

SIAP Extensions

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SIA Extensions: Use case

- Detailed description of a single Observation or of « common » features. It can be
 - « support » description (as an STC area)
 - Astrometric solution (as a WCS structure)
 - Data collection, curator, Observing Program
- « complex » links between observations
 - HST Association and members (example thanks to ECF and CADC)
 - CCD mosaic images: whole field linked to each CCD image
 - XMM Observation, with Energy bands and Exposures (P.Osuna et al)

SIAExt example Bonnarel.xml - WordPad

Fichier Edition Affichage Insertion Format ?



```
<VOTABLE ID="v1.0">
  <DESCRIPTION> SIAP output for Aladin server </DESCRIPTION>
  <RESOURCE type="results">
    <INFO name="QUERY_STATUS" value="OK"/>
    <TABLE>
      <FIELD ID="ObservationName" ucd="VOX:Image_Title" datatype="char"
             arraysize="*" />
      <FIELD ID="CentralPoint_RA" ucd="POS_EQ_RA_MAIN" datatype="double" />
      <FIELD ID="CentralPoint_DEC" ucd="POS_EQ_DEC_MAIN" datatype="double" />
      <FIELD ID="Naxes" ucd="VOX:Image_Naxes" datatype="int" />
      <FIELD ID="Naxis" ucd="VOX:Image_Naxis" datatype="int" arraysize="*" />
      <FIELD ID="AngularPixelSize" ucd="VOX:Image_Scale" datatype="double"
             arraysize="*" unit="deg" />
      <FIELD ID="OriginalCoding" ucd="VOX:Image_Format" datatype="char"
             arraysize="*" />
      <FIELD ID="FilterName" ucd="VOX:BandPass_ID" datatype="char" arraysize="*"
             ref="Filter"/>
      <FIELD ID="Location" ucd="VOX:Image_AccessReference" datatype="char"
             arraysize="*" />
      <FIELD ID="ObservationReference" datatype="char" arraysize="*"
             ref="Packaging"/>
      <FIELD ID="ObservingProgramName" datatype="char" arraysize="*"
             ref="ObservingProgram" />
    <DATA><TABLEDATA>
      <TR>
        <TD>C1 TRUMPLER 16</TD>
        <TD>161.11609638</TD>
        <TD>-59.72674777</TD>
        <TD>2</TD>
        <TD></TD>
        <TD>2.77e-05 2.77e-05</TD>
        <TD>image/fits</TD>
        <TD>F814W</TD>
        <TD><![CDATA[http://cadcwww.hia.nrc.ca/cadcbin/hstproxy?file_id=u4k2cx07b.mosaic]]></TD>
        <TD>U3YHO404B</TD>
        <TD>HST WFPC2 Associations</TD>
      </TR>
    </DATA>
```

SIAExt example Bonnarel.xml - WordPad

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```
</TABLE>
</RESOURCE>
<RESOURCE name="GeneralFeatures">
  <TABLE ID="Filter">
    <DESCRIPTION>
      Description of the filter characteristics
    </DESCRIPTION>
    <FIELD ref="FilterName" />
    <FIELD ID="Effective_wavelength" ucd="VOX:BandPass_RefValue" datatype="double" unit="um" />
    <FIELD ID="Minimal_wavelength" ucd="VOX:BandPass_LoLimit" datatype="double" unit="um" />
    <FIELD ID="Maxima_wavelength" ucd="VOX:BandPass_HiLimit" datatype="double" unit="um" />
    <DATA>
      <TABLEDATA>
        <TR><TD>F814W</TD><TD></TD><TD>0.708</TD><TD>0.959</TD></TR>
      </TABLEDATA></DATA>
    </TABLE>
    <TABLE ID="ObservingProgram">
      <DESCRIPTION>
```

The code shows two sections of XML. The first section, under the 'GeneralFeatures' resource, contains a table for a filter. It includes fields for the filter's name and its wavelength characteristics (effective, minimal, and maximal). It also contains a data table with one row for the F814W filter, showing values for its wavelength limits. The second section, under the 'ObservingProgram' resource, contains a table for observing programs. It includes fields for the program's name, organization, and dates. It also contains a data table with one row for the HST WFPC2 Associations, listing the organization (STECF/CADC/STScI), the spectral domain (Optical), and other details.

```
      </DESCRIPTION>
      <FIELD ref="ObservingProgramName" />
      <FIELD ID="Organisation" name="Organisation" ucd="CURATOR" datatype="char" />
      <FIELD ID="Begin" name="beginning_date" datatype="char" />
      <FIELD ID="End" name="end date" datatype="char" />
      <FIELD ID="SpectralDomain" name="SpectralCoverageName" ucd="SPECT_RANGE" datatype="char" />
      <DATA>
        <TABLEDATA>
          <TR>
            <TD>HST WFPC2 Associations</TD>
            <TD>STECF/CADC/STScI</TD>
            <TD></TD>
            <TD></TD>
            <TD>Optical</TD>
          </TR>
        </TABLEDATA></DATA>
      </TABLE>
    </RESOURCE>
```

SIAExt example Bonnarel.xml - WordPad

Fichier Edition Affichage Insertion Format ?



```
<TD>STECF/CADC/STScI</TD>
<TD></TD>
<TD></TD>
<TD>Optical</TD>
</TR>
</TABLEDATA></DATA>
</TABLE>
</RESOURCE>
<RESOURCE name="ObservationDetails">
<TABLE ID="Packaging">
<FIELD ref="ObservationReference"/>
<FIELD ID="Dataorganisation" name="Organisation" datatype="char"/>
<FIELD ID="Indexing" name="Indexing" datatype="char"/>
<FIELD ID="RelatedObservation" datatype="char" ref="ObservationName"/>
<FIELD ID="LinktoPixels" name="LinktoPixels" datatype="char" ucd="DATA_LINK"/>
<DATA><TABLEDATA>
<TR><TD>U3 YH0404B</TD><TD>PREVIEW </TD><TD>URL </TD><TD><![CDATA[http://cadcwww.
<TR><TD>U3 YH0404B</TD><TD>MOSAIC </TD><TD>URL </TD><TD><![CDATA[http://cadcwww.
<TR><TD>U3 YH0404B</TD><TD>LOWLEVEL</TD><TD>Observation</TD><TD>C1 TRUMPLER 16 member</TD><TD>
<TR><TD>U4K2CX06R</TD><TD>PREVIEW </TD><TD>URL </TD><TD><![CDATA[http://archive.
<TR><TD>U4K2CX07R</TD><TD>LOWLEVEL</TD><TD>Observation</TD><TD>C1 TRUMPLER 16 member CCD</TD>
</TABLEDATA></DATA>
</TABLE>
</RESOURCE>
</VOTABLE>
```

Server selector

Choose an image server or a data server
and fill in the associated form drawn below

Image servers:

- Aladin
- SDSS

Others:

- All VO
- MyData**

User own data (image/data/script/dir)

Specify a filename or an URL and press the SUBMIT button

C:\Documents and Settings\cds\Bureau\bonnairel33.xml

Info Frame

CI TRUMPLER 16 member CCD-1

ObservationName	CI TRUMPLER 16 member CCD
CentralPoint_RA	10:43:39.84
CentralPoint_DEC	-59:43:37.2
Naxes	2
AngularPixelSize	0.1 " 0.1 "
OriginalCoding	image/fits
FilterName	F814W
Location	http://archive.eso.org
ObservationReference	U4K2CX06R-B
ObservingProgramName	HST WFPC2 Associations

*

VizieR Catalogs

Surveys in VizieR

Missions in VizieR

Info Frame

HST WFPC2 Associations

ObservingProgramName	HST WFPC2 Associations
Organisation	STECF/CADC/STScI
SpectralCoverageName	Optical

SIAP Extension: technical proposal

- Add one or several Extension Resources after the main SIA one
- Describe additional information in tables, or «other» XML elements contained in these Extension RESOURCES
- Use VOTABLE refs from the Main table FIELDS to these Extension Tables or elements
- Cross-correlate the appropriate records and elements using the field values