

**Preliminary Schedule**  
**AGU Chapman Conference on**  
**Mid-Latitude Ionospheric Disturbances and Dynamics**  
**Yosemite, California**  
**January 3-6, 2007**

**Wednesday January 3, 2007**

<b>Time</b>	<b>Speaker</b>	<b>Title</b>
08:00-08:15	Conveners	<b>Welcome and Logistics</b>
<b>Theme I Characterization of Mid-Latitude Storms</b>		
<b>Chair, Anthea Coster</b>		
08:15-08:55	G W Proelss	<b>Some Comments on Ionospheric Storms at Middle Latitudes</b>
08:55-09:35	A S Rodger	<b>The Mid-Latitude Ionospheric Trough</b>
09:35-09:55	M J Taylor	<b>Characterizing Unusual F-region Structures at Mid-latitudes</b>
09:55-10:15	E Yizengaw	<b>Ionospheric Signatures of a Plasmaspheric Plume Over Europe</b>
10:15-10:30	<b>Coffee Break</b>	
10:30-11:10	J J Sojka	<b>Combining Ionospheric Observations and Models to Better Understand Severe Ionospheric Weather</b>
11:10-11:30	M Meyer	<b>A SAPS Observation at Mid-latitude with Passive, Coherent Radar</b>
11:30-11:50	C Mitchell	<b>4D Ionisation Dynamics During Storms of the Recent Solar Maximum</b>
11:50-12:10	V V Paznukhov	<b>Study of Mid-Latitude Geomagnetic Storms Using Data From the Digisonde Network</b>
12:10-12:30	V H Rios	<b>Investigating Nighttime foF2 and Total Electron Content (TEC) Enhancements at Tucumán</b>
12:30-17:30	<b>Afternoon Break</b>	
17:30-18:10	J T Emmert	<b>Climatology of Geomagnetic Storm-induced Disturbance Winds in the Thermosphere</b>
18:10-18:30	R Niciejewski	<b>The Dynamic Response of the MLT to Extreme Geomagnetic Events</b>
18:30-18:50	T J Immel	<b>Neutral Composition and Density Effects in the October-November 2003 Magnetic Storms</b>
18:50-19:10	L Z Biktash	<b>Multi-satellite Observations of the Ionospheric Structures</b>
19:10-19:30	A Coster	<b>Summary and Group Discussion</b>

**Thursday January 4, 2007**

<b>Time</b>	<b>Speaker</b>	<b>Title</b>
<b>Theme II Ionospheric Irregularities and User Needs</b>		
<b>Chair: Paul Kintner</b>		
08:00-08:40	A Saito	<b>Midlatitude Ionospheric Disturbances Detected by a Dense GPS Receiver Array in Japan</b>
08:40-09:00	T Yokoyama	<b>Three-Dimensional Simulation of the Perkins Instability in Coupled E and F Regions in Midlatitude</b>
09:00-09:20	R Tsunoda	<b>On the Coupling of Layer Instabilities in the Nighttime Midlatitude Ionosphere</b>
09:20-09:40	R A Greenwald	<b>HF Radar Backscatter From Subauroral Ionospheric Irregularities: A Review of Instability Processes and the Dynamics of the Scattering Medium</b>
09:40-10:00	<b>Coffee Break</b>	
10:00-10:20	E Mishin	<b>GPS Radio Interference due to Irregularities Within SAPSWS-Related Troughs: Consequences of Wave Effects in the Stormtime Ring Current-Plasmasphere Coupling</b>
10:20-10:40	Y Otsuka	<b>Relationship Between Medium-Scale Traveling Ionospheric Disturbance and Sporadic E Layer Activities in Summer Night Over Japan</b>
10:40-11:00	R Pfaff	<b>Highly Structured Plasma Density and Associated Electric and Magnetic Field Irregularities at Sub-Auroral, Middle, and Low Latitudes in the Topside Ionosphere Observed with the DEMETER and DMSP Satellites</b>
11:00-11:20	P R Straus	<b>GPS Occultation Measurements of Mid-Latitude Scintillation</b>
11:20-12:00	P H Doherty	<b>Mid-Latitude Storm Effects on the WAAS Air Navigation System</b>
12:00-12:20	K F Forbes	<b>Space Weather and the Incidence of Transmission Congestion in PJM's 500 Kilovolt Transformers</b>
12:20-12:40	P Kintner	<b>Summary and Group Discussion</b>
12:40-17:30	<b>Afternoon Break</b>	
17:30-19:30	Participants	<b>Posters</b>

**Friday January 5, 2007**

<b>Time</b>	<b>Speaker</b>	<b>Title</b>
<b>Theme III Ionosphere-Magnetosphere-Heliosphere Coupling</b>		
<b>Chair: Anthony Mannucci</b>		
08:00-08:40	S Sazykin	<b>The Role of Inner Magnetospheric Electric Fields in Storm-Time Ionospheric Dynamics</b>
08:40-09:00	P C Brandt	<b>Relations Between the Ring Current and Sub-Auroral Electric Fields</b>
09:00-09:20	T W Garner	<b>An Investigation Into the Coupling of the Neutral Dynamo and Region-2 Birkeland Current and Their Effect on the Penetration Electric Field</b>
09:20-10:00	B T Tsurutani	<b>The Solar Wind and Geoeffectiveness at Middle Latitudes</b>
10:00-10:20	<b>Coffee Break</b>	
10:20-10:40	T Kikuchi	<b>Storm Phase Dependence of Penetration of Magnetospheric Electric Fields to Mid and Low Latitudes</b>
10:40-11:20	G Lu	<b>Global Modeling of Ionospheric Total Electron Content During Geomagnetic Storms</b>
11:20-11:40	G S Bust	<b>Mapping the Time-varying Distribution of High Altitude Plasma During Storms</b>
11:40-12:00	J M Ruohoniemi	<b>The Coupling of Large-Scale Plasma Structure from Mid- to High Latitudes</b>
12:00-12:20	E R Talaat	<b>The Quiet and Disturbed Sub-auroral Electric Field as Observed From DMSP</b>
12:20-12:40	S V Voeykov	<b>Dynamics of the Ionosphere During Geomagnetic Disturbances in 2000-2004 as Deduced From Global GPS Network Data</b>
12:40-17:30	<b>Afternoon Break</b>	
17:30-18:10	W J Burke	<b>Stormtime Electric Fields at Subauroral Latitudes</b>
18:10-18:50	J C Foster	<b>An Insider's Viewpoint on Ionospheric-Magnetospheric-Heliospheric Coupling</b>
18:50-19:10	C S Lin	<b>Characteristics of Plasma Convection in the Mid-latitude Ionosphere and the Inner Magnetosphere Observed During an Ionospheric Storm</b>
19:10-19:20	T Mannucci	<b>Summary and Group Discussion</b>
19:20-20:00	<b>Break</b>	
20:00-22:00	<b>Conference Dinner</b>	

**Saturday January 6, 2007**

<b>Time</b>	<b>Speaker</b>	<b>Title</b>
<b>Theme IV Coupling to High and Low Latitudes and Altitudes</b>		
<b>Chair: Tim Fuller-Rowell</b>		
08:00-08:40	R A Heelis	<b>Low and Middle Latitude Ionospheric Dynamics and Energetics Associated with Magnetic Storms</b>
08:40-09:00	M Fedrizzi	<b>Physical Interpretation of the Mid and Low Latitude Thermosphere-Ionosphere Response to the April 2002 Magnetic Storm</b>
09:00-09:20	J J Makela	<b>Optical and Radio Observations of Structure in the Mid-latitude Ionosphere</b>
09:20-09:40	K Shiokawa	<b>Optical and Radio Observations and AMIE/TIEGCM Modeling of Traveling Ionospheric Disturbances at Middle Latitudes During Geomagnetic Storms</b>
09:40-10:00	R L Bishop	<b>Characterizing Ionospheric Variations in the Vicinity of Hurricanes and Typhoons Using GPS Occultation Measurements</b>
10:00-10:15	<b>Coffee Break</b>	
10:15-10:55	A D Richmond	<b>Global Electrodynamics</b>
10:55-11:15	D N Anderson	<b>Relating the Interplanetary Electric Fields (IEFs) With the Low Latitude Electric Fields (LLEFs) Under Geomagnetically Disturbed Conditions</b>
11:15-11:35	O P Verkhoglyadova	<b>Simulations of Uplift of Ionospheric Ions Due to Prompt Penetrating Electric Fields During Magnetic Storms</b>
11:35-11:55	N Maruyama	<b>Modeling of the Storm-Time Ionospheric Electric Fields</b>
11:55-12:35	G Crowley	<b>Disturbed O/N<sub>2</sub> Ratios and Their Transport to Middle and Low Latitudes</b>
12:35-14:00	<b>Lunch Break</b>	
<b>Theme V Experimental Methods and New Techniques</b>		
14:00-14:20	L J Paxton	<b>Characterizing Ionospheric Storms and the Coupled Ionosphere/Thermosphere System Using UV Remote Sensing</b>
14:20-14:40	R Behnke	<b>Future Space Weather Observational Capabilities</b>
14:40-15:00	R Eastes	<b>Global-scale Observations of the Limb and Disk (GOLD): Science Objectives and Observations</b>
15:20-15:40	K S Wood	<b>Continuous FUV/EUV Imaging of Mid-latitude Ionospheric Activity From Geosynchronous Orbit</b>
15:00-15:20	J F Spann	<b>The Use of Rapid Large-Scale Imaging to Examine the Coupling of the Mid-Latitude Ionosphere to the Upper Atmosphere and the High-Latitude Ionosphere</b>
15:40-16:00	M Mendillo	<b>Summary and Group Discussion</b>

## Posters

<b>Time</b>	<b>Speaker</b>	<b>Title</b>
<b>Poster Session</b>		
<b>Chair: Paul Kintner</b>		
17:30-19:30	G D Aburjania	<b>New Modes of the Global Weather Forming ULF Electromagnetic Wavy Structures in the Ionosphere</b>
17:30-19:30	N M R Al-Ubaidi	<b>Daily Midlatitude Critical Frequency foF2 Variation with Daily Sunspot Number R</b>
17:30-19:30	P Alvarez*	<b>Comparison Between IRI Predictions and Digisonde Measurements at Tucumán</b>
17:30-19:30	V P Burmaka	<b>Waves in the Mid-Latitude Ionosphere</b>
17:30-19:30	A P Cerruti*	<b>Solar Radio Burst Effects on Semi-codeless TEC Global Positioning System Receivers</b>
17:30-19:30	M V Codrescu	<b>Memory Effects in Ionosphere Storm Response</b>
17:30-19:30	K Z Chargazia	<b>Theoretical Model and Generation Mechanism of the Large Scale Internal Vortical Electric Field in the Ionosphere</b>
17:30-19:30	L F Chernogor	<b>Features of Midlatitude Ionospheric Storms as Observed by the Kharkov Incoherent Scatter Radar</b>
17:30-19:30	R Cosgrove	<b>Spontaneous Generation of 200-km-scale Midlatitude Electric Fields by a Sporadic E Layer, and the Effect on the F Layer</b>
17:30-19:30	N Curtis*	<b>Investigation of Evening Sector Enhanced Electron Density Plumes over Central Texas During the Halloween 2003 Superstorm</b>
17:30-19:30	T Gaussiran	<b>Preliminary Observations of Mid-latitude Structures and Disturbances Using Ground Receivers and the COSMIC Radio Beacon</b>
17:30-19:30	R Hahn*	<b>A Search for Ionospheric Irregularity Waves Over the North Eastern United States</b>
17:30-19:30	K K Hashimoto	<b>DP2 Currents at Mid- and Low-Latitudes During the Main Phase of Magnetic Storms</b>
17:30-19:30	M V Klimenko*	<b>Numerical Modeling of Solar-Cycle Variations of Dynamo Field, Equatorial Electrojet, and F Region Parameters of the Ionosphere During Vernal and Autumnal Equinox</b>
17:30-19:30	D J Knipp	<b>The Novice View: The Ionosphere as an Enigma</b>
17:30-19:30	Y Mittal	<b>Ionospheric Response to Seismic Activity</b>
17:30-19:30	M T A H Muella*	<b>Time Dependence and Dynamics of TEC, Scintillation, and Ionospheric Irregularity Zonal Drifts: A Case Study</b>
17:30-19:30	K E Nurgalieva	<b>Non-equilibrium Atmosphere and Spectrum of Its Initial Disturbances</b>
17:30-19:30	J Rai	<b>Ionospheric Response to Thunderstorms as Measured by the SROSS-C2 Satellite</b>

17:30-19:30	I I Shagimuratov	<b>Dynamics of Latitudinal Profiles in TEC Variations Over Europe Obtained from GPS Observations</b>
17:30-19:30	J J Sojka	<b>Is There a Case for Creating Ionospheric Weather Indices?</b>
17:30-19:30	Y Tao*	<b>A Simulation Study on the Semiannual Variation of the Ionospheric F2-region Zonal Electric Fields at the Magnetic Equator</b>
17:30-19:30	B T Tsurutani	<b>Prompt Penetration of the IEF and Various TEC Features of the Dayside Superfountain Effect: Observations and Simulations</b>
17:30-19:30	R Wahi	<b>Effects of Scintillation and TEC on GPS Receiver at Low Latitude Station Bhopal</b>
17:30-19:30	X Wang	<b>Initial Results of Traveling Ionospheric Disturbances (TIDS) Monitored by Space-based and Ground-based GPS Measurements</b>
17:30-19:30	J A Wanliss	<b>Multifractal Analysis of INTERMAGNET Stations: A First Step Toward Global Characterizations</b>
17:30-19:30	I E Zakharenkova*	<b>The Intensification Effect of Magnetic Storm on Pre-seismic Ionosphere Behavior</b>

\*Denotes Student First Authors