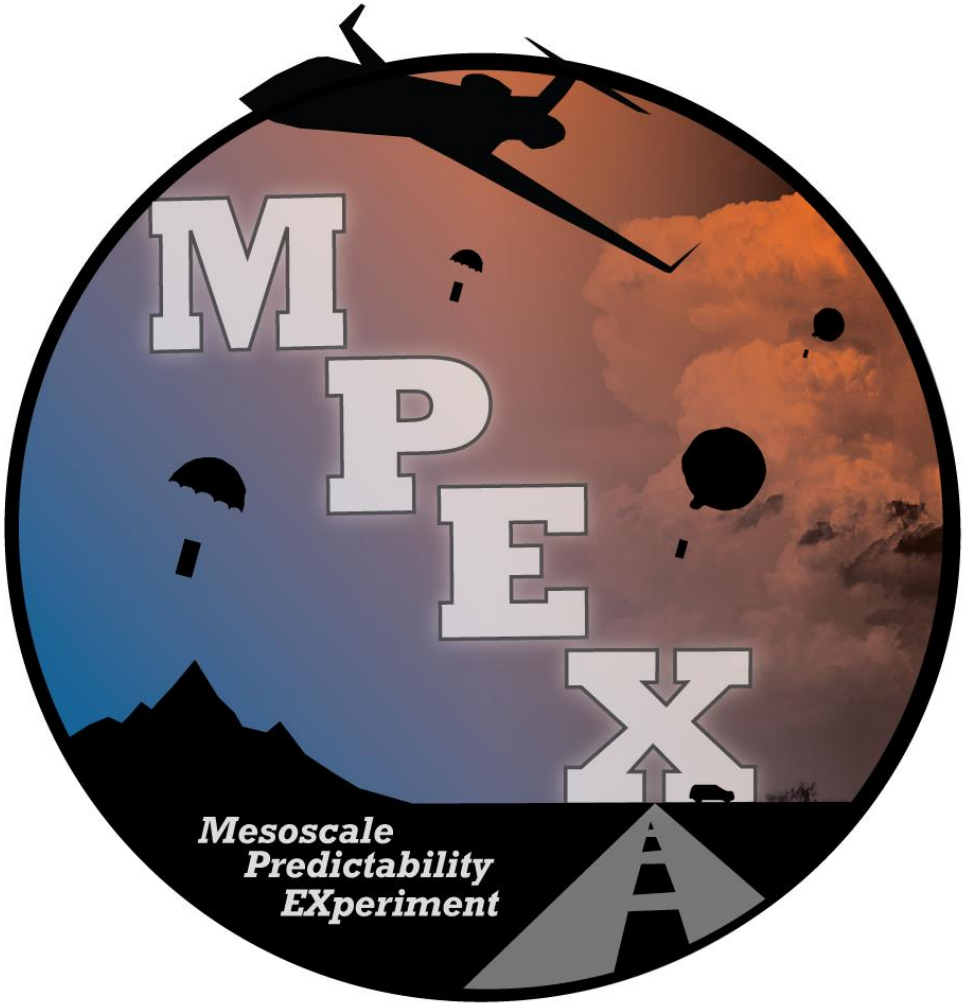


MPEX CASE OVERVIEW:

...prepared for MPEX workshop
19-20 Nov. 2013

IOP	Case Description	Instrumentation	Case Notes
1: 15 May	Upper level vortex in west Texas, produced widespread convection and severe weather in Texas and Oklahoma; unexpected tornadoes near Dallas	GV drops: 27 Upsondes: 2	Poor WRF-ARW forecast in Oklahoma
2: 16 MAY	Upper tropospheric vortex over Colorado with subsequent convection in Kansas and Nebraska	GV drops: 30 Upsondes: 4	WRF-ARW forecast reasonable
3: 18 MAY	Mid-tropospheric vortex in the Texas panhandle produced convection in Oklahoma and Kansas	GV drops: 17 Upsondes: 8	WRF-ARW forecast reasonable
4: 19 MAY	An upper-level jet-front system over Colorado and New Mexico contributes to tornado outbreak in eastern Oklahoma and Kansas	GV drops: 29 Upsondes: 14	Good WRF-ARW forecast
5: 20 May	Tornado outbreak targeted in central Oklahoma (Moore, OK tornado)	Upsondes: 21	Good WRF-ARW forecast
6: 21 MAY	An eastward moving upper-level trough in New Mexico and west Texas contributes to widespread convection in east-central Texas	GV drops: 27	WRF-ARW convection over forecast in Arkansas
7: 23 MAY	A surface front in northwest Texas along with weak upper tropospheric PV features in New Mexico and Arizona contribute to severe convection in west-central Texas	GV drops: 29 Upsondes: 9	WRF-ARW convection over forecast in west Texas
8: 27 MAY	An upper tropospheric feature over the intermountain region embedded within sub-tropical southwesterly flow contributes to locally intense convection in western and south-central Nebraska and north-central Kansas	GV drops: 29 Upsondes: 11	Reasonable WRF-ARW forecast
9: 28 MAY	Weak features in southwesterly flow over New Mexico contribute to strong convection in southwest Kansas and the Oklahoma and Texas Panhandles	GV drops: 21 Upsondes: 19	WRF-ARW convection a bit overdone and displaced southeast
10: 29 May	Deep trough over the intermountain region and moderately strong southwesterly flow over the high plains contributes to widespread convection from Texas through South Dakota. Bow echo with northern bookend vortex targeted in western OK and eastern Texas Panhandle	Upsondes: 17	WRF-ARW forecasts widespread convection; mesoscale details lacking

11: 30 MAY	Strong trough and associated jet over Wyoming, Colorado and New Mexico contributes to widespread severe convection in eastern Kansas, east-central Oklahoma, extending northeastward into Illinois	GV drops: 26 Upsondes: 24	WRF-ARW forecast only marginally successful over Kansas and Oklahoma
12: 31 MAY	Strong jet over Colorado, New Mexico and west Texas contributes to tornadic storms in central and eastern Oklahoma, extending northeastward into Missouri and Illinois (El Reno, OK tornado)	GV drops: 28 Upsondes: 16	Good WRF-ARW forecast
13: 03 June	An upper-level trough and associated cold front in Wyoming and Colorado contributes to scattered convection from western Nebraska southward to the Oklahoma Panhandle	GV drops: 32 Upsondes: 18	WRF-ARW forecast marginal, especially in Nebraska
14: 04 June	Texas Panhandle	Upsondes: 13	
15: 08 June	A weak trough embedded within strong northwesterly flow over Wyoming and Colorado contributes to widespread convection from the Oklahoma Panhandle northeastward into Iowa	GV drops: 31 Upsondes: 13	Poor WRF-ARW forecast in Iowa
16: 11 June	An upper-level trough in northern Utah embedded in southwesterly flow contributes to convection from Montana southeastward to northern Nebraska	GV drops: 33 Upsondes: 3	WRF-ARW convection overpredicted
17: 12 June	Upper-level trough extending from North Dakota southward through Nebraska contributes to severe convection from Iowa eastward (a strong Derecho was anticipated from Chicago eastward). A weak upper-level feature in northern Utah contributes to scattered convection in northeast Wyoming.	GV drops: 33 Upsondes: 4	WRF-ARW correctly predicts a modest convective wind event from Chicago eastward
18: 14 June	A weak trough and associated surface front embedded in southwesterly flow over Colorado and Wyoming contributes to modest convection from southeast Colorado northeastward to south-central Nebraska	GV drops: 33 Upsondes: 2	WRF-ARW forecast quite reasonable

Preliminary Summary of Upsonde Operations (Jeff Trapp)

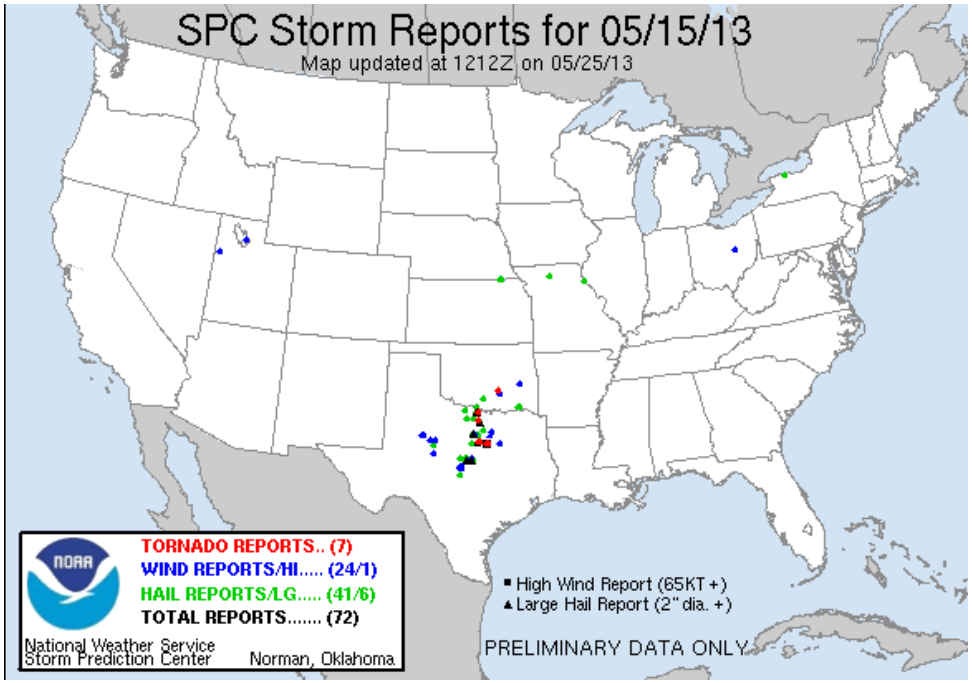
Date	Location	Description (sampling strategy)
515	northern Texas	tornadic supercell (NSSL only)
516	southwestern Kansas	convective cells (upstream)
518	west-central Kansas	tornadic supercell (upstream)
519	central Oklahoma	two tornadic supercells (surround)
520	central Oklahoma	tornadic supercell (surround)
523	northwestern Texas	tornadic supercell (surround), developing MCS (inflow)
527	central Kansas	intense cell with some supercell characteristics (surround)
528	central Kansas	intense cell with some supercell characteristics (surround)
529	western Oklahoma/eastern Texas Panhandle	developing bow echo, northern bookend vortex (surround)

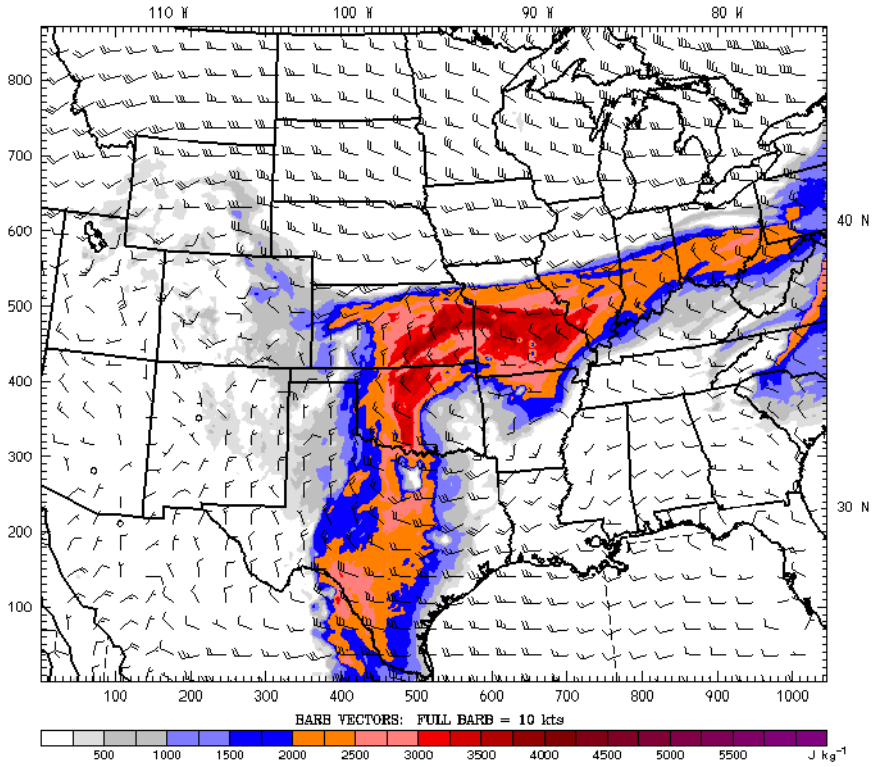
Preliminary Summary of Upsonde Operations (Jeff Trapp)

Date	Location	Description
530	south-central Oklahoma	non-tornadic supercell (surround), non-tornadic supercell (downstream-Purdue only)
531	central Oklahoma	tornadic supercell (surround)
603	Oklahoma Panhandle/southwest Kansas	intense cells with some HP supercell characteristics (surround), developing bow echo
604	eastern Texas Panhandle	pre-convective environment only

13 missions in 3 weeks
Purdue + NSSL sonde usage: ~150
CSU sonde usage: ~35
additional soundings from TAMU

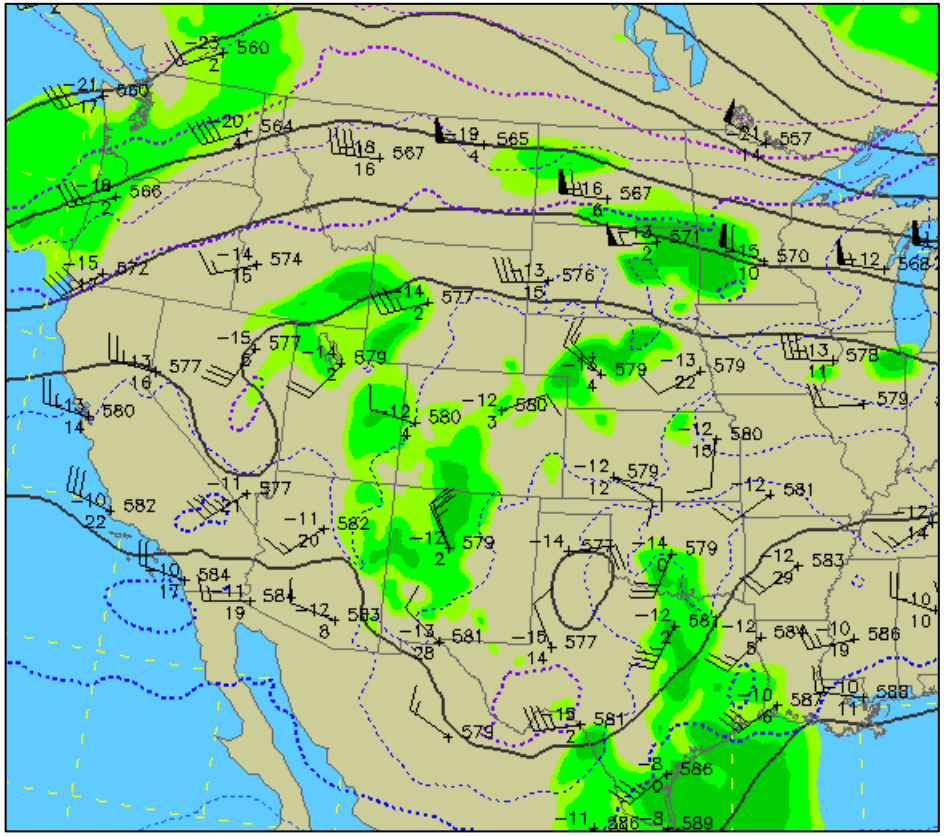
05/15/13





WRF CAPE/Shear: 21 UTC

05/15/13



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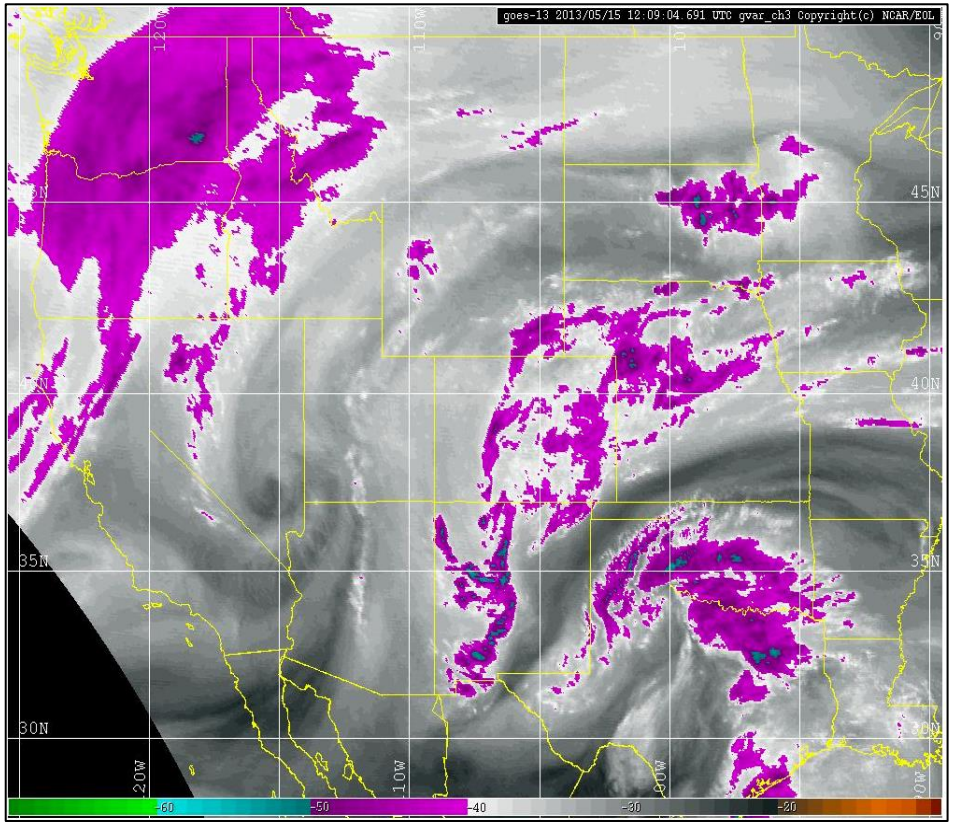
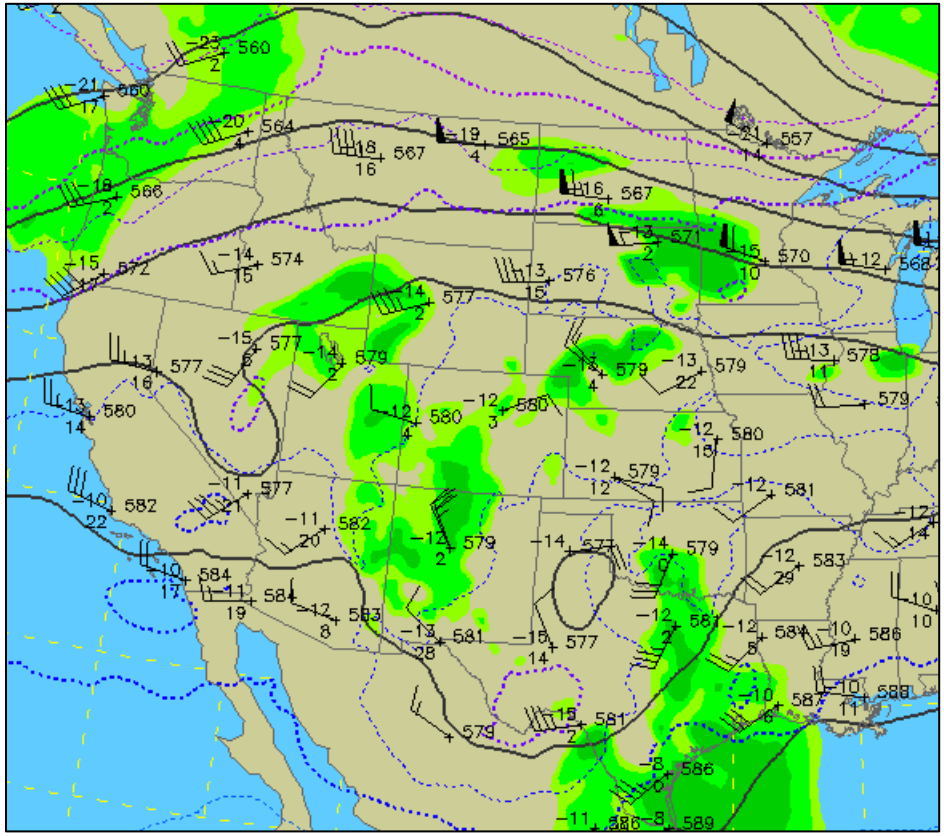


Water Vapor ~12 UTC

05/15/13



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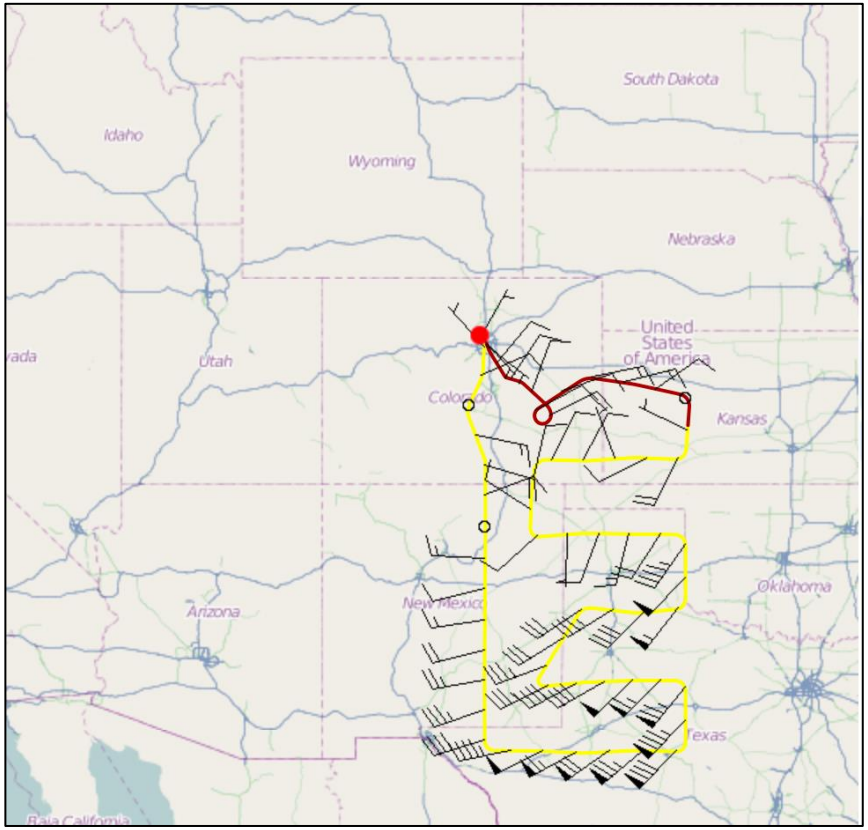
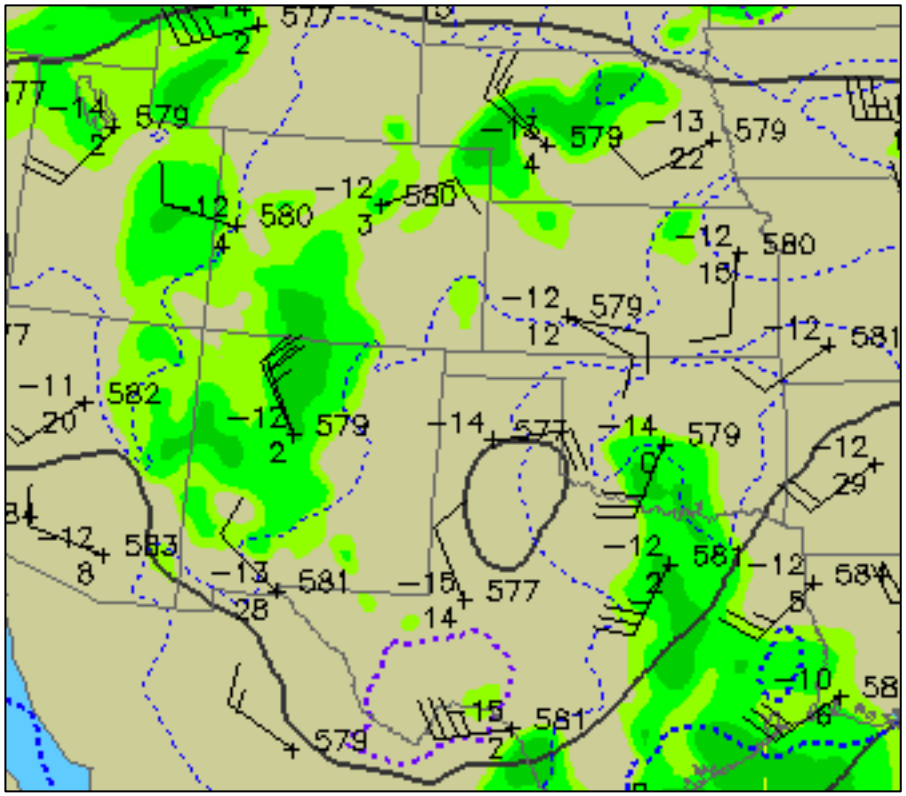


Flight Track Winds ~200 hPa

05/15/13



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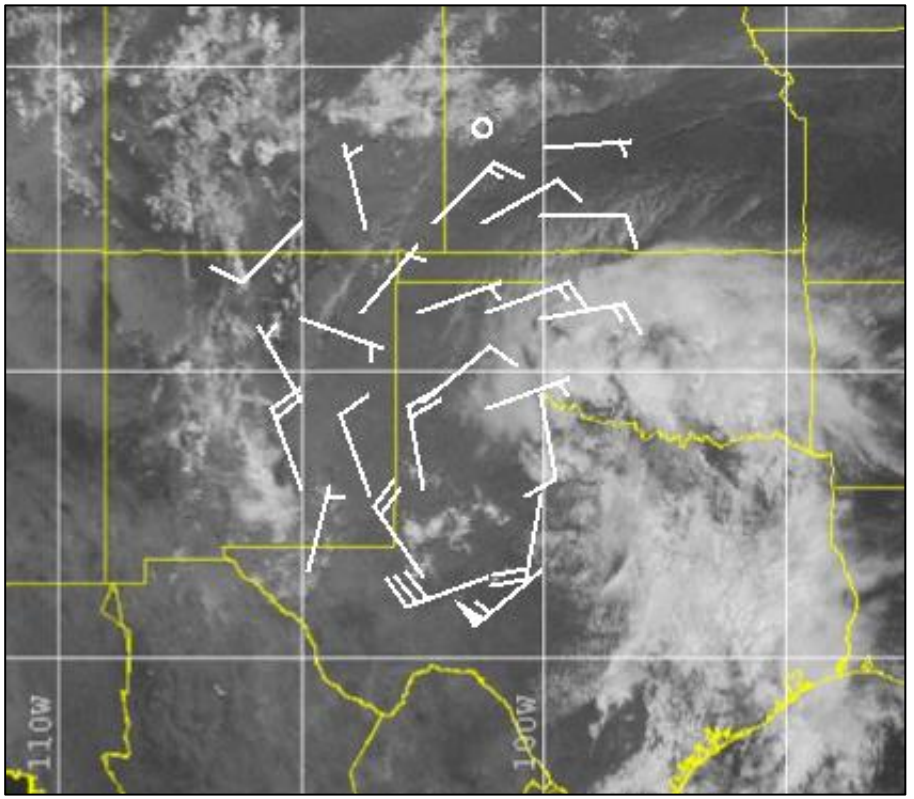
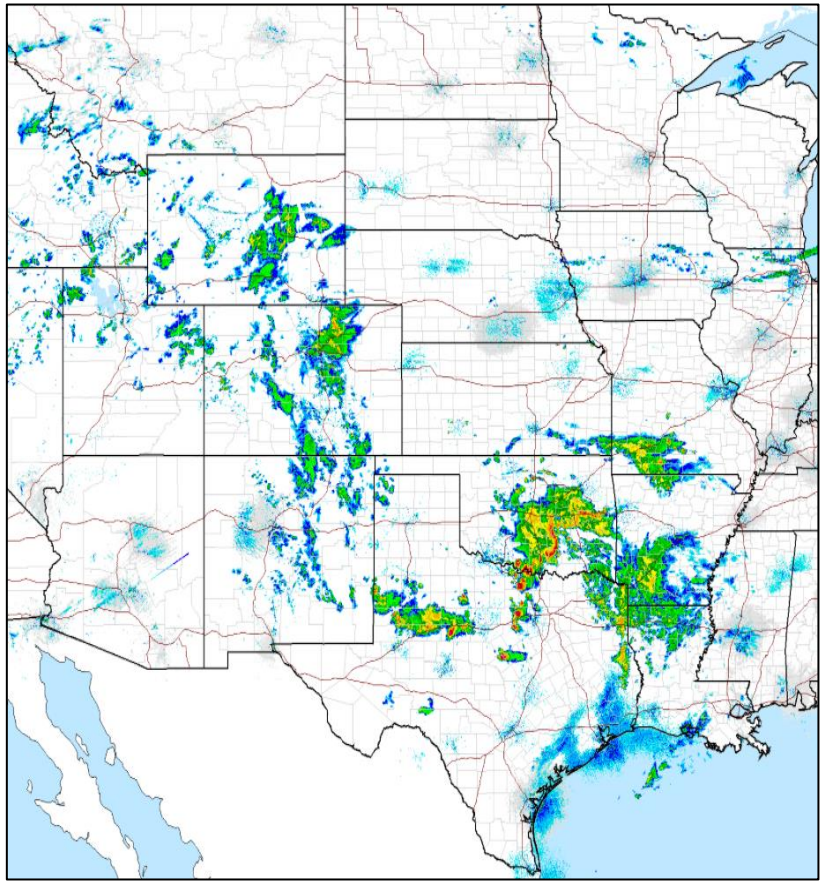


500 hPa Dropsonde Winds

05/15/13



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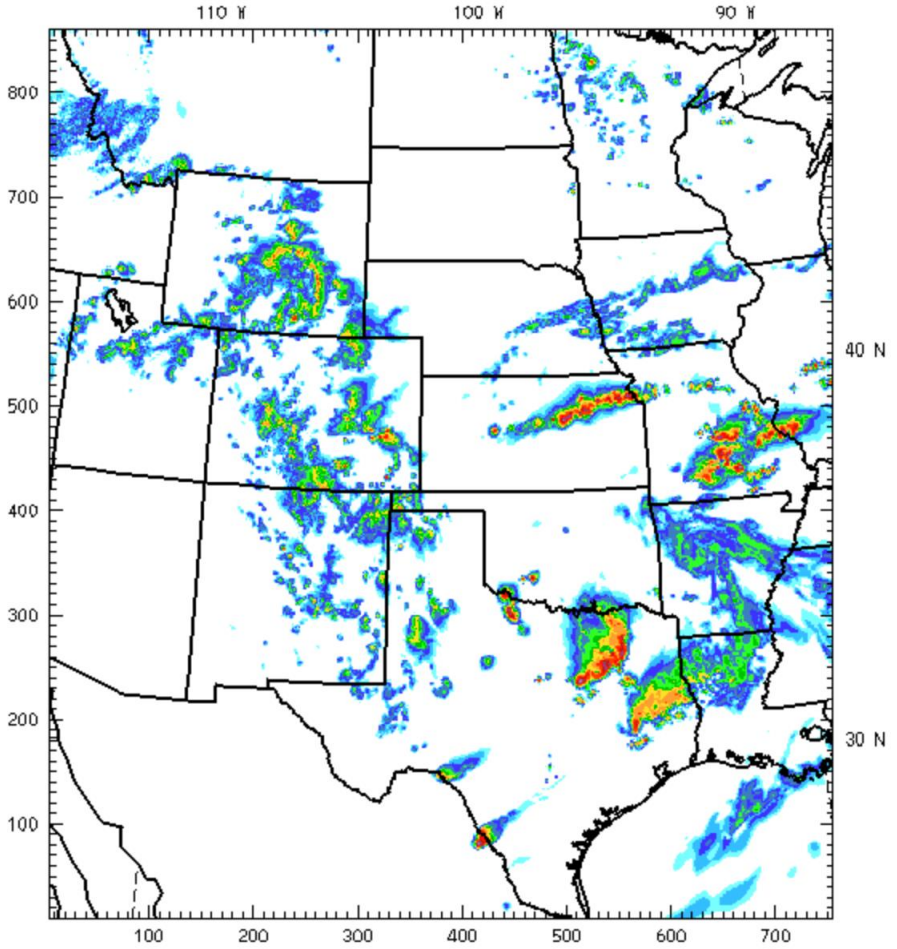
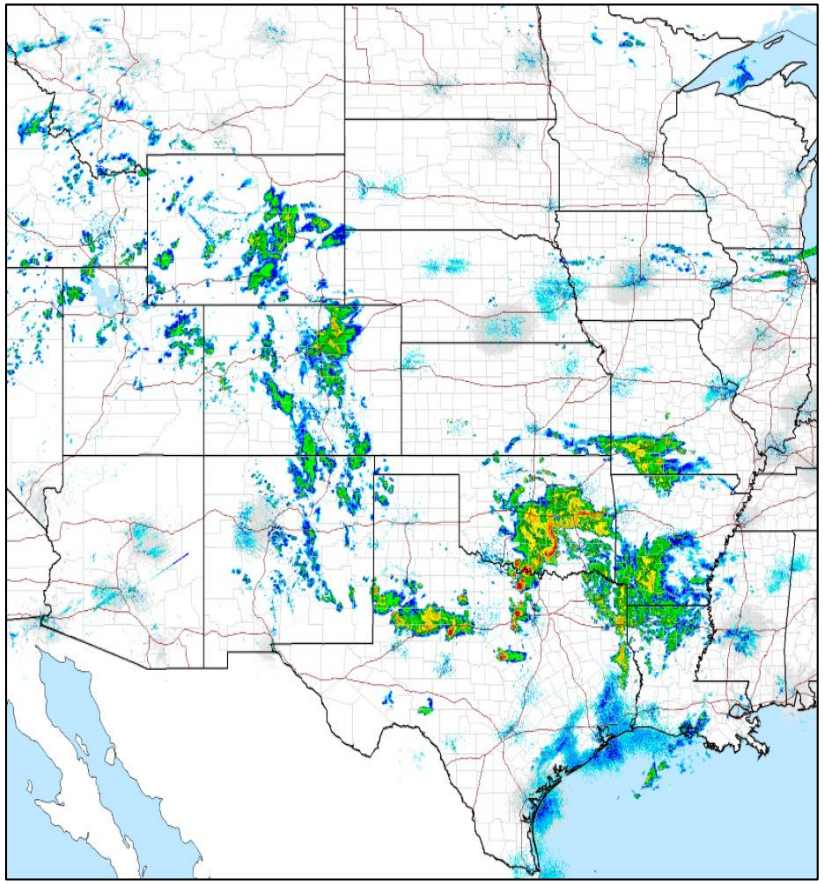


WRF-DART 12 h Forecast

05/15/13



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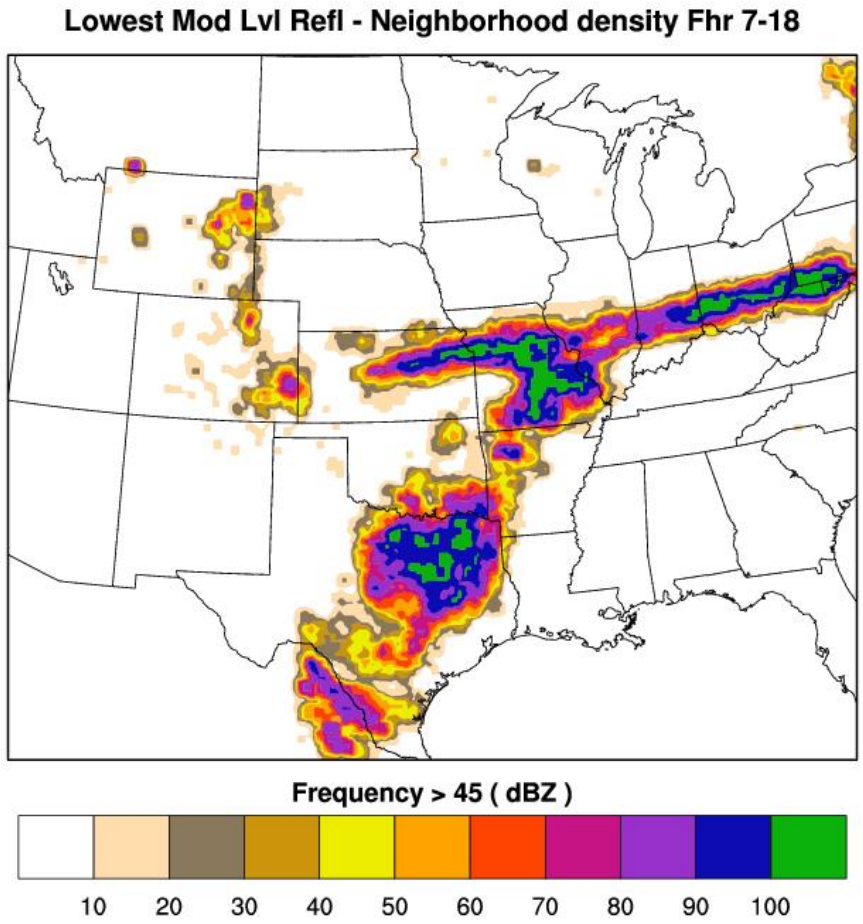

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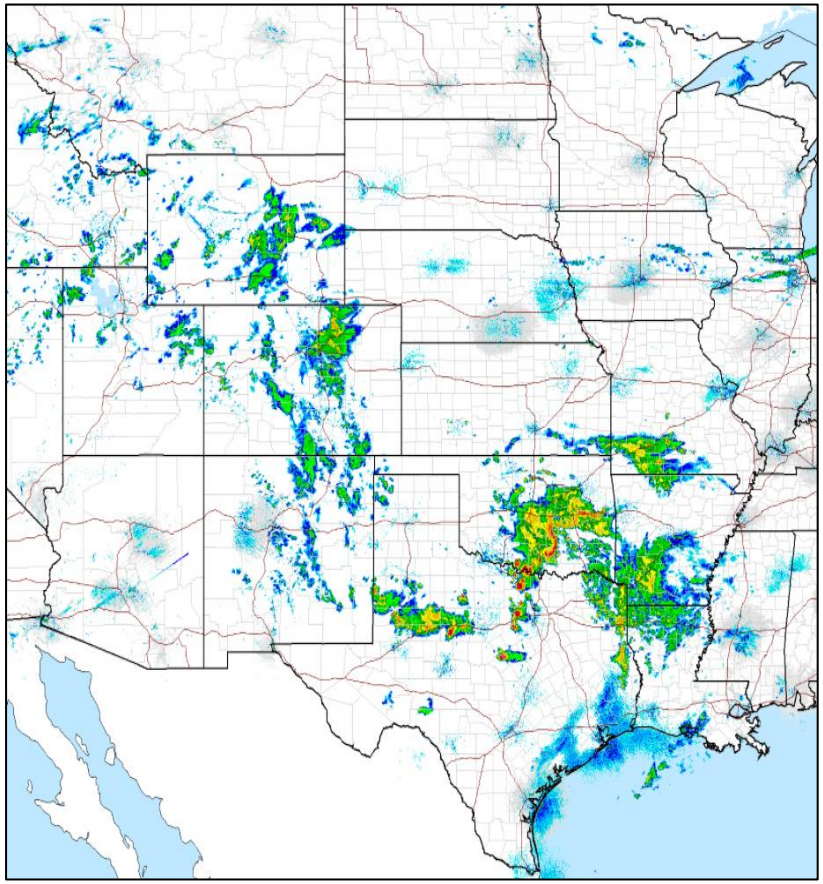

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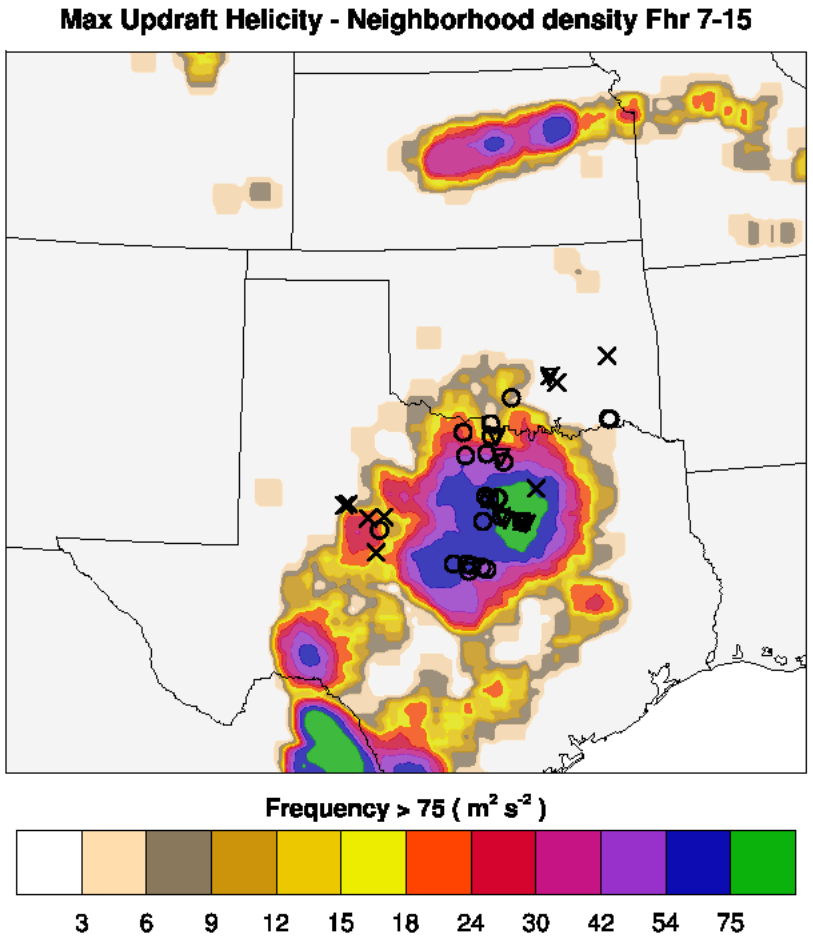

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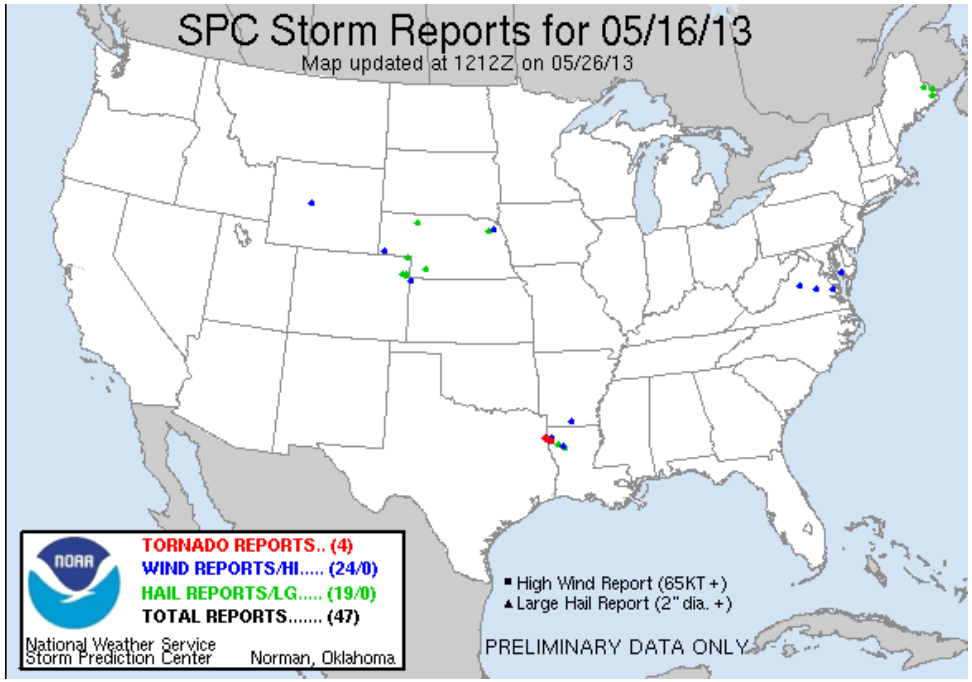
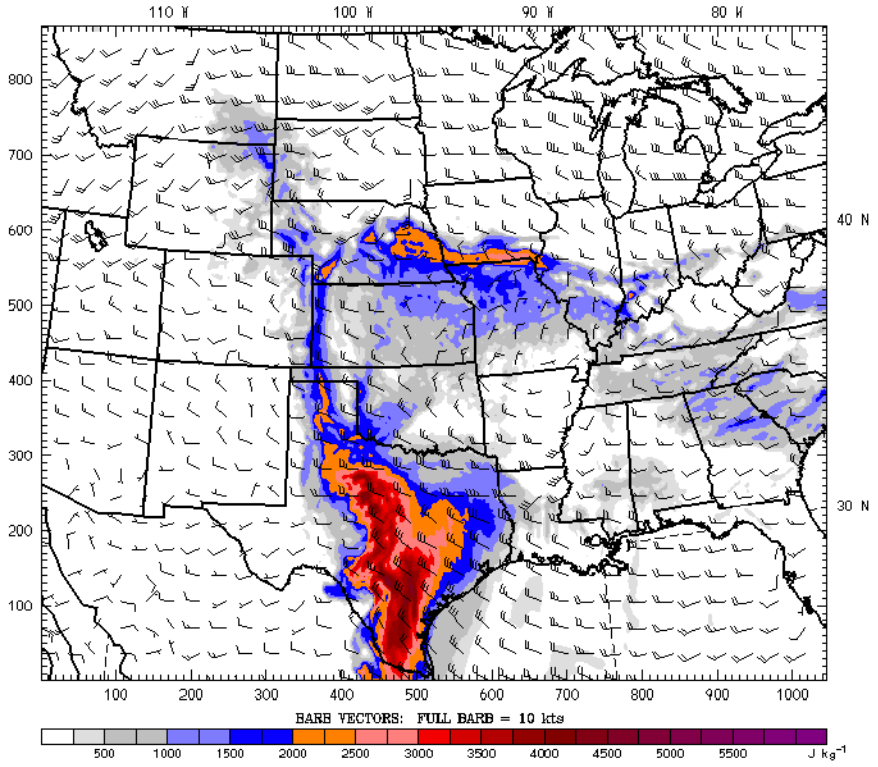
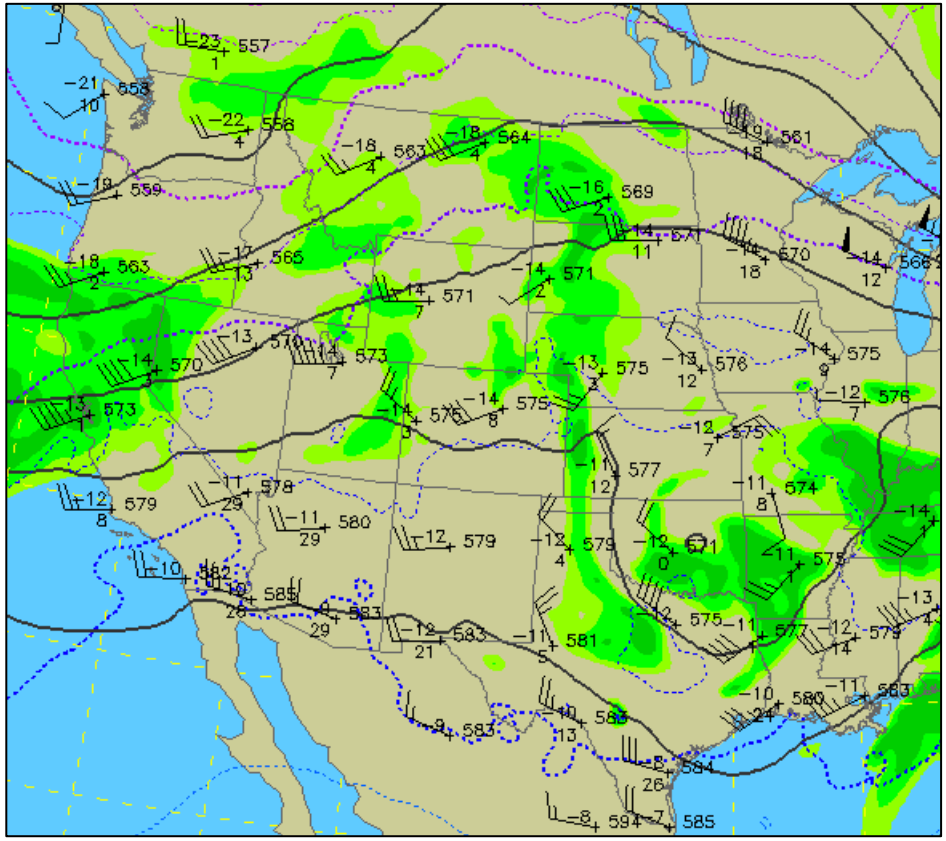


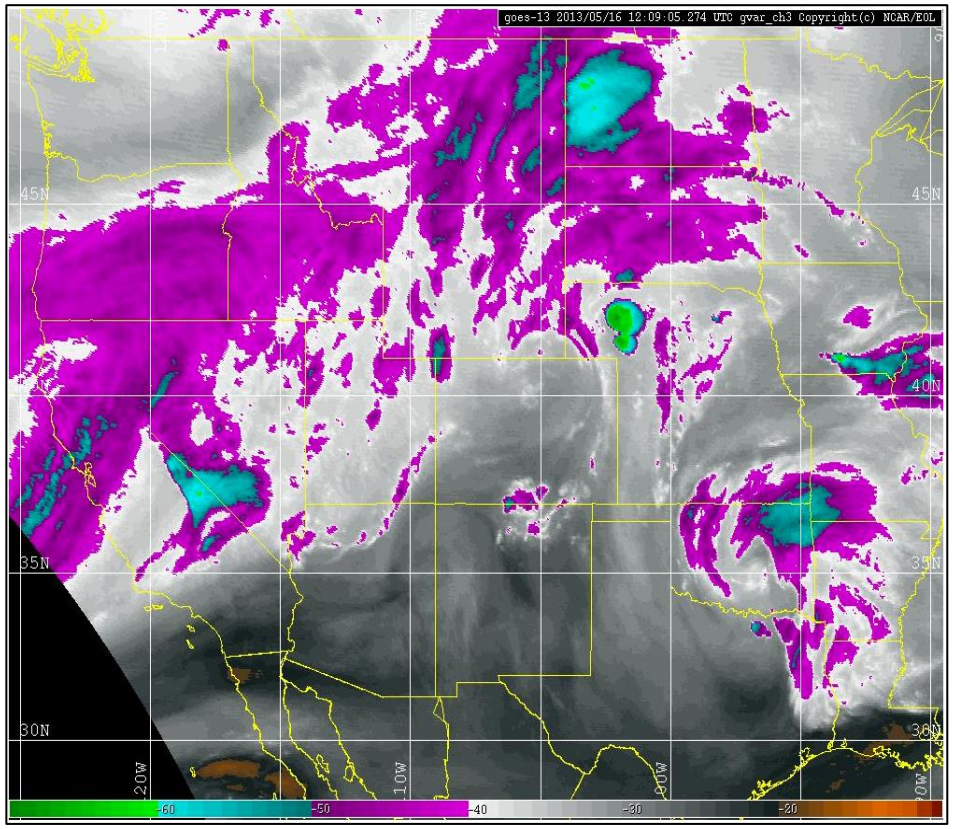


WRF CAPE/Shear: 21 UTC

05/16/13

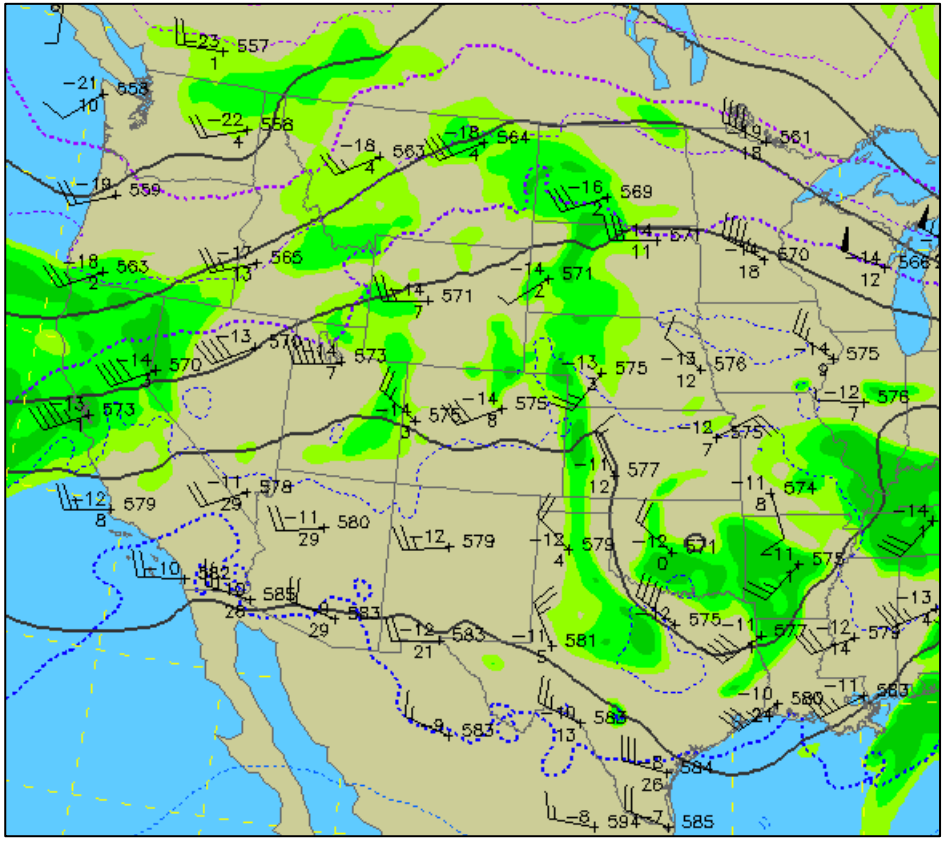


500 hPa 12:00 UTC



Water Vapor ~12 UTC

05/16/13



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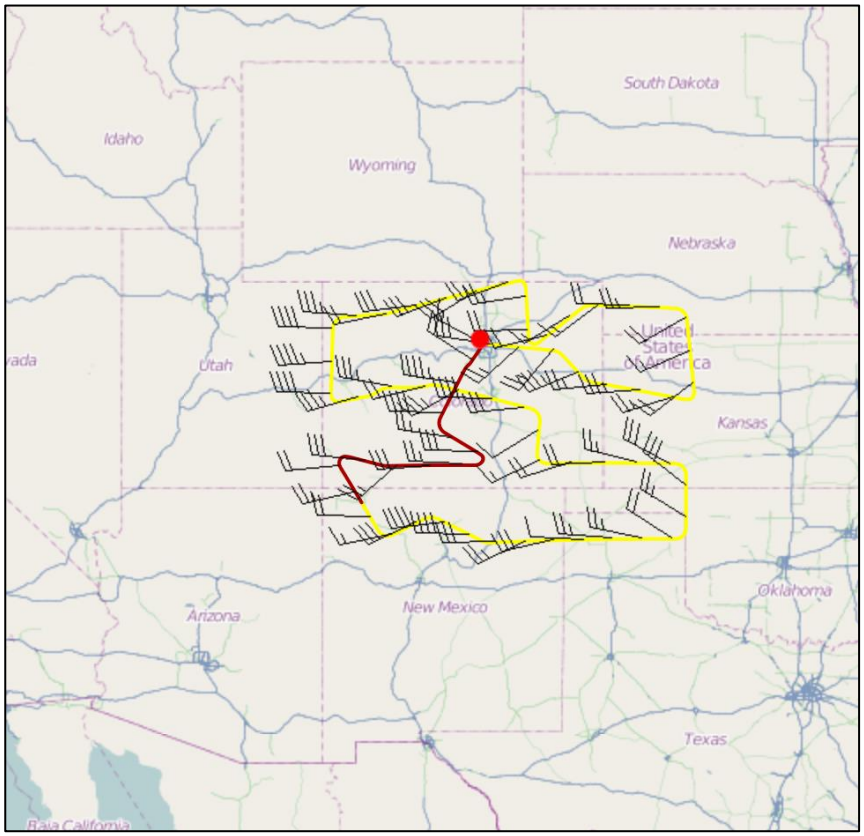
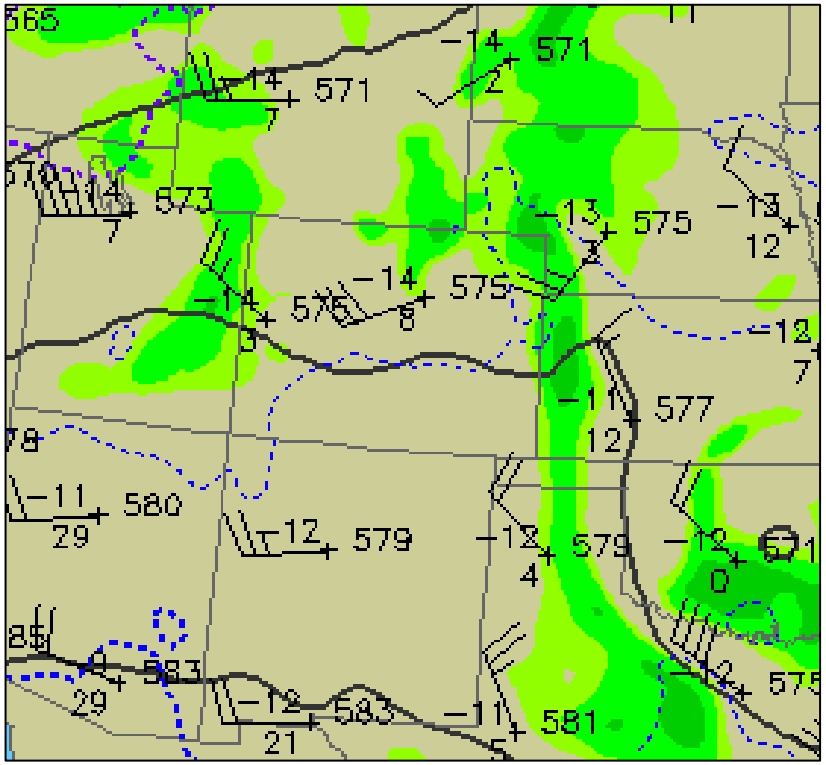


Flight Track Winds ~200 hPa

05/16/13



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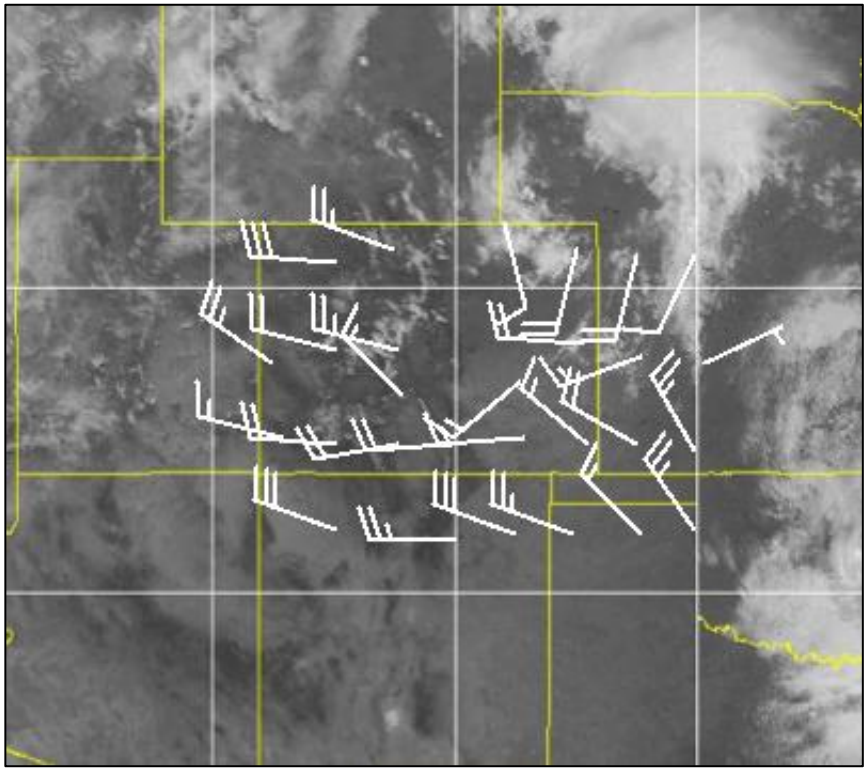
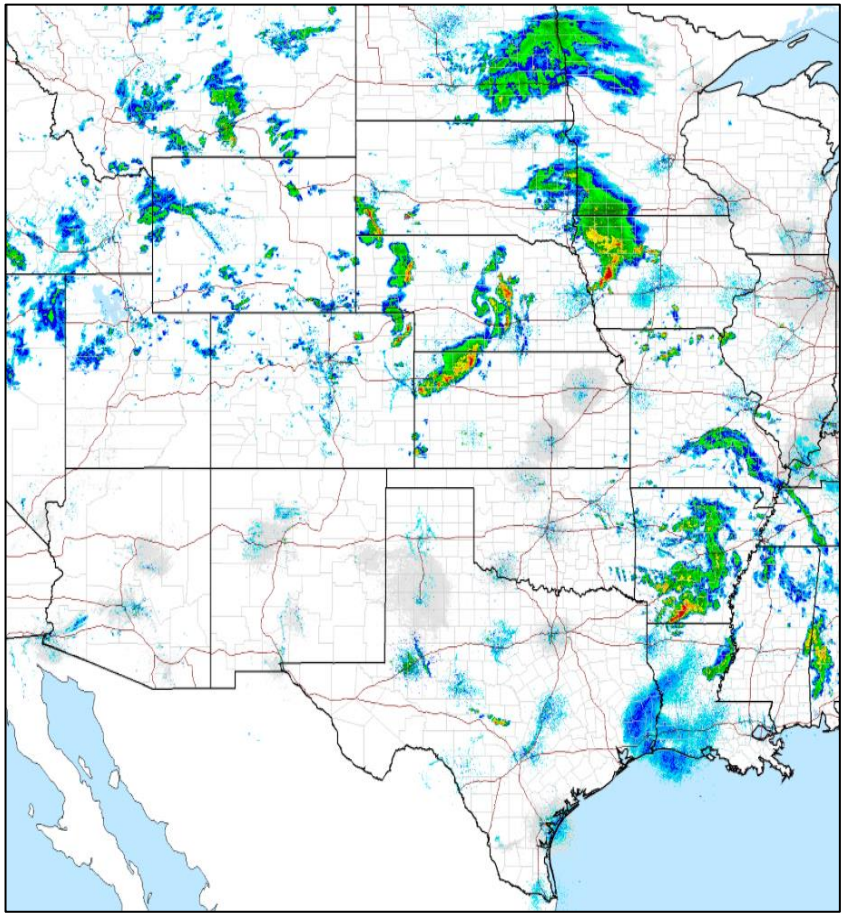


500 hPa Dropsonde Winds

05/16/13



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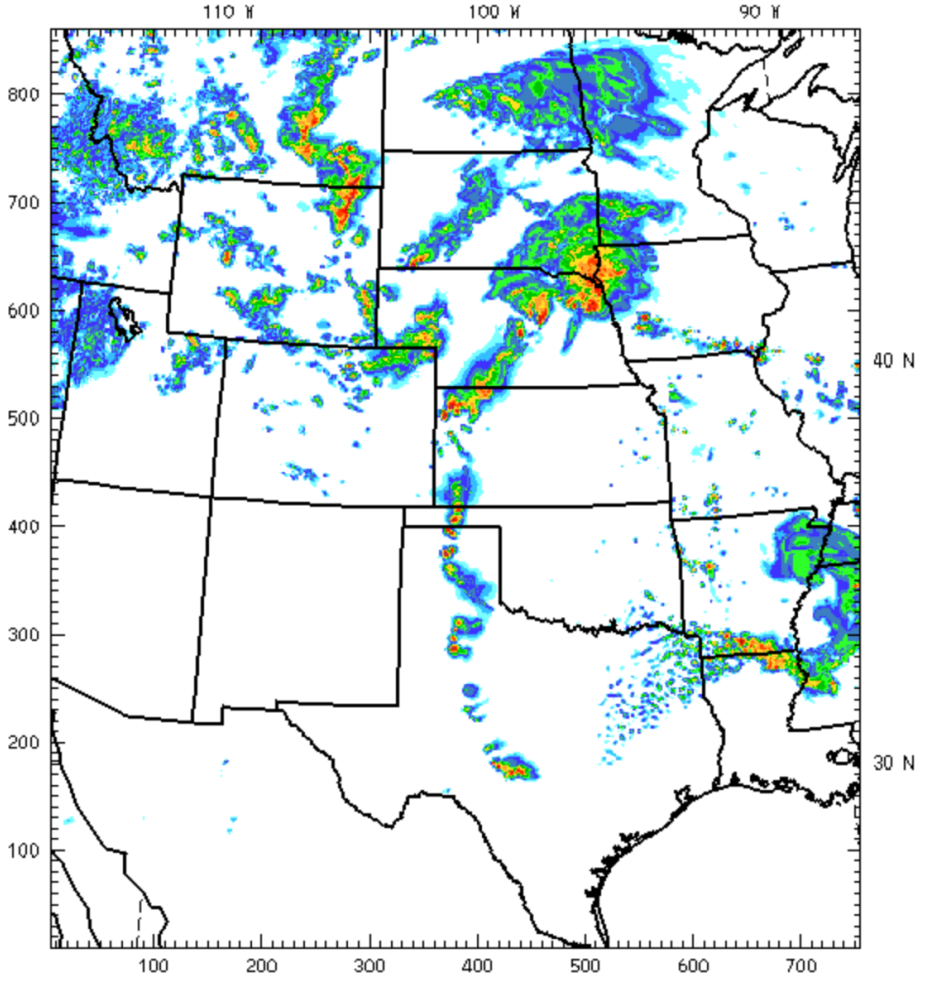
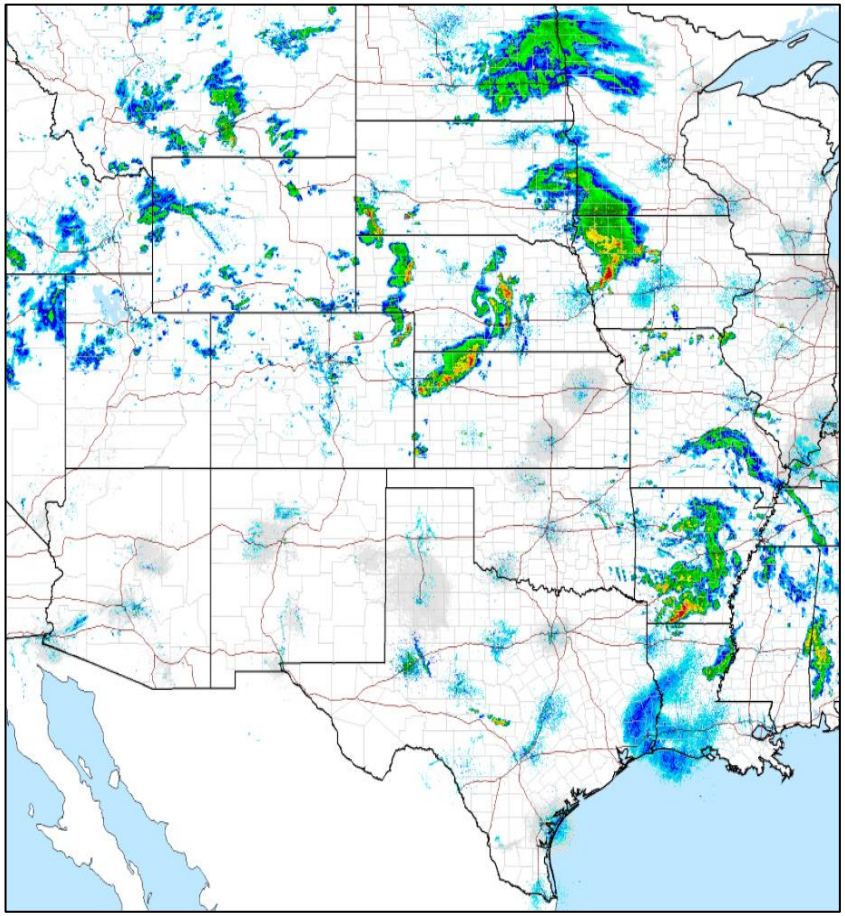


WRF-DART 12 h Forecast

05/16/13



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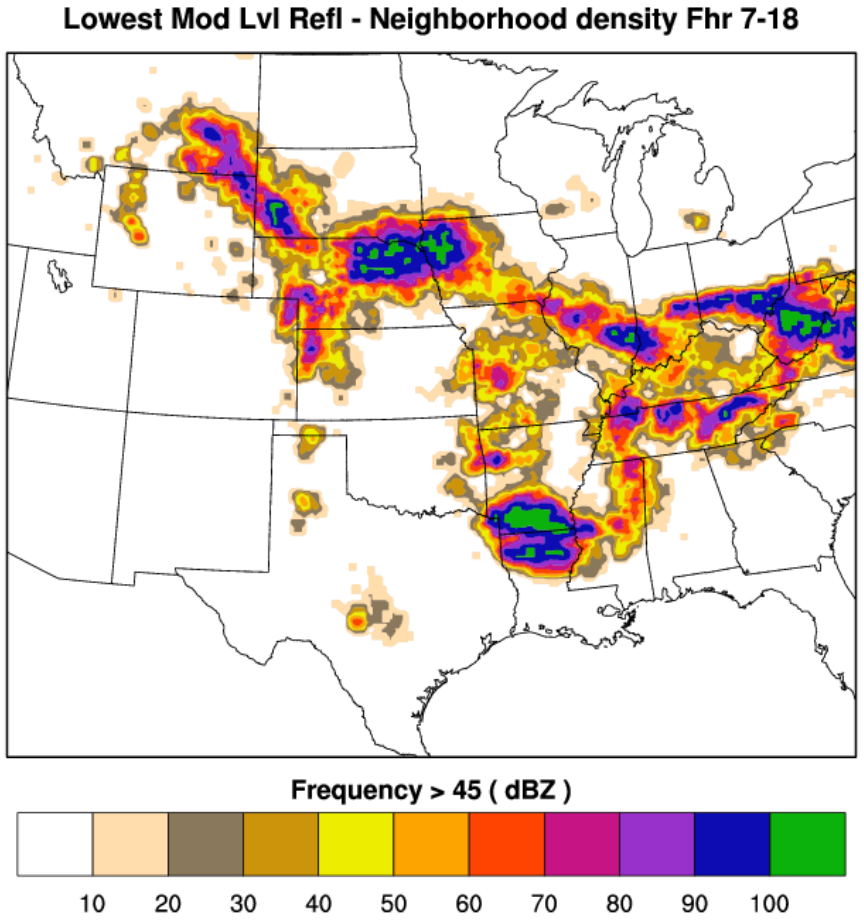

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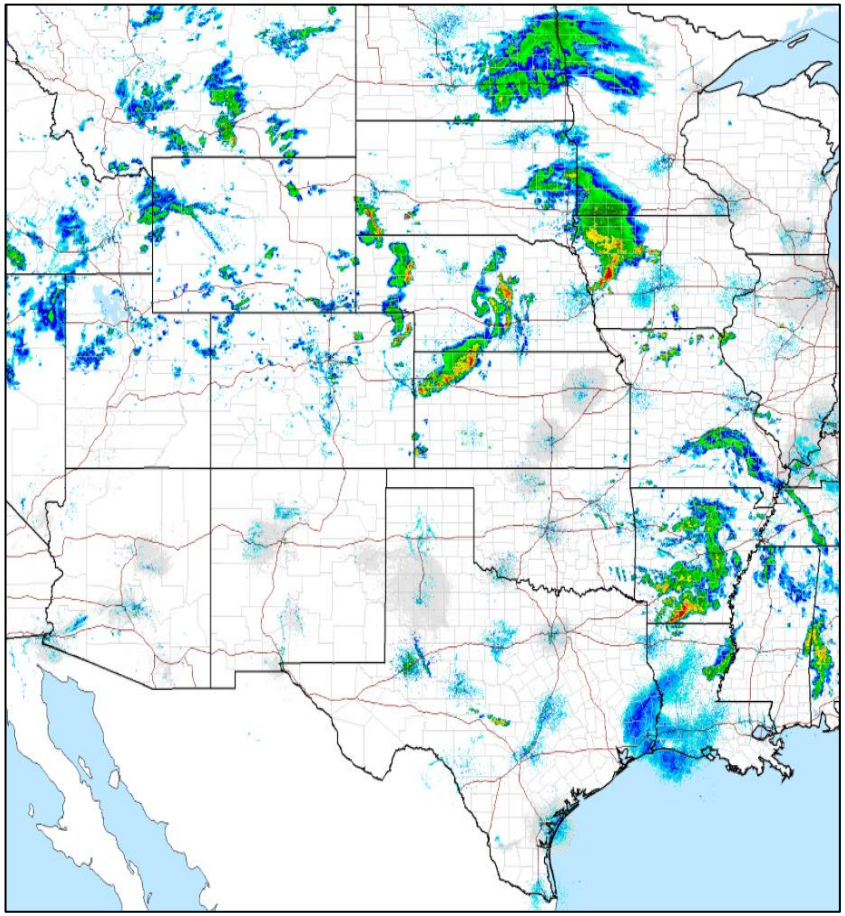

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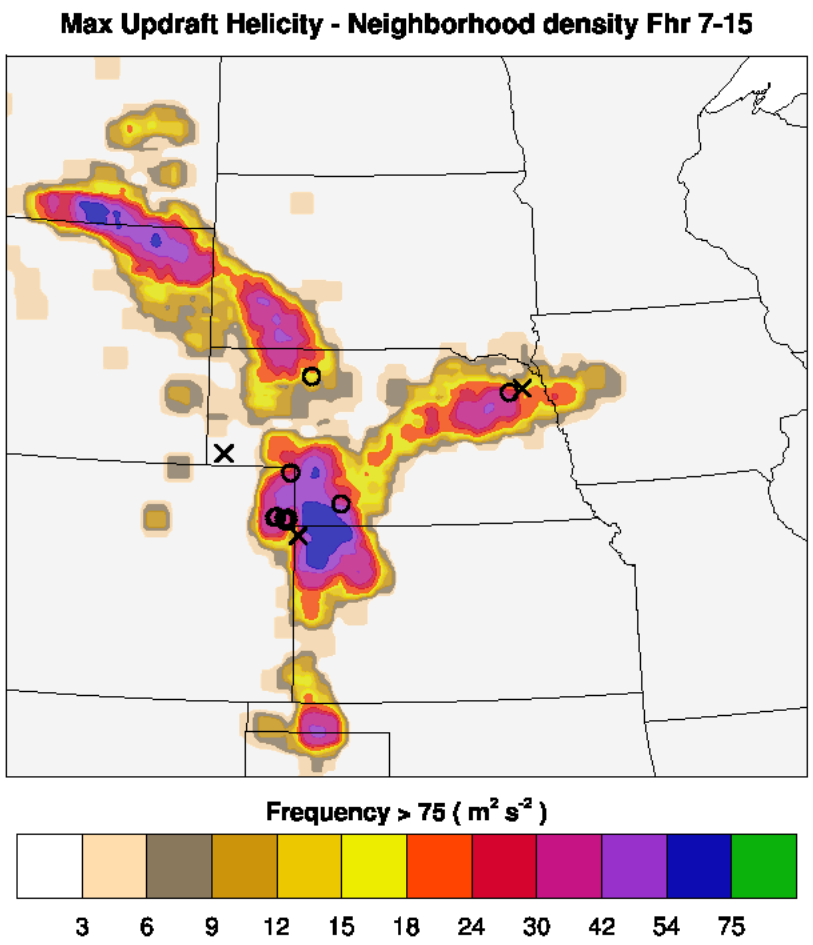

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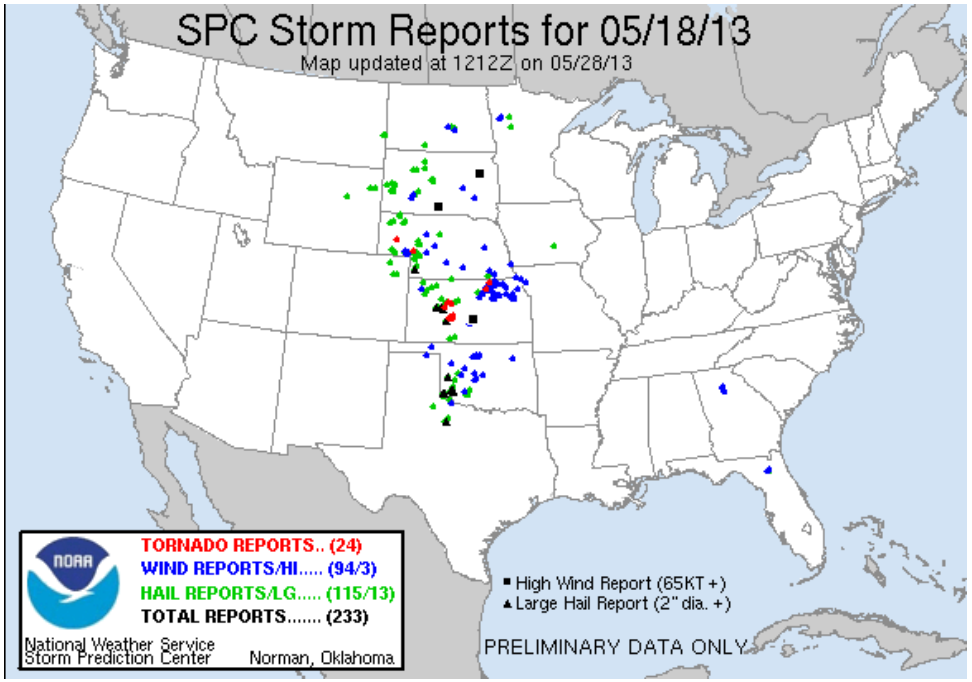
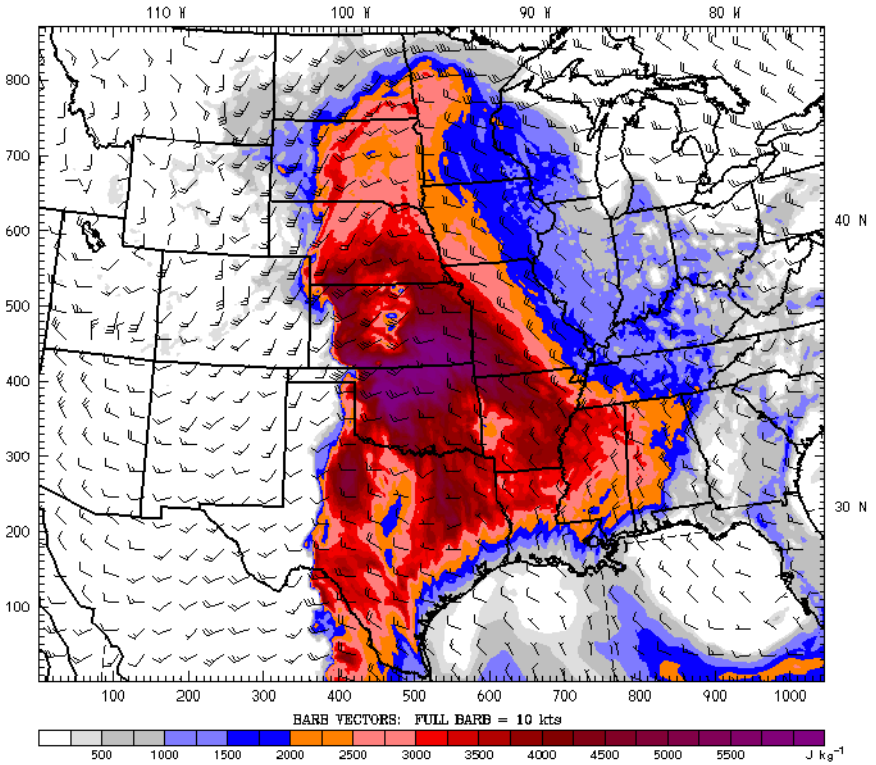
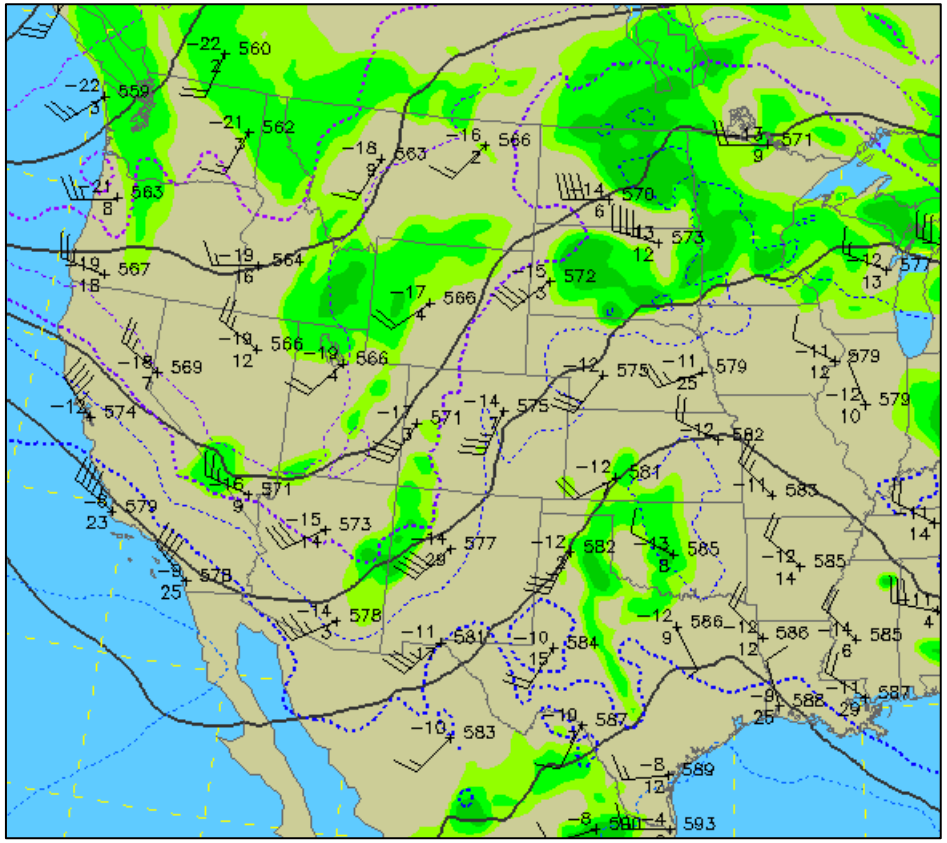


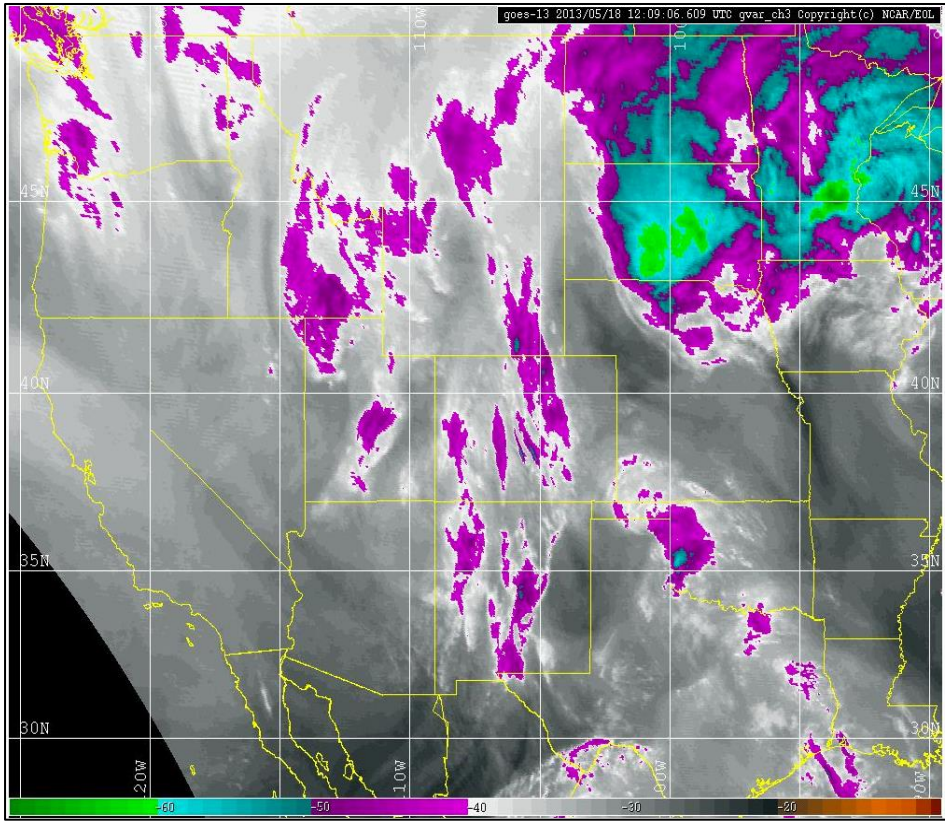


WRF CAPE/Shear: 21 UTC

05/18/13

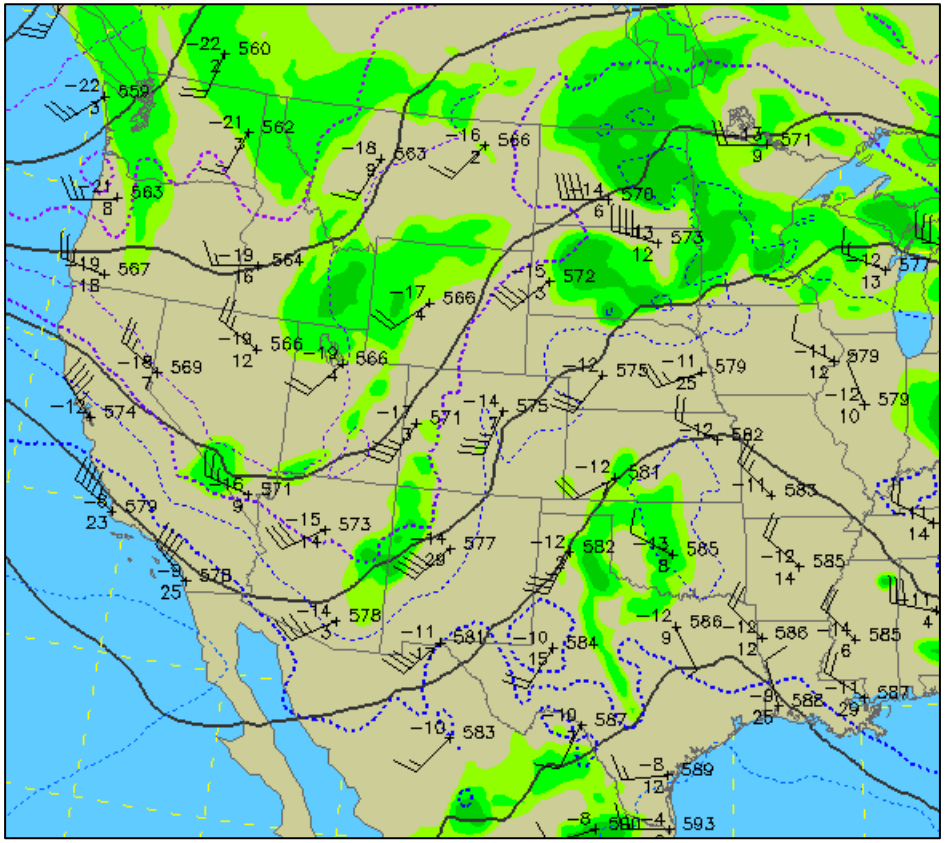


500 hPa 12:00 UTC



Water Vapor ~12 UTC

05/18/13



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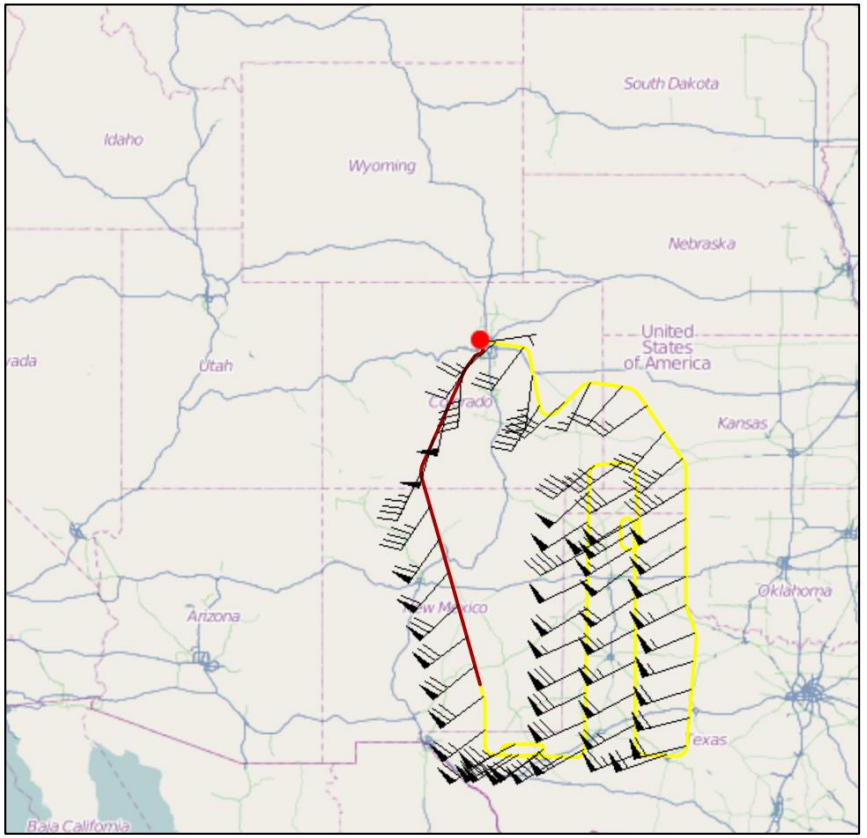
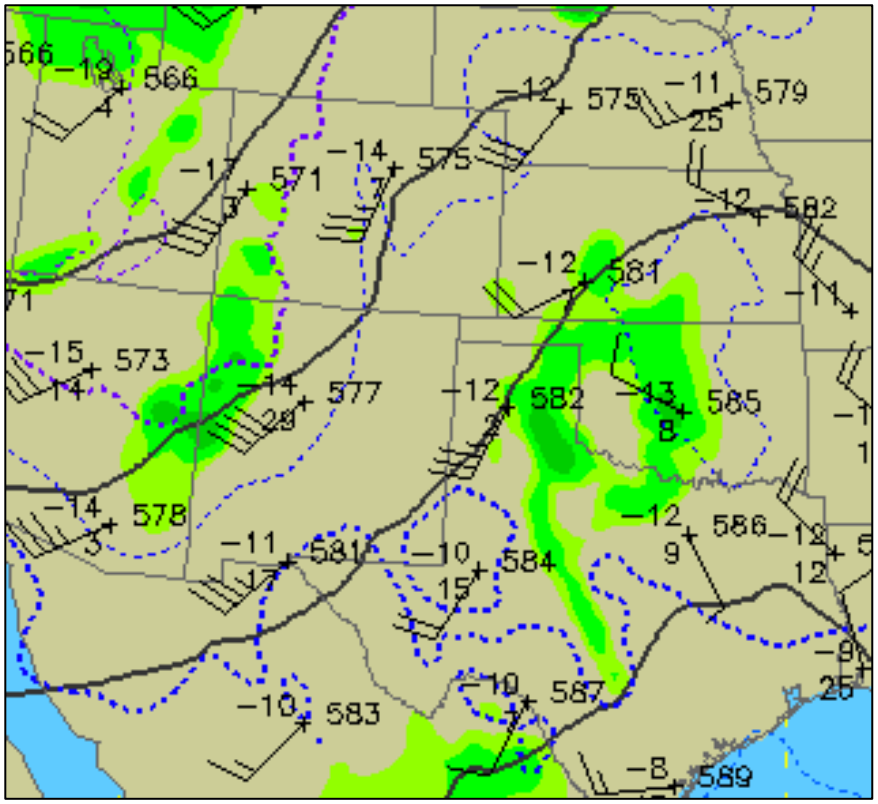


Flight Track Winds ~200 hPa

05/18/13



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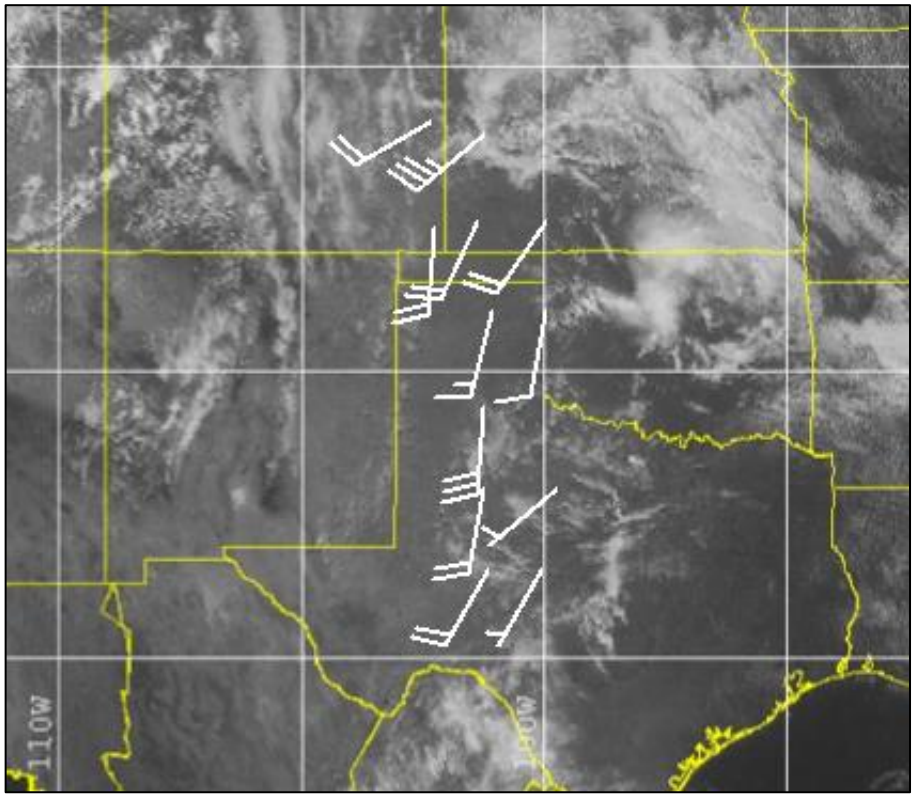
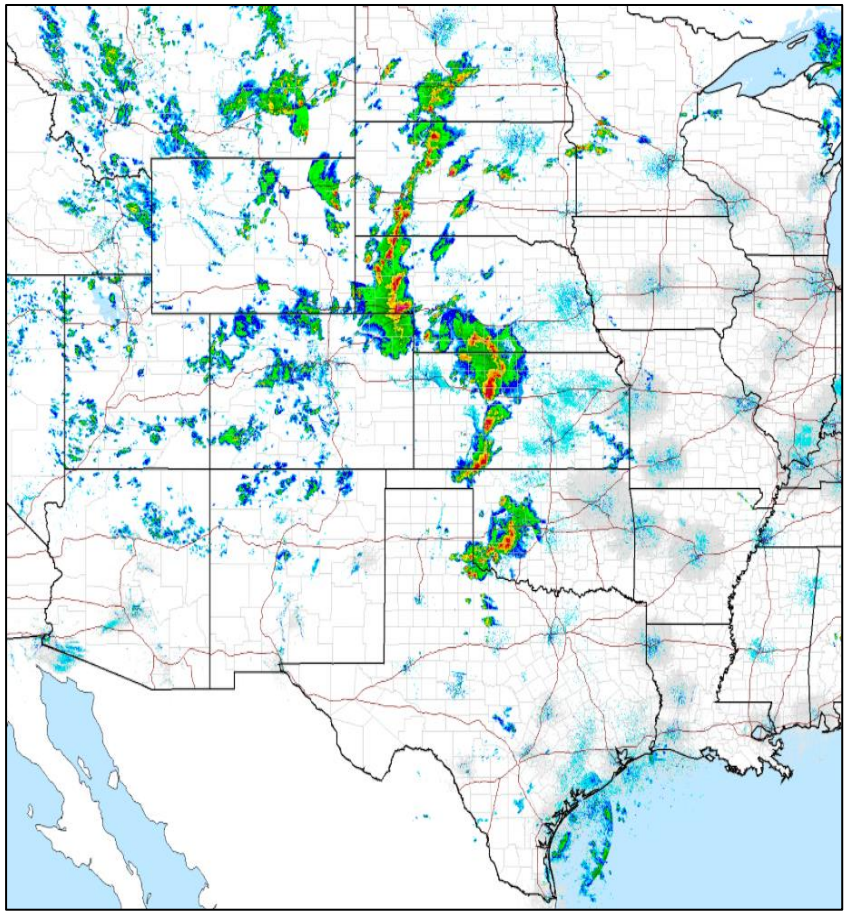


500 hPa Dropsonde Winds

05/18/13



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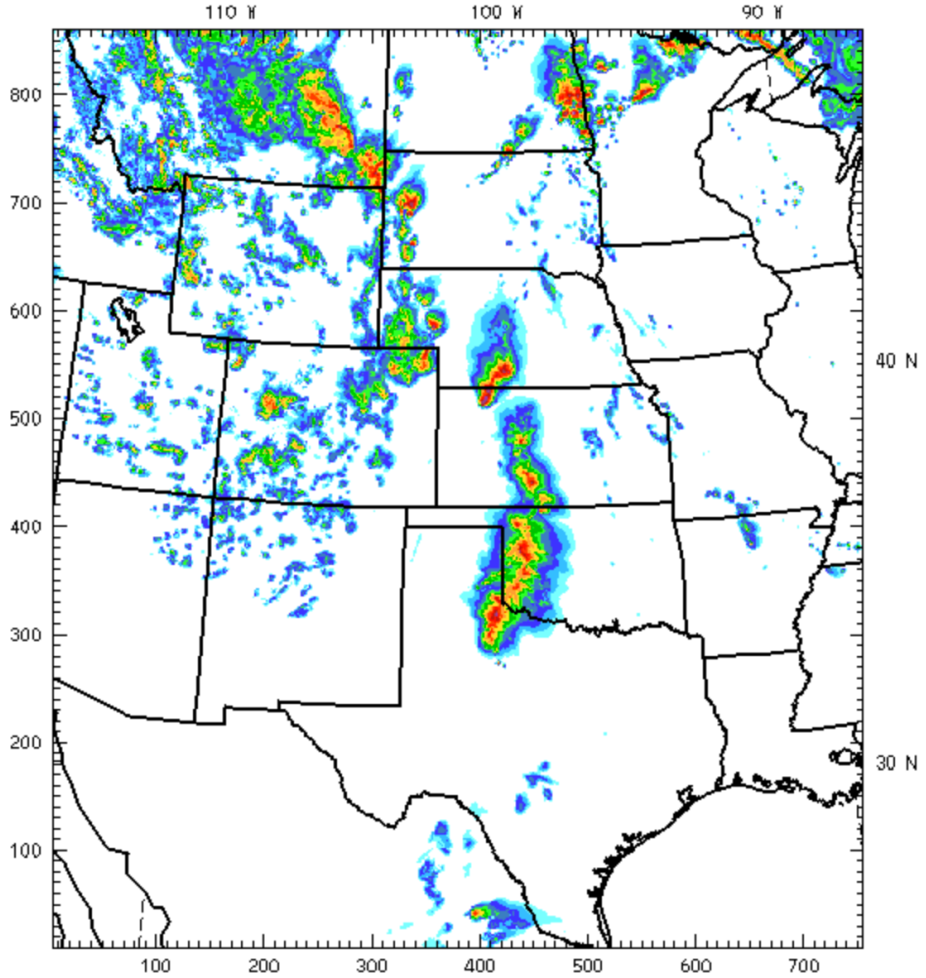
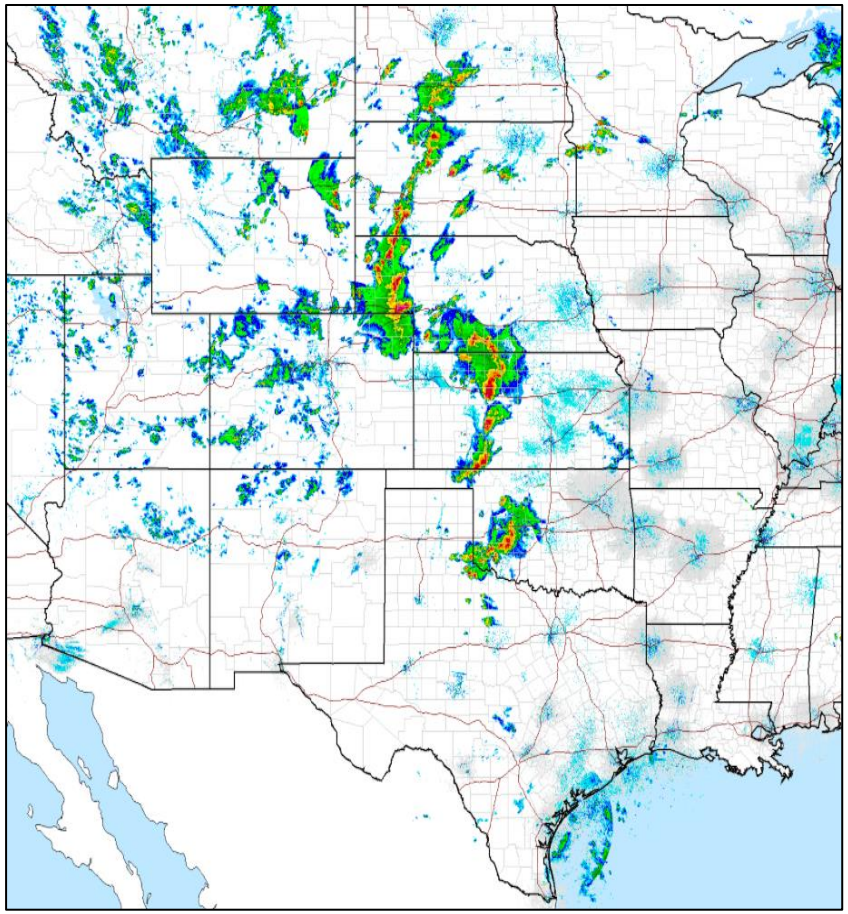
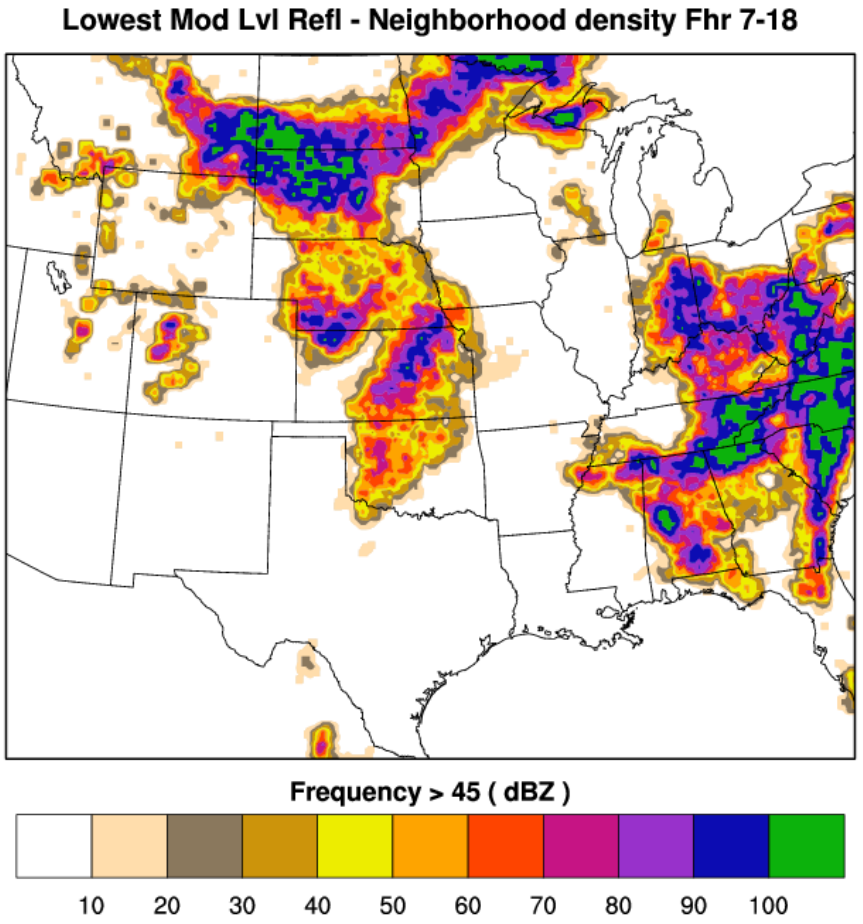


WRF-DART 12 h Forecast

05/18/13



Radar 00:00 UTC



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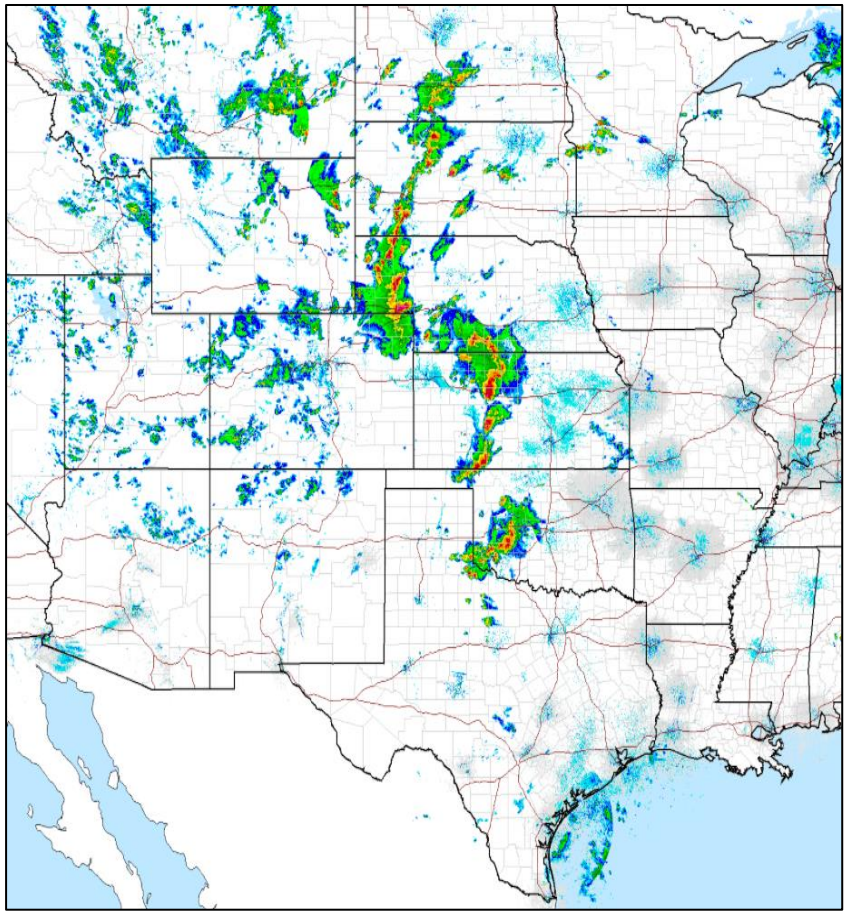

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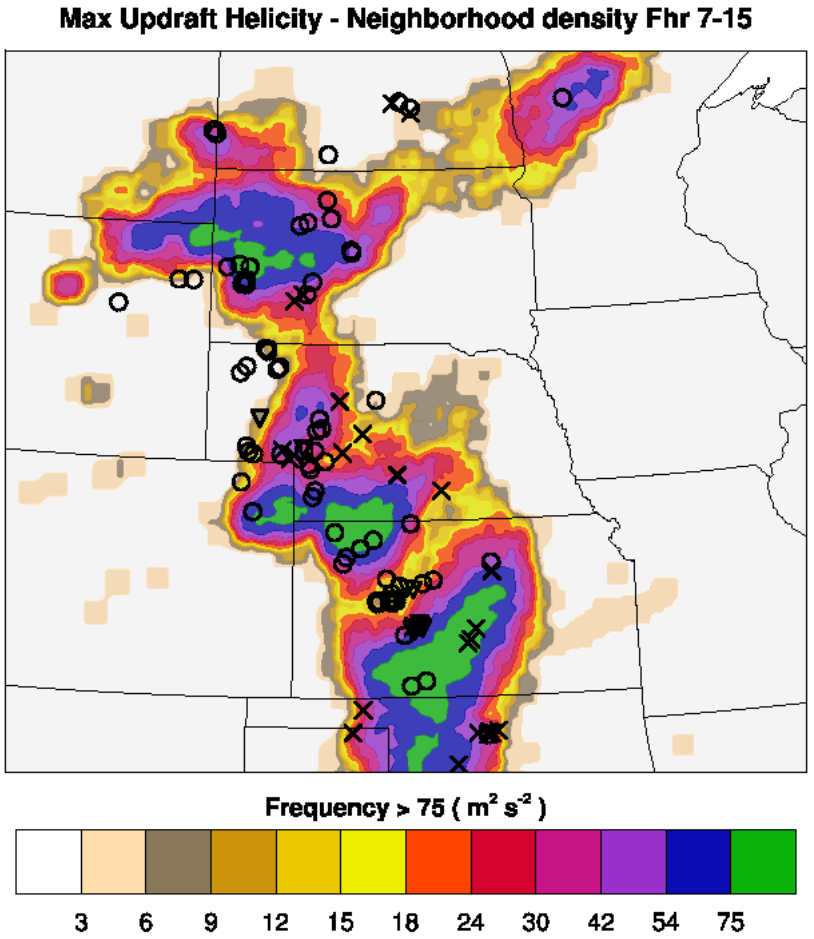

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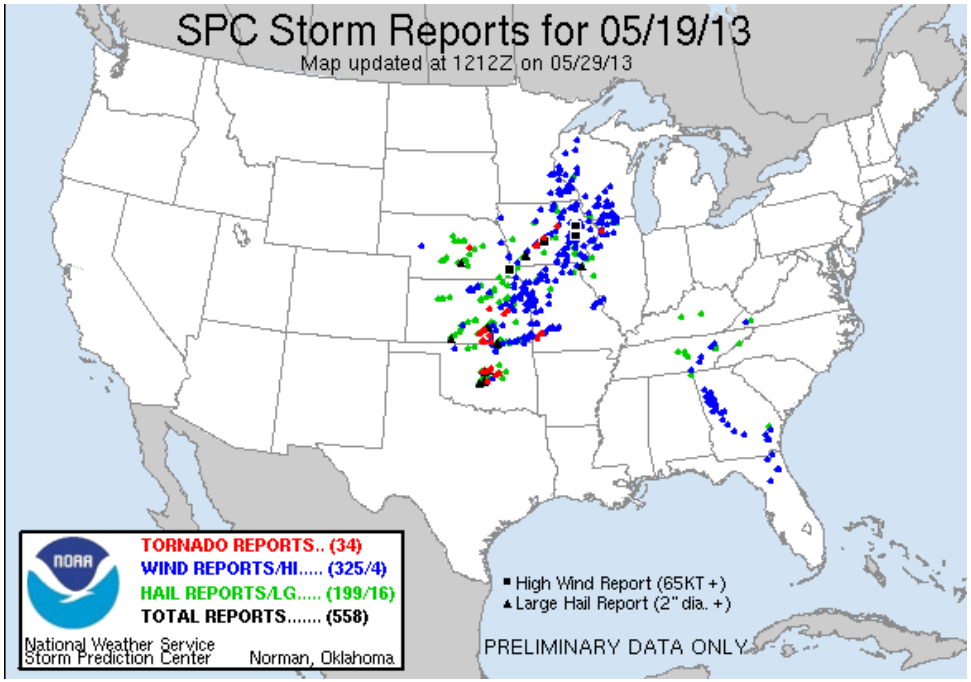
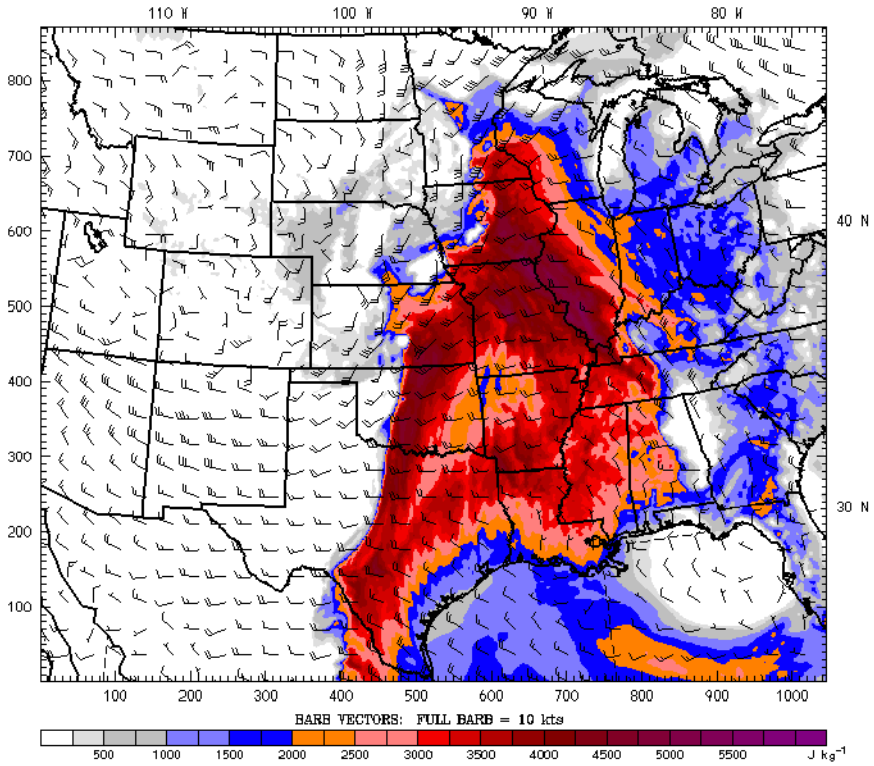
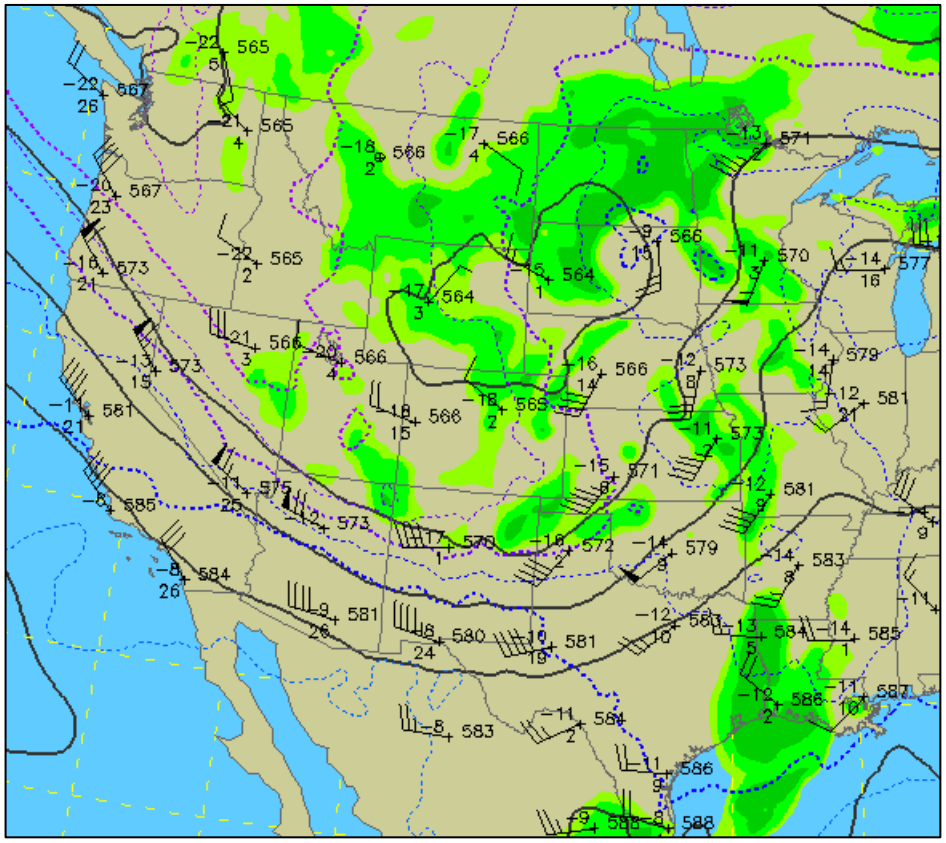


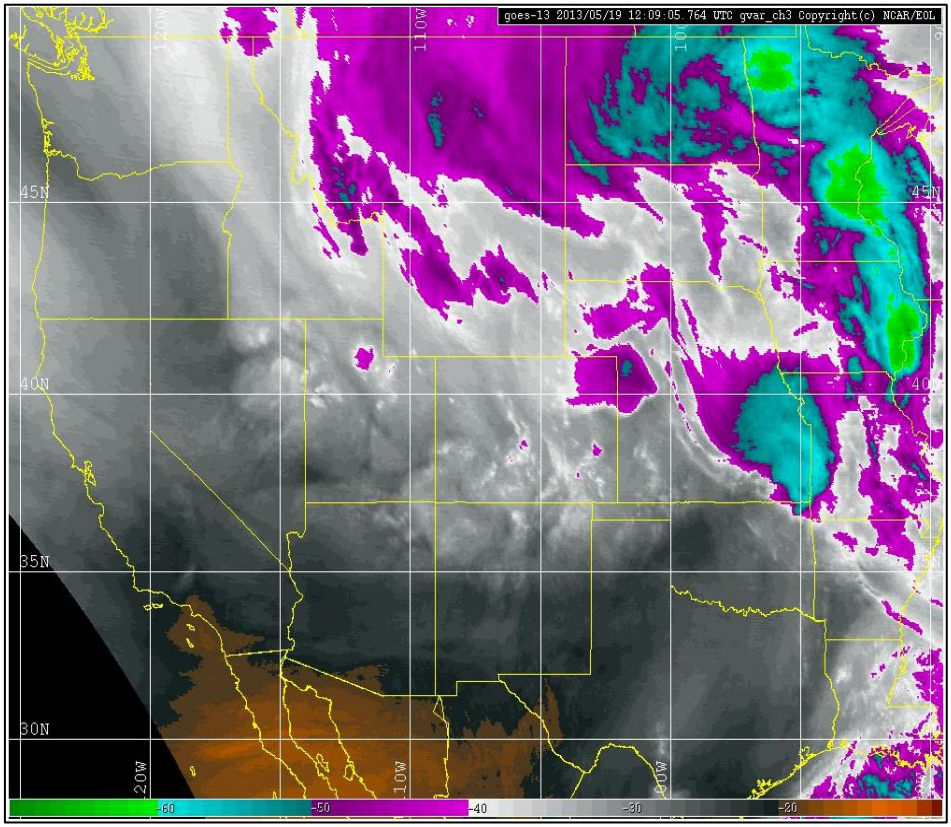


WRF CAPE/Shear: 21 UTC

05/19/13

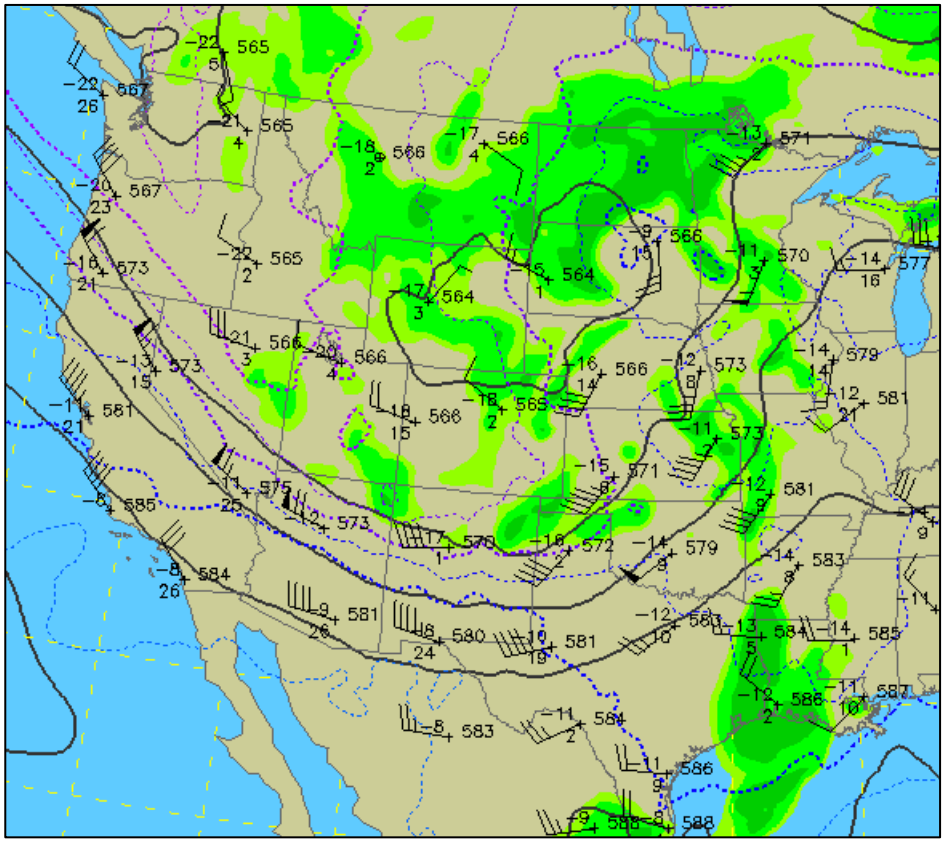


500 hPa 12:00 UTC

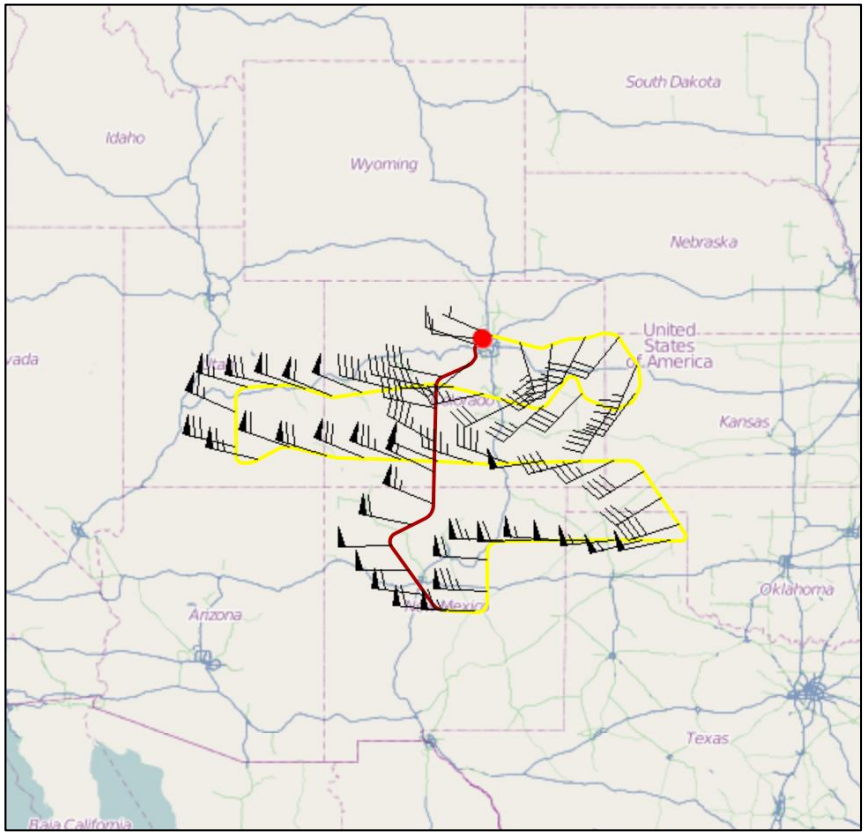


Water Vapor ~12 UTC

05/19/13

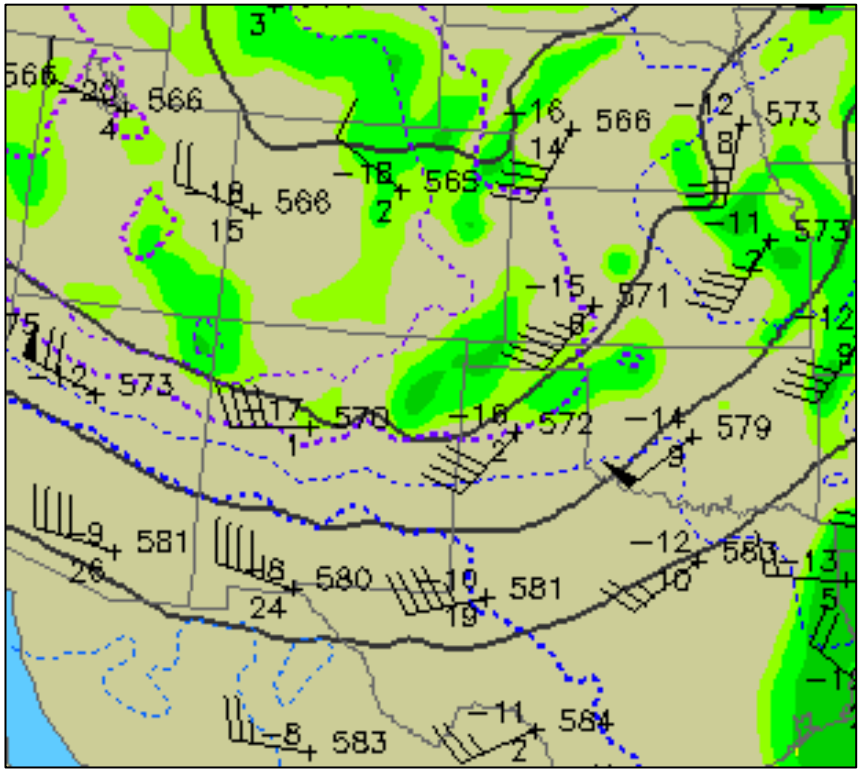


500 hPa 12:00 UTC

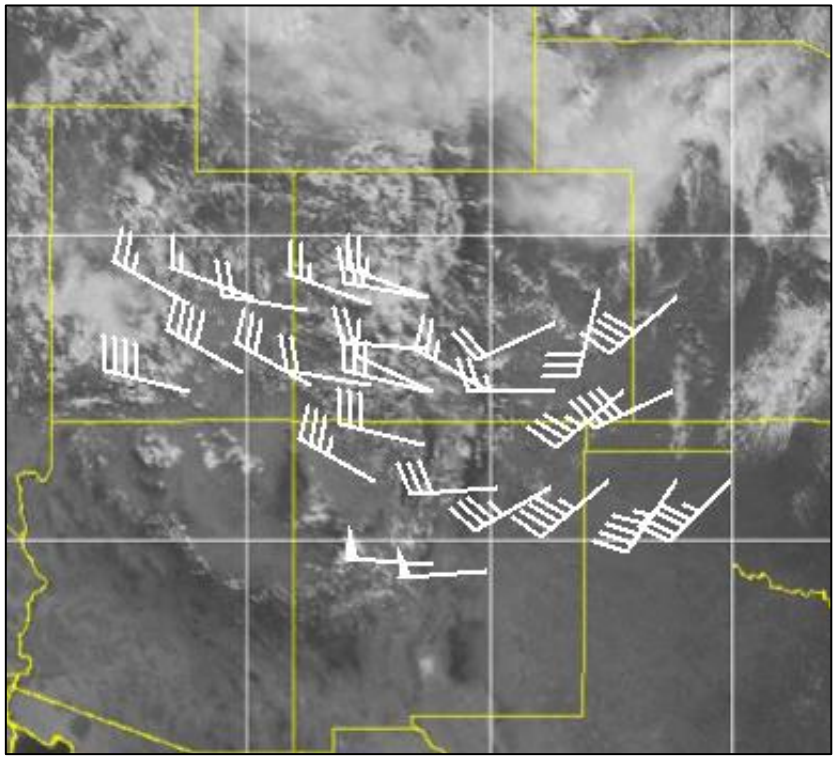


Flight Track Winds ~200 hPa

05/19/13

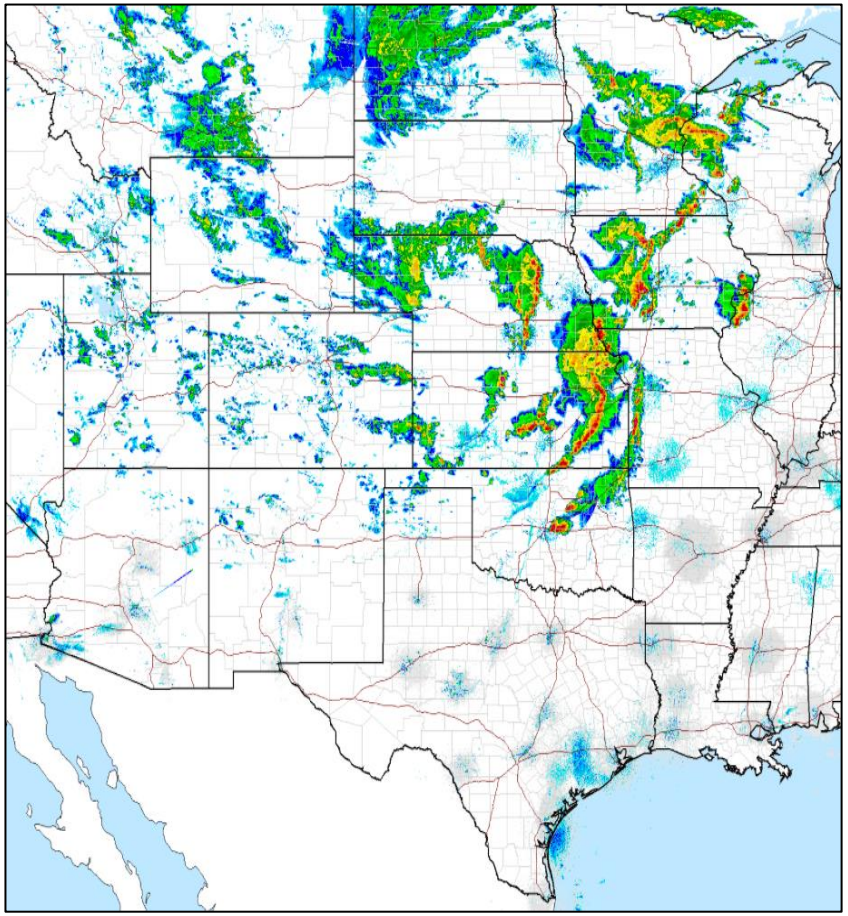


500 hPa 12:00 UTC

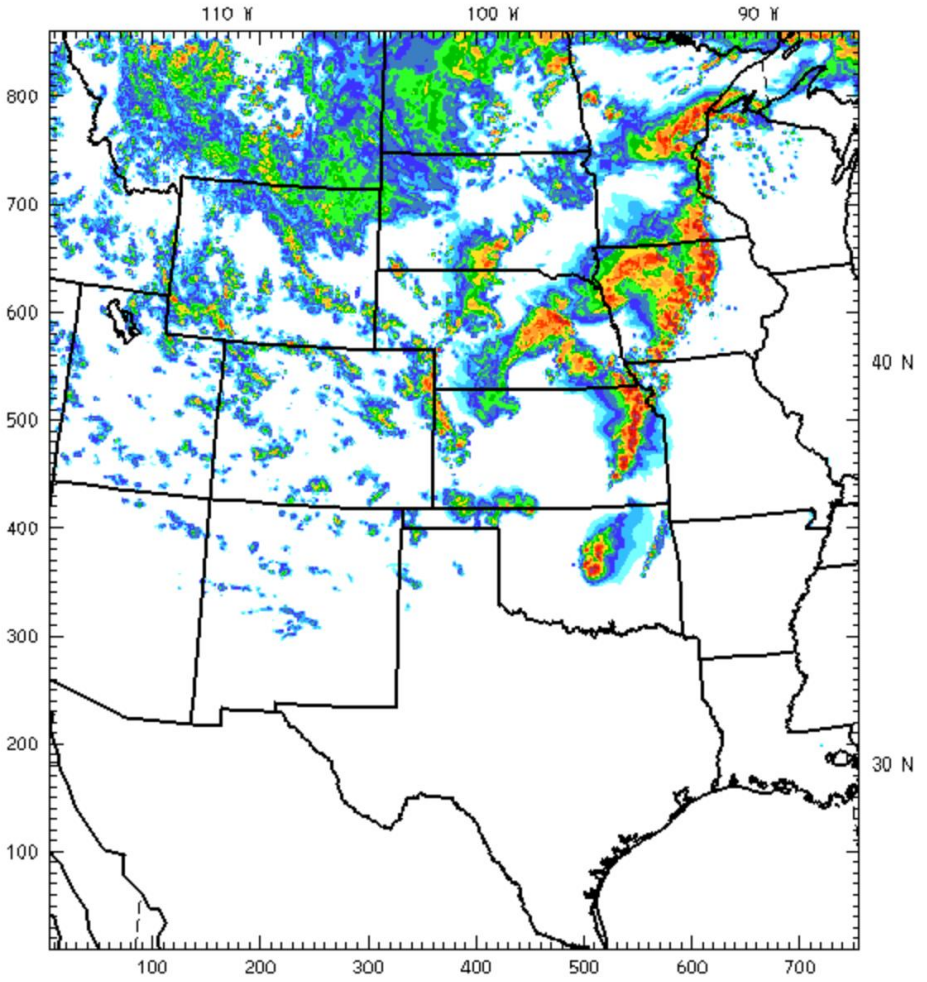


500 hPa Dropsonde Winds

05/19/13

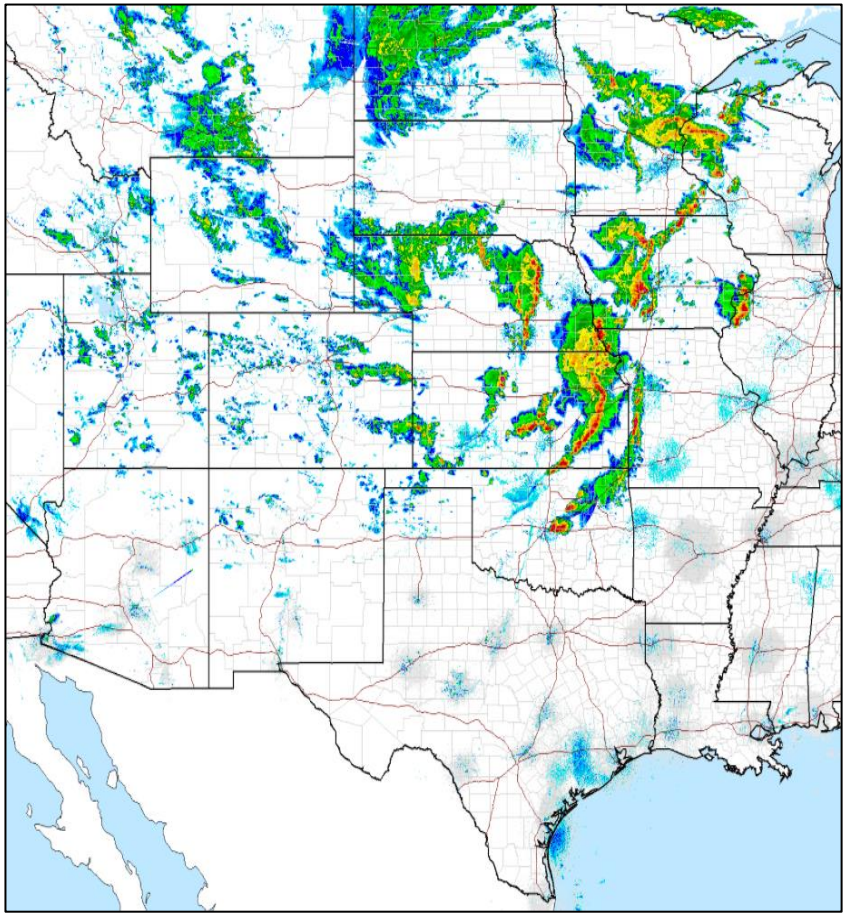


Radar 00:00 UTC

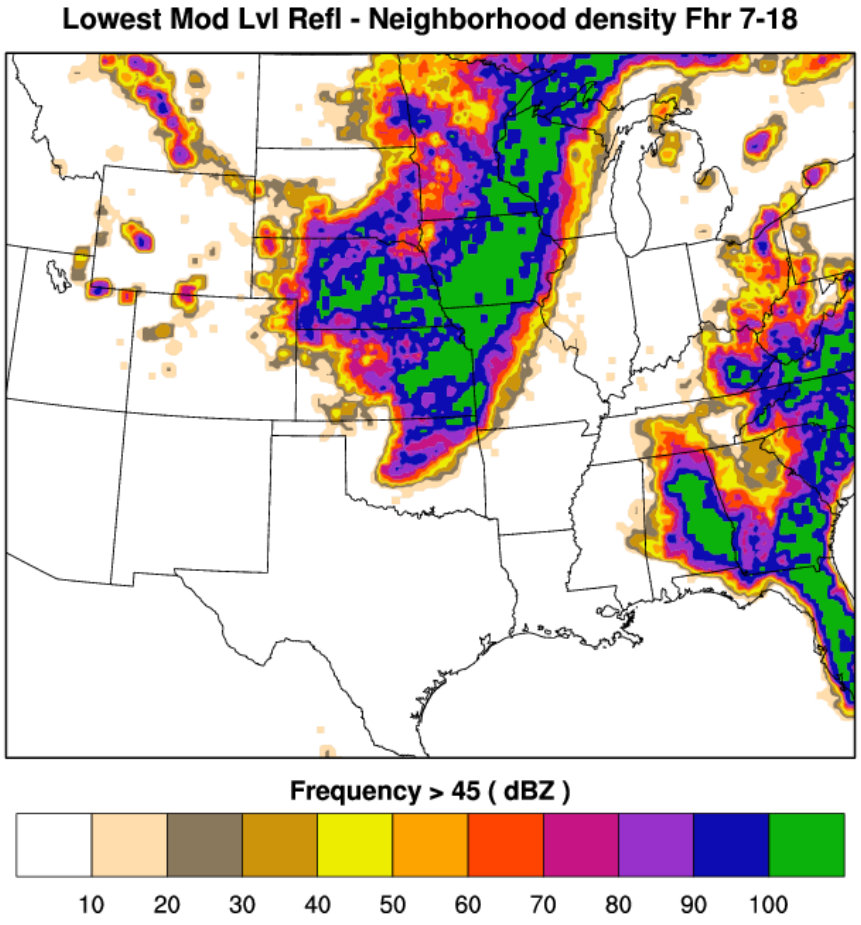


WRF-DART 12 h Forecast

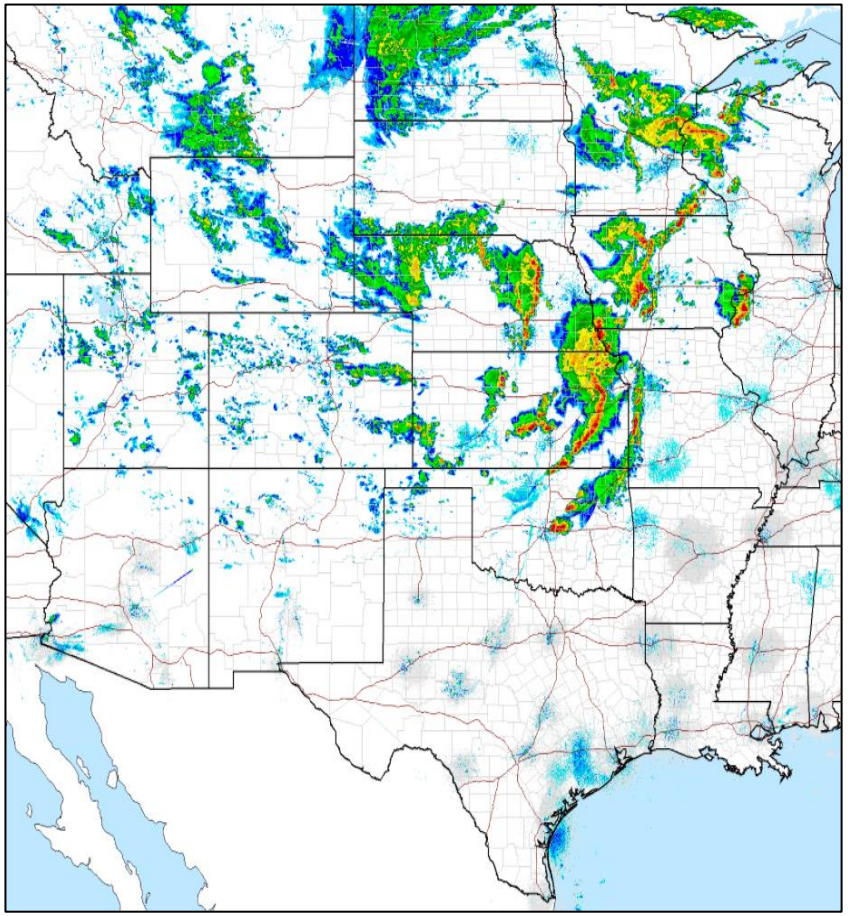
05/19/13



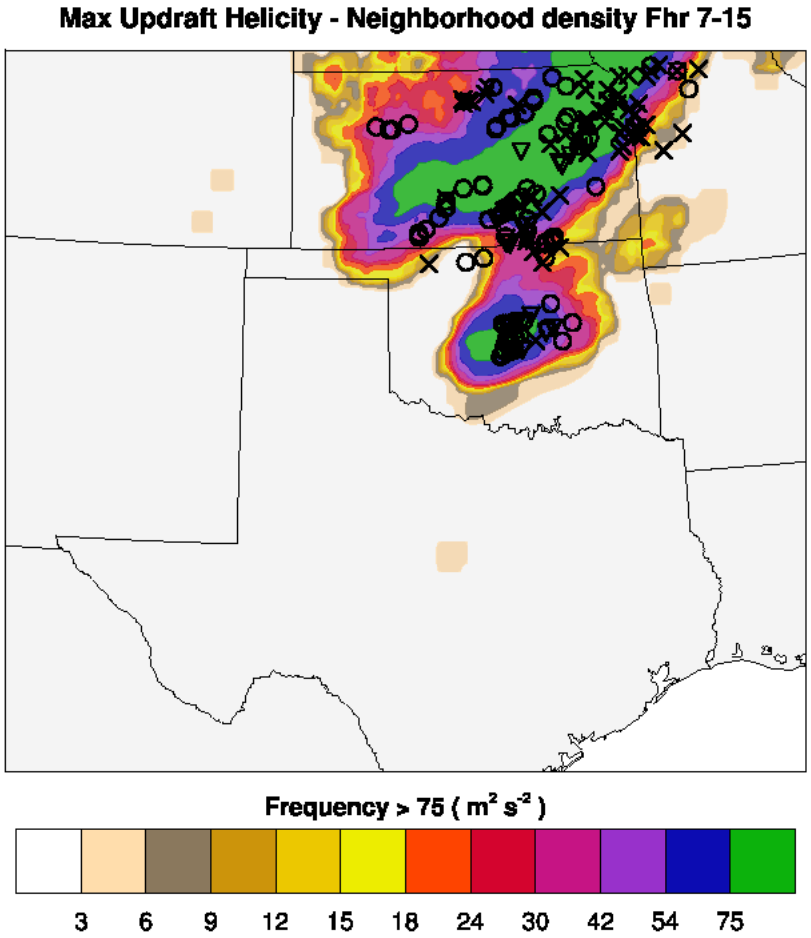
Radar 00:00 UTC



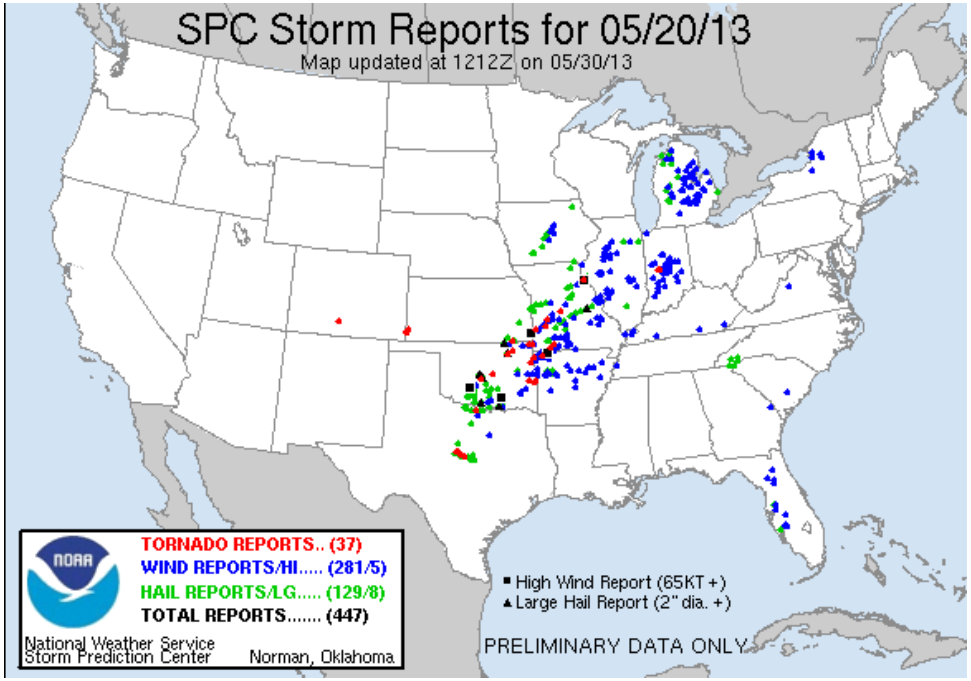
05/19/13

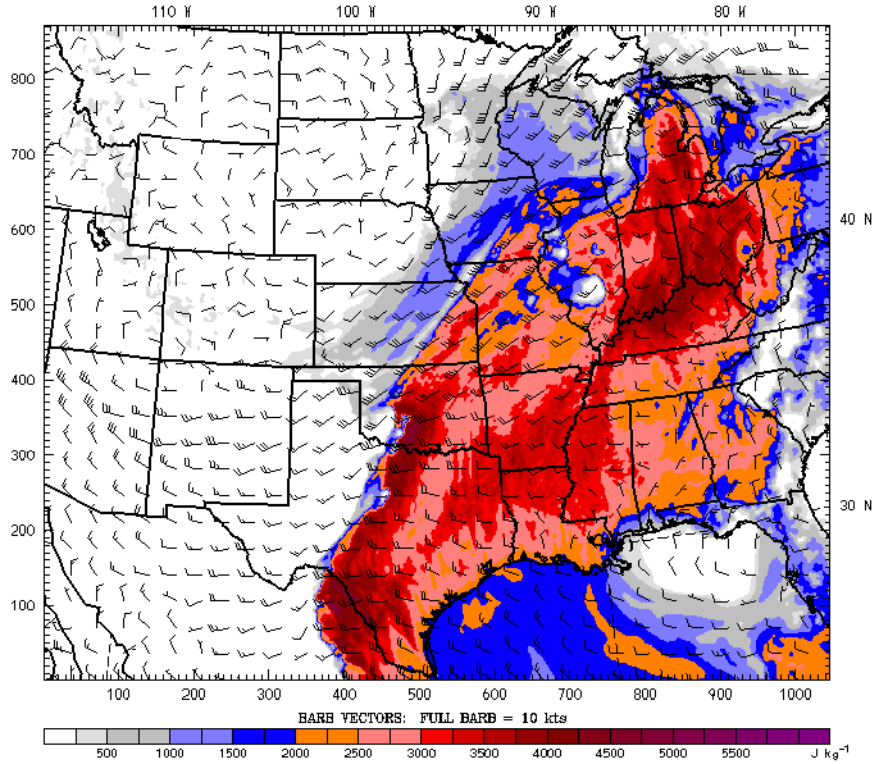


Radar 00:00 UTC



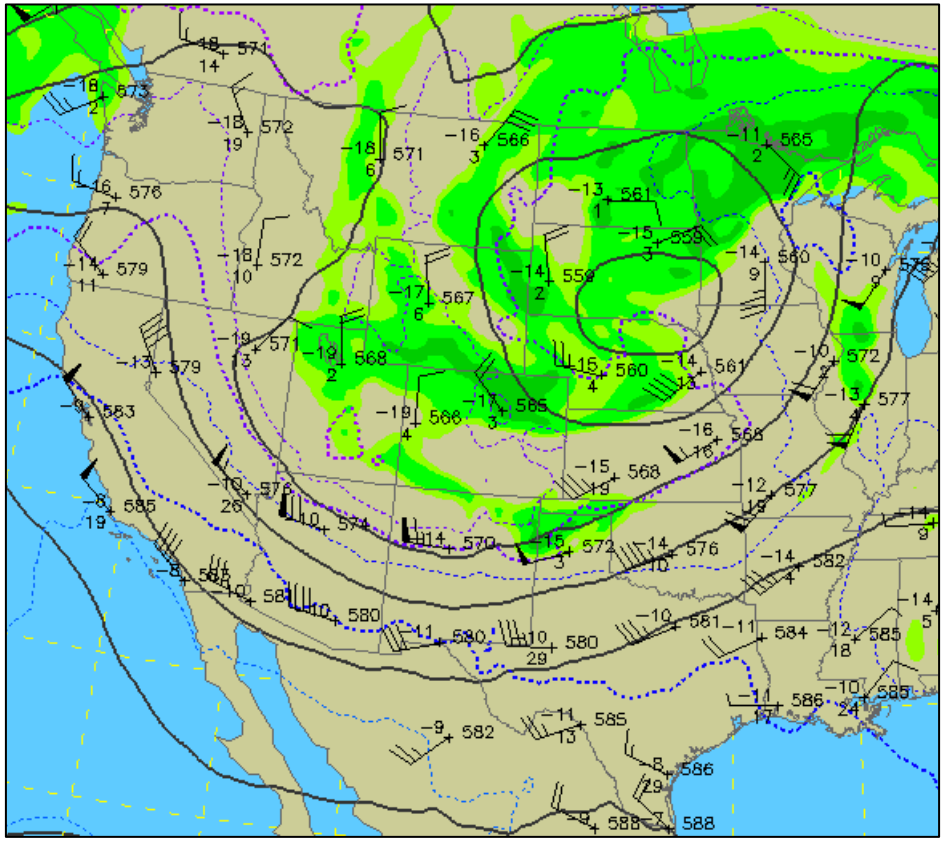
05/20/13 No Fly



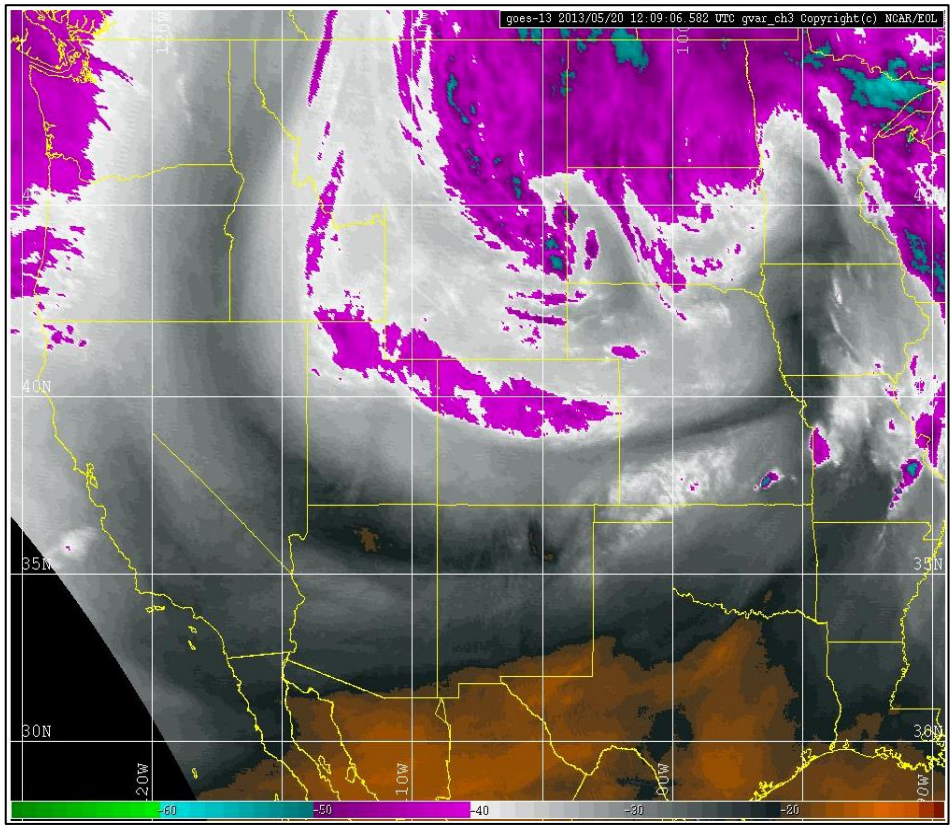


WRF CAPE/Shear: 21 UTC

05/20/13

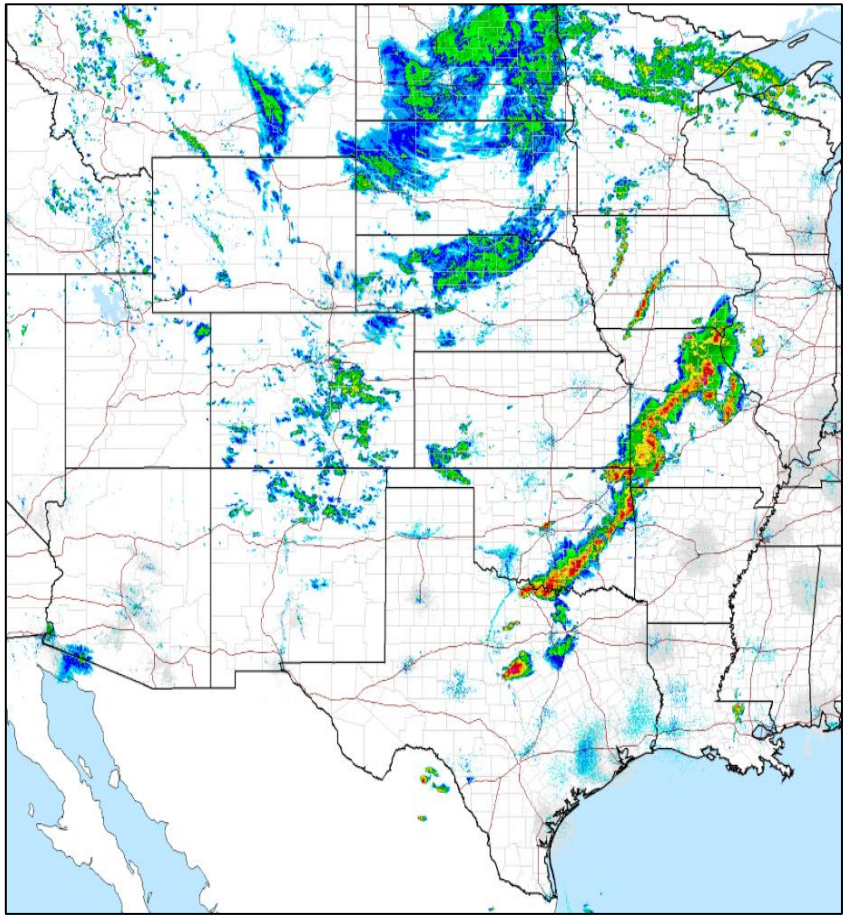


500 hPa 12:00 UTC

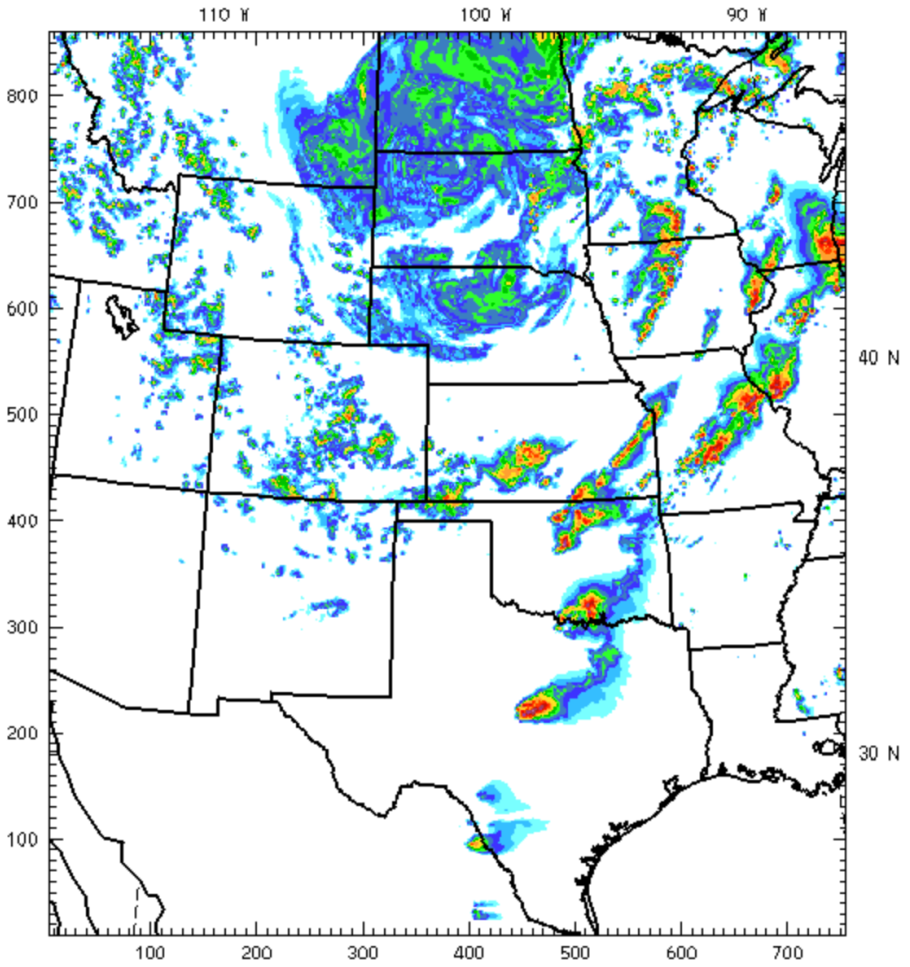


Water Vapor ~12 UTC

05/20/13

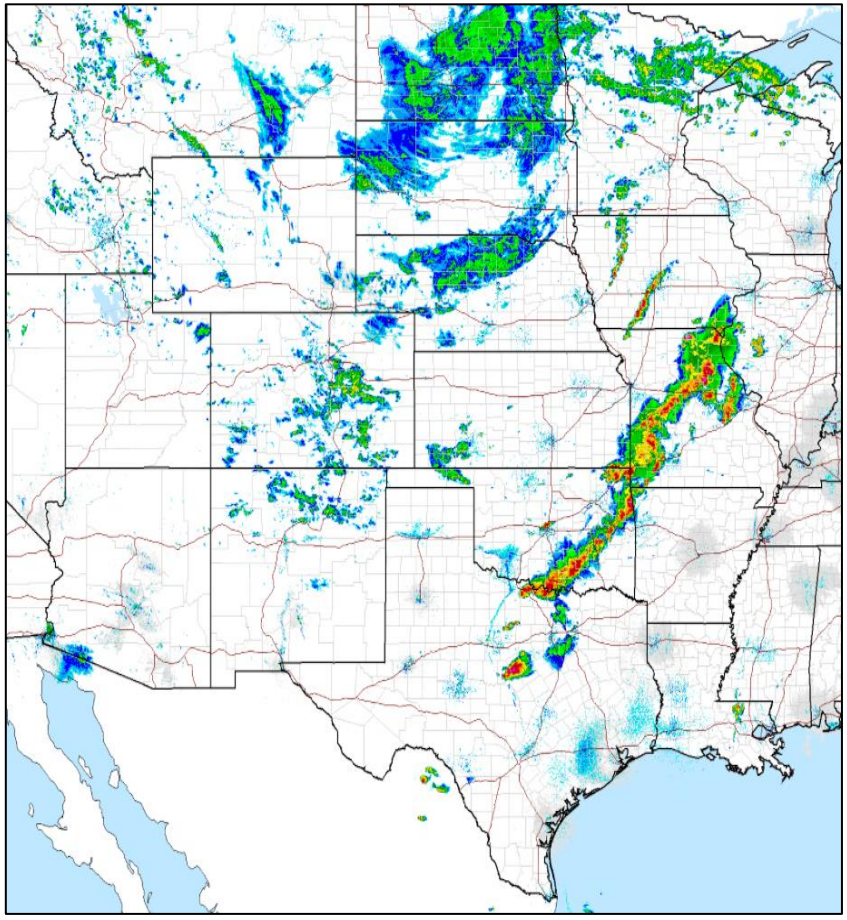


Radar 00:00 UTC

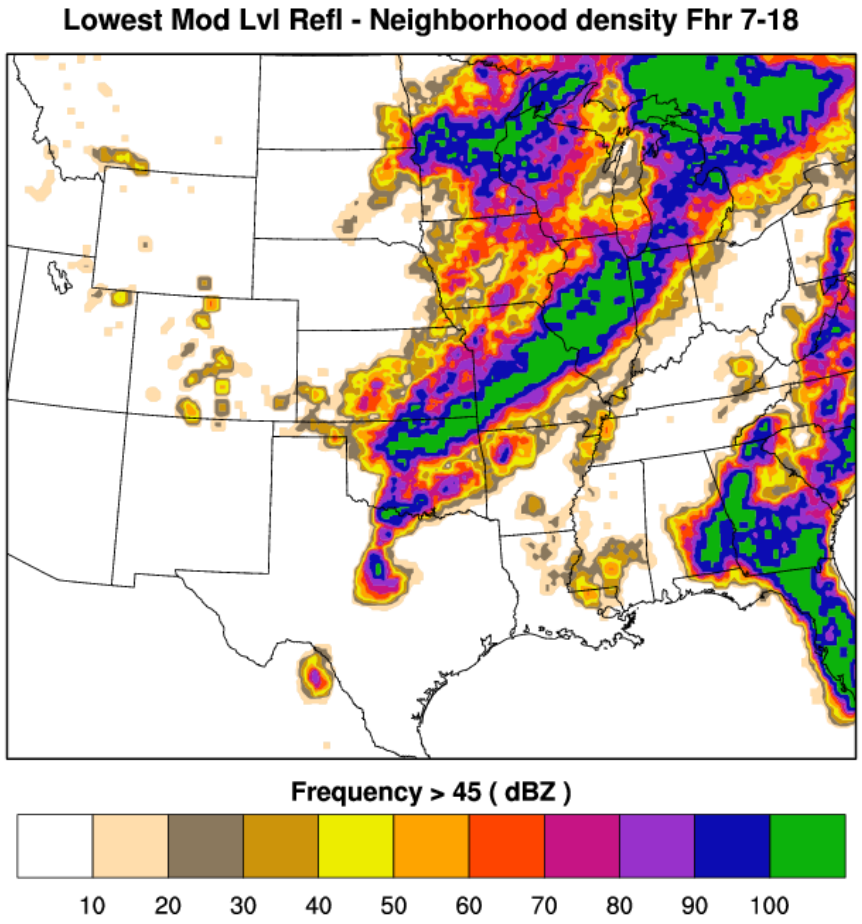


WRF-DART 12 h Forecast

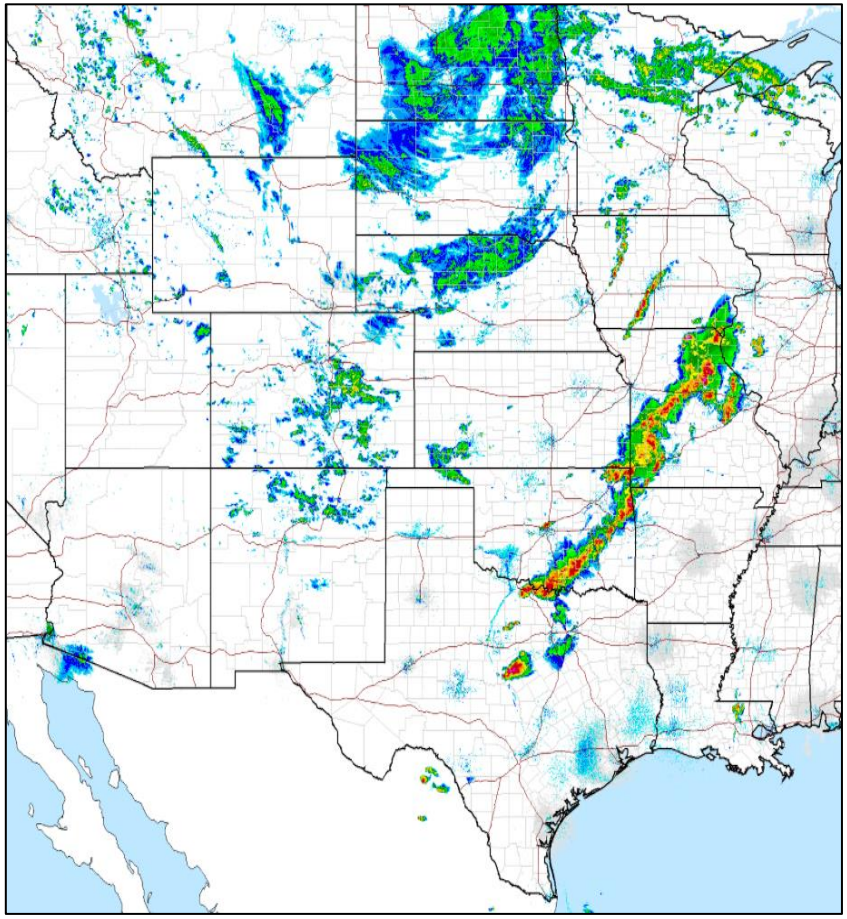
05/20/13



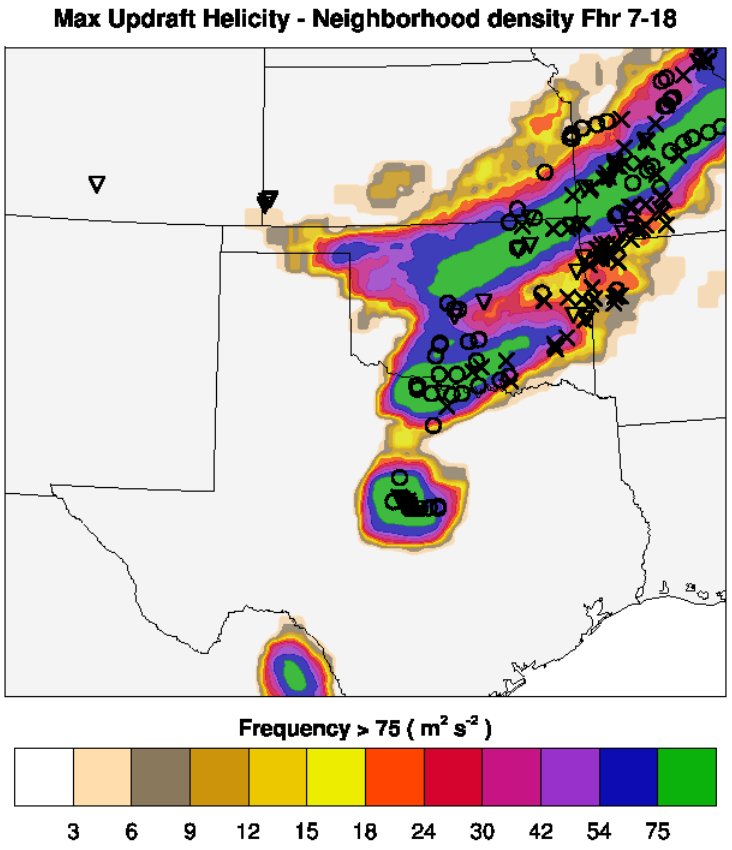
Radar 00:00 UTC



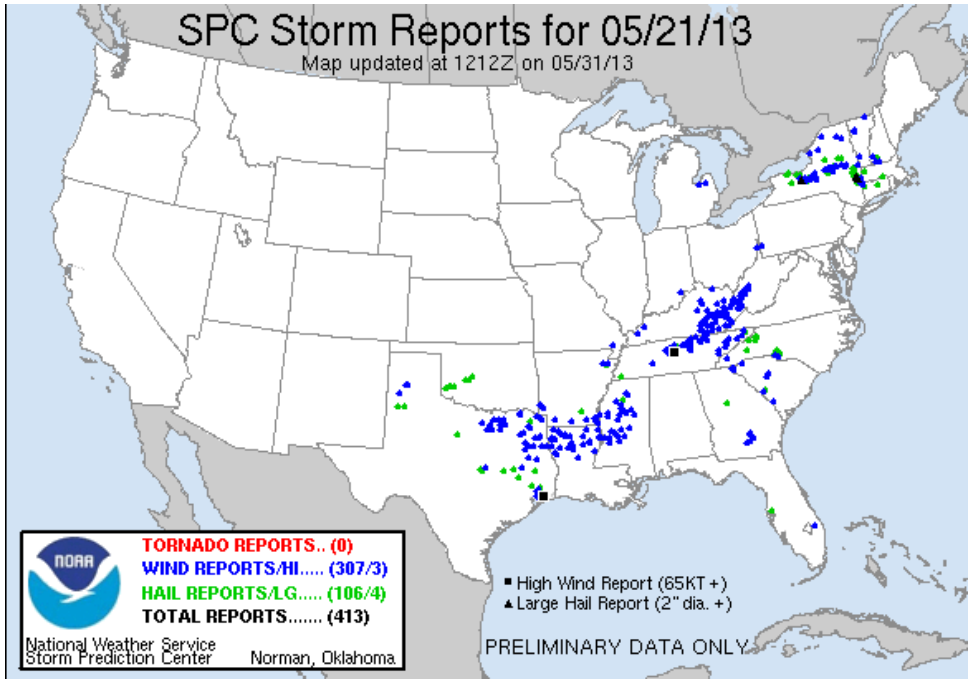
05/20/13

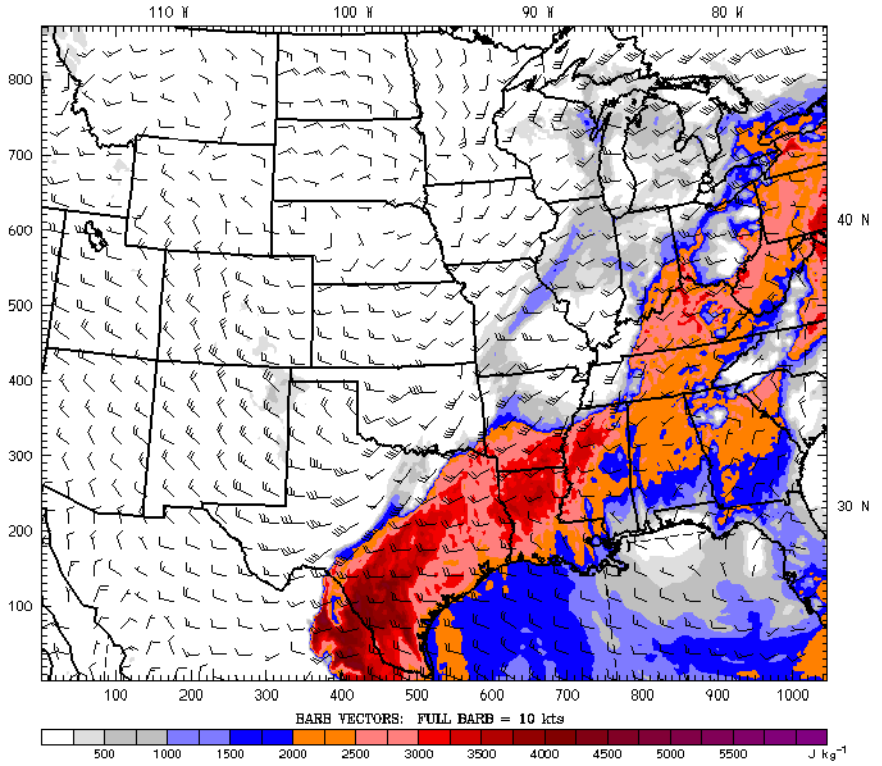


Radar 00:00 UTC



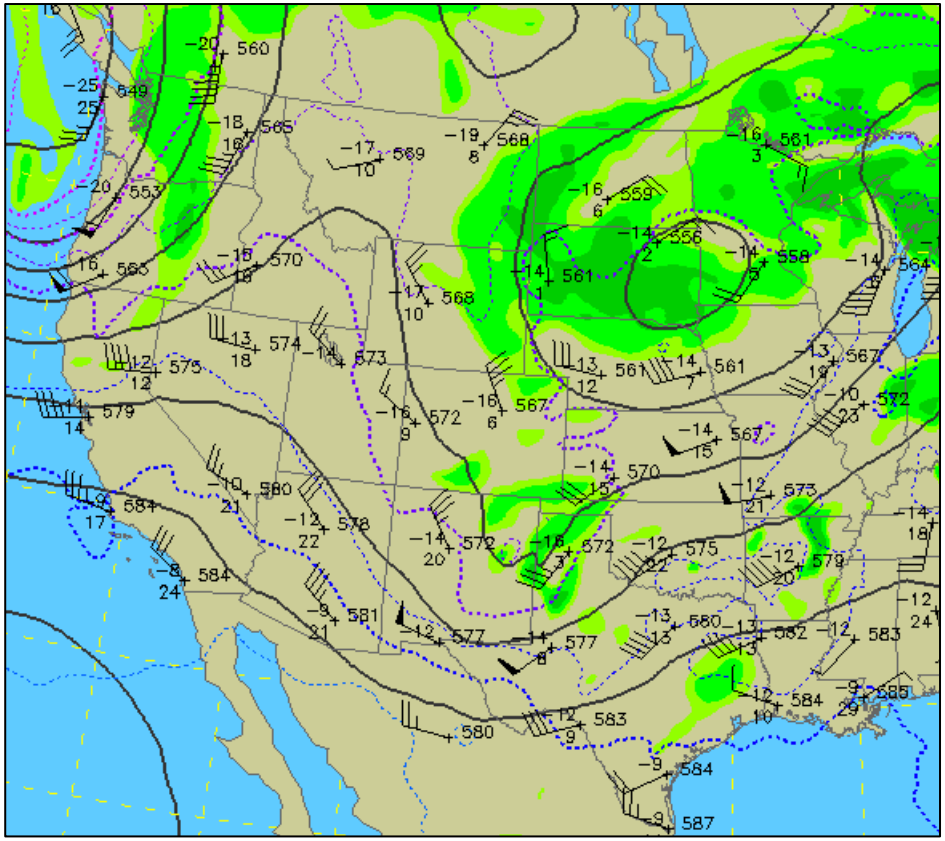
05/21/13



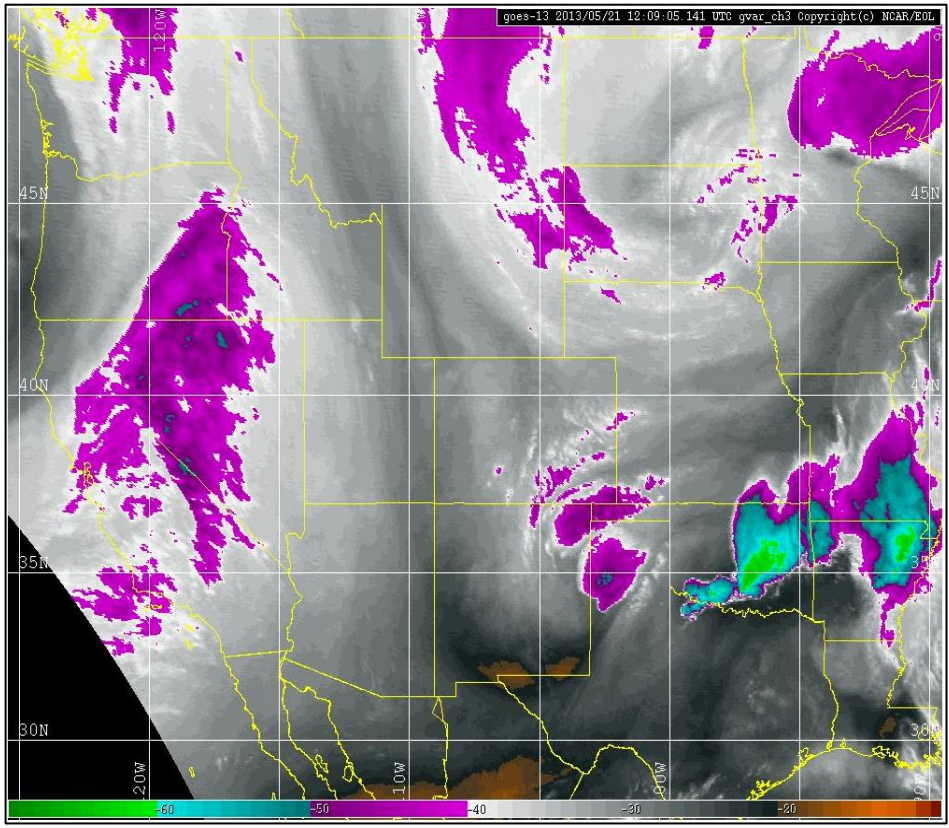


WRF CAPE/Shear: 21 UTC

05/21/13

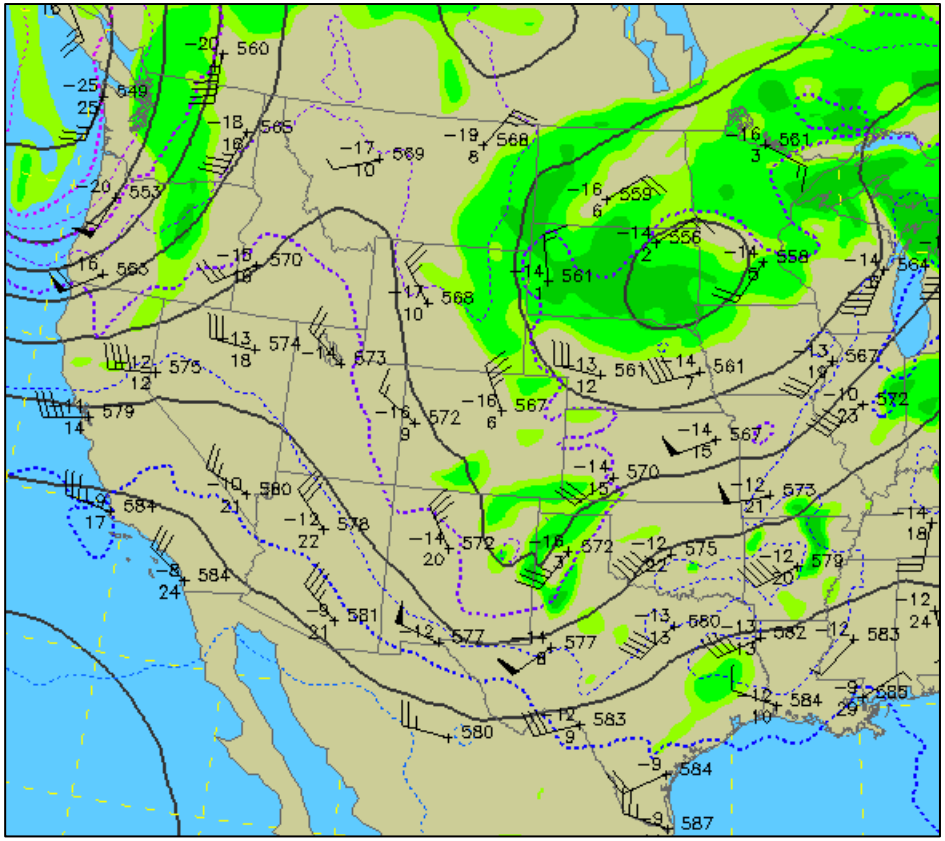


500 hPa 12:00 UTC

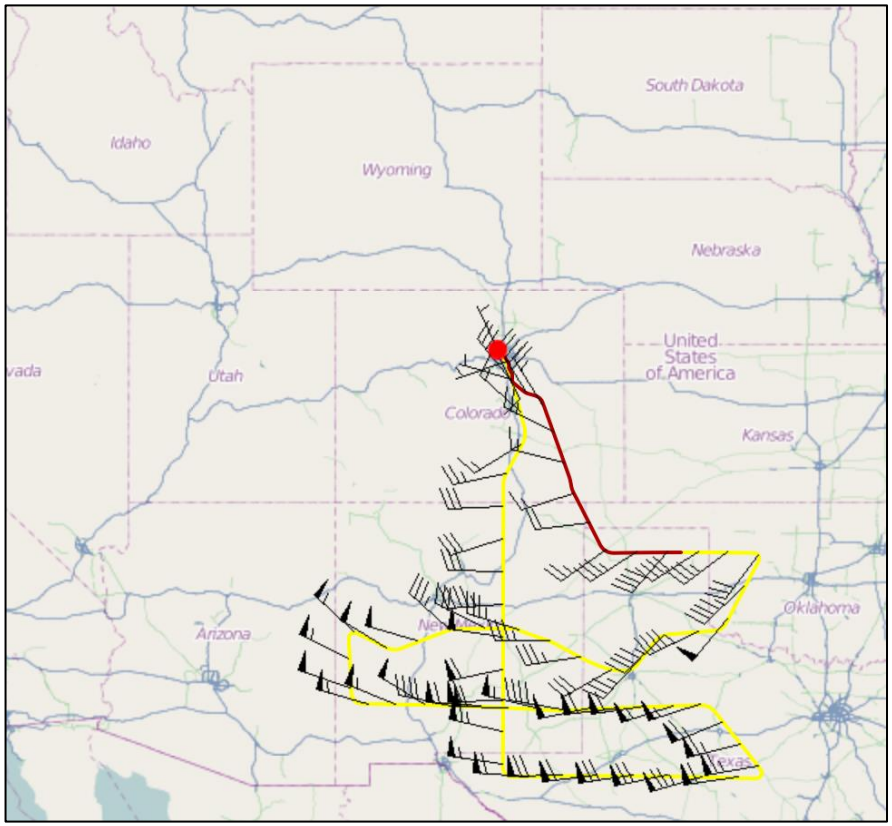


Water Vapor ~12 UTC

05/21/13

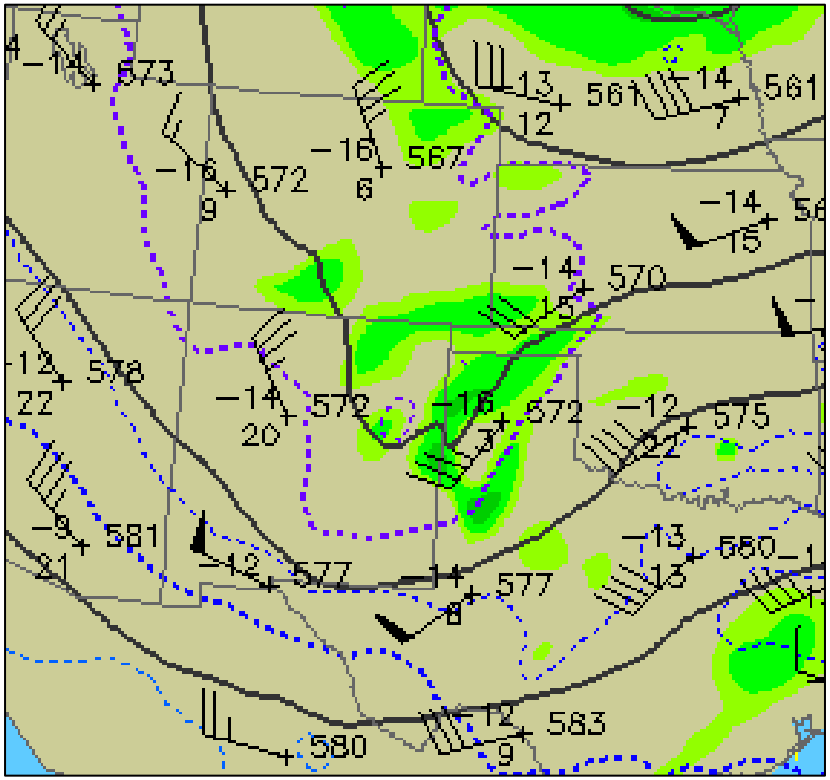


500 hPa 12:00 UTC

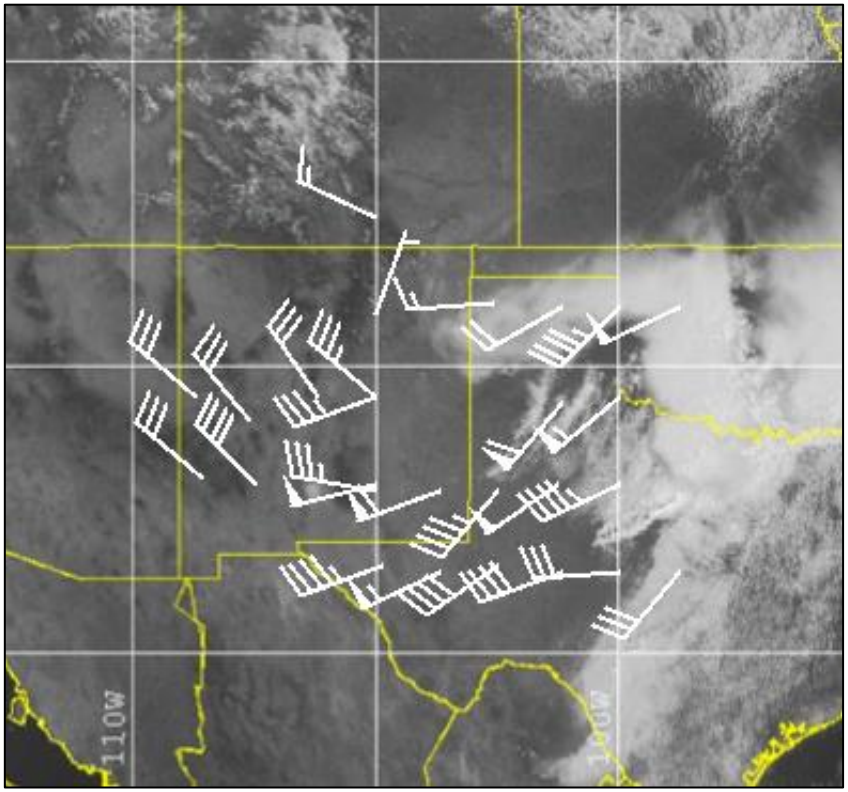


Flight Track Winds ~200 hPa

05/21/13

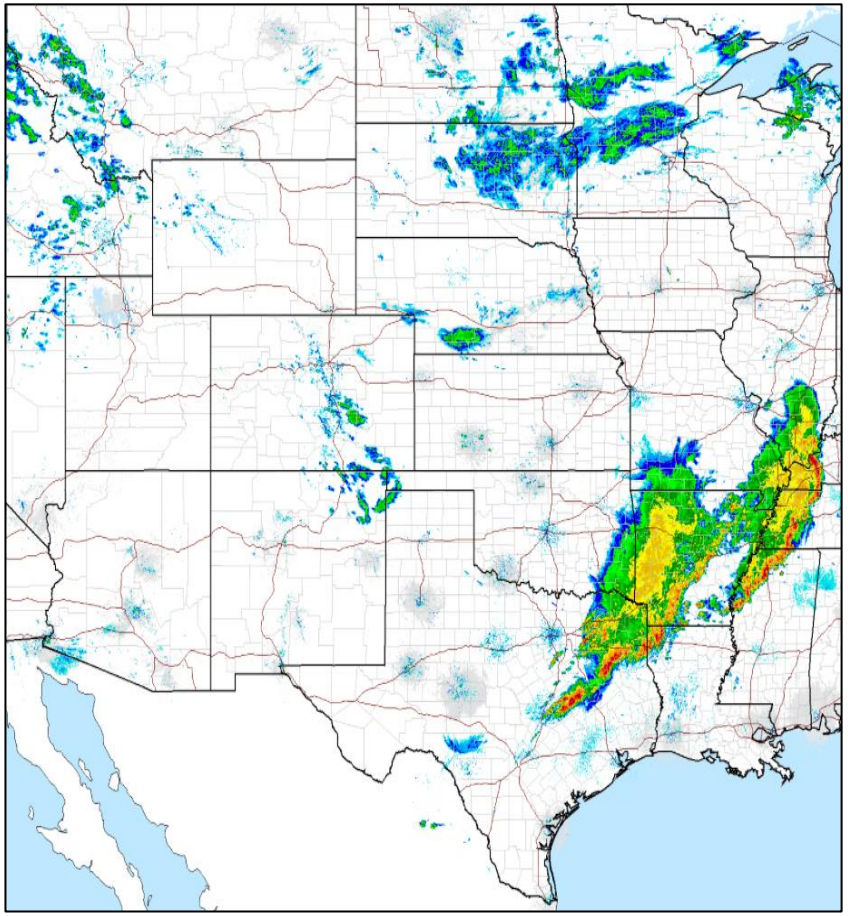


500 hPa 12:00 UTC

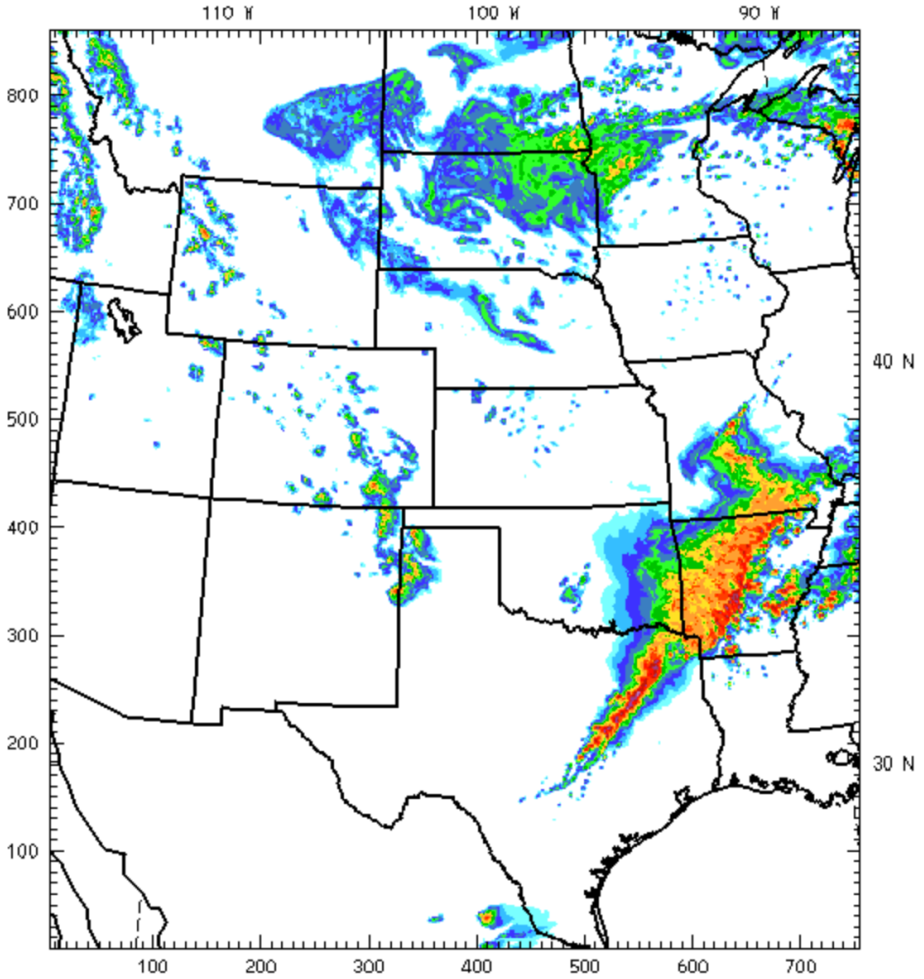


500 hPa Dropsonde Winds

05/21/13

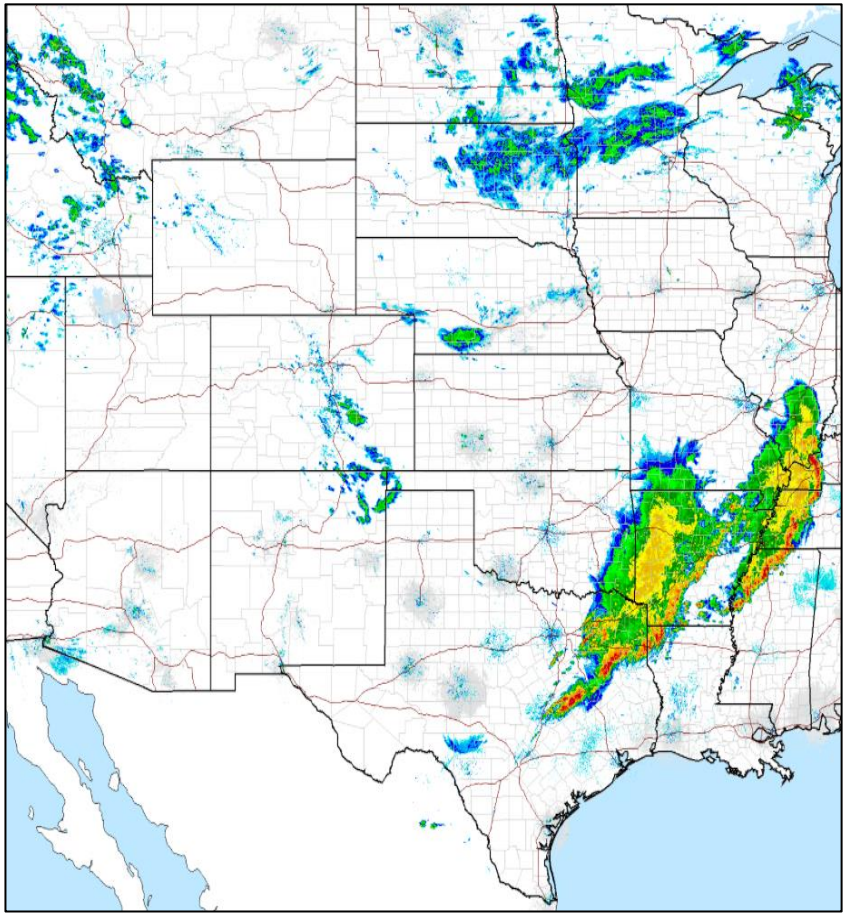


Radar 00:00 UTC

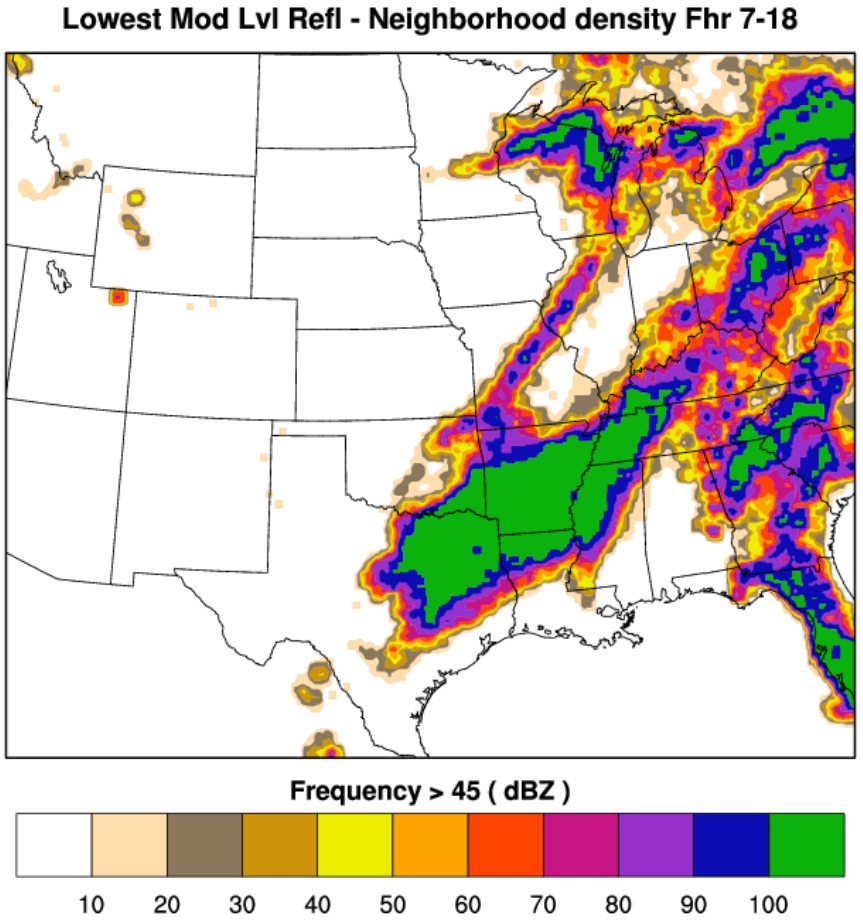


WRF-DART 12 h Forecast

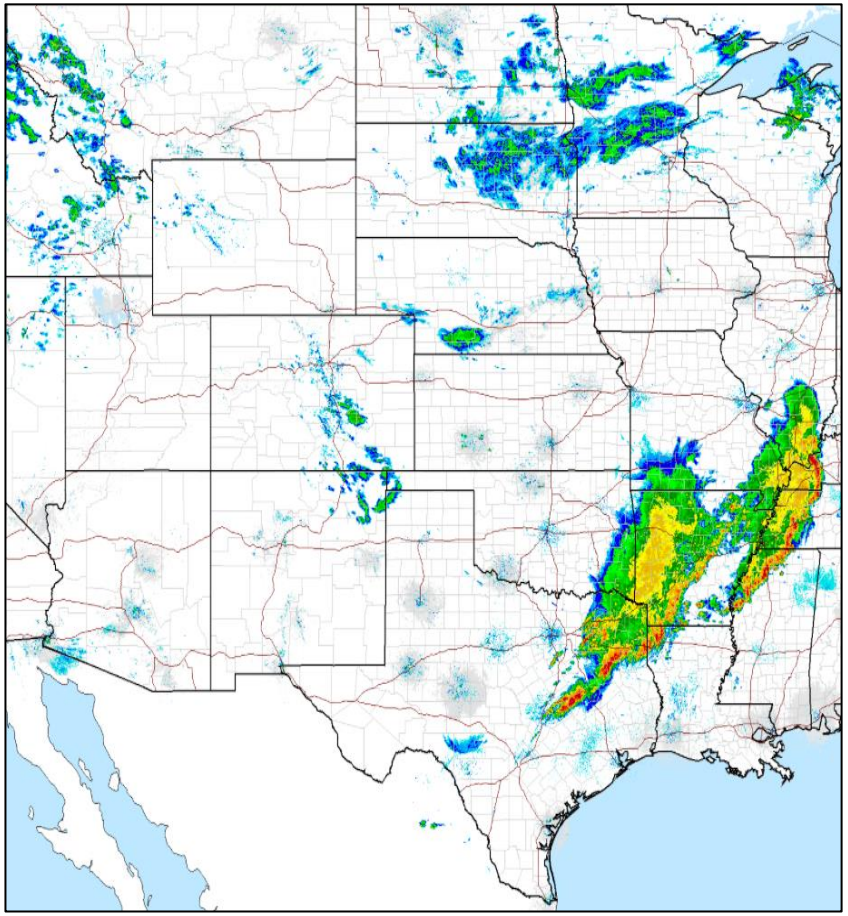
05/21/13



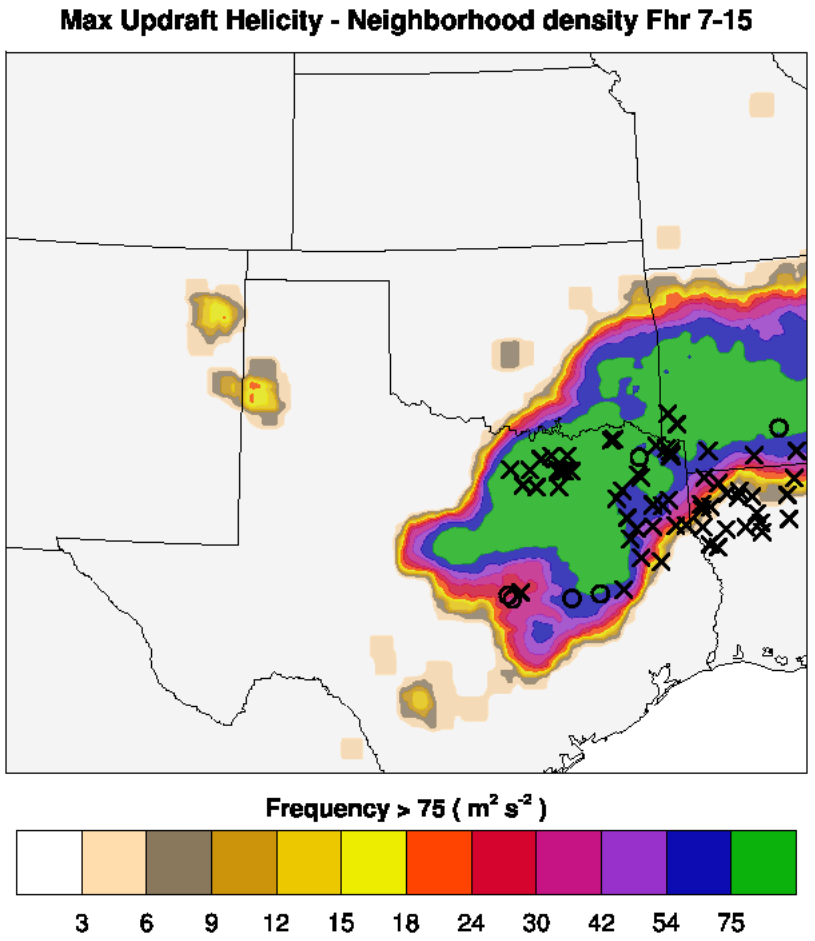
Radar 00:00 UTC



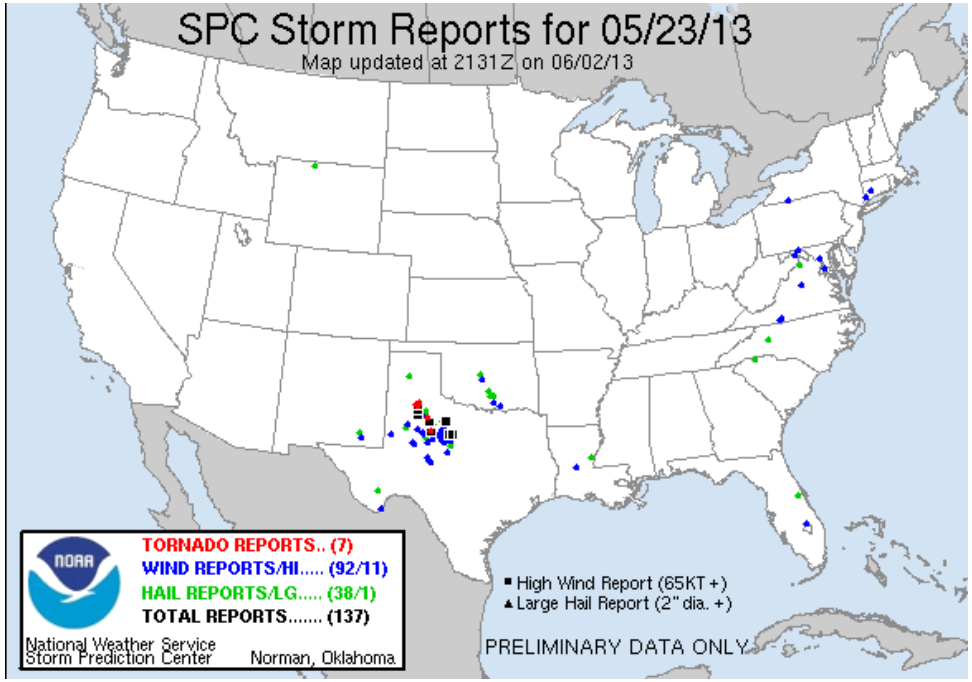
05/21/13

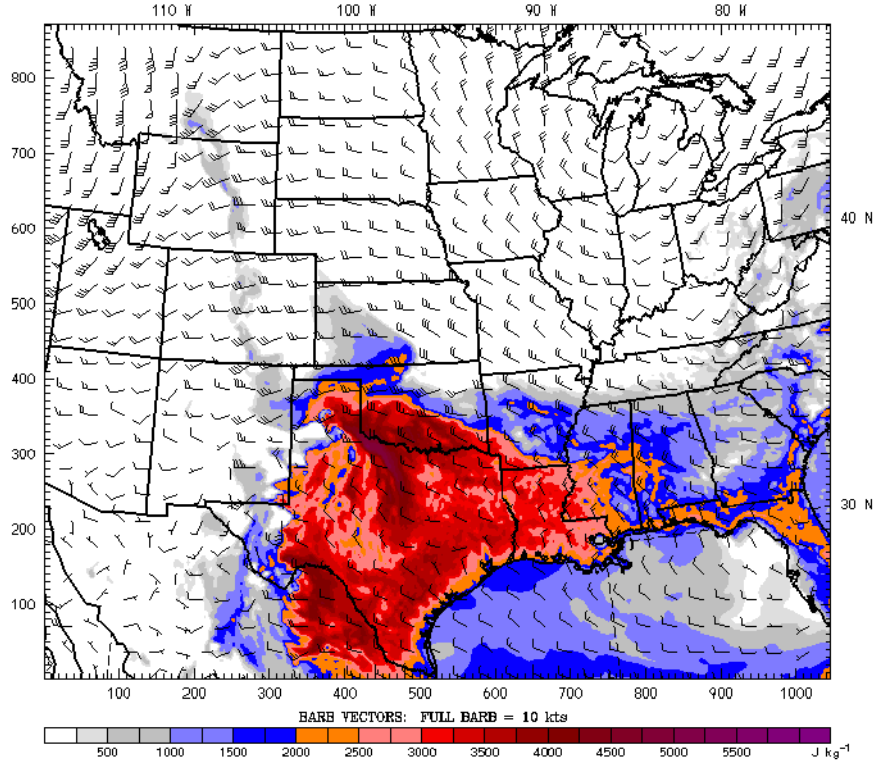


Radar 00:00 UTC



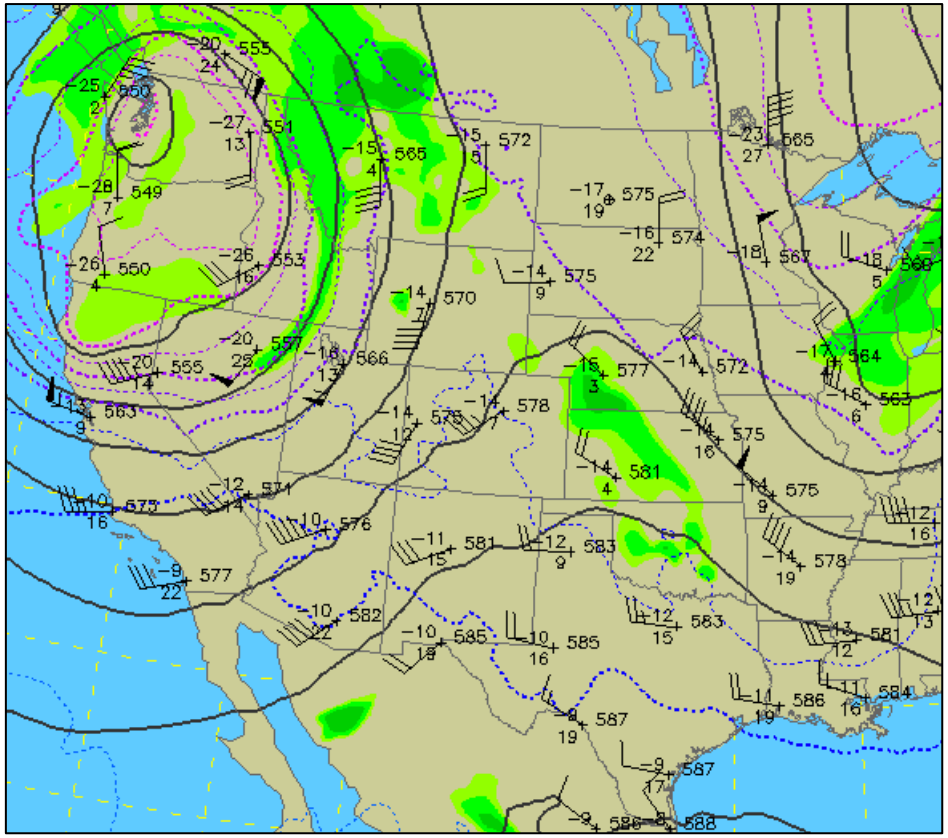
05/23/13



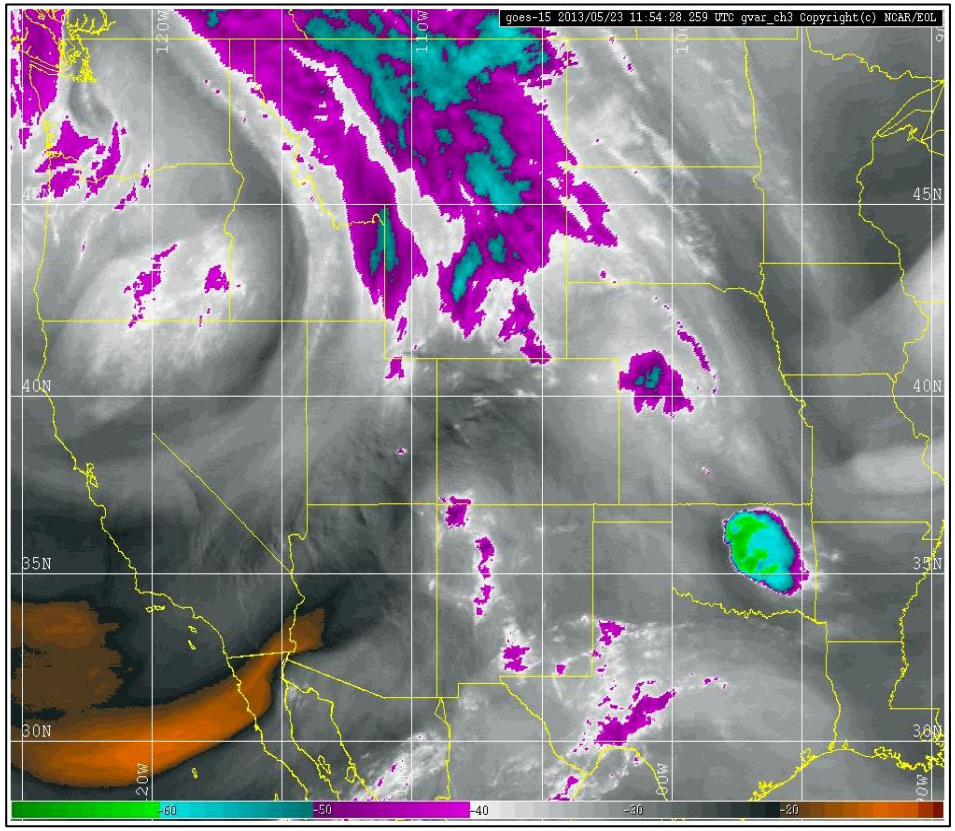


WRF CAPE/Shear: 21 UTC

05/23/13

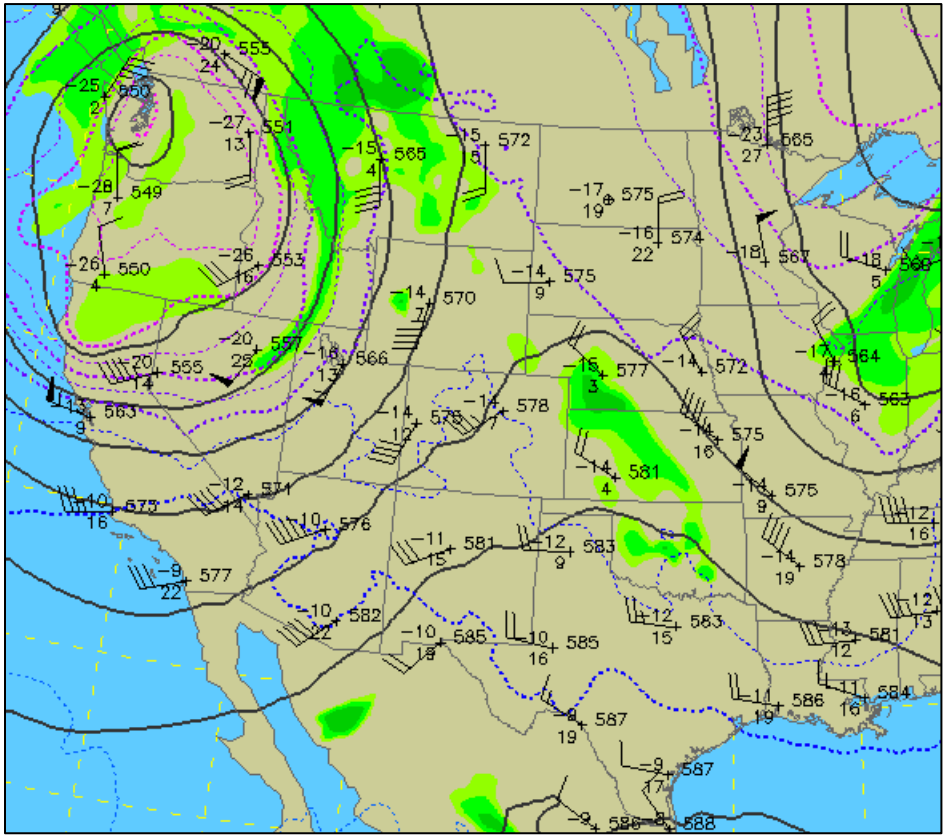


500 hPa 12:00 UTC

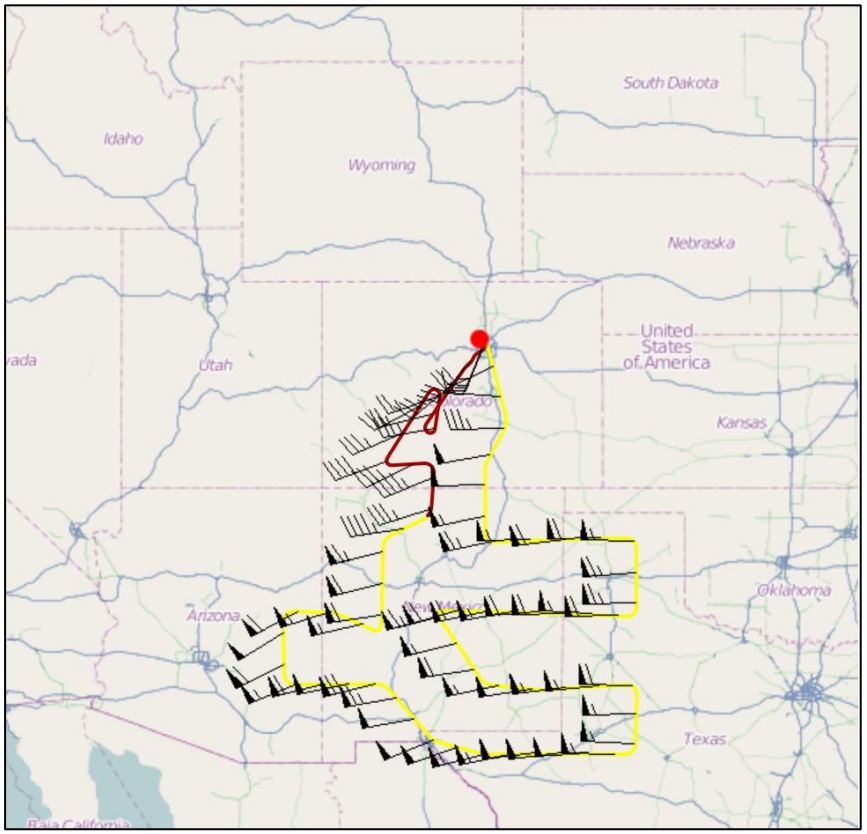


Water Vapor ~12 UTC

05/23/13

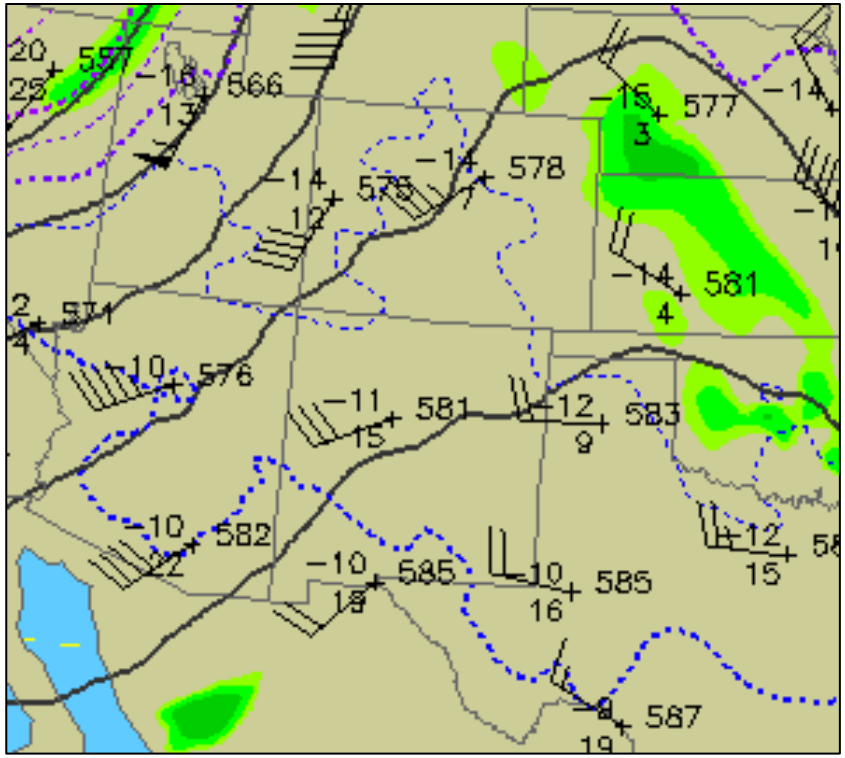


500 hPa 12:00 UTC

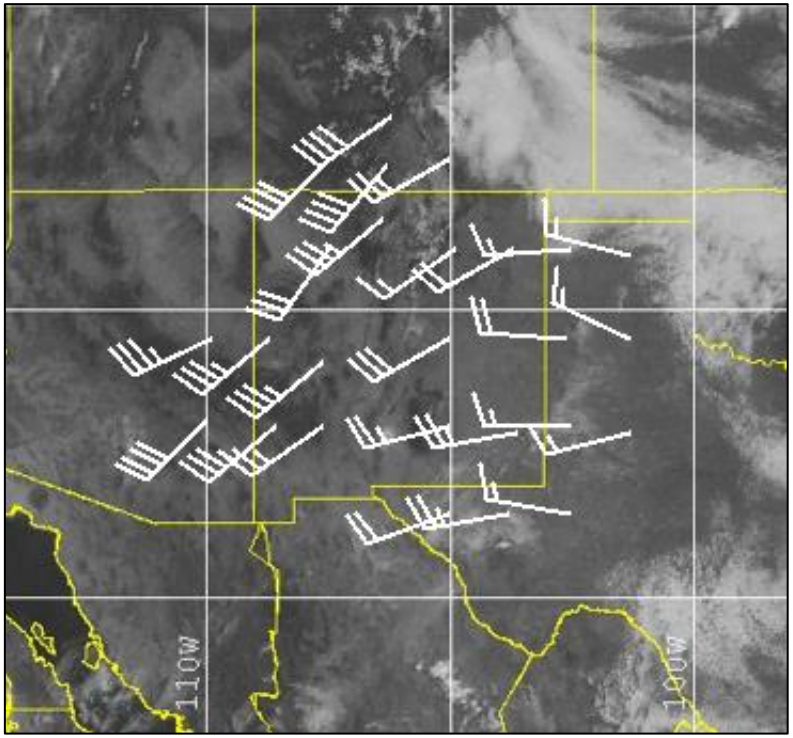


Flight Track Winds ~200 hPa

05/23/13

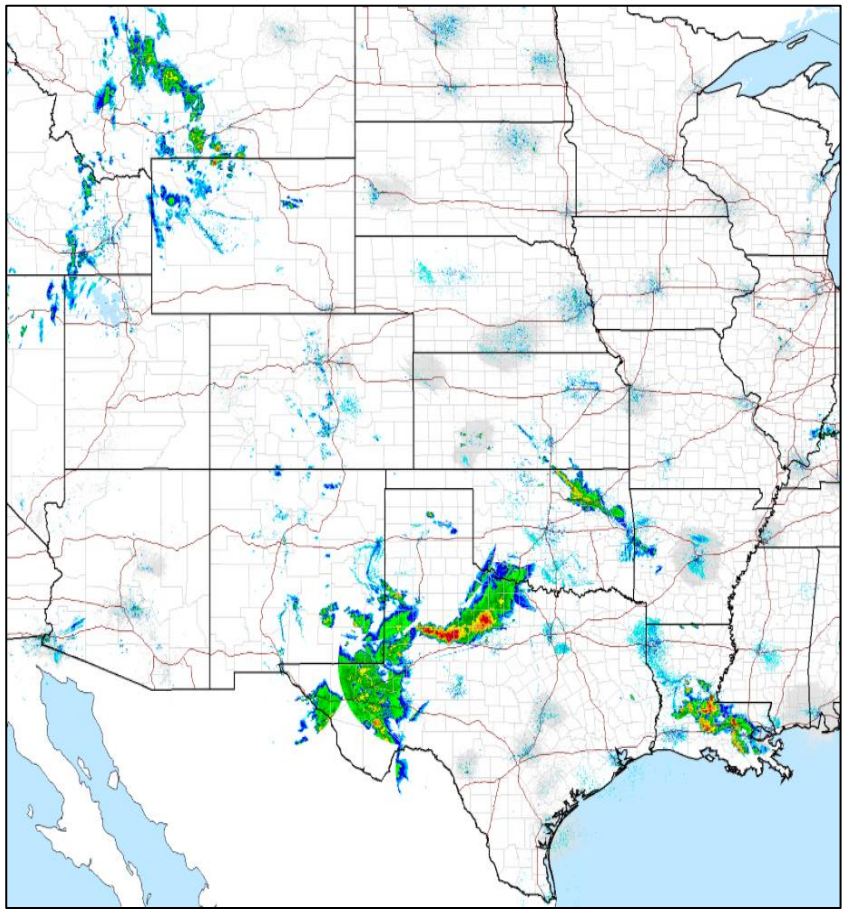


500 hPa 12:00 UTC

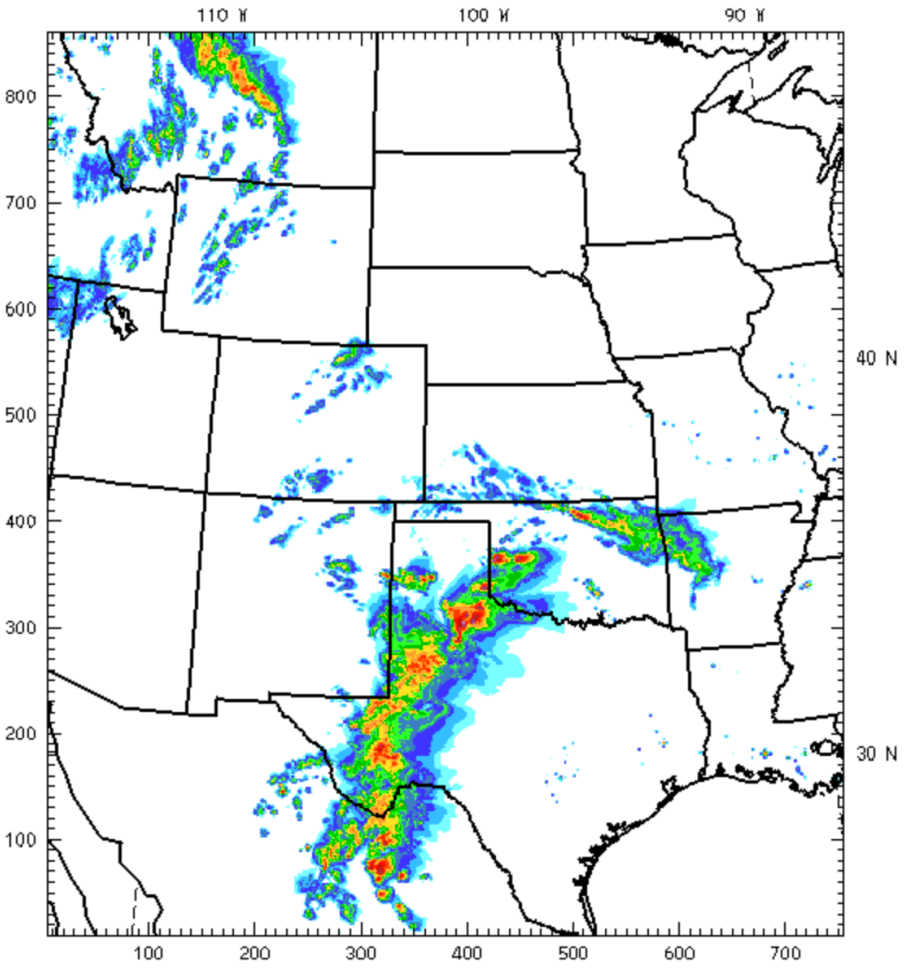


500 hPa Dropsonde Winds

05/23/13

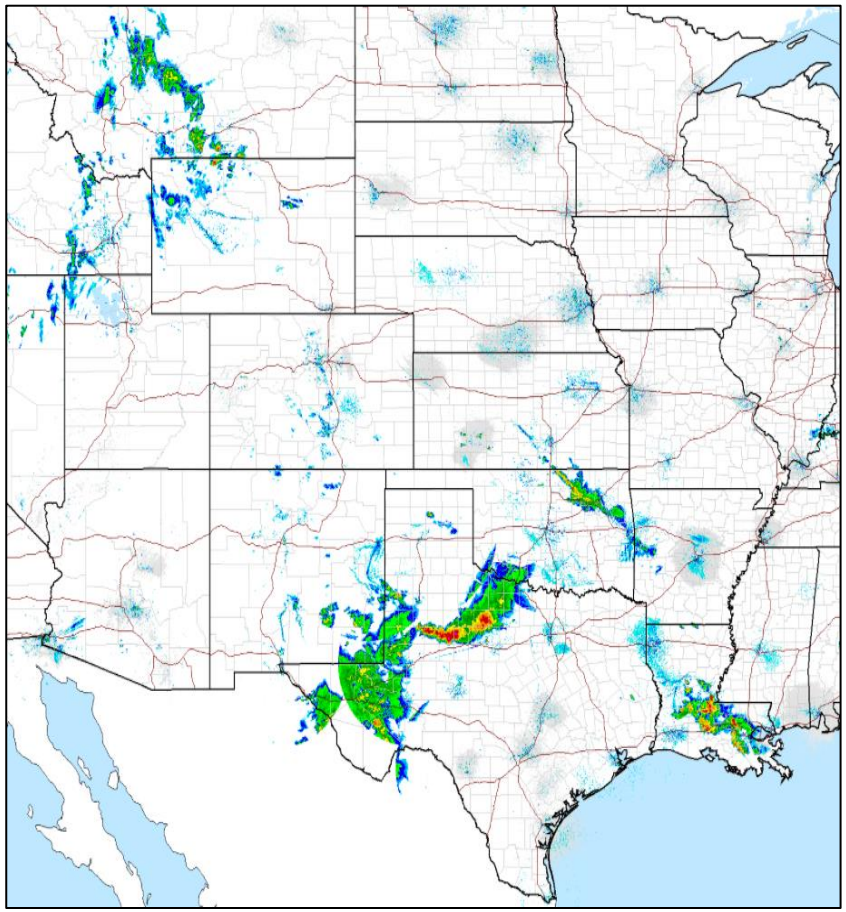


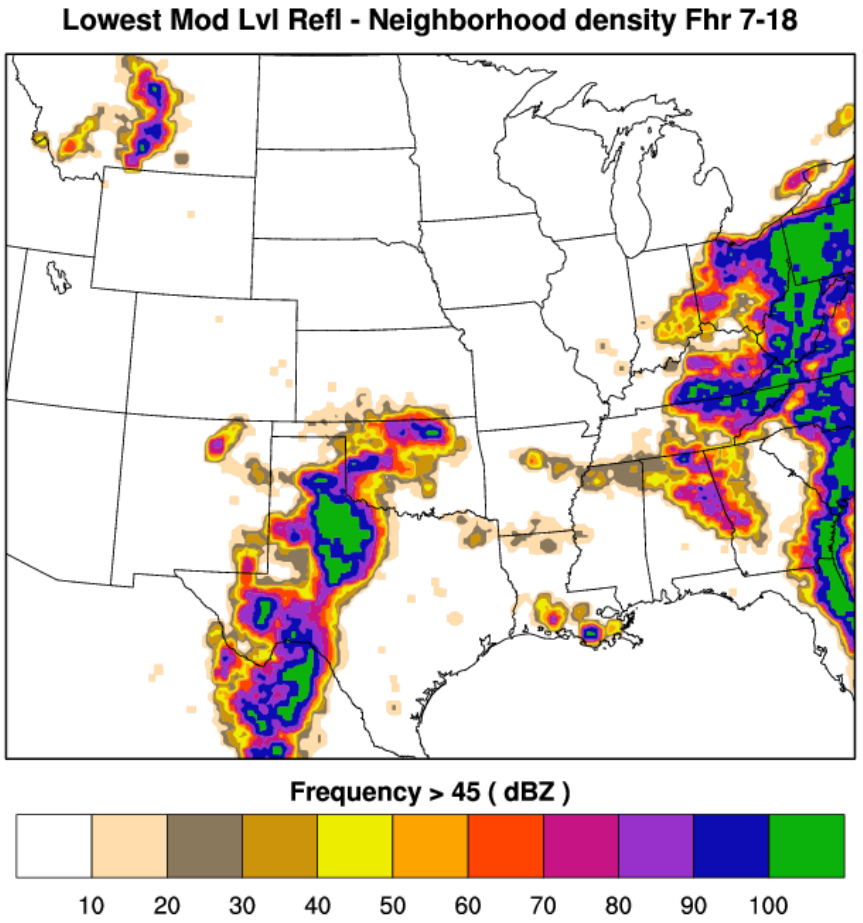
Radar 00:00 UTC



WRF-DART 12 h Forecast

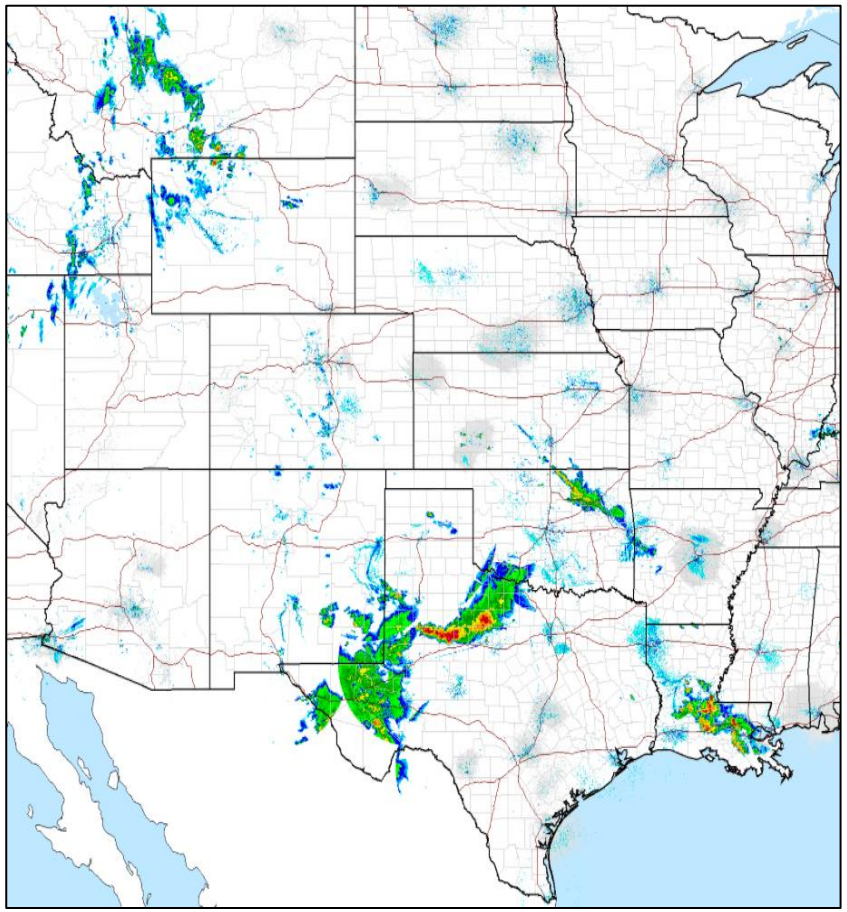
05/23/13



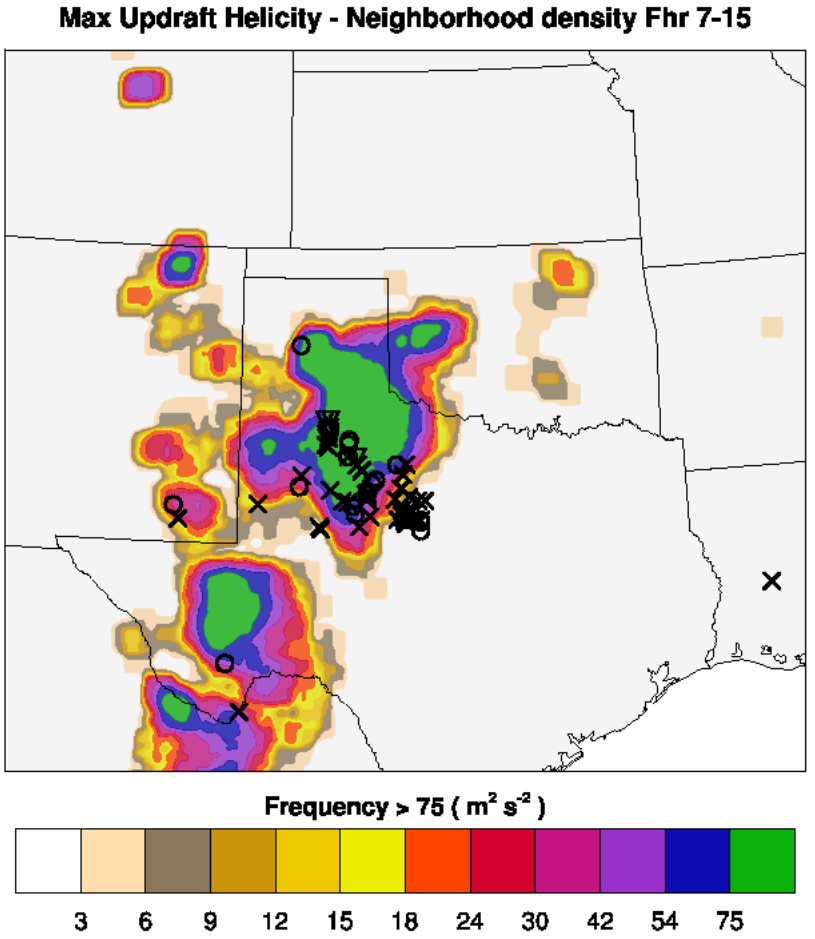


Radar 00:00 UTC

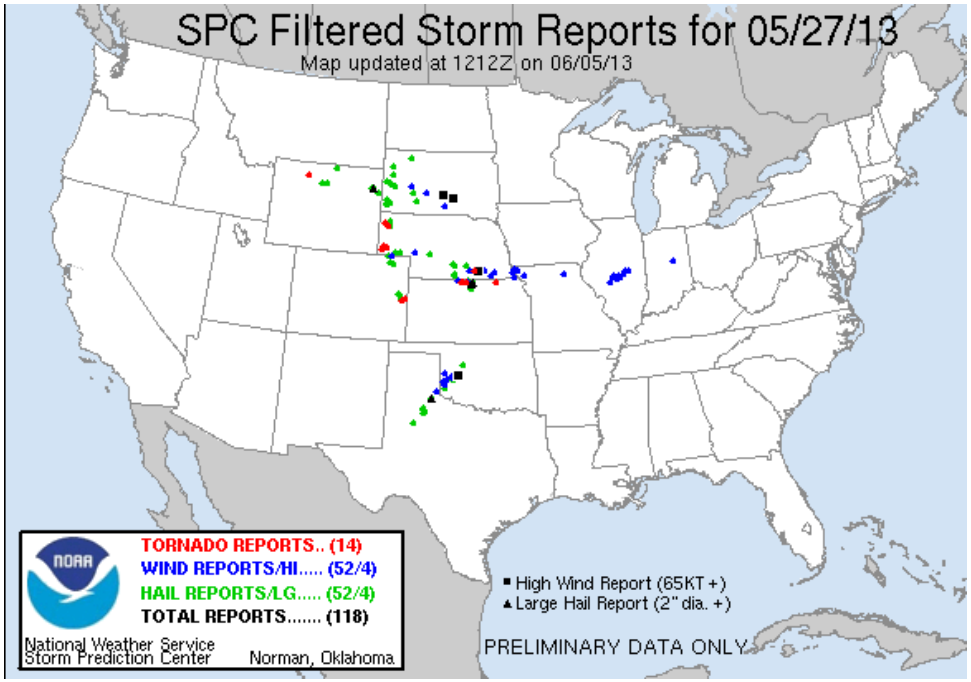
05/23/13

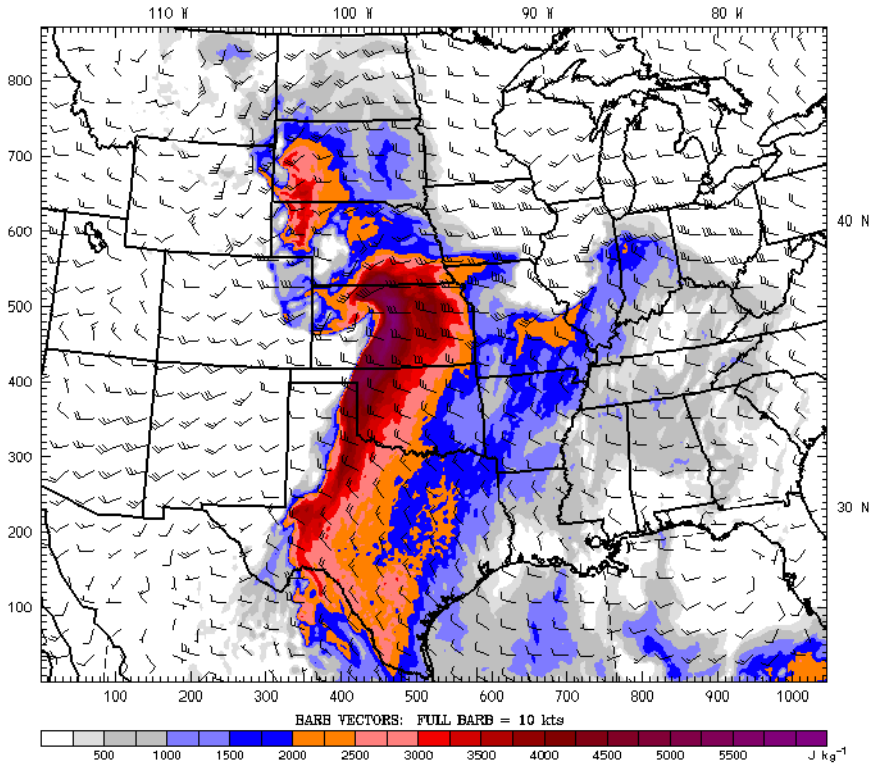


Radar 00:00 UTC



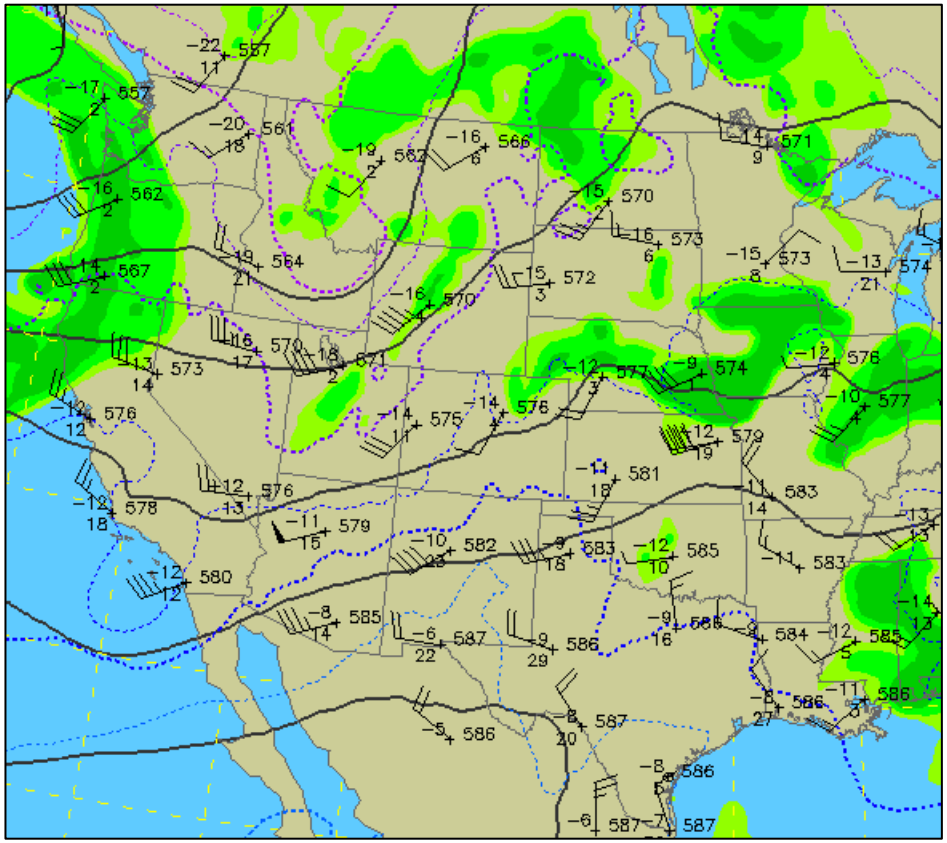
05/27/13



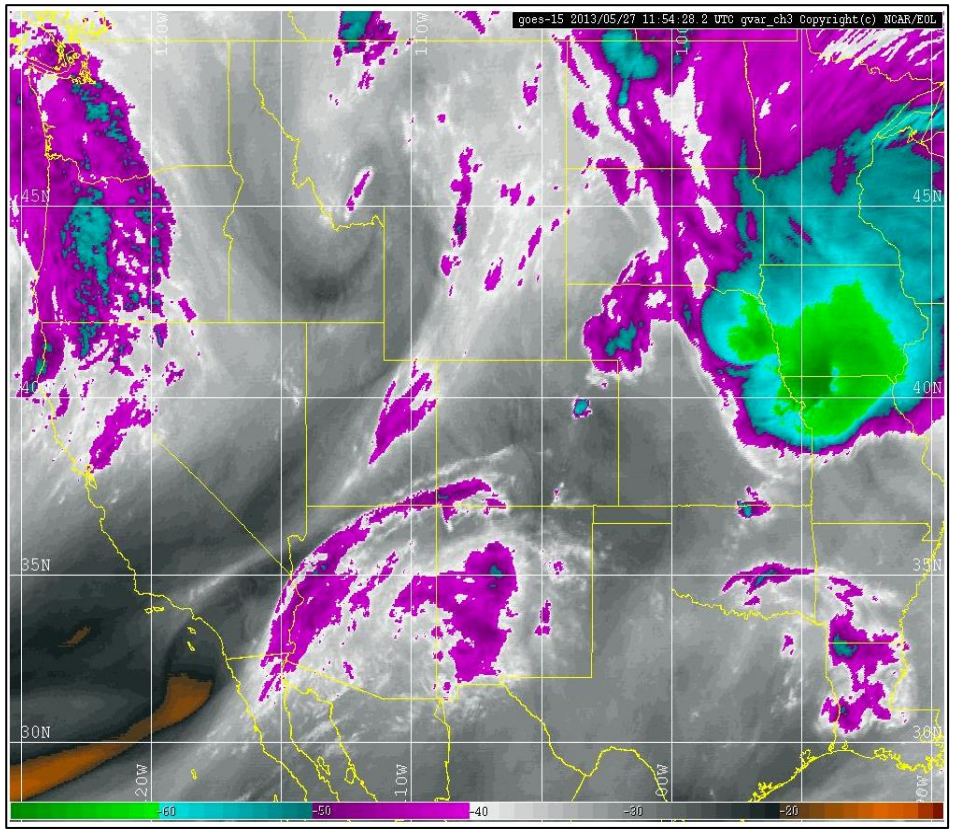


WRF CAPE/Shear: 21 UTC

05/27/13

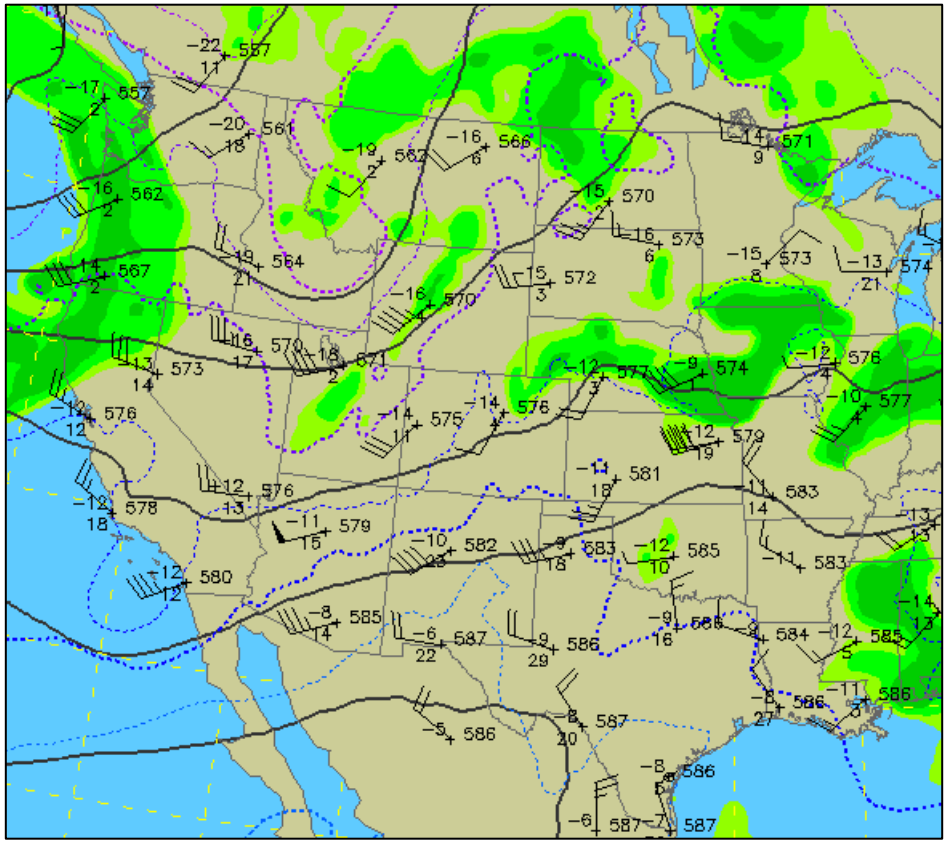


500 hPa 12:00 UTC

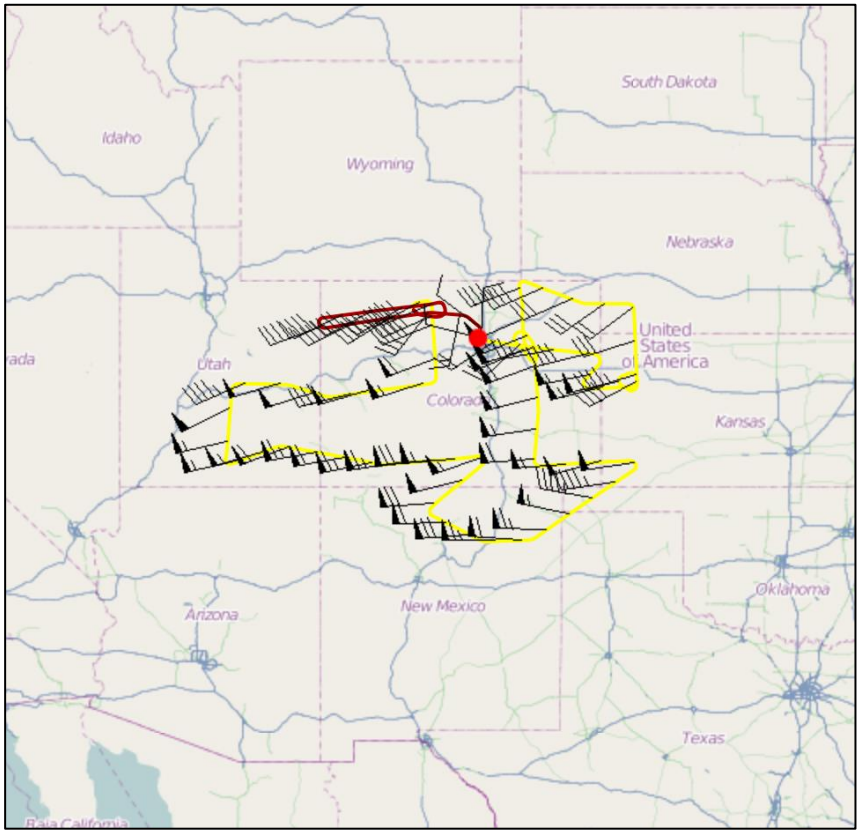


Water Vapor ~12 UTC

05/27/13

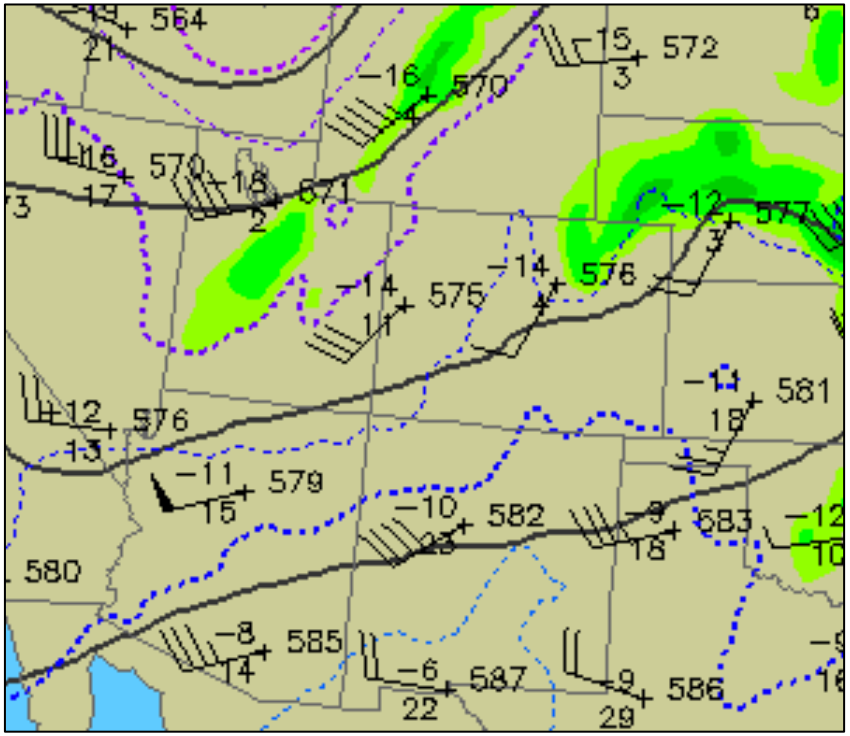


500 hPa 12:00 UTC

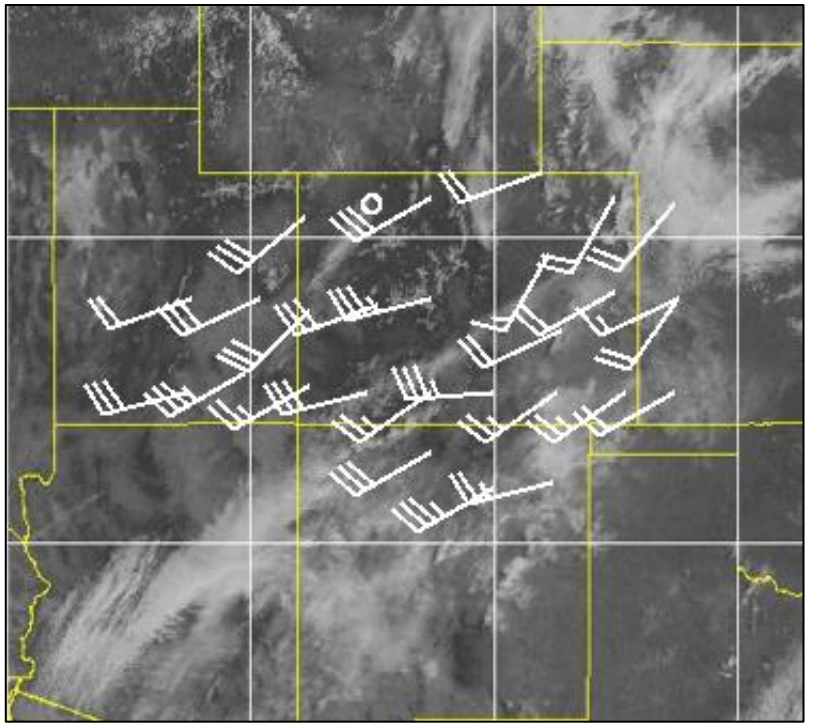


Flight Track Winds ~200 hPa

05/27/13

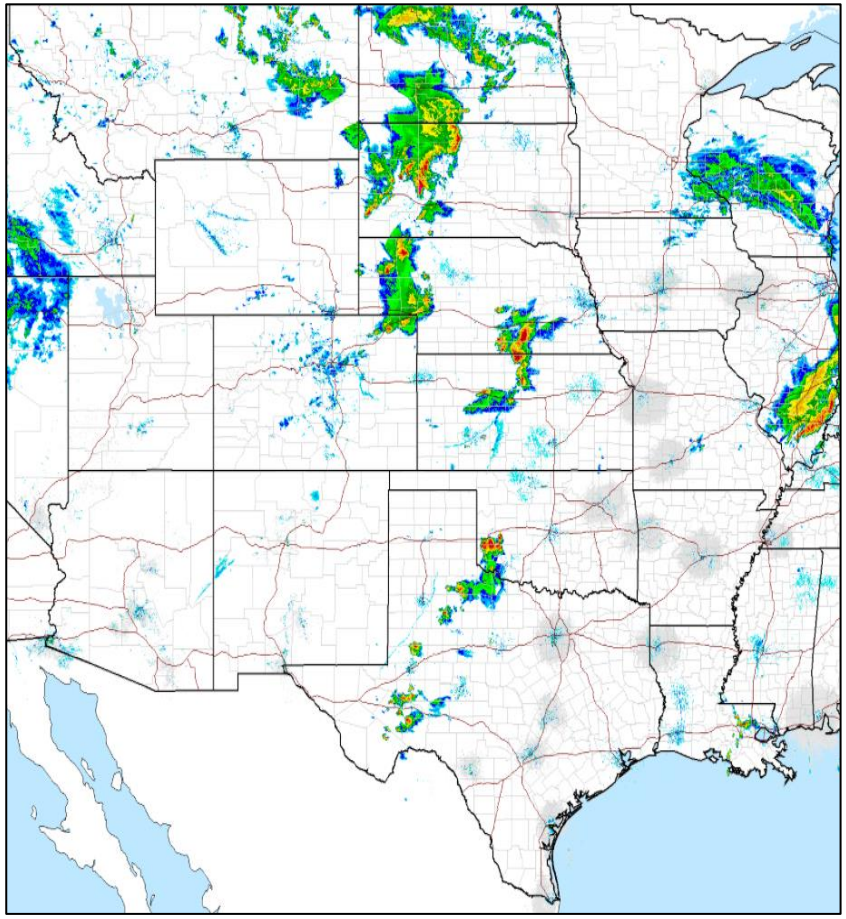


500 hPa 12:00 UTC

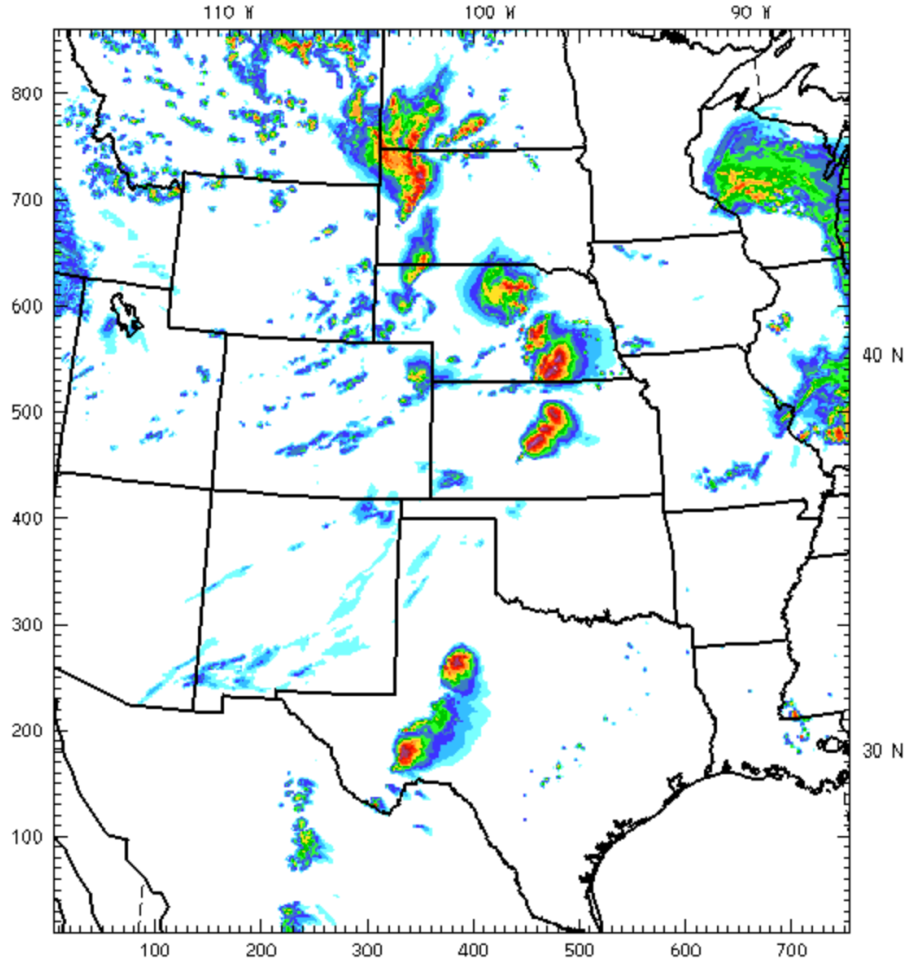


500 hPa Dropsonde Winds

05/27/13

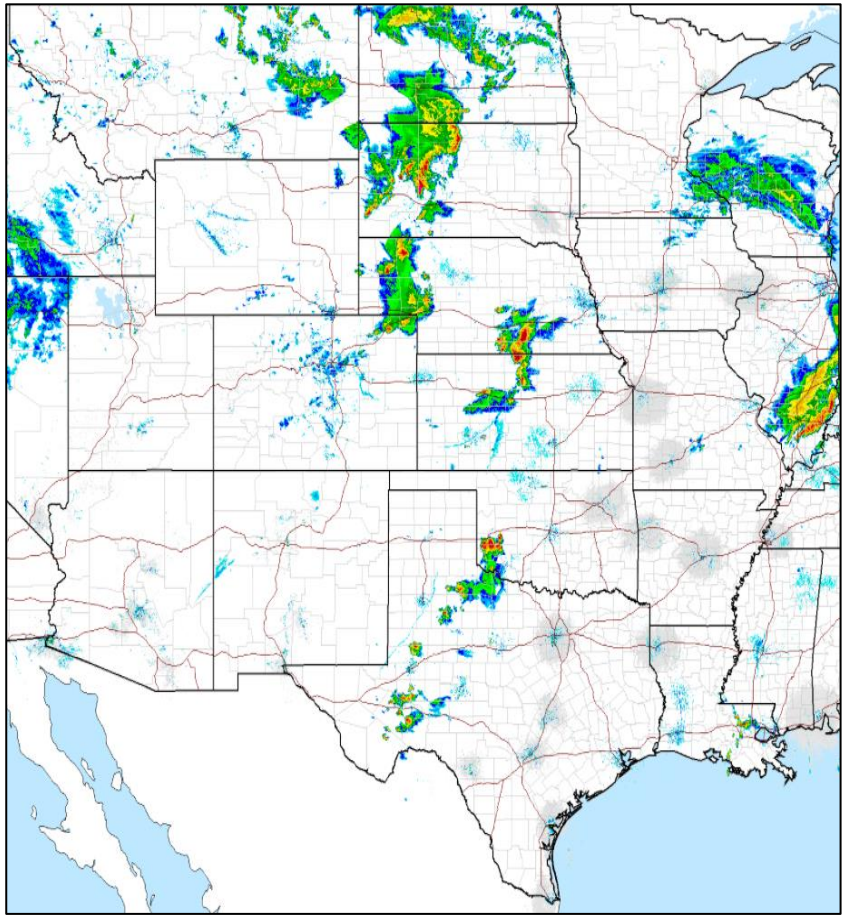


Radar 00:00 UTC

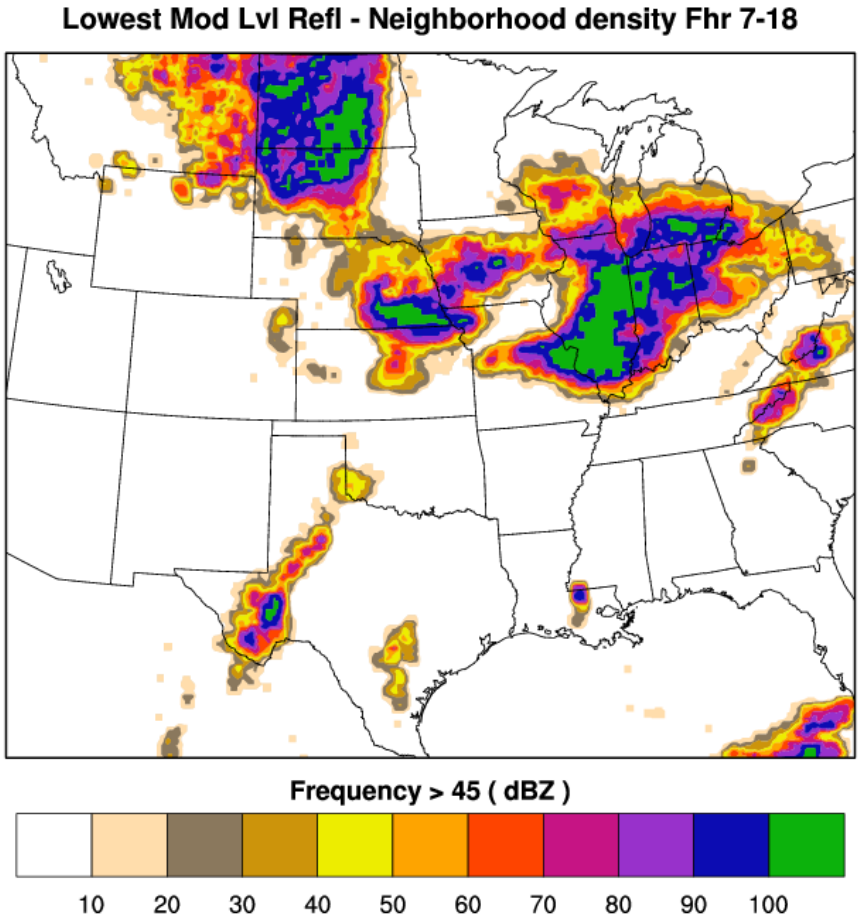


WRF-DART 12 h Forecast

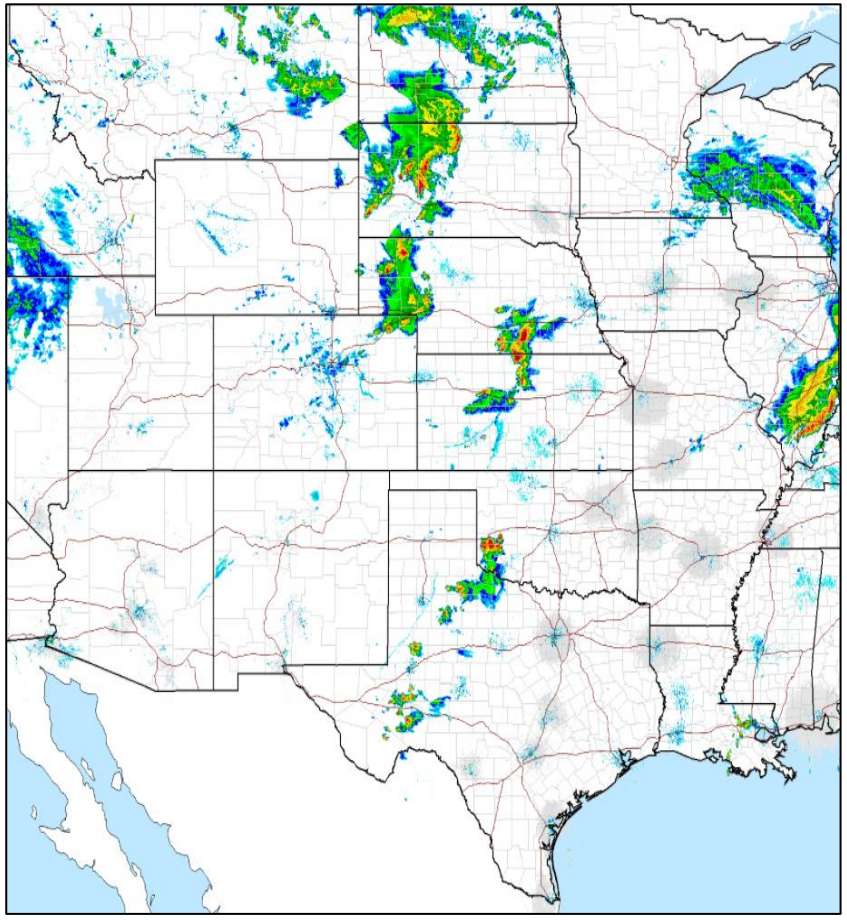
05/27/13



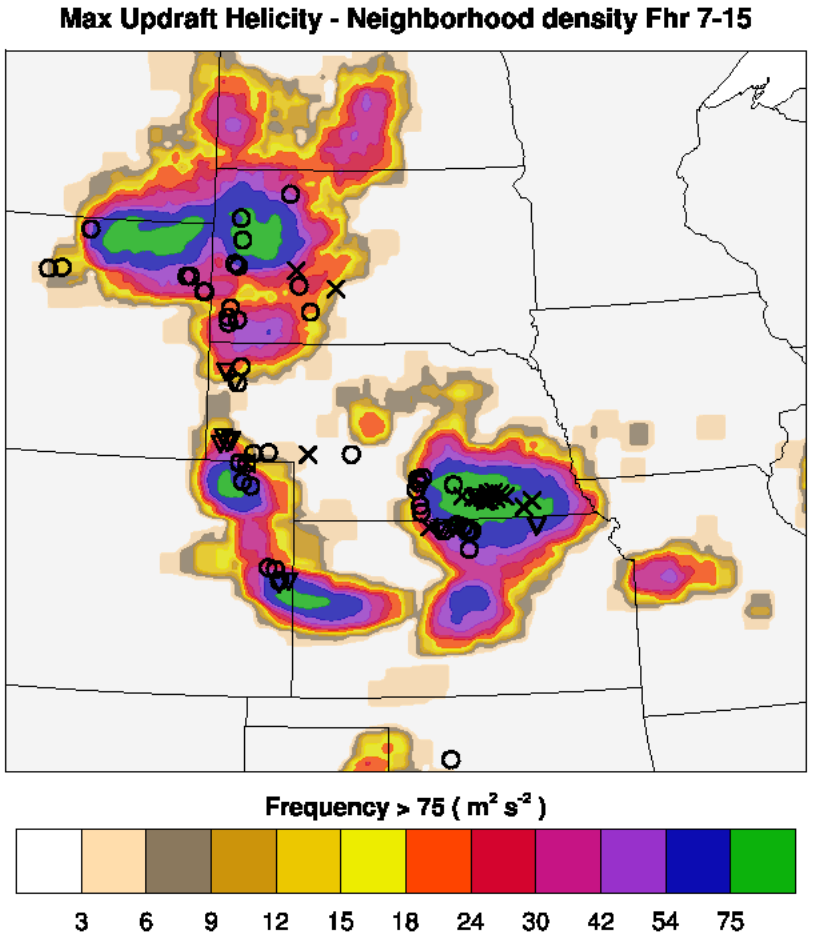
Radar 00:00 UTC



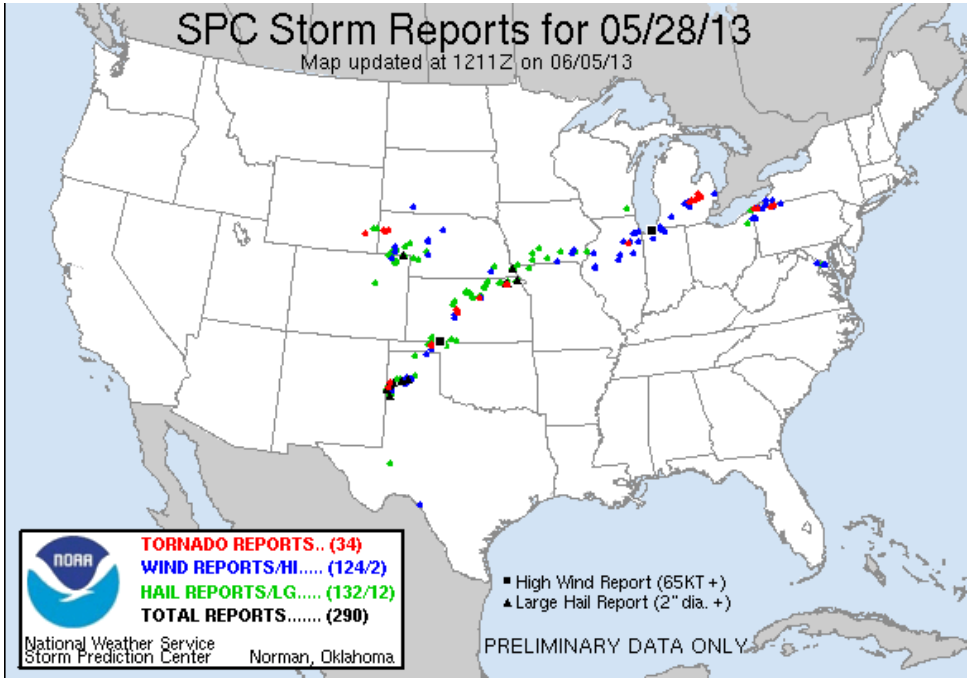
05/27/13

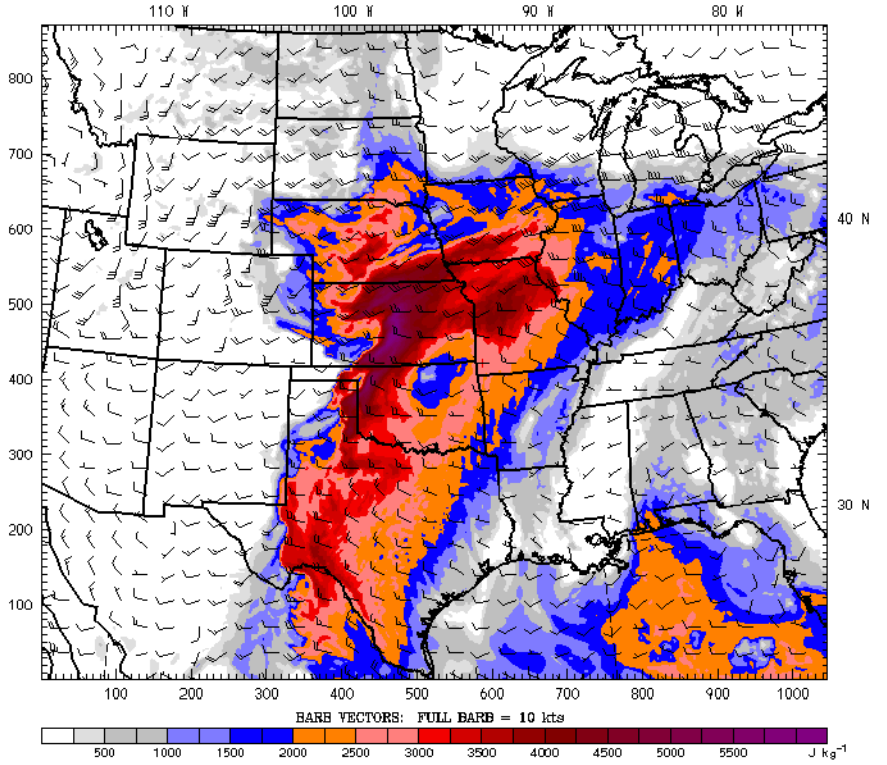


Radar 00:00 UTC



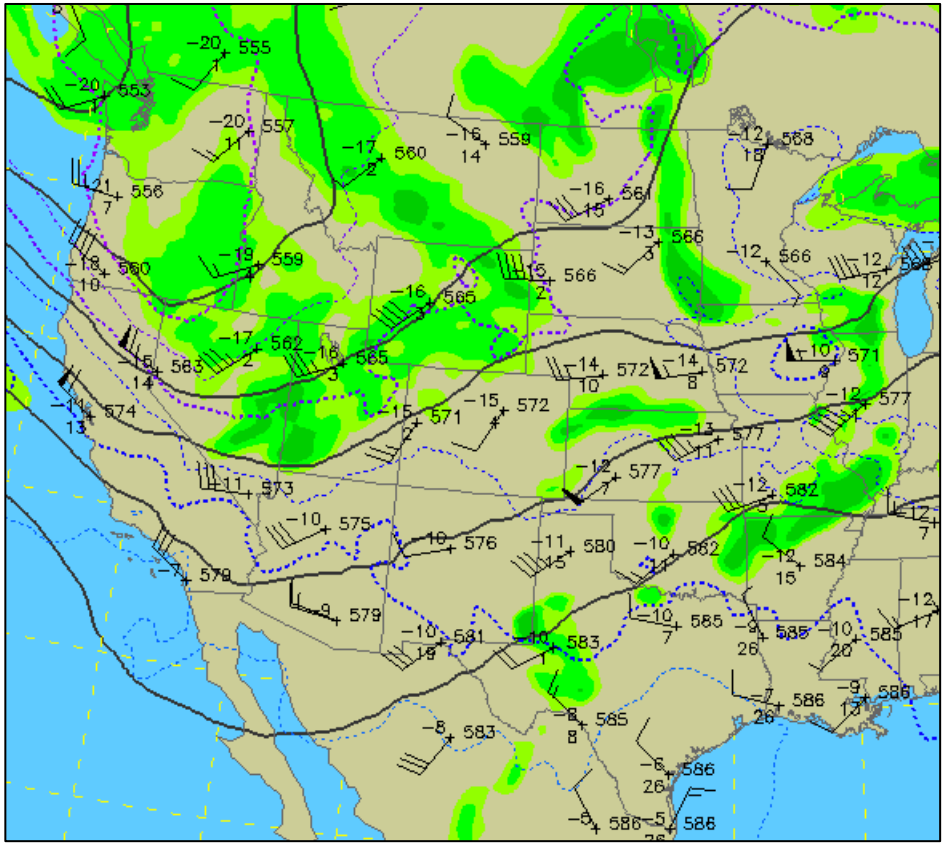
05/28/13



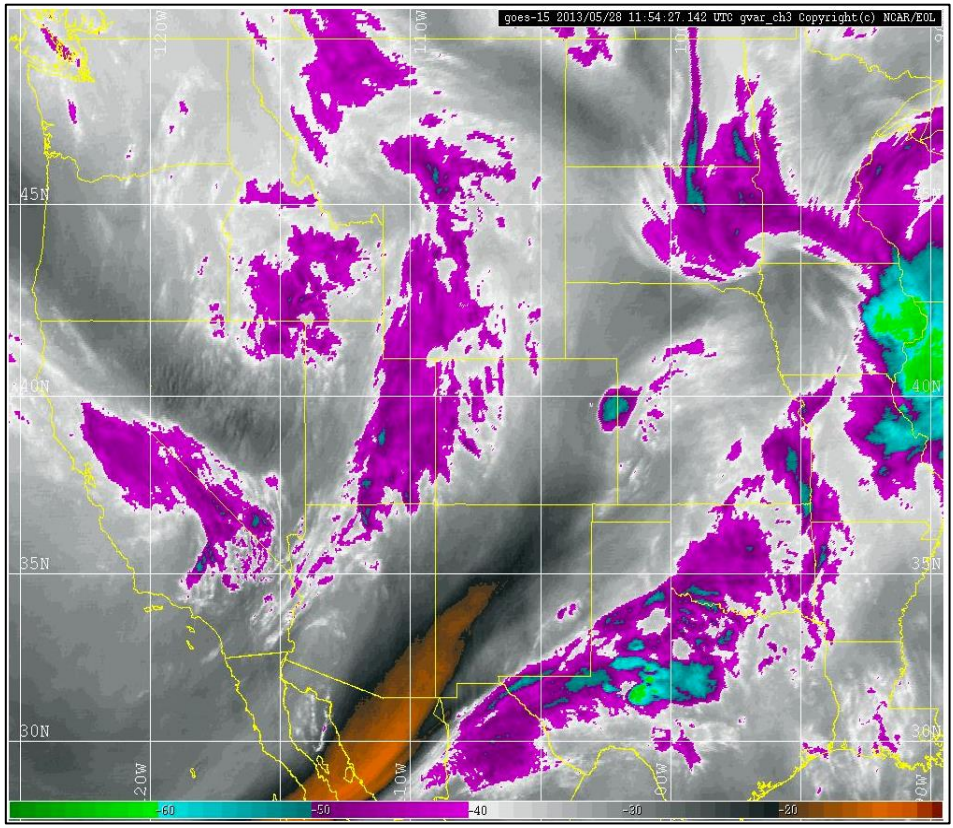


WRF CAPE/Shear: 21 UTC

05/28/13

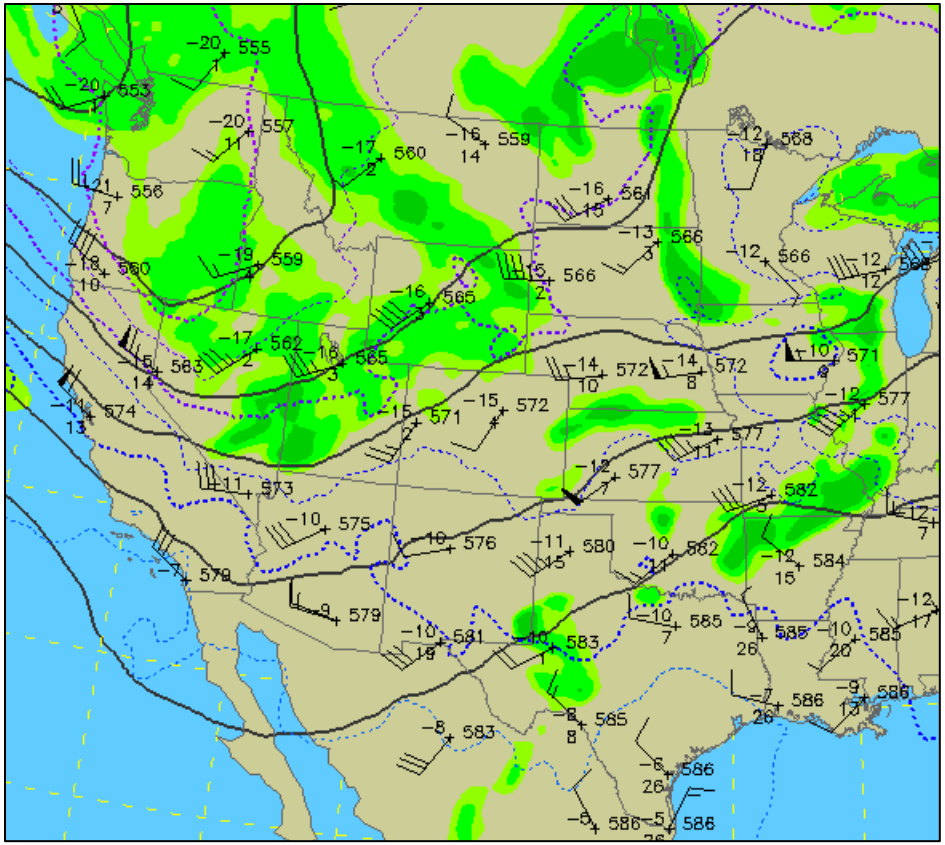


500 hPa 12:00 UTC

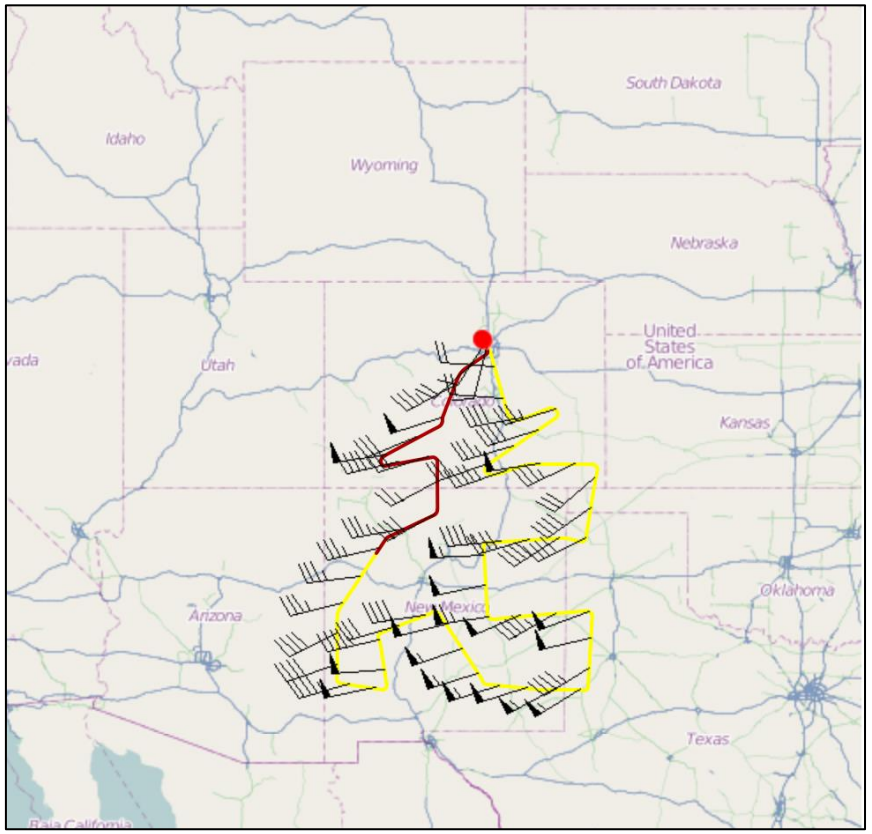


Water Vapor ~12 UTC

05/28/13

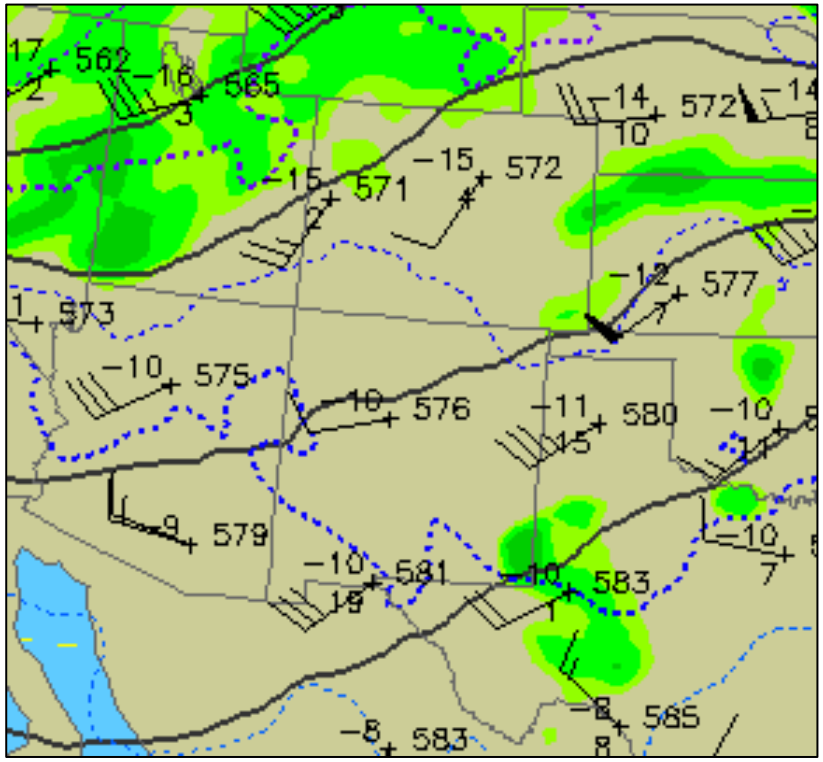


500 hPa 12:00 UTC

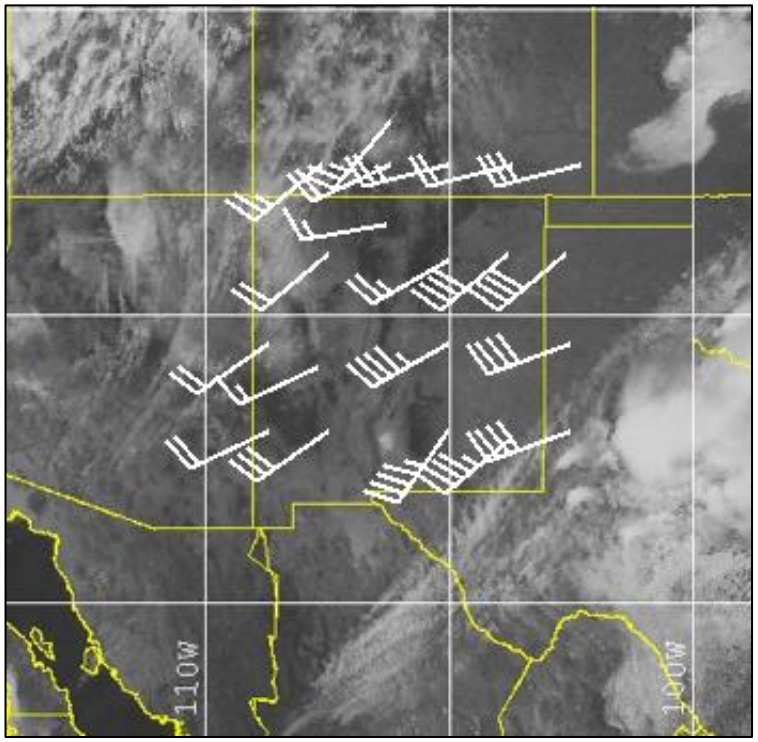


Flight Track Winds ~200 hPa

05/28/13

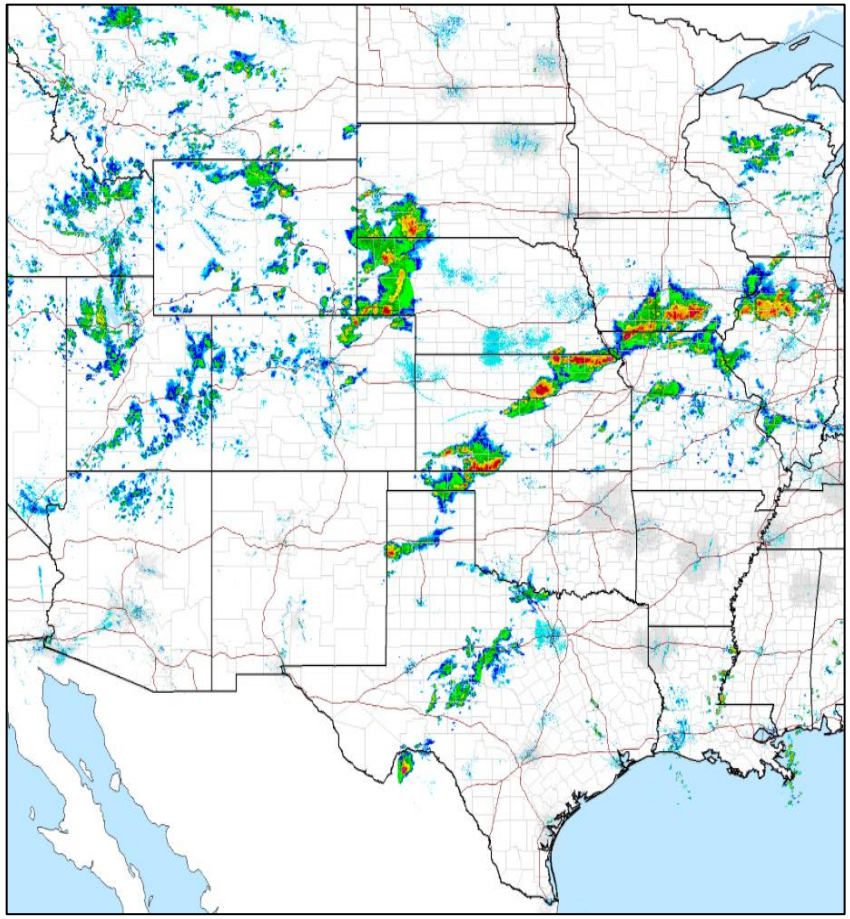


500 hPa 12:00 UTC

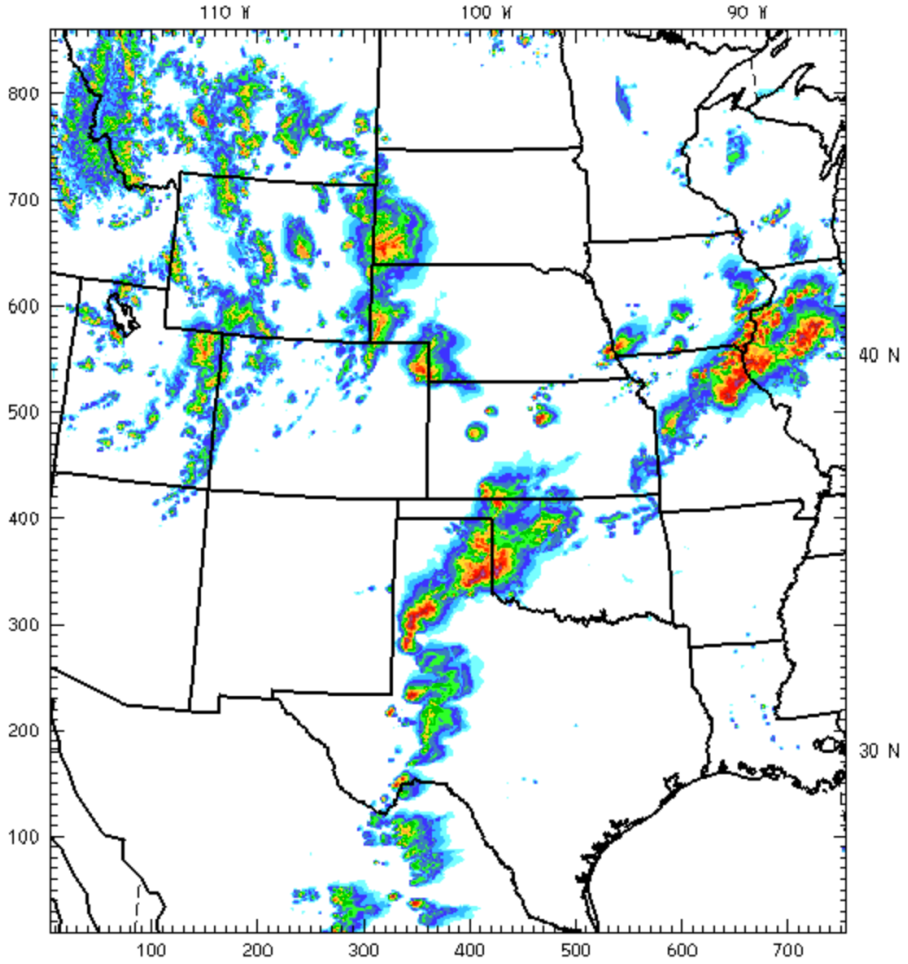


500 hPa Dropsonde Winds

05/28/13

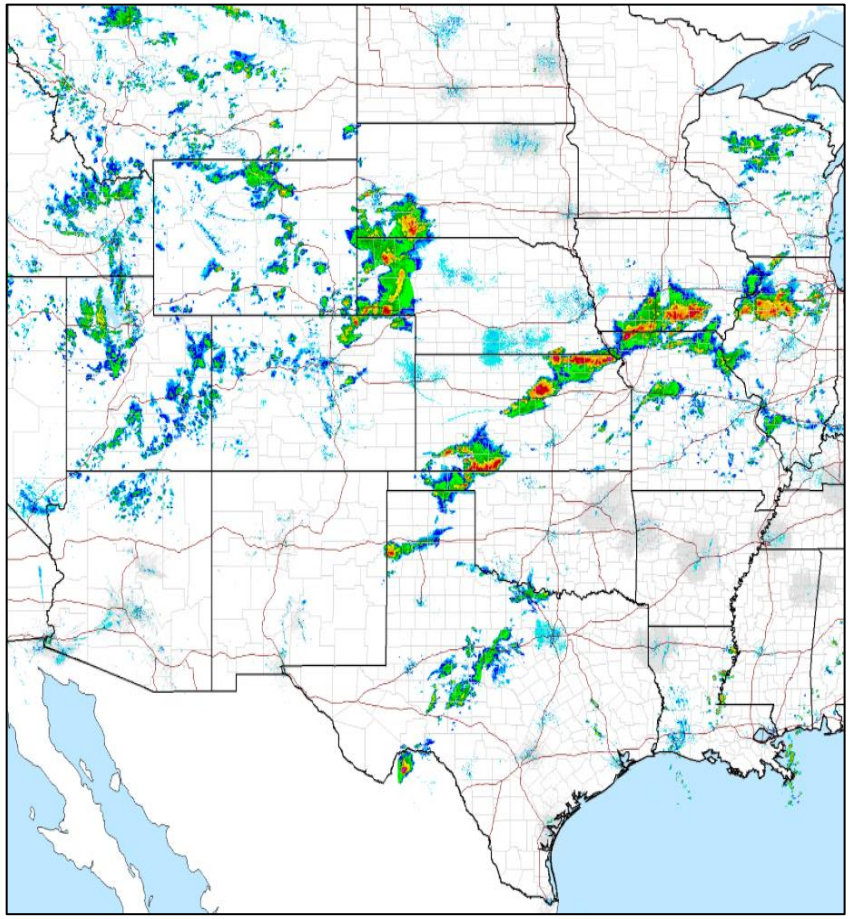


Radar 00:00 UTC

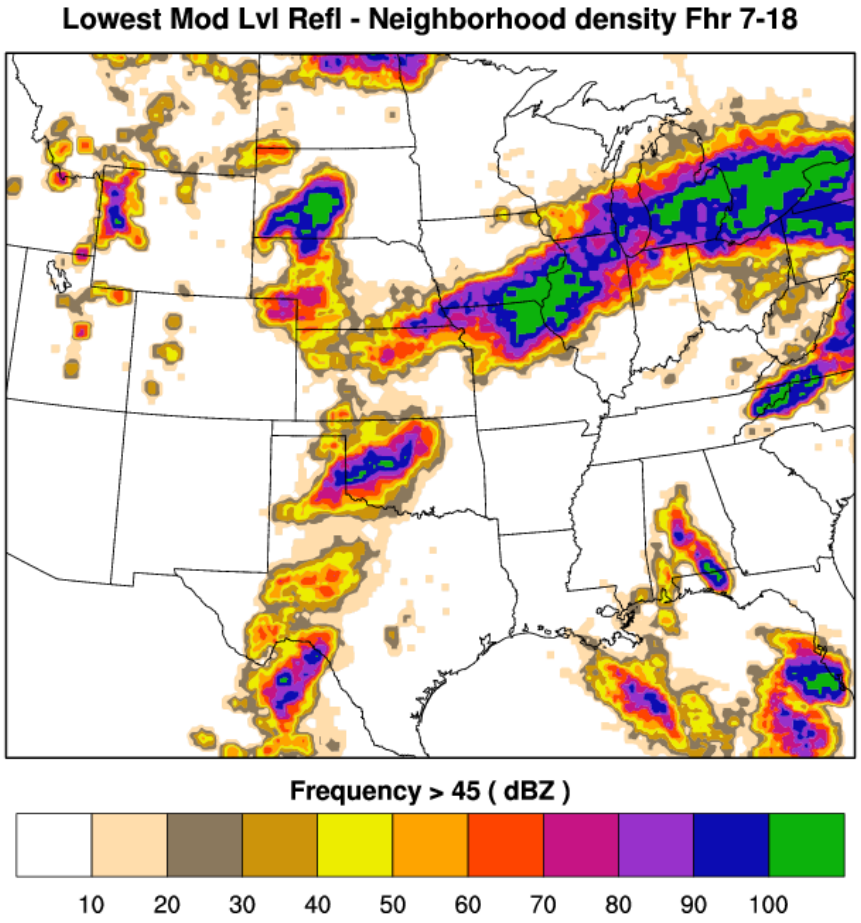


WRF-DART 12 h Forecast

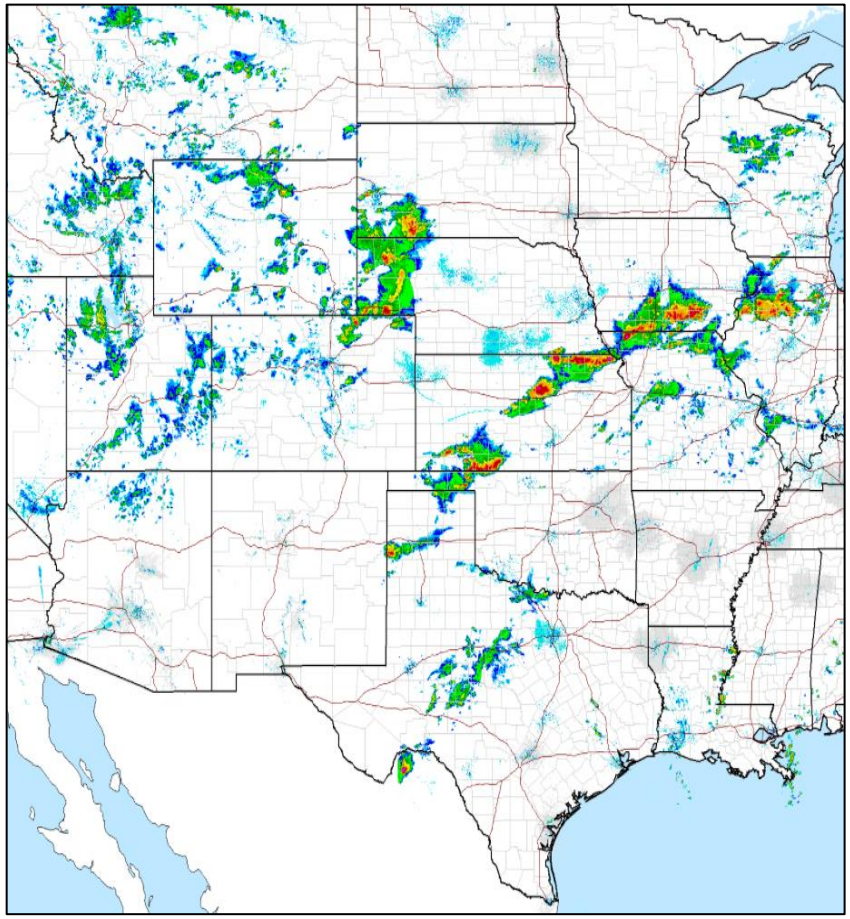
05/28/13



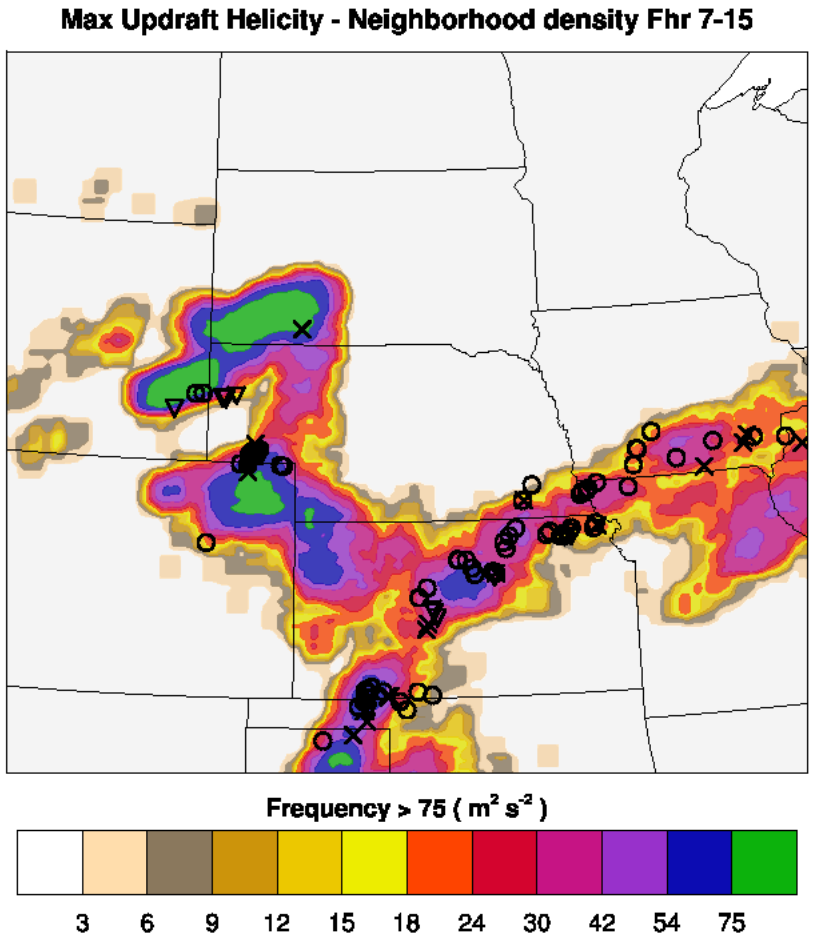
Radar 00:00 UTC



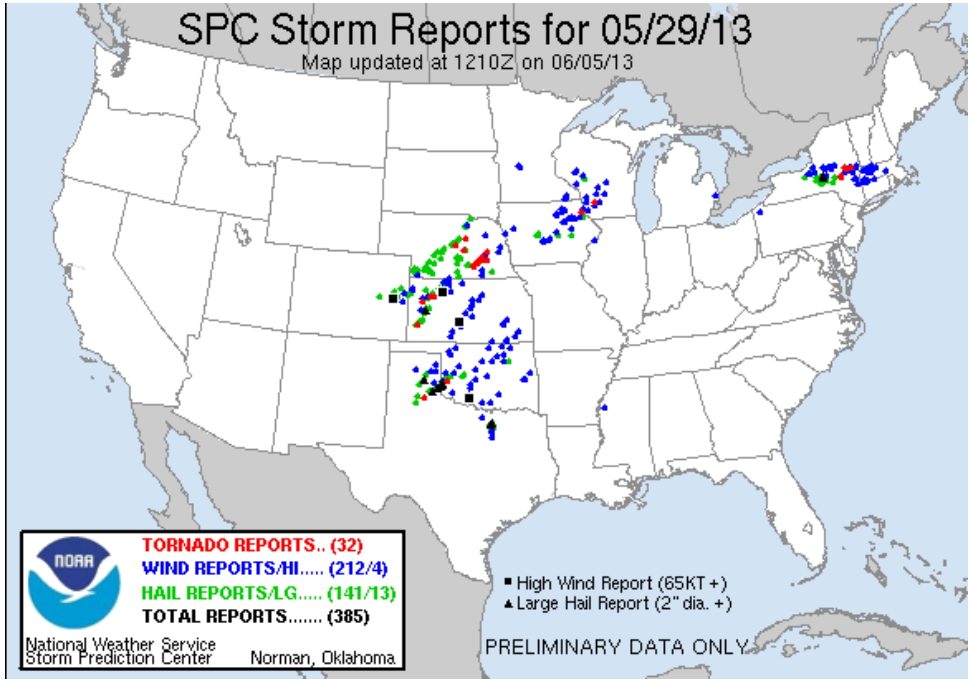
05/28/13

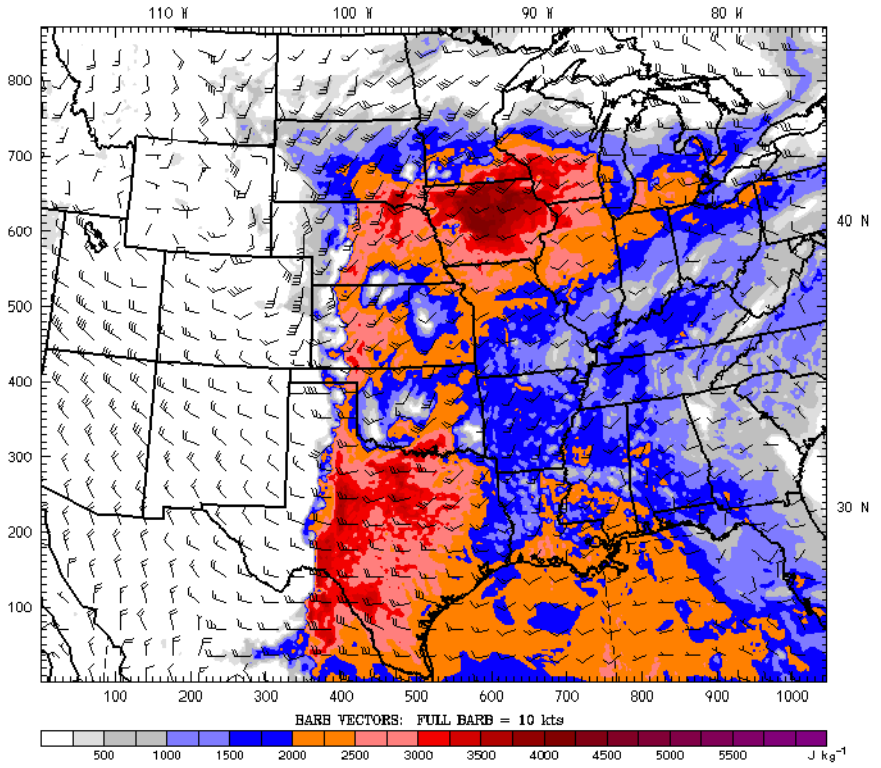


Radar 00:00 UTC



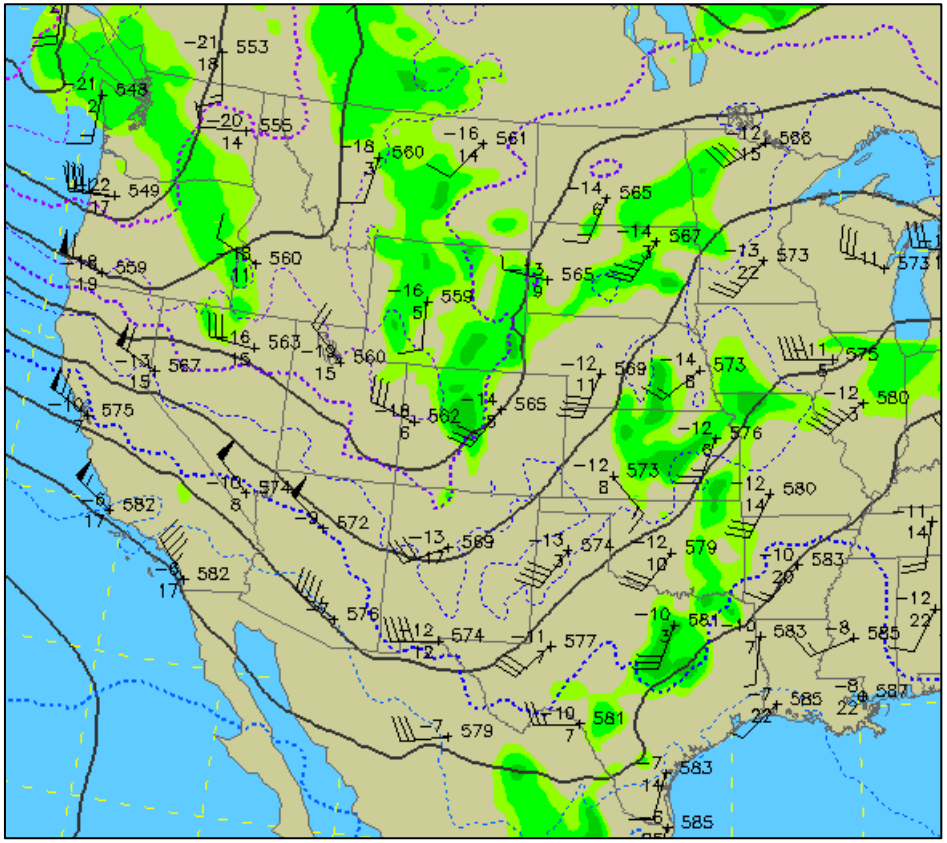
05/29/13 No Fly



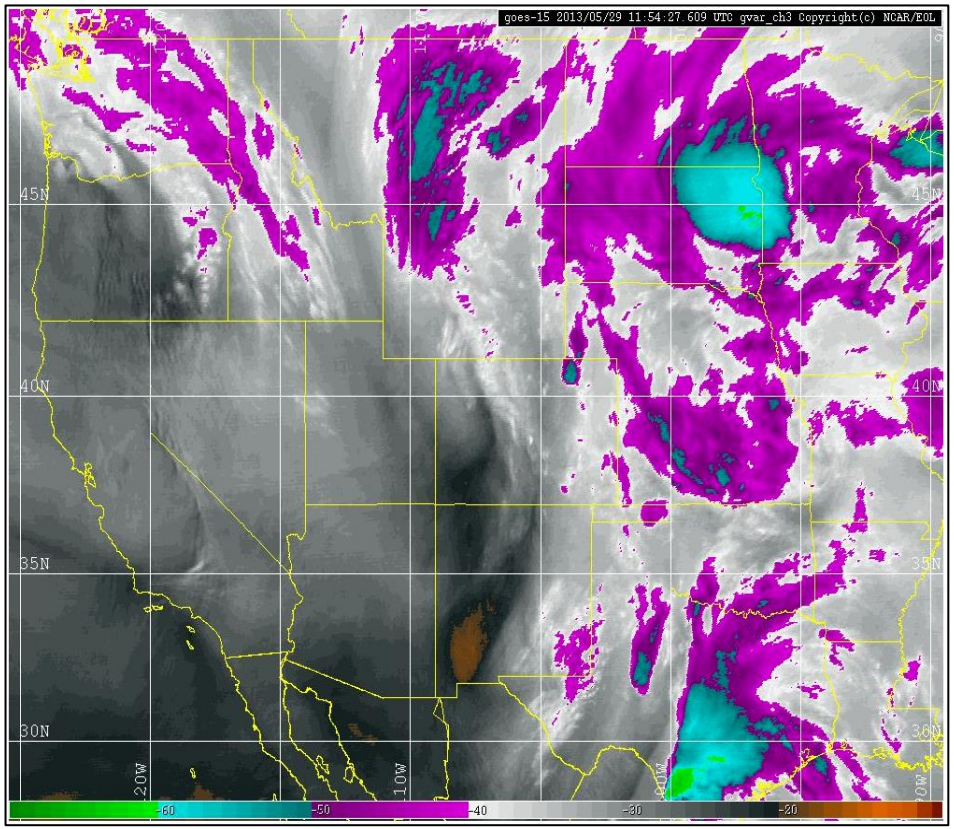


WRF CAPE/Shear: 21 UTC

05/29/13

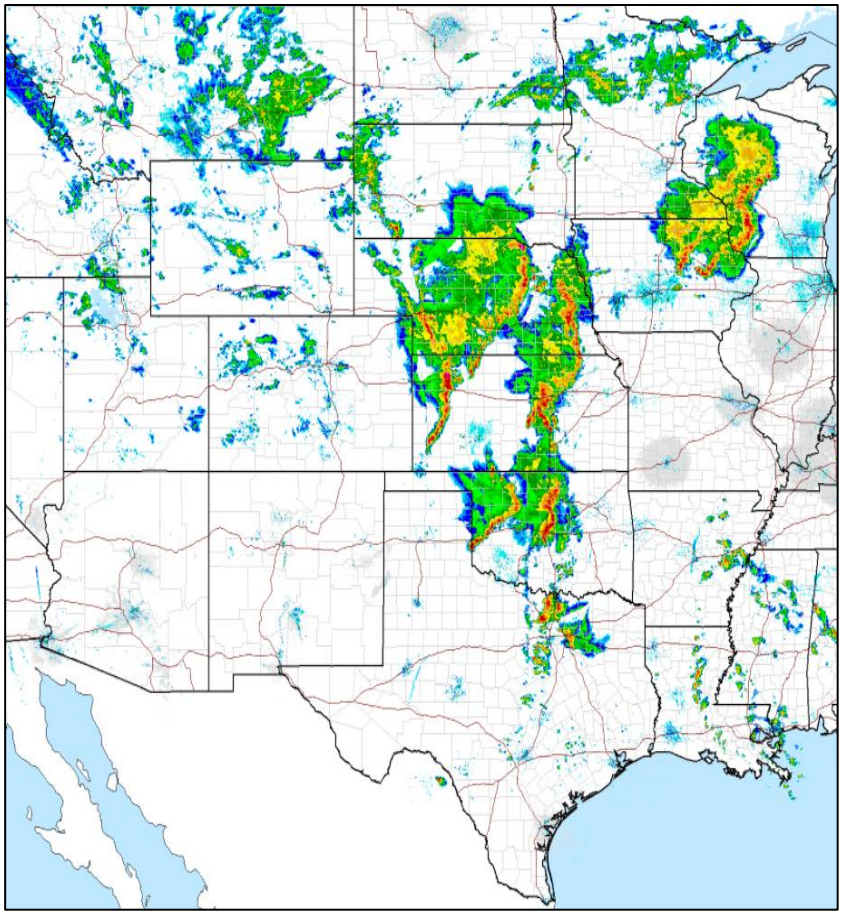


500 hPa 12:00 UTC

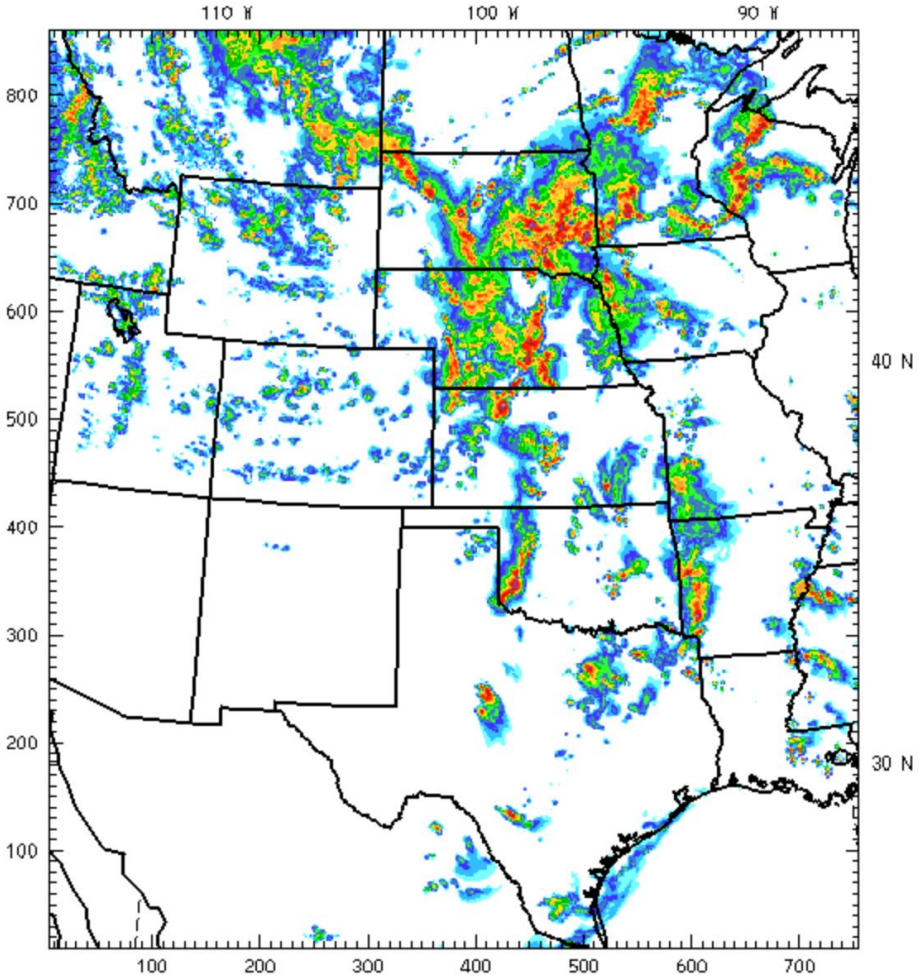


Water Vapor ~12 UTC

05/29/13

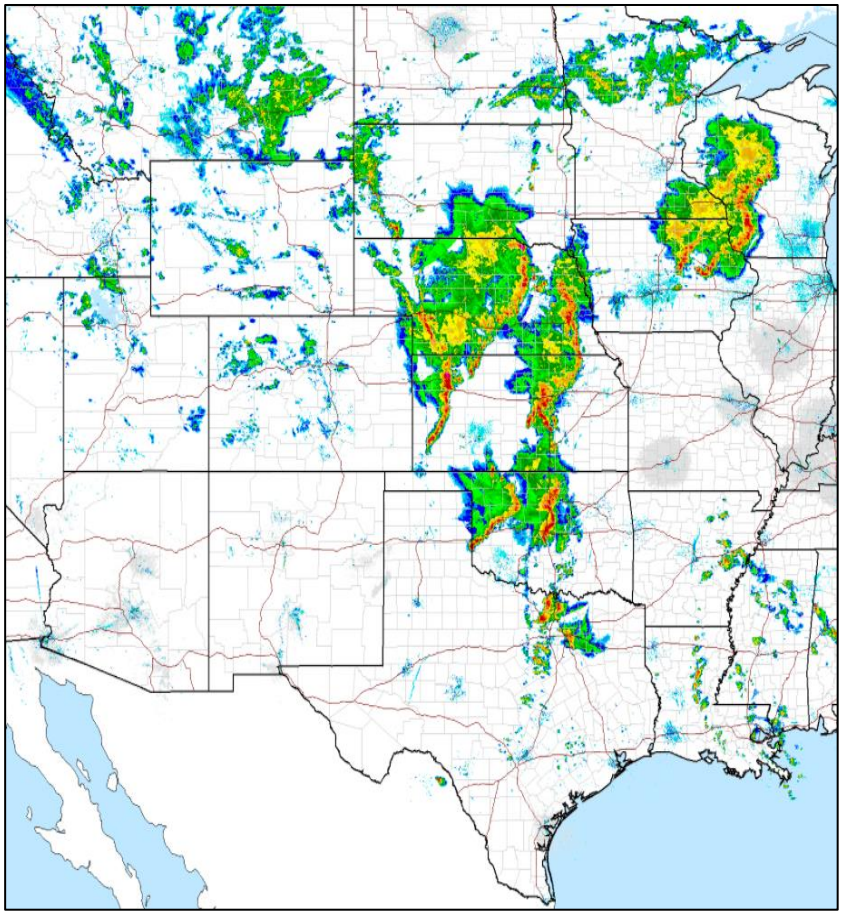


Radar 00:00 UTC

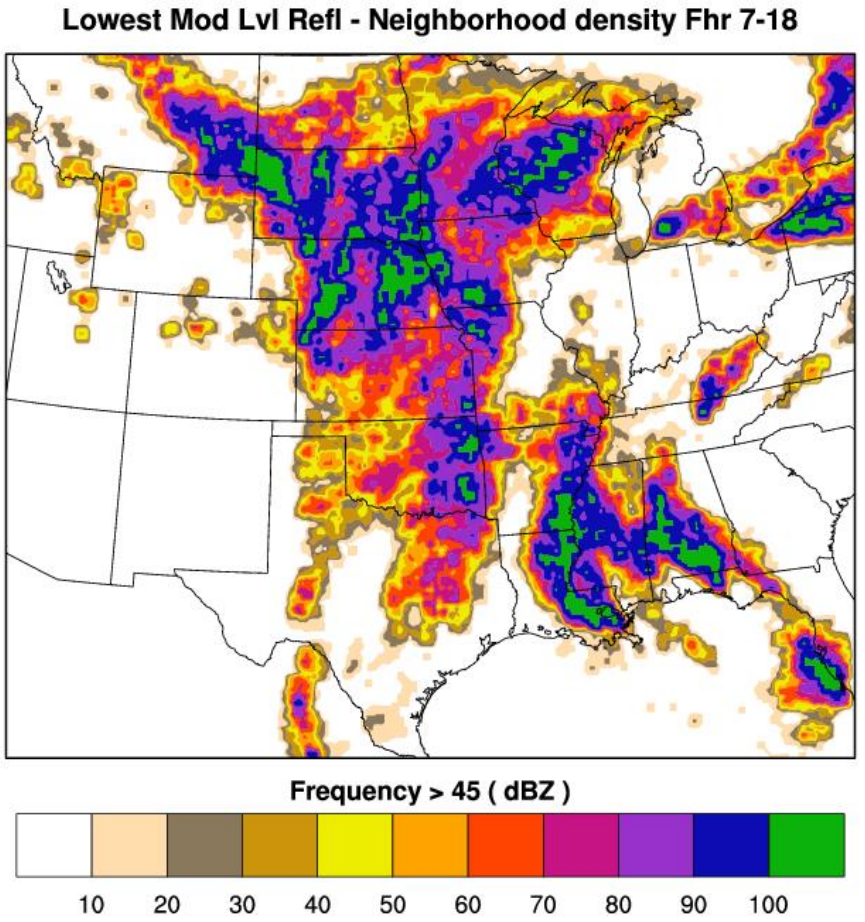


WRF-DART 12 h Forecast

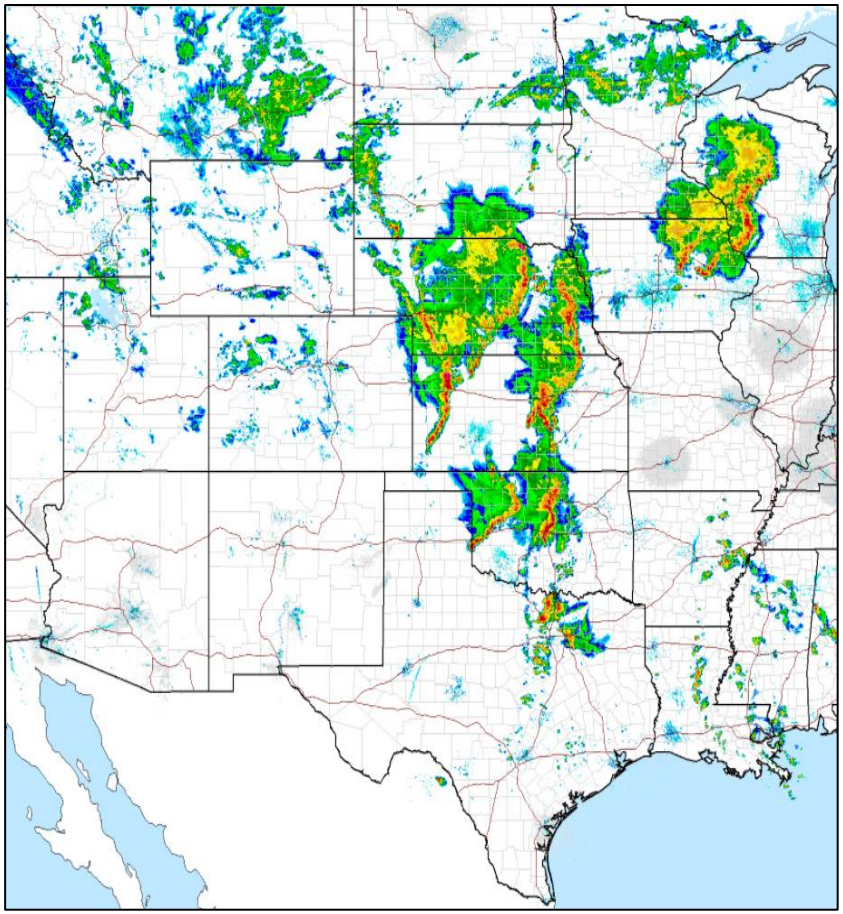
05/29/13



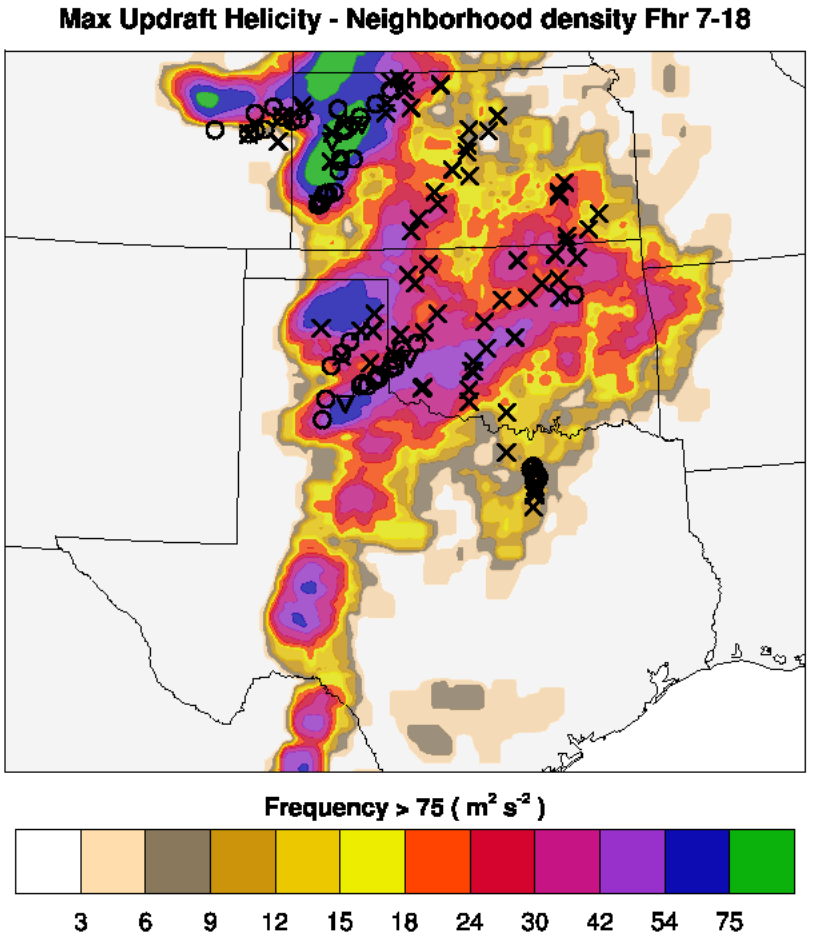
Radar 00:00 UTC



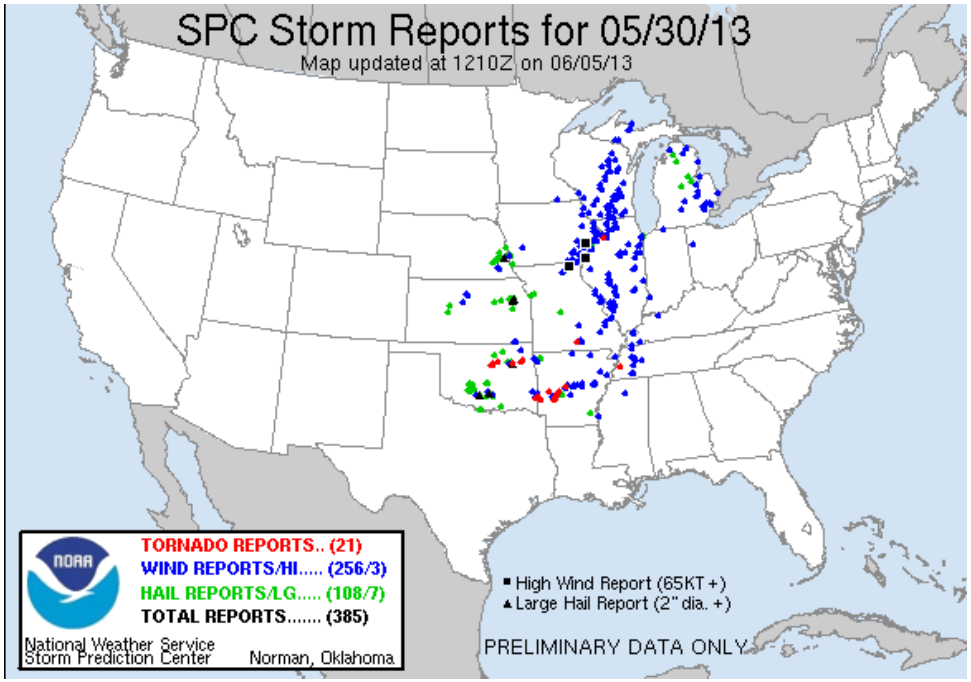
05/29/13

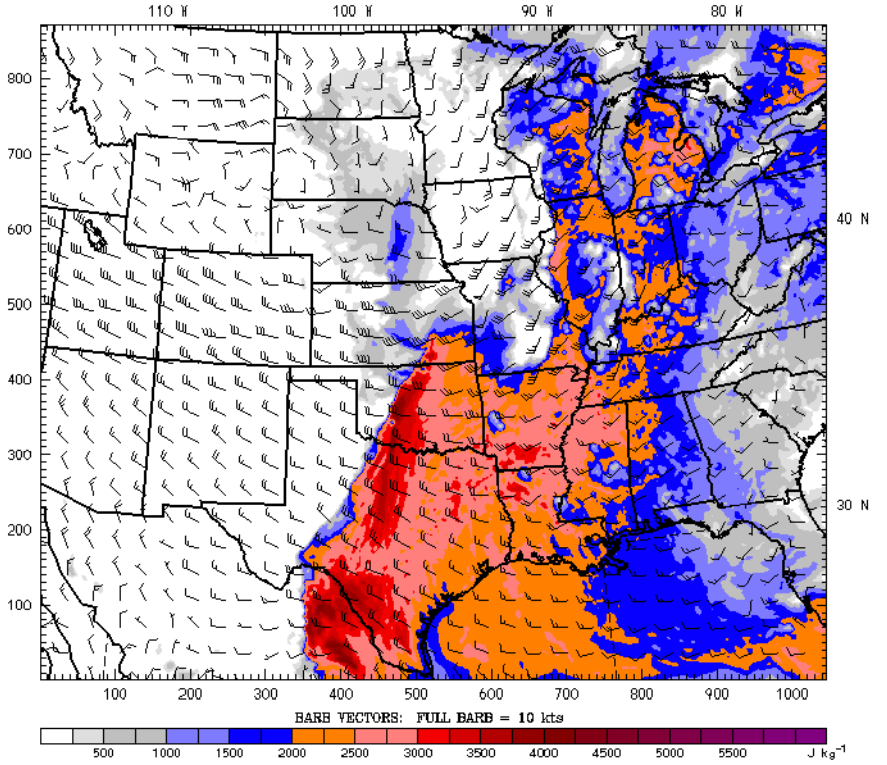


Radar 00:00 UTC



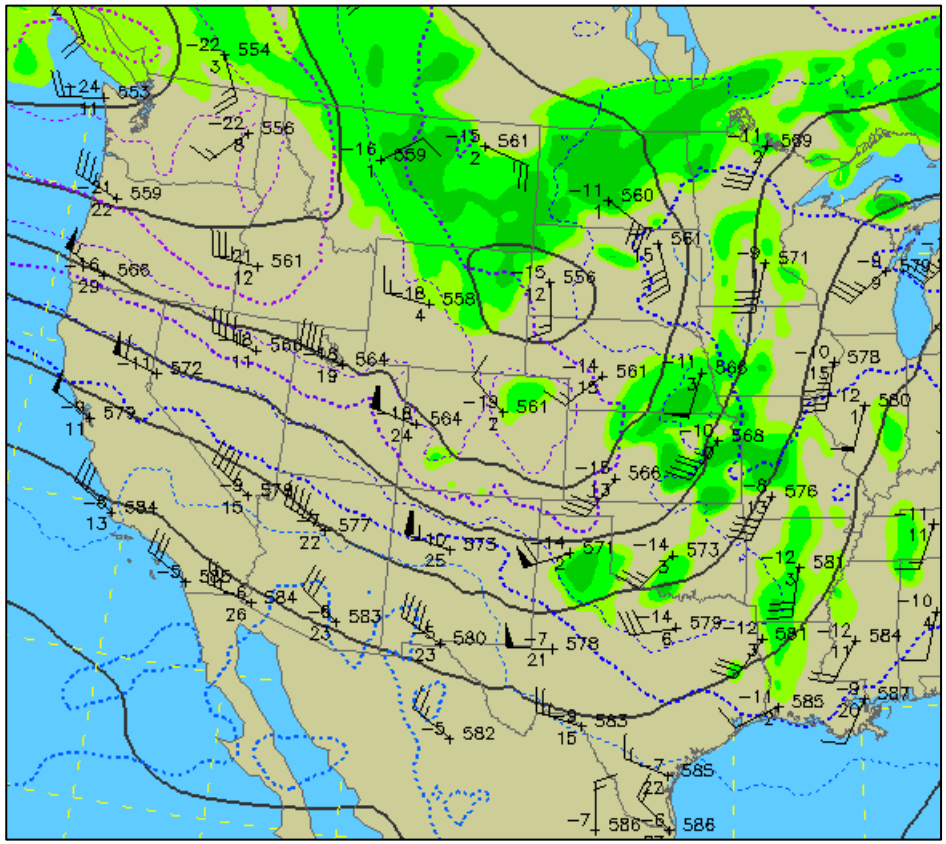
05/30/13



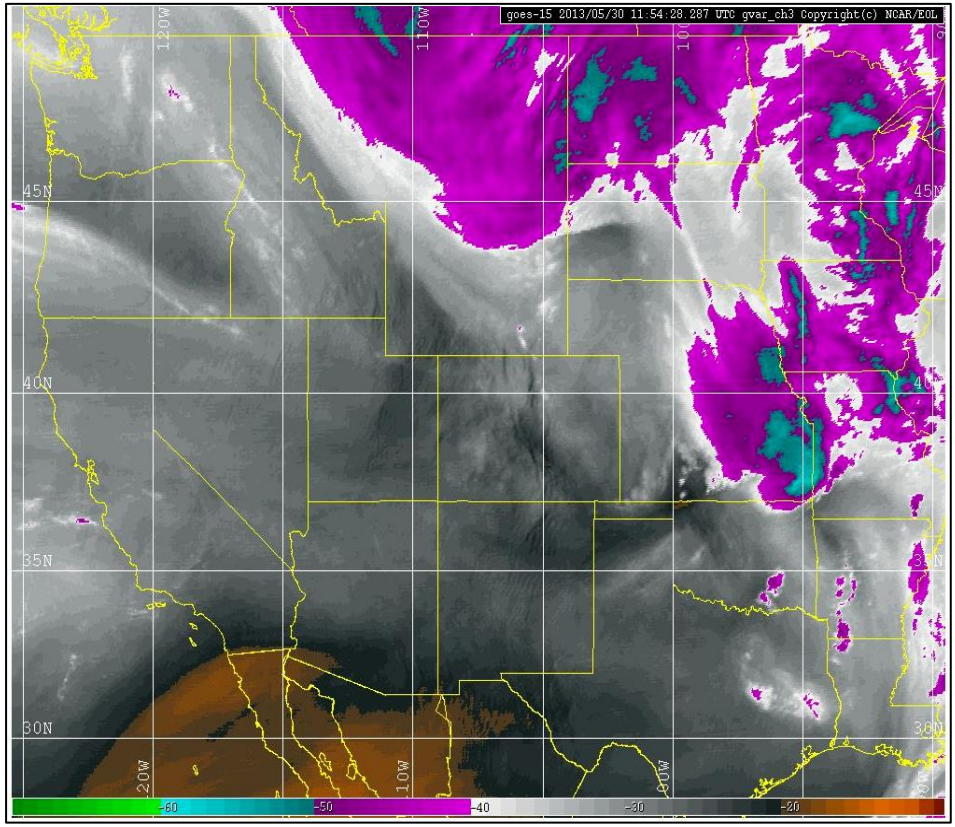


WRF CAPE/Shear: 21 UTC

05/30/13

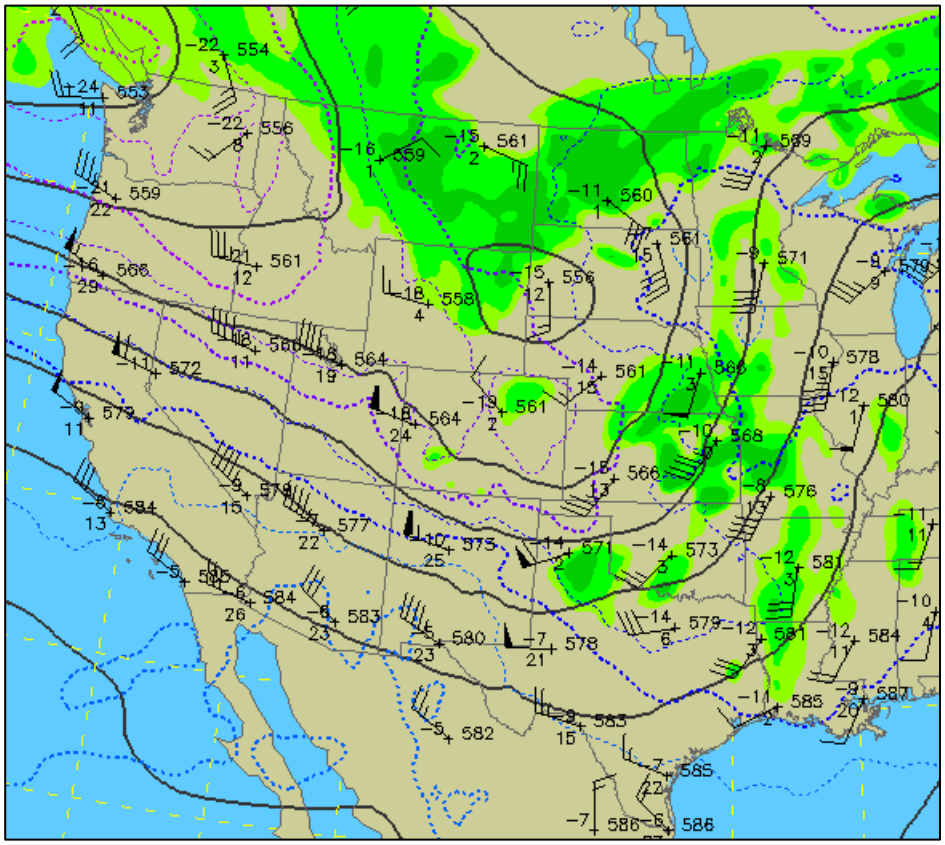


500 hPa 12:00 UTC

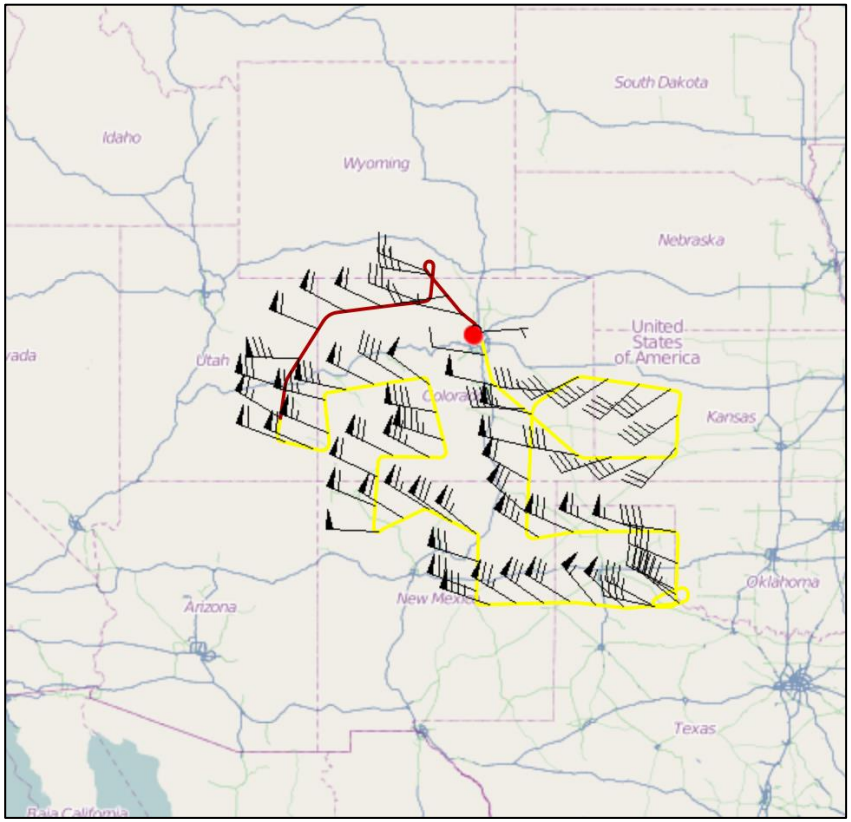


Water Vapor ~12 UTC

05/30/13

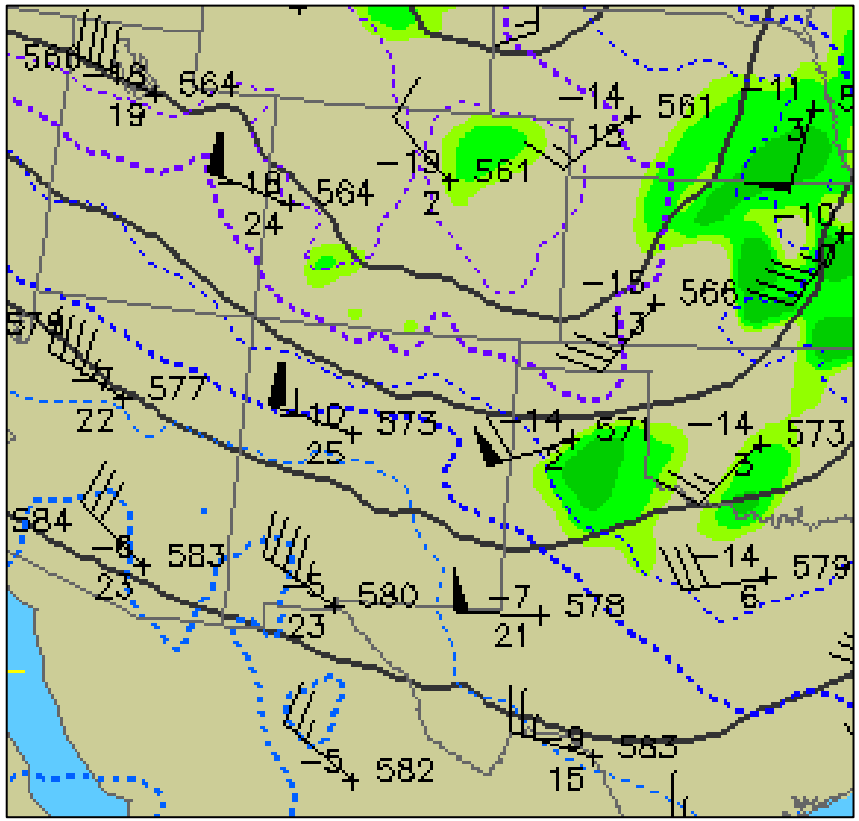


500 hPa 12:00 UTC

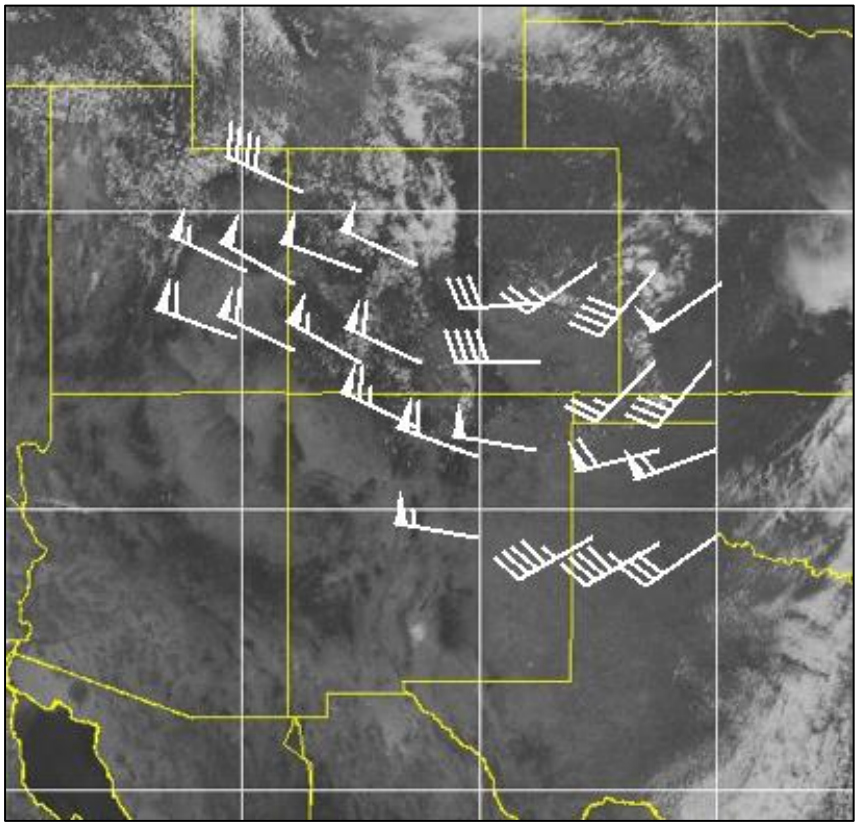


Flight Track Winds ~200 hPa

05/30/13

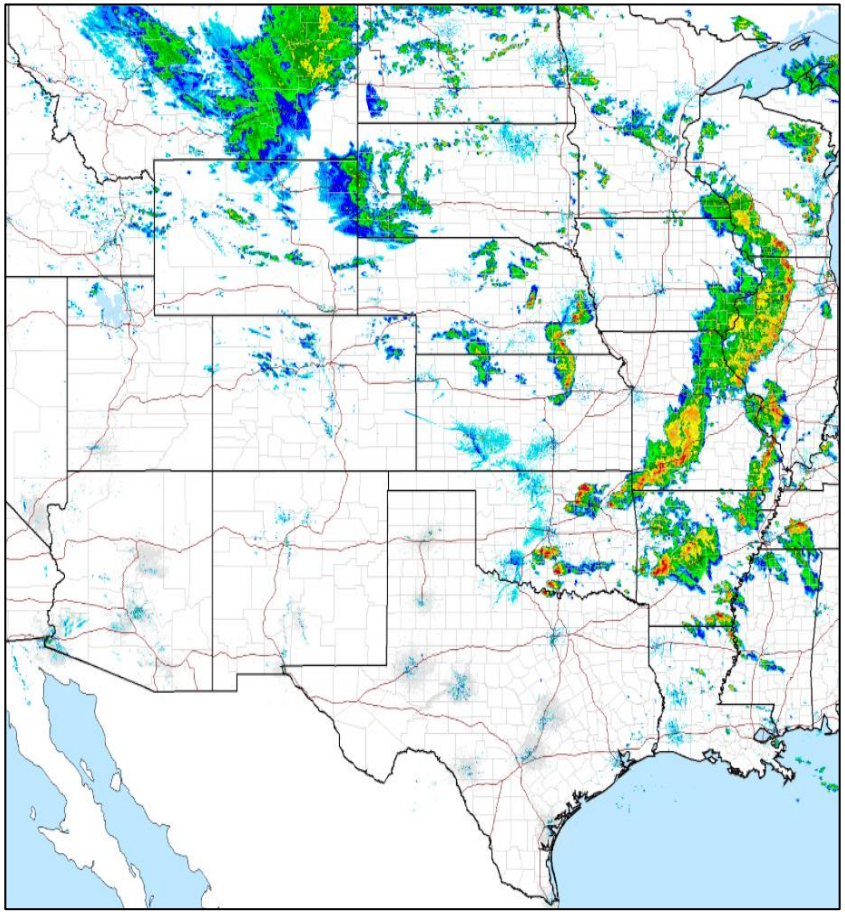


500 hPa 12:00 UTC

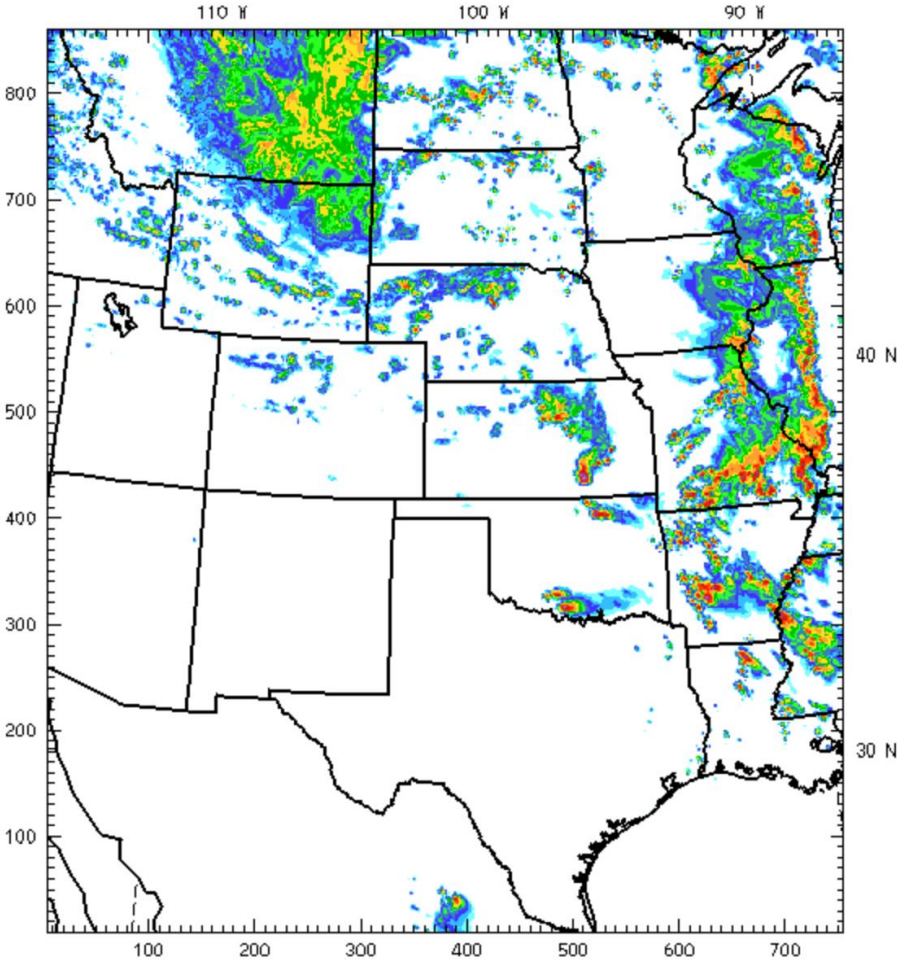


500 hPa Dropsonde Winds

05/30/13

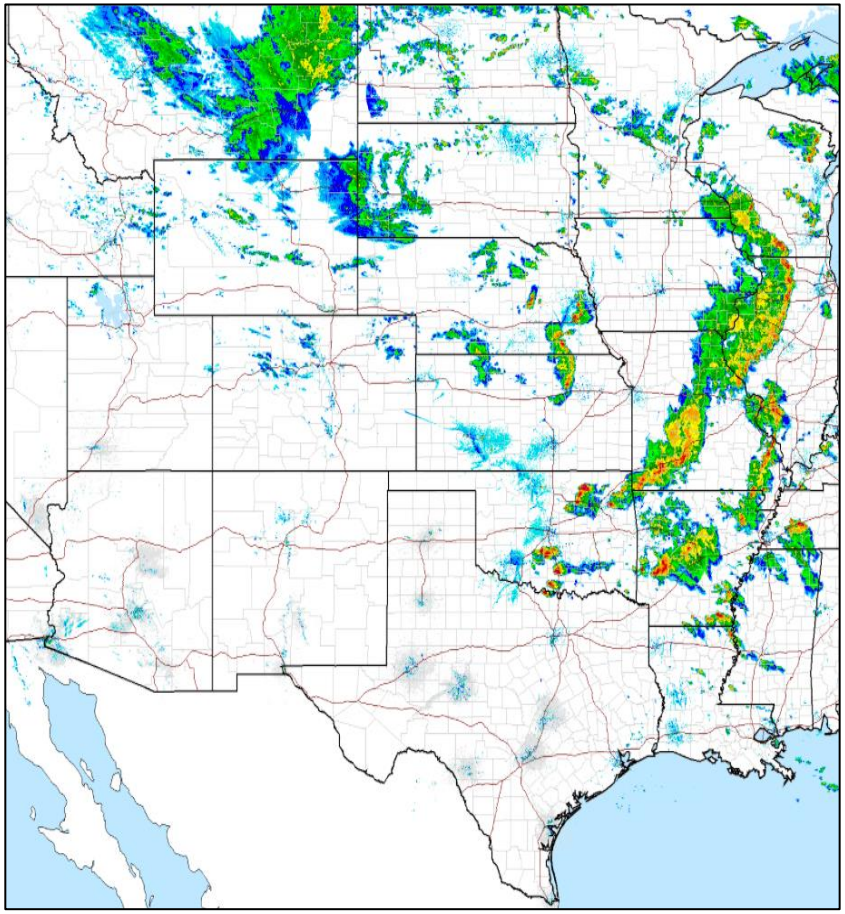


Radar 00:00 UTC

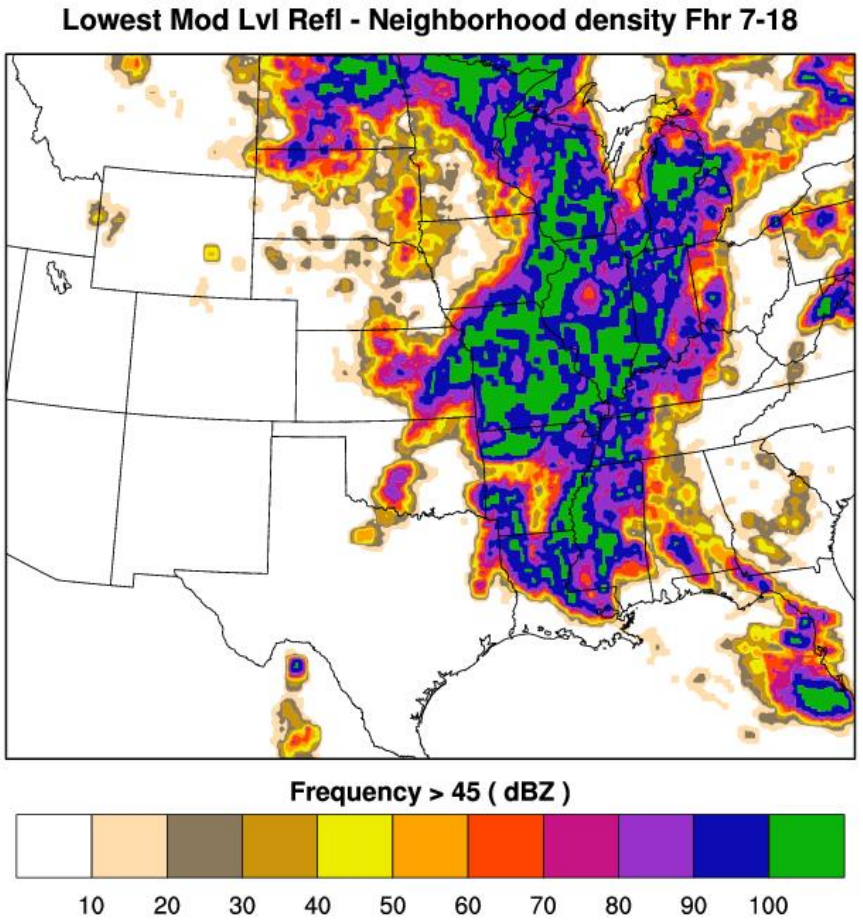


WRF-DART 12 h Forecast

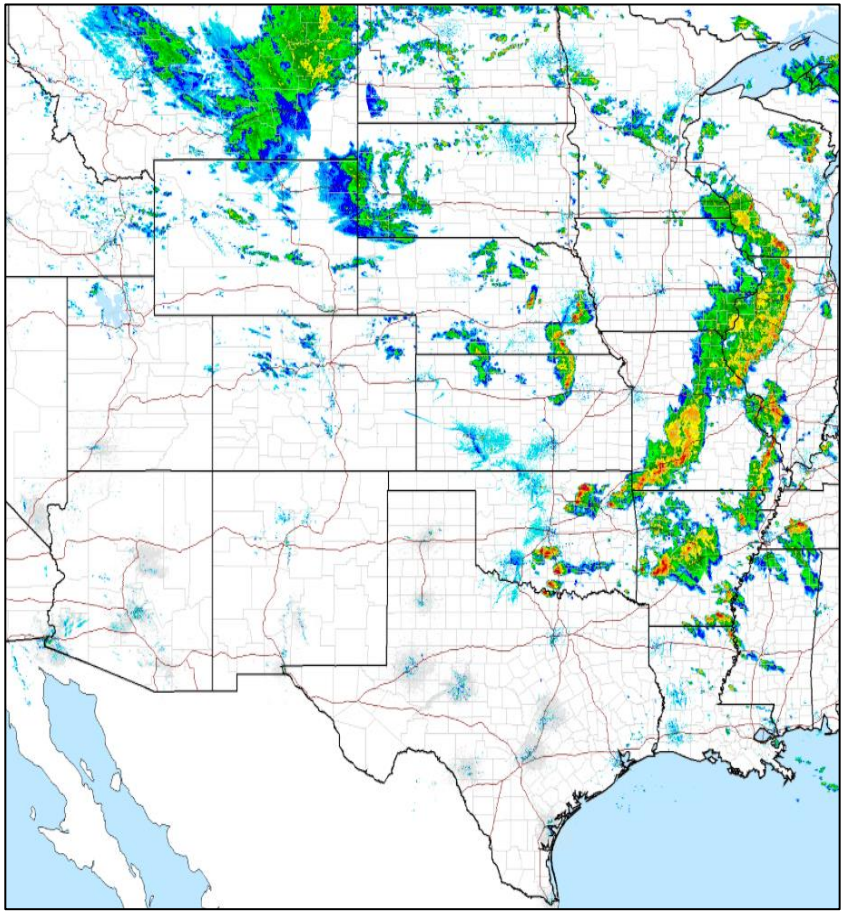
05/30/13



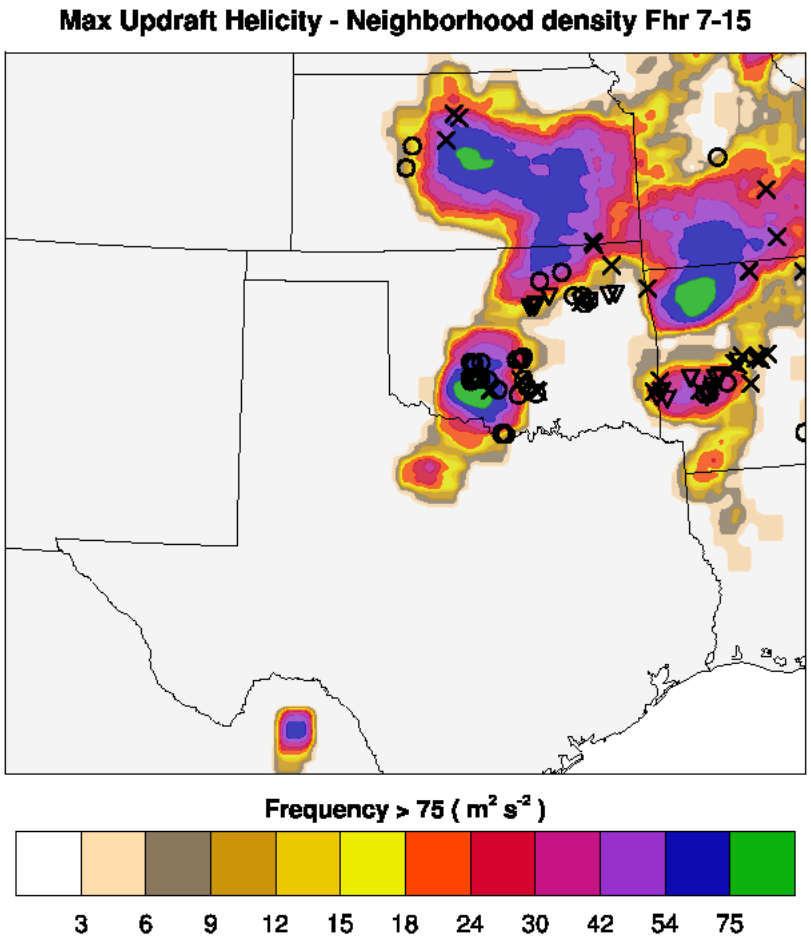
Radar 00:00 UTC



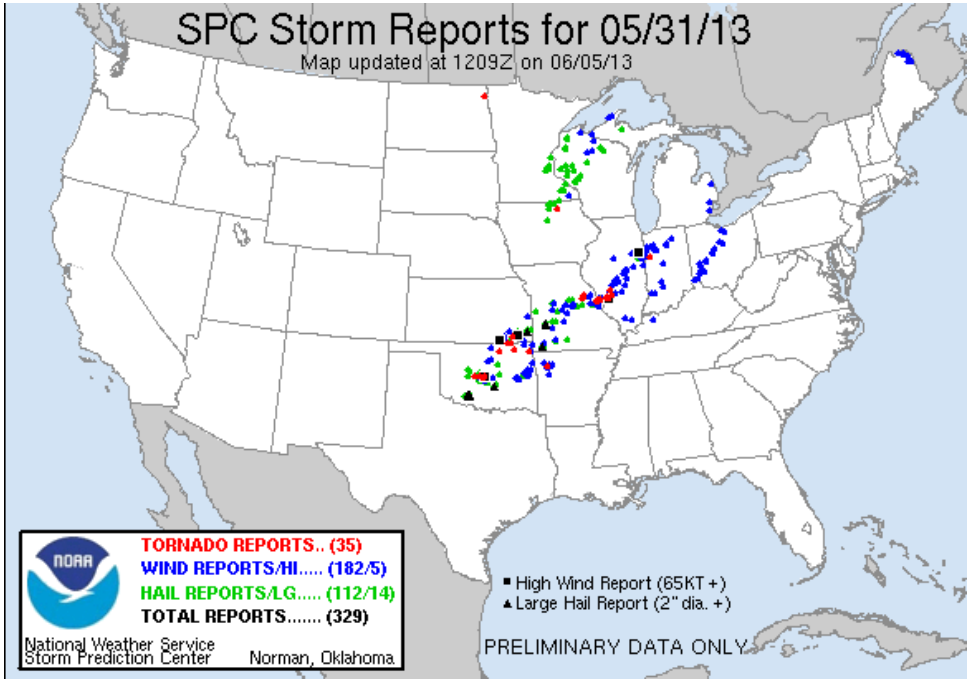
05/30/13

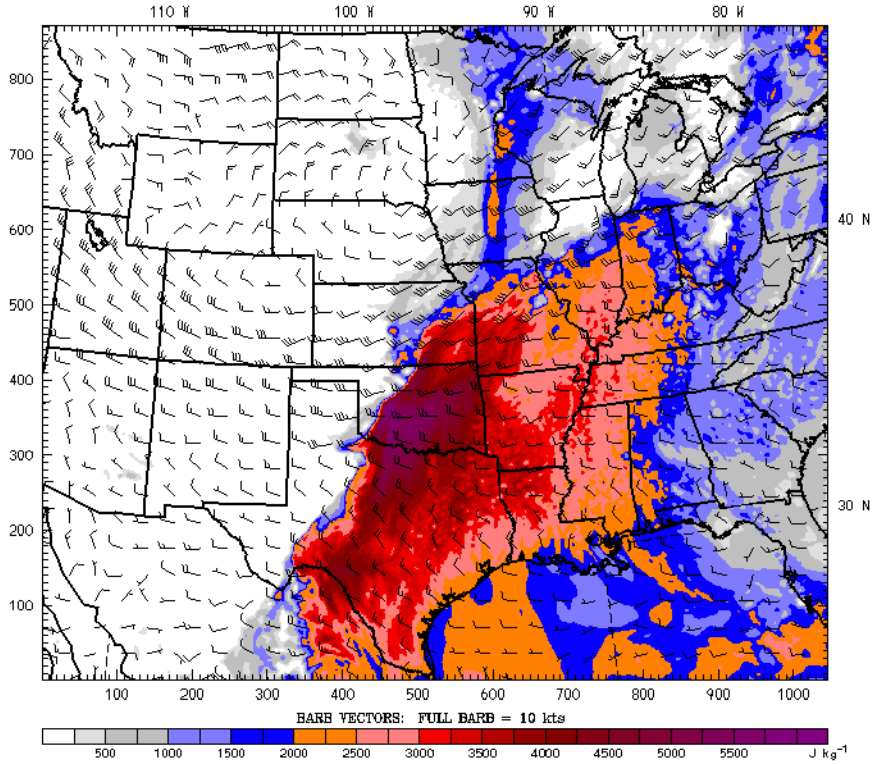


Radar 00:00 UTC



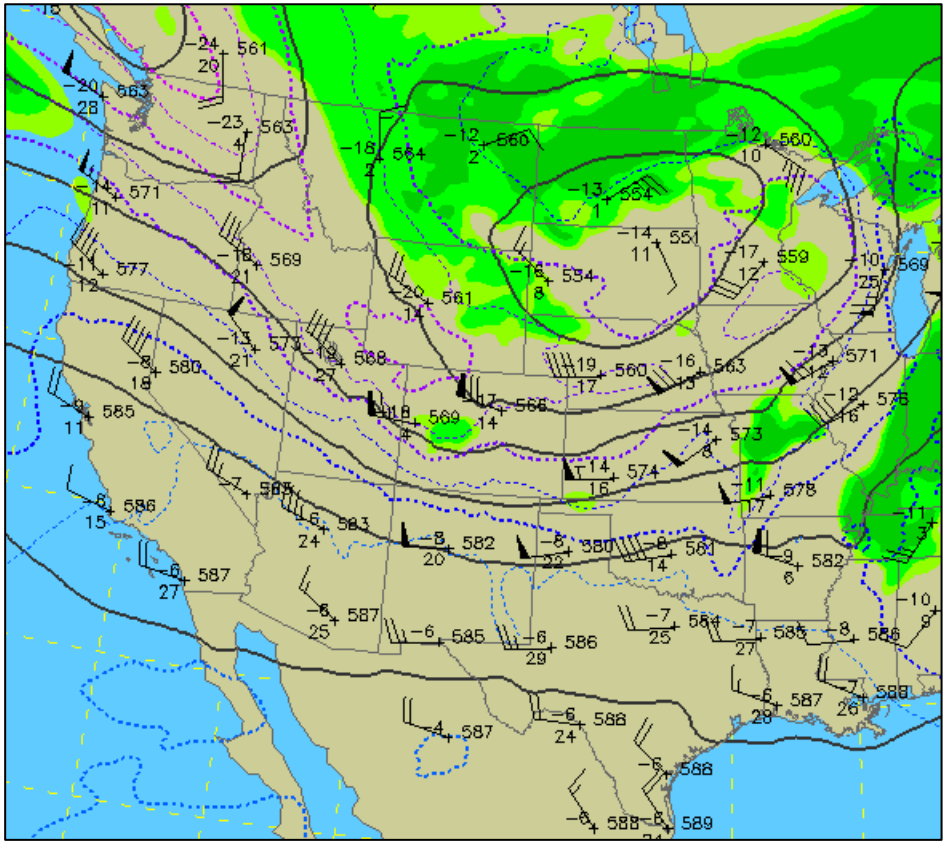
05/31/13



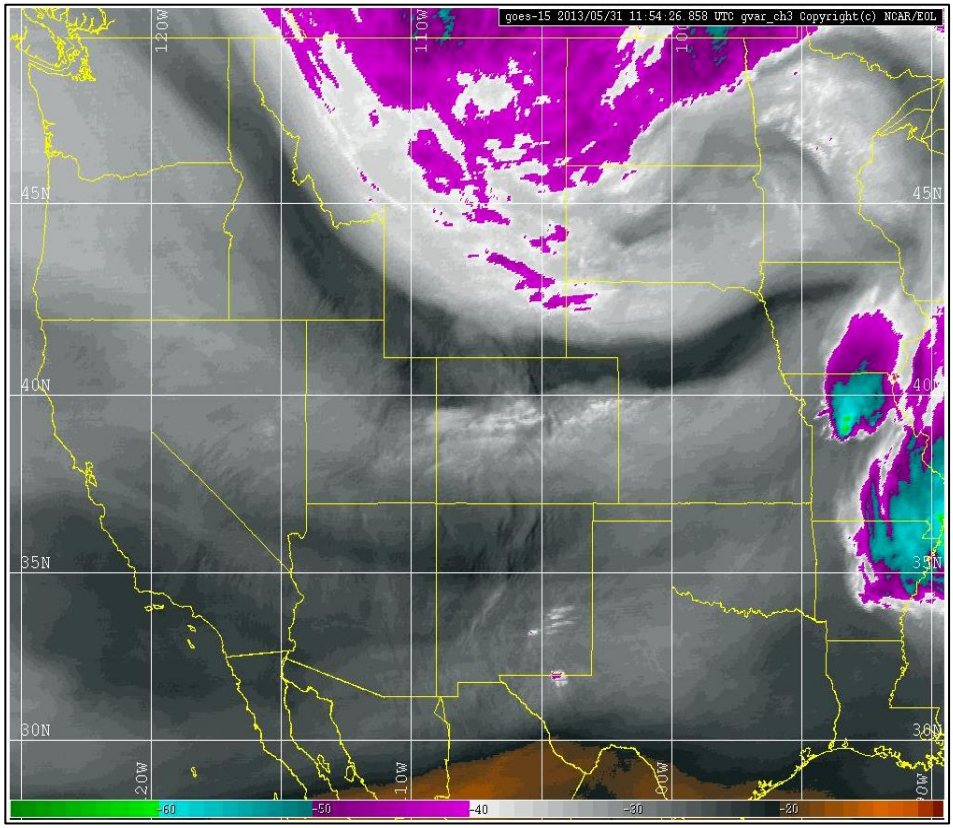


WRF CAPE/Shear: 21 UTC

05/31/13

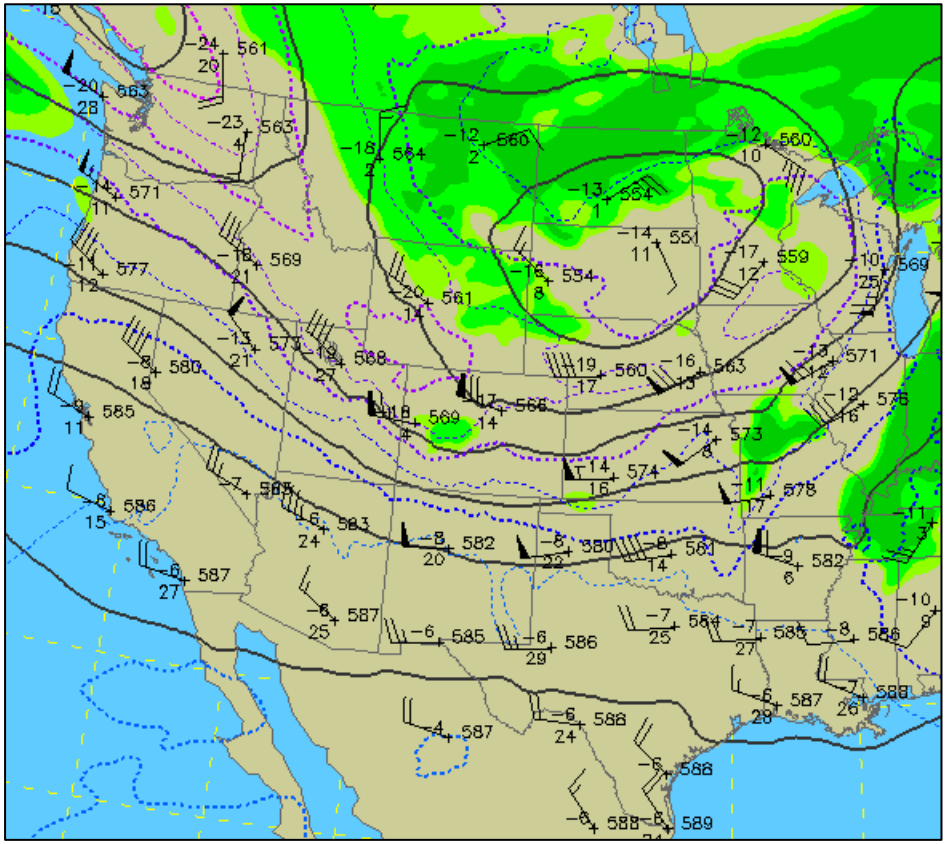


500 hPa 12:00 UTC

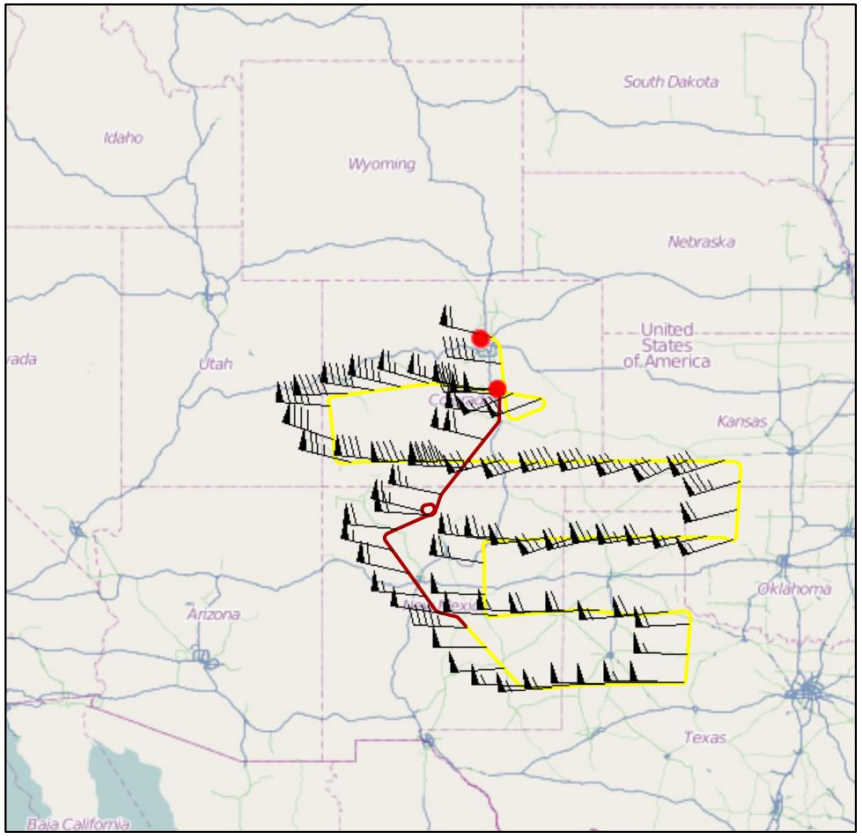


Water Vapor ~12 UTC

05/31/13

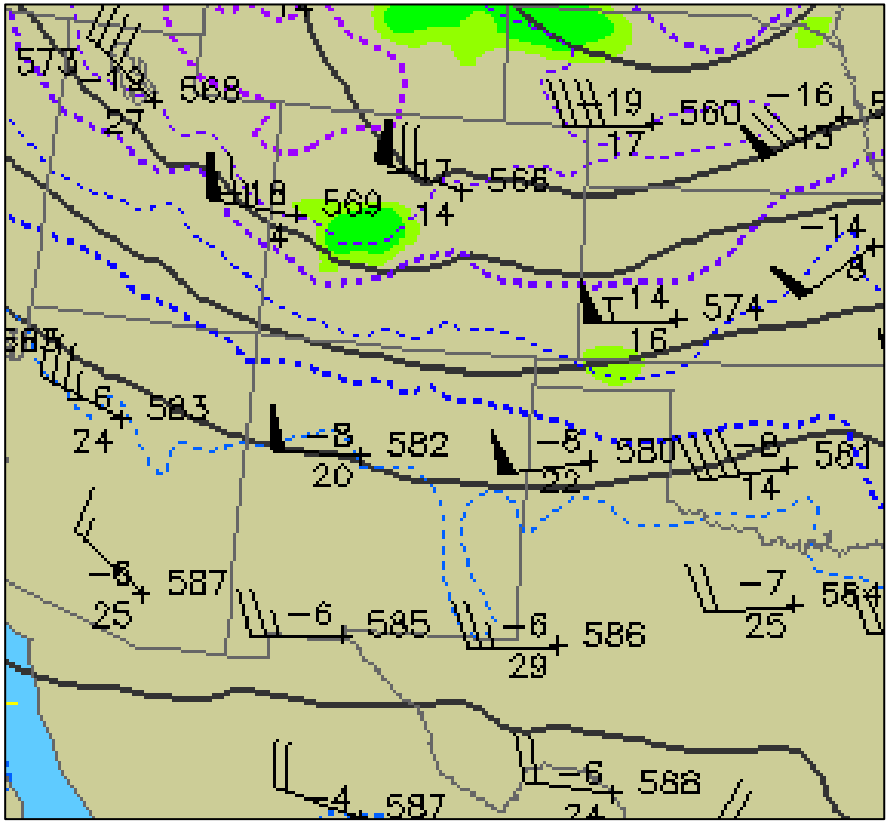


500 hPa 12:00 UTC

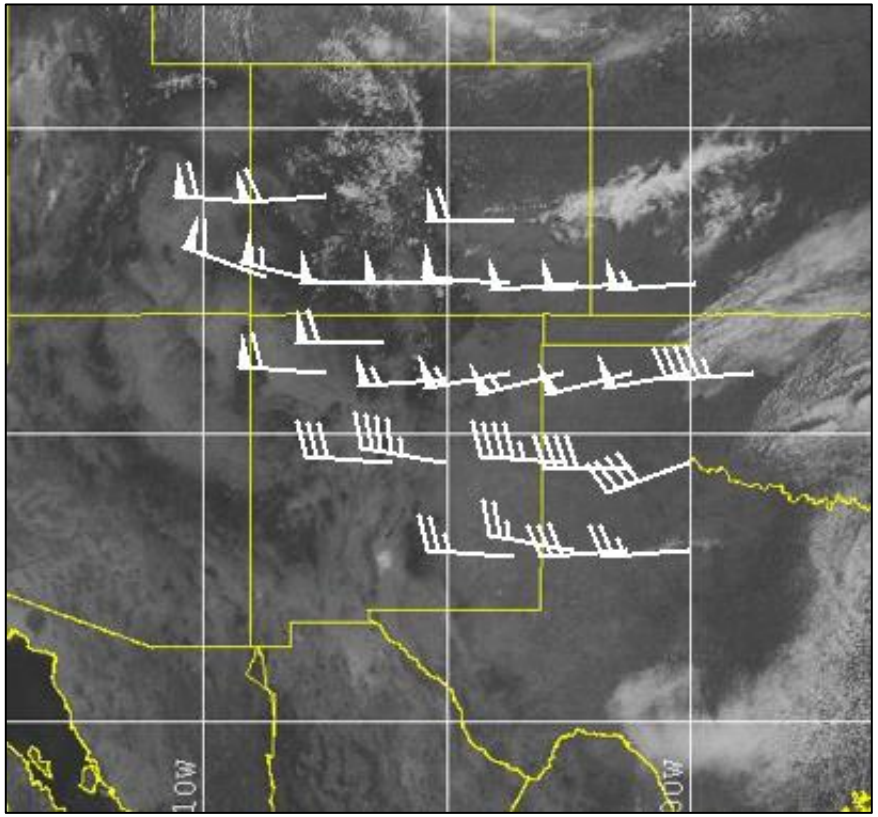


Flight Track Winds ~200 hPa

05/31/13

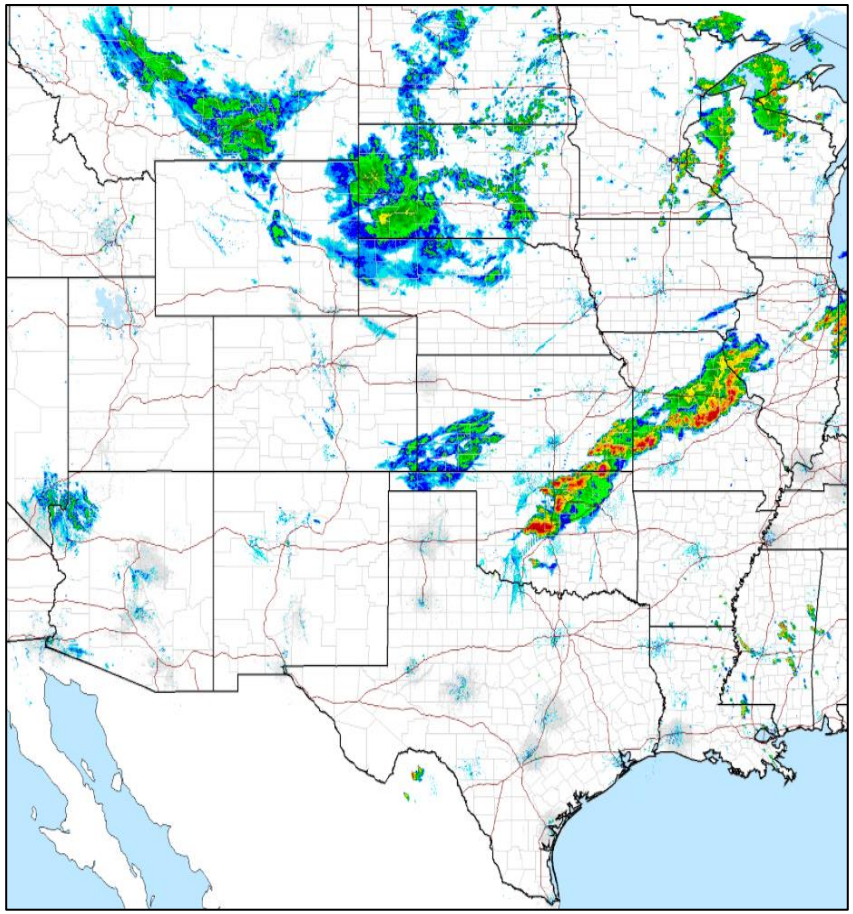


500 hPa 12:00 UTC

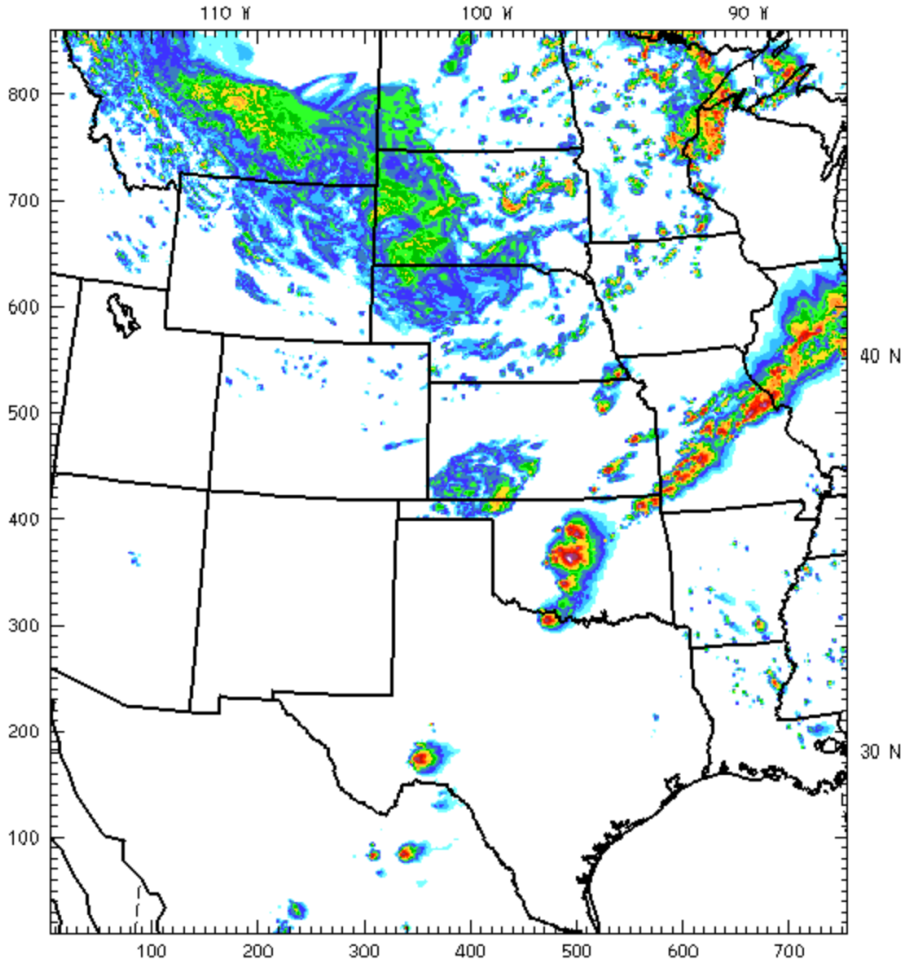


500 hPa Dropsonde Winds

05/31/13

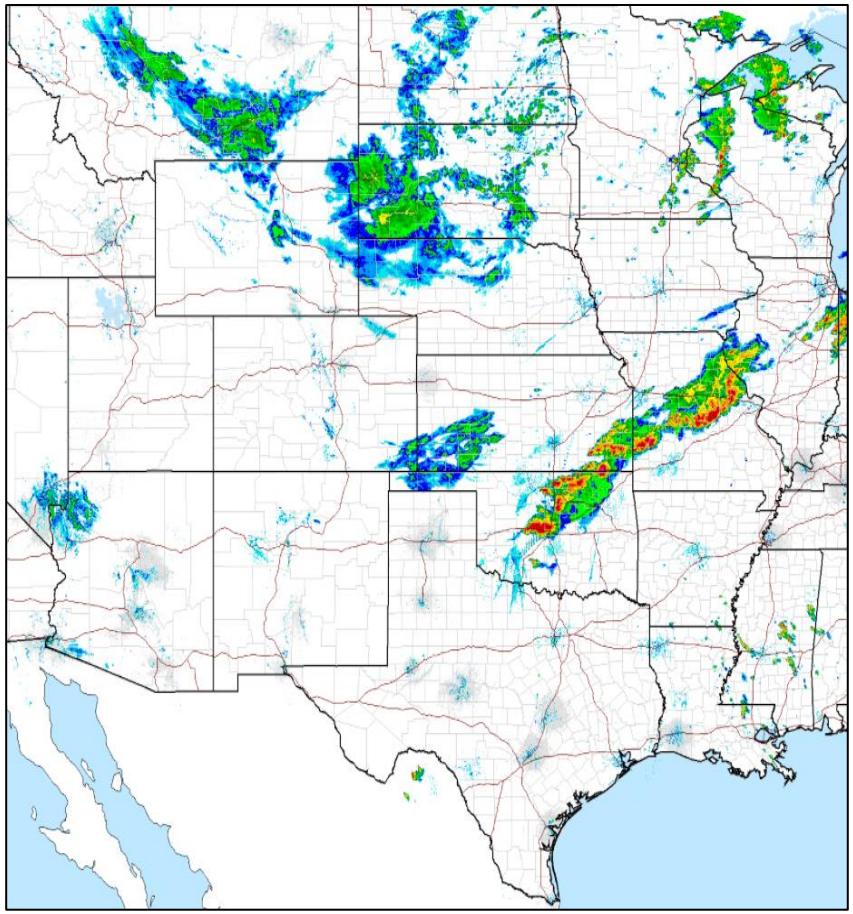


Radar 00:00 UTC

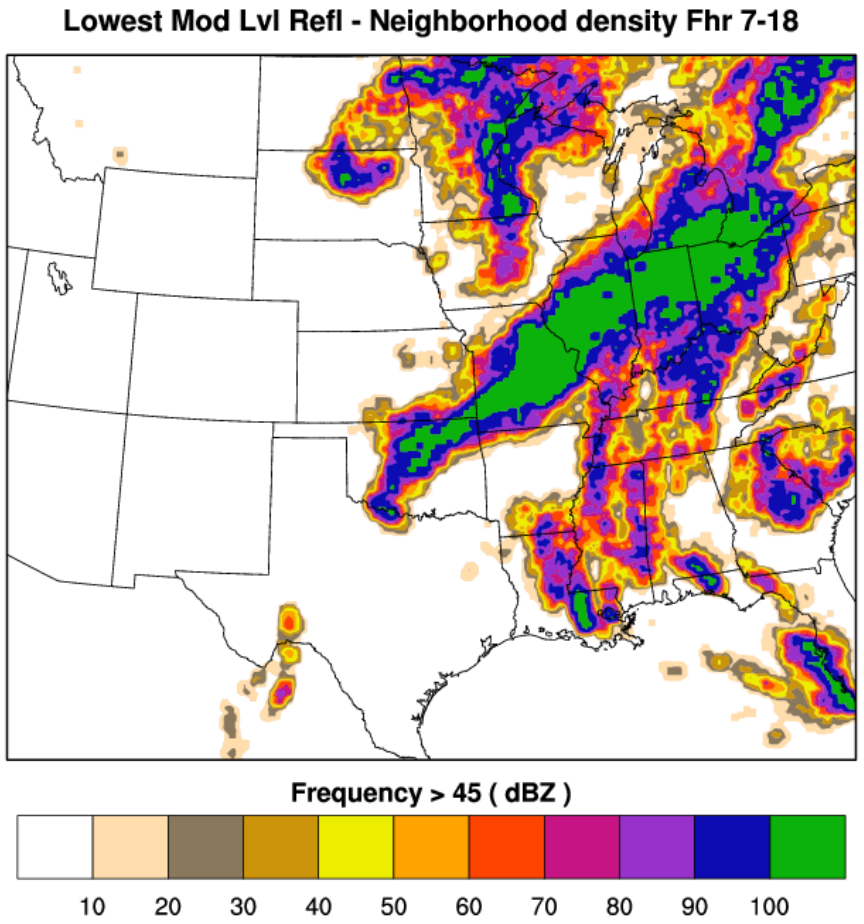


WRF-DART 12 h Forecast

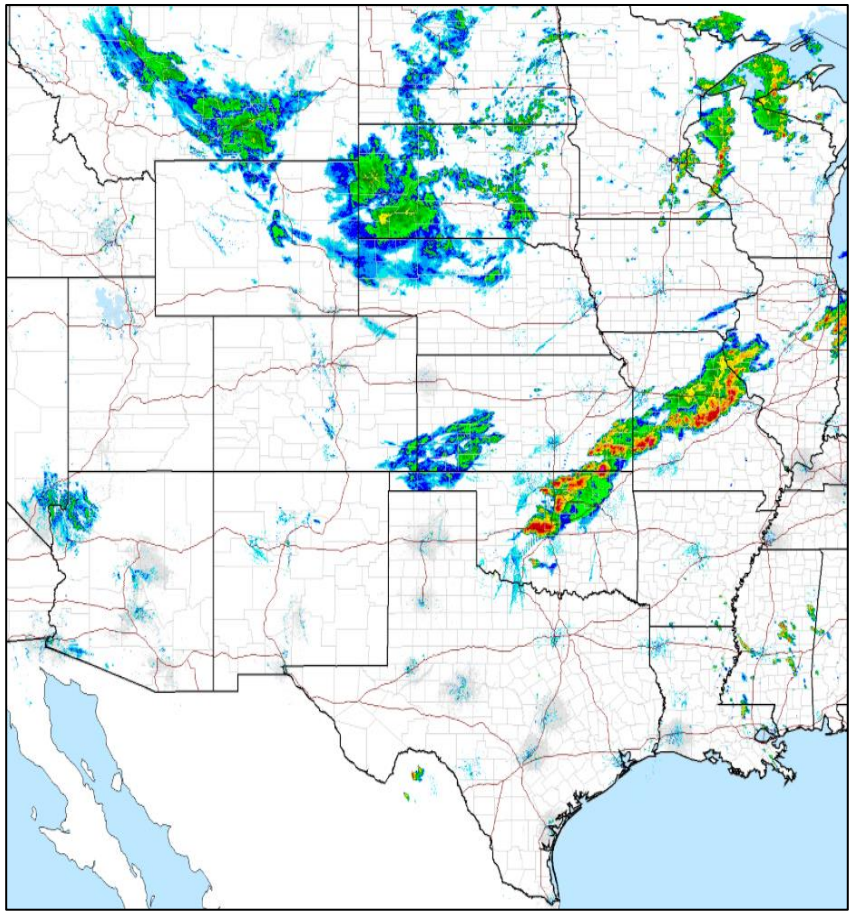
05/31/13



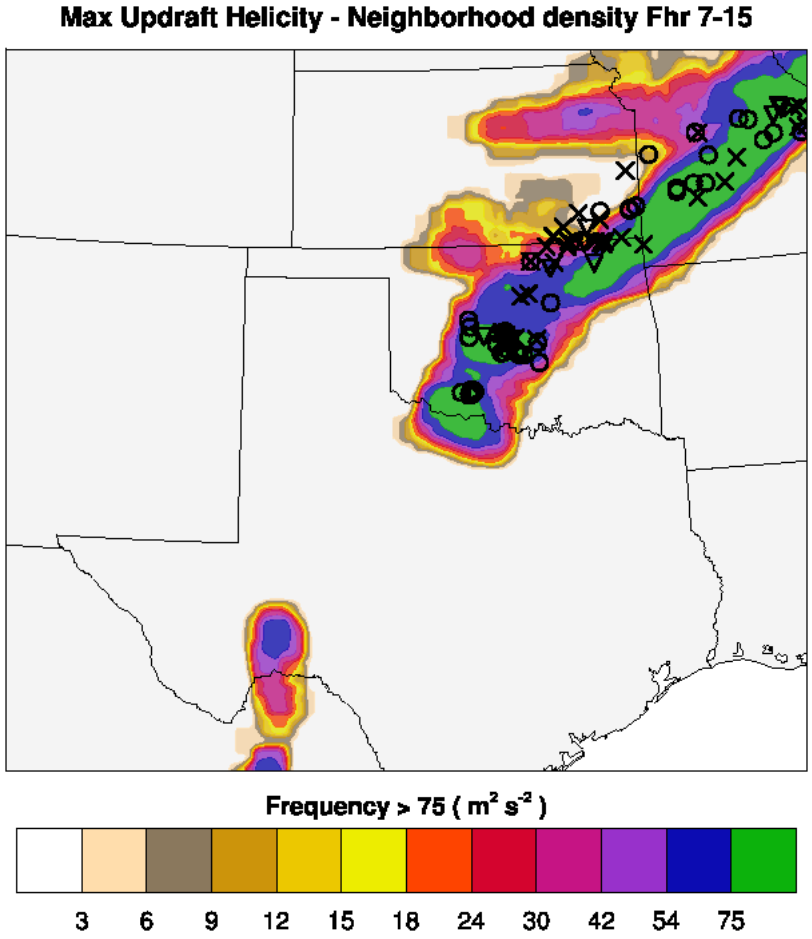
Radar 00:00 UTC



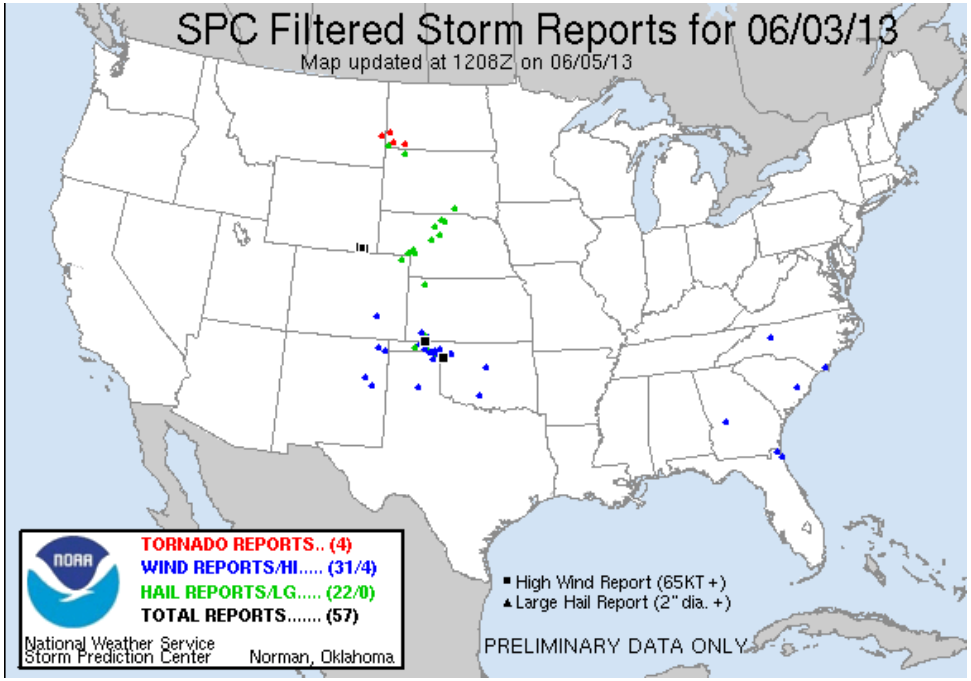
05/31/13

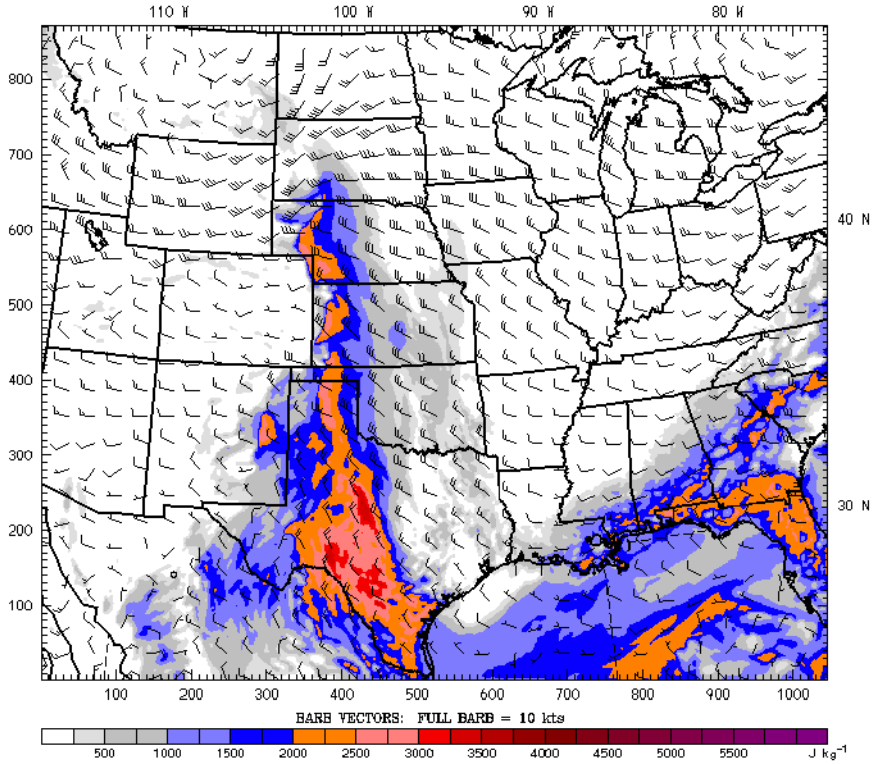


Radar 00:00 UTC



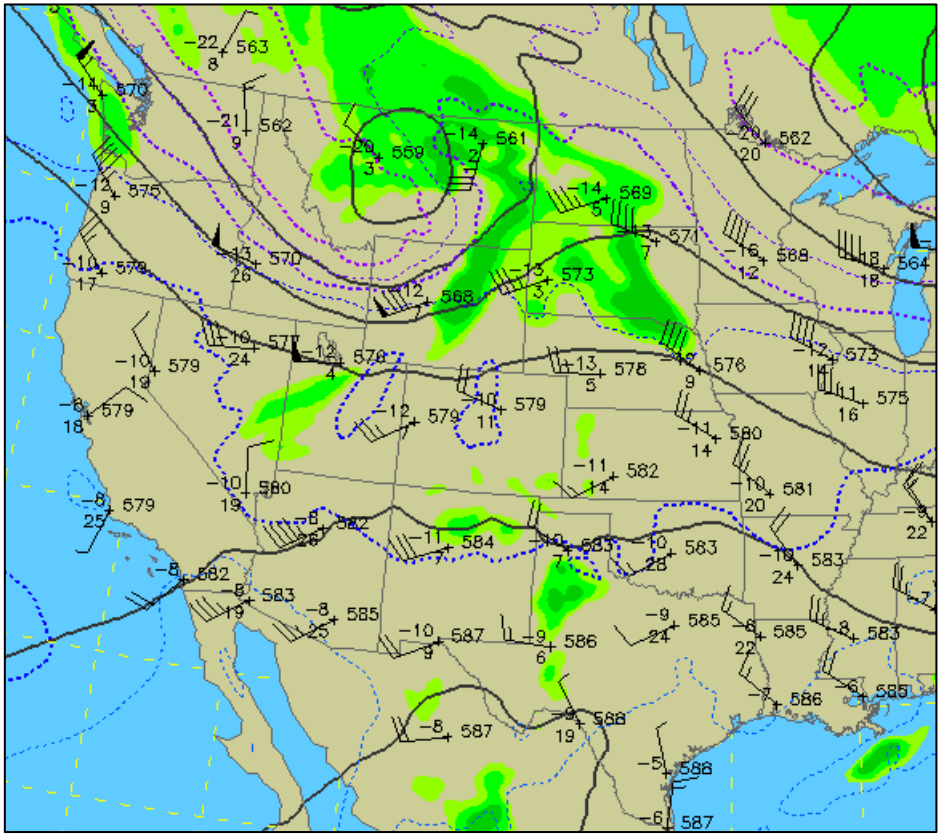
06/03/13



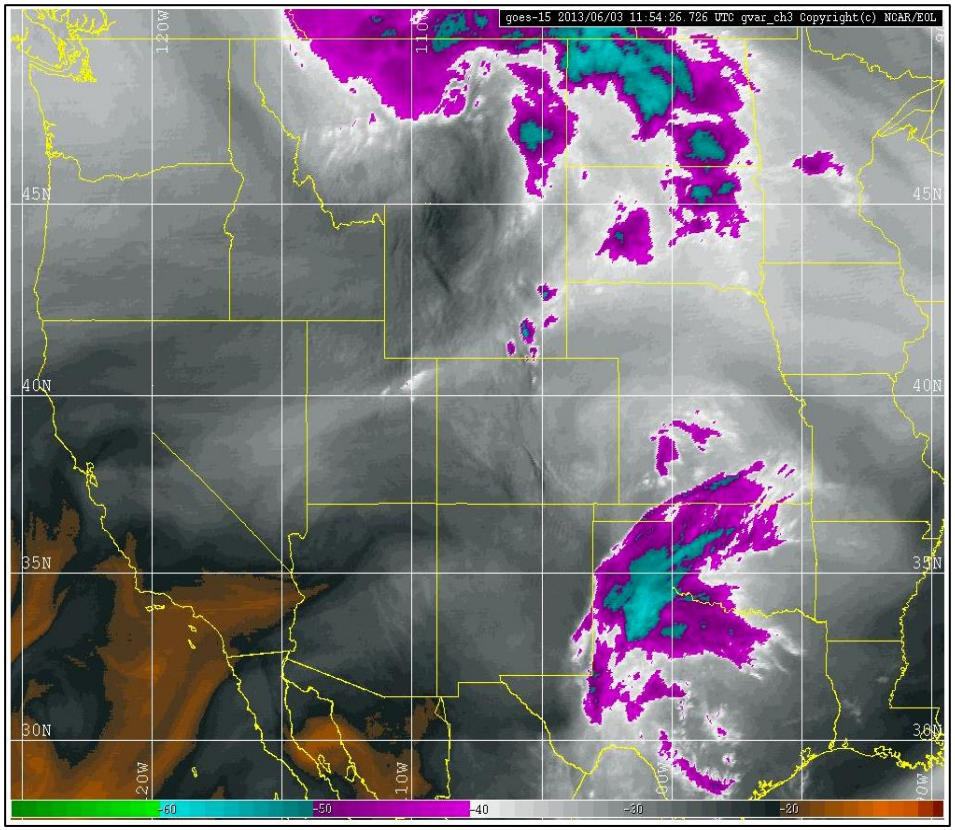


WRF CAPE/Shear: 21 UTC

06/03/13

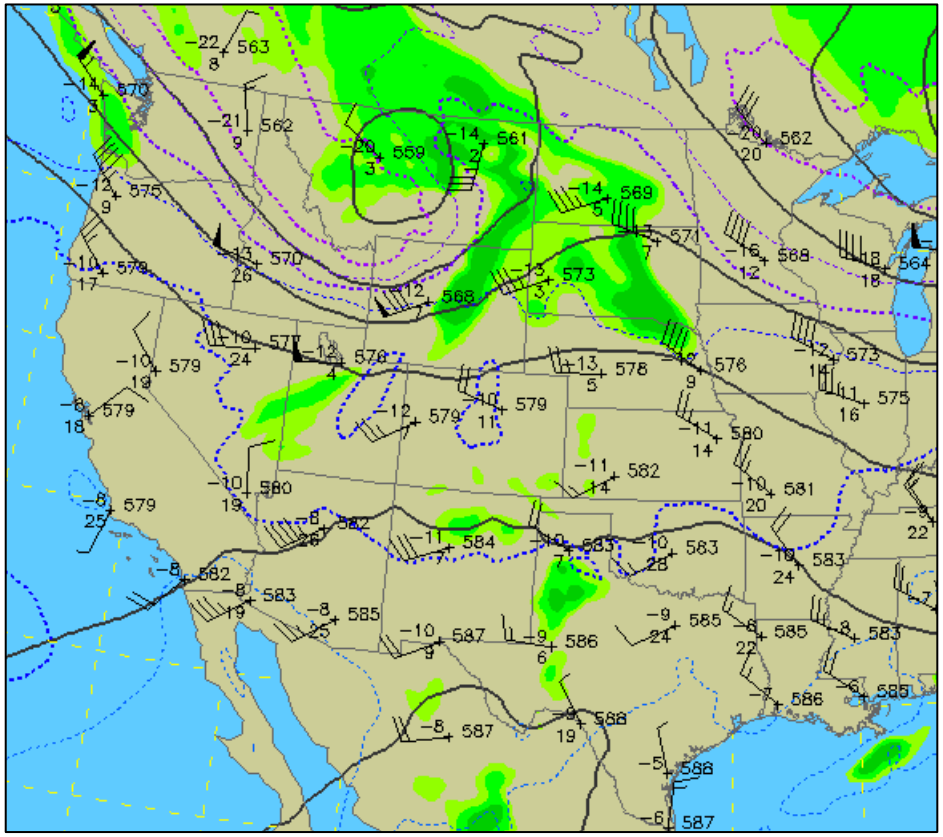


500 hPa 12:00 UTC

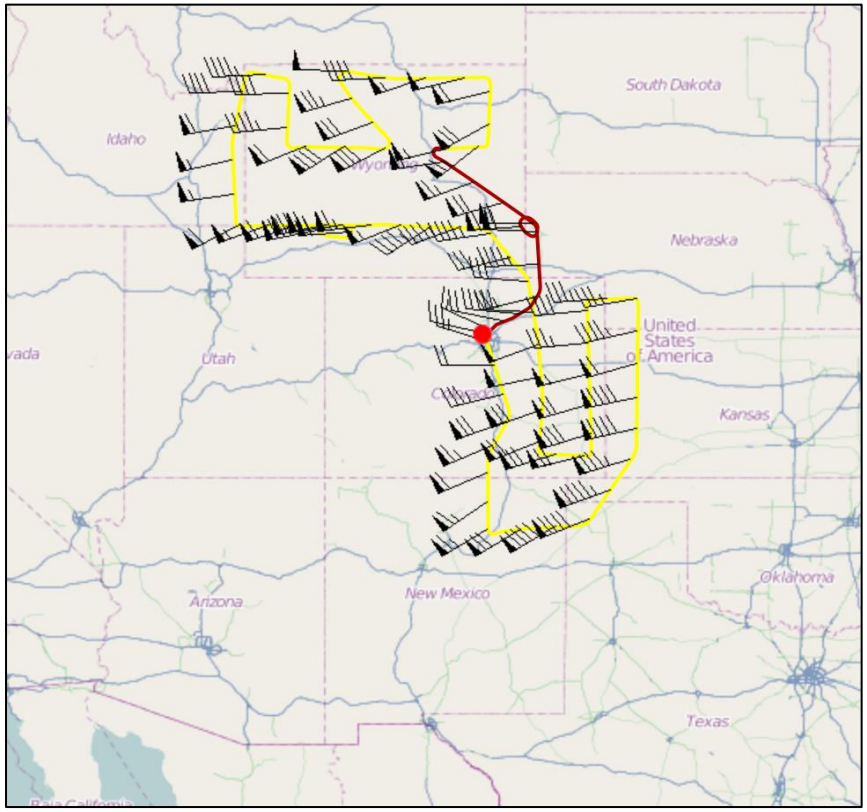


Water Vapor ~12 UTC

06/03/13

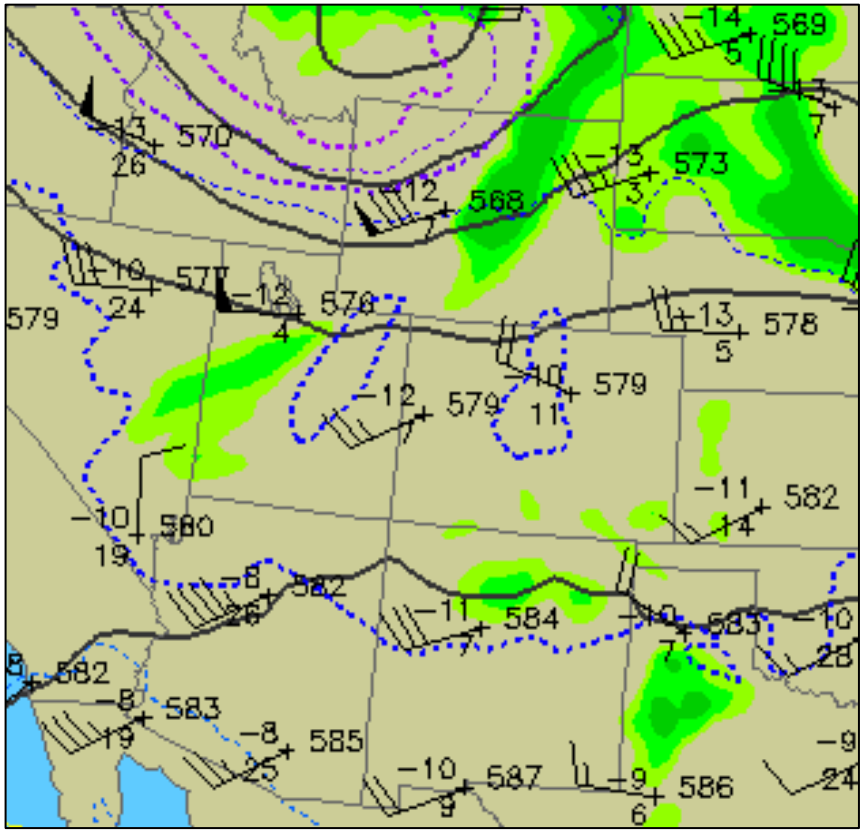


500 hPa 12:00 UTC

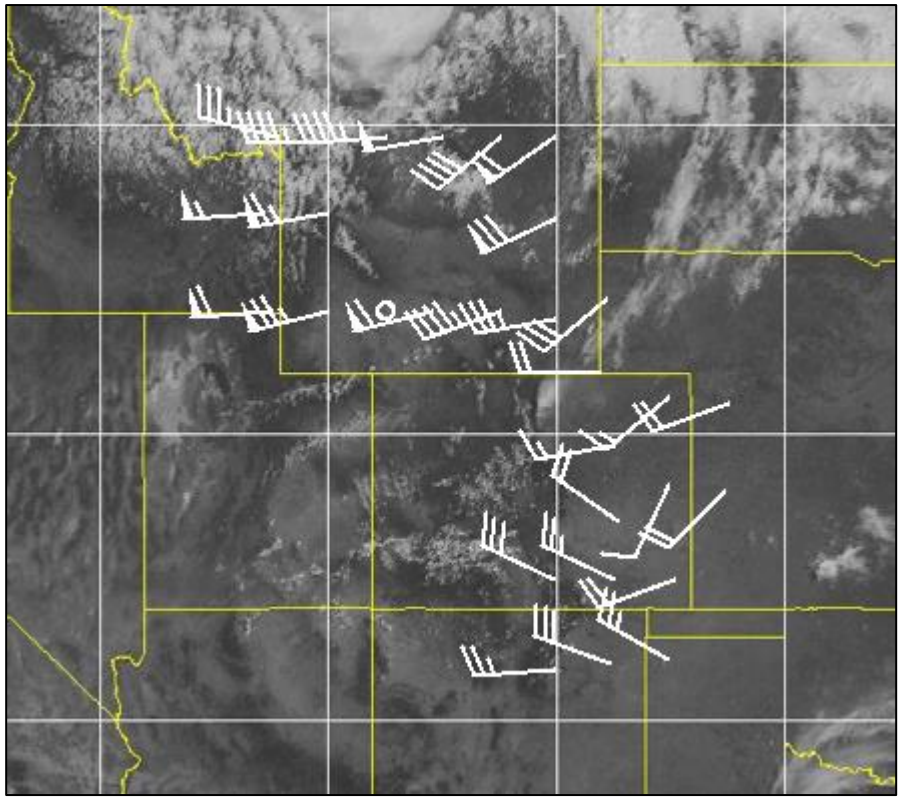


Flight Track Winds ~200 hPa

06/03/13

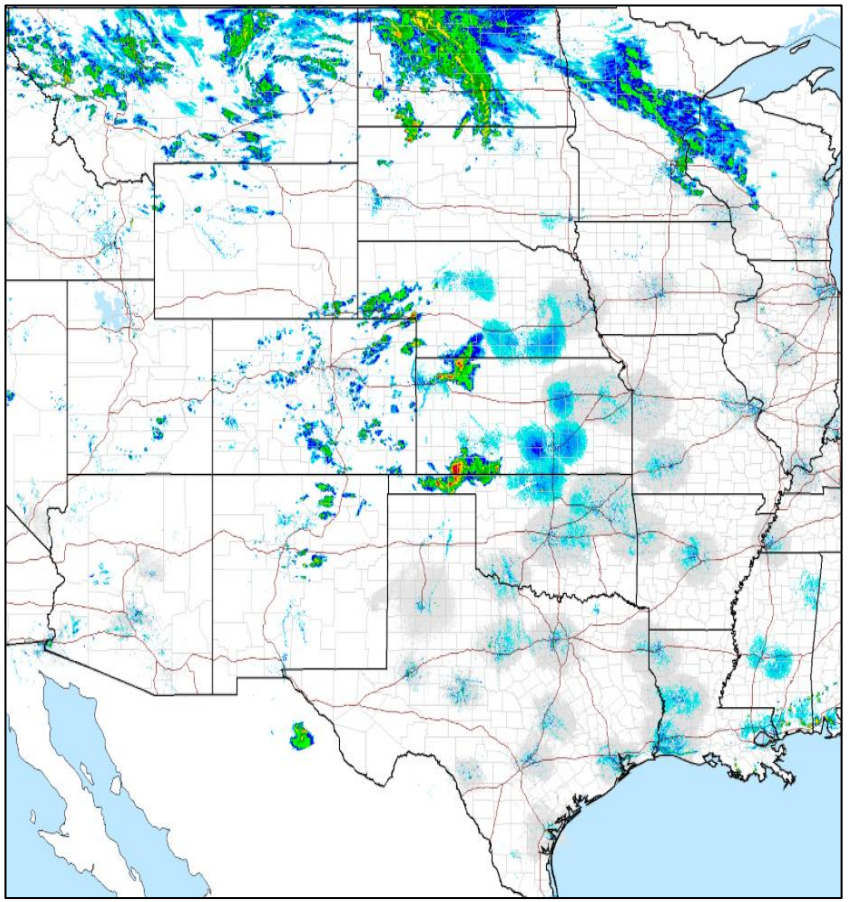


500 hPa 12:00 UTC

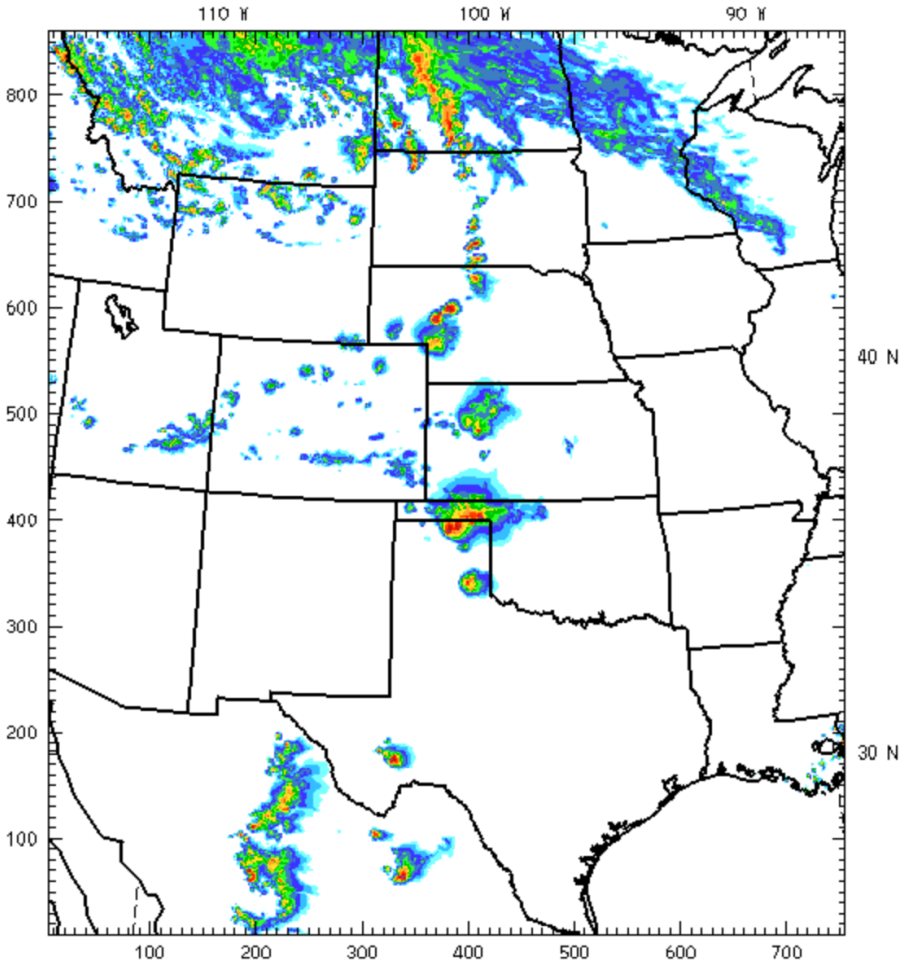


500 hPa Dropsonde Winds

06/03/13

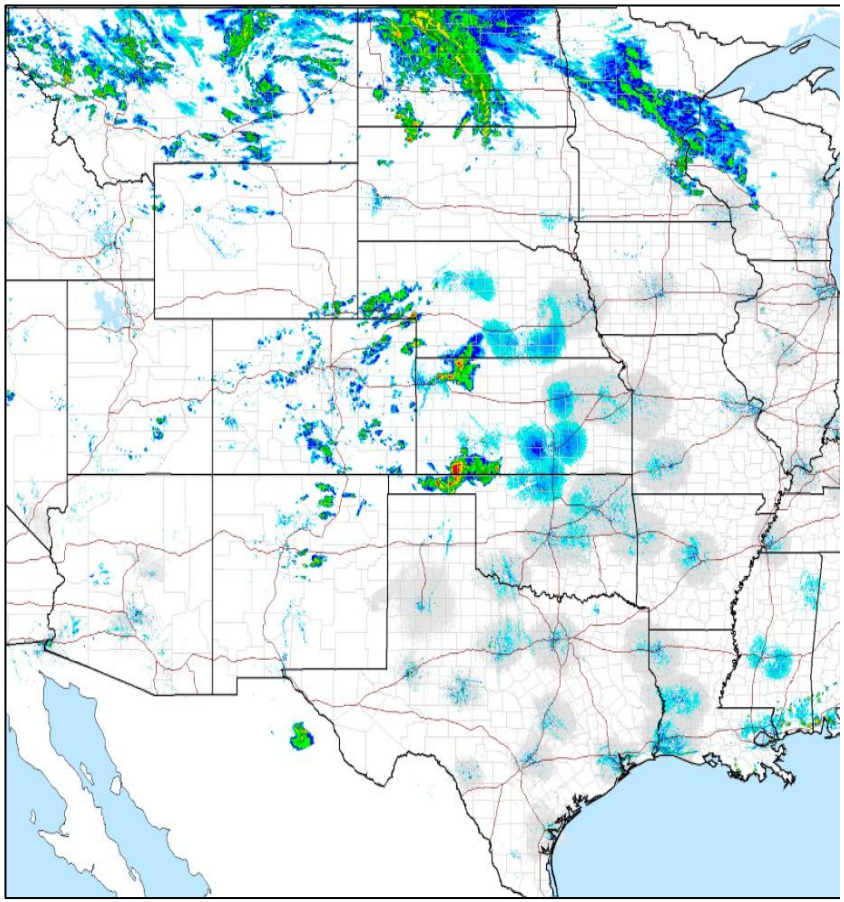


Radar 00:00 UTC

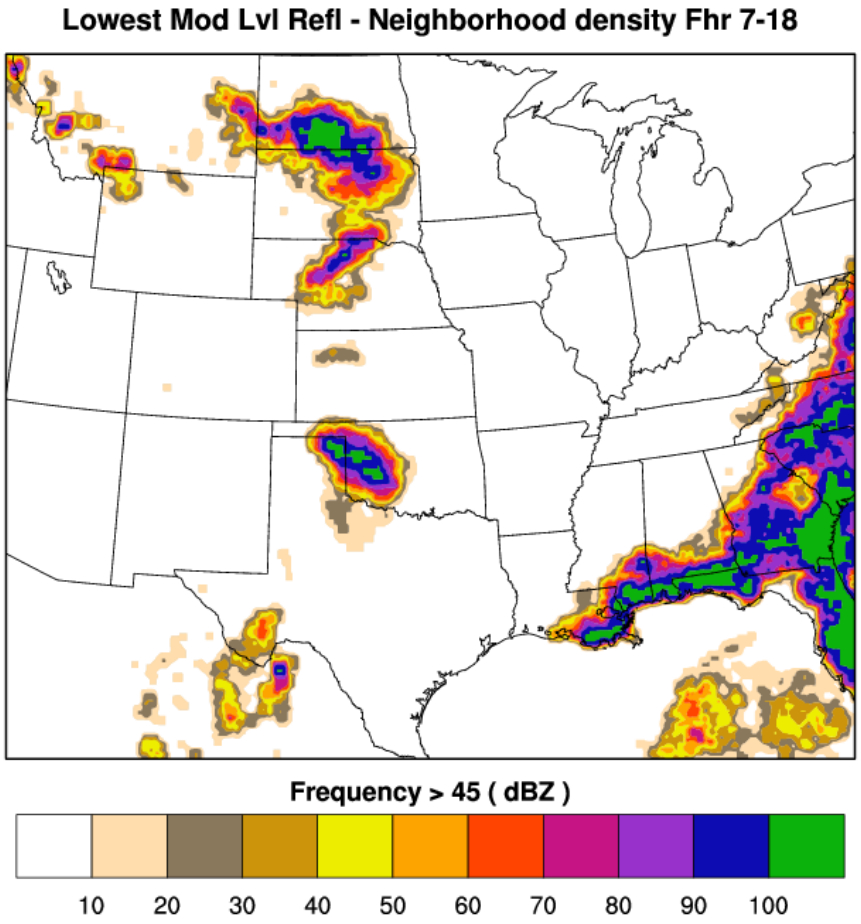


WRF-DART 12 h Forecast

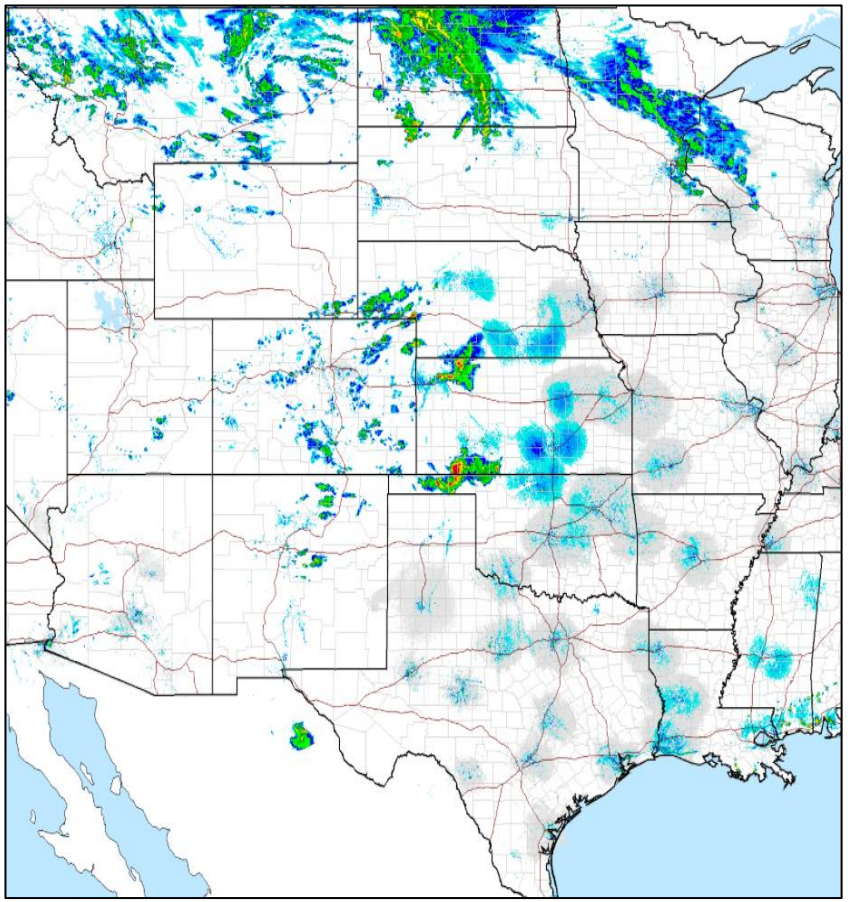
06/03/13



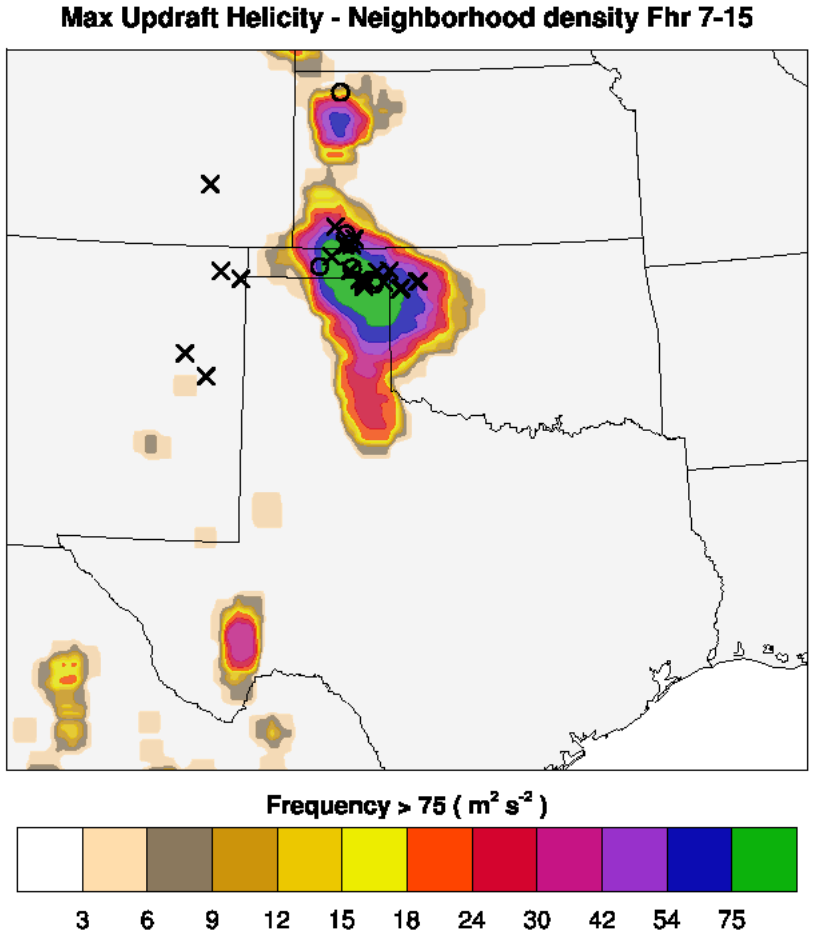
Radar 00:00 UTC



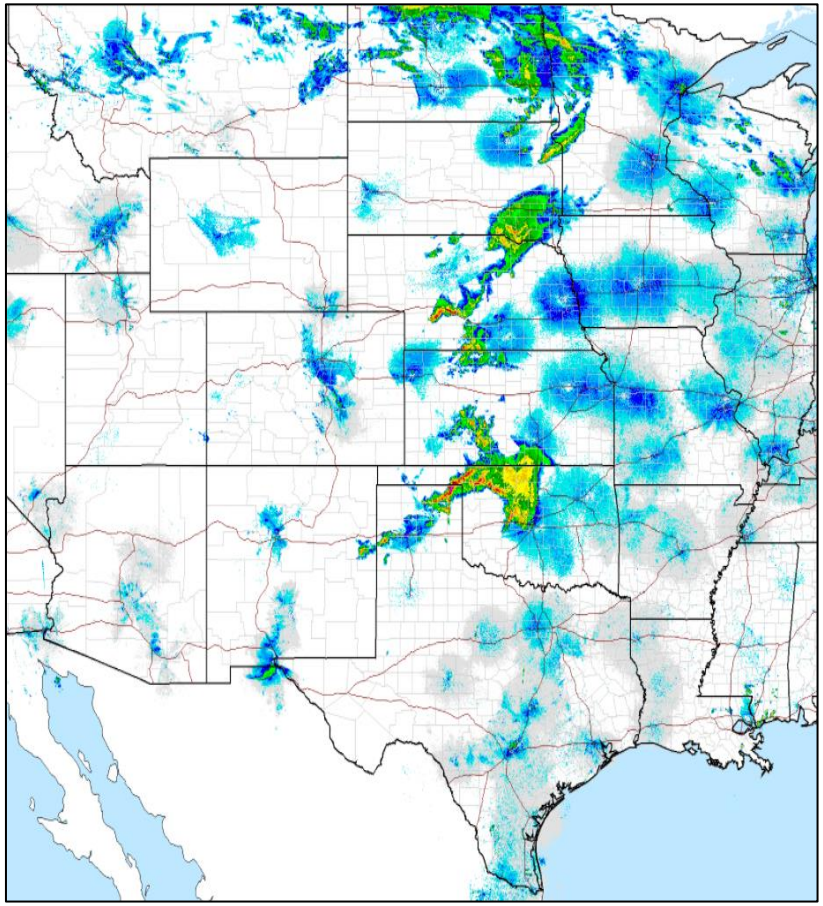
06/03/13



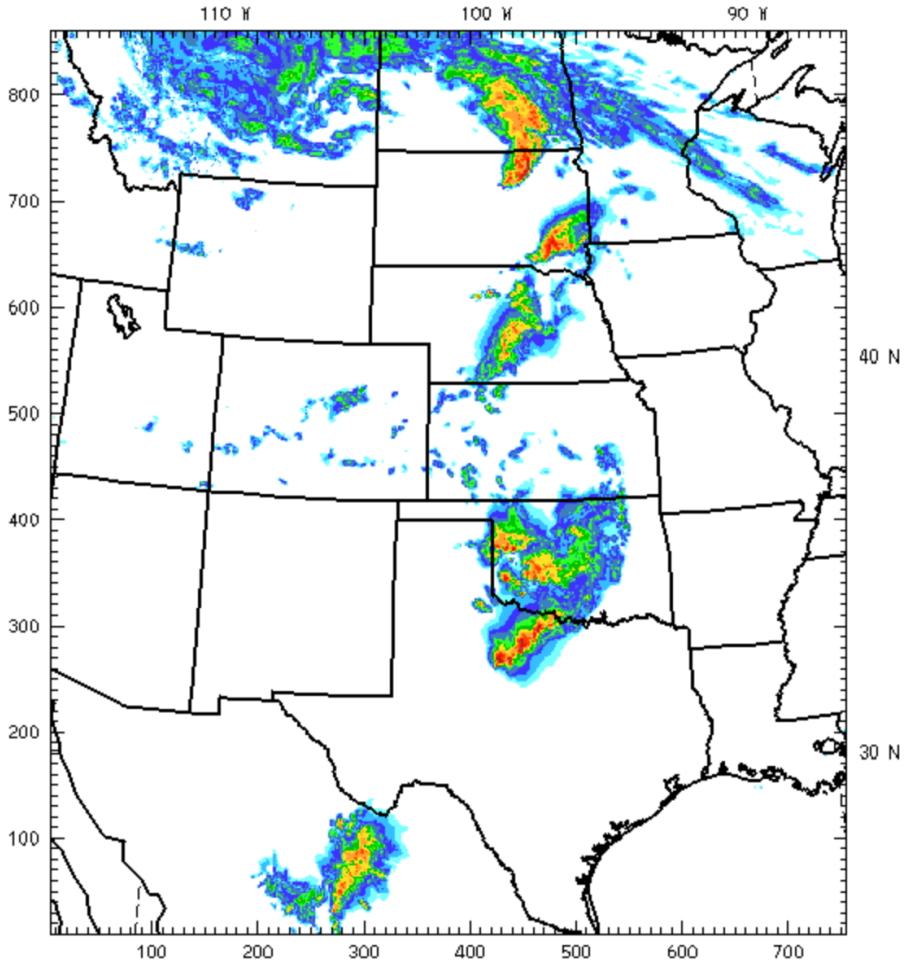
Radar 00:00 UTC



06/03/13

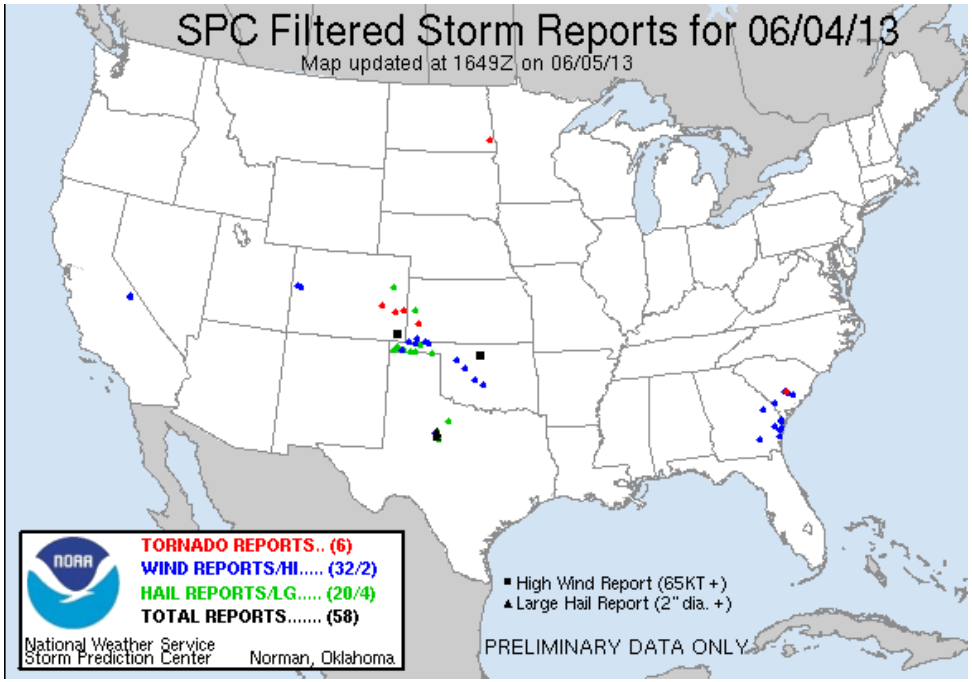


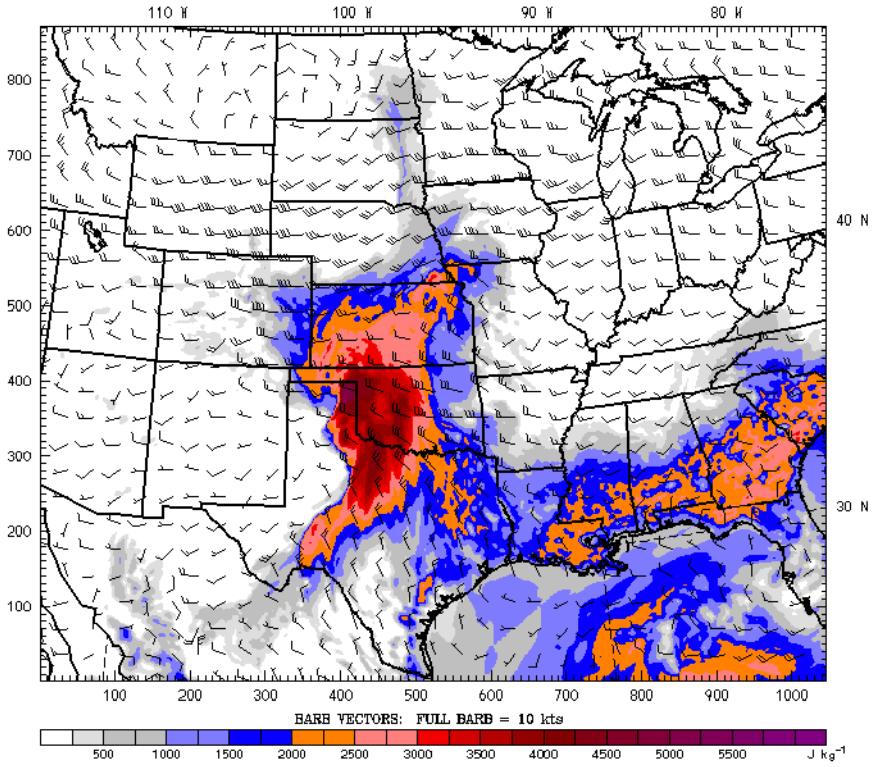
Radar 06:00 UTC



WRF-DART 18 h Forecast

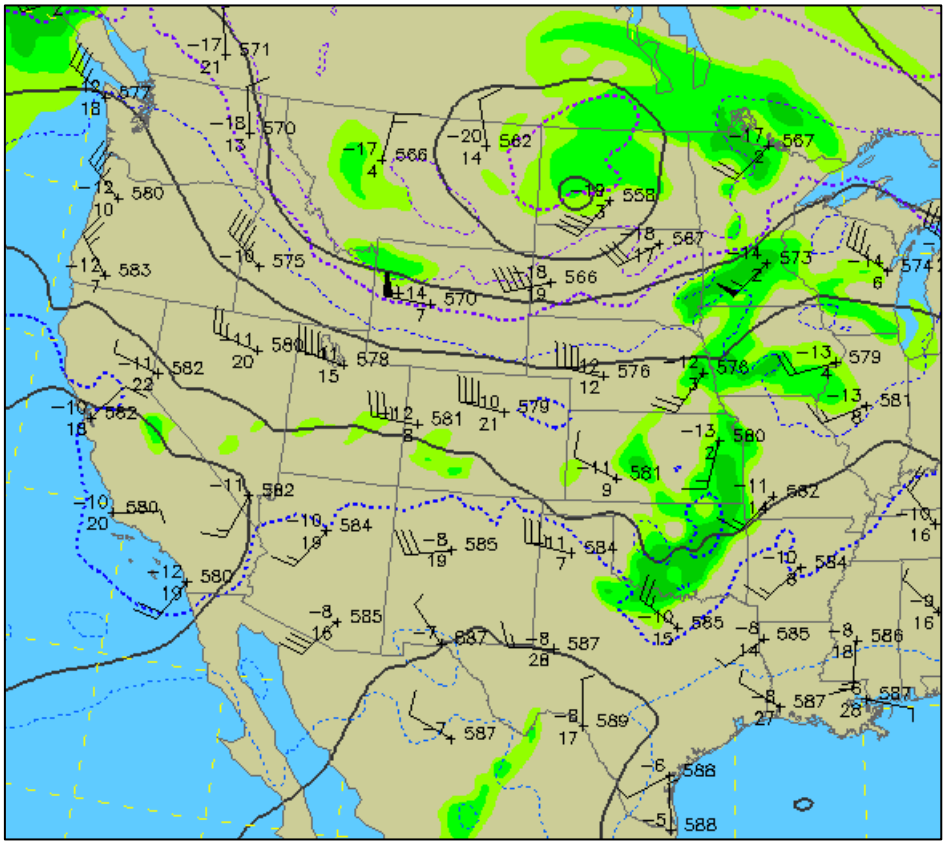
06/04/13 No Fly



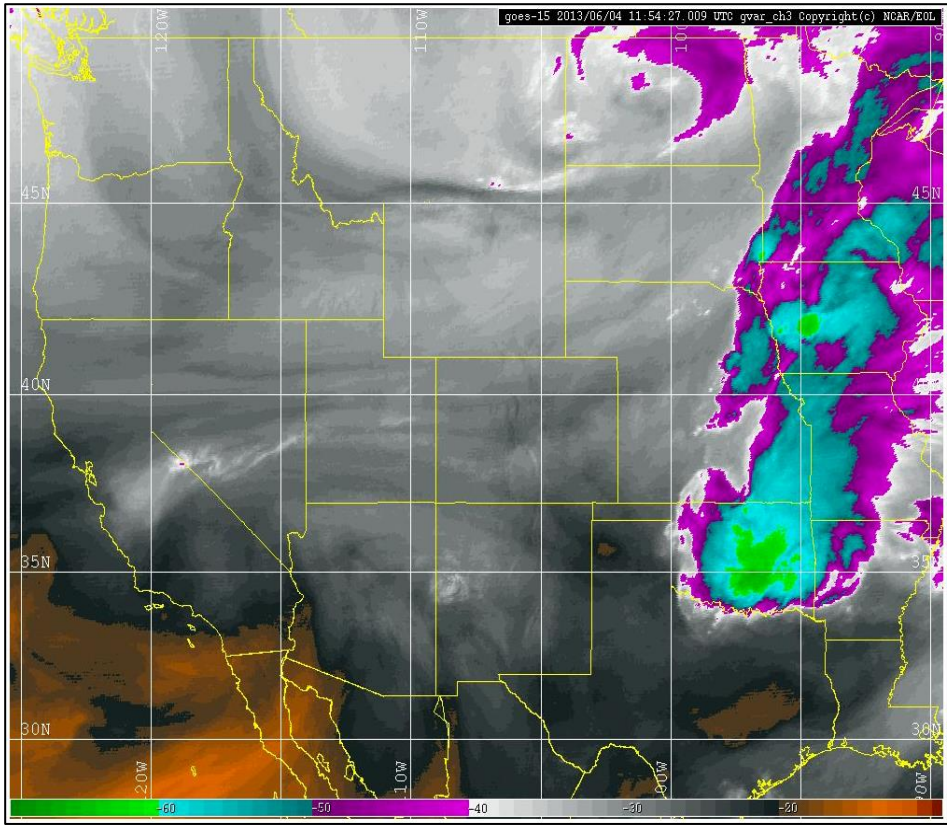


WRF CAPE/Shear: 21 UTC

06/04/13

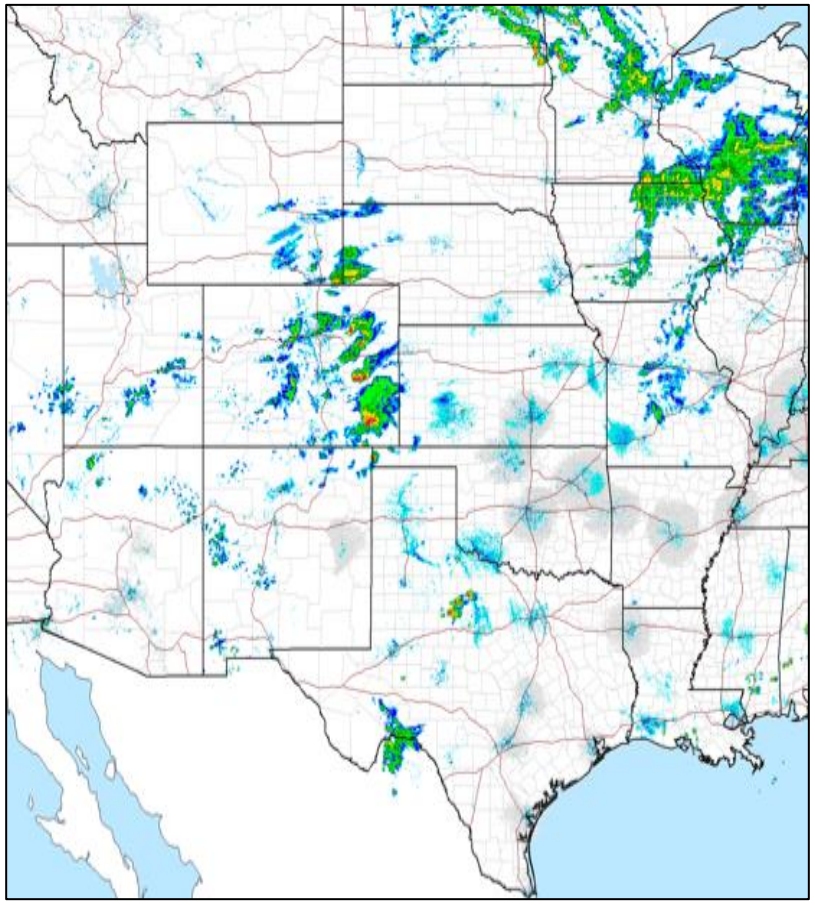


500 hPa 12:00 UTC

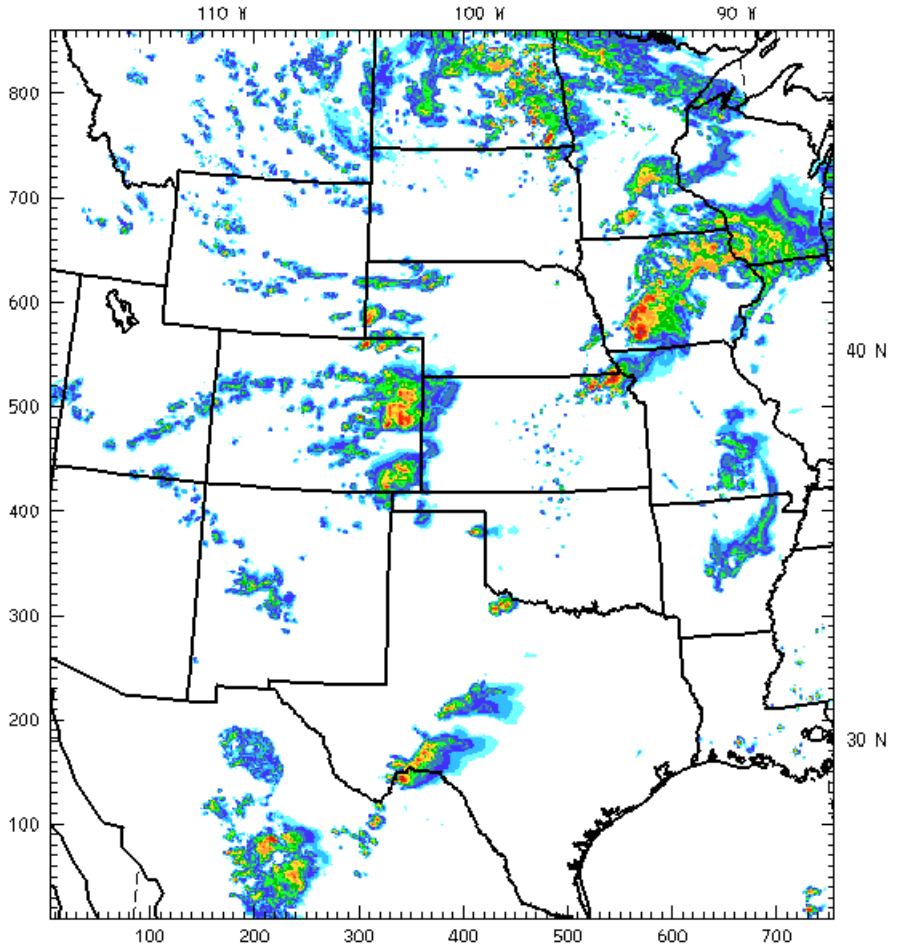


Water Vapor ~12 UTC

06/04/13

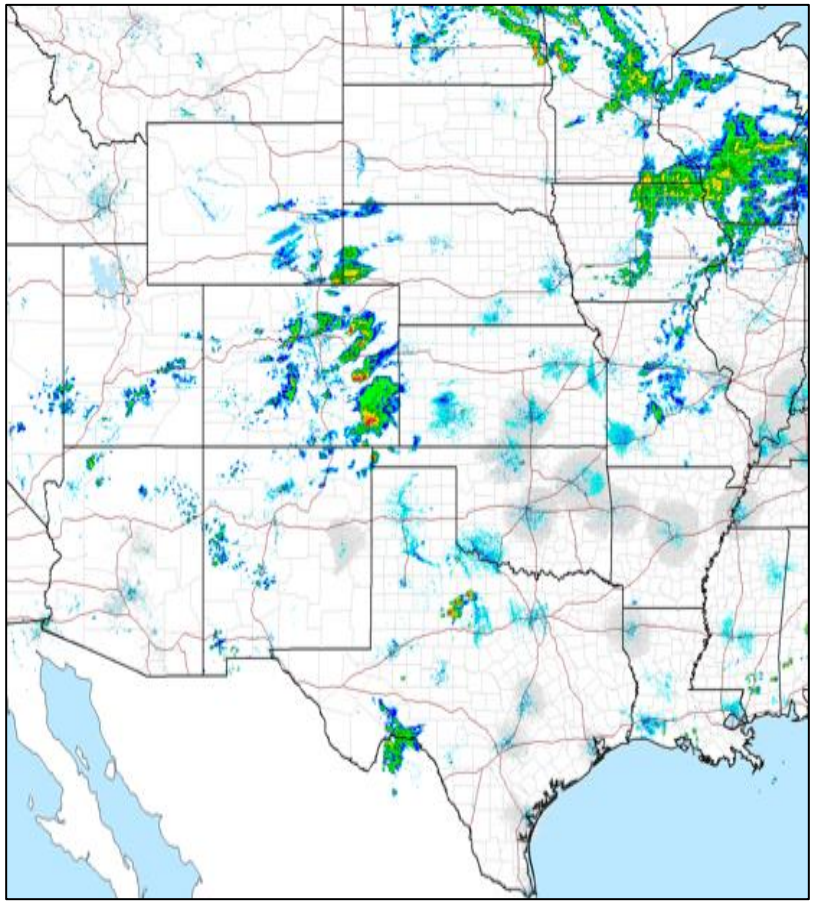


Radar 00:00 UTC

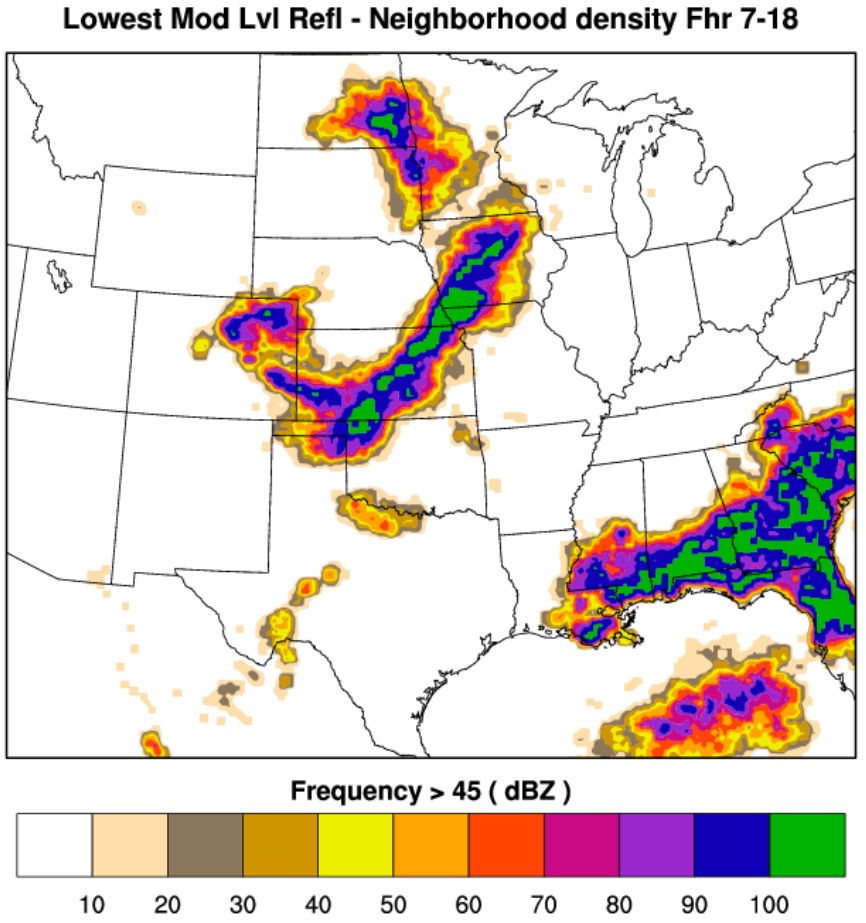


WRF-DART 12 h Forecast

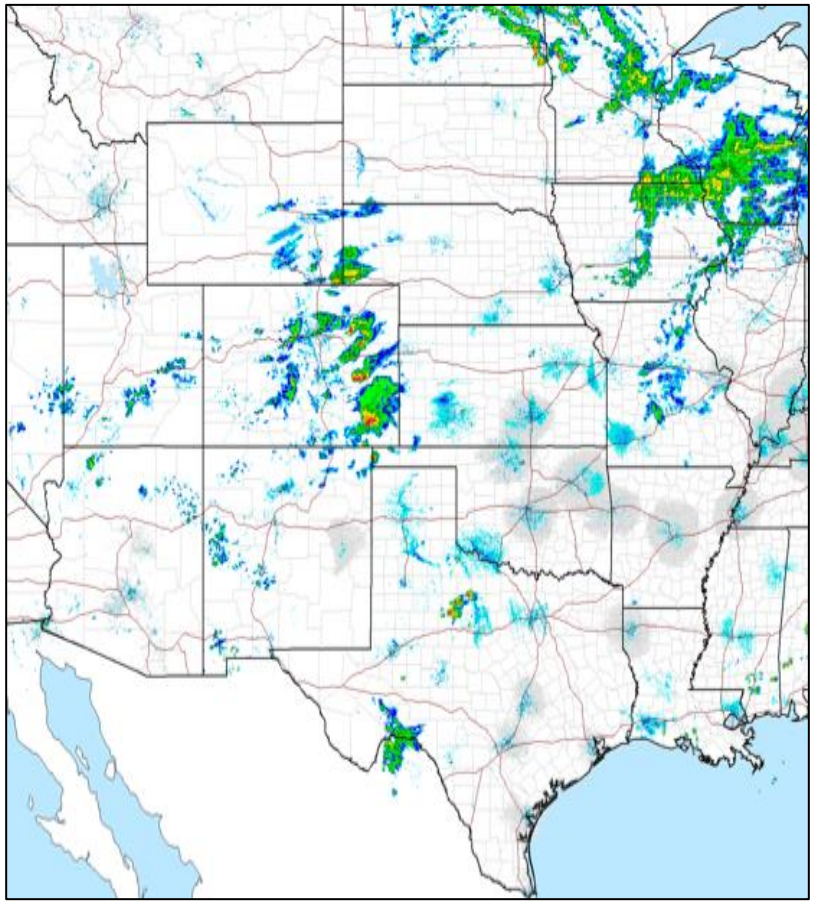
06/04/13



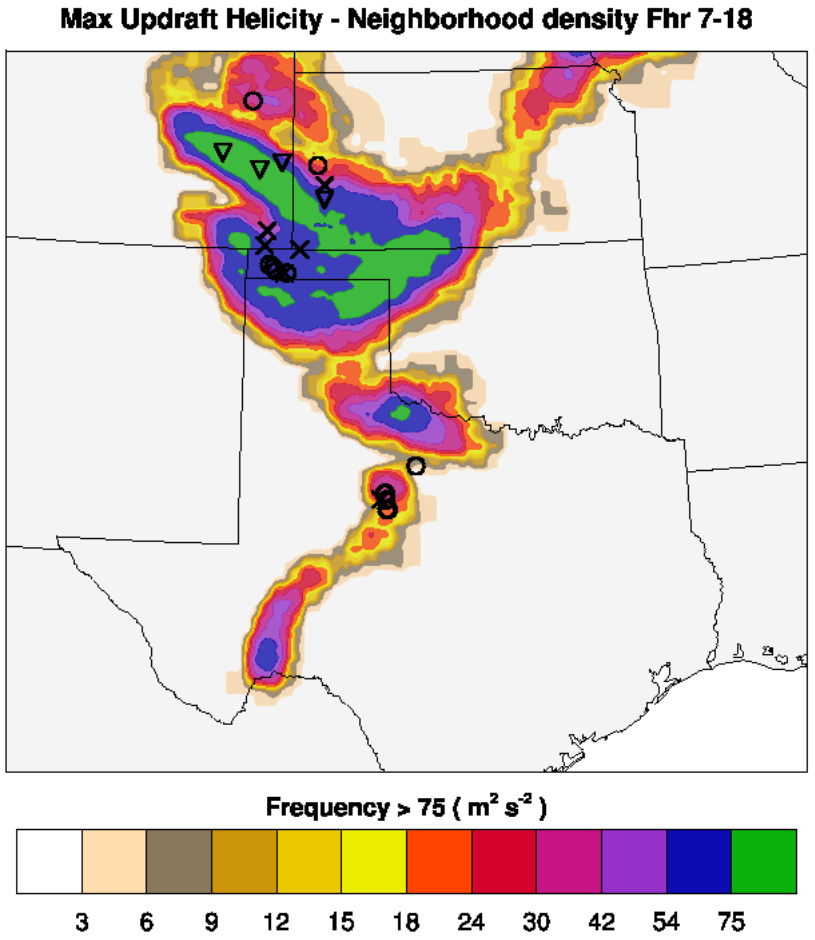
Radar 00:00 UTC



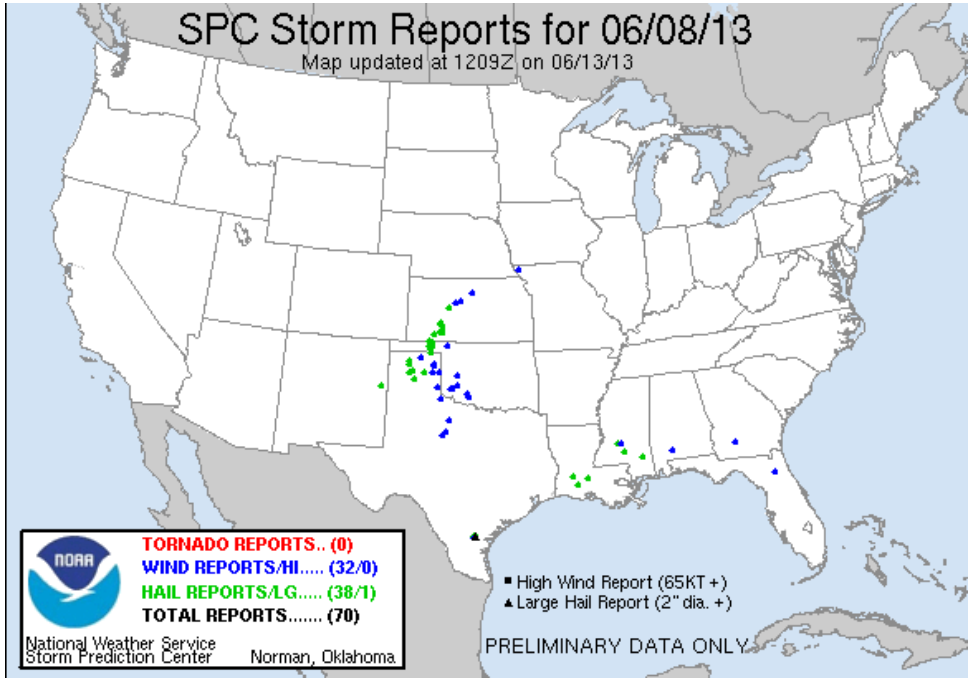
06/04/13

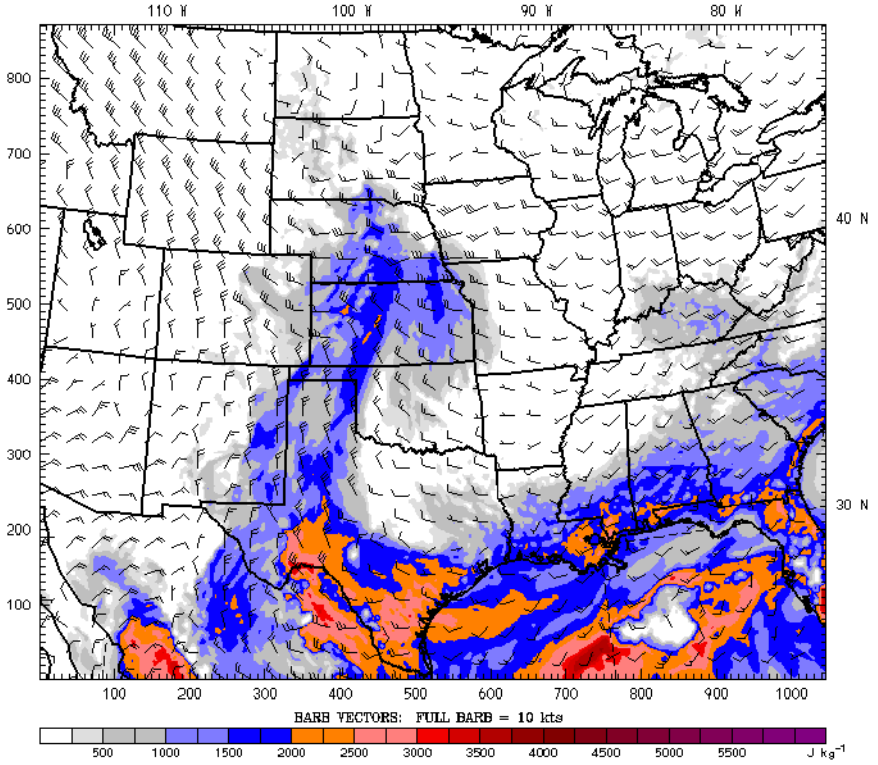


Radar 00:00 UTC



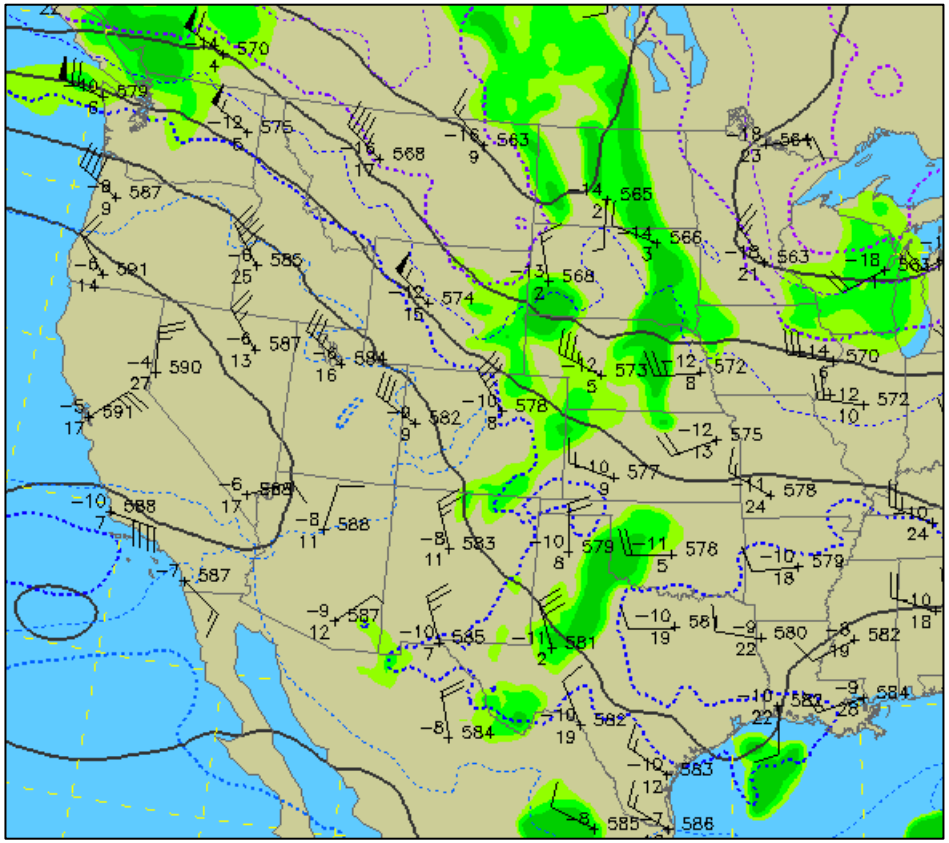
06/08/13



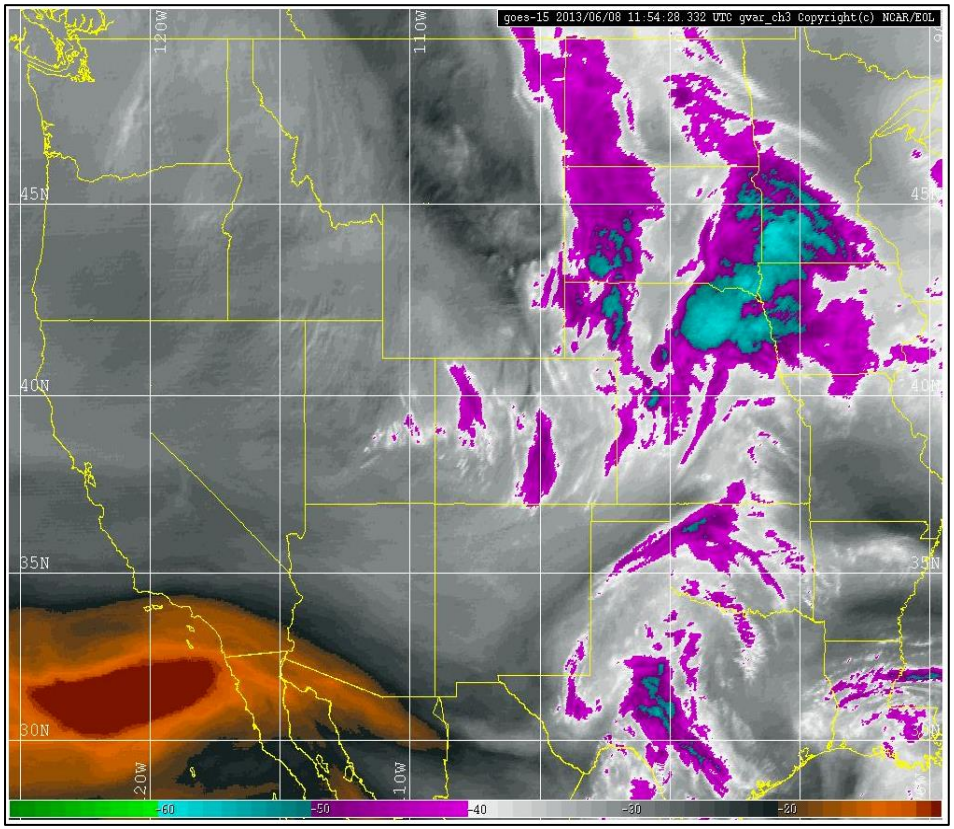


WRF CAPE/Shear: 21 UTC

06/08/13

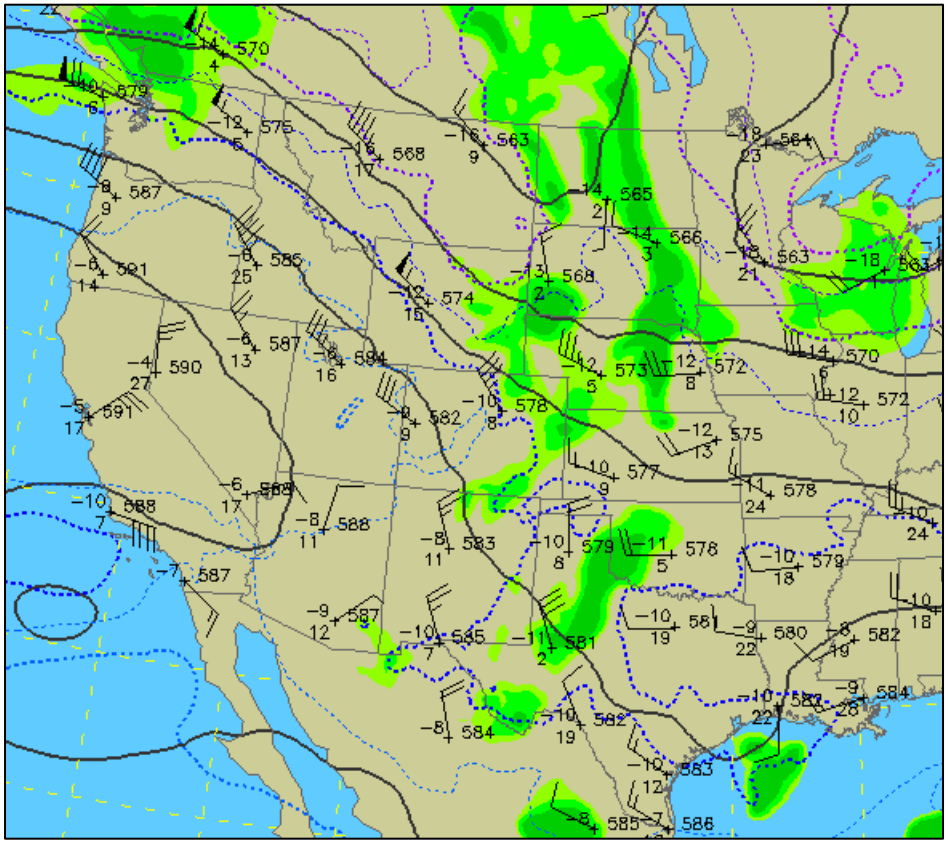


500 hPa 12:00 UTC

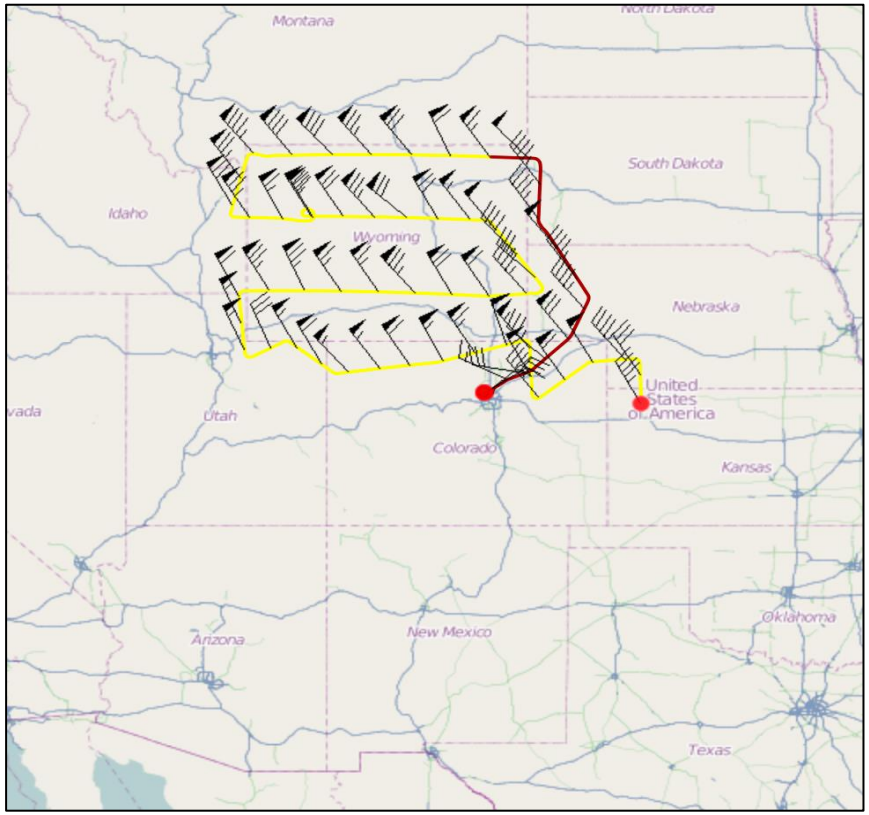


Water Vapor ~12 UTC

06/08/13

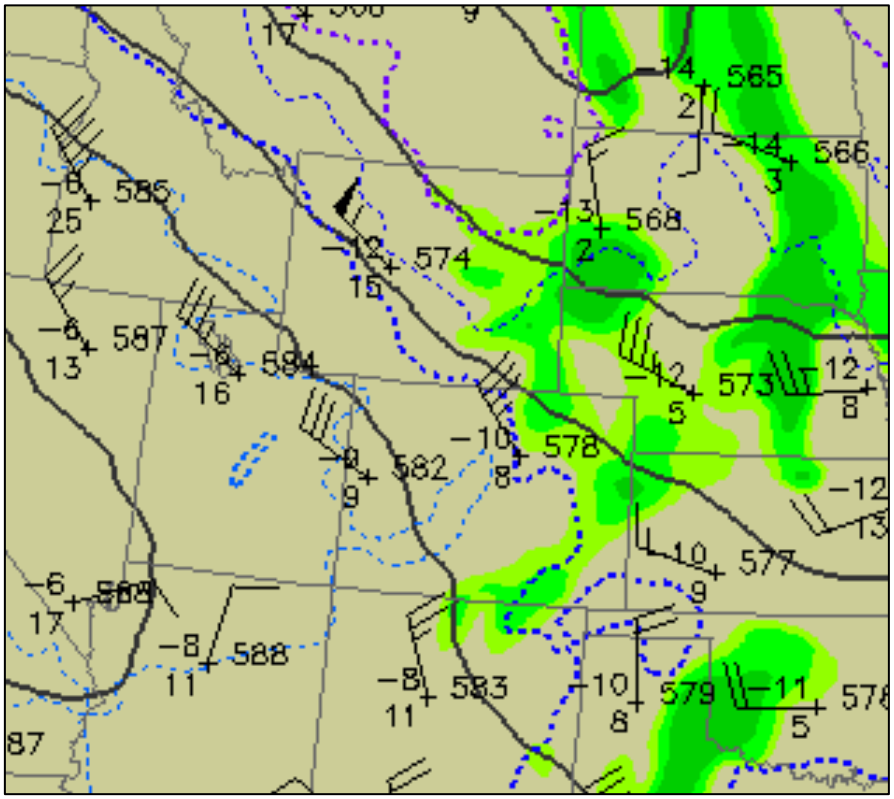


500 hPa 12:00 UTC

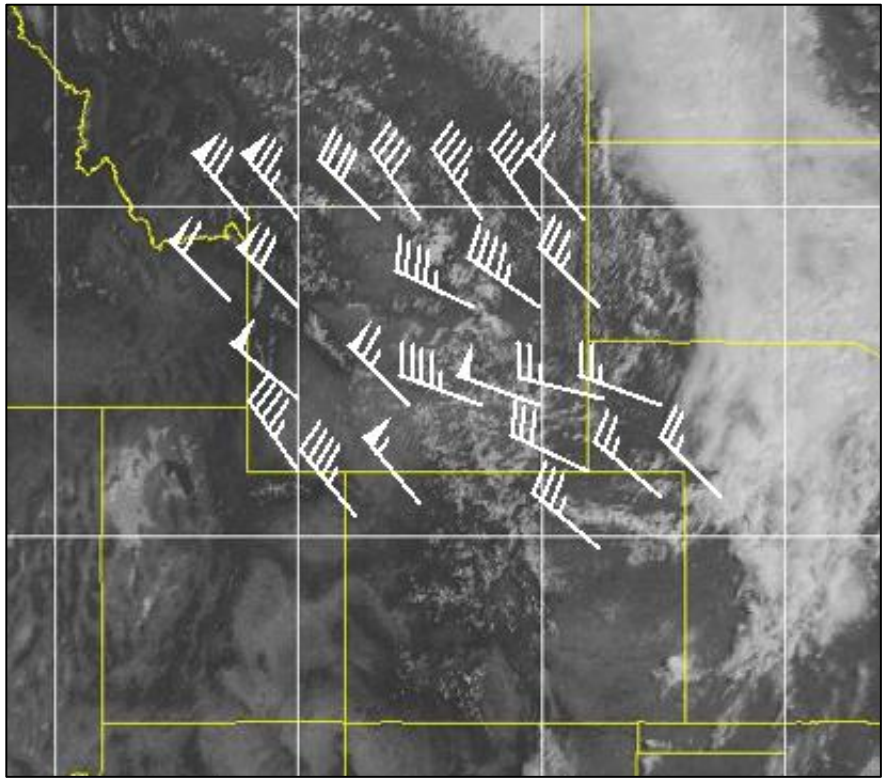


Flight Track Winds ~200 hPa

06/08/13

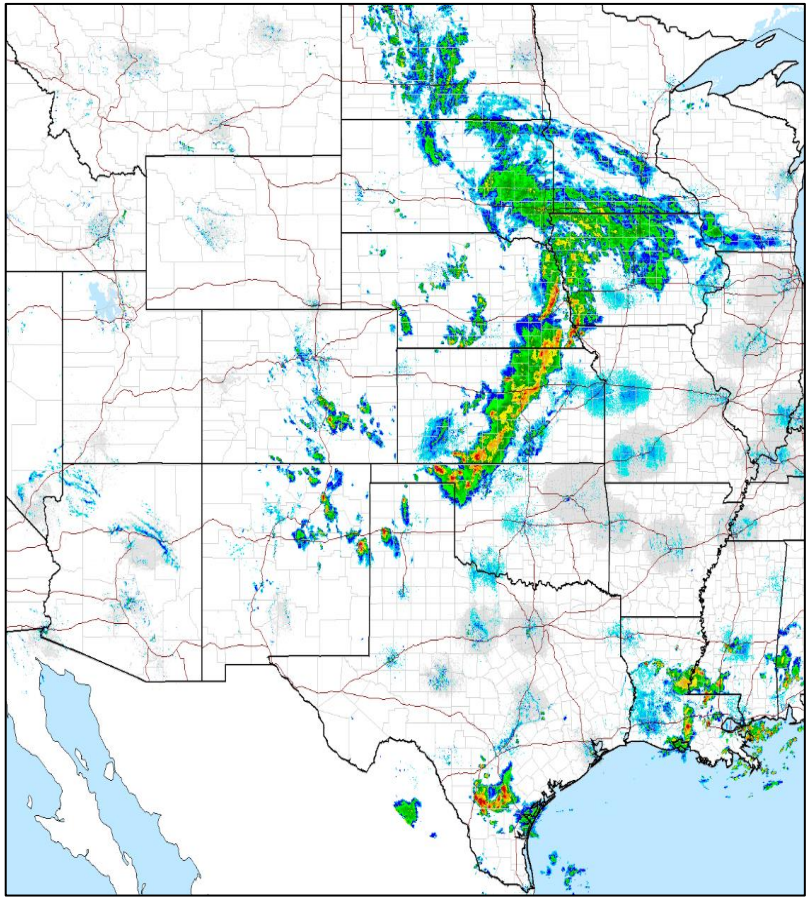


500 hPa 12:00 UTC

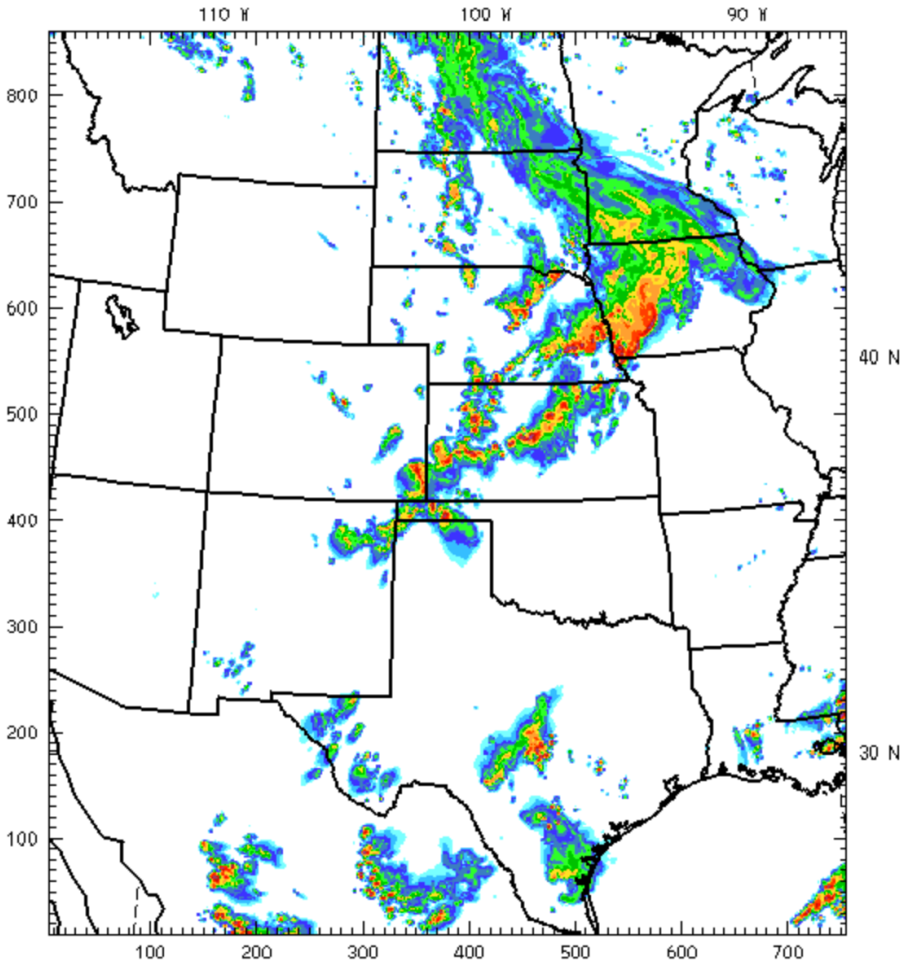


500 hPa Dropsonde Winds

06/08/13

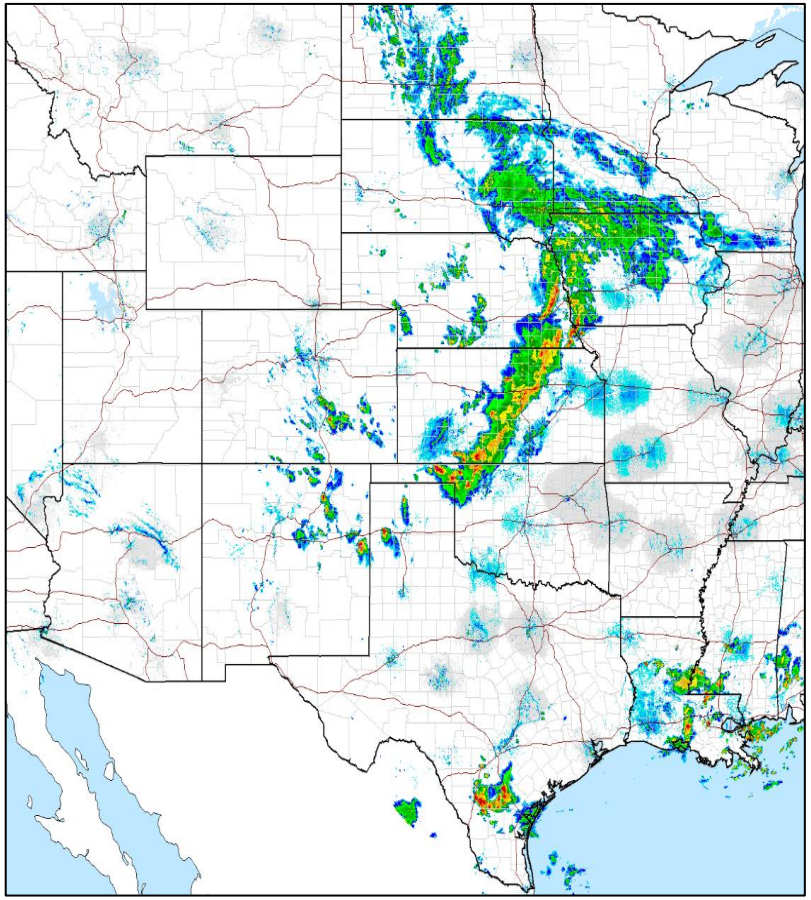


Radar 00:00 UTC

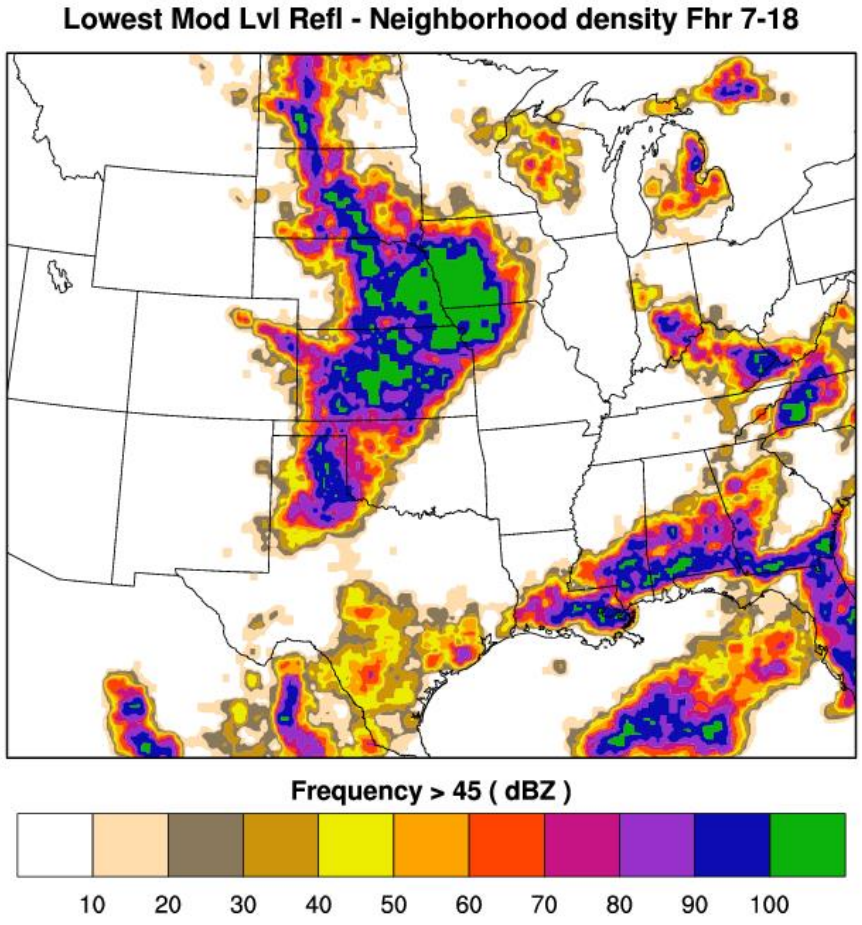


WRF-DART 12 h Forecast

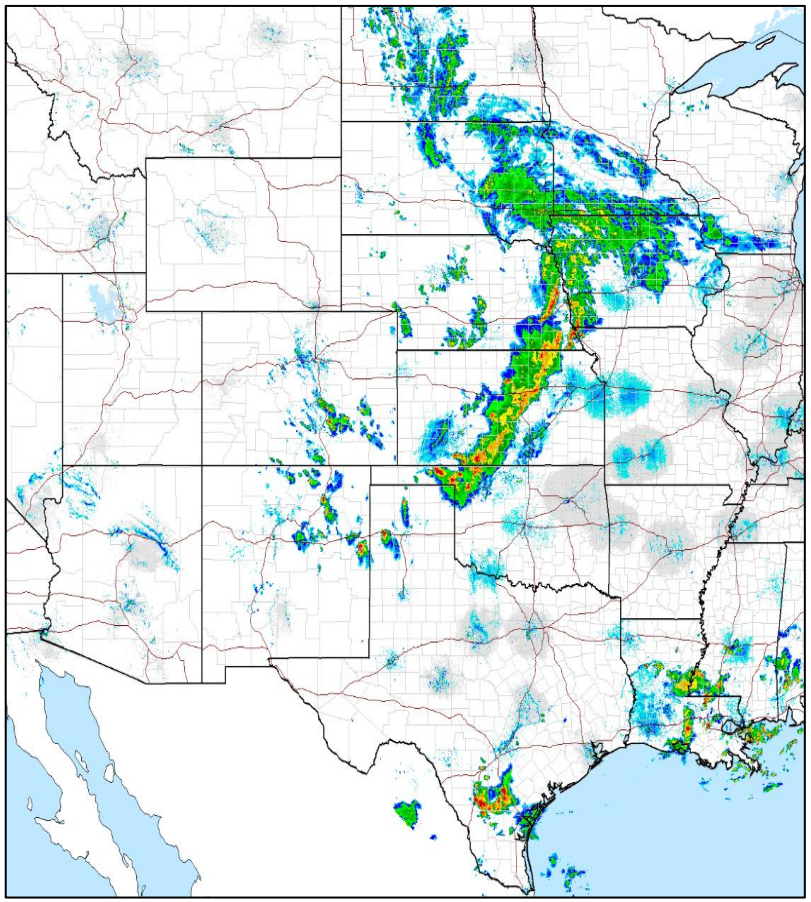
06/08/13



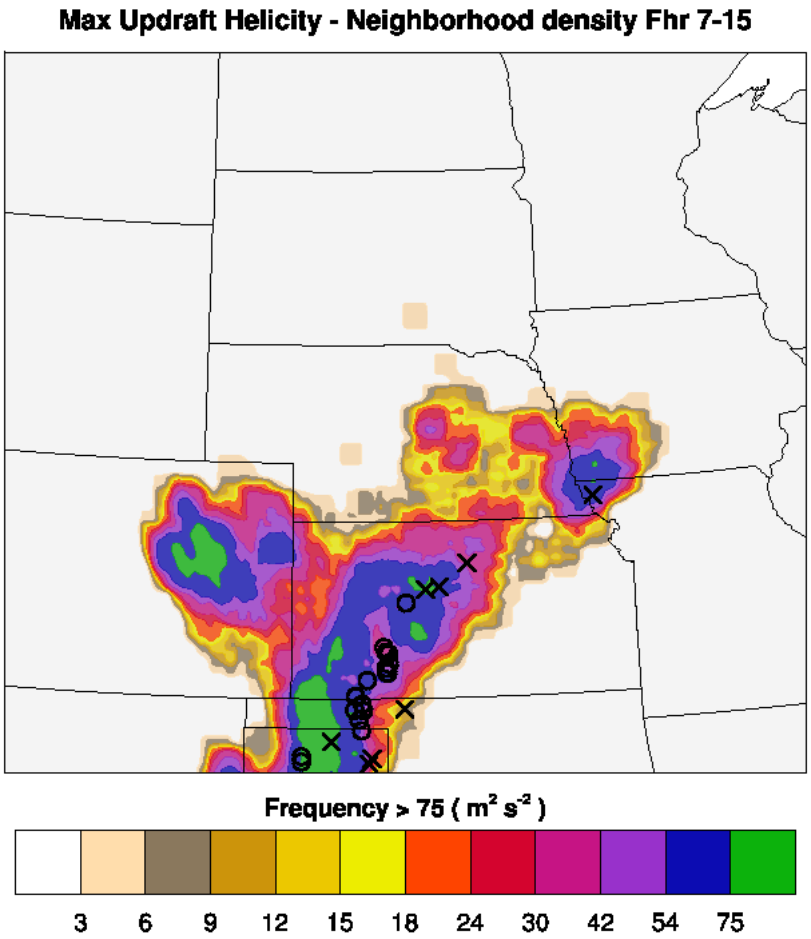
Radar 00:00 UTC



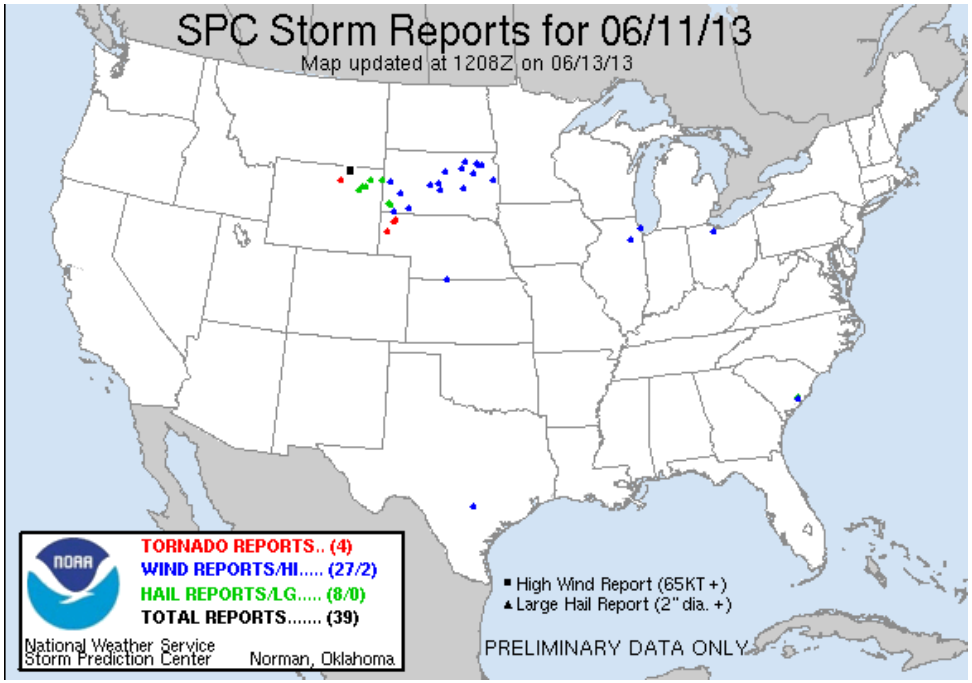
06/08/13

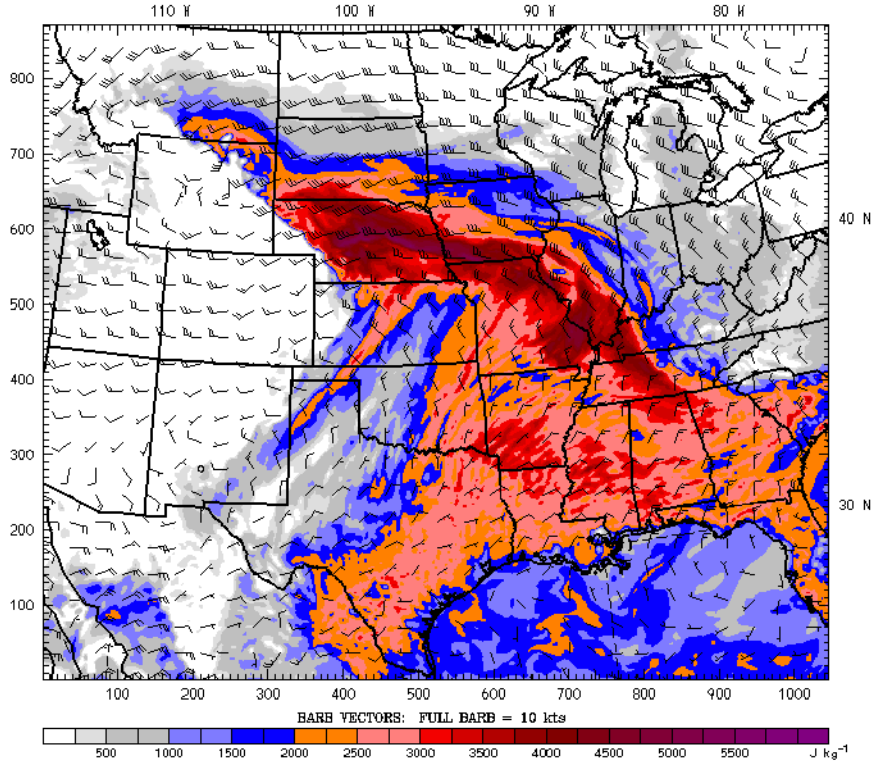


Radar 00:00 UTC



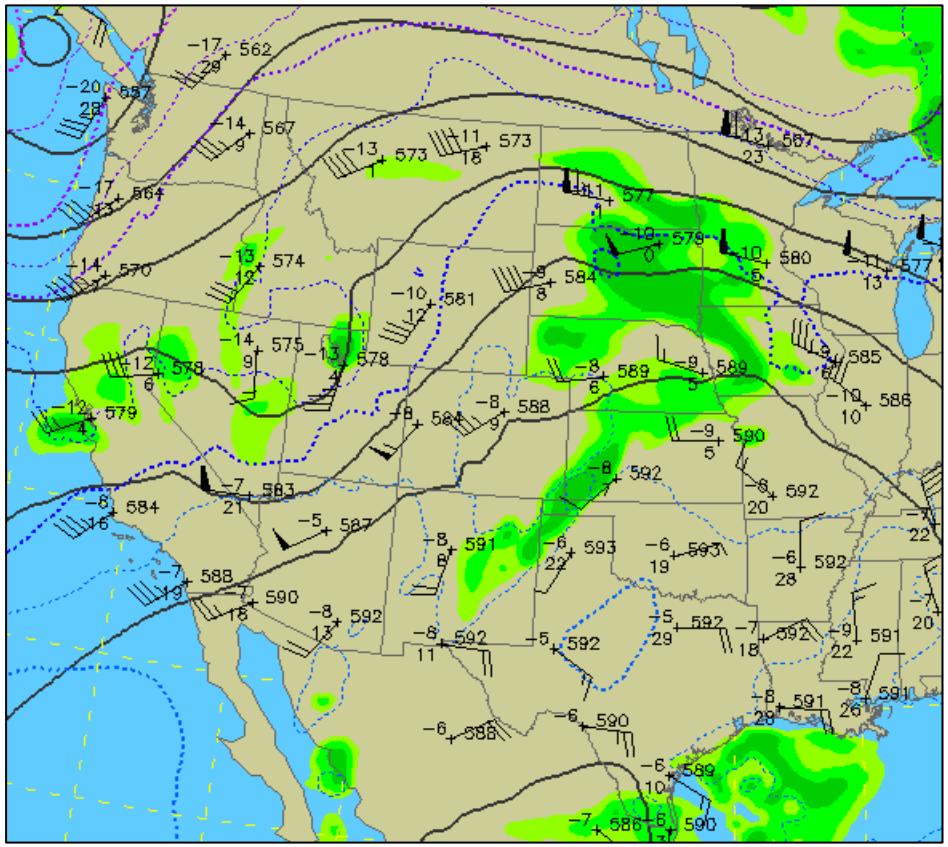
06/11/13



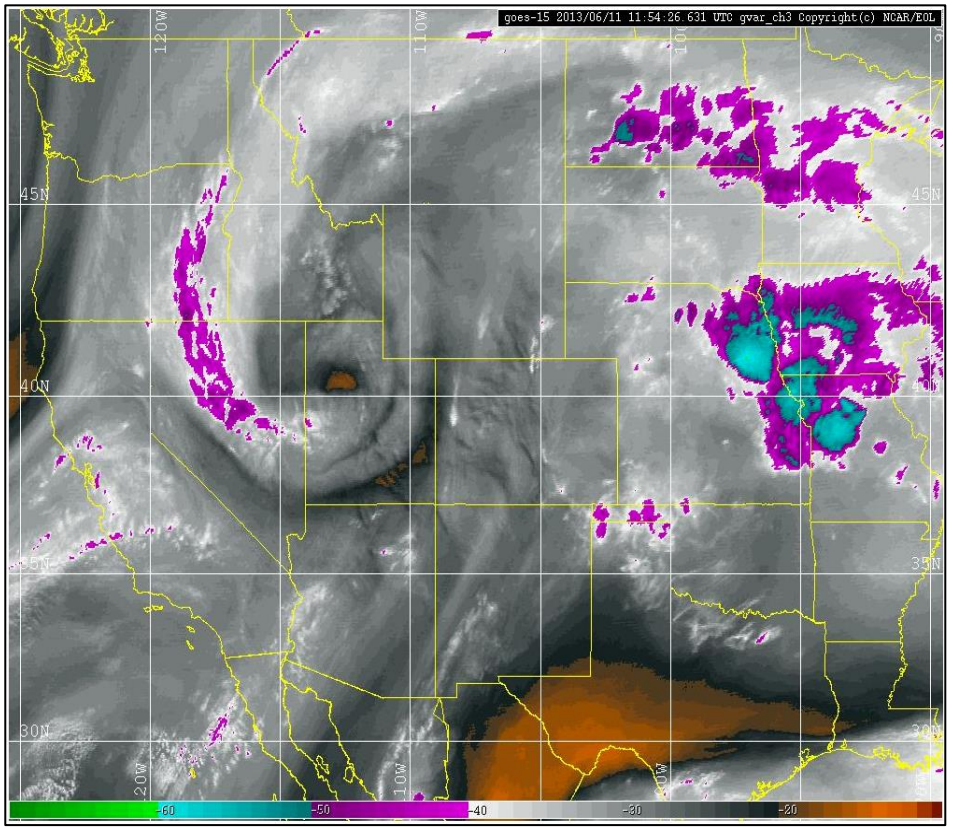


WRF CAPE/Shear: 21 UTC

06/11/13

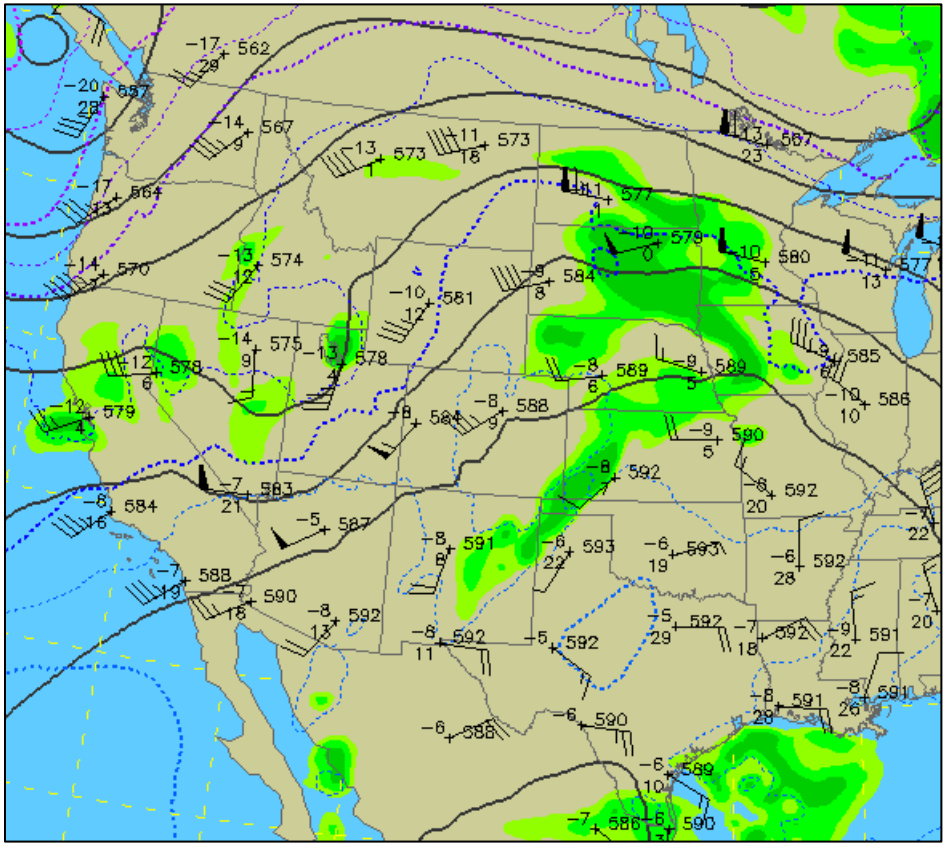


500 hPa 12:00 UTC

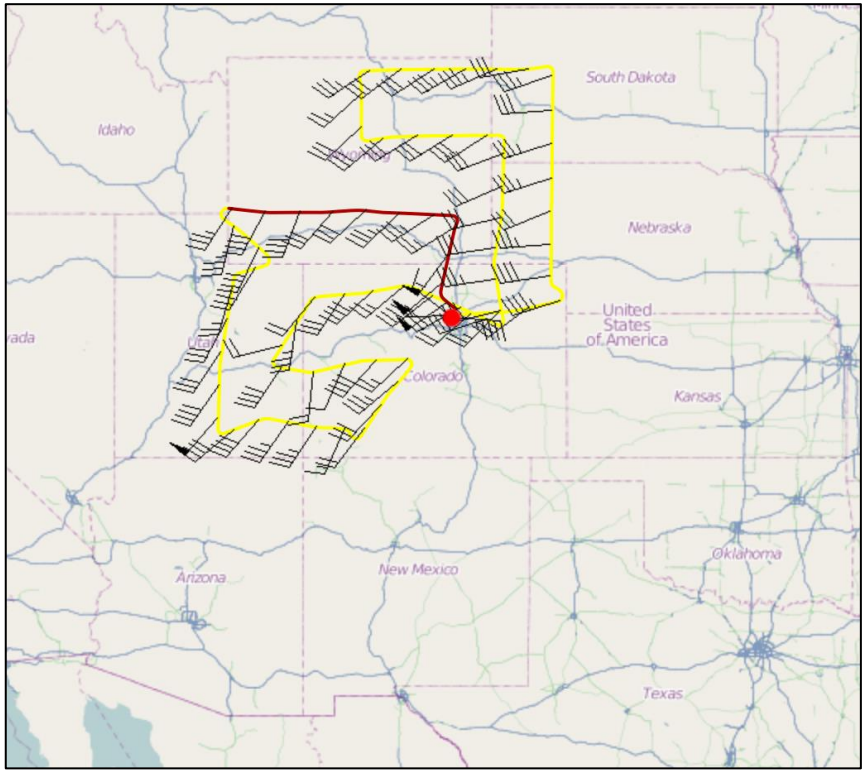


Water Vapor ~12 UTC

06/11/13

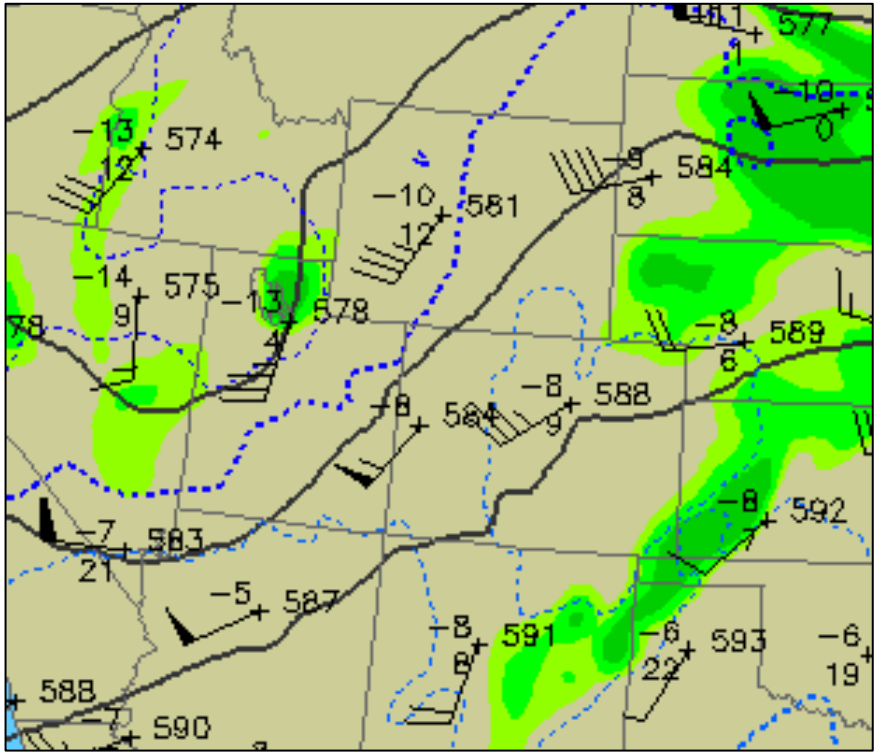


500 hPa 12:00 UTC

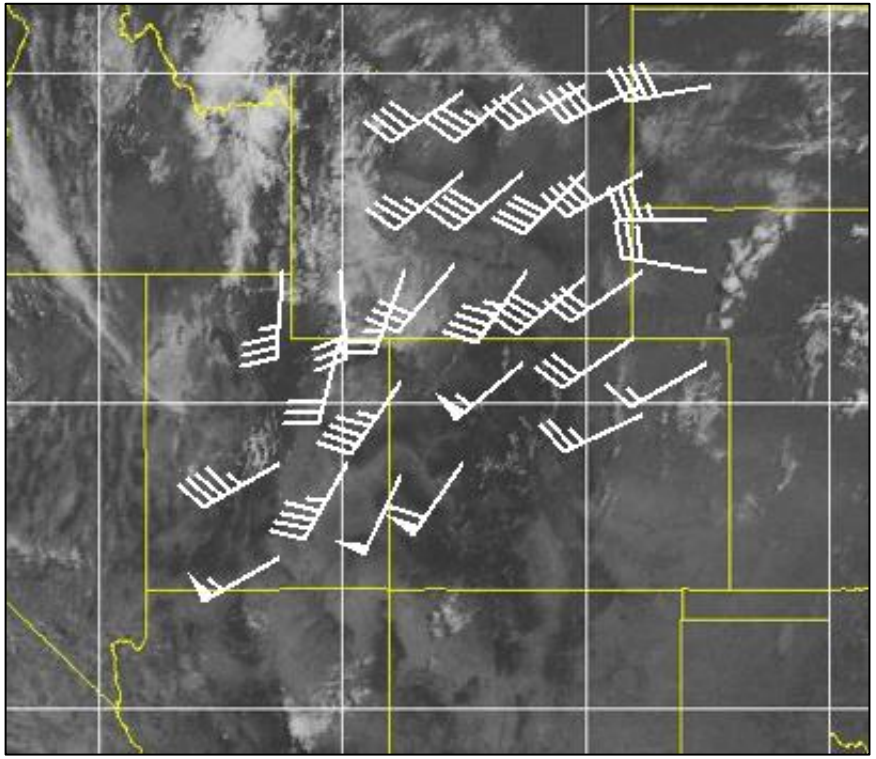


Flight Track Winds ~200 hPa

06/11/13

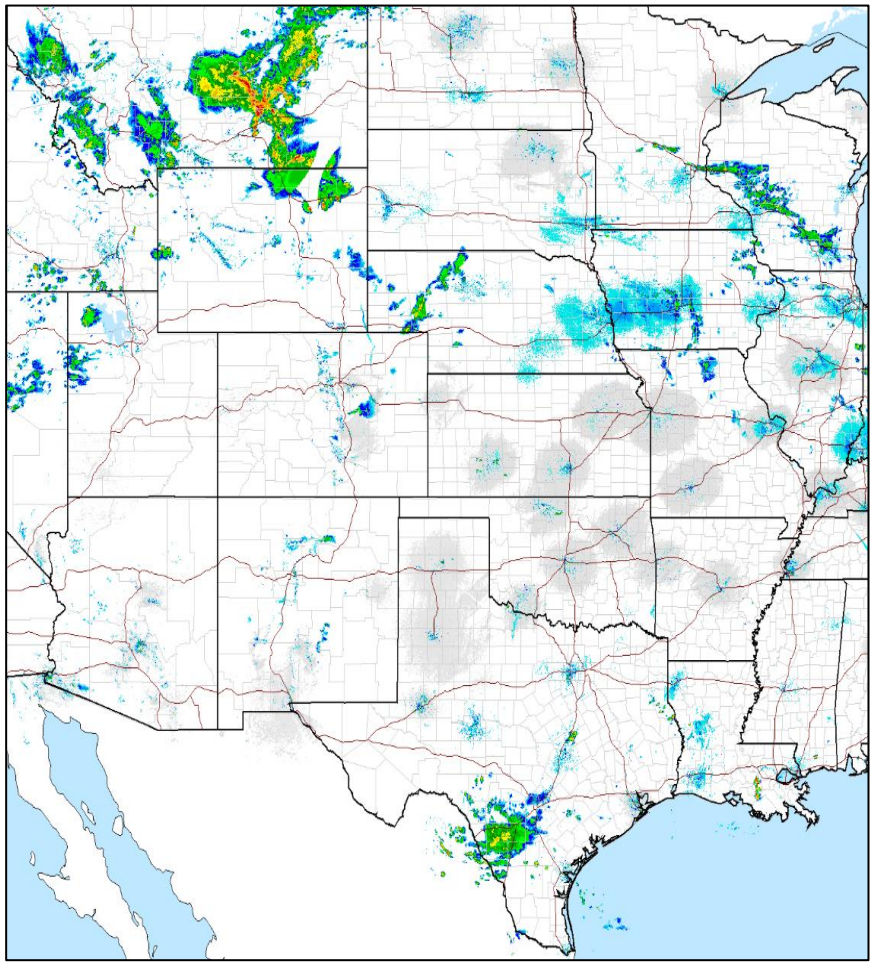


500 hPa 12:00 UTC

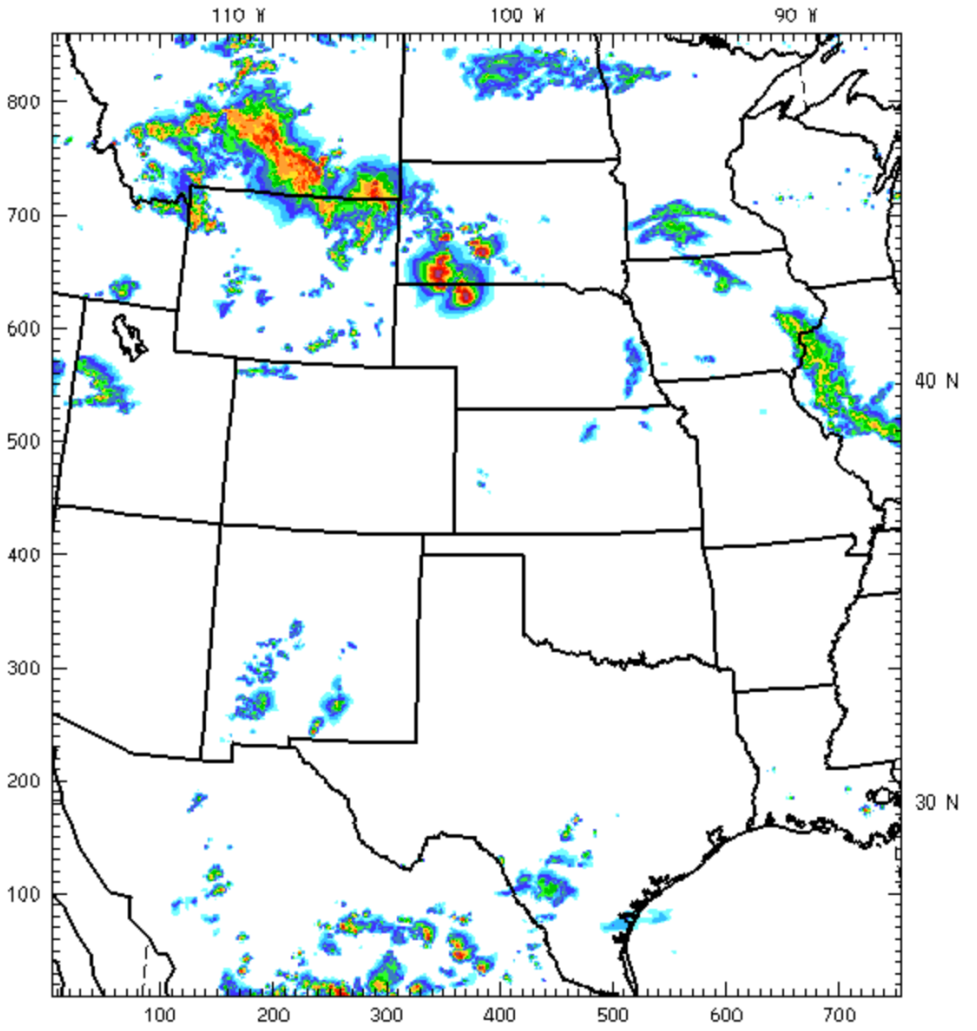


500 hPa Dropsonde Winds

06/11/13

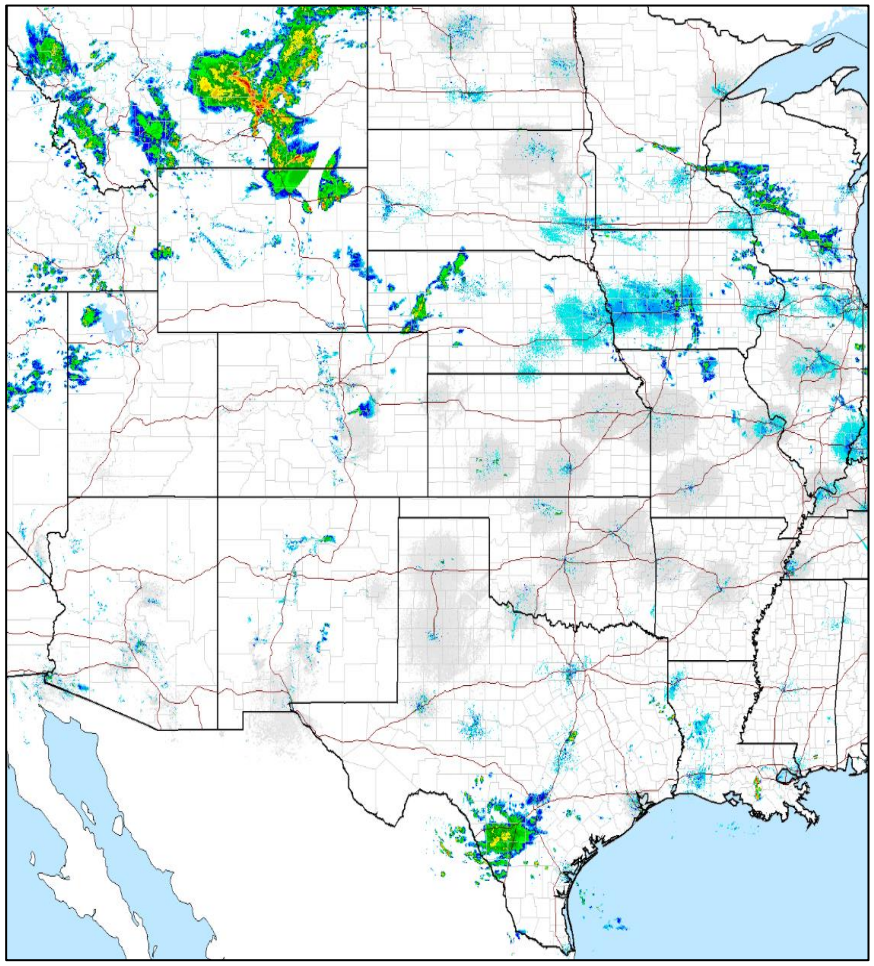


Radar 00:00 UTC

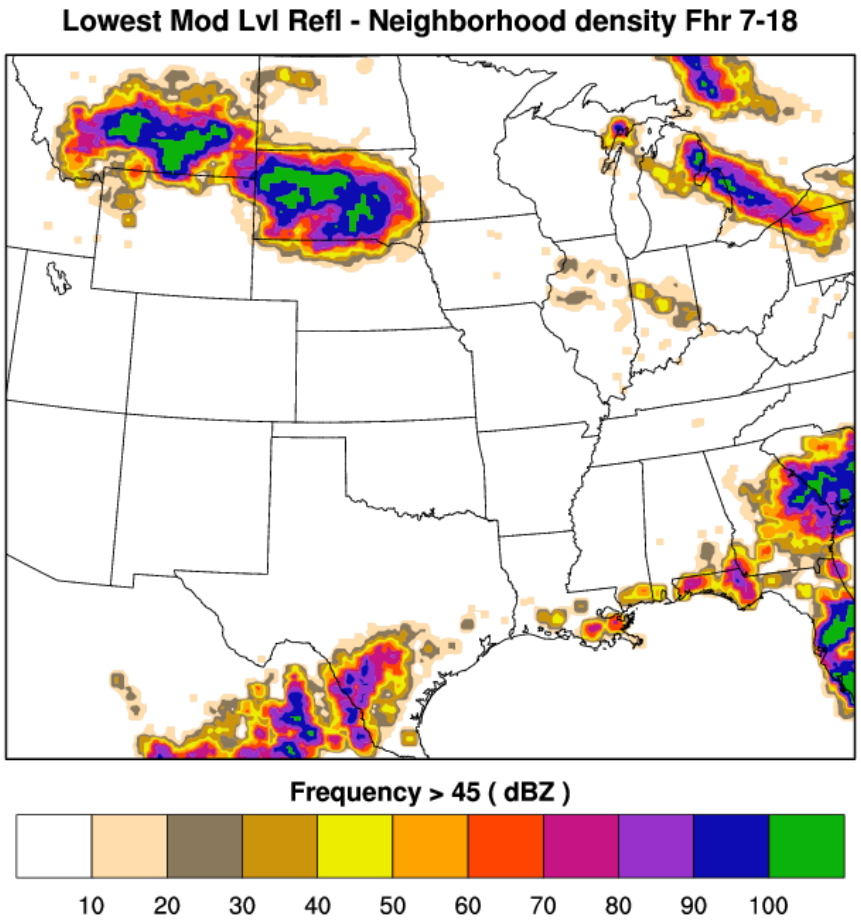


WRF-DART 12 h Forecast

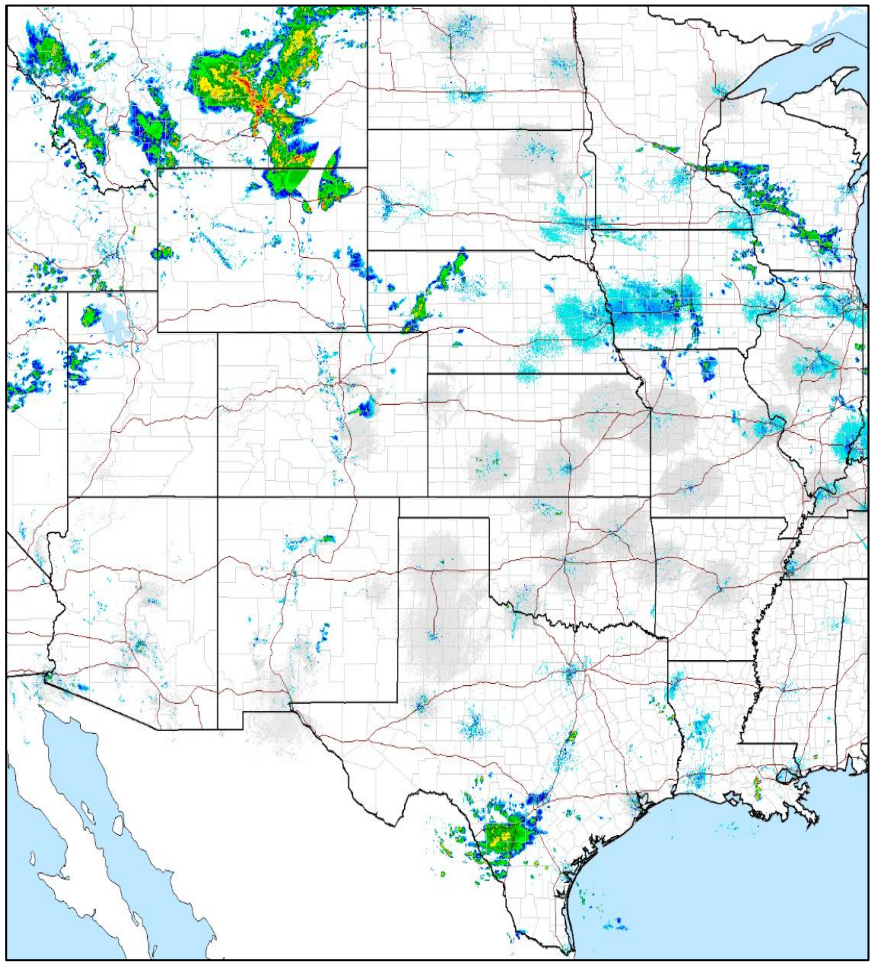
06/11/13



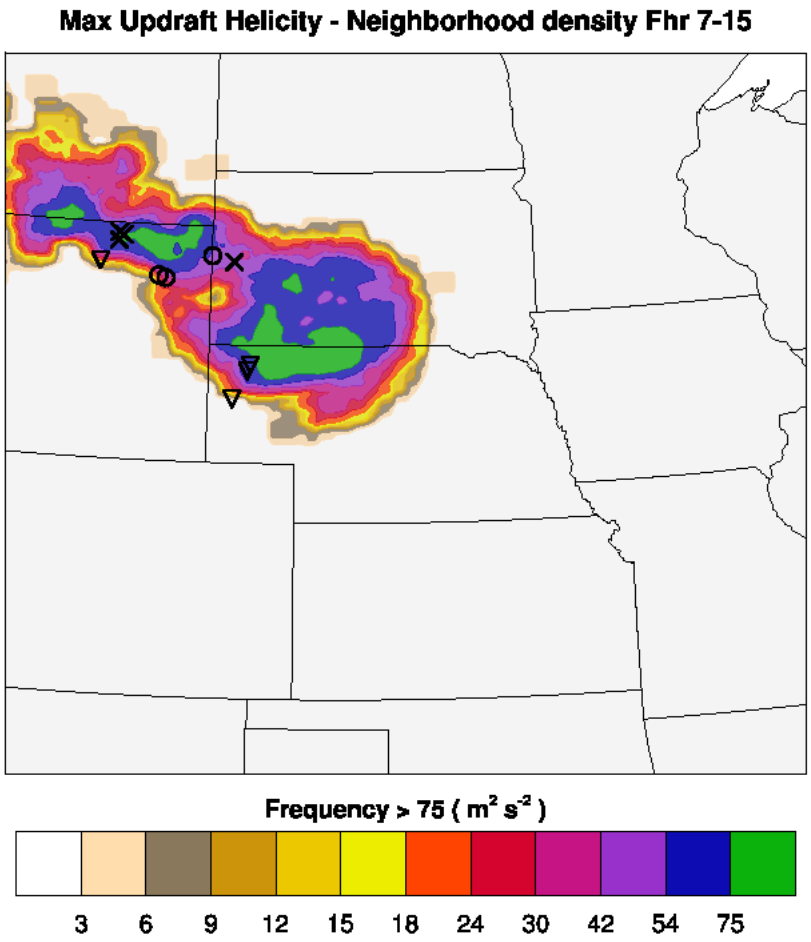
Radar 00:00 UTC



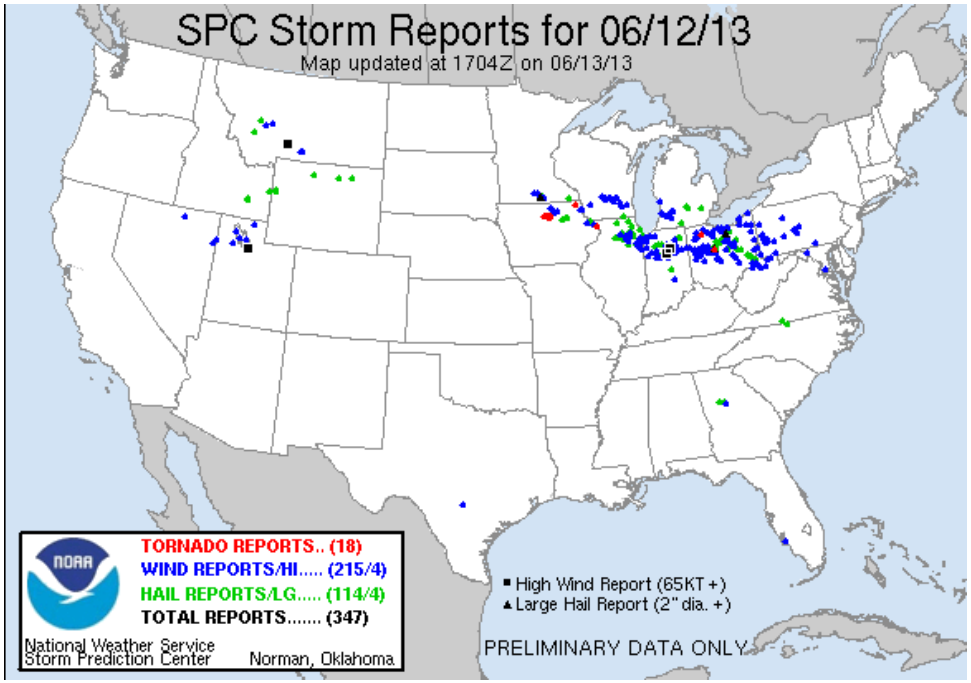
06/11/13

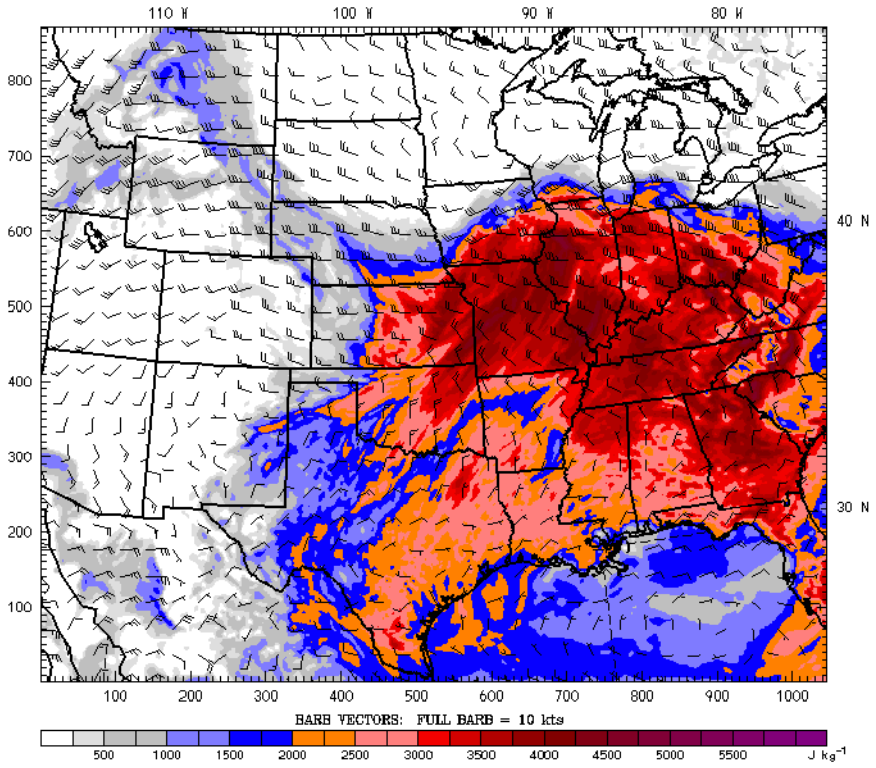


Radar 00:00 UTC



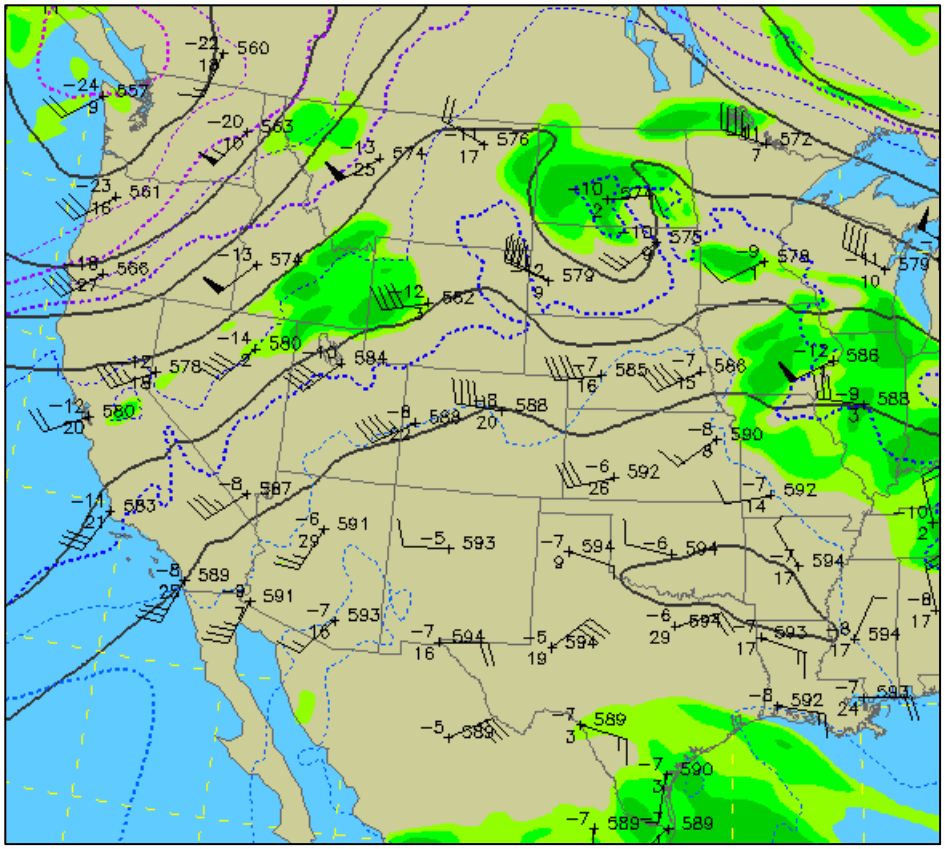
06/12/13



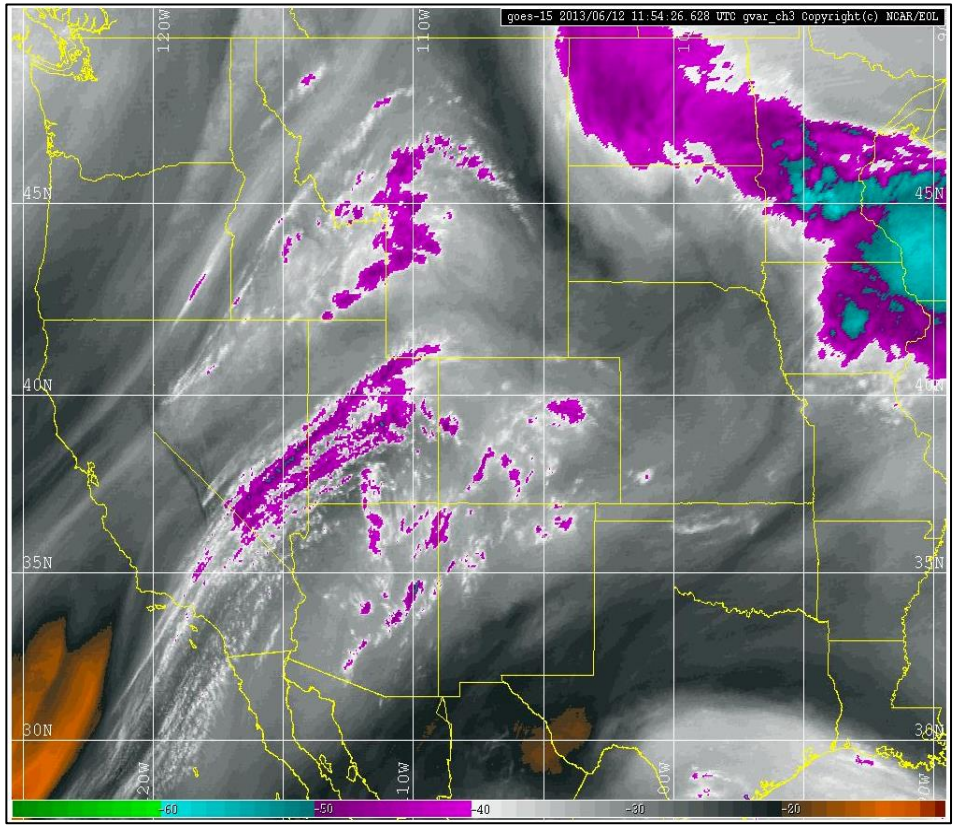


WRF CAPE/Shear: 21 UTC

06/12/13

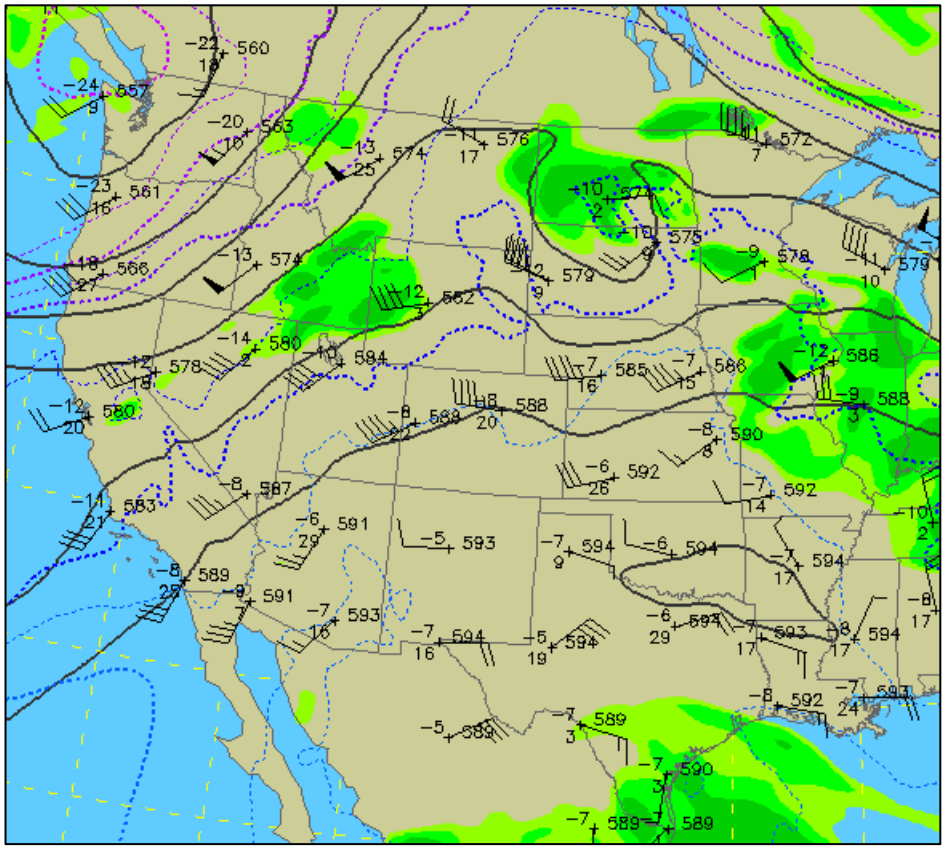


500 hPa 12:00 UTC

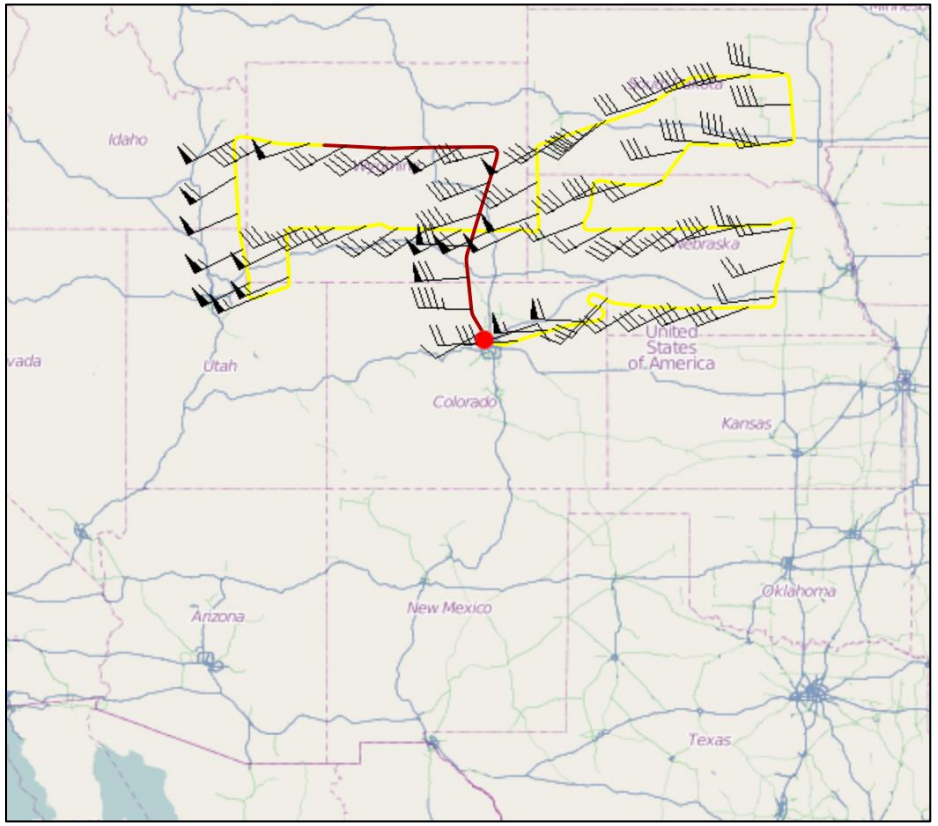


Water Vapor ~12 UTC

06/12/13

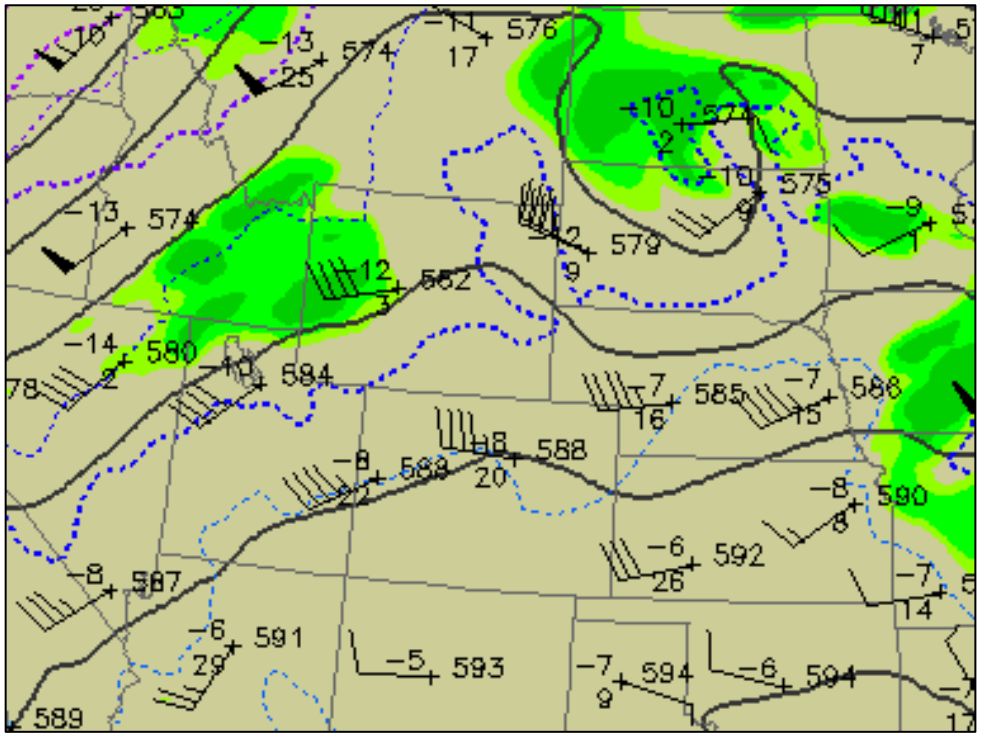


500 hPa 12:00 UTC

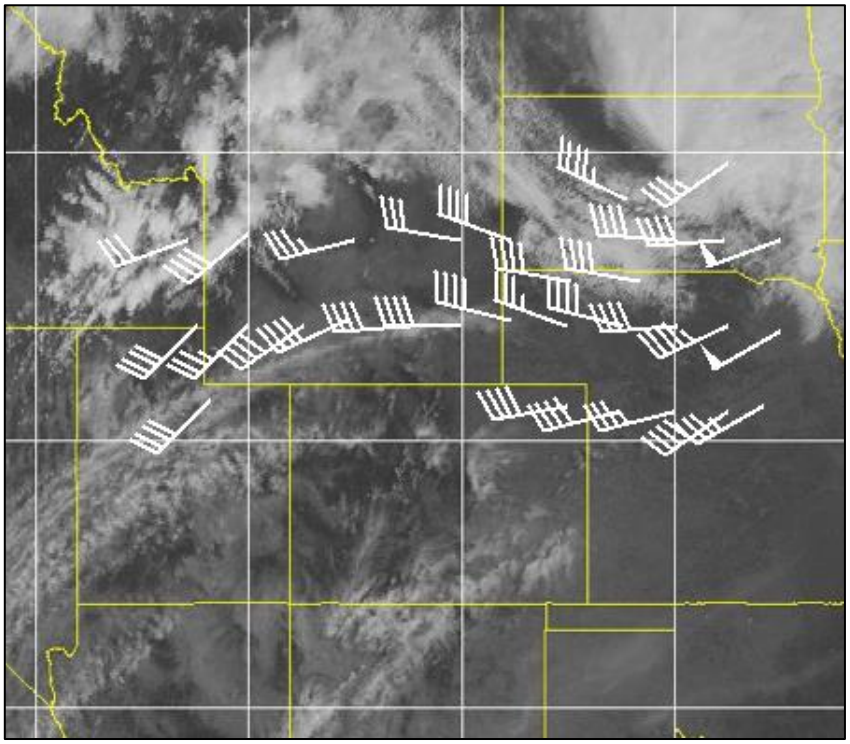


Flight Track Winds ~200 hPa

06/12/13

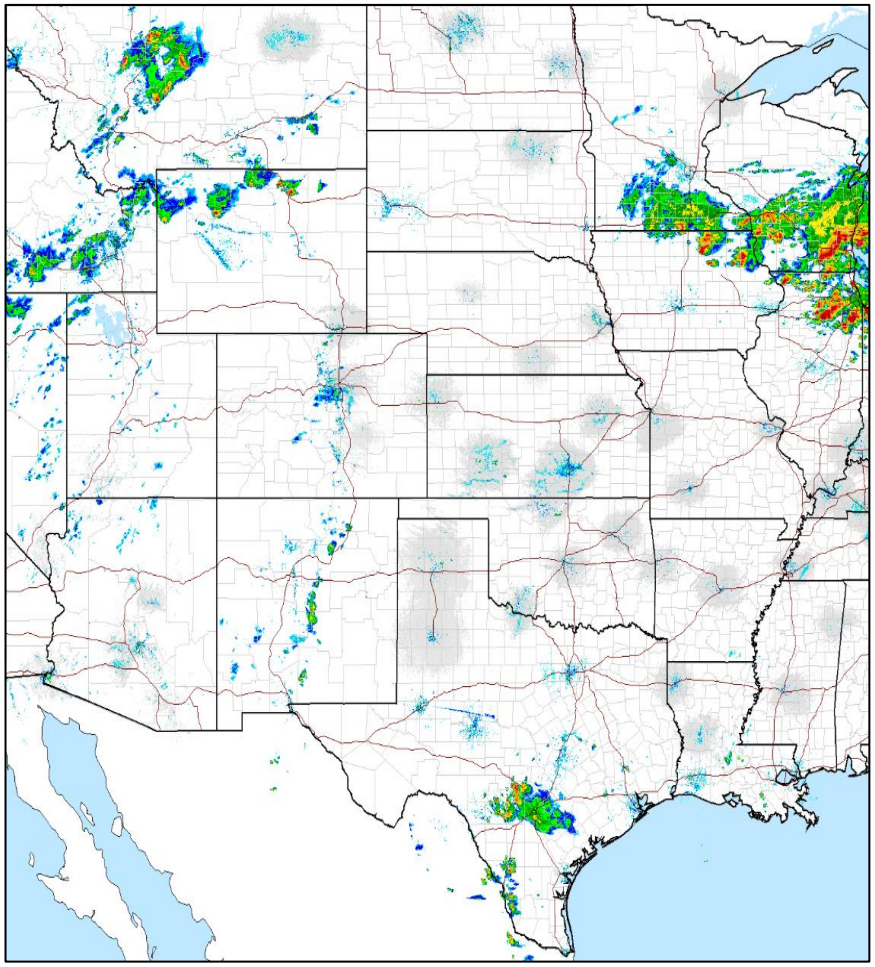


500 hPa 12:00 UTC

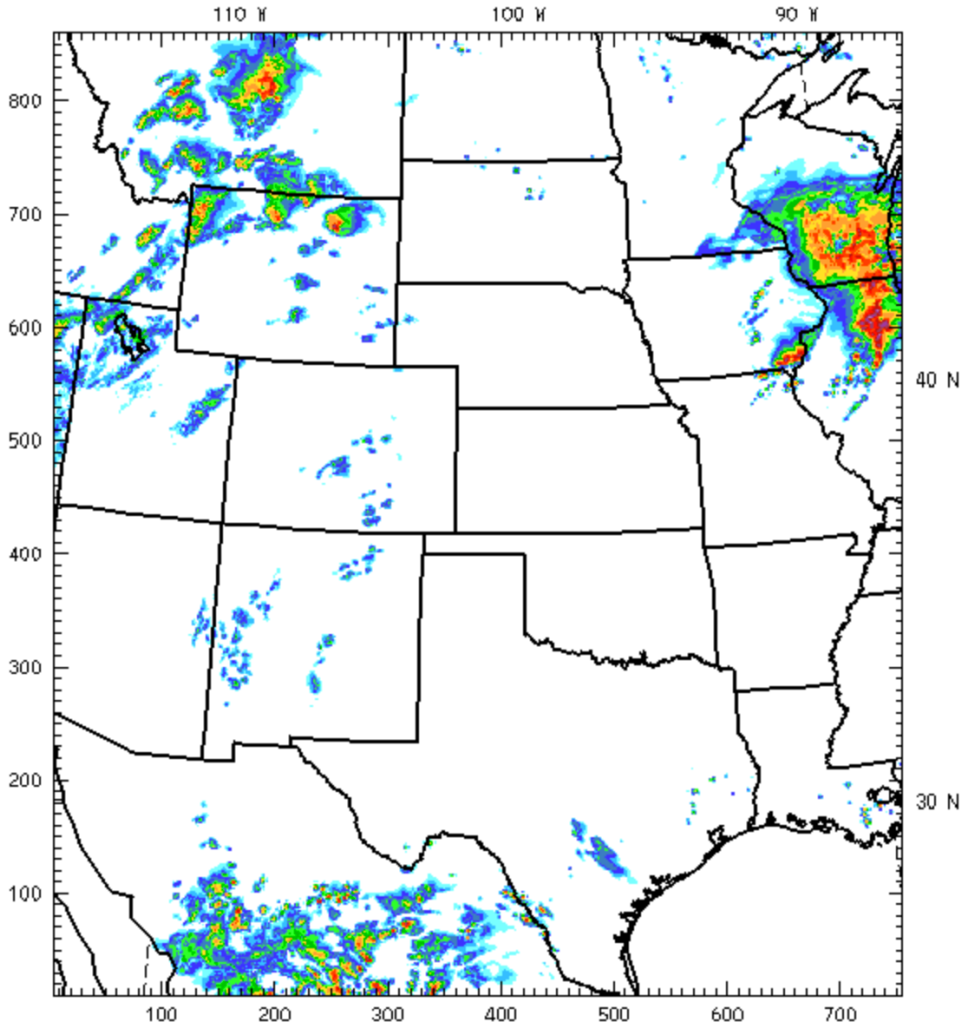


500 hPa Dropsonde Winds

06/12/13

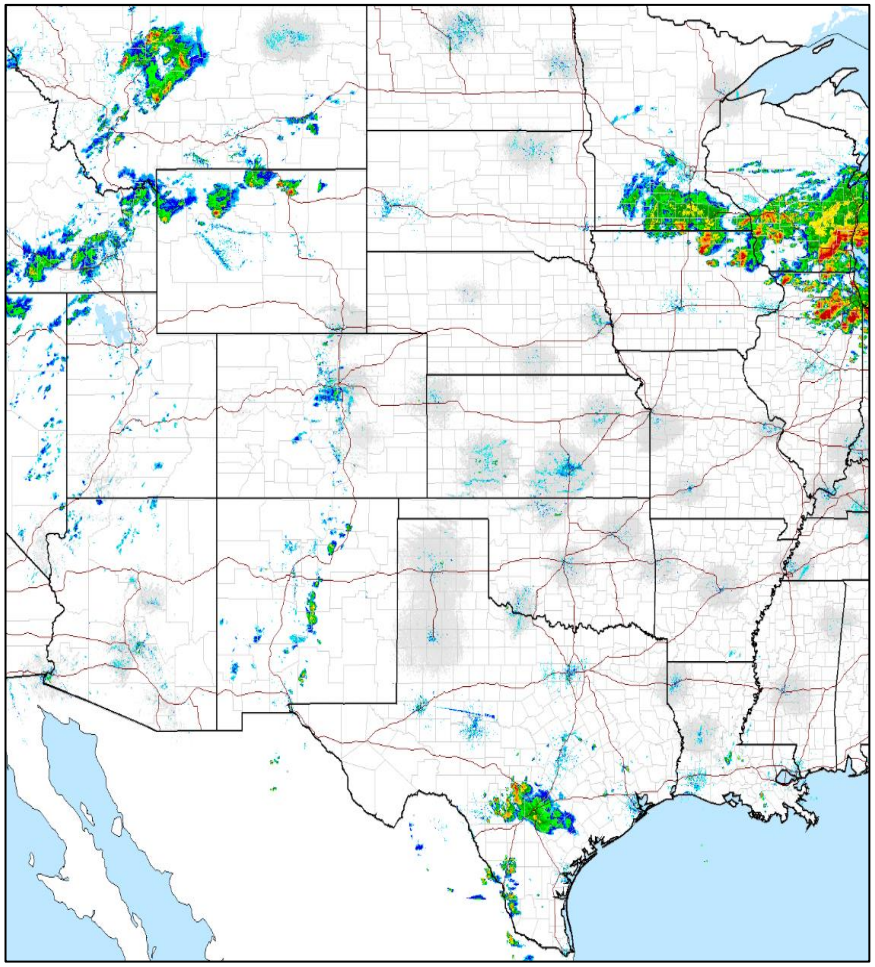


Radar 00:00 UTC

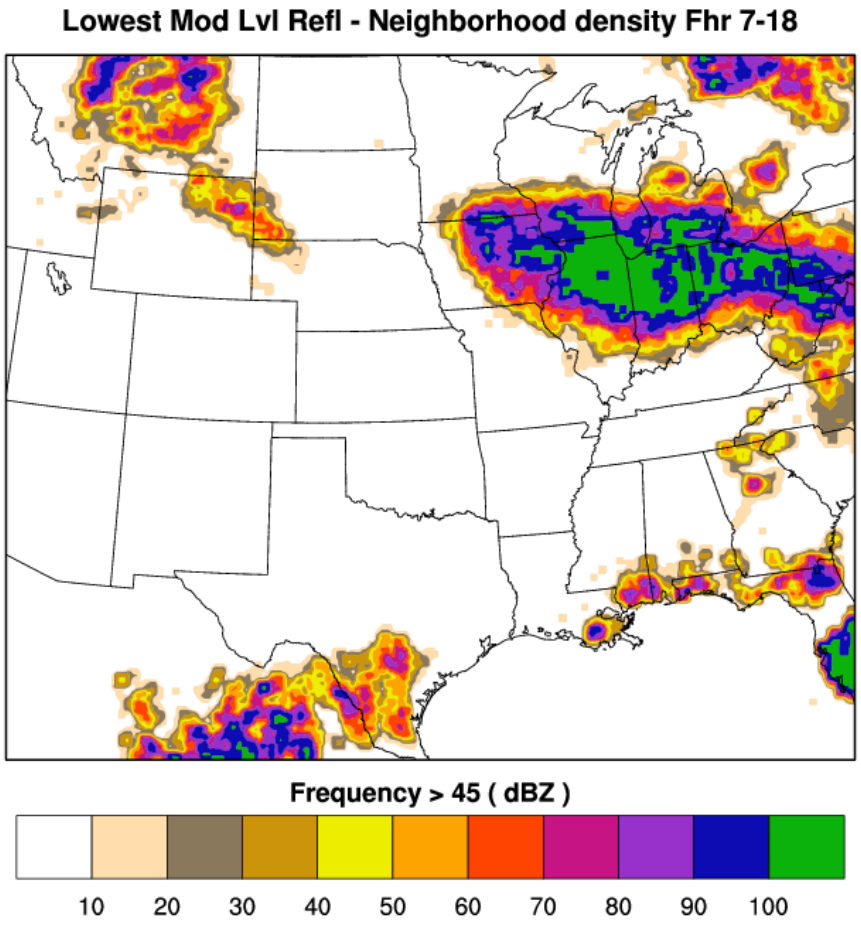


WRF-DART 12 h Forecast

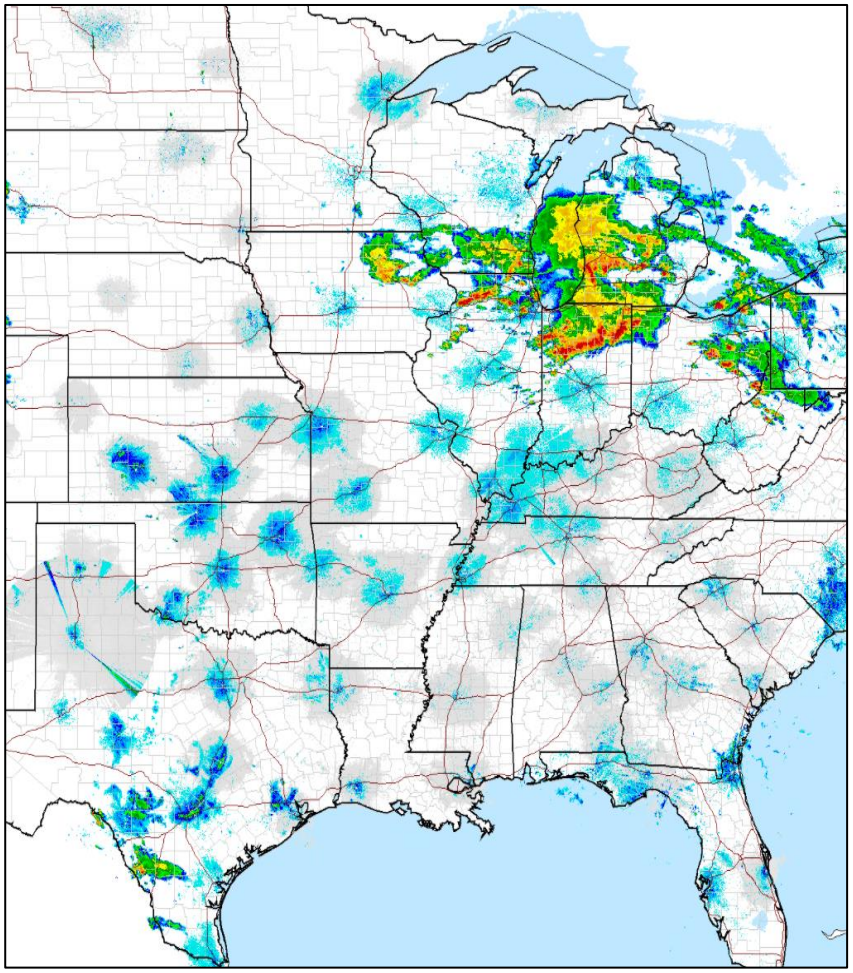
06/12/13



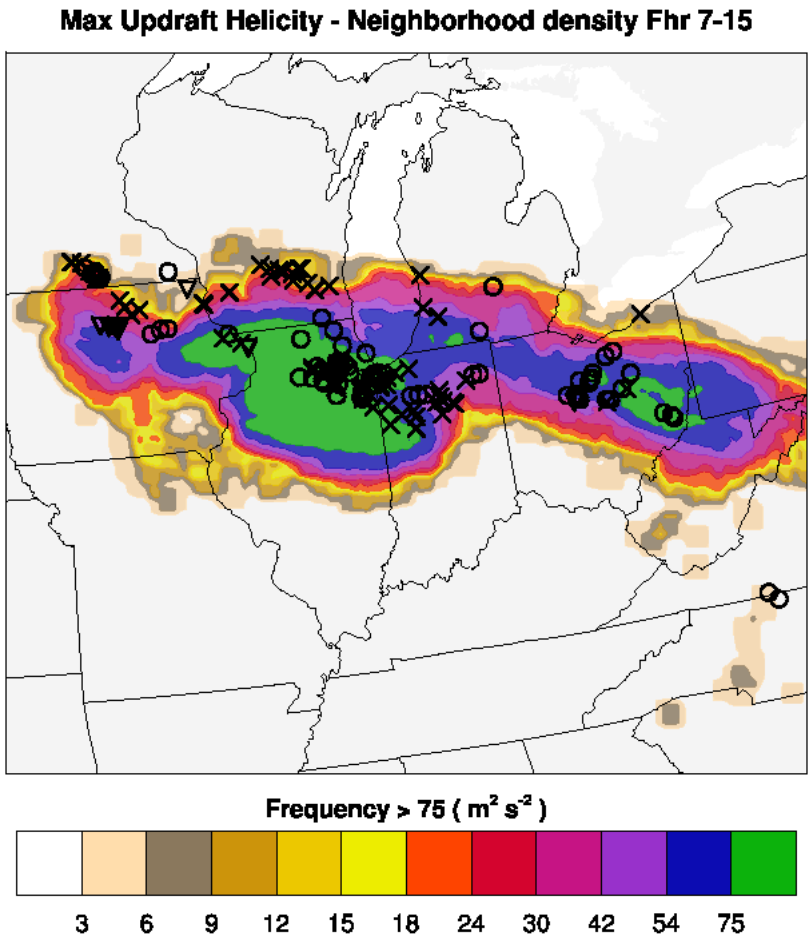
Radar 00:00 UTC



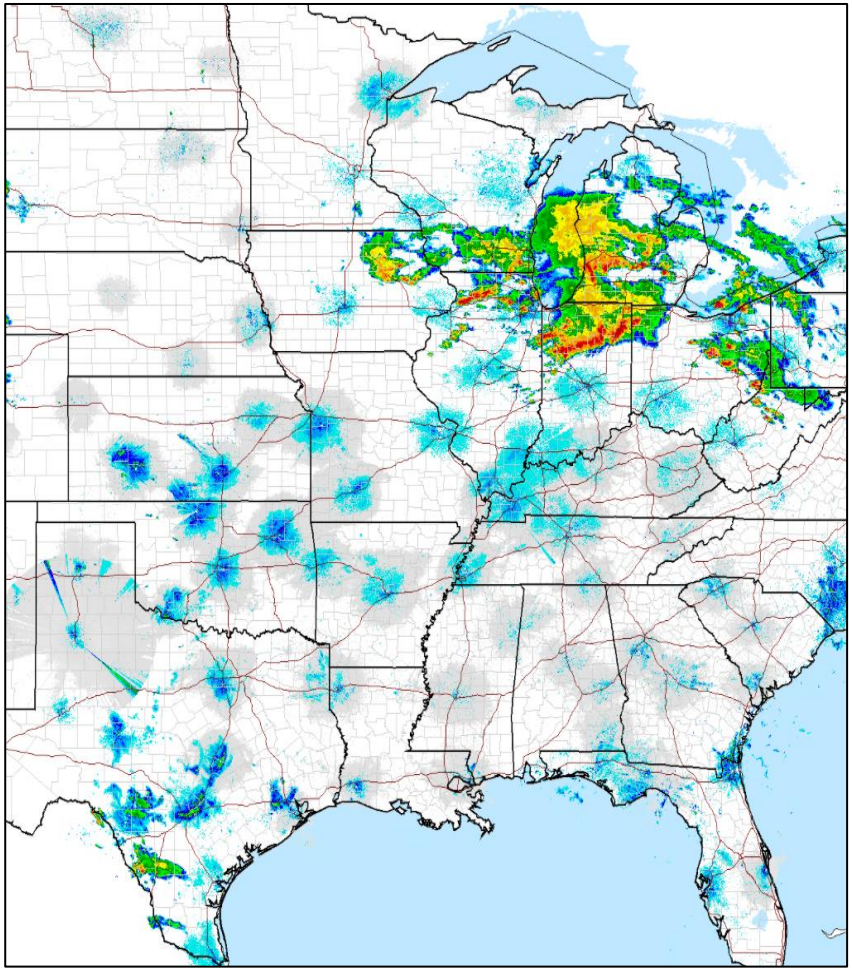
06/12/13



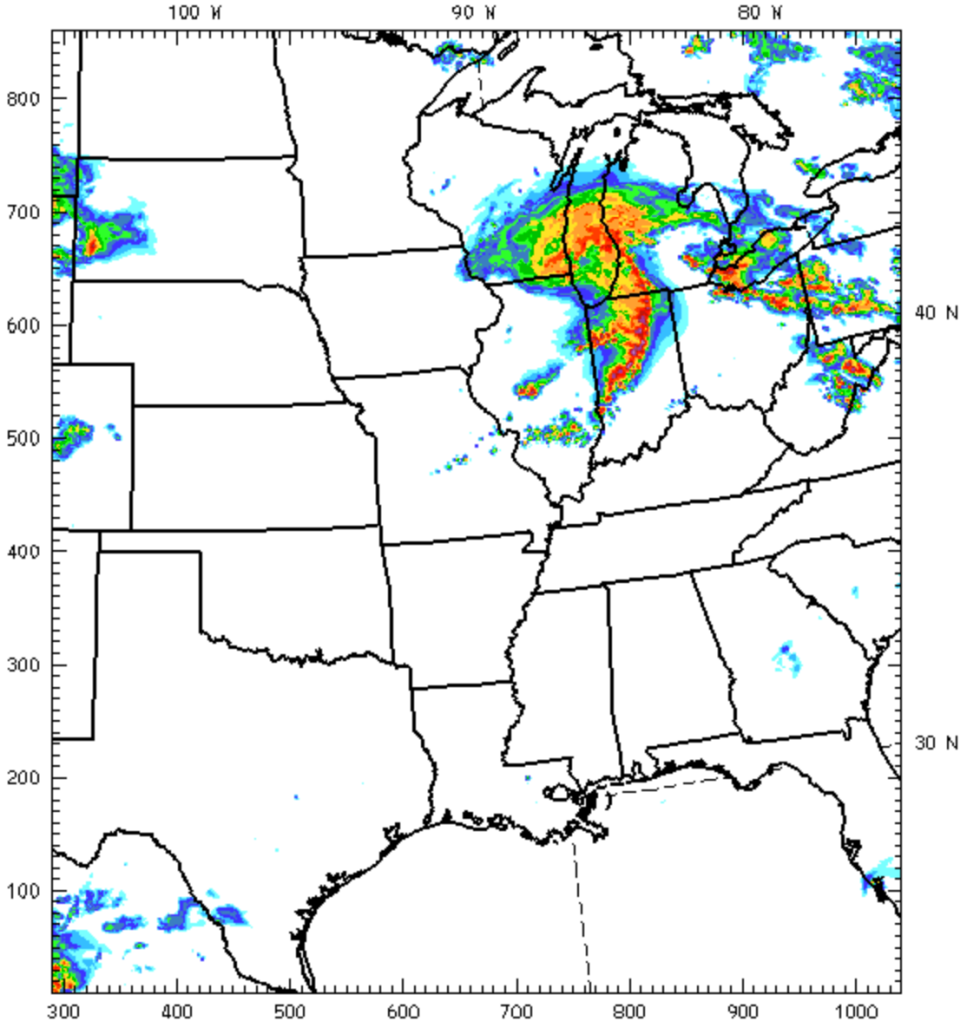
Radar 03:00 UTC



06/12/13

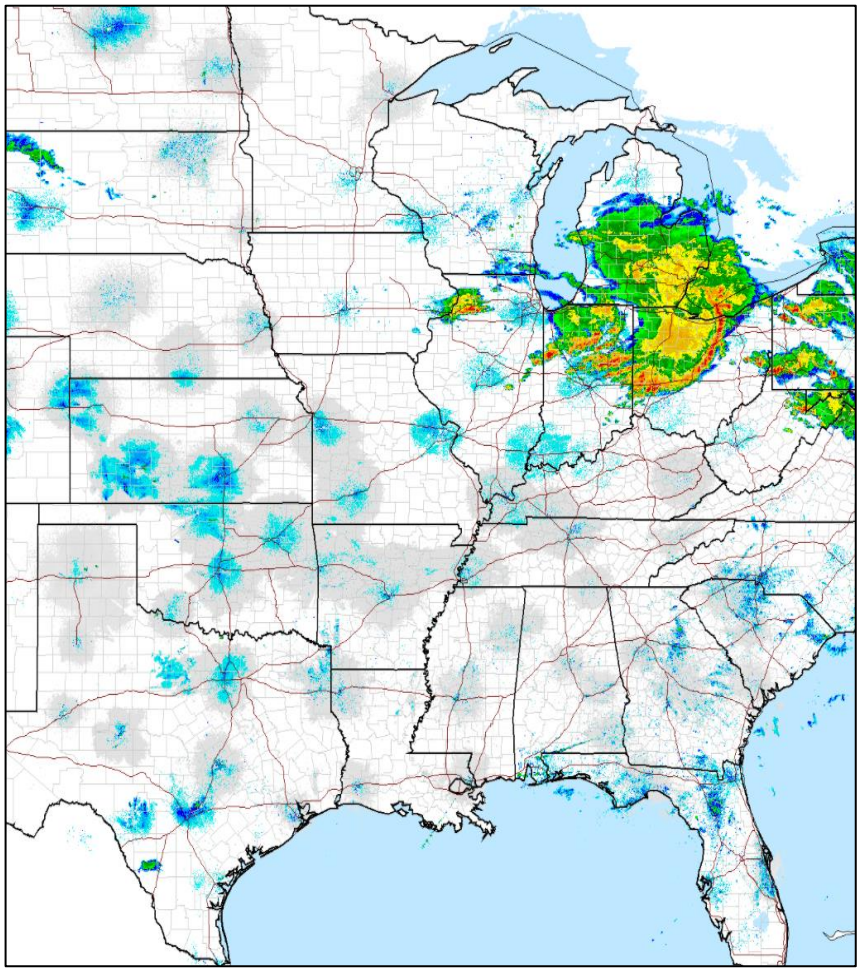


Radar 03:00 UTC

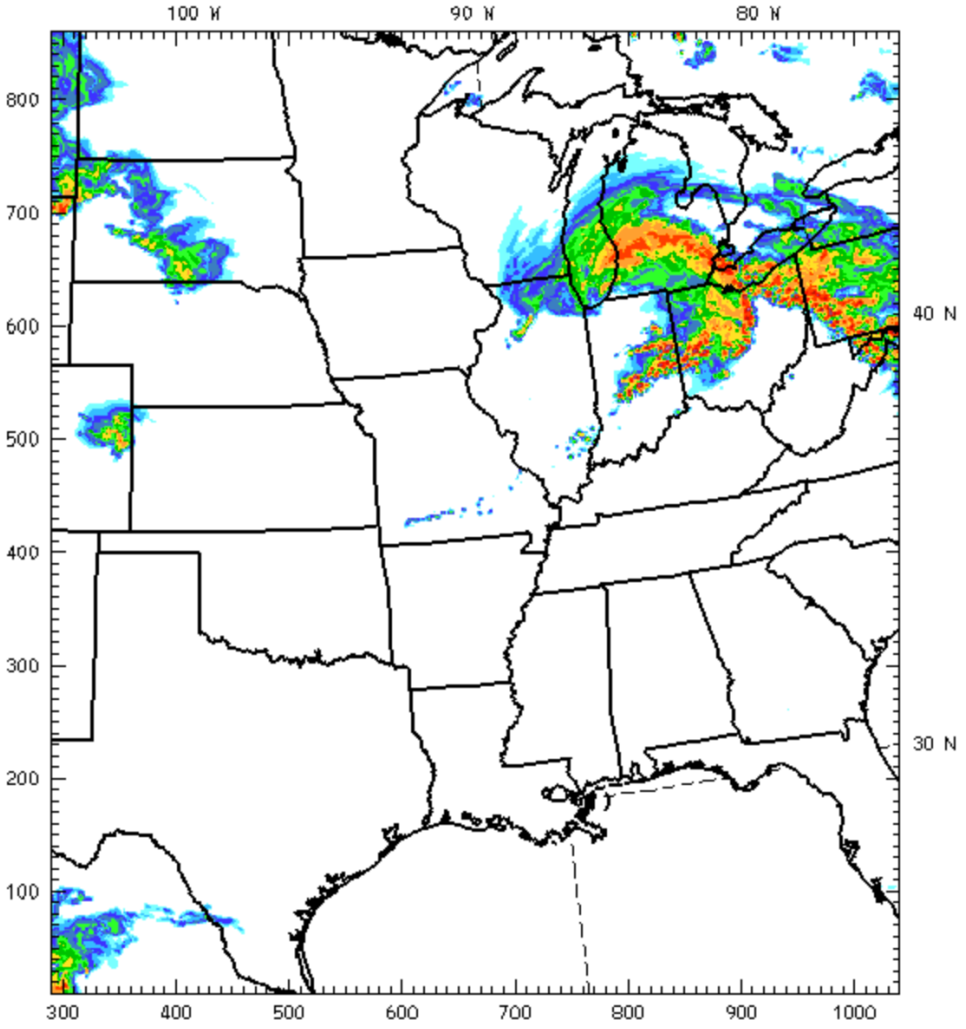


WRF-DART 15 h Forecast

06/12/13

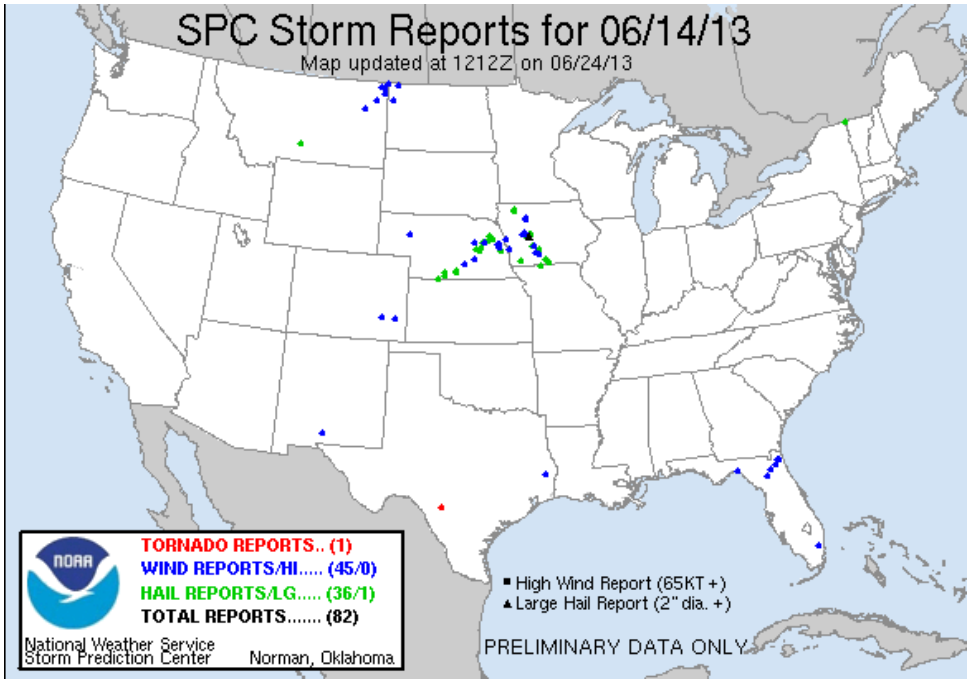


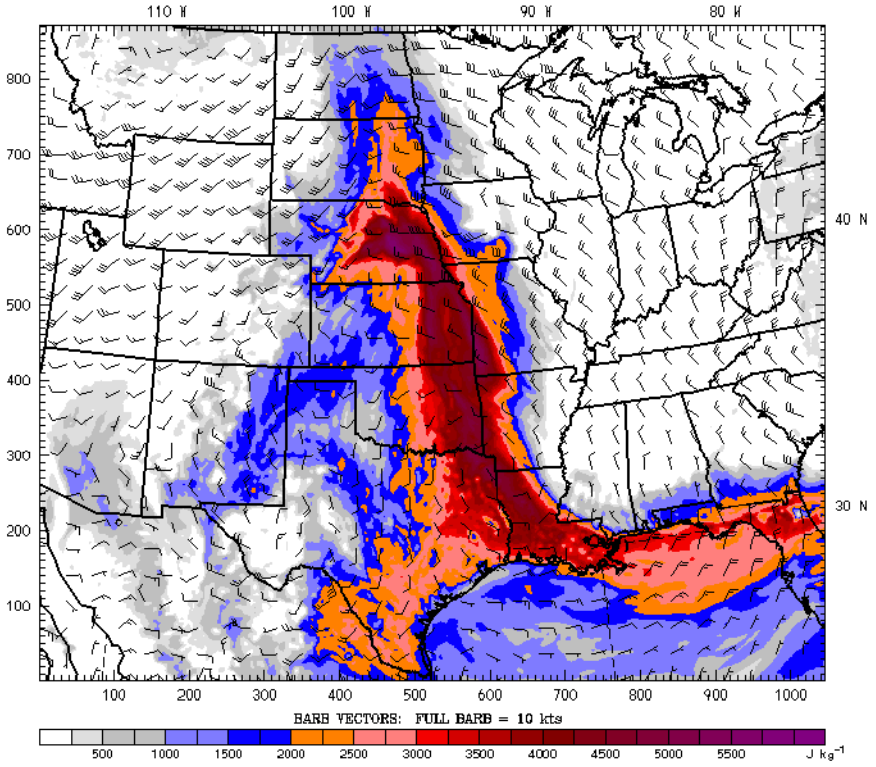
Radar 06:00 UTC



WRF-DART 18 h Forecast

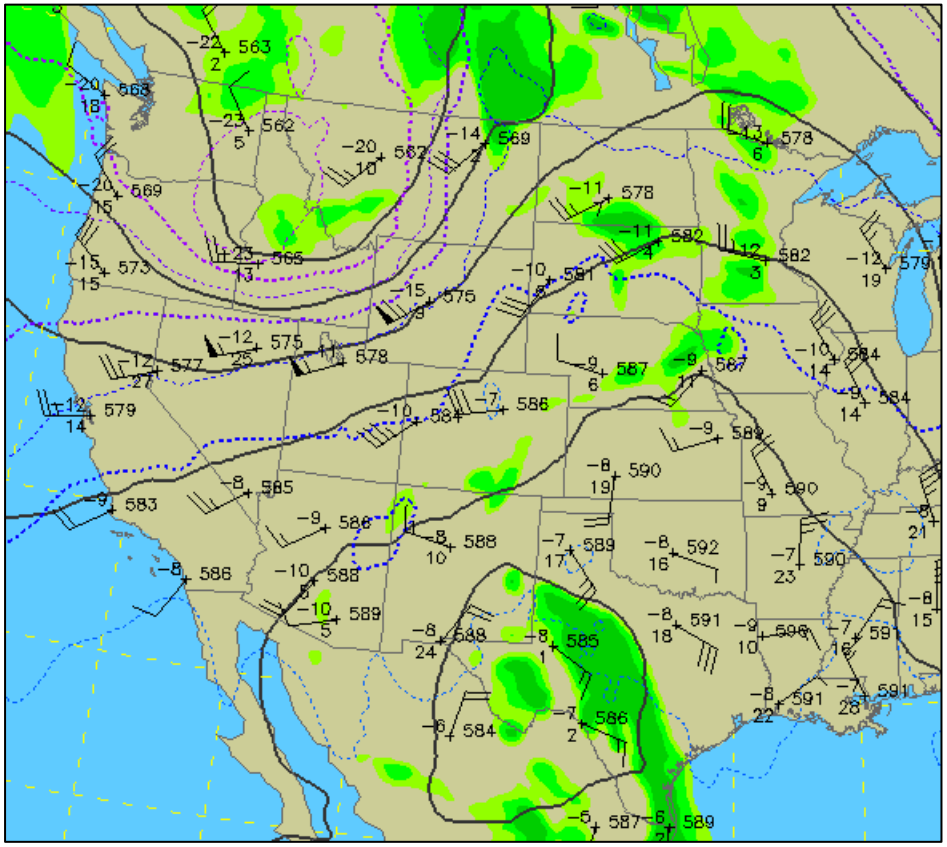
06/14/13



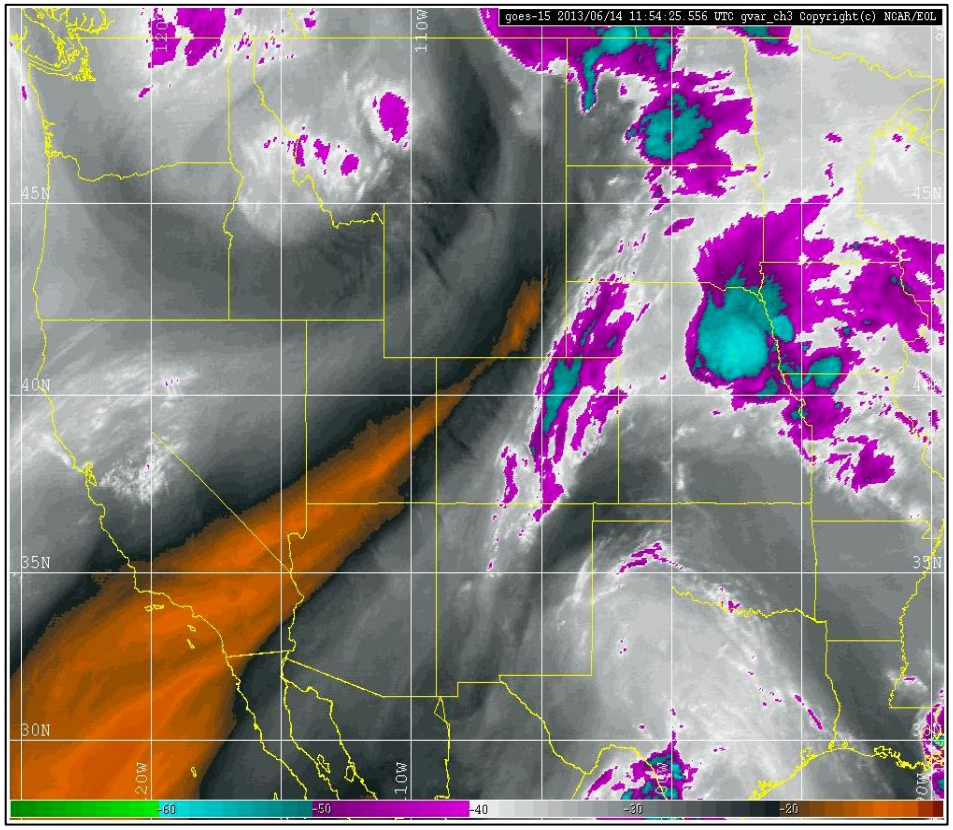


WRF CAPE/Shear: 21 UTC

06/14/13

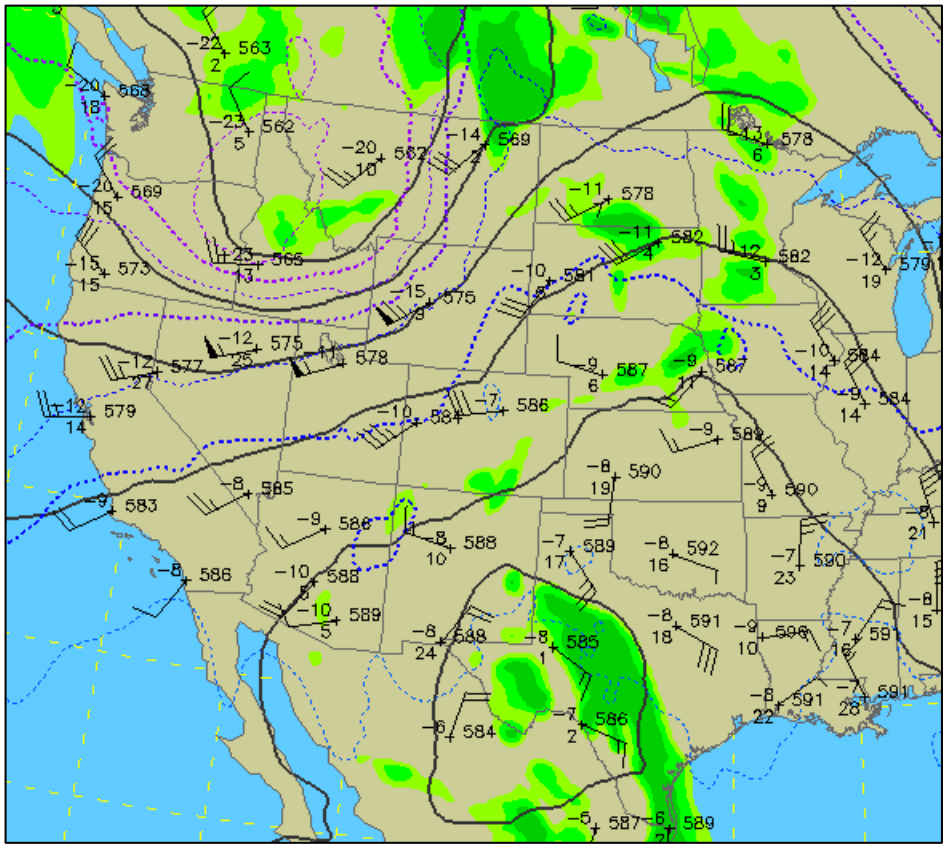


500 hPa 12:00 UTC

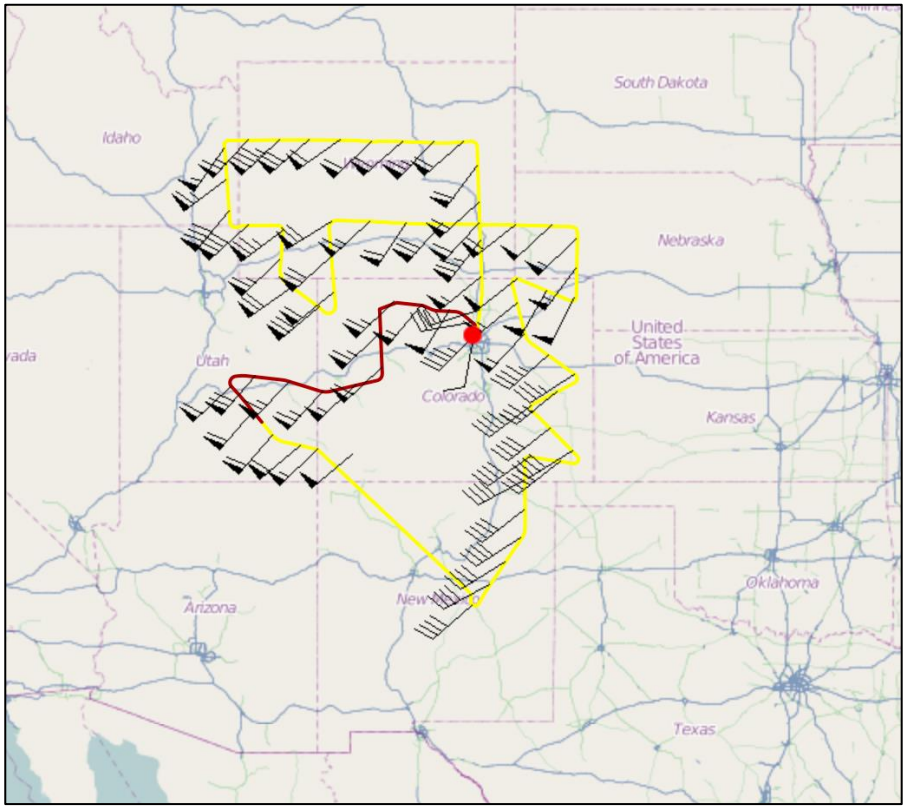


Water Vapor ~12 UTC

06/14/13

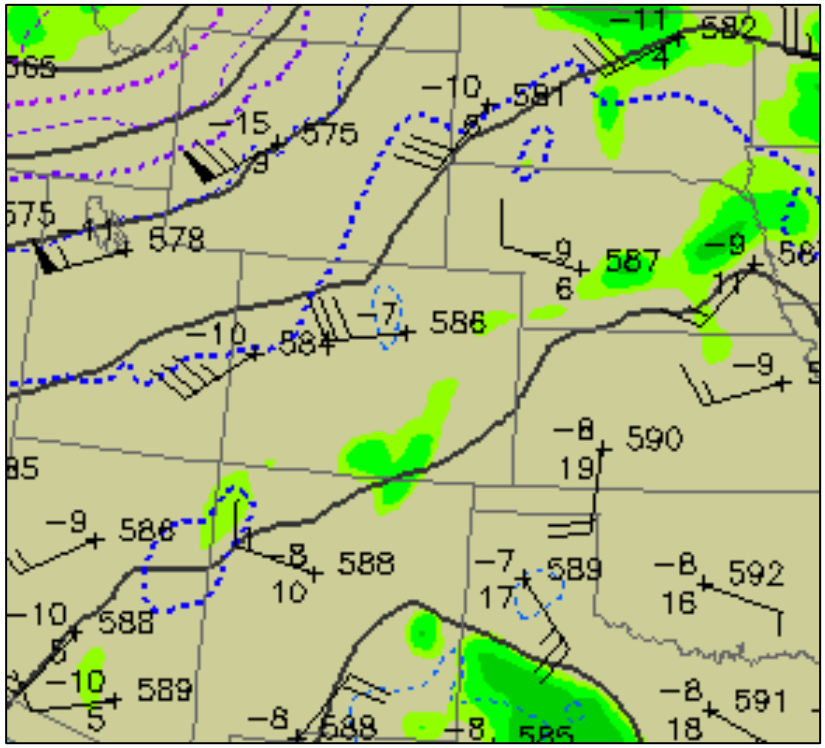


500 hPa 12:00 UTC

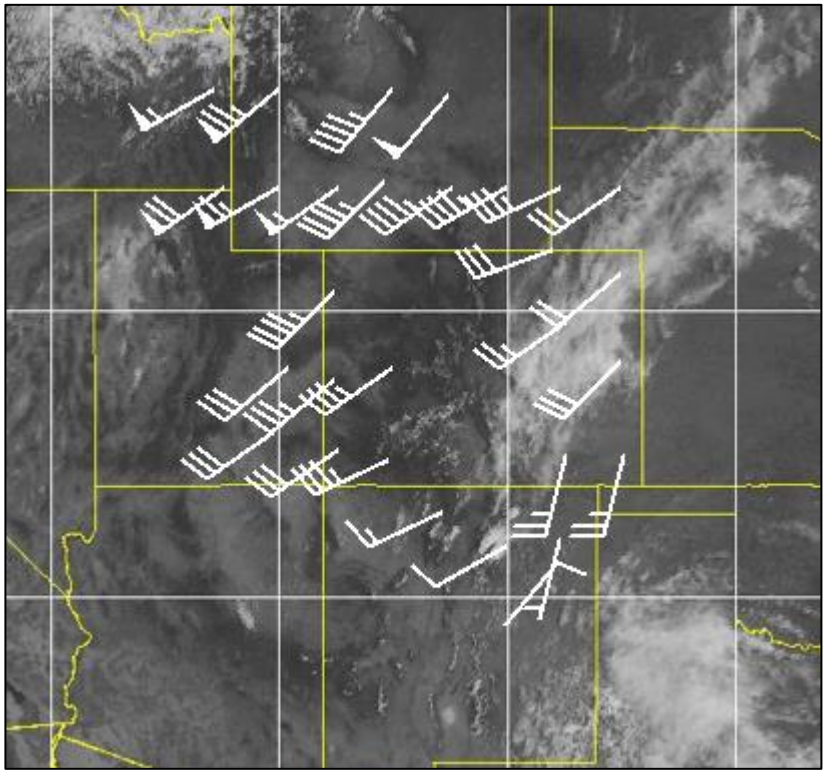


Flight Track Winds ~200 hPa

06/14/13

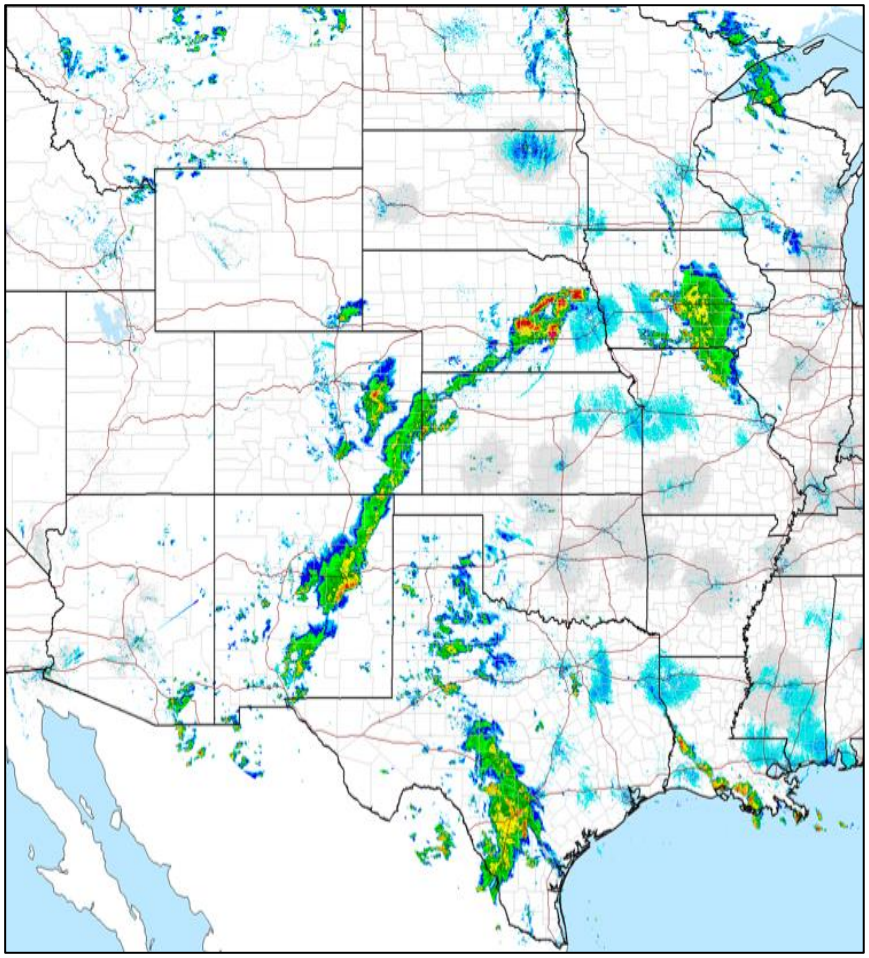


500 hPa 12:00 UTC

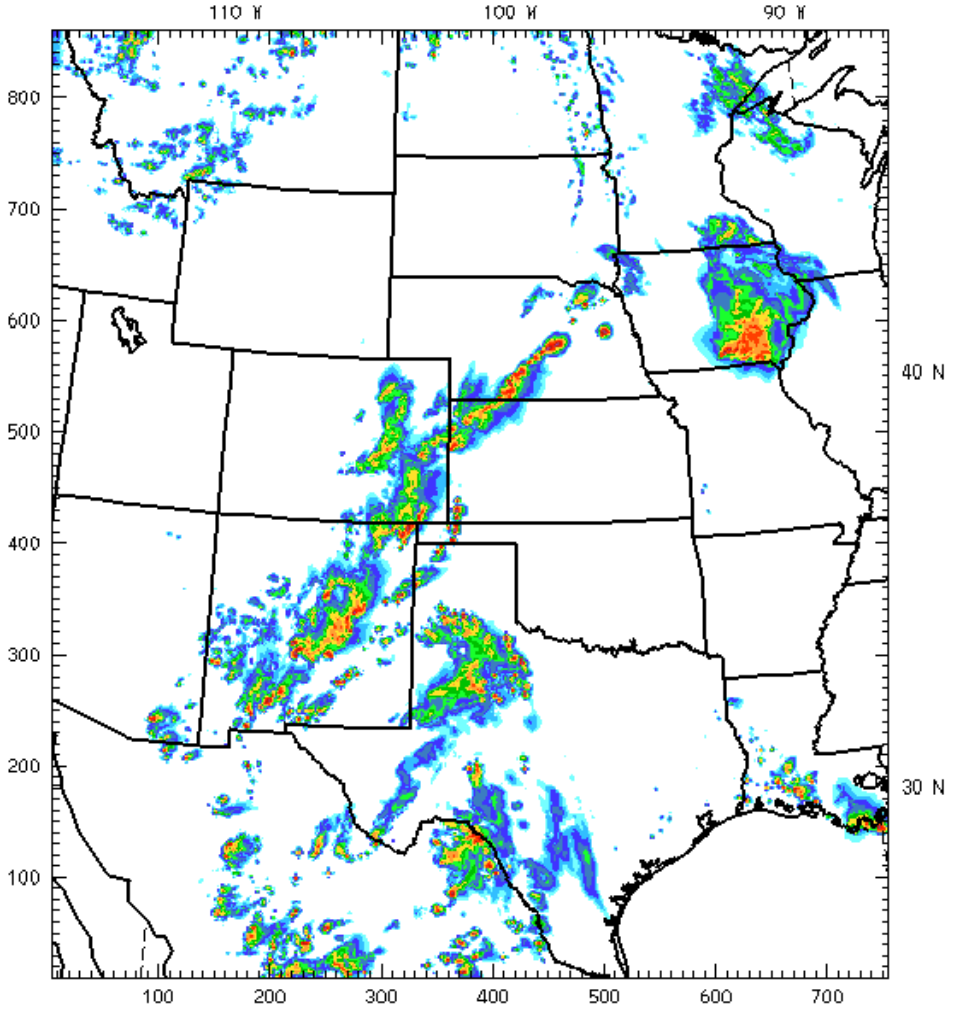


500 hPa Dropsonde Winds

06/14/13

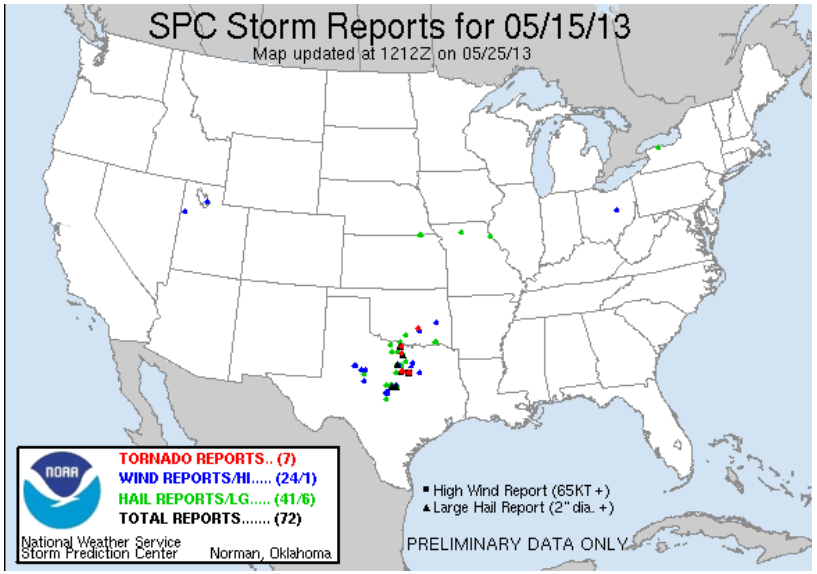


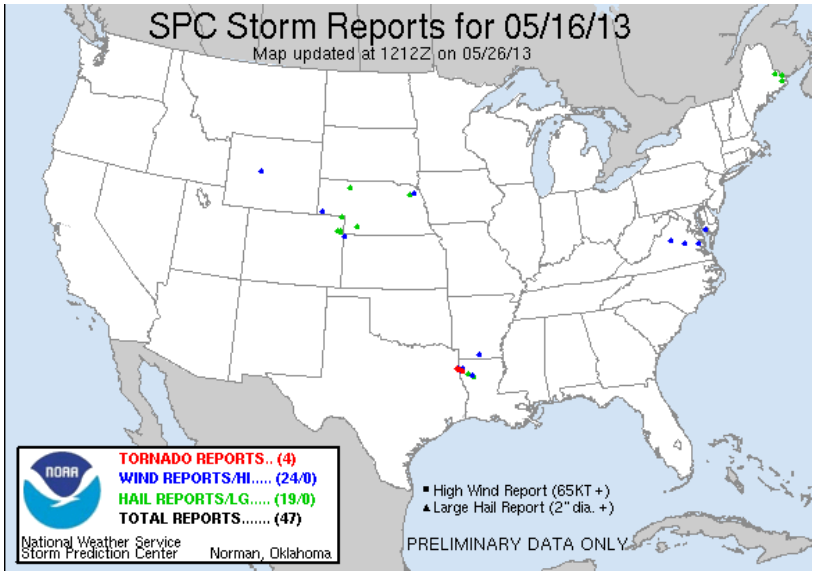
Radar 00:00 UTC

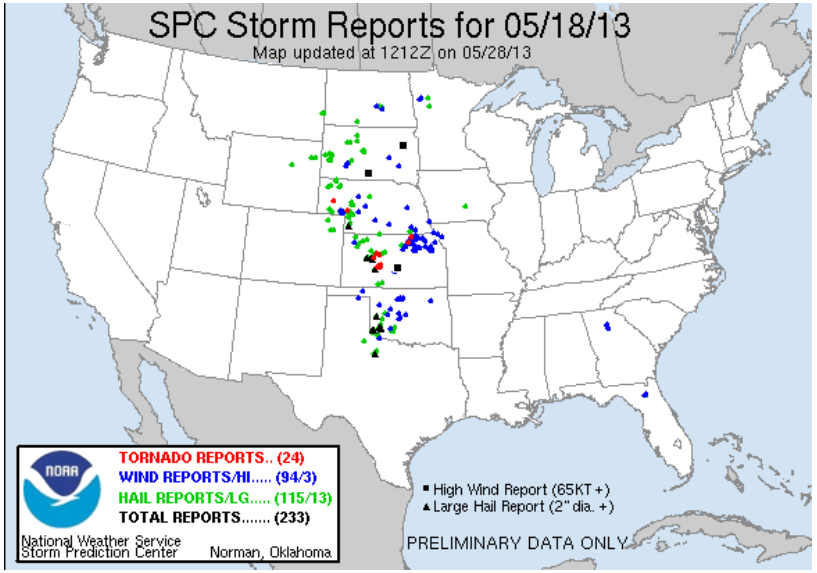


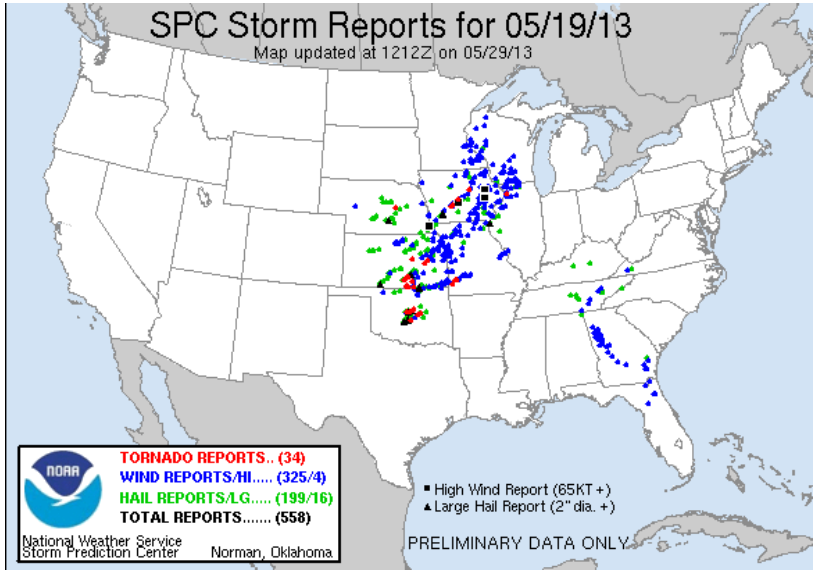
WRF-DART 11 h Forecast

MPEX Cases:


SPC Storm Reports for 05/15/13
Map updated at 1212Z on 05/25/13
TORNADO REPORTS.. (7)
WIND REPORTS/HI..... (24/1)
HAIL REPORTS/LG..... (41/6)
TOTAL REPORTS..... (72)
National Weather Service
Storm Prediction Center
Norman, Oklahoma
High Wind Report (65KT+)
Large Hail Report (2" dia.+)
PRELIMINARY DATA ONLY

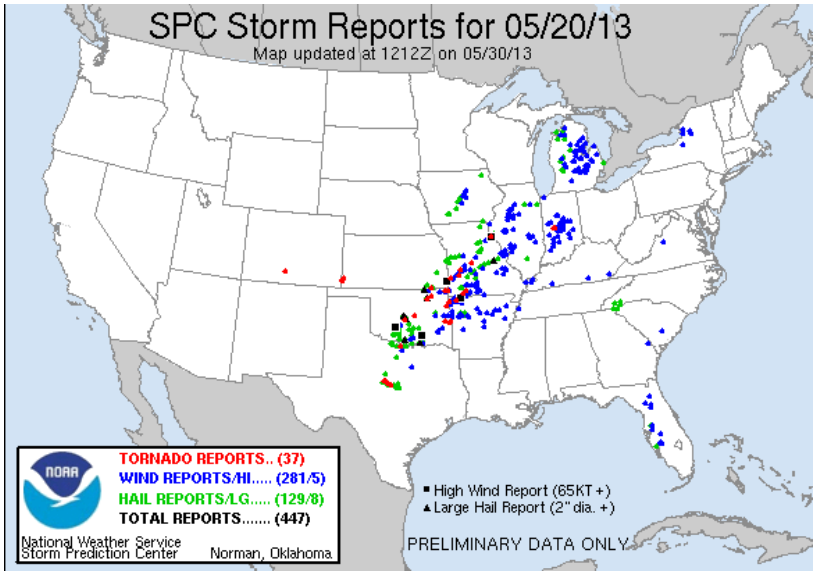

SPC Storm Reports for 05/16/13
Map updated at 1212Z on 05/26/13
TORNADO REPORTS.. (4)
WIND REPORTS/HI..... (24/0)
HAIL REPORTS/LG..... (19/0)
TOTAL REPORTS..... (47)
National Weather Service
Storm Prediction Center
Norman, Oklahoma
High Wind Report (65KT+)
Large Hail Report (2" dia.+)
PRELIMINARY DATA ONLY

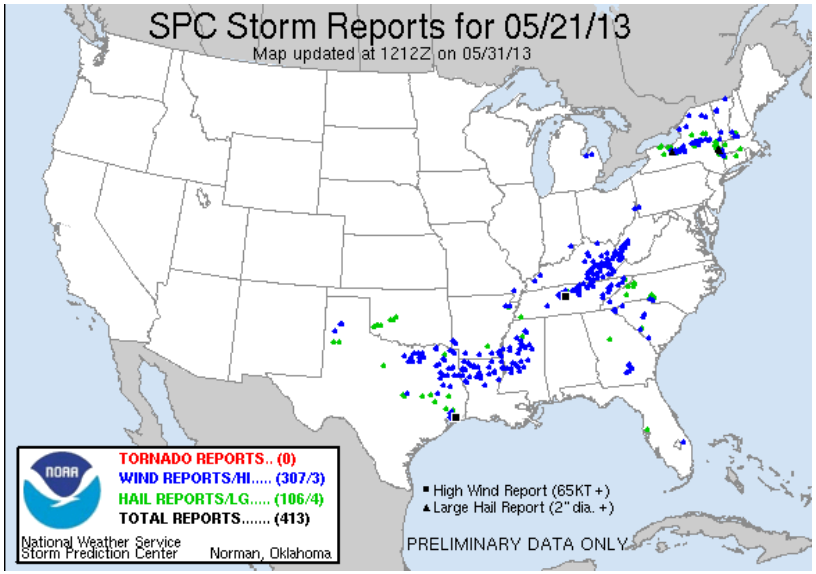

SPC Storm Reports for 05/18/13
Map updated at 1212Z on 05/28/13
TORNADO REPORTS.. (24)
WIND REPORTS/HI..... (94/3)
HAIL REPORTS/LG..... (115/13)
TOTAL REPORTS..... (233)
National Weather Service
Storm Prediction Center
Norman, Oklahoma
High Wind Report (65KT+)
Large Hail Report (2" dia.+)
PRELIMINARY DATA ONLY

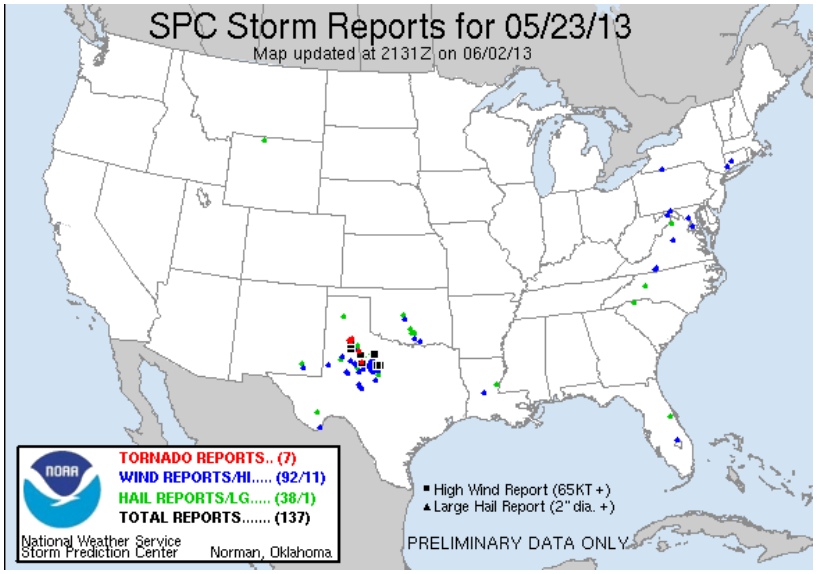

SPC Storm Reports for 05/19/13
Map updated at 1212Z on 05/29/13
TORNADO REPORTS.. (34)
WIND REPORTS/HI..... (325/4)
HAIL REPORTS/LG..... (199/16)
TOTAL REPORTS..... (558)
National Weather Service
Storm Prediction Center
Norman, Oklahoma
High Wind Report (65KT+)
Large Hail Report (2" dia.+)
PRELIMINARY DATA ONLY

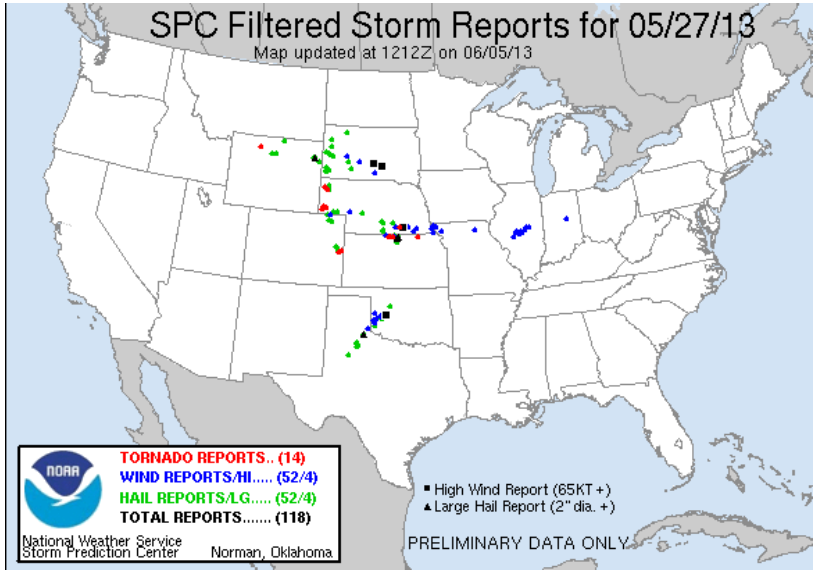
MPEX Cases:

No Fly



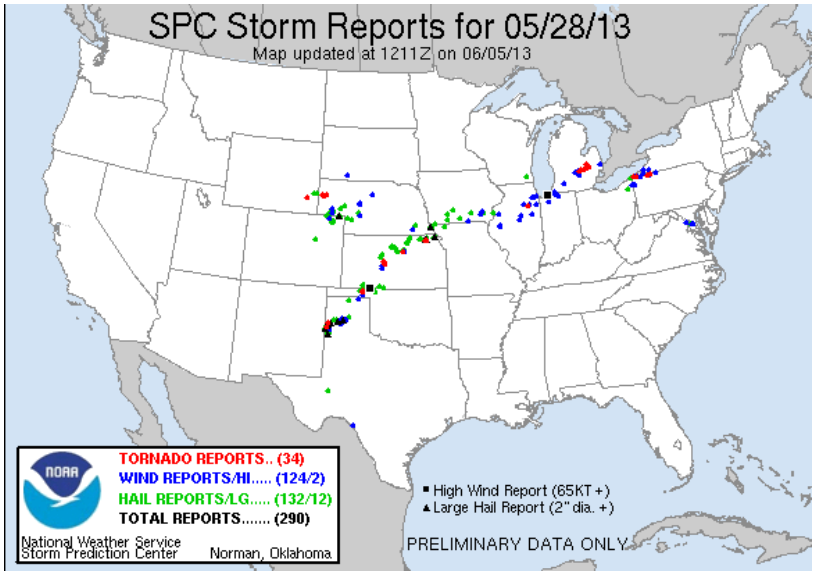


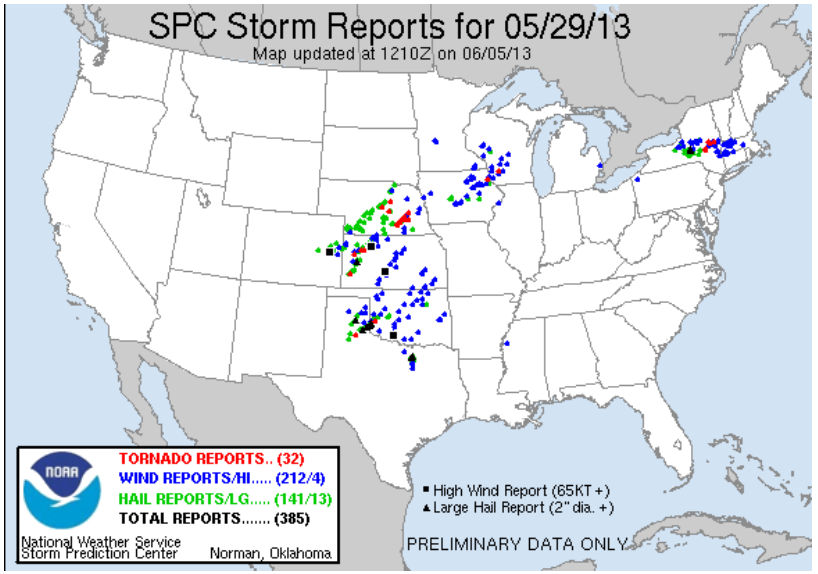


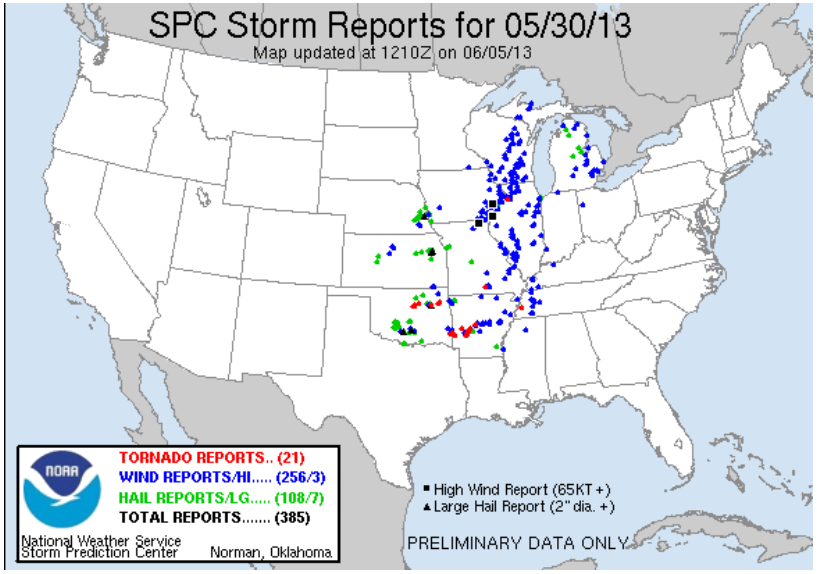


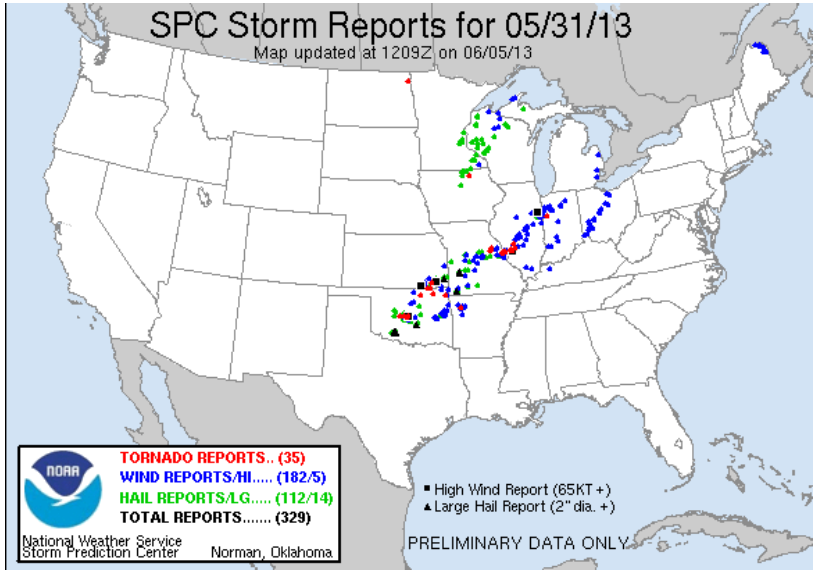
MPEX Cases:

No Fly



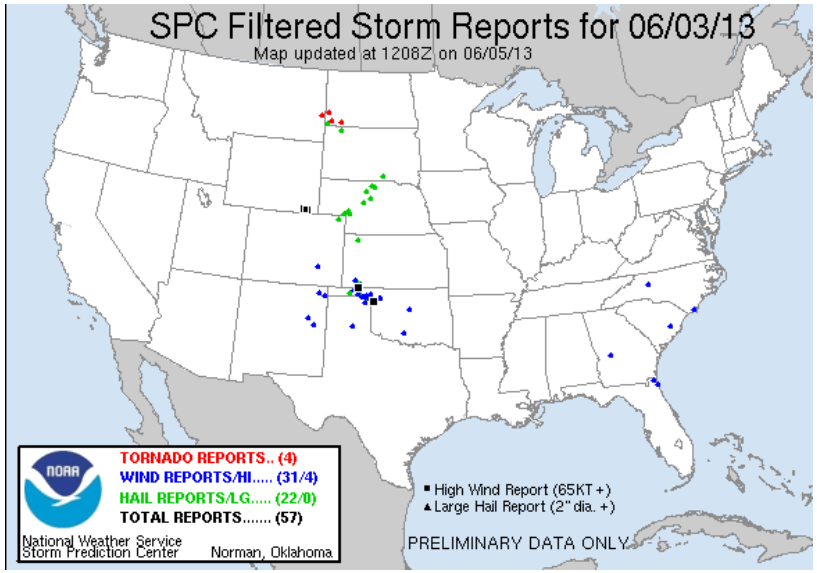


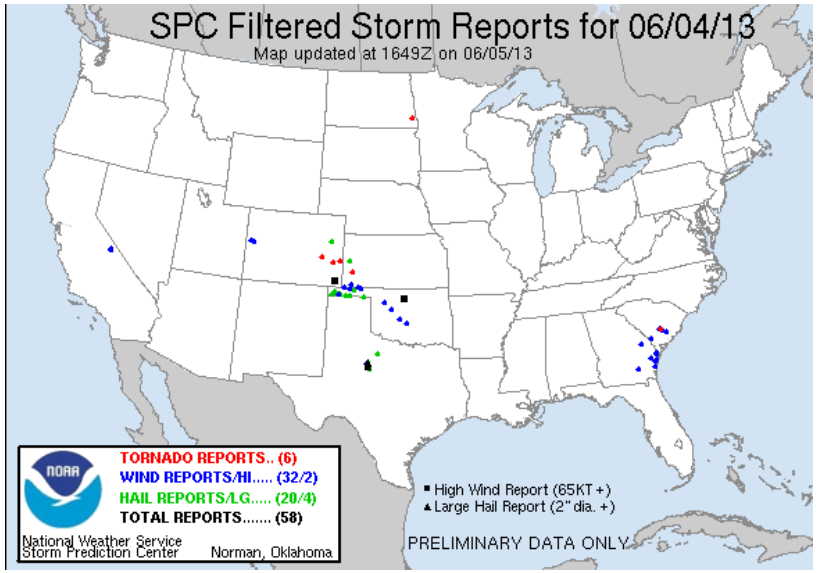


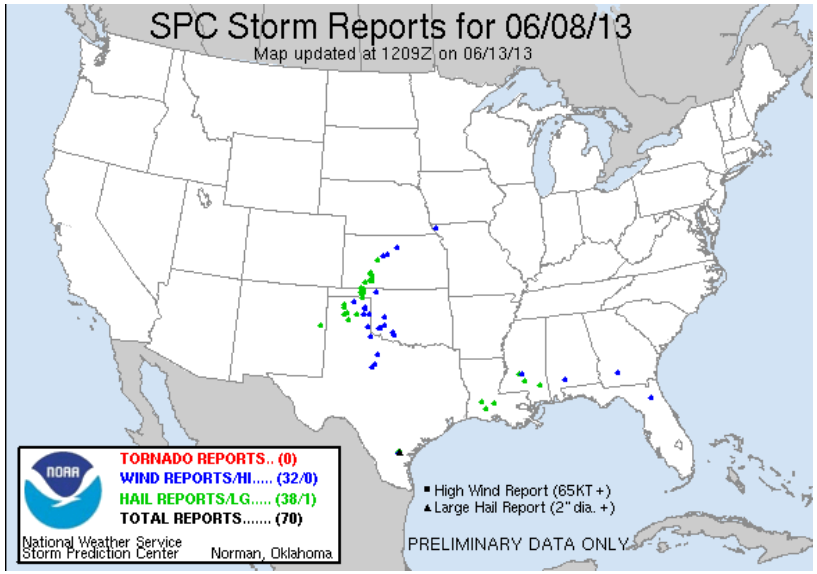


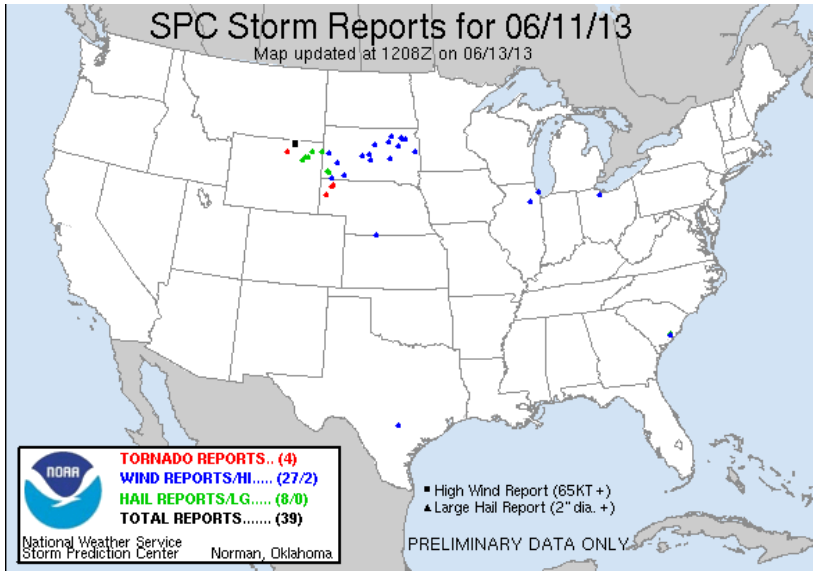
MPEX Cases:

No Fly

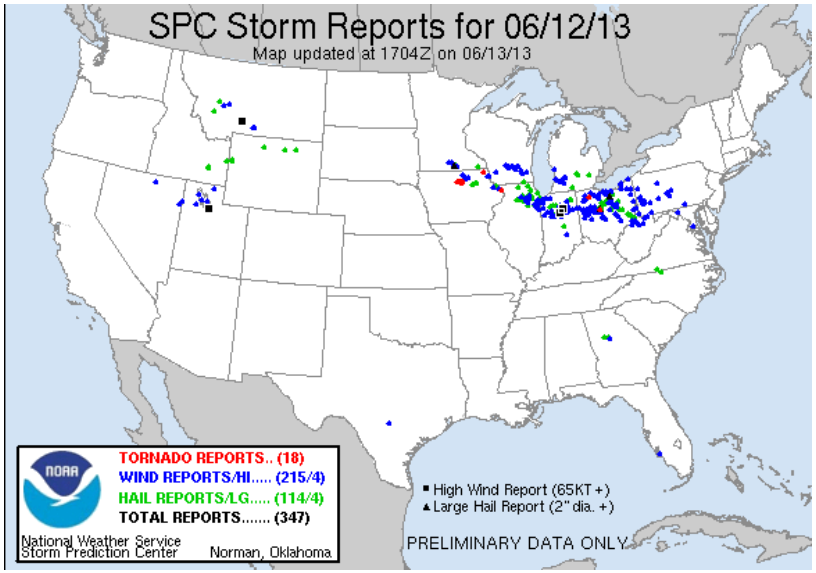


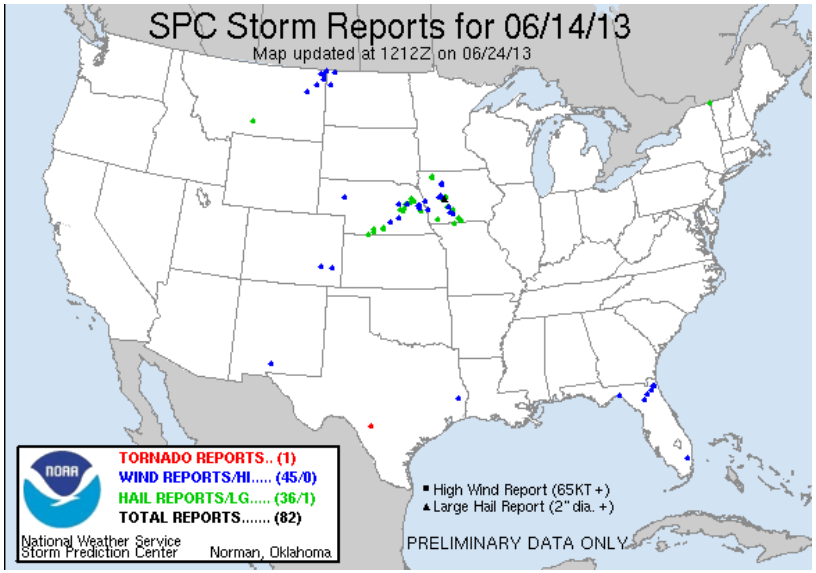




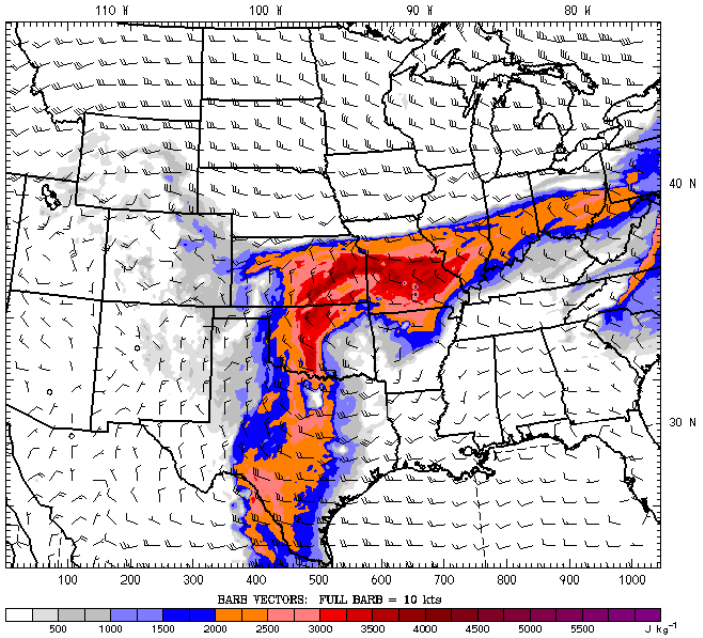


MPEX Cases:

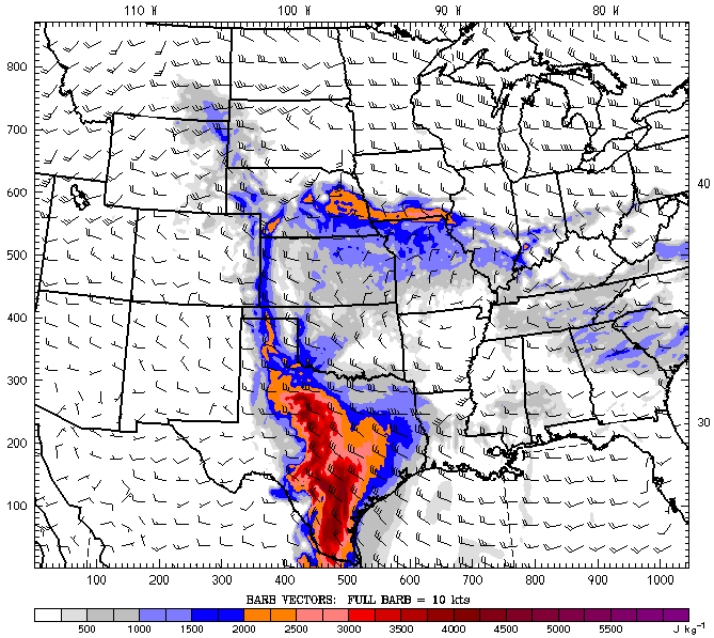

SPC Storm Reports for 06/12/13
Map updated at 1704Z on 06/13/13
TORNADO REPORTS.. (18)
WIND REPORTS/HI..... (215/4)
HAIL REPORTS/LG..... (114/4)
TOTAL REPORTS..... (347)
National Weather Service
Storm Prediction Center
Norman, Oklahoma
High Wind Report (65KT+)
Large Hail Report (2" dia.+)
PRELIMINARY DATA ONLY


SPC Storm Reports for 06/14/13
Map updated at 1212Z on 06/24/13
TORNADO REPORTS.. (1)
WIND REPORTS/HI..... (45/0)
HAIL REPORTS/LG..... (36/1)
TOTAL REPORTS..... (82)
National Weather Service
Storm Prediction Center
Norman, Oklahoma
High Wind Report (65KT+)
Large Hail Report (2" dia.+)
PRELIMINARY DATA ONLY

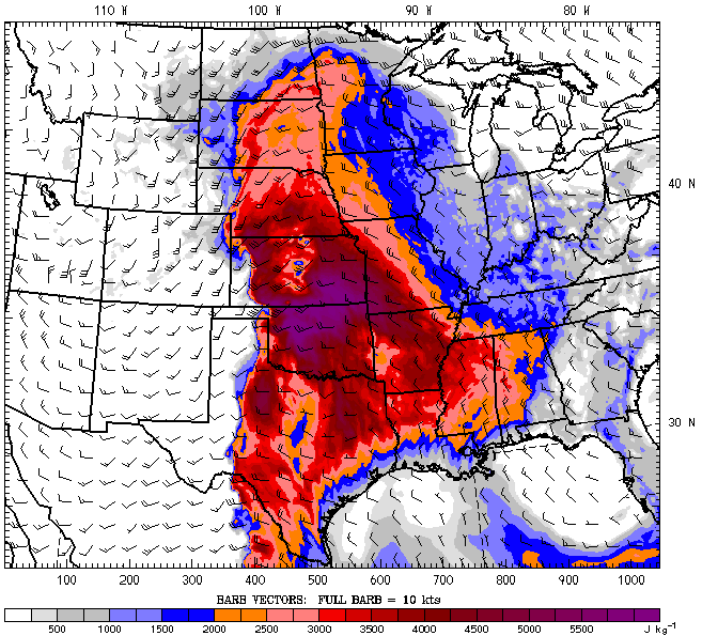
05/15



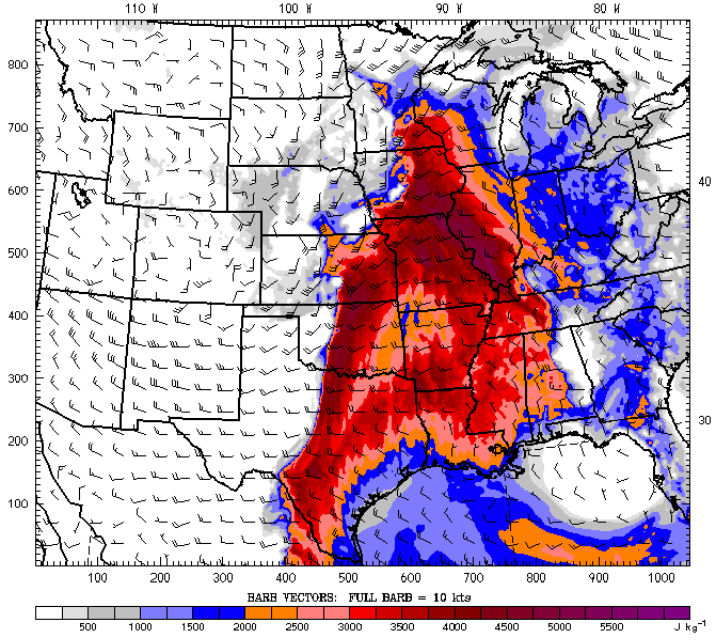
05/16



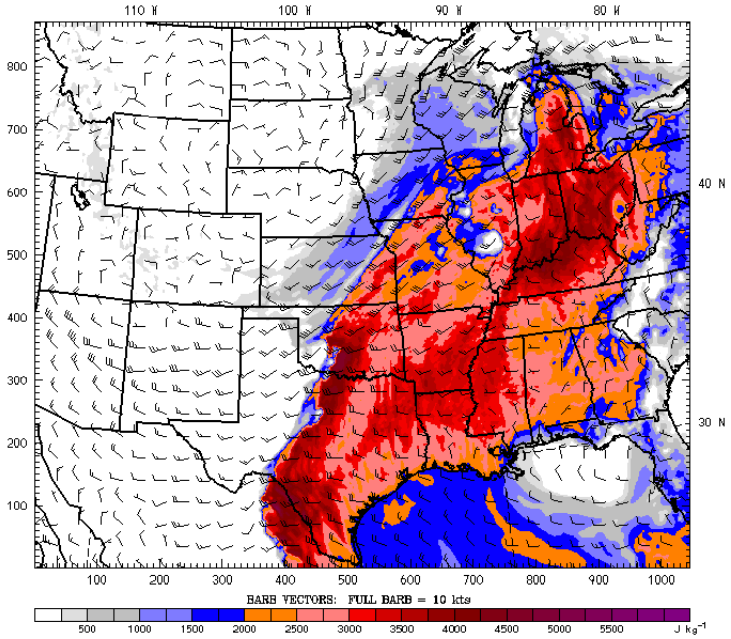
05/18



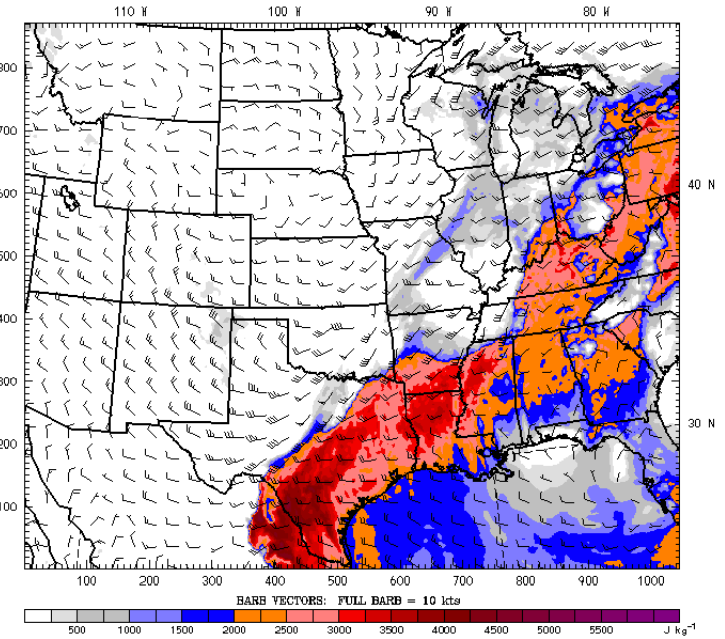
05/19



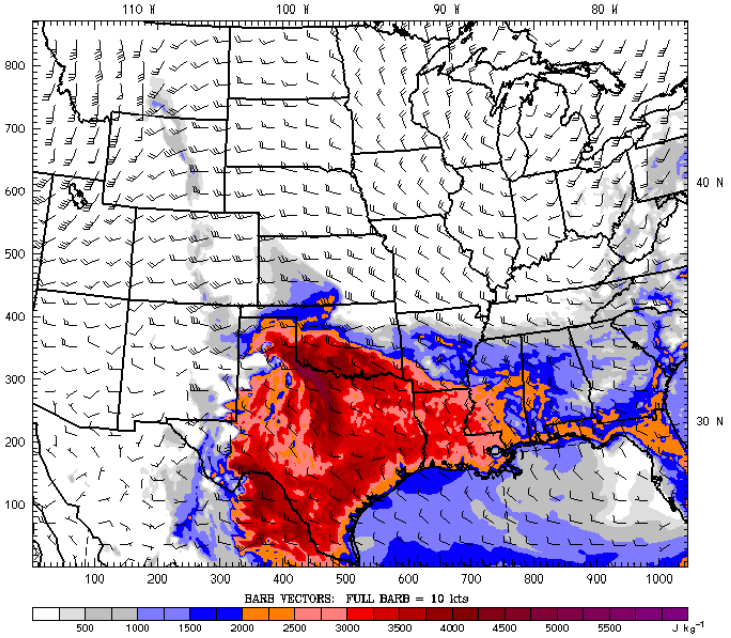
05/20



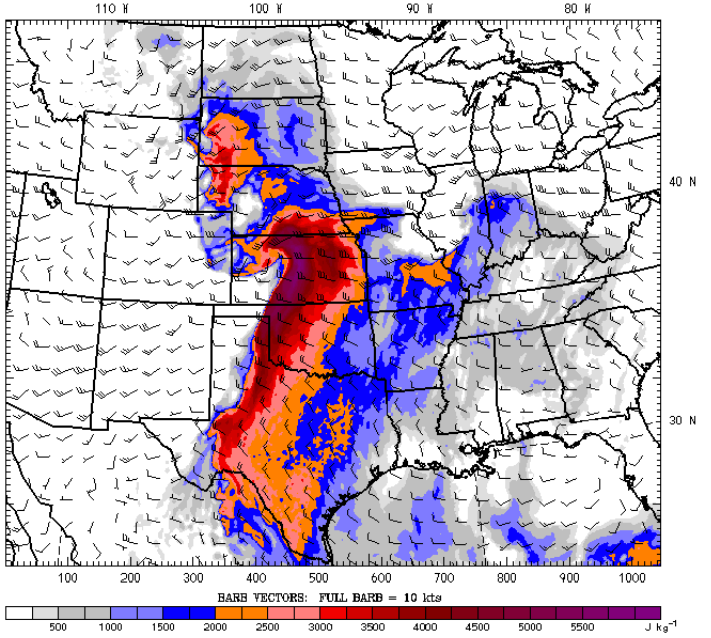
05/21



05/23



05/27



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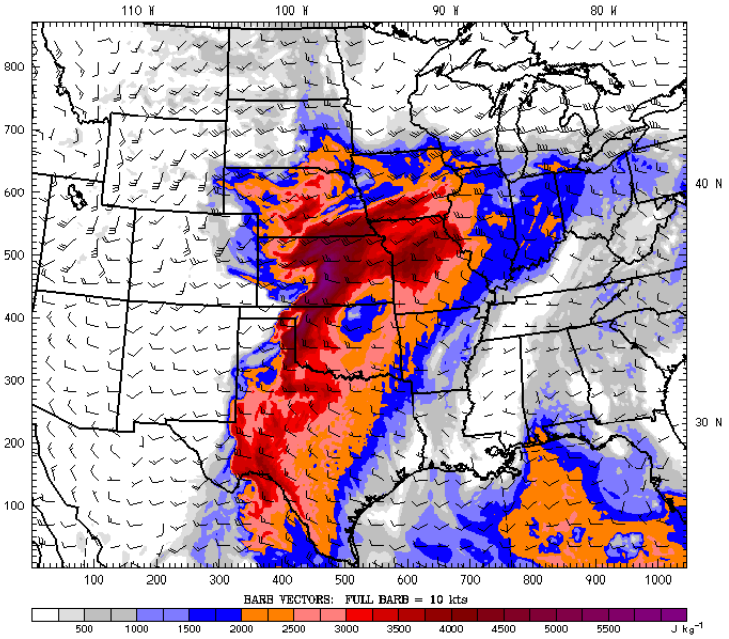

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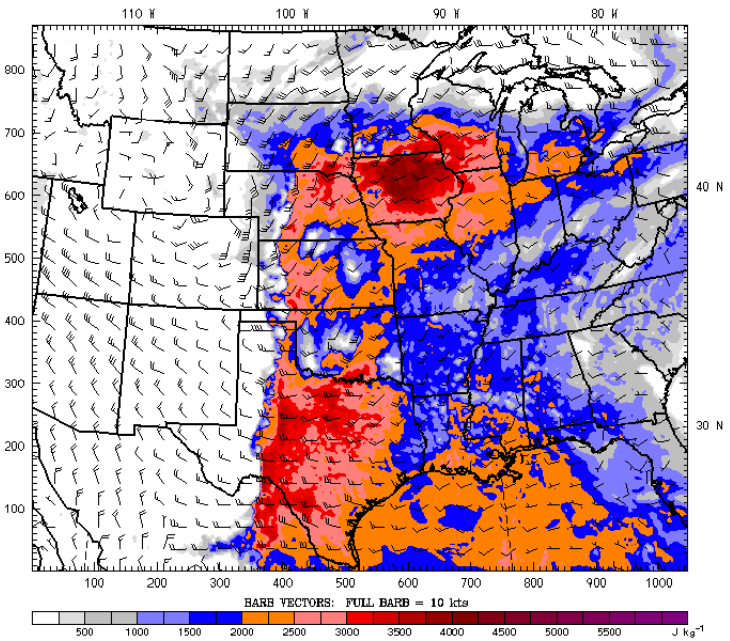

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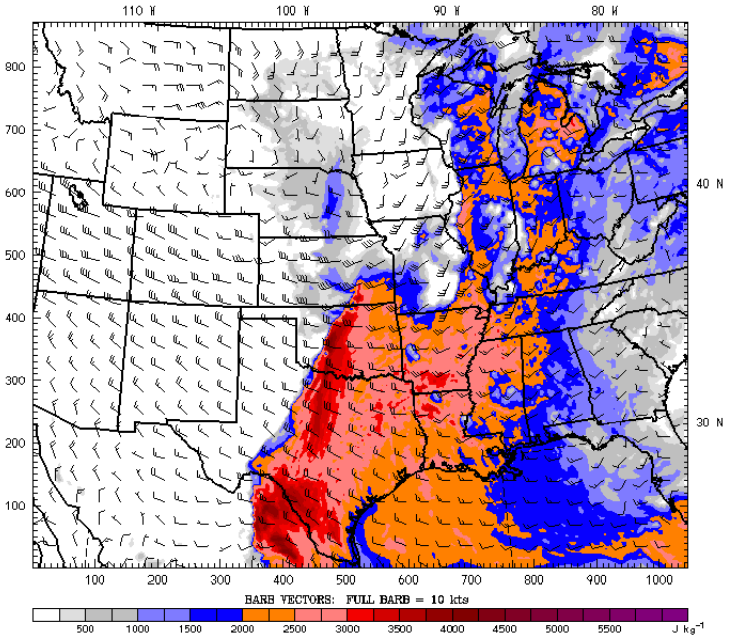

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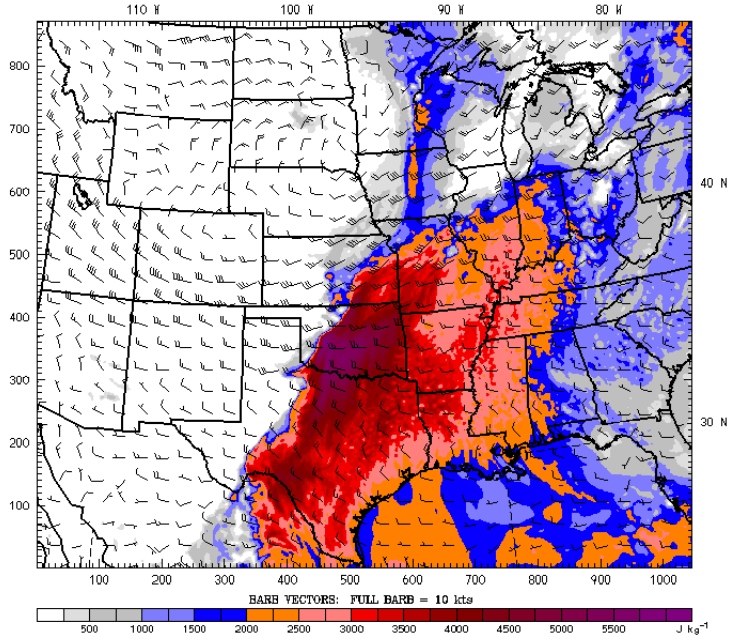
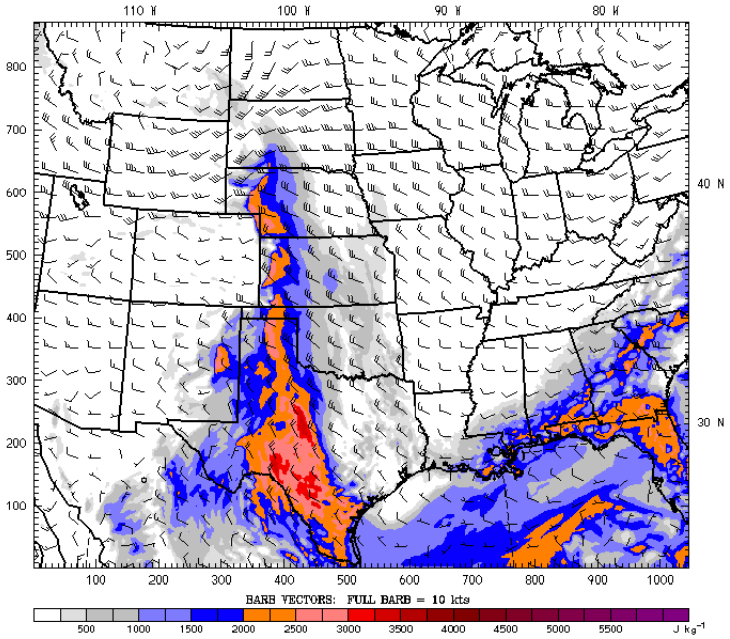
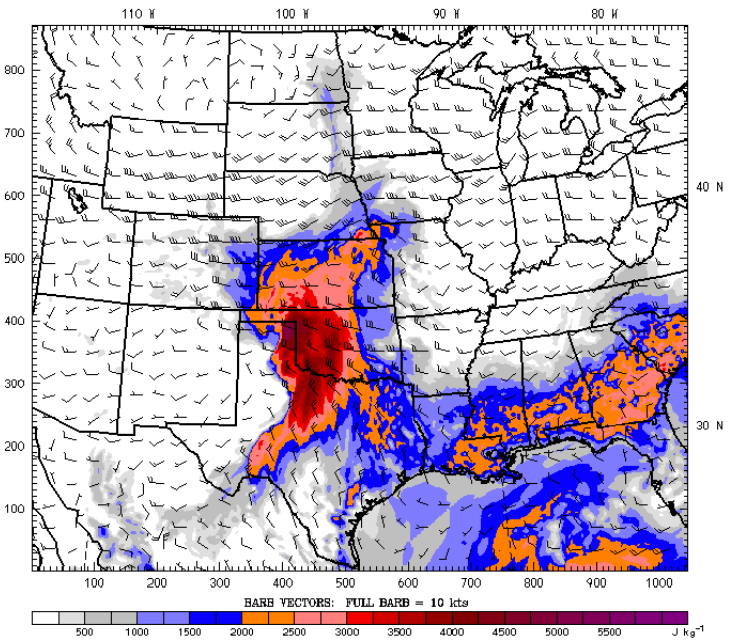


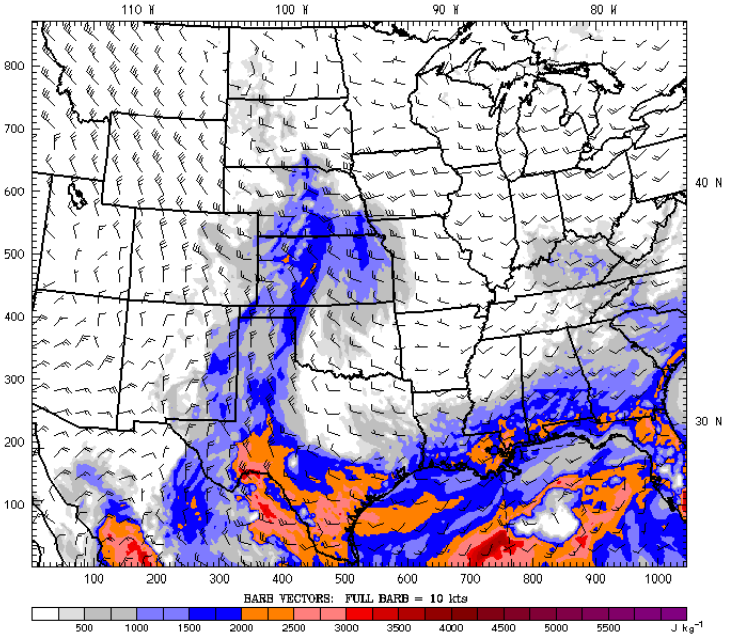
06/03



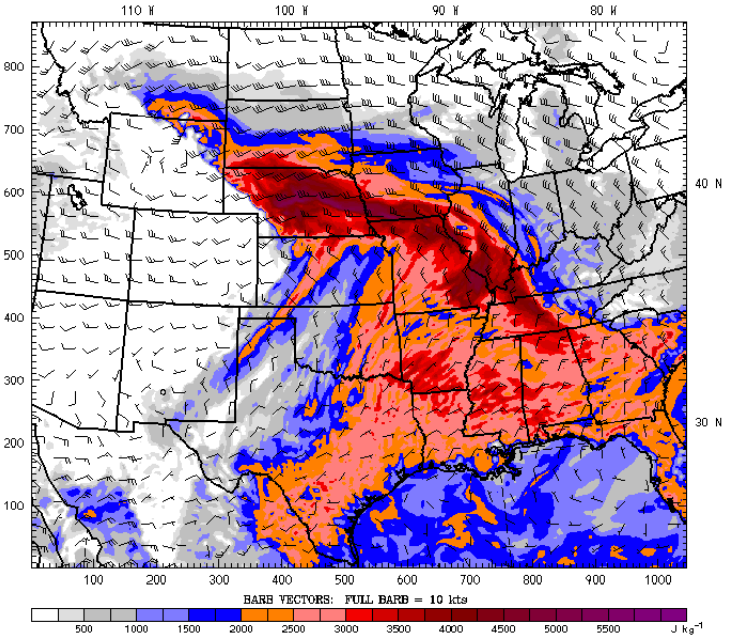
06/04



06/08



06/11



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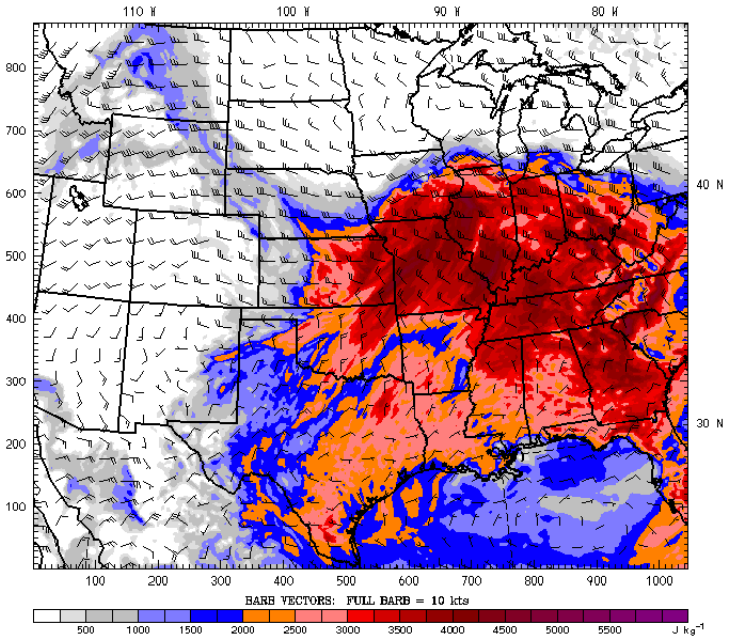
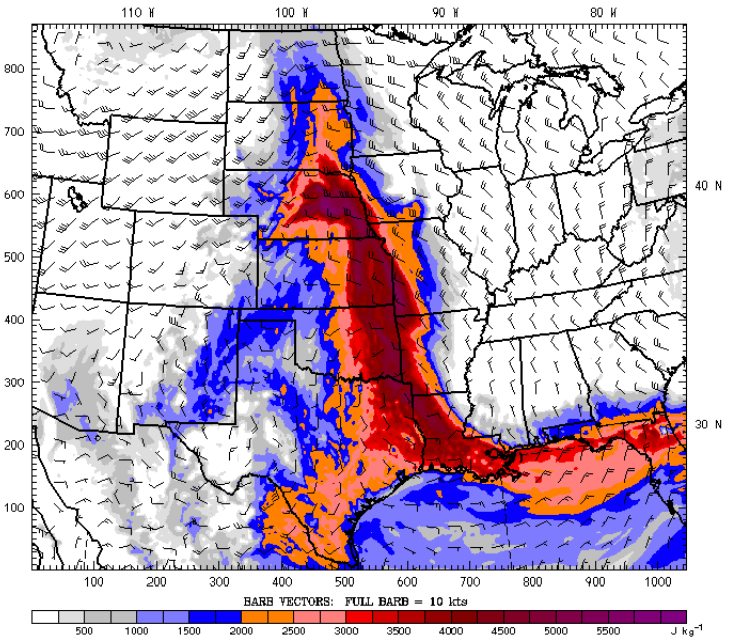

110 W
100 W
90 W
80 W
800
700
600
500
400
300
200
100
40 N
30 N
100 200 300 400 500 600 700 800 900 1000
BARB VECTORS: FULL BARB = 10 kts
500 1000 1500 2000 2500 3000 3500 4000 4500 5000 5500 J kg-1

06/14


110 W
100 W
90 W
80 W
800
700
600
500
400
300
200
100
40 N
30 N
100 200 300 400 500 600 700 800 900 1000
BARB VECTORS: FULL BARB = 10 kts
500 1000 1500 2000 2500 3000 3500 4000 4500 5000 5500 J kg-1