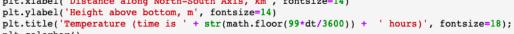
Homework Assignment #7 - Python Solution





plt.colorbar() plt.subplot(212)

plt.imshow(C[:,:,99], cmap='jet', vmin=0, vmax=.005) ax = plt.gca()

ax.invert_yaxis() plt.xlabel('Distance along North-South Axis, km', fontsize=14)

plt.ylabel('Height above bottom, m', fontsize=14)
plt.title('Chemical Density (time is ' + str(math + str(math.floor(99*dt/3600)) + ' hours)', fontsize=18); plt.colorbar() plt.show()

plt.figure(figsize=(16, 8))

plt.subplot(211) plt.imshow(T[:,:,999], cmap='jet', vmin=5, vmax=30) ax = plt.gca()

ax.invert_yaxis()

plt.xlabel('Distance along North-South Axis, km', fontsize=14) plt.ylabel('Height above bottom, m', fontsize=14)
plt.title('Temperature (time is ' + str(math.floor(999*dt/3600)) + ' hours)', fontsize=18);

plt.colorbar()

plt.subplot(212) plt.imshow(C[:,:,999], cmap='jet', vmin=0, vmax=.005) ax = plt.gca()

ax.invert_yaxis() plt.xlabel('Distance along North-South Axis, km', fontsize=14)

plt.ylabel('Height above bottom, m', fontsize=14)
plt.title('Chemical Density (time is ' + str(math.floor(999*dt/3600)) + ' hours)', fontsize=18); lt.colorbar() plt.show()

plt.figure(figsize=(16, 8)) plt.subplot(211) plt.imshow(T[:,:,9999], cmap='jet', vmin=5, vmax=30) ax = plt.gca()

ax.invert_yaxis() plt.xlabel('Distance along North-South Axis, km', fontsize=14)

plt.ylabel('Height above bottom, m', fontsize=14)
plt.title('Temperature (time is ' + str(math.floor(9999*dt/3600)) + ' hours)', fontsize=18); plt.colorbar() plt.subplot(212)

plt.imshow(C[:,:,9999], cmap='jet', vmin=0, vmax=.005) ax = plt.gca()

10

0

ó

25

50

75

ax.invert_yaxis() plt.xlabel('Distance along North-South Axis, km', fontsize=14)

plt.ylabel('Height above bottom, m', fontsize=14)
plt.title('Chemical Density (time is ' + str(math + str(math.floor(9999*dt/3600)) + ' hours)', fontsize=18); plt.colorbar()

plt.show() 30 Ε Temperature (time is 1 hours) Height above bottom, 25 30 20 20 10 15 0 10 175 ó 25 50 75 100 125 150 200 Distance along North-South Axis, km 0.005 Ε Chemical Density (time is 1 hours) Height above bottom, 0.004 30 20 0.003

100

Distance along North-South Axis, km

125

150

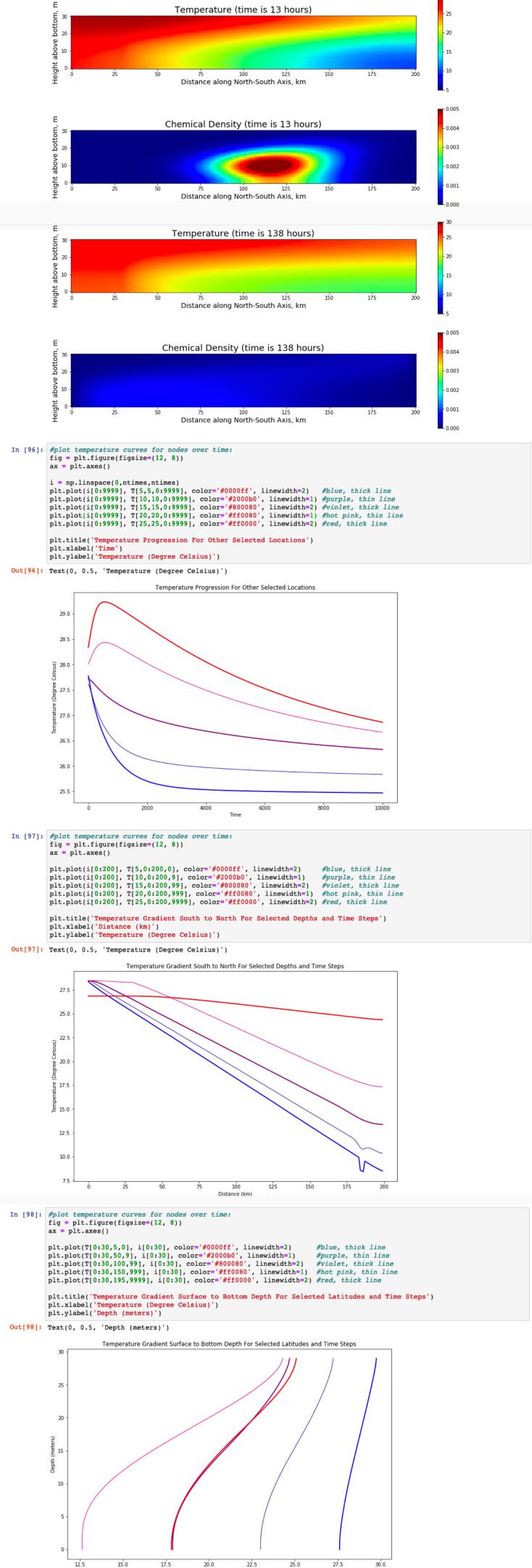
175

0.002

0.001

0.000 30

200



Temperature (Degree Celsius)