

The Southeastern Spotter



VOLUME 1, ISSUE 1

STORMS OF 2006

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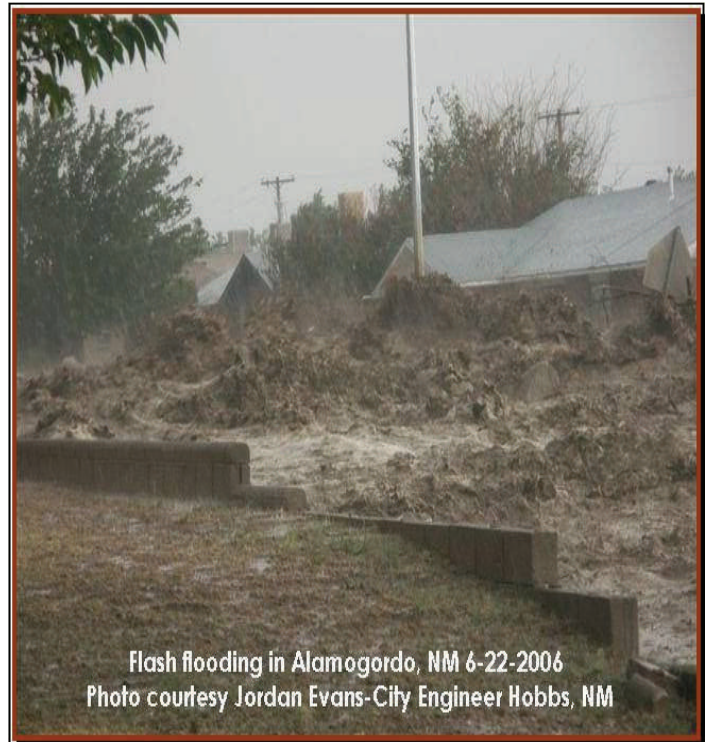
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NWS Skywarn

For the third consecutive year, the National Weather Service in Albuquerque, New Mexico, provided valuable severe weather spotting information to residents of Southeastern New Mexico. Local public safety officials along with Ham radio Skywarn spotters attended the training at the New Mexico Military Institute chapel.

The training session focused primarily on the identification of potential severe weather threats and the proper procedures for relaying information to the National Weather Service offices. Observer reports includes the following information: who, what, when, and where.

Alamogordo, NM Flash Flooding



Flash flooding in Alamogordo, NM 6-22-2006
Photo courtesy Jordan Evans-City Engineer Hobbs, NM



Eddy County SKYWARN Spotters Ham Ready!

Eddy County Skywarn has assembled a team of more than 60 experienced spotters, twenty are now licensed Amateur Radio Operators. Their newly implemented command center is now vital link between Skywarn spotters an the National Weather Service.

Joel Arnwine, the Eddy County Emergency Manager, and Wendell Malone, the Eddy and Culberson County SKYWARN Coordinator, recently organized a roster of spotters that will continue to scour the plains of Eddy County in search of severe weather; However, this time they will have an instant commu-

nications link not only to coordinate and share information among their spotter teams, but more importantly, report weather conditions to the forecasters in Albuquerque and Midland at the press of a button. Congratulations to the new hams in Eddy County!

Eddy County Wall Cloud



Ethan Nelson (Eddy County Skywarn Spotter) captured this wall cloud on April 27, 2006. The storm was southwest of the Carlsbad Airport when the photograph was taken. He captured the first one of the year!

Wet Micro-Burst causes damage in Lea County



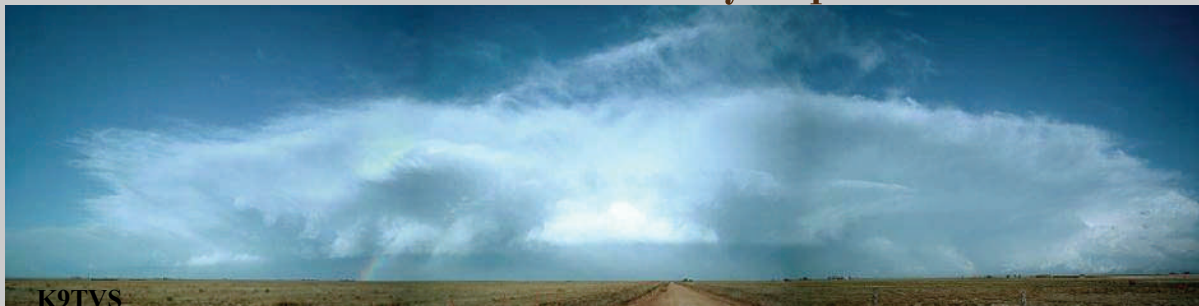
April 24, 2006 brought much needed rains to portions of South-eastern New Mexico. Its also brought a destructive wet micro-burst, which destroyed several structures near a mining facility.

Wendell Malone (Eddy County Skywarn Coordinator) conducted a damage assessment survey, and concluded that it was not a twister,

but a wet micro-burst which caused all the tornado like destruction.

A microburst is a downdraft that is less than 2.5 miles wide and that causes sudden changes in wind speed and direction, called *wind shear*.

Northern Chaves County Supercell



Cinco de Mayo was a fiesta in northern Chaves County as a supercell moved through the northeast quadrant headed east into Texas. This storm produced a Tornado in Texas and was fully documented by Chasers.

This storm had an explosive updraft, dropping large hail and heavy rain near the town of Dora, NM.

Roswell Wall cloud



8-19-06 was an amazing day with several strong thunderstorm which caused flooding in the Roswell area. The thunderstorm pictured to the left produced a rotating wall cloud on the relief route southwest of the city dump. The cell moved over Roswell from west to east, causing widespread street flooding throughout the southern portions of the city. This storm dropped several inches of rain in Chaves County.

Otero County Flooding

The month of August brought record rainfall to Otero County, and the flooding to go with it. Southeastern New Mexico reported several inches of rain with each storm system that passed through the area.

Otero county was slammed with torrential rain which caused normally dry arroyos to swell to full capacity. If you look closely, you can see debris piled on the guardrail of the crossing to the right..

An enhanced monsoonal flow, along with moisture from a dissipating hurricane was responsible for the record rainfall in New Mexico.



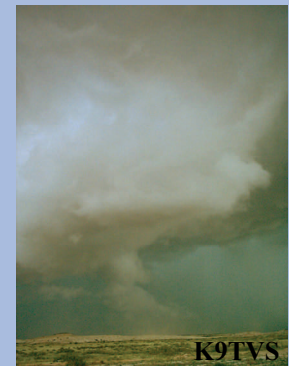
Roswell Severe Storm 9-1-06



This vigorous front moves southerly over the Roswell area on Sept. 1, prompting a severe thunderstorm warning.

The front moved south toward the Hagerman area, producing 50+ mph winds, lightening, and small hail.

8-19-06



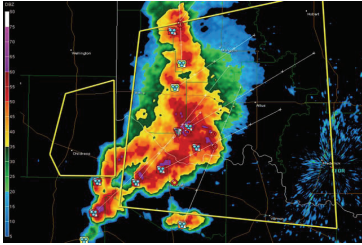
Carlsbad, NM Tropical Funnel Cloud

Many tropical funnel clouds were reported in Eddy, Chaves and a few West Texas counties. A Google search of "Tropical Funnel Cloud" did not produce much. This is a prime example of a tropical funnel as seen by many people. But because they are undetectable by Doppler radar., these reports are often overlooked or dismissed, but amazing to watch either way. A tropical funnel similar to this was observed and reported by a Roswell police officer on August 14, 2006 at 10:52 am. A tornado warning was issued, but was soon cancelled as the funnel dissipated.

6:00 P.M. MDT Monday September 4, 2006
Tropical Funnel Cloud Near The McNew Subdivision 5 Miles
North Of Carlsbad, New Mexico
Photo Courtesy Of Randy Bock



GRLEVEL WHAT??



GRLEVEL3 has proven itself capable in the field, not to mention outstanding and fast customer service. Not only is this radar software fully customizable with hail, and tornado icons, backgrounds, and logo capabilities, this program (with compatible graphics card)

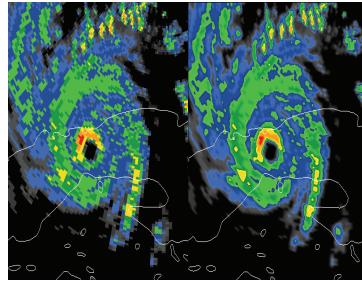
will smooth out level 3 data, giving you detailed information every storm cell detected.

GRLEVEL3 is a must have radar program!

Another great feature is the level 3 archive viewing capabilities. Ever want to see radar loops of old storms? With drag and drop capabilities this software will allow you to view the data with NEXRAD detected threats. For around \$70.00, it sure is cheaper than some of the other programs out there.

GRLEVEL3 is essential for any SKYWARN group; however, you should never rely on any software during threatening events. For more information visit

www.grlevelx.com



“The WMR-968 is not only inexpensive and accurate, it is solar powered and comes with a backlit, touch screen display.”

Mobile MESONET solution

Many spotter groups have equipped their vehicle with weather stations, which can record weather data onto a laptop, broadcast it on APRS or both!

The WMR-968 wireless weather station connected to a Byonics Wxtrak module (2M radio required for mobile operations) allows weather data to be continuously downloaded to the APRS server, to

be viewed by anyone with an internet connection. With a laptop, the weather data can be recorded and viewed later.

The WMR-968 is not only inexpensive and accurate, it is solar powered and comes with a backlit, touch screen display.

Price: \$200.00



Weather Words

Mesocyclone: Cyclonic circulation embedded in a larger storm circulation. They are usually 10 miles in diameter and contain miniature cold and warm currents that interact to form a tornado.

Front: The interface or transition zone between air masses of different properties.

Vorticity: The tendency of air or other substances to rotate.



Contacts & Links

<http://eddycountyskywarn.tripod.com>
<http://www.dfn.com/PVARC/>
www.roswelltornado.com

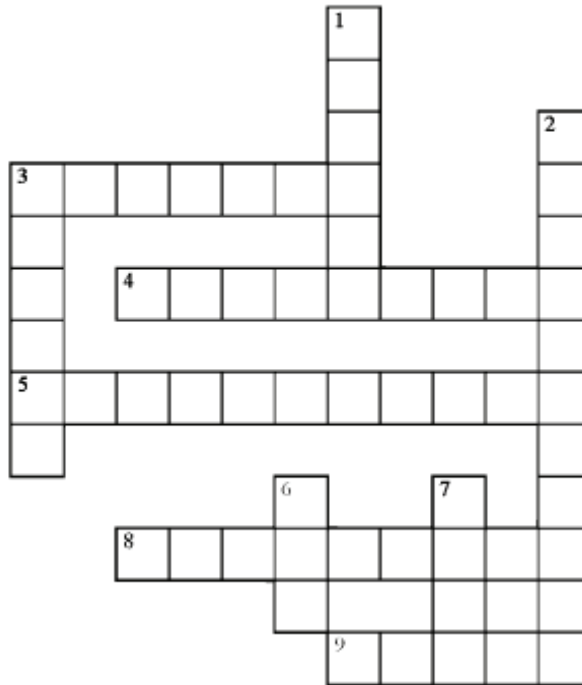
Wendell Malone-Eddy Co. Skywarn
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Steven Johnson-Chaves Co. Skywarn
k9tvs@roswelltornado.com

Wx Puzzle

ACROSS

- 3 A violently rotating column of air.
- 4 A concentrated downdraft from a severe thunderstorm.
- 5 A sudden heavy shower.
- 8 Horizontal movement of any atmospheric element.
- 9 An elongated area of high atmospheric pressure.



DOWN

- 1 A dust storm
- 2 Area of low pressure attended by storm conditions.
- 3 An elongated area of low pressure.
- 6 New Mexico county with the most recored tornadoes.
- 7 Air in motion parallel with the ground.



Photo Courtesy of Skydiary.com

SOUTHEAST NEW MEXICO RAINFALL 2006

LOCATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
CLOUDCROFT	0.03	0.50	1.09	0.77	1.23	3.50	7.26	12.39	8.19	4.27			39.23
COSMIC	0.01	0.03	0.17	0.23	0.15	2.86	3.78	13.73	5.85	4.67			31.48
MOUNTAIN PRK	0.01	0.11	0.61	0.74	1.00	0.86	3.09	9.42	4.56	M			20.40
MESCAL	0.01	0.41	0.20	0.74	0.31	1.74	4.03	12.51	3.67	3.71			27.33
ALAMOGORDO	0.00	0.33	0.08	0.07	0.02	0.74	2.07	5.95	4.06	2.86			16.18
EL PASO ARPT	0.02	0.28	0.00	0.01	0.89	0.27	3.17	6.85	4.99	0.92			17.40
RUIDOSO	0.21	0.26	0.64	0.71	0.25	0.91	6.41	9.74	6.15	3.75			29.03
SMOKEY BEAR	0.15	0.33	0.55	0.00	0.47	2.04	5.88	11.01	7.10	3.94			31.47
CAPITAN	0.06	0.00	0.32	0.07	0.83	2.00	4.77	7.62	2.87	3.18			21.72
CARRIZOZO	0.00	0.10	0.36	0.12	0.13	0.15	3.09	4.77	2.08	3.50			14.30
PICACHO	0.03	0.03	0.00	0.00	0.70	1.00	2.29	M	M	2.95			7.00
MAYHILL	0.15	0.11	0.16	0.05	0.68	2.54	9.65	14.79	3.71	2.93			34.77
ELK	0.00	0.09	0.12	0.00	0.53	1.14	5.01	7.72	3.69	2.90			21.20
DUNKEN	0.00	0.02	0.06	0.02	0.52	1.17	3.24	3.77	3.29	3.53			15.62
QUEEN CL	M	M	M	0.42	0.38	M	M	M	M	M			0.80
QUEEN RAWS	0.00	0.35	0.10	0.07	0.08	2.31	4.58	5.17	4.20	1.02			17.88
QUEEN	0.00	0.20	0.30	0.20	0.20	2.80	7.00	9.80	5.00	1.30			26.80
THE BOWL	0.01	0.37	0.37	0.27	0.07	2.81	3.71	12.36	5.55	1.40			26.92
PINE SPRINGS	0.00	0.46	1.42	0.05	0.28	2.25	3.55	8.95	5.95	1.61			24.52
GUADALUPE P	0.01	0.23	1.02	0.09	0.30	0.29	1.91	4.29	2.61	1.75			12.50
CARLSB CVNS	M	M	1.61	0.50	0.10	1.92	M	4.62	5.04	M			13.79
BAT DRAW	0.00	0.29	0.72	0.30	0.11	1.85	1.26	4.31	4.31	1.31			14.46
DARK CANYON	0.00	0.27	0.25	0.50	0.12	2.39	2.17	5.17	4.28	0.90			16.05
KINCAID RANCH	0.00	0.08	0.78	0.57	0.35	1.98	2.48	4.11	6.60	1.19			18.14
KCNM	0.00	0.30	1.56	0.26	0.16	1.20	0.19	2.12	5.12	0.68			11.59
RAY NANCE	0.00	0.29	1.71	0.15	0.15	1.33	0.53	2.71	5.77	0.93			13.57
RAYROUX	0.00	0.14	0.95	0.61	0.19	1.06	0.37	3.04	7.24	0.66			14.26
STEVE BOCK	0.00	0.39	1.40	0.24	0.11	1.45	0.55	2.60	5.13	0.92			12.79
W MALONE	0.00	0.31	1.10	0.15	0.15	1.55	0.41	2.32	5.23	0.93			12.15
CARLSBAD CL	0.00	0.31	1.08	0.10	0.16	1.80	0.54	1.90	4.30	0.76			10.95
S CARLSBAD	0.00	0.20	1.92	0.24	0.11	1.31	0.42	3.73	5.31	0.62			13.86
E CARLSBAD	0.01	0.14	1.26	0.41	0.14	1.61	0.87	3.74	5.94	0.70			14.82
C CARLSBAD	0.00	0.11	1.21	0.91	0.17	1.89	1.28	3.75	7.14	0.62			17.08
N CARLSBAD	M	M	M	1.02	M	1.75	1.12	4.30	8.91	0.90			18.00
NW CARLSBAD	0.00	0.10	0.68	1.05	0.15	1.90	0.84	2.62	6.45	0.64			14.43
BRANTLEY DAM	0.00	0.20	0.20	0.07	0.26	M	2.41	4.23	3.57	M			10.94
IBGP	0.00	0.26	0.16	0.30	0.31	1.92	1.94	5.68	5.84	0.72			17.13
LAKEWOOD	0.00	0.21	0.10	0.10	0.22	1.15	1.72	2.93	4.54	0.64			11.61
WILSON RANCH	0.00	0.20	0.20	0.30	0.40	1.40	3.20	3.30	2.80	0.90			12.70
S ARTESIA	M	M	M	0.70	0.30	1.70	1.90	2.90	3.35	1.35			12.20
ATOKA	0.00	0.19	0.20	0.34	0.15	1.87	1.75	2.63	2.81	0.72			10.66
ARTESIA 6 S	0.00	0.21	0.35	0.18	0.13	1.57	1.24	2.61	3.05	1.04			10.38
KATS	0.00	0.04	0.36	0.32	0.20	2.01	0.86	3.31	4.19	1.80			13.09
RIVERSIDE	0.00	0.30	0.45	0.30	0.67	1.32	3.70	5.60	3.40	1.25			16.99
LOCO HILLS	0.00	0.16	0.45	0.07	0.18	0.84	0.89	3.52	2.86	0.52			9.49
HOPE	0.00	0.23	0.13	0.04	0.30	M	2.44	3.92	3.31	1.83			12.20
KROW	0.00	0.17	0.01	0.20	0.37	1.18	1.05	3.34	4.11	1.69			12.12
ROSWELL CL	0.00	0.05	0.04	0.42	0.43	1.14	2.05	6.09	3.45	1.80			15.47
ROSWELL N	0.00	0.15	0.08	0.47	0.39	1.53	1.79	3.07	3.31	2.03			12.82
BITTER LKS	0.00	0.17	0.04	0.67	M	0.90	1.11	1.67	3.45	M			8.01
TATUM	0.00	0.20	1.21	0.88	0.03	1.15	3.15	3.36	6.16	1.96			18.10
CAPROCK	0.00	0.16	0.49	0.47	0.14	2.51	0.44	1.61	1.74	0.50			8.06
KHOB	0.22	0.02	0.75	0.38	0.46	0.78	1.69	4.13	1.00	0.68			10.11
HOBBS GAS CO	0.00	0.00	1.48	0.05	1.54	0.70	1.42	3.42	2.96	M			11.57
HOBBS 13W	0.00	0.12	1.34	0.34	0.37	0.57	2.89	4.79	4.39	M			14.81
PADUCA	0.00	0.02	0.95	0.06	0.00	1.05	0.62	4.16	4.74	1.24			12.84
WIPP	M	M	M	M	M	M	M	4.05	M	M			4.05
JAL	0.00	0.54	0.56	0.62	0.08	M	1.11	2.87	3.60	M			9.38

RAWS= REMOTE AUTOMATED WEATHER STATION, OPERATED BY THE BLM.

ASOS	AUTOMATED SURFACE OBSERVING STATION.
T	TRACE OF RAIN/SNOW.
CLOUDCROFT	8,660'.
COSMIC	THE COSMIC RAWS AT THE SUNSPOT OBSERVATORY AT 9,100'.
MOUNTAIN PRK	THE MOUNTAIN PARK CLIMATE CO-OP STATION WEST OF CLOUDCROFT AT 6,790'.
MESCAL	THE MESCAL RAWS LOCATED EAST OF TULAROSA AT 6,227'.
ALAMOGORDO	THE ALAMOGORDO CLIMATE COOP STATION AT 4,350'
EL PASO ARPT	THE EL PASO INTERNATION AIRPORT AT 3, 920'
RUIDOSO	6,840'.
SMOKEY BEAR	SMOKEY BEAR RAWS LOCATED 1 MILE NORTH OF RUIDOSO AT 6,900'.
CAPITAN	6,480'.
CARRIZOZO	5,420'.
PICACHO	5,040'.
MAYHILL	THE MAYHILL RAWS AT 6,558'.
ELK	LOCATED 10 MILES EAST OF MAYHILL AT 5,730'.
DUNKEN	THE DUNKEN RAWS LOCATED 45 MILES WEST OF ARTESIA AT 5,500'.
QUEEN CL	QUEEN CLIMATE COOP STATION LOCATED AT THE QUEEN GENERAL STORE.
QUEEN RAWS	THE QUEEN RAWS 3E OF QUEEN AT 5,605'.
QUEEN	DAYMOND AND PAT WRIGHT IN QUEEN.
THE BOWL	THE BOWL RAWS LOCATED JUST NORTH OF GUADALUPE PEAK AT 7,755'.
PINE SPRINGS	THE PINE SPRINGS COOP STATION LOCATED IN THE GDP MTN'S NATL PARK.
GUADALUPE P	GUADALUPE PASS ASOS AT 5,449'.
CARLSB CVNS	CARLSBAD CAVERNS NATIONAL PARK AT 4,410'.
BAT DRAW	THE BAT DRAW RAWS LOCATED AT CARLSBAD CAVERNS NAT'L PARK AT 4,425'.
DARK CANYON	CURTIS & LISA DOYLE LOCATED 7 E OF THE JUNCTION OF HWY 137/DARK CANYON RD O
KINCAID RANCH	LOCATED 6 MILES WEST OF THE CARLSBAD AIRPORT.
KCNM	THE CARLSBAD AIRPORT ASOS AT 3,240'.
RAY NANCE	LOCATED 1 MILE SOUTHEAST OF THE CARLSBAD AIRPORT.
RAYROUX	JESSIE/ANN RAYROX LOCATED 3 MILES WEST OF THE CARLSBAD AIRPORT.
STEVE BOCK	STEVE/JUDY BOCK LOCATED 2 MILES SOUTHEAST OF THE CARLSBAD AIRPORT.