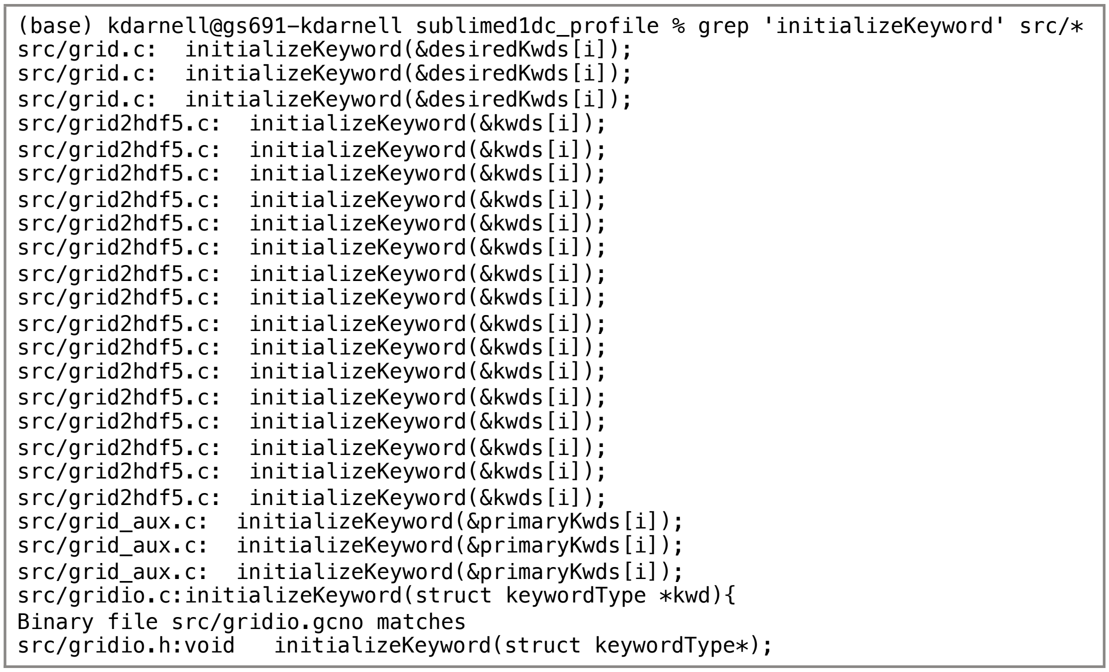
'src/gridio.c'

□

Wednesday, May 24, 2023 1:12 PM

Functions:

- ☑ function initializeKeyword



```
(base) kdarnell@gs691-kdarnell sublimed1dc_profile % grep 'initializeKeyword' src/*
src/grid.c:  initializeKeyword(&desiredKwds[i]);
src/grid.c:  initializeKeyword(&desiredKwds[i]);
src/grid.c:  initializeKeyword(&desiredKwds[i]);
src/grid2hdf5.c:  initializeKeyword(&kwds[i]);
src/grid2hdf5.c:  initializeKeyword(&kwds[i]);
src/grid2hdf5.c:  initializeKeyword(&kwds[i]);
src/grid2hdf5.c:  initializeKeyword(&kwds[i]);
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src/grid2hdf5.c:  initializeKeyword(&kwds[i]);
src/grid2hdf5.c:  initializeKeyword(&kwds[i]);
src/grid2hdf5.c:  initializeKeyword(&kwds[i]);
src/grid_aux.c:  initializeKeyword(&primaryKwds[i]);
src/grid_aux.c:  initializeKeyword(&primaryKwds[i]);
src/grid_aux.c:  initializeKeyword(&primaryKwds[i]);
src/gridio.c:initializeKeyword(struct keywordType *kwd){
Binary file src/gridio.gcno matches
src/gridio.h:void   initializeKeyword(struct keywordType*);
```
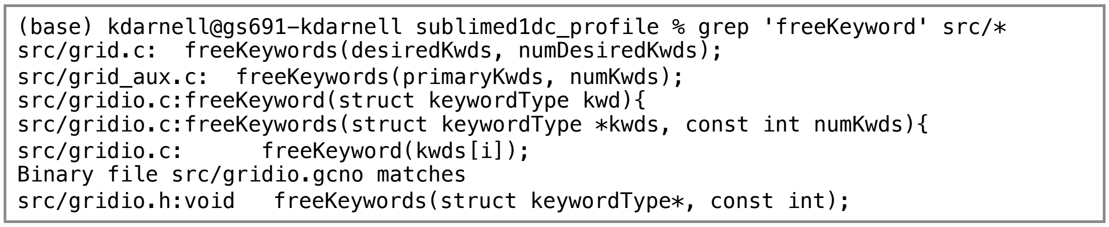

Located in:

  - ○ Grid.c
  - ○ Grid2hdf5.c
  - ○ Grid_aux.c
  - → Function removed, hcn.pop output remains unchanged.

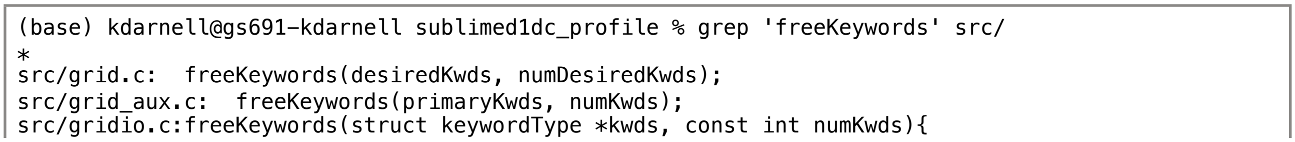
- ☑ function freeKeyword



```
(base) kdarnell@gs691-kdarnell sublimed1dc_profile % grep 'freeKeyword' src/*
src/grid.c:  freeKeywords(desiredKwds, numDesiredKwds);
src/grid_aux.c:  freeKeywords(primaryKwds, numKwds);
src/gridio.c:freeKeyword(struct keywordType kwd){
src/gridio.c:freeKeywords(struct keywordType *kwds, const int numKwds){
src/gridio.c:      freeKeyword(kwds[i]);
Binary file src/gridio.gcno matches
src/gridio.h:void   freeKeywords(struct keywordType*, const int);
```

  - ○ No changes made, only found in files I want to delete

- ☑ function freeKeywords



```
(base) kdarnell@gs691-kdarnell sublimed1dc_profile % grep 'freeKeywords' src/
*
src/grid.c:  freeKeywords(desiredKwds, numDesiredKwds);
src/grid_aux.c:  freeKeywords(primaryKwds, numKwds);
src/gridio.c:freeKeywords(struct keywordType *kwds, const int numKwds){
```

```
Binary file src/gridio.gcno matches
src/gridio.h:void   freeKeywords(struct keywordType*, const int);
```

Located in:

- ○ Grid.c
- ○ Grid_aux.c

→ Function removed, hcn.pop output remains unchanged.

☑ • function freeGridInfo

```
(base) kdarnell@gs691-kdarnell sublimed1dc_profile % grep 'freeGridInfo' src/
*
src/grid.c:  freeGridInfo(&gridInfoRead);
src/grid_aux.c:  freeGridInfo(&gridInfo);
src/gridio.c:freeGridInfo(struct gridInfoType *gridInfo){
Binary file src/gridio.gcno matches
src/gridio.h:void   freeGridInfo(struct gridInfoType*);
```

Located in:

- ○ Grid.c
- ○ Grid_aux.c

→ Function removed, hcn.pop output remains unchanged.

☑ • function openFileForWrite

```
(base) kdarnell@gs691-kdarnell sublimed1dc_profile % grep 'openFileForWrite' src/*
src/gridio.c:openFileForWrite(char *outFileName){
src/gridio.c:  fptr = openFileForWrite(outFileName);
Binary file src/gridio.gcno matches
```

- ○ No changes made, only found in files I want to delete

☑ • function constructLinkArrays

```
(base) kdarnell@gs691-kdarnell sublimed1dc_profile % grep 'constructLinkArrays' src/*
src/gridio.c:constructLinkArrays(struct gridInfoType gridInfo, struct grid *gp, struct linkType
**links\
src/gridio.c:  constructLinkArrays(gridInfo, gp, &links, &gridInfo.nLinks\
Binary file src/gridio.gcno matches
```

- ○ No changes made, only found in files I want to delete

☑ • function closeFile

```
(base) kdarnell@gs691-kdarnell sublimed1dc_profile % grep 'closeFile' src/*
src/gridio.c:closeFile(lime_fptr fptr){
src/gridio.c:  closeFile(fptr);
Binary file src/gridio.gcno matches
```

- ○ No changes made, only found in files I want to delete

☑ • function closeAndFree

```
(base) kdarnell@gs691-kdarnell sublimed1dc_profile % grep 'closeAndFree' src/*
src/gridio.c:closeAndFree(lime_fptr fptr\
src/gridio.c:    closeAndFree(fptr, firstNearNeigh, nnLinks, links, gridInfo.nLinks);
src/gridio.c:    closeAndFree(fptr, firstNearNeigh, nnLinks, links, gridInfo.nLinks);
src/gridio.c:    closeAndFree(fptr, firstNearNeigh, nnLinks, links, gridInfo.nLinks);
src/gridio.c:      closeAndFree(fptr, firstNearNeigh, nnLinks, links, gridInfo.nLinks);
src/gridio.c:      closeAndFree(fptr, firstNearNeigh, nnLinks, links, gridInfo.nLinks);
src/gridio.c:        closeAndFree(fptr, firstNearNeigh, nnLinks, links, gridInfo.nLinks);
src/gridio.c:  closeAndFree(fptr, firstNearNeigh, nnLinks, links, gridInfo.nLinks);
src/gridio.c:    closeAndFree(fptr, firstNearNeigh, nnLinks, links, 0);
src/gridio.c:    closeAndFree(fptr, firstNearNeigh, nnLinks, links, 0);
src/gridio.c:    closeAndFree(fptr, firstNearNeigh, nnLinks, links, 0);
src/gridio.c:    closeAndFree(fptr, firstNearNeigh, nnLinks, links, 0);
src/gridio.c:    closeAndFree(fptr, firstNearNeigh, nnLinks, links, gridInfoRead->nLinks);
src/gridio.c:    closeAndFree(fptr, firstNearNeigh, nnLinks, links, gridInfoRead->nLinks);
```

```
src/gridio.c:    closeAndFree(fptr, firstNearNeigh, nnLinks, links, gridInfoRead->nLinks);
src/gridio.c:    closeAndFree(fptr, firstNearNeigh, nnLinks, links, gridInfoRead->nLinks);
src/gridio.c:    closeAndFree(fptr, firstNearNeigh, nnLinks, links, gridInfoRead->nLinks);
src/gridio.c:    closeAndFree(fptr, firstNearNeigh, nnLinks, links, gridInfoRead->nLinks);
src/gridio.c:        closeAndFree(fptr, firstNearNeigh, nnLinks, links, gridInfoRead->nLinks);
src/gridio.c:        closeAndFree(fptr, firstNearNeigh, nnLinks, links, gridInfoRead->nLinks);
src/gridio.c:  closeAndFree(fptr, firstNearNeigh, nnLinks, links, gridInfoRead->nLinks);
Binary file src/gridio.gcno matches
```

  - ○ No changes made, only found in files I want to delete

- ☑ function writeKeywords

```
(base) kdarnell@gs691-kdarnell sublimed1dc_profile % grep 'writeKeywords' src/*
src/grid2fits.c:writeKeywordsToFITS(fitsfile *fptr, struct keywordType *kwds\
Binary file src/grid2fits.gcno matches
src/grid2fits.h:void          writeKeywordsToFITS(fitsfile*, struct keywordType*, const int);
src/grid2hdf5.c:writeKeywordsToHDF5(hid_t parent, struct keywordType *kwds\
src/grid2hdf5.h:void          writeKeywordsToHDF5(hid_t parent, struct keywordType *kwds, const 
int numKeywords);
src/gridio.c:writeKeywords(lime_fptr fptr\
src/gridio.c:  writeKeywordsToHDF5(fptr, kwds, numKeywords);
src/gridio.c:  writeKeywordsToFITS(fptr, kwds, numKeywords);
src/gridio.c:  status = writeKeywords(fptr, primaryKwds, numKeywords);
Binary file src/gridio.gcno matches
```

  - ○ No changes made, only found in files I want to delete

- ☑ function writeGridTable

```
(base) kdarnell@gs691-kdarnell sublimed1dc_profile % grep 'writeGridTable' src/*
src/gridio.c:writeGridTable(lime_fptr fptr\
src/gridio.c:  status = writeGridTable(fptr, gridInfo, gp, firstNearNeigh, collPartNames, 
dataFlags);
Binary file src/gridio.gcno matches
```

  - ○ No changes made, only found in files I want to delete

- ☑ function writeNnIndicesTable

```
(base) kdarnell@gs691-kdarnell sublimed1dc_profile % grep 'writeNnIndicesTable' src/*
src/gridio.c:writeNnIndicesTable(lime_fptr fptr\
src/gridio.c:    status = writeNnIndicesTable(fptr, gridInfo, nnLinks);
Binary file src/gridio.gcno matches
(base) kdarnell@gs691-kdarnell sublimed1dc_profile %
```

  - ○ No changes made, only found in files I want to delete

- ☑ function writeLinksTable

```
(base) kdarnell@gs691-kdarnell sublimed1dc_profile % grep 'writeLinksTable' src/*
src/gridio.c:writeLinksTable(lime_fptr fptr\
src/gridio.c:    status = writeLinksTable(fptr, gridInfo, links);
Binary file src/gridio.gcno matches
```

  - ○ No changes made, only found in files I want to delete

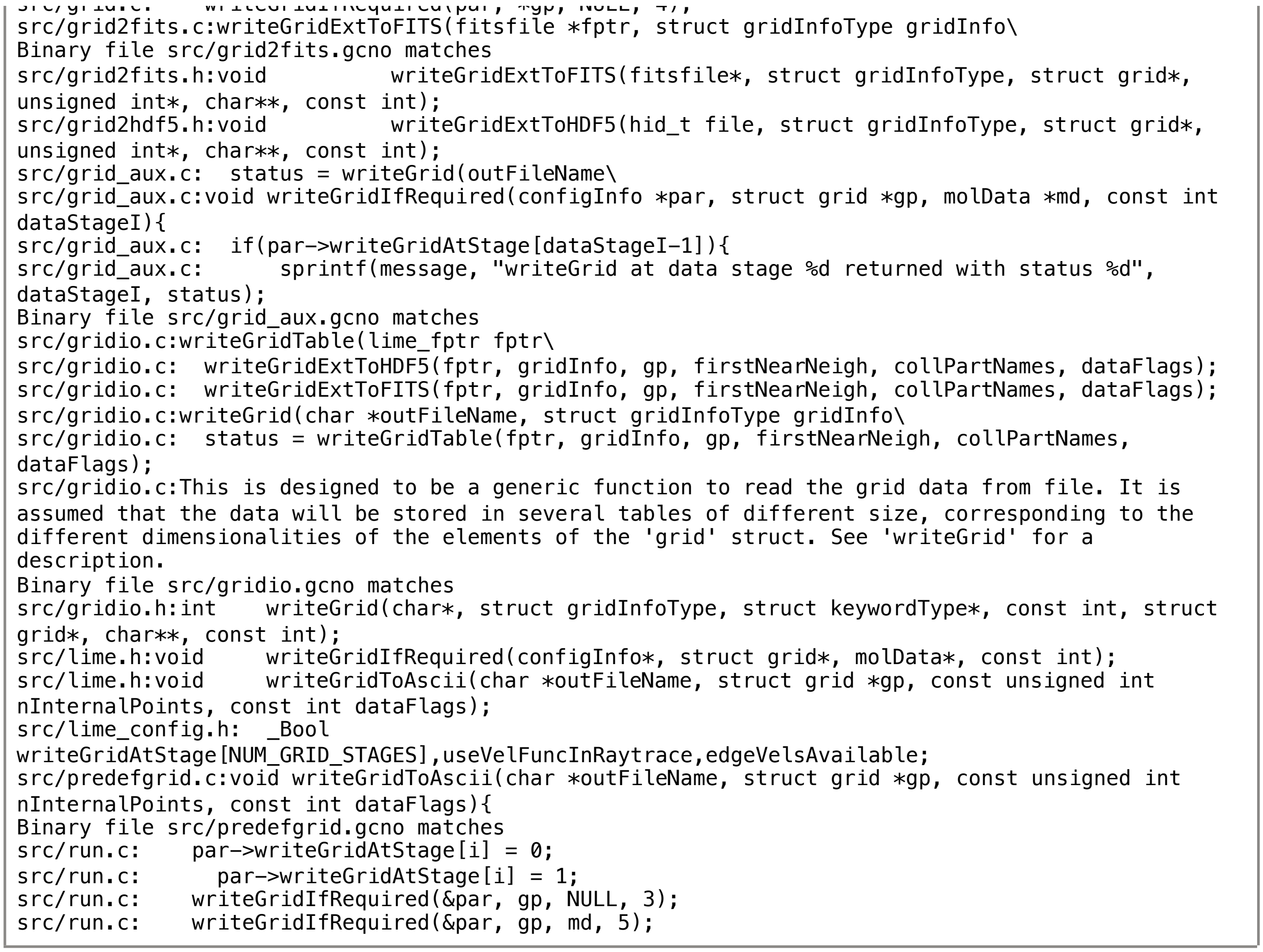
- ☑ function writePopsTable

```
(base) kdarnell@gs691-kdarnell sublimed1dc_profile % grep 'writePopsTable' src/*
src/gridio.c:writePopsTable(lime_fptr fptr\
src/gridio.c:      status = writePopsTable(fptr, gridInfo, i_us, gp);
Binary file src/gridio.gcno matches
```

  - ○ No changes made, only found in files I want to delete

- ☑ function writeGrid

```
(base) kdarnell@gs691-kdarnell sublimed1dc_profile % grep 'writeGrid' src/*
src/grid.c:    writeGridIfRequired(par, *gp, NULL, 1);
src/grid.c:    writeGridIfRequired(par, *gp, NULL, 2);
src/grid.c:    writeGridIfRequired(par, *gp, NULL, 3); /* Sufficient information for a continuum 
image. */
src/grid.c:    writeGridIfRequired(par, *gp, NULL, 4);
```



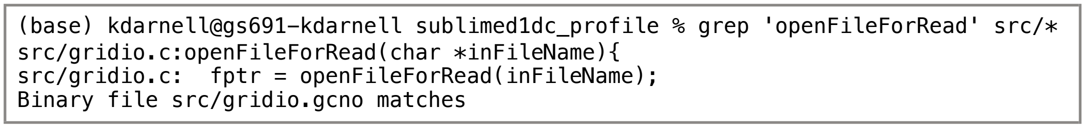
```
src/grid.c:    writeGridIfRequired(par, *gp, NULL, 4);
src/grid2fits.c:writeGridExtToFITS(fitsfile *fptr, struct gridInfoType gridInfo\
Binary file src/grid2fits.gcno matches
src/grid2fits.h:void          writeGridExtToFITS(fitsfile*, struct gridInfoType, struct grid*,
unsigned int*, char**, const int);
src/grid2hdf5.h:void          writeGridExtToHDF5(hid_t file, struct gridInfoType, struct grid*,
unsigned int*, char**, const int);
src/grid_aux.c:  status = writeGrid(outFileName\
src/grid_aux.c:void writeGridIfRequired(configInfo *par, struct grid *gp, molData *md, const int
dataStageI){
src/grid_aux.c:  if(par->writeGridAtStage[dataStageI-1]){
src/grid_aux.c:      sprintf(message, "writeGrid at data stage %d returned with status %d",
dataStageI, status);
Binary file src/grid_aux.gcno matches
src/gridio.c:writeGridTable(lime_fptr fptr\
src/gridio.c:  writeGridExtToHDF5(fptr, gridInfo, gp, firstNearNeigh, collPartNames, dataFlags);
src/gridio.c:  writeGridExtToFITS(fptr, gridInfo, gp, firstNearNeigh, collPartNames, dataFlags);
src/gridio.c:writeGrid(char *outFileName, struct gridInfoType gridInfo\
src/gridio.c:  status = writeGridTable(fptr, gridInfo, gp, firstNearNeigh, collPartNames,
dataFlags);
src/gridio.c:This is designed to be a generic function to read the grid data from file. It is
assumed that the data will be stored in several tables of different size, corresponding to the
different dimensionalities of the elements of the 'grid' struct. See 'writeGrid' for a
description.
Binary file src/gridio.gcno matches
src/gridio.h:int    writeGrid(char*, struct gridInfoType, struct keywordType*, const int, struct
grid*, char**, const int);
src/lime.h:void     writeGridIfRequired(configInfo*, struct grid*, molData*, const int);
src/lime.h:void     writeGridToAscii(char *outFileName, struct grid *gp, const unsigned int
nInternalPoints, const int dataFlags);
src/lime_config.h:  _Bool
writeGridAtStage[NUM_GRID_STAGES],useVelFuncInRaytrace,edgeVelsAvailable;
src/predefgrid.c:void writeGridToAscii(char *outFileName, struct grid *gp, const unsigned int
nInternalPoints, const int dataFlags){
Binary file src/predefgrid.gcno matches
src/run.c:    par->writeGridAtStage[i] = 0;
src/run.c:      par->writeGridAtStage[i] = 1;
src/run.c:    writeGridIfRequired(&par, gp, NULL, 3);
src/run.c:    writeGridIfRequired(&par, gp, md, 5);
```

Located in:

- ○ Grid_aux.c

→ Function removed, hcn.pop output remains unchanged.

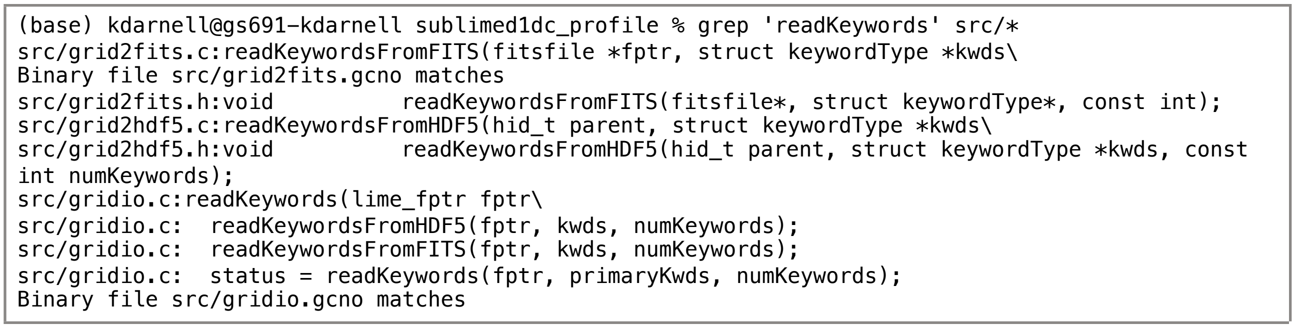
☑ • function openFileForRead



```
(base) kdarnell@gs691-kdarnell sublimed1dc_profile % grep 'openFileForRead' src/*
src/gridio.c:openFileForRead(char *inFileName){
src/gridio.c:  fptr = openFileForRead(inFileName);
Binary file src/gridio.gcno matches
```

- ○ No changes made, only found in files I want to delete

☑ • function readKeywords

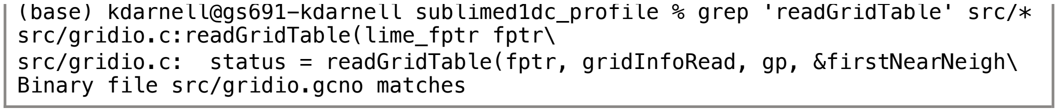


```
(base) kdarnell@gs691-kdarnell sublimed1dc_profile % grep 'readKeywords' src/*
src/grid2fits.c:readKeywordsFromFITS(fitsfile *fptr, struct keywordType *kwds\
Binary file src/grid2fits.gcno matches
src/grid2fits.h:void          readKeywordsFromFITS(fitsfile*, struct keywordType*, const int);
src/grid2hdf5.c:readKeywordsFromHDF5(hid_t parent, struct keywordType *kwds\
src/grid2hdf5.h:void          readKeywordsFromHDF5(hid_t parent, struct keywordType *kwds, const
int numKeywords);
src/gridio.c:readKeywords(lime_fptr fptr\
src/gridio.c:  readKeywordsFromHDF5(fptr, kwds, numKeywords);
src/gridio.c:  readKeywordsFromFITS(fptr, kwds, numKeywords);
src/gridio.c:  status = readKeywords(fptr, primaryKwds, numKeywords);
Binary file src/gridio.gcno matches
```

- ○ No changes made, only found in files I want to delete

☑ • function readGridTable

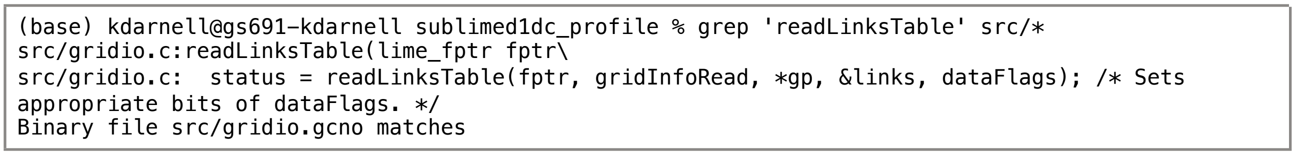
```
(base) kdarnell@gs691-kdarnell sublimed1dc_profile % grep 'readGridTable' src/*
```



```
(base) kdarnell@gs691-kdarnell sublimed1dc_profile % grep 'readGridTable' src/*
src/gridio.c:readGridTable(lime_fptr fptr\
src/gridio.c:  status = readGridTable(fptr, gridInfoRead, gp, &firstNearNeigh\
Binary file src/gridio.gcno matches
```

  - No changes made, only found in files I want to delete

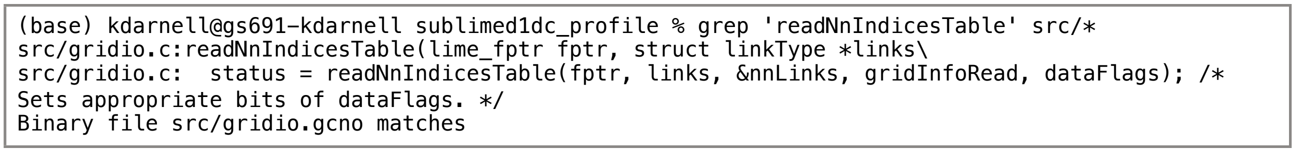
- ☑ function readLinksTable



```
(base) kdarnell@gs691-kdarnell sublimed1dc_profile % grep 'readLinksTable' src/*
src/gridio.c:readLinksTable(lime_fptr fptr\
src/gridio.c:  status = readLinksTable(fptr, gridInfoRead, *gp, &links, dataFlags); /* Sets
appropriate bits of dataFlags. */
Binary file src/gridio.gcno matches
```

  - No changes made, only found in files I want to delete

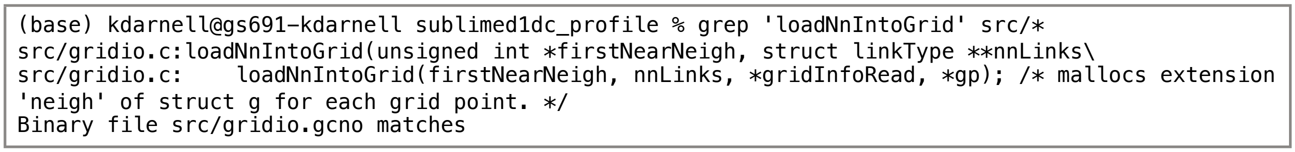
- ☑ function readNnIndicesTable



```
(base) kdarnell@gs691-kdarnell sublimed1dc_profile % grep 'readNnIndicesTable' src/*
src/gridio.c:readNnIndicesTable(lime_fptr fptr, struct linkType *links\
src/gridio.c:  status = readNnIndicesTable(fptr, links, &nnLinks, gridInfoRead, dataFlags); /*
Sets appropriate bits of dataFlags. */
Binary file src/gridio.gcno matches
```

  - No changes made, only found in files I want to delete

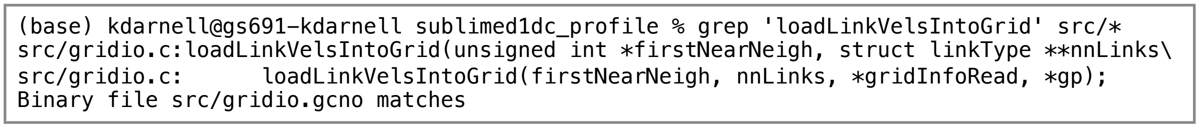
- ☑ function loadNnIntoGrid



```
(base) kdarnell@gs691-kdarnell sublimed1dc_profile % grep 'loadNnIntoGrid' src/*
src/gridio.c:loadNnIntoGrid(unsigned int *firstNearNeigh, struct linkType **nnLinks\
src/gridio.c:    loadNnIntoGrid(firstNearNeigh, nnLinks, *gridInfoRead, *gp); /* mallocs extension
'neigh' of struct g for each grid point. */
Binary file src/gridio.gcno matches
```

  - No changes made, only found in files I want to delete

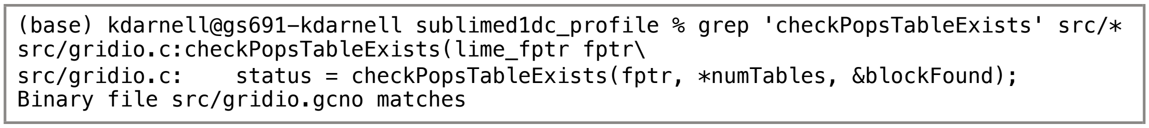
- ☑ function loadLinkVelsIntoGrid



```
(base) kdarnell@gs691-kdarnell sublimed1dc_profile % grep 'loadLinkVelsIntoGrid' src/*
src/gridio.c:loadLinkVelsIntoGrid(unsigned int *firstNearNeigh, struct linkType **nnLinks\
src/gridio.c:      loadLinkVelsIntoGrid(firstNearNeigh, nnLinks, *gridInfoRead, *gp);
Binary file src/gridio.gcno matches
```

  - No changes made, only found in files I want to delete

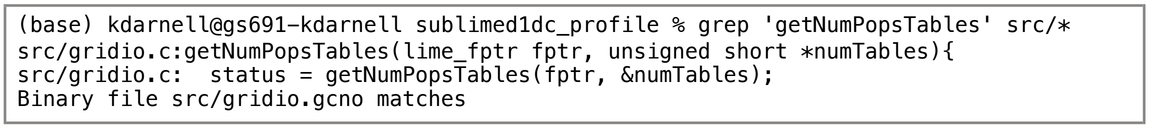
- ☑ function checkPopsTableExists



```
(base) kdarnell@gs691-kdarnell sublimed1dc_profile % grep 'checkPopsTableExists' src/*
src/gridio.c:checkPopsTableExists(lime_fptr fptr\
src/gridio.c:    status = checkPopsTableExists(fptr, *numTables, &blockFound);
Binary file src/gridio.gcno matches
```

  - No changes made, only found in files I want to delete

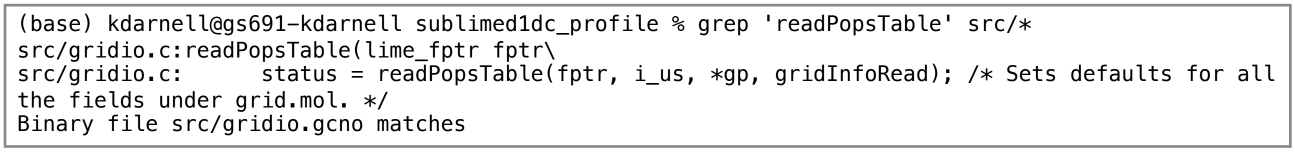
- ☑ function getNumPopsTables



```
(base) kdarnell@gs691-kdarnell sublimed1dc_profile % grep 'getNumPopsTables' src/*
src/gridio.c:getNumPopsTables(lime_fptr fptr, unsigned short *numTables){
src/gridio.c:  status = getNumPopsTables(fptr, &numTables);
Binary file src/gridio.gcno matches
```

  - No changes made, only found in files I want to delete

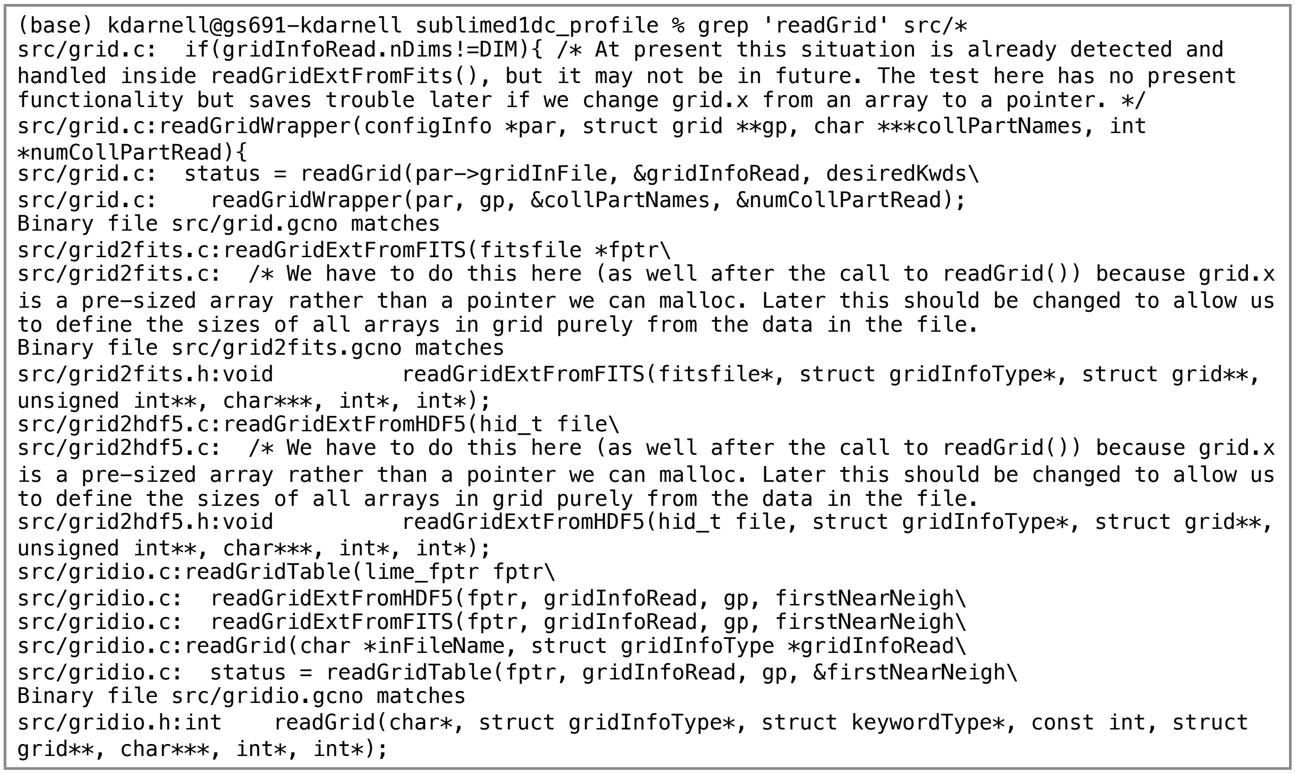
- ☑ function readPopsTable



```
(base) kdarnell@gs691-kdarnell sublimed1dc_profile % grep 'readPopsTable' src/*
src/gridio.c:readPopsTable(lime_fptr fptr\
src/gridio.c:      status = readPopsTable(fptr, i_us, *gp, gridInfoRead); /* Sets defaults for all
the fields under grid.mol. */
Binary file src/gridio.gcno matches
```

  - No changes made, only found in files I want to delete

- ☑ function readGrid

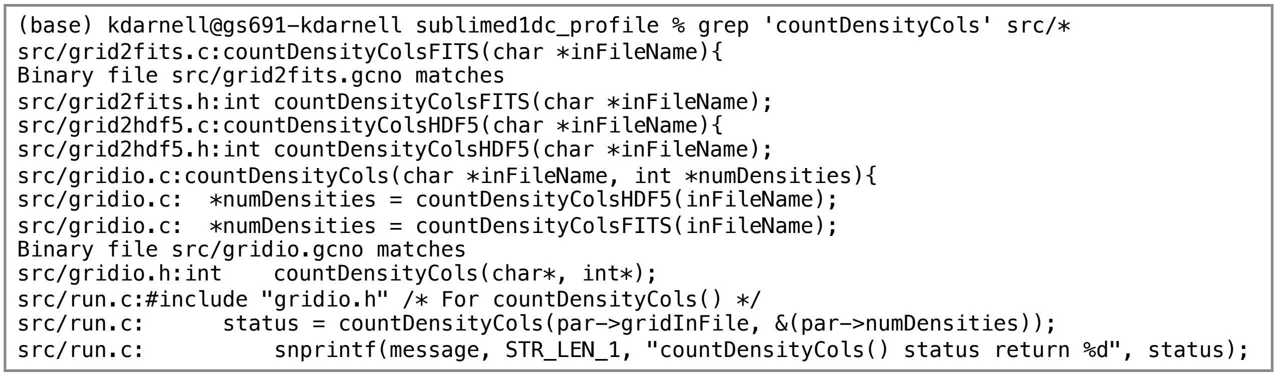


```
(base) kdarnell@gs691-kdarnell sublimed1dc_profile % grep 'readGrid' src/*
src/grid.c:  if(gridInfoRead.nDims!=DIM){ /* At present this situation is already detected and handled inside readGridExtFromFits(), but it may not be in future. The test here has no present functionality but saves trouble later if we change grid.x from an array to a pointer. */
src/grid.c:readGridWrapper(configInfo *par, struct grid **gp, char ***collPartNames, int *numCollPartRead){
src/grid.c:  status = readGrid(par->gridInFile, &gridInfoRead, desiredKwds\
src/grid.c:    readGridWrapper(par, gp, &collPartNames, &numCollPartRead);
Binary file src/grid.gcno matches
src/grid2fits.c:readGridExtFromFITS(fitsfile *fptr\
src/grid2fits.c:  /* We have to do this here (as well after the call to readGrid()) because grid.x is a pre-sized array rather than a pointer we can malloc. Later this should be changed to allow us to define the sizes of all arrays in grid purely from the data in the file.
Binary file src/grid2fits.gcno matches
src/grid2fits.h:void          readGridExtFromFITS(fitsfile*, struct gridInfoType*, struct grid**, unsigned int**, char***, int*, int*);
src/grid2hdf5.c:readGridExtFromHDF5(hid_t file\
src/grid2hdf5.c:  /* We have to do this here (as well after the call to readGrid()) because grid.x is a pre-sized array rather than a pointer we can malloc. Later this should be changed to allow us to define the sizes of all arrays in grid purely from the data in the file.
src/grid2hdf5.h:void          readGridExtFromHDF5(hid_t file, struct gridInfoType*, struct grid**, unsigned int**, char***, int*, int*);
src/gridio.c:readGridTable(lime_fptr fptr\
src/gridio.c:  readGridExtFromHDF5(fptr, gridInfoRead, gp, firstNearNeigh\
src/gridio.c:  readGridExtFromFITS(fptr, gridInfoRead, gp, firstNearNeigh\
src/gridio.c:readGrid(char *inFileName, struct gridInfoType *gridInfoRead\
src/gridio.c:  status = readGridTable(fptr, gridInfoRead, gp, &firstNearNeigh\
Binary file src/gridio.gcno matches
src/gridio.h:int    readGrid(char*, struct gridInfoType*, struct keywordType*, const int, struct grid**, char***, int*, int*);
```

  - ○ grid.c
  - ○ grid2hdf5.c (In comment)

  → Function removed, hcn.pop output remains unchanged.

- ☑ function countDensityCols



```
(base) kdarnell@gs691-kdarnell sublimed1dc_profile % grep 'countDensityCols' src/*
src/grid2fits.c:countDensityColsFITS(char *inFileName){
Binary file src/grid2fits.gcno matches
src/grid2fits.h:int countDensityColsFITS(char *inFileName);
src/grid2hdf5.c:countDensityColsHDF5(char *inFileName){
src/grid2hdf5.h:int countDensityColsHDF5(char *inFileName);
src/gridio.c:countDensityCols(char *inFileName, int *numDensities){
src/gridio.c:  *numDensities = countDensityColsHDF5(inFileName);
src/gridio.c:  *numDensities = countDensityColsFITS(inFileName);
Binary file src/gridio.gcno matches
src/gridio.h:int    countDensityCols(char*, int*);
src/run.c:#include "gridio.h" /* For countDensityCols() */
src/run.c:      status = countDensityCols(par->gridInFile, &(par->numDensities));
src/run.c:          snprintf(message, STR_LEN_1, "countDensityCols() status return %d", status);
```

  - ○ Run.c

  → Function removed, hcn.pop output remains unchanged.

The only src files that now contain references to the above functions are gridio.c, gridio.h, grid2fits.c, grid2fits.h