

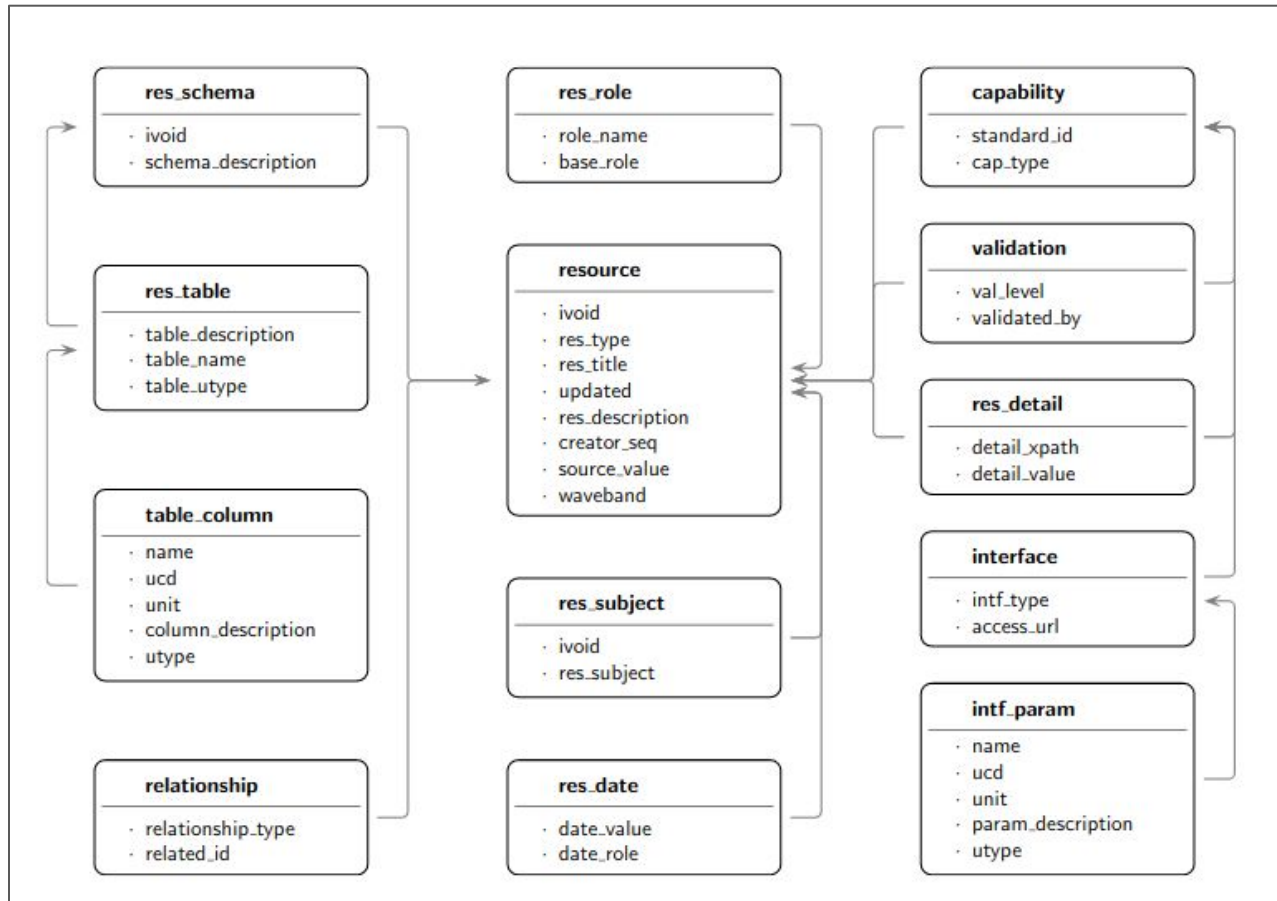
Browsing Joined Data in TAP Services

L. Michel - C. Obrecht - A. Oberto - G. Mantelet - H. Liao - S. Zomes

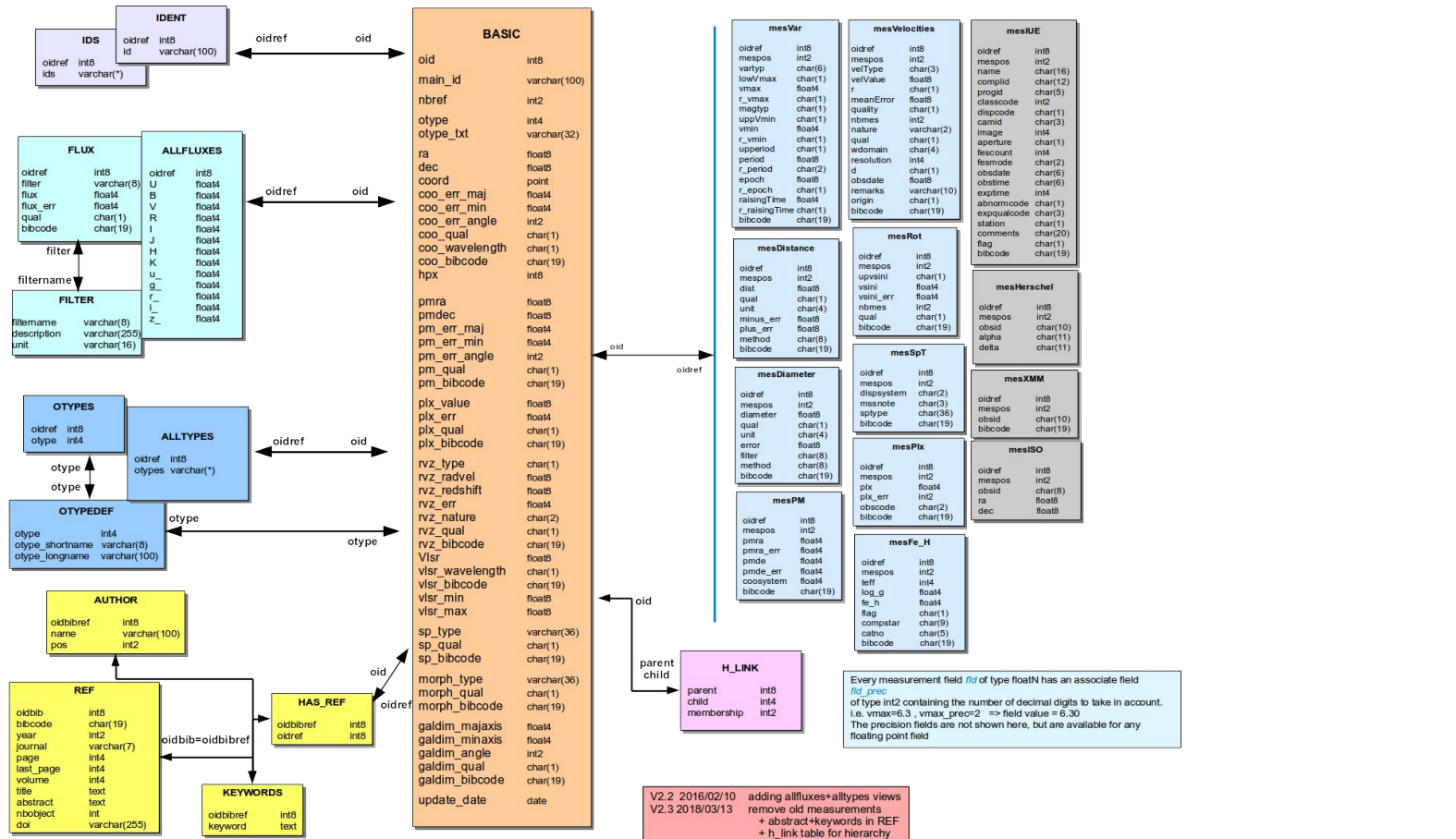
Observatoire de Strasbourg - Université Technologique de Belfort-Montbéliard

<https://github.com/lmichel/TAP-complex-data>

Complex TAP Schemas: Relational Registry



Complex TAP Schemas: Simbad



Every measurement field *fid* of type floatN has an associate field *fid_prec* of type int2 containing the number of decimal digits to take in account. i.e. vmax=6.3, vmax_prec=2 => field value = 6.30. The precision fields are not shown here, but are available for any floating point field

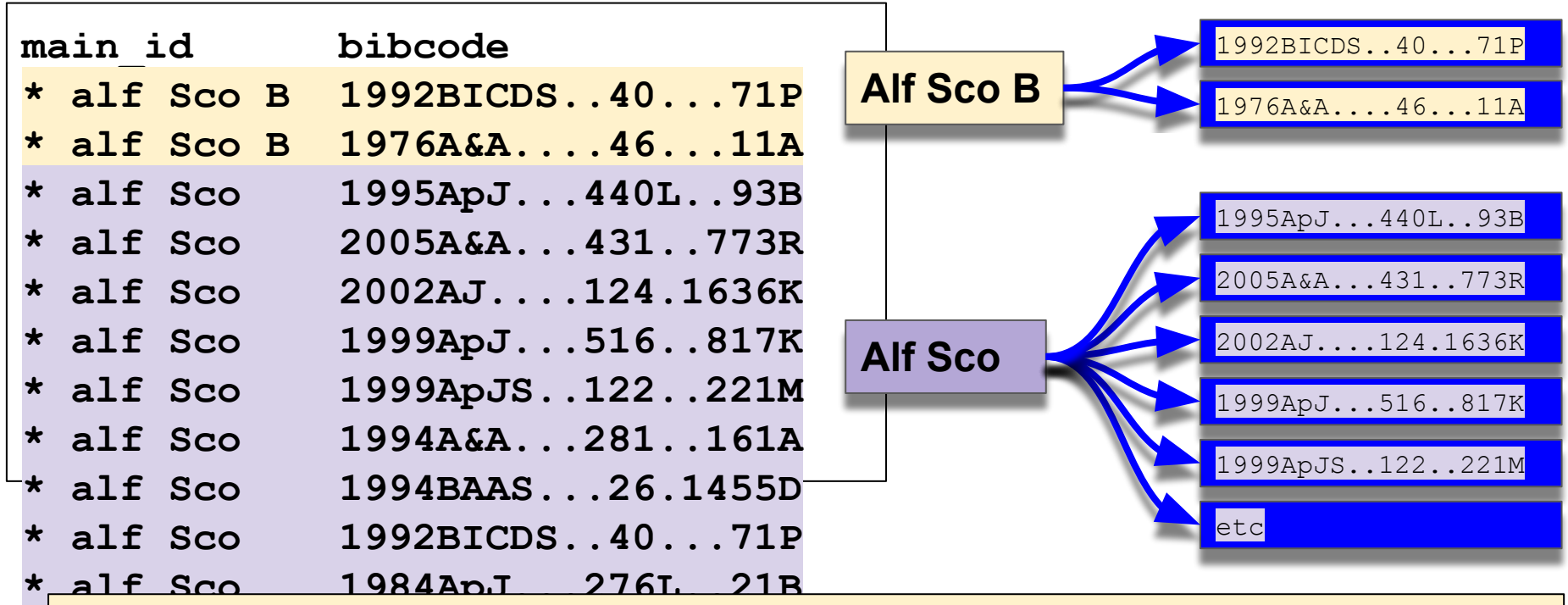
V2.2 2016/02/10 adding allfluxes+alltypes views
 V2.3 2018/03/13 remove old measurements + abstract+keywords in REF + h_link table for hierarchy

Complex TAP Schemas: Complex Queries

```
-- Gets objects and bibcodes around 'Antares' and having a publication from  
someone with a name starting with 'W'
```

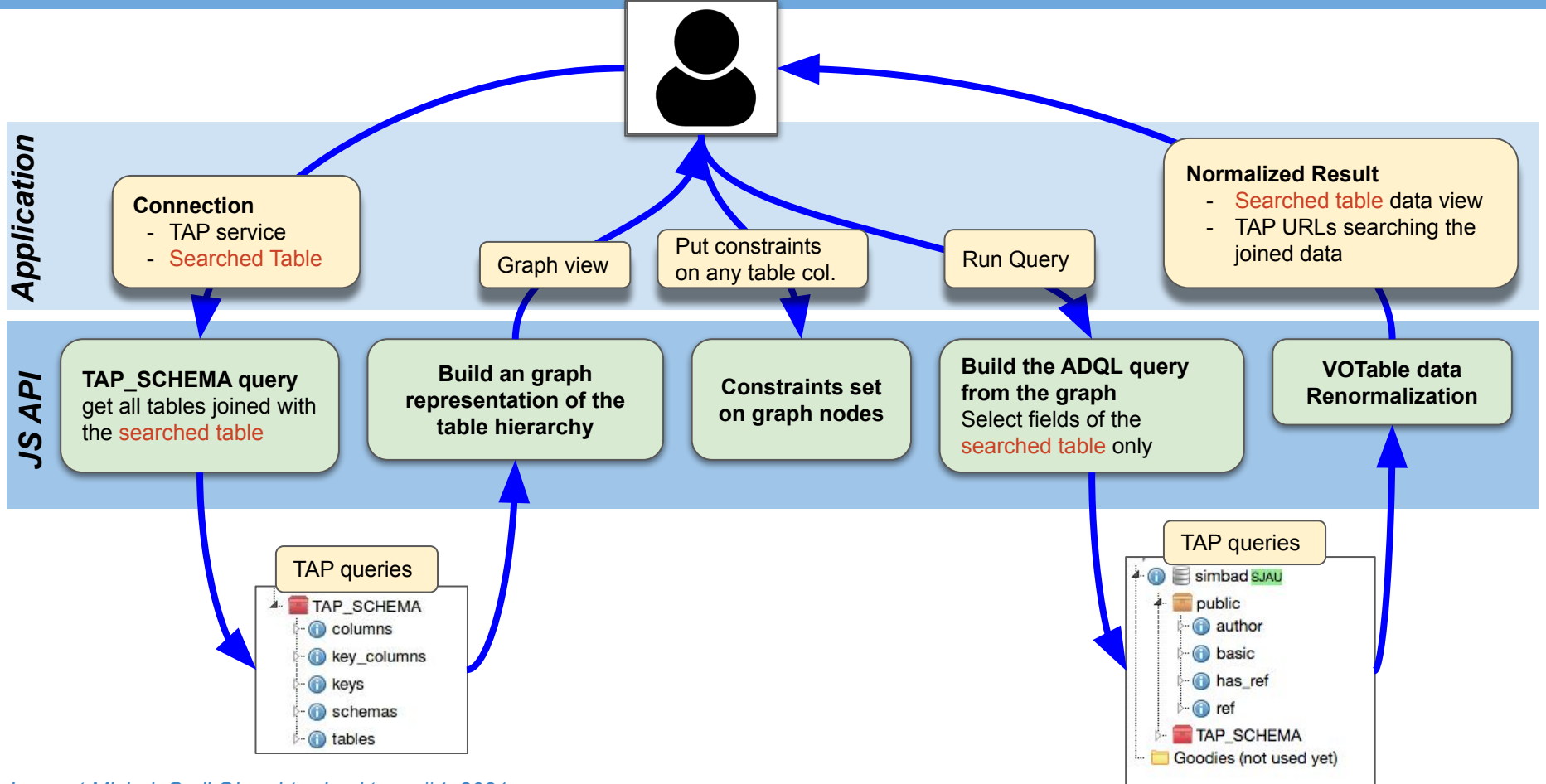
```
SELECT TOP 10  basic.main_id , basic.otype_txt ,  
               basic.ra , basic.dec, ref.bibcode, author.name  
  
FROM basic  
JOIN has_ref ON basic.oid = has_ref.oidref  
JOIN ref ON has_ref.oidbibref = ref.oidbib  
JOIN author ON ref.oidbib = author.oidbibref  
WHERE (basic.main_id like '%alf Sco%')  
      AND ( author.name like 'W%' )
```

Complex TAP Schemas: Denormalized VO Table



The client has to reconstruct the 1-to-N associations from the denormalized table

Hiding the Complexity



Status and Prospects: Toward a new TapHandle

catalog subjectUat: variable%

Service finder

name rolvoid ivoid desc title subject subjectuat tableName tableDesc utype url default

Tap Nodes

- vizier SJAU
- tap_schema
- ivoa
- IX_HE
- J_BaltA
- J_PASJ
- J_PAZh
- J_AN
- J_AZh
- III_spe
- combined
- IL_photometry
- L_astrometry
- VIII_radio
- J_AcA
- VII_nonstellar
- J_other
- J_ApJS
- J_AAS
- J_AJ
- J_MNFRAS
- J_ApJ
- J_AA
- cadonrcca-argus SJAU
- tap_schema
- ivoa
- caom2
- Goodies (not used yet)

Service tree

An observation is the primary top-level class for empirical data.

Show 5 entries

observationTID	algName	trgName
347704		HD 220172
347705		MCT 0501-2858
347706		HD 149881
347707		ALF CEN A
347708		G 191-B2B



Link Browser

(click on titles to expand links)

Link #review

Link <http://www.opencad.org/caom2/thumbnail>

Link #this

Link #cutout

Cutout a subregion of the plane...

SODA: a cutout of the plane...

IP: no description provided

geonick: CAOM201715S0264.fits

RUNID: no description provided

d4Zetu: gw48ec

CIRCLE: no description provided

275.6298050142202 -13.55055579029316 5.892556509442477E-4

POLYGON: no description provided

275.63023361301265 -13.550972455864638 275.62937641682963

-13.55097245732452 275.6293764169304 -13.550139123991272

275.6302336100085 -13.550139122531405

18 22 31.153 -15.33 2.00

FOV: 5.08"

Buttons: Browse, Ed. Frame, clear, Accept

Go To: _____

Draw counter-clockwise please

Datalink client

members of a composite observation.

members of a linked observation.

A plane is one (of several) data product(s) that are created as ...

Show 5 entries

Showing 1 to 1 of 1 entries

observationTID	planeTID	prvName	enrBandpassName
347704	574582		

An artifact is one physical product or resource (typically a file...)

CaomArtifact 1+

Constraints | Queried entries: 10

Show 5 entries

Showing 1 to 5 of 7 entries

planeTID	artifactTID	dataURI	product
574582	21048267	http://archive.stsci.edu/pub/vospectra/befs2/befs1001_spc1_vo.fits	SCIEN
574582	21048268	http://archive.stsci.edu/pub/vospectra/befs2/befs1001_spd1_vo.fits	SCIEN
574582	21048269	http://archive.stsci.edu/browse/previews/orfeus/befs/gif/BEFS1001.gif	PREVI
574582	21048270	http://archive.stsci.edu/browse/previews/orfeus/befs/thumb/BEES1001.tif	THUM
574582	21048271	http://arcl	AUXIL

<https://saada.unistra.fr/tapcomplex/demo/html>

<https://github.com/michel/TAP-complex-data>

Interested? Post or comment issues.