Notes for CF Standard Names: Broaden representation to all Geosci domains

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Discussion Topics
- Process, how to not overwhelm email list? E.g., the addition of 1000s of standard names
  - GitHub issues and pull requests?
  - Other online tracking?
  - http://csdms.colorado.edu/wiki/CSDMS_Standard_Names
  - CSDMS uses a "Basic Model Interface", basically the discussion is modifying this to a "Basic Data Model Interface"
- Guidelines instead of rules for forming names forces heavy committee review process
  - If more well defined "grammar" would greatly reduce committee work load
  - Object_quantity naming conventions based upon the idea that an object has a name(description) and quantity
  - If a 'grammar' is used, then a process to fill gaps in the grammar should be defined. If the grammar is any good, then this should be infrequent.
  - How formal do you want the grammar to be? Formal enough to allow automated verification? How to deal with names currently defined that don't fit the grammar? Use machine learning on past examples? (just kidding).
  - The hard part may actually be the *description*, not the *standard_name* itself.

What are the currently covered domains? Or, perhaps easier: which ones aren't covered?

Request (Maarten): blanket addition for trace gases and all combinations of amounts (profiles, content of layer, column content, total amount, …). This can be done almost automagically.

How do we determine the need to additional modifiers of standard names (in addition to 'standard_error', 'detection_minimum', 'number_of_observations' and 'status_flag').

Types of changes/additions to standard name table
- Fix typos
- Add a set of standard names

Namespaces
If namespaces are to be used, look at xml. But would you do that at the attribute-name level, or in the value of the standard_name attribute.
See also the "keywords_vocabulary" global attribute in
http://cci.esa.int/sites/default/files/CCI_Data_Requirements_Iss1.2_Mar2015.pdf

ISO 80000 - Quantities (companion to SI)

Actions

- Create a better method of proposing and submitting new standard_name to be discussed and accepted. (Scale to 1000s of additions at a time)
- Draft change to standard name process for formalizing the rules for forming standard names. (How maintain backward compatibility? Is CF standard name alias framework enough?)
    - Or think about way to allow use of non-CF standard names
- Linked Data for CF standard names would help allow for moving to new naming structure
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- Google Group
- Use cases?
- Proposals