

Table A1: Data Block Format for Data Manager Daily Data Files (*.dat)
(also called PCSodar Wind Data Files)

Line No.	Parameter
1	Station name, year, month, day, time, PCSodar version number.
2	Averaging time (min), transmit frequency (Hz), range (m), range interval (m), first gate (m), pulse duration (ms), pulse level (%), rotation angle (deg), ambient temperature (C), vertical wind speed correction (true/false), minimum signal-to-noise ratio (dB), minimum amplitude, minimum percent data, FFT size, sample rate (Hz), bin width (bins), u bandwidth (bins), v bandwidth (bins), w bandwidth (bins), Hamming (true/false), Hanning (true/false), compensation delay time (ms), frequency input compensation (degrees), frequency output compensation (degrees), channel 1 w amplitude (%), channel 2 w amplitude (%), channel 1 u/v amplitude (%), channel 2 u/v amplitude (%), w phase compensation (degrees), u/v phase compensation (degrees), element spacing (cm), reflector board option, in situ option, temperature 1 option, temperature 2 option, solar radiation option, precipitation option, relative humidity option, battery voltage option, relay delay (ms), system delay (sec), pulse ramp (%), temperature 2 or precip switch option, solar radiation or generator option, parameter 2 ID, W echo rejection option, V echo rejection option, U echo rejection option, compass option, roof option, solar charger current option, pressure display units option, sonic anemometer option, propane heater control option
3	Height (m), vector wind speed (m/s), vector wind direction (deg), wind speed/wind direction reliability, w speed (m/s), w reliability, w count, w standard deviation (m/s), w amplitude, w noise, w signal-to-noise ratio, w valid count, v speed (m/s), v reliability, v count, v standard deviation (m/s), v amplitude, v noise, v signal-to-noise ratio, v valid count, u speed (m/s), u reliability, u count, u standard deviation (m/s), u amplitude, u noise, u signal-to-noise ratio, u valid count
4 up to last range gate	A line formatted like Line No. 3 for each range gate. <i>Example:</i> For 14 range gates, the data block would contain 14 lines of sodar data formatted as shown for Line No. 3.
<i>If any external sensors are being sampled, their data will be recorded following the wind data, in this sequence.</i>	
	<i>anemometer</i> (Arithmetic wind speed (m/s), unit vector wind direction (deg), vector wind speed (m/s), vector wind direction (deg), wind direction standard deviation (deg))
	<i>temperature 1</i> (deg. C)
	<i>temperature 2</i> (deg. C) or <i>precipitation switch</i> (volts)
	<i>solar radiation</i> (watts/m ²), <i>generator voltage</i> (volts), or <i>barometric pressure</i> (mb or mm Hg)
	<i>precipitation</i> (mm)
	<i>relative humidity</i> (%)
	<i>battery</i> (volts)

Line No.	Parameter
	roof status
	compass (heading (degrees), heading standard deviation (degrees), pitch (degrees), pitch standard deviation (degrees), roll (degrees), roll standard deviation (degrees))
	solar charger current (amps)
	sonic anemometer (scalar wind speed (m/s), unit vector wind direction (degrees), vector wind speed (m/s), vector wind direction (degrees), vertical speed (m/s), elevation angle (degrees), wind speed standard deviation (m/s), vertical speed standard deviation (m/s), wind direction standard deviation (degrees), speed of sound (m/s), temperature (degrees C), voltage (volts))
	Heater temperature (degrees C)