



# VO-DML 1.0 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).

# Credits

Standard: Gerard Lemson, Omar Laurino

Support (alphabetical order):

- Laurent Bourges (vo-urp)
- Mark C-D ( ds, cube, stc2 )
- Pat Dowler ( caom2 )
- Paul Harrison ( dsl )
- Laurent Michel ( tessellation, help docs )
- Arnold Rots ( stc2 )
- many others in review feedback and follow-on work

# Description

“ ... defines a standard modeling language, or meta-model, for expressing data models in the ivoa.”

“This specification has three main goals:

1. Provide a set of formal rules for data modeling...
2. Provide a standard, machine-readable representation for IVOA Data Models
3. Define portable Data Model references for pointing to Data Models and the elements they define. “

# Timeline

2016, May: deemed ready for PR

2016, Sep.: ready for RFC start

2016, Oct-Nov: RFC period

2017, Jan-Feb: held for additional input from implementations (caom2/timeseries)

2017, Apr: request to add registry of DMs text

2017, May: final updates ready for review/approval (expected this week)

# Topics

Recent work has raised questions:

- Allow aggregation?
- Allow multiple composition of Object?
- Extract 'ivoa' base types description

**\*\* IF future modeling work identifies a real need for these features, we can address in a 1.1 version.**

# Package

## + Standard

- VO-DM Standard document itself
- Implementations (compliant models)
  - DatasetMetadata
  - NDCube
  - STC2: Coords, Meas, Trans
  - ivoa base types model
  - Sample test model

## + Validators

- Xslt based schema and schematron validator (GL)
- CADC VO-DML validator (PD)

# Package (cont.)

## + Tools

- VO-URP, used same formalized approach with SimDM
- UML Translators, xmi to vo-dml/xml
  - Modelio, MagicDraw, Umodel
- HTML Generator, vo-dml to html
- Jovial DSL, for expressing models and generating instances (OL)
- DSL, for creating/editing models (PH)

## + Help

- Beginner's Guide
- Modelio specific how-to guide for detailed instructions

List is growing!