

## **The Importance of Minicos**

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Mt Stromlo SLR station is one of very few stations that have been taking multi-target calibration measurements over a significant period of time and including at least four targets suitably arranged around the SLR tracking telescope system reference point (SRP). A set of measurements obtained from such targets over a short time interval is referred to here as a mini-colocation calibration or “MINICO”. Previous reports on this technique (Luck, 2004, 2006) necessarily included only relatively short periods of measurements.

A recent re-analysis of about 10 years of Minico data, together with associated tie survey results, has been undertaken and some of the results presented in this paper. As a technique for assessing the stability of the SRP, the results clearly demonstrate that the Minico method can identify signals at 1mm level, and particularly trends in the movement of the SRP and/or individual calibration targets. The significance and interpretation of such signals is perhaps not so obvious.

Since the accuracy of SLR data is directly related to the measurement of the system delay, it will be particularly important for improving to the accuracy of SLR data to monitor the SRP and calibration pier stability, allowing improvements to the accuracy of system delay measurements. Minico calibration is an important technique in doing this, and stations are encouraged to install sufficient calibration targets to support such measurements.

### **References:**

Luck, J. McK., 2004: Five-Target System Calibration. Proceedings of the 14<sup>th</sup> International Workshop on Laser Ranging, 311-321.

Luck, J. McK., 2006: Minico Calibration of System Delay Calibration at Mount Stromlo SLR. Proceedings of the 15<sup>th</sup> International Workshop on Laser Ranging, 202.