

Tornado

Continued from page 7A

He said there were at least 35 twisters over the weekend.

Many were supercells, powerful storms in which the whole cloud mass rotates, wrapping the storm in rain.

It is not that giant rotation that forms the tornado, Brooks said. "You don't directly take that rotation 10,000 feet above the ground and somehow move that down to the ground."

But the rotating cloud mass helps create a favorable environment for a tornado to form, he said, offering a low cloud base and strong wind shear.

Wind shear means that winds are blowing in one direction at one level and another direction above, causing the air in between to rotate.

Warm and moist air is lighter than air that is cold and dry, so the lighter stuff tends to rise upward. As the rising air cools, the moisture begins to condense, producing clouds and rain.

When the warm, moist air rising from below reaches that spinning area in the wind shear

it tilts the rotation and the funnel cloud forms.

Getting a better understanding of how that rotation reaches down to the ground is a major focus of research, Brooks added.

When it does reach the ground, forces in the twister become unbalanced and air is drawn in at the base of the tornado.

If conditions are just right, winds speed up as they near the center of the tornado, like a figure skater spins faster when she pulls her hands in close to her body.

While tornadoes have occurred in every state, they are most common in the center of the country, especially in Tornado Alley, a band running north from Texas through Oklahoma and Kansas.

In most cases the formation process is the same.

"If you get a good environment to make a tornado, the atmosphere doesn't care where it is. It's just more common to get those environments out here," Brooks said in a telephone interview from his Oklahoma office.

Mars' climate varies north to south

(AP) — The north and south poles on Mars look very different from each other, and scientists now think they know why: Circulation patterns in the red planet's very thin atmosphere tend to keep all the water in the north, leaving the south pole high and dry.

Mars exploration by unmanned spacecraft has shown the northern hemisphere has a large polar cap made up mostly of frozen water, while the southern hemisphere has a much smaller cap made up almost entirely of frozen carbon dioxide, or dry ice.

A new computer model suggests the apparently permanent difference results partly from the much higher elevation in the south — which is an average of three miles higher than the north.

Mark Richardson of the California Institute of Technology and John Wilson of the Geophysical Fluid Dynamics Laboratory at Princeton University reported in a recent issue of the journal Nature that the difference in elevation shifts the Hadley effect, an atmospheric circulation pattern created when heated air rises from the warmer equator and sinks toward the poles.

"It's the dominant form of atmospheric circulation in the tropics here on Earth," Richardson said, "where you get rising air

in the region most strongly heated by the sun that has to be replaced by cooler air at the surface."

On Earth, however, the circulation is balanced between the northern and southern tropics, causing the gentle trade winds across the relatively flat and even expanse of the ocean.

On Mars, the Hadley effect reaches

"I think it is an important step in understanding how climate change on Mars might be occurring."

— David Hinson
Stanford University

and ice at the north pole of Mars, and may be responsible for its alternating of ice and dust, he said.

"On Earth, we're used to thinking southern summer is similar to the northern summer," Richardson said, "but it's the way on Mars."

Mars is tilted on its axis at about the same degree as Earth, causing a change in seasons as it orbits the sun.

Unlike Earth, however, Mars has a variation in orbit that puts it about 2 percent closer to the sun when it is summer in the south, making the season much more intense than summer in the northern hemisphere.

David Hinson of Stanford University, one of the leaders of the latest NASA survey of Mars, said Martian weather is the focus of several unmanned space missions planned in the coming decade.

He said the model developed by Richardson and Wilson makes useful comparisons between actual measurements taken by the Mars Global Surveyor spacecraft now orbiting the planet and computer simulations.

"It seems quite plausible to me," Hinson said. "I think it is an important step in understanding how climate change on Mars might be occurring."

GREAT DEALS EVERY TUESDAY IN THE BATTALION

COUPON MANIA

CLIP & SAVE

Spring Formals Tuxedo Special \$69.95*

Men's formal wear by **Sir Knight FORMAL WEAR**

2008 South Texas Ave. • College Station, Texas
Next to Hastings • (979) 696-5557

CHAPS PERRY ELLIS

http://www.sirknight.com • (Next to Hastings)

Q-Nails
Professional Nails Care
Quality Service & Lowest Price

Manicures & Pedicure*	Jacuzzi Spa Pedicure* Special Massage Chair	Full Set	Fill	Solar Set
\$23	\$17	\$19	\$10	\$30

FREE Paraffin Wax for any service from \$23.00 and up

2551 - C S. Texas Ave.
College Station, TX 77840
(979) 693-2220

HOURS:
• Mon-Fri: 9am - 8pm
• Sat: 9am - 7pm
• Sun: 11am - 6pm

Auto Pros SERVICE CENTER

AC SERVICE SPECIAL
(Up to 1 pound of freon on any vehicle)
ONLY **\$59.99**

OR

10% OFF ALL SERVICES
(Over \$100)
Must Present Coupon
Owned by Tim Kelly

823-4939 3301 S. College Ave

Myra's

Gallery and Custom Framing

404 University Drive East
College Station, Tx.
(979) 693-6894

• Best Quality in Town • Best Value • 100% Satisfaction Guaranteed

ONE HOUR DIPLOMA FRAMING
Graduation Weekend, May 10th & May 11th, 2002

10% OFF with this coupon
20% OFF both diplomas and get each

Friday, May 10th 8 a.m.-midnight, Saturday, May 11th 8 a.m.-8 p.m.

2998 Texas Avenue South College Station (979) 764-3101

Next to Sonic Near College Station Wal-Mart

GOODYEAR Gemini

OIL, LUBE & FILTER AND TIRE ROTATION \$29.95

Includes: Lube where applicable
• New oil filter installed
• Up to 5 quarts Exxon brand oil, most vehicles
• 4 tire rotation

Not valid w/any offer. Expires 05/17/02.

COMPUTERIZED ALIGNMENT 10% OFF

Not valid w/any offer. Expires 05/17/02.

GRIN AND TAKE IT
DEFENSIVE DRIVING ... COMEDY STYLE

Defensive Driving with a Punch (Line)!
(Only \$25 with Coupon)

• Convenient Saturday classes
• State-approved for ticket dismissal/insurance reduction
• Taught by professional comic Bobby Bernshausen '90
• Aggie Owned and Operated • Held at 4.0&Go Tutoring
• www.grinandtakeit.com

To register, call 778-GRIN (778-4746)

Congratulations Graduating Seniors!

Bring this ad in for a free gift when you order announcements or purchase a cap & gown.

ROTHER'S BOOKSTORES

AAA Defensive Driving

Lot-of-fun, Laugh-a-lot
Ticket dismissal, insurance discount.
M.-Tu. (6 p.m.-9 p.m.) or W.-Th. (6 p.m.-9 p.m.),
Fri. (6 p.m.-8 p.m.) & Sat. (10 a.m.-2:30 p.m.)
or Sat. (8 a.m.-2:30 p.m.)

Lowest price allowed by law. \$25 Cash

111 Univ. Dr., Ste. 217 846-6117
(In Bank of America. Next to Black Eyed Pea.)
Walk-ins welcome. Arrive 30 minutes early.

PRO-NAILS
Complete and Professional Nail Care

Now Open on Sunday 12-5
Mon-Fri 9-7 Sat 9-7 Sun 12-5

Manicure & Pedicure \$23.00	Full Set (Reg) \$19.00	Manicure & Pedicure + Jacuzzi Spa \$26.00	Jacuzzi Spa \$20.00
Refill (Reg) \$10.00	Pro-Nails 2501 S. Texas Ave. D 104 College Station, Texas 764-5693 (Next to 4.0 & Loose Moose)		Solars \$30.00

Gift Certificates Available
Accepts Aggie Bucks

FREE Paraffin Wax for any service from \$23.00 & up
Coupons Good at this location only • All major Credit Cards Welcome

CarDoc

Experience the experienced, not the experiment of automotive service.

4 Tire Balance & Rotation \$12.88 or **Free Balance and Rotation** w/ wheel alignment

204 A Harvey Rd. College Station 693-8575

lwback3912@aol.com

3 FREE TANS

PLANET BEACH
1800 S. Texas Ave., Suite D
(Next to Harvey Washbangers)
College Station
979-694-1103

• a/c in all beds
• am/fm CD Stereo

First time guests only.
Must present coupon @ 1st visit.
Now accepting Aggie Bucks.
Expires 05/15/02

Tan America Beds • In Bed Air Conditioning • In Bed AM/FM CD

TOTAL TAN

FREE Child Care \$25.00

One Month Unlimited Tanning

First time customers only. Not valid with any other offer. Expires 5-31-02