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EXPANDING THE FRONTIERS OF SPACE ASTRONOMY

# VOTable 1.5: Status and Process

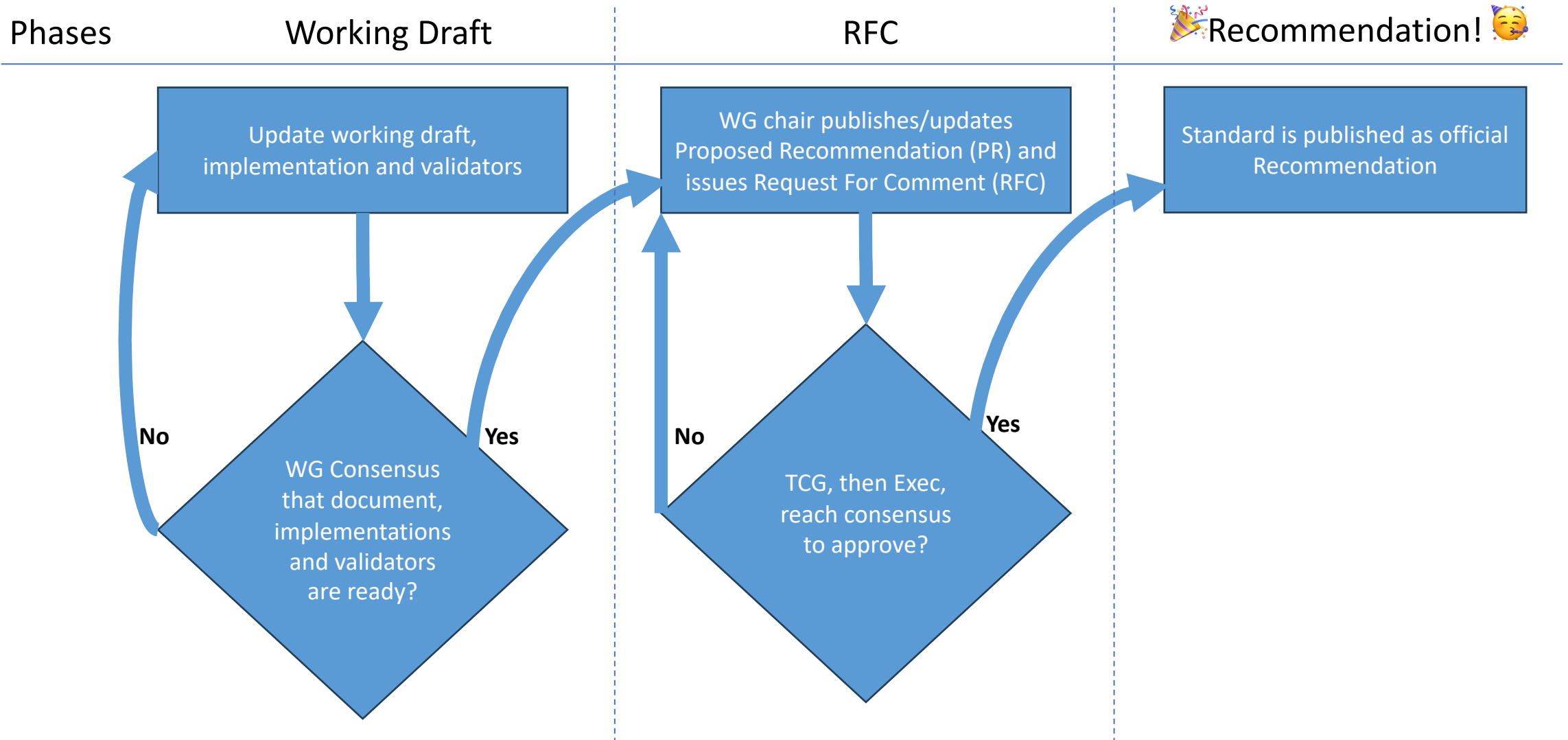
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IVOA Interop – Northern Fall 2023



# Document Process Overview(\*)



\* See [IVOA Document Standards Version 2.0](#) for details



## What's been changed so far

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From the [current working draft \(23 October 2023\)](#):

### 9.4 Differences Between Versions 1.4 and 1.5

The differences between version 1.5 of VOTable and the preceding version 1.4 are:

- COOSYS now has a **reposition** attribute analogous to TIMESYS.
- The frame identifiers (**system** attribute) in COOSYS are now taken from the reframe IVOA vocabulary.
- Clarifications and rewording on:
  - the meaning of **MIN** and **MAX value** attributes for array types.
  - removing the recommendation to use xmlns to do utype prefix binding.
  - timescales for calendar epochs.
  - positioning advice for **ID** and corresponding references.
  - noting that **RESOURCE** elements can contain **MIVOT** blocks.



## New COOSYS approach added then removed

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### Give position components roles in COOSYS (pull request #40)

- Proposed an approach for supporting the long-desired use case of epoch propagation.
- Discussion happened on Github, probably to a fairly limited audience
- The proposal was merged and made part of the 13 September working draft so that it could be concretely discussed on the Apps mail list

### Discussion made clear it was not a simple yes or no question

- Multiple possible tweaks/improvements suggested within that proposal
- Multiple alternatives available
- If MIVOT approaches are close at hand, would this change be worthwhile?
  - Were MIVOT approaches close at hand?

### Decided to defer consideration of changes for epoch propagation to v1.6























- Decision reached during Apps WG Zoom meeting
- Hopefully allows demonstration that minor revisions can be produced relatively quickly



# All Changes Were Made via Github Pull Requests

Pull requests (PRs) with milestone of v1.5:

- <https://github.com/ivoa-std/VOTable/pulls?q=+is%3Apr+milestone%3Av1.5+>

<input type="checkbox"/>	 1 Open	<input checked="" type="checkbox"/> 15 Closed	Author ▾	Label ▾	Projects ▾	Milestones ▾	Reviews ▾	Assignee ▾	Sort ▾
<input type="checkbox"/>	 <b>Explicit vocabulary lists and paragraph indentation.</b> ✓								 2
	<small>#50 opened 2 days ago by tom دونالدسون • Review required  v1.5</small>								
<input type="checkbox"/>	 <b>Preparing for release of WD-VOTable-1.5_20231022</b> ✓								 1
	<small>#49 by tom دونالدسون was merged 2 days ago • Review required  v1.5</small>								
<input type="checkbox"/>	 <b>Remove epoch propagation and cleanup for WD</b> ✓						 2		 6
	<small>#48 by tom دونالدسون was merged 3 weeks ago • Review required  v1.5</small>								
<input type="checkbox"/>	 <b>Mention MIVOT in the RESOURCE section</b> ✓								 2
	<small>#47 by Imichel was merged on Sep 26 • Approved  v1.5</small>								
<input type="checkbox"/>	 <b>Preparing for release WD-1.5 2023-09-13</b> ✓								
	<small>#45 by tom دونالدسون was merged on Sep 13 • Review required  v1.5</small>								
<input type="checkbox"/>	 <b>Create automatic preview on merge</b> ✓								 1
	<small>#44 by tom دونالدسون was merged on Sep 12 • Review required  v1.5</small>								
<input type="checkbox"/>	 <b>Update ivoatex and remove aap citation workaround</b> ✓								 6



# Can view all changes for each PR

E.g., new tests for [validating example VOTables in PR #40](#)

## Give position components roles in COOSYS #40

Edit <> Code

Merged tomdonaldson merged 2 commits into `ivoa-std:master` from `msdemlei:refs-from-coosys` on Sep 8

Conversation 19 Commits 2 Checks 1 Files changed 5 +120 -28

Changes from all commits File filter Conversations Show whitespace 0 / 5 files viewed Review in codespace Review changes

Filter changed files

- Makefile
- VOTable.tex
- VOTable.xsd
- coosys\_example.vot
- timesys\_example.vot

```
Makefile
@@ -66,3 +66,12 @@ ivoatex/Makefile:
66 66 @echo "*** ivoatex submodule not found. Initialising submodules."
67 67 @echo
68 68 git submodule update --init
69 +
70 + STILTS ?= stilts
71 + test:
72 + @$(STILTS) xsdvalidate \
73 +     schemaloc="http://www.ivoa.net/xml/VOTable/v1.3=VOTable.xsd" \
74 +     coosys_example.vot
75 + @$(STILTS) xsdvalidate \
76 +     schemaloc="http://www.ivoa.net/xml/VOTable/v1.3=VOTable.xsd" \
77 +     timesys_example.vot
```



## One PR currently open

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As mentioned on Apps mail list, [PR #50](#) makes some corrections and format changes based on recent comments:

- [Update appendix B title to V1.5](#)
- [Remove space from xtype="circle" in section 4.7](#)
- [Add reference to architecture diagram in section 1.4](#)
- [Remove `\parindent=0pt` to make paragraph breaks more apparent](#)
- [Remove unwanted indentation after example in sect. 4.7, p18](#)
- [eq `FK4/5 ==> FK4/5`](#)
- [update examples to v1.5](#)
- [Where possible, use `\ivoaDocversion` in references to "current version"](#)



# Many changes driven by existing Github issues

## List of issues addressed in v1.5

- <https://github.com/ivoa-std/VOTable/issues?q=is%3Aissue+is%3Aclosed+milestone%3Av1.5>

<input type="checkbox"/>	<input checked="" type="radio"/> 4 Open	<input checked="" type="checkbox"/> 7 Closed	Author ▾	Label ▾	Projects ▾
<input type="checkbox"/>	<input checked="" type="radio"/>	<b>Review section 9.4 (Differences Between Versions 1.4 and 1.5)</b>	<b>Priority: High</b>		
		#46 by tom دونالدسون was closed 3 weeks ago	↗	v1.5	
<input type="checkbox"/>	<input checked="" type="radio"/>	<b>Update sections 7.1 and 7.2 to match schema changes for COOSYS</b>	<b>Priority: High</b>		
		#41 by tom دونالدسون was closed 3 weeks ago	↗	v1.5	
<input type="checkbox"/>	<input checked="" type="radio"/>	<b>Add example to help explain MIN/MAX clarification</b>			
		#32 by tom دونالدسون was closed on Sep 13	↗	v1.5	
<input type="checkbox"/>	<input checked="" type="radio"/>	<b>Consider removing recommendation to avoid forward references</b>			
		#27 by smonkewitz was closed on Sep 13	↗	v1.5	
<input type="checkbox"/>	<input checked="" type="radio"/>	<b>Add definitions for legal COOSYS "system" values.</b>			
		#22 by tom دونالدسون was closed on Sep 13	↗	v1.5	
<input type="checkbox"/>	<input checked="" type="radio"/>	<b>Remove confusing paragraph in section 4.6</b>			
		#18 by tom دونالدسون was closed on Sep 13	↗	v1.5	
<input type="checkbox"/>	<input checked="" type="radio"/>	<b>COOSYS should have "refposition" attribute</b>			
		#16 by tom دونالدسون was closed on Sep 13	↗	v1.5	





## Some issues marked for v1.5 were not addressed

Open issues marked for v1.5

- <https://github.com/ivoa-std/VOTable/issues?q=is%3Aissue+milestone%3Av1.5+is%3Aopen>

4 Open ✓ 7 Closed

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**Fix unit section for consistency with VOUnits**  
#28 opened on Jul 9, 2021 by mbtaylor ↗ v1.5

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**parameter for content-type**  
#26 opened on Jun 28, 2020 by pdowler ↗ v1.5

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**Update example in section 3.7**  
#24 opened on May 15, 2020 by tom دونالدسون ↗ v1.5

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**Mention MIME type parameter 'content'**  
#15 opened on May 13, 2020 by tom دونالدسون ↗ v1.5

- Left unaddressed, they will be marked for v1.6



## Recognition of Effort

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This process requires significant effort!

- Proposing what should be modified (creating issues)
- Proposing changes (creating pull requests with actual edits to the document)
- Reviewing and commenting on proposed changes
- Building interoperable implementations
- Building validators

Big thanks to all who have contributed and will contribute!!!



## Next steps

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Merge [active PR](#) based on recent editorial comments

- Please review and comment or approve

Publish new (final?) working draft immediately after merge

Publish Proposed Recommendation (PR) for Request For Comment (RFC) period

- Consensus of working group
- Do we have needed implementations?
  - Consumers
    - ▶ Many parsers (Topcat/Stilts, Astropy) can, or soon will, accept this version
    - ▶ But do any use the new features (i.e., COOSYS reposition)
      - ◆ Should such use be required?
  - Producers?
  - Validators
    - ▶ Topcat imminent
    - ▶ Astropy soon



## Discussion: Benefits and drawbacks of using Github PRs

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### Benefits

- Proposed changes are concrete; includes pdf preview
- Every change is traceable; helps when undoing specific changes
- Comments are in context, can be attached to a specific line of the document
- Notifications – can subscribe to a document, issue, pull request

### Drawbacks

- We are used to using only one channel of communication
  - Conversations in Github may be missed by those monitoring e-mail and vice versa
- Potentially disjoint conversations; not easy to find all active discussions
- Learning curve with Github and/or [ivoatex](#). Note however that:
  - All ideas are still welcome via e-mail and Github
  - Several of us are willing to help with the mechanics, or create PRs ourselves based on those ideas.
- Notifications - not as simple as subscribing to a WG list



## Discussion: Questions/Ideas

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### Moving to RFC:

- How do we know when we've reached consensus on a working draft so that it can go to Proposed Recommendation? Are we there except for proofreading this week's new WD?
- Do we need implementations that provide and consume v1.5 VOTables? COOSYS repositioning?
  - Perhaps crucial for large or controversial changes, but not for minor corrections/improvements?

### Improving integration of both Github and e-mail discussions:

- Notify mail list when PRs created? When major comments made?

### Trying to show that we can release minor versions of the standard relatively quickly:

- Is this a realistic goal? Are there ways we can be more efficient?
- Worth having working Zoom meetings to move things forward?
  - Not as good as face to face but can help keep us engaged and focused
  - Did help with COOSYS issue

### Other ideas?