



A G E N D A

Version 1.15, 16 May, 2014

Real-Time-IRI Task Force Meeting: 19 May 2014, Monday (8:30AM – 5:00PM)

- 0830 RT-IRI Task Force Meeting Registration at UMass Lowell Inn & Conference Center
- 0840 Welcome remarks by Prof. Supriya Chakrabarti,
Assoc. Dean College of Sciences, UMass Lowell
- 0850 Opening Remarks by Prof. Bodo Reinisch
- 0900 **The Real-Time IRI**
Lee-Anne McKinnell and Dieter Bilitza
- 0930 **Real-Time IRI Driven by GIRO Data**
Ivan Galkin, Bodo Reinisch, Xueqin Huang, Dieter Bilitza, and Artem Vesnin
- 1000 Break
- Chair D. Bilitza
- 1030 **Validation of Real-Time IRI timelines of F2 layer peak height and density**
Artem Vesnin, Larisa Goncharenko, Qiu-Gang Zong, Ivan Galkin, Bodo Reinisch, and Dieter Bilitza
- 1100 **Validation of COSMIC Values of foF2 and M(3000)F2 using Ground-Based Ionosondes**
Leo F. McNamara and Donald C. Thompson (presented by Bodo Reinisch)
- 1130 **Near real-time global auroral observations and their application to IRI**
Yongliang Zhang, Larry J. Paxton, and Dieter Bilitza
- 1200 Lunch
- Chair I. Galkin
- 1330 **Real Time Mapping of the F2 Peak using the Elastic Linear Optimization (ELO) Method**
Xueqin Huang, Bodo Reinisch, Ivan Galkin and Dieter Bilitza
- 1400 **Real-time ionospheric data processing and modeling: an empirical orthogonal function approach**
Shunrong Zhang
- 1430 **ESPAS: Current functionalities of the Near-Earth space data infrastructure**
Anna Belehaki, Ioanna Tsagouri, and Anna Charisi
- 1445 **Recent upgrades in the Topside Sounders Model and possible links with IRI-2012**
Ivan Kutiev, Pencho Marinov, Anna Belehaki, and Ioanna Tsagouri
- 1500 Break
- Chair L-A. McKinnell
- 1530 **Final Discussions**

IGF DAY ONE: 20 May 2014, Tuesday (8:30AM – 5:00PM)

SESSION 1 FORUM REGISTRATION AND OPENING PRESENTATIONS

0830 GIRO Forum Registration at UMass Lowell Inn & Conference Center

Time	Topic	Presenter
0845	Opening remarks	Prof. B. Reinisch
0850	Global Ionosphere Radio Observatory -- GIRO	Prof. B. Reinisch
0910	GIRO members roundtable	Attendees

SESSION 2 SCIENCE PROJECTS WITH GIRO

Chair B. Reinisch

Time	Topic	Presenter
0930	Space weather events as seen by GIRO	Prof. Q-G. Zong
0950	Global look at stratospheric sudden warming with GIRO and GPS	Dr. L. Goncharenko
1010	Signatures of disturbances in ionograms at Eglin, Florida	Dr. L. Mcnamara
1025	Break	
1045	Inferring D-region electron density profile from Digisonde data	Prof. G. Sales
1100	Comparisons of Auroral Far Ultraviolet and Digisonde Observations	Dr. H. Knight
1115	Comparison between F layer peak characteristics from COSMIC and ionosondes	Dr. B. Ning
1130	The properties of spread F observed with the DPS at different latitudes	Dr. J. Shi
1145	Ionospheric Characteristics in Hainan during 2008-2012	Dr. X. Wang
1200	Lunch	

Chair I. Galkin

1300	FAS method for Digisonde TID Studies	Dr. V. Paznukhov
1320	Raytracing through disturbed ionosphere	Prof. X. Huang
1340	Digisonde TID observations	Prof. B. Reinisch
1400	Vary-Chap specification of topside ionosphere and extension to plasmasphere	Prof. B. Reinisch
1420	Break	

SESSION 3 ACCESS TO QUALITY DATA AT LGDC

Chair B. Reinisch

Time	Topic	Presenter
1440	Maximizing "experience index" of GIRO repositories and front end	Prof. I. Galkin
1500	Near real-time ionospheric specification by LITES on ISS	Prof. S. Chakrabarti
1520	GIRO data infrastructure and services	A. Kozlov
1540	Progress in ADRES development	Prof. I. Galkin
1600	"GIRO Mirror" today and tomorrow	A. Kozlov
1620	ESPAS and VWO: eScience projects to serve our data	Prof. I. Galkin
1640	Intelligent archival technologies	Prof. I. Galkin
1700	Adjourn	

IGF DAY TWO: 21 May 2014, Wednesday (8:30AM – 5:00PM)

SESSION 4 PROGRESS IN DIGISONDE HARDWARE

Chair I. Galkin

Time Topic

0830 Digisonde 4D overview

0850 Next Digisonde: PCI Express with DMA

0910 Next Digisonde: FPGA solutions

0930 Next Digisonde: Exploring topside sounding concept

From the Science Session 2:

0950 Measuring electron upflow in the polar cap

1010 Break

1040 DESC: Embedded system control software for DPS-4D

1100 Digisonde platform organization and data traffic

1120 Upgrade path to Digisonde 4D

Presenter

R. Hamel

I. Lisysyan

C. Granz

Prof. B. Reinisch

Dr. P. Nsumei

Prof. I. Galkin / C. Granz

Prof. I. Galkin

Prof. B. Reinisch

DR. KLAUS BIBL MEMORIAL (12:00-15:00)

Opening

Bibl Family

Memories

Memories

Open to the floor

Bodo Reinisch

Bibl Family

Gary Sales

Xueqin Huang

SOCIAL EVENT

1510 Depart for Nashoba Valley Winery

1600 Wine tasting

1730 Dinner at J's Restaurant

IGF DAY THREE: 22 May, Thursday (8:30AM – 5:00PM)

0830 Pickup of WG participants at ICC for transportation to Lowell Digisonde International.

0900	Working Group Session 1	Lowell Digisonde International
1000	Working Group Session 2	Lowell Digisonde International
1100	Working Group Session 3	Lowell Digisonde International

1200 Lunch at LDI

1245 Transportation to ICC for Sessions 5 and 6

SESSION 5 DIGISONDE OPERATIONS

Chair I. Galkin

Time Topic

1300 Concept of operations with DCART

1315 Common errors in measurement programming

1330 System fault isolation with BIT

1345 Lightning protection

1400 Troubleshooting of post-processing and archival software

1415 Computer security, Windows XP, remote access and control

1430 Break

1445 Tools for manual and automated monitoring of digisonde data quality

Presenter

R. Hamel

Prof. I. Galkin

R. Hamel

I. Lisysyan

Prof. I. Galkin

R. Hamel

Prof. I. Galkin

SESSION 6 PROGRESS IN DIGISONDE SOFTWARE

Chair R.Hamel

Time Topic

1500 Under the hood of the DCART project

1520 ARTIST-5

1540 SAO XML 5.0 and Vary-Chap profile specification

1550 ING ionogram formats

1600 Advanced SAO Explorer topics

1630 Advanced Drift Explorer topics

1700 Closing remarks

1730 Adjourn

Presenter

A. Kozlov

Prof. I. Galkin

Prof. I. Galkin

A. Kozlov

Prof. I. Galkin

A. Kozlov

Prof. B. Reinisch

IGF DAY FOUR: 23 May 2014, Friday (8:30AM – Noon)

0900	Working Group Session 4	Lowell Digisonde International
1000	Working Group Session 5	Lowell Digisonde International
1100	Working Group Session 6	Lowell Digisonde International

Working Groups

TOPIC	CURATOR
SAO Explorer 1	I. Galkin
SAO Explorer 2	A. Kozlov
ARTIST	I. Galkin
DIDBase with ADRES 1	I. Galkin
DIDBase with ADRES 2	A. Kozlov
IRI Windows	X. Huang
NHPC and ARP	X. Huang
Drift Explorer	A. Kozlov
DPS Hardware	R. Hamel
DGS-256 Hardware	D. Kitrosser
4D Testing/ Troubleshooting	R. Hamel
DCART	R. Hamel
DCART	A. Kozlov