

3A – What's next for RECON



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**RESEARCH AND EDUCATION
COLLABORATIVE OCCULTATION NETWORK**

**2016 Team Meeting
Carson City, Nevada
August 3-5, 2016**



The coming year

- More campaigns
- Tracking Jupiter Trojan events as well
- Gaia catalog
- New astrometry
- Data management improvements
- Event support and feedback
- Publications
- Site visits



Campaigns

- “Usual” pace of events and campaigns
 - Next likely event is in October 2016
 - <http://www.boulder.swri.edu/~buie/recon/reconlist.html>
- Candidates we are working
 - <http://www.boulder.swri.edu/~buie/recon/reconwatch.html>
- The occultation game is very dynamic and there may be surprises



Tracking Jupiter Trojan events

- Jupiter Trojans are easy to predict and related to TNOs
 - Possible Discovery mission
- Other main-belt targets of opportunity
 - Binaries of special interest
 - By request from scientific community



Gaia catalog

- Gaia is a European astrometry mission to make high-precision position, distance, and velocity measurements of every star in our galaxy brighter than 20th magnitude.
- First data release scheduled for 2016 Sep 14
- Annual releases each year until the final full-precision catalog is released in 2020
- Occultation predictions will immediately improve by removing all meaningful uncertainty in the star position – it will take time and work to get better orbits for the TNOs



New astrometry

- Larry Wasserman at Lowell Observatory, Discovery Channel Telescope will continue
- Christian Viellet, Director at Large Binocular Telescope, will collect images of RECON-critical objects
- JJ Kavelaars, University of Victoria, will begin getting new data from CFHT on Mauna Kea
- Pan-STARRS has begun reporting their TNO data. This takes care of brighter objects.



Data management improvements

- Automatic and targeted messages for missing report forms, data, and logs.
- Tools to let RECON team members verify their data were sent and allow download of any team data
- Faster processing of data to get first-look photometry
 - Protocols for team submission of LiMovie lightcurves
 - Allow team browsing of all lightcurves
 - Processing of data by students at CPSLO



Event support and feedback

- At-a-glance web page for event status
 - Show signup progress
 - Show weather forecast (in final week)
 - Show actual weather and reporting status
 - Show data upload status
 - Show quick-look photometry status
- Search for better tools and methods for sharing results and experiences



Publications

- This category depends entirely on the data collected.
- Negative results rarely lead to publications
- Publication plans for each successful event vary with each event but RECON-led papers are important



Site Visits

- John and Marc are available for occasional site visits across the network
- How would such a visit help you? Let us know
- Focused visit – one or two sites
- Regional mini-team meetings
- Trouble-shooting trips
- Project and science presentations
- We want to hear from you how we can help

