

$$\begin{aligned}
\phi_{2, x, R} = & \frac{\left(16 - \frac{3960}{\text{Deltax} \left(-5 \alpha + 4 \Sigma_{rem, 0}\right)} + \frac{504}{\text{Deltax} \Sigma_{rem, 0}}\right) j_{1, out, x, L}}{7 \text{Deltax}^2 \Sigma_t^2} \\
& + \frac{\left(-\frac{3960}{\text{Deltax} \left(-5 \alpha + 4 \Sigma_{rem, 0}\right)} + \frac{504}{\text{Deltax} \Sigma_{rem, 0}}\right) j_{1, out, z, R}}{7 \text{Deltax}^2 \Sigma_t^2} + \frac{16 j h_{3, out, x, L}}{7 \text{Deltax}^2 \Sigma_t^2} - \frac{1296 \bar{\phi}_{2, x, 2}}{\text{Deltax}^2 \Sigma_t^2} \\
& + \frac{16 j h_{3, inc, x, L}}{7 \text{Deltax}^2 \Sigma_t^2} - \frac{1944 \bar{\phi}_{2, x, 1}}{7 \text{Deltax}^2 \Sigma_t^2} - \frac{144 \bar{\Phi}_{0, x, 1}}{\text{Deltax}^2 \Sigma_t^2} - \frac{672 \bar{\Phi}_{0, x, 2}}{\text{Deltax}^2 \Sigma_t^2} \\
& + \frac{\left(\frac{3960}{\text{Deltax} \left(-5 \alpha + 4 \Sigma_{rem, 0}\right)} - \frac{504}{\text{Deltax} \Sigma_{rem, 0}}\right) j_{1, inc, y, R}}{7 \text{Deltax}^2 \Sigma_t^2} \\
& + \frac{\left(16 + \frac{3960}{\text{Deltax} \left(-5 \alpha + 4 \Sigma_{rem, 0}\right)} - \frac{504}{\text{Deltax} \Sigma_{rem, 0}}\right) j_{1, inc, x, L}}{7 \text{Deltax}^2 \Sigma_t^2} \\
& + \frac{\left(-\frac{3960}{\text{Deltax} \left(-5 \alpha + 4 \Sigma_{rem, 0}\right)} + \frac{504}{\text{Deltax} \Sigma_{rem, 0}}\right) j_{1, out, z, L}}{7 \text{Deltax}^2 \Sigma_t^2} \\
& + \frac{498 \phi_{2, x, L} + 1482 \phi_{2, x, R} - \frac{504 S_0}{\Sigma_{rem, 0}}}{7 \text{Deltax}^2 \Sigma_t^2} - \frac{9900 J_{3, z, L}}{7 \text{Deltax}^2 \Sigma_t^2 \left(-5 \alpha + 4 \Sigma_{rem, 0}\right) \text{Deltax}} \\
& - \frac{9900 J_{3, y, R}}{7 \text{Deltax}^2 \Sigma_t^2 \left(-5 \alpha + 4 \Sigma_{rem, 0}\right) \text{Deltax}} - \frac{9900 J_{3, y, L}}{7 \text{Deltax}^2 \Sigma_t^2 \left(-5 \alpha + 4 \Sigma_{rem, 0}\right) \text{Deltax}} \\
& - \frac{9900 J_{3, z, R}}{7 \text{Deltax}^2 \Sigma_t^2 \left(-5 \alpha + 4 \Sigma_{rem, 0}\right) \text{Deltax}} \\
& + \frac{\left(-\frac{3960}{\text{Deltax} \left(-5 \alpha + 4 \Sigma_{rem, 0}\right)} + \frac{504}{\text{Deltax} \Sigma_{rem, 0}}\right) j_{1, out, y, L}}{7 \text{Deltax}^2 \Sigma_t^2} \\
& + \frac{\left(\frac{3960}{\text{Deltax} \left(-5 \alpha + 4 \Sigma_{rem, 0}\right)} - \frac{504}{\text{Deltax} \Sigma_{rem, 0}}\right) j_{1, inc, y, L}}{7 \text{Deltax}^2 \Sigma_t^2} \\
& + \frac{\left(\frac{3960}{\text{Deltax} \left(-5 \alpha + 4 \Sigma_{rem, 0}\right)} - \frac{504}{\text{Deltax} \Sigma_{rem, 0}}\right) j_{1, inc, z, R}}{7 \text{Deltax}^2 \Sigma_t^2} - \frac{9900 J_{3, x, L}}{7 \text{Deltax}^3 \Sigma_t^2 \left(-5 \alpha + 4 \Sigma_{rem, 0}\right)}
\end{aligned}$$

$$\begin{aligned}
& - \frac{9900 J_{3, x, R}}{7 \text{Deltax}^3 \Sigma_t^2 \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} \\
& + \frac{\left(-\frac{3960}{\text{Deltay} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} + \frac{504}{\text{Deltay} \Sigma_{rem, 0}} \right) j_{1, out, y, R}}{7 \text{Deltax}^2 \Sigma_t^2} \\
& + \frac{\left(-\frac{112 \text{Deltax}^2 \Sigma_t^2}{15} + 1328 + \frac{3960}{\text{Deltax} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} - \frac{504}{\text{Deltax} \Sigma_{rem, 0}} \right) j_{1, inc, x, R}}{7 \text{Deltax}^2 \Sigma_t^2} \\
& + \frac{\left(\frac{3960}{\text{Deltaz} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} - \frac{504}{\text{Deltaz} \Sigma_{rem, 0}} \right) j_{1, inc, z, L}}{7 \text{Deltax}^2 \Sigma_t^2} \\
& + \frac{\left(\frac{112 \text{Deltax}^2 \Sigma_t^2}{15} + 1328 \right) jh_{3, out, x, R}}{7 \text{Deltax}^2 \Sigma_t^2} + \frac{\left(\frac{112 \text{Deltax}^2 \Sigma_t^2}{15} + 1328 \right) jh_{3, inc, x, R}}{7 \text{Deltax}^2 \Sigma_t^2} \\
& + \frac{\left(-\frac{112 \text{Deltax}^2 \Sigma_t^2}{15} + 1328 - \frac{3960}{\text{Deltax} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} + \frac{504}{\text{Deltax} \Sigma_{rem, 0}} \right) j_{1, out, x, R}}{7 \text{Deltax}^2 \Sigma_t^2} \\
& + \frac{\left(-\frac{3960}{\text{Deltaz} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} + \frac{504}{\text{Deltaz} \Sigma_{rem, 0}} \right) j_{1, out, z, R}}{7 \text{Deltax}^2 \Sigma_t^2} \\
\phi_{2, x, L} = & - \frac{\left(-\frac{112 \text{Deltax}^2 \Sigma_t^2}{15} + 1328 - \frac{3960}{\text{Deltax} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} + \frac{504}{\text{Deltax} \Sigma_{rem, 0}} \right) j_{1, out, x, L}}{7 \text{Deltax}^2 \Sigma_t^2} \\
& + \frac{\left(-\frac{112 \text{Deltax}^2 \Sigma_t^2}{15} + 1328 - \frac{3960}{\text{Deltax} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} + \frac{504}{\text{Deltax} \Sigma_{rem, 0}} \right) j_{1, out, x, L}}{7 \text{Deltax}^2 \Sigma_t^2} \\
& - \frac{1296 \bar{\phi}_{2, x, 2}}{\text{Deltax}^2 \Sigma_t^2} + \frac{16 jh_{3, out, x, R}}{7 \text{Deltax}^2 \Sigma_t^2} + \frac{1944 \bar{\phi}_{2, x, 1}}{7 \text{Deltax}^2 \Sigma_t^2} + \frac{16 jh_{3, inc, x, R}}{7 \text{Deltax}^2 \Sigma_t^2} + \frac{144 \bar{\Phi}_{0, x, 1}}{\text{Deltax}^2 \Sigma_t^2} - \frac{672 \bar{\Phi}_{0, x, 2}}{\text{Deltax}^2 \Sigma_t^2} \\
& + \frac{\left(\frac{3960}{\text{Deltay} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} - \frac{504}{\text{Deltay} \Sigma_{rem, 0}} \right) j_{1, inc, y, R}}{7 \text{Deltax}^2 \Sigma_t^2} \\
& + \frac{\left(\frac{112 \text{Deltax}^2 \Sigma_t^2}{15} + 1328 \right) jh_{3, out, x, L}}{7 \text{Deltax}^2 \Sigma_t^2}
\end{aligned}$$

$$\begin{aligned}
& + \frac{\left(-\frac{3960}{\text{Deltaz} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} + \frac{504}{\text{Deltaz} \Sigma_{rem, 0}} \right) j_{1, out, z, L}}{7 \text{Deltax}^2 \Sigma_t^2} \\
& - \frac{9900 J_{3, z, L}}{7 \text{Deltax}^2 \Sigma_t^2 \left(-5 \alpha + 4 \Sigma_{rem, 0} \right) \text{Deltaz}} - \frac{9900 J_{3, y, R}}{7 \text{Deltax}^2 \Sigma_t^2 \left(-5 \alpha + 4 \Sigma_{rem, 0} \right) \text{Deltay}} \\
& - \frac{9900 J_{3, y, L}}{7 \text{Deltax}^2 \Sigma_t^2 \left(-5 \alpha + 4 \Sigma_{rem, 0} \right) \text{Deltay}} - \frac{9900 J_{3, z, R}}{7 \text{Deltax}^2 \Sigma_t^2 \left(-5 \alpha + 4 \Sigma_{rem, 0} \right) \text{Deltaz}} \\
& + \frac{\left(-\frac{3960}{\text{Deltay} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} + \frac{504}{\text{Deltay} \Sigma_{rem, 0}} \right) j_{1, out, y, L}}{7 \text{Deltax}^2 \Sigma_t^2} \\
& + \frac{\left(\frac{3960}{\text{Deltay} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} - \frac{504}{\text{Deltay} \Sigma_{rem, 0}} \right) j_{1, inc, y, L}}{7 \text{Deltax}^2 \Sigma_t^2} \\
& + \frac{\left(\frac{3960}{\text{Deltaz} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} - \frac{504}{\text{Deltaz} \Sigma_{rem, 0}} \right) j_{1, inc, z, R}}{7 \text{Deltax}^2 \Sigma_t^2} \\
& + \frac{\left(-\frac{112 \text{Deltax}^2 \Sigma_t^2}{15} + 1328 + \frac{3960}{\text{Deltax} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} - \frac{504}{\text{Deltax} \Sigma_{rem, 0}} \right) j_{1, inc, x, L}}{7 \text{Deltax}^2 \Sigma_t^2} \\
& + \frac{\left(16 - \frac{3960}{\text{Deltax} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} + \frac{504}{\text{Deltax} \Sigma_{rem, 0}} \right) j_{1, out, x, R}}{7 \text{Deltax}^2 \Sigma_t^2} \\
& - \frac{9900 J_{3, x, L}}{7 \text{Deltax}^3 \Sigma_t^2 \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} - \frac{9900 J_{3, x, R}}{7 \text{Deltax}^3 \Sigma_t^2 \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} \\
& + \frac{\left(-\frac{3960}{\text{Deltay} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} + \frac{504}{\text{Deltay} \Sigma_{rem, 0}} \right) j_{1, out, y, R}}{7 \text{Deltax}^2 \Sigma_t^2} \\
& + \frac{\left(\frac{3960}{\text{Deltaz} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} - \frac{504}{\text{Deltaz} \Sigma_{rem, 0}} \right) j_{1, inc, z, L}}{7 \text{Deltax}^2 \Sigma_t^2} \\
& + \frac{\left(16 + \frac{3960}{\text{Deltax} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} - \frac{504}{\text{Deltax} \Sigma_{rem, 0}} \right) j_{1, inc, x, R}}{7 \text{Deltax}^2 \Sigma_t^2}
\end{aligned}$$

$$\begin{aligned}
& + \frac{1482 \phi_{2, x, L} + 498 \phi_{2, x, R} - \frac{504 S_0}{\Sigma_{rem, 0}}}{7 \text{Deltax}^2 \Sigma_t^2} + \frac{\left(\frac{112 \text{Deltax}^2 \Sigma_t^2}{15} + 1328 \right) jh_{3, inc, x, L}}{7 \text{Deltax}^2 \Sigma_t^2} \\
& jh_{3, out, x, R} - jh_{3, inc, x, R} = \\
& - \frac{9 \left(\frac{8400 \text{Deltax}^2 \Sigma_t^2}{\text{Deltaz} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} - \frac{308000}{\text{Deltaz} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} + \frac{39200}{\text{Deltaz} \Sigma_{rem, 0}} \right) j_{1, out, z, R}}{4900 \text{Deltax}^3 \Sigma_t^3} \\
& - \frac{9 \left(\frac{21000 \text{Deltax}^2 \Sigma_t^2}{\text{Deltay} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} - \frac{770000}{\text{Deltay} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} \right) J_{3, y, L}}{4900 \text{Deltax}^3 \Sigma_t^3} \\
& - \frac{9 \left(-2800 \text{Deltax}^2 \Sigma_t^2 + \frac{222400}{3} \right) jh_{3, out, x, R}}{4900 \text{Deltax}^3 \Sigma_t^3} + \frac{72 S_0}{\text{Deltax}^3 \Sigma_t^3 \Sigma_{rem, 0}} \\
& - \frac{9 \left(-2800 \text{Deltax}^2 \Sigma_t^2 + \frac{222400}{3} \right) jh_{3, inc, x, R}}{4900 \text{Deltax}^3 \Sigma_t^3} \\
& - \frac{9 \left(\frac{21000 \text{Deltax}^2 \Sigma_t^2}{\text{Deltaz} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} - \frac{770000}{\text{Deltaz} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} \right) J_{3, z, R}}{4900 \text{Deltax}^3 \Sigma_t^3} \\
& - \frac{9 \left(\frac{21000 \text{Deltax}^2 \Sigma_t^2}{\text{Deltay} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} - \frac{770000}{\text{Deltay} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} \right) J_{3, y, R}}{4900 \text{Deltax}^3 \Sigma_t^3} \\
& - \frac{9 \left(\frac{21000 \text{Deltax} \Sigma_t^2}{-5 \alpha + 4 \Sigma_{rem, 0}} - \frac{770000}{\text{Deltax} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} \right) J_{3, x, L}}{4900 \text{Deltax}^3 \Sigma_t^3} - \frac{1}{4900 \text{Deltax}^3 \Sigma_t^3} \left(9 \left(\right. \right. \\
& - 210 \left(- \frac{40}{\text{Deltax} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} - \frac{40}{3} \right) \text{Deltax}^2 \Sigma_t^2 + 30400 - \frac{308000}{\text{Deltax} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} \\
& + \frac{39200}{\text{Deltax} \Sigma_{rem, 0}} \left. \right) j_{1, out, x, L} \left. \right) \\
& - \frac{9 \left(\frac{21000 \text{Deltax}^2 \Sigma_t^2}{\text{Deltaz} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} - \frac{770000}{\text{Deltaz} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} \right) J_{3, z, L}}{4900 \text{Deltax}^3 \Sigma_t^3}
\end{aligned}$$

$$\begin{aligned}
& - \frac{9 \left(-\frac{8400 \text{Deltax}^2 \Sigma_t^2}{\text{Deltaz} (-5 \alpha + 4 \Sigma_{rem, 0})} + \frac{308000}{\text{Deltaz} (-5 \alpha + 4 \Sigma_{rem, 0})} - \frac{39200}{\text{Deltaz} \Sigma_{rem, 0}} \right) j_{1, inc, z, R}}{4900 \text{Deltax}^3 \Sigma_t^3} \\
& - \frac{9 \left(210 \text{Deltax}^2 \Sigma_t^2 + 60600 \right) \phi_{2, x, L}}{4900 \text{Deltax}^3 \Sigma_t^3} - \frac{1}{4900 \text{Deltax}^3 \Sigma_t^3} \left(9 \left(\right. \right. \\
& - 210 \left(\frac{40}{\text{Deltax} (-5 \alpha + 4 \Sigma_{rem, 0})} - \frac{40}{3} \right) \text{Deltax}^2 \Sigma_t^2 + 30400 + \frac{308000}{\text{Deltax} (-5 \alpha + 4 \Sigma_{rem, 0})} \\
& \left. \left. - \frac{39200}{\text{Deltax} \Sigma_{rem, 0}} \right) j_{1, inc, x, L} \right) \\
& - \frac{9 \left(-\frac{8400 \text{Deltax}^2 \Sigma_t^2}{\text{Deltay} (-5 \alpha + 4 \Sigma_{rem, 0})} + \frac{308000}{\text{Deltay} (-5 \alpha + 4 \Sigma_{rem, 0})} - \frac{39200}{\text{Deltay} \Sigma_{rem, 0}} \right) j_{1, inc, y, R}}{4900 \text{Deltax}^3 \Sigma_t^3} \\
& - \frac{9 \left(29400 \text{Deltax}^2 \Sigma_t^2 - 756000 \right) \bar{\phi}_{2, x, 2}}{4900 \text{Deltax}^3 \Sigma_t^3} - \frac{9 \left(-4410 \text{Deltax}^2 \Sigma_t^2 + 93400 \right) \phi_{2, x, R}}{4900 \text{Deltax}^3 \Sigma_t^3} + \left(\right. \\
& - \frac{1}{4900 \text{Deltax}^3 \Sigma_t^3} \left(9 \left(-210 \left(-\frac{40}{\text{Deltax} (-5 \alpha + 4 \Sigma_{rem, 0})} + \frac{40}{3} \right) \text{Deltax}^2 \Sigma_t^2 + \frac{222400}{3} \right. \right. \\
& \left. \left. - \frac{308000}{\text{Deltax} (-5 \alpha + 4 \Sigma_{rem, 0})} + \frac{39200}{\text{Deltax} \Sigma_{rem, 0}} \right) \right) - \frac{2}{5 \Sigma_t} \left. \right) j_{1, out, x, R} + \frac{432 \bar{\Phi}_{0, x, 1}}{7 \text{Deltax}^3 \Sigma_t^3} \\
& + \frac{720 \bar{\Phi}_{0, x, 2}}{\text{Deltax}^3 \Sigma_t^3} \\
& - \frac{9 \left(\frac{8400 \text{Deltax}^2 \Sigma_t^2}{\text{Deltay} (-5 \alpha + 4 \Sigma_{rem, 0})} - \frac{308000}{\text{Deltay} (-5 \alpha + 4 \Sigma_{rem, 0})} + \frac{39200}{\text{Deltay} \Sigma_{rem, 0}} \right) j_{1, out, y, L}}{4900 \text{Deltax}^3 \Sigma_t^3} \\
& - \frac{9 \left(\frac{8400 \text{Deltax}^2 \Sigma_t^2}{\text{Deltaz} (-5 \alpha + 4 \Sigma_{rem, 0})} - \frac{308000}{\text{Deltaz} (-5 \alpha + 4 \Sigma_{rem, 0})} + \frac{39200}{\text{Deltaz} \Sigma_{rem, 0}} \right) j_{1, out, z, L}}{4900 \text{Deltax}^3 \Sigma_t^3} + \left(\right. \\
& - \frac{1}{4900 \text{Deltax}^3 \Sigma_t^3} \left(9 \left(-210 \left(\frac{40}{\text{Deltax} (-5 \alpha + 4 \Sigma_{rem, 0})} + \frac{40}{3} \right) \text{Deltax}^2 \Sigma_t^2 + \frac{222400}{3} \right. \right. \\
& \left. \left. + \frac{308000}{\text{Deltax} (-5 \alpha + 4 \Sigma_{rem, 0})} - \frac{39200}{\text{Deltax} \Sigma_{rem, 0}} \right) \right) + \frac{2}{5 \Sigma_t} \left. \right) j_{1, inc, x, R}
\end{aligned}$$

$$\begin{aligned}
& - \frac{9 \left(\frac{21000 \text{Deltax} \Sigma_t^2}{-5 \alpha + 4 \Sigma_{rem, 0}} - \frac{770000}{\text{Deltax} (-5 \alpha + 4 \Sigma_{rem, 0})} \right) J_{3, x, R}}{4900 \text{Deltax}^3 \Sigma_t^3} \\
& - \frac{9 \left(2800 \text{Deltax}^2 \Sigma_t^2 + 30400 \right) jh_{3, inc, x, L}}{4900 \text{Deltax}^3 \Sigma_t^3} \\
& - \frac{9 \left(\frac{8400 \text{Deltax}^2 \Sigma_t^2}{\text{Deltay} (-5 \alpha + 4 \Sigma_{rem, 0})} - \frac{308000}{\text{Deltay} (-5 \alpha + 4 \Sigma_{rem, 0})} + \frac{39200}{\text{Deltay} \Sigma_{rem, 0}} \right) j_{1, out, y, R}}{4900 \text{Deltax}^3 \Sigma_t^3} \\
& - \frac{9 \left(-\frac{8400 \text{Deltax}^2 \Sigma_t^2}{\text{Deltay} (-5 \alpha + 4 \Sigma_{rem, 0})} + \frac{308000}{\text{Deltay} (-5 \alpha + 4 \Sigma_{rem, 0})} - \frac{39200}{\text{Deltay} \Sigma_{rem, 0}} \right) j_{1, inc, y, L}}{4900 \text{Deltax}^3 \Sigma_t^3} \\
& - \frac{9 \left(-\frac{8400 \text{Deltax}^2 \Sigma_t^2}{\text{Deltaz} (-5 \alpha + 4 \Sigma_{rem, 0})} + \frac{308000}{\text{Deltaz} (-5 \alpha + 4 \Sigma_{rem, 0})} - \frac{39200}{\text{Deltaz} \Sigma_{rem, 0}} \right) j_{1, inc, z, L}}{4900 \text{Deltax}^3 \Sigma_t^3} \\
& - \frac{9 \left(12600 \text{Deltax}^2 \Sigma_t^2 - 64800 \right) \bar{\phi}_{2, x, 1}}{4900 \text{Deltax}^3 \Sigma_t^3} - \frac{9 \left(2800 \text{Deltax}^2 \Sigma_t^2 + 30400 \right) jh_{3, out, x, L}}{4900 \text{Deltax}^3 \Sigma_t^3} \\
& jh_{3, out, x, L} - jh_{3, inc, x, L} = - \frac{9 \left(-\frac{21000 \text{Deltax}^2 \Sigma_t^2}{\text{Deltay} (-5 \alpha + 4 \Sigma_{rem, 0})} + \frac{770000}{\text{Deltay} (-5 \alpha + 4 \Sigma_{rem, 0})} \right) J_{3, y, R}}{4900 \text{Deltax}^3 \Sigma_t^3} \\
& - \frac{72 S_0}{\text{Deltax}^3 \Sigma_t^3 \Sigma_{rem, 0}} \\
& - \frac{9 \left(\frac{8400 \text{Deltax}^2 \Sigma_t^2}{\text{Deltay} (-5 \alpha + 4 \Sigma_{rem, 0})} - \frac{308000}{\text{Deltay} (-5 \alpha + 4 \Sigma_{rem, 0})} + \frac{39200}{\text{Deltay} \Sigma_{rem, 0}} \right) j_{1, inc, y, R}}{4900 \text{Deltax}^3 \Sigma_t^3} \\
& - \frac{9 \left(-\frac{8400 \text{Deltax}^2 \Sigma_t^2}{\text{Deltaz} (-5 \alpha + 4 \Sigma_{rem, 0})} + \frac{308000}{\text{Deltaz} (-5 \alpha + 4 \Sigma_{rem, 0})} - \frac{39200}{\text{Deltaz} \Sigma_{rem, 0}} \right) j_{1, out, z, R}}{4900 \text{Deltax}^3 \Sigma_t^3}
\end{aligned}$$

$$\begin{aligned}
& - \frac{9 \left(-\frac{8400 \text{Deltax}^2 \Sigma_t^2}{\text{Deltaz} (-5 \alpha + 4 \Sigma_{rem, 0})} + \frac{308000}{\text{Deltaz} (-5 \alpha + 4 \Sigma_{rem, 0})} - \frac{39200}{\text{Deltaz} \Sigma_{rem, 0}} \right) j_{1, out, z, L}}{4900 \text{Deltax}^3 \Sigma_t^3} \\
& - \frac{9 \left(-\frac{21000 \text{Deltax}^2 \Sigma_t^2}{\text{Deltaz} (-5 \alpha + 4 \Sigma_{rem, 0})} + \frac{770000}{\text{Deltaz} (-5 \alpha + 4 \Sigma_{rem, 0})} \right) J_{3, z, R}}{4900 \text{Deltax}^3 \Sigma_t^3} \\
& - \frac{9 \left(\frac{8400 \text{Deltax}^2 \Sigma_t^2}{\text{Deltaz} (-5 \alpha + 4 \Sigma_{rem, 0})} - \frac{308000}{\text{Deltaz} (-5 \alpha + 4 \Sigma_{rem, 0})} + \frac{39200}{\text{Deltaz} \Sigma_{rem, 0}} \right) j_{1, inc, z, R}}{4900 \text{Deltax}^3 \Sigma_t^3} \\
& - \frac{9 \left(\frac{8400 \text{Deltax}^2 \Sigma_t^2}{\text{Deltay} (-5 \alpha + 4 \Sigma_{rem, 0})} - \frac{308000}{\text{Deltay} (-5 \alpha + 4 \Sigma_{rem, 0})} + \frac{39200}{\text{Deltay} \Sigma_{rem, 0}} \right) j_{1, inc, y, L}}{4900 \text{Deltax}^3 \Sigma_t^3} \\
& - \frac{9 \left(-\frac{21000 \text{Deltax} \Sigma_t^2}{-5 \alpha + 4 \Sigma_{rem, 0}} + \frac{770000}{\text{Deltax} (-5 \alpha + 4 \Sigma_{rem, 0})} \right) J_{3, x, L}}{4900 \text{Deltax}^3 \Sigma_t^3} - \frac{1}{4900 \text{Deltax}^3 \Sigma_t^3} \left(9 \left(\right. \right. \\
& - 210 \left(\frac{40}{\text{Deltax} (-5 \alpha + 4 \Sigma_{rem, 0})} + \frac{40}{3} \right) \text{Deltax}^2 \Sigma_t^2 - 30400 + \frac{308000}{\text{Deltax} (-5 \alpha + 4 \Sigma_{rem, 0})} \\
& - \frac{39200}{\text{Deltax} \Sigma_{rem, 0}} \left. \right) j_{1, out, x, R} \left. \right) - \frac{9 \left(-\frac{21000 \text{Deltax} \Sigma_t^2}{-5 \alpha + 4 \Sigma_{rem, 0}} + \frac{770000}{\text{Deltax} (-5 \alpha + 4 \Sigma_{rem, 0})} \right) J_{3, x, R}}{4900 \text{Deltax}^3 \Sigma_t^3} \\
& + \left(-\frac{1}{4900 \text{Deltax}^3 \Sigma_t^3} \left(9 \left(-210 \left(\frac{40}{\text{Deltax} (-5 \alpha + 4 \Sigma_{rem, 0})} - \frac{40}{3} \right) \text{Deltax}^2 \Sigma_t^2 \right. \right. \right. \\
& - \frac{222400}{3} + \frac{308000}{\text{Deltax} (-5 \alpha + 4 \Sigma_{rem, 0})} - \frac{39200}{\text{Deltax} \Sigma_{rem, 0}} \left. \right) \left. \right) - \frac{2}{5 \Sigma_t} \left. \right) j_{1, out, x, L} \\
& - \frac{9 \left(-\frac{21000 \text{Deltax}^2 \Sigma_t^2}{\text{Deltaz} (-5 \alpha + 4 \Sigma_{rem, 0})} + \frac{770000}{\text{Deltaz} (-5 \alpha + 4 \Sigma_{rem, 0})} \right) J_{3, z, L}}{4900 \text{Deltax}^3 \Sigma_t^3} \\
& - \frac{9 \left(-\frac{8400 \text{Deltax}^2 \Sigma_t^2}{\text{Deltay} (-5 \alpha + 4 \Sigma_{rem, 0})} + \frac{308000}{\text{Deltay} (-5 \alpha + 4 \Sigma_{rem, 0})} - \frac{39200}{\text{Deltay} \Sigma_{rem, 0}} \right) j_{1, out, y, L}}{4900 \text{Deltax}^3 \Sigma_t^3}
\end{aligned}$$

$$\begin{aligned}
& - \frac{9 \left(-2800 \text{Deltax}^2 \Sigma_t^2 - 30400 \right) jh_{3, inc, x, R}}{4900 \text{Deltax}^3 \Sigma_t^3} - \frac{9 \left(2800 \text{Deltax}^2 \Sigma_t^2 - \frac{222400}{3} \right) jh_{3, out, x, L}}{4900 \text{Deltax}^3 \Sigma_t^3} \\
& + \frac{432 \bar{\Phi}_{0, x, 1}}{7 \text{Deltax}^3 \Sigma_t^3} - \frac{720 \bar{\Phi}_{0, x, 2}}{\text{Deltax}^3 \Sigma_t^3} - \frac{9 \left(4410 \text{Deltax}^2 \Sigma_t^2 - 93400 \right) \phi_{2, x, L}}{4900 \text{Deltax}^3 \Sigma_t^3} \\
& - \frac{9 \left(-210 \text{Deltax}^2 \Sigma_t^2 - 60600 \right) \phi_{2, x, R}}{4900 \text{Deltax}^3 \Sigma_t^3} \\
& - \frac{9 \left(-\frac{8400 \text{Deltax}^2 \Sigma_t^2}{\text{Deltay} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} + \frac{308000}{\text{Deltay} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} - \frac{39200}{\text{Deltay} \Sigma_{rem, 0}} \right) j_{1, out, y, R}}{4900 \text{Deltax}^3 \Sigma_t^3} \\
& - \frac{9 \left(-29400 \text{Deltax}^2 \Sigma_t^2 + 756000 \right) \bar{\phi}_{2, x, 2}}{4900 \text{Deltax}^3 \Sigma_t^3} - \frac{9 \left(2800 \text{Deltax}^2 \Sigma_t^2 - \frac{222400}{3} \right) jh_{3, inc, x, L}}{4900 \text{Deltax}^3 \Sigma_t^3} \\
& - \frac{9 \left(\frac{8400 \text{Deltax}^2 \Sigma_t^2}{\text{Deltaz} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} - \frac{308000}{\text{Deltaz} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} + \frac{39200}{\text{Deltaz} \Sigma_{rem, 0}} \right) j_{1, inc, z, L}}{4900 \text{Deltax}^3 \Sigma_t^3} \\
& - \frac{9 \left(-2800 \text{Deltax}^2 \Sigma_t^2 - 30400 \right) jh_{3, out, x, R}}{4900 \text{Deltax}^3 \Sigma_t^3} - \frac{9 \left(12600 \text{Deltax}^2 \Sigma_t^2 - 64800 \right) \bar{\phi}_{2, x, 1}}{4900 \text{Deltax}^3 \Sigma_t^3} \\
& - \frac{9 \left(-\frac{21000 \text{Deltax}^2 \Sigma_t^2}{\text{Deltay} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} + \frac{770000}{\text{Deltay} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} \right) J_{3, y, L}}{4900 \text{Deltax}^3 \Sigma_t^3} + \left(\right. \\
& - \frac{1}{4900 \text{Deltax}^3 \Sigma_t^3} \left(9 \left(-210 \left(-\frac{40}{\text{Deltax} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} - \frac{40}{3} \right) \text{Deltax}^2 \Sigma_t^2 - \frac{222400}{3} \right. \right. \\
& \left. \left. - \frac{308000}{\text{Deltax} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} + \frac{39200}{\text{Deltax} \Sigma_{rem, 0}} \right) \right) + \frac{2}{5 \Sigma_t} \Big) j_{1, inc, x, L} \\
& - \frac{1}{4900 \text{Deltax}^3 \Sigma_t^3} \left(9 \left(-210 \left(-\frac{40}{\text{Deltax} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} + \frac{40}{3} \right) \text{Deltax}^2 \Sigma_t^2 - 30400 \right. \right. \\
& \left. \left. - \frac{308000}{\text{Deltax} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} + \frac{39200}{\text{Deltax} \Sigma_{rem, 0}} \right) j_{1, inc, x, R} \right) \\
& j_{1, out, x, R} - j_{1, inc, x, R} = \frac{128 jh_{3, out, x, R}}{3 \text{Deltax}} + \frac{128 jh_{3, inc, x, R}}{3 \text{Deltax}} + \frac{32 jh_{3, out, x, L}}{3 \text{Deltax}} + \frac{32 jh_{3, inc, x, L}}{3 \text{Deltax}}
\end{aligned}$$

$$\begin{aligned}
& + \frac{32 \phi_{2, x, R}}{Deltax} + \frac{8 \phi_{2, x, L}}{Deltax} + \frac{\left(\frac{128}{3} - \frac{80}{Deltax (-5 \alpha + 4 \Sigma_{rem, 0})} + \frac{20}{Deltax \Sigma_{rem, 0}} \right)}{Deltax} j_{1, out, x, R} \\
& + \frac{\left(\frac{80}{Deltay (-5 \alpha + 4 \Sigma_{rem, 0})} - \frac{20}{Deltay \Sigma_{rem, 0}} \right)}{Deltax} j_{1, inc, y, R} \\
& + \frac{\left(\frac{80}{Deltaz (-5 \alpha + 4 \Sigma_{rem, 0})} - \frac{20}{Deltaz \Sigma_{rem, 0}} \right)}{Deltax} j_{1, inc, z, L} \\
& + \frac{\left(-\frac{80}{Deltay (-5 \alpha + 4 \Sigma_{rem, 0})} + \frac{20}{Deltay \Sigma_{rem, 0}} \right)}{Deltax} j_{1, out, y, R} \\
& + \frac{\left(\frac{128}{3} + \frac{80}{Deltax (-5 \alpha + 4 \Sigma_{rem, 0})} - \frac{20}{Deltax \Sigma_{rem, 0}} \right)}{Deltax} j_{1, inc, x, R} \\
& + \frac{\left(-\frac{80}{Deltaz (-5 \alpha + 4 \Sigma_{rem, 0})} + \frac{20}{Deltaz \Sigma_{rem, 0}} \right)}{Deltax} j_{1, out, z, R} \\
& + \frac{\left(\frac{80}{Deltaz (-5 \alpha + 4 \Sigma_{rem, 0})} - \frac{20}{Deltaz \Sigma_{rem, 0}} \right)}{Deltax} j_{1, inc, z, R} \\
& + \frac{\left(\frac{32}{3} + \frac{80}{Deltax (-5 \alpha + 4 \Sigma_{rem, 0})} - \frac{20}{Deltax \Sigma_{rem, 0}} \right)}{Deltax} j_{1, inc, x, L} \\
& + \frac{\left(\frac{32}{3} - \frac{80}{Deltax (-5 \alpha + 4 \Sigma_{rem, 0})} + \frac{20}{Deltax \Sigma_{rem, 0}} \right)}{Deltax} j_{1, out, x, L} \\
& + \frac{\left(-\frac{80}{Deltay (-5 \alpha + 4 \Sigma_{rem, 0})} + \frac{20}{Deltay \Sigma_{rem, 0}} \right)}{Deltax} j_{1, out, y, L} \\
& - \frac{200 J_{3, y, L}}{Deltax (-5 \alpha + 4 \Sigma_{rem, 0}) Deltay} - \frac{200 J_{3, y, R}}{Deltax (-5 \alpha + 4 \Sigma_{rem, 0}) Deltay} \\
& - \frac{200 J_{3, z, R}}{Deltax (-5 \alpha + 4 \Sigma_{rem, 0}) Deltaz} - \frac{200 J_{3, z, L}}{Deltax (-5 \alpha + 4 \Sigma_{rem, 0}) Deltaz} \\
& - \frac{200 J_{3, x, L}}{Deltax^2 (-5 \alpha + 4 \Sigma_{rem, 0})} - \frac{20 S_0}{Deltax \Sigma_{rem, 0}} \\
& + \frac{\left(-\frac{80}{Deltaz (-5 \alpha + 4 \Sigma_{rem, 0})} + \frac{20}{Deltaz \Sigma_{rem, 0}} \right)}{Deltax} j_{1, out, z, L}
\end{aligned}$$

$$\begin{aligned}
& + \frac{\left(\frac{80}{Deltax \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} - \frac{20}{Deltax \Sigma_{rem, 0}} \right) j_{1, inc, y, L}}{Deltax} - \frac{200 J_{3, x, R}}{Deltax^2 \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} \\
& - \frac{60 \bar{\Phi}_{0, x, 1}}{Deltax} - \frac{140 \bar{\Phi}_{0, x, 2}}{Deltax} \\
j_{1, out, x, L} - j_{1, inc, x, L} = & - \frac{32 jh_{3, out, x, R}}{3 Deltax} - \frac{32 jh_{3, inc, x, R}}{3 Deltax} - \frac{128 jh_{3, inc, x, L}}{3 Deltax} - \frac{8 \phi_{2, x, R}}{Deltax} - \frac{32 \phi_{2, x, L}}{Deltax} \\
& + \frac{\left(-\frac{128}{3} - \frac{80}{Deltax \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} + \frac{20}{Deltax \Sigma_{rem, 0}} \right) j_{1, inc, x, L}}{Deltax} \\
& + \frac{\left(\frac{80}{Deltax \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} - \frac{20}{Deltax \Sigma_{rem, 0}} \right) j_{1, out, z, R}}{Deltax} \\
& + \frac{\left(-\frac{80}{Deltax \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} + \frac{20}{Deltax \Sigma_{rem, 0}} \right) j_{1, inc, y, R}}{Deltax} + \frac{-\frac{128 jh_{3, out, x, L}}{3} + \frac{20 S_0}{\Sigma_{rem, 0}}}{Deltax} \\
& + \frac{\left(\frac{80}{Deltax \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} - \frac{20}{Deltax \Sigma_{rem, 0}} \right) j_{1, out, y, R}}{Deltax} \\
& + \frac{\left(\frac{80}{Deltax \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} - \frac{20}{Deltax \Sigma_{rem, 0}} \right) j_{1, out, z, L}}{Deltax} \\
& + \frac{\left(-\frac{128}{3} + \frac{80}{Deltax \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} - \frac{20}{Deltax \Sigma_{rem, 0}} \right) j_{1, out, x, L}}{Deltax} \\
& + \frac{\left(-\frac{32}{3} + \frac{80}{Deltax \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} - \frac{20}{Deltax \Sigma_{rem, 0}} \right) j_{1, out, x, R}}{Deltax} \\
& + \frac{200 J_{3, y, L}}{Deltax \left(-5 \alpha + 4 \Sigma_{rem, 0} \right) Deltax} + \frac{200 J_{3, y, R}}{Deltax \left(-5 \alpha + 4 \Sigma_{rem, 0} \right) Deltax} \\
& + \frac{200 J_{3, z, R}}{Deltax \left(-5 \alpha + 4 \Sigma_{rem, 0} \right) Deltax} + \frac{200 J_{3, z, L}}{Deltax \left(-5 \alpha + 4 \Sigma_{rem, 0} \right) Deltax} \\
& + \frac{\left(-\frac{80}{Deltax \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} + \frac{20}{Deltax \Sigma_{rem, 0}} \right) j_{1, inc, z, R}}{Deltax} \\
& + \frac{\left(\frac{80}{Deltax \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} - \frac{20}{Deltax \Sigma_{rem, 0}} \right) j_{1, out, y, L}}{Deltax} + \frac{200 J_{3, x, L}}{Deltax^2 \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)}
\end{aligned}$$

$$\begin{aligned}
& + \frac{\left(-\frac{80}{\text{Deltaz} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} + \frac{20}{\text{Deltaz} \Sigma_{rem, 0}} \right) j_{1, inc, z, L}}{\text{Deltax}} + \frac{200 J_{3, x, R}}{\text{Deltax}^2 \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} \\
& - \frac{60 \bar{\Phi}_{0, x, 1}}{\text{Deltax}} + \frac{140 \bar{\Phi}_{0, x, 2}}{\text{Deltax}} + \frac{\left(-\frac{80}{\text{Deltay} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} + \frac{20}{\text{Deltay} \Sigma_{rem, 0}} \right) j_{1, inc, y, L}}{\text{Deltax}} \\
& + \frac{\left(-\frac{32}{3} - \frac{80}{\text{Deltax} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} + \frac{20}{\text{Deltax} \Sigma_{rem, 0}} \right) j_{1, inc, x, R}}{\text{Deltax}} \\
J_{3, x, R} = & \frac{40 j_{h3, out, x, R}}{3 \text{Deltax}} + \frac{40 j_{h3, inc, x, R}}{3 \text{Deltax}} - \frac{40 j_{h3, out, x, L}}{3 \text{Deltax}} - \frac{40 j_{h3, inc, x, L}}{3 \text{Deltax}} + \frac{21 \phi_{2, x, R}}{\text{Deltax}} - \frac{140 \bar{\phi}_{2, x, 2}}{\text{Deltax}} \\
& - \frac{60 \bar{\phi}_{2, x, 1}}{\text{Deltax}} - \frac{\phi_{2, x, L}}{\text{Deltax}} - \frac{40 j_{1, out, y, L}}{\text{Deltax} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right) \text{Deltay}} + \frac{40 j_{1, inc, y, L}}{\text{Deltax} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right) \text{Deltay}} \\
& - \frac{40 j_{1, out, z, R}}{\text{Deltax} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right) \text{Deltaz}} + \frac{40 j_{1, inc, z, R}}{\text{Deltax} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right) \text{Deltaz}} \\
& - \frac{40 j_{1, out, z, L}}{\text{Deltax} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right) \text{Deltaz}} + \frac{40 j_{1, inc, z, L}}{\text{Deltax} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right) \text{Deltaz}} \\
& - \frac{40 j_{1, out, y, R}}{\text{Deltax} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right) \text{Deltay}} + \frac{40 j_{1, inc, y, R}}{\text{Deltax} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right) \text{Deltay}} \\
& + \frac{\left(-\frac{40}{\text{Deltax} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} + \frac{40}{3} \right) j_{1, out, x, R}}{\text{Deltax}} \\
& + \frac{\left(\frac{40}{\text{Deltax} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} + \frac{40}{3} \right) j_{1, inc, x, R}}{\text{Deltax}} - \frac{100 J_{3, y, L}}{\text{Deltax} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right) \text{Deltay}} \\
& - \frac{100 J_{3, y, R}}{\text{Deltax} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right) \text{Deltay}} - \frac{100 J_{3, z, R}}{\text{Deltax} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right) \text{Deltaz}} \\
& - \frac{100 J_{3, z, L}}{\text{Deltax} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right) \text{Deltaz}} - \frac{100 J_{3, x, L}}{\text{Deltax}^2 \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} \\
& - \frac{100 J_{3, x, R}}{\text{Deltax}^2 \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} + \frac{\left(\frac{40}{\text{Deltax} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} - \frac{40}{3} \right) j_{1, inc, x, L}}{\text{Deltax}} \\
& + \frac{\left(-\frac{40}{\text{Deltax} \left(-5 \alpha + 4 \Sigma_{rem, 0} \right)} - \frac{40}{3} \right) j_{1, out, x, L}}{\text{Deltax}}
\end{aligned}$$

$$\begin{aligned}
J_{3, x, L} = & \frac{40 j h_{3, out, x, R}}{3 Deltax} + \frac{40 j h_{3, inc, x, R}}{3 Deltax} - \frac{40 j h_{3, out, x, L}}{3 Deltax} - \frac{40 j h_{3, inc, x, L}}{3 Deltax} + \frac{\phi_{2, x, R}}{Deltax} + \frac{140 \phi_{2, x, 2}}{Deltax} \\
& - \frac{60 \phi_{2, x, 1}}{Deltax} - \frac{21 \phi_{2, x, L}}{Deltax} + \frac{40 j_{1, out, y, L}}{Deltax (-5 \alpha + 4 \Sigma_{rem, 0}) Deltay} \\
& - \frac{40 j_{1, inc, y, L}}{Deltax (-5 \alpha + 4 \Sigma_{rem, 0}) Deltay} + \frac{40 j_{1, out, z, R}}{Deltax (-5 \alpha + 4 \Sigma_{rem, 0}) Deltaz} \\
& - \frac{40 j_{1, inc, z, R}}{Deltax (-5 \alpha + 4 \Sigma_{rem, 0}) Deltaz} + \frac{40 j_{1, out, z, L}}{Deltax (-5 \alpha + 4 \Sigma_{rem, 0}) Deltaz} \\
& - \frac{40 j_{1, inc, z, L}}{Deltax (-5 \alpha + 4 \Sigma_{rem, 0}) Deltaz} + \frac{40 j_{1, out, y, R}}{Deltax (-5 \alpha + 4 \Sigma_{rem, 0}) Deltay} \\
& - \frac{40 j_{1, inc, y, R}}{Deltax (-5 \alpha + 4 \Sigma_{rem, 0}) Deltay} + \frac{\left(-\frac{40}{Deltax (-5 \alpha + 4 \Sigma_{rem, 0})} - \frac{40}{3} \right) j_{1, inc, x, L}}{Deltax} \\
& + \frac{\left(-\frac{40}{Deltax (-5 \alpha + 4 \Sigma_{rem, 0})} + \frac{40}{3} \right) j_{1, inc, x, R}}{Deltax} \\
& + \frac{\left(\frac{40}{Deltax (-5 \alpha + 4 \Sigma_{rem, 0})} - \frac{40}{3} \right) j_{1, out, x, L}}{Deltax} \\
& + \frac{\left(\frac{40}{Deltax (-5 \alpha + 4 \Sigma_{rem, 0})} + \frac{40}{3} \right) j_{1, out, x, R}}{Deltax} + \frac{100 J_{3, y, L}}{Deltax (-5 \alpha + 4 \Sigma_{rem, 0}) Deltay} \\
& + \frac{100 J_{3, y, R}}{Deltax (-5 \alpha + 4 \Sigma_{rem, 0}) Deltay} + \frac{100 J_{3, z, R}}{Deltax (-5 \alpha + 4 \Sigma_{rem, 0}) Deltaz} \\
& + \frac{100 J_{3, z, L}}{Deltax (-5 \alpha + 4 \Sigma_{rem, 0}) Deltaz} + \frac{100 J_{3, x, L}}{Deltax^2 (-5 \alpha + 4 \Sigma_{rem, 0})} \\
& + \frac{100 J_{3, x, R}}{Deltax^2 (-5 \alpha + 4 \Sigma_{rem, 0})}
\end{aligned}$$