# Summary of VO-Paris Validation Tests

The following summarizes the tests performed by the VO-Paris Cone Search, SIA and SSA validators at http://voparis-validator.obspm.fr

# VO-Paris Cone Search version 1.03 Validator Tests

Note: we don’t test the data content of the VOTable (for example Uniqueness of the values for ID\_MAIN)

## Must/Errors

**VOTable XML validation** VOTable must be valid against the **VOTable 1.0** schema.

**RESOURCE** The VOTable must contain exactly one RESOURCE which must contain exactly one TABLE.

**2.2.1** The TABLE must contain exactly one FIELD with ucd='ID\_MAIN'.

**2.2.2** The TABLE must contain exactly one FIELD with ucd='POS\_EQ\_RA\_MAIN'.

**2.2.3** The TABLE must contain exactly one FIELD with ucd='POS\_EQ\_DEC\_MAIN'.

**2.3** In case of service error, an error message must appear in a valid result VOTable with name “Error” either in a VOTABLE/INFO or RESOURCE/INFO or RESOURCE/PARAM or DEFINITIONS/PARAM.

## Should/Warnings

None

# VO-Paris Simple Image Access version 1.0 Validator Tests

We perform separate tests for a normal query and a query with FORMAT=METADATA.

NB: The case of VO-Theory is handled separately.

## Must/Errors for all queries

**VOTable XML validation** VOTable must be valid against the **VOTable 1.0** schema

## Musts/Errors for query FORMAT=METADATA

**6.1.2** There must be one RESOURCE with 3 PARAMs with name = ‘INPUT:POS’, ‘INPUT:SIZE’, ‘INPUT:FORMAT’.

## Must/Errors for a normal query

**6.1.1** RESOURCE/ with type=’meta’ must only appear in case of FORMAT=METADATA

**4.2.4.1** The TABLE must contain exactly one FIELD or PARAM with ucd='VOX:Image\_Title' and datatype='char' and arraysize='\*'

**4.2.4.4** Exactly one FIELD or PARAM must have ucd=’POS\_EQ\_RA\_MAIN’ and datatype=’double’

**4.2.4.5** Exactly one FIELD or PARAM must have ucd=’POS\_EQ\_DEC\_MAIN’ and datatype=’double’

**4.2.4.6** Exactly one FIELD or PARAM must have ucd=’VOX:Image\_Naxes’ and datatype=’int’

**4.2.4.7** Exactly one FIELD or PARAM must have ucd=’VOX:Image\_Naxis’ and datatype=’int’

**4.2.4.8** Exactly one FIELD or PARAM must have ucd=’VOX:Image\_Scale’ and datatype=’double’ and arraysize contains ‘\*’ or a numeric value.

**4.2.4.9** Exactly one FIELD or PARAM must have ucd=’VOX:Image\_Format’ and datatype=’char’ and arraysize=’\*’

**4.2.4.22** Exactly one FIELD or PARAM should contain ucd = ‘VOX:Image\_AccessReference’ and datatype=’char’ and arraysize=’\*’

## Should/Warnings for all queries

**QUERY\_STATUS** VOTABLE/RESOURCE/ INFO element should contain QUERY\_STATUS

**ERROR** In case of service error, output VOTABLE/RESOURCE/INFO must have name=’QUERY\_STATUS’ with value=’ERROR’

## Should/Warnings for query FORMAT=METADATA

**6.1.1** VOTABLE/RESOURCE should have attribute type = ‘meta’
**DATA** There must be a tag VOTABLE/RESOURCE with type=’meta’ containing a tag DATA

## Should/Warning for a normal query

**4.2.4.2** RESOURCE/TABLE should contain one FIELD or PARAM with ucd = ‘INST\_ID’ and datatype='char' and arraysize='\*'

**4.2.4.3** RESOURCE/TABLE should contain one FIELD or PARAM with ucd= ‘VOX:Image\_MJDateObs’ and datatype=’double’

**4.2.4.10** Exactly one FIELD or PARAM should contain ucd = ‘VOX:STC\_CoordRefFrame’ and datatype=’char’ and arraysize=’\*’

**4.2.4.12** Exactly one FIELD or PARAM should contain ucd = ‘VOX:WCS\_CoordProjection’ and datatype=’char’ and arraysize=’3’

**4.2.4.13** Exactly one FIELD or PARAM should contain ucd = ‘VOX:WCS\_CoordRefPixel’ and datatype=’double’ and arraysize=’\*’

**4.2.4.14** Exactly one FIELD or PARAM should contain ucd = ‘VOX:WCS\_CoordRefValue’ and datatype=’double’ and arraysize=’\*’

**4.2.4.15** Exactly one FIELD or PARAM should contain ucd = ‘VOX:WCS\_CDMatrix’ and datatype=’double’ and arraysize=’\*’

**4.2.4.16** Exactly one FIELD or PARAM should contain ucd = ‘VOX:BandPass\_ID’ and datatype=’char’ and arraysize=’\*’

**4.2.4.17** Exactly one FIELD or PARAM should contain ucd = ‘VOX:BandPass\_Unit’ and datatype=’char’ and arraysize=’\*’

**4.2.4.18** Exactly one FIELD or PARAM should contain ucd = ‘VOX:BandPass\_RefValue’ and datatype=’double’

**4.2.4.19** Exactly one FIELD or PARAM should contain ucd = ‘VOX:BandPass\_HiLimit’ and datatype=’double’

**4.2.4.20** Exactly one FIELD or PARAM should contain ucd = ‘VOX:BandPass\_LoLimit’ and datatype=’double’

**4.2.4.21** Exactly one FIELD or PARAM should contain ucd = ‘VOX:Image\_PixFlags’ and datatype=’char’ and arraysize=’\*’

**4.2.4.24** Exactly one FIELD or PARAM should contain ucd = ‘VOX:Image\_FileSize’ and datatype=’int’

# VO-Paris Simple Spectral Access version 1.04 Validator Tests

We perform separate tests for a normal query and a query with FORMAT=METADATA.

## Must/Errors for all queries

**VOTable XML validation** VOTable must be valid against the **VOTable 1.1** schema

## Musts/Errors for query FORMAT=METADATA

 **4.2.2** There must be one RESOURCE with 5 PARAMs with name = ‘INPUT:POS’, ‘INPUT:SIZE’ ,‘INPUT:TIME’, ‘INPUT:BAND’, ‘INPUT:FORMAT’.

## Must/Errors for a normal query

 **4.2.5.1** There must be a FIELD or PARAM containing the utype ‘access.reference’ (case independent)

**4.2.5.2** There must be a FIELD or PARAM containing the utype ‘access.format’ (case independent)

**4.2.5.4.1** There must be a FIELD or PARAM containing the utype ‘dataset.datamodel’ (case independent)

**4.2.5.4.1** There must be a FIELD or PARAM containing the utype ‘dataset.length’ (case independent)

**4.2.5.5.1** There must be a FIELD or PARAM containing the utype ‘dataid.title’ (case independent)

**4.2.5.6.1** There must be a FIELD or PARAM containing the utype ‘curation.publisher’ (case independent)

**4.2.5.10.1** There must be a FIELD or PARAM containing the utype ‘char.spatialaxis.coverage.location.value‘ (case independent)

**4.2.5.10.2** There must be a FIELD or PARAM containing the utype ‘char.spatialaxis.coverage.bounds.extent‘ (case independent)

**4.2.5.10.3** There must be a FIELD or PARAM containing the utype ‘char.timeaxis.coverage.location.value‘ (case independent)

**4.2.5.10.5** There must be a FIELD or PARAM containing the utype ‘char.spectralaxis.coverage.location.value‘ (case independent)

**4.2.5.10.6** There must be a FIELD or PARAM containing the utype ‘char.spectralaxis.coverage.bounds.extent ‘ (case independent)

## Should/Warnings for all queries

 **QUERY\_STATUS** The VOTABLE RESOURCE element should contain an INFO element with name= ‘QUERY\_STATUS’

**SERVICE\_PROTOCOL** The VOTABLE RESOURCE element should contain an INFO element with name=’SERVICE\_PROTOCOL’ and value=’SSAP’

**QUERY\_STATUS OK** The VOTABLE RESOURCE element should contain an INFO element with name=’QUERY\_STATUS’ and value=’OK’

Should/Warnings for a query FORMAT=METADATA
 **6.1.1** The VOTABLE must contain a RESOURCE with type=’meta’

**6.2** Each PARAM should have a unit

## Should/Warnings for a normal query

**4.2.2** Each PARAM and FIELD should have utypes

**4.2.3.1** There should be a FIELD or PARAM containing the utype ‘query.score’ (case independent)

**4.2.5.3** There should be a FIELD or PARAM containing the utype ‘access.size’ (case independent)

**4.2.5.5.2** There should be a FIELD or PARAM containing the utype ‘dataid.creator’ (case independent)

**4.2.5.5.3** There should be a FIELD or PARAM containing the utype ‘dataid.collection’ (case independent)

**4.2.5.5.4** There should be a FIELD or PARAM containing the utype ‘dataid.creatordid’ (case independent)

**4.2.5.5.5** There should be a FIELD or PARAM containing the utype ‘dataid.datasource’ (case independent)

**4.2.5.5.5** There should be a FIELD or PARAM containing the utype ‘dataid.creationtype’ (case independent)

**4.2.5.6.2** There should be a FIELD or PARAM containing the utype ‘curation.reference’ (case independent)

**4.2.5.6.3** There should be a FIELD or PARAM containing the utype ‘curation.publisherdid’ (case independent)

**4.2.5.8.1** There should be a FIELD or PARAM containing the utype ‘coordsys.spaceframe.name’ (case independent)

**4.2.5.9.1** There should be a FIELD or PARAM containing the utype ‘char.fluxaxis.ucd’ (case independent)

**4.2.5.9.2** There should be a FIELD or PARAM containing the utype ‘char.spectralaxis.ucd’ (case independent)

**4.2.5.10.4** There should be a FIELD or PARAM containing the utype ‘char.timeaxis.coverage.bounds.extent‘ (case independent)

**4.2.5.10.7** There should be a FIELD or PARAM containing the utype ‘char.spectralaxis.coverage.bounds.start‘ (case independent)

**4.2.5.10.8** There should be a FIELD or PARAM containing the utype ‘char.spectralaxis.coverage.bounds.stop‘ (case independent)

**4.2.5.11.1** There should be a FIELD or PARAM containing the utype ‘char.fluxAxis.calibration‘ (case independent)

**4.2.5.11.2** There should be a FIELD or PARAM containing the utype ‘char.spectralaxis.calibration‘ (case independent)

**4.2.5.11.3** There should be a FIELD or PARAM containing the utype ‘char.spectralaxis.resolution‘ (case independent)

**4.2.5.11.4** There should be a FIELD or PARAM containing the utype ‘char.spatialaxis.accuracy.staterror‘ (case independent)

**4.2.5.11.5** There should be a FIELD or PARAM containing the utype ‘char.spatialaxis.calibration‘ (case independent)

**4.2.5.11.6** There should be a FIELD or PARAM containing the utype ‘char.spatialaxis.resolution‘ (case independent)