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1 netcdf FHIST.test.default.clm2.h0.1979-01 {
2   dimensions:
3     lon = 288 ;
4     lat = 192 ;
5     gridcell = 21013 ;
6     landunit = 62034 ;
7     column = 505906 ;
8     pft = 800088 ;
9     levgrnd = 25 ;
10    levsoi = 20 ;
11    levurb = 5 ;
12    levlak = 10 ;
13    numrad = 2 ;
14    levsno = 12 ;
15    ltype = 9 ;
16    nlevcan = 1 ;
17    nvegwcs = 4 ;
18    natpft = 15 ;
19    cft = 64 ;
20    glc_nec = 10 ;
21    elevclas = 11 ;
22    string_length = 16 ;
23    scale_type_string_length = 32 ;
24    levdcmp = 25 ;
25    hist_interval = 2 ;
26    time = UNLIMITED ; // (1 currently)
27  variables:
28    float levgrnd(levgrnd) ;
29      levgrnd:long_name = "coordinate soil levels" ;
30      levgrnd:units = "m" ;
31    float levlak(levlak) ;
32      levlak:long_name = "coordinate lake levels" ;
33      levlak:units = "m" ;
34    float levdcmp(levdcmp) ;
35      levdcmp:long_name = "coordinate soil levels" ;
36      levdcmp:units = "m" ;
37    float time(time) ;
38      time:long_name = "time" ;
39      time:units = "days since 1979-01-01 00:00:00" ;
40      time:calendar = "noleap" ;
41      time:bounds = "time_bounds" ;
42    int mcdate(time) ;
43      mcdate:long_name = "current date (YYYYMMDD)" ;
44    int mcsec(time) ;
45      mcsec:long_name = "current seconds of current date" ;
46      mcsec:units = "s" ;
47    int mdcur(time) ;
48      mdcur:long_name = "current day (from base day)" ;
49    int mscur(time) ;
50      mscur:long_name = "current seconds of current day" ;
51    int nstep(time) ;
52      nstep:long_name = "time step" ;
53    double time_bounds(time, hist_interval) ;
54      time_bounds:long_name = "history time interval endpoints" ;
55    char date_written(time, string_length) ;
56    char time_written(time, string_length) ;
57    float lon(lon) ;
58      lon:long_name = "coordinate longitude" ;
59      lon:units = "degrees_east" ;
60      lon:_FillValue = 1.e+36f ;
61      lon:missing_value = 1.e+36f ;
62    float lat(lat) ;
63      lat:long_name = "coordinate latitude" ;
64      lat:units = "degrees_north" ;
65      lat:_FillValue = 1.e+36f ;
66      lat:missing_value = 1.e+36f ;
67    float area(lat, lon) ;
68      area:long_name = "grid cell areas" ;
69      area:units = "km^2" ;
70      area:_FillValue = 1.e+36f ;
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71     area:missing_value = 1.e+36f ;
72     float landfrac(lat, lon) ;
73     landfrac:long_name = "land fraction" ;
74     landfrac:_FillValue = 1.e+36f ;
75     landfrac:missing_value = 1.e+36f ;
76     int landmask(lat, lon) ;
77     landmask:long_name = "land/ocean mask (0.=ocean and 1.=land)" ;
78     landmask:_FillValue = -9999 ;
79     landmask:missing_value = -9999 ;
80     int pftmask(lat, lon) ;
81     pftmask:long_name = "pft real/fake mask (0.=fake and 1.=real)" ;
82     pftmask:_FillValue = -9999 ;
83     pftmask:missing_value = -9999 ;
84     int nbedrock(lat, lon) ;
85     nbedrock:long_name = "index of shallowest bedrock layer" ;
86     nbedrock:_FillValue = -9999 ;
87     nbedrock:missing_value = -9999 ;
88     float ZSOI(levgrnd, lat, lon) ;
89     ZSOI:long_name = "soil depth" ;
90     ZSOI:units = "m" ;
91     ZSOI:_FillValue = 1.e+36f ;
92     ZSOI:missing_value = 1.e+36f ;
93     float DZSOI(levgrnd, lat, lon) ;
94     DZSOI:long_name = "soil thickness" ;
95     DZSOI:units = "m" ;
96     DZSOI:_FillValue = 1.e+36f ;
97     DZSOI:missing_value = 1.e+36f ;
98     float WATSAT(levgrnd, lat, lon) ;
99     WATSAT:long_name = "saturated soil water content (porosity)" ;
100    WATSAT:units = "mm3/mm3" ;
101    WATSAT:_FillValue = 1.e+36f ;
102    WATSAT:missing_value = 1.e+36f ;
103    float SUCSAT(levgrnd, lat, lon) ;
104    SUCSAT:long_name = "saturated soil matric potential" ;
105    SUCSAT:units = "mm" ;
106    SUCSAT:_FillValue = 1.e+36f ;
107    SUCSAT:missing_value = 1.e+36f ;
108    float BSW(levgrnd, lat, lon) ;
109    BSW:long_name = "slope of soil water retention curve" ;
110    BSW:units = "unitless" ;
111    BSW:_FillValue = 1.e+36f ;
112    BSW:missing_value = 1.e+36f ;
113    float HKSAT(levgrnd, lat, lon) ;
114    HKSAT:long_name = "saturated hydraulic conductivity" ;
115    HKSAT:units = "mm s-1" ;
116    HKSAT:_FillValue = 1.e+36f ;
117    HKSAT:missing_value = 1.e+36f ;
118    float ZLAKE(levlak, lat, lon) ;
119    ZLAKE:long_name = "lake layer node depth" ;
120    ZLAKE:units = "m" ;
121    ZLAKE:_FillValue = 1.e+36f ;
122    ZLAKE:missing_value = 1.e+36f ;
123    float DZLAKE(levlak, lat, lon) ;
124    DZLAKE:long_name = "lake layer thickness" ;
125    DZLAKE:units = "m" ;
126    DZLAKE:_FillValue = 1.e+36f ;
127    DZLAKE:missing_value = 1.e+36f ;
128    float ACTUAL_IMMOB(time, lat, lon) ;
129    ACTUAL_IMMOB:long_name = "actual N immobilization" ;
130    ACTUAL_IMMOB:units = "gN/m^2/s" ;
131    ACTUAL_IMMOB:cell_methods = "time: mean" ;
132    ACTUAL_IMMOB:_FillValue = 1.e+36f ;
133    ACTUAL_IMMOB:missing_value = 1.e+36f ;
134    float AGNPP(time, lat, lon) ;
135    AGNPP:long_name = "aboveground NPP" ;
136    AGNPP:units = "gC/m^2/s" ;
137    AGNPP:cell_methods = "time: mean" ;
138    AGNPP:_FillValue = 1.e+36f ;
139    AGNPP:missing_value = 1.e+36f ;
140    float ALT(time, lat, lon) ;
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141     ALT:long_name = "current active layer thickness" ;
142     ALT:units = "m" ;
143     ALT:cell_methods = "time: mean" ;
144     ALT:_FillValue = 1.e+36f ;
145     ALT:missing_value = 1.e+36f ;
146     float ALTMAX(time, lat, lon) ;
147     ALTMAX:long_name = "maximum annual active layer thickness" ;
148     ALTMAX:units = "m" ;
149     ALTMAX:cell_methods = "time: mean" ;
150     ALTMAX:_FillValue = 1.e+36f ;
151     ALTMAX:missing_value = 1.e+36f ;
152     float AR(time, lat, lon) ;
153     AR:long_name = "autotrophic respiration (MR + GR)" ;
154     AR:units = "gC/m^2/s" ;
155     AR:cell_methods = "time: mean" ;
156     AR:_FillValue = 1.e+36f ;
157     AR:missing_value = 1.e+36f ;
158     float ATM_TOPO(time, lat, lon) ;
159     ATM_TOPO:long_name = "atmospheric surface height" ;
160     ATM_TOPO:units = "m" ;
161     ATM_TOPO:cell_methods = "time: mean" ;
162     ATM_TOPO:_FillValue = 1.e+36f ;
163     ATM_TOPO:missing_value = 1.e+36f ;
164     float BAF_CROP(time, lat, lon) ;
165     BAF_CROP:long_name = "fractional area burned for crop" ;
166     BAF_CROP:units = "proportion/sec" ;
167     BAF_CROP:cell_methods = "time: mean" ;
168     BAF_CROP:_FillValue = 1.e+36f ;
169     BAF_CROP:missing_value = 1.e+36f ;
170     float BAFPEATF(time, lat, lon) ;
171     BAFPEATF:long_name = "fractional area burned in peatland" ;
172     BAFPEATF:units = "proportion/sec" ;
173     BAFPEATF:cell_methods = "time: mean" ;
174     BAFPEATF:_FillValue = 1.e+36f ;
175     BAFPEATF:missing_value = 1.e+36f ;
176     float BCDEP(time, lat, lon) ;
177     BCDEP:long_name = "total BC deposition (dry+wet) from atmosphere" ;
178     BCDEP:units = "kg/m^2/s" ;
179     BCDEP:cell_methods = "time: mean" ;
180     BCDEP:_FillValue = 1.e+36f ;
181     BCDEP:missing_value = 1.e+36f ;
182     float BGNPP(time, lat, lon) ;
183     BGNPP:long_name = "belowground NPP" ;
184     BGNPP:units = "gC/m^2/s" ;
185     BGNPP:cell_methods = "time: mean" ;
186     BGNPP:_FillValue = 1.e+36f ;
187     BGNPP:missing_value = 1.e+36f ;
188     float BTRAN2(time, lat, lon) ;
189     BTRAN2:long_name = "root zone soil wetness factor" ;
190     BTRAN2:units = "unitless" ;
191     BTRAN2:cell_methods = "time: mean" ;
192     BTRAN2:_FillValue = 1.e+36f ;
193     BTRAN2:missing_value = 1.e+36f ;
194     float BTRANMN(time, lat, lon) ;
195     BTRANMN:long_name = "daily minimum of transpiration beta factor" ;
196     BTRANMN:units = "unitless" ;
197     BTRANMN:cell_methods = "time: mean" ;
198     BTRANMN:_FillValue = 1.e+36f ;
199     BTRANMN:missing_value = 1.e+36f ;
200     float CH4PROD(time, lat, lon) ;
201     CH4PROD:long_name = "Gridcell total production of CH4" ;
202     CH4PROD:units = "gC/m2/s" ;
203     CH4PROD:cell_methods = "time: mean" ;
204     CH4PROD:_FillValue = 1.e+36f ;
205     CH4PROD:missing_value = 1.e+36f ;
206     float CH4_SURF_AERE_SAT(time, lat, lon) ;
207     CH4_SURF_AERE_SAT:long_name = "aerenchyma surface CH4 flux for inundated area; (+ to atm)" ;
208     CH4_SURF_AERE_SAT:units = "mol/m2/s" ;
209     CH4_SURF_AERE_SAT:cell_methods = "time: mean" ;
210     CH4_SURF_AERE_SAT:_FillValue = 1.e+36f ;
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211     CH4_SURF_AERE_SAT:missing_value = 1.e+36f ;
212 float CH4_SURF_AERE_UNSAT(time, lat, lon) ;
213     CH4_SURF_AERE_UNSAT:long_name = "aerenchyma surface CH4 flux for non-inundated area; (+ to atm)" ;
214     CH4_SURF_AERE_UNSAT:units = "mol/m2/s" ;
215     CH4_SURF_AERE_UNSAT:cell_methods = "time: mean" ;
216     CH4_SURF_AERE_UNSAT:_FillValue = 1.e+36f ;
217     CH4_SURF_AERE_UNSAT:missing_value = 1.e+36f ;
218 float CH4_SURF_DIFF_SAT(time, lat, lon) ;
219     CH4_SURF_DIFF_SAT:long_name = "diffusive surface CH4 flux for inundated / lake area; (+ to atm)" ;
220     CH4_SURF_DIFF_SAT:units = "mol/m2/s" ;
221     CH4_SURF_DIFF_SAT:cell_methods = "time: mean" ;
222     CH4_SURF_DIFF_SAT:_FillValue = 1.e+36f ;
223     CH4_SURF_DIFF_SAT:missing_value = 1.e+36f ;
224 float CH4_SURF_DIFF_UNSAT(time, lat, lon) ;
225     CH4_SURF_DIFF_UNSAT:long_name = "diffusive surface CH4 flux for non-inundated area; (+ to atm)" ;
226     CH4_SURF_DIFF_UNSAT:units = "mol/m2/s" ;
227     CH4_SURF_DIFF_UNSAT:cell_methods = "time: mean" ;
228     CH4_SURF_DIFF_UNSAT:_FillValue = 1.e+36f ;
229     CH4_SURF_DIFF_UNSAT:missing_value = 1.e+36f ;
230 float CH4_SURF_EBUL_SAT(time, lat, lon) ;
231     CH4_SURF_EBUL_SAT:long_name = "ebullition surface CH4 flux for inundated / lake area; (+ to atm)" ;
232     CH4_SURF_EBUL_SAT:units = "mol/m2/s" ;
233     CH4_SURF_EBUL_SAT:cell_methods = "time: mean" ;
234     CH4_SURF_EBUL_SAT:_FillValue = 1.e+36f ;
235     CH4_SURF_EBUL_SAT:missing_value = 1.e+36f ;
236 float CH4_SURF_EBUL_UNSAT(time, lat, lon) ;
237     CH4_SURF_EBUL_UNSAT:long_name = "ebullition surface CH4 flux for non-inundated area; (+ to atm)" ;
238     CH4_SURF_EBUL_UNSAT:units = "mol/m2/s" ;
239     CH4_SURF_EBUL_UNSAT:cell_methods = "time: mean" ;
240     CH4_SURF_EBUL_UNSAT:_FillValue = 1.e+36f ;
241     CH4_SURF_EBUL_UNSAT:missing_value = 1.e+36f ;
242 float COL_FIRE_CLOSS(time, lat, lon) ;
243     COL_FIRE_CLOSS:long_name = "total column-level fire C loss for non-peat fires outside land-type
... converted region" ;
244     COL_FIRE_CLOSS:units = "gC/m^2/s" ;
245     COL_FIRE_CLOSS:cell_methods = "time: mean" ;
246     COL_FIRE_CLOSS:_FillValue = 1.e+36f ;
247     COL_FIRE_CLOSS:missing_value = 1.e+36f ;
248 float COL_FIRE_NLOSS(time, lat, lon) ;
249     COL_FIRE_NLOSS:long_name = "total column-level fire N loss" ;
250     COL_FIRE_NLOSS:units = "gN/m^2/s" ;
251     COL_FIRE_NLOSS:cell_methods = "time: mean" ;
252     COL_FIRE_NLOSS:_FillValue = 1.e+36f ;
253     COL_FIRE_NLOSS:missing_value = 1.e+36f ;
254 float CONC_O2_SAT(time, levsoi, lat, lon) ;
255     CONC_O2_SAT:long_name = "O2 soil Concentration for inundated / lake area" ;
256     CONC_O2_SAT:units = "mol/m3" ;
257     CONC_O2_SAT:cell_methods = "time: mean" ;
258     CONC_O2_SAT:_FillValue = 1.e+36f ;
259     CONC_O2_SAT:missing_value = 1.e+36f ;
260 float CONC_O2_UNSAT(time, levsoi, lat, lon) ;
261     CONC_O2_UNSAT:long_name = "O2 soil Concentration for non-inundated area" ;
262     CONC_O2_UNSAT:units = "mol/m3" ;
263     CONC_O2_UNSAT:cell_methods = "time: mean" ;
264     CONC_O2_UNSAT:_FillValue = 1.e+36f ;
265     CONC_O2_UNSAT:missing_value = 1.e+36f ;
266 float COST_NACTIVE(time, lat, lon) ;
267     COST_NACTIVE:long_name = "Cost of active uptake" ;
268     COST_NACTIVE:units = "gN/gC" ;
269     COST_NACTIVE:cell_methods = "time: mean" ;
270     COST_NACTIVE:_FillValue = 1.e+36f ;
271     COST_NACTIVE:missing_value = 1.e+36f ;
272 float COST_NFIX(time, lat, lon) ;
273     COST_NFIX:long_name = "Cost of fixation" ;
274     COST_NFIX:units = "gN/gC" ;
275     COST_NFIX:cell_methods = "time: mean" ;
276     COST_NFIX:_FillValue = 1.e+36f ;
277     COST_NFIX:missing_value = 1.e+36f ;
278 float COST_NRETRANS(time, lat, lon) ;
279     COST_NRETRANS:long_name = "Cost of retranslocation" ;
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280     COST_NRETRANS:units = "gN/gC" ;
281     COST_NRETRANS:cell_methods = "time: mean" ;
282     COST_NRETRANS:_FillValue = 1.e+36f ;
283     COST_NRETRANS:missing_value = 1.e+36f ;
284     float CPHASE(time, lat, lon) ;
285     CPHASE:long_name = "crop phenology phase" ;
286     CPHASE:units = "0-not planted, 1-planted, 2-leaf emerge, 3-grain fill, 4-harvest" ;
287     CPHASE:cell_methods = "time: mean" ;
288     CPHASE:_FillValue = 1.e+36f ;
289     CPHASE:missing_value = 1.e+36f ;
290     float CPOOL(time, lat, lon) ;
291     CPOOL:long_name = "temporary photosynthate C pool" ;
292     CPOOL:units = "gC/m^2" ;
293     CPOOL:cell_methods = "time: mean" ;
294     CPOOL:_FillValue = 1.e+36f ;
295     CPOOL:missing_value = 1.e+36f ;
296     float CROPPROD1C(time, lat, lon) ;
297     CROPPROD1C:long_name = "1-yr grain product C" ;
298     CROPPROD1C:units = "gC/m^2" ;
299     CROPPROD1C:cell_methods = "time: mean" ;
300     CROPPROD1C:_FillValue = 1.e+36f ;
301     CROPPROD1C:missing_value = 1.e+36f ;
302     float CROPPROD1C_LOSS(time, lat, lon) ;
303     CROPPROD1C_LOSS:long_name = "loss from 1-yr grain product pool" ;
304     CROPPROD1C_LOSS:units = "gC/m^2/s" ;
305     CROPPROD1C_LOSS:cell_methods = "time: mean" ;
306     CROPPROD1C_LOSS:_FillValue = 1.e+36f ;
307     CROPPROD1C_LOSS:missing_value = 1.e+36f ;
308     float CROPPROD1N(time, lat, lon) ;
309     CROPPROD1N:long_name = "1-yr grain product N" ;
310     CROPPROD1N:units = "gN/m^2" ;
311     CROPPROD1N:cell_methods = "time: mean" ;
312     CROPPROD1N:_FillValue = 1.e+36f ;
313     CROPPROD1N:missing_value = 1.e+36f ;
314     float CROPPROD1N_LOSS(time, lat, lon) ;
315     CROPPROD1N_LOSS:long_name = "loss from 1-yr grain product pool" ;
316     CROPPROD1N_LOSS:units = "gN/m^2/s" ;
317     CROPPROD1N_LOSS:cell_methods = "time: mean" ;
318     CROPPROD1N_LOSS:_FillValue = 1.e+36f ;
319     CROPPROD1N_LOSS:missing_value = 1.e+36f ;
320     float CROPSEEDC_DEFICIT(time, lat, lon) ;
321     CROPSEEDC_DEFICIT:long_name = "C used for crop seed that needs to be repaid" ;
322     CROPSEEDC_DEFICIT:units = "gC/m^2" ;
323     CROPSEEDC_DEFICIT:cell_methods = "time: mean" ;
324     CROPSEEDC_DEFICIT:_FillValue = 1.e+36f ;
325     CROPSEEDC_DEFICIT:missing_value = 1.e+36f ;
326     float CWDC(time, lat, lon) ;
327     CWDC:long_name = "CWD C" ;
328     CWDC:units = "gC/m^2" ;
329     CWDC:cell_methods = "time: mean" ;
330     CWDC:_FillValue = 1.e+36f ;
331     CWDC:missing_value = 1.e+36f ;
332     float CWDC_LOSS(time, lat, lon) ;
333     CWDC_LOSS:long_name = "coarse woody debris C loss" ;
334     CWDC_LOSS:units = "gC/m^2/s" ;
335     CWDC_LOSS:cell_methods = "time: mean" ;
336     CWDC_LOSS:_FillValue = 1.e+36f ;
337     CWDC_LOSS:missing_value = 1.e+36f ;
338     float CWDC_vr(time, levsoi, lat, lon) ;
339     CWDC_vr:long_name = "CWD C (vertically resolved)" ;
340     CWDC_vr:units = "gC/m^3" ;
341     CWDC_vr:cell_methods = "time: mean" ;
342     CWDC_vr:_FillValue = 1.e+36f ;
343     CWDC_vr:missing_value = 1.e+36f ;
344     float CWDN(time, lat, lon) ;
345     CWDN:long_name = "CWD N" ;
346     CWDN:units = "gN/m^2" ;
347     CWDN:cell_methods = "time: mean" ;
348     CWDN:_FillValue = 1.e+36f ;
349     CWDN:missing_value = 1.e+36f ;
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350 float CWDN_vr(time, levdcmp, lat, lon) ;
351     CWDN_vr:long_name = "CWD N (vertically resolved)" ;
352     CWDN_vr:units = "gN/m^3" ;
353     CWDN_vr:cell_methods = "time: mean" ;
354     CWDN_vr:_FillValue = 1.e+36f ;
355     CWDN_vr:missing_value = 1.e+36f ;
356 float DEADCROOTC(time, lat, lon) ;
357     DEADCROOTC:long_name = "dead coarse root C" ;
358     DEADCROOTC:units = "gC/m^2" ;
359     DEADCROOTC:cell_methods = "time: mean" ;
360     DEADCROOTC:_FillValue = 1.e+36f ;
361     DEADCROOTC:missing_value = 1.e+36f ;
362 float DEADCROOTN(time, lat, lon) ;
363     DEADCROOTN:long_name = "dead coarse root N" ;
364     DEADCROOTN:units = "gN/m^2" ;
365     DEADCROOTN:cell_methods = "time: mean" ;
366     DEADCROOTN:_FillValue = 1.e+36f ;
367     DEADCROOTN:missing_value = 1.e+36f ;
368 float DEADSTEMC(time, lat, lon) ;
369     DEADSTEMC:long_name = "dead stem C" ;
370     DEADSTEMC:units = "gC/m^2" ;
371     DEADSTEMC:cell_methods = "time: mean" ;
372     DEADSTEMC:_FillValue = 1.e+36f ;
373     DEADSTEMC:missing_value = 1.e+36f ;
374 float DEADSTEMN(time, lat, lon) ;
375     DEADSTEMN:long_name = "dead stem N" ;
376     DEADSTEMN:units = "gN/m^2" ;
377     DEADSTEMN:cell_methods = "time: mean" ;
378     DEADSTEMN:_FillValue = 1.e+36f ;
379     DEADSTEMN:missing_value = 1.e+36f ;
380 float DENIT(time, lat, lon) ;
381     DENIT:long_name = "total rate of denitrification" ;
382     DENIT:units = "gN/m^2/s" ;
383     DENIT:cell_methods = "time: mean" ;
384     DENIT:_FillValue = 1.e+36f ;
385     DENIT:missing_value = 1.e+36f ;
386 float DISPVEGC(time, lat, lon) ;
387     DISPVEGC:long_name = "displayed veg carbon, excluding storage and cpool" ;
388     DISPVEGC:units = "gC/m^2" ;
389     DISPVEGC:cell_methods = "time: mean" ;
390     DISPVEGC:_FillValue = 1.e+36f ;
391     DISPVEGC:missing_value = 1.e+36f ;
392 float DISPVEGN(time, lat, lon) ;
393     DISPVEGN:long_name = "displayed vegetation nitrogen" ;
394     DISPVEGN:units = "gN/m^2" ;
395     DISPVEGN:cell_methods = "time: mean" ;
396     DISPVEGN:_FillValue = 1.e+36f ;
397     DISPVEGN:missing_value = 1.e+36f ;
398 float DSL(time, lat, lon) ;
399     DSL:long_name = "dry surface layer thickness" ;
400     DSL:units = "mm" ;
401     DSL:cell_methods = "time: mean" ;
402     DSL:_FillValue = 1.e+36f ;
403     DSL:missing_value = 1.e+36f ;
404 float DSTDEP(time, lat, lon) ;
405     DSTDEP:long_name = "total dust deposition (dry+wet) from atmosphere" ;
406     DSTDEP:units = "kg/m^2/s" ;
407     DSTDEP:cell_methods = "time: mean" ;
408     DSTDEP:_FillValue = 1.e+36f ;
409     DSTDEP:missing_value = 1.e+36f ;
410 float DSTFLXT(time, lat, lon) ;
411     DSTFLXT:long_name = "total surface dust emission" ;
412     DSTFLXT:units = "kg/m2/s" ;
413     DSTFLXT:cell_methods = "time: mean" ;
414     DSTFLXT:_FillValue = 1.e+36f ;
415     DSTFLXT:missing_value = 1.e+36f ;
416 float DWT_CONV_CFLUX(time, lat, lon) ;
417     DWT_CONV_CFLUX:long_name = "conversion C flux (immediate loss to atm) (0 at all times except first
... timestep of year)" ;
418     DWT_CONV_CFLUX:units = "gC/m^2/s" ;
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419     DWT_CONV_CFLUX:cell_methods = "time: mean" ;
420     DWT_CONV_CFLUX:_FillValue = 1.e+36f ;
421     DWT_CONV_CFLUX:missing_value = 1.e+36f ;
422 float DWT_CONV_CFLUX_DRIBBLED(time, lat, lon) ;
423     DWT_CONV_CFLUX_DRIBBLED:long_name = "conversion C flux (immediate loss to atm), dribbled throughout the
...     year" ;
424     DWT_CONV_CFLUX_DRIBBLED:units = "gC/m^2/s" ;
425     DWT_CONV_CFLUX_DRIBBLED:cell_methods = "time: mean" ;
426     DWT_CONV_CFLUX_DRIBBLED:_FillValue = 1.e+36f ;
427     DWT_CONV_CFLUX_DRIBBLED:missing_value = 1.e+36f ;
428 float DWT_CONV_NFLUX(time, lat, lon) ;
429     DWT_CONV_NFLUX:long_name = "conversion N flux (immediate loss to atm) (0 at all times except first
...     timestep of year)" ;
430     DWT_CONV_NFLUX:units = "gN/m^2/s" ;
431     DWT_CONV_NFLUX:cell_methods = "time: mean" ;
432     DWT_CONV_NFLUX:_FillValue = 1.e+36f ;
433     DWT_CONV_NFLUX:missing_value = 1.e+36f ;
434 float DWT_CROPPROD1C_GAIN(time, lat, lon) ;
435     DWT_CROPPROD1C_GAIN:long_name = "landcover change-driven addition to 1-year crop product pool" ;
436     DWT_CROPPROD1C_GAIN:units = "gC/m^2/s" ;
437     DWT_CROPPROD1C_GAIN:cell_methods = "time: mean" ;
438     DWT_CROPPROD1C_GAIN:_FillValue = 1.e+36f ;
439     DWT_CROPPROD1C_GAIN:missing_value = 1.e+36f ;
440 float DWT_CROPPROD1N_GAIN(time, lat, lon) ;
441     DWT_CROPPROD1N_GAIN:long_name = "landcover change-driven addition to 1-year crop product pool" ;
442     DWT_CROPPROD1N_GAIN:units = "gN/m^2/s" ;
443     DWT_CROPPROD1N_GAIN:cell_methods = "time: mean" ;
444     DWT_CROPPROD1N_GAIN:_FillValue = 1.e+36f ;
445     DWT_CROPPROD1N_GAIN:missing_value = 1.e+36f ;
446 float DWT_SEEDN_TO_DEADSTEM(time, lat, lon) ;
447     DWT_SEEDN_TO_DEADSTEM:long_name = "seed source to patch-level deadstem" ;
448     DWT_SEEDN_TO_DEADSTEM:units = "gN/m^2/s" ;
449     DWT_SEEDN_TO_DEADSTEM:cell_methods = "time: mean" ;
450     DWT_SEEDN_TO_DEADSTEM:_FillValue = 1.e+36f ;
451     DWT_SEEDN_TO_DEADSTEM:missing_value = 1.e+36f ;
452 float DWT_SEEDN_TO_LEAF(time, lat, lon) ;
453     DWT_SEEDN_TO_LEAF:long_name = "seed source to patch-level leaf" ;
454     DWT_SEEDN_TO_LEAF:units = "gN/m^2/s" ;
455     DWT_SEEDN_TO_LEAF:cell_methods = "time: mean" ;
456     DWT_SEEDN_TO_LEAF:_FillValue = 1.e+36f ;
457     DWT_SEEDN_TO_LEAF:missing_value = 1.e+36f ;
458 float DWT_SLASH_CFLUX(time, lat, lon) ;
459     DWT_SLASH_CFLUX:long_name = "slash C flux to litter and CWD due to land use" ;
460     DWT_SLASH_CFLUX:units = "gC/m^2/s" ;
461     DWT_SLASH_CFLUX:cell_methods = "time: mean" ;
462     DWT_SLASH_CFLUX:_FillValue = 1.e+36f ;
463     DWT_SLASH_CFLUX:missing_value = 1.e+36f ;
464 float DWT_WOODPRODC_GAIN(time, lat, lon) ;
465     DWT_WOODPRODC_GAIN:long_name = "landcover change-driven addition to wood product pools" ;
466     DWT_WOODPRODC_GAIN:units = "gC/m^2/s" ;
467     DWT_WOODPRODC_GAIN:cell_methods = "time: mean" ;
468     DWT_WOODPRODC_GAIN:_FillValue = 1.e+36f ;
469     DWT_WOODPRODC_GAIN:missing_value = 1.e+36f ;
470 float DWT_WOODPRODN_GAIN(time, lat, lon) ;
471     DWT_WOODPRODN_GAIN:long_name = "landcover change-driven addition to wood product pools" ;
472     DWT_WOODPRODN_GAIN:units = "gN/m^2/s" ;
473     DWT_WOODPRODN_GAIN:cell_methods = "time: mean" ;
474     DWT_WOODPRODN_GAIN:_FillValue = 1.e+36f ;
475     DWT_WOODPRODN_GAIN:missing_value = 1.e+36f ;
476 float EFLXBUILD(time, lat, lon) ;
477     EFLXBUILD:long_name = "building heat flux from change in interior building air temperature" ;
478     EFLXBUILD:units = "W/m^2" ;
479     EFLXBUILD:cell_methods = "time: mean" ;
480     EFLXBUILD:_FillValue = 1.e+36f ;
481     EFLXBUILD:missing_value = 1.e+36f ;
482 float EFLX_DYNBAL(time, lat, lon) ;
483     EFLX_DYNBAL:long_name = "dynamic land cover change conversion energy flux" ;
484     EFLX_DYNBAL:units = "W/m^2" ;
485     EFLX_DYNBAL:cell_methods = "time: mean" ;
486     EFLX_DYNBAL:_FillValue = 1.e+36f ;
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487     EFLX_DYNBAL:missing_value = 1.e+36f ;
488     float EFLX_GRND_LAKE(time, lat, lon) ;
489     EFLX_GRND_LAKE:long_name = "net heat flux into lake/snow surface, excluding light transmission" ;
490     EFLX_GRND_LAKE:units = "W/m^2" ;
491     EFLX_GRND_LAKE:cell_methods = "time: mean" ;
492     EFLX_GRND_LAKE:_FillValue = 1.e+36f ;
493     EFLX_GRND_LAKE:missing_value = 1.e+36f ;
494     float EFLX_LH_TOT(time, lat, lon) ;
495     EFLX_LH_TOT:long_name = "total latent heat flux [+ to atm]" ;
496     EFLX_LH_TOT:units = "W/m^2" ;
497     EFLX_LH_TOT:cell_methods = "time: mean" ;
498     EFLX_LH_TOT:_FillValue = 1.e+36f ;
499     EFLX_LH_TOT:missing_value = 1.e+36f ;
500     float EFLX_LH_TOT_R(time, lat, lon) ;
501     EFLX_LH_TOT_R:long_name = "Rural total evaporation" ;
502     EFLX_LH_TOT_R:units = "W/m^2" ;
503     EFLX_LH_TOT_R:cell_methods = "time: mean" ;
504     EFLX_LH_TOT_R:_FillValue = 1.e+36f ;
505     EFLX_LH_TOT_R:missing_value = 1.e+36f ;
506     float ELAI(time, lat, lon) ;
507     ELAI:long_name = "exposed one-sided leaf area index" ;
508     ELAI:units = "m^2/m^2" ;
509     ELAI:cell_methods = "time: mean" ;
510     ELAI:_FillValue = 1.e+36f ;
511     ELAI:missing_value = 1.e+36f ;
512     float ER(time, lat, lon) ;
513     ER:long_name = "total ecosystem respiration, autotrophic + heterotrophic" ;
514     ER:units = "gC/m^2/s" ;
515     ER:cell_methods = "time: mean" ;
516     ER:_FillValue = 1.e+36f ;
517     ER:missing_value = 1.e+36f ;
518     float ERRH2O(time, lat, lon) ;
519     ERRH2O:long_name = "total water conservation error" ;
520     ERRH2O:units = "mm" ;
521     ERRH2O:cell_methods = "time: mean" ;
522     ERRH2O:_FillValue = 1.e+36f ;
523     ERRH2O:missing_value = 1.e+36f ;
524     float ERRH2OSNO(time, lat, lon) ;
525     ERRH2OSNO:long_name = "imbalance in snow depth (liquid water)" ;
526     ERRH2OSNO:units = "mm" ;
527     ERRH2OSNO:cell_methods = "time: mean" ;
528     ERRH2OSNO:_FillValue = 1.e+36f ;
529     ERRH2OSNO:missing_value = 1.e+36f ;
530     float ERRSEB(time, lat, lon) ;
531     ERRSEB:long_name = "surface energy conservation error" ;
532     ERRSEB:units = "W/m^2" ;
533     ERRSEB:cell_methods = "time: mean" ;
534     ERRSEB:_FillValue = 1.e+36f ;
535     ERRSEB:missing_value = 1.e+36f ;
536     float ERRSOI(time, lat, lon) ;
537     ERRSOI:long_name = "soil/lake energy conservation error" ;
538     ERRSOI:units = "W/m^2" ;
539     ERRSOI:cell_methods = "time: mean" ;
540     ERRSOI:_FillValue = 1.e+36f ;
541     ERRSOI:missing_value = 1.e+36f ;
542     float ERRSOL(time, lat, lon) ;
543     ERRSOL:long_name = "solar radiation conservation error" ;
544     ERRSOL:units = "W/m^2" ;
545     ERRSOL:cell_methods = "time: mean" ;
546     ERRSOL:_FillValue = 1.e+36f ;
547     ERRSOL:missing_value = 1.e+36f ;
548     float ESAI(time, lat, lon) ;
549     ESAI:long_name = "exposed one-sided stem area index" ;
550     ESAI:units = "m^2/m^2" ;
551     ESAI:cell_methods = "time: mean" ;
552     ESAI:_FillValue = 1.e+36f ;
553     ESAI:missing_value = 1.e+36f ;
554     float FAREA_BURNED(time, lat, lon) ;
555     FAREA_BURNED:long_name = "timestep fractional area burned" ;
556     FAREA_BURNED:units = "proportion/sec" ;
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557     FAREA_BURNED:cell_methods = "time: mean" ;
558     FAREA_BURNED:_FillValue = 1.e+36f ;
559     FAREA_BURNED:missing_value = 1.e+36f ;
560 float FCEV(time, lat, lon) ;
561     FCEV:long_name = "canopy evaporation" ;
562     FCEV:units = "W/m^2" ;
563     FCEV:cell_methods = "time: mean" ;
564     FCEV:_FillValue = 1.e+36f ;
565     FCEV:missing_value = 1.e+36f ;
566 float FCH4(time, lat, lon) ;
567     FCH4:long_name = "Gridcell surface CH4 flux to atmosphere (+ to atm)" ;
568     FCH4:units = "kgC/m2/s" ;
569     FCH4:cell_methods = "time: mean" ;
570     FCH4:_FillValue = 1.e+36f ;
571     FCH4:missing_value = 1.e+36f ;
572 float FCH4TOCO2(time, lat, lon) ;
573     FCH4TOCO2:long_name = "Gridcell oxidation of CH4 to CO2" ;
574     FCH4TOCO2:units = "gC/m2/s" ;
575     FCH4TOCO2:cell_methods = "time: mean" ;
576     FCH4TOCO2:_FillValue = 1.e+36f ;
577     FCH4TOCO2:missing_value = 1.e+36f ;
578 float FCH4_DFSAT(time, lat, lon) ;
579     FCH4_DFSAT:long_name = "CH4 additional flux due to changing fsat, vegetated landunits only" ;
580     FCH4_DFSAT:units = "kgC/m2/s" ;
581     FCH4_DFSAT:cell_methods = "time: mean" ;
582     FCH4_DFSAT:_FillValue = 1.e+36f ;
583     FCH4_DFSAT:missing_value = 1.e+36f ;
584 float FCOV(time, lat, lon) ;
585     FCOV:long_name = "fractional impermeable area" ;
586     FCOV:units = "unitless" ;
587     FCOV:cell_methods = "time: mean" ;
588     FCOV:_FillValue = 1.e+36f ;
589     FCOV:missing_value = 1.e+36f ;
590 float FCTR(time, lat, lon) ;
591     FCTR:long_name = "canopy transpiration" ;
592     FCTR:units = "W/m^2" ;
593     FCTR:cell_methods = "time: mean" ;
594     FCTR:_FillValue = 1.e+36f ;
595     FCTR:missing_value = 1.e+36f ;
596 float FFIX_TO_SMINN(time, lat, lon) ;
597     FFIX_TO_SMINN:long_name = "free living N fixation to soil mineral N" ;
598     FFIX_TO_SMINN:units = "gN/m^2/s" ;
599     FFIX_TO_SMINN:cell_methods = "time: mean" ;
600     FFIX_TO_SMINN:_FillValue = 1.e+36f ;
601     FFIX_TO_SMINN:missing_value = 1.e+36f ;
602 float FGEV(time, lat, lon) ;
603     FGEV:long_name = "ground evaporation" ;
604     FGEV:units = "W/m^2" ;
605     FGEV:cell_methods = "time: mean" ;
606     FGEV:_FillValue = 1.e+36f ;
607     FGEV:missing_value = 1.e+36f ;
608 float FGR(time, lat, lon) ;
609     FGR:long_name = "heat flux into soil/snow including snow melt and lake / snow light transmission" ;
610     FGR:units = "W/m^2" ;
611     FGR:cell_methods = "time: mean" ;
612     FGR:_FillValue = 1.e+36f ;
613     FGR:missing_value = 1.e+36f ;
614 float FGR12(time, lat, lon) ;
615     FGR12:long_name = "heat flux between soil layers 1 and 2" ;
616     FGR12:units = "W/m^2" ;
617     FGR12:cell_methods = "time: mean" ;
618     FGR12:_FillValue = 1.e+36f ;
619     FGR12:missing_value = 1.e+36f ;
620 float FH20SFC(time, lat, lon) ;
621     FH20SFC:long_name = "fraction of ground covered by surface water" ;
622     FH20SFC:units = "unitless" ;
623     FH20SFC:cell_methods = "time: mean" ;
624     FH20SFC:_FillValue = 1.e+36f ;
625     FH20SFC:missing_value = 1.e+36f ;
626 float FINUNDATED(time, lat, lon) ;
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627     FINUNDATED:long_name = "fractional inundated area of vegetated columns" ;
628     FINUNDATED:units = "unitless" ;
629     FINUNDATED:cell_methods = "time: mean" ;
630     FINUNDATED:_FillValue = 1.e+36f ;
631     FINUNDATED:missing_value = 1.e+36f ;
632 float FIRA(time, lat, lon) ;
633     FIRA:long_name = "net infrared (longwave) radiation" ;
634     FIRA:units = "W/m^2" ;
635     FIRA:cell_methods = "time: mean" ;
636     FIRA:_FillValue = 1.e+36f ;
637     FIRA:missing_value = 1.e+36f ;
638 float FIRA_R(time, lat, lon) ;
639     FIRA_R:long_name = "Rural net infrared (longwave) radiation" ;
640     FIRA_R:units = "W/m^2" ;
641     FIRA_R:cell_methods = "time: mean" ;
642     FIRA_R:_FillValue = 1.e+36f ;
643     FIRA_R:missing_value = 1.e+36f ;
644 float FIRE(time, lat, lon) ;
645     FIRE:long_name = "emitted infrared (longwave) radiation" ;
646     FIRE:units = "W/m^2" ;
647     FIRE:cell_methods = "time: mean" ;
648     FIRE:_FillValue = 1.e+36f ;
649     FIRE:missing_value = 1.e+36f ;
650 float FIRE_R(time, lat, lon) ;
651     FIRE_R:long_name = "Rural emitted infrared (longwave) radiation" ;
652     FIRE_R:units = "W/m^2" ;
653     FIRE_R:cell_methods = "time: mean" ;
654     FIRE_R:_FillValue = 1.e+36f ;
655     FIRE_R:missing_value = 1.e+36f ;
656 float FLDS(time, lat, lon) ;
657     FLDS:long_name = "atmospheric longwave radiation (downscaled to columns in glacier regions)" ;
658     FLDS:units = "W/m^2" ;
659     FLDS:cell_methods = "time: mean" ;
660     FLDS:_FillValue = 1.e+36f ;
661     FLDS:missing_value = 1.e+36f ;
662 float FPI(time, lat, lon) ;
663     FPI:long_name = "fraction of potential immobilization" ;
664     FPI:units = "proportion" ;
665     FPI:cell_methods = "time: mean" ;
666     FPI:_FillValue = 1.e+36f ;
667     FPI:missing_value = 1.e+36f ;
668 float FPSN(time, lat, lon) ;
669     FPSN:long_name = "photosynthesis" ;
670     FPSN:units = "umol/m2s" ;
671     FPSN:cell_methods = "time: mean" ;
672     FPSN:_FillValue = 1.e+36f ;
673     FPSN:missing_value = 1.e+36f ;
674 float FREE_RETRANSN_TO_NPOOL(time, lat, lon) ;
675     FREE_RETRANSN_TO_NPOOL:long_name = "deployment of retranslocated N" ;
676     FREE_RETRANSN_TO_NPOOL:units = "gN/m^2/s" ;
677     FREE_RETRANSN_TO_NPOOL:cell_methods = "time: mean" ;
678     FREE_RETRANSN_TO_NPOOL:_FillValue = 1.e+36f ;
679     FREE_RETRANSN_TO_NPOOL:missing_value = 1.e+36f ;
680 float FROOTC(time, lat, lon) ;
681     FROOTC:long_name = "fine root C" ;
682     FROOTC:units = "gC/m^2" ;
683     FROOTC:cell_methods = "time: mean" ;
684     FROOTC:_FillValue = 1.e+36f ;
685     FROOTC:missing_value = 1.e+36f ;
686 float FROOTC_ALLOC(time, lat, lon) ;
687     FROOTC_ALLOC:long_name = "fine root C allocation" ;
688     FROOTC_ALLOC:units = "gC/m^2/s" ;
689     FROOTC_ALLOC:cell_methods = "time: mean" ;
690     FROOTC_ALLOC:_FillValue = 1.e+36f ;
691     FROOTC_ALLOC:missing_value = 1.e+36f ;
692 float FROOTC_LOSS(time, lat, lon) ;
693     FROOTC_LOSS:long_name = "fine root C loss" ;
694     FROOTC_LOSS:units = "gC/m^2/s" ;
695     FROOTC_LOSS:cell_methods = "time: mean" ;
696     FROOTC_LOSS:_FillValue = 1.e+36f ;
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697     FROOTC_LOSS:missing_value = 1.e+36f ;
698     float FROOTN(time, lat, lon) ;
699     FROOTN:long_name = "fine root N" ;
700     FROOTN:units = "gN/m^2" ;
701     FROOTN:cell_methods = "time: mean" ;
702     FROOTN:_FillValue = 1.e+36f ;
703     FROOTN:missing_value = 1.e+36f ;
704     float FSA(time, lat, lon) ;
705     FSA:long_name = "absorbed solar radiation" ;
706     FSA:units = "W/m^2" ;
707     FSA:cell_methods = "time: mean" ;
708     FSA:_FillValue = 1.e+36f ;
709     FSA:missing_value = 1.e+36f ;
710     float FSAT(time, lat, lon) ;
711     FSAT:long_name = "fractional area with water table at surface" ;
712     FSAT:units = "unitless" ;
713     FSAT:cell_methods = "time: mean" ;
714     FSAT:_FillValue = 1.e+36f ;
715     FSAT:missing_value = 1.e+36f ;
716     float FSDS(time, lat, lon) ;
717     FSDS:long_name = "atmospheric incident solar radiation" ;
718     FSDS:units = "W/m^2" ;
719     FSDS:cell_methods = "time: mean" ;
720     FSDS:_FillValue = 1.e+36f ;
721     FSDS:missing_value = 1.e+36f ;
722     float FSDSND(time, lat, lon) ;
723     FSDSND:long_name = "direct nir incident solar radiation" ;
724     FSDSND:units = "W/m^2" ;
725     FSDSND:cell_methods = "time: mean" ;
726     FSDSND:_FillValue = 1.e+36f ;
727     FSDSND:missing_value = 1.e+36f ;
728     float FSDSNDLN(time, lat, lon) ;
729     FSDSNDLN:long_name = "direct nir incident solar radiation at local noon" ;
730     FSDSNDLN:units = "W/m^2" ;
731     FSDSNDLN:cell_methods = "time: mean" ;
732     FSDSNDLN:_FillValue = 1.e+36f ;
733     FSDSNDLN:missing_value = 1.e+36f ;
734     float FSDSNI(time, lat, lon) ;
735     FSDSNI:long_name = "diffuse nir incident solar radiation" ;
736     FSDSNI:units = "W/m^2" ;
737     FSDSNI:cell_methods = "time: mean" ;
738     FSDSNI:_FillValue = 1.e+36f ;
739     FSDSNI:missing_value = 1.e+36f ;
740     float FSDSVD(time, lat, lon) ;
741     FSDSVD:long_name = "direct vis incident solar radiation" ;
742     FSDSVD:units = "W/m^2" ;
743     FSDSVD:cell_methods = "time: mean" ;
744     FSDSVD:_FillValue = 1.e+36f ;
745     FSDSVD:missing_value = 1.e+36f ;
746     float FSDSVDLN(time, lat, lon) ;
747     FSDSVDLN:long_name = "direct vis incident solar radiation at local noon" ;
748     FSDSVDLN:units = "W/m^2" ;
749     FSDSVDLN:cell_methods = "time: mean" ;
750     FSDSVDLN:_FillValue = 1.e+36f ;
751     FSDSVDLN:missing_value = 1.e+36f ;
752     float FSDSVI(time, lat, lon) ;
753     FSDSVI:long_name = "diffuse vis incident solar radiation" ;
754     FSDSVI:units = "W/m^2" ;
755     FSDSVI:cell_methods = "time: mean" ;
756     FSDSVI:_FillValue = 1.e+36f ;
757     FSDSVI:missing_value = 1.e+36f ;
758     float FSDSVILN(time, lat, lon) ;
759     FSDSVILN:long_name = "diffuse vis incident solar radiation at local noon" ;
760     FSDSVILN:units = "W/m^2" ;
761     FSDSVILN:cell_methods = "time: mean" ;
762     FSDSVILN:_FillValue = 1.e+36f ;
763     FSDSVILN:missing_value = 1.e+36f ;
764     float FSH(time, lat, lon) ;
765     FSH:long_name = "sensible heat not including correction for land use change and rain/snow conversion" ;
766     FSH:units = "W/m^2" ;
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767     FSH:cell_methods = "time: mean" ;
768     FSH:_FillValue = 1.e+36f ;
769     FSH:missing_value = 1.e+36f ;
770 float FSH_G(time, lat, lon) ;
771     FSH_G:long_name = "sensible heat from ground" ;
772     FSH_G:units = "W/m^2" ;
773     FSH_G:cell_methods = "time: mean" ;
774     FSH_G:_FillValue = 1.e+36f ;
775     FSH_G:missing_value = 1.e+36f ;
776 float FSH_PRECIP_CONVERSION(time, lat, lon) ;
777     FSH_PRECIP_CONVERSION:long_name = "Sensible heat flux from conversion of rain/snow atm forcing" ;
778     FSH_PRECIP_CONVERSION:units = "W/m^2" ;
779     FSH_PRECIP_CONVERSION:cell_methods = "time: mean" ;
780     FSH_PRECIP_CONVERSION:_FillValue = 1.e+36f ;
781     FSH_PRECIP_CONVERSION:missing_value = 1.e+36f ;
782 float FSH_R(time, lat, lon) ;
783     FSH_R:long_name = "Rural sensible heat" ;
784     FSH_R:units = "W/m^2" ;
785     FSH_R:cell_methods = "time: mean" ;
786     FSH_R:_FillValue = 1.e+36f ;
787     FSH_R:missing_value = 1.e+36f ;
788 float FSH_RUNOFF_ICE_TO_LIQ(time, lat, lon) ;
789     FSH_RUNOFF_ICE_TO_LIQ:long_name = "sensible heat flux generated from conversion of ice runoff to liquid"
790     ;
791     FSH_RUNOFF_ICE_TO_LIQ:units = "W/m^2" ;
792     FSH_RUNOFF_ICE_TO_LIQ:cell_methods = "time: mean" ;
793     FSH_RUNOFF_ICE_TO_LIQ:_FillValue = 1.e+36f ;
794     FSH_RUNOFF_ICE_TO_LIQ:missing_value = 1.e+36f ;
795 float FSH_TO_COUPLER(time, lat, lon) ;
796     FSH_TO_COUPLER:long_name = "sensible heat sent to coupler (includes corrections for land use change,
797     rain/snow conversion and conversion of ice runoff to liquid)" ;
798     FSH_TO_COUPLER:units = "W/m^2" ;
799     FSH_TO_COUPLER:cell_methods = "time: mean" ;
800     FSH_TO_COUPLER:_FillValue = 1.e+36f ;
801     FSH_TO_COUPLER:missing_value = 1.e+36f ;
802 float FSH_V(time, lat, lon) ;
803     FSH_V:long_name = "sensible heat from veg" ;
804     FSH_V:units = "W/m^2" ;
805     FSH_V:cell_methods = "time: mean" ;
806     FSH_V:_FillValue = 1.e+36f ;
807     FSH_V:missing_value = 1.e+36f ;
808 float FSM(time, lat, lon) ;
809     FSM:long_name = "snow melt heat flux" ;
810     FSM:units = "W/m^2" ;
811     FSM:cell_methods = "time: mean" ;
812     FSM:_FillValue = 1.e+36f ;
813     FSM:missing_value = 1.e+36f ;
814 float FSNO(time, lat, lon) ;
815     FSNO:long_name = "fraction of ground covered by snow" ;
816     FSNO:units = "unitless" ;
817     FSNO:cell_methods = "time: mean" ;
818     FSNO:_FillValue = 1.e+36f ;
819     FSNO:missing_value = 1.e+36f ;
820 float FSNO_EFF(time, lat, lon) ;
821     FSNO_EFF:long_name = "effective fraction of ground covered by snow" ;
822     FSNO_EFF:units = "unitless" ;
823     FSNO_EFF:cell_methods = "time: mean" ;
824     FSNO_EFF:_FillValue = 1.e+36f ;
825     FSNO_EFF:missing_value = 1.e+36f ;
826 float FSR(time, lat, lon) ;
827     FSR:long_name = "reflected solar radiation" ;
828     FSR:units = "W/m^2" ;
829     FSR:cell_methods = "time: mean" ;
830     FSR:_FillValue = 1.e+36f ;
831     FSR:missing_value = 1.e+36f ;
832 float FSRND(time, lat, lon) ;
833     FSRND:long_name = "direct nir reflected solar radiation" ;
834     FSRND:units = "W/m^2" ;
835     FSRND:cell_methods = "time: mean" ;
836     FSRND:_FillValue = 1.e+36f ;
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835     FSRND:missing_value = 1.e+36f ;
836     float FSRNDLN(time, lat, lon) ;
837     FSRNDLN:long_name = "direct nir reflected solar radiation at local noon" ;
838     FSRNDLN:units = "W/m^2" ;
839     FSRNDLN:cell_methods = "time: mean" ;
840     FSRNDLN:_FillValue = 1.e+36f ;
841     FSRNDLN:missing_value = 1.e+36f ;
842     float FSRNI(time, lat, lon) ;
843     FSRNI:long_name = "diffuse nir reflected solar radiation" ;
844     FSRNI:units = "W/m^2" ;
845     FSRNI:cell_methods = "time: mean" ;
846     FSRNI:_FillValue = 1.e+36f ;
847     FSRNI:missing_value = 1.e+36f ;
848     float FSRVD(time, lat, lon) ;
849     FSRVD:long_name = "direct vis reflected solar radiation" ;
850     FSRVD:units = "W/m^2" ;
851     FSRVD:cell_methods = "time: mean" ;
852     FSRVD:_FillValue = 1.e+36f ;
853     FSRVD:missing_value = 1.e+36f ;
854     float FSRVDLN(time, lat, lon) ;
855     FSRVDLN:long_name = "direct vis reflected solar radiation at local noon" ;
856     FSRVDLN:units = "W/m^2" ;
857     FSRVDLN:cell_methods = "time: mean" ;
858     FSRVDLN:_FillValue = 1.e+36f ;
859     FSRVDLN:missing_value = 1.e+36f ;
860     float FSRVI(time, lat, lon) ;
861     FSRVI:long_name = "diffuse vis reflected solar radiation" ;
862     FSRVI:units = "W/m^2" ;
863     FSRVI:cell_methods = "time: mean" ;
864     FSRVI:_FillValue = 1.e+36f ;
865     FSRVI:missing_value = 1.e+36f ;
866     float FUELC(time, lat, lon) ;
867     FUELC:long_name = "fuel load" ;
868     FUELC:units = "gC/m^2" ;
869     FUELC:cell_methods = "time: mean" ;
870     FUELC:_FillValue = 1.e+36f ;
871     FUELC:missing_value = 1.e+36f ;
872     float F_DENIT(time, lat, lon) ;
873     F_DENIT:long_name = "denitrification flux" ;
874     F_DENIT:units = "gN/m^2/s" ;
875     F_DENIT:cell_methods = "time: mean" ;
876     F_DENIT:_FillValue = 1.e+36f ;
877     F_DENIT:missing_value = 1.e+36f ;
878     float F_N20_DENIT(time, lat, lon) ;
879     F_N20_DENIT:long_name = "denitrification N20 flux" ;
880     F_N20_DENIT:units = "gN/m^2/s" ;
881     F_N20_DENIT:cell_methods = "time: mean" ;
882     F_N20_DENIT:_FillValue = 1.e+36f ;
883     F_N20_DENIT:missing_value = 1.e+36f ;
884     float F_N20_NIT(time, lat, lon) ;
885     F_N20_NIT:long_name = "nitrification N20 flux" ;
886     F_N20_NIT:units = "gN/m^2/s" ;
887     F_N20_NIT:cell_methods = "time: mean" ;
888     F_N20_NIT:_FillValue = 1.e+36f ;
889     F_N20_NIT:missing_value = 1.e+36f ;
890     float F_NIT(time, lat, lon) ;
891     F_NIT:long_name = "nitrification flux" ;
892     F_NIT:units = "gN/m^2/s" ;
893     F_NIT:cell_methods = "time: mean" ;
894     F_NIT:_FillValue = 1.e+36f ;
895     F_NIT:missing_value = 1.e+36f ;
896     float GPP(time, lat, lon) ;
897     GPP:long_name = "gross primary production" ;
898     GPP:units = "gC/m^2/s" ;
899     GPP:cell_methods = "time: mean" ;
900     GPP:_FillValue = 1.e+36f ;
901     GPP:missing_value = 1.e+36f ;
902     float GR(time, lat, lon) ;
903     GR:long_name = "total growth respiration" ;
904     GR:units = "gC/m^2/s" ;
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905     GR:cell_methods = "time: mean" ;
906     GR:_FillValue = 1.e+36f ;
907     GR:missing_value = 1.e+36f ;
908 float GRAINC(time, lat, lon) ;
909     GRAINC:long_name = "grain C (does not equal yield)" ;
910     GRAINC:units = "gC/m^2" ;
911     GRAINC:cell_methods = "time: mean" ;
912     GRAINC:_FillValue = 1.e+36f ;
913     GRAINC:missing_value = 1.e+36f ;
914 float GRAINC_TO_FOOD(time, lat, lon) ;
915     GRAINC_TO_FOOD:long_name = "grain C to food" ;
916     GRAINC_TO_FOOD:units = "gC/m^2/s" ;
917     GRAINC_TO_FOOD:cell_methods = "time: mean" ;
918     GRAINC_TO_FOOD:_FillValue = 1.e+36f ;
919     GRAINC_TO_FOOD:missing_value = 1.e+36f ;
920 float GRAINC_TO_SEED(time, lat, lon) ;
921     GRAINC_TO_SEED:long_name = "grain C to seed" ;
922     GRAINC_TO_SEED:units = "gC/m^2/s" ;
923     GRAINC_TO_SEED:cell_methods = "time: mean" ;
924     GRAINC_TO_SEED:_FillValue = 1.e+36f ;
925     GRAINC_TO_SEED:missing_value = 1.e+36f ;
926 float GRAINN(time, lat, lon) ;
927     GRAINN:long_name = "grain N" ;
928     GRAINN:units = "gN/m^2" ;
929     GRAINN:cell_methods = "time: mean" ;
930     GRAINN:_FillValue = 1.e+36f ;
931     GRAINN:missing_value = 1.e+36f ;
932 float GROSS_NMIN(time, lat, lon) ;
933     GROSS_NMIN:long_name = "gross rate of N mineralization" ;
934     GROSS_NMIN:units = "gN/m^2/s" ;
935     GROSS_NMIN:cell_methods = "time: mean" ;
936     GROSS_NMIN:_FillValue = 1.e+36f ;
937     GROSS_NMIN:missing_value = 1.e+36f ;
938 float GSSHA(time, lat, lon) ;
939     GSSHA:long_name = "shaded leaf stomatal conductance" ;
940     GSSHA:units = "umol H2O/m2/s" ;
941     GSSHA:cell_methods = "time: mean" ;
942     GSSHA:_FillValue = 1.e+36f ;
943     GSSHA:missing_value = 1.e+36f ;
944 float GSSUN(time, lat, lon) ;
945     GSSUN:long_name = "sunlit leaf stomatal conductance" ;
946     GSSUN:units = "umol H2O/m2/s" ;
947     GSSUN:cell_methods = "time: mean" ;
948     GSSUN:_FillValue = 1.e+36f ;
949     GSSUN:missing_value = 1.e+36f ;
950 float H2OCAN(time, lat, lon) ;
951     H2OCAN:long_name = "intercepted water" ;
952     H2OCAN:units = "mm" ;
953     H2OCAN:cell_methods = "time: mean" ;
954     H2OCAN:_FillValue = 1.e+36f ;
955     H2OCAN:missing_value = 1.e+36f ;
956 float H2OSFC(time, lat, lon) ;
957     H2OSFC:long_name = "surface water depth" ;
958     H2OSFC:units = "mm" ;
959     H2OSFC:cell_methods = "time: mean" ;
960     H2OSFC:_FillValue = 1.e+36f ;
961     H2OSFC:missing_value = 1.e+36f ;
962 float H2OSNO(time, lat, lon) ;
963     H2OSNO:long_name = "snow depth (liquid water)" ;
964     H2OSNO:units = "mm" ;
965     H2OSNO:cell_methods = "time: mean" ;
966     H2OSNO:_FillValue = 1.e+36f ;
967     H2OSNO:missing_value = 1.e+36f ;
968 float H2OSNO_TOP(time, lat, lon) ;
969     H2OSNO_TOP:long_name = "mass of snow in top snow layer" ;
970     H2OSNO_TOP:units = "kg/m2" ;
971     H2OSNO_TOP:cell_methods = "time: mean" ;
972     H2OSNO_TOP:_FillValue = 1.e+36f ;
973     H2OSNO_TOP:missing_value = 1.e+36f ;
974 float H2OSOI(time, levsoi, lat, lon) ;
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975     H2OSOI:long_name = "volumetric soil water (vegetated landunits only)" ;
976     H2OSOI:units = "mm3/mm3" ;
977     H2OSOI:cell_methods = "time: mean" ;
978     H2OSOI:_FillValue = 1.e+36f ;
979     H2OSOI:missing_value = 1.e+36f ;
980 float HEAT_CONTENT1(time, lat, lon) ;
981     HEAT_CONTENT1:long_name = "initial gridcell total heat content" ;
982     HEAT_CONTENT1:units = "J/m^2" ;
983     HEAT_CONTENT1:cell_methods = "time: mean" ;
984     HEAT_CONTENT1:_FillValue = 1.e+36f ;
985     HEAT_CONTENT1:missing_value = 1.e+36f ;
986 float HEAT_FROM_AC(time, lat, lon) ;
987     HEAT_FROM_AC:long_name = "sensible heat flux put into canyon due to heat removed from air conditioning"
988     ;
989     HEAT_FROM_AC:units = "W/m^2" ;
990     HEAT_FROM_AC:cell_methods = "time: mean" ;
991     HEAT_FROM_AC:_FillValue = 1.e+36f ;
992     HEAT_FROM_AC:missing_value = 1.e+36f ;
993 float HIA(time, lat, lon) ;
994     HIA:long_name = "2 m NWS Heat Index" ;
995     HIA:units = "C" ;
996     HIA:cell_methods = "time: mean" ;
997     HIA:_FillValue = 1.e+36f ;
998     HIA:missing_value = 1.e+36f ;
999 float HIA_R(time, lat, lon) ;
1000     HIA_R:long_name = "Rural 2 m NWS Heat Index" ;
1001     HIA_R:units = "C" ;
1002     HIA_R:cell_methods = "time: mean" ;
1003     HIA_R:_FillValue = 1.e+36f ;
1004     HIA_R:missing_value = 1.e+36f ;
1005 float HIA_U(time, lat, lon) ;
1006     HIA_U:long_name = "Urban 2 m NWS Heat Index" ;
1007     HIA_U:units = "C" ;
1008     HIA_U:cell_methods = "time: mean" ;
1009     HIA_U:_FillValue = 1.e+36f ;
1010     HIA_U:missing_value = 1.e+36f ;
1011 float HR(time, lat, lon) ;
1012     HR:long_name = "total heterotrophic respiration" ;
1013     HR:units = "gC/m^2/s" ;
1014     HR:cell_methods = "time: mean" ;
1015     HR:_FillValue = 1.e+36f ;
1016     HR:missing_value = 1.e+36f ;
1017 float HR_vr(time, levsoi, lat, lon) ;
1018     HR_vr:long_name = "total vertically resolved heterotrophic respiration" ;
1019     HR_vr:units = "gC/m^3/s" ;
1020     HR_vr:cell_methods = "time: mean" ;
1021     HR_vr:_FillValue = 1.e+36f ;
1022     HR_vr:missing_value = 1.e+36f ;
1023 float HTOP(time, lat, lon) ;
1024     HTOP:long_name = "canopy top" ;
1025     HTOP:units = "m" ;
1026     HTOP:cell_methods = "time: mean" ;
1027     HTOP:_FillValue = 1.e+36f ;
1028     HTOP:missing_value = 1.e+36f ;
1029 float HUMIDEX(time, lat, lon) ;
1030     HUMIDEX:long_name = "2 m Humidex" ;
1031     HUMIDEX:units = "C" ;
1032     HUMIDEX:cell_methods = "time: mean" ;
1033     HUMIDEX:_FillValue = 1.e+36f ;
1034     HUMIDEX:missing_value = 1.e+36f ;
1035 float HUMIDEX_R(time, lat, lon) ;
1036     HUMIDEX_R:long_name = "Rural 2 m Humidex" ;
1037     HUMIDEX_R:units = "C" ;
1038     HUMIDEX_R:cell_methods = "time: mean" ;
1039     HUMIDEX_R:_FillValue = 1.e+36f ;
1040     HUMIDEX_R:missing_value = 1.e+36f ;
1041 float HUMIDEX_U(time, lat, lon) ;
1042     HUMIDEX_U:long_name = "Urban 2 m Humidex" ;
1043     HUMIDEX_U:units = "C" ;
1044     HUMIDEX_U:cell_methods = "time: mean" ;
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1044     HUMIDEX_U:_FillValue = 1.e+36f ;
1045     HUMIDEX_U:missing_value = 1.e+36f ;
1046 float ICE_CONTENT1(time, lat, lon) ;
1047     ICE_CONTENT1:long_name = "initial gridcell total ice content" ;
1048     ICE_CONTENT1:units = "mm" ;
1049     ICE_CONTENT1:cell_methods = "time: mean" ;
1050     ICE_CONTENT1:_FillValue = 1.e+36f ;
1051     ICE_CONTENT1:missing_value = 1.e+36f ;
1052 float JMX25T(time, lat, lon) ;
1053     JMX25T:long_name = "canopy profile of jmax" ;
1054     JMX25T:units = "umol/m2/s" ;
1055     JMX25T:cell_methods = "time: minimum" ;
1056     JMX25T:_FillValue = 1.e+36f ;
1057     JMX25T:missing_value = 1.e+36f ;
1058 float Jmx25Z(time, lat, lon) ;
1059     Jmx25Z:long_name = "canopy profile of vcmax25 predicted by LUNA model" ;
1060     Jmx25Z:units = "umol/m2/s" ;
1061     Jmx25Z:cell_methods = "time: mean" ;
1062     Jmx25Z:_FillValue = 1.e+36f ;
1063     Jmx25Z:missing_value = 1.e+36f ;
1064 float LAISHA(time, lat, lon) ;
1065     LAISHA:long_name = "shaded projected leaf area index" ;
1066     LAISHA:units = "none" ;
1067     LAISHA:cell_methods = "time: mean" ;
1068     LAISHA:_FillValue = 1.e+36f ;
1069     LAISHA:missing_value = 1.e+36f ;
1070 float LAISUN(time, lat, lon) ;
1071     LAISUN:long_name = "sunlit projected leaf area index" ;
1072     LAISUN:units = "none" ;
1073     LAISUN:cell_methods = "time: mean" ;
1074     LAISUN:_FillValue = 1.e+36f ;
1075     LAISUN:missing_value = 1.e+36f ;
1076 float LAKEICEFRAC_SURF(time, lat, lon) ;
1077     LAKEICEFRAC_SURF:long_name = "surface lake layer ice mass fraction" ;
1078     LAKEICEFRAC_SURF:units = "unitless" ;
1079     LAKEICEFRAC_SURF:cell_methods = "time: mean" ;
1080     LAKEICEFRAC_SURF:_FillValue = 1.e+36f ;
1081     LAKEICEFRAC_SURF:missing_value = 1.e+36f ;
1082 float LAKEICETHICK(time, lat, lon) ;
1083     LAKEICETHICK:long_name = "thickness of lake ice (including physical expansion on freezing)" ;
1084     LAKEICETHICK:units = "m" ;
1085     LAKEICETHICK:cell_methods = "time: mean" ;
1086     LAKEICETHICK:_FillValue = 1.e+36f ;
1087     LAKEICETHICK:missing_value = 1.e+36f ;
1088 float LAND_USE_FLUX(time, lat, lon) ;
1089     LAND_USE_FLUX:long_name = "total C emitted from land cover conversion (smoothed over the year) and wood
...    and grain product pools (NOTE: not a net value)" ;
1090     LAND_USE_FLUX:units = "gC/m^2/s" ;
1091     LAND_USE_FLUX:cell_methods = "time: mean" ;
1092     LAND_USE_FLUX:_FillValue = 1.e+36f ;
1093     LAND_USE_FLUX:missing_value = 1.e+36f ;
1094 float LEAFC(time, lat, lon) ;
1095     LEAFC:long_name = "leaf C" ;
1096     LEAFC:units = "gC/m^2" ;
1097     LEAFC:cell_methods = "time: mean" ;
1098     LEAFC:_FillValue = 1.e+36f ;
1099     LEAFC:missing_value = 1.e+36f ;
1100 float LEAFCN(time, lat, lon) ;
1101     LEAFCN:long_name = "Leaf CN ratio used for flexible CN" ;
1102     LEAFCN:units = "gC/gN" ;
1103     LEAFCN:cell_methods = "time: mean" ;
1104     LEAFCN:_FillValue = 1.e+36f ;
1105     LEAFCN:missing_value = 1.e+36f ;
1106 float LEAFC_ALLOC(time, lat, lon) ;
1107     LEAFC_ALLOC:long_name = "leaf C allocation" ;
1108     LEAFC_ALLOC:units = "gC/m^2/s" ;
1109     LEAFC_ALLOC:cell_methods = "time: mean" ;
1110     LEAFC_ALLOC:_FillValue = 1.e+36f ;
1111     LEAFC_ALLOC:missing_value = 1.e+36f ;
1112 float LEAFC_CHANGE(time, lat, lon) ;
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1113     LEAFC_CHANGE:long_name = "C change in leaf" ;
1114     LEAFC_CHANGE:units = "gC/m^2/s" ;
1115     LEAFC_CHANGE:cell_methods = "time: mean" ;
1116     LEAFC_CHANGE:_FillValue = 1.e+36f ;
1117     LEAFC_CHANGE:missing_value = 1.e+36f ;
1118 float LEAFC_LOSS(time, lat, lon) ;
1119     LEAFC_LOSS:long_name = "leaf C loss" ;
1120     LEAFC_LOSS:units = "gC/m^2/s" ;
1121     LEAFC_LOSS:cell_methods = "time: mean" ;
1122     LEAFC_LOSS:_FillValue = 1.e+36f ;
1123     LEAFC_LOSS:missing_value = 1.e+36f ;
1124 float LEAFC_TO_LITTER_FUN(time, lat, lon) ;
1125     LEAFC_TO_LITTER_FUN:long_name = "leaf C litterfall used by FUN" ;
1126     LEAFC_TO_LITTER_FUN:units = "gC/m^2/s" ;
1127     LEAFC_TO_LITTER_FUN:cell_methods = "time: mean" ;
1128     LEAFC_TO_LITTER_FUN:_FillValue = 1.e+36f ;
1129     LEAFC_TO_LITTER_FUN:missing_value = 1.e+36f ;
1130 float LEAFN(time, lat, lon) ;
1131     LEAFN:long_name = "leaf N" ;
1132     LEAFN:units = "gN/m^2" ;
1133     LEAFN:cell_methods = "time: mean" ;
1134     LEAFN:_FillValue = 1.e+36f ;
1135     LEAFN:missing_value = 1.e+36f ;
1136 float LEAFN_TO_LITTER(time, lat, lon) ;
1137     LEAFN_TO_LITTER:long_name = "leaf N litterfall" ;
1138     LEAFN_TO_LITTER:units = "gN/m^2/s" ;
1139     LEAFN_TO_LITTER:cell_methods = "time: mean" ;
1140     LEAFN_TO_LITTER:_FillValue = 1.e+36f ;
1141     LEAFN_TO_LITTER:missing_value = 1.e+36f ;
1142 float LEAF_MR(time, lat, lon) ;
1143     LEAF_MR:long_name = "leaf maintenance respiration" ;
1144     LEAF_MR:units = "gC/m^2/s" ;
1145     LEAF_MR:cell_methods = "time: mean" ;
1146     LEAF_MR:_FillValue = 1.e+36f ;
1147     LEAF_MR:missing_value = 1.e+36f ;
1148 float LFC2(time, lat, lon) ;
1149     LFC2:long_name = "conversion area fraction of BET and BDT that burned" ;
1150     LFC2:units = "per sec" ;
1151     LFC2:cell_methods = "time: mean" ;
1152     LFC2:_FillValue = 1.e+36f ;
1153     LFC2:missing_value = 1.e+36f ;
1154 float LIQCAN(time, lat, lon) ;
1155     LIQCAN:long_name = "intercepted liquid water" ;
1156     LIQCAN:units = "mm" ;
1157     LIQCAN:cell_methods = "time: mean" ;
1158     LIQCAN:_FillValue = 1.e+36f ;
1159     LIQCAN:missing_value = 1.e+36f ;
1160 float LIQUID_CONTENT1(time, lat, lon) ;
1161     LIQUID_CONTENT1:long_name = "initial gridcell total liq content" ;
1162     LIQUID_CONTENT1:units = "mm" ;
1163     LIQUID_CONTENT1:cell_methods = "time: mean" ;
1164     LIQUID_CONTENT1:_FillValue = 1.e+36f ;
1165     LIQUID_CONTENT1:missing_value = 1.e+36f ;
1166 float LITFALL(time, lat, lon) ;
1167     LITFALL:long_name = "litterfall (leaves and fine roots)" ;
1168     LITFALL:units = "gC/m^2/s" ;
1169     LITFALL:cell_methods = "time: mean" ;
1170     LITFALL:_FillValue = 1.e+36f ;
1171     LITFALL:missing_value = 1.e+36f ;
1172 float LITR1C(time, lat, lon) ;
1173     LITR1C:long_name = "LITR1 C" ;
1174     LITR1C:units = "gC/m^2" ;
1175     LITR1C:cell_methods = "time: mean" ;
1176     LITR1C:_FillValue = 1.e+36f ;
1177     LITR1C:missing_value = 1.e+36f ;
1178 float LITR1C_vr(time, levsoi, lat, lon) ;
1179     LITR1C_vr:long_name = "LITR1 C (vertically resolved)" ;
1180     LITR1C_vr:units = "gC/m^3" ;
1181     LITR1C_vr:cell_methods = "time: mean" ;
1182     LITR1C_vr:_FillValue = 1.e+36f ;
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1183     LITR1C_vr:missing_value = 1.e+36f ;
1184     float LITR1N(time, lat, lon) ;
1185     LITR1N:long_name = "LITR1 N" ;
1186     LITR1N:units = "gN/m^2" ;
1187     LITR1N:cell_methods = "time: mean" ;
1188     LITR1N:_FillValue = 1.e+36f ;
1189     LITR1N:missing_value = 1.e+36f ;
1190     float LITR1N_vr(time, levdcmp, lat, lon) ;
1191     LITR1N_vr:long_name = "LITR1 N (vertically resolved)" ;
1192     LITR1N_vr:units = "gN/m^3" ;
1193     LITR1N_vr:cell_methods = "time: mean" ;
1194     LITR1N_vr:_FillValue = 1.e+36f ;
1195     LITR1N_vr:missing_value = 1.e+36f ;
1196     float LITR2C(time, lat, lon) ;
1197     LITR2C:long_name = "LITR2 C" ;
1198     LITR2C:units = "gC/m^2" ;
1199     LITR2C:cell_methods = "time: mean" ;
1200     LITR2C:_FillValue = 1.e+36f ;
1201     LITR2C:missing_value = 1.e+36f ;
1202     float LITR2C_vr(time, levsoi, lat, lon) ;
1203     LITR2C_vr:long_name = "LITR2 C (vertically resolved)" ;
1204     LITR2C_vr:units = "gC/m^3" ;
1205     LITR2C_vr:cell_methods = "time: mean" ;
1206     LITR2C_vr:_FillValue = 1.e+36f ;
1207     LITR2C_vr:missing_value = 1.e+36f ;
1208     float LITR2N(time, lat, lon) ;
1209     LITR2N:long_name = "LITR2 N" ;
1210     LITR2N:units = "gN/m^2" ;
1211     LITR2N:cell_methods = "time: mean" ;
1212     LITR2N:_FillValue = 1.e+36f ;
1213     LITR2N:missing_value = 1.e+36f ;
1214     float LITR2N_vr(time, levdcmp, lat, lon) ;
1215     LITR2N_vr:long_name = "LITR2 N (vertically resolved)" ;
1216     LITR2N_vr:units = "gN/m^3" ;
1217     LITR2N_vr:cell_methods = "time: mean" ;
1218     LITR2N_vr:_FillValue = 1.e+36f ;
1219     LITR2N_vr:missing_value = 1.e+36f ;
1220     float LITR3C(time, lat, lon) ;
1221     LITR3C:long_name = "LITR3 C" ;
1222     LITR3C:units = "gC/m^2" ;
1223     LITR3C:cell_methods = "time: mean" ;
1224     LITR3C:_FillValue = 1.e+36f ;
1225     LITR3C:missing_value = 1.e+36f ;
1226     float LITR3C_vr(time, levsoi, lat, lon) ;
1227     LITR3C_vr:long_name = "LITR3 C (vertically resolved)" ;
1228     LITR3C_vr:units = "gC/m^3" ;
1229     LITR3C_vr:cell_methods = "time: mean" ;
1230     LITR3C_vr:_FillValue = 1.e+36f ;
1231     LITR3C_vr:missing_value = 1.e+36f ;
1232     float LITR3N(time, lat, lon) ;
1233     LITR3N:long_name = "LITR3 N" ;
1234     LITR3N:units = "gN/m^2" ;
1235     LITR3N:cell_methods = "time: mean" ;
1236     LITR3N:_FillValue = 1.e+36f ;
1237     LITR3N:missing_value = 1.e+36f ;
1238     float LITR3N_vr(time, levdcmp, lat, lon) ;
1239     LITR3N_vr:long_name = "LITR3 N (vertically resolved)" ;
1240     LITR3N_vr:units = "gN/m^3" ;
1241     LITR3N_vr:cell_methods = "time: mean" ;
1242     LITR3N_vr:_FillValue = 1.e+36f ;
1243     LITR3N_vr:missing_value = 1.e+36f ;
1244     float LITTERC_HR(time, lat, lon) ;
1245     LITTERC_HR:long_name = "litter C heterotrophic respiration" ;
1246     LITTERC_HR:units = "gC/m^2/s" ;
1247     LITTERC_HR:cell_methods = "time: mean" ;
1248     LITTERC_HR:_FillValue = 1.e+36f ;
1249     LITTERC_HR:missing_value = 1.e+36f ;
1250     float LITTERC_LOSS(time, lat, lon) ;
1251     LITTERC_LOSS:long_name = "litter C loss" ;
1252     LITTERC_LOSS:units = "gC/m^2/s" ;
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1253     LITTERC_LOSS:cell_methods = "time: mean" ;
1254     LITTERC_LOSS:_FillValue = 1.e+36f ;
1255     LITTERC_LOSS:missing_value = 1.e+36f ;
1256 float LIVECROOTC(time, lat, lon) ;
1257     LIVECROOTC:long_name = "live coarse root C" ;
1258     LIVECROOTC:units = "gC/m^2" ;
1259     LIVECROOTC:cell_methods = "time: mean" ;
1260     LIVECROOTC:_FillValue = 1.e+36f ;
1261     LIVECROOTC:missing_value = 1.e+36f ;
1262 float LIVECROOTN(time, lat, lon) ;
1263     LIVECROOTN:long_name = "live coarse root N" ;
1264     LIVECROOTN:units = "gN/m^2" ;
1265     LIVECROOTN:cell_methods = "time: mean" ;
1266     LIVECROOTN:_FillValue = 1.e+36f ;
1267     LIVECROOTN:missing_value = 1.e+36f ;
1268 float LIVESTEMC(time, lat, lon) ;
1269     LIVESTEMC:long_name = "live stem C" ;
1270     LIVESTEMC:units = "gC/m^2" ;
1271     LIVESTEMC:cell_methods = "time: mean" ;
1272     LIVESTEMC:_FillValue = 1.e+36f ;
1273     LIVESTEMC:missing_value = 1.e+36f ;
1274 float LIVESTEMN(time, lat, lon) ;
1275     LIVESTEMN:long_name = "live stem N" ;
1276     LIVESTEMN:units = "gN/m^2" ;
1277     LIVESTEMN:cell_methods = "time: mean" ;
1278     LIVESTEMN:_FillValue = 1.e+36f ;
1279     LIVESTEMN:missing_value = 1.e+36f ;
1280 float LNC(time, lat, lon) ;
1281     LNC:long_name = "leaf N concentration" ;
1282     LNC:units = "gN leaf/m^2" ;
1283     LNC:cell_methods = "time: mean" ;
1284     LNC:_FillValue = 1.e+36f ;
1285     LNC:missing_value = 1.e+36f ;
1286 float MR(time, lat, lon) ;
1287     MR:long_name = "maintenance respiration" ;
1288     MR:units = "gC/m^2/s" ;
1289     MR:cell_methods = "time: mean" ;
1290     MR:_FillValue = 1.e+36f ;
1291     MR:missing_value = 1.e+36f ;
1292 float NACTIVE(time, lat, lon) ;
1293     NACTIVE:long_name = "Mycorrhizal N uptake flux" ;
1294     NACTIVE:units = "gN/m^2/s" ;
1295     NACTIVE:cell_methods = "time: mean" ;
1296     NACTIVE:_FillValue = 1.e+36f ;
1297     NACTIVE:missing_value = 1.e+36f ;
1298 float NACTIVE_NH4(time, lat, lon) ;
1299     NACTIVE_NH4:long_name = "Mycorrhizal N uptake flux" ;
1300     NACTIVE_NH4:units = "gN/m^2/s" ;
1301     NACTIVE_NH4:cell_methods = "time: mean" ;
1302     NACTIVE_NH4:_FillValue = 1.e+36f ;
1303     NACTIVE_NH4:missing_value = 1.e+36f ;
1304 float NACTIVE_NO3(time, lat, lon) ;
1305     NACTIVE_NO3:long_name = "Mycorrhizal N uptake flux" ;
1306     NACTIVE_NO3:units = "gN/m^2/s" ;
1307     NACTIVE_NO3:cell_methods = "time: mean" ;
1308     NACTIVE_NO3:_FillValue = 1.e+36f ;
1309     NACTIVE_NO3:missing_value = 1.e+36f ;
1310 float NAM(time, lat, lon) ;
1311     NAM:long_name = "AM-associated N uptake flux" ;
1312     NAM:units = "gN/m^2/s" ;
1313     NAM:cell_methods = "time: mean" ;
1314     NAM:_FillValue = 1.e+36f ;
1315     NAM:missing_value = 1.e+36f ;
1316 float NAM_NH4(time, lat, lon) ;
1317     NAM_NH4:long_name = "AM-associated N uptake flux" ;
1318     NAM_NH4:units = "gN/m^2/s" ;
1319     NAM_NH4:cell_methods = "time: mean" ;
1320     NAM_NH4:_FillValue = 1.e+36f ;
1321     NAM_NH4:missing_value = 1.e+36f ;
1322 float NAM_NO3(time, lat, lon) ;
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1323     NAM_N03:long_name = "AM-associated N uptake flux" ;
1324     NAM_N03:units = "gN/m^2/s" ;
1325     NAM_N03:cell_methods = "time: mean" ;
1326     NAM_N03:_FillValue = 1.e+36f ;
1327     NAM_N03:missing_value = 1.e+36f ;
1328     float NBP(time, lat, lon) ;
1329     NBP:long_name = "net biome production, includes fire, landuse, harvest and hrv_xsmrpool flux (latter
... smoothed over the year), positive for sink (same as net carbon exchange between land and atmosphere)" ;
1330     NBP:units = "gC/m^2/s" ;
1331     NBP:cell_methods = "time: mean" ;
1332     NBP:_FillValue = 1.e+36f ;
1333     NBP:missing_value = 1.e+36f ;
1334     float NDEPLOY(time, lat, lon) ;
1335     NDEPLOY:long_name = "total N deployed in new growth" ;
1336     NDEPLOY:units = "gN/m^2/s" ;
1337     NDEPLOY:cell_methods = "time: mean" ;
1338     NDEPLOY:_FillValue = 1.e+36f ;
1339     NDEPLOY:missing_value = 1.e+36f ;
1340     float NDEP_TO_SMINN(time, lat, lon) ;
1341     NDEP_TO_SMINN:long_name = "atmospheric N deposition to soil mineral N" ;
1342     NDEP_TO_SMINN:units = "gN/m^2/s" ;
1343     NDEP_TO_SMINN:cell_methods = "time: mean" ;
1344     NDEP_TO_SMINN:_FillValue = 1.e+36f ;
1345     NDEP_TO_SMINN:missing_value = 1.e+36f ;
1346     float NECM(time, lat, lon) ;
1347     NECM:long_name = "ECM-associated N uptake flux" ;
1348     NECM:units = "gN/m^2/s" ;
1349     NECM:cell_methods = "time: mean" ;
1350     NECM:_FillValue = 1.e+36f ;
1351     NECM:missing_value = 1.e+36f ;
1352     float NECM_NH4(time, lat, lon) ;
1353     NECM_NH4:long_name = "ECM-associated N uptake flux" ;
1354     NECM_NH4:units = "gN/m^2/s" ;
1355     NECM_NH4:cell_methods = "time: mean" ;
1356     NECM_NH4:_FillValue = 1.e+36f ;
1357     NECM_NH4:missing_value = 1.e+36f ;
1358     float NECM_N03(time, lat, lon) ;
1359     NECM_N03:long_name = "ECM-associated N uptake flux" ;
1360     NECM_N03:units = "gN/m^2/s" ;
1361     NECM_N03:cell_methods = "time: mean" ;
1362     NECM_N03:_FillValue = 1.e+36f ;
1363     NECM_N03:missing_value = 1.e+36f ;
1364     float NEE(time, lat, lon) ;
1365     NEE:long_name = "net ecosystem exchange of carbon, includes fire and hrv_xsmrpool (latter smoothed over
... the year), excludes landuse and harvest flux, positive for source" ;
1366     NEE:units = "gC/m^2/s" ;
1367     NEE:cell_methods = "time: mean" ;
1368     NEE:_FillValue = 1.e+36f ;
1369     NEE:missing_value = 1.e+36f ;
1370     float NEM(time, lat, lon) ;
1371     NEM:long_name = "Gridcell net adjustment to net carbon exchange passed to atm. for methane production" ;
1372     NEM:units = "gC/m2/s" ;
1373     NEM:cell_methods = "time: mean" ;
1374     NEM:_FillValue = 1.e+36f ;
1375     NEM:missing_value = 1.e+36f ;
1376     float NEP(time, lat, lon) ;
1377     NEP:long_name = "net ecosystem production, excludes fire, landuse, and harvest flux, positive for sink"
... ;
1378     NEP:units = "gC/m^2/s" ;
1379     NEP:cell_methods = "time: mean" ;
1380     NEP:_FillValue = 1.e+36f ;
1381     NEP:missing_value = 1.e+36f ;
1382     float NET_NMIN(time, lat, lon) ;
1383     NET_NMIN:long_name = "net rate of N mineralization" ;
1384     NET_NMIN:units = "gN/m^2/s" ;
1385     NET_NMIN:cell_methods = "time: mean" ;
1386     NET_NMIN:_FillValue = 1.e+36f ;
1387     NET_NMIN:missing_value = 1.e+36f ;
1388     float NFERTILIZATION(time, lat, lon) ;
1389     NFERTILIZATION:long_name = "fertilizer added" ;
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1390     NFERTILIZATION:units = "gN/m^2/s" ;
1391     NFERTILIZATION:cell_methods = "time: mean" ;
1392     NFERTILIZATION:_FillValue = 1.e+36f ;
1393     NFERTILIZATION:missing_value = 1.e+36f ;
1394     float NFIRE(time, lat, lon) ;
1395         NFIRE:long_name = "fire counts valid only in Reg.C" ;
1396         NFIRE:units = "counts/km2/sec" ;
1397         NFIRE:cell_methods = "time: mean" ;
1398         NFIRE:_FillValue = 1.e+36f ;
1399         NFIRE:missing_value = 1.e+36f ;
1400     float NFIX(time, lat, lon) ;
1401         NFIX:long_name = "Symbiotic BNF uptake flux" ;
1402         NFIX:units = "gN/m^2/s" ;
1403         NFIX:cell_methods = "time: mean" ;
1404         NFIX:_FillValue = 1.e+36f ;
1405         NFIX:missing_value = 1.e+36f ;
1406     float NFIX_TO_SMINN(time, lat, lon) ;
1407         NFIX_TO_SMINN:long_name = "symbiotic/asymbiotic N fixation to soil mineral N" ;
1408         NFIX_TO_SMINN:units = "gN/m^2/s" ;
1409         NFIX_TO_SMINN:cell_methods = "time: mean" ;
1410         NFIX_TO_SMINN:_FillValue = 1.e+36f ;
1411         NFIX_TO_SMINN:missing_value = 1.e+36f ;
1412     float NNONMYC(time, lat, lon) ;
1413         NNONMYC:long_name = "Non-mycorrhizal N uptake flux" ;
1414         NNONMYC:units = "gN/m^2/s" ;
1415         NNONMYC:cell_methods = "time: mean" ;
1416         NNONMYC:_FillValue = 1.e+36f ;
1417         NNONMYC:missing_value = 1.e+36f ;
1418     float NNONMYC_NH4(time, lat, lon) ;
1419         NNONMYC_NH4:long_name = "Non-mycorrhizal N uptake flux" ;
1420         NNONMYC_NH4:units = "gN/m^2/s" ;
1421         NNONMYC_NH4:cell_methods = "time: mean" ;
1422         NNONMYC_NH4:_FillValue = 1.e+36f ;
1423         NNONMYC_NH4:missing_value = 1.e+36f ;
1424     float NNONMYC_NO3(time, lat, lon) ;
1425         NNONMYC_NO3:long_name = "Non-mycorrhizal N uptake flux" ;
1426         NNONMYC_NO3:units = "gN/m^2/s" ;
1427         NNONMYC_NO3:cell_methods = "time: mean" ;
1428         NNONMYC_NO3:_FillValue = 1.e+36f ;
1429         NNONMYC_NO3:missing_value = 1.e+36f ;
1430     float NPASSIVE(time, lat, lon) ;
1431         NPASSIVE:long_name = "Passive N uptake flux" ;
1432         NPASSIVE:units = "gN/m^2/s" ;
1433         NPASSIVE:cell_methods = "time: mean" ;
1434         NPASSIVE:_FillValue = 1.e+36f ;
1435         NPASSIVE:missing_value = 1.e+36f ;
1436     float NPOOL(time, lat, lon) ;
1437         NPOOL:long_name = "temporary plant N pool" ;
1438         NPOOL:units = "gN/m^2" ;
1439         NPOOL:cell_methods = "time: mean" ;
1440         NPOOL:_FillValue = 1.e+36f ;
1441         NPOOL:missing_value = 1.e+36f ;
1442     float NPP(time, lat, lon) ;
1443         NPP:long_name = "net primary production" ;
1444         NPP:units = "gC/m^2/s" ;
1445         NPP:cell_methods = "time: mean" ;
1446         NPP:_FillValue = 1.e+36f ;
1447         NPP:missing_value = 1.e+36f ;
1448     float NPP_GROWTH(time, lat, lon) ;
1449         NPP_GROWTH:long_name = "Total C used for growth in FUN" ;
1450         NPP_GROWTH:units = "gC/m^2/s" ;
1451         NPP_GROWTH:cell_methods = "time: mean" ;
1452         NPP_GROWTH:_FillValue = 1.e+36f ;
1453         NPP_GROWTH:missing_value = 1.e+36f ;
1454     float NPP_NACTIVE(time, lat, lon) ;
1455         NPP_NACTIVE:long_name = "Mycorrhizal N uptake used C" ;
1456         NPP_NACTIVE:units = "gC/m^2/s" ;
1457         NPP_NACTIVE:cell_methods = "time: mean" ;
1458         NPP_NACTIVE:_FillValue = 1.e+36f ;
1459         NPP_NACTIVE:missing_value = 1.e+36f ;
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1460 float NPP_NACTIVE_NH4(time, lat, lon) ;
1461     NPP_NACTIVE_NH4:long_name = "Mycorrhizal N uptake use C" ;
1462     NPP_NACTIVE_NH4:units = "gC/m^2/s" ;
1463     NPP_NACTIVE_NH4:cell_methods = "time: mean" ;
1464     NPP_NACTIVE_NH4:_FillValue = 1.e+36f ;
1465     NPP_NACTIVE_NH4:missing_value = 1.e+36f ;
1466 float NPP_NACTIVE_N03(time, lat, lon) ;
1467     NPP_NACTIVE_N03:long_name = "Mycorrhizal N uptake used C" ;
1468     NPP_NACTIVE_N03:units = "gC/m^2/s" ;
1469     NPP_NACTIVE_N03:cell_methods = "time: mean" ;
1470     NPP_NACTIVE_N03:_FillValue = 1.e+36f ;
1471     NPP_NACTIVE_N03:missing_value = 1.e+36f ;
1472 float NPP_NAM(time, lat, lon) ;
1473     NPP_NAM:long_name = "AM-associated N uptake used C" ;
1474     NPP_NAM:units = "gC/m^2/s" ;
1475     NPP_NAM:cell_methods = "time: mean" ;
1476     NPP_NAM:_FillValue = 1.e+36f ;
1477     NPP_NAM:missing_value = 1.e+36f ;
1478 float NPP_NAM_NH4(time, lat, lon) ;
1479     NPP_NAM_NH4:long_name = "AM-associated N uptake use C" ;
1480     NPP_NAM_NH4:units = "gC/m^2/s" ;
1481     NPP_NAM_NH4:cell_methods = "time: mean" ;
1482     NPP_NAM_NH4:_FillValue = 1.e+36f ;
1483     NPP_NAM_NH4:missing_value = 1.e+36f ;
1484 float NPP_NAM_N03(time, lat, lon) ;
1485     NPP_NAM_N03:long_name = "AM-associated N uptake use C" ;
1486     NPP_NAM_N03:units = "gC/m^2/s" ;
1487     NPP_NAM_N03:cell_methods = "time: mean" ;
1488     NPP_NAM_N03:_FillValue = 1.e+36f ;
1489     NPP_NAM_N03:missing_value = 1.e+36f ;
1490 float NPP_NECM(time, lat, lon) ;
1491     NPP_NECM:long_name = "ECM-associated N uptake used C" ;
1492     NPP_NECM:units = "gC/m^2/s" ;
1493     NPP_NECM:cell_methods = "time: mean" ;
1494     NPP_NECM:_FillValue = 1.e+36f ;
1495     NPP_NECM:missing_value = 1.e+36f ;
1496 float NPP_NECM_NH4(time, lat, lon) ;
1497     NPP_NECM_NH4:long_name = "ECM-associated N uptake use C" ;
1498     NPP_NECM_NH4:units = "gC/m^2/s" ;
1499     NPP_NECM_NH4:cell_methods = "time: mean" ;
1500     NPP_NECM_NH4:_FillValue = 1.e+36f ;
1501     NPP_NECM_NH4:missing_value = 1.e+36f ;
1502 float NPP_NECM_N03(time, lat, lon) ;
1503     NPP_NECM_N03:long_name = "ECM-associated N uptake used C" ;
1504     NPP_NECM_N03:units = "gC/m^2/s" ;
1505     NPP_NECM_N03:cell_methods = "time: mean" ;
1506     NPP_NECM_N03:_FillValue = 1.e+36f ;
1507     NPP_NECM_N03:missing_value = 1.e+36f ;
1508 float NPP_NFIX(time, lat, lon) ;
1509     NPP_NFIX:long_name = "Symbiotic BNF uptake used C" ;
1510     NPP_NFIX:units = "gC/m^2/s" ;
1511     NPP_NFIX:cell_methods = "time: mean" ;
1512     NPP_NFIX:_FillValue = 1.e+36f ;
1513     NPP_NFIX:missing_value = 1.e+36f ;
1514 float NPP_NNONMYC(time, lat, lon) ;
1515     NPP_NNONMYC:long_name = "Non-mycorrhizal N uptake used C" ;
1516     NPP_NNONMYC:units = "gC/m^2/s" ;
1517     NPP_NNONMYC:cell_methods = "time: mean" ;
1518     NPP_NNONMYC:_FillValue = 1.e+36f ;
1519     NPP_NNONMYC:missing_value = 1.e+36f ;
1520 float NPP_NNONMYC_NH4(time, lat, lon) ;
1521     NPP_NNONMYC_NH4:long_name = "Non-mycorrhizal N uptake use C" ;
1522     NPP_NNONMYC_NH4:units = "gC/m^2/s" ;
1523     NPP_NNONMYC_NH4:cell_methods = "time: mean" ;
1524     NPP_NNONMYC_NH4:_FillValue = 1.e+36f ;
1525     NPP_NNONMYC_NH4:missing_value = 1.e+36f ;
1526 float NPP_NNONMYC_N03(time, lat, lon) ;
1527     NPP_NNONMYC_N03:long_name = "Non-mycorrhizal N uptake use C" ;
1528     NPP_NNONMYC_N03:units = "gC/m^2/s" ;
1529     NPP_NNONMYC_N03:cell_methods = "time: mean" ;
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1530     NPP_NNONMYC_N03:_FillValue = 1.e+36f ;
1531     NPP_NNONMYC_N03:missing_value = 1.e+36f ;
1532 float NPP_NRETRANS(time, lat, lon) ;
1533     NPP_NRETRANS:long_name = "Retranslocated N uptake flux" ;
1534     NPP_NRETRANS:units = "gC/m^2/s" ;
1535     NPP_NRETRANS:cell_methods = "time: mean" ;
1536     NPP_NRETRANS:_FillValue = 1.e+36f ;
1537     NPP_NRETRANS:missing_value = 1.e+36f ;
1538 float NPP_NUPTAKE(time, lat, lon) ;
1539     NPP_NUPTAKE:long_name = "Total C used by N uptake in FUN" ;
1540     NPP_NUPTAKE:units = "gC/m^2/s" ;
1541     NPP_NUPTAKE:cell_methods = "time: mean" ;
1542     NPP_NUPTAKE:_FillValue = 1.e+36f ;
1543     NPP_NUPTAKE:missing_value = 1.e+36f ;
1544 float NRETRANS(time, lat, lon) ;
1545     NRETRANS:long_name = "Retranslocated N uptake flux" ;
1546     NRETRANS:units = "gN/m^2/s" ;
1547     NRETRANS:cell_methods = "time: mean" ;
1548     NRETRANS:_FillValue = 1.e+36f ;
1549     NRETRANS:missing_value = 1.e+36f ;
1550 float NRETRANS_REG(time, lat, lon) ;
1551     NRETRANS_REG:long_name = "Retranslocated N uptake flux" ;
1552     NRETRANS_REG:units = "gN/m^2/s" ;
1553     NRETRANS_REG:cell_methods = "time: mean" ;
1554     NRETRANS_REG:_FillValue = 1.e+36f ;
1555     NRETRANS_REG:missing_value = 1.e+36f ;
1556 float NRETRANS_SEASON(time, lat, lon) ;
1557     NRETRANS_SEASON:long_name = "Retranslocated N uptake flux" ;
1558     NRETRANS_SEASON:units = "gN/m^2/s" ;
1559     NRETRANS_SEASON:cell_methods = "time: mean" ;
1560     NRETRANS_SEASON:_FillValue = 1.e+36f ;
1561     NRETRANS_SEASON:missing_value = 1.e+36f ;
1562 float NRETRANS_STRESS(time, lat, lon) ;
1563     NRETRANS_STRESS:long_name = "Retranslocated N uptake flux" ;
1564     NRETRANS_STRESS:units = "gN/m^2/s" ;
1565     NRETRANS_STRESS:cell_methods = "time: mean" ;
1566     NRETRANS_STRESS:_FillValue = 1.e+36f ;
1567     NRETRANS_STRESS:missing_value = 1.e+36f ;
1568 float NUPTAKE(time, lat, lon) ;
1569     NUPTAKE:long_name = "Total N uptake of FUN" ;
1570     NUPTAKE:units = "gN/m^2/s" ;
1571     NUPTAKE:cell_methods = "time: mean" ;
1572     NUPTAKE:_FillValue = 1.e+36f ;
1573     NUPTAKE:missing_value = 1.e+36f ;
1574 float NUPTAKE_NPP_FRACTION(time, lat, lon) ;
1575     NUPTAKE_NPP_FRACTION:long_name = "frac of NPP used in N uptake" ;
1576     NUPTAKE_NPP_FRACTION:units = "-" ;
1577     NUPTAKE_NPP_FRACTION:cell_methods = "time: mean" ;
1578     NUPTAKE_NPP_FRACTION:_FillValue = 1.e+36f ;
1579     NUPTAKE_NPP_FRACTION:missing_value = 1.e+36f ;
1580 float OCDEP(time, lat, lon) ;
1581     OCDEP:long_name = "total OC deposition (dry+wet) from atmosphere" ;
1582     OCDEP:units = "kg/m^2/s" ;
1583     OCDEP:cell_methods = "time: mean" ;
1584     OCDEP:_FillValue = 1.e+36f ;
1585     OCDEP:missing_value = 1.e+36f ;
1586 float O_SCALAR(time, levsoi, lat, lon) ;
1587     O_SCALAR:long_name = "fraction by which decomposition is reduced due to anoxia" ;
1588     O_SCALAR:units = "unitless" ;
1589     O_SCALAR:cell_methods = "time: mean" ;
1590     O_SCALAR:_FillValue = 1.e+36f ;
1591     O_SCALAR:missing_value = 1.e+36f ;
1592 float PARVEGLN(time, lat, lon) ;
1593     PARVEGLN:long_name = "absorbed par by vegetation at local noon" ;
1594     PARVEGLN:units = "W/m^2" ;
1595     PARVEGLN:cell_methods = "time: mean" ;
1596     PARVEGLN:_FillValue = 1.e+36f ;
1597     PARVEGLN:missing_value = 1.e+36f ;
1598 float PBOT(time, lat, lon) ;
1599     PBOT:long_name = "atmospheric pressure at surface (downscaled to columns in glacier regions)" ;
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1600     PBOT:units = "Pa" ;
1601     PBOT:cell_methods = "time: mean" ;
1602     PBOT:_FillValue = 1.e+36f ;
1603     PBOT:missing_value = 1.e+36f ;
1604     float PCH4(time, lat, lon) ;
1605     PCH4:long_name = "atmospheric partial pressure of CH4" ;
1606     PCH4:units = "Pa" ;
1607     PCH4:cell_methods = "time: mean" ;
1608     PCH4:_FillValue = 1.e+36f ;
1609     PCH4:missing_value = 1.e+36f ;
1610     float PCO2(time, lat, lon) ;
1611     PCO2:long_name = "atmospheric partial pressure of CO2" ;
1612     PCO2:units = "Pa" ;
1613     PCO2:cell_methods = "time: mean" ;
1614     PCO2:_FillValue = 1.e+36f ;
1615     PCO2:missing_value = 1.e+36f ;
1616     float PCT_CFT(time, cft, lat, lon) ;
1617     PCT_CFT:long_name = "% of each crop on the crop landunit" ;
1618     PCT_CFT:units = "%" ;
1619     PCT_CFT:cell_methods = "time: mean" ;
1620     PCT_CFT:_FillValue = 1.e+36f ;
1621     PCT_CFT:missing_value = 1.e+36f ;
1622     float PCT_GLC_MEC(time, glc_nec, lat, lon) ;
1623     PCT_GLC_MEC:long_name = "% of each GLC elevation class on the glc_mec landunit" ;
1624     PCT_GLC_MEC:units = "%" ;
1625     PCT_GLC_MEC:cell_methods = "time: mean" ;
1626     PCT_GLC_MEC:_FillValue = 1.e+36f ;
1627     PCT_GLC_MEC:missing_value = 1.e+36f ;
1628     float PCT_LANDUNIT(time, ltype, lat, lon) ;
1629     PCT_LANDUNIT:long_name = "% of each landunit on grid cell" ;
1630     PCT_LANDUNIT:units = "%" ;
1631     PCT_LANDUNIT:cell_methods = "time: mean" ;
1632     PCT_LANDUNIT:_FillValue = 1.e+36f ;
1633     PCT_LANDUNIT:missing_value = 1.e+36f ;
1634     float PCT_NAT_PFT(time, natpft, lat, lon) ;
1635     PCT_NAT_PFT:long_name = "% of each PFT on the natural vegetation (i.e., soil) landunit" ;
1636     PCT_NAT_PFT:units = "%" ;
1637     PCT_NAT_PFT:cell_methods = "time: mean" ;
1638     PCT_NAT_PFT:_FillValue = 1.e+36f ;
1639     PCT_NAT_PFT:missing_value = 1.e+36f ;
1640     float PFT_FIRE_CLOSS(time, lat, lon) ;
1641     PFT_FIRE_CLOSS:long_name = "total patch-level fire C loss for non-peat fires outside land-type converted
...     region" ;
1642     PFT_FIRE_CLOSS:units = "gC/m^2/s" ;
1643     PFT_FIRE_CLOSS:cell_methods = "time: mean" ;
1644     PFT_FIRE_CLOSS:_FillValue = 1.e+36f ;
1645     PFT_FIRE_CLOSS:missing_value = 1.e+36f ;
1646     float PFT_FIRE_NLOSS(time, lat, lon) ;
1647     PFT_FIRE_NLOSS:long_name = "total patch-level fire N loss" ;
1648     PFT_FIRE_NLOSS:units = "gN/m^2/s" ;
1649     PFT_FIRE_NLOSS:cell_methods = "time: mean" ;
1650     PFT_FIRE_NLOSS:_FillValue = 1.e+36f ;
1651     PFT_FIRE_NLOSS:missing_value = 1.e+36f ;
1652     float PLANT_NDEMAND(time, lat, lon) ;
1653     PLANT_NDEMAND:long_name = "N flux required to support initial GPP" ;
1654     PLANT_NDEMAND:units = "gN/m^2/s" ;
1655     PLANT_NDEMAND:cell_methods = "time: mean" ;
1656     PLANT_NDEMAND:_FillValue = 1.e+36f ;
1657     PLANT_NDEMAND:missing_value = 1.e+36f ;
1658     float POTENTIAL_IMMOB(time, lat, lon) ;
1659     POTENTIAL_IMMOB:long_name = "potential N immobilization" ;
1660     POTENTIAL_IMMOB:units = "gN/m^2/s" ;
1661     POTENTIAL_IMMOB:cell_methods = "time: mean" ;
1662     POTENTIAL_IMMOB:_FillValue = 1.e+36f ;
1663     POTENTIAL_IMMOB:missing_value = 1.e+36f ;
1664     float POT_F_DENIT(time, lat, lon) ;
1665     POT_F_DENIT:long_name = "potential denitrification flux" ;
1666     POT_F_DENIT:units = "gN/m^2/s" ;
1667     POT_F_DENIT:cell_methods = "time: mean" ;
1668     POT_F_DENIT:_FillValue = 1.e+36f ;
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1669     POT_F_DENIT:missing_value = 1.e+36f ;
1670     float POT_F_NIT(time, lat, lon) ;
1671     POT_F_NIT:long_name = "potential nitrification flux" ;
1672     POT_F_NIT:units = "gN/m^2/s" ;
1673     POT_F_NIT:cell_methods = "time: mean" ;
1674     POT_F_NIT:FillValue = 1.e+36f ;
1675     POT_F_NIT:missing_value = 1.e+36f ;
1676     float PSNSHA(time, lat, lon) ;
1677     PSNSHA:long_name = "shaded leaf photosynthesis" ;
1678     PSNSHA:units = "umolCO2/m^2/s" ;
1679     PSNSHA:cell_methods = "time: mean" ;
1680     PSNSHA:FillValue = 1.e+36f ;
1681     PSNSHA:missing_value = 1.e+36f ;
1682     float PSNSHADE_TO_CPOOL(time, lat, lon) ;
1683     PSNSHADE_TO_CPOOL:long_name = "C fixation from shaded canopy" ;
1684     PSNSHADE_TO_CPOOL:units = "gC/m^2/s" ;
1685     PSNSHADE_TO_CPOOL:cell_methods = "time: mean" ;
1686     PSNSHADE_TO_CPOOL:FillValue = 1.e+36f ;
1687     PSNSHADE_TO_CPOOL:missing_value = 1.e+36f ;
1688     float PSNSUN(time, lat, lon) ;
1689     PSNSUN:long_name = "sunlit leaf photosynthesis" ;
1690     PSNSUN:units = "umolCO2/m^2/s" ;
1691     PSNSUN:cell_methods = "time: mean" ;
1692     PSNSUN:FillValue = 1.e+36f ;
1693     PSNSUN:missing_value = 1.e+36f ;
1694     float PSNSUN_TO_CPOOL(time, lat, lon) ;
1695     PSNSUN_TO_CPOOL:long_name = "C fixation from sunlit canopy" ;
1696     PSNSUN_TO_CPOOL:units = "gC/m^2/s" ;
1697     PSNSUN_TO_CPOOL:cell_methods = "time: mean" ;
1698     PSNSUN_TO_CPOOL:FillValue = 1.e+36f ;
1699     PSNSUN_TO_CPOOL:missing_value = 1.e+36f ;
1700     float Q2M(time, lat, lon) ;
1701     Q2M:long_name = "2m specific humidity" ;
1702     Q2M:units = "kg/kg" ;
1703     Q2M:cell_methods = "time: mean" ;
1704     Q2M:FillValue = 1.e+36f ;
1705     Q2M:missing_value = 1.e+36f ;
1706     float QBOT(time, lat, lon) ;
1707     QBOT:long_name = "atmospheric specific humidity (downscaled to columns in glacier regions)" ;
1708     QBOT:units = "kg/kg" ;
1709     QBOT:cell_methods = "time: mean" ;
1710     QBOT:FillValue = 1.e+36f ;
1711     QBOT:missing_value = 1.e+36f ;
1712     float QCHARGE(time, lat, lon) ;
1713     QCHARGE:long_name = "aquifer recharge rate (vegetated landunits only)" ;
1714     QCHARGE:units = "mm/s" ;
1715     QCHARGE:cell_methods = "time: mean" ;
1716     QCHARGE:FillValue = 1.e+36f ;
1717     QCHARGE:missing_value = 1.e+36f ;
1718     float QDRAI(time, lat, lon) ;
1719     QDRAI:long_name = "sub-surface drainage" ;
1720     QDRAI:units = "mm/s" ;
1721     QDRAI:cell_methods = "time: mean" ;
1722     QDRAI:FillValue = 1.e+36f ;
1723     QDRAI:missing_value = 1.e+36f ;
1724     float QDRAI_PERCH(time, lat, lon) ;
1725     QDRAI_PERCH:long_name = "perched wt drainage" ;
1726     QDRAI_PERCH:units = "mm/s" ;
1727     QDRAI_PERCH:cell_methods = "time: mean" ;
1728     QDRAI_PERCH:FillValue = 1.e+36f ;
1729     QDRAI_PERCH:missing_value = 1.e+36f ;
1730     float QDRAI_XS(time, lat, lon) ;
1731     QDRAI_XS:long_name = "saturation excess drainage" ;
1732     QDRAI_XS:units = "mm/s" ;
1733     QDRAI_XS:cell_methods = "time: mean" ;
1734     QDRAI_XS:FillValue = 1.e+36f ;
1735     QDRAI_XS:missing_value = 1.e+36f ;
1736     float QDRIP(time, lat, lon) ;
1737     QDRIP:long_name = "throughfall" ;
1738     QDRIP:units = "mm/s" ;
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1739     QDRIP:cell_methods = "time: mean" ;
1740     QDRIP:_FillValue = 1.e+36f ;
1741     QDRIP:missing_value = 1.e+36f ;
1742 float QFLOOD(time, lat, lon) ;
1743     QFLOOD:long_name = "runoff from river flooding" ;
1744     QFLOOD:units = "mm/s" ;
1745     QFLOOD:cell_methods = "time: mean" ;
1746     QFLOOD:_FillValue = 1.e+36f ;
1747     QFLOOD:missing_value = 1.e+36f ;
1748 float QFLX_DEW_GRND(time, lat, lon) ;
1749     QFLX_DEW_GRND:long_name = "ground surface dew formation" ;
1750     QFLX_DEW_GRND:units = "mm H2O/s" ;
1751     QFLX_DEW_GRND:cell_methods = "time: mean" ;
1752     QFLX_DEW_GRND:_FillValue = 1.e+36f ;
1753     QFLX_DEW_GRND:missing_value = 1.e+36f ;
1754 float QFLX_DEW_SNOW(time, lat, lon) ;
1755     QFLX_DEW_SNOW:long_name = "surface dew added to snow pack" ;
1756     QFLX_DEW_SNOW:units = "mm H2O/s" ;
1757     QFLX_DEW_SNOW:cell_methods = "time: mean" ;
1758     QFLX_DEW_SNOW:_FillValue = 1.e+36f ;
1759     QFLX_DEW_SNOW:missing_value = 1.e+36f ;
1760 float QFLX_EVAP_TOT(time, lat, lon) ;
1761     QFLX_EVAP_TOT:long_name = "qflx_evap_soi + qflx_evap_can + qflx_tran_veg" ;
1762     QFLX_EVAP_TOT:units = "mm H2O/s" ;
1763     QFLX_EVAP_TOT:cell_methods = "time: mean" ;
1764     QFLX_EVAP_TOT:_FillValue = 1.e+36f ;
1765     QFLX_EVAP_TOT:missing_value = 1.e+36f ;
1766 float QFLX_ICE_DYNBAL(time, lat, lon) ;
1767     QFLX_ICE_DYNBAL:long_name = "ice dynamic land cover change conversion runoff flux" ;
1768     QFLX_ICE_DYNBAL:units = "mm/s" ;
1769     QFLX_ICE_DYNBAL:cell_methods = "time: mean" ;
1770     QFLX_ICE_DYNBAL:_FillValue = 1.e+36f ;
1771     QFLX_ICE_DYNBAL:missing_value = 1.e+36f ;
1772 float QFLX_LIQ_DYNBAL(time, lat, lon) ;
1773     QFLX_LIQ_DYNBAL:long_name = "liq dynamic land cover change conversion runoff flux" ;
1774     QFLX_LIQ_DYNBAL:units = "mm/s" ;
1775     QFLX_LIQ_DYNBAL:cell_methods = "time: mean" ;
1776     QFLX_LIQ_DYNBAL:_FillValue = 1.e+36f ;
1777     QFLX_LIQ_DYNBAL:missing_value = 1.e+36f ;
1778 float QFLX_SNOW_DRAIN(time, lat, lon) ;
1779     QFLX_SNOW_DRAIN:long_name = "drainage from snow pack" ;
1780     QFLX_SNOW_DRAIN:units = "mm/s" ;
1781     QFLX_SNOW_DRAIN:cell_methods = "time: mean" ;
1782     QFLX_SNOW_DRAIN:_FillValue = 1.e+36f ;
1783     QFLX_SNOW_DRAIN:missing_value = 1.e+36f ;
1784 float QFLX_SNOW_DRAIN_ICE(time, lat, lon) ;
1785     QFLX_SNOW_DRAIN_ICE:long_name = "drainage from snow pack melt (ice landunits only)" ;
1786     QFLX_SNOW_DRAIN_ICE:units = "mm/s" ;
1787     QFLX_SNOW_DRAIN_ICE:cell_methods = "time: mean" ;
1788     QFLX_SNOW_DRAIN_ICE:_FillValue = 1.e+36f ;
1789     QFLX_SNOW_DRAIN_ICE:missing_value = 1.e+36f ;
1790 float QFLX_SUB_SNOW(time, lat, lon) ;
1791     QFLX_SUB_SNOW:long_name = "sublimation rate from snow pack (also includes bare ice sublimation from
... glacier columns)" ;
1792     QFLX_SUB_SNOW:units = "mm H2O/s" ;
1793     QFLX_SUB_SNOW:cell_methods = "time: mean" ;
1794     QFLX_SUB_SNOW:_FillValue = 1.e+36f ;
1795     QFLX_SUB_SNOW:missing_value = 1.e+36f ;
1796 float QH2OSFC(time, lat, lon) ;
1797     QH2OSFC:long_name = "surface water runoff" ;
1798     QH2OSFC:units = "mm/s" ;
1799     QH2OSFC:cell_methods = "time: mean" ;
1800     QH2OSFC:_FillValue = 1.e+36f ;
1801     QH2OSFC:missing_value = 1.e+36f ;
1802 float QICE(time, lat, lon) ;
1803     QICE:long_name = "ice growth/melt" ;
1804     QICE:units = "mm/s" ;
1805     QICE:cell_methods = "time: mean" ;
1806     QICE:_FillValue = 1.e+36f ;
1807     QICE:missing_value = 1.e+36f ;
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1808 float QICE_FRZ(time, lat, lon) ;
1809     QICE_FRZ:long_name = "ice growth" ;
1810     QICE_FRZ:units = "mm/s" ;
1811     QICE_FRZ:cell_methods = "time: mean" ;
1812     QICE_FRZ:_FillValue = 1.e+36f ;
1813     QICE_FRZ:missing_value = 1.e+36f ;
1814 float QICE_MELT(time, lat, lon) ;
1815     QICE_MELT:long_name = "ice melt" ;
1816     QICE_MELT:units = "mm/s" ;
1817     QICE_MELT:cell_methods = "time: mean" ;
1818     QICE_MELT:_FillValue = 1.e+36f ;
1819     QICE_MELT:missing_value = 1.e+36f ;
1820 float QINFL(time, lat, lon) ;
1821     QINFL:long_name = "infiltration" ;
1822     QINFL:units = "mm/s" ;
1823     QINFL:cell_methods = "time: mean" ;
1824     QINFL:_FillValue = 1.e+36f ;
1825     QINFL:missing_value = 1.e+36f ;
1826 float QINTR(time, lat, lon) ;
1827     QINTR:long_name = "interception" ;
1828     QINTR:units = "mm/s" ;
1829     QINTR:cell_methods = "time: mean" ;
1830     QINTR:_FillValue = 1.e+36f ;
1831     QINTR:missing_value = 1.e+36f ;
1832 float QIRRIG(time, lat, lon) ;
1833     QIRRIG:long_name = "water added through irrigation" ;
1834     QIRRIG:units = "mm/s" ;
1835     QIRRIG:cell_methods = "time: mean" ;
1836     QIRRIG:_FillValue = 1.e+36f ;
1837     QIRRIG:missing_value = 1.e+36f ;
1838 float QOVER(time, lat, lon) ;
1839     QOVER:long_name = "surface runoff" ;
1840     QOVER:units = "mm/s" ;
1841     QOVER:cell_methods = "time: mean" ;
1842     QOVER:_FillValue = 1.e+36f ;
1843     QOVER:missing_value = 1.e+36f ;
1844 float QRGWL(time, lat, lon) ;
1845     QRGWL:long_name = "surface runoff at glaciers (liquid only), wetlands, lakes; also includes melted ice
... runoff from QSNWCPICE" ;
1846     QRGWL:units = "mm/s" ;
1847     QRGWL:cell_methods = "time: mean" ;
1848     QRGWL:_FillValue = 1.e+36f ;
1849     QRGWL:missing_value = 1.e+36f ;
1850 float QRUNOFF(time, lat, lon) ;
1851     QRUNOFF:long_name = "total liquid runoff not including correction for land use change" ;
1852     QRUNOFF:units = "mm/s" ;
1853     QRUNOFF:cell_methods = "time: mean" ;
1854     QRUNOFF:_FillValue = 1.e+36f ;
1855     QRUNOFF:missing_value = 1.e+36f ;
1856 float QRUNOFF_ICE(time, lat, lon) ;
1857     QRUNOFF_ICE:long_name = "total liquid runoff not incl corret for LULCC (ice landunits only)" ;
1858     QRUNOFF_ICE:units = "mm/s" ;
1859     QRUNOFF_ICE:cell_methods = "time: mean" ;
1860     QRUNOFF_ICE:_FillValue = 1.e+36f ;
1861     QRUNOFF_ICE:missing_value = 1.e+36f ;
1862 float QRUNOFF_ICE_TO_COUPLER(time, lat, lon) ;
1863     QRUNOFF_ICE_TO_COUPLER:long_name = "total ice runoff sent to coupler (includes corrections for land use
... change)" ;
1864     QRUNOFF_ICE_TO_COUPLER:units = "mm/s" ;
1865     QRUNOFF_ICE_TO_COUPLER:cell_methods = "time: mean" ;
1866     QRUNOFF_ICE_TO_COUPLER:_FillValue = 1.e+36f ;
1867     QRUNOFF_ICE_TO_COUPLER:missing_value = 1.e+36f ;
1868 float QRUNOFF_TO_COUPLER(time, lat, lon) ;
1869     QRUNOFF_TO_COUPLER:long_name = "total liquid runoff sent to coupler (includes corrections for land use
... change)" ;
1870     QRUNOFF_TO_COUPLER:units = "mm/s" ;
1871     QRUNOFF_TO_COUPLER:cell_methods = "time: mean" ;
1872     QRUNOFF_TO_COUPLER:_FillValue = 1.e+36f ;
1873     QRUNOFF_TO_COUPLER:missing_value = 1.e+36f ;
1874 float QSNOCPLIQ(time, lat, lon) ;
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1875     QSNOCPLIQ:long_name = "excess liquid h2o due to snow capping not including correction for land use
...     change" ;
1876     QSNOCPLIQ:units = "mm H2O/s" ;
1877     QSNOCPLIQ:cell_methods = "time: mean" ;
1878     QSNOCPLIQ:_FillValue = 1.e+36f ;
1879     QSNOCPLIQ:missing_value = 1.e+36f ;
1880 float QSNOEVP(time, lat, lon) ;
1881     QSNOEVP:long_name = "evaporation from snow" ;
1882     QSNOEVP:units = "mm/s" ;
1883     QSNOEVP:cell_methods = "time: mean" ;
1884     QSNOEVP:_FillValue = 1.e+36f ;
1885     QSNOEVP:missing_value = 1.e+36f ;
1886 float QSNOFMZ(time, lat, lon) ;
1887     QSNOFMZ:long_name = "column-integrated snow freezing rate" ;
1888     QSNOFMZ:units = "kg/m2/s" ;
1889     QSNOFMZ:cell_methods = "time: mean" ;
1890     QSNOFMZ:_FillValue = 1.e+36f ;
1891     QSNOFMZ:missing_value = 1.e+36f ;
1892 float QSNOFMZ_ICE(time, lat, lon) ;
1893     QSNOFMZ_ICE:long_name = "column-integrated snow freezing rate (ice landunits only)" ;
1894     QSNOFMZ_ICE:units = "mm/s" ;
1895     QSNOFMZ_ICE:cell_methods = "time: mean" ;
1896     QSNOFMZ_ICE:_FillValue = 1.e+36f ;
1897     QSNOFMZ_ICE:missing_value = 1.e+36f ;
1898 float QSNOMELT(time, lat, lon) ;
1899     QSNOMELT:long_name = "snow melt rate" ;
1900     QSNOMELT:units = "mm/s" ;
1901     QSNOMELT:cell_methods = "time: mean" ;
1902     QSNOMELT:_FillValue = 1.e+36f ;
1903     QSNOMELT:missing_value = 1.e+36f ;
1904 float QSNOMELT_ICE(time, lat, lon) ;
1905     QSNOMELT_ICE:long_name = "snow melt (ice landunits only)" ;
1906     QSNOMELT_ICE:units = "mm/s" ;
1907     QSNOMELT_ICE:cell_methods = "time: mean" ;
1908     QSNOMELT_ICE:_FillValue = 1.e+36f ;
1909     QSNOMELT_ICE:missing_value = 1.e+36f ;
1910 float QSN0_TEMPUNLOAD(time, lat, lon) ;
1911     QSN0_TEMPUNLOAD:long_name = "canopy snow temp unloading" ;
1912     QSN0_TEMPUNLOAD:units = "mm/s" ;
1913     QSN0_TEMPUNLOAD:cell_methods = "time: mean" ;
1914     QSN0_TEMPUNLOAD:_FillValue = 1.e+36f ;
1915     QSN0_TEMPUNLOAD:missing_value = 1.e+36f ;
1916 float QSN0_WINDUNLOAD(time, lat, lon) ;
1917     QSN0_WINDUNLOAD:long_name = "canopy snow wind unloading" ;
1918     QSN0_WINDUNLOAD:units = "mm/s" ;
1919     QSN0_WINDUNLOAD:cell_methods = "time: mean" ;
1920     QSN0_WINDUNLOAD:_FillValue = 1.e+36f ;
1921     QSN0_WINDUNLOAD:missing_value = 1.e+36f ;
1922 float QSNWCPIECE(time, lat, lon) ;
1923     QSNWCPIECE:long_name = "excess solid h2o due to snow capping not including correction for land use
...     change" ;
1924     QSNWCPIECE:units = "mm H2O/s" ;
1925     QSNWCPIECE:cell_methods = "time: mean" ;
1926     QSNWCPIECE:_FillValue = 1.e+36f ;
1927     QSNWCPIECE:missing_value = 1.e+36f ;
1928 float QSOIL(time, lat, lon) ;
1929     QSOIL:long_name = "Ground evaporation (soil/snow evaporation + soil/snow sublimation - dew)" ;
1930     QSOIL:units = "mm/s" ;
1931     QSOIL:cell_methods = "time: mean" ;
1932     QSOIL:_FillValue = 1.e+36f ;
1933     QSOIL:missing_value = 1.e+36f ;
1934 float QSOIL_ICE(time, lat, lon) ;
1935     QSOIL_ICE:long_name = "Ground evaporation (ice landunits only)" ;
1936     QSOIL_ICE:units = "mm/s" ;
1937     QSOIL_ICE:cell_methods = "time: mean" ;
1938     QSOIL_ICE:_FillValue = 1.e+36f ;
1939     QSOIL_ICE:missing_value = 1.e+36f ;
1940 float QVEGE(time, lat, lon) ;
1941     QVEGE:long_name = "canopy evaporation" ;
1942     QVEGE:units = "mm/s" ;
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1943     QVEGE:cell_methods = "time: mean" ;
1944     QVEGE:_FillValue = 1.e+36f ;
1945     QVEGE:missing_value = 1.e+36f ;
1946 float QVEGT(time, lat, lon) ;
1947     QVEGT:long_name = "canopy transpiration" ;
1948     QVEGT:units = "mm/s" ;
1949     QVEGT:cell_methods = "time: mean" ;
1950     QVEGT:_FillValue = 1.e+36f ;
1951     QVEGT:missing_value = 1.e+36f ;
1952 float RAIN(time, lat, lon) ;
1953     RAIN:long_name = "atmospheric rain, after rain/snow repartitioning based on temperature" ;
1954     RAIN:units = "mm/s" ;
1955     RAIN:cell_methods = "time: mean" ;
1956     RAIN:_FillValue = 1.e+36f ;
1957     RAIN:missing_value = 1.e+36f ;
1958 float RAIN_FROM_ATM(time, lat, lon) ;
1959     RAIN_FROM_ATM:long_name = "atmospheric rain received from atmosphere (pre-repartitioning)" ;
1960     RAIN_FROM_ATM:units = "mm/s" ;
1961     RAIN_FROM_ATM:cell_methods = "time: mean" ;
1962     RAIN_FROM_ATM:_FillValue = 1.e+36f ;
1963     RAIN_FROM_ATM:missing_value = 1.e+36f ;
1964 float RETRANSN(time, lat, lon) ;
1965     RETRANSN:long_name = "plant pool of retranslocated N" ;
1966     RETRANSN:units = "gN/m^2" ;
1967     RETRANSN:cell_methods = "time: mean" ;
1968     RETRANSN:_FillValue = 1.e+36f ;
1969     RETRANSN:missing_value = 1.e+36f ;
1970 float RETRANSN_TO_NPOOL(time, lat, lon) ;
1971     RETRANSN_TO_NPOOL:long_name = "deployment of retranslocated N" ;
1972     RETRANSN_TO_NPOOL:units = "gN/m^2/s" ;
1973     RETRANSN_TO_NPOOL:cell_methods = "time: mean" ;
1974     RETRANSN_TO_NPOOL:_FillValue = 1.e+36f ;
1975     RETRANSN_TO_NPOOL:missing_value = 1.e+36f ;
1976 float RH2M(time, lat, lon) ;
1977     RH2M:long_name = "2m relative humidity" ;
1978     RH2M:units = "%" ;
1979     RH2M:cell_methods = "time: mean" ;
1980     RH2M:_FillValue = 1.e+36f ;
1981     RH2M:missing_value = 1.e+36f ;
1982 float RR(time, lat, lon) ;
1983     RR:long_name = "root respiration (fine root MR + total root GR)" ;
1984     RR:units = "gC/m^2/s" ;
1985     RR:cell_methods = "time: mean" ;
1986     RR:_FillValue = 1.e+36f ;
1987     RR:missing_value = 1.e+36f ;
1988 float RSSHA(time, lat, lon) ;
1989     RSSHA:long_name = "shaded leaf stomatal resistance" ;
1990     RSSHA:units = "s/m" ;
1991     RSSHA:cell_methods = "time: minimum" ;
1992     RSSHA:_FillValue = 1.e+36f ;
1993     RSSHA:missing_value = 1.e+36f ;
1994 float RSSUN(time, lat, lon) ;
1995     RSSUN:long_name = "sunlit leaf stomatal resistance" ;
1996     RSSUN:units = "s/m" ;
1997     RSSUN:cell_methods = "time: minimum" ;
1998     RSSUN:_FillValue = 1.e+36f ;
1999     RSSUN:missing_value = 1.e+36f ;
2000 float SABG(time, lat, lon) ;
2001     SABG:long_name = "solar rad absorbed by ground" ;
2002     SABG:units = "W/m^2" ;
2003     SABG:cell_methods = "time: mean" ;
2004     SABG:_FillValue = 1.e+36f ;
2005     SABG:missing_value = 1.e+36f ;
2006 float SABG_PEN(time, lat, lon) ;
2007     SABG_PEN:long_name = "Rural solar rad penetrating top soil or snow layer" ;
2008     SABG_PEN:units = "watt/m^2" ;
2009     SABG_PEN:cell_methods = "time: mean" ;
2010     SABG_PEN:_FillValue = 1.e+36f ;
2011     SABG_PEN:missing_value = 1.e+36f ;
2012 float SABV(time, lat, lon) ;
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2013     SABV:long_name = "solar rad absorbed by veg" ;
2014     SABV:units = "W/m^2" ;
2015     SABV:cell_methods = "time: mean" ;
2016     SABV:_FillValue = 1.e+36f ;
2017     SABV:missing_value = 1.e+36f ;
2018     float SEEDC(time, lat, lon) ;
2019     SEEDC:long_name = "pool for seeding new PFTs via dynamic landcover" ;
2020     SEEDC:units = "gC/m^2" ;
2021     SEEDC:cell_methods = "time: mean" ;
2022     SEEDC:_FillValue = 1.e+36f ;
2023     SEEDC:missing_value = 1.e+36f ;
2024     float SEEDN(time, lat, lon) ;
2025     SEEDN:long_name = "pool for seeding new PFTs via dynamic landcover" ;
2026     SEEDN:units = "gN/m^2" ;
2027     SEEDN:cell_methods = "time: mean" ;
2028     SEEDN:_FillValue = 1.e+36f ;
2029     SEEDN:missing_value = 1.e+36f ;
2030     float SLASH_HARVESTC(time, lat, lon) ;
2031     SLASH_HARVESTC:long_name = "slash harvest carbon (to litter)" ;
2032     SLASH_HARVESTC:units = "gC/m^2/s" ;
2033     SLASH_HARVESTC:cell_methods = "time: mean" ;
2034     SLASH_HARVESTC:_FillValue = 1.e+36f ;
2035     SLASH_HARVESTC:missing_value = 1.e+36f ;
2036     float SMINN(time, lat, lon) ;
2037     SMINN:long_name = "soil mineral N" ;
2038     SMINN:units = "gN/m^2" ;
2039     SMINN:cell_methods = "time: mean" ;
2040     SMINN:_FillValue = 1.e+36f ;
2041     SMINN:missing_value = 1.e+36f ;
2042     float SMINN_TO_NPOOL(time, lat, lon) ;
2043     SMINN_TO_NPOOL:long_name = "deployment of soil mineral N uptake" ;
2044     SMINN_TO_NPOOL:units = "gN/m^2/s" ;
2045     SMINN_TO_NPOOL:cell_methods = "time: mean" ;
2046     SMINN_TO_NPOOL:_FillValue = 1.e+36f ;
2047     SMINN_TO_NPOOL:missing_value = 1.e+36f ;
2048     float SMINN_TO_PLANT(time, lat, lon) ;
2049     SMINN_TO_PLANT:long_name = "plant uptake of soil mineral N" ;
2050     SMINN_TO_PLANT:units = "gN/m^2/s" ;
2051     SMINN_TO_PLANT:cell_methods = "time: mean" ;
2052     SMINN_TO_PLANT:_FillValue = 1.e+36f ;
2053     SMINN_TO_PLANT:missing_value = 1.e+36f ;
2054     float SMINN_TO_PLANT_FUN(time, lat, lon) ;
2055     SMINN_TO_PLANT_FUN:long_name = "Total soil N uptake of FUN" ;
2056     SMINN_TO_PLANT_FUN:units = "gN/m^2/s" ;
2057     SMINN_TO_PLANT_FUN:cell_methods = "time: mean" ;
2058     SMINN_TO_PLANT_FUN:_FillValue = 1.e+36f ;
2059     SMINN_TO_PLANT_FUN:missing_value = 1.e+36f ;
2060     float SMINN_vr(time, levsoi, lat, lon) ;
2061     SMINN_vr:long_name = "soil mineral N" ;
2062     SMINN_vr:units = "gN/m^3" ;
2063     SMINN_vr:cell_methods = "time: mean" ;
2064     SMINN_vr:_FillValue = 1.e+36f ;
2065     SMINN_vr:missing_value = 1.e+36f ;
2066     float SMIN_NH4(time, lat, lon) ;
2067     SMIN_NH4:long_name = "soil mineral NH4" ;
2068     SMIN_NH4:units = "gN/m^2" ;
2069     SMIN_NH4:cell_methods = "time: mean" ;
2070     SMIN_NH4:_FillValue = 1.e+36f ;
2071     SMIN_NH4:missing_value = 1.e+36f ;
2072     float SMIN_NH4_vr(time, levsoi, lat, lon) ;
2073     SMIN_NH4_vr:long_name = "soil mineral NH4 (vert. res.)" ;
2074     SMIN_NH4_vr:units = "gN/m^3" ;
2075     SMIN_NH4_vr:cell_methods = "time: mean" ;
2076     SMIN_NH4_vr:_FillValue = 1.e+36f ;
2077     SMIN_NH4_vr:missing_value = 1.e+36f ;
2078     float SMIN_NO3(time, lat, lon) ;
2079     SMIN_NO3:long_name = "soil mineral NO3" ;
2080     SMIN_NO3:units = "gN/m^2" ;
2081     SMIN_NO3:cell_methods = "time: mean" ;
2082     SMIN_NO3:_FillValue = 1.e+36f ;
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2083     SMIN_N03:missing_value = 1.e+36f ;
2084 float SMIN_N03_LEACHED(time, lat, lon) ;
2085     SMIN_N03_LEACHED:long_name = "soil N03 pool loss to leaching" ;
2086     SMIN_N03_LEACHED:units = "gN/m^2/s" ;
2087     SMIN_N03_LEACHED:cell_methods = "time: mean" ;
2088     SMIN_N03_LEACHED:_FillValue = 1.e+36f ;
2089     SMIN_N03_LEACHED:missing_value = 1.e+36f ;
2090 float SMIN_N03_RUNOFF(time, lat, lon) ;
2091     SMIN_N03_RUNOFF:long_name = "soil N03 pool loss to runoff" ;
2092     SMIN_N03_RUNOFF:units = "gN/m^2/s" ;
2093     SMIN_N03_RUNOFF:cell_methods = "time: mean" ;
2094     SMIN_N03_RUNOFF:_FillValue = 1.e+36f ;
2095     SMIN_N03_RUNOFF:missing_value = 1.e+36f ;
2096 float SMIN_N03_vr(time, levsoi, lat, lon) ;
2097     SMIN_N03_vr:long_name = "soil mineral N03 (vert. res.)" ;
2098     SMIN_N03_vr:units = "gN/m^3" ;
2099     SMIN_N03_vr:cell_methods = "time: mean" ;
2100     SMIN_N03_vr:_FillValue = 1.e+36f ;
2101     SMIN_N03_vr:missing_value = 1.e+36f ;
2102 float SMP(time, levgrnd, lat, lon) ;
2103     SMP:long_name = "soil matric potential (vegetated landunits only)" ;
2104     SMP:units = "mm" ;
2105     SMP:cell_methods = "time: mean" ;
2106     SMP:_FillValue = 1.e+36f ;
2107     SMP:missing_value = 1.e+36f ;
2108 float SNOBCMCL(time, lat, lon) ;
2109     SNOBCMCL:long_name = "mass of BC in snow column" ;
2110     SNOBCMCL:units = "kg/m2" ;
2111     SNOBCMCL:cell_methods = "time: mean" ;
2112     SNOBCMCL:_FillValue = 1.e+36f ;
2113     SNOBCMCL:missing_value = 1.e+36f ;
2114 float SNOBCMSL(time, lat, lon) ;
2115     SNOBCMSL:long_name = "mass of BC in top snow layer" ;
2116     SNOBCMSL:units = "kg/m2" ;
2117     SNOBCMSL:cell_methods = "time: mean" ;
2118     SNOBCMSL:_FillValue = 1.e+36f ;
2119     SNOBCMSL:missing_value = 1.e+36f ;
2120 float SNOCAN(time, lat, lon) ;
2121     SNOCAN:long_name = "intercepted snow" ;
2122     SNOCAN:units = "mm" ;
2123     SNOCAN:cell_methods = "time: mean" ;
2124     SNOCAN:_FillValue = 1.e+36f ;
2125     SNOCAN:missing_value = 1.e+36f ;
2126 float SNODSTMCL(time, lat, lon) ;
2127     SNODSTMCL:long_name = "mass of dust in snow column" ;
2128     SNODSTMCL:units = "kg/m2" ;
2129     SNODSTMCL:cell_methods = "time: mean" ;
2130     SNODSTMCL:_FillValue = 1.e+36f ;
2131     SNODSTMCL:missing_value = 1.e+36f ;
2132 float SNODSTMSL(time, lat, lon) ;
2133     SNODSTMSL:long_name = "mass of dust in top snow layer" ;
2134     SNODSTMSL:units = "kg/m2" ;
2135     SNODSTMSL:cell_methods = "time: mean" ;
2136     SNODSTMSL:_FillValue = 1.e+36f ;
2137     SNODSTMSL:missing_value = 1.e+36f ;
2138 float SNOFSRND(time, lat, lon) ;
2139     SNOFSRND:long_name = "direct nir reflected solar radiation from snow" ;
2140     SNOFSRND:units = "W/m^2" ;
2141     SNOFSRND:cell_methods = "time: mean" ;
2142     SNOFSRND:_FillValue = 1.e+36f ;
2143     SNOFSRND:missing_value = 1.e+36f ;
2144 float SNOFSRNI(time, lat, lon) ;
2145     SNOFSRNI:long_name = "diffuse nir reflected solar radiation from snow" ;
2146     SNOFSRNI:units = "W/m^2" ;
2147     SNOFSRNI:cell_methods = "time: mean" ;
2148     SNOFSRNI:_FillValue = 1.e+36f ;
2149     SNOFSRNI:missing_value = 1.e+36f ;
2150 float SNOFSRVD(time, lat, lon) ;
2151     SNOFSRVD:long_name = "direct vis reflected solar radiation from snow" ;
2152     SNOFSRVD:units = "W/m^2" ;
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2153     SNOFSRVD:cell_methods = "time: mean" ;
2154     SNOFSRVD:_FillValue = 1.e+36f ;
2155     SNOFSRVD:missing_value = 1.e+36f ;
2156 float SNOFSRVI(time, lat, lon) ;
2157     SNOFSRVI:long_name = "diffuse vis reflected solar radiation from snow" ;
2158     SNOFSRVI:units = "W/m^2" ;
2159     SNOFSRVI:cell_methods = "time: mean" ;
2160     SNOFSRVI:_FillValue = 1.e+36f ;
2161     SNOFSRVI:missing_value = 1.e+36f ;
2162 float SNOINTABS(time, lat, lon) ;
2163     SNOINTABS:long_name = "Fraction of incoming solar absorbed by lower snow layers" ;
2164     SNOINTABS:units = "-" ;
2165     SNOINTABS:cell_methods = "time: mean" ;
2166     SNOINTABS:_FillValue = 1.e+36f ;
2167     SNOINTABS:missing_value = 1.e+36f ;
2168 float SNOOCMCL(time, lat, lon) ;
2169     SNOOCMCL:long_name = "mass of OC in snow column" ;
2170     SNOOCMCL:units = "kg/m2" ;
2171     SNOOCMCL:cell_methods = "time: mean" ;
2172     SNOOCMCL:_FillValue = 1.e+36f ;
2173     SNOOCMCL:missing_value = 1.e+36f ;
2174 float SNOOCMSL(time, lat, lon) ;
2175     SNOOCMSL:long_name = "mass of OC in top snow layer" ;
2176     SNOOCMSL:units = "kg/m2" ;
2177     SNOOCMSL:cell_methods = "time: mean" ;
2178     SNOOCMSL:_FillValue = 1.e+36f ;
2179     SNOOCMSL:missing_value = 1.e+36f ;
2180 float SNOTXMASS(time, lat, lon) ;
2181     SNOTXMASS:long_name = "snow temperature times layer mass, layer sum; to get mass-weighted temperature,
...    divide by (SNOWICE+SNOWLIQ)" ;
2182     SNOTXMASS:units = "K kg/m2" ;
2183     SNOTXMASS:cell_methods = "time: mean" ;
2184     SNOTXMASS:_FillValue = 1.e+36f ;
2185     SNOTXMASS:missing_value = 1.e+36f ;
2186 float SNOUNLOAD(time, lat, lon) ;
2187     SNOUNLOAD:long_name = "Canopy snow unloading" ;
2188     SNOUNLOAD:units = "mm" ;
2189     SNOUNLOAD:cell_methods = "time: mean" ;
2190     SNOUNLOAD:_FillValue = 1.e+36f ;
2191     SNOUNLOAD:missing_value = 1.e+36f ;
2192 float SNOW(time, lat, lon) ;
2193     SNOW:long_name = "atmospheric snow, after rain/snow repartitioning based on temperature" ;
2194     SNOW:units = "mm/s" ;
2195     SNOW:cell_methods = "time: mean" ;
2196     SNOW:_FillValue = 1.e+36f ;
2197     SNOW:missing_value = 1.e+36f ;
2198 float SNOWDP(time, lat, lon) ;
2199     SNOWDP:long_name = "gridcell mean snow height" ;
2200     SNOWDP:units = "m" ;
2201     SNOWDP:cell_methods = "time: mean" ;
2202     SNOWDP:_FillValue = 1.e+36f ;
2203     SNOWDP:missing_value = 1.e+36f ;
2204 float SNOWICE(time, lat, lon) ;
2205     SNOWICE:long_name = "snow ice" ;
2206     SNOWICE:units = "kg/m2" ;
2207     SNOWICE:cell_methods = "time: mean" ;
2208     SNOWICE:_FillValue = 1.e+36f ;
2209     SNOWICE:missing_value = 1.e+36f ;
2210 float SNOWLIQ(time, lat, lon) ;
2211     SNOWLIQ:long_name = "snow liquid water" ;
2212     SNOWLIQ:units = "kg/m2" ;
2213     SNOWLIQ:cell_methods = "time: mean" ;
2214     SNOWLIQ:_FillValue = 1.e+36f ;
2215     SNOWLIQ:missing_value = 1.e+36f ;
2216 float SNOW_DEPTH(time, lat, lon) ;
2217     SNOW_DEPTH:long_name = "snow height of snow covered area" ;
2218     SNOW_DEPTH:units = "m" ;
2219     SNOW_DEPTH:cell_methods = "time: mean" ;
2220     SNOW_DEPTH:_FillValue = 1.e+36f ;
2221     SNOW_DEPTH:missing_value = 1.e+36f ;
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2222 float SNOW_FROM_ATM(time, lat, lon) ;
2223     SNOW_FROM_ATM:long_name = "atmospheric snow received from atmosphere (pre-repartitioning)" ;
2224     SNOW_FROM_ATM:units = "mm/s" ;
2225     SNOW_FROM_ATM:cell_methods = "time: mean" ;
2226     SNOW_FROM_ATM:_FillValue = 1.e+36f ;
2227     SNOW_FROM_ATM:missing_value = 1.e+36f ;
2228 float SNOW_PERSISTENCE(time, lat, lon) ;
2229     SNOW_PERSISTENCE:long_name = "Length of time of continuous snow cover (nat. veg. landunits only)" ;
2230     SNOW_PERSISTENCE:units = "seconds" ;
2231     SNOW_PERSISTENCE:cell_methods = "time: instantaneous" ;
2232     SNOW_PERSISTENCE:_FillValue = 1.e+36f ;
2233     SNOW_PERSISTENCE:missing_value = 1.e+36f ;
2234 float SNOW_SINKS(time, lat, lon) ;
2235     SNOW_SINKS:long_name = "snow sinks (liquid water)" ;
2236     SNOW_SINKS:units = "mm/s" ;
2237     SNOW_SINKS:cell_methods = "time: mean" ;
2238     SNOW_SINKS:_FillValue = 1.e+36f ;
2239     SNOW_SINKS:missing_value = 1.e+36f ;
2240 float SNOW_SOURCES(time, lat, lon) ;
2241     SNOW_SOURCES:long_name = "snow sources (liquid water)" ;
2242     SNOW_SOURCES:units = "mm/s" ;
2243     SNOW_SOURCES:cell_methods = "time: mean" ;
2244     SNOW_SOURCES:_FillValue = 1.e+36f ;
2245     SNOW_SOURCES:missing_value = 1.e+36f ;
2246 float SOIL1C(time, lat, lon) ;
2247     SOIL1C:long_name = "SOIL1 C" ;
2248     SOIL1C:units = "gC/m^2" ;
2249     SOIL1C:cell_methods = "time: mean" ;
2250     SOIL1C:_FillValue = 1.e+36f ;
2251     SOIL1C:missing_value = 1.e+36f ;
2252 float SOIL1C_vr(time, levsoi, lat, lon) ;
2253     SOIL1C_vr:long_name = "SOIL1 C (vertically resolved)" ;
2254     SOIL1C_vr:units = "gC/m^3" ;
2255     SOIL1C_vr:cell_methods = "time: mean" ;
2256     SOIL1C_vr:_FillValue = 1.e+36f ;
2257     SOIL1C_vr:missing_value = 1.e+36f ;
2258 float SOIL1N(time, lat, lon) ;
2259     SOIL1N:long_name = "SOIL1 N" ;
2260     SOIL1N:units = "gN/m^2" ;
2261     SOIL1N:cell_methods = "time: mean" ;
2262     SOIL1N:_FillValue = 1.e+36f ;
2263     SOIL1N:missing_value = 1.e+36f ;
2264 float SOIL1N_vr(time, levdcmp, lat, lon) ;
2265     SOIL1N_vr:long_name = "SOIL1 N (vertically resolved)" ;
2266     SOIL1N_vr:units = "gN/m^3" ;
2267     SOIL1N_vr:cell_methods = "time: mean" ;
2268     SOIL1N_vr:_FillValue = 1.e+36f ;
2269     SOIL1N_vr:missing_value = 1.e+36f ;
2270 float SOIL2C(time, lat, lon) ;
2271     SOIL2C:long_name = "SOIL2 C" ;
2272     SOIL2C:units = "gC/m^2" ;
2273     SOIL2C:cell_methods = "time: mean" ;
2274     SOIL2C:_FillValue = 1.e+36f ;
2275     SOIL2C:missing_value = 1.e+36f ;
2276 float SOIL2C_vr(time, levsoi, lat, lon) ;
2277     SOIL2C_vr:long_name = "SOIL2 C (vertically resolved)" ;
2278     SOIL2C_vr:units = "gC/m^3" ;
2279     SOIL2C_vr:cell_methods = "time: mean" ;
2280     SOIL2C_vr:_FillValue = 1.e+36f ;
2281     SOIL2C_vr:missing_value = 1.e+36f ;
2282 float SOIL2N(time, lat, lon) ;
2283     SOIL2N:long_name = "SOIL2 N" ;
2284     SOIL2N:units = "gN/m^2" ;
2285     SOIL2N:cell_methods = "time: mean" ;
2286     SOIL2N:_FillValue = 1.e+36f ;
2287     SOIL2N:missing_value = 1.e+36f ;
2288 float SOIL2N_vr(time, levdcmp, lat, lon) ;
2289     SOIL2N_vr:long_name = "SOIL2 N (vertically resolved)" ;
2290     SOIL2N_vr:units = "gN/m^3" ;
2291     SOIL2N_vr:cell_methods = "time: mean" ;
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2292     SOIL2N_vr:_FillValue = 1.e+36f ;
2293     SOIL2N_vr:missing_value = 1.e+36f ;
2294 float SOIL3C(time, lat, lon) ;
2295     SOIL3C:long_name = "SOIL3 C" ;
2296     SOIL3C:units = "gC/m^2" ;
2297     SOIL3C:cell_methods = "time: mean" ;
2298     SOIL3C:_FillValue = 1.e+36f ;
2299     SOIL3C:missing_value = 1.e+36f ;
2300 float SOIL3C_vr(time, levsoi, lat, lon) ;
2301     SOIL3C_vr:long_name = "SOIL3 C (vertically resolved)" ;
2302     SOIL3C_vr:units = "gC/m^3" ;
2303     SOIL3C_vr:cell_methods = "time: mean" ;
2304     SOIL3C_vr:_FillValue = 1.e+36f ;
2305     SOIL3C_vr:missing_value = 1.e+36f ;
2306 float SOIL3N(time, lat, lon) ;
2307     SOIL3N:long_name = "SOIL3 N" ;
2308     SOIL3N:units = "gN/m^2" ;
2309     SOIL3N:cell_methods = "time: mean" ;
2310     SOIL3N:_FillValue = 1.e+36f ;
2311     SOIL3N:missing_value = 1.e+36f ;
2312 float SOIL3N_vr(time, levdcmp, lat, lon) ;
2313     SOIL3N_vr:long_name = "SOIL3 N (vertically resolved)" ;
2314     SOIL3N_vr:units = "gN/m^3" ;
2315     SOIL3N_vr:cell_methods = "time: mean" ;
2316     SOIL3N_vr:_FillValue = 1.e+36f ;
2317     SOIL3N_vr:missing_value = 1.e+36f ;
2318 float SOILC_CHANGE(time, lat, lon) ;
2319     SOILC_CHANGE:long_name = "C change in soil" ;
2320     SOILC_CHANGE:units = "gC/m^2/s" ;
2321     SOILC_CHANGE:cell_methods = "time: mean" ;
2322     SOILC_CHANGE:_FillValue = 1.e+36f ;
2323     SOILC_CHANGE:missing_value = 1.e+36f ;
2324 float SOILC_HR(time, lat, lon) ;
2325     SOILC_HR:long_name = "soil C heterotrophic respiration" ;
2326     SOILC_HR:units = "gC/m^2/s" ;
2327     SOILC_HR:cell_methods = "time: mean" ;
2328     SOILC_HR:_FillValue = 1.e+36f ;
2329     SOILC_HR:missing_value = 1.e+36f ;
2330 float SOILICE(time, levsoi, lat, lon) ;
2331     SOILICE:long_name = "soil ice (vegetated landunits only)" ;
2332     SOILICE:units = "kg/m2" ;
2333     SOILICE:cell_methods = "time: mean" ;
2334     SOILICE:_FillValue = 1.e+36f ;
2335     SOILICE:missing_value = 1.e+36f ;
2336 float SOILLIQ(time, levsoi, lat, lon) ;
2337     SOILLIQ:long_name = "soil liquid water (vegetated landunits only)" ;
2338     SOILLIQ:units = "kg/m2" ;
2339     SOILLIQ:cell_methods = "time: mean" ;
2340     SOILLIQ:_FillValue = 1.e+36f ;
2341     SOILLIQ:missing_value = 1.e+36f ;
2342 float SOILRESIS(time, lat, lon) ;
2343     SOILRESIS:long_name = "soil resistance to evaporation" ;
2344     SOILRESIS:units = "s/m" ;
2345     SOILRESIS:cell_methods = "time: mean" ;
2346     SOILRESIS:_FillValue = 1.e+36f ;
2347     SOILRESIS:missing_value = 1.e+36f ;
2348 float SOILWATER_10CM(time, lat, lon) ;
2349     SOILWATER_10CM:long_name = "soil liquid water + ice in top 10cm of soil (veg landunits only)" ;
2350     SOILWATER_10CM:units = "kg/m2" ;
2351     SOILWATER_10CM:cell_methods = "time: mean" ;
2352     SOILWATER_10CM:_FillValue = 1.e+36f ;
2353     SOILWATER_10CM:missing_value = 1.e+36f ;
2354 float SOMC_FIRE(time, lat, lon) ;
2355     SOMC_FIRE:long_name = "C loss due to peat burning" ;
2356     SOMC_FIRE:units = "gC/m^2/s" ;
2357     SOMC_FIRE:cell_methods = "time: mean" ;
2358     SOMC_FIRE:_FillValue = 1.e+36f ;
2359     SOMC_FIRE:missing_value = 1.e+36f ;
2360 float SOM_C_LEACHED(time, lat, lon) ;
2361     SOM_C_LEACHED:long_name = "total flux of C from SOM pools due to leaching" ;
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2362     SOM_C_LEACHED:units = "gC/m^2/s" ;
2363     SOM_C_LEACHED:cell_methods = "time: mean" ;
2364     SOM_C_LEACHED:_FillValue = 1.e+36f ;
2365     SOM_C_LEACHED:missing_value = 1.e+36f ;
2366 float SOYFIXN(time, lat, lon) ;
2367     SOYFIXN:long_name = "soybean fixation" ;
2368     SOYFIXN:units = "gN/m^2/s" ;
2369     SOYFIXN:cell_methods = "time: mean" ;
2370     SOYFIXN:_FillValue = 1.e+36f ;
2371     SOYFIXN:missing_value = 1.e+36f ;
2372 float SR(time, lat, lon) ;
2373     SR:long_name = "total soil respiration (HR + root resp)" ;
2374     SR:units = "gC/m^2/s" ;
2375     SR:cell_methods = "time: mean" ;
2376     SR:_FillValue = 1.e+36f ;
2377     SR:missing_value = 1.e+36f ;
2378 float STORVEGC(time, lat, lon) ;
2379     STORVEGC:long_name = "stored vegetation carbon, excluding cpool" ;
2380     STORVEGC:units = "gC/m^2" ;
2381     STORVEGC:cell_methods = "time: mean" ;
2382     STORVEGC:_FillValue = 1.e+36f ;
2383     STORVEGC:missing_value = 1.e+36f ;
2384 float STORVEGN(time, lat, lon) ;
2385     STORVEGN:long_name = "stored vegetation nitrogen" ;
2386     STORVEGN:units = "gN/m^2" ;
2387     STORVEGN:cell_methods = "time: mean" ;
2388     STORVEGN:_FillValue = 1.e+36f ;
2389     STORVEGN:missing_value = 1.e+36f ;
2390 float SUPPLEMENT_TO_SMINN(time, lat, lon) ;
2391     SUPPLEMENT_TO_SMINN:long_name = "supplemental N supply" ;
2392     SUPPLEMENT_TO_SMINN:units = "gN/m^2/s" ;
2393     SUPPLEMENT_TO_SMINN:cell_methods = "time: mean" ;
2394     SUPPLEMENT_TO_SMINN:_FillValue = 1.e+36f ;
2395     SUPPLEMENT_TO_SMINN:missing_value = 1.e+36f ;
2396 float SWBGT(time, lat, lon) ;
2397     SWBGT:long_name = "2 m Simplified Wetbulb Globe Temp" ;
2398     SWBGT:units = "C" ;
2399     SWBGT:cell_methods = "time: mean" ;
2400     SWBGT:_FillValue = 1.e+36f ;
2401     SWBGT:missing_value = 1.e+36f ;
2402 float SWBGT_R(time, lat, lon) ;
2403     SWBGT_R:long_name = "Rural 2 m Simplified Wetbulb Globe Temp" ;
2404     SWBGT_R:units = "C" ;
2405     SWBGT_R:cell_methods = "time: mean" ;
2406     SWBGT_R:_FillValue = 1.e+36f ;
2407     SWBGT_R:missing_value = 1.e+36f ;
2408 float SWBGT_U(time, lat, lon) ;
2409     SWBGT_U:long_name = "Urban 2 m Simplified Wetbulb Globe Temp" ;
2410     SWBGT_U:units = "C" ;
2411     SWBGT_U:cell_methods = "time: mean" ;
2412     SWBGT_U:_FillValue = 1.e+36f ;
2413     SWBGT_U:missing_value = 1.e+36f ;
2414 float TAUX(time, lat, lon) ;
2415     TAUX:long_name = "zonal surface stress" ;
2416     TAUX:units = "kg/m/s^2" ;
2417     TAUX:cell_methods = "time: mean" ;
2418     TAUX:_FillValue = 1.e+36f ;
2419     TAUX:missing_value = 1.e+36f ;
2420 float TAUU(time, lat, lon) ;
2421     TAUU:long_name = "meridional surface stress" ;
2422     TAUU:units = "kg/m/s^2" ;
2423     TAUU:cell_methods = "time: mean" ;
2424     TAUU:_FillValue = 1.e+36f ;
2425     TAUU:missing_value = 1.e+36f ;
2426 float TBOT(time, lat, lon) ;
2427     TBOT:long_name = "atmospheric air temperature (downscaled to columns in glacier regions)" ;
2428     TBOT:units = "K" ;
2429     TBOT:cell_methods = "time: mean" ;
2430     TBOT:_FillValue = 1.e+36f ;
2431     TBOT:missing_value = 1.e+36f ;
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2432 float TBUILD(time, lat, lon) ;
2433     TBUILD:long_name = "internal urban building air temperature" ;
2434     TBUILD:units = "K" ;
2435     TBUILD:cell_methods = "time: mean" ;
2436     TBUILD:_FillValue = 1.e+36f ;
2437     TBUILD:missing_value = 1.e+36f ;
2438 float TG(time, lat, lon) ;
2439     TG:long_name = "ground temperature" ;
2440     TG:units = "K" ;
2441     TG:cell_methods = "time: mean" ;
2442     TG:_FillValue = 1.e+36f ;
2443     TG:missing_value = 1.e+36f ;
2444 float TH2OSFC(time, lat, lon) ;
2445     TH2OSFC:long_name = "surface water temperature" ;
2446     TH2OSFC:units = "K" ;
2447     TH2OSFC:cell_methods = "time: mean" ;
2448     TH2OSFC:_FillValue = 1.e+36f ;
2449     TH2OSFC:missing_value = 1.e+36f ;
2450 float THBOT(time, lat, lon) ;
2451     THBOT:long_name = "atmospheric air potential temperature (downscaled to columns in glacier regions)" ;
2452     THBOT:units = "K" ;
2453     THBOT:cell_methods = "time: mean" ;
2454     THBOT:_FillValue = 1.e+36f ;
2455     THBOT:missing_value = 1.e+36f ;
2456 float TKE1(time, lat, lon) ;
2457     TKE1:long_name = "top lake level eddy thermal conductivity" ;
2458     TKE1:units = "W/(mK)" ;
2459     TKE1:cell_methods = "time: mean" ;
2460     TKE1:_FillValue = 1.e+36f ;
2461     TKE1:missing_value = 1.e+36f ;
2462 float TLAI(time, lat, lon) ;
2463     TLAI:long_name = "total projected leaf area index" ;
2464     TLAI:units = "none" ;
2465     TLAI:cell_methods = "time: mean" ;
2466     TLAI:_FillValue = 1.e+36f ;
2467     TLAI:missing_value = 1.e+36f ;
2468 float TLAKE(time, levlak, lat, lon) ;
2469     TLAKE:long_name = "lake temperature" ;
2470     TLAKE:units = "K" ;
2471     TLAKE:cell_methods = "time: mean" ;
2472     TLAKE:_FillValue = 1.e+36f ;
2473     TLAKE:missing_value = 1.e+36f ;
2474 float TOTCOLC(time, lat, lon) ;
2475     TOTCOLC:long_name = "total column carbon, incl veg and cpool but excl product pools" ;
2476     TOTCOLC:units = "gC/m^2" ;
2477     TOTCOLC:cell_methods = "time: mean" ;
2478     TOTCOLC:_FillValue = 1.e+36f ;
2479     TOTCOLC:missing_value = 1.e+36f ;
2480 float TOTCOLCH4(time, lat, lon) ;
2481     TOTCOLCH4:long_name = "total belowground CH4 (0 for non-lake special landunits in the absence of dynamic
... landunits)" ;
2482     TOTCOLCH4:units = "gC/m2" ;
2483     TOTCOLCH4:cell_methods = "time: mean" ;
2484     TOTCOLCH4:_FillValue = 1.e+36f ;
2485     TOTCOLCH4:missing_value = 1.e+36f ;
2486 float TOTCOLN(time, lat, lon) ;
2487     TOTCOLN:long_name = "total column-level N, excluding product pools" ;
2488     TOTCOLN:units = "gN/m^2" ;
2489     TOTCOLN:cell_methods = "time: mean" ;
2490     TOTCOLN:_FillValue = 1.e+36f ;
2491     TOTCOLN:missing_value = 1.e+36f ;
2492 float TOTECOSYSC(time, lat, lon) ;
2493     TOTECOSYSC:long_name = "total ecosystem carbon, incl veg but excl cpool and product pools" ;
2494     TOTECOSYSC:units = "gC/m^2" ;
2495     TOTECOSYSC:cell_methods = "time: mean" ;
2496     TOTECOSYSC:_FillValue = 1.e+36f ;
2497     TOTECOSYSC:missing_value = 1.e+36f ;
2498 float TOTECOSYSN(time, lat, lon) ;
2499     TOTECOSYSN:long_name = "total ecosystem N, excluding product pools" ;
2500     TOTECOSYSN:units = "gN/m^2" ;
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2501     TOTECOSYSN:cell_methods = "time: mean" ;
2502     TOTECOSYSN:_FillValue = 1.e+36f ;
2503     TOTECOSYSN:missing_value = 1.e+36f ;
2504     float TOTLITC(time, lat, lon) ;
2505     TOTLITC:long_name = "total litter carbon" ;
2506     TOTLITC:units = "gC/m^2" ;
2507     TOTLITC:cell_methods = "time: mean" ;
2508     TOTLITC:_FillValue = 1.e+36f ;
2509     TOTLITC:missing_value = 1.e+36f ;
2510     float TOTLITC_1m(time, lat, lon) ;
2511     TOTLITC_1m:long_name = "total litter carbon to 1 meter depth" ;
2512     TOTLITC_1m:units = "gC/m^2" ;
2513     TOTLITC_1m:cell_methods = "time: mean" ;
2514     TOTLITC_1m:_FillValue = 1.e+36f ;
2515     TOTLITC_1m:missing_value = 1.e+36f ;
2516     float TOTLITN(time, lat, lon) ;
2517     TOTLITN:long_name = "total litter N" ;
2518     TOTLITN:units = "gN/m^2" ;
2519     TOTLITN:cell_methods = "time: mean" ;
2520     TOTLITN:_FillValue = 1.e+36f ;
2521     TOTLITN:missing_value = 1.e+36f ;
2522     float TOTLITN_1m(time, lat, lon) ;
2523     TOTLITN_1m:long_name = "total litter N to 1 meter" ;
2524     TOTLITN_1m:units = "gN/m^2" ;
2525     TOTLITN_1m:cell_methods = "time: mean" ;
2526     TOTLITN_1m:_FillValue = 1.e+36f ;
2527     TOTLITN_1m:missing_value = 1.e+36f ;
2528     float TOTPFTC(time, lat, lon) ;
2529     TOTPFTC:long_name = "total patch-level carbon, including cpool" ;
2530     TOTPFTC:units = "gC/m^2" ;
2531     TOTPFTC:cell_methods = "time: mean" ;
2532     TOTPFTC:_FillValue = 1.e+36f ;
2533     TOTPFTC:missing_value = 1.e+36f ;
2534     float TOTPFTN(time, lat, lon) ;
2535     TOTPFTN:long_name = "total patch-level nitrogen" ;
2536     TOTPFTN:units = "gN/m^2" ;
2537     TOTPFTN:cell_methods = "time: mean" ;
2538     TOTPFTN:_FillValue = 1.e+36f ;
2539     TOTPFTN:missing_value = 1.e+36f ;
2540     float TOTSOILICE(time, lat, lon) ;
2541     TOTSOILICE:long_name = "vertically summed soil cie (veg landunits only)" ;
2542     TOTSOILICE:units = "kg/m2" ;
2543     TOTSOILICE:cell_methods = "time: mean" ;
2544     TOTSOILICE:_FillValue = 1.e+36f ;
2545     TOTSOILICE:missing_value = 1.e+36f ;
2546     float TOTSOILLIQ(time, lat, lon) ;
2547     TOTSOILLIQ:long_name = "vertically summed soil liquid water (veg landunits only)" ;
2548     TOTSOILLIQ:units = "kg/m2" ;
2549     TOTSOILLIQ:cell_methods = "time: mean" ;
2550     TOTSOILLIQ:_FillValue = 1.e+36f ;
2551     TOTSOILLIQ:missing_value = 1.e+36f ;
2552     float TOTSOMC(time, lat, lon) ;
2553     TOTSOMC:long_name = "total soil organic matter carbon" ;
2554     TOTSOMC:units = "gC/m^2" ;
2555     TOTSOMC:cell_methods = "time: mean" ;
2556     TOTSOMC:_FillValue = 1.e+36f ;
2557     TOTSOMC:missing_value = 1.e+36f ;
2558     float TOTSOMC_1m(time, lat, lon) ;
2559     TOTSOMC_1m:long_name = "total soil organic matter carbon to 1 meter depth" ;
2560     TOTSOMC_1m:units = "gC/m^2" ;
2561     TOTSOMC_1m:cell_methods = "time: mean" ;
2562     TOTSOMC_1m:_FillValue = 1.e+36f ;
2563     TOTSOMC_1m:missing_value = 1.e+36f ;
2564     float TOTSOMN(time, lat, lon) ;
2565     TOTSOMN:long_name = "total soil organic matter N" ;
2566     TOTSOMN:units = "gN/m^2" ;
2567     TOTSOMN:cell_methods = "time: mean" ;
2568     TOTSOMN:_FillValue = 1.e+36f ;
2569     TOTSOMN:missing_value = 1.e+36f ;
2570     float TOTSOMN_1m(time, lat, lon) ;
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2571     TOTSOMN_1m:long_name = "total soil organic matter N to 1 meter" ;
2572     TOTSOMN_1m:units = "gN/m^2" ;
2573     TOTSOMN_1m:cell_methods = "time: mean" ;
2574     TOTSOMN_1m:_FillValue = 1.e+36f ;
2575     TOTSOMN_1m:missing_value = 1.e+36f ;
2576 float TOTVEGC(time, lat, lon) ;
2577     TOTVEGC:long_name = "total vegetation carbon, excluding cpool" ;
2578     TOTVEGC:units = "gC/m^2" ;
2579     TOTVEGC:cell_methods = "time: mean" ;
2580     TOTVEGC:_FillValue = 1.e+36f ;
2581     TOTVEGC:missing_value = 1.e+36f ;
2582 float TOTVEGN(time, lat, lon) ;
2583     TOTVEGN:long_name = "total vegetation nitrogen" ;
2584     TOTVEGN:units = "gN/m^2" ;
2585     TOTVEGN:cell_methods = "time: mean" ;
2586     TOTVEGN:_FillValue = 1.e+36f ;
2587     TOTVEGN:missing_value = 1.e+36f ;
2588 float TOT_WOODPRODC(time, lat, lon) ;
2589     TOT_WOODPRODC:long_name = "total wood product C" ;
2590     TOT_WOODPRODC:units = "gC/m^2" ;
2591     TOT_WOODPRODC:cell_methods = "time: mean" ;
2592     TOT_WOODPRODC:_FillValue = 1.e+36f ;
2593     TOT_WOODPRODC:missing_value = 1.e+36f ;
2594 float TOT_WOODPRODC_LOSS(time, lat, lon) ;
2595     TOT_WOODPRODC_LOSS:long_name = "total loss from wood product pools" ;
2596     TOT_WOODPRODC_LOSS:units = "gC/m^2/s" ;
2597     TOT_WOODPRODC_LOSS:cell_methods = "time: mean" ;
2598     TOT_WOODPRODC_LOSS:_FillValue = 1.e+36f ;
2599     TOT_WOODPRODC_LOSS:missing_value = 1.e+36f ;
2600 float TOT_WOODPRODN(time, lat, lon) ;
2601     TOT_WOODPRODN:long_name = "total wood product N" ;
2602     TOT_WOODPRODN:units = "gN/m^2" ;
2603     TOT_WOODPRODN:cell_methods = "time: mean" ;
2604     TOT_WOODPRODN:_FillValue = 1.e+36f ;
2605     TOT_WOODPRODN:missing_value = 1.e+36f ;
2606 float TOT_WOODPRODN_LOSS(time, lat, lon) ;
2607     TOT_WOODPRODN_LOSS:long_name = "total loss from wood product pools" ;
2608     TOT_WOODPRODN_LOSS:units = "gN/m^2/s" ;
2609     TOT_WOODPRODN_LOSS:cell_methods = "time: mean" ;
2610     TOT_WOODPRODN_LOSS:_FillValue = 1.e+36f ;
2611     TOT_WOODPRODN_LOSS:missing_value = 1.e+36f ;
2612 float TPU25T(time, lat, lon) ;
2613     TPU25T:long_name = "canopy profile of tpu" ;
2614     TPU25T:units = "umol/m2/s" ;
2615     TPU25T:cell_methods = "time: minimum" ;
2616     TPU25T:_FillValue = 1.e+36f ;
2617     TPU25T:missing_value = 1.e+36f ;
2618 float TREFMNAV(time, lat, lon) ;
2619     TREFMNAV:long_name = "daily minimum of average 2-m temperature" ;
2620     TREFMNAV:units = "K" ;
2621     TREFMNAV:cell_methods = "time: mean" ;
2622     TREFMNAV:_FillValue = 1.e+36f ;
2623     TREFMNAV:missing_value = 1.e+36f ;
2624 float TREFMXAV(time, lat, lon) ;
2625     TREFMXAV:long_name = "daily maximum of average 2-m temperature" ;
2626     TREFMXAV:units = "K" ;
2627     TREFMXAV:cell_methods = "time: mean" ;
2628     TREFMXAV:_FillValue = 1.e+36f ;
2629     TREFMXAV:missing_value = 1.e+36f ;
2630 float TSA(time, lat, lon) ;
2631     TSA:long_name = "2m air temperature" ;
2632     TSA:units = "K" ;
2633     TSA:cell_methods = "time: mean" ;
2634     TSA:_FillValue = 1.e+36f ;
2635     TSA:missing_value = 1.e+36f ;
2636 float TSAI(time, lat, lon) ;
2637     TSAI:long_name = "total projected stem area index" ;
2638     TSAI:units = "none" ;
2639     TSAI:cell_methods = "time: mean" ;
2640     TSAI:_FillValue = 1.e+36f ;
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2641     TSAI:missing_value = 1.e+36f ;
2642     float TSOI(time, levgrnd, lat, lon) ;
2643     TSOI:long_name = "soil temperature (vegetated landunits only)" ;
2644     TSOI:units = "K" ;
2645     TSOI:cell_methods = "time: mean" ;
2646     TSOI:_FillValue = 1.e+36f ;
2647     TSOI:missing_value = 1.e+36f ;
2648     float TSOI_10CM(time, lat, lon) ;
2649     TSOI_10CM:long_name = "soil temperature in top 10cm of soil" ;
2650     TSOI_10CM:units = "K" ;
2651     TSOI_10CM:cell_methods = "time: mean" ;
2652     TSOI_10CM:_FillValue = 1.e+36f ;
2653     TSOI_10CM:missing_value = 1.e+36f ;
2654     float TSOI_ICE(time, levgrnd, lat, lon) ;
2655     TSOI_ICE:long_name = "soil temperature (ice landunits only)" ;
2656     TSOI_ICE:units = "K" ;
2657     TSOI_ICE:cell_methods = "time: mean" ;
2658     TSOI_ICE:_FillValue = 1.e+36f ;
2659     TSOI_ICE:missing_value = 1.e+36f ;
2660     float TV(time, lat, lon) ;
2661     TV:long_name = "vegetation temperature" ;
2662     TV:units = "K" ;
2663     TV:cell_methods = "time: mean" ;
2664     TV:_FillValue = 1.e+36f ;
2665     TV:missing_value = 1.e+36f ;
2666     float TWS(time, lat, lon) ;
2667     TWS:long_name = "total water storage" ;
2668     TWS:units = "mm" ;
2669     TWS:cell_methods = "time: mean" ;
2670     TWS:_FillValue = 1.e+36f ;
2671     TWS:missing_value = 1.e+36f ;
2672     float T_SCALAR(time, levsoi, lat, lon) ;
2673     T_SCALAR:long_name = "temperature inhibition of decomposition" ;
2674     T_SCALAR:units = "unitless" ;
2675     T_SCALAR:cell_methods = "time: mean" ;
2676     T_SCALAR:_FillValue = 1.e+36f ;
2677     T_SCALAR:missing_value = 1.e+36f ;
2678     float U10(time, lat, lon) ;
2679     U10:long_name = "10-m wind" ;
2680     U10:units = "m/s" ;
2681     U10:cell_methods = "time: mean" ;
2682     U10:_FillValue = 1.e+36f ;
2683     U10:missing_value = 1.e+36f ;
2684     float U10_DUST(time, lat, lon) ;
2685     U10_DUST:long_name = "10-m wind for dust model" ;
2686     U10_DUST:units = "m/s" ;
2687     U10_DUST:cell_methods = "time: mean" ;
2688     U10_DUST:_FillValue = 1.e+36f ;
2689     U10_DUST:missing_value = 1.e+36f ;
2690     float URBAN_AC(time, lat, lon) ;
2691     URBAN_AC:long_name = "urban air conditioning flux" ;
2692     URBAN_AC:units = "W/m^2" ;
2693     URBAN_AC:cell_methods = "time: mean" ;
2694     URBAN_AC:_FillValue = 1.e+36f ;
2695     URBAN_AC:missing_value = 1.e+36f ;
2696     float URBAN_HEAT(time, lat, lon) ;
2697     URBAN_HEAT:long_name = "urban heating flux" ;
2698     URBAN_HEAT:units = "W/m^2" ;
2699     URBAN_HEAT:cell_methods = "time: mean" ;
2700     URBAN_HEAT:_FillValue = 1.e+36f ;
2701     URBAN_HEAT:missing_value = 1.e+36f ;
2702     float VCMX25T(time, lat, lon) ;
2703     VCMX25T:long_name = "canopy profile of vcmax25" ;
2704     VCMX25T:units = "umol/m2/s" ;
2705     VCMX25T:cell_methods = "time: minimum" ;
2706     VCMX25T:_FillValue = 1.e+36f ;
2707     VCMX25T:missing_value = 1.e+36f ;
2708     float VEGWP(time, nvegwcs, lat, lon) ;
2709     VEGWP:long_name = "vegetation water matric potential for sun/sha canopy,xyl,root segments" ;
2710     VEGWP:units = "mm" ;
```

```
2711     VEGWP:cell_methods = "time: mean" ;
2712     VEGWP:_FillValue = 1.e+36f ;
2713     VEGWP:missing_value = 1.e+36f ;
2714 float VOLR(time, lat, lon) ;
2715     VOLR:long_name = "river channel total water storage" ;
2716     VOLR:units = "m3" ;
2717     VOLR:cell_methods = "time: mean" ;
2718     VOLR:_FillValue = 1.e+36f ;
2719     VOLR:missing_value = 1.e+36f ;
2720 float VOLRMCH(time, lat, lon) ;
2721     VOLRMCH:long_name = "river channel main channel water storage" ;
2722     VOLRMCH:units = "m3" ;
2723     VOLRMCH:cell_methods = "time: mean" ;
2724     VOLRMCH:_FillValue = 1.e+36f ;
2725     VOLRMCH:missing_value = 1.e+36f ;
2726 float Vcmx25Z(time, lat, lon) ;
2727     Vcmx25Z:long_name = "canopy profile of vcmax25 predicted by LUNA model" ;
2728     Vcmx25Z:units = "umol/m2/s" ;
2729     Vcmx25Z:cell_methods = "time: mean" ;
2730     Vcmx25Z:_FillValue = 1.e+36f ;
2731     Vcmx25Z:missing_value = 1.e+36f ;
2732 float WA(time, lat, lon) ;
2733     WA:long_name = "water in the unconfined aquifer (vegetated landunits only)" ;
2734     WA:units = "mm" ;
2735     WA:cell_methods = "time: mean" ;
2736     WA:_FillValue = 1.e+36f ;
2737     WA:missing_value = 1.e+36f ;
2738 float WASTEHEAT(time, lat, lon) ;
2739     WASTEHEAT:long_name = "sensible heat flux from heating/cooling sources of urban waste heat" ;
2740     WASTEHEAT:units = "W/m^2" ;
2741     WASTEHEAT:cell_methods = "time: mean" ;
2742     WASTEHEAT:_FillValue = 1.e+36f ;
2743     WASTEHEAT:missing_value = 1.e+36f ;
2744 float WBT(time, lat, lon) ;
2745     WBT:long_name = "2 m Stull Wet Bulb" ;
2746     WBT:units = "C" ;
2747     WBT:cell_methods = "time: mean" ;
2748     WBT:_FillValue = 1.e+36f ;
2749     WBT:missing_value = 1.e+36f ;
2750 float WBT_R(time, lat, lon) ;
2751     WBT_R:long_name = "Rural 2 m Stull Wet Bulb" ;
2752     WBT_R:units = "C" ;
2753     WBT_R:cell_methods = "time: mean" ;
2754     WBT_R:_FillValue = 1.e+36f ;
2755     WBT_R:missing_value = 1.e+36f ;
2756 float WBT_U(time, lat, lon) ;
2757     WBT_U:long_name = "Urban 2 m Stull Wet Bulb" ;
2758     WBT_U:units = "C" ;
2759     WBT_U:cell_methods = "time: mean" ;
2760     WBT_U:_FillValue = 1.e+36f ;
2761     WBT_U:missing_value = 1.e+36f ;
2762 float WIND(time, lat, lon) ;
2763     WIND:long_name = "atmospheric wind velocity magnitude" ;
2764     WIND:units = "m/s" ;
2765     WIND:cell_methods = "time: mean" ;
2766     WIND:_FillValue = 1.e+36f ;
2767     WIND:missing_value = 1.e+36f ;
2768 float WOODC(time, lat, lon) ;
2769     WOODC:long_name = "wood C" ;
2770     WOODC:units = "gC/m^2" ;
2771     WOODC:cell_methods = "time: mean" ;
2772     WOODC:_FillValue = 1.e+36f ;
2773     WOODC:missing_value = 1.e+36f ;
2774 float WOODC_ALLOC(time, lat, lon) ;
2775     WOODC_ALLOC:long_name = "wood C eallocation" ;
2776     WOODC_ALLOC:units = "gC/m^2/s" ;
2777     WOODC_ALLOC:cell_methods = "time: mean" ;
2778     WOODC_ALLOC:_FillValue = 1.e+36f ;
2779     WOODC_ALLOC:missing_value = 1.e+36f ;
2780 float WOODC_LOSS(time, lat, lon) ;
```



```
2781     WOODC_LOSS:long_name = "wood C loss" ;
2782     WOODC_LOSS:units = "gC/m^2/s" ;
2783     WOODC_LOSS:cell_methods = "time: mean" ;
2784     WOODC_LOSS:_FillValue = 1.e+36f ;
2785     WOODC_LOSS:missing_value = 1.e+36f ;
2786     float WOOD_HARVESTC(time, lat, lon) ;
2787     WOOD_HARVESTC:long_name = "wood harvest carbon (to product pools)" ;
2788     WOOD_HARVESTC:units = "gC/m^2/s" ;
2789     WOOD_HARVESTC:cell_methods = "time: mean" ;
2790     WOOD_HARVESTC:_FillValue = 1.e+36f ;
2791     WOOD_HARVESTC:missing_value = 1.e+36f ;
2792     float WOOD_HARVESTN(time, lat, lon) ;
2793     WOOD_HARVESTN:long_name = "wood harvest N (to product pools)" ;
2794     WOOD_HARVESTN:units = "gN/m^2/s" ;
2795     WOOD_HARVESTN:cell_methods = "time: mean" ;
2796     WOOD_HARVESTN:_FillValue = 1.e+36f ;
2797     WOOD_HARVESTN:missing_value = 1.e+36f ;
2798     float WTGQ(time, lat, lon) ;
2799     WTGQ:long_name = "surface tracer conductance" ;
2800     WTGQ:units = "m/s" ;
2801     WTGQ:cell_methods = "time: mean" ;
2802     WTGQ:_FillValue = 1.e+36f ;
2803     WTGQ:missing_value = 1.e+36f ;
2804     float W_SCALAR(time, levsoi, lat, lon) ;
2805     W_SCALAR:long_name = "Moisture (dryness) inhibition of decomposition" ;
2806     W_SCALAR:units = "unitless" ;
2807     W_SCALAR:cell_methods = "time: mean" ;
2808     W_SCALAR:_FillValue = 1.e+36f ;
2809     W_SCALAR:missing_value = 1.e+36f ;
2810     float XSMRPOOL(time, lat, lon) ;
2811     XSMRPOOL:long_name = "temporary photosynthate C pool" ;
2812     XSMRPOOL:units = "gC/m^2" ;
2813     XSMRPOOL:cell_methods = "time: mean" ;
2814     XSMRPOOL:_FillValue = 1.e+36f ;
2815     XSMRPOOL:missing_value = 1.e+36f ;
2816     float XSMRPOOL_RECOVER(time, lat, lon) ;
2817     XSMRPOOL_RECOVER:long_name = "C flux assigned to recovery of negative xsmrpool" ;
2818     XSMRPOOL_RECOVER:units = "gC/m^2/s" ;
2819     XSMRPOOL_RECOVER:cell_methods = "time: mean" ;
2820     XSMRPOOL_RECOVER:_FillValue = 1.e+36f ;
2821     XSMRPOOL_RECOVER:missing_value = 1.e+36f ;
2822     float ZBOT(time, lat, lon) ;
2823     ZBOT:long_name = "atmospheric reference height" ;
2824     ZBOT:units = "m" ;
2825     ZBOT:cell_methods = "time: mean" ;
2826     ZBOT:_FillValue = 1.e+36f ;
2827     ZBOT:missing_value = 1.e+36f ;
2828     float ZWT(time, lat, lon) ;
2829     ZWT:long_name = "water table depth (vegetated landunits only)" ;
2830     ZWT:units = "m" ;
2831     ZWT:cell_methods = "time: mean" ;
2832     ZWT:_FillValue = 1.e+36f ;
2833     ZWT:missing_value = 1.e+36f ;
2834     float ZWT_CH4_UNSAT(time, lat, lon) ;
2835     ZWT_CH4_UNSAT:long_name = "depth of water table for methane production used in non-inundated area" ;
2836     ZWT_CH4_UNSAT:units = "m" ;
2837     ZWT_CH4_UNSAT:cell_methods = "time: mean" ;
2838     ZWT_CH4_UNSAT:_FillValue = 1.e+36f ;
2839     ZWT_CH4_UNSAT:missing_value = 1.e+36f ;
2840     float ZWT_PERCH(time, lat, lon) ;
2841     ZWT_PERCH:long_name = "perched water table depth (vegetated landunits only)" ;
2842     ZWT_PERCH:units = "m" ;
2843     ZWT_PERCH:cell_methods = "time: mean" ;
2844     ZWT_PERCH:_FillValue = 1.e+36f ;
2845     ZWT_PERCH:missing_value = 1.e+36f ;
2846
2847 // global attributes:
2848 :title = "CLM History file information" ;
2849 :comment = "NOTE: None of the variables are weighted by land fraction!" ;
2850 :Conventions = "CF-1.0" ;
```

```
2851 :history = "created on 06/22/18 12:54:52" ;
2852 :source = "Community Land Model CLM4.0" ;
2853 :hostname = "cheyenne" ;
2854 :username = "baird" ;
2855 :version = "cesm2.0.0" ;
2856 :revision_id = "$Id: histFileMod.F90 42903 2012-12-21 15:32:10Z muszala $" ;
2857 :case_title = "UNSET" ;
2858 :case_id = "FHIST.test.default" ;
2859 :Surface_dataset = "surfdata_0.9x1.25_78pfts_CMIP6_simyr1850_c170824.nc" ;
2860 :Initial_conditions_dataset = "b.e20.BHIST.f09_g17.20thC.297_01_v2.clm2.r.1979-01-01-00000.nc" ;
2861 :PFT_physiological_constants_dataset = "clm5_params.c171117.nc" ;
2862 :ltype_vegetated_or_bare_soil = 1 ;
2863 :ltype_crop = 2 ;
2864 :ltype_UNUSED = 3 ;
2865 :ltype_landice_multiple_elevation_classes = 4 ;
2866 :ltype_deep_lake = 5 ;
2867 :ltype_wetland = 6 ;
2868 :ltype_urban_tbd = 7 ;
2869 :ltype_urban_hd = 8 ;
2870 :ltype_urban_md = 9 ;
2871 :ctype_vegetated_or_bare_soil = 1 ;
2872 :ctype_crop = 2 ;
2873 :ctype_crop_noncompete = "2*100+m, m=cft_lb,cft_ub" ;
2874 :ctype_landice = 3 ;
2875 :ctype_landice_multiple_elevation_classes = "4*100+m, m=1,glcnec" ;
2876 :ctype_deep_lake = 5 ;
2877 :ctype_wetland = 6 ;
2878 :ctype_urban_roof = 71 ;
2879 :ctype_urban_sunwall = 72 ;
2880 :ctype_urban_shadewall = 73 ;
2881 :ctype_urban_impervious_road = 74 ;
2882 :ctype_urban_pervious_road = 75 ;
2883 :cft_c3_crop = 1 ;
2884 :cft_c3_irrigated = 2 ;
2885 :cft_temperate_corn = 3 ;
2886 :cft_irrigated_temperate_corn = 4 ;
2887 :cft_spring_wheat = 5 ;
2888 :cft_irrigated_spring_wheat = 6 ;
2889 :cft_winter_wheat = 7 ;
2890 :cft_irrigated_winter_wheat = 8 ;
2891 :cft_temperate_soybean = 9 ;
2892 :cft_irrigated_temperate_soybean = 10 ;
2893 :cft_barley = 11 ;
2894 :cft_irrigated_barley = 12 ;
2895 :cft_winter_barley = 13 ;
2896 :cft_irrigated_winter_barley = 14 ;
2897 :cft_rye = 15 ;
2898 :cft_irrigated_rye = 16 ;
2899 :cft_winter_rye = 17 ;
2900 :cft_irrigated_winter_rye = 18 ;
2901 :cft_cassava = 19 ;
2902 :cft_irrigated_cassava = 20 ;
2903 :cft_citrus = 21 ;
2904 :cft_irrigated_citrus = 22 ;
2905 :cft_cocoa = 23 ;
2906 :cft_irrigated_cocoa = 24 ;
2907 :cft_coffee = 25 ;
2908 :cft_irrigated_coffee = 26 ;
2909 :cft_cotton = 27 ;
2910 :cft_irrigated_cotton = 28 ;
2911 :cft_datepalm = 29 ;
2912 :cft_irrigated_datepalm = 30 ;
2913 :cft_foddergrass = 31 ;
2914 :cft_irrigated_foddergrass = 32 ;
2915 :cft_grapes = 33 ;
2916 :cft_irrigated_grapes = 34 ;
2917 :cft_groundnuts = 35 ;
2918 :cft_irrigated_groundnuts = 36 ;
2919 :cft_millet = 37 ;
2920 :cft_irrigated_millet = 38 ;
```

```
2921      :cft_oilpalm = 39 ;
2922      :cft_irrigated_oilpalm = 40 ;
2923      :cft_potatoes = 41 ;
2924      :cft_irrigated_potatoes = 42 ;
2925      :cft_pulses = 43 ;
2926      :cft_irrigated_pulses = 44 ;
2927      :cft_rapeseed = 45 ;
2928      :cft_irrigated_rapeseed = 46 ;
2929      :cft_rice = 47 ;
2930      :cft_irrigated_rice = 48 ;
2931      :cft_sorghum = 49 ;
2932      :cft_irrigated_sorghum = 50 ;
2933      :cft_sugarbeet = 51 ;
2934      :cft_irrigated_sugarbeet = 52 ;
2935      :cft_sugarcane = 53 ;
2936      :cft_irrigated_sugarcane = 54 ;
2937      :cft_sunflower = 55 ;
2938      :cft_irrigated_sunflower = 56 ;
2939      :cft_miscanthus = 57 ;
2940      :cft_irrigated_miscanthus = 58 ;
2941      :cft_switchgrass = 59 ;
2942      :cft_irrigated_switchgrass = 60 ;
2943      :cft_tropical_corn = 61 ;
2944      :cft_irrigated_tropical_corn = 62 ;
2945      :cft_tropical_soybean = 63 ;
2946      :cft_irrigated_tropical_soybean = 64 ;
2947      :time_period_freq = "month_1" ;
2948  }
2949
```