

American Meteorological Society (AMS) - St. Louis Chapter Meeting

Thursday, February 18th, 2010

Location: Grappa Grill in Saint Charles, MO

Call to Order: 8:35 pm by Dr. Charles Graves

Board Members in Attendance:

Dr. Charles Graves – President

Andrew Kren – Vice President

Allison Wreath – Treasurer

Benjamin Sipprell – Secretary

Chad Gravelle – Webmaster

Secretary Report – Benjamin Daniel Sipprell

Nothing new to report

Treasurer's Report – Allison Wreath

Savings:	\$466.86 (increase of \$1.94 in interest)
Checking:	
Previous balance of:	\$938.34
Activity on account:	\$397.00 (food and service Spiro's) \$100.00 (deposit for Spiro's)
	\$292.85 (members 09-10 dues/meal payment)
Total in account:	\$734.19
	\$38 kept as cash for change at meetings
Grand total in checking:	\$772.19

* There have been 3 new members added since the last meeting.

** Life time members (exempt from annual dues): George Taniguchi, Wayne McCollum, Ron Przybylinski

Old Business – Dr. Charles Graves

John Gordon from WFO LMK (Louisville, KY) will potentially be our next speaker for March/April Working with Chris Higgins in getting a Fox2 News Weather Station tour as our final meeting

A board meeting of the officers was held to brainstorm future ideas, but are open to additional suggestion

NWS personnel and SLU undergraduates/graduates have attended multiple conferences/seminars
There are still several conferences to come including the Severe Local Storms Conference
and the Annual NWA Conference

New Business – Dr. Charles Graves

None

Speaker Introductions – Dr. Charles Graves

Dr. Patrick Market – Associate Professor of Meteorology, University of Missouri
“*Stability Profiles Associated with Cyclone Wrap-Around Precipitation*”

Encompassing projects:

 PLOWs – Profiling of Winter Storms

 CAUSD – Collection and Analysis of Upper Air Sounding Data

Primary Interest: Banded Snow / Precipitation (TROWAL)

Question/Objective: What is the stability profile associated with rain and snow bands that wrap around low pressure region?

Focus: Rawinsonde profiles investigating stability and shear

Case I: 8-9 December 2009

 Location of experiment was not in the heaviest band, but close

 37.4 mb drop in pressure over 18 hours

 Will be investigating lapse rate tendencies (10 sec data every 30 minutes)

 Around 8 pm and 10 pm

 Around 240 J/kg CAPE observed near H65

 This would lower to H7 by midnight

 Instability released and convection resulted

 Potential energy to kinetic energy as CAPE diminished into midnight

 From 12 – 16z

$\partial\theta_e/\partial z < 0$

 RUC model did pick up regions of potential instability

 Overall

 Reflectivities observed up to 40 dBz ... mid-tropospheric warming

 5-cm radar observes cores with depth of 8 to 10 km in height

 Convective columns observed

 Lightning present during 3-6z timeframe with highest core-depths

Conclusions

 Convective structures present and upright

 CAPE down 20%; conversion underway

 Reflectivities up to 30 dBz and as high as 10 km AGL

 Updraft velocities of 7 m/s observed by MIPS

 Depth of tower consistent with depth of equilibrium observed via localized soundings

 EL poised around H35

 Potential gravity wave impacts

Meeting Adjourned: 9:43 pm by Dr. Charles Graves