

## **Agenda for Sept. 24 AWG meeting**

- Minutes of Perugia meeting

## **Agenda Items**



**ILRS Fall 2007 Workshop**

25-28 September 2007 Grasse, France

## **Monday 24th September** **Analysis Working Group meeting**

## **Tuesday 25th September**

08:30 On Site registration

09:30-10:00 Welcome/Introduction

*What are the scientific challenges for future ?*

### **Session 1 - Chair(s): P.Exertier - C.Luceri**

10:00-10:30 Scientific and Analysis challenges for next decade – paper revue

10:30-11:00 Coffee break

11:00-12:30 **Miscellaneous Scientific Achievements:** *ITRF and different techniques, SLR contribution to Radar altimetry calibrations, SLR and Earth Orientation Parameters, Lunar science and fundamental Physics..*

Break

*Stations, operations and analysts collaborations to develop in future ?*

### **Session 2 - Chair(s) : E.Pavlis - F.Deleflie**

14:00-15:30 **Improved data analysis procedures and corrections** *...with an eye on things like s/c-CoM dependence on the s/c design and station detection systems), inclusion of new or improved geophysical models in the data reduction for improved ILRS product*

15:30-16:00 Coffee break

### **Session 3 - Chair(s) : M.Torrence - G.Bianco**

16:00-17:30 **Working together: station operations and data analysis groups**  
*...Generate a working, flexible and robust at the same time mechanism to make this close collaboration work.*

*NEWG's quick-response and action dissemination procedures (e.g. restricted tracking) can*

be used as a blueprint.

## Wednesday 26th September

*Technological challenges for future ?*

### Session 4 - Chair(s) : T. Otsubo - J. Degnan

09:00-09:30 Technology paper review

09:30-10:30 Laser Reflector Array for Challenging orbits

10:30-11:00 Coffee break

### Session 5 : W. Gurtner - ..

11:00-12:30 Toward an Higher level of Automation for stations

Break

*Stations, operations and analysts collaborations to develop in future ?*

### Session 6 - Chair(s) : G. Appleby - E. Pavlis

14:00-15:30 Counters performance and calibrations - Event Timer arriving...

### Session 7 - Chair(s) : G. Kirchner - ...

16:00-17:30 Kilohertz SLR and more

- Advantages, side effects / additional outputs; - Other possible / future kHz SLR products - (Simple) ways to switch to kHz SLR

## Thursday 27th September

*Projects, missions and stations tomorrow and next decades*

### Session 8 - Chair(s) : U. Schreiber - J. Degnan

08:45 -10:15 New related "laser ranging" space projects for tomorrow and next decade

Transponders, Lunar missions, space debris tracking, one way laser link projects...

### Session 9 - Chair(s) : J. M. Torre - Y. Fumin

10:45-12:00 Time transfer experiments

Science, time comparison and fundamental physics

T2L2 status, operational issues and data

Break

*Stations, operations and analysts collaborations to develop in future?*

### Session 10 - Chair(s) : R. Ricklefs -...

13:30-14:45 Technological Challenges with Data Format:

Progress of the Consolidated Laser Ranging Data (CDR)

Format and Experiences with the Consolidated Prediction Format (CPF)

■ **Announcements:**

○ **December 5-7, Unified Analysis Workshop (UAW), in San Francisco, CA area**

○ **ILRS representatives to participate:**

- E. C. Pavlis,                   AWG overview on operations, products, future plans
- V. Luceri,                     Analysis procedures review, bias estimation, etc.
- C. Sciarretta,                Combination procedures review, SLR\_TRF, Orbits, etc.
- G. Appleby,                 Range modeling improvements, CoM, calibrations, etc.
- Horst Müller,                Station performance monitoring, qualifying, feedback...
- Jürgen Müller                LLR overview, status, science, products, future...
  - Michael Pearlman,
  - Werner Gurtner (?)

**Proposals will be discussed in detail following the standard reporting!!!**

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■ **AC and CC Reports:**

- **ASI – AC & CC**
- **BKG**
- **DGFI – AC & CC**
- **GA**
- **GFZ**
- **JCET**
- **NSGF**

- **Recent data analysis issues – 1993 – present:**
  - Stanford corrections for Herstmonceux, Potsdam, and Borowiecz, ??? - **GA**
  - Station bias adjustment, revision of Eastbourne “list”, implementation - **CL**
  - New, ITRF2005-consistent *a priori* TRF (1976 – present), **SLRF2005** - **CL**
  - Core site re-classification - **CL**
  
- **Historical data analysis – 1983 – 1993:** Status, AC contributions, CC combinations
  - Core-site selection for the historical network - **CL**
  - 1983 – present product:
    - Combination results? – **CS & RK**
    - **Final results by December, Unified Analysis Workshop (UAW)!**
  
- **Other products for UAW presentation:**
  - SP3c Orbit files – **CL, HM, ECP**
  - Daily “weekly” analysis & pos+eop report for station feedback – **ECP, ???**
  - Product improvements (inclusion of atmospheric effects) – **ECP**
    - Test files for ECMWF, 6- & 3-hour products (JPB)
    - Target-signature modeling specific to site and mode of operation – **GA, ECP**
  
- **UAW Presentations – discussion, planning and assignments**
  
- **???, next meeting? (after the UAW, EGU?)**

- Project Status - a “living document” matrix (*to be maintained under the ILRS pages*):

AC/CC	Weekly POS+EOP	Daily POS+EOP	Orbit Product SP3c	Reanalysis 1983 - 1993	Reanalysis 1993 - 2007	Reanalysis 1983 – 2007  (SET, biases, data editing)
ASI - AC	✓		✓ (test mode)	✓	✓ (version w/SET)	
ASI - CC	✓					
BKG	✓			NA		
DGFI - AC	✓		✓ (test mode)	???	✓ (version w/SET)	
DGFI - CC	✓					
GA	✓			✓	✓ (version w/SET)	
GFZ	✓			???	✓ (version w/SET)	
JCET	✓	✓ (test mode)	✓ (test mode)	✓	✓ (version w/SET)	
NSGF	✓			✓	✓ (version w/SET)	

- **Open action items from past AWG meetings**

✓ = DONE

ACs	prepare for new format (CRD) SLR data
ACs	include conversion of orbit solutions into SP3c format (step-size 2 minutes for LAGEOS; 15 minutes for Etalon)
AWG	re-assess AWG core stations status + general ILRS classification
AWG	make overview of station activities 1993-present, based on eccentricity file and "pos+eop" info
CCs	prepare for combination of SP3c files
Mareyen	<i>develop 2-day analysts get-together in Frankfurt(???)</i>
Müller (H)	develop SLR discontinuities file further (1976-2007)
Müller (Jürgen)	develop validation plan for (new) LLR stations
Noomen, Pearlman, Gurtner	<i>homogenization of QC reports</i>
Pavlis	get letter expressing general support for ILRS activities from IERS chairman
Pavlis, Luceri, Gurtner	develop report with pos+eop use for stations and managers
Pavlis, Luceri, & Co.	organize guest editorial board for JoG special issue
Pavlis	check IERS procedure for station documentation after earthquakes and such
Noomen	get Delft QC procedure running again
Pavlis	check of the GRGS orbits and transformation matrices
Pearlman	remind Simosato to become IGS station

- **New action items**

Pavlis	dataset for the test on the models of atmospheric loading and gravity
Pavlis, Luceri ✓	new ITRF for SLR analysis
Luceri	new list of core sites from SLR2005 for daily EOP referencing
Luceri ✓	contact stations to rationalize biases seen in the data analysis
Müller (H)	exchange and compare bias estimates with Luceri
Appleby ✓	send Luceri the Potsdam Stanford ET corrections to test
Appleby ✓	contact Francis Pierron to test their Stanford ET
Müller (H), Pavlis ✓, Luceri ✓	exchange and compare orbits in SP3c format
Pavlis ✓	check with GA/Mt. Stromlo the reason for delayed submissions of data
Pavlis ✓	check with Noll that ONLY latest SINEX versions are online
Pavlis ✓	check with Noll and Seemüller to generate archive for daily submissions
Pavlis, Luceri	pilot project for the generation of a bias list, etc.
Müller (H), Pavlis ✓, Luceri ✓	validate the SLRF2005 (final version)
ACs	verify that your SINEXs are formatted correctly for daily submissions!!!
CCs	start combination from pre-1993 time series, after DGFI & GFZ submission
ACs and CCs	work on generating daily submission of weekly solutions