$$\phi_{2,\,x,\,R} = \frac{1}{7\,Deltax^2\,\Sigma_t^2}\left(-14\,Deltax^2\,\Sigma_t^2\left(\frac{8\,j_{1,\,out,\,x,\,R}}{15} + \frac{8\,j_{1,\,inc,\,x,\,R}}{15} - \frac{8\,\hat{j}_{3,\,out,\,x,\,R}}{15} - \frac{8\,\hat{j}_{3,\,inc,\,x,\,R}}{15}\right)\right.$$

$$+ 16\,j_{1,\,out,\,x,\,L} + 16\,j_{1,\,inc,\,x,\,L} + 16\,\hat{j}_{3,\,out,\,x,\,L} + 16\,\hat{j}_{3,\,inc,\,x,\,L} + 1328\,j_{1,\,out,\,x,\,R} + 1328\,j_{1,\,inc,\,x,\,R}$$

$$+ 1328\,\hat{j}_{3,\,out,\,x,\,R} + 1328\,\hat{j}_{3,\,inc,\,x,\,R} + 498\,\phi_{2,\,x,\,L} + 1482\,\phi_{2,\,x,\,R}$$

$$- \frac{1}{-5\,\alpha + 4\,\Sigma_{rem,\,0}}\left(1980\left(\frac{5\left(\hat{j}_{3,\,out,\,x,\,R} - \hat{j}_{3,\,inc,\,x,\,R} + \hat{j}_{3,\,out,\,x,\,L} - \hat{j}_{3,\,inc,\,x,\,L}\right)}{Deltax}\right.\right.$$

$$+ \frac{5\left(\hat{j}_{3,\,out,\,y,\,R} - \hat{j}_{3,\,inc,\,y,\,R} + \hat{j}_{3,\,out,\,y,\,L} - \hat{j}_{3,\,inc,\,y,\,L}\right)}{Deltay}$$

$$+ \frac{5\left(\hat{j}_{3,\,out,\,z,\,R} - \hat{j}_{3,\,inc,\,z,\,R} + \hat{j}_{3,\,out,\,z,\,L} - \hat{j}_{3,\,inc,\,z,\,L}\right)}{Deltaz}$$

$$+ \frac{2\left(j_{1,\,out,\,x,\,R} - j_{1,\,inc,\,x,\,R} + j_{1,\,out,\,x,\,L} - j_{1,\,inc,\,x,\,L}\right)}{Deltax}$$

$$+ \frac{2\left(j_{1,\,out,\,y,\,R} - j_{1,\,inc,\,y,\,R} + j_{1,\,out,\,y,\,L} - j_{1,\,inc,\,y,\,L}\right)}{Deltay}$$

$$\left.\left. + \frac{2\left(j_{1,\,out,\,z,\,R} - j_{1,\,inc,\,z,\,R} + j_{1,\,out,\,z,\,L} - j_{1,\,inc,\,z,\,L}\right)}{Deltaz}\right)\right) - \frac{1}{\Sigma_{rem,\,0}}\left(504\left(S_0\right.\right.$$

$$- \frac{j_{1,\,out,\,x,\,R} - j_{1,\,inc,\,x,\,R} + j_{1,\,out,\,x,\,L} - j_{1,\,inc,\,x,\,L}}{Deltax} - \frac{j_{1,\,out,\,y,\,R} - j_{1,\,inc,\,y,\,R} + j_{1,\,out,\,y,\,L} - j_{1,\,inc,\,y,\,L}}{Deltay}$$

$$\left.\left. - \frac{j_{1,\,out,\,z,\,R} - j_{1,\,inc,\,z,\,R} + j_{1,\,out,\,z,\,L} - j_{1,\,inc,\,z,\,L}}{Deltaz}\right)\right) - 1008\,\bar{\Phi}_{0,\,x,\,1} - 4704\,\bar{\Phi}_{0,\,x,\,2} - 1944\,\bar{\phi}_{2,\,x,\,1}$$

$$\left. - 9072\,\bar{\phi}_{2,\,x,\,2}\right)$$

$$\phi_{2,\,x,\,L} = \frac{1}{7\,Deltax^2\,\Sigma_t^2}\left(-14\,Deltax^2\,\Sigma_t^2\left(\frac{8\,j_{1,\,out,\,x,\,L}}{15} + \frac{8\,j_{1,\,inc,\,x,\,L}}{15} - \frac{8\,\hat{j}_{3,\,out,\,x,\,L}}{15} - \frac{8\,\hat{j}_{3,\,inc,\,x,\,L}}{15}\right)\right.$$

$$+ 1328\, j_{1,\, out,\, x,\, L} + 1328\, j_{1,\, inc,\, x,\, L} + 1328\, \hat{j}_{3,\, out,\, x,\, L} + 1328\, \hat{j}_{3,\, inc,\, x,\, L} + 16\, j_{1,\, out,\, x,\, R} + 16\, j_{1,\, inc,\, x,\, R}$$

$$+ 16\, \hat{j}_{3,\, out,\, x,\, R} + 16\, \hat{j}_{3,\, inc,\, x,\, R} + 1482\, \phi_{2,\, x,\, L} + 498\, \phi_{2,\, x,\, R}$$

$$- \frac{1}{-5\, \alpha + 4\, \Sigma_{rem,\, 0}} \left(1980 \left(\frac{5 \left(\hat{j}_{3,\, out,\, x,\, R} - \hat{j}_{3,\, inc,\, x,\, R} + \hat{j}_{3,\, out,\, x,\, L} - \hat{j}_{3,\, inc,\, x,\, L} \right)}{Deltax} \right.\right.$$

$$+ \frac{5 \left(\hat{j}_{3,\, out,\, y,\, R} - \hat{j}_{3,\, inc,\, y,\, R} + \hat{j}_{3,\, out,\, y,\, L} - \hat{j}_{3,\, inc,\, y,\, L} \right)}{Deltay}$$

$$+ \frac{5 \left(\hat{j}_{3,\, out,\, z,\, R} - \hat{j}_{3,\, inc,\, z,\, R} + \hat{j}_{3,\, out,\, z,\, L} - \hat{j}_{3,\, inc,\, z,\, L} \right)}{Deltaz}$$

$$+ \frac{2 \left(j_{1,\, out,\, x,\, R} - j_{1,\, inc,\, x,\, R} + j_{1,\, out,\, x,\, L} - j_{1,\, inc,\, x,\, L} \right)}{Deltax}$$

$$+ \frac{2 \left(j_{1,\, out,\, y,\, R} - j_{1,\, inc,\, y,\, R} + j_{1,\, out,\, y,\, L} - j_{1,\, inc,\, y,\, L} \right)}{Deltay}$$

$$\left.\left. + \frac{2 \left(j_{1,\, out,\, z,\, R} - j_{1,\, inc,\, z,\, R} + j_{1,\, out,\, z,\, L} - j_{1,\, inc,\, z,\, L} \right)}{Deltaz} \right) \right) - \frac{1}{\Sigma_{rem,\, 0}} \left(504 \left(S_0 \right.\right.$$

$$- \frac{j_{1,\, out,\, x,\, R} - j_{1,\, inc,\, x,\, R} + j_{1,\, out,\, x,\, L} - j_{1,\, inc,\, x,\, L}}{Deltax} - \frac{j_{1,\, out,\, y,\, R} - j_{1,\, inc,\, y,\, R} + j_{1,\, out,\, y,\, L} - j_{1,\, inc,\, y,\, L}}{Deltay}$$

$$\left.\left. - \frac{j_{1,\, out,\, z,\, R} - j_{1,\, inc,\, z,\, R} + j_{1,\, out,\, z,\, L} - j_{1,\, inc,\, z,\, L}}{Deltaz} \right) \right) + 1008\, \bar{\Phi}_{0,\, x,\, 1} - 4704\, \bar{\Phi}_{0,\, x,\, 2} + 1944\, \bar{\phi}_{2,\, x,\, 1}$$

$$\left. - 9072\, \bar{\phi}_{2,\, x,\, 2} \right)$$

$$\hat{j}_{3,\, out,\, x,\, R} - \hat{j}_{3,\, inc,\, x,\, R} = - \frac{1}{4900\, Deltax^3\, \Sigma_t^3} \left(9 \left(-210 \left(21\, \phi_{2,\, x,\, R} - \phi_{2,\, x,\, L} \right.\right.\right.$$

$$- \frac{1}{-5\, \alpha + 4\, \Sigma_{rem,\, 0}} \left(20 \left(\frac{5 \left(\hat{j}_{3,\, out,\, x,\, R} - \hat{j}_{3,\, inc,\, x,\, R} + \hat{j}_{3,\, out,\, x,\, L} - \hat{j}_{3,\, inc,\, x,\, L} \right)}{Deltax} \right.\right.$$

$$+\frac{5\left(\hat{j}_{3,\,out,\,y,\,R}-\hat{j}_{3,\,inc,\,y,\,R}+\hat{j}_{3,\,out,\,y,\,L}-\hat{j}_{3,\,inc,\,y,\,L}\right)}{Deltay}$$

$$+\frac{5\left(\hat{j}_{3,\,out,\,z,\,R}-\hat{j}_{3,\,inc,\,z,\,R}+\hat{j}_{3,\,out,\,z,\,L}-\hat{j}_{3,\,inc,\,z,\,L}\right)}{Deltaz}$$

$$+\frac{2\left(j_{1,\,out,\,x,\,R}-j_{1,\,inc,\,x,\,R}+j_{1,\,out,\,x,\,L}-j_{1,\,inc,\,x,\,L}\right)}{Deltax}$$

$$+\frac{2\left(j_{1,\,out,\,y,\,R}-j_{1,\,inc,\,y,\,R}+j_{1,\,out,\,y,\,L}-j_{1,\,inc,\,y,\,L}\right)}{Deltay}$$

$$+\frac{2\left(j_{1,\,out,\,z,\,R}-j_{1,\,inc,\,z,\,R}+j_{1,\,out,\,z,\,L}-j_{1,\,inc,\,z,\,L}\right)}{Deltaz}\Bigg)\Bigg)+\frac{40\,j_{1,\,out,\,x,\,R}}{3}+\frac{40\,j_{1,\,inc,\,x,\,R}}{3}$$

$$+\frac{40\,\hat{j}_{3,\,out,\,x,\,R}}{3}+\frac{40\,\hat{j}_{3,\,inc,\,x,\,R}}{3}-\frac{40\,j_{1,\,out,\,x,\,L}}{3}-\frac{40\,j_{1,\,inc,\,x,\,L}}{3}-\frac{40\,\hat{j}_{3,\,out,\,x,\,L}}{3}-\frac{40\,\hat{j}_{3,\,inc,\,x,\,L}}{3}$$

$$-60\,\bar{\phi}_{2,\,x,\,1}-140\,\bar{\phi}_{2,\,x,\,2}\Bigg)\,Deltax^2\,\Sigma_t^2+\frac{222400\,j_{1,\,out,\,x,\,R}}{3}+\frac{222400\,j_{1,\,inc,\,x,\,R}}{3}$$

$$+\frac{222400\,\hat{j}_{3,\,out,\,x,\,R}}{3}+\frac{222400\,\hat{j}_{3,\,inc,\,x,\,R}}{3}+93400\,\phi_{2,\,x,\,R}+30400\,j_{1,\,out,\,x,\,L}+30400\,j_{1,\,inc,\,x,\,L}$$

$$+30400\,\hat{j}_{3,\,out,\,x,\,L}+30400\,\hat{j}_{3,\,inc,\,x,\,L}+60600\,\phi_{2,\,x,\,L}-33600\,\bar{\Phi}_{0,\,x,\,1}$$

$$-\frac{1}{-5\,\alpha+4\,\Sigma_{rem,\,0}}\Bigg(154000\left(\frac{5\left(\hat{j}_{3,\,out,\,x,\,R}-\hat{j}_{3,\,inc,\,x,\,R}+\hat{j}_{3,\,out,\,x,\,L}-\hat{j}_{3,\,inc,\,x,\,L}\right)}{Deltax}\right.$$

$$+\frac{5\left(\hat{j}_{3,\,out,\,y,\,R}-\hat{j}_{3,\,inc,\,y,\,R}+\hat{j}_{3,\,out,\,y,\,L}-\hat{j}_{3,\,inc,\,y,\,L}\right)}{Deltay}$$

$$+\frac{5\left(\hat{j}_{3,\,out,\,z,\,R}-\hat{j}_{3,\,inc,\,z,\,R}+\hat{j}_{3,\,out,\,z,\,L}-\hat{j}_{3,\,inc,\,z,\,L}\right)}{Deltaz}$$

$$+\frac{2\left(j_{1,\,out,\,x,\,R}-j_{1,\,inc,\,x,\,R}+j_{1,\,out,\,x,\,L}-j_{1,\,inc,\,x,\,L}\right)}{Deltax}$$

$$+\frac{2\left(j_{1,\,out,\,y,\,R}-j_{1,\,inc,\,y,\,R}+j_{1,\,out,\,y,\,L}-j_{1,\,inc,\,y,\,L}\right)}{Deltay}$$

$$+\frac{2\left(j_{1,\,out,\,z,\,R}-j_{1,\,inc,\,z,\,R}+j_{1,\,out,\,z,\,L}-j_{1,\,inc,\,z,\,L}\right)}{Deltaz}\Bigg)\Bigg)-\frac{1}{\Sigma_{rem,\,0}}\Bigg(39200\left(S_0$$

$$-\frac{j_{1,\,out,\,x,\,R}-j_{1,\,inc,\,x,\,R}+j_{1,\,out,\,x,\,L}-j_{1,\,inc,\,x,\,L}}{Deltax}-\frac{j_{1,\,out,\,y,\,R}-j_{1,\,inc,\,y,\,R}+j_{1,\,out,\,y,\,L}-j_{1,\,inc,\,y,\,L}}{Deltay}$$

$$-\frac{j_{1,\,out,\,z,\,R}-j_{1,\,inc,\,z,\,R}+j_{1,\,out,\,z,\,L}-j_{1,\,inc,\,z,\,L}}{Deltaz}\Bigg)\Bigg)-392000\,\bar{\Phi}_{0,\,x,\,2}-64800\,\bar{\phi}_{2,\,x,\,1}$$

$$-756000\,\bar{\phi}_{2,\,x,\,2}\Bigg)\Bigg)-\frac{2\left(j_{1,\,out,\,x,\,R}-j_{1,\,inc,\,x,\,R}\right)}{5\,\Sigma_t}$$

$$\hat{j}_{3,\,out,\,x,\,L}-\hat{j}_{3,\,inc,\,x,\,L}=-\frac{1}{4900\,Deltax^3\,\Sigma_t^3}\Bigg(9\Bigg(-210\Bigg(\phi_{2,\,x,\,R}-21\,\phi_{2,\,x,\,L}$$

$$+\frac{1}{-5\,\alpha+4\,\Sigma_{rem,\,0}}\Bigg(20\Bigg(\frac{5\left(\hat{j}_{3,\,out,\,x,\,R}-\hat{j}_{3,\,inc,\,x,\,R}+\hat{j}_{3,\,out,\,x,\,L}-\hat{j}_{3,\,inc,\,x,\,L}\right)}{Deltax}$$

$$+\frac{5\left(\hat{j}_{3,\,out,\,y,\,R}-\hat{j}_{3,\,inc,\,y,\,R}+\hat{j}_{3,\,out,\,y,\,L}-\hat{j}_{3,\,inc,\,y,\,L}\right)}{Deltay}$$

$$+\frac{5\left(\hat{j}_{3,\,out,\,z,\,R}-\hat{j}_{3,\,inc,\,z,\,R}+\hat{j}_{3,\,out,\,z,\,L}-\hat{j}_{3,\,inc,\,z,\,L}\right)}{Deltaz}$$

$$+\frac{2\left(j_{1,\,out,\,x,\,R}-j_{1,\,inc,\,x,\,R}+j_{1,\,out,\,x,\,L}-j_{1,\,inc,\,x,\,L}\right)}{Deltax}$$

$$+\frac{2\left(j_{1,\,out,\,y,\,R}-j_{1,\,inc,\,y,\,R}+j_{1,\,out,\,y,\,L}-j_{1,\,inc,\,y,\,L}\right)}{Deltay}$$

$$+\frac{2\left(j_{1,\,out,\,z,\,R}-j_{1,\,inc,\,z,\,R}+j_{1,\,out,\,z,\,L}-j_{1,\,inc,\,z,\,L}\right)}{Deltaz}\Bigg)\Bigg)+\frac{40\,j_{1,\,out,\,x,\,R}}{3}+\frac{40\,j_{1,\,inc,\,x,\,R}}{3}$$

$$+\frac{40\,\hat{j}_{3,\,out,\,x,\,R}}{3}+\frac{40\,\hat{j}_{3,\,inc,\,x,\,R}}{3}-\frac{40\,j_{1,\,out,\,x,\,L}}{3}-\frac{40\,j_{1,\,inc,\,x,\,L}}{3}-\frac{40\,\hat{j}_{3,\,out,\,x,\,L}}{3}-\frac{40\,\hat{j}_{3,\,inc,\,x,\,L}}{3}$$

$$-60\,\bar{\phi}_{2,\,x,\,1}+140\,\bar{\phi}_{2,\,x,\,2}\Big)\,Deltax^2\,\Sigma_t^2-30400\,j_{1,\,out,\,x,\,R}-30400\,j_{1,\,inc,\,x,\,R}-30400\,\hat{j}_{3,\,out,\,x,\,R}$$

$$-30400\,\hat{j}_{3,\,inc,\,x,\,R}-60600\,\phi_{2,\,x,\,R}-\frac{222400\,j_{1,\,out,\,x,\,L}}{3}-\frac{222400\,j_{1,\,inc,\,x,\,L}}{3}-\frac{222400\,\hat{j}_{3,\,out,\,x,\,L}}{3}$$

$$-\frac{222400\,\hat{j}_{3,\,inc,\,x,\,L}}{3}-93400\,\phi_{2,\,x,\,L}-33600\,\bar{\Phi}_{0,\,x,\,1}$$

$$+\frac{1}{-5\,\alpha+4\,\Sigma_{rem,\,0}}\Bigg(154000\Bigg(\frac{5\left(\hat{j}_{3,\,out,\,x,\,R}-\hat{j}_{3,\,inc,\,x,\,R}+\hat{j}_{3,\,out,\,x,\,L}-\hat{j}_{3,\,inc,\,x,\,L}\right)}{Deltax}$$

$$+\frac{5\left(\hat{j}_{3,\,out,\,y,\,R}-\hat{j}_{3,\,inc,\,y,\,R}+\hat{j}_{3,\,out,\,y,\,L}-\hat{j}_{3,\,inc,\,y,\,L}\right)}{Deltay}$$

$$+\frac{5\left(\hat{j}_{3,\,out,\,z,\,R}-\hat{j}_{3,\,inc,\,z,\,R}+\hat{j}_{3,\,out,\,z,\,L}-\hat{j}_{3,\,inc,\,z,\,L}\right)}{Deltaz}$$

$$+\frac{2\left(j_{1,\,out,\,x,\,R}-j_{1,\,inc,\,x,\,R}+j_{1,\,out,\,x,\,L}-j_{1,\,inc,\,x,\,L}\right)}{Deltax}$$

$$+\frac{2\left(j_{1,\,out,\,y,\,R}-j_{1,\,inc,\,y,\,R}+j_{1,\,out,\,y,\,L}-j_{1,\,inc,\,y,\,L}\right)}{Deltay}$$

$$+\frac{2\left(j_{1,\,out,\,z,\,R}-j_{1,\,inc,\,z,\,R}+j_{1,\,out,\,z,\,L}-j_{1,\,inc,\,z,\,L}\right)}{Deltaz}\Bigg)\Bigg)+\frac{1}{\Sigma_{rem,\,0}}\Bigg(39200\Bigg(S_0$$

$$-\frac{j_{1,\,out,\,x,\,R}-j_{1,\,inc,\,x,\,R}+j_{1,\,out,\,x,\,L}-j_{1,\,inc,\,x,\,L}}{Deltax}-\frac{j_{1,\,out,\,y,\,R}-j_{1,\,inc,\,y,\,R}+j_{1,\,out,\,y,\,L}-j_{1,\,inc,\,y,\,L}}{Deltay}$$

$$-\frac{j_{1,\,out,\,z,\,R}-j_{1,\,inc,\,z,\,R}+j_{1,\,out,\,z,\,L}-j_{1,\,inc,\,z,\,L}}{Deltaz}\Bigg)\Bigg)+392000\,\bar{\Phi}_{0,\,x,\,2}-64800\,\bar{\phi}_{2,\,x,\,1}$$

$$+756000\,\bar{\phi}_{2,\,x,\,2}\Bigg)\Bigg)-\frac{2\left(j_{1,\,out,\,x,\,L}-j_{1,\,inc,\,x,\,L}\right)}{5\,\Sigma_t}$$

$$j_{1,\,out,\,x,\,R} - j_{1,\,inc,\,x,\,R} = \frac{1}{Deltax}\left(\frac{128\,j_{1,\,out,\,x,\,R}}{3} + \frac{128\,j_{1,\,inc,\,x,\,R}}{3} + \frac{128\,\hat{j}_{3,\,out,\,x,\,R}}{3} + \frac{128\,\hat{j}_{3,\,inc,\,x,\,R}}{3} \right.$$

$$+ 32\,\phi_{2,\,x,\,R} + \frac{32\,j_{1,\,out,\,x,\,L}}{3} + \frac{32\,j_{1,\,inc,\,x,\,L}}{3} + \frac{32\,\hat{j}_{3,\,out,\,x,\,L}}{3} + \frac{32\,\hat{j}_{3,\,inc,\,x,\,L}}{3} + 8\,\phi_{2,\,x,\,L}$$

$$- \frac{1}{-5\,\alpha + 4\,\Sigma_{rem,\,0}}\left(40\left(\frac{5\left(\hat{j}_{3,\,out,\,x,\,R} - \hat{j}_{3,\,inc,\,x,\,R} + \hat{j}_{3,\,out,\,x,\,L} - \hat{j}_{3,\,inc,\,x,\,L}\right)}{Deltax} \right.\right.$$

$$+ \frac{5\left(\hat{j}_{3,\,out,\,y,\,R} - \hat{j}_{3,\,inc,\,y,\,R} + \hat{j}_{3,\,out,\,y,\,L} - \hat{j}_{3,\,inc,\,y,\,L}\right)}{Deltay}$$

$$+ \frac{5\left(\hat{j}_{3,\,out,\,z,\,R} - \hat{j}_{3,\,inc,\,z,\,R} + \hat{j}_{3,\,out,\,z,\,L} - \hat{j}_{3,\,inc,\,z,\,L}\right)}{Deltaz}$$

$$+ \frac{2\left(j_{1,\,out,\,x,\,R} - j_{1,\,inc,\,x,\,R} + j_{1,\,out,\,x,\,L} - j_{1,\,inc,\,x,\,L}\right)}{Deltax}$$

$$+ \frac{2\left(j_{1,\,out,\,y,\,R} - j_{1,\,inc,\,y,\,R} + j_{1,\,out,\,y,\,L} - j_{1,\,inc,\,y,\,L}\right)}{Deltay}$$

$$\left.\left.\left. + \frac{2\left(j_{1,\,out,\,z,\,R} - j_{1,\,inc,\,z,\,R} + j_{1,\,out,\,z,\,L} - j_{1,\,inc,\,z,\,L}\right)}{Deltaz} \right)\right) - \frac{1}{\Sigma_{rem,\,0}}\left(20\left(S_0 \right.\right.$$

$$\left. - \frac{j_{1,\,out,\,x,\,R} - j_{1,\,inc,\,x,\,R} + j_{1,\,out,\,x,\,L} - j_{1,\,inc,\,x,\,L}}{Deltax} - \frac{j_{1,\,out,\,y,\,R} - j_{1,\,inc,\,y,\,R} + j_{1,\,out,\,y,\,L} - j_{1,\,inc,\,y,\,L}}{Deltay} \right.$$

$$\left.\left. - \frac{j_{1,\,out,\,z,\,R} - j_{1,\,inc,\,z,\,R} + j_{1,\,out,\,z,\,L} - j_{1,\,inc,\,z,\,L}}{Deltaz} \right)\right) - 60\,\bar{\Phi}_{0,\,x,\,1} - 140\,\bar{\Phi}_{0,\,x,\,2}\Bigg)$$

$$j_{1,\,out,\,x,\,L} - j_{1,\,inc,\,x,\,L} = \frac{1}{Deltax}\left(-\frac{32\,j_{1,\,out,\,x,\,R}}{3} - \frac{32\,j_{1,\,inc,\,x,\,R}}{3} - \frac{32\,\hat{j}_{3,\,out,\,x,\,R}}{3} - \frac{32\,\hat{j}_{3,\,inc,\,x,\,R}}{3} \right.$$

$$- 8\,\phi_{2,\,x,\,R} - \frac{128\,j_{1,\,out,\,x,\,L}}{3} - \frac{128\,j_{1,\,inc,\,x,\,L}}{3} - \frac{128\,\hat{j}_{3,\,out,\,x,\,L}}{3} - \frac{128\,\hat{j}_{3,\,inc,\,x,\,L}}{3} - 32\,\phi_{2,\,x,\,L}$$

$$+ \frac{1}{-5\,\alpha + 4\,\Sigma_{rem,\,0}}\left(40\left(\frac{5\left(\hat{j}_{3,\,out,\,x,\,R} - \hat{j}_{3,\,inc,\,x,\,R} + \hat{j}_{3,\,out,\,x,\,L} - \hat{j}_{3,\,inc,\,x,\,L}\right)}{Deltax} \right.\right.$$

$$+\frac{5\left(\hat{j}_{3,\,out,\,y,\,R}-\hat{j}_{3,\,inc,\,y,\,R}+\hat{j}_{3,\,out,\,y,\,L}-\hat{j}_{3,\,inc,\,y,\,L}\right)}{Deltay}$$

$$+\frac{5\left(\hat{j}_{3,\,out,\,z,\,R}-\hat{j}_{3,\,inc,\,z,\,R}+\hat{j}_{3,\,out,\,z,\,L}-\hat{j}_{3,\,inc,\,z,\,L}\right)}{Deltaz}$$

$$+\frac{2\left(j_{1,\,out,\,x,\,R}-j_{1,\,inc,\,x,\,R}+j_{1,\,out,\,x,\,L}-j_{1,\,inc,\,x,\,L}\right)}{Deltax}$$

$$+\frac{2\left(j_{1,\,out,\,y,\,R}-j_{1,\,inc,\,y,\,R}+j_{1,\,out,\,y,\,L}-j_{1,\,inc,\,y,\,L}\right)}{Deltay}$$

$$+\frac{2\left(j_{1,\,out,\,z,\,R}-j_{1,\,inc,\,z,\,R}+j_{1,\,out,\,z,\,L}-j_{1,\,inc,\,z,\,L}\right)}{Deltaz}\Bigg)\Bigg)+\frac{1}{\Sigma_{rem,\,0}}\Bigg(20\Bigg(S_0$$

$$-\frac{j_{1,\,out,\,x,\,R}-j_{1,\,inc,\,x,\,R}+j_{1,\,out,\,x,\,L}-j_{1,\,inc,\,x,\,L}}{Deltax}-\frac{j_{1,\,out,\,y,\,R}-j_{1,\,inc,\,y,\,R}+j_{1,\,out,\,y,\,L}-j_{1,\,inc,\,y,\,L}}{Deltay}$$

$$-\frac{j_{1,\,out,\,z,\,R}-j_{1,\,inc,\,z,\,R}+j_{1,\,out,\,z,\,L}-j_{1,\,inc,\,z,\,L}}{Deltaz}\Bigg)\Bigg)-60\,\bar{\Phi}_{0,\,x,\,1}+140\,\bar{\Phi}_{0,\,x,\,2}\Bigg)$$

$$j_{3,\,out,\,x,\,R}-j_{3,\,inc,\,x,\,R}=\frac{1}{Deltax}\Bigg(21\,\phi_{2,\,x,\,R}-\phi_{2,\,x,\,L}$$

$$-\frac{1}{-5\,\alpha+4\,\Sigma_{rem,\,0}}\Bigg(20\Bigg(\frac{5\left(\hat{j}_{3,\,out,\,x,\,R}-\hat{j}_{3,\,inc,\,x,\,R}+\hat{j}_{3,\,out,\,x,\,L}-\hat{j}_{3,\,inc,\,x,\,L}\right)}{Deltax}$$

$$+\frac{5\left(\hat{j}_{3,\,out,\,y,\,R}-\hat{j}_{3,\,inc,\,y,\,R}+\hat{j}_{3,\,out,\,y,\,L}-\hat{j}_{3,\,inc,\,y,\,L}\right)}{Deltay}$$

$$+\frac{5\left(\hat{j}_{3,\,out,\,z,\,R}-\hat{j}_{3,\,inc,\,z,\,R}+\hat{j}_{3,\,out,\,z,\,L}-\hat{j}_{3,\,inc,\,z,\,L}\right)}{Deltaz}$$

$$+\frac{2\left(j_{1,\,out,\,x,\,R}-j_{1,\,inc,\,x,\,R}+j_{1,\,out,\,x,\,L}-j_{1,\,inc,\,x,\,L}\right)}{Deltax}$$

$$+\frac{2\left(j_{1,\,out,\,y,\,R}-j_{1,\,inc,\,y,\,R}+j_{1,\,out,\,y,\,L}-j_{1,\,inc,\,y,\,L}\right)}{Deltay}$$

$$+\frac{2\left(j_{1,\,out,\,z,\,R}-j_{1,\,inc,\,z,\,R}+j_{1,\,out,\,z,\,L}-j_{1,\,inc,\,z,\,L}\right)}{Deltaz}\Bigg)\Bigg)+\frac{40\,j_{1,\,out,\,x,\,R}}{3}+\frac{40\,j_{1,\,inc,\,x,\,R}}{3}$$

$$+\frac{40\,\hat{j}_{3,\,out,\,x,\,R}}{3}+\frac{40\,\hat{j}_{3,\,inc,\,x,\,R}}{3}-\frac{40\,j_{1,\,out,\,x,\,L}}{3}-\frac{40\,j_{1,\,inc,\,x,\,L}}{3}-\frac{40\,\hat{j}_{3,\,out,\,x,\,L}}{3}-\frac{40\,\hat{j}_{3,\,inc,\,x,\,L}}{3}$$

$$-60\,\bar{\phi}_{2,\,x,\,1}-140\,\bar{\phi}_{2,\,x,\,2}\Bigg)$$

$$j_{3,\,out,\,x,\,L}-j_{3,\,inc,\,x,\,L}=\frac{1}{Deltax}\Bigg(\phi_{2,\,x,\,R}-21\,\phi_{2,\,x,\,L}$$

$$+\frac{1}{-5\,\alpha+4\,\Sigma_{rem,\,0}}\left(20\left(\frac{5\left(\hat{j}_{3,\,out,\,x,\,R}-\hat{j}_{3,\,inc,\,x,\,R}+\hat{j}_{3,\,out,\,x,\,L}-\hat{j}_{3,\,inc,\,x,\,L}\right)}{Deltax}\right.\right.$$
$$+\frac{5\left(\hat{j}_{3,\,out,\,y,\,R}-\hat{j}_{3,\,inc,\,y,\,R}+\hat{j}_{3,\,out,\,y,\,L}-\hat{j}_{3,\,inc,\,y,\,L}\right)}{Deltay}$$
$$+\frac{5\left(\hat{j}_{3,\,out,\,z,\,R}-\hat{j}_{3,\,inc,\,z,\,R}+\hat{j}_{3,\,out,\,z,\,L}-\hat{j}_{3,\,inc,\,z,\,L}\right)}{Deltaz}$$
$$+\frac{2\left(j_{1,\,out,\,x,\,R}-j_{1,\,inc,\,x,\,R}+j_{1,\,out,\,x,\,L}-j_{1,\,inc,\,x,\,L}\right)}{Deltax}$$
$$+\frac{2\left(j_{1,\,out,\,y,\,R}-j_{1,\,inc,\,y,\,R}+j_{1,\,out,\,y,\,L}-j_{1,\,inc,\,y,\,L}\right)}{Deltay}$$
$$\left.\left.+\frac{2\left(j_{1,\,out,\,z,\,R}-j_{1,\,inc,\,z,\,R}+j_{1,\,out,\,z,\,L}-j_{1,\,inc,\,z,\,L}\right)}{Deltaz}\right)\right)+\frac{40\,j_{1,\,out,\,x,\,R}}{3}+\frac{40\,j_{1,\,inc,\,x,\,R}}{3}$$
$$+\frac{40\,\hat{j}_{3,\,out,\,x,\,R}}{3}+\frac{40\,\hat{j}_{3,\,inc,\,x,\,R}}{3}-\frac{40\,j_{1,\,out,\,x,\,L}}{3}-\frac{40\,j_{1,\,inc,\,x,\,L}}{3}-\frac{40\,\hat{j}_{3,\,out,\,x,\,L}}{3}-\frac{40\,\hat{j}_{3,\,inc,\,x,\,L}}{3}$$
$$\left.-60\,\bar{\phi}_{2,\,x,\,1}+140\,\bar{\phi}_{2,\,x,\,2}\right)$$