

# CAMEA the Characterization editor

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# CAMEA main functionalities

- CAMEA, the characterization editor is intended to help to create Characterization serialisations in either Xml or Ascii (utype value)
- CAMEA can load existing characterization files in whatever format: Ascii(Utypes) or xml for visualisation and bug fixing

# CAMEA VO features

- CAMEA can load from URL
- CAMEA talks « PLASTIC »
  - New PLASTIC message recently created
  - Can retrieve a characterization file URL from another VOTool (eg, Aladin)

# Characterization of images in Aladin server

- Aladin server can provide characterization files in XML for all images (DSS1, DSS2, Mama scans, 2MASS, DENIS, IRAS, WENSS, GOODS, etc ...)
- Pointers available via SIA (Image description in text/xml format)
- File can be downloaded in the browser or sent to CAMEA

Server selector

Others **File** all VO **FOV** **SExtractor**

Image servers

- Aladin images
- SkyView
- Sloan
- MAST
- GADC
- MSaadaSI
- DSS...
- VLA...
- newServ
- Others...

**Experimental SIA ext Aladin Server** ?

Fill in all these fields and press the SUBMIT button

Target: NGC 6946

Radius:

- ObservingProgramName: POSSI
  - Filter\_Name: E-DSS1
    - POSSI\_E-DSS1\_106
      - Data Access
        - Image Cutout
        - Image charac in VOTABLE
        - Image characterization XMLSchema based
- Filter\_Name: E-LOW-DSS1
  - POSSI\_E-LOW-DSS1\_106
    - Data Access
      - Image Cutout
      - Image charac in VOTABLE
      - Image characterization XMLSchema based

Reset Clear Help **SUBMIT** Close

CAMEA - <http://baladin.u-strasbg.fr/cgi-bin/nph-Aladin++test.cgi?out=qualifier&position=308.749625...>

Edit Tool Plastic Help

spatial time spectral

Axis

Coverage

Resolution

Sampling

Axis type: spatial

Name: spatial

Calibration status: CALIBRATED

UCD: pos

Unit: deg

Observatory location:

Coordinate system:

Id: TT-ICRS-WAVELENGTH-TOPO

Ref:

Link HREF:

Order: (lon, lat)

Number of bins: (14000,14000)

Quality:

Statistical error:

Flavor: statistical

value:

bounds:

map:

XML **1 error(s) detected**

Data Info Frame

Display

Image characterization XMLSchema based

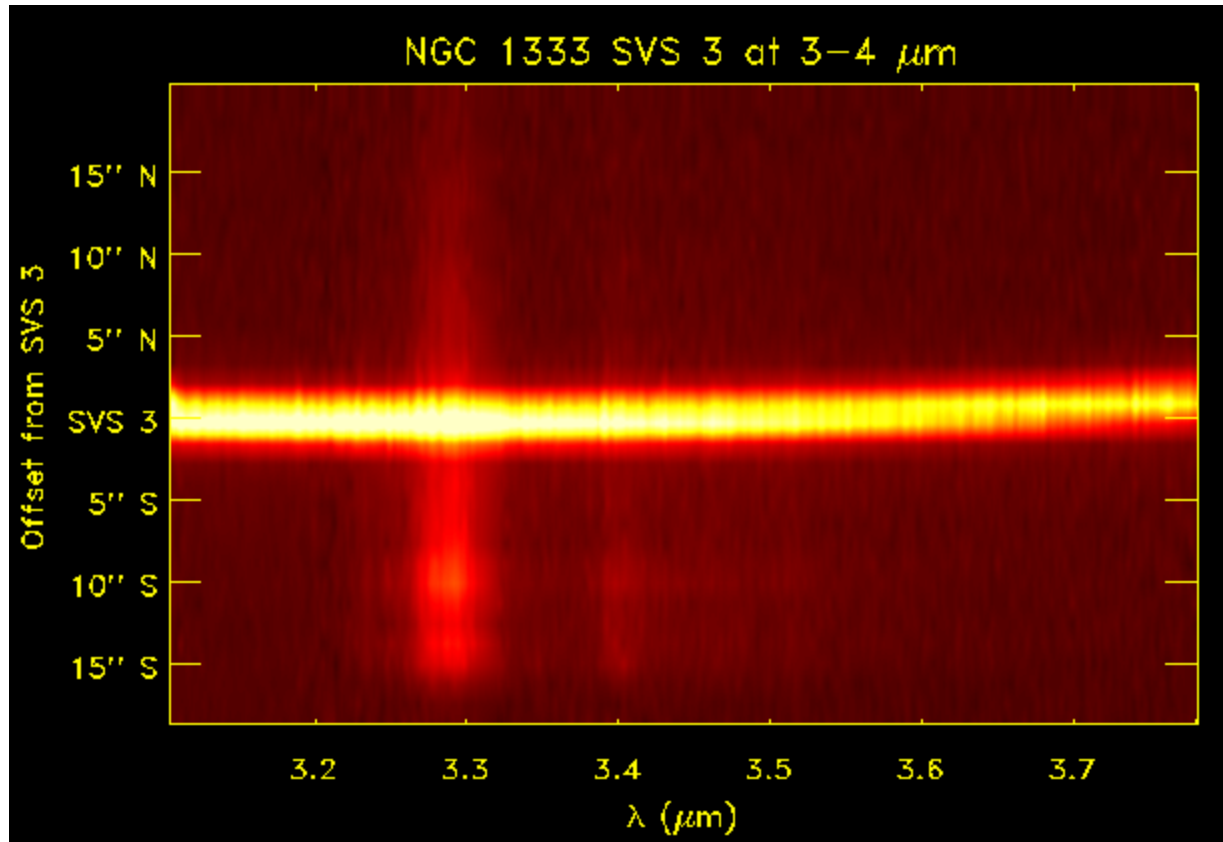
Field name	Value
ObservationName	POSSI_E-DSS1_106
CentralPoint_RA	20:34:59.91
CentralPoint_DEC	+60:30:04.2
Naxes	2
AngularPixelSize	1.7" 1.7"
OriginalCoding	image/fits
DataType	Fits.image
Filter_Name	E-DSS1
Location	<a href="http://baladin.u-strasbg.fr/">http://baladin.u-strasbg.fr/...</a>
PlateNumber	106
ObservingProgramName	POSSI

16.8" x 11.06"

Data are being down

Stick **DOWNLOAD** Load in... Close

*Image characterization sent to CAMEA by Aladin using PLastic*



*A dataset to characterize: A long-slit spectrum*

# Long slit spectrum: characterization figures

- Slit centered at 25.0, -36.00
- From 24.9,-36.3 to 25.1,-35.7
- 1024 spatial pixels
- 2.5 arcsec resolution /1 arcsec sampling
- 1024 radial velocity pixels
- Centered on 500 km/s
- From 450 km/s to 550 km/s
- 1km/s resolution 0.1km/s sampling

# Creating a charac file for a velocity axis

- Dataset can be a long slit spectrum
- Create a spatial axis (linear)
- Create a velocity axis, give it a location , bounds and a resolution plus a sampling period.
- Validate and look at the result (xml )





**velocity** **spatial**

**Axis**

**Coverage**

**Resolution**

**Sampling**

Activated

Unit:

Coordinate system id:

**Location:**

Time  Redshift  Spectral  Position  Misc

Unit:

Coordinate system id:

**Bounds:**

CharBox  Limits

Extent:

Unit:

Coordinate system id:

Support:

Extent:

Unit:

Coordinate system id:

Variability:

Unit:

**Unit**

**Description:** Local redefinition of unit if needed

**Type:** Controlled unit vocabulary following the VOTABLEunit definitions

**Status:** **OPTIONAL**

**Example(s):** arcsec

**Bounds**

**Description:** The actual values defining the bounds. Can be interval or charbox.

**Type:** 1D bounds: stc:coordScalarIntervalType  
2D bounds: stc:coord2VecIntervalType  
3D bounds: stc:coord3VecIntervalType

**Status:** **OPTIONAL**

**Example(s):** 1) Interval:  
1.2..3.5  
(1.4,2.5)..(2.3,3.7)  
(1.4,2.5,1.0)..(4.6,2.8,1.9)  
2) Charbox:  
same syntax as for interval, but the first value is the center of the box and the second value is the size of the box (can be 1D, 2D or 3D)

**Location**

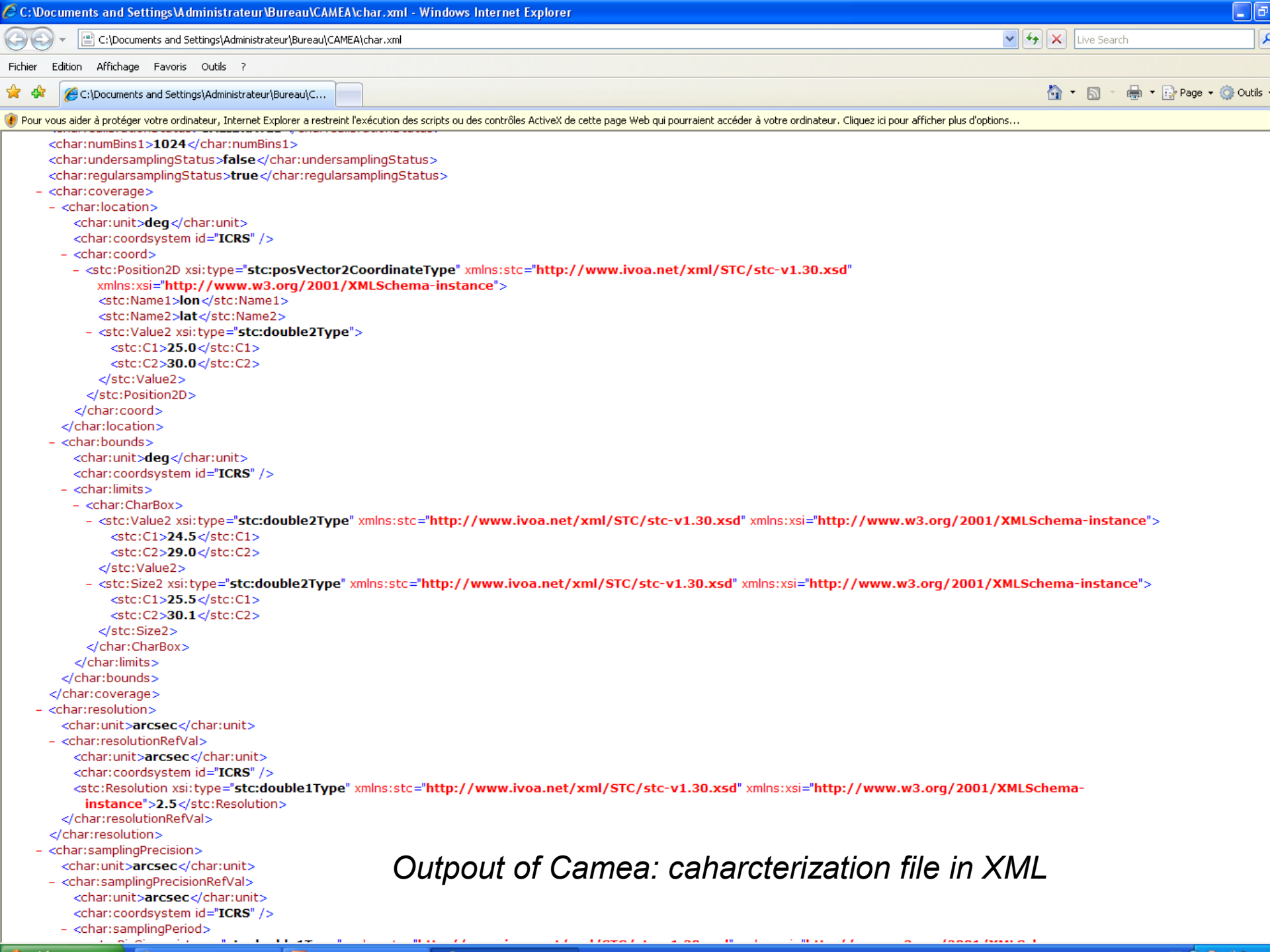
**Description:** The typical coordinate value

**Type:** stc:astroCoordsType

**Status:** **MANDATORY**

**Example(s):** 1.4  
(2.3,4.5)  
(2.4,5.0,1.2)

*Characterization of the long-slit spectrum velocity axis*



Warning banner: Pour vous aider à protéger votre ordinateur, Internet Explorer a restreint l'exécution des scripts ou des contrôles ActiveX de cette page Web qui pourraient accéder à votre ordinateur. Cliquez ici pour afficher plus d'options...

```
<char:numBins1>1024</char:numBins1>
<char:undersamplingStatus>>false</char:undersamplingStatus>
<char:regularsamplingStatus>>true</char:regularsamplingStatus>
- <char:coverage>
  - <char:location>
    <char:unit>deg</char:unit>
    <char:coordsystem id="ICRS" />
  - <char:coord>
    - <stc:Position2D xsi:type="stc:posVector2CoordinateType" xmlns:stc="http://www.ivoa.net/xml/STC/stc-v1.30.xsd"
      xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
      <stc:Name1>lon</stc:Name1>
      <stc:Name2>lat</stc:Name2>
      - <stc:Value2 xsi:type="stc:double2Type">
        <stc:C1>25.0</stc:C1>
        <stc:C2>30.0</stc:C2>
      </stc:Value2>
    </stc:Position2D>
    </char:coord>
  </char:location>
  - <char:bounds>
    <char:unit>deg</char:unit>
    <char:coordsystem id="ICRS" />
  - <char:limits>
    - <char:CharBox>
      - <stc:Value2 xsi:type="stc:double2Type" xmlns:stc="http://www.ivoa.net/xml/STC/stc-v1.30.xsd" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
        <stc:C1>24.5</stc:C1>
        <stc:C2>29.0</stc:C2>
      </stc:Value2>
      - <stc:Size2 xsi:type="stc:double2Type" xmlns:stc="http://www.ivoa.net/xml/STC/stc-v1.30.xsd" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
        <stc:C1>25.5</stc:C1>
        <stc:C2>30.1</stc:C2>
      </stc:Size2>
    </char:CharBox>
    </char:limits>
  </char:bounds>
</char:coverage>
- <char:resolution>
  <char:unit>arcsec</char:unit>
  - <char:resolutionRefVal>
    <char:unit>arcsec</char:unit>
    <char:coordsystem id="ICRS" />
    <stc:Resolution xsi:type="stc:double1Type" xmlns:stc="http://www.ivoa.net/xml/STC/stc-v1.30.xsd" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance">2.5</stc:Resolution>
  </char:resolutionRefVal>
</char:resolution>
- <char:samplingPrecision>
  <char:unit>arcsec</char:unit>
  - <char:samplingPrecisionRefVal>
    <char:unit>arcsec</char:unit>
    <char:coordsystem id="ICRS" />
  - <char:samplingPeriod>
```

Output of Camea: caharcterization file in XML