

Clinic Session 2 – Productivity

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Introduction

In an effort to address the much discussed disparity in productivity across the SLR Network, Clinic Session 2 aimed to discover the factors affecting productivity for each represented station, and where possible identify and share suggestions for improvement. In addition we wanted to make the observing priorities in terms of ILRS product improvement clear to participating stations.

The Presentation

With the use of both ILRS standard productivity charts and some new bubble charts produced by Justine Woo, we demonstrated the current deficiencies in the Network. As an example for Lageos 1&2 only 12 stations are meeting the minimum ILRS requirement for 600 passes per year. It was also shown that many high performing stations actually have several weaknesses (weather for example) but that by making the most of their strengths these stations were still able to contribute at well above the current performance standard.

Standard ILRS Lageos performance chart

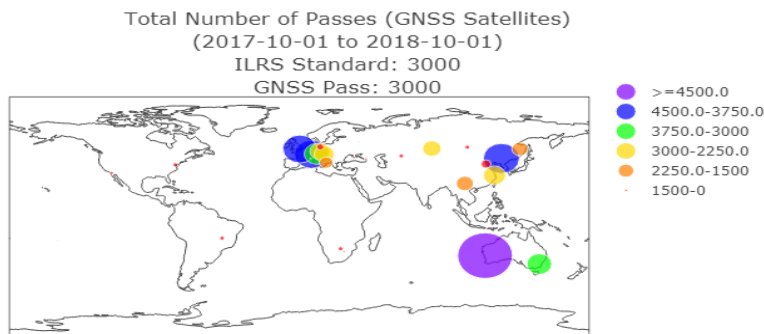
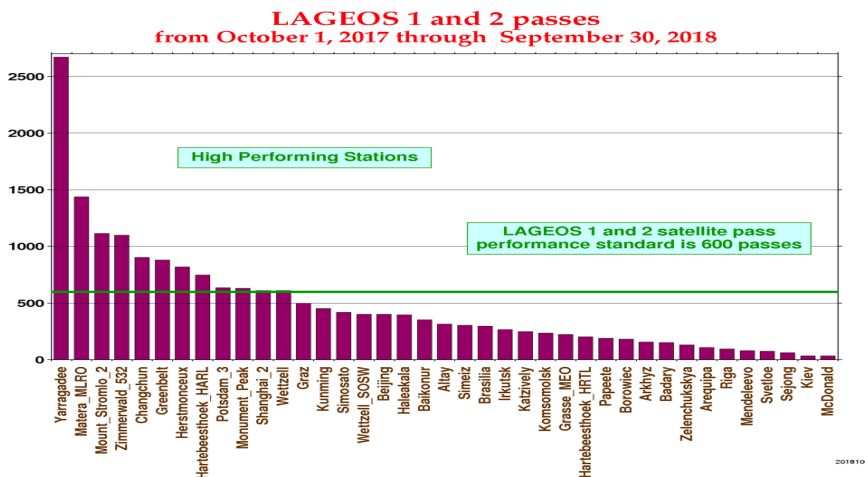


Chart by Justine Woo

As an example, the chart above showed clearly the lack of data from the Americas for GNSS.

The Discussion

In each session we discussed what represented station personnel felt was their main limiting factors in being able to achieve higher productivity. The table below summarizes the output from these discussions. Unfortunately many of the weaker stations were not represented (even though some of them had personnel at the Workshop) which is an area we would like to address in future if possible.

It was encouraging that, of the weaker stations that were represented, most had plans for upgrades or changes in operations that would help get them “above the green line”.

We spent some time going over the site log entries for each station to ensure the operation hours were accurate – in many cases they weren’t.

Station	Main Limiting Factor	Upgrade Plans	Site Log Correction
Kunming	No Daylight Tracking	yes - daylight	5 deg min ele
Arequipa	No HEO/ downtime		
Haleakela	No HEO / manning	Extra staff	
Greenbelt	HEO limited		
Tahiti	HEO limited / downtime	Repairs in progress	
Mon Peak	HEO limited		
Metsahovi	funding	Automation	Op hours <24/7
Borowiec	No Daylight Tracking	2yr plan to daylight - 2nd system	
Hart 7501	V limited daytime HEO	MCP swap - amplifier repair	
Hart 7503	Downtime/parts turnaround	local repair training	
Mendeleev	Very high glonass priority	Inc awareness of geodesy import	
Altay	Very high glonass priority	Inc awareness of geodesy import	
Shanghai			18 hours/day / min el 15
Wetzell 7827	Night only / aircraft safety	24/7 soon	12 hours / day / min el 20
Wetzell 8834			24/7 / min el 20
Potsdam	Staffing	Automation ~1year for night	

Table 1 Showing main limiting factors identified for attending stations (stns in red are below ILRS performance standard for Lageos passes).

Conclusions

Overall the clinic sessions were well organised and the numbers of people attending each session (approx. 10-15) made it quite manageable. While it would possibly have been more productive if several more struggling stations attended, it could be seen that several stations have fairly readily solvable problems that will hopefully be remedied with planned upgrades or changes to procedures. We would like to further reiterate the importance of stations following through on these ideas, as several presentations during the main Workshop demonstrated; increasing output from the existing network is the easiest and most cost effective way to improve the quality of ILRS products.