

Status of ObsCore Extension for visibility data

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New dataproduct_type use cases

- In the context of DataLink 1.1, if the link is towards a dataproduct we can use the content_qualifier term to specify the type of this dataproduct
- Can be timeseries, spectra
 - Light curve and velocity curves are TimeSeries.
 - One is mapping flux, the other one radial velocity
 - For double stars or exoplanets the analysis software will be very different
 - And last but not least we want the user to be able to read a standard definition of the type.
- In the radio domain can be images, but also ...



New dataproduct_type use cases

- In the radio domain, can be images, but also
 - ... velocity fields, dispersion maps, etc. may be obtained from spectral cubes as moment 0, 1, 2, etc.
 - Is that still images ? No → need specific terms
 - Again you may inform the user with a correct definition about the nature of the dataproduct
 - And then you will not apply the same software on velocity fields (find rotation curves) and images (segmentation)



Proposed new terms

- « Velocity curve » and « light curve » as children of « timeseries »
- « velocity field » as a sibling of « image »



Dataproduct-type as SKOS vocabulary

- Hierarchical organization of dataproduct types is not enough
- SKOS proposal allows some datatype to have several « parents ». (Spectrum and TimeSeries for dynamical spectra)
- Useful for selection of datasets in ObsTAP/SIA. We can select on narrow terms or on parents according to the science case.
- Useful to prepare client in DataLink context (new content_qualifier term)
- Behind these relationship are properties of dataproduct



Dataproduct-type as SKOS vocabulary

- In the new proposed we have two different type of properties
 - Which sampled data axes are independent?
 - Which sampled data axes are dependent (= observable) ?
- New term DynamicSpectra have time (TimeSeries) and spectral (spectrum) axes sampled and independent.
 - Other properties not relevant today
 - Which independent axes are sparsed and which are regular
 - Table or bitmap organization
- New terms for « velocity » and « Photometric » observables ?



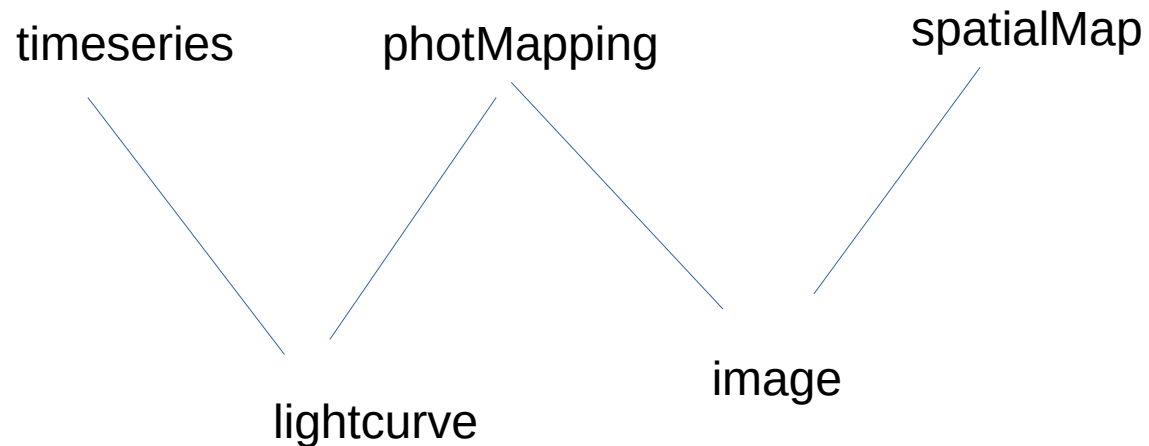
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- New terms for « velocity » and « Photometric » observables ?
- « photMapping » and « VelocityMapping »



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- New term for spatial maps (reserve image for fluxes)
- « photMapping », « VelocityMapping » and « spatialMap »



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