

## QUALITY CONTROLLED LOCAL CLIMATOLOGICAL DATA

Effective January, 2005, flags will be available for most data elements:

If data are suspect:

s will appended to the value on the web form

s will be placed in a column following the suspect value in the ASCII form

If data are flagged as erroneous, it will not be printed.

### \*\*NOTICE OF CHANGE:

Effective July 28, 2000, observations contained in the Quality Controlled Local Climatological Data Hourly Observations table are reported in whole degrees Fahrenheit. The dry bulb, dew point and wet bulb temperatures were originally reported to the nearest tenth of a degree Fahrenheit. The Automated Surface Observing System (ASOS) records temperatures and dew points in whole degrees Fahrenheit and converts these values to the nearest tenth of a degree Celsius for observation transmission. Until this date, these values online have incorrectly been converted back to the nearest tenth of a degree Fahrenheit, implying a level of precision that is not present at the instrument level. We apologize for any inconvenience this may cause.

The Automated Weather Observing System (AWOS) generally records temperatures and dew points in whole degrees Fahrenheit and converts these values to the nearest whole degree Celsius for observation transmission. Also, AWOS stations will often have less data (i.e., fewer weather elements) than ASOS stations.

NCDC forms contain:

whole degree Celsius temperature values for AWOS stations

tenths degrees Celsius temperature values for ASOS stations

### FORMAT FOR DAILY TABLE

| COLUMN                       | TERMINOLOGY  |
|------------------------------|--|
| 1                            | DATE   |
| Temp                         | Degrees Fahrenheit   |
| 2                            | MAXIMUM  |
| 3                            | MINIMUM  |
| 4                            | AVERAGE  |
| 5                            | DEPARTURE FROM NORMAL  |
| 6                            | AVERAGE DEW POINT  |
| 7                            | AVERAGE WET BULB   |
| Degree Days:<br>Base 65 F    |  |
| 8                            | HEATING (SEASON BEGINS WITH JULY)  |
| 9                            | COOLING (SEASON BEGINS WITH JANUARY)   |
| 10                           | SUNRISE (Calculated, not observed)   |
| 11                           | SUNSET (Calculated, not observed)  |
| Significant<br>Weather Types | Weather Phenomena  |
| 12                           | +FC TORNADO/WATERSPOUT<br>FC FUNNEL CLOUD<br>TS THUNDERSTORM<br>GR HAIL<br>RA RAIN |

|                |  |
|----------------|--|
|                | DZ DRIZZLE<br>SN SNOW<br>SG SNOW GRAINS<br>GS SMALL HAIL &/OR SNOW PELLETS<br>PL ICE PELLETS<br>IC ICE CRYSTALS<br>FG+ HEAVY FOG (FG & LE.25 MILES VISIBILITY)<br>FG FOG<br>BR MIST<br>UP UNKNOWN PRECIPITATION<br>HZ HAZE<br>FU SMOKE<br>VA VOLCANIC ASH<br>DU WIDESPREAD DUST<br>DS DUSTSTORM<br>PO SAND/DUST WHIRLS<br>SA SAND<br>SS SANDSTORM<br>PY SPRAY<br>SQ SQUALL<br>DR LOW DRIFTING<br>SH SHOWER<br>FZ FREEZING<br>MI SHALLOW<br>PR PARTIAL<br>BC PATCHES<br>BL BLOWING<br>VC VICINITY<br>- LIGHT<br>+ HEAVY<br>"NO SIGN" MODERATE |
| Snow/Ice       | INCHES   |
| 13             | SNOW/ICE (ON GROUND) (1200 UTC)<br>T = TRACE<br>M = MISSING DATA   |
| 14             | WATER EQUIVALENT (1800 UTC) M = MISSING DATA   |
| Precipitation: | INCHES (24-HR PERIOD ENDING AT INDICATED LOCAL STANDARD TIME)  |
| 15             | SNOWFALL (INCHES AND TENTHS) (2400 LST) *<br>T = TRACE<br>M = MISSING DATA   |
| 16             | WATER EQUIVALENT (INCHES & HUNDREDTHS (2400 LST)<br>RAINFALL & MELTED SNOW<br>M = MISSING DATA<br>T = TRACE  |
| Pressure       | INCHES OF HG   |
| 17             | AVERAGE STATION PRESSURE   |
| 18             | AVERAGE SEA LEVEL PRESSURE   |
| Wind           | SPEED IN MILES PER HOUR<br>DIRECTION TO TENS OF DEGREES  |
| 19             | RESULTANT WIND SPEED   |
| 20             | RESULTANT DIRECTION - (WHOLE DEGREES)  |
| 21             | AVERAGE SPEED  |
| 22             | MAXIMUM 5 SECOND SPEED   |
| 23             | MAXIMUM 5 SECOND DIRECTION   |
| 24             | MAXIMUM 2 MINUTE SPEED   |
| 25             | MAXIMUM 2 MINUTE DIRECTION   |

|           |  |
|-----------|--|
| 26        | DATE   |
|           | NOTE: RESULTANT WIND IS THE VECTOR SUM OF WIND SPEEDS AND DIRECTIONS |
| ELEMENTS: |  |
| 27        | AVERAGE MONTHLY MAXIMUM TEMPERATURE (DEGREES F)                      |
| 28        | MONTHLY MAXIMUM TEMPERATURE DEPARTURE FROM NORMAL (DEGREES F)        |
| 29        | AVERAGE MONTHLY MINIMUM TEMPERATURE (DEGREES F)                      |
| 30        | MONTHLY MINIMUM TEMPERATURE DEPARTURE FROM NORMAL (DEGREES F)        |
| 31        | MONTHLY AVERAGE TEMPERATURE (DEGREES F)                              |
| 32        | MONTHLY AVERAGE TEMPERATURE DEPARTURE FROM NORMAL (DEGREES F)        |
| 33        | MONTHLY AVERAGE DEW POINT (DEGREES F)                                |
| 34        | MONTHLY AVERAGE WET BULB (DEGREES F)                                 |
| 35        | MONTHLY AVERAGE HDD  |
| 36        | MONTHLY AVERAGE CDD  |
| 37        | MONTHLY TOTAL HDD  |
| 38        | MONTHLY HDD DEPARTURE FROM NORMAL                                    |
| 39        | SEASON TO DATE TOTAL HDD   |
| 40        | SEASON TO DATE DEPARTURE FROM NORMAL HDD                             |
| 41        | MONTHLY TOTAL CDD  |
| 42        | MONTHLY CDD DEPARTURE FROM NORMAL                                    |
| 43        | SEASON TO DATE TOTAL CDD   |
| 44        | SEASON TO DATE DEPARTURE FROM NORMAL CDD                             |
| 45        | TOTAL MONTHLY SNOW/ICE WATER EQUIVALENT (INCHES)                     |
| 46        | TOTAL MONTHLY SNOWFALL (INCHES)*                                     |
| 47        | GREATEST MONTHLY 24HR SNOWFALL (INCHES)                              |
| 48        | DATE OF GREATEST MONTHLY 24HR SNOWFALL                               |
| 49        | GREATEST MONTHLY 24HR SNOW DEPTH (INCHES)                            |
| 50        | DATE OF GREATEST MONTHLY 24HR SNOW DEPTH                             |
| 51        | TOTAL MONTHLY PRECIPITATION (INCHES)                                 |
| 52        | MONTHLY PRECIPITATION DEPARTURE FROM NORMAL (INCHES)                 |
| 53        | GREATEST 24HR PRECIPITATION (INCHES)                                 |
| 54        | DATE OF GREATEST 24HR PRECIPITATION                                  |
| 55        | MONTHLY AVERAGE STATION PRESSURE (INCHES HG)                         |
| 56        | MONTHLY AVERAGE SEA LEVEL PRESSURE (INCHES HG)                       |
| 57        | MONTHLY RESULTANT WIND SPEED (MPH)                                   |
| 58        | MONTHLY RESULTANT WIND DIRECTION (TENS OF DEGREES)                   |
| 59        | MONTHLY AVERAGE WIND SPEED (MPH)                                     |
| 60        | MONTHLY MAXIMUM SEA LEVEL PRESSURE (INCHES OF HG)                    |
| 61        | DATE OF MONTHLY MAXIMUM SEA LEVEL PRESSURE                           |
| 62        | TIME OF MONTHLY MAXIMUM SEA LEVEL PRESSURE                           |
| 63        | MONTHLY MINIMUM SEA LEVEL PRESSURE (INCHES OF HG)                    |
| 64        | DATE OF MONTHLY MINIMUM SEA LEVEL PRESSURE                           |
| 65        | TIME OF MONTHLY MINIMUM SEA LEVEL PRESSURE                           |
| 66        | NUMBER OF DAYS WITH MAXIMUM TEMPERATURE >= 90 F                      |
| 67        | NUMBER OF DAYS WITH MAXIMUM TEMPERATURE <= 32 F                      |
| 68        | NUMBER OF DAYS WITH THUNDERSTORMS                                    |
| 69        | NUMBER OF DAYS WITH MINIMUM TEMPERATURE <= 32 F                      |
| 70        | NUMBER OF DAYS WITH MINIMUM TEMPERATURE <= 0 F                       |
| 71        | NUMBER OF DAYS WITH HEAVY FOG  |
| 72        | NUMBER OF DAYS WITH PRECIPITATION >= .01 INCH                        |
| 73        | NUMBER OF DAYS WITH PRECIPITATION >= .10 INCH                        |
| 74        | NUMBER OF DAYS WITH SNOWFALL >= 1.0 INCH                             |

\* Not all stations report snow totals

M = Missing Data, or data that are not normally reported for the station.

- = values not available for sunrise/sunset.



**Table of Remarks and Supplemental Coded Data**

The following groups are reported in the **Remarks** section of the SWO reports. Remarks include clarifying or augmenting data concerning elements in the body of the SWO reports, additive coded data, and maintenance data. If an element or phenomena does not occur, is missing, or cannot be observed, the corresponding group and space are omitted (body and/or remarks) from that particular report, except for Sea-level Pressure (SLPppp). SLPNO shall be reported in a METAR when the SLP is not available. The left most column are examples.

|  |  |  |
|--|--|--|
| <b>TORNADO,<br/>FUNNEL<br/>CLOUD or<br/>WATERSPOUT</b> | TORNADIC<br>ACTIVITY   | Augmented; report should include TORNADO, FUNNEL CLOUD or WATERSPOUT, time (after the hour) of beginning/end, location, movement; e.g., TORNADO B25 N MOVE E   |
| <b>AO2</b>   | TYPE OF<br>AUTOMATED<br>STATION  | AO1; automated station without a precipitation discriminator. AO2; automated station with precipitation discriminator.   |
| <b>PK WND<br/>20032/25</b>                             | PEAK WIND  | PK WND dddff(F)/(hh)mm; direction in tens of degrees, speed in whole knots, time (reported in UTC) in minutes after the hour. Only minutes after the hour is included if the hour can be inferred from the report.   |
| <b>WSHFT 1715</b>                                      | WIND<br>SHIFT,/FONT>   | WSHFT followed by hours and minutes of occurrence. The term FROPA may be entered after the time if it is reasonably certain that the wind shift was a result of a frontal passage.   |
| <b>TWR VIS 2</b>                                       | TOWER OR<br>SURFACE<br>VISIBILITY  | TWR VIS vvvvv: visibility reported by tower personnel, e.g., TWR VIS 2; SFC VIS vvvvv: visibility reported by ASOS or observer.  |
| <b>VIS 3/4V1<br/>1/2</b>                               | VARIABLE<br>PREVAILING<br>VISIBILITY                                     | VIS v <sub>n</sub> v <sub>n</sub> v <sub>n</sub> v <sub>n</sub> v <sub>n</sub> Vv <sub>x</sub> v <sub>x</sub> v <sub>x</sub> v <sub>x</sub> v <sub>x</sub> ; reported if prevailing visibility is <3 statute miles and variable.   |
| <b>VIS 3/4<br/>RWY11</b>                               | VISIBILITY AT<br>SECOND<br>LOCATION                                      | VIS vvvvv(LOC); reported if different than the reported prevailing visibility in the body of the report.   |
| <b>FRQ LTG NE</b>                                      | LIGHTNING  | (FREQUENCY) LTG (LOCATION); when detected the frequency and location is reported, e.g., FRQ LTG NE, meaning frequent lightning to northeast of station. (See code details in table below)  |
| <b>RAB07</b>   | BEGINNING AND<br>ENDING TIME OF<br>PRECIPITATION<br>AND<br>THUNDERSTORMS | w'w'B(hh)mmE(hh)mm; TSB(hh)mmE(hh)mm, where w'w' is the present weather precipitation contraction, B indicates began, E indicates ended; (hh) indicates the hour (reported in UTC) the phenomena began or ended and can be omitted if the hour can be inferred from the report, mm indicates the minutes after the hour the phenomenon began or ended. |
|  | VIRGA  | Augmented to report by human observer; indicates precipitation not reaching the ground is observed.  |
| <b>CIG<br/>013V017</b>                                 | VARIABLE<br>CEILING  | CIG h <sub>n</sub> h <sub>n</sub> h <sub>n</sub> Vh <sub>x</sub> h <sub>x</sub> h <sub>x</sub> ; reported if the ceiling in the body of the report is <3000 feet and variable.   |
| <b>CIG 017</b>   | CEILING HEIGHT   | CIG hhh[LOC]; Ceiling height reported if secondary   |

|                  |   |   |
|------------------|---|---|
| <b>RWY11</b>     | AT SECOND LOCATION                      | ceilometer site ceiling value is different than the ceiling height in the body of the report.   |
| <b>PRESFR</b>    | PRESSURE RISING OR FALLING RAPIDLY      | PRESRR or PRESFR; pressure rising or falling rapidly at time of observation.  |
| <b>SLP125</b>    | SEA LEVEL PRESSURE                      | SLPppp; sea level pressure reported for ppp in tens, units, and tenths of hPa.  |
| <b>P0003</b>     | HOURLY PRECIPITATION AMOUNT             | Prrrrr; in tens, units, tenths and hundredths of an inch since last regular hourly METAR. A trace is reported as P0000.   |
| <b>60009</b>     | 3- AND 6-HOUR PRECIPITATION AMOUNT      | 6RRRR; precipitation amount, including water equivalent, to nearest 0.01 inches for past 6 hours reported in 00, 06, 12, and 18 UTC observations and for past 3 hours in 03, 09, 15, and 21 UTC observations. A trace is 60000.   |
| <b>70015</b>     | 24-HOUR PRECIPITATION AMOUNT            | 7R <sub>24</sub> R <sub>24</sub> R <sub>24</sub> R <sub>24</sub> ; precipitation amount to nearest 0.01 inches for past 24 hours reported in 12 UTC observation; e.g., 70015 indicates 0.15 inches of precipitation for past 24 hours.  |
| <b>T00640036</b> | HOURLY TEMPERATURE AND DEW POINT        | Ts <sub>n</sub> T <sub>a</sub> T <sub>a</sub> T <sub>a</sub> T <sub>a</sub> S <sub>n</sub> T' <sub>a</sub> T' <sub>a</sub> T' <sub>a</sub> ; reported to nearest tenth of °C; s <sub>n</sub> : 1 if temperature or dew point below 0°C and 0 if temperature/dew point 0°C or higher.  |
| <b>10066</b>     | 6-HOUR MAXIMUM TEMPERATURE              | 1s <sub>n</sub> T <sub>x</sub> T <sub>x</sub> T <sub>x</sub> ; maximum temperature for past 6 hours reported to nearest tenth of degree Celsius; reported on 00, 06, 12, 18 UTC reports; s <sub>n</sub> = 1 if temperature below 0°C and 0 if temperature 0°C or higher.  |
| <b>21012</b>     | 6-HOUR MINIMUM TEMPERATURE              | 2s <sub>n</sub> T <sub>n</sub> T <sub>n</sub> T <sub>n</sub> ; minimum temperature for past 6 hours reported to nearest tenth of degree Celsius; reported on 00, 06, 12, 18 UTC reports; s <sub>n</sub> = 1 if temperature below 0°C and 0 if temperature 0°C or higher.  |
| <b>400461006</b> | 24-HOUR MAXIMUM AND MINIMUM TEMPERATURE | 4s <sub>n</sub> T <sub>x</sub> T <sub>x</sub> T <sub>x</sub> S <sub>n</sub> T <sub>n</sub> T <sub>n</sub> T <sub>n</sub> ; maximum temperature for past 6 hours reported to nearest tenth of degree Celsius; reported on midnight local standard time reports; s <sub>n</sub> = 1 if temperature below 0°C and 0 if temperature 0°C or higher; e.g., 400461006 indicates a 24-hour maximum temperature of 4.6°C and a 24-hour minimum temperature of -0.6°C.            |
| <b>58033</b>     | PRESSURE TENDENCY                       | 5appp; the character (a) and amount of change in pressure (ppp) in tenths of hPa for the past 3 hours. (See code details in table below)  |
| <b>TSNO</b>      | SENSOR STATUS INDICATORS                | RVRNO: RVR missing; PWINO: precipitation identifier information not available; PNO: precipitation amount not available; FZRANO: freezing rain information not available; TSNO: thunderstorm information not available (may indicate augmenting weather observer not logged on); VISNO [LOC] visibility at second location not available, e.g. VISNO RWY06; CHINO [LOC]: (cloud-height- indicator) sky condition at secondary location not available, e.g., CHINO RWY06. |
| <b>\$</b>        | MAINTENANCE                             | Maintenance is needed on the system.  |

|  |                    |  |
|--|--------------------|--|
|  | CHECK<br>INDICATOR |  |
|--|--------------------|--|

Table of Remarks Referring to Type and Frequency of Lightning

| Type of Lightning      |             |  |
|------------------------|-------------|--|
| Type                   | Contraction | Definition   |
| Cloud-ground           | CG          | Lightning occurring between cloud and ground.  |
| In-cloud               | IC          | Lightning which takes place within the cloud.  |
| Cloud-cloud            | CC          | Streaks of lightning reaching from one cloud to another.                               |
| Cloud-air              | CA          | Streaks of lightning which pass from a cloud to the air, but do not strike the ground. |
| Frequency of Lightning |             |  |
| Frequency              | Contraction | Definition   |
| Occasional             | OCNL        | Less than 1 flash per minute.  |
| Frequent               | FRQ         | About 1 to 6 flashes per minute.   |
| Continuous             | CONS        | More than 6 flashes per minute.  |

## HOURLY OBSERVATIONS DOCUMENTATION

WATER EQUIVALENT IN INCHES  
T = TRACE PRECIPITATION AMOUNT  
M = MISSING DATA

\*\* THE SUM OF THE HOURLY TOTALS IS GIVEN WHEN IT DIFFERS FROM THE DAILY TOTAL. NWS DOES NOT EDIT ASOS HOURLY VALUES BUT MAY EDIT DAILY AND MONTHLY TOTALS. HOURLY, DAILY, AND MONTHLY TOTALS ARE PRINTED AS REPORTED BY THE ASOS SITE.

HOURLY PRECIPITATION DATA ARE NOT NORMALLY AVAILABLE FOR AWOS SITES.

\*\* NCDC DERIVES THE MONTHLY SHORT DURATION PRECIPITATION FROM 1 MINUTE ASOS DATA. THE MONTHLY SHORT DURATION PRECIPITATION DATA ARE NOT PRINTED WHEN INCONSISTENT WITH ASOS HOURLY TOTALS.

## NUMERICAL CODES LISTING FOR HOURLY OBSERVATIONS

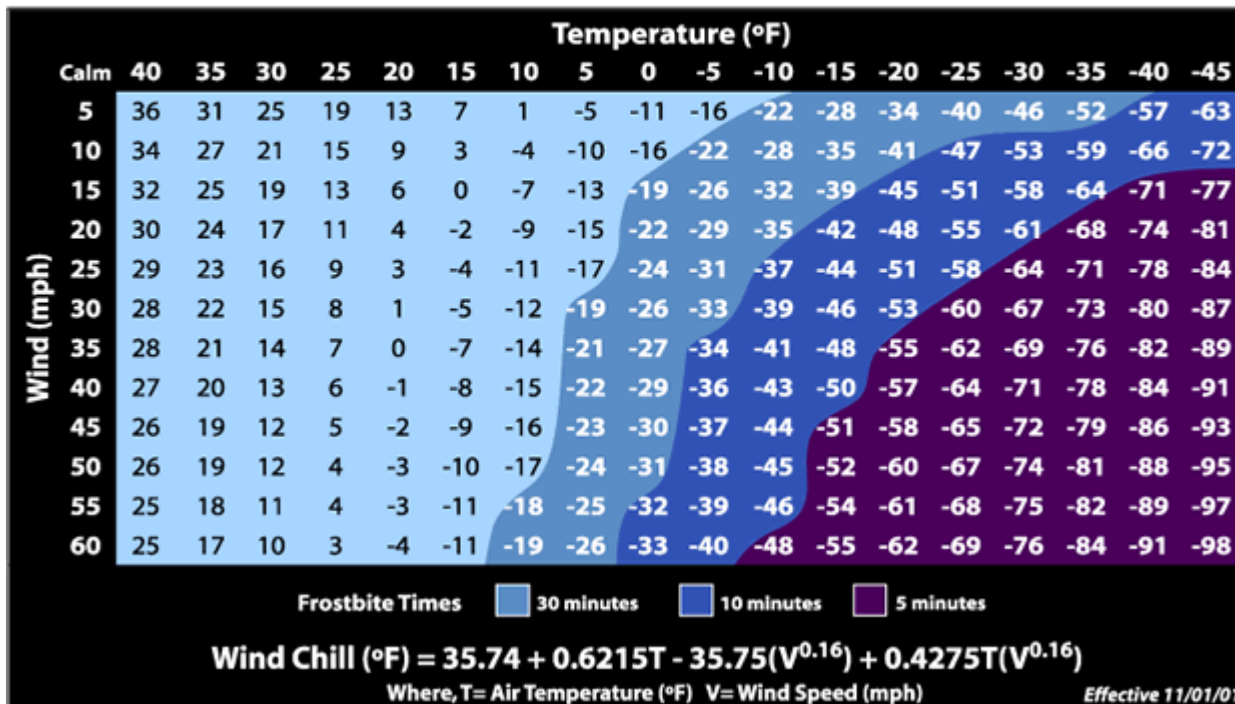
| COLUMN | TERMINOLOGY   |
|--------|---|
| 1      | DATE  |
| 2      | TIME: TIME IN LST (LOCAL STANDARD TIME)   |
| 3      | STATION TYPE<br>0 AMOS now AWOS, also USAF stations<br>4 MAPSO<br>5 Navy METAR<br>6 Navy Airways(obsolete)<br>8 SOD- Keyed from 10C<br>9 SOD/HPD- Keyed B16, F-6, Navy Forms<br>11 ASOS (NWS)<br>12 ASOS (FAA)<br>15 Climate Reference Network (CRN)  |
| 4      | Sky Conditions<br>SKY CONDITIONS BELOW 12,000 FEET AGL (ABOVE GROUND LEVEL)<br>SKY CONDITIONS CONTRACTIONS ARE FOR EACH LAYER IN ASCENDING ORDER.<br>NUMBERS FOLLOWING CONTRACTIONS ARE BASE HEIGHT IN HUNDREDS OF FEET ABOVE GROUND LEVEL (AGL).<br>CLR: CLEAR BELOW 12,000 FT<br>FEW: > 0/8 - 2/8 SKY COVER<br>SCT SCATTERED: 3/8 - 4/8 SKY COVER<br>BKN BROKEN: 5/8 - 7/8 SKY COVER<br>OVC OVERCAST: 8/8 SKY COVER<br><br>VVXXX INDICATES INDEFINITE CEILING WITH THE VERTICAL VISIBILITY (XXX) LISTED IN HUNDREDS OF FEET.<br><br>WHEN CLOUDS ARE COMPOSED OF TOWERING CUMULUS OR CUMULONIMBUS, TCU OR CB (RESPECTIVELY) FOLLOW CLOUD HEIGHT. |



|    |   |
|----|---|
|    | SOME STATIONS REPORT CLOUDS ABOVE 12,000 FEET.  |
| 5  | VISIBILITY IN STATUTE MILES (SM)  |
| 6  | (SEE DAILY TABLE #12 FOR EXPLANATION OF WEATHER TYPES)  |
| 7  | DRY BULB TEMPERATURE (DEGREES F) WHOLE DEGREES  |
| 8  | DRY BULB TEMPERATURE (DEGREES C) ASOS IN TENTHS; AWOS IN WHOLE DEGREES                                      |
| 9  | WET BULB TEMPERATURE (DEGREES F) WHOLE DEGREES  |
| 10 | WET BULB TEMPERATURE (DEGREES C) ASOS IN TENTHS; AWOS IN WHOLE DEGREES                                      |
| 11 | DEW POINT TEMPERATURE (DEGREES F) WHOLE DEGREES   |
| 12 | WET BULB TEMPERATURE (DEGREES C) ASOS IN TENTHS; AWOS IN WHOLE DEGREES                                      |
| 13 | RELATIVE HUMIDITY (PERCENT)   |
| 14 | WIND SPEED (MPH)  |
| 15 | WIND DIRECTION (TENS OF DEGREES FROM TRUE NORTH)<br>VRB = VARIABLE WITH SPEED EQUAL TO OR LESS THAN 6 KNOTS |
| 16 | WIND CHARACTERISTIC GUSTS (MPH)   |
| 17 | STATION PRESSURE (INCHES IN HUNDREDTHS)   |
| 18 | PRESSURE TENDENCY   |
| 19 | NET 3 HOUR CHANGE (MILLIBARS)   |
| 20 | SEA LEVEL PRESSURE (INCHES IN HUNDREDTHS)   |
| 21 | REPORT TYPE:<br>AA - METAR (AVIATION ROUTINE WEATHER REPORT) - HOURLY<br>SP - METAR SPECIAL REPORT          |
| 22 | PRECIPITATION TOTALS (INCHES AND HUNDREDTHS)<br>HOURLY TOTALS IF COLUMN 20 IS "AA" (HOURLY METAR REPORT).   |
| 23 | ALTIMETER (INCHES IN HUNDREDTHS)  |



## Wind Chill Chart



Source: <http://www.nws.noaa.gov/om/windchill/index.shtml>

Surface Weather Observations - METAR always have wind speeds originally reported in knots. The conversion table below will provide a quick conversion for winds from calm to 99 knots. The converted values are all rounded to the nearest integer. For a more accurate conversion use the following formula:  
 KNOT = 1.15155 MILES PER HOUR

| Knots to Miles Per Hour Conversion Chart |     |     |     |     |     |     |     |     |     |     |
|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| K  | 0   | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   |
| T  | MPH | MPH | MPH | MPH | MPH | MPH | MPH | MPH | MPH | MPH |
| S  |     |     |     |     |     |     |     |     |     |     |
| 0  | 0   | 1   | 2   | 3   | 5   | 6   | 7   | 8   | 9   | 10  |
| 10                                       | 12  | 13  | 14  | 15  | 16  | 17  | 18  | 20  | 21  | 22  |
| 20                                       | 23  | 24  | 25  | 26  | 28  | 29  | 30  | 31  | 32  | 33  |
| 30                                       | 35  | 36  | 37  | 38  | 39  | 40  | 41  | 43  | 44  | 45  |
| 40                                       | 46  | 47  | 48  | 49  | 51  | 52  | 53  | 54  | 55  | 56  |
| 50                                       | 58  | 59  | 60  | 61  | 62  | 63  | 64  | 66  | 67  | 68  |
| 60                                       | 69  | 70  | 71  | 72  | 74  | 75  | 76  | 77  | 78  | 79  |
| 70                                       | 81  | 82  | 83  | 84  | 85  | 86  | 87  | 89  | 90  | 91  |
| 80                                       | 92  | 93  | 94  | 96  | 97  | 98  | 99  | 100 | 101 | 102 |
| 90                                       | 104 | 105 | 106 | 107 | 108 | 109 | 110 | 112 | 113 | 114 |

| TEMPERATURE - HUMIDITY INDEX (STEADMAN, 1979) |     |     |     |     |     |     |     |     |     |     |     |  |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| RELATIVE HUMIDITY (PERCENT)                   |     |     |     |     |     |     |     |     |     |     |     |  |
|   | 0   | 10  | 20  | 30  | 40  | 50  | 60  | 70  | 80  | 90  | 100 |  |
| T > 120                                       | 107 | 116 | 130 | 148 |     |     |     |     |     |     |     |  |
| E > 115                                       | 103 | 111 | 120 | 135 | 151 |     |     |     |     |     |     |  |
| M > 110                                       | 99  | 105 | 112 | 123 | 137 | 150 |     |     |     |     |     |  |
| P > 105                                       | 95  | 100 | 105 | 113 | 123 | 135 | 149 |     |     |     |     |  |
| E > 100                                       | 91  | 95  | 99  | 104 | 110 | 120 | 132 | 144 |     |     |     |  |
| R > 95  | 87  | 90  | 93  | 96  | 101 | 107 | 114 | 124 | 136 |     |     |  |
| A > 90  | 83  | 85  | 87  | 90  | 93  | 96  | 100 | 106 | 113 | 122 |     |  |
| T > 85  | 78  | 80  | 82  | 84  | 86  | 88  | 90  | 93  | 97  | 102 | 108 |  |
| U > 80  | 73  | 75  | 77  | 78  | 79  | 81  | 82  | 85  | 86  | 88  | 91  |  |
| R > 75  | 69  | 70  | 72  | 73  | 74  | 75  | 76  | 77  | 78  | 79  | 80  |  |
| E > 70  | 64  | 65  | 66  | 67  | 68  | 69  | 70  | 70  | 71  | 71  | 72  |  |

### Pressure Tendency description:

- 0: Increasing, then decreasing; atmospheric pressure the same or higher than 3 hours ago
- 1: Increasing then steady; or increasing, then increasing more slowly; atmospheric pressure now higher than 3 hours ago
- 2: Increasing (steadily or unsteadily); atmospheric pressure now higher than 3 hours ago
- 3: Decreasing or steady, then increasing; or increasing, then increasing more rapidly; atmospheric pressure now higher than 3 hours ago
- 4: Steady; atmospheric pressure the same as 3 hours ago
- 5: Decreasing, then increasing; atmospheric pressure the same or lower than 3 hours ago
- 6: Decreasing, then steady; or decreasing, then decreasing more slowly; atmospheric pressure

now lower than 3 hours ago

7: Decreasing (steadily or unsteadily); atmospheric pressure now lower than 3 hours ago

8: Steady or increasing, then decreasing; or decreasing, then decreasing more rapidly;  
atmospheric pressure now lower than 3 hours ago

9: Missing