



Characterisation 2.0: Advocating for a new start

F.Bonnarel on behalf of
F.Bonnarel, M.Louys, I.Chilingarian, L.Michel



Two questions

- ▶ Why is a Characterisation version 2 needed ?
- ▶ Why wasn't it done before ?
- ▶ Latter question easy to answer :
 - Few participants (IC, ML , FB)
 - other priorities (SIAV2, DataLink, Obscore 1.0 and 1.1);
 - IC left VO duties

Why is Characterisation version 2 needed.

- ▶ Version 1.3 of charDM is incomplete
 - where we need it today.
 - In Obscore
 - In Spectral DM
 - In Cube DM + DataSet DM
 - No flux or observable axis
 - No polarisation axis
 - No redshift axis

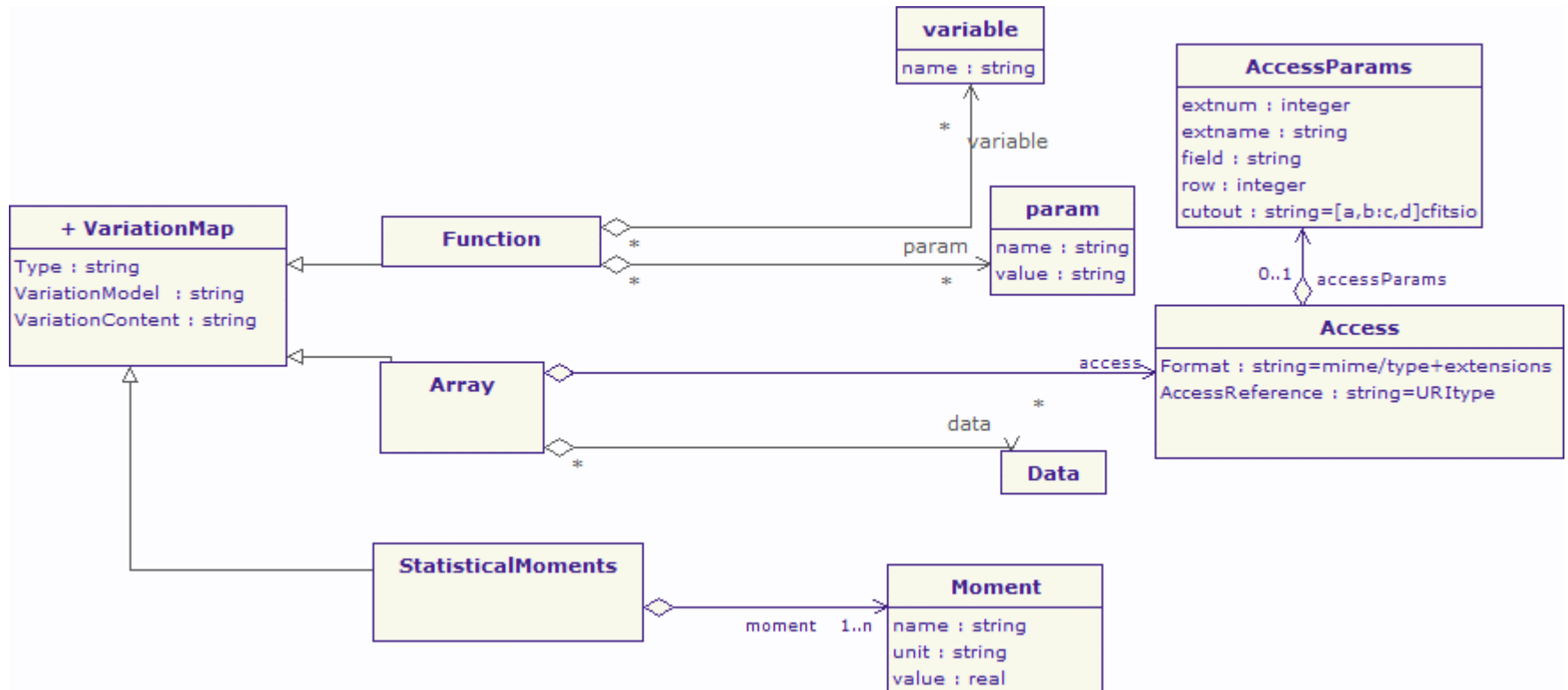
Why is Characterisation version 2 needed.

- ▶ Emerging use cases related to Large multiD dataset
 - Combined datasets need combined characterisation
 - Level 4 = variation or responses maps : need to be described in the context of provenance
 - Specific flavor : visibility data (spatial « frequency » axes)

What does exist ?

- ▶ WD published in december 2012: is a combination of
 - extended use cases,
 - partial UML diagrams (see next slide)
 - Classes and attributes description
 - Examples
 - It is not really in Working draft form, but an extended note.
Got one single extended comment (J Salgado 2014)
- ▶ Utype list and xml schema used for internal DM work (Spectral DM and Obscore) but unpublished.
 - Status of the list in the VO-DML context ?

Level 4 UML diagram (Char 2 partial view)



What has been done in the mean time ?

- ▶ Some of Char 2 concepts and utypes have been used
 - in Obscore
 - In Spectral DM
- ▶ CubeDM+DatasetDM is agnostic about which version of Char is used.
 - Will strongly benefit to have char2

A couple of use cases

- ▶ Limits in flux or observable for a datasets (sensitivity, saturation)
- ▶ Link to Visibility dirty beam. Estimate of sensitivity map of radio data
- ▶ Point to variable PSF (or SF) across the fields
- ▶ Flux limits in some polarization state
- ▶ Theoretical Spectrum fitting need resolution variation
- ▶ Need IVOA « names » for all these « calibration » or response data

Work to be done

- ▶ Full UML diagram to be completed
 - ▶ Working Draft concentrating on Classes and attribute description
 - ▶ Publish utype list
 - ▶ Question of VO-DML ?
 - Formal VO-DML description (vo-dml-xml)
 - Utype generation
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