



STC-2.0 status

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The USVOA is recognized by the American Astronomical Society (AAS) as a Special Interest Group (SIG) of the Working Group on Astronomical Software (WGAS).

Organizational Structure

+ Modeling partnership

- Domain Expert: Arnold Rots (retiring)
- Modeler: Mark Cresitello-Dittmar (over booked)
 - both need replacement by summer 2017

+ Use case/requirements based approach

- Constrain use cases => Science Priority – Multi-D data
 - Defines scope and requirements
 - May NOT handle all cases STC1 does
- 3 sample files: VLA cube, 2D image, Event list
 - Sets domain requirements
 - Provide baseline implementation examples
- Identifies minimal set of objects
- Other use cases and examples can follow

Activity

+ Twiki updated with requirements from cube model

- Participants, goals, use cases, requirements, etc
 - <http://wiki.ivoa.net/twiki/bin/view/IVOA/STC2>

+ Model

- Normalize elements to identify pattern
 - Identify all concepts involved, and proper relation
 - May over describe simple cases
- Implement pattern in all required domains
- Trim elements not needed for specified use case
 - Coordinate flavors, unused domains, region, area, several support datatypes
- Separate into sub-models
 - `stc2_core`, `stc2_coords`, `stc2_transform`

Activity

+ Uploaded to Volute

- Link likely to change

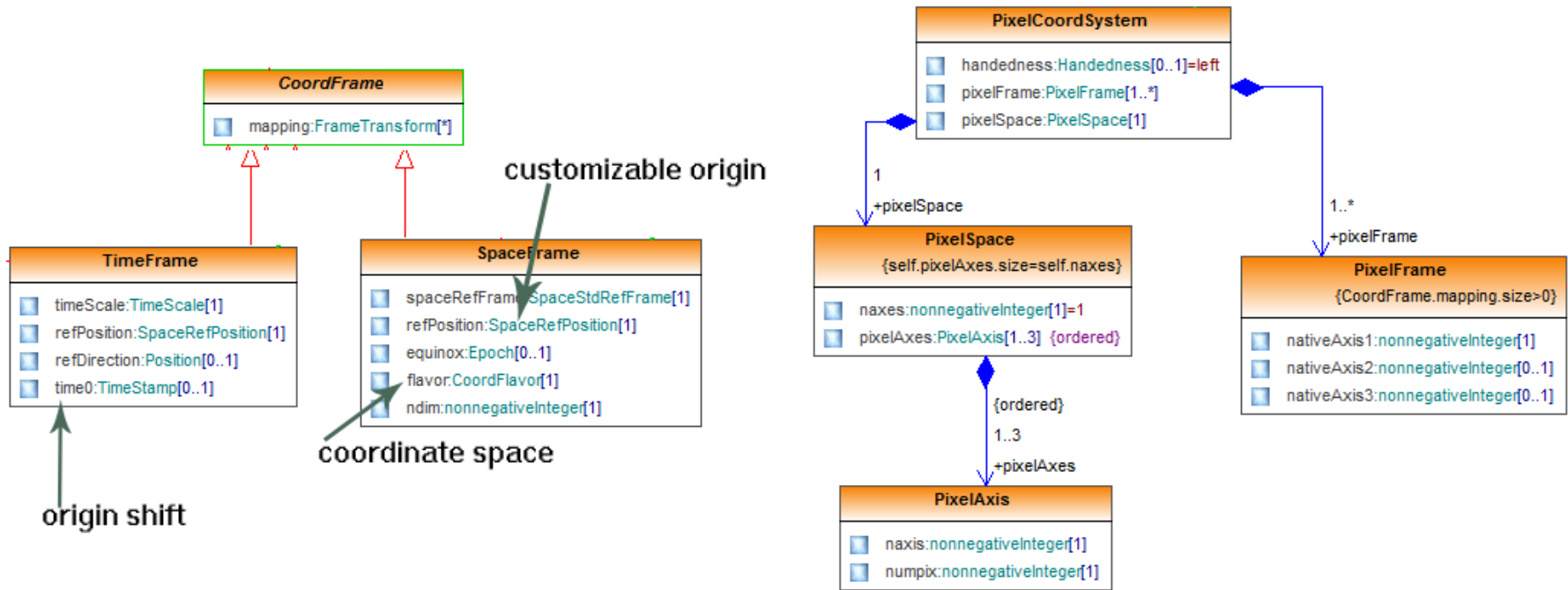
+ Distributed to small group for comment

- Good feedback on structure

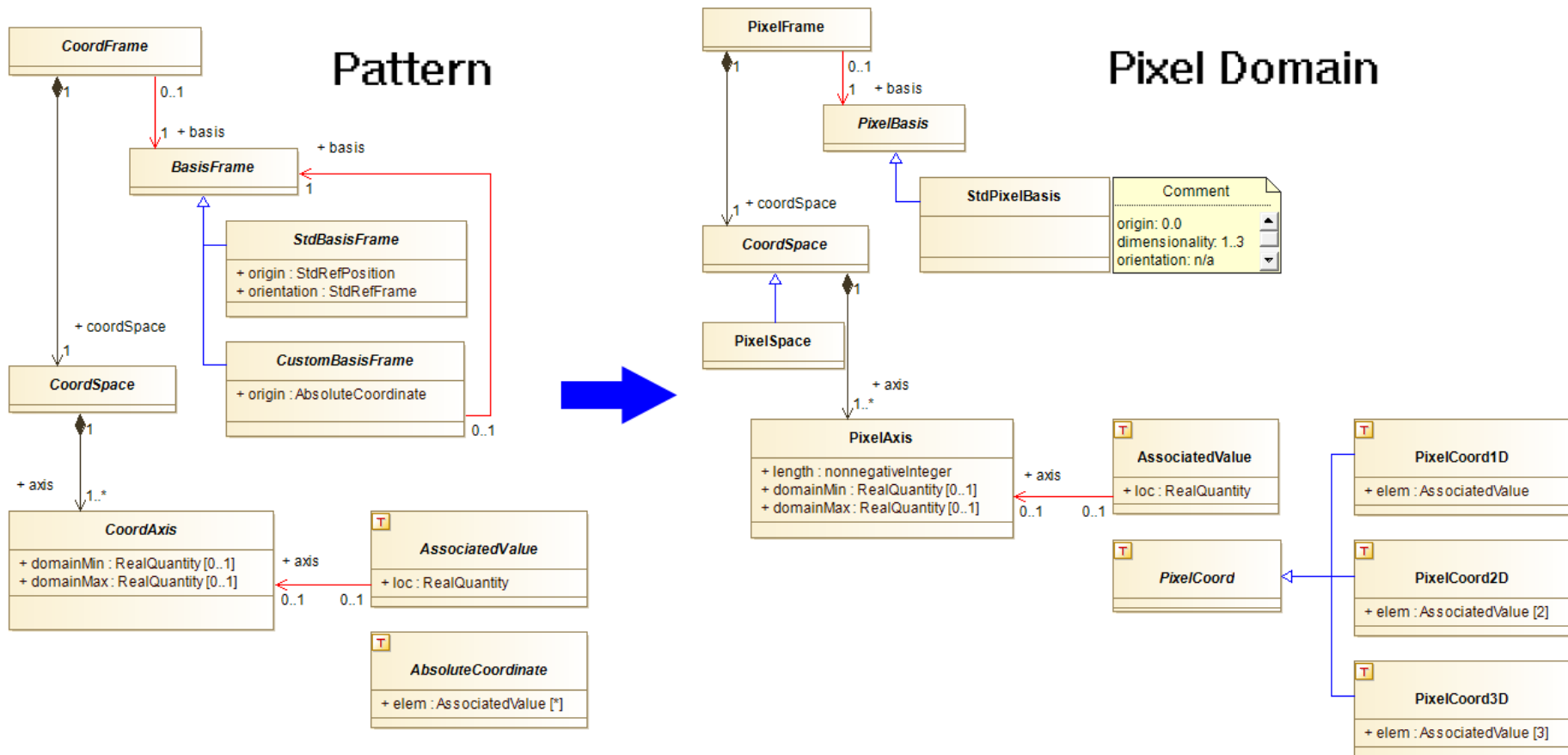
+ Looking for

- More input on pattern approach in general
 - More explicit, more consistent across domains
 - More understandable?
- Level of normalization

Pattern: current

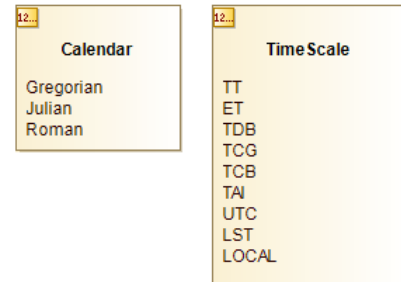
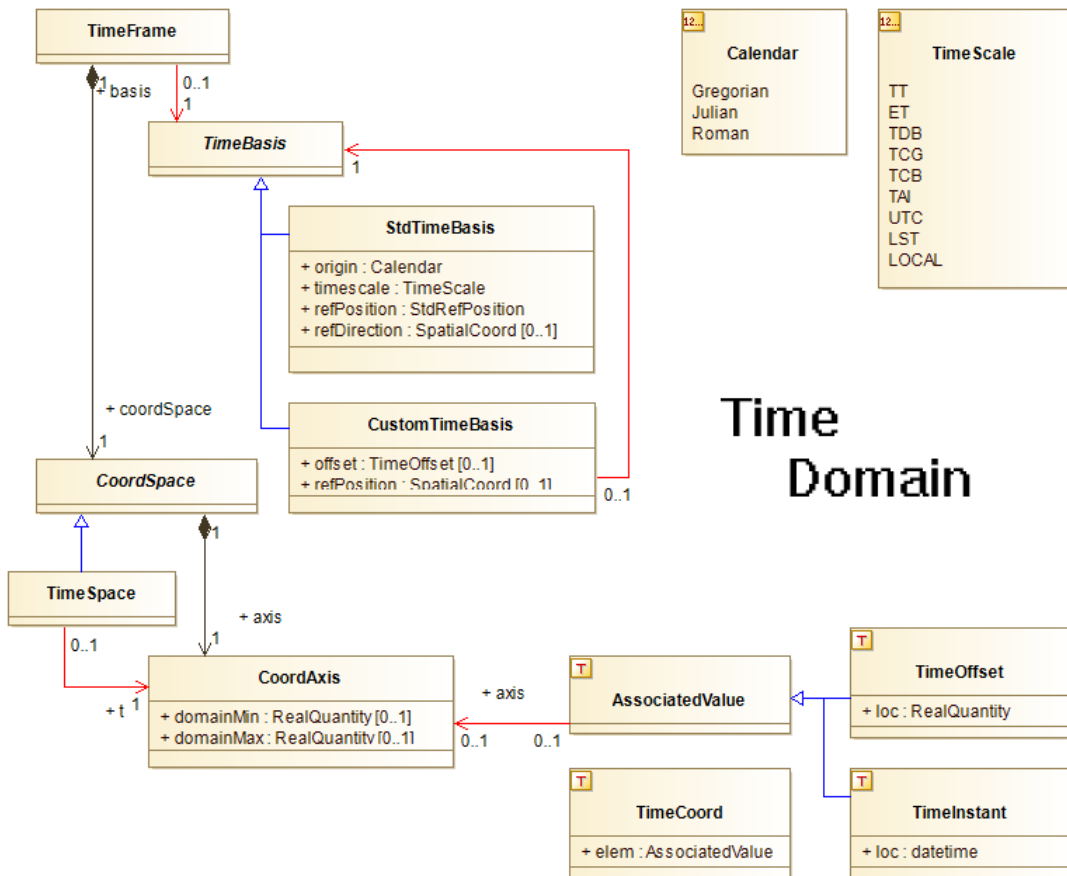
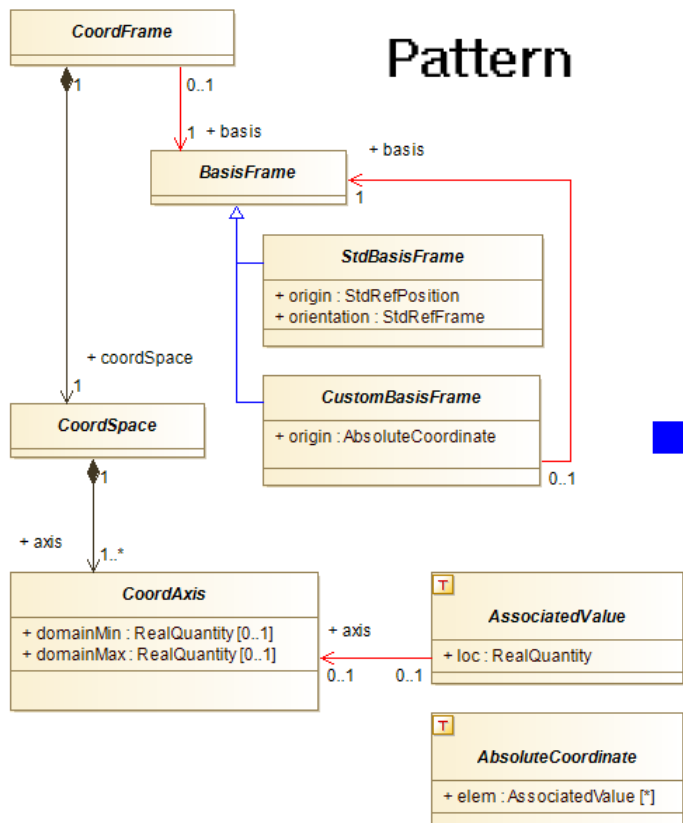


Pattern example – Pixel Domain



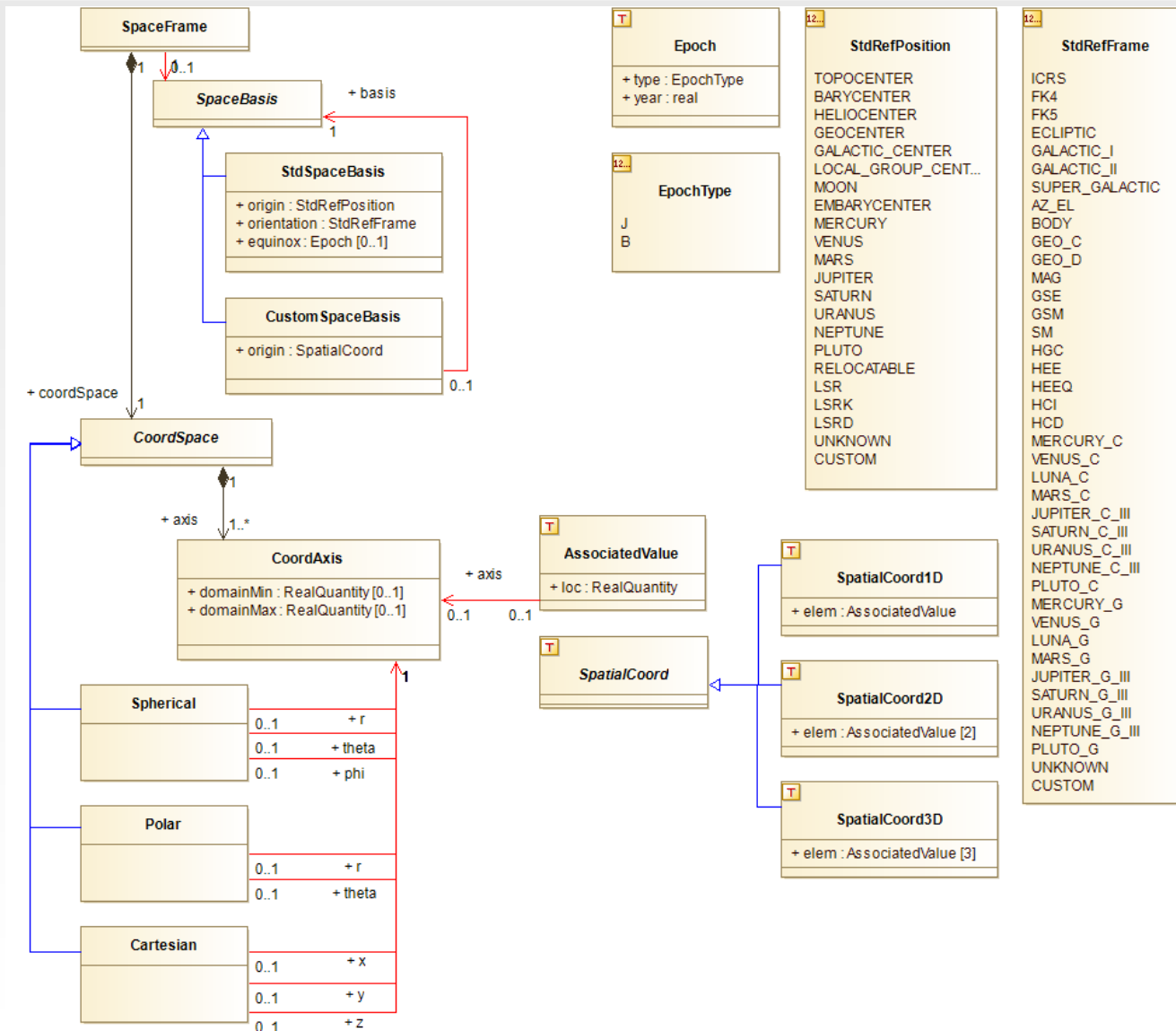
Pattern example – Time Domain

Pattern



Time Domain

Pattern example – Spatial Domain



ToDo

- + Complete migration of coords and transform parts
- + Distribute to DM group
 - Work questions within group mail list
 - Decide on normalization level
- + Incorporate into Dataset and NDCube models
- + Serialize sample files in VOTable, annotated to model
 - Iterate to resolve issues as identified.
- + Update working draft

Big Picture

This approach constrains the model to support active participants in IVOA projects. It will consist of a limited number of packages and components required to implement an available set of sample files.

It is very important to develop the model in context of “the big picture” to ensure that it can accommodate growth as new samples and use cases are considered.