Units

IVOA TCG meeting
Champaign, Urbana, 2012 May 20

Outline

- Units 1.0 document
- Feedback
- Unity library
- Changes and PR

Units 1.0 document

- Working Draft 2011 December 16
- Major rework of previous versions
- Structure of the document :
    - Introduction & Scope
    - Current use of units in astronomy
    - Proposal for VOUnits
    - Use cases and applications

VOUnits goals and definitions

- VOUnits deal with unit labels (not plain text or typography)

- Base symbols (m), prefixes (k), symbols (km), mathematical operators

- Do not reinvent the wheel, ensure maximum compatibility & least surprise

- Do not prescribe mandatory units for quantities

Current use

- IAU 1989 : SI-flavoured typography for publications

- NASA OGIP FITS files

- Standards for astronomical catalogues (used at CDS)

- FITS 2010 specification

- + few others

Proposal & applications

- 8 pages of systematic comparisons of the major systems

- tl;dr : use FITS 2010 specification

- Norman's Unity library

    - https://bitbucket.org/nxg/unity

Comments received

- Wiki page opened for dicussing a few points

  http://www.ivoa.net/cgi-bin/twiki/bin/view/IVOA/DiscussionOnVOUnits

- Only Markus Demleitner & Norman Gray...

- Use FITS 2010 specification with clarifications (grammar) & minor adjustements

Moving to PR

- New document, with a few modifications and clarifications
- Distribute, 2 weeks discussion and then PR