

## Two-minute mean wind data – RW 07L/07R touchdown zones

Ending-time (hh:mm:sec)	Direction (degrees)	RW 07L		Direction (degrees)	RW 07R	
		Speed (knots)	Gust (knots)		Speed (knots)	Gust (knots)
10:25:00	317	34	50	306	30	36
10:25:10	317	34	50	306	31	36
10:25:20	317	34	50	308	31	36
10:25:30	316	35	50	308	31	36
10:25:40	317	36	50	309	31	40
10:25:50	316	36	50	310	32	40
10:26:00	315	36	50	311	33	40
10:26:10	314	36	49	311	33	40
10:26:20	315	36	49	312	32	40
10:26:30	315	37	49	314	32	40
10:26:40	314	37	49	315	31	40
10:26:50	315	38	49	315	29	40
10:27:00	315	38	49	315	29	40
10:27:10	315	39	49	314	29	40
10:27:20	316	40	49	314	29	40
10:27:30	317	40	50	313	29	39
10:27:40	316	40	50	313	29	39
10:27:50	317	40	50	313	29	38
10:28:00	317	40	50	313	29	38
10:28:10	317	39	50	313	28	38
10:28:20	316	39	50	310	29	38
10:28:30	315	39	50	310	29	38
10:28:40	315	39	50	308	30	38
10:28:50	315	38	50	308	31	40
10:29:00	315	38	50	308	32	40
10:29:10	315	39	50	308	32	40
10:29:20	315	38	50	307	31	40
10:29:30	315	38	44	307	31	40
10:29:40	316	38	44	307	31	40
10:29:50	316	38	44	306	31	40
10:30:00	316	38	44	306	31	40
10:30:10	317	39	46	306	30	40
10:30:20	317	39	46	305	30	40
10:30:30	317	39	46	307	31	40
10:30:40	317	39	46	307	31	40
10:30:50	317	40	46	307	30	38
10:31:00	318	41	46	307	30	35
10:31:10	318	41	46	307	30	35
10:31:20	318	41	47	307	30	35
10:31:30	317	41	47	308	30	35
10:31:40	317	41	47	308	30	35
10:31:50	317	41	47	308	30	36

**Two-minute mean wind data – RW 07L/07R touchdown zones**

Ending-time (hh:mm:sec)	Direction (degrees)	RW 07L		Direction (degrees)	RW 07R	
		Speed (knots)	Gust (knots)		Speed (knots)	Gust (knots)
10:32:00	317	42	47	308	31	36
10:32:10	317	41	47	309	32	40
10:32:20	317	40	47	309	32	40
10:32:30	317	40	47	309	32	40
10:32:40	317	39	47	309	32	40
10:32:50	317	39	47	309	32	40
10:33:00	317	39	47	309	32	40
10:33:10	317	38	47	309	32	40
10:33:20	317	37	45	310	32	40
10:33:30	317	37	45	310	31	40
10:33:40	316	37	45	310	31	40
10:33:50	316	37	45	310	30	40
10:34:00	317	36	45	310	30	40
10:34:10	316	37	45	309	28	35
10:34:20	316	37	45	309	28	35
10:34:30	317	37	45	309	28	35
10:34:40	317	38	47	309	27	35
10:34:50	317	38	47	310	27	33
10:35:00	316	38	47	310	27	33
10:35:10	316	38	47	311	26	31
10:35:20	317	38	47	312	26	31
10:35:30	316	37	47	314	25	31
10:35:40	316	37	47	315	25	31
10:35:50	315	36	47	315	25	31
10:36:00	315	36	47	315	25	31
10:36:10	316	36	47	316	25	31
10:36:20	316	36	47	317	25	31
10:36:30	316	36	47	317	25	31
10:36:40	316	35	45	317	25	31
10:36:50	316	35	45	318	25	31
10:37:00	316	34	40	318	25	31
10:37:10	317	35	46	316	26	31
10:37:20	317	36	46	316	26	31
10:37:30	317	36	46	315	26	31
10:37:40	317	37	46	314	27	31
10:37:50	318	37	46	313	27	31
10:38:00	317	37	46	313	27	31
10:38:10	317	37	46	313	27	35
10:38:20	316	37	46	312	28	35
10:38:30	316	37	46	311	28	35
10:38:40	315	37	46	311	28	35
10:38:50	315	37	46	311	28	35

## Two-minute mean wind data – RW 07L/07R touchdown zones

Ending-time (hh:mm:sec)	Direction (degrees)	RW 07L		Direction (degrees)	RW 07R	
		Speed (knots)	Gust (knots)		Speed (knots)	Gust (knots)
10:39:00	314	38	46	311	29	35
10:39:10	314	37	42	310	29	35
10:39:20	313	37	44	310	29	35
10:39:30	313	37	44	310	29	35
10:39:40	313	38	44	311	29	35
10:39:50	313	38	46	311	29	36
10:40:00	313	38	46	311	29	36
10:40:10	313	39	46	312	30	39
10:40:20	314	39	46	312	30	39
10:40:30	314	38	46	312	30	39
10:40:40	314	38	46	311	30	39
10:40:50	313	38	46	310	31	39
10:41:00	313	37	46	310	31	39
10:41:10	313	37	46	309	31	39
10:41:20	313	37	46	309	31	39
10:41:30	312	36	46	309	32	39
10:41:40	312	36	46	308	32	39
10:41:50	312	36	45	308	32	39
10:42:00	312	35	44	308	32	39
10:42:10	312	35	43	308	31	37
10:42:20	312	35	44	308	31	37
10:42:30	312	36	44	308	31	37
10:42:40	312	36	44	308	30	36
10:42:50	312	36	44	309	30	36
10:43:00	313	36	44	310	29	35
10:43:10	313	36	44	311	28	33
10:43:20	314	35	44	311	28	33
10:43:30	315	35	44	310	28	33
10:43:40	315	34	44	310	28	33
10:43:50	315	34	44	311	27	33
10:44:00	315	33	44	311	27	33
10:44:10	314	32	44	311	27	34
10:44:20	315	32	42	312	27	34
10:44:30	315	32	42	311	27	35
10:44:40	316	32	41	310	28	36
10:44:50	316	32	39	310	28	36
10:45:00	317	32	39	310	29	36

## Two-minute mean wind data – RW 07L/25R and RW 07R/25L mid-points

Ending-time (hh:mm:sec)	Direction (degrees)	RW 07L/25R		Direction (degrees)	RW 07R/25L	
		Speed (knots)	Gust (knots)		Speed (knots)	Gust (knots)
10:25:00	324	38	47	305	33	40
10:25:10	324	37	44	305	34	40
10:25:20	324	38	47	306	33	40
10:25:30	325	39	47	308	33	40
10:25:40	325	39	47	308	34	43
10:25:50	325	39	47	309	34	43
10:26:00	324	40	47	309	35	43
10:26:10	324	40	47	310	35	43
10:26:20	324	40	47	309	36	43
10:26:30	323	40	47	309	36	43
10:26:40	323	40	47	309	36	43
10:26:50	323	40	47	309	36	43
10:27:00	323	40	47	309	36	43
10:27:10	324	41	47	311	35	43
10:27:20	324	40	47	310	35	43
10:27:30	324	40	48	310	35	43
10:27:40	324	39	48	310	35	42
10:27:50	324	39	48	310	35	42
10:28:00	323	40	48	310	35	42
10:28:10	323	40	48	310	35	42
10:28:20	324	40	48	311	35	42
10:28:30	324	40	48	311	35	42
10:28:40	324	40	48	310	35	42
10:28:50	324	40	48	309	35	42
10:29:00	323	40	48	309	35	42
10:29:10	324	40	48	309	36	42
10:29:20	324	40	48	310	36	42
10:29:30	324	40	45	310	36	42
10:29:40	324	39	45	310	36	42
10:29:50	324	40	47	309	36	42
10:30:00	324	40	47	308	36	42
10:30:10	323	39	47	307	35	42
10:30:20	323	40	51	307	35	42
10:30:30	324	40	51	307	35	42
10:30:40	324	40	51	307	35	42
10:30:50	323	41	51	307	36	44
10:31:00	323	41	51	307	36	44
10:31:10	323	42	51	307	36	44
10:31:20	322	42	51	307	37	44
10:31:30	322	42	51	307	37	44
10:31:40	322	42	51	308	36	44
10:31:50	322	42	51	307	36	44

**Two-minute mean wind data – RW 07L/25R and RW 07R/25L mid-points**

Ending-time (hh:mm:sec)	Direction (degrees)	RW 07L/25R		RW 07R/25L		
		Speed (knots)	Gust (knots)	Direction (degrees)	Speed (knots)	Gust (knots)
10:32:00	322	42	51	308	35	44
10:32:10	322	42	51	309	35	44
10:32:20	322	42	51	309	34	44
10:32:30	321	42	51	310	34	44
10:32:40	321	41	51	310	34	44
10:32:50	321	40	48	310	34	44
10:33:00	321	40	48	310	33	42
10:33:10	321	40	48	309	33	42
10:33:20	321	40	48	309	33	42
10:33:30	321	41	48	309	32	42
10:33:40	321	41	48	307	33	42
10:33:50	321	40	48	307	33	42
10:34:00	321	40	46	306	34	42
10:34:10	321	40	46	306	35	42
10:34:20	322	40	46	306	35	42
10:34:30	322	40	46	306	35	42
10:34:40	322	40	46	306	35	41
10:34:50	323	40	46	306	35	42
10:35:00	324	39	46	306	36	46
10:35:10	324	39	46	307	37	46
10:35:20	324	39	46	307	37	46
10:35:30	324	39	46	307	37	46
10:35:40	324	39	46	307	37	46
10:35:50	324	38	46	308	37	46
10:36:00	324	38	46	309	37	46
10:36:10	324	38	44	309	36	46
10:36:20	324	38	44	309	36	46
10:36:30	324	38	44	309	36	46
10:36:40	324	38	44	309	35	46
10:36:50	323	37	44	309	34	46
10:37:00	322	37	44	309	33	44
10:37:10	321	37	44	308	32	41
10:37:20	321	37	44	308	32	40
10:37:30	321	38	44	308	32	40
10:37:40	321	38	44	308	32	40
10:37:50	321	38	45	308	32	40
10:38:00	322	38	45	308	32	40
10:38:10	322	38	45	308	32	40
10:38:20	321	37	45	308	32	40
10:38:30	321	37	45	308	32	40
10:38:40	321	37	45	308	32	40
10:38:50	321	37	45	309	33	40

**Two-minute mean wind data – RW 07L/25R and RW 07R/25L mid-points**

Ending-time (hh:mm:sec)	RW 07L/25R			RW 07R/25L		
	Direction (degrees)	Speed (knots)	Gust (knots)	Direction (degrees)	Speed (knots)	Gust (knots)
10:39:00	321	37	45	309	33	40
10:39:10	322	37	45	309	33	40
10:39:20	322	37	45	309	33	40
10:39:30	323	36	45	310	33	39
10:39:40	323	36	45	310	33	39
10:39:50	323	36	44	309	33	39
10:40:00	323	37	44	310	33	39
10:40:10	322	38	47	310	33	39
10:40:20	322	38	47	309	33	39
10:40:30	323	38	47	309	33	39
10:40:40	322	38	47	310	34	39
10:40:50	322	38	47	310	33	39
10:41:00	322	38	47	310	33	39
10:41:10	322	38	47	310	32	39
10:41:20	321	38	47	309	31	39
10:41:30	321	39	47	308	31	39
10:41:40	320	39	47	309	32	40
10:41:50	320	39	47	309	32	40
10:42:00	319	39	47	309	32	40
10:42:10	319	39	47	309	32	41
10:42:20	318	38	45	309	32	41
10:42:30	318	38	45	308	32	41
10:42:40	318	38	45	307	32	41
10:42:50	317	38	45	306	32	41
10:43:00	317	38	45	306	33	41
10:43:10	317	39	45	306	33	41
10:43:20	318	39	45	306	33	41
10:43:30	318	38	45	306	33	41
10:43:40	319	38	45	305	33	41
10:43:50	319	38	42	306	32	41
10:44:00	320	37	42	306	32	41
10:44:10	320	37	42	307	32	37
10:44:20	320	37	42	308	31	37
10:44:30	321	37	42	308	31	37
10:44:40	322	37	42	309	31	37
10:44:50	322	37	42	309	31	37
10:45:00	322	37	42	309	31	37

**Two-minute mean wind data – RW 25L/25R touchdown zones**

Ending-time (hh:mm:sec)	Direction (degrees)	RW 25L		RW 25R		
		Speed (knots)	Gust (knots)	Direction (degrees)	Speed (knots)	Gust (knots)
10:25:00	316	30	42	325	39	48
10:25:10	317	29	39	324	39	48
10:25:20	318	29	39	324	39	48
10:25:30	318	29	39	325	40	48
10:25:40	318	30	39	325	40	48
10:25:50	316	29	37	324	40	48
10:26:00	317	29	37	325	40	46
10:26:10	317	28	36	325	40	47
10:26:20	318	27	36	325	40	47
10:26:30	318	27	36	324	40	47
10:26:40	318	28	42	324	40	47
10:26:50	317	28	42	325	41	47
10:27:00	316	28	42	325	41	47
10:27:10	316	29	42	326	40	47
10:27:20	315	29	42	326	40	47
10:27:30	316	29	42	326	41	47
10:27:40	317	30	42	325	41	47
10:27:50	319	29	42	326	41	47
10:28:00	319	30	42	325	41	47
10:28:10	319	31	42	325	41	49
10:28:20	320	31	42	324	41	49
10:28:30	320	31	42	324	41	49
10:28:40	320	31	40	324	41	49
10:28:50	320	31	40	323	41	49
10:29:00	320	31	40	322	41	49
10:29:10	320	31	40	320	42	49
10:29:20	320	31	40	319	42	49
10:29:30	319	31	40	318	44	55
10:29:40	318	32	42	319	44	55
10:29:50	318	32	42	319	44	55
10:30:00	319	32	42	321	44	52
10:30:10	319	32	42	321	46	56
10:30:20	319	32	42	323	47	56
10:30:30	319	32	42	324	44	56
10:30:40	320	31	42	325	39	51
10:30:50	320	31	42	325	38	48
10:31:00	320	31	42	325	39	48
10:31:10	320	30	42	325	40	48
10:31:20	321	31	42	325	40	47
10:31:30	322	31	42	325	41	47
10:31:40	322	31	40	325	41	47
10:31:50	322	30	39	324	41	49

## Two-minute mean wind data – RW 25L/25R touchdown zones

Ending-time (hh:mm:sec)	Direction (degrees)	RW 25L		RW 25R		
		Speed (knots)	Gust (knots)	Direction (degrees)	Speed (knots)	Gust (knots)
10:32:00	322	30	39	322	41	49
10:32:10	322	30	39	321	42	49
10:32:20	322	29	39	322	42	48
10:32:30	322	29	39	322	42	48
10:32:40	322	29	39	322	41	45
10:32:50	321	29	39	321	39	45
10:33:00	321	29	39	320	40	52
10:33:10	321	28	39	320	41	52
10:33:20	321	28	39	320	41	52
10:33:30	320	27	35	320	41	52
10:33:40	320	27	36	320	41	52
10:33:50	319	27	36	320	41	52
10:34:00	319	27	36	320	41	52
10:34:10	318	28	44	320	41	52
10:34:20	317	29	44	320	41	52
10:34:30	317	29	44	320	41	52
10:34:40	317	29	44	320	40	52
10:34:50	318	29	44	320	39	48
10:35:00	318	29	44	320	39	47
10:35:10	319	29	44	321	39	47
10:35:20	319	29	44	321	38	47
10:35:30	320	29	44	321	38	47
10:35:40	320	29	44	320	37	45
10:35:50	320	29	44	320	36	45
10:36:00	321	29	44	320	36	45
10:36:10	321	29	39	320	37	46
10:36:20	321	29	39	321	37	46
10:36:30	321	29	39	321	37	46
10:36:40	320	29	42	321	37	46
10:36:50	320	30	42	321	37	46
10:37:00	321	30	42	321	37	46
10:37:10	320	30	42	321	38	46
10:37:20	319	30	42	320	39	46
10:37:30	319	29	42	320	39	46
10:37:40	319	29	42	321	40	46
10:37:50	319	29	42	321	40	46
10:38:00	319	29	42	321	39	46
10:38:10	320	29	42	321	39	46
10:38:20	319	29	42	321	39	46
10:38:30	320	28	42	321	39	46
10:38:40	320	27	36	321	39	46
10:38:50	319	26	36	321	39	46



## Two-minute mean wind data – RW 25L/25R touchdown zones

Ending-time (hh:mm:sec)	Direction (degrees)	RW 25L		RW 25R		
		Speed (knots)	Gust (knots)	Direction (degrees)	Speed (knots)	Gust (knots)
10:39:00	318	26	36	321	39	46
10:39:10	318	26	36	322	38	46
10:39:20	318	26	36	322	37	44
10:39:30	318	26	36	322	37	45
10:39:40	318	26	36	322	37	45
10:39:50	318	26	35	322	37	45
10:40:00	319	25	34	322	38	45
10:40:10	318	24	32	322	38	45
10:40:20	318	23	32	322	38	45
10:40:30	318	23	32	322	38	45
10:40:40	318	24	32	322	39	45
10:40:50	318	24	32	322	39	45
10:41:00	318	25	33	321	39	45
10:41:10	319	25	33	322	39	45
10:41:20	319	25	33	322	39	45
10:41:30	319	25	33	321	39	45
10:41:40	319	25	33	321	38	45
10:41:50	319	25	33	321	38	45
10:42:00	317	26	36	321	38	45
10:42:10	318	26	36	320	38	45
10:42:20	318	27	36	320	37	45
10:42:30	318	27	36	320	36	44
10:42:40	317	28	36	320	36	42
10:42:50	317	28	36	319	35	41
10:43:00	317	27	36	318	36	41
10:43:10	316	26	36	318	36	42
10:43:20	317	26	36	318	36	43
10:43:30	316	25	36	318	37	43
10:43:40	317	24	36	318	37	43
10:43:50	317	25	36	318	37	43
10:44:00	318	24	35	318	37	43
10:44:10	318	24	35	318	37	43
10:44:20	318	25	39	318	37	43
10:44:30	319	25	39	318	38	43
10:44:40	319	25	39	318	38	43
10:44:50	319	26	39	319	38	43
10:45:00	320	26	39	319	38	43

Note : Gust figures evaluated from running 3 – second mean wind sequence

## Ten-second mean wind data – RW 07L/07R touchdown zones

Ending-time (hh:mm:sec)	RW 07L		RW 07R	
	Direction (degrees)	Speed (knots)	Direction (degrees)	Speed (knots)
10:25:00	310	28	312	34
10:25:10	312	32	315	32
10:25:20	308	31	313	28
10:25:30	313	42	313	28
10:25:40	317	42	312	37
10:25:50	313	36	313	38
10:26:00	311	38	315	33
10:26:10	318	46	315	33
10:26:20	322	41	322	26
10:26:30	318	40	322	24
10:26:40	317	39	319	22
10:26:50	318	39	308	27
10:27:00	312	35	308	27
10:27:10	313	38	305	32
10:27:20	320	44	315	31
10:27:30	320	48	304	33
10:27:40	315	39	304	33
10:27:50	316	40	315	31
10:28:00	316	34	313	31
10:28:10	314	31	308	31
10:28:20	311	38	304	29
10:28:30	314	42	304	29
10:28:40	311	37	300	28
10:28:50	315	36	305	36
10:29:00	314	35	307	30
10:29:10	314	39	307	30
10:29:20	317	39	309	27
10:29:30	323	41	302	28
10:29:40	323	42	308	30
10:29:50	320	41	305	33
10:30:00	318	35	305	29
10:30:10	318	42	306	28
10:30:20	316	42	301	31
10:30:30	313	37	315	29
10:30:40	316	44	315	29
10:30:50	313	43	310	31
10:31:00	321	43	308	31
10:31:10	316	39	309	30
10:31:20	316	45	308	28
10:31:30	316	40	307	30
10:31:40	322	42	311	32
10:31:50	324	44	312	35

**Ten-second mean wind data – RW 07L/07R touchdown zones**

Ending-time (hh:mm:sec)	RW 07L		RW 07R	
	Direction (degrees)	Speed (knots)	Direction (degrees)	Speed (knots)
10:32:00	316	40	306	32
10:32:10	313	31	307	37
10:32:20	314	30	312	34
10:32:30	314	37	309	32
10:32:40	316	33	311	31
10:32:50	320	41	312	28
10:33:00	319	40	309	31
10:33:10	315	34	308	31
10:33:20	314	33	312	29
10:33:30	317	40	311	24
10:33:40	318	41	309	24
10:33:50	324	40	308	27
10:34:00	317	36	307	26
10:34:10	311	34	306	27
10:34:20	314	36	306	27
10:34:30	319	39	308	28
10:34:40	317	43	308	28
10:34:50	317	40	318	27
10:35:00	317	42	318	27
10:35:10	315	34	324	24
10:35:20	315	31	325	21
10:35:30	313	31	326	21
10:35:40	314	33	319	28
10:35:50	313	35	319	28
10:36:00	316	36	309	26
10:36:10	317	34	313	27
10:36:20	318	35	317	24
10:36:30	316	36	309	29
10:36:40	324	38	314	24
10:36:50	316	36	317	28
10:37:00	318	35	320	27
10:37:10	318	45	313	27
10:37:20	319	41	313	27
10:37:30	316	34	308	29
10:37:40	316	38	313	26
10:37:50	316	37	309	25
10:38:00	313	37	310	26
10:38:10	312	38	308	31
10:38:20	310	33	305	33
10:38:30	310	36	311	38
10:38:40	315	39	315	32
10:38:50	313	35	315	32

**Ten-second mean wind data – RW 07L/07R touchdown zones**

Ending-time (hh:mm:sec)	RW 07L		RW 07R	
	Direction (degrees)	Speed (knots)	Direction (degrees)	Speed (knots)
10:39:00	315	38	315	30
10:39:10	312	39	309	30
10:39:20	309	39	314	27
10:39:30	312	42	314	27
10:39:40	315	39	315	25
10:39:50	314	39	309	31
10:40:00	318	40	310	33
10:40:10	318	43	310	36
10:40:20	315	34	310	36
10:40:30	310	33	308	34
10:40:40	310	32	305	31
10:40:50	310	33	303	34
10:41:00	311	35	303	34
10:41:10	309	36	308	33
10:41:20	308	34	316	29
10:41:30	309	35	316	28
10:41:40	312	35	304	29
10:41:50	315	37	304	29
10:42:00	316	40	307	30
10:42:10	316	38	307	29
10:42:20	313	39	308	26
10:42:30	311	34	308	26
10:42:40	315	35	313	28
10:42:50	313	36	316	27
10:43:00	315	35	311	27
10:43:10	315	30	316	28
10:43:20	316	30	316	28
10:43:30	316	30	308	26
10:43:40	312	28	309	28
10:43:50	319	29	317	24
10:44:00	315	27	317	24
10:44:10	313	32	310	30
10:44:20	317	36	308	27
10:44:30	317	38	301	31
10:44:40	319	35	307	34
10:44:50	321	35	307	34
10:45:00	321	38	313	31

**Ten-second mean wind data – RW 07L/25R and RW 07R/25L mid-points**

Ending-time (hh:mm:sec)	RW 07L/25R		RW 07R/25L	
	Direction (degrees)	Speed (knots)	Direction (degrees)	Speed (knots)
10:25:00	325	34	310	35
10:25:10	320	35	298	34
10:25:20	320	45	311	32
10:25:30	326	43	314	32
10:25:40	326	43	308	40
10:25:50	324	40	312	40
10:26:00	324	40	313	38
10:26:10	318	36	312	39
10:26:20	318	36	302	37
10:26:30	316	42	305	35
10:26:40	324	40	314	33
10:26:50	327	34	315	33
10:27:00	329	40	311	32
10:27:10	325	42	311	31
10:27:20	323	37	304	34
10:27:30	327	44	308	33
10:27:40	321	37	310	39
10:27:50	321	37	315	37
10:28:00	320	42	316	39
10:28:10	324	43	311	35
10:28:20	324	40	306	36
10:28:30	322	40	305	36
10:28:40	321	37	306	34
10:28:50	324	42	307	33
10:29:00	325	39	306	37
10:29:10	327	38	310	40
10:29:20	327	38	315	35
10:29:30	327	40	312	34
10:29:40	323	35	311	38
10:29:50	321	44	309	36
10:30:00	321	44	301	32
10:30:10	321	38	302	34
10:30:20	323	46	305	33
10:30:30	326	42	302	32
10:30:40	321	43	306	38
10:30:50	322	48	301	42
10:31:00	320	45	310	41
10:31:10	324	40	312	40
10:31:20	319	36	312	39
10:31:30	319	36	315	37
10:31:40	321	35	313	32
10:31:50	320	45	307	28

**Ten-second mean wind data – RW 07L/25R and RW 07R/25L mid-points**

Ending-time (hh:mm:sec)	RW 07L/25R		RW 07R/25L	
	Direction (degrees)	Speed (knots)	Direction (degrees)	Speed (knots)
10:32:00	321	44	310	25
10:32:10	321	44	309	28
10:32:20	319	40	314	28
10:32:30	319	42	306	29
10:32:40	323	37	305	40
10:32:50	321	38	310	36
10:33:00	321	38	306	35
10:33:10	321	37	304	35
10:33:20	324	42	310	37
10:33:30	317	43	308	36
10:33:40	317	43	300	35
10:33:50	322	39	303	34
10:34:00	324	38	302	34
10:34:10	325	44	307	35
10:34:20	322	40	307	32
10:34:30	322	40	309	34
10:34:40	326	36	306	37
10:34:50	330	39	310	39
10:35:00	324	34	310	42
10:35:10	324	34	313	42
10:35:20	324	40	311	38
10:35:30	322	38	303	35
10:35:40	318	38	308	37
10:35:50	324	37	309	34
10:36:00	324	37	312	34
10:36:10	322	39	308	30
10:36:20	324	37	308	28
10:36:30	321	37	307	29
10:36:40	321	37	309	30
10:36:50	320	37	307	30
10:37:00	321	33	309	32
10:37:10	318	40	311	31
10:37:20	318	40	304	32
10:37:30	321	42	303	35
10:37:40	324	40	313	36
10:37:50	322	40	309	32
10:38:00	327	37	311	35
10:38:10	323	33	303	30
10:38:20	322	33	308	32
10:38:30	320	38	312	31
10:38:40	322	37	309	32
10:38:50	321	36	312	33

## Ten-second mean wind data – RW 07L/25R and RW 07R/25L mid-points

Ending-time (hh:mm:sec)	RW 07L/25R		RW 07R/25L	
	Direction (degrees)	Speed (knots)	Direction (degrees)	Speed (knots)
10:39:00	320	36	309	33
10:39:10	325	36	312	37
10:39:20	323	35	313	35
10:39:30	324	39	313	35
10:39:40	324	39	306	29
10:39:50	320	42	305	34
10:40:00	327	42	313	31
10:40:10	325	45	306	30
10:40:20	325	45	302	33
10:40:30	320	37	312	36
10:40:40	319	34	313	35
10:40:50	323	34	314	28
10:41:00	318	36	310	27
10:41:10	318	36	309	29
10:41:20	315	39	305	30
10:41:30	323	42	308	33
10:41:40	319	43	312	38
10:41:50	319	43	311	35
10:42:00	315	39	305	31
10:42:10	315	40	303	33
10:42:20	314	37	303	33
10:42:30	319	35	302	35
10:42:40	319	35	299	32
10:42:50	315	33	305	32
10:43:00	320	39	309	32
10:43:10	321	39	307	34
10:43:20	324	40	303	31
10:43:30	325	38	311	31
10:43:40	322	37	307	30
10:43:50	321	38	319	29
10:44:00	320	36	309	31
10:44:10	320	36	312	29
10:44:20	318	33	309	29
10:44:30	323	35	308	32
10:44:40	320	38	306	35
10:44:50	320	38	306	35
10:45:00	321	37	312	32

**Ten-second mean wind data – RW 25L/25R touchdown zones**

Ending-time (hh:mm:sec)	RW 25R		RW 25L	
	Direction (degrees)	Speed (knots)	Direction (degrees)	Speed (knots)
10:25:00	325	41	328	30
10:25:10	322	42	324	26
10:25:20	325	39	323	28
10:25:30	326	37	319	26
10:25:40	326	40	309	25
10:25:50	321	40	300	28
10:26:00	325	40	315	28
10:26:10	325	44	318	23
10:26:20	323	42	319	23
10:26:30	324	41	317	31
10:26:40	329	40	318	36
10:26:50	328	41	310	36
10:27:00	331	41	319	32
10:27:10	323	36	320	31
10:27:20	327	43	317	29
10:27:30	326	41	329	30
10:27:40	323	40	327	30
10:27:50	322	41	319	26
10:28:00	321	39	312	29
10:28:10	319	47	326	35
10:28:20	320	44	326	30
10:28:30	320	41	315	31
10:28:40	322	39	318	32
10:28:50	319	45	314	31
10:29:00	322	42	320	32
10:29:10	321	44	320	36
10:29:20	321	46	317	31
10:29:30	317	45	314	27
10:29:40	320	41	313	38
10:29:50	320	45	322	34
10:30:00	322	49	320	29
10:30:10	323	52	326	33
10:30:20	327	38	327	25
10:30:30	323	35	319	31
10:30:40	324	37	326	28
10:30:50	324	42	320	31
10:31:00	325	41	320	27
10:31:10	326	40	321	31
10:31:20	323	42	322	33
10:31:30	331	41	323	36
10:31:40	323	40	323	32
10:31:50	320	44	320	31



**Ten-second mean wind data – RW 25L/25R touchdown zones**

Ending-time (hh:mm:sec)	RW 25R		RW 25L	
	Direction (degrees)	Speed (knots)	Direction (degrees)	Speed (knots)
10:32:00	322	42	320	29
10:32:10	324	42	325	23
10:32:20	321	43	320	24
10:32:30	323	39	319	28
10:32:40	322	42	327	31
10:32:50	322	36	311	24
10:33:00	321	40	317	28
10:33:10	318	37	322	25
10:33:20	319	39	322	27
10:33:30	320	39	314	29
10:33:40	326	43	320	33
10:33:50	323	41	315	28
10:34:00	316	39	311	28
10:34:10	319	39	312	35
10:34:20	319	40	317	34
10:34:30	320	38	320	31
10:34:40	321	38	326	29
10:34:50	318	37	325	25
10:35:00	321	36	315	27
10:35:10	325	35	331	26
10:35:20	322	33	328	26
10:35:30	320	35	314	30
10:35:40	318	33	323	31
10:35:50	322	37	321	32
10:36:00	319	35	314	28
10:36:10	323	43	317	31
10:36:20	323	40	324	28
10:36:30	319	40	316	30
10:36:40	320	41	318	34
10:36:50	322	40	325	33
10:37:00	322	37	320	31
10:37:10	319	40	323	25
10:37:20	320	43	316	24
10:37:30	318	42	319	19
10:37:40	326	38	318	28
10:37:50	321	36	320	33
10:38:00	321	33	314	34
10:38:10	322	37	324	32
10:38:20	322	40	317	24
10:38:30	323	41	325	21
10:38:40	321	41	313	21
10:38:50	323	35	321	24

### Ten-second mean wind data – RW 25L/25R touchdown zones

Ending-time (hh:mm:sec)	RW 25R		RW 25L	
	Direction (degrees)	Speed (knots)	Direction (degrees)	Speed (knots)
10:39:00	321	37	311	24
10:39:10	322	31	319	29
10:39:20	322	33	313	22
10:39:30	324	43	322	26
10:39:40	326	39	315	27
10:39:50	322	38	323	26
10:40:00	320	37	328	20
10:40:10	321	38	316	21
10:40:20	319	44	314	19
10:40:30	321	45	317	22
10:40:40	319	42	322	24
10:40:50	322	40	318	26
10:41:00	319	35	314	31
10:41:10	323	33	324	29
10:41:20	324	38	317	27
10:41:30	321	36	321	29
10:41:40	317	30	320	29
10:41:50	320	38	316	24
10:42:00	320	38	307	29
10:42:10	319	38	325	28
10:42:20	316	37	315	25
10:42:30	317	31	319	26
10:42:40	318	37	310	31
10:42:50	314	36	319	27
10:43:00	312	37	311	19
10:43:10	317	40	317	21
10:43:20	319	41	321	22
10:43:30	322	39	319	21
10:43:40	320	35	322	22
10:43:50	318	37	321	27
10:44:00	321	36	317	21
10:44:10	319	38	323	28
10:44:20	318	39	320	35
10:44:30	320	39	325	29
10:44:40	317	36	312	32
10:44:50	321	38	323	33
10:45:00	317	41	319	24

## 1-second wind direction and speed recorded at 25L/25R TDZ anemometers

Date	Time (UTC)	RW 25L		RW 25R	
		Direction (degrees)	Speed (knots)	Direction (degrees)	Speed (knots)
22-Aug-99	10:42:00	310	28	319	34
22-Aug-99	10:42:01	334	31	321	36
22-Aug-99	10:42:02	328	28	320	37
22-Aug-99	10:42:03	324	28	319	37
22-Aug-99	10:42:04	339	25	319	37
22-Aug-99	10:42:05	329	27	321	40
22-Aug-99	10:42:06	324	31	319	39
22-Aug-99	10:42:07	326	31	319	38
22-Aug-99	10:42:08	323	29	315	37
22-Aug-99	10:42:09	310	26	318	36
22-Aug-99	10:42:10	311	23	319	39
22-Aug-99	10:42:11	311	23	318	39
22-Aug-99	10:42:12	311	26	318	40
22-Aug-99	10:42:13	311	24	315	39
22-Aug-99	10:42:14	320	23	315	38
22-Aug-99	10:42:15	319	25	316	36
22-Aug-99	10:42:16	326	24	319	37
22-Aug-99	10:42:17	330	24	319	36
22-Aug-99	10:42:18	314	26	315	36
22-Aug-99	10:42:19	299	26	315	34
22-Aug-99	10:42:20	310	25	314	31
22-Aug-99	10:42:21	314	27	315	28
22-Aug-99	10:42:22	313	26	315	29
22-Aug-99	10:42:23	313	28	314	29
22-Aug-99	10:42:24	299	28	319	30
22-Aug-99	10:42:25	314	31	316	30
22-Aug-99	10:42:26	314	27	314	33
22-Aug-99	10:42:27	340	22	319	31
22-Aug-99	10:42:28	321	21	318	33
22-Aug-99	10:42:29	326	21	320	33
22-Aug-99	10:42:30	334	27	321	35
22-Aug-99	10:42:31	323	34	320	33
22-Aug-99	10:42:32	320	36	313	32
22-Aug-99	10:42:33	320	35	321	34
22-Aug-99	10:42:34	311	30	318	38
22-Aug-99	10:42:35	300	29	318	38
22-Aug-99	10:42:36	293	29	319	37
22-Aug-99	10:42:37	308	26	318	40
22-Aug-99	10:42:38	303	31	318	41
22-Aug-99	10:42:39	323	31	320	40
22-Aug-99	10:42:40	303	28	321	41
22-Aug-99	10:42:41	318	25	318	42
22-Aug-99	10:42:42	318	26	315	42
22-Aug-99	10:42:43	331	26	318	39

**1-second wind direction and speed recorded at 25L/25R TDZ anemometers**

Date	Time (UTC)	RW 25L		RW 25R	
		Direction (degrees)	Speed (knots)	Direction (degrees)	Speed (knots)
22-Aug-99	10:42:44	326	29	318	36
22-Aug-99	10:42:45	318	29	315	39
22-Aug-99	10:42:46	313	29	314	37
22-Aug-99	10:42:47	311	28	313	30
22-Aug-99	10:42:48	314	27	309	29
22-Aug-99	10:42:49	324	24	314	30
22-Aug-99	10:42:50	316	23	309	33
22-Aug-99	10:42:51	314	23	304	31
22-Aug-99	10:42:52	319	21	299	30
22-Aug-99	10:42:53	318	20	318	35
22-Aug-99	10:42:54	309	19	310	40
22-Aug-99	10:42:55	311	18	313	38
22-Aug-99	10:42:56	310	19	314	37
22-Aug-99	10:42:57	309	18	318	38
22-Aug-99	10:42:58	299	18	314	37
22-Aug-99	10:42:59	301	18	313	40
22-Aug-99	10:43:00	323	20	316	39
22-Aug-99	10:43:01	320	21	314	40
22-Aug-99	10:43:02	320	23	320	41
22-Aug-99	10:43:03	321	23	314	38
22-Aug-99	10:43:04	319	20	321	39
22-Aug-99	10:43:05	324	20	318	35
22-Aug-99	10:43:06	308	19	314	37
22-Aug-99	10:43:07	283	19	318	41
22-Aug-99	10:43:08	320	18	321	43
22-Aug-99	10:43:09	345	22	316	43
22-Aug-99	10:43:10	306	20	319	41
22-Aug-99	10:43:11	335	20	314	41
22-Aug-99	10:43:12	339	17	318	39
22-Aug-99	10:43:13	294	14	320	42
22-Aug-99	10:43:14	303	15	321	43
22-Aug-99	10:43:15	311	21	319	42
22-Aug-99	10:43:16	320	24	318	41
22-Aug-99	10:43:17	331	28	321	40
22-Aug-99	10:43:18	324	28	320	39
22-Aug-99	10:43:19	325	26	316	39
22-Aug-99	10:43:20	325	24	319	41
22-Aug-99	10:43:21	319	25	320	39
22-Aug-99	10:43:22	323	24	326	40
22-Aug-99	10:43:23	309	22	324	39
22-Aug-99	10:43:24	328	22	320	39
22-Aug-99	10:43:25	325	21	325	39
22-Aug-99	10:43:26	314	22	320	40
22-Aug-99	10:43:27	321	21	320	41

**1-second wind direction and speed recorded at 25L/25R TDZ anemometers**

Date	Time (UTC)	RW 25L		RW 25R	
		Direction (degrees)	Speed (knots)	Direction (degrees)	Speed (knots)
22-Aug-99	10:43:28	318	20	320	37
22-Aug-99	10:43:29	315	19	320	35
22-Aug-99	10:43:30	321	18	320	38
22-Aug-99	10:43:31	323	17	320	37
22-Aug-99	10:43:32	316	19	321	34
22-Aug-99	10:43:33	315	20	319	34
22-Aug-99	10:43:34	318	21	320	31
22-Aug-99	10:43:35	330	19	325	34
22-Aug-99	10:43:36	333	19	321	38
22-Aug-99	10:43:37	320	25	318	37
22-Aug-99	10:43:38	318	29	316	38
22-Aug-99	10:43:39	330	26	320	36
22-Aug-99	10:43:40	315	24	321	35
22-Aug-99	10:43:41	309	27	318	31
22-Aug-99	10:43:42	316	30	318	32
22-Aug-99	10:43:43	319	29	320	36
22-Aug-99	10:43:44	320	26	318	37
22-Aug-99	10:43:45	319	26	318	35
22-Aug-99	10:43:46	330	26	316	38
22-Aug-99	10:43:47	329	26	318	39
22-Aug-99	10:43:48	329	26	319	40
22-Aug-99	10:43:49	325	25	321	40
22-Aug-99	10:43:50	316	24	318	39
22-Aug-99	10:43:51	311	23	324	37
22-Aug-99	10:43:52	328	23	321	36
22-Aug-99	10:43:53	334	21	321	36
22-Aug-99	10:43:54	329	22	326	37
22-Aug-99	10:43:55	334	24	324	38
22-Aug-99	10:43:56	314	23	320	35
22-Aug-99	10:43:57	301	19	316	35
22-Aug-99	10:43:58	305	17	318	37
22-Aug-99	10:43:59	305	17	320	34
22-Aug-99	10:44:00	305	19	319	30

**1-second wind direction and speed recorded at 07L/07R TDZ anemometers**

Date	Time (UTC)	RW 07L		RW 07R	
		Direction (degrees)	Speed (knots)	Direction (degrees)	Speed (knots)
22-Aug-99	10:42:00	315	43	304	31
22-Aug-99	10:42:01	316	43	310	31
22-Aug-99	10:42:02	324	42	310	30
22-Aug-99	10:42:03	316	43	303	31
22-Aug-99	10:42:04	316	38	308	31
22-Aug-99	10:42:05	311	37	313	31
22-Aug-99	10:42:06	319	37	309	29
22-Aug-99	10:42:07	316	35	303	27
22-Aug-99	10:42:08	309	32	301	28
22-Aug-99	10:42:09	320	33	308	27
22-Aug-99	10:42:10	314	36	303	27
22-Aug-99	10:42:11	314	36		
22-Aug-99	10:42:12	316	37		
22-Aug-99	10:42:13	313	36		
22-Aug-99	10:42:14	314	36		
22-Aug-99	10:42:15	318	41		
22-Aug-99	10:42:16	314	43		
22-Aug-99	10:42:17	315	45		
22-Aug-99	10:42:18	310	45		
22-Aug-99	10:42:19	310	38		
22-Aug-99	10:42:20	309	35		
22-Aug-99	10:42:21	315	35	305	28
22-Aug-99	10:42:22	311	38	308	26
22-Aug-99	10:42:23	313	34	303	24
22-Aug-99	10:42:24	313	34	300	26
22-Aug-99	10:42:25	313	36	310	25
22-Aug-99	10:42:26	306	33	314	25
22-Aug-99	10:42:27	304	33	309	27
22-Aug-99	10:42:28	310	32	309	27
22-Aug-99	10:42:29	313	31	308	29
22-Aug-99	10:42:30	316	31	313	27
22-Aug-99	10:42:31	323	32	305	26
22-Aug-99	10:42:32	313	29	311	27
22-Aug-99	10:42:33	313	30	309	27
22-Aug-99	10:42:34	310	28	311	28
22-Aug-99	10:42:35	309	33	313	29
22-Aug-99	10:42:36	315	37	310	29
22-Aug-99	10:42:37	320	37	315	27
22-Aug-99	10:42:38	316	40	318	30
22-Aug-99	10:42:39	320	42	316	31
22-Aug-99	10:42:40	315	44	319	28
22-Aug-99	10:42:41	319	43	329	29
22-Aug-99	10:42:42	313	40	309	29
22-Aug-99	10:42:43	316	39	304	27

1-second wind direction and speed recorded at 07L/07R TDZ anemometers

Date	Time (UTC)	RW 07L		RW 07R	
		Direction (degrees)	Speed (knots)	Direction (degrees)	Speed (knots)
22-Aug-99	10:42:44	316	39	310	27
22-Aug-99	10:42:45	314	38	310	28
22-Aug-99	10:42:46	308	30	311	28
22-Aug-99	10:42:47	314	31	326	27
22-Aug-99	10:42:48	311	31	326	25
22-Aug-99	10:42:49	309	34	319	25
22-Aug-99	10:42:50	313	32	316	24
22-Aug-99	10:42:51	310	34	311	24
22-Aug-99	10:42:52	315	35	310	23
22-Aug-99	10:42:53	319	35	306	25
22-Aug-99	10:42:54	315	36	306	26
22-Aug-99	10:42:55	314	36	315	30
22-Aug-99	10:42:56	313	35	304	28
22-Aug-99	10:42:57	315	33	314	27
22-Aug-99	10:42:58	315	35	318	27
22-Aug-99	10:42:59	319	34	311	28
22-Aug-99	10:43:00	315	33	311	28
22-Aug-99	10:43:01	313	32		
22-Aug-99	10:43:02	311	33		
22-Aug-99	10:43:03	310	29		
22-Aug-99	10:43:04	316	31		
22-Aug-99	10:43:05	315	31		
22-Aug-99	10:43:06	321	30		
22-Aug-99	10:43:07	315	29		
22-Aug-99	10:43:08	316	27		
22-Aug-99	10:43:09	315	29		
22-Aug-99	10:43:10	319	33		
22-Aug-99	10:43:11	321	31	313	28
22-Aug-99	10:43:12	314	32	316	29
22-Aug-99	10:43:13	315	33	320	30
22-Aug-99	10:43:14	309	32	319	28
22-Aug-99	10:43:15	314	30	306	27
22-Aug-99	10:43:16	314	28	316	29
22-Aug-99	10:43:17	319	28	315	28
22-Aug-99	10:43:18	321	27	314	28
22-Aug-99	10:43:19	318	28	315	28
22-Aug-99	10:43:20	316	29	321	29
22-Aug-99	10:43:21	319	29	306	27
22-Aug-99	10:43:22	318	32	310	24
22-Aug-99	10:43:23	320	33	308	26
22-Aug-99	10:43:24	318	33	308	26
22-Aug-99	10:43:25	319	32	313	26
22-Aug-99	10:43:26	315	30	304	25
22-Aug-99	10:43:27	318	31	306	23

**1-second wind direction and speed recorded at 07L/07R TDZ anemometers**

Date	Time (UTC)	RW 07L		RW 07R	
		Direction (degrees)	Speed (knots)	Direction (degrees)	Speed (knots)
22-Aug-99	10:43:28	309	30	301	25
22-Aug-99	10:43:29	310	27	306	29
22-Aug-99	10:43:30	311	26	314	29
22-Aug-99	10:43:31	313	28	303	29
22-Aug-99	10:43:32	314	28	305	29
22-Aug-99	10:43:33	311	26	305	31
22-Aug-99	10:43:34	311	26	316	30
22-Aug-99	10:43:35	314	27	304	28
22-Aug-99	10:43:36	310	28	308	30
22-Aug-99	10:43:37	314	28	309	27
22-Aug-99	10:43:38	311	31	313	26
22-Aug-99	10:43:39	311	31	313	26
22-Aug-99	10:43:40	311	29	315	25
22-Aug-99	10:43:41	314	31	305	28
22-Aug-99	10:43:42	320	31	315	27
22-Aug-99	10:43:43	319	30	311	25
22-Aug-99	10:43:44	324	30	324	26
22-Aug-99	10:43:45	320	29	318	25
22-Aug-99	10:43:46	318	29	324	24
22-Aug-99	10:43:47	320	28	320	23
22-Aug-99	10:43:48	315	28	319	21
22-Aug-99	10:43:49	318	27	311	22
22-Aug-99	10:43:50	319	28	320	24
22-Aug-99	10:43:51	320	26		
22-Aug-99	10:43:52	320	26		
22-Aug-99	10:43:53	316	24		
22-Aug-99	10:43:54	316	24		
22-Aug-99	10:43:55	310	24		
22-Aug-99	10:43:56	311	25		
22-Aug-99	10:43:57	315	28		
22-Aug-99	10:43:58	318	29		
22-Aug-99	10:43:59	315	29		
22-Aug-99	10:44:00	313	30		