

# Ejection and Sweep Analysis (GLM Version) All Data

Experiments in canopy flux (Yukio Inoue)

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## 1 Introduction

Quadrant analysis can be used to characterize flow. It detects and sorts turbulent events associated with outward interactions (quadrant I), ejections (quadrant II), inward interactions (quadrant III), and sweeps (quadrant IV).

An ejection is characterized by the upward movement of slow fluid ( $u' < 0, w' > 0$ ). A sweep is the downward movement of fast fluid ( $u' > 0, w' < 0$ ).

### Definition of events

- Outward interaction (quadrant I): ( $u' > 0, w' > 0$ )
- Ejection (quadrant II): ( $u' < 0, w' > 0$ )
- Inward interaction (quadrant III): ( $u' < 0, w' < 0$ )
- Sweep (quadrant IV): ( $u' > 0, w' < 0$ )

A hole size parameter can be defined to extract extreme events. This threshold is defined by:

$$|u'w'| = H|\overline{u'w'}|$$

Where  $u'$  and  $w'$  are the fluctuations in the instantaneous velocities of  $u$  (longitudinal direction) and  $w$  (vertical direction).

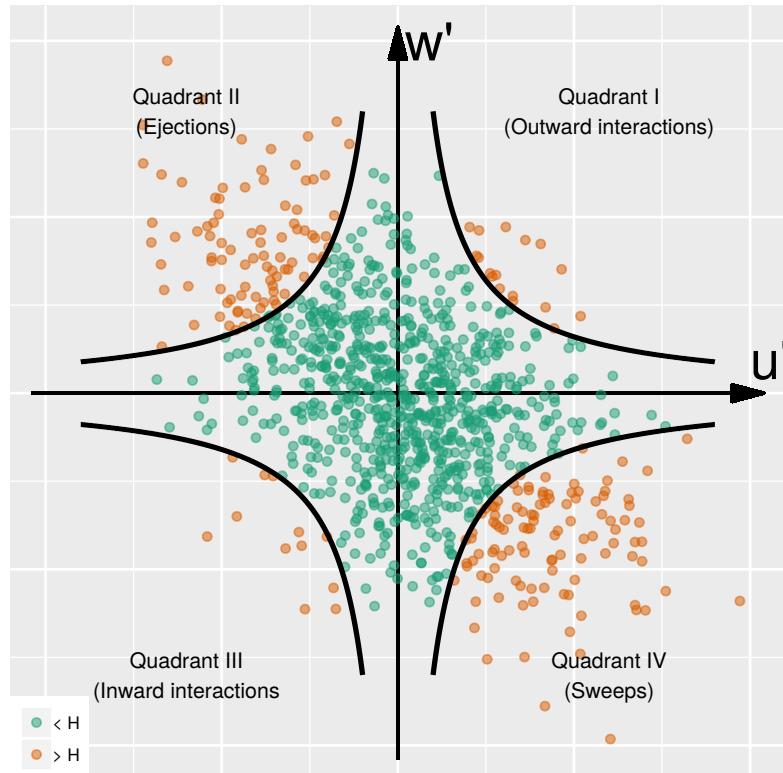


Figure 1: Bursting events and their associated quadrants. The thick line is the hole, where  $|u'w'| = \text{constant}$ .

### 1.1 Definitions of quadrant-hole analysis

**Negative momentum flux** (i.e., Reynolds shear stress;  $S_{i,H}$ )

$$S_{i,H} = \frac{1}{T} \int_0^T u'(t) \cdot w'(t) I_{i,H,t}(u', w') \cdot dt$$

where  $i$  is the quadrat ( $i = \{1, 2, 3, 4\}$ ),  $t$  is the time, and  $T$  is the total duration.  $I_{i,H,t}$  is called the conditional sampling function.

$$I_{i,H,t}(u', w') = \begin{cases} 1, & \text{if } (u', w') \text{ is in quadrant } i \text{ and } |u'w'| \geq H|\bar{u'w'}| \\ 0, & \text{otherwise} \end{cases}$$

The quadrant fraction of the stress ( $S_{i,H}^f$ ) is

$$S_{i,H}^f = S_{i,H}/S$$

where  $S$  is the mean stress,

$$S = \frac{1}{T} \int_0^T u'(t) \cdot w'(t) \cdot dt$$

Note that when  $H = 0$  (no hole region),

$$\sum_{i=1}^4 S_{i,H=0}^4 = 1$$

The **total kinetic energy** can also be calculated similarly.

$$TKE_{i,H} = \frac{1}{T} \int_0^T \frac{1}{2} (u'(t)^2 + v'(t)^2 + w'(t)^2) \cdot I_{i,H,t}(u', w') \cdot dt$$

The quadrant fraction of the TKE ( $TKE_{i,H}^f$ ) is

$$TKE_{i,H}^f = TKE_{i,H}/TKE$$

where TKE is the mean TKE,

$$TKE = \frac{1}{T} \int_0^T \frac{1}{2} (u'(t)^2 + v'(t)^2 + w'(t)^2) \cdot dt$$

Note that when  $H = 0$  (no hole region),

$$\sum_{i=1}^4 TKE_{i,H=0}^4 = 1$$

therefore, if the sum does not equal one for a hole size of 0, then there is something wrong with the calculation!

The duration ( $D$ ) of events is simply,

$$D_{i,H} = \frac{1}{T} \int_0^T I_{i,H,t} \cdot dt$$

## 1.2 Good References

- Wallace JM. 2016. Quadrant Analysis in Turbluence Research: History and Evolution. *Annual Review of Fluid Mechanics* 45(1): 131-158.
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- Lelouvetel J, Bigillon F, Doppler D, Vinkovic I, Champagne JY. 2009. Experimental investigation of ejections and sweeps involved in particle suspension. *Water Resources Research* 45(2): W02416.

## 2 Read data and packages

The code is not printed, because it this PDF is already very long.

Read some packages and the despiked data set.

## 3 Declare some functions

Functions for data processing.

Functions for making tables.

Functions for making plots.

## 4 Process data

After nesting the data frames, the data is processed to determine the events at hole sizes of 0, 1, 2, 3, and 4.

## 5 Quadrant analysis

### 5.1 Tables of velocity statistics

Table 1: Summary of data at 0.5 Hz.

Distance	Density	Position	Mean ( $\text{cm s}^{-1}$ )			Std. Dev. ( $\text{cm s}^{-1}$ )			Total duration
			u	v	w	u	v	w	
-2	High	Canopy edge	0.75	0.07	0.32	1.10	0.85	0.35	178.990
-2	Low	Canopy edge	0.89	0.04	0.05	1.16	0.93	0.37	178.580
-2	Medium	Canopy edge	0.67	0.00	0.23	0.68	0.49	0.21	179.095
13	High	Canopy edge	0.36	0.04	0.03	1.16	0.46	0.29	179.270
13	Low	Canopy edge	0.05	-0.15	-0.16	0.91	0.69	0.28	179.045
13	Medium	Canopy edge	0.30	-0.05	0.11	0.67	0.57	0.22	179.345
43	High	Canopy edge	0.38	0.05	-0.09	1.03	0.80	0.31	178.820
43	Low	Canopy edge	0.80	0.06	-0.08	0.96	0.75	0.26	179.420
43	Medium	Canopy edge	-0.11	-0.27	-0.29	0.77	0.31	0.19	179.390
62	High	Canopy edge	-0.07	-0.20	-0.35	0.88	0.72	0.30	179.310
62	Low	Canopy edge	0.04	-0.08	-0.26	1.06	0.85	0.28	179.385
62	Medium	Canopy edge	0.33	-0.04	-0.10	0.83	0.66	0.27	179.120
-2	High	Above canopy	0.74	0.08	0.18	1.18	0.93	0.39	178.580
-2	Low	Above canopy	1.22	0.01	0.07	1.02	0.73	0.32	179.460
-2	Medium	Above canopy	0.81	0.03	0.23	0.71	0.52	0.21	178.730
13	High	Above canopy	0.49	0.02	0.24	0.89	0.68	0.27	178.970
13	Low	Above canopy	1.21	0.08	0.15	0.95	0.70	0.31	179.200
13	Medium	Above canopy	0.53	-0.03	-0.01	0.74	0.51	0.21	178.930
43	High	Above canopy	0.98	0.01	-0.05	0.82	0.64	0.26	179.185
43	Low	Above canopy	1.12	0.09	-0.16	1.16	1.01	0.36	178.625
43	Medium	Above canopy	0.78	-0.04	-0.02	0.73	0.53	0.22	179.115
62	High	Above canopy	1.01	0.06	-0.08	0.93	0.73	0.31	179.245
62	Low	Above canopy	0.74	0.03	-0.10	1.12	0.86	0.36	178.965
62	Medium	Above canopy	0.75	0.04	-0.06	0.72	0.55	0.33	179.090
-2	High	Within canopy	0.42	0.08	-0.11	1.33	1.11	0.40	178.740
-2	Low	Within canopy	0.61	0.09	-0.06	1.36	1.12	0.41	179.040
-2	Medium	Within canopy	0.45	0.05	-0.15	1.22	0.93	0.30	178.500
13	High	Within canopy	0.28	0.01	-0.02	1.43	0.97	0.42	179.160
13	Low	Within canopy	1.05	0.10	-0.20	0.99	0.81	0.32	178.480
13	Medium	Within canopy	0.12	-0.03	-0.13	1.40	0.97	0.31	178.965
43	High	Within canopy	-0.35	-0.18	-0.83	1.48	1.09	0.48	178.785
43	Low	Within canopy	0.04	0.03	0.02	0.74	0.62	0.25	178.875
43	Medium	Within canopy	0.13	-0.28	-0.30	1.36	0.75	0.30	178.940
62	Low	Within canopy	-0.09	-0.24	-0.18	1.24	0.50	0.29	178.630
62	Medium	Within canopy	0.01	-0.08	-0.23	1.21	0.93	0.31	178.770

Table 2: Summary of data at 1 Hz.

Distance	Density	Position	Mean (cm s <sup>-1</sup> )			Std. Dev. (cm s <sup>-1</sup> )			Total duration
			u	v	w	u	v	w	
-2	High	Canopy edge	1.95	0.11	0.73	1.21	0.92	0.36	179.000
-2	Low	Canopy edge	2.15	0.06	0.26	1.05	0.91	0.36	179.035
-2	Medium	Canopy edge	1.95	0.06	0.63	0.79	0.58	0.24	179.045
13	High	Canopy edge	1.24	0.02	0.09	1.14	0.42	0.27	178.505
13	Low	Canopy edge	0.67	-0.33	-0.01	1.04	0.78	0.31	178.995
13	Medium	Canopy edge	1.22	-0.21	0.47	0.76	0.59	0.23	179.140
43	High	Canopy edge	0.92	-0.02	0.05	0.98	0.74	0.29	178.620
43	Low	Canopy edge	2.09	0.12	0.07	0.78	0.68	0.26	179.050
43	Medium	Canopy edge	0.73	0.04	-0.11	0.78	0.38	0.20	178.880
62	High	Canopy edge	0.23	0.00	0.02	1.17	0.92	0.38	178.955
62	Low	Canopy edge	1.40	0.11	-0.09	0.91	0.74	0.28	179.190
62	Medium	Canopy edge	1.12	0.10	-0.07	0.81	0.66	0.24	178.565
-2	High	Above canopy	2.03	0.16	0.72	1.27	1.01	0.39	179.090
-2	Low	Above canopy	2.17	0.06	0.12	0.99	0.89	0.34	178.495
-2	Medium	Above canopy	2.10	0.12	0.62	0.81	0.60	0.24	178.725
13	High	Above canopy	1.63	0.31	0.81	0.81	0.78	0.29	178.685
13	Low	Above canopy	2.44	0.27	0.31	1.00	0.87	0.33	179.420
13	Medium	Above canopy	1.79	-0.03	0.13	0.77	0.58	0.22	179.025
43	High	Above canopy	2.45	-0.14	0.05	0.70	0.64	0.23	179.350
43	Low	Above canopy	2.90	0.04	-0.25	1.03	1.07	0.37	178.525
43	Medium	Above canopy	2.11	-0.03	0.16	0.70	0.57	0.22	179.215
62	High	Above canopy	2.31	-0.06	-0.05	0.72	0.66	0.28	178.825
62	Low	Above canopy	2.04	-0.03	-0.19	0.99	0.88	0.44	179.415
62	Medium	Above canopy	1.64	0.07	-0.05	0.74	0.56	0.23	178.750
-2	High	Within canopy	1.67	0.08	0.10	1.06	0.90	0.33	178.915
-2	Low	Within canopy	2.00	0.10	-0.02	0.95	0.86	0.32	179.010
-2	Medium	Within canopy	1.75	0.09	-0.02	0.85	0.69	0.25	179.105
13	High	Within canopy	1.21	0.00	0.47	1.29	0.83	0.37	179.045
13	Low	Within canopy	2.53	0.13	-0.29	0.83	0.78	0.29	178.895
13	Medium	Within canopy	0.74	0.21	0.22	1.13	0.76	0.28	178.625
43	High	Within canopy	0.34	0.13	-0.11	1.36	0.91	0.40	179.280
43	Low	Within canopy	0.18	-0.09	0.07	0.41	0.61	0.20	179.370
43	Medium	Within canopy	0.36	0.03	-0.06	1.36	0.73	0.29	179.025
62	High	Within canopy	0.35	0.09	-0.09	1.37	1.10	0.43	178.510
62	Low	Within canopy	0.66	-0.05	0.02	1.20	0.99	0.37	179.100
62	Medium	Within canopy	0.49	0.12	-0.03	1.21	0.91	0.30	178.625

Table 3: Summary of data at 10 Hz.

Distance	Density	Position	Mean (cm s <sup>-1</sup> )			Std. Dev. (cm s <sup>-1</sup> )			Total duration
			u	v	w	u	v	w	
-2	High	Canopy edge	25.29	0.91	5.30	1.49	1.50	1.53	178.900
13	High	Canopy edge	9.56	1.27	3.35	2.87	1.83	1.34	178.920
43	High	Canopy edge	12.95	3.50	5.95	3.05	3.58	1.37	178.810
62	High	Canopy edge	4.23	-0.28	-0.07	1.23	0.81	0.44	178.870
-2	High	Above canopy	26.43	1.19	4.44	1.22	1.32	1.14	178.750
-2	Low	Above canopy	27.61	0.92	-0.29	1.66	2.46	1.47	178.820
-2	Medium	Above canopy	27.90	0.73	3.27	1.06	1.17	0.92	178.960
13	High	Above canopy	33.14	1.69	9.22	1.27	1.45	1.45	179.335
13	Low	Above canopy	29.52	1.10	0.99	1.51	1.76	1.15	179.480
13	Medium	Above canopy	32.41	1.46	5.72	1.08	1.28	0.99	179.325
43	High	Above canopy	35.02	0.43	3.45	4.37	3.92	2.66	178.955
43	Low	Above canopy	35.02	0.62	-1.35	1.27	3.06	1.38	178.840
43	Medium	Above canopy	39.87	1.30	3.58	1.13	1.39	1.22	179.275
62	High	Above canopy	38.64	-0.56	-0.31	4.79	4.48	3.33	179.440
62	Low	Above canopy	36.42	0.12	-2.71	1.31	1.65	1.13	178.585
62	Medium	Above canopy	42.69	0.61	2.31	1.17	1.33	1.40	178.940
-2	High	Within canopy	23.53	0.47	3.32	2.13	1.87	1.30	178.750
-2	Low	Within canopy	26.59	0.68	-1.05	1.54	1.68	1.39	179.120
-2	Medium	Within canopy	26.46	0.52	2.66	1.72	1.62	1.25	178.565
13	High	Within canopy	1.67	0.04	0.26	1.63	1.08	0.58	179.205
13	Low	Within canopy	21.08	-0.27	-1.04	3.29	3.21	1.95	179.310
13	Medium	Within canopy	12.73	0.41	-0.69	3.08	2.05	1.16	179.425
43	High	Within canopy	6.82	1.85	-1.23	1.88	2.17	1.11	175.220
43	Low	Within canopy	14.81	2.38	2.51	1.95	2.18	1.09	179.025
43	Medium	Within canopy	6.61	1.12	0.49	1.30	1.34	0.56	179.210
62	High	Within canopy	7.75	2.62	0.85	1.40	1.80	0.97	178.915
62	Low	Within canopy	8.86	-0.91	-0.53	1.81	1.99	1.13	178.795
62	Medium	Within canopy	9.17	-0.25	-1.90	1.50	1.36	0.96	179.345
-2	Low	Canopy edge	27.05	0.78	1.81	1.37	1.68	1.47	178.485
-2	Medium	Canopy edge	27.34	0.94	3.09	1.39	1.45	1.54	179.440
13	Low	Canopy edge	30.11	1.85	3.10	1.41	1.97	1.36	179.285
13	Medium	Canopy edge	0.96	0.88	-0.30	1.12	1.05	0.52	178.825
43	Low	Canopy edge	9.73	-0.35	1.34	2.23	1.57	1.21	179.225
43	Medium	Canopy edge	1.91	-0.16	-0.06	1.46	0.53	0.35	178.845
62	Low	Canopy edge	14.58	0.25	0.40	2.20	2.18	1.48	178.890
62	Medium	Canopy edge	2.11	-0.82	0.10	1.28	1.17	0.53	178.730

Table 4: Summary of data at 15 Hz.

Distance	Density	Position	Mean (cm s <sup>-1</sup> )			Std. Dev. (cm s <sup>-1</sup> )			Total duration
			u	v	w	u	v	w	
-2	High	Above canopy	39.45	1.62	5.97	1.63	1.73	1.51	178.720
-2	Low	Above canopy	40.31	1.29	-0.72	1.72	2.50	1.98	179.010
-2	Medium	Above canopy	41.62	1.20	4.25	1.43	1.67	1.46	178.655
13	High	Above canopy	48.03	2.18	10.68	1.62	2.08	1.92	179.140
13	Low	Above canopy	42.94	1.48	0.72	1.67	2.14	1.66	178.850
13	Medium	Above canopy	47.23	1.81	6.58	1.44	1.82	1.64	179.210
43	High	Above canopy	66.01	2.76	4.10	1.55	2.22	2.10	179.030
43	Low	Above canopy	50.49	0.41	-2.73	1.83	2.60	1.89	179.400
43	Medium	Above canopy	57.23	1.59	4.07	1.41	1.83	1.71	178.565
62	High	Above canopy	68.27	1.93	3.06	3.97	4.02	4.21	179.025
62	Low	Above canopy	52.49	0.24	-4.57	1.70	2.06	1.59	178.755
62	Medium	Above canopy	61.22	0.99	2.85	1.43	1.81	1.91	178.565
-2	High	Within canopy	34.83	0.47	5.02	2.97	2.56	1.78	179.250
-2	Low	Within canopy	38.95	1.21	-1.88	2.16	2.39	2.04	179.290
-2	Medium	Within canopy	39.41	1.14	3.83	2.57	2.54	2.04	178.970
13	High	Within canopy	3.35	-3.95	1.75	2.89	2.53	1.18	178.990
13	Low	Within canopy	33.11	2.98	-1.29	4.60	4.36	2.78	178.530
13	Medium	Within canopy	2.92	-0.84	0.25	1.73	1.83	0.72	179.035
43	High	Within canopy	2.29	-0.37	-0.78	1.46	1.15	0.65	179.300
43	Low	Within canopy	9.89	0.29	1.99	2.66	1.84	0.99	178.595
43	Medium	Within canopy	10.96	1.71	-0.63	1.66	1.94	0.92	178.675
62	High	Within canopy	11.35	2.09	-0.93	1.90	2.42	1.27	178.785
62	Low	Within canopy	13.43	-1.97	-0.23	2.43	3.10	1.78	178.895
62	Medium	Within canopy	11.98	-0.82	-2.75	2.32	2.05	1.26	178.585
-2	Low	Canopy edge	39.47	1.27	2.74	1.95	2.23	2.41	178.660
-2	Medium	Canopy edge	39.98	1.34	4.93	2.37	2.68	2.88	178.795
13	Low	Canopy edge	40.11	5.50	2.11	3.60	3.61	1.99	178.545
13	Medium	Canopy edge	8.81	-1.22	-0.10	2.97	1.79	1.03	178.730
43	Low	Canopy edge	15.57	2.65	4.08	3.14	2.87	1.60	179.320
43	Medium	Canopy edge	8.56	0.07	1.06	1.98	1.62	0.88	178.625
62	Low	Canopy edge	18.96	-3.38	-0.38	3.26	3.22	2.18	178.975
62	Medium	Canopy edge	2.63	-1.15	-0.58	1.20	1.50	0.59	179.340
-2	High	Canopy edge	38.28	1.30	6.79	1.98	2.12	2.20	178.735
13	High	Canopy edge	5.38	3.15	2.32	3.03	2.63	1.60	179.440
43	High	Canopy edge	1.15	0.09	0.22	1.80	0.88	0.53	178.755
62	High	Canopy edge	6.44	-0.28	0.60	2.43	1.65	0.98	179.005

Table 5: Summary of data at 2 Hz.

Distance	Density	Position	Mean (cm s <sup>-1</sup> )			Std. Dev. (cm s <sup>-1</sup> )			Total duration
			u	v	w	u	v	w	
-2	Low	Canopy edge	4.86	0.08	0.54	0.80	0.87	0.40	179.325
13	Low	Canopy edge	1.74	-0.66	0.48	1.69	0.81	0.44	179.245
43	Low	Canopy edge	2.71	0.06	0.33	1.11	1.02	0.49	179.090
62	Low	Canopy edge	0.52	-0.06	-0.02	0.81	0.42	0.24	178.535
-2	High	Canopy edge	4.39	0.23	1.66	1.24	0.94	0.42	178.910
-2	Medium	Canopy edge	4.62	0.22	1.31	0.82	0.65	0.33	178.945
13	High	Canopy edge	2.49	-0.11	-0.19	0.95	0.48	0.28	179.290
13	Medium	Canopy edge	3.20	0.33	1.18	0.91	0.68	0.28	179.120
43	High	Canopy edge	2.41	-0.24	0.30	0.97	0.82	0.31	179.445
43	Medium	Canopy edge	2.59	0.23	-0.10	0.90	0.50	0.27	179.425
62	High	Canopy edge	1.25	0.02	0.24	1.49	1.18	0.55	179.165
62	Medium	Canopy edge	2.67	0.38	0.02	0.75	0.73	0.27	178.640
-2	High	Above canopy	4.60	0.24	1.46	1.23	1.00	0.41	179.095
-2	Low	Above canopy	5.07	0.06	0.22	0.93	1.04	0.41	179.115
-2	Medium	Above canopy	4.93	0.22	1.17	0.78	0.68	0.30	178.860
13	High	Above canopy	0.50	0.38	0.32	0.79	0.61	0.27	178.495
13	Low	Above canopy	5.52	0.32	0.58	0.92	0.98	0.42	178.525
13	Medium	Above canopy	4.74	-0.03	0.44	0.74	0.80	0.30	178.505
43	High	Above canopy	5.40	-0.32	0.25	0.90	1.01	0.50	179.340
43	Low	Above canopy	6.33	-0.07	-0.23	0.92	1.05	0.46	179.040
43	Medium	Above canopy	4.75	0.02	0.69	0.86	0.84	0.42	179.185
62	High	Above canopy	5.17	0.04	0.12	0.87	1.01	0.53	179.075
62	Low	Above canopy	6.74	0.04	-0.37	0.82	0.97	0.49	179.015
62	Medium	Above canopy	3.97	0.11	0.00	0.90	0.92	0.46	178.750
-2	High	Within canopy	3.98	0.16	0.40	1.39	1.37	0.50	179.185
-2	Low	Within canopy	4.93	0.11	0.00	0.82	1.00	0.37	179.230
-2	Medium	Within canopy	4.49	0.18	0.17	0.71	0.74	0.27	178.525
13	High	Within canopy	2.72	0.09	1.06	1.37	0.94	0.39	178.725
13	Low	Within canopy	5.22	0.33	-0.49	0.84	0.82	0.50	178.735
13	Medium	Within canopy	2.42	0.50	0.57	1.22	0.96	0.39	179.435
43	High	Within canopy	1.16	-0.27	-0.04	1.15	0.90	0.36	178.945
43	Low	Within canopy	0.94	-0.24	0.25	0.53	0.64	0.22	178.705
43	Medium	Within canopy	1.23	0.45	0.30	1.08	1.06	0.30	178.685
62	High	Within canopy	0.87	0.16	0.29	1.00	0.69	0.29	178.730
62	Low	Within canopy	1.84	-0.06	0.09	1.10	0.94	0.37	178.695
62	Medium	Within canopy	1.43	0.92	-0.27	1.04	0.79	0.38	179.060

Table 6: Summary of data at 4 Hz.

Distance	Density	Position	Mean (cm s <sup>-1</sup> )			Std. Dev. (cm s <sup>-1</sup> )			Total duration
			u	v	w	u	v	w	
-2	Low	Canopy edge	10.77	0.18	0.99	0.90	0.90	0.56	179.095
-2	Medium	Canopy edge	10.20	0.41	1.85	0.77	0.79	0.55	178.810
13	Low	Canopy edge	11.10	0.68	1.14	1.42	1.44	0.71	178.790
13	Medium	Canopy edge	4.12	-0.08	0.33	1.23	1.05	0.42	179.435
43	Low	Canopy edge	6.47	0.52	1.29	1.60	1.60	1.00	178.615
43	Medium	Canopy edge	2.90	1.06	1.03	1.52	1.50	0.63	178.715
62	Low	Canopy edge	8.13	0.24	0.87	1.16	1.27	0.76	178.785
62	Medium	Canopy edge	5.96	-0.36	0.45	0.83	0.88	0.43	179.100
-2	High	Canopy edge	9.63	0.41	2.78	1.14	1.02	0.57	178.500
13	High	Canopy edge	1.67	1.93	0.73	1.59	1.36	0.70	178.500
43	High	Canopy edge	6.21	-0.25	0.17	0.93	1.08	0.47	179.430
62	High	Canopy edge	3.77	0.12	-0.05	1.07	1.18	0.46	179.335
-2	High	Above canopy	10.10	0.43	2.48	1.16	1.08	0.52	178.485
-2	Low	Above canopy	11.03	0.13	0.29	0.79	0.87	0.51	179.400
-2	Medium	Above canopy	10.49	0.37	1.90	0.73	0.73	0.39	178.965
13	High	Above canopy	13.96	0.58	5.43	0.96	0.93	0.56	178.665
13	Low	Above canopy	11.94	0.16	0.93	0.78	0.78	0.47	179.345
13	Medium	Above canopy	11.87	0.90	2.44	0.92	0.84	0.41	178.940
43	High	Above canopy	11.49	-0.57	0.51	1.71	1.83	1.06	179.285
43	Low	Above canopy	13.84	0.14	-0.29	1.33	1.35	0.69	178.520
43	Medium	Above canopy	14.27	0.36	1.62	1.30	1.06	0.67	178.710
62	High	Above canopy	11.67	0.40	0.44	1.54	1.79	1.08	179.305
62	Low	Above canopy	14.78	-0.10	-0.70	1.28	1.23	0.78	178.530
62	Medium	Above canopy	11.53	0.33	0.58	1.45	1.56	1.06	179.375
-2	High	Within canopy	8.86	0.23	1.08	1.37	1.42	0.62	179.330
-2	Low	Within canopy	10.73	0.22	-0.40	0.75	0.89	0.54	178.555
-2	Medium	Within canopy	9.86	0.13	0.81	0.87	0.92	0.54	178.495
13	High	Within canopy	6.77	0.79	2.33	1.68	1.61	0.73	179.300
13	Low	Within canopy	9.69	0.68	-0.66	1.51	1.55	0.77	179.080
13	Medium	Within canopy	5.56	1.57	2.00	2.12	1.98	0.92	179.230
43	High	Within canopy	1.59	-0.58	0.62	1.20	1.28	0.57	180.865
43	Low	Within canopy	5.99	0.80	1.13	1.78	1.56	0.78	179.225
43	Medium	Within canopy	3.55	0.00	1.13	1.04	0.89	0.37	178.635
62	High	Within canopy	2.55	0.33	0.80	1.14	1.02	0.46	178.795
62	Low	Within canopy	0.13	0.01	0.01	0.27	0.33	0.11	179.340
62	Medium	Within canopy	4.56	0.16	-0.55	0.94	0.97	0.57	178.510

Table 7: Summary of data at 6 Hz.

Distance	Density	Position	Mean (cm s <sup>-1</sup> )			Std. Dev. (cm s <sup>-1</sup> )			Total duration
			u	v	w	u	v	w	
-2	Low	Canopy edge	16.35	0.27	1.45	0.88	0.90	0.78	178.685
-2	Medium	Canopy edge	16.01	0.55	2.50	0.84	0.90	0.80	178.545
13	Low	Canopy edge	18.30	0.82	2.94	0.84	0.91	0.72	179.455
13	Medium	Canopy edge	5.90	0.45	-0.58	1.81	0.98	0.59	178.930
43	Low	Canopy edge	12.25	0.52	1.23	1.97	1.96	1.32	178.740
43	Medium	Canopy edge	2.47	-1.16	0.87	1.60	0.80	0.45	178.655
62	Low	Canopy edge	11.79	0.17	1.03	1.66	1.69	1.15	179.175
62	Medium	Canopy edge	7.63	1.32	1.06	0.94	1.01	0.47	179.430
-2	High	Canopy edge	14.94	0.58	3.59	1.07	1.14	0.79	178.570
13	High	Canopy edge	9.99	2.08	3.54	2.26	1.71	1.08	179.065
43	High	Canopy edge	2.64	3.27	3.37	2.14	2.47	1.25	178.795
62	High	Canopy edge	4.17	1.07	0.63	0.97	0.94	0.57	178.775
-2	High	Above canopy	15.56	0.65	3.21	0.97	1.02	0.64	179.395
-2	Low	Above canopy	16.66	1.59	-0.30	1.24	2.99	1.05	178.825
-2	Medium	Above canopy	16.39	0.51	2.42	0.74	0.80	0.55	178.930
13	High	Above canopy	20.50	1.73	6.41	0.95	1.20	0.78	178.595
13	Low	Above canopy	17.95	0.28	1.18	1.00	0.95	0.68	178.715
13	Medium	Above canopy	19.79	0.99	4.08	0.76	0.83	0.66	179.280
43	High	Above canopy	19.27	-0.14	0.91	2.56	2.49	1.55	178.885
43	Low	Above canopy	22.02	-0.14	-0.19	1.29	1.36	0.90	179.005
43	Medium	Above canopy	24.47	0.63	3.05	1.08	1.02	0.75	178.485
62	High	Above canopy	22.37	0.09	-0.91	2.92	2.95	2.02	179.255
62	Low	Above canopy	22.97	-0.12	-1.25	1.23	1.26	0.88	178.585
62	Medium	Above canopy	21.51	0.40	1.37	2.06	2.17	1.50	178.590
-2	High	Within canopy	13.77	0.25	1.90	1.46	1.43	0.81	179.255
-2	Low	Within canopy	16.24	0.31	-0.58	1.16	1.18	0.84	178.940
-2	Medium	Within canopy	15.56	0.21	1.53	1.10	1.09	0.82	178.675
13	High	Within canopy	9.31	-0.44	3.10	2.52	2.16	0.96	178.785
13	Low	Within canopy	15.01	1.13	-1.62	2.21	2.23	1.30	179.040
13	Medium	Within canopy	1.79	0.12	-0.12	1.05	0.54	0.32	179.220
43	High	Within canopy	2.37	0.00	0.61	1.23	1.14	0.61	175.265
43	Low	Within canopy	9.43	2.08	0.56	1.89	2.02	1.13	179.015
43	Medium	Within canopy	5.59	-0.13	1.25	1.03	0.99	0.44	178.785
62	High	Within canopy	4.06	0.64	0.67	1.16	1.25	0.58	179.105
62	Low	Within canopy	4.60	-0.37	0.19	1.44	1.53	0.84	179.085
62	Medium	Within canopy	7.35	-0.40	-1.37	1.21	1.41	0.89	178.485

Table 8: Summary of data at 8 Hz.

Distance	Density	Position	Mean (cm s <sup>-1</sup> )			Std. Dev. (cm s <sup>-1</sup> )			Total duration
			u	v	w	u	v	w	
-2	Low	Canopy edge	21.61	0.52	1.70	1.07	1.24	1.10	179.135
13	Low	Canopy edge	24.32	0.48	2.93	1.18	1.22	0.95	178.580
43	Low	Canopy edge	10.24	1.34	1.31	1.75	1.25	0.81	179.175
62	Low	Canopy edge	16.03	0.19	0.82	2.23	2.20	1.52	179.100
-2	High	Canopy edge	20.11	0.72	4.45	1.31	1.23	1.17	179.230
13	High	Canopy edge	10.88	1.18	4.37	3.57	2.36	1.42	178.545
43	High	Canopy edge	1.69	1.76	4.71	3.22	3.58	1.53	178.670
62	High	Canopy edge	7.06	1.06	1.46	1.08	0.98	0.60	178.975
-2	High	Above canopy	20.96	0.94	3.88	1.06	1.07	0.78	178.780
-2	Low	Above canopy	22.15	1.24	-0.28	1.53	2.88	1.26	178.945
-2	Medium	Above canopy	22.17	0.58	3.04	0.94	0.93	0.71	179.460
13	High	Above canopy	26.80	1.62	8.00	1.10	1.21	1.05	179.110
13	Low	Above canopy	23.81	1.20	0.93	1.36	1.92	0.98	179.100
13	Medium	Above canopy	26.23	1.15	4.90	1.01	1.11	0.85	178.810
43	High	Above canopy	28.16	0.66	0.89	3.86	3.69	2.36	178.930
43	Low	Above canopy	28.94	2.51	-1.28	1.55	4.22	1.30	178.770
43	Medium	Above canopy	32.57	0.98	3.66	0.91	1.12	0.84	179.320
62	High	Above canopy	31.47	-0.43	-1.40	3.28	3.28	2.15	178.935
62	Low	Above canopy	29.83	0.60	-2.17	1.31	2.14	1.00	179.275
62	Medium	Above canopy	32.57	0.50	2.13	2.59	2.16	1.94	178.855
-2	High	Within canopy	18.58	0.29	2.62	1.68	1.62	1.06	179.200
-2	Low	Within canopy	21.58	0.51	-0.78	1.26	1.39	1.15	178.785
-2	Medium	Within canopy	21.10	0.28	2.16	1.36	1.33	1.05	179.075
13	High	Within canopy	2.18	0.99	0.80	1.83	1.24	0.65	179.305
13	Low	Within canopy	11.81	-1.00	-2.02	2.97	2.53	1.48	178.515
13	Medium	Within canopy	6.03	-0.51	-0.75	2.12	1.72	0.77	178.735
43	High	Within canopy	4.28	-0.18	0.72	2.11	1.80	0.97	163.600
43	Low	Within canopy	12.06	1.51	2.06	1.91	1.64	1.00	179.060
43	Medium	Within canopy	5.17	1.09	0.96	1.21	0.90	0.49	179.200
62	High	Within canopy	5.82	1.15	0.52	1.24	1.57	0.72	179.115
62	Low	Within canopy	7.46	-0.09	0.27	1.38	1.35	0.82	178.700
62	Medium	Within canopy	8.86	-0.67	-2.26	1.43	1.41	0.85	178.550
-2	Medium	Canopy edge	21.67	0.59	2.78	1.12	1.27	1.20	179.025
13	Medium	Canopy edge	1.30	0.59	-0.16	1.12	0.82	0.43	179.365
43	Medium	Canopy edge	2.80	1.33	0.47	1.69	1.20	0.69	179.390
62	Medium	Canopy edge	6.87	-0.66	1.16	1.28	1.06	0.64	179.175

## 5.2 Tables of quadrant statistics for a hole size of 0

Table 9: Quadrant analysis summary for a hole size of 0 at the edge of the canopy, at a flow speed setting of 0.5 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	22.755	447	1876	0.221	0.232	4551	0.127
High	II	Ejection	57.070	282	929	0.349	0.289	11414	0.319
High	III	Inward interaction	44.250	116	615	0.111	0.148	8850	0.247
High	IV	Sweep	54.915	268	1106	0.319	0.331	10983	0.307
Low	I	Outward interaction	24.035	400	1953	0.186	0.225	4807	0.135
Low	II	Ejection	60.135	314	1067	0.366	0.307	12027	0.337
Low	III	Inward interaction	36.195	146	795	0.102	0.138	7239	0.203
Low	IV	Sweep	58.215	308	1187	0.346	0.331	11643	0.326
Medium	I	Outward interaction	23.725	160	720	0.207	0.252	4745	0.132
Medium	II	Ejection	58.485	120	383	0.381	0.330	11697	0.327
Medium	III	Inward interaction	39.360	35	194	0.076	0.113	7872	0.220
Medium	IV	Sweep	57.525	107	361	0.336	0.306	11505	0.321

Table 10: Quadrant analysis summary for a hole size of 0 at the edge of the canopy, at a flow speed setting of 0.5 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	18.865	450	1901	0.205	0.245	3773	0.105
High	II	Ejection	64.170	243	695	0.376	0.305	12834	0.358
High	III	Inward interaction	36.765	104	431	0.092	0.108	7353	0.205
High	IV	Sweep	59.470	228	838	0.327	0.341	11894	0.332
Low	I	Outward interaction	21.535	294	1333	0.203	0.233	4307	0.120
Low	II	Ejection	59.275	201	672	0.381	0.323	11855	0.331
Low	III	Inward interaction	39.820	57	367	0.072	0.119	7964	0.222
Low	IV	Sweep	58.415	184	685	0.344	0.325	11683	0.326
Medium	I	Outward interaction	23.575	119	642	0.156	0.208	4715	0.131
Medium	II	Ejection	61.630	114	392	0.393	0.332	12326	0.344
Medium	III	Inward interaction	38.280	35	237	0.075	0.125	7656	0.213
Medium	IV	Sweep	55.860	121	435	0.375	0.334	11172	0.311

Table 11: Quadrant analysis summary for a hole size of 0 at the edge of the canopy, at a flow speed setting of 0.5 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	21.190	436	1998	0.238	0.265	4238	0.118
High	II	Ejection	60.325	226	790	0.351	0.298	12065	0.337
High	III	Inward interaction	42.180	85	488	0.093	0.129	8436	0.236
High	IV	Sweep	55.125	225	892	0.319	0.308	11025	0.308
Low	I	Outward interaction	23.910	224	1252	0.168	0.215	4782	0.133
Low	II	Ejection	61.930	198	711	0.383	0.316	12386	0.345
Low	III	Inward interaction	33.240	89	589	0.093	0.140	6648	0.185
Low	IV	Sweep	60.340	189	759	0.357	0.329	12068	0.336
Medium	I	Outward interaction	22.215	121	619	0.138	0.210	4443	0.124
Medium	II	Ejection	67.085	121	335	0.415	0.344	13417	0.374
Medium	III	Inward interaction	29.170	40	203	0.061	0.090	5834	0.163
Medium	IV	Sweep	60.920	124	382	0.387	0.356	12184	0.340

Table 12: Quadrant analysis summary for a hole size of 0 at the edge of the canopy, at a flow speed setting of 0.5 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	25.650	234	1109	0.190	0.229	5130	0.143
High	II	Ejection	58.080	201	652	0.368	0.305	11616	0.324
High	III	Inward interaction	41.920	74	417	0.098	0.141	8384	0.234
High	IV	Sweep	53.660	204	752	0.345	0.325	10732	0.299
Low	I	Outward interaction	23.505	256	1570	0.163	0.214	4701	0.131
Low	II	Ejection	63.050	220	817	0.375	0.298	12610	0.351
Low	III	Inward interaction	32.695	121	832	0.107	0.158	6539	0.182
Low	IV	Sweep	60.135	219	947	0.355	0.330	12027	0.335
Medium	I	Outward interaction	25.930	175	914	0.170	0.221	5186	0.145
Medium	II	Ejection	60.520	167	558	0.376	0.314	12104	0.338
Medium	III	Inward interaction	37.430	69	411	0.096	0.143	7486	0.209
Medium	IV	Sweep	55.240	174	627	0.358	0.322	11048	0.308

Table 13: Quadrant analysis summary for a hole size of 0 above the canopy, at a flow speed setting of 0.5 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	25.935	424	1987	0.206	0.241	5187	0.145
High	II	Ejection	58.715	324	1040	0.357	0.286	11743	0.329
High	III	Inward interaction	41.155	168	848	0.130	0.164	8231	0.230
High	IV	Sweep	52.775	310	1250	0.307	0.309	10555	0.296
Low	I	Outward interaction	28.965	310	1307	0.232	0.251	5793	0.161
Low	II	Ejection	52.130	251	837	0.339	0.289	10426	0.290
Low	III	Inward interaction	48.135	89	469	0.112	0.149	9627	0.268
Low	IV	Sweep	50.230	244	937	0.318	0.311	10046	0.280
Medium	I	Outward interaction	22.070	145	746	0.172	0.227	4414	0.123
Medium	II	Ejection	61.505	119	386	0.394	0.327	12301	0.344
Medium	III	Inward interaction	38.820	35	214	0.072	0.114	7764	0.217
Medium	IV	Sweep	56.335	119	428	0.362	0.332	11267	0.315

Table 14: Quadrant analysis summary for a hole size of 0 above the canopy, at a flow speed setting of 0.5 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	23.660	297	1321	0.240	0.263	4732	0.132
High	II	Ejection	57.030	181	622	0.352	0.298	11406	0.319
High	III	Inward interaction	45.545	59	317	0.092	0.121	9109	0.254
High	IV	Sweep	52.735	176	718	0.316	0.318	10547	0.295
Low	I	Outward interaction	24.055	287	1270	0.192	0.228	4811	0.134
Low	II	Ejection	59.525	226	706	0.374	0.313	11905	0.332
Low	III	Inward interaction	38.965	79	432	0.085	0.125	7793	0.217
Low	IV	Sweep	56.655	222	790	0.349	0.333	11331	0.316
Medium	I	Outward interaction	21.385	164	837	0.183	0.238	4277	0.120
Medium	II	Ejection	64.710	116	381	0.391	0.328	12942	0.362
Medium	III	Inward interaction	35.050	40	244	0.073	0.114	7010	0.196
Medium	IV	Sweep	57.785	117	417	0.353	0.320	11557	0.323

Table 15: Quadrant analysis summary for a hole size of 0 above the canopy, at a flow speed setting of 0.5 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	19.890	234	1075	0.173	0.206	3978	0.111
High	II	Ejection	58.385	181	589	0.392	0.332	11677	0.326
High	III	Inward interaction	41.200	44	281	0.067	0.111	8240	0.230
High	IV	Sweep	59.710	166	609	0.368	0.351	11942	0.333
Low	I	Outward interaction	23.090	470	2153	0.212	0.224	4618	0.129
Low	II	Ejection	59.585	297	1071	0.346	0.287	11917	0.334
Low	III	Inward interaction	38.980	136	864	0.104	0.152	7796	0.218
Low	IV	Sweep	56.970	304	1316	0.338	0.337	11394	0.319
Medium	I	Outward interaction	22.510	156	749	0.174	0.220	4502	0.126
Medium	II	Ejection	62.270	129	412	0.399	0.334	12454	0.348
Medium	III	Inward interaction	34.355	41	255	0.069	0.114	6871	0.192
Medium	IV	Sweep	59.980	120	424	0.358	0.331	11996	0.335

Table 16: Quadrant analysis summary for a hole size of 0 above the canopy, at a flow speed setting of 0.5 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	22.995	319	1394	0.208	0.239	4599	0.128
High	II	Ejection	60.590	207	667	0.355	0.302	12118	0.338
High	III	Inward interaction	40.785	72	409	0.083	0.125	8157	0.228
High	IV	Sweep	54.875	228	818	0.354	0.335	10975	0.306
Low	I	Outward interaction	24.475	430	1897	0.218	0.243	4895	0.137
Low	II	Ejection	56.510	305	992	0.358	0.293	11302	0.316
Low	III	Inward interaction	42.565	111	638	0.098	0.142	8513	0.238
Low	IV	Sweep	55.415	283	1109	0.325	0.321	11083	0.310
Medium	I	Outward interaction	23.505	195	736	0.182	0.206	4701	0.131
Medium	II	Ejection	54.110	163	514	0.351	0.331	10822	0.302
Medium	III	Inward interaction	41.965	43	250	0.072	0.125	8393	0.234
Medium	IV	Sweep	59.510	167	477	0.395	0.338	11902	0.332

Table 17: Quadrant analysis summary for a hole size of 0 within the canopy, at a flow speed setting of 0.5 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	21.265	624	3049	0.208	0.230	4253	0.119
High	II	Ejection	60.360	358	1304	0.339	0.280	12072	0.338
High	III	Inward interaction	41.550	169	975	0.110	0.144	8310	0.232
High	IV	Sweep	55.565	393	1752	0.343	0.346	11113	0.311
Low	I	Outward interaction	21.770	645	3189	0.210	0.238	4354	0.122
Low	II	Ejection	60.855	391	1389	0.356	0.289	12171	0.340
Low	III	Inward interaction	39.050	180	1057	0.105	0.141	7810	0.218
Low	IV	Sweep	57.365	384	1689	0.329	0.332	11473	0.320
Medium	I	Outward interaction	25.750	324	2047	0.192	0.240	5150	0.144
Medium	II	Ejection	62.120	245	989	0.351	0.280	12424	0.348
Medium	III	Inward interaction	33.625	163	1078	0.126	0.165	6725	0.188
Medium	IV	Sweep	57.005	253	1211	0.331	0.315	11401	0.319

Table 18: Quadrant analysis summary for a hole size of 0 within the canopy, at a flow speed setting of 0.5 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	21.725	644	2902	0.193	0.223	4345	0.121
High	II	Ejection	61.425	418	1328	0.354	0.288	12285	0.343
High	III	Inward interaction	37.060	211	1062	0.108	0.139	7412	0.207
High	IV	Sweep	58.950	424	1677	0.345	0.350	11790	0.329
Low	I	Outward interaction	22.860	330	1625	0.198	0.241	4572	0.128
Low	II	Ejection	59.145	240	795	0.372	0.305	11829	0.331
Low	III	Inward interaction	40.365	91	526	0.097	0.138	8073	0.226
Low	IV	Sweep	56.110	227	870	0.333	0.317	11222	0.314
Medium	I	Outward interaction	23.745	340	2517	0.160	0.223	4749	0.133
Medium	II	Ejection	63.470	296	1182	0.372	0.280	12694	0.355
Medium	III	Inward interaction	32.970	182	1284	0.119	0.158	6594	0.184
Medium	IV	Sweep	58.780	299	1548	0.349	0.339	11756	0.328

Table 19: Quadrant analysis summary for a hole size of 0 within the canopy, at a flow speed setting of 0.5 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	30.415	296	1619	0.097	0.152	6083	0.170
High	II	Ejection	59.895	642	1922	0.415	0.356	11979	0.335
High	III	Inward interaction	28.995	285	1483	0.089	0.133	5799	0.162
High	IV	Sweep	59.480	621	1949	0.398	0.359	11896	0.333
Low	I	Outward interaction	20.720	165	821	0.140	0.190	4144	0.116
Low	II	Ejection	58.930	172	515	0.414	0.339	11786	0.329
Low	III	Inward interaction	41.960	31	234	0.053	0.110	8392	0.235
Low	IV	Sweep	57.265	167	563	0.392	0.360	11453	0.320
Medium	I	Outward interaction	22.775	300	2072	0.140	0.210	4555	0.127
Medium	II	Ejection	65.790	293	1032	0.395	0.302	13158	0.368
Medium	III	Inward interaction	30.855	160	961	0.101	0.132	6171	0.172
Medium	IV	Sweep	59.520	298	1342	0.363	0.356	11904	0.333

Table 20: Quadrant analysis summary for a hole size of 0 within the canopy, at a flow speed setting of 0.5 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
Low	I	Outward interaction	24.710	401	1796	0.232	0.266	4942	0.138
Low	II	Ejection	56.455	259	813	0.342	0.275	11291	0.316
Low	III	Inward interaction	44.355	110	495	0.114	0.132	8871	0.248
Low	IV	Sweep	53.110	250	1029	0.311	0.328	10622	0.297
Medium	I	Outward interaction	22.795	320	1984	0.161	0.208	4559	0.128
Medium	II	Ejection	60.815	287	1060	0.386	0.297	12163	0.340
Medium	III	Inward interaction	33.270	144	1022	0.106	0.157	6654	0.186
Medium	IV	Sweep	61.890	254	1184	0.347	0.338	12378	0.346

Table 21: Quadrant analysis summary for a hole size of 0 at the edge of the canopy, at a flow speed setting of 1 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	23.440	460	2279	0.209	0.246	4688	0.131
High	II	Ejection	61.125	297	1025	0.351	0.289	12225	0.341
High	III	Inward interaction	40.245	147	798	0.115	0.148	8049	0.225
High	IV	Sweep	54.190	310	1267	0.325	0.317	10838	0.303
Low	I	Outward interaction	25.520	351	1621	0.193	0.223	5104	0.143
Low	II	Ejection	57.405	294	971	0.364	0.301	11481	0.321
Low	III	Inward interaction	41.070	116	668	0.102	0.148	8214	0.229
Low	IV	Sweep	55.040	288	1105	0.341	0.328	11008	0.307
Medium	I	Outward interaction	23.645	185	909	0.184	0.234	4729	0.132
Medium	II	Ejection	61.880	146	469	0.380	0.316	12376	0.346
Medium	III	Inward interaction	37.140	57	332	0.089	0.134	7428	0.207
Medium	IV	Sweep	56.380	146	516	0.347	0.316	11276	0.315

Table 22: Quadrant analysis summary for a hole size of 0 at the edge of the canopy, at a flow speed setting of 1 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	22.300	325	1549	0.190	0.249	4460	0.125
High	II	Ejection	63.010	227	672	0.375	0.305	12602	0.353
High	III	Inward interaction	35.295	102	424	0.094	0.108	7059	0.198
High	IV	Sweep	57.900	225	810	0.341	0.338	11580	0.324
Low	I	Outward interaction	22.480	371	1734	0.210	0.243	4496	0.126
Low	II	Ejection	58.805	243	820	0.360	0.301	11761	0.329
Low	III	Inward interaction	39.360	96	538	0.095	0.132	7872	0.220
Low	IV	Sweep	58.350	228	891	0.335	0.324	11670	0.326
Medium	I	Outward interaction	28.475	127	688	0.168	0.223	5695	0.159
Medium	II	Ejection	57.935	143	485	0.382	0.321	11587	0.323
Medium	III	Inward interaction	38.515	53	305	0.095	0.134	7703	0.215
Medium	IV	Sweep	54.215	141	522	0.355	0.322	10843	0.303

Table 23: Quadrant analysis summary for a hole size of 0 at the edge of the canopy, at a flow speed setting of 1 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	22.475	304	1404	0.190	0.222	4495	0.126
High	II	Ejection	58.420	227	741	0.369	0.304	11684	0.327
High	III	Inward interaction	43.075	68	403	0.081	0.122	8615	0.241
High	IV	Sweep	54.650	238	918	0.361	0.352	10930	0.306
Low	I	Outward interaction	24.175	159	846	0.152	0.203	4835	0.135
Low	II	Ejection	63.245	159	541	0.399	0.339	12649	0.353
Low	III	Inward interaction	29.865	66	420	0.078	0.124	5973	0.167
Low	IV	Sweep	61.765	152	545	0.372	0.334	12353	0.345
Medium	I	Outward interaction	20.580	161	771	0.158	0.221	4116	0.115
Medium	II	Ejection	67.635	125	362	0.400	0.341	13527	0.378
Medium	III	Inward interaction	29.950	47	248	0.066	0.103	5990	0.167
Medium	IV	Sweep	60.715	130	396	0.376	0.335	12143	0.339

Table 24: Quadrant analysis summary for a hole size of 0 at the edge of the canopy, at a flow speed setting of 1 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	22.215	550	2317	0.220	0.244	4443	0.124
High	II	Ejection	58.450	337	1058	0.354	0.293	11690	0.327
High	III	Inward interaction	40.555	131	720	0.095	0.138	8111	0.227
High	IV	Sweep	57.735	319	1188	0.331	0.325	11547	0.323
Low	I	Outward interaction	28.145	198	1041	0.175	0.224	5629	0.157
Low	II	Ejection	60.645	197	663	0.375	0.307	12129	0.338
Low	III	Inward interaction	33.750	101	587	0.108	0.152	6750	0.188
Low	IV	Sweep	56.650	192	731	0.342	0.317	11330	0.316
Medium	I	Outward interaction	25.105	154	848	0.155	0.208	5021	0.141
Medium	II	Ejection	62.130	155	538	0.388	0.327	12426	0.348
Medium	III	Inward interaction	33.890	61	404	0.083	0.134	6778	0.190
Medium	IV	Sweep	57.440	162	591	0.374	0.332	11488	0.322

Table 25: Quadrant analysis summary for a hole size of 0 above the canopy, at a flow speed setting of 1 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	22.965	568	2598	0.218	0.240	4593	0.128
High	II	Ejection	58.535	366	1246	0.358	0.293	11707	0.327
High	III	Inward interaction	40.510	157	923	0.106	0.150	8102	0.226
High	IV	Sweep	57.080	335	1377	0.319	0.316	11416	0.319
Low	I	Outward interaction	22.195	343	1614	0.181	0.212	4439	0.124
Low	II	Ejection	59.110	264	889	0.371	0.311	11822	0.331
Low	III	Inward interaction	36.790	103	640	0.090	0.139	7358	0.206
Low	IV	Sweep	60.400	249	943	0.358	0.337	12080	0.338
Medium	I	Outward interaction	22.440	206	1007	0.193	0.236	4488	0.126
Medium	II	Ejection	61.450	148	493	0.379	0.316	12290	0.344
Medium	III	Inward interaction	36.385	57	342	0.087	0.130	7277	0.204
Medium	IV	Sweep	58.450	140	522	0.341	0.318	11690	0.327

Table 26: Quadrant analysis summary for a hole size of 0 above the canopy, at a flow speed setting of 1 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	27.255	220	1036	0.209	0.235	5451	0.153
High	II	Ejection	54.615	188	662	0.358	0.301	10923	0.306
High	III	Inward interaction	41.295	71	446	0.102	0.153	8259	0.231
High	IV	Sweep	55.520	171	676	0.331	0.312	11104	0.311
Low	I	Outward interaction	22.325	351	1643	0.186	0.217	4465	0.124
Low	II	Ejection	61.690	252	848	0.370	0.310	12338	0.344
Low	III	Inward interaction	36.945	107	616	0.093	0.135	7389	0.206
Low	IV	Sweep	58.460	252	976	0.351	0.338	11692	0.326
Medium	I	Outward interaction	25.885	151	762	0.182	0.224	5177	0.145
Medium	II	Ejection	59.165	135	472	0.374	0.317	11833	0.330
Medium	III	Inward interaction	35.900	58	345	0.097	0.141	7180	0.201
Medium	IV	Sweep	58.075	128	482	0.347	0.318	11615	0.324

Table 27: Quadrant analysis summary for a hole size of 0 above the canopy, at a flow speed setting of 1 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	23.695	169	831	0.196	0.229	4739	0.132
High	II	Ejection	58.970	130	470	0.375	0.323	11794	0.329
High	III	Inward interaction	38.130	42	280	0.078	0.124	7626	0.213
High	IV	Sweep	58.555	123	474	0.351	0.323	11711	0.326
Low	I	Outward interaction	25.500	323	1681	0.181	0.205	5100	0.143
Low	II	Ejection	60.020	267	1000	0.351	0.287	12004	0.336
Low	III	Inward interaction	36.175	142	933	0.112	0.161	7235	0.203
Low	IV	Sweep	56.830	286	1282	0.356	0.348	11366	0.318
Medium	I	Outward interaction	21.555	140	711	0.153	0.197	4311	0.120
Medium	II	Ejection	61.510	130	437	0.406	0.346	12302	0.343
Medium	III	Inward interaction	34.360	38	276	0.066	0.122	6872	0.192
Medium	IV	Sweep	61.790	120	422	0.376	0.335	12358	0.345

Table 28: Quadrant analysis summary for a hole size of 0 above the canopy, at a flow speed setting of 1 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	25.800	145	700	0.149	0.195	5160	0.144
High	II	Ejection	64.110	150	488	0.384	0.337	12822	0.359
High	III	Inward interaction	32.690	53	327	0.070	0.115	6538	0.183
High	IV	Sweep	56.225	178	581	0.398	0.352	11245	0.314
Low	I	Outward interaction	27.330	370	1431	0.195	0.224	5466	0.152
Low	II	Ejection	58.295	322	954	0.362	0.319	11659	0.325
Low	III	Inward interaction	38.055	108	611	0.079	0.133	7611	0.212
Low	IV	Sweep	55.735	338	1010	0.363	0.323	11147	0.311
Medium	I	Outward interaction	22.955	116	614	0.121	0.172	4591	0.128
Medium	II	Ejection	61.315	149	471	0.416	0.354	12263	0.343
Medium	III	Inward interaction	32.330	44	296	0.065	0.117	6466	0.181
Medium	IV	Sweep	62.150	140	469	0.398	0.357	12430	0.348

Table 29: Quadrant analysis summary for a hole size of 0 within the canopy, at a flow speed setting of 1 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	21.855	365	1875	0.187	0.225	4371	0.122
High	II	Ejection	60.485	264	938	0.375	0.312	12097	0.338
High	III	Inward interaction	38.240	95	622	0.086	0.131	7648	0.214
High	IV	Sweep	58.335	256	1039	0.352	0.333	11667	0.326
Low	I	Outward interaction	23.340	258	1327	0.156	0.198	4668	0.130
Low	II	Ejection	60.275	248	841	0.387	0.324	12055	0.337
Low	III	Inward interaction	34.405	89	560	0.079	0.123	6881	0.192
Low	IV	Sweep	60.990	238	906	0.377	0.354	12198	0.341
Medium	I	Outward interaction	25.925	176	938	0.174	0.215	5185	0.145
Medium	II	Ejection	60.015	164	583	0.376	0.310	12003	0.335
Medium	III	Inward interaction	34.660	77	472	0.103	0.145	6932	0.194
Medium	IV	Sweep	58.505	155	637	0.348	0.330	11701	0.327

Table 30: Quadrant analysis summary for a hole size of 0 within the canopy, at a flow speed setting of 1 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	23.050	467	2093	0.182	0.216	4610	0.129
High	II	Ejection	61.745	350	1085	0.367	0.300	12349	0.345
High	III	Inward interaction	37.165	165	769	0.104	0.128	7433	0.208
High	IV	Sweep	57.085	359	1392	0.347	0.356	11417	0.319
Low	I	Outward interaction	26.645	233	1099	0.216	0.237	5329	0.149
Low	II	Ejection	56.915	172	628	0.342	0.290	11383	0.318
Low	III	Inward interaction	38.625	83	513	0.112	0.161	7725	0.216
Low	IV	Sweep	56.710	167	678	0.330	0.312	11342	0.317
Medium	I	Outward interaction	23.405	263	1703	0.163	0.230	4681	0.131
Medium	II	Ejection	63.770	231	829	0.389	0.305	12754	0.357
Medium	III	Inward interaction	33.790	117	712	0.104	0.139	6758	0.189
Medium	IV	Sweep	57.660	225	983	0.344	0.327	11532	0.323

Table 31: Quadrant analysis summary for a hole size of 0 within the canopy, at a flow speed setting of 1 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	24.045	737	3028	0.274	0.286	4809	0.134
High	II	Ejection	58.085	334	1114	0.300	0.254	11617	0.324
High	III	Inward interaction	45.980	188	859	0.133	0.155	9196	0.256
High	IV	Sweep	51.170	371	1514	0.293	0.304	10234	0.285
Low	I	Outward interaction	25.835	54	384	0.135	0.190	5167	0.144
Low	II	Ejection	55.400	76	314	0.403	0.334	11080	0.309
Low	III	Inward interaction	37.540	21	206	0.077	0.149	7508	0.209
Low	IV	Sweep	60.595	66	281	0.386	0.327	12119	0.338
Medium	I	Outward interaction	22.100	338	2267	0.158	0.226	4420	0.123
Medium	II	Ejection	65.035	280	1007	0.383	0.295	13007	0.363
Medium	III	Inward interaction	30.865	162	1030	0.105	0.143	6173	0.172
Medium	IV	Sweep	61.025	275	1217	0.354	0.335	12205	0.341

Table 32: Quadrant analysis summary for a hole size of 0 within the canopy, at a flow speed setting of 1 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	21.750	638	2913	0.198	0.217	4350	0.122
High	II	Ejection	60.960	415	1401	0.360	0.292	12192	0.341
High	III	Inward interaction	38.605	177	1031	0.097	0.136	7721	0.216
High	IV	Sweep	57.195	423	1815	0.345	0.355	11439	0.320
Low	I	Outward interaction	21.445	553	2571	0.216	0.241	4289	0.120
Low	II	Ejection	58.960	331	1124	0.355	0.290	11792	0.329
Low	III	Inward interaction	41.810	129	748	0.098	0.137	8362	0.233
Low	IV	Sweep	56.885	319	1332	0.331	0.332	11377	0.318
Medium	I	Outward interaction	23.300	315	2050	0.166	0.224	4660	0.130
Medium	II	Ejection	63.610	264	981	0.380	0.293	12722	0.356
Medium	III	Inward interaction	32.750	143	942	0.106	0.145	6550	0.183
Medium	IV	Sweep	58.965	260	1221	0.347	0.338	11793	0.330

Table 33: Quadrant analysis summary for a hole size of 0 at the edge of the canopy, at a flow speed setting of 10 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	36.655	1381	3513	0.192	0.213	7331	0.205
High	II	Ejection	48.370	1967	4223	0.361	0.337	9674	0.270
High	III	Inward interaction	41.360	1050	2711	0.165	0.185	8272	0.231
High	IV	Sweep	52.515	1422	3061	0.283	0.265	10503	0.294
Low	I	Outward interaction	44.230	1479	3660	0.295	0.264	8846	0.248
Low	II	Ejection	38.900	1531	3898	0.268	0.248	7780	0.218
Low	III	Inward interaction	50.740	1009	3164	0.230	0.262	10148	0.284
Low	IV	Sweep	44.615	1028	3107	0.207	0.226	8923	0.250
Medium	I	Outward interaction	38.235	1264	3192	0.192	0.212	7647	0.213
Medium	II	Ejection	47.180	1808	3984	0.339	0.326	9436	0.263
Medium	III	Inward interaction	44.815	1085	2701	0.193	0.210	8963	0.250
Medium	IV	Sweep	49.210	1410	2956	0.276	0.252	9842	0.274

Table 34: Quadrant analysis summary for a hole size of 0 at the edge of the canopy, at a flow speed setting of 10 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	45.290	3755	9741	0.378	0.369	9058	0.253
High	II	Ejection	37.920	1947	5706	0.164	0.181	7584	0.212
High	III	Inward interaction	58.335	2295	5311	0.297	0.259	11667	0.326
High	IV	Sweep	37.375	1938	6097	0.161	0.191	7475	0.209
Low	I	Outward interaction	41.345	1057	3768	0.194	0.225	8269	0.231
Low	II	Ejection	45.075	1666	4471	0.333	0.291	9015	0.251
Low	III	Inward interaction	40.425	1199	3988	0.215	0.233	8085	0.225
Low	IV	Sweep	52.440	1114	3330	0.259	0.252	10488	0.292
Medium	I	Outward interaction	30.890	229	1208	0.098	0.158	6178	0.173
Medium	II	Ejection	58.580	456	1369	0.370	0.340	11716	0.328
Medium	III	Inward interaction	35.675	211	960	0.105	0.145	7135	0.199
Medium	IV	Sweep	53.680	573	1561	0.427	0.356	10736	0.300

Table 35: Quadrant analysis summary for a hole size of 0 at the edge of the canopy, at a flow speed setting of 10 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	54.045	3448	13780	0.377	0.348	10809	0.302
High	II	Ejection	32.390	1946	11946	0.128	0.181	6478	0.181
High	III	Inward interaction	55.060	3329	11821	0.371	0.304	11012	0.308
High	IV	Sweep	37.315	1656	9653	0.125	0.168	7463	0.209
Low	I	Outward interaction	42.795	1399	4057	0.190	0.217	8559	0.239
Low	II	Ejection	50.765	1755	4231	0.283	0.269	10153	0.283
Low	III	Inward interaction	40.400	1779	4381	0.228	0.222	8080	0.225
Low	IV	Sweep	45.265	2083	5145	0.299	0.292	9053	0.253
Medium	I	Outward interaction	28.790	469	1844	0.211	0.234	5758	0.161
Medium	II	Ejection	60.980	337	1171	0.320	0.314	12196	0.341
Medium	III	Inward interaction	38.460	125	594	0.075	0.100	7692	0.215
Medium	IV	Sweep	50.615	498	1581	0.394	0.352	10123	0.283

Table 36: Quadrant analysis summary for a hole size of 0 at the edge of the canopy, at a flow speed setting of 10 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	31.090	219	929	0.101	0.137	6218	0.174
High	II	Ejection	59.715	440	1306	0.390	0.369	11943	0.334
High	III	Inward interaction	31.245	177	821	0.082	0.122	6249	0.175
High	IV	Sweep	56.820	508	1384	0.428	0.372	11364	0.318
Low	I	Outward interaction	48.430	2135	5608	0.279	0.257	9686	0.271
Low	II	Ejection	44.400	1609	5027	0.193	0.212	8880	0.248
Low	III	Inward interaction	46.210	2181	6247	0.272	0.274	9242	0.258
Low	IV	Sweep	39.850	2370	6817	0.255	0.257	7970	0.223
Medium	I	Outward interaction	27.255	300	1553	0.092	0.144	5451	0.152
Medium	II	Ejection	59.865	680	1975	0.458	0.403	11973	0.335
Medium	III	Inward interaction	29.795	143	978	0.048	0.099	5959	0.167
Medium	IV	Sweep	61.815	580	1676	0.403	0.353	12363	0.346

Table 37: Quadrant analysis summary for a hole size of 0 above the canopy, at a flow speed setting of 10 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	34.510	758	2138	0.161	0.183	6902	0.193
High	II	Ejection	51.685	1123	2519	0.357	0.323	10337	0.289
High	III	Inward interaction	39.345	649	1982	0.157	0.193	7869	0.220
High	IV	Sweep	53.210	995	2282	0.325	0.301	10642	0.298
Low	I	Outward interaction	43.380	1292	4829	0.209	0.214	8676	0.243
Low	II	Ejection	52.135	1494	4885	0.291	0.260	10427	0.292
Low	III	Inward interaction	41.015	1452	6011	0.223	0.252	8203	0.229
Low	IV	Sweep	42.290	1750	6336	0.277	0.274	8458	0.236
Medium	I	Outward interaction	33.830	546	1594	0.161	0.181	6766	0.189
Medium	II	Ejection	54.665	687	1757	0.327	0.323	10933	0.305
Medium	III	Inward interaction	41.375	430	1393	0.155	0.194	8275	0.231
Medium	IV	Sweep	49.090	838	1829	0.358	0.302	9818	0.274

Table 38: Quadrant analysis summary for a hole size of 0 above the canopy, at a flow speed setting of 10 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	38.355	1120	2949	0.210	0.217	7671	0.214
High	II	Ejection	48.855	1224	3168	0.292	0.297	9771	0.272
High	III	Inward interaction	46.425	955	2606	0.217	0.232	9285	0.259
High	IV	Sweep	45.700	1256	2887	0.281	0.253	9140	0.255
Low	I	Outward interaction	43.205	743	2701	0.166	0.194	8641	0.241
Low	II	Ejection	54.090	1149	3171	0.322	0.285	10818	0.301
Low	III	Inward interaction	35.665	1051	3714	0.194	0.220	7133	0.199
Low	IV	Sweep	46.520	1313	3915	0.317	0.302	9304	0.259
Medium	I	Outward interaction	36.355	732	1932	0.213	0.207	7271	0.203
Medium	II	Ejection	48.210	773	2052	0.299	0.292	9642	0.269
Medium	III	Inward interaction	44.170	514	1666	0.182	0.217	8834	0.246
Medium	IV	Sweep	50.590	755	1902	0.306	0.284	10118	0.282

Table 39: Quadrant analysis summary for a hole size of 0 above the canopy, at a flow speed setting of 10 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	32.365	5424	18251	0.124	0.159	6473	0.181
High	II	Ejection	55.105	10787	24866	0.419	0.369	11021	0.308
High	III	Inward interaction	33.575	4273	16026	0.101	0.145	6715	0.188
High	IV	Sweep	57.910	8750	20990	0.357	0.327	11582	0.324
Low	I	Outward interaction	40.425	982	5997	0.197	0.210	8085	0.226
Low	II	Ejection	48.350	1289	6468	0.310	0.271	9670	0.270
Low	III	Inward interaction	41.220	902	6489	0.185	0.232	8244	0.230
Low	IV	Sweep	48.845	1272	6739	0.309	0.286	9769	0.273
Medium	I	Outward interaction	40.765	1088	2647	0.278	0.256	8153	0.227
Medium	II	Ejection	44.410	1006	2562	0.280	0.270	8882	0.248
Medium	III	Inward interaction	47.970	644	1997	0.194	0.227	9594	0.268
Medium	IV	Sweep	46.130	862	2262	0.249	0.247	9226	0.257

Table 40: Quadrant analysis summary for a hole size of 0 above the canopy, at a flow speed setting of 10 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	31.845	5849	20962	0.092	0.138	6369	0.177
High	II	Ejection	57.750	15253	33190	0.433	0.395	11550	0.322
High	III	Inward interaction	29.045	5489	20225	0.078	0.121	5809	0.162
High	IV	Sweep	60.800	13301	27673	0.397	0.347	12160	0.339
Low	I	Outward interaction	41.110	696	2805	0.167	0.225	8222	0.230
Low	II	Ejection	51.080	1103	3183	0.328	0.317	10216	0.286
Low	III	Inward interaction	34.995	820	2551	0.167	0.174	6999	0.196
Low	IV	Sweep	51.400	1132	2845	0.339	0.285	10280	0.288
Medium	I	Outward interaction	40.205	913	2396	0.192	0.212	8041	0.225
Medium	II	Ejection	44.365	1792	3596	0.415	0.351	8873	0.248
Medium	III	Inward interaction	40.470	733	2111	0.155	0.188	8094	0.226
Medium	IV	Sweep	53.900	847	2111	0.238	0.250	10780	0.301

Table 41: Quadrant analysis summary for a hole size of 0 within the canopy, at a flow speed setting of 10 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	37.730	1408	4350	0.162	0.189	7546	0.211
High	II	Ejection	48.380	3000	7052	0.442	0.393	9676	0.271
High	III	Inward interaction	33.180	1083	3921	0.109	0.150	6636	0.186
High	IV	Sweep	59.460	1587	3930	0.287	0.269	11892	0.333
Low	I	Outward interaction	39.060	951	3105	0.144	0.190	7812	0.218
Low	II	Ejection	48.335	2146	4751	0.402	0.360	9667	0.270
Low	III	Inward interaction	37.210	1001	2901	0.144	0.169	7442	0.208
Low	IV	Sweep	54.515	1469	3291	0.310	0.281	10903	0.304
Medium	I	Outward interaction	38.785	890	2949	0.131	0.179	7757	0.217
Medium	II	Ejection	49.575	2323	4885	0.438	0.379	9915	0.278
Medium	III	Inward interaction	32.390	972	2987	0.120	0.151	6478	0.181
Medium	IV	Sweep	57.815	1417	3219	0.311	0.291	11563	0.324

Table 42: Quadrant analysis summary for a hole size of 0 within the canopy, at a flow speed setting of 10 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	36.365	917	2994	0.290	0.292	7273	0.203
High	II	Ejection	53.115	638	2184	0.294	0.311	10623	0.296
High	III	Inward interaction	41.950	343	1232	0.125	0.139	8390	0.234
High	IV	Sweep	47.775	702	2024	0.291	0.259	9555	0.267
Low	I	Outward interaction	36.645	2996	10588	0.146	0.174	7329	0.204
Low	II	Ejection	53.055	4885	13234	0.345	0.315	10611	0.296
Low	III	Inward interaction	37.215	2916	10781	0.144	0.180	7443	0.208
Low	IV	Sweep	52.395	5237	14104	0.365	0.331	10479	0.292
Medium	I	Outward interaction	44.275	2637	7794	0.285	0.255	8855	0.247
Medium	II	Ejection	41.585	2231	7680	0.227	0.236	8317	0.232
Medium	III	Inward interaction	48.065	2069	7481	0.243	0.266	9613	0.268
Medium	IV	Sweep	45.500	2206	7194	0.245	0.242	9100	0.254

Table 43: Quadrant analysis summary for a hole size of 0 within the canopy, at a flow speed setting of 10 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	38.405	1029	4389	0.167	0.203	7681	0.219
High	II	Ejection	47.460	1719	5302	0.344	0.303	9492	0.271
High	III	Inward interaction	38.200	1072	4291	0.173	0.197	7640	0.218
High	IV	Sweep	51.155	1470	4812	0.317	0.296	10231	0.292
Low	I	Outward interaction	46.690	1292	4795	0.250	0.256	9338	0.261
Low	II	Ejection	44.205	1313	4617	0.240	0.234	8841	0.247
Low	III	Inward interaction	44.525	1431	5139	0.264	0.262	8905	0.249
Low	IV	Sweep	43.605	1365	4960	0.246	0.248	8721	0.244
Medium	I	Outward interaction	39.350	361	1664	0.169	0.193	7870	0.220
Medium	II	Ejection	50.570	547	1988	0.329	0.296	10114	0.282
Medium	III	Inward interaction	39.080	373	1810	0.173	0.208	7816	0.218
Medium	IV	Sweep	50.210	551	2048	0.329	0.303	10042	0.280

Table 44: Quadrant analysis summary for a hole size of 0 within the canopy, at a flow speed setting of 10 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	42.340	786	2978	0.210	0.230	8468	0.237
High	II	Ejection	45.985	1085	3211	0.315	0.269	9197	0.257
High	III	Inward interaction	43.480	774	2845	0.212	0.225	8696	0.243
High	IV	Sweep	47.110	886	3222	0.263	0.276	9422	0.263
Low	I	Outward interaction	36.860	875	3463	0.131	0.168	7372	0.206
Low	II	Ejection	56.390	1361	3877	0.311	0.288	11278	0.315
Low	III	Inward interaction	34.775	1012	4022	0.143	0.184	6955	0.194
Low	IV	Sweep	50.770	2021	5372	0.416	0.359	10154	0.284
Medium	I	Outward interaction	39.285	779	2455	0.184	0.214	7857	0.219
Medium	II	Ejection	49.800	974	2586	0.292	0.285	9960	0.278
Medium	III	Inward interaction	40.795	782	2238	0.192	0.202	8159	0.227
Medium	IV	Sweep	49.465	1112	2723	0.331	0.298	9893	0.276

Table 45: Quadrant analysis summary for a hole size of 0 above the canopy, at a flow speed setting of 15 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	38.655	1344	3967	0.191	0.216	7731	0.216
High	II	Ejection	49.595	1763	4289	0.321	0.300	9919	0.278
High	III	Inward interaction	42.080	1204	3516	0.186	0.209	8416	0.235
High	IV	Sweep	48.390	1705	4022	0.303	0.275	9678	0.271
Low	I	Outward interaction	49.305	1557	5261	0.199	0.220	9861	0.275
Low	II	Ejection	50.700	1996	5796	0.262	0.250	10140	0.283
Low	III	Inward interaction	38.445	2504	7656	0.249	0.250	7689	0.215
Low	IV	Sweep	40.560	2754	8105	0.289	0.279	8112	0.227
Medium	I	Outward interaction	41.310	1365	3570	0.238	0.237	8262	0.231
Medium	II	Ejection	45.090	1554	3955	0.296	0.287	9018	0.252
Medium	III	Inward interaction	45.370	1049	3021	0.201	0.221	9074	0.254
Medium	IV	Sweep	46.885	1334	3378	0.264	0.255	9377	0.262

Table 46: Quadrant analysis summary for a hole size of 0 above the canopy, at a flow speed setting of 15 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	37.720	1865	5397	0.200	0.214	7544	0.211
High	II	Ejection	52.325	2090	5619	0.312	0.309	10465	0.292
High	III	Inward interaction	39.335	1537	4717	0.172	0.195	7867	0.220
High	IV	Sweep	49.760	2229	5399	0.316	0.282	9952	0.278
Low	I	Outward interaction	41.510	1516	4331	0.201	0.198	8302	0.232
Low	II	Ejection	50.015	1800	4677	0.287	0.258	10003	0.280
Low	III	Inward interaction	39.975	1617	5498	0.206	0.243	7995	0.224
Low	IV	Sweep	47.350	2024	5755	0.306	0.301	9470	0.265
Medium	I	Outward interaction	40.600	1587	4258	0.237	0.238	8120	0.227
Medium	II	Ejection	46.725	1732	4585	0.298	0.296	9345	0.261
Medium	III	Inward interaction	43.425	1190	3493	0.190	0.209	8685	0.242
Medium	IV	Sweep	48.460	1534	3842	0.274	0.257	9692	0.270

Table 47: Quadrant analysis summary for a hole size of 0 above the canopy, at a flow speed setting of 15 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	42.530	2026	5792	0.235	0.234	8506	0.238
High	II	Ejection	46.260	2374	6342	0.300	0.279	9252	0.258
High	III	Inward interaction	45.980	1859	5664	0.233	0.247	9196	0.257
High	IV	Sweep	44.260	1921	5723	0.232	0.240	8852	0.247
Low	I	Outward interaction	40.010	1926	6900	0.199	0.225	8002	0.223
Low	II	Ejection	49.520	2534	7538	0.324	0.305	9904	0.276
Low	III	Inward interaction	37.440	1776	6015	0.172	0.184	7488	0.209
Low	IV	Sweep	52.430	2258	6697	0.306	0.286	10486	0.292
Medium	I	Outward interaction	40.630	1711	4520	0.253	0.249	8126	0.228
Medium	II	Ejection	45.085	1592	4532	0.261	0.277	9017	0.252
Medium	III	Inward interaction	44.525	1186	3491	0.192	0.210	8905	0.249
Medium	IV	Sweep	48.325	1670	4039	0.294	0.264	9665	0.271

Table 48: Quadrant analysis summary for a hole size of 0 above the canopy, at a flow speed setting of 15 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	41.430	7827	20188	0.163	0.188	8286	0.231
High	II	Ejection	42.235	21174	43133	0.450	0.410	8447	0.236
High	III	Inward interaction	29.005	8317	24052	0.121	0.157	5801	0.162
High	IV	Sweep	66.355	7980	16420	0.266	0.245	13271	0.371
Low	I	Outward interaction	41.960	1494	4784	0.203	0.233	8392	0.235
Low	II	Ejection	45.810	2120	5449	0.314	0.290	9162	0.256
Low	III	Inward interaction	39.890	1364	4287	0.176	0.198	7978	0.223
Low	IV	Sweep	51.095	1853	4704	0.307	0.279	10219	0.286
Medium	I	Outward interaction	38.535	1913	4834	0.240	0.234	7707	0.216
Medium	II	Ejection	46.665	2071	5118	0.315	0.300	9333	0.261
Medium	III	Inward interaction	43.260	1321	3857	0.186	0.209	8652	0.242
Medium	IV	Sweep	50.105	1588	4098	0.259	0.258	10021	0.281

Table 49: Quadrant analysis summary for a hole size of 0 within the canopy, at a flow speed setting of 15 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	33.960	2246	7614	0.117	0.156	6792	0.189
High	II	Ejection	52.485	5743	13025	0.462	0.412	10497	0.293
High	III	Inward interaction	27.955	1885	7110	0.081	0.120	5591	0.156
High	IV	Sweep	64.850	3431	8016	0.341	0.313	12970	0.362
Low	I	Outward interaction	38.420	1935	6383	0.138	0.188	7684	0.214
Low	II	Ejection	47.220	5054	10256	0.445	0.372	9444	0.263
Low	III	Inward interaction	34.260	2121	6146	0.135	0.162	6852	0.191
Low	IV	Sweep	59.390	2546	6116	0.282	0.279	11878	0.331
Medium	I	Outward interaction	35.795	2308	7568	0.130	0.176	7159	0.200
Medium	II	Ejection	50.020	6048	12084	0.475	0.393	10004	0.279
Medium	III	Inward interaction	34.250	1920	6744	0.103	0.150	6850	0.191
Medium	IV	Sweep	58.905	3155	7336	0.292	0.281	11781	0.329

Table 50: Quadrant analysis summary for a hole size of 0 within the canopy, at a flow speed setting of 15 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	36.255	2580	9787	0.231	0.245	7251	0.203
High	II	Ejection	49.745	2521	9209	0.310	0.317	9949	0.278
High	III	Inward interaction	44.395	1437	5823	0.158	0.179	8879	0.248
High	IV	Sweep	48.595	2500	7734	0.301	0.260	9719	0.271
Low	I	Outward interaction	37.215	5758	19446	0.143	0.169	7443	0.208
Low	II	Ejection	52.005	9495	25991	0.329	0.316	10401	0.291
Low	III	Inward interaction	37.270	6418	22078	0.160	0.192	7454	0.209
Low	IV	Sweep	52.040	10600	26500	0.368	0.322	10408	0.291
Medium	I	Outward interaction	40.145	1210	4595	0.334	0.300	8029	0.224
Medium	II	Ejection	48.000	620	3261	0.204	0.255	9600	0.268
Medium	III	Inward interaction	50.830	585	2641	0.204	0.218	10166	0.284
Medium	IV	Sweep	40.060	934	3485	0.257	0.227	8012	0.224

Table 51: Quadrant analysis summary for a hole size of 0 within the canopy, at a flow speed setting of 15 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	28.155	519	1836	0.120	0.148	5631	0.157
High	II	Ejection	59.000	740	1898	0.359	0.322	11800	0.329
High	III	Inward interaction	31.775	265	1329	0.069	0.121	6355	0.177
High	IV	Sweep	60.370	911	2357	0.452	0.409	12074	0.337
Low	I	Outward interaction	49.430	2134	6562	0.341	0.317	9886	0.277
Low	II	Ejection	41.770	1240	5301	0.167	0.216	8354	0.234
Low	III	Inward interaction	49.925	1777	5588	0.287	0.272	9985	0.280
Low	IV	Sweep	37.470	1699	5327	0.206	0.195	7494	0.210
Medium	I	Outward interaction	44.245	945	3458	0.240	0.232	8849	0.248
Medium	II	Ejection	45.270	993	3811	0.258	0.262	9054	0.253
Medium	III	Inward interaction	42.900	946	3708	0.233	0.241	8580	0.240
Medium	IV	Sweep	46.260	1013	3765	0.269	0.264	9252	0.259

Table 52: Quadrant analysis summary for a hole size of 0 within the canopy, at a flow speed setting of 15 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	40.700	1775	6682	0.263	0.275	8140	0.228
High	II	Ejection	46.555	1618	5858	0.274	0.276	9311	0.260
High	III	Inward interaction	43.675	1194	4310	0.189	0.190	8735	0.244
High	IV	Sweep	47.855	1577	5351	0.274	0.259	9571	0.268
Low	I	Outward interaction	36.250	1811	7333	0.127	0.159	7250	0.203
Low	II	Ejection	58.375	2541	7616	0.288	0.266	11675	0.326
Low	III	Inward interaction	35.200	2092	8597	0.143	0.181	7040	0.197
Low	IV	Sweep	49.070	4635	13433	0.442	0.394	9814	0.274
Medium	I	Outward interaction	35.835	1342	4641	0.140	0.167	7167	0.201
Medium	II	Ejection	54.450	2127	5883	0.336	0.322	10890	0.305
Medium	III	Inward interaction	36.385	1430	4774	0.151	0.174	7277	0.204
Medium	IV	Sweep	51.915	2469	6467	0.372	0.337	10383	0.291

Table 53: Quadrant analysis summary for a hole size of 0 at the edge of the canopy, at a flow speed setting of 15 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	35.690	2491	6877	0.168	0.189	7138	0.200
Low	II	Ejection	47.960	4363	9484	0.396	0.350	9592	0.268
Low	III	Inward interaction	37.685	2192	6389	0.156	0.185	7537	0.211
Low	IV	Sweep	57.325	2565	6235	0.279	0.275	11465	0.321
Medium	I	Outward interaction	38.100	3423	9883	0.165	0.200	7620	0.213
Medium	II	Ejection	46.870	6777	13969	0.402	0.347	9374	0.262
Medium	III	Inward interaction	36.650	3401	9248	0.158	0.180	7330	0.205
Medium	IV	Sweep	57.175	3803	9002	0.275	0.273	11435	0.320
High	I	Outward interaction	41.505	2437	6549	0.206	0.229	8301	0.232
High	II	Ejection	42.770	4096	8830	0.357	0.319	8554	0.239
High	III	Inward interaction	42.355	2241	5736	0.193	0.205	8471	0.237
High	IV	Sweep	52.105	2297	5604	0.244	0.247	10421	0.292

Table 54: Quadrant analysis summary for a hole size of 0 at the edge of the canopy, at a flow speed setting of 15 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	41.445	3931	14031	0.197	0.218	8289	0.232
Low	II	Ejection	44.285	6306	17851	0.337	0.296	8857	0.248
Low	III	Inward interaction	36.825	4097	16761	0.182	0.231	7365	0.206
Low	IV	Sweep	55.990	4214	12211	0.285	0.256	11198	0.314
Medium	I	Outward interaction	22.840	1556	5858	0.086	0.114	4568	0.128
Medium	II	Ejection	63.790	2680	7433	0.411	0.405	12758	0.357
Medium	III	Inward interaction	29.180	490	3037	0.034	0.076	5836	0.163
Medium	IV	Sweep	62.920	3095	7543	0.469	0.405	12584	0.352
High	I	Outward interaction	38.465	6773	18759	0.469	0.431	7693	0.214
High	II	Ejection	43.495	2058	6926	0.161	0.180	8699	0.242
High	III	Inward interaction	62.360	2149	6091	0.241	0.227	12472	0.348
High	IV	Sweep	35.120	2036	7735	0.129	0.162	7024	0.196

Table 55: Quadrant analysis summary for a hole size of 0 at the edge of the canopy, at a flow speed setting of 15 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	52.590	3946	11319	0.345	0.321	10518	0.293
Low	II	Ejection	39.380	2461	9661	0.161	0.205	7876	0.220
Low	III	Inward interaction	50.500	3757	10525	0.316	0.287	10100	0.282
Low	IV	Sweep	36.850	2901	9435	0.178	0.187	7370	0.205
Medium	I	Outward interaction	36.605	840	3168	0.148	0.177	7321	0.205
Medium	II	Ejection	53.550	1360	3881	0.350	0.318	10710	0.300
Medium	III	Inward interaction	36.370	784	3096	0.137	0.172	7274	0.204
Medium	IV	Sweep	52.100	1459	4165	0.365	0.332	10420	0.292
High	I	Outward interaction	40.235	1480	4058	0.500	0.424	8047	0.225
High	II	Ejection	36.970	513	1999	0.159	0.192	7394	0.207
High	III	Inward interaction	65.975	377	1403	0.209	0.241	13195	0.369
High	IV	Sweep	35.575	444	1545	0.132	0.143	7115	0.199

Table 56: Quadrant analysis summary for a hole size of 0 at the edge of the canopy, at a flow speed setting of 15 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	34.885	3482	11637	0.142	0.176	6977	0.195
Low	II	Ejection	52.200	6147	14620	0.376	0.331	10440	0.292
Low	III	Inward interaction	36.045	2967	10366	0.125	0.162	7209	0.201
Low	IV	Sweep	55.845	5457	13671	0.357	0.331	11169	0.312
Medium	I	Outward interaction	23.485	208	1598	0.051	0.104	4697	0.131
Medium	II	Ejection	67.285	583	1968	0.406	0.367	13457	0.375
Medium	III	Inward interaction	27.625	165	1566	0.047	0.120	5525	0.154
Medium	IV	Sweep	60.945	785	2423	0.496	0.409	12189	0.340
High	I	Outward interaction	46.775	1539	4515	0.258	0.245	9355	0.261
High	II	Ejection	41.825	1442	4601	0.216	0.223	8365	0.234
High	III	Inward interaction	46.895	1689	5104	0.284	0.278	9379	0.262
High	IV	Sweep	43.510	1559	5045	0.243	0.255	8702	0.243

Table 57: Quadrant analysis summary for a hole size of 0 at the edge of the canopy, at a flow speed setting of 2 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	30.935	229	957	0.189	0.212	6187	0.173
Low	II	Ejection	54.875	245	746	0.360	0.293	10975	0.306
Low	III	Inward interaction	40.255	114	595	0.123	0.171	8051	0.224
Low	IV	Sweep	53.260	230	850	0.328	0.324	10652	0.297
High	I	Outward interaction	26.560	464	2018	0.197	0.232	5312	0.148
High	II	Ejection	61.765	349	1062	0.344	0.284	12353	0.345
High	III	Inward interaction	38.590	195	874	0.120	0.146	7718	0.216
High	IV	Sweep	51.995	407	1506	0.339	0.339	10399	0.291
Medium	I	Outward interaction	28.815	190	768	0.170	0.206	5763	0.161
Medium	II	Ejection	56.935	211	574	0.371	0.304	11387	0.318
Medium	III	Inward interaction	37.345	101	462	0.117	0.160	7469	0.209
Medium	IV	Sweep	55.850	198	637	0.342	0.330	11170	0.312

Table 58: Quadrant analysis summary for a hole size of 0 at the edge of the canopy, at a flow speed setting of 2 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	32.565	561	2366	0.201	0.230	6513	0.182
Low	II	Ejection	54.685	531	1691	0.319	0.276	10937	0.305
Low	III	Inward interaction	40.110	356	1379	0.157	0.165	8022	0.224
Low	IV	Sweep	51.885	565	2116	0.323	0.328	10377	0.289
High	I	Outward interaction	24.215	185	781	0.124	0.173	4843	0.135
High	II	Ejection	63.460	241	631	0.422	0.366	12692	0.354
High	III	Inward interaction	26.770	100	439	0.074	0.107	5354	0.149
High	IV	Sweep	64.845	213	595	0.381	0.353	12969	0.362
Medium	I	Outward interaction	28.690	165	896	0.156	0.209	5738	0.160
Medium	II	Ejection	59.255	194	639	0.378	0.308	11851	0.331
Medium	III	Inward interaction	37.035	93	501	0.113	0.151	7407	0.207
Medium	IV	Sweep	54.140	197	752	0.352	0.331	10828	0.302

Table 59: Quadrant analysis summary for a hole size of 0 at the edge of the canopy, at a flow speed setting of 2 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	28.190	270	1351	0.113	0.169	5638	0.157
Low	II	Ejection	60.385	442	1203	0.399	0.322	12077	0.337
Low	III	Inward interaction	33.160	186	1010	0.092	0.149	6632	0.185
Low	IV	Sweep	57.355	462	1416	0.396	0.360	11471	0.320
High	I	Outward interaction	30.360	243	1166	0.199	0.230	6072	0.169
High	II	Ejection	52.670	254	883	0.362	0.302	10534	0.294
High	III	Inward interaction	43.210	100	528	0.116	0.148	8642	0.241
High	IV	Sweep	53.205	224	923	0.322	0.319	10641	0.296
Medium	I	Outward interaction	36.375	118	533	0.149	0.191	7275	0.203
Medium	II	Ejection	52.520	206	629	0.375	0.326	10504	0.293
Medium	III	Inward interaction	37.725	102	437	0.133	0.163	7545	0.210
Medium	IV	Sweep	52.805	188	616	0.343	0.321	10561	0.294

Table 60: Quadrant analysis summary for a hole size of 0 at the edge of the canopy, at a flow speed setting of 2 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	20.905	100	553	0.081	0.147	4181	0.117
Low	II	Ejection	69.610	161	429	0.432	0.379	13922	0.390
Low	III	Inward interaction	24.820	47	279	0.045	0.088	4964	0.139
Low	IV	Sweep	63.200	182	482	0.443	0.386	12640	0.354
High	I	Outward interaction	24.020	1283	4163	0.303	0.285	4804	0.134
High	II	Ejection	55.260	593	1758	0.322	0.277	11052	0.308
High	III	Inward interaction	48.315	233	1051	0.111	0.145	9663	0.270
High	IV	Sweep	51.570	522	1997	0.265	0.294	10314	0.288
Medium	I	Outward interaction	29.115	119	683	0.141	0.191	5823	0.163
Medium	II	Ejection	57.035	169	603	0.392	0.330	11407	0.319
Medium	III	Inward interaction	34.440	67	446	0.094	0.147	6888	0.193
Medium	IV	Sweep	58.050	158	598	0.373	0.333	11610	0.325

Table 61: Quadrant analysis summary for a hole size of 0 above the canopy, at a flow speed setting of 2 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	24.580	491	2118	0.195	0.216	4916	0.137
High	II	Ejection	61.720	355	1141	0.354	0.292	12344	0.345
High	III	Inward interaction	36.915	180	953	0.108	0.146	7383	0.206
High	IV	Sweep	55.880	379	1490	0.343	0.346	11176	0.312
Low	I	Outward interaction	28.780	266	1215	0.163	0.185	5756	0.161
Low	II	Ejection	61.020	274	914	0.356	0.294	12204	0.341
Low	III	Inward interaction	35.885	142	807	0.109	0.153	7177	0.200
Low	IV	Sweep	53.430	328	1306	0.373	0.368	10686	0.298
Medium	I	Outward interaction	29.845	164	719	0.171	0.206	5969	0.167
Medium	II	Ejection	58.140	179	538	0.364	0.299	11628	0.325
Medium	III	Inward interaction	35.990	93	475	0.117	0.164	7198	0.201
Medium	IV	Sweep	54.885	182	631	0.349	0.332	10977	0.307

Table 62: Quadrant analysis summary for a hole size of 0 above the canopy, at a flow speed setting of 2 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	43.385	245	868	0.414	0.391	8677	0.243
High	II	Ejection	34.355	148	738	0.199	0.263	6871	0.192
High	III	Inward interaction	66.465	69	237	0.180	0.164	13293	0.372
High	IV	Sweep	34.290	155	509	0.207	0.181	6858	0.192
Low	I	Outward interaction	28.260	265	1201	0.163	0.191	5652	0.158
Low	II	Ejection	59.685	282	891	0.366	0.298	11937	0.334
Low	III	Inward interaction	37.325	127	709	0.104	0.149	7465	0.209
Low	IV	Sweep	53.255	317	1212	0.367	0.362	10651	0.298
Medium	I	Outward interaction	31.700	123	697	0.146	0.193	6340	0.178
Medium	II	Ejection	54.200	196	674	0.394	0.319	10840	0.304
Medium	III	Inward interaction	36.080	87	544	0.116	0.172	7216	0.202
Medium	IV	Sweep	56.525	164	640	0.344	0.316	11305	0.317

Table 63: Quadrant analysis summary for a hole size of 0 above the canopy, at a flow speed setting of 2 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	34.855	215	1035	0.141	0.193	6971	0.194
High	II	Ejection	58.450	337	1038	0.371	0.324	11690	0.326
High	III	Inward interaction	32.305	192	961	0.117	0.166	6461	0.180
High	IV	Sweep	53.730	367	1105	0.371	0.317	10746	0.300
Low	I	Outward interaction	28.560	280	1377	0.158	0.204	5712	0.160
Low	II	Ejection	56.235	352	1043	0.391	0.304	11247	0.314
Low	III	Inward interaction	36.430	149	852	0.107	0.161	7286	0.203
Low	IV	Sweep	57.815	301	1100	0.343	0.330	11563	0.323
Medium	I	Outward interaction	29.730	165	794	0.111	0.163	5946	0.166
Medium	II	Ejection	56.455	344	904	0.438	0.352	11291	0.315
Medium	III	Inward interaction	31.470	119	666	0.085	0.145	6294	0.176
Medium	IV	Sweep	61.530	265	804	0.367	0.341	12306	0.343

Table 64: Quadrant analysis summary for a hole size of 0 above the canopy, at a flow speed setting of 2 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	34.220	242	1052	0.149	0.196	6844	0.191
High	II	Ejection	55.810	366	1021	0.368	0.310	11162	0.312
High	III	Inward interaction	35.675	187	848	0.121	0.165	7135	0.199
High	IV	Sweep	53.370	376	1135	0.362	0.330	10674	0.298
Low	I	Outward interaction	30.175	236	1091	0.154	0.198	6035	0.169
Low	II	Ejection	55.065	313	950	0.373	0.315	11013	0.308
Low	III	Inward interaction	37.740	137	710	0.112	0.161	7548	0.211
Low	IV	Sweep	56.035	298	962	0.361	0.325	11207	0.313
Medium	I	Outward interaction	29.760	162	884	0.091	0.158	5952	0.166
Medium	II	Ejection	59.390	382	1008	0.427	0.359	11878	0.332
Medium	III	Inward interaction	29.845	116	687	0.065	0.123	5969	0.167
Medium	IV	Sweep	59.755	372	1005	0.417	0.360	11951	0.334

Table 65: Quadrant analysis summary for a hole size of 0 within the canopy, at a flow speed setting of 2 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	24.060	671	3025	0.193	0.200	4812	0.134
High	II	Ejection	59.735	485	1744	0.346	0.287	11947	0.333
High	III	Inward interaction	36.950	253	1482	0.112	0.151	7390	0.206
High	IV	Sweep	58.440	500	2254	0.349	0.362	11688	0.326
Low	I	Outward interaction	27.270	240	1233	0.180	0.208	5454	0.152
Low	II	Ejection	57.115	234	849	0.367	0.299	11423	0.319
Low	III	Inward interaction	38.595	95	676	0.101	0.161	7719	0.215
Low	IV	Sweep	56.250	228	954	0.353	0.332	11250	0.314
Medium	I	Outward interaction	33.025	112	610	0.163	0.201	6605	0.185
Medium	II	Ejection	54.425	149	558	0.355	0.302	10885	0.305
Medium	III	Inward interaction	35.830	82	517	0.129	0.185	7166	0.201
Medium	IV	Sweep	55.245	145	567	0.353	0.312	11049	0.309

Table 66: Quadrant analysis summary for a hole size of 0 within the canopy, at a flow speed setting of 2 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	30.005	375	1832	0.176	0.210	6001	0.168
High	II	Ejection	57.565	386	1278	0.348	0.281	11513	0.322
High	III	Inward interaction	40.310	213	1001	0.134	0.154	8062	0.226
High	IV	Sweep	50.845	430	1832	0.342	0.355	10169	0.284
Low	I	Outward interaction	53.925	207	708	0.235	0.261	10785	0.302
Low	II	Ejection	43.060	219	681	0.198	0.201	8612	0.241
Low	III	Inward interaction	44.295	386	976	0.359	0.296	8859	0.248
Low	IV	Sweep	37.455	264	948	0.208	0.243	7491	0.210
Medium	I	Outward interaction	33.075	236	1371	0.142	0.197	6615	0.184
Medium	II	Ejection	56.260	364	1287	0.372	0.314	11252	0.314
Medium	III	Inward interaction	35.460	205	1066	0.132	0.164	7092	0.198
Medium	IV	Sweep	54.640	358	1374	0.355	0.326	10928	0.305

Table 67: Quadrant analysis summary for a hole size of 0 within the canopy, at a flow speed setting of 2 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	31.180	379	1733	0.244	0.266	6236	0.174
High	II	Ejection	54.290	274	991	0.307	0.265	10858	0.303
High	III	Inward interaction	45.425	163	753	0.153	0.169	9085	0.254
High	IV	Sweep	48.050	299	1266	0.296	0.300	9610	0.269
Low	I	Outward interaction	36.740	54	341	0.141	0.191	7348	0.206
Low	II	Ejection	50.675	103	420	0.375	0.325	10135	0.284
Low	III	Inward interaction	39.605	48	313	0.136	0.189	7921	0.222
Low	IV	Sweep	51.685	94	374	0.347	0.295	10337	0.289
Medium	I	Outward interaction	27.210	243	1720	0.171	0.221	5442	0.152
Medium	II	Ejection	58.490	239	1062	0.362	0.293	11698	0.327
Medium	III	Inward interaction	37.245	126	945	0.121	0.166	7449	0.208
Medium	IV	Sweep	55.740	240	1218	0.346	0.320	11148	0.312

Table 68: Quadrant analysis summary for a hole size of 0 within the canopy, at a flow speed setting of 2 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	21.835	306	1462	0.185	0.227	4367	0.122
High	II	Ejection	59.190	239	734	0.391	0.309	11838	0.331
High	III	Inward interaction	39.275	80	445	0.087	0.125	7855	0.220
High	IV	Sweep	58.430	209	813	0.337	0.339	11686	0.327
Low	I	Outward interaction	27.455	328	1606	0.183	0.222	5491	0.154
Low	II	Ejection	58.520	302	1011	0.359	0.297	11704	0.327
Low	III	Inward interaction	38.425	146	779	0.114	0.150	7685	0.215
Low	IV	Sweep	54.295	313	1211	0.345	0.331	10859	0.304
Medium	I	Outward interaction	33.900	180	858	0.129	0.177	6780	0.189
Medium	II	Ejection	56.440	323	959	0.385	0.329	11288	0.315
Medium	III	Inward interaction	33.155	165	782	0.115	0.158	6631	0.185
Medium	IV	Sweep	55.565	316	995	0.371	0.336	11113	0.310

Table 69: Quadrant analysis summary for a hole size of 0 at the edge of the canopy, at a flow speed setting of 4 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	35.905	306	1037	0.197	0.216	7181	0.200
Low	II	Ejection	52.245	353	936	0.331	0.283	10449	0.292
Low	III	Inward interaction	41.910	220	808	0.165	0.196	8382	0.234
Low	IV	Sweep	49.035	349	1073	0.307	0.305	9807	0.274
Medium	I	Outward interaction	36.585	293	820	0.228	0.222	7317	0.205
Medium	II	Ejection	48.705	309	813	0.320	0.293	9741	0.272
Medium	III	Inward interaction	42.485	177	619	0.160	0.194	8497	0.238
Medium	IV	Sweep	51.035	270	773	0.293	0.292	10207	0.285
High	I	Outward interaction	37.490	447	1456	0.232	0.230	7498	0.210
High	II	Ejection	47.915	483	1372	0.320	0.277	9583	0.268
High	III	Inward interaction	45.325	258	992	0.162	0.189	9065	0.254
High	IV	Sweep	47.770	432	1509	0.286	0.304	9554	0.268

Table 70: Quadrant analysis summary for a hole size of 0 at the edge of the canopy, at a flow speed setting of 4 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	44.640	591	2181	0.234	0.238	8928	0.250
Low	II	Ejection	45.530	646	2268	0.261	0.252	9106	0.255
Low	III	Inward interaction	44.395	591	2206	0.233	0.239	8879	0.248
Low	IV	Sweep	44.225	694	2509	0.272	0.271	8845	0.247
Medium	I	Outward interaction	43.860	340	1435	0.250	0.250	8772	0.244
Medium	II	Ejection	45.490	300	1323	0.229	0.240	9098	0.254
Medium	III	Inward interaction	46.865	312	1341	0.245	0.250	9373	0.261
Medium	IV	Sweep	43.220	381	1510	0.276	0.260	8644	0.241
High	I	Outward interaction	22.025	364	1878	0.051	0.095	4405	0.123
High	II	Ejection	65.805	1112	2820	0.470	0.427	13161	0.369
High	III	Inward interaction	23.230	232	1388	0.035	0.074	4646	0.130
High	IV	Sweep	67.440	1025	2607	0.444	0.404	13488	0.378

Table 71: Quadrant analysis summary for a hole size of 0 at the edge of the canopy, at a flow speed setting of 4 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	35.455	738	2525	0.136	0.164	7091	0.198
Low	II	Ejection	57.080	1194	2938	0.353	0.307	11416	0.320
Low	III	Inward interaction	33.950	687	2588	0.121	0.161	6790	0.190
Low	IV	Sweep	52.130	1442	3856	0.390	0.368	10426	0.292
Medium	I	Outward interaction	37.310	472	2352	0.162	0.198	7462	0.209
Medium	II	Ejection	53.150	682	2508	0.333	0.301	10630	0.297
Medium	III	Inward interaction	38.170	478	2240	0.168	0.193	7634	0.214
Medium	IV	Sweep	50.085	736	2719	0.338	0.308	10017	0.280
High	I	Outward interaction	35.420	213	1093	0.145	0.191	7084	0.197
High	II	Ejection	54.630	359	1163	0.378	0.314	10926	0.304
High	III	Inward interaction	36.060	184	972	0.127	0.173	7212	0.201
High	IV	Sweep	53.320	341	1217	0.350	0.321	10664	0.297

Table 72: Quadrant analysis summary for a hole size of 0 at the edge of the canopy, at a flow speed setting of 4 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	39.770	416	1438	0.161	0.180	7954	0.222
Low	II	Ejection	54.905	584	1629	0.311	0.282	10981	0.307
Low	III	Inward interaction	35.785	428	1749	0.149	0.197	7157	0.200
Low	IV	Sweep	48.325	808	2241	0.379	0.341	9665	0.270
Medium	I	Outward interaction	38.600	167	730	0.155	0.190	7720	0.216
Medium	II	Ejection	51.895	271	841	0.338	0.295	10379	0.290
Medium	III	Inward interaction	38.485	183	777	0.169	0.202	7697	0.215
Medium	IV	Sweep	50.120	280	922	0.337	0.312	10024	0.280
High	I	Outward interaction	28.390	285	1485	0.136	0.171	5678	0.158
High	II	Ejection	59.440	384	1286	0.384	0.311	11888	0.331
High	III	Inward interaction	35.505	162	1015	0.097	0.146	7101	0.198
High	IV	Sweep	56.000	407	1632	0.384	0.371	11200	0.312

Table 73: Quadrant analysis summary for a hole size of 0 above the canopy, at a flow speed setting of 4 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	35.240	381	1438	0.196	0.204	7048	0.197
High	II	Ejection	52.035	450	1411	0.341	0.296	10407	0.292
High	III	Inward interaction	41.330	227	1024	0.137	0.170	8266	0.232
High	IV	Sweep	49.880	450	1639	0.327	0.329	9976	0.279
Low	I	Outward interaction	38.485	198	766	0.165	0.199	7697	0.215
Low	II	Ejection	54.600	277	773	0.328	0.286	10920	0.304
Low	III	Inward interaction	37.990	210	758	0.173	0.195	7598	0.212
Low	IV	Sweep	48.325	319	979	0.334	0.320	9665	0.269
Medium	I	Outward interaction	36.860	206	688	0.228	0.231	7372	0.206
Medium	II	Ejection	51.005	212	642	0.326	0.298	10201	0.285
Medium	III	Inward interaction	41.515	113	501	0.141	0.189	8303	0.232
Medium	IV	Sweep	49.585	204	625	0.305	0.282	9917	0.277

Table 74: Quadrant analysis summary for a hole size of 0 above the canopy, at a flow speed setting of 4 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	35.155	330	1155	0.191	0.216	7031	0.197
High	II	Ejection	51.655	413	1086	0.351	0.299	10331	0.289
High	III	Inward interaction	41.495	209	798	0.143	0.176	8299	0.232
High	IV	Sweep	50.360	380	1150	0.315	0.308	10072	0.282
Low	I	Outward interaction	38.105	225	725	0.211	0.217	7621	0.212
Low	II	Ejection	53.390	252	698	0.331	0.292	10678	0.298
Low	III	Inward interaction	39.715	153	603	0.149	0.188	7943	0.221
Low	IV	Sweep	48.135	262	805	0.310	0.304	9627	0.268
Medium	I	Outward interaction	37.880	173	760	0.150	0.188	7576	0.212
Medium	II	Ejection	50.265	311	951	0.358	0.312	10053	0.281
Medium	III	Inward interaction	36.865	187	826	0.158	0.199	7373	0.206
Medium	IV	Sweep	53.930	270	857	0.334	0.302	10786	0.301

Table 75: Quadrant analysis summary for a hole size of 0 above the canopy, at a flow speed setting of 4 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	33.285	763	3091	0.115	0.155	6657	0.186
High	II	Ejection	60.190	1295	3503	0.353	0.317	12038	0.336
High	III	Inward interaction	32.230	771	3273	0.113	0.159	6446	0.180
High	IV	Sweep	53.580	1729	4587	0.419	0.370	10716	0.299
Low	I	Outward interaction	33.965	495	2086	0.159	0.195	6793	0.190
Low	II	Ejection	53.290	706	2168	0.355	0.318	10658	0.299
Low	III	Inward interaction	37.465	385	1677	0.136	0.173	7493	0.210
Low	IV	Sweep	53.800	687	2112	0.349	0.313	10760	0.301
Medium	I	Outward interaction	35.510	353	1280	0.117	0.155	7102	0.199
Medium	II	Ejection	53.235	844	2027	0.420	0.368	10647	0.298
Medium	III	Inward interaction	32.095	373	1405	0.112	0.154	6419	0.180
Medium	IV	Sweep	57.870	651	1635	0.352	0.323	11574	0.324

Table 76: Quadrant analysis summary for a hole size of 0 above the canopy, at a flow speed setting of 4 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	37.595	855	3301	0.162	0.205	7519	0.210
High	II	Ejection	53.690	1201	3176	0.326	0.281	10738	0.299
High	III	Inward interaction	37.805	757	3116	0.145	0.194	7561	0.211
High	IV	Sweep	50.215	1450	3852	0.368	0.319	10043	0.280
Low	I	Outward interaction	31.660	543	1954	0.152	0.184	6332	0.177
Low	II	Ejection	51.935	813	2183	0.374	0.337	10387	0.291
Low	III	Inward interaction	36.410	393	1579	0.127	0.171	7282	0.204
Low	IV	Sweep	58.525	670	1774	0.347	0.308	11705	0.328
Medium	I	Outward interaction	32.510	701	2462	0.122	0.158	6502	0.181
Medium	II	Ejection	60.805	1028	2511	0.334	0.301	12161	0.339
Medium	III	Inward interaction	33.485	565	2247	0.101	0.148	6697	0.187
Medium	IV	Sweep	52.575	1573	3778	0.442	0.392	10515	0.293

Table 77: Quadrant analysis summary for a hole size of 0 within the canopy, at a flow speed setting of 4 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	32.350	393	1842	0.126	0.155	6470	0.180
High	II	Ejection	57.530	690	2173	0.392	0.324	11506	0.321
High	III	Inward interaction	32.295	354	1807	0.113	0.151	6459	0.180
High	IV	Sweep	57.155	653	2492	0.369	0.370	11431	0.319
Low	I	Outward interaction	37.375	200	791	0.160	0.200	7475	0.209
Low	II	Ejection	51.290	332	915	0.365	0.318	10258	0.287
Low	III	Inward interaction	38.865	194	707	0.162	0.187	7773	0.218
Low	IV	Sweep	51.025	286	851	0.313	0.295	10205	0.286
Medium	I	Outward interaction	39.100	211	804	0.151	0.185	7820	0.219
Medium	II	Ejection	51.725	413	1069	0.391	0.326	10345	0.290
Medium	III	Inward interaction	34.195	217	892	0.136	0.180	6839	0.192
Medium	IV	Sweep	53.475	330	978	0.323	0.309	10695	0.300

Table 78: Quadrant analysis summary for a hole size of 0 within the canopy, at a flow speed setting of 4 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	36.110	668	2989	0.172	0.203	7222	0.201
High	II	Ejection	51.615	977	3142	0.359	0.305	10323	0.288
High	III	Inward interaction	39.395	536	2400	0.150	0.178	7879	0.220
High	IV	Sweep	52.180	857	3199	0.319	0.314	10436	0.291
Low	I	Outward interaction	44.350	638	2418	0.214	0.227	8870	0.248
Low	II	Ejection	46.620	726	2442	0.256	0.241	9324	0.260
Low	III	Inward interaction	43.100	782	2864	0.255	0.262	8620	0.241
Low	IV	Sweep	45.010	812	2831	0.276	0.270	9002	0.251
Medium	I	Outward interaction	35.775	960	4163	0.150	0.179	7155	0.200
Medium	II	Ejection	53.845	1491	4843	0.351	0.313	10769	0.300
Medium	III	Inward interaction	36.195	953	4207	0.151	0.183	7239	0.202
Medium	IV	Sweep	53.415	1485	5087	0.347	0.326	10683	0.298

Table 79: Quadrant analysis summary for a hole size of 0 within the canopy, at a flow speed setting of 4 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	38.885	380	1746	0.190	0.222	7777	0.215
High	II	Ejection	51.065	502	1708	0.328	0.285	10213	0.282
High	III	Inward interaction	41.185	341	1525	0.180	0.205	8237	0.228
High	IV	Sweep	49.730	474	1779	0.302	0.289	9946	0.275
Low	I	Outward interaction	32.490	648	2686	0.127	0.157	6498	0.181
Low	II	Ejection	57.025	1110	3197	0.383	0.327	11405	0.318
Low	III	Inward interaction	34.040	566	2575	0.117	0.157	6808	0.190
Low	IV	Sweep	55.670	1107	3595	0.373	0.359	11134	0.311
Medium	I	Outward interaction	30.840	207	1094	0.140	0.189	6168	0.173
Medium	II	Ejection	57.620	304	975	0.385	0.315	11524	0.323
Medium	III	Inward interaction	35.330	151	797	0.118	0.158	7066	0.198
Medium	IV	Sweep	54.845	296	1101	0.357	0.338	10969	0.307

Table 80: Quadrant analysis summary for a hole size of 0 within the canopy, at a flow speed setting of 4 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	29.970	289	1392	0.139	0.183	5994	0.168
High	II	Ejection	59.955	393	1163	0.378	0.305	11991	0.335
High	III	Inward interaction	33.955	204	1068	0.111	0.159	6791	0.190
High	IV	Sweep	54.915	421	1472	0.371	0.354	10983	0.307
Low	I	Outward interaction	35.390	35	143	0.336	0.291	7078	0.197
Low	II	Ejection	44.855	23	104	0.278	0.268	8971	0.250
Low	III	Inward interaction	57.410	9	59	0.141	0.195	11482	0.320
Low	IV	Sweep	41.685	22	102	0.244	0.246	8337	0.232
Medium	I	Outward interaction	42.815	276	993	0.193	0.221	8563	0.240
Medium	II	Ejection	48.295	405	1178	0.320	0.296	9659	0.271
Medium	III	Inward interaction	40.250	304	1028	0.200	0.216	8050	0.225
Medium	IV	Sweep	47.150	371	1085	0.286	0.267	9430	0.264

Table 81: Quadrant analysis summary for a hole size of 0 at the edge of the canopy, at a flow speed setting of 6 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	38.855	396	1065	0.198	0.210	7771	0.217
Low	II	Ejection	46.935	498	1195	0.300	0.285	9387	0.263
Low	III	Inward interaction	42.670	347	994	0.190	0.216	8534	0.239
Low	IV	Sweep	50.225	486	1131	0.313	0.289	10045	0.281
Medium	I	Outward interaction	38.575	402	1115	0.208	0.223	7715	0.216
Medium	II	Ejection	45.890	537	1290	0.330	0.308	9178	0.257
Medium	III	Inward interaction	42.830	308	900	0.177	0.200	8566	0.240
Medium	IV	Sweep	51.250	415	1009	0.285	0.269	10250	0.287
High	I	Outward interaction	36.040	465	1531	0.179	0.201	7208	0.202
High	II	Ejection	49.085	660	1705	0.345	0.305	9817	0.275
High	III	Inward interaction	41.635	368	1263	0.163	0.192	8327	0.233
High	IV	Sweep	51.810	568	1604	0.313	0.303	10362	0.290

Table 82: Quadrant analysis summary for a hole size of 0 at the edge of the canopy, at a flow speed setting of 6 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	38.655	336	995	0.188	0.209	7731	0.215
Low	II	Ejection	47.800	476	1191	0.329	0.309	9560	0.266
Low	III	Inward interaction	42.210	297	902	0.181	0.206	8442	0.235
Low	IV	Sweep	50.790	411	1003	0.302	0.276	10158	0.283
Medium	I	Outward interaction	32.000	503	1977	0.120	0.155	6400	0.179
Medium	II	Ejection	57.215	871	2567	0.373	0.359	11443	0.320
Medium	III	Inward interaction	34.775	338	1393	0.088	0.119	6955	0.194
Medium	IV	Sweep	54.940	1019	2730	0.419	0.367	10988	0.307
High	I	Outward interaction	42.655	1632	4955	0.250	0.256	8531	0.238
High	II	Ejection	44.705	1611	4754	0.258	0.257	8941	0.250
High	III	Inward interaction	45.175	1424	4412	0.231	0.241	9035	0.252
High	IV	Sweep	46.530	1566	4368	0.261	0.246	9306	0.260

Table 83: Quadrant analysis summary for a hole size of 0 at the edge of the canopy, at a flow speed setting of 6 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	39.805	1394	4062	0.187	0.191	7961	0.223
Low	II	Ejection	53.035	1544	4182	0.276	0.262	10607	0.297
Low	III	Inward interaction	40.385	1304	4167	0.178	0.199	8077	0.226
Low	IV	Sweep	45.515	2341	6448	0.359	0.347	9103	0.255
Medium	I	Outward interaction	46.890	529	1969	0.305	0.304	9378	0.262
Medium	II	Ejection	40.540	431	1672	0.215	0.223	8108	0.227
Medium	III	Inward interaction	50.970	450	1552	0.282	0.260	10194	0.285
Medium	IV	Sweep	40.255	400	1612	0.198	0.213	8051	0.225
High	I	Outward interaction	46.945	1649	5938	0.255	0.255	9389	0.263
High	II	Ejection	44.095	1686	6232	0.245	0.252	8819	0.247
High	III	Inward interaction	45.120	1820	5967	0.270	0.247	9024	0.252
High	IV	Sweep	42.635	1648	6292	0.231	0.246	8527	0.238

Table 84: Quadrant analysis summary for a hole size of 0 at the edge of the canopy, at a flow speed setting of 6 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	40.585	1133	3191	0.207	0.209	8117	0.227
Low	II	Ejection	51.145	1200	3203	0.277	0.264	10229	0.285
Low	III	Inward interaction	42.475	884	2834	0.169	0.194	8495	0.237
Low	IV	Sweep	44.970	1708	4583	0.346	0.333	8994	0.251
Medium	I	Outward interaction	43.185	278	1077	0.237	0.244	8637	0.241
Medium	II	Ejection	45.605	326	1098	0.293	0.263	9121	0.254
Medium	III	Inward interaction	44.000	247	1017	0.215	0.235	8800	0.245
Medium	IV	Sweep	46.640	277	1051	0.255	0.257	9328	0.260
High	I	Outward interaction	42.780	320	1024	0.218	0.229	8556	0.239
High	II	Ejection	48.400	390	1049	0.301	0.265	9680	0.271
High	III	Inward interaction	40.990	275	1032	0.179	0.221	8198	0.229
High	IV	Sweep	46.605	408	1177	0.302	0.286	9321	0.261

Table 85: Quadrant analysis summary for a hole size of 0 above the canopy, at a flow speed setting of 6 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	35.500	291	1104	0.145	0.182	7100	0.198
High	II	Ejection	54.235	469	1246	0.357	0.315	10847	0.302
High	III	Inward interaction	36.575	277	1041	0.142	0.177	7315	0.204
High	IV	Sweep	53.085	477	1318	0.356	0.326	10617	0.296
Low	I	Outward interaction	46.525	566	5046	0.178	0.227	9305	0.260
Low	II	Ejection	49.815	944	5298	0.319	0.256	9963	0.279
Low	III	Inward interaction	34.395	802	6630	0.187	0.221	6879	0.192
Low	IV	Sweep	48.090	970	6359	0.316	0.296	9618	0.269
Medium	I	Outward interaction	37.475	202	678	0.162	0.192	7495	0.209
Medium	II	Ejection	51.915	301	781	0.334	0.306	10383	0.290
Medium	III	Inward interaction	37.375	176	653	0.141	0.184	7475	0.209
Medium	IV	Sweep	52.165	326	809	0.363	0.318	10433	0.292

Table 86: Quadrant analysis summary for a hole size of 0 above the canopy, at a flow speed setting of 6 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	35.150	429	1364	0.176	0.181	7030	0.197
High	II	Ejection	46.465	645	1662	0.350	0.292	9293	0.260
High	III	Inward interaction	42.335	312	1335	0.154	0.214	8467	0.237
High	IV	Sweep	54.645	503	1509	0.320	0.312	10929	0.306
Low	I	Outward interaction	36.545	284	955	0.135	0.165	7309	0.204
Low	II	Ejection	55.330	468	1153	0.336	0.302	11066	0.310
Low	III	Inward interaction	35.200	338	1141	0.155	0.190	7040	0.197
Low	IV	Sweep	51.640	558	1405	0.374	0.343	10328	0.289
Medium	I	Outward interaction	39.190	333	875	0.226	0.226	7838	0.219
Medium	II	Ejection	48.655	362	914	0.305	0.293	9731	0.271
Medium	III	Inward interaction	42.135	232	733	0.170	0.203	8427	0.235
Medium	IV	Sweep	49.300	350	856	0.299	0.278	9860	0.275

Table 87: Quadrant analysis summary for a hole size of 0 above the canopy, at a flow speed setting of 6 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	30.580	1596	6230	0.098	0.141	6116	0.171
High	II	Ejection	56.765	3863	9072	0.439	0.380	11353	0.317
High	III	Inward interaction	30.355	1496	6077	0.091	0.136	6071	0.170
High	IV	Sweep	61.185	3046	7609	0.373	0.343	12237	0.342
Low	I	Outward interaction	36.875	607	2083	0.173	0.199	7375	0.206
Low	II	Ejection	47.850	1024	2650	0.378	0.328	9570	0.267
Low	III	Inward interaction	39.805	495	1775	0.152	0.183	7961	0.222
Low	IV	Sweep	54.475	708	2068	0.298	0.291	10895	0.304
Medium	I	Outward interaction	38.200	502	1439	0.211	0.223	7640	0.214
Medium	II	Ejection	46.960	714	1720	0.369	0.327	9392	0.263
Medium	III	Inward interaction	40.520	303	1107	0.135	0.182	8104	0.227
Medium	IV	Sweep	52.805	490	1258	0.285	0.269	10561	0.296

Table 88: Quadrant analysis summary for a hole size of 0 above the canopy, at a flow speed setting of 6 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	33.235	2464	9261	0.115	0.161	6647	0.185
High	II	Ejection	57.270	5004	11899	0.404	0.357	11454	0.319
High	III	Inward interaction	31.500	2394	9190	0.106	0.152	6300	0.176
High	IV	Sweep	57.250	4649	11002	0.375	0.330	11450	0.319
Low	I	Outward interaction	35.225	578	1976	0.170	0.202	7045	0.197
Low	II	Ejection	47.725	936	2386	0.373	0.331	9545	0.267
Low	III	Inward interaction	40.490	443	1540	0.150	0.181	8098	0.227
Low	IV	Sweep	55.145	667	1788	0.307	0.286	11029	0.309
Medium	I	Outward interaction	33.460	1309	4821	0.116	0.161	6692	0.187
Medium	II	Ejection	56.410	2762	6287	0.414	0.354	11282	0.316
Medium	III	Inward interaction	30.770	1256	4740	0.103	0.146	6154	0.172
Medium	IV	Sweep	57.950	2378	5857	0.367	0.339	11590	0.324

Table 89: Quadrant analysis summary for a hole size of 0 within the canopy, at a flow speed setting of 6 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	39.325	516	2020	0.146	0.183	7865	0.219
High	II	Ejection	48.785	1105	3017	0.388	0.340	9757	0.272
High	III	Inward interaction	34.635	618	2378	0.154	0.190	6927	0.193
High	IV	Sweep	56.510	765	2204	0.311	0.287	11302	0.315
Low	I	Outward interaction	38.675	496	1666	0.176	0.210	7735	0.216
Low	II	Ejection	47.720	882	2127	0.386	0.330	9544	0.267
Low	III	Inward interaction	40.210	456	1480	0.169	0.193	8042	0.225
Low	IV	Sweep	52.335	559	1568	0.269	0.267	10467	0.292
Medium	I	Outward interaction	39.780	416	1257	0.155	0.182	7956	0.223
Medium	II	Ejection	49.605	799	1827	0.370	0.330	9921	0.278
Medium	III	Inward interaction	35.755	473	1486	0.158	0.193	7151	0.200
Medium	IV	Sweep	53.535	634	1510	0.317	0.294	10707	0.300

Table 90: Quadrant analysis summary for a hole size of 0 within the canopy, at a flow speed setting of 6 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	41.700	1390	5642	0.224	0.221	8340	0.233
High	II	Ejection	45.130	1536	6132	0.268	0.259	9026	0.252
High	III	Inward interaction	44.910	1253	5446	0.217	0.229	8982	0.251
High	IV	Sweep	47.045	1602	6592	0.291	0.291	9409	0.263
Low	I	Outward interaction	50.885	2036	5895	0.315	0.291	10177	0.284
Low	II	Ejection	37.620	1509	5192	0.173	0.189	7524	0.210
Low	III	Inward interaction	51.365	2168	6461	0.338	0.321	10273	0.287
Low	IV	Sweep	39.170	1464	5241	0.174	0.199	7834	0.219
Medium	I	Outward interaction	25.950	163	695	0.093	0.134	5190	0.145
Medium	II	Ejection	63.820	297	847	0.415	0.401	12764	0.356
Medium	III	Inward interaction	28.635	74	363	0.046	0.077	5727	0.160
Medium	IV	Sweep	60.815	335	858	0.446	0.388	12163	0.339

Table 91: Quadrant analysis summary for a hole size of 0 within the canopy, at a flow speed setting of 6 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	40.800	365	1381	0.174	0.202	8160	0.233
High	II	Ejection	49.395	488	1546	0.282	0.274	9879	0.282
High	III	Inward interaction	38.975	453	1648	0.207	0.231	7795	0.222
High	IV	Sweep	46.095	626	1766	0.337	0.292	9219	0.263
Low	I	Outward interaction	44.400	1188	4048	0.216	0.225	8880	0.248
Low	II	Ejection	49.545	1160	3912	0.235	0.242	9909	0.277
Low	III	Inward interaction	41.470	1383	4928	0.234	0.255	8294	0.232
Low	IV	Sweep	43.600	1768	5094	0.315	0.278	8720	0.244
Medium	I	Outward interaction	36.215	230	1005	0.155	0.183	7243	0.203
Medium	II	Ejection	52.740	366	1143	0.361	0.303	10548	0.295
Medium	III	Inward interaction	36.645	204	1020	0.139	0.188	7329	0.205
Medium	IV	Sweep	53.185	346	1222	0.344	0.327	10637	0.297

Table 92: Quadrant analysis summary for a hole size of 0 within the canopy, at a flow speed setting of 6 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	33.455	337	1513	0.140	0.174	6691	0.187
High	II	Ejection	55.620	549	1650	0.379	0.315	11124	0.311
High	III	Inward interaction	35.380	262	1298	0.115	0.158	7076	0.198
High	IV	Sweep	54.650	541	1882	0.366	0.353	10930	0.305
Low	I	Outward interaction	39.660	644	2227	0.179	0.193	7932	0.221
Low	II	Ejection	51.415	876	2549	0.315	0.286	10283	0.287
Low	III	Inward interaction	38.250	575	2451	0.154	0.205	7650	0.214
Low	IV	Sweep	49.760	1013	2902	0.353	0.316	9952	0.278
Medium	I	Outward interaction	41.560	636	2164	0.214	0.237	8312	0.233
Medium	II	Ejection	48.635	674	2039	0.266	0.262	9727	0.272
Medium	III	Inward interaction	42.920	619	1991	0.215	0.225	8584	0.240
Medium	IV	Sweep	45.370	827	2303	0.304	0.276	9074	0.254

Table 93: Quadrant analysis summary for a hole size of 0 at the edge of the canopy, at a flow speed setting of 8 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	38.120	773	2011	0.222	0.220	7624	0.213
Low	II	Ejection	43.450	1050	2424	0.345	0.302	8690	0.243
Low	III	Inward interaction	43.985	563	1717	0.187	0.217	8797	0.246
Low	IV	Sweep	53.580	608	1700	0.246	0.261	10716	0.299
High	I	Outward interaction	37.070	873	2236	0.179	0.202	7414	0.207
High	II	Ejection	46.995	1331	2832	0.346	0.324	9399	0.262
High	III	Inward interaction	39.905	789	1981	0.174	0.192	7981	0.223
High	IV	Sweep	55.260	984	2093	0.301	0.282	11052	0.308
Medium	I	Outward interaction	36.605	967	2340	0.229	0.222	7321	0.204
Medium	II	Ejection	45.995	1122	2563	0.333	0.305	9199	0.257
Medium	III	Inward interaction	42.180	616	1866	0.168	0.204	8436	0.236
Medium	IV	Sweep	54.245	770	1926	0.270	0.270	10849	0.303

Table 94: Quadrant analysis summary for a hole size of 0 at the edge of the canopy, at a flow speed setting of 8 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
Low	I	Outward interaction	37.210	791	2142	0.228	0.236	7442	0.208
Low	II	Ejection	43.765	1090	2521	0.369	0.326	8753	0.245
Low	III	Inward interaction	44.955	439	1431	0.153	0.190	8991	0.252
Low	IV	Sweep	52.650	612	1597	0.250	0.248	10530	0.295
High	I	Outward interaction	48.275	4121	11777	0.335	0.313	9655	0.270
High	II	Ejection	38.815	2936	9833	0.192	0.210	7763	0.217
High	III	Inward interaction	54.425	3194	9043	0.292	0.271	10885	0.305
High	IV	Sweep	37.030	2910	10115	0.181	0.206	7406	0.207
Medium	I	Outward interaction	30.185	233	1011	0.119	0.161	6037	0.168
Medium	II	Ejection	59.355	357	1066	0.359	0.334	11871	0.331
Medium	III	Inward interaction	35.540	177	764	0.107	0.143	7108	0.198
Medium	IV	Sweep	54.285	450	1258	0.415	0.361	10857	0.303

Table 95: Quadrant analysis summary for a hole size of 0 at the edge of the canopy, at a flow speed setting of 8 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	43.320	826	2423	0.220	0.221	8664	0.242
Low	II	Ejection	48.655	861	2610	0.257	0.268	9731	0.272
Low	III	Inward interaction	41.310	791	2556	0.201	0.223	8262	0.231
Low	IV	Sweep	45.890	1143	2974	0.322	0.288	9178	0.256
High	I	Outward interaction	40.795	3075	12385	0.224	0.222	8159	0.228
High	II	Ejection	45.960	3695	13765	0.303	0.278	9192	0.257
High	III	Inward interaction	42.105	2537	12136	0.191	0.225	8421	0.236
High	IV	Sweep	49.810	3178	12591	0.282	0.276	9962	0.279
Medium	I	Outward interaction	38.415	889	2884	0.251	0.258	7683	0.214
Medium	II	Ejection	47.025	873	2789	0.302	0.305	9405	0.262
Medium	III	Inward interaction	45.180	505	1795	0.168	0.189	9036	0.252
Medium	IV	Sweep	48.770	781	2180	0.280	0.248	9754	0.272

Table 96: Quadrant analysis summary for a hole size of 0 at the edge of the canopy, at a flow speed setting of 8 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	42.965	1721	5046	0.192	0.200	8593	0.240
Low	II	Ejection	51.325	1860	5084	0.248	0.240	10265	0.287
Low	III	Inward interaction	40.340	2082	6257	0.218	0.232	8068	0.225
Low	IV	Sweep	44.470	2964	8002	0.342	0.328	8894	0.248
High	I	Outward interaction	38.100	376	1186	0.191	0.204	7620	0.213
High	II	Ejection	49.220	533	1414	0.350	0.314	9844	0.275
High	III	Inward interaction	39.550	298	1084	0.157	0.193	7910	0.221
High	IV	Sweep	52.105	434	1233	0.302	0.290	10421	0.291
Medium	I	Outward interaction	34.950	387	1432	0.137	0.176	6990	0.195
Medium	II	Ejection	53.110	796	1902	0.429	0.354	10622	0.296
Medium	III	Inward interaction	34.630	368	1290	0.129	0.157	6926	0.193
Medium	IV	Sweep	56.485	531	1580	0.304	0.313	11297	0.315

Table 97: Quadrant analysis summary for a hole size of 0 above the canopy, at a flow speed setting of 8 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	36.800	536	1488	0.204	0.213	7360	0.206
High	II	Ejection	51.900	593	1499	0.319	0.303	10380	0.290
High	III	Inward interaction	38.640	371	1223	0.148	0.184	7728	0.216
High	IV	Sweep	51.440	619	1495	0.329	0.300	10288	0.288
Low	I	Outward interaction	44.655	1316	5737	0.267	0.234	8931	0.250
Low	II	Ejection	47.895	1110	5497	0.242	0.240	9579	0.268
Low	III	Inward interaction	45.300	1087	6443	0.224	0.266	9060	0.253
Low	IV	Sweep	41.095	1428	6920	0.267	0.260	8219	0.230
Medium	I	Outward interaction	35.475	407	1103	0.185	0.194	7095	0.198
Medium	II	Ejection	54.715	464	1160	0.325	0.314	10943	0.305
Medium	III	Inward interaction	35.985	283	955	0.130	0.170	7197	0.201
Medium	IV	Sweep	53.285	526	1220	0.359	0.322	10657	0.297

Table 98: Quadrant analysis summary for a hole size of 0 above the canopy, at a flow speed setting of 8 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	34.170	769	1951	0.195	0.198	6834	0.191
High	II	Ejection	49.020	932	2095	0.339	0.305	9804	0.274
High	III	Inward interaction	43.320	467	1576	0.150	0.203	8664	0.242
High	IV	Sweep	52.600	807	1885	0.315	0.294	10520	0.294
Low	I	Outward interaction	38.655	604	2554	0.151	0.169	7731	0.216
Low	II	Ejection	54.055	864	2817	0.303	0.261	10811	0.302
Low	III	Inward interaction	40.120	801	3670	0.208	0.252	8024	0.224
Low	IV	Sweep	46.270	1125	4002	0.338	0.317	9254	0.258
Medium	I	Outward interaction	39.250	480	1426	0.188	0.210	7850	0.220
Medium	II	Ejection	53.290	601	1560	0.320	0.311	10658	0.298
Medium	III	Inward interaction	39.625	419	1335	0.166	0.198	7925	0.222
Medium	IV	Sweep	46.645	699	1610	0.326	0.281	9329	0.261

Table 99: Quadrant analysis summary for a hole size of 0 above the canopy, at a flow speed setting of 8 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	31.080	3287	13520	0.089	0.138	6216	0.174
High	II	Ejection	58.840	8529	19761	0.435	0.381	11768	0.329
High	III	Inward interaction	29.070	3271	13074	0.082	0.125	5814	0.162
High	IV	Sweep	59.940	7593	18141	0.394	0.356	11988	0.335
Low	I	Outward interaction	39.735	1027	10607	0.175	0.216	7947	0.222
Low	II	Ejection	47.915	1624	11210	0.334	0.275	9583	0.268
Low	III	Inward interaction	38.930	1086	11033	0.181	0.220	7786	0.218
Low	IV	Sweep	52.190	1382	10853	0.310	0.290	10438	0.292
Medium	I	Outward interaction	39.175	408	1316	0.179	0.206	7835	0.218
Medium	II	Ejection	48.980	639	1577	0.350	0.309	9796	0.273
Medium	III	Inward interaction	39.960	385	1242	0.172	0.198	7992	0.223
Medium	IV	Sweep	51.205	520	1401	0.298	0.287	10241	0.286

Table 100: Quadrant analysis summary for a hole size of 0 above the canopy, at a flow speed setting of 8 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	39.560	3181	10860	0.151	0.184	7912	0.221
High	II	Ejection	49.555	6253	15954	0.371	0.338	9911	0.277
High	III	Inward interaction	36.675	3407	11558	0.150	0.181	7335	0.205
High	IV	Sweep	53.145	5155	13067	0.328	0.297	10629	0.297
Low	I	Outward interaction	37.890	667	3791	0.168	0.220	7578	0.211
Low	II	Ejection	49.395	935	3895	0.308	0.294	9879	0.276
Low	III	Inward interaction	39.665	749	3356	0.198	0.204	7933	0.221
Low	IV	Sweep	52.325	936	3521	0.326	0.282	10465	0.292
Medium	I	Outward interaction	36.440	2035	5520	0.119	0.149	7288	0.204
Medium	II	Ejection	47.720	5810	11792	0.444	0.417	9544	0.267
Medium	III	Inward interaction	29.680	2640	7465	0.126	0.164	5936	0.166
Medium	IV	Sweep	65.015	2992	5617	0.312	0.270	13003	0.364

Table 101: Quadrant analysis summary for a hole size of 0 within the canopy, at a flow speed setting of 8 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	38.135	795	2710	0.142	0.175	7627	0.213
High	II	Ejection	50.435	1737	4356	0.411	0.372	10087	0.281
High	III	Inward interaction	33.860	776	2878	0.123	0.165	6772	0.189
High	IV	Sweep	56.770	1219	2992	0.324	0.288	11354	0.317
Low	I	Outward interaction	42.310	711	2117	0.177	0.208	8462	0.237
Low	II	Ejection	43.445	1628	3449	0.416	0.348	8689	0.243
Low	III	Inward interaction	39.940	773	2196	0.182	0.204	7988	0.223
Low	IV	Sweep	53.090	718	1939	0.224	0.239	10618	0.297
Medium	I	Outward interaction	37.245	614	1910	0.135	0.168	7449	0.208
Medium	II	Ejection	51.345	1469	3140	0.444	0.381	10269	0.287
Medium	III	Inward interaction	31.965	628	2031	0.118	0.153	6393	0.179
Medium	IV	Sweep	58.520	879	2155	0.303	0.298	11704	0.327

Table 102: Quadrant analysis summary for a hole size of 0 within the canopy, at a flow speed setting of 8 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	46.960	1810	4770	0.558	0.471	9392	0.262
High	II	Ejection	28.955	526	2385	0.100	0.145	5791	0.161
High	III	Inward interaction	69.880	572	1878	0.263	0.276	13976	0.390
High	IV	Sweep	33.510	360	1519	0.079	0.107	6702	0.187
Low	I	Outward interaction	42.020	2590	8402	0.213	0.227	8404	0.235
Low	II	Ejection	48.315	2961	8840	0.280	0.275	9663	0.271
Low	III	Inward interaction	41.915	2428	8111	0.199	0.219	8383	0.235
Low	IV	Sweep	46.265	3410	9344	0.308	0.278	9253	0.259
Medium	I	Outward interaction	32.830	1090	4258	0.176	0.194	6566	0.184
Medium	II	Ejection	55.245	1288	4274	0.350	0.328	11049	0.309
Medium	III	Inward interaction	36.660	494	2845	0.089	0.145	7332	0.205
Medium	IV	Sweep	54.000	1445	4452	0.384	0.334	10800	0.302

Table 103: Quadrant analysis summary for a hole size of 0 within the canopy, at a flow speed setting of 8 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	34.250	974	3678	0.152	0.178	6850	0.209
High	II	Ejection	49.635	1305	4109	0.295	0.288	9927	0.303
High	III	Inward interaction	33.975	1102	4220	0.171	0.203	6795	0.208
High	IV	Sweep	45.740	1832	5117	0.382	0.331	9148	0.280
Low	I	Outward interaction	48.760	1162	3508	0.265	0.261	9752	0.272
Low	II	Ejection	43.275	1086	3428	0.220	0.226	8655	0.242
Low	III	Inward interaction	45.830	1274	3874	0.273	0.271	9166	0.256
Low	IV	Sweep	41.195	1259	3858	0.242	0.242	8239	0.230
Medium	I	Outward interaction	38.960	297	1110	0.165	0.192	7792	0.217
Medium	II	Ejection	52.280	458	1360	0.343	0.315	10456	0.292
Medium	III	Inward interaction	37.475	285	1093	0.153	0.181	7495	0.209
Medium	IV	Sweep	50.485	470	1397	0.339	0.312	10097	0.282

Table 104: Quadrant analysis summary for a hole size of 0 within the canopy, at a flow speed setting of 8 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	37.935	461	2093	0.166	0.196	7587	0.212
High	II	Ejection	50.940	683	2259	0.331	0.284	10188	0.284
High	III	Inward interaction	38.545	452	2026	0.166	0.193	7709	0.215
High	IV	Sweep	51.695	687	2571	0.337	0.328	10339	0.289
Low	I	Outward interaction	38.435	620	2000	0.180	0.196	7687	0.215
Low	II	Ejection	51.085	788	2208	0.305	0.287	10217	0.286
Low	III	Inward interaction	39.590	559	2029	0.168	0.205	7918	0.222
Low	IV	Sweep	49.590	924	2472	0.347	0.312	9918	0.278
Medium	I	Outward interaction	36.390	595	2240	0.153	0.191	7278	0.204
Medium	II	Ejection	53.080	841	2482	0.315	0.309	10616	0.297
Medium	III	Inward interaction	37.180	594	2018	0.156	0.176	7436	0.208
Medium	IV	Sweep	51.900	1029	2649	0.377	0.323	10380	0.291

### 5.3 Tables of quadrant statistics for a hole size of 1

Table 105: Quadrant analysis summary for a hole size of 1 at the edge of the canopy, at a flow speed setting of 0.5 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	9.180	409	1372	0.082	0.069	1836	0.051
High	II	Ejection	16.645	231	589	0.083	0.053	3329	0.093
High	III	Inward interaction	4.890	74	265	0.008	0.007	978	0.027
High	IV	Sweep	15.335	216	762	0.072	0.064	3067	0.086
Low	I	Outward interaction	7.975	355	1284	0.055	0.049	1595	0.045
Low	II	Ejection	17.360	255	674	0.086	0.056	3472	0.097
Low	III	Inward interaction	4.765	102	386	0.009	0.009	953	0.027
Low	IV	Sweep	16.380	248	830	0.079	0.065	3276	0.092
Medium	I	Outward interaction	7.450	147	516	0.060	0.057	1490	0.042
Medium	II	Ejection	17.845	100	254	0.097	0.067	3569	0.100
Medium	III	Inward interaction	2.880	18	64	0.003	0.003	576	0.016
Medium	IV	Sweep	16.920	87	249	0.080	0.062	3384	0.094

Table 106: Quadrant analysis summary for a hole size of 1 at the edge of the canopy, at a flow speed setting of 0.5 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	9.260	416	1469	0.093	0.093	1852	0.052
High	II	Ejection	17.850	197	474	0.085	0.058	3570	0.100
High	III	Inward interaction	4.570	78	247	0.009	0.008	914	0.025
High	IV	Sweep	16.320	181	642	0.071	0.072	3264	0.091
Low	I	Outward interaction	8.190	269	969	0.071	0.064	1638	0.046
Low	II	Ejection	18.380	166	439	0.098	0.066	3676	0.103
Low	III	Inward interaction	2.835	30	117	0.003	0.003	567	0.016
Low	IV	Sweep	16.850	149	467	0.080	0.064	3370	0.094
Medium	I	Outward interaction	5.715	102	399	0.033	0.031	1143	0.032
Medium	II	Ejection	18.400	96	258	0.098	0.065	3680	0.103
Medium	III	Inward interaction	3.080	19	81	0.003	0.003	616	0.017
Medium	IV	Sweep	17.800	101	303	0.100	0.074	3560	0.099

Table 107: Quadrant analysis summary for a hole size of 1 at the edge of the canopy, at a flow speed setting of 0.5 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	9.895	405	1451	0.103	0.090	1979	0.055
High	II	Ejection	16.605	185	502	0.079	0.052	3321	0.093
High	III	Inward interaction	4.170	56	226	0.006	0.006	834	0.023
High	IV	Sweep	15.185	180	632	0.070	0.060	3037	0.085
Low	I	Outward interaction	6.400	196	830	0.039	0.038	1280	0.036
Low	II	Ejection	18.420	159	454	0.092	0.060	3684	0.103
Low	III	Inward interaction	4.320	62	267	0.008	0.008	864	0.024
Low	IV	Sweep	18.330	153	513	0.088	0.067	3666	0.102
Medium	I	Outward interaction	5.120	108	451	0.028	0.035	1024	0.029
Medium	II	Ejection	19.365	99	234	0.099	0.069	3873	0.108
Medium	III	Inward interaction	2.590	24	88	0.003	0.003	518	0.014
Medium	IV	Sweep	19.040	102	282	0.100	0.082	3808	0.106

Table 108: Quadrant analysis summary for a hole size of 1 at the edge of the canopy, at a flow speed setting of 0.5 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	7.975	205	779	0.052	0.050	1595	0.044
High	II	Ejection	17.240	164	417	0.089	0.058	3448	0.096
High	III	Inward interaction	4.170	41	158	0.005	0.005	834	0.023
High	IV	Sweep	16.635	167	516	0.088	0.069	3327	0.093
Low	I	Outward interaction	6.895	223	1026	0.042	0.041	1379	0.038
Low	II	Ejection	18.355	176	510	0.087	0.054	3671	0.102
Low	III	Inward interaction	5.370	88	408	0.013	0.013	1074	0.030
Low	IV	Sweep	18.270	176	631	0.087	0.067	3654	0.102
Medium	I	Outward interaction	6.365	150	606	0.036	0.036	1273	0.036
Medium	II	Ejection	18.320	135	354	0.093	0.060	3664	0.102
Medium	III	Inward interaction	4.225	41	164	0.007	0.006	845	0.024
Medium	IV	Sweep	18.045	144	439	0.097	0.074	3609	0.101

Table 109: Quadrant analysis summary for a hole size of 1 above the canopy, at a flow speed setting of 0.5 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	8.530	379	1370	0.061	0.055	1706	0.048
High	II	Ejection	17.110	263	666	0.085	0.053	3422	0.096
High	III	Inward interaction	6.280	110	408	0.013	0.012	1256	0.035
High	IV	Sweep	15.695	249	867	0.073	0.064	3139	0.088
Low	I	Outward interaction	9.695	265	896	0.066	0.057	1939	0.054
Low	II	Ejection	15.875	206	536	0.085	0.056	3175	0.088
Low	III	Inward interaction	4.070	44	163	0.005	0.004	814	0.023
Low	IV	Sweep	15.365	200	648	0.079	0.066	3073	0.086
Medium	I	Outward interaction	6.130	130	515	0.043	0.043	1226	0.034
Medium	II	Ejection	18.515	99	252	0.099	0.064	3703	0.104
Medium	III	Inward interaction	2.670	17	70	0.002	0.003	534	0.015
Medium	IV	Sweep	17.895	99	298	0.095	0.073	3579	0.100

Table 110: Quadrant analysis summary for a hole size of 1 above the canopy, at a flow speed setting of 0.5 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	9.975	274	961	0.093	0.081	1995	0.056
High	II	Ejection	16.635	150	397	0.085	0.055	3327	0.093
High	III	Inward interaction	3.640	31	114	0.004	0.003	728	0.020
High	IV	Sweep	15.510	144	511	0.076	0.067	3102	0.087
Low	I	Outward interaction	8.110	258	912	0.058	0.055	1622	0.045
Low	II	Ejection	17.430	184	459	0.089	0.060	3486	0.097
Low	III	Inward interaction	3.495	45	157	0.004	0.004	699	0.020
Low	IV	Sweep	16.520	181	551	0.083	0.068	3304	0.092
Medium	I	Outward interaction	6.735	149	599	0.052	0.054	1347	0.038
Medium	II	Ejection	18.110	95	249	0.090	0.060	3622	0.101
Medium	III	Inward interaction	3.055	24	96	0.004	0.004	611	0.017
Medium	IV	Sweep	17.545	96	289	0.088	0.067	3509	0.098

Table 111: Quadrant analysis summary for a hole size of 1 above the canopy, at a flow speed setting of 0.5 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	7.290	209	723	0.057	0.051	1458	0.041
High	II	Ejection	17.345	152	390	0.098	0.065	3469	0.097
High	III	Inward interaction	2.850	22	90	0.002	0.002	570	0.016
High	IV	Sweep	16.650	136	426	0.084	0.068	3330	0.093
Low	I	Outward interaction	8.955	428	1520	0.075	0.061	1791	0.050
Low	II	Ejection	17.070	238	674	0.080	0.052	3414	0.096
Low	III	Inward interaction	5.215	92	402	0.009	0.009	1043	0.029
Low	IV	Sweep	16.360	244	929	0.078	0.068	3272	0.092
Medium	I	Outward interaction	5.985	140	512	0.042	0.040	1197	0.033
Medium	II	Ejection	18.365	107	272	0.097	0.065	3673	0.103
Medium	III	Inward interaction	2.750	23	90	0.003	0.003	550	0.015
Medium	IV	Sweep	18.335	98	293	0.089	0.070	3667	0.102

Table 112: Quadrant analysis summary for a hole size of 1 above the canopy, at a flow speed setting of 0.5 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	8.650	290	981	0.071	0.063	1730	0.048
High	II	Ejection	16.330	166	416	0.077	0.051	3266	0.091
High	III	Inward interaction	3.460	41	158	0.004	0.004	692	0.019
High	IV	Sweep	16.060	188	576	0.085	0.069	3212	0.090
Low	I	Outward interaction	9.115	385	1362	0.073	0.065	1823	0.051
Low	II	Ejection	16.990	249	638	0.088	0.057	3398	0.095
Low	III	Inward interaction	4.355	67	268	0.006	0.006	871	0.024
Low	IV	Sweep	16.300	225	751	0.076	0.064	3260	0.091
Medium	I	Outward interaction	7.470	169	501	0.050	0.045	1494	0.042
Medium	II	Ejection	16.250	135	328	0.087	0.064	3250	0.091
Medium	III	Inward interaction	2.620	19	74	0.002	0.002	524	0.015
Medium	IV	Sweep	20.135	138	331	0.110	0.079	4027	0.112

Table 113: Quadrant analysis summary for a hole size of 1 within the canopy, at a flow speed setting of 0.5 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	8.880	565	2158	0.079	0.068	1776	0.050
High	II	Ejection	16.385	283	791	0.073	0.046	3277	0.092
High	III	Inward interaction	5.285	117	464	0.010	0.009	1057	0.030
High	IV	Sweep	15.720	319	1219	0.079	0.068	3144	0.088
Low	I	Outward interaction	8.935	585	2229	0.078	0.068	1787	0.050
Low	II	Ejection	16.905	314	863	0.079	0.050	3381	0.094
Low	III	Inward interaction	5.025	129	497	0.010	0.009	1005	0.028
Low	IV	Sweep	15.315	307	1144	0.070	0.060	3063	0.086
Medium	I	Outward interaction	8.280	286	1399	0.054	0.053	1656	0.046
Medium	II	Ejection	17.895	196	614	0.081	0.050	3579	0.100
Medium	III	Inward interaction	6.500	122	561	0.018	0.017	1300	0.036
Medium	IV	Sweep	17.360	202	822	0.081	0.065	3472	0.097

Table 114: Quadrant analysis summary for a hole size of 1 within the canopy, at a flow speed setting of 0.5 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	8.565	577	2108	0.068	0.064	1713	0.048
High	II	Ejection	17.410	337	870	0.081	0.054	3482	0.097
High	III	Inward interaction	5.485	156	527	0.012	0.010	1097	0.031
High	IV	Sweep	15.185	342	1202	0.072	0.065	3037	0.085
Low	I	Outward interaction	8.435	296	1104	0.066	0.060	1687	0.047
Low	II	Ejection	16.645	198	514	0.086	0.055	3329	0.093
Low	III	Inward interaction	4.550	59	237	0.007	0.007	910	0.025
Low	IV	Sweep	16.145	183	604	0.078	0.063	3229	0.090
Medium	I	Outward interaction	7.465	291	1645	0.043	0.046	1493	0.042
Medium	II	Ejection	19.210	236	752	0.090	0.054	3842	0.107
Medium	III	Inward interaction	6.545	136	687	0.018	0.017	1309	0.037
Medium	IV	Sweep	17.815	239	1078	0.085	0.072	3563	0.100

Table 115: Quadrant analysis summary for a hole size of 1 within the canopy, at a flow speed setting of 0.5 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	4.685	186	650	0.009	0.009	937	0.026
High	II	Ejection	22.305	530	1259	0.128	0.087	4461	0.125
High	III	Inward interaction	4.270	153	535	0.007	0.007	854	0.024
High	IV	Sweep	21.555	502	1275	0.117	0.085	4311	0.121
Low	I	Outward interaction	6.040	145	499	0.036	0.034	1208	0.034
Low	II	Ejection	17.915	148	354	0.109	0.071	3583	0.100
Low	III	Inward interaction	1.925	11	61	0.001	0.001	385	0.011
Low	IV	Sweep	16.665	143	428	0.098	0.080	3333	0.093
Medium	I	Outward interaction	6.840	255	1375	0.036	0.042	1368	0.038
Medium	II	Ejection	20.335	236	684	0.098	0.062	4067	0.114
Medium	III	Inward interaction	5.200	116	509	0.012	0.012	1040	0.029
Medium	IV	Sweep	18.920	240	965	0.093	0.081	3784	0.106

Table 116: Quadrant analysis summary for a hole size of 1 within the canopy, at a flow speed setting of 0.5 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	10.240	369	1400	0.089	0.086	2048	0.057
Low	II	Ejection	16.645	209	538	0.081	0.054	3329	0.093
Low	III	Inward interaction	4.795	71	228	0.008	0.007	959	0.027
Low	IV	Sweep	15.145	203	755	0.072	0.069	3029	0.085
Medium	I	Outward interaction	6.840	279	1292	0.042	0.041	1368	0.038
Medium	II	Ejection	19.050	234	690	0.099	0.061	3810	0.107
Medium	III	Inward interaction	5.680	105	509	0.013	0.013	1136	0.032
Medium	IV	Sweep	17.995	201	784	0.080	0.065	3599	0.101

Table 117: Quadrant analysis summary for a hole size of 1 at the edge of the canopy, at a flow speed setting of 1 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	8.920	417	1584	0.072	0.065	1784	0.050
High	II	Ejection	17.440	239	657	0.081	0.053	3488	0.097
High	III	Inward interaction	5.315	103	374	0.011	0.009	1063	0.030
High	IV	Sweep	15.565	252	894	0.076	0.064	3113	0.087
Low	I	Outward interaction	7.880	306	1053	0.052	0.045	1576	0.044
Low	II	Ejection	17.310	240	628	0.090	0.059	3462	0.097
Low	III	Inward interaction	4.550	73	281	0.007	0.007	910	0.025
Low	IV	Sweep	16.350	234	768	0.082	0.068	3270	0.091
Medium	I	Outward interaction	6.690	166	642	0.047	0.047	1338	0.037
Medium	II	Ejection	18.395	120	309	0.093	0.062	3679	0.103
Medium	III	Inward interaction	3.865	35	139	0.006	0.006	773	0.022
Medium	IV	Sweep	17.675	120	362	0.089	0.070	3535	0.099

Table 118: Quadrant analysis summary for a hole size of 1 at the edge of the canopy, at a flow speed setting of 1 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	8.520	294	1200	0.066	0.074	1704	0.048
High	II	Ejection	18.140	183	458	0.087	0.060	3628	0.102
High	III	Inward interaction	4.355	72	229	0.008	0.007	871	0.024
High	IV	Sweep	16.755	180	608	0.079	0.073	3351	0.094
Low	I	Outward interaction	8.765	338	1252	0.075	0.068	1753	0.049
Low	II	Ejection	17.135	197	527	0.085	0.056	3427	0.096
Low	III	Inward interaction	4.315	63	238	0.007	0.006	863	0.024
Low	IV	Sweep	16.285	182	618	0.075	0.063	3257	0.091
Medium	I	Outward interaction	6.010	107	434	0.030	0.030	1202	0.034
Medium	II	Ejection	17.840	119	319	0.098	0.065	3568	0.100
Medium	III	Inward interaction	4.020	29	118	0.005	0.005	804	0.022
Medium	IV	Sweep	17.310	117	359	0.094	0.071	3462	0.097

Table 119: Quadrant analysis summary for a hole size of 1 at the edge of the canopy, at a flow speed setting of 1 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	8.015	275	983	0.061	0.055	1603	0.045
High	II	Ejection	16.670	187	476	0.087	0.056	3334	0.093
High	III	Inward interaction	3.470	38	146	0.004	0.004	694	0.019
High	IV	Sweep	16.625	199	662	0.092	0.077	3325	0.093
Low	I	Outward interaction	5.735	139	532	0.032	0.030	1147	0.032
Low	II	Ejection	19.490	130	347	0.100	0.067	3898	0.109
Low	III	Inward interaction	3.285	40	166	0.005	0.005	657	0.018
Low	IV	Sweep	18.645	122	361	0.090	0.067	3729	0.104
Medium	I	Outward interaction	5.735	146	568	0.040	0.045	1147	0.032
Medium	II	Ejection	18.685	102	244	0.090	0.064	3737	0.104
Medium	III	Inward interaction	3.010	31	117	0.004	0.005	602	0.017
Medium	IV	Sweep	18.460	106	289	0.093	0.074	3692	0.103

Table 120: Quadrant analysis summary for a hole size of 1 at the edge of the canopy, at a flow speed setting of 1 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	9.135	502	1673	0.082	0.072	1827	0.051
High	II	Ejection	16.655	276	685	0.082	0.054	3331	0.093
High	III	Inward interaction	4.490	88	328	0.007	0.007	898	0.025
High	IV	Sweep	15.465	257	823	0.072	0.060	3093	0.086
Low	I	Outward interaction	6.775	170	675	0.036	0.035	1355	0.038
Low	II	Ejection	18.760	159	427	0.094	0.061	3752	0.105
Low	III	Inward interaction	4.805	66	272	0.010	0.010	961	0.027
Low	IV	Sweep	17.385	154	491	0.084	0.065	3477	0.097
Medium	I	Outward interaction	5.900	133	538	0.032	0.031	1180	0.033
Medium	II	Ejection	18.495	127	342	0.094	0.062	3699	0.104
Medium	III	Inward interaction	3.490	36	161	0.005	0.005	698	0.020
Medium	IV	Sweep	18.185	133	412	0.098	0.073	3637	0.102

Table 121: Quadrant analysis summary for a hole size of 1 above the canopy, at a flow speed setting of 1 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	8.945	515	1877	0.077	0.068	1789	0.050
High	II	Ejection	17.355	300	823	0.087	0.057	3471	0.097
High	III	Inward interaction	4.960	108	443	0.009	0.009	992	0.028
High	IV	Sweep	15.825	267	957	0.070	0.061	3165	0.088
Low	I	Outward interaction	7.700	310	1100	0.057	0.050	1540	0.043
Low	II	Ejection	17.425	217	579	0.090	0.060	3485	0.098
Low	III	Inward interaction	4.245	67	277	0.007	0.007	849	0.024
Low	IV	Sweep	16.505	202	657	0.079	0.064	3301	0.092
Medium	I	Outward interaction	7.020	189	732	0.055	0.054	1404	0.039
Medium	II	Ejection	18.130	121	323	0.092	0.061	3626	0.101
Medium	III	Inward interaction	3.780	34	142	0.005	0.006	756	0.021
Medium	IV	Sweep	17.640	114	355	0.084	0.065	3528	0.099

Table 122: Quadrant analysis summary for a hole size of 1 above the canopy, at a flow speed setting of 1 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	8.020	195	705	0.054	0.047	1604	0.045
High	II	Ejection	16.970	155	419	0.092	0.059	3394	0.095
High	III	Inward interaction	4.230	40	165	0.006	0.006	846	0.024
High	IV	Sweep	15.525	139	442	0.075	0.057	3105	0.087
Low	I	Outward interaction	7.485	317	1110	0.056	0.049	1497	0.042
Low	II	Ejection	17.505	204	534	0.085	0.055	3501	0.098
Low	III	Inward interaction	4.170	70	267	0.007	0.007	834	0.023
Low	IV	Sweep	16.935	203	678	0.082	0.068	3387	0.094
Medium	I	Outward interaction	6.260	132	511	0.039	0.036	1252	0.035
Medium	II	Ejection	17.360	111	310	0.090	0.061	3472	0.097
Medium	III	Inward interaction	4.045	35	141	0.007	0.006	809	0.023
Medium	IV	Sweep	17.165	104	326	0.083	0.064	3433	0.096

Table 123: Quadrant analysis summary for a hole size of 1 above the canopy, at a flow speed setting of 1 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	8.030	153	540	0.060	0.050	1606	0.045
High	II	Ejection	17.230	108	298	0.091	0.060	3446	0.096
High	III	Inward interaction	3.365	21	92	0.004	0.004	673	0.019
High	IV	Sweep	16.555	100	331	0.081	0.064	3311	0.092
Low	I	Outward interaction	7.455	283	1028	0.046	0.037	1491	0.042
Low	II	Ejection	16.910	213	611	0.079	0.049	3382	0.095
Low	III	Inward interaction	5.230	96	425	0.011	0.011	1046	0.029
Low	IV	Sweep	17.040	233	892	0.087	0.073	3408	0.095
Medium	I	Outward interaction	5.100	122	458	0.032	0.030	1020	0.028
Medium	II	Ejection	18.640	108	289	0.102	0.069	3728	0.104
Medium	III	Inward interaction	2.595	20	86	0.003	0.003	519	0.014
Medium	IV	Sweep	18.195	97	287	0.090	0.067	3639	0.102

Table 124: Quadrant analysis summary for a hole size of 1 above the canopy, at a flow speed setting of 1 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	6.195	123	423	0.030	0.028	1239	0.035
High	II	Ejection	17.815	122	304	0.087	0.058	3563	0.100
High	III	Inward interaction	2.900	27	96	0.003	0.003	580	0.016
High	IV	Sweep	17.975	150	405	0.108	0.079	3595	0.101
Low	I	Outward interaction	8.940	316	936	0.054	0.048	1788	0.050
Low	II	Ejection	18.290	259	587	0.091	0.062	3658	0.102
Low	III	Inward interaction	3.210	52	195	0.003	0.004	642	0.018
Low	IV	Sweep	18.420	277	666	0.098	0.070	3684	0.103
Medium	I	Outward interaction	4.470	97	370	0.020	0.020	894	0.025
Medium	II	Ejection	19.165	122	318	0.107	0.075	3833	0.107
Medium	III	Inward interaction	2.535	23	96	0.003	0.003	507	0.014
Medium	IV	Sweep	19.515	116	324	0.103	0.077	3903	0.109

Table 125: Quadrant analysis summary for a hole size of 1 within the canopy, at a flow speed setting of 1 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	7.815	330	1273	0.061	0.055	1563	0.044
High	II	Ejection	17.130	216	595	0.087	0.056	3426	0.096
High	III	Inward interaction	3.945	60	252	0.006	0.005	789	0.022
High	IV	Sweep	16.800	209	740	0.082	0.068	3360	0.094
Low	I	Outward interaction	6.825	226	824	0.040	0.036	1365	0.038
Low	II	Ejection	17.790	205	548	0.095	0.062	3558	0.099
Low	III	Inward interaction	3.620	54	215	0.005	0.005	724	0.020
Low	IV	Sweep	17.180	196	637	0.087	0.070	3436	0.096
Medium	I	Outward interaction	6.530	154	611	0.038	0.035	1306	0.036
Medium	II	Ejection	17.985	135	376	0.093	0.060	3597	0.100
Medium	III	Inward interaction	4.640	51	218	0.009	0.009	928	0.026
Medium	IV	Sweep	17.010	126	431	0.082	0.065	3402	0.095

Table 126: Quadrant analysis summary for a hole size of 1 within the canopy, at a flow speed setting of 1 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	7.965	420	1484	0.057	0.053	1593	0.044
High	II	Ejection	17.665	286	708	0.086	0.056	3533	0.099
High	III	Inward interaction	4.890	115	385	0.009	0.008	978	0.027
High	IV	Sweep	16.255	294	1047	0.081	0.076	3251	0.091
Low	I	Outward interaction	8.365	207	748	0.060	0.051	1673	0.047
Low	II	Ejection	16.000	138	386	0.077	0.050	3200	0.089
Low	III	Inward interaction	5.175	54	223	0.010	0.009	1035	0.029
Low	IV	Sweep	15.470	134	451	0.072	0.057	3094	0.086
Medium	I	Outward interaction	7.500	232	1197	0.046	0.052	1500	0.042
Medium	II	Ejection	18.615	188	540	0.092	0.058	3723	0.104
Medium	III	Inward interaction	5.320	83	364	0.012	0.011	1064	0.030
Medium	IV	Sweep	17.865	182	686	0.086	0.071	3573	0.100

Table 127: Quadrant analysis summary for a hole size of 1 within the canopy, at a flow speed setting of 1 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	11.335	682	2374	0.120	0.106	2267	0.063
High	II	Ejection	14.825	260	678	0.059	0.039	2965	0.083
High	III	Inward interaction	6.520	136	462	0.014	0.012	1304	0.036
High	IV	Sweep	13.605	298	1074	0.063	0.057	2721	0.076
Low	I	Outward interaction	5.660	45	194	0.024	0.021	1132	0.032
Low	II	Ejection	17.835	64	208	0.110	0.071	3567	0.099
Low	III	Inward interaction	3.395	11	75	0.003	0.005	679	0.019
Low	IV	Sweep	17.540	55	189	0.092	0.063	3508	0.098
Medium	I	Outward interaction	7.485	294	1592	0.046	0.054	1497	0.042
Medium	II	Ejection	19.700	223	665	0.092	0.059	3940	0.110
Medium	III	Inward interaction	5.655	124	565	0.015	0.014	1131	0.032
Medium	IV	Sweep	18.770	220	860	0.087	0.073	3754	0.105

Table 128: Quadrant analysis summary for a hole size of 1 within the canopy, at a flow speed setting of 1 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	8.835	574	1968	0.072	0.059	1767	0.049
High	II	Ejection	17.125	339	894	0.083	0.052	3425	0.096
High	III	Inward interaction	4.745	121	487	0.008	0.008	949	0.027
High	IV	Sweep	16.030	344	1300	0.078	0.071	3206	0.090
Low	I	Outward interaction	9.430	506	1846	0.087	0.076	1886	0.053
Low	II	Ejection	16.940	271	708	0.084	0.052	3388	0.095
Low	III	Inward interaction	4.655	88	342	0.007	0.007	931	0.026
Low	IV	Sweep	15.690	259	915	0.074	0.063	3138	0.088
Medium	I	Outward interaction	7.330	275	1334	0.046	0.046	1466	0.041
Medium	II	Ejection	18.720	212	618	0.090	0.054	3744	0.105
Medium	III	Inward interaction	5.525	104	454	0.013	0.012	1105	0.031
Medium	IV	Sweep	18.015	209	844	0.085	0.071	3603	0.101

Table 129: Quadrant analysis summary for a hole size of 1 at the edge of the canopy, at a flow speed setting of 10 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	10.515	1045	1815	0.042	0.032	2103	0.059
High	II	Ejection	18.265	1670	2709	0.116	0.082	3653	0.102
High	III	Inward interaction	9.930	678	1124	0.026	0.018	1986	0.056
High	IV	Sweep	17.715	1053	1638	0.071	0.048	3543	0.099
Low	I	Outward interaction	17.435	1198	2144	0.094	0.061	3487	0.098
Low	II	Ejection	13.940	1257	2255	0.079	0.051	2788	0.078
Low	III	Inward interaction	14.215	679	1360	0.043	0.032	2843	0.080
Low	IV	Sweep	12.720	710	1356	0.041	0.028	2544	0.071
Medium	I	Outward interaction	11.500	932	1656	0.043	0.033	2300	0.064
Medium	II	Ejection	17.145	1537	2530	0.105	0.075	3429	0.096
Medium	III	Inward interaction	12.035	749	1252	0.036	0.026	2407	0.067
Medium	IV	Sweep	16.190	1063	1651	0.068	0.046	3238	0.090

Table 130: Quadrant analysis summary for a hole size of 1 at the edge of the canopy, at a flow speed setting of 10 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	18.925	3258	6918	0.137	0.110	3785	0.106
High	II	Ejection	9.830	1299	2443	0.028	0.020	1966	0.055
High	III	Inward interaction	20.050	1669	2797	0.074	0.047	4010	0.112
High	IV	Sweep	9.305	1327	3087	0.027	0.024	1861	0.052
Low	I	Outward interaction	11.130	750	1658	0.037	0.027	2226	0.062
Low	II	Ejection	17.360	1399	2614	0.108	0.065	3472	0.097
Low	III	Inward interaction	12.270	913	1893	0.050	0.034	2454	0.068
Low	IV	Sweep	16.145	802	1515	0.057	0.035	3229	0.090
Medium	I	Outward interaction	4.925	128	411	0.009	0.009	985	0.028
Medium	II	Ejection	21.035	366	805	0.107	0.072	4207	0.118
Medium	III	Inward interaction	5.475	109	299	0.008	0.007	1095	0.031
Medium	IV	Sweep	21.500	490	1052	0.146	0.096	4300	0.120

Table 131: Quadrant analysis summary for a hole size of 1 at the edge of the canopy, at a flow speed setting of 10 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	20.420	2856	7739	0.118	0.074	4084	0.114
High	II	Ejection	7.320	1263	4433	0.019	0.015	1464	0.041
High	III	Inward interaction	21.820	2704	6708	0.119	0.068	4364	0.122
High	IV	Sweep	7.150	953	2962	0.014	0.010	1430	0.040
Low	I	Outward interaction	11.565	963	1960	0.035	0.028	2313	0.065
Low	II	Ejection	17.505	1336	2412	0.074	0.053	3501	0.098
Low	III	Inward interaction	13.200	1373	2437	0.058	0.040	2640	0.074
Low	IV	Sweep	16.535	1696	3260	0.089	0.068	3307	0.092
Medium	I	Outward interaction	9.785	397	1277	0.061	0.055	1957	0.055
Medium	II	Ejection	18.565	248	676	0.072	0.055	3713	0.104
Medium	III	Inward interaction	2.140	39	134	0.001	0.001	428	0.012
Medium	IV	Sweep	19.665	423	1184	0.130	0.102	3933	0.110

Table 132: Quadrant analysis summary for a hole size of 1 at the edge of the canopy, at a flow speed setting of 10 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	5.245	127	336	0.010	0.008	1049	0.029
High	II	Ejection	22.430	356	823	0.118	0.087	4486	0.125
High	III	Inward interaction	3.890	79	232	0.005	0.004	778	0.022
High	IV	Sweep	22.955	426	949	0.145	0.103	4591	0.128
Low	I	Outward interaction	16.860	1663	3110	0.076	0.050	3372	0.094
Low	II	Ejection	11.840	1079	2163	0.035	0.024	2368	0.066
Low	III	Inward interaction	15.830	1700	3431	0.073	0.051	3166	0.088
Low	IV	Sweep	14.175	1909	3973	0.073	0.053	2835	0.079
Medium	I	Outward interaction	4.470	186	519	0.009	0.008	894	0.025
Medium	II	Ejection	23.750	575	1264	0.153	0.102	4750	0.133
Medium	III	Inward interaction	1.110	27	73	0.000	0.000	222	0.006
Medium	IV	Sweep	23.160	467	1008	0.122	0.080	4632	0.130

Table 133: Quadrant analysis summary for a hole size of 1 above the canopy, at a flow speed setting of 10 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	9.220	527	972	0.030	0.022	1844	0.052
High	II	Ejection	19.595	933	1537	0.112	0.075	3919	0.110
High	III	Inward interaction	9.170	438	849	0.025	0.019	1834	0.051
High	IV	Sweep	18.625	767	1310	0.088	0.060	3725	0.104
Low	I	Outward interaction	13.295	901	2119	0.045	0.029	2659	0.074
Low	II	Ejection	18.000	1134	2330	0.076	0.043	3600	0.101
Low	III	Inward interaction	13.590	1137	2699	0.058	0.037	2718	0.076
Low	IV	Sweep	16.450	1414	3368	0.087	0.057	3290	0.092
Medium	I	Outward interaction	9.780	382	733	0.033	0.024	1956	0.055
Medium	II	Ejection	19.165	557	981	0.093	0.063	3833	0.107
Medium	III	Inward interaction	9.015	273	531	0.021	0.016	1803	0.050
Medium	IV	Sweep	19.095	676	1121	0.112	0.072	3819	0.107

Table 134: Quadrant analysis summary for a hole size of 1 above the canopy, at a flow speed setting of 10 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	12.335	832	1544	0.050	0.037	2467	0.069
High	II	Ejection	16.555	980	1761	0.079	0.056	3311	0.092
High	III	Inward interaction	13.865	712	1238	0.048	0.033	2773	0.077
High	IV	Sweep	16.715	986	1643	0.081	0.053	3343	0.093
Low	I	Outward interaction	10.250	481	1002	0.026	0.017	2050	0.057
Low	II	Ejection	19.345	904	1728	0.091	0.055	3869	0.108
Low	III	Inward interaction	11.295	792	1820	0.046	0.034	2259	0.063
Low	IV	Sweep	18.235	1067	2310	0.101	0.070	3647	0.102
Medium	I	Outward interaction	11.840	547	1010	0.052	0.035	2368	0.066
Medium	II	Ejection	17.495	620	1130	0.087	0.058	3499	0.098
Medium	III	Inward interaction	10.940	341	661	0.030	0.021	2188	0.061
Medium	IV	Sweep	17.820	588	1035	0.084	0.054	3564	0.099

Table 135: Quadrant analysis summary for a hole size of 1 above the canopy, at a flow speed setting of 10 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	7.155	3451	7288	0.017	0.014	1431	0.040
High	II	Ejection	22.465	9138	16372	0.145	0.099	4493	0.126
High	III	Inward interaction	5.445	2248	4696	0.009	0.007	1089	0.030
High	IV	Sweep	22.250	6927	12345	0.109	0.074	4450	0.124
Low	I	Outward interaction	11.980	702	2341	0.042	0.024	2396	0.067
Low	II	Ejection	18.195	1054	3069	0.095	0.048	3639	0.102
Low	III	Inward interaction	11.045	637	2354	0.035	0.023	2209	0.062
Low	IV	Sweep	17.625	1011	3233	0.089	0.049	3525	0.099
Medium	I	Outward interaction	16.335	897	1576	0.092	0.061	3267	0.091
Medium	II	Ejection	15.645	814	1445	0.080	0.054	3129	0.087
Medium	III	Inward interaction	11.995	413	812	0.031	0.023	2399	0.067
Medium	IV	Sweep	15.320	630	1151	0.060	0.042	3064	0.085

Table 136: Quadrant analysis summary for a hole size of 1 above the canopy, at a flow speed setting of 10 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	5.035	3190	6326	0.008	0.007	1007	0.028
High	II	Ejection	23.455	12836	21653	0.148	0.105	4691	0.131
High	III	Inward interaction	4.025	2679	5427	0.005	0.005	805	0.022
High	IV	Sweep	24.545	10805	17010	0.130	0.086	4909	0.137
Low	I	Outward interaction	9.690	465	1052	0.026	0.020	1938	0.054
Low	II	Ejection	18.845	888	1782	0.097	0.065	3769	0.106
Low	III	Inward interaction	9.755	574	1107	0.033	0.021	1951	0.055
Low	IV	Sweep	18.805	905	1591	0.099	0.058	3761	0.105
Medium	I	Outward interaction	11.005	653	1174	0.038	0.028	2201	0.062
Medium	II	Ejection	18.795	1585	2584	0.156	0.107	3759	0.105
Medium	III	Inward interaction	9.360	460	854	0.022	0.018	1872	0.052
Medium	IV	Sweep	14.770	577	974	0.045	0.032	2954	0.083

Table 137: Quadrant analysis summary for a hole size of 1 within the canopy, at a flow speed setting of 10 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	9.650	931	1897	0.027	0.021	1930	0.054
High	II	Ejection	21.680	2639	5043	0.174	0.126	4336	0.121
High	III	Inward interaction	6.095	623	1360	0.012	0.010	1219	0.034
High	IV	Sweep	18.530	1120	1922	0.063	0.041	3706	0.104
Low	I	Outward interaction	7.915	589	1126	0.018	0.014	1583	0.044
Low	II	Ejection	19.320	1852	3133	0.139	0.095	3864	0.108
Low	III	Inward interaction	8.530	640	1142	0.021	0.015	1706	0.048
Low	IV	Sweep	18.360	1138	1819	0.081	0.052	3672	0.103
Medium	I	Outward interaction	7.070	511	1011	0.014	0.011	1414	0.040
Medium	II	Ejection	20.430	2034	3414	0.158	0.109	4086	0.114
Medium	III	Inward interaction	6.755	592	1130	0.015	0.012	1351	0.038
Medium	IV	Sweep	18.175	1061	1703	0.073	0.048	3635	0.102

Table 138: Quadrant analysis summary for a hole size of 1 within the canopy, at a flow speed setting of 10 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	12.705	798	2050	0.088	0.070	2541	0.071
High	II	Ejection	16.845	482	1190	0.071	0.054	3369	0.094
High	III	Inward interaction	6.115	150	336	0.008	0.005	1223	0.034
High	IV	Sweep	15.700	551	1240	0.075	0.052	3140	0.088
Low	I	Outward interaction	8.755	1984	4190	0.023	0.016	1751	0.049
Low	II	Ejection	20.165	3945	7794	0.106	0.070	4033	0.112
Low	III	Inward interaction	8.495	1871	4102	0.021	0.016	1699	0.047
Low	IV	Sweep	21.940	4332	8838	0.126	0.087	4388	0.122
Medium	I	Outward interaction	16.175	2100	4753	0.083	0.057	3235	0.090
Medium	II	Ejection	13.425	1679	4274	0.055	0.042	2685	0.075
Medium	III	Inward interaction	16.060	1539	3980	0.060	0.047	3212	0.090
Medium	IV	Sweep	14.735	1685	3942	0.061	0.043	2947	0.082

Table 139: Quadrant analysis summary for a hole size of 1 within the canopy, at a flow speed setting of 10 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	9.465	689	1677	0.027	0.019	1893	0.054
High	II	Ejection	18.050	1421	3030	0.108	0.066	3610	0.103
High	III	Inward interaction	10.055	731	1724	0.031	0.021	2011	0.057
High	IV	Sweep	18.695	1162	2557	0.092	0.058	3739	0.107
Low	I	Outward interaction	15.355	966	2399	0.061	0.042	3071	0.086
Low	II	Ejection	14.510	996	2274	0.060	0.038	2902	0.081
Low	III	Inward interaction	15.770	1123	2750	0.073	0.050	3154	0.088
Low	IV	Sweep	14.550	1050	2519	0.063	0.042	2910	0.081
Medium	I	Outward interaction	10.050	240	677	0.029	0.020	2010	0.056
Medium	II	Ejection	18.750	441	1123	0.098	0.062	3750	0.105
Medium	III	Inward interaction	10.370	259	779	0.032	0.024	2074	0.058
Medium	IV	Sweep	18.925	445	1153	0.100	0.064	3785	0.106

Table 140: Quadrant analysis summary for a hole size of 1 within the canopy, at a flow speed setting of 10 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	12.540	575	1286	0.045	0.029	2508	0.070
High	II	Ejection	16.995	889	1782	0.095	0.055	3399	0.095
High	III	Inward interaction	13.130	555	1251	0.046	0.030	2626	0.073
High	IV	Sweep	15.645	678	1613	0.067	0.046	3129	0.087
Low	I	Outward interaction	7.435	526	1197	0.016	0.012	1487	0.042
Low	II	Ejection	18.920	1034	2035	0.079	0.051	3784	0.106
Low	III	Inward interaction	8.040	676	1690	0.022	0.018	1608	0.045
Low	IV	Sweep	20.980	1738	3611	0.148	0.100	4196	0.117
Medium	I	Outward interaction	11.140	553	1133	0.037	0.028	2228	0.062
Medium	II	Ejection	18.135	764	1454	0.083	0.058	3627	0.101
Medium	III	Inward interaction	11.725	558	1077	0.039	0.028	2345	0.065
Medium	IV	Sweep	19.180	904	1650	0.104	0.070	3836	0.107

Table 141: Quadrant analysis summary for a hole size of 1 above the canopy, at a flow speed setting of 15 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	10.960	973	1870	0.039	0.029	2192	0.061
High	II	Ejection	18.550	1407	2475	0.096	0.065	3710	0.104
High	III	Inward interaction	11.260	820	1544	0.034	0.025	2252	0.063
High	IV	Sweep	18.195	1333	2343	0.089	0.060	3639	0.102
Low	I	Outward interaction	12.035	1002	1919	0.031	0.020	2407	0.067
Low	II	Ejection	16.040	1461	2635	0.061	0.036	3208	0.090
Low	III	Inward interaction	14.530	2040	3984	0.077	0.049	2906	0.081
Low	IV	Sweep	15.365	2276	4534	0.091	0.059	3073	0.086
Medium	I	Outward interaction	13.680	1039	1913	0.060	0.042	2736	0.077
Medium	II	Ejection	15.755	1258	2278	0.084	0.058	3151	0.088
Medium	III	Inward interaction	12.465	691	1329	0.036	0.027	2493	0.070
Medium	IV	Sweep	16.140	1029	1843	0.070	0.048	3228	0.090

Table 142: Quadrant analysis summary for a hole size of 1 above the canopy, at a flow speed setting of 15 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	11.755	1387	2703	0.046	0.033	2351	0.066
High	II	Ejection	18.455	1661	3097	0.087	0.060	3691	0.103
High	III	Inward interaction	10.510	1049	2024	0.031	0.022	2102	0.059
High	IV	Sweep	19.655	1760	3064	0.099	0.063	3931	0.110
Low	I	Outward interaction	12.035	1099	2008	0.042	0.027	2407	0.067
Low	II	Ejection	16.890	1389	2436	0.075	0.045	3378	0.094
Low	III	Inward interaction	12.005	1241	2616	0.048	0.035	2401	0.067
Low	IV	Sweep	16.975	1657	3230	0.090	0.061	3395	0.095
Medium	I	Outward interaction	13.765	1251	2340	0.063	0.044	2753	0.077
Medium	II	Ejection	15.700	1390	2533	0.080	0.055	3140	0.088
Medium	III	Inward interaction	11.310	796	1515	0.033	0.024	2262	0.063
Medium	IV	Sweep	16.740	1174	2055	0.072	0.047	3348	0.093

Table 143: Quadrant analysis summary for a hole size of 1 above the canopy, at a flow speed setting of 15 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	13.900	1539	3026	0.058	0.040	2780	0.078
High	II	Ejection	17.490	1960	3719	0.094	0.062	3498	0.098
High	III	Inward interaction	14.540	1383	2748	0.055	0.038	2908	0.081
High	IV	Sweep	14.495	1400	2855	0.055	0.039	2899	0.081
Low	I	Outward interaction	12.105	1412	2948	0.044	0.029	2421	0.067
Low	II	Ejection	19.175	2052	4101	0.102	0.064	3835	0.107
Low	III	Inward interaction	10.320	1212	2429	0.032	0.020	2064	0.058
Low	IV	Sweep	18.135	1766	3364	0.083	0.050	3627	0.101
Medium	I	Outward interaction	13.150	1366	2526	0.065	0.045	2630	0.074
Medium	II	Ejection	14.120	1224	2387	0.063	0.046	2824	0.079
Medium	III	Inward interaction	11.555	786	1462	0.033	0.023	2311	0.065
Medium	IV	Sweep	17.290	1325	2260	0.083	0.053	3458	0.097

Table 144: Quadrant analysis summary for a hole size of 1 above the canopy, at a flow speed setting of 15 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	8.735	5156	9334	0.023	0.018	1747	0.049
High	II	Ejection	20.500	19130	32392	0.197	0.149	4100	0.115
High	III	Inward interaction	7.055	5596	10500	0.020	0.017	1411	0.039
High	IV	Sweep	16.545	4923	7278	0.041	0.027	3309	0.092
Low	I	Outward interaction	11.915	1102	2242	0.042	0.031	2383	0.067
Low	II	Ejection	17.560	1715	3148	0.097	0.064	3512	0.098
Low	III	Inward interaction	10.660	934	1797	0.032	0.022	2132	0.060
Low	IV	Sweep	17.715	1471	2544	0.084	0.052	3543	0.099
Medium	I	Outward interaction	13.965	1519	2846	0.069	0.050	2793	0.078
Medium	II	Ejection	17.990	1704	3034	0.100	0.068	3598	0.101
Medium	III	Inward interaction	11.240	869	1608	0.032	0.023	2248	0.063
Medium	IV	Sweep	16.255	1165	2068	0.062	0.042	3251	0.091

Table 145: Quadrant analysis summary for a hole size of 1 within the canopy, at a flow speed setting of 15 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	6.590	1362	2768	0.014	0.011	1318	0.037
High	II	Ejection	23.510	5004	9246	0.180	0.131	4702	0.131
High	III	Inward interaction	4.365	975	2012	0.007	0.005	873	0.024
High	IV	Sweep	22.035	2564	4234	0.087	0.056	4407	0.123
Low	I	Outward interaction	8.060	1159	2272	0.017	0.014	1612	0.045
Low	II	Ejection	20.485	4454	7022	0.170	0.110	4097	0.114
Low	III	Inward interaction	7.830	1346	2403	0.020	0.014	1566	0.044
Low	IV	Sweep	17.680	1838	2959	0.061	0.040	3536	0.099
Medium	I	Outward interaction	7.455	1344	2812	0.016	0.014	1491	0.042
Medium	II	Ejection	23.035	5417	8695	0.196	0.130	4607	0.129
Medium	III	Inward interaction	5.585	1096	2160	0.010	0.008	1117	0.031
Medium	IV	Sweep	18.140	2224	3628	0.063	0.043	3628	0.101

Table 146: Quadrant analysis summary for a hole size of 1 within the canopy, at a flow speed setting of 15 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	11.670	2080	5615	0.060	0.045	2334	0.065
High	II	Ejection	17.165	1996	5219	0.085	0.062	3433	0.096
High	III	Inward interaction	9.060	825	2004	0.019	0.013	1812	0.051
High	IV	Sweep	16.950	1988	4530	0.083	0.053	3390	0.095
Low	I	Outward interaction	8.455	3585	7419	0.020	0.015	1691	0.047
Low	II	Ejection	19.285	7588	15592	0.098	0.070	3857	0.108
Low	III	Inward interaction	9.590	4463	9881	0.029	0.022	1918	0.054
Low	IV	Sweep	20.685	8784	16558	0.121	0.080	4137	0.116
Medium	I	Outward interaction	15.030	1043	2945	0.108	0.072	3006	0.084
Medium	II	Ejection	12.290	416	1416	0.035	0.028	2458	0.069
Medium	III	Inward interaction	12.140	377	1060	0.031	0.021	2428	0.068
Medium	IV	Sweep	13.820	759	2003	0.072	0.045	2764	0.077

Table 147: Quadrant analysis summary for a hole size of 1 within the canopy, at a flow speed setting of 15 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	5.475	368	866	0.017	0.014	1095	0.031
High	II	Ejection	22.570	570	1136	0.106	0.074	4514	0.126
High	III	Inward interaction	2.885	98	242	0.002	0.002	577	0.016
High	IV	Sweep	23.065	778	1572	0.148	0.104	4613	0.129
Low	I	Outward interaction	18.265	1753	4081	0.103	0.073	3653	0.102
Low	II	Ejection	9.810	829	2322	0.026	0.022	1962	0.055
Low	III	Inward interaction	17.205	1353	3195	0.075	0.054	3441	0.096
Low	IV	Sweep	11.680	1278	2928	0.048	0.033	2336	0.065
Medium	I	Outward interaction	14.185	714	1667	0.058	0.036	2837	0.079
Medium	II	Ejection	14.930	762	1933	0.065	0.044	2986	0.084
Medium	III	Inward interaction	13.795	712	1805	0.056	0.038	2759	0.077
Medium	IV	Sweep	15.765	787	1911	0.071	0.046	3153	0.088

Table 148: Quadrant analysis summary for a hole size of 1 within the canopy, at a flow speed setting of 15 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	13.900	1435	3428	0.072	0.048	2780	0.078
High	II	Ejection	15.785	1254	2902	0.072	0.046	3157	0.088
High	III	Inward interaction	11.845	794	1637	0.034	0.020	2369	0.066
High	IV	Sweep	16.965	1220	2675	0.075	0.046	3393	0.095
Low	I	Outward interaction	7.245	1081	2507	0.015	0.011	1449	0.040
Low	II	Ejection	18.180	1829	3552	0.065	0.039	3636	0.102
Low	III	Inward interaction	7.715	1375	3338	0.021	0.015	1543	0.043
Low	IV	Sweep	20.905	4065	9322	0.165	0.117	4181	0.117
Medium	I	Outward interaction	8.045	859	1824	0.020	0.015	1609	0.045
Medium	II	Ejection	20.470	1689	3538	0.100	0.073	4094	0.115
Medium	III	Inward interaction	8.830	966	2048	0.025	0.018	1766	0.049
Medium	IV	Sweep	20.140	2046	4165	0.120	0.084	4028	0.113

Table 149: Quadrant analysis summary for a hole size of 1 at the edge of the canopy, at a flow speed setting of 15 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
Low	I	Outward interaction	10.005	1765	3353	0.033	0.026	2001	0.056
Low	II	Ejection	20.275	3760	6452	0.144	0.101	4055	0.113
Low	III	Inward interaction	9.220	1449	2676	0.025	0.019	1844	0.052
Low	IV	Sweep	17.900	1783	3082	0.060	0.042	3580	0.100
Medium	I	Outward interaction	9.960	2293	4466	0.029	0.024	1992	0.056
Medium	II	Ejection	21.420	5862	9458	0.159	0.107	4284	0.120
Medium	III	Inward interaction	9.110	2238	4059	0.026	0.020	1822	0.051
Medium	IV	Sweep	17.700	2698	4511	0.060	0.042	3540	0.099
High	I	Outward interaction	11.655	1789	3358	0.042	0.033	2331	0.065
High	II	Ejection	16.630	3525	5943	0.119	0.083	3326	0.093
High	III	Inward interaction	12.570	1504	2647	0.039	0.028	2514	0.070
High	IV	Sweep	15.585	1607	2673	0.051	0.035	3117	0.087

Table 150: Quadrant analysis summary for a hole size of 1 at the edge of the canopy, at a flow speed setting of 15 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	12.075	2747	6586	0.040	0.030	2415	0.068
Low	II	Ejection	18.655	5324	11640	0.120	0.081	3731	0.104
Low	III	Inward interaction	10.225	3028	8463	0.037	0.032	2045	0.057
Low	IV	Sweep	18.385	3091	5900	0.069	0.041	3677	0.103
Medium	I	Outward interaction	3.960	1027	2448	0.010	0.008	792	0.022
Medium	II	Ejection	23.800	2145	4806	0.123	0.098	4760	0.133
Medium	III	Inward interaction	0.435	50	133	0.000	0.000	87	0.002
Medium	IV	Sweep	25.080	2612	5319	0.158	0.114	5016	0.140
High	I	Outward interaction	16.950	6257	15345	0.191	0.155	3390	0.094
High	II	Ejection	9.295	1290	2834	0.022	0.016	1859	0.052
High	III	Inward interaction	15.295	1322	2378	0.036	0.022	3059	0.085
High	IV	Sweep	7.160	1309	3582	0.017	0.015	1432	0.040

Table 151: Quadrant analysis summary for a hole size of 1 at the edge of the canopy, at a flow speed setting of 15 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	18.475	3213	7017	0.099	0.070	3695	0.103
Low	II	Ejection	9.310	1627	4282	0.025	0.021	1862	0.052
Low	III	Inward interaction	18.600	2948	6290	0.091	0.063	3720	0.104
Low	IV	Sweep	10.020	2087	4766	0.035	0.026	2004	0.056
Medium	I	Outward interaction	8.465	554	1339	0.023	0.017	1693	0.047
Medium	II	Ejection	19.505	1099	2348	0.103	0.070	3901	0.109
Medium	III	Inward interaction	7.865	495	1222	0.019	0.015	1573	0.044
Medium	IV	Sweep	19.675	1200	2646	0.113	0.080	3935	0.110
High	I	Outward interaction	18.105	1348	3356	0.205	0.158	3621	0.101
High	II	Ejection	8.585	349	968	0.025	0.022	1717	0.048
High	III	Inward interaction	12.055	222	542	0.022	0.017	2411	0.067
High	IV	Sweep	7.505	294	720	0.019	0.014	1501	0.042

Table 152: Quadrant analysis summary for a hole size of 1 at the edge of the canopy, at a flow speed setting of 15 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
Low	I	Outward interaction	8.825	2281	4670	0.024	0.018	1765	0.049
Low	II	Ejection	22.330	5119	9351	0.134	0.091	4466	0.125
Low	III	Inward interaction	7.370	1709	3656	0.015	0.012	1474	0.041
Low	IV	Sweep	19.995	4402	7983	0.103	0.069	3999	0.112
Medium	I	Outward interaction	2.180	97	324	0.002	0.002	436	0.012
Medium	II	Ejection	24.395	460	1060	0.116	0.072	4879	0.136
Medium	III	Inward interaction	1.560	45	182	0.001	0.001	312	0.009
Medium	IV	Sweep	24.570	672	1527	0.171	0.104	4914	0.137
High	I	Outward interaction	16.230	1154	2561	0.067	0.048	3246	0.091
High	II	Ejection	13.125	1040	2516	0.049	0.038	2625	0.073
High	III	Inward interaction	15.965	1343	2910	0.077	0.054	3193	0.089
High	IV	Sweep	13.750	1232	2806	0.061	0.045	2750	0.077

Table 153: Quadrant analysis summary for a hole size of 1 at the edge of the canopy, at a flow speed setting of 2 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	7.975	191	592	0.041	0.034	1595	0.044
Low	II	Ejection	17.715	201	465	0.095	0.059	3543	0.099
Low	III	Inward interaction	5.590	64	244	0.010	0.010	1118	0.031
Low	IV	Sweep	15.920	183	543	0.078	0.062	3184	0.089
High	I	Outward interaction	8.505	407	1406	0.055	0.052	1701	0.048
High	II	Ejection	17.525	273	671	0.077	0.051	3505	0.098
High	III	Inward interaction	5.425	131	428	0.011	0.010	1085	0.030
High	IV	Sweep	15.860	334	1076	0.085	0.074	3172	0.089
Medium	I	Outward interaction	6.385	156	496	0.031	0.029	1277	0.036
Medium	II	Ejection	18.490	172	376	0.099	0.065	3698	0.103
Medium	III	Inward interaction	5.195	63	210	0.010	0.010	1039	0.029
Medium	IV	Sweep	17.275	159	435	0.085	0.070	3455	0.097

Table 154: Quadrant analysis summary for a hole size of 1 at the edge of the canopy, at a flow speed setting of 2 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
Low	I	Outward interaction	8.380	464	1722	0.043	0.043	1676	0.047
Low	II	Ejection	16.920	419	1131	0.078	0.057	3384	0.094
Low	III	Inward interaction	7.180	250	770	0.020	0.017	1436	0.040
Low	IV	Sweep	16.115	457	1562	0.081	0.075	3223	0.090
High	I	Outward interaction	5.270	153	519	0.022	0.025	1054	0.029
High	II	Ejection	21.840	197	441	0.119	0.088	4368	0.122
High	III	Inward interaction	3.365	64	201	0.006	0.006	673	0.019
High	IV	Sweep	20.915	167	410	0.096	0.078	4183	0.117
Medium	I	Outward interaction	6.240	136	570	0.028	0.029	1248	0.035
Medium	II	Ejection	18.360	158	416	0.096	0.062	3672	0.103
Medium	III	Inward interaction	5.020	60	227	0.010	0.009	1004	0.028
Medium	IV	Sweep	17.515	161	515	0.093	0.074	3503	0.098

Table 155: Quadrant analysis summary for a hole size of 1 at the edge of the canopy, at a flow speed setting of 2 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	5.340	191	642	0.015	0.015	1068	0.030
Low	II	Ejection	20.930	358	752	0.112	0.070	4186	0.117
Low	III	Inward interaction	4.370	104	366	0.007	0.007	874	0.024
Low	IV	Sweep	21.225	381	915	0.121	0.086	4245	0.119
High	I	Outward interaction	7.530	208	735	0.042	0.036	1506	0.042
High	II	Ejection	16.865	214	585	0.098	0.064	3373	0.094
High	III	Inward interaction	4.935	54	200	0.007	0.006	987	0.028
High	IV	Sweep	15.335	181	627	0.075	0.062	3067	0.085
Medium	I	Outward interaction	7.350	79	280	0.020	0.020	1470	0.041
Medium	II	Ejection	18.795	172	429	0.112	0.079	3759	0.105
Medium	III	Inward interaction	6.850	61	197	0.014	0.013	1370	0.038
Medium	IV	Sweep	18.280	152	405	0.096	0.073	3656	0.102

Table 156: Quadrant analysis summary for a hole size of 1 at the edge of the canopy, at a flow speed setting of 2 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	3.500	79	343	0.011	0.015	700	0.020
Low	II	Ejection	20.930	130	292	0.105	0.077	4186	0.117
Low	III	Inward interaction	1.980	27	111	0.002	0.003	396	0.011
Low	IV	Sweep	22.175	152	355	0.129	0.100	4435	0.124
High	I	Outward interaction	9.075	1190	3110	0.106	0.080	1815	0.051
High	II	Ejection	12.120	483	1107	0.058	0.038	2424	0.068
High	III	Inward interaction	4.600	154	483	0.007	0.006	920	0.026
High	IV	Sweep	11.740	409	1330	0.047	0.045	2348	0.066
Medium	I	Outward interaction	5.490	93	373	0.021	0.020	1098	0.031
Medium	II	Ejection	19.015	140	387	0.108	0.071	3803	0.106
Medium	III	Inward interaction	4.150	38	157	0.006	0.006	830	0.023
Medium	IV	Sweep	18.135	129	392	0.095	0.068	3627	0.102

Table 157: Quadrant analysis summary for a hole size of 1 above the canopy, at a flow speed setting of 2 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	8.280	440	1515	0.059	0.052	1656	0.046
High	II	Ejection	17.680	281	737	0.081	0.054	3536	0.099
High	III	Inward interaction	4.995	123	467	0.010	0.010	999	0.028
High	IV	Sweep	16.430	308	1069	0.082	0.073	3286	0.092
Low	I	Outward interaction	6.445	224	717	0.031	0.024	1289	0.036
Low	II	Ejection	17.580	217	562	0.081	0.052	3516	0.098
Low	III	Inward interaction	4.875	86	324	0.009	0.008	975	0.027
Low	IV	Sweep	16.585	273	913	0.096	0.080	3317	0.093
Medium	I	Outward interaction	6.620	136	450	0.031	0.029	1324	0.037
Medium	II	Ejection	18.035	145	343	0.091	0.059	3607	0.101
Medium	III	Inward interaction	5.090	61	229	0.011	0.011	1018	0.028
Medium	IV	Sweep	17.295	148	440	0.089	0.073	3459	0.097

Table 158: Quadrant analysis summary for a hole size of 1 above the canopy, at a flow speed setting of 2 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	20.420	217	612	0.173	0.130	4084	0.114
High	II	Ejection	10.235	117	399	0.047	0.042	2047	0.057
High	III	Inward interaction	6.745	21	50	0.005	0.004	1349	0.038
High	IV	Sweep	9.805	125	313	0.048	0.032	1961	0.055
Low	I	Outward interaction	6.905	218	733	0.033	0.028	1381	0.039
Low	II	Ejection	18.390	226	564	0.091	0.058	3678	0.103
Low	III	Inward interaction	4.645	72	281	0.007	0.007	929	0.026
Low	IV	Sweep	17.130	262	847	0.098	0.081	3426	0.096
Medium	I	Outward interaction	6.400	91	363	0.022	0.020	1280	0.036
Medium	II	Ejection	19.855	164	423	0.121	0.073	3971	0.111
Medium	III	Inward interaction	5.420	52	226	0.011	0.011	1084	0.030
Medium	IV	Sweep	17.690	130	385	0.085	0.059	3538	0.099

Table 159: Quadrant analysis summary for a hole size of 1 above the canopy, at a flow speed setting of 2 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	6.890	146	462	0.019	0.017	1378	0.038
High	II	Ejection	21.130	270	614	0.107	0.069	4226	0.118
High	III	Inward interaction	6.620	119	382	0.015	0.013	1324	0.037
High	IV	Sweep	21.035	301	672	0.119	0.076	4207	0.117
Low	I	Outward interaction	6.995	223	770	0.031	0.028	1399	0.039
Low	II	Ejection	20.755	292	653	0.120	0.070	4151	0.116
Low	III	Inward interaction	4.950	85	330	0.008	0.008	990	0.028
Low	IV	Sweep	18.355	235	691	0.085	0.066	3671	0.103
Medium	I	Outward interaction	5.140	109	332	0.013	0.012	1028	0.029
Medium	II	Ejection	22.410	293	592	0.148	0.091	4482	0.125
Medium	III	Inward interaction	3.805	62	214	0.005	0.006	761	0.021
Medium	IV	Sweep	21.010	208	474	0.098	0.069	4202	0.117

Table 160: Quadrant analysis summary for a hole size of 1 above the canopy, at a flow speed setting of 2 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	7.275	168	476	0.022	0.019	1455	0.041
High	II	Ejection	20.110	297	594	0.108	0.065	4022	0.112
High	III	Inward interaction	6.575	110	290	0.013	0.010	1315	0.037
High	IV	Sweep	19.845	309	682	0.110	0.074	3969	0.111
Low	I	Outward interaction	7.075	180	560	0.027	0.024	1415	0.040
Low	II	Ejection	19.995	258	579	0.112	0.070	3999	0.112
Low	III	Inward interaction	5.380	74	248	0.009	0.008	1076	0.030
Low	IV	Sweep	18.620	240	615	0.097	0.069	3724	0.104
Medium	I	Outward interaction	4.405	94	308	0.008	0.008	881	0.025
Medium	II	Ejection	22.635	320	646	0.136	0.088	4527	0.127
Medium	III	Inward interaction	2.810	52	185	0.003	0.003	562	0.016
Medium	IV	Sweep	21.440	305	621	0.123	0.080	4288	0.120

Table 161: Quadrant analysis summary for a hole size of 1 within the canopy, at a flow speed setting of 2 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	8.105	602	1992	0.058	0.044	1621	0.045
High	II	Ejection	16.860	389	1069	0.078	0.050	3372	0.094
High	III	Inward interaction	5.220	177	668	0.011	0.010	1044	0.029
High	IV	Sweep	15.645	400	1527	0.075	0.066	3129	0.087
Low	I	Outward interaction	7.280	206	747	0.041	0.034	1456	0.041
Low	II	Ejection	18.210	190	531	0.095	0.060	3642	0.102
Low	III	Inward interaction	4.300	52	252	0.006	0.007	860	0.024
Low	IV	Sweep	16.825	186	634	0.086	0.066	3365	0.094
Medium	I	Outward interaction	7.020	87	345	0.027	0.024	1404	0.039
Medium	II	Ejection	17.430	120	344	0.092	0.060	3486	0.098
Medium	III	Inward interaction	6.370	55	247	0.016	0.016	1274	0.036
Medium	IV	Sweep	17.550	118	370	0.091	0.065	3510	0.098

Table 162: Quadrant analysis summary for a hole size of 1 within the canopy, at a flow speed setting of 2 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	7.665	319	1243	0.038	0.036	1533	0.043
High	II	Ejection	17.000	313	838	0.083	0.054	3400	0.095
High	III	Inward interaction	6.505	135	468	0.014	0.012	1301	0.036
High	IV	Sweep	15.835	357	1340	0.088	0.081	3167	0.089
Low	I	Outward interaction	12.440	136	359	0.036	0.031	2488	0.070
Low	II	Ejection	11.025	155	326	0.036	0.025	2205	0.062
Low	III	Inward interaction	19.850	334	637	0.139	0.086	3970	0.111
Low	IV	Sweep	11.105	203	523	0.047	0.040	2221	0.062
Medium	I	Outward interaction	6.605	168	724	0.020	0.021	1321	0.037
Medium	II	Ejection	19.725	298	823	0.107	0.070	3945	0.110
Medium	III	Inward interaction	6.640	132	490	0.016	0.014	1328	0.037
Medium	IV	Sweep	18.565	291	899	0.098	0.072	3713	0.103

Table 163: Quadrant analysis summary for a hole size of 1 within the canopy, at a flow speed setting of 2 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	10.245	332	1246	0.070	0.063	2049	0.057
High	II	Ejection	15.455	215	593	0.069	0.045	3091	0.086
High	III	Inward interaction	6.715	107	354	0.015	0.012	1343	0.038
High	IV	Sweep	14.285	243	870	0.072	0.061	2857	0.080
Low	I	Outward interaction	6.595	34	159	0.016	0.016	1319	0.037
Low	II	Ejection	17.290	87	267	0.109	0.070	3458	0.097
Low	III	Inward interaction	7.415	29	132	0.016	0.015	1483	0.041
Low	IV	Sweep	16.655	76	238	0.091	0.060	3331	0.093
Medium	I	Outward interaction	6.995	207	1049	0.038	0.035	1399	0.039
Medium	II	Ejection	17.740	193	645	0.089	0.054	3548	0.099
Medium	III	Inward interaction	5.805	85	415	0.013	0.011	1161	0.032
Medium	IV	Sweep	17.415	196	790	0.088	0.065	3483	0.097

Table 164: Quadrant analysis summary for a hole size of 1 within the canopy, at a flow speed setting of 2 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	7.800	277	1024	0.060	0.057	1560	0.044
High	II	Ejection	18.010	200	489	0.099	0.063	3602	0.101
High	III	Inward interaction	3.860	48	177	0.005	0.005	772	0.022
High	IV	Sweep	16.635	169	564	0.078	0.067	3327	0.093
Low	I	Outward interaction	7.780	283	1055	0.045	0.041	1556	0.044
Low	II	Ejection	17.715	244	642	0.088	0.057	3543	0.099
Low	III	Inward interaction	5.355	92	333	0.010	0.009	1071	0.030
Low	IV	Sweep	16.490	255	827	0.085	0.069	3298	0.092
Medium	I	Outward interaction	5.590	118	435	0.014	0.015	1118	0.031
Medium	II	Ejection	19.980	262	626	0.111	0.076	3996	0.112
Medium	III	Inward interaction	5.595	101	335	0.012	0.011	1119	0.031
Medium	IV	Sweep	20.290	259	652	0.111	0.080	4058	0.113

Table 165: Quadrant analysis summary for a hole size of 1 at the edge of the canopy, at a flow speed setting of 4 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	9.270	237	586	0.039	0.031	1854	0.052
Low	II	Ejection	16.935	282	551	0.086	0.054	3387	0.095
Low	III	Inward interaction	9.280	143	348	0.024	0.019	1856	0.052
Low	IV	Sweep	15.815	278	656	0.079	0.060	3163	0.088
Medium	I	Outward interaction	11.505	236	480	0.058	0.041	2301	0.064
Medium	II	Ejection	16.305	252	491	0.087	0.059	3261	0.091
Medium	III	Inward interaction	8.940	112	261	0.021	0.017	1788	0.050
Medium	IV	Sweep	15.590	209	446	0.069	0.051	3118	0.087
High	I	Outward interaction	11.710	357	891	0.058	0.044	2342	0.066
High	II	Ejection	16.780	393	864	0.091	0.061	3356	0.094
High	III	Inward interaction	8.485	152	433	0.018	0.015	1697	0.048
High	IV	Sweep	14.485	339	956	0.068	0.058	2897	0.081

Table 166: Quadrant analysis summary for a hole size of 1 at the edge of the canopy, at a flow speed setting of 4 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
Low	I	Outward interaction	12.710	439	1194	0.050	0.037	2542	0.071
Low	II	Ejection	14.320	501	1293	0.064	0.045	2864	0.080
Low	III	Inward interaction	13.310	443	1189	0.052	0.039	2662	0.074
Low	IV	Sweep	13.970	549	1534	0.068	0.052	2794	0.078
Medium	I	Outward interaction	14.735	263	790	0.065	0.046	2947	0.082
Medium	II	Ejection	13.505	218	659	0.049	0.035	2701	0.075
Medium	III	Inward interaction	15.165	231	711	0.059	0.043	3033	0.085
Medium	IV	Sweep	15.110	305	873	0.077	0.053	3022	0.084
High	I	Outward interaction	2.295	168	447	0.002	0.002	459	0.013
High	II	Ejection	26.245	927	1876	0.156	0.113	5249	0.147
High	III	Inward interaction	1.190	80	209	0.001	0.001	238	0.007
High	IV	Sweep	26.160	834	1680	0.140	0.101	5232	0.147

Table 167: Quadrant analysis summary for a hole size of 1 at the edge of the canopy, at a flow speed setting of 4 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	7.375	473	996	0.018	0.013	1475	0.041
Low	II	Ejection	20.645	945	1704	0.101	0.064	4129	0.116
Low	III	Inward interaction	6.890	416	917	0.015	0.012	1378	0.039
Low	IV	Sweep	20.305	1208	2444	0.127	0.091	4061	0.114
Medium	I	Outward interaction	9.340	322	991	0.028	0.021	1868	0.052
Medium	II	Ejection	19.375	543	1396	0.097	0.061	3875	0.108
Medium	III	Inward interaction	9.805	330	966	0.030	0.021	1961	0.055
Medium	IV	Sweep	19.260	601	1578	0.106	0.069	3852	0.108
High	I	Outward interaction	7.425	146	492	0.021	0.018	1485	0.041
High	II	Ejection	20.195	298	709	0.116	0.071	4039	0.113
High	III	Inward interaction	7.000	114	368	0.015	0.013	1400	0.039
High	IV	Sweep	19.060	277	727	0.101	0.069	3812	0.106

Table 168: Quadrant analysis summary for a hole size of 1 at the edge of the canopy, at a flow speed setting of 4 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	8.930	271	594	0.024	0.017	1786	0.050
Low	II	Ejection	18.320	448	875	0.080	0.050	3664	0.102
Low	III	Inward interaction	8.565	286	717	0.024	0.019	1713	0.048
Low	IV	Sweep	19.120	687	1418	0.128	0.085	3824	0.107
Medium	I	Outward interaction	8.495	110	328	0.022	0.019	1699	0.047
Medium	II	Ejection	18.355	219	500	0.096	0.062	3671	0.102
Medium	III	Inward interaction	9.645	129	347	0.030	0.023	1929	0.054
Medium	IV	Sweep	17.905	229	557	0.099	0.067	3581	0.100
High	I	Outward interaction	6.040	222	786	0.023	0.019	1208	0.034
High	II	Ejection	19.205	315	833	0.102	0.065	3841	0.107
High	III	Inward interaction	4.545	91	359	0.007	0.007	909	0.025
High	IV	Sweep	18.305	339	1129	0.104	0.084	3661	0.102

Table 169: Quadrant analysis summary for a hole size of 1 above the canopy, at a flow speed setting of 4 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	9.745	297	848	0.042	0.033	1949	0.055
High	II	Ejection	17.765	365	916	0.094	0.066	3553	0.100
High	III	Inward interaction	6.805	135	435	0.013	0.012	1361	0.038
High	IV	Sweep	16.285	367	1110	0.087	0.073	3257	0.091
Low	I	Outward interaction	7.795	138	370	0.023	0.020	1559	0.043
Low	II	Ejection	18.210	218	455	0.086	0.056	3642	0.102
Low	III	Inward interaction	9.585	151	354	0.031	0.023	1917	0.053
Low	IV	Sweep	17.055	263	608	0.097	0.070	3411	0.095
Medium	I	Outward interaction	11.695	165	407	0.058	0.043	2339	0.065
Medium	II	Ejection	17.675	172	392	0.091	0.063	3535	0.099
Medium	III	Inward interaction	7.105	68	201	0.014	0.013	1421	0.040
Medium	IV	Sweep	16.305	162	375	0.080	0.056	3261	0.091

Table 170: Quadrant analysis summary for a hole size of 1 above the canopy, at a flow speed setting of 4 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	9.090	254	651	0.038	0.032	1818	0.051
High	II	Ejection	17.925	338	668	0.100	0.064	3585	0.100
High	III	Inward interaction	7.755	125	321	0.016	0.013	1551	0.043
High	IV	Sweep	16.200	301	721	0.080	0.062	3240	0.091
Low	I	Outward interaction	10.570	175	403	0.045	0.033	2114	0.059
Low	II	Ejection	18.180	201	416	0.090	0.059	3636	0.101
Low	III	Inward interaction	8.380	99	235	0.020	0.015	1676	0.047
Low	IV	Sweep	16.030	211	489	0.083	0.061	3206	0.089
Medium	I	Outward interaction	8.135	111	331	0.021	0.018	1627	0.045
Medium	II	Ejection	19.370	259	601	0.115	0.076	3874	0.108
Medium	III	Inward interaction	9.215	128	380	0.027	0.023	1843	0.051
Medium	IV	Sweep	19.005	215	502	0.093	0.062	3801	0.106

Table 171: Quadrant analysis summary for a hole size of 1 above the canopy, at a flow speed setting of 4 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	6.440	456	1022	0.013	0.010	1288	0.036
High	II	Ejection	21.865	994	1913	0.098	0.063	4373	0.122
High	III	Inward interaction	6.525	461	1082	0.014	0.011	1305	0.036
High	IV	Sweep	22.770	1476	2918	0.152	0.100	4554	0.127
Low	I	Outward interaction	8.645	359	1013	0.029	0.024	1729	0.048
Low	II	Ejection	19.135	573	1295	0.104	0.068	3827	0.107
Low	III	Inward interaction	7.420	241	678	0.017	0.014	1484	0.042
Low	IV	Sweep	19.840	557	1306	0.104	0.071	3968	0.111
Medium	I	Outward interaction	6.365	202	435	0.012	0.009	1273	0.036
Medium	II	Ejection	22.530	719	1381	0.151	0.106	4506	0.126
Medium	III	Inward interaction	6.390	222	522	0.013	0.011	1278	0.036
Medium	IV	Sweep	21.090	515	972	0.101	0.070	4218	0.118

Table 172: Quadrant analysis summary for a hole size of 1 above the canopy, at a flow speed setting of 4 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	9.540	578	1398	0.028	0.022	1908	0.053
High	II	Ejection	19.305	941	1688	0.092	0.054	3861	0.108
High	III	Inward interaction	8.405	472	1196	0.020	0.017	1681	0.047
High	IV	Sweep	19.305	1213	2327	0.118	0.074	3861	0.108
Low	I	Outward interaction	8.250	399	992	0.029	0.024	1650	0.046
Low	II	Ejection	19.140	673	1406	0.114	0.080	3828	0.107
Low	III	Inward interaction	6.610	238	603	0.014	0.012	1322	0.037
Low	IV	Sweep	19.920	517	1075	0.091	0.064	3984	0.112
Medium	I	Outward interaction	6.935	442	953	0.016	0.013	1387	0.039
Medium	II	Ejection	20.905	776	1348	0.087	0.056	4181	0.117
Medium	III	Inward interaction	5.530	304	652	0.009	0.007	1106	0.031
Medium	IV	Sweep	22.095	1362	2535	0.161	0.111	4419	0.123

Table 173: Quadrant analysis summary for a hole size of 1 within the canopy, at a flow speed setting of 4 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	6.060	278	926	0.017	0.015	1212	0.034
High	II	Ejection	20.760	568	1414	0.117	0.076	4152	0.116
High	III	Inward interaction	5.800	228	746	0.013	0.011	1160	0.032
High	IV	Sweep	19.075	528	1702	0.100	0.084	3815	0.106
Low	I	Outward interaction	8.180	134	339	0.024	0.019	1636	0.046
Low	II	Ejection	19.105	275	557	0.113	0.072	3821	0.107
Low	III	Inward interaction	9.535	130	295	0.027	0.019	1907	0.053
Low	IV	Sweep	17.150	226	477	0.083	0.056	3430	0.096
Medium	I	Outward interaction	7.775	136	336	0.019	0.015	1555	0.044
Medium	II	Ejection	20.330	347	693	0.129	0.083	4066	0.114
Medium	III	Inward interaction	7.690	141	354	0.020	0.016	1538	0.043
Medium	IV	Sweep	17.530	259	551	0.083	0.057	3506	0.098

Table 174: Quadrant analysis summary for a hole size of 1 within the canopy, at a flow speed setting of 4 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	9.190	485	1465	0.032	0.025	1838	0.051
High	II	Ejection	18.940	804	1915	0.108	0.068	3788	0.106
High	III	Inward interaction	8.490	336	978	0.020	0.016	1698	0.047
High	IV	Sweep	17.995	679	1896	0.087	0.064	3599	0.100
Low	I	Outward interaction	12.575	452	1103	0.043	0.029	2515	0.070
Low	II	Ejection	15.445	549	1215	0.064	0.040	3089	0.086
Low	III	Inward interaction	14.880	614	1544	0.069	0.049	2976	0.083
Low	IV	Sweep	16.105	643	1537	0.078	0.052	3221	0.090
Medium	I	Outward interaction	8.995	643	1709	0.025	0.018	1799	0.050
Medium	II	Ejection	21.105	1204	2842	0.111	0.072	4221	0.118
Medium	III	Inward interaction	9.000	638	1704	0.025	0.018	1800	0.050
Medium	IV	Sweep	20.820	1197	2991	0.109	0.075	4164	0.116

Table 175: Quadrant analysis summary for a hole size of 1 within the canopy, at a flow speed setting of 4 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	10.580	278	872	0.038	0.030	2116	0.058
High	II	Ejection	18.320	404	953	0.095	0.057	3664	0.101
High	III	Inward interaction	10.080	234	679	0.030	0.022	2016	0.056
High	IV	Sweep	16.530	372	981	0.079	0.053	3306	0.091
Low	I	Outward interaction	6.550	436	1214	0.017	0.014	1310	0.037
Low	II	Ejection	21.370	906	2021	0.117	0.077	4274	0.119
Low	III	Inward interaction	6.480	342	984	0.013	0.011	1296	0.036
Low	IV	Sweep	21.180	908	2329	0.116	0.088	4236	0.118
Medium	I	Outward interaction	6.290	154	608	0.021	0.021	1258	0.035
Medium	II	Ejection	19.275	248	631	0.105	0.068	3855	0.108
Medium	III	Inward interaction	5.615	94	340	0.012	0.011	1123	0.031
Medium	IV	Sweep	18.185	240	715	0.096	0.073	3637	0.102

Table 176: Quadrant analysis summary for a hole size of 1 within the canopy, at a flow speed setting of 4 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	6.565	213	741	0.022	0.021	1313	0.037
High	II	Ejection	21.040	315	703	0.107	0.065	4208	0.118
High	III	Inward interaction	5.520	124	400	0.011	0.010	1104	0.031
High	IV	Sweep	20.975	348	929	0.117	0.085	4195	0.117
Low	I	Outward interaction	13.515	31	98	0.114	0.076	2703	0.075
Low	II	Ejection	13.160	18	60	0.066	0.046	2632	0.073
Low	III	Inward interaction	6.535	4	19	0.008	0.007	1307	0.036
Low	IV	Sweep	11.800	18	59	0.057	0.040	2360	0.066
Medium	I	Outward interaction	11.055	190	441	0.034	0.025	2211	0.062
Medium	II	Ejection	17.085	330	702	0.092	0.062	3417	0.096
Medium	III	Inward interaction	12.020	226	511	0.044	0.032	2404	0.067
Medium	IV	Sweep	16.055	293	605	0.077	0.051	3211	0.090

Table 177: Quadrant analysis summary for a hole size of 1 at the edge of the canopy, at a flow speed setting of 6 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	10.355	293	533	0.039	0.028	2071	0.058
Low	II	Ejection	16.150	399	709	0.083	0.058	3230	0.090
Low	III	Inward interaction	10.950	242	451	0.034	0.025	2190	0.061
Low	IV	Sweep	17.075	389	654	0.085	0.057	3415	0.096
Medium	I	Outward interaction	10.800	309	588	0.045	0.033	2160	0.060
Medium	II	Ejection	16.520	447	805	0.099	0.069	3304	0.093
Medium	III	Inward interaction	10.590	203	383	0.029	0.021	2118	0.059
Medium	IV	Sweep	16.835	318	559	0.072	0.049	3367	0.094
High	I	Outward interaction	9.495	342	775	0.035	0.027	1899	0.053
High	II	Ejection	18.105	548	1056	0.106	0.070	3621	0.101
High	III	Inward interaction	9.560	239	540	0.024	0.019	1912	0.054
High	IV	Sweep	17.280	445	941	0.082	0.059	3456	0.097

Table 178: Quadrant analysis summary for a hole size of 1 at the edge of the canopy, at a flow speed setting of 6 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	10.400	245	479	0.037	0.027	2080	0.058
Low	II	Ejection	17.450	394	713	0.099	0.067	3490	0.097
Low	III	Inward interaction	11.140	205	401	0.033	0.024	2228	0.062
Low	IV	Sweep	16.680	320	553	0.077	0.050	3336	0.093
Medium	I	Outward interaction	6.745	319	884	0.016	0.015	1349	0.038
Medium	II	Ejection	21.925	704	1685	0.115	0.090	4385	0.123
Medium	III	Inward interaction	3.745	144	363	0.004	0.003	749	0.021
Medium	IV	Sweep	22.315	859	1928	0.143	0.105	4463	0.125
High	I	Outward interaction	14.260	1269	2823	0.065	0.049	2852	0.080
High	II	Ejection	15.200	1244	2631	0.068	0.048	3040	0.085
High	III	Inward interaction	13.740	1044	2301	0.051	0.038	2748	0.077
High	IV	Sweep	15.505	1202	2398	0.067	0.045	3101	0.087

Table 179: Quadrant analysis summary for a hole size of 1 at the edge of the canopy, at a flow speed setting of 6 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	11.400	991	1958	0.038	0.026	2280	0.064
Low	II	Ejection	17.315	1141	2255	0.067	0.046	3463	0.097
Low	III	Inward interaction	10.530	880	1885	0.031	0.023	2106	0.059
Low	IV	Sweep	18.850	1996	4309	0.127	0.096	3770	0.105
Medium	I	Outward interaction	16.400	426	1277	0.086	0.069	3280	0.092
Medium	II	Ejection	11.880	325	979	0.048	0.038	2376	0.066
Medium	III	Inward interaction	17.455	343	942	0.074	0.054	3491	0.098
Medium	IV	Sweep	11.140	293	925	0.040	0.034	2228	0.062
High	I	Outward interaction	15.620	1242	2942	0.064	0.042	3124	0.087
High	II	Ejection	14.435	1289	3131	0.061	0.041	2887	0.081
High	III	Inward interaction	15.255	1424	3090	0.071	0.043	3051	0.085
High	IV	Sweep	13.635	1252	3181	0.056	0.040	2727	0.076

Table 180: Quadrant analysis summary for a hole size of 1 at the edge of the canopy, at a flow speed setting of 6 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	12.710	837	1669	0.048	0.034	2542	0.071
Low	II	Ejection	17.010	905	1712	0.069	0.047	3402	0.095
Low	III	Inward interaction	10.140	567	1141	0.026	0.019	2028	0.057
Low	IV	Sweep	16.530	1433	2964	0.107	0.079	3306	0.092
Medium	I	Outward interaction	14.190	211	545	0.059	0.041	2838	0.079
Medium	II	Ejection	16.020	260	603	0.082	0.051	3204	0.089
Medium	III	Inward interaction	12.665	179	483	0.045	0.032	2533	0.071
Medium	IV	Sweep	14.825	210	523	0.061	0.041	2965	0.083
High	I	Outward interaction	13.055	236	554	0.049	0.038	2611	0.073
High	II	Ejection	17.035	310	636	0.084	0.057	3407	0.095
High	III	Inward interaction	10.735	186	511	0.032	0.029	2147	0.060
High	IV	Sweep	15.815	326	715	0.082	0.059	3163	0.088

Table 181: Quadrant analysis summary for a hole size of 1 above the canopy, at a flow speed setting of 6 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	7.705	195	477	0.021	0.017	1541	0.043
High	II	Ejection	19.445	381	736	0.104	0.067	3889	0.108
High	III	Inward interaction	7.820	181	423	0.020	0.015	1564	0.044
High	IV	Sweep	19.255	389	816	0.105	0.073	3851	0.107
Low	I	Outward interaction	10.800	374	1805	0.027	0.019	2160	0.060
Low	II	Ejection	18.955	754	2734	0.097	0.050	3791	0.106
Low	III	Inward interaction	11.225	583	3122	0.044	0.034	2245	0.063
Low	IV	Sweep	17.555	785	3171	0.093	0.054	3511	0.098
Medium	I	Outward interaction	9.080	138	293	0.027	0.020	1816	0.051
Medium	II	Ejection	19.025	243	459	0.099	0.066	3805	0.106
Medium	III	Inward interaction	8.190	111	246	0.019	0.015	1638	0.046
Medium	IV	Sweep	19.750	269	496	0.114	0.074	3950	0.110

Table 182: Quadrant analysis summary for a hole size of 1 above the canopy, at a flow speed setting of 6 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	9.885	296	611	0.034	0.023	1977	0.055
High	II	Ejection	18.895	547	1000	0.121	0.072	3779	0.106
High	III	Inward interaction	8.720	189	463	0.019	0.015	1744	0.049
High	IV	Sweep	19.190	400	800	0.090	0.058	3838	0.107
Low	I	Outward interaction	7.285	179	394	0.017	0.014	1457	0.041
Low	II	Ejection	19.295	367	680	0.092	0.062	3859	0.108
Low	III	Inward interaction	8.570	236	513	0.026	0.021	1714	0.048
Low	IV	Sweep	20.605	468	912	0.125	0.089	4121	0.115
Medium	I	Outward interaction	11.620	256	457	0.051	0.035	2324	0.065
Medium	II	Ejection	17.175	291	525	0.087	0.059	3435	0.096
Medium	III	Inward interaction	10.010	151	303	0.026	0.020	2002	0.056
Medium	IV	Sweep	17.025	276	481	0.081	0.054	3405	0.095

Table 183: Quadrant analysis summary for a hole size of 1 above the canopy, at a flow speed setting of 6 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	5.195	894	1913	0.009	0.007	1039	0.029
High	II	Ejection	23.990	3279	5943	0.157	0.105	4798	0.134
High	III	Inward interaction	4.720	786	1735	0.007	0.006	944	0.026
High	IV	Sweep	22.960	2392	4331	0.110	0.073	4592	0.128
Low	I	Outward interaction	8.905	440	997	0.030	0.023	1781	0.050
Low	II	Ejection	18.160	875	1702	0.123	0.080	3632	0.101
Low	III	Inward interaction	8.495	318	734	0.021	0.016	1699	0.047
Low	IV	Sweep	16.830	535	1172	0.069	0.051	3366	0.094
Medium	I	Outward interaction	12.640	385	790	0.054	0.040	2528	0.071
Medium	II	Ejection	18.735	606	1103	0.125	0.084	3747	0.105
Medium	III	Inward interaction	7.490	165	358	0.014	0.011	1498	0.042
Medium	IV	Sweep	17.060	365	641	0.068	0.044	3412	0.096

Table 184: Quadrant analysis summary for a hole size of 1 above the canopy, at a flow speed setting of 6 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	6.560	1465	3090	0.014	0.011	1312	0.037
High	II	Ejection	23.095	4160	7337	0.135	0.089	4619	0.129
High	III	Inward interaction	5.975	1341	3064	0.011	0.010	1195	0.033
High	IV	Sweep	22.735	3759	6471	0.120	0.077	4547	0.127
Low	I	Outward interaction	8.700	425	1016	0.031	0.026	1740	0.049
Low	II	Ejection	17.825	796	1575	0.119	0.082	3565	0.100
Low	III	Inward interaction	8.385	284	646	0.020	0.016	1677	0.047
Low	IV	Sweep	17.435	511	1033	0.074	0.052	3487	0.098
Medium	I	Outward interaction	6.105	792	1695	0.013	0.010	1221	0.034
Medium	II	Ejection	22.835	2309	4012	0.140	0.091	4567	0.128
Medium	III	Inward interaction	5.630	731	1550	0.011	0.009	1126	0.032
Medium	IV	Sweep	22.245	1907	3401	0.113	0.076	4449	0.125

Table 185: Quadrant analysis summary for a hole size of 1 within the canopy, at a flow speed setting of 6 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	7.675	325	805	0.018	0.014	1535	0.043
High	II	Ejection	19.445	945	1998	0.132	0.090	3889	0.108
High	III	Inward interaction	8.770	436	1072	0.028	0.022	1754	0.049
High	IV	Sweep	18.170	581	1221	0.076	0.051	3634	0.101
Low	I	Outward interaction	10.715	344	744	0.034	0.026	2143	0.060
Low	II	Ejection	19.705	758	1390	0.137	0.089	3941	0.110
Low	III	Inward interaction	9.805	298	594	0.027	0.019	1961	0.055
Low	IV	Sweep	16.335	408	789	0.061	0.042	3267	0.091
Medium	I	Outward interaction	8.860	269	524	0.022	0.017	1772	0.050
Medium	II	Ejection	18.335	670	1199	0.115	0.080	3667	0.103
Medium	III	Inward interaction	9.310	337	694	0.029	0.024	1862	0.052
Medium	IV	Sweep	17.590	496	844	0.081	0.054	3518	0.098

Table 186: Quadrant analysis summary for a hole size of 1 within the canopy, at a flow speed setting of 6 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	12.925	1052	2978	0.052	0.036	2585	0.072
High	II	Ejection	15.875	1207	3434	0.074	0.051	3175	0.089
High	III	Inward interaction	13.295	891	2645	0.046	0.033	2659	0.074
High	IV	Sweep	16.460	1265	4036	0.080	0.062	3292	0.092
Low	I	Outward interaction	19.290	1611	3253	0.094	0.061	3858	0.108
Low	II	Ejection	10.600	1055	2299	0.034	0.024	2120	0.059
Low	III	Inward interaction	19.925	1762	3837	0.107	0.074	3985	0.111
Low	IV	Sweep	10.505	1014	2259	0.032	0.023	2101	0.059
Medium	I	Outward interaction	4.230	111	321	0.010	0.010	846	0.024
Medium	II	Ejection	22.230	241	564	0.117	0.093	4446	0.124
Medium	III	Inward interaction	1.285	20	62	0.001	0.001	257	0.007
Medium	IV	Sweep	23.165	279	631	0.142	0.108	4633	0.129

Table 187: Quadrant analysis summary for a hole size of 1 within the canopy, at a flow speed setting of 6 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	9.915	242	581	0.028	0.021	1983	0.057
High	II	Ejection	16.195	376	829	0.071	0.048	3239	0.092
High	III	Inward interaction	10.800	338	842	0.043	0.033	2160	0.062
High	IV	Sweep	17.520	523	1082	0.107	0.068	3504	0.100
Low	I	Outward interaction	13.180	854	1816	0.046	0.030	2636	0.074
Low	II	Ejection	14.350	817	1760	0.048	0.032	2870	0.080
Low	III	Inward interaction	13.675	1063	2587	0.059	0.044	2735	0.076
Low	IV	Sweep	16.890	1481	3014	0.102	0.064	3378	0.094
Medium	I	Outward interaction	8.505	159	446	0.025	0.019	1701	0.048
Medium	II	Ejection	19.700	299	689	0.110	0.068	3940	0.110
Medium	III	Inward interaction	7.725	131	411	0.019	0.016	1545	0.043
Medium	IV	Sweep	19.015	279	715	0.099	0.068	3803	0.106

Table 188: Quadrant analysis summary for a hole size of 1 within the canopy, at a flow speed setting of 6 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	7.505	233	641	0.022	0.017	1501	0.042
High	II	Ejection	20.870	450	981	0.117	0.070	4174	0.117
High	III	Inward interaction	6.075	152	412	0.011	0.009	1215	0.034
High	IV	Sweep	20.600	442	1100	0.113	0.078	4120	0.115
Low	I	Outward interaction	10.605	449	968	0.033	0.022	2121	0.059
Low	II	Ejection	18.330	691	1403	0.089	0.056	3666	0.102
Low	III	Inward interaction	8.935	375	936	0.023	0.018	1787	0.050
Low	IV	Sweep	18.810	841	1680	0.111	0.069	3762	0.105
Medium	I	Outward interaction	12.675	471	1043	0.048	0.035	2535	0.071
Medium	II	Ejection	15.605	511	1016	0.065	0.042	3121	0.087
Medium	III	Inward interaction	12.990	452	919	0.048	0.031	2598	0.073
Medium	IV	Sweep	17.080	675	1330	0.094	0.060	3416	0.096

Table 189: Quadrant analysis summary for a hole size of 1 at the edge of the canopy, at a flow speed setting of 8 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	11.160	601	1088	0.051	0.035	2232	0.062
Low	II	Ejection	17.625	899	1564	0.120	0.079	3525	0.098
Low	III	Inward interaction	11.315	377	731	0.032	0.024	2263	0.063
Low	IV	Sweep	14.670	420	760	0.046	0.032	2934	0.082
High	I	Outward interaction	9.860	632	1120	0.034	0.027	1972	0.055
High	II	Ejection	17.765	1111	1803	0.109	0.078	3553	0.099
High	III	Inward interaction	9.880	532	872	0.029	0.021	1976	0.055
High	IV	Sweep	18.640	749	1162	0.077	0.053	3728	0.104
Medium	I	Outward interaction	11.705	777	1362	0.059	0.041	2341	0.065
Medium	II	Ejection	17.395	933	1594	0.105	0.072	3479	0.097
Medium	III	Inward interaction	10.120	390	759	0.025	0.020	2024	0.057
Medium	IV	Sweep	17.405	555	959	0.062	0.043	3481	0.097

Table 190: Quadrant analysis summary for a hole size of 1 at the edge of the canopy, at a flow speed setting of 8 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	13.405	633	1234	0.066	0.049	2681	0.075
Low	II	Ejection	17.975	941	1653	0.131	0.088	3595	0.101
Low	III	Inward interaction	8.465	249	478	0.016	0.012	1693	0.047
Low	IV	Sweep	15.035	429	759	0.050	0.034	3007	0.084
High	I	Outward interaction	19.200	3397	7512	0.110	0.079	3840	0.108
High	II	Ejection	11.650	2127	4807	0.042	0.031	2330	0.065
High	III	Inward interaction	19.240	2364	4867	0.076	0.052	3848	0.108
High	IV	Sweep	10.940	2082	5235	0.038	0.032	2188	0.061
Medium	I	Outward interaction	6.060	155	458	0.016	0.015	1212	0.034
Medium	II	Ejection	21.090	283	631	0.101	0.070	4218	0.118
Medium	III	Inward interaction	5.690	97	252	0.009	0.008	1138	0.032
Medium	IV	Sweep	21.440	381	868	0.139	0.098	4288	0.120

Table 191: Quadrant analysis summary for a hole size of 1 at the edge of the canopy, at a flow speed setting of 8 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	13.480	608	1238	0.050	0.035	2696	0.075
Low	II	Ejection	15.945	641	1415	0.063	0.048	3189	0.089
Low	III	Inward interaction	12.010	562	1251	0.041	0.032	2402	0.067
Low	IV	Sweep	17.180	943	1883	0.099	0.068	3436	0.096
High	I	Outward interaction	13.020	2314	6154	0.054	0.035	2604	0.073
High	II	Ejection	17.080	2967	7594	0.090	0.057	3416	0.096
High	III	Inward interaction	11.385	1744	4992	0.035	0.025	2277	0.064
High	IV	Sweep	16.820	2470	6328	0.074	0.047	3364	0.094
Medium	I	Outward interaction	13.060	717	1819	0.069	0.055	2612	0.073
Medium	II	Ejection	17.105	702	1740	0.088	0.069	3421	0.095
Medium	III	Inward interaction	9.890	304	727	0.022	0.017	1978	0.055
Medium	IV	Sweep	16.490	602	1285	0.073	0.049	3298	0.092

Table 192: Quadrant analysis summary for a hole size of 1 at the edge of the canopy, at a flow speed setting of 8 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	11.400	1189	2338	0.035	0.025	2280	0.064
Low	II	Ejection	15.435	1314	2486	0.053	0.035	3087	0.086
Low	III	Inward interaction	13.620	1590	3360	0.056	0.042	2724	0.076
Low	IV	Sweep	17.625	2512	5321	0.115	0.086	3525	0.098
High	I	Outward interaction	11.050	277	579	0.041	0.029	2210	0.062
High	II	Ejection	19.160	443	883	0.113	0.076	3832	0.107
High	III	Inward interaction	9.290	191	420	0.024	0.018	1858	0.052
High	IV	Sweep	18.090	338	682	0.082	0.056	3618	0.101
Medium	I	Outward interaction	8.035	251	605	0.020	0.017	1607	0.045
Medium	II	Ejection	23.135	681	1301	0.160	0.106	4627	0.129
Medium	III	Inward interaction	7.595	230	474	0.018	0.013	1519	0.042
Medium	IV	Sweep	19.135	396	847	0.077	0.057	3827	0.107

Table 193: Quadrant analysis summary for a hole size of 1 above the canopy, at a flow speed setting of 8 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	10.205	415	789	0.044	0.031	2041	0.057
High	II	Ejection	18.075	470	864	0.088	0.061	3615	0.101
High	III	Inward interaction	8.350	244	496	0.021	0.016	1670	0.047
High	IV	Sweep	17.630	500	884	0.091	0.061	3526	0.099
Low	I	Outward interaction	15.360	1009	2754	0.071	0.039	3072	0.086
Low	II	Ejection	14.955	804	2386	0.055	0.033	2991	0.084
Low	III	Inward interaction	13.835	807	2668	0.051	0.034	2767	0.077
Low	IV	Sweep	14.665	1145	3324	0.076	0.044	2933	0.082
Medium	I	Outward interaction	9.400	310	539	0.037	0.025	1880	0.052
Medium	II	Ejection	19.210	363	648	0.089	0.062	3842	0.107
Medium	III	Inward interaction	7.550	172	345	0.017	0.013	1510	0.042
Medium	IV	Sweep	21.170	431	749	0.117	0.079	4234	0.118

Table 194: Quadrant analysis summary for a hole size of 1 above the canopy, at a flow speed setting of 8 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	10.835	583	1031	0.047	0.033	2167	0.060
High	II	Ejection	18.705	769	1291	0.107	0.072	3741	0.104
High	III	Inward interaction	8.890	297	566	0.020	0.015	1778	0.050
High	IV	Sweep	18.835	631	1053	0.088	0.059	3767	0.105
Low	I	Outward interaction	8.615	352	901	0.020	0.013	1723	0.048
Low	II	Ejection	18.010	665	1388	0.078	0.043	3602	0.101
Low	III	Inward interaction	12.055	620	1716	0.048	0.035	2411	0.067
Low	IV	Sweep	18.350	936	2354	0.111	0.074	3670	0.102
Medium	I	Outward interaction	11.165	340	641	0.038	0.027	2233	0.062
Medium	II	Ejection	18.605	489	860	0.091	0.060	3721	0.104
Medium	III	Inward interaction	10.325	279	543	0.029	0.021	2065	0.058
Medium	IV	Sweep	19.300	558	975	0.108	0.070	3860	0.108

Table 195: Quadrant analysis summary for a hole size of 1 above the canopy, at a flow speed setting of 8 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	4.580	1709	3639	0.007	0.005	916	0.026
High	II	Ejection	24.390	7172	12687	0.152	0.101	4878	0.136
High	III	Inward interaction	4.255	1564	3231	0.006	0.005	851	0.024
High	IV	Sweep	24.180	6155	10994	0.129	0.087	4836	0.135
Low	I	Outward interaction	10.765	702	3659	0.032	0.020	2153	0.060
Low	II	Ejection	19.055	1344	5417	0.110	0.053	3811	0.107
Low	III	Inward interaction	10.400	763	3827	0.034	0.020	2080	0.058
Low	IV	Sweep	17.870	1099	4634	0.084	0.042	3574	0.100
Medium	I	Outward interaction	10.675	288	572	0.034	0.024	2135	0.060
Medium	II	Ejection	19.195	530	945	0.114	0.072	3839	0.107
Medium	III	Inward interaction	10.535	259	503	0.031	0.021	2107	0.059
Medium	IV	Sweep	17.980	403	736	0.081	0.053	3596	0.100

Table 196: Quadrant analysis summary for a hole size of 1 above the canopy, at a flow speed setting of 8 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	8.690	2080	4127	0.022	0.015	1738	0.049
High	II	Ejection	19.800	5289	9983	0.125	0.085	3960	0.111
High	III	Inward interaction	8.830	2210	4752	0.023	0.018	1766	0.049
High	IV	Sweep	18.955	4051	7492	0.092	0.061	3791	0.106
Low	I	Outward interaction	10.245	450	1559	0.031	0.024	2049	0.057
Low	II	Ejection	17.340	743	2058	0.086	0.055	3468	0.097
Low	III	Inward interaction	11.420	548	1365	0.042	0.024	2284	0.064
Low	IV	Sweep	18.795	748	1825	0.094	0.052	3759	0.105
Medium	I	Outward interaction	6.330	1132	1922	0.011	0.009	1266	0.035
Medium	II	Ejection	22.190	5150	8603	0.183	0.141	4438	0.124
Medium	III	Inward interaction	7.475	1833	3527	0.022	0.020	1495	0.042
Medium	IV	Sweep	20.600	2118	2914	0.070	0.044	4120	0.115

Table 197: Quadrant analysis summary for a hole size of 1 within the canopy, at a flow speed setting of 8 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	7.820	491	1020	0.018	0.014	1564	0.044
High	II	Ejection	20.510	1488	2912	0.143	0.101	4102	0.114
High	III	Inward interaction	7.155	480	1101	0.016	0.013	1431	0.040
High	IV	Sweep	20.235	943	1661	0.089	0.057	4047	0.113
Low	I	Outward interaction	10.410	474	894	0.029	0.022	2082	0.058
Low	II	Ejection	18.765	1444	2424	0.160	0.106	3753	0.105
Low	III	Inward interaction	11.425	537	1002	0.036	0.027	2285	0.064
Low	IV	Sweep	13.770	466	810	0.038	0.026	2754	0.077
Medium	I	Outward interaction	7.270	372	704	0.016	0.012	1454	0.041
Medium	II	Ejection	21.890	1273	2182	0.164	0.113	4378	0.122
Medium	III	Inward interaction	6.740	390	751	0.015	0.012	1348	0.038
Medium	IV	Sweep	18.675	637	1105	0.070	0.049	3735	0.104

Table 198: Quadrant analysis summary for a hole size of 1 within the canopy, at a flow speed setting of 8 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	21.615	1639	3809	0.233	0.173	4323	0.121
High	II	Ejection	5.345	302	931	0.011	0.010	1069	0.030
High	III	Inward interaction	16.465	345	747	0.037	0.026	3293	0.092
High	IV	Sweep	3.655	158	373	0.004	0.003	731	0.020
Low	I	Outward interaction	12.535	1902	4117	0.047	0.033	2507	0.070
Low	II	Ejection	16.850	2324	4837	0.077	0.052	3370	0.094
Low	III	Inward interaction	11.985	1723	3844	0.040	0.030	2397	0.067
Low	IV	Sweep	18.145	2751	5702	0.098	0.067	3629	0.102
Medium	I	Outward interaction	8.610	842	2188	0.036	0.026	1722	0.048
Medium	II	Ejection	20.410	1028	2561	0.103	0.073	4082	0.114
Medium	III	Inward interaction	3.915	182	637	0.004	0.003	783	0.022
Medium	IV	Sweep	20.565	1201	2828	0.122	0.081	4113	0.115

Table 199: Quadrant analysis summary for a hole size of 1 within the canopy, at a flow speed setting of 8 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	7.785	635	1544	0.023	0.017	1557	0.048
High	II	Ejection	17.060	983	2200	0.076	0.053	3412	0.104
High	III	Inward interaction	8.985	774	1905	0.032	0.024	1797	0.055
High	IV	Sweep	18.220	1553	3350	0.129	0.086	3644	0.111
Low	I	Outward interaction	16.750	881	1888	0.069	0.048	3350	0.094
Low	II	Ejection	13.290	798	1700	0.050	0.034	2658	0.074
Low	III	Inward interaction	16.805	995	2173	0.078	0.056	3361	0.094
Low	IV	Sweep	13.865	985	2121	0.064	0.045	2773	0.077
Medium	I	Outward interaction	9.780	202	489	0.028	0.021	1956	0.055
Medium	II	Ejection	19.055	369	831	0.101	0.070	3811	0.106
Medium	III	Inward interaction	8.920	188	463	0.024	0.018	1784	0.050
Medium	IV	Sweep	19.220	384	864	0.105	0.074	3844	0.107

Table 200: Quadrant analysis summary for a hole size of 1 within the canopy, at a flow speed setting of 8 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	9.975	318	818	0.030	0.020	1995	0.056
High	II	Ejection	18.450	551	1200	0.097	0.055	3690	0.103
High	III	Inward interaction	9.690	308	768	0.028	0.018	1938	0.054
High	IV	Sweep	19.205	555	1407	0.101	0.067	3841	0.107
Low	I	Outward interaction	10.345	438	924	0.034	0.024	2069	0.058
Low	II	Ejection	18.010	617	1236	0.084	0.057	3602	0.101
Low	III	Inward interaction	9.550	376	835	0.027	0.020	1910	0.053
Low	IV	Sweep	19.065	768	1489	0.111	0.072	3813	0.107
Medium	I	Outward interaction	8.845	400	967	0.025	0.020	1769	0.050
Medium	II	Ejection	18.765	654	1384	0.087	0.061	3753	0.105
Medium	III	Inward interaction	9.235	397	863	0.026	0.019	1847	0.052
Medium	IV	Sweep	20.915	861	1716	0.127	0.084	4183	0.117

#### 5.4 Tables of quadrant statistics for a hole size of 2

Table 201: Quadrant analysis summary for a hole size of 2 at the edge of the canopy, at a flow speed setting of 0.5 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	6.185	360	1096	0.048	0.037	1237	0.035
High	II	Ejection	9.365	184	418	0.037	0.021	1873	0.052
High	III	Inward interaction	2.390	53	155	0.003	0.002	478	0.013
High	IV	Sweep	8.265	169	564	0.030	0.025	1653	0.046
Low	I	Outward interaction	4.920	302	973	0.029	0.023	984	0.028
Low	II	Ejection	9.615	202	482	0.038	0.022	1923	0.054
Low	III	Inward interaction	2.540	77	251	0.004	0.003	508	0.014
Low	IV	Sweep	8.590	194	620	0.032	0.025	1718	0.048
Medium	I	Outward interaction	5.205	133	425	0.038	0.033	1041	0.029
Medium	II	Ejection	10.540	82	188	0.047	0.029	2108	0.059
Medium	III	Inward interaction	1.255	12	37	0.001	0.001	251	0.007
Medium	IV	Sweep	9.250	68	181	0.034	0.025	1850	0.052

Table 202: Quadrant analysis summary for a hole size of 2 at the edge of the canopy, at a flow speed setting of 0.5 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	6.110	360	1155	0.053	0.048	1222	0.034
High	II	Ejection	9.910	157	348	0.037	0.024	1982	0.055
High	III	Inward interaction	2.455	58	163	0.003	0.003	491	0.014
High	IV	Sweep	8.495	138	494	0.028	0.029	1699	0.047
Low	I	Outward interaction	5.610	239	783	0.043	0.036	1122	0.031
Low	II	Ejection	10.460	133	317	0.045	0.027	2092	0.058
Low	III	Inward interaction	1.230	20	65	0.001	0.001	246	0.007
Low	IV	Sweep	9.325	116	349	0.035	0.026	1865	0.052
Medium	I	Outward interaction	3.740	90	316	0.019	0.016	748	0.021
Medium	II	Ejection	10.575	78	186	0.046	0.027	2115	0.059
Medium	III	Inward interaction	1.325	12	44	0.001	0.001	265	0.007
Medium	IV	Sweep	10.315	82	230	0.047	0.033	2063	0.058

Table 203: Quadrant analysis summary for a hole size of 2 at the edge of the canopy, at a flow speed setting of 0.5 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	6.535	355	1128	0.060	0.046	1307	0.037
High	II	Ejection	9.195	147	355	0.035	0.020	1839	0.051
High	III	Inward interaction	2.190	42	142	0.002	0.002	438	0.012
High	IV	Sweep	8.290	142	475	0.030	0.025	1658	0.046
Low	I	Outward interaction	4.055	171	642	0.022	0.019	811	0.023
Low	II	Ejection	10.010	125	323	0.039	0.023	2002	0.056
Low	III	Inward interaction	2.150	45	171	0.003	0.003	430	0.012
Low	IV	Sweep	9.765	117	367	0.036	0.026	1953	0.054
Medium	I	Outward interaction	3.455	96	361	0.017	0.019	691	0.019
Medium	II	Ejection	10.795	80	175	0.044	0.029	2159	0.060
Medium	III	Inward interaction	1.225	17	54	0.001	0.001	245	0.007
Medium	IV	Sweep	10.845	81	215	0.045	0.036	2169	0.060

Table 204: Quadrant analysis summary for a hole size of 2 at the edge of the canopy, at a flow speed setting of 0.5 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	5.035	176	579	0.028	0.023	1007	0.028
High	II	Ejection	9.690	131	303	0.040	0.024	1938	0.054
High	III	Inward interaction	1.720	27	83	0.001	0.001	344	0.010
High	IV	Sweep	9.220	132	391	0.038	0.029	1844	0.051
Low	I	Outward interaction	4.290	190	780	0.022	0.019	858	0.024
Low	II	Ejection	9.560	135	354	0.035	0.020	1912	0.053
Low	III	Inward interaction	2.755	64	250	0.005	0.004	551	0.015
Low	IV	Sweep	9.780	135	461	0.036	0.026	1956	0.055
Medium	I	Outward interaction	4.135	132	484	0.020	0.019	827	0.023
Medium	II	Ejection	10.220	107	253	0.041	0.024	2044	0.057
Medium	III	Inward interaction	1.900	29	96	0.002	0.002	380	0.011
Medium	IV	Sweep	10.090	113	324	0.043	0.030	2018	0.056

Table 205: Quadrant analysis summary for a hole size of 2 above the canopy, at a flow speed setting of 0.5 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	5.430	327	1046	0.033	0.027	1086	0.030
High	II	Ejection	9.380	207	480	0.037	0.021	1876	0.053
High	III	Inward interaction	2.720	74	243	0.004	0.003	544	0.015
High	IV	Sweep	8.280	189	631	0.029	0.024	1656	0.046
Low	I	Outward interaction	5.670	222	700	0.033	0.026	1134	0.032
Low	II	Ejection	8.730	163	379	0.037	0.022	1746	0.049
Low	III	Inward interaction	1.690	28	89	0.001	0.001	338	0.009
Low	IV	Sweep	8.380	157	493	0.034	0.027	1676	0.047
Medium	I	Outward interaction	4.130	116	413	0.026	0.024	826	0.023
Medium	II	Ejection	10.635	80	186	0.046	0.027	2127	0.060
Medium	III	Inward interaction	1.135	11	38	0.001	0.001	227	0.006
Medium	IV	Sweep	9.975	78	219	0.042	0.030	1995	0.056

Table 206: Quadrant analysis summary for a hole size of 2 above the canopy, at a flow speed setting of 0.5 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	6.655	241	754	0.055	0.042	1331	0.037
High	II	Ejection	9.520	121	287	0.039	0.023	1904	0.053
High	III	Inward interaction	1.555	20	65	0.001	0.001	311	0.009
High	IV	Sweep	8.700	114	382	0.034	0.028	1740	0.049
Low	I	Outward interaction	5.440	226	725	0.034	0.029	1088	0.030
Low	II	Ejection	9.835	148	337	0.040	0.025	1967	0.055
Low	III	Inward interaction	1.530	31	87	0.001	0.001	306	0.009
Low	IV	Sweep	8.980	143	407	0.036	0.027	1796	0.050
Medium	I	Outward interaction	4.550	133	476	0.032	0.029	910	0.025
Medium	II	Ejection	10.150	76	181	0.040	0.024	2030	0.057
Medium	III	Inward interaction	1.470	17	59	0.001	0.001	294	0.008
Medium	IV	Sweep	10.050	76	218	0.040	0.029	2010	0.056

Table 207: Quadrant analysis summary for a hole size of 2 above the canopy, at a flow speed setting of 0.5 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	4.650	180	541	0.031	0.024	930	0.026
High	II	Ejection	10.550	127	297	0.050	0.030	2110	0.059
High	III	Inward interaction	1.065	13	40	0.001	0.000	213	0.006
High	IV	Sweep	9.645	111	331	0.040	0.031	1929	0.054
Low	I	Outward interaction	5.965	374	1191	0.044	0.032	1193	0.033
Low	II	Ejection	8.910	183	459	0.032	0.018	1782	0.050
Low	III	Inward interaction	2.450	64	234	0.003	0.003	490	0.014
Low	IV	Sweep	8.645	188	691	0.032	0.027	1729	0.048
Medium	I	Outward interaction	4.265	127	428	0.027	0.024	853	0.024
Medium	II	Ejection	10.635	87	205	0.046	0.028	2127	0.059
Medium	III	Inward interaction	1.230	16	53	0.001	0.001	246	0.007
Medium	IV	Sweep	9.865	76	211	0.037	0.027	1973	0.055

Table 208: Quadrant analysis summary for a hole size of 2 above the canopy, at a flow speed setting of 0.5 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	5.720	254	772	0.041	0.033	1144	0.032
High	II	Ejection	9.420	135	306	0.036	0.021	1884	0.053
High	III	Inward interaction	1.595	28	89	0.001	0.001	319	0.009
High	IV	Sweep	9.025	152	439	0.039	0.030	1805	0.050
Low	I	Outward interaction	5.770	332	1084	0.040	0.033	1154	0.032
Low	II	Ejection	9.495	198	467	0.039	0.023	1899	0.053
Low	III	Inward interaction	2.070	47	158	0.002	0.002	414	0.012
Low	IV	Sweep	8.570	172	549	0.031	0.025	1714	0.048
Medium	I	Outward interaction	4.535	144	395	0.026	0.021	907	0.025
Medium	II	Ejection	9.315	109	240	0.040	0.027	1863	0.052
Medium	III	Inward interaction	1.000	12	40	0.000	0.000	200	0.006
Medium	IV	Sweep	11.125	108	244	0.048	0.032	2225	0.062

Table 209: Quadrant analysis summary for a hole size of 2 within the canopy, at a flow speed setting of 0.5 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	5.825	490	1676	0.045	0.035	1165	0.033
High	II	Ejection	8.800	219	545	0.030	0.017	1760	0.049
High	III	Inward interaction	2.825	86	300	0.004	0.003	565	0.016
High	IV	Sweep	8.660	254	946	0.035	0.029	1732	0.048
Low	I	Outward interaction	5.610	503	1674	0.042	0.032	1122	0.031
Low	II	Ejection	9.145	246	611	0.034	0.019	1829	0.051
Low	III	Inward interaction	2.575	96	313	0.004	0.003	515	0.014
Low	IV	Sweep	8.180	242	861	0.030	0.024	1636	0.046
Medium	I	Outward interaction	4.950	240	1035	0.027	0.023	990	0.028
Medium	II	Ejection	9.045	146	411	0.030	0.017	1809	0.051
Medium	III	Inward interaction	3.220	88	348	0.007	0.005	644	0.018
Medium	IV	Sweep	8.970	151	593	0.031	0.024	1794	0.050

Table 210: Quadrant analysis summary for a hole size of 2 within the canopy, at a flow speed setting of 0.5 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	5.260	489	1635	0.035	0.030	1052	0.029
High	II	Ejection	9.340	262	623	0.034	0.021	1868	0.052
High	III	Inward interaction	2.750	113	326	0.004	0.003	550	0.015
High	IV	Sweep	8.390	277	928	0.032	0.028	1678	0.047
Low	I	Outward interaction	5.430	256	818	0.036	0.029	1086	0.030
Low	II	Ejection	9.585	162	380	0.041	0.024	1917	0.054
Low	III	Inward interaction	2.110	41	143	0.002	0.002	422	0.012
Low	IV	Sweep	8.725	143	453	0.033	0.026	1745	0.049
Medium	I	Outward interaction	4.430	239	1199	0.021	0.020	886	0.025
Medium	II	Ejection	10.060	178	519	0.036	0.019	2012	0.056
Medium	III	Inward interaction	3.240	96	408	0.006	0.005	648	0.018
Medium	IV	Sweep	9.275	181	784	0.033	0.027	1855	0.052

Table 211: Quadrant analysis summary for a hole size of 2 within the canopy, at a flow speed setting of 0.5 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	1.865	120	382	0.002	0.002	373	0.010
High	II	Ejection	11.915	405	879	0.052	0.032	2383	0.067
High	III	Inward interaction	1.435	83	254	0.001	0.001	287	0.008
High	IV	Sweep	10.425	362	853	0.041	0.027	2085	0.058
Low	I	Outward interaction	3.960	126	379	0.020	0.017	792	0.022
Low	II	Ejection	11.290	126	271	0.058	0.034	2258	0.063
Low	III	Inward interaction	0.505	5	19	0.000	0.000	101	0.003
Low	IV	Sweep	10.465	122	349	0.052	0.041	2093	0.059
Medium	I	Outward interaction	3.915	205	987	0.016	0.017	783	0.022
Medium	II	Ejection	10.600	179	481	0.039	0.023	2120	0.059
Medium	III	Inward interaction	2.610	83	327	0.004	0.004	522	0.015
Medium	IV	Sweep	9.805	181	715	0.036	0.031	1961	0.055

Table 212: Quadrant analysis summary for a hole size of 2 within the canopy, at a flow speed setting of 0.5 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
Low	I	Outward interaction	6.865	322	1125	0.052	0.046	1373	0.038
Low	II	Ejection	9.220	164	390	0.035	0.022	1844	0.052
Low	III	Inward interaction	2.585	54	157	0.003	0.002	517	0.014
Low	IV	Sweep	8.055	158	575	0.030	0.028	1611	0.045
Medium	I	Outward interaction	4.260	237	972	0.022	0.019	852	0.024
Medium	II	Ejection	10.365	184	492	0.042	0.024	2073	0.058
Medium	III	Inward interaction	2.660	73	294	0.004	0.004	532	0.015
Medium	IV	Sweep	9.140	150	555	0.030	0.023	1828	0.051

Table 213: Quadrant analysis summary for a hole size of 2 at the edge of the canopy, at a flow speed setting of 1 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	5.750	360	1211	0.040	0.032	1150	0.032
High	II	Ejection	9.315	183	458	0.033	0.020	1863	0.052
High	III	Inward interaction	2.720	76	237	0.004	0.003	544	0.015
High	IV	Sweep	8.125	195	649	0.031	0.024	1625	0.045
Low	I	Outward interaction	5.080	265	822	0.029	0.023	1016	0.028
Low	II	Ejection	9.675	191	450	0.040	0.023	1935	0.054
Low	III	Inward interaction	2.170	52	168	0.002	0.002	434	0.012
Low	IV	Sweep	9.045	185	575	0.036	0.028	1809	0.051
Medium	I	Outward interaction	4.465	148	510	0.028	0.025	893	0.025
Medium	II	Ejection	10.075	95	223	0.040	0.024	2015	0.056
Medium	III	Inward interaction	1.890	25	83	0.002	0.002	378	0.011
Medium	IV	Sweep	9.890	93	266	0.039	0.029	1978	0.055

Table 214: Quadrant analysis summary for a hole size of 2 at the edge of the canopy, at a flow speed setting of 1 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	5.390	250	934	0.035	0.036	1078	0.030
High	II	Ejection	10.000	143	336	0.038	0.024	2000	0.056
High	III	Inward interaction	2.350	55	156	0.003	0.003	470	0.013
High	IV	Sweep	8.765	138	459	0.032	0.029	1753	0.049
Low	I	Outward interaction	5.765	296	988	0.043	0.036	1153	0.032
Low	II	Ejection	9.550	156	385	0.038	0.023	1910	0.053
Low	III	Inward interaction	2.090	45	143	0.002	0.002	418	0.012
Low	IV	Sweep	8.590	141	455	0.030	0.024	1718	0.048
Medium	I	Outward interaction	3.845	94	345	0.017	0.015	769	0.021
Medium	II	Ejection	10.310	96	235	0.046	0.028	2062	0.058
Medium	III	Inward interaction	1.505	18	63	0.001	0.001	301	0.008
Medium	IV	Sweep	9.935	94	266	0.043	0.030	1987	0.055

Table 215: Quadrant analysis summary for a hole size of 2 at the edge of the canopy, at a flow speed setting of 1 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	5.225	238	760	0.035	0.028	1045	0.029
High	II	Ejection	9.770	153	355	0.042	0.024	1954	0.055
High	III	Inward interaction	1.560	25	80	0.001	0.001	312	0.009
High	IV	Sweep	9.610	163	519	0.043	0.035	1922	0.054
Low	I	Outward interaction	3.655	122	416	0.018	0.015	731	0.020
Low	II	Ejection	10.595	102	250	0.043	0.026	2119	0.059
Low	III	Inward interaction	1.555	28	98	0.002	0.002	311	0.009
Low	IV	Sweep	10.015	94	265	0.037	0.026	2003	0.056
Medium	I	Outward interaction	3.905	131	468	0.024	0.025	781	0.022
Medium	II	Ejection	10.410	81	183	0.040	0.026	2082	0.058
Medium	III	Inward interaction	1.585	23	78	0.002	0.002	317	0.009
Medium	IV	Sweep	10.370	83	219	0.041	0.032	2074	0.058

Table 216: Quadrant analysis summary for a hole size of 2 at the edge of the canopy, at a flow speed setting of 1 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	6.045	439	1345	0.048	0.039	1209	0.034
High	II	Ejection	9.595	222	500	0.038	0.023	1919	0.054
High	III	Inward interaction	2.255	64	200	0.003	0.002	451	0.013
High	IV	Sweep	8.630	205	636	0.032	0.026	1726	0.048
Low	I	Outward interaction	4.330	148	525	0.020	0.017	866	0.024
Low	II	Ejection	9.935	123	301	0.038	0.023	1987	0.055
Low	III	Inward interaction	2.360	48	172	0.004	0.003	472	0.013
Low	IV	Sweep	9.145	118	355	0.034	0.025	1829	0.051
Medium	I	Outward interaction	3.725	116	403	0.017	0.015	745	0.021
Medium	II	Ejection	10.115	100	247	0.041	0.024	2023	0.057
Medium	III	Inward interaction	1.550	25	89	0.002	0.001	310	0.009
Medium	IV	Sweep	10.265	106	306	0.044	0.031	2053	0.057

Table 217: Quadrant analysis summary for a hole size of 2 above the canopy, at a flow speed setting of 1 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	5.790	448	1464	0.043	0.034	1158	0.032
High	II	Ejection	9.680	237	588	0.038	0.023	1936	0.054
High	III	Inward interaction	2.485	78	284	0.003	0.003	497	0.014
High	IV	Sweep	8.305	204	699	0.028	0.023	1661	0.046
Low	I	Outward interaction	4.955	268	848	0.032	0.025	991	0.028
Low	II	Ejection	9.910	174	418	0.041	0.025	1982	0.056
Low	III	Inward interaction	1.895	45	155	0.002	0.002	379	0.011
Low	IV	Sweep	9.050	161	497	0.035	0.027	1810	0.051
Medium	I	Outward interaction	4.825	170	593	0.034	0.030	965	0.027
Medium	II	Ejection	9.870	95	233	0.039	0.024	1974	0.055
Medium	III	Inward interaction	1.665	24	81	0.002	0.001	333	0.009
Medium	IV	Sweep	9.570	88	256	0.035	0.026	1914	0.054

Table 218: Quadrant analysis summary for a hole size of 2 above the canopy, at a flow speed setting of 1 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	5.425	172	556	0.033	0.025	1085	0.030
High	II	Ejection	9.440	124	304	0.041	0.024	1888	0.053
High	III	Inward interaction	1.895	27	94	0.002	0.001	379	0.011
High	IV	Sweep	8.760	111	337	0.034	0.025	1752	0.049
Low	I	Outward interaction	5.095	280	876	0.034	0.026	1019	0.028
Low	II	Ejection	9.845	162	385	0.038	0.022	1969	0.055
Low	III	Inward interaction	2.080	51	159	0.003	0.002	416	0.012
Low	IV	Sweep	9.230	159	512	0.035	0.028	1846	0.051
Medium	I	Outward interaction	4.335	119	421	0.024	0.021	867	0.024
Medium	II	Ejection	9.965	90	230	0.042	0.026	1993	0.056
Medium	III	Inward interaction	1.735	24	80	0.002	0.002	347	0.010
Medium	IV	Sweep	9.465	82	238	0.036	0.026	1893	0.053

Table 219: Quadrant analysis summary for a hole size of 2 above the canopy, at a flow speed setting of 1 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	5.280	134	419	0.035	0.026	1056	0.029
High	II	Ejection	10.150	88	219	0.044	0.026	2030	0.057
High	III	Inward interaction	1.125	12	41	0.001	0.001	225	0.006
High	IV	Sweep	9.040	79	244	0.035	0.026	1808	0.050
Low	I	Outward interaction	4.665	242	762	0.025	0.017	933	0.026
Low	II	Ejection	9.210	167	430	0.034	0.019	1842	0.052
Low	III	Inward interaction	2.495	69	249	0.004	0.003	499	0.014
Low	IV	Sweep	9.210	183	680	0.037	0.030	1842	0.052
Medium	I	Outward interaction	3.460	110	372	0.019	0.017	692	0.019
Medium	II	Ejection	10.675	88	214	0.047	0.029	2135	0.060
Medium	III	Inward interaction	1.045	13	43	0.001	0.001	209	0.006
Medium	IV	Sweep	10.095	77	208	0.039	0.027	2019	0.056

Table 220: Quadrant analysis summary for a hole size of 2 above the canopy, at a flow speed setting of 1 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	3.845	105	314	0.016	0.013	769	0.022
High	II	Ejection	9.895	97	219	0.038	0.023	1979	0.055
High	III	Inward interaction	1.105	17	46	0.001	0.001	221	0.006
High	IV	Sweep	10.500	124	301	0.052	0.034	2100	0.059
Low	I	Outward interaction	5.230	261	712	0.026	0.021	1046	0.029
Low	II	Ejection	9.565	198	405	0.036	0.022	1913	0.053
Low	III	Inward interaction	1.200	31	93	0.001	0.001	240	0.007
Low	IV	Sweep	9.915	215	475	0.041	0.027	1983	0.055
Medium	I	Outward interaction	2.920	85	293	0.011	0.010	584	0.016
Medium	II	Ejection	10.650	98	231	0.048	0.030	2130	0.060
Medium	III	Inward interaction	1.030	15	53	0.001	0.001	206	0.006
Medium	IV	Sweep	10.940	91	241	0.046	0.032	2188	0.061

Table 221: Quadrant analysis summary for a hole size of 2 within the canopy, at a flow speed setting of 1 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	5.240	290	1000	0.036	0.029	1048	0.029
High	II	Ejection	9.795	175	435	0.040	0.023	1959	0.055
High	III	Inward interaction	1.890	42	146	0.002	0.002	378	0.011
High	IV	Sweep	9.325	165	574	0.036	0.029	1865	0.052
Low	I	Outward interaction	4.215	191	604	0.021	0.016	843	0.024
Low	II	Ejection	10.275	167	400	0.044	0.026	2055	0.057
Low	III	Inward interaction	1.530	36	111	0.001	0.001	306	0.009
Low	IV	Sweep	9.785	159	495	0.040	0.031	1957	0.055
Medium	I	Outward interaction	4.150	135	472	0.021	0.017	830	0.023
Medium	II	Ejection	9.880	107	267	0.040	0.023	1976	0.055
Medium	III	Inward interaction	2.275	37	135	0.003	0.003	455	0.013
Medium	IV	Sweep	9.295	98	316	0.035	0.026	1859	0.052

Table 222: Quadrant analysis summary for a hole size of 2 within the canopy, at a flow speed setting of 1 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	5.095	361	1141	0.031	0.026	1019	0.028
High	II	Ejection	9.740	226	516	0.037	0.023	1948	0.054
High	III	Inward interaction	2.490	84	241	0.004	0.003	498	0.014
High	IV	Sweep	9.360	237	835	0.038	0.035	1872	0.052
Low	I	Outward interaction	5.665	184	602	0.036	0.028	1133	0.032
Low	II	Ejection	8.760	109	278	0.033	0.020	1752	0.049
Low	III	Inward interaction	2.445	38	134	0.003	0.003	489	0.014
Low	IV	Sweep	8.185	105	331	0.030	0.022	1637	0.046
Medium	I	Outward interaction	4.435	192	877	0.023	0.022	887	0.025
Medium	II	Ejection	10.490	149	390	0.041	0.024	2098	0.059
Medium	III	Inward interaction	2.590	59	219	0.004	0.003	518	0.014
Medium	IV	Sweep	9.545	138	499	0.035	0.027	1909	0.053

Table 223: Quadrant analysis summary for a hole size of 2 within the canopy, at a flow speed setting of 1 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	7.700	604	1950	0.072	0.059	1540	0.043
High	II	Ejection	7.880	198	477	0.024	0.015	1576	0.044
High	III	Inward interaction	3.490	101	300	0.005	0.004	698	0.019
High	IV	Sweep	7.390	236	795	0.027	0.023	1478	0.041
Low	I	Outward interaction	3.300	37	127	0.012	0.008	660	0.018
Low	II	Ejection	10.315	53	153	0.052	0.030	2063	0.058
Low	III	Inward interaction	1.260	6	37	0.001	0.001	252	0.007
Low	IV	Sweep	9.770	44	139	0.041	0.026	1954	0.054
Medium	I	Outward interaction	4.305	239	1153	0.022	0.022	861	0.024
Medium	II	Ejection	10.155	167	455	0.036	0.021	2031	0.057
Medium	III	Inward interaction	2.820	89	356	0.005	0.005	564	0.016
Medium	IV	Sweep	9.520	163	624	0.033	0.027	1904	0.053

Table 224: Quadrant analysis summary for a hole size of 2 within the canopy, at a flow speed setting of 1 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	5.620	490	1515	0.039	0.029	1124	0.031
High	II	Ejection	9.510	269	645	0.036	0.021	1902	0.053
High	III	Inward interaction	2.310	86	290	0.003	0.002	462	0.013
High	IV	Sweep	8.835	274	1000	0.034	0.030	1767	0.049
Low	I	Outward interaction	6.065	436	1429	0.048	0.038	1213	0.034
Low	II	Ejection	9.775	217	512	0.039	0.022	1955	0.055
Low	III	Inward interaction	2.355	64	212	0.003	0.002	471	0.013
Low	IV	Sweep	8.520	204	690	0.032	0.026	1704	0.048
Medium	I	Outward interaction	4.455	231	984	0.023	0.021	891	0.025
Medium	II	Ejection	9.895	163	429	0.037	0.020	1979	0.055
Medium	III	Inward interaction	2.780	75	278	0.005	0.004	556	0.016
Medium	IV	Sweep	9.415	158	609	0.034	0.027	1883	0.053

Table 225: Quadrant analysis summary for a hole size of 2 at the edge of the canopy, at a flow speed setting of 10 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	4.950	725	1122	0.014	0.009	990	0.028
High	II	Ejection	10.460	1331	1955	0.053	0.034	2092	0.058
High	III	Inward interaction	3.205	341	494	0.004	0.003	641	0.018
High	IV	Sweep	7.115	631	882	0.017	0.010	1423	0.040
Low	I	Outward interaction	8.275	831	1309	0.031	0.018	1655	0.046
Low	II	Ejection	7.315	954	1521	0.031	0.018	1463	0.041
Low	III	Inward interaction	4.785	356	596	0.008	0.005	957	0.027
Low	IV	Sweep	4.555	387	641	0.008	0.005	911	0.026
Medium	I	Outward interaction	4.595	573	900	0.010	0.007	919	0.026
Medium	II	Ejection	9.440	1206	1790	0.045	0.029	1888	0.053
Medium	III	Inward interaction	4.165	401	593	0.007	0.004	833	0.023
Medium	IV	Sweep	7.065	693	965	0.019	0.012	1413	0.039

Table 226: Quadrant analysis summary for a hole size of 2 at the edge of the canopy, at a flow speed setting of 10 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	10.975	2623	5142	0.064	0.047	2195	0.061
High	II	Ejection	3.355	694	1084	0.005	0.003	671	0.019
High	III	Inward interaction	7.235	883	1275	0.014	0.008	1447	0.040
High	IV	Sweep	3.360	759	1663	0.006	0.005	672	0.019
Low	I	Outward interaction	4.325	459	864	0.009	0.005	865	0.024
Low	II	Ejection	9.150	1070	1739	0.043	0.023	1830	0.051
Low	III	Inward interaction	5.680	619	1121	0.016	0.009	1136	0.032
Low	IV	Sweep	6.130	460	724	0.013	0.006	1226	0.034
Medium	I	Outward interaction	1.440	66	188	0.001	0.001	288	0.008
Medium	II	Ejection	10.020	259	514	0.036	0.022	2004	0.056
Medium	III	Inward interaction	1.355	46	114	0.001	0.001	271	0.008
Medium	IV	Sweep	11.645	383	773	0.062	0.038	2329	0.065

Table 227: Quadrant analysis summary for a hole size of 2 at the edge of the canopy, at a flow speed setting of 10 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	10.305	2114	4930	0.044	0.024	2061	0.058
High	II	Ejection	2.520	692	1967	0.004	0.002	504	0.014
High	III	Inward interaction	10.290	1874	4017	0.039	0.019	2058	0.058
High	IV	Sweep	1.985	425	1129	0.002	0.001	397	0.011
Low	I	Outward interaction	4.275	541	973	0.007	0.005	855	0.024
Low	II	Ejection	7.525	843	1382	0.020	0.013	1505	0.042
Low	III	Inward interaction	6.215	942	1472	0.019	0.011	1243	0.035
Low	IV	Sweep	8.330	1242	2143	0.033	0.022	1666	0.046
Medium	I	Outward interaction	5.510	322	989	0.028	0.024	1102	0.031
Medium	II	Ejection	7.675	158	394	0.019	0.013	1535	0.043
Medium	III	Inward interaction	0.665	21	64	0.000	0.000	133	0.004
Medium	IV	Sweep	10.945	334	905	0.057	0.044	2189	0.061

Table 228: Quadrant analysis summary for a hole size of 2 at the edge of the canopy, at a flow speed setting of 10 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	1.715	67	152	0.002	0.001	343	0.010
High	II	Ejection	11.050	253	534	0.041	0.028	2210	0.062
High	III	Inward interaction	0.870	30	77	0.000	0.000	174	0.005
High	IV	Sweep	12.030	322	671	0.057	0.038	2406	0.067
Low	I	Outward interaction	7.525	1091	1800	0.022	0.013	1505	0.042
Low	II	Ejection	4.080	569	994	0.006	0.004	816	0.023
Low	III	Inward interaction	7.320	1156	2041	0.023	0.014	1464	0.041
Low	IV	Sweep	6.940	1370	2508	0.026	0.016	1388	0.039
Medium	I	Outward interaction	1.665	115	275	0.002	0.002	333	0.009
Medium	II	Ejection	12.740	443	875	0.064	0.038	2548	0.071
Medium	III	Inward interaction	0.120	6	14	0.000	0.000	24	0.001
Medium	IV	Sweep	11.395	331	643	0.042	0.025	2279	0.064

Table 229: Quadrant analysis summary for a hole size of 2 above the canopy, at a flow speed setting of 10 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	3.655	322	516	0.007	0.005	731	0.020
High	II	Ejection	10.310	699	1038	0.044	0.027	2062	0.058
High	III	Inward interaction	3.280	249	425	0.005	0.003	656	0.018
High	IV	Sweep	8.800	530	806	0.029	0.018	1760	0.049
Low	I	Outward interaction	4.460	479	982	0.008	0.004	892	0.025
Low	II	Ejection	7.775	714	1250	0.021	0.010	1555	0.043
Low	III	Inward interaction	6.340	760	1465	0.018	0.009	1268	0.035
Low	IV	Sweep	7.895	985	1957	0.029	0.016	1579	0.044
Medium	I	Outward interaction	3.635	218	367	0.007	0.004	727	0.020
Medium	II	Ejection	9.005	389	609	0.031	0.018	1801	0.050
Medium	III	Inward interaction	2.955	140	241	0.004	0.002	591	0.017
Medium	IV	Sweep	9.615	499	741	0.042	0.024	1923	0.054

Table 230: Quadrant analysis summary for a hole size of 2 above the canopy, at a flow speed setting of 10 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	5.145	530	870	0.013	0.009	1029	0.029
High	II	Ejection	7.820	685	1103	0.026	0.017	1564	0.044
High	III	Inward interaction	5.655	424	641	0.012	0.007	1131	0.032
High	IV	Sweep	7.950	674	999	0.026	0.015	1590	0.044
Low	I	Outward interaction	3.305	242	428	0.004	0.002	661	0.018
Low	II	Ejection	9.090	613	1045	0.029	0.016	1818	0.051
Low	III	Inward interaction	4.950	522	1008	0.013	0.008	990	0.028
Low	IV	Sweep	8.925	762	1413	0.035	0.021	1785	0.050
Medium	I	Outward interaction	5.440	374	617	0.016	0.010	1088	0.030
Medium	II	Ejection	8.245	429	684	0.028	0.017	1649	0.046
Medium	III	Inward interaction	3.745	179	304	0.005	0.003	749	0.021
Medium	IV	Sweep	7.790	393	598	0.025	0.014	1558	0.043

Table 231: Quadrant analysis summary for a hole size of 2 above the canopy, at a flow speed setting of 10 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	2.365	1808	3364	0.003	0.002	473	0.013
High	II	Ejection	12.120	6989	11414	0.060	0.037	2424	0.068
High	III	Inward interaction	1.390	931	1663	0.001	0.001	278	0.008
High	IV	Sweep	9.990	4514	7122	0.032	0.019	1998	0.056
Low	I	Outward interaction	4.880	422	1092	0.010	0.005	976	0.027
Low	II	Ejection	8.995	746	1733	0.033	0.014	1799	0.050
Low	III	Inward interaction	4.435	382	1115	0.008	0.004	887	0.025
Low	IV	Sweep	9.025	727	1913	0.033	0.015	1805	0.050
Medium	I	Outward interaction	8.060	638	991	0.032	0.019	1612	0.045
Medium	II	Ejection	7.605	584	927	0.028	0.017	1521	0.042
Medium	III	Inward interaction	3.565	193	326	0.004	0.003	713	0.020
Medium	IV	Sweep	6.165	380	608	0.015	0.009	1233	0.034

Table 232: Quadrant analysis summary for a hole size of 2 above the canopy, at a flow speed setting of 10 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	1.355	1368	2367	0.001	0.001	271	0.008
High	II	Ejection	12.585	9776	15099	0.060	0.039	2517	0.070
High	III	Inward interaction	0.920	998	1673	0.000	0.000	184	0.005
High	IV	Sweep	11.880	7413	10482	0.043	0.026	2376	0.066
Low	I	Outward interaction	3.565	265	500	0.005	0.003	713	0.020
Low	II	Ejection	9.245	631	1079	0.034	0.019	1849	0.052
Low	III	Inward interaction	3.855	345	566	0.008	0.004	771	0.022
Low	IV	Sweep	9.400	649	988	0.036	0.018	1880	0.053
Medium	I	Outward interaction	4.380	404	651	0.009	0.006	876	0.024
Medium	II	Ejection	11.695	1340	2004	0.082	0.051	2339	0.065
Medium	III	Inward interaction	2.720	214	338	0.003	0.002	544	0.015
Medium	IV	Sweep	5.100	307	455	0.008	0.005	1020	0.029

Table 233: Quadrant analysis summary for a hole size of 2 within the canopy, at a flow speed setting of 10 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	3.305	498	901	0.005	0.003	661	0.018
High	II	Ejection	13.060	2167	3810	0.086	0.057	2612	0.073
High	III	Inward interaction	1.740	285	520	0.002	0.001	348	0.010
High	IV	Sweep	6.380	587	884	0.011	0.006	1276	0.036
Low	I	Outward interaction	2.630	317	527	0.003	0.002	526	0.015
Low	II	Ejection	11.060	1497	2314	0.064	0.040	2212	0.062
Low	III	Inward interaction	2.770	330	506	0.004	0.002	554	0.015
Low	IV	Sweep	8.440	764	1094	0.025	0.014	1688	0.047
Medium	I	Outward interaction	2.205	254	431	0.002	0.001	441	0.012
Medium	II	Ejection	12.575	1698	2650	0.081	0.052	2515	0.070
Medium	III	Inward interaction	2.135	298	503	0.002	0.002	427	0.012
Medium	IV	Sweep	8.375	707	1018	0.023	0.013	1675	0.047

Table 234: Quadrant analysis summary for a hole size of 2 within the canopy, at a flow speed setting of 10 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	6.810	650	1587	0.038	0.029	1362	0.038
High	II	Ejection	7.740	324	718	0.022	0.015	1548	0.043
High	III	Inward interaction	1.175	47	95	0.000	0.000	235	0.007
High	IV	Sweep	7.815	400	829	0.027	0.017	1563	0.044
Low	I	Outward interaction	3.000	1063	1917	0.004	0.003	600	0.017
Low	II	Ejection	9.780	2765	4879	0.036	0.021	1956	0.055
Low	III	Inward interaction	2.915	993	1884	0.004	0.002	583	0.016
Low	IV	Sweep	10.800	3047	5632	0.044	0.027	2160	0.060
Medium	I	Outward interaction	7.720	1482	3044	0.028	0.017	1544	0.043
Medium	II	Ejection	5.775	1085	2506	0.015	0.011	1155	0.032
Medium	III	Inward interaction	6.050	860	1983	0.013	0.009	1210	0.034
Medium	IV	Sweep	6.445	1099	2262	0.017	0.011	1289	0.036

Table 235: Quadrant analysis summary for a hole size of 2 within the canopy, at a flow speed setting of 10 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	3.490	394	798	0.006	0.003	698	0.020
High	II	Ejection	9.495	1072	2014	0.043	0.023	1899	0.054
High	III	Inward interaction	3.780	416	831	0.007	0.004	756	0.022
High	IV	Sweep	8.415	773	1461	0.027	0.015	1683	0.048
Low	I	Outward interaction	6.555	606	1318	0.016	0.010	1311	0.037
Low	II	Ejection	6.180	637	1268	0.016	0.009	1236	0.035
Low	III	Inward interaction	7.195	750	1553	0.022	0.013	1439	0.040
Low	IV	Sweep	6.625	703	1431	0.019	0.011	1325	0.037
Medium	I	Outward interaction	3.565	132	309	0.006	0.003	713	0.020
Medium	II	Ejection	9.075	313	711	0.034	0.019	1815	0.051
Medium	III	Inward interaction	3.845	148	381	0.007	0.004	769	0.021
Medium	IV	Sweep	9.125	314	704	0.034	0.019	1825	0.051

Table 236: Quadrant analysis summary for a hole size of 2 within the canopy, at a flow speed setting of 10 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	5.355	362	671	0.012	0.007	1071	0.030
High	II	Ejection	8.790	663	1147	0.037	0.018	1758	0.049
High	III	Inward interaction	4.995	322	608	0.010	0.006	999	0.028
High	IV	Sweep	6.935	446	901	0.019	0.011	1387	0.039
Low	I	Outward interaction	2.275	257	504	0.002	0.002	455	0.013
Low	II	Ejection	8.025	656	1126	0.021	0.012	1605	0.045
Low	III	Inward interaction	3.105	401	867	0.005	0.004	621	0.017
Low	IV	Sweep	12.350	1401	2659	0.070	0.043	2470	0.069
Medium	I	Outward interaction	4.280	325	571	0.008	0.005	856	0.024
Medium	II	Ejection	7.945	490	816	0.023	0.014	1589	0.044
Medium	III	Inward interaction	4.570	328	560	0.009	0.006	914	0.025
Medium	IV	Sweep	9.695	648	1068	0.038	0.023	1939	0.054

Table 237: Quadrant analysis summary for a hole size of 2 above the canopy, at a flow speed setting of 15 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	4.780	630	1051	0.011	0.007	956	0.027
High	II	Ejection	8.870	981	1513	0.032	0.019	1774	0.050
High	III	Inward interaction	4.125	457	744	0.007	0.004	825	0.023
High	IV	Sweep	8.340	895	1388	0.027	0.016	1668	0.047
Low	I	Outward interaction	3.955	510	825	0.005	0.003	791	0.022
Low	II	Ejection	6.325	870	1358	0.014	0.007	1265	0.035
Low	III	Inward interaction	7.375	1466	2426	0.028	0.015	1475	0.041
Low	IV	Sweep	8.170	1727	2901	0.037	0.020	1634	0.046
Medium	I	Outward interaction	5.900	683	1116	0.017	0.011	1180	0.033
Medium	II	Ejection	8.155	940	1527	0.032	0.020	1631	0.046
Medium	III	Inward interaction	3.875	343	562	0.006	0.004	775	0.022
Medium	IV	Sweep	6.865	661	1039	0.019	0.011	1373	0.038

Table 238: Quadrant analysis summary for a hole size of 2 above the canopy, at a flow speed setting of 15 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	5.210	899	1509	0.013	0.008	1042	0.029
High	II	Ejection	8.355	1114	1819	0.027	0.016	1671	0.047
High	III	Inward interaction	3.645	570	953	0.006	0.004	729	0.020
High	IV	Sweep	8.715	1152	1748	0.029	0.016	1743	0.049
Low	I	Outward interaction	5.005	674	1073	0.011	0.006	1001	0.028
Low	II	Ejection	7.645	928	1403	0.023	0.012	1529	0.043
Low	III	Inward interaction	5.665	848	1487	0.015	0.009	1133	0.032
Low	IV	Sweep	8.550	1211	2040	0.033	0.019	1710	0.048
Medium	I	Outward interaction	6.515	864	1419	0.021	0.013	1303	0.036
Medium	II	Ejection	8.155	1037	1687	0.031	0.019	1631	0.046
Medium	III	Inward interaction	3.960	438	703	0.006	0.004	792	0.022
Medium	IV	Sweep	7.125	744	1160	0.020	0.011	1425	0.040

Table 239: Quadrant analysis summary for a hole size of 2 above the canopy, at a flow speed setting of 15 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	5.920	999	1712	0.016	0.010	1184	0.033
High	II	Ejection	8.760	1406	2384	0.034	0.020	1752	0.049
High	III	Inward interaction	5.855	837	1406	0.013	0.008	1171	0.033
High	IV	Sweep	5.605	820	1436	0.013	0.008	1121	0.031
Low	I	Outward interaction	5.005	862	1498	0.011	0.006	1001	0.028
Low	II	Ejection	9.280	1434	2443	0.034	0.018	1856	0.052
Low	III	Inward interaction	3.785	677	1109	0.007	0.003	757	0.021
Low	IV	Sweep	8.285	1186	1933	0.025	0.013	1657	0.046
Medium	I	Outward interaction	6.700	1017	1664	0.025	0.015	1340	0.038
Medium	II	Ejection	6.700	863	1505	0.021	0.014	1340	0.038
Medium	III	Inward interaction	3.885	415	668	0.006	0.004	777	0.022
Medium	IV	Sweep	8.495	927	1402	0.029	0.016	1699	0.048

Table 240: Quadrant analysis summary for a hole size of 2 above the canopy, at a flow speed setting of 15 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	3.205	3070	5051	0.005	0.004	641	0.018
High	II	Ejection	13.060	16304	25518	0.107	0.075	2612	0.073
High	III	Inward interaction	2.760	3303	5328	0.005	0.003	552	0.015
High	IV	Sweep	4.655	2161	2954	0.005	0.003	931	0.026
Low	I	Outward interaction	5.035	702	1220	0.011	0.007	1007	0.028
Low	II	Ejection	8.695	1240	1995	0.035	0.020	1739	0.049
Low	III	Inward interaction	3.850	520	839	0.006	0.004	770	0.022
Low	IV	Sweep	8.450	1026	1541	0.028	0.015	1690	0.047
Medium	I	Outward interaction	6.440	1035	1741	0.022	0.014	1288	0.036
Medium	II	Ejection	9.045	1229	1976	0.036	0.022	1809	0.051
Medium	III	Inward interaction	3.850	455	732	0.006	0.004	770	0.022
Medium	IV	Sweep	6.340	684	1070	0.014	0.009	1268	0.036

Table 241: Quadrant analysis summary for a hole size of 2 within the canopy, at a flow speed setting of 15 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	1.965	666	1204	0.002	0.001	393	0.011
High	II	Ejection	13.765	4028	6866	0.085	0.057	2753	0.077
High	III	Inward interaction	1.110	393	710	0.001	0.000	222	0.006
High	IV	Sweep	8.595	1498	2206	0.020	0.011	1719	0.048
Low	I	Outward interaction	2.300	538	927	0.002	0.002	460	0.013
Low	II	Ejection	12.690	3745	5374	0.089	0.052	2538	0.071
Low	III	Inward interaction	2.620	700	1079	0.003	0.002	524	0.015
Low	IV	Sweep	6.615	1058	1504	0.013	0.008	1323	0.037
Medium	I	Outward interaction	2.055	598	1052	0.002	0.001	411	0.011
Medium	II	Ejection	14.285	4521	6659	0.101	0.062	2857	0.080
Medium	III	Inward interaction	1.660	527	907	0.001	0.001	332	0.009
Medium	IV	Sweep	6.600	1242	1793	0.013	0.008	1320	0.037

Table 242: Quadrant analysis summary for a hole size of 2 within the canopy, at a flow speed setting of 15 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	5.985	1575	3830	0.023	0.016	1197	0.033
High	II	Ejection	8.215	1419	3321	0.029	0.019	1643	0.046
High	III	Inward interaction	2.535	365	772	0.002	0.001	507	0.014
High	IV	Sweep	8.320	1416	2983	0.029	0.017	1664	0.046
Low	I	Outward interaction	2.555	1739	3061	0.003	0.002	511	0.014
Low	II	Ejection	8.910	5188	9705	0.031	0.020	1782	0.050
Low	III	Inward interaction	3.585	2563	4933	0.006	0.004	717	0.020
Low	IV	Sweep	10.975	6535	11054	0.048	0.028	2195	0.061
Medium	I	Outward interaction	8.235	845	2147	0.048	0.029	1647	0.046
Medium	II	Ejection	4.035	221	668	0.006	0.004	807	0.023
Medium	III	Inward interaction	4.025	196	468	0.005	0.003	805	0.022
Medium	IV	Sweep	6.735	554	1309	0.026	0.014	1347	0.038

Table 243: Quadrant analysis summary for a hole size of 2 within the canopy, at a flow speed setting of 15 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	2.220	256	499	0.005	0.003	444	0.012
High	II	Ejection	9.340	355	647	0.027	0.017	1868	0.052
High	III	Inward interaction	0.495	29	64	0.000	0.000	99	0.003
High	IV	Sweep	13.010	618	1159	0.066	0.043	2602	0.073
Low	I	Outward interaction	9.440	1304	2774	0.040	0.026	1888	0.053
Low	II	Ejection	3.265	447	1109	0.005	0.004	653	0.018
Low	III	Inward interaction	7.635	876	1824	0.022	0.014	1527	0.043
Low	IV	Sweep	5.120	851	1763	0.014	0.009	1024	0.029
Medium	I	Outward interaction	6.285	466	922	0.017	0.009	1257	0.035
Medium	II	Ejection	6.735	509	1134	0.020	0.012	1347	0.038
Medium	III	Inward interaction	5.850	456	989	0.015	0.009	1170	0.033
Medium	IV	Sweep	7.225	527	1093	0.022	0.012	1445	0.040

Table 244: Quadrant analysis summary for a hole size of 2 within the canopy, at a flow speed setting of 15 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	6.925	1057	2131	0.027	0.015	1385	0.039
High	II	Ejection	6.995	840	1622	0.021	0.011	1399	0.039
High	III	Inward interaction	3.895	401	692	0.006	0.003	779	0.022
High	IV	Sweep	7.460	783	1488	0.021	0.011	1492	0.042
Low	I	Outward interaction	2.035	505	1016	0.002	0.001	407	0.011
Low	II	Ejection	6.480	1009	1670	0.013	0.006	1296	0.036
Low	III	Inward interaction	2.885	824	1682	0.005	0.003	577	0.016
Low	IV	Sweep	12.075	3319	6993	0.078	0.050	2415	0.067
Medium	I	Outward interaction	2.715	462	848	0.004	0.002	543	0.015
Medium	II	Ejection	9.365	1127	2118	0.031	0.020	1873	0.052
Medium	III	Inward interaction	3.140	544	1004	0.005	0.003	628	0.018
Medium	IV	Sweep	10.640	1538	2865	0.048	0.031	2128	0.060

Table 245: Quadrant analysis summary for a hole size of 2 at the edge of the canopy, at a flow speed setting of 15 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
Low	I	Outward interaction	3.885	1059	1785	0.008	0.005	777	0.022
Low	II	Ejection	11.290	2970	4602	0.064	0.040	2258	0.063
Low	III	Inward interaction	3.160	783	1244	0.005	0.003	632	0.018
Low	IV	Sweep	6.130	928	1446	0.011	0.007	1226	0.034
Medium	I	Outward interaction	3.400	1223	2021	0.005	0.004	680	0.019
Medium	II	Ejection	12.110	4593	6653	0.070	0.043	2422	0.068
Medium	III	Inward interaction	3.250	1256	1947	0.005	0.003	650	0.018
Medium	IV	Sweep	6.165	1432	2102	0.011	0.007	1233	0.034
High	I	Outward interaction	5.020	1173	1944	0.012	0.008	1004	0.028
High	II	Ejection	9.505	2870	4409	0.056	0.035	1901	0.053
High	III	Inward interaction	3.885	719	1088	0.006	0.004	777	0.022
High	IV	Sweep	5.490	853	1253	0.010	0.006	1098	0.031

Table 246: Quadrant analysis summary for a hole size of 2 at the edge of the canopy, at a flow speed setting of 15 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	4.405	1533	3112	0.008	0.005	881	0.025
Low	II	Ejection	10.175	4059	7947	0.050	0.030	2035	0.057
Low	III	Inward interaction	4.515	1984	4887	0.011	0.008	903	0.025
Low	IV	Sweep	7.040	1758	2898	0.015	0.008	1408	0.039
Medium	I	Outward interaction	1.725	710	1532	0.003	0.002	345	0.010
Medium	II	Ejection	11.540	1498	3084	0.042	0.030	2308	0.065
Medium	III	Inward interaction	0.025	7	15	0.000	0.000	5	0.000
Medium	IV	Sweep	13.835	2020	3894	0.067	0.046	2767	0.077
High	I	Outward interaction	11.830	5669	13345	0.121	0.094	2366	0.066
High	II	Ejection	3.065	674	1278	0.004	0.002	613	0.017
High	III	Inward interaction	4.055	541	818	0.004	0.002	811	0.023
High	IV	Sweep	2.345	707	1956	0.003	0.003	469	0.013

Table 247: Quadrant analysis summary for a hole size of 2 at the edge of the canopy, at a flow speed setting of 15 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
Low	I	Outward interaction	9.325	2376	4718	0.037	0.024	1865	0.052
Low	II	Ejection	3.180	899	2060	0.005	0.004	636	0.018
Low	III	Inward interaction	8.630	2003	3885	0.029	0.018	1726	0.048
Low	IV	Sweep	4.130	1335	2750	0.009	0.006	826	0.023
Medium	I	Outward interaction	3.005	307	660	0.004	0.003	601	0.017
Medium	II	Ejection	9.890	796	1554	0.038	0.024	1978	0.055
Medium	III	Inward interaction	2.585	257	548	0.003	0.002	517	0.014
Medium	IV	Sweep	10.340	900	1819	0.045	0.029	2068	0.058
High	I	Outward interaction	11.495	1190	2853	0.115	0.085	2299	0.064
High	II	Ejection	3.445	219	545	0.006	0.005	689	0.019
High	III	Inward interaction	3.065	96	208	0.002	0.002	613	0.017
High	IV	Sweep	2.745	170	395	0.004	0.003	549	0.015

Table 248: Quadrant analysis summary for a hole size of 2 at the edge of the canopy, at a flow speed setting of 15 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
Low	I	Outward interaction	2.830	1140	2021	0.004	0.002	566	0.016
Low	II	Ejection	11.430	3687	6062	0.049	0.030	2286	0.064
Low	III	Inward interaction	1.890	714	1328	0.002	0.001	378	0.011
Low	IV	Sweep	9.530	3123	5085	0.035	0.021	1906	0.053
Medium	I	Outward interaction	0.635	50	136	0.000	0.000	127	0.004
Medium	II	Ejection	11.120	309	616	0.036	0.019	2224	0.062
Medium	III	Inward interaction	0.180	9	29	0.000	0.000	36	0.001
Medium	IV	Sweep	13.810	535	1096	0.077	0.042	2762	0.077
High	I	Outward interaction	6.370	688	1367	0.016	0.010	1274	0.036
High	II	Ejection	4.865	608	1318	0.011	0.007	973	0.027
High	III	Inward interaction	7.500	945	1840	0.025	0.016	1500	0.042
High	IV	Sweep	6.360	850	1741	0.019	0.013	1272	0.036

Table 249: Quadrant analysis summary for a hole size of 2 at the edge of the canopy, at a flow speed setting of 2 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	4.840	160	440	0.021	0.015	968	0.027
Low	II	Ejection	9.720	158	334	0.041	0.023	1944	0.054
Low	III	Inward interaction	2.165	40	135	0.002	0.002	433	0.012
Low	IV	Sweep	8.295	141	390	0.031	0.023	1659	0.046
High	I	Outward interaction	5.435	348	1096	0.030	0.026	1087	0.030
High	II	Ejection	9.010	204	464	0.029	0.018	1802	0.050
High	III	Inward interaction	2.855	98	284	0.004	0.004	571	0.016
High	IV	Sweep	8.645	266	830	0.037	0.031	1729	0.048
Medium	I	Outward interaction	3.890	135	393	0.016	0.014	778	0.022
Medium	II	Ejection	10.060	134	270	0.042	0.025	2012	0.056
Medium	III	Inward interaction	2.310	43	123	0.003	0.003	462	0.013
Medium	IV	Sweep	9.005	121	315	0.034	0.026	1801	0.050

Table 250: Quadrant analysis summary for a hole size of 2 at the edge of the canopy, at a flow speed setting of 2 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	5.025	390	1368	0.022	0.021	1005	0.028
Low	II	Ejection	8.575	309	782	0.029	0.020	1715	0.048
Low	III	Inward interaction	3.785	190	557	0.008	0.006	757	0.021
Low	IV	Sweep	8.605	354	1203	0.033	0.031	1721	0.048
High	I	Outward interaction	3.210	129	400	0.011	0.012	642	0.018
High	II	Ejection	11.430	150	318	0.047	0.033	2286	0.064
High	III	Inward interaction	1.610	45	126	0.002	0.002	322	0.009
High	IV	Sweep	9.905	118	284	0.032	0.026	1981	0.055
Medium	I	Outward interaction	3.830	116	443	0.015	0.014	766	0.021
Medium	II	Ejection	10.045	124	299	0.041	0.024	2009	0.056
Medium	III	Inward interaction	2.345	42	139	0.003	0.003	469	0.013
Medium	IV	Sweep	9.815	127	385	0.041	0.031	1963	0.055

Table 251: Quadrant analysis summary for a hole size of 2 at the edge of the canopy, at a flow speed setting of 2 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	2.595	139	411	0.005	0.005	519	0.014
Low	II	Ejection	10.715	268	521	0.043	0.025	2143	0.060
Low	III	Inward interaction	1.550	60	193	0.001	0.001	310	0.009
Low	IV	Sweep	10.965	286	639	0.047	0.031	2193	0.061
High	I	Outward interaction	4.980	183	569	0.025	0.018	996	0.028
High	II	Ejection	9.810	175	433	0.046	0.028	1962	0.055
High	III	Inward interaction	1.950	35	113	0.002	0.001	390	0.011
High	IV	Sweep	8.655	144	465	0.034	0.026	1731	0.048
Medium	I	Outward interaction	2.965	52	175	0.005	0.005	593	0.017
Medium	II	Ejection	9.775	132	308	0.045	0.030	1955	0.054
Medium	III	Inward interaction	2.335	34	111	0.003	0.003	467	0.013
Medium	IV	Sweep	9.285	113	282	0.036	0.026	1857	0.052

Table 252: Quadrant analysis summary for a hole size of 2 at the edge of the canopy, at a flow speed setting of 2 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
Low	I	Outward interaction	2.110	65	263	0.005	0.007	422	0.012
Low	II	Ejection	11.215	101	213	0.044	0.030	2243	0.063
Low	III	Inward interaction	0.930	19	66	0.001	0.001	186	0.005
Low	IV	Sweep	12.185	119	269	0.056	0.042	2437	0.068
High	I	Outward interaction	5.875	1080	2577	0.062	0.043	1175	0.033
High	II	Ejection	6.120	395	818	0.024	0.014	1224	0.034
High	III	Inward interaction	2.185	114	298	0.002	0.002	437	0.012
High	IV	Sweep	6.175	323	972	0.020	0.017	1235	0.034
Medium	I	Outward interaction	3.295	79	278	0.011	0.009	659	0.018
Medium	II	Ejection	10.440	110	278	0.047	0.028	2088	0.058
Medium	III	Inward interaction	1.660	24	86	0.002	0.001	332	0.009
Medium	IV	Sweep	9.985	102	288	0.041	0.028	1997	0.056

Table 253: Quadrant analysis summary for a hole size of 2 above the canopy, at a flow speed setting of 2 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	5.470	383	1205	0.034	0.027	1094	0.031
High	II	Ejection	9.300	215	523	0.032	0.020	1860	0.052
High	III	Inward interaction	2.565	91	308	0.004	0.003	513	0.014
High	IV	Sweep	8.780	240	805	0.034	0.029	1756	0.049
Low	I	Outward interaction	4.055	192	541	0.017	0.012	811	0.023
Low	II	Ejection	9.335	167	397	0.033	0.020	1867	0.052
Low	III	Inward interaction	2.100	58	186	0.003	0.002	420	0.012
Low	IV	Sweep	9.445	223	708	0.045	0.035	1889	0.053
Medium	I	Outward interaction	4.045	117	345	0.016	0.013	809	0.023
Medium	II	Ejection	9.635	112	242	0.038	0.022	1927	0.054
Medium	III	Inward interaction	2.545	45	145	0.004	0.004	509	0.014
Medium	IV	Sweep	9.250	114	325	0.037	0.029	1850	0.052

Table 254: Quadrant analysis summary for a hole size of 2 above the canopy, at a flow speed setting of 2 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	12.080	177	456	0.084	0.057	2416	0.068
High	II	Ejection	5.115	87	253	0.017	0.013	1023	0.029
High	III	Inward interaction	0.670	4	10	0.000	0.000	134	0.004
High	IV	Sweep	5.545	100	236	0.022	0.014	1109	0.031
Low	I	Outward interaction	4.240	184	554	0.017	0.013	848	0.024
Low	II	Ejection	9.515	172	397	0.036	0.021	1903	0.053
Low	III	Inward interaction	1.715	43	146	0.002	0.001	343	0.010
Low	IV	Sweep	9.315	208	649	0.042	0.034	1863	0.052
Medium	I	Outward interaction	3.110	69	247	0.008	0.007	622	0.017
Medium	II	Ejection	10.540	127	295	0.050	0.027	2108	0.059
Medium	III	Inward interaction	2.175	33	128	0.003	0.002	435	0.012
Medium	IV	Sweep	8.585	95	268	0.030	0.020	1717	0.048

Table 255: Quadrant analysis summary for a hole size of 2 above the canopy, at a flow speed setting of 2 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	2.845	98	282	0.005	0.004	569	0.016
High	II	Ejection	9.835	188	377	0.035	0.020	1967	0.055
High	III	Inward interaction	2.140	62	172	0.003	0.002	428	0.012
High	IV	Sweep	10.425	217	433	0.043	0.024	2085	0.058
Low	I	Outward interaction	3.885	179	551	0.014	0.011	777	0.022
Low	II	Ejection	11.100	223	452	0.049	0.026	2220	0.062
Low	III	Inward interaction	1.865	52	188	0.002	0.002	373	0.010
Low	IV	Sweep	8.815	169	478	0.029	0.022	1763	0.049
Medium	I	Outward interaction	1.995	73	202	0.003	0.003	399	0.011
Medium	II	Ejection	12.435	231	423	0.065	0.036	2487	0.069
Medium	III	Inward interaction	1.260	35	101	0.001	0.001	252	0.007
Medium	IV	Sweep	9.695	143	301	0.031	0.020	1939	0.054

Table 256: Quadrant analysis summary for a hole size of 2 above the canopy, at a flow speed setting of 2 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	2.930	113	297	0.006	0.005	586	0.016
High	II	Ejection	10.145	218	390	0.040	0.022	2029	0.057
High	III	Inward interaction	2.065	56	125	0.002	0.001	413	0.012
High	IV	Sweep	10.380	230	458	0.043	0.026	2076	0.058
Low	I	Outward interaction	3.805	140	393	0.012	0.009	761	0.021
Low	II	Ejection	10.535	194	386	0.044	0.025	2107	0.059
Low	III	Inward interaction	1.790	41	119	0.002	0.001	358	0.010
Low	IV	Sweep	9.435	181	440	0.037	0.025	1887	0.053
Medium	I	Outward interaction	1.470	54	151	0.001	0.001	294	0.008
Medium	II	Ejection	12.335	246	453	0.057	0.034	2467	0.069
Medium	III	Inward interaction	0.830	26	78	0.000	0.000	166	0.005
Medium	IV	Sweep	11.415	234	435	0.050	0.030	2283	0.064

Table 257: Quadrant analysis summary for a hole size of 2 within the canopy, at a flow speed setting of 2 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	5.170	519	1514	0.032	0.022	1034	0.029
High	II	Ejection	8.940	301	739	0.032	0.018	1788	0.050
High	III	Inward interaction	2.520	127	396	0.004	0.003	504	0.014
High	IV	Sweep	8.570	319	1170	0.033	0.028	1714	0.048
Low	I	Outward interaction	4.595	178	557	0.022	0.016	919	0.026
Low	II	Ejection	9.780	148	374	0.040	0.023	1956	0.055
Low	III	Inward interaction	1.790	34	138	0.002	0.002	358	0.010
Low	IV	Sweep	9.095	146	467	0.036	0.026	1819	0.051
Medium	I	Outward interaction	3.795	69	243	0.012	0.009	759	0.021
Medium	II	Ejection	9.325	93	241	0.038	0.022	1865	0.052
Medium	III	Inward interaction	2.845	38	147	0.005	0.004	569	0.016
Medium	IV	Sweep	9.390	92	268	0.038	0.025	1878	0.053

Table 258: Quadrant analysis summary for a hole size of 2 within the canopy, at a flow speed setting of 2 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	4.640	267	936	0.019	0.017	928	0.026
High	II	Ejection	9.235	244	603	0.035	0.021	1847	0.052
High	III	Inward interaction	2.750	89	276	0.004	0.003	550	0.015
High	IV	Sweep	8.800	287	1046	0.039	0.035	1760	0.049
Low	I	Outward interaction	4.155	80	206	0.007	0.006	831	0.023
Low	II	Ejection	4.605	100	188	0.010	0.006	921	0.026
Low	III	Inward interaction	11.500	262	449	0.063	0.035	2300	0.064
Low	IV	Sweep	5.185	143	325	0.016	0.012	1037	0.029
Medium	I	Outward interaction	3.175	124	497	0.007	0.007	635	0.018
Medium	II	Ejection	10.165	224	571	0.041	0.025	2033	0.057
Medium	III	Inward interaction	2.680	84	283	0.004	0.003	536	0.015
Medium	IV	Sweep	9.320	216	626	0.037	0.025	1864	0.052

Table 259: Quadrant analysis summary for a hole size of 2 within the canopy, at a flow speed setting of 2 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	6.395	284	971	0.038	0.031	1279	0.036
High	II	Ejection	8.040	163	399	0.027	0.016	1608	0.045
High	III	Inward interaction	3.355	78	228	0.005	0.004	671	0.019
High	IV	Sweep	7.835	191	645	0.031	0.025	1567	0.044
Low	I	Outward interaction	2.555	23	86	0.004	0.003	511	0.014
Low	II	Ejection	9.890	71	193	0.051	0.029	1978	0.055
Low	III	Inward interaction	2.405	16	62	0.003	0.002	481	0.013
Low	IV	Sweep	9.155	60	173	0.040	0.024	1831	0.051
Medium	I	Outward interaction	4.250	176	766	0.019	0.015	850	0.024
Medium	II	Ejection	9.475	149	440	0.037	0.020	1895	0.053
Medium	III	Inward interaction	2.655	59	241	0.004	0.003	531	0.015
Medium	IV	Sweep	9.465	152	551	0.037	0.025	1893	0.053

Table 260: Quadrant analysis summary for a hole size of 2 within the canopy, at a flow speed setting of 2 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	4.985	239	789	0.033	0.028	997	0.028
High	II	Ejection	10.615	164	366	0.048	0.028	2123	0.059
High	III	Inward interaction	1.815	33	105	0.002	0.001	363	0.010
High	IV	Sweep	9.165	132	425	0.034	0.028	1833	0.051
Low	I	Outward interaction	4.830	240	791	0.024	0.019	966	0.027
Low	II	Ejection	9.565	189	455	0.037	0.022	1913	0.054
Low	III	Inward interaction	2.435	63	195	0.003	0.002	487	0.014
Low	IV	Sweep	8.840	200	619	0.036	0.028	1768	0.049
Medium	I	Outward interaction	2.485	84	296	0.004	0.004	497	0.014
Medium	II	Ejection	10.000	196	432	0.041	0.026	2000	0.056
Medium	III	Inward interaction	2.265	64	197	0.003	0.003	453	0.013
Medium	IV	Sweep	10.070	189	451	0.040	0.028	2014	0.056

Table 261: Quadrant analysis summary for a hole size of 2 at the edge of the canopy, at a flow speed setting of 4 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	4.875	184	409	0.016	0.012	975	0.027
Low	II	Ejection	8.485	210	368	0.032	0.018	1697	0.047
Low	III	Inward interaction	3.460	83	179	0.005	0.004	692	0.019
Low	IV	Sweep	8.045	208	461	0.030	0.021	1609	0.045
Medium	I	Outward interaction	5.940	180	331	0.023	0.015	1188	0.033
Medium	II	Ejection	8.425	191	333	0.034	0.021	1685	0.047
Medium	III	Inward interaction	2.915	60	129	0.004	0.003	583	0.016
Medium	IV	Sweep	7.285	148	291	0.023	0.016	1457	0.041
High	I	Outward interaction	5.775	267	617	0.021	0.015	1155	0.032
High	II	Ejection	8.770	297	593	0.036	0.022	1754	0.049
High	III	Inward interaction	2.810	83	227	0.003	0.003	562	0.016
High	IV	Sweep	7.110	251	673	0.025	0.020	1422	0.040

Table 262: Quadrant analysis summary for a hole size of 2 at the edge of the canopy, at a flow speed setting of 4 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
Low	I	Outward interaction	5.460	295	745	0.014	0.010	1092	0.031
Low	II	Ejection	6.865	355	824	0.022	0.014	1373	0.038
Low	III	Inward interaction	5.895	295	717	0.015	0.010	1179	0.033
Low	IV	Sweep	7.025	408	1085	0.025	0.019	1405	0.039
Medium	I	Outward interaction	6.705	176	468	0.020	0.012	1341	0.037
Medium	II	Ejection	5.695	138	362	0.013	0.008	1139	0.032
Medium	III	Inward interaction	5.895	137	374	0.014	0.009	1179	0.033
Medium	IV	Sweep	7.455	221	564	0.028	0.017	1491	0.042
High	I	Outward interaction	0.620	74	181	0.000	0.000	124	0.003
High	II	Ejection	13.780	689	1284	0.061	0.041	2756	0.077
High	III	Inward interaction	0.325	34	81	0.000	0.000	65	0.002
High	IV	Sweep	12.545	582	1088	0.047	0.031	2509	0.070

Table 263: Quadrant analysis summary for a hole size of 2 at the edge of the canopy, at a flow speed setting of 4 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
Low	I	Outward interaction	2.740	276	518	0.004	0.003	548	0.015
Low	II	Ejection	9.830	651	1054	0.033	0.019	1966	0.055
Low	III	Inward interaction	2.095	203	382	0.002	0.001	419	0.012
Low	IV	Sweep	10.875	926	1695	0.052	0.034	2175	0.061
Medium	I	Outward interaction	3.460	186	516	0.006	0.004	692	0.019
Medium	II	Ejection	9.025	373	831	0.031	0.017	1805	0.050
Medium	III	Inward interaction	3.715	193	480	0.007	0.004	743	0.021
Medium	IV	Sweep	9.475	431	1008	0.037	0.022	1895	0.053
High	I	Outward interaction	3.075	96	291	0.006	0.004	615	0.017
High	II	Ejection	10.560	224	480	0.046	0.025	2112	0.059
High	III	Inward interaction	2.365	61	174	0.003	0.002	473	0.013
High	IV	Sweep	9.415	202	491	0.037	0.023	1883	0.052

Table 264: Quadrant analysis summary for a hole size of 2 at the edge of the canopy, at a flow speed setting of 4 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	3.185	156	309	0.005	0.003	637	0.018
Low	II	Ejection	8.070	297	524	0.023	0.013	1614	0.045
Low	III	Inward interaction	3.140	163	354	0.005	0.003	628	0.018
Low	IV	Sweep	10.680	543	1010	0.056	0.034	2136	0.060
Medium	I	Outward interaction	3.100	65	177	0.005	0.004	620	0.017
Medium	II	Ejection	9.165	160	330	0.035	0.020	1833	0.051
Medium	III	Inward interaction	3.810	78	189	0.007	0.005	762	0.021
Medium	IV	Sweep	9.005	170	375	0.037	0.023	1801	0.050
High	I	Outward interaction	3.270	176	544	0.010	0.007	654	0.018
High	II	Ejection	10.565	246	588	0.044	0.025	2113	0.059
High	III	Inward interaction	1.720	54	187	0.002	0.001	344	0.010
High	IV	Sweep	10.040	269	844	0.045	0.034	2008	0.056

Table 265: Quadrant analysis summary for a hole size of 2 above the canopy, at a flow speed setting of 4 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	4.915	222	589	0.016	0.012	983	0.028
High	II	Ejection	9.335	276	636	0.038	0.024	1867	0.052
High	III	Inward interaction	2.535	80	231	0.003	0.002	507	0.014
High	IV	Sweep	8.685	284	813	0.036	0.028	1737	0.049
Low	I	Outward interaction	3.290	96	238	0.007	0.005	658	0.018
Low	II	Ejection	8.635	154	290	0.029	0.017	1727	0.048
Low	III	Inward interaction	4.135	98	205	0.009	0.006	827	0.023
Low	IV	Sweep	9.035	202	428	0.040	0.026	1807	0.050
Medium	I	Outward interaction	5.910	124	276	0.022	0.015	1182	0.033
Medium	II	Ejection	8.875	126	260	0.034	0.021	1775	0.050
Medium	III	Inward interaction	2.500	39	103	0.003	0.002	500	0.014
Medium	IV	Sweep	8.020	118	250	0.029	0.018	1604	0.045

Table 266: Quadrant analysis summary for a hole size of 2 above the canopy, at a flow speed setting of 4 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	4.645	194	451	0.015	0.011	929	0.026
High	II	Ejection	9.495	259	464	0.040	0.023	1899	0.053
High	III	Inward interaction	2.480	65	156	0.003	0.002	496	0.014
High	IV	Sweep	8.060	223	502	0.030	0.022	1612	0.045
Low	I	Outward interaction	5.230	130	271	0.017	0.011	1046	0.029
Low	II	Ejection	8.975	146	272	0.032	0.019	1795	0.050
Low	III	Inward interaction	3.035	56	116	0.004	0.003	607	0.017
Low	IV	Sweep	7.950	157	337	0.031	0.021	1590	0.044
Medium	I	Outward interaction	2.855	64	172	0.004	0.003	571	0.016
Medium	II	Ejection	10.060	194	408	0.045	0.027	2012	0.056
Medium	III	Inward interaction	3.485	75	199	0.006	0.005	697	0.019
Medium	IV	Sweep	8.985	150	319	0.031	0.019	1797	0.050

Table 267: Quadrant analysis summary for a hole size of 2 above the canopy, at a flow speed setting of 4 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	2.050	229	443	0.002	0.001	410	0.011
High	II	Ejection	9.365	627	1056	0.027	0.015	1873	0.052
High	III	Inward interaction	1.910	215	426	0.002	0.001	382	0.011
High	IV	Sweep	12.695	1142	2002	0.066	0.038	2539	0.071
Low	I	Outward interaction	3.850	241	629	0.009	0.007	770	0.022
Low	II	Ejection	9.900	427	867	0.040	0.024	1980	0.055
Low	III	Inward interaction	2.590	134	333	0.003	0.002	518	0.015
Low	IV	Sweep	9.825	400	867	0.037	0.023	1965	0.055
Medium	I	Outward interaction	1.965	98	188	0.002	0.001	393	0.011
Medium	II	Ejection	12.390	555	976	0.064	0.041	2478	0.069
Medium	III	Inward interaction	1.860	102	213	0.002	0.001	372	0.010
Medium	IV	Sweep	9.755	348	588	0.032	0.020	1951	0.055

Table 268: Quadrant analysis summary for a hole size of 2 above the canopy, at a flow speed setting of 4 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	3.585	331	678	0.006	0.004	717	0.020
High	II	Ejection	9.030	641	1015	0.029	0.015	1806	0.050
High	III	Inward interaction	2.775	245	536	0.003	0.002	555	0.015
High	IV	Sweep	10.445	935	1565	0.049	0.027	2089	0.058
Low	I	Outward interaction	3.540	266	573	0.008	0.006	708	0.020
Low	II	Ejection	10.240	518	973	0.047	0.030	2048	0.057
Low	III	Inward interaction	2.375	136	308	0.003	0.002	475	0.013
Low	IV	Sweep	8.635	343	680	0.026	0.017	1727	0.048
Medium	I	Outward interaction	2.390	237	445	0.003	0.002	478	0.013
Medium	II	Ejection	8.970	485	757	0.023	0.013	1794	0.050
Medium	III	Inward interaction	1.415	128	231	0.001	0.001	283	0.008
Medium	IV	Sweep	12.590	1092	1827	0.074	0.045	2518	0.070

Table 269: Quadrant analysis summary for a hole size of 2 within the canopy, at a flow speed setting of 4 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	2.745	197	586	0.005	0.004	549	0.015
High	II	Ejection	10.750	428	961	0.046	0.027	2150	0.060
High	III	Inward interaction	2.345	143	394	0.003	0.002	469	0.013
High	IV	Sweep	9.815	398	1242	0.039	0.032	1963	0.055
Low	I	Outward interaction	3.140	85	202	0.006	0.004	628	0.018
Low	II	Ejection	10.345	211	381	0.047	0.027	2069	0.058
Low	III	Inward interaction	3.365	71	139	0.005	0.003	673	0.019
Low	IV	Sweep	8.270	161	306	0.029	0.017	1654	0.046
Medium	I	Outward interaction	2.945	83	190	0.004	0.003	589	0.016
Medium	II	Ejection	11.185	270	488	0.055	0.032	2237	0.063
Medium	III	Inward interaction	2.680	79	168	0.004	0.003	536	0.015
Medium	IV	Sweep	8.460	185	361	0.029	0.018	1692	0.047

Table 270: Quadrant analysis summary for a hole size of 2 within the canopy, at a flow speed setting of 4 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	3.940	324	877	0.009	0.007	788	0.022
High	II	Ejection	9.995	610	1307	0.043	0.025	1999	0.056
High	III	Inward interaction	2.940	183	485	0.004	0.003	588	0.016
High	IV	Sweep	8.640	480	1265	0.030	0.021	1728	0.048
Low	I	Outward interaction	4.895	270	592	0.010	0.006	979	0.027
Low	II	Ejection	6.535	348	674	0.017	0.009	1307	0.036
Low	III	Inward interaction	6.740	415	909	0.021	0.013	1348	0.038
Low	IV	Sweep	7.660	446	935	0.026	0.015	1532	0.043
Medium	I	Outward interaction	3.245	356	798	0.005	0.003	649	0.018
Medium	II	Ejection	10.365	841	1751	0.038	0.022	2073	0.058
Medium	III	Inward interaction	3.245	356	808	0.005	0.003	649	0.018
Medium	IV	Sweep	10.085	833	1829	0.037	0.022	2017	0.056

Table 271: Quadrant analysis summary for a hole size of 2 within the canopy, at a flow speed setting of 4 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	4.505	183	527	0.011	0.008	901	0.025
High	II	Ejection	9.240	294	619	0.035	0.019	1848	0.051
High	III	Inward interaction	3.865	142	372	0.007	0.005	773	0.021
High	IV	Sweep	7.965	266	638	0.027	0.017	1593	0.044
Low	I	Outward interaction	2.700	283	736	0.005	0.004	540	0.015
Low	II	Ejection	11.010	667	1391	0.044	0.027	2202	0.061
Low	III	Inward interaction	2.180	179	452	0.002	0.002	436	0.012
Low	IV	Sweep	10.745	661	1605	0.043	0.031	2149	0.060
Medium	I	Outward interaction	3.220	119	419	0.008	0.008	644	0.018
Medium	II	Ejection	10.470	193	448	0.044	0.026	2094	0.059
Medium	III	Inward interaction	2.370	62	206	0.003	0.003	474	0.013
Medium	IV	Sweep	9.645	183	516	0.039	0.028	1929	0.054

Table 272: Quadrant analysis summary for a hole size of 2 within the canopy, at a flow speed setting of 4 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	3.195	158	505	0.008	0.007	639	0.018
High	II	Ejection	10.125	225	451	0.037	0.020	2025	0.057
High	III	Inward interaction	2.060	74	214	0.002	0.002	412	0.012
High	IV	Sweep	10.670	255	616	0.044	0.029	2134	0.060
Low	I	Outward interaction	8.115	27	76	0.059	0.035	1623	0.045
Low	II	Ejection	7.290	15	42	0.029	0.018	1458	0.041
Low	III	Inward interaction	1.760	2	8	0.001	0.001	352	0.010
Low	IV	Sweep	6.470	14	41	0.024	0.015	1294	0.036
Medium	I	Outward interaction	4.080	111	231	0.007	0.005	816	0.023
Medium	II	Ejection	8.755	246	468	0.035	0.021	1751	0.049
Medium	III	Inward interaction	5.050	142	279	0.012	0.007	1010	0.028
Medium	IV	Sweep	7.865	208	385	0.027	0.016	1573	0.044

Table 273: Quadrant analysis summary for a hole size of 2 at the edge of the canopy, at a flow speed setting of 6 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	4.705	204	336	0.012	0.008	941	0.026
Low	II	Ejection	8.060	292	465	0.030	0.019	1612	0.045
Low	III	Inward interaction	4.235	146	237	0.008	0.005	847	0.024
Low	IV	Sweep	8.455	283	427	0.031	0.018	1691	0.047
Medium	I	Outward interaction	5.145	223	373	0.015	0.010	1029	0.029
Medium	II	Ejection	8.785	346	565	0.041	0.026	1757	0.049
Medium	III	Inward interaction	3.525	106	173	0.005	0.003	705	0.020
Medium	IV	Sweep	7.480	210	329	0.021	0.013	1496	0.042
High	I	Outward interaction	4.135	232	462	0.010	0.007	827	0.023
High	II	Ejection	9.390	414	701	0.041	0.024	1878	0.053
High	III	Inward interaction	3.115	124	251	0.004	0.003	623	0.017
High	IV	Sweep	8.435	317	621	0.028	0.019	1687	0.047

Table 274: Quadrant analysis summary for a hole size of 2 at the edge of the canopy, at a flow speed setting of 6 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	4.560	163	275	0.011	0.007	912	0.025
Low	II	Ejection	9.085	297	476	0.039	0.023	1817	0.051
Low	III	Inward interaction	3.955	112	192	0.006	0.004	791	0.022
Low	IV	Sweep	7.935	225	351	0.026	0.015	1587	0.044
Medium	I	Outward interaction	2.380	175	426	0.003	0.002	476	0.013
Medium	II	Ejection	10.540	491	1079	0.039	0.028	2108	0.059
Medium	III	Inward interaction	0.985	63	142	0.000	0.000	197	0.006
Medium	IV	Sweep	11.945	656	1393	0.059	0.041	2389	0.067
High	I	Outward interaction	6.425	865	1702	0.020	0.013	1285	0.036
High	II	Ejection	6.885	828	1543	0.020	0.013	1377	0.038
High	III	Inward interaction	5.595	650	1286	0.013	0.009	1119	0.031
High	IV	Sweep	6.915	796	1403	0.020	0.012	1383	0.039

Table 275: Quadrant analysis summary for a hole size of 2 at the edge of the canopy, at a flow speed setting of 6 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
Low	I	Outward interaction	4.410	579	1026	0.009	0.005	882	0.025
Low	II	Ejection	6.695	671	1211	0.015	0.010	1339	0.037
Low	III	Inward interaction	3.780	490	914	0.006	0.004	756	0.021
Low	IV	Sweep	10.635	1563	3051	0.056	0.038	2127	0.059
Medium	I	Outward interaction	7.960	310	853	0.030	0.022	1592	0.045
Medium	II	Ejection	5.415	223	612	0.015	0.011	1083	0.030
Medium	III	Inward interaction	7.925	221	576	0.022	0.015	1585	0.044
Medium	IV	Sweep	4.845	192	564	0.011	0.009	969	0.027
High	I	Outward interaction	6.635	777	1612	0.017	0.010	1327	0.037
High	II	Ejection	6.310	843	1740	0.017	0.010	1262	0.035
High	III	Inward interaction	7.285	995	1837	0.024	0.012	1457	0.041
High	IV	Sweep	6.015	819	1805	0.016	0.010	1203	0.034

Table 276: Quadrant analysis summary for a hole size of 2 at the edge of the canopy, at a flow speed setting of 6 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	5.130	511	906	0.012	0.007	1026	0.029
Low	II	Ejection	6.935	559	956	0.017	0.011	1387	0.039
Low	III	Inward interaction	3.045	279	468	0.004	0.002	609	0.017
Low	IV	Sweep	8.990	1135	2134	0.046	0.031	1798	0.050
Medium	I	Outward interaction	6.240	137	311	0.017	0.010	1248	0.035
Medium	II	Ejection	8.045	189	381	0.030	0.016	1609	0.045
Medium	III	Inward interaction	5.235	111	258	0.011	0.007	1047	0.029
Medium	IV	Sweep	6.575	139	300	0.018	0.010	1315	0.037
High	I	Outward interaction	5.415	148	304	0.013	0.009	1083	0.030
High	II	Ejection	8.055	217	402	0.028	0.017	1611	0.045
High	III	Inward interaction	3.790	102	257	0.006	0.005	758	0.021
High	IV	Sweep	8.045	243	485	0.031	0.020	1609	0.045

Table 277: Quadrant analysis summary for a hole size of 2 above the canopy, at a flow speed setting of 6 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	3.015	121	272	0.005	0.004	603	0.017
High	II	Ejection	9.990	281	491	0.039	0.023	1998	0.056
High	III	Inward interaction	2.935	107	227	0.004	0.003	587	0.016
High	IV	Sweep	9.705	288	550	0.039	0.025	1941	0.054
Low	I	Outward interaction	3.620	194	770	0.005	0.003	724	0.020
Low	II	Ejection	9.080	517	1563	0.032	0.014	1816	0.051
Low	III	Inward interaction	4.695	361	1576	0.011	0.007	939	0.026
Low	IV	Sweep	9.010	574	1915	0.035	0.017	1802	0.050
Medium	I	Outward interaction	3.475	83	159	0.006	0.004	695	0.019
Medium	II	Ejection	9.195	171	286	0.034	0.020	1839	0.051
Medium	III	Inward interaction	2.605	57	111	0.003	0.002	521	0.015
Medium	IV	Sweep	10.055	199	334	0.043	0.025	2011	0.056

Table 278: Quadrant analysis summary for a hole size of 2 above the canopy, at a flow speed setting of 6 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	3.920	183	311	0.008	0.005	784	0.022
High	II	Ejection	10.025	414	662	0.048	0.025	2005	0.056
High	III	Inward interaction	2.720	92	206	0.003	0.002	544	0.015
High	IV	Sweep	9.000	276	481	0.029	0.016	1800	0.050
Low	I	Outward interaction	2.500	101	212	0.003	0.003	500	0.014
Low	II	Ejection	8.970	253	421	0.029	0.018	1794	0.050
Low	III	Inward interaction	3.470	147	282	0.007	0.005	694	0.019
Low	IV	Sweep	11.170	354	628	0.051	0.033	2234	0.063
Medium	I	Outward interaction	5.490	184	288	0.018	0.010	1098	0.031
Medium	II	Ejection	8.355	208	331	0.030	0.018	1671	0.047
Medium	III	Inward interaction	3.260	79	137	0.004	0.003	652	0.018
Medium	IV	Sweep	7.905	191	295	0.026	0.015	1581	0.044

Table 279: Quadrant analysis summary for a hole size of 2 above the canopy, at a flow speed setting of 6 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	1.495	423	744	0.001	0.001	299	0.008
High	II	Ejection	13.065	2509	4133	0.066	0.040	2613	0.073
High	III	Inward interaction	1.285	349	664	0.001	0.001	257	0.007
High	IV	Sweep	10.340	1574	2508	0.033	0.019	2068	0.058
Low	I	Outward interaction	4.120	306	626	0.010	0.007	824	0.023
Low	II	Ejection	10.345	706	1238	0.056	0.033	2069	0.058
Low	III	Inward interaction	3.070	179	370	0.004	0.003	614	0.017
Low	IV	Sweep	7.385	358	730	0.020	0.014	1477	0.041
Medium	I	Outward interaction	5.405	247	455	0.015	0.010	1081	0.030
Medium	II	Ejection	10.040	472	770	0.052	0.031	2008	0.056
Medium	III	Inward interaction	1.880	68	125	0.001	0.001	376	0.011
Medium	IV	Sweep	6.975	226	351	0.017	0.010	1395	0.039

Table 280: Quadrant analysis summary for a hole size of 2 above the canopy, at a flow speed setting of 6 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	1.960	701	1258	0.002	0.001	392	0.011
High	II	Ejection	11.970	3059	4821	0.052	0.030	2394	0.067
High	III	Inward interaction	1.575	568	1081	0.001	0.001	315	0.009
High	IV	Sweep	10.875	2579	3951	0.040	0.023	2175	0.061
Low	I	Outward interaction	3.925	297	646	0.010	0.007	785	0.022
Low	II	Ejection	9.755	635	1139	0.052	0.032	1951	0.055
Low	III	Inward interaction	2.890	157	320	0.004	0.003	578	0.016
Low	IV	Sweep	7.880	347	649	0.023	0.015	1576	0.044
Medium	I	Outward interaction	2.285	460	864	0.003	0.002	457	0.013
Medium	II	Ejection	12.335	1747	2725	0.057	0.034	2467	0.069
Medium	III	Inward interaction	1.665	358	617	0.002	0.001	333	0.009
Medium	IV	Sweep	10.640	1302	2044	0.037	0.022	2128	0.060

Table 281: Quadrant analysis summary for a hole size of 2 within the canopy, at a flow speed setting of 6 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	2.760	190	417	0.004	0.003	552	0.015
High	II	Ejection	10.800	749	1437	0.058	0.036	2160	0.060
High	III	Inward interaction	3.495	269	583	0.007	0.005	699	0.019
High	IV	Sweep	7.780	379	718	0.021	0.013	1556	0.043
Low	I	Outward interaction	3.700	189	355	0.006	0.004	740	0.021
Low	II	Ejection	10.825	595	976	0.059	0.034	2165	0.060
Low	III	Inward interaction	3.420	163	281	0.005	0.003	684	0.019
Low	IV	Sweep	6.415	245	416	0.014	0.009	1283	0.036
Medium	I	Outward interaction	3.065	147	260	0.004	0.003	613	0.017
Medium	II	Ejection	9.845	525	866	0.048	0.031	1969	0.055
Medium	III	Inward interaction	3.635	203	346	0.007	0.005	727	0.020
Medium	IV	Sweep	8.410	349	536	0.027	0.016	1682	0.047

Table 282: Quadrant analysis summary for a hole size of 2 within the canopy, at a flow speed setting of 6 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	5.770	697	1805	0.016	0.010	1154	0.032
High	II	Ejection	7.260	812	2039	0.023	0.014	1452	0.041
High	III	Inward interaction	5.135	522	1415	0.010	0.007	1027	0.029
High	IV	Sweep	7.855	888	2665	0.027	0.020	1571	0.044
Low	I	Outward interaction	9.105	1083	1905	0.030	0.017	1821	0.051
Low	II	Ejection	3.850	595	1091	0.007	0.004	770	0.022
Low	III	Inward interaction	9.870	1248	2446	0.037	0.023	1974	0.055
Low	IV	Sweep	3.885	577	1087	0.007	0.004	777	0.022
Medium	I	Outward interaction	1.675	76	191	0.003	0.002	335	0.009
Medium	II	Ejection	11.350	179	393	0.044	0.033	2270	0.063
Medium	III	Inward interaction	0.265	8	20	0.000	0.000	53	0.001
Medium	IV	Sweep	12.435	215	471	0.059	0.043	2487	0.069

Table 283: Quadrant analysis summary for a hole size of 2 within the canopy, at a flow speed setting of 6 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	3.450	133	268	0.005	0.003	690	0.020
High	II	Ejection	7.160	249	483	0.021	0.012	1432	0.041
High	III	Inward interaction	4.900	233	515	0.013	0.009	980	0.028
High	IV	Sweep	9.440	400	743	0.044	0.025	1888	0.054
Low	I	Outward interaction	4.945	496	900	0.010	0.006	989	0.028
Low	II	Ejection	5.465	473	879	0.011	0.006	1093	0.031
Low	III	Inward interaction	6.145	711	1488	0.018	0.011	1229	0.034
Low	IV	Sweep	9.050	1132	2001	0.042	0.023	1810	0.051
Medium	I	Outward interaction	3.230	97	257	0.006	0.004	646	0.018
Medium	II	Ejection	10.010	220	466	0.041	0.023	2002	0.056
Medium	III	Inward interaction	2.675	73	203	0.004	0.003	535	0.015
Medium	IV	Sweep	9.215	201	463	0.035	0.021	1843	0.052

Table 284: Quadrant analysis summary for a hole size of 2 within the canopy, at a flow speed setting of 6 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	2.990	148	367	0.005	0.004	598	0.017
High	II	Ejection	10.645	332	643	0.044	0.024	2129	0.059
High	III	Inward interaction	1.975	80	185	0.002	0.001	395	0.011
High	IV	Sweep	10.525	323	709	0.042	0.026	2105	0.059
Low	I	Outward interaction	3.925	259	489	0.007	0.004	785	0.022
Low	II	Ejection	8.510	474	854	0.028	0.016	1702	0.048
Low	III	Inward interaction	3.045	203	423	0.004	0.003	609	0.017
Low	IV	Sweep	10.135	641	1126	0.045	0.025	2027	0.057
Medium	I	Outward interaction	5.300	298	557	0.013	0.008	1060	0.030
Medium	II	Ejection	6.685	331	567	0.018	0.010	1337	0.037
Medium	III	Inward interaction	5.315	277	488	0.012	0.007	1063	0.030
Medium	IV	Sweep	8.530	489	850	0.034	0.019	1706	0.048

Table 285: Quadrant analysis summary for a hole size of 2 at the edge of the canopy, at a flow speed setting of 8 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
Low	I	Outward interaction	5.280	440	712	0.018	0.011	1056	0.029
Low	II	Ejection	9.750	707	1109	0.052	0.031	1950	0.054
Low	III	Inward interaction	3.780	199	319	0.006	0.003	756	0.021
Low	IV	Sweep	5.385	239	372	0.010	0.006	1077	0.030
High	I	Outward interaction	4.175	414	658	0.010	0.007	835	0.023
High	II	Ejection	9.735	865	1280	0.047	0.030	1947	0.054
High	III	Inward interaction	3.650	313	448	0.006	0.004	730	0.020
High	IV	Sweep	7.705	463	648	0.020	0.012	1541	0.043
Medium	I	Outward interaction	6.285	594	925	0.024	0.015	1257	0.035
Medium	II	Ejection	9.380	719	1103	0.044	0.027	1876	0.052
Medium	III	Inward interaction	3.110	188	319	0.004	0.003	622	0.017
Medium	IV	Sweep	6.290	303	465	0.012	0.008	1258	0.035

Table 286: Quadrant analysis summary for a hole size of 2 at the edge of the canopy, at a flow speed setting of 8 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
Low	I	Outward interaction	6.445	441	759	0.022	0.014	1289	0.036
Low	II	Ejection	10.210	758	1192	0.060	0.036	2042	0.057
Low	III	Inward interaction	2.345	112	187	0.002	0.001	469	0.013
Low	IV	Sweep	5.755	249	385	0.011	0.007	1151	0.032
High	I	Outward interaction	9.540	2444	4899	0.039	0.026	1908	0.053
High	II	Ejection	4.705	1290	2563	0.010	0.007	941	0.026
High	III	Inward interaction	7.045	1300	2342	0.015	0.009	1409	0.039
High	IV	Sweep	4.160	1213	2749	0.008	0.006	832	0.023
Medium	I	Outward interaction	2.215	96	252	0.004	0.003	443	0.012
Medium	II	Ejection	9.855	194	395	0.032	0.021	1971	0.055
Medium	III	Inward interaction	1.585	44	104	0.001	0.001	317	0.009
Medium	IV	Sweep	11.435	295	625	0.057	0.038	2287	0.064

Table 287: Quadrant analysis summary for a hole size of 2 at the edge of the canopy, at a flow speed setting of 8 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
Low	I	Outward interaction	5.395	368	662	0.012	0.008	1079	0.030
Low	II	Ejection	6.685	397	788	0.016	0.011	1337	0.037
Low	III	Inward interaction	4.730	334	654	0.010	0.007	946	0.026
Low	IV	Sweep	8.920	709	1274	0.039	0.024	1784	0.050
High	I	Outward interaction	5.605	1502	3480	0.015	0.009	1121	0.031
High	II	Ejection	8.470	2131	4739	0.032	0.018	1694	0.047
High	III	Inward interaction	4.165	981	2403	0.007	0.004	833	0.023
High	IV	Sweep	7.395	1618	3600	0.021	0.012	1479	0.041
Medium	I	Outward interaction	6.805	540	1262	0.027	0.020	1361	0.038
Medium	II	Ejection	8.325	499	1131	0.031	0.022	1665	0.046
Medium	III	Inward interaction	2.675	135	289	0.003	0.002	535	0.015
Medium	IV	Sweep	7.590	406	792	0.023	0.014	1518	0.042

Table 288: Quadrant analysis summary for a hole size of 2 at the edge of the canopy, at a flow speed setting of 8 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
Low	I	Outward interaction	4.085	674	1187	0.007	0.004	817	0.023
Low	II	Ejection	5.780	744	1262	0.011	0.007	1156	0.032
Low	III	Inward interaction	5.655	991	1790	0.015	0.009	1131	0.032
Low	IV	Sweep	9.860	1974	3811	0.051	0.035	1972	0.055
High	I	Outward interaction	4.570	177	323	0.011	0.007	914	0.026
High	II	Ejection	9.855	330	592	0.043	0.026	1971	0.055
High	III	Inward interaction	3.125	101	190	0.004	0.003	625	0.017
High	IV	Sweep	8.235	225	412	0.025	0.015	1647	0.046
Medium	I	Outward interaction	2.680	133	286	0.004	0.003	536	0.015
Medium	II	Ejection	13.090	530	937	0.070	0.043	2618	0.073
Medium	III	Inward interaction	2.345	114	199	0.003	0.002	469	0.013
Medium	IV	Sweep	7.705	238	456	0.019	0.012	1541	0.043

Table 289: Quadrant analysis summary for a hole size of 2 above the canopy, at a flow speed setting of 8 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	4.925	305	514	0.016	0.010	985	0.028
High	II	Ejection	8.600	329	537	0.029	0.018	1720	0.048
High	III	Inward interaction	3.025	141	251	0.004	0.003	605	0.017
High	IV	Sweep	9.060	371	595	0.035	0.021	1812	0.051
Low	I	Outward interaction	6.715	673	1536	0.021	0.009	1343	0.038
Low	II	Ejection	5.845	474	1168	0.013	0.006	1169	0.033
Low	III	Inward interaction	5.695	495	1319	0.013	0.007	1139	0.032
Low	IV	Sweep	7.235	827	1933	0.027	0.013	1447	0.040
Medium	I	Outward interaction	4.395	223	343	0.013	0.007	879	0.024
Medium	II	Ejection	8.760	245	393	0.027	0.017	1752	0.049
Medium	III	Inward interaction	2.275	83	146	0.002	0.002	455	0.013
Medium	IV	Sweep	10.420	305	480	0.041	0.025	2084	0.058

Table 290: Quadrant analysis summary for a hole size of 2 above the canopy, at a flow speed setting of 8 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	4.875	394	628	0.014	0.009	975	0.027
High	II	Ejection	9.810	572	861	0.042	0.025	1962	0.055
High	III	Inward interaction	2.885	151	249	0.003	0.002	577	0.016
High	IV	Sweep	8.625	424	638	0.027	0.016	1725	0.048
Low	I	Outward interaction	2.445	161	338	0.003	0.001	489	0.014
Low	II	Ejection	7.785	434	768	0.022	0.010	1557	0.043
Low	III	Inward interaction	5.630	424	959	0.015	0.009	1126	0.031
Low	IV	Sweep	9.380	698	1514	0.042	0.024	1876	0.052
Medium	I	Outward interaction	4.495	206	339	0.009	0.006	899	0.025
Medium	II	Ejection	9.225	347	541	0.032	0.019	1845	0.052
Medium	III	Inward interaction	3.375	143	239	0.005	0.003	675	0.019
Medium	IV	Sweep	9.090	383	595	0.035	0.020	1818	0.051

Table 291: Quadrant analysis summary for a hole size of 2 above the canopy, at a flow speed setting of 8 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	1.270	769	1432	0.001	0.001	254	0.007
High	II	Ejection	13.120	5390	8541	0.061	0.037	2624	0.073
High	III	Inward interaction	0.925	544	905	0.000	0.000	185	0.005
High	IV	Sweep	11.565	4211	6687	0.042	0.025	2313	0.065
Low	I	Outward interaction	3.675	376	1430	0.006	0.003	735	0.021
Low	II	Ejection	9.665	981	3040	0.041	0.015	1933	0.054
Low	III	Inward interaction	4.215	471	1666	0.009	0.004	843	0.024
Low	IV	Sweep	8.750	774	2551	0.029	0.011	1750	0.049
Medium	I	Outward interaction	4.125	171	286	0.008	0.005	825	0.023
Medium	II	Ejection	10.220	400	638	0.046	0.026	2044	0.057
Medium	III	Inward interaction	3.480	135	219	0.005	0.003	696	0.019
Medium	IV	Sweep	8.000	266	421	0.024	0.013	1600	0.045

Table 292: Quadrant analysis summary for a hole size of 2 above the canopy, at a flow speed setting of 8 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	3.115	1160	1972	0.004	0.003	623	0.017
High	II	Ejection	10.860	4078	6930	0.053	0.032	2172	0.061
High	III	Inward interaction	3.015	1187	2157	0.004	0.003	603	0.017
High	IV	Sweep	8.800	2777	4652	0.029	0.018	1760	0.049
Low	I	Outward interaction	3.535	241	701	0.006	0.004	707	0.020
Low	II	Ejection	8.365	525	1212	0.029	0.016	1673	0.047
Low	III	Inward interaction	4.950	356	697	0.012	0.005	990	0.028
Low	IV	Sweep	9.075	526	1099	0.032	0.015	1815	0.051
Medium	I	Outward interaction	1.810	529	800	0.002	0.001	362	0.010
Medium	II	Ejection	13.585	4249	6531	0.092	0.066	2717	0.076
Medium	III	Inward interaction	2.950	1077	1810	0.005	0.004	590	0.016
Medium	IV	Sweep	7.400	1105	1403	0.013	0.008	1480	0.041

Table 293: Quadrant analysis summary for a hole size of 2 within the canopy, at a flow speed setting of 8 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	2.545	262	469	0.003	0.002	509	0.014
High	II	Ejection	11.540	1180	2101	0.064	0.041	2308	0.064
High	III	Inward interaction	2.195	236	459	0.002	0.002	439	0.012
High	IV	Sweep	8.795	597	933	0.025	0.014	1759	0.049
Low	I	Outward interaction	3.480	256	414	0.005	0.003	696	0.019
Low	II	Ejection	11.755	1223	1877	0.085	0.051	2351	0.066
Low	III	Inward interaction	4.050	289	474	0.007	0.004	810	0.023
Low	IV	Sweep	4.360	231	355	0.006	0.004	872	0.024
Medium	I	Outward interaction	2.455	202	336	0.003	0.002	491	0.014
Medium	II	Ejection	12.840	1034	1629	0.078	0.049	2568	0.072
Medium	III	Inward interaction	2.165	199	324	0.003	0.002	433	0.012
Medium	IV	Sweep	7.325	376	587	0.016	0.010	1465	0.041

Table 294: Quadrant analysis summary for a hole size of 2 within the canopy, at a flow speed setting of 8 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	12.875	1410	3074	0.119	0.083	2575	0.072
High	II	Ejection	1.585	151	405	0.002	0.001	317	0.009
High	III	Inward interaction	4.030	135	266	0.004	0.002	806	0.022
High	IV	Sweep	0.835	62	136	0.000	0.000	167	0.005
Low	I	Outward interaction	5.095	1184	2256	0.012	0.007	1019	0.029
Low	II	Ejection	7.830	1558	2856	0.024	0.014	1566	0.044
Low	III	Inward interaction	4.605	1005	1956	0.009	0.006	921	0.026
Low	IV	Sweep	8.735	1915	3562	0.033	0.020	1747	0.049
Medium	I	Outward interaction	4.075	621	1439	0.012	0.008	815	0.023
Medium	II	Ejection	9.875	718	1604	0.035	0.022	1975	0.055
Medium	III	Inward interaction	0.580	44	137	0.000	0.000	116	0.003
Medium	IV	Sweep	10.730	905	1931	0.048	0.029	2146	0.060

Table 295: Quadrant analysis summary for a hole size of 2 within the canopy, at a flow speed setting of 8 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	2.895	369	778	0.005	0.003	579	0.018
High	II	Ejection	6.830	592	1180	0.018	0.011	1366	0.042
High	III	Inward interaction	3.655	479	998	0.008	0.005	731	0.022
High	IV	Sweep	9.865	1197	2353	0.054	0.033	1973	0.060
Low	I	Outward interaction	6.785	534	1006	0.017	0.010	1357	0.038
Low	II	Ejection	5.505	492	921	0.013	0.008	1101	0.031
Low	III	Inward interaction	7.525	648	1251	0.023	0.014	1505	0.042
Low	IV	Sweep	6.580	686	1294	0.021	0.013	1316	0.037
Medium	I	Outward interaction	3.510	114	244	0.006	0.004	702	0.020
Medium	II	Ejection	9.435	266	541	0.036	0.023	1887	0.053
Medium	III	Inward interaction	3.205	104	226	0.005	0.003	641	0.018
Medium	IV	Sweep	9.590	277	561	0.038	0.024	1918	0.054

Table 296: Quadrant analysis summary for a hole size of 2 within the canopy, at a flow speed setting of 8 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	3.745	182	400	0.006	0.004	749	0.021
High	II	Ejection	9.220	399	756	0.035	0.017	1844	0.051
High	III	Inward interaction	3.605	177	366	0.006	0.003	721	0.020
High	IV	Sweep	9.635	400	880	0.037	0.021	1927	0.054
Low	I	Outward interaction	4.230	273	502	0.009	0.005	846	0.024
Low	II	Ejection	8.170	415	734	0.026	0.015	1634	0.046
Low	III	Inward interaction	3.585	219	419	0.006	0.004	717	0.020
Low	IV	Sweep	9.695	567	985	0.042	0.024	1939	0.054
Medium	I	Outward interaction	3.285	229	476	0.005	0.004	657	0.018
Medium	II	Ejection	8.520	436	809	0.026	0.016	1704	0.048
Medium	III	Inward interaction	3.230	219	419	0.005	0.003	646	0.018
Medium	IV	Sweep	11.055	645	1174	0.050	0.030	2211	0.062

## 5.5 Tables of quadrant statistics for a hole size of 3

Table 297: Quadrant analysis summary for a hole size of 3 at the edge of the canopy, at a flow speed setting of 0.5 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	4.320	308	855	0.029	0.020	864	0.024
High	II	Ejection	5.820	145	307	0.018	0.010	1164	0.033
High	III	Inward interaction	1.350	38	98	0.001	0.001	270	0.008
High	IV	Sweep	5.005	131	413	0.014	0.011	1001	0.028
Low	I	Outward interaction	3.530	261	793	0.018	0.013	706	0.020
Low	II	Ejection	6.025	160	362	0.019	0.010	1205	0.034
Low	III	Inward interaction	1.475	56	171	0.002	0.001	295	0.008
Low	IV	Sweep	5.410	155	493	0.016	0.013	1082	0.030
Medium	I	Outward interaction	3.925	119	350	0.025	0.020	785	0.022
Medium	II	Ejection	6.735	66	141	0.024	0.014	1347	0.038
Medium	III	Inward interaction	0.710	8	24	0.000	0.000	142	0.004
Medium	IV	Sweep	5.505	51	132	0.015	0.011	1101	0.031

Table 298: Quadrant analysis summary for a hole size of 3 at the edge of the canopy, at a flow speed setting of 0.5 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	4.175	302	911	0.030	0.026	835	0.023
High	II	Ejection	6.335	125	264	0.019	0.011	1267	0.035
High	III	Inward interaction	1.335	41	107	0.001	0.001	267	0.007
High	IV	Sweep	5.110	106	377	0.013	0.013	1022	0.029
Low	I	Outward interaction	3.915	205	623	0.026	0.020	783	0.022
Low	II	Ejection	6.600	105	236	0.022	0.013	1320	0.037
Low	III	Inward interaction	0.660	14	42	0.000	0.000	132	0.004
Low	IV	Sweep	5.590	89	256	0.016	0.012	1118	0.031
Medium	I	Outward interaction	2.760	80	254	0.012	0.010	552	0.015
Medium	II	Ejection	6.845	63	141	0.024	0.013	1369	0.038
Medium	III	Inward interaction	0.660	8	26	0.000	0.000	132	0.004
Medium	IV	Sweep	6.750	66	175	0.025	0.016	1350	0.038

Table 299: Quadrant analysis summary for a hole size of 3 at the edge of the canopy, at a flow speed setting of 0.5 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	4.580	306	899	0.036	0.026	916	0.026
High	II	Ejection	5.895	117	264	0.018	0.010	1179	0.033
High	III	Inward interaction	1.155	29	87	0.001	0.001	231	0.006
High	IV	Sweep	5.040	110	360	0.014	0.011	1008	0.028
Low	I	Outward interaction	2.955	151	528	0.014	0.011	591	0.016
Low	II	Ejection	6.200	98	236	0.019	0.011	1240	0.035
Low	III	Inward interaction	1.245	33	115	0.001	0.001	249	0.007
Low	IV	Sweep	5.745	88	261	0.016	0.011	1149	0.032
Medium	I	Outward interaction	2.520	85	283	0.011	0.011	504	0.014
Medium	II	Ejection	6.845	64	135	0.022	0.014	1369	0.038
Medium	III	Inward interaction	0.635	11	32	0.000	0.000	127	0.004
Medium	IV	Sweep	6.765	63	161	0.022	0.017	1353	0.038

Table 300: Quadrant analysis summary for a hole size of 3 at the edge of the canopy, at a flow speed setting of 0.5 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	3.530	151	459	0.017	0.013	706	0.020
High	II	Ejection	6.320	106	228	0.021	0.012	1264	0.035
High	III	Inward interaction	0.990	19	53	0.001	0.000	198	0.006
High	IV	Sweep	5.885	105	297	0.020	0.014	1177	0.033
Low	I	Outward interaction	2.920	160	597	0.013	0.010	584	0.016
Low	II	Ejection	5.860	105	258	0.017	0.009	1172	0.033
Low	III	Inward interaction	1.570	46	163	0.002	0.001	314	0.009
Low	IV	Sweep	5.840	102	346	0.016	0.012	1168	0.033
Medium	I	Outward interaction	3.010	116	398	0.013	0.011	602	0.017
Medium	II	Ejection	6.290	83	186	0.020	0.011	1258	0.035
Medium	III	Inward interaction	1.085	21	62	0.001	0.001	217	0.006
Medium	IV	Sweep	6.115	87	238	0.020	0.014	1223	0.034

Table 301: Quadrant analysis summary for a hole size of 3 above the canopy, at a flow speed setting of 0.5 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	3.660	277	797	0.019	0.014	732	0.020
High	II	Ejection	5.620	161	349	0.017	0.009	1124	0.031
High	III	Inward interaction	1.450	51	155	0.001	0.001	290	0.008
High	IV	Sweep	4.920	142	462	0.013	0.011	984	0.028
Low	I	Outward interaction	3.895	190	568	0.019	0.015	779	0.022
Low	II	Ejection	5.610	132	289	0.019	0.011	1122	0.031
Low	III	Inward interaction	0.875	20	55	0.000	0.000	175	0.005
Low	IV	Sweep	5.210	124	378	0.017	0.013	1042	0.029
Medium	I	Outward interaction	3.120	105	342	0.018	0.015	624	0.017
Medium	II	Ejection	6.810	64	140	0.023	0.013	1362	0.038
Medium	III	Inward interaction	0.610	8	25	0.000	0.000	122	0.003
Medium	IV	Sweep	6.315	62	166	0.021	0.014	1263	0.035

Table 302: Quadrant analysis summary for a hole size of 3 above the canopy, at a flow speed setting of 0.5 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	4.755	208	606	0.034	0.024	951	0.027
High	II	Ejection	6.240	98	217	0.021	0.011	1248	0.035
High	III	Inward interaction	0.825	14	39	0.000	0.000	165	0.005
High	IV	Sweep	5.395	89	290	0.016	0.013	1079	0.030
Low	I	Outward interaction	3.865	193	592	0.021	0.017	773	0.022
Low	II	Ejection	6.295	119	253	0.021	0.012	1259	0.035
Low	III	Inward interaction	0.875	23	56	0.001	0.000	175	0.005
Low	IV	Sweep	5.675	114	318	0.018	0.013	1135	0.032
Medium	I	Outward interaction	3.475	119	399	0.022	0.018	695	0.019
Medium	II	Ejection	6.555	61	137	0.021	0.012	1311	0.037
Medium	III	Inward interaction	0.845	13	38	0.001	0.000	169	0.005
Medium	IV	Sweep	6.175	58	161	0.019	0.013	1235	0.035

Table 303: Quadrant analysis summary for a hole size of 3 above the canopy, at a flow speed setting of 0.5 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	3.325	156	427	0.019	0.014	665	0.019
High	II	Ejection	7.030	105	229	0.027	0.015	1406	0.039
High	III	Inward interaction	0.485	8	22	0.000	0.000	97	0.003
High	IV	Sweep	6.250	90	260	0.021	0.016	1250	0.035
Low	I	Outward interaction	4.020	315	942	0.025	0.017	804	0.023
Low	II	Ejection	5.460	142	334	0.015	0.008	1092	0.031
Low	III	Inward interaction	1.250	42	139	0.001	0.001	250	0.007
Low	IV	Sweep	5.425	149	536	0.016	0.013	1085	0.030
Medium	I	Outward interaction	3.150	114	354	0.018	0.015	630	0.018
Medium	II	Ejection	6.845	70	155	0.024	0.014	1369	0.038
Medium	III	Inward interaction	0.705	12	35	0.000	0.000	141	0.004
Medium	IV	Sweep	5.875	57	156	0.017	0.012	1175	0.033

Table 304: Quadrant analysis summary for a hole size of 3 above the canopy, at a flow speed setting of 0.5 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	3.930	216	609	0.024	0.018	786	0.022
High	II	Ejection	5.925	107	224	0.018	0.010	1185	0.033
High	III	Inward interaction	0.815	19	54	0.000	0.000	163	0.005
High	IV	Sweep	5.990	125	349	0.021	0.016	1198	0.033
Low	I	Outward interaction	4.070	286	891	0.024	0.019	814	0.023
Low	II	Ejection	5.990	157	346	0.020	0.011	1198	0.033
Low	III	Inward interaction	1.030	31	94	0.001	0.001	206	0.006
Low	IV	Sweep	5.090	131	406	0.014	0.011	1018	0.028
Medium	I	Outward interaction	3.160	124	315	0.016	0.012	632	0.018
Medium	II	Ejection	5.890	88	176	0.021	0.012	1178	0.033
Medium	III	Inward interaction	0.540	8	24	0.000	0.000	108	0.003
Medium	IV	Sweep	6.845	83	184	0.023	0.015	1369	0.038

Table 305: Quadrant analysis summary for a hole size of 3 within the canopy, at a flow speed setting of 0.5 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	3.945	412	1291	0.026	0.018	789	0.022
High	II	Ejection	5.285	169	386	0.014	0.007	1057	0.030
High	III	Inward interaction	1.450	57	171	0.001	0.001	290	0.008
High	IV	Sweep	5.585	206	758	0.018	0.015	1117	0.031
Low	I	Outward interaction	3.875	430	1326	0.025	0.018	775	0.022
Low	II	Ejection	5.755	195	444	0.017	0.009	1151	0.032
Low	III	Inward interaction	1.460	70	207	0.002	0.001	292	0.008
Low	IV	Sweep	5.160	193	667	0.015	0.012	1032	0.029
Medium	I	Outward interaction	3.280	201	799	0.015	0.012	656	0.018
Medium	II	Ejection	5.240	110	282	0.013	0.007	1048	0.029
Medium	III	Inward interaction	1.785	63	213	0.003	0.002	357	0.010
Medium	IV	Sweep	5.220	113	435	0.014	0.010	1044	0.029

Table 306: Quadrant analysis summary for a hole size of 3 within the canopy, at a flow speed setting of 0.5 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	3.560	411	1286	0.020	0.016	712	0.020
High	II	Ejection	5.650	202	448	0.016	0.009	1130	0.032
High	III	Inward interaction	1.525	81	208	0.002	0.001	305	0.009
High	IV	Sweep	5.370	226	730	0.017	0.014	1074	0.030
Low	I	Outward interaction	3.755	217	637	0.021	0.016	751	0.021
Low	II	Ejection	6.160	131	287	0.021	0.011	1232	0.035
Low	III	Inward interaction	1.105	27	89	0.001	0.001	221	0.006
Low	IV	Sweep	5.350	111	343	0.016	0.012	1070	0.030
Medium	I	Outward interaction	2.815	192	887	0.011	0.009	563	0.016
Medium	II	Ejection	5.610	130	353	0.014	0.007	1122	0.031
Medium	III	Inward interaction	1.590	62	239	0.002	0.001	318	0.009
Medium	IV	Sweep	5.705	139	601	0.016	0.013	1141	0.032

Table 307: Quadrant analysis summary for a hole size of 3 within the canopy, at a flow speed setting of 0.5 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	0.915	82	232	0.001	0.001	183	0.005
High	II	Ejection	6.710	295	608	0.021	0.013	1342	0.038
High	III	Inward interaction	0.625	49	142	0.000	0.000	125	0.003
High	IV	Sweep	5.945	267	608	0.017	0.011	1189	0.033
Low	I	Outward interaction	2.560	103	285	0.011	0.008	512	0.014
Low	II	Ejection	7.750	106	209	0.034	0.018	1550	0.043
Low	III	Inward interaction	0.175	2	8	0.000	0.000	35	0.001
Low	IV	Sweep	7.300	104	287	0.031	0.023	1460	0.041
Medium	I	Outward interaction	2.430	161	733	0.008	0.008	486	0.014
Medium	II	Ejection	6.220	134	344	0.017	0.010	1244	0.035
Medium	III	Inward interaction	1.415	57	204	0.002	0.001	283	0.008
Medium	IV	Sweep	5.445	131	525	0.015	0.013	1089	0.030

Table 308: Quadrant analysis summary for a hole size of 3 within the canopy, at a flow speed setting of 0.5 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	4.610	268	898	0.029	0.025	922	0.026
Low	II	Ejection	5.630	127	287	0.017	0.010	1126	0.032
Low	III	Inward interaction	1.435	39	106	0.001	0.001	287	0.008
Low	IV	Sweep	4.690	120	422	0.013	0.012	938	0.026
Medium	I	Outward interaction	2.760	196	729	0.012	0.009	552	0.015
Medium	II	Ejection	6.455	144	365	0.020	0.011	1291	0.036
Medium	III	Inward interaction	1.290	47	171	0.001	0.001	258	0.007
Medium	IV	Sweep	5.340	112	397	0.013	0.010	1068	0.030

Table 309: Quadrant analysis summary for a hole size of 3 at the edge of the canopy, at a flow speed setting of 1 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	3.940	306	963	0.023	0.017	788	0.022
High	II	Ejection	5.745	142	333	0.016	0.009	1149	0.032
High	III	Inward interaction	1.540	55	156	0.002	0.001	308	0.009
High	IV	Sweep	5.170	157	511	0.016	0.012	1034	0.029
Low	I	Outward interaction	3.550	227	655	0.017	0.013	710	0.020
Low	II	Ejection	6.095	152	333	0.020	0.011	1219	0.034
Low	III	Inward interaction	1.170	37	106	0.001	0.001	234	0.007
Low	IV	Sweep	5.725	147	443	0.018	0.014	1145	0.032
Medium	I	Outward interaction	3.390	133	432	0.019	0.016	678	0.019
Medium	II	Ejection	6.305	75	166	0.020	0.011	1261	0.035
Medium	III	Inward interaction	1.030	18	54	0.001	0.001	206	0.006
Medium	IV	Sweep	5.885	70	193	0.017	0.012	1177	0.033

Table 310: Quadrant analysis summary for a hole size of 3 at the edge of the canopy, at a flow speed setting of 1 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	3.640	209	740	0.020	0.019	728	0.020
High	II	Ejection	6.365	113	255	0.019	0.012	1273	0.036
High	III	Inward interaction	1.310	39	103	0.001	0.001	262	0.007
High	IV	Sweep	5.330	107	346	0.015	0.013	1066	0.030
Low	I	Outward interaction	4.200	258	818	0.027	0.021	840	0.023
Low	II	Ejection	5.985	123	286	0.019	0.011	1197	0.033
Low	III	Inward interaction	1.130	32	93	0.001	0.001	226	0.006
Low	IV	Sweep	5.270	110	348	0.015	0.011	1054	0.029
Medium	I	Outward interaction	2.810	83	284	0.011	0.009	562	0.016
Medium	II	Ejection	6.575	77	176	0.023	0.013	1315	0.037
Medium	III	Inward interaction	0.955	14	43	0.001	0.000	191	0.005
Medium	IV	Sweep	6.190	73	195	0.021	0.014	1238	0.035

Table 311: Quadrant analysis summary for a hole size of 3 at the edge of the canopy, at a flow speed setting of 1 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	3.640	203	593	0.020	0.015	728	0.020
High	II	Ejection	6.390	125	270	0.022	0.012	1278	0.036
High	III	Inward interaction	0.785	16	46	0.000	0.000	157	0.004
High	IV	Sweep	6.210	132	414	0.023	0.018	1242	0.035
Low	I	Outward interaction	2.670	108	344	0.011	0.009	534	0.015
Low	II	Ejection	6.930	82	191	0.022	0.013	1386	0.039
Low	III	Inward interaction	0.880	21	62	0.001	0.001	176	0.005
Low	IV	Sweep	5.865	71	192	0.016	0.011	1173	0.033
Medium	I	Outward interaction	2.985	118	402	0.017	0.017	597	0.017
Medium	II	Ejection	6.675	65	140	0.021	0.013	1335	0.037
Medium	III	Inward interaction	0.880	16	50	0.001	0.001	176	0.005
Medium	IV	Sweep	6.515	65	167	0.020	0.015	1303	0.036

Table 312: Quadrant analysis summary for a hole size of 3 at the edge of the canopy, at a flow speed setting of 1 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	4.385	382	1122	0.030	0.023	877	0.025
High	II	Ejection	5.945	174	366	0.019	0.010	1189	0.033
High	III	Inward interaction	1.195	44	122	0.001	0.001	239	0.007
High	IV	Sweep	5.500	164	493	0.016	0.013	1100	0.031
Low	I	Outward interaction	3.020	128	422	0.012	0.010	604	0.017
Low	II	Ejection	5.835	94	218	0.017	0.010	1167	0.033
Low	III	Inward interaction	1.320	35	112	0.001	0.001	264	0.007
Low	IV	Sweep	5.480	90	264	0.015	0.011	1096	0.031
Medium	I	Outward interaction	2.650	101	322	0.011	0.008	530	0.015
Medium	II	Ejection	6.360	80	186	0.020	0.012	1272	0.036
Medium	III	Inward interaction	0.920	19	60	0.001	0.001	184	0.005
Medium	IV	Sweep	6.365	83	228	0.021	0.014	1273	0.036

Table 313: Quadrant analysis summary for a hole size of 3 above the canopy, at a flow speed setting of 1 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	4.135	389	1195	0.027	0.020	827	0.023
High	II	Ejection	5.965	185	435	0.018	0.010	1193	0.033
High	III	Inward interaction	1.400	56	190	0.001	0.001	280	0.008
High	IV	Sweep	5.130	159	528	0.014	0.011	1026	0.029
Low	I	Outward interaction	3.565	232	686	0.020	0.014	713	0.020
Low	II	Ejection	6.185	138	305	0.020	0.011	1237	0.035
Low	III	Inward interaction	1.085	33	100	0.001	0.001	217	0.006
Low	IV	Sweep	5.840	130	387	0.018	0.013	1168	0.033
Medium	I	Outward interaction	3.570	152	489	0.023	0.018	714	0.020
Medium	II	Ejection	6.295	76	176	0.020	0.012	1259	0.035
Medium	III	Inward interaction	0.920	17	51	0.001	0.000	184	0.005
Medium	IV	Sweep	5.700	66	183	0.016	0.011	1140	0.032

Table 314: Quadrant analysis summary for a hole size of 3 above the canopy, at a flow speed setting of 1 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	3.940	151	455	0.021	0.015	788	0.022
High	II	Ejection	5.950	99	225	0.020	0.011	1190	0.033
High	III	Inward interaction	1.035	19	60	0.001	0.001	207	0.006
High	IV	Sweep	5.510	88	252	0.017	0.012	1102	0.031
Low	I	Outward interaction	3.625	242	691	0.021	0.015	725	0.020
Low	II	Ejection	6.210	129	287	0.019	0.011	1242	0.035
Low	III	Inward interaction	1.165	37	100	0.001	0.001	233	0.006
Low	IV	Sweep	5.710	125	388	0.017	0.013	1142	0.032
Medium	I	Outward interaction	3.300	108	360	0.017	0.013	660	0.018
Medium	II	Ejection	6.410	73	173	0.022	0.013	1282	0.036
Medium	III	Inward interaction	1.100	19	56	0.001	0.001	220	0.006
Medium	IV	Sweep	5.930	64	177	0.018	0.012	1186	0.033

Table 315: Quadrant analysis summary for a hole size of 3 above the canopy, at a flow speed setting of 1 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	3.795	116	334	0.022	0.015	759	0.021
High	II	Ejection	6.610	72	168	0.023	0.013	1322	0.037
High	III	Inward interaction	0.560	8	22	0.000	0.000	112	0.003
High	IV	Sweep	5.785	63	185	0.018	0.012	1157	0.032
Low	I	Outward interaction	3.140	205	596	0.014	0.009	628	0.018
Low	II	Ejection	5.745	131	313	0.016	0.009	1149	0.032
Low	III	Inward interaction	1.480	52	167	0.002	0.001	296	0.008
Low	IV	Sweep	5.715	144	507	0.018	0.014	1143	0.032
Medium	I	Outward interaction	2.650	100	317	0.013	0.011	530	0.015
Medium	II	Ejection	6.870	71	164	0.025	0.015	1374	0.038
Medium	III	Inward interaction	0.645	10	30	0.000	0.000	129	0.004
Medium	IV	Sweep	6.375	61	154	0.020	0.013	1275	0.036

Table 316: Quadrant analysis summary for a hole size of 3 above the canopy, at a flow speed setting of 1 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	2.550	88	239	0.009	0.007	510	0.014
High	II	Ejection	6.470	79	166	0.020	0.012	1294	0.036
High	III	Inward interaction	0.590	11	29	0.000	0.000	118	0.003
High	IV	Sweep	7.020	102	229	0.029	0.017	1404	0.039
Low	I	Outward interaction	3.310	211	545	0.013	0.010	662	0.018
Low	II	Ejection	5.690	150	286	0.016	0.009	1138	0.032
Low	III	Inward interaction	0.575	20	52	0.000	0.000	115	0.003
Low	IV	Sweep	6.005	165	351	0.019	0.012	1201	0.033
Medium	I	Outward interaction	1.990	73	227	0.007	0.006	398	0.011
Medium	II	Ejection	6.820	79	175	0.025	0.015	1364	0.038
Medium	III	Inward interaction	0.580	11	35	0.000	0.000	116	0.003
Medium	IV	Sweep	6.760	71	181	0.022	0.015	1352	0.038

Table 317: Quadrant analysis summary for a hole size of 3 within the canopy, at a flow speed setting of 1 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	3.620	246	808	0.021	0.016	724	0.020
High	II	Ejection	6.220	141	323	0.021	0.011	1244	0.035
High	III	Inward interaction	1.080	30	96	0.001	0.001	216	0.006
High	IV	Sweep	5.880	131	433	0.018	0.014	1176	0.033
Low	I	Outward interaction	3.095	166	492	0.013	0.010	619	0.017
Low	II	Ejection	6.670	135	300	0.023	0.013	1334	0.037
Low	III	Inward interaction	0.870	26	78	0.001	0.000	174	0.005
Low	IV	Sweep	6.330	129	389	0.021	0.016	1266	0.035
Medium	I	Outward interaction	3.010	119	387	0.014	0.010	602	0.017
Medium	II	Ejection	6.145	85	194	0.020	0.011	1229	0.034
Medium	III	Inward interaction	1.270	27	89	0.001	0.001	254	0.007
Medium	IV	Sweep	5.670	76	233	0.016	0.012	1134	0.032

Table 318: Quadrant analysis summary for a hole size of 3 within the canopy, at a flow speed setting of 1 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	3.450	302	911	0.018	0.014	690	0.019
High	II	Ejection	6.145	179	386	0.019	0.011	1229	0.034
High	III	Inward interaction	1.330	58	155	0.001	0.001	266	0.007
High	IV	Sweep	5.925	188	659	0.019	0.017	1185	0.033
Low	I	Outward interaction	3.990	159	482	0.022	0.016	798	0.022
Low	II	Ejection	5.580	88	205	0.017	0.009	1116	0.031
Low	III	Inward interaction	1.330	27	85	0.001	0.001	266	0.007
Low	IV	Sweep	5.095	84	253	0.015	0.010	1019	0.028
Medium	I	Outward interaction	2.825	156	652	0.012	0.011	565	0.016
Medium	II	Ejection	6.525	117	284	0.020	0.011	1305	0.037
Medium	III	Inward interaction	1.350	39	134	0.001	0.001	270	0.008
Medium	IV	Sweep	5.585	103	360	0.015	0.012	1117	0.031

Table 319: Quadrant analysis summary for a hole size of 3 within the canopy, at a flow speed setting of 1 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	5.450	520	1565	0.044	0.034	1090	0.030
High	II	Ejection	4.735	151	338	0.011	0.006	947	0.026
High	III	Inward interaction	1.860	69	189	0.002	0.001	372	0.010
High	IV	Sweep	4.640	189	619	0.014	0.011	928	0.026
Low	I	Outward interaction	2.230	31	93	0.007	0.004	446	0.012
Low	II	Ejection	7.015	44	120	0.030	0.016	1403	0.039
Low	III	Inward interaction	0.495	3	18	0.000	0.000	99	0.003
Low	IV	Sweep	6.390	36	110	0.022	0.013	1278	0.036
Medium	I	Outward interaction	2.755	194	870	0.011	0.011	551	0.015
Medium	II	Ejection	5.675	122	309	0.015	0.008	1135	0.032
Medium	III	Inward interaction	1.595	63	239	0.002	0.002	319	0.009
Medium	IV	Sweep	5.385	119	455	0.014	0.011	1077	0.030

Table 320: Quadrant analysis summary for a hole size of 3 within the canopy, at a flow speed setting of 1 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	3.705	406	1163	0.021	0.015	741	0.021
High	II	Ejection	6.090	215	484	0.019	0.010	1218	0.034
High	III	Inward interaction	1.275	60	187	0.001	0.001	255	0.007
High	IV	Sweep	5.705	221	772	0.018	0.015	1141	0.032
Low	I	Outward interaction	4.220	371	1125	0.028	0.021	844	0.024
Low	II	Ejection	5.935	168	364	0.018	0.009	1187	0.033
Low	III	Inward interaction	1.420	48	151	0.001	0.001	284	0.008
Low	IV	Sweep	5.260	161	528	0.015	0.012	1052	0.029
Medium	I	Outward interaction	2.990	193	775	0.013	0.011	598	0.017
Medium	II	Ejection	6.000	126	308	0.017	0.009	1200	0.034
Medium	III	Inward interaction	1.410	49	163	0.002	0.001	282	0.008
Medium	IV	Sweep	5.350	116	427	0.014	0.011	1070	0.030

Table 321: Quadrant analysis summary for a hole size of 3 at the edge of the canopy, at a flow speed setting of 10 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	2.545	491	706	0.005	0.003	509	0.014
High	II	Ejection	6.200	1013	1397	0.024	0.014	1240	0.035
High	III	Inward interaction	1.105	163	212	0.001	0.000	221	0.006
High	IV	Sweep	2.950	347	460	0.004	0.002	590	0.016
Low	I	Outward interaction	4.220	553	802	0.011	0.006	844	0.024
Low	II	Ejection	4.250	715	1055	0.014	0.007	850	0.024
Low	III	Inward interaction	1.825	182	280	0.001	0.001	365	0.010
Low	IV	Sweep	1.620	189	292	0.001	0.001	324	0.009
Medium	I	Outward interaction	2.145	357	531	0.003	0.002	429	0.012
Medium	II	Ejection	5.890	946	1330	0.022	0.014	1178	0.033
Medium	III	Inward interaction	1.630	211	294	0.001	0.001	326	0.009
Medium	IV	Sweep	3.420	440	584	0.006	0.003	684	0.019

Table 322: Quadrant analysis summary for a hole size of 3 at the edge of the canopy, at a flow speed setting of 10 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	6.820	2060	3821	0.031	0.022	1364	0.038
High	II	Ejection	1.310	366	521	0.001	0.001	262	0.007
High	III	Inward interaction	2.215	353	459	0.002	0.001	443	0.012
High	IV	Sweep	1.515	462	999	0.002	0.001	303	0.008
Low	I	Outward interaction	1.920	282	484	0.002	0.001	384	0.011
Low	II	Ejection	5.545	825	1252	0.020	0.010	1109	0.031
Low	III	Inward interaction	2.760	396	664	0.005	0.003	552	0.015
Low	IV	Sweep	2.495	250	361	0.003	0.001	499	0.014
Medium	I	Outward interaction	0.655	42	109	0.000	0.000	131	0.004
Medium	II	Ejection	5.300	179	337	0.013	0.008	1060	0.030
Medium	III	Inward interaction	0.450	22	50	0.000	0.000	90	0.003
Medium	IV	Sweep	7.110	300	582	0.030	0.018	1422	0.040

Table 323: Quadrant analysis summary for a hole size of 3 at the edge of the canopy, at a flow speed setting of 10 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	5.975	1573	3338	0.019	0.009	1195	0.033
High	II	Ejection	0.950	367	902	0.001	0.000	190	0.005
High	III	Inward interaction	5.545	1286	2604	0.014	0.007	1109	0.031
High	IV	Sweep	0.630	183	454	0.000	0.000	126	0.004
Low	I	Outward interaction	1.595	278	479	0.001	0.001	319	0.009
Low	II	Ejection	3.450	501	783	0.005	0.003	690	0.019
Low	III	Inward interaction	3.140	616	910	0.006	0.004	628	0.018
Low	IV	Sweep	4.805	906	1502	0.014	0.009	961	0.027
Medium	I	Outward interaction	3.505	261	792	0.014	0.012	701	0.020
Medium	II	Ejection	3.615	101	236	0.006	0.004	723	0.020
Medium	III	Inward interaction	0.265	12	29	0.000	0.000	53	0.001
Medium	IV	Sweep	6.615	260	682	0.027	0.020	1323	0.037

Table 324: Quadrant analysis summary for a hole size of 3 at the edge of the canopy, at a flow speed setting of 10 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	0.620	36	72	0.000	0.000	124	0.003
High	II	Ejection	5.620	169	340	0.014	0.009	1124	0.031
High	III	Inward interaction	0.245	12	28	0.000	0.000	49	0.001
High	IV	Sweep	6.830	237	477	0.024	0.015	1366	0.038
Low	I	Outward interaction	3.445	667	1042	0.006	0.003	689	0.019
Low	II	Ejection	1.425	269	435	0.001	0.001	285	0.008
Low	III	Inward interaction	3.570	752	1221	0.007	0.004	714	0.020
Low	IV	Sweep	3.790	970	1675	0.010	0.006	758	0.021
Medium	I	Outward interaction	0.765	75	161	0.001	0.000	153	0.004
Medium	II	Ejection	7.460	337	624	0.028	0.016	1492	0.042
Medium	III	Inward interaction	0.035	2	4	0.000	0.000	7	0.000
Medium	IV	Sweep	5.770	221	401	0.014	0.008	1154	0.032

Table 325: Quadrant analysis summary for a hole size of 3 above the canopy, at a flow speed setting of 10 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	1.670	196	282	0.002	0.001	334	0.009
High	II	Ejection	5.640	496	690	0.017	0.010	1128	0.032
High	III	Inward interaction	1.490	147	229	0.001	0.001	298	0.008
High	IV	Sweep	4.265	342	484	0.009	0.005	853	0.024
Low	I	Outward interaction	1.830	260	497	0.002	0.001	366	0.010
Low	II	Ejection	3.380	407	660	0.005	0.002	676	0.019
Low	III	Inward interaction	2.980	459	773	0.005	0.002	596	0.017
Low	IV	Sweep	3.945	647	1124	0.010	0.005	789	0.022
Medium	I	Outward interaction	1.510	120	188	0.002	0.001	302	0.008
Medium	II	Ejection	4.620	263	382	0.011	0.006	924	0.026
Medium	III	Inward interaction	1.125	72	119	0.001	0.000	225	0.006
Medium	IV	Sweep	5.365	363	509	0.017	0.009	1073	0.030

Table 326: Quadrant analysis summary for a hole size of 3 above the canopy, at a flow speed setting of 10 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	2.440	336	519	0.004	0.002	488	0.014
High	II	Ejection	4.095	473	712	0.009	0.006	819	0.023
High	III	Inward interaction	2.175	219	305	0.002	0.001	435	0.012
High	IV	Sweep	3.830	423	591	0.008	0.004	766	0.021
Low	I	Outward interaction	1.065	108	174	0.001	0.000	213	0.006
Low	II	Ejection	4.495	391	621	0.009	0.005	899	0.025
Low	III	Inward interaction	2.515	344	606	0.004	0.003	503	0.014
Low	IV	Sweep	4.755	528	903	0.013	0.007	951	0.026
Medium	I	Outward interaction	2.665	245	368	0.005	0.003	533	0.015
Medium	II	Ejection	4.295	290	430	0.010	0.005	859	0.024
Medium	III	Inward interaction	1.360	88	139	0.001	0.001	272	0.008
Medium	IV	Sweep	4.285	275	390	0.009	0.005	857	0.024

Table 327: Quadrant analysis summary for a hole size of 3 above the canopy, at a flow speed setting of 10 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	0.955	979	1756	0.001	0.000	191	0.005
High	II	Ejection	6.980	5166	8080	0.025	0.015	1396	0.039
High	III	Inward interaction	0.410	376	638	0.000	0.000	82	0.002
High	IV	Sweep	4.625	2716	3991	0.009	0.005	925	0.026
Low	I	Outward interaction	1.950	225	496	0.002	0.001	390	0.011
Low	II	Ejection	4.480	491	990	0.011	0.004	896	0.025
Low	III	Inward interaction	1.720	200	466	0.002	0.001	344	0.010
Low	IV	Sweep	4.740	487	1121	0.011	0.005	948	0.027
Medium	I	Outward interaction	4.385	441	643	0.012	0.007	877	0.024
Medium	II	Ejection	4.130	416	611	0.011	0.006	826	0.023
Medium	III	Inward interaction	1.195	87	135	0.001	0.000	239	0.007
Medium	IV	Sweep	2.570	212	313	0.003	0.002	514	0.014

Table 328: Quadrant analysis summary for a hole size of 3 above the canopy, at a flow speed setting of 10 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	0.375	533	933	0.000	0.000	75	0.002
High	II	Ejection	7.220	7194	10554	0.026	0.016	1444	0.040
High	III	Inward interaction	0.260	385	607	0.000	0.000	52	0.001
High	IV	Sweep	5.795	4646	6114	0.013	0.007	1159	0.032
Low	I	Outward interaction	1.370	139	232	0.001	0.001	274	0.008
Low	II	Ejection	4.810	428	674	0.012	0.006	962	0.027
Low	III	Inward interaction	1.670	201	299	0.002	0.001	334	0.009
Low	IV	Sweep	4.920	444	623	0.013	0.006	984	0.028
Medium	I	Outward interaction	2.110	260	405	0.003	0.002	422	0.012
Medium	II	Ejection	7.835	1112	1591	0.045	0.027	1567	0.044
Medium	III	Inward interaction	0.990	103	150	0.001	0.000	198	0.006
Medium	IV	Sweep	1.855	151	204	0.001	0.001	371	0.010

Table 329: Quadrant analysis summary for a hole size of 3 within the canopy, at a flow speed setting of 10 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	1.215	252	419	0.001	0.001	243	0.007
High	II	Ejection	8.325	1726	2902	0.044	0.028	1665	0.047
High	III	Inward interaction	0.630	139	228	0.000	0.000	126	0.004
High	IV	Sweep	2.255	279	388	0.002	0.001	451	0.013
Low	I	Outward interaction	1.110	181	278	0.001	0.000	222	0.006
Low	II	Ejection	7.145	1212	1766	0.034	0.020	1429	0.040
Low	III	Inward interaction	0.985	164	228	0.001	0.000	197	0.005
Low	IV	Sweep	4.230	493	668	0.008	0.004	846	0.024
Medium	I	Outward interaction	0.820	128	201	0.000	0.000	164	0.005
Medium	II	Ejection	7.960	1359	2016	0.041	0.025	1592	0.045
Medium	III	Inward interaction	0.825	158	247	0.000	0.000	165	0.005
Medium	IV	Sweep	3.900	429	582	0.006	0.004	780	0.022

Table 330: Quadrant analysis summary for a hole size of 3 within the canopy, at a flow speed setting of 10 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	4.560	551	1286	0.022	0.016	912	0.025
High	II	Ejection	3.715	206	431	0.007	0.004	743	0.021
High	III	Inward interaction	0.220	13	23	0.000	0.000	44	0.001
High	IV	Sweep	4.260	285	577	0.011	0.007	852	0.024
Low	I	Outward interaction	1.145	547	910	0.001	0.000	229	0.006
Low	II	Ejection	4.920	1828	3031	0.012	0.007	984	0.027
Low	III	Inward interaction	1.110	503	845	0.001	0.000	222	0.006
Low	IV	Sweep	5.605	2022	3472	0.015	0.009	1121	0.031
Medium	I	Outward interaction	4.265	1049	2017	0.011	0.006	853	0.024
Medium	II	Ejection	2.665	673	1470	0.004	0.003	533	0.015
Medium	III	Inward interaction	2.205	419	906	0.002	0.001	441	0.012
Medium	IV	Sweep	2.990	678	1309	0.005	0.003	598	0.017

Table 331: Quadrant analysis summary for a hole size of 3 within the canopy, at a flow speed setting of 10 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	1.480	225	416	0.001	0.001	296	0.008
High	II	Ejection	5.385	785	1382	0.018	0.009	1077	0.031
High	III	Inward interaction	1.510	221	407	0.001	0.001	302	0.009
High	IV	Sweep	4.180	499	871	0.009	0.004	836	0.024
Low	I	Outward interaction	2.690	334	659	0.004	0.002	538	0.015
Low	II	Ejection	2.920	394	722	0.005	0.002	584	0.016
Low	III	Inward interaction	3.540	480	889	0.007	0.004	708	0.020
Low	IV	Sweep	3.090	435	795	0.006	0.003	618	0.017
Medium	I	Outward interaction	1.455	71	152	0.001	0.001	291	0.008
Medium	II	Ejection	4.820	216	467	0.012	0.007	964	0.027
Medium	III	Inward interaction	1.575	82	190	0.002	0.001	315	0.009
Medium	IV	Sweep	4.675	212	431	0.012	0.006	935	0.026

Table 332: Quadrant analysis summary for a hole size of 3 within the canopy, at a flow speed setting of 10 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	2.350	209	352	0.003	0.002	470	0.013
High	II	Ejection	5.020	485	778	0.015	0.007	1004	0.028
High	III	Inward interaction	2.080	177	303	0.002	0.001	416	0.012
High	IV	Sweep	3.375	284	534	0.006	0.003	675	0.019
Low	I	Outward interaction	0.850	128	224	0.000	0.000	170	0.005
Low	II	Ejection	3.665	396	642	0.006	0.003	733	0.020
Low	III	Inward interaction	1.365	234	466	0.001	0.001	273	0.008
Low	IV	Sweep	7.550	1082	1933	0.033	0.019	1510	0.042
Medium	I	Outward interaction	1.820	184	299	0.002	0.001	364	0.010
Medium	II	Ejection	3.730	300	458	0.007	0.004	746	0.021
Medium	III	Inward interaction	1.905	180	287	0.002	0.001	381	0.011
Medium	IV	Sweep	5.030	435	673	0.013	0.007	1006	0.028

Table 333: Quadrant analysis summary for a hole size of 3 above the canopy, at a flow speed setting of 15 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	2.060	370	561	0.003	0.002	412	0.012
High	II	Ejection	4.740	671	977	0.012	0.007	948	0.027
High	III	Inward interaction	1.540	231	350	0.001	0.001	308	0.009
High	IV	Sweep	3.780	546	786	0.008	0.004	756	0.021
Low	I	Outward interaction	1.355	240	358	0.001	0.000	271	0.008
Low	II	Ejection	2.665	492	685	0.003	0.002	533	0.015
Low	III	Inward interaction	3.855	983	1445	0.010	0.005	771	0.022
Low	IV	Sweep	4.685	1276	1946	0.015	0.008	937	0.026
Medium	I	Outward interaction	2.975	456	699	0.006	0.003	595	0.017
Medium	II	Ejection	4.695	692	1052	0.014	0.008	939	0.026
Medium	III	Inward interaction	1.415	169	256	0.001	0.001	283	0.008
Medium	IV	Sweep	3.280	416	605	0.006	0.003	656	0.018

Table 334: Quadrant analysis summary for a hole size of 3 above the canopy, at a flow speed setting of 15 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	2.350	538	822	0.004	0.002	470	0.013
High	II	Ejection	4.090	722	1090	0.008	0.005	818	0.023
High	III	Inward interaction	1.475	310	477	0.001	0.001	295	0.008
High	IV	Sweep	4.060	704	990	0.008	0.004	812	0.023
Low	I	Outward interaction	2.140	378	551	0.003	0.001	428	0.012
Low	II	Ejection	3.585	581	813	0.007	0.003	717	0.020
Low	III	Inward interaction	2.660	526	797	0.004	0.002	532	0.015
Low	IV	Sweep	4.675	859	1306	0.013	0.007	935	0.026
Medium	I	Outward interaction	3.275	569	877	0.007	0.004	655	0.018
Medium	II	Ejection	4.580	755	1148	0.013	0.007	916	0.026
Medium	III	Inward interaction	1.585	236	344	0.001	0.001	317	0.009
Medium	IV	Sweep	3.360	458	663	0.006	0.003	672	0.019

Table 335: Quadrant analysis summary for a hole size of 3 above the canopy, at a flow speed setting of 15 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	2.915	645	1025	0.005	0.003	583	0.016
High	II	Ejection	4.740	970	1516	0.013	0.007	948	0.026
High	III	Inward interaction	2.435	468	706	0.003	0.002	487	0.014
High	IV	Sweep	2.245	443	704	0.003	0.002	449	0.013
Low	I	Outward interaction	2.200	496	778	0.003	0.001	440	0.012
Low	II	Ejection	4.875	967	1487	0.012	0.006	975	0.027
Low	III	Inward interaction	1.495	354	527	0.001	0.001	299	0.008
Low	IV	Sweep	3.910	748	1113	0.008	0.004	782	0.022
Medium	I	Outward interaction	3.785	746	1154	0.010	0.006	757	0.021
Medium	II	Ejection	3.625	607	992	0.008	0.005	725	0.020
Medium	III	Inward interaction	1.535	218	325	0.001	0.001	307	0.009
Medium	IV	Sweep	4.230	598	840	0.009	0.005	846	0.024

Table 336: Quadrant analysis summary for a hole size of 3 above the canopy, at a flow speed setting of 15 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	1.470	1936	2989	0.001	0.001	294	0.008
High	II	Ejection	8.885	13601	20146	0.061	0.040	1777	0.050
High	III	Inward interaction	1.105	1772	2638	0.001	0.001	221	0.006
High	IV	Sweep	1.140	745	965	0.000	0.000	228	0.006
Low	I	Outward interaction	2.275	426	669	0.003	0.002	455	0.013
Low	II	Ejection	4.760	880	1309	0.014	0.007	952	0.027
Low	III	Inward interaction	1.600	286	418	0.001	0.001	320	0.009
Low	IV	Sweep	4.295	680	943	0.009	0.005	859	0.024
Medium	I	Outward interaction	3.350	699	1090	0.008	0.005	670	0.019
Medium	II	Ejection	4.740	842	1272	0.013	0.008	948	0.027
Medium	III	Inward interaction	1.340	214	323	0.001	0.001	268	0.008
Medium	IV	Sweep	2.560	370	543	0.003	0.002	512	0.014

Table 337: Quadrant analysis summary for a hole size of 3 within the canopy, at a flow speed setting of 15 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	0.745	348	595	0.000	0.000	149	0.004
High	II	Ejection	8.490	3122	5044	0.041	0.026	1698	0.047
High	III	Inward interaction	0.275	131	212	0.000	0.000	55	0.002
High	IV	Sweep	3.380	788	1071	0.004	0.002	676	0.019
Low	I	Outward interaction	0.825	262	414	0.000	0.000	165	0.005
Low	II	Ejection	8.455	3088	4202	0.049	0.027	1691	0.047
Low	III	Inward interaction	0.950	350	511	0.001	0.000	190	0.005
Low	IV	Sweep	2.790	589	794	0.003	0.002	558	0.016
Medium	I	Outward interaction	0.615	253	417	0.000	0.000	123	0.003
Medium	II	Ejection	9.475	3681	5129	0.055	0.032	1895	0.053
Medium	III	Inward interaction	0.585	259	404	0.000	0.000	117	0.003
Medium	IV	Sweep	2.745	677	937	0.003	0.002	549	0.015

Table 338: Quadrant analysis summary for a hole size of 3 within the canopy, at a flow speed setting of 15 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	3.430	1186	2701	0.010	0.006	686	0.019
High	II	Ejection	4.325	990	2109	0.011	0.006	865	0.024
High	III	Inward interaction	0.760	149	304	0.000	0.000	152	0.004
High	IV	Sweep	4.305	964	1936	0.010	0.006	861	0.024
Low	I	Outward interaction	0.920	849	1393	0.001	0.000	184	0.005
Low	II	Ejection	4.680	3520	6259	0.011	0.007	936	0.026
Low	III	Inward interaction	1.445	1397	2513	0.001	0.001	289	0.008
Low	IV	Sweep	6.105	4614	7317	0.019	0.010	1221	0.034
Medium	I	Outward interaction	5.070	688	1674	0.024	0.014	1014	0.028
Medium	II	Ejection	1.575	120	342	0.001	0.001	315	0.009
Medium	III	Inward interaction	1.365	94	206	0.001	0.000	273	0.008
Medium	IV	Sweep	3.595	398	884	0.010	0.005	719	0.020

Table 339: Quadrant analysis summary for a hole size of 3 within the canopy, at a flow speed setting of 15 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	1.325	204	378	0.002	0.001	265	0.007
High	II	Ejection	4.355	214	375	0.008	0.005	871	0.024
High	III	Inward interaction	0.125	10	23	0.000	0.000	25	0.001
High	IV	Sweep	7.860	478	860	0.031	0.019	1572	0.044
Low	I	Outward interaction	5.470	962	1918	0.017	0.010	1094	0.031
Low	II	Ejection	1.410	260	610	0.001	0.001	282	0.008
Low	III	Inward interaction	3.460	523	1033	0.006	0.003	692	0.019
Low	IV	Sweep	2.630	571	1093	0.005	0.003	526	0.015
Medium	I	Outward interaction	2.980	288	517	0.005	0.002	596	0.017
Medium	II	Ejection	3.425	336	697	0.007	0.004	685	0.019
Medium	III	Inward interaction	2.740	282	546	0.004	0.002	548	0.015
Medium	IV	Sweep	3.455	334	637	0.007	0.003	691	0.019

Table 340: Quadrant analysis summary for a hole size of 3 within the canopy, at a flow speed setting of 15 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	4.005	786	1424	0.011	0.006	801	0.022
High	II	Ejection	3.440	554	963	0.007	0.003	688	0.019
High	III	Inward interaction	1.275	179	279	0.001	0.000	255	0.007
High	IV	Sweep	3.185	451	793	0.005	0.003	637	0.018
Low	I	Outward interaction	0.775	268	502	0.000	0.000	155	0.004
Low	II	Ejection	2.725	559	872	0.003	0.001	545	0.015
Low	III	Inward interaction	1.495	548	1005	0.002	0.001	299	0.008
Low	IV	Sweep	7.840	2714	5439	0.041	0.026	1568	0.044
Medium	I	Outward interaction	1.070	249	425	0.001	0.000	214	0.006
Medium	II	Ejection	4.395	699	1230	0.009	0.005	879	0.025
Medium	III	Inward interaction	1.355	317	531	0.001	0.001	271	0.008
Medium	IV	Sweep	5.880	1104	1956	0.019	0.012	1176	0.033

Table 341: Quadrant analysis summary for a hole size of 3 at the edge of the canopy, at a flow speed setting of 15 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	1.710	623	997	0.002	0.001	342	0.010
Low	II	Ejection	7.065	2330	3407	0.031	0.019	1413	0.040
Low	III	Inward interaction	1.240	420	625	0.001	0.001	248	0.007
Low	IV	Sweep	2.075	421	616	0.002	0.001	415	0.012
Medium	I	Outward interaction	1.365	656	1014	0.001	0.001	273	0.008
Medium	II	Ejection	7.430	3509	4761	0.033	0.019	1486	0.042
Medium	III	Inward interaction	1.340	699	1011	0.001	0.001	268	0.007
Medium	IV	Sweep	2.345	717	1007	0.002	0.001	469	0.013
High	I	Outward interaction	2.385	752	1161	0.004	0.002	477	0.013
High	II	Ejection	6.255	2360	3413	0.030	0.018	1251	0.035
High	III	Inward interaction	1.195	298	407	0.001	0.000	239	0.007
High	IV	Sweep	2.000	409	575	0.002	0.001	400	0.011

Table 342: Quadrant analysis summary for a hole size of 3 at the edge of the canopy, at a flow speed setting of 15 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	1.670	791	1491	0.002	0.001	334	0.009
Low	II	Ejection	5.795	2933	5379	0.021	0.012	1159	0.032
Low	III	Inward interaction	2.180	1266	2826	0.003	0.002	436	0.012
Low	IV	Sweep	2.690	886	1319	0.003	0.001	538	0.015
Medium	I	Outward interaction	0.935	514	1008	0.001	0.001	187	0.005
Medium	II	Ejection	5.800	984	1931	0.014	0.010	1160	0.032
Medium	III	Inward interaction	0.015	5	10	0.000	0.000	3	0.000
Medium	IV	Sweep	8.000	1491	2788	0.029	0.019	1600	0.045
High	I	Outward interaction	8.855	5076	11533	0.081	0.061	1771	0.049
High	II	Ejection	1.195	356	639	0.001	0.000	239	0.007
High	III	Inward interaction	0.960	171	232	0.000	0.000	192	0.005
High	IV	Sweep	1.070	435	1238	0.001	0.001	214	0.006

Table 343: Quadrant analysis summary for a hole size of 3 at the edge of the canopy, at a flow speed setting of 15 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
Low	I	Outward interaction	5.310	1753	3318	0.015	0.009	1062	0.030
Low	II	Ejection	1.290	511	1108	0.001	0.001	258	0.007
Low	III	Inward interaction	4.180	1284	2337	0.009	0.005	836	0.023
Low	IV	Sweep	1.955	856	1686	0.003	0.002	391	0.011
Medium	I	Outward interaction	1.180	165	326	0.001	0.001	236	0.007
Medium	II	Ejection	5.285	550	1016	0.014	0.008	1057	0.030
Medium	III	Inward interaction	0.950	130	268	0.001	0.000	190	0.005
Medium	IV	Sweep	5.860	655	1272	0.018	0.011	1172	0.033
High	I	Outward interaction	8.080	1052	2476	0.071	0.052	1616	0.045
High	II	Ejection	1.705	143	335	0.002	0.001	341	0.010
High	III	Inward interaction	1.100	47	102	0.000	0.000	220	0.006
High	IV	Sweep	1.190	100	235	0.001	0.001	238	0.007

Table 344: Quadrant analysis summary for a hole size of 3 at the edge of the canopy, at a flow speed setting of 15 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
Low	I	Outward interaction	0.990	537	877	0.001	0.000	198	0.006
Low	II	Ejection	6.005	2479	3791	0.017	0.010	1201	0.034
Low	III	Inward interaction	0.570	297	519	0.000	0.000	114	0.003
Low	IV	Sweep	5.010	2172	3327	0.013	0.007	1002	0.028
Medium	I	Outward interaction	0.330	33	83	0.000	0.000	66	0.002
Medium	II	Ejection	5.535	201	369	0.012	0.006	1107	0.031
Medium	III	Inward interaction	0.035	3	12	0.000	0.000	7	0.000
Medium	IV	Sweep	8.325	418	802	0.036	0.018	1665	0.046
High	I	Outward interaction	2.770	400	735	0.004	0.002	554	0.015
High	II	Ejection	2.140	363	746	0.003	0.002	428	0.012
High	III	Inward interaction	3.875	654	1185	0.009	0.005	775	0.022
High	IV	Sweep	3.425	594	1143	0.007	0.005	685	0.019

Table 345: Quadrant analysis summary for a hole size of 3 at the edge of the canopy, at a flow speed setting of 2 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	3.230	134	336	0.012	0.008	646	0.018
Low	II	Ejection	6.040	123	242	0.020	0.010	1208	0.034
Low	III	Inward interaction	1.005	26	70	0.001	0.001	201	0.006
Low	IV	Sweep	5.160	111	294	0.015	0.011	1032	0.029
High	I	Outward interaction	3.675	292	857	0.017	0.014	735	0.021
High	II	Ejection	5.315	153	327	0.013	0.008	1063	0.030
High	III	Inward interaction	1.585	69	178	0.002	0.001	317	0.009
High	IV	Sweep	5.535	214	639	0.019	0.015	1107	0.031
Medium	I	Outward interaction	2.775	118	327	0.010	0.008	555	0.016
Medium	II	Ejection	6.025	103	196	0.019	0.011	1205	0.034
Medium	III	Inward interaction	1.295	31	80	0.001	0.001	259	0.007
Medium	IV	Sweep	5.460	93	236	0.016	0.012	1092	0.031

Table 346: Quadrant analysis summary for a hole size of 3 at the edge of the canopy, at a flow speed setting of 2 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
Low	I	Outward interaction	3.480	331	1143	0.013	0.012	696	0.019
Low	II	Ejection	4.925	227	559	0.012	0.008	985	0.027
Low	III	Inward interaction	2.220	141	407	0.003	0.003	444	0.012
Low	IV	Sweep	5.215	272	932	0.016	0.015	1043	0.029
High	I	Outward interaction	2.160	108	313	0.006	0.006	432	0.012
High	II	Ejection	6.670	113	231	0.021	0.014	1334	0.037
High	III	Inward interaction	0.920	32	88	0.001	0.001	184	0.005
High	IV	Sweep	5.365	84	200	0.012	0.010	1073	0.030
Medium	I	Outward interaction	2.630	98	360	0.009	0.008	526	0.015
Medium	II	Ejection	6.240	98	221	0.020	0.011	1248	0.035
Medium	III	Inward interaction	1.385	32	97	0.001	0.001	277	0.008
Medium	IV	Sweep	6.035	98	291	0.019	0.014	1207	0.034

Table 347: Quadrant analysis summary for a hole size of 3 at the edge of the canopy, at a flow speed setting of 2 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	1.575	106	292	0.002	0.002	315	0.009
Low	II	Ejection	6.225	200	370	0.019	0.010	1245	0.035
Low	III	Inward interaction	0.715	37	105	0.000	0.000	143	0.004
Low	IV	Sweep	6.300	211	449	0.020	0.013	1260	0.035
High	I	Outward interaction	3.405	156	439	0.014	0.010	681	0.019
High	II	Ejection	6.385	142	329	0.025	0.014	1277	0.036
High	III	Inward interaction	1.025	24	71	0.001	0.000	205	0.006
High	IV	Sweep	5.370	113	351	0.016	0.012	1074	0.030
Medium	I	Outward interaction	1.595	38	122	0.002	0.002	319	0.009
Medium	II	Ejection	5.860	103	229	0.021	0.013	1172	0.033
Medium	III	Inward interaction	1.045	21	65	0.001	0.001	209	0.006
Medium	IV	Sweep	5.370	84	205	0.016	0.011	1074	0.030

Table 348: Quadrant analysis summary for a hole size of 3 at the edge of the canopy, at a flow speed setting of 2 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
Low	I	Outward interaction	1.375	52	194	0.003	0.003	275	0.008
Low	II	Ejection	6.780	79	159	0.021	0.014	1356	0.038
Low	III	Inward interaction	0.475	12	38	0.000	0.000	95	0.003
Low	IV	Sweep	7.580	93	208	0.027	0.020	1516	0.042
High	I	Outward interaction	4.400	993	2237	0.043	0.028	880	0.025
High	II	Ejection	3.870	338	664	0.013	0.007	774	0.022
High	III	Inward interaction	1.355	90	211	0.001	0.001	271	0.008
High	IV	Sweep	4.035	266	756	0.011	0.009	807	0.023
Medium	I	Outward interaction	2.210	66	213	0.006	0.005	442	0.012
Medium	II	Ejection	6.590	87	208	0.023	0.013	1318	0.037
Medium	III	Inward interaction	0.840	16	52	0.001	0.000	168	0.005
Medium	IV	Sweep	6.220	80	210	0.020	0.013	1244	0.035

Table 349: Quadrant analysis summary for a hole size of 3 above the canopy, at a flow speed setting of 2 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	3.800	325	963	0.020	0.015	760	0.021
High	II	Ejection	5.450	162	369	0.014	0.008	1090	0.030
High	III	Inward interaction	1.440	65	201	0.002	0.001	288	0.008
High	IV	Sweep	5.310	188	611	0.016	0.013	1062	0.030
Low	I	Outward interaction	2.800	164	421	0.010	0.006	560	0.016
Low	II	Ejection	5.585	128	284	0.015	0.008	1117	0.031
Low	III	Inward interaction	1.165	41	117	0.001	0.001	233	0.007
Low	IV	Sweep	6.195	184	556	0.024	0.018	1239	0.035
Medium	I	Outward interaction	2.865	101	279	0.010	0.008	573	0.016
Medium	II	Ejection	5.785	86	175	0.017	0.010	1157	0.032
Medium	III	Inward interaction	1.485	33	95	0.002	0.001	297	0.008
Medium	IV	Sweep	5.690	89	249	0.018	0.014	1138	0.032

Table 350: Quadrant analysis summary for a hole size of 3 above the canopy, at a flow speed setting of 2 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	7.545	140	342	0.041	0.027	1509	0.042
High	II	Ejection	2.935	64	169	0.007	0.005	587	0.016
High	III	Inward interaction	0.145	1	4	0.000	0.000	29	0.001
High	IV	Sweep	3.465	78	181	0.011	0.007	693	0.019
Low	I	Outward interaction	2.700	150	406	0.009	0.006	540	0.015
Low	II	Ejection	5.785	133	288	0.017	0.009	1157	0.032
Low	III	Inward interaction	0.905	30	91	0.001	0.000	181	0.005
Low	IV	Sweep	5.945	169	500	0.022	0.017	1189	0.033
Medium	I	Outward interaction	1.845	55	183	0.004	0.003	369	0.010
Medium	II	Ejection	6.405	99	219	0.024	0.012	1281	0.036
Medium	III	Inward interaction	1.150	23	79	0.001	0.001	230	0.006
Medium	IV	Sweep	4.925	71	195	0.013	0.008	985	0.028

Table 351: Quadrant analysis summary for a hole size of 3 above the canopy, at a flow speed setting of 2 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	1.545	72	186	0.002	0.002	309	0.009
High	II	Ejection	5.335	133	246	0.013	0.007	1067	0.030
High	III	Inward interaction	0.840	33	88	0.001	0.000	168	0.005
High	IV	Sweep	5.525	151	288	0.016	0.008	1105	0.031
Low	I	Outward interaction	2.520	146	415	0.007	0.005	504	0.014
Low	II	Ejection	6.350	164	311	0.021	0.010	1270	0.035
Low	III	Inward interaction	0.925	34	110	0.001	0.001	185	0.005
Low	IV	Sweep	4.790	121	333	0.011	0.008	958	0.027
Medium	I	Outward interaction	1.145	55	146	0.001	0.001	229	0.006
Medium	II	Ejection	7.575	179	311	0.030	0.016	1515	0.042
Medium	III	Inward interaction	0.550	21	56	0.000	0.000	110	0.003
Medium	IV	Sweep	4.900	96	195	0.011	0.007	980	0.027

Table 352: Quadrant analysis summary for a hole size of 3 above the canopy, at a flow speed setting of 2 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	1.695	86	205	0.003	0.002	339	0.009
High	II	Ejection	5.580	156	262	0.016	0.008	1116	0.031
High	III	Inward interaction	0.815	30	59	0.000	0.000	163	0.005
High	IV	Sweep	5.685	164	308	0.017	0.010	1137	0.032
Low	I	Outward interaction	2.225	108	280	0.005	0.004	445	0.012
Low	II	Ejection	6.100	144	269	0.019	0.010	1220	0.034
Low	III	Inward interaction	0.845	25	64	0.000	0.000	169	0.005
Low	IV	Sweep	5.385	135	312	0.016	0.010	1077	0.030
Medium	I	Outward interaction	0.710	35	89	0.000	0.000	142	0.004
Medium	II	Ejection	7.075	182	313	0.024	0.013	1415	0.040
Medium	III	Inward interaction	0.310	13	35	0.000	0.000	62	0.002
Medium	IV	Sweep	6.905	179	313	0.023	0.013	1381	0.039

Table 353: Quadrant analysis summary for a hole size of 3 within the canopy, at a flow speed setting of 2 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	3.550	441	1220	0.019	0.012	710	0.020
High	II	Ejection	5.490	235	534	0.015	0.008	1098	0.031
High	III	Inward interaction	1.430	94	266	0.002	0.001	286	0.008
High	IV	Sweep	5.580	260	906	0.017	0.014	1116	0.031
Low	I	Outward interaction	3.275	154	444	0.014	0.009	655	0.018
Low	II	Ejection	5.900	114	266	0.019	0.010	1180	0.033
Low	III	Inward interaction	0.900	23	81	0.001	0.000	180	0.005
Low	IV	Sweep	5.690	116	358	0.018	0.013	1138	0.032
Medium	I	Outward interaction	2.390	56	182	0.006	0.004	478	0.013
Medium	II	Ejection	5.665	72	172	0.018	0.010	1133	0.032
Medium	III	Inward interaction	1.610	27	96	0.002	0.002	322	0.009
Medium	IV	Sweep	5.665	71	197	0.018	0.011	1133	0.032

Table 354: Quadrant analysis summary for a hole size of 3 within the canopy, at a flow speed setting of 2 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	2.950	217	724	0.010	0.008	590	0.017
High	II	Ejection	5.715	190	446	0.017	0.010	1143	0.032
High	III	Inward interaction	1.400	59	170	0.001	0.001	280	0.008
High	IV	Sweep	5.720	233	823	0.021	0.018	1144	0.032
Low	I	Outward interaction	2.065	55	142	0.002	0.002	413	0.012
Low	II	Ejection	2.270	65	116	0.003	0.002	454	0.013
Low	III	Inward interaction	6.885	193	307	0.028	0.014	1377	0.039
Low	IV	Sweep	2.780	102	223	0.006	0.004	556	0.016
Medium	I	Outward interaction	1.940	96	367	0.003	0.003	388	0.011
Medium	II	Ejection	5.985	169	412	0.018	0.011	1197	0.033
Medium	III	Inward interaction	1.365	57	179	0.001	0.001	273	0.008
Medium	IV	Sweep	5.455	163	464	0.016	0.011	1091	0.030

Table 355: Quadrant analysis summary for a hole size of 3 within the canopy, at a flow speed setting of 2 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	4.350	240	758	0.022	0.016	870	0.024
High	II	Ejection	4.635	121	270	0.012	0.006	927	0.026
High	III	Inward interaction	1.895	57	150	0.002	0.001	379	0.011
High	IV	Sweep	4.720	148	474	0.014	0.011	944	0.026
Low	I	Outward interaction	1.330	16	56	0.002	0.001	266	0.007
Low	II	Ejection	6.390	58	146	0.027	0.014	1278	0.036
Low	III	Inward interaction	0.960	9	33	0.001	0.000	192	0.005
Low	IV	Sweep	5.540	47	126	0.019	0.011	1108	0.031
Medium	I	Outward interaction	2.930	151	593	0.011	0.008	586	0.016
Medium	II	Ejection	5.770	116	315	0.017	0.009	1154	0.032
Medium	III	Inward interaction	1.485	43	154	0.002	0.001	297	0.008
Medium	IV	Sweep	5.850	118	405	0.018	0.011	1170	0.033

Table 356: Quadrant analysis summary for a hole size of 3 within the canopy, at a flow speed setting of 2 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	3.615	208	645	0.021	0.017	723	0.020
High	II	Ejection	6.650	131	274	0.024	0.013	1330	0.037
High	III	Inward interaction	0.960	23	64	0.001	0.000	192	0.005
High	IV	Sweep	5.735	103	327	0.016	0.013	1147	0.032
Low	I	Outward interaction	3.375	204	620	0.014	0.011	675	0.019
Low	II	Ejection	5.875	147	329	0.017	0.010	1175	0.033
Low	III	Inward interaction	1.320	43	124	0.001	0.001	264	0.007
Low	IV	Sweep	5.540	158	477	0.018	0.013	1108	0.031
Medium	I	Outward interaction	1.475	65	215	0.002	0.002	295	0.008
Medium	II	Ejection	5.855	149	314	0.018	0.011	1171	0.033
Medium	III	Inward interaction	1.100	42	118	0.001	0.001	220	0.006
Medium	IV	Sweep	5.670	138	324	0.017	0.011	1134	0.032

Table 357: Quadrant analysis summary for a hole size of 3 at the edge of the canopy, at a flow speed setting of 4 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	3.125	147	303	0.008	0.005	625	0.017
Low	II	Ejection	5.015	160	259	0.014	0.008	1003	0.028
Low	III	Inward interaction	1.435	46	100	0.001	0.001	287	0.008
Low	IV	Sweep	4.665	156	337	0.013	0.009	933	0.026
Medium	I	Outward interaction	3.435	136	234	0.010	0.006	687	0.019
Medium	II	Ejection	5.135	147	240	0.016	0.009	1027	0.029
Medium	III	Inward interaction	1.220	34	71	0.001	0.001	244	0.007
Medium	IV	Sweep	4.070	108	204	0.009	0.006	814	0.023
High	I	Outward interaction	3.360	204	458	0.009	0.006	672	0.019
High	II	Ejection	5.115	221	416	0.016	0.009	1023	0.029
High	III	Inward interaction	1.200	48	122	0.001	0.001	240	0.007
High	IV	Sweep	4.170	190	494	0.011	0.009	834	0.023

Table 358: Quadrant analysis summary for a hole size of 3 at the edge of the canopy, at a flow speed setting of 4 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	2.720	201	489	0.005	0.003	544	0.015
Low	II	Ejection	3.565	244	530	0.008	0.005	713	0.020
Low	III	Inward interaction	2.980	195	447	0.005	0.003	596	0.017
Low	IV	Sweep	4.060	305	798	0.011	0.008	812	0.023
Medium	I	Outward interaction	3.250	113	280	0.006	0.004	650	0.018
Medium	II	Ejection	2.500	81	192	0.003	0.002	500	0.014
Medium	III	Inward interaction	2.600	80	206	0.004	0.002	520	0.014
Medium	IV	Sweep	4.105	158	375	0.011	0.006	821	0.023
High	I	Outward interaction	0.215	36	82	0.000	0.000	43	0.001
High	II	Ejection	7.680	490	874	0.024	0.015	1536	0.043
High	III	Inward interaction	0.095	14	27	0.000	0.000	19	0.001
High	IV	Sweep	6.535	393	698	0.017	0.010	1307	0.037

Table 359: Quadrant analysis summary for a hole size of 3 at the edge of the canopy, at a flow speed setting of 4 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
Low	I	Outward interaction	1.245	167	299	0.001	0.001	249	0.007
Low	II	Ejection	4.815	419	637	0.010	0.006	963	0.027
Low	III	Inward interaction	0.770	102	175	0.000	0.000	154	0.004
Low	IV	Sweep	6.215	691	1195	0.022	0.014	1243	0.035
Medium	I	Outward interaction	1.440	105	285	0.001	0.001	288	0.008
Medium	II	Ejection	4.680	251	514	0.011	0.005	936	0.026
Medium	III	Inward interaction	1.555	109	257	0.002	0.001	311	0.009
Medium	IV	Sweep	5.010	298	642	0.014	0.007	1002	0.028
High	I	Outward interaction	1.550	66	181	0.002	0.001	310	0.009
High	II	Ejection	5.995	165	333	0.019	0.010	1199	0.033
High	III	Inward interaction	0.920	33	90	0.001	0.000	184	0.005
High	IV	Sweep	5.195	145	337	0.015	0.009	1039	0.029

Table 360: Quadrant analysis summary for a hole size of 3 at the edge of the canopy, at a flow speed setting of 4 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	1.380	92	170	0.001	0.001	276	0.008
Low	II	Ejection	3.945	191	317	0.007	0.004	789	0.022
Low	III	Inward interaction	1.210	89	175	0.001	0.001	242	0.007
Low	IV	Sweep	6.430	420	726	0.026	0.015	1286	0.036
Medium	I	Outward interaction	1.355	40	110	0.001	0.001	271	0.008
Medium	II	Ejection	4.870	113	218	0.013	0.007	974	0.027
Medium	III	Inward interaction	1.795	49	111	0.002	0.001	359	0.010
Medium	IV	Sweep	5.110	125	263	0.015	0.009	1022	0.029
High	I	Outward interaction	2.115	143	410	0.005	0.004	423	0.012
High	II	Ejection	6.230	187	408	0.020	0.010	1246	0.035
High	III	Inward interaction	0.750	33	100	0.000	0.000	150	0.004
High	IV	Sweep	6.455	217	662	0.024	0.017	1291	0.036

Table 361: Quadrant analysis summary for a hole size of 3 above the canopy, at a flow speed setting of 4 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	2.815	166	421	0.007	0.005	563	0.016
High	II	Ejection	5.520	207	449	0.017	0.010	1104	0.031
High	III	Inward interaction	1.150	49	129	0.001	0.001	230	0.006
High	IV	Sweep	5.130	216	606	0.016	0.013	1026	0.029
Low	I	Outward interaction	1.905	74	175	0.003	0.002	381	0.011
Low	II	Ejection	4.675	109	192	0.011	0.006	935	0.026
Low	III	Inward interaction	1.965	63	119	0.003	0.002	393	0.011
Low	IV	Sweep	5.380	155	313	0.018	0.011	1076	0.030
Medium	I	Outward interaction	3.640	96	202	0.011	0.007	728	0.020
Medium	II	Ejection	4.805	90	175	0.013	0.008	961	0.027
Medium	III	Inward interaction	1.210	25	63	0.001	0.001	242	0.007
Medium	IV	Sweep	4.475	86	176	0.012	0.007	895	0.025

Table 362: Quadrant analysis summary for a hole size of 3 above the canopy, at a flow speed setting of 4 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	2.730	148	325	0.007	0.005	546	0.015
High	II	Ejection	5.650	197	333	0.018	0.010	1130	0.032
High	III	Inward interaction	0.940	35	76	0.001	0.000	188	0.005
High	IV	Sweep	4.550	165	360	0.012	0.009	910	0.025
Low	I	Outward interaction	2.945	97	191	0.007	0.004	589	0.016
Low	II	Ejection	4.800	102	181	0.012	0.007	960	0.027
Low	III	Inward interaction	1.260	31	60	0.001	0.001	252	0.007
Low	IV	Sweep	4.655	120	240	0.014	0.009	931	0.026
Medium	I	Outward interaction	1.195	38	94	0.001	0.001	239	0.007
Medium	II	Ejection	5.725	143	284	0.019	0.011	1145	0.032
Medium	III	Inward interaction	1.430	42	107	0.001	0.001	286	0.008
Medium	IV	Sweep	4.710	103	210	0.011	0.006	942	0.026

Table 363: Quadrant analysis summary for a hole size of 3 above the canopy, at a flow speed setting of 4 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	0.775	116	217	0.000	0.000	155	0.004
High	II	Ejection	4.265	375	596	0.007	0.004	853	0.024
High	III	Inward interaction	0.690	103	182	0.000	0.000	138	0.004
High	IV	Sweep	7.470	846	1376	0.029	0.015	1494	0.042
Low	I	Outward interaction	1.870	157	394	0.003	0.002	374	0.010
Low	II	Ejection	5.475	306	587	0.016	0.009	1095	0.031
Low	III	Inward interaction	1.150	79	176	0.001	0.001	230	0.006
Low	IV	Sweep	5.240	277	598	0.014	0.009	1048	0.029
Medium	I	Outward interaction	0.705	47	86	0.000	0.000	141	0.004
Medium	II	Ejection	7.065	409	687	0.027	0.017	1413	0.040
Medium	III	Inward interaction	0.640	48	88	0.000	0.000	128	0.004
Medium	IV	Sweep	4.600	217	348	0.009	0.005	920	0.026

Table 364: Quadrant analysis summary for a hole size of 3 above the canopy, at a flow speed setting of 4 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	1.435	178	323	0.001	0.001	287	0.008
High	II	Ejection	4.420	411	604	0.009	0.004	884	0.025
High	III	Inward interaction	1.095	129	266	0.001	0.000	219	0.006
High	IV	Sweep	6.135	703	1092	0.022	0.011	1227	0.034
Low	I	Outward interaction	1.760	179	362	0.003	0.002	352	0.010
Low	II	Ejection	6.015	392	681	0.021	0.012	1203	0.034
Low	III	Inward interaction	1.065	81	174	0.001	0.001	213	0.006
Low	IV	Sweep	4.110	224	450	0.008	0.005	822	0.023
Medium	I	Outward interaction	0.910	122	222	0.001	0.000	182	0.005
Medium	II	Ejection	3.850	273	405	0.006	0.003	770	0.021
Medium	III	Inward interaction	0.445	56	87	0.000	0.000	89	0.002
Medium	IV	Sweep	8.045	871	1370	0.038	0.022	1609	0.045

Table 365: Quadrant analysis summary for a hole size of 3 within the canopy, at a flow speed setting of 4 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	1.550	146	406	0.002	0.002	310	0.009
High	II	Ejection	6.200	318	682	0.020	0.011	1240	0.035
High	III	Inward interaction	1.220	95	242	0.001	0.001	244	0.007
High	IV	Sweep	5.835	303	928	0.017	0.014	1167	0.033
Low	I	Outward interaction	1.660	60	134	0.002	0.002	332	0.009
Low	II	Ejection	5.835	155	259	0.019	0.010	1167	0.033
Low	III	Inward interaction	1.240	37	66	0.001	0.001	248	0.007
Low	IV	Sweep	4.440	114	203	0.011	0.006	888	0.025
Medium	I	Outward interaction	1.350	52	117	0.001	0.001	270	0.008
Medium	II	Ejection	6.840	207	356	0.026	0.014	1368	0.038
Medium	III	Inward interaction	1.165	46	95	0.001	0.001	233	0.007
Medium	IV	Sweep	4.520	130	238	0.011	0.006	904	0.025

Table 366: Quadrant analysis summary for a hole size of 3 within the canopy, at a flow speed setting of 4 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	2.030	223	558	0.003	0.002	406	0.011
High	II	Ejection	5.720	451	902	0.018	0.010	1144	0.032
High	III	Inward interaction	1.100	94	234	0.001	0.000	220	0.006
High	IV	Sweep	4.645	333	867	0.011	0.008	929	0.026
Low	I	Outward interaction	2.140	159	328	0.003	0.001	428	0.012
Low	II	Ejection	3.015	213	381	0.005	0.002	603	0.017
Low	III	Inward interaction	3.435	276	554	0.007	0.004	687	0.019
Low	IV	Sweep	3.825	293	561	0.008	0.005	765	0.021
Medium	I	Outward interaction	1.195	180	366	0.001	0.001	239	0.007
Medium	II	Ejection	5.090	537	1043	0.012	0.006	1018	0.028
Medium	III	Inward interaction	1.275	188	395	0.001	0.001	255	0.007
Medium	IV	Sweep	4.810	525	1059	0.011	0.006	962	0.027

Table 367: Quadrant analysis summary for a hole size of 3 within the canopy, at a flow speed setting of 4 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	2.195	121	335	0.003	0.002	439	0.012
High	II	Ejection	4.860	204	403	0.013	0.006	972	0.027
High	III	Inward interaction	1.825	90	221	0.002	0.001	365	0.010
High	IV	Sweep	4.280	189	432	0.010	0.006	856	0.024
Low	I	Outward interaction	1.420	196	496	0.002	0.001	284	0.008
Low	II	Ejection	6.110	474	948	0.018	0.010	1222	0.034
Low	III	Inward interaction	0.835	91	220	0.000	0.000	167	0.005
Low	IV	Sweep	5.785	462	1093	0.016	0.011	1157	0.032
Medium	I	Outward interaction	1.990	94	315	0.004	0.004	398	0.011
Medium	II	Ejection	6.285	148	329	0.020	0.012	1257	0.035
Medium	III	Inward interaction	1.270	43	128	0.001	0.001	254	0.007
Medium	IV	Sweep	5.750	139	377	0.018	0.012	1150	0.032

Table 368: Quadrant analysis summary for a hole size of 3 within the canopy, at a flow speed setting of 4 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	1.950	123	361	0.004	0.003	390	0.011
High	II	Ejection	5.525	160	307	0.014	0.007	1105	0.031
High	III	Inward interaction	1.070	49	137	0.001	0.001	214	0.006
High	IV	Sweep	5.660	176	406	0.016	0.010	1132	0.032
Low	I	Outward interaction	5.545	23	62	0.035	0.020	1109	0.031
Low	II	Ejection	4.510	11	30	0.014	0.008	902	0.025
Low	III	Inward interaction	0.615	1	3	0.000	0.000	123	0.003
Low	IV	Sweep	3.985	11	30	0.012	0.007	797	0.022
Medium	I	Outward interaction	1.870	68	139	0.002	0.001	374	0.010
Medium	II	Ejection	4.960	181	319	0.015	0.008	992	0.028
Medium	III	Inward interaction	2.415	88	158	0.003	0.002	483	0.014
Medium	IV	Sweep	4.135	142	245	0.010	0.005	827	0.023

Table 369: Quadrant analysis summary for a hole size of 3 at the edge of the canopy, at a flow speed setting of 6 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	2.630	148	234	0.005	0.003	526	0.015
Low	II	Ejection	4.525	213	319	0.012	0.007	905	0.025
Low	III	Inward interaction	1.990	90	136	0.002	0.001	398	0.011
Low	IV	Sweep	4.700	204	293	0.012	0.007	940	0.026
Medium	I	Outward interaction	2.825	162	253	0.006	0.004	565	0.016
Medium	II	Ejection	5.245	268	411	0.019	0.011	1049	0.029
Medium	III	Inward interaction	1.250	52	79	0.001	0.001	250	0.007
Medium	IV	Sweep	3.595	133	198	0.006	0.004	719	0.020
High	I	Outward interaction	2.205	163	309	0.004	0.002	441	0.012
High	II	Ejection	5.450	311	488	0.018	0.010	1090	0.031
High	III	Inward interaction	1.275	69	127	0.001	0.001	255	0.007
High	IV	Sweep	4.525	221	422	0.011	0.007	905	0.025

Table 370: Quadrant analysis summary for a hole size of 3 at the edge of the canopy, at a flow speed setting of 6 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
Low	I	Outward interaction	2.240	106	166	0.003	0.002	448	0.012
Low	II	Ejection	5.360	224	332	0.017	0.010	1072	0.030
Low	III	Inward interaction	1.530	58	92	0.001	0.001	306	0.009
Low	IV	Sweep	4.165	156	230	0.009	0.005	833	0.023
Medium	I	Outward interaction	0.965	96	221	0.001	0.001	193	0.005
Medium	II	Ejection	5.400	328	687	0.013	0.009	1080	0.030
Medium	III	Inward interaction	0.350	30	66	0.000	0.000	70	0.002
Medium	IV	Sweep	6.835	485	992	0.025	0.017	1367	0.038
High	I	Outward interaction	3.155	575	1063	0.007	0.004	631	0.018
High	II	Ejection	3.245	521	905	0.006	0.004	649	0.018
High	III	Inward interaction	2.625	400	754	0.004	0.002	525	0.015
High	IV	Sweep	3.425	512	853	0.006	0.004	685	0.019

Table 371: Quadrant analysis summary for a hole size of 3 at the edge of the canopy, at a flow speed setting of 6 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	1.870	322	527	0.002	0.001	374	0.010
Low	II	Ejection	2.720	368	621	0.003	0.002	544	0.015
Low	III	Inward interaction	1.575	269	472	0.001	0.001	315	0.009
Low	IV	Sweep	6.470	1190	2169	0.026	0.017	1294	0.036
Medium	I	Outward interaction	4.475	227	605	0.012	0.009	895	0.025
Medium	II	Ejection	2.845	154	396	0.005	0.004	569	0.016
Medium	III	Inward interaction	3.190	118	312	0.005	0.003	638	0.018
Medium	IV	Sweep	2.365	125	353	0.004	0.003	473	0.013
High	I	Outward interaction	2.940	453	862	0.004	0.002	588	0.016
High	II	Ejection	3.085	541	1034	0.005	0.003	617	0.017
High	III	Inward interaction	3.715	668	1113	0.008	0.004	743	0.021
High	IV	Sweep	2.840	508	1014	0.005	0.003	568	0.016

Table 372: Quadrant analysis summary for a hole size of 3 at the edge of the canopy, at a flow speed setting of 6 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
Low	I	Outward interaction	2.300	301	503	0.003	0.002	460	0.013
Low	II	Ejection	3.180	338	553	0.005	0.003	636	0.018
Low	III	Inward interaction	1.155	146	227	0.001	0.000	231	0.006
Low	IV	Sweep	5.475	898	1609	0.022	0.014	1095	0.031
Medium	I	Outward interaction	2.820	83	177	0.005	0.003	564	0.016
Medium	II	Ejection	4.350	133	247	0.011	0.006	870	0.024
Medium	III	Inward interaction	2.255	65	134	0.003	0.002	451	0.013
Medium	IV	Sweep	3.180	89	177	0.006	0.003	636	0.018
High	I	Outward interaction	2.430	89	168	0.003	0.002	486	0.014
High	II	Ejection	4.135	147	259	0.010	0.006	827	0.023
High	III	Inward interaction	1.430	54	131	0.001	0.001	286	0.008
High	IV	Sweep	4.155	172	321	0.011	0.007	831	0.023

Table 373: Quadrant analysis summary for a hole size of 3 above the canopy, at a flow speed setting of 6 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	1.445	79	165	0.002	0.001	289	0.008
High	II	Ejection	5.555	203	334	0.016	0.009	1111	0.031
High	III	Inward interaction	1.275	63	125	0.001	0.001	255	0.007
High	IV	Sweep	5.450	211	383	0.016	0.010	1090	0.030
Low	I	Outward interaction	1.360	98	373	0.001	0.000	272	0.008
Low	II	Ejection	4.530	332	934	0.010	0.004	906	0.025
Low	III	Inward interaction	2.010	205	823	0.003	0.002	402	0.011
Low	IV	Sweep	4.830	399	1182	0.013	0.006	966	0.027
Medium	I	Outward interaction	1.595	52	92	0.002	0.001	319	0.009
Medium	II	Ejection	4.935	119	188	0.013	0.007	987	0.028
Medium	III	Inward interaction	0.970	29	52	0.001	0.000	194	0.005
Medium	IV	Sweep	5.555	144	226	0.017	0.009	1111	0.031

Table 374: Quadrant analysis summary for a hole size of 3 above the canopy, at a flow speed setting of 6 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	1.630	107	165	0.002	0.001	326	0.009
High	II	Ejection	5.565	300	444	0.019	0.009	1113	0.031
High	III	Inward interaction	1.030	47	99	0.001	0.000	206	0.006
High	IV	Sweep	4.310	177	282	0.009	0.005	862	0.024
Low	I	Outward interaction	1.130	62	126	0.001	0.001	226	0.006
Low	II	Ejection	4.530	169	263	0.010	0.006	906	0.025
Low	III	Inward interaction	1.660	93	163	0.002	0.001	332	0.009
Low	IV	Sweep	6.210	253	424	0.020	0.012	1242	0.035
Medium	I	Outward interaction	2.995	134	195	0.007	0.004	599	0.017
Medium	II	Ejection	4.425	145	215	0.011	0.006	885	0.025
Medium	III	Inward interaction	1.220	41	68	0.001	0.001	244	0.007
Medium	IV	Sweep	4.085	130	188	0.009	0.005	817	0.023

Table 375: Quadrant analysis summary for a hole size of 3 above the canopy, at a flow speed setting of 6 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	0.615	230	385	0.000	0.000	123	0.003
High	II	Ejection	7.500	1841	2876	0.028	0.016	1500	0.042
High	III	Inward interaction	0.410	154	276	0.000	0.000	82	0.002
High	IV	Sweep	4.740	954	1404	0.009	0.005	948	0.026
Low	I	Outward interaction	2.105	210	406	0.003	0.002	421	0.012
Low	II	Ejection	6.535	565	922	0.028	0.016	1307	0.037
Low	III	Inward interaction	1.180	96	181	0.001	0.001	236	0.007
Low	IV	Sweep	3.775	241	480	0.007	0.005	755	0.021
Medium	I	Outward interaction	2.510	154	272	0.004	0.003	502	0.014
Medium	II	Ejection	5.960	364	557	0.024	0.013	1192	0.033
Medium	III	Inward interaction	0.590	29	52	0.000	0.000	118	0.003
Medium	IV	Sweep	3.220	138	202	0.005	0.003	644	0.018

Table 376: Quadrant analysis summary for a hole size of 3 above the canopy, at a flow speed setting of 6 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	0.695	339	563	0.000	0.000	139	0.004
High	II	Ejection	6.240	2093	3104	0.018	0.010	1248	0.035
High	III	Inward interaction	0.490	237	406	0.000	0.000	98	0.003
High	IV	Sweep	5.390	1659	2338	0.013	0.007	1078	0.030
Low	I	Outward interaction	1.925	205	421	0.003	0.002	385	0.011
Low	II	Ejection	6.005	506	841	0.025	0.015	1201	0.034
Low	III	Inward interaction	1.215	89	170	0.001	0.001	243	0.007
Low	IV	Sweep	3.980	232	417	0.008	0.005	796	0.022
Medium	I	Outward interaction	0.905	248	426	0.001	0.000	181	0.005
Medium	II	Ejection	6.965	1256	1838	0.023	0.013	1393	0.039
Medium	III	Inward interaction	0.605	184	283	0.000	0.000	121	0.003
Medium	IV	Sweep	5.170	817	1183	0.011	0.006	1034	0.029

Table 377: Quadrant analysis summary for a hole size of 3 within the canopy, at a flow speed setting of 6 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	1.205	116	241	0.001	0.001	241	0.007
High	II	Ejection	6.560	584	1051	0.028	0.016	1312	0.037
High	III	Inward interaction	1.600	166	326	0.002	0.001	320	0.009
High	IV	Sweep	3.840	248	454	0.007	0.004	768	0.021
Low	I	Outward interaction	1.505	105	191	0.001	0.001	301	0.008
Low	II	Ejection	6.675	465	725	0.029	0.016	1335	0.037
Low	III	Inward interaction	1.305	85	139	0.001	0.001	261	0.007
Low	IV	Sweep	2.875	147	236	0.004	0.002	575	0.016
Medium	I	Outward interaction	1.210	79	130	0.001	0.001	242	0.007
Medium	II	Ejection	6.175	416	664	0.024	0.015	1235	0.035
Medium	III	Inward interaction	1.630	121	190	0.002	0.001	326	0.009
Medium	IV	Sweep	4.400	240	345	0.010	0.006	880	0.025

Table 378: Quadrant analysis summary for a hole size of 3 within the canopy, at a flow speed setting of 6 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	2.805	449	1125	0.005	0.003	561	0.016
High	II	Ejection	3.520	519	1229	0.007	0.004	704	0.020
High	III	Inward interaction	2.085	283	709	0.002	0.001	417	0.012
High	IV	Sweep	4.085	607	1844	0.010	0.007	817	0.023
Low	I	Outward interaction	4.315	662	1084	0.009	0.005	863	0.024
Low	II	Ejection	1.630	331	544	0.002	0.001	326	0.009
Low	III	Inward interaction	5.035	827	1512	0.013	0.007	1007	0.028
Low	IV	Sweep	1.545	313	556	0.001	0.001	309	0.009
Medium	I	Outward interaction	0.855	56	135	0.001	0.001	171	0.005
Medium	II	Ejection	6.260	130	273	0.018	0.013	1252	0.035
Medium	III	Inward interaction	0.110	4	9	0.000	0.000	22	0.001
Medium	IV	Sweep	7.385	164	352	0.026	0.019	1477	0.041

Table 379: Quadrant analysis summary for a hole size of 3 within the canopy, at a flow speed setting of 6 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	1.435	74	136	0.001	0.001	287	0.008
High	II	Ejection	3.495	161	291	0.007	0.004	699	0.020
High	III	Inward interaction	2.665	165	349	0.005	0.003	533	0.015
High	IV	Sweep	5.320	294	513	0.018	0.010	1064	0.030
Low	I	Outward interaction	2.105	282	469	0.002	0.001	421	0.012
Low	II	Ejection	2.135	251	425	0.002	0.001	427	0.012
Low	III	Inward interaction	3.145	470	913	0.006	0.004	629	0.018
Low	IV	Sweep	5.220	836	1364	0.018	0.009	1044	0.029
Medium	I	Outward interaction	1.575	64	166	0.002	0.001	315	0.009
Medium	II	Ejection	5.535	158	319	0.016	0.009	1107	0.031
Medium	III	Inward interaction	1.210	44	116	0.001	0.001	242	0.007
Medium	IV	Sweep	4.980	143	306	0.013	0.008	996	0.028

Table 380: Quadrant analysis summary for a hole size of 3 within the canopy, at a flow speed setting of 6 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	1.505	99	234	0.002	0.001	301	0.008
High	II	Ejection	5.865	238	432	0.017	0.009	1173	0.033
High	III	Inward interaction	0.730	42	91	0.000	0.000	146	0.004
High	IV	Sweep	5.780	228	469	0.016	0.009	1156	0.032
Low	I	Outward interaction	1.740	152	271	0.002	0.001	348	0.010
Low	II	Ejection	4.360	317	541	0.010	0.005	872	0.024
Low	III	Inward interaction	1.175	109	208	0.001	0.001	235	0.007
Low	IV	Sweep	5.690	466	757	0.019	0.009	1138	0.032
Medium	I	Outward interaction	2.325	178	304	0.003	0.002	465	0.013
Medium	II	Ejection	3.220	212	332	0.006	0.003	644	0.018
Medium	III	Inward interaction	2.325	160	260	0.003	0.002	465	0.013
Medium	IV	Sweep	4.705	346	557	0.013	0.007	941	0.026

Table 381: Quadrant analysis summary for a hole size of 3 at the edge of the canopy, at a flow speed setting of 8 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	2.995	333	502	0.008	0.004	599	0.017
Low	II	Ejection	5.850	545	805	0.024	0.014	1170	0.033
Low	III	Inward interaction	1.465	104	156	0.001	0.001	293	0.008
Low	IV	Sweep	2.300	136	199	0.002	0.001	460	0.013
High	I	Outward interaction	2.220	285	418	0.003	0.002	444	0.012
High	II	Ejection	5.515	645	900	0.020	0.012	1103	0.031
High	III	Inward interaction	1.530	183	244	0.002	0.001	306	0.009
High	IV	Sweep	3.355	271	354	0.005	0.003	671	0.019
Medium	I	Outward interaction	3.820	455	655	0.011	0.006	764	0.021
Medium	II	Ejection	5.515	543	786	0.019	0.011	1103	0.031
Medium	III	Inward interaction	1.050	86	137	0.001	0.000	210	0.006
Medium	IV	Sweep	2.235	148	207	0.002	0.001	447	0.012

Table 382: Quadrant analysis summary for a hole size of 3 at the edge of the canopy, at a flow speed setting of 8 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
Low	I	Outward interaction	3.280	292	471	0.007	0.005	656	0.018
Low	II	Ejection	6.575	610	911	0.031	0.018	1315	0.037
Low	III	Inward interaction	0.800	53	81	0.000	0.000	160	0.004
Low	IV	Sweep	2.300	135	199	0.002	0.001	460	0.013
High	I	Outward interaction	5.025	1684	3139	0.014	0.009	1005	0.028
High	II	Ejection	1.980	717	1340	0.002	0.001	396	0.011
High	III	Inward interaction	2.725	664	1136	0.003	0.002	545	0.015
High	IV	Sweep	1.810	703	1544	0.002	0.002	362	0.010
Medium	I	Outward interaction	1.155	69	174	0.001	0.001	231	0.006
Medium	II	Ejection	4.910	127	244	0.011	0.006	982	0.027
Medium	III	Inward interaction	0.570	22	47	0.000	0.000	114	0.003
Medium	IV	Sweep	6.950	228	475	0.027	0.017	1390	0.039

Table 383: Quadrant analysis summary for a hole size of 3 at the edge of the canopy, at a flow speed setting of 8 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	2.290	209	353	0.003	0.002	458	0.013
Low	II	Ejection	2.775	219	411	0.004	0.002	555	0.015
Low	III	Inward interaction	1.995	189	348	0.002	0.001	399	0.011
Low	IV	Sweep	5.045	521	880	0.016	0.009	1009	0.028
High	I	Outward interaction	2.670	952	2016	0.005	0.002	534	0.015
High	II	Ejection	4.455	1465	3017	0.012	0.006	891	0.025
High	III	Inward interaction	1.670	528	1175	0.002	0.001	334	0.009
High	IV	Sweep	3.590	1033	2129	0.007	0.003	718	0.020
Medium	I	Outward interaction	3.875	400	869	0.011	0.008	775	0.022
Medium	II	Ejection	4.225	339	720	0.011	0.007	845	0.024
Medium	III	Inward interaction	0.955	66	139	0.000	0.000	191	0.005
Medium	IV	Sweep	3.485	250	466	0.006	0.004	697	0.019

Table 384: Quadrant analysis summary for a hole size of 3 at the edge of the canopy, at a flow speed setting of 8 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
Low	I	Outward interaction	1.690	383	645	0.002	0.001	338	0.009
Low	II	Ejection	2.195	383	596	0.002	0.001	439	0.012
Low	III	Inward interaction	2.475	582	963	0.004	0.002	495	0.014
Low	IV	Sweep	5.815	1498	2727	0.023	0.015	1163	0.032
High	I	Outward interaction	2.235	115	202	0.003	0.002	447	0.012
High	II	Ejection	5.500	239	402	0.018	0.010	1100	0.031
High	III	Inward interaction	1.110	49	86	0.001	0.000	222	0.006
High	IV	Sweep	3.905	141	245	0.007	0.004	781	0.022
Medium	I	Outward interaction	1.125	75	143	0.001	0.001	225	0.006
Medium	II	Ejection	7.585	392	657	0.030	0.017	1517	0.042
Medium	III	Inward interaction	0.875	57	90	0.001	0.000	175	0.005
Medium	IV	Sweep	3.180	131	236	0.004	0.003	636	0.018

Table 385: Quadrant analysis summary for a hole size of 3 above the canopy, at a flow speed setting of 8 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	2.965	235	377	0.007	0.004	593	0.017
High	II	Ejection	4.575	226	347	0.011	0.006	915	0.026
High	III	Inward interaction	1.370	85	137	0.001	0.001	274	0.008
High	IV	Sweep	5.075	269	404	0.014	0.008	1015	0.028
Low	I	Outward interaction	3.300	443	947	0.007	0.003	660	0.018
Low	II	Ejection	2.580	271	619	0.003	0.001	516	0.014
Low	III	Inward interaction	2.440	281	683	0.003	0.002	488	0.014
Low	IV	Sweep	3.905	583	1207	0.010	0.004	781	0.022
Medium	I	Outward interaction	2.485	166	243	0.005	0.003	497	0.014
Medium	II	Ejection	4.370	160	242	0.009	0.005	874	0.024
Medium	III	Inward interaction	0.790	40	65	0.000	0.000	158	0.004
Medium	IV	Sweep	5.475	206	304	0.014	0.008	1095	0.031

Table 386: Quadrant analysis summary for a hole size of 3 above the canopy, at a flow speed setting of 8 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	2.445	265	396	0.005	0.003	489	0.014
High	II	Ejection	5.525	411	582	0.017	0.010	1105	0.031
High	III	Inward interaction	1.050	74	115	0.001	0.000	210	0.006
High	IV	Sweep	4.215	270	384	0.008	0.005	843	0.024
Low	I	Outward interaction	0.830	76	153	0.000	0.000	166	0.005
Low	II	Ejection	3.850	282	457	0.007	0.003	770	0.021
Low	III	Inward interaction	2.920	283	554	0.005	0.003	584	0.016
Low	IV	Sweep	5.110	502	979	0.017	0.009	1022	0.029
Medium	I	Outward interaction	1.845	115	170	0.002	0.001	369	0.010
Medium	II	Ejection	4.845	235	339	0.011	0.006	969	0.027
Medium	III	Inward interaction	1.205	69	105	0.001	0.000	241	0.007
Medium	IV	Sweep	4.485	250	356	0.011	0.006	897	0.025

Table 387: Quadrant analysis summary for a hole size of 3 above the canopy, at a flow speed setting of 8 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	0.425	349	606	0.000	0.000	85	0.002
High	II	Ejection	7.450	3867	5817	0.025	0.014	1490	0.042
High	III	Inward interaction	0.200	158	236	0.000	0.000	40	0.001
High	IV	Sweep	5.565	2637	3867	0.013	0.007	1113	0.031
Low	I	Outward interaction	1.425	197	638	0.001	0.000	285	0.008
Low	II	Ejection	5.230	687	1847	0.015	0.005	1046	0.029
Low	III	Inward interaction	1.815	277	845	0.002	0.001	363	0.010
Low	IV	Sweep	4.460	514	1471	0.010	0.003	892	0.025
Medium	I	Outward interaction	1.730	97	143	0.002	0.001	346	0.010
Medium	II	Ejection	5.575	285	423	0.018	0.009	1115	0.031
Medium	III	Inward interaction	1.360	72	105	0.001	0.001	272	0.008
Medium	IV	Sweep	3.675	164	236	0.007	0.003	735	0.020

Table 388: Quadrant analysis summary for a hole size of 3 above the canopy, at a flow speed setting of 8 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	1.245	624	985	0.001	0.001	249	0.007
High	II	Ejection	6.285	3022	4793	0.023	0.013	1257	0.035
High	III	Inward interaction	1.070	586	952	0.001	0.000	214	0.006
High	IV	Sweep	4.500	1861	2929	0.010	0.006	900	0.025
Low	I	Outward interaction	1.310	122	316	0.001	0.001	262	0.007
Low	II	Ejection	4.500	365	758	0.011	0.005	900	0.025
Low	III	Inward interaction	2.295	220	379	0.003	0.001	459	0.013
Low	IV	Sweep	4.745	358	670	0.011	0.005	949	0.026
Medium	I	Outward interaction	0.655	261	387	0.000	0.000	131	0.004
Medium	II	Ejection	8.685	3366	4928	0.047	0.032	1737	0.049
Medium	III	Inward interaction	1.180	570	863	0.001	0.001	236	0.007
Medium	IV	Sweep	2.125	427	521	0.001	0.001	425	0.012

Table 389: Quadrant analysis summary for a hole size of 3 within the canopy, at a flow speed setting of 8 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	1.095	153	256	0.001	0.000	219	0.006
High	II	Ejection	7.210	929	1565	0.031	0.019	1442	0.040
High	III	Inward interaction	0.800	118	206	0.000	0.000	160	0.004
High	IV	Sweep	4.045	354	524	0.007	0.004	809	0.023
Low	I	Outward interaction	1.455	146	224	0.001	0.001	291	0.008
Low	II	Ejection	7.785	1009	1456	0.046	0.026	1557	0.044
Low	III	Inward interaction	1.335	132	202	0.001	0.001	267	0.007
Low	IV	Sweep	1.505	107	154	0.001	0.001	301	0.008
Medium	I	Outward interaction	0.995	111	174	0.001	0.000	199	0.006
Medium	II	Ejection	7.990	814	1227	0.038	0.023	1598	0.045
Medium	III	Inward interaction	0.840	103	159	0.001	0.000	168	0.005
Medium	IV	Sweep	3.115	211	311	0.004	0.002	623	0.017

Table 390: Quadrant analysis summary for a hole size of 3 within the canopy, at a flow speed setting of 8 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	8.945	1235	2608	0.073	0.049	1789	0.050
High	II	Ejection	0.620	83	193	0.000	0.000	124	0.003
High	III	Inward interaction	0.895	44	82	0.000	0.000	179	0.005
High	IV	Sweep	0.245	26	56	0.000	0.000	49	0.001
Low	I	Outward interaction	2.385	738	1279	0.003	0.002	477	0.013
Low	II	Ejection	3.715	968	1635	0.007	0.004	743	0.021
Low	III	Inward interaction	1.935	562	1030	0.002	0.001	387	0.011
Low	IV	Sweep	4.530	1281	2243	0.011	0.007	906	0.025
Medium	I	Outward interaction	2.455	484	1072	0.006	0.004	491	0.014
Medium	II	Ejection	4.920	471	995	0.011	0.007	984	0.028
Medium	III	Inward interaction	0.075	8	26	0.000	0.000	15	0.000
Medium	IV	Sweep	6.365	681	1365	0.021	0.012	1273	0.036

Table 391: Quadrant analysis summary for a hole size of 3 within the canopy, at a flow speed setting of 8 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	1.225	211	420	0.001	0.001	245	0.007
High	II	Ejection	3.010	343	633	0.005	0.003	602	0.018
High	III	Inward interaction	1.580	280	533	0.002	0.001	316	0.010
High	IV	Sweep	5.910	911	1711	0.025	0.014	1182	0.036
Low	I	Outward interaction	3.035	312	544	0.004	0.003	607	0.017
Low	II	Ejection	2.420	285	481	0.003	0.002	484	0.014
Low	III	Inward interaction	3.355	382	676	0.006	0.003	671	0.019
Low	IV	Sweep	3.370	459	805	0.007	0.004	674	0.019
Medium	I	Outward interaction	1.470	65	129	0.001	0.001	294	0.008
Medium	II	Ejection	5.075	187	358	0.014	0.008	1015	0.028
Medium	III	Inward interaction	1.260	55	109	0.001	0.001	252	0.007
Medium	IV	Sweep	5.130	193	367	0.014	0.008	1026	0.029

Table 392: Quadrant analysis summary for a hole size of 3 within the canopy, at a flow speed setting of 8 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	1.535	99	197	0.001	0.001	307	0.009
High	II	Ejection	5.015	281	487	0.013	0.006	1003	0.028
High	III	Inward interaction	1.505	100	196	0.001	0.001	301	0.008
High	IV	Sweep	5.125	275	553	0.013	0.007	1025	0.029
Low	I	Outward interaction	1.960	167	290	0.002	0.001	392	0.011
Low	II	Ejection	3.965	267	441	0.008	0.004	793	0.022
Low	III	Inward interaction	1.510	126	223	0.001	0.001	302	0.008
Low	IV	Sweep	5.415	411	664	0.017	0.009	1083	0.030
Medium	I	Outward interaction	1.340	126	245	0.001	0.001	268	0.008
Medium	II	Ejection	4.045	273	477	0.008	0.005	809	0.023
Medium	III	Inward interaction	1.360	123	221	0.001	0.001	272	0.008
Medium	IV	Sweep	6.370	470	815	0.021	0.012	1274	0.036

## 5.6 Tables of quadrant statistics for a hole size of 4

Table 393: Quadrant analysis summary for a hole size of 4 at the edge of the canopy, at a flow speed setting of 0.5 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	3.090	260	685	0.017	0.012	618	0.017
High	II	Ejection	3.895	115	227	0.010	0.005	779	0.022
High	III	Inward interaction	0.800	27	65	0.000	0.000	160	0.004
High	IV	Sweep	3.195	102	311	0.007	0.005	639	0.018
Low	I	Outward interaction	2.425	215	605	0.010	0.007	485	0.014
Low	II	Ejection	4.095	128	278	0.010	0.005	819	0.023
Low	III	Inward interaction	0.835	38	109	0.001	0.000	167	0.005
Low	IV	Sweep	3.605	124	389	0.009	0.007	721	0.020
Medium	I	Outward interaction	3.060	106	298	0.018	0.013	612	0.017
Medium	II	Ejection	4.425	52	106	0.012	0.007	885	0.025
Medium	III	Inward interaction	0.335	5	13	0.000	0.000	67	0.002
Medium	IV	Sweep	3.585	40	97	0.008	0.005	717	0.020

Table 394: Quadrant analysis summary for a hole size of 4 at the edge of the canopy, at a flow speed setting of 0.5 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	2.910	248	702	0.017	0.014	582	0.016
High	II	Ejection	4.155	98	197	0.010	0.006	831	0.023
High	III	Inward interaction	0.765	28	69	0.001	0.000	153	0.004
High	IV	Sweep	3.380	82	291	0.007	0.007	676	0.019
Low	I	Outward interaction	2.840	175	503	0.016	0.012	568	0.016
Low	II	Ejection	4.345	82	175	0.011	0.006	869	0.024
Low	III	Inward interaction	0.420	10	30	0.000	0.000	84	0.002
Low	IV	Sweep	3.635	69	193	0.008	0.006	727	0.020
Medium	I	Outward interaction	2.075	70	210	0.008	0.006	415	0.012
Medium	II	Ejection	4.615	50	108	0.013	0.007	923	0.026
Medium	III	Inward interaction	0.370	5	16	0.000	0.000	74	0.002
Medium	IV	Sweep	4.435	52	131	0.013	0.008	887	0.025

Table 395: Quadrant analysis summary for a hole size of 4 at the edge of the canopy, at a flow speed setting of 0.5 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	3.365	262	727	0.023	0.015	673	0.019
High	II	Ejection	3.900	93	196	0.009	0.005	780	0.022
High	III	Inward interaction	0.695	21	60	0.000	0.000	139	0.004
High	IV	Sweep	3.340	87	280	0.007	0.006	668	0.019
Low	I	Outward interaction	2.225	132	443	0.009	0.007	445	0.012
Low	II	Ejection	4.020	77	173	0.010	0.005	804	0.022
Low	III	Inward interaction	0.760	24	75	0.001	0.000	152	0.004
Low	IV	Sweep	3.490	65	188	0.007	0.005	698	0.019
Medium	I	Outward interaction	1.845	74	227	0.007	0.006	369	0.010
Medium	II	Ejection	4.620	51	104	0.012	0.007	924	0.026
Medium	III	Inward interaction	0.380	8	21	0.000	0.000	76	0.002
Medium	IV	Sweep	4.270	48	118	0.010	0.008	854	0.024

Table 396: Quadrant analysis summary for a hole size of 4 at the edge of the canopy, at a flow speed setting of 0.5 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	2.415	124	355	0.009	0.007	483	0.013
High	II	Ejection	4.160	83	171	0.011	0.006	832	0.023
High	III	Inward interaction	0.530	12	32	0.000	0.000	106	0.003
High	IV	Sweep	3.865	82	226	0.010	0.007	773	0.022
Low	I	Outward interaction	2.125	136	471	0.008	0.006	425	0.012
Low	II	Ejection	3.835	82	192	0.009	0.004	767	0.021
Low	III	Inward interaction	0.825	30	96	0.001	0.000	165	0.005
Low	IV	Sweep	3.585	75	247	0.007	0.005	717	0.020
Medium	I	Outward interaction	2.300	102	332	0.009	0.007	460	0.013
Medium	II	Ejection	4.030	64	137	0.010	0.005	806	0.022
Medium	III	Inward interaction	0.605	14	39	0.000	0.000	121	0.003
Medium	IV	Sweep	3.935	66	173	0.010	0.006	787	0.022

Table 397: Quadrant analysis summary for a hole size of 4 above the canopy, at a flow speed setting of 0.5 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	2.665	238	641	0.012	0.008	533	0.015
High	II	Ejection	3.765	128	265	0.009	0.005	753	0.021
High	III	Inward interaction	0.880	37	108	0.001	0.000	176	0.005
High	IV	Sweep	2.835	101	314	0.005	0.004	567	0.016
Low	I	Outward interaction	2.770	162	467	0.012	0.009	554	0.015
Low	II	Ejection	3.840	106	220	0.011	0.006	768	0.021
Low	III	Inward interaction	0.520	14	36	0.000	0.000	104	0.003
Low	IV	Sweep	3.435	98	290	0.009	0.007	687	0.019
Medium	I	Outward interaction	2.390	93	284	0.012	0.009	478	0.013
Medium	II	Ejection	4.505	51	106	0.012	0.007	901	0.025
Medium	III	Inward interaction	0.340	5	16	0.000	0.000	68	0.002
Medium	IV	Sweep	4.225	48	126	0.011	0.007	845	0.024

Table 398: Quadrant analysis summary for a hole size of 4 above the canopy, at a flow speed setting of 0.5 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	3.500	178	497	0.021	0.015	700	0.020
High	II	Ejection	4.275	79	164	0.011	0.006	855	0.024
High	III	Inward interaction	0.450	9	25	0.000	0.000	90	0.003
High	IV	Sweep	3.450	68	217	0.008	0.006	690	0.019
Low	I	Outward interaction	2.725	160	463	0.012	0.009	545	0.015
Low	II	Ejection	4.205	95	192	0.011	0.006	841	0.023
Low	III	Inward interaction	0.505	16	37	0.000	0.000	101	0.003
Low	IV	Sweep	3.905	92	251	0.010	0.007	781	0.022
Medium	I	Outward interaction	2.640	105	327	0.014	0.011	528	0.015
Medium	II	Ejection	4.420	49	105	0.011	0.006	884	0.025
Medium	III	Inward interaction	0.520	9	26	0.000	0.000	104	0.003
Medium	IV	Sweep	3.885	44	113	0.009	0.006	777	0.022

Table 399: Quadrant analysis summary for a hole size of 4 above the canopy, at a flow speed setting of 0.5 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	2.345	130	329	0.011	0.007	469	0.013
High	II	Ejection	4.795	85	173	0.015	0.008	959	0.027
High	III	Inward interaction	0.240	5	12	0.000	0.000	48	0.001
High	IV	Sweep	4.275	73	202	0.012	0.008	855	0.024
Low	I	Outward interaction	2.895	267	748	0.015	0.010	579	0.016
Low	II	Ejection	3.610	111	249	0.008	0.004	722	0.020
Low	III	Inward interaction	0.700	28	90	0.000	0.000	140	0.004
Low	IV	Sweep	3.620	118	413	0.008	0.007	724	0.020
Medium	I	Outward interaction	2.450	101	296	0.012	0.009	490	0.014
Medium	II	Ejection	4.595	56	118	0.013	0.007	919	0.026
Medium	III	Inward interaction	0.400	8	23	0.000	0.000	80	0.002
Medium	IV	Sweep	3.610	42	111	0.008	0.005	722	0.020

Table 400: Quadrant analysis summary for a hole size of 4 above the canopy, at a flow speed setting of 0.5 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	2.895	186	471	0.015	0.010	579	0.016
High	II	Ejection	3.920	84	169	0.009	0.005	784	0.022
High	III	Inward interaction	0.495	14	36	0.000	0.000	99	0.003
High	IV	Sweep	4.130	102	281	0.012	0.009	826	0.023
Low	I	Outward interaction	3.080	247	737	0.016	0.012	616	0.017
Low	II	Ejection	3.990	124	258	0.010	0.005	798	0.022
Low	III	Inward interaction	0.615	22	63	0.000	0.000	123	0.003
Low	IV	Sweep	3.230	100	301	0.007	0.005	646	0.018
Medium	I	Outward interaction	2.360	107	264	0.010	0.007	472	0.013
Medium	II	Ejection	3.855	69	132	0.011	0.006	771	0.022
Medium	III	Inward interaction	0.260	5	13	0.000	0.000	52	0.001
Medium	IV	Sweep	4.425	63	137	0.011	0.007	885	0.025

Table 401: Quadrant analysis summary for a hole size of 4 within the canopy, at a flow speed setting of 0.5 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	2.740	342	989	0.015	0.010	548	0.015
High	II	Ejection	3.425	131	278	0.007	0.003	685	0.019
High	III	Inward interaction	0.735	36	106	0.000	0.000	147	0.004
High	IV	Sweep	3.735	165	593	0.010	0.008	747	0.021
Low	I	Outward interaction	2.865	370	1075	0.016	0.011	573	0.016
Low	II	Ejection	3.965	157	342	0.009	0.005	793	0.022
Low	III	Inward interaction	0.865	50	137	0.001	0.000	173	0.005
Low	IV	Sweep	3.475	155	531	0.008	0.006	695	0.019
Medium	I	Outward interaction	2.345	170	646	0.009	0.007	469	0.013
Medium	II	Ejection	3.335	84	205	0.006	0.003	667	0.019
Medium	III	Inward interaction	0.965	42	128	0.001	0.001	193	0.005
Medium	IV	Sweep	3.060	81	311	0.006	0.004	612	0.017

Table 402: Quadrant analysis summary for a hole size of 4 within the canopy, at a flow speed setting of 0.5 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	2.565	346	1043	0.012	0.009	513	0.014
High	II	Ejection	3.655	156	331	0.008	0.004	731	0.020
High	III	Inward interaction	0.900	57	138	0.001	0.000	180	0.005
High	IV	Sweep	3.830	190	596	0.010	0.008	766	0.021
Low	I	Outward interaction	2.715	184	492	0.013	0.009	543	0.015
Low	II	Ejection	4.320	108	223	0.012	0.006	864	0.024
Low	III	Inward interaction	0.610	18	54	0.000	0.000	122	0.003
Low	IV	Sweep	3.555	88	265	0.008	0.006	711	0.020
Medium	I	Outward interaction	1.840	151	668	0.006	0.005	368	0.010
Medium	II	Ejection	3.510	98	252	0.007	0.003	702	0.020
Medium	III	Inward interaction	0.820	39	140	0.001	0.000	164	0.005
Medium	IV	Sweep	3.410	101	440	0.007	0.006	682	0.019

Table 403: Quadrant analysis summary for a hole size of 4 within the canopy, at a flow speed setting of 0.5 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	0.550	60	161	0.000	0.000	110	0.003
High	II	Ejection	4.125	217	436	0.010	0.006	825	0.023
High	III	Inward interaction	0.295	29	80	0.000	0.000	59	0.002
High	IV	Sweep	3.615	197	431	0.008	0.005	723	0.020
Low	I	Outward interaction	1.815	87	219	0.006	0.004	363	0.010
Low	II	Ejection	5.595	89	166	0.020	0.010	1119	0.031
Low	III	Inward interaction	0.090	1	4	0.000	0.000	18	0.001
Low	IV	Sweep	5.195	86	231	0.018	0.013	1039	0.029
Medium	I	Outward interaction	1.585	126	529	0.004	0.004	317	0.009
Medium	II	Ejection	3.800	100	242	0.008	0.004	760	0.021
Medium	III	Inward interaction	0.740	37	126	0.001	0.000	148	0.004
Medium	IV	Sweep	3.340	98	390	0.007	0.006	668	0.019

Table 404: Quadrant analysis summary for a hole size of 4 within the canopy, at a flow speed setting of 0.5 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	3.185	221	708	0.016	0.014	637	0.018
Low	II	Ejection	3.650	98	214	0.008	0.005	730	0.020
Low	III	Inward interaction	0.855	28	74	0.001	0.000	171	0.005
Low	IV	Sweep	3.005	94	325	0.007	0.006	601	0.017
Medium	I	Outward interaction	2.000	167	589	0.007	0.005	400	0.011
Medium	II	Ejection	4.065	109	259	0.010	0.005	813	0.023
Medium	III	Inward interaction	0.760	33	108	0.001	0.000	152	0.004
Medium	IV	Sweep	3.195	81	289	0.006	0.004	639	0.018

Table 405: Quadrant analysis summary for a hole size of 4 at the edge of the canopy, at a flow speed setting of 1 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	2.815	257	768	0.014	0.010	563	0.016
High	II	Ejection	3.705	109	243	0.008	0.004	741	0.021
High	III	Inward interaction	0.935	40	104	0.001	0.000	187	0.005
High	IV	Sweep	3.415	124	392	0.008	0.006	683	0.019
Low	I	Outward interaction	2.620	194	515	0.011	0.007	524	0.015
Low	II	Ejection	4.120	121	256	0.011	0.006	824	0.023
Low	III	Inward interaction	0.690	26	68	0.000	0.000	138	0.004
Low	IV	Sweep	3.620	112	327	0.009	0.006	724	0.020
Medium	I	Outward interaction	2.610	118	359	0.013	0.010	522	0.015
Medium	II	Ejection	4.150	59	124	0.010	0.006	830	0.023
Medium	III	Inward interaction	0.615	13	36	0.000	0.000	123	0.003
Medium	IV	Sweep	3.690	52	140	0.008	0.006	738	0.021

Table 406: Quadrant analysis summary for a hole size of 4 at the edge of the canopy, at a flow speed setting of 1 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	2.605	175	600	0.012	0.011	521	0.015
High	II	Ejection	3.970	85	185	0.009	0.005	794	0.022
High	III	Inward interaction	0.775	28	68	0.001	0.000	155	0.004
High	IV	Sweep	3.340	81	258	0.007	0.006	668	0.019
Low	I	Outward interaction	2.965	215	641	0.016	0.012	593	0.017
Low	II	Ejection	3.900	96	210	0.009	0.005	780	0.022
Low	III	Inward interaction	0.700	23	64	0.000	0.000	140	0.004
Low	IV	Sweep	3.495	87	272	0.008	0.006	699	0.020
Medium	I	Outward interaction	2.105	73	226	0.007	0.005	421	0.012
Medium	II	Ejection	4.455	62	133	0.013	0.007	891	0.025
Medium	III	Inward interaction	0.525	10	27	0.000	0.000	105	0.003
Medium	IV	Sweep	4.130	58	147	0.011	0.007	826	0.023

Table 407: Quadrant analysis summary for a hole size of 4 at the edge of the canopy, at a flow speed setting of 1 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	2.635	171	478	0.013	0.009	527	0.015
High	II	Ejection	4.455	102	210	0.013	0.007	891	0.025
High	III	Inward interaction	0.405	10	26	0.000	0.000	81	0.002
High	IV	Sweep	4.365	108	332	0.013	0.010	873	0.024
Low	I	Outward interaction	2.015	94	285	0.008	0.006	403	0.011
Low	II	Ejection	4.385	62	137	0.011	0.006	877	0.024
Low	III	Inward interaction	0.530	15	42	0.000	0.000	106	0.003
Low	IV	Sweep	3.695	54	141	0.008	0.005	739	0.021
Medium	I	Outward interaction	2.315	105	341	0.012	0.011	463	0.013
Medium	II	Ejection	4.545	52	110	0.011	0.007	909	0.025
Medium	III	Inward interaction	0.505	11	32	0.000	0.000	101	0.003
Medium	IV	Sweep	4.175	49	122	0.010	0.007	835	0.023

Table 408: Quadrant analysis summary for a hole size of 4 at the edge of the canopy, at a flow speed setting of 1 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	3.175	323	907	0.018	0.014	635	0.018
High	II	Ejection	3.890	136	270	0.010	0.005	778	0.022
High	III	Inward interaction	0.645	30	73	0.000	0.000	129	0.004
High	IV	Sweep	3.595	128	382	0.008	0.007	719	0.020
Low	I	Outward interaction	2.245	111	346	0.008	0.006	449	0.013
Low	II	Ejection	3.730	72	161	0.008	0.005	746	0.021
Low	III	Inward interaction	0.790	25	76	0.001	0.000	158	0.004
Low	IV	Sweep	3.455	68	196	0.007	0.005	691	0.019
Medium	I	Outward interaction	1.995	89	270	0.007	0.005	399	0.011
Medium	II	Ejection	4.190	63	138	0.011	0.006	838	0.023
Medium	III	Inward interaction	0.560	14	40	0.000	0.000	112	0.003
Medium	IV	Sweep	4.220	65	170	0.011	0.007	844	0.024

Table 409: Quadrant analysis summary for a hole size of 4 above the canopy, at a flow speed setting of 1 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	3.050	334	973	0.017	0.012	610	0.017
High	II	Ejection	3.925	145	326	0.009	0.005	785	0.022
High	III	Inward interaction	0.785	39	128	0.001	0.000	157	0.004
High	IV	Sweep	3.205	120	392	0.006	0.005	641	0.018
Low	I	Outward interaction	2.500	192	525	0.011	0.008	500	0.014
Low	II	Ejection	4.075	109	226	0.011	0.005	815	0.023
Low	III	Inward interaction	0.605	22	63	0.000	0.000	121	0.003
Low	IV	Sweep	3.905	104	300	0.010	0.007	781	0.022
Medium	I	Outward interaction	2.790	136	411	0.016	0.012	558	0.016
Medium	II	Ejection	4.090	60	131	0.010	0.006	818	0.023
Medium	III	Inward interaction	0.520	12	31	0.000	0.000	104	0.003
Medium	IV	Sweep	3.465	48	129	0.007	0.005	693	0.019

Table 410: Quadrant analysis summary for a hole size of 4 above the canopy, at a flow speed setting of 1 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	3.030	132	380	0.014	0.010	606	0.017
High	II	Ejection	4.005	79	170	0.011	0.006	801	0.022
High	III	Inward interaction	0.615	13	40	0.000	0.000	123	0.003
High	IV	Sweep	3.610	69	192	0.009	0.006	722	0.020
Low	I	Outward interaction	2.625	206	562	0.013	0.009	525	0.015
Low	II	Ejection	4.010	100	206	0.009	0.005	802	0.022
Low	III	Inward interaction	0.690	26	64	0.000	0.000	138	0.004
Low	IV	Sweep	3.605	95	292	0.008	0.006	721	0.020
Medium	I	Outward interaction	2.455	94	291	0.011	0.008	491	0.014
Medium	II	Ejection	4.340	58	132	0.012	0.006	868	0.024
Medium	III	Inward interaction	0.710	14	40	0.000	0.000	142	0.004
Medium	IV	Sweep	3.930	50	133	0.009	0.006	786	0.022

Table 411: Quadrant analysis summary for a hole size of 4 above the canopy, at a flow speed setting of 1 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	2.830	100	274	0.014	0.009	566	0.016
High	II	Ejection	4.425	57	126	0.012	0.006	885	0.025
High	III	Inward interaction	0.295	5	13	0.000	0.000	59	0.002
High	IV	Sweep	3.955	51	143	0.010	0.007	791	0.022
Low	I	Outward interaction	2.220	173	456	0.008	0.005	444	0.012
Low	II	Ejection	3.650	100	223	0.008	0.004	730	0.020
Low	III	Inward interaction	0.905	38	113	0.001	0.000	181	0.005
Low	IV	Sweep	3.765	114	386	0.009	0.007	753	0.021
Medium	I	Outward interaction	2.050	90	267	0.009	0.007	410	0.011
Medium	II	Ejection	4.625	57	125	0.013	0.007	925	0.026
Medium	III	Inward interaction	0.395	7	21	0.000	0.000	79	0.002
Medium	IV	Sweep	4.150	47	112	0.010	0.006	830	0.023

Table 412: Quadrant analysis summary for a hole size of 4 above the canopy, at a flow speed setting of 1 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	1.795	74	186	0.005	0.004	359	0.010
High	II	Ejection	4.255	62	126	0.011	0.006	851	0.024
High	III	Inward interaction	0.290	7	17	0.000	0.000	58	0.002
High	IV	Sweep	4.935	84	178	0.017	0.009	987	0.028
Low	I	Outward interaction	2.345	176	433	0.008	0.006	469	0.013
Low	II	Ejection	3.545	113	205	0.008	0.004	709	0.020
Low	III	Inward interaction	0.330	13	36	0.000	0.000	66	0.002
Low	IV	Sweep	3.930	128	269	0.010	0.006	786	0.022
Medium	I	Outward interaction	1.445	62	180	0.004	0.003	289	0.008
Medium	II	Ejection	4.645	64	136	0.014	0.008	929	0.026
Medium	III	Inward interaction	0.360	8	23	0.000	0.000	72	0.002
Medium	IV	Sweep	4.500	56	137	0.011	0.008	900	0.025

Table 413: Quadrant analysis summary for a hole size of 4 within the canopy, at a flow speed setting of 1 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	2.635	209	648	0.013	0.009	527	0.015
High	II	Ejection	4.185	113	243	0.011	0.006	837	0.023
High	III	Inward interaction	0.515	17	53	0.000	0.000	103	0.003
High	IV	Sweep	3.885	103	333	0.009	0.007	777	0.022
Low	I	Outward interaction	2.220	138	387	0.008	0.006	444	0.012
Low	II	Ejection	4.440	108	224	0.012	0.006	888	0.025
Low	III	Inward interaction	0.470	17	46	0.000	0.000	94	0.003
Low	IV	Sweep	4.335	105	310	0.012	0.009	867	0.024
Medium	I	Outward interaction	2.205	103	318	0.009	0.006	441	0.012
Medium	II	Ejection	4.110	67	147	0.011	0.005	822	0.023
Medium	III	Inward interaction	0.755	19	59	0.001	0.000	151	0.004
Medium	IV	Sweep	3.630	58	171	0.008	0.005	726	0.020

Table 414: Quadrant analysis summary for a hole size of 4 within the canopy, at a flow speed setting of 1 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	2.410	251	723	0.010	0.008	482	0.013
High	II	Ejection	4.035	140	288	0.010	0.005	807	0.023
High	III	Inward interaction	0.785	42	104	0.001	0.000	157	0.004
High	IV	Sweep	3.755	144	498	0.009	0.008	751	0.021
Low	I	Outward interaction	2.925	137	389	0.014	0.009	585	0.016
Low	II	Ejection	3.570	68	149	0.008	0.004	714	0.020
Low	III	Inward interaction	0.710	18	53	0.000	0.000	142	0.004
Low	IV	Sweep	3.395	67	196	0.008	0.005	679	0.019
Medium	I	Outward interaction	1.995	131	504	0.007	0.006	399	0.011
Medium	II	Ejection	4.260	91	209	0.010	0.005	852	0.024
Medium	III	Inward interaction	0.740	26	83	0.001	0.000	148	0.004
Medium	IV	Sweep	3.460	76	263	0.007	0.005	692	0.019

Table 415: Quadrant analysis summary for a hole size of 4 within the canopy, at a flow speed setting of 1 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	4.035	446	1292	0.028	0.020	807	0.023
High	II	Ejection	3.005	113	247	0.005	0.003	601	0.017
High	III	Inward interaction	1.055	47	123	0.001	0.001	211	0.006
High	IV	Sweep	3.275	155	498	0.008	0.006	655	0.018
Low	I	Outward interaction	1.555	26	71	0.004	0.002	311	0.009
Low	II	Ejection	4.895	37	92	0.017	0.009	979	0.027
Low	III	Inward interaction	0.210	2	9	0.000	0.000	42	0.001
Low	IV	Sweep	4.415	30	87	0.013	0.007	883	0.025
Medium	I	Outward interaction	1.815	155	643	0.006	0.005	363	0.010
Medium	II	Ejection	3.520	92	221	0.007	0.004	704	0.020
Medium	III	Inward interaction	0.855	42	143	0.001	0.001	171	0.005
Medium	IV	Sweep	3.265	87	325	0.006	0.005	653	0.018

Table 416: Quadrant analysis summary for a hole size of 4 within the canopy, at a flow speed setting of 1 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	2.580	335	901	0.012	0.008	516	0.014
High	II	Ejection	4.025	169	359	0.010	0.005	805	0.023
High	III	Inward interaction	0.675	39	109	0.000	0.000	135	0.004
High	IV	Sweep	3.865	177	608	0.010	0.008	773	0.022
Low	I	Outward interaction	3.045	313	906	0.017	0.012	609	0.017
Low	II	Ejection	3.935	132	268	0.009	0.005	787	0.022
Low	III	Inward interaction	0.775	32	93	0.000	0.000	155	0.004
Low	IV	Sweep	3.420	126	404	0.008	0.006	684	0.019
Medium	I	Outward interaction	2.025	158	576	0.007	0.005	405	0.011
Medium	II	Ejection	3.815	97	224	0.008	0.004	763	0.021
Medium	III	Inward interaction	0.820	34	104	0.001	0.000	164	0.005
Medium	IV	Sweep	3.320	87	321	0.007	0.005	664	0.019

Table 417: Quadrant analysis summary for a hole size of 4 at the edge of the canopy, at a flow speed setting of 10 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	1.295	318	436	0.002	0.001	259	0.007
High	II	Ejection	4.055	788	1035	0.012	0.007	811	0.023
High	III	Inward interaction	0.370	73	93	0.000	0.000	74	0.002
High	IV	Sweep	1.210	180	227	0.001	0.000	242	0.007
Low	I	Outward interaction	2.215	360	489	0.004	0.002	443	0.012
Low	II	Ejection	2.710	544	768	0.007	0.003	542	0.015
Low	III	Inward interaction	0.675	86	119	0.000	0.000	135	0.004
Low	IV	Sweep	0.705	101	148	0.000	0.000	141	0.004
Medium	I	Outward interaction	1.055	219	316	0.001	0.001	211	0.006
Medium	II	Ejection	3.775	729	985	0.011	0.006	755	0.021
Medium	III	Inward interaction	0.640	105	143	0.000	0.000	128	0.004
Medium	IV	Sweep	1.790	281	362	0.002	0.001	358	0.010

Table 418: Quadrant analysis summary for a hole size of 4 at the edge of the canopy, at a flow speed setting of 10 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	4.490	1613	2871	0.016	0.011	898	0.025
High	II	Ejection	0.545	193	254	0.000	0.000	109	0.003
High	III	Inward interaction	0.560	111	135	0.000	0.000	112	0.003
High	IV	Sweep	0.770	290	628	0.000	0.000	154	0.004
Low	I	Outward interaction	1.060	193	305	0.001	0.000	212	0.006
Low	II	Ejection	3.555	634	910	0.010	0.005	711	0.020
Low	III	Inward interaction	1.545	265	420	0.002	0.001	309	0.009
Low	IV	Sweep	1.025	129	176	0.001	0.000	205	0.006
Medium	I	Outward interaction	0.325	27	66	0.000	0.000	65	0.002
Medium	II	Ejection	3.100	127	233	0.005	0.003	620	0.017
Medium	III	Inward interaction	0.160	10	24	0.000	0.000	32	0.001
Medium	IV	Sweep	4.585	234	443	0.015	0.009	917	0.026

Table 419: Quadrant analysis summary for a hole size of 4 at the edge of the canopy, at a flow speed setting of 10 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	3.515	1139	2269	0.008	0.004	703	0.020
High	II	Ejection	0.435	216	473	0.000	0.000	87	0.002
High	III	Inward interaction	2.850	823	1593	0.005	0.002	570	0.016
High	IV	Sweep	0.180	68	166	0.000	0.000	36	0.001
Low	I	Outward interaction	0.685	151	256	0.000	0.000	137	0.004
Low	II	Ejection	1.520	271	405	0.001	0.001	304	0.008
Low	III	Inward interaction	1.555	380	537	0.002	0.001	311	0.009
Low	IV	Sweep	2.770	634	1016	0.006	0.004	554	0.015
Medium	I	Outward interaction	2.360	212	625	0.008	0.006	472	0.013
Medium	II	Ejection	1.975	67	154	0.002	0.001	395	0.011
Medium	III	Inward interaction	0.150	8	19	0.000	0.000	30	0.001
Medium	IV	Sweep	4.150	199	514	0.013	0.009	830	0.023

Table 420: Quadrant analysis summary for a hole size of 4 at the edge of the canopy, at a flow speed setting of 10 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	0.300	22	43	0.000	0.000	60	0.002
High	II	Ejection	3.135	115	224	0.005	0.003	627	0.018
High	III	Inward interaction	0.075	5	12	0.000	0.000	15	0.000
High	IV	Sweep	4.030	173	338	0.010	0.006	806	0.023
Low	I	Outward interaction	1.715	414	626	0.002	0.001	343	0.010
Low	II	Ejection	0.540	129	197	0.000	0.000	108	0.003
Low	III	Inward interaction	2.005	510	796	0.003	0.002	401	0.011
Low	IV	Sweep	2.170	682	1118	0.004	0.002	434	0.012
Medium	I	Outward interaction	0.440	55	105	0.000	0.000	88	0.002
Medium	II	Ejection	4.790	259	462	0.014	0.008	958	0.027
Medium	III	Inward interaction	0.015	1	2	0.000	0.000	3	0.000
Medium	IV	Sweep	2.890	141	249	0.005	0.002	578	0.016

Table 421: Quadrant analysis summary for a hole size of 4 above the canopy, at a flow speed setting of 10 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	0.825	118	162	0.001	0.000	165	0.005
High	II	Ejection	3.270	351	471	0.007	0.004	654	0.018
High	III	Inward interaction	0.670	82	120	0.000	0.000	134	0.004
High	IV	Sweep	2.290	226	306	0.003	0.002	458	0.013
Low	I	Outward interaction	0.710	129	236	0.000	0.000	142	0.004
Low	II	Ejection	1.460	218	330	0.001	0.000	292	0.008
Low	III	Inward interaction	1.380	258	390	0.001	0.001	276	0.008
Low	IV	Sweep	2.165	431	684	0.003	0.002	433	0.012
Medium	I	Outward interaction	0.680	67	96	0.000	0.000	136	0.004
Medium	II	Ejection	2.620	182	252	0.004	0.002	524	0.015
Medium	III	Inward interaction	0.455	37	56	0.000	0.000	91	0.003
Medium	IV	Sweep	3.140	263	359	0.007	0.004	628	0.018

Table 422: Quadrant analysis summary for a hole size of 4 above the canopy, at a flow speed setting of 10 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	1.235	212	324	0.001	0.001	247	0.007
High	II	Ejection	2.240	325	467	0.004	0.002	448	0.012
High	III	Inward interaction	0.850	108	145	0.000	0.000	170	0.005
High	IV	Sweep	1.785	248	328	0.002	0.001	357	0.010
Low	I	Outward interaction	0.375	49	79	0.000	0.000	75	0.002
Low	II	Ejection	2.220	236	357	0.003	0.001	444	0.012
Low	III	Inward interaction	1.235	211	345	0.001	0.001	247	0.007
Low	IV	Sweep	2.650	361	574	0.005	0.003	530	0.015
Medium	I	Outward interaction	1.445	165	231	0.002	0.001	289	0.008
Medium	II	Ejection	2.345	194	275	0.004	0.002	469	0.013
Medium	III	Inward interaction	0.530	43	66	0.000	0.000	106	0.003
Medium	IV	Sweep	2.285	182	247	0.003	0.002	457	0.013

Table 423: Quadrant analysis summary for a hole size of 4 above the canopy, at a flow speed setting of 10 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	0.395	508	850	0.000	0.000	79	0.002
High	II	Ejection	4.060	3708	5539	0.011	0.006	812	0.023
High	III	Inward interaction	0.120	141	219	0.000	0.000	24	0.001
High	IV	Sweep	2.085	1514	2129	0.002	0.001	417	0.012
Low	I	Outward interaction	0.765	112	207	0.000	0.000	153	0.004
Low	II	Ejection	2.430	325	585	0.004	0.001	486	0.014
Low	III	Inward interaction	0.780	112	234	0.000	0.000	156	0.004
Low	IV	Sweep	2.350	298	633	0.003	0.001	470	0.013
Medium	I	Outward interaction	2.275	283	392	0.004	0.002	455	0.013
Medium	II	Ejection	2.455	300	414	0.005	0.002	491	0.014
Medium	III	Inward interaction	0.375	35	50	0.000	0.000	75	0.002
Medium	IV	Sweep	1.080	113	152	0.001	0.000	216	0.006

Table 424: Quadrant analysis summary for a hole size of 4 above the canopy, at a flow speed setting of 10 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	0.130	235	371	0.000	0.000	26	0.001
High	II	Ejection	4.400	5287	7472	0.011	0.007	880	0.025
High	III	Inward interaction	0.065	124	198	0.000	0.000	13	0.000
High	IV	Sweep	2.760	2703	3374	0.004	0.002	552	0.015
Low	I	Outward interaction	0.610	78	118	0.000	0.000	122	0.003
Low	II	Ejection	2.565	284	419	0.004	0.002	513	0.014
Low	III	Inward interaction	0.740	113	158	0.000	0.000	148	0.004
Low	IV	Sweep	2.880	311	423	0.005	0.002	576	0.016
Medium	I	Outward interaction	1.015	160	237	0.001	0.001	203	0.006
Medium	II	Ejection	5.335	904	1259	0.025	0.015	1067	0.030
Medium	III	Inward interaction	0.330	43	58	0.000	0.000	66	0.002
Medium	IV	Sweep	0.650	69	87	0.000	0.000	130	0.004

Table 425: Quadrant analysis summary for a hole size of 4 within the canopy, at a flow speed setting of 10 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	0.570	145	234	0.000	0.000	114	0.003
High	II	Ejection	5.275	1325	2127	0.021	0.013	1055	0.030
High	III	Inward interaction	0.270	71	109	0.000	0.000	54	0.002
High	IV	Sweep	0.775	122	165	0.000	0.000	155	0.004
Low	I	Outward interaction	0.525	108	157	0.000	0.000	105	0.003
Low	II	Ejection	4.730	962	1341	0.018	0.010	946	0.026
Low	III	Inward interaction	0.460	94	129	0.000	0.000	92	0.003
Low	IV	Sweep	2.060	296	385	0.002	0.001	412	0.012
Medium	I	Outward interaction	0.325	64	95	0.000	0.000	65	0.002
Medium	II	Ejection	5.355	1090	1569	0.022	0.013	1071	0.030
Medium	III	Inward interaction	0.370	89	129	0.000	0.000	74	0.002
Medium	IV	Sweep	1.790	244	321	0.002	0.001	358	0.010

Table 426: Quadrant analysis summary for a hole size of 4 within the canopy, at a flow speed setting of 10 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	3.270	474	1090	0.013	0.010	654	0.018
High	II	Ejection	1.820	128	255	0.002	0.001	364	0.010
High	III	Inward interaction	0.055	4	6	0.000	0.000	11	0.000
High	IV	Sweep	2.315	196	388	0.004	0.002	463	0.013
Low	I	Outward interaction	0.450	273	432	0.000	0.000	90	0.003
Low	II	Ejection	2.720	1232	1967	0.004	0.002	544	0.015
Low	III	Inward interaction	0.430	244	402	0.000	0.000	86	0.002
Low	IV	Sweep	2.910	1277	2123	0.005	0.003	582	0.016
Medium	I	Outward interaction	2.285	695	1283	0.004	0.002	457	0.013
Medium	II	Ejection	1.415	437	914	0.002	0.001	283	0.008
Medium	III	Inward interaction	0.795	189	403	0.000	0.000	159	0.004
Medium	IV	Sweep	1.480	419	783	0.002	0.001	296	0.008

Table 427: Quadrant analysis summary for a hole size of 4 within the canopy, at a flow speed setting of 10 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	0.600	118	200	0.000	0.000	120	0.003
High	II	Ejection	3.150	566	932	0.008	0.004	630	0.018
High	III	Inward interaction	0.560	105	178	0.000	0.000	112	0.003
High	IV	Sweep	2.125	312	513	0.003	0.001	425	0.012
Low	I	Outward interaction	1.205	187	360	0.001	0.000	241	0.007
Low	II	Ejection	1.340	228	391	0.001	0.001	268	0.007
Low	III	Inward interaction	1.900	309	539	0.002	0.001	380	0.011
Low	IV	Sweep	1.580	274	468	0.002	0.001	316	0.009
Medium	I	Outward interaction	0.590	36	69	0.000	0.000	118	0.003
Medium	II	Ejection	2.715	150	305	0.005	0.002	543	0.015
Medium	III	Inward interaction	0.775	49	108	0.000	0.000	155	0.004
Medium	IV	Sweep	2.610	146	283	0.005	0.002	522	0.015

Table 428: Quadrant analysis summary for a hole size of 4 within the canopy, at a flow speed setting of 10 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	1.020	115	184	0.001	0.000	204	0.006
High	II	Ejection	2.970	348	521	0.007	0.003	594	0.017
High	III	Inward interaction	0.865	93	151	0.001	0.000	173	0.005
High	IV	Sweep	1.695	175	321	0.002	0.001	339	0.009
Low	I	Outward interaction	0.350	64	106	0.000	0.000	70	0.002
Low	II	Ejection	1.735	233	365	0.002	0.001	347	0.010
Low	III	Inward interaction	0.695	142	271	0.000	0.000	139	0.004
Low	IV	Sweep	4.790	822	1420	0.016	0.009	958	0.027
Medium	I	Outward interaction	0.850	107	170	0.001	0.000	170	0.005
Medium	II	Ejection	1.690	168	248	0.002	0.001	338	0.009
Medium	III	Inward interaction	0.820	94	143	0.000	0.000	164	0.005
Medium	IV	Sweep	2.715	286	428	0.005	0.003	543	0.015

Table 429: Quadrant analysis summary for a hole size of 4 above the canopy, at a flow speed setting of 15 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	1.055	234	337	0.001	0.001	211	0.006
High	II	Ejection	2.520	436	607	0.004	0.002	504	0.014
High	III	Inward interaction	0.570	111	165	0.000	0.000	114	0.003
High	IV	Sweep	1.910	343	475	0.002	0.001	382	0.011
Low	I	Outward interaction	0.475	108	162	0.000	0.000	95	0.003
Low	II	Ejection	1.290	291	374	0.001	0.000	258	0.007
Low	III	Inward interaction	2.010	624	853	0.003	0.001	402	0.011
Low	IV	Sweep	2.890	948	1349	0.007	0.003	578	0.016
Medium	I	Outward interaction	1.720	316	463	0.002	0.001	344	0.010
Medium	II	Ejection	2.700	488	709	0.006	0.003	540	0.015
Medium	III	Inward interaction	0.560	84	122	0.000	0.000	112	0.003
Medium	IV	Sweep	1.570	249	345	0.002	0.001	314	0.009

Table 430: Quadrant analysis summary for a hole size of 4 above the canopy, at a flow speed setting of 15 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	1.160	325	483	0.001	0.001	232	0.006
High	II	Ejection	2.175	476	685	0.003	0.002	435	0.012
High	III	Inward interaction	0.665	172	254	0.000	0.000	133	0.004
High	IV	Sweep	1.900	411	556	0.002	0.001	380	0.011
Low	I	Outward interaction	0.935	204	288	0.001	0.000	187	0.005
Low	II	Ejection	1.875	374	499	0.002	0.001	375	0.010
Low	III	Inward interaction	1.390	335	461	0.001	0.001	278	0.008
Low	IV	Sweep	2.775	616	874	0.005	0.003	555	0.016
Medium	I	Outward interaction	1.725	371	546	0.002	0.001	345	0.010
Medium	II	Ejection	2.625	535	775	0.005	0.003	525	0.015
Medium	III	Inward interaction	0.635	123	175	0.000	0.000	127	0.004
Medium	IV	Sweep	1.620	269	370	0.002	0.001	324	0.009

Table 431: Quadrant analysis summary for a hole size of 4 above the canopy, at a flow speed setting of 15 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	1.435	399	601	0.002	0.001	287	0.008
High	II	Ejection	2.485	626	929	0.004	0.002	497	0.014
High	III	Inward interaction	1.150	272	396	0.001	0.000	230	0.006
High	IV	Sweep	0.990	242	364	0.001	0.000	198	0.006
Low	I	Outward interaction	0.910	258	376	0.001	0.000	182	0.005
Low	II	Ejection	2.445	600	853	0.004	0.002	489	0.014
Low	III	Inward interaction	0.615	180	250	0.000	0.000	123	0.003
Low	IV	Sweep	2.160	499	709	0.003	0.001	432	0.012
Medium	I	Outward interaction	2.365	560	837	0.005	0.003	473	0.013
Medium	II	Ejection	2.010	417	644	0.003	0.002	402	0.011
Medium	III	Inward interaction	0.650	114	160	0.000	0.000	130	0.004
Medium	IV	Sweep	2.035	358	477	0.003	0.001	407	0.011

Table 432: Quadrant analysis summary for a hole size of 4 above the canopy, at a flow speed setting of 15 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	0.825	1345	1969	0.001	0.000	165	0.005
High	II	Ejection	6.235	11192	16024	0.035	0.022	1247	0.035
High	III	Inward interaction	0.455	921	1264	0.000	0.000	91	0.003
High	IV	Sweep	0.370	301	383	0.000	0.000	74	0.002
Low	I	Outward interaction	1.145	267	396	0.001	0.001	229	0.006
Low	II	Ejection	2.715	615	868	0.005	0.003	543	0.015
Low	III	Inward interaction	0.670	148	200	0.000	0.000	134	0.004
Low	IV	Sweep	2.420	463	617	0.004	0.002	484	0.014
Medium	I	Outward interaction	1.750	452	681	0.003	0.001	350	0.010
Medium	II	Ejection	2.685	579	855	0.005	0.003	537	0.015
Medium	III	Inward interaction	0.495	98	136	0.000	0.000	99	0.003
Medium	IV	Sweep	1.080	195	271	0.001	0.000	216	0.006

Table 433: Quadrant analysis summary for a hole size of 4 within the canopy, at a flow speed setting of 15 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	0.355	205	327	0.000	0.000	71	0.002
High	II	Ejection	5.395	2380	3731	0.020	0.012	1079	0.030
High	III	Inward interaction	0.055	34	51	0.000	0.000	11	0.000
High	IV	Sweep	1.465	422	533	0.001	0.000	293	0.008
Low	I	Outward interaction	0.320	128	191	0.000	0.000	64	0.002
Low	II	Ejection	5.595	2459	3201	0.026	0.014	1119	0.031
Low	III	Inward interaction	0.390	182	252	0.000	0.000	78	0.002
Low	IV	Sweep	1.185	314	407	0.001	0.000	237	0.007
Medium	I	Outward interaction	0.215	114	171	0.000	0.000	43	0.001
Medium	II	Ejection	6.300	2901	3897	0.029	0.016	1260	0.035
Medium	III	Inward interaction	0.215	126	181	0.000	0.000	43	0.001
Medium	IV	Sweep	1.040	326	429	0.001	0.000	208	0.006

Table 434: Quadrant analysis summary for a hole size of 4 within the canopy, at a flow speed setting of 15 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	2.190	921	2014	0.005	0.003	438	0.012
High	II	Ejection	2.430	694	1406	0.004	0.002	486	0.014
High	III	Inward interaction	0.245	59	118	0.000	0.000	49	0.001
High	IV	Sweep	2.325	647	1281	0.004	0.002	465	0.013
Low	I	Outward interaction	0.320	386	634	0.000	0.000	64	0.002
Low	II	Ejection	2.585	2350	4026	0.004	0.002	517	0.014
Low	III	Inward interaction	0.610	750	1225	0.000	0.000	122	0.003
Low	IV	Sweep	3.355	3079	4630	0.007	0.004	671	0.019
Medium	I	Outward interaction	3.475	576	1365	0.014	0.008	695	0.019
Medium	II	Ejection	0.725	72	192	0.000	0.000	145	0.004
Medium	III	Inward interaction	0.585	51	107	0.000	0.000	117	0.003
Medium	IV	Sweep	2.135	296	637	0.004	0.002	427	0.012

Table 435: Quadrant analysis summary for a hole size of 4 within the canopy, at a flow speed setting of 15 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	0.860	166	300	0.001	0.001	172	0.005
High	II	Ejection	1.970	120	205	0.002	0.001	394	0.011
High	III	Inward interaction	0.035	4	10	0.000	0.000	7	0.000
High	IV	Sweep	4.885	363	626	0.015	0.009	977	0.027
Low	I	Outward interaction	3.230	688	1309	0.007	0.004	646	0.018
Low	II	Ejection	0.655	154	331	0.000	0.000	131	0.004
Low	III	Inward interaction	1.680	310	582	0.002	0.001	336	0.009
Low	IV	Sweep	1.400	376	710	0.002	0.001	280	0.008
Medium	I	Outward interaction	1.440	171	284	0.001	0.001	288	0.008
Medium	II	Ejection	1.760	213	427	0.002	0.001	352	0.010
Medium	III	Inward interaction	1.425	179	326	0.001	0.001	285	0.008
Medium	IV	Sweep	1.825	217	387	0.002	0.001	365	0.010

Table 436: Quadrant analysis summary for a hole size of 4 within the canopy, at a flow speed setting of 15 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	2.450	583	997	0.005	0.002	490	0.014
High	II	Ejection	1.860	376	602	0.003	0.001	372	0.010
High	III	Inward interaction	0.445	80	119	0.000	0.000	89	0.002
High	IV	Sweep	1.530	268	441	0.001	0.001	306	0.009
Low	I	Outward interaction	0.350	153	297	0.000	0.000	70	0.002
Low	II	Ejection	1.110	287	443	0.001	0.000	222	0.006
Low	III	Inward interaction	0.670	315	513	0.000	0.000	134	0.004
Low	IV	Sweep	5.230	2184	4249	0.022	0.013	1046	0.029
Medium	I	Outward interaction	0.550	152	259	0.000	0.000	110	0.003
Medium	II	Ejection	2.160	426	719	0.003	0.002	432	0.012
Medium	III	Inward interaction	0.615	182	286	0.000	0.000	123	0.003
Medium	IV	Sweep	3.505	798	1365	0.008	0.005	701	0.020

Table 437: Quadrant analysis summary for a hole size of 4 at the edge of the canopy, at a flow speed setting of 15 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
Low	I	Outward interaction	0.765	356	534	0.001	0.000	153	0.004
Low	II	Ejection	4.500	1784	2482	0.015	0.009	900	0.025
Low	III	Inward interaction	0.565	238	328	0.000	0.000	113	0.003
Low	IV	Sweep	0.705	181	250	0.000	0.000	141	0.004
Medium	I	Outward interaction	0.560	338	495	0.000	0.000	112	0.003
Medium	II	Ejection	4.710	2624	3402	0.016	0.009	942	0.026
Medium	III	Inward interaction	0.620	399	539	0.000	0.000	124	0.003
Medium	IV	Sweep	0.845	321	438	0.000	0.000	169	0.005
High	I	Outward interaction	1.250	493	724	0.001	0.001	250	0.007
High	II	Ejection	4.235	1912	2648	0.016	0.009	847	0.024
High	III	Inward interaction	0.370	118	153	0.000	0.000	74	0.002
High	IV	Sweep	0.640	165	220	0.000	0.000	128	0.004

Table 438: Quadrant analysis summary for a hole size of 4 at the edge of the canopy, at a flow speed setting of 15 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
Low	I	Outward interaction	0.715	424	727	0.000	0.000	143	0.004
Low	II	Ejection	3.340	2044	3600	0.008	0.004	668	0.019
Low	III	Inward interaction	1.175	827	1768	0.001	0.001	235	0.007
Low	IV	Sweep	1.000	407	561	0.000	0.000	200	0.006
Medium	I	Outward interaction	0.555	383	712	0.001	0.000	111	0.003
Medium	II	Ejection	3.135	649	1243	0.005	0.003	627	0.018
Medium	III	Inward interaction	0.005	2	2	0.000	0.000	1	0.000
Medium	IV	Sweep	4.815	1085	2014	0.013	0.008	963	0.027
High	I	Outward interaction	6.895	4531	9988	0.056	0.041	1379	0.038
High	II	Ejection	0.555	201	348	0.000	0.000	111	0.003
High	III	Inward interaction	0.200	44	56	0.000	0.000	40	0.001
High	IV	Sweep	0.565	283	807	0.000	0.000	113	0.003

Table 439: Quadrant analysis summary for a hole size of 4 at the edge of the canopy, at a flow speed setting of 15 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
Low	I	Outward interaction	3.115	1269	2328	0.007	0.004	623	0.017
Low	II	Ejection	0.645	324	674	0.000	0.000	129	0.004
Low	III	Inward interaction	2.155	821	1446	0.003	0.002	431	0.012
Low	IV	Sweep	1.085	582	1110	0.001	0.001	217	0.006
Medium	I	Outward interaction	0.570	98	190	0.000	0.000	114	0.003
Medium	II	Ejection	2.925	373	659	0.005	0.003	585	0.016
Medium	III	Inward interaction	0.425	73	148	0.000	0.000	85	0.002
Medium	IV	Sweep	3.370	463	864	0.007	0.004	674	0.019
High	I	Outward interaction	6.070	937	2162	0.048	0.034	1214	0.034
High	II	Ejection	0.885	92	208	0.001	0.000	177	0.005
High	III	Inward interaction	0.500	27	56	0.000	0.000	100	0.003
High	IV	Sweep	0.615	63	136	0.000	0.000	123	0.003

Table 440: Quadrant analysis summary for a hole size of 4 at the edge of the canopy, at a flow speed setting of 15 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
Low	I	Outward interaction	0.325	226	351	0.000	0.000	65	0.002
Low	II	Ejection	3.040	1541	2247	0.005	0.003	608	0.017
Low	III	Inward interaction	0.190	127	198	0.000	0.000	38	0.001
Low	IV	Sweep	2.910	1554	2317	0.005	0.003	582	0.016
Medium	I	Outward interaction	0.135	18	47	0.000	0.000	27	0.001
Medium	II	Ejection	2.780	125	216	0.004	0.002	556	0.016
Medium	III	Inward interaction	0.015	1	4	0.000	0.000	3	0.000
Medium	IV	Sweep	5.350	327	605	0.018	0.009	1070	0.030
High	I	Outward interaction	1.200	222	381	0.001	0.001	240	0.007
High	II	Ejection	1.005	217	428	0.001	0.000	201	0.006
High	III	Inward interaction	2.245	466	820	0.004	0.002	449	0.013
High	IV	Sweep	1.935	409	747	0.003	0.002	387	0.011

Table 441: Quadrant analysis summary for a hole size of 4 at the edge of the canopy, at a flow speed setting of 2 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	2.210	110	256	0.007	0.004	442	0.012
Low	II	Ejection	3.870	95	177	0.010	0.005	774	0.022
Low	III	Inward interaction	0.550	18	41	0.000	0.000	110	0.003
Low	IV	Sweep	3.335	87	222	0.008	0.005	667	0.019
High	I	Outward interaction	2.570	242	680	0.010	0.008	514	0.014
High	II	Ejection	3.240	113	228	0.006	0.003	648	0.018
High	III	Inward interaction	0.870	47	111	0.001	0.000	174	0.005
High	IV	Sweep	3.705	172	510	0.010	0.008	741	0.021
Medium	I	Outward interaction	2.045	102	270	0.006	0.005	409	0.011
Medium	II	Ejection	3.790	78	143	0.009	0.005	758	0.021
Medium	III	Inward interaction	0.845	24	59	0.001	0.000	169	0.005
Medium	IV	Sweep	3.480	71	172	0.008	0.006	696	0.019

Table 442: Quadrant analysis summary for a hole size of 4 at the edge of the canopy, at a flow speed setting of 2 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	2.400	273	952	0.007	0.007	480	0.013
Low	II	Ejection	2.975	165	395	0.005	0.004	595	0.017
Low	III	Inward interaction	1.395	105	294	0.002	0.001	279	0.008
Low	IV	Sweep	3.175	204	700	0.007	0.007	635	0.018
High	I	Outward interaction	1.510	89	251	0.004	0.003	302	0.008
High	II	Ejection	4.175	85	168	0.010	0.006	835	0.023
High	III	Inward interaction	0.490	21	50	0.000	0.000	98	0.003
High	IV	Sweep	3.055	59	141	0.005	0.004	611	0.017
Medium	I	Outward interaction	1.920	84	285	0.005	0.004	384	0.011
Medium	II	Ejection	4.050	76	164	0.010	0.005	810	0.023
Medium	III	Inward interaction	0.865	23	69	0.001	0.000	173	0.005
Medium	IV	Sweep	3.805	74	213	0.009	0.007	761	0.021

Table 443: Quadrant analysis summary for a hole size of 4 at the edge of the canopy, at a flow speed setting of 2 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	0.905	75	184	0.001	0.001	181	0.005
Low	II	Ejection	3.755	148	266	0.008	0.004	751	0.021
Low	III	Inward interaction	0.350	23	61	0.000	0.000	70	0.002
Low	IV	Sweep	3.705	153	310	0.008	0.005	741	0.021
High	I	Outward interaction	2.495	134	355	0.009	0.006	499	0.014
High	II	Ejection	4.330	114	249	0.013	0.007	866	0.024
High	III	Inward interaction	0.630	17	49	0.000	0.000	126	0.004
High	IV	Sweep	3.530	89	269	0.008	0.006	706	0.020
Medium	I	Outward interaction	0.970	28	88	0.001	0.001	194	0.005
Medium	II	Ejection	3.825	81	174	0.011	0.007	765	0.021
Medium	III	Inward interaction	0.510	13	38	0.000	0.000	102	0.003
Medium	IV	Sweep	3.230	61	146	0.007	0.005	646	0.018

Table 444: Quadrant analysis summary for a hole size of 4 at the edge of the canopy, at a flow speed setting of 2 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
Low	I	Outward interaction	0.880	40	145	0.001	0.002	176	0.005
Low	II	Ejection	4.340	61	120	0.010	0.007	868	0.024
Low	III	Inward interaction	0.225	7	20	0.000	0.000	45	0.001
Low	IV	Sweep	4.915	72	156	0.014	0.010	983	0.028
High	I	Outward interaction	3.400	912	1977	0.030	0.019	680	0.019
High	II	Ejection	2.745	299	535	0.008	0.004	549	0.015
High	III	Inward interaction	0.895	72	150	0.001	0.000	179	0.005
High	IV	Sweep	2.745	216	602	0.006	0.005	549	0.015
Medium	I	Outward interaction	1.535	55	164	0.003	0.002	307	0.009
Medium	II	Ejection	4.245	68	151	0.012	0.006	849	0.024
Medium	III	Inward interaction	0.455	11	31	0.000	0.000	91	0.003
Medium	IV	Sweep	4.135	63	160	0.010	0.006	827	0.023

Table 445: Quadrant analysis summary for a hole size of 4 above the canopy, at a flow speed setting of 2 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	2.675	270	761	0.012	0.008	535	0.015
High	II	Ejection	3.455	123	275	0.007	0.004	691	0.019
High	III	Inward interaction	0.810	45	124	0.001	0.000	162	0.005
High	IV	Sweep	3.520	150	479	0.009	0.007	704	0.020
Low	I	Outward interaction	2.025	140	348	0.006	0.004	405	0.011
Low	II	Ejection	3.645	99	205	0.008	0.004	729	0.020
Low	III	Inward interaction	0.690	29	72	0.000	0.000	138	0.004
Low	IV	Sweep	4.305	152	443	0.014	0.010	861	0.024
Medium	I	Outward interaction	2.015	85	217	0.006	0.004	403	0.011
Medium	II	Ejection	3.560	65	125	0.008	0.004	712	0.020
Medium	III	Inward interaction	0.910	25	64	0.001	0.001	182	0.005
Medium	IV	Sweep	3.690	69	188	0.009	0.007	738	0.021

Table 446: Quadrant analysis summary for a hole size of 4 above the canopy, at a flow speed setting of 2 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	4.895	110	257	0.021	0.013	979	0.027
High	II	Ejection	1.835	48	121	0.003	0.002	367	0.010
High	III	Inward interaction	0.075	1	2	0.000	0.000	15	0.000
High	IV	Sweep	2.270	61	140	0.005	0.003	454	0.013
Low	I	Outward interaction	1.910	125	319	0.005	0.003	382	0.011
Low	II	Ejection	3.780	103	213	0.008	0.005	756	0.021
Low	III	Inward interaction	0.455	19	52	0.000	0.000	91	0.003
Low	IV	Sweep	4.070	137	396	0.012	0.009	814	0.023
Medium	I	Outward interaction	1.195	44	133	0.002	0.001	239	0.007
Medium	II	Ejection	4.305	79	165	0.013	0.006	861	0.024
Medium	III	Inward interaction	0.595	15	46	0.000	0.000	119	0.003
Medium	IV	Sweep	3.195	55	151	0.007	0.004	639	0.018

Table 447: Quadrant analysis summary for a hole size of 4 above the canopy, at a flow speed setting of 2 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	0.940	54	128	0.001	0.001	188	0.005
High	II	Ejection	3.105	94	165	0.005	0.003	621	0.017
High	III	Inward interaction	0.410	20	50	0.000	0.000	82	0.002
High	IV	Sweep	3.230	107	202	0.007	0.003	646	0.018
Low	I	Outward interaction	1.660	117	311	0.004	0.003	332	0.009
Low	II	Ejection	3.945	123	222	0.010	0.005	789	0.022
Low	III	Inward interaction	0.540	24	74	0.000	0.000	108	0.003
Low	IV	Sweep	2.810	87	240	0.005	0.003	562	0.016
Medium	I	Outward interaction	0.755	44	115	0.001	0.001	151	0.004
Medium	II	Ejection	4.680	135	226	0.014	0.007	936	0.026
Medium	III	Inward interaction	0.320	15	37	0.000	0.000	64	0.002
Medium	IV	Sweep	2.705	65	128	0.004	0.002	541	0.015

Table 448: Quadrant analysis summary for a hole size of 4 above the canopy, at a flow speed setting of 2 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	1.130	68	153	0.001	0.001	226	0.006
High	II	Ejection	3.280	112	182	0.007	0.003	656	0.018
High	III	Inward interaction	0.350	16	31	0.000	0.000	70	0.002
High	IV	Sweep	3.275	116	211	0.007	0.004	655	0.018
Low	I	Outward interaction	1.405	83	203	0.003	0.002	281	0.008
Low	II	Ejection	3.550	102	181	0.008	0.004	710	0.020
Low	III	Inward interaction	0.400	15	34	0.000	0.000	80	0.002
Low	IV	Sweep	3.390	104	232	0.008	0.005	678	0.019
Medium	I	Outward interaction	0.355	23	54	0.000	0.000	71	0.002
Medium	II	Ejection	4.315	134	221	0.011	0.006	863	0.024
Medium	III	Inward interaction	0.140	7	17	0.000	0.000	28	0.001
Medium	IV	Sweep	4.260	133	223	0.011	0.006	852	0.024

Table 449: Quadrant analysis summary for a hole size of 4 within the canopy, at a flow speed setting of 2 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	2.660	381	1012	0.012	0.007	532	0.015
High	II	Ejection	3.610	184	397	0.008	0.004	722	0.020
High	III	Inward interaction	0.900	71	196	0.001	0.000	180	0.005
High	IV	Sweep	3.685	208	703	0.009	0.007	737	0.021
Low	I	Outward interaction	2.340	130	358	0.008	0.005	468	0.013
Low	II	Ejection	3.790	88	195	0.009	0.005	758	0.021
Low	III	Inward interaction	0.485	15	49	0.000	0.000	97	0.003
Low	IV	Sweep	3.730	91	275	0.009	0.006	746	0.021
Medium	I	Outward interaction	1.710	47	145	0.004	0.002	342	0.010
Medium	II	Ejection	3.850	58	131	0.010	0.005	770	0.022
Medium	III	Inward interaction	0.885	18	60	0.001	0.001	177	0.005
Medium	IV	Sweep	3.560	54	144	0.008	0.005	712	0.020

Table 450: Quadrant analysis summary for a hole size of 4 within the canopy, at a flow speed setting of 2 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	2.070	181	570	0.006	0.005	414	0.012
High	II	Ejection	3.665	146	326	0.008	0.005	733	0.021
High	III	Inward interaction	0.780	40	107	0.000	0.000	156	0.004
High	IV	Sweep	3.740	185	641	0.011	0.009	748	0.021
Low	I	Outward interaction	1.295	42	105	0.001	0.001	259	0.007
Low	II	Ejection	1.165	41	71	0.001	0.001	233	0.007
Low	III	Inward interaction	3.830	130	197	0.010	0.005	766	0.021
Low	IV	Sweep	1.715	76	164	0.003	0.002	343	0.010
Medium	I	Outward interaction	1.165	71	249	0.002	0.001	233	0.006
Medium	II	Ejection	3.605	124	292	0.008	0.005	721	0.020
Medium	III	Inward interaction	0.785	39	119	0.001	0.000	157	0.004
Medium	IV	Sweep	3.355	122	341	0.007	0.005	671	0.019

Table 451: Quadrant analysis summary for a hole size of 4 within the canopy, at a flow speed setting of 2 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	3.105	203	618	0.013	0.009	621	0.017
High	II	Ejection	2.925	92	193	0.006	0.003	585	0.016
High	III	Inward interaction	1.095	40	102	0.001	0.001	219	0.006
High	IV	Sweep	3.205	118	365	0.008	0.006	641	0.018
Low	I	Outward interaction	0.815	13	40	0.001	0.000	163	0.005
Low	II	Ejection	4.370	47	113	0.015	0.008	874	0.024
Low	III	Inward interaction	0.500	6	20	0.000	0.000	100	0.003
Low	IV	Sweep	3.670	37	96	0.010	0.005	734	0.021
Medium	I	Outward interaction	2.060	127	464	0.007	0.005	412	0.012
Medium	II	Ejection	3.705	89	230	0.009	0.004	741	0.021
Medium	III	Inward interaction	0.865	30	98	0.001	0.000	173	0.005
Medium	IV	Sweep	3.615	88	292	0.008	0.005	723	0.020

Table 452: Quadrant analysis summary for a hole size of 4 within the canopy, at a flow speed setting of 2 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	2.545	173	509	0.012	0.009	509	0.014
High	II	Ejection	4.540	106	212	0.013	0.007	908	0.025
High	III	Inward interaction	0.500	14	40	0.000	0.000	100	0.003
High	IV	Sweep	3.575	78	241	0.008	0.006	715	0.020
Low	I	Outward interaction	2.370	169	475	0.008	0.006	474	0.013
Low	II	Ejection	3.780	113	246	0.009	0.005	756	0.021
Low	III	Inward interaction	0.705	28	71	0.000	0.000	141	0.004
Low	IV	Sweep	3.550	124	354	0.009	0.006	710	0.020
Medium	I	Outward interaction	1.005	53	166	0.001	0.001	201	0.006
Medium	II	Ejection	3.670	114	227	0.009	0.005	734	0.020
Medium	III	Inward interaction	0.610	28	73	0.000	0.000	122	0.003
Medium	IV	Sweep	3.490	103	236	0.008	0.005	698	0.019

Table 453: Quadrant analysis summary for a hole size of 4 at the edge of the canopy, at a flow speed setting of 4 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	1.915	111	214	0.004	0.002	383	0.011
Low	II	Ejection	3.225	123	189	0.007	0.004	645	0.018
Low	III	Inward interaction	0.660	27	52	0.000	0.000	132	0.004
Low	IV	Sweep	2.885	117	246	0.006	0.004	577	0.016
Medium	I	Outward interaction	2.205	105	174	0.005	0.003	441	0.012
Medium	II	Ejection	3.225	112	172	0.008	0.004	645	0.018
Medium	III	Inward interaction	0.600	21	43	0.000	0.000	120	0.003
Medium	IV	Sweep	2.440	79	145	0.004	0.003	488	0.014
High	I	Outward interaction	2.010	154	336	0.004	0.003	402	0.011
High	II	Ejection	2.975	159	279	0.007	0.004	595	0.017
High	III	Inward interaction	0.595	30	70	0.000	0.000	119	0.003
High	IV	Sweep	2.600	144	373	0.005	0.004	520	0.015

Table 454: Quadrant analysis summary for a hole size of 4 at the edge of the canopy, at a flow speed setting of 4 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	1.580	145	341	0.002	0.001	316	0.009
Low	II	Ejection	2.040	170	348	0.003	0.002	408	0.011
Low	III	Inward interaction	1.540	124	270	0.002	0.001	308	0.009
Low	IV	Sweep	2.430	225	574	0.005	0.003	486	0.014
Medium	I	Outward interaction	1.595	70	162	0.002	0.001	319	0.009
Medium	II	Ejection	1.235	50	110	0.001	0.001	247	0.007
Medium	III	Inward interaction	1.160	46	113	0.001	0.001	232	0.006
Medium	IV	Sweep	2.420	113	257	0.005	0.002	484	0.013
High	I	Outward interaction	0.100	21	47	0.000	0.000	20	0.001
High	II	Ejection	4.370	339	589	0.010	0.006	874	0.024
High	III	Inward interaction	0.035	6	10	0.000	0.000	7	0.000
High	IV	Sweep	3.435	255	437	0.006	0.003	687	0.019

Table 455: Quadrant analysis summary for a hole size of 4 at the edge of the canopy, at a flow speed setting of 4 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	0.580	98	161	0.000	0.000	116	0.003
Low	II	Ejection	2.645	278	411	0.004	0.002	529	0.015
Low	III	Inward interaction	0.340	55	89	0.000	0.000	68	0.002
Low	IV	Sweep	3.920	527	878	0.011	0.006	784	0.022
Medium	I	Outward interaction	0.665	62	161	0.000	0.000	133	0.004
Medium	II	Ejection	2.505	165	323	0.004	0.002	501	0.014
Medium	III	Inward interaction	0.765	66	147	0.000	0.000	153	0.004
Medium	IV	Sweep	2.835	207	418	0.005	0.003	567	0.016
High	I	Outward interaction	0.980	50	127	0.001	0.001	196	0.005
High	II	Ejection	3.710	123	240	0.009	0.004	742	0.021
High	III	Inward interaction	0.465	20	53	0.000	0.000	93	0.003
High	IV	Sweep	3.055	105	235	0.006	0.004	611	0.017

Table 456: Quadrant analysis summary for a hole size of 4 at the edge of the canopy, at a flow speed setting of 4 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	0.695	59	107	0.000	0.000	139	0.004
Low	II	Ejection	2.020	122	193	0.002	0.001	404	0.011
Low	III	Inward interaction	0.595	55	104	0.000	0.000	119	0.003
Low	IV	Sweep	4.100	324	531	0.013	0.007	820	0.023
Medium	I	Outward interaction	0.735	27	72	0.000	0.000	147	0.004
Medium	II	Ejection	2.950	83	153	0.006	0.003	590	0.016
Medium	III	Inward interaction	0.925	31	67	0.001	0.000	185	0.005
Medium	IV	Sweep	3.110	94	188	0.007	0.004	622	0.017
High	I	Outward interaction	1.360	113	287	0.003	0.002	272	0.008
High	II	Ejection	3.895	142	292	0.009	0.005	779	0.022
High	III	Inward interaction	0.420	22	62	0.000	0.000	84	0.002
High	IV	Sweep	4.190	170	496	0.012	0.008	838	0.023

Table 457: Quadrant analysis summary for a hole size of 4 above the canopy, at a flow speed setting of 4 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	1.695	124	308	0.003	0.002	339	0.009
High	II	Ejection	3.315	151	306	0.007	0.004	663	0.019
High	III	Inward interaction	0.570	30	77	0.000	0.000	114	0.003
High	IV	Sweep	3.225	166	460	0.008	0.006	645	0.018
Low	I	Outward interaction	1.205	58	130	0.002	0.001	241	0.007
Low	II	Ejection	2.645	76	127	0.004	0.002	529	0.015
Low	III	Inward interaction	1.060	42	74	0.001	0.001	212	0.006
Low	IV	Sweep	3.245	116	227	0.008	0.005	649	0.018
Medium	I	Outward interaction	2.305	73	151	0.005	0.003	461	0.013
Medium	II	Ejection	2.885	66	122	0.006	0.003	577	0.016
Medium	III	Inward interaction	0.595	16	36	0.000	0.000	119	0.003
Medium	IV	Sweep	2.610	62	122	0.005	0.003	522	0.015

Table 458: Quadrant analysis summary for a hole size of 4 above the canopy, at a flow speed setting of 4 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	1.720	114	242	0.003	0.002	344	0.010
High	II	Ejection	3.675	152	247	0.009	0.005	735	0.021
High	III	Inward interaction	0.420	20	39	0.000	0.000	84	0.002
High	IV	Sweep	2.785	124	264	0.006	0.004	557	0.016
Low	I	Outward interaction	1.865	75	143	0.003	0.002	373	0.010
Low	II	Ejection	2.795	73	122	0.005	0.003	559	0.016
Low	III	Inward interaction	0.620	19	33	0.000	0.000	124	0.003
Low	IV	Sweep	2.815	90	174	0.006	0.004	563	0.016
Medium	I	Outward interaction	0.630	25	60	0.000	0.000	126	0.004
Medium	II	Ejection	3.455	105	196	0.008	0.004	691	0.019
Medium	III	Inward interaction	0.640	24	59	0.000	0.000	128	0.004
Medium	IV	Sweep	2.510	69	134	0.004	0.002	502	0.014

Table 459: Quadrant analysis summary for a hole size of 4 above the canopy, at a flow speed setting of 4 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	0.285	54	93	0.000	0.000	57	0.002
High	II	Ejection	1.900	208	313	0.002	0.001	380	0.011
High	III	Inward interaction	0.205	40	60	0.000	0.000	41	0.001
High	IV	Sweep	4.590	618	942	0.013	0.007	918	0.026
Low	I	Outward interaction	1.020	106	257	0.001	0.001	204	0.006
Low	II	Ejection	3.235	220	403	0.007	0.004	647	0.018
Low	III	Inward interaction	0.525	44	95	0.000	0.000	105	0.003
Low	IV	Sweep	2.855	187	408	0.005	0.003	571	0.016
Medium	I	Outward interaction	0.225	20	36	0.000	0.000	45	0.001
Medium	II	Ejection	4.215	299	484	0.012	0.007	843	0.024
Medium	III	Inward interaction	0.210	20	37	0.000	0.000	42	0.001
Medium	IV	Sweep	2.330	136	214	0.003	0.002	466	0.013

Table 460: Quadrant analysis summary for a hole size of 4 above the canopy, at a flow speed setting of 4 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	0.635	98	169	0.000	0.000	127	0.004
High	II	Ejection	2.265	258	358	0.003	0.001	453	0.013
High	III	Inward interaction	0.415	61	114	0.000	0.000	83	0.002
High	IV	Sweep	3.935	537	793	0.011	0.005	787	0.022
Low	I	Outward interaction	1.010	127	245	0.001	0.001	202	0.006
Low	II	Ejection	3.710	295	482	0.010	0.005	742	0.021
Low	III	Inward interaction	0.530	50	101	0.000	0.000	106	0.003
Low	IV	Sweep	2.300	157	314	0.003	0.002	460	0.013
Medium	I	Outward interaction	0.440	72	121	0.000	0.000	88	0.002
Medium	II	Ejection	1.575	140	202	0.001	0.001	315	0.009
Medium	III	Inward interaction	0.165	26	37	0.000	0.000	33	0.001
Medium	IV	Sweep	5.285	681	1020	0.019	0.011	1057	0.029

Table 461: Quadrant analysis summary for a hole size of 4 within the canopy, at a flow speed setting of 4 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	1.040	115	305	0.001	0.001	208	0.006
High	II	Ejection	3.845	239	497	0.009	0.005	769	0.021
High	III	Inward interaction	0.630	60	140	0.000	0.000	126	0.004
High	IV	Sweep	3.505	223	674	0.008	0.006	701	0.020
Low	I	Outward interaction	0.960	44	92	0.001	0.001	192	0.005
Low	II	Ejection	3.650	117	186	0.009	0.005	730	0.020
Low	III	Inward interaction	0.560	21	36	0.000	0.000	112	0.003
Low	IV	Sweep	2.595	81	141	0.005	0.002	519	0.015
Medium	I	Outward interaction	0.780	37	80	0.001	0.000	156	0.004
Medium	II	Ejection	4.165	153	250	0.012	0.006	833	0.023
Medium	III	Inward interaction	0.540	27	54	0.000	0.000	108	0.003
Medium	IV	Sweep	2.485	90	165	0.004	0.002	497	0.014

Table 462: Quadrant analysis summary for a hole size of 4 within the canopy, at a flow speed setting of 4 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	1.195	161	374	0.001	0.001	239	0.007
High	II	Ejection	3.465	333	624	0.008	0.004	693	0.019
High	III	Inward interaction	0.435	49	112	0.000	0.000	87	0.002
High	IV	Sweep	2.600	229	577	0.004	0.003	520	0.015
Low	I	Outward interaction	1.030	95	191	0.001	0.000	206	0.006
Low	II	Ejection	1.455	128	218	0.001	0.001	291	0.008
Low	III	Inward interaction	1.785	179	333	0.002	0.001	357	0.010
Low	IV	Sweep	2.035	190	345	0.003	0.001	407	0.011
Medium	I	Outward interaction	0.520	98	180	0.000	0.000	104	0.003
Medium	II	Ejection	2.620	336	626	0.004	0.002	524	0.015
Medium	III	Inward interaction	0.540	99	203	0.000	0.000	108	0.003
Medium	IV	Sweep	2.425	329	642	0.003	0.002	485	0.014

Table 463: Quadrant analysis summary for a hole size of 4 within the canopy, at a flow speed setting of 4 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	1.175	82	219	0.001	0.001	235	0.006
High	II	Ejection	2.825	145	275	0.005	0.003	565	0.016
High	III	Inward interaction	0.925	58	138	0.001	0.000	185	0.005
High	IV	Sweep	2.400	132	300	0.004	0.002	480	0.013
Low	I	Outward interaction	0.780	134	329	0.001	0.000	156	0.004
Low	II	Ejection	3.305	317	613	0.006	0.004	661	0.018
Low	III	Inward interaction	0.335	45	102	0.000	0.000	67	0.002
Low	IV	Sweep	3.215	316	746	0.006	0.004	643	0.018
Medium	I	Outward interaction	1.360	76	239	0.002	0.002	272	0.008
Medium	II	Ejection	3.960	112	237	0.010	0.005	792	0.022
Medium	III	Inward interaction	0.705	29	81	0.000	0.000	141	0.004
Medium	IV	Sweep	3.585	104	274	0.008	0.006	717	0.020

Table 464: Quadrant analysis summary for a hole size of 4 within the canopy, at a flow speed setting of 4 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	1.295	97	271	0.002	0.002	259	0.007
High	II	Ejection	3.130	112	209	0.006	0.003	626	0.018
High	III	Inward interaction	0.470	28	74	0.000	0.000	94	0.003
High	IV	Sweep	3.115	121	269	0.006	0.004	623	0.017
Low	I	Outward interaction	4.090	20	51	0.022	0.012	818	0.023
Low	II	Ejection	2.915	9	22	0.007	0.004	583	0.016
Low	III	Inward interaction	0.205	0	1	0.000	0.000	41	0.001
Low	IV	Sweep	2.760	9	23	0.007	0.004	552	0.015
Medium	I	Outward interaction	0.975	44	85	0.001	0.000	195	0.005
Medium	II	Ejection	3.010	133	219	0.007	0.003	602	0.017
Medium	III	Inward interaction	1.120	49	84	0.001	0.000	224	0.006
Medium	IV	Sweep	2.275	96	158	0.004	0.002	455	0.013

Table 465: Quadrant analysis summary for a hole size of 4 at the edge of the canopy, at a flow speed setting of 6 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	1.480	103	156	0.002	0.001	296	0.008
Low	II	Ejection	2.690	153	219	0.005	0.003	538	0.015
Low	III	Inward interaction	0.885	51	73	0.001	0.000	177	0.005
Low	IV	Sweep	2.720	145	203	0.005	0.003	544	0.015
Medium	I	Outward interaction	1.695	120	178	0.003	0.002	339	0.009
Medium	II	Ejection	3.400	210	306	0.010	0.005	680	0.019
Medium	III	Inward interaction	0.485	26	38	0.000	0.000	97	0.003
Medium	IV	Sweep	1.735	81	117	0.002	0.001	347	0.010
High	I	Outward interaction	1.245	115	209	0.002	0.001	249	0.007
High	II	Ejection	3.295	232	343	0.008	0.004	659	0.018
High	III	Inward interaction	0.570	38	68	0.000	0.000	114	0.003
High	IV	Sweep	2.400	146	271	0.004	0.002	480	0.013

Table 466: Quadrant analysis summary for a hole size of 4 at the edge of the canopy, at a flow speed setting of 6 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	1.22	71	106	0.001	0.001	244	0.007
Low	II	Ejection	3.21	164	231	0.008	0.004	642	0.018
Low	III	Inward interaction	0.60	29	43	0.000	0.000	120	0.003
Low	IV	Sweep	2.27	107	150	0.003	0.002	454	0.013
Medium	I	Outward interaction	0.39	50	109	0.000	0.000	78	0.002
Medium	II	Ejection	2.97	218	448	0.005	0.003	594	0.017
Medium	III	Inward interaction	0.12	13	28	0.000	0.000	24	0.001
Medium	IV	Sweep	4.19	360	716	0.011	0.007	838	0.023
High	I	Outward interaction	1.80	405	708	0.003	0.002	360	0.010
High	II	Ejection	1.66	331	545	0.002	0.001	332	0.009
High	III	Inward interaction	1.29	243	443	0.001	0.001	258	0.007
High	IV	Sweep	1.66	309	488	0.002	0.001	332	0.009

Table 467: Quadrant analysis summary for a hole size of 4 at the edge of the canopy, at a flow speed setting of 6 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
Low	I	Outward interaction	0.810	172	269	0.000	0.000	162	0.005
Low	II	Ejection	1.100	195	324	0.001	0.000	220	0.006
Low	III	Inward interaction	0.680	144	252	0.000	0.000	136	0.004
Low	IV	Sweep	3.985	875	1541	0.012	0.007	797	0.022
Medium	I	Outward interaction	2.640	166	422	0.005	0.004	528	0.015
Medium	II	Ejection	1.660	108	269	0.002	0.001	332	0.009
Medium	III	Inward interaction	1.265	59	160	0.001	0.001	253	0.007
Medium	IV	Sweep	1.260	82	238	0.001	0.001	252	0.007
High	I	Outward interaction	1.270	246	434	0.001	0.001	254	0.007
High	II	Ejection	1.600	342	615	0.002	0.001	320	0.009
High	III	Inward interaction	2.085	455	705	0.003	0.001	417	0.012
High	IV	Sweep	1.380	306	585	0.001	0.001	276	0.008

Table 468: Quadrant analysis summary for a hole size of 4 at the edge of the canopy, at a flow speed setting of 6 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
Low	I	Outward interaction	1.040	168	268	0.001	0.000	208	0.006
Low	II	Ejection	1.435	193	304	0.001	0.001	287	0.008
Low	III	Inward interaction	0.470	78	109	0.000	0.000	94	0.003
Low	IV	Sweep	3.710	730	1257	0.012	0.008	742	0.021
Medium	I	Outward interaction	1.380	51	99	0.001	0.001	276	0.008
Medium	II	Ejection	2.460	93	161	0.005	0.002	492	0.014
Medium	III	Inward interaction	1.075	39	77	0.001	0.000	215	0.006
Medium	IV	Sweep	1.705	58	108	0.002	0.001	341	0.010
High	I	Outward interaction	1.120	52	94	0.001	0.001	224	0.006
High	II	Ejection	2.365	103	176	0.004	0.002	473	0.013
High	III	Inward interaction	0.605	30	70	0.000	0.000	121	0.003
High	IV	Sweep	2.495	129	233	0.005	0.003	499	0.014

Table 469: Quadrant analysis summary for a hole size of 4 above the canopy, at a flow speed setting of 6 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	0.790	54	108	0.001	0.000	158	0.004
High	II	Ejection	3.375	147	234	0.007	0.004	675	0.019
High	III	Inward interaction	0.635	39	68	0.000	0.000	127	0.004
High	IV	Sweep	3.410	158	284	0.008	0.005	682	0.019
Low	I	Outward interaction	0.495	45	175	0.000	0.000	99	0.003
Low	II	Ejection	2.230	202	525	0.003	0.001	446	0.012
Low	III	Inward interaction	0.905	114	435	0.001	0.000	181	0.005
Low	IV	Sweep	2.690	272	750	0.005	0.002	538	0.015
Medium	I	Outward interaction	0.825	33	57	0.001	0.000	165	0.005
Medium	II	Ejection	2.675	80	120	0.005	0.002	535	0.015
Medium	III	Inward interaction	0.440	16	29	0.000	0.000	88	0.002
Medium	IV	Sweep	3.290	105	157	0.007	0.004	658	0.018

Table 470: Quadrant analysis summary for a hole size of 4 above the canopy, at a flow speed setting of 6 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	0.815	69	102	0.001	0.000	163	0.005
High	II	Ejection	3.285	218	308	0.008	0.004	657	0.018
High	III	Inward interaction	0.425	24	47	0.000	0.000	85	0.002
High	IV	Sweep	2.225	115	174	0.003	0.001	445	0.012
Low	I	Outward interaction	0.585	40	81	0.000	0.000	117	0.003
Low	II	Ejection	2.585	116	176	0.004	0.002	517	0.014
Low	III	Inward interaction	0.815	58	97	0.001	0.000	163	0.005
Low	IV	Sweep	3.560	176	286	0.008	0.005	712	0.020
Medium	I	Outward interaction	1.845	102	143	0.003	0.002	369	0.010
Medium	II	Ejection	2.485	100	144	0.004	0.002	497	0.014
Medium	III	Inward interaction	0.570	24	38	0.000	0.000	114	0.003
Medium	IV	Sweep	2.285	90	127	0.004	0.002	457	0.013

Table 471: Quadrant analysis summary for a hole size of 4 above the canopy, at a flow speed setting of 6 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	0.230	110	179	0.000	0.000	46	0.001
High	II	Ejection	4.480	1330	1999	0.012	0.007	896	0.025
High	III	Inward interaction	0.160	77	134	0.000	0.000	32	0.001
High	IV	Sweep	2.145	546	771	0.002	0.001	429	0.012
Low	I	Outward interaction	1.205	149	283	0.001	0.001	241	0.007
Low	II	Ejection	4.325	450	691	0.015	0.008	865	0.024
Low	III	Inward interaction	0.615	60	108	0.000	0.000	123	0.003
Low	IV	Sweep	1.985	159	315	0.002	0.002	397	0.011
Medium	I	Outward interaction	1.160	92	161	0.001	0.001	232	0.006
Medium	II	Ejection	3.785	282	418	0.012	0.006	757	0.021
Medium	III	Inward interaction	0.185	12	21	0.000	0.000	37	0.001
Medium	IV	Sweep	1.530	82	117	0.001	0.001	306	0.009

Table 472: Quadrant analysis summary for a hole size of 4 above the canopy, at a flow speed setting of 6 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	0.245	155	249	0.000	0.000	49	0.001
High	II	Ejection	3.510	1442	2052	0.007	0.004	702	0.020
High	III	Inward interaction	0.160	95	165	0.000	0.000	32	0.001
High	IV	Sweep	2.600	994	1330	0.004	0.002	520	0.015
Low	I	Outward interaction	1.155	154	303	0.001	0.001	231	0.006
Low	II	Ejection	4.025	410	648	0.014	0.008	805	0.023
Low	III	Inward interaction	0.615	55	99	0.000	0.000	123	0.003
Low	IV	Sweep	2.220	158	279	0.003	0.002	444	0.012
Medium	I	Outward interaction	0.395	136	221	0.000	0.000	79	0.002
Medium	II	Ejection	3.935	864	1223	0.009	0.005	787	0.022
Medium	III	Inward interaction	0.295	112	165	0.000	0.000	59	0.002
Medium	IV	Sweep	2.485	481	659	0.003	0.002	497	0.014

Table 473: Quadrant analysis summary for a hole size of 4 within the canopy, at a flow speed setting of 6 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	0.645	78	160	0.000	0.000	129	0.004
High	II	Ejection	4.075	447	754	0.013	0.007	815	0.023
High	III	Inward interaction	0.830	107	197	0.001	0.000	166	0.005
High	IV	Sweep	1.990	160	286	0.002	0.001	398	0.011
Low	I	Outward interaction	0.620	57	101	0.000	0.000	124	0.003
Low	II	Ejection	4.310	361	543	0.014	0.008	862	0.024
Low	III	Inward interaction	0.575	48	73	0.000	0.000	115	0.003
Low	IV	Sweep	1.395	88	140	0.001	0.001	279	0.008
Medium	I	Outward interaction	0.540	44	68	0.000	0.000	108	0.003
Medium	II	Ejection	3.990	325	496	0.012	0.007	798	0.022
Medium	III	Inward interaction	0.755	71	106	0.000	0.000	151	0.004
Medium	IV	Sweep	2.505	167	231	0.004	0.002	501	0.014

Table 474: Quadrant analysis summary for a hole size of 4 within the canopy, at a flow speed setting of 6 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	1.430	285	705	0.002	0.001	286	0.008
High	II	Ejection	1.825	334	728	0.002	0.001	365	0.010
High	III	Inward interaction	0.910	153	379	0.001	0.000	182	0.005
High	IV	Sweep	2.320	418	1290	0.004	0.003	464	0.013
Low	I	Outward interaction	1.825	352	556	0.002	0.001	365	0.010
Low	II	Ejection	0.650	170	266	0.000	0.000	130	0.004
Low	III	Inward interaction	2.595	527	904	0.004	0.002	519	0.014
Low	IV	Sweep	0.670	172	294	0.000	0.000	134	0.004
Medium	I	Outward interaction	0.570	47	109	0.001	0.000	114	0.003
Medium	II	Ejection	3.695	94	194	0.008	0.005	739	0.021
Medium	III	Inward interaction	0.035	2	4	0.000	0.000	7	0.000
Medium	IV	Sweep	4.715	125	266	0.013	0.009	943	0.026

Table 475: Quadrant analysis summary for a hole size of 4 within the canopy, at a flow speed setting of 6 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	0.615	41	72	0.000	0.000	123	0.004
High	II	Ejection	1.820	104	180	0.002	0.001	364	0.010
High	III	Inward interaction	1.430	111	221	0.002	0.001	286	0.008
High	IV	Sweep	3.345	222	376	0.009	0.005	669	0.019
Low	I	Outward interaction	1.035	170	273	0.001	0.000	207	0.006
Low	II	Ejection	0.905	135	213	0.000	0.000	181	0.005
Low	III	Inward interaction	1.625	298	551	0.002	0.001	325	0.009
Low	IV	Sweep	3.210	619	953	0.008	0.004	642	0.018
Medium	I	Outward interaction	0.880	45	110	0.001	0.000	176	0.005
Medium	II	Ejection	3.160	112	218	0.007	0.003	632	0.018
Medium	III	Inward interaction	0.555	25	62	0.000	0.000	111	0.003
Medium	IV	Sweep	2.915	103	213	0.006	0.003	583	0.016

Table 476: Quadrant analysis summary for a hole size of 4 within the canopy, at a flow speed setting of 6 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	0.805	67	153	0.001	0.000	161	0.004
High	II	Ejection	3.380	169	293	0.007	0.003	676	0.019
High	III	Inward interaction	0.360	25	54	0.000	0.000	72	0.002
High	IV	Sweep	3.325	158	308	0.007	0.004	665	0.019
Low	I	Outward interaction	0.735	82	147	0.000	0.000	147	0.004
Low	II	Ejection	2.305	207	339	0.003	0.002	461	0.013
Low	III	Inward interaction	0.590	67	125	0.000	0.000	118	0.003
Low	IV	Sweep	3.600	350	541	0.009	0.004	720	0.020
Medium	I	Outward interaction	1.200	113	187	0.001	0.001	240	0.007
Medium	II	Ejection	1.520	129	193	0.002	0.001	304	0.009
Medium	III	Inward interaction	1.020	88	136	0.001	0.000	204	0.006
Medium	IV	Sweep	2.665	238	364	0.005	0.003	533	0.015

Table 477: Quadrant analysis summary for a hole size of 4 at the edge of the canopy, at a flow speed setting of 8 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	1.825	256	364	0.004	0.002	365	0.010
Low	II	Ejection	3.860	428	607	0.012	0.007	772	0.022
Low	III	Inward interaction	0.620	55	78	0.000	0.000	124	0.003
Low	IV	Sweep	1.040	76	108	0.001	0.000	208	0.006
High	I	Outward interaction	1.165	186	253	0.001	0.001	233	0.007
High	II	Ejection	3.460	492	658	0.009	0.006	692	0.019
High	III	Inward interaction	0.830	123	154	0.001	0.000	166	0.005
High	IV	Sweep	1.680	166	214	0.002	0.001	336	0.009
Medium	I	Outward interaction	2.335	332	458	0.005	0.003	467	0.013
Medium	II	Ejection	3.310	400	559	0.009	0.005	662	0.018
Medium	III	Inward interaction	0.385	40	58	0.000	0.000	77	0.002
Medium	IV	Sweep	0.895	75	98	0.000	0.000	179	0.005

Table 478: Quadrant analysis summary for a hole size of 4 at the edge of the canopy, at a flow speed setting of 8 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
Low	I	Outward interaction	1.645	183	284	0.002	0.001	329	0.009
Low	II	Ejection	4.415	487	687	0.017	0.009	883	0.025
Low	III	Inward interaction	0.290	25	35	0.000	0.000	58	0.002
Low	IV	Sweep	0.970	72	103	0.001	0.000	194	0.005
High	I	Outward interaction	2.810	1157	2049	0.005	0.003	562	0.016
High	II	Ejection	0.885	390	730	0.001	0.000	177	0.005
High	III	Inward interaction	1.035	310	499	0.001	0.000	207	0.006
High	IV	Sweep	0.770	382	798	0.000	0.000	154	0.004
Medium	I	Outward interaction	0.660	50	127	0.001	0.000	132	0.004
Medium	II	Ejection	2.520	82	151	0.003	0.002	504	0.014
Medium	III	Inward interaction	0.245	12	23	0.000	0.000	49	0.001
Medium	IV	Sweep	4.280	173	352	0.013	0.008	856	0.024

Table 479: Quadrant analysis summary for a hole size of 4 at the edge of the canopy, at a flow speed setting of 8 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
Low	I	Outward interaction	1.080	122	203	0.001	0.000	216	0.006
Low	II	Ejection	1.190	119	213	0.001	0.001	238	0.007
Low	III	Inward interaction	0.940	108	192	0.001	0.000	188	0.005
Low	IV	Sweep	3.070	385	629	0.007	0.004	614	0.017
High	I	Outward interaction	1.420	621	1248	0.002	0.001	284	0.008
High	II	Ejection	2.450	997	1934	0.004	0.002	490	0.014
High	III	Inward interaction	0.785	304	637	0.000	0.000	157	0.004
High	IV	Sweep	1.870	662	1352	0.002	0.001	374	0.010
Medium	I	Outward interaction	2.215	287	596	0.005	0.003	443	0.012
Medium	II	Ejection	2.325	233	477	0.004	0.003	465	0.013
Medium	III	Inward interaction	0.370	33	71	0.000	0.000	74	0.002
Medium	IV	Sweep	1.830	162	287	0.002	0.001	366	0.010

Table 480: Quadrant analysis summary for a hole size of 4 at the edge of the canopy, at a flow speed setting of 8 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
Low	I	Outward interaction	0.740	221	369	0.000	0.000	148	0.004
Low	II	Ejection	0.955	206	300	0.001	0.000	191	0.005
Low	III	Inward interaction	1.180	344	553	0.001	0.001	236	0.007
Low	IV	Sweep	3.550	1121	1984	0.010	0.006	710	0.020
High	I	Outward interaction	1.060	71	125	0.001	0.001	212	0.006
High	II	Ejection	3.230	173	276	0.007	0.004	646	0.018
High	III	Inward interaction	0.455	25	44	0.000	0.000	91	0.003
High	IV	Sweep	2.030	89	150	0.002	0.001	406	0.011
Medium	I	Outward interaction	0.480	40	73	0.000	0.000	96	0.003
Medium	II	Ejection	4.505	282	455	0.013	0.007	901	0.025
Medium	III	Inward interaction	0.375	30	46	0.000	0.000	75	0.002
Medium	IV	Sweep	1.320	69	115	0.001	0.001	264	0.007

Table 481: Quadrant analysis summary for a hole size of 4 above the canopy, at a flow speed setting of 8 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	1.815	177	274	0.003	0.002	363	0.010
High	II	Ejection	2.420	149	215	0.004	0.002	484	0.014
High	III	Inward interaction	0.725	54	82	0.000	0.000	145	0.004
High	IV	Sweep	3.120	198	287	0.006	0.003	624	0.017
Low	I	Outward interaction	1.875	307	625	0.003	0.001	375	0.010
Low	II	Ejection	1.050	137	302	0.001	0.000	210	0.006
Low	III	Inward interaction	1.105	157	356	0.001	0.000	221	0.006
Low	IV	Sweep	2.310	419	788	0.004	0.002	462	0.013
Medium	I	Outward interaction	1.550	126	179	0.003	0.001	310	0.009
Medium	II	Ejection	2.290	103	151	0.003	0.002	458	0.013
Medium	III	Inward interaction	0.300	20	31	0.000	0.000	60	0.002
Medium	IV	Sweep	2.850	131	188	0.005	0.003	570	0.016

Table 482: Quadrant analysis summary for a hole size of 4 above the canopy, at a flow speed setting of 8 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	1.330	181	256	0.002	0.001	266	0.007
High	II	Ejection	3.135	285	392	0.007	0.004	627	0.018
High	III	Inward interaction	0.375	35	55	0.000	0.000	75	0.002
High	IV	Sweep	2.035	163	223	0.002	0.001	407	0.011
Low	I	Outward interaction	0.310	36	62	0.000	0.000	62	0.002
Low	II	Ejection	1.940	178	272	0.002	0.001	388	0.011
Low	III	Inward interaction	1.460	175	313	0.002	0.001	292	0.008
Low	IV	Sweep	3.235	382	686	0.008	0.004	647	0.018
Medium	I	Outward interaction	0.830	65	90	0.001	0.000	166	0.005
Medium	II	Ejection	2.520	152	210	0.004	0.002	504	0.014
Medium	III	Inward interaction	0.450	33	47	0.000	0.000	90	0.003
Medium	IV	Sweep	2.465	166	227	0.004	0.002	493	0.014

Table 483: Quadrant analysis summary for a hole size of 4 above the canopy, at a flow speed setting of 8 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	0.120	132	213	0.000	0.000	24	0.001
High	II	Ejection	4.180	2625	3828	0.010	0.005	836	0.023
High	III	Inward interaction	0.040	39	53	0.000	0.000	8	0.000
High	IV	Sweep	2.795	1614	2253	0.004	0.002	559	0.016
Low	I	Outward interaction	0.590	103	297	0.000	0.000	118	0.003
Low	II	Ejection	2.965	475	1133	0.006	0.002	593	0.017
Low	III	Inward interaction	0.890	170	469	0.001	0.000	178	0.005
Low	IV	Sweep	2.285	326	828	0.003	0.001	457	0.013
Medium	I	Outward interaction	0.800	56	79	0.001	0.000	160	0.004
Medium	II	Ejection	3.295	206	291	0.008	0.004	659	0.018
Medium	III	Inward interaction	0.575	38	54	0.000	0.000	115	0.003
Medium	IV	Sweep	1.795	100	137	0.002	0.001	359	0.010

Table 484: Quadrant analysis summary for a hole size of 4 above the canopy, at a flow speed setting of 8 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	0.520	329	486	0.000	0.000	104	0.003
High	II	Ejection	3.895	2250	3409	0.011	0.006	779	0.022
High	III	Inward interaction	0.465	321	491	0.000	0.000	93	0.003
High	IV	Sweep	2.430	1237	1849	0.004	0.002	486	0.014
Low	I	Outward interaction	0.515	61	139	0.000	0.000	103	0.003
Low	II	Ejection	2.440	246	481	0.004	0.002	488	0.014
Low	III	Inward interaction	1.200	140	224	0.001	0.000	240	0.007
Low	IV	Sweep	2.590	240	419	0.004	0.002	518	0.014
Medium	I	Outward interaction	0.270	134	187	0.000	0.000	54	0.002
Medium	II	Ejection	5.610	2586	3619	0.023	0.015	1122	0.031
Medium	III	Inward interaction	0.500	296	432	0.000	0.000	100	0.003
Medium	IV	Sweep	0.585	146	175	0.000	0.000	117	0.003

Table 485: Quadrant analysis summary for a hole size of 4 within the canopy, at a flow speed setting of 8 Hz and a distance of -2 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	0.500	88	137	0.000	0.000	100	0.003
High	II	Ejection	4.730	727	1181	0.016	0.009	946	0.026
High	III	Inward interaction	0.310	59	101	0.000	0.000	62	0.002
High	IV	Sweep	1.765	190	267	0.002	0.001	353	0.010
Low	I	Outward interaction	0.675	86	128	0.000	0.000	135	0.004
Low	II	Ejection	5.370	827	1137	0.026	0.014	1074	0.030
Low	III	Inward interaction	0.515	65	94	0.000	0.000	103	0.003
Low	IV	Sweep	0.535	48	68	0.000	0.000	107	0.003
Medium	I	Outward interaction	0.460	64	94	0.000	0.000	92	0.003
Medium	II	Ejection	5.235	638	932	0.020	0.012	1047	0.029
Medium	III	Inward interaction	0.340	52	78	0.000	0.000	68	0.002
Medium	IV	Sweep	1.280	108	155	0.001	0.000	256	0.007

Table 486: Quadrant analysis summary for a hole size of 4 within the canopy, at a flow speed setting of 8 Hz and a distance of 13 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	6.465	1080	2217	0.046	0.030	1293	0.036
High	II	Ejection	0.245	45	92	0.000	0.000	49	0.001
High	III	Inward interaction	0.315	20	38	0.000	0.000	63	0.002
High	IV	Sweep	0.095	13	23	0.000	0.000	19	0.001
Low	I	Outward interaction	1.230	466	773	0.001	0.001	246	0.007
Low	II	Ejection	1.860	590	950	0.002	0.001	372	0.010
Low	III	Inward interaction	0.805	295	509	0.000	0.000	161	0.005
Low	IV	Sweep	2.300	810	1368	0.004	0.002	460	0.013
Medium	I	Outward interaction	1.595	383	817	0.003	0.002	319	0.009
Medium	II	Ejection	2.550	302	616	0.004	0.002	510	0.014
Medium	III	Inward interaction	0.005	1	3	0.000	0.000	1	0.000
Medium	IV	Sweep	3.775	495	975	0.009	0.005	755	0.021

Table 487: Quadrant analysis summary for a hole size of 4 within the canopy, at a flow speed setting of 8 Hz and a distance of 43 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	0.540	119	232	0.000	0.000	108	0.003
High	II	Ejection	1.275	181	331	0.001	0.001	255	0.008
High	III	Inward interaction	0.795	174	309	0.001	0.000	159	0.005
High	IV	Sweep	3.755	693	1242	0.012	0.007	751	0.023
Low	I	Outward interaction	1.270	163	270	0.001	0.001	254	0.007
Low	II	Ejection	1.000	151	242	0.001	0.000	200	0.006
Low	III	Inward interaction	1.560	221	359	0.002	0.001	312	0.009
Low	IV	Sweep	1.800	302	507	0.003	0.001	360	0.010
Medium	I	Outward interaction	0.750	40	81	0.000	0.000	150	0.004
Medium	II	Ejection	2.805	129	238	0.005	0.003	561	0.016
Medium	III	Inward interaction	0.505	29	51	0.000	0.000	101	0.003
Medium	IV	Sweep	2.870	132	240	0.005	0.003	574	0.016

Table 488: Quadrant analysis summary for a hole size of 4 within the canopy, at a flow speed setting of 8 Hz and a distance of 62 cm from the leading edge.

Density	Quadrant	Event	Duration	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	0.615	51	95	0.000	0.000	123	0.003
High	II	Ejection	2.810	193	316	0.005	0.002	562	0.016
High	III	Inward interaction	0.690	57	105	0.000	0.000	138	0.004
High	IV	Sweep	2.805	184	349	0.005	0.002	561	0.016
Low	I	Outward interaction	0.955	102	170	0.001	0.000	191	0.005
Low	II	Ejection	2.060	172	274	0.003	0.001	412	0.012
Low	III	Inward interaction	0.750	77	127	0.000	0.000	150	0.004
Low	IV	Sweep	3.180	296	459	0.007	0.004	636	0.018
Medium	I	Outward interaction	0.620	72	131	0.000	0.000	124	0.003
Medium	II	Ejection	1.995	167	274	0.002	0.001	399	0.011
Medium	III	Inward interaction	0.605	68	116	0.000	0.000	121	0.003
Medium	IV	Sweep	3.480	318	534	0.008	0.004	696	0.019

\clearpage



## 6 Plots of quadrant data

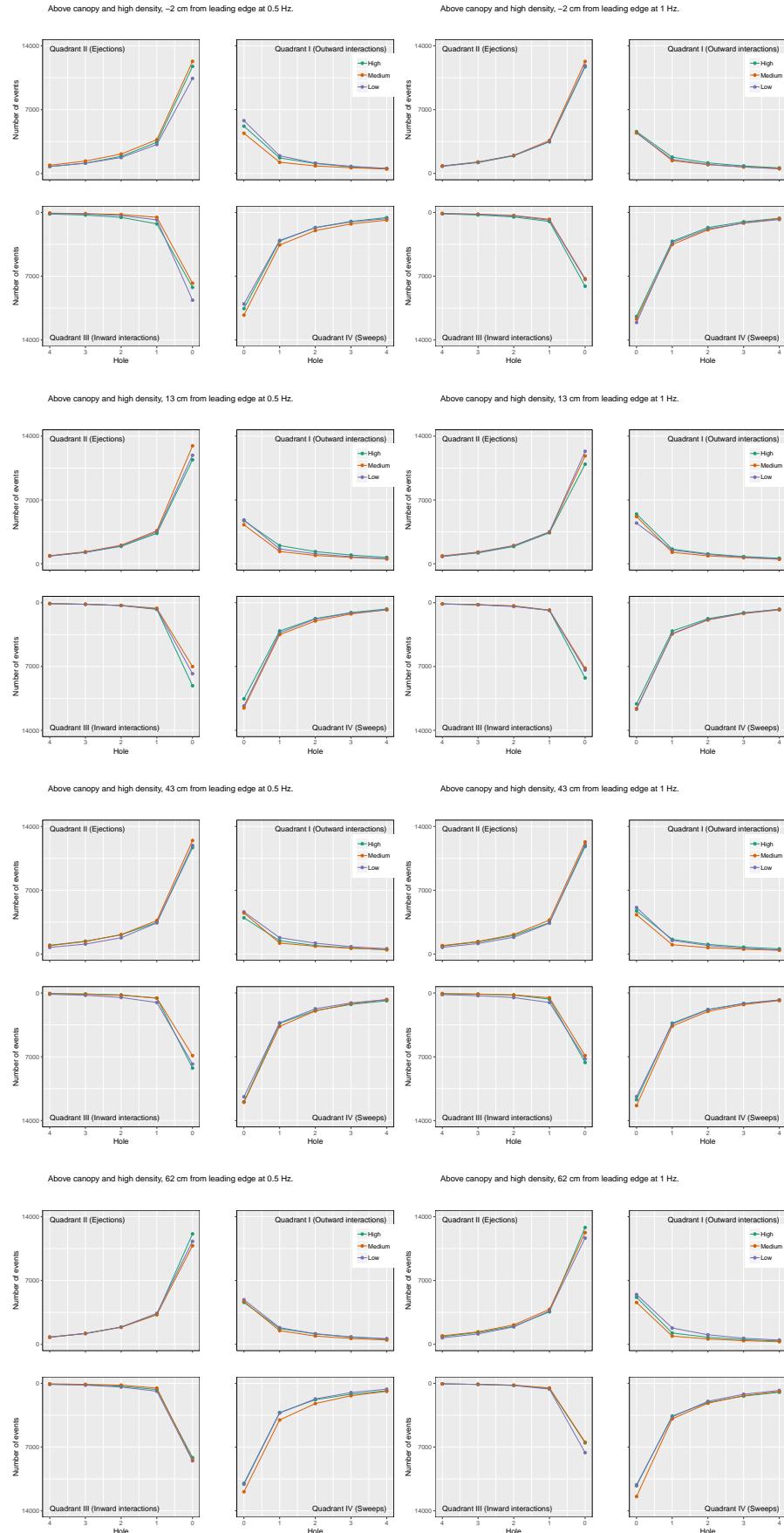


Figure 2: Variation in the number of events over hole size above the canopy.

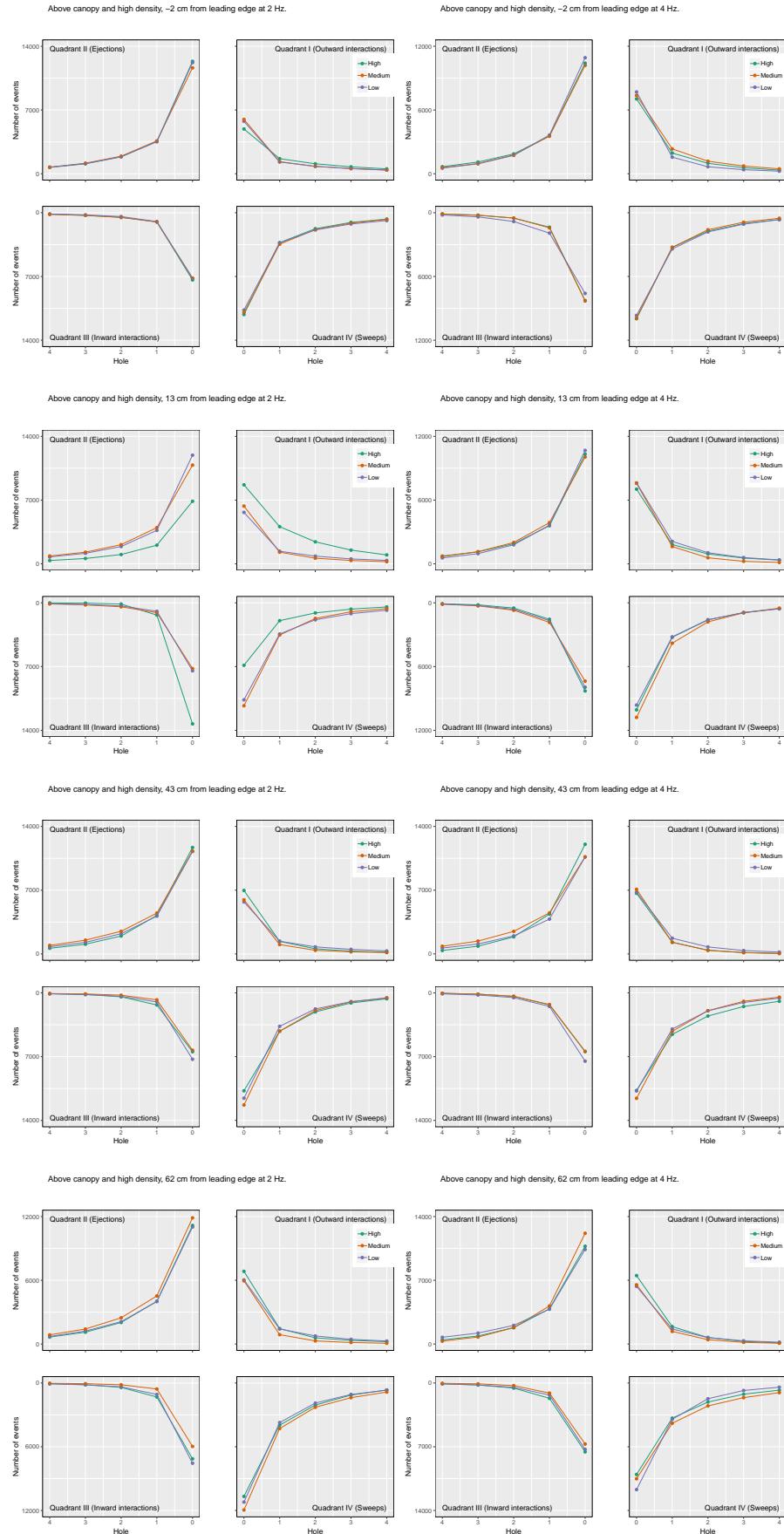


Figure 3: Variation in the number of events over hole size above the canopy.

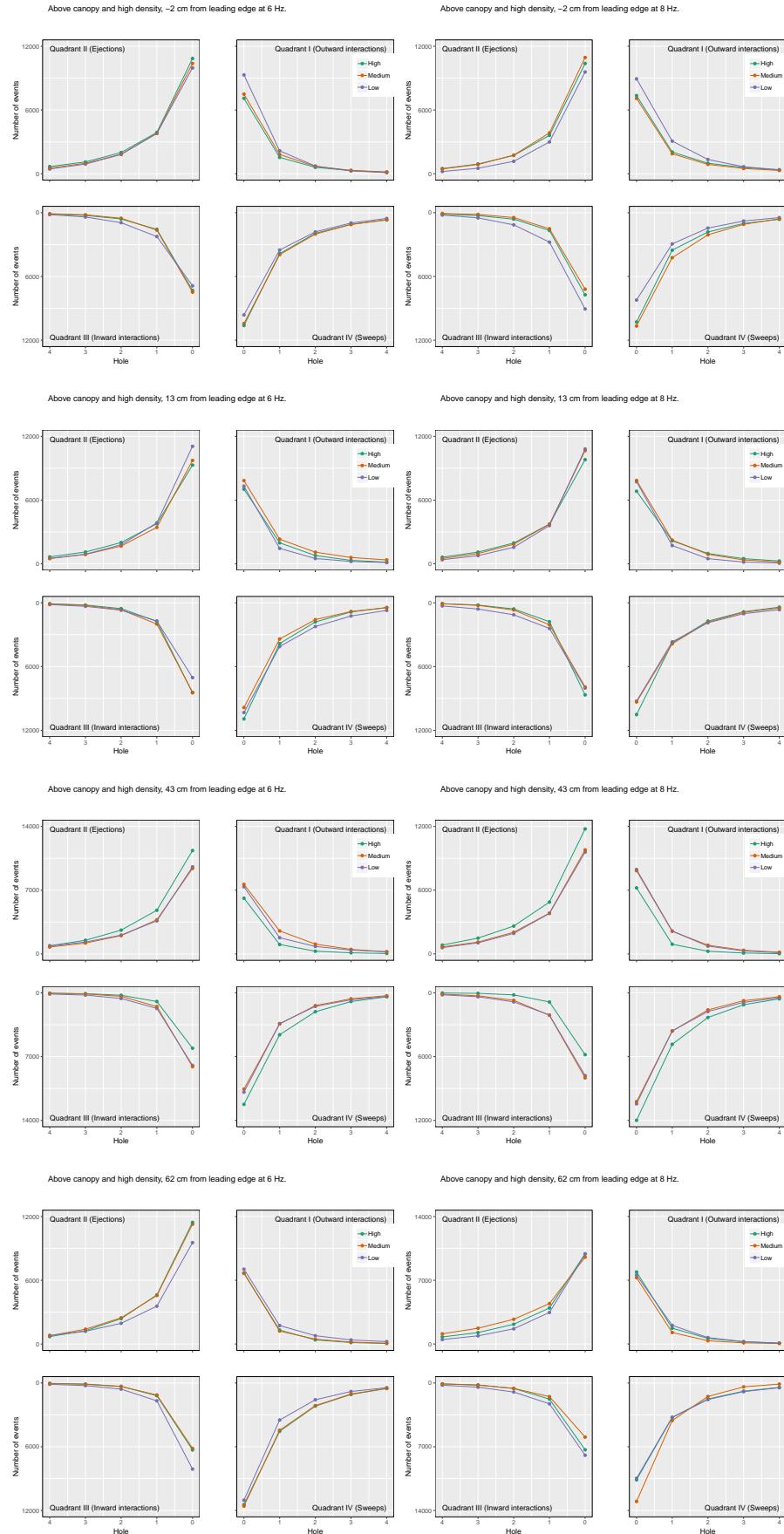


Figure 4: Variation in the number of events over hole size above the canopy.

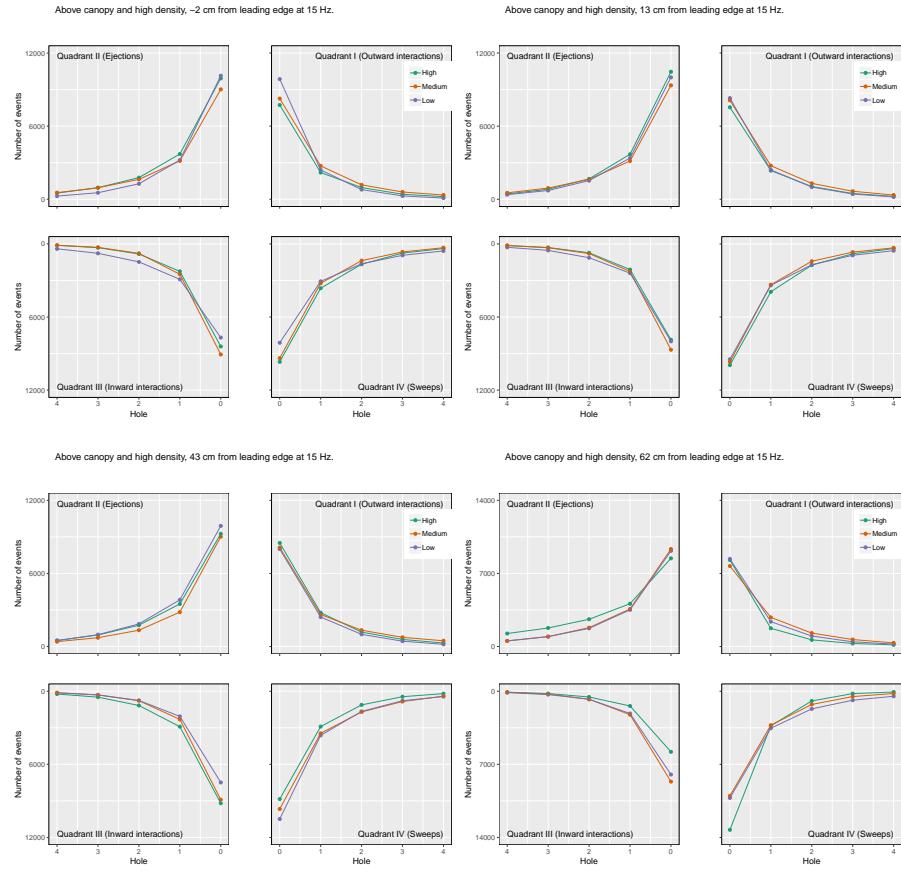


Figure 5: Variation in the number of events over hole size above the canopy.

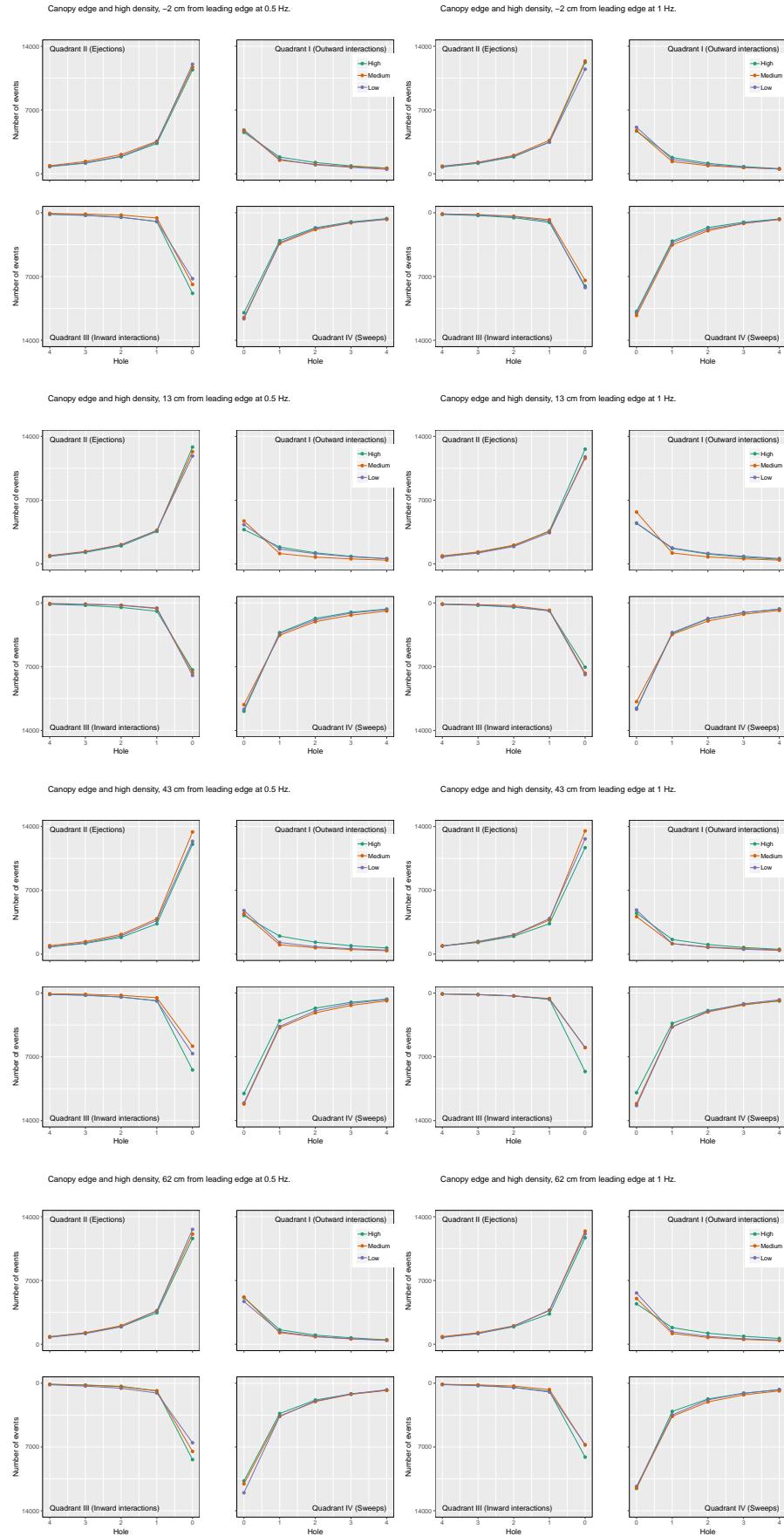


Figure 6: Variation in the number of events over hole size at the canopy edge.

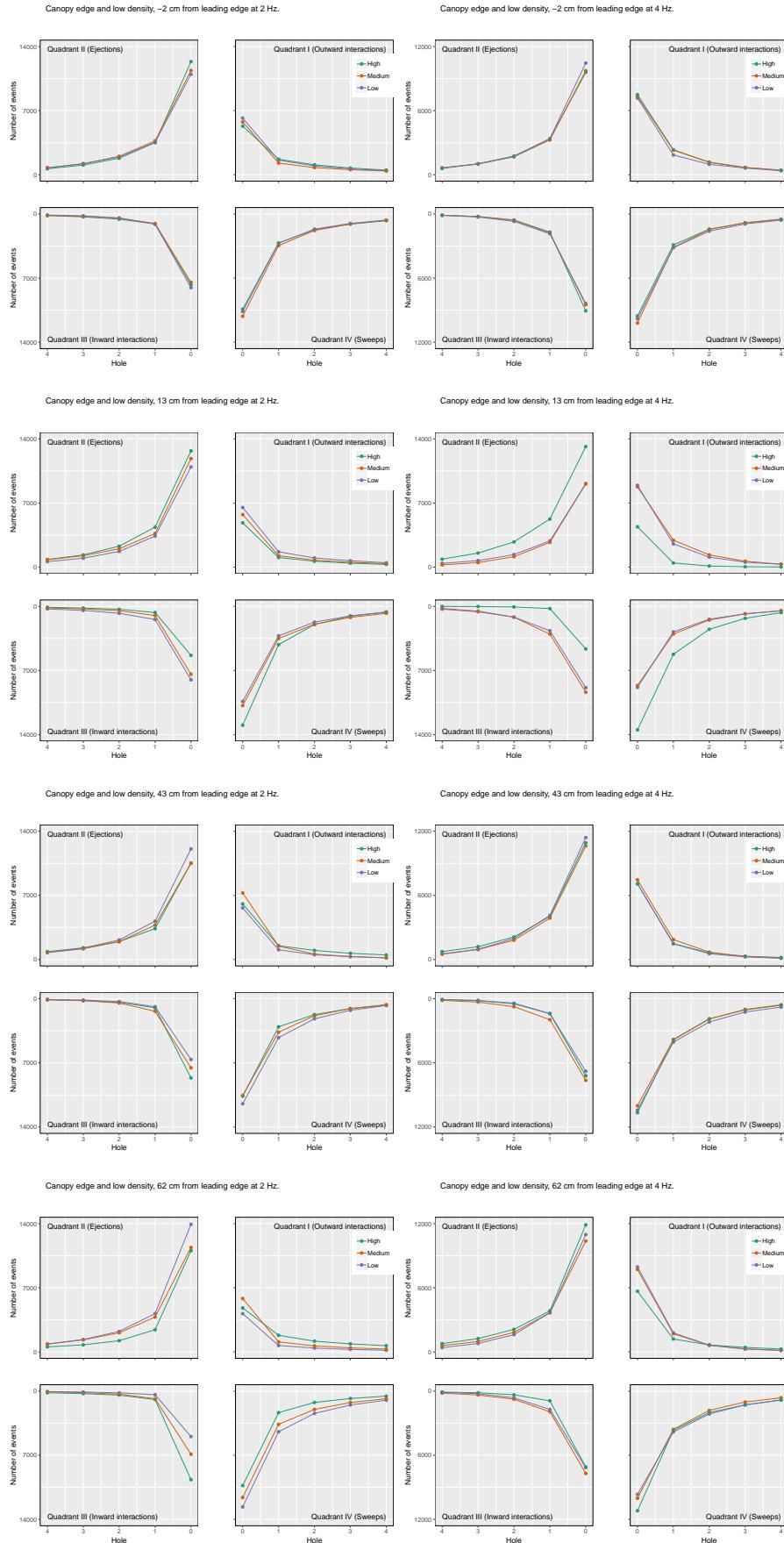


Figure 7: Variation in the number of events over hole size at the canopy edge.

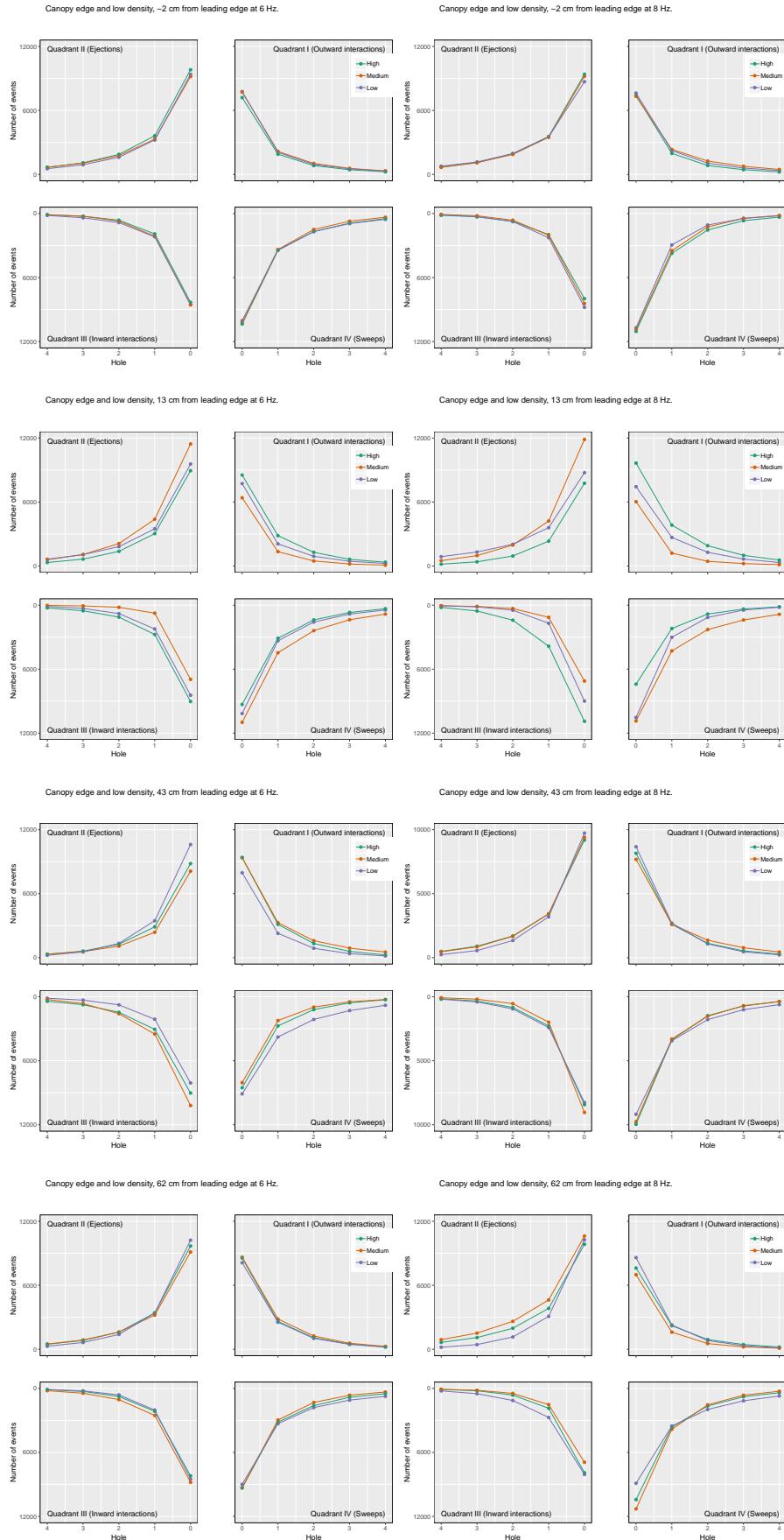


Figure 8: Variation in the number of events over hole size at the canopy edge.

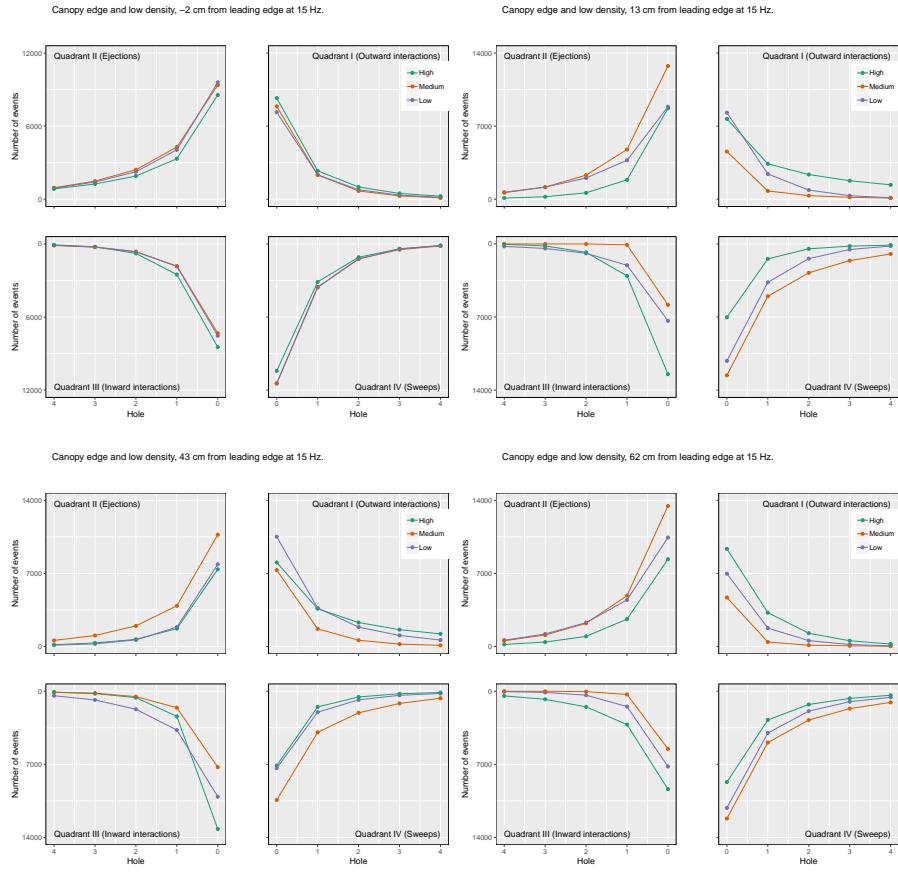


Figure 9: Variation in the number of events over hole size at the canopy edge.

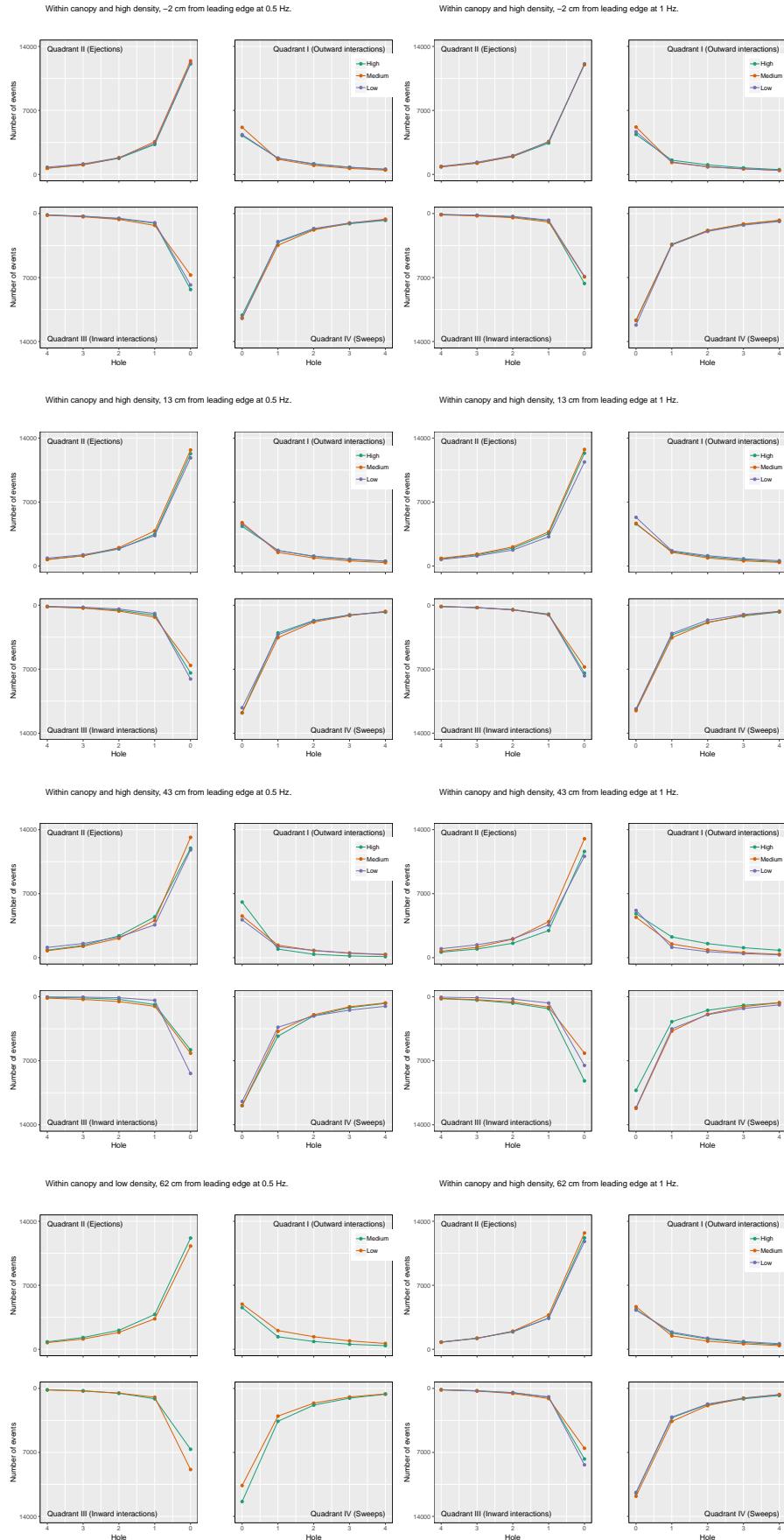


Figure 10: Variation in the number of events over hole size within the canopy.

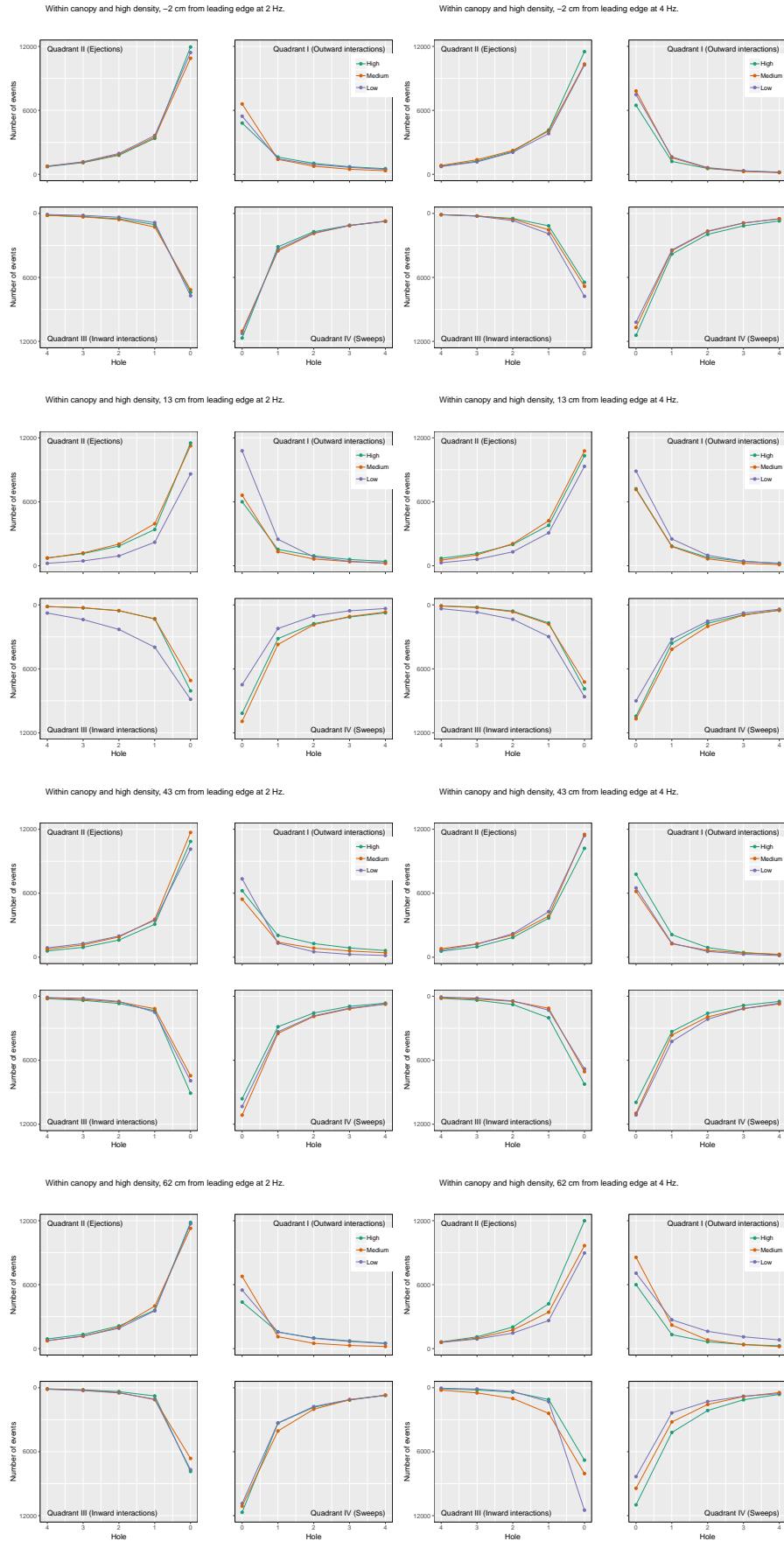


Figure 11: Variation in the number of events over hole size within the canopy.

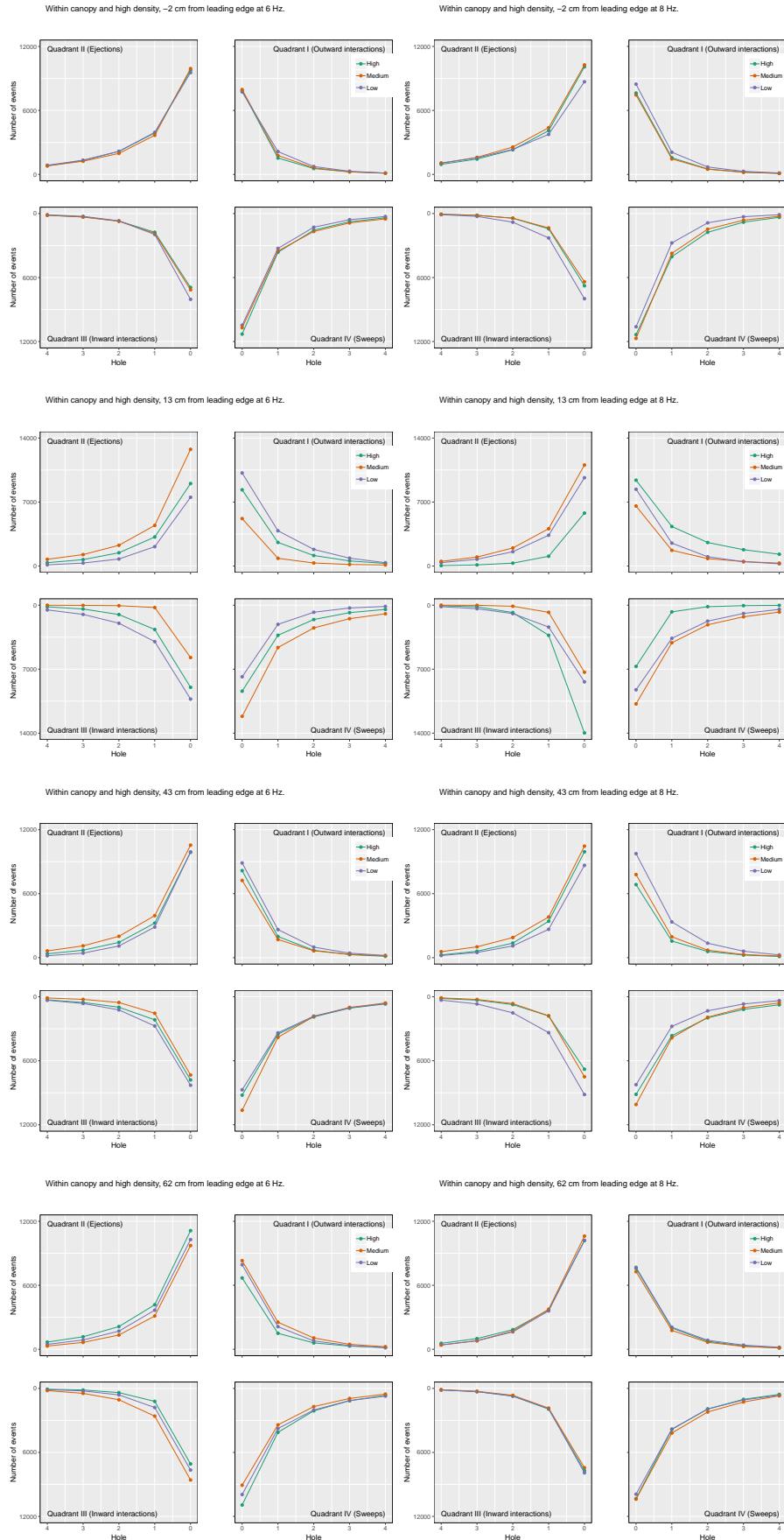


Figure 12: Variation in the number of events over hole size within the canopy.

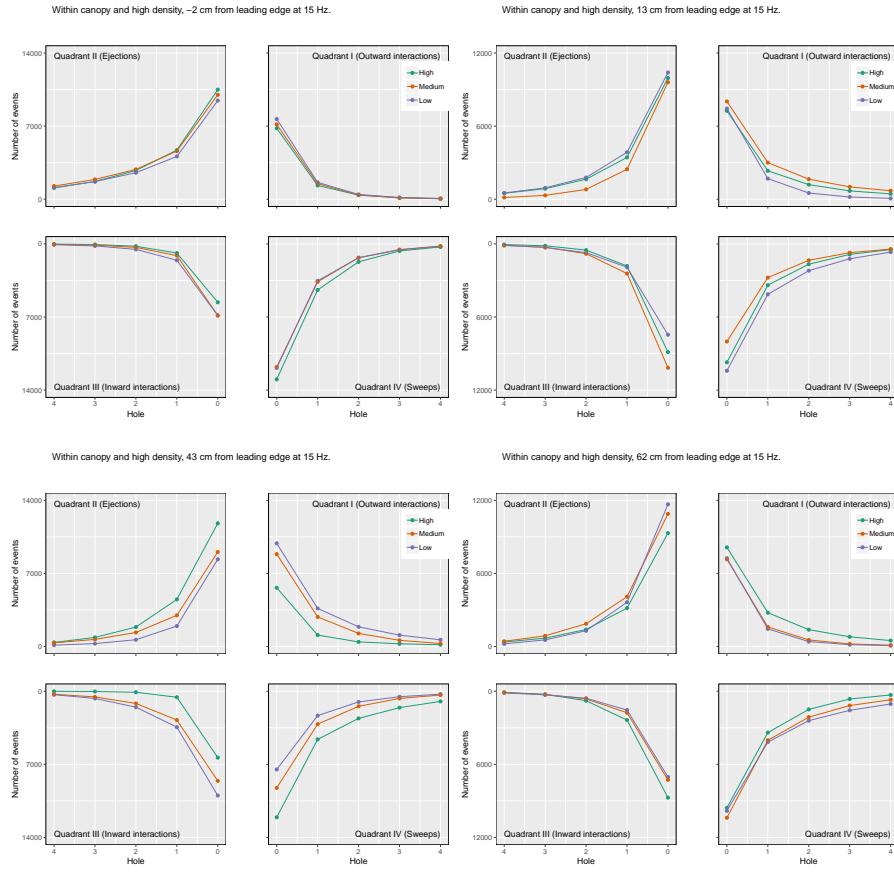


Figure 13: Variation in the number of events over hole size within the canopy.



## 6.1 Plots of the proportion of events

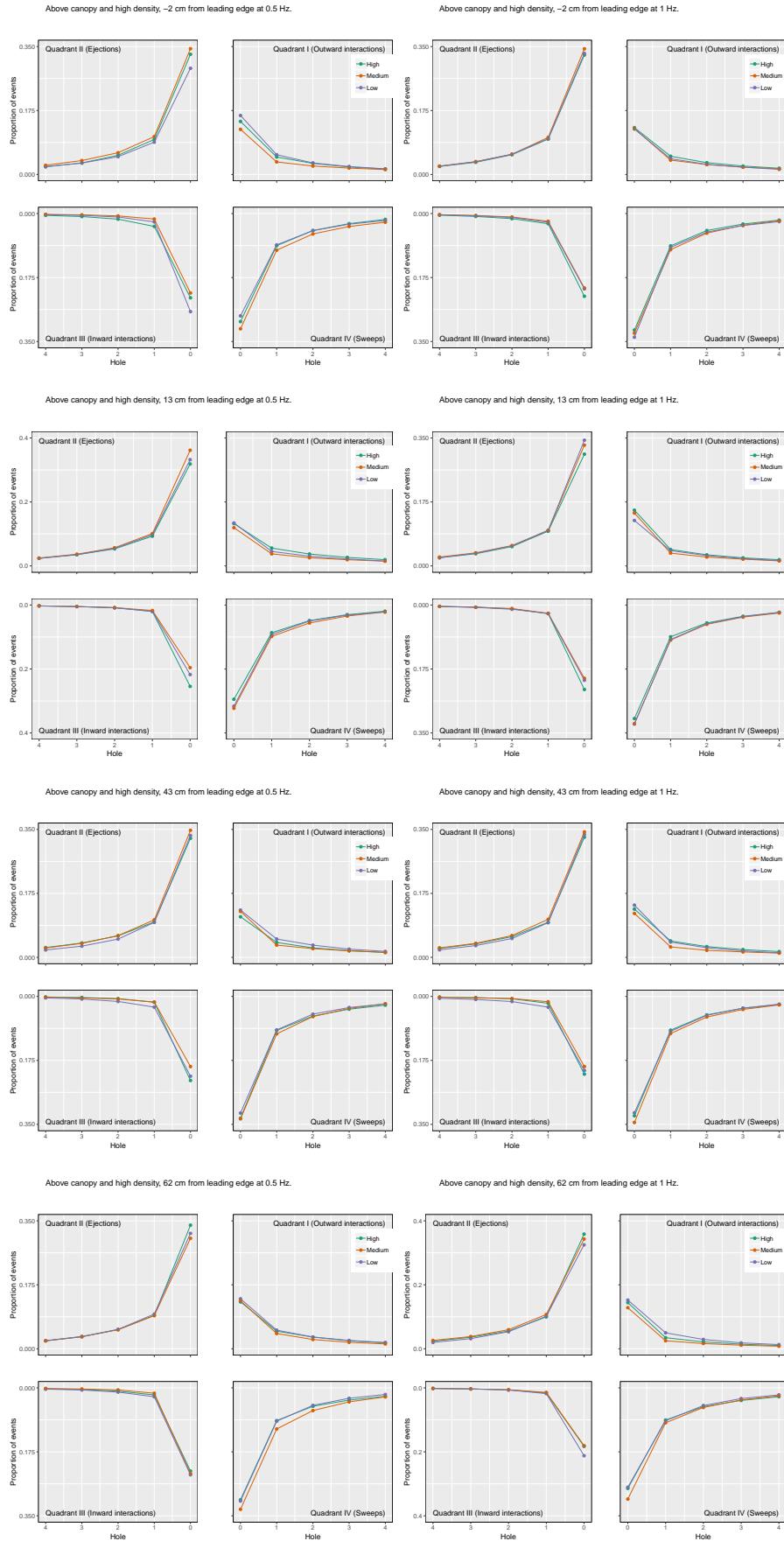


Figure 14: Variation in the proportion of events over hole size above the canopy.

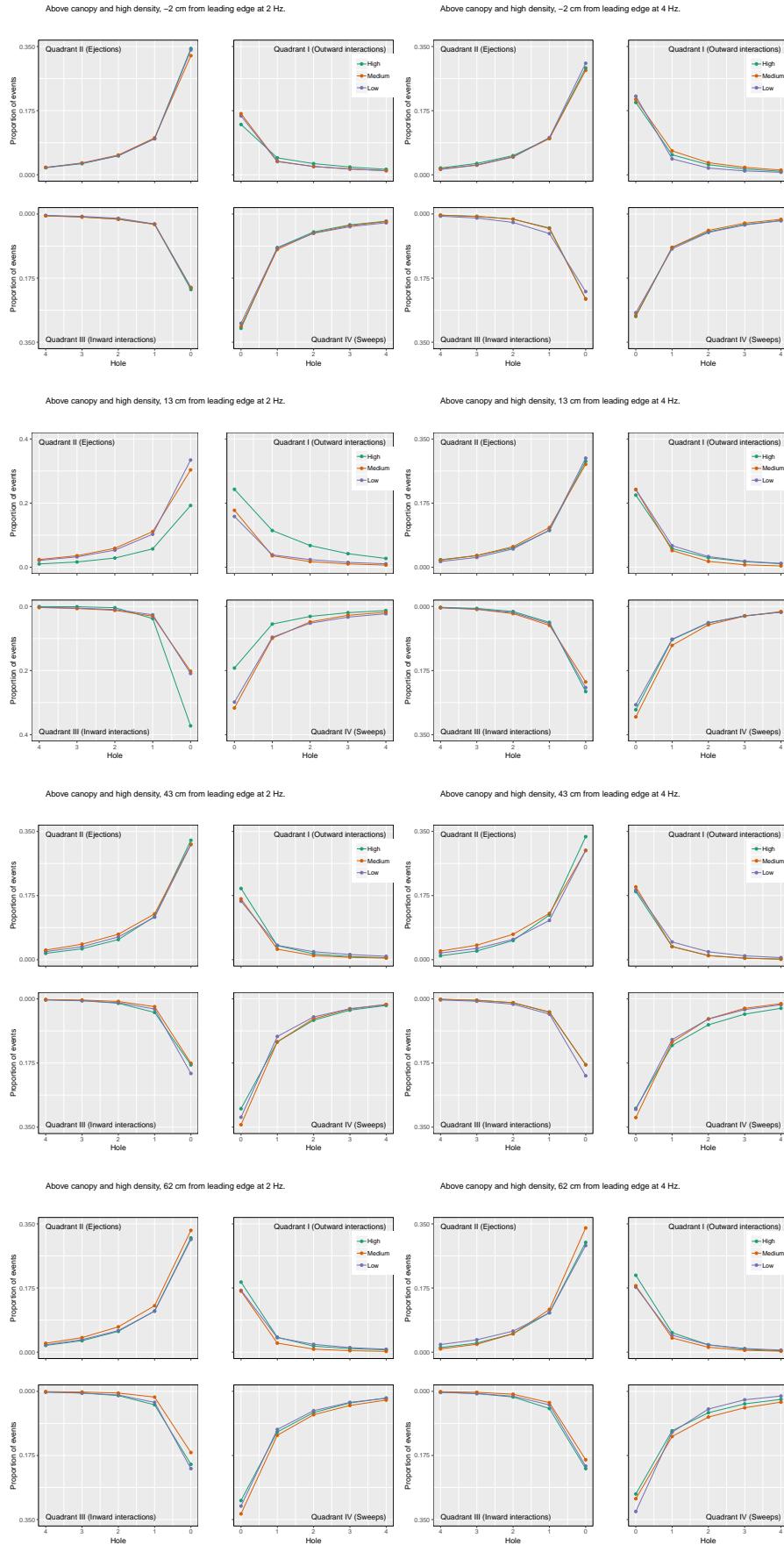


Figure 15: Variation in the proportion of events over hole size above the canopy.

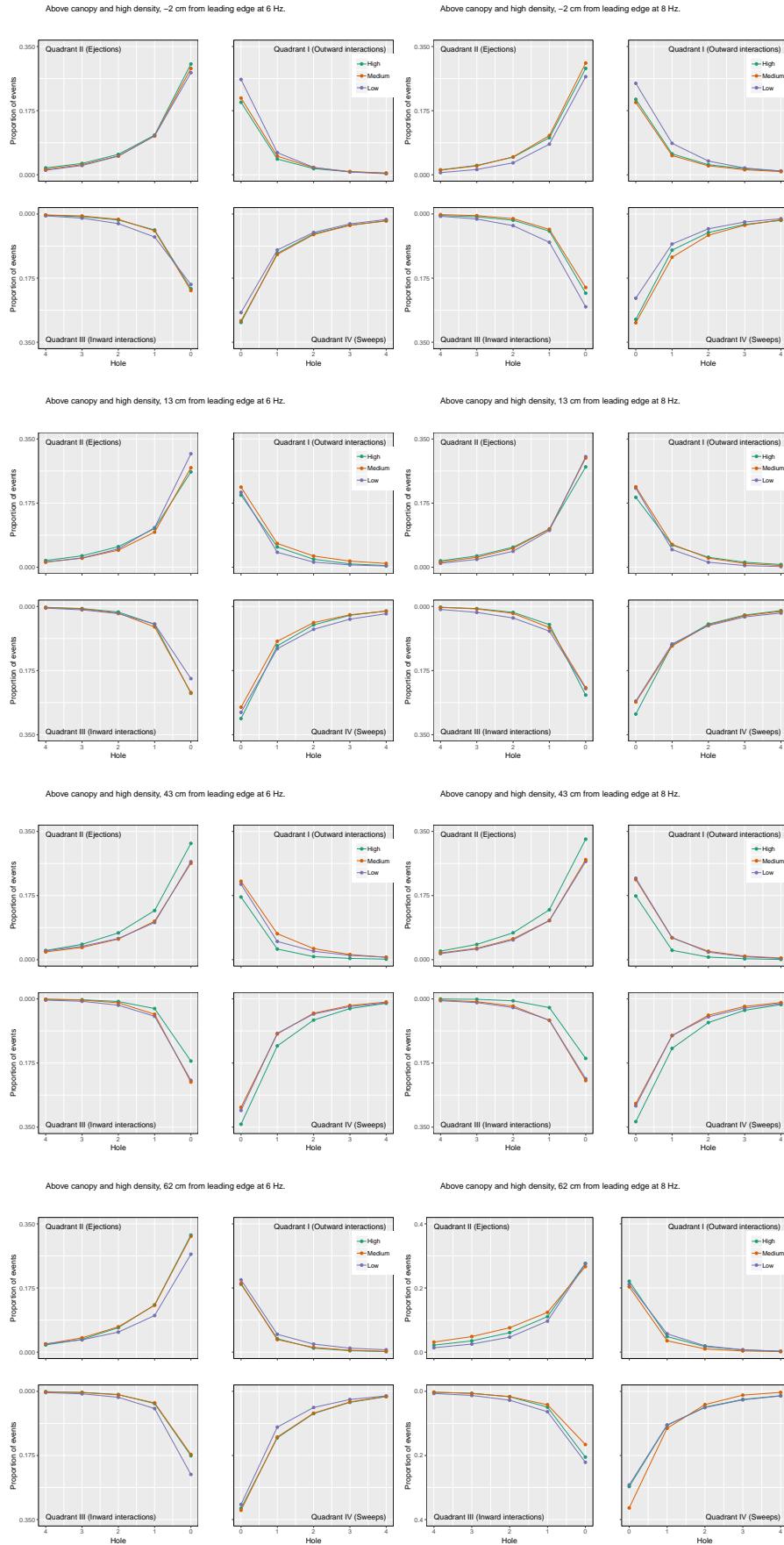


Figure 16: Variation in the proportion of events over hole size above the canopy.

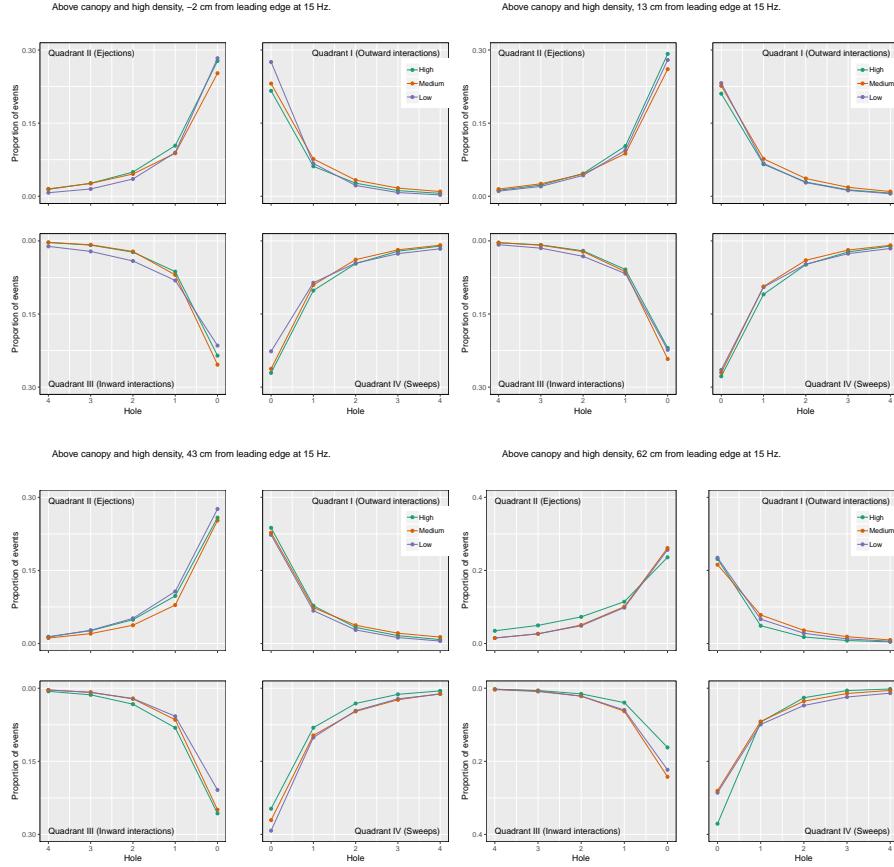


Figure 17: Variation in the proportion of events over hole size above the canopy.

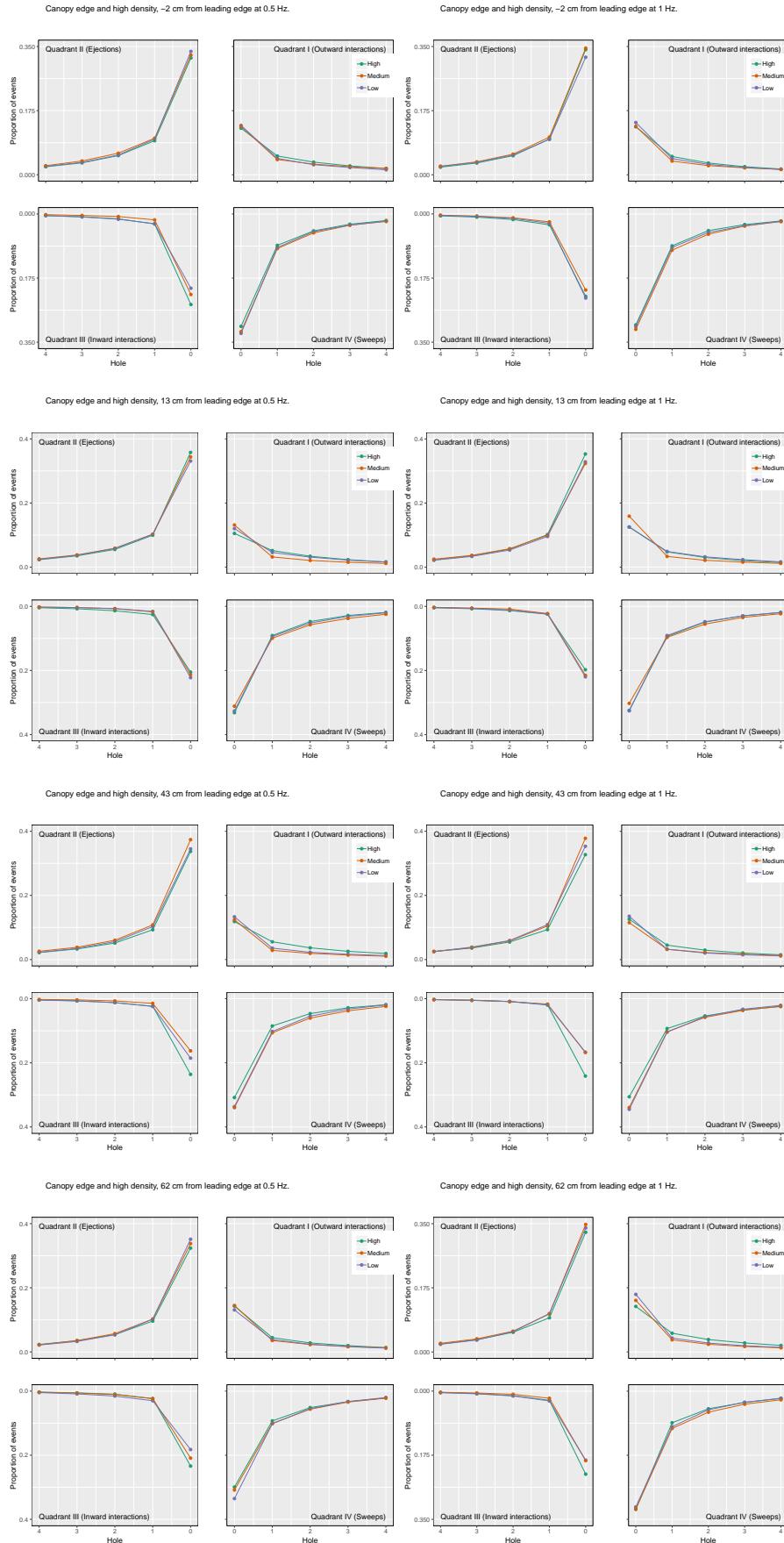


Figure 18: Variation in the proportion of events over hole size at the canopy edge.

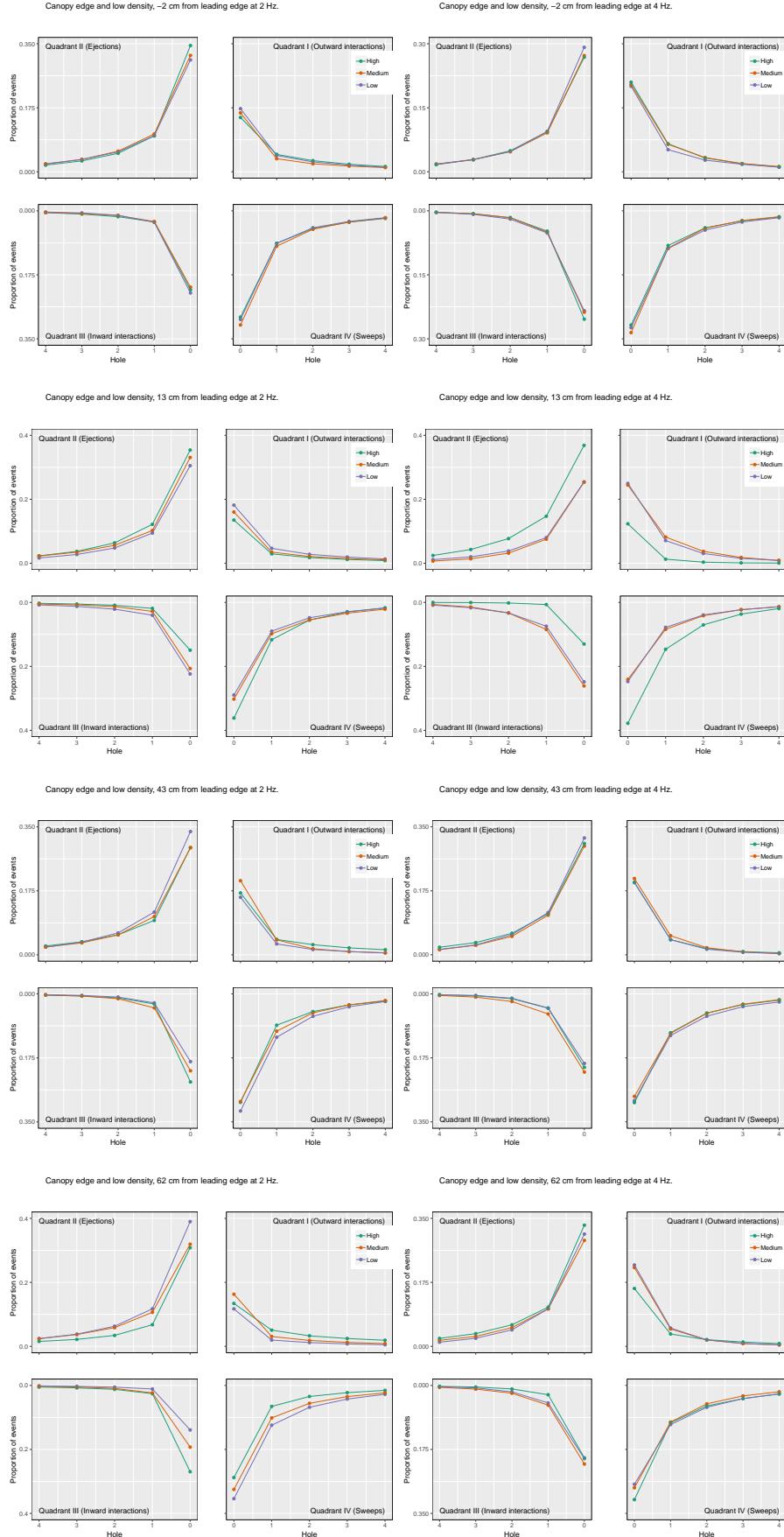


Figure 19: Variation in the proportion of events over hole size at the canopy edge.

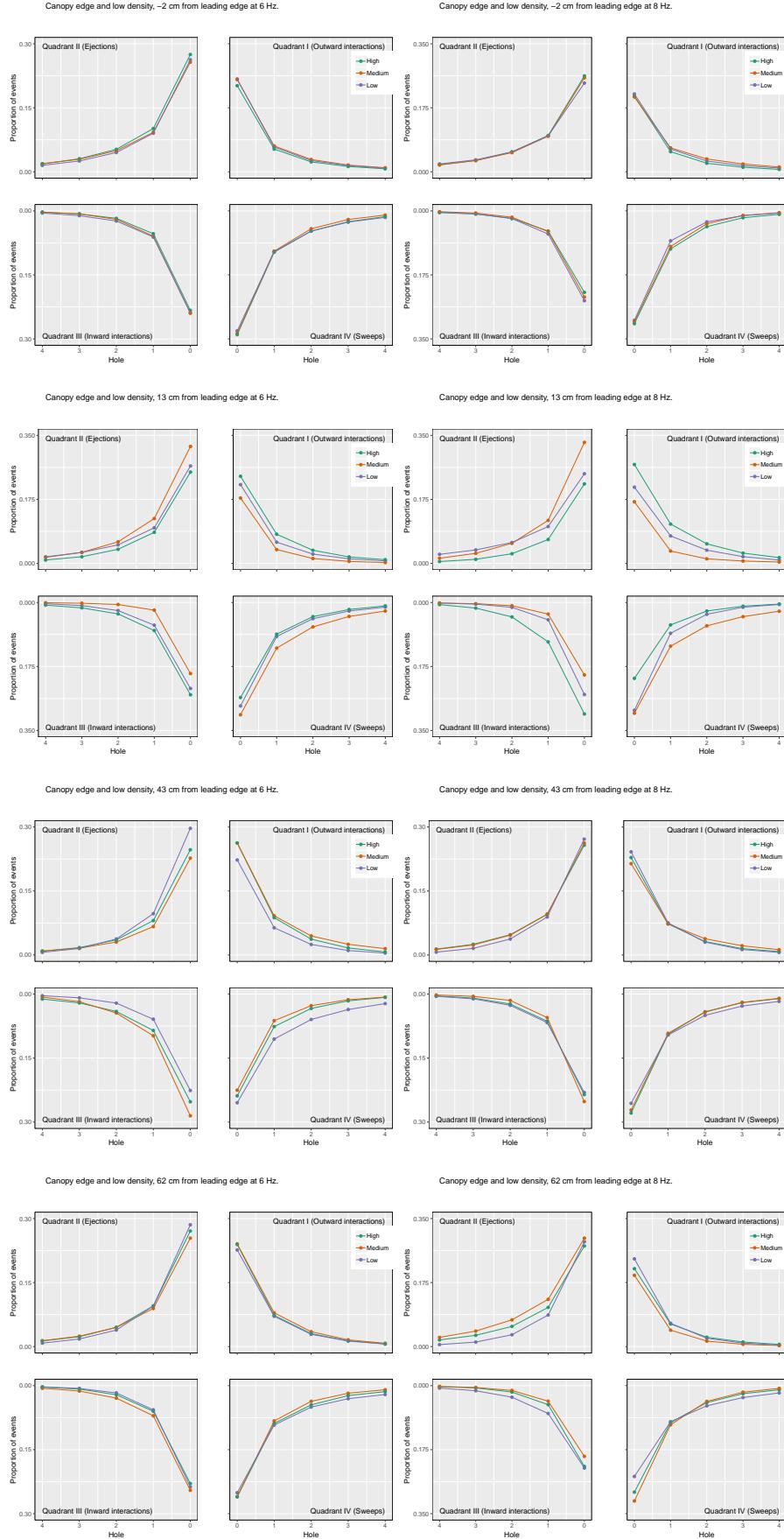


Figure 20: Variation in the proportion of events over hole size at the canopy edge.

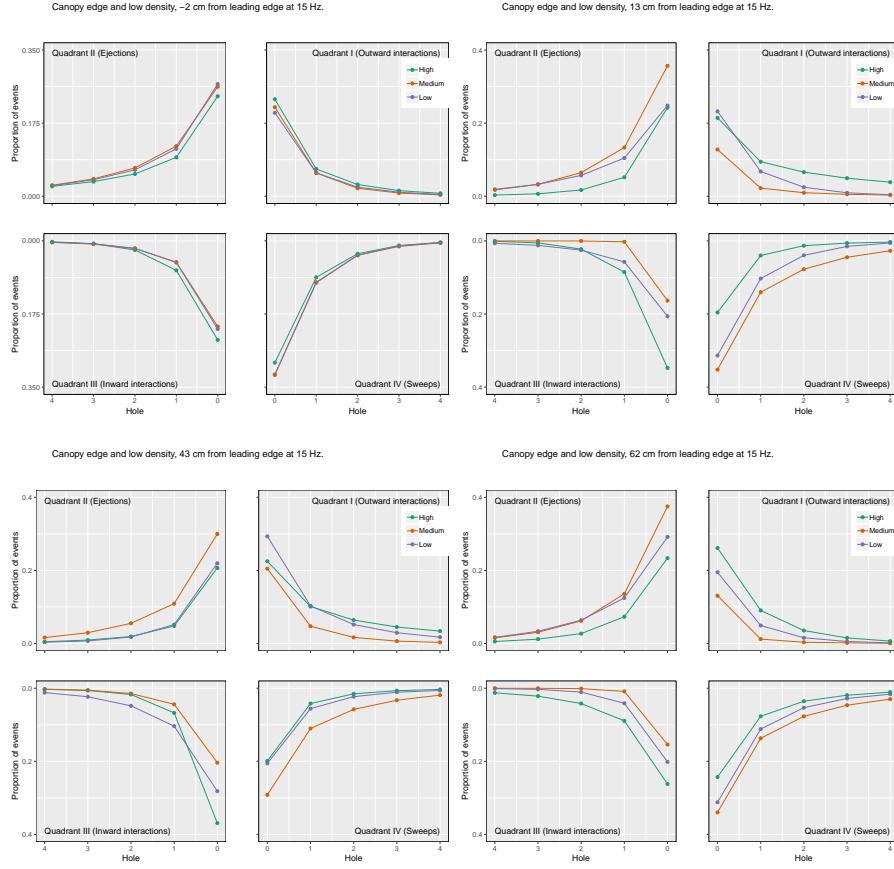


Figure 21: Variation in the proportion of events over hole size at the canopy edge.

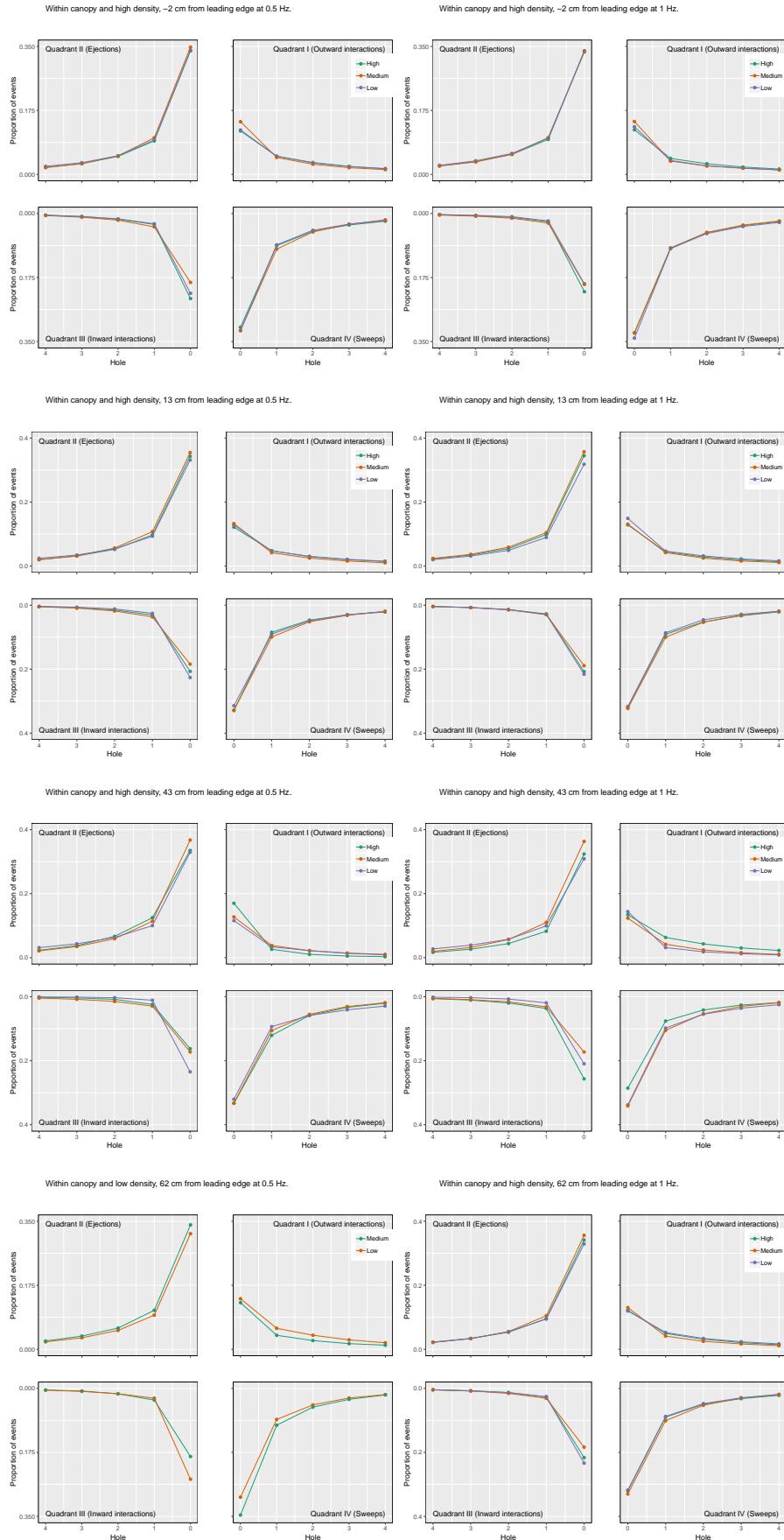


Figure 22: Variation in the proportion of events over hole size within the canopy.

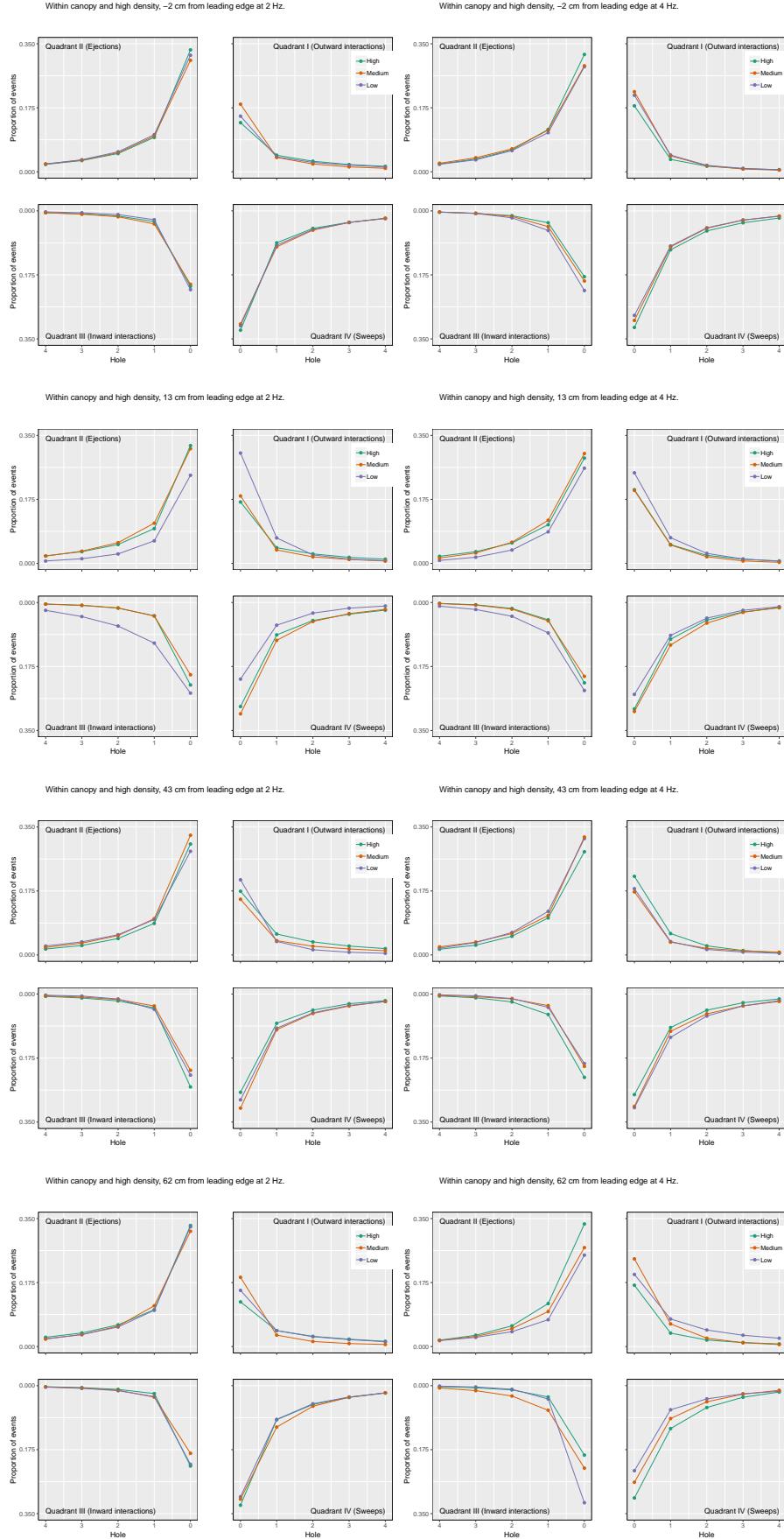


Figure 23: Variation in the proportion of events over hole size within the canopy.

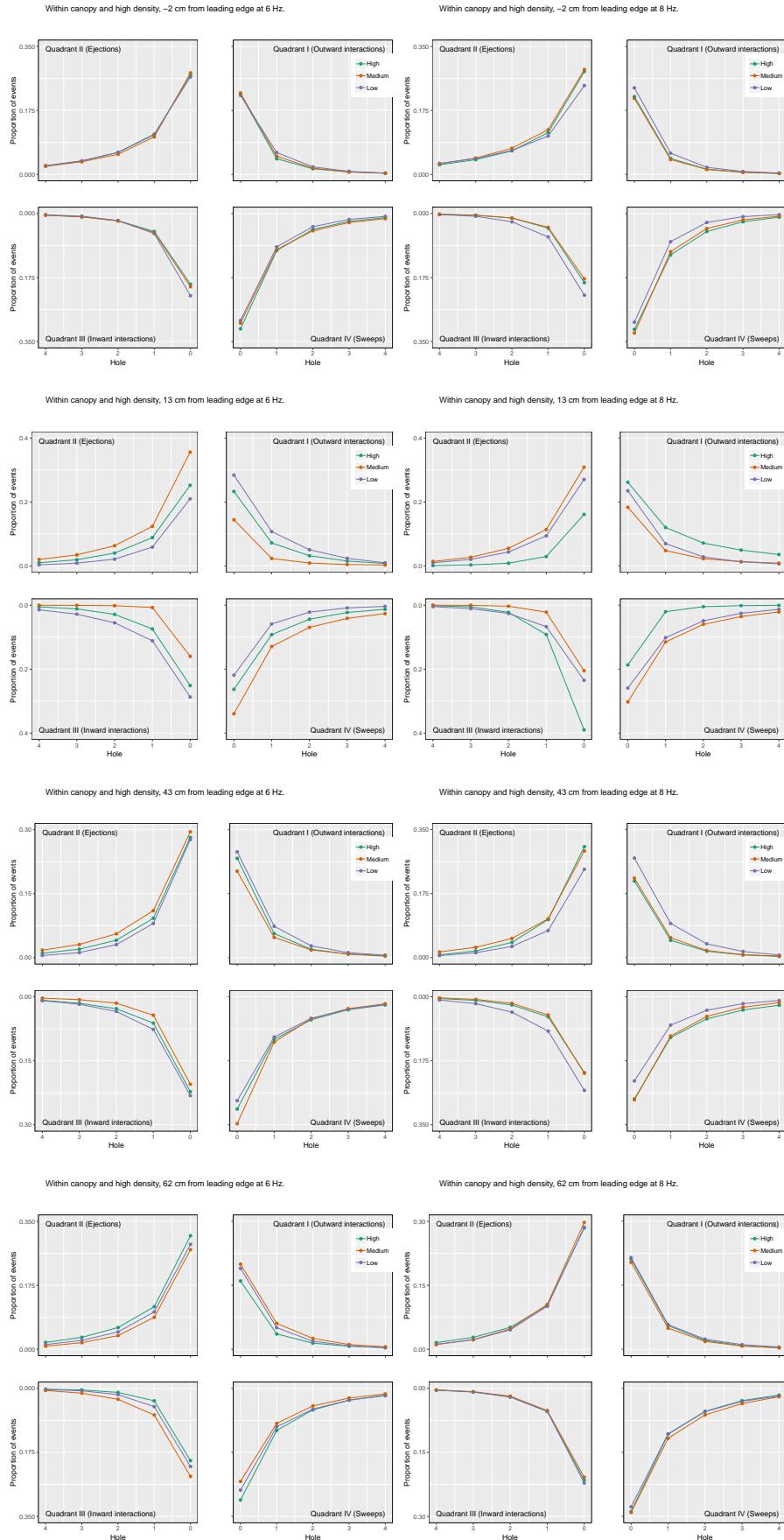


Figure 24: Variation in the proportion of events over hole size within the canopy.

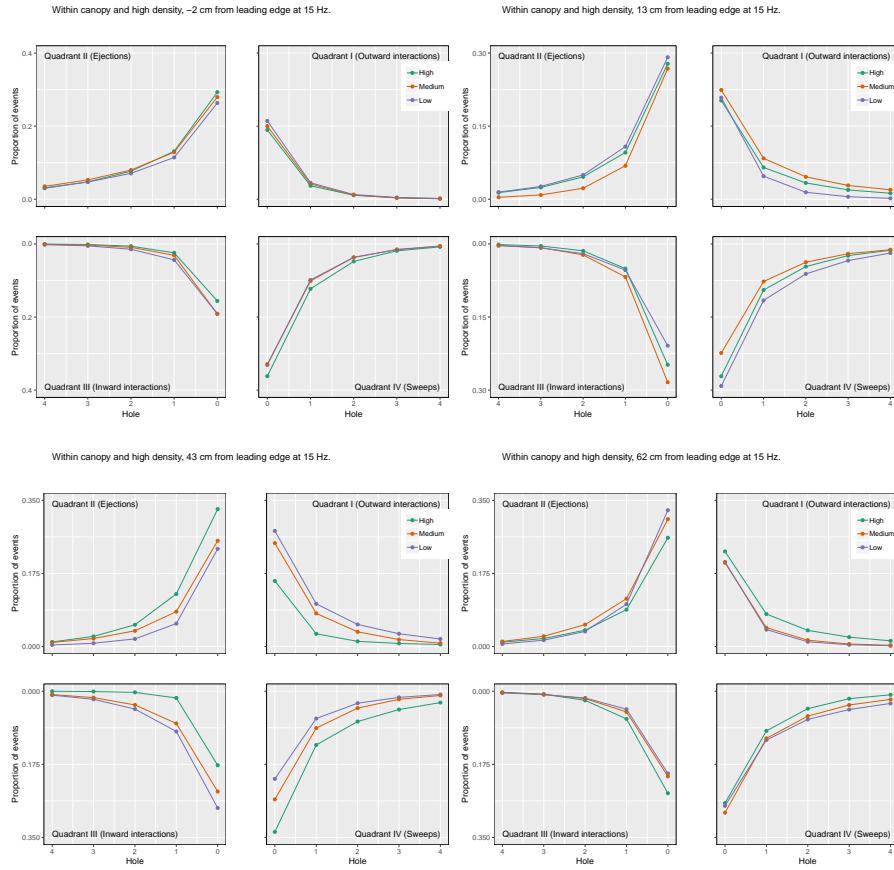


Figure 25: Variation in the proportion of events over hole size within the canopy.



## 6.2 Plots of stress

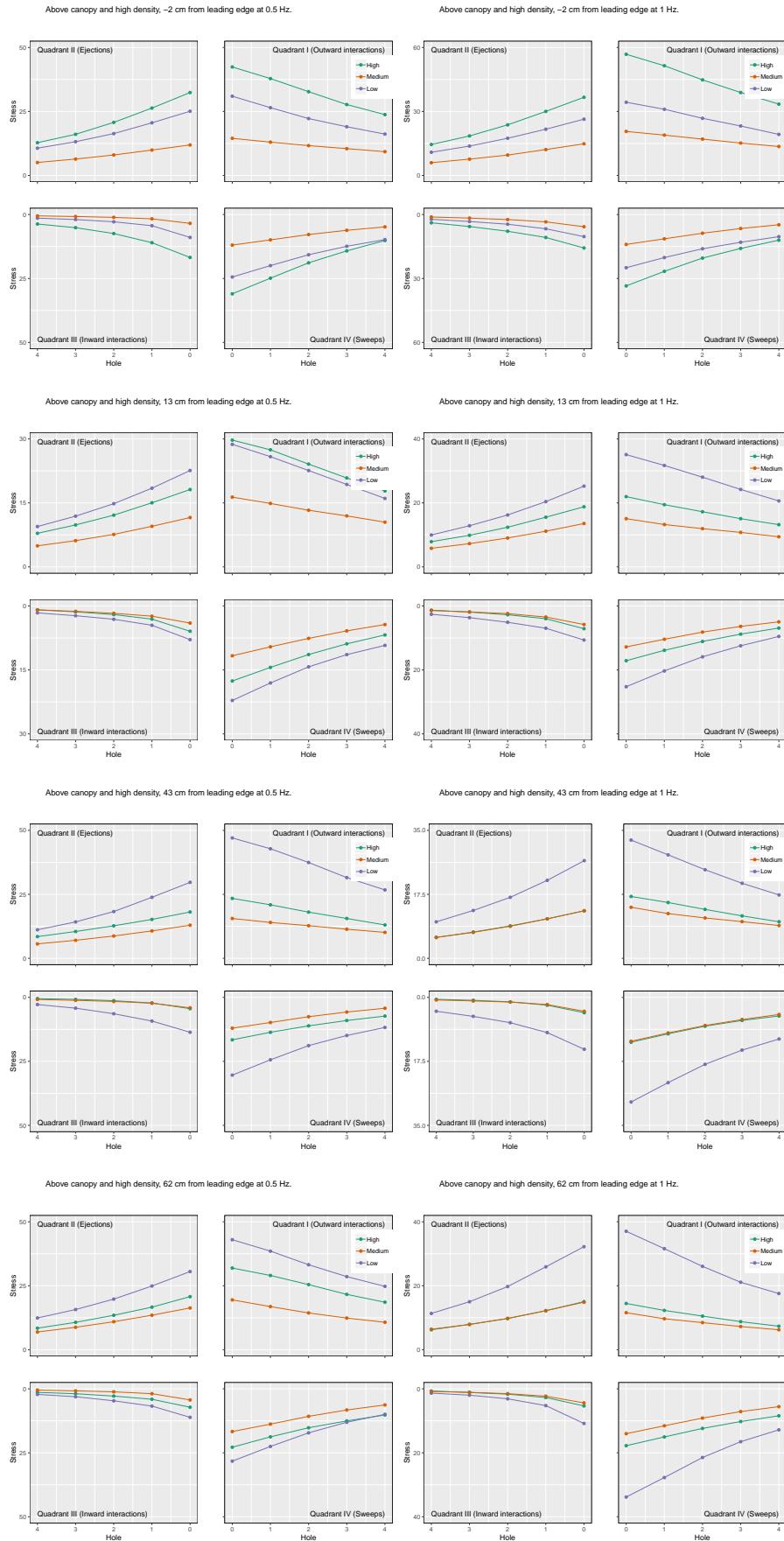


Figure 26: Variation in the negative momentum stress over hole size above the canopy.

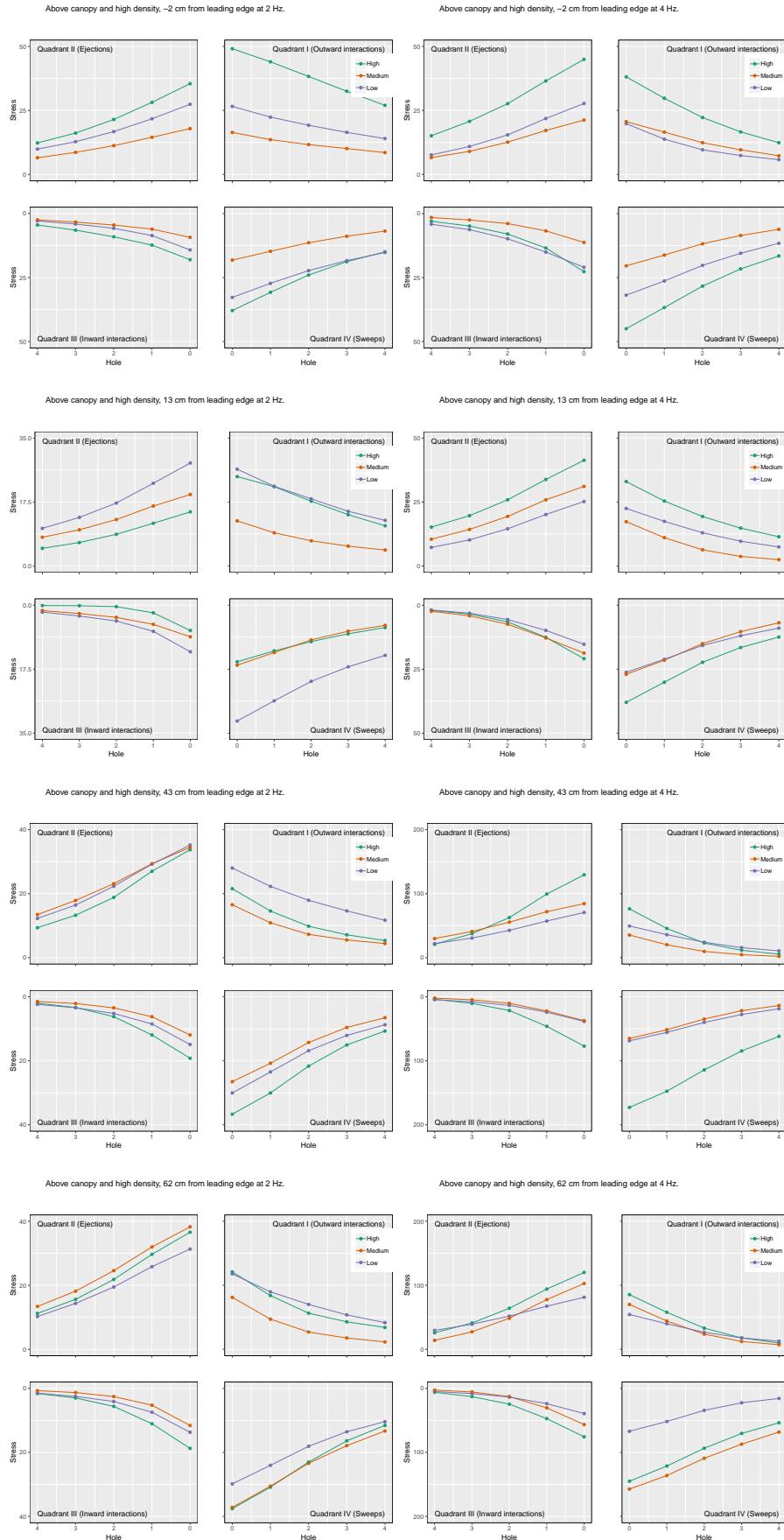


Figure 27: Variation in the negative momentum stress over hole size above the canopy.

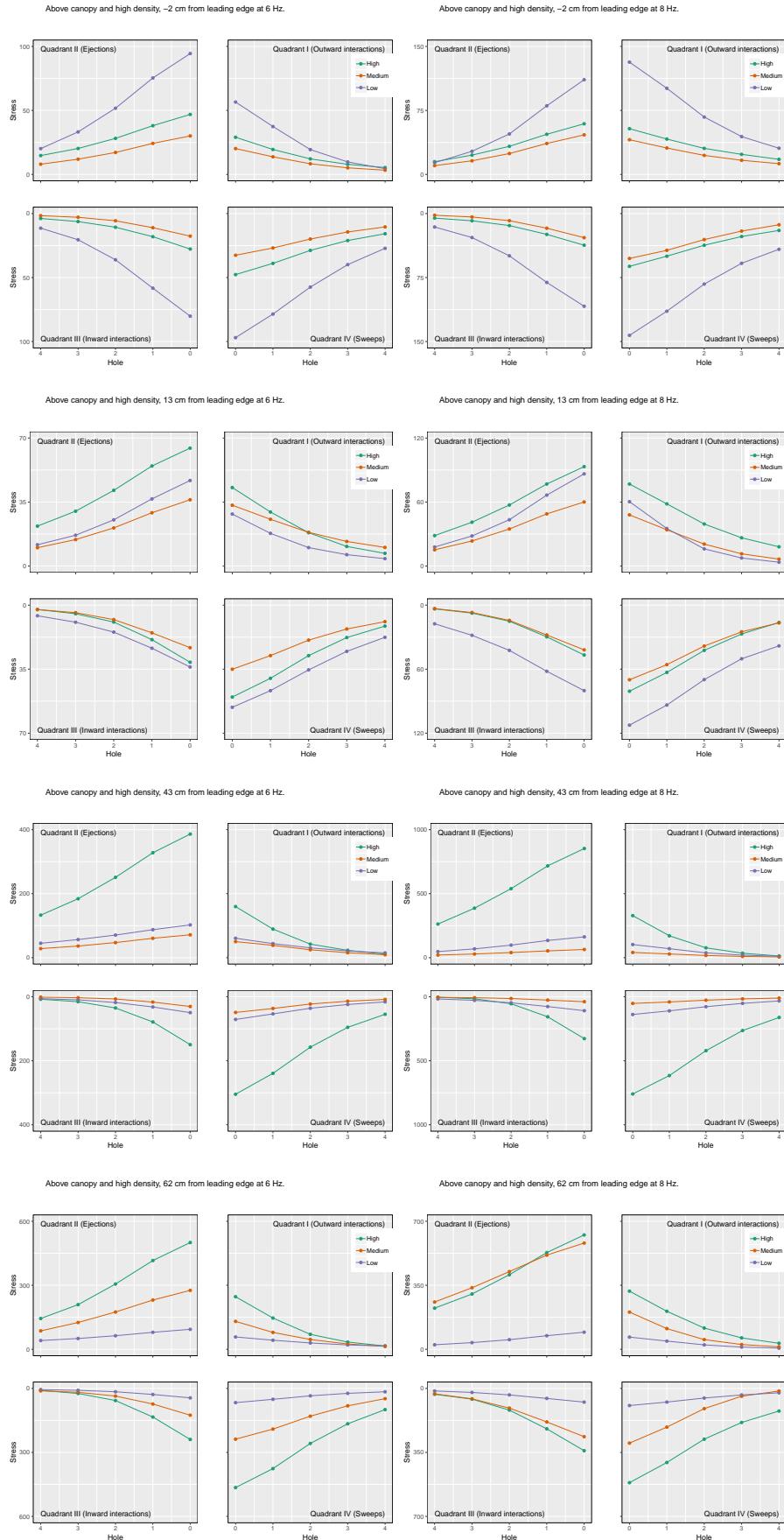


Figure 28: Variation in the negative momentum stress over hole size above the canopy.

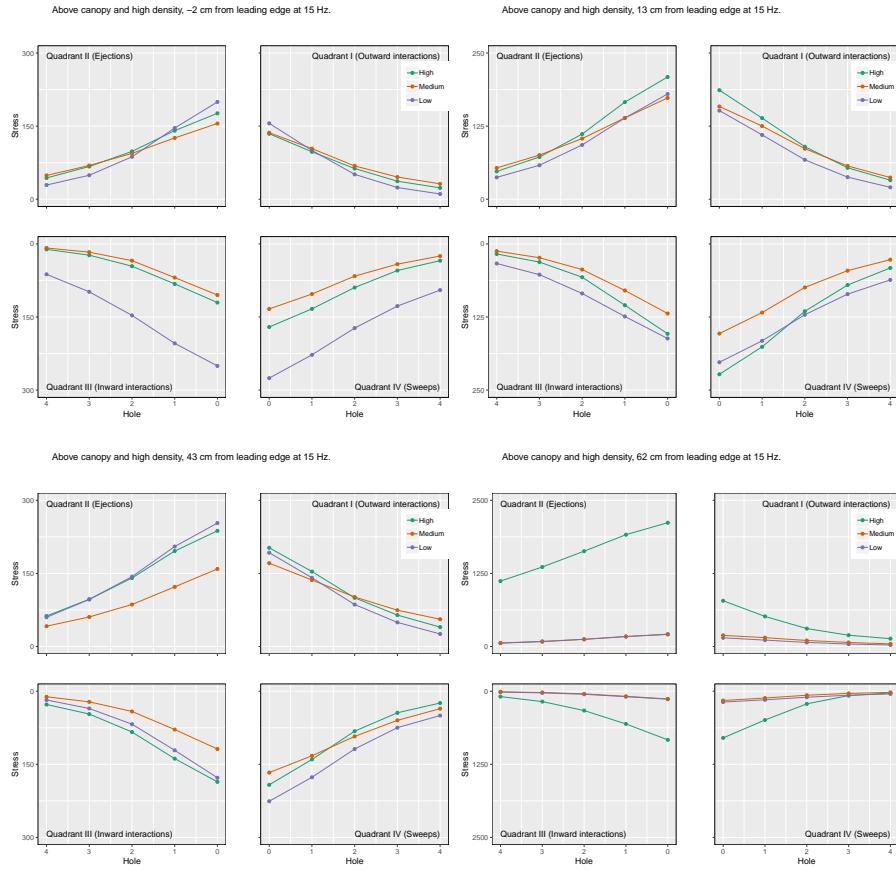


Figure 29: Variation in the negative momentum stress over hole size above the canopy.

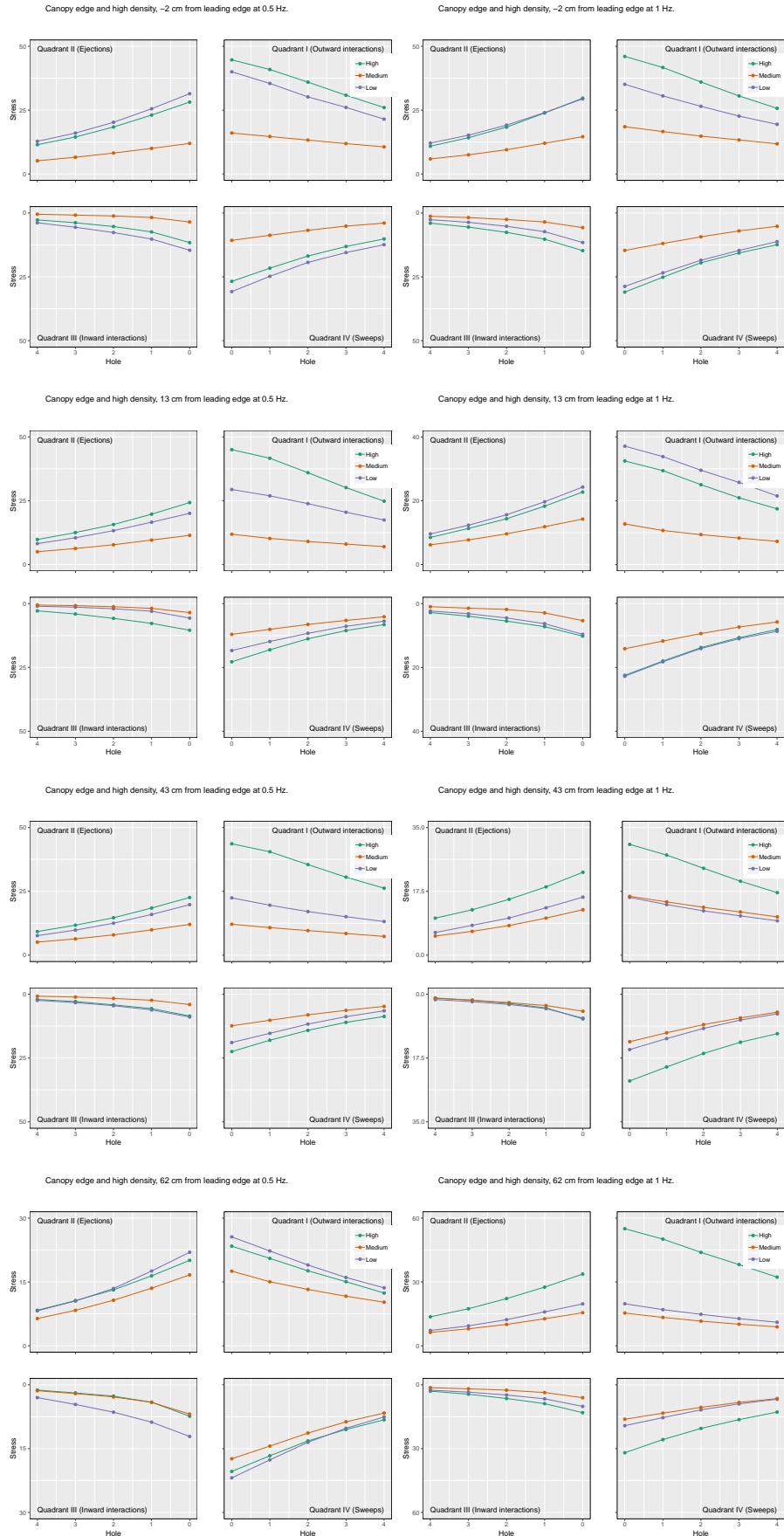


Figure 30: Variation in the negative momentum stress over hole size at the canopy edge.

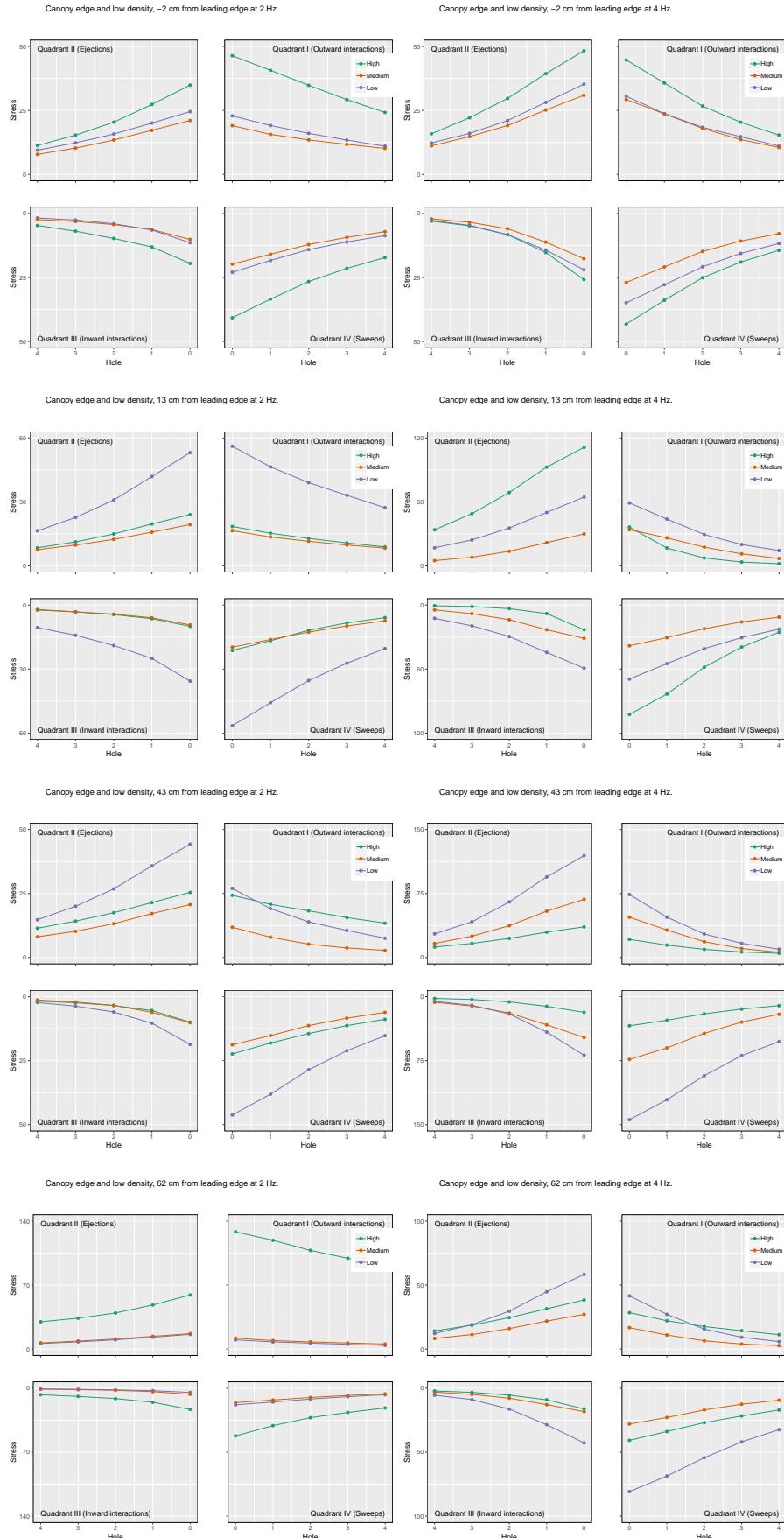


Figure 31: Variation in the negative momentum stress over hole size at the canopy edge.

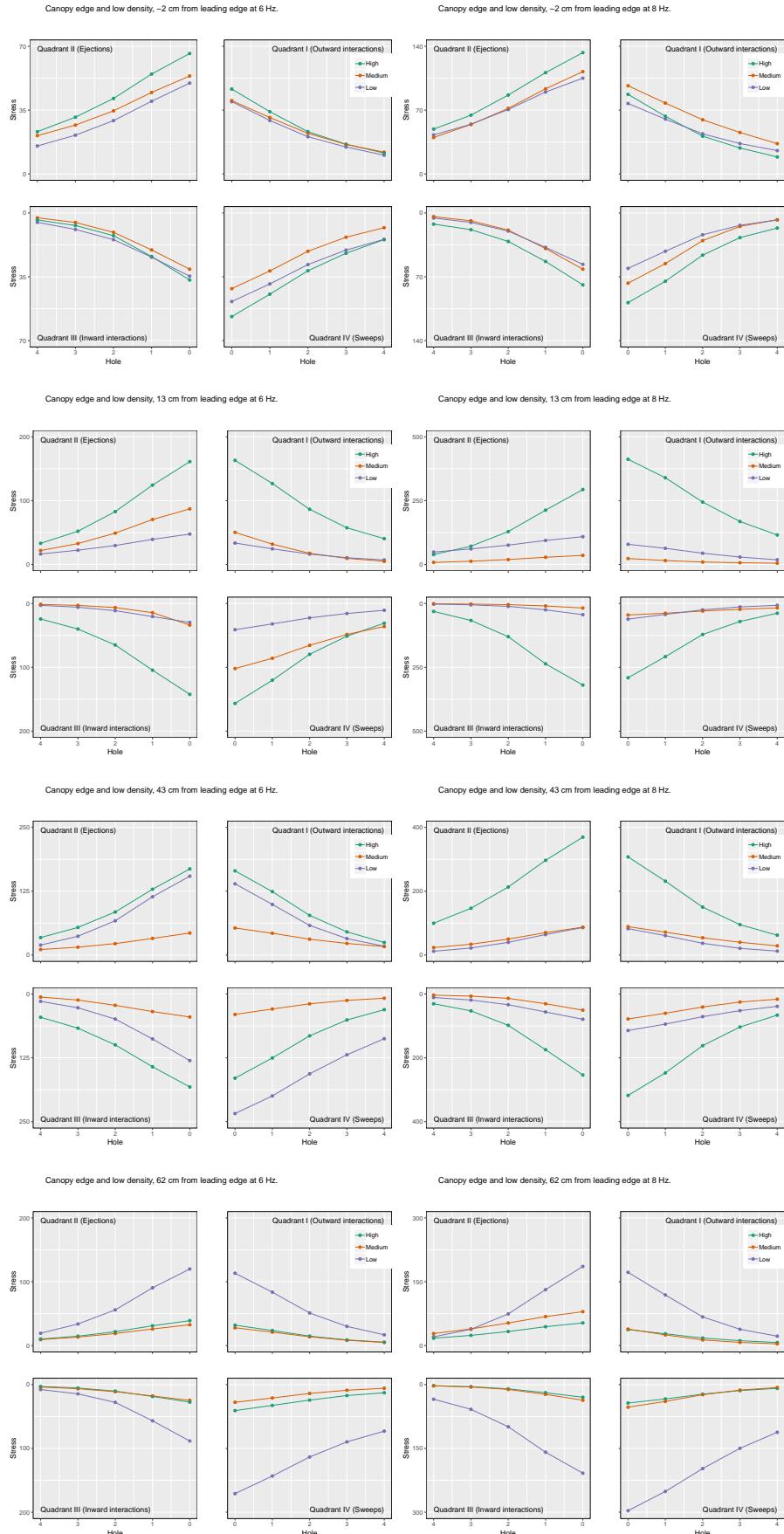


Figure 32: Variation in the negative momentum stress over hole size at the canopy edge.

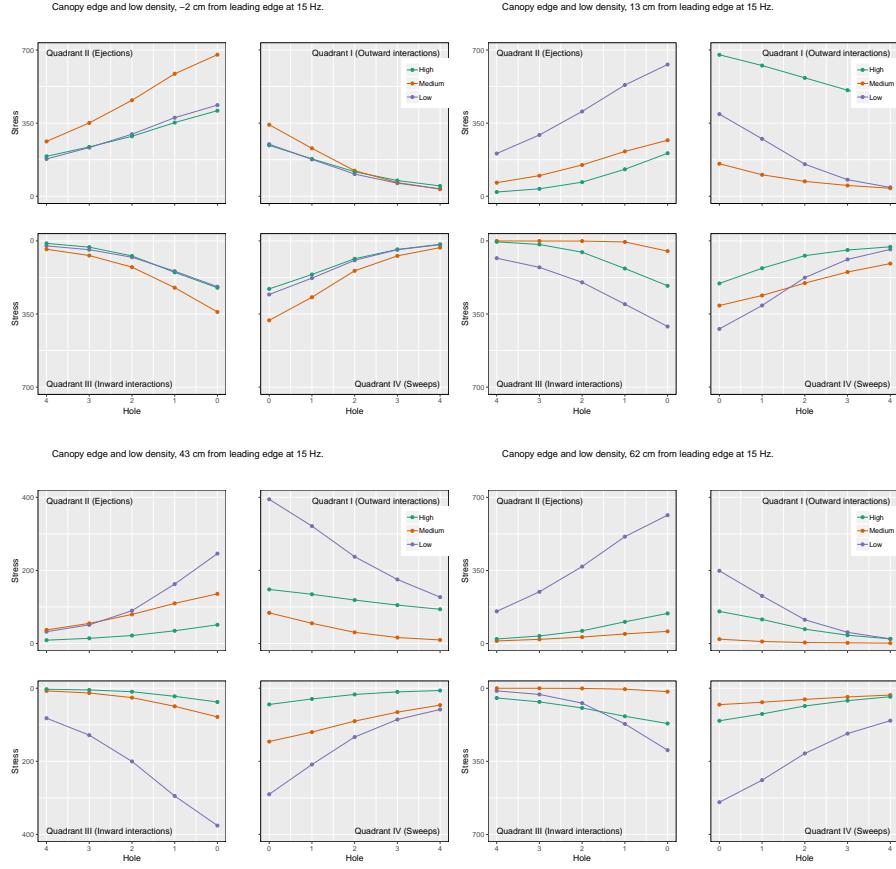


Figure 33: Variation in the negative momentum stress over hole size at the canopy edge.

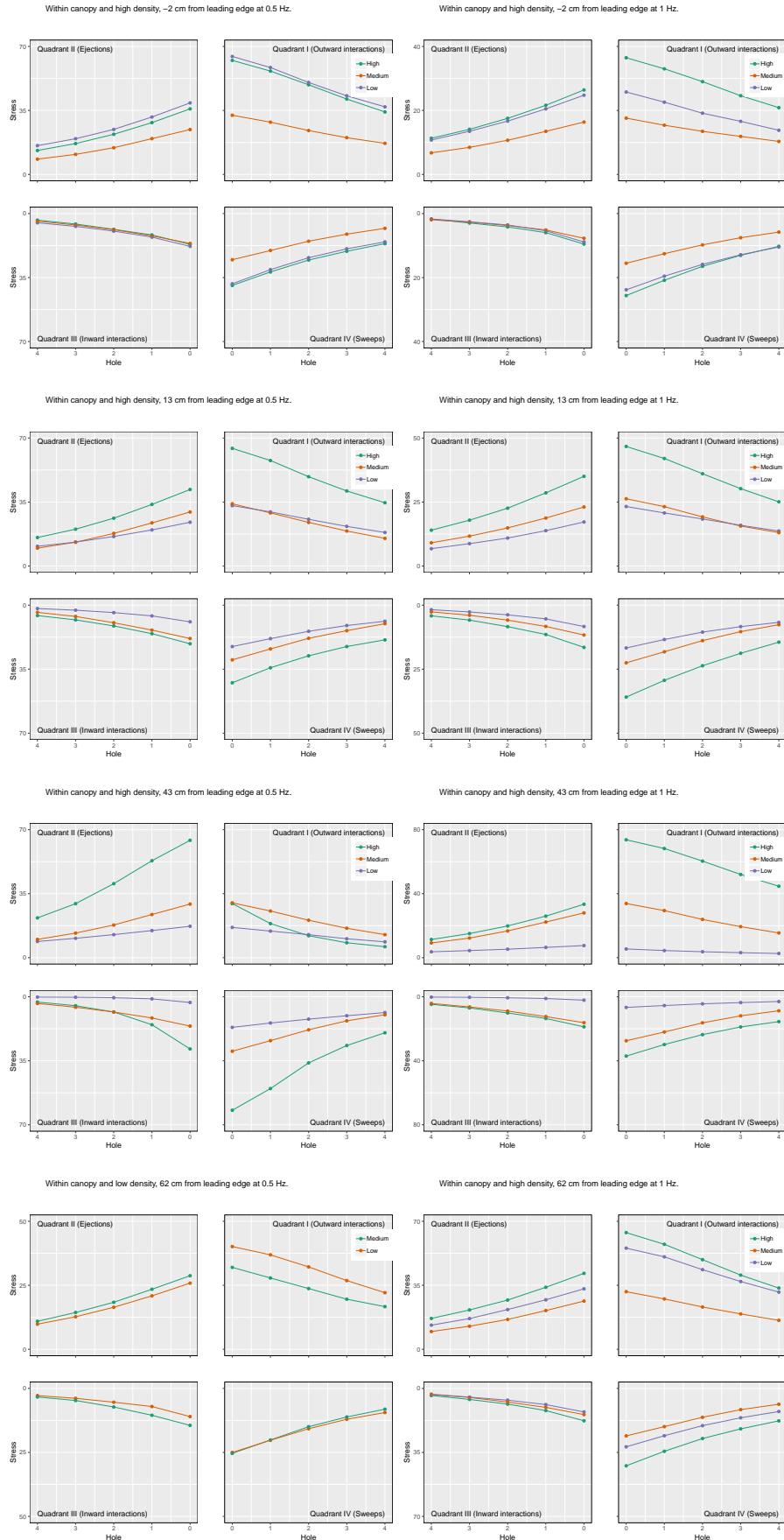


Figure 34: Variation in the negative momentum stress over hole size within the canopy.

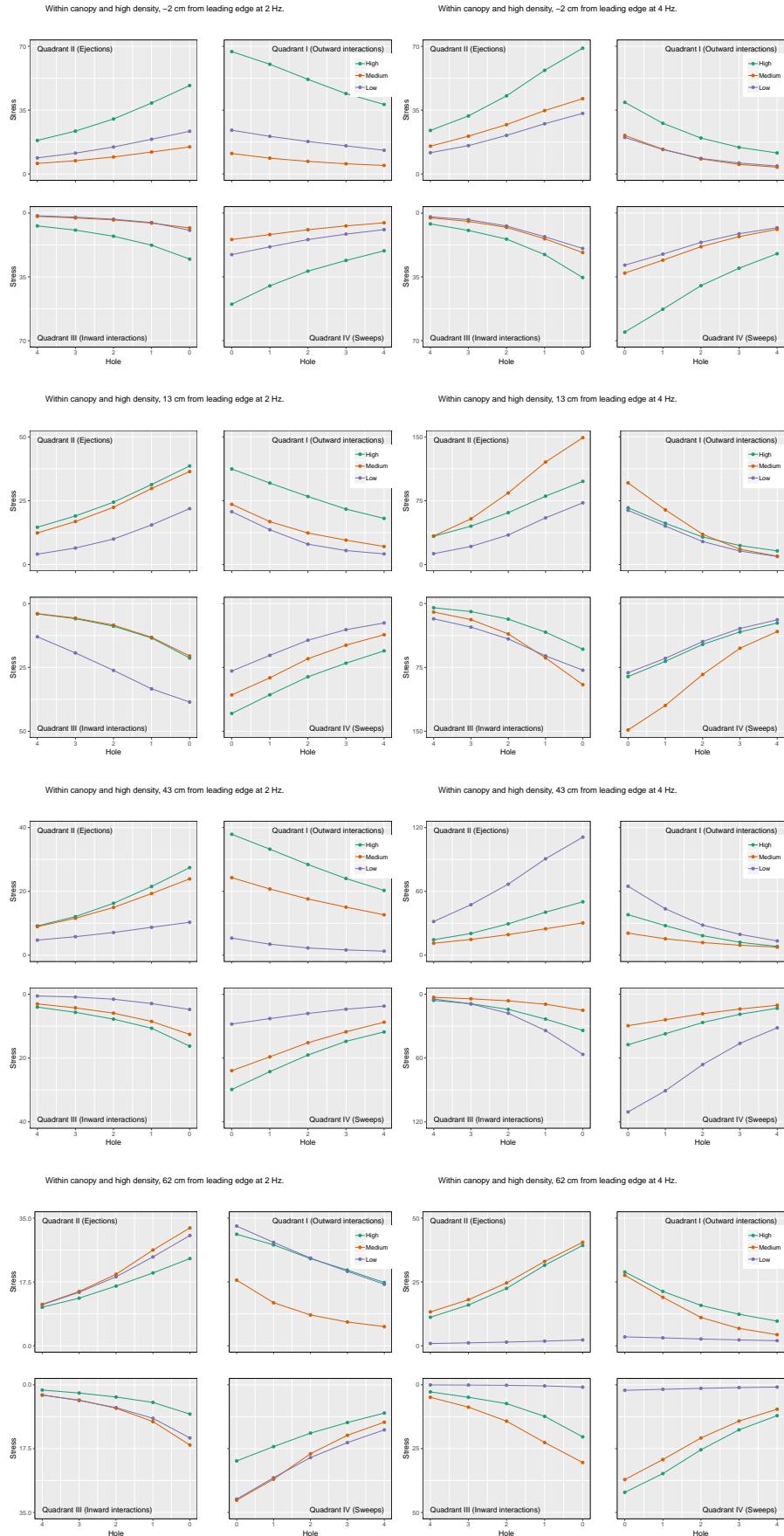


Figure 35: Variation in the negative momentum stress over hole size within the canopy.

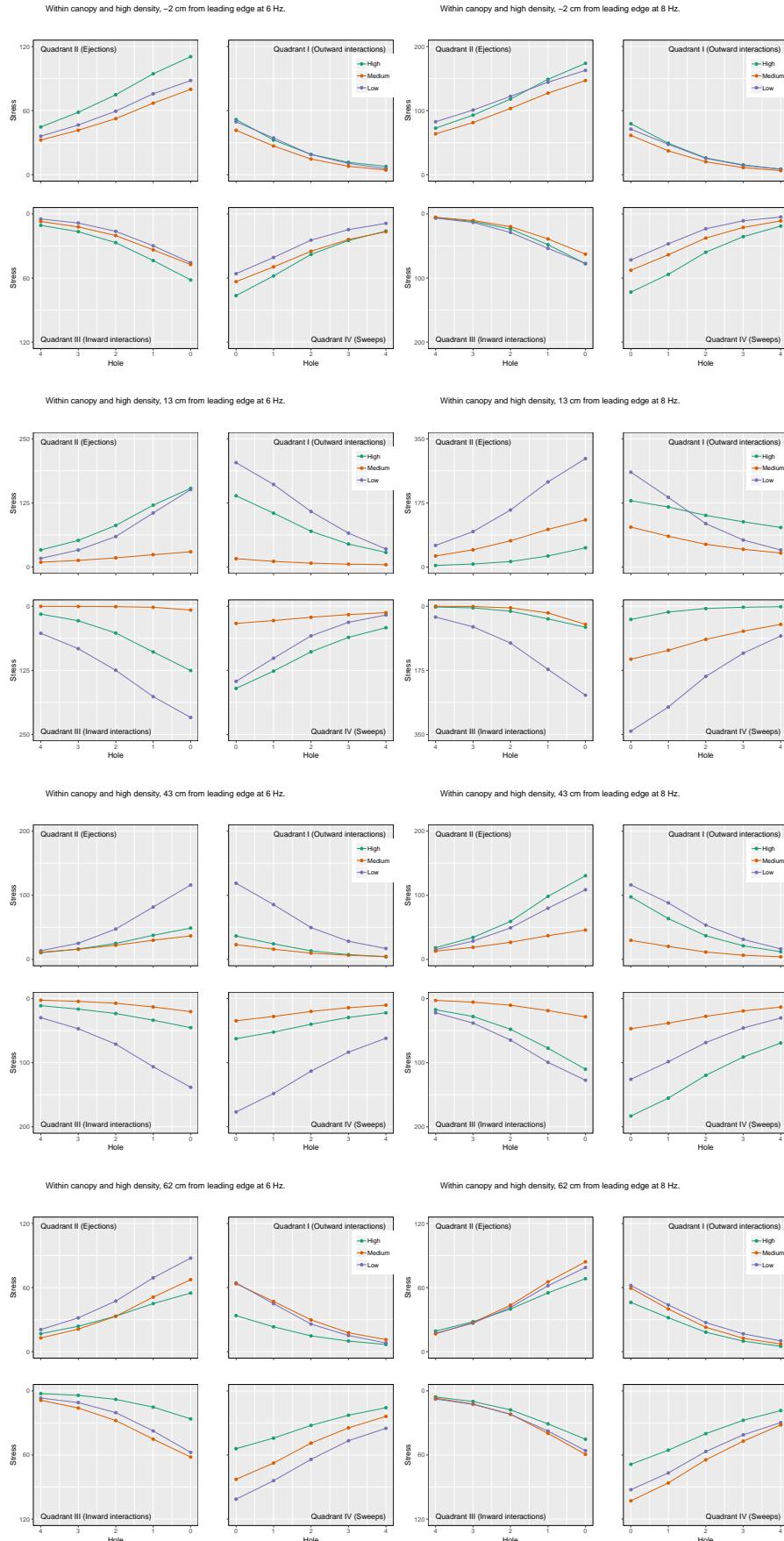


Figure 36: Variation in the negative momentum stress over hole size within the canopy.

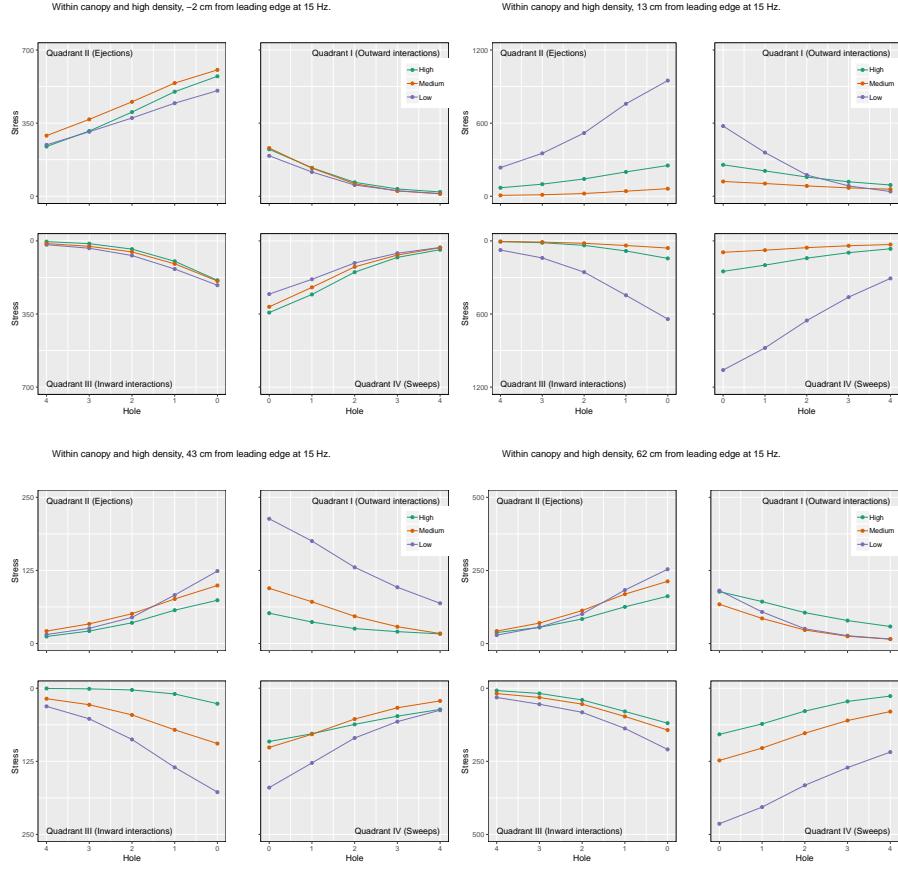


Figure 37: Variation in the negative momentum stress over hole size within the canopy.



### 6.3 Plots of total kinetic energy

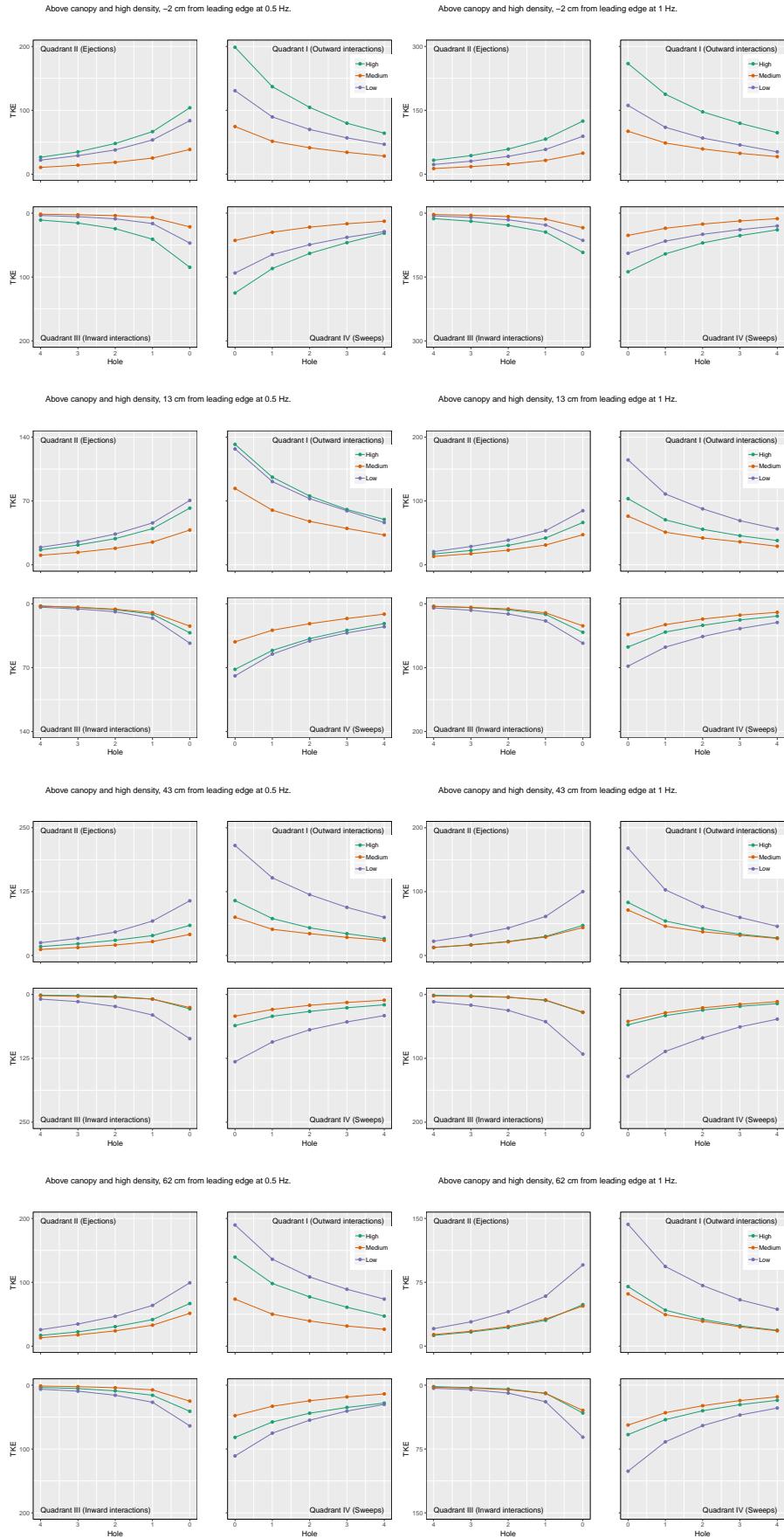


Figure 38: Variation in the total kinetic energy over hole size above the canopy.

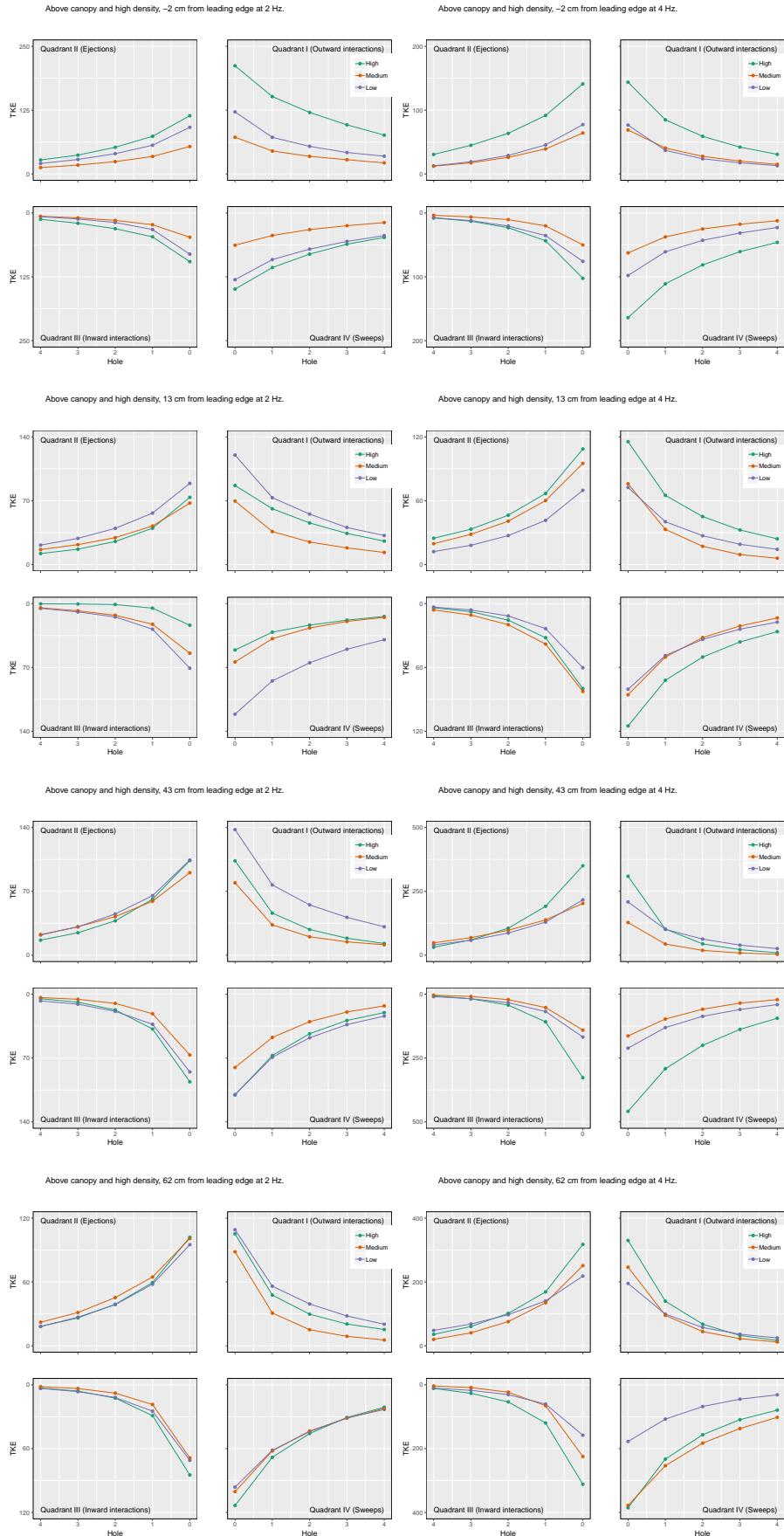
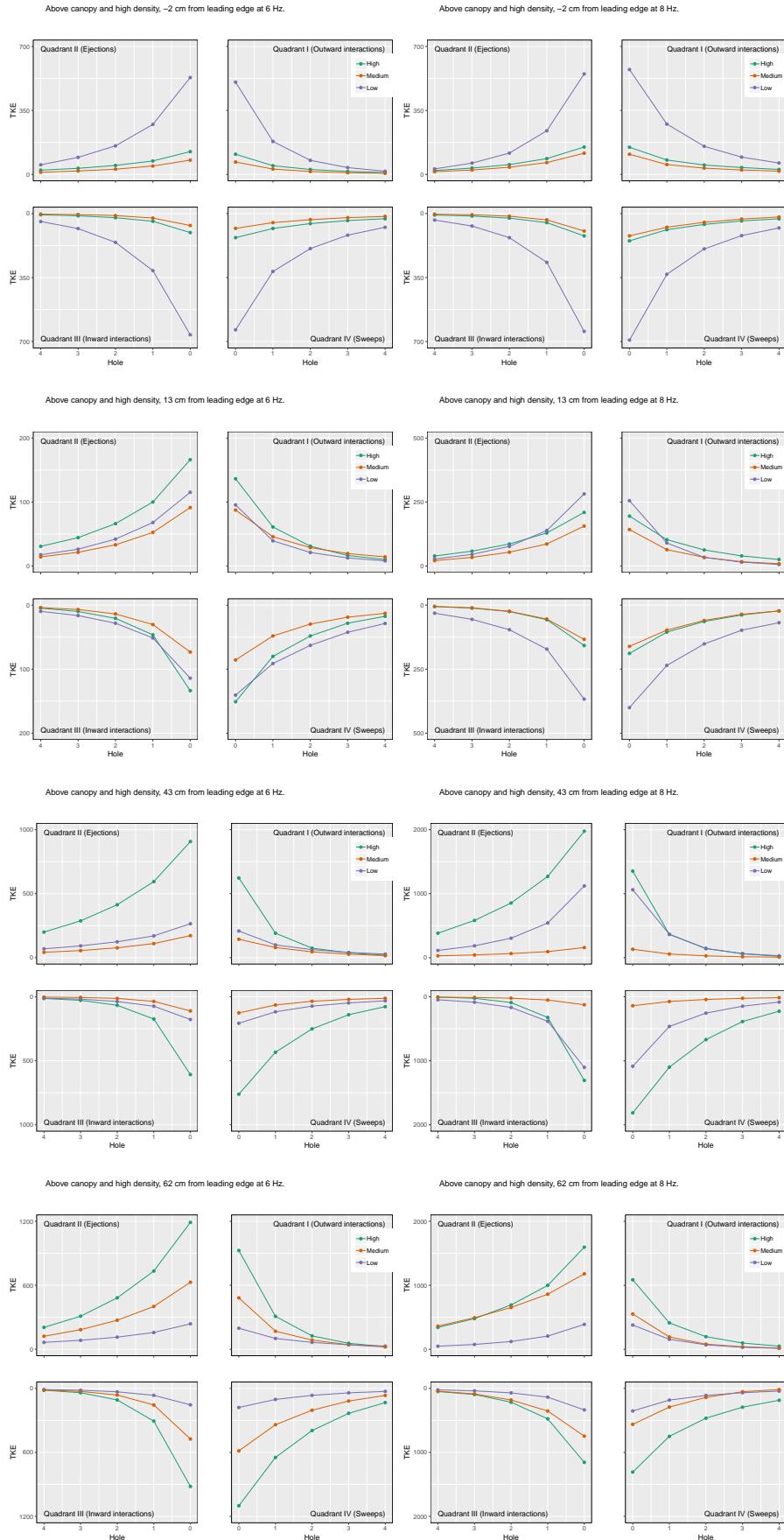


Figure 39: Variation in the total kinetic energy over hole size above the canopy.



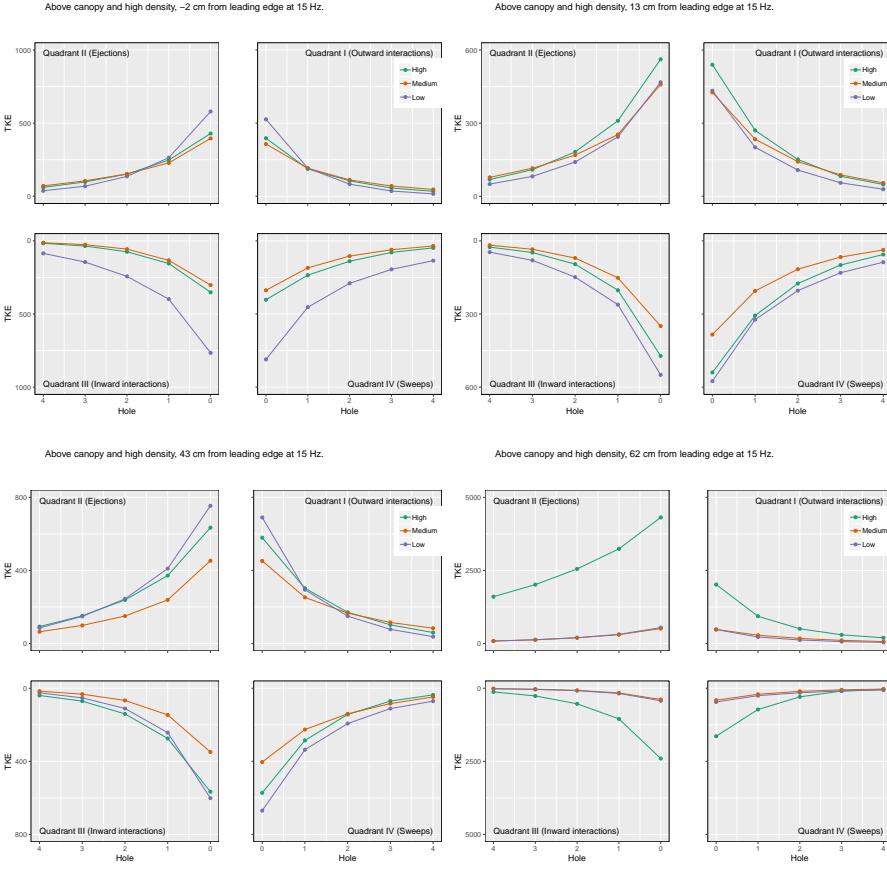


Figure 41: Variation in the total kinetic energy over hole size above the canopy.

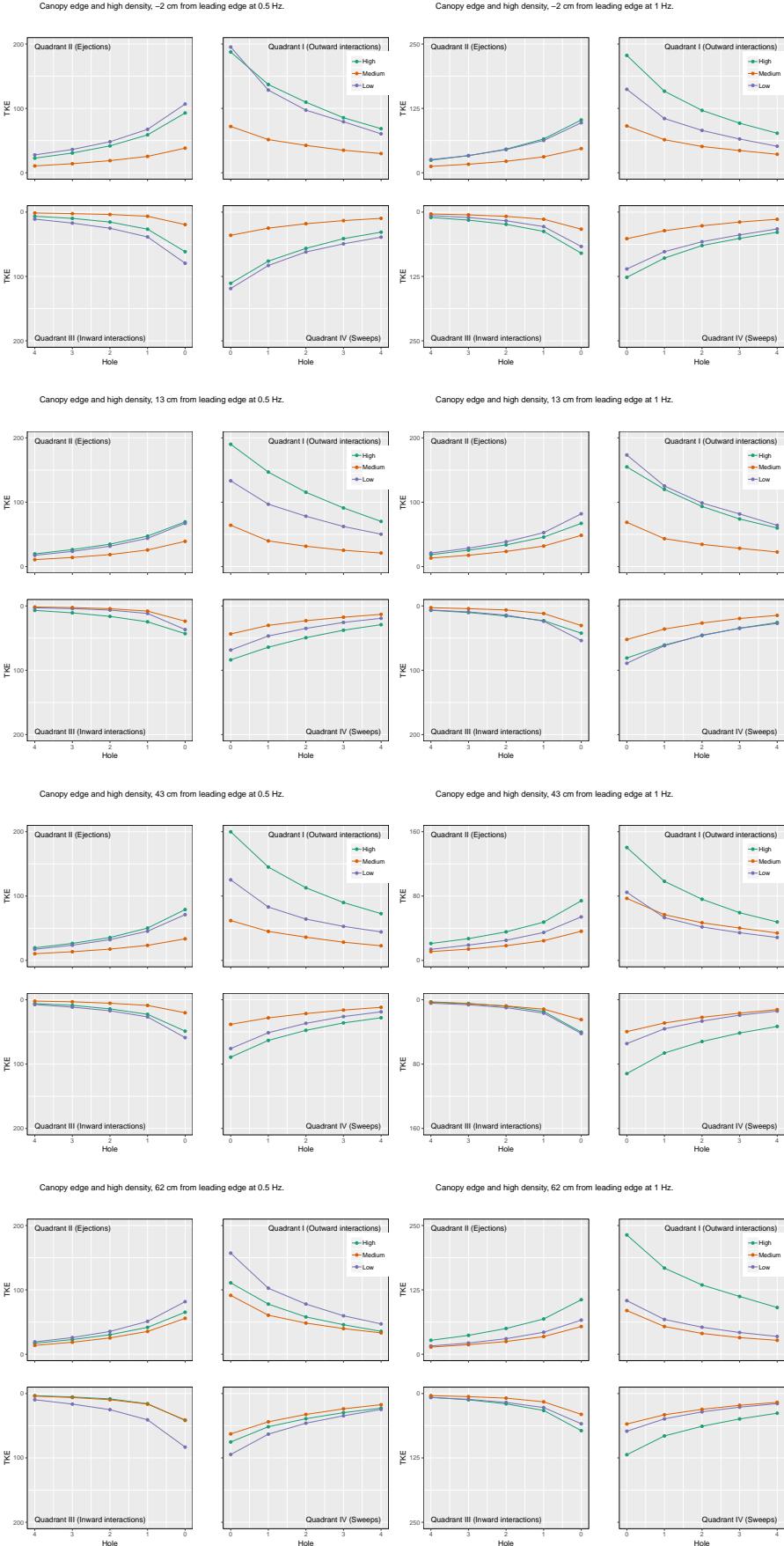


Figure 42: Variation in the total kinetic energy over hole size at the canopy edge.

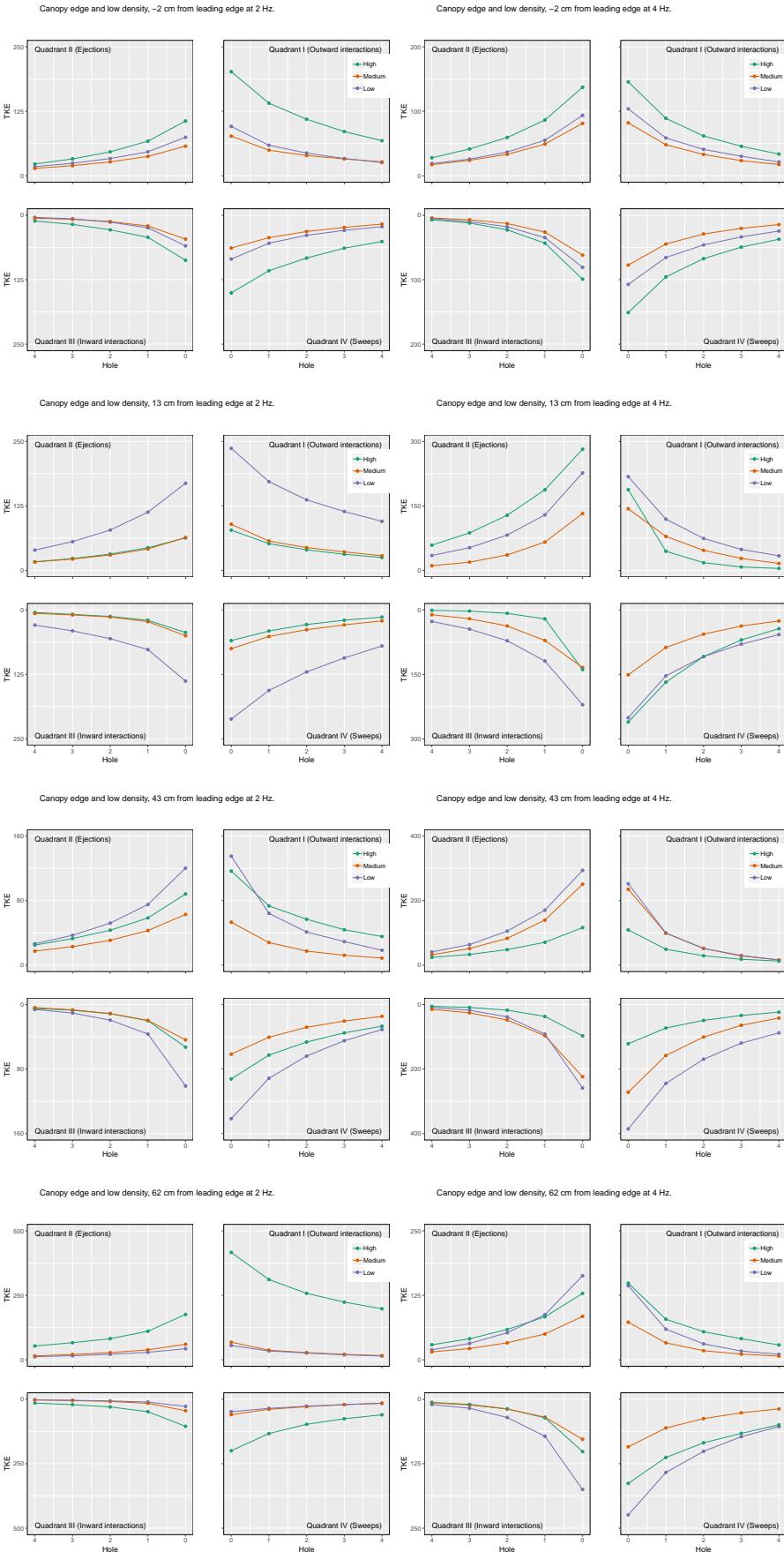


Figure 43: Variation in the total kinetic energy over hole size at the canopy edge.

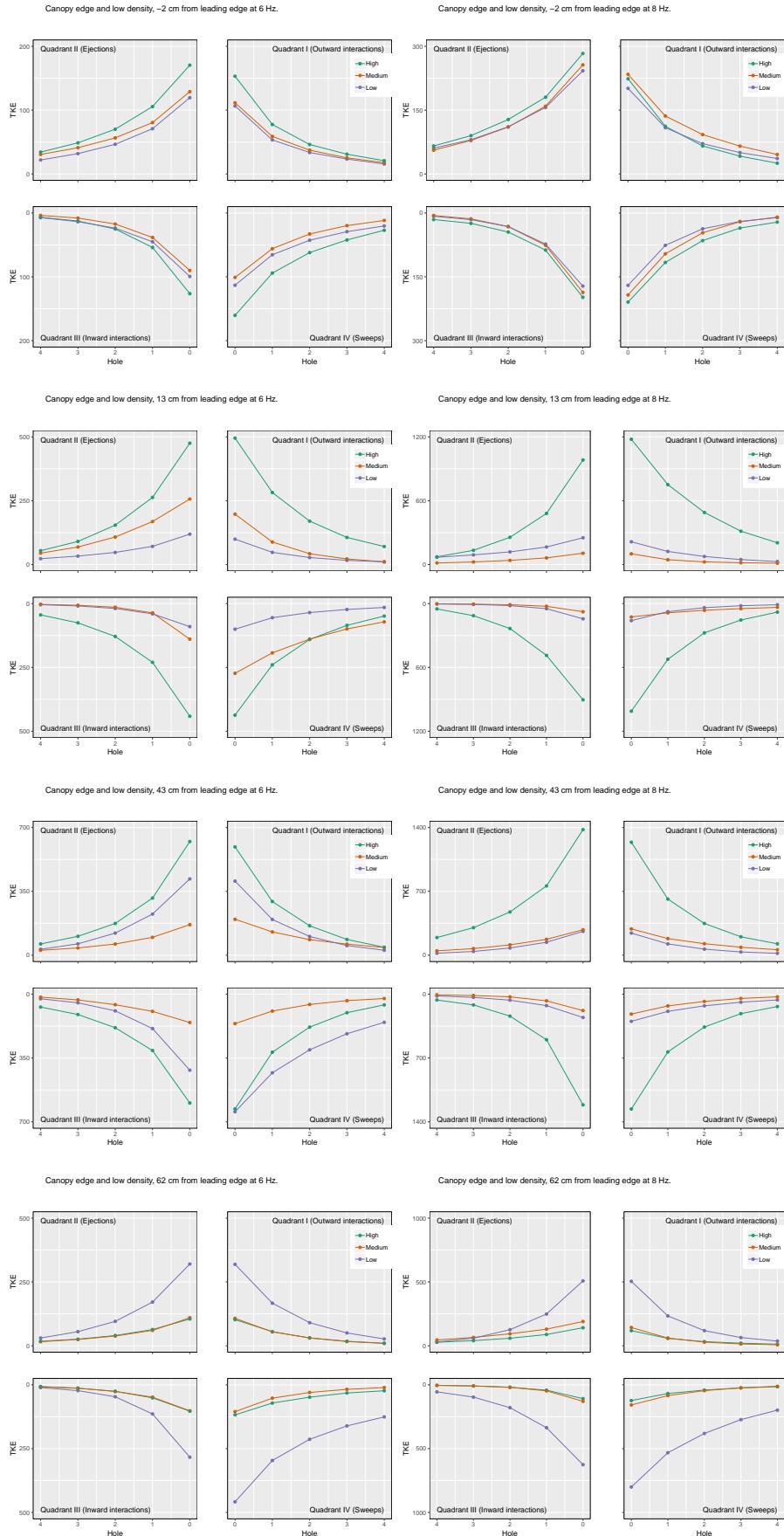


Figure 44: Variation in the total kinetic energy over hole size at the canopy edge.

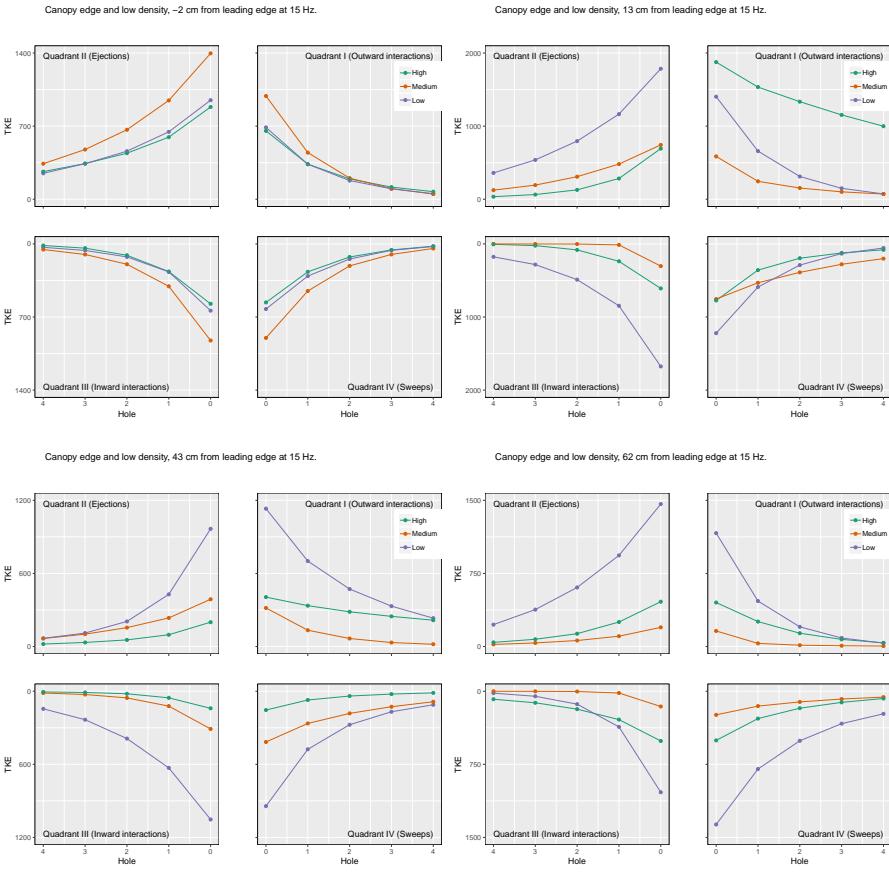


Figure 45: Variation in the total kinetic energy over hole size at the canopy edge.

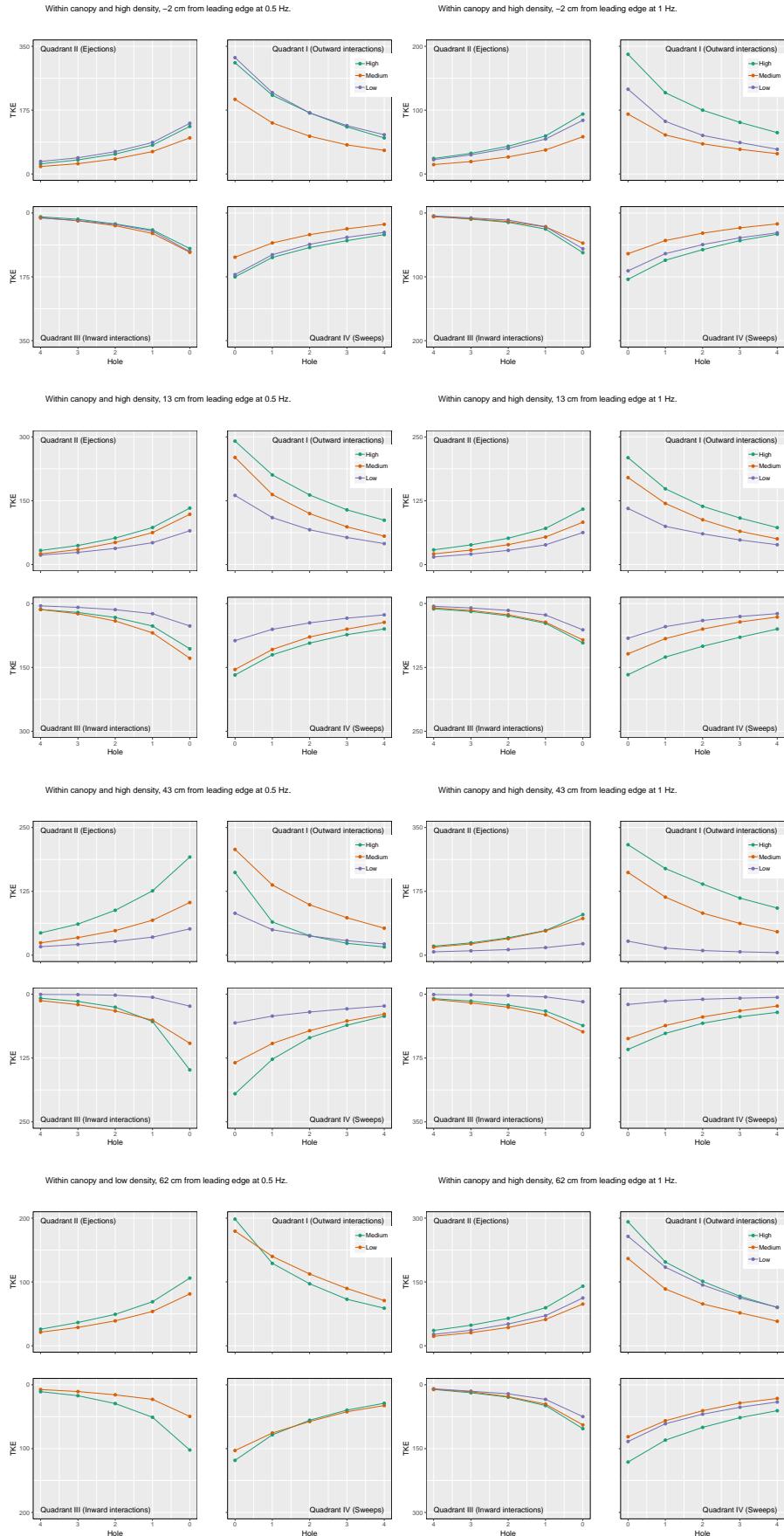


Figure 46: Variation in the total kinetic energy over hole size within the canopy.

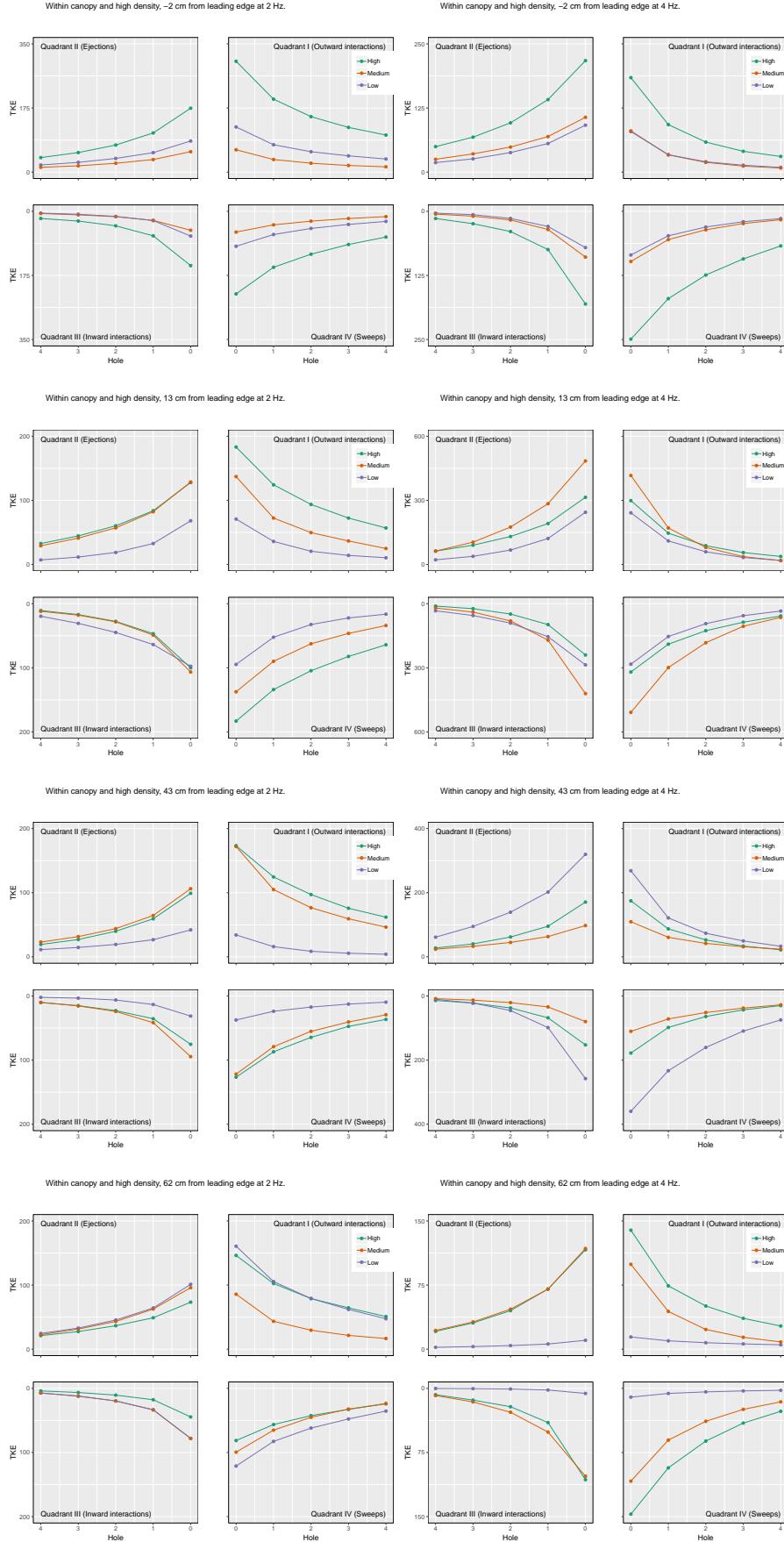


Figure 47: Variation in the total kinetic energy over hole size within the canopy.

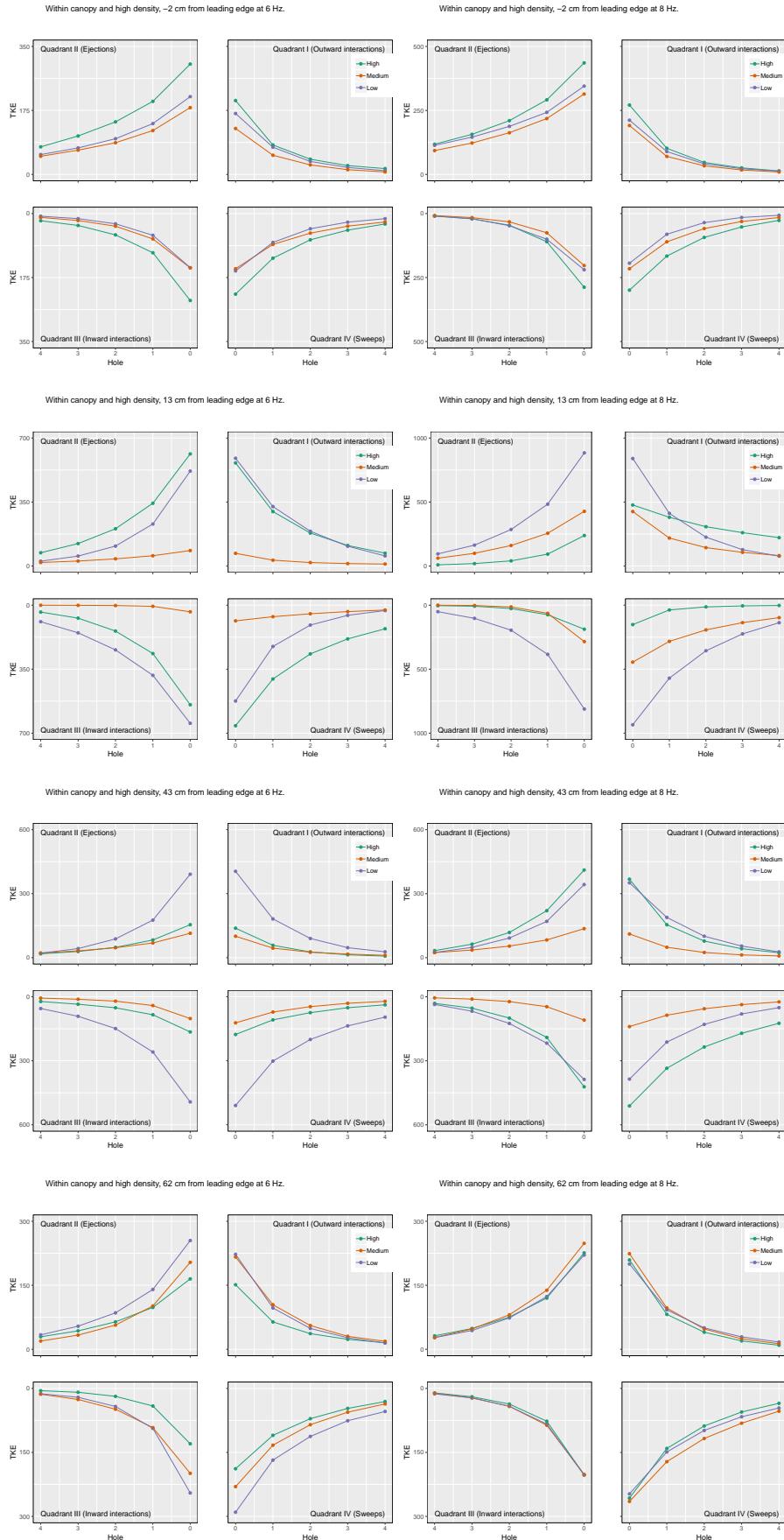


Figure 48: Variation in the total kinetic energy over hole size within the canopy.

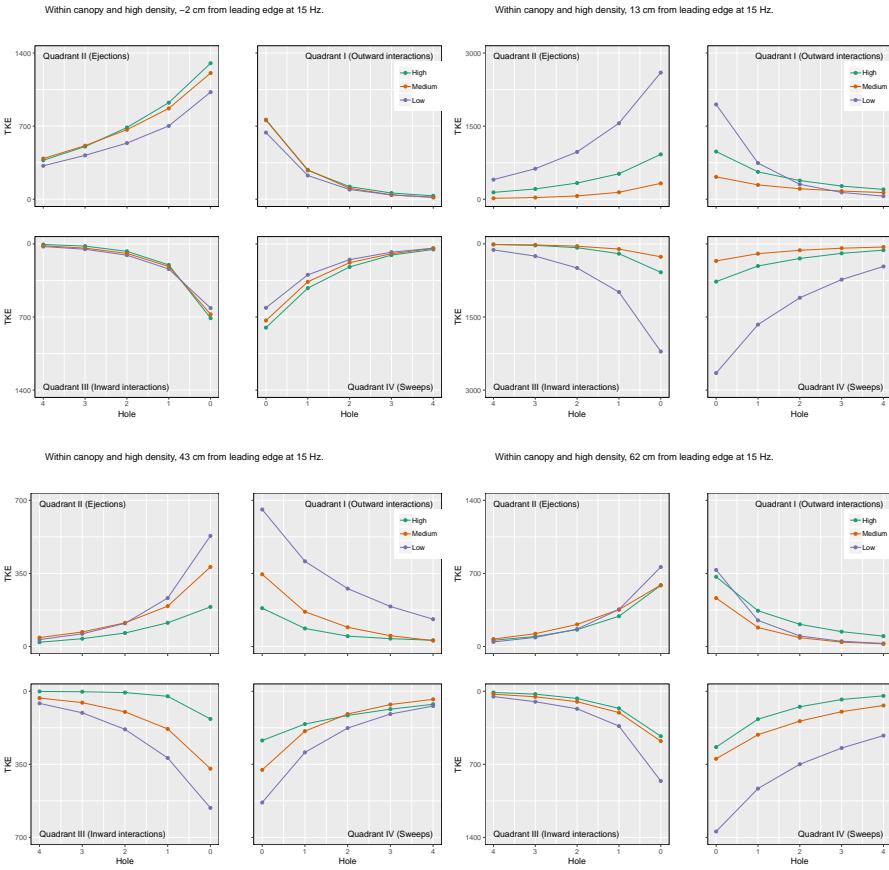


Figure 49: Variation in the total kinetic energy over hole size within the canopy.



## 7 Total kinetic energy analysis

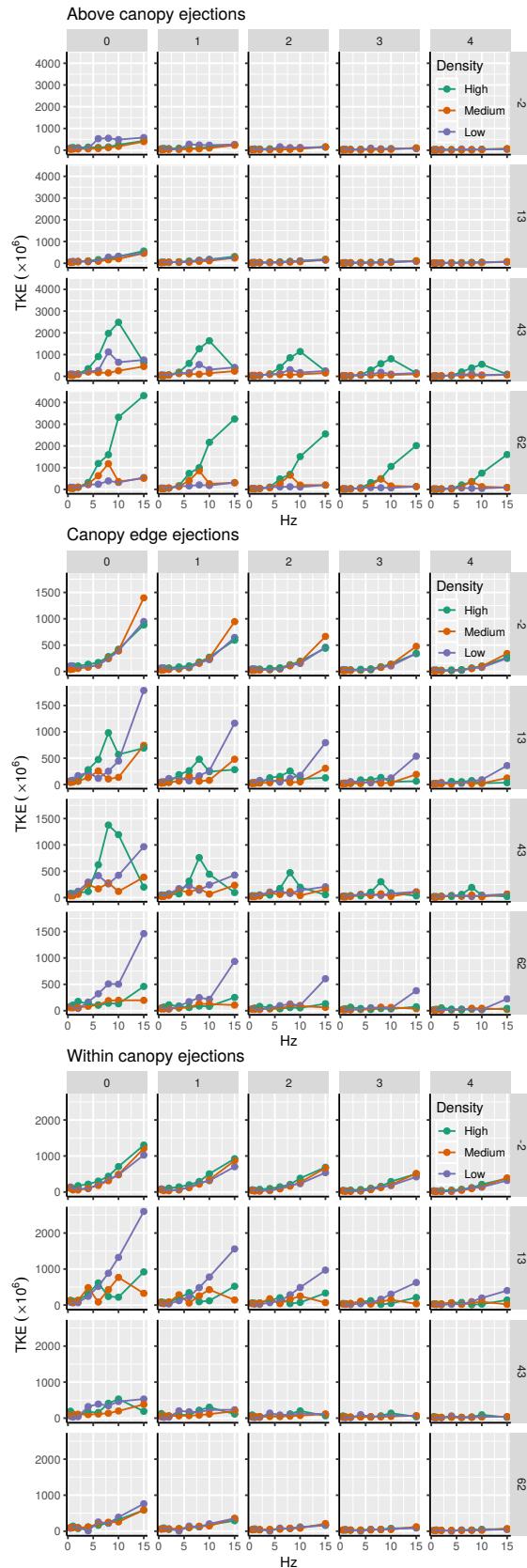


Figure 50: Variation in total kinetic energy of the ejections with Hz.

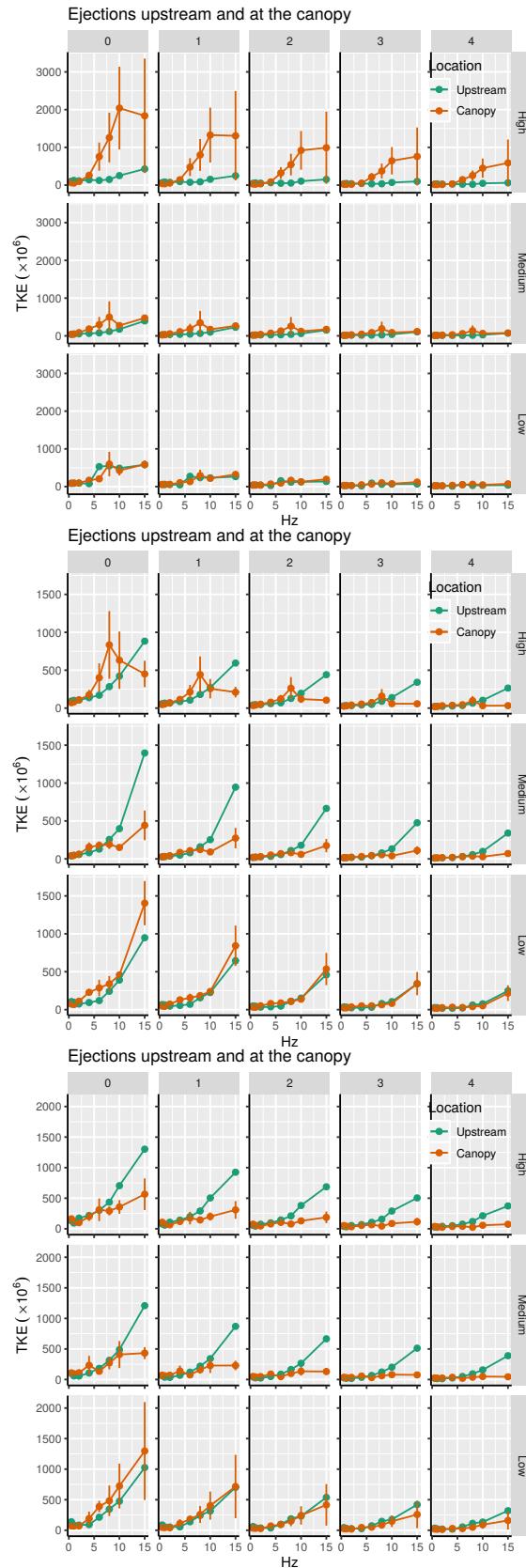


Figure 51: Variation in mean total kinetic energy upstream of the ejections upstream and at the canopy with Hz.

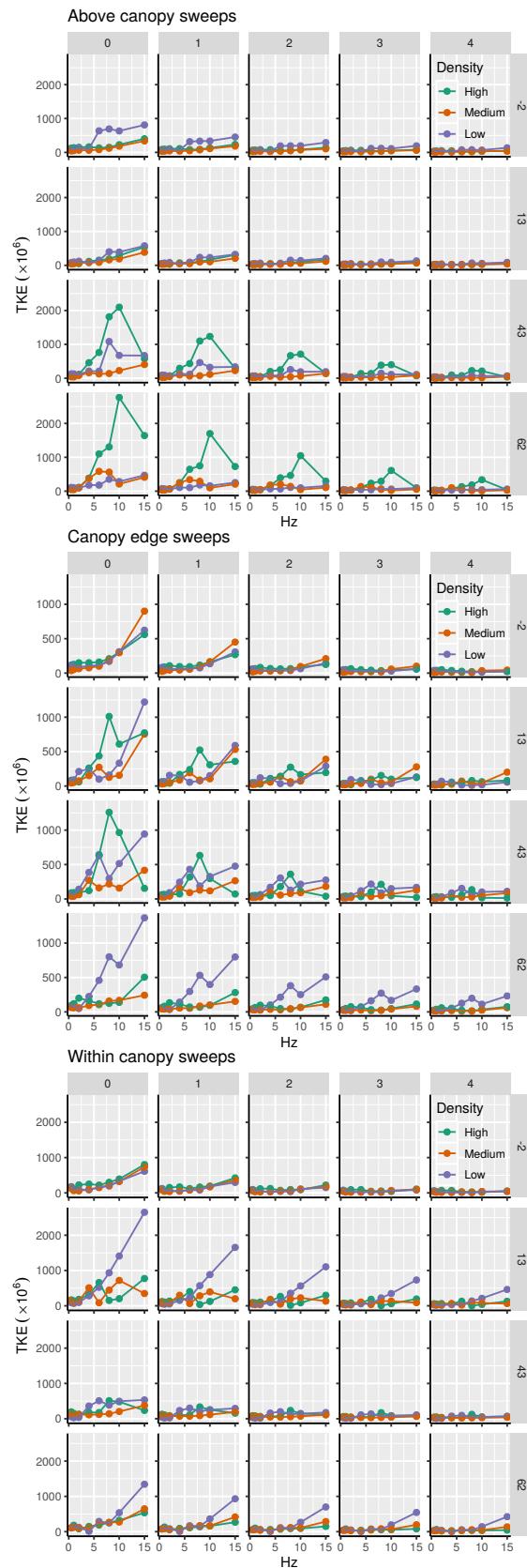


Figure 52: Variation in total kinetic energy of the sweeps with Hz.

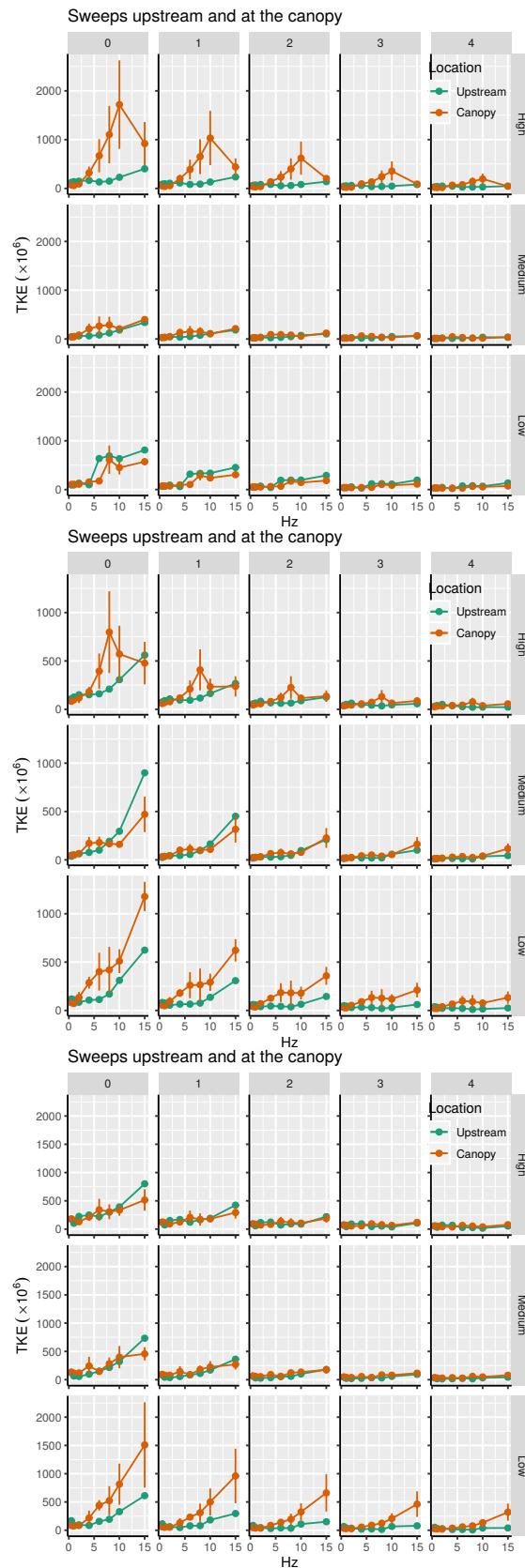


Figure 53: Variation in mean total kinetic energy upstream of the sweeps upstream and at the canopy with Hz.

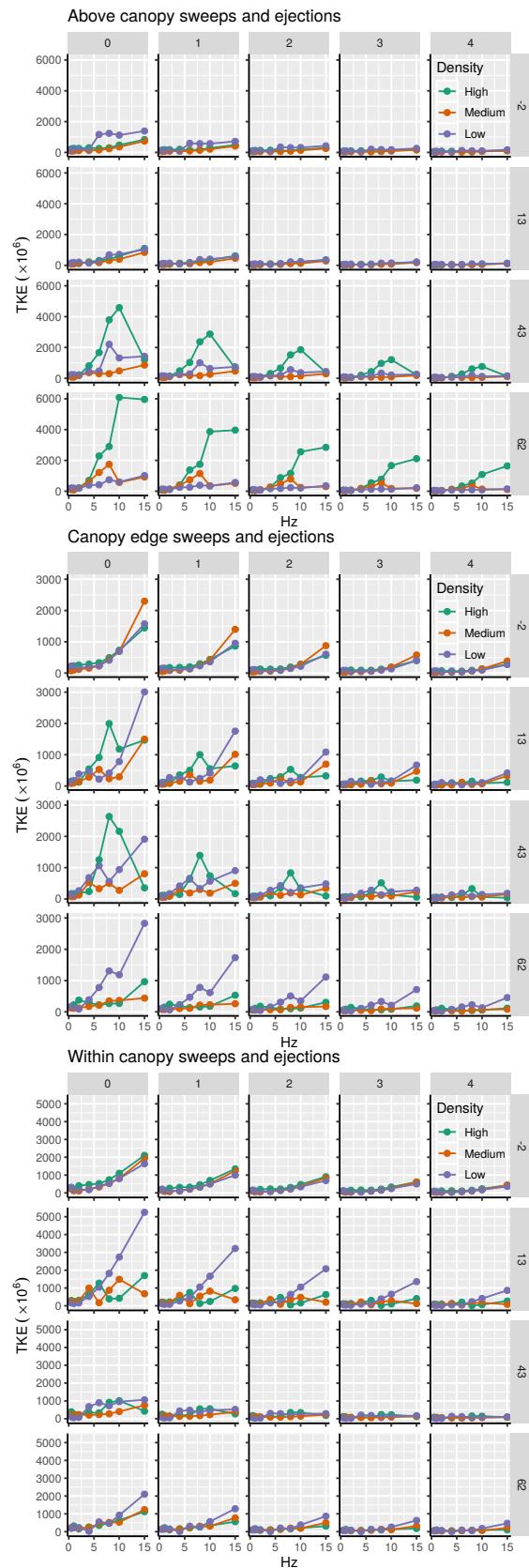


Figure 54: Variation in total kinetic energy of the both the ejections and sweeps with Hz.

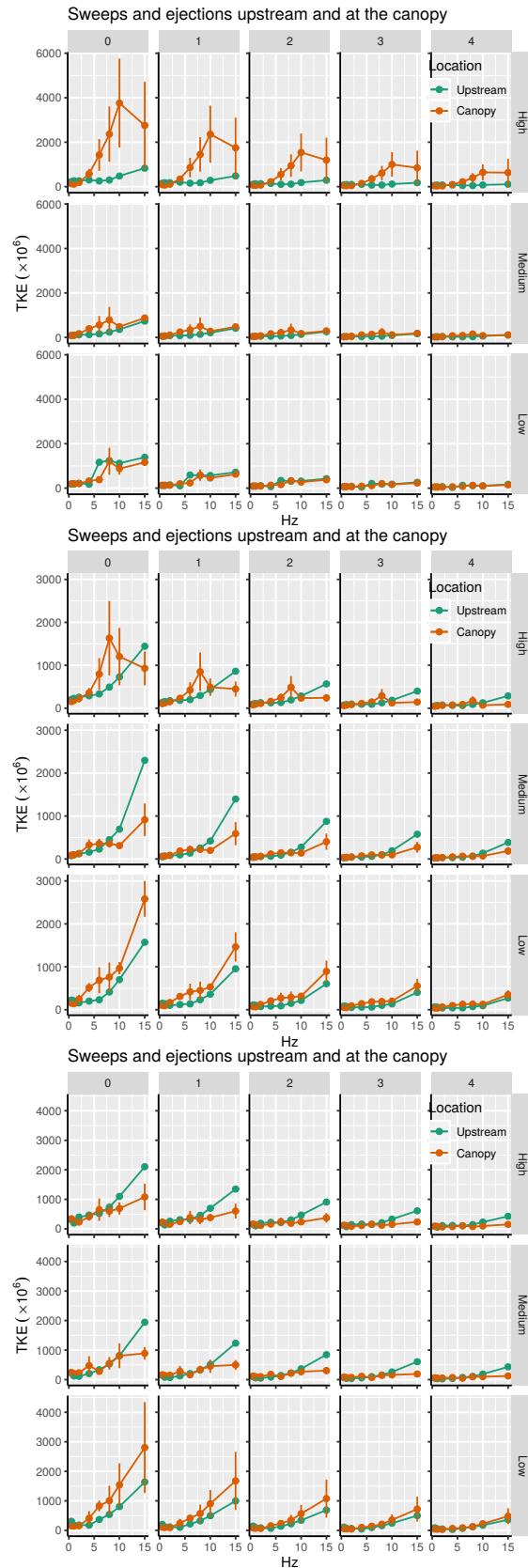


Figure 55: Variation in mean total kinetic energy of the sweeps and ejections upstream and at the canopy with Hz.

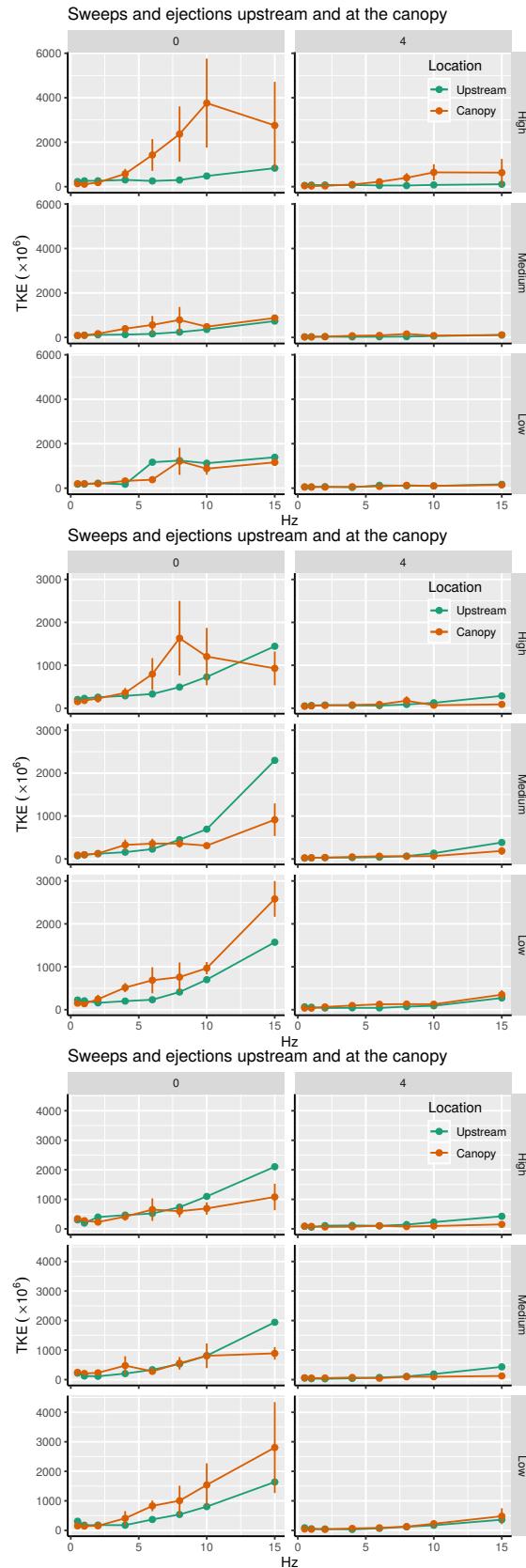


Figure 56: Variation in mean total kinetic energy of the sweeps and ejections upstream and at the canopy with Hz for a hole size of 0 and 4.



## 8 Negative momentum stress analysis

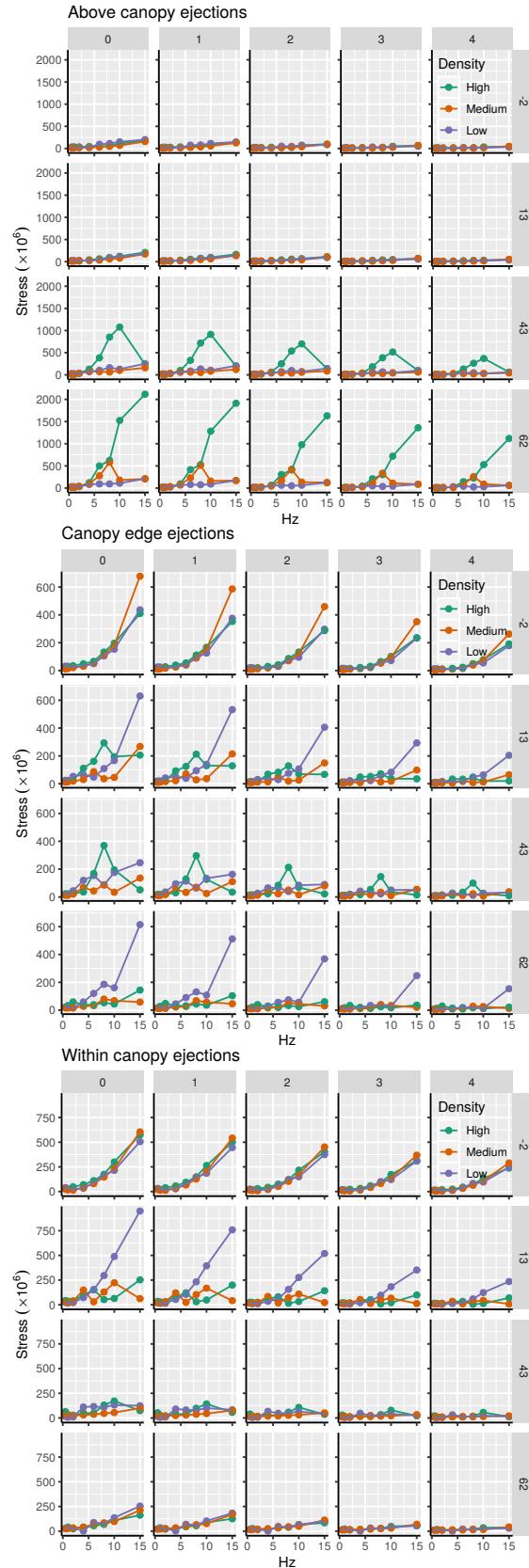


Figure 57: Variation in negative momentum flux of the ejections with Hz.

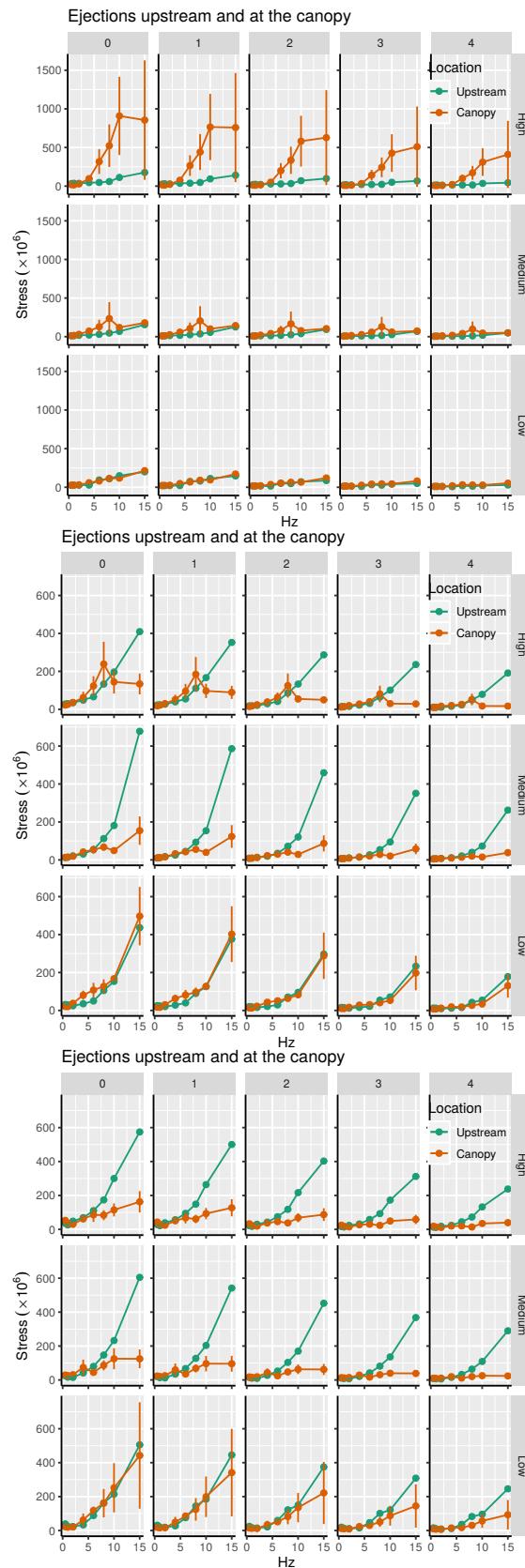


Figure 58: Variation in mean negative momentum flux upstream of the ejections upstream and at the canopy with Hz.

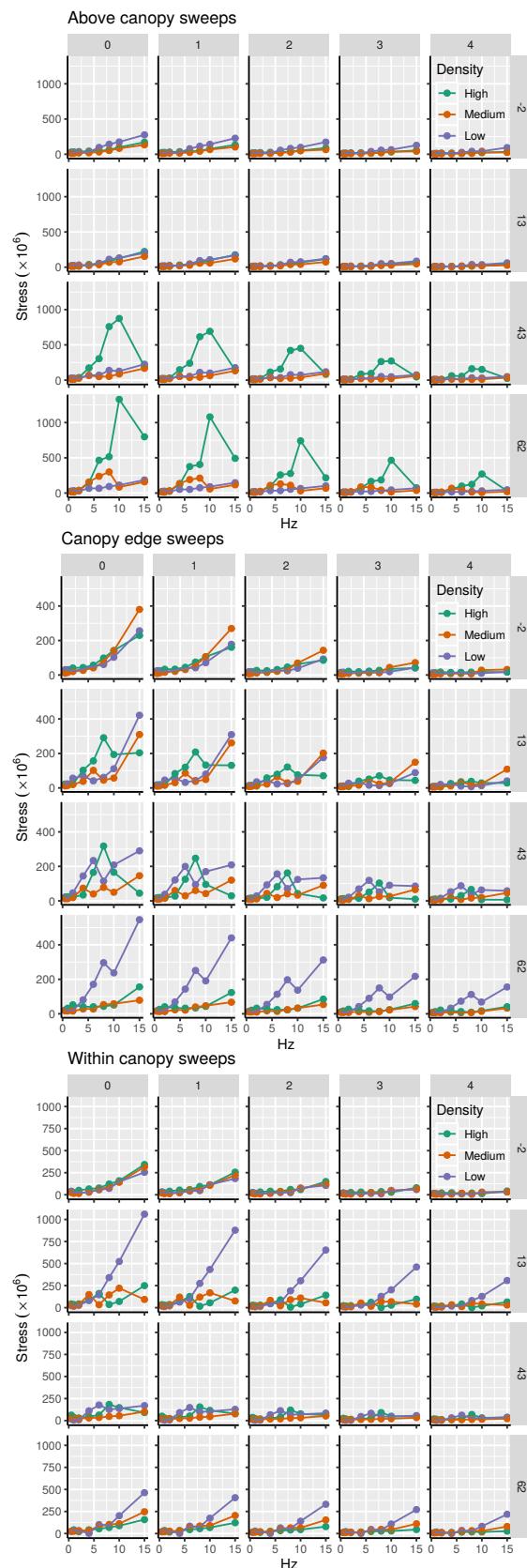


Figure 59: Variation in negative momentum flux of the sweeps with Hz.

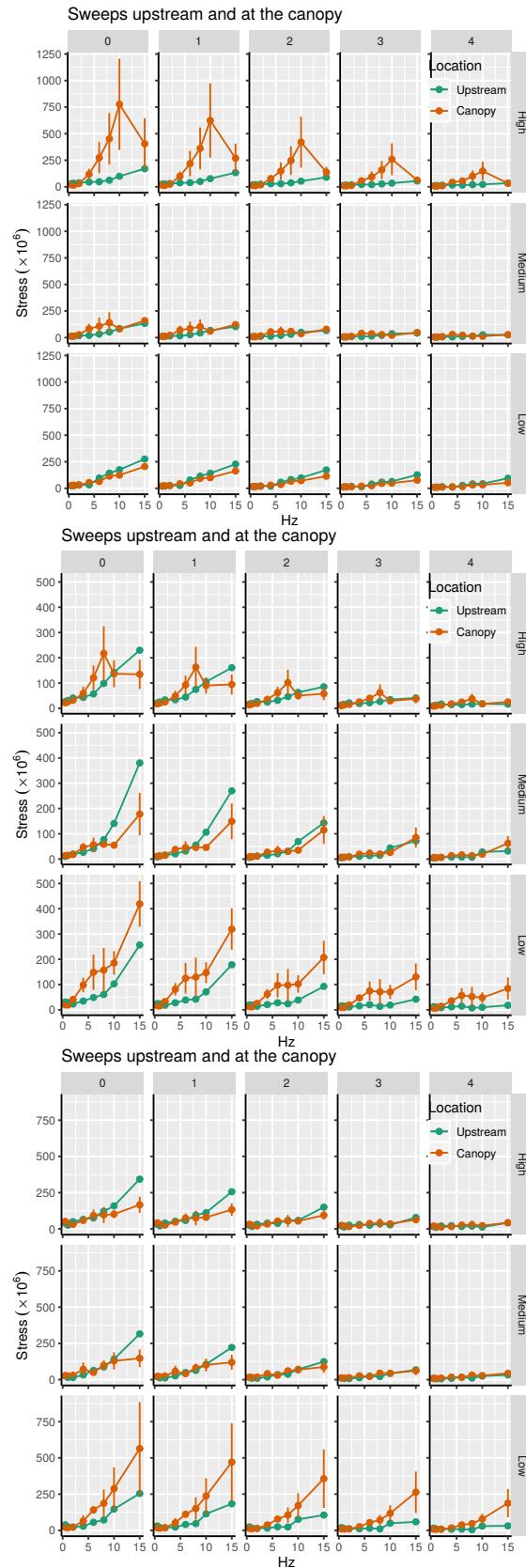


Figure 60: Variation in mean negative momentum flux upstream of the sweeps upstream and at the canopy with Hz.

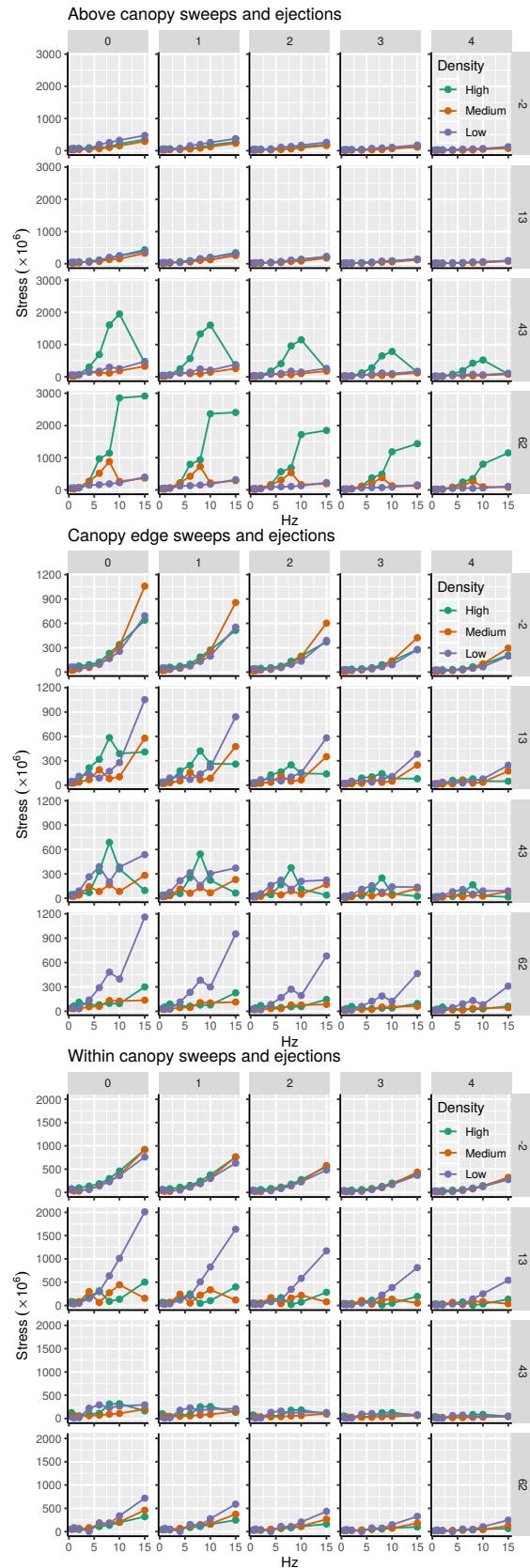


Figure 61: Variation in negative momentum flux of the both the ejections and sweeps with Hz.

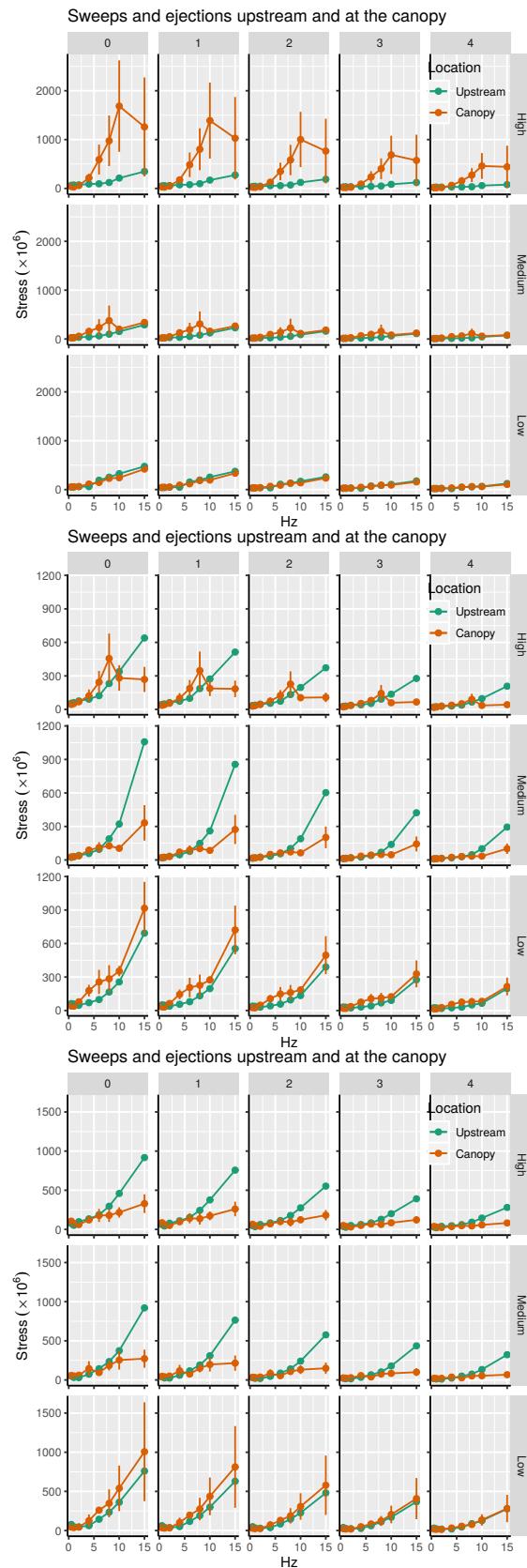


Figure 62: Variation in mean negative momentum flux of the sweeps and ejections upstream and at the canopy with Hz.

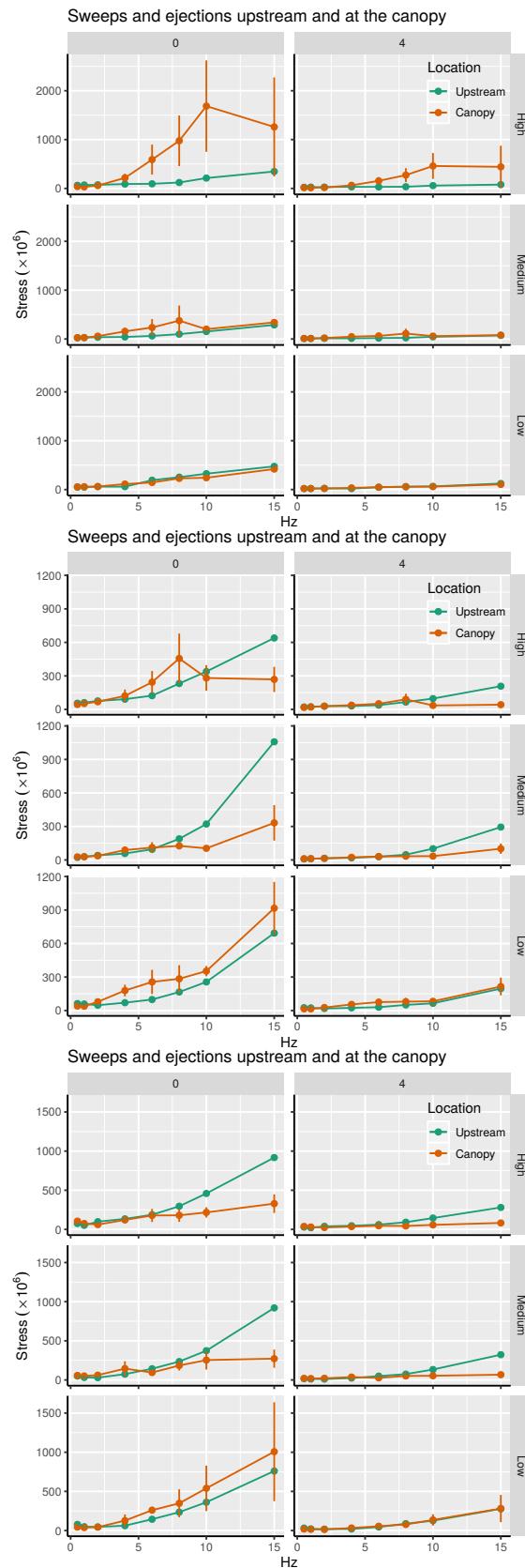


Figure 63: Variation in mean negative momentum flux of the sweeps and ejections upstream and at the canopy with Hz for a hole size of 0 and 4.



## 9 Event duration analysis

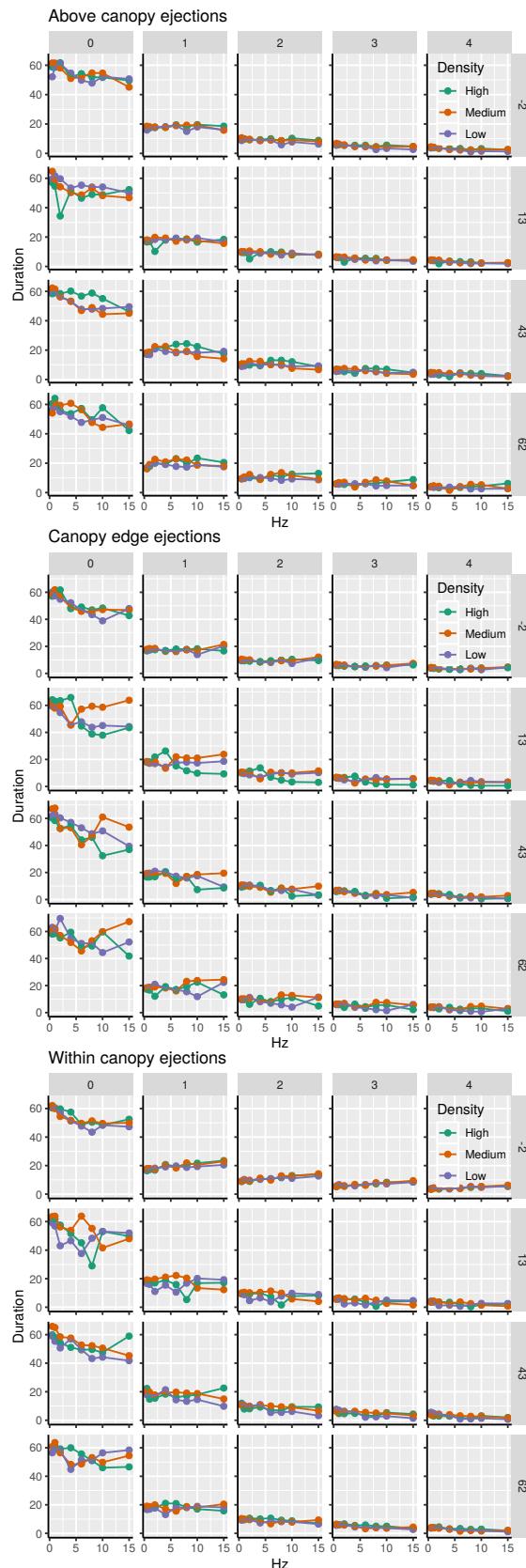


Figure 64: Variation in duration of the ejections with Hz.

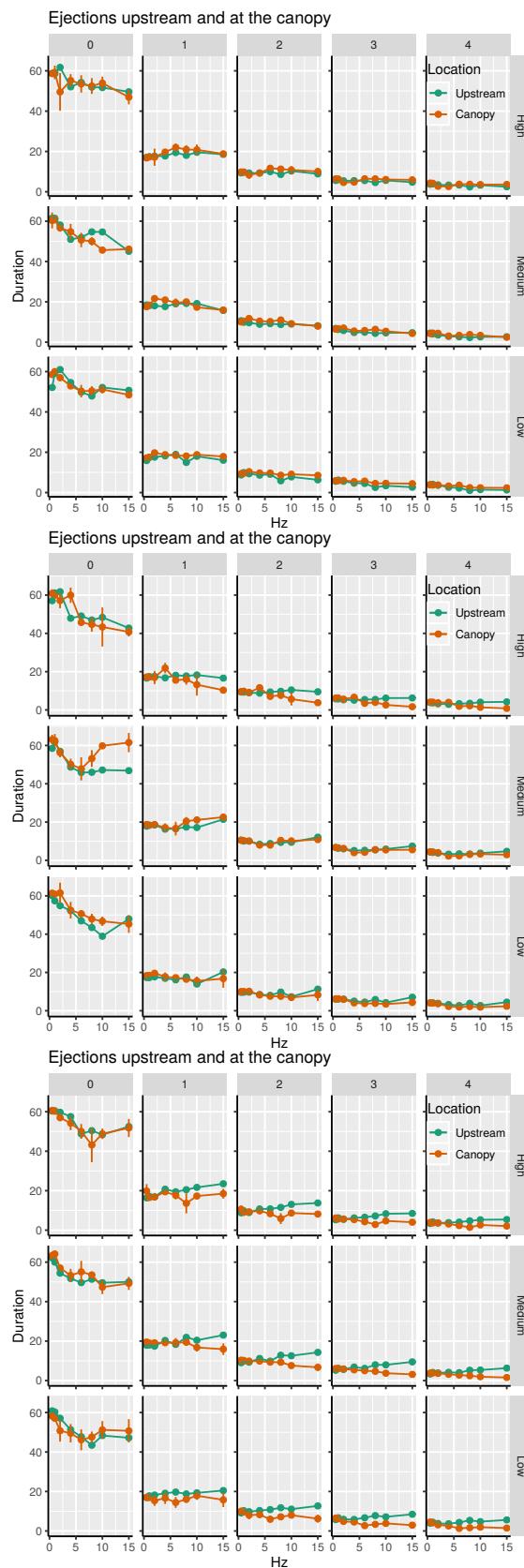


Figure 65: Variation in mean duration upstream of the ejections upstream and at the canopy with Hz.

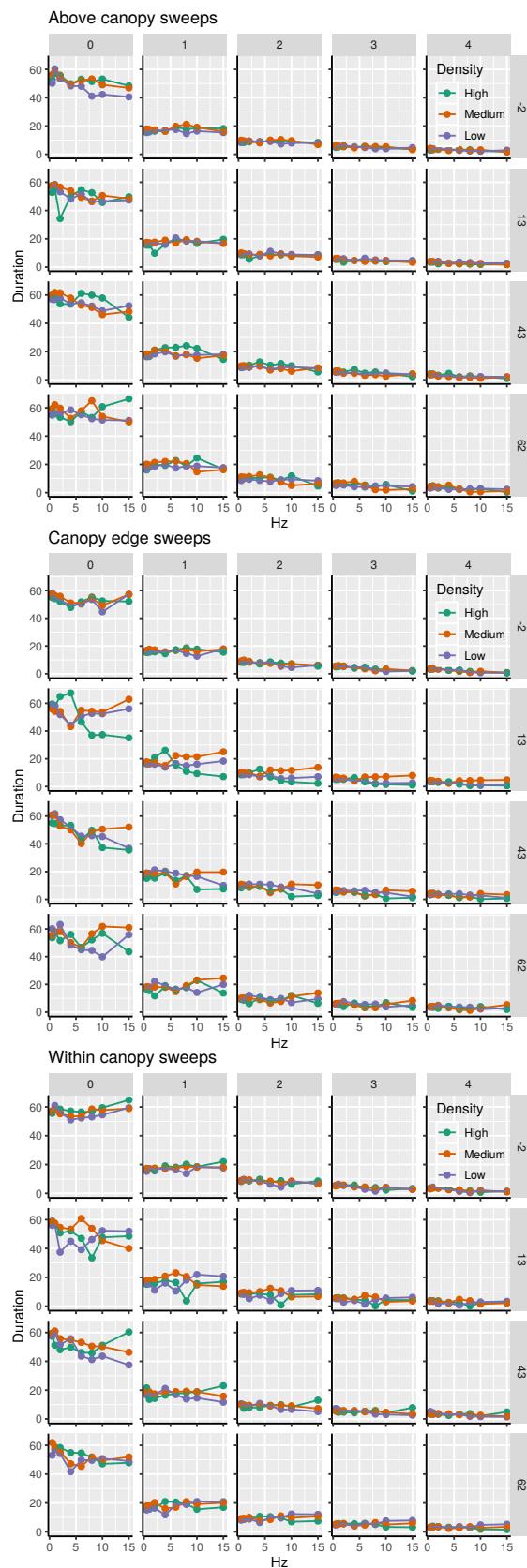


Figure 66: Variation in duration of the sweeps with Hz.

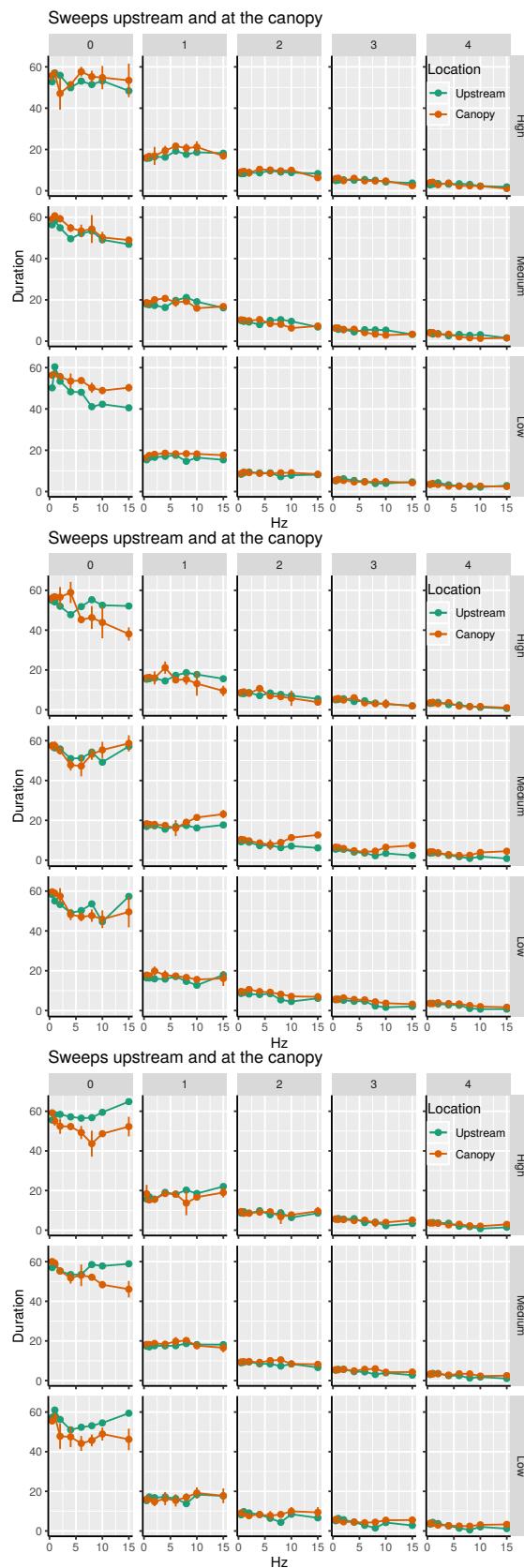


Figure 67: Variation in mean duration upstream of the sweeps upstream and at the canopy with Hz.

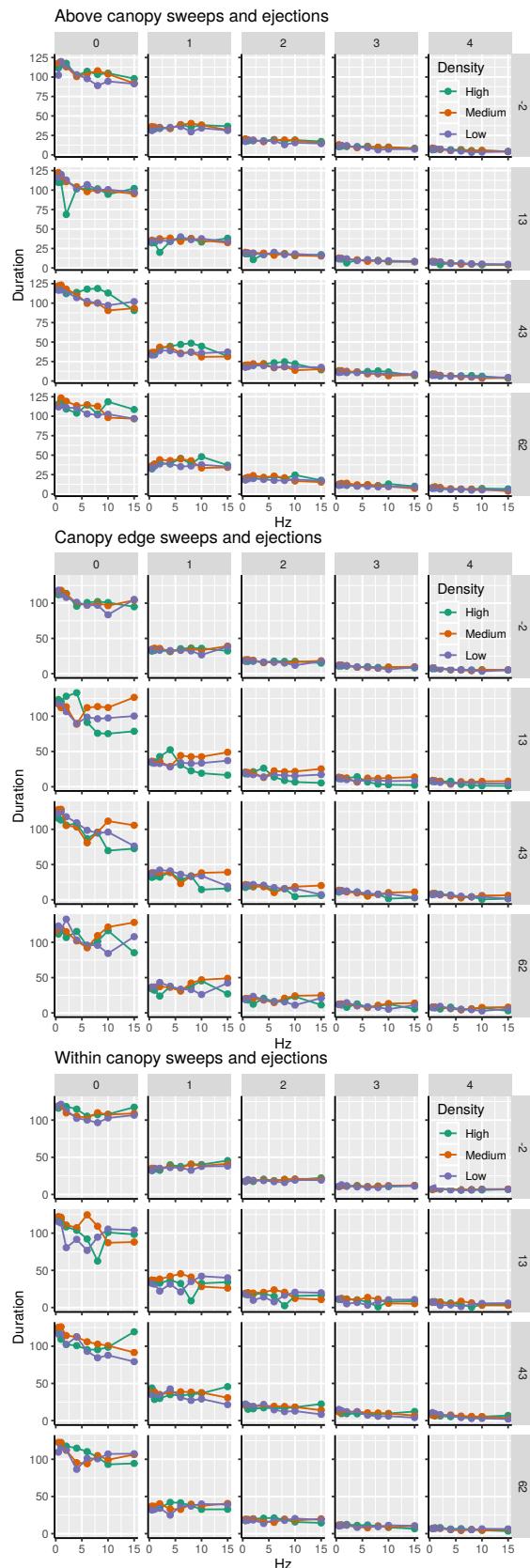


Figure 68: Variation in duration of the both the ejections and sweeps with Hz.

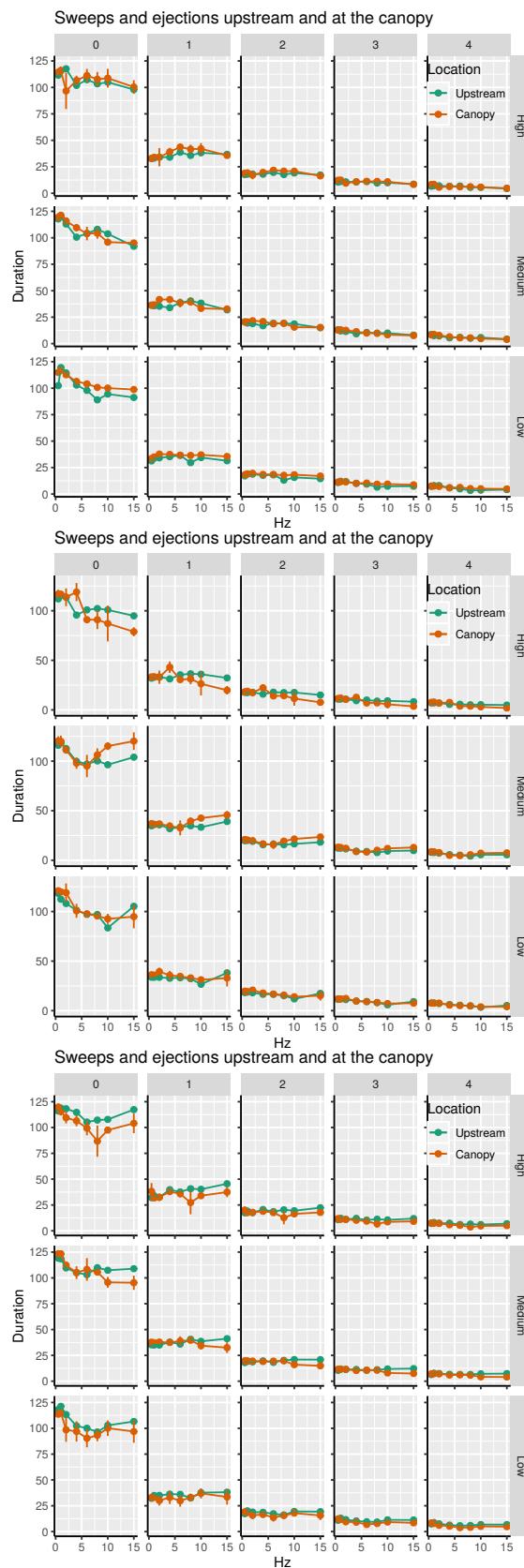


Figure 69: Variation in mean duration of the sweeps and ejections upstream and at the canopy with Hz.

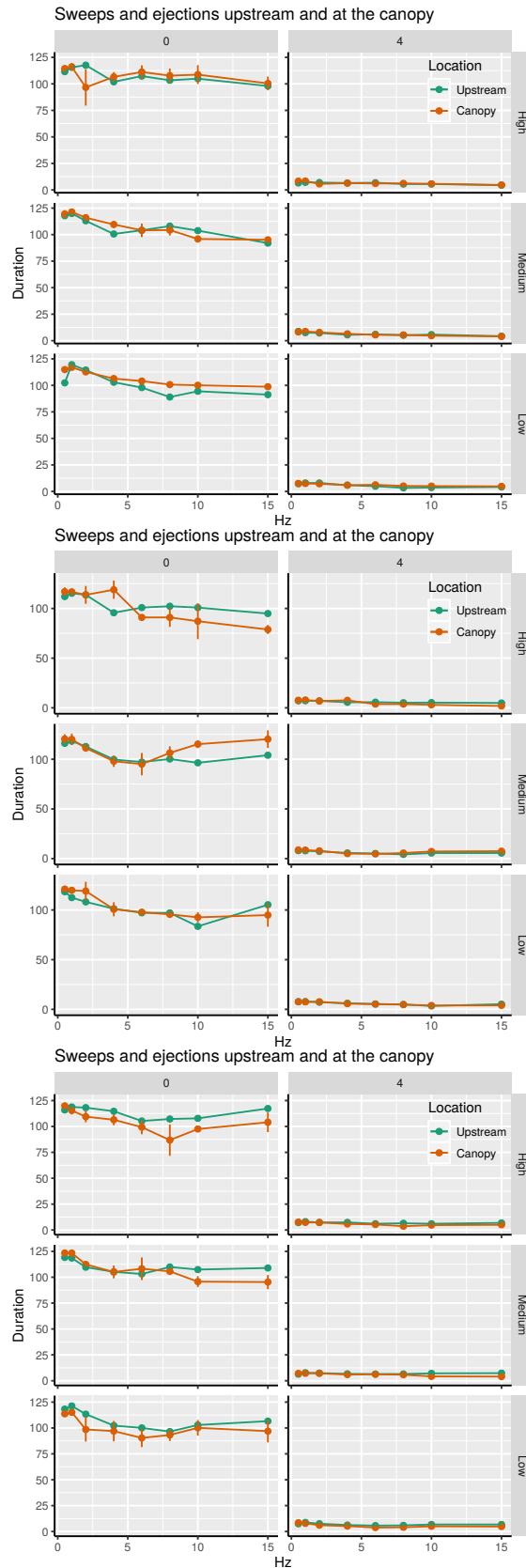


Figure 70: Variation in mean duration of the sweeps and ejections upstream and at the canopy with Hz for a hole size of 0 and 4.



## 10 Stress fraction analysis

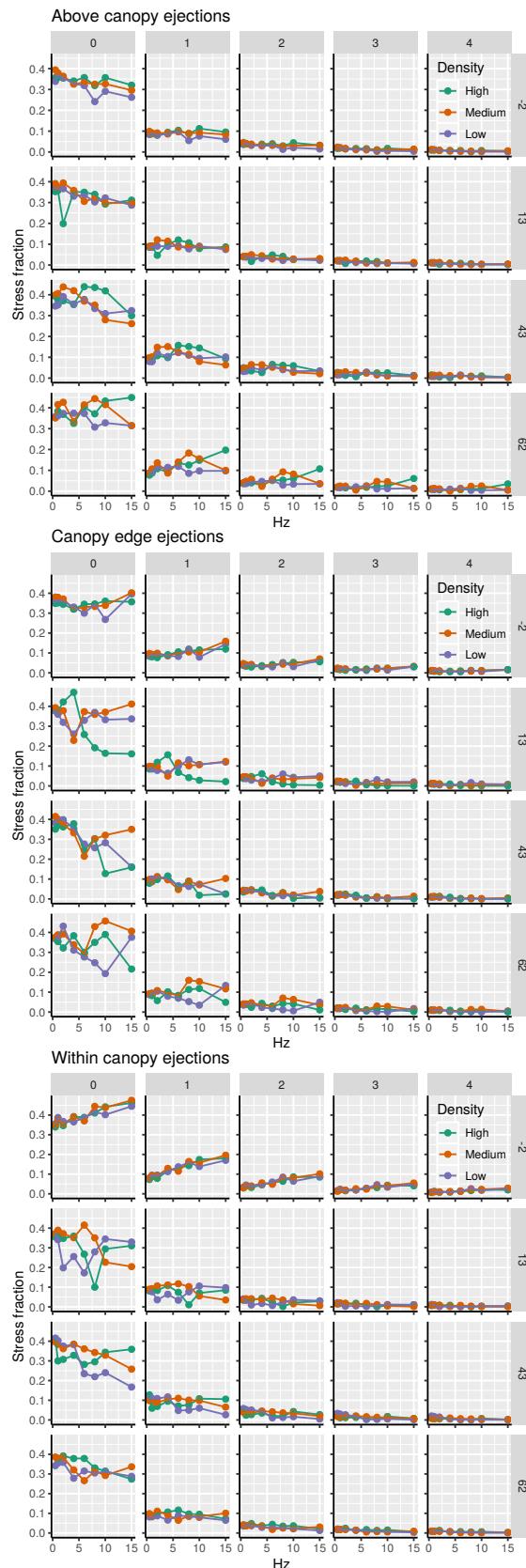


Figure 71: Variation in stress fraction of the ejections with Hz.

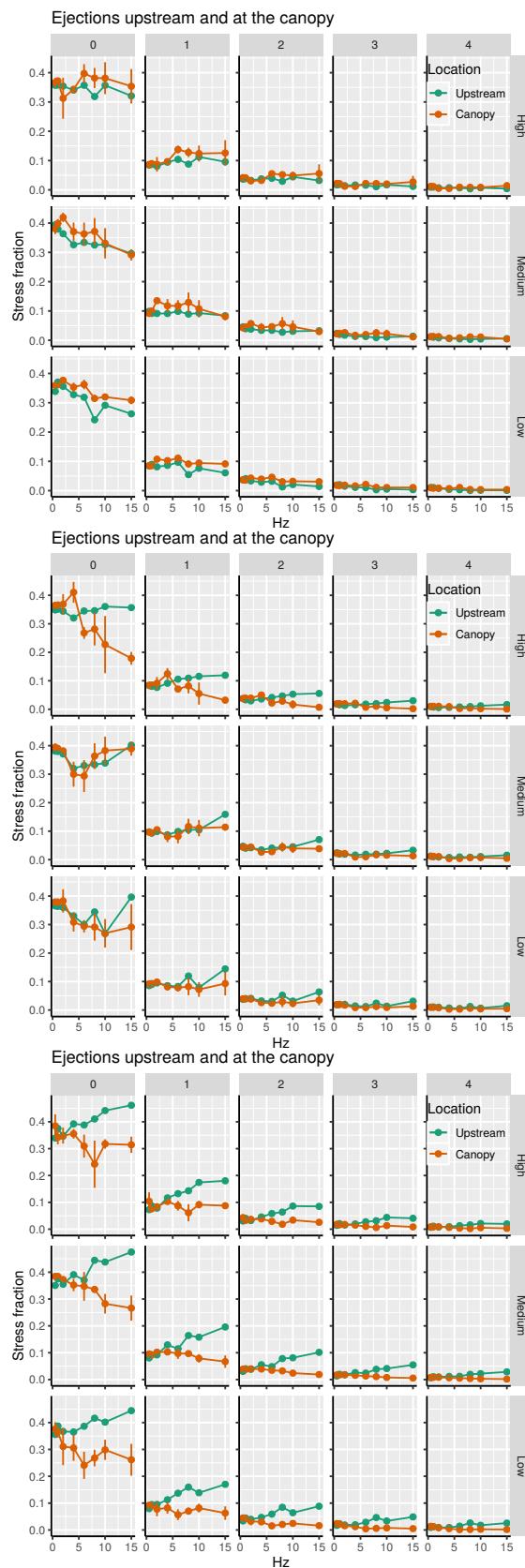


Figure 72: Variation in mean stress fraction upstream of the ejections upstream and at the canopy with Hz.

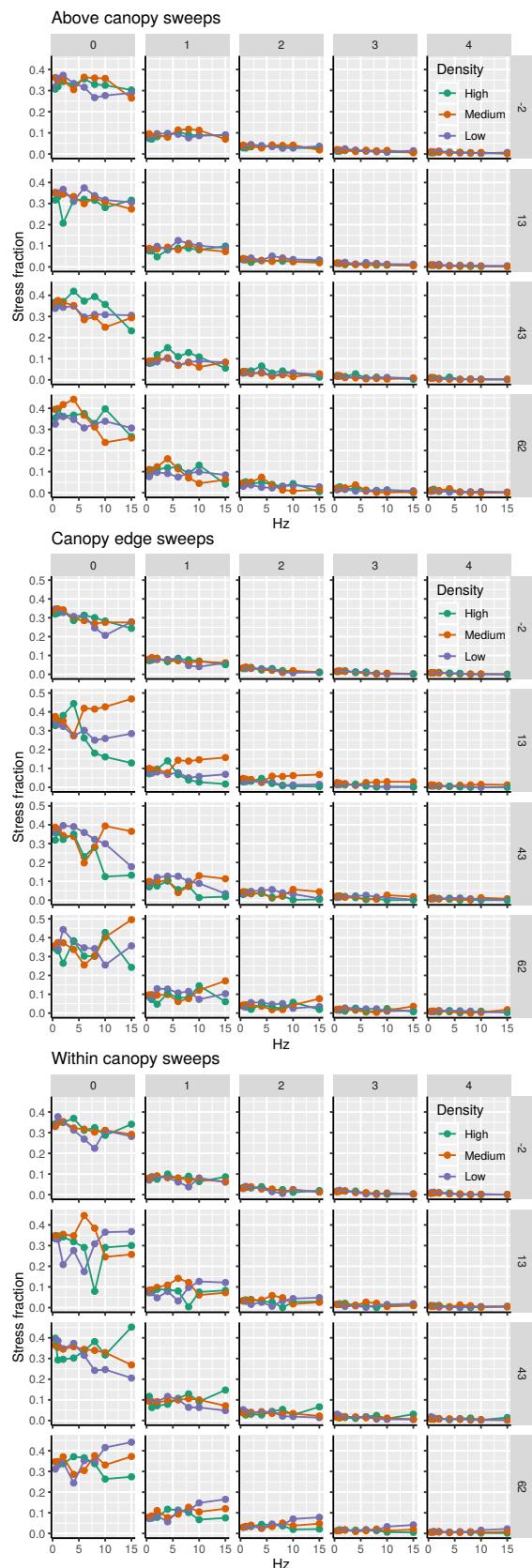


Figure 73: Variation in stress fraction of the sweeps with Hz.

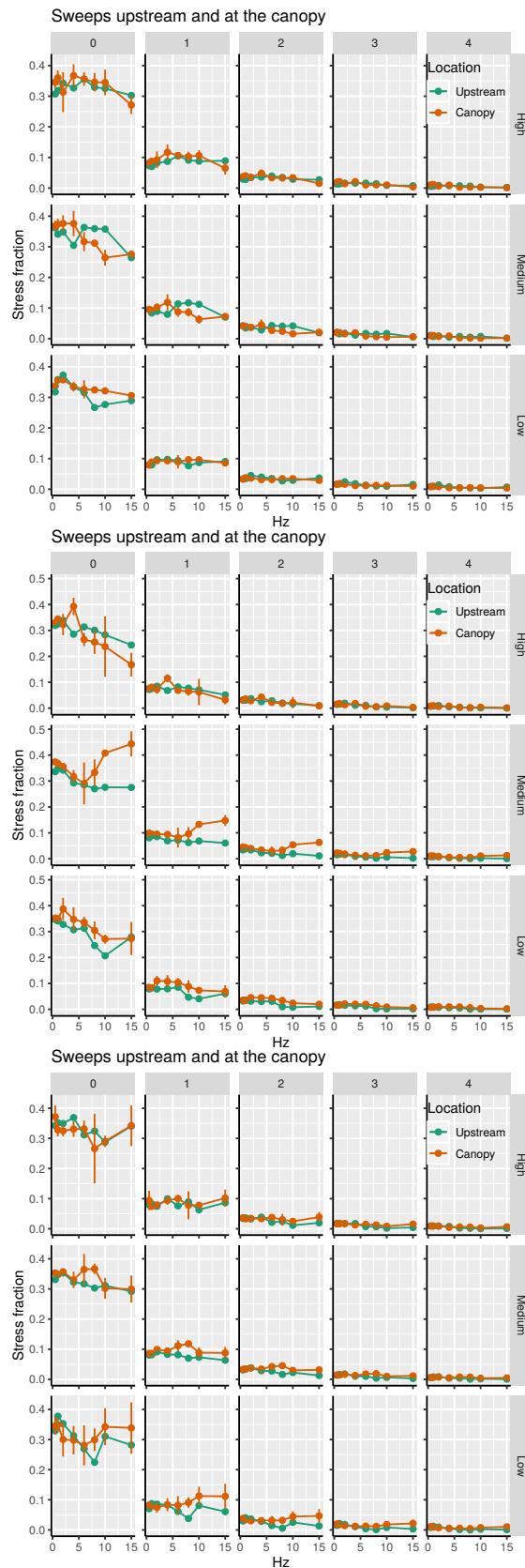


Figure 74: Variation in mean stress fraction upstream of the sweeps upstream and at the canopy with Hz.

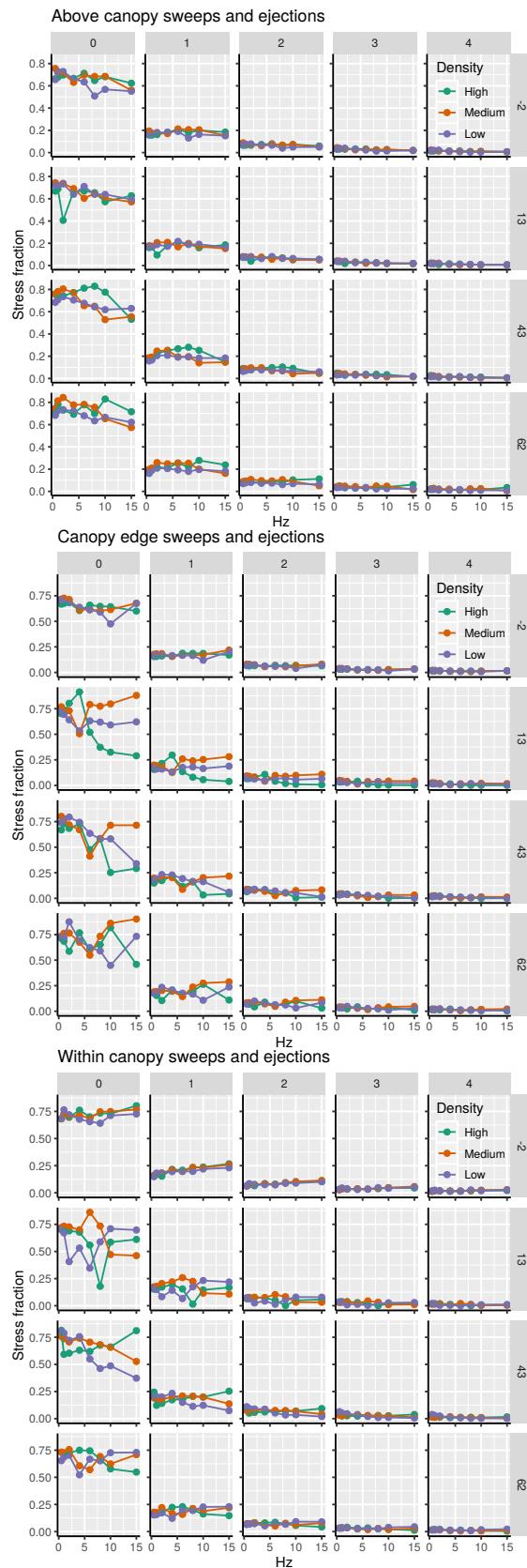


Figure 75: Variation in stress fraction of the both the ejections and sweeps with Hz.

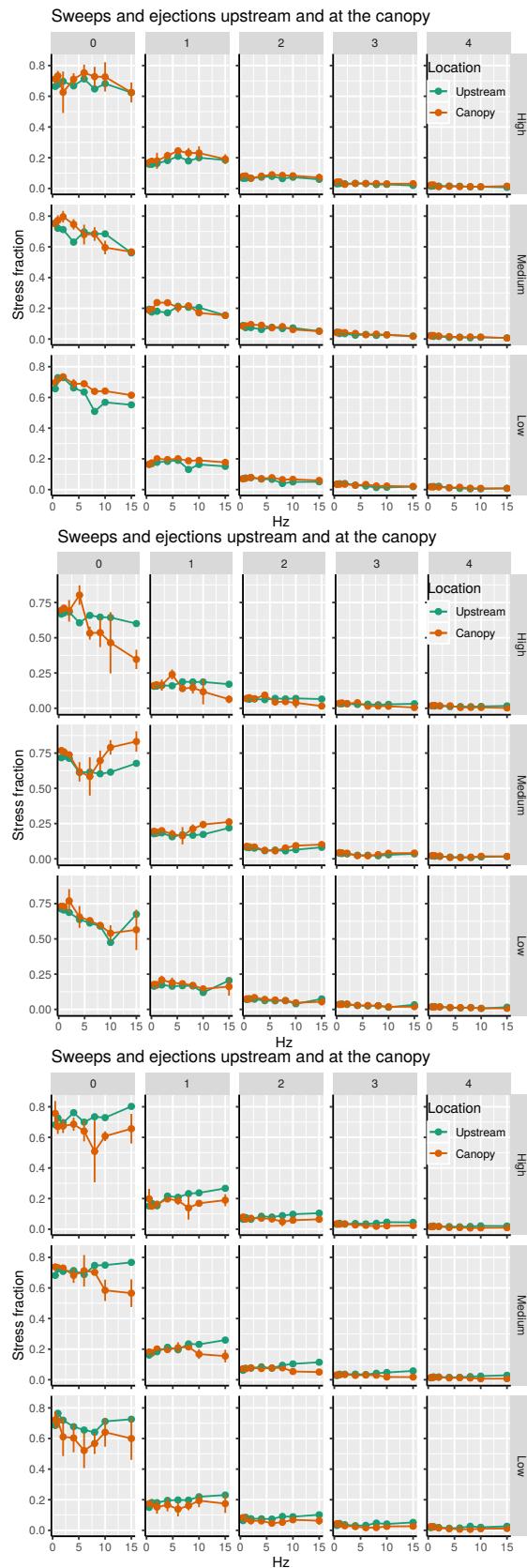


Figure 76: Variation in mean stress fraction of the sweeps and ejections upstream and at the canopy with Hz.

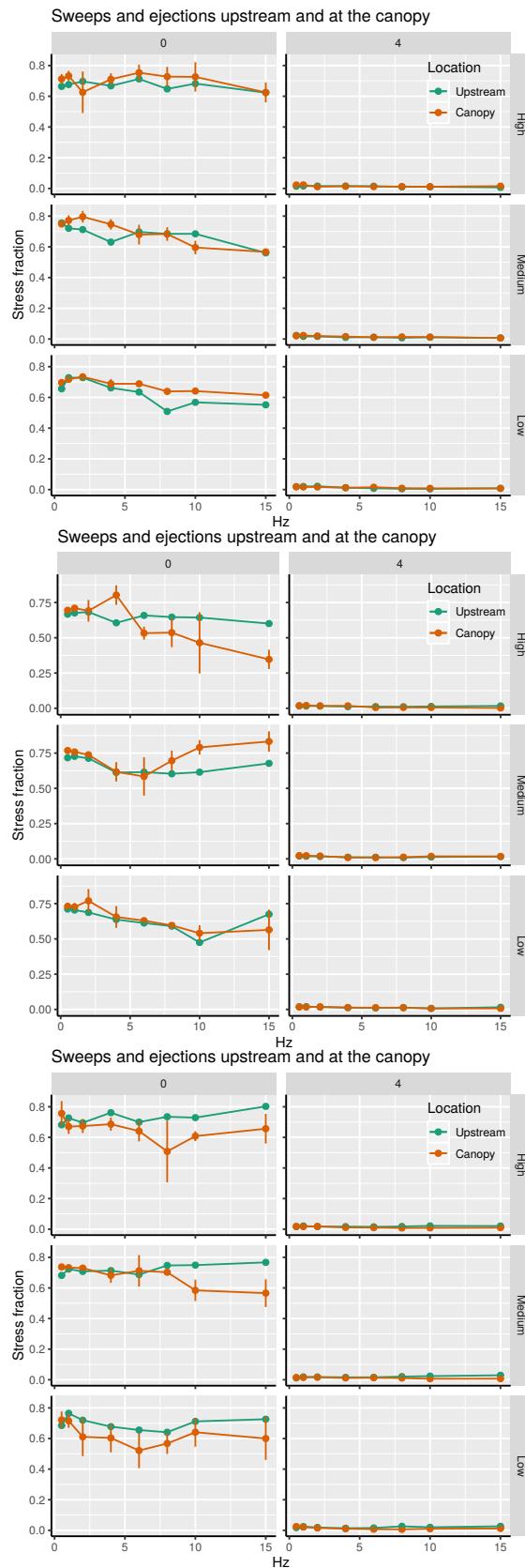


Figure 77: Variation in mean stress fraction of the sweeps and ejections upstream and at the canopy with Hz for a hole size of 0 and 4.



## 11 TKE fraction analysis

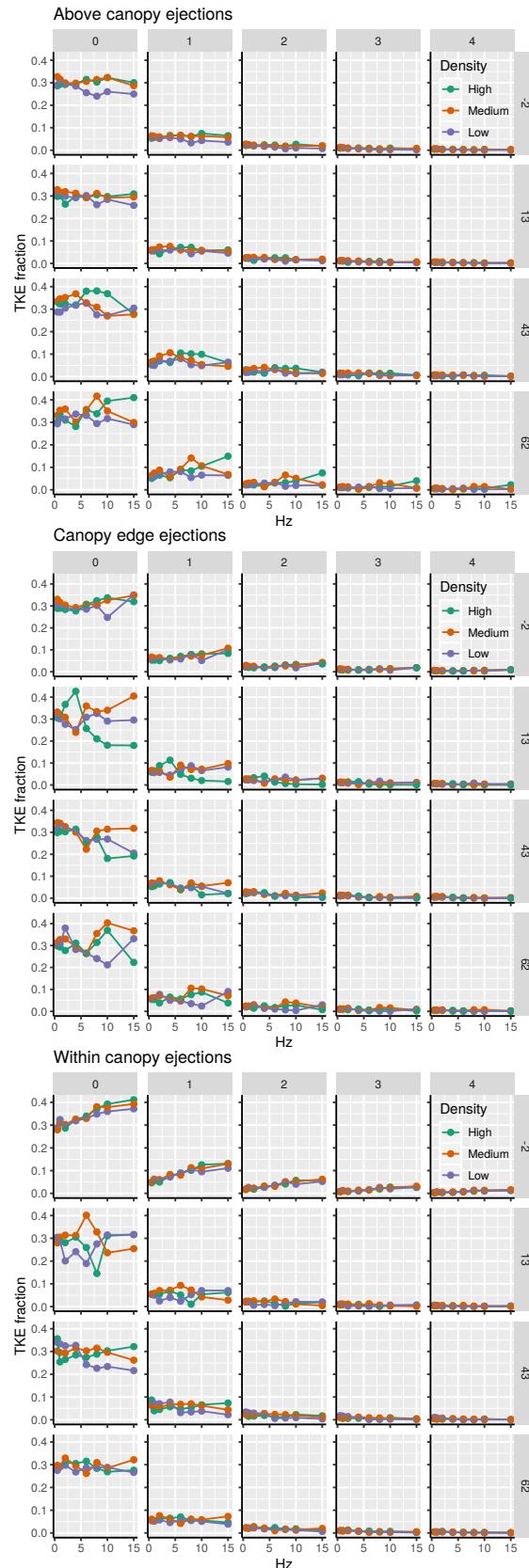


Figure 78: Variation in TKE fraction of the ejections with Hz.

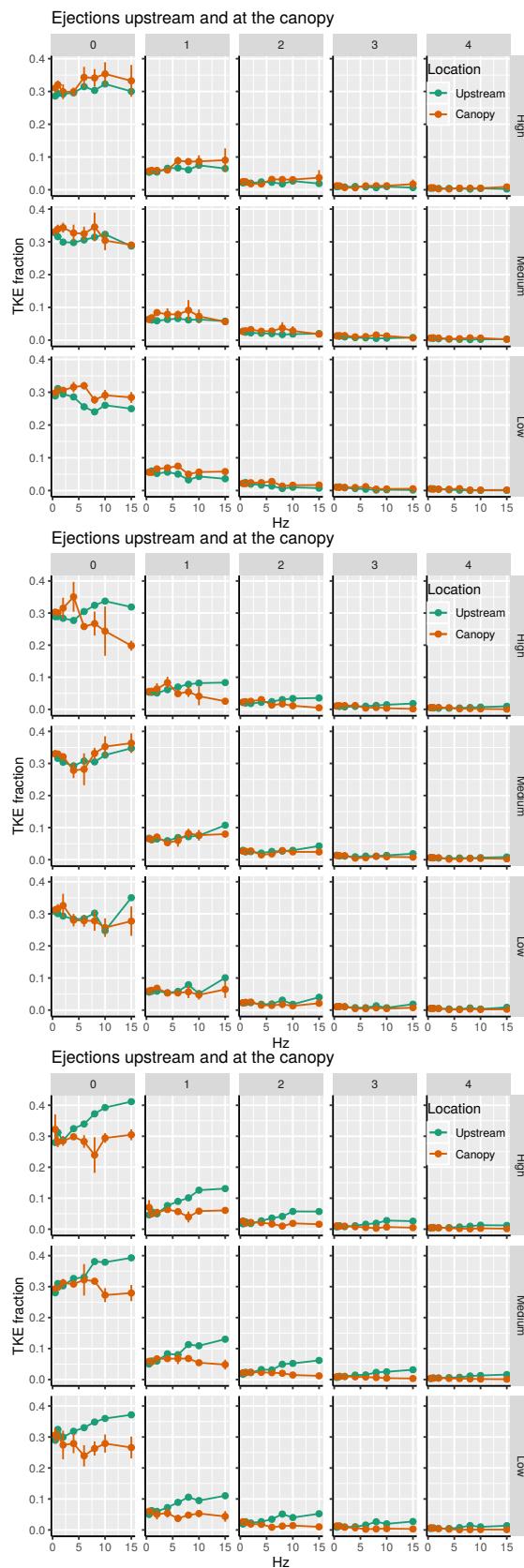


Figure 79: Variation in mean TKE fraction upstream of the ejections upstream and at the canopy with Hz.

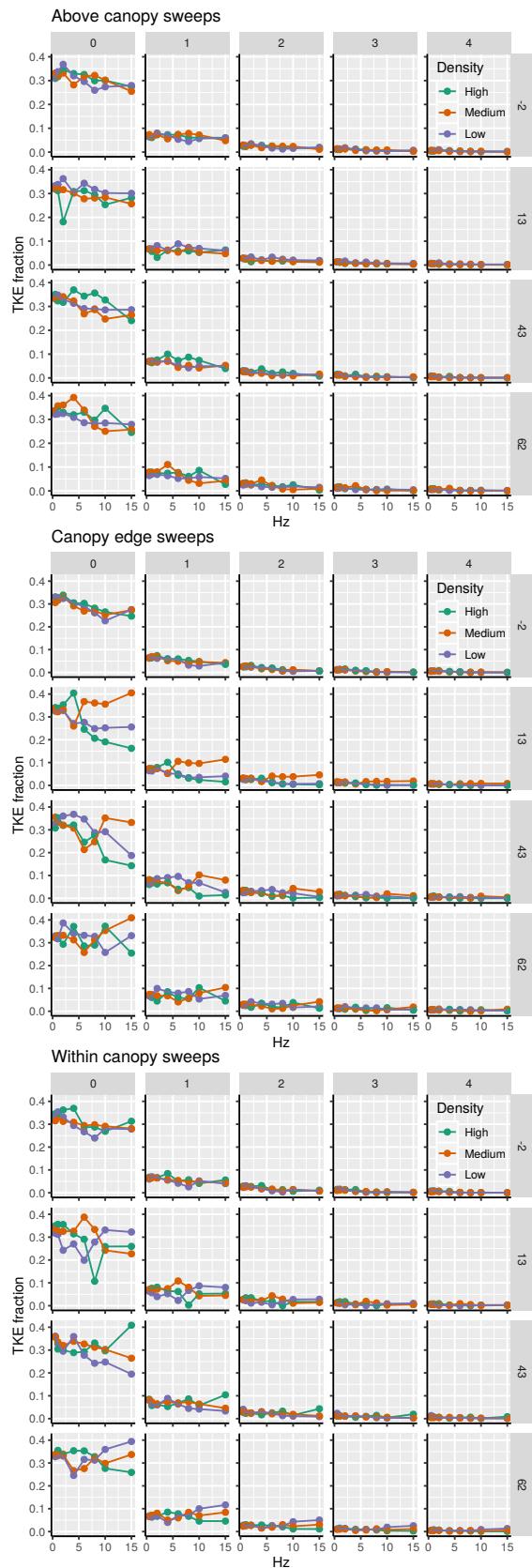


Figure 80: Variation in TKE fraction of the sweeps with Hz.

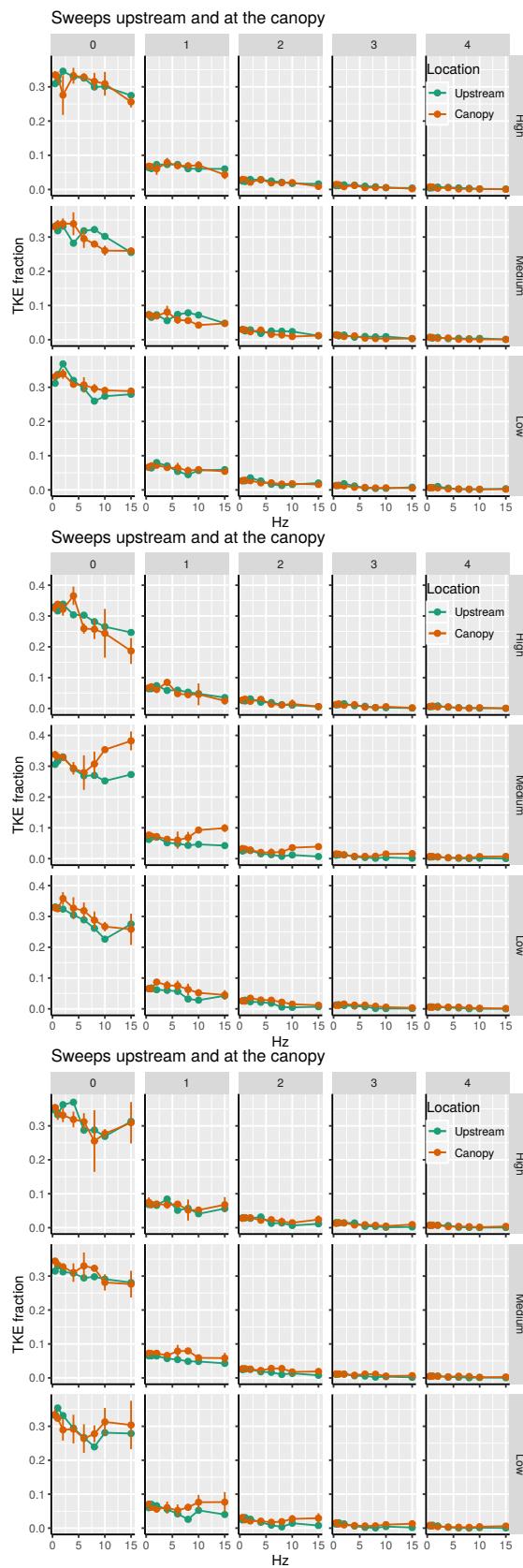


Figure 81: Variation in mean TKE fraction upstream of the sweeps upstream and at the canopy with Hz.

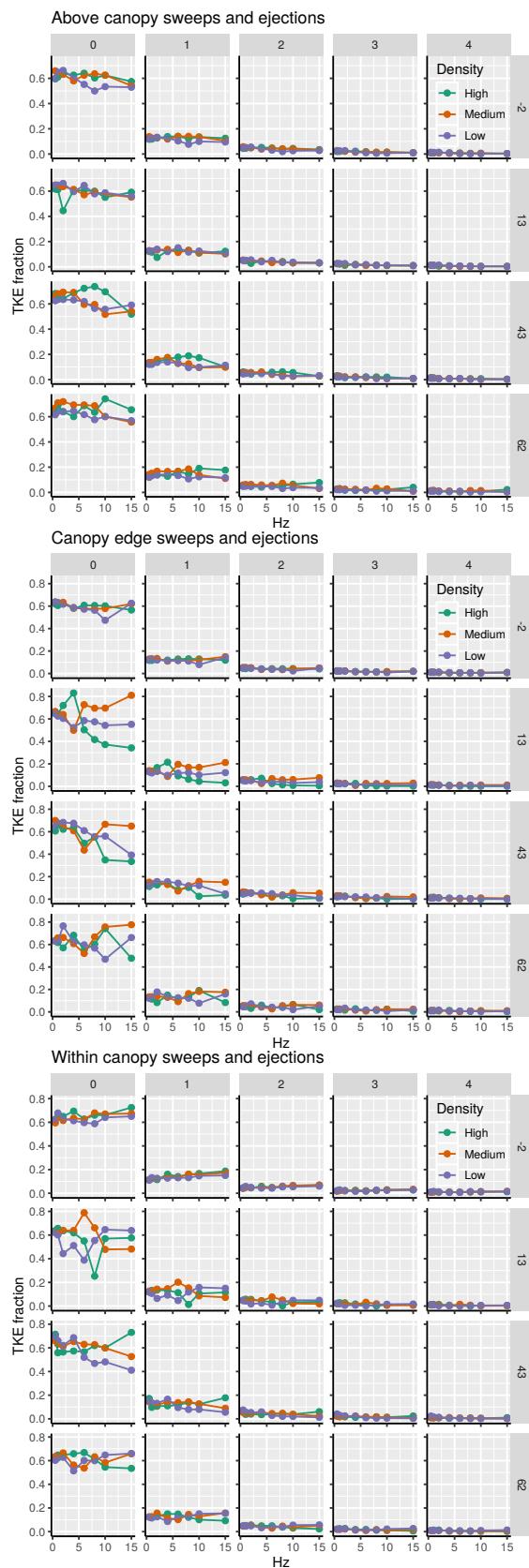


Figure 82: Variation in TKE fraction of the both the ejections and sweeps with Hz.

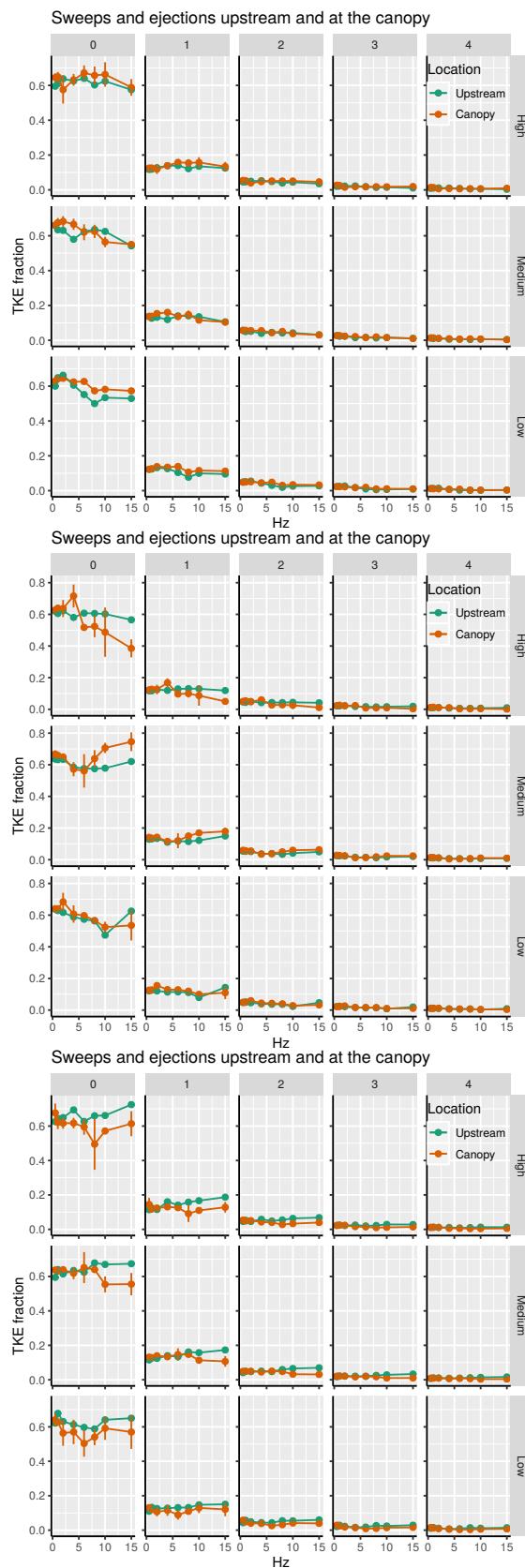


Figure 83: Variation in mean TKE fraction of the sweeps and ejections upstream and at the canopy with Hz.

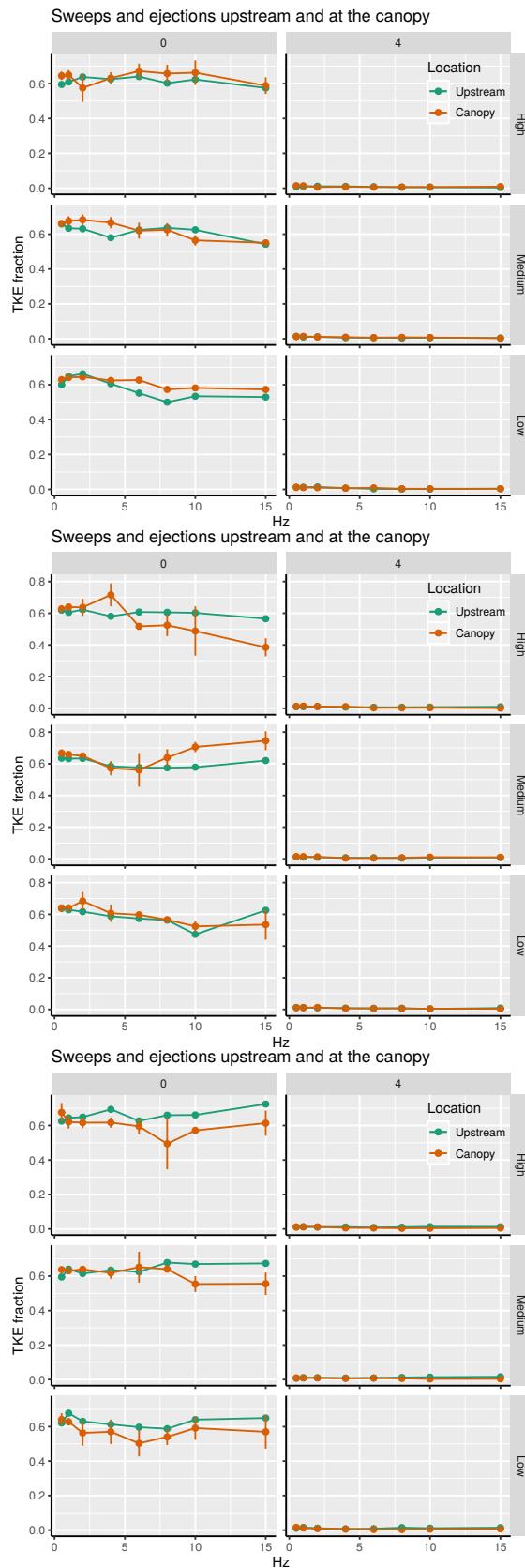


Figure 84: Variation in mean TKE fraction of the sweeps and ejections upstream and at the canopy with Hz for a hole size of 0 and 4.

## 12 Events across the canopy length

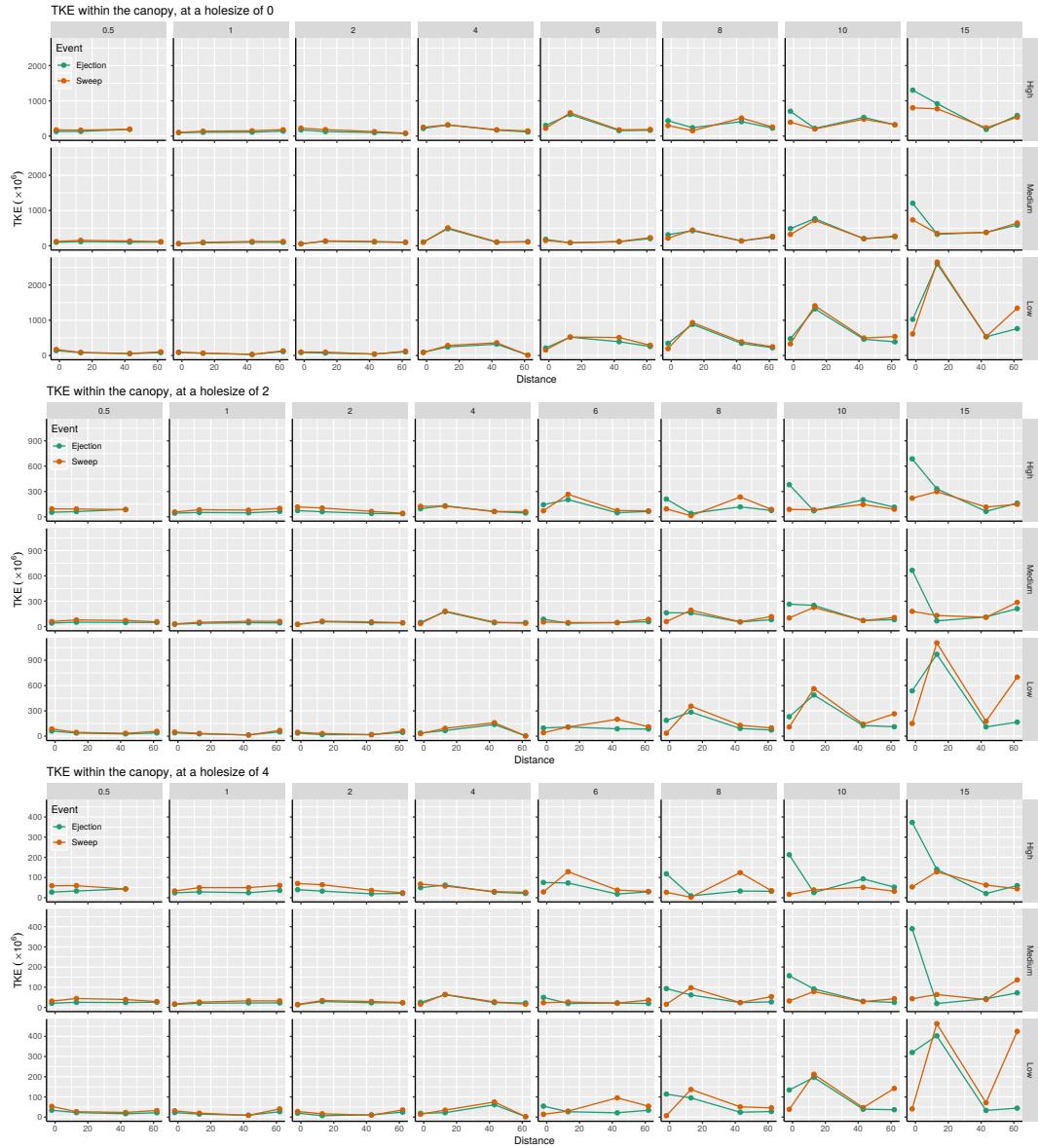


Figure 85: Variation in TKE along the length of the canopy at a hole size of 0, 2, and 4.

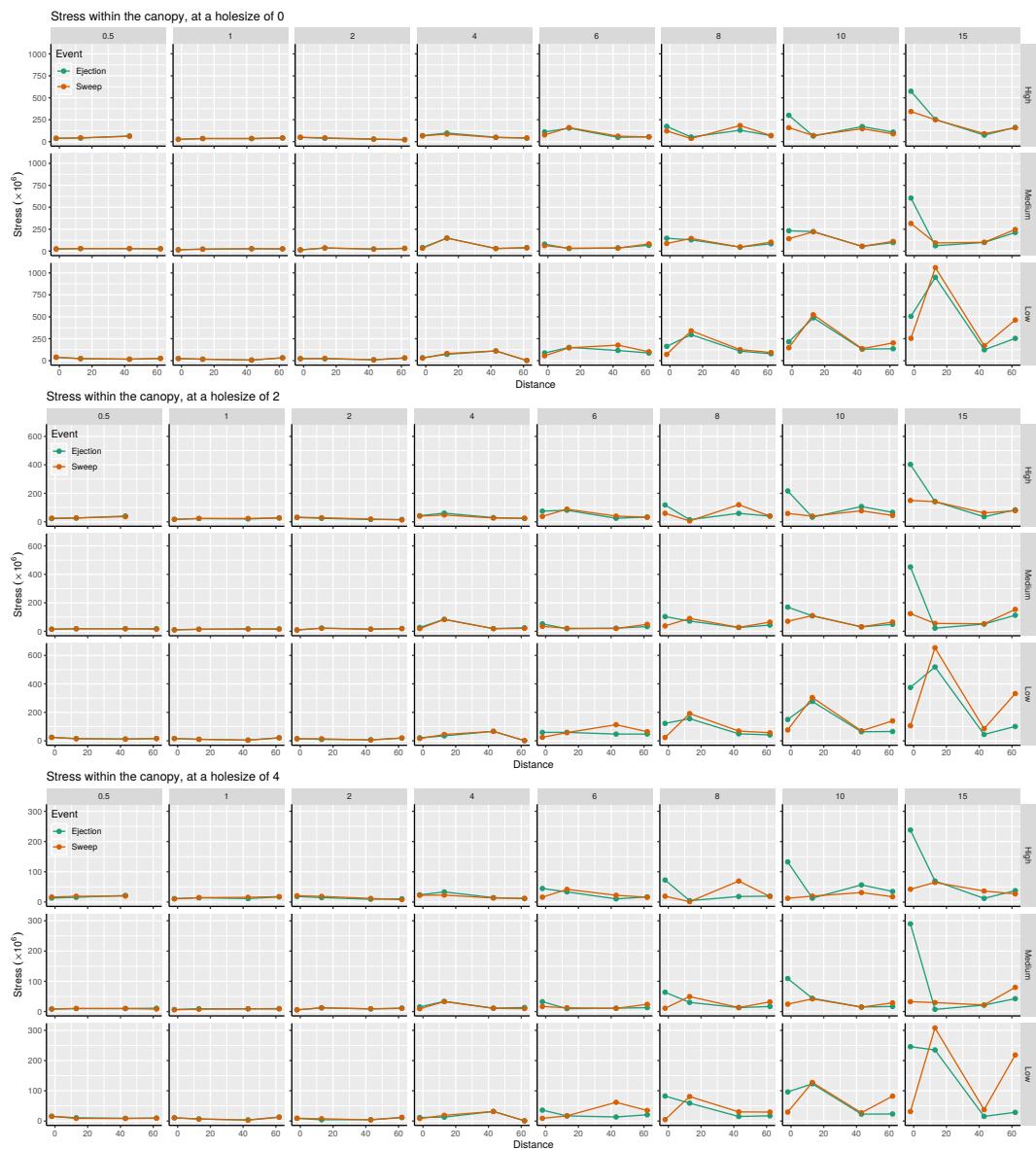


Figure 86: Variation in negative momentum flux along the length of the canopy at a hole size of 0, 2, and 4.

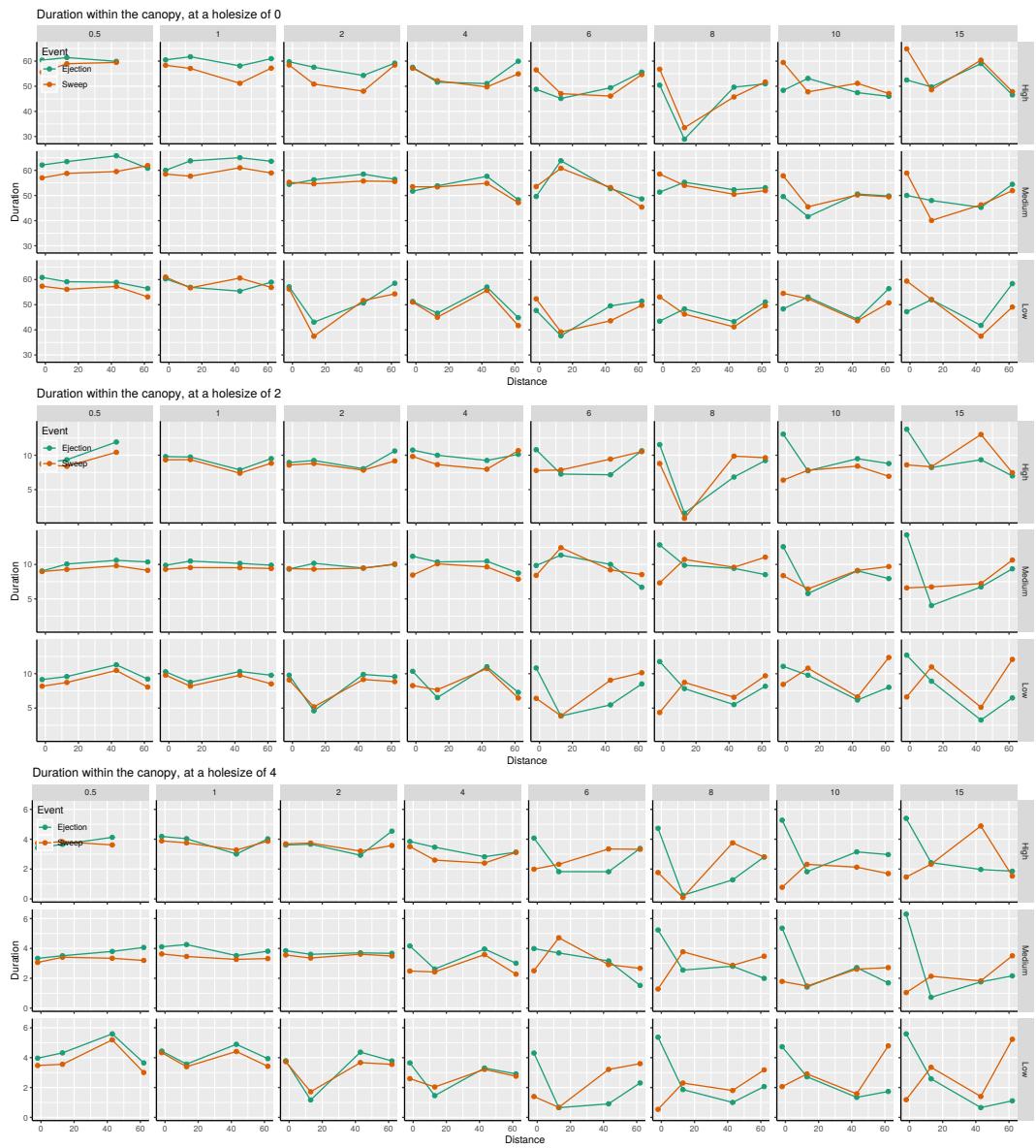


Figure 87: Variation in duration of events along the length of the canopy at a hole size of 0, 2, and 4.

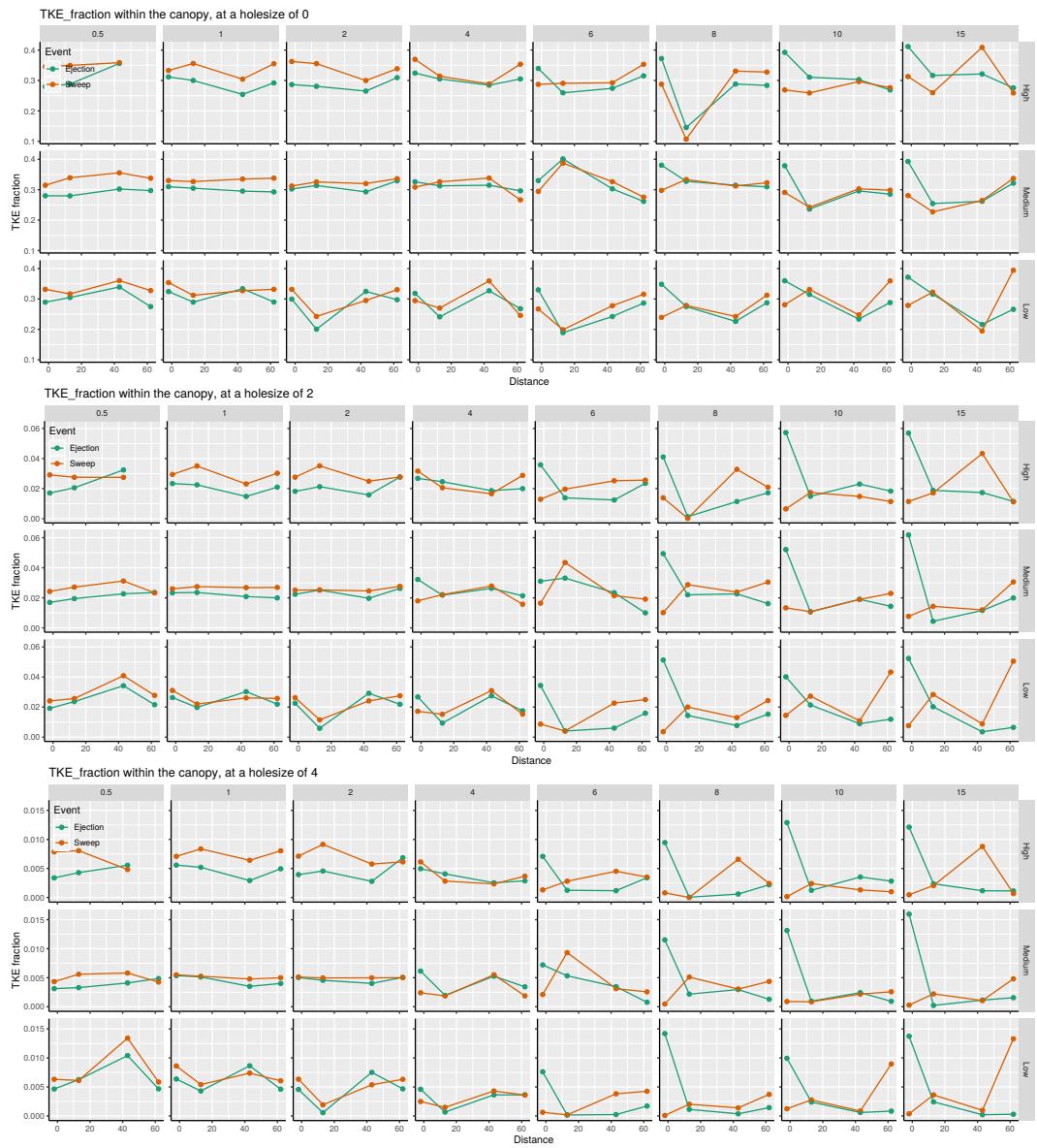


Figure 88: Variation in TKE fraction along the length of the canopy at a hole size of 0, 2, and 4.

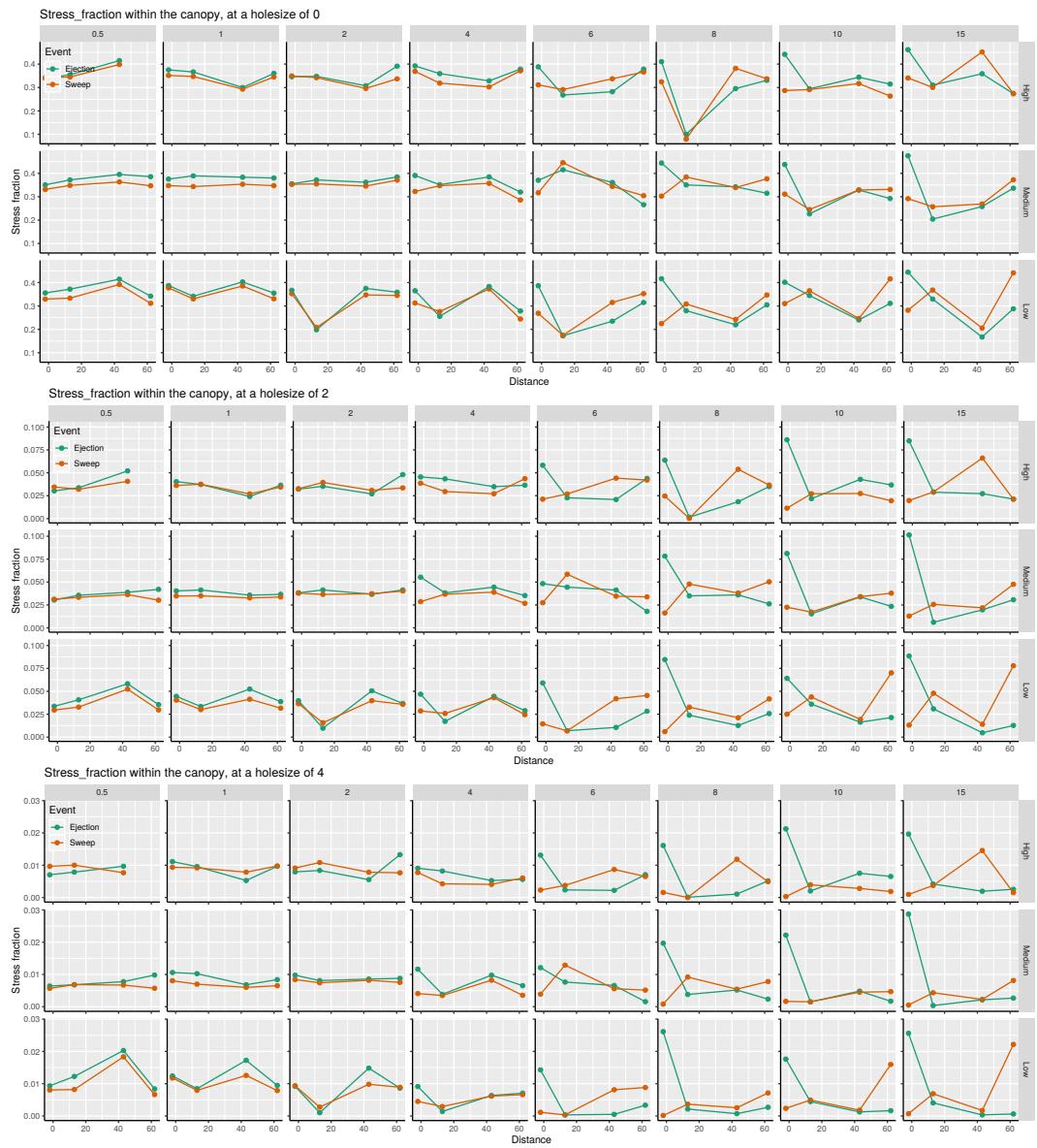


Figure 89: Variation in stress fraction along the length of the canopy at a hole size of 0, 2, and 4.