Metadata for Timeseries / Extension for ObscoreTable for Time series

Obscore and T	Definition TD	Utype	ucd	rec. units	Mandatory	default	
extension keywords		datamodelpath			/optional		
% position on sky							
s_ra	Position (within a certain area)	Char.SpatialAxis.Coverage.RefVal.	pos.eq.ra	deg	man	ICRS	
s_dec	Position (within a certain area.	Char.SpatialAxis.Coverage.RefVal	pos.eq.dec	deg	man		
s_resolution	Angular resolution interval	Char.SpatialAxis.Resolution.RefVal	pos.AngResol	arcsec	man		exemple HST/ WFPC2 cf François : ds ce cas on a deux résolutions spatiales
%target							
target_name	Name of Target	Target.name	meta.id;src	null	opt		
%Observable							
% nb of observables per point							
o_xel	Nb of observables per time point	TSNDpoint.nbMeas	meta.number	null	man	1	pas necessaire si on code une ligen de données par observable et qu'on relie au même dataset.
%observable types							
%Type of data: one value among (Events, photometry, radial velocities, spectra, images, polarisation, other)							
o_type	List of types of the Observable quantities	Char.ObservableAxis.observableTypeList ??	meta.class	null	opt	scalar	pour préciser si l'observable est structuré en dataproduct. Ds ce cas definir une règle pour interpréter o_ucd
%One value in [scalar, image , spectrum, cube,...] as dataproduct_type in the Obscore vocabulary.							
% Physical nature of observable							
o_ucd	Physical nature attached to observable	Char.ObservableAxis.ucd	meta.class	null	man		obscore
%Limits along observable axis							
% ex: Magnitudes / Fluxes/ counts, etc interval (min)							
o_min	Minimum value for Observable	Char.ObservableAxis.Coverage.BoundsLimits.LoLim	$(o_ucd); stat.min	o_units'	opt		obscore ext
o_max	Maximum value for Observable (ex. Mag max)	Char.ObservableAxis.Coverage.BoundsLimits.hiLim	$(o_ucd);stat.max	o_units'	opt		obscore ext / important pour la découverte
o_unit	Unit of the dependent observable	Char.ObservableAxis.unit	meta.unit	null	opt		Obscore
o_complextype	specifies if complex data are compiled value or observed with the first instruments in [false,true]	Char.ObservableAxis.status?	null		opt		too sophisticated for now / given up
% sensitivity , max detection limit. TBC							
%o_upperlimit	upperlimit is a limiting value for the estimated faintest object in the observation (LSST, ZTF)						these tags are in columns added to the data instead. . not appropriate as metadata
o_upperlimit	flag in the data indicating that some values are upperlimits and not detections measurements. not queryable	Char.ObservableAxis.Coverage.Sensitivity.Quality???	meta.code.qual	null	opt	no	if yes it means some values are upperlimits
		?	phot.flux;stat.max	flux units	opt		
% spectral coverage							
em_min	spectral interval (min)	Char.SpectralAxis.Coverage.Bounds.Limits.LoLim	em.interval;stat.min	'em_unit'	man	nm	
em_max	spectral interval	Char.SpectralAxis.Coverage.Bounds.Limits.HiLim	em.interval;stat.max	'em_unit'	man	nm	
% Must be qualified by a ucd em.freq if spectral axis is in Frequency							
em_ucd	Wavelength/ Frequency/ Energy	Char.SpectralAxis.ucd	meta.ucd	null	opt		obscore :query in meters
em_unit	Unit along the spectral axis	Char.SpectralAxis.unit	meta.unit	null	opt		if mentionned then it means em_min and max are given in these units
% Polarisation states							not applicable here
pol_states	Polarization state list	Char.Polarization.List	meta.class	null	opt		
%time features							
t_min	Time start of the sequence(min)	Char.TimeAxis.Coverage.Bounds.Limits.LoLim	time.start;obs.sequence	s	man		in recommended TimeCoordsys
t_max	Time end of the sequence	Char.TimeAxis.Coverage.Bounds.Limits.HiLim	time.end;obs.sequence	s	man		obscore
% NB: the time span , or elapsed time for the sequence is then t_max -t_min							
t_exposure	Exposure time (sum of multiple exposures)	Char.TimeAxis.Support.Extent	time.duration;obs.exposure	s	man		obscore ext
t_exp_min	Exposure time of samples (min)	Char.TimeAxis.Sampling.Extent.loLim	time.duration;obs.exposure;stat.min	s	man		obscore ext
t_exp_max	Exposure time of samples (max)	Char.TimeAxis.Sampling.Extent.hiLim	time.duration;obs.exposure;stat.max	s	man		obscore ext table
%time space between 2 time samples / cadence							
t_sampling_step_min	minimal length of time interval between 2 observations / cadence (min)	Char.TimeAxis.Sampling.Period.LoLim	time.interval;obs.sequence;stat.min	s	opt		obscore ext table
t_sampling_step_max	maximal length of time interval between 2 observations / cadence (min)	Char.TimeAxis.Sampling.Period.hiLim	time.interval;obs.sequence;stat.max	s	opt		obscore ext table
%NB : the UCD time.period is rather dedicated to a physical event. Not appropriate here							
%nb of sample along the time axis							
t_xel	nb of time stamps in the series	Char.TimeAxis.numBins	meta.number	null	man		
%Time CoosSystem						imposed for discovery	can be proposed in various formats in the query response
t_origin	Time(frame origin)	stc:TimeFrame.timeOrigin	time.epoch	?	opt		description to be in each dataset
t_scale	Time frame scale	stc:TimeFrame.timeScale	time.scale	?	opt		obscore ext table
t_refPosition (barycenter, heliocenter, …)	Time reference position	stc:TimeFrame.refPosition	?	?	opt		
t_refDirection (for solar observations)	Time reference direction	stc:TimeFrame.refDirection	?	?	opt		
%Time representation ISOtime , MJD, JD , Time offset a la STC ?							
t_format	Time representation	?	?	null	man	MJD?	