



Wood Buffalo Environmental Association  
**Ambient Air Monitoring Station  
Site Documentation**

Janvier

---

LAST UPDATED: MARCH 28, 2024



## Table of Contents

General Site Information .....	4
Station .....	4
Location.....	4
Owner/Operator/Approval Holder .....	4
Site Description .....	4
Site Influences .....	5
Localized Sources (within 20 metres of station).....	5
Roadway Influences .....	5
Major Point Sources.....	5
Station Equipment .....	6
Analytical Equipment .....	6
Meteorological Equipment .....	6
Support Equipment.....	6
Site photos .....	12
Station Photos.....	17

## Tables and Figures

Figure 1 – Area topographic map showing AMS 22.....	8
Figure 2 – Aerial photo showing AMS 22.....	9
Figure 3 – Plan view sketch for AMS 22 site.....	10
Figure 4 – Elevation view image for AMS 22 site.....	11
Figure 5 – Environment looking North.....	12
Figure 6 – Environment looking East.....	13
Figure 7 – Environment looking South.....	14
Figure 8 – Environment looking West.....	15
Figure 9 – Meteorological Tower.....	16
Figure 10 – Photo showing the inlet and sample manifold.....	17
Figure 11 – Curb shot of the monitoring station.....	18
Figure 12 –Photo of the front and the back of instrument rack.....	19
Figure 13 – Windrose (five year).....	20

## General Site Information

Revision Date: March 28, 2024

### Station

Station ID	AMS 22
Station name	Janvier
Date station established	October 2016

### Location

Station street address	Block 4; Lot 135 - Adjacent to Nokohoo Road between Teed Ave and Lapouse Ave.
Legal land description	6-05-80-05-W4
Airshed Zone	Wood Buffalo Environmental Association
Latitude	55.903242
Longitude	-110.749744
UTM East	515647
UTM North	6195323
Nearest community	Janvier
Community population	437
Census Year	2021

### Owner/Operator/Approval Holder

Operating Agency	Wood Buffalo Environmental Association
Address of Operating Agency	Unit 3-805 Memorial Drive, Fort McMurray, Alberta T9K 0K4
Name of Approval Holder	NA
Approval number	NA
Contact Name	Wood Buffalo Environmental Association
Address	Unit 3-805 Memorial Drive, Fort McMurray, Alberta T9K 0K4
Phone number	780-799-4420
Email address	info@wbea.org

### Site Description

Land use by sector	0 – 90 degrees	Trees
	91 – 180 degrees	Main road
	181 – 270 degrees	Main road
	271 – 360 degrees	Trees and House
Site elevation (m) (above sea level)	471	
Angle of elevation to nearby buildings	Greatest angle	10°
	Building direction	SE
Airflow restrictions	North	None

	East	None
	South	None
	West	Trees (45 m from station, 17 m high)
Distance to nearest trees (m)	North	80 m from station, 17 m high
	East	80 m from station, 15 m high
	West	45 m from station, 17 m high
	South	None
Sample manifold	Type	All glass
	Inlet height above roof	1 metre
Wind Sensors	Type	Cup and vane
	Height above ground (m)	20 m
	Distance from station (m)	2 m

### Site Influences

#### Localized Sources (within 20 metres of station)

Type	Distance (m)	Description
Vehicles	20 m west	Gravel road

#### Roadway Influences

Type	Traffic Volume	Distance (m)	Description
Main access road	low	25 m	Paved

#### Major Point Sources

Facility Name	Source Type	Distance from site (km)	Compass direction from site
ConocoPhillips	SAGD	33.38	NW
Tervita	Landfill	11 kms	NW

## Station Equipment

Equipment Owner: WBEA

### Analytical Equipment

Parameter	Make	Model	Serial Number	Date Instrument Installed	WBEA Data Start Date
<b>Continuous</b>					
SO <sub>2</sub>	Thermo Scientific	43i	1152430006	2016	January, 2017
TRS	Thermo Scientific	43i-TLE	1151680031	2021	January, 2017
NO/NO <sub>x</sub> /NO <sub>2</sub>	Teledyne/API	T200	833	2022	January, 2017
THC/CH <sub>4</sub> /NMHC	Thermo Scientific	55i	1317958219	2024	January, 2017
O <sub>3</sub>	Teledyne/API	T400	7046	2023	January, 2017
PM <sub>2.5</sub>	Teledyne/API	T640	325	2018	January, 2017
<b>Time-Integrated</b>					
PM <sub>2.5</sub> A	Thermo Scientific	2000i	2000i 20388 1308	2019	-
PM <sub>2.5</sub> B	Thermo Scientific	2000i	2000i 20489 1408	2019	-
PM <sub>10</sub> A	Thermo Scientific	2000i	2000i 20523 1411	2020	-
PM <sub>10</sub> B	Thermo Scientific	2000i	2000i 20383 1308	2020	-
PAH	Tisch	TE-PUFPLUSBL	1001108	2021	-
VOC	Tisch	TE-123	1018	2021	-
Dustfall	Advantage Manufacturing	-	-	2022	-

### Meteorological Equipment

Parameter	Make	Model	Serial Number	WMO Site Class	Date Sensor Installed	WBEA Data Start Date
AT/RH	Vaisala	HMP155	G4330042	Class 3	2018	January, 2016
WS 20m	Met One	010C-1	D16121	Class 3	2021	October, 2021
WD 20m	Met One	020C-1	D14528	Class 3	2021	October, 2021

### Support Equipment

Name	Description	Make	Model	Serial Number
Datalogger	Datalogger	Campbell Scientific	CR3000	2586
Gas Dilution Calibrator	Dynamic dilution calibrator	Teledyne/API	T700	3806
Zero air generator	Zero Air Generator	Teledyne/API	T701	691
TRS converter	Thermal oxidizer	CD Nova	CDN-101	587
Shelter / Building	Air monitoring portable	ITB	8 x 16 trailer	ITB-15-16494
HVAC	Heating and air conditioning system. Wall mount unit	BARD	1 ton	314P143189505-02

Deck	10x20	NA	NA	NA
------	-------	----	----	----

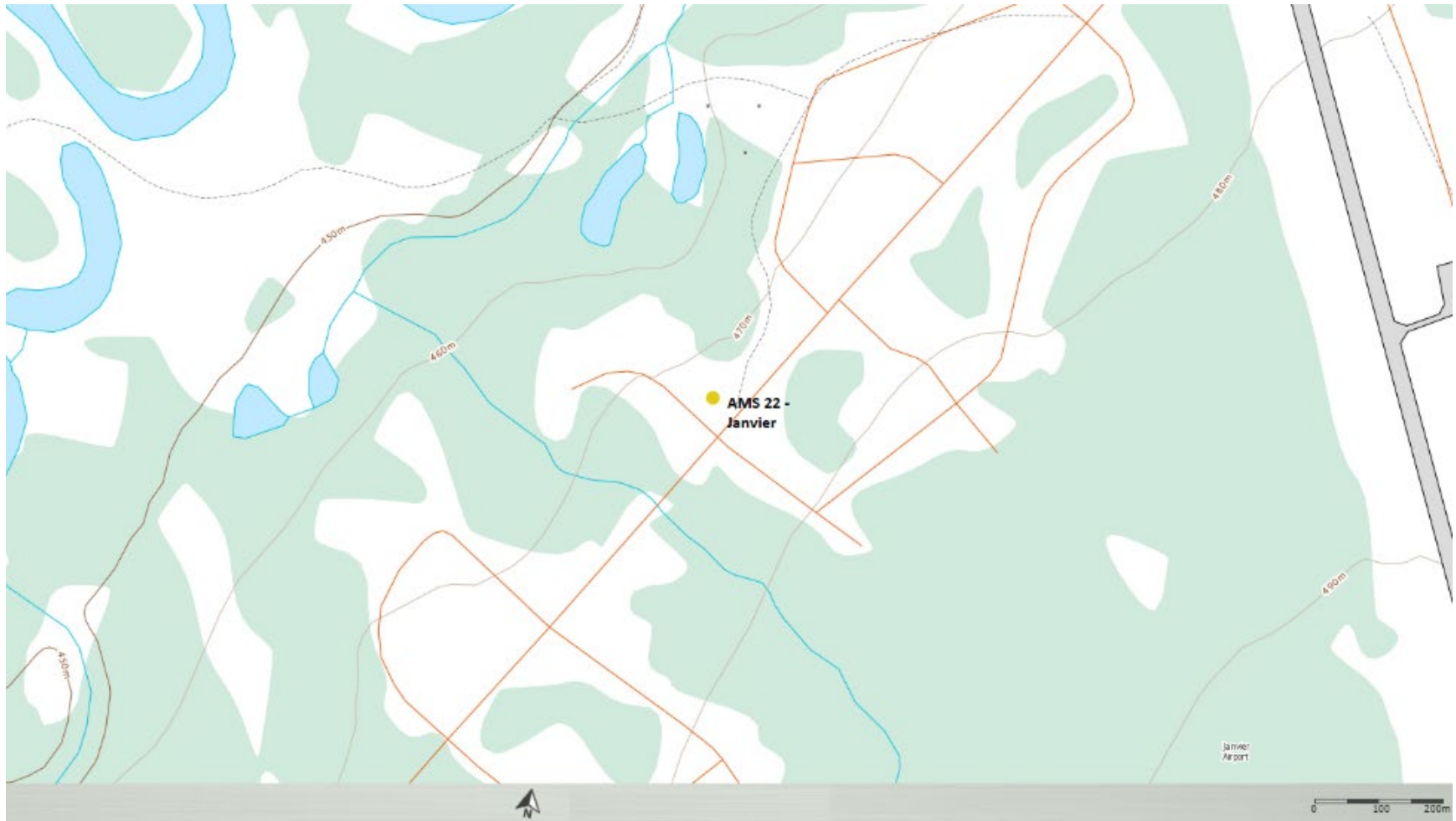


Figure 1 – Area topographic map showing AMS 22





Figure 2 – Aerial photo showing AMS 22

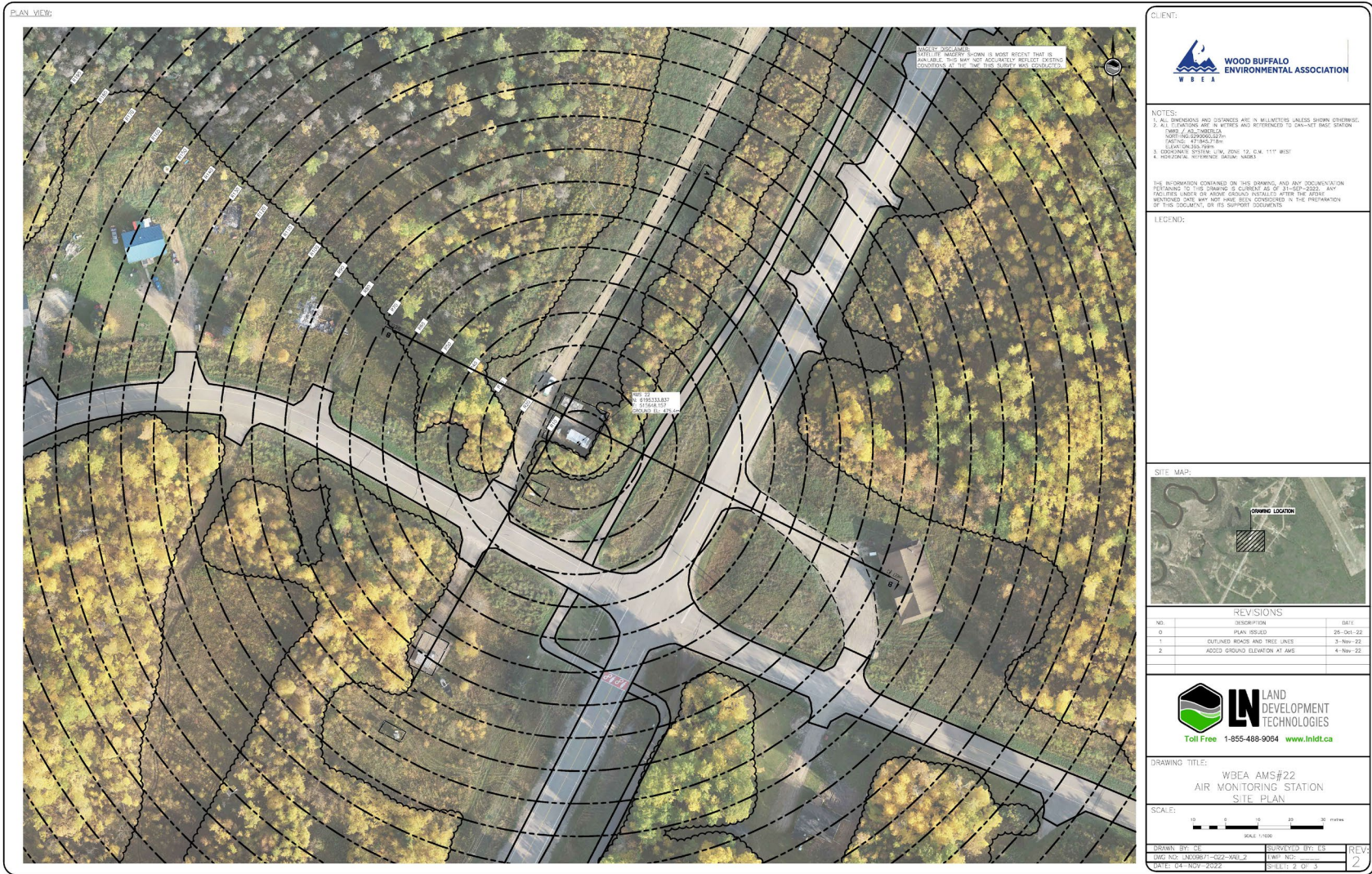


Figure 3 – Plan view sketch for AMS 22 site

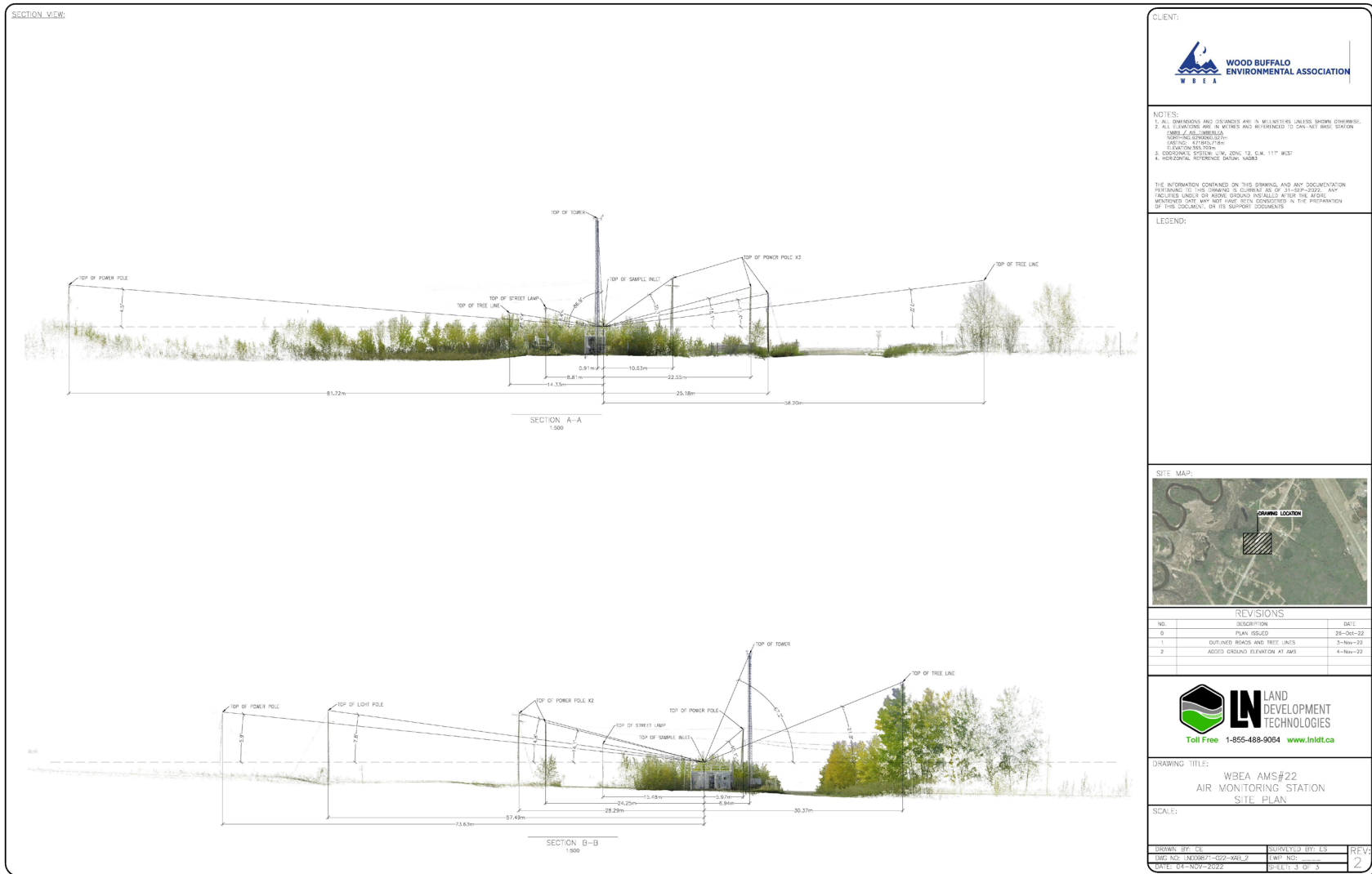


Figure 4 – Elevation view image for AMS 22 site

Site photos

The following photos show the environment surrounding the monitoring station.



Figure 5 – Environment looking North



Figure 6 – Environment looking East



Figure 7 – Environment looking South



Figure 8 – Environment looking West



Figure 9 – Meteorological Tower



## Station Photos

The following photos show the monitoring station and instrumentation.



Figure 10 – Photo showing the inlet and sample manifold



Figure 11 – Curb shot of the monitoring station



Figure 12 –Photo of the front and the back of instrument rack



Wood Buffalo Environmental Association  
Wind Rose 2019 - 2024

Wind Speed 20 m (WS20m) - km/h  
Janvier

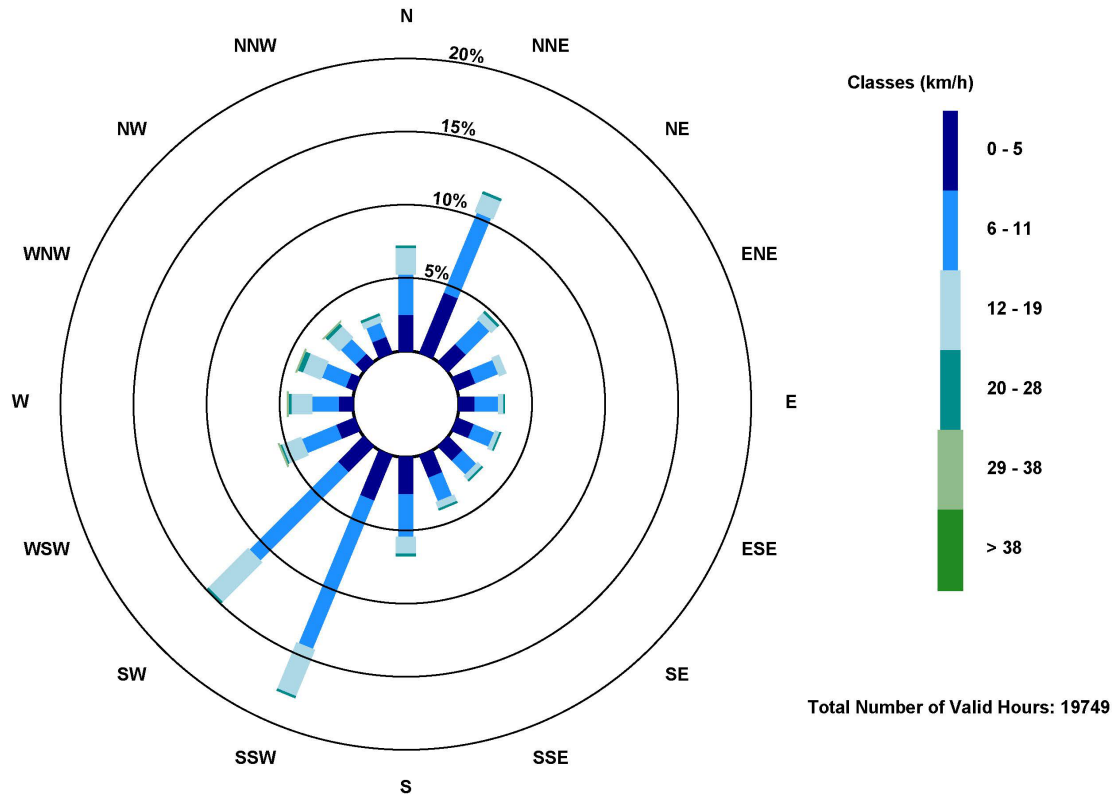


Figure 13 – Windrose (five year)