

2002

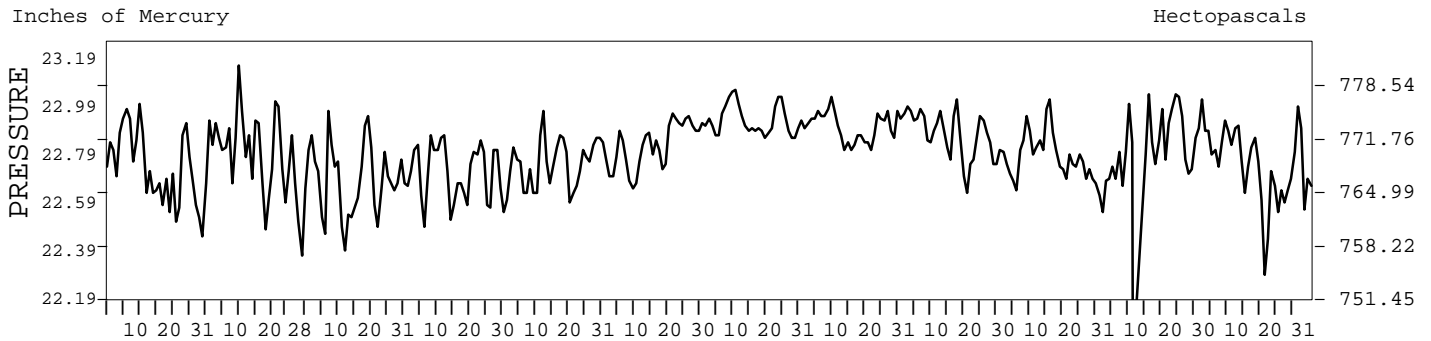
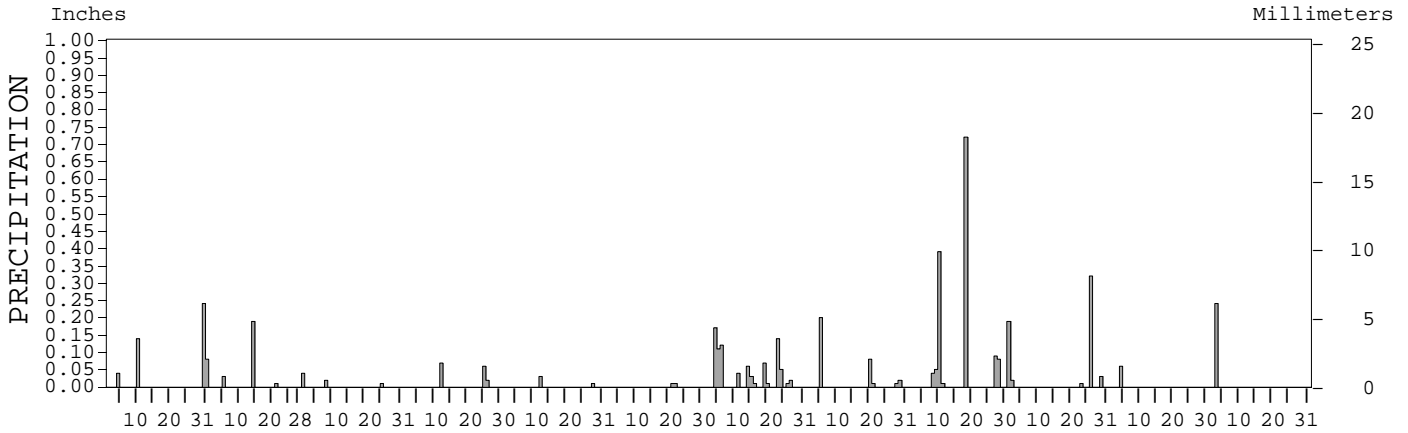
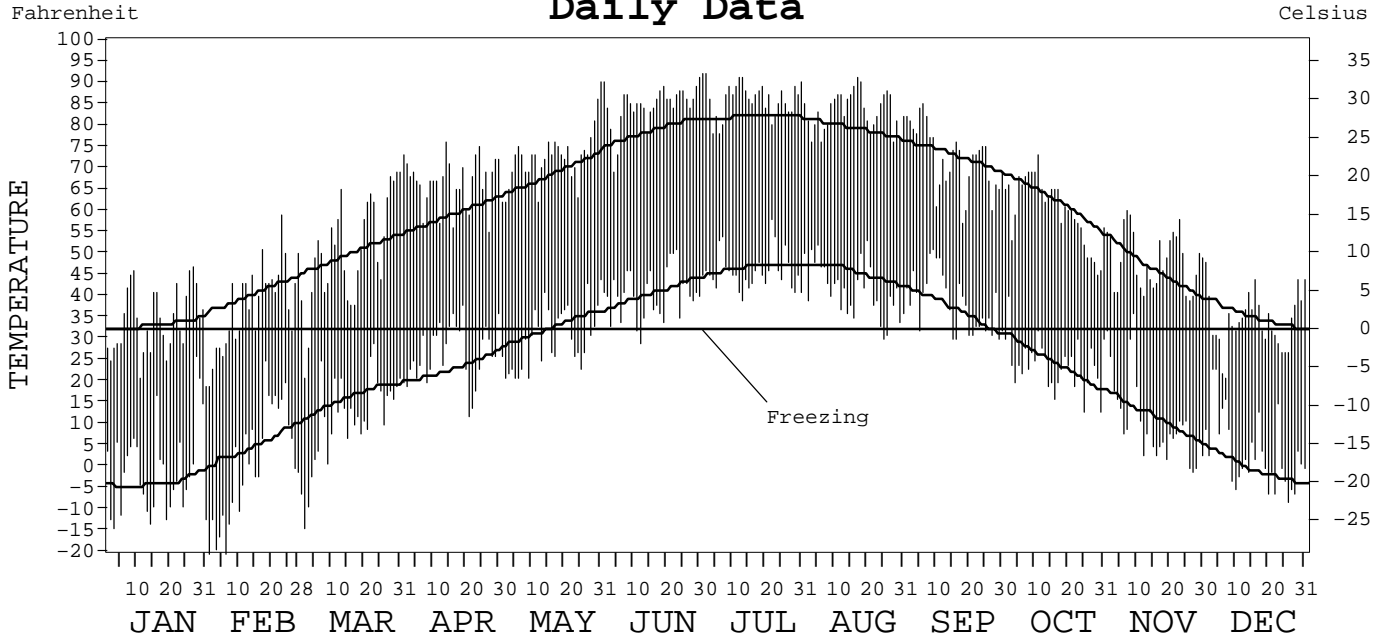
# LOCAL CLIMATOLOGICAL DATA ANNUAL SUMMARY WITH COMPARATIVE DATA



ISSN 0198-7720

## ALAMOSA, COLORADO (ALS)

### Daily Data



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*Thomas R. Karl*

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|---|---|---|---|

# METEOROLOGICAL DATA FOR 2002

## ALAMOSA, CO (ALS)

LATITUDE: 37° 26' 10" N      LONGITUDE: 105° 51' 56" W      ELEVATION (FT): GRND: 7533      BARO: 7536      TIME ZONE: MOUNTAIN (UTC + 7)      WBAN: 23061

|                      | ELEMENT                       | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG   | SEP   | OCT   | NOV  | DEC    | YEAR      |    |
|----------------------|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|--------|-----------|----|
| TEMPERATURE °F       | MEAN DAILY MAXIMUM            | 34.2  | 38.1  | 51.0  | 66.7  | 72.3  | 84.5  | 86.1  | 83.2  | 72.2  | 60.1  | 48.5 | 34.2   | 60.9      |    |
|                      | HIGHEST DAILY MAXIMUM         | 47    | 59    | 69    | 76    | 90    | 91    | 92    | 91    | 85    | 73    | 60   | 48     | 92        |    |
|                      | DATE OF OCCURRENCE            | 27    | 23    | 31+   | 14    | 31    | 30    | 02+   | 17    | 06    | 11    | 07   | 01     | JUL 02+   |    |
|                      | MEAN DAILY MINIMUM            | -6    | 1.2   | 11.5  | 26.6  | 30.1  | 40.5  | 45.8  | 41.6  | 38.4  | 23.9  | 10.9 | 3.4    | 22.8      |    |
|                      | LOWEST DAILY MINIMUM          | -14   | -20   | -14   | 12    | 21    | 29    | 39    | 30    | 30    | 13    | -1   | -8     | -20       |    |
|                      | DATE OF OCCURRENCE            | 3     | 06+   | 02    | 21    | 09+   | 12    | 13    | 25    | 29+   | 30+   | 27   | 26     | FEB 06+   |    |
|                      | AVERAGE DRY BULB              | 16.8  | 19.7  | 31.3  | 46.7  | 51.2  | 62.5  | 66.0  | 62.4  | 55.3  | 42.0  | 29.7 | 18.8   | 41.9      |    |
|                      | MEAN WET BULB                 | 14.2  | 15.5  | 23.8  | 35.2  | 38.5  | 47.6  | 53.0  | 49.3  | 46.0  | 34.4  |      | 15.6   |           |    |
|                      | MEAN DEW POINT                | 7.3   | 5.9   | 6.9   | 16.8  | 19.0  | 31.3  | 43.5  | 37.2  | 37.3  | 24.0  |      | 9.7    |           |    |
|                      | NUMBER OF DAYS WITH:          |       |       |       |       |       |       |       |       |       |       |      |        |           |    |
|                      | MAXIMUM ≥ 90°                 | 0     | 0     | 0     | 0     | 1     | 2     | 5     | 2     | 0     | 0     | 0    | 0      | 0         | 10 |
|                      | MAXIMUM ≤ 32°                 | 15    | 11    | 2     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0    | 14     | 42        |    |
|                      | MINIMUM ≤ 32°                 | 31    | 28    | 31    | 23    | 19    | 2     | 0     | 2     | 9     | 30    | 29   | 31     | 235       |    |
|                      | MINIMUM ≤ 0°                  | 17    | 14    | 4     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 3    | 15     | 53        |    |
| H/C                  | HEATING DEGREE DAYS           | 1488  | 1261  | 1039  | 545   | 424   | 83    | 12    | 90    | 283   | 704   | 1050 | 1425   | 8404      |    |
|                      | COOLING DEGREE DAYS           | 0     | 0     | 0     | 0     | 2     | 17    | 47    | 17    | 0     | 0     | 0    | 0      | 83        |    |
| RH                   | MEAN (PERCENT)                | 68    | 60    | 40    | 35    | 32    | 36    | 52    | 46    | 57    | 55    | 55   | 71     | 51        |    |
|                      | HOUR 05 LST                   | 78    | 76    | 65    | 59    | 59    | 65    | 84    | 76    | 84    | 80    | 76   | 83     | 74        |    |
|                      | HOUR 11 LST                   | 56    | 45    | 26    | 21    | 19    | 21    | 32    | 29    | 41    | 38    | 39   | 61     | 36        |    |
|                      | HOUR 17 LST                   | 58    | 37    | 20    | 19    | 14    | 17    | 29    | 27    | 34    | 33    | 34   | 59     | 32        |    |
|                      | HOUR 23 LST                   | 77    | 72    | 49    | 42    | 41    | 45    | 62    | 56    | 70    | 65    | 66   | 80     | 60        |    |
| S                    | PERCENT POSSIBLE SUNSHINE     |       |       |       |       |       |       |       |       |       |       |      |        |           |    |
| W/O                  | NUMBER OF DAYS WITH:          |       |       |       |       |       |       |       |       |       |       |      |        |           |    |
|                      | HEAVY FOG (VISBY ≤ 1/4 MI)    | 6     | 1     | 3     | 1     | 0     | 0     | 0     | 2     | 1     | 4     | 1    | 4      | 23        |    |
|                      | THUNDERSTORMS                 | 0     | 0     | 0     | 5     | 7     | 9     | 23    | 12    | 11    | 6     | 0    | 0      | 73        |    |
| CLOUDINESS           | SUNRISE-SUNSET: (OKTAS)       |       |       |       |       |       |       |       |       |       |       |      |        |           |    |
|                      | CEILOMETER (≤ 12,000 FT.)     |       |       |       |       |       |       |       |       |       |       |      |        |           |    |
|                      | SATELLITE (> 12,000 FT.)      |       |       |       |       |       |       |       |       |       |       |      |        |           |    |
|                      | MIDNIGHT-MIDNIGHT: (OKTAS)    |       |       |       |       |       |       |       |       |       |       |      |        |           |    |
|                      | CEILOMETER (≤ 12,000 FT.)     |       |       |       |       |       |       |       |       |       |       |      |        |           |    |
|                      | SATELLITE (> 12,000 FT.)      |       |       |       |       |       |       |       |       |       |       |      |        |           |    |
| NUMBER OF DAYS WITH: |                               |       |       |       |       |       |       |       |       |       |       |      |        |           |    |
| CLEAR                |                               |       |       |       |       |       |       |       |       |       |       |      |        |           |    |
| PARTLY CLOUDY        |                               |       |       |       |       |       |       |       |       |       |       |      |        |           |    |
| CLOUDY               |                               |       |       |       |       |       |       |       |       |       |       |      |        |           |    |
| PR                   | MEAN STATION PRESS. (IN.)     | 22.73 | 22.80 | 22.68 | 22.72 | 22.75 | 22.83 | 22.93 | 22.91 | 22.86 | 22.77 |      | 22.73  |           |    |
|                      | MEAN SEA-LEVEL PRESS. (IN.)   | 30.22 | 30.29 | 29.99 | 29.89 | 29.89 | 29.90 | 30.03 | 30.02 | 30.02 | 30.01 |      |        |           |    |
| WINDS                | RESULTANT SPEED (MPH)         | 2.6   | 1.5   | 4.3   | 7.0   | 4.0   | 3.4   | 1.7   | 1.4   | 2.0   | 3.2   |      | 1.5    |           |    |
|                      | RES. DIR. (TENS OF DEGS.)     | 21    | 31    | 24    | 23    | 20    | 20    | 11    | 15    | 19    | 18    |      | 24     |           |    |
|                      | MEAN SPEED (MPH)              | 6.5   | 6.6   | 9.9   | 11.3  | 9.9   | 8.7   | 7.1   | 6.8   | 7.3   | 6.9   |      | 4.3    |           |    |
|                      | PREVAIL. DIR. (TENS OF DEGS.) | 20    | 36    | 24    | 23    | 24    | 19    | 09    | 17    | 18    | 18    | 36   | 19     | 20        |    |
|                      | MAXIMUM 2-MINUTE WIND:        |       |       |       |       |       |       |       |       |       |       |      |        |           |    |
|                      | SPEED (MPH)                   | 38    | 38    | 47    | 44    | 45    | 39    | 37    | 36    | 35    | 36    | 31   | 28     | 47        |    |
|                      | DIR. (TENS OF DEGS.)          | 23    | 34    | 22    | 21    | 18    | 01    | 06    | 33    | 23    | 23    | 23   | 23     | 22        |    |
|                      | DATE OF OCCURRENCE            | 28    | 08    | 23    | 17    | 21    | 16    | 14    | 29    | 29    | 03    | 02   | 17     | MAR 23    |    |
|                      | MAXIMUM 5-SECOND WIND:        |       |       |       |       |       |       |       |       |       |       |      |        |           |    |
|                      | SPEED (MPH)                   | 46    | 45    | 59    | 52    | 56    | 52    | 47    | 56    | 41    | 40    | 36   | 33     | 59        |    |
| DIR. (TENS OF DEGS.) | 23                            | 35    | 25    | 21    | 25    | 36    | 04    | 01    | 23    | 24    | 24    | 26   | 25     |           |    |
| DATE OF OCCURRENCE   | 28                            | 08    | 23    | 20+   | 14    | 16    | 14    | 18    | 29    | 03    | 02    | 17   | MAR 23 |           |    |
| PRECIPITATION        | WATER EQUIVALENT:             |       |       |       |       |       |       |       |       |       |       |      |        |           |    |
|                      | TOTAL (IN.)                   | 0.50  | 0.23  | 0.07  | 0.15  | 0.04  | 0.02  | 0.84  | 0.32  | 1.38  | 0.57  | 0.06 | 0.24   | 4.42      |    |
|                      | GREATEST 24-HOUR (IN.)        | 0.32  | 0.19  | 0.04  | 0.08  | 0.03  | 0.02  | 0.19  | 0.20  | 0.72  | 0.32  | 0.06 | 0.24   | 0.72      |    |
|                      | DATE OF OCCURRENCE            | 30-31 | 14    | 01    | 25-26 | 12    | 21-22 | 23-24 | 05    | 18    | 26    | 04   | 03     | SEP 18    |    |
|                      | NUMBER OF DAYS WITH:          |       |       |       |       |       |       |       |       |       |       |      |        |           |    |
|                      | PRECIPITATION ≥ 0.01          | 4     | 3     | 3     | 3     | 2     | 2     | 13    | 5     | 7     | 5     | 1    | 1      | 49        |    |
| PRECIPITATION ≥ 0.10 | 2                             | 1     | 0     | 0     | 0     | 0     | 4     | 1     | 2     | 2     | 0     | 1    | 13     |           |    |
| PRECIPITATION ≥ 1.00 | 0                             | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0    | 0      |           |    |
| SNOWFALL             | SNOW, ICE PELLETS, HAIL:      |       |       |       |       |       |       |       |       |       |       |      |        |           |    |
|                      | TOTAL (IN.)                   | 7.4   | 4.3   | 0.9   | 0.0   | T     | 0.0   | 0.0   | 0.0   | 0.0   | T     | 0.6  | 3.4    | 16.6      |    |
|                      | GREATEST 24-HOUR (IN.)        | 4.6   | 2.8   | 0.6   | 0.0   | T     | 0.0   | 0.0   | 0.0   | 0.0   | T     | 0.6  | 3.4    | 4.6       |    |
|                      | DATE OF OCCURRENCE            | 30-31 | 14    | 01    |       | 12    |       |       |       |       | 29    | 04   | 03     | JAN 30-31 |    |
|                      | MAXIMUM SNOW DEPTH (IN.)      | 3     | 4     | T     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | T    | 3      | 4         |    |
|                      | DATE OF OCCURRENCE            | 31    | 05    | 25+   |       |       |       |       |       |       |       | 10+  | 04     | FEB 05    |    |
| NUMBER OF DAYS WITH: |                               |       |       |       |       |       |       |       |       |       |       |      |        |           |    |
| SNOWFALL ≥ 1.0       | 3                             | 2     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 1    | 6      |           |    |

# NORMALS, MEANS, AND EXTREMES

## ALAMOSA, CO (ALS)

LATITUDE: 37° 26' 10" N      LONGITUDE: 105° 51' 56" W      ELEVATION (FT): GRND: 7533      BARO: 7536      TIME ZONE: MOUNTAIN (UTC + 7)      WBAN: 23061

|                       | ELEMENT                     | POR  | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG   | SEP   | OCT   | NOV   | DEC      | YEAR     |
|-----------------------|-----------------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|----------|
| TEMPERATURE °F        | NORMAL DAILY MAXIMUM        | 30   | 33.1  | 40.2  | 49.6  | 58.7  | 68.3  | 78.4  | 81.7  | 78.9  | 72.5  | 61.7  | 45.7  | 34.8     | 58.6     |
|                       | MEAN DAILY MAXIMUM          | 54   | 34.2  | 40.4  | 48.6  | 58.7  | 68.4  | 78.3  | 82.1  | 79.5  | 73.6  | 62.8  | 46.9  | 36.0     | 59.1     |
|                       | HIGHEST DAILY MAXIMUM       | 56   | 62    | 66    | 73    | 80    | 90    | 95    | 96    | 91    | 87    | 81    | 71    | 61       | 96       |
|                       | YEAR OF OCCURRENCE          |      | 1971  | 1986  | 1989  | 1989  | 2002  | 1994  | 1989  | 2002  | 1990  | 1979  | 1980  | 1958     | JUL 1989 |
|                       | MEAN OF EXTREME MAXS.       | 54   | 48.7  | 53.7  | 63.7  | 72.4  | 80.0  | 87.5  | 88.8  | 86.5  | 82.6  | 74.7  | 61.4  | 50.4     | 70.9     |
|                       | NORMAL DAILY MINIMUM        | 30   | -3.7  | 4.7   | 15.8  | 22.8  | 32.4  | 40.4  | 46.4  | 45.2  | 36.5  | 23.9  | 11.1  | -7       | 22.9     |
|                       | MEAN DAILY MINIMUM          | 54   | -2.2  | 5.2   | 15.6  | 23.9  | 33.1  | 41.3  | 47.4  | 45.5  | 36.6  | 24.4  | 11.5  | 1        | 23.5     |
|                       | LOWEST DAILY MINIMUM        | 56   | -50   | -35   | -20   | -6    | 11    | 24    | 30    | 29    | 15    | -10   | -30   | -42      | -50      |
|                       | YEAR OF OCCURRENCE          |      | 1948  | 1948  | 1964  | 1973  | 1967  | 1990  | 1997  | 1964  | 1999  | 1945  | 1952  | 1978     | JAN 1948 |
|                       | MEAN OF EXTREME MINS.       | 54   | -22.0 | -14.0 | -1.4  | 9.0   | 20.2  | 30.5  | 39.1  | 36.5  | 24.1  | 9.6   | -6.1  | -18.7    | 8.9      |
|                       | NORMAL DRY BULB             | 30   | 14.7  | 22.4  | 32.3  | 41.1  | 50.4  | 59.4  | 64.9  | 62.4  | 54.8  | 43.5  | 29.9  | 17.5     | 41.1     |
|                       | MEAN DRY BULB               | 56   | 16.1  | 22.7  | 32.2  | 41.3  | 50.9  | 59.7  | 64.7  | 62.4  | 55.2  | 43.6  | 29.2  | 18.0     | 41.3     |
|                       | MEAN WET BULB               | 59   | 20.7  | 24.5  | 31.4  | 37.6  | 43.4  | 50.0  | 55.8  | 55.5  | 47.6  | 36.8  | 26.6  | 16.3     | 37.2     |
|                       | MEAN DEW POINT              | 59   | 10.9  | 13.2  | 19.3  | 20.7  | 29.7  | 34.2  | 46.3  | 49.4  | 39.8  | 26.3  | 17.1  | 8.2      | 26.3     |
|                       | NORMAL NO. DAYS WITH:       |      |       |       |       |       |       |       |       |       |       |       |       |          |          |
|                       | MAXIMUM ≥ 90°               | 30   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.3   | 0.9   | *     | 0.0   | 0.0   | 0.0      | 0.0      |
| MAXIMUM ≤ 32°         | 30                          | 13.5 | 6.4   | 1.5   | 0.1   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.1   | 2.9   | 11.3  | 35.8     |          |
| MINIMUM ≤ 32°         | 30                          | 31.0 | 28.0  | 30.5  | 26.9  | 14.2  | 2.1   | 0.0   | 0.2   | 7.3   | 26.5  | 29.5  | 31.0  | 227.2    |          |
| MINIMUM ≤ 0°          | 30                          | 19.3 | 9.7   | 1.5   | 0.1   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.1   | 3.6   | 16.0  | 50.3     |          |
| H/C                   | NORMAL HEATING DEG. DAYS    | 30   | 1551  | 1189  | 985   | 719   | 451   | 169   | 47    | 91    | 302   | 675   | 1082  | 1475     | 8736     |
|                       | NORMAL COOLING DEG. DAYS    | 30   | 0     | 0     | 0     | 0     | 0     | 7     | 27    | 10    | 0     | 0     | 0     | 0        | 44       |
| RH                    | NORMAL (PERCENT)            |      |       |       |       |       |       |       |       |       |       |       |       |          |          |
|                       | HOUR 05 LST                 | 30   | 80    | 80    | 76    | 70    | 72    | 77    | 85    | 86    | 83    | 78    | 80    | 80       | 79       |
|                       | HOUR 11 LST                 | 30   | 60    | 55    | 43    | 32    | 29    | 29    | 39    | 42    | 40    | 39    | 49    | 59       | 43       |
|                       | HOUR 17 LST                 | 30   | 58    | 49    | 38    | 28    | 27    | 26    | 36    | 38    | 34    | 33    | 48    | 60       | 40       |
|                       | HOUR 23 LST                 | 30   | 82    | 79    | 69    | 60    | 58    | 56    | 67    | 70    | 67    | 67    | 78    | 81       | 70       |
| S                     | PERCENT POSSIBLE SUNSHINE   |      |       |       |       |       |       |       |       |       |       |       |       |          |          |
| W/O                   | MEAN NO. DAYS WITH:         |      |       |       |       |       |       |       |       |       |       |       |       |          |          |
|                       | HEAVY FOG (VISBY ≤ 1/4 MI)  | 29   | 3.9   | 2.2   | 1.9   | 1.1   | 0.9   | 0.5   | 0.9   | 1.1   | 1.3   | 1.0   | 2.2   | 3.8      | 20.8     |
|                       | THUNDERSTORMS               | 29   | 0.0   | 0.2   | 0.5   | 1.5   | 6.8   | 6.8   | 13.3  | 13.7  | 6.0   | 1.5   | 0.1   | 0.0      | 50.4     |
| CLOUDINESS            | MEAN:                       |      |       |       |       |       |       |       |       |       |       |       |       |          |          |
|                       | SUNRISE-SUNSET (OKTAS)      | 2    | 3.2   | 4.8   | 4.5   | 4.8   | 4.3   | 2.7   | 2.4   | 5.1   | 2.4   | 3.6   | 4.0   | 3.2      | 3.8      |
|                       | MIDNIGHT-MIDNIGHT (OKTAS)   | 1    | 4.0   | 4.8   | 4.8   | 4.8   | 4.3   | 3.6   | 2.8   | 5.3   | 2.4   | 4.0   | 5.2   | 3.2      | 4.1      |
|                       | MEAN NO. DAYS WITH:         |      |       |       |       |       |       |       |       |       |       |       |       |          |          |
|                       | CLEAR                       | 2    | 15.5  | 8.0   | 8.3   | 7.5   | 11.0  | 14.3  | 16.0  | 5.0   | 9.5   | 10.5  | 6.0   | 12.0     | 123.6    |
| PARTLY CLOUDY         | 2                           | 6.0  | 6.3   | 4.3   | 7.5   | 7.3   | 6.0   | 6.5   | 10.0  | 1.5   | 6.5   | 5.5   | 7.5   | 74.9     |          |
| CLOUDY                | 2                           | 5.7  | 7.0   | 3.0   | 7.5   | 5.7   | 5.0   | 1.0   | 9.0   | 1.5   | 3.0   | 3.5   | 2.5   | 54.4     |          |
| PR                    | MEAN STATION PRESSURE (IN)  | 20   | 22.76 | 22.73 | 22.69 | 22.70 | 22.76 | 22.85 | 22.95 | 22.97 | 22.90 | 22.85 | 22.79 | 22.77    | 22.81    |
|                       | MEAN SEA-LEVEL PRES. (IN)   | 14   | 30.28 | 30.16 | 30.03 | 29.94 | 29.93 | 29.95 | 30.02 | 30.09 | 30.08 | 30.04 | 30.16 | 30.30    | 30.08    |
| WINDS                 | MEAN SPEED (MPH)            | 10   | 5.4   | 6.9   | 8.1   | 10.0  | 9.5   | 8.9   | 6.8   | 6.0   | 6.4   | 6.4   | 5.4   | 4.8      | 7.1      |
|                       | PREVAIL. DIR (TENS OF DEGS) | 39   | 24    | 18    | 18    | 18    | 22    | 24    | 18    | 18    | 18    | 18    | 18    | 20       | 18       |
|                       | MAXIMUM 2-MINUTE:           |      |       |       |       |       |       |       |       |       |       |       |       |          |          |
|                       | SPEED (MPH)                 | 9    | 41    | 46    | 49    | 51    | 45    | 49    | 41    | 38    | 54    | 45    | 48    | 43       | 54       |
|                       | DIR. (TENS OF DEGS)         |      | 23    | 23    | 22    | 24    | 18    | 20    | 30    | 24    | 26    | 30    | 21    | 21       | 26       |
|                       | YEAR OF OCCURRENCE          |      | 1996  | 1993  | 1999  | 1999  | 2002  | 1998  | 1994  | 2001  | 2000  | 1997  | 1994  | 1998     | SEP 2000 |
|                       | MAXIMUM 5-SECOND:           |      |       |       |       |       |       |       |       |       |       |       |       |          |          |
| SPEED (MPH)           | 9                           | 54   | 62    | 60    | 75    | 57    | 57    | 57    | 56    | 67    | 54    | 55    | 52    | 75       |          |
| DIR. (TENS OF DEGS)   |                             | 22   | 19    | 22    | 21    | 18    | 20    | 30    | 01    | 25    | 31    | 21    | 21    | 21       |          |
| YEAR OF OCCURRENCE    |                             | 1999 | 1998  | 1999  | 1999  | 1996  | 1998  | 1994  | 2002  | 2000  | 1997  | 1994  | 1998  | APR 1999 |          |
| PRECIPITATION         | NORMAL (IN)                 | 30   | 0.25  | 0.21  | 0.46  | 0.54  | 0.70  | 0.59  | 0.94  | 1.19  | 0.89  | 0.67  | 0.48  | 0.33     | 7.25     |
|                       | MAXIMUM MONTHLY (IN)        | 56   | 0.75  | 1.42  | 1.62  | 1.72  | 1.85  | 2.58  | 3.50  | 5.40  | 1.94  | 2.37  | 1.23  | 1.52     | 5.40     |
|                       | YEAR OF OCCURRENCE          |      | 1979  | 1963  | 1992  | 1990  | 1973  | 1969  | 1968  | 1993  | 1959  | 1969  | 1991  | 1964     | AUG 1993 |
|                       | MINIMUM MONTHLY (IN)        | 55   | T     | T     | T     | T     | 0.01  | T     | 0.02  | 0.21  | T     | T     | T     | T        | T        |
|                       | YEAR OF OCCURRENCE          |      | 1981  | 1954  | 1955  | 1972  | 1975  | 1980  | 1994  | 1980  | 1956  | 1983  | 1989  | 1980     | NOV 1989 |
|                       | MAXIMUM IN 24 HOURS (IN)    | 56   | 0.47  | 1.15  | 1.15  | 1.33  | 1.04  | 1.04  | 1.57  | 1.34  | 1.82  | 1.27  | 0.78  | 0.93     | 1.82     |
|                       | YEAR OF OCCURRENCE          |      | 1956  | 1963  | 1992  | 1952  | 1990  | 1969  | 1971  | 1993  | 1959  | 1969  | 1985  | 1964     | SEP 1959 |
| NORMAL NO. DAYS WITH: |                             |      |       |       |       |       |       |       |       |       |       |       |       |          |          |
| PRECIPITATION ≥ 0.01  | 30                          | 3.9  | 4.4   | 5.9   | 4.9   | 5.3   | 6.0   | 9.7   | 10.4  | 6.5   | 4.4   | 4.1   | 4.5   | 70.0     |          |
| PRECIPITATION ≥ 1.00  | 30                          | 0.0  | 0.0   | *     | *     | 0.0   | *     | 0.1   | 0.0   | 0.0   | *     | 0.0   | 0.0   | 0.1      |          |
| SNOWFALL              | NORMAL (IN)                 | 30   | 4.6   | 2.7   | 5.9   | 3.6   | 1.9   | 0.*   | 0.0   | 0.0   | 0.*   | 3.1   | 4.4   | 4.8      | 31.0     |
|                       | MAXIMUM MONTHLY (IN)        | 55   | 13.8  | 16.0  | 29.2  | 16.4  | 13.5  | 0.2   | T     | 0.0   | 4.2   | 20.3  | 19.8  | 27.7     | 29.2     |
|                       | YEAR OF OCCURRENCE          |      | 1979  | 1963  | 1973  | 1947  | 1978  | 1983  | 1981  |       | 1961  | 1969  | 1972  | 1967     | MAR 1973 |
|                       | MAXIMUM IN 24 HOURS (IN)    | 55   | 9.4   | 11.5  | 14.0  | 10.0  | 12.0  | 0.2   | T     | 0.0   | 4.2   | 15.5  | 9.2   | 15.8     | 15.8     |
|                       | YEAR OF OCCURRENCE          |      | 1987  | 1963  | 1962  | 1957  | 1990  | 1983  | 1981  | 1994  | 1961  | 1969  | 1985  | 1967     | DEC 1967 |
|                       | MAXIMUM SNOW DEPTH (IN)     | 58   | 10    | 10    | 11    | 11    | 4     | T     | T     | 0     | 1     | 12    | 12    | 18       | 18       |
|                       | YEAR OF OCCURRENCE          |      | 1992  | 1963  | 1992  | 1957  | 1978  | 1990  | 1990  |       | 1959  | 1991  | 1972  | 1964     | DEC 1964 |
| NORMAL NO. DAYS WITH: |                             |      |       |       |       |       |       |       |       |       |       |       |       |          |          |
| SNOWFALL ≥ 1.0        | 30                          | 1.4  | 1.1   | 2.0   | 1.0   | 0.7   | 0.0   | 0.0   | 0.0   | 0.1   | 0.7   | 1.4   | 1.6   | 10.0     |          |

PRECIPITATION (inches) 2002 ALAMOSA, CO (ALS)

| YEAR           | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL  | AUG  | SEP  | OCT  | NOV  | DEC  | ANNUAL |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|--------|
| 1973           | 0.16 | 0.12 | 1.42 | 0.41 | 1.85 | 0.69 | 1.09 | 0.65 | 1.06 | 0.64 | 0.11 | 0.19 | 8.39   |
| 1974           | 0.70 | 0.08 | 0.24 | 0.18 | 0.09 | 0.72 | 1.78 | 0.72 | 0.62 | 0.74 | 0.15 | 0.74 | 6.76   |
| 1975           | 0.38 | 0.22 | 0.50 | 0.33 | 0.01 | 0.65 | 0.51 | 0.90 | 1.47 | 0.78 | 0.43 | 0.04 | 6.22   |
| 1976           | 0.05 | 0.33 | 0.39 | 0.50 | 0.77 | 0.07 | 1.43 | 1.22 | 0.67 | 0.51 | 0.20 | 0.07 | 6.21   |
| 1977           | 0.25 | 0.27 | 0.14 | 0.82 | 0.35 | 1.17 | 2.20 | 0.63 | 1.15 | 0.08 | 0.63 | 0.17 | 7.86   |
| 1978           | 0.33 | 0.07 | 0.13 | 0.20 | 1.59 | 1.23 | 1.04 | 0.27 | 0.19 | 0.51 | 0.90 | 0.81 | 7.27   |
| 1979           | 0.75 | 0.09 | 0.29 | 0.42 | 0.94 | 0.72 | 0.19 | 1.61 | 0.22 | 0.19 | 0.50 | 0.55 | 6.47   |
| 1980           | 0.32 | 0.31 | 0.65 | 1.48 | 1.21 | T    | 0.54 | 0.21 | 0.46 | 0.52 | 0.01 | T    | 5.71   |
| 1981           | T    | 0.13 | 0.62 | 0.01 | 0.99 | 0.95 | 1.43 | 1.94 | 1.40 | 0.34 | 0.78 | 0.33 | 8.92   |
| 1982           | 0.07 | 0.49 | 0.40 | 0.37 | 0.57 | 0.22 | 0.51 | 0.58 | 1.85 | 0.19 | 0.25 | 0.49 | 5.99   |
| 1983           | 0.21 | 0.25 | 0.85 | 0.32 | 0.87 | 1.23 | 0.50 | 0.87 | 0.38 | T    | 0.78 | 0.99 | 7.25   |
| 1984           | 0.14 | 0.28 | 1.12 | 0.49 | 0.18 | 0.55 | 0.74 | 1.07 | 0.36 | 1.48 | 0.10 | 0.59 | 7.10   |
| 1985           | 0.28 | 0.28 | 0.44 | 0.97 | 0.37 | 0.47 | 1.68 | 0.91 | 1.33 | 2.02 | 0.68 | 0.37 | 9.80   |
| 1986           | 0.05 | 0.10 | 0.37 | 1.08 | 0.74 | 0.67 | 0.54 | 0.66 | 1.20 | 1.18 | 1.02 | 0.12 | 7.73   |
| 1987           | 0.65 | 0.48 | 0.29 | 0.85 | 1.00 | 0.14 | 0.03 | 1.06 | 0.22 | 0.31 | 0.95 | 0.51 | 6.49   |
| 1988           | 0.26 | 0.25 | 0.18 | 0.35 | 0.51 | 0.83 | 0.66 | 1.08 | 0.64 | 0.20 | 0.35 | 0.11 | 5.42   |
| 1989           | 0.31 | 0.28 | 0.10 | 0.09 | 0.12 | 0.14 | 1.46 | 0.35 | 0.09 | T    | T    | 0.15 |        |
| 1990           | 0.62 | 0.20 | 0.43 | 1.72 | 0.78 | 0.45 | 1.86 | 1.28 | 1.48 | 0.72 | 0.90 | 0.75 | 11.19  |
| 1991           | 0.14 | 0.36 | 0.32 | 0.16 | 0.66 | 0.30 | 0.59 | 0.88 | 0.70 | 0.95 | 1.23 | 0.98 | 7.27   |
| 1992           | 0.08 | 0.08 | 1.62 | 0.04 | 1.13 | 1.23 | 1.21 | 1.97 | 0.50 | 0.01 | 0.48 | 0.79 | 9.14   |
| 1993           | 0.25 | 0.39 | 0.68 | 0.42 | 0.93 | 0.14 | 0.33 | 5.40 | 0.58 | 0.32 | 0.35 | 0.10 | 9.89   |
| 1994           | 0.22 | 0.04 | 0.45 | 0.39 | 1.78 | 0.15 | 0.02 | 1.22 | 1.01 | 0.88 | 0.84 | 0.07 | 7.07   |
| 1995           | 0.10 | 0.09 | 0.36 | 0.87 | 0.63 | 1.26 | 0.95 | 0.85 | 1.60 | 0.00 | 0.20 | 0.13 | 7.04   |
| 1996           | 0.06 | 0.01 | 0.36 | 0.66 | 0.03 | 1.16 | 0.57 | 0.94 | 0.57 | 0.86 | 0.22 | T    | 5.44   |
| 1997           | 0.33 | 0.77 | 0.04 | 0.17 | 0.51 | 0.79 | 0.92 | 0.92 | 1.69 | 0.43 | 0.54 | 0.19 | 7.30   |
| 1998           | T    | 0.03 | 0.53 | 0.67 | 0.01 | 0.27 | 1.45 | 1.03 | 0.86 | 1.66 | 0.35 | 0.01 | 6.87   |
| 1999           | 0.07 | T    | 0.22 | 1.15 | 1.07 | 0.32 | 0.31 | 3.08 | 1.09 | 0.24 | T    | 0.03 | 7.58   |
| 2000           | 0.23 | 0.02 | 0.52 | 0.60 | 0.10 | 0.54 | 0.37 | 1.01 | 0.23 | 1.24 | 0.05 | 0.11 | 5.02   |
| 2001           | 0.36 | 0.56 | 1.02 | 0.27 | 1.09 | 0.07 | 2.75 | 3.22 | 0.11 | 0.03 | 0.26 | 0.13 | 9.87   |
| 2002           | 0.50 | 0.23 | 0.07 | 0.15 | 0.04 | 0.02 | 0.84 | 0.32 | 1.38 | 0.57 | 0.06 | 0.24 | 4.42   |
| POR=<br>57 YRS | 0.27 | 0.27 | 0.41 | 0.52 | 0.67 | 0.54 | 1.08 | 1.25 | 0.80 | 0.65 | 0.37 | 0.33 | 7.16   |

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AVERAGE TEMPERATURE (°F) 2002 ALAMOSA, CO (ALS)

| YEAR           | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL  | AUG  | SEP  | OCT  | NOV  | DEC  | ANNUAL |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|--------|
| 1973           | 5.6  | 16.2 | 31.6 | 36.4 | 50.2 | 59.0 | 63.4 | 62.1 | 53.4 | 44.3 | 33.5 | 20.7 | 39.7   |
| 1974           | 11.2 | 14.9 | 37.7 | 38.8 | 53.2 | 60.1 | 63.9 | 59.3 | 53.5 | 45.5 | 29.2 | 13.2 | 40.0   |
| 1975           | 6.8  | 22.0 | 31.8 | 37.3 | 47.4 | 57.7 | 64.7 | 61.6 | 54.2 | 42.4 | 26.3 | 16.9 | 39.1   |
| 1976           | 13.8 | 29.8 | 32.3 | 42.4 | 50.8 | 57.9 | 64.9 | 60.5 | 54.3 | 39.7 | 28.0 | 13.3 | 40.6   |
| 1977           | 13.2 | 23.5 | 29.3 | 43.0 | 50.6 | 61.4 | 65.3 | 63.9 | 56.7 | 44.8 | 33.0 | 24.5 | 42.4   |
| 1978           | 22.8 | 25.3 | 35.9 | 43.3 | 48.1 | 60.8 | 65.4 | 60.2 | 55.5 | 44.4 | 32.6 | 8.0  | 41.9   |
| 1979           | 6.0  | 10.6 | 30.4 | 41.4 | 50.7 | 58.0 | 63.6 | 61.1 | 55.9 | 45.7 | 21.0 | 18.5 | 38.6   |
| 1980           | 20.8 | 29.4 | 30.2 | 38.2 | 48.5 | 61.9 | 67.0 | 61.9 | 56.0 | 40.4 | 30.4 | 28.1 | 42.7   |
| 1981           | 23.7 | 25.6 | 33.2 | 45.5 | 50.1 | 62.6 | 65.9 | 61.9 | 56.2 | 43.6 | 34.6 | 20.7 | 43.6   |
| 1982           | 17.8 | 22.2 | 33.2 | 40.2 | 48.5 | 57.2 | 64.1 | 64.2 | 55.6 | 41.4 | 30.8 | 20.9 | 41.3   |
| 1983           | 20.3 | 26.2 | 34.2 | 36.3 | 46.8 | 56.5 | 65.3 | 64.7 | 57.7 | 43.2 | 27.7 | 13.8 | 41.1   |
| 1984           | 1.6  | 10.8 | 27.1 | 38.1 | 55.2 | 58.6 | 65.9 | 63.2 | 56.3 | 40.7 | 29.9 | 20.1 | 39.0   |
| 1985           | 17.7 | 21.6 | 34.5 | 43.9 | 51.4 | 60.3 | 65.3 | 63.0 | 52.2 | 44.3 | 30.0 | 17.4 | 41.8   |
| 1986           | 25.0 | 29.7 | 36.8 | 43.4 | 50.5 | 60.3 | 63.1 | 62.8 | 52.6 | 41.3 | 31.3 | 20.4 | 43.1   |
| 1987           | 13.4 | 23.4 | 31.0 | 42.7 | 50.7 | 61.0 | 63.9 | 62.3 | 52.7 | 45.4 | 27.1 | 14.7 | 40.7   |
| 1988           | 4.5  | 17.2 | 31.5 | 42.8 | 50.1 | 61.8 | 64.5 | 63.9 | 53.5 | 46.1 | 29.8 | 17.8 | 40.3   |
| 1989           | 15.0 | 21.5 | 37.2 | 44.7 | 53.3 | 58.9 | 65.9 | 62.3 | 55.8 | 42.2 | 31.4 | 19.6 | 42.3   |
| 1990           | 14.8 | 25.9 | 36.4 | 43.3 | 49.3 | 62.5 | 63.6 | 61.1 | 58.3 | 44.4 | 31.7 | 13.3 | 42.1   |
| 1991           | 10.9 | 26.1 | 34.0 | 40.0 | 51.6 | 59.4 | 64.8 | 63.4 | 55.4 | 44.5 | 22.7 | 5.2  | 39.8   |
| 1992           | 1.4  | 14.5 | 29.6 | 47.0 | 53.5 | 58.8 | 62.1 | 60.8 | 55.0 | 45.2 | 22.1 | 6.7  | 38.1   |
| 1993           | 11.9 | 19.1 | 33.9 | 41.7 | 50.8 | 58.7 | 63.3 | 61.1 | 53.4 | 41.1 | 25.8 | 18.5 | 39.9   |
| 1994           | 19.3 | 22.7 | 34.8 | 41.8 | 52.3 | 62.4 | 63.1 | 63.5 | 54.2 | 42.3 | 25.5 | 22.6 | 42.0   |
| 1995           | 23.3 | 33.2 | 34.6 | 38.9 | 47.4 | 56.8 | 62.0 | 64.7 | 53.7 | 42.2 | 32.4 | 23.6 | 42.7   |
| 1996           | 20.8 | 28.6 | 32.0 | 41.7 | 55.2 | 60.0 | 65.1 | 62.7 | 52.6 | 40.2 | 31.6 | 21.5 | 42.7   |
| 1997           | 16.0 | 22.3 | 34.9 | 37.8 | 50.6 | 59.1 | 62.6 | 62.7 | 57.9 | 42.5 | 27.5 | 8.7  | 40.2   |
| 1998           | 15.4 | 24.2 | 32.5 | 38.3 | 51.0 | 58.2 | 65.7 | 63.2 | 57.9 | 42.9 | 34.1 | 23.6 | 42.3   |
| 1999           | 25.6 | 28.4 | 37.3 | 38.7 | 49.3 | 58.0 | 64.7 | 62.7 | 53.4 | 43.2 | 32.7 | 20.1 | 42.8   |
| 2000           | 24.2 | 29.3 | 33.6 | 44.5 | 53.9 | 60.6 | 64.8 | 64.6 | 56.5 | 43.5 | 24.6 | 21.8 | 43.5   |
| 2001           | 14.8 | 24.0 | 34.2 | 44.1 | 54.1 | 60.9 | 65.8 | 62.6 | 56.1 | 44.3 | 30.5 | 19.0 | 42.5   |
| 2002           | 16.8 | 19.7 | 31.3 | 46.7 | 51.2 | 62.5 | 66.0 | 62.4 | 55.3 | 42.0 | 29.7 | 18.8 | 41.9   |
| POR=<br>57 YRS | 16.3 | 22.9 | 32.3 | 41.4 | 50.7 | 59.8 | 64.7 | 62.4 | 55.2 | 43.5 | 29.2 | 18.1 | 41.4   |

HEATING DEGREE DAYS (base 65°F) 2002 ALAMOSA, CO (ALS)

| YEAR    | JUL | AUG | SEP | OCT | NOV  | DEC  | JAN  | FEB  | MAR  | APR | MAY | JUN | TOTAL |
|---------|-----|-----|-----|-----|------|------|------|------|------|-----|-----|-----|-------|
| 1973-74 | 74  | 91  | 342 | 633 | 937  | 1366 | 1662 | 1394 | 839  | 778 | 359 | 173 | 8648  |
| 1974-75 | 41  | 170 | 339 | 595 | 1067 | 1601 | 1802 | 1198 | 1023 | 826 | 537 | 212 | 9411  |
| 1975-76 | 26  | 102 | 319 | 695 | 1157 | 1485 | 1579 | 1014 | 1010 | 672 | 432 | 208 | 8699  |
| 1976-77 | 24  | 132 | 314 | 779 | 1104 | 1596 | 1598 | 1155 | 1097 | 655 | 440 | 104 | 8998  |
| 1977-78 | 19  | 51  | 246 | 621 | 951  | 1252 | 1302 | 1103 | 900  | 647 | 516 | 126 | 7734  |
| 1978-79 | 18  | 141 | 278 | 632 | 966  | 1762 | 1827 | 1518 | 1069 | 704 | 438 | 203 | 9556  |
| 1979-80 | 57  | 127 | 267 | 590 | 1312 | 1438 | 1363 | 1029 | 1071 | 798 | 504 | 107 | 8663  |
| 1980-81 | 5   | 102 | 263 | 757 | 1031 | 1136 | 1274 | 1097 | 979  | 576 | 458 | 102 | 7780  |
| 1981-82 | 14  | 108 | 256 | 656 | 904  | 1366 | 1457 | 1192 | 977  | 736 | 508 | 230 | 8404  |
| 1982-83 | 59  | 47  | 275 | 724 | 1016 | 1361 | 1380 | 1080 | 946  | 856 | 556 | 249 | 8549  |
| 1983-84 | 28  | 35  | 213 | 674 | 1112 | 1582 | 1964 | 1567 | 1166 | 799 | 297 | 188 | 9625  |
| 1984-85 | 11  | 56  | 252 | 748 | 1051 | 1384 | 1462 | 1209 | 937  | 625 | 415 | 146 | 8296  |
| 1985-86 | 30  | 66  | 378 | 636 | 1045 | 1473 | 1231 | 983  | 866  | 639 | 446 | 138 | 7931  |
| 1986-87 | 63  | 75  | 366 | 728 | 1004 | 1377 | 1594 | 1160 | 1049 | 661 | 436 | 115 | 8628  |
| 1987-88 | 66  | 96  | 364 | 601 | 1130 | 1557 | 1872 | 1381 | 1031 | 658 | 454 | 102 | 9312  |
| 1988-89 | 28  | 50  | 337 | 577 | 1049 | 1453 | 1544 | 1211 | 854  | 600 | 357 | 180 | 8240  |
| 1989-90 | 17  | 82  | 270 | 698 | 1001 | 1400 | 1550 | 1089 | 880  | 640 | 480 | 105 | 8212  |
| 1990-91 | 59  | 118 | 201 | 633 | 990  | 1599 | 1671 | 1081 | 954  | 742 | 410 | 172 | 8630  |
| 1991-92 | 33  | 51  | 280 | 630 | 1263 | 1852 | 1973 | 1459 | 1093 | 535 | 350 | 179 | 9698  |
| 1992-93 | 97  | 131 | 295 | 607 | 1281 | 1803 | 1638 | 1280 | 958  | 692 | 435 | 185 | 9402  |
| 1993-94 | 51  | 118 | 342 | 735 | 1167 | 1435 | 1412 | 1179 | 930  | 693 | 387 | 89  | 8538  |
| 1994-95 | 62  | 53  | 319 | 700 | 1174 | 1307 | 1287 | 882  | 934  | 777 | 538 | 238 | 8271  |
| 1995-96 | 102 | 25  | 334 | 701 | 969  | 1276 | 1364 | 1047 | 1018 | 692 | 299 | 147 | 7974  |
| 1996-97 | 26  | 78  | 366 | 762 | 992  | 1343 | 1512 | 1186 | 924  | 811 | 441 | 169 | 8610  |
| 1997-98 | 74  | 80  | 209 | 691 | 1119 | 1738 | 1527 | 1137 | 999  | 795 | 430 | 212 | 9011  |
| 1998-99 | 7   | 58  | 208 | 682 | 920  | 1276 | 1217 | 1018 | 851  | 784 | 482 | 206 | 7709  |
| 1999-00 | 30  | 69  | 339 | 667 | 962  | 1388 | 1257 | 1026 | 968  | 607 | 337 | 124 | 7774  |
| 2000-01 | 25  | 33  | 249 | 660 | 1206 | 1333 | 1550 | 1138 | 946  | 622 | 333 | 126 | 8221  |
| 2001-02 | 17  | 80  | 259 | 634 | 1025 | 1420 | 1488 | 1261 | 1039 | 545 | 424 | 83  | 8275  |
| 2002-   | 12  | 90  | 283 | 704 | 1050 | 1425 |      |      |      |     |     |     |       |

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COOLING DEGREE DAYS (base 65°F) 2002 ALAMOSA, CO (ALS)

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | ANNUAL |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--------|
| 1973 | 0   | 0   | 0   | 0   | 0   | 14  | 30  | 8   | 0   | 0   | 0   | 0   | 52     |
| 1974 | 0   | 0   | 0   | 0   | 0   | 31  | 13  | 0   | 0   | 0   | 0   | 0   | 44     |
| 1975 | 0   | 0   | 0   | 0   | 0   | 0   | 24  | 4   | 0   | 0   | 0   | 0   | 28     |
| 1976 | 0   | 0   | 0   | 0   | 0   | 1   | 25  | 0   | 0   | 0   | 0   | 0   | 26     |
| 1977 | 0   | 0   | 0   | 0   | 0   | 2   | 36  | 25  | 2   | 0   | 0   | 0   | 65     |
| 1978 | 0   | 0   | 0   | 0   | 0   | 8   | 39  | 0   | 0   | 0   | 0   | 0   | 47     |
| 1979 | 0   | 0   | 0   | 0   | 0   | 0   | 21  | 13  | 0   | 0   | 0   | 0   | 34     |
| 1980 | 0   | 0   | 0   | 0   | 0   | 22  | 76  | 12  | 0   | 0   | 0   | 0   | 110    |
| 1981 | 0   | 0   | 0   | 0   | 0   | 35  | 47  | 19  | 0   | 0   | 0   | 0   | 101    |
| 1982 | 0   | 0   | 0   | 0   | 0   | 0   | 38  | 27  | 0   | 0   | 0   | 0   | 65     |
| 1983 | 0   | 0   | 0   | 0   | 0   | 4   | 43  | 30  | 1   | 0   | 0   | 0   | 78     |
| 1984 | 0   | 0   | 0   | 0   | 2   | 1   | 45  | 8   | 0   | 0   | 0   | 0   | 56     |
| 1985 | 0   | 0   | 0   | 0   | 0   | 9   | 47  | 9   | 0   | 0   | 0   | 0   | 65     |
| 1986 | 0   | 0   | 0   | 0   | 0   | 3   | 11  | 14  | 0   | 0   | 0   | 0   | 28     |
| 1987 | 0   | 0   | 0   | 0   | 0   | 0   | 39  | 22  | 0   | 0   | 0   | 0   | 61     |
| 1988 | 0   | 0   | 0   | 0   | 0   | 13  | 17  | 22  | 0   | 0   | 0   | 0   | 52     |
| 1989 | 0   | 0   | 0   | 0   | 0   | 6   | 52  | 6   | 0   | 0   | 0   | 0   | 64     |
| 1990 | 0   | 0   | 0   | 0   | 0   | 35  | 22  | 3   | 7   | 0   | 0   | 0   | 67     |
| 1991 | 0   | 0   | 0   | 0   | 0   | 12  | 33  | 8   | 0   | 0   | 0   | 0   | 53     |
| 1992 | 0   | 0   | 0   | 0   | 0   | 1   | 12  | 6   | 0   | 0   | 0   | 0   | 19     |
| 1993 | 0   | 0   | 0   | 0   | 0   | 6   | 6   | 4   | 0   | 0   | 0   | 0   | 16     |
| 1994 | 0   | 0   | 0   | 0   | 0   | 16  | 12  | 14  | 0   | 0   | 0   | 0   | 42     |
| 1995 | 0   | 0   | 0   | 0   | 0   | 0   | 19  | 23  | 4   | 0   | 0   | 0   | 46     |
| 1996 | 0   | 0   | 0   | 0   | 0   | 0   | 35  | 15  | 0   | 0   | 0   | 0   | 50     |
| 1997 | 0   | 0   | 0   | 0   | 0   | 0   | 5   | 17  | 0   | 0   | 0   | 0   | 22     |
| 1998 | 0   | 0   | 0   | 0   | 0   | 14  | 37  | 9   | 0   | 0   | 0   | 0   | 60     |
| 1999 | 0   | 0   | 0   | 0   | 0   | 2   | 28  | 3   | 0   | 0   | 0   | 0   | 33     |
| 2000 | 0   | 0   | 0   | 0   | 0   | 0   | 27  | 27  | 0   | 0   | 0   | 0   | 54     |
| 2001 | 0   | 0   | 0   | 0   | 0   | 10  | 53  | 14  | 0   | 0   | 0   | 0   | 77     |
| 2002 | 0   | 0   | 0   | 0   | 2   | 17  | 47  | 17  | 0   | 0   | 0   | 0   | 83     |

SNOWFALL (inches) 2002 ALAMOSA, CO (ALS)

| YEAR           | JUL | AUG | SEP | OCT  | NOV  | DEC  | JAN  | FEB | MAR  | APR | MAY  | JUN | TOTAL |
|----------------|-----|-----|-----|------|------|------|------|-----|------|-----|------|-----|-------|
| 1973-74        | 0.0 | 0.0 | 1.0 | 8.1  | 1.1  | 3.1  | 12.4 | 1.9 | 4.3  | 5.5 | 0.0  | 0.0 | 37.4  |
| 1974-75        | 0.0 | 0.0 | T   | 0.2  | 3.3  | 10.0 | 7.0  | 4.2 | 6.5  | 4.3 | T    | T   | 35.5  |
| 1975-76        | 0.0 | 0.0 | 0.0 | 0.5  | 5.9  | 0.8  | 0.8  | 3.4 | 6.4  | 2.1 | 0.0  | 0.0 | 19.9  |
| 1976-77        | 0.0 | 0.0 | T   | 6.5  | 2.6  | 2.1  | 3.4  | 5.7 | 2.5  | 7.1 | T    | 0.0 | 29.9  |
| 1977-78        | 0.0 | 0.0 | 0.0 | 0.0  | 0.4  | 3.9  | 4.4  | 0.9 | 1.0  | 0.1 | 13.5 | 0.0 | 24.2  |
| 1978-79        | 0.0 | 0.0 | 0.0 | 0.2  | 4.1  | 12.1 | 13.8 | 0.9 | 3.0  | 1.8 | 2.4  | T   | 38.3  |
| 1979-80        | 0.0 | 0.0 | 0.0 | 1.1  | 5.3  | 6.8  | 5.0  | 2.1 | 6.3  | 8.3 | 2.3  | 0.0 | 37.2  |
| 1980-81        | 0.0 | 0.0 | 0.0 | 2.2  | 0.1  | T    | T    | 1.8 | 6.0  | 0.0 | T    | 0.0 | 10.1  |
| 1981-82        | T   | 0.0 | 0.0 | T    | 5.4  | 4.9  | 1.2  | 6.9 | 2.9  | 1.4 | 2.1  | 0.0 | 24.8  |
| 1982-83        | 0.0 | 0.0 | 0.0 | 2.1  | 2.2  | 6.0  | 3.4  | 5.1 | 10.2 | 3.5 | 0.5  | 0.2 | 33.2  |
| 1983-84        | 0.0 | 0.0 | 0.0 | 0.0  | 8.1  | 11.2 | 1.4  | 2.8 | 10.6 | 2.8 | T    | 0.0 | 36.9  |
| 1984-85        | 0.0 | 0.0 | 0.0 | 6.7  | 0.9  | 5.6  | 2.8  | 2.8 | 6.1  | 0.8 | 1.2  | 0.0 | 26.9  |
| 1985-86        | 0.0 | 0.0 | 0.0 | 6.0  | 9.7  | 6.7  | 0.5  | 1.0 | 3.5  | 4.5 | 2.1  | 0.0 | 34.0  |
| 1986-87        | 0.0 | 0.0 | T   | 2.7  | 6.9  | 1.9  | 12.8 | 7.0 | 3.9  | 8.4 | 0.0  | 0.0 | 43.6  |
| 1987-88        | 0.0 | 0.0 | 0.0 | 0.0  | 6.8  | 7.5  | 6.0  | 2.9 | 3.4  | 0.7 | 0.0  | 0.0 | 27.3  |
| 1988-89        | 0.0 | 0.0 | 0.0 | 0.0  | 3.0  | 1.4  | 5.2  | 3.0 | 1.0  | 0.9 | 0.0  | 0.0 | 14.5  |
| 1989-90        | 0.0 | 0.0 | T   | T    | T    | 2.2  | 13.0 | 2.5 | 3.3  | 9.2 | 4.8  | 0.0 | 0.0   |
| 1990-91        | 0.0 | 0.0 | 0.0 | 0.2  | 6.4  | 9.9  | 1.4  | 4.6 | 3.2  | 1.4 | 0.2  | T   | 27.3  |
| 1991-92        | 0.0 | 0.0 | 0.0 | 15.1 | 10.2 | 8.9  | 0.9  | 1.7 | 16.2 | 0.3 | 1.0  | T   | 54.3  |
| 1992-93        | 0.0 | 0.0 |     |      |      |      |      |     |      |     |      |     |       |
| 1993-94        |     |     |     |      |      |      |      |     |      |     |      |     |       |
| 1994-95        |     |     |     |      |      |      |      |     |      | 0.0 | 0.0  |     |       |
| 1995-96        |     |     | 0.0 | 0.0  | 1.3  | 1.7  | 0.9  | 0.3 | 3.3  | 5.1 | 0.0  | 0.0 |       |
| 1996-97        | 0.0 | 0.0 | 0.0 | 11.5 | 2.1  |      |      |     |      |     |      |     |       |
| 1997-98        |     |     |     | 1.3  | 5.6  | 4.1  | T    | 0.7 | 5.1  | 8.6 | 0.0  | 0.0 |       |
| 1998-99        | 0.0 | 0.0 | 0.0 | 1.8  | 2.3  | 0.3  | 1.7  | T   | 2.8  | 7.2 | 5.9  | 0.0 | 22.0  |
| 1999-00        | 0.0 | 0.0 | 0.0 | T    | T    | 0.3  | 3.5  | 0.2 | 6.3  | 0.2 | 0.0  | 0.0 | 10.5  |
| 2000-01        | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 1.8  | 5.5  | 6.6 | 1.4  | 1.4 | 6.4  | 0.0 | 23.1  |
| 2001-02        | 0.0 | 0.0 | 0.0 | T    | 2.8  | 2.6  | 7.4  | 4.3 | 0.9  | 0.0 | T    | 0.0 | 18.0  |
| 2002-          | 0.0 | 0.0 | 0.0 | T    | 0.6  | 3.4  |      |     |      |     |      |     |       |
| POR=<br>54 YRS | T   | 0.0 | 0.2 | 3.0  | 3.9  | 5.2  | 4.3  | 3.9 | 5.7  | 4.3 | 1.8  | T   | 32.3  |

WBAN : 23061

REFERENCE NOTES:

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| <p>PAGE 1:<br/>THE TEMPERATURE GRAPH SHOWS NORMAL MAXIMUM AND NORMAL MINIMUM DAILY TEMPERATURES (SOLID CURVES) AND THE ACTUAL DAILY HIGH AND LOW TEMPERATURES (VERTICAL BARS).</p> <p>PAGE 2 AND 3:<br/>H/C INDICATES HEATING AND COOLING DEGREE DAYS.<br/>RH INDICATES RELATIVE HUMIDITY<br/>W/O INDICATES WEATHER AND OBSTRUCTIONS<br/>S INDICATES SUNSHINE.<br/>PR INDICATES PRESSURE.<br/>CLOUDINESS ON PAGE 3 IS THE SUM OF THE CEILOMETER AND SATELLITE DATA NOT TO EXCEED EIGHT EIGHTHS(OKTAS).</p> <p>GENERAL:<br/>T INDICATES TRACE PRECIPITATION, AN AMOUNT GREATER THAN ZERO BUT LESS THAN THE LOWEST REPORTABLE VALUE.<br/>+ INDICATES THE VALUE ALSO OCCURS ON EARLIER DATES.<br/>BLANK ENTRIES DENOTE MISSING OR UNREPORTED DATA.<br/>NORMALS ARE 30-YEAR AVERAGES (1961 - 1990).<br/>ASOS INDICATES AUTOMATED SURFACE OBSERVING SYSTEM.<br/>PM INDICATES THE LAST DAY OF THE PREVIOUS MONTH.<br/>POR (PERIOD OF RECORD) BEGINS WITH THE JANUARY DATA MONTH AND IS THE NUMBER OF YEARS USED TO COMPUTE THE MEAN. INDIVIDUAL MONTHS WITHIN THE POR MAY BE MISSING.<br/>WHEN THE POR FOR A NORMAL IS LESS THAN 30 YEARS, THE NORMAL IS PROVISIONAL AND IS BASED ON THE NUMBER OF YEARS INDICATED.<br/>0.* OR * INDICATES THE VALUE OR MEAN-DAYS-WITH IS BETWEEN 0.00 AND 0.05.<br/>CLOUDINESS FOR ASOS STATIONS DIFFERS FROM THE NON-ASOS OBSERVATION TAKEN BY A HUMAN OBSERVER. ASOS STATION CLOUDINESS IS BASED ON TIME-AVERAGED CEILOMETER DATA FOR CLOUDS AT OR BELOW 12,000 FEET AND ON SATELLITE DATA FOR CLOUDS ABOVE 12,000 FEET.<br/>THE NUMBER OF DAYS WITH CLEAR, PARTLY CLOUDY, AND CLOUDY CONDITIONS FOR ASOS STATIONS IS THE SUM OF THE CEILOMETER AND SATELLITE DATA FOR THE SUNRISE TO SUNSET PERIOD.</p> | <p>GENERAL CONTINUED:<br/>CLEAR INDICATES 0 - 2 OKTAS, PARTLY CLOUDY INDICATES 3 - 6 OKTAS, AND CLOUDY INDICATES 7 OR 8 OKTAS.<br/>WHEN AT LEAST ONE OF THE ELEMENTS (CEILOMETER OR SATELLITE) IS MISSING, THE DAILY CLOUDINESS IS NOT COMPUTED.<br/>WIND DIRECTION IS RECORDED IN TENS OF DEGREES (2 DIGITS) CLOCKWISE FROM TRUE NORTH. "00" INDICATES CALM. "36" INDICATES TRUE NORTH.<br/>RESULTANT WIND IS THE VECTOR AVERAGE OF THE SPEED AND DIRECTION.<br/>AVERAGE TEMPERATURE IS THE SUM OF THE MEAN DAILY MAXIMUM AND MINIMUM TEMPERATURE DIVIDED BY 2.<br/>SNOWFALL DATA COMPRISE ALL FORMS OF FROZEN PRECIPITATION, INCLUDING HAIL.<br/>A HEATING (COOLING) DEGREE DAY IS THE DIFFERENCE BETWEEN THE AVERAGE DAILY TEMPERATURE AND 65° F.<br/>DRY BULB IS THE TEMPERATURE OF THE AMBIENT AIR.<br/>DEW POINT IS THE TEMPERATURE TO WHICH THE AIR MUST BE COOLED TO ACHIEVE 100 PERCENT RELATIVE HUMIDITY.<br/>WET BULB IS THE TEMPERATURE THE AIR WOULD HAVE IF THE MOISTURE CONTENT WAS INCREASED TO 100 PERCENT RELATIVE HUMIDITY.</p> <p>ON JULY 1, 1996, THE NATIONAL WEATHER SERVICE BEGAN USING THE "METAR" OBSERVATION CODE THAT WAS ALREADY EMPLOYED BY MOST OTHER NATIONS OF THE WORLD. THE MOST NOTICEABLE DIFFERENCE IN THIS ANNUAL PUBLICATION WILL BE THE CHANGE IN UNITS FROM TENTHS TO EIGHTS(OKTAS) FOR REPORTING THE AMOUNT OF SKY COVER.</p> |
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## 2002 ALAMOSA, COLORADO (ALS)

Alamosa is located in the south-central part of Colorado, near the center of the San Luis Valley which lies in a broad depression between mountain ranges converging to the north. The valley is the first of a series of basins along the Rio Grande River. The mountain ranges to the east reach altitudes over 14,000 feet and those to the west are between 13,000 and 14,000 feet. The length of the valley from north to south is over 80 miles, and its greatest width is about 50 miles. The valley floor ranges in altitude from 7,500 to near 8,000 feet and has a remarkably flat surface, except for a range of low hills across the southern portion. From the lowest areas which lie along an axis near the eastern border, the valley floor rises to the foothills, steeply to the east and more gently to the west.

The climate of the San Luis Valley is marked by cold winters and moderate summers, light precipitation, and much sunshine. At Alamosa about 80 percent of the annual precipitation occurs from April to October, most of it in the form of scattered light showers and thunderstorms that develop over the mountains and move into the valley during the afternoon. More than half of these thunderstorms occur during July and August. Hail frequently falls in some parts of the valley during their movement. Winter snows occur mainly in frequent light falls, with occasional falls as early as September or as late as May. A good snow cover will remain on the ground for several weeks during the coldest months.

All agriculture in the valley is dependent on irrigation, using water supplied by the more abundant precipitation in the surrounding mountains. Summer grazing of cattle and sheep on nearby mountain ranges and smaller valleys is extensive. A wide variety of vegetables, grains and feed crops are grown locally, with potatoes being the main commercial crop.

Summer is characterized by frequent days with maximum temperatures in the middle 80s and minimum temperatures in the low 40s. Relative humidity ranges from about 76 percent in the early mornings to around 40 percent during the afternoons. Winds are light during the coldest weather, but are strong with occasional blowing dust during the spring and early summer months.

Based on the 1951-1980 period, the average first occurrence of 32 degrees Fahrenheit in the fall is September 8 and the average last occurrence in the spring is June 8.

# STATION LOCATION

ALAMOSA, COLORADO

| LOCATION                              | Occupied From | Occupied To | Airline Distances and Directions from previous Location | LATITUDE |         | ELEVATION ABOVE |        |                 |                      |              |                 |                      |                    |                  |            | AUTOMATIC OBSERVING EQUIPMENT *                    | * TYPE<br>M = AMOS<br>T = AUTOB<br>S = ASOS<br>W = AWOS<br><br>REMARKS |
|---------------------------------------|---------------|-------------|---|----------|---------|-----------------|--------|-----------------|----------------------|--------------|-----------------|----------------------|--------------------|------------------|------------|--|--|
|                                       |               |             |   | NORTH    | WEST    | GROUND          |        |                 |                      |              |                 |                      |                    |                  |            |  |  |
|                                       |               |             |   |          |         | SEA LEVEL       | GROUND | WIND INSTRUMENT | EXTREME THERMOMETERS | PSYCHROMETER | SUNSHINE SWITCH | TIPPING GAUGE BUCKET | WEIGHING RAIN GAGE | 8 INCH RAIN GAGE | HYGROMETER |  |  |
| <b>AIRPORT</b>                        |               |             |   |          |         |                 |        |                 |                      |              |                 |                      |                    |                  |            |  |  |
| Alamosa Airport                       | 1/14/45       | 10/20/54    | 2.5mi..SE   | 37°26'   | 105°51' | 7534            | 33     | 5               | 5                    |              |                 |                      | 4                  | 3                |            |  |  |
| Alamosa Airport                       | 10/20/54      | 11/17/77    | 0.5 mi..W   | 37°27'   | 105°52' | 7538<br>a7536   | b33    | 5               | c5                   | c5           |                 |                      | 4                  | c4               | c4         |  |  |
| Alamosa Airport                       | 11/17/77      | 5/1/80      | 450 ft..S   | 37°27'   | 105°52' | 7536            | 30     | 5               | 5                    |              |                 |                      | 4                  | 4                |            |  |  |
| + Bergman Field<br>(Name Change 5/80) | 5/1/80        | 09/01/92    |   | 37°27'   | 105°52' |                 |        |                 |                      |              |                 |                      |                    |                  |            |  |  |
| San Luis Valley<br>Regional Airport   | 09/01/92      | Present     | NA  | 37°26'   | 105°52' | d7533           |        |                 |                      |              |                 |                      |                    |                  | S          | ASOS Commissioned 09/01/92<br>d. Ground elevation. |  |

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\* NOTES: For earlier station history see previous edition.