

## Atmosphere/Ionosphere (AI)

### Session Overview

	Talks			Posters	
<b>AI 1: Neutral Atmosphere</b>	<b>Part I</b>	1 - 3	Thur, Jul 8, 09:00-10:00	P 1 – P 7	Thur, Jul 8, 15:30-16:30
	<b>Part II</b>	4 - 7	Thur, Jul 8, 10:30-11:30		
<b>AI 2: Ionosphere/Thermosphere</b>	<b>Part I</b>	8 - 10	Thur, Jul 8, 12:00-13:00	P 8 – P 13	
	<b>Part II</b>	11- 15	Thur, Jul 8, 14:00-15:15		

<b>AI 1: Neutral Atmosphere, Part I</b>			Thur, Jul 8, 9:00 – 10:00		
<u>Chair:</u> Kent Lauritsen					
1.	Three years of space based atmosphere sounding with CHAMP: Results, highlights and future prospects (30 min)	J. Wickert, T. Schmidt, G. Beyerle, Ch. Reigber, L. Grunwaldt, R. König, R. Galas, S. Heise, and M. Ramatschi			
2.	Radio Occultation Based Climatologies: Status of the CHAMPCLIM Project and First Results from the Summer Season 2003	A. Gobiet, U. Foelsche, A.K. Steiner, M. Borsche, T. Schmidt, A. Löscher, G. Kirchengast, and J. Wickert			
3.	Connections of the parameters of gravity waves with amplitude and phase variations of the CHAMP radio occultation signal	A.G. Pavelyev, J. Wickert, Y.A. Liou, V.N. Gubenko			
<b>AI 1: Neutral Atmosphere, Part II</b>			Thur, Jul 8, 10:30 – 11:30		
<u>Chair:</u> Andreas Gobiet					
4.	Correction technique for Radio Occultation data with the use of regional meteorological models	V. Kunitsyn, V. Zakharov, K. Dethloff, R. Neuber, A. Rinke, I. Hebestadt			
5.	Excess-Doppler prediction technique for the open-loop signal tracking of the Lagrange Radio Occultation GPS receiver: performance validation through comparisons with Champ observations	R. Notarpietro, A. Zin, M. Gabella, G. Perona			
6.	An analysis of the negative refractivity bias detected in GPS radio occultation data: Results from simulation studies, aerological soundings and CHAMP observations	G. Beyerle, G. Koenig-Langlo, J. Wickert, T. Schmidt, S. Heise and J. Kaschenz			
7.	Atmospheric densities derived from CHAMP/STAR: An overview	Sean Bruinsma			

<b>AI 1: Neutral Atmosphere - Poster</b>		Thur, Jul 8, 15:30 - 16:30
P 1	Cross-Validation of MIPAS/ENVISAT and GPS-RO/CHAMP Temperatures	Ding-Yi Wang for IMK-IAA MIPAS group and Jens Wickert for GFZ GPS/CHAMP Group
P 2	Inversion of Radio Occultations with Noise	Michael E. Gorbunov and Kent B. Lauritsen
P 3	Monitoring of CHAMP data with the 3dvar system of DWD	M. Tomassini, M. Gorbunov, L. Kornblueh, A. Rhodin
P 4	Error levels in atmospheric surface pressure analysis fields	David Salstein and Rui M. Ponte
P 5	Validation of CHAMP and SAC-C Occultation Profiles	Shengjie Ge, C. K. Shum
P 6	Derivation of Vertical Water Vapor Profiles from GPS Radio Occultation with CHAMP	S. Heise, J. Wickert, G. Beyerle, T. Schmidt, J. Kaschenz, S.B. Healy, and Ch. Reigber
P 7	GPS radio occultation with CHAMP: An application for climate research	T. Schmidt, J. Wickert, G. Beyerle, Ch. Reigber
<b>AI 2: Ionosphere/Thermosphere, Part I</b>		Thur, Jul 8, 12:00 - 13:00
<u>Chair:</u> Peter Stauning		
8.	Ionospheric sounding by means of GPS measurements onboard CHAMP (30 min)	N. Jakowski, S. Heise, A. Wehrenpfnig, K. Tsybulya, S.M. Stankov, V. Wilken, Ch. Reigber, and H. Lühr
9.	Similarity of the amplitude variations in CHAMP radio occultation signal and Earth-based observations of the radio waves scintillations	A.G. Pavelyev, J. Wickert, C. Reigber, T. Schmidt, Y.A. Liou, K. Igarashi, D.A. Pavelyev
10.	Medium- and Small-Scale Ionospheric Irregularities Detected by CHAMP Radiooccultation Measurements	K. Tsybulya and N. Jakowski
<b>AI 2: Ionosphere/Thermosphere, Part II</b>		Thur, Jul 8, 14:00 - 15:15
<u>Chair:</u> Alexander Pavelyev		
11.	Search for Earthquake signatures in the ionosphere by ground and space based GPS measurements	N. Jakowski, V. Wilken, and K. Tsybulya
12.	Global Thermosphere Density Response During the Solar Storms of 2002 and 2003 from CHAMP Accelerometer Measurements	R. S. Nerem, J. M. Forbes, E. K. Sutton, and S. Bruinsma
13.	High-Latitude Thermospheric Neutral Density Variations Observed by the STAR Accelerometer on CHAMP	V. K. Henize, H. Lühr, and W. Köhler
14.	IMF By-related Cusp currents on different scales	P. Stauning and J. Watermann
15.	Evidence for night-time signal in observatory data related to solar wind sector structure and investigation of coupling mechanism	S. Macmillan, V. Lesur and A. Thomson

<b>AI 2: Ionosphere/Thermosphere - Poster</b>		Thur, Jul 8, 15:30 - 16:30
P 8	1D Spherical Elementary Current Systems and Their Use for Determining Ionospheric Currents from Satellite Measurements	Juusola, L., Amm, O., Viljanen, A.
P 9	Solar Zenith Angle Control of Field-aligned Currents: A Statistical Study of the Southern Hemisphere	H. Wang, H. Lühr, S. Y. Ma
P 10	Evidence for connection between the amplitude variations in the CHAMP radio occultation signal and DST index	J. Wickert, A.G. Pavelyev, C. Reigber, T. Schmidt, Y.A. Liou, S.S. Matyugov, A.A. Pavelyev
P 11	The latitudinal relation between small-scale magnetic field variations and energetic particle precipitation in the low-altitude cusp	J. Watermann, P. Stauning, P.T. Newell, F. Christiansen, H. Lühr and K. Schlegel
P 12	Webbased Geographical Information Services	Glosa, Matthias, Buchta, Stefanie and Ritschel, Bernd
P 13	Ionosphere/Plasmasphere Imaging based on GPS TEC Data from CHAMP and SAC-C	S. Heise and N. Jakowski