

Task3 involves a 22 independent MULTIFLUX runs, according to Tabl 4-1. The MULTIFLUX input files used in Task 2 were modified for the 22 independent tasks according to Table M-13-1.

Table M-13-1 Input Property Modification and Variation Table

Parameter	New Values and Required Changes to the Input Files in Task 2
Dx (Drift spacing change from 26.9 m to 40.5 m)	Change lines 50-51 in p. 85 and lines 1-2 in p. 87: (dx 0.920 0.6907 1e-5 0.3797 0.42 0.3394 1e-5 0.5 0.9 1.5 2.5 4.0 6.0 9.0 13.3502) in order to represent 56.48 MTU/acre heat load according to the AMR case This change does not apply to the 85 MTU/acre runs.
K [W/m/K]	
2.0	Line 10 in p. 94: (tcond tcondLin (solid 1.185E+00) (liquid 1.996E+00) (gas 1.185E+00)) Line 65 in p. 101: (tcond tcondLin (solid 1.318E-02) (liquid 2.220E-02) (gas 1.318E-02)) Line 22 in p. 132: kcon=2.02; %conductivity of wall rock
1.6	Line 10 in p. 94 : (tcond tcondLin (solid 1.185E+00) (liquid 1.590E+00) (gas 1.185E+00)) Line 65 in p. 101 : (tcond tcondLin (solid 1.50E-02) (liquid 1.00E-02) (gas 1.50E-02)) Line 22 in p. 132 : kcon=1.6; %conductivity of wall rock
1.2	p. 94 line 10 : (tcond tcondLin (solid 1.185E+00) (liquid 1.185E+00) (gas 1.185E+00)) Line 65 in p. 101 : (tcond tcondLin (solid 1.50E-02) (liquid 1.50E-02) (gas 1.50E-02)) Line 22 in p. 132 : kcon=1.2; %conductivity of wall rock
H [W/m ² /K]	
1.89	Lines 42-43 in p. 132: hi=1.89; %inner surface heat transport coefficient ho=1.89;%outter surface heat transport coefficient
3.0	Lines 42-43 in p. 132 : hi=3.0; %inner surface heat transport coefficient ho=3.0; %outter surface heat transport coefficient
4.0	Lines 42-43 in p. 132 : hi=4.0; %inner surface heat transport coefficient ho=4.0; %outter surface heat transport coefficient
ρ kg/m ³	
2540	Line 5 in p. 94: (solid-density 2.891E+03) (porosity 1.310e-01) Line 61 in p. 101: (solid-density 2.825E+01) (porosity 1.100e-02)
1905	Line 5 in p. 94 : (solid-density 2.1682e+03) (porosity 1.310e-01) Line 61 in p. 101: (solid-density 21.1875) (porosity 1.100e-02)
AFR [m ³ /s]	
15	Use the first 20 rows of qmain.dat file in Task2 for the Base Case
5	Multiply qmain.dat of the Base Case by 5/15
1	Multiply qmain.dat of the Base Case by 1/15
ATL [MTU/acre]	
56	Use the first 20 rows of qq.dat file in Task2 for the Base Case
37	Multiply qq.dat of the Base Case by 37/56
5	Multiply qq.dat of the Base Case by 5/56
85	Use Task2 NUFT input deck. which was for 85 MTU/acre load and re-functionalize with new NTCF input deck
Intake Air Temperature [°C]	
25	Use the first 20 rows of tair.dat file in Task2 for the Base Case
30	25 in tair.dat to 30 Use Task2 NUFT input deck. which was for 85 MTU/acre load and re-functionalize with new NTCF input deck Multiply qmain.dat of the Base Case by 5/15

Parameter	New Values and Required Changes to the Input Files in Task 2
Intake Air Relative Humidity [%]	
30	Use the first 20 rows of pair.dat file in Task2 for the Base Case
90	Use Task2 NUFT input deck. which was for 85 MTU/acre load and re-functionalize with new NTCF input deck Multiply qmain.dat of the Base Case by 5/15 Use 2.8518763e+003 in pair.dat
Percolation [mm/year]	
10	Lines 59-66 in p. 132 (table 0.0 3.2105730e-07 600.00y 3.2105730e-07 ;; 1.0130000e+01 mm/yr 600.001y 9.1531440e-07 2000.00y 9.1531440e-07 ;; 2.8880000e+01 mm/yr 2000.001y 1.3311359e-06 1.0e30 1.3311359e-06) ;; 4.2000000e+01 mm/yr (enthalpy 0.0 6.68E+04 1E+30 6.68E+04))
50	Lines 59-66 in p. 132 : (table 0.0 1.6052865e-06 600.00y 1.6052865e-06 ;; 5.0650000e+01 mm/yr , multiplied by 5 for sensitivity analysis, 12/3/02 600.001y 4.5765720e-06 2000.00y 4.5765720e-06 ;; 1.4440000e+02 mm/yr, multiplied by 5 for sensitivity analysis, 12/3/02 2000.001y 6.6556795e-06 1.0e30 6.6556795e-06) ;; 2.1000000e+02 mm/yr, multiplied by 5 for sensitivity analysis, 12/3/02 (enthalpy 0.0 6.68E+04 1E+30 6.68E+04))

Other modified input files are as follows:

Base Case NTCF input file for first drift cell:

```
%DO NOT EDIT THE NEXT LINE ---- NUFT input deck file identifier
211

%number of layers
21 1

%%section-to-segment assignment
%1- segment index
%2- segment to layer assignment
%3- layer to segment assignment
%4- drift section length
1      2      3      4      5      6      7      8      9      10     11     12     13     14
15     16     17     18     19     20     21
1      1      1      1      1      1      1      1      1      1      1      1      1
1      1      1      1      1      1      1      1      1      1      1      1      1
1      1      1      1      1      1      1      1      1      1      1      1      1
1      1      1      1      1      1      1      1      1      1      1      1      1
1.8650      0.1000      2.6375      2.6375      0.1000      2.6525      2.6525      0.1000
1.8650      1.8650      0.1000      2.6525      2.6525      0.1000      2.6375      2.6375
0.1000      2.6525      2.6525      0.1000      2.7850
2      2      2      2      2      2      2      2      2      2      2      2      2
2      2      2      2      2      2      2      2      2      2      2      2      2

%NTCF constant optimizer search windows
%[temperature(lower upper increment) pressure(lower upper increment) heat optimization flag]
15 35 1 800 1200 20 0

%nuftfunl perturbation flags
1 1
```

```

%amplitude of randomized correction of central values
%temperature      Pressure
    0.02          0.1

%control flags for the negative corrections in NTCF matrices
0 0

%time divisions and number of NUFT internal time ticks
20 10

%time vector (size: 1 x timeDiv)
0 0.167 0.5 1 2 5 10 15 20 25 30 35 40 45 50 60 75 100 150 200 300

%pbar vector (size: 1 x timeDiv)
8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04
8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04
8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04
8.872000e+04 8.872000e+04

%wall temperature distribution (size: timeDiv x layers)
3.9288950e+01 4.1701780e+01 4.4083050e+01 4.3878940e+01 4.1794060e+01
4.3724640e+01 4.4936730e+01 4.1284200e+01 4.3036310e+01 4.2418830e+01 4.2018970e+01
4.3939820e+01 4.4126190e+01 4.2152340e+01 4.4063650e+01 4.4300030e+01 4.2491410e+01
4.4451610e+01 4.4835990e+01 4.1554180e+01 4.2804320e+01
4.2742900e+01 4.5689350e+01 4.8078040e+01 4.7920740e+01 4.5860680e+01
4.7785340e+01 4.9105850e+01 4.5304110e+01 4.7054510e+01 4.6400810e+01 4.6160000e+01
4.8078300e+01 4.8321780e+01 4.6376110e+01 4.8278740e+01 4.8567710e+01 4.6801530e+01
4.8748110e+01 4.9175400e+01 4.5717430e+01 4.6959550e+01
4.4221030e+01 4.7349160e+01 4.9697550e+01 4.9573910e+01 4.7571460e+01
4.9457930e+01 5.0801740e+01 4.7017140e+01 4.8733400e+01 4.8081270e+01 4.7916610e+01
4.9798250e+01 5.0068750e+01 4.8179300e+01 5.0042550e+01 5.0354340e+01 4.8645130e+01
5.0548980e+01 5.0988440e+01 4.7527160e+01 4.8742060e+01
4.4861780e+01 4.8045730e+01 5.0338630e+01 5.0239460e+01 4.8300830e+01
5.0139470e+01 5.1479010e+01 4.7761970e+01 4.9434830e+01 4.8794770e+01 4.8675120e+01
5.0509540e+01 5.0793730e+01 4.8965240e+01 5.0780140e+01 5.1102320e+01 4.9451000e+01
5.1303940e+01 5.1744520e+01 4.8334090e+01 4.9516060e+01
4.4754100e+01 4.7885350e+01 5.0072390e+01 4.9997070e+01 4.8162650e+01
4.9914210e+01 5.1215660e+01 4.7656480e+01 4.9249990e+01 4.8637390e+01 4.8552600e+01
5.0299910e+01 5.0587080e+01 4.8856440e+01 5.0584460e+01 5.0906090e+01 4.9344480e+01
5.1107520e+01 5.1536010e+01 4.8260760e+01 4.9384160e+01
4.3633430e+01 4.6574470e+01 4.8595130e+01 4.8540020e+01 4.6855840e+01
4.8473330e+01 4.9693500e+01 4.6399900e+01 4.7871070e+01 4.7303620e+01 4.7238710e+01
4.8851240e+01 4.9126180e+01 4.7535250e+01 4.9130430e+01 4.9436300e+01 4.8000440e+01
4.9627280e+01 5.0026620e+01 4.6987900e+01 4.8022430e+01
4.2104540e+01 4.4805480e+01 4.6651590e+01 4.6610460e+01 4.5078300e+01
4.6556160e+01 4.7681940e+01 4.4673260e+01 4.6016970e+01 4.5497680e+01 4.5440740e+01
4.6912840e+01 4.7168280e+01 4.5718420e+01 4.7175620e+01 4.7459050e+01 4.6149370e+01
4.7635190e+01 4.8000150e+01 4.5219040e+01 4.6161820e+01
4.0703310e+01 4.3187910e+01 4.4886320e+01 4.4854240e+01 4.3448600e+01
4.4808630e+01 4.5850930e+01 4.3085200e+01 4.4321350e+01 4.3843140e+01 4.3788950e+01
4.5142620e+01 4.5379260e+01 4.4046870e+01 4.5387730e+01 4.5650110e+01 4.4445320e+01
4.5812400e+01 4.6147060e+01 4.3587250e+01 4.4453050e+01
3.9450210e+01 4.1743100e+01 4.3311800e+01 4.3286410e+01 4.1990890e+01
4.3247450e+01 4.4215150e+01 4.1662360e+01 4.2804120e+01 4.2361830e+01 4.2309630e+01
4.3559440e+01 4.3778850e+01 4.2548920e+01 4.3787650e+01 4.4030880e+01 4.2917710e+01
4.4180600e+01 4.4488440e+01 4.2123270e+01 4.2921760e+01
3.8325030e+01 4.0445170e+01 4.1897180e+01 4.1877240e+01 4.0680390e+01
4.1843840e+01 4.2743670e+01 4.0382300e+01 4.1439150e+01 4.1029250e+01 4.0978950e+01
4.2135440e+01 4.2339150e+01 4.1201220e+01 4.2348080e+01 4.2573880e+01 4.1543080e+01
4.2712240e+01 4.2996010e+01 4.0806230e+01 4.1544350e+01
3.7334440e+01 3.9303160e+01 4.0652240e+01 4.0636540e+01 3.9526300e+01
4.0607560e+01 4.1447060e+01 3.9253880e+01 4.0235830e+01 3.9854370e+01 3.9806150e+01
4.0880360e+01 4.1070050e+01 4.0013050e+01 4.1078830e+01 4.1289090e+01 4.0330910e+01
4.1417360e+01 4.1679980e+01 3.9644570e+01 4.0329570e+01
3.6451670e+01 3.8285190e+01 3.9541880e+01 3.9529670e+01 3.8496940e+01
3.9504400e+01 4.0289440e+01 3.8246880e+01 3.9161610e+01 3.8805660e+01 3.8759650e+01
3.9760050e+01 3.9937120e+01 3.8952720e+01 3.9945690e+01 4.0141960e+01 3.9249010e+01
4.0261190e+01 4.0504960e+01 3.8608000e+01 3.9245410e+01
3.5654550e+01 3.7365200e+01 3.8537730e+01 3.8528510e+01 3.7566300e+01
3.8506500e+01 3.9241630e+01 3.7336240e+01 3.8189720e+01 3.7857090e+01 3.7813320e+01

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3.8746520e+01  3.8912110e+01  3.7993880e+01  3.8920500e+01  3.9104030e+01  3.8270610e+01
3.9215100e+01  3.9441800e+01  3.7671090e+01  3.8265240e+01
  3.4945620e+01  3.6546400e+01  3.7643650e+01  3.7636920e+01  3.6737670e+01
3.7617700e+01  3.8307920e+01  3.6525200e+01  3.7323890e+01  3.7012200e+01  3.6970550e+01
3.7843670e+01  3.7998980e+01  3.7139940e+01  3.8007190e+01  3.8179310e+01  3.7399180e+01
3.8283110e+01  3.8494630e+01  3.6836980e+01  3.7392500e+01
  3.4035160e+01  3.5493700e+01  3.6494290e+01  3.6490390e+01  3.5671790e+01
3.6474540e+01  3.7106470e+01  3.5481590e+01  3.6209950e+01  3.5925330e+01  3.5886200e+01
3.6682220e+01  3.6824190e+01  3.6041110e+01  3.6832120e+01  3.6989440e+01  3.6277740e+01
3.7083910e+01  3.7275940e+01  3.5764070e+01  3.6270090e+01
  3.2809660e+01  3.4068790e+01  3.4934170e+01  3.4934960e+01  3.4230060e+01
3.4924640e+01  3.5474610e+01  3.4072240e+01  3.4702120e+01  3.4456360e+01  3.4421260e+01
3.5109450e+01  3.5233560e+01  3.4557820e+01  3.5242070e+01  3.5379340e+01  3.4764300e+01
3.5461550e+01  3.5626830e+01  3.4320730e+01  3.4757600e+01
  3.1415150e+01  3.2457990e+01  3.3171330e+01  3.3174910e+01  3.2595610e+01
3.3168300e+01  3.3625600e+01  3.2468400e+01  3.2987610e+01  3.2783890e+01  3.2755380e+01
3.3322380e+01  3.3425450e+01  3.2868810e+01  3.3432890e+01  3.3546790e+01  3.3039720e+01
3.3614400e+01  3.3749890e+01  3.2670630e+01  3.3030010e+01
  2.9921190e+01  3.0732470e+01  3.1282550e+01  3.1287540e+01  3.0841980e+01
3.1283690e+01  3.1640120e+01  3.0745430e+01  3.1145660e+01  3.0987060e+01  3.0966170e+01
3.1403170e+01  3.1483210e+01  3.1053990e+01  3.1488980e+01  3.1577400e+01  3.1186170e+01
3.1629240e+01  3.1733130e+01  3.0897170e+01  3.1173660e+01
  2.8820950e+01  2.9459060e+01  2.9887530e+01  2.9892890e+01  2.9546620e+01
2.9890690e+01  3.0171060e+01  2.9472140e+01  2.9783800e+01  2.9659220e+01  2.9644200e+01
2.9984420e+01  3.0047270e+01  2.9713050e+01  3.0051810e+01  3.0121200e+01  2.9816500e+01
3.0161490e+01  3.0242200e+01  2.9588180e+01  2.9803120e+01
  2.8101600e+01  2.8621440e+01  2.8971110e+01  2.8976260e+01  2.8694210e+01
2.8975110e+01  2.9204770e+01  2.8634790e+01  2.8889170e+01  2.8787410e+01  2.8774660e+01
2.9052270e+01  2.9103650e+01  2.8831000e+01  2.9107520e+01  2.9164250e+01  2.8915470e+01
2.9197040e+01  2.9262550e+01  2.8728980e+01  2.8904220e+01

```

```
%wall temperature perturbation vector (size: 1 x timeDiv)
```

```
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
```

```
%wall partial vapor pressure distribution (size: timeDiv x layers)
```

```

9.5616830e+02  9.5704490e+02  9.5791640e+02  9.5788790e+02  9.5716430e+02
9.5787720e+02  9.5835410e+02  9.5707230e+02  9.5770890e+02  9.5751880e+02  9.5739360e+02
9.5810390e+02  9.5821480e+02  9.5753050e+02  9.5823710e+02  9.5836580e+02  9.5774070e+02
9.5846530e+02  9.5864800e+02  9.5749430e+02  9.5797050e+02
  9.5862480e+02  9.5987550e+02  9.6081740e+02  9.6082890e+02  9.6007730e+02
9.6084310e+02  9.6142800e+02  9.5997980e+02  9.6066310e+02  9.6044930e+02  9.6041270e+02
9.6117810e+02  9.6134410e+02  9.6063630e+02  9.6139420e+02  9.6157660e+02  9.6093990e+02
9.6171440e+02  9.6194850e+02  9.6062010e+02  9.6113460e+02
  9.6011590e+02  9.6155930e+02  9.6251100e+02  9.6255660e+02  9.6182310e+02
9.6259410e+02  9.6322690e+02  9.6173810e+02  9.6242470e+02  9.6220900e+02  9.6223240e+02
9.6300450e+02  9.6320570e+02  9.6251640e+02  9.6327870e+02  9.6349380e+02  9.6287900e+02
9.6365610e+02  9.6391650e+02  9.6253580e+02  9.6305580e+02
  9.6105630e+02  9.6260120e+02  9.6352700e+02  9.6360220e+02  9.6291280e+02
9.6366060e+02  9.6431100e+02  9.6284750e+02  9.6351210e+02  9.6330490e+02  9.6337600e+02
9.6412580e+02  9.6435070e+02  9.6370390e+02  9.6444260e+02  9.6467850e+02  9.6410550e+02
9.6485680e+02  9.6513020e+02  9.6376070e+02  9.6426650e+02
  9.6147010e+02  9.6303010e+02  9.6386480e+02  9.6397210e+02  9.6338080e+02
9.6405290e+02  9.6468450e+02  9.6334770e+02  9.6394330e+02  9.6375960e+02  9.6388030e+02
9.6455480e+02  9.6479340e+02  9.6423910e+02  9.6490210e+02  9.6514770e+02  9.6466090e+02
9.6533330e+02  9.6560370e+02  9.6433690e+02  9.6479250e+02
  9.6105030e+02  9.6249280e+02  9.6312220e+02  9.6326670e+02  9.6286930e+02
9.6337300e+02  9.6392440e+02  9.6288720e+02  9.6333080e+02  9.6319560e+02  9.6337530e+02
9.6388120e+02  9.6411740e+02  9.6374450e+02  9.6423990e+02  9.6447710e+02  9.6415620e+02
9.6465550e+02  9.6489650e+02  9.6388690e+02  9.6422880e+02
  9.6032640e+02  9.6148330e+02  9.6153630e+02  9.6179660e+02  9.6195300e+02
9.6198270e+02  9.6231710e+02  9.6212060e+02  9.6213560e+02  9.6214040e+02  9.6250280e+02
9.6253510e+02  9.6277600e+02  9.6292220e+02  9.6294580e+02  9.6316940e+02  9.6332480e+02
9.6333630e+02  9.6350230e+02  9.6321180e+02  9.6323590e+02
  9.5978920e+02  9.6082720e+02  9.6056480e+02  9.6087800e+02  9.6132700e+02
9.6109660e+02  9.6131500e+02  9.6155170e+02  9.6133220e+02  9.6140260e+02  9.6187250e+02
9.6164570e+02  9.6188280e+02  9.6230330e+02  9.6206830e+02  9.6227940e+02  9.6268950e+02
9.6243350e+02  9.6255720e+02  9.6263340e+02  9.6248380e+02
  9.5921480e+02  9.6024200e+02  9.5999360e+02  9.6028090e+02  9.6069620e+02
9.6047780e+02  9.6069630e+02  9.6088850e+02  9.6068190e+02  9.6073620e+02  9.6119130e+02
9.6097620e+02  9.6119600e+02  9.6158450e+02  9.6136180e+02  9.6155840e+02  9.6194120e+02
9.6169870e+02  9.6181630e+02  9.6185650e+02  9.6171430e+02

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9.5874400e+02 9.5967950e+02 9.5927560e+02 9.5958250e+02 9.6013720e+02
9.5979120e+02 9.5994470e+02 9.6035500e+02 9.6003390e+02 9.6012080e+02 9.6061870e+02
9.6027630e+02 9.6048840e+02 9.6100770e+02 9.6065810e+02 9.6084330e+02 9.6134690e+02
9.6097360e+02 9.6106660e+02 9.6129550e+02 9.6106800e+02
9.5834000e+02 9.5935590e+02 9.5927510e+02 9.5949180e+02 9.5971520e+02
9.5963620e+02 9.5988950e+02 9.5982700e+02 9.5974850e+02 9.5975040e+02 9.6011640e+02
9.6004040e+02 9.6022740e+02 9.6043530e+02 9.6035200e+02 9.6052450e+02 9.6074160e+02
9.6064480e+02 9.6076570e+02 9.6059790e+02 9.6054880e+02
9.5791300e+02 9.5894700e+02 9.5910000e+02 9.5925000e+02 9.5923340e+02
9.5934840e+02 9.5966850e+02 9.5927620e+02 9.5937410e+02 9.5931790e+02 9.5957690e+02
9.5969380e+02 9.5985990e+02 9.5984180e+02 9.5995200e+02 9.6011280e+02 9.6012010e+02
9.6022450e+02 9.5936270e+02 9.5992210e+02 9.6000200e+02
9.5750750e+02 9.5846110e+02 9.5868660e+02 9.5881310e+02 9.5872170e+02
9.5889830e+02 9.5922260e+02 9.5875660e+02 9.5890990e+02 9.5884340e+02 9.5904320e+02
9.5922050e+02 9.5937340e+02 9.5928350e+02 9.5945540e+02 9.5960580e+02 9.5954270e+02
9.5971160e+02 9.5984750e+02 9.5935430e+02 9.5947430e+02
9.5713410e+02 9.5794130e+02 9.5823730e+02 9.5834960e+02 9.5819350e+02
9.5843140e+02 9.5875050e+02 9.5824680e+02 9.5845370e+02 9.5838770e+02 9.5850990e+02
9.5874610e+02 9.5888710e+02 9.5873310e+02 9.5896620e+02 9.5910670e+02 9.5897550e+02
9.5920880e+02 9.5933800e+02 9.5882650e+02 9.5898510e+02
9.5672370e+02 9.5732620e+02 9.5733440e+02 9.5750660e+02 9.5763080e+02
9.5763290e+02 9.5782970e+02 9.5777380e+02 9.5776640e+02 9.5777960e+02 9.5797610e+02
9.5797640e+02 9.5811860e+02 9.5822710e+02 9.5822560e+02 9.5835730e+02 9.5846380e+02
9.5845460e+02 9.5854260e+02 9.5842050e+02 9.5842110e+02
9.5633780e+02 9.5606840e+02 9.5389840e+02 9.5457190e+02 9.5684190e+02
9.5504930e+02 9.5447350e+02 9.5760140e+02 9.5596700e+02 9.5652850e+02 9.5749400e+02
9.5570330e+02 9.5592130e+02 9.5804540e+02 9.5625590e+02 9.5638830e+02 9.5834700e+02
9.5648590e+02 9.5632790e+02 9.5891270e+02 9.5771360e+02
9.5579880e+02 9.5686840e+02 9.5756590e+02 9.5750520e+02 9.5687950e+02
9.5744590e+02 9.5789750e+02 9.5667320e+02 9.5718460e+02 9.5695970e+02 9.5695170e+02
9.5751950e+02 9.5759480e+02 9.5700240e+02 9.5756460e+02 9.5766100e+02 9.5714250e+02
9.5771820e+02 9.5787680e+02 9.5674580e+02 9.5712830e+02
9.5420900e+02 9.5474160e+02 9.5487250e+02 9.5490670e+02 9.5481840e+02
9.5492240e+02 9.5510110e+02 9.5478640e+02 9.5487950e+02 9.5481960e+02 9.5492200e+02
9.5502700e+02 9.5508720e+02 9.5500170e+02 9.5510370e+02 9.5516700e+02 9.5510450e+02
9.5520600e+02 9.5527400e+02 9.5495440e+02 9.5502720e+02
9.5325280e+02 9.5349150e+02 9.5424390e+02 9.5414720e+02 9.5346700e+02
9.5409320e+02 9.5439980e+02 9.5338730e+02 9.5394680e+02 9.5379040e+02 9.5351000e+02
9.5412870e+02 9.5414200e+02 9.5348940e+02 9.5411210e+02 9.5414760e+02 9.5353500e+02
9.5417830e+02 9.5427200e+02 9.5340090e+02 9.5381510e+02
9.5294230e+02 9.5311500e+02 9.5381670e+02 9.5372300e+02 9.5308690e+02
9.5367170e+02 9.5394650e+02 9.5301760e+02 9.5353970e+02 9.5339800e+02 9.5312170e+02
9.5369920e+02 9.5370680e+02 9.5309640e+02 9.5367800e+02 9.5370660e+02 9.5313160e+02
9.5373280e+02 9.5381600e+02 9.5302160e+02 9.5340850e+02

```

```
%wall partial vapor pressure perturbation vector (size: 1 x timeDiv)
```

```
99.9 100 99.9 100 99.9 100 99.9 100 99.9 100 99.9 100 99.9 100 99.9 100 99.9 100
```

```
Base Case NTCF input file for 17th drift cell:
```

```
%DO NOT EDIT THE NEXT LINE ---- NUFT input deck file identifier
```

```
211
```

```
%number of layers
```

```
21 1
```

```
%section-to-segment assignment
```

```
%1- segment index
```

```
%2- segment to layer assignment
```

```
%3- layer to segment assignment
```

```
%4- drift section length
```

```

1      2      3      4      5      6      7      8      9      10     11     12     13     14
15     16     17     18     19     20     21
1      1      1      1      1      1      1      1      1      1      1      1      1
1      1      1      1      1      1      1      1      1      1      1      1      1
1      1      1      1      1      1      1      1      1      1      1      1      1
1      1      1      1      1      1      1      1
1.8650      0.1000      2.6375      2.6375      0.1000      2.6525      2.6525      0.1000
1.8650      1.8650      0.1000      2.6525      2.6525      0.1000      2.6375      2.6375
0.1000      2.6525      2.6525      0.1000      2.7850
2      2      2      2      2      2      2      2      2      2      2      2      2
2      2      2      2      2      2      2

```

```

%NTCF constant optimizer search windows
%[temperature(lower upper increment) pressure(lower upper increment) heat optimization flag]
15 35 1 800 1200 20 0

%nuftfun1 perturbation flags
1 1

%amplitude of randomized correction of central values
%temperature      Pressure
    0.02          0.1

%control flags for the negative corrections in NTCF matrices
0 0

%time divisions and number of NUFT internal time ticks
20 10

%time vector (size: 1 x timeDiv)
0 0.167 0.5 1 2 5 10 15 20 25 30 35 40 45 50 60 75 100 150 200 300

%pbar vector (size: 1 x timeDiv)
8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04
8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04
8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04
8.872000e+04 8.872000e+04

%wall temperature distribution (size: timeDiv x layers)
5.6867240e+01 5.9504320e+01 6.1848690e+01 6.1594790e+01 5.9489830e+01
6.1379100e+01 6.2542630e+01 5.8809300e+01 6.0528500e+01 5.9862660e+01 5.9517680e+01
6.1406150e+01 6.1554130e+01 5.9566380e+01 6.1438240e+01 6.1634200e+01 5.9822920e+01
6.1743370e+01 6.2096080e+01 5.8729080e+01 5.9959640e+01
6.8839680e+01 7.1993880e+01 7.4222600e+01 7.4038620e+01 7.2071780e+01
7.3851930e+01 7.5057550e+01 7.1339010e+01 7.2962540e+01 7.2287250e+01 7.2154270e+01
7.3941880e+01 7.4147190e+01 7.2294430e+01 7.4056860e+01 7.4299010e+01 7.2629280e+01
7.4432560e+01 7.4810270e+01 7.1410240e+01 7.2569380e+01
7.4649050e+01 7.7913520e+01 8.0039010e+01 7.9900770e+01 7.8051710e+01
7.9742620e+01 8.0932070e+01 7.7336300e+01 7.8878820e+01 7.8227580e+01 7.8184270e+01
7.9885980e+01 8.0118130e+01 7.8378530e+01 8.0051790e+01 8.0313490e+01 7.8751640e+01
8.0461320e+01 8.0842420e+01 7.7538940e+01 7.8639360e+01
7.8181260e+01 8.1443360e+01 8.3473320e+01 8.3369110e+01 8.1624740e+01
8.3235830e+01 8.4397660e+01 8.0943370e+01 8.2413060e+01 8.1791830e+01 8.1801430e+01
8.3424800e+01 8.3672980e+01 8.2033560e+01 8.3627140e+01 8.3899620e+01 8.2430590e+01
8.4057300e+01 8.4436330e+01 8.1254910e+01 8.2302380e+01
7.9838300e+01 8.2988360e+01 8.4890570e+01 8.4818970e+01 8.3206030e+01
8.4713480e+01 8.5826300e+01 8.2584880e+01 8.3959860e+01 8.3383130e+01 8.3428530e+01
8.4948100e+01 8.5204660e+01 8.3689990e+01 8.5180270e+01 8.5456610e+01 8.4100710e+01
8.5620690e+01 8.5989780e+01 8.2998080e+01 8.3976160e+01
7.8670760e+01 8.1584390e+01 8.3325460e+01 8.3280830e+01 8.1823220e+01
8.3202620e+01 8.4241160e+01 8.1285520e+01 8.2543430e+01 8.2024320e+01 8.2082110e+01
8.3471580e+01 8.3724390e+01 8.2355810e+01 8.3718750e+01 8.3988150e+01 8.2762610e+01
8.4151900e+01 8.4500420e+01 8.1767460e+01 8.2659550e+01
7.5076410e+01 7.7766260e+01 7.9371620e+01 7.9338620e+01 7.8000990e+01
7.9273330e+01 8.0242230e+01 7.7521610e+01 7.8681790e+01 7.8204070e+01 7.8256350e+01
7.9536220e+01 7.9773590e+01 7.8515700e+01 7.9772560e+01 8.0025410e+01 7.8897980e+01
8.0178890e+01 8.0501850e+01 7.7979660e+01 7.8799950e+01
7.1385770e+01 7.3867600e+01 7.5360950e+01 7.5333670e+01 7.4092250e+01
7.5276800e+01 7.6183990e+01 7.3661270e+01 7.4741200e+01 7.4298060e+01 7.4338370e+01
7.5528180e+01 7.5749100e+01 7.4579700e+01 7.5749640e+01 7.5985640e+01 7.4936160e+01
7.6128480e+01 7.6428160e+01 7.4085580e+01 7.4847230e+01
6.8004090e+01 7.0300960e+01 7.1694700e+01 7.1671550e+01 7.0514800e+01
7.1621260e+01 7.2472420e+01 7.0124640e+01 7.1133160e+01 7.0720330e+01 7.0750050e+01
7.1859930e+01 7.2065520e+01 7.0974090e+01 7.2066730e+01 7.2287050e+01 7.1306320e+01
7.2419900e+01 7.2698430e+01 7.0515380e+01 7.1225130e+01
6.4891290e+01 6.7021230e+01 6.8323890e+01 6.8304250e+01 6.7224660e+01
6.8259610e+01 6.9058900e+01 6.6870150e+01 6.7813250e+01 6.7427910e+01 6.7448860e+01
6.8485740e+01 6.8677270e+01 6.7657010e+01 6.8678880e+01 6.8884720e+01 6.7966890e+01
6.9008360e+01 6.9267500e+01 6.7229990e+01 6.7892440e+01
6.2121350e+01 6.4100380e+01 6.5320600e+01 6.5303990e+01 6.4294170e+01
6.5264370e+01 6.6016090e+01 6.3971230e+01 6.4855100e+01 6.4494840e+01 6.4508420e+01
6.5479350e+01 6.5658260e+01 6.4702560e+01 6.5660370e+01 6.5853140e+01 6.4992430e+01
6.5968610e+01 6.6210320e+01 6.4305210e+01 6.4925010e+01

```

```

5.9616650e+01 6.1459880e+01 6.2604780e+01 6.2590890e+01 6.1644750e+01
6.2555710e+01 6.3263700e+01 6.1349650e+01 6.2179330e+01 6.1841940e+01 6.1849630e+01
6.2760380e+01 6.2927910e+01 6.2031260e+01 6.2930460e+01 6.3111380e+01 6.2303030e+01
6.3219480e+01 6.3445390e+01 6.1660960e+01 6.2241880e+01
5.7324270e+01 5.9043460e+01 6.0119240e+01 6.0107330e+01 5.9219170e+01
6.0075720e+01 6.0742940e+01 5.8948290e+01 5.9728210e+01 5.9411510e+01 5.9413940e+01
6.0269510e+01 6.0426250e+01 5.9583430e+01 6.0428810e+01 6.0598480e+01 5.9837910e+01
6.0699530e+01 6.0910720e+01 5.9236680e+01 5.9782020e+01
5.5382360e+01 5.6993170e+01 5.8005440e+01 5.7995910e+01 5.7161460e+01
5.7967850e+01 5.8598140e+01 5.6912060e+01 5.7646120e+01 5.7348400e+01 5.7348020e+01
5.8152870e+01 5.8300500e+01 5.7507740e+01 5.8303510e+01 5.8463510e+01 5.7747570e+01
5.8558600e+01 5.8756830e+01 5.7183130e+01 5.7695780e+01
5.2766420e+01 5.4238630e+01 5.5169810e+01 5.5162520e+01 5.4395940e+01
5.5138280e+01 5.5720770e+01 5.4172570e+01 5.4848100e+01 5.4574230e+01 5.4570040e+01
5.5310210e+01 5.5445610e+01 5.4716160e+01 5.5448600e+01 5.5595710e+01 5.4936270e+01
5.5682740e+01 5.4418120e+01 5.4418120e+01 5.488120e+01
4.9249050e+01 5.0530830e+01 5.1347000e+01 5.1343000e+01 5.0672740e+01
5.1324000e+01 5.1838430e+01 5.0484270e+01 5.1076630e+01 5.0836490e+01 5.0829190e+01
5.1477680e+01 5.1596350e+01 5.0957080e+01 5.1599510e+01 5.1728760e+01 5.1150100e+01
5.1804770e+01 5.1962790e+01 5.0696680e+01 5.1108800e+01
4.5112960e+01 4.6171170e+01 4.6851600e+01 4.6850850e+01 4.6293930e+01
4.6837530e+01 4.7269990e+01 4.6144640e+01 4.6638720e+01 4.6438710e+01 4.6428680e+01
4.6969110e+01 4.7068080e+01 4.6535400e+01 4.7071450e+01 4.7179550e+01 4.6696530e+01
4.7242730e+01 4.7373410e+01 4.6320310e+01 4.6663220e+01
4.0698180e+01 4.1510920e+01 4.2038640e+01 4.2041290e+01 4.1611760e+01
4.2033930e+01 4.2372770e+01 4.1503660e+01 4.1887030e+01 4.1732440e+01 4.1721900e+01
4.2140900e+01 4.2218390e+01 4.1806160e+01 4.2222310e+01 4.2307010e+01 4.1932370e+01
4.2356330e+01 4.2456960e+01 4.1642810e+01 4.1908180e+01
3.7377750e+01 3.8015570e+01 3.8429340e+01 3.8433840e+01 3.8098850e+01
3.8430110e+01 3.8699280e+01 3.8018560e+01 3.8319160e+01 3.8197930e+01 3.8189770e+01
3.8518150e+01 3.8579970e+01 3.8257680e+01 3.8584080e+01 3.8651650e+01 3.8358520e+01
3.8690930e+01 3.8770030e+01 3.8131730e+01 3.8339360e+01
3.5104290e+01 3.5625920e+01 3.5965830e+01 3.5970390e+01 3.5695790e+01
3.5968120e+01 3.6190450e+01 3.5632010e+01 3.5878990e+01 3.5779340e+01 3.5771740e+01
3.6041460e+01 3.6092290e+01 3.5827620e+01 3.6095880e+01 3.6151520e+01 3.5910580e+01
3.6183750e+01 3.6248400e+01 3.5724640e+01 3.5895020e+01

```

```
%wall temperature perturbation vector (size: 1 x timeDiv)
```

```
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
```

```
%wall partial vapor pressure distribution (size: timeDiv x layers)
```

```

9.6541290e+02 9.6656680e+02 9.6764500e+02 9.6763400e+02 9.6675610e+02
9.6764110e+02 9.6823940e+02 9.6666300e+02 9.6744650e+02 9.6722790e+02 9.6710290e+02
9.6798810e+02 9.6814940e+02 9.6732160e+02 9.6819890e+02 9.6838040e+02 9.6762850e+02
9.6852760e+02 9.6877780e+02 9.6735430e+02 9.6796430e+02
9.8073130e+02 9.8258940e+02 9.8371180e+02 9.8386120e+02 9.8306680e+02
9.8398670e+02 9.8476870e+02 9.8307000e+02 9.8387070e+02 9.8367840e+02 9.8378990e+02
9.8472010e+02 9.8504410e+02 9.8430060e+02 9.8521220e+02 9.8554530e+02 9.8489200e+02
9.8581940e+02 9.8620360e+02 9.8461740e+02 9.8528510e+02
9.9391230e+02 9.9610320e+02 9.9714340e+02 9.9745620e+02 9.9685650e+02
9.9771200e+02 9.9856950e+02 9.9702300e+02 9.9775100e+02 9.9764080e+02 9.9794230e+02
9.9881600e+02 9.9927680e+02 9.9872140e+02 9.9956920e+02 1.0000250e+03 9.9955480e+02
1.0004110e+03 1.0008890e+03 9.9940910e+02 1.0000650e+03
1.0136740e+03 1.0161490e+03 1.0169410e+03 1.0175210e+03 1.0173340e+03
1.0179950e+03 1.0189010e+03 1.0178160e+03 1.0183460e+03 1.0184090e+03 1.0190000e+03
1.0196900e+03 1.0203540e+03 1.0201950e+03 1.0208500e+03 1.0214850e+03 1.0213900e+03
1.0220400e+03 1.0226430e+03 1.0215400e+03 1.0221130e+03
1.0454220e+03 1.0468570e+03 1.0461480e+03 1.0473620e+03 1.0489210e+03
1.0483900e+03 1.0488790e+03 1.0504710e+03 1.0498860e+03 1.0506290e+03 1.0518160e+03
1.0513210e+03 1.0523120e+03 1.0538130e+03 1.0532850e+03 1.0541810e+03 1.0556030e+03
1.0550230e+03 1.0569570e+03 1.0569530e+03 1.0568060e+03
1.0880690e+03 1.0896150e+03 1.0881250e+03 1.0899610e+03 1.0926590e+03
1.0915160e+03 1.0919710e+03 1.0950560e+03 1.0938640e+03 1.0950950e+03 1.0968930e+03
1.0958040e+03 1.0972280e+03 1.0998200e+03 1.0986830e+03 1.0999560e+03 1.1023890e+03
1.1011680e+03 1.1020750e+03 1.1046100e+03 1.1041550e+03
1.0326420e+03 1.0368500e+03 1.0385690e+03 1.0392000e+03 1.0382840e+03
1.0396920e+03 1.0412000e+03 1.0385610e+03 1.0397480e+03 1.0395710e+03 1.0402630e+03
1.0417120e+03 1.0425770e+03 1.0417320e+03 1.0431270e+03 1.0439720e+03 1.0432780e+03
1.0446830e+03 1.0455480e+03 1.0429840e+03 1.0440920e+03
1.0145490e+03 1.0180170e+03 1.0195980e+03 1.0200560e+03 1.0191220e+03
1.0204170e+03 1.0217270e+03 1.0193020e+03 1.0204060e+03 1.0202000e+03 1.0206710e+03

```

```

1.0219940e+03 1.0226740e+03 1.0218030e+03 1.0230870e+03 1.0237610e+03 1.0230250e+03
1.0243210e+03 1.0250300e+03 1.0226910e+03 1.0236780e+03
1.0037080e+03 1.0071070e+03 1.0088490e+03 1.0091480e+03 1.0079560e+03
1.0093790e+03 1.0107120e+03 1.0079550e+03 1.0091900e+03 1.0088680e+03 1.0091940e+03
1.0106360e+03 1.0112070e+03 1.0100900e+03 1.0115000e+03 1.0120820e+03 1.0111200e+03
1.0125500e+03 1.0132030e+03 1.0105780e+03 1.0116210e+03
9.9688230e+02 1.0000650e+03 1.0016840e+03 1.0019240e+03 1.0007830e+03
1.0021040e+03 1.0033430e+03 1.0007260e+03 1.0018780e+03 1.0015470e+03 1.0018400e+03
1.0031760e+03 1.0036770e+03 1.0026070e+03 1.0039150e+03 1.0044310e+03 1.0035100e+03
1.0048370e+03 1.0054270e+03 1.0029310e+03 1.0038910e+03
9.9324700e+02 9.9578740e+02 9.9712600e+02 9.9738110e+02 9.9648910e+02
9.9758670e+02 9.9862070e+02 9.9655200e+02 9.9750420e+02 9.9728130e+02 9.9752250e+02
9.9863300e+02 9.9909030e+02 9.9825390e+02 9.9934090e+02 9.9980630e+02 9.9908310e+02
1.0001850e+03 1.0007010e+03 9.9873240e+02 9.9953910e+02
9.8985770e+02 9.9209300e+02 9.9334430e+02 9.9357940e+02 9.9274660e+02
9.9377520e+02 9.9472130e+02 9.928310e+02 9.9372600e+02 9.9351380e+02 9.9371880e+02
9.9475770e+02 9.9517750e+02 9.9439560e+02 9.9541450e+02 9.9584220e+02 9.9516040e+02
9.9619440e+02 9.9666770e+02 9.9488110e+02 9.9563490e+02
9.8701740e+02 9.8905670e+02 9.9029640e+02 9.9050340e+02 9.8966090e+02
9.9068180e+02 9.9158370e+02 9.8975300e+02 9.9063520e+02 9.9044550e+02 9.9057350e+02
9.9160220e+02 9.9199070e+02 9.9119830e+02 9.9220950e+02 9.9260770e+02 9.9190980e+02
9.9293760e+02 9.9338340e+02 9.9165870e+02 9.9240070e+02
9.8418010e+02 9.8616100e+02 9.8757910e+02 9.8772520e+02 9.8669370e+02
9.8786170e+02 9.8880150e+02 9.8673150e+02 9.8775140e+02 9.8751370e+02 9.8753020e+02
9.8870240e+02 9.8905970e+02 9.8808700e+02 9.8924420e+02 9.8961880e+02 9.8874870e+02
9.8992850e+02 9.9036960e+02 9.8845170e+02 9.8928290e+02
9.7929620e+02 9.8150510e+02 9.8387820e+02 9.8381030e+02 9.8184830e+02
9.8380110e+02 9.8507120e+02 9.8166390e+02 9.8339590e+02 9.8291550e+02 9.8252500e+02
9.8447060e+02 9.8477370e+02 9.8291660e+02 9.8485210e+02 9.8520520e+02 9.8350540e+02
9.8549120e+02 9.8599790e+02 9.8293700e+02 9.8426740e+02
9.7581880e+02 9.7789960e+02 9.8020670e+02 9.8010940e+02 9.7817680e+02
9.8007410e+02 9.8128240e+02 9.7795300e+02 9.7964510e+02 9.7916440e+02 9.7875480e+02
9.8064450e+02 9.8091070e+02 9.7908100e+02 9.8096160e+02 9.8127830e+02 9.7960210e+02
9.8153260e+02 9.8200320e+02 9.7902540e+02 9.8031290e+02
9.7394710e+02 9.7568960e+02 9.7734250e+02 9.7733190e+02 9.7599070e+02
9.7734930e+02 9.7827590e+02 9.7586950e+02 9.7707150e+02 9.7673800e+02 9.7653560e+02
9.7789250e+02 9.7814040e+02 9.7687220e+02 9.7821880e+02 9.7849860e+02 9.7734500e+02
9.7872470e+02 9.7910730e+02 9.7693020e+02 9.7786460e+02
9.7155320e+02 9.7306250e+02 9.7444370e+02 9.7445090e+02 9.7334240e+02
9.7447800e+02 9.7526620e+02 9.7325420e+02 9.7425730e+02 9.7398410e+02 9.7383650e+02
9.7497150e+02 9.7519420e+02 9.7414680e+02 9.7527220e+02 9.7552040e+02 9.7456940e+02
9.7572190e+02 9.7605390e+02 9.7423010e+02 9.7501470e+02
9.6994510e+02 9.7130750e+02 9.7255230e+02 9.7256400e+02 9.7156960e+02
9.7259340e+02 9.7330670e+02 9.7149870e+02 9.7240260e+02 9.7216030e+02 9.7203070e+02
9.7305430e+02 9.7325990e+02 9.7232060e+02 9.7333530e+02 9.7356350e+02 9.7271080e+02
9.7374980e+02 9.7405310e+02 9.7241440e+02 9.7312310e+02
9.6902620e+02 9.7029840e+02 9.7146610e+02 9.7148030e+02 9.7055050e+02
9.7151130e+02 9.7218120e+02 9.7049110e+02 9.7133890e+02 9.7111480e+02 9.7099320e+02
9.7195380e+02 9.7214940e+02 9.7127110e+02 9.7222340e+02 9.7244000e+02 9.7164250e+02
9.7261750e+02 9.7290400e+02 9.7137260e+02 9.7203830e+02

```

%wall partial vapor pressure perturbation vector (size: 1 x timeDiv)

99.9 100 99.9 100 99.9 100 99.9 100 99.9 100 99.9 100 99.9 100 99.9 100

NTCF input file for 1st drift cell for 85 MTU/acre:

%DO NOT EDIT THE NEXT LINE ---- NUFT input deck file identifier
211

%number of layers
21 1

%%section-to-segment assignment
%1- segment index
%2- segment to layer assignment
%3- layer to segment assignment
%4- drift section length

1	2	3	4	5	6	7	8	9	10	11	12	13	14
15	16	17	18	19	20	21							
1	1	1	1	1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1							


```

1      1      1      1      1      1      1      1      1      1      1      1      1      1
1      1      1      1      1      1      1      1      1      1      1      1      1      1
1.8650      0.1000      2.6375      2.6375      0.1000      2.6525      2.6525      0.1000
1.8650      1.8650      0.1000      2.6525      2.6525      0.1000      2.6375      2.6375
0.1000      2.6525      2.6525      0.1000      2.7850
2      2      2      2      2      2      2      2      2      2      2      2      2      2
2      2      2      2      2      2      2      2      2      2      2      2      2      2

%NTCF constant optimizer search windows
%[temperature(lower upper increment) pressure(lower upper increment) heat optimization flag]
15 35 1 800 1200 20 0

%nufftunl perturbation flags
1 1

%amplitude of randomized correction of central values
%temperature      Pressure
0.02              0.1

%control flags for the negative corrections in NTCF matrices
0 0

%time divisions and number of NUFT internal time ticks
23 10

%time vector (size: 1 x timeDiv)
0 0.167 0.5 1 2 5 10 15 20 25 30 35 40 45 50 60 75 100 150 200 300 500 750 1000

%pbar vector (size: 1 x timeDiv)
8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04
8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04
8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04
8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04

%wall temperature distribution (size: timeDiv x layers)
4.3556985e+01 4.3556985e+01 4.3556985e+01 4.3556985e+01 4.3556985e+01 4.3556985e+01
4.3556985e+01 4.3556985e+01 4.3556985e+01 4.3556985e+01 4.3556985e+01 4.3556985e+01
4.3556985e+01 4.3556985e+01 4.3556985e+01 4.3556985e+01 4.3556985e+01 4.3556985e+01
4.3556985e+01 4.3556985e+01 4.3556985e+01 4.3556985e+01 4.3556985e+01 4.3556985e+01
4.7858456e+01 4.7858456e+01 4.7858456e+01 4.7858456e+01 4.7858456e+01 4.7858456e+01
4.7858456e+01 4.7858456e+01 4.7858456e+01 4.7858456e+01 4.7858456e+01 4.7858456e+01
4.7858456e+01 4.7858456e+01 4.7858456e+01 4.7858456e+01 4.7858456e+01 4.7858456e+01
4.7858456e+01 4.7858456e+01 4.7858456e+01 4.7858456e+01 4.7858456e+01 4.7858456e+01
4.9568015e+01 4.9568015e+01 4.9568015e+01 4.9568015e+01 4.9568015e+01 4.9568015e+01
4.9568015e+01 4.9568015e+01 4.9568015e+01 4.9568015e+01 4.9568015e+01 4.9568015e+01
4.9568015e+01 4.9568015e+01 4.9568015e+01 4.9568015e+01 4.9568015e+01 4.9568015e+01
4.9568015e+01 4.9568015e+01 4.9568015e+01 4.9568015e+01 4.9568015e+01 4.9568015e+01
5.0284926e+01 5.0284926e+01 5.0284926e+01 5.0284926e+01 5.0284926e+01 5.0284926e+01
5.0284926e+01 5.0284926e+01 5.0284926e+01 5.0284926e+01 5.0284926e+01 5.0284926e+01
5.0284926e+01 5.0284926e+01 5.0284926e+01 5.0284926e+01 5.0284926e+01 5.0284926e+01
5.0284926e+01 5.0284926e+01 5.0284926e+01 5.0284926e+01 5.0284926e+01 5.0284926e+01
5.0009191e+01 5.0009191e+01 5.0009191e+01 5.0009191e+01 5.0009191e+01 5.0009191e+01
5.0009191e+01 5.0009191e+01 5.0009191e+01 5.0009191e+01 5.0009191e+01 5.0009191e+01
5.0009191e+01 5.0009191e+01 5.0009191e+01 5.0009191e+01 5.0009191e+01 5.0009191e+01
5.0009191e+01 5.0009191e+01 5.0009191e+01 5.0009191e+01 5.0009191e+01 5.0009191e+01
4.8520221e+01 4.8520221e+01 4.8520221e+01 4.8520221e+01 4.8520221e+01 4.8520221e+01
4.8520221e+01 4.8520221e+01 4.8520221e+01 4.8520221e+01 4.8520221e+01 4.8520221e+01
4.8520221e+01 4.8520221e+01 4.8520221e+01 4.8520221e+01 4.8520221e+01 4.8520221e+01
4.8520221e+01 4.8520221e+01 4.8520221e+01 4.8520221e+01 4.8520221e+01 4.8520221e+01
4.6534926e+01 4.6534926e+01 4.6534926e+01 4.6534926e+01 4.6534926e+01 4.6534926e+01
4.6534926e+01 4.6534926e+01 4.6534926e+01 4.6534926e+01 4.6534926e+01 4.6534926e+01
4.6534926e+01 4.6534926e+01 4.6534926e+01 4.6534926e+01 4.6534926e+01 4.6534926e+01
4.6534926e+01 4.6534926e+01 4.6534926e+01 4.6534926e+01 4.6534926e+01 4.6534926e+01
4.4770221e+01 4.4770221e+01 4.4770221e+01 4.4770221e+01 4.4770221e+01 4.4770221e+01
4.4770221e+01 4.4770221e+01 4.4770221e+01 4.4770221e+01 4.4770221e+01 4.4770221e+01
4.4770221e+01 4.4770221e+01 4.4770221e+01 4.4770221e+01 4.4770221e+01 4.4770221e+01
4.4770221e+01 4.4770221e+01 4.4770221e+01 4.4770221e+01 4.4770221e+01 4.4770221e+01
4.3556985e+01 4.3556985e+01 4.3556985e+01 4.3556985e+01 4.3556985e+01 4.3556985e+01
4.3556985e+01 4.3556985e+01 4.3556985e+01 4.3556985e+01 4.3556985e+01 4.3556985e+01
4.3556985e+01 4.3556985e+01 4.3556985e+01 4.3556985e+01 4.3556985e+01 4.3556985e+01
4.3556985e+01 4.3556985e+01 4.3556985e+01 4.3556985e+01 4.3556985e+01 4.3556985e+01

```

9.5984241e+02	9.5984241e+02	9.5984241e+02	9.5984241e+02	9.5984241e+02	9.5984241e+02
9.5984241e+02	9.5984241e+02	9.5984241e+02	9.5984241e+02	9.5984241e+02	9.5984241e+02
9.5984241e+02	9.5984241e+02	9.5984241e+02	9.5984241e+02	9.5984241e+02	9.5984241e+02
9.5984241e+02	9.5984241e+02	9.5984241e+02	9.5984241e+02	9.5984241e+02	9.5984241e+02
9.6316537e+02	9.6316537e+02	9.6316537e+02	9.6316537e+02	9.6316537e+02	9.6316537e+02
9.6316537e+02	9.6316537e+02	9.6316537e+02	9.6316537e+02	9.6316537e+02	9.6316537e+02
9.6316537e+02	9.6316537e+02	9.6316537e+02	9.6316537e+02	9.6316537e+02	9.6316537e+02
9.6316537e+02	9.6316537e+02	9.6316537e+02	9.6316537e+02	9.6316537e+02	9.6316537e+02
9.6490856e+02	9.6490856e+02	9.6490856e+02	9.6490856e+02	9.6490856e+02	9.6490856e+02
9.6490856e+02	9.6490856e+02	9.6490856e+02	9.6490856e+02	9.6490856e+02	9.6490856e+02

[illegible]

```

9.5602918e+02 9.5602918e+02 9.5602918e+02 9.5602918e+02 9.5602918e+02 9.5602918e+02
9.5602918e+02 9.5602918e+02 9.5602918e+02 9.5602918e+02
9.5548444e+02 9.5548444e+02 9.5548444e+02 9.5548444e+02 9.5548444e+02
9.5548444e+02 9.5548444e+02 9.5548444e+02 9.5548444e+02 9.5548444e+02 9.5548444e+02
9.5548444e+02 9.5548444e+02 9.5548444e+02 9.5548444e+02 9.5548444e+02 9.5548444e+02
9.5548444e+02 9.5548444e+02 9.5548444e+02 9.5548444e+02
9.5532101e+02 9.5532101e+02 9.5532101e+02 9.5532101e+02 9.5532101e+02
9.5532101e+02 9.5532101e+02 9.5532101e+02 9.5532101e+02 9.5532101e+02 9.5532101e+02
9.5532101e+02 9.5532101e+02 9.5532101e+02 9.5532101e+02 9.5532101e+02 9.5532101e+02
9.5532101e+02 9.5532101e+02 9.5532101e+02 9.5532101e+02

```

%wall partial vapor pressure perturbation vector (size: 1 x timeDiv)

```

99.9 100 99.9 100 99.9 100 99.9 100 99.9 100 99.9 100 99.9 100 99.9 100
99.9 100 99.9 100 99.9

```

NTCF input file for 17th drift cell for 85 MTU/acre:

%DO NOT EDIT THE NEXT LINE ---- NUFT input deck file identifier

211

%number of layers

21 1

%section-to-segment assignment

%1- segment index

%2- segment to layer assignment

%3- layer to segment assignment

%4- drift section length

```

1      2      3      4      5      6      7      8      9      10     11     12     13     14
15     16     17     18     19     20     21
1      1      1      1      1      1      1      1      1      1      1      1      1
1      1      1      1      1      1      1      1      1      1      1      1      1
1      1      1      1      1      1      1      1      1      1      1      1      1
1      1      1      1      1      1      1      1
1.8650      0.1000      2.6375      2.6375      0.1000      2.6525      2.6525      0.1000
1.8650      1.8650      0.1000      2.6525      2.6525      0.1000      2.6375      2.6375
0.1000      2.6525      2.6525      0.1000      2.7850
2      2      2      2      2      2      2      2      2      2      2      2      2
2      2      2      2      2      2      2

```

%NTCF constant optimizer search windows

%[temperature(lower upper increment) pressure(lower upper increment) heat optimization flag]

15 35 1 800 1200 20 0

%nuftfunl perturbation flags

1 1

%amplitude of randomized correction of central values

%temperature Pressure

0.02 0.1

%control flags for the negative corrections in NTCF matrices

0 0

%time divisions and number of NUFT internal time ticks

23 10

%time vector (size: 1 x timeDiv)

0 0.167 0.5 1 2 5 10 15 20 25 30 35 40 45 50 60 75 100 150 200 300 500 750 1000

%pbar vector (size: 1 x timeDiv)

```

8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04
8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04
8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04
8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04

```

%wall temperature distribution (size: timeDiv x layers)

```

6.2000000e+01 6.2000000e+01 6.2000000e+01 6.2000000e+01 6.2000000e+01
6.2000000e+01 6.2000000e+01 6.2000000e+01 6.2000000e+01 6.2000000e+01 6.2000000e+01
6.2000000e+01 6.2000000e+01 6.2000000e+01 6.2000000e+01 6.2000000e+01 6.2000000e+01
6.2000000e+01 6.2000000e+01 6.2000000e+01 6.2000000e+01

```

[illegible]

[illegible]

```

1.0495136e+03 1.0495136e+03 1.0495136e+03 1.0495136e+03 1.0495136e+03 1.0495136e+03
1.0495136e+03 1.0495136e+03 1.0495136e+03 1.0495136e+03
1.0465953e+03 1.0465953e+03 1.0465953e+03 1.0465953e+03 1.0465953e+03
1.0465953e+03 1.0465953e+03 1.0465953e+03 1.0465953e+03 1.0465953e+03 1.0465953e+03
1.0465953e+03 1.0465953e+03 1.0465953e+03 1.0465953e+03 1.0465953e+03 1.0465953e+03
1.0465953e+03 1.0465953e+03 1.0465953e+03 1.0465953e+03
1.0401751e+03 1.0401751e+03 1.0401751e+03 1.0401751e+03 1.0401751e+03
1.0401751e+03 1.0401751e+03 1.0401751e+03 1.0401751e+03 1.0401751e+03 1.0401751e+03
1.0401751e+03 1.0401751e+03 1.0401751e+03 1.0401751e+03 1.0401751e+03 1.0401751e+03
1.0401751e+03 1.0401751e+03 1.0401751e+03 1.0401751e+03
1.0331712e+03 1.0331712e+03 1.0331712e+03 1.0331712e+03 1.0331712e+03
1.0331712e+03 1.0331712e+03 1.0331712e+03 1.0331712e+03 1.0331712e+03 1.0331712e+03
1.0331712e+03 1.0331712e+03 1.0331712e+03 1.0331712e+03 1.0331712e+03 1.0331712e+03
1.0331712e+03 1.0331712e+03 1.0331712e+03 1.0331712e+03
1.0244163e+03 1.0244163e+03 1.0244163e+03 1.0244163e+03 1.0244163e+03
1.0244163e+03 1.0244163e+03 1.0244163e+03 1.0244163e+03 1.0244163e+03 1.0244163e+03
1.0244163e+03 1.0244163e+03 1.0244163e+03 1.0244163e+03 1.0244163e+03 1.0244163e+03
1.0244163e+03 1.0244163e+03 1.0244163e+03 1.0244163e+03
1.0168288e+03 1.0168288e+03 1.0168288e+03 1.0168288e+03 1.0168288e+03
1.0168288e+03 1.0168288e+03 1.0168288e+03 1.0168288e+03 1.0168288e+03 1.0168288e+03
1.0168288e+03 1.0168288e+03 1.0168288e+03 1.0168288e+03 1.0168288e+03 1.0168288e+03
1.0168288e+03 1.0168288e+03 1.0168288e+03 1.0168288e+03
1.0098249e+03 1.0098249e+03 1.0098249e+03 1.0098249e+03 1.0098249e+03
1.0098249e+03 1.0098249e+03 1.0098249e+03 1.0098249e+03 1.0098249e+03 1.0098249e+03
1.0098249e+03 1.0098249e+03 1.0098249e+03 1.0098249e+03 1.0098249e+03 1.0098249e+03
1.0098249e+03 1.0098249e+03 1.0098249e+03 1.0098249e+03
1.0010700e+03 1.0010700e+03 1.0010700e+03 1.0010700e+03 1.0010700e+03
1.0010700e+03 1.0010700e+03 1.0010700e+03 1.0010700e+03 1.0010700e+03 1.0010700e+03
1.0010700e+03 1.0010700e+03 1.0010700e+03 1.0010700e+03 1.0010700e+03 1.0010700e+03
1.0010700e+03 1.0010700e+03 1.0010700e+03 1.0010700e+03
9.9173152e+02 9.9173152e+02 9.9173152e+02 9.9173152e+02 9.9173152e+02
9.9173152e+02 9.9173152e+02 9.9173152e+02 9.9173152e+02 9.9173152e+02 9.9173152e+02
9.9173152e+02 9.9173152e+02 9.9173152e+02 9.9173152e+02 9.9173152e+02 9.9173152e+02
9.9173152e+02 9.9173152e+02 9.9173152e+02 9.9173152e+02
9.8706226e+02 9.8706226e+02 9.8706226e+02 9.8706226e+02 9.8706226e+02
9.8706226e+02 9.8706226e+02 9.8706226e+02 9.8706226e+02 9.8706226e+02 9.8706226e+02
9.8706226e+02 9.8706226e+02 9.8706226e+02 9.8706226e+02 9.8706226e+02 9.8706226e+02
9.8706226e+02 9.8706226e+02 9.8706226e+02 9.8706226e+02
9.8356031e+02 9.8356031e+02 9.8356031e+02 9.8356031e+02 9.8356031e+02
9.8356031e+02 9.8356031e+02 9.8356031e+02 9.8356031e+02 9.8356031e+02 9.8356031e+02
9.8356031e+02 9.8356031e+02 9.8356031e+02 9.8356031e+02 9.8356031e+02 9.8356031e+02
9.8356031e+02 9.8356031e+02 9.8356031e+02 9.8356031e+02

```

%wall partial vapor pressure perturbation vector (size: 1 x timeDiv)

```

99.9 100 99.9 100 99.9 100 99.9 100 99.9 100 99.9 100 99.9 100 99.9 100
99.9 100 99.9 100 99.9

```

NTCF input file for 1st drift cell for 50 mm/year percolation:

```

%DO NOT EDIT THE NEXT LINE ---- NUFT input deck file identifier
211

```

```

%number of layers
21 1

```

```

%%section-to-segment assignment
%1- segment index
%2- segment to layer assignment
%3- layer to segment assignment
%4- drift section length

```

1	2	3	4	5	6	7	8	9	10	11	12	13	14
15	16	17	18	19	20	21							
1	1	1	1	1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1							
1	1	1	1	1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1							
1.8650	0.1000	2.6375	2.6375	0.1000	2.6525	2.6525	0.1000						
1.8650	1.8650	0.1000	2.6525	2.6525	0.1000	2.6375	2.6375						
0.1000	2.6525	2.6525	0.1000	2.7850									
2	2	2	2	2	2	2	2	2	2	2	2	2	2
2	2	2	2	2	2	2							

```
%NCTCF constant optimizer search windows
%[temperature(lower upper increment) pressure(lower upper increment) heat optimization flag]
15 35 1 800 1200 20 0

%nufftfun1 perturbation flags
1 1

%amplitude of randomized correction of central values
%temperature      Pressure
    0.02           0.1

%control flags for the negative corrections in NCTCF matrices
0 0

%time divisions and number of NUFT internal time ticks
20 10

%time vector (size: 1 x timeDiv)
0 0.167 0.5 1 2 5 10 15 20 25 30 35 40 45 50 60 75 100 150 200 300

%pbars vector (size: 1 x timeDiv)
8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04
8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04
8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04
8.872000e+04 8.872000e+04

%wall temperature distribution (size: timeDiv x layers)
    3.9288950e+01 4.1701780e+01 4.4083050e+01 4.3878940e+01 4.1794060e+01
4.3724640e+01 4.4936730e+01 4.1284200e+01 4.3036310e+01 4.2418830e+01 4.2018970e+01
4.3939820e+01 4.4126190e+01 4.2152340e+01 4.4063650e+01 4.4300030e+01 4.2491410e+01
4.4451610e+01 4.4835990e+01 4.1554180e+01 4.2804320e+01
    4.2742900e+01 4.5689350e+01 4.8078040e+01 4.7920740e+01 4.5860680e+01
4.7785340e+01 4.9105850e+01 4.5304110e+01 4.7054510e+01 4.6400810e+01 4.6160000e+01
4.8078300e+01 4.8321780e+01 4.6376110e+01 4.8278740e+01 4.8567710e+01 4.6801530e+01
4.8748110e+01 4.9175400e+01 4.5717430e+01 4.6959550e+01
    4.4221030e+01 4.7349160e+01 4.9697550e+01 4.9573910e+01 4.7571460e+01
4.9457930e+01 5.0801740e+01 4.7017140e+01 4.8733400e+01 4.8081270e+01 4.7916610e+01
4.9798250e+01 5.0068750e+01 4.8179300e+01 5.0042550e+01 5.0354340e+01 4.8645130e+01
5.0548980e+01 5.0988440e+01 4.7527160e+01 4.8742060e+01
    4.4861780e+01 4.8045730e+01 5.0338630e+01 5.0239460e+01 4.8300830e+01
5.0139470e+01 5.1479010e+01 4.7761970e+01 4.9434830e+01 4.8794770e+01 4.8675120e+01
5.0509540e+01 5.0793730e+01 4.8965240e+01 5.0780140e+01 5.1102320e+01 4.9451000e+01
5.1303940e+01 5.1744520e+01 4.8334090e+01 4.9516060e+01
    4.4754100e+01 4.7885350e+01 5.0072390e+01 4.9997070e+01 4.8162650e+01
4.9914210e+01 5.1215660e+01 4.7656480e+01 4.9249990e+01 4.8637390e+01 4.8552600e+01
5.0299910e+01 5.0587080e+01 4.8856440e+01 5.0584460e+01 5.0906090e+01 4.9344480e+01
5.1107520e+01 5.1536010e+01 4.8260760e+01 4.9384160e+01
    4.3633430e+01 4.6574470e+01 4.8595130e+01 4.8540020e+01 4.6855840e+01
4.8473330e+01 4.9693500e+01 4.6399900e+01 4.7871070e+01 4.7303620e+01 4.7238710e+01
4.8851240e+01 4.9126180e+01 4.7535250e+01 4.9130430e+01 4.9436300e+01 4.8000440e+01
4.9627280e+01 5.0026620e+01 4.6987900e+01 4.8022430e+01
    4.2104540e+01 4.4805480e+01 4.6651590e+01 4.6610460e+01 4.5078300e+01
4.6556160e+01 4.7681940e+01 4.4673260e+01 4.6016970e+01 4.5497680e+01 4.5440740e+01
4.6912840e+01 4.7168280e+01 4.5718420e+01 4.7175620e+01 4.7459050e+01 4.6149370e+01
4.7635190e+01 4.8000150e+01 4.5219040e+01 4.6161820e+01
    4.0703310e+01 4.3187910e+01 4.4886320e+01 4.4854240e+01 4.3448600e+01
4.4808630e+01 4.5850930e+01 4.3085200e+01 4.4321350e+01 4.3843140e+01 4.3788950e+01
4.5142620e+01 4.5379260e+01 4.4046870e+01 4.5387730e+01 4.5650110e+01 4.4445320e+01
4.5812400e+01 4.6147060e+01 4.3587250e+01 4.4453050e+01
    3.9450210e+01 4.1743100e+01 4.3311800e+01 4.3286410e+01 4.1990890e+01
4.3247450e+01 4.4215150e+01 4.1662360e+01 4.2804120e+01 4.2361830e+01 4.2309630e+01
4.3559440e+01 4.3778850e+01 4.2548920e+01 4.3787650e+01 4.4030880e+01 4.2917710e+01
4.4180600e+01 4.4488440e+01 4.2123270e+01 4.2921760e+01
    3.8325030e+01 4.0445170e+01 4.1897180e+01 4.1877240e+01 4.0680390e+01
4.1843840e+01 4.2743670e+01 4.0382300e+01 4.1439150e+01 4.1029250e+01 4.0978950e+01
4.2135440e+01 4.2339150e+01 4.1201220e+01 4.2348080e+01 4.2573880e+01 4.1543080e+01
4.2712240e+01 4.2996010e+01 4.0806230e+01 4.1544350e+01
    3.7334440e+01 3.9303160e+01 4.0652240e+01 4.0636540e+01 3.9526300e+01
4.0607560e+01 4.1447060e+01 3.9253880e+01 4.0235830e+01 3.9854370e+01 3.9806150e+01
4.0880360e+01 4.1070050e+01 4.0013050e+01 4.1078830e+01 4.1289090e+01 4.0330910e+01
4.1417360e+01 4.1679980e+01 3.9644570e+01 4.0329570e+01
```



```

3.6451670e+01 3.8285190e+01 3.9541880e+01 3.9529670e+01 3.8496940e+01
3.9504400e+01 4.0289440e+01 3.8246880e+01 3.9161610e+01 3.8805660e+01 3.8759650e+01
3.9760050e+01 3.9937120e+01 3.8952720e+01 3.9945690e+01 4.0141960e+01 3.9249010e+01
4.0261190e+01 4.0504960e+01 3.8608000e+01 3.9245410e+01
3.5654550e+01 3.7365200e+01 3.8537730e+01 3.8528510e+01 3.7566300e+01
3.8506500e+01 3.9241630e+01 3.7336240e+01 3.8189720e+01 3.7857090e+01 3.7813320e+01
3.8746520e+01 3.8912110e+01 3.7993880e+01 3.8920500e+01 3.9104030e+01 3.8270610e+01
3.9215100e+01 3.9441800e+01 3.7671090e+01 3.8265240e+01
3.4945620e+01 3.6546400e+01 3.7643650e+01 3.7636920e+01 3.6737670e+01
3.7617700e+01 3.8307920e+01 3.6525200e+01 3.7323890e+01 3.7012200e+01 3.6970550e+01
3.7843670e+01 3.7998980e+01 3.7139940e+01 3.8007190e+01 3.8179310e+01 3.7399180e+01
3.8283110e+01 3.8494630e+01 3.6836980e+01 3.7392500e+01
3.4035160e+01 3.5493700e+01 3.6494290e+01 3.6490390e+01 3.5671790e+01
3.6474540e+01 3.7106470e+01 3.5481590e+01 3.6209950e+01 3.5925330e+01 3.5886200e+01
3.6682220e+01 3.6824190e+01 3.6041110e+01 3.6832120e+01 3.6989440e+01 3.6277740e+01
3.7083910e+01 3.7275940e+01 3.5764030e+01 3.6270090e+01
3.2809660e+01 3.4068790e+01 3.4934170e+01 3.4934960e+01 3.4230060e+01
3.4924640e+01 3.5474610e+01 3.4072240e+01 3.4702120e+01 3.4456360e+01 3.4421260e+01
3.5109450e+01 3.5233560e+01 3.4557820e+01 3.5242070e+01 3.5379340e+01 3.4764300e+01
3.5461550e+01 3.5626830e+01 3.4320730e+01 3.4757600e+01
3.1415150e+01 3.2457990e+01 3.3171330e+01 3.3174910e+01 3.2595610e+01
3.3168300e+01 3.3625600e+01 3.2468490e+01 3.2987610e+01 3.2783890e+01 3.2755380e+01
3.3322380e+01 3.3425450e+01 3.2868810e+01 3.3432890e+01 3.3546790e+01 3.3039720e+01
3.3614400e+01 3.3749890e+01 3.2670630e+01 3.3030010e+01
2.9921190e+01 3.0732470e+01 3.1282550e+01 3.1287540e+01 3.0841980e+01
3.1283690e+01 3.1640120e+01 3.0745430e+01 3.1145660e+01 3.0987060e+01 3.0966170e+01
3.1403170e+01 3.1483210e+01 3.1053990e+01 3.1488980e+01 3.1577400e+01 3.1186170e+01
3.1629240e+01 3.1733130e+01 3.0897170e+01 3.1173660e+01
2.8820950e+01 2.9459060e+01 2.9887530e+01 2.9892890e+01 2.9546620e+01
2.9890690e+01 3.0171060e+01 2.9472140e+01 2.9783800e+01 2.9659220e+01 2.9644200e+01
2.9984420e+01 3.0047270e+01 2.9713050e+01 3.0051810e+01 3.0121200e+01 2.9816500e+01
3.0161490e+01 3.0242200e+01 2.9588180e+01 2.9803120e+01
2.8101600e+01 2.8621440e+01 2.8971110e+01 2.8976260e+01 2.8694210e+01
2.8975110e+01 2.9204770e+01 2.8634790e+01 2.8889170e+01 2.8787410e+01 2.8774660e+01
2.9052270e+01 2.9103650e+01 2.8831000e+01 2.9107520e+01 2.9164250e+01 2.8915470e+01
2.9197040e+01 2.9262550e+01 2.8728980e+01 2.8904220e+01

```

```
%wall temperature perturbation vector (size: 1 x timeDiv)
```

```
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
```

```
%wall partial vapor pressure distribution (size: timeDiv x layers)
```

```

9.5616830e+02 9.5704490e+02 9.5791640e+02 9.5788790e+02 9.5716430e+02
9.5787720e+02 9.5835410e+02 9.5707230e+02 9.5770890e+02 9.5751880e+02 9.5739360e+02
9.5810390e+02 9.5821480e+02 9.5753050e+02 9.5823710e+02 9.5836580e+02 9.5774070e+02
9.5846530e+02 9.5864800e+02 9.5749430e+02 9.5797050e+02
9.5862480e+02 9.5987550e+02 9.6081740e+02 9.6082890e+02 9.6007730e+02
9.6084310e+02 9.6142800e+02 9.5997980e+02 9.6066310e+02 9.6044930e+02 9.6041270e+02
9.6117810e+02 9.6134410e+02 9.6063630e+02 9.6139420e+02 9.6157660e+02 9.6093990e+02
9.6171440e+02 9.6194850e+02 9.6062010e+02 9.6113460e+02
9.6011590e+02 9.6155930e+02 9.6251100e+02 9.6255660e+02 9.6182310e+02
9.6259410e+02 9.6322690e+02 9.6173810e+02 9.6242470e+02 9.6220900e+02 9.6223240e+02
9.6300450e+02 9.6320570e+02 9.6251640e+02 9.6327870e+02 9.6349380e+02 9.6287900e+02
9.6365610e+02 9.6391650e+02 9.6253580e+02 9.6305580e+02
9.6105630e+02 9.6260120e+02 9.6352700e+02 9.6360220e+02 9.6291280e+02
9.6366060e+02 9.6431100e+02 9.6284750e+02 9.6351210e+02 9.6330490e+02 9.6337600e+02
9.6412580e+02 9.6435070e+02 9.6370390e+02 9.6444260e+02 9.6467850e+02 9.6410550e+02
9.6485680e+02 9.6513020e+02 9.6376070e+02 9.6426650e+02
9.6147010e+02 9.6303010e+02 9.6386480e+02 9.6397210e+02 9.6338080e+02
9.6405290e+02 9.6468450e+02 9.6334770e+02 9.6394330e+02 9.6375960e+02 9.6388030e+02
9.6455480e+02 9.6479340e+02 9.6423910e+02 9.6490210e+02 9.6514770e+02 9.6466090e+02
9.6533330e+02 9.6560370e+02 9.6433690e+02 9.6479250e+02
9.6105030e+02 9.6249280e+02 9.6312220e+02 9.6326670e+02 9.6286930e+02
9.6337300e+02 9.6392440e+02 9.6288720e+02 9.6333080e+02 9.6319560e+02 9.6337530e+02
9.6388120e+02 9.6411740e+02 9.6374450e+02 9.6423990e+02 9.6447710e+02 9.6415620e+02
9.6465550e+02 9.6489650e+02 9.6388690e+02 9.6422880e+02
9.6032640e+02 9.6148330e+02 9.6153630e+02 9.6179660e+02 9.6195300e+02
9.6198270e+02 9.6231710e+02 9.6212060e+02 9.6213560e+02 9.6214040e+02 9.6250280e+02
9.6253510e+02 9.6277600e+02 9.6292220e+02 9.6294580e+02 9.6316940e+02 9.6332480e+02
9.6333630e+02 9.6350230e+02 9.6321180e+02 9.6323590e+02
9.5978920e+02 9.6082720e+02 9.6056480e+02 9.6087800e+02 9.6132700e+02
9.6109660e+02 9.6131500e+02 9.6155170e+02 9.6133220e+02 9.6140260e+02 9.6187250e+02

```

```

9.6164570e+02  9.6188280e+02  9.6230330e+02  9.6206830e+02  9.6227940e+02  9.6268950e+02
9.6243350e+02  9.6255720e+02  9.6263340e+02  9.6248380e+02
  9.5921480e+02  9.6024200e+02  9.5999360e+02  9.6028090e+02  9.6069620e+02
9.6047780e+02  9.6069630e+02  9.6088850e+02  9.6068190e+02  9.6073620e+02  9.6119130e+02
9.6097620e+02  9.6119600e+02  9.6158450e+02  9.6136180e+02  9.6155840e+02  9.6194120e+02
9.6169870e+02  9.6181630e+02  9.6185650e+02  9.6171430e+02
  9.5874400e+02  9.5967950e+02  9.5927560e+02  9.5958250e+02  9.6013720e+02
9.5979120e+02  9.5994470e+02  9.6035500e+02  9.6003390e+02  9.6012080e+02  9.6061870e+02
9.6027630e+02  9.6048840e+02  9.6100770e+02  9.6065810e+02  9.6084330e+02  9.6134690e+02
9.6097360e+02  9.6106660e+02  9.6129550e+02  9.6106800e+02
  9.5834000e+02  9.5935590e+02  9.5927510e+02  9.5949180e+02  9.5971520e+02
9.5963620e+02  9.5988950e+02  9.5987500e+02  9.5974850e+02  9.5975040e+02  9.6011640e+02
9.6004040e+02  9.6022740e+02  9.6043530e+02  9.6035200e+02  9.6052450e+02  9.6074160e+02
9.6064480e+02  9.6076570e+02  9.6059790e+02  9.6054880e+02
  9.5791300e+02  9.5894700e+02  9.5910000e+02  9.5925000e+02  9.5923340e+02
9.5934840e+02  9.5966850e+02  9.5927620e+02  9.5937410e+02  9.5931790e+02  9.5957690e+02
9.5969380e+02  9.5985990e+02  9.5984180e+02  9.5995200e+02  9.6011280e+02  9.6012010e+02
9.6022450e+02  9.6036270e+02  9.5992210e+02  9.6000200e+02
  9.5750750e+02  9.5846110e+02  9.5868660e+02  9.5881310e+02  9.5872170e+02
9.5889830e+02  9.5922260e+02  9.5875660e+02  9.5890990e+02  9.5884340e+02  9.5904320e+02
9.5922050e+02  9.5937340e+02  9.5928350e+02  9.5945540e+02  9.5960580e+02  9.5954270e+02
9.5971160e+02  9.5984750e+02  9.5935430e+02  9.5947430e+02
  9.5713410e+02  9.5794130e+02  9.5823730e+02  9.5834960e+02  9.5819350e+02
9.5843140e+02  9.5875050e+02  9.5824680e+02  9.5845370e+02  9.5838770e+02  9.5850990e+02
9.5874610e+02  9.5888710e+02  9.5873310e+02  9.5896620e+02  9.5910670e+02  9.5897550e+02
9.5920880e+02  9.5933800e+02  9.5882650e+02  9.5898510e+02
  9.5672370e+02  9.5732620e+02  9.5733440e+02  9.5750660e+02  9.5763080e+02
9.5763290e+02  9.5782970e+02  9.5777380e+02  9.5776640e+02  9.5777960e+02  9.5797610e+02
9.5797640e+02  9.5811860e+02  9.5822710e+02  9.5822560e+02  9.5835730e+02  9.5846380e+02
9.5845460e+02  9.5854260e+02  9.5842050e+02  9.5842110e+02
  9.5633780e+02  9.5606840e+02  9.5389840e+02  9.5457190e+02  9.5684190e+02
9.5504930e+02  9.5447350e+02  9.5760140e+02  9.5596700e+02  9.5652850e+02  9.5749400e+02
9.5570330e+02  9.5592130e+02  9.5804540e+02  9.5625590e+02  9.5638830e+02  9.5834700e+02
9.5648590e+02  9.5632790e+02  9.5891270e+02  9.5771360e+02
  9.5579880e+02  9.5686840e+02  9.5756590e+02  9.5750520e+02  9.5687950e+02
9.5744590e+02  9.5789750e+02  9.5667320e+02  9.5718460e+02  9.5695970e+02  9.5695170e+02
9.5751950e+02  9.5759480e+02  9.5700240e+02  9.5756460e+02  9.5766100e+02  9.5714250e+02
9.5771820e+02  9.5787680e+02  9.5674580e+02  9.5712830e+02
  9.5420900e+02  9.5474160e+02  9.5487250e+02  9.5490670e+02  9.5481840e+02
9.5492240e+02  9.5510110e+02  9.5478640e+02  9.5487950e+02  9.5481960e+02  9.5492200e+02
9.5502700e+02  9.5508720e+02  9.5500170e+02  9.5510370e+02  9.5516700e+02  9.5510450e+02
9.5520600e+02  9.5527400e+02  9.5495440e+02  9.5502720e+02
  9.5325280e+02  9.5349150e+02  9.5424390e+02  9.5414720e+02  9.5346700e+02
9.5409320e+02  9.5439980e+02  9.5338730e+02  9.5394680e+02  9.5379040e+02  9.5351000e+02
9.5412870e+02  9.5414200e+02  9.5348940e+02  9.5411210e+02  9.5414760e+02  9.5353500e+02
9.5417830e+02  9.5427200e+02  9.5340090e+02  9.5381510e+02
  9.5294230e+02  9.5311500e+02  9.5381670e+02  9.5372300e+02  9.5308690e+02
9.5367170e+02  9.5394650e+02  9.5301760e+02  9.5353970e+02  9.5339800e+02  9.5312170e+02
9.5369920e+02  9.5370680e+02  9.5309640e+02  9.5367800e+02  9.5370660e+02  9.5313160e+02
9.5373280e+02  9.5381600e+02  9.5302160e+02  9.5340850e+02

```

%wall partial vapor pressure perturbation vector (size: 1 x timeDiv)

99.9 100 99.9 100 99.9 100 99.9 100 99.9 100 99.9 100 99.9 100 99.9 100 99.9 100

NTCF input file for 17th drift cell for 50 mm/year percolation:

%DO NOT EDIT THE NEXT LINE ---- NUFT input deck file identifier
211

%number of layers

21 1

%%section-to-segment assignment

%1- segment index

%2- segment to layer assignment

%3- layer to segment assignment

%4- drift section length

1	2	3	4	5	6	7	8	9	10	11	12	13	14
15	16	17	18	19	20	21							
1	1	1	1	1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1							
1	1	1	1	1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1							

```

1.8650      0.1000      2.6375      2.6375      0.1000      2.6525      2.6525      0.1000
1.8650      1.8650      0.1000      2.6525      2.6525      0.1000      2.6375      2.6375
0.1000      2.6525      2.6525      0.1000      2.7850
2           2           2           2           2           2           2           2           2           2
2           2           2           2           2           2           2

%NTCF constant optimizer search windows
%[temperature(lower upper increment) pressure(lower upper increment) heat optimization flag]
15 35 1 800 1200 20 0

%nuftfunl perturbation flags
1 1

%amplitude of randomized correction of central values
%temperature      Pressure
0.02              0.1

%control flags for the negative corrections in NTCF matrices
0 0

%time divisions and number of NUFT internal time ticks
20 10

%time vector (size: 1 x timeDiv)
0 0.167 0.5 1 2 5 10 15 20 25 30 35 40 45 50 60 75 100 150 200 300

%pbar vector (size: 1 x timeDiv)
8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04
8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04
8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04 8.872000e+04
8.872000e+04 8.872000e+04

%wall temperature distribution (size: timeDiv x layers)
5.6867240e+01 5.9504320e+01 6.1848690e+01 6.1594790e+01 5.9489830e+01
6.1379100e+01 6.2542630e+01 5.8809300e+01 6.0528500e+01 5.9862660e+01 5.9517680e+01
6.1406150e+01 6.1554130e+01 5.9566380e+01 6.1438240e+01 6.1634200e+01 5.9822920e+01
6.1743370e+01 6.2096080e+01 5.8729080e+01 5.9959640e+01
6.8839680e+01 7.1993880e+01 7.4222600e+01 7.4038620e+01 7.2071780e+01
7.3851930e+01 7.5057550e+01 7.1339010e+01 7.2962540e+01 7.2287250e+01 7.2154270e+01
7.3941880e+01 7.4147190e+01 7.2294430e+01 7.4056860e+01 7.4299010e+01 7.2629280e+01
7.4432560e+01 7.4810270e+01 7.1410240e+01 7.2569380e+01
7.4649050e+01 7.7913520e+01 8.0039010e+01 7.9900770e+01 7.8051710e+01
7.9742620e+01 8.0932070e+01 7.7336300e+01 7.8878820e+01 7.8227580e+01 7.8184270e+01
7.9885980e+01 8.0118130e+01 7.8378530e+01 8.0051790e+01 8.0313490e+01 7.8751640e+01
8.0461320e+01 8.0842420e+01 7.7538940e+01 7.8639360e+01
7.8181260e+01 8.1443360e+01 8.3473320e+01 8.3369110e+01 8.1624740e+01
8.3235830e+01 8.4397660e+01 8.0943370e+01 8.2413060e+01 8.1791830e+01 8.1801430e+01
8.3424800e+01 8.3672980e+01 8.2033560e+01 8.3627140e+01 8.3899620e+01 8.2430590e+01
8.4057300e+01 8.4436330e+01 8.1254910e+01 8.2302380e+01
7.9838300e+01 8.2988360e+01 8.4890570e+01 8.4818970e+01 8.3206030e+01
8.4713480e+01 8.5826300e+01 8.2584880e+01 8.3959860e+01 8.3383130e+01 8.3428530e+01
8.4948100e+01 8.5204660e+01 8.3689990e+01 8.5180270e+01 8.5456610e+01 8.4100710e+01
8.5620690e+01 8.5989780e+01 8.2998080e+01 8.3976160e+01
7.8670760e+01 8.1584390e+01 8.3325460e+01 8.3280830e+01 8.1823220e+01
8.3202620e+01 8.4241160e+01 8.1285520e+01 8.2543430e+01 8.2024320e+01 8.2082110e+01
8.3471580e+01 8.3724390e+01 8.2355810e+01 8.3718750e+01 8.3988150e+01 8.2762610e+01
8.4151900e+01 8.4500420e+01 8.1767460e+01 8.2659550e+01
7.5076410e+01 7.7766260e+01 7.9371620e+01 7.9338620e+01 7.8000990e+01
7.9273330e+01 8.0242230e+01 7.7521610e+01 7.8681790e+01 7.8204070e+01 7.8256350e+01
7.9536220e+01 7.9773590e+01 7.8515700e+01 7.9772560e+01 8.0025410e+01 7.8897980e+01
8.0178890e+01 8.0501850e+01 7.7979780e+01 7.8799950e+01
7.1385770e+01 7.3867600e+01 7.5360950e+01 7.5333670e+01 7.4092250e+01
7.5276800e+01 7.6183990e+01 7.3661270e+01 7.4741200e+01 7.4298060e+01 7.4338370e+01
7.5528180e+01 7.5749100e+01 7.4579700e+01 7.5749640e+01 7.5985640e+01 7.4936160e+01
7.6128480e+01 7.6408160e+01 7.4085580e+01 7.4847230e+01
6.8004090e+01 7.0300960e+01 7.1694700e+01 7.1671550e+01 7.0514800e+01
7.1621260e+01 7.2472420e+01 7.0124640e+01 7.1133160e+01 7.0720330e+01 7.0750050e+01
7.1859930e+01 7.2065520e+01 7.0974090e+01 7.2066730e+01 7.2287050e+01 7.1306320e+01
7.2419900e+01 7.2698430e+01 7.0515380e+01 7.1225130e+01
6.4891290e+01 6.7021230e+01 6.8323890e+01 6.8304250e+01 6.7224660e+01
6.8259610e+01 6.9058900e+01 6.6870150e+01 6.7813250e+01 6.7427910e+01 6.7448860e+01

```

```

6.8485740e+01 6.8677270e+01 6.7657010e+01 6.8678880e+01 6.8884720e+01 6.7966890e+01
6.9008360e+01 6.9267500e+01 6.7229990e+01 6.7892440e+01
  6.2121350e+01 6.4100380e+01 6.5320600e+01 6.5303990e+01 6.4294170e+01
6.5264370e+01 6.6016090e+01 6.3971230e+01 6.4855100e+01 6.4494840e+01 6.4508420e+01
6.5479350e+01 6.5658260e+01 6.4702560e+01 6.5660370e+01 6.5853140e+01 6.4992430e+01
6.5968610e+01 6.6210320e+01 6.4305210e+01 6.4925010e+01
  5.9616650e+01 6.1459880e+01 6.2604780e+01 6.2590890e+01 6.1644750e+01
6.2555710e+01 6.3263700e+01 6.1349650e+01 6.2179330e+01 6.1841940e+01 6.1849630e+01
6.2760380e+01 6.2927910e+01 6.2031260e+01 6.2930460e+01 6.3111380e+01 6.2303030e+01
6.3219480e+01 6.3445390e+01 6.1660960e+01 6.2241880e+01
  5.7324270e+01 5.9043460e+01 6.0119240e+01 6.0107330e+01 5.9219170e+01
6.0075720e+01 6.0742940e+01 5.894290e+01 5.9728210e+01 5.9411510e+01 5.9413940e+01
6.0269510e+01 6.0426250e+01 5.9583430e+01 6.0428810e+01 6.0598480e+01 5.9837910e+01
6.0699530e+01 6.0910720e+01 5.9236680e+01 5.9782020e+01
  5.5382360e+01 5.6993170e+01 5.8005440e+01 5.7995910e+01 5.7161460e+01
5.7967850e+01 5.8598140e+01 5.6912400e+01 5.7646120e+01 5.7348400e+01 5.7348020e+01
5.8152870e+01 5.8300500e+01 5.7507740e+01 5.8303510e+01 5.8463510e+01 5.7747570e+01
5.8558600e+01 5.8756830e+01 5.7183130e+01 5.7695780e+01
  5.2766420e+01 5.4238630e+01 5.5169810e+01 5.5162520e+01 5.4395940e+01
5.5138280e+01 5.5720770e+01 5.4172570e+01 5.4848100e+01 5.4574230e+01 5.4570040e+01
5.5310210e+01 5.5445610e+01 5.4716160e+01 5.5448600e+01 5.5595710e+01 5.4936270e+01
5.5682740e+01 5.5864120e+01 5.4418100e+01 5.4889120e+01
  4.9249050e+01 5.0530830e+01 5.1347000e+01 5.1343000e+01 5.0672740e+01
5.1324000e+01 5.1838430e+01 5.0484230e+01 5.1076630e+01 5.0836490e+01 5.0829190e+01
5.1477680e+01 5.1596350e+01 5.0957080e+01 5.1599510e+01 5.1728760e+01 5.1150100e+01
5.1804770e+01 5.1962790e+01 5.0696680e+01 5.1108800e+01
  4.5112960e+01 4.6171170e+01 4.6851600e+01 4.6850850e+01 4.6293930e+01
4.6837530e+01 4.7269990e+01 4.6144640e+01 4.6638720e+01 4.6438710e+01 4.6428680e+01
4.6969110e+01 4.7068080e+01 4.6535400e+01 4.7071450e+01 4.7179550e+01 4.6696530e+01
4.7242730e+01 4.7373410e+01 4.6320310e+01 4.6663220e+01
  4.0698180e+01 4.1510920e+01 4.2038640e+01 4.2041290e+01 4.1611760e+01
4.2033930e+01 4.2372770e+01 4.1503600e+01 4.1887030e+01 4.1732440e+01 4.1721900e+01
4.2140900e+01 4.2218390e+01 4.1806160e+01 4.2222310e+01 4.2307010e+01 4.1932370e+01
4.2356330e+01 4.2456960e+01 4.1642810e+01 4.1908180e+01
  3.7377750e+01 3.8015570e+01 3.8429340e+01 3.8433840e+01 3.8098850e+01
3.8430110e+01 3.8699280e+01 3.8018560e+01 3.8319160e+01 3.8197930e+01 3.8189770e+01
3.8518150e+01 3.8579970e+01 3.8257680e+01 3.8584080e+01 3.8651650e+01 3.8358520e+01
3.8690930e+01 3.8770030e+01 3.8131730e+01 3.8339360e+01
  3.5104290e+01 3.5625920e+01 3.5965830e+01 3.5970390e+01 3.5695790e+01
3.5968120e+01 3.6190450e+01 3.5632010e+01 3.5878990e+01 3.5779340e+01 3.5771740e+01
3.6041460e+01 3.6092290e+01 3.5827620e+01 3.6095880e+01 3.6151520e+01 3.5910580e+01
3.6183750e+01 3.6248400e+01 3.5724640e+01 3.5895020e+01

```

```
%wall temperature perturbation vector (size: 1 x timeDiv)
```

```
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
```

```
%wall partial vapor pressure distribution (size: timeDiv x layers)
```

```

9.6541290e+02 9.6656680e+02 9.6764500e+02 9.6763400e+02 9.6675610e+02
9.6764110e+02 9.6823940e+02 9.6666300e+02 9.6744650e+02 9.6722790e+02 9.6710290e+02
9.6798810e+02 9.6814940e+02 9.6732160e+02 9.6819890e+02 9.6838040e+02 9.6762850e+02
9.6852760e+02 9.6877780e+02 9.6735430e+02 9.6796430e+02
  9.8073130e+02 9.8258940e+02 9.8371180e+02 9.8386120e+02 9.8306680e+02
9.8398670e+02 9.8476870e+02 9.8307000e+02 9.8387070e+02 9.8367840e+02 9.8378990e+02
9.8472010e+02 9.8504410e+02 9.8430060e+02 9.8521220e+02 9.8554530e+02 9.8489200e+02
9.8581940e+02 9.8620360e+02 9.8461740e+02 9.8528510e+02
  9.9391230e+02 9.9610320e+02 9.9714340e+02 9.9745620e+02 9.9685650e+02
9.9771200e+02 9.9856950e+02 9.9702300e+02 9.9775100e+02 9.9764080e+02 9.9794230e+02
9.9881600e+02 9.9927680e+02 9.9872140e+02 9.9956920e+02 1.0000250e+03 9.9955480e+02
1.0004110e+03 1.0008890e+03 9.9940910e+02 1.0000650e+03
  1.0136740e+03 1.0161490e+03 1.0169410e+03 1.0175210e+03 1.0173340e+03
1.0179950e+03 1.0189010e+03 1.0178100e+03 1.0183460e+03 1.0184090e+03 1.0190000e+03
1.0196900e+03 1.0203540e+03 1.0201950e+03 1.0208500e+03 1.0214850e+03 1.0213900e+03
1.0220400e+03 1.0226430e+03 1.0215400e+03 1.0221130e+03
  1.0454220e+03 1.0468570e+03 1.0461480e+03 1.0473620e+03 1.0489210e+03
1.0483900e+03 1.0488790e+03 1.0504710e+03 1.0498860e+03 1.0506290e+03 1.0518160e+03
1.0513210e+03 1.0523120e+03 1.0538130e+03 1.0532850e+03 1.0541810e+03 1.0556030e+03
1.0550230e+03 1.0556970e+03 1.0569530e+03 1.0568060e+03
  1.0880690e+03 1.0896150e+03 1.0881250e+03 1.0899610e+03 1.0926590e+03
1.0915160e+03 1.0919710e+03 1.0950560e+03 1.0938640e+03 1.0950950e+03 1.0968930e+03
1.0958040e+03 1.0972280e+03 1.0998200e+03 1.0986830e+03 1.0999560e+03 1.1023890e+03
1.1011680e+03 1.1020750e+03 1.1046100e+03 1.1041550e+03

```

```

1.0326420e+03 1.0368500e+03 1.0385690e+03 1.0392000e+03 1.0382840e+03
1.0396920e+03 1.0412000e+03 1.0385610e+03 1.0397480e+03 1.0395710e+03 1.0402630e+03
1.0417120e+03 1.0425770e+03 1.0417320e+03 1.0431270e+03 1.0439720e+03 1.0432780e+03
1.0446830e+03 1.0455480e+03 1.0429840e+03 1.0440920e+03
1.0145490e+03 1.0180170e+03 1.0195980e+03 1.0200560e+03 1.0191220e+03
1.0204170e+03 1.0217270e+03 1.0193020e+03 1.0204060e+03 1.0202000e+03 1.0206710e+03
1.0219940e+03 1.0226740e+03 1.0218030e+03 1.0230870e+03 1.0237610e+03 1.0230250e+03
1.0243210e+03 1.0250300e+03 1.0226910e+03 1.0236780e+03
1.0037080e+03 1.0071070e+03 1.0088490e+03 1.0091480e+03 1.0079560e+03
1.0093790e+03 1.0107120e+03 1.0079550e+03 1.0091900e+03 1.0088680e+03 1.0091940e+03
1.0106360e+03 1.0112070e+03 1.0100900e+03 1.0115000e+03 1.0120820e+03 1.0111200e+03
1.0125500e+03 1.0132010e+03 1.0105780e+03 1.0116210e+03
9.9688230e+02 1.0000650e+03 1.0016840e+03 1.0019240e+03 1.0007830e+03
1.0021040e+03 1.0033430e+03 1.0007260e+03 1.0018780e+03 1.0015470e+03 1.0018400e+03
1.0031760e+03 1.0036770e+03 1.0026070e+03 1.0039150e+03 1.0044310e+03 1.0035100e+03
1.0048370e+03 1.0054270e+03 1.0029310e+03 1.0038910e+03
9.9324700e+02 9.9578740e+02 9.9712600e+02 9.9738110e+02 9.9648910e+02
9.9758670e+02 9.9862070e+02 9.9655390e+02 9.9750420e+02 9.9728130e+02 9.9752250e+02
9.9863300e+02 9.9909030e+02 9.9825390e+02 9.9934090e+02 9.9980630e+02 9.9908310e+02
1.0001850e+03 9.987010e+02 9.9873240e+02 9.9953910e+02
9.8985770e+02 9.9209300e+02 9.9334430e+02 9.9357940e+02 9.9274660e+02
9.9377520e+02 9.9472130e+02 9.9283610e+02 9.9372600e+02 9.9353180e+02 9.9371880e+02
9.9475770e+02 9.9517750e+02 9.9439560e+02 9.9541450e+02 9.9584220e+02 9.9516040e+02
9.9619440e+02 9.9666770e+02 9.9488110e+02 9.9563490e+02
9.8701740e+02 9.8905670e+02 9.9029640e+02 9.9050340e+02 9.8966090e+02
9.9068180e+02 9.9158370e+02 9.8975020e+02 9.9063520e+02 9.9044550e+02 9.9057350e+02
9.9160220e+02 9.9199070e+02 9.9119830e+02 9.9220950e+02 9.9260770e+02 9.9190980e+02
9.9293760e+02 9.9338340e+02 9.9165870e+02 9.9240070e+02
9.8418010e+02 9.8616100e+02 9.8757910e+02 9.8772520e+02 9.8669370e+02
9.8786170e+02 9.8880150e+02 9.8673150e+02 9.8775140e+02 9.8751370e+02 9.8753020e+02
9.8870240e+02 9.8905970e+02 9.8808700e+02 9.8924420e+02 9.8961880e+02 9.8874870e+02
9.8992850e+02 9.9036960e+02 9.8845170e+02 9.8928290e+02
9.7929620e+02 9.8150510e+02 9.8387820e+02 9.8381030e+02 9.8184830e+02
9.8380110e+02 9.8507120e+02 9.8166390e+02 9.8339590e+02 9.8291550e+02 9.8252500e+02
9.8447060e+02 9.8477370e+02 9.8291660e+02 9.8485210e+02 9.8520520e+02 9.8350540e+02
9.8549120e+02 9.8599790e+02 9.8293700e+02 9.8426740e+02
9.7581880e+02 9.7789960e+02 9.8020670e+02 9.8010940e+02 9.7817680e+02
9.8007410e+02 9.8128240e+02 9.7795950e+02 9.7964510e+02 9.7916440e+02 9.7875480e+02
9.8064450e+02 9.8091070e+02 9.7908100e+02 9.8096160e+02 9.8127830e+02 9.7960210e+02
9.8153260e+02 9.8200320e+02 9.7902540e+02 9.8031290e+02
9.7394710e+02 9.7568960e+02 9.7734250e+02 9.7733190e+02 9.7599070e+02
9.7734930e+02 9.7827590e+02 9.7586950e+02 9.7707150e+02 9.7673800e+02 9.7653560e+02
9.7789250e+02 9.7814040e+02 9.7687220e+02 9.7821880e+02 9.7849860e+02 9.7734500e+02
9.7872470e+02 9.7910730e+02 9.7693020e+02 9.7786460e+02
9.7155320e+02 9.7306250e+02 9.7444370e+02 9.7445090e+02 9.7334240e+02
9.7447800e+02 9.7526620e+02 9.7325420e+02 9.7425730e+02 9.7398410e+02 9.7383650e+02
9.7497150e+02 9.7519420e+02 9.7414680e+02 9.7527220e+02 9.7552040e+02 9.7456940e+02
9.7572190e+02 9.7605390e+02 9.7423010e+02 9.7501470e+02
9.6994510e+02 9.7130750e+02 9.7255230e+02 9.7256400e+02 9.7156960e+02
9.7259340e+02 9.7330670e+02 9.7149870e+02 9.7240260e+02 9.7216030e+02 9.7203070e+02
9.7305430e+02 9.7325990e+02 9.7232060e+02 9.7333530e+02 9.7356350e+02 9.7271080e+02
9.7374980e+02 9.7405310e+02 9.7241440e+02 9.7312310e+02
9.6902620e+02 9.7029840e+02 9.7146610e+02 9.7148030e+02 9.7055050e+02
9.7151130e+02 9.7218120e+02 9.7049110e+02 9.7133890e+02 9.7111480e+02 9.7099320e+02
9.7195380e+02 9.7214940e+02 9.7127110e+02 9.7222340e+02 9.7244000e+02 9.7164250e+02
9.7261750e+02 9.7290400e+02 9.7137260e+02 9.7203830e+02

```

```
%wall partial vapor pressure perturbation vector (size: 1 x timeDiv)
```

```
99.9 100 99.9 100 99.9 100 99.9 100 99.9 100 99.9 100 99.9 100 99.9 100 99.9 100
```

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