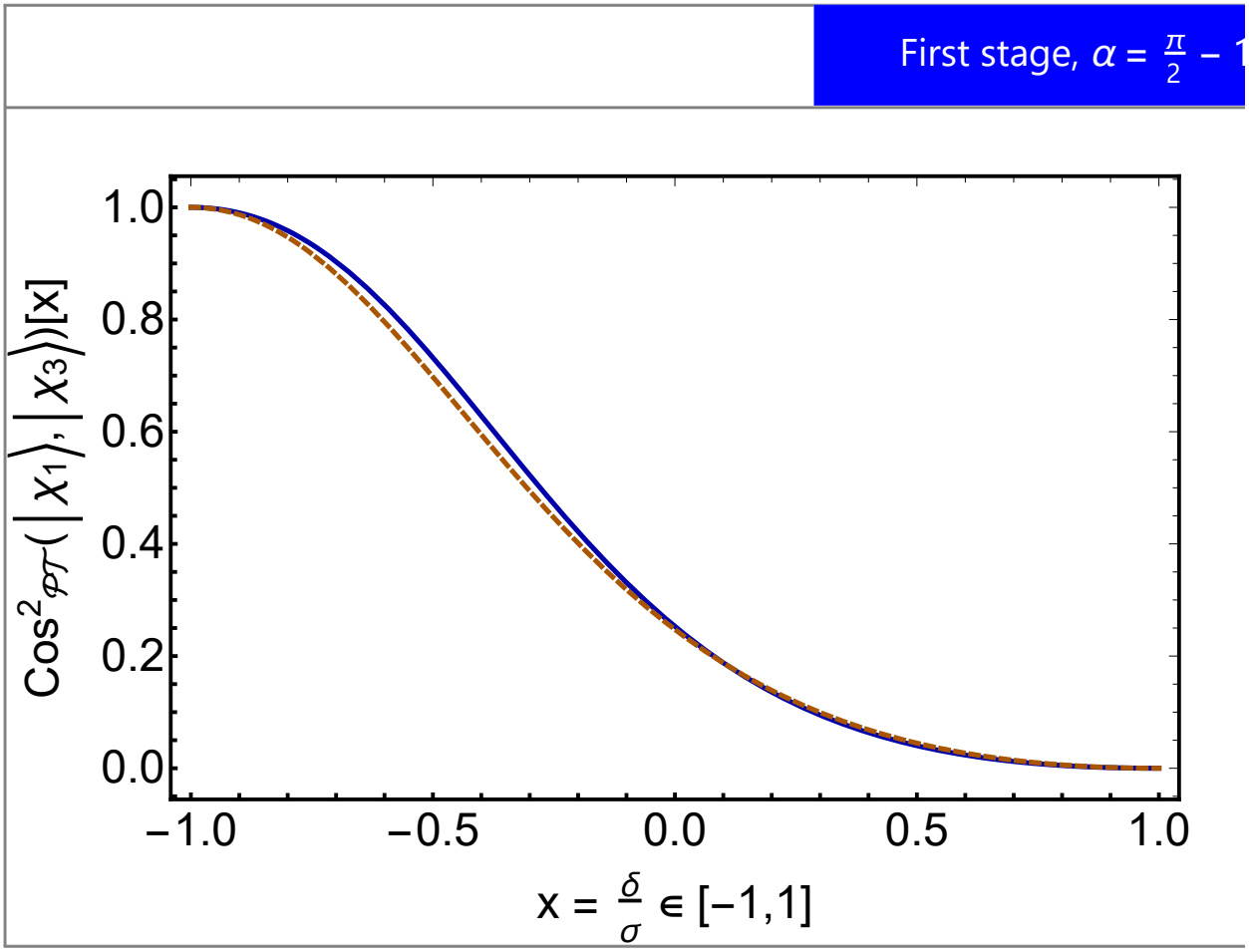
In[53]:=
```
p2 = Plot[{N[DecisivenessFirstFunction[-x * 4 / 5, 4 / 5, π / 2 - 1, 3]],
   N[DecisivenessFirstFunction[-x * 6 / 5, 6 / 5, π / 2 - 1, 2]]}, {x, -1, 1},
  PlotRange → All, PlotStyle → {Directive[Darker[Blue], Thickness[0.005], Dashed[1]],
    Directive[Darker[Orange], Thickness[0.005], Dashed]},
  Frame → True, FrameStyle → Directive[Black, Thick], LabelStyle → Large,
  PlotLegends → LineLegend[{"σ = 4/5", "σ = 6/5"}, LegendFunction → Framed],
  Axes → False, Frame → True, FrameStyle → Directive[Black, Thick],
  LabelStyle → Large, PlotStyle → {Directive[Darker[Green], Thickness[0.007]]},
  FrameLabel → {{"⟨ψ_PT|ψ_PT⟩ / (⟨ψ_PT|ψ_PT⟩ + ⟨ψ_PT|ζ²|ψ_PT⟩) [x]",}, {"x = δ/σ ∈ [-1,1]", ""}},
  LabelStyle → {FontWeight → "Bold", FontSize → 25},
  ImageSize → 650, GridLinesStyle → Directive[Thick, Gray]]
```

Out[53]=



In[54]:=
```
title =
  Panel[Style["First stage, α = π/2 - 1, ϕ = -π/2, 𝒩(0) ≈ 𝒩min, x dependence", White, 20],
   ImageSize → 600, Background → Blue, Alignment → Center];
DependenceVariation = Deploy@Grid[{{title, SpanFromLeft}, {p1, p2}},
   Dividers → Gray, Spacings → {0, 0}]
```

Out[55]=



In[56]:=
```
Export["DependenceVariationFirst_xDependence.png", DependenceVariation]
```

Out[56]= DependenceVariationFirst_xDependence.png