


```
43: num_atmos_calls=          48 time_init=          2019          8          29
44:           0           0           0 time_atmos=          2019          8
45:           29           0           0           0 time_end=          2019
46:           8           30           0           0           0 dt_atmos=
47:           1800 Run_length=          86400
48:
49: WARNING from PE      0: MPP_OPEN: File time_stamp.out opened WRONLY already
exists!
50:
51:
52: WARNING from PE      0: MPP_OPEN: File time_stamp.out opened WRONLY already
exists!
53:
54: atmosphere_init: current_time_seconds =          0.0
55: Using n_split from the namelist: 006
56: Off center implicit scheme param=  1.000000000000000
57:   p_fac=  0.10000000000000000
58: Using n_sponge : 010
59: Using non_ortho :      T
60: Starting PEs :          6
61: Starting Threads :          1
62: Cubic: cubed-sphere domain decomposition
63: whalo =   3, ehalo =   3, shalo =   3, nhalo =   3
64:   X-AXIS = 192
65:   Y-AXIS = 192
66: Cubic: cubed-sphere domain decomposition
67: Cubic: cubed-sphere domain decomposition
68: whalo =   3, ehalo =   3, shalo =   3, nhalo =   3
69:   X-AXIS = 192
70:   Y-AXIS = 192
71: Cubic: cubed-sphere domain decomposition
72: whalo =   3, ehalo =   3, shalo =   3, nhalo =   3
73:   X-AXIS = 192
74:   Y-AXIS = 192
75: whalo =   3, ehalo =   3, shalo =   3, nhalo =   3
76: Cubic: cubed-sphere domain decomposition
77: whalo =   3, ehalo =   3, shalo =   3, nhalo =   3
78:   X-AXIS = 192
79:   Y-AXIS = 192
80:   X-AXIS = 192
81:   Y-AXIS = 192
82: Cubic: cubed-sphere domain decomposition
83: whalo =   3, ehalo =   3, shalo =   3, nhalo =   3
84:   X-AXIS = 192
85:   Y-AXIS = 192
86: Cubic: cubed-sphere domain decomposition
87: whalo =   1, ehalo =   1, shalo =   1, nhalo =   1
88:   X-AXIS = 192
89:   Y-AXIS = 192
90: Cubic: cubed-sphere domain decomposition
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91: whalo =    1, ehalo =    1, shalo =    1, nhalo =    1
92:   X-AXIS = 192
93:   Y-AXIS = 192
94: Cubic: cubed-sphere domain decomposition
95: whalo =    1, ehalo =    1, shalo =    1, nhalo =    1
96:   X-AXIS = 192
97:   Y-AXIS = 192
98: Cubic: cubed-sphere domain decomposition
99: whalo =    1, ehalo =    1, shalo =    1, nhalo =    1
100:  X-AXIS = 192
101:  Y-AXIS = 192
102: Cubic: cubed-sphere domain decomposition
103: whalo =    1, ehalo =    1, shalo =    1, nhalo =    1
104:  X-AXIS = 192
105:  Y-AXIS = 192
106: Cubic: cubed-sphere domain decomposition
107: whalo =    1, ehalo =    1, shalo =    1, nhalo =    1
108:  X-AXIS = 192
109:  Y-AXIS = 192
110: ncnst=          9 num_prog=          9 pnats=          0 dnats=
111:          1 num_family=          0
112:
113: ==>Note from fv_grid_tools_mod(read_grid): read atmosphere grid from
    mosaic ver
114: sion grid
115: NOTE from PE      0: MPP_IO_SET_STACK_SIZE: stack size set to    148225.
116: MAX    AREA (m*m): 0.33368269525095E+10      MIN AREA (m*m):
    0.14515505475549E+10
117: GLOBAL AREA (m*m): 0.51009649655352E+15 IDEAL GLOBAL AREA (m*m):
    0.51009649655132E+15
118:
119:   Cubed-Sphere Grid Stats :          193 x          193 x          6
120:     Deviation from Orthogonal : min:          0.00 max:          29.77 avg:
    8.83
121:     Aspect Ratio              : min:          1.00 max:          1.06 avg:
    1.02
122:
123: Corner interpolation coefficient=  1.49660009851305
124: Corner interpolation coefficient=  1.49660009851297
125: Corner interpolation coefficient=  1.49660009851299
126: Corner interpolation coefficient=  1.49660009851302
127: Corner interpolation coefficient=  1.49660009851298
128: Corner interpolation coefficient=  1.49660009851309
129: da_max/da_min=    2.29880175935333
130: da_max_c/da_min_c=  2.30405679291829
131:
132: Divergence damping Coefficients
133: For small dt=   150.000000000000
134: External mode del-2 (m**2/s)=  0.00000000000000E+000
135: Internal mode del-2 SMAG dimensionless coeff=  0.100000000000000

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136: Internal mode del-2 background diff= 0.000000000000000E+000
137: Internal mode del-6 background diff= 0.120000000000000
138: tracer del-2 diff= 0.000000000000000E+000
139: Vorticity del-4 (m**4/s)= 5618663.97895176
140: beta= 0.000000000000000E+000
141:
142: FV_RESTART: 1 T
143: NOTE from PE 0: READING FROM SST_RESTART DISABLED
144: Tracer sphum initialized with surface value of 0.100000E+31 and vertical multiplier of 1.000000
145: Tracer liq_wat initialized with surface value of 0.100000E+31 and vertical multiplier of 1.000000
146: Tracer rainwat initialized with surface value of 0.100000E+31 and vertical multiplier of 1.000000
147: Tracer ice_wat initialized with surface value of 0.100000E+31 and vertical multiplier of 1.000000
148: Tracer snowwat initialized with surface value of 0.100000E+31 and vertical multiplier of 1.000000
149: Tracer graupel initialized with surface value of 0.100000E+31 and vertical multiplier of 1.000000
150: Tracer o3mr initialized with surface value of 0.100000E+31 and vertical multiplier of 1.000000
151: Tracer sgs_tke initialized with surface value of 0.100000E+31 and vertical multiplier of 1.000000
152: Tracer cld_amt initialized with surface value of 0.100000E+31 and vertical multiplier of 1.000000
153: Calling get_external_ic
154: enter get_nggps_ic is= 1 ie= 192 js= 1 je= 192 isd= -2 ied= 195 jsd= -2 jed= 195
155: NOTE from PE 0: Using external_IC::get_nggps_ic which is valid only for data which has been horizontally interpolated to the current cubed-sphere grid
156: enter get_nggps_ic is= 1 ie= 192 js= 1 je= 192 isd= -2 ied= 195 jsd= -2 jed= 195
157: enter get_nggps_ic is= 1 ie= 192 js= 1 je= 192 isd= -2 ied= 195 jsd= -2 jed= 195
158: enter get_nggps_ic is= 1 ie= 192 js= 1 je= 192 isd= -2 ied= 195 jsd= -2 jed= 195
159: enter get_nggps_ic is= 1 ie= 192 js= 1 je= 192 isd= -2 ied= 195 jsd= -2 jed= 195
160: NOTE from PE 0: External_IC::get_nggps_ic - use externally-generated, filtered terrain and NCEP pressure levels (no vertical remapping)
161: enter get_nggps_ic is= 1 ie= 192 js= 1 je= 192 isd= -2 ied= 195 jsd= -2 jed= 195
162: NOTE from PE 0: ==> External_ic::get_nggps_ic: using control file gfs_ctrl.nc for NGGPS IC
163: NOTE from PE 0: ==> External_ic::get_nggps_ic: using tiled data file oro_data.nc for NGGPS IC
164: NOTE from PE 0: ==> External_ic::get_nggps_ic: using tiled data file sfc_data.nc for NGGPS IC

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165: NOTE from PE      0: ==> External_ic::get_nggps_ic: using tiled data file
    gfs_data.nc for NGGPS IC
166: Tracer sphum initialized with surface value of 0.100000E+31 and vertical
    multiplier of 1.000000
167: Tracer liq_wat initialized with surface value of 0.100000E+31 and vertical
    multiplier of 1.000000
168: Tracer rainwat initialized with surface value of 0.100000E+31 and vertical
    multiplier of 1.000000
169: Tracer ice_wat initialized with surface value of 0.100000E+31 and vertical
    multiplier of 1.000000
170: Tracer snowwat initialized with surface value of 0.100000E+31 and vertical
    multiplier of 1.000000
171: Tracer graupel initialized with surface value of 0.100000E+31 and vertical
    multiplier of 1.000000
172: Tracer o3mr initialized with surface value of 0.100000E+31 and vertical
    multiplier of 1.000000
173: Tracer sgs_tke initialized with surface value of 0.100000E+31 and vertical
    multiplier of 1.000000
174: Tracer cld_amt initialized with surface value of 0.100000E+31 and vertical
    multiplier of 1.000000
175: NOTE from PE      0: MPP_IO_SET_STACK_SIZE: stack size set to 2408640.
176: NOTE from PE      0: MPP_IO_SET_STACK_SIZE: stack size set to 2433024.
177: sphum = 1
178: clwmr = 2
179: o3mr = 7
180: liq_aero = -2147483646
181: ice_aero = -2147483646
182: ncnst = 9
183: ptop & ks 20.000000000000000 21
184: GFS ak = 0.000000000000000E+000 20.000000000000000
185: 64.2470000000000 137.7900000000000 221.9580000000000
186: 318.2660000000000 428.4340000000000 554.4240000000000
187: 698.4570000000000 863.0580000000000 1051.0800000000000
188: 1265.7520000000000 1510.7110000000000 1790.0510000000000
189: 2108.3660000000000 2470.7880000000000 2883.0380000000000
190: 3351.4600000000000 3883.0520000000000 4485.4930000000000
191: 5167.1460000000000 5937.0500000000000 6804.8740000000000
192: 7777.1500000000000 8832.5370000000000 9936.6140000000000
193: 11054.8530000000000 12152.9370000000000 13197.0650000000000
194: 14154.3160000000000 14993.0740000000000 15683.4890000000000
195: 16197.9670000000000 16511.7360000000000 16611.6030000000000
196: 16503.1440000000000 16197.3150000000000 15708.8930000000000
197: 15056.3420000000000 14261.4350000000000 13348.6710000000000
198: 12344.4900000000000 11276.3480000000000 10171.7120000000000
199: 9057.0510000000000 7956.9080000000000 6893.1170000000000
200: 5884.2060000000000 4945.0290000000000 4086.6140000000000
201: 3316.2170000000000 2637.5530000000000 2051.1500000000000
202: 1554.7890000000000 1143.9880000000000 812.4890000000000
203: 552.7200000000000 356.2230000000000 214.0150000000000
204: 116.8990000000000 55.7120000000000 21.5160000000000

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205: 5.741000000000000 0.575000000000000 0.000000000000000E+000
206: 0.000000000000000E+000 FV3 ak= 20.0000000000000
207: 64.2470000000000 137.790000000000 221.958000000000
208: 318.266000000000 428.434000000000 554.424000000000
209: 698.457000000000 863.058000000000 1051.080000000000
210: 1265.752000000000 1510.711000000000 1790.051000000000
211: 2108.366000000000 2470.788000000000 2883.038000000000
212: 3351.460000000000 3883.052000000000 4485.493000000000
213: 5167.146000000000 5937.050000000000 6804.874000000000
214: 7777.150000000000 8832.537000000000 9936.614000000000
215: 11054.85300000000 12152.93700000000 13197.06500000000
216: 14154.31600000000 14993.07400000000 15683.48900000000
217: 16197.96700000000 16511.73600000000 16611.60300000000
218: 16503.14400000000 16197.31500000000 15708.89300000000
219: 15056.34200000000 14261.43500000000 13348.67100000000
220: 12344.49000000000 11276.34800000000 10171.71200000000
221: 9057.05100000000 7956.90800000000 6893.11700000000
222: 5884.20600000000 4945.02900000000 4086.61400000000
223: 3316.21700000000 2637.55300000000 2051.15000000000
224: 1554.78900000000 1143.98800000000 812.48900000000
225: 552.720000000000 356.223000000000 214.015000000000
226: 116.899000000000 55.7120000000000 21.5160000000000
227: 5.741000000000000 0.575000000000000 0.000000000000000E+000
228: 0.000000000000000E+000
229: PS_model (mb) 1033.08554687500 512.100016570461
230: PT_model 315.319728924480 180.768524169922
231: Global Area= 510096496553518.
232: ZS_diff (m) 720.791015625000 -911.770751953125
233: -4.970434724955713E-007
234: GFS_IC Z500 5691.28841723256 5765.06306155452
235: 5456.21686179921 5865.99410354184
236: fv3_IC Z500 5691.26303962739 5765.01750623263
237: 5456.20501872134 5865.97549337196
238: PS_diff (mb) 80.9688343839420 -68.9252996236713
239: -1.600587499389379E-002
240: done remap_scalar_nggps
241: done remap_dwinds
242: PS max = 1033.08554687500 min = 512.100016570461
243: T max = 315.319728924480 min = 180.768524169922
244: W max = 6.15371179580688 min = -6.52699279785156
245: SPHUM max = 2.385154808819909E-002 min = 0.000000000000000E+000
246: TS max = 326.972534179688 min = 199.569061279297
247: liq_wat max = 1.306659986982800E-003 min = -2.141685325008907E-004
248: ice_wat max = 9.529318194836377E-004 min = -1.068195212961993E-004
249: rainwat max = 2.477737143635746E-003 min = 2.858216384108146E-022
250: snowwat max = 1.484338194131851E-003 min = 0.000000000000000E+000
251: graupel max = 4.505973774939775E-003 min = 0.000000000000000E+000
252: O3MR max = 1.834060458349995E-005 min = 0.000000000000000E+000
253: IC generated from the specified external source
254: in fv_restart ncnst= 9

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255:
256: fv_restart u      =  -6648683925813861760
257: fv_restart v      =   6690313471714208143
258: fv_restart w      =  -627097456143133298
259: fv_restart delp   =  -3770089750835376007
260: fv_restart phis   =   6394345575066255039
261: fv_restart pt     =   2107511668650385776
262: fv_restart q(prog) nq =           9   161608733826087865
263: fv_restart sphum  =   167667681772238967
264: fv_restart liq_wat =   2464974827417734788
265: fv_restart rainwat =   1436762421127864669
266: fv_restart ice_wat =   1835375654832471981
267: fv_restart snowwat =  -1753440821603128389
268: fv_restart graupel =  -7919635939420844994
269: fv_restart o3mr   =   3929904909699750843
270: fv_restart sgs_tke =                               0
271: fv_restart cld_amt =                               0
272: ZS   5702.78515625000      -75.1599197387695      232.178703521215
273: PS   1033.08801214518      512.100273532003      985.449570797318
274: T    315.319728924480      180.768524169922      289.080944921941
275: sphum 2.385154808819909E-002  0.000000000000000E+000  9.916643945316207E-003
276: liq_wat 1.306659986982800E-003 -2.141685325008907E-004
1.649791739310810E-006
277: rainwat 2.477737143635746E-003  2.858216384108146E-022
2.342048681941044E-006
278: ice_wat 9.529318194836377E-004 -1.068195212961993E-004
7.781018851977811E-007
279: snowwat 1.484338194131851E-003  0.000000000000000E+000
5.393087597721591E-007
280: graupel 4.505973774939775E-003  0.000000000000000E+000
2.665226150916648E-008
281: o3mr 1.834060458349995E-005  0.000000000000000E+000  5.993872669849721E-008
282: sgs_tke 0.000000000000000E+000  0.000000000000000E+000
0.000000000000000E+000
283: cld_amt 0.000000000000000E+000  0.000000000000000E+000
0.000000000000000E+000
284: U max =   126.413745671503      min =  -117.742188037857
285: V max =   142.666607551046      min =  -123.863829579423
286: W    6.15371179580688      -6.52699279785156      -1.674995137747356E-003
287:
288: mp_top=           1 pfull=  0.379150775374218
289: Mean specific humidity (mg/kg) above 75 mb=  3.25092798814335
290: Total surface pressure (mb) =   985.449570797320
291: mean dry surface pressure =   982.850723276299
292: Total Water Vapor (kg/m**2) =   26.3972723761997
293: --- Micro Phys water substances (kg/m**2) ---
294: Total cloud water=  4.526128483999287E-002
295: Total rain water=  1.035892000792594E-002

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296: Total cloud ice = 2.935753395566309E-002
297: Total snow      = 1.548374466377039E-002
298: Total graupel  = 3.135662761242649E-003
299: -----
300: NOTE from PE      0: No adiabatic initialization correction in use
301: model init,iaufhrs= -1.0000000000000000      -1.0000000000000000
302: -1.0000000000000000      -1.0000000000000000      -1.0000000000000000
303: -1.0000000000000000      -1.0000000000000000
304: dxmax= 18.1991080870045      dxmin= 24.5164135836650      dxinv=
305: -0.158295336600173      max_lon= 5000      max_lat= 2000
min_lon=
306: 192      min_lat= 94      rhc_max= 0.9999999000000000
307: NOAH Land Surface Model used
308: nst_anl= T      use_ufo= T      frac_grid= F
309: min_lakeice= 0.1500000000000000      min_seaice= 1.0000000000000000E-006
310: NSSTM is active
311: nstf_name(1)= 2
312: nstf_name(2)= 1
313: nstf_name(3)= 0
314: nstf_name(4)= 0
315: nstf_name(5)= 0
316: scale & aerosol-aware mass-flux deep conv scheme
317: scale-aware hybrid edmf PBL scheme used
318: scale- & aerosol-aware mass-flux shallow conv scheme (2017)
319: Original mountain blocking and orographic gravity wave drag
parameterization
320: used
321: non-statioary gravity wave drag parameterization used
322: do_gwd= T
323: Radiative heating calculated at 64 layers
324: max-random cloud overlap for Shortwave IOVR_SW= 1
325: max-random cloud overlap for Longwave IOVR_LW= 1
326: sub-grid cloud for Shortwave ISUBC_SW= 2
327: sub-grid cloud for Longwave ISUBC_LW= 2
328: avg_max_length= 3600.000000000000
329: Using GFDL Cloud Microphysics
330: num_p3d= 5      num_p2d= 1      crtrh= 0.9000000000000000
331: 0.9000000000000000      0.9000000000000000      npdf3d= 0
pdfcld= F
332: shcnvcw= F      cnvcld= T      ncnvcld3d= 1      do_shoc= F      nshoc3d=
333: 0      nshoc_2d= 0      shoc_cld= F      nkbfsnoc= -999
334: nahdshoc= -999      nscfshoc= -999      uni_cld= F      ntot3d=
6
335: ntot2d= 1      shocafcnv= F      indcld= -1      shoc_parm=
336: 7000.000000000000      1.0000000000000000      4.285714300000000
337: 0.7000000000000000      -999.0000000000000000      ncnvw= 6      ncnvc=
338: -999
339:
340: basic control parameters
341: me : 0

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342: master          : 0
343: communicator     : -1006632900
344: nlunit          : 9999
345: fn_nml          : using internal file
346: fhzero          : 6.000000000000000
347: ldiag3d         : F
348: lssav           : F
349: fhcyc           : 24.000000000000000
350: thermodyn_id    : 1
351: sfcpress_id     : 1
352: gen_coord_hybrid : F
353:
354: grid extent parameters
355: isc              : 1
356: jsc              : 1
357: nx               : 192
358: ny               : 192
359: levs             : 64
360: cnx              : 192
361: cny              : 192
362: lonr             : 768
363: latr             : 384
364: blkksz(1)       : 32
365: blkksz(nblks)   : 32
366:
367: coupling parameters
368: cplflx          : F
369: cplwav          : F
370: cplchm          : F
371:
372: integrated dynamics through earth atmosphere
373: lsidea          : F
374:
375: calendars and time parameters and activation triggers
376: dtp              : 1800.0000000000000
377: dtf              : 1800.0000000000000
378: nscyc           : 48
379: nszero          : 12
380: idat            : 2019      8      29      0
381:      0      0      0      0
382: idate           : 0      8      29      2019
383:
384: radiation control parameters
385: fhswr           : 3600.0000000000000
386: fhlwr           : 3600.0000000000000
387: nsswr           : 2
388: nslwr           : 2
389: levr            : 64
390: nfxr            : 45
391: aero_in         : F

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392:  ntrcaer      :          1
393:  lmfshal      :   T
394:  lmfdeep2     :   T
395:  nrcm         :          2
396:  iflip        :          1
397:  isol         :          2
398:  ico2         :          2
399:  ialb         :          1
400:  iems         :          1
401:  iaer         :        111
402:  icliq_sw     :          1
403:  iovr_sw      :          1
404:  iovr_lw      :          1
405:  ictm         :          1
406:  isubc_sw     :          2
407:  isubc_lw     :          2
408:  crick_proof  :   F
409:  ccnorm       :   F
410:  norad_precip :   F
411:  lwhttr      :   T
412:  swhttr      :   T
413:
414:  microphysical switch
415:  nclد         :          5
416:  imp_physics  :        11
417:
418:  GFDL microphysical parameters
419:  GFDL MP radiation inter:  T
420:
421:  land/surface model parameters
422:  lsm          :          1
423:  lsoil        :          4
424:  lsoil_lsm    :          4
425:  lsnow_lsm    :          3
426:  ivegsrc      :          1
427:  isot         :          1
428:  use_ufo      :   T
429:
430:  tuning parameters for physical parameterizations
431:  ras          :   F
432:  flipv        :   T
433:  trans_trac   :   T
434:  old_monin    :   F
435:  do_gwd       :   T
436:  cnvgwd       :   T
437:  do_cnvgwd    :   F
438:  mstrat       :   F
439:  moist_adj    :   F
440:  cscnv        :   F
441:  cal_pre      :   F

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442:	do_aw	:	F		
443:	flx_form	:	F		
444:	do_shoc	:	F		
445:	shoc_parm	:		7000.000000000000	1.00000000000000
446:	4.285714300000000	:		0.700000000000000	-999.000000000000
447:	shocftcnv	:	F		
448:	shoc_cld	:	F		
449:	uni_cld	:	F		
450:	h2o_phys	:	T		
451:	pdfcld	:	F		
452:	shcnvcw	:	F		
453:	redrag	:	T		
454:	hybedmf	:	T		
455:	satmedmf	:	F		
456:	isatmedmf	:		0	
457:	shinhong	:	F		
458:	do_yсу	:	F		
459:	dspheat	:	T		
460:	lheatstrg	:	F		
461:	cnvcld	:	T		
462:	random_clds	:	F		
463:	shal_cnv	:	T		
464:	imfshalcnv	:		2	
465:	imfdeepcnv	:		2	
466:	do_deep	:	T		
467:	nmtvr	:		14	
468:	jcap	:		1	
469:	cs_parm	:		8.00000000000000	4.00000000000000
470:	1000.000000000000	:		3500.000000000000	20.00000000000000
471:	1.000000000000000	:		-999.000000000000	1.00000000000000
472:	0.600000000000000	:		0.00000000000000E+000	
473:	flgmin	:		0.180000000000000	0.220000000000000
474:	cgwf	:		0.500000000000000	5.00000000000000E-002
475:	ccwf	:		1.000000000000000	1.000000000000000
476:	cdmbgwd	:		3.500000000000000	0.250000000000000
477:	1.000000000000000	:		1.000000000000000	
478:	sup	:		1.000000000000000	
479:	ctei_rm	:		10.00000000000000	10.00000000000000
480:	crtrh	:		0.900000000000000	0.900000000000000
481:	0.900000000000000	:			
482:	dlqf	:		0.00000000000000E+000	0.00000000000000E+000
483:	seed0	:		0	
484:	rbcr	:		0.250000000000000	
485:	do_mynnedmf	:	F		
486:	do_mynnsfclay	:	F		
487:	do_myjsfc	:	F		
488:	do_myjpb1	:	F		
489:	gwd_opt	:		1	
490:		:			
491:	Rayleigh friction	:			

```

492: prslrd0      : 0.0000000000000000E+000
493: ral_ts       : 0.0000000000000000E+000
494:
495: mass flux deep convection
496: clam_deep    : 0.1000000000000000
497: c0s_deep    : 2.000000000000000E-003
498: c1_deep     : 2.000000000000000E-003
499: betal_deep  : 5.000000000000000E-002
500: betas_deep  : 5.000000000000000E-002
501: evfact_deep : 0.3000000000000000
502: evfactl_deep : 0.3000000000000000
503: pgcon_deep  : 0.5500000000000000
504: asolfac_deep : 0.9580000000000000
505:
506: mass flux shallow convection
507: clam_shal   : 0.3000000000000000
508: c0s_shal   : 2.000000000000000E-003
509: c1_shal    : 5.000000000000000E-004
510: pgcon_shal : 0.5500000000000000
511: asolfac_shal : 0.9580000000000000
512:
513: near surface sea temperature model
514: nst_anl     : T
515: nstf_name   :          2          1          0          0
516:             0
517: lsea       :          0
518:
519: surface layer options
520: sfc_z0_type :          0
521:
522: background vertical diffusion coefficients
523: xkzm_m     : 1.0000000000000000
524: xkzm_h     : 1.0000000000000000
525: xkzm_s     : 1.0000000000000000
526: xkzminv    : 0.3000000000000000
527: moninq_fac : 1.0000000000000000
528: dspfac     : 1.0000000000000000
529: bl_upfr    : 0.1300000000000000
530: bl_dnfr    : 0.1000000000000000
531:
532: stochastic physics
533: do_sppt    : T
534: do_shum    : T
535: do_skeb    : T
536: do_sfcperfs : F
537:
538: cellular automata
539: nca       :          5
540: ncells    :          5
541: nlives    :         10

```

```

542:  nfracseed      :    0.5000000000000000
543:  nseed          :           100000
544:  ca_global      :    F
545:  ca_sgs         :    F
546:  do_ca          :    F
547:  iseed_ca       :           0
548:  ca_smooth      :    F
549:  isppt_deep     :    F
550:  nspinup        :           1
551:  nthresh        :    0.0000000000000000E+000
552:
553:  tracers
554:  tracer_names   : sphum
555:  liq_wat        :           rainwat
556:  ice_wat        :           snowwat
557:  graupel        :           o3mr
558:  sgs_tke        :           cld_amt
559:  ntrac          :           9
560:  ntqv           :           1
561:  ntoz           :           7
562:  ntcw           :           2
563:  ntiw           :           4
564:  ntrw           :           3
565:  ntsw           :           5
566:  ntgl           :           6
567:  ntclamt        :           9
568:  ntlnc          :          -99
569:  ntinc          :          -99
570:  ntrnc          :          -99
571:  ntsnc          :          -99
572:  ntgnc          :          -99
573:  ntke           :           8
574:  nto            :           0
575:  nto2           :           0
576:  ntw            :          -99
577:  ntia           :          -99
578:  ntchm          :           0
579:  ntchs          :          -99
580:  fscav          :
581:
582:  derived totals for phy_f*d
583:  ntot2d         :           1
584:  ntot3d         :           6
585:  num_p2d        :           1
586:  num_p3d        :           5
587:  nshoc_2d       :           0
588:  nshoc_3d       :           0
589:  ncnvcl3d       :           1
590:  npdf3d         :           0
591:  nctp           :           0

```

```

592:  nkbfsnoc      :      -999
593:  nahdsnoc      :      -999
594:  nscfsnoc      :      -999
595:
596:  debug flags
597:  debug          :  F
598:  pre_rad        :  F
599:
600:  variables modified at each time step
601:  ipt            :      1
602:  lprnt          :  F
603:  lsswr          :  F
604:  lslwr          :  F
605:  solhr          :  -9999.000000000000
606:  solcon         :  -9999.000000000000
607:  slag           :  -9999.000000000000
608:  sdec           :  -9999.000000000000
609:  cdec           :  -9999.000000000000
610:  clstp          :  -9999.000000000000
611:  phour          :  0.0000000000000000E+000
612:  fhour          :  0.5000000000000000
613:  zhour          :  0.0000000000000000E+000
614:  kdt            :      0
615:  jdat           :      2019      8      29      0
616:      0          0          0          0
617:  sec            :  0.0000000000000000E+000
618:  si             :  1.0000000000000000      0.994670137967030
619:  0.988630030551305      0.981795355947387      0.974074829179211
620:  0.965370569372193      0.955579045414836      0.944592287197078
621:  0.932299594647352      0.918589853166181      0.903354556653176
622:  0.886491478900351      0.867909171686985      0.847532021746212
623:  0.825305882291101      0.801203957859928      0.775232608753270
624:  0.747436709629337      0.717903956645773      0.686767568199990
625:  0.654206972126252      0.620446045471596      0.585748535469621
626:  0.550410960071072      0.514753123680963      0.479106813575342
627:  0.443803755579685      0.409163370230986      0.375481639620453
628:  0.343021632871033      0.312006338485267      0.282614364066433
629:  0.254978018417156      0.229183937796752      0.205273975252949
630:  0.183250541893293      0.163082923261438      0.144713204521001
631:  0.128062075677410      0.113034552990968      9.952492552934208E-002
632:  8.742129366270174E-002      7.660920966635407E-002      6.697471990523667E-002
633:  5.840827204975076E-002      5.080841024628596E-002      4.407969004491388E-002
634:  3.813288583979074E-002      3.2885444494348749E-002      2.826156655643848E-002
635:  2.419217215339815E-002      2.061463896155175E-002      1.747249395390158E-002
636:  1.471507822911011E-002      1.229704358126450E-002      1.017797739499531E-002
637:  8.321978184689799E-003      6.697171906618627E-003      5.275396081141108E-003
638:  4.031725976013030E-003      2.944237698040571E-003      1.993563989931395E-003
639:  1.162726420216179E-003      4.367701495483935E-004      0.000000000000000E+000
640:  first_time_step :  T
641:  restart         :  F

```

```

642: hydrostatic      : F
643: in compns_stochy
644: skeb= 0.3000000000000000    -999.000000000000    -999.000000000000

645: -999.000000000000    -999.000000000000
646: NOTE ntrunc adjusted for even nlats      766
647: stochastic physics
648: do_sppt : T
649: do_shum : T
650: do_skeb : T
651: do_sfcperfs : F
652: in init stochdata      6      768
653: getcon_h jcap= 766 me= 0
654: nspt =      1
655: nshum =      1
656: nskeb =      1
657: Initialize random pattern for SPPT
658: using seed 468083333      2019102712453
659: Initialize random pattern for SHUM
660: using seed 468083332      2019102712452
661: Initialize random pattern for SKEB      60
662: using seed 468083331      2019102712451
663: using streamfunction      1.000000000000000      0.000000000000000E+000
664: sppt vert profile      1 0.997335595000000
      0.000000000000000E+000
665: sppt vert profile      2 0.991651733104640      0.500000000000000
666: sppt vert profile      3 0.985215619728529      1.000000000000000
667: sppt vert profile      4 0.977939481031589      1.000000000000000
668: sppt vert profile      5 0.969728769600197      1.000000000000000
669: sppt vert profile      6 0.960482819269497      1.000000000000000
670: sppt vert profile      7 0.950095921623889      1.000000000000000
671: sppt vert profile      8 0.938458785197433      1.000000000000000
672: sppt vert profile      9 0.925460546905232      1.000000000000000
673: sppt vert profile     10 0.910991440212241      1.000000000000000
674: sppt vert profile     11 0.894946141001974      1.000000000000000
675: sppt vert profile     12 0.877227850695953      1.000000000000000
676: sppt vert profile     13 0.857753071880553      1.000000000000000
677: sppt vert profile     14 0.836456950414610      1.000000000000000

```

678:	sppt vert profile	15	0.813299031322804	1.000000000000000
679:	sppt vert profile	16	0.7882691011100691	1.000000000000000
680:	sppt vert profile	17	0.761392767003949	1.000000000000000
681:	sppt vert profile	18	0.732736287996051	1.000000000000000
682:	sppt vert profile	19	0.702410077285291	1.000000000000000
683:	sppt vert profile	20	0.670570395612043	1.000000000000000
684:	sppt vert profile	21	0.637418814960513	1.000000000000000
685:	sppt vert profile	22	0.603199050192498	1.000000000000000
686:	sppt vert profile	23	0.568191122127345	1.000000000000000
687:	sppt vert profile	24	0.532703068993090	1.000000000000000
688:	sppt vert profile	25	0.497060556638697	1.000000000000000
689:	sppt vert profile	26	0.461595209244817	1.000000000000000
690:	sppt vert profile	27	0.426632470093781	1.000000000000000
691:	sppt vert profile	28	0.392479917729516	1.000000000000000
692:	sppt vert profile	29	0.359416966233959	1.000000000000000
693:	sppt vert profile	30	0.327686547448174	1.000000000000000
694:	sppt vert profile	31	0.297489379308983	1.000000000000000
695:	sppt vert profile	32	0.268980857996051	1.000000000000000
696:	sppt vert profile	33	0.242270414299112	1.000000000000000
697:	sppt vert profile	34	0.217422289466930	1.000000000000000
698:	sppt vert profile	35	0.194458657443238	1.000000000000000
699:	sppt vert profile	36	0.173365433119447	1.000000000000000
700:	sppt vert profile	37	0.154098380552813	1.000000000000000
701:	sppt vert profile	38	0.136588975725568	1.000000000000000
702:	sppt vert profile	39	0.120750167566634	1.000000000000000

703: sppt vert profile	40	0.106481709802567	1.00000000000000
704: sppt vert profile	41	9.367490158440278E-002	0.915665354458704
705: sppt vert profile	42	8.221667541461007E-002	0.762889005528134
706: sppt vert profile	43	7.199293712240869E-002	0.626572494965449
707: sppt vert profile	44	6.289202369200395E-002	0.505226982560052
708: sppt vert profile	45	5.480846989141165E-002	0.397446265218822
709: sppt vert profile	46	4.764382527147088E-002	0.301917670286278
710: sppt vert profile	47	4.130575024679171E-002	0.217410003290556
711: sppt vert profile	48	3.570835143139191E-002	0.142778019085225
712: sppt vert profile 002	49	3.077244817374136E-002	7.696597564988480E-
713: sppt vert profile 002	50	2.642559723593288E-002	1.900796314577166E-
714: sppt vert profile 0.00000000000000E+000	51	2.260194471865746E-002	
715: sppt vert profile 0.00000000000000E+000	52	1.924193978282330E-002	
716: sppt vert profile 0.00000000000000E+000	53	1.629201382033564E-002	
717: sppt vert profile 0.00000000000000E+000	54	1.370416090819349E-002	
718: sppt vert profile 0.00000000000000E+000	55	1.143549851924975E-002	
719: sppt vert profile 0.00000000000000E+000	56	9.447867719644620E-003	
720: sppt vert profile 0.00000000000000E+000	57	7.707379072063180E-003	
721: sppt vert profile 0.00000000000000E+000	58	6.184012833168806E-003	
722: sppt vert profile 0.00000000000000E+000	59	4.851224086870682E-003	
723: sppt vert profile 0.00000000000000E+000	60	3.685587364264561E-003	
724: sppt vert profile 0.00000000000000E+000	61	2.666456071076012E-003	
725: sppt vert profile 0.00000000000000E+000	62	1.775656465942744E-003	
726: sppt vert profile 0.00000000000000E+000	63	9.972211253701875E-004	
727: sppt vert profile 0.00000000000000E+000	64	4.158292201382034E-004	

728:	skeb vert profile	1	0.99733559500000	1.00000000000000
729:	skeb vert profile	2	0.991651733104640	1.00000000000000
730:	skeb vert profile	3	0.985215619728529	1.00000000000000
731:	skeb vert profile	4	0.977939481031589	1.00000000000000
732:	skeb vert profile	5	0.969728769600197	1.00000000000000
733:	skeb vert profile	6	0.960482819269497	1.00000000000000
734:	skeb vert profile	7	0.950095921623889	1.00000000000000
735:	skeb vert profile	8	0.938458785197433	1.00000000000000
736:	skeb vert profile	9	0.925460546905232	1.00000000000000
737:	skeb vert profile	10	0.910991440212241	1.00000000000000
738:	skeb vert profile	11	0.894946141001974	1.00000000000000
739:	skeb vert profile	12	0.877227850695953	1.00000000000000
740:	skeb vert profile	13	0.857753071880553	1.00000000000000
741:	skeb vert profile	14	0.836456950414610	1.00000000000000
742:	skeb vert profile	15	0.813299031322804	1.00000000000000
743:	skeb vert profile	16	0.7882691011100691	1.00000000000000
744:	skeb vert profile	17	0.761392767003949	1.00000000000000
745:	skeb vert profile	18	0.732736287996051	1.00000000000000
746:	skeb vert profile	19	0.702410077285291	1.00000000000000
747:	skeb vert profile	20	0.670570395612043	1.00000000000000
748:	skeb vert profile	21	0.637418814960513	1.00000000000000
749:	skeb vert profile	22	0.603199050192498	1.00000000000000
750:	skeb vert profile	23	0.568191122127345	1.00000000000000
751:	skeb vert profile	24	0.532703068993090	1.00000000000000
752:	skeb vert profile	25	0.497060556638697	1.00000000000000

753:	skeb vert profile	26	0.461595209244817	1.00000000000000
754:	skeb vert profile	27	0.426632470093781	1.00000000000000
755:	skeb vert profile	28	0.392479917729516	1.00000000000000
756:	skeb vert profile	29	0.359416966233959	1.00000000000000
757:	skeb vert profile	30	0.327686547448174	1.00000000000000
758:	skeb vert profile	31	0.297489379308983	1.00000000000000
759:	skeb vert profile	32	0.268980857996051	1.00000000000000
760:	skeb vert profile	33	0.242270414299112	1.00000000000000
761:	skeb vert profile	34	0.217422289466930	1.00000000000000
762:	skeb vert profile	35	0.194458657443238	1.00000000000000
763:	skeb vert profile	36	0.173365433119447	1.00000000000000
764:	skeb vert profile	37	0.154098380552813	1.00000000000000
765:	skeb vert profile	38	0.136588975725568	1.00000000000000
766:	skeb vert profile	39	0.120750167566634	1.00000000000000
767:	skeb vert profile	40	0.106481709802567	1.00000000000000
768:	skeb vert profile	41	9.367490158440278E-002	0.915665354458704
769:	skeb vert profile	42	8.221667541461007E-002	0.762889005528134
770:	skeb vert profile	43	7.199293712240869E-002	0.626572494965449
771:	skeb vert profile	44	6.289202369200395E-002	0.505226982560052
772:	skeb vert profile	45	5.480846989141165E-002	0.397446265218822
773:	skeb vert profile	46	4.764382527147088E-002	0.301917670286278
774:	skeb vert profile	47	4.130575024679171E-002	0.217410003290556
775:	skeb vert profile	48	3.570835143139191E-002	0.142778019085225
776:	skeb vert profile	49	3.077244817374136E-002	7.696597564988480E-002
777:	skeb vert profile	50	2.642559723593288E-002	1.900796314577166E-002

778:	skeb vert profile	51	2.260194471865746E-002	
	0.000000000000000E+000			
779:	skeb vert profile	52	1.924193978282330E-002	
	0.000000000000000E+000			
780:	skeb vert profile	53	1.629201382033564E-002	
	0.000000000000000E+000			
781:	skeb vert profile	54	1.370416090819349E-002	
	0.000000000000000E+000			
782:	skeb vert profile	55	1.143549851924975E-002	
	0.000000000000000E+000			
783:	skeb vert profile	56	9.447867719644620E-003	
	0.000000000000000E+000			
784:	skeb vert profile	57	7.707379072063180E-003	
	0.000000000000000E+000			
785:	skeb vert profile	58	6.184012833168806E-003	
	0.000000000000000E+000			
786:	skeb vert profile	59	4.851224086870682E-003	
	0.000000000000000E+000			
787:	skeb vert profile	60	3.685587364264561E-003	
	0.000000000000000E+000			
788:	skeb vert profile	61	2.666456071076012E-003	
	0.000000000000000E+000			
789:	skeb vert profile	62	1.775656465942744E-003	
	0.000000000000000E+000			
790:	skeb vert profile	63	9.972211253701875E-004	
	0.000000000000000E+000			
791:	skeb vert profile	64	4.158292201382034E-004	
	0.000000000000000E+000			
792:	skeb vpts		1.000000000000000	0.000000000000000E+000
793:	skeb vpts		1.000000000000000	0.336383993313568
794:	skeb vpts		1.000000000000000	0.717287955924313
795:	skeb vpts		2.000000000000000	0.147906545158145
796:	skeb vpts		2.000000000000000	0.633835293970908
797:	skeb vpts		3.000000000000000	0.181031857061038
798:	skeb vpts		3.000000000000000	0.795752301099399
799:	skeb vpts		4.000000000000000	0.484464745900625
800:	skeb vpts		5.000000000000000	0.253730323296376
801:	skeb vpts		6.000000000000000	0.110045268781144
802:	skeb vpts		7.000000000000000	5.964290532230430E-002
803:	skeb vpts		8.000000000000000	0.108251994979102
804:	skeb vpts		9.000000000000000	0.260814106343943
805:	skeb vpts		10.000000000000000	0.521167456352734
806:	skeb vpts		11.000000000000000	0.891706263302506
807:	skeb vpts		13.000000000000000	0.373034985829550
808:	skeb vpts		14.000000000000000	0.963638127765798
809:	skeb vpts		16.000000000000000	0.659594331566547
810:	skeb vpts		18.000000000000000	0.454369090130159
811:	skeb vpts		20.000000000000000	0.338714534171077
812:	skeb vpts		22.000000000000000	0.300701170989533
813:	skeb vpts		24.000000000000000	0.325905395658057

814:	skeb vpts	26.00000000000000	0.397754933347050	
815:	skeb vpts	28.00000000000000	0.498019374671588	
816:	skeb vpts	30.00000000000000	0.607425067178981	
817:	skeb vpts	32.00000000000000	0.706345730670921	
818:	skeb vpts	34.00000000000000	0.775520884698971	
819:	skeb vpts	36.00000000000000	0.796747325038761	
820:	skeb vpts	38.00000000000000	0.753488684973502	
821:	skeb vpts	40.00000000000000	0.631367700539833	
822:	skeb vpts	42.00000000000000	0.418505423522501	
823:	skeb vpts	44.00000000000000	0.105705151323266	
824:	skeb vpts	45.00000000000000	0.686490518625770	
825:	skeb vpts	47.00000000000000	0.157059580873095	
826:	skeb vpts	48.00000000000000	0.516100033178667	
827:	skeb vpts	49.00000000000000	0.764445464598733	
828:	skeb vpts	50.00000000000000	0.904713859761048	
829:	skeb vpts	51.00000000000000	0.940960627322499	
830:	skeb vpts	52.00000000000000	0.878337649480420	
831:	skeb vpts	53.00000000000000	0.722777730795702	
832:	skeb vpts	54.00000000000000	0.480714037014470	
833:	skeb vpts	55.00000000000000	0.158838162168041	
834:	skeb vpts	55.00000000000000	0.763902461167084	
835:	skeb vpts	56.00000000000000	0.302515407589945	
836:	skeb vpts	56.00000000000000	0.780918675943096	
837:	skeb vpts	57.00000000000000	0.204938789784282	
838:	skeb vpts	57.00000000000000	0.580040617726818	
839:	skeb vpts	57.00000000000000	0.911307527506912	
840:	skeb vpts	58.00000000000000	0.203425611827940	
841:	skeb vpts	58.00000000000000	0.460682227790485	
842:	skeb vpts	58.00000000000000	0.686974760312169	
843:	skeb vpts	58.00000000000000	0.885827564739350	
844:	skeb vpts	59.00000000000000	6.041095425678147E-002	
845:	skeb vpts	59.00000000000000	0.213566029577158	
846:	skeb vpts	59.00000000000000	0.347830677086653	
847:	skeb vpts	59.00000000000000	0.465463230078483	
848:	skeb vpts	59.00000000000000	0.568469343240434	
849:	skeb vpts	59.00000000000000	0.658625653888421	
850:	skeb vpts	59.00000000000000	0.737503151086078	
851:	skeb vpts	59.00000000000000	0.806488207852369	
852:	skeb vpts	59.00000000000000	0.866802737027229	
853:	skeb vpts	59.00000000000000	0.919522302339237	
854:	skeb vpts	59.00000000000000	0.965591892561328	
855:	skeb vpts	58.00000000000000	1.000000000000000	
856:	shum vert profile	1	0.997335595000000	0.986766320426577
857:	shum vert profile	2	0.991651733104640	0.959117839206681
858:	shum vert profile	3	0.985215619728529	0.928744224672282
859:	shum vert profile	4	0.977939481031589	0.895563101516632

860: shum vert profile	5	0.969728769600197	0.859541516709375
861: shum vert profile	6	0.960482819269497	0.820709635644092
862: shum vert profile	7	0.950095921623889	0.779174391836135
863: shum vert profile	8	0.938458785197433	0.735131360468089
864: shum vert profile	9	0.925460546905232	0.688873747147550
865: shum vert profile	10	0.910991440212241	0.640796850020256
866: shum vert profile	11	0.894946141001974	0.591396082918618
867: shum vert profile	12	0.877227850695953	0.541257173312374
868: shum vert profile	13	0.857753071880553	0.491037568137039
869: shum vert profile	14	0.836456950414610	0.441439082064531
870: shum vert profile	15	0.813299031322804	0.393173281915253
871: shum vert profile	16	0.788269101100691	0.346922282279474
872: shum vert profile	17	0.761392767003949	0.303298998901570
873: shum vert profile	18	0.732736287996051	0.262811414269962
874: shum vert profile	19	0.702410077285291	0.225835230640046
875: shum vert profile	20	0.670570395612043	0.192598412535388
876: shum vert profile	21	0.637418814960513	0.163179260434677
877: shum vert profile	22	0.603199050192498	0.137517410367390
878: shum vert profile	23	0.568191122127345	0.115435379624156
879: shum vert profile 002	24	0.532703068993090	9.666685899825839E-
880: shum vert profile 002	25	0.497060556638697	8.088739984453164E-
881: shum vert profile 002	26	0.461595209244817	6.774369042781868E-
882: shum vert profile 002	27	0.426632470093781	5.687851226367721E-
883: shum vert profile 0.00000000000000E+000	28	0.392479917729516	
884: shum vert profile 0.00000000000000E+000	29	0.359416966233959	

885: shum vert profile 0.0000000000000000E+000	30	0.327686547448174
886: shum vert profile 0.0000000000000000E+000	31	0.297489379308983
887: shum vert profile 0.0000000000000000E+000	32	0.268980857996051
888: shum vert profile 0.0000000000000000E+000	33	0.242270414299112
889: shum vert profile 0.0000000000000000E+000	34	0.217422289466930
890: shum vert profile 0.0000000000000000E+000	35	0.194458657443238
891: shum vert profile 0.0000000000000000E+000	36	0.173365433119447
892: shum vert profile 0.0000000000000000E+000	37	0.154098380552813
893: shum vert profile 0.0000000000000000E+000	38	0.136588975725568
894: shum vert profile 0.0000000000000000E+000	39	0.120750167566634
895: shum vert profile 0.0000000000000000E+000	40	0.106481709802567
896: shum vert profile 0.0000000000000000E+000	41	9.367490158440278E-002
897: shum vert profile 0.0000000000000000E+000	42	8.221667541461007E-002
898: shum vert profile 0.0000000000000000E+000	43	7.199293712240869E-002
899: shum vert profile 0.0000000000000000E+000	44	6.289202369200395E-002
900: shum vert profile 0.0000000000000000E+000	45	5.480846989141165E-002
901: shum vert profile 0.0000000000000000E+000	46	4.764382527147088E-002
902: shum vert profile 0.0000000000000000E+000	47	4.130575024679171E-002
903: shum vert profile 0.0000000000000000E+000	48	3.570835143139191E-002
904: shum vert profile 0.0000000000000000E+000	49	3.077244817374136E-002
905: shum vert profile 0.0000000000000000E+000	50	2.642559723593288E-002
906: shum vert profile 0.0000000000000000E+000	51	2.260194471865746E-002
907: shum vert profile 0.0000000000000000E+000	52	1.924193978282330E-002
908: shum vert profile 0.0000000000000000E+000	53	1.629201382033564E-002
909: shum vert profile 0.0000000000000000E+000	54	1.370416090819349E-002

```

910: shum vert profile          55  1.143549851924975E-002
    0.000000000000000E+000
911: shum vert profile          56  9.447867719644620E-003
    0.000000000000000E+000
912: shum vert profile          57  7.707379072063180E-003
    0.000000000000000E+000
913: shum vert profile          58  6.184012833168806E-003
    0.000000000000000E+000
914: shum vert profile          59  4.851224086870682E-003
    0.000000000000000E+000
915: shum vert profile          60  3.685587364264561E-003
    0.000000000000000E+000
916: shum vert profile          61  2.666456071076012E-003
    0.000000000000000E+000
917: shum vert profile          62  1.775656465942744E-003
    0.000000000000000E+000
918: shum vert profile          63  9.972211253701875E-004
    0.000000000000000E+000
919: shum vert profile          64  4.158292201382034E-004
    0.000000000000000E+000
920: do_skeb= T
921:   In rad_initialize (GFS_rrtmg_setup_init), before calling radinit
922:   si =  1.000000000000000    0.994670137967030    0.988630030551305

923:  0.981795355947387    0.974074829179211    0.965370569372193
924:  0.955579045414836    0.944592287197078    0.932299594647352
925:  0.918589853166181    0.9033545556653176    0.886491478900351
926:  0.867909171686985    0.847532021746212    0.825305882291101
927:  0.801203957859928    0.775232608753270    0.747436709629337
928:  0.717903956645773    0.686767568199990    0.654206972126252
929:  0.620446045471596    0.585748535469621    0.550410960071072
930:  0.514753123680963    0.479106813575342    0.443803755579685
931:  0.409163370230986    0.375481639620453    0.343021632871033
932:  0.312006338485267    0.282614364066433    0.254978018417156
933:  0.229183937796752    0.205273975252949    0.183250541893293
934:  0.163082923261438    0.144713204521001    0.128062075677410
935:  0.113034552990968    9.952492552934208E-002    8.742129366270174E-002
936:  7.660920966635407E-002    6.697471990523667E-002    5.840827204975076E-002
937:  5.080841024628596E-002    4.407969004491388E-002    3.813288583979074E-002
938:  3.288544494348749E-002    2.826156655643848E-002    2.419217215339815E-002
939:  2.061463896155175E-002    1.747249395390158E-002    1.471507822911011E-002
940:  1.229704358126450E-002    1.017797739499531E-002    8.321978184689799E-003
941:  6.697171906618627E-003    5.275396081141108E-003    4.031725976013030E-003
942:  2.944237698040571E-003    1.993563989931395E-003    1.162726420216179E-003
943:  4.367701495483935E-004    0.000000000000000E+000
944:  levr=          64  ictm=          1  isol=          2  ico2=
2
945:  iaer=          111  ialb=          1  iems=          1  ntcw=          2
946:  np3d=           5  ntoz=          7  iovr_sw=          1  iovr_lw=
947:           1  isubc_sw=          2  isubc_lw=          2  icliq_sw=

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948:          1 iflip=          1 me=          0
949:  crick_proof= F  ccnorm= F  norad_precip= F
950:  NEW RADIATION PROGRAM STRUCTURES BECAME OPER.   May 01 2007
951:  NCEP-Radiation_driver   v5.2  Jan 2013
952:  - Selected Control Flag settings: ICTMflg=          1  ISOLar =
    2
953:  ICO2flg=          2  IAERflg=          111  IALBflg=          1  IEMSflg=
954:          1  ICLDflg=          1  IMP_PHYSICS=          11  IOZNflg=
955:          7
956:  IVFLIP=          1  IOVRSW=          1  IOVRLW=          1  ISUBCSW=
957:          2  ISUBCLW=          2
958:  LCRICK= F  LCNORM= F  LNOPREC= F
959:  LTP =          0 , add extra top layer = F
960:  - ISUBCLW=          2  Use McICA with random
961:  permutation seeds for LW random number generator
962:  - ISUBCSW=          2  Use McICA with random
963:  permutation seeds for SW random number generator
964:  NCEP-Radiation_astronomy v5.2  Jan 2013
965:  - Using NOAA annual mean TSI table in TIM scale
966:  with cycle approximation (new values)!
967:  NCEP-Radiation_aerosols  v5.2  Jan 2013
968:  - Using OPAC-seasonal climatology for tropospheric aerosol effect
969:  IAER=          111  LW-trop-aer= T  SW-trop-aer= T  Volc-aer= T
970:  - Include stratospheric volcanic aerosol effect
971:  - Compute multi-band aerosol optical properties for SW input parameters
972:  - Compute multi-band aerosol optical properties for LW input parameters
973:  NCEP-Radiation_gases    v5.1  Nov 2012
974:  - Using interactive ozone distribution
975:  - Using observed co2 monthly 2-d data
976:  NCEP-Radiation_surface  v5.1  Nov 2012
977:  - Using MODIS based land surface albedo for sw
978:  - Using Varying Surface Emissivity for lw
979:  Opened data file: sfc_emissivity_idx.txt
980:  SURFACE EMISSIVITY INDEX, IDM,JDM: 360 180   NOTE: DATA FROM N TO S

981:
982:  NCEP-Radiation_clouds   v5.1  Nov 2012
983:  - Using Prognostic Cloud Method
984:  --- GFDL Lin cloud microphysics
985:  - Using AER Longwave Radiation, Version:
986:  NCEP LW v5.1  Nov 2012 -RRTMG-LW v4.82
987:  --- Include rare gases N2O, CH4, O2, CFCs absorptions in LW
988:  --- Using MCICA sub-colum clouds approximation
989:  with provided input array of permutation seeds
990:  - Using AER Shortwave Radiation, Version:
991:  NCEP SW v5.1  Nov 2012 -RRTMG-SW v3.8
992:  --- PIFM 2-stream transfer scheme
993:  --- Include rare gases N2O, CH4, O2, absorptions in SW
994:  --- Using MCICA sub-colum clouds approximation
995:  with provided input array of permutation seeds

```

```

996: Radiation sub-cloud initial seed =      47854 IC-ideate =      0
997:      8      29      2019
998: return from rad_initialize (GFS_rrtmg_setup_init) - after calling radinit
999: Reading in o3data from global_o3prdlos.f77
1000: oz_coeff =      6
1001: latsozp =      71
1002: levozp =      53
1003: timeoz =      12
1004: Reading in h2odata from global_h2oprldlos.f77
1005: h2o_coeff =      3
1006: latsh2o =      73
1007: levh2o =      72
1008: timeh2o =      12
1009: do_physb_gwsrsrc T in cires_ugwp_init
1010: init_okw_gws
1011: init_fjet_gws
1012: init_convective Gws cgwf      32      4
1013: VAY-ugwp is initialized T
1014: in iau_init -1.0000000000000000
1015: nfiles =      0
1016: in fv3gfs_diag_register, nrgst_bl=      53 nrgst_nb=      94
1017: nrgst_vctbl=      2 isco=      1      192 jsco=      1
1018:      192 num_axes_phys=      2
1019: NOTE from PE      0: reading topographic/orographic information from
INPUT/oro_data.tile*.nc
1020: NOTE from PE      0: gfs_driver::surface_props_input - will computing
lakefrac
1021: resetting Model%frac_grid= F
1022: NOTE from PE      0: reading surface properties data from
INPUT/sfc_data.tile*.nc
1023: NOTE from PE      0: gfs_driver:: - after put to container
1024: NOTE from PE      0: gfs_driver::surface_props_input - computing sncovr
1025: NOTE from PE      0: No physics restarts - cold starting physical
parameterizations
1026: ---fdiag 1.0000000000000000      2.0000000000000000
1027: 3.0000000000000000      4.0000000000000000      5.0000000000000000
1028: 6.0000000000000000      7.0000000000000000      8.0000000000000000
1029: 9.0000000000000000      10.0000000000000000      11.0000000000000000
1030: 12.0000000000000000      13.0000000000000000      14.0000000000000000
1031: 15.0000000000000000      16.0000000000000000      17.0000000000000000
1032: 18.0000000000000000      19.0000000000000000      20.0000000000000000
1033: 21.0000000000000000      22.0000000000000000      23.0000000000000000
1034: 24.0000000000000000      25.0000000000000000      26.0000000000000000
1035: 27.0000000000000000      28.0000000000000000      29.0000000000000000
1036: 30.0000000000000000      31.0000000000000000      32.0000000000000000
1037: 33.0000000000000000      34.0000000000000000      35.0000000000000000
1038: 36.0000000000000000      37.0000000000000000      38.0000000000000000
1039: 39.0000000000000000      40.0000000000000000
1040: be create fcst grid
1041: dateS=hours since 2019-08-29 00:00:00date_init=      2019      8

```

```

1042:          29          0          0          0
1043: af create fcst fieldbundle, name=dynrc=          0
1044: af create fcst fieldbundle, name=phy_nearest_stodrc=          0
1045: af create fcst fieldbundle, name=phy_bilinearrc=          0
1046: in fv_phys bundle,nbdl=          2
1047: in fcst,init total time: 57.1927928924561
1048: af fcstCom FBCount=          3
1049: af allco wrtComp,write_groups=          1
1050: aft wrtgrd, Gaussian, dimj_start=          1          192 dimj_end=
191
1051:          382 wrt_group=          0
1052: af wrtState reconcile, FBcount=          3
1053: af get wrtfb=mirror_dyn_bilinearrc=          0
1054: af get wrtfb=mirror_phy_bilinearrc=          0
1055: af get wrtfb=mirror_phy_nearest_stodrc=          0
1056: in fv3cap init, time wrtcrt/regrdst 12.4042639732361
1057: af set up output_interval,rc=          0 nfhout=          3          0
1058:          0
1059: in fv3_cap, init time= 69.6760940551758
1060: Rayleigh_Super tau= 10.00000000000000
1061:          1 0.379150775374218
1062:          2 0.963871677296582
1063:          3 1.76542623475949
1064:          4 2.67225797307616
1065:          5 3.70625064534251
1066:          6 4.88725381108638
1067:          7 6.23670999273840
1068:          8 7.77857086016401
1069:          9 9.53982867890537
1070:         10 11.5509321183380
1071:         11 13.8462199296658
1072:         12 16.4643340512127
1073:         13 19.4486890885347
1074:         14 22.8478827559944
1075:         15 26.7161399795044
1076:         16 31.1137441701637
1077:         17 36.1073636911943
1078:         18 41.7703432241075
1079:         19 48.1828593963412
1080:         20 55.4318974644045
1081:         21 63.6109885902168
1082:         22 72.8196327566246
1083: Rayleigh friction E-folding time (days):
1084:          1 0.379150775374218          10.8096140887264
1085:          2 0.963871677296582          16.5818681310322
1086:          3 1.76542623475949          29.0560344329854
1087:          4 2.67225797307616          53.4602794273955
1088:          5 3.70625064534251          110.544757762893
1089:          6 4.88725381108638          293.610300159162
1090:          7 6.23670999273840          1568.14167700556

```

1091: forrtl: severe (174): SIGSEGV, segmentation fault occurred

1092: Image	PC	Routine	Line	Source
1093: ufs_weather_model	0000000001361CE6	Unknown	Unknown	Unknown
1094: libpthread-2.17.s	00002AB9F11F05D0	Unknown	Unknown	Unknown
1095: ufs_weather_model	0000000000B6BDD2	Unknown	Unknown	Unknown
1096: ufs_weather_model	0000000000B682C0	Unknown	Unknown	Unknown
1097: ufs_weather_model	0000000000B650B0	Unknown	Unknown	Unknown
1098: ufs_weather_model	0000000000A3AA0B	Unknown	Unknown	Unknown
1099: ufs_weather_model	0000000000A36B7E	Unknown	Unknown	Unknown
1100: ufs_weather_model	00000000005FC821	Unknown	Unknown	Unknown
1101: libiomp5.so	00002AB9F0CDAC53	__kmp_invoke_micr	Unknown	Unknown
1102: libiomp5.so	00002AB9F0CAA7ED	__kmp_fork_call	Unknown	Unknown
1103: libiomp5.so	00002AB9F0C81E2A	__kmpc_fork_call	Unknown	Unknown
1104: ufs_weather_model	00000000005EEAB4	Unknown	Unknown	Unknown
1105: ufs_weather_model	00000000005A6D02	Unknown	Unknown	Unknown
1106: ufs_weather_model	0000000000526F59	Unknown	Unknown	Unknown
1107: ufs_weather_model	00000000004BD98B	Unknown	Unknown	Unknown
1108: ufs_weather_model	00000000004AEBCA	Unknown	Unknown	Unknown
1109: libesmf.so	00002AB9EBF0FEBC	_ZN5ESMCI6FTable1	2010	
ESMCI_FTable.C				
1110: libesmf.so	00002AB9EBF1386A	ESMCI_FTableCallE	746	
ESMCI_FTable.C				
1111: libesmf.so	00002AB9EC3889BA	_ZN5ESMCI2VM5ente	1178	
ESMCI_VM.C				
1112: libesmf.so	00002AB9EBF11367	c_esmc_ftablecall	898	
ESMCI_FTable.C				
1113: libesmf.so	00002AB9EC5A3135	esmf_compmo	1209	
ESMF_Comp.F90				
1114: libesmf.so	00002AB9EC789864	esmf_gridcompmo	1889	
ESMF_GridComp.F90				
1115: ufs_weather_model	00000000004A21E7	Unknown	Unknown	Unknown
1116: libesmf.so	00002AB9EC23D680	_ZN5ESMCI13Method	287	
ESMCI_MethodTable.C				
1117: libesmf.so	00002AB9EC23D5A5	_ZN5ESMCI11Method	455	
ESMCI_MethodTable.C				
1118: libesmf.so	00002AB9EC23CD70	c_esmc_methodtabl	203	
ESMCI_MethodTable.C				
1119: libesmf.so	00002AB9EC457CB4	esmf_attachmethod	785	
ESMF_AttachMethods.F90				
1120: libesmf.so	00002AB9ECC252A9	nuopc_modelbase_m	901	
NUOPC_ModelBase.F90				
1121: libesmf.so	00002AB9EBF0FEBC	_ZN5ESMCI6FTable1	2010	
ESMCI_FTable.C				
1122: libesmf.so	00002AB9EBF1386A	ESMCI_FTableCallE	746	
ESMCI_FTable.C				
1123: libesmf.so	00002AB9EC3889BA	_ZN5ESMCI2VM5ente	1178	
ESMCI_VM.C				
1124: libesmf.so	00002AB9EBF11367	c_esmc_ftablecall	898	
ESMCI_FTable.C				

1125:	libesmfm.so	00002AB9EC5A3135	esmf_compmo_m_e	1209	
	ESMF_Comp.F90				
1126:	libesmfm.so	00002AB9EC789864	esmf_gridcompmo_m_	1889	
	ESMF_GridComp.F90				
1127:	libesmfm.so	00002AB9ECBD160B	nuopc_driver_m_r	2898	
	NUOPC_Driver.F90				
1128:	libesmfm.so	00002AB9EBF0FEBC	_ZN5ESMCI6FTable1	2010	
	ESMCI_FTable.C				
1129:	libesmfm.so	00002AB9EBF1386A	ESMCI_FTableCallE	746	
	ESMCI_FTable.C				
1130:	libesmfm.so	00002AB9EC3889BA	_ZN5ESMCI2VM5ente	1178	
	ESMCI_VM.C				
1131:	libesmfm.so	00002AB9EBF11367	c_esmc_ftablecall	898	
	ESMCI_FTable.C				
1132:	libesmfm.so	00002AB9EC5A3135	esmf_compmo_m_e	1209	
	ESMF_Comp.F90				
1133:	libesmfm.so	00002AB9EC789864	esmf_gridcompmo_m_	1889	
	ESMF_GridComp.F90				
1134:	ufs_weather_model	000000000049A25E	Unknown	Unknown	Unknown
1135:	libesmfm.so	00002AB9EBF0FEBC	_ZN5ESMCI6FTable1	2010	
	ESMCI_FTable.C				
1136:	libesmfm.so	00002AB9EBF1386A	ESMCI_FTableCallE	746	
	ESMCI_FTable.C				
1137:	libesmfm.so	00002AB9EC3889BA	_ZN5ESMCI2VM5ente	1178	
	ESMCI_VM.C				
1138:	libesmfm.so	00002AB9EBF11367	c_esmc_ftablecall	898	
	ESMCI_FTable.C				
1139:	libesmfm.so	00002AB9EC5A3135	esmf_compmo_m_e	1209	
	ESMF_Comp.F90				
1140:	libesmfm.so	00002AB9EC789864	esmf_gridcompmo_m_	1889	
	ESMF_GridComp.F90				
1141:	ufs_weather_model	000000000041CF18	Unknown	Unknown	Unknown
1142:	ufs_weather_model	000000000041BB6E	Unknown	Unknown	Unknown
1143:	libc-2.17.so	00002AB9F141F495	__libc_start_main	Unknown	Unknown
1144:	ufs_weather_model	000000000041BA69	Unknown	Unknown	Unknown
1145:	forrtl: severe (174): SIGSEGV, segmentation fault occurred				
1146:	Image	PC	Routine	Line	Source
1147:	ufs_weather_model	0000000001361CE6	Unknown	Unknown	Unknown
1148:	libpthread-2.17.s	00002B8E16F875D0	Unknown	Unknown	Unknown
1149:	ufs_weather_model	0000000000B6BDD2	Unknown	Unknown	Unknown
1150:	ufs_weather_model	0000000000B682C0	Unknown	Unknown	Unknown
1151:	ufs_weather_model	0000000000B650B0	Unknown	Unknown	Unknown
1152:	ufs_weather_model	0000000000A3AA0B	Unknown	Unknown	Unknown
1153:	ufs_weather_model	0000000000A36B7E	Unknown	Unknown	Unknown
1154:	ufs_weather_model	00000000005FC821	Unknown	Unknown	Unknown
1155:	libiomp5.so	00002B8E16A71C53	__kmp_invoke_micr	Unknown	Unknown
1156:	libiomp5.so	00002B8E16A417ED	__kmp_fork_call	Unknown	Unknown
1157:	libiomp5.so	00002B8E16A18E2A	__kmpc_fork_call	Unknown	Unknown
1158:	ufs_weather_model	00000000005EEAB4	Unknown	Unknown	Unknown

1159:	ufs_weather_model	00000000005A6D02	Unknown	Unknown	Unknown
1160:	ufs_weather_model	0000000000526F59	Unknown	Unknown	Unknown
1161:	ufs_weather_model	00000000004BD98B	Unknown	Unknown	Unknown
1162:	ufs_weather_model	00000000004AEBCA	Unknown	Unknown	Unknown
1163:	libesm.so	00002B8E11CA6EBC	_ZN5ESMCI6FTable1	2010	
	ESMCI_FTable.C				
1164:	libesm.so	00002B8E11CAA86A	ESMCI_FTableCallE	746	
	ESMCI_FTable.C				
1165:	libesm.so	00002B8E1211F9BA	_ZN5ESMCI2VM5ente	1178	
	ESMCI_VM.C				
1166:	libesm.so	00002B8E11CA8367	c_esmc_ftablecall	898	
	ESMCI_FTable.C				
1167:	libesm.so	00002B8E1233A135	esmf_compmo mp_e	1209	
	ESMF_Comp.F90				
1168:	libesm.so	00002B8E12520864	esmf_gridcompmo_	1889	
	ESMF_GridComp.F90				
1169:	ufs_weather_model	00000000004A21E7	Unknown	Unknown	Unknown
1170:	libesm.so	00002B8E11FD4680	_ZN5ESMCI13Method	287	
	ESMCI_MethodTable.C				
1171:	libesm.so	00002B8E11FD45A5	_ZN5ESMCI11Method	455	
	ESMCI_MethodTable.C				
1172:	libesm.so	00002B8E11FD3D70	c_esmc_methodtabl	203	
	ESMCI_MethodTable.C				
1173:	libesm.so	00002B8E121EECB4	esmf_attachmethod	785	
	ESMF_AttachMethods.F90				
1174:	libesm.so	00002B8E129BC2A9	nuopc_modelbase_m	901	
	NUOPC_ModelBase.F90				
1175:	libesm.so	00002B8E11CA6EBC	_ZN5ESMCI6FTable1	2010	
	ESMCI_FTable.C				
1176:	libesm.so	00002B8E11CAA86A	ESMCI_FTableCallE	746	
	ESMCI_FTable.C				
1177:	libesm.so	00002B8E1211F9BA	_ZN5ESMCI2VM5ente	1178	
	ESMCI_VM.C				
1178:	libesm.so	00002B8E11CA8367	c_esmc_ftablecall	898	
	ESMCI_FTable.C				
1179:	libesm.so	00002B8E1233A135	esmf_compmo mp_e	1209	
	ESMF_Comp.F90				
1180:	libesm.so	00002B8E12520864	esmf_gridcompmo_	1889	
	ESMF_GridComp.F90				
1181:	libesm.so	00002B8E1296860B	nuopc_driver_mp_r	2898	
	NUOPC_Driver.F90				
1182:	libesm.so	00002B8E11CA6EBC	_ZN5ESMCI6FTable1	2010	
	ESMCI_FTable.C				
1183:	libesm.so	00002B8E11CAA86A	ESMCI_FTableCallE	746	
	ESMCI_FTable.C				
1184:	libesm.so	00002B8E1211F9BA	_ZN5ESMCI2VM5ente	1178	
	ESMCI_VM.C				
1185:	libesm.so	00002B8E11CA8367	c_esmc_ftablecall	898	
	ESMCI_FTable.C				
1186:	libesm.so	00002B8E1233A135	esmf_compmo mp_e	1209	
	ESMF_Comp.F90				

1187:	libesmfm.so	00002B8E12520864	esmf_gridcompmod_	1889		
	ESMF_GridComp.F90					
1188:	ufs_weather_model	000000000049A25E	Unknown	Unknown	Unknown	
1189:	libesmfm.so	00002B8E11CA6EBC	_ZN5ESMCI6FTable1	2010		
	ESMCI_FTable.C					
1190:	libesmfm.so	00002B8E11CAA86A	ESMCI_FTableCallE	746		
	ESMCI_FTable.C					
1191:	libesmfm.so	00002B8E1211F9BA	_ZN5ESMCI2VM5ente	1178		
	ESMCI_VM.C					
1192:	libesmfm.so	00002B8E11CA8367	c_esmc_ftablecall	898		
	ESMCI_FTable.C					
1193:	libesmfm.so	00002B8E1233A135	esmf_compmod_mp_e	1209		
	ESMF_Comp.F90					
1194:	libesmfm.so	00002B8E12520864	esmf_gridcompmod_	1889		
	ESMF_GridComp.F90					
1195:	ufs_weather_model	000000000041CF18	Unknown	Unknown	Unknown	
1196:	ufs_weather_model	000000000041BB6E	Unknown	Unknown	Unknown	
1197:	libc-2.17.so	00002B8E171B6495	__libc_start_main	Unknown	Unknown	
1198:	ufs_weather_model	000000000041BA69	Unknown	Unknown	Unknown	
1199:	forrtl: severe (174): SIGSEGV, segmentation fault occurred					
1200:	Image	PC	Routine	Line	Source	
1201:	ufs_weather_model	0000000001361CE6	Unknown	Unknown	Unknown	
1202:	libpthread-2.17.s	00002AFA4F2D25D0	Unknown	Unknown	Unknown	
1203:	ufs_weather_model	0000000000B6BDD2	Unknown	Unknown	Unknown	
1204:	ufs_weather_model	0000000000B682C0	Unknown	Unknown	Unknown	
1205:	ufs_weather_model	0000000000B650B0	Unknown	Unknown	Unknown	
1206:	ufs_weather_model	0000000000A3AA0B	Unknown	Unknown	Unknown	
1207:	ufs_weather_model	0000000000A36B7E	Unknown	Unknown	Unknown	
1208:	ufs_weather_model	00000000005FC821	Unknown	Unknown	Unknown	
1209:	libiomp5.so	00002AFA4EDBCC53	__kmp_invoke_micr	Unknown	Unknown	
1210:	libiomp5.so	00002AFA4ED8C7ED	__kmp_fork_call	Unknown	Unknown	
1211:	libiomp5.so	00002AFA4ED63E2A	__kmpc_fork_call	Unknown	Unknown	
1212:	ufs_weather_model	00000000005EEAB4	Unknown	Unknown	Unknown	
1213:	ufs_weather_model	00000000005A6D02	Unknown	Unknown	Unknown	
1214:	ufs_weather_model	0000000000526F59	Unknown	Unknown	Unknown	
1215:	ufs_weather_model	00000000004BD98B	Unknown	Unknown	Unknown	
1216:	ufs_weather_model	00000000004AEBCA	Unknown	Unknown	Unknown	
1217:	libesmfm.so	00002AFA49FF1EBC	_ZN5ESMCI6FTable1	2010		
	ESMCI_FTable.C					
1218:	libesmfm.so	00002AFA49FF586A	ESMCI_FTableCallE	746		
	ESMCI_FTable.C					
1219:	libesmfm.so	00002AFA4A46A9BA	_ZN5ESMCI2VM5ente	1178		
	ESMCI_VM.C					
1220:	libesmfm.so	00002AFA49FF3367	c_esmc_ftablecall	898		
	ESMCI_FTable.C					
1221:	libesmfm.so	00002AFA4A685135	esmf_compmod_mp_e	1209		
	ESMF_Comp.F90					
1222:	libesmfm.so	00002AFA4A86B864	esmf_gridcompmod_	1889		
	ESMF_GridComp.F90					

1223:	ufs_weather_model	0000000004A21E7	Unknown	Unknown	Unknown
1224:	libesm.so	00002AFA4A31F680	_ZN5ESMCI13Method	287	
	ESMCI_MethodTable.C				
1225:	libesm.so	00002AFA4A31F5A5	_ZN5ESMCI11Method	455	
	ESMCI_MethodTable.C				
1226:	libesm.so	00002AFA4A31ED70	c_esmc_methodtabl	203	
	ESMCI_MethodTable.C				
1227:	libesm.so	00002AFA4A539CB4	esmf_attachmethod	785	
	ESMF_AttachMethods.F90				
1228:	libesm.so	00002AFA4AD072A9	nuopc_modelbase_m	901	
	NUOPC_ModelBase.F90				
1229:	libesm.so	00002AFA49FF1EBC	_ZN5ESMCI6FTable1	2010	
	ESMCI_FTable.C				
1230:	libesm.so	00002AFA49FF586A	ESMCI_FTableCallE	746	
	ESMCI_FTable.C				
1231:	libesm.so	00002AFA4A46A9BA	_ZN5ESMCI2VM5ente	1178	
	ESMCI_VM.C				
1232:	libesm.so	00002AFA49FF3367	c_esmc_ftablecall	898	
	ESMCI_FTable.C				
1233:	libesm.so	00002AFA4A685135	esmf_compmod_mp_e	1209	
	ESMF_Comp.F90				
1234:	libesm.so	00002AFA4A86B864	esmf_gridcompmod_	1889	
	ESMF_GridComp.F90				
1235:	libesm.so	00002AFA4ACB360B	nuopc_driver_mp_r	2898	
	NUOPC_Driver.F90				
1236:	libesm.so	00002AFA49FF1EBC	_ZN5ESMCI6FTable1	2010	
	ESMCI_FTable.C				
1237:	libesm.so	00002AFA49FF586A	ESMCI_FTableCallE	746	
	ESMCI_FTable.C				
1238:	libesm.so	00002AFA4A46A9BA	_ZN5ESMCI2VM5ente	1178	
	ESMCI_VM.C				
1239:	libesm.so	00002AFA49FF3367	c_esmc_ftablecall	898	
	ESMCI_FTable.C				
1240:	libesm.so	00002AFA4A685135	esmf_compmod_mp_e	1209	
	ESMF_Comp.F90				
1241:	libesm.so	00002AFA4A86B864	esmf_gridcompmod_	1889	
	ESMF_GridComp.F90				
1242:	ufs_weather_model	00000000049A25E	Unknown	Unknown	Unknown
1243:	libesm.so	00002AFA49FF1EBC	_ZN5ESMCI6FTable1	2010	
	ESMCI_FTable.C				
1244:	libesm.so	00002AFA49FF586A	ESMCI_FTableCallE	746	
	ESMCI_FTable.C				
1245:	libesm.so	00002AFA4A46A9BA	_ZN5ESMCI2VM5ente	1178	
	ESMCI_VM.C				
1246:	libesm.so	00002AFA49FF3367	c_esmc_ftablecall	898	
	ESMCI_FTable.C				
1247:	libesm.so	00002AFA4A685135	esmf_compmod_mp_e	1209	
	ESMF_Comp.F90				
1248:	libesm.so	00002AFA4A86B864	esmf_gridcompmod_	1889	
	ESMF_GridComp.F90				

1249:	ufs_weather_model	00000000041CF18	Unknown	Unknown	Unknown
1250:	ufs_weather_model	00000000041BB6E	Unknown	Unknown	Unknown
1251:	libc-2.17.so	00002AFA4F501495	__libc_start_main	Unknown	Unknown
1252:	ufs_weather_model	00000000041BA69	Unknown	Unknown	Unknown
1253:	forrtl: severe (174): SIGSEGV, segmentation fault occurred				
1254:	Image	PC	Routine	Line	Source
1255:	ufs_weather_model	0000000001361CE6	Unknown	Unknown	Unknown
1256:	libpthread-2.17.s	00002B4BEC2485D0	Unknown	Unknown	Unknown
1257:	ufs_weather_model	0000000000B6BDD2	Unknown	Unknown	Unknown
1258:	ufs_weather_model	0000000000B682C0	Unknown	Unknown	Unknown
1259:	ufs_weather_model	0000000000B650B0	Unknown	Unknown	Unknown
1260:	ufs_weather_model	0000000000A3AA0B	Unknown	Unknown	Unknown
1261:	ufs_weather_model	0000000000A36B7E	Unknown	Unknown	Unknown
1262:	ufs_weather_model	00000000005FC821	Unknown	Unknown	Unknown
1263:	libiomp5.so	00002B4BEBD32C53	__kmp_invoke_micr	Unknown	Unknown
1264:	libiomp5.so	00002B4BEBD027ED	__kmp_fork_call	Unknown	Unknown
1265:	libiomp5.so	00002B4BEBD09E2A	__kmpc_fork_call	Unknown	Unknown
1266:	ufs_weather_model	00000000005EEAB4	Unknown	Unknown	Unknown
1267:	ufs_weather_model	00000000005A6D02	Unknown	Unknown	Unknown
1268:	ufs_weather_model	0000000000526F59	Unknown	Unknown	Unknown
1269:	ufs_weather_model	00000000004BD98B	Unknown	Unknown	Unknown
1270:	ufs_weather_model	00000000004AEBCA	Unknown	Unknown	Unknown
1271:	libesmf.so	00002B4BE6F67EBC	_ZN5ESMCI6FTable1	2010	
	ESMCI_FTable.C				
1272:	libesmf.so	00002B4BE6F6B86A	ESMCI_FTableCallE	746	
	ESMCI_FTable.C				
1273:	libesmf.so	00002B4BE73E09BA	_ZN5ESMCI2VM5ente	1178	
	ESMCI_VM.C				
1274:	libesmf.so	00002B4BE6F69367	c_esmc_ftablecall	898	
	ESMCI_FTable.C				
1275:	libesmf.so	00002B4BE75FB135	esmf_compmo mp_e	1209	
	ESMF_Comp.F90				
1276:	libesmf.so	00002B4BE77E1864	esmf_gridcompmo_	1889	
	ESMF_GridComp.F90				
1277:	ufs_weather_model	00000000004A21E7	Unknown	Unknown	Unknown
1278:	libesmf.so	00002B4BE7295680	_ZN5ESMCI13Method	287	
	ESMCI_MethodTable.C				
1279:	libesmf.so	00002B4BE72955A5	_ZN5ESMCI11Method	455	
	ESMCI_MethodTable.C				
1280:	libesmf.so	00002B4BE7294D70	c_esmc_methodtabl	203	
	ESMCI_MethodTable.C				
1281:	libesmf.so	00002B4BE74AFCB4	esmf_attachmethod	785	
	ESMF_AttachMethods.F90				
1282:	libesmf.so	00002B4BE7C7D2A9	nuopc_modelbase_m	901	
	NUOPC_ModelBase.F90				
1283:	libesmf.so	00002B4BE6F67EBC	_ZN5ESMCI6FTable1	2010	
	ESMCI_FTable.C				
1284:	libesmf.so	00002B4BE6F6B86A	ESMCI_FTableCallE	746	
	ESMCI_FTable.C				

1285:	libesmfm.so	00002B4BE73E09BA	_ZN5ESMCI2VM5ente	1178		
	ESMCI_VM.C					
1286:	libesmfm.so	00002B4BE6F69367	c_esmc_fhtablecall	898		
	ESMCI_FTable.C					
1287:	libesmfm.so	00002B4BE75FB135	esmf_compmoam_mp_e	1209		
	ESMF_Comp.F90					
1288:	libesmfm.so	00002B4BE77E1864	esmf_gridcompmoam_	1889		
	ESMF_GridComp.F90					
1289:	libesmfm.so	00002B4BE7C2960B	nuopc_driver_mp_r	2898		
	NUOPC_Driver.F90					
1290:	libesmfm.so	00002B4BE6F67EBC	_ZN5ESMCI6FTable1	2010		
	ESMCI_FTable.C					
1291:	libesmfm.so	00002B4BE6F6B86A	ESMCI_FTableCallE	746		
	ESMCI_FTable.C					
1292:	libesmfm.so	00002B4BE73E09BA	_ZN5ESMCI2VM5ente	1178		
	ESMCI_VM.C					
1293:	libesmfm.so	00002B4BE6F69367	c_esmc_fhtablecall	898		
	ESMCI_FTable.C					
1294:	libesmfm.so	00002B4BE75FB135	esmf_compmoam_mp_e	1209		
	ESMF_Comp.F90					
1295:	libesmfm.so	00002B4BE77E1864	esmf_gridcompmoam_	1889		
	ESMF_GridComp.F90					
1296:	ufs_weather_model	000000000049A25E	Unknown	Unknown	Unknown	
1297:	libesmfm.so	00002B4BE6F67EBC	_ZN5ESMCI6FTable1	2010		
	ESMCI_FTable.C					
1298:	libesmfm.so	00002B4BE6F6B86A	ESMCI_FTableCallE	746		
	ESMCI_FTable.C					
1299:	libesmfm.so	00002B4BE73E09BA	_ZN5ESMCI2VM5ente	1178		
	ESMCI_VM.C					
1300:	libesmfm.so	00002B4BE6F69367	c_esmc_fhtablecall	898		
	ESMCI_FTable.C					
1301:	libesmfm.so	00002B4BE75FB135	esmf_compmoam_mp_e	1209		
	ESMF_Comp.F90					
1302:	libesmfm.so	00002B4BE77E1864	esmf_gridcompmoam_	1889		
	ESMF_GridComp.F90					
1303:	ufs_weather_model	000000000041CF18	Unknown	Unknown	Unknown	
1304:	ufs_weather_model	000000000041BB6E	Unknown	Unknown	Unknown	
1305:	libc-2.17.so	00002B4BEC477495	__libc_start_main	Unknown	Unknown	
1306:	ufs_weather_model	000000000041BA69	Unknown	Unknown	Unknown	
1307:	forrtl: severe (174): SIGSEGV, segmentation fault occurred					
1308:	Image	PC	Routine	Line	Source	
1309:	ufs_weather_model	00000000001361CE6	Unknown	Unknown	Unknown	
1310:	libpthread-2.17.s	00002B45558575D0	Unknown	Unknown	Unknown	
1311:	ufs_weather_model	0000000000B6BDD2	Unknown	Unknown	Unknown	
1312:	ufs_weather_model	0000000000B682C0	Unknown	Unknown	Unknown	
1313:	ufs_weather_model	0000000000B650B0	Unknown	Unknown	Unknown	
1314:	ufs_weather_model	0000000000A3AA0B	Unknown	Unknown	Unknown	
1315:	ufs_weather_model	0000000000A36B7E	Unknown	Unknown	Unknown	
1316:	ufs_weather_model	00000000005FC821	Unknown	Unknown	Unknown	

1317:	libiomp5.so	00002B4555341C53	__kmp_invoke_micr	Unknown	Unknown
1318:	libiomp5.so	00002B45553117ED	__kmp_fork_call	Unknown	Unknown
1319:	libiomp5.so	00002B45552E8E2A	__kmpc_fork_call	Unknown	Unknown
1320:	ufs_weather_model	00000000005EEAB4	Unknown	Unknown	Unknown
1321:	ufs_weather_model	00000000005A6D02	Unknown	Unknown	Unknown
1322:	ufs_weather_model	0000000000526F59	Unknown	Unknown	Unknown
1323:	ufs_weather_model	00000000004BD98B	Unknown	Unknown	Unknown
1324:	ufs_weather_model	00000000004AEBCA	Unknown	Unknown	Unknown
1325:	libesmf.so ESMCI_FTable.C	00002B4550576EBC	_ZN5ESMCI6FTable1	2010	
1326:	libesmf.so ESMCI_FTable.C	00002B455057A86A	ESMCI_FTableCallE	746	
1327:	libesmf.so ESMCI_VM.C	00002B45509EF9BA	_ZN5ESMCI2VM5ente	1178	
1328:	libesmf.so ESMCI_FTable.C	00002B4550578367	c_esmc_ftablecall	898	
1329:	libesmf.so ESMF_Comp.F90	00002B4550C0A135	esmf_compmo mp_e	1209	
1330:	libesmf.so ESMF_GridComp.F90	00002B4550DF0864	esmf_gridcompmo_	1889	
1331:	ufs_weather_model	00000000004A21E7	Unknown	Unknown	Unknown
1332:	libesmf.so ESMCI_MethodTable.C	00002B45508A4680	_ZN5ESMCI13Method	287	
1333:	libesmf.so ESMCI_MethodTable.C	00002B45508A45A5	_ZN5ESMCI11Method	455	
1334:	libesmf.so ESMCI_MethodTable.C	00002B45508A3D70	c_esmc_methodtabl	203	
1335:	libesmf.so ESMF_AttachMethods.F90	00002B4550ABECB4	esmf_attachmethod	785	
1336:	libesmf.so NUOPC_ModelBase.F90	00002B455128C2A9	nuopc_modelbase_m	901	
1337:	libesmf.so ESMCI_FTable.C	00002B4550576EBC	_ZN5ESMCI6FTable1	2010	
1338:	libesmf.so ESMCI_FTable.C	00002B455057A86A	ESMCI_FTableCallE	746	
1339:	libesmf.so ESMCI_VM.C	00002B45509EF9BA	_ZN5ESMCI2VM5ente	1178	
1340:	libesmf.so ESMCI_FTable.C	00002B4550578367	c_esmc_ftablecall	898	
1341:	libesmf.so ESMF_Comp.F90	00002B4550C0A135	esmf_compmo mp_e	1209	
1342:	libesmf.so ESMF_GridComp.F90	00002B4550DF0864	esmf_gridcompmo_	1889	
1343:	libesmf.so NUOPC_Driver.F90	00002B455123860B	nuopc_driver_mp_r	2898	
1344:	libesmf.so ESMCI_FTable.C	00002B4550576EBC	_ZN5ESMCI6FTable1	2010	
1345:	libesmf.so ESMCI_FTable.C	00002B455057A86A	ESMCI_FTableCallE	746	
1346:	libesmf.so ESMCI_VM.C	00002B45509EF9BA	_ZN5ESMCI2VM5ente	1178	

1347:	libesmfm.so	00002B4550578367	c_esmc_ftablecall	898	
	ESMCI_FTable.C				
1348:	libesmfm.so	00002B4550C0A135	esmf_compmoam_p_e	1209	
	ESMF_Comp.F90				
1349:	libesmfm.so	00002B4550DF0864	esmf_gridcompmoam_	1889	
	ESMF_GridComp.F90				
1350:	ufs_weather_model	000000000049A25E	Unknown	Unknown	Unknown
1351:	libesmfm.so	00002B4550576EBC	_ZN5ESMCI6FTable1	2010	
	ESMCI_FTable.C				
1352:	libesmfm.so	00002B455057A86A	ESMCI_FTableCallE	746	
	ESMCI_FTable.C				
1353:	libesmfm.so	00002B45509EF9BA	_ZN5ESMCI2VM5ente	1178	
	ESMCI_VM.C				
1354:	libesmfm.so	00002B4550578367	c_esmc_ftablecall	898	
	ESMCI_FTable.C				
1355:	libesmfm.so	00002B4550C0A135	esmf_compmoam_p_e	1209	
	ESMF_Comp.F90				
1356:	libesmfm.so	00002B4550DF0864	esmf_gridcompmoam_	1889	
	ESMF_GridComp.F90				
1357:	ufs_weather_model	000000000041CF18	Unknown	Unknown	Unknown
1358:	ufs_weather_model	000000000041BB6E	Unknown	Unknown	Unknown
1359:	libc-2.17.so	00002B4555A86495	__libc_start_main	Unknown	Unknown
1360:	ufs_weather_model	000000000041BA69	Unknown	Unknown	Unknown
1361:	forrtl: severe (174): SIGSEGV, segmentation fault occurred				
1362:	Image	PC	Routine	Line	Source
1363:	ufs_weather_model	00000000001361CE6	Unknown	Unknown	Unknown
1364:	libpthread-2.17.s	00002B03AB2205D0	Unknown	Unknown	Unknown
1365:	ufs_weather_model	0000000000B6BDD2	Unknown	Unknown	Unknown
1366:	ufs_weather_model	0000000000B682C0	Unknown	Unknown	Unknown
1367:	ufs_weather_model	0000000000B650B0	Unknown	Unknown	Unknown
1368:	ufs_weather_model	0000000000A3AA0B	Unknown	Unknown	Unknown
1369:	ufs_weather_model	0000000000A36B7E	Unknown	Unknown	Unknown
1370:	ufs_weather_model	00000000005FC821	Unknown	Unknown	Unknown
1371:	libiomp5.so	00002B03AAD0AC53	__kmp_invoke_micr	Unknown	Unknown
1372:	libiomp5.so	00002B03AACDA7ED	__kmp_fork_call	Unknown	Unknown
1373:	libiomp5.so	00002B03AACB1E2A	__kmpc_fork_call	Unknown	Unknown
1374:	ufs_weather_model	00000000005EEAB4	Unknown	Unknown	Unknown
1375:	ufs_weather_model	00000000005A6D02	Unknown	Unknown	Unknown
1376:	ufs_weather_model	0000000000526F59	Unknown	Unknown	Unknown
1377:	ufs_weather_model	00000000004BD98B	Unknown	Unknown	Unknown
1378:	ufs_weather_model	00000000004AEBCA	Unknown	Unknown	Unknown
1379:	libesmfm.so	00002B03A5F3FEBC	_ZN5ESMCI6FTable1	2010	
	ESMCI_FTable.C				
1380:	libesmfm.so	00002B03A5F4386A	ESMCI_FTableCallE	746	
	ESMCI_FTable.C				
1381:	libesmfm.so	00002B03A63B89BA	_ZN5ESMCI2VM5ente	1178	
	ESMCI_VM.C				
1382:	libesmfm.so	00002B03A5F41367	c_esmc_ftablecall	898	
	ESMCI_FTable.C				

1383:	libesmfm.so	00002B03A65D3135	esmf_compmoam_p_e	1209		
	ESMF_Comp.F90					
1384:	libesmfm.so	00002B03A67B9864	esmf_gridcompmoam_	1889		
	ESMF_GridComp.F90					
1385:	ufs_weather_model	00000000004A21E7	Unknown	Unknown	Unknown	
1386:	libesmfm.so	00002B03A626D680	_ZN5ESMCI13Method	287		
	ESMCI_MethodTable.C					
1387:	libesmfm.so	00002B03A626D5A5	_ZN5ESMCI11Method	455		
	ESMCI_MethodTable.C					
1388:	libesmfm.so	00002B03A626CD70	c_esmc_methodtabl	203		
	ESMCI_MethodTable.C					
1389:	libesmfm.so	00002B03A6487CB4	esmf_attachmethod	785		
	ESMF_AttachMethods.F90					
1390:	libesmfm.so	00002B03A6C552A9	nuopc_modelbase_m	901		
	NUOPC_ModelBase.F90					
1391:	libesmfm.so	00002B03A5F3FEBC	_ZN5ESMCI6FTable1	2010		
	ESMCI_FTable.C					
1392:	libesmfm.so	00002B03A5F4386A	ESMCI_FTableCallE	746		
	ESMCI_FTable.C					
1393:	libesmfm.so	00002B03A63B89BA	_ZN5ESMCI2VM5ente	1178		
	ESMCI_VM.C					
1394:	libesmfm.so	00002B03A5F41367	c_esmc_ftablecall	898		
	ESMCI_FTable.C					
1395:	libesmfm.so	00002B03A65D3135	esmf_compmoam_p_e	1209		
	ESMF_Comp.F90					
1396:	libesmfm.so	00002B03A67B9864	esmf_gridcompmoam_	1889		
	ESMF_GridComp.F90					
1397:	libesmfm.so	00002B03A6C0160B	nuopc_driver_mp_r	2898		
	NUOPC_Driver.F90					
1398:	libesmfm.so	00002B03A5F3FEBC	_ZN5ESMCI6FTable1	2010		
	ESMCI_FTable.C					
1399:	libesmfm.so	00002B03A5F4386A	ESMCI_FTableCallE	746		
	ESMCI_FTable.C					
1400:	libesmfm.so	00002B03A63B89BA	_ZN5ESMCI2VM5ente	1178		
	ESMCI_VM.C					
1401:	libesmfm.so	00002B03A5F41367	c_esmc_ftablecall	898		
	ESMCI_FTable.C					
1402:	libesmfm.so	00002B03A65D3135	esmf_compmoam_p_e	1209		
	ESMF_Comp.F90					
1403:	libesmfm.so	00002B03A67B9864	esmf_gridcompmoam_	1889		
	ESMF_GridComp.F90					
1404:	ufs_weather_model	000000000049A25E	Unknown	Unknown	Unknown	
1405:	libesmfm.so	00002B03A5F3FEBC	_ZN5ESMCI6FTable1	2010		
	ESMCI_FTable.C					
1406:	libesmfm.so	00002B03A5F4386A	ESMCI_FTableCallE	746		
	ESMCI_FTable.C					
1407:	libesmfm.so	00002B03A63B89BA	_ZN5ESMCI2VM5ente	1178		
	ESMCI_VM.C					
1408:	libesmfm.so	00002B03A5F41367	c_esmc_ftablecall	898		
	ESMCI_FTable.C					

1409:	libesmfm.so	00002B03A65D3135	esmfm_compmo_mpe	1209		
	ESMF_Comp.F90					
1410:	libesmfm.so	00002B03A67B9864	esmfm_gridcompmo_m	1889		
	ESMF_GridComp.F90					
1411:	ufs_weather_model	000000000041CF18	Unknown		Unknown	Unknown
1412:	ufs_weather_model	000000000041BB6E	Unknown		Unknown	Unknown
1413:	libc-2.17.so	00002B03AB44F495	__libc_start_main		Unknown	Unknown
1414:	ufs_weather_model	000000000041BA69	Unknown		Unknown	Unknown
1415:	Model ended:	Tue Nov 10 15:16:58	MST 2020			
1416:	RESULT: ERROR 174					
1417:						