cifdiff

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Abstract

List the differences between two Calibration Index Files.

1 Instruments/Modes

Instrument	Mode
n/a	n/a

2 Use

pipeline processing	no
interactive analysis	yes

3 Description

cifdiff takes two Calibration Index Files (CIFs) and writes to a file the names of the CCF components that are in one CIF but not in the other. Refer to [1] for a description of the CCF naming convention.

4 Parameters

This section documents the parameters recognized by this task (if any).

Parameter	Mand	Type	Default	Constraints
calindex1set	yes	e	ccf.cif	

Name of the first calibration index set.

calindex2set	yes	e	ccf.cif	

Name of the second calibration index set.

withfile	no	b	no	

Write the output to an ascii file?

outfile	no	f	cifdiff.asc	

Name of the output ascii file.

5 Errors

This section documents warnings and errors generated by this task (if any). Note that warnings and errors can also be generated in the SAS infrastructure libraries, in which case they would not be documented here. Refer to the index of all errors and warnings available in the HTML version of the SAS documentation.

6 Input Files

1. Two Calibration Index Files. See **cifbuild**.

7 Output Files

1. A plain text file.

8 Algorithm

```
string c1 = stringParameter("calindex1set");
string c2 = stringParameter("calindex2set");
CalIndex cif1 = CalIndexSet(c1).calibrationIndex("cif1");
CalIndex cif2 = CalIndexSet(c2).calibrationIndex("cif2");
ofstream out(stringParameter("outfile").c_str());

cif1.sort(CcfConstituent::compare);
cif2.sort(CcfConstituent::compare);

CalIndex cif3("cif3");
set_difference(cif1.begin(), cif1.end(), cif2.begin(), cif2.end(), back_inserter(cif3), CcfConstituen
out << "CCF constituents that are in " << c1 << " but not in " << c2 << ":" << endl;
if(cif3.size() == 0)
  out << "** none **" << endl;
else
  for(CalIndex::const_iterator i = cif3.begin(); i != cif3.end(); i++)
    out << (*i)->name() << endl;
```

```
// repeat swapping cif1 and cif2
```

9 Comments

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References

[1] ESA. Interface control document for the XMM current calibration file. Technical Report XMM-GEN-ICD-0005, ESA/SSD, Dec 2001. Issue 4.0.