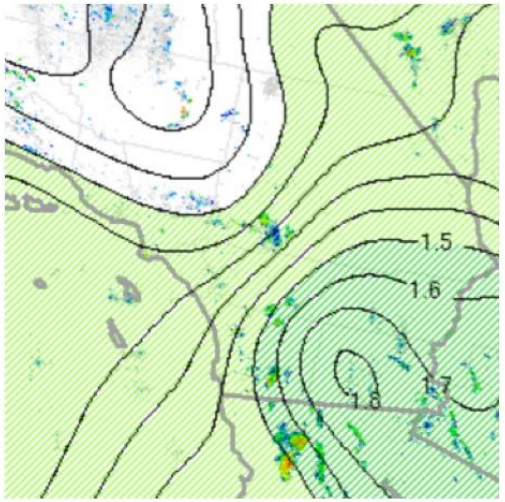
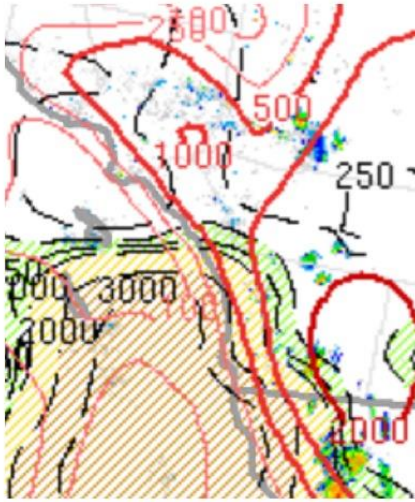
Photo Collection of Monsoon
July 28 to August 3, 2014

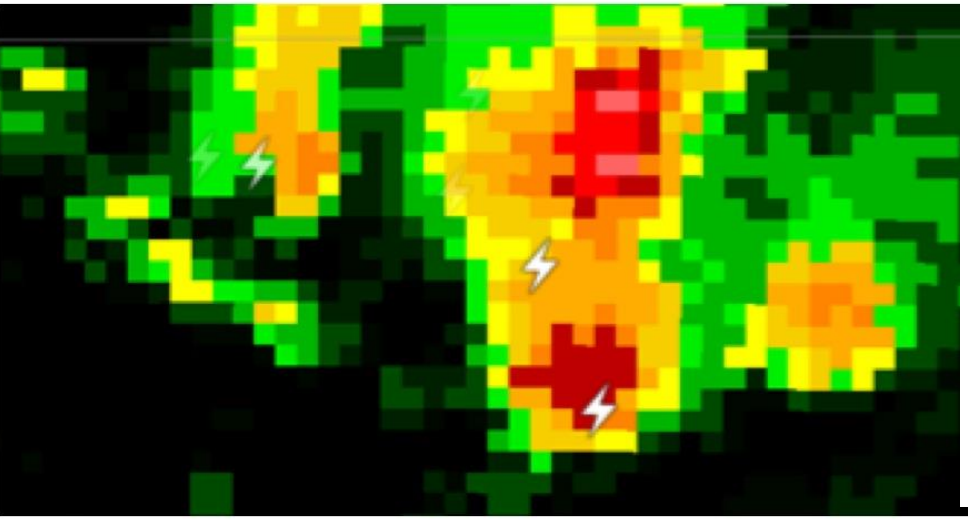
July 28,2014

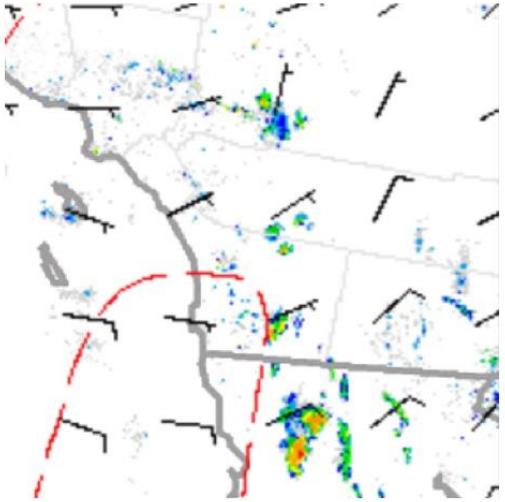
August 1, 2014 moisture surge
Pre-upper low

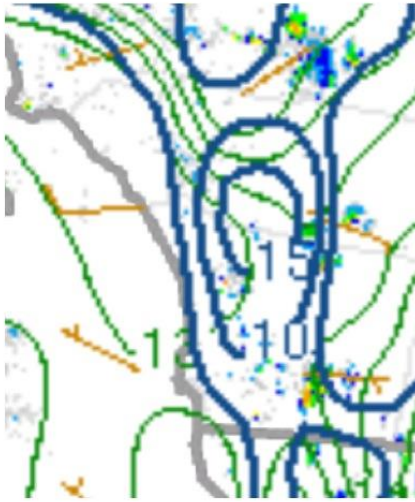
Glaciated tops



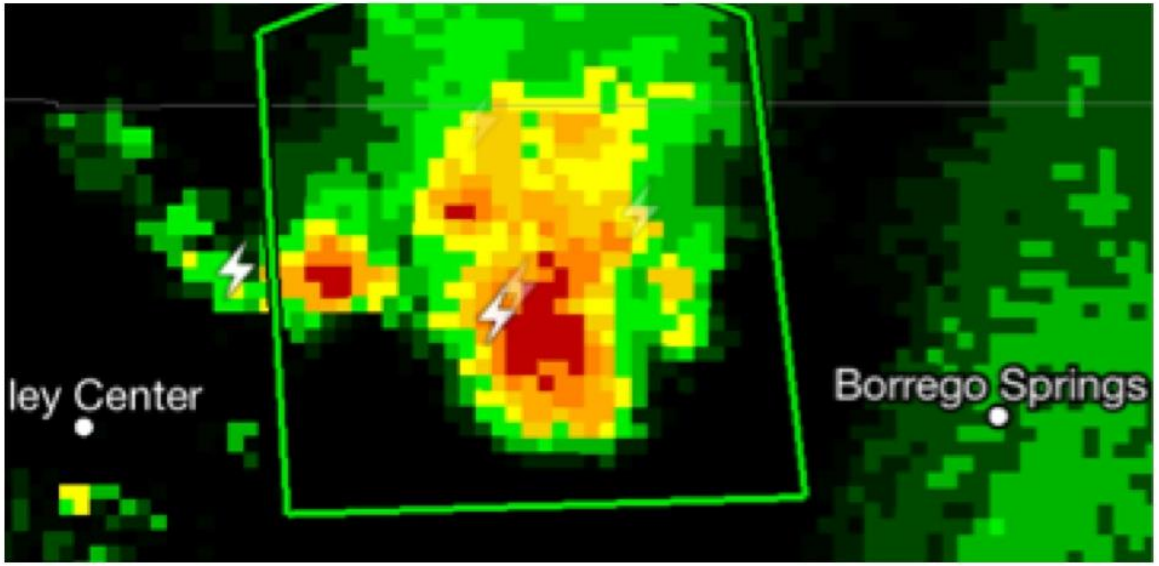




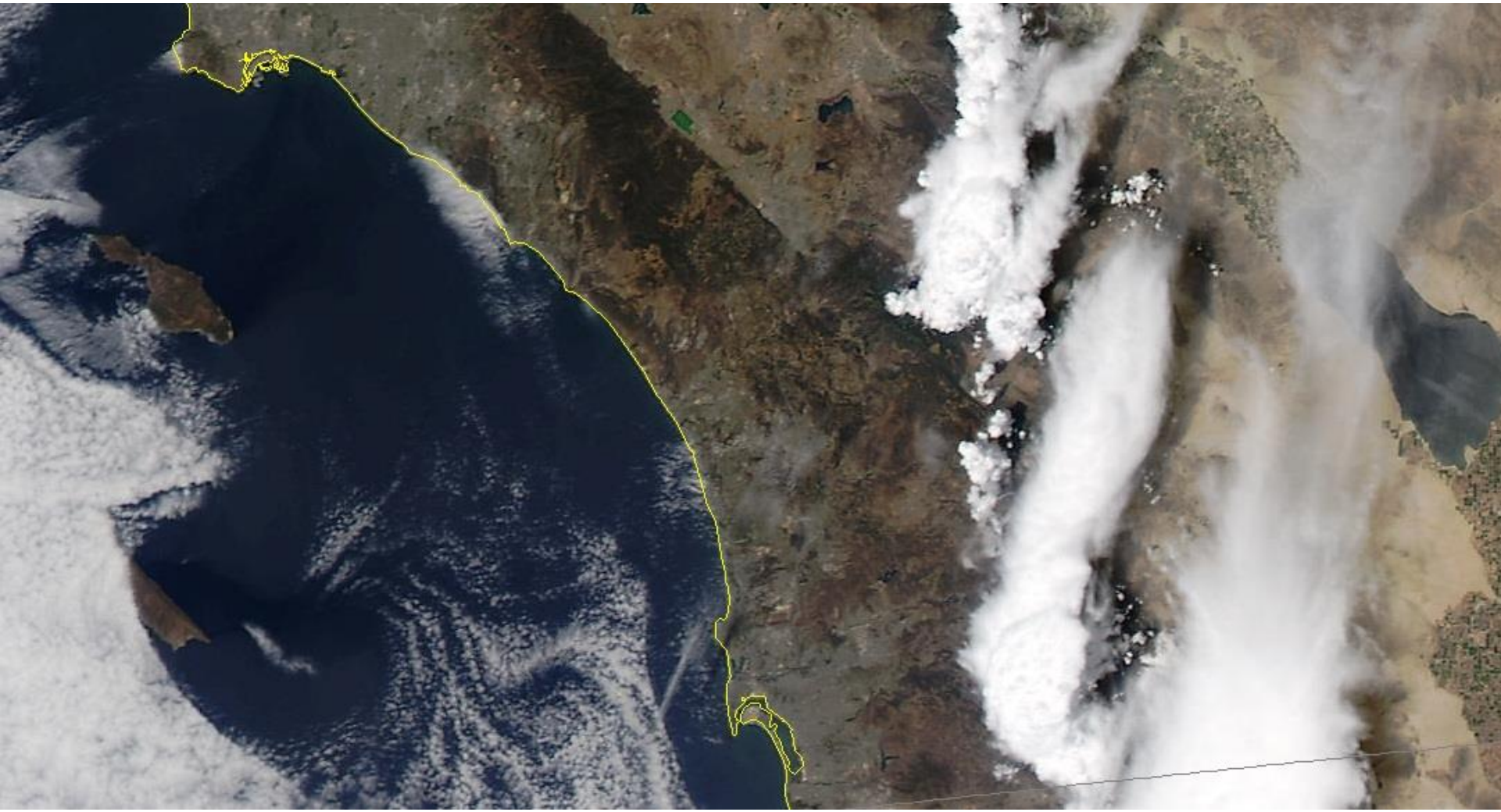


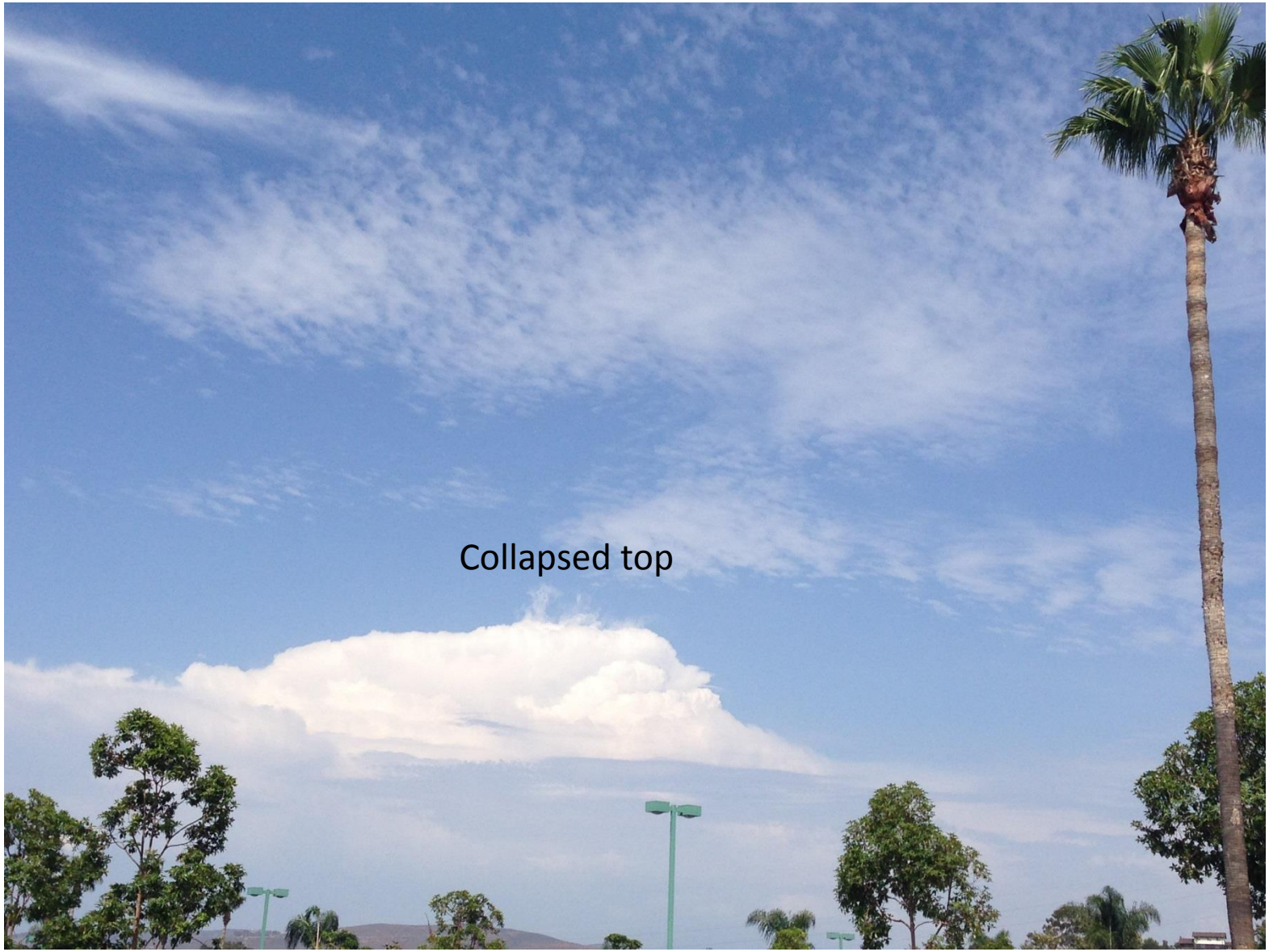


Persistent strong thunderstorms



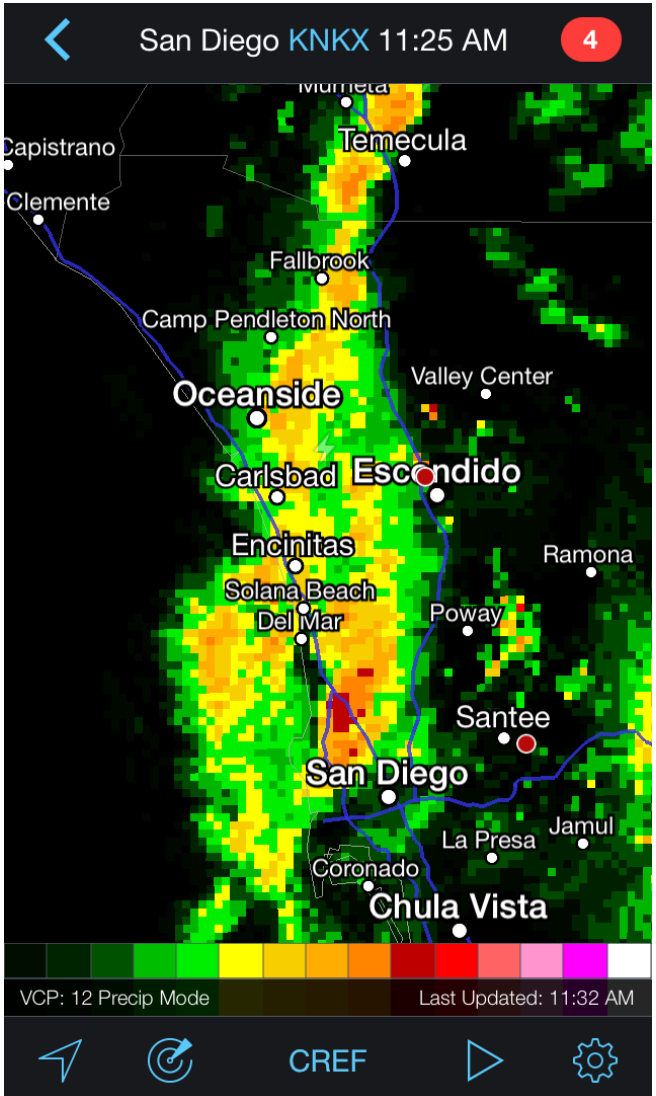
MODIS view August 1



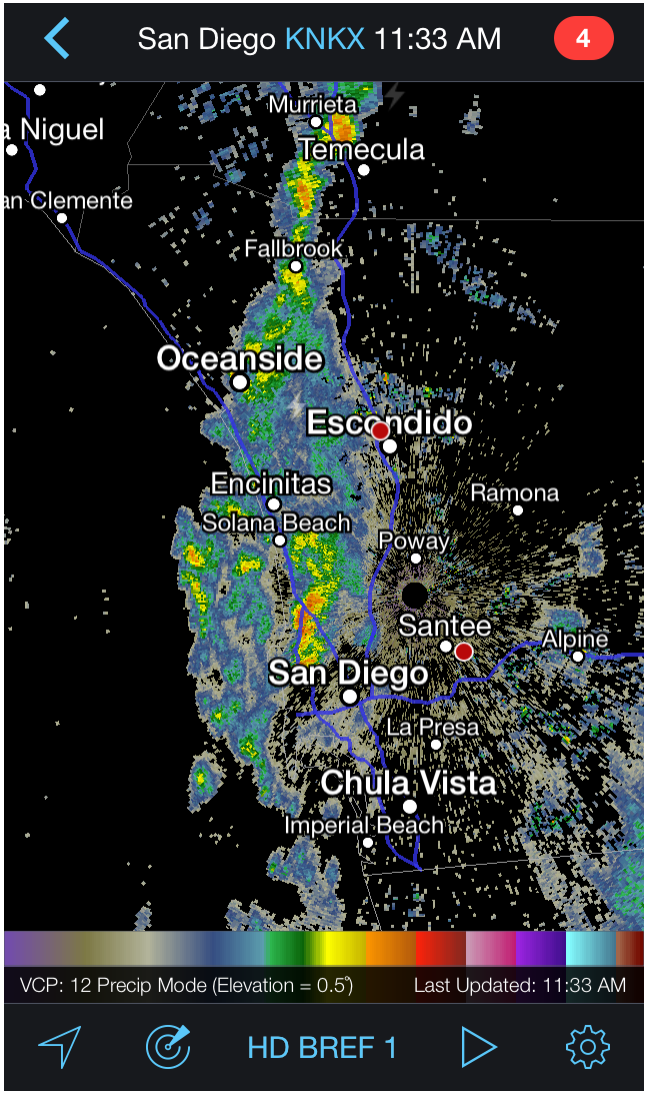

Collapsed top

Main Surge Flash Flood Watches
August 2, 2014

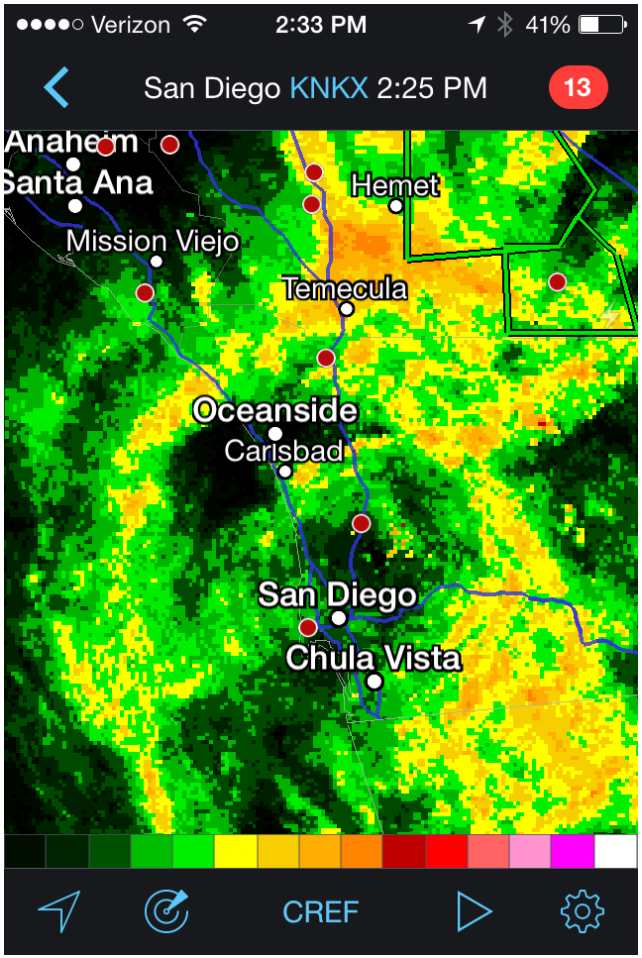
Morning Elevated thunderstorms August 2, 2014



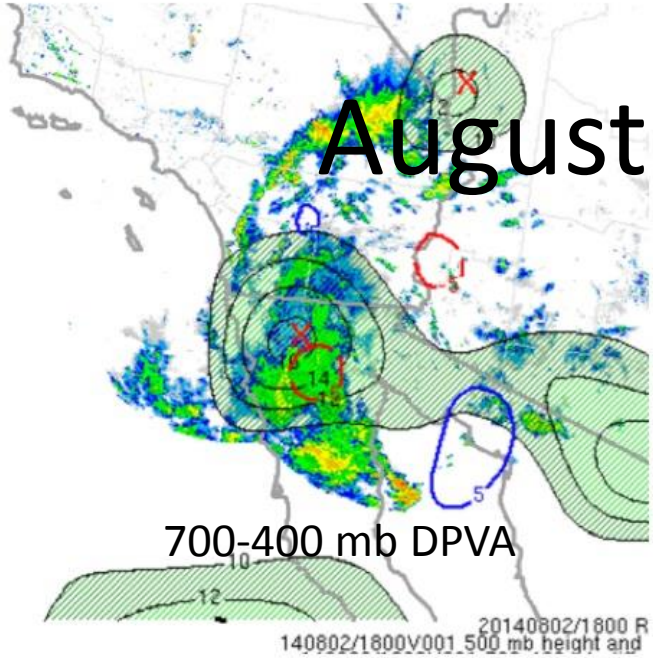
Moving east to west

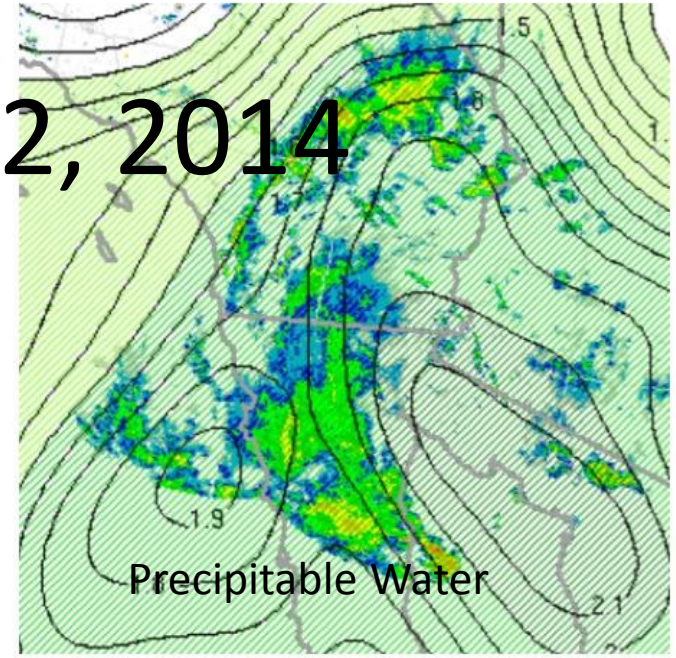


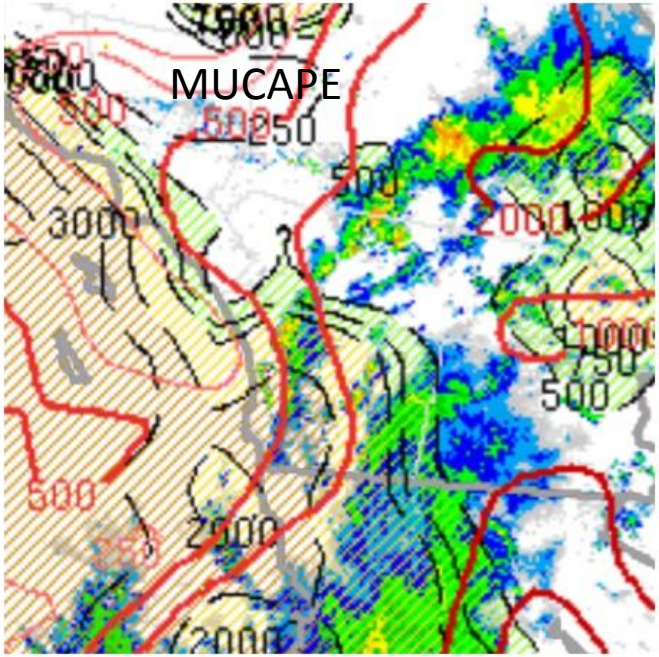
Mesoscale Convective Vortex on radar

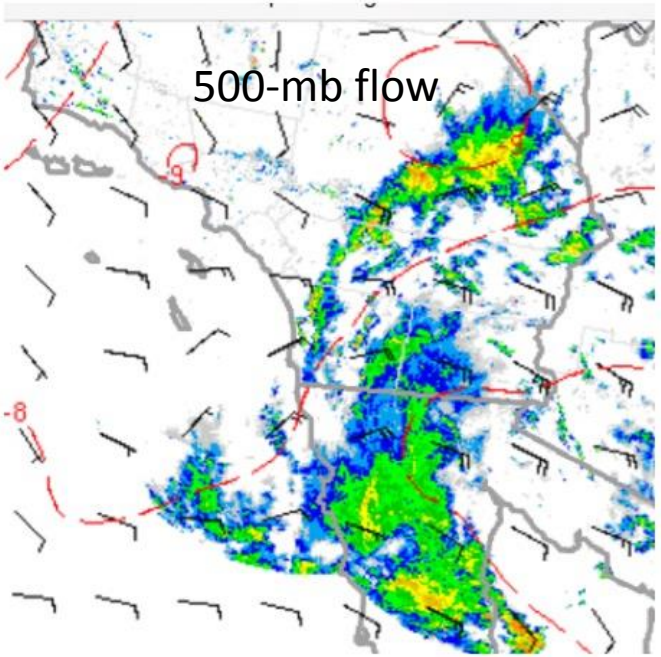


August 2, 2014





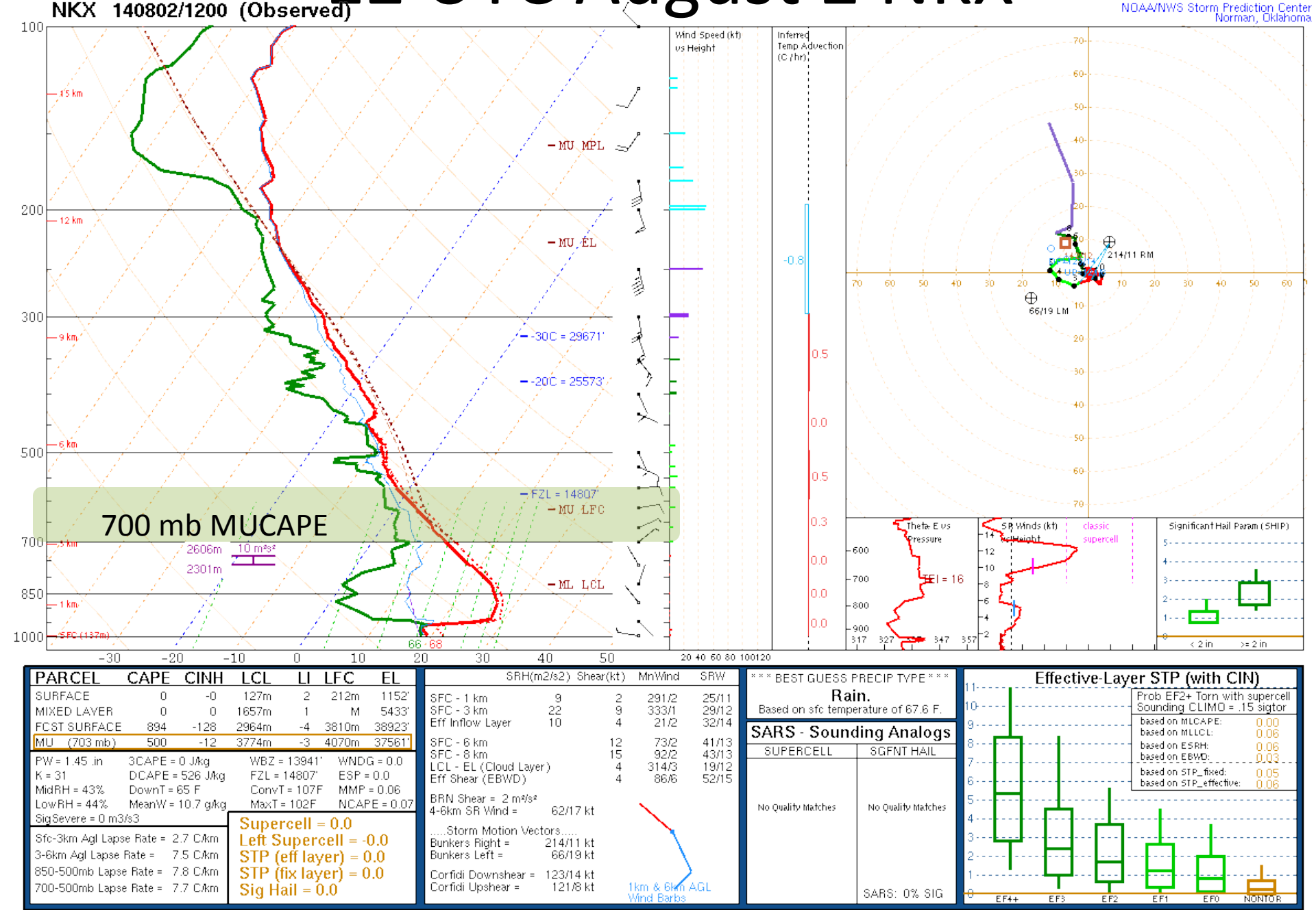




Leading Edge of Elevated Convection


Elevated Convection and Rainshaft
Marine Layer
Lagoon

12 UTC August 2 NKX



PARCEL	CAPE	CINH	LCL	LI	LFC	EL
SURFACE	0	-0	127m	2	212m	1152'
MIXED LAYER	0	0	1657m	1	M	5433'
FCST SURFACE	894	-128	2964m	-4	3810m	38923'
MU (703 mb)	500	-12	3774m	-3	4070m	37561'

PW = 1.45 in	3CAPE = 0 J/kg	WBZ = 13941'	WNDG = 0.0
K = 31	DCAPE = 526 J/kg	FZL = 14807'	ESP = 0.0
MidRH = 43%	DownT = 65 F	ConvT = 107F	MMP = 0.06
LowRH = 44%	MeanW = 10.7 g/kg	MaxT = 102F	NCAPE = 0.07
SigSevere = 0 m3/s3			

Sfc-3km AgI Lapse Rate =	2.7 C/km
3-6km AgI Lapse Rate =	7.5 C/km
850-500mb Lapse Rate =	7.8 C/km
700-500mb Lapse Rate =	7.7 C/km

Supercell = 0.0
Left Supercell = -0.0
STP (eff layer) = 0.0
STP (fix layer) = 0.0
Sig Hail = 0.0

	SRH(m2/s2)	Shear(kt)	MnWind	SRW
SFC - 1 km	9	2	291/2	25/11
SFC - 3 km	22	9	333/1	29/12
Eff Inflow Layer	10	4	21/2	32/14
SFC - 6 km		12	73/2	41/13
SFC - 8 km		15	92/2	43/13
LCL - EL (Cloud Layer)		4	314/3	19/12
Eff Shear (EBWD)		4	86/6	52/15

BRN Shear = 2 m²/s²
4-6km SR Wind = 62/17 kt

.....Storm Motion Vectors.....
Bunkers Right = 214/11 kt
Bunkers Left = 66/19 kt

Corfidi Downshear = 123/14 kt
Corfidi Upshear = 121/8 kt

1km & 6km AGL Wind Barbs

*** BEST GUESS PRECIP TYPE ***
Rain.
Based on sfc temperature of 67.6 F.

SARS - Sounding Analogs

SUPERCELL	SGFNT HAIL
No Quality Matches	No Quality Matches

SARS: 0% SIG

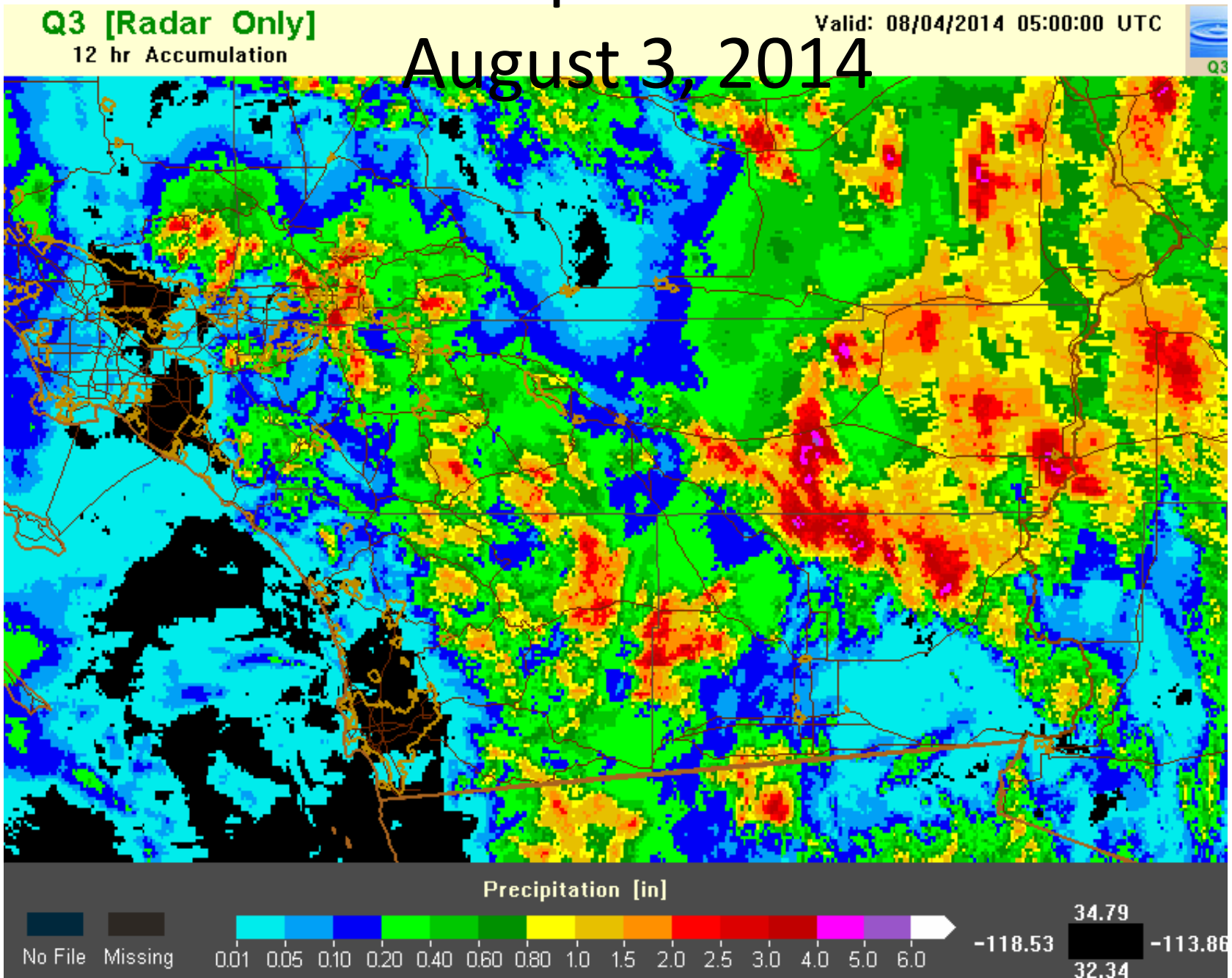
Effective-Layer STP (with CIN)

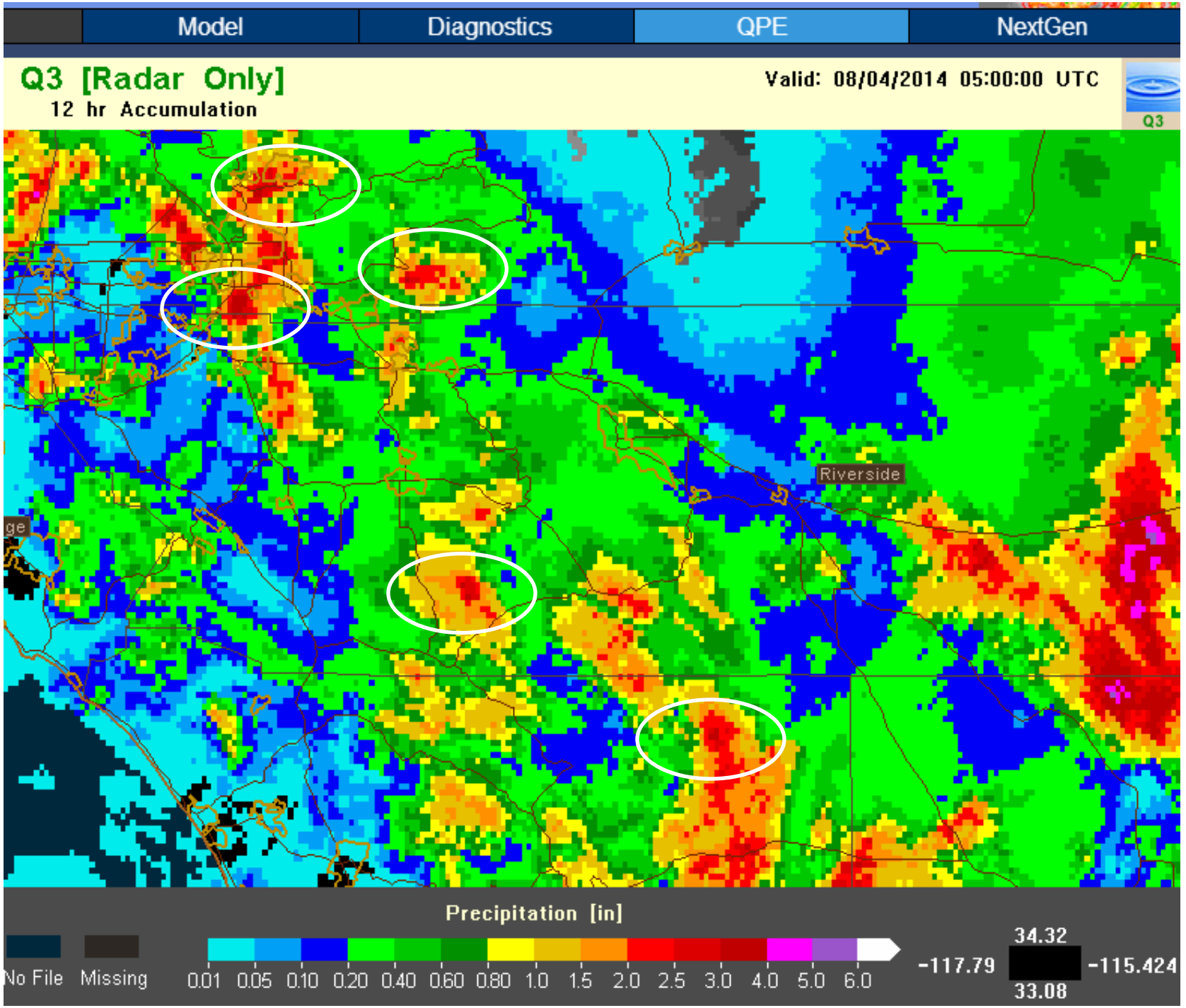
Prob EF2+ Torn with supercell
Sounding CLIMO = .15 sigtor

based on MLCAPE:	0.00
based on MLLCL:	0.06
based on ESRH:	0.06
based on EBWD:	0.03
based on STP_fixed:	0.05
based on STP_effective:	0.06

EF4+ EF3 EF2 EF1 EF0 NONTOR

Radar Precipitation Estimate
August 3, 2014



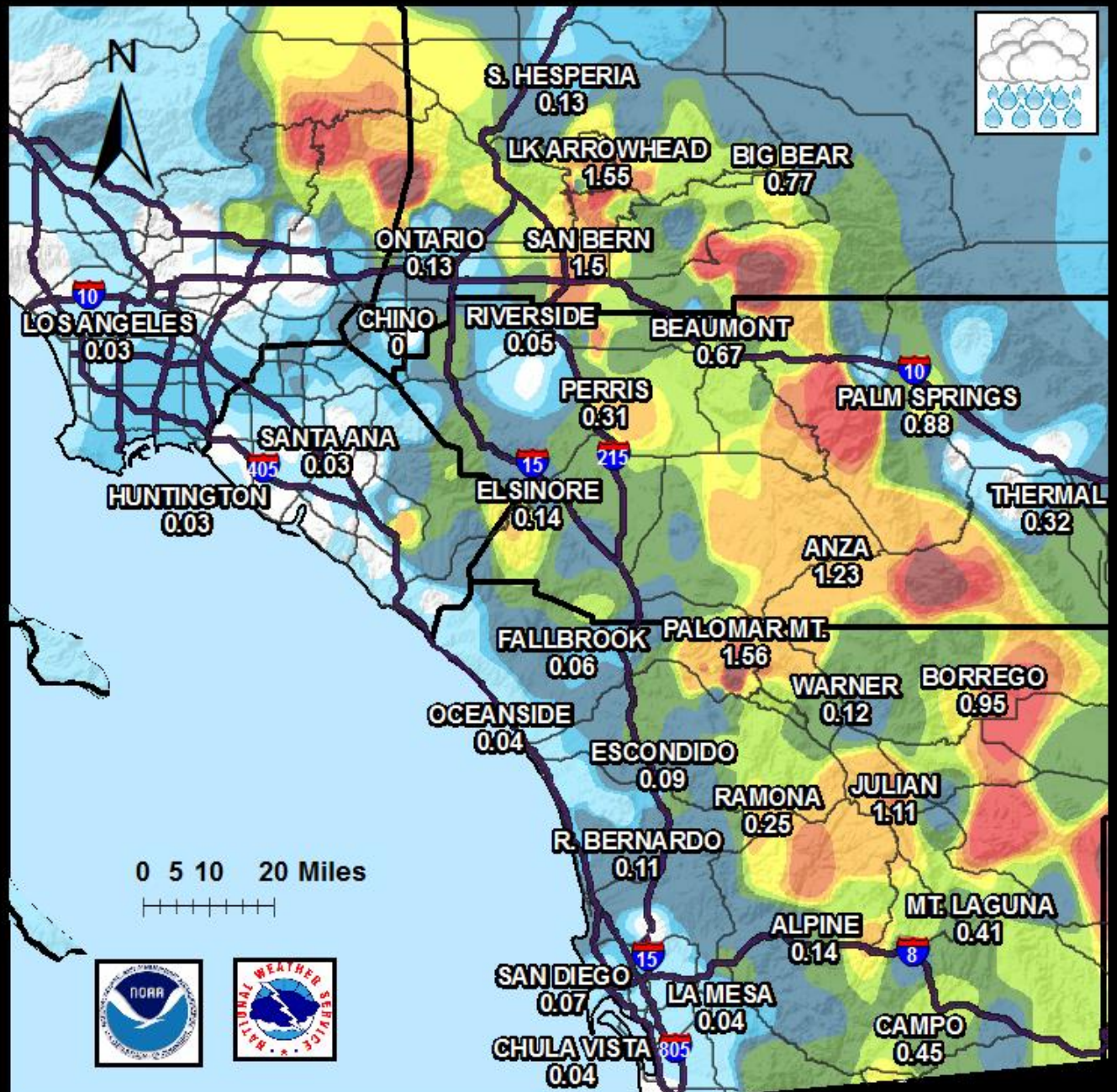

Model
Diagnostics
QPE
NextGen
Q3 [Radar Only]
12 hr Accumulation
Valid: 08/04/2014 05:00:00 UTC
Q3
Riverside
Precipitation [in]
No File
Missing
0.01 0.05 0.10 0.20 0.40 0.60 0.80 1.0 1.5 2.0 2.5 3.0 4.0 5.0 6.0
34.32
-117.79
-115.424
33.08

48-Hour Observed Precip Amounts Ending 8/4/2014 at 5:00 AM

Created by:
National Weather Service
San Diego, CA

Rainfall Accumulation (In)

- 7.00 - 9.99
- 5.00 - 6.99
- 3.00 - 4.99
- 2.00 - 2.99
- 1.50 - 1.99
- 1.00 - 1.49
- 0.75 - 0.99
- 0.5 - 0.74
- 0.25 - 0.49
- 0.10 - 0.25
- 0.05 - 0.10
- 0.01 - 0.05
- 0.00



Map generated 8/4/2014 at 5:17:24 AM

Summary August 3, 2014

- 3.96 inches in 2 hours at Yucaipa Ridge
- 4.00 inches in less than 2 hours Mt Baldy (worse flood damage since 1969)
- 11 million in damage for San Bernardino County
- 25 homes with flood and debris damage in San Bernardino County
- Flash Flooding west of the mountains including Redlands and Ramona
- Incident Command Post for Mt Baldy and Valley of the Falls (search and rescue)

24 hour precipitation on August 3

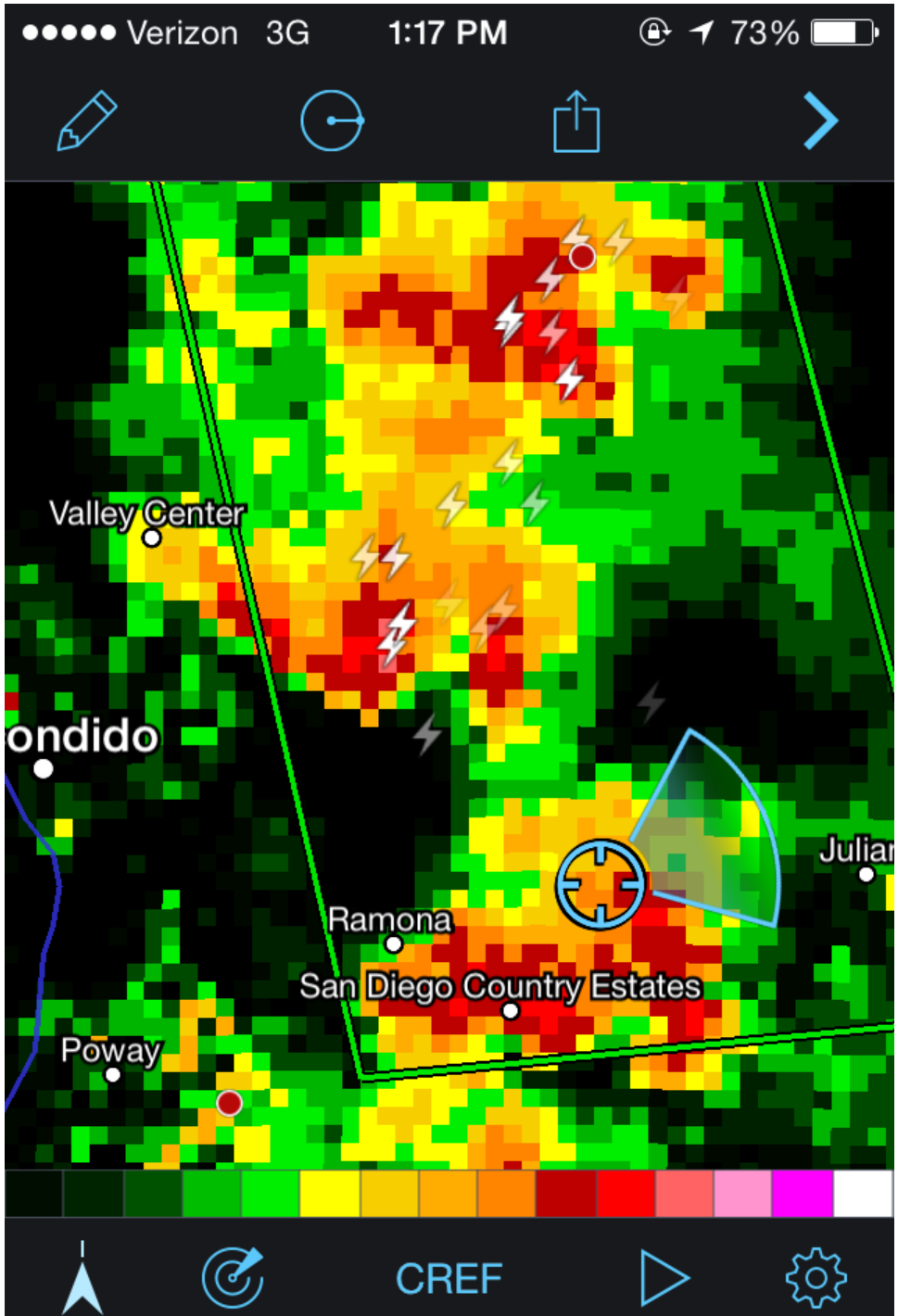
- 1. MT BALDY VILLAGE 3.89
- 2. YUCAIPA RIDGE 3.63
- 3. BOUCHER HILL 3.26
- 4. CREST PARK 2.72
- 5. MILL CREEK EAST 2.58
- 6. RIMFOREST 2.35
- 7. RECHE CANYON 1.85 2W LOMA LINDA
- 8. SMALL CANYON DAM 1.74
- 9. SD COUNTRY ESTATES 1.65
- 10.LAKE ARROWHEAD NW 1.59

24 hour precipitation on August 2

- 1. SNOW CK 7N IDYLLWILD 2.48 3N SAN JACINTO PK
- 2. MOUNT SAN JACINTO 2.35 1ENE MT SAN JAC PK
- 3. YUCAIPA RIDGE 1.10 2ESE FOREST FALLS
- 4. TICK RIDGE 1.06 4NNW CABAZON
- 5. VISTA GRANDE 0.83 6SE BANNING
- 6. PUERTA LA CRUZ 0.77
- 7. KEENWILD RAWS 0.71 6SW IDYLLWILD
- 8. WARNER SPRINGS 0.71
- 9. VISTA GRANDE RAWS 0.70 6WNW SAN JACINTO PK
- 10.OAK GROVE 0.67

August 3, 2014

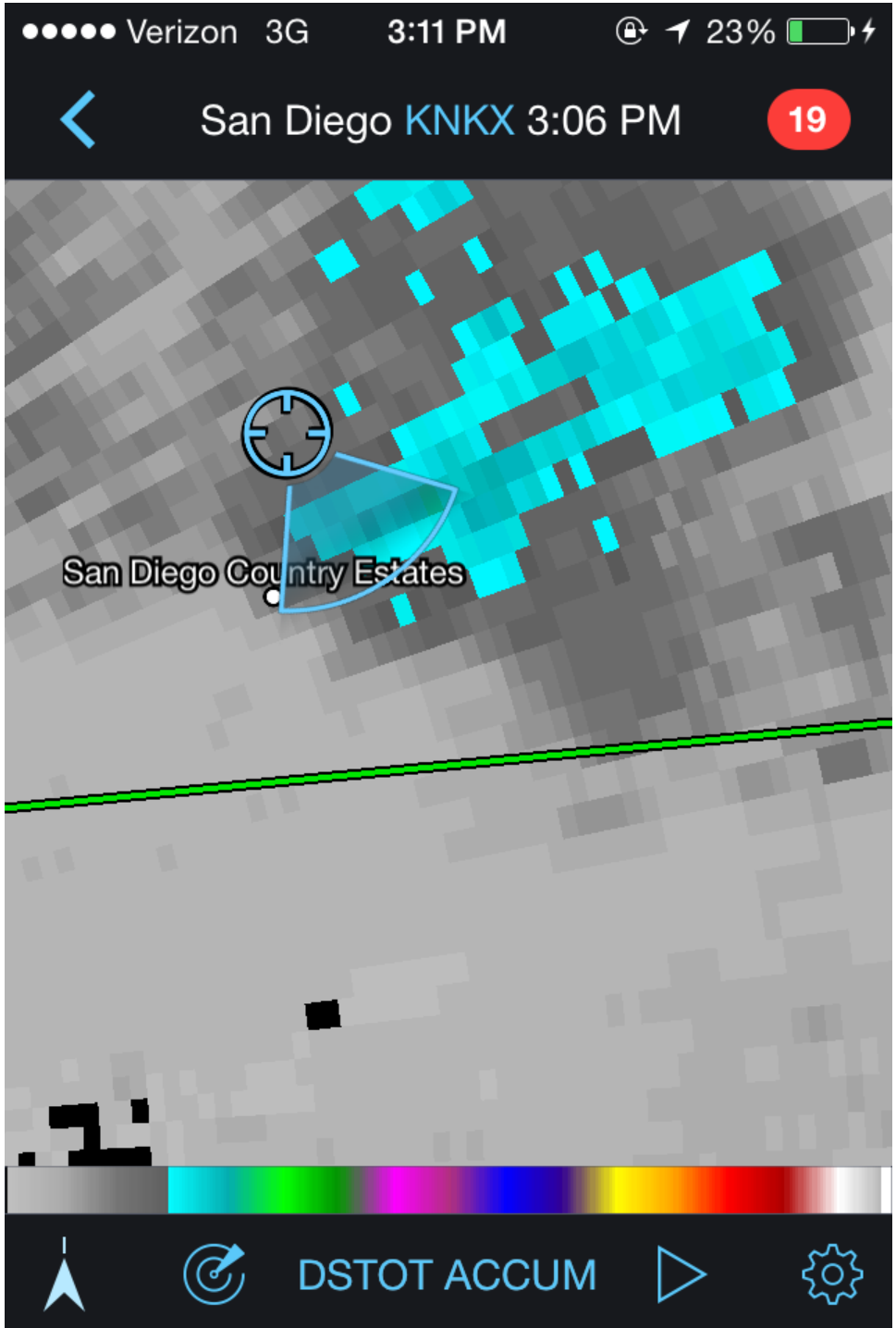
Ramona
San Diego Country Estates

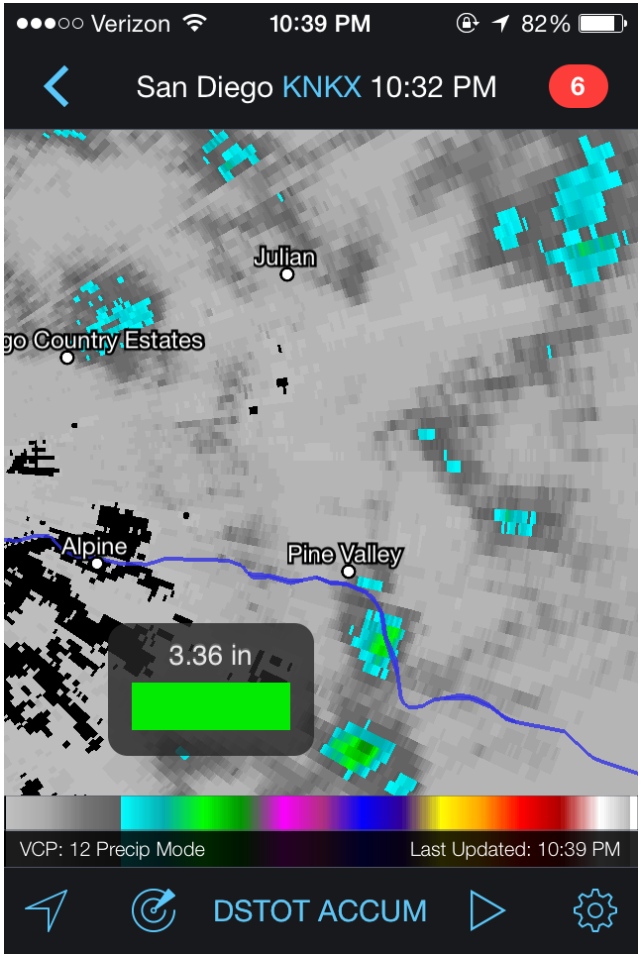

Verizon 3G
1:17 PM
73%
Valley Center
ondido
Julian
Ramona
San Diego Country Estates
Poway
CREF

San Diego Country Estate

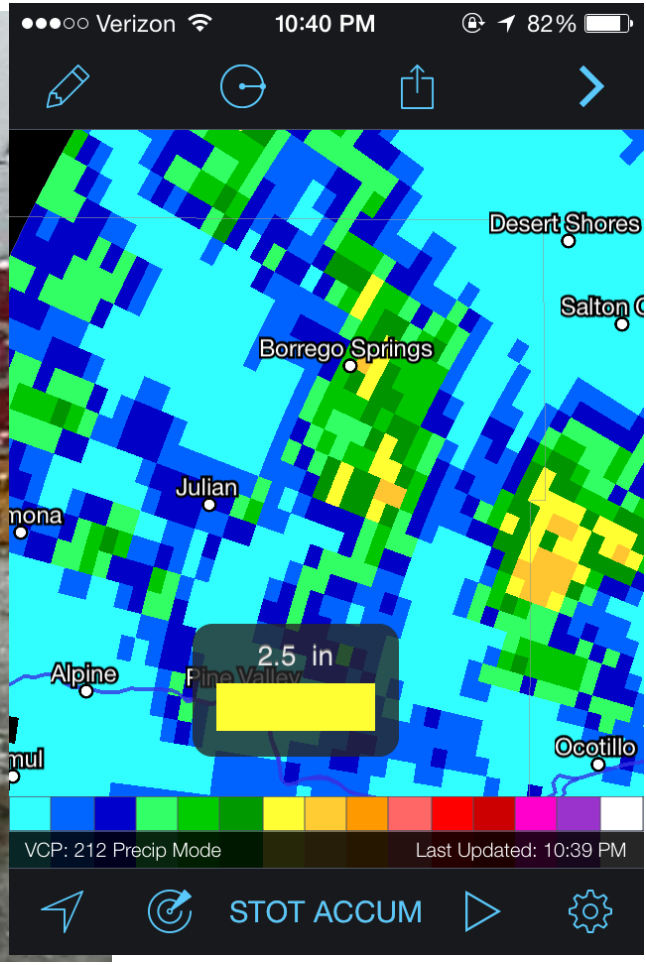
Ramona


Verizon 3G 1:27 PM 66%
Temecula
Valley Center
Escondido
Ramona
Poway
Santee
Alpine
La Presa
CREF


Verizon 3G 3:11 PM 23%
San Diego KNKX 3:06 PM
19
San Diego Country Estates
DSTOT ACCUM

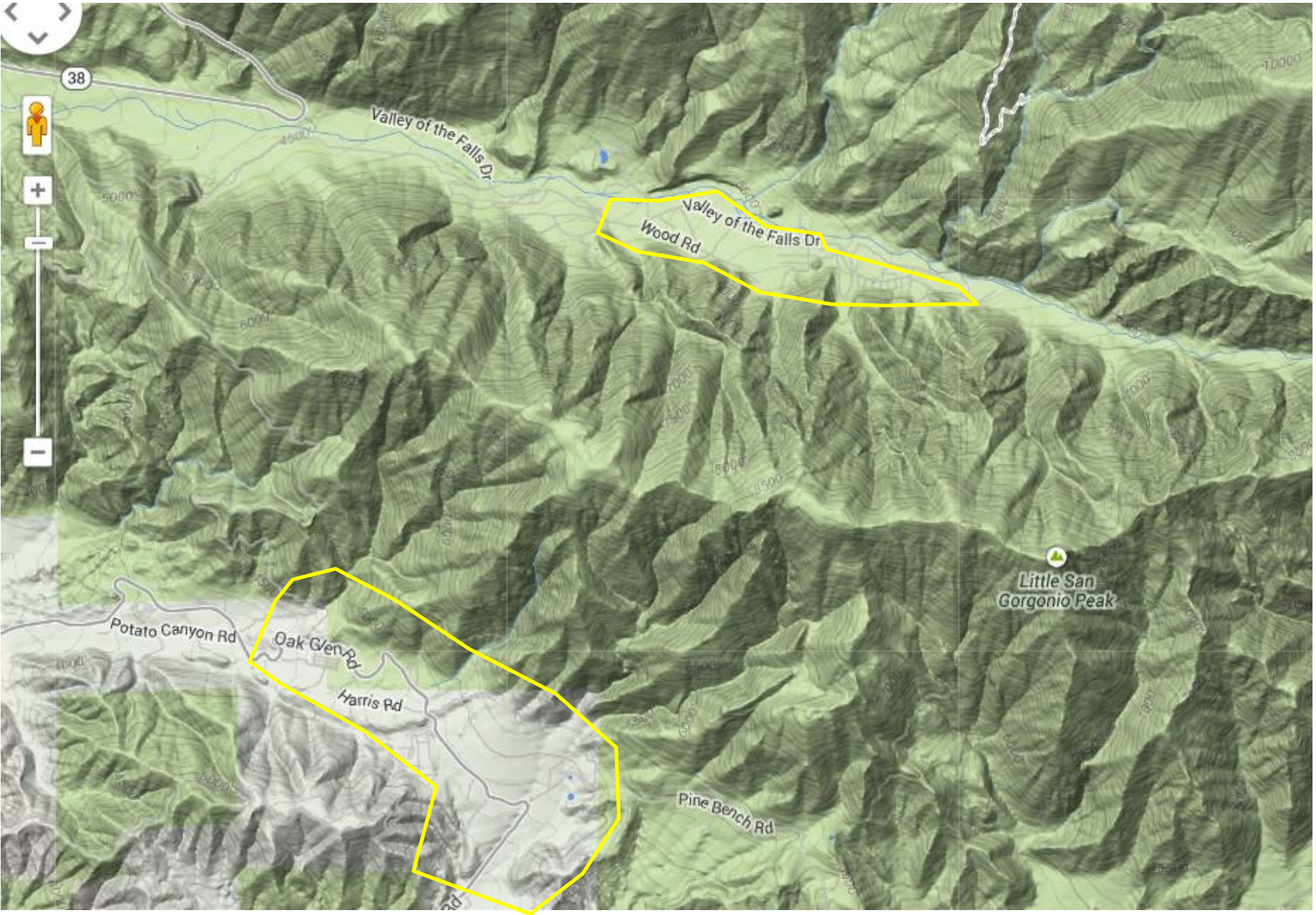

Verizon 10:39 PM 82%
San Diego KNKX 10:32 PM
6
Julian
Alpine
Pine Valley
3.36 in
VCP: 12 Precip Mode
Last Updated: 10:39 PM
DSTOT ACCUM

Borrego Springs



Road damage on Borrego-Salton Seaway
San Diego County Flood Control

Road damage on SR-78 going towards Ocotillo Wells
San Diego County Flood Control


38
Valley of the Falls Dr
Valley of the Falls Dr
Wood Rd
Little San Gorgonio Peak
Potato Canyon Rd
Oak Glen Rd
Harris Rd
Pine Bench Rd

Damage Assessment Valley of the Falls

Valley of the Falls


Meeting Center


Parking Lot


Main Road


Main Road

Main Road mud and rock debris closure

Forest Falls Valley of the Falls

Vehicle deposited in Mill Creek

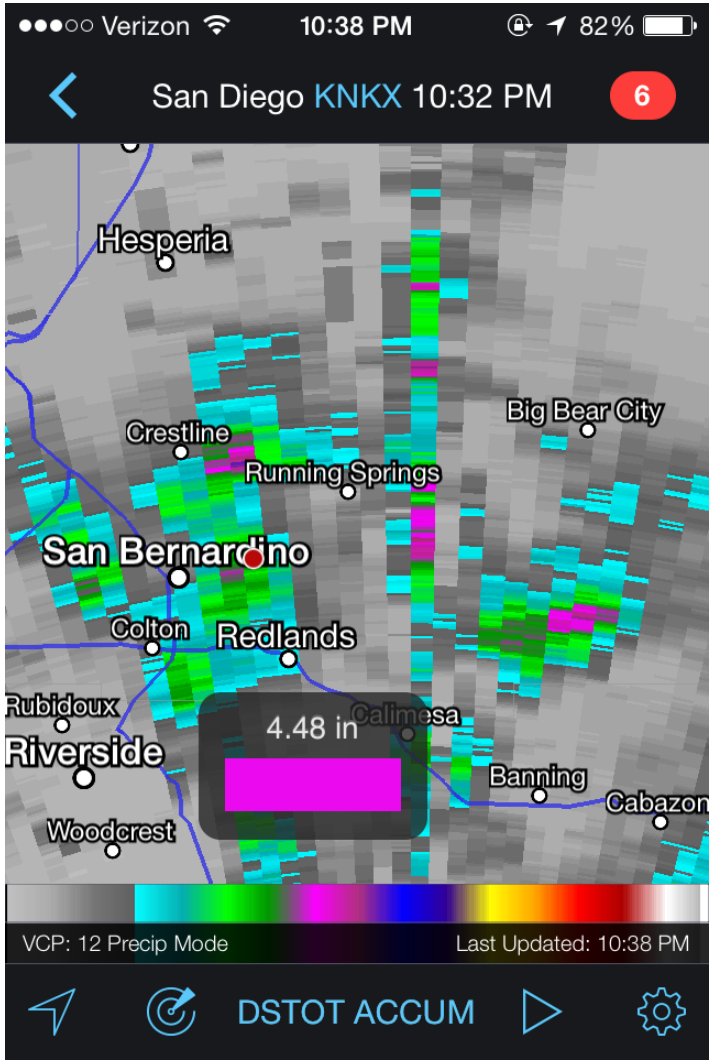
Lytle Creek area

Lytle Creek
Green Mountain low crossing

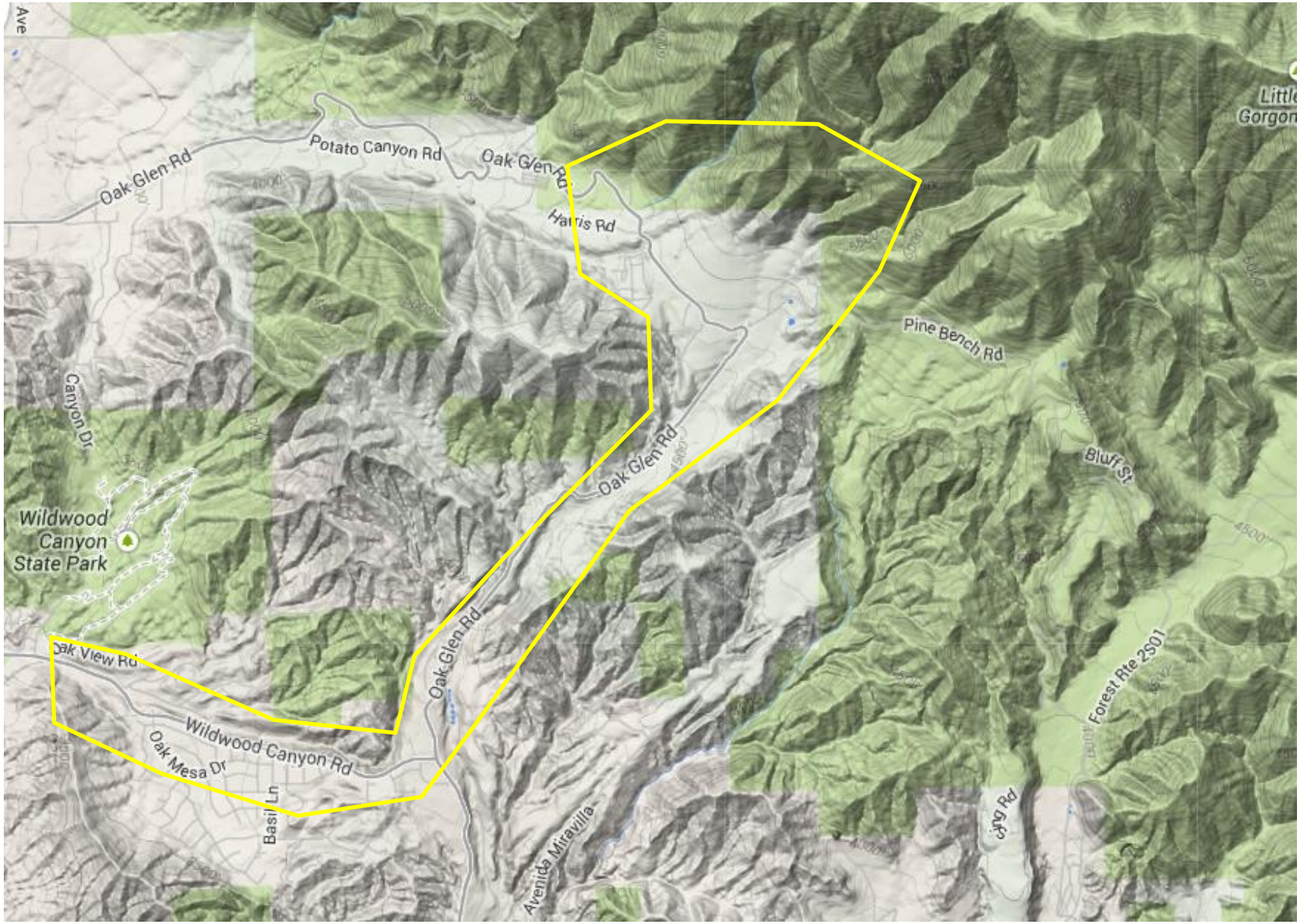
New Dirt For “make shift” crossing

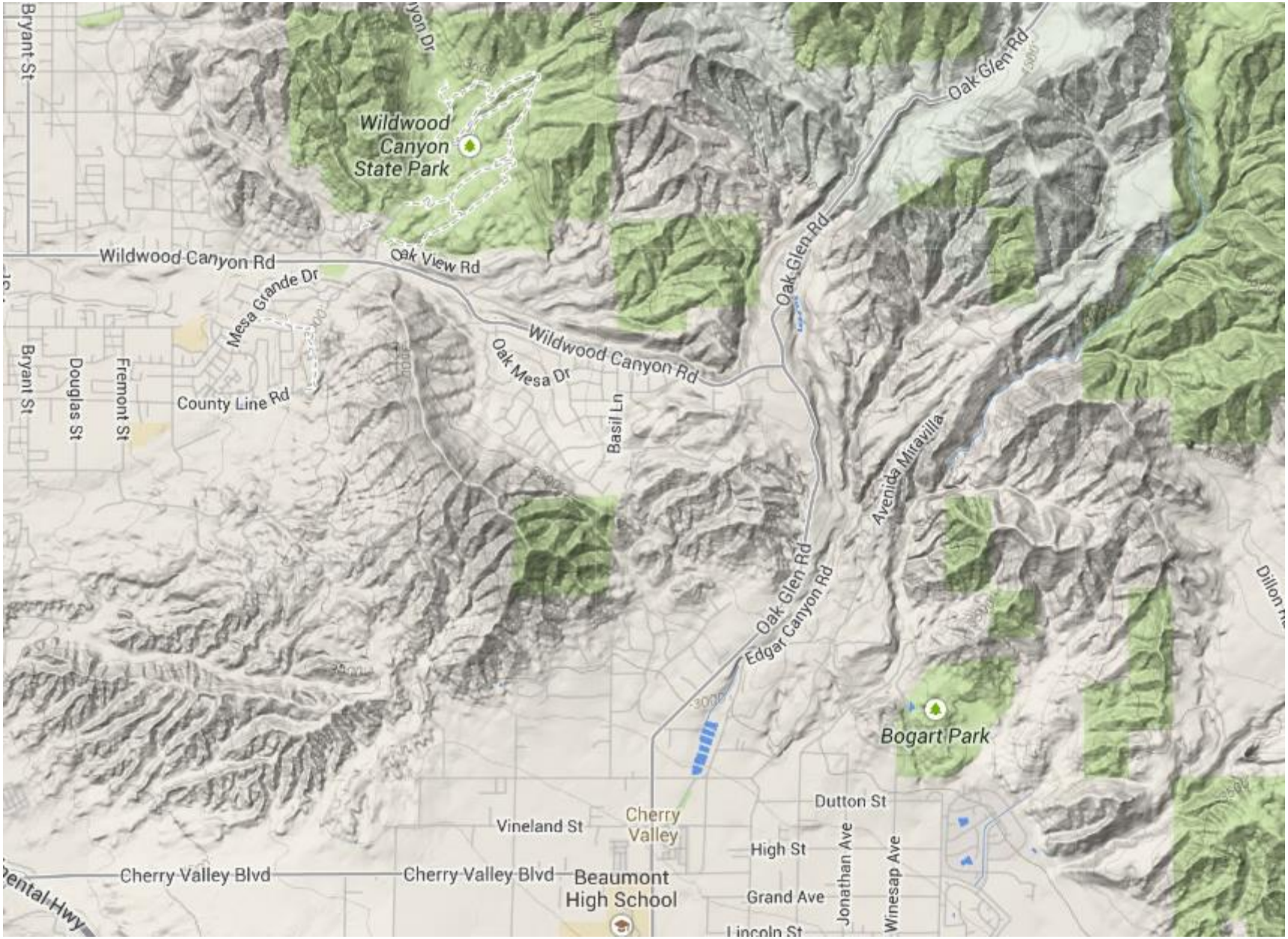
Redlands Heavy Rain Debris

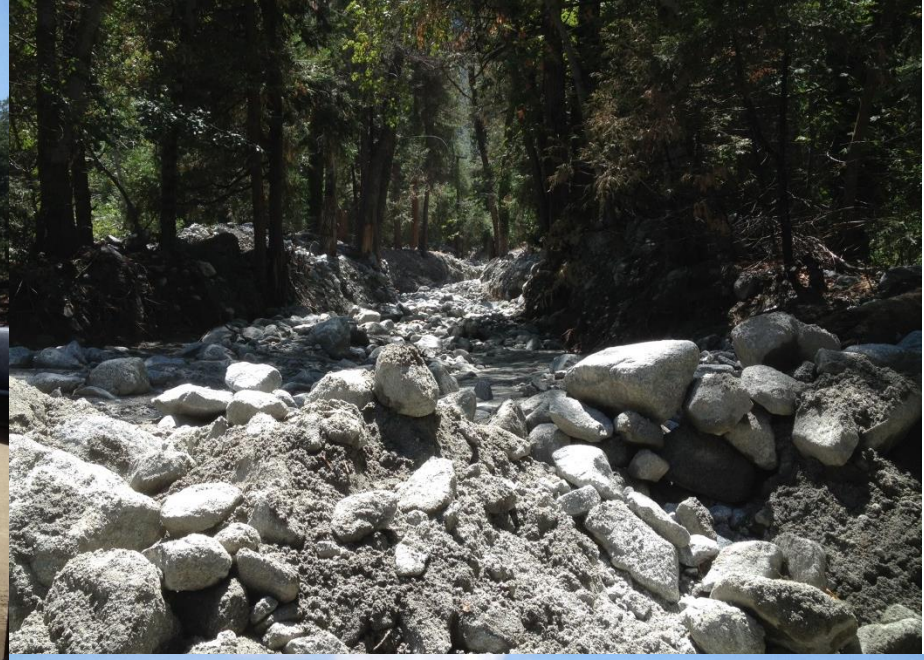
Oak Glen flood damage assessment



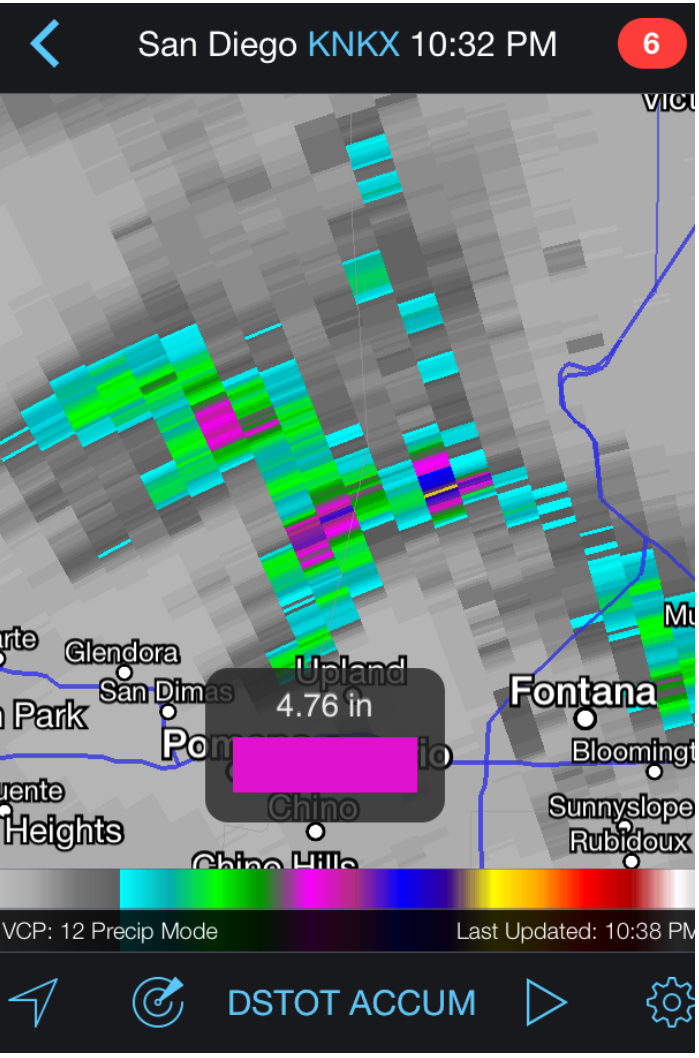
Oak Glen floods


Oak Glen Rd
Potato Canyon Rd
Oak Glen Rd
Harris Rd
Pine Bench Rd
Canyon Dr
Wildwood Canyon State Park
Oak Glen Rd
Bluff St
Oak View Rd
Oak Glen Rd
Forest Rte 2S01
Wildwood Canyon Rd
Oak Mesa Dr
Basil Ln
Avenida Miravilla


Bryant St
Wildwood Canyon State Park
Oak Glen Rd
Wildwood Canyon Rd
Oak View Rd
Mesa Grande Dr
Oak Glen Rd
Wildwood Canyon Rd
Oak Mesa Dr
Basil Ln
Bryant St
Douglas St
Fremont St
County Line Rd
Avenida Miravilla
Oak Glen Rd
Edgar Canyon Rd
Bogart Park
Dutton St
Vineland St
Cherry Valley
High St
Jonathan Ave
Winesap Ave
Cherry Valley Blvd
Cherry Valley Blvd
Beaumont High School
Grand Ave
Lincoln St

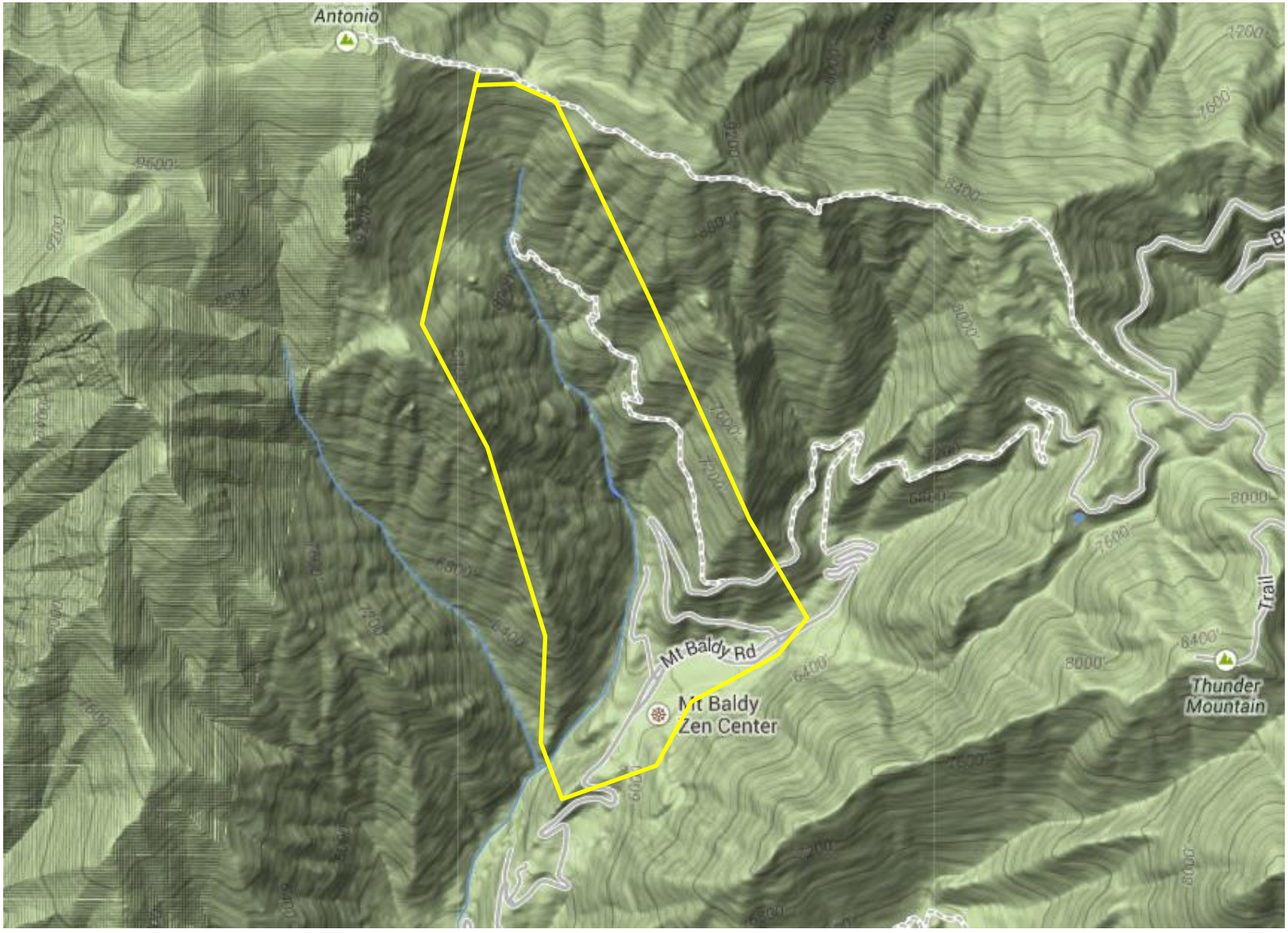


Mt Baldy Search and Rescue

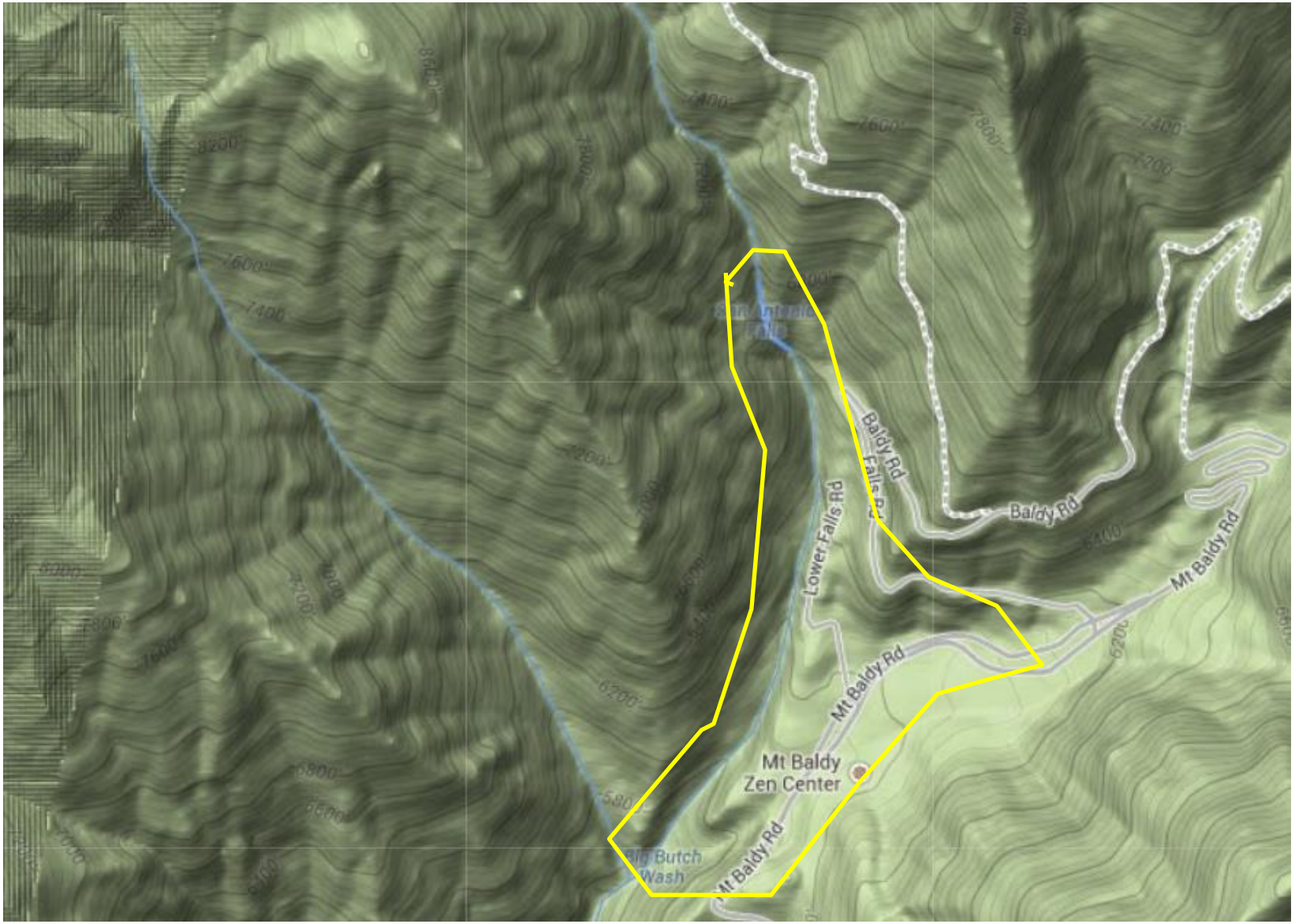


Mt Baldy
Joint San Bernardino and LA County

Mt Baldy


Antonio
Mt Baldy Rd
Mt Baldy
Zen Center
Thunder
Mountain
Trail

Mt Baldy Zen Center and homes



High water mark on tree


SHAW
SPEED LIMIT
5

Media

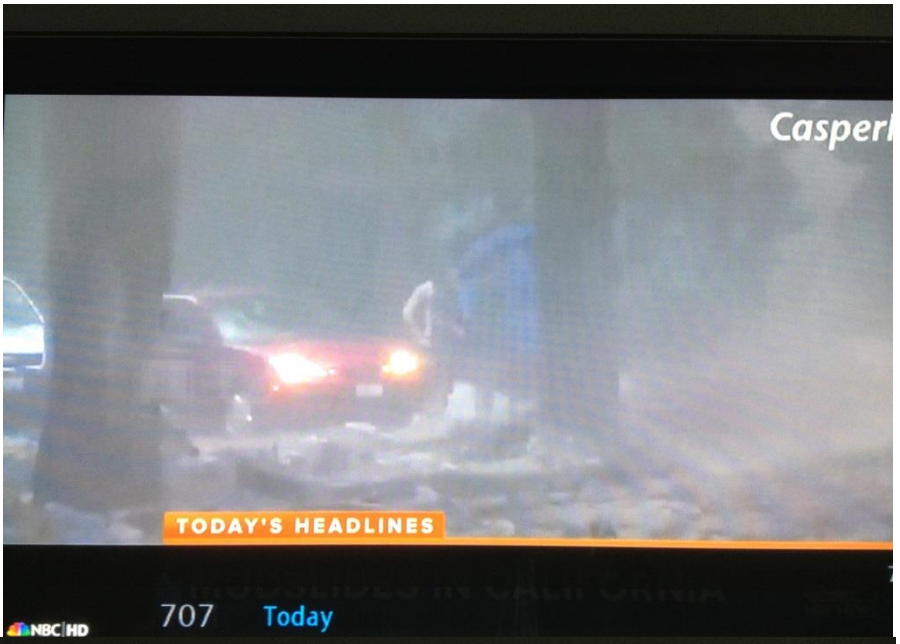

NBC7.COM


CasperNews
MUDSLIDES AND FLOODING
FOREST FALLS
/NBCSANDIEGO

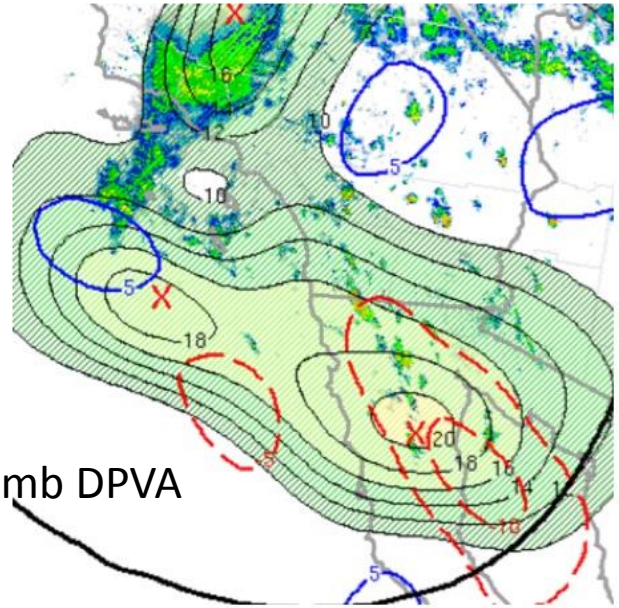

OODING WASHES DAMAGES I-10
ST OF INDIO

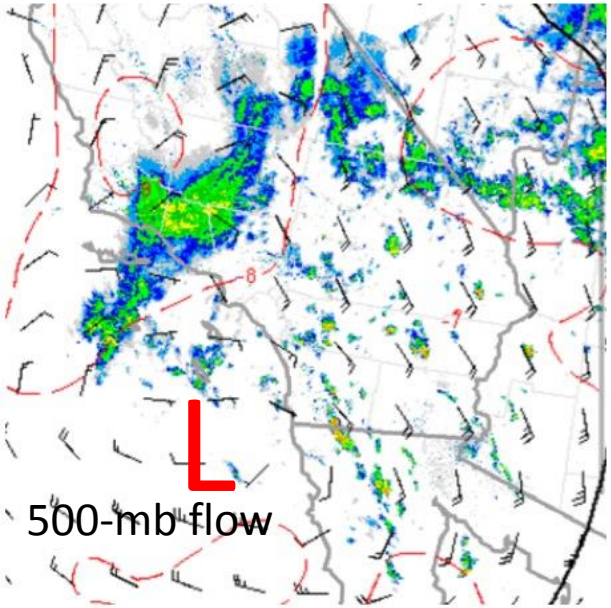

CasperNews
MUDSLIDES AND FLOODING
FOREST FALLS
/NBCSANDIEGO

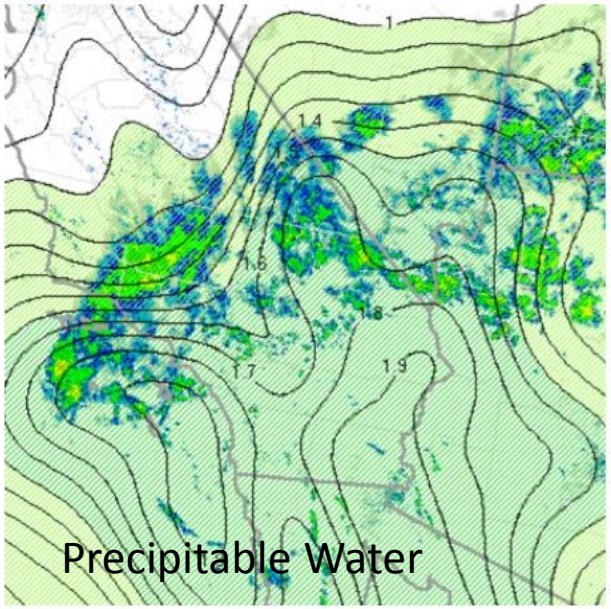
National Media coverage

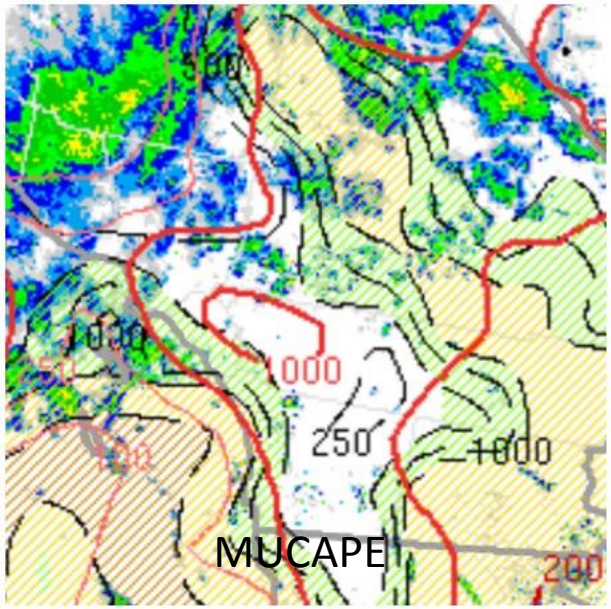


Upper Air analysis August 3

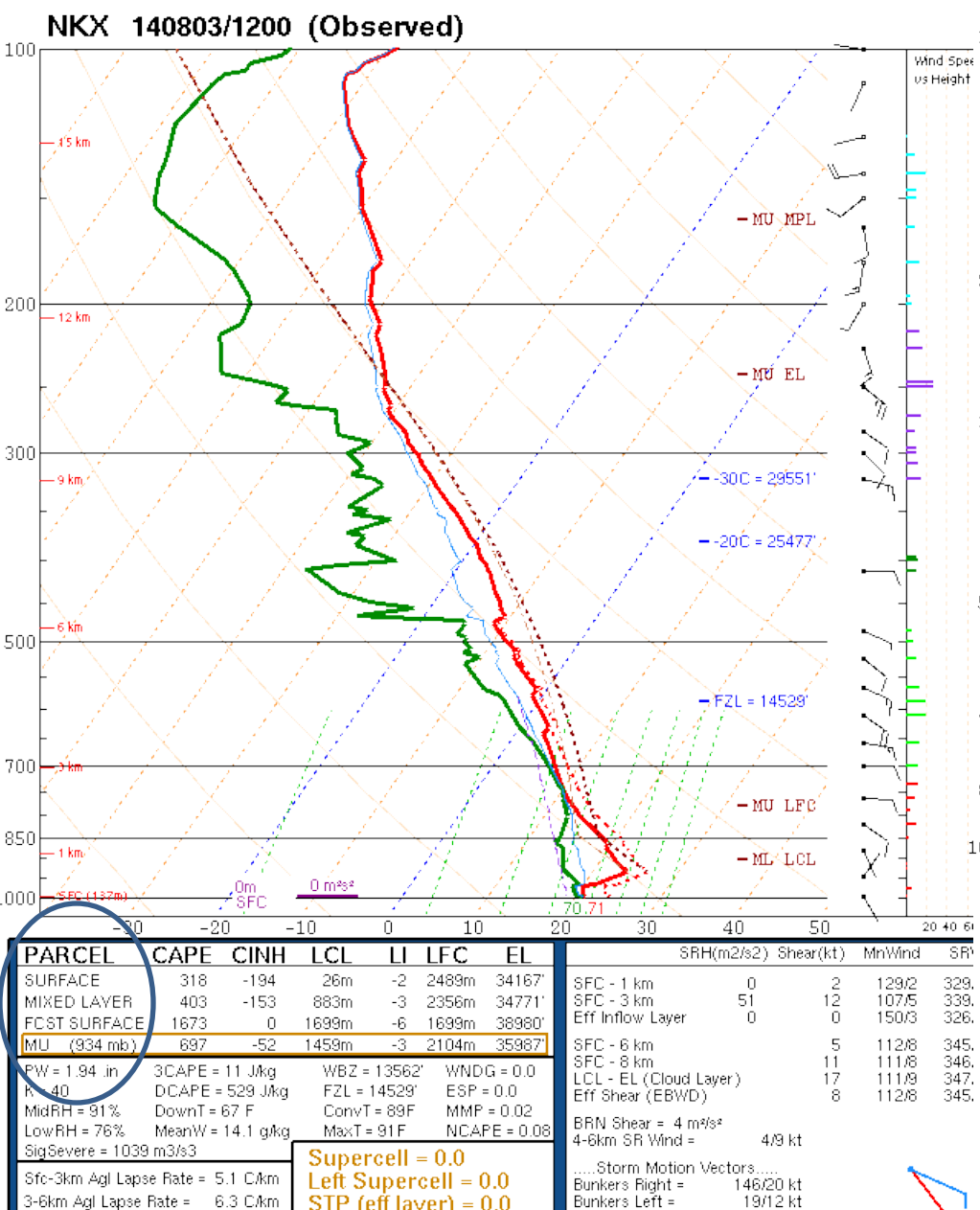








NKX 12 UTC August 3 and 00 UTC 4



PARCEL	CAPE	CINH	LCL	LI	LFC	EL
SURFACE	318	-194	26m	-2	2489m	34167'
MIXED LAYER	403	-153	883m	-3	2356m	34771'
FCST SURFACE	1673	0	1699m	-6	1699m	38980'
MU (934 mb)	697	-52	1459m	-3	2104m	35987'

PW = 1.94 in | 3CAPE = 11 J/kg | WBZ = 13562' | WNDG = 0.0
K = 40 | DCAPE = 529 J/kg | FZL = 14529' | ESP = 0.0
MidRH = 91% | DownT = 67 F | ConvT = 89F | MMP = 0.02
LowRH = 76% | MeanW = 14.1 g/kg | MaxT = 91F | NCAPE = 0.08
SigSevere = 1039 m3/s3

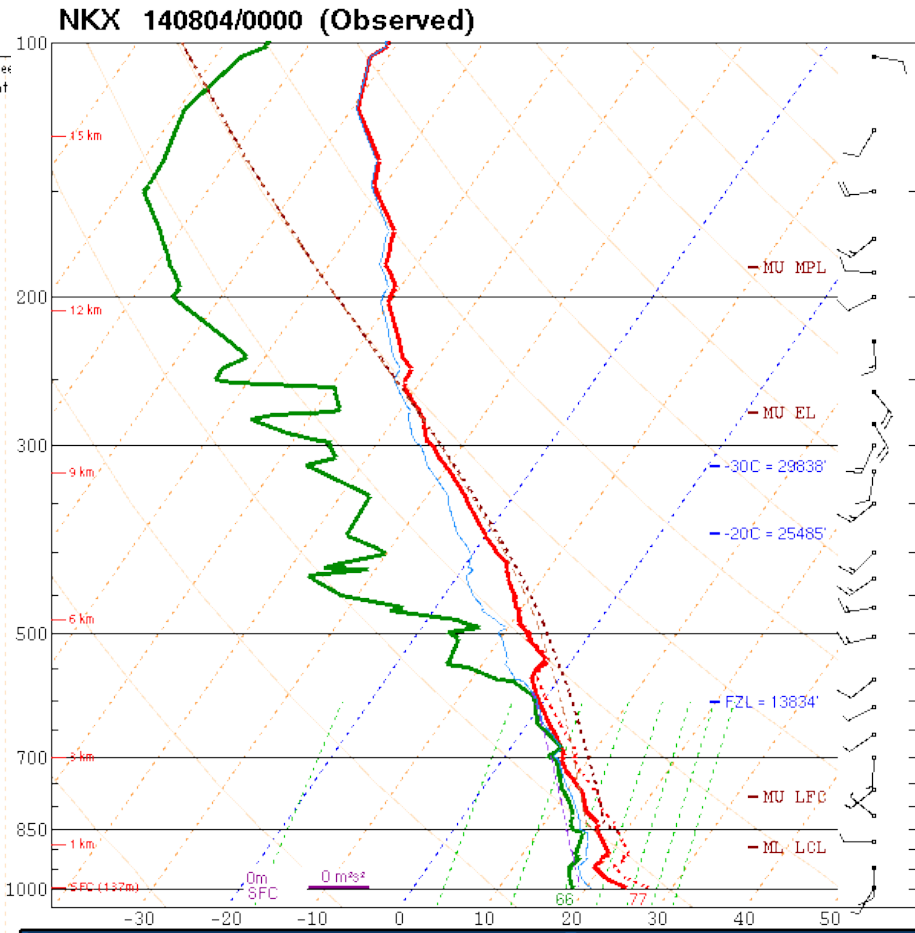
Sfc-3km Agl Lapse Rate = 5.1 C/km
3-6km Agl Lapse Rate = 6.3 C/km

Supercell = 0.0
Left Supercell = 0.0
STP (eff layer) = 0.0

	SRH(m2/s2)	Shear(kt)	MnWind	SR
SFC - 1 km	0	2	129/2	329.
SFC - 3 km	51	12	107/5	339.
Eff Inflow Layer	0	0	150/3	326.
SFC - 6 km		5	112/8	345.
SFC - 8 km		11	111/8	346.
LCL - EL (Cloud Layer)		17	111/9	347.
Eff Shear (EBWD)		8	112/8	345.

BRN Shear = 4 m²/s²
4-6km SR Wind = 4/9 kt

.....Storm Motion Vectors.....
Bunkers Right = 146/20 kt
Bunkers Left = 19/12 kt



PARCEL	CAPE	CINH	LCL	LI	LFC	EL
SURFACE	145	-92	768m	-1	2606m	23112'
MIXED LAYER	65	-120	959m	-0	5635m	21340'
FCST SURFACE	689	-2	1549m	-3	1744m	35123'
MU (859 mb)	449	-11	1521m	-2	2104m	33241'

PW = 1.88 in | 3CAPE = 2 J/kg | WBZ = 13619' | WNDG = 0.0
K = 36 | DCAPE = 351 J/kg | FZL = 13834' | ESP = 0.0
MidRH = 90% | DownT = 67 F | ConvT = 88F | MMP = 0.01
LowRH = 80% | MeanW = 13.2 g/kg | MaxT = 87F | NCAPE = 0.06
SigSevere = 304 m3/s3

Sfc-3km Agl Lapse Rate = 6.4 C/km
3-6km Agl Lapse Rate = 5.7 C/km
850-500mb Lapse Rate = 5.9 C/km
700-500mb Lapse Rate = 5.6 C/km

Supercell = 0.0
Left Supercell = 0.0
STP (eff layer) = 0.0
STP (fix layer) = -0.0
Sig Hail = 0.0

	SRH(m2/s2)	Shear(kt)	MnWi
SFC - 1 km	-25	6	204
SFC - 3 km	-41	2	244
Eff Inflow Layer	0	0	210
SFC - 6 km		9	245
SFC - 8 km		9	243
LCL - EL (Cloud Layer)		17	258
Eff Shear (EBWD)		10	243

BRN Shear = 3 m²/s²
4-6km SR Wind = 191/16 kt

.....Storm Motion Vectors.....
Bunkers Right = 335/14 kt
Bunkers Left = 189/17 kt

Corfidi Downshear = 240/14 kt
Corfidi Upshear = 243/6 kt