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The Winter of '95-'96 ... A Season of Extremes



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INTRODUCTION

This report provides a review of the Winter of 1995-1996--a winter of unusual extremes in parts of the country. Although December was not unusually active, January and February proved to be quite interesting. Those months included the following extreme events: the January blizzard and ensuing flooding in the Northeast, and then in February-- a severe cold wave, Pacific Northwest flooding, and unusual warmth and fires in the southern plains.

Another interesting aspect of the past winter was the 'seesaw' pattern of temperatures and precipitation over much of the nation. Extremely cold conditions (such as early February) were often followed by unusual warmth. The same applied to precipitation, with the Northwest beginning the season on the dry side, and then moving into a very wet pattern. Therefore, as is sometimes the case in climatology, the averages of the season as a whole belie the extremes contained within.

DECEMBER 1995

The month of December was fairly quiet compared to what was to come. In early December, record 24-hour snowfalls in Buffalo, NY of 38 inches and in Sault Ste. Marie, MI of 28 inches on December 9-10 were due to lake-effect snowstorms.

In mid-December, an unusually intense storm struck the Pacific Northwest. Heavy rains of 5-20 inches accompanied the system. However, very low pressures and high winds were its key features. Record low sea level pressure readings were recorded at Astoria, OR (28.53 inches), Seattle, WA (28.65 inches), and Medford, OR (28.93 inches). Wind gusts reached 119 mph at Sea Lion Caves, OR and 103 mph at Angel Island, CA. Six deaths and over 2 million power outages were attributed to the storm.

In the latter part of the month, Miami failed to exceed 65 F for 8 consecutive days from December 21 - 28, an all-time record for the city.

JANUARY 1996

January proved to be quite cold over much of the nation (below normal in 37 states), with unusually heavy snowfall over most of the East. From January 6-8, much of the eastern seaboard received from 1 to 3 feet of snow during the "Blizzard of '96." A large area from the southern Appalachians to southern New Hampshire and Maine received a foot or more, with 20 inches or more very common over the major metropolitan areas of the east. However, upstate New York received very little snow as the storm featured a very pronounced western edge where snowfall ended. Storm total snowfall records set by the blizzard included:

Elkins, WV--23.4 inches (old record--20.7 on Nov 24-25, 1950)
Charleston, WV--20.5 inches (old record--18.9 on Mar 13-14, 1993)
Cincinnati, OH--14.4 inches (old record--11.3 on Jan 16-17, 1978)
Newark, NJ--27.8 inches (old record--26.0 on Dec 26-27, 1947)

Philadelphia, PA--30.7 inches (old record--21.3 on Feb 11-12, 1983)
Scranton, PA--21.0 inches (old record--20.5 on Nov 24-25, 1971)
New Jersey state record--White House Station, NJ--35 inches (old record--34.0 in Feb 1899)

24-hour snowfall records included:

Lynchburg, VA--20.0 inches
Wilmington, DE--22.0 inches
Philadelphia, PA--27.6 inches
Roanoke, VA--22.2 inches
Cincinnati, OH--12.8 inches

Accumulations as great as 48 inches occurred in Pocahontas County, WV at the Snowshoe ski resort. Wind gusts of over 50 mph were rather common also, and resulted in blizzard conditions for much of the area. Two lesser events then followed, resulting in additions to the snow cover, with Boston, MA and Harrisburg, PA both reporting record snow depths of 32 inches, along with Philadelphia, PA--28 inches, and Bluefield, WV--25 inches. Table 1 and Figures 1-5 provide a detailed analysis of this storm.

Following are some state by state impacts of the January 6-8 snowstorm. Death tolls include direct and indirect causes, and some states, such as Pennsylvania, keep very detailed records of these statistics.

Alabama--2 deaths, some roads closed by ice.
Arkansas--4 deaths.
Connecticut--4 deaths, 27 inches at Darien.
Delaware--4 deaths, 22 inches at New Castle, a record for January.
District of Columbia--Federal and local governments closed.
Georgia--1 death, up to 12 inches in mountains of northeastern Georgia.
Indiana--3 deaths, up to 9 inches in southern portion of state.
Kentucky--6 deaths, 28 inches at Pine Mountain.
Maine--no deaths reported, up to 12 inches of snow along coast.
Maryland--6 deaths, 33 inches at Frostburg.
Massachusetts--no deaths reported, 18 inches in Boston.
New Hampshire--no deaths reported, up to 17 inches in southwest portion of state.
New Jersey--4 deaths, 27.8 inches at Newark Airport.
New York--7 deaths, 27.5 inches in New York City on Staten Island, 20.2 inches in Central Park.
North Carolina--5 deaths, up to 30 inches in northern mountains.
Ohio--3 deaths, up to 18 inches in southeastern counties, 14.4 inches at Cincinnati.
Pennsylvania--80 deaths, 30.7 inches in Philadelphia.
Rhode Island--no deaths reported, 24 inches at Warwick.
South Carolina--2 deaths, 10 inches in mountains of Pickens County.
Tennessee--4 deaths, up to 30 inches in higher mountains.
Virginia--13 deaths, 47 inches in Shenandoah National Park.
West Virginia--6 deaths, 48 inches at Snowshoe--highest total for the storm.
Overall snowstorm death toll--154.

The sudden warm-up that followed proved to be almost as deadly and damaging as the blizzard itself. Burlington, VT recorded 65 F on January 19. Moderate to heavy rains (3.03 inches in 24 hours at Williamsport, PA) and rapid snowmelt triggered serious flooding along the Delaware, Susquehanna, upper Ohio, Potomac and James River basins, with crests as much as 20 feet above flood stage. The flooding killed 33 people, forced over 200,000 from their homes, and destroyed or damaged hundreds of roads and bridges.

In Harpers Ferry, WV, where the Shennandoah and Potomac rivers meet, the water crested at 31 feet--13 feet above flood stage. USGS scientists estimated that the Potomac River crested at a flow of 312,000 cubic feet per second (cfs) at Point of Rocks, MD, nearing the level of 347,000 cfs reached in June of 1972 after rains from Hurricane Agnes. The Susquehanna River at Harrisburg, PA crested at 570,000 cfs, well below the flow of 1 million cfs reached in June 1972 from Hurricane Agnes.

State officials reported flood fatalities as follows:

Pennsylvania--19
New York--10
West Virginia--2
Vermont--2

No flood-related deaths have been reported from Maryland, Virginia, Ohio, or New Jersey. Presidential disaster declarations included the states of Virginia, Ohio, Pennsylvania, Maryland, West Virginia and New York. Pennsylvania was especially hard hit by the blizzard and flooding as the following statistics show:

- Estimated \$1 billion in total damages and costs from the combined blizzard and flooding.
- Some areas experienced the worst flooding since Hurricane Agnes in 1972, which killed 48 people and left 220,000 homeless.
- 99 deaths (80 blizzard-related, 19 flood-related).
- Over 52,000 homes affected (over 11,000 destroyed or with major damage).
- 57 of the state's 67 counties received some flooding.
- More than 200,000 Pennsylvanians evacuated during the flooding.
- Approximately 2000 businesses damaged or destroyed.
- Over 1500 roads and bridges damaged.
- 78 parks damaged or destroyed.
- Damage to state and local highways and bridges estimated to be over \$500 million.

Various statistics from other states:

West Virginia: Over 8000 homes affected and over \$24 million in damages to public facilities and infrastructure.

Maryland: Over 700 homes and businesses damaged or destroyed.

Ohio: Over 2000 homes and businesses damaged, with approximately \$500,000 in uninsured damages, and public facility and infrastructure losses estimated at approximately \$11 million.

Overall, the blizzard and ensuing flooding killed an estimated 187 people and caused approximately \$3 billion in total damages and costs (including snow removal).

FEBRUARY 1996

February was just as eventful as January with one severe cold episode affecting the eastern two-thirds of the nation, and one severe flooding event affecting the Pacific Northwest. Also, the southern plains experienced record warmth and extensive prairie fires due to an extended drought.

The arctic outbreak actually began in late January in the northern plains and northern Rockies. Glasgow, MT had 21 successive subzero minimum temperatures from January through early February. Then, the air mass began to move slowly south and east. Minneapolis-St. Paul recorded 6 consecutive minimums below -20 F, breaking a record set during the arctic outbreak of 1899. Wind chills of between -50 F and -100 F were rather common throughout the northern plains area. Overall, this outbreak set nearly 400 record daily minimums, at least 15 all-time low readings, and over 50 new records for the month of February. Waterloo, IA reported a record number of successive hours below zero (139 hours), as did Des Moines, IA (132 hours). Immokalee, FL reached 27 F, and preliminary damage estimates for Florida's vegetable crop stand at \$50-60 million. The citrus industry escaped without significant damage. Nationwide, over 100 deaths were attributed to the cold wave and its associated weather.

New state record low temperatures were tied or set at the following locations:

Minnesota--Tower (-60 F) on Feb 2, old record -59 F at Leech Lake Dam, Feb 8, 1899

Iowa--Elkader (-47 F) on Feb 3, tied record set at Washta, Jan 12, 1912

Illinois--Elizabeth (-35 F) on Feb 3, tied record set at Mt. Carroll, Jan 22, 1930

Rhode Island--Greene (-25 F) on Feb 5, old record -23 F at Kingston, Jan 11, 1942

Table 2 and Figures 6-7 provide more detailed statistics for this event.

As the cold air moved south and east, much warmer air surged into the plains states with temperatures reaching 70 F as far north as southeastern Montana, a rise of 100 F from the prior week. This typified the winter's 'seesaw' pattern as mentioned earlier. Tulsa, OK set new February records for minimum temperature (-11 F) and maximum temperature (90 F) only 18 days apart. Warm air returned to the south and east with 100 F temperatures in southern Texas (including San Antonio) on Feb 21-22. This warm air then spread eastward with several locations in the Ohio Valley approaching 80 F on the 23rd. In Texas and Oklahoma, extensive prairie fires resulted from a combination of an unusually dry winter (less than 50% of normal precipitation), very low humidities, and high winds. Over 180,000 acres burned in the 2 states.

Another key event of the month was the severe flooding in the Pacific Northwest. On February 6th, a very strong subtropical jet stream reached Oregon. Moisture feeds of this kind are sometimes referred to as the "Pineapple Express" due to their origin in the vicinity of Hawaii. Although such subtropical flows of moisture are not rare, it is unusual for them to persist with such intensity for such a long period of time (3-5 days).

The early February rains were quite heavy in both Washington and Oregon. In Oregon, the heaviest rains occurred in the northwest corner, while in Washington, the heaviest rains occurred on the windward sides of the Cascades. In these two areas amounts of 12 to 20 inches were reported, and up to 30-inch totals were estimated in some higher elevation locations.

Some of the notable precipitation amounts included:

Laurel Mountain, OR--8.20 inches in 24 hours, over 23 inches in 3 days.
Corvallis, OR--3.26 inches in 24 hours (new record for any day in February).

Eugene, OR--5.17 inches in 24 hours.

Newport, OR--7.71 inches in 3 days.

Government Camp, OR--11.30 inches in 4 days.

Blazed Alder, OR--18.30 inches in 5 days.

Little Meadows, OR--17.60 inches in 5 days.

Saddle Mountain, OR--20.40 inches in 5 days.

Portland (10.03 inches), Salem (13.01), and Eugene, OR (16.89 inches)--wettest February on record.

Astoria, OR-- 2nd wettest February with 14.53 inches.

Prior to this event, October through January seasonal precipitation had also been above normal:

	Oct 95-Jan 96	Normal
Laurel Mountain, OR	108.66	59.10
Portland, OR	27.46	19.50
Eugene, OR	41.55	28.13

See Table 3 and Figure 8 for additional preliminary data. Note that Figure 8 does not reflect the locally heavier amounts which fell in higher mountain locations. For October 1 through February 11, precipitation amounts exceeded 130% of normal for Washington state from the Puget Sound to the Cascades, over northern and western Oregon, western Montana, and northern Idaho. Some locations exceeded 200% of normal.

In addition to the wet conditions, temperatures were unusually warm. In the Willamette Valley, daily minimum temperatures were often higher than normal maximum values for early February. Early morning minimums in the 50's were quite common. As a result, the freezing level quickly moved upward to 7000 - 8000 feet. Rain fell at mountain pass levels, which induced heavy snowmelt. At Government Camp in Oregon, snow depths dropped from 88 inches on February 5th to just 30 inches on February 9th. Therefore, melting snow became just as severe a problem as the heavy rains.

The combination was devastating.

At Portland, the Willamette River crested just 5 inches from the top of the sea wall, saving the downtown areas from widespread flooding. The Columbia River crested between 7 and 14 feet above flood stage at various stations. The flooding was considered to be the worst since 1964 in many areas. Several smaller rivers reached record levels at one or more measuring sites, including the Sandy, Tualatin, Pudding, S. Yamhill, and Nehalem Rivers. Over 30,000 residents were forced from their homes; numerous bridges and roads were washed out (including parts of I-90 and I-5); and 60 counties in Oregon, Washington, Idaho, and Montana were declared federal disaster areas because of the flooding.

Interstate 5 was blocked by a mudslide near Centralia, and was also closed at Chehalis because of water over the road, severing western Washington's major north-south route. Sections of Interstate 82 were closed because of flooding along the Yakima River. The White Pass highway (U.S. 12), the last link between eastern and western Washington, was closed near Randle because of water over the road. Interstate 90 and U.S. 2, the major east-west routes across the Cascades, were closed by mudslides.

Of the 9 people who died, 6 victims were in Oregon, 2 in Montana, and 1 in Washington. Oregon officials estimated at least \$400 million in uninsured property damage alone, as only about 20 percent of the homes and businesses destroyed or damaged there are covered by insurance. Oregon also reported \$166 million in highway damage and \$165 million in waterway infrastructure damage. States of emergency were declared in 19 of Washington's 39 counties. Officials there estimated flood damage at \$120 million. In Idaho, flood damage is estimated to be well over \$100 million. Overall damage estimates for the Pacific Northwest are not yet complete, but are well over \$600 million and climbing. Over 1000 homes in the region were either severely damaged or destroyed.

During the third week of February the tropical feed shifted south, moving the heaviest precipitation into California. Mt. Wilson reported over 19 inches for the month. The heavy precipitation generally did not reach the Rockies. In fact, winter precipitation along the continental divide was below normal, with extremely dry conditions found east of the mountains in the central and southern plains. Several samples of February's precipitation in these areas:

In Colorado: Denver--.38 inches, Colorado Springs--.18 inches.

In New Mexico: Hobbs--.08 inches, Roswell--.23 inches.

In Texas: San Angelo--.49 inches, Corpus Christi--.42 inches, San Antonio and Del Rio--no measurable precipitation for the month.

In Arizona: Yuma and Tucson--no measurable precipitation for the month.

SUMMARY AND CONCLUSION

Figures 9-10 provide a state by state and national perspective on the winter (December through February) conditions taken as a whole. Compared to normal, the Southeast was the coldest region, and the Southwest was the warmest. The upper Midwest and Northeast regions were also colder than normal, although periods of warmth 'masked' the periods of extreme cold.

Much of the nation received near to below normal precipitation, with portions of the far west, north-central, and New England being wetter than normal. The northern plains, Great Lakes, mid-Atlantic, and Northeast generally received 200-350% of normal seasonal snowfalls. Table 4 shows seasonal snowfall amounts (as of April 30), including 24 locations which set new seasonal records. Figure 11 shows the percent of normal for the season over the mid-Atlantic and Northeast regions.

Over 300 deaths can be attributed in some way to the Winter of '95-'96. Also, \$3-4 billion in total damages and costs were inflicted by the combination of very heavy snowfall and severe flooding. For further information and data, please contact the National Climatic Data Center -- email 'orders@ncdc.noaa.gov', phone 704-271-4800, WWW homepage 'http://www.ncdc.noaa.gov'. This report is also on line via NCDC's homepage.

REFERENCES

NCDC obtained the information from this report from numerous sources including:

- The National Weather Service
- The Midwestern Climate Center
- The Oregon State Climatologist
- The Climate Prediction Center
- The U.S. Geological Survey
- Individual state emergency management offices

All figures for damages and fatalities are based on individual state reports from their emergency management offices. The Climate Prediction Center has an excellent report available on line with additional information concerning the Winter of 1995-1996--internet address is <http://nic.fb4.noaa.gov/products/>.

TABLE 1

Blizzard of '96 Snowfall Totals (inches)

Most data obtained from NWS bulletins via internet

Huntsville, AL	2	Fitchburg, MA	12
Avon, CT	15	Foxboro, MA	20
Bradley Int'l Arpt., CT	18	Franklin, MA	14
Burlington, CT	19	Gloucester, MA	17
East Granby, CT	15	Harwichport, MA	18
East Hartford, CT	14	Haverhill, MA	7
Farmington, CT	15	Hopkinton, MA	22
Glastonbury, CT	20	Kingston, MA	24
Mansfield, CT	23	Manchester-By-The-Sea, MA	28
New Britain, CT	18	Mansfield, MA	21
Putnam, CT	23	Maynard, MA	16
Simsbury, CT	20	Milton, MA	21
Union, CT	16	Monson, MA	16
Vernon, CT	17	N. Amherst, MA	17
W. Hartford, CT	17	N. Chester, MA	21
Wethersfield, CT	15	N. Dartmouth, MA	20
Willington, CT	18	N. Fairhaven, MA	26
Washington, DC (Nat'l)	17	N. Grafton, MA	12
Dover, DE	20	Nantucket, MA	13
Wilmington, DE	21	Natick, MA	18
Athens, GA	1	New Bedford, MA	26
Atlanta, GA	1	Newburyport, MA	14
Marietta, GA	2	Northampton, MA	13
Bowling Green, KY	7	Norton, MA	16
Jackson, KY	14	Norwell, MA	29
Lexington, KY	12	Onset, MA	23
Louisville, KY	10	Peabody, MA	16
Paducah, KY	4	Pembroke, MA	15
Acushnet, MA	17	Randolph, MA	20
Agawam, MA	18	Reading, MA	8
Belmont, MA	18	Rockport, MA	18
Boston, MA	18	Rowley, MA	17
Brockton, MA	24	S. Dennis, MA	14
Burlington, MA	15	S. Hadley, MA	14
Chatham, MA	16	Salem, MA	18
Chelmsford, MA	14	Shrewsbury, MA	18
Chicopee, MA	23	Southampton, MA	15
Cohasset, MA	19	Southbridge, MA	14
Deerfield, MA	19	Springfield, MA	18
E. Falmouth, MA	18	Sudbury, MA	17
E. Longmeadow, MA	20	Taunton, MA	23
East Woburn, MA	17	Taunton/NWSFO, MA	19
Easton, MA	18	Tisbury, MA	13
Tyngsboro, MA	13	Woburn, MA	19
W. Granville, MA	21	Worcester, MA	14
Wakefield, MA	16	Baltimore (City), MD	23
Westborough, MA	14	BWI Airport, MD	23
Westhampton, MA	28	Cumberland, MD	22
Whitman, MA	24	Damascus, MD	28

Frostburg, MD	33	Westmoreland, NH	2
Oakland, MD	30	Atlantic City, NJ	12
Owings Mills, MD	27	Elizabeth, NJ	29
Salisbury, MD	7	McGuire AFB, NJ	27
Silver Spring, MD	23	Millville, NJ	13
Portland, ME	10	Newark, NJ	28
Asheville, NC	11	White House, NJ	35
Beech Mountain, NC	24	Bayshore, NY	31
Black Mountain, NC	7	Binghamton, NY	7
Boone, NC	24	Islip, NY	18
Bryson City, NC	9	JFK Arpt, NY	21
Charlotte, NC	2	LaGuardia Arpt., NY	24
Franklin, NC	6	New York/Central Park, NY	20
Greensboro, NC	9	Akron, OH	3
Hendersonville, NC	8	Cincinnati, OH	13
Hickory, NC	9	Columbus, OH	8
Lenoir, NC	10	Dayton, OH	16
Little Switzerland, NC	30	Zanesville, OH	8
Marshall, NC	22	Altoona, PA	18
Morganton, NC	12	Harrisburg, PA	22
Mt. Mitchell, NC	27	Lehigh County, PA	25
Mt. Pisgah, NC	16	Montgomery County, PA	30
Murphy, NC	4	Philadelphia, PA	31
Raleigh/Durham, NC	4	Pittsburgh, PA	10
Rocky Mount/Wilson, NC	2	Scranton, PA	21
Spruce Pine, NC	18	Coventry, RI	27
West Jefferson, NC	24	Cranston, RI	21
Alstead, NH	3	Cumberland, RI	22
Amherst, NH	5	Foster, RI	24
Bedford, NH	12	Middletown, RI	20
Hillsborough, NH	9	N. Smithfield, RI	22
Hollis, NH	5	Providence, RI	24
Jaffrey, NH	17	Tiverton, RI	13
Manchester, NH	1	W. Warwick, RI	23
Marlow, NH	10	Warwick, RI	19
Nashua, NH	12	Woonsocket, RI	22
New Ipswich, NH	10	Anderson, SC	1
Peterborough, NH	16	Greer, SC	3
Richmond, NH	14	Bristol, TN	10
Stoddard, NH	9	Chattanooga, TN	1
Swanzy, NH	7	Crossville, TN	6

Knoxville, TN	5
Bluemont, VA	29
Dulles Airport, VA	25
Front Royal, VA	32
Lynchburg, VA	20
Newport News, VA	4
Roanoke, VA	22
Shenandoah, VA	37
Sperryville, VA	31
Beckley, WV	19
Bluefield, WV	22
Brandywine, WV	30
Charleston, WV	18
Huntington, WV	13
Lewisburg, WV	23
Petersburg, WV	30
Snowshoe, WV	48

TABLE 2

Lowest Temperature (degrees F),
February 1-5, 1996
Based on NWS bulletins obtained
via internet

AL Alabaster	4
AL Anniston	8
AL Auburn	9
AL Birmingham	5
AL Dothan	12
AL Gadsden	4
AL Huntsville	1
AL Mobile	11
AL Montgomery	10
AL Muscle Shoals	1
AL Pinson	1
AL Selma	12
AL Tuscaloosa	7
AR El Dorado	7
AR Fayetteville	-9
AR Fort Smith	3
AR Harrison	-5
AR Hot Springs	7
AR Jonesboro	1
AR Little Rock	5
AR North Little Rock	4
AR Pine Bluff	9
AR Texarkana	10
AZ Bisbee	38
AZ Buckeye	40
AZ Bullhead City	44
AZ Canyon De Chelly	13
AZ Carefree	42
AZ Casa Grande	42
AZ Coolidge	37
AZ Douglas	32
AZ Flagstaff	17
AZ Gila Bend	43
AZ Globe-Miami	33
AZ Grand Canyon S. Rim	18
AZ Greer	17
AZ Holbrook	21
AZ Kingman	30
AZ Lake Havasu City	45
AZ Lost Dutchman Park	42
AZ Navajo Nat'l Monument	16
CA Lemoore NAS	48
CA Livermore	46
CA Long Beach	51
CA Los Angeles (Airport)	52
CA Los Angeles Civic Ctr	55
CA Marin Civic Center	44

AZ Nogales	40
AZ Organ Pipe	41
AZ Page	29
AZ Parker	44
AZ Payson	28
AZ Phoenix	45
AZ Picacho Rock St. Pk.	44
AZ Pinetop	24
AZ Pipe Spring	23
AZ Prescott	27
AZ Safford	35
AZ Show Low	24
AZ Sierra Vista	35
AZ Tacna	39
AZ Tucson	42
AZ Willcox	30
AZ Williams	22
AZ Winslow	17
AZ Youngtown	41
AZ Yuma	52
CA Alameda NAS	48
CA Alpine	45
CA Anaheim	51
CA Arcata	41
CA Bakersfield	40
CA Barstow/Daggett	42
CA Beaumont	41
CA Bishop	25
CA Blue Canyon	32
CA Blythe	43
CA Brown Field	48
CA Burbank	48
CA Concord	46
CA Crescent City	40
CA Death Valley	45
CA Del Mar	42
CA El Centro	49
CA El Toro	50
CA Eureka	45
CA Fremont	48
CA Fresno	46
CA Gilroy	49
CA Imperial	49
CA Kentfield	42
CA King City	48
CA Lancaster	41
CA Lemon Grove	48
CA Marysville	47
CA Miramar	49
CA Monrovia	48
CA Monterey	49
CA Montgomery Field	49
CA Mount Wilson	36

CA Mt. Laguna	32	CO Brighton	-20
CA National City	38	CO Colorado Springs	-18
CA Needles	44	CO Denver	-16
CA Newhall	43	CO Eagle	-21
CA Northridge	48	CO Fort Collins	-20
CA Oakland Airport	50	CO Fort Morgan	-26
CA Ontario	49	CO Fraser	-36
CA Pacifica	46	CO Glenwood Springs	-4
CA Palomar Mtn.	34	CO Grand Junction	12
CA Paso Robles	47	CO Grand Lake	-18
CA Point Mugu	51	CO Greeley	-20
CA Poway	43	CO Hayden	-19
CA Ramona	40	CO La Junta	-19
CA Red Bluff	37	CO Lamar	-23
CA Redding	42	CO Leadville	-9
CA Redondo Beach	51	CO Limon	-23
CA Redwood City	48	CO Longmont	-21
CA Sacramento	41	CO Montrose	0
CA Salinas	47	CO Pueblo	-26
CA San Diego	51	CO Rifle	4
CA San Francisco	47	CO Trinidad	-23
CA San Jose	48	CO Wheat Ridge	-10
CA San Luis Obispo	41	CT Bridgeport	2
CA Santa Ana	49	CT Hartford	-13
CA Santa Barbara	46	DC Washington	5
CA Santa Cruz	47	DE Wilmington	0
CA Santa Maria	47	FL Coral Springs	36
CA Santa Monica	50	FL Crestview	10
CA Shelter Cove	46	FL Daytona Beach	26
CA Stockton	47	FL Fort Lauderdale	34
CA Tahoe Valley	19	FL Fort Myers	29
CA Thermal	42	FL Gainesville	18
CA Torrance	51	FL Homestead AFB	36
CA Ukiah	40	FL Jacksonville Arpt.	19
CA Vallejo	46	FL Jacksonville Beach	21
CA Ventura	49	FL Jacksonville/Cecil Field	17
CA Wrightwood	24	FL Key West	44
CA Yosemite Valley	31	FL Lakeland	24
CO Akron	-16	FL Mayport	22
CO Alamosa	-10	FL Melbourne	29
CO Boulder	-8	FL Miami	37
FL Milton	12	FL Vero Beach	30
FL Naples	29	FL West Palm Beach	33
FL North Dade County	34	GA Albany	11
FL Ocala	16	GA Alma	13
FL Orlando	26	GA Athens	7
FL Pensacola	16	GA Atlanta	6
FL Sarasota/Bradenton	27	GA Augusta	11
FL St. Augustine	21	GA Brunswick	18
FL Tallahassee	16	GA Columbus	10
FL Tamiami Arpt.	36	GA Gainesville	7
FL Tampa/St. Petersburg	25	GA Macon	10
FL Tavernier	39	GA Marietta	5

GA Peachtree City	6	ID Pocatello	-9
GA Rome	5	ID Rexburg	-22
GA Savannah	18	ID Salmon	-25
GA Valdosta	15	ID Stanley	-39
GA W. Atlanta	6	ID Twin Falls	-9
IA Ames	-28	ID Weiser	-3
IA Burlington	-6	IL Chicago-Lakefront	-16
IA Decorah	-36	IL Chicago-Midway	-17
IA Des Moines	-26	IL Chicago-O'Hare	-19
IA Dubuque	-27	IL Decatur	-15
IA Elkader	-47	IL Elizabeth	-35
IA Estherville	-23	IL Moline	-28
IA Iowa City	-34	IL Peoria	-19
IA Lamoni	-22	IL Quincy	-18
IA Marshalltown	-35	IL Rockford	-24
IA Mason City	-32	IL Springfield	-19
IA Ottumwa	-27	IN Evansville	-7
IA Sioux City	-23	IN Fort Wayne	-9
IA Spencer	-27	IN Indianapolis	-12
IA Waterloo	-31	IN South Bend	-13
ID Boise	1	KS Belleville	-15
ID Burley	-15	KS Chanute	-6
ID Caldwell	4	KS Coffeyville	-6
ID Challis	-25	KS Concordia	-14
ID Coeur d'Alene	-12	KS Dodge City	-9
ID Emmett	5	KS Emporia	-9
ID Grangeville	-10	KS Garden City	-12
ID Idaho Falls	-19	KS Goodland	-19
ID Jerome	-11	KS Hill City	-10
ID Lewiston	-4	KS Hutchinson	-9
ID Lowell	-5	KS Lawrence	-11
ID Malad City	-17	KS Manhattan	-13
ID Malta	-15	KS Pittsburg	-7
ID Mullan	-7	KS Russell	-13
ID Parma	8	KS Salina	-10
KS Topeka	-11	MA Boston	4
KS Wichita	-6	MA Worcester	-7
KY Bowling Green	-4	MD Annapolis	2
KY Jackson	-8	MD BWI Airport	-1
KY Lexington	-10	MD Cumberland	-1
KY Louisville	-5	MD Easton	5
KY Paducah	-3	MD Frederick	3
LA Alexandria	13	MD Hagerstown	-1
LA Baton Rouge	15	MD Keyzers Ridge	-9
LA Belle Chasse	17	MD North East	-2
LA Lafayette	16	MD Salisbury	-1
LA Lake Charles	17	MD Waldorf	-3
LA Monroe	12	MD Waterloo	0
LA New Orleans-Audubon	20	MD Westminster	-4
LA New Orleans-Lakefront	20	ME Augusta	-10
LA New Orleans-Moisant	16	ME Bangor	-6
LA Shreveport	14	ME Brunswick	-8
LA Slidell	15	ME Caribou	-23

ME Eastport	-4	MO Cape Girardeau	-8
ME Greenville	-13	MO Columbia	-13
ME Houlton	-22	MO Joplin	-5
ME Portland	-12	MO Kansas City	-12
ME Rumford	-13	MO Kirksville	-17
MI Alpena	-23	MO Sedalia	-13
MI Copper Harbor	-12	MO Springfield	-8
MI Detroit	-7	MO St. Joseph	-12
MI Flint	-11	MO St. Louis	-12
MI Grand Rapids	-17	MO Vichy	-12
MI Houghton	-23	MS Biloxi/Keesler	17
MI Houghton Lake	-31	MS Columbus AFB	6
MI Lansing	-13	MS Greenwood	8
MI Marquette	-38	MS Gulfport	15
MI Muskegon	-19	MS Jackson	10
MI Pellston	-33	MS McComb	9
MI Port Hope	-6	MS Meridian	7
MI Saginaw	-14	MS Natchez	12
MI Sault Ste. Marie	-27	MS Tupelo	4
MN Alexandria	-38	MT Anaconda	-24
MN Brainerd	-45	MT Baker	-37
MN Duluth	-39	MT Belgrade	-42
MN Hibbing	-44	MT Big Timber	-32
MN International Falls	-45	MT Billings	-28
MN Minneapolis/St. Paul	-32	MT Bozeman	-37
MN Redwood Falls	-30	MT Butte	-38
MN Rochester	-35	MT Cut Bank	-37
MN St. Cloud	-40	MT Drummond	-37
MN Tower	-60	MT Gardiner	-23
MT Glasgow	-38	NC Black Mountain	-7
MT Glendive	-35	NC Boone 2W	-8
MT Great Falls	-35	NC Bryson City	0
MT Hamilton	-28	NC Charlotte	7
MT Hardin	-38	NC Cherry Point	11
MT Harlowton	-34	NC Elizabeth City	7
MT Havre	-41	NC Fayetteville	5
MT Helena	-42	NC Franklin	2
MT Jordan	-41	NC Goldsboro	6
MT Kalispell	-22	NC Grandfather Mountain	-13
MT Lewistown	-30	NC Greensboro	1
MT Libby	-22	NC Hendersonville	0
MT Livingston	-32	NC Hickory	2
MT Miles City	-35	NC Highlands	-6
MT Missoula	-27	NC Jacksonville	9
MT Plentywood	-41	NC Lenoir	-3
MT Red Lodge	-26	NC Marshall	-10
MT Roundup	-41	NC Mt. Mitchell	-14
MT Sidney	-35	NC Mt. Pisgah	-11
MT Superior	-20	NC Murphy	-4
MT West Yellowstone	-53	NC New Bern	9
MT Wisdom	-49	NC Pisgah Forest	0
NC Asheville Apt	-1	NC Raleigh/Durham	0
NC Asheville City	-5	NC Rocky Mount/Wilson	4

NC Rosman (DOD)	-2	NE Hastings Airport	-18
NC Spruce Pine	-5	NE Hastings NWS	-18
NC West Jefferson	-4	NE Imperial	-17
NC Wilmington	11	NE Kearney	-18
ND Bismarck	-37	NE Lincoln	-22
ND Bowman	-36	NE McCook	-12
ND Devils Lake	-36	NE Norfolk	-23
ND Dickinson	-30	NE North Platte	-20
ND Fargo	-39	NE Omaha	-23
ND Garrison	-35	NE Ord	-27
ND Grand Forks	-40	NE Scottsbluff	-20
ND Hettinger	-36	NE Sidney	-24
ND Jamestown	-31	NE Tekamah	-21
ND Lidgerwood	-30	NE Valentine	-29
ND Minot	-34	NE Valley	-22
ND Wahpeton	-42	NH Concord	-15
ND Williston	-37	NH Mount Washington	-22
NE Alliance	-29	NH Portsmouth	-10
NE Broken Bow	-23	NJ Atlantic City	-8
NE Chadron	-27	NJ Newark	3
NE Columbus	-19	NM Albuquerque	17
NE Falls City	-18	NM Carlsbad	21
NE Grand Island	-19	NM Chama	-13
NM Clayton	-10	NV Las Vegas	37
NM Cloudcroft	9	NV Laughlin	44
NM Clovis (Cannon AFB)	6	NV Lovelock	18
NM Deming	27	NV McDermitt	-13
NM Farmington	14	NV McGill	7
NM Gallup	8	NV Mercury/Desert Rock	35
NM Grants	8	NV Mt. Charleston	8
NM Hobbs	13	NV Pahump	32
NM Las Cruces	29	NV Red Rock	32
NM Portales	5	NV Reno	31
NM Raton	-15	NV Ruth	-7
NM Red River	-7	NV Spanish Springs	32
NM Roswell	18	NV Sparks	32
NM Ruidoso	12	NV Stead	29
NM Santa Fe	0	NV Tonopah	21
NM Silver City	29	NV Virginia City	25
NM Star Lake	-5	NV Wells	-23
NM Taos	-5	NV Wildhorse Res.	-42
NV Battle Mountain	-8	NV Winnemucca	-2
NV Caliente	21	NV Yerington	28
NV Carson City	30	NY Albany	0
NV Dagget Pass	22	NY Binghamton	-6
NV Elko	-14	NY Buffalo	-2
NV Ely	5	NY Elmira	-3
NV Eureka	-1	NY Glens Falls	-9
NV Fallon	24	NY Massena	-16
NV Fernley	27	NY New York	5
NV Glenbrook	26	NY Poughkeepsie	4
NV Great Basin Nat'l Park	8	NY Rochester	-2
NV Jackpot	-20	NY Syracuse	-2

NY Utica	-6	OK Ponca City	-5
NY Watertown	-21	OK Tulsa	-11
OH Akron/Canton	-8	OR Astoria	21
OH Cincinnati	-11	OR Baker City	-17
OH Cincinnati-Lunken	-4	OR Brookings	40
OH Cleveland	-10	OR Burns	-20
OH Columbus	-3	OR Corvallis	18
OH Dayton	-8	OR Eugene	18
OH Findlay	-8	OR Florence	23
OH Mansfield	-7	OR John Day	-10
OH Toledo	-8	OR Klamath Falls	17
OH Youngstown	-8	OR Lagrande	-17
OH Zanesville	-6	OR Lakeview	8
OK Gage	-10	OR Medford	24
OK Hobart	-2	OR Mt. Sexton	27
OK McAlester	1	OR Newport	24
OK Oklahoma City	-3	OR North Bend	32
OR Pendleton (Airport)	-11	SD Pierre	-31
OR Portland	14	SD Rapid City	-31
OR Redmond	-4	SD Sioux Falls	-29
OR Rome	-8	SD Watertown	-38
OR Roseburg	26	TN Bristol	-15
OR Salem	16	TN Chattanooga	2
OR Seaside	18	TN Crossville	-16
OR The Dalles	3	TN Dyersburg	2
OR Tillamook	24	TN Jackson	0
PA Allentown	-8	TN Knoxville	-8
PA Altoona	-9	TN Memphis	4
PA Bradford	-12	TN Morristown	-8
PA Erie	-9	TN Nashville	-3
PA Harrisburg	2	TX Abilene	6
PA Philadelphia	3	TX Alice	28
PA Pittsburgh	-6	TX Amarillo	-3
PA Wilkes-Barre	-6	TX Austin	19
PA Williamsport	-4	TX Beaumont/Port Arthur	21
RI Greene	-25	TX Brownsville	32
RI Providence	-2	TX Bryan/College Station	16
SC Anderson	9	TX Childress	2
SC Beaufort	20	TX Corpus Christi Arpt.	29
SC Charleston (City)	19	TX Corpus Christi NAS	30
SC Charleston Arpt.	16	TX Cotulla	23
SC Columbia	14	TX Dalhart	-2
SC Florence	11	TX Dallas NAS	12
SC Greer	8	TX Dallas-Love Field	11
SC North Myrtle Beach	11	TX Dallas/Ft. Worth Arpt.	8
SD Aberdeen	-36	TX El Paso	31
SD Buffalo	-30	TX Fort Worth/Meacham	7
SD Chamberlain	-30	TX Galveston	28
SD Custer	-33	TX Houston Int'contl	22
SD Huron	-33	TX Houston-Hobby	24
SD Lemmon	-29	TX Kingsville	28
SD Mobridge	-32	TX Lubbock	7
SD Pickstown	-25	TX Lufkin	18

TX McAllen	31	UT Bear Lake S.P.	-10
TX Midland/Odessa	13	UT Brian Head	-5
TX Mineral Wells	8	UT Brigham City	-12
TX Palacios	25	UT Bryce Canyon N.P.	2
TX San Angelo	7	UT Cedar City	16
TX San Antonio	19	UT Coalville	-22
TX Victoria	23	UT Delta	-1
TX Waco	12	UT Duchesne	-6
TX Wichita Falls	3	UT Duck Creek	-11
TX Wink	17	UT Escalante	11
UT Alta	-1	UT Fillmore	4
UT Flaming Gorge	-15	WA Bremerton	14
UT Green River	9	WA Burlington	18
UT Hanksville	5	WA Colville	-12
UT Heber	-19	WA Deer Park	-21
UT Helper	8	WA Ellensburg	-21
UT Kearns	1	WA Ephrata	-19
UT Laketown	-14	WA Everett	19
UT Logan	-13	WA Forks	20
UT Manti	-1	WA Friday Harbor	18
UT Midway	-15	WA Hanford	-15
UT Moab	10	WA Hoquiam	25
UT Monticello	2	WA Long Beach City	19
UT Nephi	-10	WA Moses Lake	-20
UT Ogden	1	WA Navy Whidbey	16
UT Orem	3	WA NOAA Sandpoint	23
UT Price	6	WA Oak Harbor	18
UT Provo	3	WA Olympia	10
UT Randolph	-33	WA Omak	-14
UT Richfield	11	WA Pasco	-17
UT Salt Lake City	-12	WA Port Angeles	14
UT South Jordan	-4	WA Pullman	-24
UT Spanish Fork	4	WA Quillayute	20
UT St. George	29	WA Seattle	22
UT Tooele	2	WA Spokane	-24
UT Trenton	-19	WA Stampede Pass	-4
UT Utah Test Range	-12	WA Tacoma	9
UT Vernal	-8	WA Walla Walla	-15
VA Charlottesville	-1	WA Wenatchee	-8
VA Danville	-2	WA Winthrop	-20
VA Dulles Airport	-10	WA Yakima	-17
VA Lynchburg	-7	WI Eau Claire	-35
VA Newport News	4	WI Green Bay	-28
VA Norfolk	11	WI La Crosse	-36
VA Petersburg	-5	WI Madison	-29
VA Quantico	-6	WI Marshfield	-34
VA Richmond	-2	WI Milwaukee	-26
VA Roanoke	-1	WI Park Falls	-38
VA Wakefield	-6	WI Wausau	-33
VT Burlington	-9	WV Beckley	-16
VT Morrisville	-12	WV Bluefield	-9
WA Arlington	10	WV Charleston	-12
WA Bellingham	16	WV Clarksburg	-11

WV Elkins	-20	WV Parkersburg	-10
WV Huntington	-9	WV Wheeling	-3
WV Lewisburg	-10	WY Big Piney	-35
WV Martinsburg	-5	WY Casper	-27
WV Morgantown	-3	WY Cheyenne	-21
WY Cody	-30		
WY Evanston	-9		
WY Gillette	-32		
WY Jackson	-34		
WY Lake Yellowstone	-38		
WY Lander	-14		
WY Laramie	-24		
WY Mammoth	-28		
WY Rawlins	-18		
WY Riverton	-18		
WY Rock Springs	-13		
WY Sheridan	-27		
WY Tower Falls	-42		
WY Worland	-37		

TABLE 3

Pacific Northwest Precipitation (in inches), February 3-9, 1996
Preliminary report based on NWS bulletins obtained via internet

Location	Total	Feb. Normal	Total as % normal**
Tillamook, OR	13.50*	9.94	136%
Seaside, OR	12.64	9.13	138%
Florence, OR	12.21		
Stampede Pass, WA	11.66		
Eugene, OR	9.59	5.64	170%
Newport (City), OR	9.14	8.13	112%
Astoria, OR	8.95	7.59	118%
Toledo, WA	8.39	4.91	171%
Salem, OR	8.07	4.50	179%
Portland (City), OR	7.51	3.85	195%
Olympia, WA	7.40	5.77	128%
Gold Beach, OR	7.18	10.31	70%
Corvallis, OR	7.14	5.04	142%
Portland (Apt), OR	7.09	3.85	184%
Vancouver, WA	6.93	4.53	153%
Sea-Tac Airport, WA	6.31	3.99	158%
Long Beach City, WA	5.10		
Ocean Shores, WA	4.89		
NOAA Sandpoint, WA	4.57	4.04	113%
Forks, WA	4.34	14.79	29%
The Dalles, OR	3.34		
Winthrop, WA	2.36	1.26	187%
Burlington, WA	2.20		
Bellingham, WA	1.88	3.64	52%
Mt. Sexton, OR	1.26	4.07	31%
Medford, OR	1.20	1.93	62%
Wenatchee, WA	1.10	0.76	145%
Yakima, WA	0.98	0.74	132%
Klamath Falls, OR	0.87	1.28	68%
Lakeview, OR	0.77	1.41	55%
Pendleton (Apt), OR	0.66	1.14	58%
Redmond, OR	0.56	0.60	93%
Burns, OR	0.35	0.76	46%
Rome, OR	0.27	0.54	50%
Baker City, OR	0.21	0.62	34%

* Total for February 3-8

** Normal and % of normal are for the entire month of February--many locations received more than the month's normal in 7 days.

TABLE 4

Table of 1995-96 seasonal snowfall totals (in inches), along with seasonal normals and percent of normal. * indicates new seasonal record. Values are as of April 30, 1996.

Station	Total	Norm	%Norm
Marquette, MI	250.8*	129.0	194%
Sault Ste. Marie, MI	216.3*	115.5	187%
Syracuse, NY	168.8	114.1	148%
Blue Hill Observatory, MA	143.8*	59.6	241%
Elkins, WV	136.6*	76.3	179%
Duluth, MN	135.4*	78.2	173%
Binghamton, NY	133.4*	82.9	161%
Worcester, MA	132.9*	68.5	194%
Erie, PA	129.2	85.8	151%
Portland, ME	123.0	70.6	174%
Muskegon, MI	116.2	97.2	120%
International Falls, MN	116.0*	64.2	181%
Windsor Locks, CT	115.2*	48.0	240%
Concord, NH	112.4	63.5	177%
Boston, MA	107.6*	41.7	258%
Providence, RI	106.1*	36.1	294%
Charleston, WV	105.9*	32.6	325%
Caribou, ME	104.7	110.4	95%
Cleveland, OH	101.1	55.4	182%
Burlington, VT	98.8	77.5	127%
Wilkes-Barre/Scranton, PA	98.3	47.9	205%
Lander, WY	91.7	102.1	90%
Mansfield, OH	90.5*	41.8	217%
Williamsport, PA	87.7*	41.8	210%
Albany, NY	86.5	63.7	136%
Salt Lake City, UT	85.7	58.1	148%
Casper, WY	80.9	78.8	103%
Bismarck, ND	80.1	42.4	189%
Grand Rapids, MI	79.7	71.5	111%
Newark, NJ	78.4*	27.5	285%
Green Bay, WI	77.5	46.5	167%
Bridgeport, CT	76.8*	25.6	300%
N.Y.-Central Park, NY	75.6*	28.4	266%
Pittsburgh, PA	74.5	43.4	172%
Fargo, ND	74.2	38.4	193%
N.Y.-JFK Airport, NY	69.0*	23.0	300%
Rapid City, SD	65.0	39.4	165%
Cheyenne, WY	64.1	55.1	116%
Philadelphia, PA	63.1*	20.8	303%
Jackson, KY	62.7*	21.9	286%
Baltimore, MD	62.5*	20.6	303%
Dulles Airport, VA	61.9*	22.5	275%
Rochester, MN	61.6	49.0	126%
Huron, SD	60.8	39.5	154%

La Crosse, WI	60.7	42.6	142%
Madison, WI	60.2	43.5	138%
St. Cloud, MN	58.5	44.7	131%
Lynchburg, VA	56.8*	17.9	317%
Minneapolis, MN	55.5	49.6	112%
Columbus, OH	54.1	27.7	195%
Spokane, WA	52.3	50.0	105%
Indianapolis, IN	51.7	22.8	227%
Youngstown, OH	51.6	56.2	92%
Milwaukee, WI	51.4	47.4	108%
Denver, CO	50.3	60.3	83%
Missoula, MT	49.8	45.9	108%
Kalispell, MT	48.5	63.9	76%
Aberdeen, SD	48.1	36.0	134%
Canton/Akron, OH	47.4	47.6	100%
National Airport, VA	46.0*	16.4	280%
Huntington, WV	44.9	25.9	173%
Cincinnati, OH	44.3	23.1	192%
Des Moines, IA	43.5	33.3	131%
Sioux Falls, SD	40.4	40.2	100%
Glasgow, MT	40.0	27.4	146%
Lansing, MI	39.2	48.9	80%
Waterloo, IA	37.8	32.5	116%
Toledo, OH	35.4	37.2	95%
Dubuque, IA	34.7	44.0	79%
Bristol, TN	34.5	15.6	221%
Grand Island, NE	34.3	30.6	112%
Bellemont/Flagstaff, AZ	33.7	100.6	33%
Scottsbluff, NE	33.0	41.5	80%
Norfolk, NE	33.0	30.6	108%
Lexington, KY	31.4	15.9	197%
Pocatello, ID	29.7	42.9	69%
Moline, IL	27.8	30.2	92%
Detroit, MI	27.6	41.5	67%
Rockford, IL	26.2	35.9	73%
Louisville, KY	25.1	16.3	154%
Chicago, IL	23.9	38.5	62%
Springfield, MO	23.4	17.0	138%
Concordia, KS	22.7	21.7	105%
Pueblo, CO	21.9	33.2	66%
Asheville, NC	21.7	15.3	142%
Yakima, WA	21.2	23.7	89%
Springfield, IL	21.0	23.3	90%
Columbia, MO	19.8	22.9	86%
Sioux City, IA	19.0	32.0	59%
Colorado Springs, CO	18.4	42.2	44%
North Platte, NE	18.4	30.5	60%
Raleigh, NC	14.6	6.9	212%
Topeka, KS	14.5	21.1	69%
Dodge City, KS	14.5	19.8	73%
Peoria, IL	12.8	25.0	51%
Paducah, KY	12.8	11.1	115%
Alamosa, CO	12.6	34.1	37%

Seattle, WA	11.0	11.8	93%
Grand Junction, CO	10.5	24.9	42%
Amarillo, TX	9.9	15.2	65%
Reno, NV	9.7	24.5	40%
Greenville/Spartanburg, SC	9.2	6.2	148%
Portland, OR	8.4	6.5	129%
Eugene, OR	6.0	6.4	94%
Lubbock, TX	3.7	9.9	37%
Albuquerque, NM	3.4	10.9	31%
Medford, OR	1.3	7.2	18%

'Blizzard of '96'
Snowfall Totals
(inches),
January 6-8, 1996

see region below

Figure 1

1

**"Blizzard of '96"
Snowfall Totals,
January 6-8, 1996**

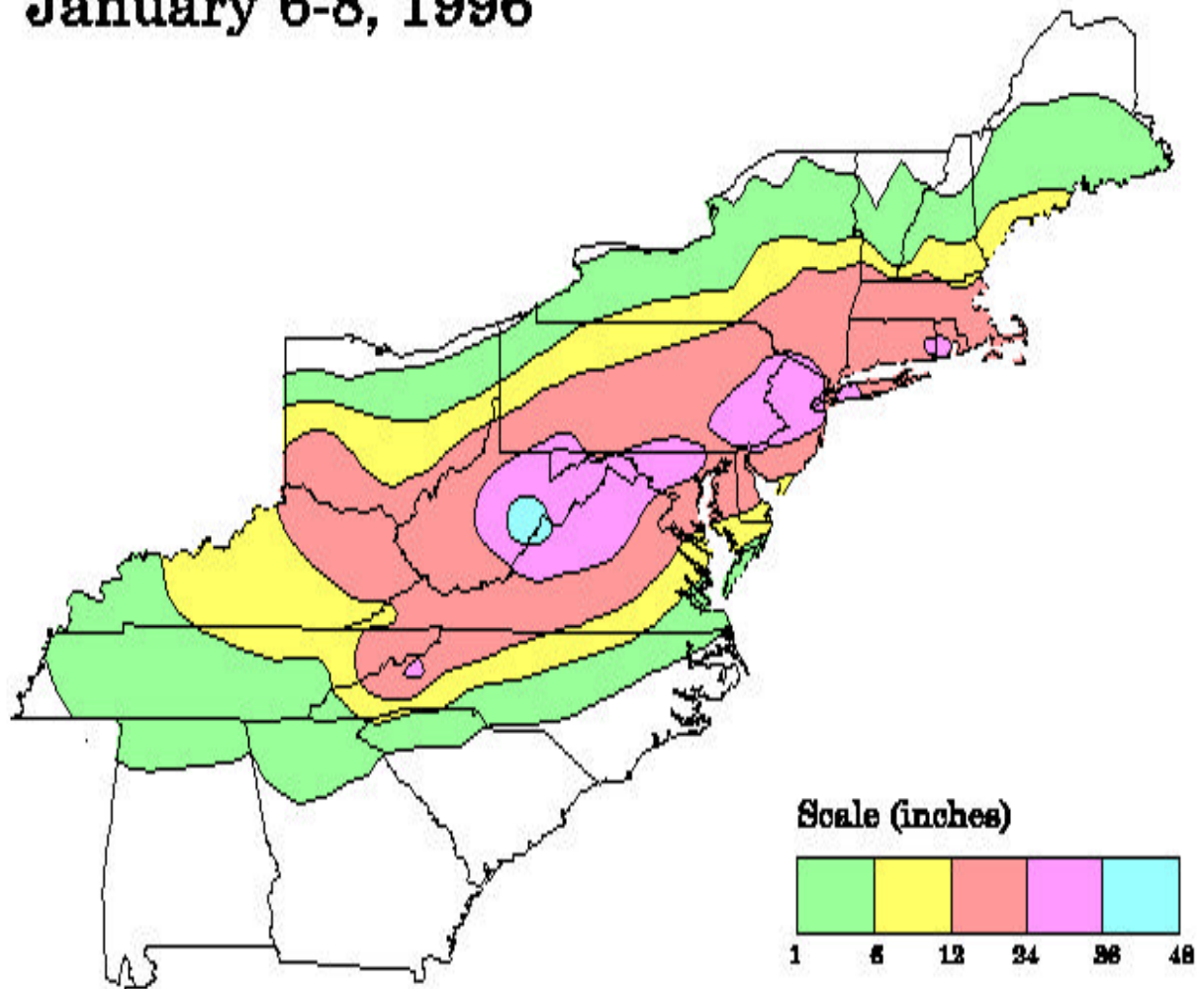
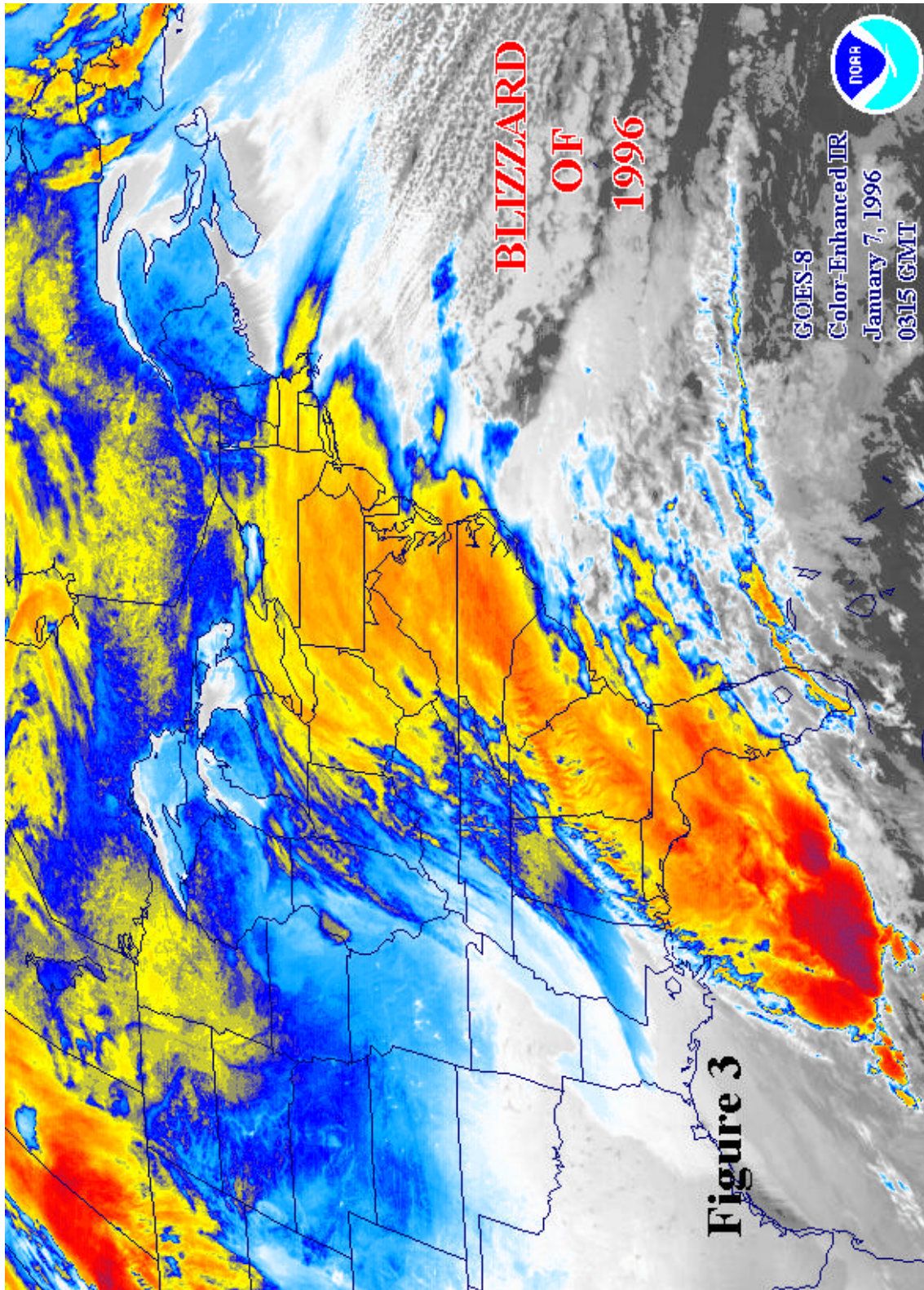


Figure 2





Lowest Temperature Recorded (degrees F), February 1-5, 1996

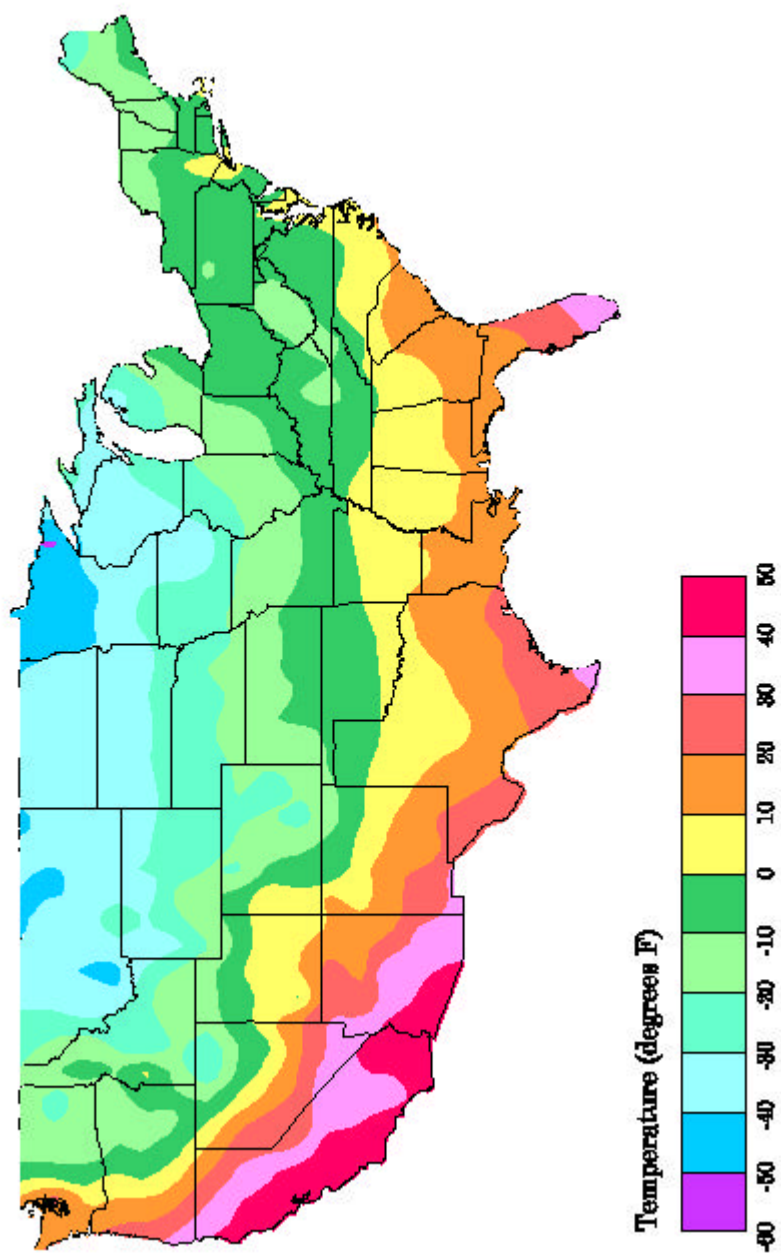


Figure 5

**Departure from Normal of Lowest Temperature
Recorded (degrees F), February 1-5, 1996**

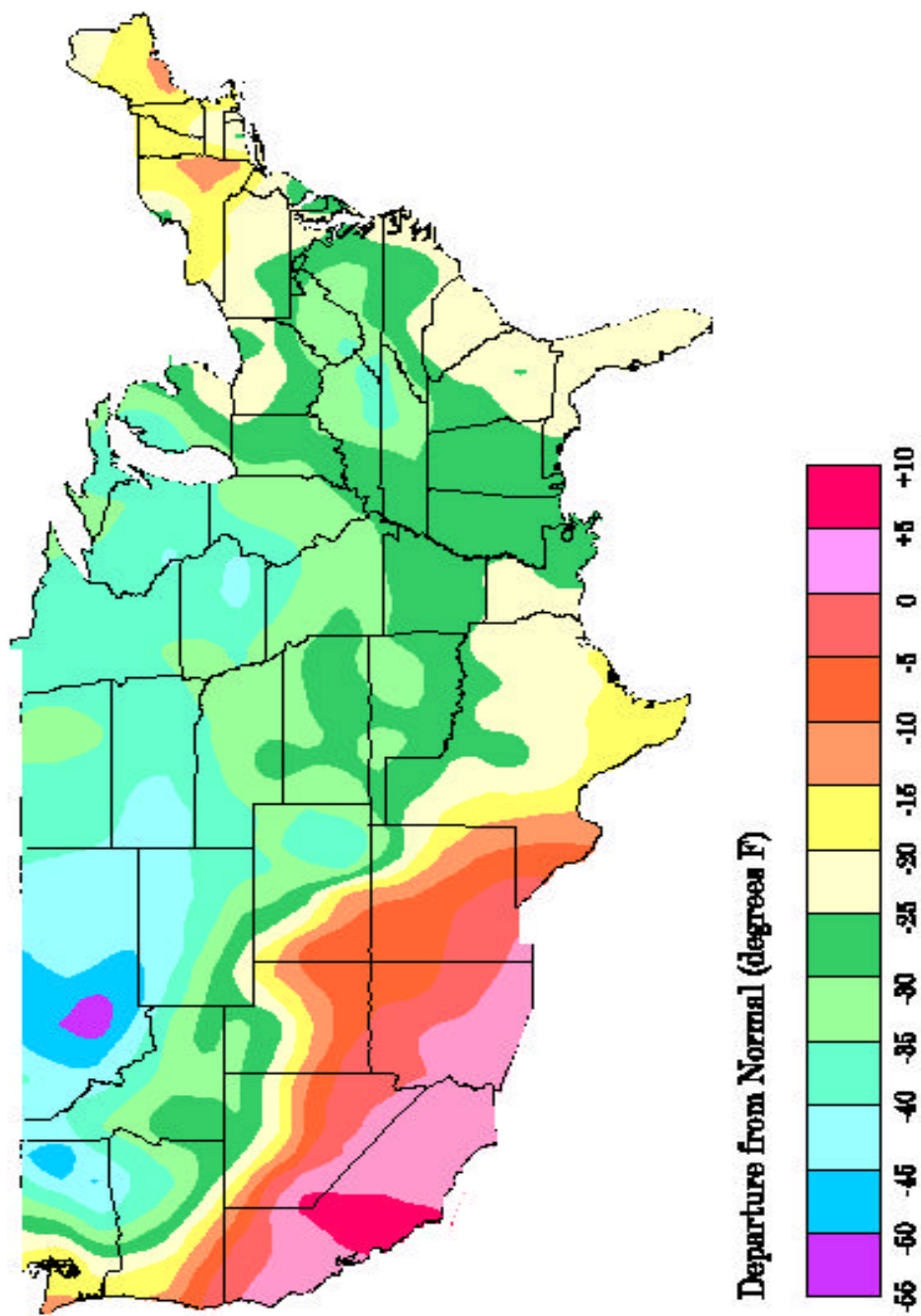


Figure 6

Pacific Northwest Precipitation, February 3-9, 1996

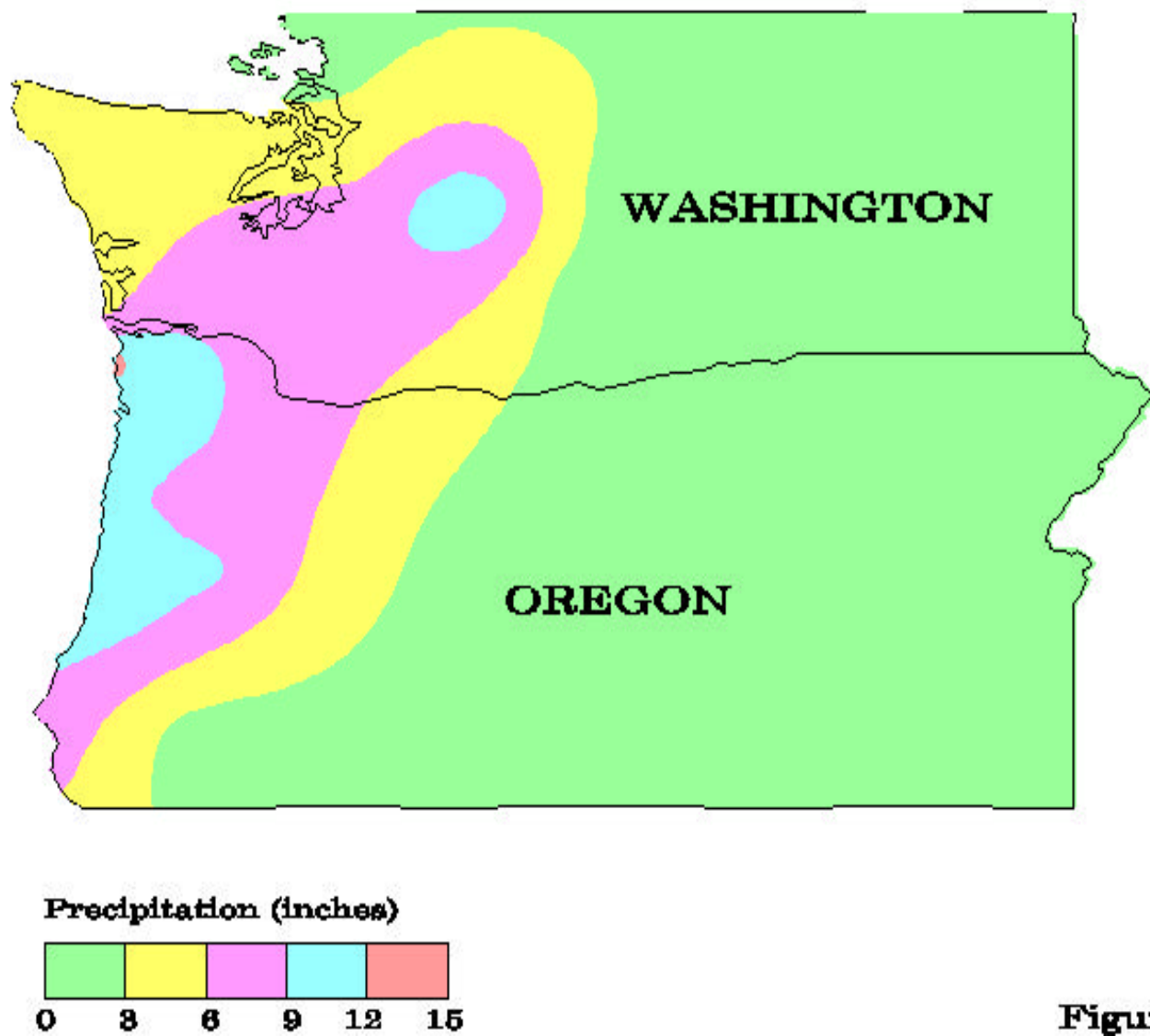
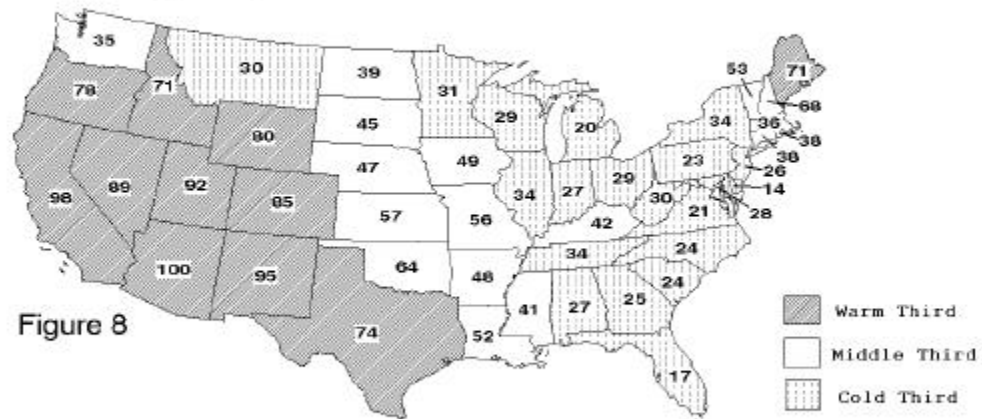


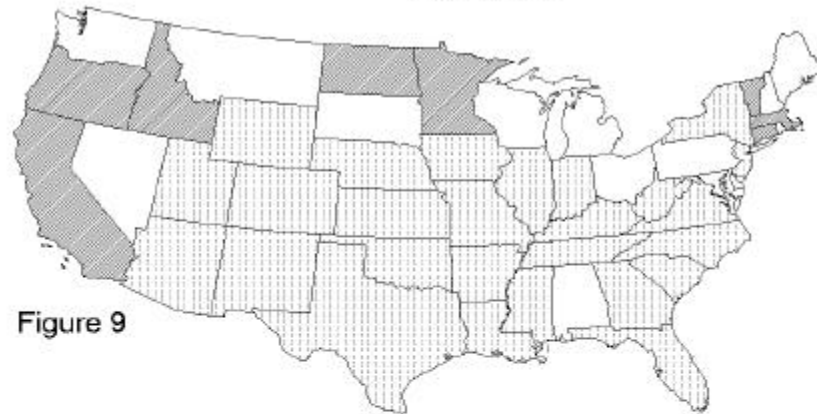
Figure 7

WINTER (DJF), 1995-96 STATEWIDE RANKS



1 = Coldest
102 = Warmest

Temperature Ranks for the contiguous United States. Each state is ranked based on its data from 1895-1996. States having a rank in the warm third or cool third of their historical distribution are shaded.



National Climatic Data Center, NOAA

Wet Third
Middle Third
Dry Third

Precipitation Rank Categories for the contiguous United States. Each state is ranked based on its data from 1895-1996. States having a rank in the wet third or dry third of their historical distribution are shaded.

**Percent of Normal Snowfall
Received During Winter '95-'96**

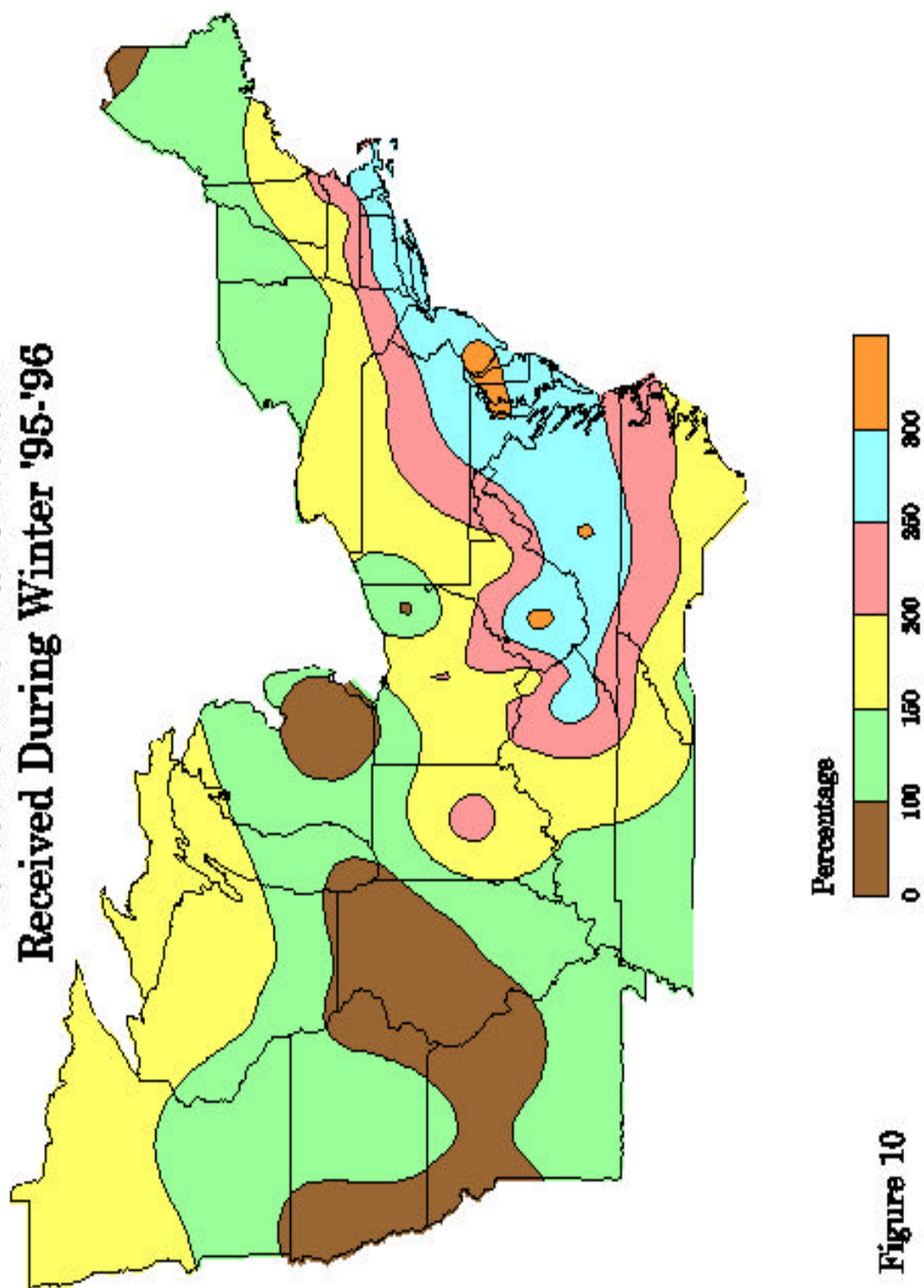


Figure 10