

# APSG2010 Program

(Shanghai Astronomical Observatory, 2010/8/16—2010/8/21)

## August 16 Monday

13:00-18:00      **Registration of the participants at the lobby of Tianwen Mansion of Shanghai Astronomical Observatory (SHAO)**

18:30-            **Reception**

## August 17 Tuesday Morning

08:30-08:40      **Opening Ceremony**

**Conveners: H. T. Hsu and Shuhua Ye**

### Invited Presentations

**Conveners: H. T. Hsu and Shuhua Ye**

08:40-09:10	H. T. Hsu	Space Advanced Gravity Measurement Plan in CAS
09:10-09:40	Tatevian Suriya	Integration of the Russian Geodetic Network into the GGOS
09:40-10:10	Pil Ho Park	KASI's Research Activity on Space Geodey
10:10-10:40	Zhiqin Wei	Velocity Field of China Continent
10:40-11:00	Coffee Break	
11:00-11:30	Jinwei Ren	Ms7.1 Yushu Earthquake on April 14th 2010 in Tibetan Plateau
11:30-12:00	B. F. Chao	GPS occultation by FormoSAT-3/COSMIC: GPS-ARC
12:00-12:30	Xiaoli Ding	Modeling PSInSAR Time-Series without Phase Unwrapping
12:30-13:00	Jinsong Ping	To promote GRACE type follow-on mission in China

**13:00-14:30 Lunch**

## August 17 Tuesday Afternoon

### Session 1. Gravity

**Time-Variable Gravity and Earth Rotation Dynamics, Space-borne, absolute/superconducting gravimetry and their applications.**

**Conveners: H. T. Hsu and Bin Wu**

14:30-14:50	Ching-Chung Cheng	Superconducting and absolute gravity observations for geodynamic applications in Taiwan
14:50-15:10	Nosov Dmitry	The First Results of Tests of Absolute Laser Gravimeter for Field Operation
15:10-15:30	Wei-Yung Chung	Wavelet analysis of Earth's rotation excitation series
15:30-15:50	Daxin Xu	Study of the gravity anomaly matching method for underwater navigation
15:50-16:10	Wenbin Shen	Detection and analysis of gravity anomaly signals prior to Wenchuan Mw7.9 earthquake using superconducting gravimeter and broadband seismometer data
16:10-16:40	Photo and Coffee Break	
16:40-17:00	Haoming Yan	Global mass balance effects on the Earth's rotation rate
17:00-17:20	Zizhan Zhang	Hydrological mass variations caused by extreme weather conditions in China measured by GRACE TVG data
17:20-17:40	Xiaoyun Wan	Researches on singularities in computing gradients of the gravitational field
17:40-18:00	Xueqing Xu	High Precision Prediction Method of Earth Orientation Parameters
18:00-18:20	Bunin Ilya	Investigation of the optical system of the absolute laser ballistic gravimeter
18:20-18:40	Zhenhe Zhai	The Merging of Gravity data Derived from Airborne Gravimetry and Satellite Altimetry in Bohai Gulf Area

## August 18 Wednesday Morning

### Session 1. (continue) Gravity

**Time-Variable Gravity and Earth Rotation Dynamics, Space-borne, absolute/superconducting gravimetry and their applications.**

**Conveners: B. F. Chao and Chengli Huang**

08:30-08:50	Jianqiao Xu	Geodynamic Implication of Temporal Changes in Gravity from Superconducting Gravimeter
08:50-09:10	C. L. Huang	On the contribution of the Chinese Mars mission YH-1 on the Mars gravity field

09:10-09:30	Xiaoming Cui	Determination of Free Core Nutation parameters and investigation of coupling parameters at the Core-Mantle boundary
09:30-09:50	Zhao Yang	Theoretical research and detection of spectral splitting of spheroidal oscillations of the earth
09:50-10:10	Yonghong Zhou	Studies on the oceanic excitation of the Earth's variable rotation
10:10-10:30	Coffee Break	
10:30-10:50	Buxi Gao	Estimation on the Earth's Rotation Rate at past 3 billion years
10:50-11:10	Xiaodong Chen	Influence of the underground water on gravity observation at Wuhan station

## **Session 2. Crustal Dynamics and Earthquake**

**Monitoring crustal movement and deformation by space techniques and earthquake monitoring**

**Convener: Suriya Tatevian**

11:10-11:30	Shestakov V. Nikolay	Recent crustal movements of Russian Far East as seen from GPS observations
11:30-11:50	Timofeev Vladimir	Pre, co and post-seismic motion for South Baikal earthquake zone (27/08/2008, $M = 6.1 \div 6.3$ ) by GPS and geophysical methods.
11:50-12:10	Ashurkov Sergey	Rotation parameters of Amurian plate from GPS measurements and geological consequence
12:10-12:30	Yanxing Li	Relationship between plate motion with atmosphere circulation and ocean circulation

**12:30-14:00 Lunch**

## **August 18 Wednesday Afternoon**

### **Session 2. (continue) Crustal Dynamics and Earthquake**

**Monitoring crustal movement and deformation by space techniques and earthquake monitoring**

**Conveners: Jinwei Ren and Vladimi Timofeev**

14:00-14:20	Zhengxin Li	Regional plumb line variations at Tangshan and a determination of underground matter change before and after earthquakes
14:20-14:40	Nobuyuki Kawano	Digital PZT for the measurement of plumb

		line variations
14:40-15:00	Ta-Kang Yeh	Vertical displacement due to ocean tidal loading around Taiwan
15:00-15:20	Wei-Chia Hung	Using Persistent Scatterers SAR Interferometry to monitor subsidence of the Choushui River Alluvial Fan in Taiwan
15:20-15:40	Chunyan Qu	The PSInSAR technique and its application to the study on crustal deformation of the Haiyuan fault zone
15:40-16:00	Vilor Nikolay	Remote sensing method of investigation and calculation of deep heat flow of regional structures in areas with high velocity crustal motions by GPS data
16:00-16:20	Coffee Break	
16:20-16:40	Zhiqiang Yin	SLR Monitoring crustal movement caused by Ms8.8 Chile earthquake
16:40-17:00	Zotov Leonid	Application of multichannel singular spectrum analysis to satellites measurements
17:00-17:20	Chung-Liang Lo	Variation of the Earth Oblateness caused by earthquakes for the past forty years
17:20-17:40	Bo Hu	Test study of monitoring the deformation of frozen ground area of Tibetan Plateau using DInSAR technique
17:40-18:00	Kefei Zhang	Look in space – a recent Australian space geodesy initiative in atmosphere and climate studies
18:00-18:20	Zhigen Yang	Re-discussion on Radial Tectonic Motions of Continental Borders around Mid-Atlantic in Northern Hemisphere by Space Geodetic Observations

**18:30- Banquet**

## **August 19 Thursday Morning**

### **Session 3. Sea level change, water and atmospheric variations**

**Results given by space techniques, comparison with models and terrestrial observations**

**Conveners: X. L. Ding and C. Huang**

08:30-08:50	Jianbin Duan	GRACE Observed Ocean Bottom Pressure
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		Variations
08:50-09:10	Xiaoli Su	The trend of terrestrial water storage variations revealed by GRACE
09:10-09:30	Yi Hsiang Li	Analysis of ENSO's thermocline depth variations
09:30-09:50	Jen-Ru Liao	Using gravity and topography data to retrieve surface flooding scenarios
09:50-10:10	Min Jiang	Study on contribution of Eustatic sea level to Global Mean Sea Level Variations using GRACE
10:10-10:30	Coffee Break	
10:30-10:50	Feng Wei	Regional sea level change in China from satellite altimetry, GRACE and in-situ observations
10:50-11:10	Chia-Chu Yang	Understanding Tatun volcano group, Northern Taiwan, Using GPS and Geophysical observations
11:10-11:30	Chaitip Prasert	Future Temperature Evidence from Four Asian Countries Using Generalized Extreme Value Estimation
11:30-11:50	Peng Guo	Ionospheric equivalent slab thickness analysis based on ground-based and air-based GPS measurements
11:50-12:10	De Chun Liao	Attempt of the SSTA prediction by artificial neural network technique

### **12:30-14:00 Lunch**

### **August 19 Thursday Afternoon**

#### **Session 3. (Continue) Sea level change, water and atmospheric variations**

**Results given by space techniques, comparison with models and terrestrial observations.**

**Convener: P. H. Park**

14:00-14:20	Zhongmiao Sun	Simulation and initial analysis on altimetry satellite constellation
14:20-14:40	Cheng-Yin Chu	Global tropopause height variabilities estimated from FormoSat-3/COSMIC GPS occultation data
14:40-15:00	Yuei An Liou	Investigation on the GPS RO retrieval data quality and its improvement
15:00-15:20	Tingting Han	Discussion on the global features and trends of the tropopause derived from GPS/CHAMP RO data

15:20-16:00	Coffee Break
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#### Session 4. The Moon and Planetary Geodesy

New results from CE-1、SELENE and introductions about future missions

Conveners: Ziqing Wei and Jinsong Ping

16:00-16:20	Jinsong Ping	New Progress of Selenodesy by CE-1
16:20-16:40	Qian Huang	Spectral Analysis of the Moon from gravity and topography data
16:40-17:00	Qinghui Liu	High-Accuracy Same-Beam VLBI Technique and its Applications
17:00-17:20	Ming Chen	The principle of inverse VLBI system

#### Discussion and Closing Ceremony

Conveners: H. T. Hsu and Shuhua Ye

17:20-18:20	Discussion on the future activities on APSG	
18:20-18:30	Closing Ceremony	

#### Poster (August 17 - August 19)

1	Zotov Leonid	Chandler wobble excitation reconstruction and analysis
2	Wenbin Shen	Estimates of the splitting frequencies of the spheroidal oscillation modes ${}_0S_2$ and ${}_3S_1$ using superconducting gravimeters records
3	Xiaoli Su	The calibration of Laser Altimeter and the research of Yutu area
4	Weijing Que	The variations of the earth's gravity field for 1993-2009 from satellite laser ranging observations
5	Wu Jiang	New method to resolve $2\pi$ ambiguity in NBV
6	Yun Xiao	Baseline Approach Used for Processing the Satellite-to-Satellite Tracking Data
7	Kefei Zhang	Numerical ray tracing techniques to synthesize and study L-band GPS frequency propagation in the ionosphere and lower atmosphere

8	Frank Fu	Antarctica tropospheric temperature studies using GPS radio occultation observations
9	Lei Wang	Prospective Earth Science Studies Using GRACE Follow-on Gravimetry
10	Rongjian Liu	Non-spherical symmetric inversion of ionospheric occultation data
11	Xinsheng Wang	Three-dimensional lithospheric density structure beneath North China Craton
12	Xiansheng Xu	Back-propagation Inversion Method for GPS/LEO Radio Occultation Data
13	N.V.Vilor	Geodynamics and the nature of the outgoing surface ir radistion of regional faults in north-west China, Xinjiang
14	N.A.Chuikova	Lateral density variations in the Earth's mantle and core
15	Yingchun Li	The 1985 Chinese National Height Datum(CNHD85) Change and Its Trend from Tied-Gauge Records
16	Xiaoyong Song	Validating the Different Ocean Tide Loading models Using CMONIC Station

### **August 20 Friday**

**07:30-20:00**      **To take two buses at SHAO to go to the World Expo**  
**To take the same buses at the World Expo to go back to SHAO**  
**Or to go back to your hotel by yourself**

### **August 21 Saturday**

**Meeting Over or Tour**