## SLR System Biases Notes from Discussions at the Matera Workshop October 26 – 31, 2015

System biases have plagued SLR since in inception. Both short and long-term biases can degrade the quality of our data products and alienate our user community. As an example: short-term biases reduce the available data and corrupt orbits on supported altimetry missions; long-term systematic effects can be aliased into our geophysical data products, in particular the reference frame.

We had two sessions on systems biased at the Matera Workshop. The PP summary charts are attached. After the WS sessions we identified the general actions that should be undertaken. I have added a few more words in red.

- Analysis Issues
  - Update the range bias model for the data to date (Pilot Project planned by the AWG)
  - Implement an improved diagnostic procedure (maybe based on the methods presented at the sessions)
    - Toshi presently runs the "short-term (daily) detection process"
      - What more needs to be done here?
      - Should we rely on only one center?
    - Jose presented a "long-term (annual) detection process" -
      - What intervals do we need? Maybe a 2 -3 centers could participate? Reporting?
      - How do we add diagnostics? We need to tell the stations what the problems might be.
- Station Issues
  - Prepare and distribute to the stations the results that were presented at the Systems Biases Sessions with explanations and suggestions for inquiry (Appleby/Mueller/Otsubo with the CB);
  - Provide the stations with a first set of improved diagnostic tools/procedures (Varghese and Kirchner with the CB)
    - What are the most likely "6" things that they should be checking?
- Communication Issues with the stations
  - Assess where we stand on the feedback, report, and responsiveness from each station
    - How recent are the Site logs and system notifications from the stations?
  - Define timely steps for better communication with the stations
    - Do we need a single focus "traffic cop" somewhere?
  - Issue a recommended "system configuration" and list of "good practices";