RAPTOR™ Radar Wind Profiler

Interface Control Document (ICD) for Wind Profiler Science Data

Document 9000206 — Rev C

Notice of Proprietary Information

The following table displays changes in each of this document's revisions.

Revision	Issue Date	Description of Changes	Originator
A	June 26, 2009	Added Item numbers to Table 2. Clarified height is in meters (not km). Clarified that the "number of levels" is the value representing the number of data lines following the header.	S. McLaughlin
A	December 19, 2010	Added data format for on-demand raw spectral data files	B. Weber
A	December 22, 2010	Identified data types. Included clarifications and modifications based on review by Larry Trost.	B. Weber
A	January 10, 2011	Created Table 1, page numbers, headers, footers, formatting, and editing.	A. Rae
A	July 10, 2012	Modified Threshold values POW: 100 to 150, SNR: -25 to -100	B. Weber
A	August 28, 2012	Added RASS temperature section. Corrected some existing content. Updated header and footer formats.	D. Merritt, A. Rae
A	April 3, 2014	Updated logos, Added CNS file definitions	A. Rae, M. James
B	Nov 1, 2016	Minor edits to wind section	T. Wilfong
C	June 1, 2017	Updated for CWB, removed RASS temperature moment data and RASS consensus file section.	B. Kostreva D. Merritt T. Wilfong

Table of Contents

1 Introduction

This document describes the science data products and their data file formats generated on the WPC (Wind Profiler Computer) by BIRCH (Basic Interface for Radar Control and Health) and ASPEN (Advanced Signal Processing ENgine).

The science data products are described in Table 1-1.

Table 1-1: RAPTOR RWP Science Data Products

No.	Science Data Products	File Types
I	• Adjustable resolution (e.g. 5-minute) wind data (speed, direction, u, v, w) at all heights for all antenna beams. • Adjustable resolution (e.g. 5-minute) moment data (radial velocity, signal power, spectral width, plus SNR) at all heights for all antenna beams.	ASCII data files generated by ASPEN communicated by the WPC to a CCS. BUFR data files generated by VizRCM on the WPC.
II	• Adjustable resolution (e.g. 10-minute) wind data (speed, direction, u, v, w) at all heights for all antenna beams. • Adjustable resolution (e.g. 10-minute) moment data (radial velocity, signal power, spectral width, plus SNR) at all heights for all antenna beams.	ASCII data files generated by ASPEN communicated by the WPC to a CCS. BUFR data files generated by VizRCM on the WPC.
III	• 60-minute wind data (speed, direction, u, v, w) at all heights for all antenna beams. • 60-minute moment data (radial velocity, signal power, spectral width, plus SNR) at all heights for all antenna beams.	ASCII data files generated by ASPEN communicated by the WPC to a CCS.
IV	24 hour consensus wind data files. There are two types of files – high resolution and hourly. Only the highest temporal resolution data are appended to high temporal resolution files at the production interval specified in ASPEN (e.g. 5 minutes) The hourly consensus data are appended to the hourly files at 60 minute intervals.	ASCII data files generated by ASPEN communicated by the WPC to a CCS.
V	Raw spectral image files including averaged radar Doppler spectra for all heights and antenna beams.	PNG format graphics files generated by BIRCH, communicated by the WPC to a CCS.
VI	Raw moment data files.	Binary data file generated by ASPEN.
VII	Raw spectral data files.	Binary data file generated by BIRCH.

A selectable set of these science data products are communicated by the WPC to a CCS (Client Computer System). The interface for communication between WPC and CCS is described in 9001633 (VIZRCM Remote Data Monitor Client) and 9001621 (VIZRCM Remote Control Client).

All science data products listed in Table 1-1 are stored on the WPC and may be transferred locally to recording media for distribution. The total disk space requirement for all science data products is less than about 3GB per day.

2 Wind

2.1 Wind Moment Data Files (I, II, III)

ASPEN generates wind and moment ASCII data files of three types: two high temporal resolution files produced every N and NN minutes (by default; N and NN are adjustable by the user e.g. 5 and 10 minutes) and hourly files produced every 60 minutes. The high temporal resolution files and the hourly files have exactly the same format but they have slightly different file names. The high temporal resolution file contains wind and radial moment data averaged over the most recent time (typically 30 minutes) prior to the generation of this file. The hourly file contains wind and radial moment data averaged over the most recent 60 minutes prior to the generation of this file. Table 2-1 shows the filename description for each wind and moment file type.

Table 2-1: Wind and Moment File Name Description

Item	Description
Filename (oblique beams only or oblique beam vertical beam used)	wyyyy-mm-dd-hh-mm_rr.asd where w indicates a wind file and yyyy-mm-dd-hh-mm is the end time of the observation and rr is the reporting time interval (resolution), e.g. 05 for 5-minute data, 10 for ten minute data and 60 for hourly data.
Filename (Vertical Beam)	vyyyy-mm-dd-hh-mm_rr.asd. The naming convention is the same with the exception that the first letter –v – indicates only vertical beam data. The vertical beam file is created anytime a vertical beam is used either in a group combined with oblique beams or in a group with only the vertical beam.

The format and field descriptors for the Wind Files are given in Table 2-2 and Table 2-3. The high temporal resolution wind and moment file sizes are estimated to be less than 30KB each and less than 7.2 MB per day, depending on temporal resolution. The hourly wind and moment file sizes are estimated to be less than 30KB each and less than 0.72MB per day.

Each wind and moment file contains two repeated section types: a header (H) and the meteorological data (D). These are repeated for multiple modes. For example for three modes (1,2,3), the wind and moment file contains the following sections: H1, D1, H2, D2, H3, D3. Each header (H) contains mode information. A change in mode is defined as any change in any of the operating parameters of the radar, such as, the coherent or incoherent averaging, number of FFT points, number of code bits, pulse width, or inter-pulse period (IPP), etc.

Table 2-2 and Table 2-3 further define the header and data sections. The wind and moment data file contains wind components, i.e., height, wind speed, wind direction, and all vector components (u, v, and w). The wind and moment data file also contains radial moment data, i.e., radial velocity, signal power, spectral width, and SNR for all antenna beam positions.

Table 2-2: Wind and Moment File Header Nomenclature and Data Content by Line Number[1]

Line	Description					
1	Site Name		Site Identifier			
2	File Data Type		File Format Version			
3	Site Latitude		Site Longitude		Site Elevation	
4	Date of end of averaging period		24-hour time of end of averaging period		UTC time zone difference	
5	Mode Name	Mode Number	Mode TX power	Mode pulse width	Mode number code bits	Mode IPP
6[2]	Mode zenith angle	Mode number of beam positions, n	Mode Azimuth 1	Mode Azimuth 2…	Mode Azimuth n	
7	Mode number gates	Mode number FFT points	Mode NTDI	Mode NFDI		
8	Mode number of levels[3] "N"	Mode averaging time	Mode QC interval			
9	Labels for data lines: HT SPD DIR QC U V W SD_H SD_W VEL NUM POW SNR WDTH					
10	Data entries for Level 1					
…	…					
10+N-1	Data entries for Level N					
10+N	$ (this character indicates the end of data)					

The units, the ranges of values, and the threshold values for the field descriptors from Table 2-2 are given in Table 2-3. The Range indicates the nominal range of values for the data. The threshold, when exceeded, indicates an error condition.

[1] Items in the data file that are separated by white space have extra columns in this table.

[2] For each beam position (1 .. n) there is an azimuth angle.

[3] The "number of levels" is the number of data lines following the header. (Note that this is not necessarily the same as "number of gates." The number of gates is related to hardware sampling.)

Table 2-3: Wind File Descriptors

Item	Name	Description	Type or Format Specifier	Units	Range	Threshold	Example
1	Site Name	Name of physical site, one word, no spaces or punctuation, no more than 8 ASCII characters.	Alphanumeric, %8s	n/a	n/a	n/a	Longmont
2	Site Identifier	Radar ID: can be WMO, ICAO or other customer designated value. Can be any combination of letters or numbers (no white space).	Alphanumeric, %5s	n/a	n/a	n/a	LMTCO
3	File Data Type	Indicates the name of the data type (no white space).	Alphanumeric	n/a	n/a	n/a	wind
4	File Format Version	Version number of this file format.	Numeric, %7.3f	n/a	1.0 to 999.999		1.02
5	Site Latitude	Two digits immediately to the left of the decimal point are whole minutes, to the right are decimals of minutes, and the remaining digits to the left of the whole minutes are whole degrees. (ddmm.mmmmm). <0 indicates South and >0 indicates North.	Numeric, %10.5f	(from GPS GGA format)	-90 to +90	< -90, > +90	4009.29533 [is 40° 09.29533’ or 40° 09’ 17.72”]
6	Site Longitude	Two digits immediately to the left of the decimal point are whole minutes, to the right are decimals of minutes, and the remaining digits to the left of the whole minutes are whole degrees. (dddmm.mmmmm). <0 indicates West and >0 indicates East.	Numeric, %11.5f	(from GPS GGA format)	-180 to +180	< -180, < +180	-10512.42580 [is -105° 12.4258’ or -105 12’ 25.71”]
7	Site Elevation	Elevation in meters above mean sea level.	Numeric, %6.1f	Meters	-86 to 3500	< - 86, > +3500	1516.1

Item	Name	Description	Type or Format Specifier	Units	Range	Threshold	Example
8	End date of averaging period	Date of end of averaging period.	YYYY-MM-DD	Where YYYY is year, MM is month, and DD is day	2009-06-01 to 3000-01-01	< 2009-06-01, > 3000-01-01	2009-05-26
9	End time of averaging period	Time of end of averaging period.	hh:mm:ss	Where hh is hours, mm is minutes, and ss is seconds	00:00:00 to 23:59:59	< 00:00:00, > 23:59:59	12:12:00
10	UTC time zone difference	Difference in hours and minutes of the data file time from UTC[4] (if equal zero, then date and time are UTC). Difference = UTC – data file time	hh:mm	Where hh is hours, and mm is minutes	-12:00 to +12:00	< -12:00, > +12:00	-06:00
11	Mode Name	Name of wind profiler operational mode (no white space).	Alphanumeric, %8s	n/a	n/a		Lo-Low
12	Mode Number	Mode number from configuration file	Numeric, %2u	n/a	1 to 16	< 1, > 16	3
13	Mode TX power	Transmit power level setting (based on 8 bit value).	Numeric, %3u	n/a	0 to 255	< 0, > 255	225
14	Mode pulse width	Pulse width of this mode.[5]	Numeric, %5.3	Microseconds	0.100 to 9.0	< 0.1, > 9.0	1.2
15	Mode number code bits	Number of phase code bits in a pulse.	Numeric, %2u	n/a	0 to 32	< 1, > 32	4
16	Mode IPP	Inter-pulse period of this mode.	Numeric, %8.2f	Microseconds	10 to 500	< 0, > 500	78.4
17	Mode zenith angle	Angle from vertical.	Numeric, %5.1f	Degrees	0 to 30	< 0, > 30	16.0

[4]The WPC should always be set to UTC.

[5] The basis of the range resolution. This is not the same as the “Number of levels” which may be different.

Item	Name	Description	Type or Format Specifier	Units	Range	Threshold	Example
18	Mode number of beam positions, b	Number of azimuth beam positions.	Numeric, %2u	n/a	0 to 24	< 0, > 24	4
19	Mode azimuth 1 .. b	Pointing azimuth, from true North.	Numeric, %5.1f	Degrees	0 to 359.9	< 0, > 359.9	33.7
20	Mode number of range gates	Number of range gates (sampled gates) for this mode.[6]	Numeric, %4u	n/a	1 to 1024	< 1,> 1024	80
21	Mode FFT points	Fast Fourier Transform length.	Numeric, %5u	n/a	16 to 32768	< 16, > 32768	16384
22	Mode NTDI	Number of time domain integrations.	Numeric, %4u	n/a	1 to 1024	< 1, > 1024	16
23	Mode NFDI	Number of frequency domain integrations.	Numeric, %4u	n/a	1 to 1024	< 1, > 1024	10
24	Mode number levels	Number of reporting levels for this mode.[7]	Numeric, %4u	n/a	1 1024	< 1, > 1024	120
25	Mode averaging time	Met data averaging time for this mode.	Numeric, %3u	Seconds	1 to 7200	< 1, > 7200	900
26	Mode QC interval	Quality control interval for this mode.	Numeric, %3u	Seconds	1 to 14400	< 1, > 14400	1800
The following definitions are for the data line labels and the data itself.							
27	HT	The altitude of the center of the range gate.	Numeric, %8.4f	Meters above ground level (site elevation)	0.00 to 60000	< 0, > 60000	123.4525
28	SPD	The wind speed. 999.9 if missing.	Numeric, %8.4f	m/s	0 to 125	< 0, > 125 (or 999.9)	12.6

[6] The hardware defined sampling of the return signal, not necessarily the final computed levels.

[7] The "number of levels" is the number of data lines following the header. (Not necessarily the same as "number of gates." The number of gates is related to hardware sampling.)

Item	Name	Description	Type or Format Specifier	Units	Range	Threshold	Example
29	DIR	The direction from which the wind is blowing (degrees clockwise from True North). 999.9 if missing.	Numeric, %5.1f	Degrees	0 to 359.9	< 0, > 359.9 (or 999.9)	272.1
30	QC	A decimal value between 0 to 1 indicating the quality of the winds at the given level.	Numeric, %4.2f	n/a	0 to 1, inclusive	< 0, > 1	.78
31	U	Zonal wind. 999.9 if missing.	Numeric, %9.4f	m/s	-125 to +125	< -125, > 125 (or 999.9)	12.6
32	V	Meridional wind. 999.9 if missing.	Numeric, %9.4f	m/s	-125 to +125	< -125, > 125 (or 999.9)	-12.6
33	W	Vertical wind. 999.9 if missing.	Numeric, %8.4f	m/s	-20 to +20	< -20, > +20 (or 999.9)	-2.1
34	SD_H	The standard deviations for SPD. 999.9 if missing.	Numeric, %8.4f	m/s	0 to 100	< 0, > 100 (or 999.9)	0.59
35	SD_W	The standard deviations for W. 999.9 if missing.	Numeric, %8.4f	m/s	0 to 100	< 0, > 100 (or 999.9)	0.17
36	VEL	The radial velocity (all beams). 999.9 if missing.	Numeric, %8.4f	m/s	-35 to 35	<-35, >35 (or 999.9)	3.14
37	NUM	The number of measurements averaged in radial velocity (all beams). 9999 if missing.	Numeric, %4u	n/a	0 to 1000	<0, >1000 (or 9999)	8
38	POW	The power of the atmospheric signal associated with VEL (all beams). 999.9 if missing.	Numeric, %8.4f	dB	-25 to 150	< -25,> 150 (or 999.9)	45
39	SNR	The signal to noise ratio of the atmospheric signal associated with VEL (all beams). 999.9 if missing.	Numeric, %8.4f	dB	-100 to 100	< -100, > 100 (or 999.9)	-11.2

Item	Name	Description	Type or Format Specifier	Units	Range	Threshold	Example
40	WDTH	The spectral width of the atmospheric signal associated with VEL (all beams). 999.9 if missing.	Numeric, %8.4f	m/s	0 to 25	< 0, > 24 (or 999.9)	3.22
41	$	Indicates the end of the data.	Literal, ASCII	n/a	n/a	n/a	$

2.2 Wind Consensus Data Files (IV)

When enabled, ASPEN will append wind records to a consensus data file every time a new highest temporal resolution wind profile is generated or every time an hourly wind profile is generated. For example if a user has set up ASPEN to generate winds at 5, 10 and 60 minutes; then either the 5 minute wind data or the 60 minute wind data can be written to consensus files. The consensus files are ASCII text files and named as shown.

Table 2-4: Wind Consensus File Name Description

Item	Description
Filename	wyyddd.cns where w indicates a wind file and yyddd is the 2 digit year and 3 digit day number for the observed data.

Table 2-5 and Table 2-6 further define the header and data sections. The wind and consensus data file contains wind components, i.e., height, wind speed, wind direction, and all vector components (u, v, and w). The wind and consensus data file also contains radial moment data, i.e., radial velocity, signal power, spectral width, and SNR for all antenna beam positions. It is important to note that the normal ASPEN wind files (asd files) bear the date/time stamp of the end of the averaging period. Conversely the consensus files (cns files) bear the date/time stamp of the beginning of the averaging period.

Table 2-5: Wind and Consensus File Header Nomenclature and Data Content by Line Number[8]

Line	Description				
1	Site Name (up to 28 characters)				
2	File Data Type	File Format Version			
3	Site Latitude	Site Longitude	Site Elevation (m)		
4	Date and begin time of consensus	Minutes to add to get to UT			
5	Averaging Time	Number of beams	Number of range gates		
6[9]	Num:tot (window) Beam 1	Num:tot (window) Beam 2, etc	Num:tot (window) Beam N		
7	No of coded cells (pair – oblique then vertical)	No of spectra (pair – oblique then vertical)	Pulse width (pair – oblique then vertical)	IPP (us) (pair – oblique then vertical)	
8	Full scale Doppler velocity (m/s) (pair – oblique then	Vertical correction applied to obliques? (0 = no, 1 = yes)	Delay to first gate (pair – oblique	Number of Gates (pair – oblique then vertical)	Spacing of gates (pair – oblique then vertical)

[8] Items in the data file that are separated by white space have extra columns in this table.

[9] For each beam position (1 .. n) there is an azimuth angle.

Line	Description				
	vertical)		then vertical)		
9	Azimuth and elevation of each beam				
10	Labels for data lines: HT SPD DIR RAD CNT SNR				
11	Data entries for Level 1				
12, etc…	…				
11+N-1	Data entries for Level N				
11+N	$ (this character indicates the end of data)				

Table 2-6: Wind Consensus File Descriptors

Item	Name	Description	Type or Format Specifier	Units	Range	Threshold	Example
1	Site Name	Name of physical site, one word, no spaces or punctuation, no more than 8 ASCII characters.	Alphanumeric, %8s	n/a	n/a	n/a	Longmont
2	Site Identifier	Radar ID: can be WMO, ICAO or other customer designated value. Can be any combination of letters or numbers (no white space).	Alphanumeric, %5s	n/a	n/a	n/a	LMTCO
3	File Data Type	Indicates the name of the data type (no white space).	Alphanumeric	n/a	n/a	n/a	wind
4	File Format Version	Version number of this file format.	Numeric, %7.3f	n/a	1.0 to 999.999		1.02
5	Site Latitude	Two digits immediately to the left of the decimal point are whole minutes, to the right are decimals of minutes, and the remaining digits to the left of the whole minutes are whole degrees. (ddmm.mmmmm). <0 indicates South and >0 indicates North.	Numeric, %10.5f	(from GPS GGA format)	-90 to +90	< -90, > +90	4009.29533 [is 40° 09.29533’ or 40° 09’ 17.72”]
6	Site Longitude	Two digits immediately to the left of the decimal point are whole minutes, to the right are decimals of minutes, and the remaining digits to the left of the whole minutes are whole degrees. (dddmm.mmmmm). <0 indicates West and >0 indicates East.	Numeric, %11.5f	(from GPS GGA format)	-180 to +180	< -180, < +180	-10512.42580 [is -105° 12.4258’ or -105 12’ 25.71”]
7	Site Elevation	Elevation in meters above mean sea level.	Numeric, %6.1f	Meters	-86 to 3500	< - 86, > +3500	1516.1

Item	Name	Description	Type or Format Specifier	Units	Range	Threshold	Example
8	Beginning date of averaging period	Date of the beginning of the averaging period.	YYYY-MM-DD	Where YYYY is year, MM is month, and DD is day	2009-06-01 to 3000-01-01	< 2009-06-01, > 3000-01-01	2009-05-26
9	End time of averaging period	Time of beginning of the averaging period.	hh:mm:ss	Where hh is hours, mm is minutes, and ss is seconds	00:00:00 to 23:59:59	< 00:00:00, > 23:59:59	12:12:00
10	UTC time zone difference	Difference in hours and minutes of the data file time from UTC[10] (if equal zero, then date and time are UTC). Difference = UTC – data file time	hh:mm	Where hh is hours, and mm is minutes	-12:00 to +12:00	< -12:00, > +12:00	-06:00
11							
12							
13							
14							
15							
16	IPP	Inter-pulse period of this mode.	Numeric, %8.2f	Microseconds	10 to 500	< 0, > 500	78.4
17							
18	Number of beam positions, b	Number of azimuth beam positions.	Numeric, %2u	n/a	0 to 24	< 0, > 24	4
19	azimuth 1 .. b	Pointing azimuth, from true North.	Numeric, %5.1f	Degrees	0 to 359.9	< 0, > 359.9	33.7

[10]The WPC should always be set to UTC.

Item	Name	Description	Type or Format Specifier	Units	Range	Threshold	Example
20	number of range gates	Number of range gates (sampled gates) for this mode.[11]	Numeric, %4u	n/a	1 to 1024	< 1,> 1024	80
21							
22							
23							
24							
25	Averaging time	Met data averaging time for this mode.	Numeric, %3u	Seconds	1 to 7200	< 1, > 7200	900
26							
The following definitions are for the data line labels and the data itself.							
27	HT	The altitude of the center of the range gate.	Numeric, %8.4f	Meters above ground level (site elevation)	0.00 to 60000	< 0, > 60000	123.4525
28	SPD	The wind speed. 999.9 if missing.	Numeric, %8.4f	m/s	0 to 125	< 0, > 125 (or 999.9)	12.6
29	DIR	The direction from which the wind is blowing (degrees clockwise from True North). 999.9 if missing.	Numeric, %5.1f	Degrees	0 to 359.9	< 0, > 359.9 (or 999.9)	272.1
30	CNT						
31	SNR	The signal to noise ratio of the atmospheric signal associated with VEL (all beams). 999.9 if missing.	Numeric, %8.4f	dB	-100 to 100	< -100, > 100 (or 999.9)	-11.2
32	$	Indicates the end of the data.	Literal, ASCII	n/a	n/a	n/a	$

[11] The hardware defined sampling of the return signal, not necessarily the final computed levels.

3 Raw Spectral Image Files (V)

BIRCH generates a raw spectral image file in PNG (Portable Network Graphics) image file format for every observation period, for every beam/mode combination. Each raw spectral image file contains averaged radar Doppler spectra stacked in range for the antenna beam and height mode associated with the observation period. For typical radar operation using 4 antenna beams and 3 height modes, nominally there will be 12 (=4x3) image files generated every 5 minutes. The typical image file is about 20 to 30KB in size.

The image filename is:

```
<siteid>_YYMMDD_HHmmSS_<mode>_<beam>.png
```

where <siteid> identifies the Wind Profiler site. The string “YYMMDD” gives the year, month, day and string “HHmmSS” gives the hour, minute, second (UTC). The height mode is indicated by the string

```
<mode> = m<nnn>
```

where “m” is literal and where <nnn> is a three digit index number, e.g., 001, 002, 003. The antenna beam is indicated by the string

```
<beam> = b<nnn>
```

where “b” is literal and where <nnn> is a three digit index number, e.g., 001, 002, 003, 004.

4 Raw Moment and Spectral Data Files (VI, VII)

ASPEN generates raw moment binary data files (VI) and BIRCH generates raw spectral binary data files (VII). Raw data (VI, VII) for at least the most recent one week time period are stored on the WPC and are available for recording on local media for distribution.

Raw moment data files (VI) are created at least every six (5) minutes. Assuming a maximum of 250 gates (for combined modes), 4 antenna beams, 10 signals per gate, and 4 characteristics per signal (i.e., power, velocity, spectral width, and signal-to-noise, each with 8 bytes), the disk usage requirement is at most 0.084GB per day. That is, 4 antenna beams * 250 gates per beam * 10 signals per beam * 32 bytes per signal = 0.32MB per 5 min period. Adding 10% overhead for descriptions, etc., gives 0.35MB per 5 min observation period. This corresponds to about 0.084GB per day.

Raw spectral data files are created at least every six (5) minutes. Assuming a maximum of 250 gates (for combined modes), 4 antenna beams, and 1000 Doppler bins for the saved averaged spectra, the disk usage requirement is at most 2.1GB per day. That is, 4 antenna beams * 250 gates per beam * 1000 spectral points per gate * 8 bytes per point = 8MB per period. Adding 10% overhead for descriptions, etc., gives 8.8MB per observation period. This corresponds to about 2.1GB per day.

5 Acronyms and Terms

Acronym/Term	Definition
ASPEN	Advanced Signal Processing ENgine (software) This is DeTect developed software resident on the WPC. ASPEN processes and creates the meteorological data products, such as spectra, moments, and wind profiles.
BIRCH	Basic Interface for Radar Control and Health (software) This is DeTect developed software resident on the WPC and responsible for controlling the radar (antenna control, transmitter control, data acquisition, and data processing from raw time-series to averaged spectra).
CCS	Client Computer System CCS controls, monitors, and receives all data from the WPC. The CCS computer is a separate computer connected to the WPC through a local network.
ICD	Interface Control Document
RWP	Radar Wind Profiler
Siteid	5-character ASCII alphanumeric string identifying site. This is often based on WMO or ICAO identifier. Each site must have a unique siteid.
Site Name	Unique name of physical site, one word, no spaces or punctuation, no more than 8 alphanumeric ASCII characters. BIRCH and ASPEN use this name for all configurations, data, error, status, and health files.
VizRCM	Remote Control Monitoring Software (Control Client and Monitor Client)
WPC	Wind Profiler Computer WPC provides software platform for Linux OS or Windows OS and applications BIRCH and ASPEN. WPC provides hardware platform for SDR Card and SDR Buffer Card.

6 Referenced Documents

Document Number	Title
9001621, 9001633	VIZRCM Remote Control Client and Remote Monitor Client Documentation