

Table 23b. Ranking of Summed Weighted Frequencies (by impact and air traffic).

*(The Difference Between this table and table 23 is the use of lightning data within 50 nm radius of airport instead of station
Thunderstorm data for all CONUS Sites)*

Rank	Site ID	Summed Weighted Impact Factor
1	ORD	638.94
2	ATL	601.34
3	DFW	563.71
4	DEN	549.76
5	STL	544.16
6	CLT	526.49
7	DTW	517.83
8	MEM	509.58
9	MSP	496.55
10	IAH	494.51
11	EWR	493.40
12	BOS	481.07
13	PHL	476.82
14	LGA	455.85
15	SLC	455.59
16	IAD	433.94
17	CVG	421.28
18	BWI	414.00
19	MDW	412.58
20	PIT	398.45
21	HOU	395.48
22	JFK	394.37
23	IND	383.41
24	LAX	382.85
25	CLE	362.57
26	SEA	359.79
27	BNA	356.90
28	CMH	339.00
29	ANC*	336.95
30	LAS	334.81
31	PDX	334.58
32	RDU	333.33
33	PHX	327.51
34	MCI	326.49
35	MCO	314.92
36	MIA	313.39
37	SFO	313.30
38	BDL	304.51
39	PVD	301.55
40	MSY	299.81

Rank	Site ID	Summed Weighted Impact Factor
41	OMA	288.92
42	SNA	266.06
43	FLL	265.16
44	MKE	260.48
45	OAK	253.41
46	DCA	252.57
47	ABQ	244.18
48	TPA	240.56
49	BUF	239.67
50	MHT	237.68
51	DAL	235.24
52	PBI	227.53
53	SAT	227.17
54	AUS	218.86
55	SDF	218.55
56	TUS	209.99
57	HNL*	194.29
58	BUR	184.46
59	SAN	181.59
60	JAX	176.70
61	ONT	176.08
62	RNO	170.49
63	ORF	169.02
64	OGG*	161.32
65	SJC	157.75
66	SJU+	146.52
67	SMF	142.92
68	RSW	120.32

Table 23b. (cont.)

* Does not include turbulence. Station thunderstorm frequencies used instead of lightning data within 50 nm.

+ Does not include turbulence, wind, ceilings or visibility. Station thunderstorm frequencies used instead of lightning data within 50 nm.

Table 23c. Ranking of Summed Weighted Frequencies (by impact and air traffic).

Rank	Site ID	Summed Weighted Impact Factor
1	ORD	452.28
2	ATL	261.44
3	LAX	183.35
4	CLT	174.20
5	BOS	171.63
6	STL	128.97
7	DFW	124.73
8	DEN	115.96
9	MEM	115.84
10	LGA	115.33
11	DTW	113.77
12	EWR	110.65
13	IAH	100.25
14	SEA	99.80
15	MSP	89.53
16	MDW	86.84
17	JFK	84.52
18	SLC	76.09
19	PHL	69.97
20	SFO	62.57
21	IAD	62.09
22	BWI	60.91
23	PDX	57.71
24	HOU	57.44
25	CLE	55.22
26	SNA	48.22
27	ANC	45.50
28	IND	40.92
29	RDU	39.07
30	OAK	37.41
31	BNA	37.35
32	PIT	35.28
33	OMA	31.78
34	LAS	30.79
35	MIA	30.38
36	HNL	29.38
37	MCO	28.83
38	CVG	28.19
39	PVD	25.48
40	MSY	25.37
Rank	Site ID	Summed Weighted Impact Factor

41	MCI	22.89
42	CMH	21.93
43	BUR	21.24
44	BDL	20.31
45	PHX	20.30
46	FLL	19.86
47	SAN	15.69
48	ONT	15.22
49	MKE	14.93
50	MHT	14.33
51	SJC	13.14
52	BUF	12.13
53	OGG	11.92
54	PBI	11.82
55	DCA	10.57
56	SAT	8.85
57	ABQ	8.84
58	AUS	8.65
59	SDF	8.43
60	TPA	8.00
61	DAL	7.56
62	TUS	7.05
63	RNO	6.11
64	ORF	5.46
65	SMF	5.42
66	JAX	4.61
67	RSW	2.33
68	SJU	2.04

Table 23c. (cont.)

Algorithm for table 23c: (refer to Aviation_Weather_Factor_Summary.xls spread sheet):
 CONUS sites: $BF = (F * G) + (BB * N) + (R * S) + (W * X) + (AB * AC) + (AG * AH) + (AQ * AR)$

Non-CONUS sites: $BF = (F * G) + (M * N) + (R * S) + (W * X) + (AB * AC) + (AG * AH) + (AQ * AR)$, where:

BF= Weighted impact factor summed for all events (except turbulence)

F=Significant wind frequency * air traffic factor = significant wind factor

G=Wind impact factor (based on the CWSU poll)

M=Thunderstorm (at station) frequency * air traffic factor = thunderstorm factor

BB=Thunderstorm frequency (within 50 nm) * air traffic factor = thunderstorm factor

N=Thunderstorm impact factor (based on the CWSU poll)

R=Significant ceiling frequency * air traffic factor = significant ceiling factor

S= Ceiling impact factor (based on the CWSU poll)

W=Significant visibility frequency * air traffic factor = significant visibility factor

X=Visibility impact factor (based on the CWSU poll)

AB=Snow event frequency * air traffic factor = snow event factor

AC=snow impact factor (based on CWSU poll)

AG=Freezing precipitation frequency * air traffic factor = Freezing precipitation event factor

AH=Freezing precipitation event factor (based on CWSU poll)

AQ=Composite Icing score * air traffic factor = Icing factor

AR=Icing impact fact (based on CWSU poll)