

Requests for commercial partners

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Motivation

M. Scanderbeg to coordinate recommendations to float manufacturers at AST15 meeting (ADMT14 action item)

Differences in way various floats operate and the data sent back

High speed communications allow for more data to be sent

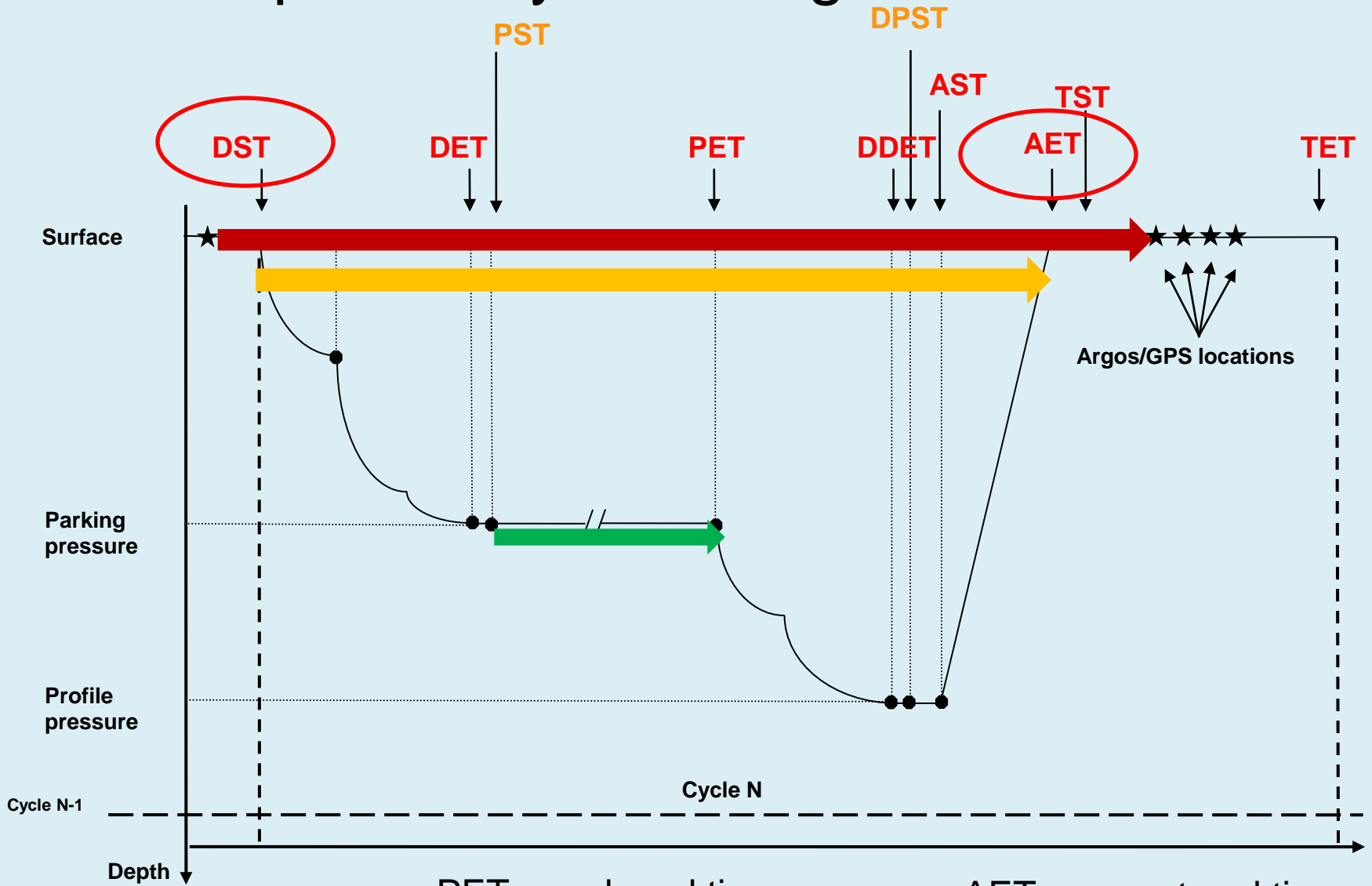
Complete information in new V3.0 format

Better defined and more detailed cycle timing information

- 1) Improved velocities at 1000 db – independent check to compare with geostrophy
- 2) Ability to investigate vertical shear
- 3) More complete data set including meta data

Argo user's manual with V3.0 format can be found at <http://www.argodatamgt.org/Documentation>

Updated cycle timing information



DST – descent start time
 DET – descent end time
 PST – park start time
 PET – park end time
 DDET – deep descent end time
 DPST – deep park start time
 AST – ascent start time
 AET – ascent end time
 TST – transmission start time
 TET – transmission end time

Requests related to cycle timing

ADMT12 action item: Contact TWR, SeaBird, MetOcean, NKE to ask that all float cycle timing information be sent back – seen progress on this with newer float models (APEX with APF11, NAVIS, NOVA, SOLO-II, etc)

- Report all cycle timing measurements (refer to new V3.0 trajectory file format for mandatory cycle times) in same resolution – 1 minute
- If measured, consider sending back times of CTD measurements during descent, drift and ascent to help determine descent and ascent rates which are important for delayed mode quality control of the profile data and can help with estimating the position at depth
- If using high speed communications, consider getting more than one position to improve surface velocity calculations

Other requests

- Pressure measurement resolution
 - Consider keeping trajectory pressure measurements in same resolution as profile
 - Consider keeping surface pressure at highest resolution possible
- Consider minimizing float clock drift
 1. For floats that get a GPS fix, use that to reset float's internal clock each time it surfaces
 2. If no GPS fix is available or if using Argos, reset the float's internal clock each time it surfaces
 3. If the float's clock cannot be reset, report internal clock time each cycle
- Consider making high speed communications (ie Iridium, Argos 3, etc) a reasonably priced option to allow for more data to be sent, optimal data resolution & shorter surface time
- Consider packing data, no matter what communication system, to allow for smoother transfer of data

Final requests

- Consider improving float documentation to better describe how the float functions and how to match each input (user chosen configuration parameter) with output (technical data provided by the float)
- Minimize new changes to the format requiring new decoders – each time this happens, a DAC must create a new decoder which is difficult; or package decoders as part of the float
- The float version (including the decoder) are now included in the meta file and are being tracked at the AIC – please help us by making it clear what changes with a new version/ new decoder
- Consider new protocol such SWE (Sensor Web Enable) to communicate metadata to shore in a more normalized way