# Appendix A

**Description of fields found in the Text table and in the Time Series options.**

## COLUMN HEADERS

**Ht (m)** – Height
**Spd (m/s)** – Vector speed
**Dir (deg)** – Vector direction
**W (m/s)** – Vertical Velocity (a.k.a. radial velocity of the W component)
**SDW** – Standard Deviation of the W component
**IW (millivolts)** – Intensity of the return signal of the W component
**GSPD (m/s)** – Gust Speed in m/s
**GDIR (deg)** – Gust Direction in m/s
**U (m/s)** – Radial velocity of the U component
**SDU** – Standard Deviation of the U component
**NU (count)** – Number of quality return signals for the U component
**IU (millivolts)** – Intensity of the return signal of the U component
**SNRU** – Signal to Noise Ration of the U component
**V (m/s)** – Radial velocity of the V component
**SDV** – Standard Deviation of the V component
**NV (count)** – Number of quality return signals for the V component
**IV (millivolts)** – Intensity of the return signal of the V component
**SNRV** – Signal to Noise Ration of the V component
**NW (count)** – Number of quality return signals for the W component
**SNRW** – Signal to Noise Ration of the W component

## FOOTERS

**TC (deg C)** – Temperature (requires NM### or WXT##)
**RH (%)** – Relative Humidity (requires NM### or WXT##)
**Pmb (millibars)** – Barometric Pressure (requires NM### or WXT##)
**Rmm (mm)** – Rainfall Accumulation (requires WXT##)
**Rsec (s)** - Rainfall Duration (requires WXT##)
**Hhits/cm2 (hits/cm$^2$)** – Hail (requires WXT##)
**Hsec (s)** – Hail Duration (requires WXT##)
**DewPT (deg C)** – Dew Point (requires NM###)
**PTDir (deg)** – Magnetic Direction (requires NM###)
**HEATON** – Percent of time the heater ran during the averaging interval
**GENON** – Percent of time the generator ran during the averaging interval
**FUEL** – Percent of fuel remaining in the fuel tank
**RAIN** – Percent of time the rain was present during the averaging interval
**SNOW** – Percent of time the snow was present during the averaging interval

# Appendix B

## Descriptions of the Information found in the 4 line WindTable Header

The first header line is defined as:

| Position | Item | Description | Units |
|---|---|---|---|
| 1 | Site Name | Name of the site as specified by user | |
| 2 | Start Date/Time | | |
| 3 | End Date/Time | | |
| 4 | Software Version | | |
| 5 | Frequency & Reflector Type | Transmit Frequency concatenated with letter(s) representing reflector type | HZ (R,TP,S) |
| 6 | Bw | Filter Bandwidth | Hz |
| 7 | Damp | % Amplitude Level | % |
| 8 | Pulw | Transmit pulse width | millisecond |
| 9 | Rise | Pulse shading | millisecond |
| 10 | Rofs | In phase offset | millivolt |
| 11 | Jofs | Quadrature offset | millivolt |
| 12 | Temp | Temperature (found on models with temp sensors or 3m mets) | deg C |

The second header line is defined as:

| Position | Item | Description | Units |
|---|---|---|---|
| 1 | Sec | Wind table time reporting interval | Seconds |
| 2 | Avdst | Wind table altitude reporting interval | Meters |
| 3 | Amp | Fixed amplitude threshold | |
| 4 | Snr | Signal to Noise threshold | |
| 5 | Back | % of background noise set as threshold | |
| 6 | Noms | Not used | |
| 7 | Nwt | Not used | |
| 8 | Gd | Percent good threshold | % |
| 9 | Nfft | Number of FFT points | |
| 10 | Srate | Digital sampling rate | Hz |
| 11 | Clut | Ground clutter rejection flag | |
| 12 | Nbini | Signal search window | # points |
| 13 | Ngav | Number of pulses for gust detection | |
| 14 | Mincr | C Beam spectra search limit (lower) | Radial m/s |
| 15 | Maxcr | C Beam spectra search limit (upper) | Radial m/s |
| 16 | Minbr | B Beam spectra search limit (lower) | Radial m/s |
| 17 | Maxbr | B Beam spectra search limit (upper) | Radial m/s |
| 18 | Minar | A Beam spectra search limit (lower) | Radial m/s |
| 19 | Maxar | A Beam spectra search limit (upper) | Radial m/s |
| 20 | Wdog | Watchdog timer enable flag | |
| 21 | Mxdel | Mixing height amplitude detection threshold | Millivolt |
| 22 | Ptdir | Sodar reference from rotation angle | Degrees |
| 23 | Wmax | Vertical velocity detection threshold | m/s |
| 24 | Phase | Interelement spacing | Cm |
| 25 | Speci | S file output interval increment | |
| 26 | Specl | S file number of levels output | |
| 27 | Specm | S file flag to detail number of axes recorded | |
| 28 | Specn | S file number of pulse averages | |
| 29 | Specs | S file index of first level recorded | |
| 30 | Cdia | DFS data axis | |
| 31 | Cdid | DFS number of SRATE samples per level | |
| 32 | Cdin | DFS number of pulses per record | |

The third header line is defined as:

| Position | Item | Description | Units |
|---|---|---|---|

| | | | |
|---|---|---|---|
| 1 | Axes | Number of active beams | |
| 2 | Levels | Number of sampling altitudes | |
| 3 | ZenithV | Zenith angle of V beam | Deg |
| 4 | ZenithU | Zenith angle of U beam | Deg |
| 5 | Rotation | Sodar antenna rotation angle | Deg |
| 6 | Separation | Deviation of sodar reference from orthogonal orientation | Deg |
| 7 | mixHt | Detected mixing height | Meters |
| 8 | rmnU | Noise sample for U beam (X) | millivolt |
| 9 | rmnV | Noise sample for V beam (Y) | millivolt |
| 10 | rmnW | Noise sample for W beam (Z) | millivolt |
| Fields below are only provided on systems with applicable options | | | |
| 11 | Antenna status | Status of speakers in antenna (with speaker fault detection, not real-time) | |
| 12 | AC status | Status of backup UPS (optional and used for obsolete configurations) | |
| 13 | Anemometer Temperature | Temperature from a 3m met sensor (only available on systems with 3m met sensor) | Deg C |
| 14 | Battery Voltage | ASP battery voltage (DC systems only) | Volts |
| | | | |

## The fourth header line is defined as:

| Position | Item | Description | Units |
|---|---|---|---|
| Fields below are only provided on systems with applicable options | | | |
| 1 | Antenna status | Status of speakers in antenna (with speaker fault detection, not real-time) | |
| 2 | AC status | Status of backup UPS (optional and used for obsolete configurations) | |
| 3 | Battery Voltage | ASP battery voltage (DC systems only) | Volts |
| 4 | Anemometer Temperature | Temperature from a 3m met sensor (only available on systems with 3m met sensor) | Deg C |
| 5 | Generator Status | Percent of generator runtime during the last averaging interval | % |
| 6 | Fuel Level | Percent of Fuel remaining as of the last averaging interval | % |
| 7 | Rain Status | Percent of time rain was detected during last averaging interval | % |
| 8 | Snow Status | Percent of time snow was detected during last averaging interval | % |
| 9 | Heater Status | Percent of time the heater was on during last averaging interval | % |