Consolidated Laser Prediction Format: Field Test

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The consolidated prediction format has developed to the point that field tests can be performed for slr and llr targets at selected sites, currently MLRS

Introduction

- Consolidated Prediction Format provides method of ranging to disparate targets using one format
- Allows cross-technique ranging attempts
- Does not rely on on-site gravity model, tuning, or separate drag and time bias functions
- Tabular format contains un-tuned state vectors at appropriate intervals
- Typically in true body fixed system of date

Purpose of Field Tests

- Verify that nothing has been "forgotten" in the format, either concepts or fields
- Get a feel for performance of the predictions in some of the various configurations
- Work through any prediction handling bottlenecks
- Begin building infrastructure for network implementation

MLRS Field Tests

- SLR uses converted HTSI TIVs and NSGF native tabular predictions

- LLR uses DE-403-based native tabular predictions

- Software changes to data acquisition system permit both old and new formats

- Normalpoint code currently does not use tabular format, due to development time constraints

- No transponder test, although predictions have been verified

Results

- Code and predictions are in place
- Acquisition software has been tested in simulation mode for slr and llr with no unexpected results
- Data has been acquired on 4 slr passes using the HTSI-derived predictions
- NSGF predicts are being evaluated
- LLR changes and predictions are in place awaiting tests

Conclusion

- Field tests are just beginning
- Early tests are encouraging
- Test sites and infrastructure will expand over the next year