

# cxctods9

April 16, 2023

## Abstract

Conversion of CXC region file to Ds9 format

## 1 Instruments/Modes

not applicable

## 2 Use

pipeline processing	no
interactive analysis	yes

## 3 Description

**cxctods9** converts a given *CXC*[1] file to Ds9 format which can then be used to mark regions on a displayed image in Ds9. The type of coordinates in the CXC table are characterized with the parameter **regtype**. The Ds9 regions are written to standard output. Example:

```
cxctods9 table=reg.cxc >reg.ds9
```

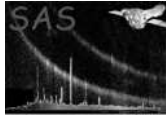
## 4 Parameters

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

Parameter	Mand	Type	Default	Constraints
<b>table</b>	yes	table		name of existing table in existing dataset

The name of the CXC table from which to read.

<b>regtype</b>	no	string	image	image linear fk5
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The type of coordinate system the coordinates of the regions' reference points are to be associated with.

## 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.

### **UnknownRegionTableType** (*error*)

The specified table is not a CXC region table.

### **ColumnNotFound/UnknownCoordinateAxes** (*error*)

There is an inconsistency in the region table: The value of the **MFORM** attribute is syntactically incorrect or points to a non-existing column.

### **MandatoryColumnsMissing/MissingData** (*error*)

Specified table is not CXC-compliant.

### **UnknownShape** (*error*)

An unknown region shape was encountered.

In addition **dal** errors can occur in conjunction with the reading of the data set (e.g. access problems).

## References

- [1] J. McDowell and A. Rots. FITS REGION Binary Table Design. Technical Report ASC-FITS-REGION-1.0, Chandra Science Center, March 1998. Found at the URL: <http://hea-www.harvard.edu/~jcm/asc/docs/asc/region.ps>.