In[1]:=
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MMatrix[α_, ω_, t_, M0_] := M0 * {{Cos[α + t ω]^2 + Sin[t ω]^2, -2 i Sin[α] Sin[t ω]^2},
   {2 i Sin[α] Sin[t ω]^2, Cos[α - t ω]^2 + Sin[t ω]^2}} * Sec[α]^2
MMatrixInv[α_, ω_, t_, M0_] := {{Sec[α]^2 (Cos[α - t ω]^2 + Sin[t ω]^2)/M0,
   (2 i Sec[α] Sin[t ω]^2 Tan[α])/M0},
  {-(2 i Sec[α] Sin[t ω]^2 Tan[α])/M0, Sec[α]^2 (Cos[α + t ω]^2 + Sin[t ω]^2)/M0}}
Hq11[r_, s_, Θ_] := r * Exp[I * Θ]
Hq12[r_, s_, Θ_] := s
Hq21[r_, s_, Θ_] := s
Hq22[r_, s_, Θ_] := r * Exp[-I * Θ]
Hq[r_, s_, Θ_] := {{Hq11[r, s, Θ], Hq12[r, s, Θ]}, {Hq21[r, s, Θ], Hq22[r, s, Θ]}}
Zeta11[α_, ω_, t_, M0_] :=
 ((-4 M0 + 2 M0 Cos[2 t ω] - M0 Cos[2 α - 2 t ω] - M0 Cos[2 α + 2 t ω] + 2 M0 Cos[α - t ω]^2 Sec[α]^2 +
      2 M0 Cos[2 α] Cos[α - t ω]^2 Sec[α]^2 + 2 M0 Sec[α]^2 Sin[t ω]^2 +
      2 M0 Cos[2 α] Sec[α]^2 Sin[t ω]^2 + 2 Sqrt[2] Sqrt[-M0^2 (-6 - 2 Cos[2 α] +
            2 Cos[2 t ω] - Cos[2 α - 2 t ω] - Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2]) *
    Sqrt[(1/(1 + Cos[2 α])) (-2 + 4 M0 - 2 Cos[2 α] - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] +
        M0 Cos[2 α + 2 t ω] - 2 Sqrt[2] Sqrt[M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
            Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2])]) /
  (8 Sqrt[M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2]) +
 ((4 M0 - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] + M0 Cos[2 α + 2 t ω] - 2 M0 Cos[α - t ω]^2 Sec[α]^2 -
      2 M0 Cos[2 α] Cos[α - t ω]^2 Sec[α]^2 - 2 M0 Sec[α]^2 Sin[t ω]^2 -
      2 M0 Cos[2 α] Sec[α]^2 Sin[t ω]^2 + 2 Sqrt[2] Sqrt[-M0^2 (-6 - 2 Cos[2 α] +
            2 Cos[2 t ω] - Cos[2 α - 2 t ω] - Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2]) *
    Sqrt[(1/(1 + Cos[2 α])) (-2 + 4 M0 - 2 Cos[2 α] - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] +
        M0 Cos[2 α + 2 t ω] + 2 Sqrt[2] Sqrt[M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
            Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2])]) /
  (8 Sqrt[M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2])
Zeta12[α_, ω_, t_, M0_] :=
 (i Cos[α] Cot[α] Csc[t ω]^2 (-4 M0 + 2 M0 Cos[2 t ω] - M0 Cos[2 α - 2 t ω] -
      M0 Cos[2 α + 2 t ω] + 2 M0 Cos[α - t ω]^2 Sec[α]^2 + 2 M0 Cos[2 α] Cos[α - t ω]^2 Sec[α]^2 +
      2 M0 Sec[α]^2 Sin[t ω]^2 + 2 M0 Cos[2 α] Sec[α]^2 Sin[t ω]^2 + 2 Sqrt[2] Sqrt[-M0^2 (-6 - 2 Cos[2 α] +
            2 Cos[2 t ω] - Cos[2 α - 2 t ω] - Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2])
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$$\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,\text{M0}-2\,\text{Cos}[2\,\alpha]-2\,\text{M0}\,\text{Cos}[2\,t\,\omega]+\text{M0}\,\text{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.}$$
$$\left.\text{M0}\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\sqrt{2}\,\sqrt{\left(\text{M0}^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\right.\right.\right.$$
$$\left.\left.\left.\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)$$
$$\left(4\,\text{M0}-2\,\text{M0}\,\text{Cos}[2\,t\,\omega]+\text{M0}\,\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{M0}\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\,\text{M0}\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-\right.$$
$$2\,\text{M0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{M0}\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2-$$
$$2\,\text{M0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\sqrt{2}$$
$$\left.\sqrt{\text{M0}^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2}\right)$$
$$\Big/\left(32\,\text{M0}\left(1+\text{Cos}[2\,\alpha]\right)\right.$$
$$\left.\sqrt{\text{M0}^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2}\right)-$$
$$\left(i\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[t\,\omega]^2\left(4\,\text{M0}-2\,\text{M0}\,\text{Cos}[2\,t\,\omega]+\text{M0}\,\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{M0}\,\text{Cos}[2\,\alpha+2\,t\,\omega]-\right.\right.$$
$$2\,\text{M0}\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{M0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{M0}\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2-$$
$$2\,\text{M0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\left(-\text{M0}^2\left(-6-2\,\text{Cos}[2\,\alpha]+\right.\right.}$$
$$\left.\left.\left.2\,\text{Cos}[2\,t\,\omega]-\text{Cos}[2\,\alpha-2\,t\,\omega]-\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)$$
$$\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,\text{M0}-2\,\text{Cos}[2\,\alpha]-2\,\text{M0}\,\text{Cos}[2\,t\,\omega]+\text{M0}\,\text{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.}$$
$$\left.\text{M0}\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\left(\text{M0}^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\right.\right.\right.$$
$$\left.\left.\left.\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)$$
$$\left(-4\,\text{M0}+2\,\text{M0}\,\text{Cos}[2\,t\,\omega]-\text{M0}\,\text{Cos}[2\,\alpha-2\,t\,\omega]-\text{M0}\,\text{Cos}[2\,\alpha+2\,t\,\omega]+\right.$$
$$2\,\text{M0}\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{M0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+$$
$$2\,\text{M0}\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\,\text{M0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\sqrt{2}$$
$$\left.\sqrt{\text{M0}^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2}\right)$$
$$\Big/\left(32\,\text{M0}\left(1+\text{Cos}[2\,\alpha]\right)\right.$$
$$\left.\sqrt{\text{M0}^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2}\right)$$

$$\text{Zeta21}[\alpha\_,\,\omega\_,\,t\_,\,\text{M0}\_] := -\left(\left(i\,\text{M0}\left(1+\text{Cos}[2\,\alpha]\right)\text{Sec}[\alpha]\,\text{Sin}[t\,\omega]^2\right.\right.$$
$$\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,\text{M0}-2\,\text{Cos}[2\,\alpha]-2\,\text{M0}\,\text{Cos}[2\,t\,\omega]+\text{M0}\,\text{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.}$$
$$\left.\text{M0}\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\sqrt{2}\,\sqrt{\left(\text{M0}^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\right.\right.\right.$$
$$\left.\left.\left.\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\text{Tan}[\alpha]\Big/\left(2\right.$$
$$\left.\sqrt{\text{M0}^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2}\right)\right)$$

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    + ( i M0 (1 + Cos[2 α]) Sec[α] Sin[t ω]^2
      √( (1/(1 + Cos[2 α])) (-2 + 4 M0 - 2 Cos[2 α] - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] +
            M0 Cos[2 α + 2 t ω] + 2 √2 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
                  Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2)) Tan[α] ) /
   (2 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2) )
Zeta22[α_, ω_, t_, M0_] :=
  ( √( (1/(1 + Cos[2 α])) (-2 + 4 M0 - 2 Cos[2 α] - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] +
            M0 Cos[2 α + 2 t ω] - 2 √2 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
                  Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2)) )
    (4 M0 - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] + M0 Cos[2 α + 2 t ω] - 2 M0 Cos[α - t ω]^2 Sec[α]^2 -
      2 M0 Cos[2 α] Cos[α - t ω]^2 Sec[α]^2 - 2 M0 Sec[α]^2 Sin[t ω]^2 -
      2 M0 Cos[2 α] Sec[α]^2 Sin[t ω]^2 + 2 √2
       √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2) ) /
   (8 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2) ) +
  ( √( (1/(1 + Cos[2 α])) (-2 + 4 M0 - 2 Cos[2 α] - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] +
            M0 Cos[2 α + 2 t ω] + 2 √2 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
                  Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2)) )
    (-4 M0 + 2 M0 Cos[2 t ω] - M0 Cos[2 α - 2 t ω] - M0 Cos[2 α + 2 t ω] +
      2 M0 Cos[α - t ω]^2 Sec[α]^2 + 2 M0 Cos[2 α] Cos[α - t ω]^2 Sec[α]^2 +
      2 M0 Sec[α]^2 Sin[t ω]^2 + 2 M0 Cos[2 α] Sec[α]^2 Sin[t ω]^2 + 2 √2
       √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2) ) /
   (8 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2) )
ℊMatrix[α_, ω_, t_, M0_] := {{Zeta11[α, ω, t, M0], Zeta12[α, ω, t, M0]},
  {Zeta21[α, ω, t, M0], Zeta22[α, ω, t, M0]}}
Hq11[r_, s_, ϴ_] := r * Exp[I * ϴ]
```

```
Hq12[r_, s_, θ_] := s
Hq21[r_, s_, θ_] := s
Hq22[r_, s_, θ_] := r * Exp[-I * θ]
Hq[r_, s_, θ_] := {{Hq11[r, s, θ], Hq12[r, s, θ]}, {Hq21[r, s, θ], Hq22[r, s, θ]}}
DergMatrix11[α_, ω_, t_, M0_] :=
 -(((((-4 M0 + 2 M0 Cos[2 t ω] - M0 Cos[2 α - 2 t ω] - M0 Cos[2 α + 2 t ω] + 2 M0 Cos[α - t ω]^2 Sec[α]^2 +
          2 M0 Cos[2 α] Cos[α - t ω]^2 Sec[α]^2 + 2 M0 Sec[α]^2 Sin[t ω]^2 +
          2 M0 Cos[2 α] Sec[α]^2 Sin[t ω]^2 + 2 Sqrt[2] Sqrt[-M0^2 (-6 - 2 Cos[2 α] + 2
                Cos[2 t ω] - Cos[2 α - 2 t ω] - Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2])
        Sqrt[(1/(1 + Cos[2 α])) (-2 + 4 M0 - 2 Cos[2 α] - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] +
            M0 Cos[2 α + 2 t ω] - 2 Sqrt[2] Sqrt[M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
                Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2])])
      (2 M0^2 ω Cos[t ω] (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω])
        Sin[α]^2 Sin[t ω] + M0^2 Sin[α]^2 Sin[t ω]^2
        (4 ω Sin[2 t ω] + 2 ω Sin[2 α - 2 t ω] - 2 ω Sin[2 α + 2 t ω]))) /
    (16 (M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω])
        Sin[α]^2 Sin[t ω]^2)^(3/2))) -
  (((4 M0 - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] + M0 Cos[2 α + 2 t ω] - 2 M0 Cos[α - t ω]^2 Sec[α]^2 -
          2 M0 Cos[2 α] Cos[α - t ω]^2 Sec[α]^2 - 2 M0 Sec[α]^2 Sin[t ω]^2 -
          2 M0 Cos[2 α] Sec[α]^2 Sin[t ω]^2 + 2 Sqrt[2] Sqrt[-M0^2 (-6 - 2 Cos[2 α] +
                2 Cos[2 t ω] - Cos[2 α - 2 t ω] - Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2])
        Sqrt[(1/(1 + Cos[2 α])) (-2 + 4 M0 - 2 Cos[2 α] - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] +
            M0 Cos[2 α + 2 t ω] + 2 Sqrt[2] Sqrt[M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
                Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2])])
      (2 M0^2 ω Cos[t ω] (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω])
        Sin[α]^2 Sin[t ω] + M0^2 Sin[α]^2 Sin[t ω]^2
        (4 ω Sin[2 t ω] + 2 ω Sin[2 α - 2 t ω] - 2 ω Sin[2 α + 2 t ω]))) /
    (16 (M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2)^(3/2)) +
  (((-4 M0 + 2 M0 Cos[2 t ω] - M0 Cos[2 α - 2 t ω] - M0 Cos[2 α + 2 t ω] +
          2 M0 Cos[α - t ω]^2 Sec[α]^2 + 2 M0 Cos[2 α] Cos[α - t ω]^2 Sec[α]^2 +
          2 M0 Sec[α]^2 Sin[t ω]^2 + 2 M0 Cos[2 α] Sec[α]^2 Sin[t ω]^2 +
          2 Sqrt[2] Sqrt[-M0^2 (-6 - 2 Cos[2 α] + 2 Cos[2 t ω] - Cos[2 α - 2 t ω] - Cos[2 α + 2 t ω])
              Sin[α]^2 Sin[t ω]^2])
        (4 M0 ω Sin[2 t ω] + 2 M0 ω Sin[2 α - 2 t ω] - 2 M0 ω Sin[2 α + 2 t ω] - (Sqrt[2] (2 M0^2 ω Cos[t ω]
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$$\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]+M0^2\sin[\alpha]^2\sin[t\omega]^2\left(4\omega\sin[2t\omega]+2\omega\sin[2\alpha-2t\omega]-2\omega\sin[2\alpha+2t\omega]\right)\Big)\Big)\Big/\left(\sqrt{M0^2\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2}\right)\Big)\Big)\Big/\left(16\left(1+\cos[2\alpha]\right)\sqrt{M0^2\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2}\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4M0-2\cos[2\alpha]-2M0\cos[2t\omega]+M0\cos[2\alpha-2t\omega]+M0\cos[2\alpha+2t\omega]-2\sqrt{2}\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)}\right)\right)+\left(\left(4M0-2M0\cos[2t\omega]+M0\cos[2\alpha-2t\omega]+M0\cos[2\alpha+2t\omega]-2M0\cos[\alpha-t\omega]^2\sec[\alpha]^2-2M0\cos[2\alpha]\cos[\alpha-t\omega]^2\sec[\alpha]^2-2M0\sec[\alpha]^2\sin[t\omega]^2-2M0\cos[2\alpha]\sec[\alpha]^2\sin[t\omega]^2+2\sqrt{2}\sqrt{\left(-M0^2\left(-6-2\cos[2\alpha]+2\cos[2t\omega]-\cos[2\alpha-2t\omega]-\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)}\right)\left(4M0\omega\sin[2t\omega]+2M0\omega\sin[2\alpha-2t\omega]-2M0\omega\sin[2\alpha+2t\omega]+\left(\sqrt{2}\left(2M0^2\omega\cos[t\omega]\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]+M0^2\sin[\alpha]^2\sin[t\omega]^2\left(4\omega\sin[2t\omega]+2\omega\sin[2\alpha-2t\omega]-2\omega\sin[2\alpha+2t\omega]\right)\right)\Big)\Big/\left(\sqrt{M0^2\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2}\right)\Big)\Big)\Big/\left(16\left(1+\cos[2\alpha]\right)\sqrt{M0^2\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2}\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4M0-2\cos[2\alpha]-2M0\cos[2t\omega]+M0\cos[2\alpha-2t\omega]+M0\cos[2\alpha+2t\omega]+2\sqrt{2}\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)}\right)\right)+\left(\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4M0-2\cos[2\alpha]-2M0\cos[2t\omega]+M0\cos[2\alpha-2t\omega]+M0\cos[2\alpha+2t\omega]+2\sqrt{2}\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)}\right)\right)}\left(-4M0\omega\cos[t\omega]\sec[\alpha]^2\sin[t\omega]-4M0\omega\cos[2\alpha]\cos[t\omega]\sec[\alpha]^2\sin[t\omega]+4M0\omega\sin[2t\omega]+2M0\omega\sin[2\alpha-2t\omega]-4M0\omega\cos[\alpha-t\omega]\sec[\alpha]^2\sin[\alpha-t\omega]-4M0\omega\cos[2\alpha]\cos[\alpha-t\omega]\sec[\alpha]^2\sin[\alpha-t\omega]-2M0\omega\sin[2\alpha+2t\omega]+\left(\sqrt{2}\left(-2M0^2\omega\cos[t\omega]\left(-6-2\cos[2\alpha]+2\cos[2t\omega]-\cos[2\alpha-2t\omega]-\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]-M0^2\sin[\alpha]^2\sin[t\omega]^2\left(-4\omega\sin[2t\omega]-2\omega\sin[2\alpha-2t\omega]+2\omega\sin[2\alpha+2t\omega]\right)\right)\Big)\Big/$$

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        (√(-M0^2 (-6 - 2 Cos[2 α] + 2 Cos[2 t ω] - Cos[2 α - 2 t ω] - Cos[2 α + 2 t ω])
            Sin[α]^2 Sin[t ω]^2)))) /
   (8 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2)) +
  (√((1/(1 + Cos[2 α])) (-2 + 4 M0 - 2 Cos[2 α] - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] +
        M0 Cos[2 α + 2 t ω] - 2 √2 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
            Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2)))
    (4 M0 ω Cos[t ω] Sec[α]^2 Sin[t ω] + 4 M0 ω Cos[2 α] Cos[t ω] Sec[α]^2 Sin[t ω] -
     4 M0 ω Sin[2 t ω] - 2 M0 ω Sin[2 α - 2 t ω] + 4 M0 ω Cos[α - t ω] Sec[α]^2 Sin[α - t ω] +
     4 M0 ω Cos[2 α] Cos[α - t ω] Sec[α]^2 Sin[α - t ω] + 2 M0 ω Sin[2 α + 2 t ω] +
     (√2 (-2 M0^2 ω Cos[t ω] (-6 - 2 Cos[2 α] + 2 Cos[2 t ω] - Cos[2 α - 2 t ω] - Cos[2 α + 2 t ω])
          Sin[α]^2 Sin[t ω] - M0^2 Sin[α]^2 Sin[t ω]^2
          (-4 ω Sin[2 t ω] - 2 ω Sin[2 α - 2 t ω] + 2 ω Sin[2 α + 2 t ω])))) /
    (√(-M0^2 (-6 - 2 Cos[2 α] + 2 Cos[2 t ω] - Cos[2 α - 2 t ω] - Cos[2 α + 2 t ω])
        Sin[α]^2 Sin[t ω]^2)))) /
   (8 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2))

DerMatrix12[α_, ω_, t_, M0_] :=
 -((((i ω Cos[α] Cot[α] Cot[t ω] Csc[t ω]^2 (-4 M0 + 2 M0 Cos[2 t ω] - M0 Cos[2 α - 2 t ω] -
          M0 Cos[2 α + 2 t ω] + 2 M0 Cos[α - t ω]^2 Sec[α]^2 + 2 M0 Cos[2 α] Cos[α - t ω]^2 Sec[α]^2 +
          2 M0 Sec[α]^2 Sin[t ω]^2 + 2 M0 Cos[2 α] Sec[α]^2 Sin[t ω]^2 + 2 √2 √(-M0^2 (-6 - 2
              Cos[2 α] + 2 Cos[2 t ω] - Cos[2 α - 2 t ω] - Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2)))
       √((1/(1 + Cos[2 α])) (-2 + 4 M0 - 2 Cos[2 α] - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] +
          M0 Cos[2 α + 2 t ω] - 2 √2 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
              Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2)))
       (4 M0 - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] + M0 Cos[2 α + 2 t ω] -
        2 M0 Cos[α - t ω]^2 Sec[α]^2 - 2 M0 Cos[2 α] Cos[α - t ω]^2 Sec[α]^2 -
        2 M0 Sec[α]^2 Sin[t ω]^2 - 2 M0 Cos[2 α] Sec[α]^2 Sin[t ω]^2 +
        2 √2 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω])
            Sin[α]^2 Sin[t ω]^2)) /
       (16 M0 (1 + Cos[2 α])
        √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2)))
   + (i ω Cos[α] Cot[α] Cot[t ω] Csc[t ω]^2 (4 M0 - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] +
       M0 Cos[2 α + 2 t ω] - 2 M0 Cos[α - t ω]^2 Sec[α]^2 - 2 M0 Cos[2 α] Cos[α - t ω]^2 Sec[α]^2 -
       2 M0 Sec[α]^2 Sin[t ω]^2 - 2 M0 Cos[2 α] Sec[α]^2 Sin[t ω]^2 + 2 √2 √(-M0^2 (-6 - 2 Cos[2 α] +
```

$$
\begin{aligned}
&\left(2\,\mathrm{Cos}[2\,t\,\omega]-\mathrm{Cos}[2\,\alpha-2\,t\,\omega]-\mathrm{Cos}[2\,\alpha+2\,t\,\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\Big)\Big)\\
&\sqrt{\Big(\frac{1}{1+\mathrm{Cos}[2\,\alpha]}\Big(-2+4\,M0-2\,\mathrm{Cos}[2\,\alpha]-2\,M0\,\mathrm{Cos}[2\,t\,\omega]+M0\,\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+\\
&\quad M0\,\mathrm{Cos}[2\,\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,t\,\omega]+\right.\right.}\\
&\qquad\left.\left.\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+\mathrm{Cos}[2\,\alpha+2\,t\,\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\right)\Big)\Big)\\
&\Big(-4\,M0+2\,M0\,\mathrm{Cos}[2\,t\,\omega]-M0\,\mathrm{Cos}[2\,\alpha-2\,t\,\omega]-M0\,\mathrm{Cos}[2\,\alpha+2\,t\,\omega]+\\
&\quad 2\,M0\,\mathrm{Cos}[\alpha-t\,\omega]^2\,\mathrm{Sec}[\alpha]^2+2\,M0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Cos}[\alpha-t\,\omega]^2\,\mathrm{Sec}[\alpha]^2+\\
&\quad 2\,M0\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2+2\,M0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2+2\sqrt{2}\\
&\quad\sqrt{M0^2\left(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,t\,\omega]+\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+\mathrm{Cos}[2\,\alpha+2\,t\,\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2}\Big)\\
&\Big)\Big/\Big(16\,M0\left(1+\mathrm{Cos}[2\,\alpha]\right)\\
&\sqrt{M0^2\left(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,t\,\omega]+\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+\mathrm{Cos}[2\,\alpha+2\,t\,\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2}\Big)-\\
&\Big(i\,\mathrm{Cos}[\alpha]\,\mathrm{Cot}[\alpha]\,\mathrm{Csc}[t\,\omega]^2\Big(-4\,M0+2\,M0\,\mathrm{Cos}[2\,t\,\omega]-M0\,\mathrm{Cos}[2\,\alpha-2\,t\,\omega]-\\
&\quad M0\,\mathrm{Cos}[2\,\alpha+2\,t\,\omega]+2\,M0\,\mathrm{Cos}[\alpha-t\,\omega]^2\,\mathrm{Sec}[\alpha]^2+2\,M0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Cos}[\alpha-t\,\omega]^2\,\mathrm{Sec}[\alpha]^2+\\
&\quad 2\,M0\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2+2\,M0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\left(-M0^2\left(-6-2\,\mathrm{Cos}[2\,\alpha]+\right.\right.}\\
&\qquad\left.\left.2\,\mathrm{Cos}[2\,t\,\omega]-\mathrm{Cos}[2\,\alpha-2\,t\,\omega]-\mathrm{Cos}[2\,\alpha+2\,t\,\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\right)\Big)\Big)\\
&\sqrt{\Big(\frac{1}{1+\mathrm{Cos}[2\,\alpha]}\Big(-2+4\,M0-2\,\mathrm{Cos}[2\,\alpha]-2\,M0\,\mathrm{Cos}[2\,t\,\omega]+M0\,\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+\\
&\quad M0\,\mathrm{Cos}[2\,\alpha+2\,t\,\omega]-2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,t\,\omega]+\right.\right.}\\
&\qquad\left.\left.\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+\mathrm{Cos}[2\,\alpha+2\,t\,\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\right)\Big)\Big)\\
&\Big(4\,M0-2\,M0\,\mathrm{Cos}[2\,t\,\omega]+M0\,\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\mathrm{Cos}[2\,\alpha+2\,t\,\omega]-2\,M0\,\mathrm{Cos}[\alpha-t\,\omega]^2\,\mathrm{Sec}[\alpha]^2-\\
&\quad 2\,M0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Cos}[\alpha-t\,\omega]^2\,\mathrm{Sec}[\alpha]^2-2\,M0\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2-\\
&\quad 2\,M0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2+2\sqrt{2}\\
&\quad\sqrt{M0^2\left(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,t\,\omega]+\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+\mathrm{Cos}[2\,\alpha+2\,t\,\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2}\Big)\\
&\Big(2\,M0^2\,\omega\,\mathrm{Cos}[t\,\omega]\left(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,t\,\omega]+\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+\mathrm{Cos}[2\,\alpha+2\,t\,\omega]\right)\\
&\quad\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]+M0^2\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\\
&\quad\left(4\,\omega\,\mathrm{Sin}[2\,t\,\omega]+2\,\omega\,\mathrm{Sin}[2\,\alpha-2\,t\,\omega]-2\,\omega\,\mathrm{Sin}[2\,\alpha+2\,t\,\omega]\right)\Big)\Big)\Big/\Big(64\,M0\left(1+\mathrm{Cos}[2\,\alpha]\right)\\
&\left(M0^2\left(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,t\,\omega]+\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+\mathrm{Cos}[2\,\alpha+2\,t\,\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\right)^{3/2}\Big)+\\
&\Big(i\,\mathrm{Cos}[\alpha]\,\mathrm{Cot}[\alpha]\,\mathrm{Csc}[t\,\omega]^2\Big(4\,M0-2\,M0\,\mathrm{Cos}[2\,t\,\omega]+M0\,\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\mathrm{Cos}[2\,\alpha+2\,t\,\omega]-\\
&\quad 2\,M0\,\mathrm{Cos}[\alpha-t\,\omega]^2\,\mathrm{Sec}[\alpha]^2-2\,M0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Cos}[\alpha-t\,\omega]^2\,\mathrm{Sec}[\alpha]^2-2\,M0\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2-\\
&\quad 2\,M0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\left(-M0^2\left(-6-2\,\mathrm{Cos}[2\,\alpha]+\right.\right.}\\
&\qquad\left.\left.2\,\mathrm{Cos}[2\,t\,\omega]-\mathrm{Cos}[2\,\alpha-2\,t\,\omega]-\mathrm{Cos}[2\,\alpha+2\,t\,\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\right)\Big)\Big)\\
&\sqrt{\Big(\frac{1}{1+\mathrm{Cos}[2\,\alpha]}\Big(-2+4\,M0-2\,\mathrm{Cos}[2\,\alpha]-2\,M0\,\mathrm{Cos}[2\,t\,\omega]+M0\,\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+\\
&\quad M0\,\mathrm{Cos}[2\,\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,t\,\omega]+\right.\right.}
\end{aligned}
$$

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

$$\Big(-4\,M0 + 2\,M0\,\text{Cos}[2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] +$$
$$2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 +$$
$$2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\,\sqrt{2}$$
$$\sqrt{M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2}\Big)$$
$$\Big(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)$$
$$\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega] + M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2$$
$$\left(4\,\omega\,\text{Sin}[2\,t\,\omega] + 2\,\omega\,\text{Sin}[2\,\alpha - 2\,t\,\omega] - 2\,\omega\,\text{Sin}[2\,\alpha + 2\,t\,\omega]\right)\Big)\Big)\Big/\Big(64\,M0\,\left(1 + \text{Cos}[2\,\alpha]\right)$$
$$\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)^{3/2}\Big) +$$
$$\Big(i\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[t\,\omega]^2\,\Big(-4\,M0 + 2\,M0\,\text{Cos}[2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] -$$
$$M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] + 2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 +$$
$$2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 +$$
$$2\,\sqrt{2}\,\sqrt{\left(-M0^2\,\left(-6 - 2\,\text{Cos}[2\,\alpha] + 2\,\text{Cos}[2\,t\,\omega] - \text{Cos}[2\,\alpha - 2\,t\,\omega] - \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\right.}$$
$$\left.\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\Big)\,\Big(4\,M0 - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] +$$
$$M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 -$$
$$2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\,\sqrt{2}$$
$$\sqrt{M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2}\Big)$$
$$\Big(4\,M0\,\omega\,\text{Sin}[2\,t\,\omega] + 2\,M0\,\omega\,\text{Sin}[2\,\alpha - 2\,t\,\omega] - 2\,M0\,\omega\,\text{Sin}[2\,\alpha + 2\,t\,\omega] -$$
$$\Big(\sqrt{2}\,\Big(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)$$
$$\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega] + M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2$$
$$\left(4\,\omega\,\text{Sin}[2\,t\,\omega] + 2\,\omega\,\text{Sin}[2\,\alpha - 2\,t\,\omega] - 2\,\omega\,\text{Sin}[2\,\alpha + 2\,t\,\omega]\right)\Big)\Big)\Big/$$
$$\Big(\sqrt{M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2}$$
$$\Big)\Big)\Big)\Big/\Big(64\,M0\,\left(1 + \text{Cos}[2\,\alpha]\right)^2$$
$$\sqrt{M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2}$$
$$\sqrt{\Big(\frac{1}{1 + \text{Cos}[2\,\alpha]}\,\Big(-2 + 4\,M0 - 2\,\text{Cos}[2\,\alpha] - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] +$$
$$M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\,\sqrt{2}\,\sqrt{\Big(M0^2\,\Big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] +$$
$$\text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\Big)\Big)\Big)\Big) -$$
$$\Big(i\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[t\,\omega]^2\,\Big(4\,M0 - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] -$$
$$2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 -$$
$$2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 +$$
$$2\,\sqrt{2}\,\sqrt{\left(-M0^2\,\left(-6 - 2\,\text{Cos}[2\,\alpha] + 2\,\text{Cos}[2\,t\,\omega] - \text{Cos}[2\,\alpha - 2\,t\,\omega] - \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\right.}$$
$$\left.\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\Big)\,\Big(-4\,M0 + 2\,M0\,\text{Cos}[2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] -$$

$$\begin{aligned}
&M0\,\mathrm{Cos}[2\alpha+2t\omega]+2M0\,\mathrm{Cos}[\alpha-t\omega]^2\,\mathrm{Sec}[\alpha]^2+2M0\,\mathrm{Cos}[2\alpha]\,\mathrm{Cos}[\alpha-t\omega]^2\,\mathrm{Sec}[\alpha]^2+\\
&2M0\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\omega]^2+2M0\,\mathrm{Cos}[2\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\omega]^2+2\sqrt{2}\\
&\sqrt{M0^2\left(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2t\omega]+\mathrm{Cos}[2\alpha-2t\omega]+\mathrm{Cos}[2\alpha+2t\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]^2}\Big)\\
&\Big(4M0\,\omega\,\mathrm{Sin}[2t\omega]+2M0\,\omega\,\mathrm{Sin}[2\alpha-2t\omega]-2M0\,\omega\,\mathrm{Sin}[2\alpha+2t\omega]+\\
&\Big(\sqrt{2}\,\Big(2M0^2\,\omega\,\mathrm{Cos}[t\omega]\left(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2t\omega]+\mathrm{Cos}[2\alpha-2t\omega]+\mathrm{Cos}[2\alpha+2t\omega]\right)\\
&\quad\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]+M0^2\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]^2\\
&\quad\left(4\omega\,\mathrm{Sin}[2t\omega]+2\omega\,\mathrm{Sin}[2\alpha-2t\omega]-2\omega\,\mathrm{Sin}[2\alpha+2t\omega]\right)\Big)\Big)\Big/\\
&\Big(\sqrt{M0^2\left(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2t\omega]+\mathrm{Cos}[2\alpha-2t\omega]+\mathrm{Cos}[2\alpha+2t\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]^2}\\
&\Big)\Big)\Big)\Big/\Big(64M0\left(1+\mathrm{Cos}[2\alpha]\right)^2\\
&\sqrt{M0^2\left(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2t\omega]+\mathrm{Cos}[2\alpha-2t\omega]+\mathrm{Cos}[2\alpha+2t\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]^2}\\
&\sqrt{\Big(\frac{1}{1+\mathrm{Cos}[2\alpha]}\Big(-2+4M0-2\,\mathrm{Cos}[2\alpha]-2M0\,\mathrm{Cos}[2t\omega]+M0\,\mathrm{Cos}[2\alpha-2t\omega]+\\
&\quad M0\,\mathrm{Cos}[2\alpha+2t\omega]+2\sqrt{2}\,\sqrt{\Big(M0^2\left(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2t\omega]+\right.}\\
&\quad\left.\left.\left.\mathrm{Cos}[2\alpha-2t\omega]+\mathrm{Cos}[2\alpha+2t\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]^2\Big)\Big)\Big)\Big)+\right.\\
&\Big(i\,\mathrm{Cos}[\alpha]\,\mathrm{Cot}[\alpha]\,\mathrm{Csc}[t\omega]^2\Big(-4M0+2M0\,\mathrm{Cos}[2t\omega]-M0\,\mathrm{Cos}[2\alpha-2t\omega]-M0\,\mathrm{Cos}[2\alpha+2t\omega]+\\
&\quad 2M0\,\mathrm{Cos}[\alpha-t\omega]^2\,\mathrm{Sec}[\alpha]^2+2M0\,\mathrm{Cos}[2\alpha]\,\mathrm{Cos}[\alpha-t\omega]^2\,\mathrm{Sec}[\alpha]^2+2M0\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\omega]^2+\\
&\quad 2M0\,\mathrm{Cos}[2\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\omega]^2+2\sqrt{2}\,\sqrt{\Big(-M0^2\Big(-6-2\,\mathrm{Cos}[2\alpha]+\\
&\quad\left.2\,\mathrm{Cos}[2t\omega]-\mathrm{Cos}[2\alpha-2t\omega]-\mathrm{Cos}[2\alpha+2t\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]^2\Big)}\Big)\\
&\sqrt{\Big(\frac{1}{1+\mathrm{Cos}[2\alpha]}\Big(-2+4M0-2\,\mathrm{Cos}[2\alpha]-2M0\,\mathrm{Cos}[2t\omega]+M0\,\mathrm{Cos}[2\alpha-2t\omega]+\\
&\quad M0\,\mathrm{Cos}[2\alpha+2t\omega]-2\sqrt{2}\,\sqrt{\Big(M0^2\left(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2t\omega]+\right.}\\
&\quad\left.\left.\left.\mathrm{Cos}[2\alpha-2t\omega]+\mathrm{Cos}[2\alpha+2t\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]^2\Big)\Big)\Big)\Big)\right.\\
&\Big(-4M0\,\omega\,\mathrm{Cos}[t\omega]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\omega]-4M0\,\omega\,\mathrm{Cos}[2\alpha]\,\mathrm{Cos}[t\omega]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\omega]+\\
&4M0\,\omega\,\mathrm{Sin}[2t\omega]+2M0\,\omega\,\mathrm{Sin}[2\alpha-2t\omega]-4M0\,\omega\,\mathrm{Cos}[\alpha-t\omega]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\alpha-t\omega]-\\
&4M0\,\omega\,\mathrm{Cos}[2\alpha]\,\mathrm{Cos}[\alpha-t\omega]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\alpha-t\omega]-\\
&2M0\,\omega\,\mathrm{Sin}[2\alpha+2t\omega]+\Big(\sqrt{2}\,\Big(2M0^2\,\omega\,\mathrm{Cos}[t\omega]\\
&\quad\left(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2t\omega]+\mathrm{Cos}[2\alpha-2t\omega]+\mathrm{Cos}[2\alpha+2t\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]+\\
&\quad M0^2\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]^2\left(4\omega\,\mathrm{Sin}[2t\omega]+2\omega\,\mathrm{Sin}[2\alpha-2t\omega]-2\omega\,\mathrm{Sin}[2\alpha+2t\omega]\right)\Big)\Big)\Big/\\
&\Big(\sqrt{M0^2\left(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2t\omega]+\mathrm{Cos}[2\alpha-2t\omega]+\mathrm{Cos}[2\alpha+2t\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]^2}\\
&\Big)\Big)\Big)\Big/\Big(32M0\left(1+\mathrm{Cos}[2\alpha]\right)\\
&\sqrt{M0^2\left(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2t\omega]+\mathrm{Cos}[2\alpha-2t\omega]+\mathrm{Cos}[2\alpha+2t\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]^2}\Big)-
\end{aligned}$$

$$\left(i \cos[\alpha] \cot[\alpha] \csc[t\omega]^2 \left(4 M0 - 2 M0 \cos[2 t \omega] + M0 \cos[2\alpha - 2 t \omega] + M0 \cos[2\alpha + 2 t \omega] - 2 M0 \cos[\alpha - t \omega]^2 \sec[\alpha]^2 - 2 M0 \cos[2\alpha] \cos[\alpha - t \omega]^2 \sec[\alpha]^2 - 2 M0 \sec[\alpha]^2 \sin[t \omega]^2 - 2 M0 \cos[2\alpha] \sec[\alpha]^2 \sin[t \omega]^2 + 2\sqrt{2} \sqrt{\left(-M0^2 \left(-6 - 2\cos[2\alpha] + 2\cos[2 t \omega] - \cos[2\alpha - 2 t \omega] - \cos[2\alpha + 2 t \omega]\right) \sin[\alpha]^2 \sin[t \omega]^2\right)}\right)\right)$$

$$\sqrt{\left(\frac{1}{1 + \cos[2\alpha]} \left(-2 + 4 M0 - 2\cos[2\alpha] - 2 M0 \cos[2 t \omega] + M0 \cos[2\alpha - 2 t \omega] + M0 \cos[2\alpha + 2 t \omega] + 2\sqrt{2} \sqrt{\left(M0^2 \left(6 + 2\cos[2\alpha] - 2\cos[2 t \omega] + \cos[2\alpha - 2 t \omega] + \cos[2\alpha + 2 t \omega]\right) \sin[\alpha]^2 \sin[t \omega]^2\right)}\right)\right)}$$

$$\left(4 M0 \omega \cos[t \omega] \sec[\alpha]^2 \sin[t \omega] + 4 M0 \omega \cos[2\alpha] \cos[t \omega] \sec[\alpha]^2 \sin[t \omega] - 4 M0 \omega \sin[2 t \omega] - 2 M0 \omega \sin[2\alpha - 2 t \omega] + 4 M0 \omega \cos[\alpha - t \omega] \sec[\alpha]^2 \sin[\alpha - t \omega] + 4 M0 \omega \cos[2\alpha] \cos[\alpha - t \omega] \sec[\alpha]^2 \sin[\alpha - t \omega] + 2 M0 \omega \sin[2\alpha + 2 t \omega] + \left(\sqrt{2} \left(2 M0^2 \omega \cos[t \omega] \left(6 + 2\cos[2\alpha] - 2\cos[2 t \omega] + \cos[2\alpha - 2 t \omega] + \cos[2\alpha + 2 t \omega]\right) \sin[\alpha]^2 \sin[t \omega] + M0^2 \sin[\alpha]^2 \sin[t \omega]^2 \left(4 \omega \sin[2 t \omega] + 2 \omega \sin[2\alpha - 2 t \omega] - 2 \omega \sin[2\alpha + 2 t \omega]\right)\right)\right) \Big/ \left(\sqrt{M0^2 \left(6 + 2\cos[2\alpha] - 2\cos[2 t \omega] + \cos[2\alpha - 2 t \omega] + \cos[2\alpha + 2 t \omega]\right) \sin[\alpha]^2 \sin[t \omega]^2}\right)\right) \Big/ \left(32 M0 \left(1 + \cos[2\alpha]\right) \sqrt{M0^2 \left(6 + 2\cos[2\alpha] - 2\cos[2 t \omega] + \cos[2\alpha - 2 t \omega] + \cos[2\alpha + 2 t \omega]\right) \sin[\alpha]^2 \sin[t \omega]^2}\right) -$$

$$\left(i \cos[\alpha] \cot[\alpha] \csc[t\omega]^2 \sqrt{\left(\frac{1}{1 + \cos[2\alpha]} \left(-2 + 4 M0 - 2\cos[2\alpha] - 2 M0 \cos[2 t \omega] + M0 \cos[2\alpha - 2 t \omega] + M0 \cos[2\alpha + 2 t \omega] + 2\sqrt{2} \sqrt{\left(M0^2 \left(6 + 2\cos[2\alpha] - 2\cos[2 t \omega] + \cos[2\alpha - 2 t \omega] + \cos[2\alpha + 2 t \omega]\right) \sin[\alpha]^2 \sin[t \omega]^2\right)}\right)\right)}\right)$$

$$\left(-4 M0 + 2 M0 \cos[2 t \omega] - M0 \cos[2\alpha - 2 t \omega] - M0 \cos[2\alpha + 2 t \omega] + 2 M0 \cos[\alpha - t \omega]^2 \sec[\alpha]^2 + 2 M0 \cos[2\alpha] \cos[\alpha - t \omega]^2 \sec[\alpha]^2 + 2 M0 \sec[\alpha]^2 \sin[t \omega]^2 + 2 M0 \cos[2\alpha] \sec[\alpha]^2 \sin[t \omega]^2 + 2\sqrt{2} \sqrt{M0^2 \left(6 + 2\cos[2\alpha] - 2\cos[2 t \omega] + \cos[2\alpha - 2 t \omega] + \cos[2\alpha + 2 t \omega]\right) \sin[\alpha]^2 \sin[t \omega]^2}\right)$$

$$\left(-4 M0 \omega \cos[t \omega] \sec[\alpha]^2 \sin[t \omega] - 4 M0 \omega \cos[2\alpha] \cos[t \omega] \sec[\alpha]^2 \sin[t \omega] + 4 M0 \omega \sin[2 t \omega] + 2 M0 \omega \sin[2\alpha - 2 t \omega] - 4 M0 \omega \cos[\alpha - t \omega] \sec[\alpha]^2 \sin[\alpha - t \omega] - 4 M0 \omega \cos[2\alpha] \cos[\alpha - t \omega] \sec[\alpha]^2 \sin[\alpha - t \omega] - 2 M0 \omega \sin[2\alpha + 2 t \omega] + \left(\sqrt{2} \left(-2 M0^2 \omega \cos[t \omega] \left(-6 - 2\cos[2\alpha] + 2\cos[2 t \omega] - \cos[2\alpha - 2 t \omega] - \cos[2\alpha + 2 t \omega]\right) \sin[\alpha]^2 \sin[t \omega] - M0^2 \sin[\alpha]^2 \sin[t \omega]^2 \left(-4 \omega \sin[2 t \omega] - 2 \omega \sin[2\alpha - 2 t \omega] + 2 \omega \sin[2\alpha + 2 t \omega]\right)\right)\right) \Big/ \left(\sqrt{-M0^2 \left(-6 - 2\cos[2\alpha] + 2\cos[2 t \omega] - \cos[2\alpha - 2 t \omega] - \cos[2\alpha + 2 t \omega]\right) \sin[\alpha]^2 \sin[t \omega]^2}\right)\right) \Big/ \left(32 M0 \left(1 + \cos[2\alpha]\right) \sqrt{M0^2 \left(6 + 2\cos[2\alpha] - 2\cos[2 t \omega] + \cos[2\alpha - 2 t \omega] + \cos[2\alpha + 2 t \omega]\right) \sin[\alpha]^2 \sin[t \omega]^2}\right) +$$

$$\left(i \cos[\alpha] \cot[\alpha] \csc[t\,\omega]^2 \sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4\,M0-2\cos[2\alpha]-2\,M0\cos[2\,t\,\omega]+\right.\right.\right.$$
$$M0\cos[2\alpha-2\,t\,\omega]+M0\cos[2\alpha+2\,t\,\omega]-2\sqrt{2}\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-\right.\right.\right.$$
$$\left.\left.\left.\left.\left.2\cos[2\,t\,\omega]+\cos[2\alpha-2\,t\,\omega]+\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)\right)$$
$$\left(4\,M0-2\,M0\cos[2\,t\,\omega]+M0\cos[2\alpha-2\,t\,\omega]+M0\cos[2\alpha+2\,t\,\omega]-2\,M0\cos[\alpha-t\,\omega]^2\right.$$
$$\sec[\alpha]^2-2\,M0\cos[2\alpha]\cos[\alpha-t\,\omega]^2\sec[\alpha]^2-$$
$$2\,M0\sec[\alpha]^2\sin[t\,\omega]^2-2\,M0\cos[2\alpha]\sec[\alpha]^2\sin[t\,\omega]^2+2\sqrt{2}$$
$$\left.\sqrt{M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\cos[2\alpha-2\,t\,\omega]+\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2}\right)$$
$$\left(4\,M0\,\omega\cos[t\,\omega]\sec[\alpha]^2\sin[t\,\omega]+4\,M0\,\omega\cos[2\alpha]\cos[t\,\omega]\sec[\alpha]^2\sin[t\,\omega]-\right.$$
$$4\,M0\,\omega\sin[2\,t\,\omega]-2\,M0\,\omega\sin[2\alpha-2\,t\,\omega]+4\,M0\,\omega\cos[\alpha-t\,\omega]\sec[\alpha]^2\sin[\alpha-t\,\omega]+$$
$$4\,M0\,\omega\cos[2\alpha]\cos[\alpha-t\,\omega]\sec[\alpha]^2\sin[\alpha-t\,\omega]+2\,M0\,\omega\sin[2\alpha+2\,t\,\omega]+$$
$$\left(\sqrt{2}\left(-2\,M0^2\,\omega\cos[t\,\omega]\left(-6-2\cos[2\alpha]+2\cos[2\,t\,\omega]-\cos[2\alpha-2\,t\,\omega]-\cos[2\alpha+2\,t\,\omega]\right)\right.\right.$$
$$\sin[\alpha]^2\sin[t\,\omega]-M0^2\sin[\alpha]^2\sin[t\,\omega]^2$$
$$\left.\left.\left(-4\,\omega\sin[2\,t\,\omega]-2\,\omega\sin[2\alpha-2\,t\,\omega]+2\,\omega\sin[2\alpha+2\,t\,\omega]\right)\right)\right)\Big/$$
$$\left(\sqrt{\left(-M0^2\left(-6-2\cos[2\alpha]+2\cos[2\,t\,\omega]-\cos[2\alpha-2\,t\,\omega]-\cos[2\alpha+2\,t\,\omega]\right)\right.\right.$$
$$\left.\left.\sin[\alpha]^2\sin[t\,\omega]^2\right)}\right)\Big)\Big/\left(32\,M0\left(1+\cos[2\alpha]\right)\right.$$
$$\left.\sqrt{M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\cos[2\alpha-2\,t\,\omega]+\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2}\right)$$

$$\text{DergMatrix21}[\alpha\_,\ \omega\_,\ t\_,\ M0\_] := -\left(\left(i\,M0\,\omega\left(1+\cos[2\alpha]\right)\cos[t\,\omega]\sec[\alpha]\sin[t\,\omega]\right.\right.$$
$$\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4\,M0-2\cos[2\alpha]-2\,M0\cos[2\,t\,\omega]+M0\cos[2\alpha-2\,t\,\omega]+\right.\right.}$$
$$M0\cos[2\alpha+2\,t\,\omega]-2\sqrt{2}\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\right.\right.}$$
$$\left.\left.\left.\left.\left.\cos[2\alpha-2\,t\,\omega]+\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)\right)\tan[\alpha]\Big)\Big/$$
$$\left(\sqrt{M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\cos[2\alpha-2\,t\,\omega]+\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2}\right)\Big)$$
$$+\left(i\,M0\,\omega\left(1+\cos[2\alpha]\right)\cos[t\,\omega]\sec[\alpha]\sin[t\,\omega]\right.$$
$$\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4\,M0-2\cos[2\alpha]-2\,M0\cos[2\,t\,\omega]+M0\cos[2\alpha-2\,t\,\omega]+\right.\right.}$$
$$M0\cos[2\alpha+2\,t\,\omega]+2\sqrt{2}\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\right.\right.}$$
$$\left.\left.\left.\left.\left.\cos[2\alpha-2\,t\,\omega]+\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)\right)\tan[\alpha]\Big)\Big/$$
$$\left(\sqrt{M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\cos[2\alpha-2\,t\,\omega]+\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2}\right)+$$
$$\left(i\,M0\left(1+\cos[2\alpha]\right)\sec[\alpha]\sin[t\,\omega]^2\right.$$
$$\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4\,M0-2\cos[2\alpha]-2\,M0\cos[2\,t\,\omega]+M0\cos[2\alpha-2\,t\,\omega]+\right.\right.}$$

$$\left(\mathrm{M0}\,\mathrm{Cos}[2\alpha+2t\omega]-2\sqrt{2}\,\sqrt{\left(\mathrm{M0}^2\left(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2t\omega]+\mathrm{Cos}[2\alpha-2t\omega]+\mathrm{Cos}[2\alpha+2t\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]^2\right)}\right)$$
$$\left(2\,\mathrm{M0}^2\,\omega\,\mathrm{Cos}[t\omega]\left(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2t\omega]+\mathrm{Cos}[2\alpha-2t\omega]+\mathrm{Cos}[2\alpha+2t\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]+\mathrm{M0}^2\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]^2\left(4\omega\,\mathrm{Sin}[2t\omega]+2\omega\,\mathrm{Sin}[2\alpha-2t\omega]-2\omega\,\mathrm{Sin}[2\alpha+2t\omega]\right)\right)\mathrm{Tan}[\alpha]\Big)\Big/\Big(4\left(\mathrm{M0}^2\left(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2t\omega]+\mathrm{Cos}[2\alpha-2t\omega]+\mathrm{Cos}[2\alpha+2t\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]^2\right)^{3/2}\Big)-$$
$$\Bigg(i\,\mathrm{M0}\left(1+\mathrm{Cos}[2\alpha]\right)\mathrm{Sec}[\alpha]\,\mathrm{Sin}[t\omega]^2\sqrt{\Bigg(\frac{1}{1+\mathrm{Cos}[2\alpha]}\Big(-2+4\,\mathrm{M0}-2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{M0}\,\mathrm{Cos}[2t\omega]+\mathrm{M0}\,\mathrm{Cos}[2\alpha-2t\omega]+\mathrm{M0}\,\mathrm{Cos}[2\alpha+2t\omega]+2\sqrt{2}\,\sqrt{\left(\mathrm{M0}^2\left(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2t\omega]+\mathrm{Cos}[2\alpha-2t\omega]+\mathrm{Cos}[2\alpha+2t\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]^2\right)}\Big)$$
$$\left(2\,\mathrm{M0}^2\,\omega\,\mathrm{Cos}[t\omega]\left(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2t\omega]+\mathrm{Cos}[2\alpha-2t\omega]+\mathrm{Cos}[2\alpha+2t\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]+\mathrm{M0}^2\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]^2\left(4\omega\,\mathrm{Sin}[2t\omega]+2\omega\,\mathrm{Sin}[2\alpha-2t\omega]-2\omega\,\mathrm{Sin}[2\alpha+2t\omega]\right)\right)\mathrm{Tan}[\alpha]\Big)\Big/\Big(4\left(\mathrm{M0}^2\left(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2t\omega]+\mathrm{Cos}[2\alpha-2t\omega]+\mathrm{Cos}[2\alpha+2t\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]^2\right)^{3/2}\Big)-$$
$$\Bigg(i\,\mathrm{M0}\,\mathrm{Sec}[\alpha]\,\mathrm{Sin}[t\omega]^2\Big(4\,\mathrm{M0}\,\omega\,\mathrm{Sin}[2t\omega]+2\,\mathrm{M0}\,\omega\,\mathrm{Sin}[2\alpha-2t\omega]-2\,\mathrm{M0}\,\omega\,\mathrm{Sin}[2\alpha+2t\omega]-\Big(\sqrt{2}\,\Big(2\,\mathrm{M0}^2\,\omega\,\mathrm{Cos}[t\omega]\left(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2t\omega]+\mathrm{Cos}[2\alpha-2t\omega]+\mathrm{Cos}[2\alpha+2t\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]+\mathrm{M0}^2\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]^2\left(4\omega\,\mathrm{Sin}[2t\omega]+2\omega\,\mathrm{Sin}[2\alpha-2t\omega]-2\omega\,\mathrm{Sin}[2\alpha+2t\omega]\right)\Big)\Big)\Big/$$
$$\left(\sqrt{\mathrm{M0}^2\left(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2t\omega]+\mathrm{Cos}[2\alpha-2t\omega]+\mathrm{Cos}[2\alpha+2t\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]^2}\right)\Big)\mathrm{Tan}[\alpha]\Big)\Big/$$
$$\Big(4\sqrt{\mathrm{M0}^2\left(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2t\omega]+\mathrm{Cos}[2\alpha-2t\omega]+\mathrm{Cos}[2\alpha+2t\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]^2}$$
$$\sqrt{\Big(\frac{1}{1+\mathrm{Cos}[2\alpha]}\Big(-2+4\,\mathrm{M0}-2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{M0}\,\mathrm{Cos}[2t\omega]+\mathrm{M0}\,\mathrm{Cos}[2\alpha-2t\omega]+\mathrm{M0}\,\mathrm{Cos}[2\alpha+2t\omega]-2\sqrt{2}\,\sqrt{\left(\mathrm{M0}^2\left(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2t\omega]+\mathrm{Cos}[2\alpha-2t\omega]+\mathrm{Cos}[2\alpha+2t\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]^2\right)}\Big)\Big)}+$$
$$\Bigg(i\,\mathrm{M0}\,\mathrm{Sec}[\alpha]\,\mathrm{Sin}[t\omega]^2\Big(4\,\mathrm{M0}\,\omega\,\mathrm{Sin}[2t\omega]+2\,\mathrm{M0}\,\omega\,\mathrm{Sin}[2\alpha-2t\omega]-2\,\mathrm{M0}\,\omega\,\mathrm{Sin}[2\alpha+2t\omega]+\Big(\sqrt{2}\,\Big(2\,\mathrm{M0}^2\,\omega\,\mathrm{Cos}[t\omega]\left(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2t\omega]+\mathrm{Cos}[2\alpha-2t\omega]+\mathrm{Cos}[2\alpha+2t\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]+\mathrm{M0}^2\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]^2\left(4\omega\,\mathrm{Sin}[2t\omega]+2\omega\,\mathrm{Sin}[2\alpha-2t\omega]-2\omega\,\mathrm{Sin}[2\alpha+2t\omega]\right)\Big)\Big)\Big/$$
$$\left(\sqrt{\mathrm{M0}^2\left(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2t\omega]+\mathrm{Cos}[2\alpha-2t\omega]+\mathrm{Cos}[2\alpha+2t\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]^2}\right)\Big)\mathrm{Tan}[\alpha]\Big)\Big/$$

$$\left(4 \sqrt{M0^2 \left(6 + 2 \cos[2 \alpha] - 2 \cos[2 t \omega] + \cos[2 \alpha - 2 t \omega] + \cos[2 \alpha + 2 t \omega]\right) \sin[\alpha]^2 \sin[t \omega]^2}\right.$$
$$\sqrt{\left(\frac{1}{1 + \cos[2 \alpha]} \left(-2 + 4 M0 - 2 \cos[2 \alpha] - 2 M0 \cos[2 t \omega] + M0 \cos[2 \alpha - 2 t \omega] + \right.\right.}$$
$$M0 \cos[2 \alpha + 2 t \omega] + 2 \sqrt{2} \sqrt{\left(M0^2 \left(6 + 2 \cos[2 \alpha] - 2 \cos[2 t \omega] + \right.\right.$$
$$\left.\left.\left.\left.\cos[2 \alpha - 2 t \omega] + \cos[2 \alpha + 2 t \omega]\right) \sin[\alpha]^2 \sin[t \omega]^2\right)\right)\right)$$

$$\text{DergMatrix22}[\alpha\_, \omega\_, t\_, M0\_] := -\left(\left(\sqrt{\left(\frac{1}{1 + \cos[2 \alpha]} \left(-2 + 4 M0 - 2 \cos[2 \alpha] - 2 M0 \cos[2 t \omega] + \right.\right.\right.$$
$$M0 \cos[2 \alpha - 2 t \omega] + M0 \cos[2 \alpha + 2 t \omega] - 2 \sqrt{2} \sqrt{\left(M0^2 \left(6 + 2 \cos[2 \alpha] - \right.\right.$$
$$\left.\left.\left.\left.2 \cos[2 t \omega] + \cos[2 \alpha - 2 t \omega] + \cos[2 \alpha + 2 t \omega]\right) \sin[\alpha]^2 \sin[t \omega]^2\right)\right)\right)$$
$$\left(4 M0 - 2 M0 \cos[2 t \omega] + M0 \cos[2 \alpha - 2 t \omega] + M0 \cos[2 \alpha + 2 t \omega] - 2 M0 \cos[\alpha - t \omega]^2 \right.$$
$$\sec[\alpha]^2 - 2 M0 \cos[2 \alpha] \cos[\alpha - t \omega]^2 \sec[\alpha]^2 - 2 M0 \sec[\alpha]^2 \sin[t \omega]^2 -$$
$$2 M0 \cos[2 \alpha] \sec[\alpha]^2 \sin[t \omega]^2 + 2 \sqrt{2} \sqrt{\left(M0^2 \left(6 + 2 \cos[2 \alpha] - 2 \right.\right.}$$
$$\left.\left.\cos[2 t \omega] + \cos[2 \alpha - 2 t \omega] + \cos[2 \alpha + 2 t \omega]\right) \sin[\alpha]^2 \sin[t \omega]^2\right)\right)$$
$$\left(2 M0^2 \omega \cos[t \omega] \left(6 + 2 \cos[2 \alpha] - 2 \cos[2 t \omega] + \cos[2 \alpha - 2 t \omega] + \cos[2 \alpha + 2 t \omega]\right) \right.$$
$$\sin[\alpha]^2 \sin[t \omega] + M0^2 \sin[\alpha]^2 \sin[t \omega]^2$$
$$\left.\left.\left(4 \omega \sin[2 t \omega] + 2 \omega \sin[2 \alpha - 2 t \omega] - 2 \omega \sin[2 \alpha + 2 t \omega]\right)\right)\right) /$$
$$\left(16 \left(M0^2 \left(6 + 2 \cos[2 \alpha] - 2 \cos[2 t \omega] + \cos[2 \alpha - 2 t \omega] + \cos[2 \alpha + 2 t \omega]\right) \right.\right.$$
$$\left.\left.\sin[\alpha]^2 \sin[t \omega]^2\right)^{3/2}\right) -$$
$$\left(\sqrt{\left(\frac{1}{1 + \cos[2 \alpha]} \left(-2 + 4 M0 - 2 \cos[2 \alpha] - 2 M0 \cos[2 t \omega] + M0 \cos[2 \alpha - 2 t \omega] + \right.\right.\right.}$$
$$M0 \cos[2 \alpha + 2 t \omega] + 2 \sqrt{2} \sqrt{\left(M0^2 \left(6 + 2 \cos[2 \alpha] - 2 \cos[2 t \omega] + \right.\right.}$$
$$\left.\left.\left.\left.\cos[2 \alpha - 2 t \omega] + \cos[2 \alpha + 2 t \omega]\right) \sin[\alpha]^2 \sin[t \omega]^2\right)\right)\right)$$
$$\left(-4 M0 + 2 M0 \cos[2 t \omega] - M0 \cos[2 \alpha - 2 t \omega] - M0 \cos[2 \alpha + 2 t \omega] + \right.$$
$$2 M0 \cos[\alpha - t \omega]^2 \sec[\alpha]^2 + 2 M0 \cos[2 \alpha] \cos[\alpha - t \omega]^2 \sec[\alpha]^2 +$$
$$2 M0 \sec[\alpha]^2 \sin[t \omega]^2 + 2 M0 \cos[2 \alpha] \sec[\alpha]^2 \sin[t \omega]^2 + 2 \sqrt{2}$$
$$\left.\sqrt{M0^2 \left(6 + 2 \cos[2 \alpha] - 2 \cos[2 t \omega] + \cos[2 \alpha - 2 t \omega] + \cos[2 \alpha + 2 t \omega]\right) \sin[\alpha]^2 \sin[t \omega]^2}\right)$$
$$\left(2 M0^2 \omega \cos[t \omega] \left(6 + 2 \cos[2 \alpha] - 2 \cos[2 t \omega] + \cos[2 \alpha - 2 t \omega] + \cos[2 \alpha + 2 t \omega]\right) \right.$$
$$\sin[\alpha]^2 \sin[t \omega] + M0^2 \sin[\alpha]^2 \sin[t \omega]^2$$
$$\left.\left.\left(4 \omega \sin[2 t \omega] + 2 \omega \sin[2 \alpha - 2 t \omega] - 2 \omega \sin[2 \alpha + 2 t \omega]\right)\right)\right) / \left(16 \right.$$
$$\left.\left(M0^2 \left(6 + 2 \cos[2 \alpha] - 2 \cos[2 t \omega] + \cos[2 \alpha - 2 t \omega] + \cos[2 \alpha + 2 t \omega]\right) \sin[\alpha]^2 \sin[t \omega]^2\right)^{3/2}\right) +$$
$$\left(\left(4 M0 - 2 M0 \cos[2 t \omega] + M0 \cos[2 \alpha - 2 t \omega] + M0 \cos[2 \alpha + 2 t \omega] - \right.\right.$$
$$2 M0 \cos[\alpha - t \omega]^2 \sec[\alpha]^2 - 2 M0 \cos[2 \alpha] \cos[\alpha - t \omega]^2 \sec[\alpha]^2 -$$
$$2 M0 \sec[\alpha]^2 \sin[t \omega]^2 - 2 M0 \cos[2 \alpha] \sec[\alpha]^2 \sin[t \omega]^2 + 2 \sqrt{2}$$

$$\sqrt{M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2}\Big)$$

$$\Big(4\,M0\,\omega\,\text{Sin}[2\,t\,\omega]+2\,M0\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-2\,M0\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]-$$

$$\Big(\sqrt{2}\,\Big(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)$$

$$\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]+M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2$$

$$\left(4\,\omega\,\text{Sin}[2\,t\,\omega]+2\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-2\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]\right)\Big)\Big)\Big/$$

$$\Big(\sqrt{M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2}$$

$$\Big)\Big)\Big)\Big/\Big(16\,\left(1+\text{Cos}[2\,\alpha]\right)$$

$$\sqrt{M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2}$$

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

$$M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\,\sqrt{2}\,\sqrt{\Big(M0^2\,\Big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+$$

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

$$\Big(\Big(-4\,M0+2\,M0\,\text{Cos}[2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\,M0\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+$$

$$2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+$$

$$2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\,\sqrt{2}$$

$$\sqrt{M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2}\Big)$$

$$\Big(4\,M0\,\omega\,\text{Sin}[2\,t\,\omega]+2\,M0\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-2\,M0\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]+$$

$$\Big(\sqrt{2}\,\Big(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)$$

$$\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]+M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2$$

$$\left(4\,\omega\,\text{Sin}[2\,t\,\omega]+2\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-2\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]\right)\Big)\Big)\Big/$$

$$\Big(\sqrt{M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2}$$

$$\Big)\Big)\Big)\Big/\Big(16\,\left(1+\text{Cos}[2\,\alpha]\right)$$

$$\sqrt{M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2}$$

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

$$M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\,\sqrt{2}\,\sqrt{\Big(M0^2\,\Big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+$$

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

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

$$M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\,\sqrt{2}\,\sqrt{\Big(M0^2\,\Big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+$$

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

```
      (-4 M0 ω Cos[t ω] Sec[α]^2 Sin[t ω] - 4 M0 ω Cos[2 α] Cos[t ω] Sec[α]^2 Sin[t ω] +
        4 M0 ω Sin[2 t ω] + 2 M0 ω Sin[2 α - 2 t ω] - 4 M0 ω Cos[α - t ω] Sec[α]^2 Sin[α - t ω] -
        4 M0 ω Cos[2 α] Cos[α - t ω] Sec[α]^2 Sin[α - t ω] -
        2 M0 ω Sin[2 α + 2 t ω] + (Sqrt[2] (2 M0^2 ω Cos[t ω]
              (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω] +
            M0^2 Sin[α]^2 Sin[t ω]^2 (4 ω Sin[2 t ω] + 2 ω Sin[2 α - 2 t ω] - 2 ω Sin[2 α + 2 t ω])))/
       (Sqrt[M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2]
        ))))/
    (8 Sqrt[M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2]) +
   (Sqrt[(1/(1 + Cos[2 α])) (-2 + 4 M0 - 2 Cos[2 α] - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] +
          M0 Cos[2 α + 2 t ω] + 2 Sqrt[2] Sqrt[M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
              Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2])])
      (4 M0 ω Cos[t ω] Sec[α]^2 Sin[t ω] + 4 M0 ω Cos[2 α] Cos[t ω] Sec[α]^2 Sin[t ω] -
        4 M0 ω Sin[2 t ω] - 2 M0 ω Sin[2 α - 2 t ω] + 4 M0 ω Cos[α - t ω] Sec[α]^2 Sin[α - t ω] +
        4 M0 ω Cos[2 α] Cos[α - t ω] Sec[α]^2 Sin[α - t ω] +
        2 M0 ω Sin[2 α + 2 t ω] + (Sqrt[2] (2 M0^2 ω Cos[t ω]
              (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω] +
            M0^2 Sin[α]^2 Sin[t ω]^2 (4 ω Sin[2 t ω] + 2 ω Sin[2 α - 2 t ω] - 2 ω Sin[2 α + 2 t ω])))/
       (Sqrt[M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2]
        ))))/
    (8 Sqrt[M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2])

DergMatrix[α_, ω_, t_, M0_] := {{DergMatrix11[α, ω, t, M0], DergMatrix12[α, ω, t, M0]},
  {DergMatrix21[α, ω, t, M0], DergMatrix22[α, ω, t, M0]}}
L11[α_, ω_, t_, M0_, s_, r_, Θ_] :=
 -(1/M0) 2 i Sec[α] Sin[t ω]^2 (s + ((Sqrt[(1/(1 + Cos[2 α])) (-2 + 4 M0 - 2 Cos[2 α] - 2 M0 Cos[2 t ω] +
            M0 Cos[2 α - 2 t ω] + M0 Cos[2 α + 2 t ω] - 2 Sqrt[2] Sqrt[M0^2 (6 + 2 Cos[2 α] -
              2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2])])
        (4 M0 - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] + M0 Cos[2 α + 2 t ω] -
          2 M0 Cos[α - t ω]^2 Sec[α]^2 - 2 M0 Cos[2 α] Cos[α - t ω]^2 Sec[α]^2 - 2 M0 Sec[α]^2
```

$$\begin{aligned}
&\text{Sin}[t\,\omega]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - \right.\right.}\\
&\qquad \left.\left.2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Bigg)\Bigg/\\
&\left(8\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\right.}\right.\\
&\qquad \left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right) +\\
&\left(\sqrt{\left(\frac{1}{1 + \text{Cos}[2\,\alpha]}\,\left(-2 + 4\,M0 - 2\,\text{Cos}[2\,\alpha] - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + \right.\right.\right.\\
&\qquad \left.\left.\left.M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] + 2\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \right.\right.\right.\right.\right.\\
&\qquad\qquad \left.\left.\left.\left.\left.\text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\right)\\
&\left(-4\,M0 + 2\,M0\,\text{Cos}[2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] + \right.\\
&\quad 2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,M0\,\text{Sec}[\alpha]^2\\
&\quad \text{Sin}[t\,\omega]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - \right.\right.}\\
&\qquad \left.\left.2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Bigg)\Bigg/\\
&\left(8\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\right.}\right.\\
&\qquad \left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\Bigg)\\
&\left(s\,\left(\left(\left(-4\,M0 + 2\,M0\,\text{Cos}[2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] + 2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\right.\right.\right.\right.\\
&\qquad \text{Sec}[\alpha]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 +\\
&\qquad 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\sqrt{2}\,\sqrt{\left(-M0^2\,\left(-6 - 2\,\text{Cos}[2\,\alpha] + \right.\right.}\\
&\qquad\qquad \left.\left.\left.2\,\text{Cos}[2\,t\,\omega] - \text{Cos}[2\,\alpha - 2\,t\,\omega] - \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\\
&\quad \sqrt{\left(\frac{1}{1 + \text{Cos}[2\,\alpha]}\,\left(-2 + 4\,M0 - 2\,\text{Cos}[2\,\alpha] - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + \right.\right.}\\
&\qquad \left.\left.M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \right.\right.\right.\right.\\
&\qquad\qquad \left.\left.\left.\left.\text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\right)\Bigg)\Bigg/\\
&\left(8\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\right.}\right.\\
&\qquad \left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right) +\\
&\left(\left(4\,M0 - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - \right.\right.\\
&\quad 2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Sec}[\alpha]^2\\
&\quad \text{Sin}[t\,\omega]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\sqrt{2}\,\sqrt{\left(-M0^2\,\left(-6 - 2\,\text{Cos}[2\,\alpha] + \right.\right.}\\
&\qquad \left.\left.2\,\text{Cos}[2\,t\,\omega] - \text{Cos}[2\,\alpha - 2\,t\,\omega] - \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Bigg)\\
&\quad \sqrt{\left(\frac{1}{1 + \text{Cos}[2\,\alpha]}\,\left(-2 + 4\,M0 - 2\,\text{Cos}[2\,\alpha] - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + \right.\right.}\\
&\qquad \left.\left.M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] + 2\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \right.\right.\right.\right.\\
&\qquad\qquad \left.\left.\left.\left.\text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\right)\Bigg)\Bigg/\\
&\left(8\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\right.}\right.\\
&\qquad \left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\Bigg) +
\end{aligned}$$

$$e^{-i\theta}\, r \left(\left(i \cos[\alpha] \cot[\alpha] \csc[t\omega]^2 \left(-4 M0 + 2 M0 \cos[2 t\omega] - M0 \cos[2\alpha - 2 t\omega] - M0 \cos[2\alpha + 2 t\omega] + 2 M0 \cos[\alpha - t\omega]^2 \sec[\alpha]^2 + 2 M0 \cos[2\alpha] \cos[\alpha - t\omega]^2 \sec[\alpha]^2 + 2 M0 \sec[\alpha]^2 \sin[t\omega]^2 + 2 M0 \cos[2\alpha] \sec[\alpha]^2 \sin[t\omega]^2 + 2\sqrt{2} \sqrt{\left(-M0^2 \left(-6 - 2\cos[2\alpha] + 2\cos[2 t\omega] - \cos[2\alpha - 2 t\omega] - \cos[2\alpha + 2 t\omega] \right) \sin[\alpha]^2 \sin[t\omega]^2 \right)} \right) \right.$$

$$\sqrt{\left(\frac{1}{1 + \cos[2\alpha]} \left(-2 + 4 M0 - 2\cos[2\alpha] - 2 M0 \cos[2 t\omega] + M0 \cos[2\alpha - 2 t\omega] + M0 \cos[2\alpha + 2 t\omega] - 2\sqrt{2} \sqrt{\left(M0^2 \left(6 + 2\cos[2\alpha] - 2\cos[2 t\omega] + \cos[2\alpha - 2 t\omega] + \cos[2\alpha + 2 t\omega] \right) \sin[\alpha]^2 \sin[t\omega]^2 \right)} \right) \right)}$$

$$\left(4 M0 - 2 M0 \cos[2 t\omega] + M0 \cos[2\alpha - 2 t\omega] + M0 \cos[2\alpha + 2 t\omega] - 2 M0 \cos[\alpha - t\omega]^2 \sec[\alpha]^2 - 2 M0 \cos[2\alpha] \cos[\alpha - t\omega]^2 \sec[\alpha]^2 - 2 M0 \sec[\alpha]^2 \sin[t\omega]^2 - 2 M0 \cos[2\alpha] \sec[\alpha]^2 \sin[t\omega]^2 + 2\sqrt{2} \sqrt{\left(M0^2 \left(6 + 2\cos[2\alpha] - 2\cos[2 t\omega] + \cos[2\alpha - 2 t\omega] + \cos[2\alpha + 2 t\omega] \right) \sin[\alpha]^2 \sin[t\omega]^2 \right)} \right) \Big) \Big/$$

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

$$\left(i \cos[\alpha] \cot[\alpha] \csc[t\omega]^2 \left(4 M0 - 2 M0 \cos[2 t\omega] + M0 \cos[2\alpha - 2 t\omega] + M0 \cos[2\alpha + 2 t\omega] - 2 M0 \cos[\alpha - t\omega]^2 \sec[\alpha]^2 - 2 M0 \cos[2\alpha] \cos[\alpha - t\omega]^2 \sec[\alpha]^2 - 2 M0 \sec[\alpha]^2 \sin[t\omega]^2 - 2 M0 \cos[2\alpha] \sec[\alpha]^2 \sin[t\omega]^2 + 2\sqrt{2} \sqrt{\left(-M0^2 \left(-6 - 2\cos[2\alpha] + 2\cos[2 t\omega] - \cos[2\alpha - 2 t\omega] - \cos[2\alpha + 2 t\omega] \right) \sin[\alpha]^2 \sin[t\omega]^2 \right)} \right) \right.$$

$$\sqrt{\left(\frac{1}{1 + \cos[2\alpha]} \left(-2 + 4 M0 - 2\cos[2\alpha] - 2 M0 \cos[2 t\omega] + M0 \cos[2\alpha - 2 t\omega] + M0 \cos[2\alpha + 2 t\omega] + 2\sqrt{2} \sqrt{\left(M0^2 \left(6 + 2\cos[2\alpha] - 2\cos[2 t\omega] + \cos[2\alpha - 2 t\omega] + \cos[2\alpha + 2 t\omega] \right) \sin[\alpha]^2 \sin[t\omega]^2 \right)} \right) \right)}$$

$$\left(-4 M0 + 2 M0 \cos[2 t\omega] - M0 \cos[2\alpha - 2 t\omega] - M0 \cos[2\alpha + 2 t\omega] + 2 M0 \cos[\alpha - t\omega]^2 \sec[\alpha]^2 + 2 M0 \cos[2\alpha] \cos[\alpha - t\omega]^2 \sec[\alpha]^2 + 2 M0 \sec[\alpha]^2 \sin[t\omega]^2 + 2 M0 \cos[2\alpha] \sec[\alpha]^2 \sin[t\omega]^2 + 2\sqrt{2} \sqrt{\left(M0^2 \left(6 + 2\cos[2\alpha] - 2\cos[2 t\omega] + \cos[2\alpha - 2 t\omega] + \cos[2\alpha + 2 t\omega] \right) \sin[\alpha]^2 \sin[t\omega]^2 \right)} \right) \Big) \Big/$$

$$\left(32 M0 \left(1 + \cos[2\alpha] \right) \sqrt{\left(M0^2 \left(6 + 2\cos[2\alpha] - 2\cos[2 t\omega] + \cos[2\alpha - 2 t\omega] + \cos[2\alpha + 2 t\omega] \right) \sin[\alpha]^2 \sin[t\omega]^2 \right)} \right) \Big) \Big) +$$

$$\left(\left(i \cos[\alpha] \cot[\alpha] \csc[t\omega]^2 \left(-4 M0 + 2 M0 \cos[2 t\omega] - M0 \cos[2\alpha - 2 t\omega] - M0 \cos[2\alpha + 2 t\omega] + 2 M0 \cos[\alpha - t\omega]^2 \sec[\alpha]^2 + 2 M0 \cos[2\alpha] \cos[\alpha - t\omega]^2 \sec[\alpha]^2 + 2 M0 \sec[\alpha]^2 \sin[t\omega]^2 + 2 M0 \cos[2\alpha] \sec[\alpha]^2 \sin[t\omega]^2 + 2\sqrt{2} \sqrt{\left(-M0^2 \left(-6 - 2\cos[2\alpha] + 2\cos[2 t\omega] - \cos[2\alpha - 2 t\omega] - \cos[2\alpha + 2 t\omega] \right) \sin[\alpha]^2 \sin[t\omega]^2 \right)} \right) \right.$$

$$\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4\,M0-2\cos[2\alpha]-2\,M0\cos[2\,t\,\omega]+M0\cos[2\alpha-2\,t\,\omega]+\right.\right.}$$
$$M0\cos[2\alpha+2\,t\,\omega]-2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\right.\right.}$$
$$\left.\left.\left.\left.\cos[2\alpha-2\,t\,\omega]+\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)\Bigg)$$
$$\Big(4\,M0-2\,M0\cos[2\,t\,\omega]+M0\cos[2\alpha-2\,t\,\omega]+M0\cos[2\alpha+2\,t\,\omega]-$$
$$2\,M0\cos[\alpha-t\,\omega]^2\sec[\alpha]^2-2\,M0\cos[2\alpha]\cos[\alpha-t\,\omega]^2\sec[\alpha]^2-$$
$$2\,M0\sec[\alpha]^2\sin[t\,\omega]^2-2\,M0\cos[2\alpha]\sec[\alpha]^2\sin[t\,\omega]^2+$$
$$2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\cos[2\alpha-2\,t\,\omega]+\right.\right.}$$
$$\left.\left.\left.\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)\Big/$$
$$\Big(32\,M0\left(1+\cos[2\alpha]\right)\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\cos[2\alpha-2\,t\,\omega]+\right.\right.}$$
$$\left.\left.\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)\Big)-$$
$$\Bigg(i\cos[\alpha]\cot[\alpha]\csc[t\,\omega]^2\left(4\,M0-2\,M0\cos[2\,t\,\omega]+M0\cos[2\alpha-2\,t\,\omega]+\right.$$
$$M0\cos[2\alpha+2\,t\,\omega]-2\,M0\cos[\alpha-t\,\omega]^2\sec[\alpha]^2-$$
$$2\,M0\cos[2\alpha]\cos[\alpha-t\,\omega]^2\sec[\alpha]^2-2\,M0\sec[\alpha]^2\sin[t\,\omega]^2-$$
$$2\,M0\cos[2\alpha]\sec[\alpha]^2\sin[t\,\omega]^2+2\sqrt{2}\,\sqrt{\left(-M0^2\left(-6-2\cos[2\alpha]+\right.\right.}$$
$$\left.\left.\left.2\cos[2\,t\,\omega]-\cos[2\alpha-2\,t\,\omega]-\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)$$
$$\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4\,M0-2\cos[2\alpha]-2\,M0\cos[2\,t\,\omega]+M0\cos[2\alpha-2\,t\,\omega]+\right.\right.}$$
$$M0\cos[2\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\right.\right.}$$
$$\left.\left.\left.\left.\cos[2\alpha-2\,t\,\omega]+\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)\Bigg)$$
$$\Big(-4\,M0+2\,M0\cos[2\,t\,\omega]-M0\cos[2\alpha-2\,t\,\omega]-M0\cos[2\alpha+2\,t\,\omega]+$$
$$2\,M0\cos[\alpha-t\,\omega]^2\sec[\alpha]^2+2\,M0\cos[2\alpha]\cos[\alpha-t\,\omega]^2\sec[\alpha]^2+$$
$$2\,M0\sec[\alpha]^2\sin[t\,\omega]^2+2\,M0\cos[2\alpha]\sec[\alpha]^2\sin[t\,\omega]^2+$$
$$2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\cos[2\alpha-2\,t\,\omega]+\right.\right.}$$
$$\left.\left.\left.\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)\Big)\Big/$$
$$\Big(32\,M0\left(1+\cos[2\alpha]\right)\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\cos[2\alpha-2\,t\,\omega]+\right.\right.}$$
$$\left.\left.\left.\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)\Bigg)$$
$$\Bigg(e^{i\,\theta}\,r\left(\left(\left(-4\,M0+2\,M0\cos[2\,t\,\omega]-M0\cos[2\alpha-2\,t\,\omega]-M0\cos[2\alpha+2\,t\,\omega]+\right.\right.\right.$$
$$2\,M0\cos[\alpha-t\,\omega]^2\sec[\alpha]^2+2\,M0\cos[2\alpha]\cos[\alpha-t\,\omega]^2\sec[\alpha]^2+2\,M0\sec[\alpha]^2$$
$$\sin[t\,\omega]^2+2\,M0\cos[2\alpha]\sec[\alpha]^2\sin[t\,\omega]^2+2\sqrt{2}\,\sqrt{\left(-M0^2\left(-6-2\cos[2\alpha]+\right.\right.}$$
$$\left.\left.\left.\left.2\cos[2\,t\,\omega]-\cos[2\alpha-2\,t\,\omega]-\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)$$
$$\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4\,M0-2\cos[2\alpha]-2\,M0\cos[2\,t\,\omega]+M0\cos[2\alpha-2\,t\,\omega]+\right.\right.}$$
$$M0\cos[2\alpha+2\,t\,\omega]-2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\right.\right.}$$
$$\left.\left.\left.\left.\cos[2\alpha-2\,t\,\omega]+\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)\Bigg)\Big/$$

$$\left(8\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)}+\left(\left(4M0-2M0\cos[2t\omega]+M0\cos[2\alpha-2t\omega]+M0\cos[2\alpha+2t\omega]-2M0\cos[\alpha-t\omega]^2\sec[\alpha]^2-2M0\cos[2\alpha]\cos[\alpha-t\omega]^2\sec[\alpha]^2-2M0\sec[\alpha]^2\sin[t\omega]^2-2M0\cos[2\alpha]\sec[\alpha]^2\sin[t\omega]^2+2\sqrt{2}\sqrt{\left(-M0^2\left(-6-2\cos[2\alpha]+2\cos[2t\omega]-\cos[2\alpha-2t\omega]-\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)}\right)\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4M0-2\cos[2\alpha]-2M0\cos[2t\omega]+M0\cos[2\alpha-2t\omega]+M0\cos[2\alpha+2t\omega]+2\sqrt{2}\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)}\right)\right)}\Big/\left(8\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)}\right)+s\left(\left(i\cos[\alpha]\cot[\alpha]\csc[t\omega]^2\left(-4M0+2M0\cos[2t\omega]-M0\cos[2\alpha-2t\omega]-M0\cos[2\alpha+2t\omega]+2M0\cos[\alpha-t\omega]^2\sec[\alpha]^2+2M0\cos[2\alpha]\cos[\alpha-t\omega]^2\sec[\alpha]^2+2M0\sec[\alpha]^2\sin[t\omega]^2+2M0\cos[2\alpha]\sec[\alpha]^2\sin[t\omega]^2+2\sqrt{2}\sqrt{\left(-M0^2\left(-6-2\cos[2\alpha]+2\cos[2t\omega]-\cos[2\alpha-2t\omega]-\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)}\right)\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4M0-2\cos[2\alpha]-2M0\cos[2t\omega]+M0\cos[2\alpha-2t\omega]+M0\cos[2\alpha+2t\omega]-2\sqrt{2}\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)}\right)\right)}+\left(4M0-2M0\cos[2t\omega]+M0\cos[2\alpha-2t\omega]+M0\cos[2\alpha+2t\omega]-2M0\cos[\alpha-t\omega]^2\sec[\alpha]^2-2M0\cos[2\alpha]\cos[\alpha-t\omega]^2\sec[\alpha]^2-2M0\sec[\alpha]^2\sin[t\omega]^2-2M0\cos[2\alpha]\sec[\alpha]^2\sin[t\omega]^2+2\sqrt{2}\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)}\right)\Big/\left(32M0\left(1+\cos[2\alpha]\right)\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)}-\left(i\cos[\alpha]\cot[\alpha]\csc[t\omega]^2\left(4M0-2M0\cos[2t\omega]+M0\cos[2\alpha-2t\omega]+M0\cos[2\alpha+2t\omega]-2M0\cos[\alpha-t\omega]^2\sec[\alpha]^2-2M0\cos[2\alpha]\cos[\alpha-t\omega]^2\sec[\alpha]^2-2M0\sec[\alpha]^2\sin[t\omega]^2-2M0\cos[2\alpha]\sec[\alpha]^2\sin[t\omega]^2+2\sqrt{2}\sqrt{\left(-M0^2\left(-6-2\cos[2\alpha]+2\cos[2t\omega]-\cos[2\alpha-2t\omega]-\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)}\right)\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4M0-2\cos[2\alpha]-2M0\cos[2t\omega]+M0\cos[2\alpha-2t\omega]+M0\cos[2\alpha+2t\omega]+2\sqrt{2}\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\right.\right.\right.\right.$$

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

$$(-4\,\mathrm{M0}+2\,\mathrm{M0}\,\mathrm{Cos}[2t\omega]-\mathrm{M0}\,\mathrm{Cos}[2\alpha-2t\omega]-\mathrm{M0}\,\mathrm{Cos}[2\alpha+2t\omega]+$$
$$2\,\mathrm{M0}\,\mathrm{Cos}[\alpha-t\omega]^2\,\mathrm{Sec}[\alpha]^2+2\,\mathrm{M0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Cos}[\alpha-t\omega]^2\,\mathrm{Sec}[\alpha]^2+2\,\mathrm{M0}\,\mathrm{Sec}[\alpha]^2$$
$$\mathrm{Sin}[t\omega]^2+2\,\mathrm{M0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\omega]^2+2\sqrt{2}\ \surd(\mathrm{M0}^2\,(6+2\,\mathrm{Cos}[2\alpha]-$$
$$2\,\mathrm{Cos}[2t\omega]+\mathrm{Cos}[2\alpha-2t\omega]+\mathrm{Cos}[2\alpha+2t\omega])\ \mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]^2)))\,/$$

$$(32\,\mathrm{M0}\,(1+\mathrm{Cos}[2\alpha])\ \surd(\mathrm{M0}^2\,(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2t\omega]+\mathrm{Cos}[2\alpha-2t\omega]+$$
$$\mathrm{Cos}[2\alpha+2t\omega])\ \mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]^2)))+$$

$$\mathrm{i}\,(((\mathrm{i}\,\mathrm{Cos}[\alpha]\,\mathrm{Cot}[\alpha]\,\mathrm{Csc}[t\omega]^2\,(-4\,\mathrm{M0}+2\,\mathrm{M0}\,\mathrm{Cos}[2t\omega]-\mathrm{M0}\,\mathrm{Cos}[2\alpha-2t\omega]-$$
$$\mathrm{M0}\,\mathrm{Cos}[2\alpha+2t\omega]+2\,\mathrm{M0}\,\mathrm{Cos}[\alpha-t\omega]^2\,\mathrm{Sec}[\alpha]^2+$$
$$2\,\mathrm{M0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Cos}[\alpha-t\omega]^2\,\mathrm{Sec}[\alpha]^2+2\,\mathrm{M0}\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\omega]^2+$$
$$2\,\mathrm{M0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\omega]^2+2\sqrt{2}\ \surd(-\mathrm{M0}^2\,(-6-2\,\mathrm{Cos}[2\alpha]+$$
$$2\,\mathrm{Cos}[2t\omega]-\mathrm{Cos}[2\alpha-2t\omega]-\mathrm{Cos}[2\alpha+2t\omega])\ \mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]^2))$$

$$\surd\Big(\frac{1}{1+\mathrm{Cos}[2\alpha]}\ (-2+4\,\mathrm{M0}-2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{M0}\,\mathrm{Cos}[2t\omega]+\mathrm{M0}\,\mathrm{Cos}[2\alpha-2t\omega]+$$
$$\mathrm{M0}\,\mathrm{Cos}[2\alpha+2t\omega]-2\sqrt{2}\ \surd(\mathrm{M0}^2\,(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2t\omega]+$$
$$\mathrm{Cos}[2\alpha-2t\omega]+\mathrm{Cos}[2\alpha+2t\omega])\ \mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]^2))\Big)$$

$$(4\,\mathrm{M0}-2\,\mathrm{M0}\,\mathrm{Cos}[2t\omega]+\mathrm{M0}\,\mathrm{Cos}[2\alpha-2t\omega]+\mathrm{M0}\,\mathrm{Cos}[2\alpha+2t\omega]-$$
$$2\,\mathrm{M0}\,\mathrm{Cos}[\alpha-t\omega]^2\,\mathrm{Sec}[\alpha]^2-2\,\mathrm{M0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Cos}[\alpha-t\omega]^2\,\mathrm{Sec}[\alpha]^2-2\,\mathrm{M0}\,\mathrm{Sec}[\alpha]^2$$
$$\mathrm{Sin}[t\omega]^2-2\,\mathrm{M0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\omega]^2+2\sqrt{2}\ \surd(\mathrm{M0}^2\,(6+2\,\mathrm{Cos}[2\alpha]-$$
$$2\,\mathrm{Cos}[2t\omega]+\mathrm{Cos}[2\alpha-2t\omega]+\mathrm{Cos}[2\alpha+2t\omega])\ \mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]^2)))\,/$$

$$(32\,\mathrm{M0}\,(1+\mathrm{Cos}[2\alpha])\ \surd(\mathrm{M0}^2\,(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2t\omega]+\mathrm{Cos}[2\alpha-2t\omega]+$$
$$\mathrm{Cos}[2\alpha+2t\omega])\ \mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]^2))-$$

$$(\mathrm{i}\,\mathrm{Cos}[\alpha]\,\mathrm{Cot}[\alpha]\,\mathrm{Csc}[t\omega]^2\,(4\,\mathrm{M0}-2\,\mathrm{M0}\,\mathrm{Cos}[2t\omega]+\mathrm{M0}\,\mathrm{Cos}[2\alpha-2t\omega]+$$
$$\mathrm{M0}\,\mathrm{Cos}[2\alpha+2t\omega]-2\,\mathrm{M0}\,\mathrm{Cos}[\alpha-t\omega]^2\,\mathrm{Sec}[\alpha]^2-$$
$$2\,\mathrm{M0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Cos}[\alpha-t\omega]^2\,\mathrm{Sec}[\alpha]^2-2\,\mathrm{M0}\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\omega]^2-$$
$$2\,\mathrm{M0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\omega]^2+2\sqrt{2}\ \surd(-\mathrm{M0}^2\,(-6-2\,\mathrm{Cos}[2\alpha]+$$
$$2\,\mathrm{Cos}[2t\omega]-\mathrm{Cos}[2\alpha-2t\omega]-\mathrm{Cos}[2\alpha+2t\omega])\ \mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]^2))$$

$$\surd\Big(\frac{1}{1+\mathrm{Cos}[2\alpha]}\ (-2+4\,\mathrm{M0}-2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{M0}\,\mathrm{Cos}[2t\omega]+\mathrm{M0}\,\mathrm{Cos}[2\alpha-2t\omega]+$$
$$\mathrm{M0}\,\mathrm{Cos}[2\alpha+2t\omega]+2\sqrt{2}\ \surd(\mathrm{M0}^2\,(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2t\omega]+$$
$$\mathrm{Cos}[2\alpha-2t\omega]+\mathrm{Cos}[2\alpha+2t\omega])\ \mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]^2))\Big)$$

$$(-4\,\mathrm{M0}+2\,\mathrm{M0}\,\mathrm{Cos}[2t\omega]-\mathrm{M0}\,\mathrm{Cos}[2\alpha-2t\omega]-\mathrm{M0}\,\mathrm{Cos}[2\alpha+2t\omega]+$$
$$2\,\mathrm{M0}\,\mathrm{Cos}[\alpha-t\omega]^2\,\mathrm{Sec}[\alpha]^2+2\,\mathrm{M0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Cos}[\alpha-t\omega]^2\,\mathrm{Sec}[\alpha]^2+2\,\mathrm{M0}\,\mathrm{Sec}[\alpha]^2$$
$$\mathrm{Sin}[t\omega]^2+2\,\mathrm{M0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\omega]^2+2\sqrt{2}\ \surd(\mathrm{M0}^2\,(6+2\,\mathrm{Cos}[2\alpha]-$$
$$2\,\mathrm{Cos}[2t\omega]+\mathrm{Cos}[2\alpha-2t\omega]+\mathrm{Cos}[2\alpha+2t\omega])\ \mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]^2)))\,/$$

$$\left(32\,M0\,\left(1+\text{Cos}[2\,\alpha]\right)\sqrt{\left(M0^{2}\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^{2}\,\text{Sin}[t\,\omega]^{2}\right)}\right)$$

$$\Bigg(-\Bigg(\Bigg(\Bigg(-4\,M0+2\,M0\,\text{Cos}[2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\,M0\,\text{Cos}[\alpha-t\,\omega]^{2}\,\text{Sec}[\alpha]^{2}+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^{2}\,\text{Sec}[\alpha]^{2}+2\,M0\,\text{Sec}[\alpha]^{2}\,\text{Sin}[t\,\omega]^{2}+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^{2}\,\text{Sin}[t\,\omega]^{2}+2\,\sqrt{2}\,\sqrt{\left(-M0^{2}\,\left(-6-2\,\text{Cos}[2\,\alpha]+2\,\text{Cos}[2\,t\,\omega]-\text{Cos}[2\,\alpha-2\,t\,\omega]-\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^{2}\,\text{Sin}[t\,\omega]^{2}\right)}\Bigg)$$

$$\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\,\sqrt{2}\,\sqrt{\left(M0^{2}\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^{2}\,\text{Sin}[t\,\omega]^{2}\right)}\right)\right)}$$

$$\left(2\,M0^{2}\,\omega\,\text{Cos}[t\,\omega]\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^{2}\,\text{Sin}[t\,\omega]+M0^{2}\,\text{Sin}[\alpha]^{2}\,\text{Sin}[t\,\omega]^{2}\left(4\,\omega\,\text{Sin}[2\,t\,\omega]+2\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-2\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]\right)\right)\Bigg)\Big/$$

$$\left(16\,\left(M0^{2}\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^{2}\,\text{Sin}[t\,\omega]^{2}\right)^{3/2}\right)\Bigg)-$$

$$\Bigg(\Bigg(4\,M0-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\,M0\,\text{Cos}[\alpha-t\,\omega]^{2}\,\text{Sec}[\alpha]^{2}-2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^{2}\,\text{Sec}[\alpha]^{2}-2\,M0\,\text{Sec}[\alpha]^{2}\,\text{Sin}[t\,\omega]^{2}-2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^{2}\,\text{Sin}[t\,\omega]^{2}+2\,\sqrt{2}\,\sqrt{\left(-M0^{2}\,\left(-6-2\,\text{Cos}[2\,\alpha]+2\,\text{Cos}[2\,t\,\omega]-\text{Cos}[2\,\alpha-2\,t\,\omega]-\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^{2}\,\text{Sin}[t\,\omega]^{2}\right)}\Bigg)$$

$$\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\,\sqrt{2}\,\sqrt{\left(M0^{2}\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^{2}\,\text{Sin}[t\,\omega]^{2}\right)}\right)\right)}$$

$$\left(2\,M0^{2}\,\omega\,\text{Cos}[t\,\omega]\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^{2}\,\text{Sin}[t\,\omega]+M0^{2}\,\text{Sin}[\alpha]^{2}\,\text{Sin}[t\,\omega]^{2}\left(4\,\omega\,\text{Sin}[2\,t\,\omega]+2\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-2\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]\right)\right)\Bigg)\Big/$$

$$\left(16\,\left(M0^{2}\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^{2}\,\text{Sin}[t\,\omega]^{2}\right)^{3/2}\right)+$$

$$\Bigg(\Bigg(-4\,M0+2\,M0\,\text{Cos}[2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\,M0\,\text{Cos}[\alpha-t\,\omega]^{2}\,\text{Sec}[\alpha]^{2}+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^{2}\,\text{Sec}[\alpha]^{2}+2\,M0\,\text{Sec}[\alpha]^{2}\,\text{Sin}[t\,\omega]^{2}+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^{2}\,\text{Sin}[t\,\omega]^{2}+2\,\sqrt{2}\,\sqrt{\left(-M0^{2}\,\left(-6-2\,\text{Cos}[2\,\alpha]+2\,\text{Cos}[2\,t\,\omega]-\text{Cos}[2\,\alpha-2\,t\,\omega]-\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^{2}\,\text{Sin}[t\,\omega]^{2}\right)}\Bigg)$$

$$\Bigg(4\,M0\,\omega\,\text{Sin}[2\,t\,\omega]+2\,M0\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-2\,M0\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]-$$

$$\Bigg(\sqrt{2}\,\left(2\,M0^{2}\,\omega\,\text{Cos}[t\,\omega]\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.$$

$$\mathrm{Cos}[2\alpha+2t\omega])\ \mathrm{Sin}[\alpha]^2\ \mathrm{Sin}[t\omega]+\mathrm{M0}^2\ \mathrm{Sin}[\alpha]^2\ \mathrm{Sin}[t\omega]^2$$
$$(4\omega\ \mathrm{Sin}[2t\omega]+2\omega\ \mathrm{Sin}[2\alpha-2t\omega]-2\omega\ \mathrm{Sin}[2\alpha+2t\omega])))\ /$$
$$(\surd(\mathrm{M0}^2\ (6+2\ \mathrm{Cos}[2\alpha]-2\ \mathrm{Cos}[2t\omega]+\mathrm{Cos}[2\alpha-2t\omega]+$$
$$\mathrm{Cos}[2\alpha+2t\omega])\ \mathrm{Sin}[\alpha]^2\ \mathrm{Sin}[t\omega]^2))))\ /$$
$$(16\ (1+\mathrm{Cos}[2\alpha])\ \surd(\mathrm{M0}^2\ (6+2\ \mathrm{Cos}[2\alpha]-2\ \mathrm{Cos}[2t\omega]+\mathrm{Cos}[2\alpha-2t\omega]+$$
$$\mathrm{Cos}[2\alpha+2t\omega])\ \mathrm{Sin}[\alpha]^2\ \mathrm{Sin}[t\omega]^2)$$
$$\surd(\frac{1}{1+\mathrm{Cos}[2\alpha]}\ (-2+4\ \mathrm{M0}-2\ \mathrm{Cos}[2\alpha]-2\ \mathrm{M0}\ \mathrm{Cos}[2t\omega]+\mathrm{M0}\ \mathrm{Cos}[2\alpha-2t\omega]+$$
$$\mathrm{M0}\ \mathrm{Cos}[2\alpha+2t\omega]-2\sqrt{2}\ \surd(\mathrm{M0}^2\ (6+2\ \mathrm{Cos}[2\alpha]-2\ \mathrm{Cos}[2t\omega]+$$
$$\mathrm{Cos}[2\alpha-2t\omega]+\mathrm{Cos}[2\alpha+2t\omega])\ \mathrm{Sin}[\alpha]^2\ \mathrm{Sin}[t\omega]^2))))+$$
$$((4\ \mathrm{M0}-2\ \mathrm{M0}\ \mathrm{Cos}[2t\omega]+\mathrm{M0}\ \mathrm{Cos}[2\alpha-2t\omega]+\mathrm{M0}\ \mathrm{Cos}[2\alpha+2t\omega]-2\ \mathrm{M0}$$
$$\mathrm{Cos}[\alpha-t\omega]^2\ \mathrm{Sec}[\alpha]^2-2\ \mathrm{M0}\ \mathrm{Cos}[2\alpha]\ \mathrm{Cos}[\alpha-t\omega]^2\ \mathrm{Sec}[\alpha]^2-2\ \mathrm{M0}\ \mathrm{Sec}[\alpha]^2$$
$$\mathrm{Sin}[t\omega]^2-2\ \mathrm{M0}\ \mathrm{Cos}[2\alpha]\ \mathrm{Sec}[\alpha]^2\ \mathrm{Sin}[t\omega]^2+2\sqrt{2}\ \surd(-\mathrm{M0}^2\ (-6-2\ \mathrm{Cos}[2\alpha]+$$
$$2\ \mathrm{Cos}[2t\omega]-\mathrm{Cos}[2\alpha-2t\omega]-\mathrm{Cos}[2\alpha+2t\omega])\ \mathrm{Sin}[\alpha]^2\ \mathrm{Sin}[t\omega]^2))$$
$$(4\ \mathrm{M0}\ \omega\ \mathrm{Sin}[2t\omega]+2\ \mathrm{M0}\ \omega\ \mathrm{Sin}[2\alpha-2t\omega]-2\ \mathrm{M0}\ \omega\ \mathrm{Sin}[2\alpha+2t\omega]+$$
$$(\sqrt{2}\ (2\ \mathrm{M0}^2\ \omega\ \mathrm{Cos}[t\omega]\ (6+2\ \mathrm{Cos}[2\alpha]-2\ \mathrm{Cos}[2t\omega]+\mathrm{Cos}[2\alpha-2t\omega]+$$
$$\mathrm{Cos}[2\alpha+2t\omega])\ \mathrm{Sin}[\alpha]^2\ \mathrm{Sin}[t\omega]+\mathrm{M0}^2\ \mathrm{Sin}[\alpha]^2\ \mathrm{Sin}[t\omega]^2$$
$$(4\omega\ \mathrm{Sin}[2t\omega]+2\omega\ \mathrm{Sin}[2\alpha-2t\omega]-2\omega\ \mathrm{Sin}[2\alpha+2t\omega])))\ /$$
$$(\surd(\mathrm{M0}^2\ (6+2\ \mathrm{Cos}[2\alpha]-2\ \mathrm{Cos}[2t\omega]+\mathrm{Cos}[2\alpha-2t\omega]+$$
$$\mathrm{Cos}[2\alpha+2t\omega])\ \mathrm{Sin}[\alpha]^2\ \mathrm{Sin}[t\omega]^2))))\ /$$
$$(16\ (1+\mathrm{Cos}[2\alpha])\ \surd(\mathrm{M0}^2\ (6+2\ \mathrm{Cos}[2\alpha]-2\ \mathrm{Cos}[2t\omega]+\mathrm{Cos}[2\alpha-2t\omega]+$$
$$\mathrm{Cos}[2\alpha+2t\omega])\ \mathrm{Sin}[\alpha]^2\ \mathrm{Sin}[t\omega]^2)$$
$$\surd(\frac{1}{1+\mathrm{Cos}[2\alpha]}\ (-2+4\ \mathrm{M0}-2\ \mathrm{Cos}[2\alpha]-2\ \mathrm{M0}\ \mathrm{Cos}[2t\omega]+\mathrm{M0}\ \mathrm{Cos}[2\alpha-2t\omega]+$$
$$\mathrm{M0}\ \mathrm{Cos}[2\alpha+2t\omega]+2\sqrt{2}\ \surd(\mathrm{M0}^2\ (6+2\ \mathrm{Cos}[2\alpha]-2\ \mathrm{Cos}[2t\omega]+$$
$$\mathrm{Cos}[2\alpha-2t\omega]+\mathrm{Cos}[2\alpha+2t\omega])\ \mathrm{Sin}[\alpha]^2\ \mathrm{Sin}[t\omega]^2))))+$$
$$(\surd(\frac{1}{1+\mathrm{Cos}[2\alpha]}\ (-2+4\ \mathrm{M0}-2\ \mathrm{Cos}[2\alpha]-2\ \mathrm{M0}\ \mathrm{Cos}[2t\omega]+\mathrm{M0}\ \mathrm{Cos}[2\alpha-2t\omega]+$$
$$\mathrm{M0}\ \mathrm{Cos}[2\alpha+2t\omega]+2\sqrt{2}\ \surd(\mathrm{M0}^2\ (6+2\ \mathrm{Cos}[2\alpha]-2\ \mathrm{Cos}[2t\omega]+$$
$$\mathrm{Cos}[2\alpha-2t\omega]+\mathrm{Cos}[2\alpha+2t\omega])\ \mathrm{Sin}[\alpha]^2\ \mathrm{Sin}[t\omega]^2)))$$
$$(-4\ \mathrm{M0}\ \omega\ \mathrm{Cos}[t\omega]\ \mathrm{Sec}[\alpha]^2\ \mathrm{Sin}[t\omega]-4\ \mathrm{M0}\ \omega\ \mathrm{Cos}[2\alpha]\ \mathrm{Cos}[t\omega]\ \mathrm{Sec}[\alpha]^2$$
$$\mathrm{Sin}[t\omega]+4\ \mathrm{M0}\ \omega\ \mathrm{Sin}[2t\omega]+2\ \mathrm{M0}\ \omega\ \mathrm{Sin}[2\alpha-2t\omega]-$$
$$4\ \mathrm{M0}\ \omega\ \mathrm{Cos}[\alpha-t\omega]\ \mathrm{Sec}[\alpha]^2\ \mathrm{Sin}[\alpha-t\omega]-4\ \mathrm{M0}\ \omega\ \mathrm{Cos}[2\alpha]$$
$$\mathrm{Cos}[\alpha-t\omega]\ \mathrm{Sec}[\alpha]^2\ \mathrm{Sin}[\alpha-t\omega]-2\ \mathrm{M0}\ \omega\ \mathrm{Sin}[2\alpha+2t\omega]+$$
$$(\sqrt{2}\ (-2\ \mathrm{M0}^2\ \omega\ \mathrm{Cos}[t\omega]\ (-6-2\ \mathrm{Cos}[2\alpha]+2\ \mathrm{Cos}[2t\omega]-\mathrm{Cos}[2\alpha-2t\omega]-$$
$$\mathrm{Cos}[2\alpha+2t\omega])\ \mathrm{Sin}[\alpha]^2\ \mathrm{Sin}[t\omega]-\mathrm{M0}^2\ \mathrm{Sin}[\alpha]^2\ \mathrm{Sin}[t\omega]^2$$

$$\left(-4\,\omega\,\text{Sin}[2\,t\,\omega]-2\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]+2\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]\right)\Big)\Big)\Big/$$
$$\left(\sqrt{\left(-M0^2\,\left(-6-2\,\text{Cos}[2\,\alpha]+2\,\text{Cos}[2\,t\,\omega]-\text{Cos}[2\,\alpha-2\,t\,\omega]-\right.\right.\right.$$
$$\left.\left.\left.\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\Big)\Big/$$
$$\left(8\,\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\right.\right.}$$
$$\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)+$$
$$\left(\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\,\left(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.\right.$$
$$\left.\left.\left.M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\,\sqrt{2}\,\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\right.\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\left.\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\right)$$
$$\left(4\,M0\,\omega\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]+4\,M0\,\omega\,\text{Cos}[2\,\alpha]\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2\right.$$
$$\text{Sin}[t\,\omega]-4\,M0\,\omega\,\text{Sin}[2\,t\,\omega]-2\,M0\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]+$$
$$4\,M0\,\omega\,\text{Cos}[\alpha-t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[\alpha-t\,\omega]+4\,M0\,\omega\,\text{Cos}[2\,\alpha]$$
$$\text{Cos}[\alpha-t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[\alpha-t\,\omega]+2\,M0\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]+$$
$$\left(\sqrt{2}\,\left(-2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\,\left(-6-2\,\text{Cos}[2\,\alpha]+2\,\text{Cos}[2\,t\,\omega]-\text{Cos}[2\,\alpha-2\,t\,\omega]-\right.\right.\right.$$
$$\left.\left.\left.\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]-M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right.\right.$$
$$\left.\left.\left.\left(-4\,\omega\,\text{Sin}[2\,t\,\omega]-2\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]+2\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]\right)\right)\right)\Big/$$
$$\left(\sqrt{\left(-M0^2\,\left(-6-2\,\text{Cos}[2\,\alpha]+2\,\text{Cos}[2\,t\,\omega]-\text{Cos}[2\,\alpha-2\,t\,\omega]-\right.\right.\right.$$
$$\left.\left.\left.\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\Big)\Big/$$
$$\left(8\,\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\right.\right.}$$
$$\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)+$$
$$\left(\left(\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\,\left(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.\right.\right.$$
$$\left.\left.\left.\left.M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\,\sqrt{2}\,\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\right.\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\left.\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\right)$$
$$\left(4\,M0-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-\right.$$
$$2\,M0\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Sec}[\alpha]^2$$
$$\text{Sin}[t\,\omega]^2-2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\,\sqrt{2}\,\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-\right.\right.}$$
$$\left.\left.\left.\left.2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\Big)\Big/$$
$$\left(8\,\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\right.\right.}$$
$$\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)+$$
$$\left(\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\,\left(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.\right.$$
$$\left.\left.\left.M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\,\sqrt{2}\,\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\left.\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\right)$$
$$\left(-4\,M0+2\,M0\,\text{Cos}[2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+\right.$$
$$2\,M0\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Sec}[\alpha]^2$$

$$\begin{aligned}
&\text{Sin}[t\,\omega]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - \right.\right.}\\
&\qquad \left.\left.2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Bigg)\Bigg/\\
&\left(8\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\right.}\right.\\
&\qquad \left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\Bigg)\\
&\left(-\left(\left(\left(i\,\omega\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Cot}[t\,\omega]\,\text{Csc}[t\,\omega]^2\,\left(-4\,M0 + 2\,M0\,\text{Cos}[2\,t\,\omega] - \right.\right.\right.\right.\\
&\qquad M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] + 2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 +\\
&\qquad 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 +\\
&\qquad 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\sqrt{2}\,\sqrt{\left(-M0^2\,\left(-6 - 2\,\text{Cos}[2\,\alpha] + \right.\right.}\\
&\qquad \left.\left.\left.\left.2\,\text{Cos}[2\,t\,\omega] - \text{Cos}[2\,\alpha - 2\,t\,\omega] - \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\\
&\qquad \sqrt{\left(\frac{1}{1 + \text{Cos}[2\,\alpha]}\,\left(-2 + 4\,M0 - 2\,\text{Cos}[2\,\alpha] - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + \right.\right.\\
&\qquad \left.\left.M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \right.\right.\right.\right.}\\
&\qquad \left.\left.\left.\left.\text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\Bigg)\\
&\qquad \left(4\,M0 - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - \right.\\
&\qquad 2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 -\\
&\qquad 2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 +\\
&\qquad 2\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\right.}\\
&\qquad \left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\Bigg/\,\left(16\,M0\,\left(1 + \text{Cos}[2\,\alpha]\right)\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - \right.\right.}\right.\\
&\qquad \left.\left.\left.2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\Bigg) +\\
&\left(i\,\omega\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Cot}[t\,\omega]\,\text{Csc}[t\,\omega]^2\,\left(4\,M0 - 2\,M0\,\text{Cos}[2\,t\,\omega] + \right.\right.\\
&\qquad M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 -\\
&\qquad 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 -\\
&\qquad 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\sqrt{2}\,\sqrt{\left(-M0^2\,\left(-6 - 2\,\text{Cos}[2\,\alpha] + \right.\right.}\\
&\qquad \left.\left.\left.\left.2\,\text{Cos}[2\,t\,\omega] - \text{Cos}[2\,\alpha - 2\,t\,\omega] - \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\\
&\qquad \sqrt{\left(\frac{1}{1 + \text{Cos}[2\,\alpha]}\,\left(-2 + 4\,M0 - 2\,\text{Cos}[2\,\alpha] - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + \right.\right.\\
&\qquad \left.\left.M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] + 2\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \right.\right.\right.\right.}\\
&\qquad \left.\left.\left.\left.\text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\Bigg)\\
&\qquad \left(-4\,M0 + 2\,M0\,\text{Cos}[2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] + \right.\\
&\qquad 2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 +\\
&\qquad 2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 +\\
&\qquad 2\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \right.\right.}\\
&\qquad \left.\left.\left.\left.\text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\Bigg)\Bigg/\\
&\left(16\,M0\,\left(1 + \text{Cos}[2\,\alpha]\right)\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \right.\right.}\right.\\
&\qquad \left.\left.\left.\text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right) -
\end{aligned}$$

$$\Bigg(i \cos[\alpha] \cot[\alpha] \csc[t\omega]^2 \Big(-4 M0 + 2 M0 \cos[2 t\omega] - M0 \cos[2\alpha - 2 t\omega] - M0 \cos[2\alpha + 2 t\omega] + 2 M0 \cos[\alpha - t\omega]^2 \sec[\alpha]^2 + 2 M0 \cos[2\alpha] \cos[\alpha - t\omega]^2 \sec[\alpha]^2 + 2 M0 \sec[\alpha]^2 \sin[t\omega]^2 + 2 M0 \cos[2\alpha] \sec[\alpha]^2 \sin[t\omega]^2 + 2\sqrt{2}\sqrt{\Big(-M0^2 \Big(-6 - 2\cos[2\alpha] + 2\cos[2 t\omega] - \cos[2\alpha - 2 t\omega] - \cos[2\alpha + 2 t\omega]\Big) \sin[\alpha]^2 \sin[t\omega]^2\Big)}\Big) \Big/ \sqrt{\Big(\frac{1}{1 + \cos[2\alpha]} \Big(-2 + 4 M0 - 2\cos[2\alpha] - 2 M0 \cos[2 t\omega] + M0 \cos[2\alpha - 2 t\omega] + M0 \cos[2\alpha + 2 t\omega] - 2\sqrt{2}\sqrt{\Big(M0^2 \Big(6 + 2\cos[2\alpha] - 2\cos[2 t\omega] + \cos[2\alpha - 2 t\omega] + \cos[2\alpha + 2 t\omega]\Big) \sin[\alpha]^2 \sin[t\omega]^2\Big)}\Big)\Big)} \Big(4 M0 - 2 M0 \cos[2 t\omega] + M0 \cos[2\alpha - 2 t\omega] + M0 \cos[2\alpha + 2 t\omega] - 2 M0 \cos[\alpha - t\omega]^2 \sec[\alpha]^2 - 2 M0 \cos[2\alpha] \cos[\alpha - t\omega]^2 \sec[\alpha]^2 - 2 M0 \sec[\alpha]^2 \sin[t\omega]^2 - 2 M0 \cos[2\alpha] \sec[\alpha]^2 \sin[t\omega]^2 + 2\sqrt{2}\sqrt{\Big(M0^2 \Big(6 + 2\cos[2\alpha] - 2\cos[2 t\omega] + \cos[2\alpha - 2 t\omega] + \cos[2\alpha + 2 t\omega]\Big) \sin[\alpha]^2 \sin[t\omega]^2\Big)} \Big(2 M0^2 \omega \cos[t\omega] \Big(6 + 2\cos[2\alpha] - 2\cos[2 t\omega] + \cos[2\alpha - 2 t\omega] + \cos[2\alpha + 2 t\omega]\Big) \sin[\alpha]^2 \sin[t\omega] + M0^2 \sin[\alpha]^2 \sin[t\omega]^2 \Big(4\omega \sin[2 t\omega] + 2\omega \sin[2\alpha - 2 t\omega] - 2\omega \sin[2\alpha + 2 t\omega]\Big)\Big)\Big) \Big/ \Big(64 M0 \Big(1 + \cos[2\alpha]\Big) \Big(M0^2 \Big(6 + 2\cos[2\alpha] - 2\cos[2 t\omega] + \cos[2\alpha - 2 t\omega] + \cos[2\alpha + 2 t\omega]\Big) \sin[\alpha]^2 \sin[t\omega]^2\Big)^{3/2}\Big) +$$

$$\Bigg(i \cos[\alpha] \cot[\alpha] \csc[t\omega]^2 \Big(4 M0 - 2 M0 \cos[2 t\omega] + M0 \cos[2\alpha - 2 t\omega] + M0 \cos[2\alpha + 2 t\omega] - 2 M0 \cos[\alpha - t\omega]^2 \sec[\alpha]^2 - 2 M0 \cos[2\alpha] \cos[\alpha - t\omega]^2 \sec[\alpha]^2 - 2 M0 \sec[\alpha]^2 \sin[t\omega]^2 - 2 M0 \cos[2\alpha] \sec[\alpha]^2 \sin[t\omega]^2 + 2\sqrt{2}\sqrt{\Big(-M0^2 \Big(-6 - 2\cos[2\alpha] + 2\cos[2 t\omega] - \cos[2\alpha - 2 t\omega] - \cos[2\alpha + 2 t\omega]\Big) \sin[\alpha]^2 \sin[t\omega]^2\Big)}\Big) \Big/ \sqrt{\Big(\frac{1}{1 + \cos[2\alpha]} \Big(-2 + 4 M0 - 2\cos[2\alpha] - 2 M0 \cos[2 t\omega] + M0 \cos[2\alpha - 2 t\omega] + M0 \cos[2\alpha + 2 t\omega] + 2\sqrt{2}\sqrt{\Big(M0^2 \Big(6 + 2\cos[2\alpha] - 2\cos[2 t\omega] + \cos[2\alpha - 2 t\omega] + \cos[2\alpha + 2 t\omega]\Big) \sin[\alpha]^2 \sin[t\omega]^2\Big)}\Big)\Big)} \Big(-4 M0 + 2 M0 \cos[2 t\omega] - M0 \cos[2\alpha - 2 t\omega] - M0 \cos[2\alpha + 2 t\omega] + 2 M0 \cos[\alpha - t\omega]^2 \sec[\alpha]^2 + 2 M0 \cos[2\alpha] \cos[\alpha - t\omega]^2 \sec[\alpha]^2 + 2 M0 \sec[\alpha]^2 \sin[t\omega]^2 + 2 M0 \cos[2\alpha] \sec[\alpha]^2 \sin[t\omega]^2 + 2\sqrt{2}\sqrt{\Big(M0^2 \Big(6 + 2\cos[2\alpha] - 2\cos[2 t\omega] + \cos[2\alpha - 2 t\omega] + \cos[2\alpha + 2 t\omega]\Big) \sin[\alpha]^2 \sin[t\omega]^2\Big)} \Big(2 M0^2 \omega \cos[t\omega] \Big(6 + 2\cos[2\alpha] - 2\cos[2 t\omega] + \cos[2\alpha - 2 t\omega] + \cos[2\alpha + 2 t\omega]\Big) \sin[\alpha]^2 \sin[t\omega] + M0^2 \sin[\alpha]^2 \sin[t\omega]^2 \Big(4\omega \sin[2 t\omega] + 2\omega \sin[2\alpha - 2 t\omega] - 2\omega \sin[2\alpha + 2 t\omega]\Big)\Big)\Big) \Big/ \Big(64 M0 \Big(1 + \cos[2\alpha]\Big) \Big(M0^2 \Big(6 + 2\cos[2\alpha] - 2\cos[2 t\omega] + \cos[2\alpha - 2 t\omega] + \cos[2\alpha + 2 t\omega]\Big) \sin[\alpha]^2 \sin[t\omega]^2\Big)^{3/2}\Big) +$$

$$\Big(i \cos[\alpha] \cot[\alpha] \csc[t\,\omega]^2 \Big(-4\,M0 + 2\,M0 \cos[2\,t\,\omega] - M0 \cos[2\,\alpha - 2\,t\,\omega] - M0 \cos[2\,\alpha + 2\,t\,\omega] + 2\,M0 \cos[\alpha - t\,\omega]^2 \sec[\alpha]^2 + 2\,M0 \cos[2\,\alpha] \cos[\alpha - t\,\omega]^2 \sec[\alpha]^2 + 2\,M0 \sec[\alpha]^2 \sin[t\,\omega]^2 + 2\,M0 \cos[2\,\alpha] \sec[\alpha]^2 \sin[t\,\omega]^2 + 2\sqrt{2}\,\sqrt{\Big(-M0^2 \Big(-6 - 2\cos[2\,\alpha] + 2\cos[2\,t\,\omega] - \cos[2\,\alpha - 2\,t\,\omega] - \cos[2\,\alpha + 2\,t\,\omega]\Big) \sin[\alpha]^2 \sin[t\,\omega]^2\Big)}\Big)$$

$$\Big(4\,M0 - 2\,M0 \cos[2\,t\,\omega] + M0 \cos[2\,\alpha - 2\,t\,\omega] + M0 \cos[2\,\alpha + 2\,t\,\omega] - 2\,M0 \cos[\alpha - t\,\omega]^2 \sec[\alpha]^2 - 2\,M0 \cos[2\,\alpha] \cos[\alpha - t\,\omega]^2 \sec[\alpha]^2 - 2\,M0 \sec[\alpha]^2 \sin[t\,\omega]^2 - 2\,M0 \cos[2\,\alpha] \sec[\alpha]^2 \sin[t\,\omega]^2 + 2\sqrt{2}\,\sqrt{\Big(M0^2 \Big(6 + 2\cos[2\,\alpha] - 2\cos[2\,t\,\omega] + \cos[2\,\alpha - 2\,t\,\omega] + \cos[2\,\alpha + 2\,t\,\omega]\Big) \sin[\alpha]^2 \sin[t\,\omega]^2\Big)}\Big)$$

$$\Big(4\,M0\,\omega \sin[2\,t\,\omega] + 2\,M0\,\omega \sin[2\,\alpha - 2\,t\,\omega] - 2\,M0\,\omega \sin[2\,\alpha + 2\,t\,\omega] - \Big(\sqrt{2}\,\Big(2\,M0^2\,\omega \cos[t\,\omega] \Big(6 + 2\cos[2\,\alpha] - 2\cos[2\,t\,\omega] + \cos[2\,\alpha - 2\,t\,\omega] + \cos[2\,\alpha + 2\,t\,\omega]\Big) \sin[\alpha]^2 \sin[t\,\omega] + M0^2 \sin[\alpha]^2 \sin[t\,\omega]^2 \Big(4\,\omega \sin[2\,t\,\omega] + 2\,\omega \sin[2\,\alpha - 2\,t\,\omega] - 2\,\omega \sin[2\,\alpha + 2\,t\,\omega]\Big)\Big)\Big) \Big/ \Big(\sqrt{\Big(M0^2 \Big(6 + 2\cos[2\,\alpha] - 2\cos[2\,t\,\omega] + \cos[2\,\alpha - 2\,t\,\omega] + \cos[2\,\alpha + 2\,t\,\omega]\Big) \sin[\alpha]^2 \sin[t\,\omega]^2\Big)}\Big)\Big)\Big) \Big/$$

$$\Big(64\,M0 \big(1 + \cos[2\,\alpha]\big)^2 \sqrt{\Big(M0^2 \Big(6 + 2\cos[2\,\alpha] - 2\cos[2\,t\,\omega] + \cos[2\,\alpha - 2\,t\,\omega] + \cos[2\,\alpha + 2\,t\,\omega]\Big) \sin[\alpha]^2 \sin[t\,\omega]^2\Big)} \sqrt{\Big(\frac{1}{1 + \cos[2\,\alpha]} \Big(-2 + 4\,M0 - 2\cos[2\,\alpha] - 2\,M0 \cos[2\,t\,\omega] + M0 \cos[2\,\alpha - 2\,t\,\omega] + M0 \cos[2\,\alpha + 2\,t\,\omega] - 2\sqrt{2}\,\sqrt{\Big(M0^2 \Big(6 + 2\cos[2\,\alpha] - 2\cos[2\,t\,\omega] + \cos[2\,\alpha - 2\,t\,\omega] + \cos[2\,\alpha + 2\,t\,\omega]\Big) \sin[\alpha]^2 \sin[t\,\omega]^2\Big)}\Big)\Big)\Big) -$$

$$\Big(i \cos[\alpha] \cot[\alpha] \csc[t\,\omega]^2 \Big(4\,M0 - 2\,M0 \cos[2\,t\,\omega] + M0 \cos[2\,\alpha - 2\,t\,\omega] + M0 \cos[2\,\alpha + 2\,t\,\omega] - 2\,M0 \cos[\alpha - t\,\omega]^2 \sec[\alpha]^2 - 2\,M0 \cos[2\,\alpha] \cos[\alpha - t\,\omega]^2 \sec[\alpha]^2 - 2\,M0 \sec[\alpha]^2 \sin[t\,\omega]^2 - 2\,M0 \cos[2\,\alpha] \sec[\alpha]^2 \sin[t\,\omega]^2 + 2\sqrt{2}\,\sqrt{\Big(-M0^2 \Big(-6 - 2\cos[2\,\alpha] + 2\cos[2\,t\,\omega] - \cos[2\,\alpha - 2\,t\,\omega] - \cos[2\,\alpha + 2\,t\,\omega]\Big) \sin[\alpha]^2 \sin[t\,\omega]^2\Big)}\Big)$$

$$\Big(-4\,M0 + 2\,M0 \cos[2\,t\,\omega] - M0 \cos[2\,\alpha - 2\,t\,\omega] - M0 \cos[2\,\alpha + 2\,t\,\omega] + 2\,M0 \cos[\alpha - t\,\omega]^2 \sec[\alpha]^2 + 2\,M0 \cos[2\,\alpha] \cos[\alpha - t\,\omega]^2 \sec[\alpha]^2 + 2\,M0 \sec[\alpha]^2 \sin[t\,\omega]^2 + 2\,M0 \cos[2\,\alpha] \sec[\alpha]^2 \sin[t\,\omega]^2 + 2\sqrt{2}\,\sqrt{\Big(M0^2 \Big(6 + 2\cos[2\,\alpha] - 2\cos[2\,t\,\omega] + \cos[2\,\alpha - 2\,t\,\omega] + \cos[2\,\alpha + 2\,t\,\omega]\Big) \sin[\alpha]^2 \sin[t\,\omega]^2\Big)}\Big)$$

$$\Big(4\,M0\,\omega \sin[2\,t\,\omega] + 2\,M0\,\omega \sin[2\,\alpha - 2\,t\,\omega] - 2\,M0\,\omega \sin[2\,\alpha + 2\,t\,\omega] + \Big(\sqrt{2}\,\Big(2\,M0^2\,\omega \cos[t\,\omega] \Big(6 + 2\cos[2\,\alpha] - 2\cos[2\,t\,\omega] + \cos[2\,\alpha - 2\,t\,\omega] + \cos[2\,\alpha + 2\,t\,\omega]\Big) \sin[\alpha]^2 \sin[t\,\omega] + M0^2 \sin[\alpha]^2 \sin[t\,\omega]^2 \Big(4\,\omega \sin[2\,t\,\omega] + 2\,\omega \sin[2\,\alpha - 2\,t\,\omega] - 2\,\omega \sin[2\,\alpha + 2\,t\,\omega]\Big)\Big)\Big) \Big/ \Big(\sqrt{\Big(M0^2 \Big(6 + 2\cos[2\,\alpha] - 2\cos[2\,t\,\omega] + \cos[2\,\alpha - 2\,t\,\omega] + \cos[2\,\alpha + 2\,t\,\omega]\Big) \sin[\alpha]^2 \sin[t\,\omega]^2\Big)}\Big)\Big)\Big) \Big/$$

$$\Bigg(64\,M0\,\left(1+\text{Cos}[2\,\alpha]\right)^2\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[\right.\right.}$$
$$\left.\left.2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}$$
$$\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.}$$
$$M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\right.\right.}$$
$$\left.\left.\left.\left.\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\right)+$$

$$\Bigg(i\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[t\,\omega]^2\,\left(-4\,M0+2\,M0\,\text{Cos}[2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]-\right.$$
$$M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\,M0\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+$$
$$2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+$$
$$2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\left(-M0^2\,\left(-6-2\,\text{Cos}[2\,\alpha]+\right.\right.}$$
$$\left.\left.2\,\text{Cos}[2\,t\,\omega]-\text{Cos}[2\,\alpha-2\,t\,\omega]-\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}$$
$$\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.}$$
$$M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\sqrt{2}\,\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\right.\right.}$$
$$\left.\left.\left.\left.\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\right)$$
$$\Bigg(-4\,M0\,\omega\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]-4\,M0\,\omega\,\text{Cos}[2\,\alpha]\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2$$
$$\text{Sin}[t\,\omega]+4\,M0\,\omega\,\text{Sin}[2\,t\,\omega]+2\,M0\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-$$
$$4\,M0\,\omega\,\text{Cos}[\alpha-t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[\alpha-t\,\omega]-4\,M0\,\omega\,\text{Cos}[2\,\alpha]$$
$$\text{Cos}[\alpha-t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[\alpha-t\,\omega]-2\,M0\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]+$$
$$\Bigg(\sqrt{2}\,\left(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.$$
$$\left.\left.\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]+M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2$$
$$\left.\left(4\,\omega\,\text{Sin}[2\,t\,\omega]+2\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-2\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]\right)\right)\Bigg)\Big/$$
$$\Bigg(\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.}$$
$$\left.\left.\left.\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\Bigg)\Big/$$
$$\Bigg(32\,M0\,\left(1+\text{Cos}[2\,\alpha]\right)\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.}$$
$$\left.\left.\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}-$$
$$\Bigg(i\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[t\,\omega]^2\,\left(4\,M0-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+\right.$$
$$M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\,M0\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-$$
$$2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2-$$
$$2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\left(-M0^2\,\left(-6-2\,\text{Cos}[2\,\alpha]+\right.\right.}$$
$$\left.\left.2\,\text{Cos}[2\,t\,\omega]-\text{Cos}[2\,\alpha-2\,t\,\omega]-\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}$$
$$\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.}$$
$$M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\right.\right.}$$
$$\left.\left.\left.\left.\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\right)$$
$$\Bigg(4\,M0\,\omega\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]+4\,M0\,\omega\,\text{Cos}[2\,\alpha]\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2$$

$$\begin{aligned}
&\text{Sin}[t\,\omega] - 4\,M0\,\omega\,\text{Sin}[2\,t\,\omega] - 2\,M0\,\omega\,\text{Sin}[2\,\alpha - 2\,t\,\omega] + \\
&4\,M0\,\omega\,\text{Cos}[\alpha - t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[\alpha - t\,\omega] + 4\,M0\,\omega\,\text{Cos}[2\,\alpha] \\
&\text{Cos}[\alpha - t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[\alpha - t\,\omega] + 2\,M0\,\omega\,\text{Sin}[2\,\alpha + 2\,t\,\omega] + \\
&\left(\sqrt{2}\,\left(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \right.\right.\right. \\
&\left.\left.\left.\text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega] + M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right.\right. \\
&\left.\left.\left(4\,\omega\,\text{Sin}[2\,t\,\omega] + 2\,\omega\,\text{Sin}[2\,\alpha - 2\,t\,\omega] - 2\,\omega\,\text{Sin}[2\,\alpha + 2\,t\,\omega]\right)\right)\right)\Big/ \\
&\left(\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \right.\right.\right. \\
&\left.\left.\left.\text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\Big/ \\
&\left(32\,M0\,\left(1 + \text{Cos}[2\,\alpha]\right)\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \right.\right.\right. \\
&\left.\left.\left.\text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right) - \\
&\left(i\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[t\,\omega]^2\,\sqrt{\left(\frac{1}{1 + \text{Cos}[2\,\alpha]}\,\left(-2 + 4\,M0 - 2\,\text{Cos}[2\,\alpha] - \right.\right.\right. \\
&\left.\left.\left.2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] + \right.\right. \\
&\left.\left.\left.2\,\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \right.\right.\right.\right.\right. \\
&\left.\left.\left.\left.\left.\text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\right) \\
&\left(-4\,M0 + 2\,M0\,\text{Cos}[2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] + \right. \\
&2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 + \\
&2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + \\
&2\,\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\right.} \\
&\left.\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Big)\,\left(-4\,M0\,\omega\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega] - \right. \\
&4\,M0\,\omega\,\text{Cos}[2\,\alpha]\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega] + 4\,M0\,\omega\,\text{Sin}[2\,t\,\omega] + \\
&2\,M0\,\omega\,\text{Sin}[2\,\alpha - 2\,t\,\omega] - 4\,M0\,\omega\,\text{Cos}[\alpha - t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[\alpha - t\,\omega] - \\
&4\,M0\,\omega\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[\alpha - t\,\omega] - 2\,M0\,\omega\,\text{Sin}[2\,\alpha + 2\,t\,\omega] + \\
&\left(\sqrt{2}\,\left(-2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\,\left(-6 - 2\,\text{Cos}[2\,\alpha] + 2\,\text{Cos}[2\,t\,\omega] - \text{Cos}[2\,\alpha - 2\,t\,\omega] - \right.\right.\right. \\
&\left.\left.\left.\text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega] - M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right.\right. \\
&\left.\left.\left(-4\,\omega\,\text{Sin}[2\,t\,\omega] - 2\,\omega\,\text{Sin}[2\,\alpha - 2\,t\,\omega] + 2\,\omega\,\text{Sin}[2\,\alpha + 2\,t\,\omega]\right)\right)\right)\Big/ \\
&\left(\sqrt{\left(-M0^2\,\left(-6 - 2\,\text{Cos}[2\,\alpha] + 2\,\text{Cos}[2\,t\,\omega] - \text{Cos}[2\,\alpha - 2\,t\,\omega] - \right.\right.\right. \\
&\left.\left.\left.\text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\Big/ \\
&\left(32\,M0\,\left(1 + \text{Cos}[2\,\alpha]\right)\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \right.\right.\right. \\
&\left.\left.\left.\text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right) + \\
&\left(i\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[t\,\omega]^2\,\sqrt{\left(\frac{1}{1 + \text{Cos}[2\,\alpha]}\,\left(-2 + 4\,M0 - 2\,\text{Cos}[2\,\alpha] - \right.\right.\right. \\
&\left.\left.\left.2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - \right.\right. \\
&\left.\left.\left.2\,\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \right.\right.\right.\right.\right. \\
&\left.\left.\left.\left.\left.\text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\right) \\
&\left(4\,M0 - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - \right. \\
&2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - \\
&2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + \\
&2\,\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\right.} \\
&\left.\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Big)\,\left(4\,M0\,\omega\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega] + \right.
\end{aligned}$$

$$4\,M0\,\omega\,\text{Cos}[2\,\alpha]\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega] - 4\,M0\,\omega\,\text{Sin}[2\,t\,\omega] -$$
$$2\,M0\,\omega\,\text{Sin}[2\,\alpha - 2\,t\,\omega] + 4\,M0\,\omega\,\text{Cos}[\alpha - t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[\alpha - t\,\omega] +$$
$$4\,M0\,\omega\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[\alpha - t\,\omega] + 2\,M0\,\omega\,\text{Sin}[2\,\alpha + 2\,t\,\omega] +$$
$$\left(\sqrt{2}\,\left(-2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\,\left(-6 - 2\,\text{Cos}[2\,\alpha] + 2\,\text{Cos}[2\,t\,\omega] - \text{Cos}[2\,\alpha - 2\,t\,\omega] -\right.\right.\right.$$
$$\left.\left.\left.\text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega] - M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right.\right.$$
$$\left.\left.\left(-4\,\omega\,\text{Sin}[2\,t\,\omega] - 2\,\omega\,\text{Sin}[2\,\alpha - 2\,t\,\omega] + 2\,\omega\,\text{Sin}[2\,\alpha + 2\,t\,\omega]\right)\right)\right)\Big/$$
$$\left(\sqrt{\left(-M0^2\,\left(-6 - 2\,\text{Cos}[2\,\alpha] + 2\,\text{Cos}[2\,t\,\omega] - \text{Cos}[2\,\alpha - 2\,t\,\omega] -\right.\right.\right.$$
$$\left.\left.\left.\text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\Big)\Big)\Big/$$
$$\left(32\,M0\,\left(1 + \text{Cos}[2\,\alpha]\right)\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] +\right.\right.\right.$$
$$\left.\left.\left.\text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\Big)\Big)\Big)$$

$$\text{Tan}[\alpha] + \frac{1}{M0}\,\text{Sec}[\alpha]^2\,\left(\text{Cos}[\alpha - t\,\omega]^2 + \text{Sin}[t\,\omega]^2\right)\,\left(e^{i\,\theta}\right.$$
$$r +$$
$$\left(\left(\left(-4\,M0 + 2\,M0\,\text{Cos}[2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] +\right.\right.\right.$$
$$2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 +$$
$$2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 +$$
$$2\,\sqrt{2}\,\sqrt{\left(-M0^2\,\left(-6 - 2\,\text{Cos}[2\,\alpha] + 2\,\text{Cos}[2\,t\,\omega] -\right.\right.$$
$$\left.\left.\text{Cos}[2\,\alpha - 2\,t\,\omega] - \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Big)$$
$$\sqrt{\left(\frac{1}{1 + \text{Cos}[2\,\alpha]}\,\left(-2 + 4\,M0 - 2\,\text{Cos}[2\,\alpha] - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] +\right.\right.$$
$$M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\,\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] +\right.\right.\right.$$
$$\left.\left.\left.\left.\text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\Big)\Big)\Big/$$
$$\left(8\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\right.\right.$$
$$\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right) +$$
$$\left(\left(4\,M0 - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] -\right.\right.$$
$$2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 -$$
$$2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 +$$
$$2\,\sqrt{2}\,\sqrt{\left(-M0^2\,\left(-6 - 2\,\text{Cos}[2\,\alpha] + 2\,\text{Cos}[2\,t\,\omega] -\right.\right.$$
$$\left.\left.\text{Cos}[2\,\alpha - 2\,t\,\omega] - \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Big)$$
$$\sqrt{\left(\frac{1}{1 + \text{Cos}[2\,\alpha]}\,\left(-2 + 4\,M0 - 2\,\text{Cos}[2\,\alpha] - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] +\right.\right.$$
$$M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] + 2\,\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] +\right.\right.\right.$$
$$\left.\left.\left.\left.\text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\Big)\Big)\Big/$$
$$\left(8\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\right.\right.$$
$$\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\Big)$$

$$\left(e^{i\theta} r \left(\left(\left(-4\,M0 + 2\,M0\,\text{Cos}[2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] + 2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\sqrt{2}\,\sqrt{\left(-M0^2\left(-6 - 2\,\text{Cos}[2\,\alpha] + 2\,\text{Cos}[2\,t\,\omega] - \text{Cos}[2\,\alpha - 2\,t\,\omega] - \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\sqrt{\left(\frac{1}{1 + \text{Cos}[2\,\alpha]}\left(-2 + 4\,M0 - 2\,\text{Cos}[2\,\alpha] - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\sqrt{2}\,\sqrt{\left(M0^2\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\right)\right)\Big/\left(8\sqrt{\left(M0^2\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right) + \left(\left(4\,M0 - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\sqrt{2}\,\sqrt{\left(-M0^2\left(-6 - 2\,\text{Cos}[2\,\alpha] + 2\,\text{Cos}[2\,t\,\omega] - \text{Cos}[2\,\alpha - 2\,t\,\omega] - \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\sqrt{\left(\frac{1}{1 + \text{Cos}[2\,\alpha]}\left(-2 + 4\,M0 - 2\,\text{Cos}[2\,\alpha] - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] + 2\sqrt{2}\,\sqrt{\left(M0^2\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\right)\right)\Big/\left(8\sqrt{\left(M0^2\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\right) + s\left(\left(i\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[t\,\omega]^2\left(-4\,M0 + 2\,M0\,\text{Cos}[2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] + 2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\sqrt{2}\,\sqrt{\left(-M0^2\left(-6 - 2\,\text{Cos}[2\,\alpha] + 2\,\text{Cos}[2\,t\,\omega] - \text{Cos}[2\,\alpha - 2\,t\,\omega] - \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\sqrt{\left(\frac{1}{1 + \text{Cos}[2\,\alpha]}\left(-2 + 4\,M0 - 2\,\text{Cos}[2\,\alpha] - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\sqrt{2}\,\sqrt{\left(M0^2\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\right)\left(4\,M0 - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\sqrt{2}\,\sqrt{\left(M0^2\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] +\right.\right.\right.$$

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

$$\Big(32\,\mathrm{M0}\,\big(1+\mathrm{Cos}[2\alpha]\big)\,\sqrt{\Big(\mathrm{M0}^2\,\big(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2t\omega]+\mathrm{Cos}[2\alpha-2t\omega]+}$$
$$\mathrm{Cos}[2\alpha+2t\omega]\big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]^2\Big)\Big)-$$

$$\Big(i\,\mathrm{Cos}[\alpha]\,\mathrm{Cot}[\alpha]\,\mathrm{Csc}[t\omega]^2\,\Big(4\,\mathrm{M0}-2\,\mathrm{M0}\,\mathrm{Cos}[2t\omega]+\mathrm{M0}\,\mathrm{Cos}[2\alpha-2t\omega]+$$
$$\mathrm{M0}\,\mathrm{Cos}[2\alpha+2t\omega]-2\,\mathrm{M0}\,\mathrm{Cos}[\alpha-t\omega]^2\,\mathrm{Sec}[\alpha]^2-$$
$$2\,\mathrm{M0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Cos}[\alpha-t\omega]^2\,\mathrm{Sec}[\alpha]^2-2\,\mathrm{M0}\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\omega]^2-$$
$$2\,\mathrm{M0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\omega]^2+2\sqrt{2}\,\sqrt{\Big(-\mathrm{M0}^2\,\big(-6-2\,\mathrm{Cos}[2\alpha]+}$$
$$2\,\mathrm{Cos}[2t\omega]-\mathrm{Cos}[2\alpha-2t\omega]-\mathrm{Cos}[2\alpha+2t\omega]\big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]^2\Big)\Big)$$

$$\sqrt{\Big(\frac{1}{1+\mathrm{Cos}[2\alpha]}\,\Big(-2+4\,\mathrm{M0}-2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{M0}\,\mathrm{Cos}[2t\omega]+\mathrm{M0}\,\mathrm{Cos}[2\alpha-2t\omega]+}$$
$$\mathrm{M0}\,\mathrm{Cos}[2\alpha+2t\omega]+2\sqrt{2}\,\sqrt{\Big(\mathrm{M0}^2\,\big(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2t\omega]+}$$
$$\mathrm{Cos}[2\alpha-2t\omega]+\mathrm{Cos}[2\alpha+2t\omega]\big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]^2\Big)\Big)\Big)$$

$$\Big(-4\,\mathrm{M0}+2\,\mathrm{M0}\,\mathrm{Cos}[2t\omega]-\mathrm{M0}\,\mathrm{Cos}[2\alpha-2t\omega]-\mathrm{M0}\,\mathrm{Cos}[2\alpha+2t\omega]+$$
$$2\,\mathrm{M0}\,\mathrm{Cos}[\alpha-t\omega]^2\,\mathrm{Sec}[\alpha]^2+2\,\mathrm{M0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Cos}[\alpha-t\omega]^2\,\mathrm{Sec}[\alpha]^2+$$
$$2\,\mathrm{M0}\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\omega]^2+2\,\mathrm{M0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\omega]^2+$$
$$2\sqrt{2}\,\sqrt{\Big(\mathrm{M0}^2\,\big(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2t\omega]+\mathrm{Cos}[2\alpha-2t\omega]+}$$
$$\mathrm{Cos}[2\alpha+2t\omega]\big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]^2\Big)\Big)\Big)\Big/$$

$$\Big(32\,\mathrm{M0}\,\big(1+\mathrm{Cos}[2\alpha]\big)\,\sqrt{\Big(\mathrm{M0}^2\,\big(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2t\omega]+\mathrm{Cos}[2\alpha-2t\omega]+}$$
$$\mathrm{Cos}[2\alpha+2t\omega]\big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]^2\Big)\Big)\Big)\Big)+$$

$$\Big(s\,\Big(\Big(\Big(-4\,\mathrm{M0}+2\,\mathrm{M0}\,\mathrm{Cos}[2t\omega]-\mathrm{M0}\,\mathrm{Cos}[2\alpha-2t\omega]-\mathrm{M0}\,\mathrm{Cos}[2\alpha+2t\omega]+2\,\mathrm{M0}\,\mathrm{Cos}[\alpha-t\omega]^2$$
$$\mathrm{Sec}[\alpha]^2+2\,\mathrm{M0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Cos}[\alpha-t\omega]^2\,\mathrm{Sec}[\alpha]^2+2\,\mathrm{M0}\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\omega]^2+$$
$$2\,\mathrm{M0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\omega]^2+2\sqrt{2}\,\sqrt{\Big(-\mathrm{M0}^2\,\big(-6-2\,\mathrm{Cos}[2\alpha]+}$$
$$2\,\mathrm{Cos}[2t\omega]-\mathrm{Cos}[2\alpha-2t\omega]-\mathrm{Cos}[2\alpha+2t\omega]\big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]^2\Big)\Big)$$

$$\sqrt{\Big(\frac{1}{1+\mathrm{Cos}[2\alpha]}\,\Big(-2+4\,\mathrm{M0}-2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{M0}\,\mathrm{Cos}[2t\omega]+\mathrm{M0}\,\mathrm{Cos}[2\alpha-2t\omega]+}$$
$$\mathrm{M0}\,\mathrm{Cos}[2\alpha+2t\omega]-2\sqrt{2}\,\sqrt{\Big(\mathrm{M0}^2\,\big(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2t\omega]+}$$
$$\mathrm{Cos}[2\alpha-2t\omega]+\mathrm{Cos}[2\alpha+2t\omega]\big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]^2\Big)\Big)\Big)\Big)\Big/$$

$$\Big(8\,\sqrt{\Big(\mathrm{M0}^2\,\big(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2t\omega]+\mathrm{Cos}[2\alpha-2t\omega]+\mathrm{Cos}[2\alpha+2t\omega]\big)}$$
$$\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]^2\Big)\Big)+$$

$$\Big(\Big(4\,\mathrm{M0}-2\,\mathrm{M0}\,\mathrm{Cos}[2t\omega]+\mathrm{M0}\,\mathrm{Cos}[2\alpha-2t\omega]+\mathrm{M0}\,\mathrm{Cos}[2\alpha+2t\omega]-$$
$$2\,\mathrm{M0}\,\mathrm{Cos}[\alpha-t\omega]^2\,\mathrm{Sec}[\alpha]^2-2\,\mathrm{M0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Cos}[\alpha-t\omega]^2\,\mathrm{Sec}[\alpha]^2-$$
$$2\,\mathrm{M0}\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\omega]^2-2\,\mathrm{M0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\omega]^2+$$
$$2\sqrt{2}\,\sqrt{\Big(-\mathrm{M0}^2\,\big(-6-2\,\mathrm{Cos}[2\alpha]+2\,\mathrm{Cos}[2t\omega]-}$$
$$\mathrm{Cos}[2\alpha-2t\omega]-\mathrm{Cos}[2\alpha+2t\omega]\big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]^2\Big)\Big)$$

$$\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4\,M0-2\cos[2\alpha]-2\,M0\cos[2\,t\,\omega]+M0\cos[2\alpha-2\,t\,\omega]+\right.\right.}$$
$$M0\cos[2\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\right.\right.}$$
$$\left.\left.\left.\left.\cos[2\alpha-2\,t\,\omega]+\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)\Big)\Big/$$
$$\left(8\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\cos[2\alpha-2\,t\,\omega]+\cos[2\alpha+2\,t\,\omega]\right)\right.}\right.$$
$$\left.\left.\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)+$$
$$e^{-i\,\theta}\,r\left(\left(i\cos[\alpha]\cot[\alpha]\csc[t\,\omega]^2\left(-4\,M0+2\,M0\cos[2\,t\,\omega]-M0\cos[2\alpha-2\,t\,\omega]-\right.\right.\right.$$
$$M0\cos[2\alpha+2\,t\,\omega]+2\,M0\cos[\alpha-t\,\omega]^2\sec[\alpha]^2+$$
$$2\,M0\cos[2\alpha]\cos[\alpha-t\,\omega]^2\sec[\alpha]^2+2\,M0\sec[\alpha]^2\sin[t\,\omega]^2+$$
$$2\,M0\cos[2\alpha]\sec[\alpha]^2\sin[t\,\omega]^2+2\sqrt{2}\,\sqrt{\left(-M0^2\left(-6-2\cos[2\alpha]+\right.\right.}$$
$$\left.\left.\left.\left.2\cos[2\,t\,\omega]-\cos[2\alpha-2\,t\,\omega]-\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)$$
$$\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4\,M0-2\cos[2\alpha]-2\,M0\cos[2\,t\,\omega]+M0\cos[2\alpha-2\,t\,\omega]+\right.\right.}$$
$$M0\cos[2\alpha+2\,t\,\omega]-2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\right.\right.}$$
$$\left.\left.\left.\left.\cos[2\alpha-2\,t\,\omega]+\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)\Big)$$
$$\left(4\,M0-2\,M0\cos[2\,t\,\omega]+M0\cos[2\alpha-2\,t\,\omega]+M0\cos[2\alpha+2\,t\,\omega]-\right.$$
$$2\,M0\cos[\alpha-t\,\omega]^2\sec[\alpha]^2-2\,M0\cos[2\alpha]\cos[\alpha-t\,\omega]^2\sec[\alpha]^2-$$
$$2\,M0\sec[\alpha]^2\sin[t\,\omega]^2-2\,M0\cos[2\alpha]\sec[\alpha]^2\sin[t\,\omega]^2+$$
$$2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\cos[2\alpha-2\,t\,\omega]+\right.\right.}$$
$$\left.\left.\left.\left.\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)\Big)\Big/$$
$$\left(32\,M0\left(1+\cos[2\alpha]\right)\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\cos[2\alpha-2\,t\,\omega]+\right.\right.}\right.$$
$$\left.\left.\left.\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)-$$
$$\left(i\cos[\alpha]\cot[\alpha]\csc[t\,\omega]^2\left(4\,M0-2\,M0\cos[2\,t\,\omega]+M0\cos[2\alpha-2\,t\,\omega]+\right.\right.$$
$$M0\cos[2\alpha+2\,t\,\omega]-2\,M0\cos[\alpha-t\,\omega]^2\sec[\alpha]^2-$$
$$2\,M0\cos[2\alpha]\cos[\alpha-t\,\omega]^2\sec[\alpha]^2-2\,M0\sec[\alpha]^2\sin[t\,\omega]^2-$$
$$2\,M0\cos[2\alpha]\sec[\alpha]^2\sin[t\,\omega]^2+2\sqrt{2}\,\sqrt{\left(-M0^2\left(-6-2\cos[2\alpha]+\right.\right.}$$
$$\left.\left.\left.\left.2\cos[2\,t\,\omega]-\cos[2\alpha-2\,t\,\omega]-\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)$$
$$\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4\,M0-2\cos[2\alpha]-2\,M0\cos[2\,t\,\omega]+M0\cos[2\alpha-2\,t\,\omega]+\right.\right.}$$
$$M0\cos[2\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\right.\right.}$$
$$\left.\left.\left.\left.\cos[2\alpha-2\,t\,\omega]+\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)\Big)$$
$$\left(-4\,M0+2\,M0\cos[2\,t\,\omega]-M0\cos[2\alpha-2\,t\,\omega]-M0\cos[2\alpha+2\,t\,\omega]+\right.$$
$$2\,M0\cos[\alpha-t\,\omega]^2\sec[\alpha]^2+2\,M0\cos[2\alpha]\cos[\alpha-t\,\omega]^2\sec[\alpha]^2+$$
$$2\,M0\sec[\alpha]^2\sin[t\,\omega]^2+2\,M0\cos[2\alpha]\sec[\alpha]^2\sin[t\,\omega]^2+$$
$$2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\cos[2\alpha-2\,t\,\omega]+\right.\right.}$$
$$\left.\left.\left.\left.\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)\Big)\Big/$$

$$\left(32\,M0\,\left(1+\text{Cos}[2\,\alpha]\right)\,\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)$$

$$\left(-\left(\left(i\,M0\,\left(1+\text{Cos}[2\,\alpha]\right)\,\text{Sec}[\alpha]\,\text{Sin}[t\,\omega]^2\,\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\,\left(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\,\sqrt{2}\,\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\,\text{Tan}[\alpha]\right)\Big/\left(2\,\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\right)+\left(i\,M0\,\left(1+\text{Cos}[2\,\alpha]\right)\,\text{Sec}[\alpha]\,\text{Sin}[t\,\omega]^2\,\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\,\left(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\,\sqrt{2}\,\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\,\text{Tan}[\alpha]\right)\Big/\left(2\,\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\right)+i\left(\left(\left(\left(-4\,M0+2\,M0\,\text{Cos}[2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\,M0\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\,\sqrt{2}\,\sqrt{\left(-M0^2\,\left(-6-2\,\text{Cos}[2\,\alpha]+2\,\text{Cos}[2\,t\,\omega]-\text{Cos}[2\,\alpha-2\,t\,\omega]-\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\,\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\,\left(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\,\sqrt{2}\,\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\right)\Big/\left(8\,\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)+\left(\left(4\,M0-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\,M0\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2-2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\,\sqrt{2}\,\sqrt{\left(-M0^2\,\left(-6-2\,\text{Cos}[2\,\alpha]+2\,\text{Cos}[2\,t\,\omega]-\text{Cos}[2\,\alpha-2\,t\,\omega]-\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\,\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\,\left(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\,\sqrt{2}\,\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\right.\right.\right.\right.$$

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                Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2)))) /
      (8 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω])
            Sin[α]^2 Sin[t ω]^2)))
    (- (((-4 M0 + 2 M0 Cos[2 t ω] - M0 Cos[2 α - 2 t ω] - M0 Cos[2 α + 2 t ω] +
             2 M0 Cos[α - t ω]^2 Sec[α]^2 + 2 M0 Cos[2 α] Cos[α - t ω]^2 Sec[α]^2 + 2 M0 Sec[α]^2
              Sin[t ω]^2 + 2 M0 Cos[2 α] Sec[α]^2 Sin[t ω]^2 + 2 √2 √(-M0^2 (-6 - 2 Cos[2 α] +
                  2 Cos[2 t ω] - Cos[2 α - 2 t ω] - Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2))
           √((1/(1 + Cos[2 α])) (-2 + 4 M0 - 2 Cos[2 α] - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] +
                M0 Cos[2 α + 2 t ω] - 2 √2 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
                      Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2)))
           (2 M0^2 ω Cos[t ω] (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] +
                Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω] + M0^2 Sin[α]^2 Sin[t ω]^2
              (4 ω Sin[2 t ω] + 2 ω Sin[2 α - 2 t ω] - 2 ω Sin[2 α + 2 t ω]))) /
          (16 (M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω])
               Sin[α]^2 Sin[t ω]^2)^(3/2))) -
       ((4 M0 - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] + M0 Cos[2 α + 2 t ω] -
           2 M0 Cos[α - t ω]^2 Sec[α]^2 - 2 M0 Cos[2 α] Cos[α - t ω]^2 Sec[α]^2 -
           2 M0 Sec[α]^2 Sin[t ω]^2 - 2 M0 Cos[2 α] Sec[α]^2 Sin[t ω]^2 +
           2 √2 √(-M0^2 (-6 - 2 Cos[2 α] + 2 Cos[2 t ω] -
                 Cos[2 α - 2 t ω] - Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2))
         √((1/(1 + Cos[2 α])) (-2 + 4 M0 - 2 Cos[2 α] - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] +
              M0 Cos[2 α + 2 t ω] + 2 √2 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
                    Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2)))
         (2 M0^2 ω Cos[t ω] (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] +
              Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω] + M0^2 Sin[α]^2 Sin[t ω]^2
            (4 ω Sin[2 t ω] + 2 ω Sin[2 α - 2 t ω] - 2 ω Sin[2 α + 2 t ω]))) /
       (16 (M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω])
            Sin[α]^2 Sin[t ω]^2)^(3/2)) +
       ((-4 M0 + 2 M0 Cos[2 t ω] - M0 Cos[2 α - 2 t ω] - M0 Cos[2 α + 2 t ω] +
           2 M0 Cos[α - t ω]^2 Sec[α]^2 + 2 M0 Cos[2 α] Cos[α - t ω]^2 Sec[α]^2 +
           2 M0 Sec[α]^2 Sin[t ω]^2 + 2 M0 Cos[2 α] Sec[α]^2 Sin[t ω]^2 +
           2 √2 √(-M0^2 (-6 - 2 Cos[2 α] + 2 Cos[2 t ω] -
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$$\left(\cos[2\alpha - 2t\omega] - \cos[2\alpha + 2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\Big)\Big)$$
$$\Big(4M0\,\omega\sin[2t\omega] + 2M0\,\omega\sin[2\alpha - 2t\omega] - 2M0\,\omega\sin[2\alpha + 2t\omega] -$$
$$\Big(\sqrt{2}\,\Big(2M0^2\,\omega\cos[t\omega]\,\Big(6 + 2\cos[2\alpha] - 2\cos[2t\omega] + \cos[2\alpha - 2t\omega] +$$
$$\cos[2\alpha + 2t\omega]\Big)\sin[\alpha]^2\sin[t\omega] + M0^2\sin[\alpha]^2\sin[t\omega]^2$$
$$\left(4\omega\sin[2t\omega] + 2\omega\sin[2\alpha - 2t\omega] - 2\omega\sin[2\alpha + 2t\omega]\right)\Big)\Big)\Big/$$
$$\Big(\sqrt{\Big(M0^2\,\Big(6 + 2\cos[2\alpha] - 2\cos[2t\omega] + \cos[2\alpha - 2t\omega] +$$
$$\cos[2\alpha + 2t\omega]\Big)\sin[\alpha]^2\sin[t\omega]^2\Big)}\Big)\Big)\Big/$$
$$\Big(16\,\left(1 + \cos[2\alpha]\right)\sqrt{\Big(M0^2\,\Big(6 + 2\cos[2\alpha] - 2\cos[2t\omega] + \cos[2\alpha - 2t\omega] +$$
$$\cos[2\alpha + 2t\omega]\Big)\sin[\alpha]^2\sin[t\omega]^2\Big)}$$
$$\sqrt{\Big(\frac{1}{1 + \cos[2\alpha]}\,\Big(-2 + 4M0 - 2\cos[2\alpha] - 2M0\cos[2t\omega] + M0\cos[2\alpha - 2t\omega] +$$
$$M0\cos[2\alpha + 2t\omega] - 2\sqrt{2}\,\sqrt{\Big(M0^2\,\Big(6 + 2\cos[2\alpha] - 2\cos[2t\omega] +$$
$$\cos[2\alpha - 2t\omega] + \cos[2\alpha + 2t\omega]\Big)\sin[\alpha]^2\sin[t\omega]^2\Big)}\Big)\Big)} +$$
$$\Big(\Big(4M0 - 2M0\cos[2t\omega] + M0\cos[2\alpha - 2t\omega] + M0\cos[2\alpha + 2t\omega] - 2M0$$
$$\cos[\alpha - t\omega]^2\sec[\alpha]^2 - 2M0\cos[2\alpha]\cos[\alpha - t\omega]^2\sec[\alpha]^2 -$$
$$2M0\sec[\alpha]^2\sin[t\omega]^2 - 2M0\cos[2\alpha]\sec[\alpha]^2\sin[t\omega]^2 +$$
$$2\sqrt{2}\,\sqrt{\Big(-M0^2\,\Big(-6 - 2\cos[2\alpha] + 2\cos[2t\omega] -$$
$$\cos[2\alpha - 2t\omega] - \cos[2\alpha + 2t\omega]\Big)\sin[\alpha]^2\sin[t\omega]^2\Big)}$$
$$\Big(4M0\,\omega\sin[2t\omega] + 2M0\,\omega\sin[2\alpha - 2t\omega] - 2M0\,\omega\sin[2\alpha + 2t\omega] +$$
$$\Big(\sqrt{2}\,\Big(2M0^2\,\omega\cos[t\omega]\,\Big(6 + 2\cos[2\alpha] - 2\cos[2t\omega] + \cos[2\alpha - 2t\omega] +$$
$$\cos[2\alpha + 2t\omega]\Big)\sin[\alpha]^2\sin[t\omega] + M0^2\sin[\alpha]^2\sin[t\omega]^2$$
$$\left(4\omega\sin[2t\omega] + 2\omega\sin[2\alpha - 2t\omega] - 2\omega\sin[2\alpha + 2t\omega]\right)\Big)\Big)\Big/$$
$$\Big(\sqrt{\Big(M0^2\,\Big(6 + 2\cos[2\alpha] - 2\cos[2t\omega] + \cos[2\alpha - 2t\omega] +$$
$$\cos[2\alpha + 2t\omega]\Big)\sin[\alpha]^2\sin[t\omega]^2\Big)}\Big)\Big)\Big/$$
$$\Big(16\,\left(1 + \cos[2\alpha]\right)\sqrt{\Big(M0^2\,\Big(6 + 2\cos[2\alpha] - 2\cos[2t\omega] + \cos[2\alpha - 2t\omega] +$$
$$\cos[2\alpha + 2t\omega]\Big)\sin[\alpha]^2\sin[t\omega]^2\Big)}$$
$$\sqrt{\Big(\frac{1}{1 + \cos[2\alpha]}\,\Big(-2 + 4M0 - 2\cos[2\alpha] - 2M0\cos[2t\omega] + M0\cos[2\alpha - 2t\omega] +$$
$$M0\cos[2\alpha + 2t\omega] + 2\sqrt{2}\,\sqrt{\Big(M0^2\,\Big(6 + 2\cos[2\alpha] - 2\cos[2t\omega] +$$
$$\cos[2\alpha - 2t\omega] + \cos[2\alpha + 2t\omega]\Big)\sin[\alpha]^2\sin[t\omega]^2\Big)}\Big)\Big)} +$$
$$\Big(\sqrt{\Big(\frac{1}{1 + \cos[2\alpha]}\,\Big(-2 + 4M0 - 2\cos[2\alpha] - 2M0\cos[2t\omega] + M0\cos[2\alpha - 2t\omega] +$$
$$M0\cos[2\alpha + 2t\omega] + 2\sqrt{2}\,\sqrt{\Big(M0^2\,\Big(6 + 2\cos[2\alpha] - 2\cos[2t\omega] +$$
$$\cos[2\alpha - 2t\omega] + \cos[2\alpha + 2t\omega]\Big)\sin[\alpha]^2\sin[t\omega]^2\Big)}\Big)\Big)}$$
$$\Big(-4M0\,\omega\cos[t\omega]\sec[\alpha]^2\sin[t\omega] - 4M0\,\omega\cos[2\alpha]\cos[t\omega]\sec[\alpha]^2$$

$$\begin{aligned}
&\sin[t\omega] + 4\,M0\,\omega\sin[2t\omega] + 2\,M0\,\omega\sin[2\alpha - 2t\omega] - \\
&4\,M0\,\omega\cos[\alpha - t\omega]\sec[\alpha]^2\sin[\alpha - t\omega] - 4\,M0\,\omega\cos[2\alpha] \\
&\cos[\alpha - t\omega]\sec[\alpha]^2\sin[\alpha - t\omega] - 2\,M0\,\omega\sin[2\alpha + 2t\omega] + \\
&\Big(\sqrt{2}\,\Big(-2\,M0^2\,\omega\cos[t\omega]\,\big(-6 - 2\cos[2\alpha] + 2\cos[2t\omega] - \cos[2\alpha - 2t\omega] - \\
&\qquad \cos[2\alpha + 2t\omega]\big)\sin[\alpha]^2\sin[t\omega] - M0^2\sin[\alpha]^2\sin[t\omega]^2 \\
&\qquad \big(-4\,\omega\sin[2t\omega] - 2\,\omega\sin[2\alpha - 2t\omega] + 2\,\omega\sin[2\alpha + 2t\omega]\big)\Big)\Big)\Big/ \\
&\Big(\sqrt{\big(-M0^2\,\big(-6 - 2\cos[2\alpha] + 2\cos[2t\omega] - \cos[2\alpha - 2t\omega] - \\
&\qquad \cos[2\alpha + 2t\omega]\big)\sin[\alpha]^2\sin[t\omega]^2\big)}\Big)\Big)\Big/ \\
&\Big(8\sqrt{\big(M0^2\,\big(6 + 2\cos[2\alpha] - 2\cos[2t\omega] + \cos[2\alpha - 2t\omega] + \cos[2\alpha + 2t\omega]\big) \\
&\sin[\alpha]^2\sin[t\omega]^2\big)}\Big) + \\
&\Big(\sqrt{\Big(\frac{1}{1 + \cos[2\alpha]}\,\big(-2 + 4\,M0 - 2\cos[2\alpha] - 2\,M0\cos[2t\omega] + M0\cos[2\alpha - 2t\omega] + \\
&\qquad M0\cos[2\alpha + 2t\omega] - 2\sqrt{2}\,\sqrt{\big(M0^2\,\big(6 + 2\cos[2\alpha] - 2\cos[2t\omega] + \\
&\qquad \cos[2\alpha - 2t\omega] + \cos[2\alpha + 2t\omega]\big)\sin[\alpha]^2\sin[t\omega]^2\big)}\Big) \\
&\big(4\,M0\,\omega\cos[t\omega]\sec[\alpha]^2\sin[t\omega] + 4\,M0\,\omega\cos[2\alpha]\cos[t\omega]\sec[\alpha]^2 \\
&\sin[t\omega] - 4\,M0\,\omega\sin[2t\omega] - 2\,M0\,\omega\sin[2\alpha - 2t\omega] + \\
&4\,M0\,\omega\cos[\alpha - t\omega]\sec[\alpha]^2\sin[\alpha - t\omega] + 4\,M0\,\omega\cos[2\alpha] \\
&\cos[\alpha - t\omega]\sec[\alpha]^2\sin[\alpha - t\omega] + 2\,M0\,\omega\sin[2\alpha + 2t\omega] + \\
&\Big(\sqrt{2}\,\Big(-2\,M0^2\,\omega\cos[t\omega]\,\big(-6 - 2\cos[2\alpha] + 2\cos[2t\omega] - \cos[2\alpha - 2t\omega] - \\
&\qquad \cos[2\alpha + 2t\omega]\big)\sin[\alpha]^2\sin[t\omega] - M0^2\sin[\alpha]^2\sin[t\omega]^2 \\
&\qquad \big(-4\,\omega\sin[2t\omega] - 2\,\omega\sin[2\alpha - 2t\omega] + 2\,\omega\sin[2\alpha + 2t\omega]\big)\Big)\Big)\Big/ \\
&\Big(\sqrt{\big(-M0^2\,\big(-6 - 2\cos[2\alpha] + 2\cos[2t\omega] - \cos[2\alpha - 2t\omega] - \\
&\qquad \cos[2\alpha + 2t\omega]\big)\sin[\alpha]^2\sin[t\omega]^2\big)}\Big)\Big)\Big/ \\
&\Big(8\sqrt{\big(M0^2\,\big(6 + 2\cos[2\alpha] - 2\cos[2t\omega] + \cos[2\alpha - 2t\omega] + \cos[2\alpha + 2t\omega]\big) \\
&\sin[\alpha]^2\sin[t\omega]^2\big)}\Big)\Big) + \\
&\Big(-\Big(\Big(\mathrm{i}\,\omega\cos[\alpha]\cot[\alpha]\cot[t\omega]\csc[t\omega]^2\,\big(-4\,M0 + 2\,M0\cos[2t\omega] - \\
&\qquad M0\cos[2\alpha - 2t\omega] - M0\cos[2\alpha + 2t\omega] + 2\,M0\cos[\alpha - t\omega]^2\sec[\alpha]^2 + \\
&\qquad 2\,M0\cos[2\alpha]\cos[\alpha - t\omega]^2\sec[\alpha]^2 + 2\,M0\sec[\alpha]^2\sin[t\omega]^2 + \\
&\qquad 2\,M0\cos[2\alpha]\sec[\alpha]^2\sin[t\omega]^2 + 2\sqrt{2}\,\sqrt{\big(-M0^2\,\big(-6 - 2\cos[2\alpha] + \\
&\qquad\qquad 2\cos[2t\omega] - \cos[2\alpha - 2t\omega] - \cos[2\alpha + 2t\omega]\big)\sin[\alpha]^2\sin[t\omega]^2\big)}\Big) \\
&\sqrt{\Big(\frac{1}{1 + \cos[2\alpha]}\,\big(-2 + 4\,M0 - 2\cos[2\alpha] - 2\,M0\cos[2t\omega] + M0\cos[2\alpha - 2t\omega] + \\
&\qquad M0\cos[2\alpha + 2t\omega] - 2\sqrt{2}\,\sqrt{\big(M0^2\,\big(6 + 2\cos[2\alpha] - 2\cos[2t\omega] + \\
&\qquad \cos[2\alpha - 2t\omega] + \cos[2\alpha + 2t\omega]\big)\sin[\alpha]^2\sin[t\omega]^2\big)}\Big) \\
&\big(4\,M0 - 2\,M0\cos[2t\omega] + M0\cos[2\alpha - 2t\omega] + M0\cos[2\alpha + 2t\omega] - \\
&2\,M0\cos[\alpha - t\omega]^2\sec[\alpha]^2 - 2\,M0\cos[2\alpha]\cos[\alpha - t\omega]^2\sec[\alpha]^2 - \\
&2\,M0\sec[\alpha]^2\sin[t\omega]^2 - 2\,M0\cos[2\alpha]\sec[\alpha]^2\sin[t\omega]^2 + \\
&2\sqrt{2}\,\sqrt{\big(M0^2\,\big(6 + 2\cos[2\alpha] - 2\cos[2t\omega] + \cos[2\alpha - 2t\omega] + \cos[2\alpha + 2t\omega]\big)}
\end{aligned}$$

$$\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)\big)\Big/\Big(16\,M0\,\big(1+\text{Cos}[2\,\alpha]\big)\,\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\Big)+$$

$$\Big(i\,\omega\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Cot}[t\,\omega]\,\text{Csc}[t\,\omega]^2\,\big(4\,M0-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\,M0\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2-2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\big(-M0^2\,\big(-6-2\,\text{Cos}[2\,\alpha]+2\,\text{Cos}[2\,t\,\omega]-\text{Cos}[2\,\alpha-2\,t\,\omega]-\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\big)\,\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\,\big(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\big)\Big)\,\big(-4\,M0+2\,M0\,\text{Cos}[2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\,M0\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\big)\Big/\Big(16\,M0\,\big(1+\text{Cos}[2\,\alpha]\big)\,\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\big)-$$

$$\Big(i\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[t\,\omega]^2\,\big(-4\,M0+2\,M0\,\text{Cos}[2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\,M0\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\big(-M0^2\,\big(-6-2\,\text{Cos}[2\,\alpha]+2\,\text{Cos}[2\,t\,\omega]-\text{Cos}[2\,\alpha-2\,t\,\omega]-\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\big)\,\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\,\big(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\sqrt{2}\,\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\big)\Big)\,\big(4\,M0-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\,M0\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2-2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\,\big(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]+M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\,\big(4\,\omega\,\text{Sin}[2\,t\,\omega]+2\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-2\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]\big)\big)\Big)\Big/\Big(64\,M0\,\big(1+\text{Cos}[2\,\alpha]\big)\,\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+$$

$$\left(\cos[2\alpha + 2t\omega]\right) \sin[\alpha]^2 \sin[t\omega]^2\Big)^{3/2}\Big) +$$

$$\Big(i \cos[\alpha] \cot[\alpha] \csc[t\omega]^2 \Big(4 M0 - 2 M0 \cos[2t\omega] + M0 \cos[2\alpha - 2t\omega] +$$
$$M0 \cos[2\alpha + 2t\omega] - 2 M0 \cos[\alpha - t\omega]^2 \sec[\alpha]^2 -$$
$$2 M0 \cos[2\alpha] \cos[\alpha - t\omega]^2 \sec[\alpha]^2 - 2 M0 \sec[\alpha]^2 \sin[t\omega]^2 -$$
$$2 M0 \cos[2\alpha] \sec[\alpha]^2 \sin[t\omega]^2 + 2\sqrt{2}\sqrt{\Big(-M0^2 \Big(-6 - 2\cos[2\alpha] +$$
$$2\cos[2t\omega] - \cos[2\alpha - 2t\omega] - \cos[2\alpha + 2t\omega]\Big) \sin[\alpha]^2 \sin[t\omega]^2\Big)}\Big)$$
$$\sqrt{\Big(\frac{1}{1 + \cos[2\alpha]} \Big(-2 + 4 M0 - 2\cos[2\alpha] - 2 M0 \cos[2t\omega] + M0 \cos[2\alpha - 2t\omega] +$$
$$M0 \cos[2\alpha + 2t\omega] + 2\sqrt{2}\sqrt{\Big(M0^2 \Big(6 + 2\cos[2\alpha] - 2\cos[2t\omega] +$$
$$\cos[2\alpha - 2t\omega] + \cos[2\alpha + 2t\omega]\Big) \sin[\alpha]^2 \sin[t\omega]^2\Big)}\Big)\Big)}$$
$$\Big(-4 M0 + 2 M0 \cos[2t\omega] - M0 \cos[2\alpha - 2t\omega] - M0 \cos[2\alpha + 2t\omega] +$$
$$2 M0 \cos[\alpha - t\omega]^2 \sec[\alpha]^2 + 2 M0 \cos[2\alpha] \cos[\alpha - t\omega]^2 \sec[\alpha]^2 +$$
$$2 M0 \sec[\alpha]^2 \sin[t\omega]^2 + 2 M0 \cos[2\alpha] \sec[\alpha]^2 \sin[t\omega]^2 +$$
$$2\sqrt{2}\sqrt{\Big(M0^2 \Big(6 + 2\cos[2\alpha] - 2\cos[2t\omega] + \cos[2\alpha - 2t\omega] + \cos[2\alpha + 2t\omega]\Big)$$
$$\sin[\alpha]^2 \sin[t\omega]^2\Big)}\Big) \Big(2 M0^2 \omega \cos[t\omega] \Big(6 + 2\cos[2\alpha] - 2\cos[2t\omega] +$$
$$\cos[2\alpha - 2t\omega] + \cos[2\alpha + 2t\omega]\Big) \sin[\alpha]^2 \sin[t\omega] + M0^2 \sin[\alpha]^2$$
$$\sin[t\omega]^2 \Big(4\omega \sin[2t\omega] + 2\omega \sin[2\alpha - 2t\omega] - 2\omega \sin[2\alpha + 2t\omega]\Big)\Big)\Big) \Big/$$
$$\Big(64 M0 \Big(1 + \cos[2\alpha]\Big) \Big(M0^2 \Big(6 + 2\cos[2\alpha] - 2\cos[2t\omega] + \cos[2\alpha - 2t\omega] +$$
$$\cos[2\alpha + 2t\omega]\Big) \sin[\alpha]^2 \sin[t\omega]^2\Big)^{3/2}\Big) +$$
$$\Big(i \cos[\alpha] \cot[\alpha] \csc[t\omega]^2 \Big(-4 M0 + 2 M0 \cos[2t\omega] - M0 \cos[2\alpha - 2t\omega] -$$
$$M0 \cos[2\alpha + 2t\omega] + 2 M0 \cos[\alpha - t\omega]^2 \sec[\alpha]^2 +$$
$$2 M0 \cos[2\alpha] \cos[\alpha - t\omega]^2 \sec[\alpha]^2 + 2 M0 \sec[\alpha]^2 \sin[t\omega]^2 +$$
$$2 M0 \cos[2\alpha] \sec[\alpha]^2 \sin[t\omega]^2 + 2\sqrt{2}\sqrt{\Big(-M0^2 \Big(-6 - 2\cos[2\alpha] +$$
$$2\cos[2t\omega] - \cos[2\alpha - 2t\omega] - \cos[2\alpha + 2t\omega]\Big) \sin[\alpha]^2 \sin[t\omega]^2\Big)}\Big)$$
$$\Big(4 M0 - 2 M0 \cos[2t\omega] + M0 \cos[2\alpha - 2t\omega] + M0 \cos[2\alpha + 2t\omega] -$$
$$2 M0 \cos[\alpha - t\omega]^2 \sec[\alpha]^2 - 2 M0 \cos[2\alpha] \cos[\alpha - t\omega]^2 \sec[\alpha]^2 -$$
$$2 M0 \sec[\alpha]^2 \sin[t\omega]^2 - 2 M0 \cos[2\alpha] \sec[\alpha]^2 \sin[t\omega]^2 +$$
$$2\sqrt{2}\sqrt{\Big(M0^2 \Big(6 + 2\cos[2\alpha] - 2\cos[2t\omega] + \cos[2\alpha - 2t\omega] +$$
$$\cos[2\alpha + 2t\omega]\Big) \sin[\alpha]^2 \sin[t\omega]^2\Big)}\Big)$$
$$\Big(4 M0 \omega \sin[2t\omega] + 2 M0 \omega \sin[2\alpha - 2t\omega] - 2 M0 \omega \sin[2\alpha + 2t\omega] -$$
$$\Big(\sqrt{2} \Big(2 M0^2 \omega \cos[t\omega] \Big(6 + 2\cos[2\alpha] - 2\cos[2t\omega] + \cos[2\alpha - 2t\omega] +$$
$$\cos[2\alpha + 2t\omega]\Big) \sin[\alpha]^2 \sin[t\omega] + M0^2 \sin[\alpha]^2 \sin[t\omega]^2$$
$$\Big(4\omega \sin[2t\omega] + 2\omega \sin[2\alpha - 2t\omega] - 2\omega \sin[2\alpha + 2t\omega]\Big)\Big)\Big) \Big/$$
$$\Big(\sqrt{\Big(M0^2 \Big(6 + 2\cos[2\alpha] - 2\cos[2t\omega] + \cos[2\alpha - 2t\omega] +$$
$$\cos[2\alpha + 2t\omega]\Big) \sin[\alpha]^2 \sin[t\omega]^2\Big)}\Big)\Big)\Big) \Big/$$
$$\Big(64 M0 \Big(1 + \cos[2\alpha]\Big)^2 \sqrt{\Big(M0^2 \Big(6 + 2\cos[2\alpha] - 2\cos[2t\omega] + \cos[$$
$$2\alpha - 2t\omega] + \cos[2\alpha + 2t\omega]\Big) \sin[\alpha]^2 \sin[t\omega]^2\Big)}$$

$$\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,\text{M0}-2\,\text{Cos}[2\,\alpha]-2\,\text{M0}\,\text{Cos}[2\,t\,\omega]+\text{M0}\,\text{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.}$$
$$\left.\left.\text{M0}\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\sqrt{2}\,\sqrt{\left(\text{M0}^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\right)-$$
$$\left(\text{i}\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[t\,\omega]^2\left(4\,\text{M0}-2\,\text{M0}\,\text{Cos}[2\,t\,\omega]+\text{M0}\,\text{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.$$
$$\text{M0}\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\,\text{M0}\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-$$
$$2\,\text{M0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{M0}\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2-$$
$$2\,\text{M0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\left(-\text{M0}^2\left(-6-2\,\text{Cos}[2\,\alpha]+\right.\right.}$$
$$\left.\left.2\,\text{Cos}[2\,t\,\omega]-\text{Cos}[2\,\alpha-2\,t\,\omega]-\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\Big)$$
$$\left(-4\,\text{M0}+2\,\text{M0}\,\text{Cos}[2\,t\,\omega]-\text{M0}\,\text{Cos}[2\,\alpha-2\,t\,\omega]-\text{M0}\,\text{Cos}[2\,\alpha+2\,t\,\omega]+\right.$$
$$2\,\text{M0}\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{M0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+$$
$$2\,\text{M0}\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\,\text{M0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+$$
$$2\sqrt{2}\,\sqrt{\left(\text{M0}^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.}$$
$$\left.\left.\left.\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)$$
$$\left(4\,\text{M0}\,\omega\,\text{Sin}[2\,t\,\omega]+2\,\text{M0}\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-2\,\text{M0}\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]+\right.$$
$$\left(\sqrt{2}\,\left(2\,\text{M0}^2\,\omega\,\text{Cos}[t\,\omega]\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.\right.$$
$$\left.\left.\left.\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]+\text{M0}^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right.\right.$$
$$\left.\left.\left.\left(4\,\omega\,\text{Sin}[2\,t\,\omega]+2\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-2\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]\right)\right)\right)\Big/$$
$$\left(\sqrt{\left(\text{M0}^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.}\right.$$
$$\left.\left.\left.\left.\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\right)\Big/$$
$$\left(64\,\text{M0}\,\left(1+\text{Cos}[2\,\alpha]\right)^2\sqrt{\left(\text{M0}^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[\right.\right.\right.}$$
$$\left.\left.\left.2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)$$
$$\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,\text{M0}-2\,\text{Cos}[2\,\alpha]-2\,\text{M0}\,\text{Cos}[2\,t\,\omega]+\text{M0}\,\text{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.}$$
$$\left.\left.\text{M0}\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\left(\text{M0}^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\right)+$$
$$\left(\text{i}\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[t\,\omega]^2\left(-4\,\text{M0}+2\,\text{M0}\,\text{Cos}[2\,t\,\omega]-\text{M0}\,\text{Cos}[2\,\alpha-2\,t\,\omega]-\right.\right.$$
$$\text{M0}\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\,\text{M0}\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+$$
$$2\,\text{M0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{M0}\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+$$
$$2\,\text{M0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\left(-\text{M0}^2\left(-6-2\,\text{Cos}[2\,\alpha]+\right.\right.}$$
$$\left.\left.2\,\text{Cos}[2\,t\,\omega]-\text{Cos}[2\,\alpha-2\,t\,\omega]-\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\Big)$$
$$\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,\text{M0}-2\,\text{Cos}[2\,\alpha]-2\,\text{M0}\,\text{Cos}[2\,t\,\omega]+\text{M0}\,\text{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.}$$
$$\left.\left.\text{M0}\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\sqrt{2}\,\sqrt{\left(\text{M0}^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\right)$$
$$\left(-4\,\text{M0}\,\omega\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]-4\,\text{M0}\,\omega\,\text{Cos}[2\,\alpha]\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2\right.$$
$$\text{Sin}[t\,\omega]+4\,\text{M0}\,\omega\,\text{Sin}[2\,t\,\omega]+2\,\text{M0}\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-$$

$$4\,M0\,\omega\,\text{Cos}[\alpha - t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[\alpha - t\,\omega] - 4\,M0\,\omega\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[\alpha - t\,\omega] - 2\,M0\,\omega\,\text{Sin}[2\,\alpha + 2\,t\,\omega] + \left(\sqrt{2}\,\left(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega] + M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\,\left(4\,\omega\,\text{Sin}[2\,t\,\omega] + 2\,\omega\,\text{Sin}[2\,\alpha - 2\,t\,\omega] - 2\,\omega\,\text{Sin}[2\,\alpha + 2\,t\,\omega]\right)\right)\right) \Big/ \left(\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\Big) \Big/ \left(32\,M0\,\left(1 + \text{Cos}[2\,\alpha]\right)\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right) - \left(i\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[t\,\omega]^2\,\left(4\,M0 - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\,\sqrt{2}\,\sqrt{\left(-M0^2\,\left(-6 - 2\,\text{Cos}[2\,\alpha] + 2\,\text{Cos}[2\,t\,\omega] - \text{Cos}[2\,\alpha - 2\,t\,\omega] - \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\sqrt{\left(\frac{1}{1 + \text{Cos}[2\,\alpha]}\,\left(-2 + 4\,M0 - 2\,\text{Cos}[2\,\alpha] - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] + 2\,\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\right)$$

$$\left(4\,M0\,\omega\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega] + 4\,M0\,\omega\,\text{Cos}[2\,\alpha]\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega] - 4\,M0\,\omega\,\text{Sin}[2\,t\,\omega] - 2\,M0\,\omega\,\text{Sin}[2\,\alpha - 2\,t\,\omega] + 4\,M0\,\omega\,\text{Cos}[\alpha - t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[\alpha - t\,\omega] + 4\,M0\,\omega\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[\alpha - t\,\omega] + 2\,M0\,\omega\,\text{Sin}[2\,\alpha + 2\,t\,\omega] + \left(\sqrt{2}\,\left(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega] + M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\,\left(4\,\omega\,\text{Sin}[2\,t\,\omega] + 2\,\omega\,\text{Sin}[2\,\alpha - 2\,t\,\omega] - 2\,\omega\,\text{Sin}[2\,\alpha + 2\,t\,\omega]\right)\right)\right) \Big/ \left(\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\Big) \Big/ \left(32\,M0\,\left(1 + \text{Cos}[2\,\alpha]\right)\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right) - \left(i\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[t\,\omega]^2\,\sqrt{\left(\frac{1}{1 + \text{Cos}[2\,\alpha]}\,\left(-2 + 4\,M0 - 2\,\text{Cos}[2\,\alpha] - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] + 2\,\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\right)}\,\left(-4\,M0 + 2\,M0\,\text{Cos}[2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] + 2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\,\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\,\left(-4\,M0\,\omega\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega] -$$

$$4\,M0\,\omega\,\text{Cos}[2\,\alpha]\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega] + 4\,M0\,\omega\,\text{Sin}[2\,t\,\omega] +$$
$$2\,M0\,\omega\,\text{Sin}[2\,\alpha - 2\,t\,\omega] - 4\,M0\,\omega\,\text{Cos}[\alpha - t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[\alpha - t\,\omega] -$$
$$4\,M0\,\omega\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[\alpha - t\,\omega] - 2\,M0\,\omega\,\text{Sin}[2\,\alpha + 2\,t\,\omega] +$$
$$\left(\sqrt{2}\,\left(-2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\,\left(-6 - 2\,\text{Cos}[2\,\alpha] + 2\,\text{Cos}[2\,t\,\omega] - \text{Cos}[2\,\alpha - 2\,t\,\omega] - \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega] - M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\,\left(-4\,\omega\,\text{Sin}[2\,t\,\omega] - 2\,\omega\,\text{Sin}[2\,\alpha - 2\,t\,\omega] + 2\,\omega\,\text{Sin}[2\,\alpha + 2\,t\,\omega]\right)\right)\right) /$$
$$\left(\sqrt{\left(-M0^2\,\left(-6 - 2\,\text{Cos}[2\,\alpha] + 2\,\text{Cos}[2\,t\,\omega] - \text{Cos}[2\,\alpha - 2\,t\,\omega] - \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\Bigg) /$$
$$\left(32\,M0\,\left(1 + \text{Cos}[2\,\alpha]\right)\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right) +$$
$$\left(i\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[t\,\omega]^2\,\sqrt{\left(\frac{1}{1 + \text{Cos}[2\,\alpha]}\,\left(-2 + 4\,M0 - 2\,\text{Cos}[2\,\alpha] - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\,\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\right)}\right)$$
$$\left(4\,M0 - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\,\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\,\left(4\,M0\,\omega\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega] + 4\,M0\,\omega\,\text{Cos}[2\,\alpha]\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega] - 4\,M0\,\omega\,\text{Sin}[2\,t\,\omega] - 2\,M0\,\omega\,\text{Sin}[2\,\alpha - 2\,t\,\omega] + 4\,M0\,\omega\,\text{Cos}[\alpha - t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[\alpha - t\,\omega] + 4\,M0\,\omega\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[\alpha - t\,\omega] + 2\,M0\,\omega\,\text{Sin}[2\,\alpha + 2\,t\,\omega] + \left(\sqrt{2}\,\left(-2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\,\left(-6 - 2\,\text{Cos}[2\,\alpha] + 2\,\text{Cos}[2\,t\,\omega] - \text{Cos}[2\,\alpha - 2\,t\,\omega] - \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega] - M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\,\left(-4\,\omega\,\text{Sin}[2\,t\,\omega] - 2\,\omega\,\text{Sin}[2\,\alpha - 2\,t\,\omega] + 2\,\omega\,\text{Sin}[2\,\alpha + 2\,t\,\omega]\right)\right)\right) /$$
$$\left(\sqrt{\left(-M0^2\,\left(-6 - 2\,\text{Cos}[2\,\alpha] + 2\,\text{Cos}[2\,t\,\omega] - \text{Cos}[2\,\alpha - 2\,t\,\omega] - \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\Bigg) /$$
$$\left(32\,M0\,\left(1 + \text{Cos}[2\,\alpha]\right)\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\Bigg)$$
$$\left(-\left(\left(i\,M0\,\left(1 + \text{Cos}[2\,\alpha]\right)\,\text{Sec}[\alpha]\,\text{Sin}[t\,\omega]^2\,\sqrt{\left(\frac{1}{1 + \text{Cos}[2\,\alpha]}\,\left(-2 + 4\,M0 - 2\,\text{Cos}[2\,\alpha] - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\,\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\right)}\right)\,\text{Tan}[\alpha]\right) / \left(2\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\Bigg) +$$

$$\left(i\,M0\,\left(1+\text{Cos}[2\,\alpha]\right)\,\text{Sec}[\alpha]\,\text{Sin}[t\,\omega]^2\,\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\,\left(-2+4\,M0-\right.\right.\right.$$
$$2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+$$
$$2\,\sqrt{2}\,\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.\right.$$
$$\left.\left.\left.\left.\left.\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\right)\,\text{Tan}[\alpha]\Bigg)\Big/$$
$$\left(2\,\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\right.}\right.$$
$$\left.\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\right)\Bigg)\Bigg)\Bigg)$$

$$\text{L12}[\alpha\_,\,\omega\_,\,t\_,\,M0\_,\,s\_,\,r\_,\,\theta\_]:=\frac{1}{M0}\,\text{Sec}[\alpha]^2\,\left(\text{Cos}[\alpha+t\,\omega]^2+\text{Sin}[t\,\omega]^2\right)$$
$$\left(s+\left(\left(\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\,\left(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.\right.\right.$$
$$M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\,\sqrt{2}\,\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\right.\right.\right.$$
$$\left.\left.\left.\left.\left.\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\right)$$
$$\left(4\,M0-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-\right.$$
$$2\,M0\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Sec}[\alpha]^2$$
$$\text{Sin}[t\,\omega]^2-2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\,\sqrt{2}\,\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-\right.\right.}$$
$$\left.\left.\left.\left.2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\Bigg)\Big/$$
$$\left(8\,\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\right.}\right.$$
$$\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)+$$
$$\left(\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\,\left(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.\right.$$
$$M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\,\sqrt{2}\,\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\right.\right.\right.$$
$$\left.\left.\left.\left.\left.\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\right)$$
$$\left(-4\,M0+2\,M0\,\text{Cos}[2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+\right.$$
$$2\,M0\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Sec}[\alpha]^2$$
$$\text{Sin}[t\,\omega]^2+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\,\sqrt{2}\,\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-\right.\right.}$$
$$\left.\left.\left.\left.2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\Bigg)\Big/$$
$$\left(8\,\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\right.}\right.$$
$$\left.\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\right)$$
$$\left(s\,\left(\left(\left(-4\,M0+2\,M0\,\text{Cos}[2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\,M0\,\text{Cos}[\alpha-t\,\omega]^2\right.\right.\right.\right.$$
$$\text{Sec}[\alpha]^2+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+$$
$$2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\,\sqrt{2}\,\sqrt{\left(-M0^2\,\left(-6-2\,\text{Cos}[2\,\alpha]+\right.\right.}$$
$$\left.\left.\left.\left.\left.2\,\text{Cos}[2\,t\,\omega]-\text{Cos}[2\,\alpha-2\,t\,\omega]-\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)$$
$$\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\,\left(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.}$$

$$M0\,\text{Cos}[2\alpha+2t\omega]-2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2t\omega]+\text{Cos}[2\alpha-2t\omega]+\text{Cos}[2\alpha+2t\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\right)}\Bigg)\Bigg)\Bigg/$$

$$\left(8\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2t\omega]+\text{Cos}[2\alpha-2t\omega]+\text{Cos}[2\alpha+2t\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\right)}\right)+$$

$$\Bigg(\Big(4\,M0-2\,M0\,\text{Cos}[2t\omega]+M0\,\text{Cos}[2\alpha-2t\omega]+M0\,\text{Cos}[2\alpha+2t\omega]-2\,M0\,\text{Cos}[\alpha-t\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-t\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\omega]^2-2\,M0\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\omega]^2+2\sqrt{2}\,\sqrt{\left(-M0^2\left(-6-2\,\text{Cos}[2\alpha]+2\,\text{Cos}[2t\omega]-\text{Cos}[2\alpha-2t\omega]-\text{Cos}[2\alpha+2t\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\right)}\Big)$$

$$\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\left(-2+4\,M0-2\,\text{Cos}[2\alpha]-2\,M0\,\text{Cos}[2t\omega]+M0\,\text{Cos}[2\alpha-2t\omega]+M0\,\text{Cos}[2\alpha+2t\omega]+2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2t\omega]+\text{Cos}[2\alpha-2t\omega]+\text{Cos}[2\alpha+2t\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\right)}\right)\Bigg)\Bigg/$$

$$\left(8\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2t\omega]+\text{Cos}[2\alpha-2t\omega]+\text{Cos}[2\alpha+2t\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\right)}\right)\Bigg)+$$

$$e^{-i\theta}\,r\Bigg(\Bigg(i\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[t\omega]^2\Big(-4\,M0+2\,M0\,\text{Cos}[2t\omega]-M0\,\text{Cos}[2\alpha-2t\omega]-M0\,\text{Cos}[2\alpha+2t\omega]+2\,M0\,\text{Cos}[\alpha-t\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-t\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\omega]^2+2\,M0\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\omega]^2+2\sqrt{2}\,\sqrt{\left(-M0^2\left(-6-2\,\text{Cos}[2\alpha]+2\,\text{Cos}[2t\omega]-\text{Cos}[2\alpha-2t\omega]-\text{Cos}[2\alpha+2t\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\right)}\Big)$$

$$\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\left(-2+4\,M0-2\,\text{Cos}[2\alpha]-2\,M0\,\text{Cos}[2t\omega]+M0\,\text{Cos}[2\alpha-2t\omega]+M0\,\text{Cos}[2\alpha+2t\omega]-2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2t\omega]+\text{Cos}[2\alpha-2t\omega]+\text{Cos}[2\alpha+2t\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\right)}\right)\Bigg)$$

$$\Big(4\,M0-2\,M0\,\text{Cos}[2t\omega]+M0\,\text{Cos}[2\alpha-2t\omega]+M0\,\text{Cos}[2\alpha+2t\omega]-2\,M0\,\text{Cos}[\alpha-t\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-t\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\omega]^2-2\,M0\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\omega]^2+2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2t\omega]+\text{Cos}[2\alpha-2t\omega]+\text{Cos}[2\alpha+2t\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\right)}\Big)\Bigg)\Bigg/$$

$$\left(32\,M0\left(1+\text{Cos}[2\alpha]\right)\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2t\omega]+\text{Cos}[2\alpha-2t\omega]+\text{Cos}[2\alpha+2t\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\right)}-\right.$$

$$\Bigg(i\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[t\omega]^2\Big(4\,M0-2\,M0\,\text{Cos}[2t\omega]+M0\,\text{Cos}[2\alpha-2t\omega]+M0\,\text{Cos}[2\alpha+2t\omega]-2\,M0\,\text{Cos}[\alpha-t\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-t\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\omega]^2-2\,M0\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\omega]^2+2\sqrt{2}\,\sqrt{\left(-M0^2\left(-6-2\,\text{Cos}[2\alpha]+2\,\text{Cos}[2t\omega]-\text{Cos}[2\alpha-2t\omega]-\text{Cos}[2\alpha+2t\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\right)}\Big)$$

$$\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4\,M0-2\cos[2\alpha]-2\,M0\cos[2\,t\,\omega]+M0\cos[2\alpha-2\,t\,\omega]+\right.\right.$$
$$M0\cos[2\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\right.\right.$$
$$\left.\left.\left.\left.\cos[2\alpha-2\,t\,\omega]+\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)\right)$$
$$\left(-4\,M0+2\,M0\cos[2\,t\,\omega]-M0\cos[2\alpha-2\,t\,\omega]-M0\cos[2\alpha+2\,t\,\omega]+\right.$$
$$2\,M0\cos[\alpha-t\,\omega]^2\sec[\alpha]^2+2\,M0\cos[2\alpha]\cos[\alpha-t\,\omega]^2\sec[\alpha]^2+2\,M0\sec[\alpha]^2$$
$$\sin[t\,\omega]^2+2\,M0\cos[2\alpha]\sec[\alpha]^2\sin[t\,\omega]^2+2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-\right.\right.}$$
$$\left.\left.\left.\left.2\cos[2\,t\,\omega]+\cos[2\alpha-2\,t\,\omega]+\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)\Big/$$
$$\left(32\,M0\left(1+\cos[2\alpha]\right)\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\cos[2\alpha-2\,t\,\omega]+\right.\right.\right.$$
$$\left.\left.\left.\left.\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)\right)+$$
$$\left(\left(i\cos[\alpha]\cot[\alpha]\csc[t\,\omega]^2\left(-4\,M0+2\,M0\cos[2\,t\,\omega]-M0\cos[2\alpha-2\,t\,\omega]-\right.\right.\right.$$
$$M0\cos[2\alpha+2\,t\,\omega]+2\,M0\cos[\alpha-t\,\omega]^2\sec[\alpha]^2+$$
$$2\,M0\cos[2\alpha]\cos[\alpha-t\,\omega]^2\sec[\alpha]^2+2\,M0\sec[\alpha]^2\sin[t\,\omega]^2+$$
$$2\,M0\cos[2\alpha]\sec[\alpha]^2\sin[t\,\omega]^2+2\sqrt{2}\,\sqrt{\left(-M0^2\left(-6-2\cos[2\alpha]+\right.\right.}$$
$$\left.\left.\left.\left.2\cos[2\,t\,\omega]-\cos[2\alpha-2\,t\,\omega]-\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)$$
$$\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4\,M0-2\cos[2\alpha]-2\,M0\cos[2\,t\,\omega]+M0\cos[2\alpha-2\,t\,\omega]+\right.\right.}$$
$$M0\cos[2\alpha+2\,t\,\omega]-2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\right.\right.}$$
$$\left.\left.\left.\left.\cos[2\alpha-2\,t\,\omega]+\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)\right)$$
$$\left(4\,M0-2\,M0\cos[2\,t\,\omega]+M0\cos[2\alpha-2\,t\,\omega]+M0\cos[2\alpha+2\,t\,\omega]-\right.$$
$$2\,M0\cos[\alpha-t\,\omega]^2\sec[\alpha]^2-2\,M0\cos[2\alpha]\cos[\alpha-t\,\omega]^2\sec[\alpha]^2-$$
$$2\,M0\sec[\alpha]^2\sin[t\,\omega]^2-2\,M0\cos[2\alpha]\sec[\alpha]^2\sin[t\,\omega]^2+$$
$$2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\cos[2\alpha-2\,t\,\omega]+\right.\right.}$$
$$\left.\left.\left.\left.\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)\Big/$$
$$\left(32\,M0\left(1+\cos[2\alpha]\right)\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\cos[2\alpha-2\,t\,\omega]+\right.\right.\right.$$
$$\left.\left.\left.\left.\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)-$$
$$\left(i\cos[\alpha]\cot[\alpha]\csc[t\,\omega]^2\left(4\,M0-2\,M0\cos[2\,t\,\omega]+M0\cos[2\alpha-2\,t\,\omega]+\right.\right.$$
$$M0\cos[2\alpha+2\,t\,\omega]-2\,M0\cos[\alpha-t\,\omega]^2\sec[\alpha]^2-$$
$$2\,M0\cos[2\alpha]\cos[\alpha-t\,\omega]^2\sec[\alpha]^2-2\,M0\sec[\alpha]^2\sin[t\,\omega]^2-$$
$$2\,M0\cos[2\alpha]\sec[\alpha]^2\sin[t\,\omega]^2+2\sqrt{2}\,\sqrt{\left(-M0^2\left(-6-2\cos[2\alpha]+\right.\right.}$$
$$\left.\left.\left.\left.2\cos[2\,t\,\omega]-\cos[2\alpha-2\,t\,\omega]-\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)$$
$$\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4\,M0-2\cos[2\alpha]-2\,M0\cos[2\,t\,\omega]+M0\cos[2\alpha-2\,t\,\omega]+\right.\right.}$$
$$M0\cos[2\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\right.\right.}$$
$$\left.\left.\left.\left.\cos[2\alpha-2\,t\,\omega]+\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)\right)$$

$$\Big(-4\,M0+2\,M0\,\text{Cos}[2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\,M0\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\Big)\Big/\Big(32\,M0\,\big(1+\text{Cos}[2\,\alpha]\big)\,\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\Big)$$

$$\Big(e^{i\,\theta}\,r\,\Big(\Big(\Big(-4\,M0+2\,M0\,\text{Cos}[2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\,M0\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\big(-M0^2\,\big(-6-2\,\text{Cos}[2\,\alpha]+2\,\text{Cos}[2\,t\,\omega]-\text{Cos}[2\,\alpha-2\,t\,\omega]-\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\Big)\,\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\,\Big(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\sqrt{2}\,\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\Big)\Big)\Big)\Big/\Big(8\,\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\Big)+\Big(\Big(4\,M0-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\,M0\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2-2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\big(-M0^2\,\big(-6-2\,\text{Cos}[2\,\alpha]+2\,\text{Cos}[2\,t\,\omega]-\text{Cos}[2\,\alpha-2\,t\,\omega]-\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\Big)\,\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\,\Big(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\Big)\Big)\Big)\Big/\Big(8\,\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\Big)\Big)+s\,\Big(\Big(i\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[t\,\omega]^2\,\Big(-4\,M0+2\,M0\,\text{Cos}[2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\,M0\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\big(-M0^2\,\big(-6-2\,\text{Cos}[2\,\alpha]+2\,\text{Cos}[2\,t\,\omega]-\text{Cos}[2\,\alpha-2\,t\,\omega]-\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\Big)\,\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\,\Big(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\sqrt{2}\,\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+$$

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

$$\Big(4\,M0 - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] -$$
$$2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Sec}[\alpha]^2$$
$$\text{Sin}[t\,\omega]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\sqrt{2}\,\sqrt{\Big(M0^2\,\Big(6 + 2\,\text{Cos}[2\,\alpha] -$$
$$2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\Big)}\Big)\Big)\Big/$$
$$\Big(32\,M0\,\Big(1 + \text{Cos}[2\,\alpha]\Big)\,\sqrt{\Big(M0^2\,\Big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] +$$
$$\text{Cos}[2\,\alpha + 2\,t\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\Big)}\Big) -$$
$$\Big(i\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[t\,\omega]^2\,\Big(4\,M0 - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] +$$
$$M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 -$$
$$2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 -$$
$$2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\sqrt{2}\,\sqrt{\Big(-M0^2\,\Big(-6 - 2\,\text{Cos}[2\,\alpha] +$$
$$2\,\text{Cos}[2\,t\,\omega] - \text{Cos}[2\,\alpha - 2\,t\,\omega] - \text{Cos}[2\,\alpha + 2\,t\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\Big)}\Big)$$
$$\sqrt{\Big(\frac{1}{1 + \text{Cos}[2\,\alpha]}\,\Big(-2 + 4\,M0 - 2\,\text{Cos}[2\,\alpha] - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] +$$
$$M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] + 2\sqrt{2}\,\sqrt{\Big(M0^2\,\Big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] +$$
$$\text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\Big)}\Big)\Big)$$
$$\Big(-4\,M0 + 2\,M0\,\text{Cos}[2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] +$$
$$2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,M0\,\text{Sec}[\alpha]^2$$
$$\text{Sin}[t\,\omega]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\sqrt{2}\,\sqrt{\Big(M0^2\,\Big(6 + 2\,\text{Cos}[2\,\alpha] -$$
$$2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\Big)}\Big)\Big)\Big/$$
$$\Big(32\,M0\,\Big(1 + \text{Cos}[2\,\alpha]\Big)\,\sqrt{\Big(M0^2\,\Big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] +$$
$$\text{Cos}[2\,\alpha + 2\,t\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\Big)}\Big)\Big)\Big) +$$
$$i\,\Big(\Big(\Big(i\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[t\,\omega]^2\,\Big(-4\,M0 + 2\,M0\,\text{Cos}[2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] -$$
$$M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] + 2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 +$$
$$2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 +$$
$$2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\sqrt{2}\,\sqrt{\Big(-M0^2\,\Big(-6 - 2\,\text{Cos}[2\,\alpha] +$$
$$2\,\text{Cos}[2\,t\,\omega] - \text{Cos}[2\,\alpha - 2\,t\,\omega] - \text{Cos}[2\,\alpha + 2\,t\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\Big)}\Big)$$
$$\sqrt{\Big(\frac{1}{1 + \text{Cos}[2\,\alpha]}\,\Big(-2 + 4\,M0 - 2\,\text{Cos}[2\,\alpha] - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] +$$
$$M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\sqrt{2}\,\sqrt{\Big(M0^2\,\Big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] +$$
$$\text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\Big)}\Big)\Big)$$
$$\Big(4\,M0 - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] -$$
$$2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Sec}[\alpha]^2$$
$$\text{Sin}[t\,\omega]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\sqrt{2}\,\sqrt{\Big(M0^2\,\Big(6 + 2\,\text{Cos}[2\,\alpha] -$$
$$2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\Big)}\Big)\Big)\Big/$$

$$\left(32\,M0\,\left(1+\text{Cos}[2\,\alpha]\right)\,\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)-$$

$$\left(i\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[t\,\omega]^2\,\left(4\,M0-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\,M0\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2-2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\,\sqrt{2}\,\sqrt{\left(-M0^2\,\left(-6-2\,\text{Cos}[2\,\alpha]+2\,\text{Cos}[2\,t\,\omega]-\text{Cos}[2\,\alpha-2\,t\,\omega]-\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\Bigg/\left(\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\,\left(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\,\sqrt{2}\,\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\right)}\,\left(-4\,M0+2\,M0\,\text{Cos}[2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\,M0\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\,\sqrt{2}\,\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\Bigg/\left(32\,M0\,\left(1+\text{Cos}[2\,\alpha]\right)\,\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)$$

$$\left(-\left(\left(\left(-4\,M0+2\,M0\,\text{Cos}[2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\,M0\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\,\sqrt{2}\,\sqrt{\left(-M0^2\,\left(-6-2\,\text{Cos}[2\,\alpha]+2\,\text{Cos}[2\,t\,\omega]-\text{Cos}[2\,\alpha-2\,t\,\omega]-\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\Bigg/\left(\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\,\left(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\,\sqrt{2}\,\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\right)}\,\left(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]+M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\,\left(4\,\omega\,\text{Sin}[2\,t\,\omega]+2\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-2\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]\right)\right)\Bigg/\left(16\,\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)^{3/2}\right)\right)-$$

$$\left(\left(4\,M0-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\,M0\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2-2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\,\sqrt{2}\,\sqrt{\left(-M0^2\,\left(-6-2\,\text{Cos}[2\,\alpha]+2\,\text{Cos}[2\,t\,\omega]-\text{Cos}[2\,\alpha-2\,t\,\omega]-\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\right)$$

$$\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4\,M0-2\cos[2\alpha]-2\,M0\cos[2\,t\,\omega]+M0\cos[2\alpha-2\,t\,\omega]+\right.\right.$$
$$M0\cos[2\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\right.\right.$$
$$\left.\left.\left.\left.\cos[2\alpha-2\,t\,\omega]+\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)\right)$$
$$\left(2\,M0^2\,\omega\cos[t\,\omega]\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\cos[2\alpha-2\,t\,\omega]+\right.\right.$$
$$\left.\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]+M0^2\sin[\alpha]^2\sin[t\,\omega]^2$$
$$\left.\left.\left(4\,\omega\sin[2\,t\,\omega]+2\,\omega\sin[2\alpha-2\,t\,\omega]-2\,\omega\sin[2\alpha+2\,t\,\omega]\right)\right)\right)\Big/$$
$$\left(16\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\cos[2\alpha-2\,t\,\omega]+\cos[2\alpha+2\,t\,\omega]\right)\right.\right.$$
$$\left.\left.\sin[\alpha]^2\sin[t\,\omega]^2\right)^{3/2}\right)+$$
$$\left(\left(-4\,M0+2\,M0\cos[2\,t\,\omega]-M0\cos[2\alpha-2\,t\,\omega]-M0\cos[2\alpha+2\,t\,\omega]+\right.\right.$$
$$2\,M0\cos[\alpha-t\,\omega]^2\sec[\alpha]^2+2\,M0\cos[2\alpha]\cos[\alpha-t\,\omega]^2\sec[\alpha]^2+2\,M0\sec[\alpha]^2$$
$$\sin[t\,\omega]^2+2\,M0\cos[2\alpha]\sec[\alpha]^2\sin[t\,\omega]^2+2\sqrt{2}\,\sqrt{\left(-M0^2\left(-6-2\cos[2\alpha]+\right.\right.$$
$$\left.\left.\left.2\cos[2\,t\,\omega]-\cos[2\alpha-2\,t\,\omega]-\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)}\right)$$
$$\left(4\,M0\,\omega\sin[2\,t\,\omega]+2\,M0\,\omega\sin[2\alpha-2\,t\,\omega]-2\,M0\,\omega\sin[2\alpha+2\,t\,\omega]-\right.$$
$$\left(\sqrt{2}\,\left(2\,M0^2\,\omega\cos[t\,\omega]\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\cos[2\alpha-2\,t\,\omega]+\right.\right.\right.$$
$$\left.\left.\left.\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]+M0^2\sin[\alpha]^2\sin[t\,\omega]^2\right.\right.$$
$$\left.\left.\left.\left(4\,\omega\sin[2\,t\,\omega]+2\,\omega\sin[2\alpha-2\,t\,\omega]-2\,\omega\sin[2\alpha+2\,t\,\omega]\right)\right)\right)\Big/$$
$$\left(\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\cos[2\alpha-2\,t\,\omega]+\right.\right.\right.$$
$$\left.\left.\left.\left.\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)}\right)\right)\Big/$$
$$\left(16\left(1+\cos[2\alpha]\right)\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\cos[2\alpha-2\,t\,\omega]+\right.\right.\right.$$
$$\left.\left.\left.\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)}$$
$$\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4\,M0-2\cos[2\alpha]-2\,M0\cos[2\,t\,\omega]+M0\cos[2\alpha-2\,t\,\omega]+\right.\right.}$$
$$M0\cos[2\alpha+2\,t\,\omega]-2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\right.\right.$$
$$\left.\left.\left.\left.\cos[2\alpha-2\,t\,\omega]+\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)\right)\Big)+$$
$$\left(\left(4\,M0-2\,M0\cos[2\,t\,\omega]+M0\cos[2\alpha-2\,t\,\omega]+M0\cos[2\alpha+2\,t\,\omega]-2\,M0\right.\right.$$
$$\cos[\alpha-t\,\omega]^2\sec[\alpha]^2-2\,M0\cos[2\alpha]\cos[\alpha-t\,\omega]^2\sec[\alpha]^2-2\,M0\sec[\alpha]^2$$
$$\sin[t\,\omega]^2-2\,M0\cos[2\alpha]\sec[\alpha]^2\sin[t\,\omega]^2+2\sqrt{2}\,\sqrt{\left(-M0^2\left(-6-2\cos[2\alpha]+\right.\right.}$$
$$\left.\left.\left.2\cos[2\,t\,\omega]-\cos[2\alpha-2\,t\,\omega]-\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)}\right)$$
$$\left(4\,M0\,\omega\sin[2\,t\,\omega]+2\,M0\,\omega\sin[2\alpha-2\,t\,\omega]-2\,M0\,\omega\sin[2\alpha+2\,t\,\omega]+\right.$$
$$\left(\sqrt{2}\,\left(2\,M0^2\,\omega\cos[t\,\omega]\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\cos[2\alpha-2\,t\,\omega]+\right.\right.\right.$$
$$\left.\left.\left.\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]+M0^2\sin[\alpha]^2\sin[t\,\omega]^2\right.\right.$$
$$\left.\left.\left.\left(4\,\omega\sin[2\,t\,\omega]+2\,\omega\sin[2\alpha-2\,t\,\omega]-2\,\omega\sin[2\alpha+2\,t\,\omega]\right)\right)\right)\Big/$$
$$\left(\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\cos[2\alpha-2\,t\,\omega]+\right.\right.\right.$$
$$\left.\left.\left.\left.\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)}\right)\right)\Big/$$

$$\Bigg(16\,\left(1+\text{Cos}[2\,\alpha]\right)\,\sqrt{\left(\text{M0}^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\,\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\,\left(-2+4\,\text{M0}-2\,\text{Cos}[2\,\alpha]-2\,\text{M0}\,\text{Cos}[2\,t\,\omega]+\text{M0}\,\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{M0}\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\,\sqrt{2}\,\sqrt{\left(\text{M0}^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\right)}+$$

$$\Bigg(\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\,\left(-2+4\,\text{M0}-2\,\text{Cos}[2\,\alpha]-2\,\text{M0}\,\text{Cos}[2\,t\,\omega]+\text{M0}\,\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{M0}\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\,\sqrt{2}\,\sqrt{\left(\text{M0}^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\right)}$$

$$\Big(-4\,\text{M0}\,\omega\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]-4\,\text{M0}\,\omega\,\text{Cos}[2\,\alpha]\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]+4\,\text{M0}\,\omega\,\text{Sin}[2\,t\,\omega]+2\,\text{M0}\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-4\,\text{M0}\,\omega\,\text{Cos}[\alpha-t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[\alpha-t\,\omega]-4\,\text{M0}\,\omega\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[\alpha-t\,\omega]-2\,\text{M0}\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]+\Big(\sqrt{2}\,\left(-2\,\text{M0}^2\,\omega\,\text{Cos}[t\,\omega]\,\left(-6-2\,\text{Cos}[2\,\alpha]+2\,\text{Cos}[2\,t\,\omega]-\text{Cos}[2\,\alpha-2\,t\,\omega]-\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]-\text{M0}^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\,\left(-4\,\omega\,\text{Sin}[2\,t\,\omega]-2\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]+2\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]\right)\right)\Big)\Big/\Big(\sqrt{\left(-\text{M0}^2\,\left(-6-2\,\text{Cos}[2\,\alpha]+2\,\text{Cos}[2\,t\,\omega]-\text{Cos}[2\,\alpha-2\,t\,\omega]-\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Big)\Bigg)\Big/$$

$$\Big(8\,\sqrt{\left(\text{M0}^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Big)+$$

$$\Bigg(\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\,\left(-2+4\,\text{M0}-2\,\text{Cos}[2\,\alpha]-2\,\text{M0}\,\text{Cos}[2\,t\,\omega]+\text{M0}\,\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{M0}\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\,\sqrt{2}\,\sqrt{\left(\text{M0}^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\right)}$$

$$\Big(4\,\text{M0}\,\omega\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]+4\,\text{M0}\,\omega\,\text{Cos}[2\,\alpha]\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]-4\,\text{M0}\,\omega\,\text{Sin}[2\,t\,\omega]-2\,\text{M0}\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]+4\,\text{M0}\,\omega\,\text{Cos}[\alpha-t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[\alpha-t\,\omega]+4\,\text{M0}\,\omega\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[\alpha-t\,\omega]+2\,\text{M0}\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]+\Big(\sqrt{2}\,\left(-2\,\text{M0}^2\,\omega\,\text{Cos}[t\,\omega]\,\left(-6-2\,\text{Cos}[2\,\alpha]+2\,\text{Cos}[2\,t\,\omega]-\text{Cos}[2\,\alpha-2\,t\,\omega]-\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]-\text{M0}^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\,\left(-4\,\omega\,\text{Sin}[2\,t\,\omega]-2\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]+2\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]\right)\right)\Big)\Big/\Big(\sqrt{\left(-\text{M0}^2\,\left(-6-2\,\text{Cos}[2\,\alpha]+2\,\text{Cos}[2\,t\,\omega]-\text{Cos}[2\,\alpha-2\,t\,\omega]-\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Big)\Bigg)\Big/$$

$$\Big(8\,\sqrt{\left(\text{M0}^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Big)\Bigg)+$$

$$\left(\left(\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4\,M0-2\cos[2\alpha]-2\,M0\cos[2\,t\,\omega]+M0\cos[2\alpha-2\,t\,\omega]+\right.\right.\right.\right.$$
$$\left.\left.\left.\left.M0\cos[2\alpha+2\,t\,\omega]-2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\right.\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\left.\cos[2\alpha-2\,t\,\omega]+\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)\right)$$
$$\left(4\,M0-2\,M0\cos[2\,t\,\omega]+M0\cos[2\alpha-2\,t\,\omega]+M0\cos[2\alpha+2\,t\,\omega]-\right.$$
$$2\,M0\cos[\alpha-t\,\omega]^2\sec[\alpha]^2-2\,M0\cos[2\alpha]\cos[\alpha-t\,\omega]^2\sec[\alpha]^2-2\,M0\sec[\alpha]^2$$
$$\sin[t\,\omega]^2-2\,M0\cos[2\alpha]\sec[\alpha]^2\sin[t\,\omega]^2+2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-\right.\right.}$$
$$\left.\left.\left.\left.2\cos[2\,t\,\omega]+\cos[2\alpha-2\,t\,\omega]+\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)\Bigg)\Bigg/$$
$$\left(8\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\cos[2\alpha-2\,t\,\omega]+\cos[2\alpha+2\,t\,\omega]\right)\right.}\right.$$
$$\left.\left.\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)+$$
$$\left(\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4\,M0-2\cos[2\alpha]-2\,M0\cos[2\,t\,\omega]+M0\cos[2\alpha-2\,t\,\omega]+\right.\right.\right.$$
$$\left.\left.\left.M0\cos[2\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\left.\cos[2\alpha-2\,t\,\omega]+\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)\right)$$
$$\left(-4\,M0+2\,M0\cos[2\,t\,\omega]-M0\cos[2\alpha-2\,t\,\omega]-M0\cos[2\alpha+2\,t\,\omega]+\right.$$
$$2\,M0\cos[\alpha-t\,\omega]^2\sec[\alpha]^2+2\,M0\cos[2\alpha]\cos[\alpha-t\,\omega]^2\sec[\alpha]^2+2\,M0\sec[\alpha]^2$$
$$\sin[t\,\omega]^2+2\,M0\cos[2\alpha]\sec[\alpha]^2\sin[t\,\omega]^2+2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-\right.\right.}$$
$$\left.\left.\left.\left.2\cos[2\,t\,\omega]+\cos[2\alpha-2\,t\,\omega]+\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)\Bigg)\Bigg/$$
$$\left(8\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\cos[2\alpha-2\,t\,\omega]+\cos[2\alpha+2\,t\,\omega]\right)\right.}\right.$$
$$\left.\left.\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)\Bigg)$$
$$\left(-\left(\left(\left(i\,\omega\cos[\alpha]\cot[\alpha]\cot[t\,\omega]\csc[t\,\omega]^2\left(-4\,M0+2\,M0\cos[2\,t\,\omega]-\right.\right.\right.\right.$$
$$M0\cos[2\alpha-2\,t\,\omega]-M0\cos[2\alpha+2\,t\,\omega]+2\,M0\cos[\alpha-t\,\omega]^2\sec[\alpha]^2+$$
$$2\,M0\cos[2\alpha]\cos[\alpha-t\,\omega]^2\sec[\alpha]^2+2\,M0\sec[\alpha]^2\sin[t\,\omega]^2+$$
$$2\,M0\cos[2\alpha]\sec[\alpha]^2\sin[t\,\omega]^2+2\sqrt{2}\,\sqrt{\left(-M0^2\left(-6-2\cos[2\alpha]+\right.\right.}$$
$$\left.\left.\left.\left.2\cos[2\,t\,\omega]-\cos[2\alpha-2\,t\,\omega]-\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)$$
$$\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4\,M0-2\cos[2\alpha]-2\,M0\cos[2\,t\,\omega]+M0\cos[2\alpha-2\,t\,\omega]+\right.\right.}$$
$$\left.\left.M0\cos[2\alpha+2\,t\,\omega]-2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\left.\cos[2\alpha-2\,t\,\omega]+\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)\right)$$
$$\left(4\,M0-2\,M0\cos[2\,t\,\omega]+M0\cos[2\alpha-2\,t\,\omega]+M0\cos[2\alpha+2\,t\,\omega]-\right.$$
$$2\,M0\cos[\alpha-t\,\omega]^2\sec[\alpha]^2-2\,M0\cos[2\alpha]\cos[\alpha-t\,\omega]^2\sec[\alpha]^2-$$
$$2\,M0\sec[\alpha]^2\sin[t\,\omega]^2-2\,M0\cos[2\alpha]\sec[\alpha]^2\sin[t\,\omega]^2+$$
$$2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\cos[2\alpha-2\,t\,\omega]+\cos[2\alpha+2\,t\,\omega]\right)\right.}$$
$$\left.\left.\left.\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)\Bigg)\Bigg/\left(16\,M0\left(1+\cos[2\alpha]\right)\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-\right.\right.}\right.$$

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

$$\Big(i\,\omega\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Cot}[t\,\omega]\,\text{Csc}[t\,\omega]^2\Big(4\,M0-2\,M0\,\text{Cos}[2\,t\,\omega]+$$
$$M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\,M0\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-$$
$$2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2-$$
$$2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\Big(-M0^2\Big(-6-2\,\text{Cos}[2\,\alpha]+$$
$$2\,\text{Cos}[2\,t\,\omega]-\text{Cos}[2\,\alpha-2\,t\,\omega]-\text{Cos}[2\,\alpha+2\,t\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\Big)}\Big)$$
$$\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\Big(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+$$
$$M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\Big(M0^2\Big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+$$
$$\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\Big)}\Big)\Big)$$
$$\Big(-4\,M0+2\,M0\,\text{Cos}[2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+$$
$$2\,M0\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+$$
$$2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+$$
$$2\sqrt{2}\,\sqrt{\Big(M0^2\Big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+$$
$$\text{Cos}[2\,\alpha+2\,t\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\Big)}\Big)\Big)\Big/$$
$$\Big(16\,M0\,\Big(1+\text{Cos}[2\,\alpha]\Big)\,\sqrt{\Big(M0^2\Big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+$$
$$\text{Cos}[2\,\alpha+2\,t\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\Big)}-$$
$$\Big(i\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[t\,\omega]^2\Big(-4\,M0+2\,M0\,\text{Cos}[2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]-$$
$$M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\,M0\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+$$
$$2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+$$
$$2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\Big(-M0^2\Big(-6-2\,\text{Cos}[2\,\alpha]+$$
$$2\,\text{Cos}[2\,t\,\omega]-\text{Cos}[2\,\alpha-2\,t\,\omega]-\text{Cos}[2\,\alpha+2\,t\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\Big)}\Big)$$
$$\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\Big(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+$$
$$M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\sqrt{2}\,\sqrt{\Big(M0^2\Big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+$$
$$\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\Big)}\Big)\Big)$$
$$\Big(4\,M0-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-$$
$$2\,M0\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-$$
$$2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2-2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+$$
$$2\sqrt{2}\,\sqrt{\Big(M0^2\Big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\Big)$$
$$\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\Big)}\Big)\Big(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\Big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+$$
$$\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]+M0^2\,\text{Sin}[\alpha]^2$$
$$\text{Sin}[t\,\omega]^2\Big(4\,\omega\,\text{Sin}[2\,t\,\omega]+2\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-2\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]\Big)\Big)\Big)\Big/$$
$$\Big(64\,M0\,\Big(1+\text{Cos}[2\,\alpha]\Big)\,\Big(M0^2\Big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+$$
$$\text{Cos}[2\,\alpha+2\,t\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\Big)^{3/2}\Big)+$$

$$\Bigg(\mathrm{i}\,\mathrm{Cos}[\alpha]\,\mathrm{Cot}[\alpha]\,\mathrm{Csc}[t\,\omega]^2\,\Big(4\,M0-2\,M0\,\mathrm{Cos}[2\,t\,\omega]+M0\,\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\mathrm{Cos}[2\,\alpha+2\,t\,\omega]-2\,M0\,\mathrm{Cos}[\alpha-t\,\omega]^2\,\mathrm{Sec}[\alpha]^2-2\,M0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Cos}[\alpha-t\,\omega]^2\,\mathrm{Sec}[\alpha]^2-2\,M0\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2-2\,M0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\Big(-M0^2\,\Big(-6-2\,\mathrm{Cos}[2\,\alpha]+2\,\mathrm{Cos}[2\,t\,\omega]-\mathrm{Cos}[2\,\alpha-2\,t\,\omega]-\mathrm{Cos}[2\,\alpha+2\,t\,\omega]\Big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\Big)}\Big)\Big/\sqrt{\Big(\frac{1}{1+\mathrm{Cos}[2\,\alpha]}\,\Big(-2+4\,M0-2\,\mathrm{Cos}[2\,\alpha]-2\,M0\,\mathrm{Cos}[2\,t\,\omega]+M0\,\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\mathrm{Cos}[2\,\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\Big(M0^2\,\Big(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,t\,\omega]+\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+\mathrm{Cos}[2\,\alpha+2\,t\,\omega]\Big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\Big)}\Big)\Big)}\,\Big(-4\,M0+2\,M0\,\mathrm{Cos}[2\,t\,\omega]-M0\,\mathrm{Cos}[2\,\alpha-2\,t\,\omega]-M0\,\mathrm{Cos}[2\,\alpha+2\,t\,\omega]+2\,M0\,\mathrm{Cos}[\alpha-t\,\omega]^2\,\mathrm{Sec}[\alpha]^2+2\,M0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Cos}[\alpha-t\,\omega]^2\,\mathrm{Sec}[\alpha]^2+2\,M0\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2+2\,M0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\Big(M0^2\,\Big(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,t\,\omega]+\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+\mathrm{Cos}[2\,\alpha+2\,t\,\omega]\Big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\Big)}\Big)\,\Big(2\,M0^2\,\omega\,\mathrm{Cos}[t\,\omega]\,\Big(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,t\,\omega]+\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+\mathrm{Cos}[2\,\alpha+2\,t\,\omega]\Big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]+M0^2\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\,\Big(4\,\omega\,\mathrm{Sin}[2\,t\,\omega]+2\,\omega\,\mathrm{Sin}[2\,\alpha-2\,t\,\omega]-2\,\omega\,\mathrm{Sin}[2\,\alpha+2\,t\,\omega]\Big)\Big)\Bigg)\Big/\Big(64\,M0\,\Big(1+\mathrm{Cos}[2\,\alpha]\Big)\,\Big(M0^2\,\Big(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,t\,\omega]+\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+\mathrm{Cos}[2\,\alpha+2\,t\,\omega]\Big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\Big)^{3/2}\Big)+\Bigg(\mathrm{i}\,\mathrm{Cos}[\alpha]\,\mathrm{Cot}[\alpha]\,\mathrm{Csc}[t\,\omega]^2\,\Big(-4\,M0+2\,M0\,\mathrm{Cos}[2\,t\,\omega]-M0\,\mathrm{Cos}[2\,\alpha-2\,t\,\omega]-M0\,\mathrm{Cos}[2\,\alpha+2\,t\,\omega]+2\,M0\,\mathrm{Cos}[\alpha-t\,\omega]^2\,\mathrm{Sec}[\alpha]^2+2\,M0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Cos}[\alpha-t\,\omega]^2\,\mathrm{Sec}[\alpha]^2+2\,M0\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2+2\,M0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\Big(-M0^2\,\Big(-6-2\,\mathrm{Cos}[2\,\alpha]+2\,\mathrm{Cos}[2\,t\,\omega]-\mathrm{Cos}[2\,\alpha-2\,t\,\omega]-\mathrm{Cos}[2\,\alpha+2\,t\,\omega]\Big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\Big)}\Big)\,\Big(4\,M0-2\,M0\,\mathrm{Cos}[2\,t\,\omega]+M0\,\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\mathrm{Cos}[2\,\alpha+2\,t\,\omega]-2\,M0\,\mathrm{Cos}[\alpha-t\,\omega]^2\,\mathrm{Sec}[\alpha]^2-2\,M0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Cos}[\alpha-t\,\omega]^2\,\mathrm{Sec}[\alpha]^2-2\,M0\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2-2\,M0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\Big(M0^2\,\Big(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,t\,\omega]+\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+\mathrm{Cos}[2\,\alpha+2\,t\,\omega]\Big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\Big)}\Big)\,\Big(4\,M0\,\omega\,\mathrm{Sin}[2\,t\,\omega]+2\,M0\,\omega\,\mathrm{Sin}[2\,\alpha-2\,t\,\omega]-2\,M0\,\omega\,\mathrm{Sin}[2\,\alpha+2\,t\,\omega]-\Big(\sqrt{2}\,\Big(2\,M0^2\,\omega\,\mathrm{Cos}[t\,\omega]\,\Big(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,t\,\omega]+\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+\mathrm{Cos}[2\,\alpha+2\,t\,\omega]\Big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]+M0^2\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\,\Big(4\,\omega\,\mathrm{Sin}[2\,t\,\omega]+2\,\omega\,\mathrm{Sin}[2\,\alpha-2\,t\,\omega]-2\,\omega\,\mathrm{Sin}[2\,\alpha+2\,t\,\omega]\Big)\Big)\Big)\Big/\Big(\sqrt{\Big(M0^2\,\Big(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,t\,\omega]+\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+\mathrm{Cos}[2\,\alpha+2\,t\,\omega]\Big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\Big)}\Big)\Big)\Big)\Big/\Big(64\,M0\,\Big(1+\mathrm{Cos}[2\,\alpha]\Big)^2\,\sqrt{\Big(M0^2\,\Big(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,t\,\omega]+\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+\mathrm{Cos}[2\,\alpha+2\,t\,\omega]\Big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\Big)}\,\sqrt{\Big(\frac{1}{1+\mathrm{Cos}[2\,\alpha]}\,\Big(-2+4\,M0-2\,\mathrm{Cos}[2\,\alpha]-2\,M0\,\mathrm{Cos}[2\,t\,\omega]+M0\,\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+$$

$$
\begin{aligned}
&\mathrm{M0}\,\mathrm{Cos}[2\alpha+2t\omega]-2\sqrt{2}\,\sqrt{\left(\mathrm{M0}^2\left(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2t\omega]+\right.\right.}\\
&\qquad\left.\left.\mathrm{Cos}[2\alpha-2t\omega]+\mathrm{Cos}[2\alpha+2t\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]^2\right)}\Bigg)\Bigg)-\\
&\Bigg(i\,\mathrm{Cos}[\alpha]\,\mathrm{Cot}[\alpha]\,\mathrm{Csc}[t\omega]^2\left(4\,\mathrm{M0}-2\,\mathrm{M0}\,\mathrm{Cos}[2t\omega]+\mathrm{M0}\,\mathrm{Cos}[2\alpha-2t\omega]+\right.\\
&\quad\mathrm{M0}\,\mathrm{Cos}[2\alpha+2t\omega]-2\,\mathrm{M0}\,\mathrm{Cos}[\alpha-t\omega]^2\,\mathrm{Sec}[\alpha]^2-\\
&\quad2\,\mathrm{M0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Cos}[\alpha-t\omega]^2\,\mathrm{Sec}[\alpha]^2-2\,\mathrm{M0}\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\omega]^2-\\
&\quad2\,\mathrm{M0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\omega]^2+2\sqrt{2}\,\sqrt{\left(-\mathrm{M0}^2\left(-6-2\,\mathrm{Cos}[2\alpha]+\right.\right.}\\
&\qquad\left.\left.2\,\mathrm{Cos}[2t\omega]-\mathrm{Cos}[2\alpha-2t\omega]-\mathrm{Cos}[2\alpha+2t\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]^2\right)}\Bigg)\\
&\quad\left(-4\,\mathrm{M0}+2\,\mathrm{M0}\,\mathrm{Cos}[2t\omega]-\mathrm{M0}\,\mathrm{Cos}[2\alpha-2t\omega]-\mathrm{M0}\,\mathrm{Cos}[2\alpha+2t\omega]+\right.\\
&\quad2\,\mathrm{M0}\,\mathrm{Cos}[\alpha-t\omega]^2\,\mathrm{Sec}[\alpha]^2+2\,\mathrm{M0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Cos}[\alpha-t\omega]^2\,\mathrm{Sec}[\alpha]^2+\\
&\quad2\,\mathrm{M0}\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\omega]^2+2\,\mathrm{M0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\omega]^2+\\
&\quad2\sqrt{2}\,\sqrt{\left(\mathrm{M0}^2\left(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2t\omega]+\mathrm{Cos}[2\alpha-2t\omega]+\right.\right.}\\
&\qquad\left.\left.\mathrm{Cos}[2\alpha+2t\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]^2\right)}\Bigg)\\
&\quad\left(4\,\mathrm{M0}\,\omega\,\mathrm{Sin}[2t\omega]+2\,\mathrm{M0}\,\omega\,\mathrm{Sin}[2\alpha-2t\omega]-2\,\mathrm{M0}\,\omega\,\mathrm{Sin}[2\alpha+2t\omega]+\right.\\
&\quad\left(\sqrt{2}\,\left(2\,\mathrm{M0}^2\,\omega\,\mathrm{Cos}[t\omega]\left(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2t\omega]+\mathrm{Cos}[2\alpha-2t\omega]+\right.\right.\right.\\
&\qquad\left.\left.\left.\mathrm{Cos}[2\alpha+2t\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]+\mathrm{M0}^2\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]^2\right.\\
&\qquad\left.\left.\left(4\,\omega\,\mathrm{Sin}[2t\omega]+2\,\omega\,\mathrm{Sin}[2\alpha-2t\omega]-2\,\omega\,\mathrm{Sin}[2\alpha+2t\omega]\right)\right)\right)\Big/\\
&\quad\left(\sqrt{\left(\mathrm{M0}^2\left(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2t\omega]+\mathrm{Cos}[2\alpha-2t\omega]+\right.\right.\right.}\\
&\qquad\left.\left.\left.\mathrm{Cos}[2\alpha+2t\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]^2\right)}\right)\Bigg)\Bigg)\Big/\\
&\Bigg(64\,\mathrm{M0}\left(1+\mathrm{Cos}[2\alpha]\right)^2\sqrt{\left(\mathrm{M0}^2\left(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2t\omega]+\mathrm{Cos}[\right.\right.}\\
&\qquad\left.\left.2\alpha-2t\omega]+\mathrm{Cos}[2\alpha+2t\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]^2\right)}\\
&\quad\sqrt{\left(\frac{1}{1+\mathrm{Cos}[2\alpha]}\left(-2+4\,\mathrm{M0}-2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{M0}\,\mathrm{Cos}[2t\omega]+\mathrm{M0}\,\mathrm{Cos}[2\alpha-2t\omega]+\right.\right.}\\
&\qquad\mathrm{M0}\,\mathrm{Cos}[2\alpha+2t\omega]+2\sqrt{2}\,\sqrt{\left(\mathrm{M0}^2\left(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2t\omega]+\right.\right.}\\
&\qquad\left.\left.\left.\left.\mathrm{Cos}[2\alpha-2t\omega]+\mathrm{Cos}[2\alpha+2t\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]^2\right)}\right)\Bigg)+\\
&\Bigg(i\,\mathrm{Cos}[\alpha]\,\mathrm{Cot}[\alpha]\,\mathrm{Csc}[t\omega]^2\left(-4\,\mathrm{M0}+2\,\mathrm{M0}\,\mathrm{Cos}[2t\omega]-\mathrm{M0}\,\mathrm{Cos}[2\alpha-2t\omega]-\right.\\
&\quad\mathrm{M0}\,\mathrm{Cos}[2\alpha+2t\omega]+2\,\mathrm{M0}\,\mathrm{Cos}[\alpha-t\omega]^2\,\mathrm{Sec}[\alpha]^2+\\
&\quad2\,\mathrm{M0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Cos}[\alpha-t\omega]^2\,\mathrm{Sec}[\alpha]^2+2\,\mathrm{M0}\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\omega]^2+\\
&\quad2\,\mathrm{M0}\,\mathrm{Cos}[2\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\omega]^2+2\sqrt{2}\,\sqrt{\left(-\mathrm{M0}^2\left(-6-2\,\mathrm{Cos}[2\alpha]+\right.\right.}\\
&\qquad\left.\left.2\,\mathrm{Cos}[2t\omega]-\mathrm{Cos}[2\alpha-2t\omega]-\mathrm{Cos}[2\alpha+2t\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]^2\right)}\Bigg)\\
&\quad\sqrt{\left(\frac{1}{1+\mathrm{Cos}[2\alpha]}\left(-2+4\,\mathrm{M0}-2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{M0}\,\mathrm{Cos}[2t\omega]+\mathrm{M0}\,\mathrm{Cos}[2\alpha-2t\omega]+\right.\right.}\\
&\qquad\mathrm{M0}\,\mathrm{Cos}[2\alpha+2t\omega]-2\sqrt{2}\,\sqrt{\left(\mathrm{M0}^2\left(6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2t\omega]+\right.\right.}\\
&\qquad\left.\left.\left.\left.\mathrm{Cos}[2\alpha-2t\omega]+\mathrm{Cos}[2\alpha+2t\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]^2\right)}\right)\Bigg)\\
&\quad\left(-4\,\mathrm{M0}\,\omega\,\mathrm{Cos}[t\omega]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\omega]-4\,\mathrm{M0}\,\omega\,\mathrm{Cos}[2\alpha]\,\mathrm{Cos}[t\omega]\,\mathrm{Sec}[\alpha]^2\right.\\
&\quad\mathrm{Sin}[t\omega]+4\,\mathrm{M0}\,\omega\,\mathrm{Sin}[2t\omega]+2\,\mathrm{M0}\,\omega\,\mathrm{Sin}[2\alpha-2t\omega]-\\
&\quad4\,\mathrm{M0}\,\omega\,\mathrm{Cos}[\alpha-t\omega]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\alpha-t\omega]-4\,\mathrm{M0}\,\omega\,\mathrm{Cos}[2\alpha]\\
&\quad\mathrm{Cos}[\alpha-t\omega]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\alpha-t\omega]-2\,\mathrm{M0}\,\omega\,\mathrm{Sin}[2\alpha+2t\omega]+
\end{aligned}
$$

$$\left(\sqrt{2}\ \left(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\ \left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]+M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\left(4\,\omega\,\text{Sin}[2\,t\,\omega]+2\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-2\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]\right)\right)\Big/\left(\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\right)\Big/$$

$$\left(32\,M0\left(1+\text{Cos}[2\,\alpha]\right)\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}-\left(i\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[t\,\omega]^2\left(4\,M0-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\,M0\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2-2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\sqrt{2}\ \sqrt{\left(-M0^2\left(-6-2\,\text{Cos}[2\,\alpha]+2\,\text{Cos}[2\,t\,\omega]-\text{Cos}[2\,\alpha-2\,t\,\omega]-\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\sqrt{2}\ \sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\right)}\left(4\,M0\,\omega\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]+4\,M0\,\omega\,\text{Cos}[2\,\alpha]\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]-4\,M0\,\omega\,\text{Sin}[2\,t\,\omega]-2\,M0\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]+4\,M0\,\omega\,\text{Cos}[\alpha-t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[\alpha-t\,\omega]+4\,M0\,\omega\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[\alpha-t\,\omega]+2\,M0\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]+\left(\sqrt{2}\ \left(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\ \left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]+M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\left(4\,\omega\,\text{Sin}[2\,t\,\omega]+2\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-2\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]\right)\right)\Big/\left(\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\right)\Big/\left(32\,M0\left(1+\text{Cos}[2\,\alpha]\right)\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}-\left(i\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[t\,\omega]^2\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\sqrt{2}\ \sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\right)}\left(-4\,M0+2\,M0\,\text{Cos}[2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\,M0\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\sqrt{2}\ \sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\left(-4\,M0\,\omega\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]-4\,M0\,\omega\,\text{Cos}[2\,\alpha]\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]+4\,M0\,\omega\,\text{Sin}[2\,t\,\omega]+2\,M0\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-4\,M0\,\omega\,\text{Cos}[\alpha-t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[\alpha-t\,\omega]-$$

$$4\,M0\,\omega\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[\alpha - t\,\omega] - 2\,M0\,\omega\,\text{Sin}[2\,\alpha + 2\,t\,\omega] + \left(\sqrt{2}\,\left(-2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\,\left(-6 - 2\,\text{Cos}[2\,\alpha] + 2\,\text{Cos}[2\,t\,\omega] - \text{Cos}[2\,\alpha - 2\,t\,\omega] - \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega] - M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\,\left(-4\,\omega\,\text{Sin}[2\,t\,\omega] - 2\,\omega\,\text{Sin}[2\,\alpha - 2\,t\,\omega] + 2\,\omega\,\text{Sin}[2\,\alpha + 2\,t\,\omega]\right)\right)\right) \Big/ \left(\sqrt{\left(-M0^2\,\left(-6 - 2\,\text{Cos}[2\,\alpha] + 2\,\text{Cos}[2\,t\,\omega] - \text{Cos}[2\,\alpha - 2\,t\,\omega] - \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\Big) \Big/ \left(32\,M0\,\left(1 + \text{Cos}[2\,\alpha]\right)\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)} + \left(i\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[t\,\omega]^2\,\sqrt{\left(\frac{1}{1 + \text{Cos}[2\,\alpha]}\,\left(-2 + 4\,M0 - 2\,\text{Cos}[2\,\alpha] - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\,\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\right)} \left(4\,M0 - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\,\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\,\left(4\,M0\,\omega\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega] + 4\,M0\,\omega\,\text{Cos}[2\,\alpha]\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega] - 4\,M0\,\omega\,\text{Sin}[2\,t\,\omega] - 2\,M0\,\omega\,\text{Sin}[2\,\alpha - 2\,t\,\omega] + 4\,M0\,\omega\,\text{Cos}[\alpha - t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[\alpha - t\,\omega] + 4\,M0\,\omega\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[\alpha - t\,\omega] + 2\,M0\,\omega\,\text{Sin}[2\,\alpha + 2\,t\,\omega] + \left(\sqrt{2}\,\left(-2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\,\left(-6 - 2\,\text{Cos}[2\,\alpha] + 2\,\text{Cos}[2\,t\,\omega] - \text{Cos}[2\,\alpha - 2\,t\,\omega] - \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega] - M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\,\left(-4\,\omega\,\text{Sin}[2\,t\,\omega] - 2\,\omega\,\text{Sin}[2\,\alpha - 2\,t\,\omega] + 2\,\omega\,\text{Sin}[2\,\alpha + 2\,t\,\omega]\right)\right)\right) \Big/ \left(\sqrt{\left(-M0^2\,\left(-6 - 2\,\text{Cos}[2\,\alpha] + 2\,\text{Cos}[2\,t\,\omega] - \text{Cos}[2\,\alpha - 2\,t\,\omega] - \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\Big) \Big/ \left(32\,M0\,\left(1 + \text{Cos}[2\,\alpha]\right)\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\right)\right) + \frac{1}{M0}\,2\,i\,\text{Sec}[\alpha]\,\text{Sin}[t\,\omega]^2\,\text{Tan}[\alpha]\,\left(e^{i\,\Theta}\,r + \left(\left(\left(-4\,M0 + 2\,M0\,\text{Cos}[2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] + 2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\,\sqrt{2}\,\sqrt{\left(-M0^2\,\left(-6 - 2\,\text{Cos}[2\,\alpha] + 2\,\text{Cos}[2\,t\,\omega] - \text{Cos}[2\,\alpha - 2\,t\,\omega] - \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\,\sqrt{\left(\frac{1}{1 + \text{Cos}[2\,\alpha]}\,\left(-2 + 4\,M0 - 2\,\text{Cos}[2\,\alpha] - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\,\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\right)}\Big) \Big/$$

$$\left(8 \sqrt{\left(M0^2 \left(6 + 2 \cos[2\alpha] - 2 \cos[2 t \omega] + \cos[2\alpha - 2 t \omega] + \cos[2\alpha + 2 t \omega]\right) \sin[\alpha]^2 \sin[t \omega]^2\right)}\right) +$$

$$\left(\left(4 M0 - 2 M0 \cos[2 t \omega] + M0 \cos[2\alpha - 2 t \omega] + M0 \cos[2\alpha + 2 t \omega] - 2 M0 \cos[\alpha - t \omega]^2 \sec[\alpha]^2 - 2 M0 \cos[2\alpha] \cos[\alpha - t \omega]^2 \sec[\alpha]^2 - 2 M0 \sec[\alpha]^2 \sin[t \omega]^2 - 2 M0 \cos[2\alpha] \sec[\alpha]^2 \sin[t \omega]^2 + 2\sqrt{2} \sqrt{\left(-M0^2 \left(-6 - 2 \cos[2\alpha] + 2 \cos[2 t \omega] - \cos[2\alpha - 2 t \omega] - \cos[2\alpha + 2 t \omega]\right) \sin[\alpha]^2 \sin[t \omega]^2\right)}\right) \sqrt{\left(\frac{1}{1 + \cos[2\alpha]} \left(-2 + 4 M0 - 2 \cos[2\alpha] - 2 M0 \cos[2 t \omega] + M0 \cos[2\alpha - 2 t \omega] + M0 \cos[2\alpha + 2 t \omega] + 2\sqrt{2} \sqrt{\left(M0^2 \left(6 + 2 \cos[2\alpha] - 2 \cos[2 t \omega] + \cos[2\alpha - 2 t \omega] + \cos[2\alpha + 2 t \omega]\right) \sin[\alpha]^2 \sin[t \omega]^2\right)}\right)\right)}\Big/$$

$$\left(8 \sqrt{\left(M0^2 \left(6 + 2 \cos[2\alpha] - 2 \cos[2 t \omega] + \cos[2\alpha - 2 t \omega] + \cos[2\alpha + 2 t \omega]\right) \sin[\alpha]^2 \sin[t \omega]^2\right)}\right)\Bigg)$$

$$\left(e^{i \theta} r \left(\left(\left(-4 M0 + 2 M0 \cos[2 t \omega] - M0 \cos[2\alpha - 2 t \omega] - M0 \cos[2\alpha + 2 t \omega] + 2 M0 \cos[\alpha - t \omega]^2 \sec[\alpha]^2 + 2 M0 \cos[2\alpha] \cos[\alpha - t \omega]^2 \sec[\alpha]^2 + 2 M0 \sec[\alpha]^2 \sin[t \omega]^2 + 2 M0 \cos[2\alpha] \sec[\alpha]^2 \sin[t \omega]^2 + 2\sqrt{2} \sqrt{\left(-M0^2 \left(-6 - 2 \cos[2\alpha] + 2 \cos[2 t \omega] - \cos[2\alpha - 2 t \omega] - \cos[2\alpha + 2 t \omega]\right) \sin[\alpha]^2 \sin[t \omega]^2\right)}\right) \sqrt{\left(\frac{1}{1 + \cos[2\alpha]} \left(-2 + 4 M0 - 2 \cos[2\alpha] - 2 M0 \cos[2 t \omega] + M0 \cos[2\alpha - 2 t \omega] + M0 \cos[2\alpha + 2 t \omega] - 2\sqrt{2} \sqrt{\left(M0^2 \left(6 + 2 \cos[2\alpha] - 2 \cos[2 t \omega] + \cos[2\alpha - 2 t \omega] + \cos[2\alpha + 2 t \omega]\right) \sin[\alpha]^2 \sin[t \omega]^2\right)}\right)\right)}\Big/$$

$$\left(8 \sqrt{\left(M0^2 \left(6 + 2 \cos[2\alpha] - 2 \cos[2 t \omega] + \cos[2\alpha - 2 t \omega] + \cos[2\alpha + 2 t \omega]\right) \sin[\alpha]^2 \sin[t \omega]^2\right)}\right) +$$

$$\left(\left(4 M0 - 2 M0 \cos[2 t \omega] + M0 \cos[2\alpha - 2 t \omega] + M0 \cos[2\alpha + 2 t \omega] - 2 M0 \cos[\alpha - t \omega]^2 \sec[\alpha]^2 - 2 M0 \cos[2\alpha] \cos[\alpha - t \omega]^2 \sec[\alpha]^2 - 2 M0 \sec[\alpha]^2 \sin[t \omega]^2 - 2 M0 \cos[2\alpha] \sec[\alpha]^2 \sin[t \omega]^2 + 2\sqrt{2} \sqrt{\left(-M0^2 \left(-6 - 2 \cos[2\alpha] + 2 \cos[2 t \omega] - \cos[2\alpha - 2 t \omega] - \cos[2\alpha + 2 t \omega]\right) \sin[\alpha]^2 \sin[t \omega]^2\right)}\right) \sqrt{\left(\frac{1}{1 + \cos[2\alpha]} \left(-2 + 4 M0 - 2 \cos[2\alpha] - 2 M0 \cos[2 t \omega] + M0 \cos[2\alpha - 2 t \omega] + M0 \cos[2\alpha + 2 t \omega] + 2\sqrt{2} \sqrt{\left(M0^2 \left(6 + 2 \cos[2\alpha] - 2 \cos[2 t \omega] + \cos[2\alpha - 2 t \omega] + \cos[2\alpha + 2 t \omega]\right) \sin[\alpha]^2 \sin[t \omega]^2\right)}\right)\right)}\Big/$$

$$\left(8 \sqrt{\left(M0^2 \left(6 + 2 \cos[2\alpha] - 2 \cos[2 t \omega] + \cos[2\alpha - 2 t \omega] + \cos[2\alpha + 2 t \omega]\right) \sin[\alpha]^2 \sin[t \omega]^2\right)}\right)\Bigg) +$$

$$
\begin{aligned}
&s\left(\left(\left(i\,\mathrm{Cos}[\alpha]\,\mathrm{Cot}[\alpha]\,\mathrm{Csc}[t\,\omega]^2\left(-4\,M0+2\,M0\,\mathrm{Cos}[2\,t\,\omega]-M0\,\mathrm{Cos}[2\,\alpha-2\,t\,\omega]-\right.\right.\right.\right.\\
&\qquad M0\,\mathrm{Cos}[2\,\alpha+2\,t\,\omega]+2\,M0\,\mathrm{Cos}[\alpha-t\,\omega]^2\,\mathrm{Sec}[\alpha]^2+\\
&\qquad 2\,M0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Cos}[\alpha-t\,\omega]^2\,\mathrm{Sec}[\alpha]^2+2\,M0\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2+\\
&\qquad 2\,M0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\left(-M0^2\left(-6-2\,\mathrm{Cos}[2\,\alpha]+\right.\right.\right.\\
&\qquad\qquad \left.\left.\left.2\,\mathrm{Cos}[2\,t\,\omega]-\mathrm{Cos}[2\,\alpha-2\,t\,\omega]-\mathrm{Cos}[2\,\alpha+2\,t\,\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\right)}\Big)\\
&\qquad \sqrt{\left(\frac{1}{1+\mathrm{Cos}[2\,\alpha]}\left(-2+4\,M0-2\,\mathrm{Cos}[2\,\alpha]-2\,M0\,\mathrm{Cos}[2\,t\,\omega]+M0\,\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.\\
&\qquad\qquad M0\,\mathrm{Cos}[2\,\alpha+2\,t\,\omega]-2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,t\,\omega]+\right.\right.\right.\\
&\qquad\qquad\qquad \left.\left.\left.\left.\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+\mathrm{Cos}[2\,\alpha+2\,t\,\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\right)}\right)\Big)\\
&\qquad \left(4\,M0-2\,M0\,\mathrm{Cos}[2\,t\,\omega]+M0\,\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\mathrm{Cos}[2\,\alpha+2\,t\,\omega]-\right.\\
&\qquad 2\,M0\,\mathrm{Cos}[\alpha-t\,\omega]^2\,\mathrm{Sec}[\alpha]^2-2\,M0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Cos}[\alpha-t\,\omega]^2\,\mathrm{Sec}[\alpha]^2-\\
&\qquad 2\,M0\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2-2\,M0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2+\\
&\qquad 2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,t\,\omega]+\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.\right.\\
&\qquad\qquad \left.\left.\left.\mathrm{Cos}[2\,\alpha+2\,t\,\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\right)}\Big)\Big)\Big/\\
&\qquad \left(32\,M0\left(1+\mathrm{Cos}[2\,\alpha]\right)\sqrt{\left(M0^2\left(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,t\,\omega]+\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.\right.\\
&\qquad\qquad \left.\left.\left.\mathrm{Cos}[2\,\alpha+2\,t\,\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\right)}\Big)-\\
&\qquad \left(i\,\mathrm{Cos}[\alpha]\,\mathrm{Cot}[\alpha]\,\mathrm{Csc}[t\,\omega]^2\left(4\,M0-2\,M0\,\mathrm{Cos}[2\,t\,\omega]+M0\,\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.\\
&\qquad M0\,\mathrm{Cos}[2\,\alpha+2\,t\,\omega]-2\,M0\,\mathrm{Cos}[\alpha-t\,\omega]^2\,\mathrm{Sec}[\alpha]^2-\\
&\qquad 2\,M0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Cos}[\alpha-t\,\omega]^2\,\mathrm{Sec}[\alpha]^2-2\,M0\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2-\\
&\qquad 2\,M0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\left(-M0^2\left(-6-2\,\mathrm{Cos}[2\,\alpha]+\right.\right.\right.\\
&\qquad\qquad \left.\left.\left.2\,\mathrm{Cos}[2\,t\,\omega]-\mathrm{Cos}[2\,\alpha-2\,t\,\omega]-\mathrm{Cos}[2\,\alpha+2\,t\,\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\right)}\Big)\\
&\qquad \sqrt{\left(\frac{1}{1+\mathrm{Cos}[2\,\alpha]}\left(-2+4\,M0-2\,\mathrm{Cos}[2\,\alpha]-2\,M0\,\mathrm{Cos}[2\,t\,\omega]+M0\,\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.\\
&\qquad\qquad M0\,\mathrm{Cos}[2\,\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,t\,\omega]+\right.\right.\right.\\
&\qquad\qquad\qquad \left.\left.\left.\left.\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+\mathrm{Cos}[2\,\alpha+2\,t\,\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\right)}\right)\Big)\\
&\qquad \left(-4\,M0+2\,M0\,\mathrm{Cos}[2\,t\,\omega]-M0\,\mathrm{Cos}[2\,\alpha-2\,t\,\omega]-M0\,\mathrm{Cos}[2\,\alpha+2\,t\,\omega]+\right.\\
&\qquad 2\,M0\,\mathrm{Cos}[\alpha-t\,\omega]^2\,\mathrm{Sec}[\alpha]^2+2\,M0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Cos}[\alpha-t\,\omega]^2\,\mathrm{Sec}[\alpha]^2+\\
&\qquad 2\,M0\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2+2\,M0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2+\\
&\qquad 2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,t\,\omega]+\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.\right.\\
&\qquad\qquad \left.\left.\left.\mathrm{Cos}[2\,\alpha+2\,t\,\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\right)}\Big)\Big)\Big/\\
&\qquad \left(32\,M0\left(1+\mathrm{Cos}[2\,\alpha]\right)\sqrt{\left(M0^2\left(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,t\,\omega]+\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.\right.\\
&\qquad\qquad \left.\left.\left.\mathrm{Cos}[2\,\alpha+2\,t\,\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\right)}\Big)\Big)\Big)+\\
&s\left(\left(\left(\left(-4\,M0+2\,M0\,\mathrm{Cos}[2\,t\,\omega]-M0\,\mathrm{Cos}[2\,\alpha-2\,t\,\omega]-M0\,\mathrm{Cos}[2\,\alpha+2\,t\,\omega]+2\,M0\,\mathrm{Cos}[\alpha-t\,\omega]^2\right.\right.\right.\right.\\
&\qquad \mathrm{Sec}[\alpha]^2+2\,M0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Cos}[\alpha-t\,\omega]^2\,\mathrm{Sec}[\alpha]^2+2\,M0\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2+\\
&\qquad 2\,M0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\left(-M0^2\left(-6-2\,\mathrm{Cos}[2\,\alpha]+\right.\right.\right.\\
&\qquad\qquad \left.\left.\left.2\,\mathrm{Cos}[2\,t\,\omega]-\mathrm{Cos}[2\,\alpha-2\,t\,\omega]-\mathrm{Cos}[2\,\alpha+2\,t\,\omega]\right)\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\right)}\Big)
\end{aligned}
$$

$$\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4\,M0-2\cos[2\alpha]-2\,M0\cos[2\,t\,\omega]+M0\cos[2\alpha-2\,t\,\omega]+\right.\right.}$$
$$\left.\left.M0\cos[2\alpha+2\,t\,\omega]-2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\cos[2\alpha-2\,t\,\omega]+\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)\Bigg)\Bigg/$$
$$\left(8\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\cos[2\alpha-2\,t\,\omega]+\cos[2\alpha+2\,t\,\omega]\right)\right.}\right.$$
$$\left.\left.\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)+$$
$$\left(\left(4\,M0-2\,M0\cos[2\,t\,\omega]+M0\cos[2\alpha-2\,t\,\omega]+M0\cos[2\alpha+2\,t\,\omega]-\right.\right.$$
$$2\,M0\cos[\alpha-t\,\omega]^2\sec[\alpha]^2-2\,M0\cos[2\alpha]\cos[\alpha-t\,\omega]^2\sec[\alpha]^2-$$
$$2\,M0\sec[\alpha]^2\sin[t\,\omega]^2-2\,M0\cos[2\alpha]\sec[\alpha]^2\sin[t\,\omega]^2+$$
$$2\sqrt{2}\,\sqrt{\left(-M0^2\left(-6-2\cos[2\alpha]+2\cos[2\,t\,\omega]-\right.\right.}$$
$$\left.\left.\left.\cos[2\alpha-2\,t\,\omega]-\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)}\Bigg)$$
$$\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4\,M0-2\cos[2\alpha]-2\,M0\cos[2\,t\,\omega]+M0\cos[2\alpha-2\,t\,\omega]+\right.\right.}$$
$$\left.\left.M0\cos[2\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\cos[2\alpha-2\,t\,\omega]+\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)\Bigg)\Bigg/$$
$$\left(8\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\cos[2\alpha-2\,t\,\omega]+\cos[2\alpha+2\,t\,\omega]\right)\right.}\right.$$
$$\left.\left.\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)\Bigg)+$$
$$e^{-i\,\theta}\,r\left(\left(i\cos[\alpha]\cot[\alpha]\csc[t\,\omega]^2\left(-4\,M0+2\,M0\cos[2\,t\,\omega]-M0\cos[2\alpha-2\,t\,\omega]-\right.\right.\right.$$
$$M0\cos[2\alpha+2\,t\,\omega]+2\,M0\cos[\alpha-t\,\omega]^2\sec[\alpha]^2+$$
$$2\,M0\cos[2\alpha]\cos[\alpha-t\,\omega]^2\sec[\alpha]^2+2\,M0\sec[\alpha]^2\sin[t\,\omega]^2+$$
$$2\,M0\cos[2\alpha]\sec[\alpha]^2\sin[t\,\omega]^2+2\sqrt{2}\,\sqrt{\left(-M0^2\left(-6-2\cos[2\alpha]+\right.\right.}$$
$$\left.\left.\left.2\cos[2\,t\,\omega]-\cos[2\alpha-2\,t\,\omega]-\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)}\Bigg)$$
$$\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4\,M0-2\cos[2\alpha]-2\,M0\cos[2\,t\,\omega]+M0\cos[2\alpha-2\,t\,\omega]+\right.\right.}$$
$$\left.\left.M0\cos[2\alpha+2\,t\,\omega]-2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\cos[2\alpha-2\,t\,\omega]+\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)\Bigg)$$
$$\left(4\,M0-2\,M0\cos[2\,t\,\omega]+M0\cos[2\alpha-2\,t\,\omega]+M0\cos[2\alpha+2\,t\,\omega]-\right.$$
$$2\,M0\cos[\alpha-t\,\omega]^2\sec[\alpha]^2-2\,M0\cos[2\alpha]\cos[\alpha-t\,\omega]^2\sec[\alpha]^2-$$
$$2\,M0\sec[\alpha]^2\sin[t\,\omega]^2-2\,M0\cos[2\alpha]\sec[\alpha]^2\sin[t\,\omega]^2+$$
$$2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\cos[2\alpha-2\,t\,\omega]+\right.\right.}$$
$$\left.\left.\left.\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)}\Bigg)\Bigg/$$
$$\left(32\,M0\left(1+\cos[2\alpha]\right)\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\cos[2\alpha-2\,t\,\omega]+\right.\right.\right.}$$
$$\left.\left.\left.\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)-$$
$$\left(i\cos[\alpha]\cot[\alpha]\csc[t\,\omega]^2\left(4\,M0-2\,M0\cos[2\,t\,\omega]+M0\cos[2\alpha-2\,t\,\omega]+\right.\right.$$
$$M0\cos[2\alpha+2\,t\,\omega]-2\,M0\cos[\alpha-t\,\omega]^2\sec[\alpha]^2-$$
$$2\,M0\cos[2\alpha]\cos[\alpha-t\,\omega]^2\sec[\alpha]^2-2\,M0\sec[\alpha]^2\sin[t\,\omega]^2-$$

$$2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\sqrt{2}\,\sqrt{\left(-M0^2\,\left(-6 - 2\,\text{Cos}[2\,\alpha] + 2\,\text{Cos}[2\,t\,\omega] - \text{Cos}[2\,\alpha - 2\,t\,\omega] - \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}$$

$$\sqrt{\left(\frac{1}{1 + \text{Cos}[2\,\alpha]}\left(-2 + 4\,M0 - 2\,\text{Cos}[2\,\alpha] - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] + 2\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\right)}$$

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

$$\left(32\,M0\,\left(1 + \text{Cos}[2\,\alpha]\right)\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\Bigg)$$

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

$$\left(2\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\Bigg) +$$

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

$$\left(2\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\Bigg) +$$

$$i\,\Bigg(\Bigg(\Bigg(\Bigg(-4\,M0 + 2\,M0\,\text{Cos}[2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] + 2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\sqrt{2}\,\sqrt{\left(-M0^2\,\left(-6 - 2\,\text{Cos}[2\,\alpha] + 2\,\text{Cos}[2\,t\,\omega] - \text{Cos}[2\,\alpha - 2\,t\,\omega] - \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)$$

$$\sqrt{\left(\frac{1}{1 + \text{Cos}[2\,\alpha]}\left(-2 + 4\,M0 - 2\,\text{Cos}[2\,\alpha] - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] +\right.\right.\right.\right.$$

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

$$(8\sqrt{(\text{M0}^2\ (6+2\ \text{Cos}[2\alpha]-2\ \text{Cos}[2t\omega]+\text{Cos}[2\alpha-2t\omega]+\text{Cos}[2\alpha+2t\omega])}$$
$$\text{Sin}[\alpha]^2\ \text{Sin}[t\omega]^2))\ +$$

$$((4\ \text{M0}-2\ \text{M0}\ \text{Cos}[2t\omega]+\text{M0}\ \text{Cos}[2\alpha-2t\omega]+\text{M0}\ \text{Cos}[2\alpha+2t\omega]-$$
$$2\ \text{M0}\ \text{Cos}[\alpha-t\omega]^2\ \text{Sec}[\alpha]^2-2\ \text{M0}\ \text{Cos}[2\alpha]\ \text{Cos}[\alpha-t\omega]^2\ \text{Sec}[\alpha]^2-$$
$$2\ \text{M0}\ \text{Sec}[\alpha]^2\ \text{Sin}[t\omega]^2-2\ \text{M0}\ \text{Cos}[2\alpha]\ \text{Sec}[\alpha]^2\ \text{Sin}[t\omega]^2+$$
$$2\sqrt{2}\ \sqrt{(-\text{M0}^2\ (-6-2\ \text{Cos}[2\alpha]+2\ \text{Cos}[2t\omega]-}$$
$$\text{Cos}[2\alpha-2t\omega]-\text{Cos}[2\alpha+2t\omega])\ \text{Sin}[\alpha]^2\ \text{Sin}[t\omega]^2))$$

$$\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\ (-2+4\ \text{M0}-2\ \text{Cos}[2\alpha]-2\ \text{M0}\ \text{Cos}[2t\omega]+\text{M0}\ \text{Cos}[2\alpha-2t\omega]+\right.}$$
$$\text{M0}\ \text{Cos}[2\alpha+2t\omega]+2\sqrt{2}\ \sqrt{(\text{M0}^2\ (6+2\ \text{Cos}[2\alpha]-2\ \text{Cos}[2t\omega]+}$$
$$\text{Cos}[2\alpha-2t\omega]+\text{Cos}[2\alpha+2t\omega])\ \text{Sin}[\alpha]^2\ \text{Sin}[t\omega]^2))))\Big/$$

$$(8\sqrt{(\text{M0}^2\ (6+2\ \text{Cos}[2\alpha]-2\ \text{Cos}[2t\omega]+\text{Cos}[2\alpha-2t\omega]+\text{Cos}[2\alpha+2t\omega])}$$
$$\text{Sin}[\alpha]^2\ \text{Sin}[t\omega]^2)))$$

$$(-(((-4\ \text{M0}+2\ \text{M0}\ \text{Cos}[2t\omega]-\text{M0}\ \text{Cos}[2\alpha-2t\omega]-\text{M0}\ \text{Cos}[2\alpha+2t\omega]+$$
$$2\ \text{M0}\ \text{Cos}[\alpha-t\omega]^2\ \text{Sec}[\alpha]^2+2\ \text{M0}\ \text{Cos}[2\alpha]\ \text{Cos}[\alpha-t\omega]^2\ \text{Sec}[\alpha]^2+2\ \text{M0}\ \text{Sec}[\alpha]^2$$
$$\text{Sin}[t\omega]^2+2\ \text{M0}\ \text{Cos}[2\alpha]\ \text{Sec}[\alpha]^2\ \text{Sin}[t\omega]^2+2\sqrt{2}\ \sqrt{(-\text{M0}^2\ (-6-2\ \text{Cos}[2\alpha]+}$$
$$2\ \text{Cos}[2t\omega]-\text{Cos}[2\alpha-2t\omega]-\text{Cos}[2\alpha+2t\omega])\ \text{Sin}[\alpha]^2\ \text{Sin}[t\omega]^2))$$

$$\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\ (-2+4\ \text{M0}-2\ \text{Cos}[2\alpha]-2\ \text{M0}\ \text{Cos}[2t\omega]+\text{M0}\ \text{Cos}[2\alpha-2t\omega]+\right.}$$
$$\text{M0}\ \text{Cos}[2\alpha+2t\omega]-2\sqrt{2}\ \sqrt{(\text{M0}^2\ (6+2\ \text{Cos}[2\alpha]-2\ \text{Cos}[2t\omega]+}$$
$$\text{Cos}[2\alpha-2t\omega]+\text{Cos}[2\alpha+2t\omega])\ \text{Sin}[\alpha]^2\ \text{Sin}[t\omega]^2)))$$

$$(2\ \text{M0}^2\ \omega\ \text{Cos}[t\omega]\ (6+2\ \text{Cos}[2\alpha]-2\ \text{Cos}[2t\omega]+\text{Cos}[2\alpha-2t\omega]+$$
$$\text{Cos}[2\alpha+2t\omega])\ \text{Sin}[\alpha]^2\ \text{Sin}[t\omega]+\text{M0}^2\ \text{Sin}[\alpha]^2\ \text{Sin}[t\omega]^2$$
$$(4\ \omega\ \text{Sin}[2t\omega]+2\ \omega\ \text{Sin}[2\alpha-2t\omega]-2\ \omega\ \text{Sin}[2\alpha+2t\omega])))\Big/$$

$$(16\ (\text{M0}^2\ (6+2\ \text{Cos}[2\alpha]-2\ \text{Cos}[2t\omega]+\text{Cos}[2\alpha-2t\omega]+\text{Cos}[2\alpha+2t\omega])$$
$$\text{Sin}[\alpha]^2\ \text{Sin}[t\omega]^2)^{3/2}))\ -$$

$$((4\ \text{M0}-2\ \text{M0}\ \text{Cos}[2t\omega]+\text{M0}\ \text{Cos}[2\alpha-2t\omega]+\text{M0}\ \text{Cos}[2\alpha+2t\omega]-$$
$$2\ \text{M0}\ \text{Cos}[\alpha-t\omega]^2\ \text{Sec}[\alpha]^2-2\ \text{M0}\ \text{Cos}[2\alpha]\ \text{Cos}[\alpha-t\omega]^2\ \text{Sec}[\alpha]^2-$$
$$2\ \text{M0}\ \text{Sec}[\alpha]^2\ \text{Sin}[t\omega]^2-2\ \text{M0}\ \text{Cos}[2\alpha]\ \text{Sec}[\alpha]^2\ \text{Sin}[t\omega]^2+$$
$$2\sqrt{2}\ \sqrt{(-\text{M0}^2\ (-6-2\ \text{Cos}[2\alpha]+2\ \text{Cos}[2t\omega]-}$$
$$\text{Cos}[2\alpha-2t\omega]-\text{Cos}[2\alpha+2t\omega])\ \text{Sin}[\alpha]^2\ \text{Sin}[t\omega]^2))$$

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

$$M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Bigg)$$

$$\Big(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]+M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2$$

$$\left(4\,\omega\,\text{Sin}[2\,t\,\omega]+2\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-2\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]\right)\Big)\Bigg)\Big/$$

$$\Big(16\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)^{3/2}\Big)+$$

$$\Big(\Big(-4\,M0+2\,M0\,\text{Cos}[2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\,M0\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\left(-M0^2\left(-6-2\,\text{Cos}[2\,\alpha]+2\,\text{Cos}[2\,t\,\omega]-\text{Cos}[2\,\alpha-2\,t\,\omega]-\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Big)$$

$$\Big(4\,M0\,\omega\,\text{Sin}[2\,t\,\omega]+2\,M0\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-2\,M0\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]-\Big(\sqrt{2}\,\Big(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]+M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2$$

$$\left(4\,\omega\,\text{Sin}[2\,t\,\omega]+2\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-2\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]\right)\Big)\Big)\Big/\Big(\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Big)\Big)\Big)\Big/$$

$$\Big(16\left(1+\text{Cos}[2\,\alpha]\right)\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}$$

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

$$\Big(\Big(4\,M0-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\,M0\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2-2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\left(-M0^2\left(-6-2\,\text{Cos}[2\,\alpha]+2\,\text{Cos}[2\,t\,\omega]-\text{Cos}[2\,\alpha-2\,t\,\omega]-\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Big)$$

$$\Big(4\,M0\,\omega\,\text{Sin}[2\,t\,\omega]+2\,M0\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-2\,M0\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]+\Big(\sqrt{2}\,\Big(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]+M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2$$

$$\left(4\,\omega\,\text{Sin}[2\,t\,\omega]+2\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-2\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]\right)\Big)\Big)\Big/\Big(\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Big)\Big)\Big)\Big/$$

$$\Big(16\left(1+\text{Cos}[2\,\alpha]\right)\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+$$

$$\cos[2\alpha + 2t\omega]\Big)\sin[\alpha]^2\sin[t\omega]^2\Big)$$

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

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

$$\left.\left.\left.\left.\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)\right)\right)+$$

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

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

$$\left.\left.\left.\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)\right)\Bigg)$$

$$\Big(-4M0\,\omega\cos[t\omega]\sec[\alpha]^2\sin[t\omega]-4M0\,\omega\cos[2\alpha]\cos[t\omega]\sec[\alpha]^2$$

$$\sin[t\omega]+4M0\,\omega\sin[2t\omega]+2M0\,\omega\sin[2\alpha-2t\omega]-$$

$$4M0\,\omega\cos[\alpha-t\omega]\sec[\alpha]^2\sin[\alpha-t\omega]-4M0\,\omega\cos[2\alpha]$$

$$\cos[\alpha-t\omega]\sec[\alpha]^2\sin[\alpha-t\omega]-2M0\,\omega\sin[2\alpha+2t\omega]+$$

$$\Big(\sqrt{2}\left(-2M0^2\,\omega\cos[t\omega]\left(-6-2\cos[2\alpha]+2\cos[2t\omega]-\cos[2\alpha-2t\omega]-\right.\right.$$

$$\left.\left.\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]-M0^2\sin[\alpha]^2\sin[t\omega]^2\right.$$

$$\left.\left(-4\omega\sin[2t\omega]-2\omega\sin[2\alpha-2t\omega]+2\omega\sin[2\alpha+2t\omega]\right)\right)\Big)\Big/$$

$$\Big(\sqrt{\left(-M0^2\left(-6-2\cos[2\alpha]+2\cos[2t\omega]-\cos[2\alpha-2t\omega]-\right.\right.}$$

$$\left.\left.\left.\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)\right)\Big)\Big/$$

$$\Big(8\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\right.}$$

$$\left.\sin[\alpha]^2\sin[t\omega]^2\right)\Big)+$$

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

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

$$\left.\left.\left.\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)\right)\Bigg)$$

$$\Big(4M0\,\omega\cos[t\omega]\sec[\alpha]^2\sin[t\omega]+4M0\,\omega\cos[2\alpha]\cos[t\omega]\sec[\alpha]^2$$

$$\sin[t\omega]-4M0\,\omega\sin[2t\omega]-2M0\,\omega\sin[2\alpha-2t\omega]+$$

$$4M0\,\omega\cos[\alpha-t\omega]\sec[\alpha]^2\sin[\alpha-t\omega]+4M0\,\omega\cos[2\alpha]$$

$$\cos[\alpha-t\omega]\sec[\alpha]^2\sin[\alpha-t\omega]+2M0\,\omega\sin[2\alpha+2t\omega]+$$

$$\Big(\sqrt{2}\left(-2M0^2\,\omega\cos[t\omega]\left(-6-2\cos[2\alpha]+2\cos[2t\omega]-\cos[2\alpha-2t\omega]-\right.\right.$$

$$\left.\left.\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]-M0^2\sin[\alpha]^2\sin[t\omega]^2\right.$$

$$\left.\left(-4\omega\sin[2t\omega]-2\omega\sin[2\alpha-2t\omega]+2\omega\sin[2\alpha+2t\omega]\right)\right)\Big)\Big/$$

$$\Big(\sqrt{\left(-M0^2\left(-6-2\cos[2\alpha]+2\cos[2t\omega]-\cos[2\alpha-2t\omega]-\right.\right.}$$

$$\left.\left.\left.\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)\right)\Big)\Big/$$

$$\Big(8\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\right.}$$

$$\left.\left.\sin[\alpha]^2\sin[t\omega]^2\right)\right)\Bigg)+$$

$$\left(-\left(\left(i\,\omega\cos[\alpha]\cot[\alpha]\cot[t\omega]\csc[t\omega]^2\left(-4M0+2M0\cos[2t\omega]-\right.\right.\right.\right.$$

$$
\begin{aligned}
&M0\,\text{Cos}[2\alpha-2t\omega]-M0\,\text{Cos}[2\alpha+2t\omega]+2\,M0\,\text{Cos}[\alpha-t\omega]^2\,\text{Sec}[\alpha]^2+\\
&2\,M0\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-t\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\omega]^2+\\
&2\,M0\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\omega]^2+2\sqrt{2}\,\sqrt{\left(-M0^2\left(-6-2\,\text{Cos}[2\alpha]+\right.\right.}\\
&\left.\left.2\,\text{Cos}[2t\omega]-\text{Cos}[2\alpha-2t\omega]-\text{Cos}[2\alpha+2t\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\right)}\Bigg)\\
&\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\left(-2+4\,M0-2\,\text{Cos}[2\alpha]-2\,M0\,\text{Cos}[2t\omega]+M0\,\text{Cos}[2\alpha-2t\omega]+\right.\right.}\\
&M0\,\text{Cos}[2\alpha+2t\omega]-2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2t\omega]+\right.\right.}\\
&\left.\left.\left.\left.\text{Cos}[2\alpha-2t\omega]+\text{Cos}[2\alpha+2t\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\right)\right)\Bigg)\\
&\Bigg(4\,M0-2\,M0\,\text{Cos}[2t\omega]+M0\,\text{Cos}[2\alpha-2t\omega]+M0\,\text{Cos}[2\alpha+2t\omega]-\\
&2\,M0\,\text{Cos}[\alpha-t\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-t\omega]^2\,\text{Sec}[\alpha]^2-\\
&2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\omega]^2-2\,M0\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\omega]^2+\\
&2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2t\omega]+\text{Cos}[2\alpha-2t\omega]+\text{Cos}[2\alpha+2t\omega]\right)\right.}\\
&\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\right)\right)\Bigg/\left(16\,M0\left(1+\text{Cos}[2\alpha]\right)\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\alpha]-\right.\right.\right.\\
&\left.\left.\left.2\,\text{Cos}[2t\omega]+\text{Cos}[2\alpha-2t\omega]+\text{Cos}[2\alpha+2t\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\right)}\right)+\\
&\Bigg(i\,\omega\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Cot}[t\omega]\,\text{Csc}[t\omega]^2\left(4\,M0-2\,M0\,\text{Cos}[2t\omega]+\right.\\
&M0\,\text{Cos}[2\alpha-2t\omega]+M0\,\text{Cos}[2\alpha+2t\omega]-2\,M0\,\text{Cos}[\alpha-t\omega]^2\,\text{Sec}[\alpha]^2-\\
&2\,M0\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-t\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\omega]^2-\\
&2\,M0\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\omega]^2+2\sqrt{2}\,\sqrt{\left(-M0^2\left(-6-2\,\text{Cos}[2\alpha]+\right.\right.}\\
&\left.\left.2\,\text{Cos}[2t\omega]-\text{Cos}[2\alpha-2t\omega]-\text{Cos}[2\alpha+2t\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\right)}\Bigg)\\
&\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\left(-2+4\,M0-2\,\text{Cos}[2\alpha]-2\,M0\,\text{Cos}[2t\omega]+M0\,\text{Cos}[2\alpha-2t\omega]+\right.\right.}\\
&M0\,\text{Cos}[2\alpha+2t\omega]+2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2t\omega]+\right.\right.}\\
&\left.\left.\left.\left.\text{Cos}[2\alpha-2t\omega]+\text{Cos}[2\alpha+2t\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\right)\right)\Bigg)\\
&\Bigg(-4\,M0+2\,M0\,\text{Cos}[2t\omega]-M0\,\text{Cos}[2\alpha-2t\omega]-M0\,\text{Cos}[2\alpha+2t\omega]+\\
&2\,M0\,\text{Cos}[\alpha-t\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-t\omega]^2\,\text{Sec}[\alpha]^2+\\
&2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\omega]^2+2\,M0\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\omega]^2+\\
&2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2t\omega]+\text{Cos}[2\alpha-2t\omega]+\right.\right.}\\
&\left.\left.\left.\text{Cos}[2\alpha+2t\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\right)}\Bigg)\Bigg/\\
&\left(16\,M0\left(1+\text{Cos}[2\alpha]\right)\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2t\omega]+\text{Cos}[2\alpha-2t\omega]+\right.\right.\right.}\\
&\left.\left.\left.\text{Cos}[2\alpha+2t\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\right)}\right)-\\
&\Bigg(i\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[t\omega]^2\left(-4\,M0+2\,M0\,\text{Cos}[2t\omega]-M0\,\text{Cos}[2\alpha-2t\omega]-\right.\\
&M0\,\text{Cos}[2\alpha+2t\omega]+2\,M0\,\text{Cos}[\alpha-t\omega]^2\,\text{Sec}[\alpha]^2+\\
&2\,M0\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-t\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\omega]^2+\\
&2\,M0\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\omega]^2+2\sqrt{2}\,\sqrt{\left(-M0^2\left(-6-2\,\text{Cos}[2\alpha]+\right.\right.}\\
&\left.\left.2\,\text{Cos}[2t\omega]-\text{Cos}[2\alpha-2t\omega]-\text{Cos}[2\alpha+2t\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\right)}\Bigg)\\
&\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\left(-2+4\,M0-2\,\text{Cos}[2\alpha]-2\,M0\,\text{Cos}[2t\omega]+M0\,\text{Cos}[2\alpha-2t\omega]+\right.\right.}
\end{aligned}
$$

$$
\begin{aligned}
&M0 \cos[2\alpha + 2t\omega] - 2\sqrt{2}\,\sqrt{\left(M0^2\left(6 + 2\cos[2\alpha] - 2\cos[2t\omega] + \cos[2\alpha - 2t\omega] + \cos[2\alpha + 2t\omega]\right)\sin[\alpha]^2 \sin[t\omega]^2\right)}\Bigg)\\
&\Big(4M0 - 2M0\cos[2t\omega] + M0\cos[2\alpha - 2t\omega] + M0\cos[2\alpha + 2t\omega] - 2M0\cos[\alpha - t\omega]^2 \sec[\alpha]^2 - 2M0\cos[2\alpha]\cos[\alpha - t\omega]^2 \sec[\alpha]^2 - 2M0\sec[\alpha]^2 \sin[t\omega]^2 - 2M0\cos[2\alpha]\sec[\alpha]^2 \sin[t\omega]^2 + 2\sqrt{2}\,\sqrt{\left(M0^2\left(6 + 2\cos[2\alpha] - 2\cos[2t\omega] + \cos[2\alpha - 2t\omega] + \cos[2\alpha + 2t\omega]\right)\sin[\alpha]^2 \sin[t\omega]^2\right)}\Big)\\
&\Big(2M0^2\omega\cos[t\omega]\left(6 + 2\cos[2\alpha] - 2\cos[2t\omega] + \cos[2\alpha - 2t\omega] + \cos[2\alpha + 2t\omega]\right)\sin[\alpha]^2 \sin[t\omega] + M0^2 \sin[\alpha]^2 \sin[t\omega]^2\left(4\omega\sin[2t\omega] + 2\omega\sin[2\alpha - 2t\omega] - 2\omega\sin[2\alpha + 2t\omega]\right)\Big)\Bigg)\Big/\\
&\Big(64M0\left(1 + \cos[2\alpha]\right)\left(M0^2\left(6 + 2\cos[2\alpha] - 2\cos[2t\omega] + \cos[2\alpha - 2t\omega] + \cos[2\alpha + 2t\omega]\right)\sin[\alpha]^2 \sin[t\omega]^2\right)^{3/2}\Big) +\\
&\Bigg(i\cos[\alpha]\cot[\alpha]\csc[t\omega]^2\Big(4M0 - 2M0\cos[2t\omega] + M0\cos[2\alpha - 2t\omega] + M0\cos[2\alpha + 2t\omega] - 2M0\cos[\alpha - t\omega]^2 \sec[\alpha]^2 - 2M0\cos[2\alpha]\cos[\alpha - t\omega]^2 \sec[\alpha]^2 - 2M0\sec[\alpha]^2 \sin[t\omega]^2 - 2M0\cos[2\alpha]\sec[\alpha]^2 \sin[t\omega]^2 + 2\sqrt{2}\,\sqrt{\left(-M0^2\left(-6 - 2\cos[2\alpha] + 2\cos[2t\omega] - \cos[2\alpha - 2t\omega] - \cos[2\alpha + 2t\omega]\right)\sin[\alpha]^2 \sin[t\omega]^2\right)}\Big)\\
&\sqrt{\Bigg(\frac{1}{1 + \cos[2\alpha]}\Big(-2 + 4M0 - 2\cos[2\alpha] - 2M0\cos[2t\omega] + M0\cos[2\alpha - 2t\omega] + M0\cos[2\alpha + 2t\omega] + 2\sqrt{2}\,\sqrt{\left(M0^2\left(6 + 2\cos[2\alpha] - 2\cos[2t\omega] + \cos[2\alpha - 2t\omega] + \cos[2\alpha + 2t\omega]\right)\sin[\alpha]^2 \sin[t\omega]^2\right)}\Big)\Bigg)}\\
&\Big(-4M0 + 2M0\cos[2t\omega] - M0\cos[2\alpha - 2t\omega] - M0\cos[2\alpha + 2t\omega] + 2M0\cos[\alpha - t\omega]^2 \sec[\alpha]^2 + 2M0\cos[2\alpha]\cos[\alpha - t\omega]^2 \sec[\alpha]^2 + 2M0\sec[\alpha]^2 \sin[t\omega]^2 + 2M0\cos[2\alpha]\sec[\alpha]^2 \sin[t\omega]^2 + 2\sqrt{2}\,\sqrt{\left(M0^2\left(6 + 2\cos[2\alpha] - 2\cos[2t\omega] + \cos[2\alpha - 2t\omega] + \cos[2\alpha + 2t\omega]\right)\sin[\alpha]^2 \sin[t\omega]^2\right)}\Big)\\
&\Big(2M0^2\omega\cos[t\omega]\left(6 + 2\cos[2\alpha] - 2\cos[2t\omega] + \cos[2\alpha - 2t\omega] + \cos[2\alpha + 2t\omega]\right)\sin[\alpha]^2 \sin[t\omega] + M0^2 \sin[\alpha]^2 \sin[t\omega]^2\left(4\omega\sin[2t\omega] + 2\omega\sin[2\alpha - 2t\omega] - 2\omega\sin[2\alpha + 2t\omega]\right)\Big)\Bigg)\Big/\\
&\Big(64M0\left(1 + \cos[2\alpha]\right)\left(M0^2\left(6 + 2\cos[2\alpha] - 2\cos[2t\omega] + \cos[2\alpha - 2t\omega] + \cos[2\alpha + 2t\omega]\right)\sin[\alpha]^2 \sin[t\omega]^2\right)^{3/2}\Big) +\\
&\Bigg(i\cos[\alpha]\cot[\alpha]\csc[t\omega]^2\Big(-4M0 + 2M0\cos[2t\omega] - M0\cos[2\alpha - 2t\omega] - M0\cos[2\alpha + 2t\omega] + 2M0\cos[\alpha - t\omega]^2 \sec[\alpha]^2 + 2M0\cos[2\alpha]\cos[\alpha - t\omega]^2 \sec[\alpha]^2 + 2M0\sec[\alpha]^2 \sin[t\omega]^2 + 2M0\cos[2\alpha]\sec[\alpha]^2 \sin[t\omega]^2 + 2\sqrt{2}\,\sqrt{\left(-M0^2\left(-6 - 2\cos[2\alpha] + 2\cos[2t\omega] - \cos[2\alpha - 2t\omega] - \cos[2\alpha + 2t\omega]\right)\sin[\alpha]^2 \sin[t\omega]^2\right)}\Big)\\
&\Big(4M0 - 2M0\cos[2t\omega] + M0\cos[2\alpha - 2t\omega] + M0\cos[2\alpha + 2t\omega] - 2M0\cos[\alpha - t\omega]^2 \sec[\alpha]^2 - 2M0\cos[2\alpha]\cos[\alpha - t\omega]^2 \sec[\alpha]^2 - 2M0\sec[\alpha]^2 \sin[t\omega]^2 - 2M0\cos[2\alpha]\sec[\alpha]^2 \sin[t\omega]^2 + 2\sqrt{2}\,\sqrt{\left(M0^2\left(6 + 2\cos[2\alpha] - 2\cos[2t\omega] + \cos[2\alpha - 2t\omega] +\right.\right.}
\end{aligned}
$$

$$\left(\text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\Big)\Big)$$

$$\Big(4\,M0\,\omega\,\text{Sin}[2\,t\,\omega] + 2\,M0\,\omega\,\text{Sin}[2\,\alpha - 2\,t\,\omega] - 2\,M0\,\omega\,\text{Sin}[2\,\alpha + 2\,t\,\omega] -$$

$$\Big(\sqrt{2}\,\Big(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\,\Big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] +$$

$$\text{Cos}[2\,\alpha + 2\,t\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega] + M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2$$

$$\Big(4\,\omega\,\text{Sin}[2\,t\,\omega] + 2\,\omega\,\text{Sin}[2\,\alpha - 2\,t\,\omega] - 2\,\omega\,\text{Sin}[2\,\alpha + 2\,t\,\omega]\Big)\Big)\Big)\Big/$$

$$\Big(\sqrt{\Big(M0^2\,\Big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] +$$

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

$$\Big(64\,M0\,\left(1 + \text{Cos}[2\,\alpha]\right)^2\,\sqrt{\Big(M0^2\,\Big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[$$

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

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

$$M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\,\sqrt{2}\,\sqrt{\Big(M0^2\,\Big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] +$$

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

$$\Big(i\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[t\,\omega]^2\,\Big(4\,M0 - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] +$$

$$M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 -$$

$$2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 -$$

$$2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\,\sqrt{2}\,\sqrt{\Big(-M0^2\,\Big(-6 - 2\,\text{Cos}[2\,\alpha] +$$

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

$$\Big(-4\,M0 + 2\,M0\,\text{Cos}[2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] +$$

$$2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 +$$

$$2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 +$$

$$2\,\sqrt{2}\,\sqrt{\Big(M0^2\,\Big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] +$$

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

$$\Big(4\,M0\,\omega\,\text{Sin}[2\,t\,\omega] + 2\,M0\,\omega\,\text{Sin}[2\,\alpha - 2\,t\,\omega] - 2\,M0\,\omega\,\text{Sin}[2\,\alpha + 2\,t\,\omega] +$$

$$\Big(\sqrt{2}\,\Big(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\,\Big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] +$$

$$\text{Cos}[2\,\alpha + 2\,t\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega] + M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2$$

$$\Big(4\,\omega\,\text{Sin}[2\,t\,\omega] + 2\,\omega\,\text{Sin}[2\,\alpha - 2\,t\,\omega] - 2\,\omega\,\text{Sin}[2\,\alpha + 2\,t\,\omega]\Big)\Big)\Big)\Big/$$

$$\Big(\sqrt{\Big(M0^2\,\Big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] +$$

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

$$\Big(64\,M0\,\left(1 + \text{Cos}[2\,\alpha]\right)^2\,\sqrt{\Big(M0^2\,\Big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[$$

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

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

$$M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] + 2\,\sqrt{2}\,\sqrt{\Big(M0^2\,\Big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] +$$

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

$$\Bigg(\mathrm{i}\,\mathrm{Cos}[\alpha]\,\mathrm{Cot}[\alpha]\,\mathrm{Csc}[t\,\omega]^2\,\Big(-4\,M0+2\,M0\,\mathrm{Cos}[2\,t\,\omega]-M0\,\mathrm{Cos}[2\,\alpha-2\,t\,\omega]-M0\,\mathrm{Cos}[2\,\alpha+2\,t\,\omega]+2\,M0\,\mathrm{Cos}[\alpha-t\,\omega]^2\,\mathrm{Sec}[\alpha]^2+2\,M0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Cos}[\alpha-t\,\omega]^2\,\mathrm{Sec}[\alpha]^2+2\,M0\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2+2\,M0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\Big(-M0^2\,\Big(-6-2\,\mathrm{Cos}[2\,\alpha]+2\,\mathrm{Cos}[2\,t\,\omega]-\mathrm{Cos}[2\,\alpha-2\,t\,\omega]-\mathrm{Cos}[2\,\alpha+2\,t\,\omega]\Big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\Big)}\Big)\Big/\sqrt{\Big(\frac{1}{1+\mathrm{Cos}[2\,\alpha]}\,\Big(-2+4\,M0-2\,\mathrm{Cos}[2\,\alpha]-2\,M0\,\mathrm{Cos}[2\,t\,\omega]+M0\,\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\mathrm{Cos}[2\,\alpha+2\,t\,\omega]-2\sqrt{2}\,\sqrt{\Big(M0^2\,\Big(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,t\,\omega]+\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+\mathrm{Cos}[2\,\alpha+2\,t\,\omega]\Big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\Big)}\Big)\Big)}\Big(-4\,M0\,\omega\,\mathrm{Cos}[t\,\omega]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\,\omega]-4\,M0\,\omega\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Cos}[t\,\omega]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\,\omega]+4\,M0\,\omega\,\mathrm{Sin}[2\,t\,\omega]+2\,M0\,\omega\,\mathrm{Sin}[2\,\alpha-2\,t\,\omega]-4\,M0\,\omega\,\mathrm{Cos}[\alpha-t\,\omega]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\alpha-t\,\omega]-4\,M0\,\omega\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Cos}[\alpha-t\,\omega]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\alpha-t\,\omega]-2\,M0\,\omega\,\mathrm{Sin}[2\,\alpha+2\,t\,\omega]+\Big(\sqrt{2}\,\Big(2\,M0^2\,\omega\,\mathrm{Cos}[t\,\omega]\,\Big(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,t\,\omega]+\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+\mathrm{Cos}[2\,\alpha+2\,t\,\omega]\Big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]+M0^2\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\,\Big(4\,\omega\,\mathrm{Sin}[2\,t\,\omega]+2\,\omega\,\mathrm{Sin}[2\,\alpha-2\,t\,\omega]-2\,\omega\,\mathrm{Sin}[2\,\alpha+2\,t\,\omega]\Big)\Big)\Big)\Big/\Big(\sqrt{\Big(M0^2\,\Big(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,t\,\omega]+\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+\mathrm{Cos}[2\,\alpha+2\,t\,\omega]\Big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\Big)}\Big)\Big)\Bigg)\Big/\Big(32\,M0\,\Big(1+\mathrm{Cos}[2\,\alpha]\Big)\,\sqrt{\Big(M0^2\,\Big(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,t\,\omega]+\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+\mathrm{Cos}[2\,\alpha+2\,t\,\omega]\Big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\Big)}\Big)-$$

$$\Bigg(\mathrm{i}\,\mathrm{Cos}[\alpha]\,\mathrm{Cot}[\alpha]\,\mathrm{Csc}[t\,\omega]^2\,\Big(4\,M0-2\,M0\,\mathrm{Cos}[2\,t\,\omega]+M0\,\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\mathrm{Cos}[2\,\alpha+2\,t\,\omega]-2\,M0\,\mathrm{Cos}[\alpha-t\,\omega]^2\,\mathrm{Sec}[\alpha]^2-2\,M0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Cos}[\alpha-t\,\omega]^2\,\mathrm{Sec}[\alpha]^2-2\,M0\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2-2\,M0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\Big(-M0^2\,\Big(-6-2\,\mathrm{Cos}[2\,\alpha]+2\,\mathrm{Cos}[2\,t\,\omega]-\mathrm{Cos}[2\,\alpha-2\,t\,\omega]-\mathrm{Cos}[2\,\alpha+2\,t\,\omega]\Big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\Big)}\Big)\Big)\Big/\sqrt{\Big(\frac{1}{1+\mathrm{Cos}[2\,\alpha]}\,\Big(-2+4\,M0-2\,\mathrm{Cos}[2\,\alpha]-2\,M0\,\mathrm{Cos}[2\,t\,\omega]+M0\,\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\mathrm{Cos}[2\,\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\Big(M0^2\,\Big(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,t\,\omega]+\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+\mathrm{Cos}[2\,\alpha+2\,t\,\omega]\Big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\Big)}\Big)\Big)}\Big(4\,M0\,\omega\,\mathrm{Cos}[t\,\omega]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\,\omega]+4\,M0\,\omega\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Cos}[t\,\omega]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\,\omega]-4\,M0\,\omega\,\mathrm{Sin}[2\,t\,\omega]-2\,M0\,\omega\,\mathrm{Sin}[2\,\alpha-2\,t\,\omega]+4\,M0\,\omega\,\mathrm{Cos}[\alpha-t\,\omega]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\alpha-t\,\omega]+4\,M0\,\omega\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Cos}[\alpha-t\,\omega]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[\alpha-t\,\omega]+2\,M0\,\omega\,\mathrm{Sin}[2\,\alpha+2\,t\,\omega]+\Big(\sqrt{2}\,\Big(2\,M0^2\,\omega\,\mathrm{Cos}[t\,\omega]\,\Big(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,t\,\omega]+\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+\mathrm{Cos}[2\,\alpha+2\,t\,\omega]\Big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]+M0^2\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\,\Big(4\,\omega\,\mathrm{Sin}[2\,t\,\omega]+2\,\omega\,\mathrm{Sin}[2\,\alpha-2\,t\,\omega]-2\,\omega\,\mathrm{Sin}[2\,\alpha+2\,t\,\omega]\Big)\Big)\Big)\Big/\Big(\sqrt{\Big(M0^2\,\Big(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,t\,\omega]+\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+$$

Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2)))) /

(32 M0 (1 + Cos[2 α]) √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] +
Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2)) -

(ⅈ Cos[α] Cot[α] Csc[t ω]^2 √((1/(1 + Cos[2 α])) (-2 + 4 M0 - 2 Cos[2 α] -
2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] + M0 Cos[2 α + 2 t ω] +
2 √2 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] +
Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2)))

(-4 M0 + 2 M0 Cos[2 t ω] - M0 Cos[2 α - 2 t ω] - M0 Cos[2 α + 2 t ω] +
2 M0 Cos[α - t ω]^2 Sec[α]^2 + 2 M0 Cos[2 α] Cos[α - t ω]^2 Sec[α]^2 +
2 M0 Sec[α]^2 Sin[t ω]^2 + 2 M0 Cos[2 α] Sec[α]^2 Sin[t ω]^2 +
2 √2 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω])
Sin[α]^2 Sin[t ω]^2)) (-4 M0 ω Cos[t ω] Sec[α]^2 Sin[t ω] -
4 M0 ω Cos[2 α] Cos[t ω] Sec[α]^2 Sin[t ω] + 4 M0 ω Sin[2 t ω] +
2 M0 ω Sin[2 α - 2 t ω] - 4 M0 ω Cos[α - t ω] Sec[α]^2 Sin[α - t ω] -
4 M0 ω Cos[2 α] Cos[α - t ω] Sec[α]^2 Sin[α - t ω] - 2 M0 ω Sin[2 α + 2 t ω] +
(√2 (-2 M0^2 ω Cos[t ω] (-6 - 2 Cos[2 α] + 2 Cos[2 t ω] - Cos[2 α - 2 t ω] -
Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω] - M0^2 Sin[α]^2 Sin[t ω]^2
(-4 ω Sin[2 t ω] - 2 ω Sin[2 α - 2 t ω] + 2 ω Sin[2 α + 2 t ω]))) /
(√(-M0^2 (-6 - 2 Cos[2 α] + 2 Cos[2 t ω] - Cos[2 α - 2 t ω] -
Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2)))) /

(32 M0 (1 + Cos[2 α]) √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] +
Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2)) +

(ⅈ Cos[α] Cot[α] Csc[t ω]^2 √((1/(1 + Cos[2 α])) (-2 + 4 M0 - 2 Cos[2 α] -
2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] + M0 Cos[2 α + 2 t ω] -
2 √2 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] +
Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2)))

(4 M0 - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] + M0 Cos[2 α + 2 t ω] -
2 M0 Cos[α - t ω]^2 Sec[α]^2 - 2 M0 Cos[2 α] Cos[α - t ω]^2 Sec[α]^2 -
2 M0 Sec[α]^2 Sin[t ω]^2 - 2 M0 Cos[2 α] Sec[α]^2 Sin[t ω]^2 +
2 √2 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω])
Sin[α]^2 Sin[t ω]^2)) (4 M0 ω Cos[t ω] Sec[α]^2 Sin[t ω] +
4 M0 ω Cos[2 α] Cos[t ω] Sec[α]^2 Sin[t ω] - 4 M0 ω Sin[2 t ω] -
2 M0 ω Sin[2 α - 2 t ω] + 4 M0 ω Cos[α - t ω] Sec[α]^2 Sin[α - t ω] +
4 M0 ω Cos[2 α] Cos[α - t ω] Sec[α]^2 Sin[α - t ω] + 2 M0 ω Sin[2 α + 2 t ω] +
(√2 (-2 M0^2 ω Cos[t ω] (-6 - 2 Cos[2 α] + 2 Cos[2 t ω] - Cos[2 α - 2 t ω] -
Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω] - M0^2 Sin[α]^2 Sin[t ω]^2
(-4 ω Sin[2 t ω] - 2 ω Sin[2 α - 2 t ω] + 2 ω Sin[2 α + 2 t ω]))) /
(√(-M0^2 (-6 - 2 Cos[2 α] + 2 Cos[2 t ω] - Cos[2 α - 2 t ω] -

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

$$\Big(32\,\text{M0}\ \big(1 + \text{Cos}[2\,\alpha]\big)\ \sqrt{\Big(\text{M0}^2\ \big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] +}$$
$$\text{Cos}[2\,\alpha + 2\,t\,\omega]\big)\ \text{Sin}[\alpha]^2\ \text{Sin}[t\,\omega]^2\Big)}\Big)$$

$$\Bigg(-\Bigg(\Bigg(\Big(i\,\text{M0}\ \big(1 + \text{Cos}[2\,\alpha]\big)\ \text{Sec}[\alpha]\ \text{Sin}[t\,\omega]^2\ \sqrt{\Bigg(\frac{1}{1 + \text{Cos}[2\,\alpha]}\ \Big(-2 + 4\,\text{M0} -}$$
$$2\,\text{Cos}[2\,\alpha] - 2\,\text{M0}\,\text{Cos}[2\,t\,\omega] + \text{M0}\,\text{Cos}[2\,\alpha - 2\,t\,\omega] +$$
$$\text{M0}\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\,\sqrt{2}\ \sqrt{\Big(\text{M0}^2\ \big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] +}$$
$$\text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\big)\ \text{Sin}[\alpha]^2\ \text{Sin}[t\,\omega]^2\Big)}\Big)\Bigg)}$$
$$\text{Tan}[\alpha]\Big)\Big/\ \Big(2\ \sqrt{\Big(\text{M0}^2\ \big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] +}$$
$$\text{Cos}[2\,\alpha + 2\,t\,\omega]\big)\ \text{Sin}[\alpha]^2\ \text{Sin}[t\,\omega]^2\Big)}\Big) +$$

$$\Big(i\,\text{M0}\ \big(1 + \text{Cos}[2\,\alpha]\big)\ \text{Sec}[\alpha]\ \text{Sin}[t\,\omega]^2\ \sqrt{\Bigg(\frac{1}{1 + \text{Cos}[2\,\alpha]}\ \Big(-2 + 4\,\text{M0} -}$$
$$2\,\text{Cos}[2\,\alpha] - 2\,\text{M0}\,\text{Cos}[2\,t\,\omega] + \text{M0}\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{M0}\,\text{Cos}[2\,\alpha + 2\,t\,\omega] +$$
$$2\,\sqrt{2}\ \sqrt{\Big(\text{M0}^2\ \big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] +}$$
$$\text{Cos}[2\,\alpha + 2\,t\,\omega]\big)\ \text{Sin}[\alpha]^2\ \text{Sin}[t\,\omega]^2\Big)}\Big)\Bigg)}\ \text{Tan}[\alpha]\Big)\Big/$$
$$\Big(2\ \sqrt{\Big(\text{M0}^2\ \big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\big)}$$
$$\text{Sin}[\alpha]^2\ \text{Sin}[t\,\omega]^2\Big)}\Big)\Bigg)\Bigg)\Bigg)$$

$$\text{L21}[\alpha\_,\ \omega\_,\ t\_,\ \text{M0}\_,\ s\_,\ r\_,\ \theta\_] := \frac{1}{\text{M0}}\ \text{Sec}[\alpha]^2\ \big(\text{Cos}[\alpha - t\,\omega]^2 + \text{Sin}[t\,\omega]^2\big)$$

$$\Bigg(s + \Bigg(\Bigg(\Big(-4\,\text{M0} + 2\,\text{M0}\,\text{Cos}[2\,t\,\omega] - \text{M0}\,\text{Cos}[2\,\alpha - 2\,t\,\omega] - \text{M0}\,\text{Cos}[2\,\alpha + 2\,t\,\omega] + 2\,\text{M0}\,\text{Cos}[\alpha - t\,\omega]^2$$
$$\text{Sec}[\alpha]^2 + 2\,\text{M0}\,\text{Cos}[2\,\alpha]\ \text{Cos}[\alpha - t\,\omega]^2\ \text{Sec}[\alpha]^2 + 2\,\text{M0}\,\text{Sec}[\alpha]^2\ \text{Sin}[t\,\omega]^2 +$$
$$2\,\text{M0}\,\text{Cos}[2\,\alpha]\ \text{Sec}[\alpha]^2\ \text{Sin}[t\,\omega]^2 + 2\,\sqrt{2}\ \sqrt{\Big(-\text{M0}^2\ \big(-6 - 2\,\text{Cos}[2\,\alpha] +}$$
$$2\,\text{Cos}[2\,t\,\omega] - \text{Cos}[2\,\alpha - 2\,t\,\omega] - \text{Cos}[2\,\alpha + 2\,t\,\omega]\big)\ \text{Sin}[\alpha]^2\ \text{Sin}[t\,\omega]^2\Big)}\Big)$$
$$\sqrt{\Bigg(\frac{1}{1 + \text{Cos}[2\,\alpha]}\ \Big(-2 + 4\,\text{M0} - 2\,\text{Cos}[2\,\alpha] - 2\,\text{M0}\,\text{Cos}[2\,t\,\omega] + \text{M0}\,\text{Cos}[2\,\alpha - 2\,t\,\omega] +}$$
$$\text{M0}\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\,\sqrt{2}\ \sqrt{\Big(\text{M0}^2\ \big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] +}$$
$$\text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\big)\ \text{Sin}[\alpha]^2\ \text{Sin}[t\,\omega]^2\Big)}\Big)\Bigg)}\Bigg)\Big/$$
$$\Big(8\ \sqrt{\Big(\text{M0}^2\ \big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\big)}$$
$$\text{Sin}[\alpha]^2\ \text{Sin}[t\,\omega]^2\Big)}\Big) +$$

$$\Bigg(\Big(4\,\text{M0} - 2\,\text{M0}\,\text{Cos}[2\,t\,\omega] + \text{M0}\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{M0}\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\,\text{M0}\,\text{Cos}[\alpha - t\,\omega]^2$$
$$\text{Sec}[\alpha]^2 - 2\,\text{M0}\,\text{Cos}[2\,\alpha]\ \text{Cos}[\alpha - t\,\omega]^2\ \text{Sec}[\alpha]^2 - 2\,\text{M0}\,\text{Sec}[\alpha]^2\ \text{Sin}[t\,\omega]^2 -$$
$$2\,\text{M0}\,\text{Cos}[2\,\alpha]\ \text{Sec}[\alpha]^2\ \text{Sin}[t\,\omega]^2 + 2\,\sqrt{2}\ \sqrt{\Big(-\text{M0}^2\ \big(-6 - 2\,\text{Cos}[2\,\alpha] +}$$
$$2\,\text{Cos}[2\,t\,\omega] - \text{Cos}[2\,\alpha - 2\,t\,\omega] - \text{Cos}[2\,\alpha + 2\,t\,\omega]\big)\ \text{Sin}[\alpha]^2\ \text{Sin}[t\,\omega]^2\Big)}\Big)$$

$$\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\left(-2+4\,\text{M0}-2\,\text{Cos}[2\alpha]-2\,\text{M0}\,\text{Cos}[2\,t\,\omega]+\text{M0}\,\text{Cos}[2\alpha-2\,t\,\omega]+\right.\right.}$$
$$\text{M0}\,\text{Cos}[2\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\left(\text{M0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\,t\,\omega]+\right.\right.}$$
$$\left.\left.\left.\left.\text{Cos}[2\alpha-2\,t\,\omega]+\text{Cos}[2\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\Big)\Big/$$
$$\left(8\sqrt{\left(\text{M0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\alpha-2\,t\,\omega]+\text{Cos}[2\alpha+2\,t\,\omega]\right)\right.}\right.$$
$$\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\Bigg)$$
$$\left(s\left(\left(\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\left(-2+4\,\text{M0}-2\,\text{Cos}[2\alpha]-2\,\text{M0}\,\text{Cos}[2\,t\,\omega]+\text{M0}\,\text{Cos}[2\alpha-2\,t\,\omega]+\right.\right.\right.\right.}$$
$$\text{M0}\,\text{Cos}[2\alpha+2\,t\,\omega]-2\sqrt{2}\,\sqrt{\left(\text{M0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\,t\,\omega]+\right.\right.}$$
$$\left.\left.\left.\left.\text{Cos}[2\alpha-2\,t\,\omega]+\text{Cos}[2\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\Big)$$
$$\left(4\,\text{M0}-2\,\text{M0}\,\text{Cos}[2\,t\,\omega]+\text{M0}\,\text{Cos}[2\alpha-2\,t\,\omega]+\text{M0}\,\text{Cos}[2\alpha+2\,t\,\omega]-\right.$$
$$2\,\text{M0}\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{M0}\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{M0}\,\text{Sec}[\alpha]^2$$
$$\text{Sin}[t\,\omega]^2-2\,\text{M0}\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\left(\text{M0}^2\left(6+2\,\text{Cos}[2\alpha]-\right.\right.}$$
$$\left.\left.\left.\left.2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\alpha-2\,t\,\omega]+\text{Cos}[2\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\Big)\Big/$$
$$\left(8\sqrt{\left(\text{M0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\alpha-2\,t\,\omega]+\text{Cos}[2\alpha+2\,t\,\omega]\right)\right.}\right.$$
$$\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)+$$
$$\left(\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\left(-2+4\,\text{M0}-2\,\text{Cos}[2\alpha]-2\,\text{M0}\,\text{Cos}[2\,t\,\omega]+\text{M0}\,\text{Cos}[2\alpha-2\,t\,\omega]+\right.\right.\right.}$$
$$\text{M0}\,\text{Cos}[2\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\left(\text{M0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\,t\,\omega]+\right.\right.}$$
$$\left.\left.\left.\left.\text{Cos}[2\alpha-2\,t\,\omega]+\text{Cos}[2\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\Big)$$
$$\left(-4\,\text{M0}+2\,\text{M0}\,\text{Cos}[2\,t\,\omega]-\text{M0}\,\text{Cos}[2\alpha-2\,t\,\omega]-\text{M0}\,\text{Cos}[2\alpha+2\,t\,\omega]+\right.$$
$$2\,\text{M0}\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{M0}\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{M0}\,\text{Sec}[\alpha]^2$$
$$\text{Sin}[t\,\omega]^2+2\,\text{M0}\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\left(\text{M0}^2\left(6+2\,\text{Cos}[2\alpha]-\right.\right.}$$
$$\left.\left.\left.\left.2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\alpha-2\,t\,\omega]+\text{Cos}[2\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\Big)\Big/$$
$$\left(8\sqrt{\left(\text{M0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\alpha-2\,t\,\omega]+\text{Cos}[2\alpha+2\,t\,\omega]\right)\right.}\right.$$
$$\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\Bigg)+$$
$$e^{i\,\theta}\,r\left(-\left(\left(i\,\text{M0}\left(1+\text{Cos}[2\alpha]\right)\text{Sec}[\alpha]\,\text{Sin}[t\,\omega]^2\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\left(-2+4\,\text{M0}-\right.\right.\right.\right.$$
$$2\,\text{Cos}[2\alpha]-2\,\text{M0}\,\text{Cos}[2\,t\,\omega]+\text{M0}\,\text{Cos}[2\alpha-2\,t\,\omega]+\text{M0}\,\text{Cos}[2\alpha+2\,t\,\omega]-$$
$$2\sqrt{2}\,\sqrt{\left(\text{M0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\alpha-2\,t\,\omega]+\right.\right.}$$
$$\left.\left.\left.\left.\left.\text{Cos}[2\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\text{Tan}[\alpha]\right)\Big/$$
$$\left(2\sqrt{\left(\text{M0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\alpha-2\,t\,\omega]+\text{Cos}[2\alpha+2\,t\,\omega]\right)\right.}\right.$$
$$\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)+\left(i\,\text{M0}\left(1+\text{Cos}[2\alpha]\right)\text{Sec}[\alpha]\,\text{Sin}[t\,\omega]^2\right.$$

$$\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4\,M0-2\cos[2\alpha]-2\,M0\cos[2\,t\,\omega]+M0\cos[2\alpha-2\,t\,\omega]+M0\cos[2\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\cos[2\alpha-2\,t\,\omega]+\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)}\right)\tan[\alpha]\right)\Big/\left(2\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\cos[2\alpha-2\,t\,\omega]+\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)}\right)\right)}+$$

$$\left(-\left(\left(i\,M0\left(1+\cos[2\alpha]\right)\sec[\alpha]\sin[t\,\omega]^2\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4\,M0-2\cos[2\alpha]-2\,M0\cos[2\,t\,\omega]+M0\cos[2\alpha-2\,t\,\omega]+M0\cos[2\alpha+2\,t\,\omega]-2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\cos[2\alpha-2\,t\,\omega]+\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)}\right)\tan[\alpha]\right)\Big/\left(2\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\cos[2\alpha-2\,t\,\omega]+\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)}\right)\right)+\left(i\,M0\left(1+\cos[2\alpha]\right)\sec[\alpha]\sin[t\,\omega]^2\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4\,M0-2\cos[2\alpha]-2\,M0\cos[2\,t\,\omega]+M0\cos[2\alpha-2\,t\,\omega]+M0\cos[2\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\cos[2\alpha-2\,t\,\omega]+\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)}\right)\tan[\alpha]\right)\Big/\left(2\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\cos[2\alpha-2\,t\,\omega]+\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)}\right)\right)\left(e^{-i\,\theta}\,r\left(\left(\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4\,M0-2\cos[2\alpha]-2\,M0\cos[2\,t\,\omega]+M0\cos[2\alpha-2\,t\,\omega]+M0\cos[2\alpha+2\,t\,\omega]-2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\cos[2\alpha-2\,t\,\omega]+\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)}\right)\right)\left(4\,M0-2\,M0\cos[2\,t\,\omega]+M0\cos[2\alpha-2\,t\,\omega]+M0\cos[2\alpha+2\,t\,\omega]-2\,M0\cos[\alpha-t\,\omega]^2\sec[\alpha]^2-2\,M0\cos[2\alpha]\cos[\alpha-t\,\omega]^2\sec[\alpha]^2-2\,M0\sec[\alpha]^2\sin[t\,\omega]^2-2\,M0\cos[2\alpha]\sec[\alpha]^2\sin[t\,\omega]^2+2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\cos[2\alpha-2\,t\,\omega]+\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)}\right)\Big/\left(8\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\cos[2\alpha-2\,t\,\omega]+\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)}\right)+\left(\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4\,M0-2\cos[2\alpha]-2\,M0\cos[2\,t\,\omega]+M0\cos[2\alpha-2\,t\,\omega]+M0\cos[2\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\cos[2\alpha-2\,t\,\omega]+\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)}\right)\right)\left(-4\,M0+2\,M0\cos[2\,t\,\omega]-M0\cos[2\alpha-2\,t\,\omega]-M0\cos[2\alpha+2\,t\,\omega]+\right.$$

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2 M0 Cos[α - t ω]^2 Sec[α]^2 + 2 M0 Cos[2 α] Cos[α - t ω]^2 Sec[α]^2 + 2 M0 Sec[α]^2
 Sin[t ω]^2 + 2 M0 Cos[2 α] Sec[α]^2 Sin[t ω]^2 + 2 √2 √(M0^2 (6 + 2 Cos[2 α] -
      2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2)))/
 (8 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω])
    Sin[α]^2 Sin[t ω]^2))) +
s (-(((i M0 (1 + Cos[2 α]) Sec[α] Sin[t ω]^2 √((1/(1 + Cos[2 α])) (-2 + 4 M0 -
        2 Cos[2 α] - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] + M0 Cos[2 α + 2 t ω] -
        2 √2 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] +
            Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2))) Tan[α])/
   (2 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω])
      Sin[α]^2 Sin[t ω]^2))) + (i M0 (1 + Cos[2 α]) Sec[α] Sin[t ω]^2
   √((1/(1 + Cos[2 α])) (-2 + 4 M0 - 2 Cos[2 α] - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] +
        M0 Cos[2 α + 2 t ω] + 2 √2 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
            Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2))) Tan[α])/
   (2 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω])
      Sin[α]^2 Sin[t ω]^2)))) +
i (((-(((√((1/(1 + Cos[2 α])) (-2 + 4 M0 - 2 Cos[2 α] - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] +
          M0 Cos[2 α + 2 t ω] - 2 √2 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
              Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2)))
     (4 M0 - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] + M0 Cos[2 α + 2 t ω] -
       2 M0 Cos[α - t ω]^2 Sec[α]^2 - 2 M0 Cos[2 α] Cos[α - t ω]^2 Sec[α]^2 - 2 M0 Sec[α]^2
        Sin[t ω]^2 - 2 M0 Cos[2 α] Sec[α]^2 Sin[t ω]^2 + 2 √2 √(M0^2 (6 + 2 Cos[2 α] -
            2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2))
     (2 M0^2 ω Cos[t ω] (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] +
          Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω] + M0^2 Sin[α]^2 Sin[t ω]^2
       (4 ω Sin[2 t ω] + 2 ω Sin[2 α - 2 t ω] - 2 ω Sin[2 α + 2 t ω])))/
   (16 (M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω])
      Sin[α]^2 Sin[t ω]^2)^(3/2))) -
 (√((1/(1 + Cos[2 α])) (-2 + 4 M0 - 2 Cos[2 α] - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] +
        M0 Cos[2 α + 2 t ω] + 2 √2 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
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$$\left(\cos[2\alpha - 2t\omega] + \cos[2\alpha + 2t\omega]\right) \sin[\alpha]^2 \sin[t\omega]^2\Big)\Big)$$

$$\Big(-4\,M0 + 2\,M0\cos[2t\omega] - M0\cos[2\alpha - 2t\omega] - M0\cos[2\alpha + 2t\omega] + 2\,M0\cos[\alpha - t\omega]^2 \sec[\alpha]^2 + 2\,M0\cos[2\alpha]\cos[\alpha - t\omega]^2 \sec[\alpha]^2 + 2\,M0\sec[\alpha]^2 \sin[t\omega]^2 + 2\,M0\cos[2\alpha]\sec[\alpha]^2 \sin[t\omega]^2 + 2\sqrt{2}\,\sqrt{\left(M0^2\left(6 + 2\cos[2\alpha] - 2\cos[2t\omega] + \cos[2\alpha - 2t\omega] + \cos[2\alpha + 2t\omega]\right)\sin[\alpha]^2 \sin[t\omega]^2\right)}\,\Big(2\,M0^2\,\omega\cos[t\omega]\,\Big(6 + 2\cos[2\alpha] - 2\cos[2t\omega] + \cos[2\alpha - 2t\omega] + \cos[2\alpha + 2t\omega]\Big)\sin[\alpha]^2 \sin[t\omega] + M0^2 \sin[\alpha]^2 \sin[t\omega]^2\left(4\,\omega\sin[2t\omega] + 2\,\omega\sin[2\alpha - 2t\omega] - 2\,\omega\sin[2\alpha + 2t\omega]\right)\Big)\Big)\Big/$$

$$\Big(16\left(M0^2\left(6 + 2\cos[2\alpha] - 2\cos[2t\omega] + \cos[2\alpha - 2t\omega] + \cos[2\alpha + 2t\omega]\right)\sin[\alpha]^2 \sin[t\omega]^2\right)^{3/2}\Big) +$$

$$\Big(\Big(4\,M0 - 2\,M0\cos[2t\omega] + M0\cos[2\alpha - 2t\omega] + M0\cos[2\alpha + 2t\omega] - 2\,M0\cos[\alpha - t\omega]^2 \sec[\alpha]^2 - 2\,M0\cos[2\alpha]\cos[\alpha - t\omega]^2 \sec[\alpha]^2 - 2\,M0\sec[\alpha]^2 \sin[t\omega]^2 - 2\,M0\cos[2\alpha]\sec[\alpha]^2 \sin[t\omega]^2 + 2\sqrt{2}\,\sqrt{\left(M0^2\left(6 + 2\cos[2\alpha] - 2\cos[2t\omega] + \cos[2\alpha - 2t\omega] + \cos[2\alpha + 2t\omega]\right)\sin[\alpha]^2 \sin[t\omega]^2\right)}\Big(4\,M0\,\omega\sin[2t\omega] + 2\,M0\,\omega\sin[2\alpha - 2t\omega] - 2\,M0\,\omega\sin[2\alpha + 2t\omega] - \Big(\sqrt{2}\,\Big(2\,M0^2\,\omega\cos[t\omega]\,\Big(6 + 2\cos[2\alpha] - 2\cos[2t\omega] + \cos[2\alpha - 2t\omega] + \cos[2\alpha + 2t\omega]\Big)\sin[\alpha]^2 \sin[t\omega] + M0^2 \sin[\alpha]^2 \sin[t\omega]^2\left(4\,\omega\sin[2t\omega] + 2\,\omega\sin[2\alpha - 2t\omega] - 2\,\omega\sin[2\alpha + 2t\omega]\right)\Big)\Big)\Big/\Big(\sqrt{\left(M0^2\left(6 + 2\cos[2\alpha] - 2\cos[2t\omega] + \cos[2\alpha - 2t\omega] + \cos[2\alpha + 2t\omega]\right)\sin[\alpha]^2 \sin[t\omega]^2\right)}\Big)\Big)\Big)\Big/$$

$$\Big(16\left(1 + \cos[2\alpha]\right)\sqrt{\left(M0^2\left(6 + 2\cos[2\alpha] - 2\cos[2t\omega] + \cos[2\alpha - 2t\omega] + \cos[2\alpha + 2t\omega]\right)\sin[\alpha]^2 \sin[t\omega]^2\right)}\,\sqrt{\Big(\frac{1}{1 + \cos[2\alpha]}\Big(-2 + 4\,M0 - 2\cos[2\alpha] - 2\,M0\cos[2t\omega] + M0\cos[2\alpha - 2t\omega] + M0\cos[2\alpha + 2t\omega] - 2\sqrt{2}\,\sqrt{\left(M0^2\left(6 + 2\cos[2\alpha] - 2\cos[2t\omega] + \cos[2\alpha - 2t\omega] + \cos[2\alpha + 2t\omega]\right)\sin[\alpha]^2 \sin[t\omega]^2\right)}\Big)\Big)} +$$

$$\Big(\Big(-4\,M0 + 2\,M0\cos[2t\omega] - M0\cos[2\alpha - 2t\omega] - M0\cos[2\alpha + 2t\omega] + 2\,M0\cos[\alpha - t\omega]^2 \sec[\alpha]^2 + 2\,M0\cos[2\alpha]\cos[\alpha - t\omega]^2 \sec[\alpha]^2 + 2\,M0\sec[\alpha]^2 \sin[t\omega]^2 + 2\,M0\cos[2\alpha]\sec[\alpha]^2 \sin[t\omega]^2 + 2\sqrt{2}\,\sqrt{\left(M0^2\left(6 + 2\cos[2\alpha] - 2\cos[2t\omega] + \cos[2\alpha - 2t\omega] + \cos[2\alpha + 2t\omega]\right)\sin[\alpha]^2 \sin[t\omega]^2\right)}\Big(4\,M0\,\omega\sin[2t\omega] + 2\,M0\,\omega\sin[2\alpha - 2t\omega] - 2\,M0\,\omega\sin[2\alpha + 2t\omega] + \Big(\sqrt{2}\,\Big(2\,M0^2\,\omega\cos[t\omega]\,\Big(6 + 2\cos[2\alpha] - 2\cos[2t\omega] + \cos[2\alpha - 2t\omega] + \cos[2\alpha + 2t\omega]\Big)\sin[\alpha]^2 \sin[t\omega] + M0^2 \sin[\alpha]^2 \sin[t\omega]^2\left(4\,\omega\sin[2t\omega] + 2\,\omega\sin[2\alpha - 2t\omega] - 2\,\omega\sin[2\alpha + 2t\omega]\right)\Big)\Big)\Big/\Big(\sqrt{\left(M0^2\left(6 + 2\cos[2\alpha] - 2\cos[2t\omega] + \cos[2\alpha - 2t\omega] + \cos[2\alpha + 2t\omega]\right)\sin[\alpha]^2 \sin[t\omega]^2\right)}\Big)\Big)\Big)\Big/$$

$$\Bigg(16\,(1+\text{Cos}[2\,\alpha])\,\sqrt{(\text{M0}^2\,(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega])\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2)}\,\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\,(-2+4\,\text{M0}-2\,\text{Cos}[2\,\alpha]-2\,\text{M0}\,\text{Cos}[2\,t\,\omega]+\text{M0}\,\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{M0}\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\,\sqrt{2}\,\sqrt{(\text{M0}^2\,(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega])\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2)}\Big)\Big)}+\Bigg(\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\,(-2+4\,\text{M0}-2\,\text{Cos}[2\,\alpha]-2\,\text{M0}\,\text{Cos}[2\,t\,\omega]+\text{M0}\,\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{M0}\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\,\sqrt{2}\,\sqrt{(\text{M0}^2\,(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega])\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2)}\Big)}\Big(-4\,\text{M0}\,\omega\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]-4\,\text{M0}\,\omega\,\text{Cos}[2\,\alpha]\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]+4\,\text{M0}\,\omega\,\text{Sin}[2\,t\,\omega]+2\,\text{M0}\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-4\,\text{M0}\,\omega\,\text{Cos}[\alpha-t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[\alpha-t\,\omega]-4\,\text{M0}\,\omega\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[\alpha-t\,\omega]-2\,\text{M0}\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]+\Big(\sqrt{2}\,\Big(2\,\text{M0}^2\,\omega\,\text{Cos}[t\,\omega]\,(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega])\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]+\text{M0}^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\,(4\,\omega\,\text{Sin}[2\,t\,\omega]+2\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-2\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega])\Big)\Big)\Big/\Big(\sqrt{(\text{M0}^2\,(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega])\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2)}\Big)\Big)\Big/\Big(8\,\sqrt{(\text{M0}^2\,(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega])\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2)}\Big)+\Bigg(\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\,(-2+4\,\text{M0}-2\,\text{Cos}[2\,\alpha]-2\,\text{M0}\,\text{Cos}[2\,t\,\omega]+\text{M0}\,\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{M0}\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\,\sqrt{2}\,\sqrt{(\text{M0}^2\,(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega])\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2)}\Big)\Big)}\Big(4\,\text{M0}\,\omega\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]+4\,\text{M0}\,\omega\,\text{Cos}[2\,\alpha]\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]-4\,\text{M0}\,\omega\,\text{Sin}[2\,t\,\omega]-2\,\text{M0}\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]+4\,\text{M0}\,\omega\,\text{Cos}[\alpha-t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[\alpha-t\,\omega]+4\,\text{M0}\,\omega\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[\alpha-t\,\omega]+2\,\text{M0}\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]+\Big(\sqrt{2}\,\Big(2\,\text{M0}^2\,\omega\,\text{Cos}[t\,\omega]\,(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega])\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]+\text{M0}^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\,(4\,\omega\,\text{Sin}[2\,t\,\omega]+2\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-2\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega])\Big)\Big)\Big/\Big(\sqrt{(\text{M0}^2\,(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega])\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2)}\Big)\Big)\Big/\Big(8\,\sqrt{(\text{M0}^2\,(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega])\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2)}\Big)\Bigg)\Bigg(-\Bigg(\Big(i\,\text{M0}\,(1+\text{Cos}[2\,\alpha])\,\text{Sec}[\alpha]\,\text{Sin}[t\,\omega]^2\,\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\,(-2+4\,\text{M0}-$$

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

$$\left(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\text{Tan}[\alpha]\Big/\left(\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)+$$

$$\left(i\,M0\,\omega\left(1+\text{Cos}[2\,\alpha]\right)\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]\,\text{Sin}[t\,\omega]\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\text{Tan}[\alpha]\Big/\left(\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)+\left(i\,M0\left(1+\text{Cos}[2\,\alpha]\right)\text{Sec}[\alpha]\,\text{Sin}[t\,\omega]^2\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\left(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]+M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\left(4\,\omega\,\text{Sin}[2\,t\,\omega]+2\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-2\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]\right)\right)\text{Tan}[\alpha]\Big/\left(4\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)^{3/2}\right)-\left(i\,M0\left(1+\text{Cos}[2\,\alpha]\right)\text{Sec}[\alpha]\,\text{Sin}[t\,\omega]^2\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\left(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]+M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\left(4\,\omega\,\text{Sin}[2\,t\,\omega]+2\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-2\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]\right)\right)\text{Tan}[\alpha]\Big/\left(4\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)^{3/2}\right)-\left(i\,M0\,\text{Sec}[\alpha]\,\text{Sin}[t\,\omega]^2\left(4\,M0\,\omega\,\text{Sin}[2\,t\,\omega]+2\,M0\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-2\,M0\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]-\left(\sqrt{2}\,\left(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\right.\right.\right.\right.$$

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                    Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω] + M0^2 Sin[α]^2
                  Sin[t ω]^2 (4 ω Sin[2 t ω] + 2 ω Sin[2 α - 2 t ω] - 2 ω Sin[2 α + 2 t ω]))) /
              (√(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[
                    2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2))) Tan[α]) /
          (4 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω])
                Sin[α]^2 Sin[t ω]^2) √((1/(1 + Cos[2 α])) (-2 + 4 M0 - 2 Cos[2 α] - 2 M0 Cos[2 t ω] +
                 M0 Cos[2 α - 2 t ω] + M0 Cos[2 α + 2 t ω] - 2 √2 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[
                        2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2))))) +
        (ⅈ M0 Sec[α] Sin[t ω]^2 (4 M0 ω Sin[2 t ω] + 2 M0 ω Sin[2 α - 2 t ω] - 2 M0 ω
                Sin[2 α + 2 t ω] + (√2 (2 M0^2 ω Cos[t ω] (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
                    Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω] + M0^2 Sin[α]^2
                  Sin[t ω]^2 (4 ω Sin[2 t ω] + 2 ω Sin[2 α - 2 t ω] - 2 ω Sin[2 α + 2 t ω]))) /
              (√(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[
                    2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2))) Tan[α]) /
          (4 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω])
                Sin[α]^2 Sin[t ω]^2) √((1/(1 + Cos[2 α]))
               (-2 + 4 M0 - 2 Cos[2 α] - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] +
                 M0 Cos[2 α + 2 t ω] + 2 √2 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
                      Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2)))))) -
 (1/M0) 2 ⅈ Sec[α] Sin[t ω]^2 Tan[α] (ⅇ^(-ⅈ θ) r + (((ⅈ Cos[α] Cot[α] Csc[t ω]^2
          (-4 M0 + 2 M0 Cos[2 t ω] - M0 Cos[2 α - 2 t ω] - M0 Cos[2 α + 2 t ω] +
            2 M0 Cos[α - t ω]^2 Sec[α]^2 + 2 M0 Cos[2 α] Cos[α - t ω]^2 Sec[α]^2 +
            2 M0 Sec[α]^2 Sin[t ω]^2 + 2 M0 Cos[2 α] Sec[α]^2 Sin[t ω]^2 +
            2 √2 √(-M0^2 (-6 - 2 Cos[2 α] + 2 Cos[2 t ω] -
                   Cos[2 α - 2 t ω] - Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2))
          √((1/(1 + Cos[2 α])) (-2 + 4 M0 - 2 Cos[2 α] - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] +
               M0 Cos[2 α + 2 t ω] - 2 √2 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
                    Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2)))
          (4 M0 - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] + M0 Cos[2 α + 2 t ω] -
            2 M0 Cos[α - t ω]^2 Sec[α]^2 - 2 M0 Cos[2 α] Cos[α - t ω]^2 Sec[α]^2 -
            2 M0 Sec[α]^2 Sin[t ω]^2 - 2 M0 Cos[2 α] Sec[α]^2 Sin[t ω]^2 +
            2 √2 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] +
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$$
\begin{aligned}
&\quad \text{Cos}[2\alpha+2t\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\big)\big)\Big)\Big/ \\
&\Big(32\,M0\,\big(1+\text{Cos}[2\alpha]\big)\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2t\omega]+\text{Cos}[2\alpha-2t\omega]+} \\
&\quad \text{Cos}[2\alpha+2t\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\big)\big)- \\
&\Big(\mathbb{i}\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[t\omega]^2\,\Big(4\,M0-2\,M0\,\text{Cos}[2t\omega]+M0\,\text{Cos}[2\alpha-2t\omega]+ \\
&\quad M0\,\text{Cos}[2\alpha+2t\omega]-2\,M0\,\text{Cos}[\alpha-t\omega]^2\,\text{Sec}[\alpha]^2- \\
&\quad 2\,M0\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-t\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\omega]^2- \\
&\quad 2\,M0\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\omega]^2+2\sqrt{2}\sqrt{\big(-M0^2\,\big(-6-2\,\text{Cos}[2\alpha]+} \\
&\qquad 2\,\text{Cos}[2t\omega]-\text{Cos}[2\alpha-2t\omega]-\text{Cos}[2\alpha+2t\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\big)\Big) \\
&\quad \sqrt{\Big(\frac{1}{1+\text{Cos}[2\alpha]}\,\Big(-2+4\,M0-2\,\text{Cos}[2\alpha]-2\,M0\,\text{Cos}[2t\omega]+M0\,\text{Cos}[2\alpha-2t\omega]+} \\
&\qquad M0\,\text{Cos}[2\alpha+2t\omega]+2\sqrt{2}\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2t\omega]+} \\
&\qquad\quad \text{Cos}[2\alpha-2t\omega]+\text{Cos}[2\alpha+2t\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\big)\Big)\Big) \\
&\quad \Big(-4\,M0+2\,M0\,\text{Cos}[2t\omega]-M0\,\text{Cos}[2\alpha-2t\omega]-M0\,\text{Cos}[2\alpha+2t\omega]+ \\
&\quad 2\,M0\,\text{Cos}[\alpha-t\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-t\omega]^2\,\text{Sec}[\alpha]^2+ \\
&\quad 2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\omega]^2+2\,M0\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\omega]^2+ \\
&\quad 2\sqrt{2}\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2t\omega]+\text{Cos}[2\alpha-2t\omega]+} \\
&\qquad \text{Cos}[2\alpha+2t\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\big)\Big)\Big)\Big/ \\
&\Big(32\,M0\,\big(1+\text{Cos}[2\alpha]\big)\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2t\omega]+\text{Cos}[2\alpha-2t\omega]+} \\
&\quad \text{Cos}[2\alpha+2t\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\big)\big)\Big) \\
&\Big(s\,\Big(\Big(\sqrt{\Big(\frac{1}{1+\text{Cos}[2\alpha]}\,\Big(-2+4\,M0-2\,\text{Cos}[2\alpha]-2\,M0\,\text{Cos}[2t\omega]+M0\,\text{Cos}[2\alpha-2t\omega]+} \\
&\qquad M0\,\text{Cos}[2\alpha+2t\omega]-2\sqrt{2}\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2t\omega]+} \\
&\qquad\quad \text{Cos}[2\alpha-2t\omega]+\text{Cos}[2\alpha+2t\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\big)\Big)\Big) \\
&\quad \Big(4\,M0-2\,M0\,\text{Cos}[2t\omega]+M0\,\text{Cos}[2\alpha-2t\omega]+M0\,\text{Cos}[2\alpha+2t\omega]- \\
&\quad 2\,M0\,\text{Cos}[\alpha-t\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-t\omega]^2\,\text{Sec}[\alpha]^2- \\
&\quad 2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\omega]^2-2\,M0\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\omega]^2+ \\
&\quad 2\sqrt{2}\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2t\omega]+\text{Cos}[2\alpha-2t\omega]+} \\
&\qquad \text{Cos}[2\alpha+2t\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\big)\Big)\Big)\Big/ \\
&\quad \Big(8\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2t\omega]+\text{Cos}[2\alpha-2t\omega]+\text{Cos}[2\alpha+2t\omega]\big)} \\
&\qquad \text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\big)\Big)+ \\
&\quad \Big(\sqrt{\Big(\frac{1}{1+\text{Cos}[2\alpha]}\,\Big(-2+4\,M0-2\,\text{Cos}[2\alpha]-2\,M0\,\text{Cos}[2t\omega]+M0\,\text{Cos}[2\alpha-2t\omega]+} \\
&\qquad M0\,\text{Cos}[2\alpha+2t\omega]+2\sqrt{2}\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2t\omega]+} \\
&\qquad\quad \text{Cos}[2\alpha-2t\omega]+\text{Cos}[2\alpha+2t\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\big)\Big)\Big) \\
&\quad \Big(-4\,M0+2\,M0\,\text{Cos}[2t\omega]-M0\,\text{Cos}[2\alpha-2t\omega]-M0\,\text{Cos}[2\alpha+2t\omega]+ \\
&\quad 2\,M0\,\text{Cos}[\alpha-t\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-t\omega]^2\,\text{Sec}[\alpha]^2+
\end{aligned}
$$

$$2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Big)\Big/ \left(8\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Big)\Big) +$$

$$e^{i\,\theta}\,r\,\Bigg(-\Bigg(\Bigg(i\,M0\,\left(1 + \text{Cos}[2\,\alpha]\right)\,\text{Sec}[\alpha]\,\text{Sin}[t\,\omega]^2\,\sqrt{\left(\frac{1}{1 + \text{Cos}[2\,\alpha]}\,\left(-2 + 4\,M0 - 2\,\text{Cos}[2\,\alpha] - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Big)\Big)\,\text{Tan}[\alpha]\Big)\Big/ \left(2\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Big)\Big) + \Big(i\,M0\,\left(1 + \text{Cos}[2\,\alpha]\right)\,\text{Sec}[\alpha]\,\text{Sin}[t\,\omega]^2\,\sqrt{\left(\frac{1}{1 + \text{Cos}[2\,\alpha]}\,\left(-2 + 4\,M0 - 2\,\text{Cos}[2\,\alpha] - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] + 2\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Big)\Big)\,\text{Tan}[\alpha]\Big)\Big/ \left(2\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Big)\Big)\Bigg) +$$

$$\Bigg(\Bigg(\sqrt{\left(\frac{1}{1 + \text{Cos}[2\,\alpha]}\,\left(-2 + 4\,M0 - 2\,\text{Cos}[2\,\alpha] - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Big)\Big)}\Big)\Big/ \left(4\,M0 - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Big)\Big)\Big/ \left(8\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Big)\Big) +$$

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

$$2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Bigg)\Bigg/ \left(8\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\Bigg)$$

$$\Bigg(e^{-i\,\theta}\,r\,\Bigg(\Bigg(\sqrt{\left(\frac{1}{1 + \text{Cos}[2\,\alpha]}\,\left(-2 + 4\,M0 - 2\,\text{Cos}[2\,\alpha] - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\right)}\Bigg)\Bigg(4\,M0 - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Bigg)\Bigg/ \left(8\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right) + \Bigg(\sqrt{\left(\frac{1}{1 + \text{Cos}[2\,\alpha]}\,\left(-2 + 4\,M0 - 2\,\text{Cos}[2\,\alpha] - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] + 2\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\right)}\Bigg)\Bigg(-4\,M0 + 2\,M0\,\text{Cos}[2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] + 2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Bigg)\Bigg/ \left(8\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\Bigg) + s\,\Bigg(-\Bigg(\Bigg(i\,M0\,\left(1 + \text{Cos}[2\,\alpha]\right)\,\text{Sec}[\alpha]\,\text{Sin}[t\,\omega]^2\,\sqrt{\left(\frac{1}{1 + \text{Cos}[2\,\alpha]}\,\left(-2 + 4\,M0 - 2\,\text{Cos}[2\,\alpha] - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\right)}\Bigg)\,\text{Tan}[\alpha]\Bigg)\Bigg/ \left(2\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\Bigg) + \Bigg(i\,M0\,\left(1 + \text{Cos}[2\,\alpha]\right)\,\text{Sec}[\alpha]\,\text{Sin}[t\,\omega]^2$$

$$\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4\,M0-2\cos[2\alpha]-2\,M0\cos[2\,t\,\omega]+M0\cos[2\alpha-2\,t\,\omega]+\right.\right.}$$
$$\left.M0\cos[2\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\right.\right.\right.$$
$$\left.\left.\left.\cos[2\alpha-2\,t\,\omega]+\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)\tan[\alpha]\Bigg)\Big/$$
$$\left(2\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\cos[2\alpha-2\,t\,\omega]+\cos[2\alpha+2\,t\,\omega]\right)\right.}\right.$$
$$\left.\left.\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)\Bigg)\Bigg)+$$
$$i\left(\left(\left(\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4\,M0-2\cos[2\alpha]-2\,M0\cos[2\,t\,\omega]+M0\cos[2\alpha-2\,t\,\omega]+\right.\right.\right.\right.$$
$$\left.\left.M0\cos[2\alpha+2\,t\,\omega]-2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\cos[2\alpha-2\,t\,\omega]+\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)\Bigg)$$
$$\left(4\,M0-2\,M0\cos[2\,t\,\omega]+M0\cos[2\alpha-2\,t\,\omega]+M0\cos[2\alpha+2\,t\,\omega]-\right.$$
$$2\,M0\cos[\alpha-t\,\omega]^2\sec[\alpha]^2-2\,M0\cos[2\alpha]\cos[\alpha-t\,\omega]^2\sec[\alpha]^2-$$
$$2\,M0\sec[\alpha]^2\sin[t\,\omega]^2-2\,M0\cos[2\alpha]\sec[\alpha]^2\sin[t\,\omega]^2+$$
$$2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\cos[2\alpha-2\,t\,\omega]+\right.\right.}$$
$$\left.\left.\left.\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)\Bigg)\Big/$$
$$\left(8\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\cos[2\alpha-2\,t\,\omega]+\cos[2\alpha+2\,t\,\omega]\right)\right.}\right.$$
$$\left.\left.\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)+$$
$$\left(\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4\,M0-2\cos[2\alpha]-2\,M0\cos[2\,t\,\omega]+M0\cos[2\alpha-2\,t\,\omega]+\right.\right.\right.}$$
$$\left.M0\cos[2\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\right.\right.\right.$$
$$\left.\left.\left.\cos[2\alpha-2\,t\,\omega]+\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)\Bigg)$$
$$\left(-4\,M0+2\,M0\cos[2\,t\,\omega]-M0\cos[2\alpha-2\,t\,\omega]-M0\cos[2\alpha+2\,t\,\omega]+\right.$$
$$2\,M0\cos[\alpha-t\,\omega]^2\sec[\alpha]^2+2\,M0\cos[2\alpha]\cos[\alpha-t\,\omega]^2\sec[\alpha]^2+$$
$$2\,M0\sec[\alpha]^2\sin[t\,\omega]^2+2\,M0\cos[2\alpha]\sec[\alpha]^2\sin[t\,\omega]^2+$$
$$2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\cos[2\alpha-2\,t\,\omega]+\right.\right.}$$
$$\left.\left.\left.\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)\Bigg)\Big/$$
$$\left(8\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\cos[2\alpha-2\,t\,\omega]+\cos[2\alpha+2\,t\,\omega]\right)\right.}\right.$$
$$\left.\left.\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)\Bigg)$$
$$\left(-\left(\left(\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4\,M0-2\cos[2\alpha]-2\,M0\cos[2\,t\,\omega]+M0\cos[2\alpha-2\,t\,\omega]+\right.\right.\right.\right.$$
$$\left.M0\cos[2\alpha+2\,t\,\omega]-2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2\,t\,\omega]+\right.\right.\right.$$
$$\left.\left.\left.\left.\cos[2\alpha-2\,t\,\omega]+\cos[2\alpha+2\,t\,\omega]\right)\sin[\alpha]^2\sin[t\,\omega]^2\right)\right)\Bigg)\right.$$
$$\left(4\,M0-2\,M0\cos[2\,t\,\omega]+M0\cos[2\alpha-2\,t\,\omega]+M0\cos[2\alpha+2\,t\,\omega]-\right.$$
$$2\,M0\cos[\alpha-t\,\omega]^2\sec[\alpha]^2-2\,M0\cos[2\alpha]\cos[\alpha-t\,\omega]^2\sec[\alpha]^2-2\,M0\sec[\alpha]^2$$
$$\sin[t\,\omega]^2-2\,M0\cos[2\alpha]\sec[\alpha]^2\sin[t\,\omega]^2+2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-\right.\right.}$$

$$2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)\Big)$$
$$\Big(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+$$
$$\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]+M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2$$
$$\big(4\,\omega\,\text{Sin}[2\,t\,\omega]+2\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-2\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]\big)\big)\Big)\Big/$$
$$\Big(16\,\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)$$
$$\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)^{3/2}\big)\Big)-$$
$$\Big(\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\,\big(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+$$
$$M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\,\sqrt{2}\,\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+$$
$$\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)\big)\Big)$$
$$\big(-4\,M0+2\,M0\,\text{Cos}[2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+$$
$$2\,M0\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+$$
$$2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+$$
$$2\,\sqrt{2}\,\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)$$
$$\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\,\big(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+$$
$$\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]+M0^2\,\text{Sin}[\alpha]^2$$
$$\text{Sin}[t\,\omega]^2\,\big(4\,\omega\,\text{Sin}[2\,t\,\omega]+2\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-2\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]\big)\big)\Big)\Big/$$
$$\Big(16\,\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)$$
$$\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)^{3/2}\big)+$$
$$\Big(\big(4\,M0-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-$$
$$2\,M0\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Sec}[\alpha]^2$$
$$\text{Sin}[t\,\omega]^2-2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\,\sqrt{2}\,\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-$$
$$2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\Big)$$
$$\Big(4\,M0\,\omega\,\text{Sin}[2\,t\,\omega]+2\,M0\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-2\,M0\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]-$$
$$\Big(\sqrt{2}\,\big(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+$$
$$\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]+M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2$$
$$\big(4\,\omega\,\text{Sin}[2\,t\,\omega]+2\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-2\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]\big)\big)\Big)\Big/$$
$$\Big(\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+$$
$$\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\big)\Big)\Big)\Big/$$
$$\Big(16\,\big(1+\text{Cos}[2\,\alpha]\big)\,\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+$$
$$\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}$$
$$\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\,\big(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+$$
$$M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\,\sqrt{2}\,\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+$$
$$\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\big)\Big)\Big)+$$

$$\Bigg(\Big(-4\,M0+2\,M0\,\text{Cos}[2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\,M0\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\Big)\Big(4\,M0\,\omega\,\text{Sin}[2\,t\,\omega]+2\,M0\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-2\,M0\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]+\Big(\sqrt{2}\,\big(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]+M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\,\big(4\,\omega\,\text{Sin}[2\,t\,\omega]+2\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-2\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]\big)\big)\Big)\Big/\Big(\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\big)\Big)\Big)\Big/\Big(16\,\big(1+\text{Cos}[2\,\alpha]\big)\,\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\,\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\,\big(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\big)\Big)}+\Big(\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\,\big(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\sqrt{2}\,\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\big)\Big)}\Big(-4\,M0\,\omega\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]-4\,M0\,\omega\,\text{Cos}[2\,\alpha]\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]+4\,M0\,\omega\,\text{Sin}[2\,t\,\omega]+2\,M0\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-4\,M0\,\omega\,\text{Cos}[\alpha-t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[\alpha-t\,\omega]-4\,M0\,\omega\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[\alpha-t\,\omega]-2\,M0\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]+\Big(\sqrt{2}\,\big(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]+M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\,\big(4\,\omega\,\text{Sin}[2\,t\,\omega]+2\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-2\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]\big)\big)\Big)\Big/\Big(\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\big)\Big)\Big)\Big/\Big(8\,\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}+\Big(\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\,\big(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\big)\Big)}\Big(4\,M0\,\omega\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]+4\,M0\,\omega\,\text{Cos}[2\,\alpha]\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]-4\,M0\,\omega\,\text{Sin}[2\,t\,\omega]-2\,M0\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]+$$

$$4\,M0\,\omega\,\text{Cos}[\alpha - t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[\alpha - t\,\omega] + 4\,M0\,\omega\,\text{Cos}[2\,\alpha]$$
$$\text{Cos}[\alpha - t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[\alpha - t\,\omega] + 2\,M0\,\omega\,\text{Sin}[2\,\alpha + 2\,t\,\omega] +$$
$$\left(\sqrt{2}\,\left(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \right.\right.\right.$$
$$\left.\left.\left.\text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega] + M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right.\right.$$
$$\left.\left.\left(4\,\omega\,\text{Sin}[2\,t\,\omega] + 2\,\omega\,\text{Sin}[2\,\alpha - 2\,t\,\omega] - 2\,\omega\,\text{Sin}[2\,\alpha + 2\,t\,\omega]\right)\right)\right)\Big/$$
$$\left(\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \right.\right.\right.$$
$$\left.\left.\left.\text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\Big/$$
$$\left(8\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\right.\right.}$$
$$\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right) +$$
$$\left(\left(i\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[t\,\omega]^2\,\left(-4\,M0 + 2\,M0\,\text{Cos}[2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] - \right.\right.\right.$$
$$M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] + 2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 +$$
$$2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 +$$
$$2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\,\sqrt{2}\,\sqrt{\left(-M0^2\,\left(-6 - 2\,\text{Cos}[2\,\alpha] + \right.\right.}$$
$$\left.\left.2\,\text{Cos}[2\,t\,\omega] - \text{Cos}[2\,\alpha - 2\,t\,\omega] - \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}$$
$$\sqrt{\left(\frac{1}{1 + \text{Cos}[2\,\alpha]}\,\left(-2 + 4\,M0 - 2\,\text{Cos}[2\,\alpha] - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + \right.\right.}$$
$$M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\,\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \right.\right.}$$
$$\left.\left.\left.\left.\text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\Big)$$
$$\left(4\,M0 - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - \right.$$
$$2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 -$$
$$2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 +$$
$$2\,\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \right.\right.}$$
$$\left.\left.\left.\text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\Big/$$
$$\left(32\,M0\,\left(1 + \text{Cos}[2\,\alpha]\right)\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \right.\right.}$$
$$\left.\left.\left.\text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right) -$$
$$\left(i\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[t\,\omega]^2\,\left(4\,M0 - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + \right.\right.$$
$$M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 -$$
$$2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 -$$
$$2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\,\sqrt{2}\,\sqrt{\left(-M0^2\,\left(-6 - 2\,\text{Cos}[2\,\alpha] + \right.\right.}$$
$$\left.\left.2\,\text{Cos}[2\,t\,\omega] - \text{Cos}[2\,\alpha - 2\,t\,\omega] - \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}$$
$$\sqrt{\left(\frac{1}{1 + \text{Cos}[2\,\alpha]}\,\left(-2 + 4\,M0 - 2\,\text{Cos}[2\,\alpha] - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + \right.\right.}$$
$$M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] + 2\,\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \right.\right.}$$
$$\left.\left.\left.\left.\text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\Big)$$
$$\left(-4\,M0 + 2\,M0\,\text{Cos}[2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] + \right.$$
$$2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 +$$
$$2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 +$$

$$2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)}\Big)\Big/$$
$$\left(32\,M0\left(1+\cos[2\alpha]\right)\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)}\Big)$$
$$\Bigg(-\Bigg(\Bigg(i\,M0\,\omega\left(1+\cos[2\alpha]\right)\cos[t\omega]\sec[\alpha]\sin[t\omega]\sqrt{\Bigg(\frac{1}{1+\cos[2\alpha]}$$
$$\left(-2+4\,M0-2\cos[2\alpha]-2\,M0\cos[2t\omega]+M0\cos[2\alpha-2t\omega]+M0\cos[2\alpha+2t\omega]-2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)}\Big)\Big)$$
$$\tan[\alpha]\Big)\Big/\left(\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)}\right)+$$
$$\Bigg(i\,M0\,\omega\left(1+\cos[2\alpha]\right)\cos[t\omega]\sec[\alpha]\sin[t\omega]\sqrt{\Bigg(\frac{1}{1+\cos[2\alpha]}$$
$$\left(-2+4\,M0-2\cos[2\alpha]-2\,M0\cos[2t\omega]+M0\cos[2\alpha-2t\omega]+M0\cos[2\alpha+2t\omega]+2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)}\Big)\Big)\tan[\alpha]\Big)\Big/$$
$$\left(\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)}\right)+\Bigg(i\,M0\left(1+\cos[2\alpha]\right)\sec[\alpha]\sin[t\omega]^2$$
$$\sqrt{\Bigg(\frac{1}{1+\cos[2\alpha]}\left(-2+4\,M0-2\cos[2\alpha]-2\,M0\cos[2t\omega]+M0\cos[2\alpha-2t\omega]+M0\cos[2\alpha+2t\omega]-2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)}\Big)\Big)$$
$$\Big(2\,M0^2\,\omega\cos[t\omega]\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]+M0^2\sin[\alpha]^2\sin[t\omega]^2$$
$$\left(4\,\omega\sin[2t\omega]+2\,\omega\sin[2\alpha-2t\omega]-2\,\omega\sin[2\alpha+2t\omega]\right)\Big)\tan[\alpha]\Big)\Big/$$
$$\Big(4\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)^{3/2}\Big)-\Bigg(i\,M0\left(1+\cos[2\alpha]\right)\sec[\alpha]\sin[t\omega]^2$$
$$\sqrt{\Bigg(\frac{1}{1+\cos[2\alpha]}\left(-2+4\,M0-2\cos[2\alpha]-2\,M0\cos[2t\omega]+M0\cos[2\alpha-2t\omega]+M0\cos[2\alpha+2t\omega]+2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)}\Big)\Big)$$
$$\Big(2\,M0^2\,\omega\cos[t\omega]\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+$$

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Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω] + M0^2 Sin[α]^2 Sin[t ω]^2
(4 ω Sin[2 t ω] + 2 ω Sin[2 α - 2 t ω] - 2 ω Sin[2 α + 2 t ω])) Tan[α]) /
(4 (M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω])
Sin[α]^2 Sin[t ω]^2)^(3/2)) -
(i M0 Sec[α] Sin[t ω]^2 (4 M0 ω Sin[2 t ω] + 2 M0 ω Sin[2 α - 2 t ω] -
2 M0 ω Sin[2 α + 2 t ω] - (Sqrt[2] (2 M0^2 ω Cos[t ω] (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω] + M0^2 Sin[α]^2
Sin[t ω]^2 (4 ω Sin[2 t ω] + 2 ω Sin[2 α - 2 t ω] - 2 ω Sin[2 α + 2 t ω])))) /
(Sqrt[(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[
2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2)]) Tan[α]) /
(4 Sqrt[(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω])
Sin[α]^2 Sin[t ω]^2)] Sqrt[(1/(1 + Cos[2 α]) (-2 + 4 M0 - 2 Cos[2 α] - 2 M0 Cos[2 t ω] +
M0 Cos[2 α - 2 t ω] + M0 Cos[2 α + 2 t ω] - 2 Sqrt[2] Sqrt[(M0^2 (6 + 2 Cos[2 α] - 2 Cos[
2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2)]))] +
(i M0 Sec[α] Sin[t ω]^2 (4 M0 ω Sin[2 t ω] + 2 M0 ω Sin[2 α - 2 t ω] - 2 M0 ω
Sin[2 α + 2 t ω] + (Sqrt[2] (2 M0^2 ω Cos[t ω] (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω] + M0^2 Sin[α]^2
Sin[t ω]^2 (4 ω Sin[2 t ω] + 2 ω Sin[2 α - 2 t ω] - 2 ω Sin[2 α + 2 t ω])))) /
(Sqrt[(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[
2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2)]) Tan[α]) /
(4 Sqrt[(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω])
Sin[α]^2 Sin[t ω]^2)] Sqrt[(1/(1 + Cos[2 α])
(-2 + 4 M0 - 2 Cos[2 α] - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] +
M0 Cos[2 α + 2 t ω] + 2 Sqrt[2] Sqrt[(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2)]))]]]]]]

L22[α_, ω_, t_, M0_, s_, r_, Θ_] := (1/M0) 2 i Sec[α] Sin[t ω]^2 Tan[α]
(s + ((((-4 M0 + 2 M0 Cos[2 t ω] - M0 Cos[2 α - 2 t ω] - M0 Cos[2 α + 2 t ω] + 2 M0 Cos[α - t ω]^2
Sec[α]^2 + 2 M0 Cos[2 α] Cos[α - t ω]^2 Sec[α]^2 + 2 M0 Sec[α]^2 Sin[t ω]^2 +
2 M0 Cos[2 α] Sec[α]^2 Sin[t ω]^2 + 2 Sqrt[2] Sqrt[(-M0^2 (-6 - 2 Cos[2 α] +
2 Cos[2 t ω] - Cos[2 α - 2 t ω] - Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2)])
```

$$\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\left(-2+4\,\text{M0}-2\,\text{Cos}[2\alpha]-2\,\text{M0}\,\text{Cos}[2\,t\,\omega]+\text{M0}\,\text{Cos}[2\alpha-2\,t\,\omega]+\right.\right.$$
$$\left.\left.\text{M0}\,\text{Cos}[2\alpha+2\,t\,\omega]-2\sqrt{2}\,\sqrt{\left(\text{M0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\,t\,\omega]+\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\text{Cos}[2\alpha-2\,t\,\omega]+\text{Cos}[2\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\right)\Big/$$
$$\left(8\sqrt{\left(\text{M0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\alpha-2\,t\,\omega]+\text{Cos}[2\alpha+2\,t\,\omega]\right)\right.}\right.$$
$$\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)+$$
$$\left(\left(4\,\text{M0}-2\,\text{M0}\,\text{Cos}[2\,t\,\omega]+\text{M0}\,\text{Cos}[2\alpha-2\,t\,\omega]+\text{M0}\,\text{Cos}[2\alpha+2\,t\,\omega]-2\,\text{M0}\,\text{Cos}[\alpha-t\,\omega]^2\right.\right.$$
$$\text{Sec}[\alpha]^2-2\,\text{M0}\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{M0}\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2-$$
$$2\,\text{M0}\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\left(-\text{M0}^2\left(-6-2\,\text{Cos}[2\alpha]+\right.\right.}$$
$$\left.\left.\left.2\,\text{Cos}[2\,t\,\omega]-\text{Cos}[2\alpha-2\,t\,\omega]-\text{Cos}[2\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)$$
$$\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\left(-2+4\,\text{M0}-2\,\text{Cos}[2\alpha]-2\,\text{M0}\,\text{Cos}[2\,t\,\omega]+\text{M0}\,\text{Cos}[2\alpha-2\,t\,\omega]+\right.\right.$$
$$\left.\left.\text{M0}\,\text{Cos}[2\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\left(\text{M0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\,t\,\omega]+\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\text{Cos}[2\alpha-2\,t\,\omega]+\text{Cos}[2\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\right)\Big/$$
$$\left(8\sqrt{\left(\text{M0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\alpha-2\,t\,\omega]+\text{Cos}[2\alpha+2\,t\,\omega]\right)\right.}\right.$$
$$\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\Bigg)$$
$$\left(s\left(\left(\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\left(-2+4\,\text{M0}-2\,\text{Cos}[2\alpha]-2\,\text{M0}\,\text{Cos}[2\,t\,\omega]+\text{M0}\,\text{Cos}[2\alpha-2\,t\,\omega]+\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\text{M0}\,\text{Cos}[2\alpha+2\,t\,\omega]-2\sqrt{2}\,\sqrt{\left(\text{M0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\,t\,\omega]+\right.\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\left.\text{Cos}[2\alpha-2\,t\,\omega]+\text{Cos}[2\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\right)$$
$$\left(4\,\text{M0}-2\,\text{M0}\,\text{Cos}[2\,t\,\omega]+\text{M0}\,\text{Cos}[2\alpha-2\,t\,\omega]+\text{M0}\,\text{Cos}[2\alpha+2\,t\,\omega]-\right.$$
$$2\,\text{M0}\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{M0}\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{M0}\,\text{Sec}[\alpha]^2$$
$$\text{Sin}[t\,\omega]^2-2\,\text{M0}\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\left(\text{M0}^2\left(6+2\,\text{Cos}[2\alpha]-\right.\right.}$$
$$\left.\left.\left.\left.2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\alpha-2\,t\,\omega]+\text{Cos}[2\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\right)\Big/$$
$$\left(8\sqrt{\left(\text{M0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\alpha-2\,t\,\omega]+\text{Cos}[2\alpha+2\,t\,\omega]\right)\right.}\right.$$
$$\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)+$$
$$\left(\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\left(-2+4\,\text{M0}-2\,\text{Cos}[2\alpha]-2\,\text{M0}\,\text{Cos}[2\,t\,\omega]+\text{M0}\,\text{Cos}[2\alpha-2\,t\,\omega]+\right.\right.\right.$$
$$\left.\left.\left.\text{M0}\,\text{Cos}[2\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\left(\text{M0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\,t\,\omega]+\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\text{Cos}[2\alpha-2\,t\,\omega]+\text{Cos}[2\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\right)$$
$$\left(-4\,\text{M0}+2\,\text{M0}\,\text{Cos}[2\,t\,\omega]-\text{M0}\,\text{Cos}[2\alpha-2\,t\,\omega]-\text{M0}\,\text{Cos}[2\alpha+2\,t\,\omega]+\right.$$
$$2\,\text{M0}\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{M0}\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{M0}\,\text{Sec}[\alpha]^2$$
$$\text{Sin}[t\,\omega]^2+2\,\text{M0}\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\left(\text{M0}^2\left(6+2\,\text{Cos}[2\alpha]-\right.\right.}$$
$$\left.\left.\left.\left.2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\alpha-2\,t\,\omega]+\text{Cos}[2\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\right)\Big/$$
$$\left(8\sqrt{\left(\text{M0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\alpha-2\,t\,\omega]+\text{Cos}[2\alpha+2\,t\,\omega]\right)\right.}\right.$$

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Sin[α]^2 Sin[t ω]^2))) +
e^(i θ) r (-(((i M0 (1 + Cos[2 α]) Sec[α] Sin[t ω]^2 Sqrt[(1/(1 + Cos[2 α])) (-2 + 4 M0 -
2 Cos[2 α] - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] + M0 Cos[2 α + 2 t ω] -
2 Sqrt[2] Sqrt[M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] +
Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2])) Tan[α])/
(2 Sqrt[M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω])
Sin[α]^2 Sin[t ω]^2])) + (i M0 (1 + Cos[2 α]) Sec[α] Sin[t ω]^2
Sqrt[(1/(1 + Cos[2 α])) (-2 + 4 M0 - 2 Cos[2 α] - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] +
M0 Cos[2 α + 2 t ω] + 2 Sqrt[2] Sqrt[M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2])) Tan[α])/
(2 Sqrt[M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω])
Sin[α]^2 Sin[t ω]^2]))) +
(-(((i M0 (1 + Cos[2 α]) Sec[α] Sin[t ω]^2 Sqrt[(1/(1 + Cos[2 α])) (-2 + 4 M0 - 2 Cos[2 α] -
2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] + M0 Cos[2 α + 2 t ω] -
2 Sqrt[2] Sqrt[M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] +
Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2])) Tan[α])/
(2 Sqrt[M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω])
Sin[α]^2 Sin[t ω]^2])) + (i M0 (1 + Cos[2 α]) Sec[α] Sin[t ω]^2
Sqrt[(1/(1 + Cos[2 α])) (-2 + 4 M0 - 2 Cos[2 α] - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] +
M0 Cos[2 α + 2 t ω] + 2 Sqrt[2] Sqrt[M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2])) Tan[α])/
(2 Sqrt[M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω])
Sin[α]^2 Sin[t ω]^2]))) +
(e^(-i θ) r (((Sqrt[(1/(1 + Cos[2 α])) (-2 + 4 M0 - 2 Cos[2 α] - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] +
M0 Cos[2 α + 2 t ω] - 2 Sqrt[2] Sqrt[M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2])))
(4 M0 - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] + M0 Cos[2 α + 2 t ω] -
2 M0 Cos[α - t ω]^2 Sec[α]^2 - 2 M0 Cos[2 α] Cos[α - t ω]^2 Sec[α]^2 - 2 M0 Sec[α]^2
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$$\text{Sin}[t\,\omega]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Bigg)\Bigg/$$
$$\left(8\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right) +$$
$$\Bigg(\sqrt{\Bigg(\frac{1}{1 + \text{Cos}[2\,\alpha]}\,\Big(-2 + 4\,M0 - 2\,\text{Cos}[2\,\alpha] - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] + 2\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Big)\Bigg)}$$
$$\Big(-4\,M0 + 2\,M0\,\text{Cos}[2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] + 2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Big)\Bigg/$$
$$\left(8\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\Bigg) +$$
$$s\,\Bigg(-\Bigg(\Bigg(i\,M0\,\left(1 + \text{Cos}[2\,\alpha]\right)\,\text{Sec}[\alpha]\,\text{Sin}[t\,\omega]^2\,\sqrt{\Bigg(\frac{1}{1 + \text{Cos}[2\,\alpha]}\,\Big(-2 + 4\,M0 - 2\,\text{Cos}[2\,\alpha] - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Big)\Bigg)}\,\text{Tan}[\alpha]\Bigg)\Bigg/$$
$$\left(2\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\Bigg) + \Bigg(i\,M0\,\left(1 + \text{Cos}[2\,\alpha]\right)\,\text{Sec}[\alpha]\,\text{Sin}[t\,\omega]^2$$
$$\sqrt{\Bigg(\frac{1}{1 + \text{Cos}[2\,\alpha]}\,\Big(-2 + 4\,M0 - 2\,\text{Cos}[2\,\alpha] - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] + 2\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Big)\Bigg)}\,\text{Tan}[\alpha]\Bigg)\Bigg/$$
$$\left(2\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\Bigg)\Bigg) +$$
$$i\,\Bigg(\Bigg(-\Bigg(\Bigg(\sqrt{\Bigg(\frac{1}{1 + \text{Cos}[2\,\alpha]}\,\Big(-2 + 4\,M0 - 2\,\text{Cos}[2\,\alpha] - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Big)\Bigg)}$$
$$\Big(4\,M0 - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] -\right.\right.\right.$$

$$
\begin{aligned}
&2\,\mathrm{Cos}[2\,t\,\omega] + \mathrm{Cos}[2\,\alpha - 2\,t\,\omega] + \mathrm{Cos}[2\,\alpha + 2\,t\,\omega]\big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\big)\Big)\\
&\Big(2\,M0^2\,\omega\,\mathrm{Cos}[t\,\omega]\,\big(6 + 2\,\mathrm{Cos}[2\,\alpha] - 2\,\mathrm{Cos}[2\,t\,\omega] + \mathrm{Cos}[2\,\alpha - 2\,t\,\omega] +\\
&\quad \mathrm{Cos}[2\,\alpha + 2\,t\,\omega]\big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega] + M0^2\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\\
&\quad \big(4\,\omega\,\mathrm{Sin}[2\,t\,\omega] + 2\,\omega\,\mathrm{Sin}[2\,\alpha - 2\,t\,\omega] - 2\,\omega\,\mathrm{Sin}[2\,\alpha + 2\,t\,\omega]\big)\big)\Big)\Big/\\
&\Big(16\,\big(M0^2\,\big(6 + 2\,\mathrm{Cos}[2\,\alpha] - 2\,\mathrm{Cos}[2\,t\,\omega] + \mathrm{Cos}[2\,\alpha - 2\,t\,\omega] + \mathrm{Cos}[2\,\alpha + 2\,t\,\omega]\big)\\
&\quad \mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\big)^{3/2}\Big)\Big) -\\
&\Big(\sqrt{\Big(\frac{1}{1 + \mathrm{Cos}[2\,\alpha]}\,\big(-2 + 4\,M0 - 2\,\mathrm{Cos}[2\,\alpha] - 2\,M0\,\mathrm{Cos}[2\,t\,\omega] + M0\,\mathrm{Cos}[2\,\alpha - 2\,t\,\omega] +\\
&\quad M0\,\mathrm{Cos}[2\,\alpha + 2\,t\,\omega] + 2\,\sqrt{2}\,\sqrt{\big(M0^2\,\big(6 + 2\,\mathrm{Cos}[2\,\alpha] - 2\,\mathrm{Cos}[2\,t\,\omega] +\\
&\quad \mathrm{Cos}[2\,\alpha - 2\,t\,\omega] + \mathrm{Cos}[2\,\alpha + 2\,t\,\omega]\big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\big)\Big)\Big)\\
&\Big(-4\,M0 + 2\,M0\,\mathrm{Cos}[2\,t\,\omega] - M0\,\mathrm{Cos}[2\,\alpha - 2\,t\,\omega] - M0\,\mathrm{Cos}[2\,\alpha + 2\,t\,\omega] +\\
&\quad 2\,M0\,\mathrm{Cos}[\alpha - t\,\omega]^2\,\mathrm{Sec}[\alpha]^2 + 2\,M0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Cos}[\alpha - t\,\omega]^2\,\mathrm{Sec}[\alpha]^2 +\\
&\quad 2\,M0\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2 + 2\,M0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2 +\\
&\quad 2\,\sqrt{2}\,\sqrt{\big(M0^2\,\big(6 + 2\,\mathrm{Cos}[2\,\alpha] - 2\,\mathrm{Cos}[2\,t\,\omega] + \mathrm{Cos}[2\,\alpha - 2\,t\,\omega] + \mathrm{Cos}[2\,\alpha + 2\,t\,\omega]\big)\\
&\quad \mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\big)\Big)\,\big(2\,M0^2\,\omega\,\mathrm{Cos}[t\,\omega]\,\big(6 + 2\,\mathrm{Cos}[2\,\alpha] - 2\,\mathrm{Cos}[2\,t\,\omega] +\\
&\quad \mathrm{Cos}[2\,\alpha - 2\,t\,\omega] + \mathrm{Cos}[2\,\alpha + 2\,t\,\omega]\big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega] + M0^2\,\mathrm{Sin}[\alpha]^2\\
&\quad \mathrm{Sin}[t\,\omega]^2\,\big(4\,\omega\,\mathrm{Sin}[2\,t\,\omega] + 2\,\omega\,\mathrm{Sin}[2\,\alpha - 2\,t\,\omega] - 2\,\omega\,\mathrm{Sin}[2\,\alpha + 2\,t\,\omega]\big)\big)\Big)\Big)\Big/\\
&\Big(16\,\big(M0^2\,\big(6 + 2\,\mathrm{Cos}[2\,\alpha] - 2\,\mathrm{Cos}[2\,t\,\omega] + \mathrm{Cos}[2\,\alpha - 2\,t\,\omega] + \mathrm{Cos}[2\,\alpha + 2\,t\,\omega]\big)\\
&\quad \mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\big)^{3/2}\Big)\Big) +\\
&\Big(\Big(4\,M0 - 2\,M0\,\mathrm{Cos}[2\,t\,\omega] + M0\,\mathrm{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\mathrm{Cos}[2\,\alpha + 2\,t\,\omega] -\\
&\quad 2\,M0\,\mathrm{Cos}[\alpha - t\,\omega]^2\,\mathrm{Sec}[\alpha]^2 - 2\,M0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Cos}[\alpha - t\,\omega]^2\,\mathrm{Sec}[\alpha]^2 - 2\,M0\,\mathrm{Sec}[\alpha]^2\\
&\quad \mathrm{Sin}[t\,\omega]^2 - 2\,M0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2 + 2\,\sqrt{2}\,\sqrt{\big(M0^2\,\big(6 + 2\,\mathrm{Cos}[2\,\alpha] -\\
&\quad 2\,\mathrm{Cos}[2\,t\,\omega] + \mathrm{Cos}[2\,\alpha - 2\,t\,\omega] + \mathrm{Cos}[2\,\alpha + 2\,t\,\omega]\big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\big)\Big)\\
&\Big(4\,M0\,\omega\,\mathrm{Sin}[2\,t\,\omega] + 2\,M0\,\omega\,\mathrm{Sin}[2\,\alpha - 2\,t\,\omega] - 2\,M0\,\omega\,\mathrm{Sin}[2\,\alpha + 2\,t\,\omega] -\\
&\quad \Big(\sqrt{2}\,\big(2\,M0^2\,\omega\,\mathrm{Cos}[t\,\omega]\,\big(6 + 2\,\mathrm{Cos}[2\,\alpha] - 2\,\mathrm{Cos}[2\,t\,\omega] + \mathrm{Cos}[2\,\alpha - 2\,t\,\omega] +\\
&\quad \mathrm{Cos}[2\,\alpha + 2\,t\,\omega]\big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega] + M0^2\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\\
&\quad \big(4\,\omega\,\mathrm{Sin}[2\,t\,\omega] + 2\,\omega\,\mathrm{Sin}[2\,\alpha - 2\,t\,\omega] - 2\,\omega\,\mathrm{Sin}[2\,\alpha + 2\,t\,\omega]\big)\big)\Big)\Big/\\
&\quad \Big(\sqrt{\big(M0^2\,\big(6 + 2\,\mathrm{Cos}[2\,\alpha] - 2\,\mathrm{Cos}[2\,t\,\omega] + \mathrm{Cos}[2\,\alpha - 2\,t\,\omega] +\\
&\quad \mathrm{Cos}[2\,\alpha + 2\,t\,\omega]\big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\big)}\Big)\Big)\Big)\Big/\\
&\Big(16\,\big(1 + \mathrm{Cos}[2\,\alpha]\big)\,\sqrt{\big(M0^2\,\big(6 + 2\,\mathrm{Cos}[2\,\alpha] - 2\,\mathrm{Cos}[2\,t\,\omega] + \mathrm{Cos}[2\,\alpha - 2\,t\,\omega] +\\
&\quad \mathrm{Cos}[2\,\alpha + 2\,t\,\omega]\big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\big)}\\
&\quad \sqrt{\Big(\frac{1}{1 + \mathrm{Cos}[2\,\alpha]}\,\big(-2 + 4\,M0 - 2\,\mathrm{Cos}[2\,\alpha] - 2\,M0\,\mathrm{Cos}[2\,t\,\omega] + M0\,\mathrm{Cos}[2\,\alpha - 2\,t\,\omega] +\\
&\quad M0\,\mathrm{Cos}[2\,\alpha + 2\,t\,\omega] - 2\,\sqrt{2}\,\sqrt{\big(M0^2\,\big(6 + 2\,\mathrm{Cos}[2\,\alpha] - 2\,\mathrm{Cos}[2\,t\,\omega] +\\
&\quad \mathrm{Cos}[2\,\alpha - 2\,t\,\omega] + \mathrm{Cos}[2\,\alpha + 2\,t\,\omega]\big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\big)}\Big)\Big)\Big) +
\end{aligned}
$$

$$\Bigg(\Big(-4\,M0+2\,M0\,\text{Cos}[2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\,M0\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\Big)\Big(4\,M0\,\omega\,\text{Sin}[2\,t\,\omega]+2\,M0\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-2\,M0\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]+\Big(\sqrt{2}\,\big(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]+M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\,\big(4\,\omega\,\text{Sin}[2\,t\,\omega]+2\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-2\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]\big)\big)\Big)\Big/\Big(\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\big)\Big)\Big)\Big/\Big(16\,\big(1+\text{Cos}[2\,\alpha]\big)\,\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\,\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\,\big(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\big)\Big)\Big)+\Big(\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\,\big(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\sqrt{2}\,\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\big)\Big)}\Big)\Big(-4\,M0\,\omega\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]-4\,M0\,\omega\,\text{Cos}[2\,\alpha]\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]+4\,M0\,\omega\,\text{Sin}[2\,t\,\omega]+2\,M0\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-4\,M0\,\omega\,\text{Cos}[\alpha-t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[\alpha-t\,\omega]-4\,M0\,\omega\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[\alpha-t\,\omega]-2\,M0\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]+\Big(\sqrt{2}\,\big(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]+M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\,\big(4\,\omega\,\text{Sin}[2\,t\,\omega]+2\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-2\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]\big)\big)\Big)\Big/\Big(\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\big)\Big)\Big)\Big/\Big(8\,\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}+\Big(\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\,\big(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\big)\Big)}\Big)\Big(4\,M0\,\omega\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]+4\,M0\,\omega\,\text{Cos}[2\,\alpha]\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]-4\,M0\,\omega\,\text{Sin}[2\,t\,\omega]-2\,M0\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]+4\,M0\,\omega\,\text{Cos}[\alpha-t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[\alpha-t\,\omega]+4\,M0\,\omega\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[\alpha-t\,\omega]+$$

$$2\,M0\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]+\left(\sqrt{2}\,\left(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]+M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\,\left(4\,\omega\,\text{Sin}[2\,t\,\omega]+2\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-2\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]\right)\right)\right)\Big/\left(\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\Big)\Big/\left(8\,\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)$$

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

$$\left(\left(\left(-4\,M0+2\,M0\,\text{Cos}[2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\,M0\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\,\sqrt{2}\,\sqrt{\left(-M0^2\,\left(-6-2\,\text{Cos}[2\,\alpha]+2\,\text{Cos}[2\,t\,\omega]-\text{Cos}[2\,\alpha-2\,t\,\omega]-\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\,\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\,\left(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\,\sqrt{2}\,\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\right)\Big/\left(8\,\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)+\left(\left(4\,M0-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\,M0\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2-2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\,\sqrt{2}\,\sqrt{\left(-M0^2\,\left(-6-2\,\text{Cos}[2\,\alpha]+\right.\right.\right.\right.$$

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

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

$$M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] + 2\sqrt{2}\,\sqrt{\big(M0^2\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] +$$

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

$$\Big(8\sqrt{\big(M0^2\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\big)$$

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

$$\Big(-\Big(\Big(\Big(i\,M0\,\omega\,\big(1 + \text{Cos}[2\,\alpha]\big)\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]\,\text{Sin}[t\,\omega]\,\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}$$

$$\Big(-2 + 4\,M0 - 2\,\text{Cos}[2\,\alpha] - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] +$$

$$M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\sqrt{2}\,\sqrt{\big(M0^2\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] +$$

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

$$\text{Tan}[\alpha]\Big)\Big/\Big(\sqrt{\big(M0^2\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] +$$

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

$$\Big(i\,M0\,\omega\,\big(1 + \text{Cos}[2\,\alpha]\big)\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]\,\text{Sin}[t\,\omega]\,\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}$$

$$\Big(-2 + 4\,M0 - 2\,\text{Cos}[2\,\alpha] - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] +$$

$$M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] + 2\sqrt{2}\,\sqrt{\big(M0^2\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] +$$

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

$$\Big(\sqrt{\big(M0^2\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\big)$$

$$\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)\big) + \Big(i\,M0\,\big(1 + \text{Cos}[2\,\alpha]\big)\,\text{Sec}[\alpha]\,\text{Sin}[t\,\omega]^2$$

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

$$M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\sqrt{2}\,\sqrt{\big(M0^2\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] +$$

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

$$\Big(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] +$$

$$\text{Cos}[2\,\alpha + 2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega] + M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2$$

$$\big(4\,\omega\,\text{Sin}[2\,t\,\omega] + 2\,\omega\,\text{Sin}[2\,\alpha - 2\,t\,\omega] - 2\,\omega\,\text{Sin}[2\,\alpha + 2\,t\,\omega]\big)\big)\,\text{Tan}[\alpha]\Big)\Big/$$

$$\Big(4\,\big(M0^2\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\big)$$

$$\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)^{3/2}\Big) - \Big(i\,M0\,\big(1 + \text{Cos}[2\,\alpha]\big)\,\text{Sec}[\alpha]\,\text{Sin}[t\,\omega]^2$$

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

$$M0\,\text{Cos}[2\alpha+2t\omega]+2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2t\omega]+\text{Cos}[2\alpha-2t\omega]+\text{Cos}[2\alpha+2t\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\right)}\Bigg)$$

$$\Big(2M0^2\omega\,\text{Cos}[t\omega]\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2t\omega]+\text{Cos}[2\alpha-2t\omega]+\text{Cos}[2\alpha+2t\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]+M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\left(4\omega\,\text{Sin}[2t\omega]+2\omega\,\text{Sin}[2\alpha-2t\omega]-2\omega\,\text{Sin}[2\alpha+2t\omega]\right)\Big)\,\text{Tan}[\alpha]\Bigg)\Big/$$

$$\Big(4\left(M0^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2t\omega]+\text{Cos}[2\alpha-2t\omega]+\text{Cos}[2\alpha+2t\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\right)^{3/2}\Big)-$$

$$\Big(i\,M0\,\text{Sec}[\alpha]\,\text{Sin}[t\omega]^2\Big(4M0\omega\,\text{Sin}[2t\omega]+2M0\omega\,\text{Sin}[2\alpha-2t\omega]-2M0\omega\,\text{Sin}[2\alpha+2t\omega]-\Big(\sqrt{2}\,\Big(2M0^2\omega\,\text{Cos}[t\omega]\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2t\omega]+\text{Cos}[2\alpha-2t\omega]+\text{Cos}[2\alpha+2t\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]+M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\left(4\omega\,\text{Sin}[2t\omega]+2\omega\,\text{Sin}[2\alpha-2t\omega]-2\omega\,\text{Sin}[2\alpha+2t\omega]\right)\Big)\Big/\Big(\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2t\omega]+\text{Cos}[2\alpha-2t\omega]+\text{Cos}[2\alpha+2t\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\right)}\Big)\,\text{Tan}[\alpha]\Bigg)\Big/$$

$$\Bigg(4\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2t\omega]+\text{Cos}[2\alpha-2t\omega]+\text{Cos}[2\alpha+2t\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\right)}\sqrt{\Bigg(\frac{1}{1+\text{Cos}[2\alpha]}\Big(-2+4M0-2\,\text{Cos}[2\alpha]-2M0\,\text{Cos}[2t\omega]+M0\,\text{Cos}[2\alpha-2t\omega]+M0\,\text{Cos}[2\alpha+2t\omega]-2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2t\omega]+\text{Cos}[2\alpha-2t\omega]+\text{Cos}[2\alpha+2t\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\right)}\Big)\Bigg)}+$$

$$\Big(i\,M0\,\text{Sec}[\alpha]\,\text{Sin}[t\omega]^2\Big(4M0\omega\,\text{Sin}[2t\omega]+2M0\omega\,\text{Sin}[2\alpha-2t\omega]-2M0\omega\,\text{Sin}[2\alpha+2t\omega]+\Big(\sqrt{2}\,\Big(2M0^2\omega\,\text{Cos}[t\omega]\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2t\omega]+\text{Cos}[2\alpha-2t\omega]+\text{Cos}[2\alpha+2t\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]+M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\left(4\omega\,\text{Sin}[2t\omega]+2\omega\,\text{Sin}[2\alpha-2t\omega]-2\omega\,\text{Sin}[2\alpha+2t\omega]\right)\Big)\Big/\Big(\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2t\omega]+\text{Cos}[2\alpha-2t\omega]+\text{Cos}[2\alpha+2t\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\right)}\Big)\,\text{Tan}[\alpha]\Bigg)\Big/$$

$$\Bigg(4\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2t\omega]+\text{Cos}[2\alpha-2t\omega]+\text{Cos}[2\alpha+2t\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\right)}\sqrt{\Bigg(\frac{1}{1+\text{Cos}[2\alpha]}\Big(-2+4M0-2\,\text{Cos}[2\alpha]-2M0\,\text{Cos}[2t\omega]+M0\,\text{Cos}[2\alpha-2t\omega]+M0\,\text{Cos}[2\alpha+2t\omega]+2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2t\omega]+\text{Cos}[2\alpha-2t\omega]+\text{Cos}[2\alpha+2t\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\right)}\Big)\Bigg)}\Bigg)+$$

$$\frac{1}{M0}\,\text{Sec}[\alpha]^2\left(\text{Cos}[\alpha+t\omega]^2+\text{Sin}[t\omega]^2\right)\Bigg(e^{-i\theta}r+\Bigg(\Big(i\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[t\omega]^2\Big(-4M0+2M0\,\text{Cos}[2t\omega]-M0\,\text{Cos}[2\alpha-2t\omega]-M0\,\text{Cos}[2\alpha+2t\omega]+2M0\,\text{Cos}[\alpha-t\omega]^2\,\text{Sec}[\alpha]^2+2M0\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-t\omega]^2\,\text{Sec}[\alpha]^2+$$

$$2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 +$$
$$2\sqrt{2}\,\sqrt{\left(-M0^2\,\left(-6 - 2\,\text{Cos}[2\,\alpha] + 2\,\text{Cos}[2\,t\,\omega] - \text{Cos}[2\,\alpha - 2\,t\,\omega] - \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Bigg)$$
$$\sqrt{\left(\frac{1}{1 + \text{Cos}[2\,\alpha]}\,\left(-2 + 4\,M0 - 2\,\text{Cos}[2\,\alpha] - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\right)}$$
$$\Big(4\,M0 - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Big)\Bigg/$$
$$\Big(32\,M0\,\left(1 + \text{Cos}[2\,\alpha]\right)\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)} -$$
$$\Big(i\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[t\,\omega]^2\,\Big(4\,M0 - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\sqrt{2}\,\sqrt{\left(-M0^2\,\left(-6 - 2\,\text{Cos}[2\,\alpha] + 2\,\text{Cos}[2\,t\,\omega] - \text{Cos}[2\,\alpha - 2\,t\,\omega] - \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Big)$$
$$\sqrt{\left(\frac{1}{1 + \text{Cos}[2\,\alpha]}\,\left(-2 + 4\,M0 - 2\,\text{Cos}[2\,\alpha] - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] + 2\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\right)}$$
$$\Big(-4\,M0 + 2\,M0\,\text{Cos}[2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] + 2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Big)\Bigg/$$
$$\Big(32\,M0\,\left(1 + \text{Cos}[2\,\alpha]\right)\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Big)\Bigg)$$
$$\Bigg(s\,\Bigg(\Bigg(\sqrt{\left(\frac{1}{1 + \text{Cos}[2\,\alpha]}\,\left(-2 + 4\,M0 - 2\,\text{Cos}[2\,\alpha] - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\right)}$$
$$\Big(4\,M0 - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 +$$

$$2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)}\Bigg)\Bigg/$$
$$\left(8\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)}\right)+$$
$$\left(\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4M0-2\cos[2\alpha]-2M0\cos[2t\omega]+M0\cos[2\alpha-2t\omega]+M0\cos[2\alpha+2t\omega]+2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)}\right)\right)}\right)$$
$$\left(-4M0+2M0\cos[2t\omega]-M0\cos[2\alpha-2t\omega]-M0\cos[2\alpha+2t\omega]+2M0\cos[\alpha-t\omega]^2\sec[\alpha]^2+2M0\cos[2\alpha]\cos[\alpha-t\omega]^2\sec[\alpha]^2+2M0\sec[\alpha]^2\sin[t\omega]^2+2M0\cos[2\alpha]\sec[\alpha]^2\sin[t\omega]^2+2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)}\Bigg)\Bigg/$$
$$\left(8\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)}\right)\Bigg)+$$
$$e^{i\theta}r\left(-\left(\left(i\,M0\left(1+\cos[2\alpha]\right)\sec[\alpha]\sin[t\omega]^2\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4M0-2\cos[2\alpha]-2M0\cos[2t\omega]+M0\cos[2\alpha-2t\omega]+M0\cos[2\alpha+2t\omega]-2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)}\right)\tan[\alpha]\right)\Bigg/$$
$$\left(2\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)}\right)+\left(i\,M0\left(1+\cos[2\alpha]\right)\sec[\alpha]\sin[t\omega]^2\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4M0-2\cos[2\alpha]-2M0\cos[2t\omega]+M0\cos[2\alpha-2t\omega]+M0\cos[2\alpha+2t\omega]+2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)}\right)\tan[\alpha]\right)\Bigg/$$
$$\left(2\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)}\right)\Bigg)\Bigg)+$$
$$\left(\left(\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4M0-2\cos[2\alpha]-2M0\cos[2t\omega]+M0\cos[2\alpha-2t\omega]+M0\cos[2\alpha+2t\omega]-2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)}\right)\right)}\right)$$
$$\left(4M0-2M0\cos[2t\omega]+M0\cos[2\alpha-2t\omega]+M0\cos[2\alpha+2t\omega]-2M0\cos[\alpha-t\omega]^2\sec[\alpha]^2-2M0\cos[2\alpha]\cos[\alpha-t\omega]^2\sec[\alpha]^2-\right.$$

$$
\begin{aligned}
&2\,M0\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2 - 2\,M0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2 + \\
&2\sqrt{2}\,\surd\big(M0^2\,\big(6 + 2\,\mathrm{Cos}[2\,\alpha] - 2\,\mathrm{Cos}[2\,t\,\omega] + \mathrm{Cos}[2\,\alpha - 2\,t\,\omega] + \\
&\quad \mathrm{Cos}[2\,\alpha + 2\,t\,\omega]\big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\big)\big)\Big)\Big/ \\
&\big(8\,\surd\big(M0^2\,\big(6 + 2\,\mathrm{Cos}[2\,\alpha] - 2\,\mathrm{Cos}[2\,t\,\omega] + \mathrm{Cos}[2\,\alpha - 2\,t\,\omega] + \mathrm{Cos}[2\,\alpha + 2\,t\,\omega]\big) \\
&\quad \mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\big)\big) + \\
&\Big(\surd\Big(\frac{1}{1 + \mathrm{Cos}[2\,\alpha]}\,\big(-2 + 4\,M0 - 2\,\mathrm{Cos}[2\,\alpha] - 2\,M0\,\mathrm{Cos}[2\,t\,\omega] + M0\,\mathrm{Cos}[2\,\alpha - 2\,t\,\omega] + \\
&\quad M0\,\mathrm{Cos}[2\,\alpha + 2\,t\,\omega] + 2\sqrt{2}\,\surd\big(M0^2\,\big(6 + 2\,\mathrm{Cos}[2\,\alpha] - 2\,\mathrm{Cos}[2\,t\,\omega] + \\
&\quad\quad \mathrm{Cos}[2\,\alpha - 2\,t\,\omega] + \mathrm{Cos}[2\,\alpha + 2\,t\,\omega]\big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\big)\big)\Big)\Big) \\
&\big(-4\,M0 + 2\,M0\,\mathrm{Cos}[2\,t\,\omega] - M0\,\mathrm{Cos}[2\,\alpha - 2\,t\,\omega] - M0\,\mathrm{Cos}[2\,\alpha + 2\,t\,\omega] + \\
&\quad 2\,M0\,\mathrm{Cos}[\alpha - t\,\omega]^2\,\mathrm{Sec}[\alpha]^2 + 2\,M0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Cos}[\alpha - t\,\omega]^2\,\mathrm{Sec}[\alpha]^2 + \\
&\quad 2\,M0\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2 + 2\,M0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2 + \\
&\quad 2\sqrt{2}\,\surd\big(M0^2\,\big(6 + 2\,\mathrm{Cos}[2\,\alpha] - 2\,\mathrm{Cos}[2\,t\,\omega] + \mathrm{Cos}[2\,\alpha - 2\,t\,\omega] + \\
&\quad\quad \mathrm{Cos}[2\,\alpha + 2\,t\,\omega]\big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\big)\big)\Big)\Big/ \\
&\big(8\,\surd\big(M0^2\,\big(6 + 2\,\mathrm{Cos}[2\,\alpha] - 2\,\mathrm{Cos}[2\,t\,\omega] + \mathrm{Cos}[2\,\alpha - 2\,t\,\omega] + \mathrm{Cos}[2\,\alpha + 2\,t\,\omega]\big) \\
&\quad \mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\big)\big)\Big) \\
&\Big(e^{-i\,\theta}\,r\,\Big(\Big(\surd\Big(\frac{1}{1 + \mathrm{Cos}[2\,\alpha]}\,\big(-2 + 4\,M0 - 2\,\mathrm{Cos}[2\,\alpha] - 2\,M0\,\mathrm{Cos}[2\,t\,\omega] + M0\,\mathrm{Cos}[2\,\alpha - 2\,t\,\omega] + \\
&\quad M0\,\mathrm{Cos}[2\,\alpha + 2\,t\,\omega] - 2\sqrt{2}\,\surd\big(M0^2\,\big(6 + 2\,\mathrm{Cos}[2\,\alpha] - 2\,\mathrm{Cos}[2\,t\,\omega] + \\
&\quad\quad \mathrm{Cos}[2\,\alpha - 2\,t\,\omega] + \mathrm{Cos}[2\,\alpha + 2\,t\,\omega]\big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\big)\big)\Big)\Big) \\
&\quad \big(4\,M0 - 2\,M0\,\mathrm{Cos}[2\,t\,\omega] + M0\,\mathrm{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\mathrm{Cos}[2\,\alpha + 2\,t\,\omega] - \\
&\quad 2\,M0\,\mathrm{Cos}[\alpha - t\,\omega]^2\,\mathrm{Sec}[\alpha]^2 - 2\,M0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Cos}[\alpha - t\,\omega]^2\,\mathrm{Sec}[\alpha]^2 - 2\,M0\,\mathrm{Sec}[\alpha]^2 \\
&\quad \mathrm{Sin}[t\,\omega]^2 - 2\,M0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2 + 2\sqrt{2}\,\surd\big(M0^2\,\big(6 + 2\,\mathrm{Cos}[2\,\alpha] - \\
&\quad\quad 2\,\mathrm{Cos}[2\,t\,\omega] + \mathrm{Cos}[2\,\alpha - 2\,t\,\omega] + \mathrm{Cos}[2\,\alpha + 2\,t\,\omega]\big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\big)\big)\Big)\Big/ \\
&\quad \big(8\,\surd\big(M0^2\,\big(6 + 2\,\mathrm{Cos}[2\,\alpha] - 2\,\mathrm{Cos}[2\,t\,\omega] + \mathrm{Cos}[2\,\alpha - 2\,t\,\omega] + \mathrm{Cos}[2\,\alpha + 2\,t\,\omega]\big) \\
&\quad\quad \mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\big)\big) + \\
&\quad \Big(\surd\Big(\frac{1}{1 + \mathrm{Cos}[2\,\alpha]}\,\big(-2 + 4\,M0 - 2\,\mathrm{Cos}[2\,\alpha] - 2\,M0\,\mathrm{Cos}[2\,t\,\omega] + M0\,\mathrm{Cos}[2\,\alpha - 2\,t\,\omega] + \\
&\quad\quad M0\,\mathrm{Cos}[2\,\alpha + 2\,t\,\omega] + 2\sqrt{2}\,\surd\big(M0^2\,\big(6 + 2\,\mathrm{Cos}[2\,\alpha] - 2\,\mathrm{Cos}[2\,t\,\omega] + \\
&\quad\quad\quad \mathrm{Cos}[2\,\alpha - 2\,t\,\omega] + \mathrm{Cos}[2\,\alpha + 2\,t\,\omega]\big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\big)\big)\Big)\Big) \\
&\quad \big(-4\,M0 + 2\,M0\,\mathrm{Cos}[2\,t\,\omega] - M0\,\mathrm{Cos}[2\,\alpha - 2\,t\,\omega] - M0\,\mathrm{Cos}[2\,\alpha + 2\,t\,\omega] + \\
&\quad 2\,M0\,\mathrm{Cos}[\alpha - t\,\omega]^2\,\mathrm{Sec}[\alpha]^2 + 2\,M0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Cos}[\alpha - t\,\omega]^2\,\mathrm{Sec}[\alpha]^2 + 2\,M0\,\mathrm{Sec}[\alpha]^2 \\
&\quad \mathrm{Sin}[t\,\omega]^2 + 2\,M0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2 + 2\sqrt{2}\,\surd\big(M0^2\,\big(6 + 2\,\mathrm{Cos}[2\,\alpha] - \\
&\quad\quad 2\,\mathrm{Cos}[2\,t\,\omega] + \mathrm{Cos}[2\,\alpha - 2\,t\,\omega] + \mathrm{Cos}[2\,\alpha + 2\,t\,\omega]\big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\big)\big)\Big)\Big/ \\
&\quad \big(8\,\surd\big(M0^2\,\big(6 + 2\,\mathrm{Cos}[2\,\alpha] - 2\,\mathrm{Cos}[2\,t\,\omega] + \mathrm{Cos}[2\,\alpha - 2\,t\,\omega] + \mathrm{Cos}[2\,\alpha + 2\,t\,\omega]\big)
\end{aligned}
$$

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

$$s\Big(-\Big(\Big(\Big(i\,M0\,(1+\text{Cos}[2\,\alpha])\,\text{Sec}[\alpha]\,\text{Sin}[t\,\omega]^2\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\Big(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\sqrt{2}\,\sqrt{(M0^2\,(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega])\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2)}\Big)\Big)\,\text{Tan}[\alpha]\Big)\Big/$$

$$\Big(2\sqrt{(M0^2\,(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega])\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2)}\Big)\Big) + \Big(i\,M0\,(1+\text{Cos}[2\,\alpha])\,\text{Sec}[\alpha]\,\text{Sin}[t\,\omega]^2$$

$$\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\Big(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{(M0^2\,(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega])\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2)}\Big)\Big)\,\text{Tan}[\alpha]\Big)\Big/$$

$$\Big(2\sqrt{(M0^2\,(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega])\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2)}\Big)\Big)\Big)\Big) +$$

$$i\Big(\Big(\Big(\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\Big(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\sqrt{2}\,\sqrt{(M0^2\,(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega])\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2)}\Big)\Big)$$

$$\Big(4\,M0-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\,M0\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2-2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{(M0^2\,(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega])\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2)}\Big)\Big/$$

$$\Big(8\sqrt{(M0^2\,(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega])\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2)}\Big) +$$

$$\Big(\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\Big(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{(M0^2\,(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega])\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2)}\Big)\Big)$$

$$\Big(-4\,M0+2\,M0\,\text{Cos}[2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\,M0\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{(M0^2\,(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega])\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2)}\Big)\Big/$$

$$\left(8 \sqrt{\left(M0^2 \left(6 + 2 \cos[2 \alpha] - 2 \cos[2 t \omega] + \cos[2 \alpha - 2 t \omega] + \cos[2 \alpha + 2 t \omega]\right) \sin[\alpha]^2 \sin[t \omega]^2\right)}\right)$$

$$\left(-\left(\left(\sqrt{\left(\frac{1}{1 + \cos[2 \alpha]} \left(-2 + 4 M0 - 2 \cos[2 \alpha] - 2 M0 \cos[2 t \omega] + M0 \cos[2 \alpha - 2 t \omega] + M0 \cos[2 \alpha + 2 t \omega] - 2 \sqrt{2} \sqrt{\left(M0^2 \left(6 + 2 \cos[2 \alpha] - 2 \cos[2 t \omega] + \cos[2 \alpha - 2 t \omega] + \cos[2 \alpha + 2 t \omega]\right) \sin[\alpha]^2 \sin[t \omega]^2\right)}\right)\right)}\right)\right)\right)$$

$$\left(4 M0 - 2 M0 \cos[2 t \omega] + M0 \cos[2 \alpha - 2 t \omega] + M0 \cos[2 \alpha + 2 t \omega] - 2 M0 \cos[\alpha - t \omega]^2 \sec[\alpha]^2 - 2 M0 \cos[2 \alpha] \cos[\alpha - t \omega]^2 \sec[\alpha]^2 - 2 M0 \sec[\alpha]^2 \sin[t \omega]^2 - 2 M0 \cos[2 \alpha] \sec[\alpha]^2 \sin[t \omega]^2 + 2 \sqrt{2} \sqrt{\left(M0^2 \left(6 + 2 \cos[2 \alpha] - 2 \cos[2 t \omega] + \cos[2 \alpha - 2 t \omega] + \cos[2 \alpha + 2 t \omega]\right) \sin[\alpha]^2 \sin[t \omega]^2\right)}\right)$$

$$\left(2 M0^2 \omega \cos[t \omega] \left(6 + 2 \cos[2 \alpha] - 2 \cos[2 t \omega] + \cos[2 \alpha - 2 t \omega] + \cos[2 \alpha + 2 t \omega]\right) \sin[\alpha]^2 \sin[t \omega] + M0^2 \sin[\alpha]^2 \sin[t \omega]^2 \left(4 \omega \sin[2 t \omega] + 2 \omega \sin[2 \alpha - 2 t \omega] - 2 \omega \sin[2 \alpha + 2 t \omega]\right)\right)\Big/$$

$$\left(16 \left(M0^2 \left(6 + 2 \cos[2 \alpha] - 2 \cos[2 t \omega] + \cos[2 \alpha - 2 t \omega] + \cos[2 \alpha + 2 t \omega]\right) \sin[\alpha]^2 \sin[t \omega]^2\right)^{3/2}\right) -$$

$$\left(\sqrt{\left(\frac{1}{1 + \cos[2 \alpha]} \left(-2 + 4 M0 - 2 \cos[2 \alpha] - 2 M0 \cos[2 t \omega] + M0 \cos[2 \alpha - 2 t \omega] + M0 \cos[2 \alpha + 2 t \omega] + 2 \sqrt{2} \sqrt{\left(M0^2 \left(6 + 2 \cos[2 \alpha] - 2 \cos[2 t \omega] + \cos[2 \alpha - 2 t \omega] + \cos[2 \alpha + 2 t \omega]\right) \sin[\alpha]^2 \sin[t \omega]^2\right)}\right)\right)}\right)$$

$$\left(-4 M0 + 2 M0 \cos[2 t \omega] - M0 \cos[2 \alpha - 2 t \omega] - M0 \cos[2 \alpha + 2 t \omega] + 2 M0 \cos[\alpha - t \omega]^2 \sec[\alpha]^2 + 2 M0 \cos[2 \alpha] \cos[\alpha - t \omega]^2 \sec[\alpha]^2 + 2 M0 \sec[\alpha]^2 \sin[t \omega]^2 + 2 M0 \cos[2 \alpha] \sec[\alpha]^2 \sin[t \omega]^2 + 2 \sqrt{2} \sqrt{\left(M0^2 \left(6 + 2 \cos[2 \alpha] - 2 \cos[2 t \omega] + \cos[2 \alpha - 2 t \omega] + \cos[2 \alpha + 2 t \omega]\right) \sin[\alpha]^2 \sin[t \omega]^2\right)}\right) \left(2 M0^2 \omega \cos[t \omega] \left(6 + 2 \cos[2 \alpha] - 2 \cos[2 t \omega] + \cos[2 \alpha - 2 t \omega] + \cos[2 \alpha + 2 t \omega]\right) \sin[\alpha]^2 \sin[t \omega] + M0^2 \sin[\alpha]^2 \sin[t \omega]^2 \left(4 \omega \sin[2 t \omega] + 2 \omega \sin[2 \alpha - 2 t \omega] - 2 \omega \sin[2 \alpha + 2 t \omega]\right)\right)\Big/$$

$$\left(16 \left(M0^2 \left(6 + 2 \cos[2 \alpha] - 2 \cos[2 t \omega] + \cos[2 \alpha - 2 t \omega] + \cos[2 \alpha + 2 t \omega]\right) \sin[\alpha]^2 \sin[t \omega]^2\right)^{3/2}\right) +$$

$$\left(\left(4 M0 - 2 M0 \cos[2 t \omega] + M0 \cos[2 \alpha - 2 t \omega] + M0 \cos[2 \alpha + 2 t \omega] - 2 M0 \cos[\alpha - t \omega]^2 \sec[\alpha]^2 - 2 M0 \cos[2 \alpha] \cos[\alpha - t \omega]^2 \sec[\alpha]^2 - 2 M0 \sec[\alpha]^2 \sin[t \omega]^2 - 2 M0 \cos[2 \alpha] \sec[\alpha]^2 \sin[t \omega]^2 + 2 \sqrt{2} \sqrt{\left(M0^2 \left(6 + 2 \cos[2 \alpha] - 2 \cos[2 t \omega] + \cos[2 \alpha - 2 t \omega] + \cos[2 \alpha + 2 t \omega]\right) \sin[\alpha]^2 \sin[t \omega]^2\right)}\right)\right)$$

$$\left(4 M0 \omega \sin[2 t \omega] + 2 M0 \omega \sin[2 \alpha - 2 t \omega] - 2 M0 \omega \sin[2 \alpha + 2 t \omega] - \left(\sqrt{2} \left(2 M0^2 \omega \cos[t \omega] \left(6 + 2 \cos[2 \alpha] - 2 \cos[2 t \omega] + \cos[2 \alpha - 2 t \omega] + \cos[2 \alpha + 2 t \omega]\right) \sin[\alpha]^2 \sin[t \omega] + M0^2 \sin[\alpha]^2 \sin[t \omega]^2 \left(4 \omega \sin[2 t \omega] + 2 \omega \sin[2 \alpha - 2 t \omega] - 2 \omega \sin[2 \alpha + 2 t \omega]\right)\right)\right)\Big/$$

$$\left(\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)}\right)\Bigg/$$
$$\left(16\left(1+\cos[2\alpha]\right)\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)}\right.$$
$$\left.\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4M0-2\cos[2\alpha]-2M0\cos[2t\omega]+M0\cos[2\alpha-2t\omega]+M0\cos[2\alpha+2t\omega]-2\sqrt{2}\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)}\right)\right)}\right)+$$
$$\left(\left(-4M0+2M0\cos[2t\omega]-M0\cos[2\alpha-2t\omega]-M0\cos[2\alpha+2t\omega]+2M0\cos[\alpha-t\omega]^2\sec[\alpha]^2+2M0\cos[2\alpha]\cos[\alpha-t\omega]^2\sec[\alpha]^2+2M0\sec[\alpha]^2\sin[t\omega]^2+2M0\cos[2\alpha]\sec[\alpha]^2\sin[t\omega]^2+2\sqrt{2}\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)}\right)\right.$$
$$\left(4M0\omega\sin[2t\omega]+2M0\omega\sin[2\alpha-2t\omega]-2M0\omega\sin[2\alpha+2t\omega]+\left(\sqrt{2}\left(2M0^2\omega\cos[t\omega]\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]+M0^2\sin[\alpha]^2\sin[t\omega]^2\left(4\omega\sin[2t\omega]+2\omega\sin[2\alpha-2t\omega]-2\omega\sin[2\alpha+2t\omega]\right)\right)\right)\Bigg/$$
$$\left(\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)}\right)\Bigg/$$
$$\left(16\left(1+\cos[2\alpha]\right)\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)}\right.$$
$$\left.\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4M0-2\cos[2\alpha]-2M0\cos[2t\omega]+M0\cos[2\alpha-2t\omega]+M0\cos[2\alpha+2t\omega]+2\sqrt{2}\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)}\right)\right)}\right)+$$
$$\left(\sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4M0-2\cos[2\alpha]-2M0\cos[2t\omega]+M0\cos[2\alpha-2t\omega]+M0\cos[2\alpha+2t\omega]-2\sqrt{2}\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)}\right)\right)}\right.$$
$$\left(-4M0\omega\cos[t\omega]\sec[\alpha]^2\sin[t\omega]-4M0\omega\cos[2\alpha]\cos[t\omega]\sec[\alpha]^2\sin[t\omega]+4M0\omega\sin[2t\omega]+2M0\omega\sin[2\alpha-2t\omega]-4M0\omega\cos[\alpha-t\omega]\sec[\alpha]^2\sin[\alpha-t\omega]-4M0\omega\cos[2\alpha]\cos[\alpha-t\omega]\sec[\alpha]^2\sin[\alpha-t\omega]-2M0\omega\sin[2\alpha+2t\omega]+\left(\sqrt{2}\left(2M0^2\omega\cos[t\omega]\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]+M0^2\sin[\alpha]^2\sin[t\omega]^2\left(4\omega\sin[2t\omega]+2\omega\sin[2\alpha-2t\omega]-2\omega\sin[2\alpha+2t\omega]\right)\right)\right)\Bigg/$$
$$\left(\sqrt{\left(M0^2\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\right.\right.\right.$$

$$\cos[2\alpha + 2t\omega])\sin[\alpha]^2\sin[t\omega]^2)))\Big)\Big/$$
$$\Big(8\sqrt{\left(M0^2\left(6 + 2\cos[2\alpha] - 2\cos[2t\omega] + \cos[2\alpha - 2t\omega] + \cos[2\alpha + 2t\omega]\right)\right.}$$
$$\left.\sin[\alpha]^2\sin[t\omega]^2\right)\Big) +$$
$$\Bigg(\sqrt{\Bigg(\frac{1}{1+\cos[2\alpha]}\Big(-2 + 4M0 - 2\cos[2\alpha] - 2M0\cos[2t\omega] + M0\cos[2\alpha - 2t\omega] +$$
$$M0\cos[2\alpha + 2t\omega] + 2\sqrt{2}\sqrt{\left(M0^2\left(6 + 2\cos[2\alpha] - 2\cos[2t\omega] +\right.\right.}$$
$$\left.\left.\cos[2\alpha - 2t\omega] + \cos[2\alpha + 2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)\Big)\Bigg)$$
$$\Big(4M0\omega\cos[t\omega]\sec[\alpha]^2\sin[t\omega] + 4M0\omega\cos[2\alpha]\cos[t\omega]\sec[\alpha]^2$$
$$\sin[t\omega] - 4M0\omega\sin[2t\omega] - 2M0\omega\sin[2\alpha - 2t\omega] +$$
$$4M0\omega\cos[\alpha - t\omega]\sec[\alpha]^2\sin[\alpha - t\omega] + 4M0\omega\cos[2\alpha]$$
$$\cos[\alpha - t\omega]\sec[\alpha]^2\sin[\alpha - t\omega] + 2M0\omega\sin[2\alpha + 2t\omega] +$$
$$\Big(\sqrt{2}\Big(2M0^2\omega\cos[t\omega]\Big(6 + 2\cos[2\alpha] - 2\cos[2t\omega] + \cos[2\alpha - 2t\omega] +$$
$$\cos[2\alpha + 2t\omega]\Big)\sin[\alpha]^2\sin[t\omega] + M0^2\sin[\alpha]^2\sin[t\omega]^2$$
$$\Big(4\omega\sin[2t\omega] + 2\omega\sin[2\alpha - 2t\omega] - 2\omega\sin[2\alpha + 2t\omega]\Big)\Big)\Big)\Big/$$
$$\Big(\sqrt{\left(M0^2\left(6 + 2\cos[2\alpha] - 2\cos[2t\omega] + \cos[2\alpha - 2t\omega] +\right.\right.}$$
$$\left.\left.\cos[2\alpha + 2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)\Big)\Big)\Big)\Big/$$
$$\Big(8\sqrt{\left(M0^2\left(6 + 2\cos[2\alpha] - 2\cos[2t\omega] + \cos[2\alpha - 2t\omega] + \cos[2\alpha + 2t\omega]\right)\right.}$$
$$\left.\sin[\alpha]^2\sin[t\omega]^2\right)\Big)\Bigg) +$$
$$\Bigg(\Big(i\cos[\alpha]\cot[\alpha]\csc[t\omega]^2\Big(-4M0 + 2M0\cos[2t\omega] - M0\cos[2\alpha - 2t\omega] -$$
$$M0\cos[2\alpha + 2t\omega] + 2M0\cos[\alpha - t\omega]^2\sec[\alpha]^2 +$$
$$2M0\cos[2\alpha]\cos[\alpha - t\omega]^2\sec[\alpha]^2 + 2M0\sec[\alpha]^2\sin[t\omega]^2 +$$
$$2M0\cos[2\alpha]\sec[\alpha]^2\sin[t\omega]^2 + 2\sqrt{2}\sqrt{\left(-M0^2\left(-6 - 2\cos[2\alpha] +\right.\right.}$$
$$\left.\left.2\cos[2t\omega] - \cos[2\alpha - 2t\omega] - \cos[2\alpha + 2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)\Big)$$
$$\sqrt{\Bigg(\frac{1}{1+\cos[2\alpha]}\Big(-2 + 4M0 - 2\cos[2\alpha] - 2M0\cos[2t\omega] + M0\cos[2\alpha - 2t\omega] +$$
$$M0\cos[2\alpha + 2t\omega] - 2\sqrt{2}\sqrt{\left(M0^2\left(6 + 2\cos[2\alpha] - 2\cos[2t\omega] +\right.\right.}$$
$$\left.\left.\cos[2\alpha - 2t\omega] + \cos[2\alpha + 2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)\Big)\Bigg)$$
$$\Big(4M0 - 2M0\cos[2t\omega] + M0\cos[2\alpha - 2t\omega] + M0\cos[2\alpha + 2t\omega] -$$
$$2M0\cos[\alpha - t\omega]^2\sec[\alpha]^2 - 2M0\cos[2\alpha]\cos[\alpha - t\omega]^2\sec[\alpha]^2 -$$
$$2M0\sec[\alpha]^2\sin[t\omega]^2 - 2M0\cos[2\alpha]\sec[\alpha]^2\sin[t\omega]^2 +$$
$$2\sqrt{2}\sqrt{\left(M0^2\left(6 + 2\cos[2\alpha] - 2\cos[2t\omega] + \cos[2\alpha - 2t\omega] +\right.\right.}$$
$$\left.\left.\cos[2\alpha + 2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)\Big)\Big)\Big/$$
$$\Big(32M0\left(1 + \cos[2\alpha]\right)\sqrt{\left(M0^2\left(6 + 2\cos[2\alpha] - 2\cos[2t\omega] + \cos[2\alpha - 2t\omega] +\right.\right.}$$
$$\left.\left.\cos[2\alpha + 2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)\Big) -$$
$$\Bigg(i\cos[\alpha]\cot[\alpha]\csc[t\omega]^2\Big(4M0 - 2M0\cos[2t\omega] + M0\cos[2\alpha - 2t\omega] +$$
$$M0\cos[2\alpha + 2t\omega] - 2M0\cos[\alpha - t\omega]^2\sec[\alpha]^2 -$$

$$2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2-$$
$$2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\left(-M0^2\,\left(-6-2\,\text{Cos}[2\,\alpha]+\right.\right.}$$
$$\left.\left.2\,\text{Cos}[2\,t\,\omega]-\text{Cos}[2\,\alpha-2\,t\,\omega]-\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}$$
$$\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\,\left(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.$$
$$M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\right.\right.}$$
$$\left.\left.\left.\left.\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\right)$$
$$\left(-4\,M0+2\,M0\,\text{Cos}[2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+\right.$$
$$2\,M0\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+$$
$$2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+$$
$$2\sqrt{2}\,\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.}$$
$$\left.\left.\left.\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\Big/$$
$$\left(32\,M0\,\left(1+\text{Cos}[2\,\alpha]\right)\,\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.\right.$$
$$\left.\left.\left.\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\Bigg)$$
$$\left(-\left(\left(\left(i\,M0\,\omega\,\left(1+\text{Cos}[2\,\alpha]\right)\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]\,\text{Sin}[t\,\omega]\,\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\right.\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\left.\left(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\left.M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\sqrt{2}\,\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\right.\right.\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\left.\left.\left.\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\right)\right)\right)$$
$$\left.\left.\text{Tan}[\alpha]\right)\Big/\left(\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.\right.}$$
$$\left.\left.\left.\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\Bigg)+$$
$$\left(i\,M0\,\omega\,\left(1+\text{Cos}[2\,\alpha]\right)\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]\,\text{Sin}[t\,\omega]\,\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\right.}\right.$$
$$\left.\left.\left(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.$$
$$\left.\left.M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\left.\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\right)\,\text{Tan}[\alpha]\Bigg)\Big/$$
$$\left(\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\right.}\right.$$
$$\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)+\Bigg(i\,M0\,\left(1+\text{Cos}[2\,\alpha]\right)\,\text{Sec}[\alpha]\,\text{Sin}[t\,\omega]^2$$
$$\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\,\left(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.}$$
$$M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\sqrt{2}\,\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\right.\right.}$$
$$\left.\left.\left.\left.\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\right)$$
$$\left(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.$$
$$\left.\left.\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]+M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right.$$

$$\left(4\,\omega\,\text{Sin}[2\,t\,\omega]+2\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-2\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]\right)\text{Tan}[\alpha]\Big)\Big/$$
$$\Big(4\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)^{3/2}\Big)-\Big(i\,M0\left(1+\text{Cos}[2\,\alpha]\right)\text{Sec}[\alpha]\,\text{Sin}[t\,\omega]^2$$
$$\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\Big(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+$$
$$M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\right.\right.$$
$$\left.\left.\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Big)\Big)$$
$$\left(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.$$
$$\left.\left.\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]+M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right.$$
$$\left.\left(4\,\omega\,\text{Sin}[2\,t\,\omega]+2\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-2\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]\right)\right)\text{Tan}[\alpha]\Big)\Big/$$
$$\Big(4\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)^{3/2}\Big)-$$
$$\Big(i\,M0\,\text{Sec}[\alpha]\,\text{Sin}[t\,\omega]^2\left(4\,M0\,\omega\,\text{Sin}[2\,t\,\omega]+2\,M0\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-\right.$$
$$2\,M0\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]-\Big(\sqrt{2}\,\left(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\right.\right.$$
$$\left.\left.\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]+M0^2\,\text{Sin}[\alpha]^2\right.$$
$$\left.\left.\text{Sin}[t\,\omega]^2\left(4\,\omega\,\text{Sin}[2\,t\,\omega]+2\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-2\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]\right)\right)\Big)\Big/$$
$$\Big(\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[\right.\right.}$$
$$\left.\left.2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Big)\Big)\text{Tan}[\alpha]\Big)\Big/$$
$$\Big(4\,\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\right.}$$
$$\left.\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\Big(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+$$
$$M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[\right.\right.}$$
$$\left.\left.2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Big)\Big)\Big)+$$
$$\Big(i\,M0\,\text{Sec}[\alpha]\,\text{Sin}[t\,\omega]^2\left(4\,M0\,\omega\,\text{Sin}[2\,t\,\omega]+2\,M0\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-2\,M0\,\omega\right.$$
$$\text{Sin}[2\,\alpha+2\,t\,\omega]+\Big(\sqrt{2}\,\left(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\right.\right.$$
$$\left.\left.\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]+M0^2\,\text{Sin}[\alpha]^2\right.$$
$$\left.\left.\text{Sin}[t\,\omega]^2\left(4\,\omega\,\text{Sin}[2\,t\,\omega]+2\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-2\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]\right)\right)\Big)\Big/$$
$$\Big(\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[\right.\right.}$$
$$\left.\left.2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Big)\Big)\text{Tan}[\alpha]\Big)\Big/$$
$$\Big(4\,\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\right.}$$
$$\left.\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}$$
$$\Big(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+$$

```
M0 Cos[2 α + 2 t ω] + 2 √2 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
                Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2))))))

Σ[α_, ω_, t_, M0_, s_, r_, Θ_] := {{L11[α, ω, t, M0, s, r, Θ], L12[α, ω, t, M0, s, r, Θ]},
  {L21[α, ω, t, M0, s, r, Θ], L22[α, ω, t, M0, s, r, Θ]}}
υ11[α_, ω_, t_, M0_, s_, r_, Θ_] := i (-1/M0 2 i Sec[α] Sin[t ω]^2
    (-s ((((-4 M0 + 2 M0 Cos[2 t ω] - M0 Cos[2 α - 2 t ω] - M0 Cos[2 α + 2 t ω] + 2 M0 Cos[α - t ω]^2
          Sec[α]^2 + 2 M0 Cos[2 α] Cos[α - t ω]^2 Sec[α]^2 + 2 M0 Sec[α]^2 Sin[t ω]^2 + 2
          M0 Cos[2 α] Sec[α]^2 Sin[t ω]^2 + 2 √2 √(-M0^2 (-6 - 2 Cos[2 α] +
              2 Cos[2 t ω] - Cos[2 α - 2 t ω] - Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2))
        √(1/(1 + Cos[2 α]) (-2 + 4 M0 - 2 Cos[2 α] - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] +
            M0 Cos[2 α + 2 t ω] - 2 √2 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
                Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2))))/
      (8 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω])
          Sin[α]^2 Sin[t ω]^2)) +
      (((4 M0 - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] + M0 Cos[2 α + 2 t ω] - 2 M0
          Cos[α - t ω]^2 Sec[α]^2 - 2 M0 Cos[2 α] Cos[α - t ω]^2 Sec[α]^2 - 2 M0 Sec[α]^2
          Sin[t ω]^2 - 2 M0 Cos[2 α] Sec[α]^2 Sin[t ω]^2 + 2 √2 √(-M0^2 (-6 - 2 Cos[2 α] +
              2 Cos[2 t ω] - Cos[2 α - 2 t ω] - Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2))
        √(1/(1 + Cos[2 α]) (-2 + 4 M0 - 2 Cos[2 α] - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] +
            M0 Cos[2 α + 2 t ω] + 2 √2 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
                Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2))))/
      (8 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω])
          Sin[α]^2 Sin[t ω]^2)) +
    s ((√(1/(1 + Cos[2 α]) (-2 + 4 M0 - 2 Cos[2 α] - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] +
            M0 Cos[2 α + 2 t ω] - 2 √2 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
                Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2))
        (4 M0 - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] + M0 Cos[2 α + 2 t ω] - 2 M0
          Cos[α - t ω]^2 Sec[α]^2 - 2 M0 Cos[2 α] Cos[α - t ω]^2 Sec[α]^2 - 2 M0 Sec[α]^2
          Sin[t ω]^2 - 2 M0 Cos[2 α] Sec[α]^2 Sin[t ω]^2 + 2 √2 √(M0^2 (6 + 2 Cos[2 α] -
              2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2))/
      (8 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω])
```

$$\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\Big)\Big) +$$
$$\Bigg(\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\Big(-2+4\,\text{M0}-2\,\text{Cos}[2\,\alpha]-2\,\text{M0}\,\text{Cos}[2\,t\,\omega]+\text{M0}\,\text{Cos}[2\,\alpha-2\,t\,\omega]+$$
$$\text{M0}\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\Big(\text{M0}^2\,\Big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+$$
$$\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\Big)\Big)\Big)$$
$$\Big(-4\,\text{M0}+2\,\text{M0}\,\text{Cos}[2\,t\,\omega]-\text{M0}\,\text{Cos}[2\,\alpha-2\,t\,\omega]-\text{M0}\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\,\text{M0}$$
$$\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{M0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{M0}\,\text{Sec}[\alpha]^2$$
$$\text{Sin}[t\,\omega]^2+2\,\text{M0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\Big(\text{M0}^2\,\Big(6+2\,\text{Cos}[2\,\alpha]-$$
$$2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\Big)\Big)\Bigg)\Big/$$
$$\Big(8\sqrt{\Big(\text{M0}^2\,\Big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\Big)$$
$$\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\Big)\Big)\Bigg) -$$
$$e^{-i\,\theta}\,r\Bigg(\Bigg(i\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[t\,\omega]^2\Big(-4\,\text{M0}+2\,\text{M0}\,\text{Cos}[2\,t\,\omega]-\text{M0}\,\text{Cos}[2\,\alpha-2\,t\,\omega]-$$
$$\text{M0}\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\,\text{M0}\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{M0}\,\text{Cos}[2\,\alpha]$$
$$\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{M0}\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\,\text{M0}\,\text{Cos}[2\,\alpha]$$
$$\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\Big(-\text{M0}^2\,\Big(-6-2\,\text{Cos}[2\,\alpha]+2\,\text{Cos}[2\,t\,\omega]-$$
$$\text{Cos}[2\,\alpha-2\,t\,\omega]-\text{Cos}[2\,\alpha+2\,t\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\Big)\Big)$$
$$\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\Big(-2+4\,\text{M0}-2\,\text{Cos}[2\,\alpha]-2\,\text{M0}\,\text{Cos}[2\,t\,\omega]+\text{M0}\,\text{Cos}[2\,\alpha-2\,t\,\omega]+$$
$$\text{M0}\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\sqrt{2}\,\sqrt{\Big(\text{M0}^2\,\Big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+$$
$$\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\Big)\Big)\Big)$$
$$\Big(4\,\text{M0}-2\,\text{M0}\,\text{Cos}[2\,t\,\omega]+\text{M0}\,\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{M0}\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\,\text{M0}$$
$$\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{M0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{M0}\,\text{Sec}[\alpha]^2$$
$$\text{Sin}[t\,\omega]^2-2\,\text{M0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\Big(\text{M0}^2\,\Big(6+2\,\text{Cos}[2\,\alpha]-$$
$$2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\Big)\Big)\Bigg)\Big/$$
$$\Big(32\,\text{M0}\,\Big(1+\text{Cos}[2\,\alpha]\Big)\sqrt{\Big(\text{M0}^2\,\Big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+$$
$$\text{Cos}[2\,\alpha+2\,t\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\Big)\Big) -$$
$$\Bigg(i\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[t\,\omega]^2\Big(4\,\text{M0}-2\,\text{M0}\,\text{Cos}[2\,t\,\omega]+\text{M0}\,\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{M0}$$
$$\text{Cos}[2\,\alpha+2\,t\,\omega]-2\,\text{M0}\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{M0}\,\text{Cos}[2\,\alpha]$$
$$\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{M0}\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2-2\,\text{M0}\,\text{Cos}[2\,\alpha]$$
$$\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\Big(-\text{M0}^2\,\Big(-6-2\,\text{Cos}[2\,\alpha]+2\,\text{Cos}[2\,t\,\omega]-$$
$$\text{Cos}[2\,\alpha-2\,t\,\omega]-\text{Cos}[2\,\alpha+2\,t\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\Big)\Big)$$
$$\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\Big(-2+4\,\text{M0}-2\,\text{Cos}[2\,\alpha]-2\,\text{M0}\,\text{Cos}[2\,t\,\omega]+\text{M0}\,\text{Cos}[2\,\alpha-2\,t\,\omega]+$$
$$\text{M0}\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\Big(\text{M0}^2\,\Big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+$$
$$\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\Big)\Big)\Big)$$

$$\left(-4\,M0+2\,M0\,\text{Cos}[2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\,M0\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\Big/\left(32\,M0\left(1+\text{Cos}[2\,\alpha]\right)\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)+$$

$$e^{i\,\theta}\,r\left(\left(i\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[t\,\omega]^2\left(-4\,M0+2\,M0\,\text{Cos}[2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\,M0\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\left(-M0^2\left(-6-2\,\text{Cos}[2\,\alpha]+2\,\text{Cos}[2\,t\,\omega]-\text{Cos}[2\,\alpha-2\,t\,\omega]-\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\right)}\left(4\,M0-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\,M0\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2-2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\Big/\left(32\,M0\left(1+\text{Cos}[2\,\alpha]\right)\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)-\left(i\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[t\,\omega]^2\left(4\,M0-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\,M0\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2-2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\left(-M0^2\left(-6-2\,\text{Cos}[2\,\alpha]+2\,\text{Cos}[2\,t\,\omega]-\text{Cos}[2\,\alpha-2\,t\,\omega]-\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\right)}\left(-4\,M0+2\,M0\,\text{Cos}[2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\,M0\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\Big/\left(32\,M0\left(1+\text{Cos}[2\,\alpha]\right)\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.$$

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                Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2)) ) -

i (-((( i ω Cos[α] Cot[α] Cot[t ω] Csc[t ω]^2 (-4 M0 + 2 M0 Cos[2 t ω] -
          M0 Cos[2 α - 2 t ω] - M0 Cos[2 α + 2 t ω] + 2 M0 Cos[α - t ω]^2 Sec[α]^2 +
          2 M0 Cos[2 α] Cos[α - t ω]^2 Sec[α]^2 + 2 M0 Sec[α]^2 Sin[t ω]^2 +
          2 M0 Cos[2 α] Sec[α]^2 Sin[t ω]^2 + 2 √2 √(-M0^2 (-6 - 2 Cos[2 α] +
              2 Cos[2 t ω] - Cos[2 α - 2 t ω] - Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2)) /
        √((1/(1 + Cos[2 α])) (-2 + 4 M0 - 2 Cos[2 α] - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] +
            M0 Cos[2 α + 2 t ω] - 2 √2 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
                Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2)))) *
       (4 M0 - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] + M0 Cos[2 α + 2 t ω] -
         2 M0 Cos[α - t ω]^2 Sec[α]^2 - 2 M0 Cos[2 α] Cos[α - t ω]^2 Sec[α]^2 - 2 M0 Sec[α]^2
          Sin[t ω]^2 - 2 M0 Cos[2 α] Sec[α]^2 Sin[t ω]^2 + 2 √2 √(M0^2 (6 + 2 Cos[2 α] -
              2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2)))) /
      (16 M0 (1 + Cos[2 α]) √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[
            2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2)) ) +

   (i ω Cos[α] Cot[α] Cot[t ω] Csc[t ω]^2 (4 M0 - 2 M0 Cos[2 t ω] + M0 Cos[
          2 α - 2 t ω] + M0 Cos[2 α + 2 t ω] - 2 M0 Cos[α - t ω]^2 Sec[α]^2 - 2 M0
        Cos[2 α] Cos[α - t ω]^2 Sec[α]^2 - 2 M0 Sec[α]^2 Sin[t ω]^2 - 2 M0 Cos[2 α]
        Sec[α]^2 Sin[t ω]^2 + 2 √2 √(-M0^2 (-6 - 2 Cos[2 α] + 2 Cos[2 t ω] -
            Cos[2 α - 2 t ω] - Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2)) /
      √((1/(1 + Cos[2 α])) (-2 + 4 M0 - 2 Cos[2 α] - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] +
          M0 Cos[2 α + 2 t ω] + 2 √2 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
              Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2))) *
     (-4 M0 + 2 M0 Cos[2 t ω] - M0 Cos[2 α - 2 t ω] - M0 Cos[2 α + 2 t ω] + 2 M0
        Cos[α - t ω]^2 Sec[α]^2 + 2 M0 Cos[2 α] Cos[α - t ω]^2 Sec[α]^2 + 2 M0 Sec[α]^2
        Sin[t ω]^2 + 2 M0 Cos[2 α] Sec[α]^2 Sin[t ω]^2 + 2 √2 √(M0^2 (6 + 2 Cos[2 α] -
            2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2)) /
      (16 M0 (1 + Cos[2 α]) √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] +
          Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2)) -

   (i Cos[α] Cot[α] Csc[t ω]^2 (-4 M0 + 2 M0 Cos[2 t ω] - M0 Cos[2 α - 2 t ω] -
        M0 Cos[2 α + 2 t ω] + 2 M0 Cos[α - t ω]^2 Sec[α]^2 + 2 M0 Cos[2 α]
        Cos[α - t ω]^2 Sec[α]^2 + 2 M0 Sec[α]^2 Sin[t ω]^2 + 2 M0 Cos[2 α]
        Sec[α]^2 Sin[t ω]^2 + 2 √2 √(-M0^2 (-6 - 2 Cos[2 α] + 2 Cos[2 t ω] -
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        Cos[2 α - 2 t ω] - Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2))
  Sqrt[(1/(1 + Cos[2 α])) (-2 + 4 M0 - 2 Cos[2 α] - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] +
      M0 Cos[2 α + 2 t ω] - 2 Sqrt[2] Sqrt[(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
          Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2))]]
  (4 M0 - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] + M0 Cos[2 α + 2 t ω] - 2 M0
    Cos[α - t ω]^2 Sec[α]^2 - 2 M0 Cos[2 α] Cos[α - t ω]^2 Sec[α]^2 - 2 M0 Sec[α]^2
    Sin[t ω]^2 - 2 M0 Cos[2 α] Sec[α]^2 Sin[t ω]^2 + 2 Sqrt[2] Sqrt[(M0^2 (6 + 2 Cos[2 α] -
        2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2))
  (2 M0^2 ω Cos[t ω] (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] +
      Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω] + M0^2 Sin[α]^2 Sin[t ω]^2
    (4 ω Sin[2 t ω] + 2 ω Sin[2 α - 2 t ω] - 2 ω Sin[2 α + 2 t ω])))/
 (64 M0 (1 + Cos[2 α]) (M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] +
      Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2)^(3/2)) +
 (i Cos[α] Cot[α] Csc[t ω]^2 (4 M0 - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] + M0
      Cos[2 α + 2 t ω] - 2 M0 Cos[α - t ω]^2 Sec[α]^2 - 2 M0 Cos[2 α]
    Cos[α - t ω]^2 Sec[α]^2 - 2 M0 Sec[α]^2 Sin[t ω]^2 - 2 M0 Cos[2 α]
    Sec[α]^2 Sin[t ω]^2 + 2 Sqrt[2] Sqrt[(-M0^2 (-6 - 2 Cos[2 α] + 2 Cos[2 t ω] -
        Cos[2 α - 2 t ω] - Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2))
  Sqrt[(1/(1 + Cos[2 α])) (-2 + 4 M0 - 2 Cos[2 α] - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] +
      M0 Cos[2 α + 2 t ω] + 2 Sqrt[2] Sqrt[(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
          Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2))]]
  (-4 M0 + 2 M0 Cos[2 t ω] - M0 Cos[2 α - 2 t ω] - M0 Cos[2 α + 2 t ω] + 2 M0
    Cos[α - t ω]^2 Sec[α]^2 + 2 M0 Cos[2 α] Cos[α - t ω]^2 Sec[α]^2 + 2 M0 Sec[α]^2
    Sin[t ω]^2 + 2 M0 Cos[2 α] Sec[α]^2 Sin[t ω]^2 + 2 Sqrt[2] Sqrt[(M0^2 (6 + 2 Cos[2 α] -
        2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2))
  (2 M0^2 ω Cos[t ω] (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] +
      Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω] + M0^2 Sin[α]^2 Sin[t ω]^2
    (4 ω Sin[2 t ω] + 2 ω Sin[2 α - 2 t ω] - 2 ω Sin[2 α + 2 t ω])))/
 (64 M0 (1 + Cos[2 α]) (M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] +
      Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2)^(3/2)) +
 (i Cos[α] Cot[α] Csc[t ω]^2 (-4 M0 + 2 M0 Cos[2 t ω] - M0 Cos[2 α - 2 t ω] -
      M0 Cos[2 α + 2 t ω] + 2 M0 Cos[α - t ω]^2 Sec[α]^2 + 2 M0 Cos[2 α]
    Cos[α - t ω]^2 Sec[α]^2 + 2 M0 Sec[α]^2 Sin[t ω]^2 + 2 M0 Cos[2 α]
    Sec[α]^2 Sin[t ω]^2 + 2 Sqrt[2] Sqrt[(-M0^2 (-6 - 2 Cos[2 α] + 2 Cos[2 t ω] -
        Cos[2 α - 2 t ω] - Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2))
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$$\Big(4\,M0 - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\sqrt{2}\,\sqrt{\big(M0^2\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\Big)$$

$$\Big(4\,M0\,\omega\,\text{Sin}[2\,t\,\omega] + 2\,M0\,\omega\,\text{Sin}[2\,\alpha - 2\,t\,\omega] - 2\,M0\,\omega\,\text{Sin}[2\,\alpha + 2\,t\,\omega] - \Big(\sqrt{2}\,\big(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega] + M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\,\big(4\,\omega\,\text{Sin}[2\,t\,\omega] + 2\,\omega\,\text{Sin}[2\,\alpha - 2\,t\,\omega] - 2\,\omega\,\text{Sin}[2\,\alpha + 2\,t\,\omega]\big)\big)\Big)\Big/\Big(\sqrt{\big(M0^2\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\big)\Big)\Big/$$

$$\Big(64\,M0\,\big(1 + \text{Cos}[2\,\alpha]\big)^2\,\sqrt{\big(M0^2\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\,\sqrt{\Big(\frac{1}{1 + \text{Cos}[2\,\alpha]}\,\big(-2 + 4\,M0 - 2\,\text{Cos}[2\,\alpha] - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\sqrt{2}\,\sqrt{\big(M0^2\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\big)\Big)}\Big) -$$

$$\Big(i\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[t\,\omega]^2\,\Big(4\,M0 - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\sqrt{2}\,\sqrt{\big(-M0^2\,\big(-6 - 2\,\text{Cos}[2\,\alpha] + 2\,\text{Cos}[2\,t\,\omega] - \text{Cos}[2\,\alpha - 2\,t\,\omega] - \text{Cos}[2\,\alpha + 2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\Big)$$

$$\Big(-4\,M0 + 2\,M0\,\text{Cos}[2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] + 2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\sqrt{2}\,\sqrt{\big(M0^2\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\Big)$$

$$\Big(4\,M0\,\omega\,\text{Sin}[2\,t\,\omega] + 2\,M0\,\omega\,\text{Sin}[2\,\alpha - 2\,t\,\omega] - 2\,M0\,\omega\,\text{Sin}[2\,\alpha + 2\,t\,\omega] + \Big(\sqrt{2}\,\big(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega] + M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\,\big(4\,\omega\,\text{Sin}[2\,t\,\omega] + 2\,\omega\,\text{Sin}[2\,\alpha - 2\,t\,\omega] - 2\,\omega\,\text{Sin}[2\,\alpha + 2\,t\,\omega]\big)\big)\Big)\Big/\Big(\sqrt{\big(M0^2\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\big)\Big)\Big/$$

$$\Big(64\,M0\,\big(1 + \text{Cos}[2\,\alpha]\big)^2\,\sqrt{\big(M0^2\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\,\sqrt{\Big(\frac{1}{1 + \text{Cos}[2\,\alpha]}\,\big(-2 + 4\,M0 - 2\,\text{Cos}[2\,\alpha] - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] + 2\sqrt{2}\,\sqrt{\big(M0^2\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] +$$

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Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2)))) +

(i Cos[α] Cot[α] Csc[t ω]^2 (-4 M0 + 2 M0 Cos[2 t ω] - M0 Cos[2 α - 2 t ω] -
    M0 Cos[2 α + 2 t ω] + 2 M0 Cos[α - t ω]^2 Sec[α]^2 + 2 M0 Cos[2 α]
     Cos[α - t ω]^2 Sec[α]^2 + 2 M0 Sec[α]^2 Sin[t ω]^2 + 2 M0 Cos[2 α]
     Sec[α]^2 Sin[t ω]^2 + 2 Sqrt[2] Sqrt[-M0^2 (-6 - 2 Cos[2 α] + 2 Cos[2 t ω] -
          Cos[2 α - 2 t ω] - Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2])
   Sqrt[(1/(1 + Cos[2 α])) (-2 + 4 M0 - 2 Cos[2 α] - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] +
      M0 Cos[2 α + 2 t ω] - 2 Sqrt[2] Sqrt[M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
          Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2])]
   (-4 M0 ω Cos[t ω] Sec[α]^2 Sin[t ω] - 4 M0 ω Cos[2 α] Cos[t ω] Sec[α]^2
     Sin[t ω] + 4 M0 ω Sin[2 t ω] + 2 M0 ω Sin[2 α - 2 t ω] - 4 M0 ω Cos[α - t ω]
     Sec[α]^2 Sin[α - t ω] - 4 M0 ω Cos[2 α] Cos[α - t ω] Sec[α]^2 Sin[α - t ω] - 2
     M0 ω Sin[2 α + 2 t ω] + (Sqrt[2] (2 M0^2 ω Cos[t ω] (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
          Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω] + M0^2 Sin[α]^2
        Sin[t ω]^2 (4 ω Sin[2 t ω] + 2 ω Sin[2 α - 2 t ω] - 2 ω Sin[2 α + 2 t ω])))/
    (Sqrt[M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[
          2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2]))/
  (32 M0 (1 + Cos[2 α]) Sqrt[M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] +
       Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2] -
   (i Cos[α] Cot[α] Csc[t ω]^2 (4 M0 - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] + M0
       Cos[2 α + 2 t ω] - 2 M0 Cos[α - t ω]^2 Sec[α]^2 - 2 M0 Cos[2 α]
       Cos[α - t ω]^2 Sec[α]^2 - 2 M0 Sec[α]^2 Sin[t ω]^2 - 2 M0 Cos[2 α]
       Sec[α]^2 Sin[t ω]^2 + 2 Sqrt[2] Sqrt[-M0^2 (-6 - 2 Cos[2 α] + 2 Cos[2 t ω] -
            Cos[2 α - 2 t ω] - Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2])
     Sqrt[(1/(1 + Cos[2 α])) (-2 + 4 M0 - 2 Cos[2 α] - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] +
        M0 Cos[2 α + 2 t ω] + 2 Sqrt[2] Sqrt[M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
            Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2])]
     (4 M0 ω Cos[t ω] Sec[α]^2 Sin[t ω] + 4 M0 ω Cos[2 α] Cos[t ω] Sec[α]^2
       Sin[t ω] - 4 M0 ω Sin[2 t ω] - 2 M0 ω Sin[2 α - 2 t ω] + 4 M0 ω Cos[α - t ω]
       Sec[α]^2 Sin[α - t ω] + 4 M0 ω Cos[2 α] Cos[α - t ω] Sec[α]^2 Sin[α - t ω] + 2
       M0 ω Sin[2 α + 2 t ω] + (Sqrt[2] (2 M0^2 ω Cos[t ω] (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
            Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω] + M0^2 Sin[α]^2
          Sin[t ω]^2 (4 ω Sin[2 t ω] + 2 ω Sin[2 α - 2 t ω] - 2 ω Sin[2 α + 2 t ω])))/
      (Sqrt[M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[
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$$2\alpha + 2t\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\Big)\Big)\Big)\Big/$$

$$\Big(32\,M0\,\big(1+\text{Cos}[2\alpha]\big)\,\sqrt{\Big(M0^2\,\big(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2t\omega]+\text{Cos}[2\alpha-2t\omega]+\text{Cos}[2\alpha+2t\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\Big)}-$$

$$\Big(i\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[t\omega]^2\sqrt{\Big(\frac{1}{1+\text{Cos}[2\alpha]}\,\big(-2+4\,M0-2\,\text{Cos}[2\alpha]-2\,M0\,\text{Cos}[2t\omega]+M0\,\text{Cos}[2\alpha-2t\omega]+M0\,\text{Cos}[2\alpha+2t\omega]+2\sqrt{2}\,\sqrt{\Big(M0^2\,\big(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2t\omega]+\text{Cos}[2\alpha-2t\omega]+\text{Cos}[2\alpha+2t\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\Big)}\Big)\Big)}$$

$$\Big(-4\,M0+2\,M0\,\text{Cos}[2t\omega]-M0\,\text{Cos}[2\alpha-2t\omega]-M0\,\text{Cos}[2\alpha+2t\omega]+2\,M0\,\text{Cos}[\alpha-t\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-t\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\omega]^2+2\,M0\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\omega]^2+2\sqrt{2}\,\sqrt{\Big(M0^2\,\big(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2t\omega]+\text{Cos}[2\alpha-2t\omega]+\text{Cos}[2\alpha+2t\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\Big)}\Big)$$

$$\Big(-4\,M0\,\omega\,\text{Cos}[t\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\omega]-4\,M0\,\omega\,\text{Cos}[2\alpha]\,\text{Cos}[t\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\omega]+4\,M0\,\omega\,\text{Sin}[2t\omega]+2\,M0\,\omega\,\text{Sin}[2\alpha-2t\omega]-4\,M0\,\omega\,\text{Cos}[\alpha-t\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[\alpha-t\omega]-4\,M0\,\omega\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-t\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[\alpha-t\omega]-2\,M0\,\omega\,\text{Sin}[2\alpha+2t\omega]+\Big(\sqrt{2}\,\Big(-2\,M0^2\,\omega\,\text{Cos}[t\omega]\,\big(-6-2\,\text{Cos}[2\alpha]+2\,\text{Cos}[2t\omega]-\text{Cos}[2\alpha-2t\omega]-\text{Cos}[2\alpha+2t\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]-M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\,\big(-4\,\omega\,\text{Sin}[2t\omega]-2\,\omega\,\text{Sin}[2\alpha-2t\omega]+2\,\omega\,\text{Sin}[2\alpha+2t\omega]\big)\Big)\Big)\Big/\Big(\sqrt{\Big(-M0^2\,\big(-6-2\,\text{Cos}[2\alpha]+2\,\text{Cos}[2t\omega]-\text{Cos}[2\alpha-2t\omega]-\text{Cos}[2\alpha+2t\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\Big)}\Big)\Big)\Big/$$

$$\Big(32\,M0\,\big(1+\text{Cos}[2\alpha]\big)\,\sqrt{\Big(M0^2\,\big(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2t\omega]+\text{Cos}[2\alpha-2t\omega]+\text{Cos}[2\alpha+2t\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\Big)}+$$

$$\Big(i\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[t\omega]^2\sqrt{\Big(\frac{1}{1+\text{Cos}[2\alpha]}\,\big(-2+4\,M0-2\,\text{Cos}[2\alpha]-2\,M0\,\text{Cos}[2t\omega]+M0\,\text{Cos}[2\alpha-2t\omega]+M0\,\text{Cos}[2\alpha+2t\omega]-2\sqrt{2}\,\sqrt{\Big(M0^2\,\big(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2t\omega]+\text{Cos}[2\alpha-2t\omega]+\text{Cos}[2\alpha+2t\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\Big)}\Big)\Big)}$$

$$\Big(4\,M0-2\,M0\,\text{Cos}[2t\omega]+M0\,\text{Cos}[2\alpha-2t\omega]+M0\,\text{Cos}[2\alpha+2t\omega]-2\,M0\,\text{Cos}[\alpha-t\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-t\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\omega]^2-2\,M0\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\omega]^2+2\sqrt{2}\,\sqrt{\Big(M0^2\,\big(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2t\omega]+\text{Cos}[2\alpha-2t\omega]+\text{Cos}[2\alpha+2t\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\Big)}\Big)$$

$$\Big(4\,M0\,\omega\,\text{Cos}[t\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\omega]+4\,M0\,\omega\,\text{Cos}[2\alpha]\,\text{Cos}[t\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\omega]-4\,M0\,\omega\,\text{Sin}[2t\omega]-2\,M0\,\omega\,\text{Sin}[2\alpha-2t\omega]+4\,M0\,\omega\,\text{Cos}[\alpha-t\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[\alpha-t\omega]+4\,M0\,\omega\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-t\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[\alpha-t\omega]+2\,M0\,\omega\,\text{Sin}[2\alpha+2t\omega]+\Big(\sqrt{2}\,\Big(-2\,M0^2\,\omega\,\text{Cos}[t\omega]\,\big(-6-2\,\text{Cos}[2\alpha]+2\,\text{Cos}[2t\omega]-\text{Cos}[2\alpha-2t\omega]-\text{Cos}[2\alpha+2t\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]-M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\,\big(-4\,\omega\,\text{Sin}[2t\omega]-2\,\omega\,\text{Sin}[2\alpha-2t\omega]+2\,\omega\,\text{Sin}[2\alpha+2t\omega]\big)\Big)\Big)\Big/\Big(\sqrt{\Big(-M0^2\,\big(-6-2\,\text{Cos}[2\alpha]+2\,\text{Cos}[2t\omega]-\text{Cos}[2\alpha-2t\omega]-\text{Cos}[2\alpha+2t\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\Big)}\Big)\Big)\Big/$$

$$\Big(32\,M0\,\big(1+\text{Cos}[2\alpha]\big)\,\sqrt{\Big(M0^2\,\big(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2t\omega]+\text{Cos}[2\alpha-2t\omega]+$$

$$\mathrm{Cos}[2\alpha+2t\omega])\ \mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\omega]^2)))))\ \mathrm{Tan}[\alpha]\ +$$

$$\frac{1}{\mathrm{M0}}\mathrm{Sec}[\alpha]^2\ (\mathrm{Cos}[\alpha-t\omega]^2+\mathrm{Sin}[t\omega]^2)\ \Big(-s\ (((i\,\mathrm{Cos}[\alpha]\ \mathrm{Cot}[\alpha]\ \mathrm{Csc}[t\omega]^2$$

$$(-4\,\mathrm{M0}+2\,\mathrm{M0}\,\mathrm{Cos}[2t\omega]-\mathrm{M0}\,\mathrm{Cos}[2\alpha-2t\omega]-\mathrm{M0}\,\mathrm{Cos}[2\alpha+2t\omega]+2\,\mathrm{M0}$$

$$\mathrm{Cos}[\alpha-t\omega]^2\,\mathrm{Sec}[\alpha]^2+2\,\mathrm{M0}\,\mathrm{Cos}[2\alpha]\ \mathrm{Cos}[\alpha-t\omega]^2\,\mathrm{Sec}[\alpha]^2+2\,\mathrm{M0}\,\mathrm{Sec}[\alpha]^2$$

$$\mathrm{Sin}[t\omega]^2+2\,\mathrm{M0}\,\mathrm{Cos}[2\alpha]\ \mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\omega]^2+2\sqrt{2}\ \sqrt{(-\mathrm{M0}^2\ (-6-2\,\mathrm{Cos}[2\alpha]+}$$

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

$$\sqrt{\Big(\frac{1}{1+\mathrm{Cos}[2\alpha]}\ (-2+4\,\mathrm{M0}-2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{M0}\,\mathrm{Cos}[2t\omega]+\mathrm{M0}\,\mathrm{Cos}[2\alpha-2t\omega]+}$$

$$\mathrm{M0}\,\mathrm{Cos}[2\alpha+2t\omega]-2\sqrt{2}\ \sqrt{(\mathrm{M0}^2\ (6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2t\omega]+}$$

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

$$(4\,\mathrm{M0}-2\,\mathrm{M0}\,\mathrm{Cos}[2t\omega]+\mathrm{M0}\,\mathrm{Cos}[2\alpha-2t\omega]+\mathrm{M0}\,\mathrm{Cos}[2\alpha+2t\omega]-2\,\mathrm{M0}$$

$$\mathrm{Cos}[\alpha-t\omega]^2\,\mathrm{Sec}[\alpha]^2-2\,\mathrm{M0}\,\mathrm{Cos}[2\alpha]\ \mathrm{Cos}[\alpha-t\omega]^2\,\mathrm{Sec}[\alpha]^2-2\,\mathrm{M0}\,\mathrm{Sec}[\alpha]^2$$

$$\mathrm{Sin}[t\omega]^2-2\,\mathrm{M0}\,\mathrm{Cos}[2\alpha]\ \mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\omega]^2+2\sqrt{2}\ \sqrt{(\mathrm{M0}^2\ (6+2\,\mathrm{Cos}[2\alpha]-}$$

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

$$(32\,\mathrm{M0}\ (1+\mathrm{Cos}[2\alpha])\ \sqrt{(\mathrm{M0}^2\ (6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2t\omega]+\mathrm{Cos}[2\alpha-2t\omega]+}$$

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

$$(i\,\mathrm{Cos}[\alpha]\ \mathrm{Cot}[\alpha]\ \mathrm{Csc}[t\omega]^2\ (4\,\mathrm{M0}-2\,\mathrm{M0}\,\mathrm{Cos}[2t\omega]+\mathrm{M0}\,\mathrm{Cos}[2\alpha-2t\omega]+\mathrm{M0}$$

$$\mathrm{Cos}[2\alpha+2t\omega]-2\,\mathrm{M0}\,\mathrm{Cos}[\alpha-t\omega]^2\,\mathrm{Sec}[\alpha]^2-2\,\mathrm{M0}\,\mathrm{Cos}[2\alpha]$$

$$\mathrm{Cos}[\alpha-t\omega]^2\,\mathrm{Sec}[\alpha]^2-2\,\mathrm{M0}\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\omega]^2-2\,\mathrm{M0}\,\mathrm{Cos}[2\alpha]$$

$$\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\omega]^2+2\sqrt{2}\ \sqrt{(-\mathrm{M0}^2\ (-6-2\,\mathrm{Cos}[2\alpha]+2\,\mathrm{Cos}[2t\omega]-}$$

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

$$\sqrt{\Big(\frac{1}{1+\mathrm{Cos}[2\alpha]}\ (-2+4\,\mathrm{M0}-2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{M0}\,\mathrm{Cos}[2t\omega]+\mathrm{M0}\,\mathrm{Cos}[2\alpha-2t\omega]+}$$

$$\mathrm{M0}\,\mathrm{Cos}[2\alpha+2t\omega]+2\sqrt{2}\ \sqrt{(\mathrm{M0}^2\ (6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2t\omega]+}$$

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

$$(-4\,\mathrm{M0}+2\,\mathrm{M0}\,\mathrm{Cos}[2t\omega]-\mathrm{M0}\,\mathrm{Cos}[2\alpha-2t\omega]-\mathrm{M0}\,\mathrm{Cos}[2\alpha+2t\omega]+2\,\mathrm{M0}$$

$$\mathrm{Cos}[\alpha-t\omega]^2\,\mathrm{Sec}[\alpha]^2+2\,\mathrm{M0}\,\mathrm{Cos}[2\alpha]\ \mathrm{Cos}[\alpha-t\omega]^2\,\mathrm{Sec}[\alpha]^2+2\,\mathrm{M0}\,\mathrm{Sec}[\alpha]^2$$

$$\mathrm{Sin}[t\omega]^2+2\,\mathrm{M0}\,\mathrm{Cos}[2\alpha]\ \mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\omega]^2+2\sqrt{2}\ \sqrt{(\mathrm{M0}^2\ (6+2\,\mathrm{Cos}[2\alpha]-}$$

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

$$(32\,\mathrm{M0}\ (1+\mathrm{Cos}[2\alpha])\ \sqrt{(\mathrm{M0}^2\ (6+2\,\mathrm{Cos}[2\alpha]-2\,\mathrm{Cos}[2t\omega]+\mathrm{Cos}[2\alpha-2t\omega]+}$$

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

$$i\ \Big(-\ (((-4\,\mathrm{M0}+2\,\mathrm{M0}\,\mathrm{Cos}[2t\omega]-\mathrm{M0}\,\mathrm{Cos}[2\alpha-2t\omega]-\mathrm{M0}\,\mathrm{Cos}[2\alpha+2t\omega]+$$

$$2\,\mathrm{M0}\,\mathrm{Cos}[\alpha-t\omega]^2\,\mathrm{Sec}[\alpha]^2+2\,\mathrm{M0}\,\mathrm{Cos}[2\alpha]\ \mathrm{Cos}[\alpha-t\omega]^2\,\mathrm{Sec}[\alpha]^2+2\,\mathrm{M0}\,\mathrm{Sec}[\alpha]^2$$

$$\mathrm{Sin}[t\omega]^2+2\,\mathrm{M0}\,\mathrm{Cos}[2\alpha]\ \mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\omega]^2+2\sqrt{2}\ \sqrt{(-\mathrm{M0}^2\ (-6-2\,\mathrm{Cos}[2\alpha]+}$$

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

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

$$M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\sqrt{2}\,\sqrt{\big(M0^2\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] +$$

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

$$\big(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] +$$

$$\text{Cos}[2\,\alpha + 2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega] + M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2$$

$$\big(4\,\omega\,\text{Sin}[2\,t\,\omega] + 2\,\omega\,\text{Sin}[2\,\alpha - 2\,t\,\omega] - 2\,\omega\,\text{Sin}[2\,\alpha + 2\,t\,\omega]\big)\big)\Big)\Big/$$

$$\Big(16\,\big(M0^2\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\big)$$

$$\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)^{3/2}\Big)\Big) -$$

$$\Big(\big(4\,M0 - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\,M0$$

$$\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Sec}[\alpha]^2$$

$$\text{Sin}[t\,\omega]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\sqrt{2}\,\sqrt{\big(-M0^2\,\big(-6 - 2\,\text{Cos}[2\,\alpha] +$$

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

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

$$M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] + 2\sqrt{2}\,\sqrt{\big(M0^2\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] +$$

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

$$\big(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] +$$

$$\text{Cos}[2\,\alpha + 2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega] + M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2$$

$$\big(4\,\omega\,\text{Sin}[2\,t\,\omega] + 2\,\omega\,\text{Sin}[2\,\alpha - 2\,t\,\omega] - 2\,\omega\,\text{Sin}[2\,\alpha + 2\,t\,\omega]\big)\big)\Big)\Big/$$

$$\Big(16\,\big(M0^2\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\big)$$

$$\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)^{3/2}\Big) +$$

$$\Big(\big(-4\,M0 + 2\,M0\,\text{Cos}[2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] + 2\,M0$$

$$\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,M0\,\text{Sec}[\alpha]^2$$

$$\text{Sin}[t\,\omega]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\sqrt{2}\,\sqrt{\big(-M0^2\,\big(-6 - 2\,\text{Cos}[2\,\alpha] +$$

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

$$\big(4\,M0\,\omega\,\text{Sin}[2\,t\,\omega] + 2\,M0\,\omega\,\text{Sin}[2\,\alpha - 2\,t\,\omega] - 2\,M0\,\omega\,\text{Sin}[2\,\alpha + 2\,t\,\omega] -$$

$$\big(\sqrt{2}\,\big(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] +$$

$$\text{Cos}[2\,\alpha + 2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega] + M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2$$

$$\big(4\,\omega\,\text{Sin}[2\,t\,\omega] + 2\,\omega\,\text{Sin}[2\,\alpha - 2\,t\,\omega] - 2\,\omega\,\text{Sin}[2\,\alpha + 2\,t\,\omega]\big)\big)\Big)\Big/$$

$$\big(\sqrt{\big(M0^2\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[$$

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

$$\Big(16\,\big(1 + \text{Cos}[2\,\alpha]\big)\,\sqrt{\big(M0^2\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] +$$

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      Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2))
  Sqrt[(1/(1 + Cos[2 α])) (-2 + 4 M0 - 2 Cos[2 α] - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] +
      M0 Cos[2 α + 2 t ω] - 2 Sqrt[2] Sqrt[M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
          Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2])]) +
((4 M0 - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] + M0 Cos[2 α + 2 t ω] - 2 M0
      Cos[α - t ω]^2 Sec[α]^2 - 2 M0 Cos[2 α] Cos[α - t ω]^2 Sec[α]^2 - 2 M0 Sec[α]^2
      Sin[t ω]^2 - 2 M0 Cos[2 α] Sec[α]^2 Sin[t ω]^2 + 2 Sqrt[2] Sqrt[-M0^2 (-6 - 2 Cos[2 α] +
          2 Cos[2 t ω] - Cos[2 α - 2 t ω] - Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2]) *
    (4 M0 ω Sin[2 t ω] + 2 M0 ω Sin[2 α - 2 t ω] - 2 M0 ω Sin[2 α + 2 t ω] +
      (Sqrt[2] (2 M0^2 ω Cos[t ω] (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] +
            Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω] + M0^2 Sin[α]^2 Sin[t ω]^2
          (4 ω Sin[2 t ω] + 2 ω Sin[2 α - 2 t ω] - 2 ω Sin[2 α + 2 t ω])))/
      (Sqrt[M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[
          2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2]))/
  (16 (1 + Cos[2 α]) Sqrt[M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] +
        Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2]
    Sqrt[(1/(1 + Cos[2 α])) (-2 + 4 M0 - 2 Cos[2 α] - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] +
        M0 Cos[2 α + 2 t ω] + 2 Sqrt[2] Sqrt[M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
            Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2])]) +
  (Sqrt[(1/(1 + Cos[2 α])) (-2 + 4 M0 - 2 Cos[2 α] - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] +
        M0 Cos[2 α + 2 t ω] + 2 Sqrt[2] Sqrt[M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
            Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2])] *
    (-4 M0 ω Cos[t ω] Sec[α]^2 Sin[t ω] - 4 M0 ω Cos[2 α] Cos[t ω] Sec[α]^2
      Sin[t ω] + 4 M0 ω Sin[2 t ω] + 2 M0 ω Sin[2 α - 2 t ω] - 4 M0 ω Cos[α - t ω]
      Sec[α]^2 Sin[α - t ω] - 4 M0 ω Cos[2 α] Cos[α - t ω] Sec[α]^2 Sin[α - t ω] - 2 M0
      ω Sin[2 α + 2 t ω] + (Sqrt[2] (-2 M0^2 ω Cos[t ω] (-6 - 2 Cos[2 α] + 2 Cos[2 t ω] -
            Cos[2 α - 2 t ω] - Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω] - M0^2 Sin[α]^2
          Sin[t ω]^2 (-4 ω Sin[2 t ω] - 2 ω Sin[2 α - 2 t ω] + 2 ω Sin[2 α + 2 t ω])))/
      (Sqrt[-M0^2 (-6 - 2 Cos[2 α] + 2 Cos[2 t ω] - Cos[2 α - 2 t ω] -
          Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2]))/
  (8 Sqrt[M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω])
      Sin[α]^2 Sin[t ω]^2]) +
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(Sqrt[(1/(1 + Cos[2 α])) (-2 + 4 M0 - 2 Cos[2 α] - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] +
          M0 Cos[2 α + 2 t ω] - 2 Sqrt[2] Sqrt[M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
              Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2])] *
    (4 M0 ω Cos[t ω] Sec[α]^2 Sin[t ω] + 4 M0 ω Cos[2 α] Cos[t ω] Sec[α]^2
      Sin[t ω] - 4 M0 ω Sin[2 t ω] - 2 M0 ω Sin[2 α - 2 t ω] + 4 M0 ω Cos[α - t ω]
      Sec[α]^2 Sin[α - t ω] + 4 M0 ω Cos[2 α] Cos[α - t ω] Sec[α]^2 Sin[α - t ω] + 2 M0
      ω Sin[2 α + 2 t ω] + (Sqrt[2] (-2 M0^2 ω Cos[t ω] (-6 - 2 Cos[2 α] + 2 Cos[2 t ω] -
            Cos[2 α - 2 t ω] - Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω] - M0^2 Sin[α]^2
          Sin[t ω]^2 (-4 ω Sin[2 t ω] - 2 ω Sin[2 α - 2 t ω] + 2 ω Sin[2 α + 2 t ω])))/
     (Sqrt[(-M0^2 (-6 - 2 Cos[2 α] + 2 Cos[2 t ω] - Cos[2 α - 2 t ω] -
           Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2)]))/
   (8 Sqrt[M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω])
       Sin[α]^2 Sin[t ω]^2]) +
  s (-((I M0 (1 + Cos[2 α]) Sec[α] Sin[t ω]^2 Sqrt[(1/(1 + Cos[2 α])) (-2 + 4 M0 -
          2 Cos[2 α] - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] + M0 Cos[2 α + 2 t ω] -
          2 Sqrt[2] Sqrt[M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] +
              Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2])] Tan[α])/
     (2 Sqrt[M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω])
       Sin[α]^2 Sin[t ω]^2]) +
    (I M0 (1 + Cos[2 α]) Sec[α] Sin[t ω]^2 Sqrt[(1/(1 + Cos[2 α])) (-2 + 4 M0 - 2 Cos[2 α] -
          2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] + M0 Cos[2 α + 2 t ω] +
          2 Sqrt[2] Sqrt[M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] +
              Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2])] Tan[α])/
     (2 Sqrt[M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω])
       Sin[α]^2 Sin[t ω]^2])))

υ12[α_, ω_, t_, M0_, s_, r_, Θ_] := I ((1/M0) Sec[α]^2 (Cos[α + t ω]^2 + Sin[t ω]^2)
   (-s (((-4 M0 + 2 M0 Cos[2 t ω] - M0 Cos[2 α - 2 t ω] - M0 Cos[2 α + 2 t ω] + 2 M0 Cos[α - t ω]^2
          Sec[α]^2 + 2 M0 Cos[2 α] Cos[α - t ω]^2 Sec[α]^2 + 2 M0 Sec[α]^2 Sin[t ω]^2 + 2
          M0 Cos[2 α] Sec[α]^2 Sin[t ω]^2 + 2 Sqrt[2] Sqrt[-M0^2 (-6 - 2 Cos[2 α] +
              2 Cos[2 t ω] - Cos[2 α - 2 t ω] - Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2])
```

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

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

$$e^{-i\,\theta}\,r\left(\left(i\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[t\,\omega]^2\left(-4\,M0+2\,M0\,\text{Cos}[2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]-\right.\right.\right.$$
$$M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\,M0\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Cos}[2\,\alpha]$$
$$\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\,M0\,\text{Cos}[2\,\alpha]$$
$$\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\left(-M0^2\left(-6-2\,\text{Cos}[2\,\alpha]+2\,\text{Cos}[2\,t\,\omega]-\right.\right.}$$
$$\left.\left.\text{Cos}[2\,\alpha-2\,t\,\omega]-\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\Big)$$
$$\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.$$
$$M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\right.\right.}$$
$$\left.\left.\left.\left.\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\Big)$$
$$\left(4\,M0-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\,M0\right.$$
$$\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Sec}[\alpha]^2$$
$$\text{Sin}[t\,\omega]^2-2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-\right.\right.}$$
$$\left.\left.\left.\left.2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\Big)\Big/$$
$$\left(32\,M0\left(1+\text{Cos}[2\,\alpha]\right)\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.\right.$$
$$\left.\left.\left.\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right) -$$
$$\left(i\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[t\,\omega]^2\left(4\,M0-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\right.\right.$$
$$\text{Cos}[2\,\alpha+2\,t\,\omega]-2\,M0\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Cos}[2\,\alpha]$$
$$\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2-2\,M0\,\text{Cos}[2\,\alpha]$$
$$\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\left(-M0^2\left(-6-2\,\text{Cos}[2\,\alpha]+2\,\text{Cos}[2\,t\,\omega]-\right.\right.}$$
$$\left.\left.\text{Cos}[2\,\alpha-2\,t\,\omega]-\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\Big)$$
$$\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.$$
$$M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\right.\right.}$$
$$\left.\left.\left.\left.\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\Big)$$
$$\left(-4\,M0+2\,M0\,\text{Cos}[2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\,M0\right.$$
$$\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Sec}[\alpha]^2$$
$$\text{Sin}[t\,\omega]^2+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-\right.\right.}$$
$$\left.\left.\left.\left.2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\Big)\Big/$$
$$\left(32\,M0\left(1+\text{Cos}[2\,\alpha]\right)\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.\right.$$
$$\left.\left.\left.\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\Big) +$$
$$e^{i\,\theta}\,r\left(\left(i\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[t\,\omega]^2\left(-4\,M0+2\,M0\,\text{Cos}[2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]-\right.\right.\right.$$
$$M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\,M0\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Cos}[2\,\alpha]$$
$$\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\,M0\,\text{Cos}[2\,\alpha]$$
$$\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\left(-M0^2\left(-6-2\,\text{Cos}[2\,\alpha]+2\,\text{Cos}[2\,t\,\omega]-\right.\right.}$$

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Cos[2 α - 2 t ω] - Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2))
 Sqrt[(1/(1 + Cos[2 α])) (-2 + 4 M0 - 2 Cos[2 α] - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] +
    M0 Cos[2 α + 2 t ω] - 2 Sqrt[2] Sqrt[M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
      Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2])]
  (4 M0 - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] + M0 Cos[2 α + 2 t ω] - 2 M0
    Cos[α - t ω]^2 Sec[α]^2 - 2 M0 Cos[2 α] Cos[α - t ω]^2 Sec[α]^2 - 2 M0 Sec[α]^2
    Sin[t ω]^2 - 2 M0 Cos[2 α] Sec[α]^2 Sin[t ω]^2 + 2 Sqrt[2] Sqrt[M0^2 (6 + 2 Cos[2 α] -
      2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2]) /
 (32 M0 (1 + Cos[2 α]) Sqrt[M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] +
     Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2]) -
 (I Cos[α] Cot[α] Csc[t ω]^2 (4 M0 - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] + M0
    Cos[2 α + 2 t ω] - 2 M0 Cos[α - t ω]^2 Sec[α]^2 - 2 M0 Cos[2 α]
    Cos[α - t ω]^2 Sec[α]^2 - 2 M0 Sec[α]^2 Sin[t ω]^2 - 2 M0 Cos[2 α]
    Sec[α]^2 Sin[t ω]^2 + 2 Sqrt[2] Sqrt[-M0^2 (-6 - 2 Cos[2 α] + 2 Cos[2 t ω] -
      Cos[2 α - 2 t ω] - Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2])
  Sqrt[(1/(1 + Cos[2 α])) (-2 + 4 M0 - 2 Cos[2 α] - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] +
     M0 Cos[2 α + 2 t ω] + 2 Sqrt[2] Sqrt[M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
       Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2])]
  (-4 M0 + 2 M0 Cos[2 t ω] - M0 Cos[2 α - 2 t ω] - M0 Cos[2 α + 2 t ω] + 2 M0
    Cos[α - t ω]^2 Sec[α]^2 + 2 M0 Cos[2 α] Cos[α - t ω]^2 Sec[α]^2 + 2 M0 Sec[α]^2
    Sin[t ω]^2 + 2 M0 Cos[2 α] Sec[α]^2 Sin[t ω]^2 + 2 Sqrt[2] Sqrt[M0^2 (6 + 2 Cos[2 α] -
      2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2]) /
 (32 M0 (1 + Cos[2 α]) Sqrt[M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] +
     Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2]) -
I (-((I ω Cos[α] Cot[α] Cot[t ω] Csc[t ω]^2 (-4 M0 + 2 M0 Cos[2 t ω] -
      M0 Cos[2 α - 2 t ω] - M0 Cos[2 α + 2 t ω] + 2 M0 Cos[α - t ω]^2 Sec[α]^2 +
      2 M0 Cos[2 α] Cos[α - t ω]^2 Sec[α]^2 + 2 M0 Sec[α]^2 Sin[t ω]^2 +
      2 M0 Cos[2 α] Sec[α]^2 Sin[t ω]^2 + 2 Sqrt[2] Sqrt[-M0^2 (-6 - 2 Cos[2 α] +
        2 Cos[2 t ω] - Cos[2 α - 2 t ω] - Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2])
    Sqrt[(1/(1 + Cos[2 α])) (-2 + 4 M0 - 2 Cos[2 α] - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] +
       M0 Cos[2 α + 2 t ω] - 2 Sqrt[2] Sqrt[M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
         Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2])]
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$$\Big(4\,M0 - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\sqrt{2}\,\sqrt{\big(M0^2\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\Big)\Big/$$

$$\Big(16\,M0\,\big(1 + \text{Cos}[2\,\alpha]\big)\,\sqrt{\big(M0^2\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\Big) +$$

$$\Big(i\,\omega\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Cot}[t\,\omega]\,\text{Csc}[t\,\omega]^2\,\big(4\,M0 - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\sqrt{2}\,\sqrt{\big(-M0^2\,\big(-6 - 2\,\text{Cos}[2\,\alpha] + 2\,\text{Cos}[2\,t\,\omega] - \text{Cos}[2\,\alpha - 2\,t\,\omega] - \text{Cos}[2\,\alpha + 2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\Big)$$

$$\sqrt{\Big(\frac{1}{1 + \text{Cos}[2\,\alpha]}\,\big(-2 + 4\,M0 - 2\,\text{Cos}[2\,\alpha] - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] + 2\sqrt{2}\,\sqrt{\big(M0^2\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\Big)\Big)}$$

$$\Big(-4\,M0 + 2\,M0\,\text{Cos}[2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] + 2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\sqrt{2}\,\sqrt{\big(M0^2\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\Big)\Big/$$

$$\Big(16\,M0\,\big(1 + \text{Cos}[2\,\alpha]\big)\,\sqrt{\big(M0^2\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\Big) -$$

$$\Big(i\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[t\,\omega]^2\,\big(-4\,M0 + 2\,M0\,\text{Cos}[2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] + 2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\sqrt{2}\,\sqrt{\big(-M0^2\,\big(-6 - 2\,\text{Cos}[2\,\alpha] + 2\,\text{Cos}[2\,t\,\omega] - \text{Cos}[2\,\alpha - 2\,t\,\omega] - \text{Cos}[2\,\alpha + 2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\Big)$$

$$\sqrt{\Big(\frac{1}{1 + \text{Cos}[2\,\alpha]}\,\big(-2 + 4\,M0 - 2\,\text{Cos}[2\,\alpha] - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\sqrt{2}\,\sqrt{\big(M0^2\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\Big)\Big)}$$

$$\Big(4\,M0 - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\sqrt{2}\,\sqrt{\big(M0^2\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\Big)$$

$$\Big(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\,\big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega] + M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2$$

$$\left(4\,\omega\,\text{Sin}[2\,t\,\omega] + 2\,\omega\,\text{Sin}[2\,\alpha - 2\,t\,\omega] - 2\,\omega\,\text{Sin}[2\,\alpha + 2\,t\,\omega]\right)\Big)\Big/$$

$$\Big(64\,M0\,\left(1 + \text{Cos}[2\,\alpha]\right)\,\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)^{3/2}\Big) +$$

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

$$\Big(64\,M0\,\left(1 + \text{Cos}[2\,\alpha]\right)\,\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)^{3/2}\Big) +$$

$$\Big(i\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[t\,\omega]^2\,\Big(-4\,M0 + 2\,M0\,\text{Cos}[2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] + 2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\,\sqrt{2}\,\sqrt{\left(-M0^2\,\left(-6 - 2\,\text{Cos}[2\,\alpha] + 2\,\text{Cos}[2\,t\,\omega] - \text{Cos}[2\,\alpha - 2\,t\,\omega] - \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\,\Big(4\,M0 - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\,\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\,\Big(4\,M0\,\omega\,\text{Sin}[2\,t\,\omega] + 2\,M0\,\omega\,\text{Sin}[2\,\alpha - 2\,t\,\omega] - 2\,M0\,\omega\,\text{Sin}[2\,\alpha + 2\,t\,\omega] - \Big(\sqrt{2}\,\left(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega] + M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\,\left(4\,\omega\,\text{Sin}[2\,t\,\omega] + 2\,\omega\,\text{Sin}[2\,\alpha - 2\,t\,\omega] - 2\,\omega\,\text{Sin}[2\,\alpha + 2\,t\,\omega]\right)\Big)\Big)\Big/\Big(\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Big)\Big)\Big)\Big/$$

$$\Bigg(64\,M0\,\left(1+\cos[2\alpha]\right)^2\sqrt{\left(M0^2\,\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)}\\ \sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4\,M0-2\cos[2\alpha]-2\,M0\cos[2t\omega]+M0\cos[2\alpha-2t\omega]+M0\cos[2\alpha+2t\omega]-2\sqrt{2}\,\sqrt{\left(M0^2\,\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)}\right)\right)}\Bigg)-\\ \Bigg(i\cos[\alpha]\cot[\alpha]\csc[t\omega]^2\left(4\,M0-2\,M0\cos[2t\omega]+M0\cos[2\alpha-2t\omega]+M0\cos[2\alpha+2t\omega]-2\,M0\cos[\alpha-t\omega]^2\sec[\alpha]^2-2\,M0\cos[2\alpha]\cos[\alpha-t\omega]^2\sec[\alpha]^2-2\,M0\sec[\alpha]^2\sin[t\omega]^2-2\,M0\cos[2\alpha]\sec[\alpha]^2\sin[t\omega]^2+2\sqrt{2}\,\sqrt{\left(-M0^2\,\left(-6-2\cos[2\alpha]+2\cos[2t\omega]-\cos[2\alpha-2t\omega]-\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)}\right)\\ \left(-4\,M0+2\,M0\cos[2t\omega]-M0\cos[2\alpha-2t\omega]-M0\cos[2\alpha+2t\omega]+2\,M0\cos[\alpha-t\omega]^2\sec[\alpha]^2+2\,M0\cos[2\alpha]\cos[\alpha-t\omega]^2\sec[\alpha]^2+2\,M0\sec[\alpha]^2\sin[t\omega]^2+2\,M0\cos[2\alpha]\sec[\alpha]^2\sin[t\omega]^2+2\sqrt{2}\,\sqrt{\left(M0^2\,\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)}\right)\\ \left(4\,M0\,\omega\sin[2t\omega]+2\,M0\,\omega\sin[2\alpha-2t\omega]-2\,M0\,\omega\sin[2\alpha+2t\omega]+\left(\sqrt{2}\,\left(2\,M0^2\,\omega\cos[t\omega]\,\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]+M0^2\sin[\alpha]^2\sin[t\omega]^2\left(4\,\omega\sin[2t\omega]+2\,\omega\sin[2\alpha-2t\omega]-2\,\omega\sin[2\alpha+2t\omega]\right)\right)\right)\Big/\\ \left(\sqrt{\left(M0^2\,\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)}\right)\Bigg)\Big/$$

$$\Bigg(64\,M0\,\left(1+\cos[2\alpha]\right)^2\sqrt{\left(M0^2\,\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)}\\ \sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4\,M0-2\cos[2\alpha]-2\,M0\cos[2t\omega]+M0\cos[2\alpha-2t\omega]+M0\cos[2\alpha+2t\omega]+2\sqrt{2}\,\sqrt{\left(M0^2\,\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)}\right)\right)}\Bigg)+\\ \Bigg(i\cos[\alpha]\cot[\alpha]\csc[t\omega]^2\left(-4\,M0+2\,M0\cos[2t\omega]-M0\cos[2\alpha-2t\omega]-M0\cos[2\alpha+2t\omega]+2\,M0\cos[\alpha-t\omega]^2\sec[\alpha]^2+2\,M0\cos[2\alpha]\cos[\alpha-t\omega]^2\sec[\alpha]^2+2\,M0\sec[\alpha]^2\sin[t\omega]^2+2\,M0\cos[2\alpha]\sec[\alpha]^2\sin[t\omega]^2+2\sqrt{2}\,\sqrt{\left(-M0^2\,\left(-6-2\cos[2\alpha]+2\cos[2t\omega]-\cos[2\alpha-2t\omega]-\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)}\right)\\ \sqrt{\left(\frac{1}{1+\cos[2\alpha]}\left(-2+4\,M0-2\cos[2\alpha]-2\,M0\cos[2t\omega]+M0\cos[2\alpha-2t\omega]+M0\cos[2\alpha+2t\omega]-2\sqrt{2}\,\sqrt{\left(M0^2\,\left(6+2\cos[2\alpha]-2\cos[2t\omega]+\cos[2\alpha-2t\omega]+\cos[2\alpha+2t\omega]\right)\sin[\alpha]^2\sin[t\omega]^2\right)}\right)\right)}\Bigg)$$

$$\Big(-4\,M0\,\omega\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega] - 4\,M0\,\omega\,\text{Cos}[2\,\alpha]\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega] + 4\,M0\,\omega\,\text{Sin}[2\,t\,\omega] + 2\,M0\,\omega\,\text{Sin}[2\,\alpha - 2\,t\,\omega] - 4\,M0\,\omega\,\text{Cos}[\alpha - t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[\alpha - t\,\omega] - 4\,M0\,\omega\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[\alpha - t\,\omega] - 2\,M0\,\omega\,\text{Sin}[2\,\alpha + 2\,t\,\omega] + \Big(\sqrt{2}\,\Big(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\,\Big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega] + M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\,\Big(4\,\omega\,\text{Sin}[2\,t\,\omega] + 2\,\omega\,\text{Sin}[2\,\alpha - 2\,t\,\omega] - 2\,\omega\,\text{Sin}[2\,\alpha + 2\,t\,\omega]\Big)\Big)\Big)\Big/\Big(\sqrt{\Big(M0^2\,\Big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\Big)}\Big)\Big)\Big/\Big(32\,M0\,\Big(1 + \text{Cos}[2\,\alpha]\Big)\,\sqrt{\Big(M0^2\,\Big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\Big)} - \Big(i\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[t\,\omega]^2\,\Big(4\,M0 - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\,\sqrt{2}\,\sqrt{\Big(-M0^2\,\Big(-6 - 2\,\text{Cos}[2\,\alpha] + 2\,\text{Cos}[2\,t\,\omega] - \text{Cos}[2\,\alpha - 2\,t\,\omega] - \text{Cos}[2\,\alpha + 2\,t\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\Big)}\,\sqrt{\Big(\frac{1}{1 + \text{Cos}[2\,\alpha]}\,\Big(-2 + 4\,M0 - 2\,\text{Cos}[2\,\alpha] - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] + 2\,\sqrt{2}\,\sqrt{\Big(M0^2\,\Big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\Big)}\Big)\Big)\Big(4\,M0\,\omega\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega] + 4\,M0\,\omega\,\text{Cos}[2\,\alpha]\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega] - 4\,M0\,\omega\,\text{Sin}[2\,t\,\omega] - 2\,M0\,\omega\,\text{Sin}[2\,\alpha - 2\,t\,\omega] + 4\,M0\,\omega\,\text{Cos}[\alpha - t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[\alpha - t\,\omega] + 4\,M0\,\omega\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[\alpha - t\,\omega] + 2\,M0\,\omega\,\text{Sin}[2\,\alpha + 2\,t\,\omega] + \Big(\sqrt{2}\,\Big(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\,\Big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega] + M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\,\Big(4\,\omega\,\text{Sin}[2\,t\,\omega] + 2\,\omega\,\text{Sin}[2\,\alpha - 2\,t\,\omega] - 2\,\omega\,\text{Sin}[2\,\alpha + 2\,t\,\omega]\Big)\Big)\Big)\Big/\Big(\sqrt{\Big(M0^2\,\Big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\Big)}\Big)\Big)\Big/\Big(32\,M0\,\Big(1 + \text{Cos}[2\,\alpha]\Big)\,\sqrt{\Big(M0^2\,\Big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\Big)} - \Big(i\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[t\,\omega]^2\,\sqrt{\Big(\frac{1}{1 + \text{Cos}[2\,\alpha]}\,\Big(-2 + 4\,M0 - 2\,\text{Cos}[2\,\alpha] - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] + 2\,\sqrt{2}\,\sqrt{\Big(M0^2\,\Big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\Big)}\Big)\Big)\Big(-4\,M0 + 2\,M0\,\text{Cos}[2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] + 2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\,\sqrt{2}\,\sqrt{\Big(M0^2\,\Big(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\Big)}\Big)\Big(-4\,M0\,\omega\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega] - 4\,M0\,\omega\,\text{Cos}[2\,\alpha]\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2$$

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Sin[t ω] + 4 M0 ω Sin[2 t ω] + 2 M0 ω Sin[2 α - 2 t ω] - 4 M0 ω Cos[α - t ω]
Sec[α]^2 Sin[α - t ω] - 4 M0 ω Cos[2 α] Cos[α - t ω] Sec[α]^2 Sin[α - t ω] - 2 M0
ω Sin[2 α + 2 t ω] + (√2 (-2 M0^2 ω Cos[t ω] (-6 - 2 Cos[2 α] + 2 Cos[2 t ω] -
Cos[2 α - 2 t ω] - Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω] - M0^2 Sin[α]^2
Sin[t ω]^2 (-4 ω Sin[2 t ω] - 2 ω Sin[2 α - 2 t ω] + 2 ω Sin[2 α + 2 t ω])))/
(√(-M0^2 (-6 - 2 Cos[2 α] + 2 Cos[2 t ω] - Cos[2 α - 2 t ω] -
Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2)))/
(32 M0 (1 + Cos[2 α]) √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] +
Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2)) +
(i Cos[α] Cot[α] Csc[t ω]^2 √((1/(1 + Cos[2 α])) (-2 + 4 M0 - 2 Cos[2 α] - 2 M0 Cos[2 t ω] +
M0 Cos[2 α - 2 t ω] + M0 Cos[2 α + 2 t ω] - 2 √2 √(M0^2 (6 + 2 Cos[2 α] -
2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2)))
(4 M0 - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] + M0 Cos[2 α + 2 t ω] - 2 M0
Cos[α - t ω]^2 Sec[α]^2 - 2 M0 Cos[2 α] Cos[α - t ω]^2 Sec[α]^2 - 2 M0 Sec[α]^2
Sin[t ω]^2 - 2 M0 Cos[2 α] Sec[α]^2 Sin[t ω]^2 + 2 √2 √(M0^2 (6 + 2 Cos[2 α] -
2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2))
(4 M0 ω Cos[t ω] Sec[α]^2 Sin[t ω] + 4 M0 ω Cos[2 α] Cos[t ω] Sec[α]^2
Sin[t ω] - 4 M0 ω Sin[2 t ω] - 2 M0 ω Sin[2 α - 2 t ω] + 4 M0 ω Cos[α - t ω]
Sec[α]^2 Sin[α - t ω] + 4 M0 ω Cos[2 α] Cos[α - t ω] Sec[α]^2 Sin[α - t ω] + 2 M0
ω Sin[2 α + 2 t ω] + (√2 (-2 M0^2 ω Cos[t ω] (-6 - 2 Cos[2 α] + 2 Cos[2 t ω] -
Cos[2 α - 2 t ω] - Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω] - M0^2 Sin[α]^2
Sin[t ω]^2 (-4 ω Sin[2 t ω] - 2 ω Sin[2 α - 2 t ω] + 2 ω Sin[2 α + 2 t ω])))/
(√(-M0^2 (-6 - 2 Cos[2 α] + 2 Cos[2 t ω] - Cos[2 α - 2 t ω] -
Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2)))/
(32 M0 (1 + Cos[2 α]) √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] +
Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2)) +
(1/M0) 2 i Sec[α] Sin[t ω]^2 Tan[α] (-s ((i Cos[α] Cot[α] Csc[t ω]^2 (-4 M0 + 2 M0
Cos[2 t ω] - M0 Cos[2 α - 2 t ω] - M0 Cos[2 α + 2 t ω] + 2 M0 Cos[α - t ω]^2
Sec[α]^2 + 2 M0 Cos[2 α] Cos[α - t ω]^2 Sec[α]^2 + 2 M0 Sec[α]^2 Sin[t ω]^2 + 2
M0 Cos[2 α] Sec[α]^2 Sin[t ω]^2 + 2 √2 √(-M0^2 (-6 - 2 Cos[2 α] +
2 Cos[2 t ω] - Cos[2 α - 2 t ω] - Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2))
√((1/(1 + Cos[2 α])) (-2 + 4 M0 - 2 Cos[2 α] - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] +
M0 Cos[2 α + 2 t ω] - 2 √2 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2)))
(4 M0 - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] + M0 Cos[2 α + 2 t ω] - 2 M0
```

$$\begin{aligned}
&\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Sec}[\alpha]^2\\
&\text{Sin}[t\,\omega]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] -\right.\right.}\\
&\qquad \left.\left.2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Bigg)\Bigg/\\
&\left(32\,M0\,\left(1 + \text{Cos}[2\,\alpha]\right)\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] +\right.\right.}\right.\\
&\qquad \left.\left.\left.\text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right) -\\
&\Bigg(i\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[t\,\omega]^2\,\left(4\,M0 - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\right.\\
&\qquad \text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\\
&\qquad \text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\\
&\qquad \text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\sqrt{2}\,\sqrt{\left(-M0^2\,\left(-6 - 2\,\text{Cos}[2\,\alpha] + 2\,\text{Cos}[2\,t\,\omega] -\right.\right.}\\
&\qquad \left.\left.\left.\text{Cos}[2\,\alpha - 2\,t\,\omega] - \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\\
&\qquad \sqrt{\left(\frac{1}{1 + \text{Cos}[2\,\alpha]}\,\left(-2 + 4\,M0 - 2\,\text{Cos}[2\,\alpha] - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] +\right.\right.\\
&\qquad \left.\left.M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] + 2\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] +\right.\right.}\right.\\
&\qquad \left.\left.\left.\left.\text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\Bigg)\\
&\qquad \left(-4\,M0 + 2\,M0\,\text{Cos}[2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] + 2\,M0\right.\\
&\qquad \text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,M0\,\text{Sec}[\alpha]^2\\
&\qquad \text{Sin}[t\,\omega]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] -\right.\right.}\\
&\qquad \left.\left.\left.2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\Bigg)\Bigg/\\
&\left(32\,M0\,\left(1 + \text{Cos}[2\,\alpha]\right)\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] +\right.\right.}\right.\\
&\qquad \left.\left.\left.\text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right) -\\
&i\,\Bigg(-\Bigg(\Bigg(\left(-4\,M0 + 2\,M0\,\text{Cos}[2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] +\right.\\
&\qquad 2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,M0\,\text{Sec}[\alpha]^2\\
&\qquad \text{Sin}[t\,\omega]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\sqrt{2}\,\sqrt{\left(-M0^2\,\left(-6 - 2\,\text{Cos}[2\,\alpha] +\right.\right.}\\
&\qquad \left.\left.\left.2\,\text{Cos}[2\,t\,\omega] - \text{Cos}[2\,\alpha - 2\,t\,\omega] - \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\\
&\qquad \sqrt{\left(\frac{1}{1 + \text{Cos}[2\,\alpha]}\,\left(-2 + 4\,M0 - 2\,\text{Cos}[2\,\alpha] - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] +\right.\right.}\\
&\qquad \left.\left.M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\sqrt{2}\,\sqrt{\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] +\right.\right.}\right.\\
&\qquad \left.\left.\left.\left.\text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\Bigg)\\
&\qquad \left(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] +\right.\right.\\
&\qquad \left.\left.\text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega] + M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right.\\
&\qquad \left.\left.\left(4\,\omega\,\text{Sin}[2\,t\,\omega] + 2\,\omega\,\text{Sin}[2\,\alpha - 2\,t\,\omega] - 2\,\omega\,\text{Sin}[2\,\alpha + 2\,t\,\omega]\right)\right)\Bigg)\Bigg/\\
&\left(16\,\left(M0^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\right.\right.\\
&\qquad \left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)^{3/2}\right)\Bigg) -
\end{aligned}$$

$$\Bigg(\Big(4\,M0 - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\sqrt{2}\,\sqrt{\left(-M0^2\left(-6 - 2\,\text{Cos}[2\,\alpha] + 2\,\text{Cos}[2\,t\,\omega] - \text{Cos}[2\,\alpha - 2\,t\,\omega] - \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Big)\sqrt{\left(\frac{1}{1 + \text{Cos}[2\,\alpha]}\left(-2 + 4\,M0 - 2\,\text{Cos}[2\,\alpha] - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] + 2\sqrt{2}\,\sqrt{\left(M0^2\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\right)}\Big(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega] + M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\left(4\,\omega\,\text{Sin}[2\,t\,\omega] + 2\,\omega\,\text{Sin}[2\,\alpha - 2\,t\,\omega] - 2\,\omega\,\text{Sin}[2\,\alpha + 2\,t\,\omega]\right)\Big)\Bigg)\Big/\Big(16\left(M0^2\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)^{3/2}\Big) +$$

$$\Bigg(\Big(-4\,M0 + 2\,M0\,\text{Cos}[2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] - M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] + 2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 + 2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\sqrt{2}\,\sqrt{\left(-M0^2\left(-6 - 2\,\text{Cos}[2\,\alpha] + 2\,\text{Cos}[2\,t\,\omega] - \text{Cos}[2\,\alpha - 2\,t\,\omega] - \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Big)\Big(4\,M0\,\omega\,\text{Sin}[2\,t\,\omega] + 2\,M0\,\omega\,\text{Sin}[2\,\alpha - 2\,t\,\omega] - 2\,M0\,\omega\,\text{Sin}[2\,\alpha + 2\,t\,\omega] - \Big(\sqrt{2}\,\Big(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega] + M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\left(4\,\omega\,\text{Sin}[2\,t\,\omega] + 2\,\omega\,\text{Sin}[2\,\alpha - 2\,t\,\omega] - 2\,\omega\,\text{Sin}[2\,\alpha + 2\,t\,\omega]\right)\Big)\Big)\Big/\Big(\sqrt{\left(M0^2\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Big)\Big)\Bigg)\Big/$$

$$\Bigg(16\left(1 + \text{Cos}[2\,\alpha]\right)\sqrt{\left(M0^2\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\sqrt{\left(\frac{1}{1 + \text{Cos}[2\,\alpha]}\left(-2 + 4\,M0 - 2\,\text{Cos}[2\,\alpha] - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\sqrt{2}\,\sqrt{\left(M0^2\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\right)}\Bigg) +$$

$$\Bigg(\Big(4\,M0 - 2\,M0\,\text{Cos}[2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + M0\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\,M0\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,M0\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 - 2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\sqrt{2}\,\sqrt{\left(-M0^2\left(-6 - 2\,\text{Cos}[2\,\alpha] + 2\,\text{Cos}[2\,t\,\omega] - \text{Cos}[2\,\alpha - 2\,t\,\omega] - \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Big)\Big(4\,M0\,\omega\,\text{Sin}[2\,t\,\omega] + 2\,M0\,\omega\,\text{Sin}[2\,\alpha - 2\,t\,\omega] - 2\,M0\,\omega\,\text{Sin}[2\,\alpha + 2\,t\,\omega] + \Big(\sqrt{2}\,\Big(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega] + M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2$$

$$\left(4\,\omega\,\text{Sin}[2\,t\,\omega]+2\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-2\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]\right)\Big)\Big)\Big/$$
$$\left(\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[\right.\right.\right.}$$
$$\left.\left.\left.2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\Big)\Big)\Big/$$
$$\Bigg(16\,\left(1+\text{Cos}[2\,\alpha]\right)\,\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.}$$
$$\left.\left.\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)$$
$$\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\,\left(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.}$$
$$M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\,\sqrt{2}\,\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\right.\right.}$$
$$\left.\left.\left.\left.\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\Bigg)+$$
$$\Bigg(\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\,\left(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.}$$
$$M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\,\sqrt{2}\,\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\right.\right.}$$
$$\left.\left.\left.\left.\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\Bigg)$$
$$\left(-4\,M0\,\omega\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]-4\,M0\,\omega\,\text{Cos}[2\,\alpha]\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2\right.$$
$$\text{Sin}[t\,\omega]+4\,M0\,\omega\,\text{Sin}[2\,t\,\omega]+2\,M0\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-4\,M0\,\omega\,\text{Cos}[\alpha-t\,\omega]$$
$$\text{Sec}[\alpha]^2\,\text{Sin}[\alpha-t\,\omega]-4\,M0\,\omega\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[\alpha-t\,\omega]-2\,M0$$
$$\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]+\left(\sqrt{2}\,\left(-2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\,\left(-6-2\,\text{Cos}[2\,\alpha]+2\,\text{Cos}[2\,t\,\omega]-\right.\right.\right.$$
$$\left.\left.\left.\text{Cos}[2\,\alpha-2\,t\,\omega]-\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]-M0^2\,\text{Sin}[\alpha]^2\right.\right.$$
$$\left.\left.\text{Sin}[t\,\omega]^2\,\left(-4\,\omega\,\text{Sin}[2\,t\,\omega]-2\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]+2\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]\right)\right)\right)\Big/$$
$$\Bigg(\sqrt{\left(-M0^2\,\left(-6-2\,\text{Cos}[2\,\alpha]+2\,\text{Cos}[2\,t\,\omega]-\text{Cos}[2\,\alpha-2\,t\,\omega]-\right.\right.}$$
$$\left.\left.\left.\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\Bigg)\Big/$$
$$\left(8\,\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\right.}\right.$$
$$\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)+$$
$$\Bigg(\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\,\left(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.}$$
$$M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\,\sqrt{2}\,\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\right.\right.}$$
$$\left.\left.\left.\left.\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\Bigg)$$
$$\left(4\,M0\,\omega\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]+4\,M0\,\omega\,\text{Cos}[2\,\alpha]\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2\right.$$
$$\text{Sin}[t\,\omega]-4\,M0\,\omega\,\text{Sin}[2\,t\,\omega]-2\,M0\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]+4\,M0\,\omega\,\text{Cos}[\alpha-t\,\omega]$$
$$\text{Sec}[\alpha]^2\,\text{Sin}[\alpha-t\,\omega]+4\,M0\,\omega\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[\alpha-t\,\omega]+2\,M0$$
$$\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]+\left(\sqrt{2}\,\left(-2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\,\left(-6-2\,\text{Cos}[2\,\alpha]+2\,\text{Cos}[2\,t\,\omega]-\right.\right.\right.$$
$$\left.\left.\left.\text{Cos}[2\,\alpha-2\,t\,\omega]-\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]-M0^2\,\text{Sin}[\alpha]^2\right.\right.$$
$$\left.\left.\text{Sin}[t\,\omega]^2\,\left(-4\,\omega\,\text{Sin}[2\,t\,\omega]-2\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]+2\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]\right)\right)\right)\Big/$$
$$\Bigg(\sqrt{\left(-M0^2\,\left(-6-2\,\text{Cos}[2\,\alpha]+2\,\text{Cos}[2\,t\,\omega]-\text{Cos}[2\,\alpha-2\,t\,\omega]-\right.\right.}$$
$$\left.\left.\left.\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\Bigg)\Big/$$
$$\left(8\,\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\right.}\right.$$

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Sin[α]^2 Sin[t ω]^2))) +
s (-(((i M0 (1 + Cos[2 α]) Sec[α] Sin[t ω]^2 √((1/(1 + Cos[2 α])) (-2 + 4 M0 -
      2 Cos[2 α] - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] + M0 Cos[2 α + 2 t ω] -
      2 √2 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] +
            Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2))) Tan[α]) /
    (2 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω])
        Sin[α]^2 Sin[t ω]^2))) +
   (i M0 (1 + Cos[2 α]) Sec[α] Sin[t ω]^2 √((1/(1 + Cos[2 α])) (-2 + 4 M0 - 2 Cos[2 α] -
      2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] + M0 Cos[2 α + 2 t ω] +
      2 √2 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] +
            Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2))) Tan[α]) /
    (2 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω])
        Sin[α]^2 Sin[t ω]^2))))

υ21[α_, ω_, t_, M0_, s_, r_, θ_] := i (-(1/M0) 2 i Sec[α] Sin[t ω]^2 Tan[α]
   (s (((i Cos[α] Cot[α] Csc[t ω]^2 (-4 M0 + 2 M0 Cos[2 t ω] - M0 Cos[2 α - 2 t ω] - M0
        Cos[2 α + 2 t ω] + 2 M0 Cos[α - t ω]^2 Sec[α]^2 + 2 M0 Cos[2 α] Cos[α - t ω]^2
        Sec[α]^2 + 2 M0 Sec[α]^2 Sin[t ω]^2 + 2 M0 Cos[2 α] Sec[α]^2 Sin[t ω]^2 + 2 √2
        √(-M0^2 (-6 - 2 Cos[2 α] + 2 Cos[2 t ω] - Cos[2 α - 2 t ω] - Cos[2 α + 2 t ω])
          Sin[α]^2 Sin[t ω]^2)) √((1/(1 + Cos[2 α])) (-2 + 4 M0 - 2 Cos[2 α] - 2 M0 Cos[2 t
           ω] + M0 Cos[2 α - 2 t ω] + M0 Cos[2 α + 2 t ω] - 2 √2 √(M0^2 (6 + 2 Cos[2 α] -
             2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2)))
      (4 M0 - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] + M0 Cos[2 α + 2 t ω] - 2 M0
        Cos[α - t ω]^2 Sec[α]^2 - 2 M0 Cos[2 α] Cos[α - t ω]^2 Sec[α]^2 - 2 M0 Sec[α]^2
        Sin[t ω]^2 - 2 M0 Cos[2 α] Sec[α]^2 Sin[t ω]^2 + 2 √2 √(M0^2 (6 + 2 Cos[2 α] -
            2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2))) /
     (32 M0 (1 + Cos[2 α]) √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] +
          Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2)) -
     (i Cos[α] Cot[α] Csc[t ω]^2 (4 M0 - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] + M0
        Cos[2 α + 2 t ω] - 2 M0 Cos[α - t ω]^2 Sec[α]^2 - 2 M0 Cos[2 α]
        Cos[α - t ω]^2 Sec[α]^2 - 2 M0 Sec[α]^2 Sin[t ω]^2 - 2 M0 Cos[2 α]
        Sec[α]^2 Sin[t ω]^2 + 2 √2 √(-M0^2 (-6 - 2 Cos[2 α] + 2 Cos[2 t ω] -
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$$\text{Cos}[2\alpha-2t\omega]-\text{Cos}[2\alpha+2t\omega]\Big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\Big)\Big)$$

$$\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\Big(-2+4\,\text{M0}-2\,\text{Cos}[2\alpha]-2\,\text{M0}\,\text{Cos}[2t\omega]+\text{M0}\,\text{Cos}[2\alpha-2t\omega]+\right.}$$
$$\text{M0}\,\text{Cos}[2\alpha+2t\omega]+2\sqrt{2}\,\sqrt{\Big(\text{M0}^2\,\big(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2t\omega]+}$$
$$\text{Cos}[2\alpha-2t\omega]+\text{Cos}[2\alpha+2t\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\Big)\Big)\Big)$$
$$\Big(-4\,\text{M0}+2\,\text{M0}\,\text{Cos}[2t\omega]-\text{M0}\,\text{Cos}[2\alpha-2t\omega]-\text{M0}\,\text{Cos}[2\alpha+2t\omega]+2\,\text{M0}$$
$$\text{Cos}[\alpha-t\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{M0}\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-t\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{M0}\,\text{Sec}[\alpha]^2$$
$$\text{Sin}[t\omega]^2+2\,\text{M0}\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\omega]^2+2\sqrt{2}\,\sqrt{\Big(\text{M0}^2\,\big(6+2\,\text{Cos}[2\alpha]-}$$
$$2\,\text{Cos}[2t\omega]+\text{Cos}[2\alpha-2t\omega]+\text{Cos}[2\alpha+2t\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\Big)}\Big)\Big)\Big/$$
$$\Big(32\,\text{M0}\,\big(1+\text{Cos}[2\alpha]\big)\,\sqrt{\Big(\text{M0}^2\,\big(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2t\omega]+\text{Cos}[2\alpha-2t\omega]+}$$
$$\text{Cos}[2\alpha+2t\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\Big)}\Big)-$$

$$i\,\Bigg(-\Bigg(\Bigg(\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\Big(-2+4\,\text{M0}-2\,\text{Cos}[2\alpha]-2\,\text{M0}\,\text{Cos}[2t\omega]+\text{M0}\,\text{Cos}[2\alpha-2t\omega]+\right.}$$
$$\text{M0}\,\text{Cos}[2\alpha+2t\omega]-2\sqrt{2}\,\sqrt{\Big(\text{M0}^2\,\big(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2t\omega]+}$$
$$\text{Cos}[2\alpha-2t\omega]+\text{Cos}[2\alpha+2t\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\Big)\Big)\Big)$$
$$\Big(4\,\text{M0}-2\,\text{M0}\,\text{Cos}[2t\omega]+\text{M0}\,\text{Cos}[2\alpha-2t\omega]+\text{M0}\,\text{Cos}[2\alpha+2t\omega]-$$
$$2\,\text{M0}\,\text{Cos}[\alpha-t\omega]^2\,\text{Sec}[\alpha]^2-2\,\text{M0}\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-t\omega]^2\,\text{Sec}[\alpha]^2-$$
$$2\,\text{M0}\,\text{Sec}[\alpha]^2\,\text{Sin}[t\omega]^2-2\,\text{M0}\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\omega]^2+$$
$$2\sqrt{2}\,\sqrt{\Big(\text{M0}^2\,\big(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2t\omega]+\text{Cos}[2\alpha-2t\omega]+\text{Cos}[2\alpha+2t\omega]\big)}$$
$$\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\Big)\Big)\,\Big(2\,\text{M0}^2\,\omega\,\text{Cos}[t\omega]\,\big(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2t\omega]+$$
$$\text{Cos}[2\alpha-2t\omega]+\text{Cos}[2\alpha+2t\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]+\text{M0}^2\,\text{Sin}[\alpha]^2$$
$$\text{Sin}[t\omega]^2\,\big(4\,\omega\,\text{Sin}[2t\omega]+2\,\omega\,\text{Sin}[2\alpha-2t\omega]-2\,\omega\,\text{Sin}[2\alpha+2t\omega]\big)\Big)\Bigg)\Bigg/$$
$$\Big(16\,\Big(\text{M0}^2\,\big(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2t\omega]+\text{Cos}[2\alpha-2t\omega]+\text{Cos}[2\alpha+2t\omega]\big)$$
$$\text{Sin}[\alpha]^2\,\text{Sin}[t\omega]^2\Big)^{3/2}\Big)\Bigg)-$$

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

$$\Big(16\,\big(M0^2\,\big(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,t\,\omega]+\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+\mathrm{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\big)^{3/2}\Big)+\Big(\big(4\,M0-2\,M0\,\mathrm{Cos}[2\,t\,\omega]+M0\,\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\mathrm{Cos}[2\,\alpha+2\,t\,\omega]-2\,M0\,\mathrm{Cos}[\alpha-t\,\omega]^2\,\mathrm{Sec}[\alpha]^2-2\,M0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Cos}[\alpha-t\,\omega]^2\,\mathrm{Sec}[\alpha]^2-2\,M0\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2-2\,M0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\big(M0^2\,\big(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,t\,\omega]+\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+\mathrm{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\big)}\Big)\Big(4\,M0\,\omega\,\mathrm{Sin}[2\,t\,\omega]+2\,M0\,\omega\,\mathrm{Sin}[2\,\alpha-2\,t\,\omega]-2\,M0\,\omega\,\mathrm{Sin}[2\,\alpha+2\,t\,\omega]-\Big(\sqrt{2}\,\big(2\,M0^2\,\omega\,\mathrm{Cos}[t\,\omega]\,\big(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,t\,\omega]+\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+\mathrm{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]+M0^2\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\,\big(4\,\omega\,\mathrm{Sin}[2\,t\,\omega]+2\,\omega\,\mathrm{Sin}[2\,\alpha-2\,t\,\omega]-2\,\omega\,\mathrm{Sin}[2\,\alpha+2\,t\,\omega]\big)\big)\Big)\Big/\Big(\sqrt{\big(M0^2\,\big(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,t\,\omega]+\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+\mathrm{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\big)}\Big)\Big)\Big)\Big/\Big(16\,\big(1+\mathrm{Cos}[2\,\alpha]\big)\,\sqrt{\big(M0^2\,\big(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,t\,\omega]+\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+\mathrm{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\big)}\,\sqrt{\frac{1}{1+\mathrm{Cos}[2\,\alpha]}\,\big(-2+4\,M0-2\,\mathrm{Cos}[2\,\alpha]-2\,M0\,\mathrm{Cos}[2\,t\,\omega]+M0\,\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\mathrm{Cos}[2\,\alpha+2\,t\,\omega]-2\sqrt{2}\,\sqrt{\big(M0^2\,\big(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,t\,\omega]+\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+\mathrm{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\big)}\big)}\Big)+\Big(\big(-4\,M0+2\,M0\,\mathrm{Cos}[2\,t\,\omega]-M0\,\mathrm{Cos}[2\,\alpha-2\,t\,\omega]-M0\,\mathrm{Cos}[2\,\alpha+2\,t\,\omega]+2\,M0\,\mathrm{Cos}[\alpha-t\,\omega]^2\,\mathrm{Sec}[\alpha]^2+2\,M0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Cos}[\alpha-t\,\omega]^2\,\mathrm{Sec}[\alpha]^2+2\,M0\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2+2\,M0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\big(M0^2\,\big(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,t\,\omega]+\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+\mathrm{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\big)}\Big)\Big(4\,M0\,\omega\,\mathrm{Sin}[2\,t\,\omega]+2\,M0\,\omega\,\mathrm{Sin}[2\,\alpha-2\,t\,\omega]-2\,M0\,\omega\,\mathrm{Sin}[2\,\alpha+2\,t\,\omega]+\Big(\sqrt{2}\,\big(2\,M0^2\,\omega\,\mathrm{Cos}[t\,\omega]\,\big(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,t\,\omega]+\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+\mathrm{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]+M0^2\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\,\big(4\,\omega\,\mathrm{Sin}[2\,t\,\omega]+2\,\omega\,\mathrm{Sin}[2\,\alpha-2\,t\,\omega]-2\,\omega\,\mathrm{Sin}[2\,\alpha+2\,t\,\omega]\big)\big)\Big)\Big/\Big(\sqrt{\big(M0^2\,\big(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,t\,\omega]+\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+\mathrm{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\big)}\Big)\Big)\Big)\Big/\Big(16\,\big(1+\mathrm{Cos}[2\,\alpha]\big)\,\sqrt{\big(M0^2\,\big(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,t\,\omega]+\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+\mathrm{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\big)}\,\sqrt{\frac{1}{1+\mathrm{Cos}[2\,\alpha]}\,\big(-2+4\,M0-2\,\mathrm{Cos}[2\,\alpha]-2\,M0\,\mathrm{Cos}[2\,t\,\omega]+M0\,\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\mathrm{Cos}[2\,\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\big(M0^2\,\big(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,t\,\omega]+\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+\mathrm{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2\big)}\big)}\Big)+\Big(\sqrt{\frac{1}{1+\mathrm{Cos}[2\,\alpha]}\,\big(-2+4\,M0-2\,\mathrm{Cos}[2\,\alpha]-2\,M0\,\mathrm{Cos}[2\,t\,\omega]+M0\,\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+$$

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M0 Cos[2 α + 2 t ω] - 2 √2 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
                Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2))
 (-4 M0 ω Cos[t ω] Sec[α]^2 Sin[t ω] - 4 M0 ω Cos[2 α] Cos[t ω] Sec[α]^2
   Sin[t ω] + 4 M0 ω Sin[2 t ω] + 2 M0 ω Sin[2 α - 2 t ω] - 4 M0 ω Cos[α - t ω]
   Sec[α]^2 Sin[α - t ω] - 4 M0 ω Cos[2 α] Cos[α - t ω] Sec[α]^2 Sin[α - t ω] - 2
   M0 ω Sin[2 α + 2 t ω] + (√2 (2 M0^2 ω Cos[t ω] (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
          Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω] + M0^2 Sin[α]^2
        Sin[t ω]^2 (4 ω Sin[2 t ω] + 2 ω Sin[2 α - 2 t ω] - 2 ω Sin[2 α + 2 t ω])))) /
  (√(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[
          2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2))) /
 (8 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω])
   Sin[α]^2 Sin[t ω]^2)) +
(√((1/(1 + Cos[2 α])) (-2 + 4 M0 - 2 Cos[2 α] - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] +
        M0 Cos[2 α + 2 t ω] + 2 √2 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
          Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2)))
 (4 M0 ω Cos[t ω] Sec[α]^2 Sin[t ω] + 4 M0 ω Cos[2 α] Cos[t ω] Sec[α]^2
   Sin[t ω] - 4 M0 ω Sin[2 t ω] - 2 M0 ω Sin[2 α - 2 t ω] + 4 M0 ω Cos[α - t ω]
   Sec[α]^2 Sin[α - t ω] + 4 M0 ω Cos[2 α] Cos[α - t ω] Sec[α]^2 Sin[α - t ω] + 2
   M0 ω Sin[2 α + 2 t ω] + (√2 (2 M0^2 ω Cos[t ω] (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
          Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω] + M0^2 Sin[α]^2
        Sin[t ω]^2 (4 ω Sin[2 t ω] + 2 ω Sin[2 α - 2 t ω] - 2 ω Sin[2 α + 2 t ω])))) /
  (√(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[
          2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2))) /
 (8 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω])
   Sin[α]^2 Sin[t ω]^2)) -
s (-((i M0 (1 + Cos[2 α]) Sec[α] Sin[t ω]^2 √((1/(1 + Cos[2 α])) (-2 + 4 M0 -
          2 Cos[2 α] - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] + M0 Cos[2 α + 2 t ω] -
          2 √2 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] +
              Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2))) Tan[α]) /
  (2 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω])
    Sin[α]^2 Sin[t ω]^2))) + (i M0 (1 + Cos[2 α]) Sec[α] Sin[t ω]^2
  √((1/(1 + Cos[2 α])) (-2 + 4 M0 - 2 Cos[2 α] - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] +
        M0 Cos[2 α + 2 t ω] + 2 √2 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
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                    Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2)))) Tan[α])/
          (2 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω])
                Sin[α]^2 Sin[t ω]^2)))) + 1/M0 Sec[α]^2 (Cos[α - t ω]^2 + Sin[t ω]^2)
     (s (((-4 M0 + 2 M0 Cos[2 t ω] - M0 Cos[2 α - 2 t ω] - M0 Cos[2 α + 2 t ω] + 2 M0
                Cos[α - t ω]^2 Sec[α]^2 + 2 M0 Cos[2 α] Cos[α - t ω]^2 Sec[α]^2 + 2 M0 Sec[α]^2
                Sin[t ω]^2 + 2 M0 Cos[2 α] Sec[α]^2 Sin[t ω]^2 + 2 √2 √(-M0^2 (-6 - 2 Cos[2 α] +
                   2 Cos[2 t ω] - Cos[2 α - 2 t ω] - Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2))
             √(1/(1 + Cos[2 α]) (-2 + 4 M0 - 2 Cos[2 α] - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] +
                 M0 Cos[2 α + 2 t ω] - 2 √2 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
                     Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2))))/
          (8 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω])
                Sin[α]^2 Sin[t ω]^2)) +
         ((4 M0 - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] + M0 Cos[2 α + 2 t ω] - 2 M0
                Cos[α - t ω]^2 Sec[α]^2 - 2 M0 Cos[2 α] Cos[α - t ω]^2 Sec[α]^2 - 2 M0 Sec[α]^2
                Sin[t ω]^2 - 2 M0 Cos[2 α] Sec[α]^2 Sin[t ω]^2 + 2 √2 √(-M0^2 (-6 - 2 Cos[2 α] +
                   2 Cos[2 t ω] - Cos[2 α - 2 t ω] - Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2))
             √(1/(1 + Cos[2 α]) (-2 + 4 M0 - 2 Cos[2 α] - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] +
                 M0 Cos[2 α + 2 t ω] + 2 √2 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
                     Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2))))/
          (8 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω])
                Sin[α]^2 Sin[t ω]^2))) -
      s ((√(1/(1 + Cos[2 α]) (-2 + 4 M0 - 2 Cos[2 α] - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] +
                 M0 Cos[2 α + 2 t ω] - 2 √2 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
                     Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2)))
            (4 M0 - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] + M0 Cos[2 α + 2 t ω] - 2 M0
                Cos[α - t ω]^2 Sec[α]^2 - 2 M0 Cos[2 α] Cos[α - t ω]^2 Sec[α]^2 - 2 M0 Sec[α]^2
                Sin[t ω]^2 - 2 M0 Cos[2 α] Sec[α]^2 Sin[t ω]^2 + 2 √2 √(M0^2 (6 + 2 Cos[2 α] -
                   2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2)))/
          (8 √(M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω])
                Sin[α]^2 Sin[t ω]^2)) +
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$$\left(\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\left(-2+4\,\text{M0}-2\,\text{Cos}[2\alpha]-2\,\text{M0}\,\text{Cos}[2\,t\,\omega]+\text{M0}\,\text{Cos}[2\alpha-2\,t\,\omega]+\right.\right.\right.$$
$$\left.\left.\left.\text{M0}\,\text{Cos}[2\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\left(\text{M0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\,t\,\omega]+\right.\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\left.\text{Cos}[2\alpha-2\,t\,\omega]+\text{Cos}[2\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\right)$$
$$\left(-4\,\text{M0}+2\,\text{M0}\,\text{Cos}[2\,t\,\omega]-\text{M0}\,\text{Cos}[2\alpha-2\,t\,\omega]-\text{M0}\,\text{Cos}[2\alpha+2\,t\,\omega]+2\,\text{M0}\right.$$
$$\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{M0}\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,\text{M0}\,\text{Sec}[\alpha]^2$$
$$\text{Sin}[t\,\omega]^2+2\,\text{M0}\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\left(\text{M0}^2\left(6+2\,\text{Cos}[2\alpha]-\right.\right.}$$
$$\left.\left.\left.\left.2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\alpha-2\,t\,\omega]+\text{Cos}[2\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\Big/$$
$$\left(8\sqrt{\left(\text{M0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\alpha-2\,t\,\omega]+\text{Cos}[2\alpha+2\,t\,\omega]\right)\right.\right.$$
$$\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\Bigg)+$$
$$e^{-i\,\theta}\,r\left(-\left(\left(i\,\text{M0}\left(1+\text{Cos}[2\alpha]\right)\text{Sec}[\alpha]\,\text{Sin}[t\,\omega]^2\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\left(-2+4\,\text{M0}-\right.\right.\right.\right.$$
$$2\,\text{Cos}[2\alpha]-2\,\text{M0}\,\text{Cos}[2\,t\,\omega]+\text{M0}\,\text{Cos}[2\alpha-2\,t\,\omega]+\text{M0}\,\text{Cos}[2\alpha+2\,t\,\omega]-$$
$$2\sqrt{2}\,\sqrt{\left(\text{M0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\alpha-2\,t\,\omega]+\right.\right.}$$
$$\left.\left.\left.\left.\left.\text{Cos}[2\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\text{Tan}[\alpha]\Bigg)\Big/$$
$$\left(2\sqrt{\left(\text{M0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\alpha-2\,t\,\omega]+\text{Cos}[2\alpha+2\,t\,\omega]\right)\right.\right.$$
$$\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\Bigg)+\Bigg(i\,\text{M0}\left(1+\text{Cos}[2\alpha]\right)\text{Sec}[\alpha]\,\text{Sin}[t\,\omega]^2$$
$$\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\left(-2+4\,\text{M0}-2\,\text{Cos}[2\alpha]-2\,\text{M0}\,\text{Cos}[2\,t\,\omega]+\text{M0}\,\text{Cos}[2\alpha-2\,t\,\omega]+\right.\right.}$$
$$\left.\left.\text{M0}\,\text{Cos}[2\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\left(\text{M0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\,t\,\omega]+\right.\right.\right.\right.$$
$$\left.\left.\left.\left.\left.\text{Cos}[2\alpha-2\,t\,\omega]+\text{Cos}[2\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\text{Tan}[\alpha]\Bigg)\Big/$$
$$\left(2\sqrt{\left(\text{M0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\alpha-2\,t\,\omega]+\text{Cos}[2\alpha+2\,t\,\omega]\right)\right.\right.$$
$$\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\Bigg)-$$
$$e^{i\,\theta}\,r\left(-\left(\left(i\,\text{M0}\left(1+\text{Cos}[2\alpha]\right)\text{Sec}[\alpha]\,\text{Sin}[t\,\omega]^2\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\left(-2+4\,\text{M0}-\right.\right.\right.\right.$$
$$2\,\text{Cos}[2\alpha]-2\,\text{M0}\,\text{Cos}[2\,t\,\omega]+\text{M0}\,\text{Cos}[2\alpha-2\,t\,\omega]+\text{M0}\,\text{Cos}[2\alpha+2\,t\,\omega]-$$
$$2\sqrt{2}\,\sqrt{\left(\text{M0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\alpha-2\,t\,\omega]+\right.\right.}$$
$$\left.\left.\left.\left.\left.\text{Cos}[2\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\text{Tan}[\alpha]\Bigg)\Big/$$
$$\left(2\sqrt{\left(\text{M0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\alpha-2\,t\,\omega]+\text{Cos}[2\alpha+2\,t\,\omega]\right)\right.\right.$$
$$\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\Bigg)+\Bigg(i\,\text{M0}\left(1+\text{Cos}[2\alpha]\right)\text{Sec}[\alpha]\,\text{Sin}[t\,\omega]^2$$
$$\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\left(-2+4\,\text{M0}-2\,\text{Cos}[2\alpha]-2\,\text{M0}\,\text{Cos}[2\,t\,\omega]+\text{M0}\,\text{Cos}[2\alpha-2\,t\,\omega]+\right.\right.}$$
$$\left.\left.\text{M0}\,\text{Cos}[2\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\left(\text{M0}^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\,t\,\omega]+\right.\right.\right.\right.$$

$$\left(\text{Cos}[2\alpha - 2t\omega] + \text{Cos}[2\alpha + 2t\omega]\right) \text{Sin}[\alpha]^2 \text{Sin}[t\omega]^2\Big)\Big)\Big) \text{Tan}[\alpha]\Big)\Big/$$
$$\left(2\sqrt{\left(M0^2\left(6 + 2\,\text{Cos}[2\alpha] - 2\,\text{Cos}[2t\omega] + \text{Cos}[2\alpha - 2t\omega] + \text{Cos}[2\alpha + 2t\omega]\right)\right.\right.$$
$$\left.\left.\text{Sin}[\alpha]^2 \text{Sin}[t\omega]^2\right)\right)\Big) -$$
$$i\left(-\left(\left(i\,M0\,\omega\left(1 + \text{Cos}[2\alpha]\right)\text{Cos}[t\omega]\,\text{Sec}[\alpha]\,\text{Sin}[t\omega]\sqrt{\left(\frac{1}{1 + \text{Cos}[2\alpha]}\right.\right.\right.\right.$$
$$\left(-2 + 4\,M0 - 2\,\text{Cos}[2\alpha] - 2\,M0\,\text{Cos}[2t\omega] + M0\,\text{Cos}[2\alpha - 2t\omega] +\right.$$
$$M0\,\text{Cos}[2\alpha + 2t\omega] - 2\sqrt{2}\sqrt{\left(M0^2\left(6 + 2\,\text{Cos}[2\alpha] - 2\,\text{Cos}[2t\omega] +\right.\right.\right.$$
$$\left.\left.\left.\left.\left.\left.\text{Cos}[2\alpha - 2t\omega] + \text{Cos}[2\alpha + 2t\omega]\right)\text{Sin}[\alpha]^2 \text{Sin}[t\omega]^2\right)\right)\right) \text{Tan}[\alpha]\Big)\Big/$$
$$\left(\sqrt{\left(M0^2\left(6 + 2\,\text{Cos}[2\alpha] - 2\,\text{Cos}[2t\omega] + \text{Cos}[2\alpha - 2t\omega] + \text{Cos}[2\alpha + 2t\omega]\right)\right.\right.$$
$$\left.\left.\text{Sin}[\alpha]^2 \text{Sin}[t\omega]^2\right)\right)\Big) +$$
$$\left(i\,M0\,\omega\left(1 + \text{Cos}[2\alpha]\right)\text{Cos}[t\omega]\,\text{Sec}[\alpha]\,\text{Sin}[t\omega]\sqrt{\left(\frac{1}{1 + \text{Cos}[2\alpha]}\right.\right.$$
$$\left(-2 + 4\,M0 - 2\,\text{Cos}[2\alpha] - 2\,M0\,\text{Cos}[2t\omega] + M0\,\text{Cos}[2\alpha - 2t\omega] +\right.$$
$$M0\,\text{Cos}[2\alpha + 2t\omega] + 2\sqrt{2}\sqrt{\left(M0^2\left(6 + 2\,\text{Cos}[2\alpha] - 2\,\text{Cos}[2t\omega] +\right.\right.\right.$$
$$\left.\left.\left.\left.\left.\left.\text{Cos}[2\alpha - 2t\omega] + \text{Cos}[2\alpha + 2t\omega]\right)\text{Sin}[\alpha]^2 \text{Sin}[t\omega]^2\right)\right)\right) \text{Tan}[\alpha]\Big)\Big/$$
$$\left(\sqrt{\left(M0^2\left(6 + 2\,\text{Cos}[2\alpha] - 2\,\text{Cos}[2t\omega] + \text{Cos}[2\alpha - 2t\omega] + \text{Cos}[2\alpha + 2t\omega]\right)\right.\right.$$
$$\left.\left.\text{Sin}[\alpha]^2 \text{Sin}[t\omega]^2\right)\right) + \left(i\,M0\left(1 + \text{Cos}[2\alpha]\right)\text{Sec}[\alpha]\,\text{Sin}[t\omega]^2\right.$$
$$\sqrt{\left(\frac{1}{1 + \text{Cos}[2\alpha]}\left(-2 + 4\,M0 - 2\,\text{Cos}[2\alpha] - 2\,M0\,\text{Cos}[2t\omega] + M0\,\text{Cos}[2\alpha - 2t\omega] +\right.\right.$$
$$M0\,\text{Cos}[2\alpha + 2t\omega] - 2\sqrt{2}\sqrt{\left(M0^2\left(6 + 2\,\text{Cos}[2\alpha] - 2\,\text{Cos}[2t\omega] +\right.\right.\right.$$
$$\left.\left.\left.\left.\left.\text{Cos}[2\alpha - 2t\omega] + \text{Cos}[2\alpha + 2t\omega]\right)\text{Sin}[\alpha]^2 \text{Sin}[t\omega]^2\right)\right)\right)$$
$$\left(2\,M0^2\,\omega\,\text{Cos}[t\omega]\left(6 + 2\,\text{Cos}[2\alpha] - 2\,\text{Cos}[2t\omega] + \text{Cos}[2\alpha - 2t\omega] +\right.\right.$$
$$\left.\left.\text{Cos}[2\alpha + 2t\omega]\right)\text{Sin}[\alpha]^2 \text{Sin}[t\omega] + M0^2\,\text{Sin}[\alpha]^2 \text{Sin}[t\omega]^2\right.$$
$$\left.\left.\left(4\,\omega\,\text{Sin}[2t\omega] + 2\,\omega\,\text{Sin}[2\alpha - 2t\omega] - 2\,\omega\,\text{Sin}[2\alpha + 2t\omega]\right)\right) \text{Tan}[\alpha]\Big)\Big/$$
$$\left(4\left(M0^2\left(6 + 2\,\text{Cos}[2\alpha] - 2\,\text{Cos}[2t\omega] + \text{Cos}[2\alpha - 2t\omega] + \text{Cos}[2\alpha + 2t\omega]\right)\right.\right.$$
$$\left.\left.\text{Sin}[\alpha]^2 \text{Sin}[t\omega]^2\right)^{3/2}\right) - \left(i\,M0\left(1 + \text{Cos}[2\alpha]\right)\text{Sec}[\alpha]\,\text{Sin}[t\omega]^2\right.$$
$$\sqrt{\left(\frac{1}{1 + \text{Cos}[2\alpha]}\left(-2 + 4\,M0 - 2\,\text{Cos}[2\alpha] - 2\,M0\,\text{Cos}[2t\omega] + M0\,\text{Cos}[2\alpha - 2t\omega] +\right.\right.$$
$$M0\,\text{Cos}[2\alpha + 2t\omega] + 2\sqrt{2}\sqrt{\left(M0^2\left(6 + 2\,\text{Cos}[2\alpha] - 2\,\text{Cos}[2t\omega] +\right.\right.\right.$$
$$\left.\left.\left.\left.\left.\text{Cos}[2\alpha - 2t\omega] + \text{Cos}[2\alpha + 2t\omega]\right)\text{Sin}[\alpha]^2 \text{Sin}[t\omega]^2\right)\right)\right)$$
$$\left(2\,M0^2\,\omega\,\text{Cos}[t\omega]\left(6 + 2\,\text{Cos}[2\alpha] - 2\,\text{Cos}[2t\omega] + \text{Cos}[2\alpha - 2t\omega] +\right.\right.$$
$$\left.\left.\text{Cos}[2\alpha + 2t\omega]\right)\text{Sin}[\alpha]^2 \text{Sin}[t\omega] + M0^2\,\text{Sin}[\alpha]^2 \text{Sin}[t\omega]^2\right.$$

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        (4 ω Sin[2 t ω] + 2 ω Sin[2 α - 2 t ω] - 2 ω Sin[2 α + 2 t ω])) Tan[α]) /
     (4 (M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω])
        Sin[α]^2 Sin[t ω]^2)^(3/2)) -
   (i M0 Sec[α] Sin[t ω]^2 (4 M0 ω Sin[2 t ω] + 2 M0 ω Sin[2 α - 2 t ω] - 2 M0 ω
      Sin[2 α + 2 t ω] - (Sqrt[2] (2 M0^2 ω Cos[t ω] (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
            Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω] + M0^2 Sin[α]^2
          Sin[t ω]^2 (4 ω Sin[2 t ω] + 2 ω Sin[2 α - 2 t ω] - 2 ω Sin[2 α + 2 t ω])))) /
     (Sqrt[M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω])
        Sin[α]^2 Sin[t ω]^2])) Tan[α]) /
   (4 Sqrt[M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω])
      Sin[α]^2 Sin[t ω]^2] Sqrt[(1/(1 + Cos[2 α])) (-2 + 4 M0 - 2 Cos[2 α] - 2 M0 Cos[2 t ω] +
        M0 Cos[2 α - 2 t ω] + M0 Cos[2 α + 2 t ω] - 2 Sqrt[2] Sqrt[M0^2 (6 + 2 Cos[2 α] - 2 Cos[
            2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2])]) +
   (i M0 Sec[α] Sin[t ω]^2 (4 M0 ω Sin[2 t ω] + 2 M0 ω Sin[2 α - 2 t ω] - 2 M0 ω
      Sin[2 α + 2 t ω] + (Sqrt[2] (2 M0^2 ω Cos[t ω] (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
            Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω] + M0^2 Sin[α]^2
          Sin[t ω]^2 (4 ω Sin[2 t ω] + 2 ω Sin[2 α - 2 t ω] - 2 ω Sin[2 α + 2 t ω])))) /
     (Sqrt[M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω])
        Sin[α]^2 Sin[t ω]^2])) Tan[α]) /
   (4 Sqrt[M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] + Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω])
      Sin[α]^2 Sin[t ω]^2]
     Sqrt[(1/(1 + Cos[2 α])) (-2 + 4 M0 - 2 Cos[2 α] - 2 M0 Cos[2 t ω] + M0 Cos[2 α - 2 t ω] +
        M0 Cos[2 α + 2 t ω] + 2 Sqrt[2] Sqrt[M0^2 (6 + 2 Cos[2 α] - 2 Cos[2 t ω] +
            Cos[2 α - 2 t ω] + Cos[2 α + 2 t ω]) Sin[α]^2 Sin[t ω]^2])])))

υ22[α_, ω_, t_, M0_, s_, r_, Θ_] := i ((1/M0) Sec[α]^2 (Cos[α + t ω]^2 + Sin[t ω]^2)
   (s ((i Cos[α] Cot[α] Csc[t ω]^2 (-4 M0 + 2 M0 Cos[2 t ω] - M0 Cos[2 α - 2 t ω] - M0
          Cos[2 α + 2 t ω] + 2 M0 Cos[α - t ω]^2 Sec[α]^2 + 2 M0 Cos[2 α] Cos[α - t ω]^2
          Sec[α]^2 + 2 M0 Sec[α]^2 Sin[t ω]^2 + 2 M0 Cos[2 α] Sec[α]^2 Sin[t ω]^2 + 2 Sqrt[2]
          Sqrt[-M0^2 (-6 - 2 Cos[2 α] + 2 Cos[2 t ω] - Cos[2 α - 2 t ω] - Cos[2 α + 2 t ω])
            Sin[α]^2 Sin[t ω]^2]) Sqrt[(1/(1 + Cos[2 α])) (-2 + 4 M0 - 2 Cos[2 α] - 2 M0 Cos[2 t
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$$\omega] + \text{M0}\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{M0}\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\sqrt{2}\,\sqrt{\left(\text{M0}^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Big)$$

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

$$\Big(32\,\text{M0}\,\left(1 + \text{Cos}[2\,\alpha]\right)\,\sqrt{\left(\text{M0}^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Big) -$$

$$\Big(\text{i}\,\text{Cos}[\alpha]\,\text{Cot}[\alpha]\,\text{Csc}[t\,\omega]^2\,\Big(4\,\text{M0} - 2\,\text{M0}\,\text{Cos}[2\,t\,\omega] + \text{M0}\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{M0}\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\,\text{M0}\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,\text{M0}\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha - t\,\omega]^2\,\text{Sec}[\alpha]^2 - 2\,\text{M0}\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 - 2\,\text{M0}\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2 + 2\sqrt{2}\,\sqrt{\left(-\text{M0}^2\,\left(-6 - 2\,\text{Cos}[2\,\alpha] + 2\,\text{Cos}[2\,t\,\omega] - \text{Cos}[2\,\alpha - 2\,t\,\omega] - \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Big)$$

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

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

$$\Big(32\,\text{M0}\,\left(1 + \text{Cos}[2\,\alpha]\right)\,\sqrt{\left(\text{M0}^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Big)\Big) -$$

$$\text{i}\,\Big(-\Big(\Big(\sqrt{\Big(\frac{1}{1 + \text{Cos}[2\,\alpha]}\,\Big(-2 + 4\,\text{M0} - 2\,\text{Cos}[2\,\alpha] - 2\,\text{M0}\,\text{Cos}[2\,t\,\omega] + \text{M0}\,\text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{M0}\,\text{Cos}[2\,\alpha + 2\,t\,\omega] - 2\sqrt{2}\,\sqrt{\left(\text{M0}^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Big)$$

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

$$\Big(16\,\left(\text{M0}^2\,\left(6 + 2\,\text{Cos}[2\,\alpha] - 2\,\text{Cos}[2\,t\,\omega] + \text{Cos}[2\,\alpha - 2\,t\,\omega] + \text{Cos}[2\,\alpha + 2\,t\,\omega]\right)\right)$$

$$\left(\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)^{3/2}\Big)\Big) -$$

$$\Big(\sqrt{\Big(\frac{1}{1+\text{Cos}[2\alpha]}\Big(-2+4\,M0-2\,\text{Cos}[2\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\alpha-2\,t\,\omega]+$$
$$M0\,\text{Cos}[2\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\,t\,\omega]+\right.\right.$$
$$\left.\left.\text{Cos}[2\alpha-2\,t\,\omega]+\text{Cos}[2\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Big)$$
$$\Big(-4\,M0+2\,M0\,\text{Cos}[2\,t\,\omega]-M0\,\text{Cos}[2\alpha-2\,t\,\omega]-M0\,\text{Cos}[2\alpha+2\,t\,\omega]+2\,M0$$
$$\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Sec}[\alpha]^2$$
$$\text{Sin}[t\,\omega]^2+2\,M0\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\alpha]-\right.\right.$$
$$\left.\left.2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\alpha-2\,t\,\omega]+\text{Cos}[2\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Big)$$
$$\Big(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\alpha-2\,t\,\omega]+\right.$$
$$\left.\text{Cos}[2\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]+M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2$$
$$\left(4\,\omega\,\text{Sin}[2\,t\,\omega]+2\,\omega\,\text{Sin}[2\alpha-2\,t\,\omega]-2\,\omega\,\text{Sin}[2\alpha+2\,t\,\omega]\right)\Big)\Big)\Big/$$
$$\Big(16\left(M0^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\alpha-2\,t\,\omega]+\text{Cos}[2\alpha+2\,t\,\omega]\right)\right.$$
$$\left.\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)^{3/2}\Big)+$$
$$\Big(\Big(4\,M0-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\alpha+2\,t\,\omega]-2\,M0$$
$$\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Sec}[\alpha]^2$$
$$\text{Sin}[t\,\omega]^2-2\,M0\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\alpha]-\right.\right.$$
$$\left.\left.2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\alpha-2\,t\,\omega]+\text{Cos}[2\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Big)$$
$$\Big(4\,M0\,\omega\,\text{Sin}[2\,t\,\omega]+2\,M0\,\omega\,\text{Sin}[2\alpha-2\,t\,\omega]-2\,M0\,\omega\,\text{Sin}[2\alpha+2\,t\,\omega]-$$
$$\Big(\sqrt{2}\,\Big(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\alpha-2\,t\,\omega]+\text{Cos}[\right.$$
$$\left.2\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]+M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\left(4\,\omega\,\text{Sin}[2\,t\,\omega]+\right.$$
$$\left.2\,\omega\,\text{Sin}[2\alpha-2\,t\,\omega]-2\,\omega\,\text{Sin}[2\alpha+2\,t\,\omega]\right)\Big)\Big)\Big/\Big(\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\alpha]-\right.\right.$$
$$\left.\left.2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\alpha-2\,t\,\omega]+\text{Cos}[2\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Big)\Big)\Big)\Big/$$
$$\Big(16\left(1+\text{Cos}[2\alpha]\right)\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\alpha-2\,t\,\omega]+\right.\right.$$
$$\left.\left.\text{Cos}[2\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}$$
$$\sqrt{\Big(\frac{1}{1+\text{Cos}[2\alpha]}\Big(-2+4\,M0-2\,\text{Cos}[2\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\alpha-2\,t\,\omega]+$$
$$M0\,\text{Cos}[2\alpha+2\,t\,\omega]-2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\,t\,\omega]+\right.\right.$$
$$\left.\left.\text{Cos}[2\alpha-2\,t\,\omega]+\text{Cos}[2\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Big)\Big)}+$$
$$\Big(\Big(-4\,M0+2\,M0\,\text{Cos}[2\,t\,\omega]-M0\,\text{Cos}[2\alpha-2\,t\,\omega]-M0\,\text{Cos}[2\alpha+2\,t\,\omega]+2\,M0$$
$$\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Cos}[2\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Sec}[\alpha]^2$$
$$\text{Sin}[t\,\omega]^2+2\,M0\,\text{Cos}[2\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\alpha]-\right.\right.$$
$$\left.\left.2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\alpha-2\,t\,\omega]+\text{Cos}[2\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\Big)$$
$$\Big(4\,M0\,\omega\,\text{Sin}[2\,t\,\omega]+2\,M0\,\omega\,\text{Sin}[2\alpha-2\,t\,\omega]-2\,M0\,\omega\,\text{Sin}[2\alpha+2\,t\,\omega]+$$
$$\Big(\sqrt{2}\,\Big(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\alpha-2\,t\,\omega]+\right.$$
$$\left.\text{Cos}[2\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]+M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2$$

$$\left(4\,\omega\,\text{Sin}[2\,t\,\omega]+2\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-2\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]\right)\Big)\Big)\Big/$$
$$\left(\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[\right.\right.\right.$$
$$\left.\left.\left.2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\Big)\Big)\Big/$$
$$\left(16\,\left(1+\text{Cos}[2\,\alpha]\right)\,\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.\right.$$
$$\left.\left.\left.\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\,\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\,\left(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.\right.$$
$$M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\,\sqrt{2}\,\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\right.\right.\right.$$
$$\left.\left.\left.\left.\left.\left.\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)}\right)+$$
$$\left(\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\,\left(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.\right.$$
$$M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\,\sqrt{2}\,\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\right.\right.\right.$$
$$\left.\left.\left.\left.\left.\left.\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)}\right)$$
$$\left(-4\,M0\,\omega\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]-4\,M0\,\omega\,\text{Cos}[2\,\alpha]\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2\right.$$
$$\text{Sin}[t\,\omega]+4\,M0\,\omega\,\text{Sin}[2\,t\,\omega]+2\,M0\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-4\,M0\,\omega\,\text{Cos}[\alpha-t\,\omega]$$
$$\text{Sec}[\alpha]^2\,\text{Sin}[\alpha-t\,\omega]-4\,M0\,\omega\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[\alpha-t\,\omega]-2$$
$$M0\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]+\left(\sqrt{2}\,\left(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\right.\right.\right.$$
$$\left.\left.\left.\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]+M0^2\,\text{Sin}[\alpha]^2\right.\right.$$
$$\left.\left.\text{Sin}[t\,\omega]^2\,\left(4\,\omega\,\text{Sin}[2\,t\,\omega]+2\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-2\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]\right)\right)\right)\Big/$$
$$\left(\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[\right.\right.\right.\right.$$
$$\left.\left.\left.\left.2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\Big)\Big)\Big/$$
$$\left(8\,\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\right.}\right.$$
$$\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)+$$
$$\left(\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\,\left(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.\right.$$
$$M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\,\sqrt{2}\,\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\right.\right.\right.$$
$$\left.\left.\left.\left.\left.\left.\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)}\right)$$
$$\left(4\,M0\,\omega\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]+4\,M0\,\omega\,\text{Cos}[2\,\alpha]\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]^2\right.$$
$$\text{Sin}[t\,\omega]-4\,M0\,\omega\,\text{Sin}[2\,t\,\omega]-2\,M0\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]+4\,M0\,\omega\,\text{Cos}[\alpha-t\,\omega]$$
$$\text{Sec}[\alpha]^2\,\text{Sin}[\alpha-t\,\omega]+4\,M0\,\omega\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]\,\text{Sec}[\alpha]^2\,\text{Sin}[\alpha-t\,\omega]+2$$
$$M0\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]+\left(\sqrt{2}\,\left(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\right.\right.\right.$$
$$\left.\left.\left.\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]+M0^2\,\text{Sin}[\alpha]^2\right.\right.$$
$$\left.\left.\text{Sin}[t\,\omega]^2\,\left(4\,\omega\,\text{Sin}[2\,t\,\omega]+2\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-2\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]\right)\right)\right)\Big/$$
$$\left(\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[\right.\right.\right.\right.$$
$$\left.\left.\left.\left.2\,\alpha+2\,t\,\omega]\right)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\Big)\Big)\Big/$$
$$\left(8\,\sqrt{\left(M0^2\,\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\right.}\right.$$

$$\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2)))\;-$$

$$s\,(-(((i\,M0\,(1+\mathrm{Cos}[2\,\alpha])\,\mathrm{Sec}[\alpha]\,\mathrm{Sin}[t\,\omega]^2\sqrt{(\frac{1}{1+\mathrm{Cos}[2\,\alpha]}\,(-2+4\,M0-}$$

$$2\,\mathrm{Cos}[2\,\alpha]-2\,M0\,\mathrm{Cos}[2\,t\,\omega]+M0\,\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\mathrm{Cos}[2\,\alpha+2\,t\,\omega]-$$

$$2\sqrt{2}\,\sqrt{(M0^2\,(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,t\,\omega]+\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+}$$

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

$$(2\sqrt{(M0^2\,(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,t\,\omega]+\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+\mathrm{Cos}[2\,\alpha+2\,t\,\omega])}$$

$$\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2)))+(i\,M0\,(1+\mathrm{Cos}[2\,\alpha])\,\mathrm{Sec}[\alpha]\,\mathrm{Sin}[t\,\omega]^2$$

$$\sqrt{(\frac{1}{1+\mathrm{Cos}[2\,\alpha]}\,(-2+4\,M0-2\,\mathrm{Cos}[2\,\alpha]-2\,M0\,\mathrm{Cos}[2\,t\,\omega]+M0\,\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+}$$

$$M0\,\mathrm{Cos}[2\,\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{(M0^2\,(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,t\,\omega]+}$$

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

$$(2\sqrt{(M0^2\,(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,t\,\omega]+\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+\mathrm{Cos}[2\,\alpha+2\,t\,\omega])}$$

$$\mathrm{Sin}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2))))+\frac{1}{M0}\,2\,i\,\mathrm{Sec}[\alpha]\,\mathrm{Sin}[t\,\omega]^2\,\mathrm{Tan}[\alpha]$$

$$(s\,(((-4\,M0+2\,M0\,\mathrm{Cos}[2\,t\,\omega]-M0\,\mathrm{Cos}[2\,\alpha-2\,t\,\omega]-M0\,\mathrm{Cos}[2\,\alpha+2\,t\,\omega]+2\,M0$$

$$\mathrm{Cos}[\alpha-t\,\omega]^2\,\mathrm{Sec}[\alpha]^2+2\,M0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Cos}[\alpha-t\,\omega]^2\,\mathrm{Sec}[\alpha]^2+2\,M0\,\mathrm{Sec}[\alpha]^2$$

$$\mathrm{Sin}[t\,\omega]^2+2\,M0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{(-M0^2\,(-6-2\,\mathrm{Cos}[2\,\alpha]+}$$

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

$$\sqrt{(\frac{1}{1+\mathrm{Cos}[2\,\alpha]}\,(-2+4\,M0-2\,\mathrm{Cos}[2\,\alpha]-2\,M0\,\mathrm{Cos}[2\,t\,\omega]+M0\,\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+}$$

$$M0\,\mathrm{Cos}[2\,\alpha+2\,t\,\omega]-2\sqrt{2}\,\sqrt{(M0^2\,(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,t\,\omega]+}$$

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

$$(8\sqrt{(M0^2\,(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,t\,\omega]+\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+\mathrm{Cos}[2\,\alpha+2\,t\,\omega])}$$

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

$$((4\,M0-2\,M0\,\mathrm{Cos}[2\,t\,\omega]+M0\,\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\mathrm{Cos}[2\,\alpha+2\,t\,\omega]-2\,M0$$

$$\mathrm{Cos}[\alpha-t\,\omega]^2\,\mathrm{Sec}[\alpha]^2-2\,M0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Cos}[\alpha-t\,\omega]^2\,\mathrm{Sec}[\alpha]^2-2\,M0\,\mathrm{Sec}[\alpha]^2$$

$$\mathrm{Sin}[t\,\omega]^2-2\,M0\,\mathrm{Cos}[2\,\alpha]\,\mathrm{Sec}[\alpha]^2\,\mathrm{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{(-M0^2\,(-6-2\,\mathrm{Cos}[2\,\alpha]+}$$

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

$$\sqrt{(\frac{1}{1+\mathrm{Cos}[2\,\alpha]}\,(-2+4\,M0-2\,\mathrm{Cos}[2\,\alpha]-2\,M0\,\mathrm{Cos}[2\,t\,\omega]+M0\,\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+}$$

$$M0\,\mathrm{Cos}[2\,\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{(M0^2\,(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,t\,\omega]+}$$

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

$$(8\sqrt{(M0^2\,(6+2\,\mathrm{Cos}[2\,\alpha]-2\,\mathrm{Cos}[2\,t\,\omega]+\mathrm{Cos}[2\,\alpha-2\,t\,\omega]+\mathrm{Cos}[2\,\alpha+2\,t\,\omega])}$$

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

$$s\left(\left(\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.\right.\right.$$
$$M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\right.\right.\right.$$
$$\left.\left.\left.\left.\left.\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\right)$$
$$\left(4\,M0-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\,M0\right.$$
$$\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2-2\,M0\,\text{Sec}[\alpha]^2$$
$$\text{Sin}[t\,\omega]^2-2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-\right.\right.}$$
$$\left.\left.\left.\left.2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\Big)\Big/$$
$$\left(8\,\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\right.}\right.$$
$$\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)+$$
$$\left(\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.\right.$$
$$M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\right.\right.\right.$$
$$\left.\left.\left.\left.\left.\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\right)$$
$$\left(-4\,M0+2\,M0\,\text{Cos}[2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]-M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\,M0\right.$$
$$\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Cos}[\alpha-t\,\omega]^2\,\text{Sec}[\alpha]^2+2\,M0\,\text{Sec}[\alpha]^2$$
$$\text{Sin}[t\,\omega]^2+2\,M0\,\text{Cos}[2\,\alpha]\,\text{Sec}[\alpha]^2\,\text{Sin}[t\,\omega]^2+2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-\right.\right.}$$
$$\left.\left.\left.\left.2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\Big)\Big/$$
$$\left(8\,\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\right.}\right.$$
$$\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\Big)+$$

$$e^{-i\,\theta}\,r\left(-\left(\left(i\,M0\left(1+\text{Cos}[2\,\alpha]\right)\text{Sec}[\alpha]\,\text{Sin}[t\,\omega]^2\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,M0-\right.\right.\right.\right.$$
$$2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-$$
$$2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.}$$
$$\left.\left.\left.\left.\left.\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\right)\text{Tan}[\alpha]\Big)\Big/$$
$$\left(2\,\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\right.}\right.$$
$$\left.\left.\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\Big)+\Big(i\,M0\left(1+\text{Cos}[2\,\alpha]\right)\text{Sec}[\alpha]\,\text{Sin}[t\,\omega]^2$$
$$\sqrt{\left(\frac{1}{1+\text{Cos}[2\,\alpha]}\left(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+\right.\right.}$$
$$M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\right.\right.}$$
$$\left.\left.\left.\left.\left.\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)\right)\right)\text{Tan}[\alpha]\Big)\Big/$$
$$\left(2\,\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\right)\right.}\right.$$

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

$$e^{i\,\theta}\,r\Big(-\Big(\Big(\Big(i\,M0\,(1+\text{Cos}[2\,\alpha])\,\text{Sec}[\alpha]\,\text{Sin}[t\,\omega]^2\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\,\big(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\sqrt{2}\,\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)\big)\,\text{Tan}[\alpha]\Big)\Big/\Big(2\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\Big)\Big) + \Big(i\,M0\,(1+\text{Cos}[2\,\alpha])\,\text{Sec}[\alpha]\,\text{Sin}[t\,\omega]^2\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\,\big(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)\big)\,\text{Tan}[\alpha]\Big)\Big/\Big(2\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\Big)\Big) -$$

$$i\Big(-\Big(\Big(i\,M0\,\omega\,(1+\text{Cos}[2\,\alpha])\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]\,\text{Sin}[t\,\omega]\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\,\big(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\sqrt{2}\,\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)\big)\,\text{Tan}[\alpha]\Big)\Big/\Big(\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\Big)\Big) +$$

$$\Big(i\,M0\,\omega\,(1+\text{Cos}[2\,\alpha])\,\text{Cos}[t\,\omega]\,\text{Sec}[\alpha]\,\text{Sin}[t\,\omega]\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\,\big(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)\big)\,\text{Tan}[\alpha]\Big)\Big/\Big(\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\Big)\Big) + \Big(i\,M0\,(1+\text{Cos}[2\,\alpha])\,\text{Sec}[\alpha]\,\text{Sin}[t\,\omega]^2\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\,\big(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\sqrt{2}\,\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)\big)\Big)$$

$$\Big(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]+M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\,\big(4\,\omega\,\text{Sin}[2\,t\,\omega]+2\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-2\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]\big)\big)\,\text{Tan}[\alpha]\Big)\Big/$$

$$\Big(4\,\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)^{3/2}\Big)-\Big(\mathrm{i}\,M0\,\big(1+\text{Cos}[2\,\alpha]\big)\,\text{Sec}[\alpha]\,\text{Sin}[t\,\omega]^2$$

$$\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\,\big(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]+2\,\sqrt{2}\,\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\big)\Big)}$$

$$\Big(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]+M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\,\big(4\,\omega\,\text{Sin}[2\,t\,\omega]+2\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-2\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]\big)\big)\,\text{Tan}[\alpha]\Big)\Big/$$

$$\Big(4\,\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)^{3/2}\Big)-$$

$$\Big(\mathrm{i}\,M0\,\text{Sec}[\alpha]\,\text{Sin}[t\,\omega]^2\,\big(4\,M0\,\omega\,\text{Sin}[2\,t\,\omega]+2\,M0\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-2\,M0\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]-\Big(\sqrt{2}\,\Big(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]+M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\,\big(4\,\omega\,\text{Sin}[2\,t\,\omega]+2\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-2\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]\big)\Big)\Big)\Big/\Big(\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\Big)\,\text{Tan}[\alpha]\Big)\Big/$$

$$\Big(4\,\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\,\sqrt{\Big(\frac{1}{1+\text{Cos}[2\,\alpha]}\,\big(-2+4\,M0-2\,\text{Cos}[2\,\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\,\alpha+2\,t\,\omega]-2\,\sqrt{2}\,\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\big)\Big)}\Big)+$$

$$\Big(\mathrm{i}\,M0\,\text{Sec}[\alpha]\,\text{Sin}[t\,\omega]^2\,\big(4\,M0\,\omega\,\text{Sin}[2\,t\,\omega]+2\,M0\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-2\,M0\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]+\Big(\sqrt{2}\,\Big(2\,M0^2\,\omega\,\text{Cos}[t\,\omega]\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]+M0^2\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\,\big(4\,\omega\,\text{Sin}[2\,t\,\omega]+2\,\omega\,\text{Sin}[2\,\alpha-2\,t\,\omega]-2\,\omega\,\text{Sin}[2\,\alpha+2\,t\,\omega]\big)\Big)\Big)\Big/\Big(\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}\Big)\,\text{Tan}[\alpha]\Big)\Big/$$

$$\Big(4\,\sqrt{\big(M0^2\,\big(6+2\,\text{Cos}[2\,\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\,\alpha-2\,t\,\omega]+\text{Cos}[2\,\alpha+2\,t\,\omega]\big)\,\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\big)}$$

$$\sqrt{\left(\frac{1}{1+\text{Cos}[2\alpha]}\left(-2+4\,M0-2\,\text{Cos}[2\alpha]-2\,M0\,\text{Cos}[2\,t\,\omega]+M0\,\text{Cos}[2\alpha-2\,t\,\omega]+M0\,\text{Cos}[2\alpha+2\,t\,\omega]+2\sqrt{2}\,\sqrt{\left(M0^2\left(6+2\,\text{Cos}[2\alpha]-2\,\text{Cos}[2\,t\,\omega]+\text{Cos}[2\alpha-2\,t\,\omega]+\text{Cos}[2\alpha+2\,t\,\omega]\right)\text{Sin}[\alpha]^2\,\text{Sin}[t\,\omega]^2\right)}\right)\right)}$$

```
υMatrix[α_, ω_, t_, M0_, s_, r_, Θ_] := {{υ11[α, ω, t, M0, s, r, Θ],
   υ12[α, ω, t, M0, s, r, Θ]}, {υ21[α, ω, t, M0, s, r, Θ], υ22[α, ω, t, M0, s, r, Θ]}}
Unit = {{1, 0}, {0, 1}}
σy = {{0, -I}, {I, 0}}
```

Out[33]= {{1, 0}, {0, 1}}

Out[34]= {{0, -i}, {i, 0}}

In[35]:=
```
Htotal[α_, ω_, t_, M0_, s_, r_, Θ_] := KroneckerProduct[Unit, Σ[α, ω, t, M0, s, r, Θ]] +
  KroneckerProduct[σy, υMatrix[α, ω, t, M0, s, r, Θ]]
(*M0=15.338*)
M0 = 15.338
r = 1
s = 1
Θ = π / 2 - 0.5
ω = √(s^2 - r^2 Sin[Θ]^2)
α = ArcSin[(r / s) * Sin[Θ]]
τNew = (π / 2) / ω
Min[Table[Eigenvalues[MMatrix[α, ω, (k / 1000) * τNew, M0]], {k, 1, 1000}]]
```

Out[36]= 15.338

Out[37]= 1

Out[38]= 1

Out[39]= 1.0708

Out[40]= 0.479426

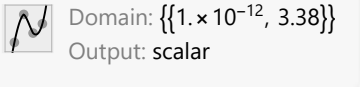
Out[41]= 1.0708

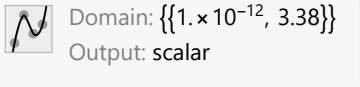
Out[42]= 3.27641

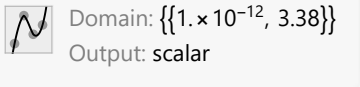
Out[43]= 1.00003

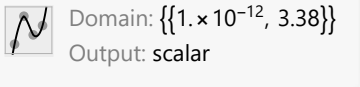
In[44]:=
```
Eqn1[t_] := Transpose[
    -I * Htotal[α, ω, t, M0, s, r, Θ].Transpose[{{ψ1[t], ψ2[t], ψ3[t], ψ4[t]}}]][[1]][[1]]
Eqn2[t_] := Transpose[-I * Htotal[α, ω, t, M0, s, r, Θ].
      Transpose[{{ψ1[t], ψ2[t], ψ3[t], ψ4[t]}}]][[1]][[2]]
Eqn3[t_] := Transpose[-I * Htotal[α, ω, t, M0, s, r, Θ].
      Transpose[{{ψ1[t], ψ2[t], ψ3[t], ψ4[t]}}]][[1]][[3]]
Eqn4[t_] := Transpose[-I * Htotal[α, ω, t, M0, s, r, Θ].
      Transpose[{{ψ1[t], ψ2[t], ψ3[t], ψ4[t]}}]][[1]][[4]]
```

In[48]:=
```
y1 = NDSolve[{ψ1'[t] == Eqn1[t], ψ2'[t] == Eqn2[t], ψ3'[t] == Eqn3[t],
    ψ4'[t] == Eqn4[t], ψ1[10^-12] == 1, ψ2[10^-12] == 0, ψ3[10^-12] == 0, ψ4[10^-12] == 0},
   {ψ1, ψ2, ψ3, ψ4}, {t, 10^-12, τNew + 0.1}, MaxSteps → 2 * 10^6, AccuracyGoal → Automatic,
   PrecisionGoal → 30, WorkingPrecision → MachinePrecision, Method → "Extrapolation"]
```

Out[48]=
```
{{ψ1 → InterpolatingFunction[ 

],
 ψ2 → InterpolatingFunction[ 

],
 ψ3 → InterpolatingFunction[ 

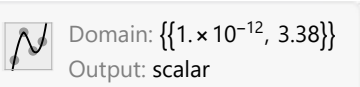
],
 ψ4 → InterpolatingFunction[ 

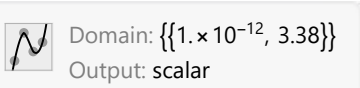
]}}
```

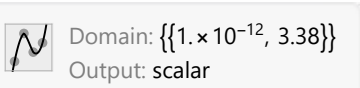
In[49]:=
```
OneOne = Evaluate[{ψ1[τNew], ψ2[τNew], ψ3[τNew], ψ4[τNew]} /. y1]
```

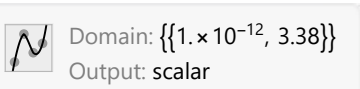
Out[49]=
```
{{-3.14962 × 10^-7 + 0.35981 i, -0.621633 + 2.30386 × 10^-7 i,
  -8.43465 × 10^-8 + 0.578441 i, 0.386683 + 6.09142 × 10^-8 i}}
```

In[50]:=
```
y2 = NDSolve[{ψ1'[t] == Eqn1[t], ψ2'[t] == Eqn2[t], ψ3'[t] == Eqn3[t],
    ψ4'[t] == Eqn4[t], ψ1[10^-12] == 0, ψ2[10^-12] == 1, ψ3[10^-12] == 0, ψ4[10^-12] == 0},
   {ψ1, ψ2, ψ3, ψ4}, {t, 10^-12, τNew + 0.1}, MaxSteps → 2 * 10^6, AccuracyGoal → Automatic,
   PrecisionGoal → 50, WorkingPrecision → MachinePrecision, Method → "Extrapolation"]
```

Out[50]=
```
{{ψ1 → InterpolatingFunction[ 

],
 ψ2 → InterpolatingFunction[ 

],
 ψ3 → InterpolatingFunction[ 

],
 ψ4 → InterpolatingFunction[ 

]}}
```

In[51]:=
```
OneTwo = Evaluate[{ψ1[τNew], ψ2[τNew], ψ3[τNew], ψ4[τNew]} /. y2]
```

Out[51]=
```
{{-0.621129 + 2.91149 × 10^-7 i, 2.88145 × 10^-7 - 0.360635 i,
  0.386602 + 7.72715 × 10^-8 i, 7.61814 × 10^-8 - 0.578515 i}}
```

In[52]:=
```
y3 = NDSolve[{ψ1'[t] == Eqn1[t], ψ2'[t] == Eqn2[t], ψ3'[t] == Eqn3[t],
   ψ4'[t] == Eqn4[t], ψ1[10^-12] == 0, ψ2[10^-12] == 0, ψ3[10^-12] == 1, ψ4[10^-12] == 0},
  {ψ1, ψ2, ψ3, ψ4}, {t, 10^-12, τNew + 0.1}, MaxSteps → 2 * 10^6, AccuracyGoal → Automatic,
  PrecisionGoal → 50, WorkingPrecision → MachinePrecision, Method → "Extrapolation"]
```

Out[52]=
```
{{ψ1 → InterpolatingFunction[  ],
  ψ2 → InterpolatingFunction[  ],
  ψ3 → InterpolatingFunction[  ],
  ψ4 → InterpolatingFunction[  ]}}
```


In[53]:=
```
TwoOne = Evaluate[{ψ1[τNew], ψ2[τNew], ψ3[τNew], ψ4[τNew]} /. y3]
```

Out[53]=
```
{{8.43465 × 10^-8 - 0.578441 i, -0.386683 - 6.09142 × 10^-8 i,
  -3.14962 × 10^-7 + 0.35981 i, -0.621633 + 2.30386 × 10^-7 i}}
```

In[54]:=
```
y4 = NDSolve[{ψ1'[t] == Eqn1[t], ψ2'[t] == Eqn2[t], ψ3'[t] == Eqn3[t],
   ψ4'[t] == Eqn4[t], ψ1[10^-12] == 0, ψ2[10^-12] == 0, ψ3[10^-12] == 0, ψ4[10^-12] == 1},
  {ψ1, ψ2, ψ3, ψ4}, {t, 10^-12, τNew + 0.1}, MaxSteps → 2 * 10^6, AccuracyGoal → Automatic,
  PrecisionGoal → 50, WorkingPrecision → MachinePrecision, Method → "Extrapolation"]
```

Out[54]=
```
{{ψ1 → InterpolatingFunction[  ],
  ψ2 → InterpolatingFunction[  ],
  ψ3 → InterpolatingFunction[  ],
  ψ4 → InterpolatingFunction[  ]}}
```


In[55]:=
```
TwoTwo = Evaluate[{ψ1[τNew], ψ2[τNew], ψ3[τNew], ψ4[τNew]} /. y4]
```

Out[55]=
```
{{-0.386602 - 7.72715 × 10^-8 i, -7.61814 × 10^-8 + 0.578515 i,
  -0.621129 + 2.91149 × 10^-7 i, 2.88145 × 10^-7 - 0.360635 i}}
```

In[56]:=
```
OneOneStart = KroneckerProduct[{{1, 0}}, {{1, 0}}]
OneTwoStart = KroneckerProduct[{{1, 0}}, {{0, 1}}]
TwoOneStart = KroneckerProduct[{{0, 1}}, {{1, 0}}]
TwoTwoStart = KroneckerProduct[{{0, 1}}, {{0, 1}}]
```

Out[56]= $\{\{1, 0, 0, 0\}\}$

Out[57]= $\{\{0, 1, 0, 0\}\}$

Out[58]= $\{\{0, 0, 1, 0\}\}$

Out[59]= $\{\{0, 0, 0, 1\}\}$

In[60]:=
```
U = Transpose[OneOneStart].OneOne + Transpose[OneTwoStart].OneTwo +
  Transpose[TwoOneStart].TwoOne + Transpose[TwoTwoStart].TwoTwo
```

Out[60]= $\{\{-3.14962 \times 10^{-7} + 0.35981\,i, -0.621633 + 2.30386 \times 10^{-7}\,i, -8.43465 \times 10^{-8} + 0.578441\,i, 0.386683 + 6.09142 \times 10^{-8}\,i\}, \{-0.621129 + 2.91149 \times 10^{-7}\,i, 2.88145 \times 10^{-7} - 0.360635\,i, 0.386602 + 7.72715 \times 10^{-8}\,i, 7.61814 \times 10^{-8} - 0.578515\,i\}, \{8.43465 \times 10^{-8} - 0.578441\,i, -0.386683 - 6.09142 \times 10^{-8}\,i, -3.14962 \times 10^{-7} + 0.35981\,i, -0.621633 + 2.30386 \times 10^{-7}\,i\}, \{-0.386602 - 7.72715 \times 10^{-8}\,i, -7.61814 \times 10^{-8} + 0.578515\,i, -0.621129 + 2.91149 \times 10^{-7}\,i, 2.88145 \times 10^{-7} - 0.360635\,i\}\}$

In[76]:=
```
TeXForm[MatrixForm[Round[U, 0.00001]]]
```

Out[76]//TeXForm=
```
\left(
\begin{array}{cccc}
 0.\, +0.35981 i & -0.62163 & 0.\, +0.57844 i & 0.38668 \\
 -0.62113 & 0.\, -0.36064 i & 0.3866 & 0.\, -0.57852 i \\
 0.\, -0.57844 i & -0.38668 & 0.\, +0.35981 i & -0.62163 \\
 -0.3866 & 0.\, +0.57852 i & -0.62113 & 0.\, -0.36064 i \\
\end{array}
\right)
```

In[62]:=
```
MatrixForm[U.Conjugate[Transpose[U]]]
```

Out[62]//MatrixForm=

$$\begin{pmatrix} 1.00001 + 0.\,i & 4.44917 \times 10^{-8} - 0.000342504\,i & 0. - 5.57582 \times 10^{-7}\,i & 5. \\ 4.44917 \times 10^{-8} + 0.000342504\,i & 1. + 0.\,i & -5.84857 \times 10^{-7} + 0.000686019\,i & \\ 0. + 5.57582 \times 10^{-7}\,i & -5.84857 \times 10^{-7} - 0.000686019\,i & 1.00001 + 0.\,i & 4. \\ 5.84857 \times 10^{-7} - 0.000686019\,i & 0. + 5.99554 \times 10^{-7}\,i & 4.44917 \times 10^{-8} + 0.000342504\,i & \end{pmatrix}$$

In[63]:=
```
(*In ideal life, it has to be a unit matrix*)
```

In[64]:=

In[65]:=

In[66]:=

In[67]:=

In[68]:=

In[69]:=

In[70]:=

In[71]:=

In[72]:=

In[73]:=

In[74]:=

In[75]:=