



Agenda

2013 CEDAR Workshop Implementing the New Dimension Strategic Plan

(All Workshops to be held in the Millennium Ballroom unless otherwise noted)

Saturday 22 June

2013 CEDAR-GEM Workshop in the Flagstaff Section of the Millennium Hotel Ballroom (See 2013 CEDAR-GEM Workshop Agenda)

Sunday 23 June

2013 CEDAR-GEM Workshop will run concurrently in the Flagstaff Section of the Millennium Hotel Ballroom (See 2013 CEDAR-GEM Workshop Agenda)

CEDAR Student Workshop (Non-students welcome!)

Canyon Section of the Millennium Hotel Ballroom

Co-Chairs: Timothy Duly and Katelynn Greer (CSSC Student Reps)

0730-0900	<i>Breakfast</i> <i>Outdoor Patio Area</i>	
0730-0900	<i>Registration, Sign Travel Vouchers</i> <i>Sunshine Room</i>	
0900-0910	Student Welcome from NSF	Rich Behnke (NSF)
0910-0930	Student Welcome from CSSC	David Hysell, (CSSC chair, Cornell)
0930-0940	Agenda information and organizational details	Timothy Duly (U IL) and Katelynn Greer (U CO) (CSSC Student Reps)
0940-1010	An Introduction to the Terrestrial Ionosphere	Roger Varney (NCAR)
1010-1040	Modeling and the Observational Aeronomer	Ethan Miller (APL)
1040-1055	<i>Break</i>	
1055-1125	The Basics of Modeling the Thermosphere and Ionosphere	Aaron Ridley (U Michigan)
1125-1155	Assimilative Models	Ludger Scherliess (Utah State)
1200-1315	<i>Student Lunch</i> <i>Outdoor Pavilion</i>	
1315-1345	What can I do with the TIE-GCM?	Astrid Maute (NCAR)
1345-1415	Modeling the earth's ionosphere with SAMI2	Joe Huba (NRL)
1415-1445	Talk: Assimilative Models / GAIM	Xiaoqing Pi (JPL)
1445-1500	<i>Break</i>	
1500-1545	PhD Panel	Nick Pedatella (NCAR), Loren Chang (NCU/Taiwan), Ellen Cousins (NCAR)
1545	<i>Adjourn</i>	
1600-1700	<i>Annual CEDAR Soccer Game, Ultimate Frisbee, etc</i> <i>Scott Carpenter Field</i>	
1800-2100	<i>CSSC Dinner</i> <i>Boulder Creek Living Room</i>	

Monday 24 June

0715-0815	<i>Breakfast</i> <i>Outdoor Patio Area</i>	
0715-0815	<i>Registration</i> <i>Sunshine Room</i>	

0815-0825	Welcome from NSF and CSSC	Rich Behnke (NSF), David Hysell (CSSC)
0825-0835	Introduction of Students by Institution	Katelynn Greer (CSSC)
0835-0845	Report of Student Workshop	Tim Duly (CSSC)
0845-0930	CEDAR Prize Lecture #24: 150-km echoes and their relevance to Aeronomy	Jorge Chau (Jicamarca, Peru)
0930-1000	<i>Break</i>	
1000-1015	Programmatic #1: Geospace -- Where are we going?	Rich Behnke (NSF)
1015-1030	CEDAR Post-Doc Report #1: Study of the effects of Coulomb collisions on H+ and He+ plasmas for topside ISR applications at Jicamarca	Marco Milla (Jicamarca, Peru)
1030-1050	Science Highlight #1: Thermospheric Neutral Density Damping Response to Sheath-Enhanced Geospace Storms	Delores Knipp (U CO)
1050-1110	MREFC Talk 1: A Network of Remote Optical Instruments including Fabry Perot Interferometers.	Jonathan Makela (U IL)
1110-1130	MREFC Talk 2: Science Goals for the Large Atmospheric Lidar Observatory	Chet Gardner (U IL)
1130-1150	MREFC Talk 3: Using Constellations of Small Satellites to Address Large Problems	Aaron Ridley (U MI)
1150-1210	MREFC Talk 4: Science Considerations when Exploring a Major Research Investment	Eric Donovan (U Calgary, Canada)
1210-1330	<i>Lunch on own</i>	
1330-1530	Geospace system science during storms and substorms	N Maruyama et al.
	<i>Flagstaff</i>	
	Equatorial Ionospheric Electrodynamics and Low-Latitude Space Weather	CS Huang et al.
	<i>Canyon</i>	
	Calibration and analysis techniques for passive optical and lidar observations	Nossal/Baumgardner
	<i>Century</i>	
1530-1600	<i>Break</i>	
1600-1800	Geospace system science during storms and substorms	N Maruyama et al.
	<i>Flagstaff</i>	
	International space weather and climate observations along the 120E/60W meridional circle and over its surrounding areas	J Foster et al
	<i>Canyon</i>	
	Calibration and analysis techniques for passive optical and lidar observations	Nossal/Baumgardner
	<i>Century</i>	
	Impacts of Meteoroids and Space Debris	Close/Fentzke
	<i>Millennium</i>	
1800-1830	<i>Buses Depart for CEDAR Banquet</i>	
	<i>Millennium Lobby</i>	
1830-2030	<i>CEDAR Banquet</i>	
	<i>Stadium Club (U CO)</i>	
2015-2050	<i>Buses Return to Millennium</i>	
Tuesday 25 June		
0715-0815	<i>Breakfast</i>	
	<i>Outdoor Patio Area</i>	
0815-0930	Tutorial #1: EUV effects on the thermosphere and ionosphere: EUV-vs-F10.7 proxy models	Phil Richards (GMU), Frank Eparvier (U CO), and Rodney Viereck (NOAA)
0930-1000	<i>Break</i>	
1000-1200	CEDAR ETI Modeling Challenge	JS Shim et al.
	<i>Flagstaff</i>	
	50 years of Gravity Wave Research - a Tribute to Colin Hines	D Fritts
	<i>Canyon</i>	
	International space weather and climate observations along the 120E/60W meridional circle and over its surrounding areas	J Foster et al.
	<i>Century</i>	
	PFISR Ion-Neutral Observations in the Thermosphere Campaign Year 1	Bristow/Pinot Team
	<i>Millennium</i>	
1200-1330	<i>Lunch on own</i>	
1330-1530	MIT boundary region science enabled by data assimilation	S Datta-Barua et al.
	<i>Flagstaff</i>	
	Observing and Modeling Small-Scale Wave Dynamics and Interactions in the MLT Region	J Snively et al.
	<i>Canyon</i>	
	Potential CEDAR role in US/UK Space Weather Collaborations	I McCrear
	<i>Century</i>	
	PFISR Ion-Neutral Observations in the Thermosphere Campaign Year 1	Bristow/Pinot Team
	<i>Millennium</i>	
1530-1600	<i>Break</i>	
1600-1900	<i>Poster Session #1 for IT</i>	
	<i>Outdoor Pavillion</i>	

Wednesday 26 June		
0715-0815	<i>Breakfast</i> <i>Outdoor Patio Area</i>	
0815-0915	Tutorial #2: Ionospheric Imaging: From two-dimensional tomography to data assimilation	Gary Bust (APL/JHU)
0915-0930	Programmatic #2: NSF Aeronomy Update	Bob Robinson and Anne-Marie Schmoltnner (NSF)
0930-1000	<i>Break</i>	
1000-1200	Planning Observing System Configurations for Answering Geospace System Science by Utilizing Simulation and Data Assimilation	G Bust et al.
	<i>Flagstaff</i> Coupling of the lower and upper atmosphere during Stratospheric Sudden Warmings	A Chandran et al.
	<i>Canyon</i> Large Atmospheric Lidar Observatory (LALO), a new initiative	Swenson/Gardner
	<i>Century</i> World Day Planning	McCready/McCrea
	<i>Millennium</i>	
1200-1330	<i>Lunch on own</i>	
1330-1530	System-Theoretic approach to CEDAR science	T Matsuo et al.
	<i>Flagstaff</i> Coupling of the lower and upper atmosphere during Stratospheric Sudden Warmings	A Chandran et al.
	<i>Canyon</i> Advances in lidar and coordinated studies of middle and upper atmosphere globally	X Chu et al.
	<i>Century</i> Lightning Effects in the Middle and Upper Atmosphere	N Liu et al.
	<i>Millennium</i>	
1530-1600	<i>Break</i>	
1600-1900	<i>Poster Session #2 for MLT</i> <i>Outdoor Pavillion</i>	
	or	
2000-2200	<i>Model railroad open house</i> <i>Barbara Emery's basement in Longmont</i>	
Thursday 27 June		
0700-0815	<i>Breakfast</i> <i>Outdoor Patio Area</i>	
	or	
0715-0815	<i>Student Breakfast with NSF</i> <i>Century</i>	
0815-0915	CEDAR Distinguished Lecture #3: A Couple's Journey through Fifty Years of Ionospheric Space Weather Research	Sunanda and Santimay Basu (BC)
0915-0930	Announcement of Poster Prize Winners	Tom Immel (CSSC)
0930-1000	<i>Break</i>	
1000-1200	Exploring mesosphere-lower thermosphere (MLT) applications for commercial suborbital spacecraft and POSSUM	HT Smith et al.
	<i>Flagstaff</i> To build a strategy to forecast the state and dynamics of the ionosphere over South America using the LISN distributed observatory	C Valladares et al.
	<i>Canyon</i> Advances in lidar and coordinated studies of middle and upper atmosphere globally	X Chu et al.
	<i>Century</i> Understanding Thermospheric Winds	A Ridley et al.
	<i>Millennium</i>	
1200-1330	<i>Lunch on own</i>	
	or	
1200-1330	<i>CSSC Lunch</i> <i>Boulder Creek Living Room</i>	
1330-1530	Planetary waves and Tides in the Middle Atmosphere and Ionosphere: Observations, Modeling and Data Assimilation	A Chandran et al.
	<i>Flagstaff</i> Exploring mesosphere-lower thermosphere (MLT) applications for commercial suborbital spacecraft and POSSUM	HT Smith et al.
	<i>Canyon</i> To the Topside: exploring the space-atmosphere interaction region	E Mierkiewicz et al.
	<i>Century</i> Understanding Thermospheric Winds	A Ridley et al.
	<i>Millennium</i>	
1530-1600	<i>Break</i>	

1600-1800	Planetary waves and Tides in the Middle Atmosphere and Ionosphere: Observations, Modeling and Data Assimilation <i>Flagstaff</i>	A. Chandran et al.
	Opportunities for cubesat science in Alaska <i>Canyon</i>	R McCoy et al.
	To the Topside: exploring the space-atmosphere interaction region <i>Century</i>	E Mierkiewicz et al.
Friday 28 June		
0715-0815	Breakfast <i>Outdoor Patio Area</i>	
0815-0915	Tutorial #3: Atmospheric tides and their roles in vertical coupling	Ruth Liebermann (GATS)
0915-0930	CEDAR Post-Doc Report #2: Short-period gravity waves over a high-latitude observation site: Rothera, Antarctica	Kim Nielsen (UVU)
0930-1000	<i>Break</i>	
1000-1015	CEDAR Post-Doc Report #3: Time-domain modeling of lightning, VLF transmitters, and their effects on the lower ionosphere	Robert Marshall (Stanford)
1015-1030	Programmatic #3: The Ionospheric Connection Explorer (ICON) - The next NASA mission for ITM science	Tom Immel (UCB)
1030-1045	Programmatic #4: Global-scale Observations of the Limb and Disk (GOLD) - A New Perspective on the Thermosphere-Ionosphere System	Richard Eastes (UCF)
1045-1105	Science Highlight #2: Intermediate Scale Ionospheric Structure: A Done Deal or Neglected Topic?	Chuck Rino (BC)
1105-1125	Science Highlight #3: High-resolution mapping of ion-neutral coupling in the auroral zone	Mark Conde (U AK)
1125-1200	Discussion of the Big Science Questions	Dave Hysell (CSSC) moderator
1200	<i>Adjourn</i>	