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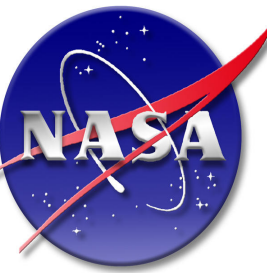
A Multi-platform Package for the Visualization of the ILRS QC Reports

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Abstract

We developed a software package based on MATLABTM that allows users to query a data base with ILRS-sanctioned QC reports and visualize the reported information as a function of the tracking site, tracked satellite target and reporting Analysis Center, over the selected period of interest. The user can perform simple statistics on the windowed data set. The "JCET QC Viewer" software works on multiple platforms (e.g. Windows, Linux and Mac OS), and does not require ownership or local availability of MATLABTM. The software will be distributed by the ILRS along with a data base of all the available QC reports up to the release date and from all ACs. The users will be responsible for updating the data base by including the reports released beyond the date of release of the package. We will present the capabilities offered by this package and examples for each application. As long as there are no format or content changes in the distributed QC reports the software requires little maintenance. We plan to maintain the QC Viewer as resources and time permits and extend it to include any future additions or modifications to the current suite of distributed reports.

ILRS QC Resources

- The ILRS has dedicated Analysis Centers that monitor the quality of the data collected at all sites

- Most QC ACs deliver these reports on a weekly basis, some provide daily reports

- The information provided in these reports is compiled into a "report card" (originally quarterly, now monthly!) that is available online

  - For each site one can find short-term and long-term performance based on their statistics over the past 3-months and 1-year periods respectively

ILRS MONTHLY GLOBAL REPORT CARD

HITOTSUBASHI UNIVERSITY REPORTS
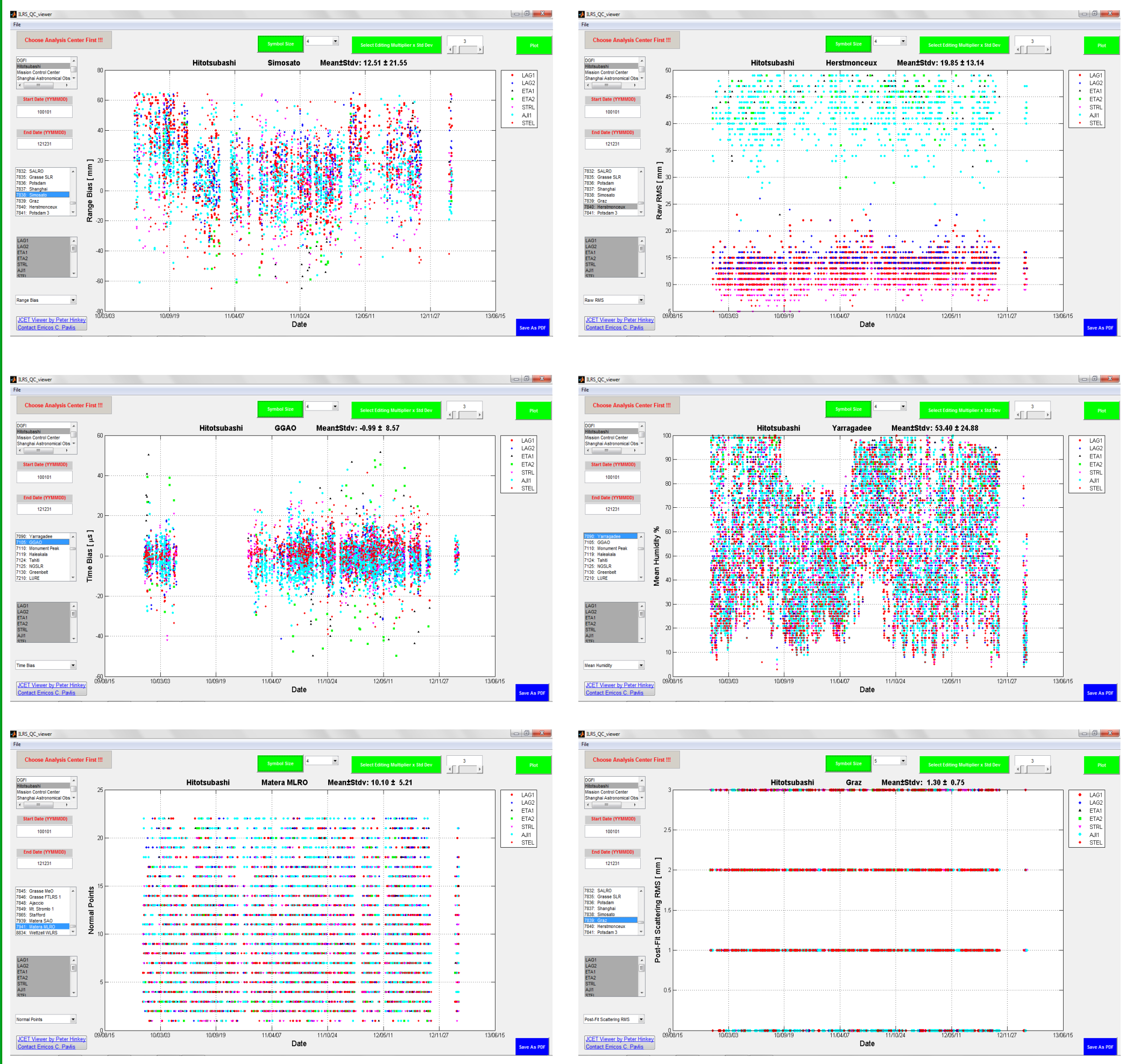
SHANGHAI ASTRONOMICAL OBSERVATORY REPORTS

MISSION CONTROL CENTER REPORTS

UNIV. of TEXAS, CENTER FOR SPACE RESEARCH REPORTS (LEGACY)

UNIVERSITY of MARYLAND JCET REPORTS

Global Report Card Access at:

http://ilrs.gsfc.nasa.gov/network/system_performance/global_report_cards/monthly/

Access Reports directly from:

1) http://ilrs.dgfi.badw.de/fileadmin/quality/weekly_biases/
2) ftp://cddis.gsfc.nasa.gov/pub/reports/slrhitu
3) ftp://cddis.gsfc.nasa.gov/pub/reports/slrjcet
4) ftp://cddis.gsfc.nasa.gov/pub/reports/slrmcc
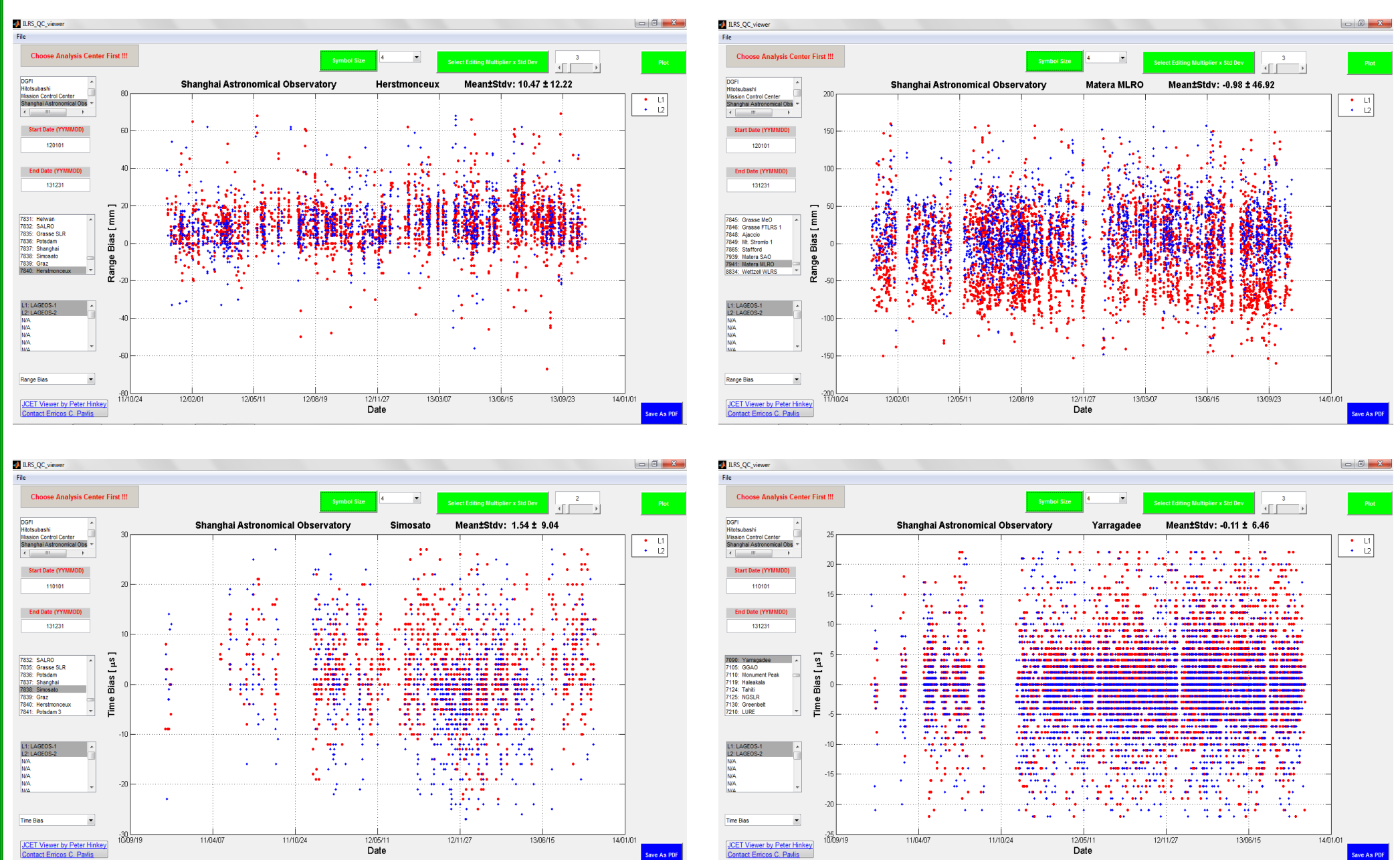5) ftp://cddis.gsfc.nasa.gov/pub/reports/slrsao

JCET QC Viewer

- The QC reports from each of the contributing ACs are in general formatted in a very tailored manner, containing different information, in different order, units, etc.

  - The information in these reports should be easily compared across AC, satellites, stations, evaluation metrics, etc., for these to be useful to the teams managing the various stations

  - In the past, the Graz team had devised a PC-based plotting package that was tailored to work with the UT/CSR reports, the only ones available at the time

- JCET's MATLAB-based QC viewer works with ALL reports from DGFI, HITU, MCC, JCET, SHAO and (legacy) UT/CSR

  - The package will run on Mac, Linux and Windows environments and it will be distributed with examples, a historical QC report data base (up to a certain date) and a simple user's manual
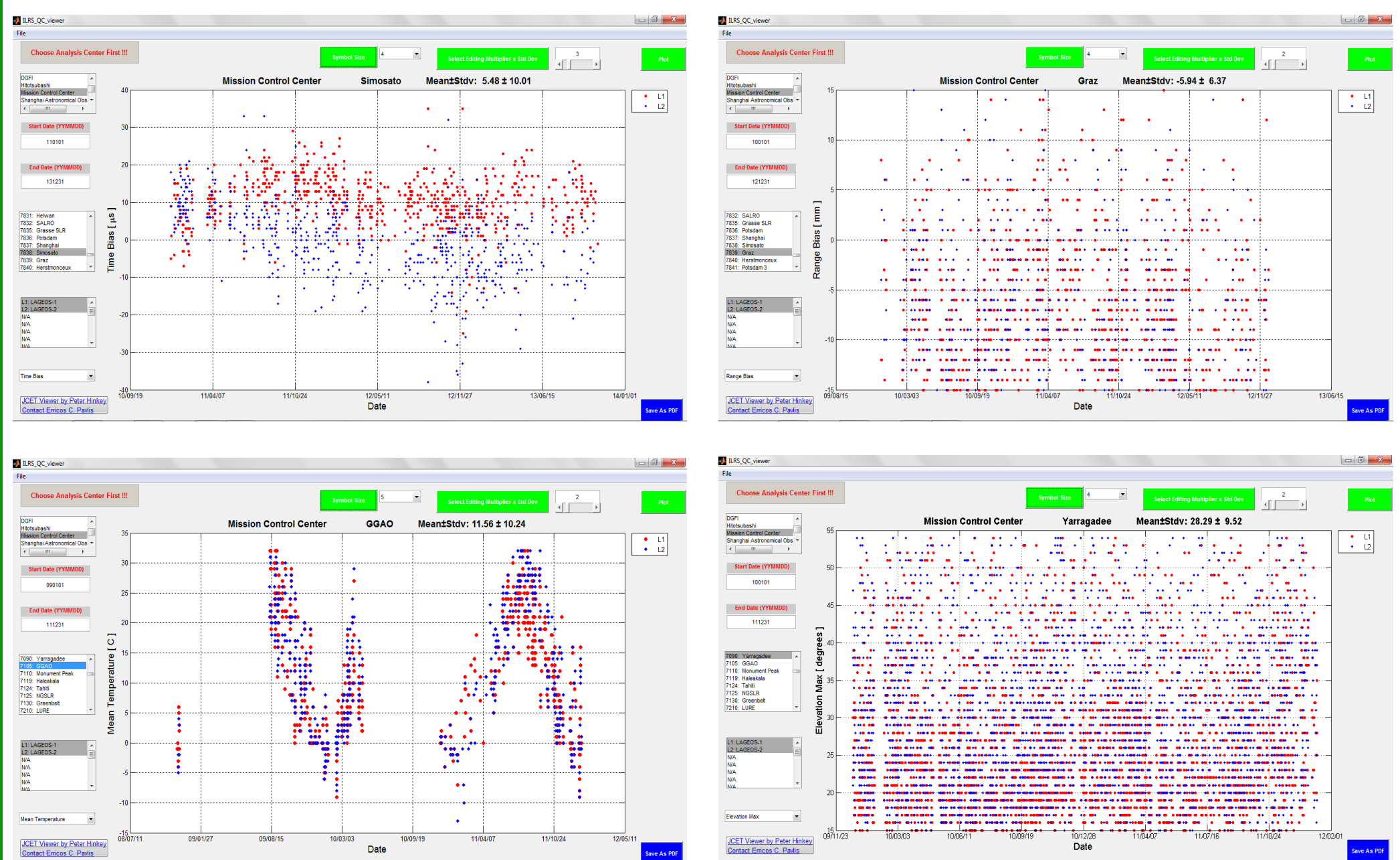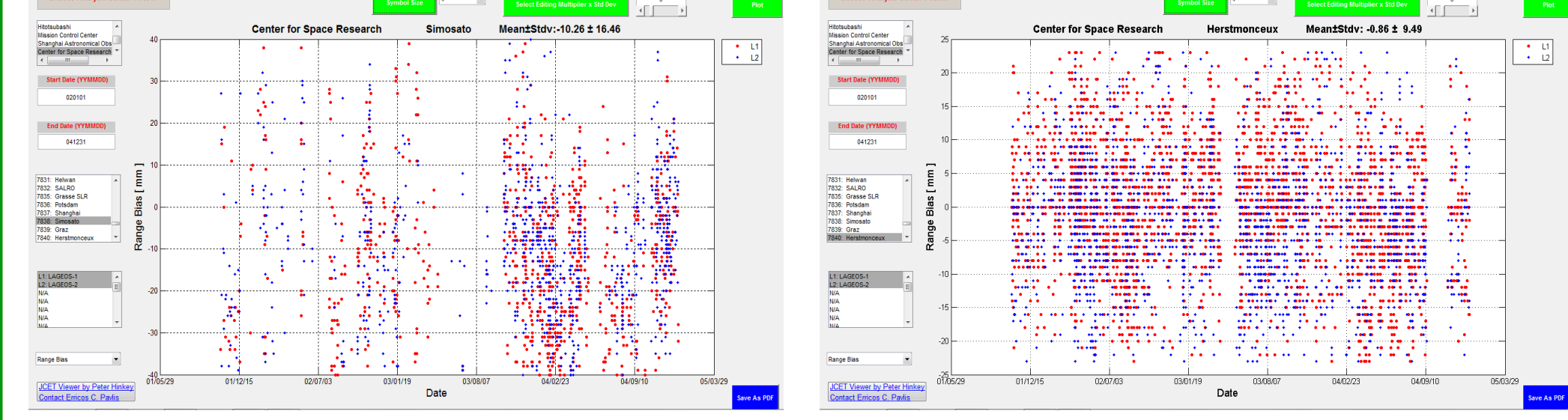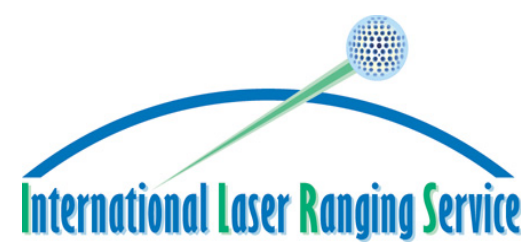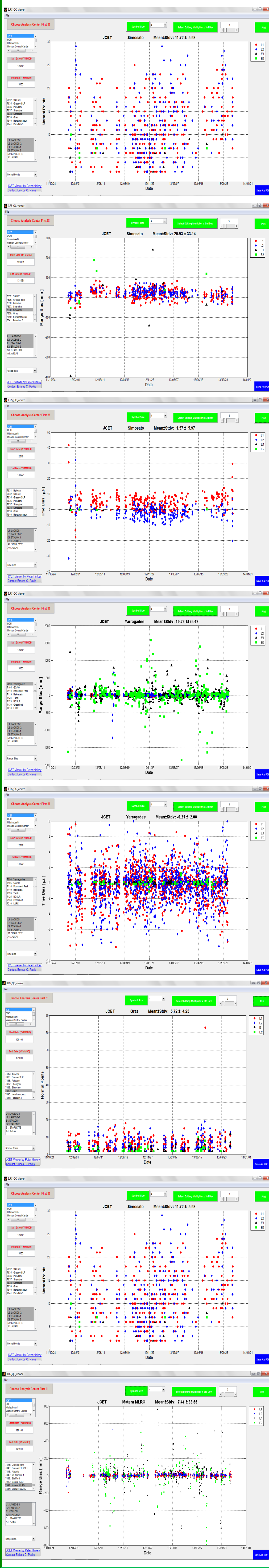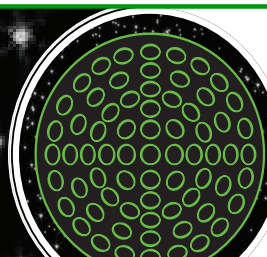
Celebrating 50 Years of SLR
Remembering the Past and Planning for the Future
19th International Workshop on Laser Ranging

To obtain an executable and installation instructions from JCET, contact:
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