

UCD List Status : going forward for version UCDList-v1.6

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IVOA Interop meeting
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□ UCD list of terms

- Information on current version of standard
- Modifications and path to new version

UCD = Unified Content Descriptors

- Where do we stand ?
- What's coming ?

□ Current standard

- Semantics standards : 3 UCD documents

Semantics	VOUnits - Units in the VO	1.0	1.1	1.1 1.1 1.0 1.0 1.0 1.0 1.0 1.0 1.0
	UCD - An IVOA standard for Unified Content Descriptors	1.10	What UCDs are & syntax	1.10 1.10 1.06 1.05 1.03
	UCD1+ Controlled Vocabulary version <= 1.3: recommendation Version >= 1.4: endorsed note	1.5	List of words	1.5 1.5 1.5 1.5 1.5 1.4 1.4 1.4 1.4 1.3 1.3 1.3 1.3 1.3 1.3 1.23 1.22 1.21 1.20 1.20 1.11 1.11 1.10 1.02 1.00
	Maintenance of the list of UCD words	2.0	Maintenance	2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0
	Vocabularies in the Virtual Observatory	2.1		2.1 2.1 2.1 2.0 2.00 2.00 2.00 2.00 1.19 1.18 1.16 1.15 1.13 1.00

List of UCD terms : EN-UCDlist-1.5 (2023-01-25)

□ Maintenance

- Up to 2018 (i.e. up to v1.3 included) : each UCD list went through the WD → PR → R process.
 - IVOA : Working Draft, Proposed Recommendation, Recommendation
- Since v1.4, lighter procedure : PEN → EN
 - IVOA : Proposed Endorsed Note, Endorsed Note
- Players :
 - User
 - Scientific board : ucd-sci@ivoa.net
 - IVOA Semantics WG : semantics@ivoa.net
- Procedure = RFM : Request For Modification

□ RFM examples

Proposals from VeroniqueDelouille (VEP-UCD-001)

- **Proposed term:** stat.skew
- **Proposed description:** Statistical skewness, third moment of normalised data distribution function
- **Prefix:** P
- **Rationale:** This term was proposed actually by Veronique Delouille after FITSKeyword evaluation for solar datasets. Would complete the stat properties within the UCD tree. Would be useful for other data as well.
- **Used-in:** SDO/AIA FITS keywords
- **Discussion:** The statistical moments (except for the mean value) don't have the same units as the observed quantity, and thus these are another quantity extracted from the data. We propose to set the prefix to P

2022-0 Proposals from BaptisteCecconi (VEP-UCD-002)

- 2022-0 • **Proposed term:** phys.rotMeasure
- 2022-0 • **Proposed description:** Rotation measure
- 2022-0 • **Prefix:** P
- 2022-0 • **Rationale:** This term is proposed for the LOFAR4SW Faraday-Rotation IPS derived product providing DM-RM (Dispersion- and Rotation-Measure) of the interplanetary scintillation from pulsar observations.
- **Used-in:** https://voparis-gitlab.obspm.fr/vespa/ivoa-standards/semantics/vep-ucd/-/blob/master/examples/J0332+5434_DM-RM_timeseries.xml
- **Discussion:** This new term is directly linked to the already existing *phys.dispMeasure*.

UCD-SCI Answer: REJECTED. This term already exist as *phys.polarization.rotMeasure*

□ RFMs in practice

In practice, people have been asking for UCD modifications via :

- Email (Semantics ML)
- RFM on wiki page.

Current : https://wiki.ivoa.net/twiki/bin/view/IVOA/UCDList_1-6_RFM

- VEP = Vocabulary Enhancement Proposals
 - Special VEPs for UCDs
<https://wiki.ivoa.net/twiki/bin/view/IVOA/VEPsForUCD>
 - <https://voparis-gitlab.obspm.fr/vespa/ivoa-standards/semantics/vep-ucd/-/tree/master>
- Github issues
 - <https://github.com/ivoa-std/UCDList/>

□ UCD reference material

- <https://www.ivoa.net/documents/>
→ links to UCD1+ Controlled Vocabulary v1.5 EN <https://www.ivoa.net/documents/UCD1+/20230125/index.html>
- Github :
<https://github.com/ivoa-std/UCDList/>
 - Release for UCDList-1.5 EN
(also UCDList-1.5 PEN, UCDList-1.4 EN),
and current draft in progress
- Current RFM :
https://wiki.ivoa.net/twiki/bin/view/IVOA/UCDList_1-6_RFM

□ Problems / inconsistencies

- IVOA vocabularies <https://ivoa.net/rdf/>
 - Links to v1.4
<https://raw.githubusercontent.com/ivoa-std/UCDList/v1.4-EN/ucd-list.txt>
- UCD 1.1 standard section 4.5
 - Links to
<http://www.ivoa.net/Documents/latest/UCDlist.html>
→ redirects to list v1.23 (2007)
- <https://www.ivoa.net/documents/UCD1+/>
→ redirects to EN-UCDlist-1.4

□ Problems on IVOA wiki

- <https://wiki.ivoa.net/twiki/bin/view/IVOA/UCDListMaintenancePage>
Missing VEP template file
- <https://wiki.ivoa.net/twiki/bin/view/IVOA/VEPsForUCD>
Stops at VEP-UCD-010...
while there are 13 VEPs on VOParis website
- RFM page out of sync with list of VEPs

□ TODO

- Wiki « osterputz » (cleanup) : fix inconsistencies, update wiki pages
- IVOA documents : check redirections and versions
- How are other Working Groups doing it ?
- Part of IVOA hackathon effort ?

□ From UCDFList v1.5 to v1.6

- Update RFM page with all inputs
https://wiki.ivoa.net/twiki/bin/view/IVOA/UCDFList_1-6_RFM
 - Summarize pending terms on Semantics ML, and discuss them (report on RFM page)
 - Commit changes to Github ivoa-std/UCDFList
 - Test UCD tools on new draft list
- PEN UCDFList 1.6 by end 2023

□ Perspectives & questions

- Get the UCDList 1.6 ball rolling again
- Where are the reference lists accessible ?
 - UCDList EN in IVOA vocabularies ?
reference vocabulary file for tools
 - UCDList draft in progress on github ?
(useful for testing tools on new version before publication)
- Document a procedure for Semantics (vice)Chair and IVOA document coordinator when new version of EN is adopted
 - Update : IVOA /latest/ & base directory redirections, update vocabulary ; create next RFM page ; github release ; ...