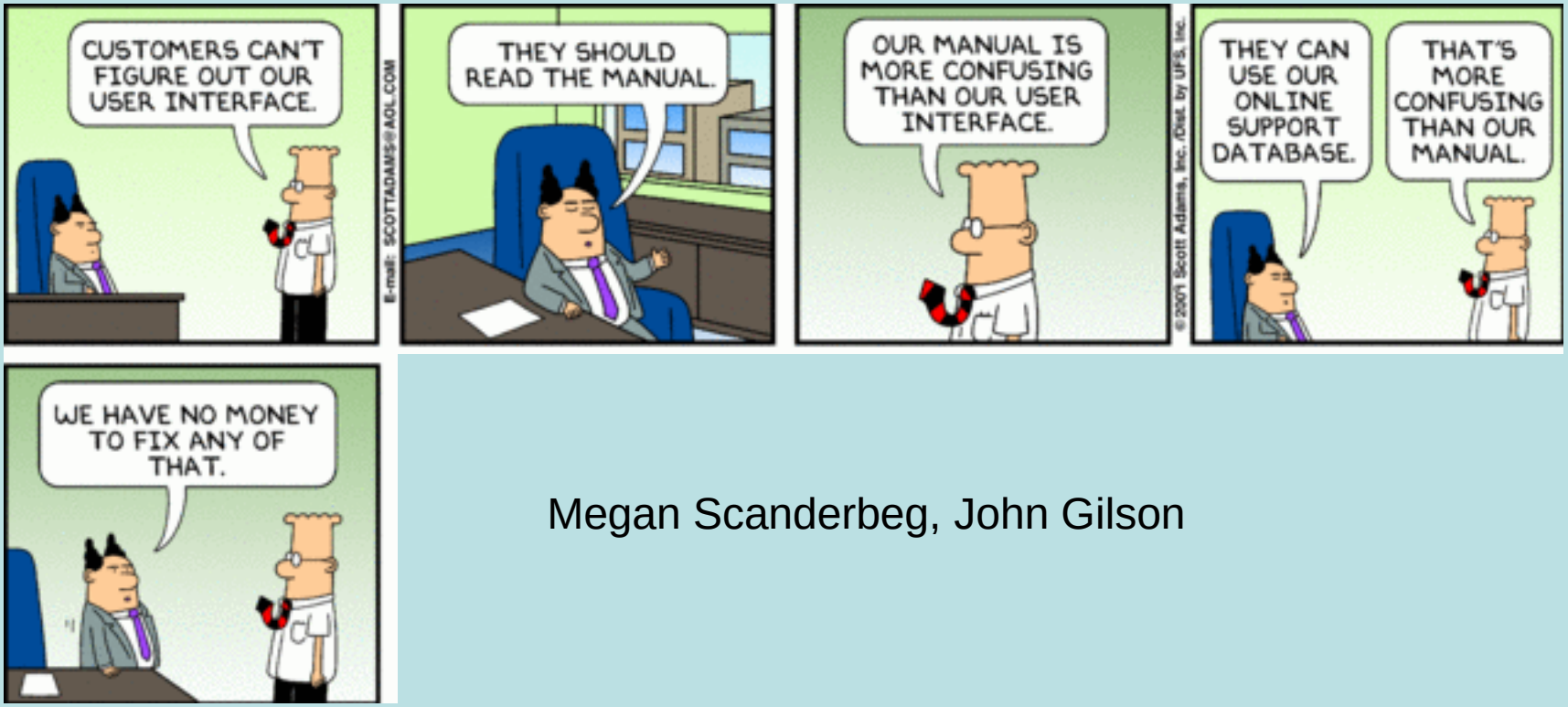
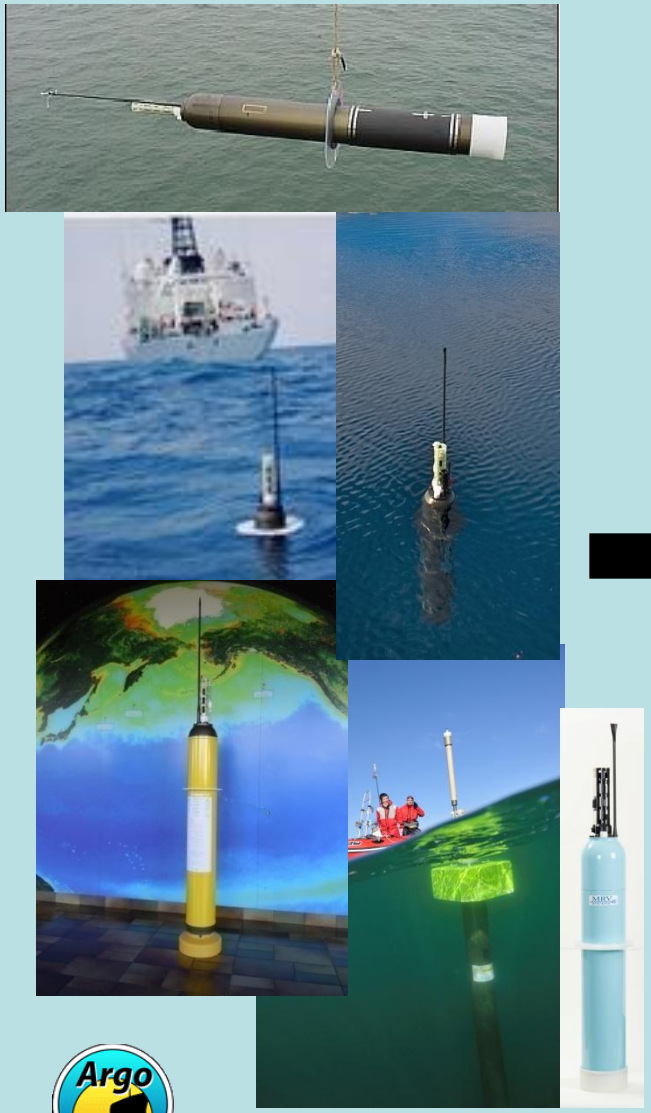
Trajectory Files Update



Megan Scanderbeg, John Gilson

Argo Steering Team Meeting
March 2015

DACs need to create files for various float types



Trajectory cookbook provides instructions on how to ***match the data floats send*** to the measurement codes in the V3.1 traj files

DAC cookbook includes definitions of all desired cycle timing information so float manufacturers can know what times Argo would like floats to send

Consistent Argo V3.1 & higher trajectory files across DACs

Current status

- DAC Trajectory Cookbook has its own DOI: http://dx.doi.org/10.13155/29824
- V3.1 trajectory files available on the GDACs!
  - CSIRO has V3.1 traj files for Argos floats in real time
  - J. Gilson: Delayed Mode trajectory files for dead floats with Argos and all Iridium floats in V3.1
  - J-P Rannou?
- New draft of trajectory cookbook distributed to review
  - Updated wording regarding “mandatory” cycle timing variables
  - Additional & updated information in APEX APF8 section
  - Simplified APEX float section split into APF8, APF9a/t, and APF9i subsections
  - Moved estimation methods to an Annex
  - Removed Standard_FORMAT_ID links for all float types except PROVOR and ARVOR

Trajectory V3.1 files

- Should make trajectory files easier to use – clearly label each measurement with a code to indicate what type of measurement was made and which cycle the measurement belongs to
- Newer float models have additional cycle times available and they are not included in V2.3 traj files – we are losing valuable information
- Cycle timing information is improving with newer float models and high speed communications
- Need to continue to educate users on new format: http://www-argo.ucsd.edu/Traj3files.html
- Information on Data FAQ page too

DACs need to create files for *new float types and versions*

NAVIS

Nova

Deep APEX
Deep NINJA
Deep ARVOR
Deep SOLO

How will timing information for new float types and versions be included in the DAC cookbook? How will info get into Argo Data Format Table?

Consistent Argo V3.1 trajectory files across DACs

Thoughts on delayed mode for traj files

- What needs to be done in dmode and how will it be done?
  - Some things will vary with float type; others will be the same
  - Can the V3.1 NetCDF traj files created from ANDRO be a starting place for some groups? Action item from ADMT-15
- Who will do this dmode on trajectory files?
  - Float's owner/ delayed mode operator?
  - Float expert who understands the float behavior (ie ANDRO work)?
  - Combination of the two?
  - Scientists?
- When will it occur?
  - Yearly when dmode is done on the prof file to apply salinity and pres adjustments?
  - When a float dies?
- First need V3.1 traj files, then can think more about these questions