

**Appendix C: Wind Direction and Distance Factors**

<b>State</b>	<b>Emission Scoring Weight</b>
AR	0.17
IA	0.15
IL	1.00
LA	0.09
MD	0.05
MI	0.08
MN	0.10
MO	0.22
MS	0.14
NJ	0.03
OH	0.08
PA	0.05
VA	0.06
WI	0.10
IN	0.10
KY	0.11
DE	0.03
WV	0.07
SD	0.07
ND	0.04

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<b>State</b>	<b>Distance from Illinois Center (miles)</b>	<b>Distance Factor (%)</b>
AR	395.46	0.60
IA	261.55	0.74
IL	0	1.00
LA	683.49	0.32
MD	660.59	0.34
MI	354.01	0.65
MN	502.26	0.50
MO	212.37	0.79
MS	506.53	0.49
NJ	768.18	0.23
OH	338.42	0.66
PA	601.58	0.40
VA	583.64	0.42
WI	319.42	0.68
IN	152.19	0.85
KY	287.8	0.71
DE	720.13	0.28
WV	463.35	0.54
SD	631.09	0.37
ND	803.01	0.20

Source: Rogerson, P. 2015. A New Method for Finding Geographic Centers, with Application to the U.S. States. *The Professional Geographer*. Published online Aug 15, 2015;  
 DOI:10.1080/00330124.2015.1062707 <http://www.tandfonline.com/doi/full/10.1080/00330124.2015.1062707#.Vd30QflVhBc> Retrieved 2015-08-26

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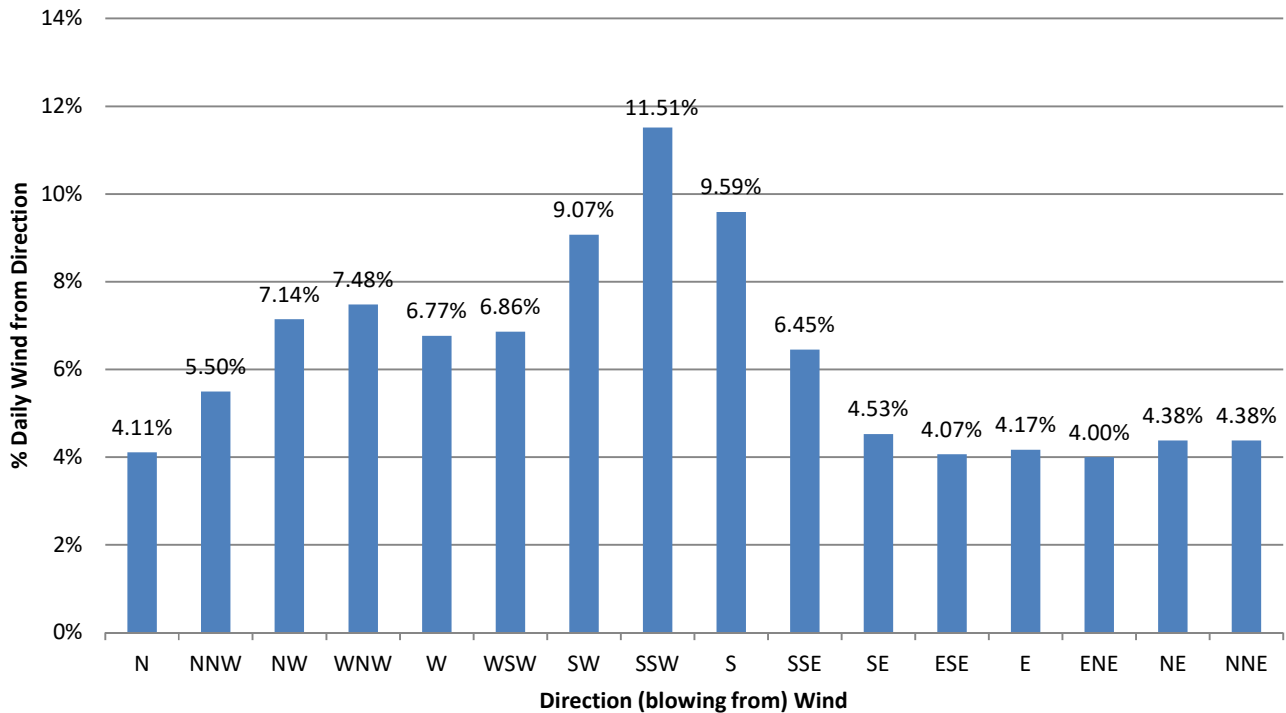
<b>State</b>	<b>ISO</b>	<b>Direction from IL</b>	<b>Wind Direction</b>
AR	MISO	SW	0.27
IA	MISO	NW	0.20
IL	PJM/MISO		1.00
LA	MISO	SW	0.27
MD	PJM	SE	0.15
MI	PJM/MISO	NE	0.13
MN	MISO	NW	0.20
MO	MISO	SW	0.27
MS	MISO	S	0.28
NJ	PJM	E	0.12
OH	PJM	E	0.12
PA	PJM	E	0.12
VA	PJM	SE	0.15
WI	MISO	N	0.14
IN	MISO	E	0.12
KY	PJM	SE	0.15
DE	PJM	E	0.12
WV	PJM	E	0.12
SD	MISO	NW	0.20
ND	MISO	NW	0.20

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Direction bin sizes 22.5

Direction		# Occurrences	% from Direction
N	360	5799	4.11%
NNW	337.5	7752	5.50%
NW	315	10072	7.14%
WNW	292.5	10551	7.48%
W	270	9541	6.77%
WSW	247.5	9678	6.86%
SW	225	12795	9.07%
SSW	202.5	16235	11.51%
S	180	13527	9.59%
SSE	157.5	9096	6.45%
SE	135	6385	4.53%
ESE	112.5	5733	4.07%
E	90	5874	4.17%
ENE	67.5	6177	4.00%
NE	45	6174	4.38%
NNE	22.5	5640	4.38%
		141,029	100.00%

Station	Location in IL	Dates Covered
Belleville	SW	11/89-12/16
Bondville	E	08/90-12/16
Brownstown	Central	09/89-12/16
Carbondale	SW	03/90-12/16
Champaign	E	02/89-12/16
DeKalb	NW	01/89-12/16
Dixon Springs	S	02/90-12/16
Fairfield	SE	09/91-12/16
Freeport	NW	06/89-12/16
Monmouth	W	06/89-12/16
Olney	E	11/89-12/16
Peoria	Central	01/89-12/16
Perry	W	07/89-12/16
Rend Lake	S	04/90-12/16
Springfield	Central	01/89-12/16
St Charles	NW	01/88-12/16
Stelle	NW	01/89-12/16



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Source: <http://www.isws.illinois.edu/warm/weather/>

### Illinois Climate Network: Weather Data

#### Station Data



#### Stations:

- [Belleville](#)
- [Big Bend](#)
- [Bondville](#)
- [Brownstown](#)
- [Carbondale](#)
- [Champaign](#)
- [DeKalb](#)
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- [Rend Lake](#)
- [Snicarte](#)
- [Springfield](#)
- [Stelle](#)
- [St. Charles](#)