

Ejection and Sweep Analysis (GLM Version) All Data

Experiments in canopy flux (Yukio Inoue)

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Important: 02_16_41_H was removed because the mean velocity is 1/10 of the mean velocites for the M and L data. This must be measurement error, so it will not be included in the following analyses.

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).

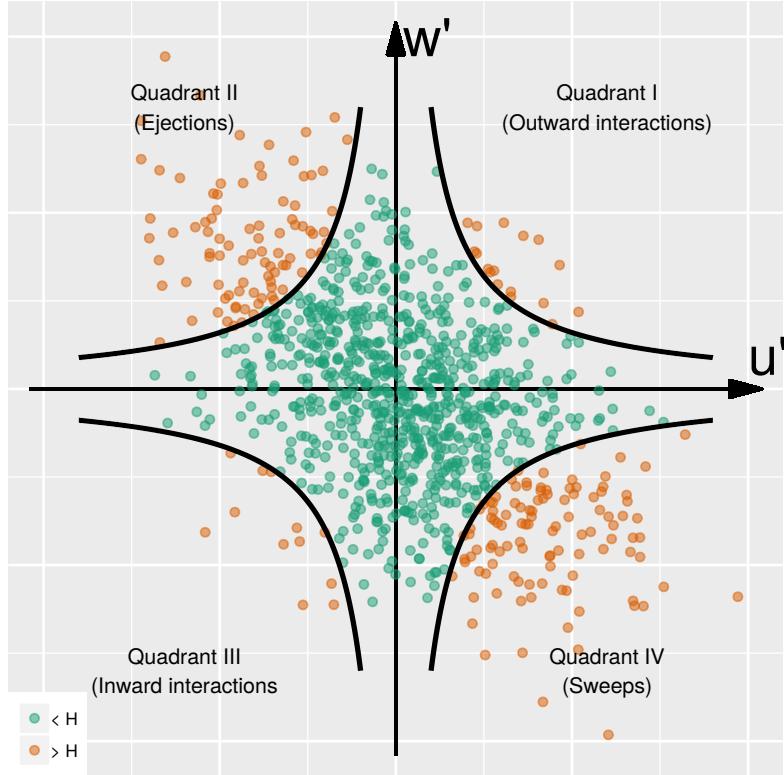


Figure 1: Bursting events and their associated quadrants. The thick line is the hole, where $|u'w'| = \text{constant}$.

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

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

where TKE is the mean TKE,

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

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

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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.

2.1 Remove erroneous data

Removing the 02_16_41_H dataset.

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 (cm s^{-1})			Std. Dev. (cm s^{-1})			Total duration
			u	v	w	u	v	w	
-2	High	Canopy edge	0.76	0.01	0.41	1.05	0.79	0.30	5
-2	Low	Canopy edge	1.17	0.13	0.09	1.16	0.95	0.40	5
-2	Medium	Canopy edge	0.59	0.07	0.24	0.68	0.48	0.19	5
13	High	Canopy edge	0.41	-0.01	0.01	1.23	0.48	0.30	5
13	Low	Canopy edge	0.09	-0.15	-0.21	0.78	0.64	0.23	5
13	Medium	Canopy edge	0.22	-0.01	0.07	0.69	0.51	0.22	5
43	High	Canopy edge	0.29	-0.01	-0.11	0.86	0.65	0.23	5
43	Low	Canopy edge	1.07	0.05	-0.04	0.94	0.71	0.26	5
43	Medium	Canopy edge	-0.11	-0.32	-0.31	0.71	0.34	0.19	5
62	High	Canopy edge	-0.09	-0.16	-0.48	0.82	0.64	0.30	5
62	Low	Canopy edge	0.07	-0.06	-0.27	1.05	0.82	0.28	5
62	Medium	Canopy edge	0.35	-0.13	-0.17	0.74	0.63	0.24	5
-2	High	Above canopy	0.89	0.29	-0.06	1.18	0.84	0.32	5
-2	Low	Above canopy	1.98	0.03	0.22	0.96	0.71	0.36	5
-2	Medium	Above canopy	0.85	-0.03	0.15	0.76	0.51	0.21	5
13	High	Above canopy	0.46	-0.15	0.14	0.97	0.73	0.26	5
13	Low	Above canopy	1.27	0.05	0.27	0.91	0.61	0.28	5
13	Medium	Above canopy	0.42	-0.04	-0.02	0.70	0.51	0.22	5
43	High	Above canopy	0.83	0.09	0.02	0.90	0.68	0.28	5
43	Low	Above canopy	0.78	0.02	-0.09	1.21	0.97	0.36	5
43	Medium	Above canopy	0.90	0.07	-0.05	0.67	0.49	0.22	5
62	High	Above canopy	0.90	0.02	-0.03	0.97	0.73	0.30	5
62	Low	Above canopy	0.94	-0.14	-0.01	1.13	0.94	0.34	5
62	Medium	Above canopy	0.95	-0.11	0.36	0.72	0.55	0.39	5
-2	High	Within canopy	0.34	-0.10	-0.07	1.21	1.06	0.36	5
-2	Low	Within canopy	0.45	-0.06	0.03	1.48	1.23	0.53	5
-2	Medium	Within canopy	0.49	0.01	-0.15	1.23	0.90	0.29	5
13	High	Within canopy	0.28	0.14	-0.09	1.55	1.05	0.33	5
13	Low	Within canopy	1.10	0.24	-0.17	1.10	0.88	0.45	5
13	Medium	Within canopy	0.04	-0.03	-0.16	1.38	0.96	0.31	5
43	High	Within canopy	-0.28	-0.12	-0.89	1.25	0.87	0.41	5
43	Low	Within canopy	0.09	-0.09	0.03	0.40	0.67	0.19	5
43	Medium	Within canopy	0.09	-0.26	-0.27	1.31	0.65	0.28	5
62	Low	Within canopy	0.22	-0.09	-0.14	1.03	0.41	0.25	5
62	Medium	Within canopy	0.00	-0.05	-0.26	1.03	0.88	0.28	5

Table 2: Summary of data at 1 Hz.

Distance	Density	Position	Mean (cm s ⁻¹)			Std. Dev. (cm s ⁻¹)			Total duration
			u	v	w	u	v	w	
-2	High	Canopy edge	1.84	0.19	0.76	1.24	0.91	0.33	5
-2	Low	Canopy edge	2.41	0.14	0.35	1.03	0.86	0.35	5
-2	Medium	Canopy edge	1.87	0.05	0.55	0.75	0.57	0.22	5
13	High	Canopy edge	1.24	0.03	0.05	1.28	0.32	0.28	5
13	Low	Canopy edge	0.60	-0.34	-0.03	1.04	0.70	0.26	5
13	Medium	Canopy edge	1.11	-0.20	0.44	0.68	0.54	0.21	5
43	High	Canopy edge	0.98	0.13	-0.04	1.09	0.84	0.34	5
43	Low	Canopy edge	2.06	0.10	0.10	0.83	0.68	0.28	5
43	Medium	Canopy edge	0.65	0.04	-0.10	0.77	0.39	0.20	5
62	High	Canopy edge	0.36	-0.04	0.10	1.16	0.94	0.43	5
62	Low	Canopy edge	1.17	0.10	0.01	0.88	0.71	0.29	5
62	Medium	Canopy edge	1.13	0.09	-0.04	0.82	0.69	0.27	5
-2	High	Above canopy	1.97	0.17	0.82	1.17	0.91	0.40	5
-2	Low	Above canopy	2.04	-0.03	0.10	1.06	0.94	0.39	5
-2	Medium	Above canopy	1.91	0.06	0.54	0.76	0.60	0.23	5
13	High	Above canopy	1.46	0.18	0.79	0.86	0.78	0.30	5
13	Low	Above canopy	2.40	0.38	0.30	1.02	0.92	0.32	5
13	Medium	Above canopy	1.42	0.02	0.08	0.73	0.59	0.22	5
43	High	Above canopy	2.38	-0.10	0.04	0.73	0.75	0.25	5
43	Low	Above canopy	2.65	0.16	-0.28	1.14	1.04	0.34	5
43	Medium	Above canopy	1.97	0.00	0.11	0.69	0.61	0.21	5
62	High	Above canopy	2.86	0.13	-0.46	0.81	0.76	0.37	5
62	Low	Above canopy	2.31	-0.25	0.03	0.92	0.81	0.55	5
62	Medium	Above canopy	1.86	0.05	-0.12	0.68	0.56	0.22	5
-2	High	Within canopy	1.37	0.07	0.14	1.13	0.87	0.35	5
-2	Low	Within canopy	1.63	0.20	-0.02	1.04	0.89	0.31	5
-2	Medium	Within canopy	1.47	0.19	-0.03	0.97	0.82	0.28	5
13	High	Within canopy	1.11	0.08	0.48	1.32	0.85	0.39	5
13	Low	Within canopy	2.35	0.11	-0.20	0.84	0.76	0.27	5
13	Medium	Within canopy	0.66	0.16	0.21	1.24	0.87	0.31	5
43	High	Within canopy	0.34	0.23	-0.22	1.55	0.99	0.36	5
43	Low	Within canopy	0.20	-0.10	0.08	0.40	0.64	0.20	5
43	Medium	Within canopy	0.37	-0.01	-0.08	1.35	0.72	0.28	5
62	High	Within canopy	0.51	0.36	-0.16	1.47	1.19	0.39	5
62	Low	Within canopy	0.67	0.03	0.02	1.11	0.90	0.35	5
62	Medium	Within canopy	0.49	0.15	-0.06	1.26	0.97	0.33	5

Table 3: Summary of data at 10 Hz.

Distance	Density	Position	Mean (cm s ⁻¹)			Std. Dev. (cm s ⁻¹)			Total duration
			u	v	w	u	v	w	
-2	High	Canopy edge	25.05	1.10	5.59	1.47	1.60	1.29	5
13	High	Canopy edge	11.70	1.88	4.37	3.15	2.15	1.34	5
43	High	Canopy edge	12.52	-1.38	5.47	3.11	3.10	1.32	5
62	High	Canopy edge	4.86	-0.23	-0.30	1.33	0.80	0.46	5
-2	High	Above canopy	26.42	1.47	4.42	1.20	1.42	1.09	5
-2	Low	Above canopy	27.92	0.22	-0.29	1.99	2.82	1.62	5
-2	Medium	Above canopy	27.96	0.69	3.18	1.11	1.19	0.82	5
13	High	Above canopy	33.09	1.78	9.37	1.22	1.48	1.34	5
13	Low	Above canopy	29.61	0.96	1.22	1.70	1.99	1.13	5
13	Medium	Above canopy	32.45	1.49	5.58	1.16	1.37	1.10	5
43	High	Above canopy	34.12	0.25	3.48	4.56	3.82	2.58	5
43	Low	Above canopy	34.98	0.03	-1.15	1.25	2.35	1.35	5
43	Medium	Above canopy	40.00	1.14	3.16	1.12	1.43	1.09	5
62	High	Above canopy	40.12	-0.13	-0.72	4.95	4.36	3.63	5
62	Low	Above canopy	36.36	0.40	-2.60	1.33	1.63	1.04	5
62	Medium	Above canopy	42.66	0.78	2.58	1.23	1.43	1.39	5
-2	High	Within canopy	23.55	0.65	3.43	2.15	1.89	1.20	5
-2	Low	Within canopy	26.56	0.90	-0.96	1.54	1.63	1.39	5
-2	Medium	Within canopy	26.24	0.19	2.96	1.89	1.67	1.25	5
13	High	Within canopy	2.24	-0.37	0.38	1.84	0.99	0.60	5
13	Low	Within canopy	21.01	-0.61	-1.13	3.07	3.18	1.90	5
13	Medium	Within canopy	10.80	0.00	-1.38	2.60	1.80	0.99	5
43	High	Within canopy	6.72	1.86	-1.30	1.81	2.07	1.06	5
43	Low	Within canopy	14.95	2.26	2.42	2.06	2.17	1.12	5
43	Medium	Within canopy	7.17	0.76	0.64	1.24	1.21	0.58	5
62	High	Within canopy	7.80	2.62	0.64	1.54	1.79	0.96	5
62	Low	Within canopy	9.00	-0.63	-0.55	1.81	1.83	1.19	5
62	Medium	Within canopy	9.58	-0.14	-2.49	1.52	1.32	0.84	5
-2	Low	Canopy edge	27.00	0.45	2.23	1.44	1.69	1.49	5
-2	Medium	Canopy edge	27.25	0.83	3.12	1.37	1.32	1.56	5
13	Low	Canopy edge	30.17	1.96	2.90	1.40	1.73	1.24	5
13	Medium	Canopy edge	0.78	0.82	-0.33	0.98	1.00	0.49	5
43	Low	Canopy edge	9.17	-0.51	0.98	2.32	1.56	1.24	5
43	Medium	Canopy edge	3.09	-0.26	-0.07	1.37	0.68	0.43	5
62	Low	Canopy edge	14.97	0.21	0.42	2.05	2.03	1.24	5
62	Medium	Canopy edge	1.62	-0.58	-0.02	1.24	1.10	0.52	5

Table 4: Summary of data at 15 Hz.

Distance	Density	Position	Mean (cm s ⁻¹)			Std. Dev. (cm s ⁻¹)			Total duration
			u	v	w	u	v	w	
-2	High	Above canopy	39.43	1.86	6.51	1.64	1.50	1.40	5
-2	Low	Above canopy	40.25	1.45	-0.57	1.68	2.52	1.79	5
-2	Medium	Above canopy	41.54	1.03	4.31	1.39	1.65	1.30	5
13	High	Above canopy	48.04	2.24	10.63	1.67	2.09	2.10	5
13	Low	Above canopy	42.91	1.44	0.62	1.68	2.18	1.58	5
13	Medium	Above canopy	47.17	2.11	6.38	1.44	1.87	1.71	5
43	High	Above canopy	66.19	2.90	3.46	1.50	2.15	1.95	5
43	Low	Above canopy	50.38	0.37	-2.98	1.73	2.34	1.80	5
43	Medium	Above canopy	57.53	1.89	4.21	1.46	1.79	1.87	5
62	High	Above canopy	68.57	1.96	2.70	3.80	3.79	4.07	5
62	Low	Above canopy	52.49	-0.05	-4.44	1.64	1.99	1.59	5
62	Medium	Above canopy	61.46	0.96	2.95	1.37	1.77	1.87	5
-2	High	Within canopy	35.03	0.59	4.69	3.03	2.52	1.91	5
-2	Low	Within canopy	38.87	1.46	-1.92	2.26	2.44	2.01	5
-2	Medium	Within canopy	39.63	1.46	3.89	2.78	2.26	1.87	5
13	High	Within canopy	2.09	-3.13	1.30	2.13	2.31	0.99	5
13	Low	Within canopy	33.11	3.12	-1.38	4.20	3.89	2.53	5
13	Medium	Within canopy	2.65	-1.14	0.44	1.76	1.78	0.72	5
43	High	Within canopy	1.84	-0.23	-0.69	1.30	0.87	0.50	5
43	Low	Within canopy	10.08	0.57	1.89	2.64	1.97	0.98	5
43	Medium	Within canopy	11.23	1.06	-0.55	1.60	1.81	0.89	5
62	High	Within canopy	11.59	2.41	-0.83	2.00	2.36	1.25	5
62	Low	Within canopy	13.40	-1.83	-0.36	2.23	3.07	1.61	5
62	Medium	Within canopy	11.02	0.10	-1.82	1.94	2.04	0.98	5
-2	Low	Canopy edge	39.58	0.78	2.78	1.82	1.96	2.03	5
-2	Medium	Canopy edge	40.22	1.52	4.13	2.28	2.29	2.50	5
13	Low	Canopy edge	39.37	6.17	2.16	4.03	3.63	1.99	5
13	Medium	Canopy edge	9.03	-1.07	0.03	2.95	1.80	1.03	5
43	Low	Canopy edge	15.74	2.68	3.85	3.22	2.94	1.73	5
43	Medium	Canopy edge	8.53	0.46	1.20	1.95	1.75	0.94	5
62	Low	Canopy edge	18.63	-3.23	-0.65	3.43	3.22	2.33	5
62	Medium	Canopy edge	3.07	-0.76	-0.74	1.21	1.42	0.55	5
-2	High	Canopy edge	38.21	1.60	6.71	1.75	1.84	1.88	5
13	High	Canopy edge	10.14	5.54	4.28	3.55	2.90	1.75	5
43	High	Canopy edge	0.79	0.18	0.24	1.50	0.89	0.47	5
62	High	Canopy edge	7.88	-0.44	0.67	2.23	1.54	1.06	5

Table 5: Summary of data at 2 Hz.

Distance	Density	Position	Mean (cm s ⁻¹)			Std. Dev. (cm s ⁻¹)			Total duration
			u	v	w	u	v	w	
-2	Low	Canopy edge	4.90	-0.06	0.51	0.88	0.93	0.37	5
13	Low	Canopy edge	2.05	-0.50	0.52	1.56	0.87	0.40	5
43	Low	Canopy edge	2.42	0.04	0.41	1.08	0.94	0.45	5
62	Low	Canopy edge	0.48	-0.10	0.01	0.77	0.55	0.24	5
-2	High	Canopy edge	4.38	0.12	1.73	1.21	0.90	0.44	5
-2	Medium	Canopy edge	4.64	0.22	1.24	0.83	0.58	0.29	5
13	High	Canopy edge	2.26	-0.08	-0.16	0.91	0.45	0.29	5
13	Medium	Canopy edge	3.21	0.16	1.20	0.95	0.64	0.26	5
43	High	Canopy edge	2.33	-0.32	0.33	1.06	0.88	0.32	5
43	Medium	Canopy edge	2.47	0.21	-0.13	0.83	0.42	0.23	5
62	High	Canopy edge	1.07	-0.05	0.25	1.18	1.02	0.33	5
62	Medium	Canopy edge	2.69	0.42	0.01	0.74	0.75	0.24	5
-2	High	Above canopy	4.44	0.20	1.42	1.26	0.99	0.41	5
-2	Low	Above canopy	4.91	0.12	0.17	0.89	0.96	0.36	5
-2	Medium	Above canopy	4.74	0.31	1.15	0.81	0.68	0.26	5
13	Low	Above canopy	5.29	0.29	0.62	0.82	0.88	0.34	5
13	Medium	Above canopy	4.53	-0.43	0.44	0.70	0.78	0.29	5
43	High	Above canopy	5.18	-0.26	0.30	0.78	0.88	0.47	5
43	Low	Above canopy	6.39	0.19	-0.25	1.06	1.16	0.49	5
43	Medium	Above canopy	4.83	-0.01	0.61	0.81	0.82	0.35	5
62	High	Above canopy	5.04	0.01	0.22	0.86	0.80	0.50	5
62	Low	Above canopy	6.70	0.13	-0.29	0.88	1.03	0.59	5
62	Medium	Above canopy	3.93	0.13	0.05	0.90	0.93	0.46	5
-2	High	Within canopy	3.97	0.31	0.33	1.53	1.34	0.57	5
-2	Low	Within canopy	4.83	0.27	-0.02	0.79	1.03	0.35	5
-2	Medium	Within canopy	4.23	0.17	0.18	0.66	0.72	0.25	5
13	High	Within canopy	2.99	0.50	1.20	1.37	0.92	0.37	5
13	Low	Within canopy	5.19	0.36	-0.57	0.78	0.84	0.37	5
13	Medium	Within canopy	2.35	0.51	0.54	1.24	0.99	0.39	5
43	High	Within canopy	1.20	-0.03	0.06	1.14	0.99	0.36	5
43	Low	Within canopy	0.82	-0.30	0.24	0.52	0.62	0.24	5
43	Medium	Within canopy	1.21	0.45	0.30	1.08	1.05	0.29	5
62	High	Within canopy	0.80	0.15	0.30	0.92	0.60	0.26	5
62	Low	Within canopy	1.93	-0.19	0.11	0.94	0.71	0.33	5
62	Medium	Within canopy	1.34	0.98	-0.09	1.12	0.81	0.35	5

Table 6: Summary of data at 4 Hz.

Distance	Density	Position	Mean (cm s ⁻¹)			Std. Dev. (cm s ⁻¹)			Total duration
			u	v	w	u	v	w	
-2	Low	Canopy edge	10.78	0.08	1.10	0.93	0.81	0.56	5
-2	Medium	Canopy edge	10.21	0.48	2.16	0.82	0.73	0.51	5
13	Low	Canopy edge	10.69	0.41	0.58	1.28	1.47	0.71	5
13	Medium	Canopy edge	4.78	-0.20	0.37	1.05	1.03	0.43	5
43	Low	Canopy edge	6.43	0.42	1.33	1.60	1.40	1.01	5
43	Medium	Canopy edge	3.46	1.15	1.00	1.73	1.81	0.78	5
62	Low	Canopy edge	7.77	0.08	0.63	1.20	1.27	0.69	5
62	Medium	Canopy edge	6.10	-0.39	0.51	0.87	0.95	0.41	5
-2	High	Canopy edge	9.54	0.52	2.61	1.00	0.87	0.47	5
13	High	Canopy edge	2.02	1.10	0.62	1.43	1.39	0.64	5
43	High	Canopy edge	6.36	-0.55	0.20	0.92	0.97	0.43	5
62	High	Canopy edge	3.73	0.23	-0.06	1.06	1.18	0.40	5
-2	High	Above canopy	9.90	0.21	2.55	1.13	1.04	0.51	5
-2	Low	Above canopy	10.94	0.12	0.35	0.71	0.78	0.44	5
-2	Medium	Above canopy	10.40	0.42	1.78	0.67	0.77	0.41	5
13	High	Above canopy	13.93	0.48	5.19	0.89	0.85	0.46	5
13	Low	Above canopy	11.98	0.04	0.90	0.84	0.74	0.46	5
13	Medium	Above canopy	11.88	0.84	2.33	0.89	0.84	0.36	5
43	High	Above canopy	11.65	-0.57	0.45	1.66	1.91	1.03	5
43	Low	Above canopy	13.79	0.27	-0.26	1.38	1.46	0.72	5
43	Medium	Above canopy	13.72	0.42	1.76	1.20	1.12	0.64	5
62	High	Above canopy	11.87	0.42	0.23	1.39	1.77	0.89	5
62	Low	Above canopy	14.67	-0.06	-0.72	1.21	1.15	0.64	5
62	Medium	Above canopy	11.20	0.48	0.79	1.18	1.31	0.88	5
-2	High	Within canopy	8.89	0.20	1.15	1.23	1.42	0.53	5
-2	Low	Within canopy	10.81	0.34	-0.52	0.70	0.84	0.50	5
-2	Medium	Within canopy	9.76	0.13	0.85	0.87	0.90	0.44	5
13	High	Within canopy	6.78	0.63	2.39	1.52	1.41	0.66	5
13	Low	Within canopy	9.71	1.60	-0.67	1.32	1.78	0.64	5
13	Medium	Within canopy	5.49	1.88	2.26	1.96	1.82	0.79	5
43	High	Within canopy	1.54	-0.59	0.59	1.15	1.14	0.49	5
43	Low	Within canopy	5.71	0.70	0.91	1.66	1.30	0.75	5
43	Medium	Within canopy	3.59	-0.02	1.16	1.04	0.94	0.37	5
62	High	Within canopy	2.64	0.37	0.87	1.18	1.05	0.53	5
62	Low	Within canopy	0.30	-0.02	0.06	0.36	0.38	0.14	5
62	Medium	Within canopy	4.24	0.01	-1.23	1.00	1.07	0.50	5

Table 7: Summary of data at 6 Hz.

Distance	Density	Position	Mean (cm s ⁻¹)			Std. Dev. (cm s ⁻¹)			Total duration
			u	v	w	u	v	w	
-2	Low	Canopy edge	16.27	0.20	1.58	0.85	0.96	0.86	5
-2	Medium	Canopy edge	15.99	0.46	2.34	0.83	0.92	0.78	5
13	Low	Canopy edge	18.32	0.68	2.81	0.86	0.94	0.79	5
13	Medium	Canopy edge	6.13	-0.08	-0.42	1.85	0.91	0.54	5
43	Low	Canopy edge	12.00	0.78	1.51	1.61	1.69	1.09	5
43	Medium	Canopy edge	1.21	-0.26	0.22	1.06	0.43	0.27	5
62	Low	Canopy edge	11.87	-0.09	0.84	1.58	1.54	0.94	5
62	Medium	Canopy edge	7.56	1.23	1.00	0.93	0.94	0.45	5
-2	High	Canopy edge	14.94	0.71	3.93	1.13	1.12	0.83	5
13	High	Canopy edge	9.76	2.02	3.62	2.25	1.81	1.11	5
43	High	Canopy edge	2.65	3.39	3.29	1.99	2.07	1.12	5
62	High	Canopy edge	3.99	0.96	0.51	0.91	0.92	0.49	5
-2	High	Above canopy	15.47	0.54	3.32	0.97	1.02	0.57	5
-2	Low	Above canopy	16.60	1.39	-0.41	1.24	2.89	1.04	5
-2	Medium	Above canopy	16.27	0.53	2.44	0.77	0.85	0.50	5
13	High	Above canopy	20.39	1.16	6.67	0.97	0.92	0.78	5
13	Low	Above canopy	18.00	0.48	1.15	1.02	0.97	0.64	5
13	Medium	Above canopy	19.85	0.85	4.28	0.82	0.81	0.61	5
43	High	Above canopy	19.53	-0.34	0.80	2.65	2.82	1.53	5
43	Low	Above canopy	22.08	0.01	-0.21	1.26	1.26	0.85	5
43	Medium	Above canopy	23.99	0.93	3.42	1.20	1.05	0.83	5
62	High	Above canopy	21.81	0.03	-0.66	2.72	2.83	1.93	5
62	Low	Above canopy	23.01	0.09	-1.26	1.29	1.25	0.85	5
62	Medium	Above canopy	20.85	0.03	1.28	2.06	2.23	1.53	5
-2	High	Within canopy	13.97	0.16	1.79	1.36	1.35	0.78	5
-2	Low	Within canopy	16.29	0.12	-0.59	1.13	1.04	0.76	5
-2	Medium	Within canopy	15.52	0.08	1.44	1.08	1.14	0.88	5
13	High	Within canopy	9.58	0.10	3.19	2.29	2.10	1.01	5
13	Low	Within canopy	15.04	0.89	-0.52	2.08	2.11	1.22	5
13	Medium	Within canopy	1.74	-0.04	-0.17	1.16	0.65	0.35	5
43	High	Within canopy	2.08	0.04	0.64	1.10	0.95	0.50	5
43	Low	Within canopy	9.50	2.39	0.56	1.91	1.90	1.18	5
43	Medium	Within canopy	5.65	-0.20	1.30	1.04	0.95	0.49	5
62	High	Within canopy	4.11	0.39	0.63	1.17	1.38	0.60	5
62	Low	Within canopy	4.49	-0.37	0.21	1.37	1.57	0.68	5
62	Medium	Within canopy	7.21	-0.19	-0.50	1.01	1.24	0.68	5

Table 8: Summary of data at 8 Hz.

Distance	Density	Position	Mean (cm s ⁻¹)			Std. Dev. (cm s ⁻¹)			Total duration
			u	v	w	u	v	w	
-2	Low	Canopy edge	21.67	0.56	1.47	1.02	1.12	0.91	5
13	Low	Canopy edge	24.15	0.47	2.90	1.26	1.18	1.10	5
43	Low	Canopy edge	10.86	1.21	1.37	1.53	1.24	0.81	5
62	Low	Canopy edge	16.36	-0.14	0.74	2.23	2.14	1.67	5
-2	High	Canopy edge	20.09	0.89	4.33	1.33	1.23	1.33	5
13	High	Canopy edge	13.54	-0.12	4.56	2.85	2.23	1.22	5
43	High	Canopy edge	2.19	1.46	4.35	2.69	3.76	1.45	5
62	High	Canopy edge	6.91	1.20	1.34	0.97	0.87	0.56	5
-2	High	Above canopy	20.91	1.13	4.07	1.08	1.09	0.68	5
-2	Low	Above canopy	22.25	0.90	-0.24	1.77	3.13	1.29	5
-2	Medium	Above canopy	22.05	0.73	3.26	0.95	0.96	0.66	5
13	High	Above canopy	26.83	1.82	8.24	1.14	1.27	1.14	5
13	Low	Above canopy	23.90	1.32	0.84	1.31	1.94	0.87	5
13	Medium	Above canopy	26.28	1.16	4.67	1.05	1.17	0.81	5
43	High	Above canopy	28.93	0.56	0.82	3.53	3.49	2.21	5
43	Low	Above canopy	28.88	2.30	-1.19	1.56	4.10	1.22	5
43	Medium	Above canopy	32.57	1.22	3.68	0.97	1.12	0.82	5
62	High	Above canopy	32.26	-0.55	-1.54	3.29	3.09	2.27	5
62	Low	Above canopy	29.74	0.45	-1.97	1.29	1.92	1.09	5
62	Medium	Above canopy	31.82	0.52	2.35	2.91	2.44	2.25	5
-2	High	Within canopy	18.56	0.48	2.66	1.79	1.57	1.08	5
-2	Low	Within canopy	21.52	0.56	-0.32	1.12	1.48	1.20	5
-2	Medium	Within canopy	20.73	0.39	2.45	1.47	1.28	1.14	5
13	High	Within canopy	2.17	0.58	0.93	2.00	1.23	0.67	5
13	Low	Within canopy	12.86	-1.17	-2.35	2.94	2.76	1.59	5
13	Medium	Within canopy	5.38	-0.50	-0.80	1.98	1.61	0.63	5
43	High	Within canopy	4.07	-0.17	0.88	1.85	1.66	0.89	5
43	Low	Within canopy	12.56	1.70	2.13	1.86	1.66	1.03	5
43	Medium	Within canopy	5.57	1.12	0.99	1.14	0.94	0.47	5
62	High	Within canopy	5.71	1.27	0.46	1.21	1.55	0.74	5
62	Low	Within canopy	7.44	-0.03	0.25	1.33	1.23	0.77	5
62	Medium	Within canopy	9.20	-0.62	-2.21	1.30	1.53	1.01	5
-2	Medium	Canopy edge	21.59	0.59	2.47	1.06	1.12	0.93	5
13	Medium	Canopy edge	0.99	0.31	-0.18	0.91	0.84	0.37	5
43	Medium	Canopy edge	1.83	0.95	0.23	1.52	1.15	0.59	5
62	Medium	Canopy edge	6.52	-0.89	1.18	1.26	1.01	0.62	5

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	0.640	182	1298	0.117	0.184	128	0.128
High	II	Ejection	1.670	229	857	0.385	0.317	334	0.334
High	III	Inward interaction	1.010	141	681	0.143	0.152	202	0.202
High	IV	Sweep	1.680	210	929	0.355	0.346	336	0.336
Low	I	Outward interaction	0.845	470	2354	0.243	0.332	169	0.169
Low	II	Ejection	1.515	320	1149	0.297	0.291	303	0.303
Low	III	Inward interaction	1.155	243	836	0.172	0.161	231	0.231
Low	IV	Sweep	1.485	316	873	0.287	0.216	297	0.297
Medium	I	Outward interaction	0.700	135	754	0.204	0.287	140	0.140
Medium	II	Ejection	1.640	115	356	0.405	0.317	328	0.328
Medium	III	Inward interaction	1.110	30	174	0.072	0.105	222	0.222
Medium	IV	Sweep	1.550	96	346	0.319	0.291	310	0.310

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	0.520	483	2280	0.201	0.257	104	0.104
High	II	Ejection	1.740	278	758	0.388	0.286	348	0.348
High	III	Inward interaction	1.105	135	456	0.120	0.109	221	0.221
High	IV	Sweep	1.635	223	977	0.292	0.347	327	0.327
Low	I	Outward interaction	0.670	193	1049	0.199	0.262	134	0.134
Low	II	Ejection	1.695	155	541	0.405	0.341	339	0.339
Low	III	Inward interaction	0.995	37	308	0.057	0.114	199	0.199
Low	IV	Sweep	1.640	135	462	0.340	0.282	328	0.328
Medium	I	Outward interaction	0.540	135	721	0.145	0.201	108	0.108
Medium	II	Ejection	1.750	118	394	0.411	0.355	350	0.350
Medium	III	Inward interaction	1.060	32	195	0.067	0.107	212	0.212
Medium	IV	Sweep	1.650	115	397	0.376	0.337	330	0.330

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	0.560	239	1533	0.197	0.281	112	0.112
High	II	Ejection	1.850	134	519	0.365	0.314	370	0.370
High	III	Inward interaction	0.950	46	301	0.065	0.094	190	0.190
High	IV	Sweep	1.640	154	581	0.373	0.312	328	0.328
Low	I	Outward interaction	0.625	183	1024	0.133	0.177	125	0.125
Low	II	Ejection	1.780	209	722	0.430	0.355	356	0.356
Low	III	Inward interaction	0.790	69	528	0.063	0.115	158	0.158
Low	IV	Sweep	1.805	179	710	0.374	0.353	361	0.361
Medium	I	Outward interaction	0.640	113	537	0.144	0.209	128	0.128
Medium	II	Ejection	1.875	113	319	0.421	0.365	375	0.375
Medium	III	Inward interaction	0.830	26	138	0.043	0.070	166	0.166
Medium	IV	Sweep	1.655	119	353	0.393	0.356	331	0.331

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	0.625	276	1013	0.207	0.215	125	0.125
High	II	Ejection	1.730	174	545	0.362	0.321	346	0.346
High	III	Inward interaction	1.105	58	356	0.077	0.134	221	0.221
High	IV	Sweep	1.540	192	631	0.354	0.330	308	0.308
Low	I	Outward interaction	0.575	322	1734	0.183	0.216	115	0.115
Low	II	Ejection	1.775	206	843	0.361	0.325	355	0.355
Low	III	Inward interaction	0.915	109	698	0.099	0.139	183	0.183
Low	IV	Sweep	1.735	208	851	0.357	0.320	347	0.347
Medium	I	Outward interaction	0.795	89	553	0.114	0.176	159	0.159
Medium	II	Ejection	1.690	162	504	0.440	0.341	338	0.338
Medium	III	Inward interaction	0.905	63	429	0.093	0.155	181	0.181
Medium	IV	Sweep	1.610	136	507	0.354	0.327	322	0.322

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 fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	0.775	233	1390	0.156	0.197	155	0.155
High	II	Ejection	1.585	303	959	0.416	0.277	317	0.317
High	III	Inward interaction	1.155	92	799	0.092	0.168	231	0.231
High	IV	Sweep	1.485	260	1319	0.335	0.358	297	0.297
Low	I	Outward interaction	0.815	220	1135	0.163	0.238	163	0.163
Low	II	Ejection	1.620	277	778	0.407	0.324	324	0.324
Low	III	Inward interaction	1.080	129	432	0.127	0.120	216	0.216
Low	IV	Sweep	1.485	226	831	0.304	0.318	297	0.297
Medium	I	Outward interaction	0.550	229	1066	0.231	0.268	110	0.110
Medium	II	Ejection	1.660	120	378	0.364	0.287	332	0.332
Medium	III	Inward interaction	1.300	40	234	0.096	0.139	260	0.260
Medium	IV	Sweep	1.490	114	449	0.310	0.306	298	0.298

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	0.675	366	1849	0.281	0.323	135	0.135
High	II	Ejection	1.670	170	598	0.323	0.259	334	0.334
High	III	Inward interaction	1.345	89	432	0.137	0.151	269	0.269
High	IV	Sweep	1.310	174	785	0.260	0.267	262	0.262
Low	I	Outward interaction	0.620	277	1183	0.183	0.228	124	0.124
Low	II	Ejection	1.575	258	792	0.433	0.387	315	0.315
Low	III	Inward interaction	1.010	61	336	0.066	0.106	202	0.202
Low	IV	Sweep	1.795	167	501	0.319	0.279	359	0.359
Medium	I	Outward interaction	0.510	180	963	0.174	0.248	102	0.102
Medium	II	Ejection	1.695	124	419	0.396	0.359	339	0.339
Medium	III	Inward interaction	1.100	29	162	0.061	0.090	220	0.220
Medium	IV	Sweep	1.695	115	354	0.369	0.303	339	0.339

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	0.505	153	1008	0.086	0.152	101	0.101
High	II	Ejection	1.690	238	723	0.451	0.364	338	0.338
High	III	Inward interaction	1.025	32	287	0.037	0.088	205	0.205
High	IV	Sweep	1.780	214	749	0.426	0.397	356	0.356
Low	I	Outward interaction	0.755	623	2990	0.326	0.356	151	0.151
Low	II	Ejection	1.420	333	1498	0.328	0.336	284	0.284
Low	III	Inward interaction	1.315	96	515	0.088	0.107	263	0.263
Low	IV	Sweep	1.510	247	843	0.258	0.201	302	0.302
Medium	I	Outward interaction	0.585	136	575	0.147	0.181	117	0.117
Medium	II	Ejection	1.710	130	371	0.410	0.341	342	0.342
Medium	III	Inward interaction	1.005	28	213	0.053	0.115	201	0.201
Medium	IV	Sweep	1.700	124	398	0.389	0.363	340	0.340

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	0.570	370	1767	0.223	0.257	114	0.114
High	II	Ejection	1.635	205	707	0.355	0.295	327	0.327
High	III	Inward interaction	1.390	53	380	0.079	0.135	278	0.278
High	IV	Sweep	1.405	230	876	0.343	0.314	281	0.281
Low	I	Outward interaction	0.700	361	1594	0.197	0.196	140	0.140
Low	II	Ejection	1.765	241	866	0.331	0.268	353	0.353
Low	III	Inward interaction	1.175	128	754	0.117	0.155	235	0.235
Low	IV	Sweep	1.360	334	1596	0.354	0.381	272	0.272
Medium	I	Outward interaction	1.190	116	435	0.154	0.211	238	0.238
Medium	II	Ejection	1.670	193	428	0.359	0.291	334	0.334
Medium	III	Inward interaction	1.060	128	372	0.151	0.160	212	0.212
Medium	IV	Sweep	1.080	280	768	0.337	0.338	216	0.216

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 fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	0.605	517	2265	0.218	0.201	121	0.121
High	II	Ejection	1.550	310	1186	0.336	0.270	310	0.310
High	III	Inward interaction	1.290	160	998	0.144	0.189	258	0.258
High	IV	Sweep	1.555	278	1491	0.302	0.340	311	0.311
Low	I	Outward interaction	0.675	1231	3809	0.292	0.258	135	0.135
Low	II	Ejection	1.455	553	1786	0.283	0.261	291	0.291
Low	III	Inward interaction	1.230	327	1404	0.141	0.174	246	0.246
Low	IV	Sweep	1.640	491	1860	0.283	0.307	328	0.328
Medium	I	Outward interaction	0.675	431	2544	0.240	0.285	135	0.135
Medium	II	Ejection	1.700	257	1089	0.360	0.307	340	0.340
Medium	III	Inward interaction	0.955	154	832	0.121	0.132	191	0.191
Medium	IV	Sweep	1.670	202	998	0.279	0.276	334	0.334

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	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	0.625	345	3102	0.135	0.216	125	0.125
High	II	Ejection	1.600	408	1511	0.409	0.269	320	0.320
High	III	Inward interaction	1.060	209	1334	0.139	0.157	212	0.212
High	IV	Sweep	1.715	295	1878	0.317	0.358	343	0.343
Low	I	Outward interaction	0.615	993	2677	0.358	0.303	123	0.123
Low	II	Ejection	1.100	543	1577	0.349	0.319	220	0.220
Low	III	Inward interaction	1.760	82	361	0.085	0.117	352	0.352
Low	IV	Sweep	1.525	233	928	0.208	0.261	305	0.305
Medium	I	Outward interaction	0.715	320	2086	0.157	0.205	143	0.143
Medium	II	Ejection	1.790	313	1238	0.384	0.304	358	0.358
Medium	III	Inward interaction	0.835	194	1299	0.111	0.149	167	0.167
Medium	IV	Sweep	1.660	305	1500	0.348	0.342	332	0.332

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	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	0.455	178	949	0.040	0.069	91	0.091
High	II	Ejection	1.820	525	1314	0.470	0.383	364	0.364
High	III	Inward interaction	0.925	99	748	0.045	0.111	185	0.185
High	IV	Sweep	1.800	503	1515	0.445	0.437	360	0.360
Low	I	Outward interaction	0.980	104	555	0.423	0.342	196	0.196
Low	II	Ejection	1.145	38	208	0.180	0.150	229	0.229
Low	III	Inward interaction	1.560	32	314	0.207	0.308	312	0.312
Low	IV	Sweep	1.315	35	242	0.189	0.200	263	0.263
Medium	I	Outward interaction	0.510	310	2375	0.130	0.218	102	0.102
Medium	II	Ejection	1.920	273	927	0.432	0.321	384	0.384
Medium	III	Inward interaction	0.845	80	614	0.056	0.094	169	0.169
Medium	IV	Sweep	1.725	268	1179	0.382	0.367	345	0.345

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
Low	I	Outward interaction	0.410	189	1053	0.083	0.134	82	0.082
Low	II	Ejection	1.935	202	489	0.422	0.295	387	0.387
Low	III	Inward interaction	0.835	83	514	0.074	0.134	167	0.167
Low	IV	Sweep	1.820	215	772	0.421	0.437	364	0.364
Medium	I	Outward interaction	0.640	271	1837	0.177	0.247	128	0.128
Medium	II	Ejection	1.620	237	889	0.391	0.302	324	0.324
Medium	III	Inward interaction	0.980	91	753	0.090	0.155	196	0.196
Medium	IV	Sweep	1.760	191	803	0.342	0.296	352	0.352

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	0.725	253	1778	0.138	0.210	145	0.145
High	II	Ejection	1.810	270	1106	0.368	0.326	362	0.362
High	III	Inward interaction	0.930	171	832	0.119	0.126	186	0.186
High	IV	Sweep	1.535	325	1357	0.375	0.339	307	0.307
Low	I	Outward interaction	0.680	267	1415	0.142	0.201	136	0.136
Low	II	Ejection	1.670	327	918	0.427	0.320	334	0.334
Low	III	Inward interaction	0.955	124	790	0.092	0.157	191	0.191
Low	IV	Sweep	1.695	256	912	0.339	0.322	339	0.339
Medium	I	Outward interaction	0.560	141	778	0.136	0.188	112	0.112
Medium	II	Ejection	1.895	128	419	0.418	0.342	379	0.379
Medium	III	Inward interaction	0.905	38	258	0.060	0.101	181	0.181
Medium	IV	Sweep	1.640	136	523	0.386	0.370	328	0.328

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	0.840	290	1793	0.201	0.331	168	0.168
High	II	Ejection	1.835	208	654	0.315	0.264	367	0.367
High	III	Inward interaction	1.020	194	589	0.164	0.132	204	0.204
High	IV	Sweep	1.305	297	949	0.320	0.272	261	0.261
Low	I	Outward interaction	0.590	260	1830	0.168	0.265	118	0.118
Low	II	Ejection	1.860	194	668	0.396	0.305	372	0.372
Low	III	Inward interaction	0.995	88	474	0.096	0.116	199	0.199
Low	IV	Sweep	1.555	199	821	0.340	0.314	311	0.311
Medium	I	Outward interaction	0.775	79	465	0.122	0.182	155	0.155
Medium	II	Ejection	1.605	130	436	0.418	0.354	321	0.321
Medium	III	Inward interaction	1.055	46	266	0.098	0.142	211	0.211
Medium	IV	Sweep	1.565	115	408	0.362	0.323	313	0.313

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	0.610	435	1657	0.202	0.203	122	0.122
High	II	Ejection	1.700	259	850	0.334	0.290	340	0.340
High	III	Inward interaction	1.260	71	561	0.069	0.142	252	0.252
High	IV	Sweep	1.430	363	1278	0.395	0.366	286	0.286
Low	I	Outward interaction	0.725	221	932	0.193	0.219	145	0.145
Low	II	Ejection	1.580	210	662	0.400	0.338	316	0.316
Low	III	Inward interaction	0.950	67	386	0.077	0.118	190	0.190
Low	IV	Sweep	1.745	156	575	0.329	0.325	349	0.349
Medium	I	Outward interaction	0.510	165	712	0.144	0.184	102	0.102
Medium	II	Ejection	1.870	123	365	0.393	0.345	374	0.374
Medium	III	Inward interaction	0.935	28	187	0.046	0.088	187	0.187
Medium	IV	Sweep	1.685	145	450	0.418	0.383	337	0.337

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	0.685	539	1985	0.208	0.224	137	0.137
High	II	Ejection	1.395	532	1443	0.418	0.332	279	0.279
High	III	Inward interaction	1.275	125	643	0.090	0.135	255	0.255
High	IV	Sweep	1.645	306	1138	0.284	0.309	329	0.329
Low	I	Outward interaction	0.615	225	1090	0.165	0.197	123	0.123
Low	II	Ejection	1.745	181	584	0.376	0.299	349	0.349
Low	III	Inward interaction	0.945	90	527	0.101	0.146	189	0.189
Low	IV	Sweep	1.695	178	721	0.358	0.358	339	0.339
Medium	I	Outward interaction	0.740	204	773	0.184	0.186	148	0.148
Medium	II	Ejection	1.590	206	644	0.400	0.332	318	0.318
Medium	III	Inward interaction	0.995	62	405	0.075	0.131	199	0.199
Medium	IV	Sweep	1.675	167	647	0.341	0.351	335	0.335

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	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	0.510	947	3284	0.306	0.282	102	0.102
High	II	Ejection	1.450	363	1074	0.334	0.262	290	0.290
High	III	Inward interaction	1.255	120	793	0.096	0.168	251	0.251
High	IV	Sweep	1.785	233	957	0.264	0.288	357	0.357
Low	I	Outward interaction	0.645	285	1304	0.143	0.157	129	0.129
Low	II	Ejection	1.550	293	1049	0.352	0.303	310	0.310
Low	III	Inward interaction	1.080	123	783	0.103	0.158	216	0.216
Low	IV	Sweep	1.725	300	1189	0.402	0.382	345	0.345
Medium	I	Outward interaction	0.610	120	692	0.124	0.171	122	0.122
Medium	II	Ejection	1.770	132	440	0.399	0.316	354	0.354
Medium	III	Inward interaction	0.930	52	376	0.083	0.142	186	0.186
Medium	IV	Sweep	1.690	137	540	0.394	0.371	338	0.338

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	0.700	225	1094	0.180	0.214	140	0.140
High	II	Ejection	1.455	255	837	0.424	0.340	291	0.291
High	III	Inward interaction	1.100	64	441	0.081	0.135	220	0.220
High	IV	Sweep	1.745	158	640	0.315	0.311	349	0.349
Low	I	Outward interaction	0.745	244	1493	0.146	0.224	149	0.149
Low	II	Ejection	1.815	258	854	0.376	0.312	363	0.363
Low	III	Inward interaction	0.885	195	855	0.138	0.153	177	0.177
Low	IV	Sweep	1.555	272	993	0.340	0.311	311	0.311
Medium	I	Outward interaction	0.665	160	699	0.183	0.199	133	0.133
Medium	II	Ejection	1.605	128	442	0.353	0.305	321	0.321
Medium	III	Inward interaction	1.080	52	328	0.097	0.152	216	0.216
Medium	IV	Sweep	1.650	129	486	0.366	0.344	330	0.330

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	0.675	254	1102	0.276	0.259	135	0.135
High	II	Ejection	1.400	140	568	0.314	0.277	280	0.280
High	III	Inward interaction	1.405	41	374	0.092	0.183	281	0.281
High	IV	Sweep	1.520	130	530	0.318	0.281	304	0.304
Low	I	Outward interaction	0.590	209	1553	0.102	0.148	118	0.118
Low	II	Ejection	1.760	289	1059	0.420	0.300	352	0.352
Low	III	Inward interaction	1.025	120	892	0.102	0.147	205	0.205
Low	IV	Sweep	1.625	280	1549	0.376	0.405	325	0.325
Medium	I	Outward interaction	0.620	108	697	0.137	0.193	124	0.124
Medium	II	Ejection	1.855	105	413	0.399	0.343	371	0.371
Medium	III	Inward interaction	0.890	36	274	0.065	0.109	178	0.178
Medium	IV	Sweep	1.635	120	485	0.399	0.355	327	0.327

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	0.995	148	595	0.147	0.174	199	0.199
High	II	Ejection	1.475	173	583	0.256	0.253	295	0.295
High	III	Inward interaction	0.960	170	810	0.164	0.228	192	0.192
High	IV	Sweep	1.570	275	748	0.433	0.345	314	0.314
Low	I	Outward interaction	1.085	298	1146	0.204	0.275	217	0.217
Low	II	Ejection	1.465	464	1214	0.427	0.393	293	0.293
Low	III	Inward interaction	0.985	135	554	0.084	0.120	197	0.197
Low	IV	Sweep	1.465	310	656	0.285	0.212	293	0.293
Medium	I	Outward interaction	0.700	84	403	0.108	0.137	140	0.140
Medium	II	Ejection	1.815	133	471	0.439	0.416	363	0.363
Medium	III	Inward interaction	0.785	40	262	0.057	0.100	157	0.157
Medium	IV	Sweep	1.700	128	420	0.396	0.347	340	0.340

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	0.480	454	2076	0.163	0.184	96	0.096
High	II	Ejection	1.660	333	1005	0.414	0.308	332	0.332
High	III	Inward interaction	1.130	74	544	0.063	0.113	226	0.226
High	IV	Sweep	1.730	279	1234	0.361	0.394	346	0.346
Low	I	Outward interaction	0.640	268	1376	0.147	0.178	128	0.128
Low	II	Ejection	1.860	237	953	0.380	0.359	372	0.372
Low	III	Inward interaction	0.890	77	505	0.059	0.091	178	0.178
Low	IV	Sweep	1.610	300	1136	0.415	0.371	322	0.322
Medium	I	Outward interaction	0.695	218	1416	0.172	0.233	139	0.139
Medium	II	Ejection	1.685	181	669	0.347	0.267	337	0.337
Medium	III	Inward interaction	1.090	100	587	0.124	0.152	218	0.218
Medium	IV	Sweep	1.530	206	959	0.357	0.348	306	0.306

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	0.770	718	2638	0.305	0.312	154	0.154
High	II	Ejection	1.460	421	1379	0.339	0.309	292	0.292
High	III	Inward interaction	1.230	150	711	0.102	0.134	246	0.246
High	IV	Sweep	1.540	300	1035	0.255	0.245	308	0.308
Low	I	Outward interaction	0.690	297	1301	0.272	0.264	138	0.138
Low	II	Ejection	1.645	137	644	0.299	0.312	329	0.329
Low	III	Inward interaction	1.195	69	402	0.109	0.141	239	0.239
Low	IV	Sweep	1.470	164	652	0.320	0.282	294	0.294
Medium	I	Outward interaction	0.570	410	2364	0.181	0.225	114	0.114
Medium	II	Ejection	1.785	291	1091	0.402	0.325	357	0.357
Medium	III	Inward interaction	0.875	99	664	0.067	0.097	175	0.175
Medium	IV	Sweep	1.770	256	1200	0.350	0.354	354	0.354

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	0.870	430	3033	0.221	0.302	174	0.174
High	II	Ejection	1.920	253	1232	0.287	0.271	384	0.384
High	III	Inward interaction	0.965	332	1352	0.189	0.149	193	0.193
High	IV	Sweep	1.245	412	1947	0.303	0.278	249	0.249
Low	I	Outward interaction	0.830	56	438	0.167	0.239	166	0.166
Low	II	Ejection	1.525	67	321	0.369	0.322	305	0.305
Low	III	Inward interaction	1.025	25	220	0.091	0.149	205	0.205
Low	IV	Sweep	1.620	64	273	0.373	0.290	324	0.324
Medium	I	Outward interaction	0.555	381	2443	0.164	0.225	111	0.111
Medium	II	Ejection	1.805	281	974	0.393	0.291	361	0.361
Medium	III	Inward interaction	0.910	167	933	0.118	0.141	182	0.182
Medium	IV	Sweep	1.730	242	1198	0.325	0.343	346	0.346

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	0.735	393	2550	0.146	0.201	147	0.147
High	II	Ejection	1.880	360	1382	0.344	0.279	376	0.376
High	III	Inward interaction	0.940	158	1163	0.076	0.117	188	0.188
High	IV	Sweep	1.445	592	2587	0.434	0.402	289	0.289
Low	I	Outward interaction	0.560	405	1813	0.172	0.188	112	0.112
Low	II	Ejection	1.775	278	920	0.375	0.303	355	0.355
Low	III	Inward interaction	1.045	83	601	0.066	0.117	209	0.209
Low	IV	Sweep	1.620	315	1304	0.388	0.392	324	0.324
Medium	I	Outward interaction	0.610	337	1917	0.148	0.178	122	0.122
Medium	II	Ejection	1.730	331	1070	0.412	0.281	346	0.346
Medium	III	Inward interaction	0.910	160	1019	0.105	0.141	182	0.182
Medium	IV	Sweep	1.750	266	1502	0.335	0.400	350	0.350

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	1.045	927	2955	0.162	0.194	209	0.209
High	II	Ejection	1.510	1429	3601	0.361	0.341	302	0.302
High	III	Inward interaction	0.995	868	2749	0.145	0.172	199	0.199
High	IV	Sweep	1.450	1369	3215	0.332	0.293	290	0.290
Low	I	Outward interaction	1.290	1434	3242	0.276	0.235	258	0.258
Low	II	Ejection	1.080	1513	3773	0.243	0.229	216	0.216
Low	III	Inward interaction	1.375	1190	3459	0.244	0.267	275	0.275
Low	IV	Sweep	1.255	1268	3808	0.237	0.269	251	0.251
Medium	I	Outward interaction	1.025	1493	3280	0.211	0.222	205	0.205
Medium	II	Ejection	1.260	1778	3499	0.308	0.291	252	0.252
Medium	III	Inward interaction	1.275	1107	2469	0.194	0.208	255	0.255
Medium	IV	Sweep	1.440	1449	2929	0.287	0.279	288	0.288

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	1.230	3208	11250	0.298	0.339	246	0.246
High	II	Ejection	1.235	2477	7770	0.231	0.235	247	0.247
High	III	Inward interaction	1.420	2436	6794	0.261	0.237	284	0.284
High	IV	Sweep	1.115	2483	6894	0.209	0.189	223	0.223
Low	I	Outward interaction	1.175	821	3037	0.170	0.220	235	0.235
Low	II	Ejection	1.400	1262	3409	0.312	0.295	280	0.280
Low	III	Inward interaction	1.005	1237	3378	0.219	0.209	201	0.201
Low	IV	Sweep	1.420	1192	3148	0.299	0.276	284	0.284
Medium	I	Outward interaction	1.035	208	866	0.132	0.162	207	0.207
Medium	II	Ejection	1.500	371	1106	0.341	0.300	300	0.300
Medium	III	Inward interaction	1.040	240	1111	0.153	0.209	208	0.208
Medium	IV	Sweep	1.425	428	1274	0.374	0.329	285	0.285

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	1.440	2802	11134	0.305	0.305	288	0.288
High	II	Ejection	1.055	2790	10863	0.222	0.218	211	0.211
High	III	Inward interaction	1.425	2716	10377	0.292	0.281	285	0.285
High	IV	Sweep	1.080	2211	9498	0.180	0.195	216	0.216
Low	I	Outward interaction	1.190	1100	4028	0.140	0.205	238	0.238
Low	II	Ejection	1.475	1873	4118	0.294	0.260	295	0.295
Low	III	Inward interaction	1.115	2360	5131	0.280	0.245	223	0.223
Low	IV	Sweep	1.220	2195	5578	0.285	0.291	244	0.244
Medium	I	Outward interaction	0.910	472	1598	0.214	0.232	182	0.182
Medium	II	Ejection	1.505	412	1369	0.308	0.328	301	0.301
Medium	III	Inward interaction	1.175	176	733	0.103	0.137	235	0.235
Medium	IV	Sweep	1.410	535	1347	0.375	0.303	282	0.282

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	0.870	376	1101	0.152	0.148	174	0.174
High	II	Ejection	1.660	440	1359	0.340	0.347	332	0.332
High	III	Inward interaction	0.920	207	947	0.088	0.134	184	0.184
High	IV	Sweep	1.550	582	1554	0.420	0.371	310	0.310
Low	I	Outward interaction	1.365	1486	4454	0.252	0.247	273	0.273
Low	II	Ejection	1.180	1530	4778	0.224	0.229	236	0.236
Low	III	Inward interaction	1.225	1721	5181	0.262	0.258	245	0.245
Low	IV	Sweep	1.230	1708	5288	0.261	0.265	246	0.246
Medium	I	Outward interaction	0.575	93	955	0.020	0.073	115	0.115
Medium	II	Ejection	1.940	644	1682	0.465	0.434	388	0.388
Medium	III	Inward interaction	0.545	101	931	0.021	0.067	109	0.109
Medium	IV	Sweep	1.940	683	1652	0.494	0.426	388	0.388

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	1.010	766	2057	0.180	0.179	202	0.202
High	II	Ejection	1.400	1081	2553	0.352	0.308	280	0.280
High	III	Inward interaction	1.185	545	2341	0.150	0.239	237	0.237
High	IV	Sweep	1.405	974	2274	0.318	0.275	281	0.281
Low	I	Outward interaction	1.110	1902	6387	0.218	0.196	222	0.222
Low	II	Ejection	1.470	1865	6800	0.283	0.276	294	0.294
Low	III	Inward interaction	1.070	2036	7826	0.225	0.231	214	0.214
Low	IV	Sweep	1.350	1960	8001	0.273	0.298	270	0.270
Medium	I	Outward interaction	0.890	557	1638	0.164	0.175	178	0.178
Medium	II	Ejection	1.475	720	1777	0.351	0.315	295	0.295
Medium	III	Inward interaction	1.105	399	1446	0.146	0.192	221	0.221
Medium	IV	Sweep	1.530	672	1731	0.340	0.318	306	0.306

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	1.180	654	2489	0.151	0.215	236	0.236
High	II	Ejection	1.275	1490	3505	0.372	0.327	255	0.255
High	III	Inward interaction	1.125	922	2374	0.203	0.196	225	0.225
High	IV	Sweep	1.420	986	2519	0.274	0.262	284	0.284
Low	I	Outward interaction	1.140	1002	3488	0.195	0.196	228	0.228
Low	II	Ejection	1.450	1169	3989	0.289	0.285	290	0.290
Low	III	Inward interaction	1.205	1018	3920	0.209	0.233	241	0.241
Low	IV	Sweep	1.205	1501	4826	0.308	0.286	241	0.241
Medium	I	Outward interaction	1.105	899	2331	0.232	0.232	221	0.221
Medium	II	Ejection	1.430	920	2397	0.307	0.309	286	0.286
Medium	III	Inward interaction	1.110	607	1833	0.157	0.183	222	0.222
Medium	IV	Sweep	1.355	956	2255	0.303	0.275	271	0.271

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	0.960	5117	15965	0.121	0.146	192	0.192
High	II	Ejection	1.565	10989	25340	0.423	0.377	313	0.313
High	III	Inward interaction	0.920	3724	14665	0.084	0.128	184	0.184
High	IV	Sweep	1.555	9695	23558	0.371	0.349	311	0.311
Low	I	Outward interaction	1.335	824	3962	0.198	0.238	267	0.267
Low	II	Ejection	1.175	1524	4666	0.323	0.247	235	0.235
Low	III	Inward interaction	1.080	1003	4544	0.196	0.221	216	0.216
Low	IV	Sweep	1.410	1112	4624	0.283	0.294	282	0.282
Medium	I	Outward interaction	1.060	1012	2641	0.267	0.249	212	0.212
Medium	II	Ejection	1.400	851	2468	0.296	0.308	280	0.280
Medium	III	Inward interaction	1.260	553	1853	0.173	0.208	252	0.252
Medium	IV	Sweep	1.280	830	2062	0.264	0.235	256	0.256

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	0.885	6242	21743	0.085	0.136	177	0.177
High	II	Ejection	1.560	18470	35112	0.446	0.386	312	0.312
High	III	Inward interaction	0.800	6479	22200	0.080	0.125	160	0.160
High	IV	Sweep	1.755	14322	28500	0.389	0.353	351	0.351
Low	I	Outward interaction	0.965	645	2691	0.137	0.188	193	0.193
Low	II	Ejection	1.340	1220	3276	0.359	0.319	268	0.268
Low	III	Inward interaction	1.185	682	2405	0.177	0.207	237	0.237
Low	IV	Sweep	1.510	987	2612	0.327	0.286	302	0.302
Medium	I	Outward interaction	1.040	1007	2595	0.186	0.198	208	0.208
Medium	II	Ejection	1.265	1821	3891	0.409	0.361	253	0.253
Medium	III	Inward interaction	1.100	715	2397	0.140	0.193	220	0.220
Medium	IV	Sweep	1.595	937	2121	0.265	0.248	319	0.319

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	0.975	1134	4746	0.136	0.192	195	0.195
High	II	Ejection	1.460	2590	6743	0.466	0.409	292	0.292
High	III	Inward interaction	0.845	995	3759	0.104	0.132	169	0.169
High	IV	Sweep	1.720	1386	3734	0.294	0.267	344	0.344
Low	I	Outward interaction	1.140	1175	3134	0.181	0.205	228	0.228
Low	II	Ejection	1.465	1920	4245	0.380	0.357	293	0.293
Low	III	Inward interaction	0.940	931	2773	0.118	0.150	188	0.188
Low	IV	Sweep	1.455	1632	3438	0.321	0.287	291	0.291
Medium	I	Outward interaction	1.230	871	2682	0.133	0.167	246	0.246
Medium	II	Ejection	1.395	2499	5397	0.434	0.381	279	0.279
Medium	III	Inward interaction	0.870	1216	3787	0.132	0.167	174	0.174
Medium	IV	Sweep	1.505	1610	3759	0.301	0.286	301	0.301

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	1.080	1026	3290	0.297	0.300	216	0.216
High	II	Ejection	1.465	711	2394	0.280	0.296	293	0.293
High	III	Inward interaction	1.185	437	1596	0.139	0.160	237	0.237
High	IV	Sweep	1.270	833	2279	0.284	0.244	254	0.254
Low	I	Outward interaction	1.005	2404	8999	0.129	0.157	201	0.201
Low	II	Ejection	1.560	3711	11448	0.310	0.310	312	0.312
Low	III	Inward interaction	1.030	2633	10179	0.145	0.182	206	0.206
Low	IV	Sweep	1.405	5523	14457	0.415	0.352	281	0.281
Medium	I	Outward interaction	0.960	1346	4726	0.148	0.166	192	0.192
Medium	II	Ejection	1.425	2358	6574	0.385	0.342	285	0.285
Medium	III	Inward interaction	1.005	772	4495	0.089	0.165	201	0.201
Medium	IV	Sweep	1.610	2049	5572	0.378	0.328	322	0.322

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	1.060	1051	4421	0.176	0.216	212	0.212
High	II	Ejection	1.335	1639	4371	0.346	0.269	267	0.267
High	III	Inward interaction	1.245	731	3414	0.144	0.196	249	0.249
High	IV	Sweep	1.360	1547	5087	0.333	0.319	272	0.272
Low	I	Outward interaction	1.400	1410	5177	0.262	0.283	280	0.280
Low	II	Ejection	1.195	1322	4168	0.210	0.195	239	0.239
Low	III	Inward interaction	1.370	1707	5531	0.311	0.296	274	0.274
Low	IV	Sweep	1.035	1584	5572	0.218	0.226	207	0.207
Medium	I	Outward interaction	1.125	353	1393	0.172	0.187	225	0.225
Medium	II	Ejection	1.375	494	1584	0.294	0.261	275	0.275
Medium	III	Inward interaction	1.140	416	1880	0.205	0.256	228	0.228
Medium	IV	Sweep	1.360	558	1816	0.329	0.296	272	0.272

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	1.265	855	2980	0.236	0.233	253	0.253
High	II	Ejection	1.205	1159	3944	0.304	0.294	241	0.241
High	III	Inward interaction	1.205	853	2789	0.224	0.208	241	0.241
High	IV	Sweep	1.325	820	3227	0.237	0.265	265	0.265
Low	I	Outward interaction	1.085	814	3274	0.121	0.177	217	0.217
Low	II	Ejection	1.570	1469	3714	0.317	0.290	314	0.314
Low	III	Inward interaction	0.945	1218	3876	0.158	0.182	189	0.189
Low	IV	Sweep	1.400	2103	5030	0.404	0.351	280	0.280
Medium	I	Outward interaction	1.070	750	2576	0.207	0.233	214	0.214
Medium	II	Ejection	1.350	845	2350	0.294	0.268	270	0.270
Medium	III	Inward interaction	1.175	705	2243	0.214	0.222	235	0.235
Medium	IV	Sweep	1.405	789	2339	0.286	0.277	281	0.281

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	1.010	1228	3434	0.177	0.201	202	0.202
High	II	Ejection	1.320	1696	3898	0.320	0.298	264	0.264
High	III	Inward interaction	1.250	1052	2998	0.188	0.217	250	0.250
High	IV	Sweep	1.420	1553	3459	0.315	0.284	284	0.284
Low	I	Outward interaction	1.255	1529	5418	0.201	0.220	251	0.251
Low	II	Ejection	1.480	1778	5317	0.275	0.255	296	0.296
Low	III	Inward interaction	1.120	2325	7582	0.273	0.275	224	0.224
Low	IV	Sweep	1.145	2095	6729	0.251	0.250	229	0.229
Medium	I	Outward interaction	1.065	1194	3472	0.230	0.233	213	0.213
Medium	II	Ejection	1.290	1232	3400	0.287	0.276	258	0.258
Medium	III	Inward interaction	1.310	863	2824	0.204	0.233	262	0.262
Medium	IV	Sweep	1.335	1156	3065	0.279	0.258	267	0.267

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	1.155	2085	5358	0.211	0.214	231	0.231
High	II	Ejection	1.485	2229	5577	0.290	0.286	297	0.297
High	III	Inward interaction	1.010	2153	6001	0.191	0.209	202	0.202
High	IV	Sweep	1.350	2605	6245	0.308	0.291	270	0.270
Low	I	Outward interaction	1.040	1560	4384	0.190	0.181	208	0.208
Low	II	Ejection	1.395	1832	4915	0.300	0.273	279	0.279
Low	III	Inward interaction	1.180	1419	5174	0.197	0.243	236	0.236
Low	IV	Sweep	1.385	1927	5506	0.313	0.303	277	0.277
Medium	I	Outward interaction	1.065	1583	4527	0.213	0.227	213	0.213
Medium	II	Ejection	1.355	1744	4266	0.298	0.272	271	0.271
Medium	III	Inward interaction	1.255	1273	3901	0.202	0.230	251	0.251
Medium	IV	Sweep	1.325	1720	4335	0.288	0.270	265	0.265

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	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	1.325	1780	5634	0.249	0.280	265	0.265
High	II	Ejection	1.100	2458	6105	0.286	0.252	220	0.220
High	III	Inward interaction	1.285	1845	4877	0.251	0.235	257	0.257
High	IV	Sweep	1.290	1571	4830	0.214	0.234	258	0.258
Low	I	Outward interaction	0.970	1844	6374	0.177	0.211	194	0.194
Low	II	Ejection	1.365	2517	6550	0.340	0.305	273	0.273
Low	III	Inward interaction	1.120	1425	5056	0.158	0.193	224	0.224
Low	IV	Sweep	1.545	2130	5502	0.326	0.290	309	0.309
Medium	I	Outward interaction	1.025	2861	6729	0.333	0.313	205	0.205
Medium	II	Ejection	1.090	1768	4851	0.219	0.240	218	0.218
Medium	III	Inward interaction	1.530	1241	3359	0.215	0.233	306	0.306
Medium	IV	Sweep	1.355	1521	3499	0.234	0.215	271	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	1.325	6477	15905	0.167	0.186	265	0.265
High	II	Ejection	1.210	17560	34413	0.414	0.368	242	0.242
High	III	Inward interaction	0.890	8431	23472	0.146	0.184	178	0.178
High	IV	Sweep	1.575	8855	18828	0.272	0.262	315	0.315
Low	I	Outward interaction	1.220	1419	4428	0.208	0.236	244	0.244
Low	II	Ejection	1.220	2097	5303	0.308	0.283	244	0.244
Low	III	Inward interaction	1.170	1398	4284	0.197	0.219	234	0.234
Low	IV	Sweep	1.390	1718	4306	0.287	0.262	278	0.278
Medium	I	Outward interaction	1.115	1767	4564	0.244	0.240	223	0.223
Medium	II	Ejection	1.350	1970	4442	0.330	0.282	270	0.270
Medium	III	Inward interaction	1.115	1308	4025	0.181	0.211	223	0.223
Medium	IV	Sweep	1.420	1389	3988	0.245	0.267	284	0.284

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	0.895	2534	8159	0.113	0.152	179	0.179
High	II	Ejection	1.505	6608	13652	0.496	0.428	301	0.301
High	III	Inward interaction	0.950	1552	6860	0.074	0.136	190	0.190
High	IV	Sweep	1.650	3861	8261	0.318	0.284	330	0.330
Low	I	Outward interaction	0.985	1570	6215	0.100	0.163	197	0.197
Low	II	Ejection	1.300	5967	12124	0.501	0.419	260	0.260
Low	III	Inward interaction	0.990	1767	5608	0.113	0.148	198	0.198
Low	IV	Sweep	1.725	2572	5914	0.286	0.271	345	0.345
Medium	I	Outward interaction	0.985	1722	5576	0.091	0.135	197	0.197
Medium	II	Ejection	1.350	7799	14136	0.565	0.468	270	0.270
Medium	III	Inward interaction	0.820	1591	5109	0.070	0.103	164	0.164
Medium	IV	Sweep	1.845	2761	6530	0.274	0.295	369	0.369

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	0.950	1729	6915	0.226	0.242	190	0.190
High	II	Ejection	1.370	1667	6696	0.314	0.337	274	0.274
High	III	Inward interaction	1.185	838	3707	0.136	0.162	237	0.237
High	IV	Sweep	1.495	1579	4716	0.324	0.259	299	0.299
Low	I	Outward interaction	1.140	4261	15518	0.137	0.181	228	0.228
Low	II	Ejection	1.450	7917	21552	0.324	0.320	290	0.290
Low	III	Inward interaction	1.025	4716	17537	0.136	0.184	205	0.205
Low	IV	Sweep	1.385	10322	22260	0.403	0.315	277	0.277
Medium	I	Outward interaction	1.265	1204	4185	0.375	0.313	253	0.253
Medium	II	Ejection	1.145	508	3087	0.143	0.209	229	0.229
Medium	III	Inward interaction	1.505	686	2932	0.254	0.261	301	0.301
Medium	IV	Sweep	1.085	849	3390	0.227	0.217	217	0.217

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	0.725	264	1041	0.079	0.112	145	0.145
High	II	Ejection	1.670	573	1433	0.395	0.354	334	0.334
High	III	Inward interaction	0.910	158	988	0.059	0.133	182	0.182
High	IV	Sweep	1.695	669	1597	0.467	0.401	339	0.339
Low	I	Outward interaction	1.270	1746	6343	0.272	0.273	254	0.254
Low	II	Ejection	1.295	1586	5912	0.252	0.260	259	0.259
Low	III	Inward interaction	1.280	1608	5373	0.252	0.233	256	0.256
Low	IV	Sweep	1.155	1578	5984	0.224	0.234	231	0.231
Medium	I	Outward interaction	1.160	1088	3315	0.272	0.233	232	0.232
Medium	II	Ejection	1.310	898	3356	0.254	0.266	262	0.262
Medium	III	Inward interaction	1.205	755	3079	0.197	0.224	241	0.241
Medium	IV	Sweep	1.325	968	3457	0.277	0.277	265	0.265

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	1.055	1244	6647	0.167	0.252	211	0.211
High	II	Ejection	1.400	2025	5874	0.361	0.295	280	0.280
High	III	Inward interaction	1.025	1112	4454	0.145	0.164	205	0.205
High	IV	Sweep	1.520	1685	5284	0.326	0.289	304	0.304
Low	I	Outward interaction	1.080	1719	6921	0.155	0.176	216	0.216
Low	II	Ejection	1.545	2421	7609	0.313	0.276	309	0.309
Low	III	Inward interaction	0.940	1808	7545	0.142	0.167	188	0.188
Low	IV	Sweep	1.435	3236	11290	0.389	0.381	287	0.287
Medium	I	Outward interaction	1.050	928	3984	0.154	0.189	210	0.210
Medium	II	Ejection	1.480	1391	4403	0.326	0.294	296	0.296
Medium	III	Inward interaction	1.075	1201	4298	0.205	0.209	215	0.215
Medium	IV	Sweep	1.395	1423	4896	0.315	0.308	279	0.279

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	0.990	2065	5313	0.171	0.187	198	0.198
Low	II	Ejection	1.420	3132	6692	0.372	0.338	284	0.284
Low	III	Inward interaction	1.035	1981	5109	0.172	0.188	207	0.207
Low	IV	Sweep	1.555	2193	5205	0.285	0.288	311	0.311
Medium	I	Outward interaction	0.990	3839	9024	0.214	0.214	198	0.198
Medium	II	Ejection	1.045	6272	13974	0.370	0.350	209	0.209
Medium	III	Inward interaction	1.370	2313	6207	0.179	0.204	274	0.274
Medium	IV	Sweep	1.595	2641	6084	0.238	0.232	319	0.319
High	I	Outward interaction	1.170	1831	5109	0.209	0.239	234	0.234
High	II	Ejection	1.205	2726	6194	0.321	0.299	241	0.241
High	III	Inward interaction	1.250	1859	4373	0.227	0.219	250	0.250
High	IV	Sweep	1.375	1811	4421	0.243	0.243	275	0.275

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	1.200	3524	14964	0.163	0.215	240	0.240
Low	II	Ejection	1.215	7779	21481	0.364	0.313	243	0.243
Low	III	Inward interaction	0.935	5171	20744	0.186	0.232	187	0.187
Low	IV	Sweep	1.650	4518	12121	0.287	0.240	330	0.330
Medium	I	Outward interaction	0.665	1822	5317	0.105	0.109	133	0.133
Medium	II	Ejection	1.745	2674	7543	0.405	0.405	349	0.349
Medium	III	Inward interaction	0.835	563	3619	0.041	0.093	167	0.167
Medium	IV	Sweep	1.755	2946	7286	0.449	0.393	351	0.351
High	I	Outward interaction	1.150	3712	11798	0.227	0.226	230	0.230
High	II	Ejection	1.305	3418	10725	0.237	0.233	261	0.261
High	III	Inward interaction	1.335	3404	11877	0.242	0.264	267	0.267
High	IV	Sweep	1.210	4575	13779	0.294	0.277	242	0.242

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	1.320	5053	13922	0.373	0.334	264	0.264
Low	II	Ejection	1.115	2859	10046	0.178	0.204	223	0.223
Low	III	Inward interaction	1.475	3514	10629	0.290	0.285	295	0.295
Low	IV	Sweep	1.090	2599	8924	0.158	0.177	218	0.218
Medium	I	Outward interaction	1.100	945	3175	0.172	0.180	220	0.220
Medium	II	Ejection	1.445	1415	4208	0.338	0.313	289	0.289
Medium	III	Inward interaction	1.030	964	3756	0.164	0.199	206	0.206
Medium	IV	Sweep	1.425	1378	4190	0.325	0.308	285	0.285
High	I	Outward interaction	1.145	828	2522	0.388	0.354	229	0.229
High	II	Ejection	1.150	445	1672	0.210	0.236	230	0.230
High	III	Inward interaction	1.350	310	1162	0.171	0.192	270	0.270
High	IV	Sweep	1.355	416	1310	0.231	0.218	271	0.271

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	0.905	3887	11774	0.131	0.155	181	0.181
Low	II	Ejection	1.500	5975	13563	0.335	0.295	300	0.300
Low	III	Inward interaction	1.105	2204	9481	0.091	0.152	221	0.221
Low	IV	Sweep	1.490	7967	18402	0.443	0.398	298	0.298
Medium	I	Outward interaction	0.610	172	1219	0.041	0.079	122	0.122
Medium	II	Ejection	1.915	579	1839	0.434	0.374	383	0.383
Medium	III	Inward interaction	0.720	169	1459	0.048	0.111	144	0.144
Medium	IV	Sweep	1.755	696	2341	0.478	0.436	351	0.351
High	I	Outward interaction	1.370	1125	3271	0.195	0.212	274	0.274
High	II	Ejection	1.390	1318	3478	0.232	0.228	278	0.278
High	III	Inward interaction	1.100	2399	6040	0.334	0.314	220	0.220
High	IV	Sweep	1.140	1663	4576	0.240	0.246	228	0.228

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
Low	I	Outward interaction	0.755	406	1747	0.286	0.299	151	0.151
Low	II	Ejection	1.380	303	1078	0.390	0.337	276	0.276
Low	III	Inward interaction	1.395	73	410	0.096	0.129	279	0.279
Low	IV	Sweep	1.470	167	706	0.228	0.235	294	0.294
High	I	Outward interaction	0.750	982	3374	0.411	0.410	150	0.150
High	II	Ejection	1.385	353	1213	0.272	0.272	277	0.277
High	III	Inward interaction	1.435	121	518	0.096	0.120	287	0.287
High	IV	Sweep	1.430	276	857	0.220	0.198	286	0.286
Medium	I	Outward interaction	0.695	171	761	0.146	0.190	139	0.139
Medium	II	Ejection	1.590	209	632	0.409	0.361	318	0.318
Medium	III	Inward interaction	0.965	52	276	0.061	0.096	193	0.193
Medium	IV	Sweep	1.750	178	561	0.384	0.353	350	0.350

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	1.075	264	1836	0.160	0.236	215	0.215
Low	II	Ejection	1.420	417	1785	0.333	0.303	284	0.284
Low	III	Inward interaction	1.155	198	1071	0.129	0.148	231	0.231
Low	IV	Sweep	1.350	496	1934	0.377	0.312	270	0.270
High	I	Outward interaction	0.645	124	476	0.078	0.110	129	0.129
High	II	Ejection	1.940	225	547	0.426	0.380	388	0.388
High	III	Inward interaction	0.630	106	404	0.065	0.091	126	0.126
High	IV	Sweep	1.785	247	657	0.431	0.419	357	0.357
Medium	I	Outward interaction	0.830	131	840	0.129	0.201	166	0.166
Medium	II	Ejection	1.560	211	673	0.392	0.302	312	0.312
Medium	III	Inward interaction	1.045	114	577	0.142	0.173	209	0.209
Medium	IV	Sweep	1.565	181	719	0.337	0.324	313	0.313

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	0.745	353	1879	0.164	0.248	149	0.149
Low	II	Ejection	1.625	400	1072	0.406	0.309	325	0.325
Low	III	Inward interaction	0.915	147	941	0.084	0.153	183	0.183
Low	IV	Sweep	1.715	323	952	0.346	0.290	343	0.343
High	I	Outward interaction	0.780	302	1478	0.210	0.232	156	0.156
High	II	Ejection	1.355	314	1160	0.380	0.316	271	0.271
High	III	Inward interaction	1.320	93	527	0.110	0.140	264	0.264
High	IV	Sweep	1.545	217	1008	0.300	0.313	309	0.309
Medium	I	Outward interaction	0.995	74	392	0.114	0.171	199	0.199
Medium	II	Ejection	1.445	185	552	0.411	0.350	289	0.289
Medium	III	Inward interaction	1.045	62	314	0.100	0.144	209	0.209
Medium	IV	Sweep	1.515	161	506	0.375	0.336	303	0.303

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	0.545	124	743	0.102	0.170	109	0.109
Low	II	Ejection	1.780	156	468	0.420	0.350	356	0.356
Low	III	Inward interaction	0.840	47	377	0.059	0.133	168	0.168
Low	IV	Sweep	1.835	151	451	0.418	0.347	367	0.367
High	I	Outward interaction	0.685	516	2648	0.268	0.284	137	0.137
High	II	Ejection	1.560	299	1183	0.354	0.289	312	0.312
High	III	Inward interaction	1.195	116	837	0.105	0.157	239	0.239
High	IV	Sweep	1.560	230	1100	0.272	0.269	312	0.312
Medium	I	Outward interaction	0.745	107	700	0.121	0.178	149	0.149
Medium	II	Ejection	1.670	169	665	0.425	0.380	334	0.334
Medium	III	Inward interaction	0.900	58	372	0.078	0.114	180	0.180
Medium	IV	Sweep	1.685	148	569	0.376	0.328	337	0.337

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	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	0.685	707	3084	0.275	0.311	137	0.137
High	II	Ejection	1.530	416	1492	0.362	0.337	306	0.306
High	III	Inward interaction	1.150	121	732	0.079	0.124	230	0.230
High	IV	Sweep	1.635	305	945	0.283	0.228	327	0.327
Low	I	Outward interaction	0.805	419	1581	0.302	0.276	161	0.161
Low	II	Ejection	1.540	239	857	0.328	0.286	308	0.308
Low	III	Inward interaction	1.200	106	682	0.114	0.177	240	0.240
Low	IV	Sweep	1.455	197	830	0.256	0.262	291	0.291
Medium	I	Outward interaction	0.710	148	920	0.145	0.221	142	0.142
Medium	II	Ejection	1.675	162	525	0.374	0.297	335	0.335
Medium	III	Inward interaction	0.910	91	505	0.114	0.155	182	0.182
Medium	IV	Sweep	1.705	155	568	0.366	0.327	341	0.341

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
Low	I	Outward interaction	0.815	195	997	0.175	0.209	163	0.163
Low	II	Ejection	1.680	187	679	0.345	0.294	336	0.336
Low	III	Inward interaction	1.045	102	614	0.117	0.165	209	0.209
Low	IV	Sweep	1.460	227	882	0.364	0.332	292	0.292
Medium	I	Outward interaction	0.775	113	631	0.123	0.167	155	0.155
Medium	II	Ejection	1.625	169	608	0.387	0.338	325	0.325
Medium	III	Inward interaction	0.845	94	628	0.111	0.181	169	0.169
Medium	IV	Sweep	1.755	153	522	0.378	0.313	351	0.351

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	0.890	168	802	0.123	0.177	178	0.178
High	II	Ejection	1.525	342	909	0.428	0.344	305	0.305
High	III	Inward interaction	0.805	149	810	0.099	0.162	161	0.161
High	IV	Sweep	1.780	239	717	0.350	0.317	356	0.356
Low	I	Outward interaction	1.000	258	1591	0.154	0.235	200	0.200
Low	II	Ejection	1.560	398	1266	0.370	0.291	312	0.312
Low	III	Inward interaction	0.985	208	1057	0.122	0.153	197	0.197
Low	IV	Sweep	1.455	407	1496	0.353	0.321	291	0.291
Medium	I	Outward interaction	0.840	143	818	0.119	0.190	168	0.168
Medium	II	Ejection	1.605	247	703	0.391	0.312	321	0.321
Medium	III	Inward interaction	0.925	119	695	0.109	0.178	185	0.185
Medium	IV	Sweep	1.630	237	712	0.381	0.321	326	0.326

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	0.715	201	684	0.099	0.120	143	0.143
High	II	Ejection	1.775	330	764	0.404	0.332	355	0.355
High	III	Inward interaction	0.825	152	583	0.087	0.118	165	0.165
High	IV	Sweep	1.685	352	1039	0.410	0.430	337	0.337
Low	I	Outward interaction	0.700	261	1122	0.113	0.144	140	0.140
Low	II	Ejection	1.490	464	1294	0.429	0.354	298	0.298
Low	III	Inward interaction	0.975	126	735	0.076	0.131	195	0.195
Low	IV	Sweep	1.835	334	1101	0.381	0.371	367	0.367
Medium	I	Outward interaction	0.685	103	749	0.043	0.109	137	0.137
Medium	II	Ejection	1.880	394	961	0.450	0.384	376	0.376
Medium	III	Inward interaction	0.575	105	598	0.037	0.073	115	0.115
Medium	IV	Sweep	1.860	416	1096	0.470	0.434	372	0.372

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	0.570	880	3359	0.157	0.172	114	0.114
High	II	Ejection	1.920	537	1599	0.322	0.275	384	0.384
High	III	Inward interaction	0.980	353	1477	0.108	0.130	196	0.196
High	IV	Sweep	1.530	864	3091	0.413	0.424	306	0.306
Low	I	Outward interaction	0.785	249	1196	0.209	0.209	157	0.157
Low	II	Ejection	1.480	224	923	0.355	0.304	296	0.296
Low	III	Inward interaction	1.125	101	707	0.121	0.177	225	0.225
Low	IV	Sweep	1.610	182	862	0.314	0.309	322	0.322
Medium	I	Outward interaction	0.865	106	532	0.176	0.183	173	0.173
Medium	II	Ejection	1.525	121	493	0.352	0.300	305	0.305
Medium	III	Inward interaction	1.100	58	435	0.121	0.191	220	0.220
Medium	IV	Sweep	1.510	122	542	0.351	0.326	302	0.302

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	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	0.765	358	2045	0.156	0.220	153	0.153
High	II	Ejection	1.805	350	1175	0.360	0.298	361	0.361
High	III	Inward interaction	0.880	261	1074	0.131	0.133	176	0.176
High	IV	Sweep	1.550	401	1610	0.354	0.350	310	0.310
Low	I	Outward interaction	1.405	137	630	0.220	0.244	281	0.281
Low	II	Ejection	1.240	169	683	0.240	0.233	248	0.248
Low	III	Inward interaction	1.185	214	818	0.291	0.267	237	0.237
Low	IV	Sweep	1.170	186	793	0.249	0.256	234	0.234
Medium	I	Outward interaction	0.900	250	1768	0.143	0.239	180	0.180
Medium	II	Ejection	1.535	418	1399	0.409	0.322	307	0.307
Medium	III	Inward interaction	0.990	258	1148	0.163	0.170	198	0.198
Medium	IV	Sweep	1.575	283	1140	0.284	0.269	315	0.315

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	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	0.955	323	1764	0.244	0.280	191	0.191
High	II	Ejection	1.505	235	937	0.280	0.234	301	0.301
High	III	Inward interaction	1.245	197	1010	0.194	0.209	249	0.249
High	IV	Sweep	1.295	274	1293	0.281	0.278	259	0.259
Low	I	Outward interaction	1.125	48	303	0.134	0.192	225	0.225
Low	II	Ejection	1.515	90	380	0.340	0.323	303	0.303
Low	III	Inward interaction	0.975	50	285	0.120	0.156	195	0.195
Low	IV	Sweep	1.385	118	423	0.405	0.329	277	0.277
Medium	I	Outward interaction	0.770	173	1912	0.136	0.250	154	0.154
Medium	II	Ejection	1.680	242	1090	0.417	0.312	336	0.336
Medium	III	Inward interaction	1.105	103	700	0.117	0.132	221	0.221
Medium	IV	Sweep	1.445	223	1246	0.330	0.306	289	0.289

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	0.645	189	1063	0.148	0.215	129	0.129
High	II	Ejection	1.685	197	604	0.404	0.319	337	0.337
High	III	Inward interaction	1.085	67	330	0.088	0.112	217	0.217
High	IV	Sweep	1.585	186	710	0.359	0.353	317	0.317
Low	I	Outward interaction	0.760	320	1424	0.241	0.290	152	0.152
Low	II	Ejection	1.665	215	708	0.356	0.316	333	0.333
Low	III	Inward interaction	1.080	77	424	0.083	0.123	216	0.216
Low	IV	Sweep	1.495	216	679	0.320	0.272	299	0.299
Medium	I	Outward interaction	0.940	141	854	0.098	0.157	188	0.188
Medium	II	Ejection	1.630	356	1086	0.428	0.347	326	0.326
Medium	III	Inward interaction	0.880	165	889	0.107	0.153	176	0.176
Medium	IV	Sweep	1.550	320	1125	0.366	0.342	310	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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
Low	I	Outward interaction	1.025	416	1323	0.250	0.298	205	0.205
Low	II	Ejection	1.405	423	1030	0.349	0.318	281	0.281
Low	III	Inward interaction	1.135	174	590	0.116	0.147	227	0.227
Low	IV	Sweep	1.435	338	755	0.285	0.238	287	0.287
Medium	I	Outward interaction	1.040	276	810	0.217	0.230	208	0.208
Medium	II	Ejection	1.360	325	778	0.335	0.289	272	0.272
Medium	III	Inward interaction	1.185	155	565	0.139	0.183	237	0.237
Medium	IV	Sweep	1.415	288	774	0.308	0.299	283	0.283
High	I	Outward interaction	0.945	347	1165	0.242	0.224	189	0.189
High	II	Ejection	1.260	374	1293	0.347	0.331	252	0.252
High	III	Inward interaction	1.310	149	554	0.144	0.148	262	0.262
High	IV	Sweep	1.485	245	986	0.268	0.298	297	0.297

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	1.260	541	1997	0.224	0.234	252	0.252
Low	II	Ejection	1.205	659	1998	0.260	0.224	241	0.241
Low	III	Inward interaction	1.230	560	2228	0.226	0.254	246	0.246
Low	IV	Sweep	1.305	678	2379	0.290	0.288	261	0.261
Medium	I	Outward interaction	1.195	304	1257	0.242	0.257	239	0.239
Medium	II	Ejection	1.330	274	1179	0.243	0.268	266	0.266
Medium	III	Inward interaction	1.225	259	1053	0.212	0.220	245	0.245
Medium	IV	Sweep	1.250	364	1192	0.303	0.255	250	0.250
High	I	Outward interaction	0.615	351	2110	0.063	0.118	123	0.123
High	II	Ejection	1.925	792	2271	0.443	0.398	385	0.385
High	III	Inward interaction	0.580	205	1595	0.035	0.084	116	0.116
High	IV	Sweep	1.880	843	2330	0.460	0.399	376	0.376

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
Low	I	Outward interaction	1.000	948	2760	0.184	0.199	200	0.200
Low	II	Ejection	1.505	984	2591	0.287	0.281	301	0.301
Low	III	Inward interaction	1.095	674	2229	0.143	0.176	219	0.219
Low	IV	Sweep	1.400	1422	3410	0.386	0.344	280	0.280
Medium	I	Outward interaction	1.090	605	2975	0.160	0.189	218	0.218
Medium	II	Ejection	1.510	787	3725	0.287	0.328	302	0.302
Medium	III	Inward interaction	1.050	769	3220	0.195	0.197	210	0.210
Medium	IV	Sweep	1.350	1095	3641	0.358	0.286	270	0.270
High	I	Outward interaction	1.080	181	766	0.153	0.169	216	0.216
High	II	Ejection	1.480	322	1078	0.373	0.325	296	0.296
High	III	Inward interaction	1.000	188	917	0.147	0.187	200	0.200
High	IV	Sweep	1.440	292	1091	0.328	0.320	288	0.288

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	1.000	365	1324	0.136	0.150	200	0.200
Low	II	Ejection	1.515	561	1558	0.318	0.268	303	0.303
Low	III	Inward interaction	1.050	348	1640	0.137	0.195	210	0.210
Low	IV	Sweep	1.435	763	2376	0.409	0.387	287	0.287
Medium	I	Outward interaction	1.115	137	696	0.127	0.169	223	0.223
Medium	II	Ejection	1.480	272	946	0.333	0.305	296	0.296
Medium	III	Inward interaction	1.030	206	883	0.176	0.198	206	0.206
Medium	IV	Sweep	1.375	320	1090	0.364	0.327	275	0.275
High	I	Outward interaction	0.735	302	2199	0.169	0.243	147	0.147
High	II	Ejection	1.590	333	1208	0.403	0.289	318	0.318
High	III	Inward interaction	1.090	115	855	0.096	0.140	218	0.218
High	IV	Sweep	1.585	276	1380	0.332	0.329	317	0.317

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 fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	1.125	467	1643	0.286	0.284	225	0.225
High	II	Ejection	1.215	477	1592	0.315	0.298	243	0.243
High	III	Inward interaction	1.305	211	1077	0.150	0.216	261	0.261
High	IV	Sweep	1.355	338	971	0.249	0.202	271	0.271
Low	I	Outward interaction	1.030	148	563	0.164	0.178	206	0.206
Low	II	Ejection	1.565	172	563	0.290	0.271	313	0.313
Low	III	Inward interaction	1.235	151	573	0.201	0.218	247	0.247
Low	IV	Sweep	1.170	273	928	0.344	0.334	234	0.234
Medium	I	Outward interaction	0.985	186	591	0.202	0.194	197	0.197
Medium	II	Ejection	1.485	207	636	0.338	0.315	297	0.297
Medium	III	Inward interaction	1.080	123	519	0.147	0.187	216	0.216
Medium	IV	Sweep	1.450	196	631	0.313	0.305	290	0.290

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	1.000	288	1062	0.229	0.247	200	0.200
High	II	Ejection	1.430	282	840	0.320	0.280	286	0.286
High	III	Inward interaction	1.320	163	618	0.170	0.190	264	0.264
High	IV	Sweep	1.250	283	972	0.281	0.283	250	0.250
Low	I	Outward interaction	1.045	279	797	0.241	0.228	209	0.209
Low	II	Ejection	1.405	271	721	0.313	0.277	281	0.281
Low	III	Inward interaction	1.175	140	590	0.136	0.190	235	0.235
Low	IV	Sweep	1.375	274	810	0.310	0.305	275	0.275
Medium	I	Outward interaction	1.090	136	685	0.144	0.182	218	0.218
Medium	II	Ejection	1.365	251	900	0.335	0.300	273	0.273
Medium	III	Inward interaction	1.145	158	777	0.176	0.217	229	0.229
Medium	IV	Sweep	1.400	253	877	0.345	0.300	280	0.280

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	0.780	682	3586	0.093	0.151	156	0.156
High	II	Ejection	1.715	1258	3372	0.376	0.311	343	0.343
High	III	Inward interaction	0.835	688	3370	0.100	0.151	167	0.167
High	IV	Sweep	1.670	1477	4302	0.430	0.387	334	0.334
Low	I	Outward interaction	0.895	583	2467	0.153	0.195	179	0.179
Low	II	Ejection	1.555	822	2336	0.374	0.320	311	0.311
Low	III	Inward interaction	1.105	385	1824	0.125	0.178	221	0.221
Low	IV	Sweep	1.445	824	2419	0.349	0.308	289	0.289
Medium	I	Outward interaction	0.940	367	1363	0.136	0.165	188	0.188
Medium	II	Ejection	1.530	656	1659	0.395	0.327	306	0.306
Medium	III	Inward interaction	0.925	377	1608	0.137	0.192	185	0.185
Medium	IV	Sweep	1.605	527	1525	0.333	0.316	321	0.321

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	1.050	823	2803	0.214	0.201	210	0.210
High	II	Ejection	1.350	944	3083	0.316	0.284	270	0.270
High	III	Inward interaction	1.125	485	2610	0.135	0.200	225	0.225
High	IV	Sweep	1.475	919	3123	0.336	0.314	295	0.295
Low	I	Outward interaction	0.925	517	2029	0.189	0.235	185	0.185
Low	II	Ejection	1.375	659	1913	0.358	0.330	275	0.275
Low	III	Inward interaction	1.015	322	1403	0.129	0.179	203	0.203
Low	IV	Sweep	1.685	486	1211	0.324	0.256	337	0.337
Medium	I	Outward interaction	0.845	587	1966	0.139	0.172	169	0.169
Medium	II	Ejection	1.685	742	1958	0.350	0.342	337	0.337
Medium	III	Inward interaction	0.860	432	1406	0.104	0.125	172	0.172
Medium	IV	Sweep	1.610	903	2168	0.407	0.361	322	0.322

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	0.995	343	1449	0.158	0.152	199	0.199
High	II	Ejection	1.430	530	1763	0.352	0.265	286	0.286
High	III	Inward interaction	1.185	298	1882	0.164	0.235	237	0.237
High	IV	Sweep	1.390	504	2382	0.326	0.348	278	0.278
Low	I	Outward interaction	1.015	175	747	0.159	0.209	203	0.203
Low	II	Ejection	1.585	296	808	0.420	0.354	317	0.317
Low	III	Inward interaction	1.035	137	568	0.127	0.163	207	0.207
Low	IV	Sweep	1.365	240	727	0.294	0.274	273	0.273
Medium	I	Outward interaction	0.955	124	798	0.096	0.173	191	0.191
Medium	II	Ejection	1.615	348	922	0.456	0.337	323	0.323
Medium	III	Inward interaction	0.850	133	657	0.092	0.126	170	0.170
Medium	IV	Sweep	1.580	277	1017	0.356	0.364	316	0.316

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	1.040	498	2184	0.157	0.192	208	0.208
High	II	Ejection	1.345	959	2923	0.392	0.333	269	0.269
High	III	Inward interaction	1.120	481	2027	0.164	0.192	224	0.224
High	IV	Sweep	1.495	630	2231	0.286	0.282	299	0.299
Low	I	Outward interaction	1.185	410	2104	0.183	0.187	237	0.237
Low	II	Ejection	1.435	553	2393	0.298	0.258	287	0.287
Low	III	Inward interaction	1.050	517	2987	0.204	0.236	210	0.210
Low	IV	Sweep	1.330	631	3190	0.315	0.319	266	0.266
Medium	I	Outward interaction	0.990	742	3200	0.140	0.163	198	0.198
Medium	II	Ejection	1.565	1077	4161	0.322	0.335	313	0.313
Medium	III	Inward interaction	0.950	706	3205	0.128	0.157	190	0.190
Medium	IV	Sweep	1.495	1434	4485	0.410	0.345	299	0.299

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	1.270	348	1617	0.258	0.290	254	0.254
High	II	Ejection	1.265	449	1567	0.333	0.279	253	0.253
High	III	Inward interaction	1.220	299	1186	0.213	0.204	244	0.244
High	IV	Sweep	1.245	268	1292	0.195	0.227	249	0.249
Low	I	Outward interaction	0.985	559	2210	0.136	0.174	197	0.197
Low	II	Ejection	1.710	883	2402	0.373	0.329	342	0.342
Low	III	Inward interaction	0.815	461	2111	0.093	0.138	163	0.163
Low	IV	Sweep	1.490	1084	3016	0.399	0.360	298	0.298
Medium	I	Outward interaction	0.770	235	1324	0.140	0.195	154	0.154
Medium	II	Ejection	1.560	311	963	0.374	0.287	312	0.312
Medium	III	Inward interaction	1.090	159	831	0.134	0.173	218	0.218
Medium	IV	Sweep	1.580	288	1145	0.352	0.345	316	0.316

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	0.960	286	1034	0.128	0.143	192	0.192
High	II	Ejection	1.595	476	1268	0.353	0.292	319	0.319
High	III	Inward interaction	0.945	216	1374	0.095	0.187	189	0.189
High	IV	Sweep	1.500	608	1747	0.424	0.378	300	0.300
Low	I	Outward interaction	1.280	64	214	0.486	0.372	256	0.256
Low	II	Ejection	0.985	23	139	0.134	0.186	197	0.197
Low	III	Inward interaction	1.980	25	117	0.288	0.315	396	0.396
Low	IV	Sweep	0.755	20	124	0.091	0.127	151	0.151
Medium	I	Outward interaction	1.030	319	1187	0.194	0.205	206	0.206
Medium	II	Ejection	1.410	417	1281	0.346	0.303	282	0.282
Medium	III	Inward interaction	1.090	229	993	0.147	0.182	218	0.218
Medium	IV	Sweep	1.470	360	1258	0.312	0.310	294	0.294

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
Low	I	Outward interaction	1.245	411	1032	0.210	0.214	249	0.249
Low	II	Ejection	1.335	490	1127	0.268	0.251	267	0.267
Low	III	Inward interaction	1.175	491	1353	0.236	0.265	235	0.235
Low	IV	Sweep	1.245	561	1302	0.286	0.270	249	0.249
Medium	I	Outward interaction	1.260	369	1025	0.233	0.241	252	0.252
Medium	II	Ejection	1.285	407	1134	0.262	0.272	257	0.257
Medium	III	Inward interaction	1.255	380	1002	0.239	0.234	251	0.251
Medium	IV	Sweep	1.200	440	1132	0.265	0.253	240	0.240
High	I	Outward interaction	1.040	559	1619	0.190	0.209	208	0.208
High	II	Ejection	1.485	684	1914	0.332	0.353	297	0.297
High	III	Inward interaction	1.010	401	1138	0.132	0.143	202	0.202
High	IV	Sweep	1.465	724	1625	0.346	0.296	293	0.293

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	1.065	374	1001	0.181	0.191	213	0.213
Low	II	Ejection	1.310	574	1428	0.342	0.335	262	0.262
Low	III	Inward interaction	1.205	320	882	0.175	0.191	241	0.241
Low	IV	Sweep	1.420	468	1110	0.302	0.283	284	0.284
Medium	I	Outward interaction	0.910	368	1665	0.098	0.134	182	0.182
Medium	II	Ejection	1.590	835	2711	0.389	0.380	318	0.318
Medium	III	Inward interaction	0.905	346	1537	0.092	0.123	181	0.181
Medium	IV	Sweep	1.595	900	2579	0.421	0.363	319	0.319
High	I	Outward interaction	1.090	1625	4756	0.220	0.218	218	0.218
High	II	Ejection	1.375	1503	5330	0.257	0.308	275	0.275
High	III	Inward interaction	1.220	1418	4227	0.215	0.216	244	0.244
High	IV	Sweep	1.315	1877	4684	0.307	0.258	263	0.263

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
Low	I	Outward interaction	1.200	968	2614	0.199	0.189	240	0.240
Low	II	Ejection	1.330	1104	3003	0.252	0.241	266	0.266
Low	III	Inward interaction	1.205	964	3329	0.199	0.242	241	0.241
Low	IV	Sweep	1.265	1609	4289	0.349	0.327	253	0.253
Medium	I	Outward interaction	1.190	256	866	0.322	0.299	238	0.238
Medium	II	Ejection	1.305	150	602	0.207	0.228	261	0.261
Medium	III	Inward interaction	1.525	117	405	0.189	0.179	305	0.305
Medium	IV	Sweep	0.980	272	1029	0.282	0.293	196	0.196
High	I	Outward interaction	1.350	1291	5659	0.266	0.321	270	0.270
High	II	Ejection	1.265	1566	5286	0.302	0.281	253	0.253
High	III	Inward interaction	1.140	1288	4279	0.224	0.205	228	0.228
High	IV	Sweep	1.245	1100	3711	0.209	0.194	249	0.249

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
Low	I	Outward interaction	1.055	828	2595	0.178	0.190	211	0.211
Low	II	Ejection	1.445	1068	2886	0.314	0.290	289	0.289
Low	III	Inward interaction	1.125	727	2361	0.166	0.185	225	0.225
Low	IV	Sweep	1.375	1223	3500	0.342	0.335	275	0.275
Medium	I	Outward interaction	1.100	276	1030	0.232	0.233	220	0.220
Medium	II	Ejection	1.355	293	957	0.304	0.267	271	0.271
Medium	III	Inward interaction	1.255	206	902	0.198	0.233	251	0.251
Medium	IV	Sweep	1.290	270	1010	0.266	0.268	258	0.258
High	I	Outward interaction	1.115	272	891	0.222	0.208	223	0.223
High	II	Ejection	1.325	336	989	0.326	0.274	265	0.265
High	III	Inward interaction	1.150	221	954	0.186	0.229	230	0.230
High	IV	Sweep	1.410	258	983	0.266	0.290	282	0.282

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	0.880	258	873	0.120	0.133	176	0.176
High	II	Ejection	1.485	467	1057	0.366	0.272	297	0.297
High	III	Inward interaction	1.050	250	1177	0.139	0.214	210	0.210
High	IV	Sweep	1.585	449	1387	0.376	0.381	317	0.317
Low	I	Outward interaction	1.260	627	4609	0.198	0.212	252	0.252
Low	II	Ejection	1.390	962	4679	0.335	0.238	278	0.278
Low	III	Inward interaction	1.010	675	6327	0.171	0.234	202	0.202
Low	IV	Sweep	1.340	878	6462	0.295	0.316	268	0.268
Medium	I	Outward interaction	0.975	173	768	0.141	0.193	195	0.195
Medium	II	Ejection	1.415	318	923	0.378	0.337	283	0.283
Medium	III	Inward interaction	1.035	134	566	0.116	0.151	207	0.207
Medium	IV	Sweep	1.575	276	786	0.365	0.319	315	0.315

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	1.180	382	1130	0.187	0.224	236	0.236
High	II	Ejection	1.215	622	1406	0.314	0.287	243	0.243
High	III	Inward interaction	1.050	326	968	0.142	0.171	210	0.210
High	IV	Sweep	1.555	553	1223	0.357	0.319	311	0.311
Low	I	Outward interaction	1.000	332	1015	0.164	0.170	200	0.200
Low	II	Ejection	1.640	438	1174	0.355	0.323	328	0.328
Low	III	Inward interaction	0.900	326	1231	0.145	0.186	180	0.180
Low	IV	Sweep	1.460	466	1317	0.336	0.322	292	0.292
Medium	I	Outward interaction	1.045	341	884	0.216	0.217	209	0.209
Medium	II	Ejection	1.315	425	987	0.339	0.306	263	0.263
Medium	III	Inward interaction	1.205	222	699	0.162	0.198	241	0.241
Medium	IV	Sweep	1.435	324	825	0.283	0.279	287	0.287

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	0.830	1944	7683	0.114	0.148	166	0.166
High	II	Ejection	1.545	4205	10838	0.460	0.387	309	0.309
High	III	Inward interaction	0.860	1685	7904	0.103	0.157	172	0.172
High	IV	Sweep	1.765	2590	7536	0.324	0.308	353	0.353
Low	I	Outward interaction	1.105	514	1697	0.169	0.193	221	0.221
Low	II	Ejection	1.290	914	2213	0.352	0.293	258	0.258
Low	III	Inward interaction	1.190	495	1812	0.176	0.222	238	0.238
Low	IV	Sweep	1.415	718	2012	0.303	0.293	283	0.283
Medium	I	Outward interaction	0.940	524	1581	0.150	0.184	188	0.188
Medium	II	Ejection	1.375	1039	2202	0.434	0.375	275	0.275
Medium	III	Inward interaction	1.025	321	1146	0.100	0.145	205	0.205
Medium	IV	Sweep	1.660	626	1441	0.316	0.296	332	0.332

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	0.840	2247	9745	0.104	0.172	168	0.168
High	II	Ejection	1.680	4523	10148	0.417	0.357	336	0.336
High	III	Inward interaction	0.850	2136	8050	0.100	0.143	170	0.170
High	IV	Sweep	1.630	4248	9594	0.380	0.328	326	0.326
Low	I	Outward interaction	1.040	442	1729	0.147	0.183	208	0.208
Low	II	Ejection	1.310	965	2602	0.404	0.346	262	0.262
Low	III	Inward interaction	1.100	398	1530	0.140	0.171	220	0.220
Low	IV	Sweep	1.550	625	1907	0.309	0.300	310	0.310
Medium	I	Outward interaction	1.050	1174	4119	0.117	0.150	210	0.210
Medium	II	Ejection	1.570	2381	5659	0.354	0.308	314	0.314
Medium	III	Inward interaction	0.915	1466	5519	0.127	0.175	183	0.183
Medium	IV	Sweep	1.465	2895	7231	0.402	0.367	293	0.293

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	1.340	391	1476	0.151	0.185	268	0.268
High	II	Ejection	1.265	940	2475	0.343	0.292	253	0.253
High	III	Inward interaction	0.985	741	2475	0.210	0.228	197	0.197
High	IV	Sweep	1.410	730	2245	0.296	0.296	282	0.282
Low	I	Outward interaction	1.115	466	1475	0.202	0.225	223	0.223
Low	II	Ejection	1.275	683	1642	0.340	0.286	255	0.255
Low	III	Inward interaction	1.235	412	1289	0.198	0.217	247	0.247
Low	IV	Sweep	1.375	484	1445	0.260	0.272	275	0.275
Medium	I	Outward interaction	1.275	623	1632	0.277	0.257	255	0.255
Medium	II	Ejection	1.170	633	1788	0.258	0.259	234	0.234
Medium	III	Inward interaction	1.250	502	1580	0.218	0.244	250	0.250
Medium	IV	Sweep	1.305	545	1489	0.248	0.240	261	0.261

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	1.180	1225	4930	0.193	0.218	236	0.236
High	II	Ejection	1.320	1826	6091	0.322	0.302	264	0.264
High	III	Inward interaction	1.180	996	4236	0.157	0.188	236	0.236
High	IV	Sweep	1.320	1858	5905	0.328	0.292	264	0.264
Low	I	Outward interaction	1.560	1738	5473	0.331	0.334	312	0.312
Low	II	Ejection	1.000	1264	3928	0.154	0.153	200	0.200
Low	III	Inward interaction	1.550	2047	5632	0.387	0.341	310	0.310
Low	IV	Sweep	0.890	1170	4943	0.127	0.172	178	0.178
Medium	I	Outward interaction	0.605	100	691	0.037	0.089	121	0.121
Medium	II	Ejection	1.945	394	1081	0.469	0.446	389	0.389
Medium	III	Inward interaction	0.610	58	421	0.022	0.054	122	0.122
Medium	IV	Sweep	1.840	418	1056	0.472	0.411	368	0.368

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	1.180	279	941	0.184	0.187	236	0.236
High	II	Ejection	1.285	397	1193	0.285	0.259	257	0.257
High	III	Inward interaction	1.220	287	1209	0.195	0.249	244	0.244
High	IV	Sweep	1.315	458	1375	0.337	0.305	263	0.263
Low	I	Outward interaction	1.290	1151	3750	0.214	0.224	258	0.258
Low	II	Ejection	1.530	983	3753	0.217	0.266	306	0.306
Low	III	Inward interaction	1.040	1695	5064	0.255	0.244	208	0.208
Low	IV	Sweep	1.140	1904	5055	0.314	0.267	228	0.228
Medium	I	Outward interaction	1.000	242	965	0.149	0.174	200	0.200
Medium	II	Ejection	1.455	371	1105	0.331	0.290	291	0.291
Medium	III	Inward interaction	1.025	223	1103	0.140	0.204	205	0.205
Medium	IV	Sweep	1.520	408	1208	0.380	0.331	304	0.304

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	0.900	295	1555	0.111	0.154	180	0.180
High	II	Ejection	1.635	541	1788	0.371	0.323	327	0.327
High	III	Inward interaction	0.870	347	1610	0.127	0.155	174	0.174
High	IV	Sweep	1.595	584	2091	0.391	0.368	319	0.319
Low	I	Outward interaction	1.175	457	1804	0.177	0.177	235	0.235
Low	II	Ejection	1.340	669	2084	0.295	0.233	268	0.268
Low	III	Inward interaction	1.125	446	2492	0.165	0.234	225	0.225
Low	IV	Sweep	1.360	812	3124	0.363	0.355	272	0.272
Medium	I	Outward interaction	1.140	367	1570	0.197	0.236	228	0.228
Medium	II	Ejection	1.270	477	1877	0.285	0.314	254	0.254
Medium	III	Inward interaction	1.195	335	1273	0.189	0.201	239	0.239
Medium	IV	Sweep	1.395	500	1355	0.329	0.249	279	0.279

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
Low	I	Outward interaction	1.075	576	1309	0.204	0.181	215	0.215
Low	II	Ejection	1.180	916	1947	0.357	0.295	236	0.236
Low	III	Inward interaction	1.210	416	1548	0.166	0.240	242	0.242
Low	IV	Sweep	1.535	539	1444	0.273	0.284	307	0.307
High	I	Outward interaction	0.865	1278	2887	0.203	0.198	173	0.173
High	II	Ejection	1.150	1577	3461	0.333	0.315	230	0.230
High	III	Inward interaction	1.210	731	2005	0.162	0.192	242	0.242
High	IV	Sweep	1.775	928	2105	0.302	0.296	355	0.355
Medium	I	Outward interaction	1.045	830	2017	0.276	0.260	209	0.209
Medium	II	Ejection	1.370	653	1717	0.285	0.290	274	0.274
Medium	III	Inward interaction	1.120	456	1388	0.163	0.192	224	0.224
Medium	IV	Sweep	1.465	591	1435	0.276	0.259	293	0.293

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	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	0.940	1135	2771	0.243	0.250	188	0.188
Low	II	Ejection	1.160	1342	2864	0.354	0.319	232	0.232
Low	III	Inward interaction	1.410	518	1405	0.166	0.190	282	0.282
Low	IV	Sweep	1.490	700	1680	0.237	0.240	298	0.298
High	I	Outward interaction	1.345	2877	8516	0.326	0.315	269	0.269
High	II	Ejection	1.005	2621	7866	0.222	0.218	201	0.201
High	III	Inward interaction	1.455	1969	6676	0.241	0.267	291	0.291
High	IV	Sweep	1.195	2104	6074	0.212	0.200	239	0.239
Medium	I	Outward interaction	0.935	159	735	0.130	0.164	187	0.187
Medium	II	Ejection	1.620	264	914	0.375	0.353	324	0.324
Medium	III	Inward interaction	0.970	140	674	0.119	0.156	194	0.194
Medium	IV	Sweep	1.475	291	928	0.376	0.327	295	0.295

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	1.145	690	2176	0.197	0.220	229	0.229
Low	II	Ejection	1.370	853	2334	0.292	0.282	274	0.274
Low	III	Inward interaction	1.180	685	2055	0.202	0.214	236	0.236
Low	IV	Sweep	1.305	951	2469	0.310	0.284	261	0.261
High	I	Outward interaction	1.230	2751	12041	0.270	0.253	246	0.246
High	II	Ejection	1.200	3027	14021	0.290	0.288	240	0.240
High	III	Inward interaction	1.315	1976	10909	0.208	0.245	263	0.263
High	IV	Sweep	1.255	2314	9982	0.232	0.214	251	0.251
Medium	I	Outward interaction	0.960	725	2492	0.230	0.241	192	0.192
Medium	II	Ejection	1.320	787	2497	0.344	0.332	264	0.264
Medium	III	Inward interaction	1.270	306	1307	0.129	0.167	254	0.254
Medium	IV	Sweep	1.450	618	1778	0.297	0.260	290	0.290

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	1.220	1533	4328	0.156	0.171	244	0.244
Low	II	Ejection	1.395	2098	4849	0.243	0.219	279	0.279
Low	III	Inward interaction	1.135	2536	7188	0.239	0.264	227	0.227
Low	IV	Sweep	1.250	3478	8513	0.362	0.345	250	0.250
High	I	Outward interaction	1.085	287	854	0.178	0.183	217	0.217
High	II	Ejection	1.285	478	1255	0.351	0.319	257	0.257
High	III	Inward interaction	1.175	224	827	0.150	0.192	235	0.235
High	IV	Sweep	1.455	387	1064	0.322	0.306	291	0.291
Medium	I	Outward interaction	0.980	375	1384	0.142	0.182	196	0.196
Medium	II	Ejection	1.495	755	1762	0.438	0.353	299	0.299
Medium	III	Inward interaction	0.910	319	1214	0.113	0.148	182	0.182
Medium	IV	Sweep	1.615	491	1472	0.307	0.318	323	0.323

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	1.060	523	1405	0.233	0.212	212	0.212
High	II	Ejection	1.430	486	1379	0.292	0.281	286	0.286
High	III	Inward interaction	1.075	412	1442	0.186	0.221	215	0.215
High	IV	Sweep	1.435	481	1402	0.290	0.286	287	0.287
Low	I	Outward interaction	1.355	1537	6615	0.286	0.246	271	0.271
Low	II	Ejection	1.175	1436	6951	0.232	0.224	235	0.235
Low	III	Inward interaction	1.240	1442	8254	0.245	0.281	248	0.248
Low	IV	Sweep	1.230	1403	7399	0.237	0.250	246	0.246
Medium	I	Outward interaction	1.055	475	1207	0.241	0.226	211	0.211
Medium	II	Ejection	1.480	411	1160	0.293	0.304	296	0.296
Medium	III	Inward interaction	1.005	302	991	0.146	0.176	201	0.201
Medium	IV	Sweep	1.460	455	1137	0.320	0.294	292	0.292

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	1.015	1204	2801	0.288	0.270	203	0.203
High	II	Ejection	1.290	989	2386	0.300	0.292	258	0.258
High	III	Inward interaction	1.205	485	1571	0.138	0.180	241	0.241
High	IV	Sweep	1.490	784	1834	0.275	0.259	298	0.298
Low	I	Outward interaction	1.190	457	2143	0.154	0.164	238	0.238
Low	II	Ejection	1.555	697	2769	0.306	0.276	311	0.311
Low	III	Inward interaction	1.000	706	3536	0.199	0.227	200	0.200
Low	IV	Sweep	1.255	963	4135	0.341	0.333	251	0.251
Medium	I	Outward interaction	1.125	418	1380	0.168	0.199	225	0.225
Medium	II	Ejection	1.485	628	1645	0.333	0.314	297	0.297
Medium	III	Inward interaction	1.040	438	1439	0.163	0.192	208	0.208
Medium	IV	Sweep	1.350	698	1704	0.337	0.295	270	0.270

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	0.840	2413	11171	0.076	0.127	168	0.168
High	II	Ejection	1.575	7408	16889	0.440	0.361	315	0.315
High	III	Inward interaction	0.835	2775	13059	0.087	0.148	167	0.167
High	IV	Sweep	1.750	6004	15273	0.396	0.363	350	0.350
Low	I	Outward interaction	1.185	901	9691	0.173	0.222	237	0.237
Low	II	Ejection	1.300	1654	11310	0.349	0.284	260	0.260
Low	III	Inward interaction	1.020	915	8927	0.151	0.176	204	0.204
Low	IV	Sweep	1.495	1348	11053	0.327	0.319	299	0.299
Medium	I	Outward interaction	0.935	412	1299	0.144	0.168	187	0.187
Medium	II	Ejection	1.475	721	1780	0.397	0.364	295	0.295
Medium	III	Inward interaction	0.965	365	1192	0.132	0.160	193	0.193
Medium	IV	Sweep	1.625	538	1365	0.327	0.308	325	0.325

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	1.060	3905	10617	0.165	0.176	212	0.212
High	II	Ejection	1.320	7056	16026	0.371	0.332	264	0.264
High	III	Inward interaction	1.035	3371	10549	0.139	0.171	207	0.207
High	IV	Sweep	1.585	5165	12901	0.326	0.321	317	0.317
Low	I	Outward interaction	1.030	785	3700	0.180	0.233	206	0.206
Low	II	Ejection	1.265	1057	3618	0.298	0.280	253	0.253
Low	III	Inward interaction	1.305	644	2740	0.187	0.219	261	0.261
Low	IV	Sweep	1.400	1072	3117	0.334	0.267	280	0.280
Medium	I	Outward interaction	0.950	2565	7708	0.106	0.150	190	0.190
Medium	II	Ejection	1.460	6828	13503	0.435	0.405	292	0.292
Medium	III	Inward interaction	0.820	3099	8368	0.111	0.141	164	0.164
Medium	IV	Sweep	1.770	4502	8338	0.348	0.303	354	0.354

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	0.905	597	2328	0.080	0.123	181	0.181
High	II	Ejection	1.475	2254	5197	0.492	0.447	295	0.295
High	III	Inward interaction	0.855	745	2646	0.094	0.132	171	0.171
High	IV	Sweep	1.765	1279	2894	0.334	0.298	353	0.353
Low	I	Outward interaction	1.090	573	2362	0.141	0.211	218	0.218
Low	II	Ejection	1.395	1374	2769	0.434	0.316	279	0.279
Low	III	Inward interaction	0.945	907	2264	0.194	0.175	189	0.189
Low	IV	Sweep	1.570	648	2319	0.231	0.298	314	0.314
Medium	I	Outward interaction	0.925	733	2076	0.123	0.151	185	0.185
Medium	II	Ejection	1.455	1559	3398	0.413	0.389	291	0.291
Medium	III	Inward interaction	0.915	631	2024	0.105	0.146	183	0.183
Medium	IV	Sweep	1.705	1156	2347	0.359	0.315	341	0.341

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	1.340	1845	5221	0.529	0.470	268	0.268
High	II	Ejection	1.020	621	2758	0.136	0.189	204	0.204
High	III	Inward interaction	1.785	663	1948	0.253	0.234	357	0.357
High	IV	Sweep	0.855	448	1872	0.082	0.108	171	0.171
Low	I	Outward interaction	1.200	2584	9291	0.204	0.238	240	0.240
Low	II	Ejection	1.285	3292	9800	0.278	0.269	257	0.257
Low	III	Inward interaction	1.050	2992	9253	0.207	0.207	210	0.210
Low	IV	Sweep	1.465	3222	9153	0.311	0.286	293	0.293
Medium	I	Outward interaction	0.920	814	4154	0.175	0.222	184	0.184
Medium	II	Ejection	1.685	891	3412	0.351	0.334	337	0.337
Medium	III	Inward interaction	1.060	385	2229	0.095	0.137	212	0.212
Medium	IV	Sweep	1.335	1216	3950	0.379	0.306	267	0.267

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	1.290	848	3151	0.211	0.234	258	0.258
High	II	Ejection	1.315	1107	3858	0.281	0.292	263	0.263
High	III	Inward interaction	1.200	968	3000	0.224	0.207	240	0.240
High	IV	Sweep	1.195	1229	3882	0.284	0.267	239	0.239
Low	I	Outward interaction	1.285	1375	3772	0.291	0.266	257	0.257
Low	II	Ejection	1.145	925	2609	0.174	0.164	229	0.229
Low	III	Inward interaction	1.405	1555	4170	0.359	0.322	281	0.281
Low	IV	Sweep	1.165	920	3881	0.176	0.248	233	0.233
Medium	I	Outward interaction	1.160	202	858	0.128	0.165	232	0.232
Medium	II	Ejection	1.430	518	1564	0.405	0.371	286	0.286
Medium	III	Inward interaction	0.895	233	1014	0.114	0.150	179	0.179
Medium	IV	Sweep	1.515	427	1250	0.353	0.314	303	0.303

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	1.135	458	2030	0.177	0.208	227	0.227
High	II	Ejection	1.365	587	2013	0.273	0.248	273	0.273
High	III	Inward interaction	1.250	482	2029	0.205	0.229	250	0.250
High	IV	Sweep	1.250	811	2792	0.345	0.315	250	0.250
Low	I	Outward interaction	1.070	518	1527	0.164	0.169	214	0.214
Low	II	Ejection	1.400	731	2015	0.304	0.291	280	0.280
Low	III	Inward interaction	1.155	426	1615	0.146	0.193	231	0.231
Low	IV	Sweep	1.375	945	2442	0.386	0.347	275	0.275
Medium	I	Outward interaction	1.105	836	2919	0.205	0.257	221	0.221
Medium	II	Ejection	1.350	885	2557	0.265	0.275	270	0.270
Medium	III	Inward interaction	1.190	742	2139	0.196	0.203	238	0.238
Medium	IV	Sweep	1.355	1108	2468	0.334	0.266	271	0.271

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	0.170	138	722	0.024	0.027	34	0.034
High	II	Ejection	0.505	189	468	0.096	0.052	101	0.101
High	III	Inward interaction	0.175	113	401	0.020	0.016	35	0.035
High	IV	Sweep	0.525	167	639	0.089	0.074	105	0.105
Low	I	Outward interaction	0.320	410	1417	0.080	0.076	64	0.064
Low	II	Ejection	0.440	251	705	0.068	0.052	88	0.088
Low	III	Inward interaction	0.190	209	551	0.024	0.017	38	0.038
Low	IV	Sweep	0.360	248	599	0.055	0.036	72	0.072
Medium	I	Outward interaction	0.205	122	493	0.054	0.055	41	0.041
Medium	II	Ejection	0.500	96	231	0.103	0.063	100	0.100
Medium	III	Inward interaction	0.075	15	45	0.002	0.002	15	0.015
Medium	IV	Sweep	0.450	78	236	0.075	0.058	90	0.090

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	0.280	453	1871	0.102	0.114	56	0.056
High	II	Ejection	0.490	228	521	0.089	0.055	98	0.098
High	III	Inward interaction	0.160	109	279	0.014	0.010	32	0.032
High	IV	Sweep	0.430	169	700	0.058	0.065	86	0.086
Low	I	Outward interaction	0.210	176	827	0.057	0.065	42	0.042
Low	II	Ejection	0.525	131	348	0.106	0.068	105	0.105
Low	III	Inward interaction	0.045	13	53	0.001	0.001	9	0.009
Low	IV	Sweep	0.430	108	319	0.071	0.051	86	0.086
Medium	I	Outward interaction	0.155	123	531	0.038	0.042	31	0.031
Medium	II	Ejection	0.560	99	270	0.110	0.078	112	0.112
Medium	III	Inward interaction	0.095	17	70	0.003	0.003	19	0.019
Medium	IV	Sweep	0.540	95	292	0.101	0.081	108	0.108

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	0.200	216	1099	0.064	0.072	40	0.040
High	II	Ejection	0.500	106	344	0.078	0.056	100	0.100
High	III	Inward interaction	0.080	28	109	0.003	0.003	16	0.016
High	IV	Sweep	0.485	129	438	0.092	0.070	97	0.097
Low	I	Outward interaction	0.150	166	702	0.029	0.029	30	0.030
Low	II	Ejection	0.535	176	486	0.109	0.072	107	0.107
Low	III	Inward interaction	0.085	39	210	0.004	0.005	17	0.017
Low	IV	Sweep	0.505	141	461	0.083	0.064	101	0.101
Medium	I	Outward interaction	0.115	103	409	0.024	0.029	23	0.023
Medium	II	Ejection	0.475	92	226	0.087	0.065	95	0.095
Medium	III	Inward interaction	0.040	12	43	0.001	0.001	8	0.008
Medium	IV	Sweep	0.490	100	277	0.097	0.083	98	0.098

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	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	0.245	260	853	0.076	0.071	49	0.049
High	II	Ejection	0.455	139	322	0.076	0.050	91	0.091
High	III	Inward interaction	0.095	29	102	0.003	0.003	19	0.019
High	IV	Sweep	0.465	157	452	0.088	0.071	93	0.093
Low	I	Outward interaction	0.210	297	1268	0.062	0.058	42	0.042
Low	II	Ejection	0.460	162	449	0.074	0.045	92	0.092
Low	III	Inward interaction	0.125	78	349	0.010	0.009	25	0.025
Low	IV	Sweep	0.490	170	580	0.082	0.062	98	0.098
Medium	I	Outward interaction	0.140	68	294	0.015	0.017	28	0.028
Medium	II	Ejection	0.455	137	317	0.100	0.058	91	0.091
Medium	III	Inward interaction	0.120	41	174	0.008	0.008	24	0.024
Medium	IV	Sweep	0.490	112	328	0.089	0.064	98	0.098

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	0.200	193	994	0.033	0.036	40	0.040
High	II	Ejection	0.505	251	651	0.110	0.060	101	0.101
High	III	Inward interaction	0.095	39	390	0.003	0.007	19	0.019
High	IV	Sweep	0.545	206	985	0.097	0.098	109	0.109
Low	I	Outward interaction	0.235	182	737	0.039	0.045	47	0.047
Low	II	Ejection	0.525	227	519	0.108	0.070	105	0.105
Low	III	Inward interaction	0.115	75	175	0.008	0.005	23	0.023
Low	IV	Sweep	0.470	178	604	0.076	0.073	94	0.094
Medium	I	Outward interaction	0.200	211	723	0.077	0.066	40	0.040
Medium	II	Ejection	0.470	98	245	0.084	0.053	94	0.094
Medium	III	Inward interaction	0.115	23	88	0.005	0.005	23	0.023
Medium	IV	Sweep	0.470	93	311	0.080	0.067	94	0.094

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	0.305	340	1237	0.118	0.098	61	0.061
High	II	Ejection	0.430	133	331	0.065	0.037	86	0.086
High	III	Inward interaction	0.150	63	244	0.011	0.009	30	0.030
High	IV	Sweep	0.405	144	552	0.067	0.058	81	0.081
Low	I	Outward interaction	0.240	256	956	0.065	0.071	48	0.048
Low	II	Ejection	0.555	223	545	0.131	0.094	111	0.111
Low	III	Inward interaction	0.085	31	155	0.003	0.004	17	0.017
Low	IV	Sweep	0.470	128	342	0.064	0.050	94	0.094
Medium	I	Outward interaction	0.175	166	748	0.055	0.066	35	0.035
Medium	II	Ejection	0.530	104	286	0.104	0.076	106	0.106
Medium	III	Inward interaction	0.060	18	53	0.002	0.002	12	0.012
Medium	IV	Sweep	0.505	95	247	0.091	0.063	101	0.101

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	0.135	120	507	0.018	0.020	27	0.027
High	II	Ejection	0.695	207	518	0.161	0.107	139	0.139
High	III	Inward interaction	0.030	9	40	0.000	0.000	6	0.006
High	IV	Sweep	0.600	183	542	0.123	0.097	120	0.120
Low	I	Outward interaction	0.380	578	2136	0.152	0.128	76	0.076
Low	II	Ejection	0.480	274	842	0.091	0.064	96	0.096
Low	III	Inward interaction	0.130	56	241	0.005	0.005	26	0.026
Low	IV	Sweep	0.395	187	555	0.051	0.035	79	0.079
Medium	I	Outward interaction	0.120	117	344	0.026	0.022	24	0.024
Medium	II	Ejection	0.465	108	247	0.093	0.062	93	0.093
Medium	III	Inward interaction	0.050	11	50	0.001	0.001	10	0.010
Medium	IV	Sweep	0.505	102	287	0.095	0.078	101	0.101

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	0.250	336	1309	0.089	0.083	50	0.050
High	II	Ejection	0.500	168	452	0.089	0.058	100	0.100
High	III	Inward interaction	0.120	28	156	0.004	0.005	24	0.024
High	IV	Sweep	0.410	189	617	0.082	0.065	82	0.082
Low	I	Outward interaction	0.290	320	926	0.072	0.047	58	0.058
Low	II	Ejection	0.435	183	521	0.062	0.040	87	0.087
Low	III	Inward interaction	0.160	85	340	0.011	0.010	32	0.032
Low	IV	Sweep	0.490	281	1233	0.108	0.106	98	0.098
Medium	I	Outward interaction	0.170	77	219	0.015	0.015	34	0.034
Medium	II	Ejection	0.495	153	278	0.084	0.056	99	0.099
Medium	III	Inward interaction	0.255	80	170	0.023	0.018	51	0.051
Medium	IV	Sweep	0.405	243	577	0.110	0.095	81	0.081

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	0.260	478	1510	0.087	0.058	52	0.052
High	II	Ejection	0.485	253	751	0.086	0.053	97	0.097
High	III	Inward interaction	0.165	116	526	0.013	0.013	33	0.033
High	IV	Sweep	0.420	211	967	0.062	0.060	84	0.084
Low	I	Outward interaction	0.315	1153	3032	0.128	0.096	63	0.063
Low	II	Ejection	0.465	441	1109	0.072	0.052	93	0.093
Low	III	Inward interaction	0.205	260	959	0.019	0.020	41	0.041
Low	IV	Sweep	0.395	370	1303	0.051	0.052	79	0.079
Medium	I	Outward interaction	0.260	400	1982	0.086	0.085	52	0.052
Medium	II	Ejection	0.480	208	651	0.082	0.052	96	0.096
Medium	III	Inward interaction	0.160	113	432	0.015	0.011	32	0.032
Medium	IV	Sweep	0.455	149	642	0.056	0.048	91	0.091

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 fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	0.230	291	2330	0.042	0.060	46	0.046
High	II	Ejection	0.555	337	1068	0.117	0.066	111	0.111
High	III	Inward interaction	0.165	141	531	0.015	0.010	33	0.033
High	IV	Sweep	0.465	227	1168	0.066	0.060	93	0.093
Low	I	Outward interaction	0.415	957	2389	0.233	0.183	83	0.083
Low	II	Ejection	0.415	482	1106	0.117	0.084	83	0.083
Low	III	Inward interaction	0.065	19	54	0.001	0.001	13	0.013
Low	IV	Sweep	0.325	161	467	0.031	0.028	65	0.065
Medium	I	Outward interaction	0.230	286	1664	0.045	0.053	46	0.046
Medium	II	Ejection	0.580	255	801	0.101	0.064	116	0.116
Medium	III	Inward interaction	0.180	139	755	0.017	0.019	36	0.036
Medium	IV	Sweep	0.480	242	919	0.080	0.061	96	0.096

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	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	0.070	92	379	0.003	0.004	14	0.014
High	II	Ejection	0.710	437	929	0.152	0.106	142	0.142
High	III	Inward interaction	0.040	28	106	0.001	0.001	8	0.008
High	IV	Sweep	0.675	416	1020	0.138	0.110	135	0.135
Low	I	Outward interaction	0.330	95	354	0.131	0.074	66	0.066
Low	II	Ejection	0.245	29	126	0.030	0.019	49	0.049
Low	III	Inward interaction	0.265	24	188	0.026	0.031	53	0.053
Low	IV	Sweep	0.275	26	132	0.030	0.023	55	0.055
Medium	I	Outward interaction	0.155	265	1622	0.034	0.045	31	0.031
Medium	II	Ejection	0.545	216	614	0.097	0.060	109	0.109
Medium	III	Inward interaction	0.085	42	195	0.003	0.003	17	0.017
Medium	IV	Sweep	0.535	215	850	0.095	0.082	107	0.107

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	0.110	166	654	0.020	0.022	22	0.022
Low	II	Ejection	0.555	166	348	0.099	0.060	111	0.111
Low	III	Inward interaction	0.100	60	347	0.006	0.011	20	0.020
Low	IV	Sweep	0.515	177	578	0.098	0.093	103	0.103
Medium	I	Outward interaction	0.185	248	1319	0.047	0.051	37	0.037
Medium	II	Ejection	0.455	196	560	0.091	0.053	91	0.091
Medium	III	Inward interaction	0.120	58	382	0.007	0.010	24	0.024
Medium	IV	Sweep	0.525	153	550	0.082	0.061	105	0.105

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	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	0.205	207	1031	0.032	0.034	41	0.041
High	II	Ejection	0.515	209	602	0.081	0.050	103	0.103
High	III	Inward interaction	0.205	133	457	0.020	0.015	41	0.041
High	IV	Sweep	0.500	274	1045	0.103	0.085	100	0.100
Low	I	Outward interaction	0.205	237	966	0.038	0.041	41	0.041
Low	II	Ejection	0.470	273	594	0.100	0.058	94	0.094
Low	III	Inward interaction	0.135	82	383	0.009	0.011	27	0.027
Low	IV	Sweep	0.490	201	631	0.077	0.064	98	0.098
Medium	I	Outward interaction	0.135	123	514	0.029	0.030	27	0.027
Medium	II	Ejection	0.555	105	287	0.101	0.069	111	0.111
Medium	III	Inward interaction	0.080	23	105	0.003	0.004	16	0.016
Medium	IV	Sweep	0.520	113	383	0.102	0.086	104	0.104

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	0.330	247	1340	0.068	0.097	66	0.066
High	II	Ejection	0.505	158	422	0.066	0.047	101	0.101
High	III	Inward interaction	0.170	166	394	0.023	0.015	34	0.034
High	IV	Sweep	0.395	251	773	0.082	0.067	79	0.079
Low	I	Outward interaction	0.200	227	1134	0.050	0.056	40	0.040
Low	II	Ejection	0.580	158	449	0.101	0.064	116	0.116
Low	III	Inward interaction	0.115	60	184	0.008	0.005	23	0.023
Low	IV	Sweep	0.515	166	620	0.094	0.079	103	0.103
Medium	I	Outward interaction	0.130	63	235	0.016	0.015	26	0.026
Medium	II	Ejection	0.530	114	290	0.121	0.078	106	0.106
Medium	III	Inward interaction	0.110	27	93	0.006	0.005	22	0.022
Medium	IV	Sweep	0.465	93	243	0.086	0.057	93	0.093

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	0.250	399	1237	0.076	0.062	50	0.050
High	II	Ejection	0.440	208	495	0.070	0.044	88	0.088
High	III	Inward interaction	0.085	31	107	0.002	0.002	17	0.017
High	IV	Sweep	0.500	319	923	0.121	0.092	100	0.100
Low	I	Outward interaction	0.175	196	603	0.042	0.034	35	0.035
Low	II	Ejection	0.565	179	475	0.122	0.087	113	0.113
Low	III	Inward interaction	0.085	33	124	0.003	0.003	17	0.017
Low	IV	Sweep	0.470	122	376	0.069	0.057	94	0.094
Medium	I	Outward interaction	0.155	148	506	0.039	0.040	31	0.031
Medium	II	Ejection	0.565	98	237	0.095	0.068	113	0.113
Medium	III	Inward interaction	0.045	11	38	0.001	0.001	9	0.009
Medium	IV	Sweep	0.540	121	329	0.112	0.090	108	0.108

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	0.310	490	1497	0.086	0.077	62	0.062
High	II	Ejection	0.600	473	1073	0.160	0.106	120	0.120
High	III	Inward interaction	0.075	47	192	0.002	0.002	15	0.015
High	IV	Sweep	0.425	216	678	0.052	0.048	85	0.085
Low	I	Outward interaction	0.145	199	737	0.034	0.031	29	0.029
Low	II	Ejection	0.640	147	383	0.112	0.072	128	0.128
Low	III	Inward interaction	0.140	60	265	0.010	0.011	28	0.028
Low	IV	Sweep	0.520	144	453	0.089	0.069	104	0.104
Medium	I	Outward interaction	0.195	183	491	0.043	0.031	39	0.039
Medium	II	Ejection	0.470	171	392	0.098	0.060	94	0.094
Medium	III	Inward interaction	0.105	35	155	0.004	0.005	21	0.021
Medium	IV	Sweep	0.495	132	417	0.079	0.067	99	0.099

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	0.255	908	2892	0.147	0.124	51	0.051
High	II	Ejection	0.470	298	740	0.089	0.059	94	0.094
High	III	Inward interaction	0.130	72	309	0.006	0.007	26	0.026
High	IV	Sweep	0.430	166	528	0.045	0.038	86	0.086
Low	I	Outward interaction	0.220	247	769	0.042	0.032	44	0.044
Low	II	Ejection	0.465	236	627	0.085	0.054	93	0.093
Low	III	Inward interaction	0.110	80	332	0.007	0.007	22	0.022
Low	IV	Sweep	0.510	252	921	0.100	0.088	102	0.102
Medium	I	Outward interaction	0.145	106	448	0.026	0.026	29	0.029
Medium	II	Ejection	0.535	108	293	0.099	0.064	107	0.107
Medium	III	Inward interaction	0.095	33	153	0.005	0.006	19	0.019
Medium	IV	Sweep	0.555	115	390	0.109	0.088	111	0.111

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	0.190	195	700	0.042	0.037	38	0.038
High	II	Ejection	0.565	226	600	0.146	0.095	113	0.113
High	III	Inward interaction	0.100	30	143	0.003	0.004	20	0.020
High	IV	Sweep	0.420	119	464	0.057	0.054	84	0.084
Low	I	Outward interaction	0.230	205	973	0.038	0.045	46	0.046
Low	II	Ejection	0.495	211	535	0.084	0.053	99	0.099
Low	III	Inward interaction	0.160	155	393	0.020	0.013	32	0.032
Low	IV	Sweep	0.460	222	683	0.082	0.063	92	0.092
Medium	I	Outward interaction	0.175	147	511	0.044	0.038	35	0.035
Medium	II	Ejection	0.505	107	301	0.093	0.065	101	0.101
Medium	III	Inward interaction	0.095	29	134	0.005	0.005	19	0.019
Medium	IV	Sweep	0.455	103	334	0.081	0.065	91	0.091

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	0.305	232	747	0.114	0.079	61	0.061
High	II	Ejection	0.440	114	339	0.081	0.052	88	0.088
High	III	Inward interaction	0.105	16	75	0.003	0.003	21	0.021
High	IV	Sweep	0.415	105	319	0.070	0.046	83	0.083
Low	I	Outward interaction	0.130	160	703	0.017	0.015	26	0.026
Low	II	Ejection	0.555	241	720	0.110	0.064	111	0.111
Low	III	Inward interaction	0.125	76	356	0.008	0.007	25	0.025
Low	IV	Sweep	0.540	237	1002	0.106	0.087	108	0.108
Medium	I	Outward interaction	0.130	96	377	0.025	0.022	26	0.026
Medium	II	Ejection	0.505	86	249	0.089	0.056	101	0.101
Medium	III	Inward interaction	0.070	19	86	0.003	0.003	14	0.014
Medium	IV	Sweep	0.555	99	336	0.112	0.083	111	0.111

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	0.290	100	264	0.029	0.022	58	0.058
High	II	Ejection	0.410	118	249	0.048	0.030	82	0.082
High	III	Inward interaction	0.330	128	364	0.042	0.035	66	0.066
High	IV	Sweep	0.795	236	456	0.188	0.107	159	0.159
Low	I	Outward interaction	0.295	229	702	0.043	0.046	59	0.059
Low	II	Ejection	0.625	402	783	0.158	0.108	125	0.125
Low	III	Inward interaction	0.085	55	92	0.003	0.002	17	0.017
Low	IV	Sweep	0.440	227	337	0.063	0.033	88	0.088
Medium	I	Outward interaction	0.080	71	213	0.010	0.008	16	0.016
Medium	II	Ejection	0.530	112	304	0.108	0.078	106	0.106
Medium	III	Inward interaction	0.050	19	75	0.002	0.002	10	0.010
Medium	IV	Sweep	0.580	107	303	0.113	0.085	116	0.116

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	0.210	414	1561	0.065	0.061	42	0.042
High	II	Ejection	0.555	287	672	0.119	0.069	111	0.111
High	III	Inward interaction	0.070	35	200	0.002	0.003	14	0.014
High	IV	Sweep	0.505	225	850	0.085	0.079	101	0.101
Low	I	Outward interaction	0.165	225	740	0.032	0.025	33	0.033
Low	II	Ejection	0.560	195	626	0.094	0.071	112	0.112
Low	III	Inward interaction	0.095	46	179	0.004	0.003	19	0.019
Low	IV	Sweep	0.580	254	797	0.127	0.094	116	0.116
Medium	I	Outward interaction	0.220	190	1034	0.048	0.054	44	0.044
Medium	II	Ejection	0.505	144	376	0.083	0.045	101	0.101
Medium	III	Inward interaction	0.175	70	259	0.014	0.011	35	0.035
Medium	IV	Sweep	0.475	170	677	0.092	0.076	95	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	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	0.365	678	2188	0.137	0.123	73	0.073
High	II	Ejection	0.490	354	931	0.096	0.070	98	0.098
High	III	Inward interaction	0.135	92	258	0.007	0.005	27	0.027
High	IV	Sweep	0.370	218	672	0.044	0.038	74	0.074
Low	I	Outward interaction	0.320	277	1049	0.118	0.099	64	0.064
Low	II	Ejection	0.445	106	395	0.062	0.052	89	0.089
Low	III	Inward interaction	0.155	42	153	0.009	0.007	31	0.031
Low	IV	Sweep	0.445	133	405	0.078	0.053	89	0.089
Medium	I	Outward interaction	0.265	371	1801	0.076	0.080	53	0.053
Medium	II	Ejection	0.620	238	706	0.114	0.073	124	0.124
Medium	III	Inward interaction	0.090	60	236	0.004	0.004	18	0.018
Medium	IV	Sweep	0.500	205	704	0.079	0.059	100	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	0.305	379	1836	0.068	0.064	61	0.061
High	II	Ejection	0.440	172	567	0.045	0.029	88	0.088
High	III	Inward interaction	0.280	290	876	0.048	0.028	56	0.056
High	IV	Sweep	0.380	359	1448	0.081	0.063	76	0.076
Low	I	Outward interaction	0.205	46	175	0.034	0.024	41	0.041
Low	II	Ejection	0.485	55	186	0.097	0.059	97	0.097
Low	III	Inward interaction	0.130	14	89	0.006	0.008	26	0.026
Low	IV	Sweep	0.445	51	151	0.082	0.044	89	0.089
Medium	I	Outward interaction	0.220	335	1592	0.057	0.058	44	0.044
Medium	II	Ejection	0.575	226	659	0.101	0.063	115	0.115
Medium	III	Inward interaction	0.190	131	592	0.019	0.019	38	0.038
Medium	IV	Sweep	0.485	189	852	0.071	0.069	97	0.097

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	0.225	296	1316	0.034	0.032	45	0.045
High	II	Ejection	0.545	275	791	0.076	0.046	109	0.109
High	III	Inward interaction	0.105	96	351	0.005	0.004	21	0.021
High	IV	Sweep	0.545	520	2032	0.144	0.119	109	0.109
Low	I	Outward interaction	0.190	365	1086	0.053	0.038	38	0.038
Low	II	Ejection	0.435	218	543	0.072	0.044	87	0.087
Low	III	Inward interaction	0.065	36	112	0.002	0.001	13	0.013
Low	IV	Sweep	0.485	258	968	0.095	0.087	97	0.097
Medium	I	Outward interaction	0.170	292	1203	0.036	0.031	34	0.034
Medium	II	Ejection	0.535	275	694	0.106	0.056	107	0.107
Medium	III	Inward interaction	0.140	116	466	0.012	0.010	28	0.028
Medium	IV	Sweep	0.525	205	904	0.077	0.072	105	0.105

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	0.245	615	1164	0.025	0.018	49	0.049
High	II	Ejection	0.540	1182	2110	0.107	0.072	108	0.108
High	III	Inward interaction	0.270	618	1244	0.028	0.021	54	0.054
High	IV	Sweep	0.585	1123	1945	0.110	0.071	117	0.117
Low	I	Outward interaction	0.455	1131	1817	0.077	0.046	91	0.091
Low	II	Ejection	0.330	1171	2181	0.058	0.040	66	0.066
Low	III	Inward interaction	0.415	846	1619	0.052	0.038	83	0.083
Low	IV	Sweep	0.415	956	1839	0.059	0.043	83	0.083
Medium	I	Outward interaction	0.335	1133	1825	0.052	0.040	67	0.067
Medium	II	Ejection	0.490	1407	2085	0.095	0.067	98	0.098
Medium	III	Inward interaction	0.350	787	1188	0.038	0.027	70	0.070
Medium	IV	Sweep	0.505	1106	1806	0.077	0.060	101	0.101

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	0.485	2739	7224	0.100	0.086	97	0.097
High	II	Ejection	0.375	1849	4024	0.052	0.037	75	0.075
High	III	Inward interaction	0.440	1879	3802	0.062	0.041	88	0.088
High	IV	Sweep	0.330	1795	3407	0.045	0.028	66	0.066
Low	I	Outward interaction	0.325	557	1167	0.032	0.023	65	0.065
Low	II	Ejection	0.530	1013	1897	0.095	0.062	106	0.106
Low	III	Inward interaction	0.315	969	1803	0.054	0.035	63	0.063
Low	IV	Sweep	0.515	929	1681	0.084	0.053	103	0.103
Medium	I	Outward interaction	0.200	117	276	0.014	0.010	40	0.040
Medium	II	Ejection	0.535	299	670	0.098	0.065	107	0.107
Medium	III	Inward interaction	0.265	168	531	0.027	0.025	53	0.053
Medium	IV	Sweep	0.570	359	859	0.125	0.089	114	0.114

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	0.535	2204	6276	0.089	0.064	107	0.107
High	II	Ejection	0.315	2194	5522	0.052	0.033	63	0.063
High	III	Inward interaction	0.520	2029	5779	0.080	0.057	104	0.104
High	IV	Sweep	0.330	1610	4204	0.040	0.026	66	0.066
Low	I	Outward interaction	0.220	558	1089	0.013	0.010	44	0.044
Low	II	Ejection	0.520	1451	2462	0.080	0.055	104	0.104
Low	III	Inward interaction	0.490	1989	3377	0.104	0.071	98	0.098
Low	IV	Sweep	0.395	1753	3478	0.074	0.059	79	0.079
Medium	I	Outward interaction	0.325	391	1021	0.063	0.053	65	0.065
Medium	II	Ejection	0.495	315	781	0.077	0.062	99	0.099
Medium	III	Inward interaction	0.130	78	196	0.005	0.004	26	0.026
Medium	IV	Sweep	0.590	458	967	0.135	0.091	118	0.118

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	0.190	282	528	0.025	0.015	38	0.038
High	II	Ejection	0.590	347	845	0.095	0.077	118	0.118
High	III	Inward interaction	0.100	79	219	0.004	0.003	20	0.020
High	IV	Sweep	0.595	492	1071	0.136	0.098	119	0.119
Low	I	Outward interaction	0.435	1135	2158	0.061	0.038	87	0.087
Low	II	Ejection	0.370	1159	2373	0.053	0.036	74	0.074
Low	III	Inward interaction	0.445	1388	2828	0.077	0.051	89	0.089
Low	IV	Sweep	0.460	1355	2713	0.077	0.051	92	0.092
Medium	I	Outward interaction	0.000	0	0	0.000	0.000	0	0.000
Medium	II	Ejection	0.675	520	1065	0.131	0.096	135	0.135
Medium	III	Inward interaction	0.015	17	40	0.000	0.000	3	0.003
Medium	IV	Sweep	0.745	569	1083	0.158	0.107	149	0.149

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	0.285	553	1007	0.037	0.025	57	0.057
High	II	Ejection	0.560	918	1572	0.120	0.076	112	0.112
High	III	Inward interaction	0.245	345	948	0.020	0.020	49	0.049
High	IV	Sweep	0.530	766	1376	0.094	0.063	106	0.106
Low	I	Outward interaction	0.375	1387	2936	0.054	0.030	75	0.075
Low	II	Ejection	0.545	1390	3455	0.078	0.052	109	0.109
Low	III	Inward interaction	0.430	1662	4159	0.074	0.049	86	0.086
Low	IV	Sweep	0.470	1500	3607	0.073	0.047	94	0.094
Medium	I	Outward interaction	0.280	426	808	0.039	0.027	56	0.056
Medium	II	Ejection	0.560	602	1004	0.111	0.068	112	0.112
Medium	III	Inward interaction	0.240	268	611	0.021	0.018	48	0.048
Medium	IV	Sweep	0.570	531	1035	0.100	0.071	114	0.114

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 fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	0.270	423	981	0.022	0.019	54	0.054
High	II	Ejection	0.545	1294	2410	0.138	0.096	109	0.109
High	III	Inward interaction	0.340	657	1162	0.044	0.029	68	0.068
High	IV	Sweep	0.480	743	1325	0.070	0.047	96	0.096
Low	I	Outward interaction	0.315	644	1327	0.035	0.021	63	0.063
Low	II	Ejection	0.485	897	1881	0.074	0.045	97	0.097
Low	III	Inward interaction	0.295	761	1701	0.038	0.025	59	0.059
Low	IV	Sweep	0.495	1262	2988	0.106	0.073	99	0.099
Medium	I	Outward interaction	0.370	722	1391	0.062	0.046	74	0.074
Medium	II	Ejection	0.550	756	1352	0.097	0.067	110	0.110
Medium	III	Inward interaction	0.260	391	684	0.024	0.016	52	0.052
Medium	IV	Sweep	0.470	741	1122	0.081	0.048	94	0.094

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	0.175	2777	6033	0.012	0.010	35	0.035
High	II	Ejection	0.640	9303	17066	0.147	0.104	128	0.128
High	III	Inward interaction	0.095	1271	2889	0.003	0.003	19	0.019
High	IV	Sweep	0.540	7609	14016	0.101	0.072	108	0.108
Low	I	Outward interaction	0.330	577	1287	0.034	0.019	66	0.066
Low	II	Ejection	0.500	1265	2551	0.114	0.057	100	0.100
Low	III	Inward interaction	0.325	729	1885	0.043	0.028	65	0.065
Low	IV	Sweep	0.455	849	2306	0.070	0.047	91	0.091
Medium	I	Outward interaction	0.370	805	1466	0.074	0.048	74	0.074
Medium	II	Ejection	0.485	681	1216	0.082	0.053	97	0.097
Medium	III	Inward interaction	0.285	359	608	0.025	0.015	57	0.057
Medium	IV	Sweep	0.510	638	1085	0.081	0.049	102	0.102

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	0.135	3292	5975	0.007	0.006	27	0.027
High	II	Ejection	0.690	16047	24100	0.171	0.117	138	0.138
High	III	Inward interaction	0.115	2849	5675	0.005	0.005	23	0.023
High	IV	Sweep	0.635	11252	16772	0.111	0.075	127	0.127
Low	I	Outward interaction	0.210	375	896	0.017	0.014	42	0.042
Low	II	Ejection	0.530	1020	2023	0.119	0.078	106	0.106
Low	III	Inward interaction	0.300	476	972	0.031	0.021	60	0.060
Low	IV	Sweep	0.490	768	1346	0.083	0.048	98	0.098
Medium	I	Outward interaction	0.335	731	1387	0.043	0.034	67	0.067
Medium	II	Ejection	0.490	1582	2587	0.138	0.093	98	0.098
Medium	III	Inward interaction	0.225	432	989	0.017	0.016	45	0.045
Medium	IV	Sweep	0.490	649	1052	0.056	0.038	98	0.098

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 fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	0.225	678	1897	0.019	0.018	45	0.045
High	II	Ejection	0.730	2327	5032	0.209	0.153	146	0.146
High	III	Inward interaction	0.170	611	1504	0.013	0.011	34	0.034
High	IV	Sweep	0.495	949	1806	0.058	0.037	99	0.099
Low	I	Outward interaction	0.260	827	1302	0.029	0.019	52	0.052
Low	II	Ejection	0.545	1609	2683	0.118	0.084	109	0.109
Low	III	Inward interaction	0.205	528	947	0.015	0.011	41	0.041
Low	IV	Sweep	0.545	1297	2145	0.095	0.067	109	0.109
Medium	I	Outward interaction	0.215	465	756	0.012	0.008	43	0.043
Medium	II	Ejection	0.560	2195	3870	0.153	0.110	112	0.112
Medium	III	Inward interaction	0.180	798	1571	0.018	0.014	36	0.036
Medium	IV	Sweep	0.435	1190	1873	0.064	0.041	87	0.087

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	0.340	883	2048	0.081	0.059	68	0.068
High	II	Ejection	0.505	540	1471	0.073	0.063	101	0.101
High	III	Inward interaction	0.185	209	433	0.010	0.007	37	0.037
High	IV	Sweep	0.400	637	1392	0.068	0.047	80	0.080
Low	I	Outward interaction	0.205	1436	2939	0.016	0.010	41	0.041
Low	II	Ejection	0.585	2900	6197	0.091	0.063	117	0.117
Low	III	Inward interaction	0.240	1760	3903	0.023	0.016	48	0.048
Low	IV	Sweep	0.665	4757	9433	0.169	0.109	133	0.133
Medium	I	Outward interaction	0.245	984	2332	0.028	0.021	49	0.049
Medium	II	Ejection	0.580	1973	4131	0.131	0.087	116	0.116
Medium	III	Inward interaction	0.120	338	998	0.005	0.004	24	0.024
Medium	IV	Sweep	0.605	1640	3529	0.114	0.078	121	0.121

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	0.275	716	1792	0.031	0.023	55	0.055
High	II	Ejection	0.550	1368	2388	0.119	0.061	110	0.110
High	III	Inward interaction	0.225	413	1018	0.015	0.011	45	0.045
High	IV	Sweep	0.525	1260	2826	0.105	0.068	105	0.105
Low	I	Outward interaction	0.430	1005	2639	0.057	0.044	86	0.086
Low	II	Ejection	0.350	972	1913	0.045	0.026	70	0.070
Low	III	Inward interaction	0.495	1408	3140	0.093	0.061	99	0.099
Low	IV	Sweep	0.345	1262	2945	0.058	0.040	69	0.069
Medium	I	Outward interaction	0.315	234	574	0.032	0.022	63	0.063
Medium	II	Ejection	0.475	386	825	0.079	0.047	95	0.095
Medium	III	Inward interaction	0.350	319	980	0.048	0.041	70	0.070
Medium	IV	Sweep	0.515	447	1017	0.100	0.063	103	0.103

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	0.395	630	1339	0.054	0.033	79	0.079
High	II	Ejection	0.500	971	2426	0.106	0.075	100	0.100
High	III	Inward interaction	0.375	618	1260	0.050	0.029	75	0.075
High	IV	Sweep	0.440	590	1615	0.057	0.044	88	0.088
Low	I	Outward interaction	0.155	407	927	0.009	0.007	31	0.031
Low	II	Ejection	0.525	1121	1940	0.081	0.051	105	0.105
Low	III	Inward interaction	0.255	856	1756	0.030	0.022	51	0.051
Low	IV	Sweep	0.585	1809	3433	0.145	0.100	117	0.117
Medium	I	Outward interaction	0.365	564	1331	0.053	0.041	73	0.073
Medium	II	Ejection	0.510	670	1400	0.088	0.060	102	0.102
Medium	III	Inward interaction	0.370	526	1007	0.050	0.031	74	0.074
Medium	IV	Sweep	0.505	600	1252	0.078	0.053	101	0.101

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	0.220	803	1342	0.025	0.017	44	0.044
High	II	Ejection	0.515	1353	2398	0.099	0.072	103	0.103
High	III	Inward interaction	0.300	734	1267	0.031	0.022	60	0.060
High	IV	Sweep	0.560	1241	2145	0.099	0.070	112	0.112
Low	I	Outward interaction	0.335	1004	2175	0.035	0.024	67	0.067
Low	II	Ejection	0.500	1352	2461	0.071	0.040	100	0.100
Low	III	Inward interaction	0.415	1899	4066	0.082	0.055	83	0.083
Low	IV	Sweep	0.420	1689	3551	0.074	0.048	84	0.084
Medium	I	Outward interaction	0.415	946	1893	0.071	0.049	83	0.083
Medium	II	Ejection	0.485	973	1888	0.085	0.058	97	0.097
Medium	III	Inward interaction	0.350	549	1281	0.035	0.028	70	0.070
Medium	IV	Sweep	0.440	866	1746	0.069	0.048	88	0.088

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	0.360	1469	2614	0.046	0.032	72	0.072
High	II	Ejection	0.480	1681	2911	0.071	0.048	96	0.096
High	III	Inward interaction	0.300	1538	2976	0.040	0.031	60	0.060
High	IV	Sweep	0.465	2047	3546	0.083	0.057	93	0.093
Low	I	Outward interaction	0.315	1108	1902	0.041	0.024	63	0.063
Low	II	Ejection	0.510	1476	2646	0.088	0.054	102	0.102
Low	III	Inward interaction	0.315	1003	1937	0.037	0.024	63	0.063
Low	IV	Sweep	0.530	1586	3502	0.099	0.074	106	0.106
Medium	I	Outward interaction	0.390	1285	2449	0.063	0.045	78	0.078
Medium	II	Ejection	0.460	1355	2297	0.079	0.050	92	0.092
Medium	III	Inward interaction	0.350	893	1719	0.039	0.028	70	0.070
Medium	IV	Sweep	0.500	1348	2484	0.085	0.058	100	0.100

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	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	0.420	1362	2815	0.060	0.044	84	0.084
High	II	Ejection	0.430	1990	3439	0.090	0.055	86	0.086
High	III	Inward interaction	0.475	1475	2696	0.074	0.048	95	0.095
High	IV	Sweep	0.390	1099	2281	0.045	0.033	78	0.078
Low	I	Outward interaction	0.290	1362	2800	0.039	0.028	58	0.058
Low	II	Ejection	0.505	1974	3595	0.099	0.062	101	0.101
Low	III	Inward interaction	0.265	878	1899	0.023	0.017	53	0.053
Low	IV	Sweep	0.555	1663	2899	0.091	0.055	111	0.111
Medium	I	Outward interaction	0.430	2519	4801	0.123	0.094	86	0.086
Medium	II	Ejection	0.310	1354	2787	0.048	0.039	62	0.062
Medium	III	Inward interaction	0.355	797	1348	0.032	0.022	71	0.071
Medium	IV	Sweep	0.385	1019	1633	0.044	0.028	77	0.077

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	0.275	3789	6045	0.020	0.015	55	0.055
High	II	Ejection	0.530	15610	25919	0.161	0.121	106	0.106
High	III	Inward interaction	0.240	6261	13476	0.029	0.029	48	0.048
High	IV	Sweep	0.495	6273	9567	0.061	0.042	99	0.099
Low	I	Outward interaction	0.390	1071	2253	0.050	0.038	78	0.078
Low	II	Ejection	0.450	1695	3004	0.092	0.059	90	0.090
Low	III	Inward interaction	0.360	1028	2058	0.045	0.032	72	0.072
Low	IV	Sweep	0.510	1342	2382	0.082	0.053	102	0.102
Medium	I	Outward interaction	0.400	1399	2727	0.069	0.051	80	0.080
Medium	II	Ejection	0.570	1634	2742	0.116	0.074	114	0.114
Medium	III	Inward interaction	0.305	853	1688	0.032	0.024	61	0.061
Medium	IV	Sweep	0.465	1031	1868	0.060	0.041	93	0.093

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	0.175	1475	3177	0.013	0.012	35	0.035
High	II	Ejection	0.685	5932	9817	0.203	0.140	137	0.137
High	III	Inward interaction	0.080	554	975	0.002	0.002	16	0.016
High	IV	Sweep	0.560	2702	4240	0.075	0.049	112	0.112
Low	I	Outward interaction	0.140	669	1496	0.006	0.006	28	0.028
Low	II	Ejection	0.575	5361	8901	0.199	0.136	115	0.115
Low	III	Inward interaction	0.180	1031	2144	0.012	0.010	36	0.036
Low	IV	Sweep	0.500	1760	2738	0.057	0.036	100	0.100
Medium	I	Outward interaction	0.150	913	1534	0.007	0.006	30	0.030
Medium	II	Ejection	0.665	7243	11288	0.259	0.184	133	0.133
Medium	III	Inward interaction	0.095	731	1169	0.004	0.003	19	0.019
Medium	IV	Sweep	0.480	1711	2798	0.044	0.033	96	0.096

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	0.255	1420	3299	0.050	0.031	51	0.051
High	II	Ejection	0.485	1313	3791	0.088	0.068	97	0.097
High	III	Inward interaction	0.215	490	1065	0.014	0.008	43	0.043
High	IV	Sweep	0.485	1253	2618	0.083	0.047	97	0.097
Low	I	Outward interaction	0.210	2344	4922	0.014	0.011	42	0.042
Low	II	Ejection	0.505	6250	12523	0.089	0.065	101	0.101
Low	III	Inward interaction	0.235	3010	6871	0.020	0.017	47	0.047
Low	IV	Sweep	0.605	8813	15533	0.150	0.096	121	0.121
Medium	I	Outward interaction	0.500	1050	3047	0.129	0.090	100	0.100
Medium	II	Ejection	0.215	272	1104	0.014	0.014	43	0.043
Medium	III	Inward interaction	0.460	471	1371	0.053	0.037	92	0.092
Medium	IV	Sweep	0.280	680	1957	0.047	0.032	56	0.056

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	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	0.100	132	405	0.005	0.006	20	0.020
High	II	Ejection	0.670	458	980	0.127	0.097	134	0.134
High	III	Inward interaction	0.040	34	84	0.001	0.000	8	0.008
High	IV	Sweep	0.640	565	1050	0.149	0.100	128	0.128
Low	I	Outward interaction	0.420	1349	3600	0.070	0.051	84	0.084
Low	II	Ejection	0.395	1223	3245	0.059	0.043	79	0.079
Low	III	Inward interaction	0.415	1205	3089	0.061	0.043	83	0.083
Low	IV	Sweep	0.430	1206	3619	0.064	0.053	86	0.086
Medium	I	Outward interaction	0.435	877	1730	0.082	0.046	87	0.087
Medium	II	Ejection	0.440	673	1539	0.064	0.041	88	0.088
Medium	III	Inward interaction	0.350	507	1235	0.038	0.026	70	0.070
Medium	IV	Sweep	0.440	726	1644	0.069	0.044	88	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	0.235	808	2662	0.024	0.022	47	0.047
High	II	Ejection	0.490	1587	3280	0.099	0.058	98	0.098
High	III	Inward interaction	0.275	721	1748	0.025	0.017	55	0.055
High	IV	Sweep	0.595	1314	2707	0.100	0.058	119	0.119
Low	I	Outward interaction	0.250	1039	2850	0.022	0.017	50	0.050
Low	II	Ejection	0.605	1901	3973	0.096	0.057	121	0.121
Low	III	Inward interaction	0.195	1144	2501	0.019	0.011	39	0.039
Low	IV	Sweep	0.490	2704	7469	0.111	0.086	98	0.098
Medium	I	Outward interaction	0.270	638	1501	0.027	0.018	54	0.054
Medium	II	Ejection	0.515	1111	2324	0.091	0.054	103	0.103
Medium	III	Inward interaction	0.285	898	1951	0.041	0.025	57	0.057
Medium	IV	Sweep	0.485	1105	2717	0.085	0.060	97	0.097

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	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	0.295	1443	2421	0.036	0.025	59	0.059
Low	II	Ejection	0.620	2701	4486	0.140	0.099	124	0.124
Low	III	Inward interaction	0.285	1414	2413	0.034	0.024	57	0.057
Low	IV	Sweep	0.500	1576	2594	0.066	0.046	100	0.100
Medium	I	Outward interaction	0.320	2894	5093	0.052	0.039	64	0.064
Medium	II	Ejection	0.475	5625	9821	0.151	0.112	95	0.095
Medium	III	Inward interaction	0.295	1479	2411	0.025	0.017	59	0.059
Medium	IV	Sweep	0.440	1654	2540	0.041	0.027	88	0.088
High	I	Outward interaction	0.350	1349	3194	0.046	0.045	70	0.070
High	II	Ejection	0.505	2321	3988	0.114	0.081	101	0.101
High	III	Inward interaction	0.420	1308	2194	0.054	0.037	84	0.084
High	IV	Sweep	0.395	1245	2012	0.048	0.032	79	0.079

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	0.280	2181	5825	0.024	0.020	56	0.056
Low	II	Ejection	0.585	6715	14052	0.151	0.099	117	0.117
Low	III	Inward interaction	0.330	3989	12328	0.051	0.049	66	0.066
Low	IV	Sweep	0.530	3207	5783	0.065	0.037	106	0.106
Medium	I	Outward interaction	0.150	1445	2842	0.019	0.013	30	0.030
Medium	II	Ejection	0.680	2196	5165	0.130	0.108	136	0.136
Medium	III	Inward interaction	0.025	93	226	0.000	0.000	5	0.005
Medium	IV	Sweep	0.695	2482	5277	0.150	0.113	139	0.139
High	I	Outward interaction	0.390	3046	6291	0.063	0.041	78	0.078
High	II	Ejection	0.390	2630	5565	0.055	0.036	78	0.078
High	III	Inward interaction	0.475	2620	6202	0.066	0.049	95	0.095
High	IV	Sweep	0.460	3886	9249	0.095	0.071	92	0.092

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	0.480	4288	9036	0.115	0.079	96	0.096
Low	II	Ejection	0.270	1950	4759	0.029	0.023	54	0.054
Low	III	Inward interaction	0.520	2686	6095	0.078	0.058	104	0.104
Low	IV	Sweep	0.260	1699	3964	0.025	0.019	52	0.052
Medium	I	Outward interaction	0.275	659	1538	0.030	0.022	55	0.055
Medium	II	Ejection	0.520	1105	2316	0.095	0.062	104	0.104
Medium	III	Inward interaction	0.275	691	1650	0.031	0.023	55	0.055
Medium	IV	Sweep	0.480	1079	2443	0.086	0.060	96	0.096
High	I	Outward interaction	0.435	737	1782	0.131	0.095	87	0.087
High	II	Ejection	0.320	317	863	0.042	0.034	64	0.064
High	III	Inward interaction	0.275	172	424	0.019	0.014	55	0.055
High	IV	Sweep	0.280	309	775	0.035	0.027	56	0.056

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	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	0.260	2867	6200	0.028	0.023	52	0.052
Low	II	Ejection	0.535	4719	7827	0.094	0.061	107	0.107
Low	III	Inward interaction	0.145	896	2015	0.005	0.004	29	0.029
Low	IV	Sweep	0.480	6763	12844	0.121	0.089	96	0.096
Medium	I	Outward interaction	0.030	50	96	0.001	0.000	6	0.006
Medium	II	Ejection	0.745	470	1101	0.137	0.087	149	0.149
Medium	III	Inward interaction	0.040	44	200	0.001	0.001	8	0.008
Medium	IV	Sweep	0.690	586	1323	0.158	0.097	138	0.138
High	I	Outward interaction	0.345	707	1428	0.031	0.023	69	0.069
High	II	Ejection	0.395	936	1719	0.047	0.032	79	0.079
High	III	Inward interaction	0.435	2108	4350	0.116	0.089	87	0.087
High	IV	Sweep	0.340	1261	2631	0.054	0.042	68	0.068

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
Low	I	Outward interaction	0.375	374	1289	0.131	0.109	75	0.075
Low	II	Ejection	0.525	260	698	0.127	0.083	105	0.105
Low	III	Inward interaction	0.075	18	56	0.001	0.001	15	0.015
Low	IV	Sweep	0.325	113	420	0.034	0.031	65	0.065
High	I	Outward interaction	0.450	942	2871	0.236	0.209	90	0.090
High	II	Ejection	0.350	276	716	0.054	0.041	70	0.070
High	III	Inward interaction	0.085	48	159	0.002	0.002	17	0.017
High	IV	Sweep	0.325	199	543	0.036	0.029	65	0.065
Medium	I	Outward interaction	0.190	143	535	0.034	0.037	38	0.038
Medium	II	Ejection	0.570	181	419	0.127	0.086	114	0.114
Medium	III	Inward interaction	0.075	26	127	0.002	0.003	15	0.015
Medium	IV	Sweep	0.560	146	434	0.101	0.087	112	0.112

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	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	0.240	184	1031	0.025	0.030	48	0.048
Low	II	Ejection	0.545	338	1212	0.104	0.079	109	0.109
Low	III	Inward interaction	0.215	119	527	0.014	0.014	43	0.043
Low	IV	Sweep	0.525	428	1490	0.127	0.094	105	0.105
High	I	Outward interaction	0.085	91	304	0.008	0.009	17	0.017
High	II	Ejection	0.725	178	374	0.126	0.097	145	0.145
High	III	Inward interaction	0.090	74	205	0.006	0.007	18	0.018
High	IV	Sweep	0.675	200	453	0.132	0.109	135	0.135
Medium	I	Outward interaction	0.165	102	482	0.020	0.023	33	0.033
Medium	II	Ejection	0.475	174	459	0.099	0.063	95	0.095
Medium	III	Inward interaction	0.175	83	371	0.017	0.019	35	0.035
Medium	IV	Sweep	0.435	146	505	0.076	0.063	87	0.087

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
Low	I	Outward interaction	0.195	281	1134	0.034	0.039	39	0.039
Low	II	Ejection	0.555	326	719	0.113	0.071	111	0.111
Low	III	Inward interaction	0.135	86	402	0.007	0.010	27	0.027
Low	IV	Sweep	0.555	248	562	0.086	0.055	111	0.111
High	I	Outward interaction	0.285	259	993	0.066	0.057	57	0.057
High	II	Ejection	0.545	273	788	0.133	0.086	109	0.109
High	III	Inward interaction	0.125	39	187	0.004	0.005	25	0.025
High	IV	Sweep	0.455	174	735	0.071	0.067	91	0.091
Medium	I	Outward interaction	0.190	44	194	0.013	0.016	38	0.038
Medium	II	Ejection	0.540	156	395	0.129	0.093	108	0.108
Medium	III	Inward interaction	0.095	26	126	0.004	0.005	19	0.019
Medium	IV	Sweep	0.500	130	344	0.100	0.075	100	0.100

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	0.115	102	536	0.018	0.026	23	0.023
Low	II	Ejection	0.595	127	306	0.114	0.076	119	0.119
Low	III	Inward interaction	0.085	28	138	0.004	0.005	17	0.017
Low	IV	Sweep	0.530	123	297	0.098	0.066	106	0.106
High	I	Outward interaction	0.340	488	2215	0.126	0.118	68	0.068
High	II	Ejection	0.500	246	717	0.093	0.056	100	0.100
High	III	Inward interaction	0.130	72	419	0.007	0.009	26	0.026
High	IV	Sweep	0.415	167	583	0.053	0.038	83	0.083
Medium	I	Outward interaction	0.140	82	363	0.017	0.017	28	0.028
Medium	II	Ejection	0.520	142	435	0.111	0.077	104	0.104
Medium	III	Inward interaction	0.075	29	99	0.003	0.003	15	0.015
Medium	IV	Sweep	0.535	120	392	0.097	0.072	107	0.107

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 fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	0.380	661	2485	0.143	0.139	76	0.076
High	II	Ejection	0.600	348	1009	0.119	0.089	120	0.120
High	III	Inward interaction	0.090	63	249	0.003	0.003	18	0.018
High	IV	Sweep	0.475	236	668	0.064	0.047	95	0.095
Low	I	Outward interaction	0.230	384	1145	0.079	0.057	46	0.046
Low	II	Ejection	0.505	189	581	0.085	0.064	101	0.101
Low	III	Inward interaction	0.115	51	281	0.005	0.007	23	0.023
Low	IV	Sweep	0.370	146	474	0.048	0.038	74	0.074
Medium	I	Outward interaction	0.200	129	638	0.036	0.043	40	0.040
Medium	II	Ejection	0.525	131	358	0.095	0.063	105	0.105
Medium	III	Inward interaction	0.145	68	253	0.014	0.012	29	0.029
Medium	IV	Sweep	0.490	124	402	0.084	0.066	98	0.098

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
Low	I	Outward interaction	0.200	162	632	0.035	0.033	40	0.040
Low	II	Ejection	0.455	146	401	0.073	0.047	91	0.091
Low	III	Inward interaction	0.165	69	297	0.012	0.013	33	0.033
Low	IV	Sweep	0.490	185	632	0.099	0.080	98	0.098
Medium	I	Outward interaction	0.175	84	376	0.021	0.023	35	0.035
Medium	II	Ejection	0.595	139	378	0.117	0.077	119	0.119
Medium	III	Inward interaction	0.125	62	260	0.011	0.011	25	0.025
Medium	IV	Sweep	0.570	122	324	0.098	0.063	114	0.114

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	0.195	104	354	0.017	0.017	39	0.039
High	II	Ejection	0.715	300	636	0.177	0.113	143	0.143
High	III	Inward interaction	0.170	87	305	0.012	0.013	34	0.034
High	IV	Sweep	0.645	176	382	0.094	0.061	129	0.129
Low	I	Outward interaction	0.165	183	716	0.018	0.017	33	0.033
Low	II	Ejection	0.580	326	816	0.113	0.070	116	0.116
Low	III	Inward interaction	0.185	137	547	0.015	0.015	37	0.037
Low	IV	Sweep	0.520	340	972	0.105	0.075	104	0.104
Medium	I	Outward interaction	0.175	104	339	0.018	0.016	35	0.035
Medium	II	Ejection	0.565	205	429	0.114	0.067	113	0.113
Medium	III	Inward interaction	0.125	73	250	0.009	0.009	25	0.025
Medium	IV	Sweep	0.655	200	489	0.129	0.088	131	0.131

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	0.135	138	298	0.013	0.010	27	0.027
High	II	Ejection	0.705	261	425	0.127	0.074	141	0.141
High	III	Inward interaction	0.130	79	163	0.007	0.005	26	0.026
High	IV	Sweep	0.615	284	624	0.121	0.094	123	0.123
Low	I	Outward interaction	0.170	188	533	0.020	0.017	34	0.034
Low	II	Ejection	0.745	407	818	0.189	0.112	149	0.149
Low	III	Inward interaction	0.075	35	119	0.002	0.002	15	0.015
Low	IV	Sweep	0.645	255	618	0.102	0.073	129	0.129
Medium	I	Outward interaction	0.040	23	72	0.001	0.001	8	0.008
Medium	II	Ejection	0.770	324	625	0.151	0.102	154	0.154
Medium	III	Inward interaction	0.050	41	136	0.001	0.001	10	0.010
Medium	IV	Sweep	0.725	337	702	0.148	0.108	145	0.145

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	0.210	778	2350	0.051	0.044	42	0.042
High	II	Ejection	0.435	401	971	0.055	0.038	87	0.087
High	III	Inward interaction	0.175	282	825	0.015	0.013	35	0.035
High	IV	Sweep	0.520	749	2358	0.122	0.110	104	0.104
Low	I	Outward interaction	0.225	222	840	0.054	0.042	45	0.045
Low	II	Ejection	0.475	184	517	0.094	0.055	95	0.095
Low	III	Inward interaction	0.150	61	362	0.010	0.012	30	0.030
Low	IV	Sweep	0.465	135	488	0.067	0.051	93	0.093
Medium	I	Outward interaction	0.175	86	300	0.029	0.021	35	0.035
Medium	II	Ejection	0.475	100	308	0.091	0.058	95	0.095
Medium	III	Inward interaction	0.180	40	196	0.014	0.014	36	0.036
Medium	IV	Sweep	0.465	100	366	0.089	0.068	93	0.093

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	0.175	298	1282	0.030	0.031	35	0.035
	II	Ejection	0.490	274	812	0.076	0.056	98	0.098
	III	Inward interaction	0.175	195	632	0.019	0.016	35	0.035
	IV	Sweep	0.485	331	1258	0.091	0.086	97	0.097
Low	I	Outward interaction	0.330	84	278	0.032	0.025	66	0.066
	II	Ejection	0.405	126	324	0.058	0.036	81	0.081
	III	Inward interaction	0.445	174	468	0.089	0.057	89	0.089
	IV	Sweep	0.430	146	412	0.072	0.049	86	0.086
Medium	I	Outward interaction	0.190	184	889	0.022	0.025	38	0.038
	II	Ejection	0.580	357	984	0.132	0.086	116	0.116
	III	Inward interaction	0.210	185	607	0.025	0.019	42	0.042
	IV	Sweep	0.455	218	615	0.063	0.042	91	0.091

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	0.310	278	1243	0.068	0.064	62	0.062
High	II	Ejection	0.415	180	517	0.059	0.036	83	0.083
High	III	Inward interaction	0.275	146	484	0.032	0.022	55	0.055
High	IV	Sweep	0.430	225	913	0.077	0.065	86	0.086
Low	I	Outward interaction	0.170	30	137	0.013	0.013	34	0.034
Low	II	Ejection	0.410	72	203	0.074	0.047	82	0.082
Low	III	Inward interaction	0.145	24	114	0.008	0.009	29	0.029
Low	IV	Sweep	0.480	101	282	0.121	0.076	96	0.096
Medium	I	Outward interaction	0.195	138	1025	0.028	0.034	39	0.039
Medium	II	Ejection	0.575	205	709	0.121	0.069	115	0.115
Medium	III	Inward interaction	0.155	62	313	0.010	0.008	31	0.031
Medium	IV	Sweep	0.425	178	774	0.078	0.056	85	0.085

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	0.200	164	745	0.040	0.047	40	0.040
High	II	Ejection	0.525	163	388	0.104	0.064	105	0.105
High	III	Inward interaction	0.090	36	95	0.004	0.003	18	0.018
High	IV	Sweep	0.500	156	552	0.095	0.087	100	0.100
Low	I	Outward interaction	0.285	289	1102	0.082	0.084	57	0.057
Low	II	Ejection	0.495	168	432	0.083	0.057	99	0.099
Low	III	Inward interaction	0.100	30	125	0.003	0.003	20	0.020
Low	IV	Sweep	0.485	172	437	0.083	0.057	97	0.097
Medium	I	Outward interaction	0.115	82	359	0.007	0.008	23	0.023
Medium	II	Ejection	0.540	297	756	0.118	0.080	108	0.108
Medium	III	Inward interaction	0.115	103	404	0.009	0.009	23	0.023
Medium	IV	Sweep	0.555	260	828	0.107	0.090	111	0.111

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	0.300	332	914	0.059	0.060	60	0.060
Low	II	Ejection	0.475	341	629	0.095	0.066	95	0.095
Low	III	Inward interaction	0.170	87	180	0.009	0.007	34	0.034
Low	IV	Sweep	0.425	251	406	0.063	0.038	85	0.085
Medium	I	Outward interaction	0.260	205	420	0.040	0.030	52	0.052
Medium	II	Ejection	0.485	266	507	0.098	0.067	97	0.097
Medium	III	Inward interaction	0.180	87	204	0.012	0.010	36	0.036
Medium	IV	Sweep	0.450	223	453	0.076	0.056	90	0.090
High	I	Outward interaction	0.350	286	746	0.074	0.053	70	0.070
High	II	Ejection	0.505	319	841	0.119	0.086	101	0.101
High	III	Inward interaction	0.245	77	184	0.014	0.009	49	0.049
High	IV	Sweep	0.430	178	574	0.056	0.050	86	0.086

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	0.305	392	949	0.039	0.027	61	0.061
Low	II	Ejection	0.400	520	1176	0.068	0.044	80	0.080
Low	III	Inward interaction	0.355	424	1196	0.049	0.039	71	0.071
Low	IV	Sweep	0.410	526	1485	0.071	0.057	82	0.082
Medium	I	Outward interaction	0.380	234	640	0.059	0.042	76	0.076
Medium	II	Ejection	0.430	201	564	0.058	0.041	86	0.086
Medium	III	Inward interaction	0.400	190	600	0.051	0.041	80	0.080
Medium	IV	Sweep	0.490	305	794	0.100	0.066	98	0.098
High	I	Outward interaction	0.080	179	732	0.004	0.005	16	0.016
High	II	Ejection	0.770	636	1394	0.142	0.098	154	0.154
High	III	Inward interaction	0.040	100	269	0.001	0.001	8	0.008
High	IV	Sweep	0.820	706	1572	0.168	0.117	164	0.164

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
Low	I	Outward interaction	0.265	727	1542	0.037	0.029	53	0.053
Low	II	Ejection	0.435	720	1208	0.061	0.038	87	0.087
Low	III	Inward interaction	0.220	412	812	0.018	0.013	44	0.044
Low	IV	Sweep	0.560	1223	2266	0.133	0.091	112	0.112
Medium	I	Outward interaction	0.260	408	1296	0.026	0.020	52	0.052
Medium	II	Ejection	0.470	576	1842	0.066	0.050	94	0.094
Medium	III	Inward interaction	0.285	574	1653	0.040	0.027	57	0.057
Medium	IV	Sweep	0.570	936	2164	0.129	0.072	114	0.114
High	I	Outward interaction	0.180	106	296	0.015	0.011	36	0.036
High	II	Ejection	0.605	269	677	0.127	0.083	121	0.121
High	III	Inward interaction	0.250	129	395	0.025	0.020	50	0.050
High	IV	Sweep	0.470	236	587	0.087	0.056	94	0.094

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	0.220	213	563	0.018	0.014	44	0.044
Low	II	Ejection	0.535	431	815	0.086	0.049	107	0.107
Low	III	Inward interaction	0.235	213	598	0.019	0.016	47	0.047
Low	IV	Sweep	0.520	658	1640	0.128	0.097	104	0.104
Medium	I	Outward interaction	0.160	74	174	0.010	0.006	32	0.032
Medium	II	Ejection	0.490	215	575	0.087	0.061	98	0.098
Medium	III	Inward interaction	0.285	153	426	0.036	0.026	57	0.057
Medium	IV	Sweep	0.500	270	664	0.112	0.072	100	0.100
High	I	Outward interaction	0.220	256	1435	0.043	0.047	44	0.044
High	II	Ejection	0.540	286	763	0.118	0.062	108	0.108
High	III	Inward interaction	0.125	61	300	0.006	0.006	25	0.025
High	IV	Sweep	0.515	218	955	0.085	0.074	103	0.103

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	0.450	399	1167	0.098	0.081	90	0.090
High	II	Ejection	0.490	402	1027	0.107	0.077	98	0.098
High	III	Inward interaction	0.165	112	305	0.010	0.008	33	0.033
High	IV	Sweep	0.375	246	524	0.050	0.030	75	0.075
Low	I	Outward interaction	0.275	110	357	0.032	0.030	55	0.055
Low	II	Ejection	0.440	129	329	0.061	0.045	88	0.088
Low	III	Inward interaction	0.280	109	254	0.033	0.022	56	0.056
Low	IV	Sweep	0.505	235	616	0.128	0.096	101	0.101
Medium	I	Outward interaction	0.305	150	313	0.050	0.032	61	0.061
Medium	II	Ejection	0.475	161	349	0.084	0.055	95	0.095
Medium	III	Inward interaction	0.240	86	253	0.023	0.020	48	0.048
Medium	IV	Sweep	0.515	157	364	0.089	0.063	103	0.103

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	0.280	233	666	0.052	0.043	56	0.056
High	II	Ejection	0.530	227	459	0.096	0.057	106	0.106
High	III	Inward interaction	0.265	90	200	0.019	0.012	53	0.053
High	IV	Sweep	0.410	225	538	0.073	0.051	82	0.082
Low	I	Outward interaction	0.325	230	496	0.062	0.044	65	0.065
Low	II	Ejection	0.560	223	489	0.103	0.075	112	0.112
Low	III	Inward interaction	0.200	74	173	0.012	0.009	40	0.040
Low	IV	Sweep	0.470	220	491	0.085	0.063	94	0.094
Medium	I	Outward interaction	0.235	81	296	0.019	0.017	47	0.047
Medium	II	Ejection	0.485	207	558	0.098	0.066	97	0.097
Medium	III	Inward interaction	0.280	107	357	0.029	0.024	56	0.056
Medium	IV	Sweep	0.525	208	539	0.106	0.069	105	0.105

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	0.140	399	1218	0.010	0.009	28	0.028
High	II	Ejection	0.635	981	1863	0.109	0.064	127	0.127
High	III	Inward interaction	0.155	392	966	0.011	0.008	31	0.031
High	IV	Sweep	0.655	1209	2327	0.138	0.082	131	0.131
Low	I	Outward interaction	0.265	428	1227	0.033	0.029	53	0.053
Low	II	Ejection	0.595	671	1408	0.117	0.074	119	0.119
Low	III	Inward interaction	0.155	203	560	0.009	0.008	31	0.031
Low	IV	Sweep	0.630	692	1697	0.128	0.094	126	0.126
Medium	I	Outward interaction	0.230	239	558	0.022	0.017	46	0.046
Medium	II	Ejection	0.635	556	1076	0.139	0.088	127	0.127
Medium	III	Inward interaction	0.230	259	675	0.023	0.020	46	0.046
Medium	IV	Sweep	0.580	400	811	0.091	0.061	116	0.116

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	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	0.385	642	1590	0.061	0.042	77	0.077
High	II	Ejection	0.490	764	1648	0.093	0.055	98	0.098
High	III	Inward interaction	0.215	272	834	0.015	0.012	43	0.043
High	IV	Sweep	0.530	710	1661	0.093	0.060	106	0.106
Low	I	Outward interaction	0.275	404	1084	0.044	0.037	55	0.055
Low	II	Ejection	0.555	553	1243	0.121	0.087	111	0.111
Low	III	Inward interaction	0.165	191	621	0.012	0.013	33	0.033
Low	IV	Sweep	0.540	351	636	0.075	0.043	108	0.108
Medium	I	Outward interaction	0.245	442	1017	0.030	0.026	49	0.049
Medium	II	Ejection	0.570	560	1082	0.089	0.064	114	0.114
Medium	III	Inward interaction	0.160	250	482	0.011	0.008	32	0.032
Medium	IV	Sweep	0.575	727	1269	0.117	0.076	115	0.115

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	0.200	258	859	0.024	0.018	40	0.040
High	II	Ejection	0.490	423	1063	0.096	0.055	98	0.098
High	III	Inward interaction	0.300	206	815	0.029	0.026	60	0.060
High	IV	Sweep	0.455	410	1668	0.087	0.080	91	0.091
Low	I	Outward interaction	0.200	125	292	0.022	0.016	40	0.040
Low	II	Ejection	0.575	243	490	0.125	0.078	115	0.115
Low	III	Inward interaction	0.180	74	191	0.012	0.010	36	0.036
Low	IV	Sweep	0.460	190	406	0.078	0.052	92	0.092
Medium	I	Outward interaction	0.135	65	331	0.007	0.010	27	0.027
Medium	II	Ejection	0.690	303	630	0.170	0.098	138	0.138
Medium	III	Inward interaction	0.140	79	232	0.009	0.007	28	0.028
Medium	IV	Sweep	0.645	228	657	0.119	0.096	129	0.129

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	0.260	336	866	0.027	0.019	52	0.052
High	II	Ejection	0.530	811	1856	0.131	0.083	106	0.106
High	III	Inward interaction	0.280	319	921	0.027	0.022	56	0.056
High	IV	Sweep	0.520	485	1122	0.077	0.049	104	0.104
Low	I	Outward interaction	0.275	283	878	0.029	0.018	55	0.055
Low	II	Ejection	0.515	436	1172	0.084	0.045	103	0.103
Low	III	Inward interaction	0.335	403	1351	0.051	0.034	67	0.067
Low	IV	Sweep	0.560	512	1973	0.108	0.083	112	0.112
Medium	I	Outward interaction	0.240	498	1248	0.023	0.015	48	0.048
Medium	II	Ejection	0.580	822	2202	0.091	0.066	116	0.116
Medium	III	Inward interaction	0.235	439	1168	0.020	0.014	47	0.047
Medium	IV	Sweep	0.645	1216	2949	0.150	0.098	129	0.129

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	0.425	271	1035	0.067	0.062	85	0.085
High	II	Ejection	0.465	367	958	0.100	0.063	93	0.093
High	III	Inward interaction	0.385	213	572	0.048	0.031	77	0.077
High	IV	Sweep	0.305	176	581	0.031	0.025	61	0.061
Low	I	Outward interaction	0.230	386	1231	0.022	0.023	46	0.046
Low	II	Ejection	0.695	714	1555	0.123	0.086	139	0.139
Low	III	Inward interaction	0.155	286	989	0.011	0.012	31	0.031
Low	IV	Sweep	0.590	923	1954	0.134	0.092	118	0.118
Medium	I	Outward interaction	0.180	178	710	0.025	0.024	36	0.036
Medium	II	Ejection	0.490	250	598	0.095	0.056	98	0.098
Medium	III	Inward interaction	0.185	112	411	0.016	0.015	37	0.037
Medium	IV	Sweep	0.470	231	758	0.084	0.068	94	0.094

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	0.135	172	552	0.011	0.011	27	0.027
High	II	Ejection	0.510	376	778	0.089	0.057	102	0.102
High	III	Inward interaction	0.120	104	641	0.006	0.011	24	0.024
High	IV	Sweep	0.690	520	1112	0.167	0.111	138	0.138
Low	I	Outward interaction	0.590	57	164	0.198	0.131	118	0.118
Low	II	Ejection	0.185	16	50	0.018	0.013	37	0.037
Low	III	Inward interaction	0.495	16	54	0.046	0.036	99	0.099
Low	IV	Sweep	0.115	14	46	0.009	0.007	23	0.023
Medium	I	Outward interaction	0.320	239	545	0.045	0.029	64	0.064
Medium	II	Ejection	0.550	338	754	0.110	0.070	110	0.110
Medium	III	Inward interaction	0.265	136	332	0.021	0.015	53	0.053
Medium	IV	Sweep	0.500	282	657	0.083	0.055	100	0.100

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	0.400	306	512	0.050	0.034	80	0.080
Low	II	Ejection	0.455	379	619	0.071	0.047	91	0.091
Low	III	Inward interaction	0.345	390	713	0.055	0.041	69	0.069
Low	IV	Sweep	0.405	458	801	0.076	0.054	81	0.081
Medium	I	Outward interaction	0.440	281	537	0.062	0.044	88	0.088
Medium	II	Ejection	0.475	316	676	0.075	0.060	95	0.095
Medium	III	Inward interaction	0.395	287	521	0.057	0.038	79	0.079
Medium	IV	Sweep	0.425	349	617	0.074	0.049	85	0.085
High	I	Outward interaction	0.230	404	890	0.030	0.025	46	0.046
High	II	Ejection	0.535	539	1133	0.094	0.075	107	0.107
High	III	Inward interaction	0.185	238	400	0.014	0.009	37	0.037
High	IV	Sweep	0.515	592	1023	0.099	0.065	103	0.103

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	0.295	267	495	0.036	0.026	59	0.059
Low	II	Ejection	0.440	473	896	0.095	0.071	88	0.088
Low	III	Inward interaction	0.330	224	410	0.034	0.024	66	0.066
Low	IV	Sweep	0.450	365	577	0.075	0.047	90	0.090
Medium	I	Outward interaction	0.140	198	499	0.008	0.006	28	0.028
Medium	II	Ejection	0.670	683	1871	0.134	0.111	134	0.134
Medium	III	Inward interaction	0.125	168	496	0.006	0.005	25	0.025
Medium	IV	Sweep	0.700	760	1827	0.156	0.113	140	0.140
High	I	Outward interaction	0.375	1265	2456	0.059	0.039	75	0.075
High	II	Ejection	0.465	1166	2837	0.067	0.055	93	0.093
High	III	Inward interaction	0.300	991	2020	0.037	0.025	60	0.060
High	IV	Sweep	0.505	1529	2961	0.096	0.063	101	0.101

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
Low	I	Outward interaction	0.360	693	1176	0.043	0.026	72	0.072
Low	II	Ejection	0.410	806	1427	0.057	0.035	82	0.082
Low	III	Inward interaction	0.285	699	1642	0.034	0.028	57	0.057
Low	IV	Sweep	0.505	1319	2674	0.114	0.081	101	0.101
Medium	I	Outward interaction	0.445	220	617	0.104	0.080	89	0.089
Medium	II	Ejection	0.310	107	326	0.035	0.029	62	0.062
Medium	III	Inward interaction	0.320	70	176	0.024	0.016	64	0.064
Medium	IV	Sweep	0.360	234	842	0.089	0.088	72	0.072
High	I	Outward interaction	0.495	972	2911	0.073	0.060	99	0.099
High	II	Ejection	0.535	1315	3364	0.107	0.076	107	0.107
High	III	Inward interaction	0.455	1007	2298	0.070	0.044	91	0.091
High	IV	Sweep	0.375	770	1585	0.044	0.025	75	0.075

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
Low	I	Outward interaction	0.300	627	1109	0.038	0.023	60	0.060
Low	II	Ejection	0.520	840	1631	0.089	0.059	104	0.104
Low	III	Inward interaction	0.275	469	923	0.026	0.018	55	0.055
Low	IV	Sweep	0.505	1002	2222	0.103	0.078	101	0.101
Medium	I	Outward interaction	0.355	214	563	0.058	0.041	71	0.071
Medium	II	Ejection	0.485	233	548	0.087	0.055	97	0.097
Medium	III	Inward interaction	0.300	144	447	0.033	0.028	60	0.060
Medium	IV	Sweep	0.430	201	496	0.066	0.044	86	0.086
High	I	Outward interaction	0.340	206	509	0.051	0.036	68	0.068
High	II	Ejection	0.560	276	606	0.113	0.071	112	0.112
High	III	Inward interaction	0.275	147	443	0.030	0.025	55	0.055
High	IV	Sweep	0.385	190	525	0.053	0.042	77	0.077

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	0.195	165	429	0.017	0.014	39	0.039
High	II	Ejection	0.530	379	682	0.106	0.063	106	0.106
High	III	Inward interaction	0.205	154	463	0.017	0.016	41	0.041
High	IV	Sweep	0.685	369	934	0.134	0.111	137	0.137
Low	I	Outward interaction	0.350	440	1776	0.039	0.023	70	0.070
Low	II	Ejection	0.565	787	2354	0.112	0.049	113	0.113
Low	III	Inward interaction	0.275	443	2280	0.031	0.023	55	0.055
Low	IV	Sweep	0.475	688	2805	0.082	0.049	95	0.095
Medium	I	Outward interaction	0.245	122	343	0.025	0.022	49	0.049
Medium	II	Ejection	0.590	265	566	0.131	0.086	118	0.118
Medium	III	Inward interaction	0.195	80	199	0.013	0.010	39	0.039
Medium	IV	Sweep	0.605	229	461	0.116	0.072	121	0.121

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	0.290	261	462	0.031	0.022	58	0.058
High	II	Ejection	0.555	522	911	0.120	0.085	111	0.111
High	III	Inward interaction	0.245	182	339	0.019	0.014	49	0.049
High	IV	Sweep	0.590	461	742	0.113	0.073	118	0.118
Low	I	Outward interaction	0.220	239	523	0.026	0.019	44	0.044
Low	II	Ejection	0.555	344	695	0.094	0.065	111	0.111
Low	III	Inward interaction	0.210	211	425	0.022	0.015	42	0.042
Low	IV	Sweep	0.545	369	802	0.099	0.073	109	0.109
Medium	I	Outward interaction	0.335	278	521	0.056	0.041	67	0.067
Medium	II	Ejection	0.430	341	593	0.089	0.060	86	0.086
Medium	III	Inward interaction	0.260	140	305	0.022	0.019	52	0.052
Medium	IV	Sweep	0.475	249	443	0.072	0.050	95	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	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	0.155	1230	2731	0.013	0.010	31	0.031
High	II	Ejection	0.685	3690	7625	0.179	0.121	137	0.137
High	III	Inward interaction	0.140	890	2457	0.009	0.008	28	0.028
High	IV	Sweep	0.545	1774	3365	0.068	0.042	109	0.109
Low	I	Outward interaction	0.255	369	671	0.028	0.018	51	0.051
Low	II	Ejection	0.460	784	1334	0.107	0.063	92	0.092
Low	III	Inward interaction	0.275	336	897	0.028	0.025	55	0.055
Low	IV	Sweep	0.430	575	1152	0.074	0.051	86	0.086
Medium	I	Outward interaction	0.270	365	781	0.030	0.026	54	0.054
Medium	II	Ejection	0.605	901	1541	0.166	0.115	121	0.121
Medium	III	Inward interaction	0.125	124	259	0.005	0.004	25	0.025
Medium	IV	Sweep	0.580	447	803	0.079	0.058	116	0.116

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	0.155	1311	3018	0.011	0.010	31	0.031
High	II	Ejection	0.725	3706	6553	0.147	0.100	145	0.145
High	III	Inward interaction	0.170	1202	2448	0.011	0.009	34	0.034
High	IV	Sweep	0.665	3405	5717	0.124	0.080	133	0.133
Low	I	Outward interaction	0.225	287	774	0.021	0.018	45	0.045
Low	II	Ejection	0.535	834	1808	0.142	0.098	107	0.107
Low	III	Inward interaction	0.200	243	523	0.016	0.011	40	0.040
Low	IV	Sweep	0.530	477	1087	0.081	0.058	106	0.106
Medium	I	Outward interaction	0.185	595	1490	0.010	0.010	37	0.037
Medium	II	Ejection	0.585	1866	3178	0.103	0.064	117	0.117
Medium	III	Inward interaction	0.230	939	1995	0.020	0.016	46	0.046
Medium	IV	Sweep	0.615	2391	4530	0.139	0.097	123	0.123

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	0.245	217	563	0.015	0.013	49	0.049
High	II	Ejection	0.415	775	1519	0.093	0.059	83	0.083
High	III	Inward interaction	0.385	584	1559	0.065	0.056	77	0.077
High	IV	Sweep	0.495	560	1185	0.080	0.055	99	0.099
Low	I	Outward interaction	0.310	336	688	0.041	0.029	62	0.062
Low	II	Ejection	0.535	588	1075	0.123	0.079	107	0.107
Low	III	Inward interaction	0.345	283	519	0.038	0.024	69	0.069
Low	IV	Sweep	0.435	367	766	0.062	0.046	87	0.087
Medium	I	Outward interaction	0.475	495	963	0.082	0.057	95	0.095
Medium	II	Ejection	0.400	496	1087	0.069	0.054	80	0.080
Medium	III	Inward interaction	0.365	371	809	0.047	0.036	73	0.073
Medium	IV	Sweep	0.415	425	749	0.061	0.038	83	0.083

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	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	0.355	868	2014	0.041	0.027	71	0.071
High	II	Ejection	0.510	1492	4203	0.102	0.080	102	0.102
High	III	Inward interaction	0.290	581	1548	0.023	0.017	58	0.058
High	IV	Sweep	0.520	1555	3775	0.108	0.074	104	0.104
Low	I	Outward interaction	0.550	1355	3171	0.091	0.068	110	0.110
Low	II	Ejection	0.235	805	1610	0.023	0.015	47	0.047
Low	III	Inward interaction	0.660	1685	3513	0.136	0.091	132	0.132
Low	IV	Sweep	0.230	757	1948	0.021	0.018	46	0.046
Medium	I	Outward interaction	0.060	45	122	0.002	0.002	12	0.012
Medium	II	Ejection	0.680	325	743	0.136	0.107	136	0.136
Medium	III	Inward interaction	0.015	9	85	0.000	0.000	3	0.003
Medium	IV	Sweep	0.765	355	790	0.167	0.128	153	0.153

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	0.335	200	457	0.037	0.026	67	0.067
High	II	Ejection	0.480	317	654	0.085	0.053	96	0.096
High	III	Inward interaction	0.355	201	553	0.040	0.033	71	0.071
High	IV	Sweep	0.460	376	796	0.096	0.062	92	0.092
Low	I	Outward interaction	0.315	808	1635	0.037	0.024	63	0.063
Low	II	Ejection	0.345	604	1414	0.030	0.023	69	0.069
Low	III	Inward interaction	0.400	1397	3051	0.081	0.056	80	0.080
Low	IV	Sweep	0.460	1640	3237	0.109	0.069	92	0.092
Medium	I	Outward interaction	0.185	157	413	0.018	0.014	37	0.037
Medium	II	Ejection	0.535	302	655	0.099	0.063	107	0.107
Medium	III	Inward interaction	0.235	142	531	0.020	0.023	47	0.047
Medium	IV	Sweep	0.555	335	772	0.114	0.077	111	0.111

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	0.170	177	442	0.013	0.008	34	0.034
High	II	Ejection	0.580	432	1006	0.105	0.064	116	0.116
High	III	Inward interaction	0.200	236	575	0.020	0.013	40	0.040
High	IV	Sweep	0.675	482	1335	0.137	0.099	135	0.135
Low	I	Outward interaction	0.310	292	764	0.030	0.020	62	0.062
Low	II	Ejection	0.545	525	1151	0.094	0.052	109	0.109
Low	III	Inward interaction	0.235	289	724	0.022	0.014	47	0.047
Low	IV	Sweep	0.585	693	1925	0.133	0.094	117	0.117
Medium	I	Outward interaction	0.320	270	717	0.041	0.030	64	0.064
Medium	II	Ejection	0.390	369	867	0.068	0.045	78	0.078
Medium	III	Inward interaction	0.310	224	396	0.033	0.016	62	0.062
Medium	IV	Sweep	0.525	412	858	0.102	0.059	105	0.105

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
Low	I	Outward interaction	0.310	419	660	0.043	0.026	62	0.062
Low	II	Ejection	0.470	781	1236	0.121	0.075	94	0.094
Low	III	Inward interaction	0.295	244	570	0.024	0.022	59	0.059
Low	IV	Sweep	0.470	392	738	0.061	0.044	94	0.094
High	I	Outward interaction	0.290	1090	1900	0.058	0.044	58	0.058
High	II	Ejection	0.430	1359	2338	0.107	0.080	86	0.086
High	III	Inward interaction	0.260	484	829	0.023	0.017	52	0.052
High	IV	Sweep	0.555	667	1082	0.068	0.048	111	0.111
Medium	I	Outward interaction	0.295	697	1222	0.066	0.044	59	0.059
Medium	II	Ejection	0.510	506	940	0.082	0.059	102	0.102
Medium	III	Inward interaction	0.260	293	590	0.024	0.019	52	0.052
Medium	IV	Sweep	0.515	453	746	0.074	0.047	103	0.103

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	0.385	962	1822	0.084	0.067	77	0.077
Low	II	Ejection	0.515	1178	1907	0.138	0.094	103	0.103
Low	III	Inward interaction	0.245	274	497	0.015	0.012	49	0.049
Low	IV	Sweep	0.405	480	825	0.044	0.032	81	0.081
High	I	Outward interaction	0.490	2311	5189	0.095	0.070	98	0.098
High	II	Ejection	0.365	2120	4785	0.065	0.048	73	0.073
High	III	Inward interaction	0.410	1379	3369	0.048	0.038	82	0.082
High	IV	Sweep	0.345	1516	3172	0.044	0.030	69	0.069
Medium	I	Outward interaction	0.200	108	298	0.019	0.014	40	0.040
Medium	II	Ejection	0.545	211	489	0.101	0.064	109	0.109
Medium	III	Inward interaction	0.195	90	248	0.015	0.012	39	0.039
Medium	IV	Sweep	0.580	243	608	0.123	0.084	116	0.116

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
Low	I	Outward interaction	0.375	492	1004	0.046	0.033	75	0.075
Low	II	Ejection	0.500	652	1318	0.081	0.058	100	0.100
Low	III	Inward interaction	0.325	482	910	0.039	0.026	65	0.065
Low	IV	Sweep	0.525	780	1569	0.102	0.073	105	0.105
High	I	Outward interaction	0.415	2196	6348	0.073	0.045	83	0.083
High	II	Ejection	0.430	2416	7696	0.083	0.057	86	0.086
High	III	Inward interaction	0.350	1279	4755	0.036	0.028	70	0.070
High	IV	Sweep	0.400	1625	4645	0.052	0.032	80	0.080
Medium	I	Outward interaction	0.325	571	1569	0.061	0.051	65	0.065
Medium	II	Ejection	0.530	664	1726	0.117	0.092	106	0.106
Medium	III	Inward interaction	0.140	140	358	0.006	0.005	28	0.028
Medium	IV	Sweep	0.485	465	990	0.075	0.048	97	0.097

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
Low	I	Outward interaction	0.265	842	1344	0.019	0.012	53	0.053
Low	II	Ejection	0.440	1519	2423	0.056	0.035	88	0.088
Low	III	Inward interaction	0.465	2022	4203	0.078	0.063	93	0.093
Low	IV	Sweep	0.535	3029	5965	0.135	0.103	107	0.107
High	I	Outward interaction	0.285	189	381	0.031	0.021	57	0.057
High	II	Ejection	0.475	406	800	0.110	0.075	95	0.095
High	III	Inward interaction	0.270	132	271	0.020	0.014	54	0.054
High	IV	Sweep	0.550	310	613	0.097	0.067	110	0.110
Medium	I	Outward interaction	0.215	241	583	0.020	0.017	43	0.043
Medium	II	Ejection	0.700	665	1253	0.180	0.117	140	0.140
Medium	III	Inward interaction	0.180	201	404	0.014	0.010	36	0.036
Medium	IV	Sweep	0.520	361	766	0.073	0.053	104	0.104

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 fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	0.330	412	772	0.057	0.036	66	0.066
High	II	Ejection	0.405	367	655	0.062	0.038	81	0.081
High	III	Inward interaction	0.235	293	656	0.029	0.022	47	0.047
High	IV	Sweep	0.455	376	783	0.072	0.051	91	0.091
Low	I	Outward interaction	0.440	1184	2897	0.072	0.035	88	0.088
Low	II	Ejection	0.420	1114	3001	0.064	0.035	84	0.084
Low	III	Inward interaction	0.440	1118	3762	0.068	0.045	88	0.088
Low	IV	Sweep	0.425	1141	3905	0.067	0.046	85	0.085
Medium	I	Outward interaction	0.315	387	662	0.059	0.037	63	0.063
Medium	II	Ejection	0.485	316	640	0.074	0.055	97	0.097
Medium	III	Inward interaction	0.240	197	391	0.023	0.017	48	0.048
Medium	IV	Sweep	0.545	363	666	0.095	0.064	109	0.109

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	0.345	1026	1865	0.083	0.061	69	0.069
High	II	Ejection	0.465	813	1452	0.089	0.064	93	0.093
High	III	Inward interaction	0.215	291	579	0.015	0.012	43	0.043
High	IV	Sweep	0.415	559	827	0.055	0.033	83	0.083
Low	I	Outward interaction	0.270	262	703	0.020	0.012	54	0.054
Low	II	Ejection	0.570	534	1328	0.086	0.049	114	0.114
Low	III	Inward interaction	0.290	530	1571	0.043	0.029	58	0.058
Low	IV	Sweep	0.555	816	2578	0.128	0.092	111	0.111
Medium	I	Outward interaction	0.315	280	543	0.032	0.022	63	0.063
Medium	II	Ejection	0.510	491	857	0.089	0.056	102	0.102
Medium	III	Inward interaction	0.275	299	656	0.029	0.023	55	0.055
Medium	IV	Sweep	0.530	573	1067	0.108	0.073	106	0.106

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	0.110	1068	2773	0.004	0.004	22	0.022
High	II	Ejection	0.685	6288	11146	0.162	0.104	137	0.137
High	III	Inward interaction	0.115	1328	3583	0.006	0.006	23	0.023
High	IV	Sweep	0.670	4866	9024	0.123	0.082	134	0.134
Low	I	Outward interaction	0.315	609	3068	0.031	0.019	63	0.063
Low	II	Ejection	0.535	1385	4790	0.120	0.049	107	0.107
Low	III	Inward interaction	0.255	577	2384	0.024	0.012	51	0.051
Low	IV	Sweep	0.530	1062	5227	0.091	0.053	106	0.106
Medium	I	Outward interaction	0.235	275	473	0.024	0.015	47	0.047
Medium	II	Ejection	0.585	607	1079	0.133	0.088	117	0.117
Medium	III	Inward interaction	0.225	226	414	0.019	0.013	45	0.045
Medium	IV	Sweep	0.590	422	782	0.093	0.064	118	0.118

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	0.280	2568	4954	0.029	0.022	56	0.056
High	II	Ejection	0.595	6157	10665	0.146	0.100	119	0.119
High	III	Inward interaction	0.245	2184	4584	0.021	0.018	49	0.049
High	IV	Sweep	0.610	4055	7656	0.098	0.073	122	0.122
Low	I	Outward interaction	0.305	575	1815	0.039	0.034	61	0.061
Low	II	Ejection	0.445	840	1884	0.083	0.051	89	0.089
Low	III	Inward interaction	0.330	436	1102	0.032	0.022	66	0.066
Low	IV	Sweep	0.500	865	1808	0.096	0.055	100	0.100
Medium	I	Outward interaction	0.145	1353	2187	0.009	0.007	29	0.029
Medium	II	Ejection	0.680	5964	9192	0.177	0.128	136	0.136
Medium	III	Inward interaction	0.210	1997	3583	0.018	0.015	42	0.042
Medium	IV	Sweep	0.685	3480	4810	0.104	0.068	137	0.137

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	0.095	209	477	0.003	0.003	19	0.019
High	II	Ejection	0.705	2010	3788	0.210	0.156	141	0.141
High	III	Inward interaction	0.130	414	1001	0.008	0.008	26	0.026
High	IV	Sweep	0.640	936	1545	0.089	0.058	128	0.128
Low	I	Outward interaction	0.205	325	663	0.015	0.011	41	0.041
Low	II	Ejection	0.655	1204	1849	0.179	0.099	131	0.131
Low	III	Inward interaction	0.350	711	1165	0.056	0.033	70	0.070
Low	IV	Sweep	0.385	420	798	0.037	0.025	77	0.077
Medium	I	Outward interaction	0.160	421	718	0.012	0.009	32	0.032
Medium	II	Ejection	0.585	1335	2196	0.142	0.101	117	0.117
Medium	III	Inward interaction	0.155	335	615	0.009	0.007	31	0.031
Medium	IV	Sweep	0.665	919	1384	0.111	0.072	133	0.133

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	0.630	1672	4256	0.225	0.180	126	0.126
High	II	Ejection	0.185	390	1097	0.015	0.014	37	0.037
High	III	Inward interaction	0.440	400	807	0.038	0.024	88	0.088
High	IV	Sweep	0.115	221	487	0.005	0.004	23	0.023
Low	I	Outward interaction	0.320	1876	4391	0.040	0.030	64	0.064
Low	II	Ejection	0.460	2587	5188	0.078	0.051	92	0.092
Low	III	Inward interaction	0.350	2288	5345	0.053	0.040	70	0.070
Low	IV	Sweep	0.490	2471	5368	0.080	0.056	98	0.098
Medium	I	Outward interaction	0.225	617	1908	0.032	0.025	45	0.045
Medium	II	Ejection	0.615	727	2032	0.104	0.073	123	0.123
Medium	III	Inward interaction	0.105	126	524	0.003	0.003	21	0.021
Medium	IV	Sweep	0.580	1025	2753	0.139	0.093	116	0.116

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	0.320	531	1285	0.033	0.024	64	0.064
High	II	Ejection	0.440	843	2123	0.072	0.054	88	0.088
High	III	Inward interaction	0.365	720	1401	0.051	0.029	73	0.073
High	IV	Sweep	0.360	949	2189	0.066	0.045	72	0.072
Low	I	Outward interaction	0.515	1111	2188	0.094	0.062	103	0.103
Low	II	Ejection	0.260	610	1004	0.026	0.014	52	0.052
Low	III	Inward interaction	0.610	1322	2711	0.133	0.091	122	0.122
Low	IV	Sweep	0.275	615	1641	0.028	0.025	55	0.055
Medium	I	Outward interaction	0.170	108	275	0.010	0.008	34	0.034
Medium	II	Ejection	0.575	441	1040	0.139	0.099	115	0.115
Medium	III	Inward interaction	0.155	150	352	0.013	0.009	31	0.031
Medium	IV	Sweep	0.570	350	688	0.109	0.065	114	0.114

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	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	0.290	309	729	0.031	0.019	58	0.058
High	II	Ejection	0.430	454	901	0.066	0.035	86	0.086
High	III	Inward interaction	0.340	322	708	0.037	0.022	68	0.068
High	IV	Sweep	0.440	663	1469	0.099	0.058	88	0.088
Low	I	Outward interaction	0.265	347	646	0.027	0.018	53	0.053
Low	II	Ejection	0.550	589	1189	0.096	0.068	110	0.110
Low	III	Inward interaction	0.220	268	522	0.018	0.012	44	0.044
Low	IV	Sweep	0.530	818	1560	0.129	0.085	106	0.106
Medium	I	Outward interaction	0.270	608	1462	0.036	0.031	54	0.054
Medium	II	Ejection	0.405	647	1174	0.058	0.038	81	0.081
Medium	III	Inward interaction	0.305	529	917	0.036	0.022	61	0.061
Medium	IV	Sweep	0.585	941	1680	0.122	0.078	117	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	0.075	95	468	0.007	0.008	15	0.015
High	II	Ejection	0.250	145	307	0.037	0.017	50	0.050
High	III	Inward interaction	0.100	92	288	0.009	0.006	20	0.020
High	IV	Sweep	0.275	127	486	0.035	0.030	55	0.055
Low	I	Outward interaction	0.230	359	1139	0.051	0.044	46	0.046
Low	II	Ejection	0.240	190	461	0.028	0.018	48	0.048
Low	III	Inward interaction	0.155	193	507	0.018	0.013	31	0.031
Low	IV	Sweep	0.200	198	425	0.024	0.014	40	0.040
Medium	I	Outward interaction	0.140	108	357	0.033	0.027	28	0.028
Medium	II	Ejection	0.335	83	185	0.060	0.034	67	0.067
Medium	III	Inward interaction	0.035	11	24	0.001	0.000	7	0.007
Medium	IV	Sweep	0.235	59	173	0.030	0.022	47	0.047

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	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	0.210	407	1390	0.068	0.063	42	0.042
High	II	Ejection	0.265	181	360	0.039	0.021	53	0.053
High	III	Inward interaction	0.105	90	217	0.008	0.005	21	0.021
High	IV	Sweep	0.215	124	502	0.021	0.023	43	0.043
Low	I	Outward interaction	0.140	157	658	0.034	0.034	28	0.028
Low	II	Ejection	0.305	106	253	0.050	0.029	61	0.061
Low	III	Inward interaction	0.020	8	36	0.000	0.000	4	0.004
Low	IV	Sweep	0.250	89	266	0.034	0.025	50	0.050
Medium	I	Outward interaction	0.095	105	318	0.020	0.016	19	0.019
Medium	II	Ejection	0.305	78	190	0.047	0.030	61	0.061
Medium	III	Inward interaction	0.020	7	18	0.000	0.000	4	0.004
Medium	IV	Sweep	0.290	73	222	0.042	0.033	58	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	0.160	202	1039	0.048	0.054	32	0.032
High	II	Ejection	0.235	79	221	0.027	0.017	47	0.047
High	III	Inward interaction	0.030	18	79	0.001	0.001	6	0.006
High	IV	Sweep	0.305	108	358	0.049	0.036	61	0.061
Low	I	Outward interaction	0.100	147	588	0.017	0.016	20	0.020
Low	II	Ejection	0.355	150	388	0.062	0.038	71	0.071
Low	III	Inward interaction	0.025	22	96	0.001	0.001	5	0.005
Low	IV	Sweep	0.290	112	350	0.038	0.028	58	0.058
Medium	I	Outward interaction	0.090	97	341	0.017	0.019	18	0.018
Medium	II	Ejection	0.295	78	183	0.046	0.033	59	0.059
Medium	III	Inward interaction	0.015	7	19	0.000	0.000	3	0.003
Medium	IV	Sweep	0.280	82	210	0.046	0.036	56	0.056

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	0.180	236	672	0.051	0.041	36	0.036
High	II	Ejection	0.270	114	241	0.037	0.022	54	0.054
High	III	Inward interaction	0.035	17	54	0.001	0.001	7	0.007
High	IV	Sweep	0.245	122	328	0.036	0.027	49	0.049
Low	I	Outward interaction	0.125	254	871	0.031	0.024	25	0.025
Low	II	Ejection	0.265	131	334	0.034	0.019	53	0.053
Low	III	Inward interaction	0.060	59	218	0.004	0.003	12	0.012
Low	IV	Sweep	0.270	135	433	0.036	0.025	54	0.054
Medium	I	Outward interaction	0.055	49	157	0.004	0.003	11	0.011
Medium	II	Ejection	0.280	119	259	0.053	0.029	56	0.056
Medium	III	Inward interaction	0.050	28	87	0.002	0.002	10	0.010
Medium	IV	Sweep	0.280	89	225	0.040	0.025	56	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	0.105	152	566	0.014	0.011	21	0.021
High	II	Ejection	0.270	202	487	0.047	0.024	54	0.054
High	III	Inward interaction	0.025	16	54	0.000	0.000	5	0.005
High	IV	Sweep	0.245	141	658	0.030	0.029	49	0.049
Low	I	Outward interaction	0.130	141	557	0.017	0.019	26	0.026
Low	II	Ejection	0.285	179	408	0.046	0.030	57	0.057
Low	III	Inward interaction	0.070	61	118	0.004	0.002	14	0.014
Low	IV	Sweep	0.240	130	415	0.028	0.026	48	0.048
Medium	I	Outward interaction	0.155	199	626	0.056	0.044	31	0.031
Medium	II	Ejection	0.310	82	197	0.046	0.028	62	0.062
Medium	III	Inward interaction	0.055	17	60	0.002	0.002	11	0.011
Medium	IV	Sweep	0.280	73	232	0.038	0.030	56	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	0.205	302	1002	0.070	0.053	41	0.041
High	II	Ejection	0.235	105	238	0.028	0.015	47	0.047
High	III	Inward interaction	0.090	51	165	0.005	0.004	18	0.018
High	IV	Sweep	0.215	108	363	0.026	0.020	43	0.043
Low	I	Outward interaction	0.160	218	770	0.037	0.038	32	0.032
Low	II	Ejection	0.350	188	424	0.070	0.046	70	0.070
Low	III	Inward interaction	0.030	17	78	0.001	0.001	6	0.006
Low	IV	Sweep	0.225	93	248	0.022	0.017	45	0.045
Medium	I	Outward interaction	0.120	151	595	0.034	0.036	24	0.024
Medium	II	Ejection	0.315	86	209	0.051	0.033	63	0.063
Medium	III	Inward interaction	0.035	14	39	0.001	0.001	7	0.007
Medium	IV	Sweep	0.275	75	183	0.039	0.025	55	0.055

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	0.070	88	334	0.007	0.007	14	0.014
High	II	Ejection	0.420	165	366	0.078	0.046	84	0.084
High	III	Inward interaction	0.005	3	13	0.000	0.000	1	0.001
High	IV	Sweep	0.360	146	416	0.059	0.045	72	0.072
Low	I	Outward interaction	0.245	501	1723	0.085	0.067	49	0.049
Low	II	Ejection	0.230	202	467	0.032	0.017	46	0.046
Low	III	Inward interaction	0.060	34	137	0.001	0.001	12	0.012
Low	IV	Sweep	0.215	137	409	0.020	0.014	43	0.043
Medium	I	Outward interaction	0.095	109	313	0.019	0.016	19	0.019
Medium	II	Ejection	0.260	89	190	0.043	0.026	52	0.052
Medium	III	Inward interaction	0.020	7	32	0.000	0.000	4	0.004
Medium	IV	Sweep	0.305	84	230	0.047	0.038	61	0.061

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	0.205	313	1130	0.068	0.059	41	0.041
High	II	Ejection	0.280	131	279	0.039	0.020	56	0.056
High	III	Inward interaction	0.040	13	47	0.001	0.000	8	0.008
High	IV	Sweep	0.240	157	505	0.040	0.031	48	0.048
Low	I	Outward interaction	0.150	250	630	0.029	0.017	30	0.030
Low	II	Ejection	0.200	135	336	0.021	0.012	40	0.040
Low	III	Inward interaction	0.075	61	220	0.004	0.003	15	0.015
Low	IV	Sweep	0.290	229	972	0.052	0.049	58	0.058
Medium	I	Outward interaction	0.070	57	160	0.004	0.005	14	0.014
Medium	II	Ejection	0.260	117	204	0.034	0.022	52	0.052
Medium	III	Inward interaction	0.070	38	76	0.003	0.002	14	0.014
Medium	IV	Sweep	0.265	211	466	0.062	0.050	53	0.053

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	0.190	432	1336	0.057	0.037	38	0.038
High	II	Ejection	0.255	192	497	0.034	0.019	51	0.051
High	III	Inward interaction	0.105	98	380	0.007	0.006	21	0.021
High	IV	Sweep	0.225	161	769	0.025	0.025	45	0.045
Low	I	Outward interaction	0.245	1071	2832	0.092	0.070	49	0.049
Low	II	Ejection	0.215	299	683	0.023	0.015	43	0.043
Low	III	Inward interaction	0.135	217	777	0.010	0.011	27	0.027
Low	IV	Sweep	0.190	273	1039	0.018	0.020	38	0.038
Medium	I	Outward interaction	0.175	352	1461	0.051	0.042	35	0.035
Medium	II	Ejection	0.270	164	496	0.037	0.022	54	0.054
Medium	III	Inward interaction	0.095	90	327	0.007	0.005	19	0.019
Medium	IV	Sweep	0.165	87	381	0.012	0.010	33	0.033

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	0.105	202	1285	0.013	0.015	21	0.021
High	II	Ejection	0.275	258	768	0.044	0.023	55	0.055
High	III	Inward interaction	0.085	107	377	0.006	0.004	17	0.017
High	IV	Sweep	0.220	167	868	0.023	0.021	44	0.044
Low	I	Outward interaction	0.300	865	1982	0.152	0.109	60	0.060
Low	II	Ejection	0.305	434	958	0.078	0.054	61	0.061
Low	III	Inward interaction	0.010	5	12	0.000	0.000	2	0.002
Low	IV	Sweep	0.135	103	252	0.008	0.006	27	0.027
Medium	I	Outward interaction	0.165	245	1401	0.028	0.032	33	0.033
Medium	II	Ejection	0.285	189	532	0.037	0.021	57	0.057
Medium	III	Inward interaction	0.055	77	317	0.003	0.002	11	0.011
Medium	IV	Sweep	0.255	188	707	0.033	0.025	51	0.051

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	0.005	15	16	0.000	0.000	1	0.001
High	II	Ejection	0.350	326	661	0.056	0.037	70	0.070
High	III	Inward interaction	0.005	8	23	0.000	0.000	1	0.001
High	IV	Sweep	0.375	317	724	0.058	0.043	75	0.075
Low	I	Outward interaction	0.230	88	294	0.085	0.043	46	0.046
Low	II	Ejection	0.125	22	75	0.011	0.006	25	0.025
Low	III	Inward interaction	0.165	19	136	0.013	0.014	33	0.033
Low	IV	Sweep	0.135	18	70	0.010	0.006	27	0.027
Medium	I	Outward interaction	0.085	216	876	0.015	0.013	17	0.017
Medium	II	Ejection	0.315	173	455	0.045	0.026	63	0.063
Medium	III	Inward interaction	0.020	15	94	0.000	0.000	4	0.004
Medium	IV	Sweep	0.285	166	676	0.039	0.035	57	0.057

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	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	0.065	135	468	0.009	0.009	13	0.013
Low	II	Ejection	0.310	133	274	0.044	0.026	62	0.062
Low	III	Inward interaction	0.050	45	224	0.002	0.003	10	0.010
Low	IV	Sweep	0.305	146	483	0.048	0.046	61	0.061
Medium	I	Outward interaction	0.125	222	1030	0.028	0.027	25	0.025
Medium	II	Ejection	0.280	164	439	0.047	0.026	56	0.056
Medium	III	Inward interaction	0.055	38	183	0.002	0.002	11	0.011
Medium	IV	Sweep	0.215	105	338	0.023	0.015	43	0.043

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	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	0.100	151	620	0.011	0.010	20	0.020
High	II	Ejection	0.270	157	414	0.032	0.018	54	0.054
High	III	Inward interaction	0.110	94	284	0.008	0.005	22	0.022
High	IV	Sweep	0.310	226	889	0.053	0.045	62	0.062
Low	I	Outward interaction	0.115	185	622	0.017	0.015	23	0.023
Low	II	Ejection	0.260	225	434	0.046	0.024	52	0.052
Low	III	Inward interaction	0.070	60	257	0.003	0.004	14	0.014
Low	IV	Sweep	0.240	148	440	0.028	0.022	48	0.048
Medium	I	Outward interaction	0.110	115	479	0.022	0.023	22	0.022
Medium	II	Ejection	0.355	89	234	0.054	0.036	71	0.071
Medium	III	Inward interaction	0.030	13	48	0.001	0.001	6	0.006
Medium	IV	Sweep	0.345	96	308	0.057	0.046	69	0.069

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	0.160	176	808	0.023	0.028	32	0.032
High	II	Ejection	0.235	108	274	0.021	0.014	47	0.047
High	III	Inward interaction	0.105	141	355	0.012	0.008	21	0.021
High	IV	Sweep	0.235	211	676	0.041	0.035	47	0.047
Low	I	Outward interaction	0.125	192	985	0.026	0.030	25	0.025
Low	II	Ejection	0.300	117	323	0.039	0.024	60	0.060
Low	III	Inward interaction	0.055	45	136	0.003	0.002	11	0.011
Low	IV	Sweep	0.250	121	429	0.033	0.026	50	0.050
Medium	I	Outward interaction	0.080	54	179	0.009	0.007	16	0.016
Medium	II	Ejection	0.315	94	219	0.059	0.035	63	0.063
Medium	III	Inward interaction	0.045	17	48	0.002	0.001	9	0.009
Medium	IV	Sweep	0.215	70	179	0.030	0.019	43	0.043

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	0.180	355	1018	0.049	0.037	36	0.036
High	II	Ejection	0.260	168	346	0.033	0.018	52	0.052
High	III	Inward interaction	0.020	14	36	0.000	0.000	4	0.004
High	IV	Sweep	0.310	270	755	0.064	0.047	62	0.062
Low	I	Outward interaction	0.110	175	508	0.023	0.018	22	0.022
Low	II	Ejection	0.320	143	351	0.055	0.036	64	0.064
Low	III	Inward interaction	0.020	18	30	0.000	0.000	4	0.004
Low	IV	Sweep	0.245	90	269	0.027	0.021	49	0.049
Medium	I	Outward interaction	0.130	140	467	0.031	0.031	26	0.026
Medium	II	Ejection	0.315	76	171	0.041	0.027	63	0.063
Medium	III	Inward interaction	0.020	7	18	0.000	0.000	4	0.004
Medium	IV	Sweep	0.340	101	278	0.059	0.048	68	0.068

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	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	0.195	411	1077	0.045	0.035	39	0.039
High	II	Ejection	0.375	392	837	0.083	0.052	75	0.075
High	III	Inward interaction	0.035	32	125	0.001	0.001	7	0.007
High	IV	Sweep	0.190	144	437	0.015	0.014	38	0.038
Low	I	Outward interaction	0.125	191	678	0.028	0.025	25	0.025
Low	II	Ejection	0.305	100	256	0.036	0.023	61	0.061
Low	III	Inward interaction	0.065	43	161	0.003	0.003	13	0.013
Low	IV	Sweep	0.260	109	260	0.034	0.020	52	0.052
Medium	I	Outward interaction	0.145	167	427	0.029	0.020	29	0.029
Medium	II	Ejection	0.295	147	307	0.053	0.029	59	0.059
Medium	III	Inward interaction	0.045	23	71	0.001	0.001	9	0.009
Medium	IV	Sweep	0.300	103	295	0.038	0.029	60	0.060

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	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	0.205	859	2744	0.112	0.095	41	0.041
High	II	Ejection	0.235	225	517	0.034	0.020	47	0.047
High	III	Inward interaction	0.060	49	185	0.002	0.002	12	0.012
High	IV	Sweep	0.185	103	353	0.012	0.011	37	0.037
Low	I	Outward interaction	0.130	194	534	0.020	0.013	26	0.026
Low	II	Ejection	0.290	196	465	0.044	0.025	58	0.058
Low	III	Inward interaction	0.065	64	226	0.003	0.003	13	0.013
Low	IV	Sweep	0.280	203	767	0.044	0.040	56	0.056
Medium	I	Outward interaction	0.100	95	377	0.016	0.015	20	0.020
Medium	II	Ejection	0.320	87	213	0.047	0.028	64	0.064
Medium	III	Inward interaction	0.055	27	108	0.003	0.002	11	0.011
Medium	IV	Sweep	0.335	93	267	0.053	0.036	67	0.067

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	0.135	175	590	0.027	0.022	27	0.027
High	II	Ejection	0.345	188	458	0.074	0.044	69	0.069
High	III	Inward interaction	0.025	13	38	0.000	0.000	5	0.005
High	IV	Sweep	0.230	92	350	0.024	0.022	46	0.046
Low	I	Outward interaction	0.125	154	746	0.016	0.019	25	0.025
Low	II	Ejection	0.260	163	357	0.034	0.019	52	0.052
Low	III	Inward interaction	0.110	137	282	0.012	0.006	22	0.022
Low	IV	Sweep	0.245	170	451	0.033	0.022	49	0.049
Medium	I	Outward interaction	0.120	135	414	0.028	0.021	24	0.024
Medium	II	Ejection	0.290	84	229	0.042	0.028	58	0.058
Medium	III	Inward interaction	0.060	24	94	0.002	0.002	12	0.012
Medium	IV	Sweep	0.275	85	248	0.040	0.029	55	0.055

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	0.200	205	568	0.066	0.040	40	0.040
High	II	Ejection	0.245	89	238	0.035	0.020	49	0.049
High	III	Inward interaction	0.025	6	27	0.000	0.000	5	0.005
High	IV	Sweep	0.210	80	224	0.027	0.016	42	0.042
Low	I	Outward interaction	0.070	123	354	0.007	0.004	14	0.014
Low	II	Ejection	0.330	197	537	0.054	0.029	66	0.066
Low	III	Inward interaction	0.055	54	203	0.002	0.002	11	0.011
Low	IV	Sweep	0.275	179	668	0.041	0.030	55	0.055
Medium	I	Outward interaction	0.075	82	266	0.013	0.009	15	0.015
Medium	II	Ejection	0.300	71	195	0.043	0.026	60	0.060
Medium	III	Inward interaction	0.025	11	42	0.001	0.000	5	0.005
Medium	IV	Sweep	0.275	75	228	0.042	0.028	55	0.055

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	0.080	41	93	0.003	0.002	16	0.016
High	II	Ejection	0.170	71	135	0.012	0.007	34	0.034
High	III	Inward interaction	0.095	55	156	0.005	0.004	19	0.019
High	IV	Sweep	0.430	167	305	0.072	0.039	86	0.086
Low	I	Outward interaction	0.125	162	485	0.013	0.013	25	0.025
Low	II	Ejection	0.310	303	548	0.059	0.037	62	0.062
Low	III	Inward interaction	0.015	24	30	0.000	0.000	3	0.003
Low	IV	Sweep	0.220	162	205	0.022	0.010	44	0.044
Medium	I	Outward interaction	0.045	64	174	0.005	0.004	9	0.009
Medium	II	Ejection	0.315	95	236	0.055	0.036	63	0.063
Medium	III	Inward interaction	0.030	15	56	0.001	0.001	6	0.006
Medium	IV	Sweep	0.320	82	199	0.048	0.031	64	0.064

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	0.155	367	1361	0.043	0.039	31	0.031
High	II	Ejection	0.285	226	462	0.048	0.024	57	0.057
High	III	Inward interaction	0.025	19	53	0.000	0.000	5	0.005
High	IV	Sweep	0.265	169	685	0.034	0.034	53	0.053
Low	I	Outward interaction	0.105	193	585	0.017	0.012	21	0.021
Low	II	Ejection	0.315	151	478	0.041	0.031	63	0.063
Low	III	Inward interaction	0.030	24	95	0.001	0.001	6	0.006
Low	IV	Sweep	0.350	206	610	0.062	0.043	70	0.070
Medium	I	Outward interaction	0.180	176	945	0.036	0.040	36	0.036
Medium	II	Ejection	0.265	110	246	0.033	0.015	53	0.053
Medium	III	Inward interaction	0.080	48	159	0.004	0.003	16	0.016
Medium	IV	Sweep	0.260	134	470	0.040	0.029	52	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	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	0.265	608	1867	0.089	0.076	53	0.053
High	II	Ejection	0.255	274	656	0.038	0.026	51	0.051
High	III	Inward interaction	0.055	61	112	0.002	0.001	11	0.011
High	IV	Sweep	0.185	158	488	0.016	0.014	37	0.037
Low	I	Outward interaction	0.230	247	898	0.075	0.061	46	0.046
Low	II	Ejection	0.230	78	245	0.024	0.017	46	0.046
Low	III	Inward interaction	0.060	25	80	0.002	0.001	12	0.012
Low	IV	Sweep	0.255	106	324	0.036	0.024	51	0.051
Medium	I	Outward interaction	0.150	289	1214	0.034	0.030	30	0.030
Medium	II	Ejection	0.295	170	430	0.039	0.021	59	0.059
Medium	III	Inward interaction	0.040	41	168	0.001	0.001	8	0.008
Medium	IV	Sweep	0.310	165	522	0.040	0.027	62	0.062

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	0.190	318	1429	0.036	0.031	38	0.038
High	II	Ejection	0.190	108	327	0.012	0.007	38	0.038
High	III	Inward interaction	0.180	237	628	0.025	0.013	36	0.036
High	IV	Sweep	0.215	293	1122	0.037	0.028	43	0.043
Low	I	Outward interaction	0.140	40	121	0.020	0.011	28	0.028
Low	II	Ejection	0.250	44	124	0.040	0.020	50	0.050
Low	III	Inward interaction	0.040	7	39	0.001	0.001	8	0.008
Low	IV	Sweep	0.230	41	114	0.034	0.017	46	0.046
Medium	I	Outward interaction	0.115	265	1205	0.024	0.023	23	0.023
Medium	II	Ejection	0.285	167	447	0.037	0.021	57	0.057
Medium	III	Inward interaction	0.085	89	350	0.006	0.005	17	0.017
Medium	IV	Sweep	0.245	141	511	0.027	0.021	49	0.049

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	0.100	204	803	0.010	0.009	20	0.020
High	II	Ejection	0.275	194	550	0.027	0.016	55	0.055
High	III	Inward interaction	0.030	49	134	0.001	0.000	6	0.006
High	IV	Sweep	0.345	444	1807	0.078	0.067	69	0.069
Low	I	Outward interaction	0.105	305	647	0.024	0.013	21	0.021
Low	II	Ejection	0.240	176	382	0.032	0.017	48	0.048
Low	III	Inward interaction	0.025	22	55	0.000	0.000	5	0.005
Low	IV	Sweep	0.280	213	702	0.045	0.036	56	0.056
Medium	I	Outward interaction	0.100	244	756	0.018	0.012	20	0.020
Medium	II	Ejection	0.285	218	456	0.045	0.020	57	0.057
Medium	III	Inward interaction	0.075	88	301	0.005	0.003	15	0.015
Medium	IV	Sweep	0.235	143	646	0.024	0.023	47	0.047

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	0.090	370	583	0.006	0.003	18	0.018
High	II	Ejection	0.270	865	1316	0.039	0.022	54	0.054
High	III	Inward interaction	0.095	316	497	0.005	0.003	19	0.019
High	IV	Sweep	0.250	745	1055	0.031	0.017	50	0.050
Low	I	Outward interaction	0.240	806	1156	0.029	0.016	48	0.048
Low	II	Ejection	0.165	878	1403	0.022	0.013	33	0.033
Low	III	Inward interaction	0.155	499	842	0.012	0.007	31	0.031
Low	IV	Sweep	0.165	575	880	0.014	0.008	33	0.033
Medium	I	Outward interaction	0.155	777	1144	0.017	0.012	31	0.031
Medium	II	Ejection	0.240	1004	1334	0.033	0.021	48	0.048
Medium	III	Inward interaction	0.110	379	533	0.006	0.004	22	0.022
Medium	IV	Sweep	0.225	718	1009	0.022	0.015	45	0.045

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	0.280	2072	5161	0.044	0.035	56	0.056
High	II	Ejection	0.160	1158	2224	0.014	0.009	32	0.032
High	III	Inward interaction	0.195	1249	1950	0.018	0.009	39	0.039
High	IV	Sweep	0.095	1030	1451	0.007	0.003	19	0.019
Low	I	Outward interaction	0.090	256	478	0.004	0.003	18	0.018
Low	II	Ejection	0.250	687	1098	0.030	0.017	50	0.050
Low	III	Inward interaction	0.180	747	1308	0.024	0.015	36	0.036
Low	IV	Sweep	0.220	583	977	0.023	0.013	44	0.044
Medium	I	Outward interaction	0.045	44	75	0.001	0.001	9	0.009
Medium	II	Ejection	0.265	214	452	0.035	0.022	53	0.053
Medium	III	Inward interaction	0.095	93	251	0.005	0.004	19	0.019
Medium	IV	Sweep	0.270	266	543	0.044	0.027	54	0.054

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	0.225	1407	3491	0.024	0.015	45	0.045
High	II	Ejection	0.155	1610	4035	0.019	0.012	31	0.031
High	III	Inward interaction	0.225	1246	3087	0.021	0.013	45	0.045
High	IV	Sweep	0.095	797	1840	0.006	0.003	19	0.019
Low	I	Outward interaction	0.055	216	342	0.001	0.001	11	0.011
Low	II	Ejection	0.245	952	1468	0.025	0.015	49	0.049
Low	III	Inward interaction	0.225	1339	2097	0.032	0.020	45	0.045
Low	IV	Sweep	0.255	1438	2640	0.039	0.029	51	0.051
Medium	I	Outward interaction	0.190	308	743	0.029	0.023	38	0.038
Medium	II	Ejection	0.235	218	491	0.026	0.018	47	0.047
Medium	III	Inward interaction	0.035	31	56	0.001	0.000	7	0.007
Medium	IV	Sweep	0.315	344	678	0.054	0.034	63	0.063

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	0.090	216	331	0.009	0.005	18	0.018
High	II	Ejection	0.255	220	483	0.026	0.019	51	0.051
High	III	Inward interaction	0.020	25	64	0.000	0.000	4	0.004
High	IV	Sweep	0.335	391	823	0.061	0.042	67	0.067
Low	I	Outward interaction	0.175	685	1005	0.015	0.007	35	0.035
Low	II	Ejection	0.140	697	1343	0.012	0.008	28	0.028
Low	III	Inward interaction	0.220	969	1757	0.027	0.016	44	0.044
Low	IV	Sweep	0.195	870	1536	0.021	0.012	39	0.039
Medium	I	Outward interaction	0.000	0	0	0.000	0.000	0	0.000
Medium	II	Ejection	0.360	391	757	0.053	0.036	72	0.072
Medium	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
Medium	IV	Sweep	0.375	423	752	0.059	0.037	75	0.075

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	0.115	358	537	0.010	0.005	23	0.023
High	II	Ejection	0.260	650	983	0.039	0.022	52	0.052
High	III	Inward interaction	0.075	177	445	0.003	0.003	15	0.015
High	IV	Sweep	0.230	494	827	0.026	0.016	46	0.046
Low	I	Outward interaction	0.150	822	1359	0.013	0.006	30	0.030
Low	II	Ejection	0.200	769	1827	0.016	0.010	40	0.040
Low	III	Inward interaction	0.190	1032	2117	0.020	0.011	38	0.038
Low	IV	Sweep	0.210	948	1871	0.021	0.011	42	0.042
Medium	I	Outward interaction	0.135	292	483	0.013	0.008	27	0.027
Medium	II	Ejection	0.285	444	680	0.042	0.023	57	0.057
Medium	III	Inward interaction	0.090	151	326	0.004	0.004	18	0.018
Medium	IV	Sweep	0.245	345	567	0.028	0.017	49	0.049

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	0.090	211	441	0.004	0.003	18	0.018
High	II	Ejection	0.295	999	1637	0.058	0.035	59	0.059
High	III	Inward interaction	0.150	420	595	0.012	0.007	30	0.030
High	IV	Sweep	0.205	462	700	0.019	0.011	41	0.041
Low	I	Outward interaction	0.105	339	606	0.006	0.003	21	0.021
Low	II	Ejection	0.215	579	1092	0.021	0.012	43	0.043
Low	III	Inward interaction	0.160	574	1136	0.016	0.009	32	0.032
Low	IV	Sweep	0.275	944	1988	0.044	0.027	55	0.055
Medium	I	Outward interaction	0.190	529	923	0.023	0.016	38	0.038
Medium	II	Ejection	0.235	490	788	0.027	0.017	47	0.047
Medium	III	Inward interaction	0.095	213	338	0.005	0.003	19	0.019
Medium	IV	Sweep	0.235	523	710	0.029	0.015	47	0.047

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	0.050	1344	2478	0.002	0.001	10	0.010
High	II	Ejection	0.355	7171	11985	0.063	0.040	71	0.071
High	III	Inward interaction	0.010	184	341	0.000	0.000	2	0.002
High	IV	Sweep	0.310	5881	10032	0.045	0.030	62	0.062
Low	I	Outward interaction	0.110	318	594	0.006	0.003	22	0.022
Low	II	Ejection	0.240	906	1430	0.039	0.015	48	0.048
Low	III	Inward interaction	0.155	486	956	0.014	0.007	31	0.031
Low	IV	Sweep	0.230	604	1207	0.025	0.013	46	0.046
Medium	I	Outward interaction	0.215	629	1075	0.034	0.021	43	0.043
Medium	II	Ejection	0.235	489	699	0.029	0.015	47	0.047
Medium	III	Inward interaction	0.115	212	311	0.006	0.003	23	0.023
Medium	IV	Sweep	0.185	348	531	0.016	0.009	37	0.037

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	0.040	1452	2558	0.001	0.001	8	0.008
High	II	Ejection	0.415	12895	17402	0.083	0.051	83	0.083
High	III	Inward interaction	0.015	667	1347	0.000	0.000	3	0.003
High	IV	Sweep	0.305	7674	9974	0.036	0.021	61	0.061
Low	I	Outward interaction	0.080	210	436	0.004	0.003	16	0.016
Low	II	Ejection	0.255	750	1247	0.042	0.023	51	0.051
Low	III	Inward interaction	0.115	278	474	0.007	0.004	23	0.023
Low	IV	Sweep	0.265	573	885	0.033	0.017	53	0.053
Medium	I	Outward interaction	0.110	387	561	0.008	0.005	22	0.022
Medium	II	Ejection	0.320	1368	2009	0.078	0.047	64	0.064
Medium	III	Inward interaction	0.070	213	467	0.003	0.002	14	0.014
Medium	IV	Sweep	0.145	307	468	0.008	0.005	29	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	0.085	360	950	0.004	0.003	17	0.017
High	II	Ejection	0.425	1846	3688	0.097	0.065	85	0.085
High	III	Inward interaction	0.045	255	675	0.001	0.001	9	0.009
High	IV	Sweep	0.185	540	956	0.012	0.007	37	0.037
Low	I	Outward interaction	0.135	604	931	0.011	0.007	27	0.027
Low	II	Ejection	0.260	1184	1754	0.042	0.026	52	0.052
Low	III	Inward interaction	0.040	168	266	0.001	0.001	8	0.008
Low	IV	Sweep	0.280	921	1410	0.035	0.023	56	0.056
Medium	I	Outward interaction	0.055	175	245	0.001	0.001	11	0.011
Medium	II	Ejection	0.285	1734	2744	0.061	0.040	57	0.057
Medium	III	Inward interaction	0.075	504	925	0.005	0.004	15	0.015
Medium	IV	Sweep	0.230	871	1285	0.025	0.015	46	0.046

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 fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	0.190	732	1643	0.037	0.026	38	0.038
High	II	Ejection	0.235	350	882	0.022	0.018	47	0.047
High	III	Inward interaction	0.055	96	197	0.001	0.001	11	0.011
High	IV	Sweep	0.175	452	918	0.021	0.014	35	0.035
Low	I	Outward interaction	0.065	723	1419	0.003	0.002	13	0.013
Low	II	Ejection	0.255	1800	3524	0.025	0.016	51	0.051
Low	III	Inward interaction	0.090	1027	2162	0.005	0.003	18	0.018
Low	IV	Sweep	0.375	3637	6559	0.073	0.043	75	0.075
Medium	I	Outward interaction	0.095	618	1062	0.007	0.004	19	0.019
Medium	II	Ejection	0.295	1449	2812	0.049	0.030	59	0.059
Medium	III	Inward interaction	0.020	81	225	0.000	0.000	4	0.004
Medium	IV	Sweep	0.270	1114	2099	0.034	0.021	54	0.054

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	0.115	440	850	0.008	0.005	23	0.023
High	II	Ejection	0.235	928	1405	0.035	0.015	47	0.047
High	III	Inward interaction	0.060	177	349	0.002	0.001	12	0.012
High	IV	Sweep	0.290	959	1866	0.044	0.025	58	0.058
Low	I	Outward interaction	0.185	633	1652	0.016	0.012	37	0.037
Low	II	Ejection	0.160	624	1238	0.013	0.008	32	0.032
Low	III	Inward interaction	0.245	1031	1761	0.034	0.017	49	0.049
Low	IV	Sweep	0.175	900	1694	0.021	0.012	35	0.035
Medium	I	Outward interaction	0.090	101	175	0.004	0.002	18	0.018
Medium	II	Ejection	0.235	275	476	0.028	0.013	47	0.047
Medium	III	Inward interaction	0.165	213	540	0.015	0.011	33	0.033
Medium	IV	Sweep	0.225	297	595	0.029	0.016	45	0.045

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 fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	0.155	365	689	0.012	0.007	31	0.031
High	II	Ejection	0.260	704	1536	0.040	0.025	52	0.052
High	III	Inward interaction	0.135	363	667	0.011	0.006	27	0.027
High	IV	Sweep	0.150	312	765	0.010	0.007	30	0.030
Low	I	Outward interaction	0.065	243	512	0.002	0.002	13	0.013
Low	II	Ejection	0.230	733	1124	0.023	0.013	46	0.046
Low	III	Inward interaction	0.120	565	1020	0.009	0.006	24	0.024
Low	IV	Sweep	0.370	1475	2565	0.075	0.047	74	0.074
Medium	I	Outward interaction	0.140	337	679	0.012	0.008	28	0.028
Medium	II	Ejection	0.255	461	820	0.030	0.018	51	0.051
Medium	III	Inward interaction	0.170	340	610	0.015	0.009	34	0.034
Medium	IV	Sweep	0.220	375	703	0.021	0.013	44	0.044

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	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	0.130	614	978	0.011	0.007	26	0.026
High	II	Ejection	0.255	962	1554	0.035	0.023	51	0.051
High	III	Inward interaction	0.115	414	627	0.007	0.004	23	0.023
High	IV	Sweep	0.295	881	1466	0.037	0.025	59	0.059
Low	I	Outward interaction	0.105	531	872	0.006	0.003	21	0.021
Low	II	Ejection	0.175	749	1109	0.014	0.006	35	0.035
Low	III	Inward interaction	0.195	1381	2275	0.028	0.014	39	0.039
Low	IV	Sweep	0.175	1118	1755	0.020	0.010	35	0.035
Medium	I	Outward interaction	0.185	616	1050	0.021	0.012	37	0.037
Medium	II	Ejection	0.215	652	1123	0.025	0.015	43	0.043
Medium	III	Inward interaction	0.090	242	410	0.004	0.002	18	0.018
Medium	IV	Sweep	0.230	623	1123	0.026	0.016	46	0.046

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	0.140	874	1283	0.011	0.006	28	0.028
High	II	Ejection	0.255	1182	1937	0.026	0.017	51	0.051
High	III	Inward interaction	0.135	1014	1694	0.012	0.008	27	0.027
High	IV	Sweep	0.285	1613	2497	0.040	0.025	57	0.057
Low	I	Outward interaction	0.145	704	981	0.012	0.006	29	0.029
Low	II	Ejection	0.210	975	1397	0.024	0.012	42	0.042
Low	III	Inward interaction	0.105	562	878	0.007	0.004	21	0.021
Low	IV	Sweep	0.295	1167	2355	0.040	0.028	59	0.059
Medium	I	Outward interaction	0.150	781	1239	0.015	0.009	30	0.030
Medium	II	Ejection	0.235	989	1508	0.029	0.017	47	0.047
Medium	III	Inward interaction	0.135	507	791	0.009	0.005	27	0.027
Medium	IV	Sweep	0.220	877	1474	0.024	0.015	44	0.044

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	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	0.195	907	1622	0.019	0.012	39	0.039
High	II	Ejection	0.265	1569	2509	0.044	0.025	53	0.053
High	III	Inward interaction	0.190	876	1415	0.018	0.010	38	0.038
High	IV	Sweep	0.145	613	1066	0.009	0.006	29	0.029
Low	I	Outward interaction	0.140	906	1512	0.013	0.007	28	0.028
Low	II	Ejection	0.275	1468	2286	0.040	0.021	55	0.055
Low	III	Inward interaction	0.070	381	666	0.003	0.002	14	0.014
Low	IV	Sweep	0.250	1101	1652	0.027	0.014	50	0.050
Medium	I	Outward interaction	0.250	2090	3701	0.059	0.042	50	0.050
Medium	II	Ejection	0.150	1001	1878	0.017	0.013	30	0.030
Medium	III	Inward interaction	0.125	423	708	0.006	0.004	25	0.025
Medium	IV	Sweep	0.150	601	758	0.010	0.005	30	0.030

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	0.065	1529	2193	0.002	0.001	13	0.013
High	II	Ejection	0.315	12895	20116	0.079	0.056	63	0.063
High	III	Inward interaction	0.110	4198	7484	0.009	0.007	22	0.022
High	IV	Sweep	0.155	3243	4362	0.010	0.006	31	0.031
Low	I	Outward interaction	0.125	582	954	0.009	0.005	25	0.025
Low	II	Ejection	0.230	1281	2015	0.035	0.020	46	0.046
Low	III	Inward interaction	0.125	553	935	0.008	0.005	25	0.025
Low	IV	Sweep	0.265	917	1367	0.029	0.016	53	0.053
Medium	I	Outward interaction	0.180	952	1506	0.021	0.013	36	0.036
Medium	II	Ejection	0.310	1180	1724	0.045	0.025	62	0.062
Medium	III	Inward interaction	0.100	427	807	0.005	0.004	20	0.020
Medium	IV	Sweep	0.180	571	910	0.013	0.008	36	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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	0.060	790	1585	0.002	0.002	12	0.012
High	II	Ejection	0.405	4840	7385	0.098	0.062	81	0.081
High	III	Inward interaction	0.015	195	302	0.000	0.000	3	0.003
High	IV	Sweep	0.185	1394	1917	0.013	0.007	37	0.037
Low	I	Outward interaction	0.020	164	340	0.000	0.000	4	0.004
Low	II	Ejection	0.400	4738	7291	0.122	0.077	80	0.080
Low	III	Inward interaction	0.050	445	760	0.001	0.001	10	0.010
Low	IV	Sweep	0.160	942	1291	0.010	0.005	32	0.032
Medium	I	Outward interaction	0.035	361	529	0.001	0.000	7	0.007
Medium	II	Ejection	0.500	6576	9534	0.177	0.117	100	0.100
Medium	III	Inward interaction	0.020	251	451	0.000	0.000	4	0.004
Medium	IV	Sweep	0.130	731	964	0.005	0.003	26	0.026

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	0.155	1227	2843	0.026	0.016	31	0.031
High	II	Ejection	0.260	982	2594	0.035	0.025	52	0.052
High	III	Inward interaction	0.070	228	536	0.002	0.001	14	0.014
High	IV	Sweep	0.280	973	1900	0.037	0.020	56	0.056
Low	I	Outward interaction	0.065	1136	2066	0.002	0.001	13	0.013
Low	II	Ejection	0.240	4374	7491	0.030	0.018	48	0.048
Low	III	Inward interaction	0.090	1649	2558	0.004	0.002	18	0.018
Low	IV	Sweep	0.340	6889	11193	0.066	0.039	68	0.068
Medium	I	Outward interaction	0.290	858	2342	0.061	0.040	58	0.058
Medium	II	Ejection	0.045	107	464	0.001	0.001	9	0.009
Medium	III	Inward interaction	0.155	238	628	0.009	0.006	31	0.031
Medium	IV	Sweep	0.115	502	1199	0.014	0.008	23	0.023

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	0.030	70	160	0.001	0.001	6	0.006
High	II	Ejection	0.310	308	638	0.039	0.029	62	0.062
High	III	Inward interaction	0.005	8	25	0.000	0.000	1	0.001
High	IV	Sweep	0.360	446	753	0.066	0.040	72	0.072
Low	I	Outward interaction	0.245	1026	2441	0.031	0.020	49	0.049
Low	II	Ejection	0.200	876	2171	0.021	0.015	40	0.040
Low	III	Inward interaction	0.160	767	1519	0.015	0.008	32	0.032
Low	IV	Sweep	0.140	610	1727	0.010	0.008	28	0.028
Medium	I	Outward interaction	0.245	667	1197	0.035	0.018	49	0.049
Medium	II	Ejection	0.190	418	896	0.017	0.010	38	0.038
Medium	III	Inward interaction	0.120	258	476	0.007	0.003	24	0.024
Medium	IV	Sweep	0.245	533	995	0.028	0.015	49	0.049

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	0.095	532	1404	0.006	0.005	19	0.019
High	II	Ejection	0.260	1216	2268	0.040	0.021	52	0.052
High	III	Inward interaction	0.075	311	641	0.003	0.002	15	0.015
High	IV	Sweep	0.230	775	1212	0.023	0.010	46	0.046
Low	I	Outward interaction	0.065	432	1023	0.002	0.002	13	0.013
Low	II	Ejection	0.210	1042	1981	0.018	0.010	42	0.042
Low	III	Inward interaction	0.095	758	1515	0.006	0.003	19	0.019
Low	IV	Sweep	0.245	2105	5378	0.043	0.031	49	0.049
Medium	I	Outward interaction	0.075	311	518	0.004	0.002	15	0.015
Medium	II	Ejection	0.230	779	1477	0.028	0.015	46	0.046
Medium	III	Inward interaction	0.155	681	1358	0.017	0.010	31	0.031
Medium	IV	Sweep	0.255	809	1757	0.033	0.020	51	0.051

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	0.105	799	1282	0.007	0.005	21	0.021
Low	II	Ejection	0.360	2087	3317	0.063	0.042	72	0.072
Low	III	Inward interaction	0.100	831	1354	0.007	0.005	20	0.020
Low	IV	Sweep	0.185	887	1251	0.014	0.008	37	0.037
Medium	I	Outward interaction	0.150	2051	3124	0.017	0.011	30	0.030
Medium	II	Ejection	0.325	4906	7655	0.090	0.060	65	0.065
Medium	III	Inward interaction	0.090	770	980	0.004	0.002	18	0.018
Medium	IV	Sweep	0.105	641	896	0.004	0.002	21	0.021
High	I	Outward interaction	0.140	827	1683	0.011	0.009	28	0.028
High	II	Ejection	0.240	1666	2516	0.039	0.024	48	0.048
High	III	Inward interaction	0.130	658	913	0.008	0.005	26	0.026
High	IV	Sweep	0.170	747	1085	0.012	0.007	34	0.034

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
Low	I	Outward interaction	0.085	1018	2076	0.003	0.002	17	0.017
Low	II	Ejection	0.330	5158	9700	0.066	0.038	66	0.066
Low	III	Inward interaction	0.140	2464	6201	0.013	0.010	28	0.028
Low	IV	Sweep	0.185	1643	2400	0.012	0.005	37	0.037
Medium	I	Outward interaction	0.085	1150	2102	0.008	0.005	17	0.017
Medium	II	Ejection	0.320	1546	3283	0.043	0.032	64	0.064
Medium	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
Medium	IV	Sweep	0.345	1805	3637	0.054	0.039	69	0.069
High	I	Outward interaction	0.210	2193	4105	0.024	0.014	42	0.042
High	II	Ejection	0.180	1779	3240	0.017	0.010	36	0.036
High	III	Inward interaction	0.180	1413	2849	0.014	0.009	36	0.036
High	IV	Sweep	0.270	3060	6518	0.044	0.029	54	0.054

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	0.250	3391	6421	0.047	0.029	50	0.050
Low	II	Ejection	0.090	1108	2302	0.006	0.004	18	0.018
Low	III	Inward interaction	0.225	1674	3376	0.021	0.014	45	0.045
Low	IV	Sweep	0.070	830	1808	0.003	0.002	14	0.014
Medium	I	Outward interaction	0.095	383	760	0.006	0.004	19	0.019
Medium	II	Ejection	0.270	805	1595	0.036	0.022	54	0.054
Medium	III	Inward interaction	0.120	429	895	0.009	0.006	24	0.024
Medium	IV	Sweep	0.250	793	1590	0.033	0.020	50	0.050
High	I	Outward interaction	0.260	629	1437	0.067	0.046	52	0.052
High	II	Ejection	0.135	207	524	0.011	0.009	27	0.027
High	III	Inward interaction	0.065	70	170	0.002	0.001	13	0.013
High	IV	Sweep	0.175	252	626	0.018	0.013	35	0.035

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	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	0.080	1345	2595	0.004	0.003	16	0.016
Low	II	Ejection	0.265	3366	4930	0.033	0.019	53	0.053
Low	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
Low	IV	Sweep	0.325	6001	10717	0.073	0.051	65	0.065
Medium	I	Outward interaction	0.005	22	22	0.000	0.000	1	0.001
Medium	II	Ejection	0.330	309	644	0.040	0.023	66	0.066
Medium	III	Inward interaction	0.005	7	21	0.000	0.000	1	0.001
Medium	IV	Sweep	0.355	447	842	0.062	0.032	71	0.071
High	I	Outward interaction	0.105	344	617	0.005	0.003	21	0.021
High	II	Ejection	0.155	555	958	0.011	0.007	31	0.031
High	III	Inward interaction	0.255	1738	3508	0.056	0.042	51	0.051
High	IV	Sweep	0.185	967	1844	0.023	0.016	37	0.037

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	0.250	323	968	0.075	0.055	50	0.050
Low	II	Ejection	0.350	223	542	0.073	0.043	70	0.070
Low	III	Inward interaction	0.010	4	17	0.000	0.000	2	0.002
Low	IV	Sweep	0.135	74	267	0.009	0.008	27	0.027
High	I	Outward interaction	0.335	867	2391	0.162	0.130	67	0.067
High	II	Ejection	0.205	226	533	0.026	0.018	41	0.041
High	III	Inward interaction	0.050	36	109	0.001	0.001	10	0.010
High	IV	Sweep	0.145	134	331	0.011	0.008	29	0.029
Medium	I	Outward interaction	0.095	113	369	0.013	0.013	19	0.019
Medium	II	Ejection	0.355	150	331	0.066	0.042	71	0.071
Medium	III	Inward interaction	0.035	16	69	0.001	0.001	7	0.007
Medium	IV	Sweep	0.300	111	326	0.041	0.035	60	0.060

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	0.105	120	663	0.007	0.008	21	0.021
Low	II	Ejection	0.260	239	741	0.035	0.023	52	0.052
Low	III	Inward interaction	0.055	48	178	0.001	0.001	11	0.011
Low	IV	Sweep	0.340	356	1195	0.068	0.049	68	0.068
High	I	Outward interaction	0.065	82	244	0.005	0.006	13	0.013
High	II	Ejection	0.330	119	250	0.038	0.030	66	0.066
High	III	Inward interaction	0.040	50	144	0.002	0.002	8	0.008
High	IV	Sweep	0.315	139	315	0.043	0.035	63	0.063
Medium	I	Outward interaction	0.080	76	264	0.007	0.006	16	0.016
Medium	II	Ejection	0.270	143	356	0.046	0.028	54	0.054
Medium	III	Inward interaction	0.115	70	278	0.010	0.009	23	0.023
Medium	IV	Sweep	0.255	118	394	0.036	0.029	51	0.051

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	0.110	234	787	0.016	0.015	22	0.022
Low	II	Ejection	0.320	258	534	0.052	0.030	64	0.064
Low	III	Inward interaction	0.030	35	154	0.001	0.001	6	0.006
Low	IV	Sweep	0.255	170	359	0.027	0.016	51	0.051
High	I	Outward interaction	0.200	224	779	0.040	0.031	40	0.040
High	II	Ejection	0.340	225	635	0.068	0.043	68	0.068
High	III	Inward interaction	0.045	19	94	0.001	0.001	9	0.009
High	IV	Sweep	0.260	135	573	0.031	0.030	52	0.052
Medium	I	Outward interaction	0.050	20	72	0.002	0.002	10	0.010
Medium	II	Ejection	0.325	127	317	0.064	0.045	65	0.065
Medium	III	Inward interaction	0.030	15	81	0.001	0.001	6	0.006
Medium	IV	Sweep	0.200	94	219	0.029	0.019	40	0.040

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	0.075	89	400	0.010	0.013	15	0.015
Low	II	Ejection	0.290	95	205	0.042	0.025	58	0.058
Low	III	Inward interaction	0.030	16	86	0.001	0.001	6	0.006
Low	IV	Sweep	0.320	101	244	0.049	0.033	64	0.064
High	I	Outward interaction	0.250	435	1959	0.082	0.077	50	0.050
High	II	Ejection	0.255	188	503	0.036	0.020	51	0.051
High	III	Inward interaction	0.055	49	267	0.002	0.002	11	0.011
High	IV	Sweep	0.170	108	355	0.014	0.009	34	0.034
Medium	I	Outward interaction	0.085	69	256	0.009	0.007	17	0.017
Medium	II	Ejection	0.305	118	311	0.054	0.032	61	0.061
Medium	III	Inward interaction	0.030	20	66	0.001	0.001	6	0.006
Medium	IV	Sweep	0.260	89	264	0.035	0.023	52	0.052

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	0.240	552	1924	0.075	0.068	48	0.048
High	II	Ejection	0.335	264	701	0.050	0.035	67	0.067
High	III	Inward interaction	0.045	46	180	0.001	0.001	9	0.009
High	IV	Sweep	0.220	157	461	0.020	0.015	44	0.044
Low	I	Outward interaction	0.165	357	1026	0.053	0.037	33	0.033
Low	II	Ejection	0.270	140	408	0.034	0.024	54	0.054
Low	III	Inward interaction	0.065	39	182	0.002	0.003	13	0.013
Low	IV	Sweep	0.200	111	336	0.020	0.015	40	0.040
Medium	I	Outward interaction	0.130	110	505	0.020	0.022	26	0.026
Medium	II	Ejection	0.280	100	243	0.039	0.023	56	0.056
Medium	III	Inward interaction	0.085	53	188	0.006	0.005	17	0.017
Medium	IV	Sweep	0.275	98	317	0.037	0.029	55	0.055

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
Low	I	Outward interaction	0.120	139	495	0.018	0.015	24	0.024
Low	II	Ejection	0.230	112	276	0.028	0.016	46	0.046
Low	III	Inward interaction	0.080	49	235	0.004	0.005	16	0.016
Low	IV	Sweep	0.225	139	414	0.034	0.024	45	0.045
Medium	I	Outward interaction	0.085	62	261	0.007	0.008	17	0.017
Medium	II	Ejection	0.270	99	237	0.038	0.022	54	0.054
Medium	III	Inward interaction	0.075	50	214	0.005	0.005	15	0.015
Medium	IV	Sweep	0.295	90	214	0.037	0.022	59	0.059

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	0.075	58	174	0.004	0.003	15	0.015
High	II	Ejection	0.325	213	390	0.057	0.031	65	0.065
High	III	Inward interaction	0.050	38	154	0.002	0.002	10	0.010
High	IV	Sweep	0.220	91	172	0.016	0.009	44	0.044
Low	I	Outward interaction	0.115	160	585	0.011	0.010	23	0.023
Low	II	Ejection	0.310	241	512	0.045	0.023	62	0.062
Low	III	Inward interaction	0.085	89	344	0.005	0.004	17	0.017
Low	IV	Sweep	0.285	258	728	0.044	0.031	57	0.057
Medium	I	Outward interaction	0.060	67	173	0.004	0.003	12	0.012
Medium	II	Ejection	0.295	157	311	0.046	0.025	59	0.059
Medium	III	Inward interaction	0.055	52	190	0.003	0.003	11	0.011
Medium	IV	Sweep	0.325	142	305	0.045	0.027	65	0.065

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	0.075	104	213	0.005	0.004	15	0.015
High	II	Ejection	0.305	169	255	0.036	0.019	61	0.061
High	III	Inward interaction	0.025	27	49	0.000	0.000	5	0.005
High	IV	Sweep	0.280	204	423	0.039	0.029	56	0.056
Low	I	Outward interaction	0.070	119	326	0.005	0.004	14	0.014
Low	II	Ejection	0.415	301	532	0.078	0.040	83	0.083
Low	III	Inward interaction	0.010	7	18	0.000	0.000	2	0.002
Low	IV	Sweep	0.310	172	426	0.033	0.024	62	0.062
Medium	I	Outward interaction	0.000	0	0	0.000	0.000	0	0.000
Medium	II	Ejection	0.350	219	387	0.047	0.029	70	0.070
Medium	III	Inward interaction	0.005	6	12	0.000	0.000	1	0.001
Medium	IV	Sweep	0.390	250	500	0.059	0.041	78	0.078

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	0.135	673	1863	0.028	0.023	27	0.027
High	II	Ejection	0.240	313	687	0.023	0.015	48	0.048
High	III	Inward interaction	0.110	219	514	0.008	0.005	22	0.022
High	IV	Sweep	0.320	627	1967	0.063	0.056	64	0.064
Low	I	Outward interaction	0.165	202	610	0.036	0.022	33	0.033
Low	II	Ejection	0.270	146	382	0.042	0.023	54	0.054
Low	III	Inward interaction	0.075	42	199	0.003	0.003	15	0.015
Low	IV	Sweep	0.225	94	303	0.023	0.015	45	0.045
Medium	I	Outward interaction	0.115	76	244	0.017	0.011	23	0.023
Medium	II	Ejection	0.260	79	220	0.039	0.023	52	0.052
Medium	III	Inward interaction	0.090	27	114	0.005	0.004	18	0.018
Medium	IV	Sweep	0.230	77	265	0.034	0.024	46	0.046

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	0.115	263	1195	0.017	0.019	23	0.023
High	II	Ejection	0.265	214	567	0.032	0.021	53	0.053
High	III	Inward interaction	0.095	154	436	0.008	0.006	19	0.019
High	IV	Sweep	0.275	267	924	0.042	0.036	55	0.055
Low	I	Outward interaction	0.095	46	156	0.005	0.004	19	0.019
Low	II	Ejection	0.160	79	172	0.014	0.008	32	0.032
Low	III	Inward interaction	0.245	131	299	0.037	0.020	49	0.049
Low	IV	Sweep	0.185	96	233	0.020	0.012	37	0.037
Medium	I	Outward interaction	0.090	137	576	0.008	0.008	18	0.018
Medium	II	Ejection	0.290	271	670	0.050	0.029	58	0.058
Medium	III	Inward interaction	0.100	135	387	0.009	0.006	20	0.020
Medium	IV	Sweep	0.235	157	386	0.024	0.014	47	0.047

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	0.195	233	942	0.036	0.030	39	0.039
High	II	Ejection	0.210	132	323	0.022	0.011	42	0.042
High	III	Inward interaction	0.160	112	365	0.014	0.010	32	0.032
High	IV	Sweep	0.205	162	549	0.026	0.019	41	0.041
Low	I	Outward interaction	0.065	19	59	0.003	0.002	13	0.013
Low	II	Ejection	0.260	60	145	0.039	0.021	52	0.052
Low	III	Inward interaction	0.040	12	43	0.001	0.001	8	0.008
Low	IV	Sweep	0.270	83	218	0.056	0.033	54	0.054
Medium	I	Outward interaction	0.120	112	676	0.014	0.014	24	0.024
Medium	II	Ejection	0.270	155	469	0.043	0.022	54	0.054
Medium	III	Inward interaction	0.075	42	171	0.003	0.002	15	0.015
Medium	IV	Sweep	0.255	146	577	0.038	0.025	51	0.051

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	0.125	137	491	0.021	0.019	25	0.025
High	II	Ejection	0.325	134	280	0.053	0.029	65	0.065
High	III	Inward interaction	0.050	29	64	0.002	0.001	10	0.010
High	IV	Sweep	0.270	120	384	0.039	0.033	54	0.054
Low	I	Outward interaction	0.175	247	843	0.043	0.039	35	0.035
Low	II	Ejection	0.250	125	301	0.031	0.020	50	0.050
Low	III	Inward interaction	0.025	13	58	0.000	0.000	5	0.005
Low	IV	Sweep	0.235	125	288	0.029	0.018	47	0.047
Medium	I	Outward interaction	0.035	49	153	0.001	0.001	7	0.007
Medium	II	Ejection	0.310	243	565	0.055	0.034	62	0.062
Medium	III	Inward interaction	0.070	80	278	0.004	0.004	14	0.014
Medium	IV	Sweep	0.280	194	560	0.040	0.031	56	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	0.175	274	731	0.028	0.028	35	0.035
Low	II	Ejection	0.265	262	448	0.041	0.026	53	0.053
Low	III	Inward interaction	0.045	39	82	0.001	0.001	9	0.009
Low	IV	Sweep	0.180	169	276	0.018	0.011	36	0.036
Medium	I	Outward interaction	0.150	163	324	0.019	0.013	30	0.030
Medium	II	Ejection	0.275	207	362	0.043	0.027	55	0.055
Medium	III	Inward interaction	0.065	50	118	0.002	0.002	13	0.013
Medium	IV	Sweep	0.200	153	298	0.023	0.016	40	0.040
High	I	Outward interaction	0.170	212	507	0.027	0.018	34	0.034
High	II	Ejection	0.285	250	567	0.053	0.033	57	0.057
High	III	Inward interaction	0.035	20	43	0.001	0.000	7	0.007
High	IV	Sweep	0.165	106	303	0.013	0.010	33	0.033

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
Low	I	Outward interaction	0.140	273	642	0.013	0.008	28	0.028
Low	II	Ejection	0.195	374	785	0.024	0.014	39	0.039
Low	III	Inward interaction	0.170	296	809	0.016	0.013	34	0.034
Low	IV	Sweep	0.225	402	1109	0.030	0.023	45	0.045
Medium	I	Outward interaction	0.185	161	399	0.020	0.013	37	0.037
Medium	II	Ejection	0.160	119	286	0.013	0.008	32	0.032
Medium	III	Inward interaction	0.120	90	192	0.007	0.004	24	0.024
Medium	IV	Sweep	0.255	224	531	0.038	0.023	51	0.051
High	I	Outward interaction	0.040	118	348	0.001	0.001	8	0.008
High	II	Ejection	0.345	425	833	0.043	0.026	69	0.069
High	III	Inward interaction	0.020	64	153	0.000	0.000	4	0.004
High	IV	Sweep	0.385	478	915	0.053	0.032	77	0.077

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	0.120	511	890	0.012	0.008	24	0.024
Low	II	Ejection	0.210	486	716	0.020	0.011	42	0.042
Low	III	Inward interaction	0.085	233	440	0.004	0.003	17	0.017
Low	IV	Sweep	0.365	1011	1683	0.072	0.044	73	0.073
Medium	I	Outward interaction	0.105	249	702	0.006	0.004	21	0.021
Medium	II	Ejection	0.195	368	1007	0.017	0.011	39	0.039
Medium	III	Inward interaction	0.140	409	954	0.014	0.008	28	0.028
Medium	IV	Sweep	0.335	724	1513	0.059	0.030	67	0.067
High	I	Outward interaction	0.065	68	153	0.003	0.002	13	0.013
High	II	Ejection	0.305	196	494	0.047	0.031	61	0.061
High	III	Inward interaction	0.125	85	264	0.008	0.007	25	0.025
High	IV	Sweep	0.275	189	439	0.041	0.025	55	0.055

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
Low	I	Outward interaction	0.060	86	157	0.002	0.001	12	0.012
Low	II	Ejection	0.245	283	474	0.026	0.013	49	0.049
Low	III	Inward interaction	0.060	91	230	0.002	0.002	12	0.012
Low	IV	Sweep	0.235	503	1122	0.044	0.030	47	0.047
Medium	I	Outward interaction	0.065	46	98	0.002	0.001	13	0.013
Medium	II	Ejection	0.265	164	401	0.036	0.023	53	0.053
Medium	III	Inward interaction	0.125	97	242	0.010	0.007	25	0.025
Medium	IV	Sweep	0.245	203	471	0.041	0.025	49	0.049
High	I	Outward interaction	0.150	221	1060	0.025	0.024	30	0.030
High	II	Ejection	0.285	224	536	0.049	0.023	57	0.057
High	III	Inward interaction	0.035	31	118	0.001	0.001	7	0.007
High	IV	Sweep	0.210	145	614	0.023	0.019	42	0.042

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	0.240	304	772	0.040	0.029	48	0.048
High	II	Ejection	0.280	309	779	0.047	0.034	56	0.056
High	III	Inward interaction	0.055	69	150	0.002	0.001	11	0.011
High	IV	Sweep	0.175	169	356	0.016	0.010	35	0.035
Low	I	Outward interaction	0.140	78	252	0.012	0.011	28	0.028
Low	II	Ejection	0.200	91	221	0.020	0.014	40	0.040
Low	III	Inward interaction	0.115	72	139	0.009	0.005	23	0.023
Low	IV	Sweep	0.260	180	395	0.050	0.032	52	0.052
Medium	I	Outward interaction	0.140	107	199	0.017	0.009	28	0.028
Medium	II	Ejection	0.220	117	217	0.028	0.016	44	0.044
Medium	III	Inward interaction	0.110	58	164	0.007	0.006	22	0.022
Medium	IV	Sweep	0.230	107	210	0.027	0.016	46	0.046

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	0.185	197	574	0.029	0.025	37	0.037
High	II	Ejection	0.240	154	269	0.029	0.015	48	0.048
High	III	Inward interaction	0.080	40	77	0.003	0.001	16	0.016
High	IV	Sweep	0.220	174	361	0.030	0.019	44	0.044
Low	I	Outward interaction	0.175	180	368	0.026	0.018	35	0.035
Low	II	Ejection	0.235	143	271	0.028	0.017	47	0.047
Low	III	Inward interaction	0.065	35	85	0.002	0.002	13	0.013
Low	IV	Sweep	0.225	161	326	0.030	0.020	45	0.045
Medium	I	Outward interaction	0.070	38	141	0.003	0.002	14	0.014
Medium	II	Ejection	0.255	159	409	0.040	0.025	51	0.051
Medium	III	Inward interaction	0.090	60	162	0.005	0.004	18	0.018
Medium	IV	Sweep	0.290	159	375	0.045	0.027	58	0.058

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 fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	0.040	187	425	0.001	0.001	8	0.008
High	II	Ejection	0.325	695	1168	0.039	0.020	65	0.065
High	III	Inward interaction	0.045	180	399	0.001	0.001	9	0.009
High	IV	Sweep	0.375	933	1576	0.061	0.032	75	0.075
Low	I	Outward interaction	0.100	233	643	0.007	0.006	20	0.020
Low	II	Ejection	0.330	506	1007	0.049	0.029	66	0.066
Low	III	Inward interaction	0.070	132	345	0.003	0.002	14	0.014
Low	IV	Sweep	0.260	435	977	0.033	0.022	52	0.052
Medium	I	Outward interaction	0.085	131	293	0.004	0.003	17	0.017
Medium	II	Ejection	0.335	412	757	0.054	0.033	67	0.067
Medium	III	Inward interaction	0.085	146	345	0.005	0.004	17	0.017
Medium	IV	Sweep	0.260	261	456	0.027	0.015	52	0.052

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	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	0.170	411	741	0.017	0.009	34	0.034
High	II	Ejection	0.240	530	935	0.032	0.015	48	0.048
High	III	Inward interaction	0.060	124	307	0.002	0.001	12	0.012
High	IV	Sweep	0.250	497	1034	0.031	0.018	50	0.050
Low	I	Outward interaction	0.145	303	824	0.017	0.015	29	0.029
Low	II	Ejection	0.300	424	856	0.050	0.032	60	0.060
Low	III	Inward interaction	0.065	123	345	0.003	0.003	13	0.013
Low	IV	Sweep	0.235	224	366	0.021	0.011	47	0.047
Medium	I	Outward interaction	0.095	263	564	0.007	0.006	19	0.019
Medium	II	Ejection	0.270	376	658	0.028	0.018	54	0.054
Medium	III	Inward interaction	0.040	108	191	0.001	0.001	8	0.008
Medium	IV	Sweep	0.320	567	910	0.051	0.030	64	0.064

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	0.120	206	666	0.011	0.008	24	0.024
High	II	Ejection	0.275	328	796	0.042	0.023	55	0.055
High	III	Inward interaction	0.120	111	421	0.006	0.005	24	0.024
High	IV	Sweep	0.225	307	1159	0.032	0.027	45	0.045
Low	I	Outward interaction	0.095	94	205	0.008	0.005	19	0.019
Low	II	Ejection	0.300	189	347	0.051	0.029	60	0.060
Low	III	Inward interaction	0.050	35	75	0.002	0.001	10	0.010
Low	IV	Sweep	0.200	131	249	0.024	0.014	40	0.040
Medium	I	Outward interaction	0.035	30	126	0.001	0.001	7	0.007
Medium	II	Ejection	0.405	238	451	0.078	0.041	81	0.081
Medium	III	Inward interaction	0.030	33	74	0.001	0.001	6	0.006
Medium	IV	Sweep	0.300	151	422	0.037	0.029	60	0.060

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	0.100	189	492	0.006	0.004	20	0.020
High	II	Ejection	0.320	665	1413	0.065	0.038	64	0.064
High	III	Inward interaction	0.070	137	403	0.003	0.002	14	0.014
High	IV	Sweep	0.205	287	600	0.018	0.010	41	0.041
Low	I	Outward interaction	0.100	169	381	0.006	0.003	20	0.020
Low	II	Ejection	0.240	291	732	0.026	0.013	48	0.048
Low	III	Inward interaction	0.135	252	808	0.013	0.008	27	0.027
Low	IV	Sweep	0.250	342	1134	0.032	0.021	50	0.050
Medium	I	Outward interaction	0.090	269	503	0.005	0.002	18	0.018
Medium	II	Ejection	0.255	514	1203	0.025	0.016	51	0.051
Medium	III	Inward interaction	0.050	161	399	0.002	0.001	10	0.010
Medium	IV	Sweep	0.320	886	2005	0.054	0.033	64	0.064

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	0.195	183	624	0.021	0.017	39	0.039
High	II	Ejection	0.245	285	704	0.041	0.024	49	0.049
High	III	Inward interaction	0.140	121	299	0.010	0.006	28	0.028
High	IV	Sweep	0.095	95	232	0.005	0.003	19	0.019
Low	I	Outward interaction	0.075	204	672	0.004	0.004	15	0.015
Low	II	Ejection	0.295	449	835	0.033	0.020	59	0.059
Low	III	Inward interaction	0.045	129	470	0.001	0.002	9	0.009
Low	IV	Sweep	0.385	766	1587	0.073	0.049	77	0.077
Medium	I	Outward interaction	0.100	139	526	0.011	0.010	20	0.020
Medium	II	Ejection	0.265	195	410	0.040	0.021	53	0.053
Medium	III	Inward interaction	0.100	86	286	0.007	0.005	20	0.020
Medium	IV	Sweep	0.255	181	539	0.036	0.026	51	0.051

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	0.065	130	434	0.004	0.004	13	0.013
High	II	Ejection	0.250	275	563	0.032	0.020	50	0.050
High	III	Inward interaction	0.030	45	354	0.001	0.002	6	0.006
High	IV	Sweep	0.320	366	685	0.054	0.032	64	0.064
Low	I	Outward interaction	0.335	47	116	0.093	0.053	67	0.067
Low	II	Ejection	0.080	11	29	0.005	0.003	16	0.016
Low	III	Inward interaction	0.145	8	19	0.007	0.004	29	0.029
Low	IV	Sweep	0.055	10	33	0.003	0.002	11	0.011
Medium	I	Outward interaction	0.150	160	314	0.014	0.008	30	0.030
Medium	II	Ejection	0.315	260	521	0.048	0.028	63	0.063
Medium	III	Inward interaction	0.040	39	92	0.001	0.001	8	0.008
Medium	IV	Sweep	0.280	210	408	0.035	0.019	56	0.056

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	0.140	167	236	0.010	0.006	28	0.028
Low	II	Ejection	0.215	257	412	0.023	0.015	43	0.043
Low	III	Inward interaction	0.180	294	489	0.022	0.015	36	0.036
Low	IV	Sweep	0.235	365	561	0.035	0.022	47	0.047
Medium	I	Outward interaction	0.155	156	249	0.012	0.007	31	0.031
Medium	II	Ejection	0.190	189	359	0.018	0.013	38	0.038
Medium	III	Inward interaction	0.155	180	262	0.014	0.008	31	0.031
Medium	IV	Sweep	0.200	247	392	0.025	0.015	40	0.040
High	I	Outward interaction	0.130	322	593	0.014	0.010	26	0.026
High	II	Ejection	0.235	365	679	0.028	0.020	47	0.047
High	III	Inward interaction	0.065	133	200	0.003	0.002	13	0.013
High	IV	Sweep	0.275	447	741	0.040	0.025	55	0.055

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
Low	I	Outward interaction	0.100	150	272	0.007	0.005	20	0.020
Low	II	Ejection	0.235	371	667	0.040	0.028	47	0.047
Low	III	Inward interaction	0.095	106	144	0.005	0.002	19	0.019
Low	IV	Sweep	0.200	252	362	0.023	0.013	40	0.040
Medium	I	Outward interaction	0.040	93	172	0.001	0.001	8	0.008
Medium	II	Ejection	0.295	456	1133	0.039	0.029	59	0.059
Medium	III	Inward interaction	0.035	75	239	0.001	0.001	7	0.007
Medium	IV	Sweep	0.355	550	1156	0.057	0.036	71	0.071
High	I	Outward interaction	0.160	820	1347	0.016	0.009	32	0.032
High	II	Ejection	0.180	684	1216	0.015	0.009	36	0.036
High	III	Inward interaction	0.145	720	1344	0.013	0.008	29	0.029
High	IV	Sweep	0.225	1041	1785	0.029	0.017	45	0.045

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	0.135	373	574	0.009	0.005	27	0.027
Low	II	Ejection	0.210	563	915	0.020	0.012	42	0.042
Low	III	Inward interaction	0.110	458	903	0.009	0.006	22	0.022
Low	IV	Sweep	0.250	988	1882	0.042	0.028	50	0.050
Medium	I	Outward interaction	0.260	179	503	0.049	0.038	52	0.052
Medium	II	Ejection	0.135	73	203	0.010	0.008	27	0.027
Medium	III	Inward interaction	0.075	29	83	0.002	0.002	15	0.015
Medium	IV	Sweep	0.195	187	636	0.039	0.036	39	0.039
High	I	Outward interaction	0.180	552	1526	0.015	0.012	36	0.036
High	II	Ejection	0.195	811	1702	0.024	0.014	39	0.039
High	III	Inward interaction	0.160	504	1090	0.012	0.007	32	0.032
High	IV	Sweep	0.130	403	606	0.008	0.003	26	0.026

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 fraction	TKE fraction	Events	Proportion
				Stress	TKE				
Low	I	Outward interaction	0.135	408	633	0.011	0.006	27	0.027
Low	II	Ejection	0.290	607	1058	0.036	0.021	58	0.058
Low	III	Inward interaction	0.075	226	392	0.003	0.002	15	0.015
Low	IV	Sweep	0.265	745	1476	0.040	0.027	53	0.053
Medium	I	Outward interaction	0.175	152	316	0.020	0.011	35	0.035
Medium	II	Ejection	0.215	157	281	0.026	0.012	43	0.043
Medium	III	Inward interaction	0.130	92	198	0.009	0.005	26	0.026
Medium	IV	Sweep	0.165	130	275	0.016	0.009	33	0.033
High	I	Outward interaction	0.195	154	342	0.022	0.014	39	0.039
High	II	Ejection	0.250	182	349	0.033	0.018	50	0.050
High	III	Inward interaction	0.115	94	268	0.008	0.006	23	0.023
High	IV	Sweep	0.205	144	353	0.022	0.015	41	0.041

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	0.060	84	214	0.003	0.002	12	0.012
High	II	Ejection	0.285	291	507	0.044	0.025	57	0.057
High	III	Inward interaction	0.055	82	220	0.002	0.002	11	0.011
High	IV	Sweep	0.325	247	596	0.042	0.034	65	0.065
Low	I	Outward interaction	0.135	248	897	0.008	0.004	27	0.027
Low	II	Ejection	0.265	533	1380	0.035	0.013	53	0.053
Low	III	Inward interaction	0.115	265	1062	0.008	0.004	23	0.023
Low	IV	Sweep	0.210	464	1311	0.024	0.010	42	0.042
Medium	I	Outward interaction	0.095	73	217	0.006	0.005	19	0.019
Medium	II	Ejection	0.350	209	388	0.061	0.035	70	0.070
Medium	III	Inward interaction	0.070	38	75	0.002	0.001	14	0.014
Medium	IV	Sweep	0.290	160	309	0.039	0.023	58	0.058

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	0.110	154	246	0.007	0.005	22	0.022
High	II	Ejection	0.255	358	550	0.038	0.024	51	0.051
High	III	Inward interaction	0.040	46	70	0.001	0.000	8	0.008
High	IV	Sweep	0.300	331	487	0.041	0.025	60	0.060
Low	I	Outward interaction	0.105	177	409	0.009	0.007	21	0.021
Low	II	Ejection	0.275	242	448	0.033	0.021	55	0.055
Low	III	Inward interaction	0.070	115	210	0.004	0.002	14	0.014
Low	IV	Sweep	0.295	269	554	0.039	0.027	59	0.059
Medium	I	Outward interaction	0.155	202	313	0.019	0.011	31	0.031
Medium	II	Ejection	0.265	281	454	0.045	0.028	53	0.053
Medium	III	Inward interaction	0.075	67	120	0.003	0.002	15	0.015
Medium	IV	Sweep	0.205	157	256	0.020	0.012	41	0.041

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	0.085	911	1861	0.005	0.004	17	0.017
High	II	Ejection	0.395	2946	5507	0.082	0.050	79	0.079
High	III	Inward interaction	0.040	437	1386	0.001	0.001	8	0.008
High	IV	Sweep	0.210	1007	1513	0.015	0.007	42	0.042
Low	I	Outward interaction	0.110	244	359	0.008	0.004	22	0.022
Low	II	Ejection	0.245	628	933	0.046	0.023	49	0.049
Low	III	Inward interaction	0.080	182	369	0.004	0.003	16	0.016
Low	IV	Sweep	0.245	459	867	0.034	0.022	49	0.049
Medium	I	Outward interaction	0.090	186	336	0.005	0.004	18	0.018
Medium	II	Ejection	0.390	760	1168	0.090	0.056	78	0.078
Medium	III	Inward interaction	0.025	36	49	0.000	0.000	5	0.005
Medium	IV	Sweep	0.205	236	380	0.015	0.010	41	0.041

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	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	0.070	809	1552	0.003	0.002	14	0.014
High	II	Ejection	0.370	2595	3892	0.053	0.030	74	0.074
High	III	Inward interaction	0.040	442	744	0.001	0.001	8	0.008
High	IV	Sweep	0.310	2226	3582	0.038	0.023	62	0.062
Low	I	Outward interaction	0.085	161	400	0.004	0.003	17	0.017
Low	II	Ejection	0.320	681	1401	0.070	0.046	64	0.064
Low	III	Inward interaction	0.070	143	216	0.003	0.002	14	0.014
Low	IV	Sweep	0.235	308	656	0.023	0.016	47	0.047
Medium	I	Outward interaction	0.035	175	590	0.001	0.001	7	0.007
Medium	II	Ejection	0.245	1223	1862	0.028	0.016	49	0.049
Medium	III	Inward interaction	0.060	421	713	0.002	0.001	12	0.012
Medium	IV	Sweep	0.375	1909	3392	0.068	0.044	75	0.075

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 fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	0.060	88	172	0.002	0.001	12	0.012
High	II	Ejection	0.225	633	1180	0.041	0.025	45	0.045
High	III	Inward interaction	0.170	365	748	0.018	0.012	34	0.034
High	IV	Sweep	0.195	357	721	0.020	0.013	39	0.039
Low	I	Outward interaction	0.140	223	421	0.012	0.008	28	0.028
Low	II	Ejection	0.260	429	700	0.043	0.025	52	0.052
Low	III	Inward interaction	0.110	143	221	0.006	0.003	22	0.022
Low	IV	Sweep	0.170	228	433	0.015	0.010	34	0.034
Medium	I	Outward interaction	0.210	319	570	0.023	0.015	42	0.042
Medium	II	Ejection	0.190	350	728	0.023	0.017	38	0.038
Medium	III	Inward interaction	0.160	238	458	0.013	0.009	32	0.032
Medium	IV	Sweep	0.180	274	413	0.017	0.009	36	0.036

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	0.120	458	917	0.007	0.004	24	0.024
High	II	Ejection	0.270	1102	2856	0.040	0.029	54	0.054
High	III	Inward interaction	0.045	164	356	0.001	0.001	9	0.009
High	IV	Sweep	0.285	1182	2630	0.045	0.028	57	0.057
Low	I	Outward interaction	0.240	880	1798	0.026	0.017	48	0.048
Low	II	Ejection	0.085	428	679	0.004	0.002	17	0.017
Low	III	Inward interaction	0.345	1208	2249	0.051	0.030	69	0.069
Low	IV	Sweep	0.060	297	533	0.002	0.001	12	0.012
Medium	I	Outward interaction	0.005	7	15	0.000	0.000	1	0.001
Medium	II	Ejection	0.360	248	519	0.055	0.040	72	0.072
Medium	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
Medium	IV	Sweep	0.395	259	553	0.063	0.046	79	0.079

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	0.115	114	246	0.007	0.005	23	0.023
High	II	Ejection	0.235	216	387	0.028	0.015	47	0.047
High	III	Inward interaction	0.115	100	243	0.006	0.005	23	0.023
High	IV	Sweep	0.255	294	558	0.042	0.024	51	0.051
Low	I	Outward interaction	0.145	538	981	0.011	0.007	29	0.029
Low	II	Ejection	0.090	285	621	0.004	0.003	18	0.018
Low	III	Inward interaction	0.220	1048	1978	0.033	0.020	44	0.044
Low	IV	Sweep	0.305	1372	2508	0.060	0.035	61	0.061
Medium	I	Outward interaction	0.100	117	281	0.007	0.005	20	0.020
Medium	II	Ejection	0.285	224	449	0.039	0.023	57	0.057
Medium	III	Inward interaction	0.070	66	249	0.003	0.003	14	0.014
Medium	IV	Sweep	0.275	248	511	0.042	0.025	55	0.055

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	0.060	104	264	0.003	0.002	12	0.012
High	II	Ejection	0.265	302	641	0.034	0.019	53	0.053
High	III	Inward interaction	0.080	141	291	0.005	0.003	16	0.016
High	IV	Sweep	0.330	330	768	0.046	0.028	66	0.066
Low	I	Outward interaction	0.105	152	379	0.005	0.003	21	0.021
Low	II	Ejection	0.195	295	540	0.019	0.009	39	0.039
Low	III	Inward interaction	0.090	183	407	0.005	0.003	18	0.018
Low	IV	Sweep	0.290	510	1276	0.049	0.031	58	0.058
Medium	I	Outward interaction	0.145	182	370	0.012	0.007	29	0.029
Medium	II	Ejection	0.200	278	515	0.026	0.014	40	0.040
Medium	III	Inward interaction	0.150	144	233	0.010	0.005	30	0.030
Medium	IV	Sweep	0.280	304	560	0.040	0.021	56	0.056

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	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	0.155	299	426	0.015	0.008	31	0.031
Low	II	Ejection	0.255	632	898	0.053	0.029	51	0.051
Low	III	Inward interaction	0.085	110	242	0.003	0.003	17	0.017
Low	IV	Sweep	0.185	243	412	0.015	0.010	37	0.037
High	I	Outward interaction	0.200	921	1522	0.034	0.024	40	0.040
High	II	Ejection	0.270	1144	1788	0.057	0.038	54	0.054
High	III	Inward interaction	0.080	256	366	0.004	0.002	16	0.016
High	IV	Sweep	0.175	332	490	0.011	0.007	35	0.035
Medium	I	Outward interaction	0.190	606	962	0.037	0.023	38	0.038
Medium	II	Ejection	0.215	317	506	0.022	0.013	43	0.043
Medium	III	Inward interaction	0.100	166	282	0.005	0.003	20	0.020
Medium	IV	Sweep	0.185	256	340	0.015	0.008	37	0.037

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	0.205	729	1170	0.034	0.023	41	0.041
Low	II	Ejection	0.285	943	1372	0.061	0.038	57	0.057
Low	III	Inward interaction	0.065	116	178	0.002	0.001	13	0.013
Low	IV	Sweep	0.150	274	412	0.009	0.006	30	0.030
High	I	Outward interaction	0.250	1691	3208	0.036	0.022	50	0.050
High	II	Ejection	0.190	1536	3143	0.025	0.016	38	0.038
High	III	Inward interaction	0.145	767	1795	0.009	0.007	29	0.029
High	IV	Sweep	0.150	958	1982	0.012	0.008	30	0.030
Medium	I	Outward interaction	0.080	65	172	0.005	0.003	16	0.016
Medium	II	Ejection	0.295	159	338	0.041	0.024	59	0.059
Medium	III	Inward interaction	0.060	44	122	0.002	0.002	12	0.012
Medium	IV	Sweep	0.315	186	417	0.051	0.031	63	0.063

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	0.105	226	379	0.006	0.004	21	0.021
Low	II	Ejection	0.215	415	758	0.022	0.014	43	0.043
Low	III	Inward interaction	0.140	310	531	0.011	0.007	28	0.028
Low	IV	Sweep	0.220	516	844	0.028	0.016	44	0.044
High	I	Outward interaction	0.230	1673	4584	0.031	0.018	46	0.046
High	II	Ejection	0.235	1839	4610	0.035	0.019	47	0.047
High	III	Inward interaction	0.135	716	2161	0.008	0.005	27	0.027
High	IV	Sweep	0.130	825	2085	0.009	0.005	26	0.026
Medium	I	Outward interaction	0.150	411	1068	0.020	0.016	30	0.030
Medium	II	Ejection	0.305	516	1265	0.052	0.039	61	0.061
Medium	III	Inward interaction	0.065	87	207	0.002	0.001	13	0.013
Medium	IV	Sweep	0.195	285	523	0.018	0.010	39	0.039

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
Low	I	Outward interaction	0.065	324	465	0.002	0.001	13	0.013
Low	II	Ejection	0.185	868	1376	0.013	0.008	37	0.037
Low	III	Inward interaction	0.175	1154	2057	0.017	0.012	35	0.035
Low	IV	Sweep	0.340	2521	4611	0.071	0.051	68	0.068
High	I	Outward interaction	0.080	93	163	0.004	0.003	16	0.016
High	II	Ejection	0.255	321	554	0.047	0.028	51	0.051
High	III	Inward interaction	0.060	46	79	0.002	0.001	12	0.012
High	IV	Sweep	0.235	202	357	0.027	0.017	47	0.047
Medium	I	Outward interaction	0.095	160	346	0.006	0.004	19	0.019
Medium	II	Ejection	0.390	510	866	0.077	0.045	78	0.078
Medium	III	Inward interaction	0.060	118	191	0.003	0.002	12	0.012
Medium	IV	Sweep	0.205	218	389	0.017	0.011	41	0.041

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	0.150	295	481	0.019	0.010	30	0.030
High	II	Ejection	0.245	292	510	0.030	0.018	49	0.049
High	III	Inward interaction	0.105	213	400	0.009	0.006	21	0.021
High	IV	Sweep	0.250	285	556	0.030	0.020	50	0.050
Low	I	Outward interaction	0.205	829	1778	0.023	0.010	41	0.041
Low	II	Ejection	0.170	683	1560	0.016	0.007	34	0.034
Low	III	Inward interaction	0.195	707	1980	0.019	0.011	39	0.039
Low	IV	Sweep	0.175	738	1975	0.018	0.009	35	0.035
Medium	I	Outward interaction	0.165	303	477	0.024	0.014	33	0.033
Medium	II	Ejection	0.225	210	355	0.023	0.014	45	0.045
Medium	III	Inward interaction	0.080	100	162	0.004	0.002	16	0.016
Medium	IV	Sweep	0.260	248	400	0.031	0.018	52	0.052

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	0.215	866	1402	0.044	0.029	43	0.043
High	II	Ejection	0.245	616	990	0.035	0.023	49	0.049
High	III	Inward interaction	0.060	136	238	0.002	0.001	12	0.012
High	IV	Sweep	0.210	400	537	0.020	0.011	42	0.042
Low	I	Outward interaction	0.045	76	174	0.001	0.001	9	0.009
Low	II	Ejection	0.215	299	720	0.018	0.010	43	0.043
Low	III	Inward interaction	0.150	384	968	0.016	0.009	30	0.030
Low	IV	Sweep	0.265	588	1575	0.044	0.027	53	0.053
Medium	I	Outward interaction	0.100	135	190	0.005	0.002	20	0.020
Medium	II	Ejection	0.285	368	593	0.037	0.022	57	0.057
Medium	III	Inward interaction	0.105	171	382	0.006	0.005	21	0.021
Medium	IV	Sweep	0.270	420	690	0.040	0.024	54	0.054

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	0.015	264	322	0.000	0.000	3	0.003
High	II	Ejection	0.370	4777	7669	0.067	0.039	74	0.074
High	III	Inward interaction	0.030	582	1601	0.001	0.001	6	0.006
High	IV	Sweep	0.305	3316	5554	0.038	0.023	61	0.061
Low	I	Outward interaction	0.080	267	1158	0.003	0.002	16	0.016
Low	II	Ejection	0.295	1071	2941	0.051	0.017	59	0.059
Low	III	Inward interaction	0.080	284	877	0.004	0.001	16	0.016
Low	IV	Sweep	0.275	776	3434	0.035	0.018	55	0.055
Medium	I	Outward interaction	0.110	175	260	0.007	0.004	22	0.022
Medium	II	Ejection	0.360	489	793	0.066	0.040	72	0.072
Medium	III	Inward interaction	0.045	86	129	0.001	0.001	9	0.009
Medium	IV	Sweep	0.240	258	451	0.023	0.015	48	0.048

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	0.085	1304	1854	0.004	0.002	17	0.017
High	II	Ejection	0.330	4790	7733	0.063	0.040	66	0.066
High	III	Inward interaction	0.085	1189	1897	0.004	0.003	17	0.017
High	IV	Sweep	0.215	2366	3978	0.020	0.013	43	0.043
Low	I	Outward interaction	0.095	313	617	0.007	0.004	19	0.019
Low	II	Ejection	0.210	603	1054	0.028	0.014	42	0.042
Low	III	Inward interaction	0.125	237	553	0.007	0.004	25	0.025
Low	IV	Sweep	0.205	595	1112	0.027	0.014	41	0.041
Medium	I	Outward interaction	0.045	745	934	0.001	0.001	9	0.009
Medium	II	Ejection	0.440	4894	7377	0.094	0.067	88	0.088
Medium	III	Inward interaction	0.045	649	998	0.001	0.001	9	0.009
Medium	IV	Sweep	0.250	1832	2235	0.020	0.011	50	0.050

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	0.015	51	81	0.000	0.000	3	0.003
High	II	Ejection	0.410	1612	2790	0.098	0.067	82	0.082
High	III	Inward interaction	0.030	198	412	0.001	0.001	6	0.006
High	IV	Sweep	0.205	459	689	0.014	0.008	41	0.041
Low	I	Outward interaction	0.065	163	316	0.002	0.002	13	0.013
Low	II	Ejection	0.400	959	1362	0.087	0.045	80	0.080
Low	III	Inward interaction	0.155	432	623	0.015	0.008	31	0.031
Low	IV	Sweep	0.140	221	354	0.007	0.004	28	0.028
Medium	I	Outward interaction	0.065	269	401	0.003	0.002	13	0.013
Medium	II	Ejection	0.345	1082	1690	0.068	0.046	69	0.069
Medium	III	Inward interaction	0.050	168	213	0.002	0.001	10	0.010
Medium	IV	Sweep	0.250	542	716	0.025	0.014	50	0.050

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	0.390	1425	3396	0.119	0.089	78	0.078
High	II	Ejection	0.065	239	598	0.003	0.003	13	0.013
High	III	Inward interaction	0.090	141	257	0.003	0.002	18	0.018
High	IV	Sweep	0.035	96	180	0.001	0.000	7	0.007
Low	I	Outward interaction	0.140	1256	2578	0.012	0.008	28	0.028
Low	II	Ejection	0.235	1831	3619	0.028	0.018	47	0.047
Low	III	Inward interaction	0.180	1607	3872	0.019	0.015	36	0.036
Low	IV	Sweep	0.235	1712	3413	0.026	0.017	47	0.047
Medium	I	Outward interaction	0.135	505	1424	0.016	0.011	27	0.027
Medium	II	Ejection	0.290	486	1131	0.033	0.019	58	0.058
Medium	III	Inward interaction	0.005	9	34	0.000	0.000	1	0.001
Medium	IV	Sweep	0.305	781	1876	0.056	0.033	61	0.061

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	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	0.130	335	713	0.008	0.005	26	0.026
High	II	Ejection	0.170	529	1229	0.017	0.012	34	0.034
High	III	Inward interaction	0.135	439	786	0.011	0.006	27	0.027
High	IV	Sweep	0.210	756	1601	0.031	0.019	42	0.042
Low	I	Outward interaction	0.230	732	1390	0.028	0.018	46	0.046
Low	II	Ejection	0.100	368	519	0.006	0.003	20	0.020
Low	III	Inward interaction	0.320	955	1815	0.050	0.032	64	0.064
Low	IV	Sweep	0.115	360	780	0.007	0.005	23	0.023
Medium	I	Outward interaction	0.050	51	101	0.001	0.001	10	0.010
Medium	II	Ejection	0.350	364	797	0.070	0.046	70	0.070
Medium	III	Inward interaction	0.075	105	237	0.004	0.003	15	0.015
Medium	IV	Sweep	0.275	249	409	0.037	0.019	55	0.055

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	0.115	185	363	0.007	0.004	23	0.023
High	II	Ejection	0.220	331	567	0.025	0.011	44	0.044
High	III	Inward interaction	0.115	177	337	0.007	0.003	23	0.023
High	IV	Sweep	0.250	545	1074	0.046	0.024	50	0.050
Low	I	Outward interaction	0.095	197	309	0.006	0.003	19	0.019
Low	II	Ejection	0.255	393	765	0.030	0.020	51	0.051
Low	III	Inward interaction	0.065	141	195	0.003	0.001	13	0.013
Low	IV	Sweep	0.300	651	1152	0.058	0.036	60	0.060
Medium	I	Outward interaction	0.155	477	1103	0.016	0.014	31	0.031
Medium	II	Ejection	0.225	472	731	0.024	0.013	45	0.045
Medium	III	Inward interaction	0.125	332	465	0.009	0.005	25	0.025
Medium	IV	Sweep	0.255	626	1033	0.035	0.021	51	0.051

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	0.050	78	328	0.004	0.004	10	0.010
High	II	Ejection	0.160	118	232	0.019	0.008	32	0.032
High	III	Inward interaction	0.075	79	244	0.006	0.004	15	0.015
High	IV	Sweep	0.155	92	288	0.014	0.010	31	0.031
Low	I	Outward interaction	0.145	280	852	0.025	0.021	29	0.029
Low	II	Ejection	0.135	135	294	0.011	0.007	27	0.027
Low	III	Inward interaction	0.105	159	383	0.010	0.007	21	0.021
Low	IV	Sweep	0.120	155	312	0.011	0.006	24	0.024
Medium	I	Outward interaction	0.100	95	294	0.021	0.016	20	0.020
Medium	II	Ejection	0.200	64	124	0.027	0.013	40	0.040
Medium	III	Inward interaction	0.025	9	19	0.000	0.000	5	0.005
Medium	IV	Sweep	0.140	45	131	0.013	0.010	28	0.028

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	0.115	298	1002	0.027	0.025	23	0.023
High	II	Ejection	0.175	149	278	0.021	0.011	35	0.035
High	III	Inward interaction	0.080	77	181	0.005	0.003	16	0.016
High	IV	Sweep	0.140	96	359	0.011	0.011	28	0.028
Low	I	Outward interaction	0.100	137	526	0.021	0.020	20	0.020
Low	II	Ejection	0.155	78	165	0.019	0.010	31	0.031
Low	III	Inward interaction	0.010	6	17	0.000	0.000	2	0.002
Low	IV	Sweep	0.155	70	193	0.017	0.011	31	0.031
Medium	I	Outward interaction	0.065	91	266	0.012	0.009	13	0.013
Medium	II	Ejection	0.210	64	147	0.027	0.016	42	0.042
Medium	III	Inward interaction	0.015	6	15	0.000	0.000	3	0.003
Medium	IV	Sweep	0.190	58	162	0.022	0.016	38	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	0.095	163	683	0.023	0.021	19	0.019
High	II	Ejection	0.150	63	153	0.014	0.007	30	0.030
High	III	Inward interaction	0.020	14	53	0.000	0.000	4	0.004
High	IV	Sweep	0.175	83	260	0.021	0.015	35	0.035
Low	I	Outward interaction	0.080	132	501	0.012	0.011	16	0.016
Low	II	Ejection	0.235	121	294	0.033	0.019	47	0.047
Low	III	Inward interaction	0.015	17	67	0.000	0.000	3	0.003
Low	IV	Sweep	0.150	80	216	0.014	0.009	30	0.030
Medium	I	Outward interaction	0.075	91	294	0.014	0.013	15	0.015
Medium	II	Ejection	0.190	64	148	0.024	0.017	38	0.038
Medium	III	Inward interaction	0.015	7	19	0.000	0.000	3	0.003
Medium	IV	Sweep	0.190	68	158	0.026	0.018	38	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	0.100	184	455	0.022	0.015	20	0.020
High	II	Ejection	0.170	91	178	0.019	0.010	34	0.034
High	III	Inward interaction	0.025	13	29	0.000	0.000	5	0.005
High	IV	Sweep	0.175	103	240	0.022	0.014	35	0.035
Low	I	Outward interaction	0.090	222	687	0.020	0.013	18	0.018
Low	II	Ejection	0.165	104	236	0.017	0.008	33	0.033
Low	III	Inward interaction	0.040	48	162	0.002	0.001	8	0.008
Low	IV	Sweep	0.170	105	319	0.018	0.012	34	0.034
Medium	I	Outward interaction	0.050	47	122	0.004	0.002	10	0.010
Medium	II	Ejection	0.210	106	226	0.036	0.019	42	0.042
Medium	III	Inward interaction	0.020	17	43	0.001	0.000	4	0.004
Medium	IV	Sweep	0.180	70	163	0.020	0.012	36	0.036

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	0.075	130	480	0.008	0.007	15	0.015
High	II	Ejection	0.180	169	348	0.026	0.011	36	0.036
High	III	Inward interaction	0.010	9	29	0.000	0.000	2	0.002
High	IV	Sweep	0.135	98	445	0.012	0.011	27	0.027
Low	I	Outward interaction	0.075	104	442	0.007	0.009	15	0.015
Low	II	Ejection	0.165	139	298	0.021	0.013	33	0.033
Low	III	Inward interaction	0.050	50	101	0.002	0.001	10	0.010
Low	IV	Sweep	0.115	86	212	0.009	0.006	23	0.023
Medium	I	Outward interaction	0.095	168	453	0.029	0.020	19	0.019
Medium	II	Ejection	0.180	61	137	0.020	0.011	36	0.036
Medium	III	Inward interaction	0.035	13	35	0.001	0.001	7	0.007
Medium	IV	Sweep	0.150	50	149	0.014	0.010	30	0.030

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	0.170	278	920	0.054	0.041	34	0.034
High	II	Ejection	0.145	82	181	0.014	0.007	29	0.029
High	III	Inward interaction	0.065	43	143	0.003	0.002	13	0.013
High	IV	Sweep	0.130	81	263	0.012	0.009	26	0.026
Low	I	Outward interaction	0.110	180	679	0.021	0.023	22	0.022
Low	II	Ejection	0.230	153	323	0.037	0.023	46	0.046
Low	III	Inward interaction	0.010	8	33	0.000	0.000	2	0.002
Low	IV	Sweep	0.130	68	174	0.009	0.007	26	0.026
Medium	I	Outward interaction	0.075	128	430	0.018	0.016	15	0.015
Medium	II	Ejection	0.200	69	163	0.026	0.016	40	0.040
Medium	III	Inward interaction	0.030	13	35	0.001	0.001	6	0.006
Medium	IV	Sweep	0.180	60	141	0.020	0.013	36	0.036

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	0.045	65	221	0.003	0.003	9	0.009
High	II	Ejection	0.245	120	229	0.033	0.017	49	0.049
High	III	Inward interaction	0.005	3	13	0.000	0.000	1	0.001
High	IV	Sweep	0.225	112	321	0.028	0.022	45	0.045
Low	I	Outward interaction	0.165	424	1295	0.048	0.034	33	0.033
Low	II	Ejection	0.160	167	391	0.019	0.010	32	0.032
Low	III	Inward interaction	0.005	4	22	0.000	0.000	1	0.001
Low	IV	Sweep	0.100	85	207	0.006	0.003	20	0.020
Medium	I	Outward interaction	0.060	93	224	0.010	0.007	12	0.012
Medium	II	Ejection	0.170	75	153	0.024	0.014	34	0.034
Medium	III	Inward interaction	0.010	5	22	0.000	0.000	2	0.002
Medium	IV	Sweep	0.180	64	178	0.021	0.017	36	0.036

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	0.085	214	691	0.019	0.015	17	0.017
High	II	Ejection	0.170	101	193	0.018	0.008	34	0.034
High	III	Inward interaction	0.010	4	16	0.000	0.000	2	0.002
High	IV	Sweep	0.155	128	387	0.021	0.015	31	0.031
Low	I	Outward interaction	0.110	212	490	0.018	0.009	22	0.022
Low	II	Ejection	0.130	109	234	0.011	0.005	26	0.026
Low	III	Inward interaction	0.040	43	137	0.001	0.001	8	0.008
Low	IV	Sweep	0.170	172	595	0.023	0.018	34	0.034
Medium	I	Outward interaction	0.060	53	152	0.004	0.004	12	0.012
Medium	II	Ejection	0.135	84	136	0.013	0.007	27	0.027
Medium	III	Inward interaction	0.020	18	35	0.000	0.000	4	0.004
Medium	IV	Sweep	0.185	179	377	0.037	0.028	37	0.037

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	0.125	352	1128	0.031	0.021	25	0.025
High	II	Ejection	0.160	149	367	0.017	0.009	32	0.032
High	III	Inward interaction	0.070	80	296	0.004	0.003	14	0.014
High	IV	Sweep	0.130	118	525	0.011	0.010	26	0.026
Low	I	Outward interaction	0.180	940	2497	0.060	0.045	36	0.036
Low	II	Ejection	0.130	219	497	0.010	0.006	26	0.026
Low	III	Inward interaction	0.075	147	515	0.004	0.004	15	0.015
Low	IV	Sweep	0.100	195	789	0.007	0.008	20	0.020
Medium	I	Outward interaction	0.125	311	1169	0.032	0.024	25	0.025
Medium	II	Ejection	0.160	127	359	0.017	0.010	32	0.032
Medium	III	Inward interaction	0.060	67	223	0.003	0.002	12	0.012
Medium	IV	Sweep	0.075	56	252	0.003	0.003	15	0.015

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	0.060	145	824	0.005	0.005	12	0.012
High	II	Ejection	0.130	187	468	0.015	0.007	26	0.026
High	III	Inward interaction	0.060	88	281	0.003	0.002	12	0.012
High	IV	Sweep	0.155	139	746	0.013	0.013	31	0.031
Low	I	Outward interaction	0.240	781	1778	0.110	0.079	48	0.048
Low	II	Ejection	0.230	380	787	0.051	0.033	46	0.046
Low	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
Low	IV	Sweep	0.065	66	174	0.003	0.002	13	0.013
Medium	I	Outward interaction	0.080	160	1029	0.009	0.011	16	0.016
Medium	II	Ejection	0.170	143	402	0.017	0.009	34	0.034
Medium	III	Inward interaction	0.035	60	177	0.001	0.001	7	0.007
Medium	IV	Sweep	0.185	159	582	0.020	0.015	37	0.037

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	0.005	15	16	0.000	0.000	1	0.001
High	II	Ejection	0.190	239	471	0.022	0.014	38	0.038
High	III	Inward interaction	0.005	8	23	0.000	0.000	1	0.001
High	IV	Sweep	0.210	227	516	0.023	0.017	42	0.042
Low	I	Outward interaction	0.175	82	249	0.060	0.027	35	0.035
Low	II	Ejection	0.065	16	46	0.004	0.002	13	0.013
Low	III	Inward interaction	0.080	13	74	0.004	0.004	16	0.016
Low	IV	Sweep	0.055	11	29	0.003	0.001	11	0.011
Medium	I	Outward interaction	0.055	179	608	0.008	0.006	11	0.011
Medium	II	Ejection	0.200	139	362	0.023	0.013	40	0.040
Medium	III	Inward interaction	0.005	5	15	0.000	0.000	1	0.001
Medium	IV	Sweep	0.160	122	502	0.016	0.014	32	0.032

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	0.040	106	295	0.005	0.004	8	0.008
Low	II	Ejection	0.215	111	221	0.026	0.015	43	0.043
Low	III	Inward interaction	0.020	27	171	0.001	0.001	4	0.004
Low	IV	Sweep	0.205	121	417	0.027	0.027	41	0.041
Medium	I	Outward interaction	0.100	203	920	0.021	0.019	20	0.020
Medium	II	Ejection	0.180	133	322	0.024	0.012	36	0.036
Medium	III	Inward interaction	0.030	25	111	0.001	0.001	6	0.006
Medium	IV	Sweep	0.125	80	231	0.010	0.006	25	0.025

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	0.065	120	505	0.006	0.005	13	0.013
High	II	Ejection	0.155	115	296	0.013	0.007	31	0.031
High	III	Inward interaction	0.030	39	105	0.001	0.001	6	0.006
High	IV	Sweep	0.175	169	742	0.022	0.021	35	0.035
Low	I	Outward interaction	0.070	147	480	0.008	0.007	14	0.014
Low	II	Ejection	0.195	202	379	0.031	0.015	39	0.039
Low	III	Inward interaction	0.030	34	149	0.001	0.001	6	0.006
Low	IV	Sweep	0.155	116	327	0.014	0.011	31	0.031
Medium	I	Outward interaction	0.090	104	444	0.016	0.017	18	0.018
Medium	II	Ejection	0.190	64	140	0.021	0.011	38	0.038
Medium	III	Inward interaction	0.020	10	40	0.000	0.000	4	0.004
Medium	IV	Sweep	0.195	70	213	0.024	0.018	39	0.039

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	0.070	110	487	0.006	0.007	14	0.014
High	II	Ejection	0.100	64	163	0.005	0.004	20	0.020
High	III	Inward interaction	0.100	139	350	0.011	0.008	20	0.020
High	IV	Sweep	0.150	173	530	0.022	0.018	30	0.030
Low	I	Outward interaction	0.100	174	895	0.019	0.022	20	0.020
Low	II	Ejection	0.155	82	208	0.014	0.008	31	0.031
Low	III	Inward interaction	0.030	34	114	0.001	0.001	6	0.006
Low	IV	Sweep	0.165	96	355	0.017	0.014	33	0.033
Medium	I	Outward interaction	0.050	44	137	0.004	0.003	10	0.010
Medium	II	Ejection	0.240	83	192	0.040	0.023	48	0.048
Medium	III	Inward interaction	0.025	13	30	0.001	0.000	5	0.005
Medium	IV	Sweep	0.170	63	157	0.022	0.013	34	0.034

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	0.115	286	773	0.025	0.018	23	0.023
High	II	Ejection	0.155	127	257	0.015	0.008	31	0.031
High	III	Inward interaction	0.015	11	20	0.000	0.000	3	0.003
High	IV	Sweep	0.245	241	669	0.045	0.033	49	0.049
Low	I	Outward interaction	0.075	153	378	0.014	0.009	15	0.015
Low	II	Ejection	0.190	110	247	0.025	0.015	38	0.038
Low	III	Inward interaction	0.015	15	27	0.000	0.000	3	0.003
Low	IV	Sweep	0.115	61	179	0.008	0.007	23	0.023
Medium	I	Outward interaction	0.090	118	379	0.018	0.017	18	0.018
Medium	II	Ejection	0.190	57	123	0.019	0.012	38	0.038
Medium	III	Inward interaction	0.005	3	4	0.000	0.000	1	0.001
Medium	IV	Sweep	0.205	79	213	0.028	0.022	41	0.041

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	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	0.135	337	855	0.026	0.019	27	0.027
High	II	Ejection	0.245	309	651	0.043	0.026	49	0.049
High	III	Inward interaction	0.010	14	56	0.000	0.000	2	0.002
High	IV	Sweep	0.110	101	299	0.006	0.005	22	0.022
Low	I	Outward interaction	0.090	166	597	0.018	0.016	18	0.018
Low	II	Ejection	0.150	64	147	0.011	0.006	30	0.030
Low	III	Inward interaction	0.035	30	85	0.001	0.001	7	0.007
Low	IV	Sweep	0.150	82	179	0.015	0.008	30	0.030
Medium	I	Outward interaction	0.105	144	350	0.018	0.012	21	0.021
Medium	II	Ejection	0.200	122	259	0.030	0.017	40	0.040
Medium	III	Inward interaction	0.020	12	35	0.000	0.000	4	0.004
Medium	IV	Sweep	0.125	61	156	0.009	0.006	25	0.025

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	0.175	813	2555	0.090	0.075	35	0.035
High	II	Ejection	0.150	179	375	0.017	0.009	30	0.030
High	III	Inward interaction	0.020	24	73	0.000	0.000	4	0.004
High	IV	Sweep	0.065	52	207	0.002	0.002	13	0.013
Low	I	Outward interaction	0.075	140	312	0.008	0.004	15	0.015
Low	II	Ejection	0.180	150	308	0.021	0.010	36	0.036
Low	III	Inward interaction	0.045	53	180	0.002	0.002	9	0.009
Low	IV	Sweep	0.165	160	595	0.020	0.018	33	0.033
Medium	I	Outward interaction	0.070	80	291	0.010	0.008	14	0.014
Medium	II	Ejection	0.185	65	153	0.020	0.011	37	0.037
Medium	III	Inward interaction	0.030	19	70	0.001	0.001	6	0.006
Medium	IV	Sweep	0.170	65	171	0.019	0.012	34	0.034

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	0.085	146	490	0.014	0.012	17	0.017
High	II	Ejection	0.230	154	352	0.040	0.023	46	0.046
High	III	Inward interaction	0.010	7	17	0.000	0.000	2	0.002
High	IV	Sweep	0.140	70	287	0.011	0.011	28	0.028
Low	I	Outward interaction	0.090	126	562	0.009	0.010	18	0.018
Low	II	Ejection	0.165	131	259	0.017	0.009	33	0.033
Low	III	Inward interaction	0.070	108	213	0.006	0.003	14	0.014
Low	IV	Sweep	0.135	128	343	0.014	0.009	27	0.027
Medium	I	Outward interaction	0.075	115	324	0.015	0.010	15	0.015
Medium	II	Ejection	0.165	63	152	0.018	0.011	33	0.033
Medium	III	Inward interaction	0.040	19	61	0.001	0.001	8	0.008
Medium	IV	Sweep	0.175	67	188	0.020	0.014	35	0.035

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	0.155	184	466	0.046	0.025	31	0.031
High	II	Ejection	0.180	75	203	0.022	0.013	36	0.036
High	III	Inward interaction	0.010	3	9	0.000	0.000	2	0.002
High	IV	Sweep	0.140	66	168	0.015	0.008	28	0.028
Low	I	Outward interaction	0.040	96	225	0.003	0.001	8	0.008
Low	II	Ejection	0.220	160	398	0.029	0.014	44	0.044
Low	III	Inward interaction	0.040	45	176	0.001	0.001	8	0.008
Low	IV	Sweep	0.175	144	479	0.021	0.013	35	0.035
Medium	I	Outward interaction	0.050	73	210	0.007	0.005	10	0.010
Medium	II	Ejection	0.175	55	143	0.020	0.011	35	0.035
Medium	III	Inward interaction	0.020	10	38	0.000	0.000	4	0.004
Medium	IV	Sweep	0.185	62	163	0.023	0.013	37	0.037

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	0.020	13	20	0.000	0.000	4	0.004
High	II	Ejection	0.070	38	79	0.003	0.002	14	0.014
High	III	Inward interaction	0.015	15	39	0.000	0.000	3	0.003
High	IV	Sweep	0.190	95	171	0.018	0.010	38	0.038
Low	I	Outward interaction	0.065	117	278	0.005	0.004	13	0.013
Low	II	Ejection	0.195	242	433	0.030	0.019	39	0.039
Low	III	Inward interaction	0.010	20	24	0.000	0.000	2	0.002
Low	IV	Sweep	0.110	104	119	0.007	0.003	22	0.022
Medium	I	Outward interaction	0.045	64	174	0.005	0.004	9	0.009
Medium	II	Ejection	0.190	77	182	0.027	0.017	38	0.038
Medium	III	Inward interaction	0.015	10	27	0.000	0.000	3	0.003
Medium	IV	Sweep	0.205	64	144	0.024	0.014	41	0.041

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	0.100	293	1124	0.022	0.021	20	0.020
High	II	Ejection	0.215	199	386	0.032	0.015	43	0.043
High	III	Inward interaction	0.015	13	36	0.000	0.000	3	0.003
High	IV	Sweep	0.175	135	584	0.018	0.019	35	0.035
Low	I	Outward interaction	0.075	166	506	0.011	0.008	15	0.015
Low	II	Ejection	0.175	109	277	0.016	0.010	35	0.035
Low	III	Inward interaction	0.015	15	42	0.000	0.000	3	0.003
Low	IV	Sweep	0.185	147	454	0.023	0.017	37	0.037
Medium	I	Outward interaction	0.090	119	478	0.012	0.010	18	0.018
Medium	II	Ejection	0.155	81	166	0.014	0.006	31	0.031
Medium	III	Inward interaction	0.035	28	92	0.001	0.001	7	0.007
Medium	IV	Sweep	0.195	117	381	0.026	0.018	39	0.039

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	0.160	485	1404	0.043	0.034	32	0.032
High	II	Ejection	0.180	229	527	0.023	0.015	36	0.036
High	III	Inward interaction	0.025	40	64	0.001	0.000	5	0.005
High	IV	Sweep	0.105	115	312	0.007	0.005	21	0.021
Low	I	Outward interaction	0.160	208	660	0.044	0.031	32	0.032
Low	II	Ejection	0.095	47	120	0.006	0.003	19	0.019
Low	III	Inward interaction	0.025	14	39	0.000	0.000	5	0.005
Low	IV	Sweep	0.170	85	283	0.019	0.014	34	0.034
Medium	I	Outward interaction	0.090	222	794	0.015	0.012	18	0.018
Medium	II	Ejection	0.180	129	294	0.018	0.009	36	0.036
Medium	III	Inward interaction	0.025	29	126	0.001	0.001	5	0.005
Medium	IV	Sweep	0.160	111	330	0.014	0.009	32	0.032

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	0.120	255	1052	0.018	0.014	24	0.024
High	II	Ejection	0.100	70	206	0.004	0.002	20	0.020
High	III	Inward interaction	0.100	165	366	0.010	0.004	20	0.020
High	IV	Sweep	0.160	258	975	0.024	0.018	32	0.032
Low	I	Outward interaction	0.085	31	75	0.010	0.004	17	0.017
Low	II	Ejection	0.150	35	89	0.019	0.009	30	0.030
Low	III	Inward interaction	0.015	4	24	0.000	0.000	3	0.003
Low	IV	Sweep	0.155	35	85	0.020	0.009	31	0.031
Medium	I	Outward interaction	0.090	238	1080	0.017	0.016	18	0.018
Medium	II	Ejection	0.155	121	307	0.015	0.008	31	0.031
Medium	III	Inward interaction	0.055	69	286	0.003	0.003	11	0.011
Medium	IV	Sweep	0.140	103	384	0.011	0.009	28	0.028

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	0.050	136	517	0.003	0.003	10	0.010
High	II	Ejection	0.115	111	287	0.006	0.004	23	0.023
High	III	Inward interaction	0.020	39	107	0.000	0.000	4	0.004
High	IV	Sweep	0.275	398	1649	0.056	0.049	55	0.055
Low	I	Outward interaction	0.080	275	593	0.017	0.009	16	0.016
Low	II	Ejection	0.170	150	304	0.019	0.010	34	0.034
Low	III	Inward interaction	0.015	15	41	0.000	0.000	3	0.003
Low	IV	Sweep	0.200	181	589	0.028	0.022	40	0.040
Medium	I	Outward interaction	0.075	219	683	0.012	0.008	15	0.015
Medium	II	Ejection	0.195	183	369	0.026	0.011	39	0.039
Medium	III	Inward interaction	0.050	69	216	0.002	0.002	10	0.010
Medium	IV	Sweep	0.125	100	461	0.009	0.009	25	0.025

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	0.060	290	397	0.003	0.001	12	0.012
High	II	Ejection	0.180	694	1046	0.021	0.012	36	0.036
High	III	Inward interaction	0.025	106	146	0.000	0.000	5	0.005
High	IV	Sweep	0.145	533	709	0.013	0.006	29	0.029
Low	I	Outward interaction	0.100	460	596	0.007	0.003	20	0.020
Low	II	Ejection	0.125	760	1225	0.014	0.009	25	0.025
Low	III	Inward interaction	0.075	312	530	0.003	0.002	15	0.015
Low	IV	Sweep	0.050	264	341	0.002	0.001	10	0.010
Medium	I	Outward interaction	0.070	471	725	0.005	0.003	14	0.014
Medium	II	Ejection	0.140	722	917	0.014	0.008	28	0.028
Medium	III	Inward interaction	0.025	131	190	0.000	0.000	5	0.005
Medium	IV	Sweep	0.095	410	530	0.005	0.003	19	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	0.140	1316	2977	0.014	0.010	28	0.028
High	II	Ejection	0.065	645	1163	0.003	0.002	13	0.013
High	III	Inward interaction	0.130	961	1351	0.009	0.004	26	0.026
High	IV	Sweep	0.055	788	1118	0.003	0.002	11	0.011
Low	I	Outward interaction	0.040	141	254	0.001	0.001	8	0.008
Low	II	Ejection	0.120	425	652	0.009	0.005	24	0.024
Low	III	Inward interaction	0.115	565	964	0.011	0.007	23	0.023
Low	IV	Sweep	0.115	374	569	0.008	0.004	23	0.023
Medium	I	Outward interaction	0.010	15	19	0.000	0.000	2	0.002
Medium	II	Ejection	0.135	146	288	0.012	0.007	27	0.027
Medium	III	Inward interaction	0.030	43	106	0.001	0.001	6	0.006
Medium	IV	Sweep	0.175	211	407	0.023	0.013	35	0.035

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	0.110	894	1962	0.007	0.004	22	0.022
High	II	Ejection	0.090	1224	2710	0.008	0.005	18	0.018
High	III	Inward interaction	0.090	658	1598	0.004	0.003	18	0.018
High	IV	Sweep	0.050	533	1159	0.002	0.001	10	0.010
Low	I	Outward interaction	0.005	26	54	0.000	0.000	1	0.001
Low	II	Ejection	0.085	459	640	0.004	0.002	17	0.017
Low	III	Inward interaction	0.115	886	1258	0.011	0.006	23	0.023
Low	IV	Sweep	0.170	1113	1937	0.020	0.014	34	0.034
Medium	I	Outward interaction	0.075	183	375	0.007	0.004	15	0.015
Medium	II	Ejection	0.105	131	286	0.007	0.005	21	0.021
Medium	III	Inward interaction	0.005	5	6	0.000	0.000	1	0.001
Medium	IV	Sweep	0.215	274	542	0.029	0.019	43	0.043

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	0.050	167	247	0.004	0.002	10	0.010
High	II	Ejection	0.105	127	270	0.006	0.004	21	0.021
High	III	Inward interaction	0.005	7	11	0.000	0.000	1	0.001
High	IV	Sweep	0.200	300	562	0.028	0.017	40	0.040
Low	I	Outward interaction	0.100	474	611	0.006	0.002	20	0.020
Low	II	Ejection	0.055	402	768	0.003	0.002	11	0.011
Low	III	Inward interaction	0.120	648	1016	0.010	0.005	24	0.024
Low	IV	Sweep	0.120	647	1139	0.010	0.006	24	0.024
Medium	I	Outward interaction	0.000	0	0	0.000	0.000	0	0.000
Medium	II	Ejection	0.245	313	577	0.029	0.019	49	0.049
Medium	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
Medium	IV	Sweep	0.215	313	545	0.025	0.016	43	0.043

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	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	0.060	243	326	0.003	0.002	12	0.012
High	II	Ejection	0.155	489	682	0.018	0.009	31	0.031
High	III	Inward interaction	0.030	98	145	0.001	0.000	6	0.006
High	IV	Sweep	0.100	293	451	0.007	0.004	20	0.020
Low	I	Outward interaction	0.070	486	709	0.004	0.001	14	0.014
Low	II	Ejection	0.050	279	464	0.001	0.001	10	0.010
Low	III	Inward interaction	0.070	493	889	0.004	0.002	14	0.014
Low	IV	Sweep	0.065	446	718	0.003	0.001	13	0.013
Medium	I	Outward interaction	0.065	178	280	0.004	0.002	13	0.013
Medium	II	Ejection	0.170	326	479	0.018	0.010	34	0.034
Medium	III	Inward interaction	0.045	93	182	0.001	0.001	9	0.009
Medium	IV	Sweep	0.125	229	321	0.009	0.005	25	0.025

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 fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	0.015	57	122	0.000	0.000	3	0.003
High	II	Ejection	0.150	708	1066	0.021	0.012	30	0.030
High	III	Inward interaction	0.060	219	319	0.003	0.001	12	0.012
High	IV	Sweep	0.080	239	317	0.004	0.002	16	0.016
Low	I	Outward interaction	0.050	203	367	0.002	0.001	10	0.010
Low	II	Ejection	0.090	328	621	0.005	0.003	18	0.018
Low	III	Inward interaction	0.095	418	833	0.007	0.004	19	0.019
Low	IV	Sweep	0.125	589	1127	0.013	0.007	25	0.025
Medium	I	Outward interaction	0.075	308	583	0.005	0.004	15	0.015
Medium	II	Ejection	0.100	295	425	0.007	0.004	20	0.020
Medium	III	Inward interaction	0.040	114	147	0.001	0.001	8	0.008
Medium	IV	Sweep	0.110	322	427	0.008	0.004	22	0.022

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	0.025	826	1205	0.001	0.000	5	0.005
High	II	Ejection	0.190	5058	8218	0.024	0.015	38	0.038
High	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
High	IV	Sweep	0.190	4372	7313	0.020	0.013	38	0.038
Low	I	Outward interaction	0.045	188	365	0.002	0.001	9	0.009
Low	II	Ejection	0.155	710	1073	0.020	0.007	31	0.031
Low	III	Inward interaction	0.060	252	406	0.003	0.001	12	0.012
Low	IV	Sweep	0.095	340	650	0.006	0.003	19	0.019
Medium	I	Outward interaction	0.105	432	667	0.011	0.006	21	0.021
Medium	II	Ejection	0.130	346	448	0.011	0.005	26	0.026
Medium	III	Inward interaction	0.035	93	132	0.001	0.000	7	0.007
Medium	IV	Sweep	0.075	178	238	0.003	0.002	15	0.015

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	0.000	0	0	0.000	0.000	0	0.000
High	II	Ejection	0.235	9217	12066	0.034	0.020	47	0.047
High	III	Inward interaction	0.005	263	914	0.000	0.000	1	0.001
High	IV	Sweep	0.140	4750	5672	0.010	0.006	28	0.028
Low	I	Outward interaction	0.020	73	173	0.000	0.000	4	0.004
Low	II	Ejection	0.155	583	896	0.020	0.010	31	0.031
Low	III	Inward interaction	0.045	149	242	0.001	0.001	9	0.009
Low	IV	Sweep	0.135	374	538	0.011	0.005	27	0.027
Medium	I	Outward interaction	0.060	255	368	0.003	0.002	12	0.012
Medium	II	Ejection	0.215	1145	1688	0.044	0.027	43	0.043
Medium	III	Inward interaction	0.020	85	190	0.000	0.000	4	0.004
Medium	IV	Sweep	0.045	133	200	0.001	0.001	9	0.009

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	0.020	106	207	0.000	0.000	4	0.004
High	II	Ejection	0.275	1431	2847	0.049	0.033	55	0.055
High	III	Inward interaction	0.020	138	363	0.000	0.000	4	0.004
High	IV	Sweep	0.055	231	391	0.002	0.001	11	0.011
Low	I	Outward interaction	0.080	432	522	0.005	0.002	16	0.016
Low	II	Ejection	0.170	966	1312	0.022	0.013	34	0.034
Low	III	Inward interaction	0.005	38	41	0.000	0.000	1	0.001
Low	IV	Sweep	0.110	503	715	0.007	0.005	22	0.022
Medium	I	Outward interaction	0.005	26	27	0.000	0.000	1	0.001
Medium	II	Ejection	0.185	1446	2231	0.033	0.021	37	0.037
Medium	III	Inward interaction	0.040	350	553	0.002	0.001	8	0.008
Medium	IV	Sweep	0.125	580	819	0.009	0.005	25	0.025

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	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	0.120	613	1370	0.020	0.014	24	0.024
High	II	Ejection	0.100	187	439	0.005	0.004	20	0.020
High	III	Inward interaction	0.015	35	77	0.000	0.000	3	0.003
High	IV	Sweep	0.105	350	696	0.010	0.006	21	0.021
Low	I	Outward interaction	0.025	349	585	0.000	0.000	5	0.005
Low	II	Ejection	0.100	912	1534	0.005	0.003	20	0.020
Low	III	Inward interaction	0.025	464	794	0.001	0.000	5	0.005
Low	IV	Sweep	0.215	2582	4400	0.030	0.016	43	0.043
Medium	I	Outward interaction	0.050	427	708	0.002	0.001	10	0.010
Medium	II	Ejection	0.185	1123	2084	0.024	0.014	37	0.037
Medium	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
Medium	IV	Sweep	0.165	843	1542	0.016	0.009	33	0.033

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	0.045	240	450	0.002	0.001	9	0.009
High	II	Ejection	0.130	693	959	0.014	0.006	26	0.026
High	III	Inward interaction	0.030	107	159	0.001	0.000	6	0.006
High	IV	Sweep	0.165	683	1243	0.018	0.009	33	0.033
Low	I	Outward interaction	0.070	343	800	0.003	0.002	14	0.014
Low	II	Ejection	0.065	344	595	0.003	0.002	13	0.013
Low	III	Inward interaction	0.190	877	1407	0.022	0.010	38	0.038
Low	IV	Sweep	0.090	614	1013	0.007	0.004	18	0.018
Medium	I	Outward interaction	0.025	35	54	0.000	0.000	5	0.005
Medium	II	Ejection	0.155	210	364	0.014	0.007	31	0.031
Medium	III	Inward interaction	0.075	124	303	0.004	0.003	15	0.015
Medium	IV	Sweep	0.110	200	342	0.010	0.005	22	0.022

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	0.065	207	363	0.003	0.001	13	0.013
High	II	Ejection	0.130	459	943	0.013	0.008	26	0.026
High	III	Inward interaction	0.070	241	447	0.004	0.002	14	0.014
High	IV	Sweep	0.045	143	308	0.001	0.001	9	0.009
Low	I	Outward interaction	0.025	117	216	0.000	0.000	5	0.005
Low	II	Ejection	0.090	415	591	0.005	0.003	18	0.018
Low	III	Inward interaction	0.055	313	485	0.002	0.001	11	0.011
Low	IV	Sweep	0.200	1043	1744	0.029	0.017	40	0.040
Medium	I	Outward interaction	0.070	217	430	0.004	0.003	14	0.014
Medium	II	Ejection	0.110	253	398	0.007	0.004	22	0.022
Medium	III	Inward interaction	0.055	149	214	0.002	0.001	11	0.011
Medium	IV	Sweep	0.085	193	321	0.004	0.002	17	0.017

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	0.060	382	617	0.003	0.002	12	0.012
High	II	Ejection	0.140	644	966	0.013	0.008	28	0.028
High	III	Inward interaction	0.055	251	397	0.002	0.001	11	0.011
High	IV	Sweep	0.120	470	753	0.008	0.005	24	0.024
Low	I	Outward interaction	0.045	312	461	0.001	0.001	9	0.009
Low	II	Ejection	0.080	442	613	0.004	0.002	16	0.016
Low	III	Inward interaction	0.135	1115	1722	0.016	0.008	27	0.027
Low	IV	Sweep	0.090	767	1131	0.007	0.003	18	0.018
Medium	I	Outward interaction	0.070	321	485	0.004	0.002	14	0.014
Medium	II	Ejection	0.130	480	772	0.011	0.006	26	0.026
Medium	III	Inward interaction	0.040	139	214	0.001	0.001	8	0.008
Medium	IV	Sweep	0.095	344	513	0.006	0.003	19	0.019

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	0.065	521	792	0.003	0.002	13	0.013
High	II	Ejection	0.120	682	1083	0.007	0.004	24	0.024
High	III	Inward interaction	0.070	660	1023	0.004	0.002	14	0.014
High	IV	Sweep	0.140	1023	1488	0.013	0.007	28	0.028
Low	I	Outward interaction	0.065	377	488	0.003	0.001	13	0.013
Low	II	Ejection	0.100	644	820	0.008	0.003	20	0.020
Low	III	Inward interaction	0.060	400	580	0.003	0.001	12	0.012
Low	IV	Sweep	0.115	629	996	0.008	0.005	23	0.023
Medium	I	Outward interaction	0.090	557	863	0.006	0.004	18	0.018
Medium	II	Ejection	0.105	629	839	0.008	0.004	21	0.021
Medium	III	Inward interaction	0.060	288	451	0.002	0.001	12	0.012
Medium	IV	Sweep	0.130	612	957	0.010	0.006	26	0.026

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	0.070	478	743	0.004	0.002	14	0.014
High	II	Ejection	0.115	935	1300	0.011	0.006	23	0.023
High	III	Inward interaction	0.055	380	547	0.002	0.001	11	0.011
High	IV	Sweep	0.055	299	437	0.002	0.001	11	0.011
Low	I	Outward interaction	0.060	507	815	0.003	0.002	12	0.012
Low	II	Ejection	0.150	1005	1447	0.015	0.007	30	0.030
Low	III	Inward interaction	0.020	152	224	0.000	0.000	4	0.004
Low	IV	Sweep	0.115	677	944	0.008	0.004	23	0.023
Medium	I	Outward interaction	0.160	1704	2768	0.031	0.020	32	0.032
Medium	II	Ejection	0.085	742	1438	0.007	0.006	17	0.017
Medium	III	Inward interaction	0.035	162	312	0.001	0.000	7	0.007
Medium	IV	Sweep	0.055	298	350	0.002	0.001	11	0.011

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	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	0.025	834	1145	0.000	0.000	5	0.005
High	II	Ejection	0.210	10695	15992	0.044	0.030	42	0.042
High	III	Inward interaction	0.050	2540	4141	0.002	0.002	10	0.010
High	IV	Sweep	0.060	1793	2268	0.002	0.001	12	0.012
Low	I	Outward interaction	0.065	374	604	0.003	0.002	13	0.013
Low	II	Ejection	0.140	975	1417	0.016	0.009	28	0.028
Low	III	Inward interaction	0.050	297	428	0.002	0.001	10	0.010
Low	IV	Sweep	0.100	442	631	0.005	0.003	20	0.020
Medium	I	Outward interaction	0.095	649	996	0.008	0.004	19	0.019
Medium	II	Ejection	0.135	679	856	0.011	0.005	27	0.027
Medium	III	Inward interaction	0.035	196	316	0.001	0.001	7	0.007
Medium	IV	Sweep	0.055	228	332	0.002	0.001	11	0.011

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	0.025	413	791	0.001	0.000	5	0.005
High	II	Ejection	0.215	3593	5271	0.039	0.024	43	0.043
High	III	Inward interaction	0.010	148	210	0.000	0.000	2	0.002
High	IV	Sweep	0.075	749	929	0.003	0.001	15	0.015
Low	I	Outward interaction	0.005	48	123	0.000	0.000	1	0.001
Low	II	Ejection	0.260	3915	5517	0.066	0.038	52	0.052
Low	III	Inward interaction	0.010	146	172	0.000	0.000	2	0.002
Low	IV	Sweep	0.075	563	756	0.003	0.002	15	0.015
Medium	I	Outward interaction	0.010	119	206	0.000	0.000	2	0.002
Medium	II	Ejection	0.360	5623	7924	0.109	0.070	72	0.072
Medium	III	Inward interaction	0.010	138	224	0.000	0.000	2	0.002
Medium	IV	Sweep	0.040	305	369	0.001	0.000	8	0.008

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	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	0.080	929	2043	0.010	0.006	16	0.016
High	II	Ejection	0.110	598	1352	0.009	0.005	22	0.022
High	III	Inward interaction	0.025	99	229	0.000	0.000	5	0.005
High	IV	Sweep	0.135	636	1154	0.012	0.006	27	0.027
Low	I	Outward interaction	0.025	526	1008	0.000	0.000	5	0.005
Low	II	Ejection	0.135	3136	5114	0.012	0.007	27	0.027
Low	III	Inward interaction	0.020	507	812	0.000	0.000	4	0.004
Low	IV	Sweep	0.205	5215	7919	0.030	0.017	41	0.041
Medium	I	Outward interaction	0.185	695	1820	0.032	0.020	37	0.037
Medium	II	Ejection	0.015	54	344	0.000	0.000	3	0.003
Medium	III	Inward interaction	0.045	96	250	0.001	0.001	9	0.009
Medium	IV	Sweep	0.055	393	874	0.005	0.003	11	0.011

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 fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	0.015	48	88	0.000	0.000	3	0.003
High	II	Ejection	0.165	208	426	0.014	0.010	33	0.033
High	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
High	IV	Sweep	0.210	334	536	0.029	0.017	42	0.042
Low	I	Outward interaction	0.120	630	1465	0.009	0.006	24	0.024
Low	II	Ejection	0.095	557	1367	0.006	0.004	19	0.019
Low	III	Inward interaction	0.085	536	1005	0.006	0.003	17	0.017
Low	IV	Sweep	0.050	310	800	0.002	0.001	10	0.010
Medium	I	Outward interaction	0.090	370	558	0.007	0.003	18	0.018
Medium	II	Ejection	0.065	197	432	0.003	0.002	13	0.013
Medium	III	Inward interaction	0.045	123	254	0.001	0.001	9	0.009
Medium	IV	Sweep	0.105	290	484	0.007	0.003	21	0.021

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 fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	0.050	365	486	0.002	0.001	10	0.010
High	II	Ejection	0.145	912	1525	0.017	0.008	29	0.029
High	III	Inward interaction	0.025	134	235	0.000	0.000	5	0.005
High	IV	Sweep	0.115	481	675	0.007	0.003	23	0.023
Low	I	Outward interaction	0.020	199	366	0.000	0.000	4	0.004
Low	II	Ejection	0.095	616	1030	0.005	0.002	19	0.019
Low	III	Inward interaction	0.035	386	925	0.001	0.001	7	0.007
Low	IV	Sweep	0.150	1727	4305	0.022	0.015	30	0.030
Medium	I	Outward interaction	0.045	224	354	0.002	0.001	9	0.009
Medium	II	Ejection	0.150	611	1123	0.015	0.008	30	0.030
Medium	III	Inward interaction	0.095	507	1003	0.008	0.004	19	0.019
Medium	IV	Sweep	0.140	544	1092	0.012	0.007	28	0.028

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 fraction	TKE fraction	Events	Proportion
				Stress	TKE				
Low	I	Outward interaction	0.035	396	546	0.001	0.001	7	0.007
Low	II	Ejection	0.180	1374	2032	0.021	0.013	36	0.036
Low	III	Inward interaction	0.040	501	637	0.002	0.001	8	0.008
Low	IV	Sweep	0.070	466	679	0.003	0.002	14	0.014
Medium	I	Outward interaction	0.080	1428	1990	0.006	0.004	16	0.016
Medium	II	Ejection	0.200	3879	5635	0.044	0.027	40	0.040
Medium	III	Inward interaction	0.050	517	663	0.001	0.001	10	0.010
Medium	IV	Sweep	0.030	243	347	0.000	0.000	6	0.006
High	I	Outward interaction	0.075	556	994	0.004	0.003	15	0.015
High	II	Ejection	0.170	1375	2027	0.023	0.014	34	0.034
High	III	Inward interaction	0.055	336	422	0.002	0.001	11	0.011
High	IV	Sweep	0.060	353	465	0.002	0.001	12	0.012

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 fraction	TKE fraction	Events	Proportion
				Stress	TKE				
Low	I	Outward interaction	0.020	339	705	0.000	0.000	4	0.004
Low	II	Ejection	0.190	3696	5863	0.027	0.013	38	0.038
Low	III	Inward interaction	0.060	1435	2948	0.003	0.002	12	0.012
Low	IV	Sweep	0.060	737	1084	0.002	0.001	12	0.012
Medium	I	Outward interaction	0.045	799	1400	0.003	0.002	9	0.009
Medium	II	Ejection	0.190	1122	2478	0.019	0.014	38	0.038
Medium	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
Medium	IV	Sweep	0.190	1306	2510	0.022	0.015	38	0.038
High	I	Outward interaction	0.090	1192	2176	0.006	0.003	18	0.018
High	II	Ejection	0.105	1271	2206	0.007	0.004	21	0.021
High	III	Inward interaction	0.060	636	1163	0.002	0.001	12	0.012
High	IV	Sweep	0.145	2081	3959	0.016	0.010	29	0.029

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	0.155	2757	4853	0.024	0.014	31	0.031
Low	II	Ejection	0.060	878	1739	0.003	0.002	12	0.012
Low	III	Inward interaction	0.090	874	1834	0.004	0.003	18	0.018
Low	IV	Sweep	0.045	617	1373	0.002	0.001	9	0.009
Medium	I	Outward interaction	0.055	274	491	0.002	0.001	11	0.011
Medium	II	Ejection	0.145	546	957	0.013	0.007	29	0.029
Medium	III	Inward interaction	0.035	190	387	0.001	0.001	7	0.007
Medium	IV	Sweep	0.140	571	1110	0.013	0.008	28	0.028
High	I	Outward interaction	0.200	565	1292	0.046	0.032	40	0.040
High	II	Ejection	0.055	127	323	0.003	0.002	11	0.011
High	III	Inward interaction	0.020	31	73	0.000	0.000	4	0.004
High	IV	Sweep	0.105	190	481	0.008	0.006	21	0.021

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	0.025	576	994	0.001	0.000	5	0.005
Low	II	Ejection	0.175	2595	3624	0.017	0.009	35	0.035
Low	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
Low	IV	Sweep	0.240	5230	9035	0.047	0.031	48	0.048
Medium	I	Outward interaction	0.005	22	22	0.000	0.000	1	0.001
Medium	II	Ejection	0.160	204	364	0.013	0.006	32	0.032
Medium	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
Medium	IV	Sweep	0.230	361	640	0.032	0.016	46	0.046
High	I	Outward interaction	0.040	165	245	0.001	0.000	8	0.008
High	II	Ejection	0.065	303	496	0.002	0.002	13	0.013
High	III	Inward interaction	0.170	1433	2913	0.031	0.023	34	0.034
High	IV	Sweep	0.105	686	1213	0.009	0.006	21	0.021

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 fraction	TKE fraction	Events	Proportion
				Stress	TKE				
Low	I	Outward interaction	0.180	275	774	0.046	0.032	36	0.036
Low	II	Ejection	0.250	184	422	0.043	0.024	50	0.050
Low	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
Low	IV	Sweep	0.085	57	214	0.004	0.004	17	0.017
High	I	Outward interaction	0.265	784	2176	0.116	0.093	53	0.053
High	II	Ejection	0.115	169	332	0.011	0.006	23	0.023
High	III	Inward interaction	0.010	12	44	0.000	0.000	2	0.002
High	IV	Sweep	0.075	90	232	0.004	0.003	15	0.015
Medium	I	Outward interaction	0.050	88	267	0.005	0.005	10	0.010
Medium	II	Ejection	0.210	114	232	0.029	0.018	42	0.042
Medium	III	Inward interaction	0.010	6	17	0.000	0.000	2	0.002
Medium	IV	Sweep	0.180	84	261	0.019	0.017	36	0.036

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	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	0.035	61	320	0.001	0.001	7	0.007
Low	II	Ejection	0.160	179	514	0.016	0.010	32	0.032
Low	III	Inward interaction	0.020	23	77	0.000	0.000	4	0.004
Low	IV	Sweep	0.190	264	774	0.028	0.018	38	0.038
High	I	Outward interaction	0.035	58	157	0.002	0.002	7	0.007
High	II	Ejection	0.150	73	143	0.011	0.008	30	0.030
High	III	Inward interaction	0.025	37	108	0.001	0.001	5	0.005
High	IV	Sweep	0.185	104	233	0.019	0.015	37	0.037
Medium	I	Outward interaction	0.060	66	218	0.005	0.004	12	0.012
Medium	II	Ejection	0.185	120	273	0.027	0.015	37	0.037
Medium	III	Inward interaction	0.060	48	156	0.003	0.003	12	0.012
Medium	IV	Sweep	0.180	99	327	0.021	0.017	36	0.036

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	0.080	206	668	0.010	0.009	16	0.016
Low	II	Ejection	0.170	185	345	0.020	0.010	34	0.034
Low	III	Inward interaction	0.020	27	127	0.000	0.000	4	0.004
Low	IV	Sweep	0.150	120	222	0.011	0.006	30	0.030
High	I	Outward interaction	0.095	153	524	0.013	0.010	19	0.019
High	II	Ejection	0.210	172	465	0.032	0.020	42	0.042
High	III	Inward interaction	0.005	3	4	0.000	0.000	1	0.001
High	IV	Sweep	0.140	94	363	0.012	0.010	28	0.028
Medium	I	Outward interaction	0.020	10	37	0.000	0.000	4	0.004
Medium	II	Ejection	0.210	101	242	0.033	0.022	42	0.042
Medium	III	Inward interaction	0.020	12	57	0.000	0.000	4	0.004
Medium	IV	Sweep	0.160	85	201	0.021	0.014	32	0.032

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	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	0.050	74	308	0.006	0.006	10	0.010
Low	II	Ejection	0.160	73	130	0.018	0.009	32	0.032
Low	III	Inward interaction	0.010	8	51	0.000	0.000	2	0.002
Low	IV	Sweep	0.210	83	190	0.026	0.017	42	0.042
High	I	Outward interaction	0.140	331	1392	0.035	0.031	28	0.028
High	II	Ejection	0.170	154	388	0.020	0.010	34	0.034
High	III	Inward interaction	0.030	35	147	0.001	0.001	6	0.006
High	IV	Sweep	0.100	80	277	0.006	0.004	20	0.020
Medium	I	Outward interaction	0.045	51	163	0.003	0.003	9	0.009
Medium	II	Ejection	0.210	99	243	0.031	0.017	42	0.042
Medium	III	Inward interaction	0.020	16	52	0.000	0.000	4	0.004
Medium	IV	Sweep	0.175	73	203	0.019	0.012	35	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	0.180	474	1611	0.048	0.043	36	0.036
High	II	Ejection	0.150	156	418	0.013	0.009	30	0.030
High	III	Inward interaction	0.030	34	127	0.001	0.001	6	0.006
High	IV	Sweep	0.105	95	295	0.006	0.005	21	0.021
Low	I	Outward interaction	0.130	333	923	0.039	0.026	26	0.026
Low	II	Ejection	0.140	92	256	0.012	0.008	28	0.028
Low	III	Inward interaction	0.020	18	54	0.000	0.000	4	0.004
Low	IV	Sweep	0.095	71	205	0.006	0.004	19	0.019
Medium	I	Outward interaction	0.080	85	328	0.009	0.009	16	0.016
Medium	II	Ejection	0.165	74	160	0.017	0.009	33	0.033
Medium	III	Inward interaction	0.050	39	110	0.003	0.002	10	0.010
Medium	IV	Sweep	0.165	75	260	0.017	0.014	33	0.033

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
Low	I	Outward interaction	0.110	133	431	0.016	0.012	22	0.022
Low	II	Ejection	0.135	86	194	0.013	0.007	27	0.027
Low	III	Inward interaction	0.045	34	170	0.002	0.002	9	0.009
Low	IV	Sweep	0.130	109	342	0.016	0.011	26	0.026
Medium	I	Outward interaction	0.045	44	156	0.003	0.002	9	0.009
Medium	II	Ejection	0.165	76	168	0.018	0.009	33	0.033
Medium	III	Inward interaction	0.035	33	137	0.002	0.002	7	0.007
Medium	IV	Sweep	0.120	56	124	0.009	0.005	24	0.024

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	0.020	22	68	0.000	0.000	4	0.004
High	II	Ejection	0.190	161	284	0.025	0.013	38	0.038
High	III	Inward interaction	0.010	9	18	0.000	0.000	2	0.002
High	IV	Sweep	0.100	52	94	0.004	0.002	20	0.020
Low	I	Outward interaction	0.065	117	469	0.005	0.004	13	0.013
Low	II	Ejection	0.160	164	293	0.016	0.007	32	0.032
Low	III	Inward interaction	0.025	38	122	0.001	0.000	5	0.005
Low	IV	Sweep	0.155	185	431	0.017	0.010	31	0.031
Medium	I	Outward interaction	0.030	50	103	0.001	0.001	6	0.006
Medium	II	Ejection	0.175	119	203	0.021	0.010	35	0.035
Medium	III	Inward interaction	0.040	44	170	0.002	0.002	8	0.008
Medium	IV	Sweep	0.150	88	184	0.013	0.008	30	0.030

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	0.035	65	142	0.002	0.001	7	0.007
High	II	Ejection	0.140	105	163	0.010	0.006	28	0.028
High	III	Inward interaction	0.010	16	20	0.000	0.000	2	0.002
High	IV	Sweep	0.175	161	308	0.019	0.013	35	0.035
Low	I	Outward interaction	0.030	75	172	0.001	0.001	6	0.006
Low	II	Ejection	0.215	196	337	0.026	0.013	43	0.043
Low	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
Low	IV	Sweep	0.130	97	230	0.008	0.005	26	0.026
Medium	I	Outward interaction	0.000	0	0	0.000	0.000	0	0.000
Medium	II	Ejection	0.190	151	247	0.017	0.010	38	0.038
Medium	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
Medium	IV	Sweep	0.205	170	309	0.021	0.013	41	0.041

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	0.085	532	1225	0.014	0.009	17	0.017
High	II	Ejection	0.140	229	486	0.010	0.006	28	0.028
High	III	Inward interaction	0.045	117	248	0.002	0.001	9	0.009
High	IV	Sweep	0.225	528	1711	0.037	0.034	45	0.045
Low	I	Outward interaction	0.120	175	442	0.022	0.012	24	0.024
Low	II	Ejection	0.170	116	278	0.021	0.011	34	0.034
Low	III	Inward interaction	0.030	24	95	0.001	0.001	6	0.006
Low	IV	Sweep	0.125	66	220	0.009	0.006	25	0.025
Medium	I	Outward interaction	0.075	63	156	0.009	0.005	15	0.015
Medium	II	Ejection	0.175	64	165	0.021	0.012	35	0.035
Medium	III	Inward interaction	0.050	17	67	0.002	0.001	10	0.010
Medium	IV	Sweep	0.160	65	199	0.020	0.013	32	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	0.070	208	944	0.008	0.009	14	0.014
High	II	Ejection	0.155	161	405	0.014	0.009	31	0.031
High	III	Inward interaction	0.070	129	354	0.005	0.003	14	0.014
High	IV	Sweep	0.185	215	732	0.023	0.019	37	0.037
Low	I	Outward interaction	0.050	33	101	0.002	0.001	10	0.010
Low	II	Ejection	0.055	42	73	0.003	0.001	11	0.011
Low	III	Inward interaction	0.130	90	190	0.013	0.007	26	0.026
Low	IV	Sweep	0.090	60	124	0.006	0.003	18	0.018
Medium	I	Outward interaction	0.050	103	401	0.003	0.003	10	0.010
Medium	II	Ejection	0.175	215	510	0.024	0.013	35	0.035
Medium	III	Inward interaction	0.065	109	292	0.005	0.003	13	0.013
Medium	IV	Sweep	0.105	95	241	0.006	0.004	21	0.021

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	0.115	180	624	0.016	0.012	23	0.023
High	II	Ejection	0.120	96	198	0.009	0.004	24	0.024
High	III	Inward interaction	0.080	74	232	0.005	0.003	16	0.016
High	IV	Sweep	0.130	127	405	0.013	0.009	26	0.026
Low	I	Outward interaction	0.035	13	36	0.001	0.001	7	0.007
Low	II	Ejection	0.155	47	107	0.018	0.009	31	0.031
Low	III	Inward interaction	0.015	6	26	0.000	0.000	3	0.003
Low	IV	Sweep	0.200	73	190	0.036	0.021	40	0.040
Medium	I	Outward interaction	0.065	77	503	0.005	0.006	13	0.013
Medium	II	Ejection	0.170	128	347	0.022	0.010	34	0.034
Medium	III	Inward interaction	0.030	24	82	0.001	0.000	6	0.006
Medium	IV	Sweep	0.140	107	325	0.015	0.008	28	0.028

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	0.075	107	329	0.010	0.008	15	0.015
High	II	Ejection	0.190	102	206	0.024	0.012	38	0.038
High	III	Inward interaction	0.035	23	52	0.001	0.001	7	0.007
High	IV	Sweep	0.180	97	288	0.021	0.016	36	0.036
Low	I	Outward interaction	0.125	215	726	0.027	0.024	25	0.025
Low	II	Ejection	0.150	96	213	0.014	0.009	30	0.030
Low	III	Inward interaction	0.005	4	14	0.000	0.000	1	0.001
Low	IV	Sweep	0.140	94	224	0.013	0.008	28	0.028
Medium	I	Outward interaction	0.035	49	153	0.001	0.001	7	0.007
Medium	II	Ejection	0.200	196	429	0.029	0.017	40	0.040
Medium	III	Inward interaction	0.045	62	205	0.002	0.002	9	0.009
Medium	IV	Sweep	0.155	142	381	0.016	0.012	31	0.031

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	0.110	220	589	0.014	0.014	22	0.022
Low	II	Ejection	0.140	188	299	0.015	0.009	28	0.028
Low	III	Inward interaction	0.015	17	40	0.000	0.000	3	0.003
Low	IV	Sweep	0.070	105	177	0.004	0.003	14	0.014
Medium	I	Outward interaction	0.080	120	208	0.007	0.005	16	0.016
Medium	II	Ejection	0.140	142	236	0.015	0.009	28	0.028
Medium	III	Inward interaction	0.030	33	69	0.001	0.001	6	0.006
Medium	IV	Sweep	0.120	117	211	0.011	0.007	24	0.024
High	I	Outward interaction	0.085	152	384	0.009	0.007	17	0.017
High	II	Ejection	0.140	174	327	0.018	0.009	28	0.028
High	III	Inward interaction	0.005	4	11	0.000	0.000	1	0.001
High	IV	Sweep	0.080	70	160	0.004	0.003	16	0.016

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	0.080	202	467	0.005	0.003	16	0.016
Low	II	Ejection	0.110	273	558	0.010	0.006	22	0.022
Low	III	Inward interaction	0.095	202	500	0.006	0.004	19	0.019
Low	IV	Sweep	0.110	271	735	0.010	0.008	22	0.022
Medium	I	Outward interaction	0.100	109	249	0.007	0.004	20	0.020
Medium	II	Ejection	0.085	79	159	0.004	0.002	17	0.017
Medium	III	Inward interaction	0.050	49	110	0.002	0.001	10	0.010
Medium	IV	Sweep	0.155	166	358	0.017	0.009	31	0.031
High	I	Outward interaction	0.010	38	56	0.000	0.000	2	0.002
High	II	Ejection	0.160	261	531	0.012	0.008	32	0.032
High	III	Inward interaction	0.005	19	31	0.000	0.000	1	0.001
High	IV	Sweep	0.200	314	555	0.018	0.010	40	0.040

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	0.075	396	712	0.006	0.004	15	0.015
Low	II	Ejection	0.110	321	459	0.007	0.004	22	0.022
Low	III	Inward interaction	0.030	112	184	0.001	0.000	6	0.006
Low	IV	Sweep	0.205	714	1015	0.028	0.015	41	0.041
Medium	I	Outward interaction	0.035	118	287	0.001	0.001	7	0.007
Medium	II	Ejection	0.120	272	741	0.008	0.005	24	0.024
Medium	III	Inward interaction	0.060	254	481	0.004	0.002	12	0.012
Medium	IV	Sweep	0.195	514	885	0.024	0.010	39	0.039
High	I	Outward interaction	0.045	57	129	0.002	0.001	9	0.009
High	II	Ejection	0.160	133	298	0.017	0.010	32	0.032
High	III	Inward interaction	0.015	18	44	0.000	0.000	3	0.003
High	IV	Sweep	0.150	134	304	0.016	0.009	30	0.030

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	0.010	20	37	0.000	0.000	2	0.002
Low	II	Ejection	0.115	172	293	0.007	0.004	23	0.023
Low	III	Inward interaction	0.010	31	62	0.000	0.000	2	0.002
Low	IV	Sweep	0.175	448	904	0.029	0.018	35	0.035
Medium	I	Outward interaction	0.020	21	45	0.000	0.000	4	0.004
Medium	II	Ejection	0.155	119	247	0.015	0.008	31	0.031
Medium	III	Inward interaction	0.055	56	114	0.003	0.001	11	0.011
Medium	IV	Sweep	0.160	168	383	0.022	0.013	32	0.032
High	I	Outward interaction	0.105	181	873	0.014	0.014	21	0.021
High	II	Ejection	0.170	176	390	0.023	0.010	34	0.034
High	III	Inward interaction	0.015	19	75	0.000	0.000	3	0.003
High	IV	Sweep	0.130	112	386	0.011	0.008	26	0.026

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	0.080	176	351	0.008	0.004	16	0.016
High	II	Ejection	0.155	218	509	0.018	0.012	31	0.031
High	III	Inward interaction	0.030	51	101	0.001	0.000	6	0.006
High	IV	Sweep	0.085	110	212	0.005	0.003	17	0.017
Low	I	Outward interaction	0.035	31	130	0.001	0.001	7	0.007
Low	II	Ejection	0.090	58	135	0.006	0.004	18	0.018
Low	III	Inward interaction	0.065	53	107	0.004	0.002	13	0.013
Low	IV	Sweep	0.165	143	284	0.025	0.014	33	0.033
Medium	I	Outward interaction	0.080	81	156	0.007	0.004	16	0.016
Medium	II	Ejection	0.130	88	153	0.013	0.007	26	0.026
Medium	III	Inward interaction	0.040	29	71	0.001	0.001	8	0.008
Medium	IV	Sweep	0.135	78	138	0.012	0.006	27	0.027

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	0.125	159	456	0.016	0.013	25	0.025
High	II	Ejection	0.130	106	172	0.011	0.005	26	0.026
High	III	Inward interaction	0.015	11	22	0.000	0.000	3	0.003
High	IV	Sweep	0.130	132	276	0.014	0.008	26	0.026
Low	I	Outward interaction	0.090	135	255	0.010	0.006	18	0.018
Low	II	Ejection	0.125	98	161	0.010	0.006	25	0.025
Low	III	Inward interaction	0.010	8	13	0.000	0.000	2	0.002
Low	IV	Sweep	0.135	121	208	0.013	0.008	27	0.027
Medium	I	Outward interaction	0.020	16	43	0.000	0.000	4	0.004
Medium	II	Ejection	0.145	119	250	0.017	0.009	29	0.029
Medium	III	Inward interaction	0.035	34	90	0.001	0.001	7	0.007
Medium	IV	Sweep	0.165	113	263	0.018	0.011	33	0.033

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	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	0.015	107	259	0.000	0.000	3	0.003
High	II	Ejection	0.140	391	662	0.010	0.005	28	0.028
High	III	Inward interaction	0.015	91	234	0.000	0.000	3	0.003
High	IV	Sweep	0.220	675	1047	0.026	0.012	44	0.044
Low	I	Outward interaction	0.035	118	279	0.001	0.001	7	0.007
Low	II	Ejection	0.160	327	636	0.015	0.009	32	0.032
Low	III	Inward interaction	0.035	81	149	0.001	0.000	7	0.007
Low	IV	Sweep	0.160	318	661	0.015	0.009	32	0.032
Medium	I	Outward interaction	0.030	61	121	0.001	0.000	6	0.006
Medium	II	Ejection	0.160	267	408	0.017	0.008	32	0.032
Medium	III	Inward interaction	0.040	88	231	0.001	0.001	8	0.008
Medium	IV	Sweep	0.095	132	204	0.005	0.003	19	0.019

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	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	0.060	205	293	0.003	0.001	12	0.012
High	II	Ejection	0.155	407	643	0.016	0.007	31	0.031
High	III	Inward interaction	0.010	38	90	0.000	0.000	2	0.002
High	IV	Sweep	0.120	322	590	0.010	0.005	24	0.024
Low	I	Outward interaction	0.060	186	451	0.004	0.003	12	0.012
Low	II	Ejection	0.160	301	554	0.019	0.011	32	0.032
Low	III	Inward interaction	0.045	97	270	0.002	0.002	9	0.009
Low	IV	Sweep	0.110	130	222	0.006	0.003	22	0.022
Medium	I	Outward interaction	0.045	158	299	0.002	0.001	9	0.009
Medium	II	Ejection	0.130	227	414	0.008	0.006	26	0.026
Medium	III	Inward interaction	0.020	64	106	0.000	0.000	4	0.004
Medium	IV	Sweep	0.200	441	647	0.025	0.013	40	0.040

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	0.070	152	453	0.005	0.003	14	0.014
High	II	Ejection	0.165	246	562	0.019	0.010	33	0.033
High	III	Inward interaction	0.010	15	40	0.000	0.000	2	0.002
High	IV	Sweep	0.150	249	948	0.017	0.015	30	0.030
Low	I	Outward interaction	0.065	77	162	0.004	0.003	13	0.013
Low	II	Ejection	0.200	155	274	0.028	0.015	40	0.040
Low	III	Inward interaction	0.010	14	44	0.000	0.000	2	0.002
Low	IV	Sweep	0.095	89	148	0.008	0.004	19	0.019
Medium	I	Outward interaction	0.025	23	109	0.000	0.001	5	0.005
Medium	II	Ejection	0.235	174	312	0.033	0.017	47	0.047
Medium	III	Inward interaction	0.020	26	50	0.000	0.000	4	0.004
Medium	IV	Sweep	0.140	92	263	0.011	0.008	28	0.028

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	0.045	106	268	0.001	0.001	9	0.009
High	II	Ejection	0.170	489	861	0.025	0.012	34	0.034
High	III	Inward interaction	0.045	100	258	0.001	0.001	9	0.009
High	IV	Sweep	0.090	170	367	0.005	0.003	18	0.018
Low	I	Outward interaction	0.050	116	266	0.002	0.001	10	0.010
Low	II	Ejection	0.090	151	311	0.005	0.002	18	0.018
Low	III	Inward interaction	0.095	203	571	0.007	0.004	19	0.019
Low	IV	Sweep	0.135	229	737	0.012	0.007	27	0.027
Medium	I	Outward interaction	0.040	148	258	0.001	0.001	8	0.008
Medium	II	Ejection	0.120	290	679	0.007	0.004	24	0.024
Medium	III	Inward interaction	0.020	83	143	0.000	0.000	4	0.004
Medium	IV	Sweep	0.190	663	1400	0.024	0.014	38	0.038

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	0.095	119	352	0.007	0.005	19	0.019
High	II	Ejection	0.180	245	600	0.026	0.015	36	0.036
High	III	Inward interaction	0.055	65	153	0.002	0.001	11	0.011
High	IV	Sweep	0.060	69	159	0.002	0.001	12	0.012
Low	I	Outward interaction	0.025	109	432	0.001	0.001	5	0.005
Low	II	Ejection	0.140	273	533	0.009	0.006	28	0.028
Low	III	Inward interaction	0.015	58	230	0.000	0.000	3	0.003
Low	IV	Sweep	0.225	554	1035	0.031	0.019	45	0.045
Medium	I	Outward interaction	0.065	111	344	0.006	0.004	13	0.013
Medium	II	Ejection	0.165	155	330	0.020	0.010	33	0.033
Medium	III	Inward interaction	0.070	68	215	0.004	0.003	14	0.014
Medium	IV	Sweep	0.165	146	432	0.019	0.014	33	0.033

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	0.050	114	316	0.003	0.002	10	0.010
High	II	Ejection	0.140	201	393	0.013	0.008	28	0.028
High	III	Inward interaction	0.010	22	171	0.000	0.000	2	0.002
High	IV	Sweep	0.165	257	470	0.020	0.011	33	0.033
Low	I	Outward interaction	0.245	41	93	0.059	0.031	49	0.049
Low	II	Ejection	0.055	9	21	0.003	0.002	11	0.011
Low	III	Inward interaction	0.050	4	10	0.001	0.001	10	0.010
Low	IV	Sweep	0.025	7	18	0.001	0.001	5	0.005
Medium	I	Outward interaction	0.070	94	176	0.004	0.002	14	0.014
Medium	II	Ejection	0.165	173	299	0.017	0.008	33	0.033
Medium	III	Inward interaction	0.010	16	29	0.000	0.000	2	0.002
Medium	IV	Sweep	0.155	140	271	0.013	0.007	31	0.031

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	0.050	80	95	0.002	0.001	10	0.010
Low	II	Ejection	0.100	151	235	0.006	0.004	20	0.020
Low	III	Inward interaction	0.095	209	343	0.008	0.005	19	0.019
Low	IV	Sweep	0.120	253	361	0.012	0.007	24	0.024
Medium	I	Outward interaction	0.075	93	137	0.004	0.002	15	0.015
Medium	II	Ejection	0.080	105	199	0.004	0.003	16	0.016
Medium	III	Inward interaction	0.085	127	167	0.005	0.003	17	0.017
Medium	IV	Sweep	0.090	159	214	0.007	0.004	18	0.018
High	I	Outward interaction	0.070	236	444	0.005	0.004	14	0.014
High	II	Ejection	0.125	252	433	0.010	0.007	25	0.025
High	III	Inward interaction	0.025	79	108	0.001	0.000	5	0.005
High	IV	Sweep	0.135	301	470	0.013	0.008	27	0.027

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
Low	I	Outward interaction	0.050	97	159	0.002	0.001	10	0.010
Low	II	Ejection	0.155	305	538	0.021	0.015	31	0.031
Low	III	Inward interaction	0.040	58	66	0.001	0.000	8	0.008
Low	IV	Sweep	0.140	207	280	0.013	0.007	28	0.028
Medium	I	Outward interaction	0.025	66	124	0.000	0.000	5	0.005
Medium	II	Ejection	0.155	310	741	0.014	0.010	31	0.031
Medium	III	Inward interaction	0.005	19	50	0.000	0.000	1	0.001
Medium	IV	Sweep	0.180	368	715	0.019	0.011	36	0.036
High	I	Outward interaction	0.095	585	959	0.007	0.004	19	0.019
High	II	Ejection	0.075	390	684	0.004	0.002	15	0.015
High	III	Inward interaction	0.085	519	952	0.005	0.003	17	0.017
High	IV	Sweep	0.120	728	1182	0.011	0.006	24	0.024

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 fraction	TKE fraction	Events	Proportion
				Stress	TKE				
Low	I	Outward interaction	0.050	175	233	0.002	0.001	10	0.010
Low	II	Ejection	0.100	335	474	0.006	0.003	20	0.020
Low	III	Inward interaction	0.080	389	758	0.005	0.004	16	0.016
Low	IV	Sweep	0.125	699	1392	0.015	0.011	25	0.025
Medium	I	Outward interaction	0.195	155	441	0.032	0.025	39	0.039
Medium	II	Ejection	0.060	47	144	0.003	0.003	12	0.012
Medium	III	Inward interaction	0.025	14	26	0.000	0.000	5	0.005
Medium	IV	Sweep	0.130	156	576	0.021	0.022	26	0.026
High	I	Outward interaction	0.070	290	842	0.003	0.002	14	0.014
High	II	Ejection	0.125	634	1101	0.012	0.006	25	0.025
High	III	Inward interaction	0.030	135	296	0.001	0.000	6	0.006
High	IV	Sweep	0.045	193	258	0.001	0.000	9	0.009

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	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	0.065	254	368	0.003	0.002	13	0.013
Low	II	Ejection	0.135	352	484	0.010	0.005	27	0.027
Low	III	Inward interaction	0.050	178	307	0.002	0.001	10	0.010
Low	IV	Sweep	0.145	537	972	0.016	0.010	29	0.029
Medium	I	Outward interaction	0.095	105	168	0.008	0.003	19	0.019
Medium	II	Ejection	0.100	102	173	0.008	0.004	20	0.020
Medium	III	Inward interaction	0.060	55	93	0.003	0.001	12	0.012
Medium	IV	Sweep	0.100	98	196	0.007	0.004	20	0.020
High	I	Outward interaction	0.095	93	181	0.006	0.004	19	0.019
High	II	Ejection	0.110	113	196	0.009	0.005	22	0.022
High	III	Inward interaction	0.045	54	146	0.002	0.001	9	0.009
High	IV	Sweep	0.110	98	213	0.008	0.005	22	0.022

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	0.020	43	123	0.000	0.000	4	0.004
High	II	Ejection	0.170	219	347	0.020	0.010	34	0.034
High	III	Inward interaction	0.040	70	175	0.001	0.001	8	0.008
High	IV	Sweep	0.130	134	316	0.009	0.007	26	0.026
Low	I	Outward interaction	0.035	93	193	0.001	0.000	7	0.007
Low	II	Ejection	0.140	357	881	0.013	0.005	28	0.028
Low	III	Inward interaction	0.040	127	419	0.001	0.001	8	0.008
Low	IV	Sweep	0.105	310	928	0.008	0.004	21	0.021
Medium	I	Outward interaction	0.040	40	116	0.001	0.001	8	0.008
Medium	II	Ejection	0.140	125	212	0.015	0.008	28	0.028
Medium	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
Medium	IV	Sweep	0.145	104	183	0.013	0.007	29	0.029

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	0.035	79	103	0.001	0.001	7	0.007
High	II	Ejection	0.115	219	307	0.010	0.006	23	0.023
High	III	Inward interaction	0.005	7	19	0.000	0.000	1	0.001
High	IV	Sweep	0.125	197	270	0.010	0.006	25	0.025
Low	I	Outward interaction	0.060	132	287	0.004	0.003	12	0.012
Low	II	Ejection	0.135	160	282	0.011	0.006	27	0.027
Low	III	Inward interaction	0.035	76	134	0.001	0.001	7	0.007
Low	IV	Sweep	0.115	148	300	0.008	0.006	23	0.023
Medium	I	Outward interaction	0.085	152	222	0.008	0.004	17	0.017
Medium	II	Ejection	0.160	215	334	0.021	0.013	32	0.032
Medium	III	Inward interaction	0.040	45	70	0.001	0.001	8	0.008
Medium	IV	Sweep	0.090	95	158	0.005	0.003	18	0.018

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	0.035	523	887	0.001	0.001	7	0.007
High	II	Ejection	0.240	2265	3995	0.038	0.022	48	0.048
High	III	Inward interaction	0.010	208	508	0.000	0.000	2	0.002
High	IV	Sweep	0.090	549	721	0.003	0.002	18	0.018
Low	I	Outward interaction	0.060	172	254	0.003	0.002	12	0.012
Low	II	Ejection	0.160	517	718	0.025	0.012	32	0.032
Low	III	Inward interaction	0.040	122	239	0.001	0.001	8	0.008
Low	IV	Sweep	0.155	353	693	0.016	0.011	31	0.031
Medium	I	Outward interaction	0.035	96	157	0.001	0.001	7	0.007
Medium	II	Ejection	0.235	578	834	0.041	0.024	47	0.047
Medium	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
Medium	IV	Sweep	0.070	108	163	0.002	0.001	14	0.014

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	0.015	225	341	0.000	0.000	3	0.003
High	II	Ejection	0.175	1565	2269	0.015	0.008	35	0.035
High	III	Inward interaction	0.010	138	227	0.000	0.000	2	0.002
High	IV	Sweep	0.150	1372	2246	0.011	0.007	30	0.030
Low	I	Outward interaction	0.030	79	169	0.001	0.001	6	0.006
Low	II	Ejection	0.200	545	1090	0.035	0.022	40	0.040
Low	III	Inward interaction	0.035	91	124	0.001	0.000	7	0.007
Low	IV	Sweep	0.085	162	335	0.004	0.003	17	0.017
Medium	I	Outward interaction	0.005	37	141	0.000	0.000	1	0.001
Medium	II	Ejection	0.145	900	1334	0.012	0.007	29	0.029
Medium	III	Inward interaction	0.025	229	302	0.001	0.000	5	0.005
Medium	IV	Sweep	0.215	1340	2123	0.027	0.016	43	0.043

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	0.015	31	59	0.000	0.000	3	0.003
High	II	Ejection	0.135	507	895	0.020	0.011	27	0.027
High	III	Inward interaction	0.060	167	332	0.003	0.002	12	0.012
High	IV	Sweep	0.080	223	410	0.005	0.003	16	0.016
Low	I	Outward interaction	0.065	139	237	0.004	0.002	13	0.013
Low	II	Ejection	0.140	312	482	0.017	0.009	28	0.028
Low	III	Inward interaction	0.045	77	101	0.001	0.001	9	0.009
Low	IV	Sweep	0.090	158	304	0.006	0.004	18	0.018
Medium	I	Outward interaction	0.095	192	296	0.006	0.003	19	0.019
Medium	II	Ejection	0.100	237	449	0.008	0.006	20	0.020
Medium	III	Inward interaction	0.080	150	282	0.004	0.003	16	0.016
Medium	IV	Sweep	0.100	193	282	0.007	0.003	20	0.020

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	0.050	240	386	0.002	0.001	10	0.010
High	II	Ejection	0.115	671	1336	0.010	0.006	23	0.023
High	III	Inward interaction	0.015	72	123	0.000	0.000	3	0.003
High	IV	Sweep	0.125	738	1616	0.012	0.008	25	0.025
Low	I	Outward interaction	0.115	563	1091	0.008	0.005	23	0.023
Low	II	Ejection	0.035	236	322	0.001	0.000	7	0.007
Low	III	Inward interaction	0.155	707	1168	0.013	0.007	31	0.031
Low	IV	Sweep	0.010	67	111	0.000	0.000	2	0.002
Medium	I	Outward interaction	0.000	0	0	0.000	0.000	0	0.000
Medium	II	Ejection	0.210	185	377	0.024	0.017	42	0.042
Medium	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
Medium	IV	Sweep	0.230	186	379	0.026	0.018	46	0.046

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	0.060	72	158	0.002	0.002	12	0.012
High	II	Ejection	0.115	133	208	0.009	0.004	23	0.023
High	III	Inward interaction	0.045	50	93	0.001	0.001	9	0.009
High	IV	Sweep	0.150	224	384	0.019	0.010	30	0.030
Low	I	Outward interaction	0.060	326	500	0.003	0.001	12	0.012
Low	II	Ejection	0.040	178	290	0.001	0.001	8	0.008
Low	III	Inward interaction	0.115	703	1145	0.012	0.006	23	0.023
Low	IV	Sweep	0.160	926	1506	0.021	0.011	32	0.032
Medium	I	Outward interaction	0.055	82	169	0.003	0.002	11	0.011
Medium	II	Ejection	0.145	145	253	0.013	0.007	29	0.029
Medium	III	Inward interaction	0.035	39	163	0.001	0.001	7	0.007
Medium	IV	Sweep	0.145	179	376	0.016	0.010	29	0.029

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	0.035	73	178	0.001	0.001	7	0.007
High	II	Ejection	0.130	209	434	0.011	0.006	26	0.026
High	III	Inward interaction	0.025	69	127	0.001	0.000	5	0.005
High	IV	Sweep	0.180	221	483	0.017	0.010	36	0.036
Low	I	Outward interaction	0.030	59	132	0.001	0.000	6	0.006
Low	II	Ejection	0.070	158	240	0.004	0.001	14	0.014
Low	III	Inward interaction	0.040	118	203	0.002	0.001	8	0.008
Low	IV	Sweep	0.155	359	871	0.018	0.011	31	0.031
Medium	I	Outward interaction	0.055	100	181	0.003	0.001	11	0.011
Medium	II	Ejection	0.135	224	422	0.014	0.008	27	0.027
Medium	III	Inward interaction	0.045	59	90	0.001	0.001	9	0.009
Medium	IV	Sweep	0.145	205	351	0.014	0.007	29	0.029

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 fraction	TKE fraction	Events	Proportion
				Stress	TKE				
Low	I	Outward interaction	0.075	184	241	0.005	0.002	15	0.015
Low	II	Ejection	0.155	510	676	0.026	0.013	31	0.031
Low	III	Inward interaction	0.015	26	56	0.000	0.000	3	0.003
Low	IV	Sweep	0.070	131	228	0.003	0.002	14	0.014
High	I	Outward interaction	0.125	690	1040	0.016	0.010	25	0.025
High	II	Ejection	0.155	882	1289	0.025	0.016	31	0.031
High	III	Inward interaction	0.045	176	225	0.001	0.001	9	0.009
High	IV	Sweep	0.080	183	267	0.003	0.002	16	0.016
Medium	I	Outward interaction	0.150	548	839	0.026	0.016	30	0.030
Medium	II	Ejection	0.080	173	232	0.004	0.002	16	0.016
Medium	III	Inward interaction	0.035	76	91	0.001	0.000	7	0.007
Medium	IV	Sweep	0.085	152	191	0.004	0.002	17	0.017

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	0.115	527	822	0.014	0.009	23	0.023
Low	II	Ejection	0.185	757	1089	0.032	0.019	37	0.037
Low	III	Inward interaction	0.020	45	50	0.000	0.000	4	0.004
Low	IV	Sweep	0.065	149	196	0.002	0.001	13	0.013
High	I	Outward interaction	0.115	1120	1967	0.011	0.006	23	0.023
High	II	Ejection	0.075	848	1639	0.005	0.003	15	0.015
High	III	Inward interaction	0.060	430	922	0.002	0.002	12	0.012
High	IV	Sweep	0.055	482	1005	0.002	0.002	11	0.011
Medium	I	Outward interaction	0.040	42	129	0.001	0.001	8	0.008
Medium	II	Ejection	0.170	115	240	0.017	0.010	34	0.034
Medium	III	Inward interaction	0.025	24	62	0.001	0.000	5	0.005
Medium	IV	Sweep	0.175	133	286	0.020	0.012	35	0.035

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
Low	I	Outward interaction	0.045	121	190	0.001	0.001	9	0.009
Low	II	Ejection	0.095	239	398	0.006	0.003	19	0.019
Low	III	Inward interaction	0.065	187	291	0.003	0.002	13	0.013
Low	IV	Sweep	0.100	329	514	0.008	0.005	20	0.020
High	I	Outward interaction	0.115	1093	3274	0.010	0.006	23	0.023
High	II	Ejection	0.125	1260	2933	0.013	0.006	25	0.025
High	III	Inward interaction	0.040	279	732	0.001	0.001	8	0.008
High	IV	Sweep	0.050	437	1022	0.002	0.001	10	0.010
Medium	I	Outward interaction	0.085	308	792	0.009	0.007	17	0.017
Medium	II	Ejection	0.150	342	817	0.017	0.012	30	0.030
Medium	III	Inward interaction	0.020	36	86	0.000	0.000	4	0.004
Medium	IV	Sweep	0.085	174	303	0.005	0.003	17	0.017

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	0.010	62	82	0.000	0.000	2	0.002
Low	II	Ejection	0.045	292	475	0.001	0.001	9	0.009
Low	III	Inward interaction	0.040	486	677	0.002	0.001	8	0.008
Low	IV	Sweep	0.195	1858	3152	0.030	0.020	39	0.039
High	I	Outward interaction	0.045	66	110	0.002	0.001	9	0.009
High	II	Ejection	0.150	250	386	0.021	0.011	30	0.030
High	III	Inward interaction	0.010	13	23	0.000	0.000	2	0.002
High	IV	Sweep	0.120	135	227	0.009	0.005	24	0.024
Medium	I	Outward interaction	0.040	89	160	0.001	0.001	8	0.008
Medium	II	Ejection	0.220	363	588	0.031	0.017	44	0.044
Medium	III	Inward interaction	0.030	74	134	0.001	0.001	6	0.006
Medium	IV	Sweep	0.070	113	176	0.003	0.002	14	0.014

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	0.080	219	357	0.007	0.004	16	0.016
High	II	Ejection	0.135	203	339	0.011	0.007	27	0.027
High	III	Inward interaction	0.065	172	303	0.005	0.003	13	0.013
High	IV	Sweep	0.110	167	303	0.008	0.005	22	0.022
Low	I	Outward interaction	0.100	561	1012	0.008	0.003	20	0.020
Low	II	Ejection	0.075	393	750	0.004	0.002	15	0.015
Low	III	Inward interaction	0.080	381	994	0.004	0.002	16	0.016
Low	IV	Sweep	0.070	427	997	0.004	0.002	14	0.014
Medium	I	Outward interaction	0.100	238	368	0.011	0.007	20	0.020
Medium	II	Ejection	0.125	143	226	0.009	0.005	25	0.025
Medium	III	Inward interaction	0.015	33	43	0.000	0.000	3	0.003
Medium	IV	Sweep	0.125	158	223	0.010	0.005	25	0.025

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	0.155	737	1126	0.027	0.017	31	0.031
High	II	Ejection	0.135	432	600	0.014	0.008	27	0.027
High	III	Inward interaction	0.035	91	135	0.001	0.000	7	0.007
High	IV	Sweep	0.090	236	294	0.005	0.003	18	0.018
Low	I	Outward interaction	0.010	21	36	0.000	0.000	2	0.002
Low	II	Ejection	0.075	152	324	0.003	0.002	15	0.015
Low	III	Inward interaction	0.105	303	692	0.009	0.005	21	0.021
Low	IV	Sweep	0.170	455	953	0.022	0.010	34	0.034
Medium	I	Outward interaction	0.020	37	55	0.000	0.000	4	0.004
Medium	II	Ejection	0.140	231	323	0.012	0.006	28	0.028
Medium	III	Inward interaction	0.050	101	216	0.002	0.001	10	0.010
Medium	IV	Sweep	0.145	294	454	0.015	0.008	29	0.029

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	0.005	108	148	0.000	0.000	1	0.001
High	II	Ejection	0.195	3339	5159	0.025	0.014	39	0.039
High	III	Inward interaction	0.010	309	749	0.000	0.000	2	0.002
High	IV	Sweep	0.170	2306	3745	0.015	0.009	34	0.034
Low	I	Outward interaction	0.035	153	571	0.001	0.000	7	0.007
Low	II	Ejection	0.155	749	1912	0.019	0.006	31	0.031
Low	III	Inward interaction	0.035	151	398	0.001	0.000	7	0.007
Low	IV	Sweep	0.120	467	1356	0.009	0.003	24	0.024
Medium	I	Outward interaction	0.035	67	101	0.001	0.000	7	0.007
Medium	II	Ejection	0.225	371	577	0.031	0.018	45	0.045
Medium	III	Inward interaction	0.025	58	93	0.001	0.000	5	0.005
Medium	IV	Sweep	0.115	157	261	0.007	0.004	23	0.023

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	0.045	832	1089	0.001	0.001	9	0.009
High	II	Ejection	0.190	3478	5229	0.026	0.016	38	0.038
High	III	Inward interaction	0.025	459	568	0.000	0.000	5	0.005
High	IV	Sweep	0.095	1438	2422	0.005	0.004	19	0.019
Low	I	Outward interaction	0.060	231	389	0.003	0.001	12	0.012
Low	II	Ejection	0.105	422	614	0.010	0.004	21	0.021
Low	III	Inward interaction	0.040	91	234	0.001	0.001	8	0.008
Low	IV	Sweep	0.125	467	774	0.013	0.006	25	0.025
Medium	I	Outward interaction	0.025	493	643	0.001	0.000	5	0.005
Medium	II	Ejection	0.240	3344	4819	0.035	0.024	48	0.048
Medium	III	Inward interaction	0.010	175	270	0.000	0.000	2	0.002
Medium	IV	Sweep	0.085	803	903	0.003	0.002	17	0.017

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 fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	0.000	0	0	0.000	0.000	0	0.000
High	II	Ejection	0.250	1260	1940	0.047	0.028	50	0.050
High	III	Inward interaction	0.020	163	363	0.000	0.000	4	0.004
High	IV	Sweep	0.070	212	265	0.002	0.001	14	0.014
Low	I	Outward interaction	0.030	91	137	0.001	0.000	6	0.006
Low	II	Ejection	0.245	715	937	0.040	0.019	49	0.049
Low	III	Inward interaction	0.060	215	317	0.003	0.002	12	0.012
Low	IV	Sweep	0.050	101	143	0.001	0.001	10	0.010
Medium	I	Outward interaction	0.045	209	299	0.002	0.001	9	0.009
Medium	II	Ejection	0.235	881	1298	0.038	0.024	47	0.047
Medium	III	Inward interaction	0.015	63	70	0.000	0.000	3	0.003
Medium	IV	Sweep	0.105	311	390	0.006	0.003	21	0.021

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	0.225	1146	2596	0.055	0.039	45	0.045
High	II	Ejection	0.030	165	301	0.001	0.001	6	0.006
High	III	Inward interaction	0.020	48	87	0.000	0.000	4	0.004
High	IV	Sweep	0.000	0	0	0.000	0.000	0	0.000
Low	I	Outward interaction	0.080	879	1635	0.005	0.003	16	0.016
Low	II	Ejection	0.105	1119	1602	0.008	0.004	21	0.021
Low	III	Inward interaction	0.065	790	1768	0.003	0.002	13	0.013
Low	IV	Sweep	0.135	1200	2266	0.011	0.007	27	0.027
Medium	I	Outward interaction	0.070	360	870	0.006	0.004	14	0.014
Medium	II	Ejection	0.130	293	642	0.009	0.005	26	0.026
Medium	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
Medium	IV	Sweep	0.175	577	1330	0.024	0.014	35	0.035

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	0.055	186	446	0.002	0.001	11	0.011
High	II	Ejection	0.080	355	761	0.005	0.004	16	0.016
High	III	Inward interaction	0.075	316	523	0.005	0.002	15	0.015
High	IV	Sweep	0.115	546	987	0.012	0.007	23	0.023
Low	I	Outward interaction	0.070	359	613	0.004	0.002	14	0.014
Low	II	Ejection	0.040	199	254	0.001	0.001	8	0.008
Low	III	Inward interaction	0.165	615	1141	0.017	0.010	33	0.033
Low	IV	Sweep	0.035	160	318	0.001	0.001	7	0.007
Medium	I	Outward interaction	0.020	28	45	0.000	0.000	4	0.004
Medium	II	Ejection	0.195	268	531	0.029	0.017	39	0.039
Medium	III	Inward interaction	0.035	65	121	0.001	0.001	7	0.007
Medium	IV	Sweep	0.135	165	240	0.012	0.005	27	0.027

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	0.045	102	194	0.002	0.001	9	0.009
High	II	Ejection	0.135	245	374	0.011	0.005	27	0.027
High	III	Inward interaction	0.050	102	171	0.002	0.001	10	0.010
High	IV	Sweep	0.145	422	775	0.021	0.010	29	0.029
Low	I	Outward interaction	0.045	120	180	0.002	0.001	9	0.009
Low	II	Ejection	0.110	223	414	0.007	0.005	22	0.022
Low	III	Inward interaction	0.040	104	141	0.001	0.001	8	0.008
Low	IV	Sweep	0.170	494	832	0.025	0.015	34	0.034
Medium	I	Outward interaction	0.070	307	678	0.005	0.004	14	0.014
Medium	II	Ejection	0.080	238	317	0.004	0.002	16	0.016
Medium	III	Inward interaction	0.050	191	245	0.002	0.001	10	0.010
Medium	IV	Sweep	0.140	444	669	0.014	0.007	28	0.028

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	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	0.035	61	288	0.002	0.002	7	0.007
High	II	Ejection	0.100	93	156	0.009	0.003	20	0.020
High	III	Inward interaction	0.045	59	156	0.003	0.002	9	0.009
High	IV	Sweep	0.100	69	202	0.007	0.004	20	0.020
Low	I	Outward interaction	0.095	215	654	0.013	0.010	19	0.019
Low	II	Ejection	0.065	84	167	0.003	0.002	13	0.013
Low	III	Inward interaction	0.075	127	320	0.006	0.004	15	0.015
Low	IV	Sweep	0.100	140	284	0.009	0.005	20	0.020
Medium	I	Outward interaction	0.090	91	271	0.018	0.013	18	0.018
Medium	II	Ejection	0.125	49	89	0.013	0.006	25	0.025
Medium	III	Inward interaction	0.015	6	12	0.000	0.000	3	0.003
Medium	IV	Sweep	0.095	35	94	0.007	0.005	19	0.019

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	0.085	247	832	0.017	0.015	17	0.017
High	II	Ejection	0.140	133	251	0.015	0.008	28	0.028
High	III	Inward interaction	0.045	51	132	0.002	0.001	9	0.009
High	IV	Sweep	0.075	61	237	0.004	0.004	15	0.015
Low	I	Outward interaction	0.080	124	440	0.015	0.013	16	0.016
Low	II	Ejection	0.100	63	124	0.010	0.005	20	0.020
Low	III	Inward interaction	0.005	3	11	0.000	0.000	1	0.001
Low	IV	Sweep	0.090	53	147	0.007	0.005	18	0.018
Medium	I	Outward interaction	0.060	88	259	0.010	0.008	12	0.012
Medium	II	Ejection	0.140	51	112	0.014	0.008	28	0.028
Medium	III	Inward interaction	0.010	5	12	0.000	0.000	2	0.002
Medium	IV	Sweep	0.125	44	117	0.011	0.008	25	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	0.095	163	683	0.023	0.021	19	0.019
High	II	Ejection	0.095	48	105	0.007	0.003	19	0.019
High	III	Inward interaction	0.020	14	53	0.000	0.000	4	0.004
High	IV	Sweep	0.105	62	159	0.010	0.005	21	0.021
Low	I	Outward interaction	0.055	110	346	0.007	0.005	11	0.011
Low	II	Ejection	0.175	101	239	0.020	0.012	35	0.035
Low	III	Inward interaction	0.010	13	47	0.000	0.000	2	0.002
Low	IV	Sweep	0.105	66	179	0.008	0.005	21	0.021
Medium	I	Outward interaction	0.070	88	277	0.012	0.012	14	0.014
Medium	II	Ejection	0.160	59	137	0.019	0.013	32	0.032
Medium	III	Inward interaction	0.005	3	6	0.000	0.000	1	0.001
Medium	IV	Sweep	0.125	55	120	0.014	0.009	25	0.025

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	0.070	156	355	0.013	0.008	14	0.014
High	II	Ejection	0.120	74	146	0.011	0.006	24	0.024
High	III	Inward interaction	0.005	4	6	0.000	0.000	1	0.001
High	IV	Sweep	0.120	82	188	0.012	0.008	24	0.024
Low	I	Outward interaction	0.075	205	648	0.015	0.011	15	0.015
Low	II	Ejection	0.110	81	180	0.009	0.004	22	0.022
Low	III	Inward interaction	0.025	36	123	0.001	0.001	5	0.005
Low	IV	Sweep	0.120	86	240	0.010	0.006	24	0.024
Medium	I	Outward interaction	0.020	30	54	0.001	0.000	4	0.004
Medium	II	Ejection	0.170	96	199	0.026	0.014	34	0.034
Medium	III	Inward interaction	0.015	15	40	0.000	0.000	3	0.003
Medium	IV	Sweep	0.130	56	133	0.012	0.007	26	0.026

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	0.055	108	398	0.005	0.004	11	0.011
High	II	Ejection	0.140	149	296	0.018	0.008	28	0.028
High	III	Inward interaction	0.005	6	17	0.000	0.000	1	0.001
High	IV	Sweep	0.070	63	269	0.004	0.003	14	0.014
Low	I	Outward interaction	0.040	72	359	0.003	0.004	8	0.008
Low	II	Ejection	0.140	128	270	0.016	0.010	28	0.028
Low	III	Inward interaction	0.040	42	91	0.002	0.001	8	0.008
Low	IV	Sweep	0.075	65	151	0.004	0.003	15	0.015
Medium	I	Outward interaction	0.075	153	405	0.021	0.014	15	0.015
Medium	II	Ejection	0.100	42	87	0.008	0.004	20	0.020
Medium	III	Inward interaction	0.015	7	20	0.000	0.000	3	0.003
Medium	IV	Sweep	0.075	32	98	0.004	0.003	15	0.015

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	0.115	228	686	0.030	0.020	23	0.023
High	II	Ejection	0.105	67	137	0.008	0.004	21	0.021
High	III	Inward interaction	0.050	37	123	0.002	0.002	10	0.010
High	IV	Sweep	0.075	56	179	0.005	0.003	15	0.015
Low	I	Outward interaction	0.070	137	476	0.010	0.010	14	0.014
Low	II	Ejection	0.180	131	269	0.025	0.015	36	0.036
Low	III	Inward interaction	0.005	5	25	0.000	0.000	1	0.001
Low	IV	Sweep	0.075	48	132	0.004	0.003	15	0.015
Medium	I	Outward interaction	0.060	117	367	0.013	0.011	12	0.012
Medium	II	Ejection	0.125	53	118	0.012	0.007	25	0.025
Medium	III	Inward interaction	0.015	8	21	0.000	0.000	3	0.003
Medium	IV	Sweep	0.140	52	116	0.014	0.008	28	0.028

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	0.020	35	113	0.001	0.001	4	0.004
High	II	Ejection	0.145	85	161	0.014	0.007	29	0.029
High	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
High	IV	Sweep	0.120	74	186	0.010	0.007	24	0.024
Low	I	Outward interaction	0.105	346	903	0.025	0.015	21	0.021
Low	II	Ejection	0.105	129	280	0.009	0.005	21	0.021
Low	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
Low	IV	Sweep	0.055	56	139	0.002	0.001	11	0.011
Medium	I	Outward interaction	0.050	87	211	0.008	0.006	10	0.010
Medium	II	Ejection	0.120	64	123	0.014	0.008	24	0.024
Medium	III	Inward interaction	0.005	3	10	0.000	0.000	1	0.001
Medium	IV	Sweep	0.135	54	158	0.014	0.011	27	0.027

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	0.065	192	545	0.013	0.009	13	0.013
High	II	Ejection	0.105	75	148	0.008	0.004	21	0.021
High	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
High	IV	Sweep	0.110	108	304	0.013	0.009	22	0.022
Low	I	Outward interaction	0.055	146	255	0.006	0.002	11	0.011
Low	II	Ejection	0.085	87	179	0.006	0.003	17	0.017
Low	III	Inward interaction	0.025	32	62	0.001	0.000	5	0.005
Low	IV	Sweep	0.105	128	425	0.011	0.008	21	0.021
Medium	I	Outward interaction	0.035	40	92	0.002	0.001	7	0.007
Medium	II	Ejection	0.090	67	101	0.007	0.004	18	0.018
Medium	III	Inward interaction	0.010	12	22	0.000	0.000	2	0.002
Medium	IV	Sweep	0.135	151	326	0.023	0.018	27	0.027

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	0.100	309	1020	0.022	0.015	20	0.020
High	II	Ejection	0.095	109	257	0.007	0.004	19	0.019
High	III	Inward interaction	0.055	68	232	0.003	0.002	11	0.011
High	IV	Sweep	0.085	89	427	0.005	0.005	17	0.017
Low	I	Outward interaction	0.120	758	2087	0.032	0.025	24	0.024
Low	II	Ejection	0.070	142	284	0.004	0.002	14	0.014
Low	III	Inward interaction	0.035	82	281	0.001	0.001	7	0.007
Low	IV	Sweep	0.070	157	655	0.004	0.005	14	0.014
Medium	I	Outward interaction	0.105	288	1012	0.025	0.018	21	0.021
Medium	II	Ejection	0.110	102	244	0.009	0.004	22	0.022
Medium	III	Inward interaction	0.030	41	113	0.001	0.001	6	0.006
Medium	IV	Sweep	0.050	44	207	0.002	0.002	10	0.010

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	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	0.030	93	423	0.002	0.001	6	0.006
High	II	Ejection	0.090	159	343	0.009	0.003	18	0.018
High	III	Inward interaction	0.040	68	210	0.002	0.001	8	0.008
High	IV	Sweep	0.095	101	542	0.006	0.006	19	0.019
Low	I	Outward interaction	0.195	689	1538	0.079	0.055	39	0.039
Low	II	Ejection	0.135	275	543	0.022	0.013	27	0.027
Low	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
Low	IV	Sweep	0.040	47	128	0.001	0.001	8	0.008
Medium	I	Outward interaction	0.060	131	872	0.005	0.007	12	0.012
Medium	II	Ejection	0.095	102	268	0.007	0.003	19	0.019
Medium	III	Inward interaction	0.020	40	144	0.001	0.000	4	0.004
Medium	IV	Sweep	0.105	110	401	0.008	0.006	21	0.021

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	0.000	0	0	0.000	0.000	0	0.000
High	II	Ejection	0.115	180	340	0.010	0.006	23	0.023
High	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
High	IV	Sweep	0.125	159	338	0.010	0.007	25	0.025
Low	I	Outward interaction	0.125	73	202	0.038	0.016	25	0.025
Low	II	Ejection	0.040	12	33	0.002	0.001	8	0.008
Low	III	Inward interaction	0.045	9	55	0.002	0.002	9	0.009
Low	IV	Sweep	0.040	10	25	0.002	0.001	8	0.008
Medium	I	Outward interaction	0.045	162	556	0.006	0.005	9	0.009
Medium	II	Ejection	0.160	122	309	0.016	0.009	32	0.032
Medium	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
Medium	IV	Sweep	0.100	93	379	0.008	0.007	20	0.020

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	0.030	90	249	0.003	0.002	6	0.006
Low	II	Ejection	0.125	81	151	0.011	0.006	25	0.025
Low	III	Inward interaction	0.015	24	155	0.000	0.001	3	0.003
Low	IV	Sweep	0.135	96	300	0.014	0.013	27	0.027
Medium	I	Outward interaction	0.070	170	780	0.012	0.011	14	0.014
Medium	II	Ejection	0.130	113	267	0.015	0.007	26	0.026
Medium	III	Inward interaction	0.020	19	93	0.000	0.000	4	0.004
Medium	IV	Sweep	0.085	64	182	0.006	0.003	17	0.017

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	0.030	76	278	0.002	0.001	6	0.006
High	II	Ejection	0.080	77	169	0.005	0.002	16	0.016
High	III	Inward interaction	0.025	35	95	0.001	0.000	5	0.005
High	IV	Sweep	0.130	142	668	0.014	0.014	26	0.026
Low	I	Outward interaction	0.045	115	328	0.004	0.003	9	0.009
Low	II	Ejection	0.160	183	335	0.023	0.011	32	0.032
Low	III	Inward interaction	0.010	14	75	0.000	0.000	2	0.002
Low	IV	Sweep	0.085	79	253	0.005	0.004	17	0.017
Medium	I	Outward interaction	0.040	69	300	0.005	0.005	8	0.008
Medium	II	Ejection	0.130	51	107	0.011	0.006	26	0.026
Medium	III	Inward interaction	0.005	3	5	0.000	0.000	1	0.001
Medium	IV	Sweep	0.130	54	156	0.012	0.009	26	0.026

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	0.030	70	290	0.002	0.002	6	0.006
High	II	Ejection	0.065	47	115	0.003	0.002	13	0.013
High	III	Inward interaction	0.085	126	313	0.009	0.006	17	0.017
High	IV	Sweep	0.120	154	473	0.015	0.012	24	0.024
Low	I	Outward interaction	0.080	151	808	0.013	0.016	16	0.016
Low	II	Ejection	0.110	66	167	0.008	0.005	22	0.022
Low	III	Inward interaction	0.030	34	114	0.001	0.001	6	0.006
Low	IV	Sweep	0.095	69	266	0.007	0.006	19	0.019
Medium	I	Outward interaction	0.030	35	98	0.002	0.001	6	0.006
Medium	II	Ejection	0.165	67	144	0.022	0.012	33	0.033
Medium	III	Inward interaction	0.020	11	27	0.000	0.000	4	0.004
Medium	IV	Sweep	0.105	49	103	0.010	0.005	21	0.021

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	0.085	240	611	0.016	0.010	17	0.017
High	II	Ejection	0.115	107	204	0.009	0.005	23	0.023
High	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
High	IV	Sweep	0.170	193	487	0.025	0.017	34	0.034
Low	I	Outward interaction	0.050	134	334	0.008	0.005	10	0.010
Low	II	Ejection	0.125	86	186	0.013	0.008	25	0.025
Low	III	Inward interaction	0.010	12	23	0.000	0.000	2	0.002
Low	IV	Sweep	0.075	48	142	0.004	0.003	15	0.015
Medium	I	Outward interaction	0.055	91	272	0.009	0.008	11	0.011
Medium	II	Ejection	0.115	41	84	0.008	0.005	23	0.023
Medium	III	Inward interaction	0.005	3	4	0.000	0.000	1	0.001
Medium	IV	Sweep	0.135	63	161	0.015	0.011	27	0.027

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	0.085	248	588	0.012	0.008	17	0.017
High	II	Ejection	0.160	234	469	0.021	0.012	32	0.032
High	III	Inward interaction	0.010	14	56	0.000	0.000	2	0.002
High	IV	Sweep	0.065	68	217	0.003	0.002	13	0.013
Low	I	Outward interaction	0.070	148	506	0.012	0.010	14	0.014
Low	II	Ejection	0.070	38	79	0.003	0.002	14	0.014
Low	III	Inward interaction	0.025	23	68	0.001	0.000	5	0.005
Low	IV	Sweep	0.090	62	140	0.007	0.004	18	0.018
Medium	I	Outward interaction	0.085	129	320	0.013	0.009	17	0.017
Medium	II	Ejection	0.145	103	208	0.018	0.010	29	0.029
Medium	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
Medium	IV	Sweep	0.085	47	128	0.005	0.004	17	0.017

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	0.155	768	2445	0.076	0.064	31	0.031
High	II	Ejection	0.095	137	269	0.008	0.004	19	0.019
High	III	Inward interaction	0.015	20	67	0.000	0.000	3	0.003
High	IV	Sweep	0.030	31	136	0.001	0.001	6	0.006
Low	I	Outward interaction	0.020	63	115	0.001	0.000	4	0.004
Low	II	Ejection	0.115	112	226	0.010	0.005	23	0.023
Low	III	Inward interaction	0.035	44	160	0.001	0.001	7	0.007
Low	IV	Sweep	0.100	128	467	0.010	0.009	20	0.020
Medium	I	Outward interaction	0.050	67	248	0.006	0.005	10	0.010
Medium	II	Ejection	0.105	47	99	0.008	0.004	21	0.021
Medium	III	Inward interaction	0.015	12	33	0.000	0.000	3	0.003
Medium	IV	Sweep	0.120	53	132	0.011	0.006	24	0.024

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	0.075	137	467	0.012	0.010	15	0.015
High	II	Ejection	0.170	128	289	0.025	0.014	34	0.034
High	III	Inward interaction	0.010	7	17	0.000	0.000	2	0.002
High	IV	Sweep	0.075	47	198	0.004	0.004	15	0.015
Low	I	Outward interaction	0.050	81	335	0.003	0.003	10	0.010
Low	II	Ejection	0.120	110	208	0.011	0.005	24	0.024
Low	III	Inward interaction	0.045	83	168	0.003	0.002	9	0.009
Low	IV	Sweep	0.095	106	286	0.008	0.005	19	0.019
Medium	I	Outward interaction	0.055	103	242	0.010	0.006	11	0.011
Medium	II	Ejection	0.100	47	101	0.008	0.004	20	0.020
Medium	III	Inward interaction	0.020	11	45	0.000	0.000	4	0.004
Medium	IV	Sweep	0.125	55	153	0.012	0.008	25	0.025

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	0.120	162	372	0.031	0.016	24	0.024
High	II	Ejection	0.095	49	116	0.008	0.004	19	0.019
High	III	Inward interaction	0.005	2	6	0.000	0.000	1	0.001
High	IV	Sweep	0.100	54	142	0.009	0.005	20	0.020
Low	I	Outward interaction	0.030	83	183	0.002	0.001	6	0.006
Low	II	Ejection	0.125	114	264	0.012	0.005	25	0.025
Low	III	Inward interaction	0.020	29	109	0.000	0.000	4	0.004
Low	IV	Sweep	0.105	108	326	0.009	0.006	21	0.021
Medium	I	Outward interaction	0.040	67	175	0.005	0.003	8	0.008
Medium	II	Ejection	0.145	50	128	0.015	0.008	29	0.029
Medium	III	Inward interaction	0.015	8	29	0.000	0.000	3	0.003
Medium	IV	Sweep	0.125	50	122	0.013	0.007	25	0.025

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	0.000	0	0	0.000	0.000	0	0.000
High	II	Ejection	0.030	20	42	0.001	0.000	6	0.006
High	III	Inward interaction	0.010	11	35	0.000	0.000	2	0.002
High	IV	Sweep	0.075	46	97	0.003	0.002	15	0.015
Low	I	Outward interaction	0.055	106	247	0.004	0.003	11	0.011
Low	II	Ejection	0.130	194	329	0.016	0.009	26	0.026
Low	III	Inward interaction	0.010	20	24	0.000	0.000	2	0.002
Low	IV	Sweep	0.060	67	71	0.003	0.001	12	0.012
Medium	I	Outward interaction	0.030	55	134	0.003	0.002	6	0.006
Medium	II	Ejection	0.135	65	148	0.016	0.010	27	0.027
Medium	III	Inward interaction	0.015	10	27	0.000	0.000	3	0.003
Medium	IV	Sweep	0.140	49	107	0.013	0.007	28	0.028

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	0.055	207	869	0.009	0.009	11	0.011
High	II	Ejection	0.160	170	308	0.020	0.009	32	0.032
High	III	Inward interaction	0.005	6	22	0.000	0.000	1	0.001
High	IV	Sweep	0.140	117	477	0.012	0.012	28	0.028
Low	I	Outward interaction	0.060	146	463	0.008	0.006	12	0.012
Low	II	Ejection	0.125	87	232	0.009	0.006	25	0.025
Low	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
Low	IV	Sweep	0.130	120	341	0.013	0.009	26	0.026
Medium	I	Outward interaction	0.060	93	396	0.006	0.006	12	0.012
Medium	II	Ejection	0.085	56	97	0.005	0.002	17	0.017
Medium	III	Inward interaction	0.030	26	78	0.001	0.001	6	0.006
Medium	IV	Sweep	0.100	79	236	0.009	0.006	20	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	0.135	447	1161	0.033	0.024	27	0.027
High	II	Ejection	0.140	194	442	0.015	0.010	28	0.028
High	III	Inward interaction	0.020	36	52	0.000	0.000	4	0.004
High	IV	Sweep	0.060	80	249	0.003	0.002	12	0.012
Low	I	Outward interaction	0.130	186	575	0.032	0.022	26	0.026
Low	II	Ejection	0.060	36	86	0.003	0.002	12	0.012
Low	III	Inward interaction	0.010	8	24	0.000	0.000	2	0.002
Low	IV	Sweep	0.110	65	222	0.009	0.007	22	0.022
Medium	I	Outward interaction	0.070	191	629	0.010	0.007	14	0.014
Medium	II	Ejection	0.105	93	193	0.008	0.003	21	0.021
Medium	III	Inward interaction	0.010	14	77	0.000	0.000	2	0.002
Medium	IV	Sweep	0.085	74	165	0.005	0.002	17	0.017

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	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	0.085	206	891	0.010	0.009	17	0.017
High	II	Ejection	0.040	35	92	0.001	0.000	8	0.008
High	III	Inward interaction	0.045	97	189	0.003	0.001	9	0.009
High	IV	Sweep	0.120	219	836	0.016	0.011	24	0.024
Low	I	Outward interaction	0.050	23	47	0.004	0.002	10	0.010
Low	II	Ejection	0.115	31	76	0.013	0.006	23	0.023
Low	III	Inward interaction	0.010	3	18	0.000	0.000	2	0.002
Low	IV	Sweep	0.125	32	71	0.014	0.006	25	0.025
Medium	I	Outward interaction	0.045	167	642	0.006	0.005	9	0.009
Medium	II	Ejection	0.120	105	259	0.010	0.005	24	0.024
Medium	III	Inward interaction	0.035	49	193	0.001	0.001	7	0.007
Medium	IV	Sweep	0.080	72	233	0.004	0.003	16	0.016

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	0.030	99	390	0.002	0.001	6	0.006
High	II	Ejection	0.055	68	168	0.002	0.001	11	0.011
High	III	Inward interaction	0.015	31	87	0.000	0.000	3	0.003
High	IV	Sweep	0.180	308	1314	0.028	0.025	36	0.036
Low	I	Outward interaction	0.070	258	534	0.014	0.007	14	0.014
Low	II	Ejection	0.115	123	230	0.011	0.005	23	0.023
Low	III	Inward interaction	0.005	6	12	0.000	0.000	1	0.001
Low	IV	Sweep	0.135	145	461	0.015	0.012	27	0.027
Medium	I	Outward interaction	0.040	165	361	0.005	0.002	8	0.008
Medium	II	Ejection	0.130	146	294	0.014	0.006	26	0.026
Medium	III	Inward interaction	0.035	52	140	0.001	0.001	7	0.007
Medium	IV	Sweep	0.075	73	283	0.004	0.003	15	0.015

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	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	0.030	174	252	0.001	0.000	6	0.006
High	II	Ejection	0.105	486	702	0.009	0.005	21	0.021
High	III	Inward interaction	0.005	25	27	0.000	0.000	1	0.001
High	IV	Sweep	0.080	347	418	0.005	0.002	16	0.016
Low	I	Outward interaction	0.055	301	372	0.002	0.001	11	0.011
Low	II	Ejection	0.075	541	758	0.006	0.003	15	0.015
Low	III	Inward interaction	0.040	191	290	0.001	0.001	8	0.008
Low	IV	Sweep	0.030	189	224	0.001	0.000	6	0.006
Medium	I	Outward interaction	0.040	331	532	0.002	0.001	8	0.008
Medium	II	Ejection	0.055	387	453	0.003	0.002	11	0.011
Medium	III	Inward interaction	0.015	91	135	0.000	0.000	3	0.003
Medium	IV	Sweep	0.045	238	309	0.001	0.001	9	0.009

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	0.060	701	1576	0.003	0.002	12	0.012
High	II	Ejection	0.045	503	811	0.002	0.001	9	0.009
High	III	Inward interaction	0.060	515	678	0.002	0.001	12	0.012
High	IV	Sweep	0.035	604	852	0.002	0.001	7	0.007
Low	I	Outward interaction	0.010	47	60	0.000	0.000	2	0.002
Low	II	Ejection	0.045	209	269	0.002	0.001	9	0.009
Low	III	Inward interaction	0.065	374	689	0.004	0.003	13	0.013
Low	IV	Sweep	0.040	164	223	0.001	0.001	8	0.008
Medium	I	Outward interaction	0.010	15	19	0.000	0.000	2	0.002
Medium	II	Ejection	0.110	129	242	0.009	0.005	22	0.022
Medium	III	Inward interaction	0.015	25	61	0.000	0.000	3	0.003
Medium	IV	Sweep	0.080	136	245	0.007	0.004	16	0.016

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	0.050	517	1096	0.002	0.001	10	0.010
High	II	Ejection	0.050	891	1810	0.003	0.002	10	0.010
High	III	Inward interaction	0.030	270	662	0.001	0.000	6	0.006
High	IV	Sweep	0.025	323	567	0.001	0.000	5	0.005
Low	I	Outward interaction	0.000	0	0	0.000	0.000	0	0.000
Low	II	Ejection	0.045	289	381	0.001	0.001	9	0.009
Low	III	Inward interaction	0.070	627	897	0.005	0.003	14	0.014
Low	IV	Sweep	0.105	770	1343	0.009	0.006	21	0.021
Medium	I	Outward interaction	0.055	153	326	0.004	0.003	11	0.011
Medium	II	Ejection	0.055	87	201	0.002	0.002	11	0.011
Medium	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
Medium	IV	Sweep	0.135	196	394	0.013	0.008	27	0.027

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	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	0.035	143	210	0.002	0.001	7	0.007
High	II	Ejection	0.040	67	142	0.001	0.001	8	0.008
High	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
High	IV	Sweep	0.145	246	459	0.017	0.010	29	0.029
Low	I	Outward interaction	0.045	249	328	0.001	0.001	9	0.009
Low	II	Ejection	0.025	267	367	0.001	0.000	5	0.005
Low	III	Inward interaction	0.055	348	532	0.002	0.001	11	0.011
Low	IV	Sweep	0.055	362	593	0.002	0.001	11	0.011
Medium	I	Outward interaction	0.000	0	0	0.000	0.000	0	0.000
Medium	II	Ejection	0.130	206	382	0.010	0.007	26	0.026
Medium	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
Medium	IV	Sweep	0.105	206	366	0.008	0.005	21	0.021

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	0.035	176	210	0.001	0.001	7	0.007
High	II	Ejection	0.090	355	486	0.007	0.004	18	0.018
High	III	Inward interaction	0.010	43	66	0.000	0.000	2	0.002
High	IV	Sweep	0.045	177	249	0.002	0.001	9	0.009
Low	I	Outward interaction	0.025	207	286	0.001	0.000	5	0.005
Low	II	Ejection	0.030	183	317	0.001	0.000	6	0.006
Low	III	Inward interaction	0.030	242	327	0.001	0.000	6	0.006
Low	IV	Sweep	0.045	351	557	0.002	0.001	9	0.009
Medium	I	Outward interaction	0.035	108	166	0.001	0.001	7	0.007
Medium	II	Ejection	0.090	211	272	0.006	0.003	18	0.018
Medium	III	Inward interaction	0.020	49	107	0.000	0.000	4	0.004
Medium	IV	Sweep	0.060	139	196	0.003	0.001	12	0.012

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	0.005	26	60	0.000	0.000	1	0.001
High	II	Ejection	0.115	616	890	0.014	0.007	23	0.023
High	III	Inward interaction	0.020	93	152	0.000	0.000	4	0.004
High	IV	Sweep	0.035	128	156	0.001	0.000	7	0.007
Low	I	Outward interaction	0.025	116	227	0.000	0.000	5	0.005
Low	II	Ejection	0.050	212	371	0.002	0.001	10	0.010
Low	III	Inward interaction	0.045	249	541	0.002	0.001	9	0.009
Low	IV	Sweep	0.080	441	777	0.006	0.003	16	0.016
Medium	I	Outward interaction	0.050	242	455	0.003	0.002	10	0.010
Medium	II	Ejection	0.070	230	311	0.004	0.002	14	0.014
Medium	III	Inward interaction	0.010	38	57	0.000	0.000	2	0.002
Medium	IV	Sweep	0.060	210	270	0.003	0.001	12	0.012

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	0.010	409	651	0.000	0.000	2	0.002
High	II	Ejection	0.115	3751	5504	0.011	0.006	23	0.023
High	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
High	IV	Sweep	0.090	2537	4417	0.006	0.004	18	0.018
Low	I	Outward interaction	0.035	157	253	0.001	0.000	7	0.007
Low	II	Ejection	0.090	493	741	0.008	0.003	18	0.018
Low	III	Inward interaction	0.015	95	119	0.000	0.000	3	0.003
Low	IV	Sweep	0.050	218	287	0.002	0.001	10	0.010
Medium	I	Outward interaction	0.065	327	461	0.005	0.003	13	0.013
Medium	II	Ejection	0.060	211	259	0.003	0.001	12	0.012
Medium	III	Inward interaction	0.010	39	62	0.000	0.000	2	0.002
Medium	IV	Sweep	0.010	35	39	0.000	0.000	2	0.002

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	0.000	0	0	0.000	0.000	0	0.000
High	II	Ejection	0.120	6008	7264	0.011	0.006	24	0.024
High	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
High	IV	Sweep	0.085	3368	4024	0.004	0.002	17	0.017
Low	I	Outward interaction	0.005	28	114	0.000	0.000	1	0.001
Low	II	Ejection	0.085	417	516	0.008	0.003	17	0.017
Low	III	Inward interaction	0.020	77	116	0.000	0.000	4	0.004
Low	IV	Sweep	0.085	267	376	0.005	0.002	17	0.017
Medium	I	Outward interaction	0.025	132	160	0.001	0.000	5	0.005
Medium	II	Ejection	0.145	926	1304	0.024	0.014	29	0.029
Medium	III	Inward interaction	0.010	49	97	0.000	0.000	2	0.002
Medium	IV	Sweep	0.020	71	97	0.000	0.000	4	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	0.000	0	0	0.000	0.000	0	0.000
High	II	Ejection	0.155	977	1950	0.019	0.013	31	0.031
High	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
High	IV	Sweep	0.025	129	203	0.000	0.000	5	0.005
Low	I	Outward interaction	0.035	239	292	0.001	0.001	7	0.007
Low	II	Ejection	0.125	810	1060	0.014	0.008	25	0.025
Low	III	Inward interaction	0.005	38	41	0.000	0.000	1	0.001
Low	IV	Sweep	0.055	309	440	0.002	0.001	11	0.011
Medium	I	Outward interaction	0.005	26	27	0.000	0.000	1	0.001
Medium	II	Ejection	0.135	1243	1893	0.021	0.013	27	0.027
Medium	III	Inward interaction	0.020	225	325	0.001	0.000	4	0.004
Medium	IV	Sweep	0.075	402	556	0.004	0.002	15	0.015

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	0.090	544	1231	0.013	0.009	18	0.018
High	II	Ejection	0.020	44	122	0.000	0.000	4	0.004
High	III	Inward interaction	0.005	13	27	0.000	0.000	1	0.001
High	IV	Sweep	0.075	291	493	0.006	0.003	15	0.015
Low	I	Outward interaction	0.010	165	337	0.000	0.000	2	0.002
Low	II	Ejection	0.030	340	475	0.001	0.000	6	0.006
Low	III	Inward interaction	0.010	264	405	0.000	0.000	2	0.002
Low	IV	Sweep	0.110	1632	2625	0.010	0.005	22	0.022
Medium	I	Outward interaction	0.020	242	324	0.001	0.000	4	0.004
Medium	II	Ejection	0.120	857	1576	0.012	0.007	24	0.024
Medium	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
Medium	IV	Sweep	0.105	621	1168	0.007	0.004	21	0.021

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	0.020	136	184	0.000	0.000	4	0.004
High	II	Ejection	0.080	534	718	0.007	0.003	16	0.016
High	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
High	IV	Sweep	0.090	446	754	0.006	0.003	18	0.018
Low	I	Outward interaction	0.035	218	526	0.001	0.001	7	0.007
Low	II	Ejection	0.020	141	260	0.000	0.000	4	0.004
Low	III	Inward interaction	0.090	486	784	0.006	0.003	18	0.018
Low	IV	Sweep	0.060	468	703	0.004	0.002	12	0.012
Medium	I	Outward interaction	0.000	0	0	0.000	0.000	0	0.000
Medium	II	Ejection	0.065	104	152	0.003	0.001	13	0.013
Medium	III	Inward interaction	0.025	56	112	0.001	0.000	5	0.005
Medium	IV	Sweep	0.070	151	254	0.005	0.002	14	0.014

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	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	0.025	107	215	0.001	0.000	5	0.005
High	II	Ejection	0.080	328	649	0.006	0.003	16	0.016
High	III	Inward interaction	0.035	149	267	0.001	0.001	7	0.007
High	IV	Sweep	0.030	108	224	0.001	0.000	6	0.006
Low	I	Outward interaction	0.000	0	0	0.000	0.000	0	0.000
Low	II	Ejection	0.040	255	295	0.001	0.001	8	0.008
Low	III	Inward interaction	0.005	53	91	0.000	0.000	1	0.001
Low	IV	Sweep	0.140	828	1357	0.016	0.009	28	0.028
Medium	I	Outward interaction	0.035	132	271	0.001	0.001	7	0.007
Medium	II	Ejection	0.050	135	221	0.002	0.001	10	0.010
Medium	III	Inward interaction	0.025	81	117	0.001	0.000	5	0.005
Medium	IV	Sweep	0.035	101	175	0.001	0.001	7	0.007

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	0.030	246	351	0.001	0.001	6	0.006
High	II	Ejection	0.075	405	607	0.004	0.003	15	0.015
High	III	Inward interaction	0.030	150	198	0.001	0.000	6	0.006
High	IV	Sweep	0.025	142	182	0.001	0.000	5	0.005
Low	I	Outward interaction	0.020	186	246	0.000	0.000	4	0.004
Low	II	Ejection	0.035	245	336	0.001	0.000	7	0.007
Low	III	Inward interaction	0.085	812	1183	0.007	0.003	17	0.017
Low	IV	Sweep	0.050	543	751	0.003	0.001	10	0.010
Medium	I	Outward interaction	0.025	166	228	0.001	0.000	5	0.005
Medium	II	Ejection	0.070	293	499	0.004	0.002	14	0.014
Medium	III	Inward interaction	0.015	68	114	0.000	0.000	3	0.003
Medium	IV	Sweep	0.045	203	281	0.002	0.001	9	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	0.025	255	366	0.001	0.000	5	0.005
High	II	Ejection	0.030	214	326	0.001	0.000	6	0.006
High	III	Inward interaction	0.035	388	566	0.001	0.001	7	0.007
High	IV	Sweep	0.050	505	716	0.002	0.001	10	0.010
Low	I	Outward interaction	0.005	43	52	0.000	0.000	1	0.001
Low	II	Ejection	0.085	580	732	0.006	0.002	17	0.017
Low	III	Inward interaction	0.035	279	340	0.001	0.000	7	0.007
Low	IV	Sweep	0.060	406	641	0.003	0.002	12	0.012
Medium	I	Outward interaction	0.025	218	298	0.001	0.000	5	0.005
Medium	II	Ejection	0.060	454	541	0.003	0.002	12	0.012
Medium	III	Inward interaction	0.020	113	177	0.000	0.000	4	0.004
Medium	IV	Sweep	0.055	314	483	0.002	0.001	11	0.011

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	0.045	355	541	0.002	0.001	9	0.009
High	II	Ejection	0.070	677	921	0.005	0.002	14	0.014
High	III	Inward interaction	0.035	274	339	0.001	0.000	7	0.007
High	IV	Sweep	0.015	100	166	0.000	0.000	3	0.003
Low	I	Outward interaction	0.025	251	420	0.001	0.000	5	0.005
Low	II	Ejection	0.080	638	838	0.005	0.002	16	0.016
Low	III	Inward interaction	0.010	84	121	0.000	0.000	2	0.002
Low	IV	Sweep	0.060	433	588	0.003	0.001	12	0.012
Medium	I	Outward interaction	0.115	1428	2250	0.019	0.012	23	0.023
Medium	II	Ejection	0.045	514	751	0.003	0.002	9	0.009
Medium	III	Inward interaction	0.015	86	164	0.000	0.000	3	0.003
Medium	IV	Sweep	0.020	144	155	0.000	0.000	4	0.004

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	0.010	435	523	0.000	0.000	2	0.002
High	II	Ejection	0.150	8969	12472	0.026	0.017	30	0.030
High	III	Inward interaction	0.025	1502	1827	0.001	0.000	5	0.005
High	IV	Sweep	0.035	1227	1512	0.001	0.000	7	0.007
Low	I	Outward interaction	0.030	211	370	0.001	0.000	6	0.006
Low	II	Ejection	0.095	762	1098	0.009	0.005	19	0.019
Low	III	Inward interaction	0.025	170	199	0.001	0.000	5	0.005
Low	IV	Sweep	0.030	172	197	0.001	0.000	6	0.006
Medium	I	Outward interaction	0.060	474	717	0.004	0.002	12	0.012
Medium	II	Ejection	0.060	384	474	0.003	0.001	12	0.012
Medium	III	Inward interaction	0.005	46	85	0.000	0.000	1	0.001
Medium	IV	Sweep	0.010	48	65	0.000	0.000	2	0.002

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	0.010	201	300	0.000	0.000	2	0.002
High	II	Ejection	0.120	2728	3942	0.016	0.010	24	0.024
High	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
High	IV	Sweep	0.035	402	487	0.001	0.000	7	0.007
Low	I	Outward interaction	0.000	0	0	0.000	0.000	0	0.000
Low	II	Ejection	0.170	3174	4271	0.035	0.019	34	0.034
Low	III	Inward interaction	0.005	92	107	0.000	0.000	1	0.001
Low	IV	Sweep	0.030	282	381	0.001	0.000	6	0.006
Medium	I	Outward interaction	0.000	0	0	0.000	0.000	0	0.000
Medium	II	Ejection	0.280	4860	6658	0.073	0.046	56	0.056
Medium	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
Medium	IV	Sweep	0.010	103	112	0.000	0.000	2	0.002

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	0.060	827	1844	0.007	0.004	12	0.012
High	II	Ejection	0.075	468	961	0.005	0.003	15	0.015
High	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
High	IV	Sweep	0.070	423	764	0.004	0.002	14	0.014
Low	I	Outward interaction	0.000	0	0	0.000	0.000	0	0.000
Low	II	Ejection	0.095	2443	3540	0.007	0.003	19	0.019
Low	III	Inward interaction	0.005	150	381	0.000	0.000	1	0.001
Low	IV	Sweep	0.110	3536	5068	0.011	0.006	22	0.022
Medium	I	Outward interaction	0.110	524	1404	0.014	0.009	22	0.022
Medium	II	Ejection	0.005	29	282	0.000	0.000	1	0.001
Medium	III	Inward interaction	0.020	49	102	0.000	0.000	4	0.004
Medium	IV	Sweep	0.045	365	824	0.004	0.002	9	0.009

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	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	0.005	25	53	0.000	0.000	1	0.001
High	II	Ejection	0.095	136	283	0.005	0.004	19	0.019
High	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
High	IV	Sweep	0.170	294	470	0.021	0.012	34	0.034
Low	I	Outward interaction	0.050	317	772	0.002	0.001	10	0.010
Low	II	Ejection	0.050	368	902	0.002	0.002	10	0.010
Low	III	Inward interaction	0.050	382	721	0.002	0.001	10	0.010
Low	IV	Sweep	0.035	242	604	0.001	0.001	7	0.007
Medium	I	Outward interaction	0.060	283	444	0.004	0.002	12	0.012
Medium	II	Ejection	0.020	83	205	0.000	0.000	4	0.004
Medium	III	Inward interaction	0.010	33	48	0.000	0.000	2	0.002
Medium	IV	Sweep	0.035	120	189	0.001	0.000	7	0.007

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 fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	0.035	290	403	0.001	0.001	7	0.007
High	II	Ejection	0.080	657	1002	0.007	0.003	16	0.016
High	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
High	IV	Sweep	0.050	254	322	0.002	0.001	10	0.010
Low	I	Outward interaction	0.015	160	288	0.000	0.000	3	0.003
Low	II	Ejection	0.050	367	573	0.002	0.001	10	0.010
Low	III	Inward interaction	0.020	250	580	0.000	0.000	4	0.004
Low	IV	Sweep	0.120	1545	3883	0.016	0.011	24	0.024
Medium	I	Outward interaction	0.025	138	205	0.001	0.000	5	0.005
Medium	II	Ejection	0.085	423	769	0.006	0.003	17	0.017
Medium	III	Inward interaction	0.045	308	534	0.002	0.001	9	0.009
Medium	IV	Sweep	0.060	296	642	0.003	0.002	12	0.012

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	0.015	224	259	0.000	0.000	3	0.003
Low	II	Ejection	0.090	859	1250	0.006	0.004	18	0.018
Low	III	Inward interaction	0.025	376	474	0.001	0.000	5	0.005
Low	IV	Sweep	0.030	252	381	0.001	0.000	6	0.006
Medium	I	Outward interaction	0.050	1053	1375	0.003	0.002	10	0.010
Medium	II	Ejection	0.130	3037	4224	0.022	0.013	26	0.026
Medium	III	Inward interaction	0.015	200	234	0.000	0.000	3	0.003
Medium	IV	Sweep	0.005	50	73	0.000	0.000	1	0.001
High	I	Outward interaction	0.035	311	504	0.001	0.001	7	0.007
High	II	Ejection	0.110	1027	1402	0.011	0.006	22	0.022
High	III	Inward interaction	0.015	115	127	0.000	0.000	3	0.003
High	IV	Sweep	0.025	176	226	0.000	0.000	5	0.005

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	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
Low	I	Outward interaction	0.005	109	160	0.000	0.000	1	0.001
Low	II	Ejection	0.120	2666	4386	0.012	0.006	24	0.024
Low	III	Inward interaction	0.025	775	1180	0.001	0.000	5	0.005
Low	IV	Sweep	0.015	252	282	0.000	0.000	3	0.003
Medium	I	Outward interaction	0.040	734	1321	0.003	0.002	8	0.008
Medium	II	Ejection	0.095	690	1607	0.006	0.005	19	0.019
Medium	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
Medium	IV	Sweep	0.110	934	1888	0.009	0.006	22	0.022
High	I	Outward interaction	0.035	571	939	0.001	0.001	7	0.007
High	II	Ejection	0.040	614	847	0.001	0.001	8	0.008
High	III	Inward interaction	0.015	191	403	0.000	0.000	3	0.003
High	IV	Sweep	0.070	1279	2361	0.005	0.003	14	0.014

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	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
Low	I	Outward interaction	0.125	2479	4207	0.017	0.010	25	0.025
Low	II	Ejection	0.035	599	1039	0.001	0.001	7	0.007
Low	III	Inward interaction	0.035	422	900	0.001	0.001	7	0.007
Low	IV	Sweep	0.020	314	542	0.000	0.000	4	0.004
Medium	I	Outward interaction	0.040	217	399	0.001	0.001	8	0.008
Medium	II	Ejection	0.070	326	522	0.004	0.002	14	0.014
Medium	III	Inward interaction	0.025	144	319	0.001	0.000	5	0.005
Medium	IV	Sweep	0.080	401	771	0.005	0.003	16	0.016
High	I	Outward interaction	0.145	482	1015	0.029	0.018	29	0.029
High	II	Ejection	0.030	89	252	0.001	0.001	6	0.006
High	III	Inward interaction	0.010	19	44	0.000	0.000	2	0.002
High	IV	Sweep	0.050	122	332	0.002	0.002	10	0.010

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	0.010	263	604	0.000	0.000	2	0.002
Low	II	Ejection	0.080	1401	2000	0.004	0.002	16	0.016
Low	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
Low	IV	Sweep	0.185	4569	7436	0.032	0.020	37	0.037
Medium	I	Outward interaction	0.005	22	22	0.000	0.000	1	0.001
Medium	II	Ejection	0.080	129	226	0.004	0.002	16	0.016
Medium	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
Medium	IV	Sweep	0.135	266	440	0.014	0.006	27	0.027
High	I	Outward interaction	0.005	31	36	0.000	0.000	1	0.001
High	II	Ejection	0.025	145	219	0.000	0.000	5	0.005
High	III	Inward interaction	0.130	1238	2432	0.020	0.015	26	0.026
High	IV	Sweep	0.045	408	709	0.002	0.002	9	0.009

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	0.125	222	590	0.026	0.017	25	0.025
Low	II	Ejection	0.140	127	259	0.017	0.008	28	0.028
Low	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
Low	IV	Sweep	0.055	42	132	0.002	0.002	11	0.011
High	I	Outward interaction	0.200	677	1726	0.076	0.056	40	0.040
High	II	Ejection	0.080	136	252	0.006	0.003	16	0.016
High	III	Inward interaction	0.005	8	21	0.000	0.000	1	0.001
High	IV	Sweep	0.040	60	156	0.001	0.001	8	0.008
Medium	I	Outward interaction	0.050	88	267	0.005	0.005	10	0.010
Medium	II	Ejection	0.140	89	166	0.015	0.008	28	0.028
Medium	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
Medium	IV	Sweep	0.090	55	175	0.006	0.006	18	0.018

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	0.030	56	299	0.001	0.001	6	0.006
Low	II	Ejection	0.070	100	301	0.004	0.003	14	0.014
Low	III	Inward interaction	0.005	6	25	0.000	0.000	1	0.001
Low	IV	Sweep	0.110	192	493	0.012	0.006	22	0.022
High	I	Outward interaction	0.020	41	97	0.001	0.001	4	0.004
High	II	Ejection	0.060	39	76	0.002	0.002	12	0.012
High	III	Inward interaction	0.015	25	50	0.000	0.000	3	0.003
High	IV	Sweep	0.100	70	160	0.007	0.006	20	0.020
Medium	I	Outward interaction	0.045	55	188	0.003	0.002	9	0.009
Medium	II	Ejection	0.140	104	232	0.017	0.009	28	0.028
Medium	III	Inward interaction	0.040	37	122	0.002	0.001	8	0.008
Medium	IV	Sweep	0.115	75	271	0.010	0.009	23	0.023

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	0.050	159	464	0.005	0.004	10	0.010
Low	II	Ejection	0.115	148	282	0.011	0.006	23	0.023
Low	III	Inward interaction	0.005	9	60	0.000	0.000	1	0.001
Low	IV	Sweep	0.075	72	136	0.003	0.002	15	0.015
High	I	Outward interaction	0.055	114	363	0.006	0.004	11	0.011
High	II	Ejection	0.110	114	281	0.011	0.006	22	0.022
High	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
High	IV	Sweep	0.070	59	227	0.004	0.003	14	0.014
Medium	I	Outward interaction	0.005	3	8	0.000	0.000	1	0.001
Medium	II	Ejection	0.110	70	166	0.012	0.008	22	0.022
Medium	III	Inward interaction	0.010	8	37	0.000	0.000	2	0.002
Medium	IV	Sweep	0.105	68	143	0.011	0.007	21	0.021

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	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
Low	I	Outward interaction	0.030	58	205	0.003	0.003	6	0.006
Low	II	Ejection	0.115	61	110	0.011	0.005	23	0.023
Low	III	Inward interaction	0.010	8	51	0.000	0.000	2	0.002
Low	IV	Sweep	0.140	65	148	0.014	0.009	28	0.028
High	I	Outward interaction	0.110	291	1150	0.024	0.020	22	0.022
High	II	Ejection	0.100	112	245	0.008	0.004	20	0.020
High	III	Inward interaction	0.015	24	105	0.000	0.000	3	0.003
High	IV	Sweep	0.050	51	215	0.002	0.002	10	0.010
Medium	I	Outward interaction	0.030	43	112	0.002	0.001	6	0.006
Medium	II	Ejection	0.145	81	181	0.018	0.009	29	0.029
Medium	III	Inward interaction	0.010	11	17	0.000	0.000	2	0.002
Medium	IV	Sweep	0.115	56	149	0.010	0.006	23	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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	0.125	378	1246	0.027	0.023	25	0.025
High	II	Ejection	0.090	110	255	0.006	0.003	18	0.018
High	III	Inward interaction	0.010	14	52	0.000	0.000	2	0.002
High	IV	Sweep	0.045	52	198	0.001	0.001	9	0.009
Low	I	Outward interaction	0.120	323	857	0.035	0.022	24	0.024
Low	II	Ejection	0.075	60	161	0.004	0.003	15	0.015
Low	III	Inward interaction	0.005	7	25	0.000	0.000	1	0.001
Low	IV	Sweep	0.055	50	145	0.002	0.002	11	0.011
Medium	I	Outward interaction	0.040	58	209	0.003	0.003	8	0.008
Medium	II	Ejection	0.115	60	124	0.009	0.005	23	0.023
Medium	III	Inward interaction	0.035	30	85	0.001	0.001	7	0.007
Medium	IV	Sweep	0.115	61	195	0.010	0.008	23	0.023

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
Low	I	Outward interaction	0.075	107	341	0.009	0.007	15	0.015
Low	II	Ejection	0.080	66	150	0.006	0.003	16	0.016
Low	III	Inward interaction	0.030	25	107	0.001	0.001	6	0.006
Low	IV	Sweep	0.100	96	322	0.011	0.008	20	0.020
Medium	I	Outward interaction	0.035	39	133	0.002	0.002	7	0.007
Medium	II	Ejection	0.115	60	126	0.010	0.005	23	0.023
Medium	III	Inward interaction	0.025	28	88	0.001	0.001	5	0.005
Medium	IV	Sweep	0.090	47	109	0.006	0.003	18	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	0.010	11	27	0.000	0.000	2	0.002
High	II	Ejection	0.140	133	223	0.015	0.008	28	0.028
High	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
High	IV	Sweep	0.025	17	26	0.000	0.000	5	0.005
Low	I	Outward interaction	0.035	82	277	0.002	0.001	7	0.007
Low	II	Ejection	0.090	113	179	0.006	0.002	18	0.018
Low	III	Inward interaction	0.015	26	101	0.000	0.000	3	0.003
Low	IV	Sweep	0.090	132	299	0.007	0.004	18	0.018
Medium	I	Outward interaction	0.020	41	85	0.001	0.000	4	0.004
Medium	II	Ejection	0.115	93	149	0.011	0.005	23	0.023
Medium	III	Inward interaction	0.030	37	136	0.001	0.001	6	0.006
Medium	IV	Sweep	0.065	52	94	0.003	0.002	13	0.013

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	0.020	44	114	0.001	0.001	4	0.004
High	II	Ejection	0.075	70	115	0.004	0.002	15	0.015
High	III	Inward interaction	0.005	9	12	0.000	0.000	1	0.001
High	IV	Sweep	0.120	127	235	0.011	0.007	24	0.024
Low	I	Outward interaction	0.020	59	119	0.001	0.000	4	0.004
Low	II	Ejection	0.095	107	173	0.006	0.003	19	0.019
Low	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
Low	IV	Sweep	0.055	51	128	0.002	0.001	11	0.011
Medium	I	Outward interaction	0.000	0	0	0.000	0.000	0	0.000
Medium	II	Ejection	0.070	78	126	0.003	0.002	14	0.014
Medium	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
Medium	IV	Sweep	0.115	115	186	0.008	0.005	23	0.023

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	0.080	514	1157	0.013	0.008	16	0.016
High	II	Ejection	0.090	172	343	0.005	0.003	18	0.018
High	III	Inward interaction	0.030	84	184	0.001	0.000	6	0.006
High	IV	Sweep	0.145	414	1335	0.019	0.017	29	0.029
Low	I	Outward interaction	0.095	154	376	0.016	0.008	19	0.019
Low	II	Ejection	0.110	90	214	0.011	0.005	22	0.022
Low	III	Inward interaction	0.015	15	51	0.000	0.000	3	0.003
Low	IV	Sweep	0.055	37	123	0.002	0.002	11	0.011
Medium	I	Outward interaction	0.065	59	148	0.007	0.004	13	0.013
Medium	II	Ejection	0.110	48	116	0.010	0.005	22	0.022
Medium	III	Inward interaction	0.010	4	18	0.000	0.000	2	0.002
Medium	IV	Sweep	0.100	50	133	0.010	0.005	20	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	0.065	200	931	0.007	0.008	13	0.013
High	II	Ejection	0.115	135	325	0.009	0.005	23	0.023
High	III	Inward interaction	0.040	90	215	0.002	0.001	8	0.008
High	IV	Sweep	0.110	157	473	0.010	0.007	22	0.022
Low	I	Outward interaction	0.035	27	74	0.001	0.001	7	0.007
Low	II	Ejection	0.025	28	45	0.001	0.000	5	0.005
Low	III	Inward interaction	0.090	70	121	0.007	0.003	18	0.018
Low	IV	Sweep	0.045	37	70	0.002	0.001	9	0.009
Medium	I	Outward interaction	0.040	92	377	0.002	0.002	8	0.008
Medium	II	Ejection	0.125	180	430	0.014	0.008	25	0.025
Medium	III	Inward interaction	0.035	75	178	0.002	0.001	7	0.007
Medium	IV	Sweep	0.050	55	141	0.002	0.001	10	0.010

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	0.075	146	482	0.009	0.006	15	0.015
High	II	Ejection	0.075	69	143	0.004	0.002	15	0.015
High	III	Inward interaction	0.045	49	179	0.002	0.001	9	0.009
High	IV	Sweep	0.090	99	343	0.007	0.005	18	0.018
Low	I	Outward interaction	0.030	12	31	0.001	0.001	6	0.006
Low	II	Ejection	0.100	37	81	0.009	0.005	20	0.020
Low	III	Inward interaction	0.010	4	21	0.000	0.000	2	0.002
Low	IV	Sweep	0.130	58	137	0.019	0.010	26	0.026
Medium	I	Outward interaction	0.035	49	300	0.002	0.002	7	0.007
Medium	II	Ejection	0.120	109	300	0.013	0.006	24	0.024
Medium	III	Inward interaction	0.015	14	34	0.000	0.000	3	0.003
Medium	IV	Sweep	0.095	86	250	0.008	0.004	19	0.019

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	0.045	82	215	0.004	0.003	9	0.009
High	II	Ejection	0.130	83	160	0.013	0.007	26	0.026
High	III	Inward interaction	0.020	16	36	0.000	0.000	4	0.004
High	IV	Sweep	0.140	83	256	0.014	0.011	28	0.028
Low	I	Outward interaction	0.090	181	554	0.016	0.013	18	0.018
Low	II	Ejection	0.110	79	172	0.009	0.005	22	0.022
Low	III	Inward interaction	0.005	4	14	0.000	0.000	1	0.001
Low	IV	Sweep	0.065	61	153	0.004	0.003	13	0.013
Medium	I	Outward interaction	0.025	39	110	0.001	0.001	5	0.005
Medium	II	Ejection	0.135	157	316	0.016	0.008	27	0.027
Medium	III	Inward interaction	0.030	46	148	0.001	0.001	6	0.006
Medium	IV	Sweep	0.105	112	302	0.009	0.006	21	0.021

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	0.085	190	510	0.009	0.010	17	0.017
Low	II	Ejection	0.080	138	209	0.006	0.004	16	0.016
Low	III	Inward interaction	0.005	7	8	0.000	0.000	1	0.001
Low	IV	Sweep	0.050	90	145	0.003	0.002	10	0.010
Medium	I	Outward interaction	0.055	98	163	0.004	0.002	11	0.011
Medium	II	Ejection	0.090	109	161	0.007	0.004	18	0.018
Medium	III	Inward interaction	0.010	18	41	0.000	0.000	2	0.002
Medium	IV	Sweep	0.075	88	153	0.005	0.003	15	0.015
High	I	Outward interaction	0.060	125	320	0.006	0.004	12	0.012
High	II	Ejection	0.105	148	279	0.011	0.006	21	0.021
High	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
High	IV	Sweep	0.055	54	131	0.002	0.001	11	0.011

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	0.030	117	261	0.001	0.001	6	0.006
Low	II	Ejection	0.070	205	435	0.005	0.003	14	0.014
Low	III	Inward interaction	0.050	123	337	0.002	0.002	10	0.010
Low	IV	Sweep	0.065	201	549	0.004	0.003	13	0.013
Medium	I	Outward interaction	0.045	61	102	0.002	0.001	9	0.009
Medium	II	Ejection	0.040	44	79	0.001	0.001	8	0.008
Medium	III	Inward interaction	0.025	27	51	0.000	0.000	5	0.005
Medium	IV	Sweep	0.065	93	198	0.004	0.002	13	0.013
High	I	Outward interaction	0.000	0	0	0.000	0.000	0	0.000
High	II	Ejection	0.085	166	341	0.004	0.003	17	0.017
High	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
High	IV	Sweep	0.095	181	328	0.005	0.003	19	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	0.055	322	600	0.003	0.002	11	0.011
Low	II	Ejection	0.060	197	263	0.002	0.001	12	0.012
Low	III	Inward interaction	0.010	47	58	0.000	0.000	2	0.002
Low	IV	Sweep	0.135	536	702	0.014	0.007	27	0.027
Medium	I	Outward interaction	0.025	91	204	0.001	0.000	5	0.005
Medium	II	Ejection	0.050	139	345	0.002	0.001	10	0.010
Medium	III	Inward interaction	0.050	225	444	0.003	0.001	10	0.010
Medium	IV	Sweep	0.090	292	440	0.006	0.002	18	0.018
High	I	Outward interaction	0.025	41	86	0.001	0.000	5	0.005
High	II	Ejection	0.080	85	186	0.005	0.003	16	0.016
High	III	Inward interaction	0.015	18	44	0.000	0.000	3	0.003
High	IV	Sweep	0.090	96	201	0.007	0.004	18	0.018

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	0.005	11	21	0.000	0.000	1	0.001
Low	II	Ejection	0.050	94	142	0.002	0.001	10	0.010
Low	III	Inward interaction	0.005	22	39	0.000	0.000	1	0.001
Low	IV	Sweep	0.130	393	800	0.019	0.012	26	0.026
Medium	I	Outward interaction	0.015	18	35	0.000	0.000	3	0.003
Medium	II	Ejection	0.095	85	164	0.007	0.003	19	0.019
Medium	III	Inward interaction	0.025	32	52	0.001	0.000	5	0.005
Medium	IV	Sweep	0.090	128	278	0.010	0.005	18	0.018
High	I	Outward interaction	0.070	136	767	0.007	0.008	14	0.014
High	II	Ejection	0.110	142	300	0.012	0.005	22	0.022
High	III	Inward interaction	0.010	15	61	0.000	0.000	2	0.002
High	IV	Sweep	0.085	87	296	0.006	0.004	17	0.017

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	0.050	143	280	0.004	0.002	10	0.010
High	II	Ejection	0.090	149	290	0.007	0.004	18	0.018
High	III	Inward interaction	0.025	45	71	0.001	0.000	5	0.005
High	IV	Sweep	0.050	76	130	0.002	0.001	10	0.010
Low	I	Outward interaction	0.010	15	48	0.000	0.000	2	0.002
Low	II	Ejection	0.065	48	109	0.003	0.002	13	0.013
Low	III	Inward interaction	0.055	48	94	0.003	0.002	11	0.011
Low	IV	Sweep	0.125	122	251	0.016	0.010	25	0.025
Medium	I	Outward interaction	0.070	75	148	0.006	0.003	14	0.014
Medium	II	Ejection	0.080	66	116	0.006	0.003	16	0.016
Medium	III	Inward interaction	0.025	20	55	0.001	0.000	5	0.005
Medium	IV	Sweep	0.070	51	87	0.004	0.002	14	0.014

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	0.095	132	360	0.010	0.008	19	0.019
High	II	Ejection	0.095	85	136	0.006	0.003	19	0.019
High	III	Inward interaction	0.010	9	14	0.000	0.000	2	0.002
High	IV	Sweep	0.060	83	177	0.004	0.002	12	0.012
Low	I	Outward interaction	0.065	117	215	0.006	0.004	13	0.013
Low	II	Ejection	0.055	57	89	0.003	0.001	11	0.011
Low	III	Inward interaction	0.005	4	6	0.000	0.000	1	0.001
Low	IV	Sweep	0.080	87	146	0.006	0.003	16	0.016
Medium	I	Outward interaction	0.010	10	30	0.000	0.000	2	0.002
Medium	II	Ejection	0.085	89	184	0.007	0.004	17	0.017
Medium	III	Inward interaction	0.020	25	57	0.000	0.000	4	0.004
Medium	IV	Sweep	0.095	79	170	0.007	0.004	19	0.019

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	0.010	79	179	0.000	0.000	2	0.002
High	II	Ejection	0.060	207	290	0.002	0.001	12	0.012
High	III	Inward interaction	0.010	69	171	0.000	0.000	2	0.002
High	IV	Sweep	0.110	423	604	0.008	0.004	22	0.022
Low	I	Outward interaction	0.020	79	204	0.000	0.000	4	0.004
Low	II	Ejection	0.070	190	352	0.004	0.002	14	0.014
Low	III	Inward interaction	0.005	17	21	0.000	0.000	1	0.001
Low	IV	Sweep	0.075	183	340	0.004	0.002	15	0.015
Medium	I	Outward interaction	0.005	16	24	0.000	0.000	1	0.001
Medium	II	Ejection	0.085	180	271	0.006	0.003	17	0.017
Medium	III	Inward interaction	0.015	43	100	0.000	0.000	3	0.003
Medium	IV	Sweep	0.050	84	134	0.002	0.001	10	0.010

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	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	0.030	124	171	0.001	0.000	6	0.006
High	II	Ejection	0.090	276	416	0.006	0.003	18	0.018
High	III	Inward interaction	0.005	24	58	0.000	0.000	1	0.001
High	IV	Sweep	0.085	253	475	0.005	0.003	17	0.017
Low	I	Outward interaction	0.030	130	279	0.002	0.001	6	0.006
Low	II	Ejection	0.110	239	400	0.010	0.006	22	0.022
Low	III	Inward interaction	0.030	73	191	0.001	0.001	6	0.006
Low	IV	Sweep	0.035	55	91	0.001	0.000	7	0.007
Medium	I	Outward interaction	0.020	86	171	0.000	0.000	4	0.004
Medium	II	Ejection	0.045	103	153	0.001	0.001	9	0.009
Medium	III	Inward interaction	0.005	23	49	0.000	0.000	1	0.001
Medium	IV	Sweep	0.120	316	437	0.011	0.005	24	0.024

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	0.040	105	205	0.002	0.001	8	0.008
High	II	Ejection	0.075	151	312	0.005	0.002	15	0.015
High	III	Inward interaction	0.005	9	24	0.000	0.000	1	0.001
High	IV	Sweep	0.100	196	733	0.009	0.008	20	0.020
Low	I	Outward interaction	0.045	61	132	0.002	0.002	9	0.009
Low	II	Ejection	0.120	115	190	0.012	0.006	24	0.024
Low	III	Inward interaction	0.005	10	24	0.000	0.000	1	0.001
Low	IV	Sweep	0.060	69	111	0.004	0.002	12	0.012
Medium	I	Outward interaction	0.005	6	44	0.000	0.000	1	0.001
Medium	II	Ejection	0.135	121	226	0.013	0.007	27	0.027
Medium	III	Inward interaction	0.010	17	36	0.000	0.000	2	0.002
Medium	IV	Sweep	0.070	57	117	0.003	0.002	14	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 fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	0.015	42	115	0.000	0.000	3	0.003
High	II	Ejection	0.105	380	660	0.012	0.006	21	0.021
High	III	Inward interaction	0.005	17	52	0.000	0.000	1	0.001
High	IV	Sweep	0.045	100	248	0.001	0.001	9	0.009
Low	I	Outward interaction	0.025	77	188	0.001	0.000	5	0.005
Low	II	Ejection	0.065	121	231	0.003	0.001	13	0.013
Low	III	Inward interaction	0.055	134	307	0.003	0.001	11	0.011
Low	IV	Sweep	0.050	115	286	0.002	0.001	10	0.010
Medium	I	Outward interaction	0.010	45	72	0.000	0.000	2	0.002
Medium	II	Ejection	0.025	76	152	0.000	0.000	5	0.005
Medium	III	Inward interaction	0.005	28	31	0.000	0.000	1	0.001
Medium	IV	Sweep	0.110	466	1020	0.010	0.006	22	0.022

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	0.050	77	247	0.002	0.002	10	0.010
High	II	Ejection	0.110	182	385	0.012	0.006	22	0.022
High	III	Inward interaction	0.030	42	91	0.001	0.000	6	0.006
High	IV	Sweep	0.020	32	76	0.000	0.000	4	0.004
Low	I	Outward interaction	0.010	69	334	0.000	0.000	2	0.002
Low	II	Ejection	0.060	143	306	0.002	0.001	12	0.012
Low	III	Inward interaction	0.010	41	113	0.000	0.000	2	0.002
Low	IV	Sweep	0.105	331	569	0.009	0.005	21	0.021
Medium	I	Outward interaction	0.045	88	267	0.003	0.002	9	0.009
Medium	II	Ejection	0.105	119	258	0.010	0.005	21	0.021
Medium	III	Inward interaction	0.030	35	130	0.001	0.001	6	0.006
Medium	IV	Sweep	0.095	107	296	0.008	0.005	19	0.019

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	0.035	91	254	0.001	0.001	7	0.007
High	II	Ejection	0.095	157	309	0.007	0.004	19	0.019
High	III	Inward interaction	0.005	13	122	0.000	0.000	1	0.001
High	IV	Sweep	0.115	211	375	0.011	0.006	23	0.023
Low	I	Outward interaction	0.195	36	80	0.042	0.021	39	0.039
Low	II	Ejection	0.025	5	10	0.001	0.000	5	0.005
Low	III	Inward interaction	0.025	2	5	0.000	0.000	5	0.005
Low	IV	Sweep	0.020	6	16	0.001	0.000	4	0.004
Medium	I	Outward interaction	0.035	55	121	0.001	0.001	7	0.007
Medium	II	Ejection	0.090	109	181	0.006	0.003	18	0.018
Medium	III	Inward interaction	0.005	11	20	0.000	0.000	1	0.001
Medium	IV	Sweep	0.055	62	117	0.002	0.001	11	0.011

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	0.025	48	59	0.000	0.000	5	0.005
Low	II	Ejection	0.045	82	113	0.002	0.001	9	0.009
Low	III	Inward interaction	0.055	150	217	0.003	0.002	11	0.011
Low	IV	Sweep	0.100	226	310	0.009	0.005	20	0.020
Medium	I	Outward interaction	0.025	40	51	0.001	0.000	5	0.005
Medium	II	Ejection	0.030	52	83	0.001	0.000	6	0.006
Medium	III	Inward interaction	0.050	88	114	0.002	0.001	10	0.010
Medium	IV	Sweep	0.060	126	161	0.004	0.002	12	0.012
High	I	Outward interaction	0.035	165	328	0.002	0.001	7	0.007
High	II	Ejection	0.075	180	292	0.004	0.003	15	0.015
High	III	Inward interaction	0.025	79	108	0.001	0.000	5	0.005
High	IV	Sweep	0.095	245	360	0.008	0.004	19	0.019

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	0.030	69	109	0.001	0.001	6	0.006
Low	II	Ejection	0.125	271	492	0.015	0.011	25	0.025
Low	III	Inward interaction	0.010	21	23	0.000	0.000	2	0.002
Low	IV	Sweep	0.105	170	228	0.008	0.004	21	0.021
Medium	I	Outward interaction	0.005	17	21	0.000	0.000	1	0.001
Medium	II	Ejection	0.085	209	473	0.005	0.004	17	0.017
Medium	III	Inward interaction	0.005	19	50	0.000	0.000	1	0.001
Medium	IV	Sweep	0.110	263	507	0.008	0.005	22	0.022
High	I	Outward interaction	0.045	332	555	0.002	0.001	9	0.009
High	II	Ejection	0.030	208	318	0.001	0.000	6	0.006
High	III	Inward interaction	0.055	383	680	0.003	0.002	11	0.011
High	IV	Sweep	0.060	471	686	0.004	0.002	12	0.012

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	0.010	40	58	0.000	0.000	2	0.002
Low	II	Ejection	0.030	129	170	0.001	0.000	6	0.006
Low	III	Inward interaction	0.050	291	614	0.003	0.002	10	0.010
Low	IV	Sweep	0.085	577	1170	0.008	0.006	17	0.017
Medium	I	Outward interaction	0.115	112	286	0.014	0.010	23	0.023
Medium	II	Ejection	0.055	45	133	0.003	0.002	11	0.011
Medium	III	Inward interaction	0.015	9	19	0.000	0.000	3	0.003
Medium	IV	Sweep	0.095	132	517	0.013	0.014	19	0.019
High	I	Outward interaction	0.035	170	452	0.001	0.001	7	0.007
High	II	Ejection	0.075	456	763	0.005	0.002	15	0.015
High	III	Inward interaction	0.015	82	168	0.000	0.000	3	0.003
High	IV	Sweep	0.020	98	131	0.000	0.000	4	0.004

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	TKE	Stress fraction	TKE fraction	Events	Proportion
Low	I	Outward interaction	0.030	143	199	0.001	0.000	6	0.006
Low	II	Ejection	0.035	115	159	0.001	0.000	7	0.007
Low	III	Inward interaction	0.015	67	103	0.000	0.000	3	0.003
Low	IV	Sweep	0.080	377	722	0.006	0.004	16	0.016
Medium	I	Outward interaction	0.040	60	90	0.002	0.001	8	0.008
Medium	II	Ejection	0.070	82	132	0.004	0.002	14	0.014
Medium	III	Inward interaction	0.025	29	52	0.001	0.000	5	0.005
Medium	IV	Sweep	0.065	73	149	0.004	0.002	13	0.013
High	I	Outward interaction	0.030	39	65	0.001	0.000	6	0.006
High	II	Ejection	0.065	80	125	0.004	0.002	13	0.013
High	III	Inward interaction	0.020	33	89	0.000	0.000	4	0.004
High	IV	Sweep	0.060	67	136	0.003	0.002	12	0.012

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	0.015	36	113	0.000	0.000	3	0.003
High	II	Ejection	0.100	158	212	0.008	0.004	20	0.020
High	III	Inward interaction	0.025	52	120	0.001	0.001	5	0.005
High	IV	Sweep	0.055	72	155	0.002	0.001	11	0.011
Low	I	Outward interaction	0.020	62	88	0.000	0.000	4	0.004
Low	II	Ejection	0.065	216	642	0.004	0.002	13	0.013
Low	III	Inward interaction	0.025	87	279	0.001	0.000	5	0.005
Low	IV	Sweep	0.060	220	705	0.003	0.002	12	0.012
Medium	I	Outward interaction	0.025	28	97	0.001	0.001	5	0.005
Medium	II	Ejection	0.080	92	156	0.006	0.003	16	0.016
Medium	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
Medium	IV	Sweep	0.075	68	112	0.004	0.002	15	0.015

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	0.025	66	77	0.001	0.000	5	0.005
High	II	Ejection	0.080	175	235	0.006	0.003	16	0.016
High	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
High	IV	Sweep	0.075	142	188	0.004	0.002	15	0.015
Low	I	Outward interaction	0.040	106	228	0.002	0.002	8	0.008
Low	II	Ejection	0.080	114	204	0.005	0.003	16	0.016
Low	III	Inward interaction	0.015	46	80	0.000	0.000	3	0.003
Low	IV	Sweep	0.055	90	179	0.002	0.002	11	0.011
Medium	I	Outward interaction	0.045	108	142	0.003	0.002	9	0.009
Medium	II	Ejection	0.095	157	229	0.009	0.005	19	0.019
Medium	III	Inward interaction	0.020	25	43	0.000	0.000	4	0.004
Medium	IV	Sweep	0.055	68	122	0.002	0.002	11	0.011

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	$\times 10^6$				Events	Proportion
				Stress	TKE	Stress fraction	TKE fraction		
High	I	Outward interaction	0.010	225	300	0.000	0.000	2	0.002
High	II	Ejection	0.130	1578	2740	0.015	0.008	26	0.026
High	III	Inward interaction	0.010	208	508	0.000	0.000	2	0.002
High	IV	Sweep	0.025	196	274	0.000	0.000	5	0.005
Low	I	Outward interaction	0.035	122	184	0.001	0.001	7	0.007
Low	II	Ejection	0.135	474	652	0.019	0.009	27	0.027
Low	III	Inward interaction	0.035	114	227	0.001	0.001	7	0.007
Low	IV	Sweep	0.090	246	477	0.007	0.004	18	0.018
Medium	I	Outward interaction	0.010	33	62	0.000	0.000	2	0.002
Medium	II	Ejection	0.155	451	623	0.021	0.012	31	0.031
Medium	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
Medium	IV	Sweep	0.020	40	52	0.000	0.000	4	0.004

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	0.000	0	0	0.000	0.000	0	0.000
High	II	Ejection	0.055	672	813	0.002	0.001	11	0.011
High	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
High	IV	Sweep	0.055	627	988	0.002	0.001	11	0.011
Low	I	Outward interaction	0.015	49	74	0.000	0.000	3	0.003
Low	II	Ejection	0.130	430	771	0.018	0.010	26	0.026
Low	III	Inward interaction	0.020	62	82	0.000	0.000	4	0.004
Low	IV	Sweep	0.050	113	257	0.002	0.001	10	0.010
Medium	I	Outward interaction	0.000	0	0	0.000	0.000	0	0.000
Medium	II	Ejection	0.080	593	859	0.004	0.002	16	0.016
Medium	III	Inward interaction	0.005	64	67	0.000	0.000	1	0.001
Medium	IV	Sweep	0.120	863	1263	0.010	0.005	24	0.024

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	0.005	13	37	0.000	0.000	1	0.001
High	II	Ejection	0.110	460	806	0.015	0.008	22	0.022
High	III	Inward interaction	0.025	82	156	0.001	0.000	5	0.005
High	IV	Sweep	0.050	174	292	0.003	0.001	10	0.010
Low	I	Outward interaction	0.035	90	155	0.001	0.001	7	0.007
Low	II	Ejection	0.095	244	371	0.009	0.005	19	0.019
Low	III	Inward interaction	0.020	42	59	0.000	0.000	4	0.004
Low	IV	Sweep	0.045	101	153	0.002	0.001	9	0.009
Medium	I	Outward interaction	0.050	121	185	0.002	0.001	10	0.010
Medium	II	Ejection	0.060	169	308	0.004	0.002	12	0.012
Medium	III	Inward interaction	0.025	64	119	0.001	0.000	5	0.005
Medium	IV	Sweep	0.065	143	214	0.003	0.002	13	0.013

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	0.010	70	102	0.000	0.000	2	0.002
High	II	Ejection	0.070	503	1063	0.005	0.003	14	0.014
High	III	Inward interaction	0.005	25	34	0.000	0.000	1	0.001
High	IV	Sweep	0.080	566	1310	0.006	0.004	16	0.016
Low	I	Outward interaction	0.085	452	665	0.005	0.002	17	0.017
Low	II	Ejection	0.010	98	138	0.000	0.000	2	0.002
Low	III	Inward interaction	0.065	388	601	0.003	0.002	13	0.013
Low	IV	Sweep	0.000	0	0	0.000	0.000	0	0.000
Medium	I	Outward interaction	0.000	0	0	0.000	0.000	0	0.000
Medium	II	Ejection	0.125	137	279	0.010	0.007	25	0.025
Medium	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
Medium	IV	Sweep	0.125	123	232	0.009	0.006	25	0.025

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 fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	0.020	29	67	0.000	0.000	4	0.004
High	II	Ejection	0.035	58	85	0.001	0.001	7	0.007
High	III	Inward interaction	0.015	20	27	0.000	0.000	3	0.003
High	IV	Sweep	0.100	178	310	0.010	0.005	20	0.020
Low	I	Outward interaction	0.040	256	393	0.001	0.001	8	0.008
Low	II	Ejection	0.025	132	213	0.000	0.000	5	0.005
Low	III	Inward interaction	0.055	426	679	0.003	0.002	11	0.011
Low	IV	Sweep	0.100	687	1037	0.010	0.005	20	0.020
Medium	I	Outward interaction	0.030	52	124	0.001	0.001	6	0.006
Medium	II	Ejection	0.085	102	162	0.005	0.002	17	0.017
Medium	III	Inward interaction	0.005	7	14	0.000	0.000	1	0.001
Medium	IV	Sweep	0.085	135	276	0.007	0.004	17	0.017

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	0.010	27	60	0.000	0.000	2	0.002
High	II	Ejection	0.085	164	330	0.006	0.003	17	0.017
High	III	Inward interaction	0.015	49	104	0.000	0.000	3	0.003
High	IV	Sweep	0.085	124	243	0.004	0.002	17	0.017
Low	I	Outward interaction	0.010	25	69	0.000	0.000	2	0.002
Low	II	Ejection	0.025	86	120	0.001	0.000	5	0.005
Low	III	Inward interaction	0.025	91	141	0.001	0.000	5	0.005
Low	IV	Sweep	0.100	275	701	0.009	0.006	20	0.020
Medium	I	Outward interaction	0.035	76	125	0.001	0.001	7	0.007
Medium	II	Ejection	0.080	162	278	0.006	0.003	16	0.016
Medium	III	Inward interaction	0.015	24	31	0.000	0.000	3	0.003
Medium	IV	Sweep	0.090	148	230	0.006	0.003	18	0.018

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 fraction	TKE fraction	Events	Proportion
				Stress	TKE				
Low	I	Outward interaction	0.050	137	172	0.002	0.001	10	0.010
Low	II	Ejection	0.125	458	569	0.019	0.009	25	0.025
Low	III	Inward interaction	0.005	11	17	0.000	0.000	1	0.001
Low	IV	Sweep	0.045	95	170	0.001	0.001	9	0.009
High	I	Outward interaction	0.065	429	601	0.005	0.003	13	0.013
High	II	Ejection	0.120	771	1106	0.017	0.011	24	0.024
High	III	Inward interaction	0.015	81	95	0.000	0.000	3	0.003
High	IV	Sweep	0.025	74	99	0.000	0.000	5	0.005
Medium	I	Outward interaction	0.095	435	618	0.013	0.007	19	0.019
Medium	II	Ejection	0.055	132	169	0.002	0.001	11	0.011
Medium	III	Inward interaction	0.010	28	33	0.000	0.000	2	0.002
Medium	IV	Sweep	0.040	86	97	0.001	0.000	8	0.008

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	0.075	397	623	0.007	0.004	15	0.015
Low	II	Ejection	0.125	602	869	0.017	0.010	25	0.025
Low	III	Inward interaction	0.005	15	15	0.000	0.000	1	0.001
Low	IV	Sweep	0.015	49	59	0.000	0.000	3	0.003
High	I	Outward interaction	0.070	828	1555	0.005	0.003	14	0.014
High	II	Ejection	0.035	528	785	0.002	0.001	7	0.007
High	III	Inward interaction	0.020	200	445	0.000	0.000	4	0.004
High	IV	Sweep	0.035	339	802	0.001	0.001	7	0.007
Medium	I	Outward interaction	0.025	31	95	0.001	0.001	5	0.005
Medium	II	Ejection	0.085	74	149	0.006	0.003	17	0.017
Medium	III	Inward interaction	0.015	16	35	0.000	0.000	3	0.003
Medium	IV	Sweep	0.095	90	171	0.008	0.004	19	0.019

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	0.015	49	66	0.000	0.000	3	0.003
Low	II	Ejection	0.035	113	168	0.001	0.001	7	0.007
Low	III	Inward interaction	0.025	90	130	0.001	0.000	5	0.005
Low	IV	Sweep	0.045	213	307	0.002	0.001	9	0.009
High	I	Outward interaction	0.060	708	1980	0.003	0.002	12	0.012
High	II	Ejection	0.080	927	2267	0.006	0.003	16	0.016
High	III	Inward interaction	0.010	85	217	0.000	0.000	2	0.002
High	IV	Sweep	0.030	302	629	0.001	0.000	6	0.006
Medium	I	Outward interaction	0.075	287	753	0.007	0.006	15	0.015
Medium	II	Ejection	0.070	221	502	0.005	0.004	14	0.014
Medium	III	Inward interaction	0.010	21	53	0.000	0.000	2	0.002
Medium	IV	Sweep	0.065	146	251	0.003	0.002	13	0.013

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	0.000	0	0	0.000	0.000	0	0.000
Low	II	Ejection	0.015	106	174	0.000	0.000	3	0.003
Low	III	Inward interaction	0.020	340	438	0.001	0.000	4	0.004
Low	IV	Sweep	0.090	1155	1880	0.009	0.005	18	0.018
High	I	Outward interaction	0.025	43	56	0.001	0.000	5	0.005
High	II	Ejection	0.110	213	334	0.013	0.007	22	0.022
High	III	Inward interaction	0.010	13	23	0.000	0.000	2	0.002
High	IV	Sweep	0.060	83	145	0.003	0.002	12	0.012
Medium	I	Outward interaction	0.025	64	106	0.001	0.000	5	0.005
Medium	II	Ejection	0.115	237	398	0.011	0.006	23	0.023
Medium	III	Inward interaction	0.020	56	111	0.000	0.000	4	0.004
Medium	IV	Sweep	0.050	90	130	0.002	0.001	10	0.010

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	0.070	205	336	0.006	0.003	14	0.014
High	II	Ejection	0.065	123	195	0.003	0.002	13	0.013
High	III	Inward interaction	0.045	141	217	0.003	0.001	9	0.009
High	IV	Sweep	0.045	94	188	0.002	0.001	9	0.009
Low	I	Outward interaction	0.065	428	821	0.004	0.001	13	0.013
Low	II	Ejection	0.020	153	261	0.000	0.000	4	0.004
Low	III	Inward interaction	0.030	180	474	0.001	0.000	6	0.006
Low	IV	Sweep	0.050	348	773	0.002	0.001	10	0.010
Medium	I	Outward interaction	0.050	168	223	0.004	0.002	10	0.010
Medium	II	Ejection	0.060	82	132	0.002	0.001	12	0.012
Medium	III	Inward interaction	0.015	33	43	0.000	0.000	3	0.003
Medium	IV	Sweep	0.070	105	147	0.004	0.002	14	0.014

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	0.105	590	922	0.015	0.009	21	0.021
High	II	Ejection	0.065	266	330	0.004	0.002	13	0.013
High	III	Inward interaction	0.005	18	23	0.000	0.000	1	0.001
High	IV	Sweep	0.040	138	172	0.001	0.001	8	0.008
Low	I	Outward interaction	0.000	0	0	0.000	0.000	0	0.000
Low	II	Ejection	0.045	104	244	0.001	0.001	9	0.009
Low	III	Inward interaction	0.050	172	326	0.002	0.001	10	0.010
Low	IV	Sweep	0.080	275	486	0.006	0.002	16	0.016
Medium	I	Outward interaction	0.005	10	14	0.000	0.000	1	0.001
Medium	II	Ejection	0.075	147	219	0.004	0.002	15	0.015
Medium	III	Inward interaction	0.020	48	119	0.000	0.000	4	0.004
Medium	IV	Sweep	0.085	213	307	0.006	0.003	17	0.017

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	0.000	0	0	0.000	0.000	0	0.000
High	II	Ejection	0.135	2641	3992	0.013	0.007	27	0.027
High	III	Inward interaction	0.005	182	283	0.000	0.000	1	0.001
High	IV	Sweep	0.075	1300	1898	0.004	0.002	15	0.015
Low	I	Outward interaction	0.015	77	330	0.000	0.000	3	0.003
Low	II	Ejection	0.090	535	1293	0.008	0.002	18	0.018
Low	III	Inward interaction	0.010	51	75	0.000	0.000	2	0.002
Low	IV	Sweep	0.055	285	823	0.003	0.001	11	0.011
Medium	I	Outward interaction	0.000	0	0	0.000	0.000	0	0.000
Medium	II	Ejection	0.135	261	372	0.013	0.007	27	0.027
Medium	III	Inward interaction	0.015	41	69	0.000	0.000	3	0.003
Medium	IV	Sweep	0.045	79	147	0.001	0.001	9	0.009

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	0.015	338	496	0.000	0.000	3	0.003
High	II	Ejection	0.105	2371	3287	0.010	0.005	21	0.021
High	III	Inward interaction	0.005	99	112	0.000	0.000	1	0.001
High	IV	Sweep	0.060	1056	1867	0.003	0.002	12	0.012
Low	I	Outward interaction	0.025	124	147	0.001	0.000	5	0.005
Low	II	Ejection	0.090	385	566	0.008	0.003	18	0.018
Low	III	Inward interaction	0.005	14	15	0.000	0.000	1	0.001
Low	IV	Sweep	0.065	328	493	0.005	0.002	13	0.013
Medium	I	Outward interaction	0.015	336	377	0.000	0.000	3	0.003
Medium	II	Ejection	0.105	1910	2502	0.009	0.005	21	0.021
Medium	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
Medium	IV	Sweep	0.015	171	191	0.000	0.000	3	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	$\times 10^6$		Stress fraction	TKE fraction	Events	Proportion
				Stress	TKE				
High	I	Outward interaction	0.000	0	0	0.000	0.000	0	0.000
High	II	Ejection	0.175	1030	1485	0.027	0.015	35	0.035
High	III	Inward interaction	0.015	136	302	0.000	0.000	3	0.003
High	IV	Sweep	0.025	94	114	0.000	0.000	5	0.005
Low	I	Outward interaction	0.005	21	22	0.000	0.000	1	0.001
Low	II	Ejection	0.130	463	582	0.014	0.006	26	0.026
Low	III	Inward interaction	0.015	72	108	0.000	0.000	3	0.003
Low	IV	Sweep	0.005	12	16	0.000	0.000	1	0.001
Medium	I	Outward interaction	0.020	108	150	0.000	0.000	4	0.004
Medium	II	Ejection	0.155	666	939	0.019	0.011	31	0.031
Medium	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
Medium	IV	Sweep	0.050	188	208	0.002	0.001	10	0.010

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	0.170	1012	2192	0.037	0.025	34	0.034
High	II	Ejection	0.010	102	172	0.000	0.000	2	0.002
High	III	Inward interaction	0.005	22	32	0.000	0.000	1	0.001
High	IV	Sweep	0.000	0	0	0.000	0.000	0	0.000
Low	I	Outward interaction	0.035	462	931	0.001	0.001	7	0.007
Low	II	Ejection	0.055	714	973	0.003	0.001	11	0.011
Low	III	Inward interaction	0.035	489	1223	0.001	0.001	7	0.007
Low	IV	Sweep	0.070	719	1310	0.003	0.002	14	0.014
Medium	I	Outward interaction	0.050	295	656	0.003	0.002	10	0.010
Medium	II	Ejection	0.050	151	340	0.002	0.001	10	0.010
Medium	III	Inward interaction	0.000	0	0	0.000	0.000	0	0.000
Medium	IV	Sweep	0.115	447	951	0.012	0.006	23	0.023

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	$\times 10^6$					
				Stress	TKE	Stress fraction	TKE fraction	Events	Proportion
High	I	Outward interaction	0.030	118	268	0.001	0.000	6	0.006
High	II	Ejection	0.055	283	574	0.003	0.002	11	0.011
High	III	Inward interaction	0.035	193	276	0.001	0.001	7	0.007
High	IV	Sweep	0.075	424	680	0.006	0.003	15	0.015
Low	I	Outward interaction	0.040	266	364	0.002	0.001	8	0.008
Low	II	Ejection	0.020	127	161	0.000	0.000	4	0.004
Low	III	Inward interaction	0.075	346	659	0.004	0.003	15	0.015
Low	IV	Sweep	0.015	87	195	0.000	0.000	3	0.003
Medium	I	Outward interaction	0.015	22	36	0.000	0.000	3	0.003
Medium	II	Ejection	0.155	232	444	0.020	0.011	31	0.031
Medium	III	Inward interaction	0.025	51	103	0.001	0.000	5	0.005
Medium	IV	Sweep	0.090	128	184	0.006	0.003	18	0.018

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	0.025	65	103	0.001	0.000	5	0.005
High	II	Ejection	0.060	132	201	0.003	0.001	12	0.012
High	III	Inward interaction	0.020	57	80	0.000	0.000	4	0.004
High	IV	Sweep	0.115	370	651	0.015	0.007	23	0.023
Low	I	Outward interaction	0.020	65	79	0.000	0.000	4	0.004
Low	II	Ejection	0.045	115	185	0.002	0.001	9	0.009
Low	III	Inward interaction	0.020	60	73	0.000	0.000	4	0.004
Low	IV	Sweep	0.115	398	664	0.014	0.008	23	0.023
Medium	I	Outward interaction	0.040	223	437	0.002	0.001	8	0.008
Medium	II	Ejection	0.045	152	208	0.002	0.001	9	0.009
Medium	III	Inward interaction	0.020	109	137	0.000	0.000	4	0.004
Medium	IV	Sweep	0.080	306	437	0.005	0.003	16	0.016

6 Plots of quadrant data

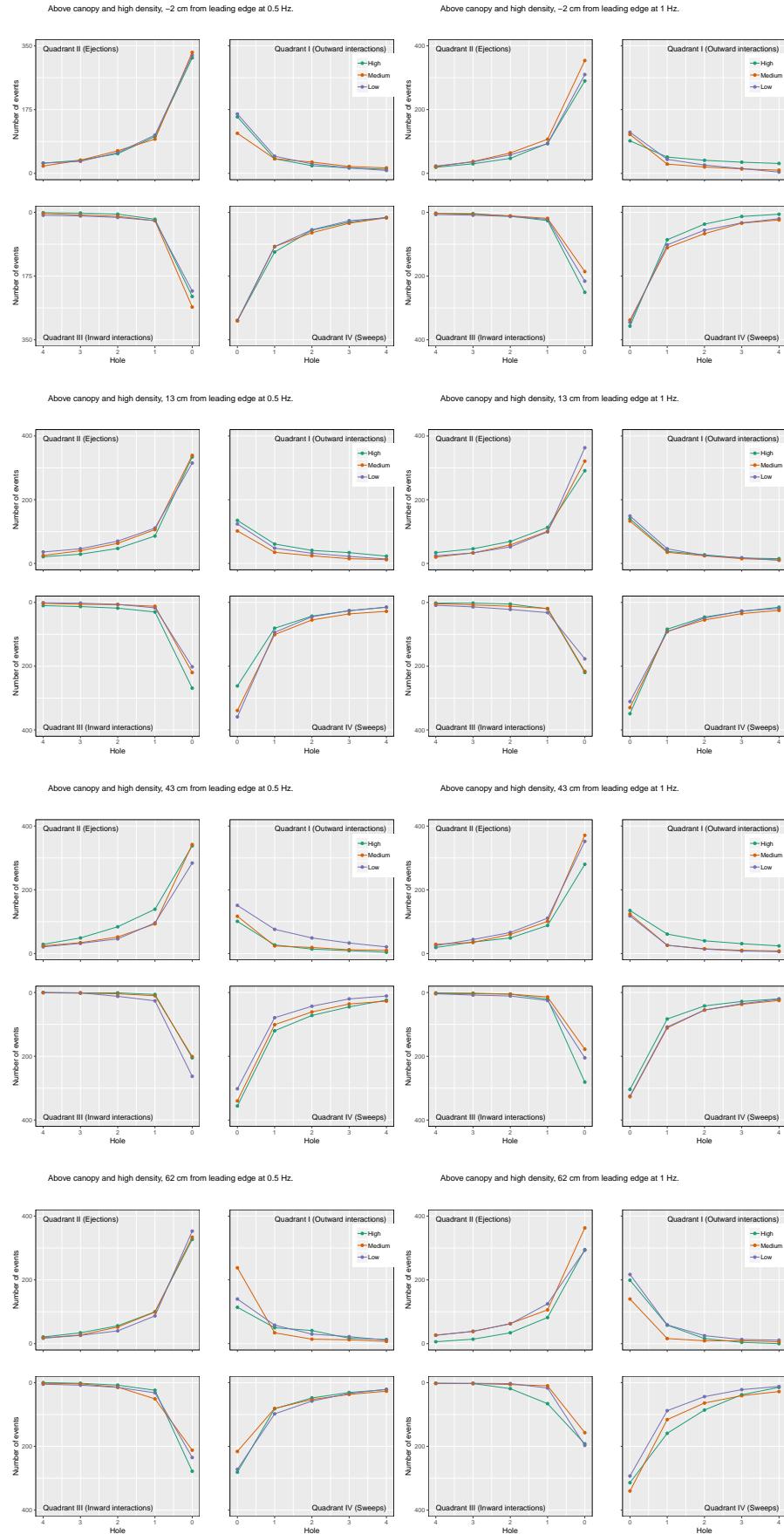


Figure 2: Variation in the number of events over hole size above the canopy.

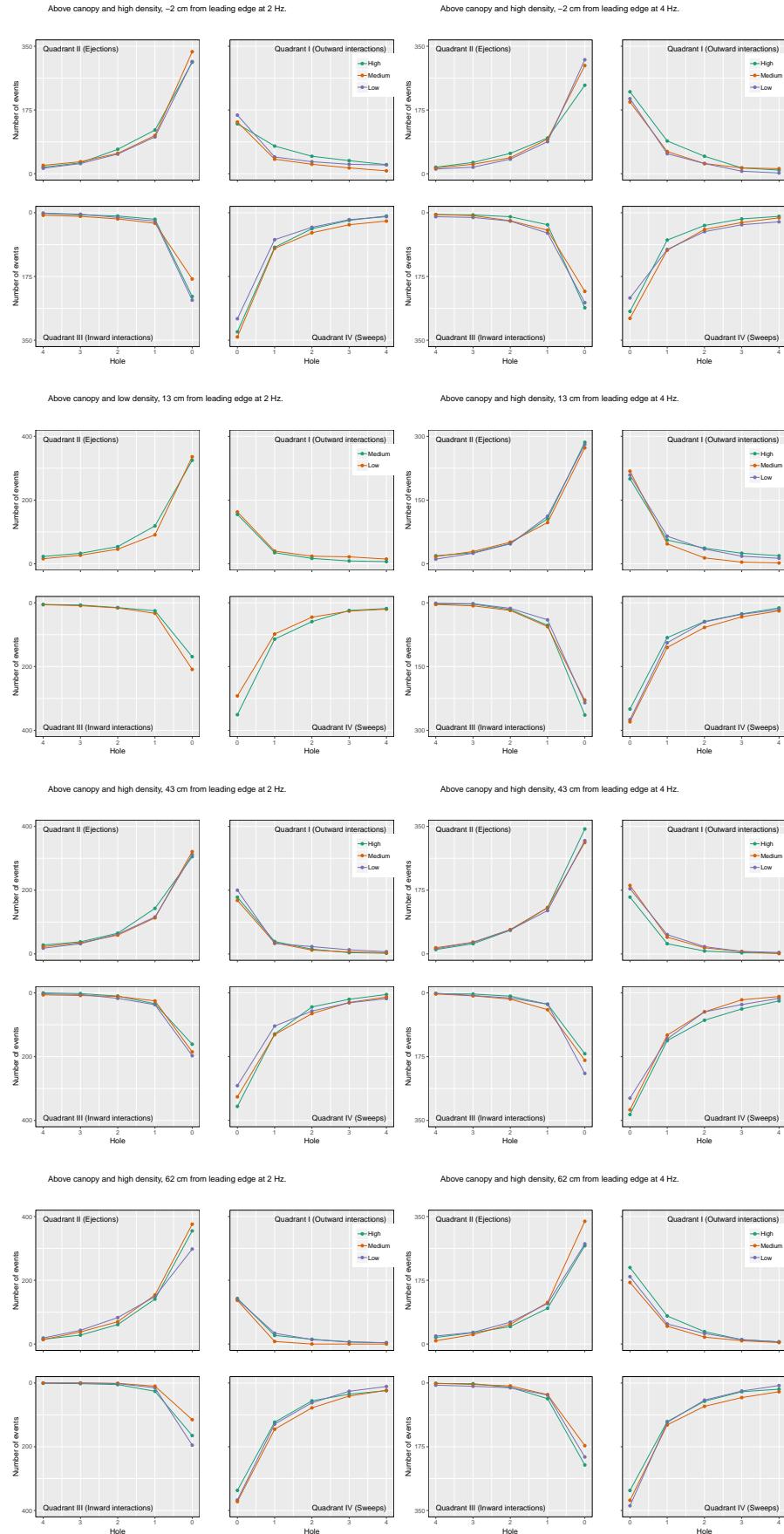


Figure 3: Variation in the number of events over hole size above the canopy.

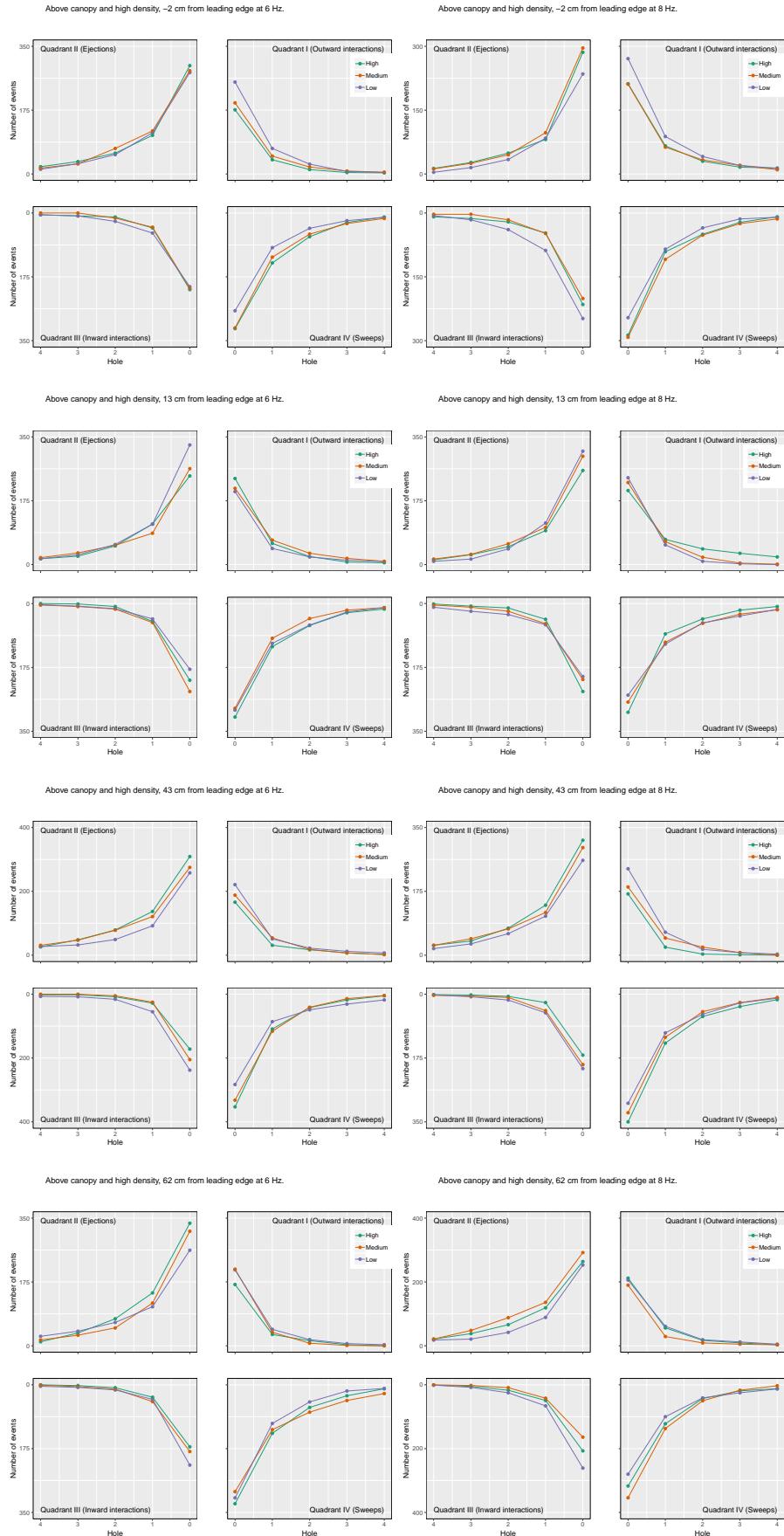


Figure 4: Variation in the number of events over hole size above the canopy.

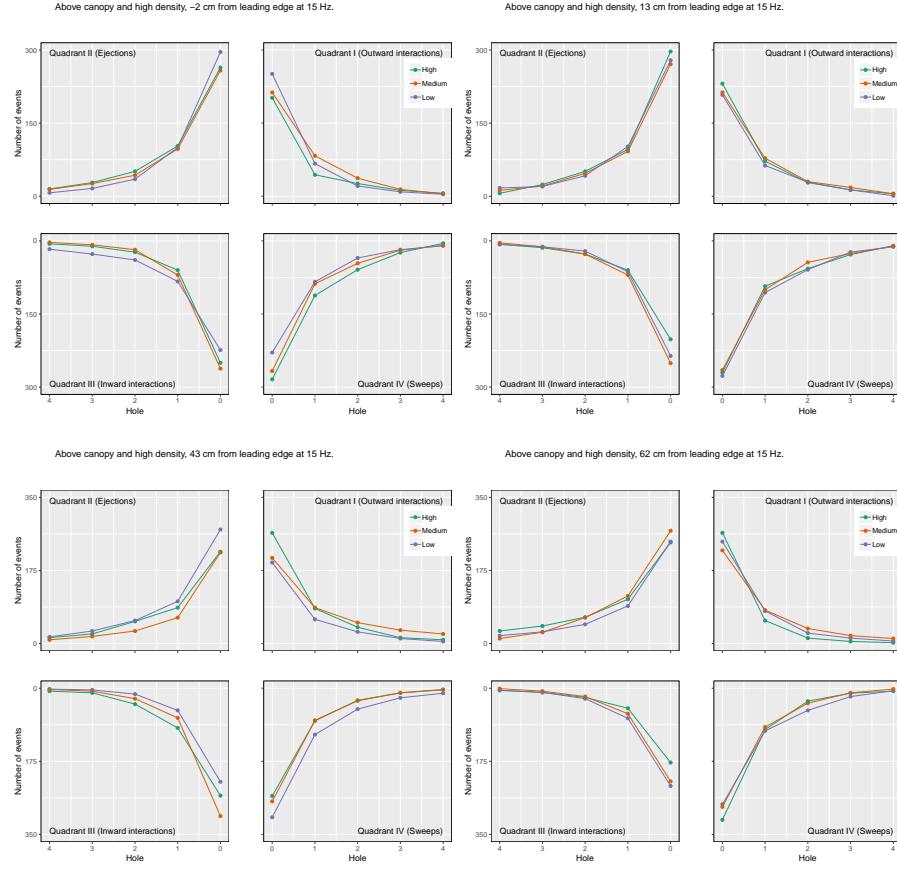


Figure 5: Variation in the number of events over hole size above the canopy.

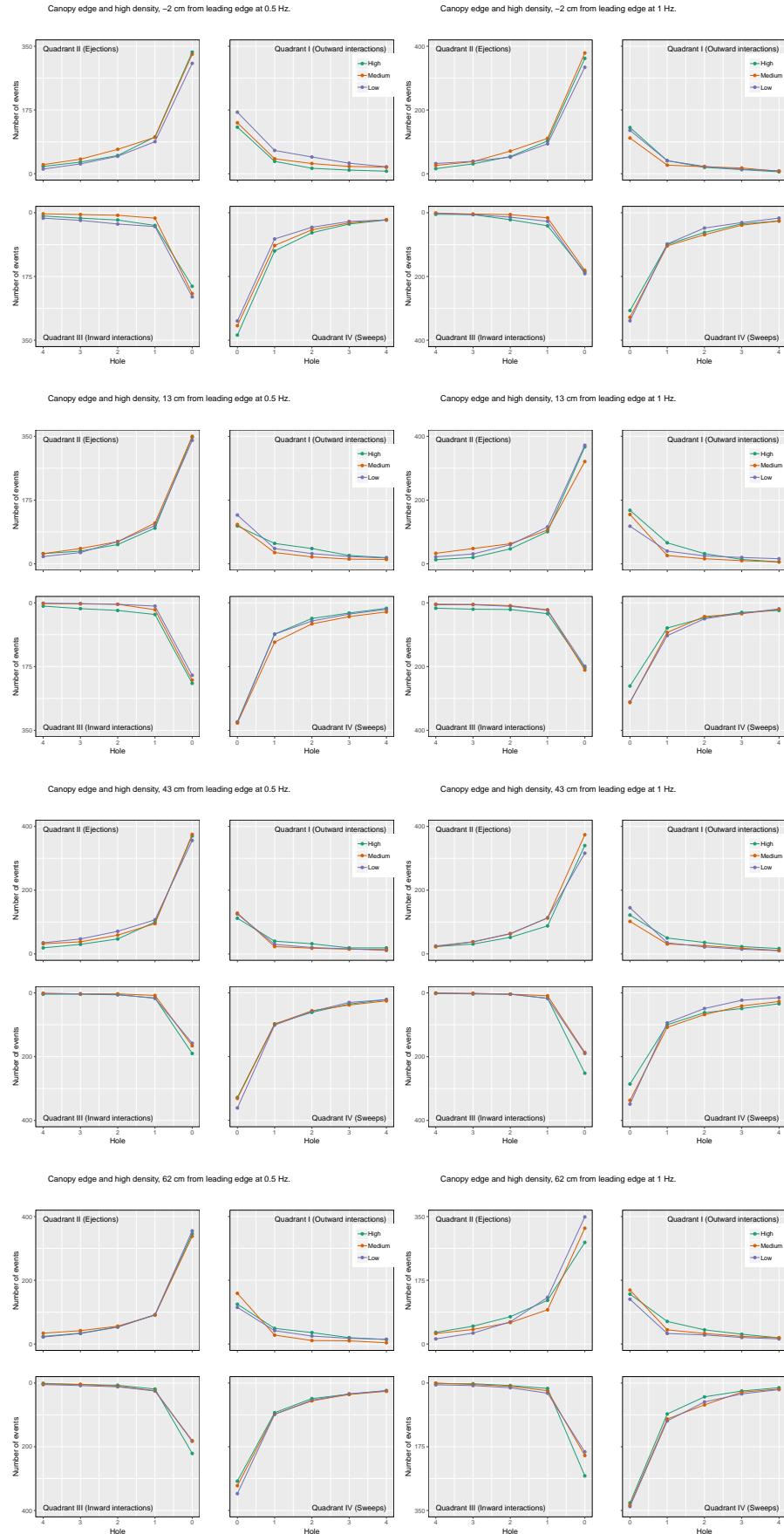


Figure 6: Variation in the number of events over hole size at the canopy edge.

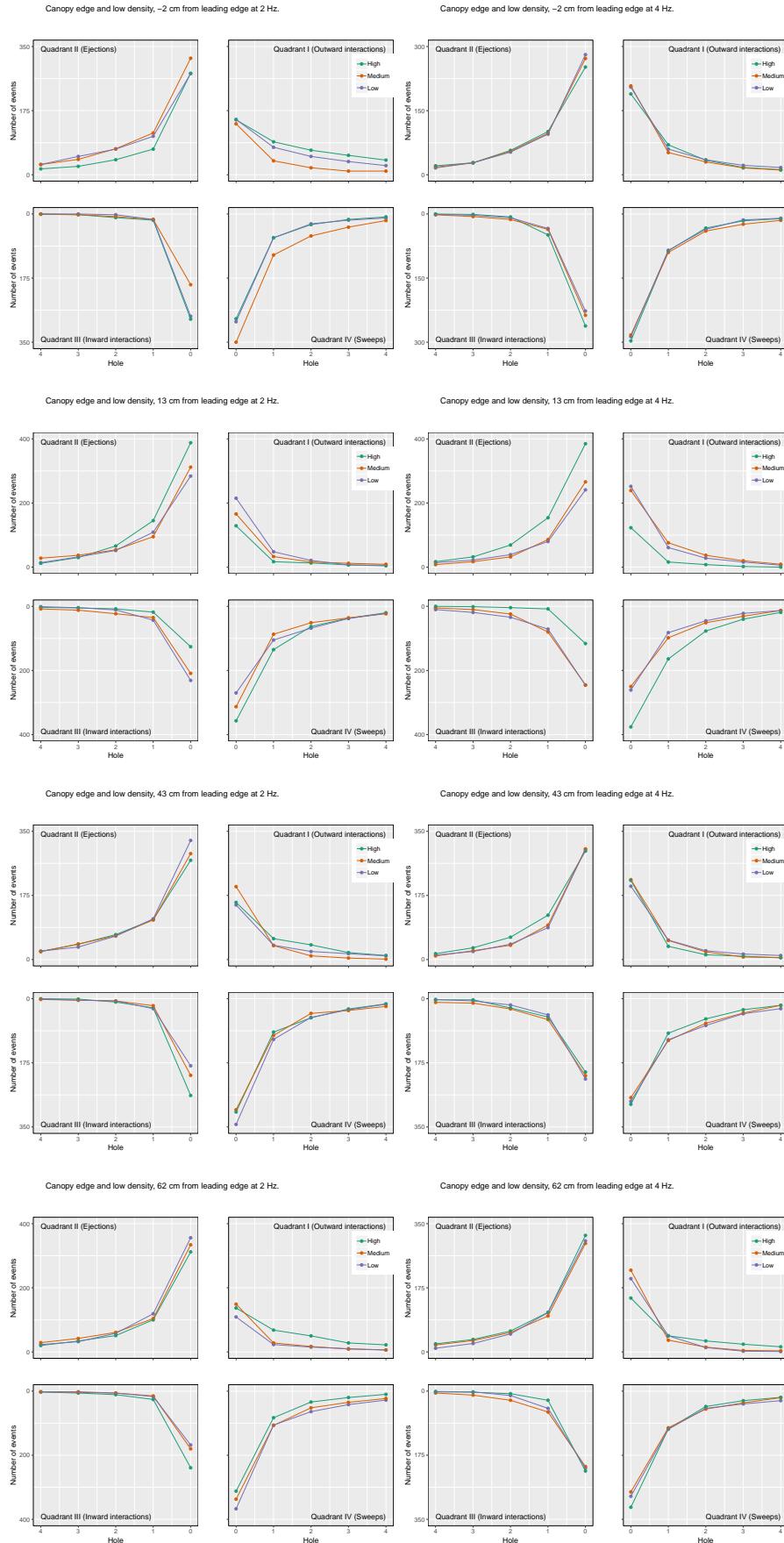


Figure 7: Variation in the number of events over hole size at the canopy edge.

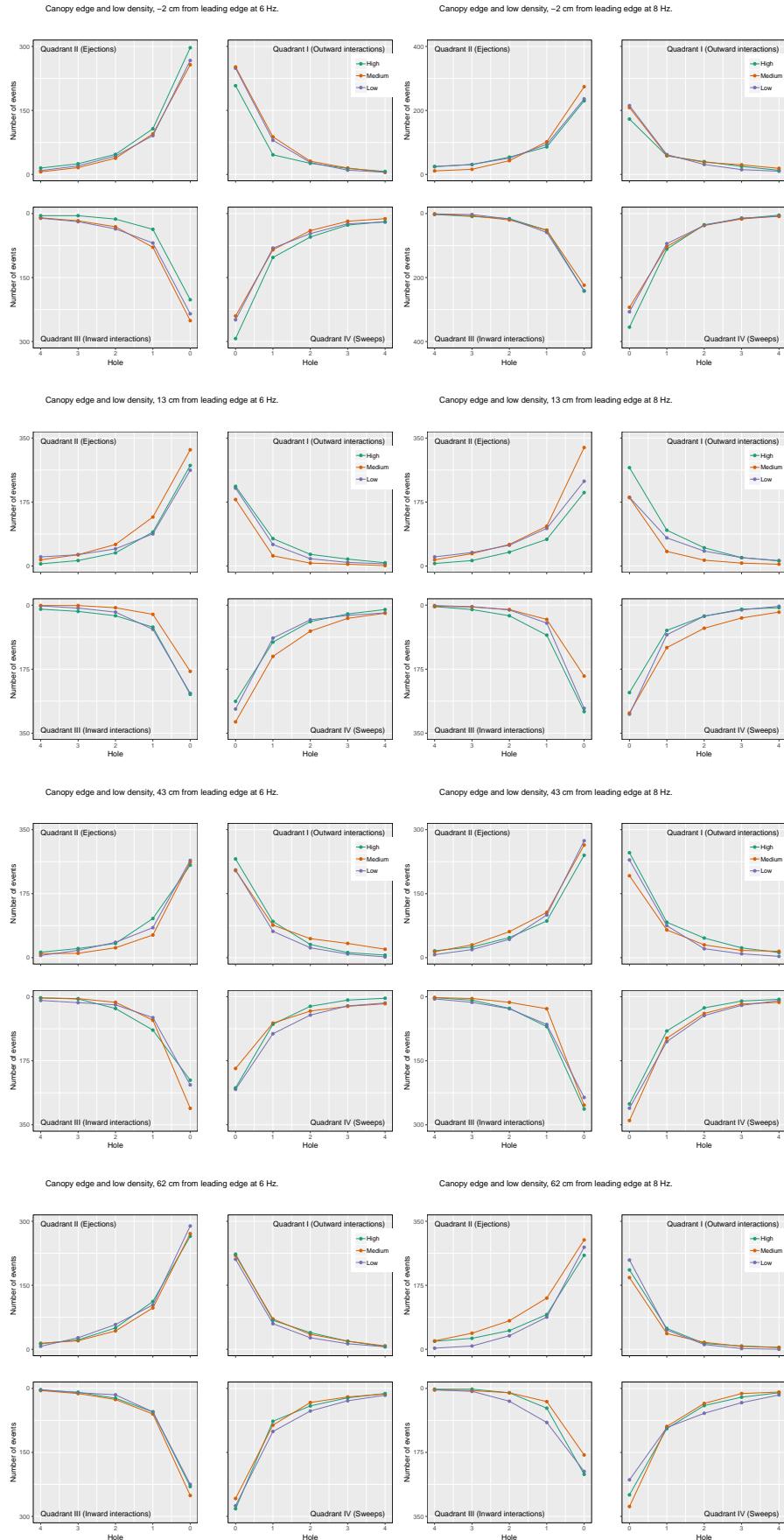


Figure 8: Variation in the number of events over hole size at the canopy edge.

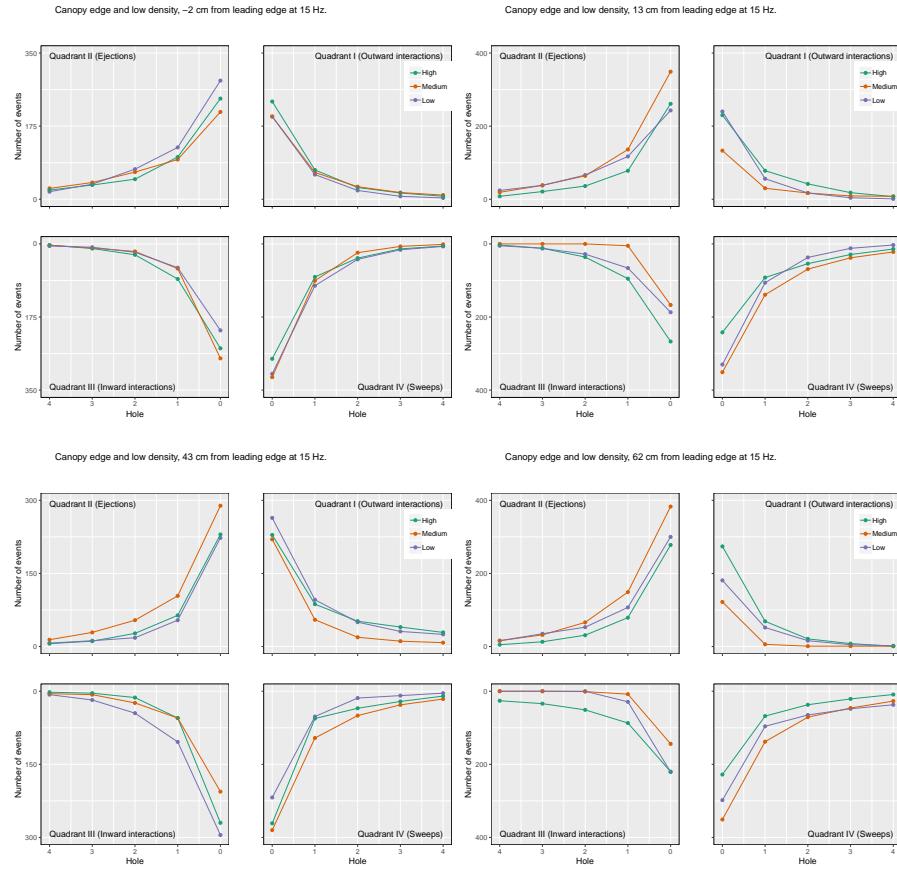


Figure 9: Variation in the number of events over hole size at the canopy edge.

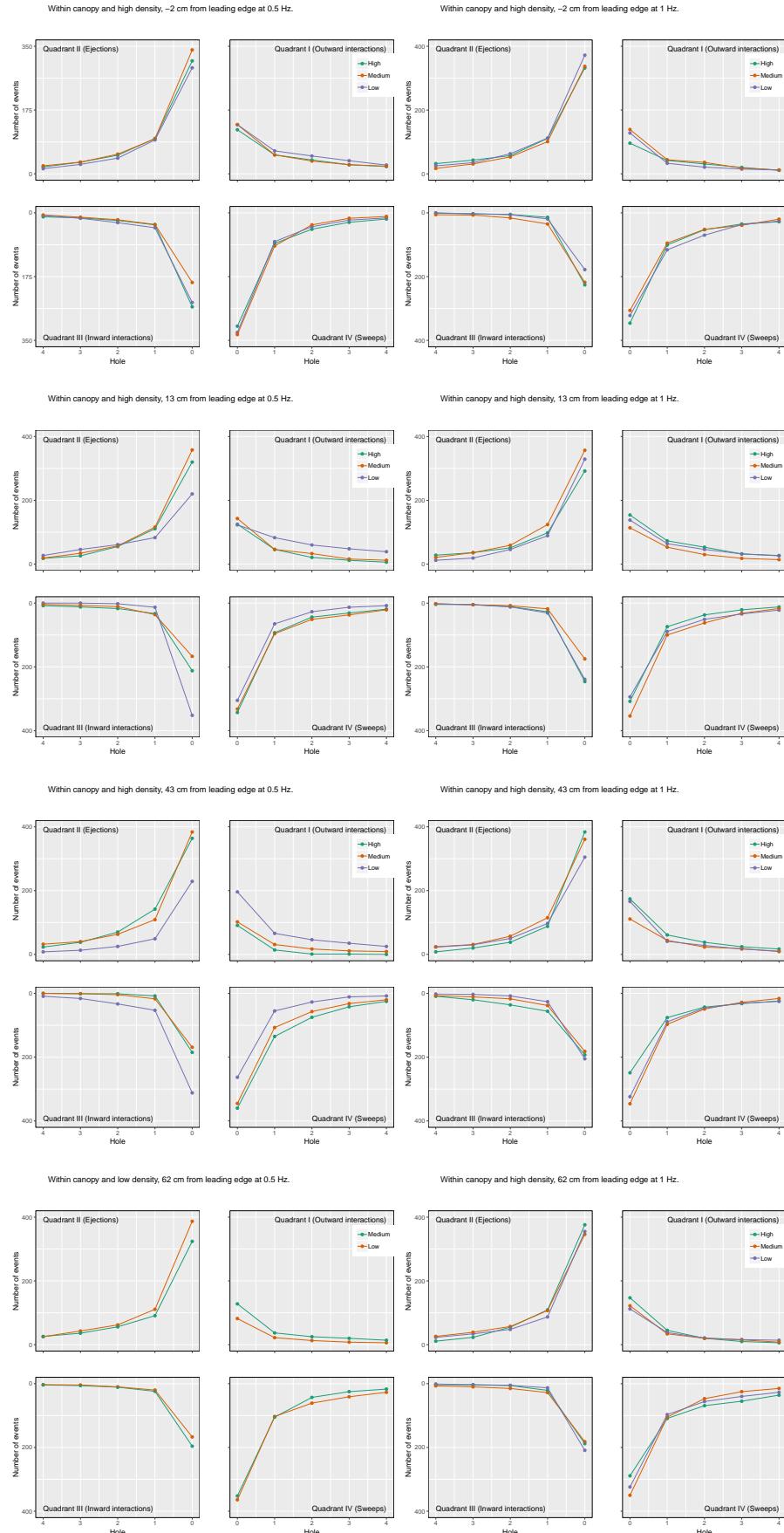


Figure 10: Variation in the number of events over hole size within the canopy.

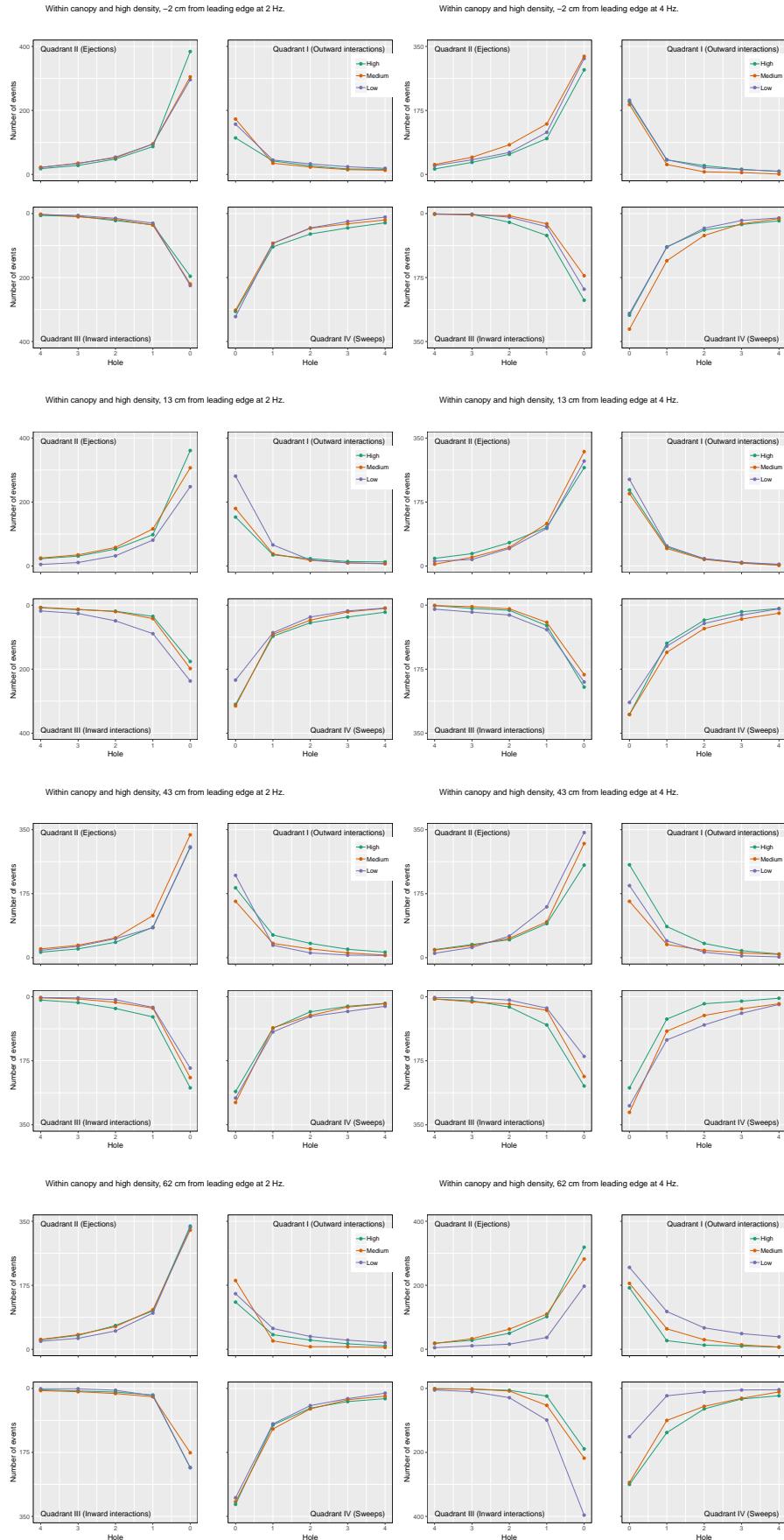


Figure 11: Variation in the number of events over hole size within the canopy.

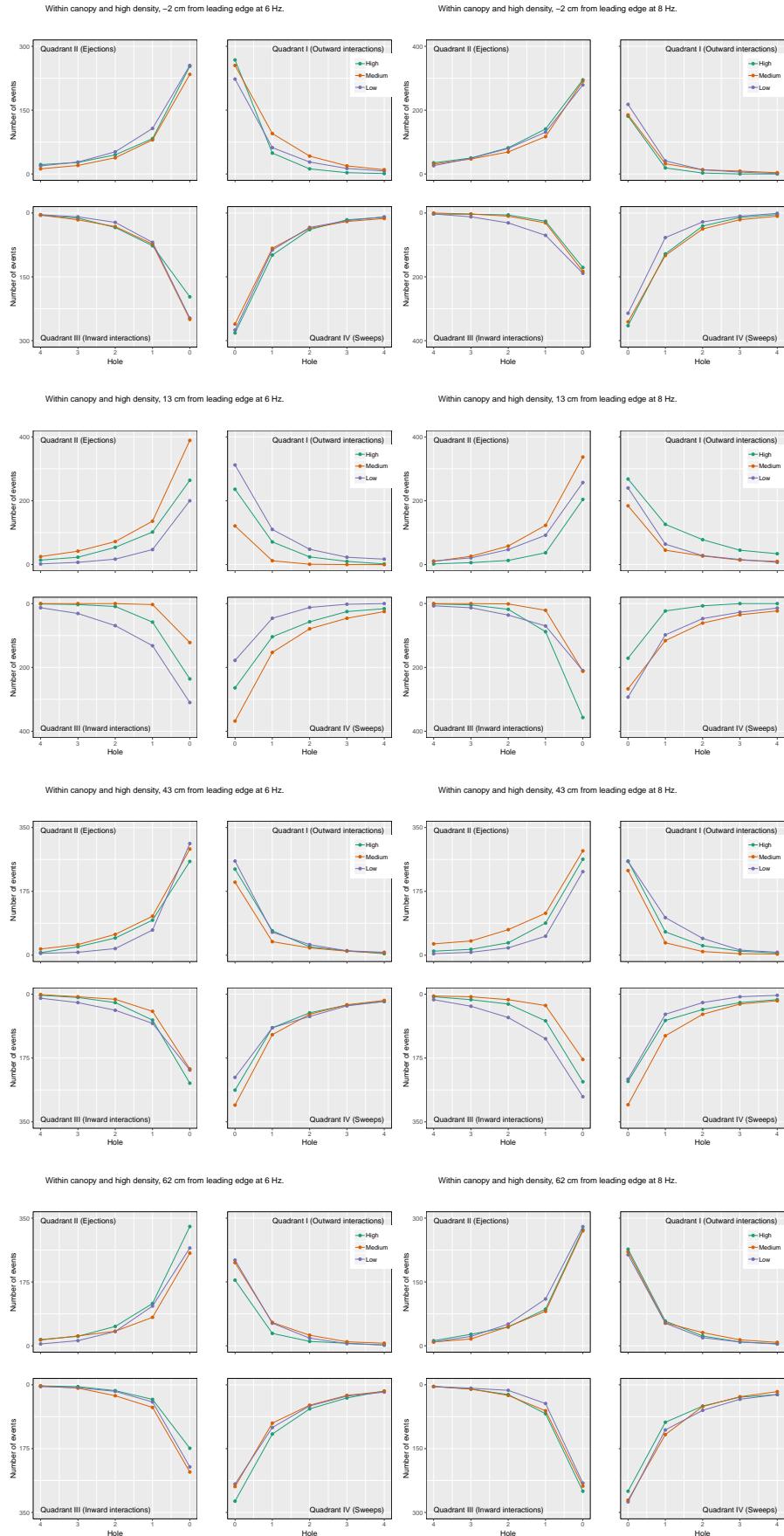


Figure 12: Variation in the number of events over hole size within the canopy.

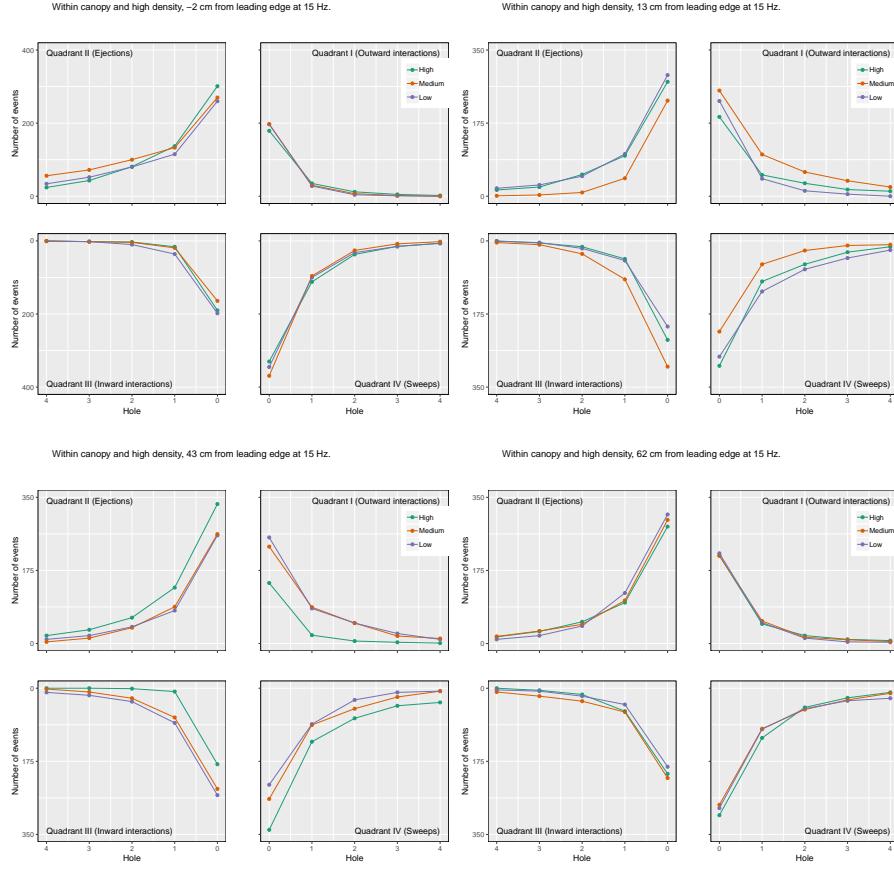


Figure 13: Variation in the number of events over hole size within the canopy.

6.1 Plots of the proportion of events

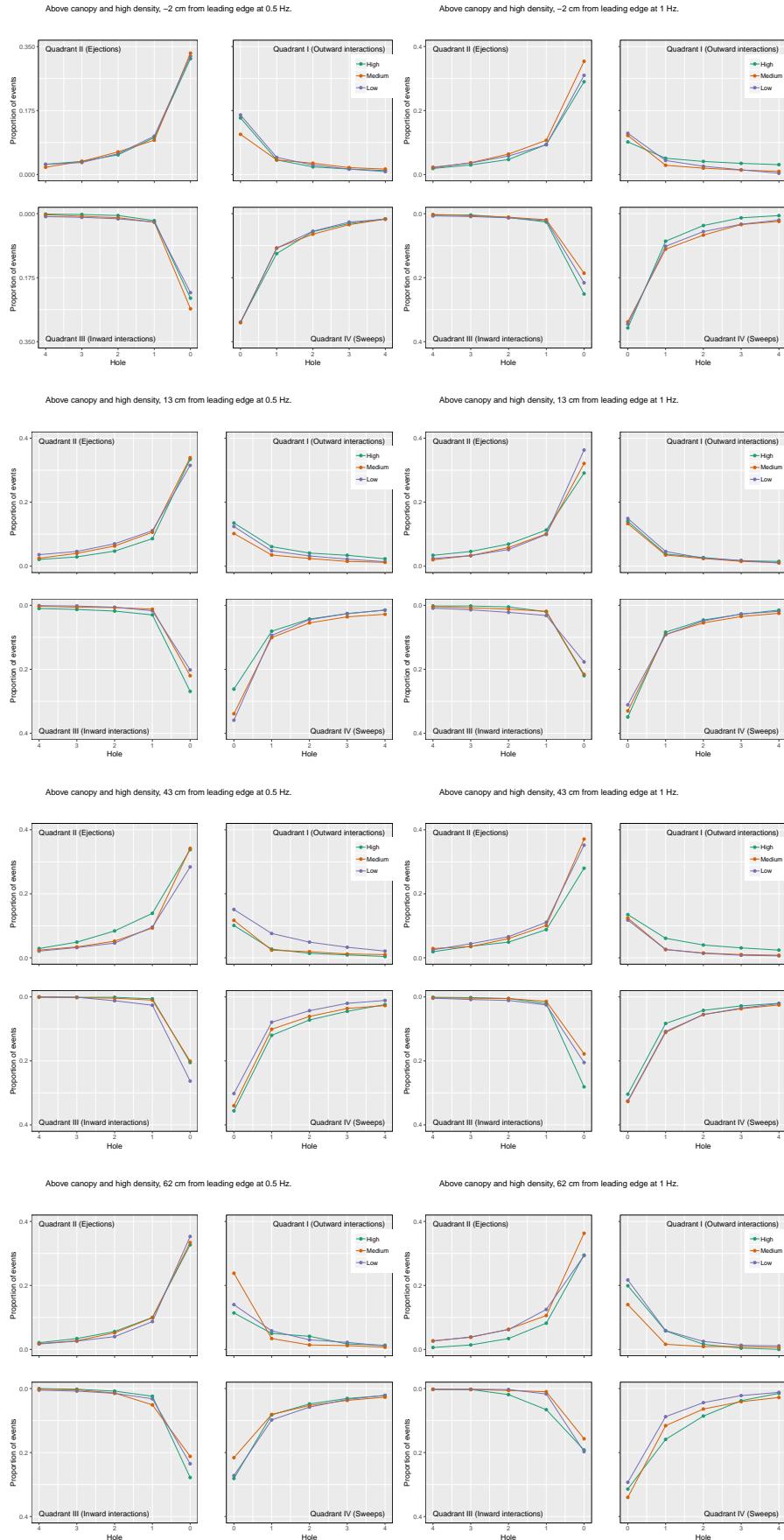


Figure 14: Variation in the proportion of events over hole size above the canopy.

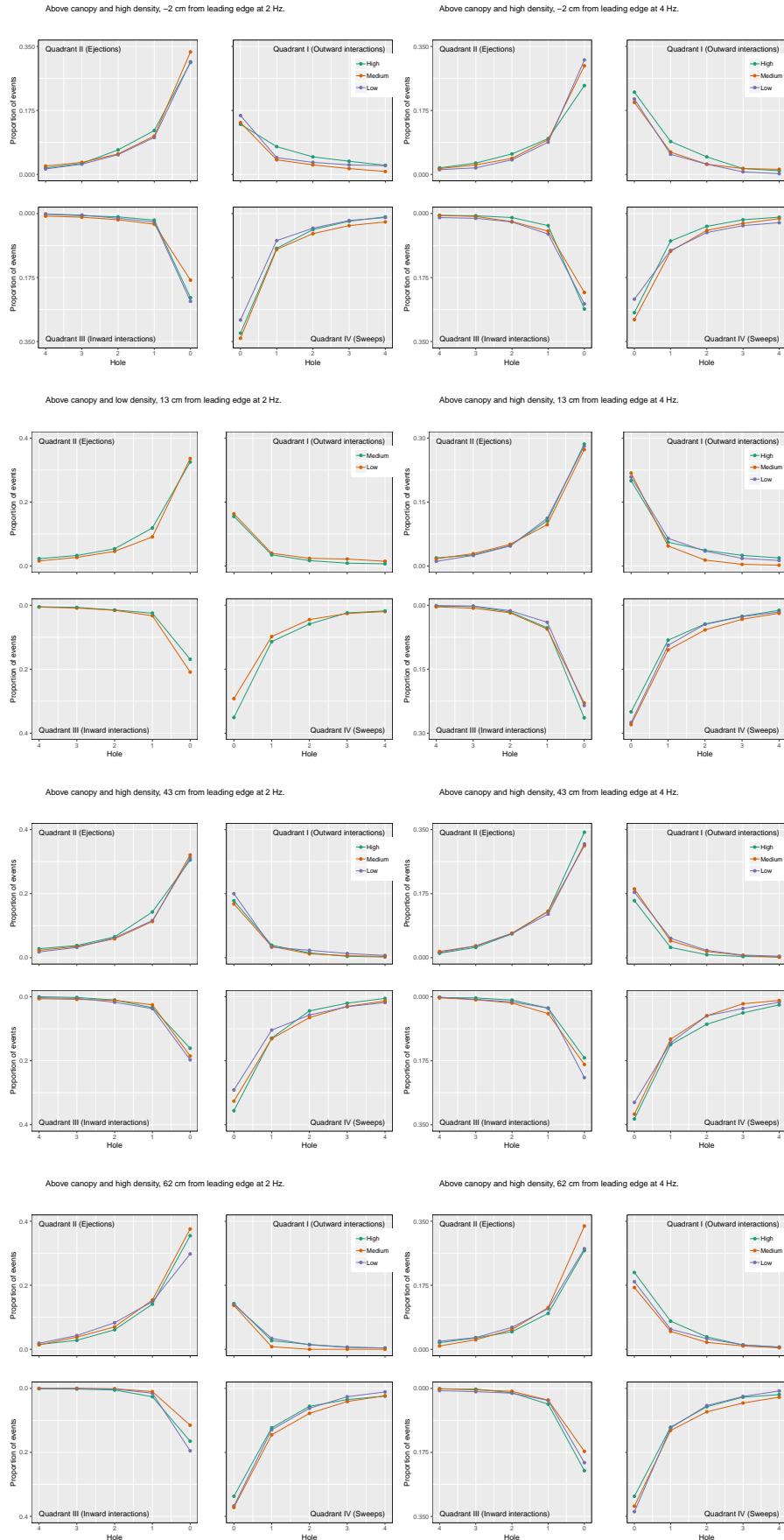


Figure 15: Variation in the proportion of events over hole size above the canopy.

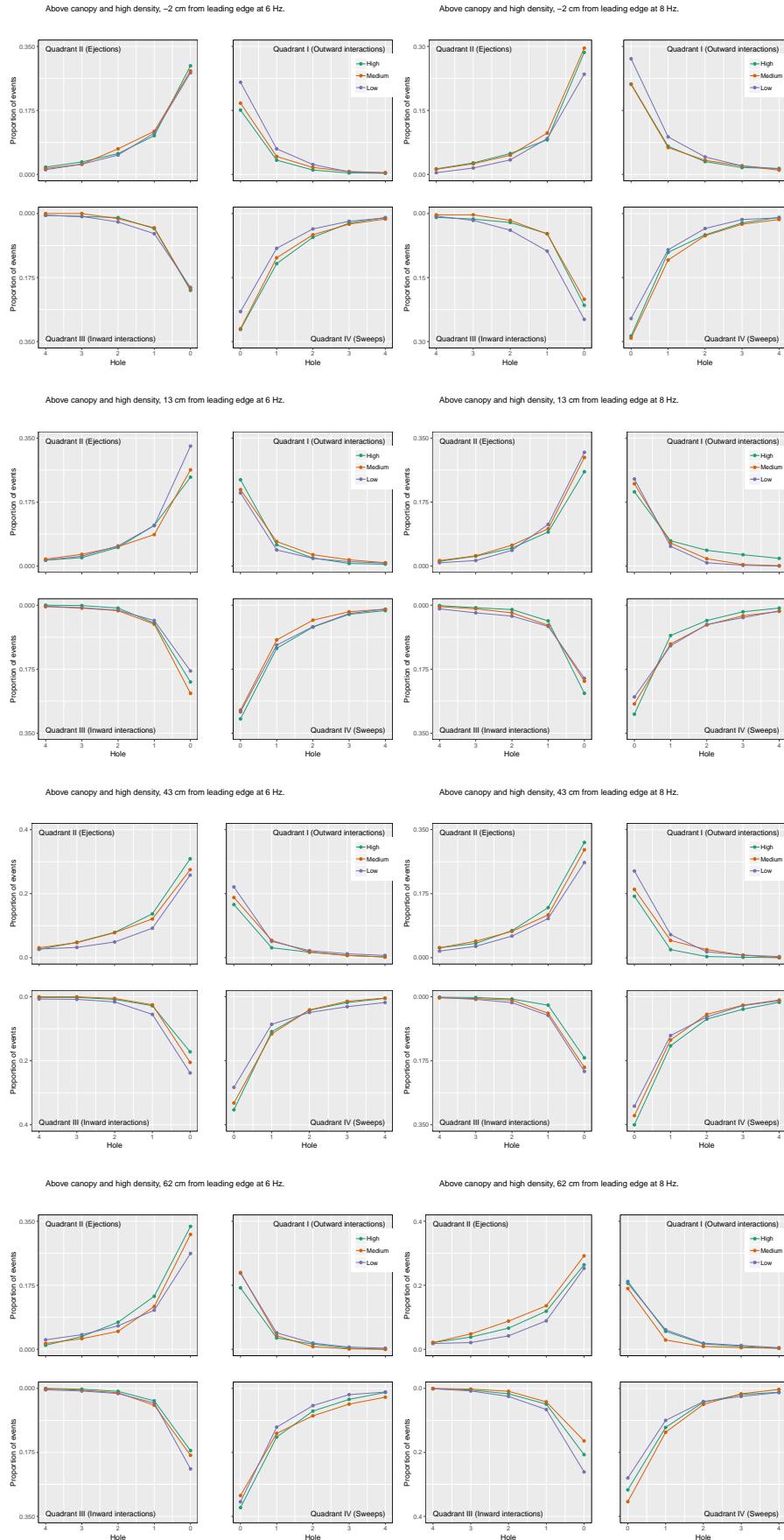


Figure 16: Variation in the proportion of events over hole size above the canopy.

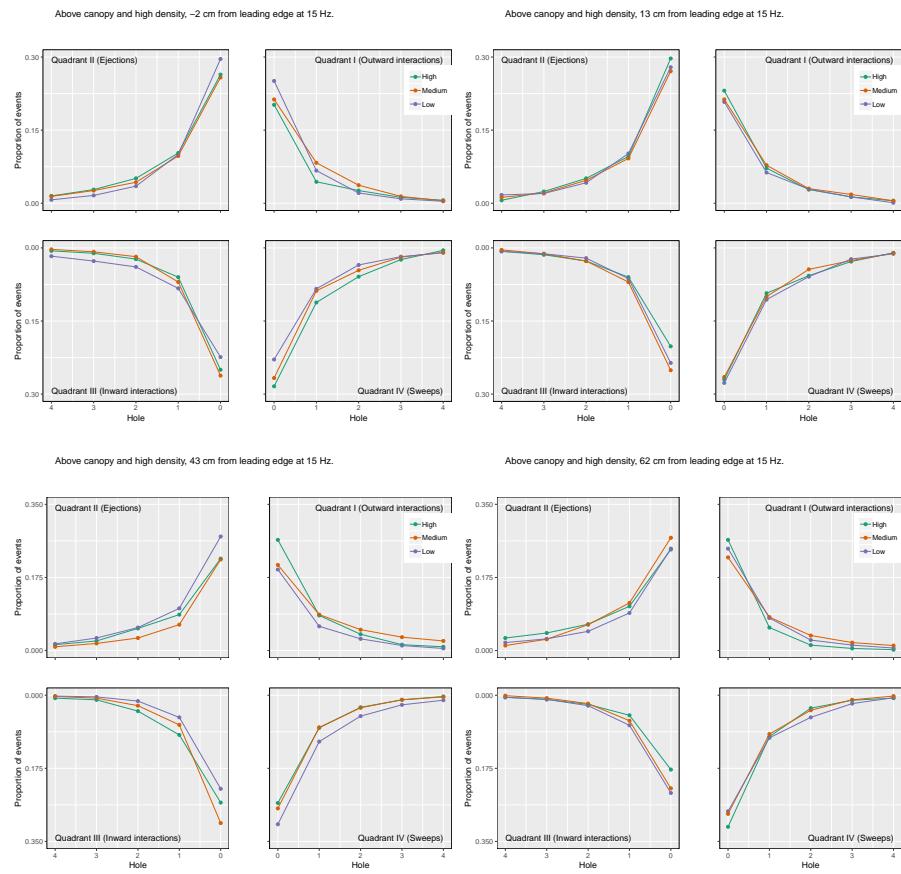


Figure 17: Variation in the proportion of events over hole size above the canopy.

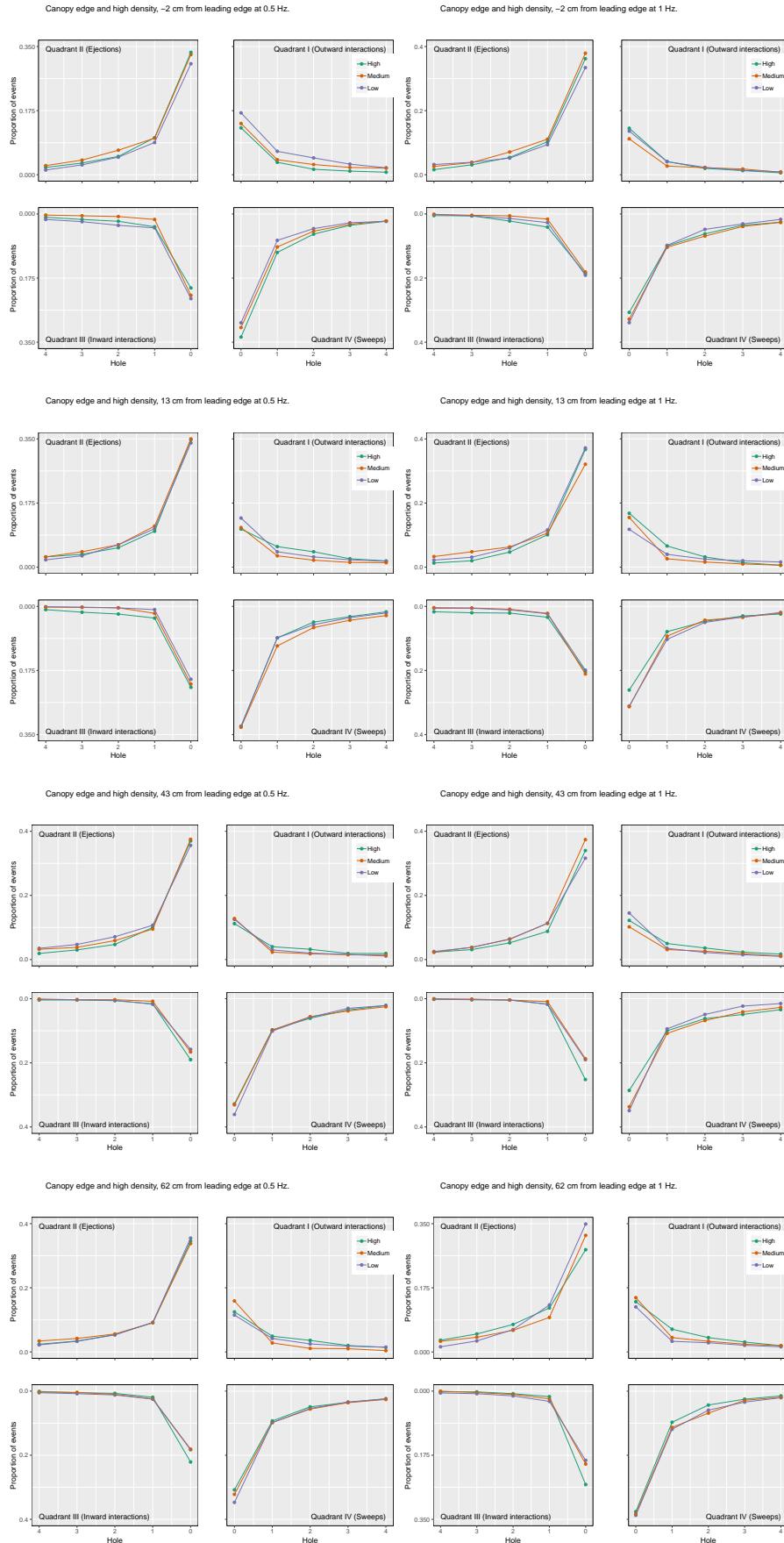


Figure 18: Variation in the proportion of events over hole size at the canopy edge.

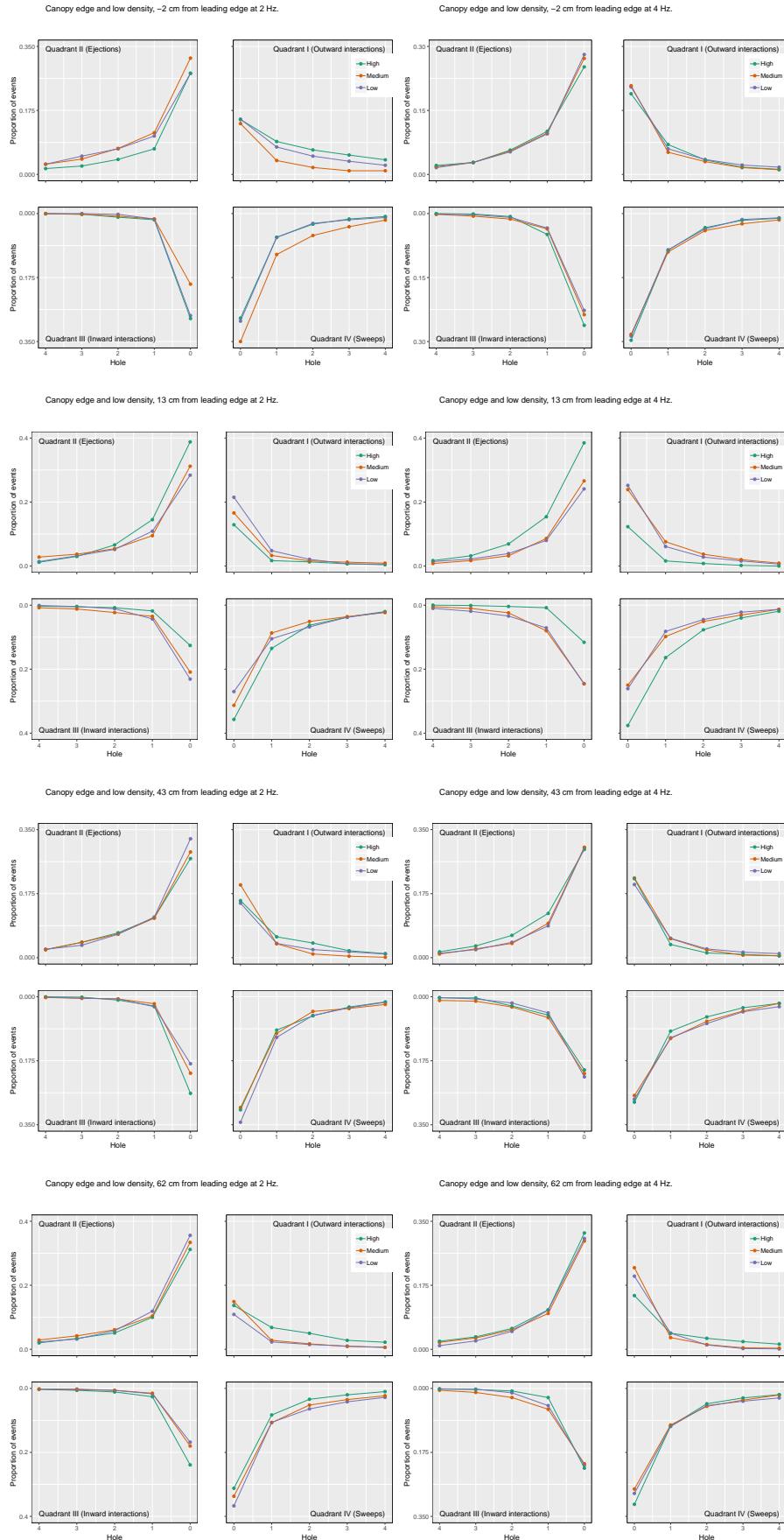


Figure 19: Variation in the proportion of events over hole size at the canopy edge.

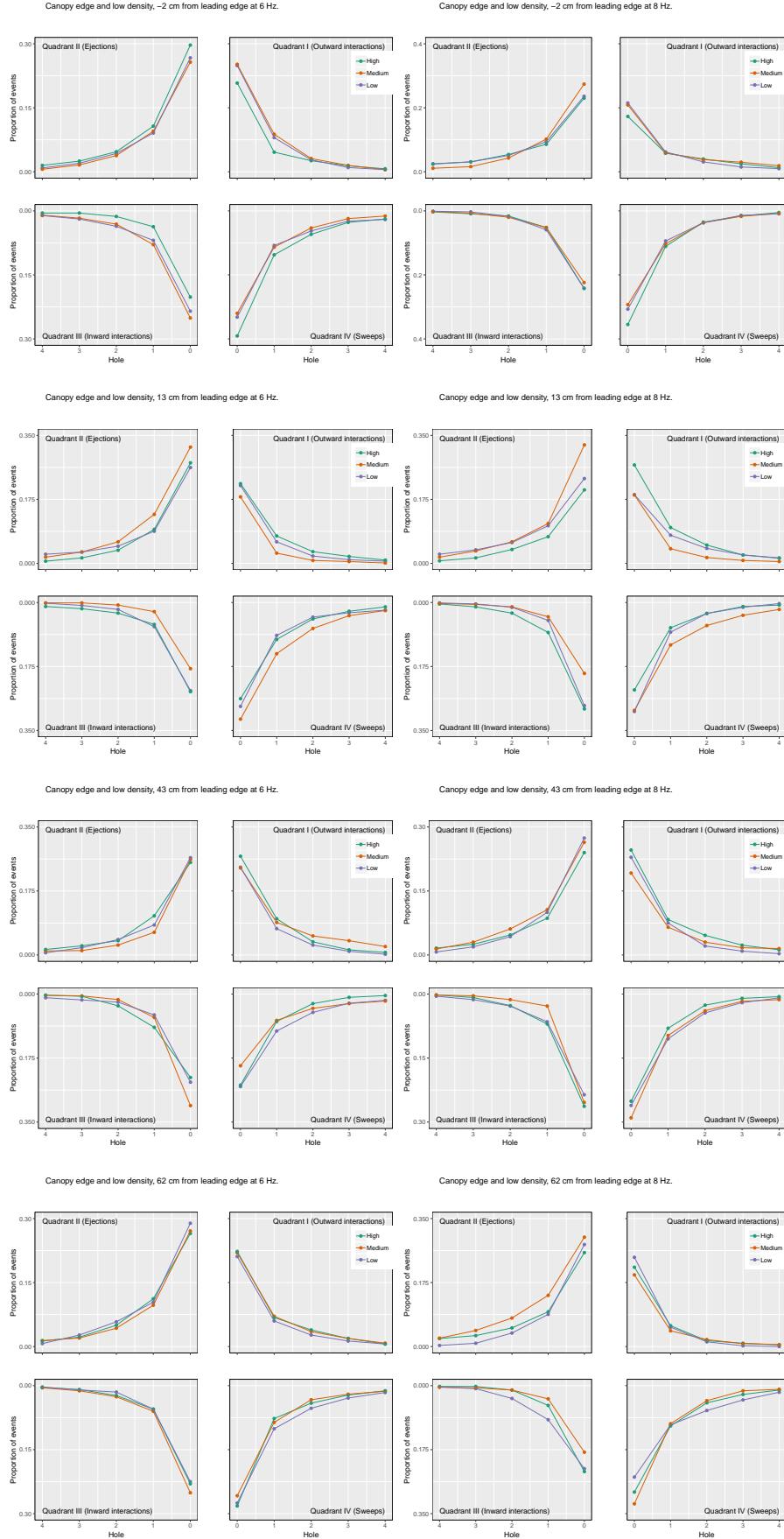


Figure 20: Variation in the proportion of events over hole size at the canopy edge.

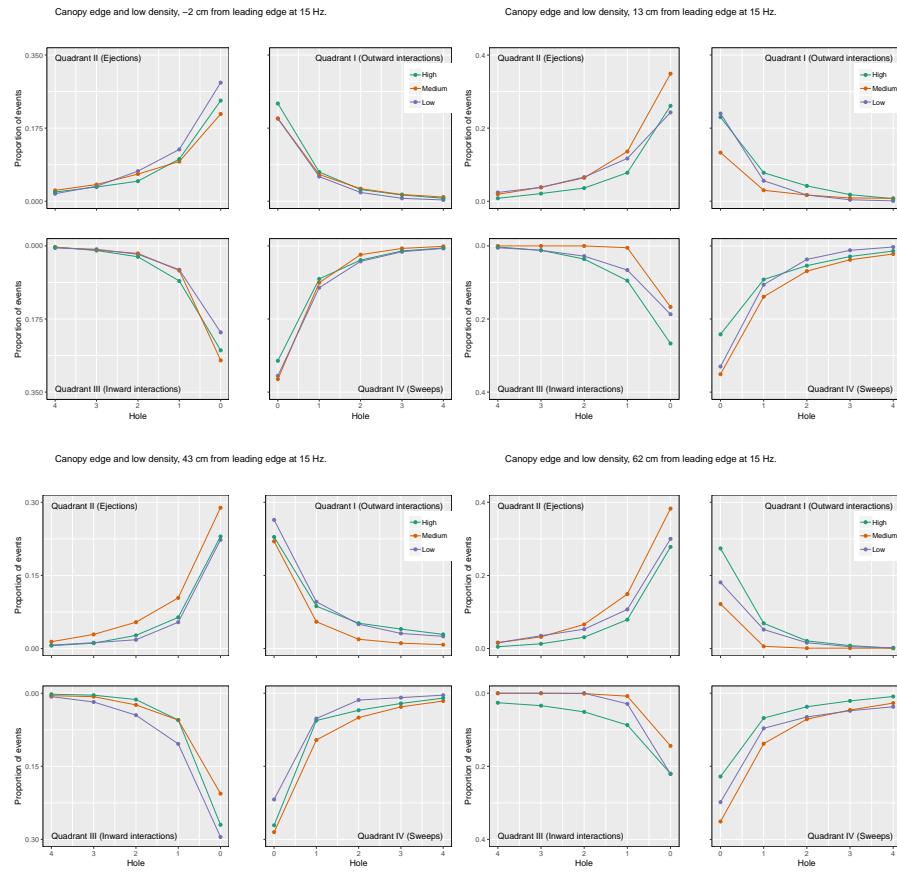


Figure 21: Variation in the proportion of events over hole size at the canopy edge.

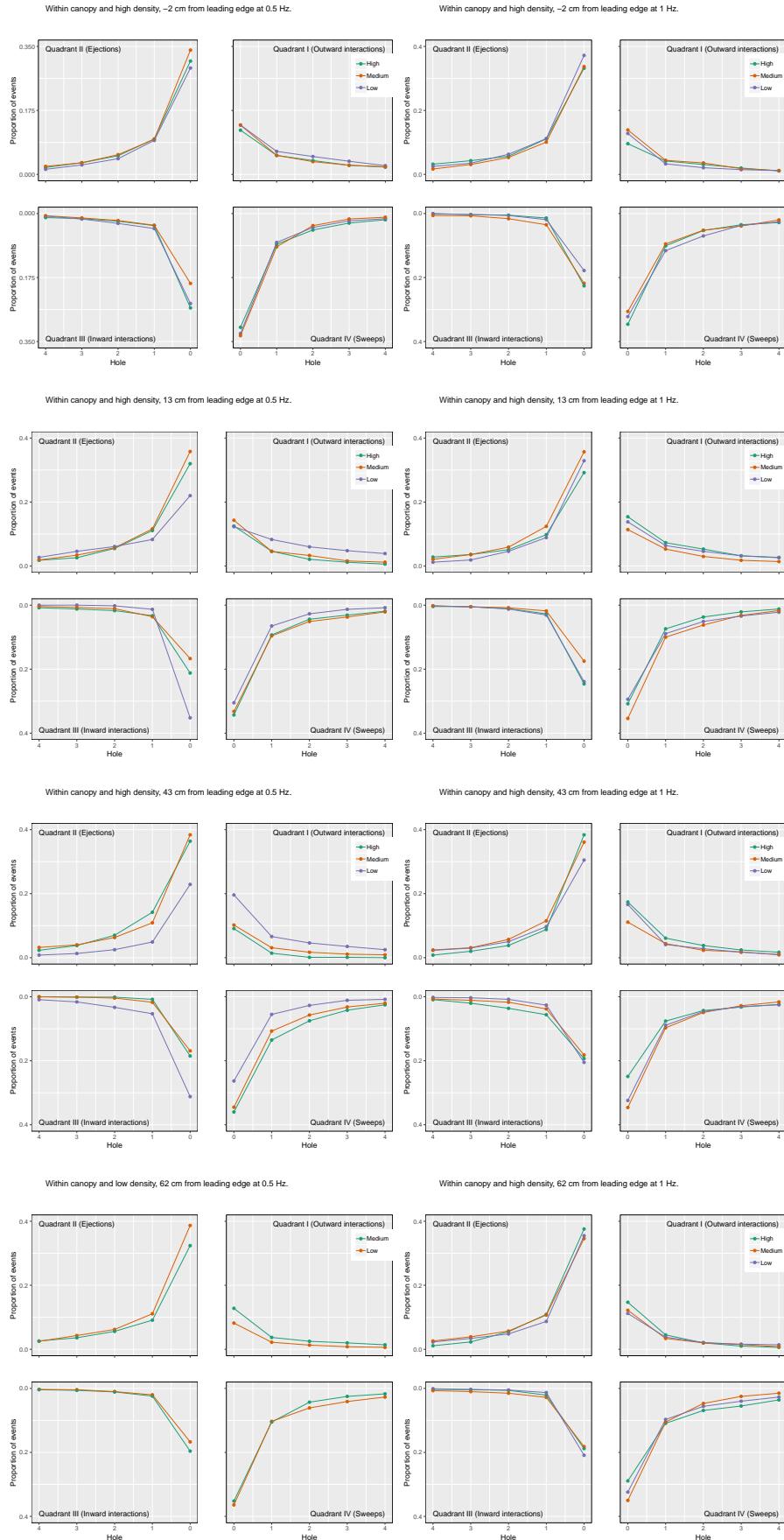


Figure 22: Variation in the proportion of events over hole size within the canopy.

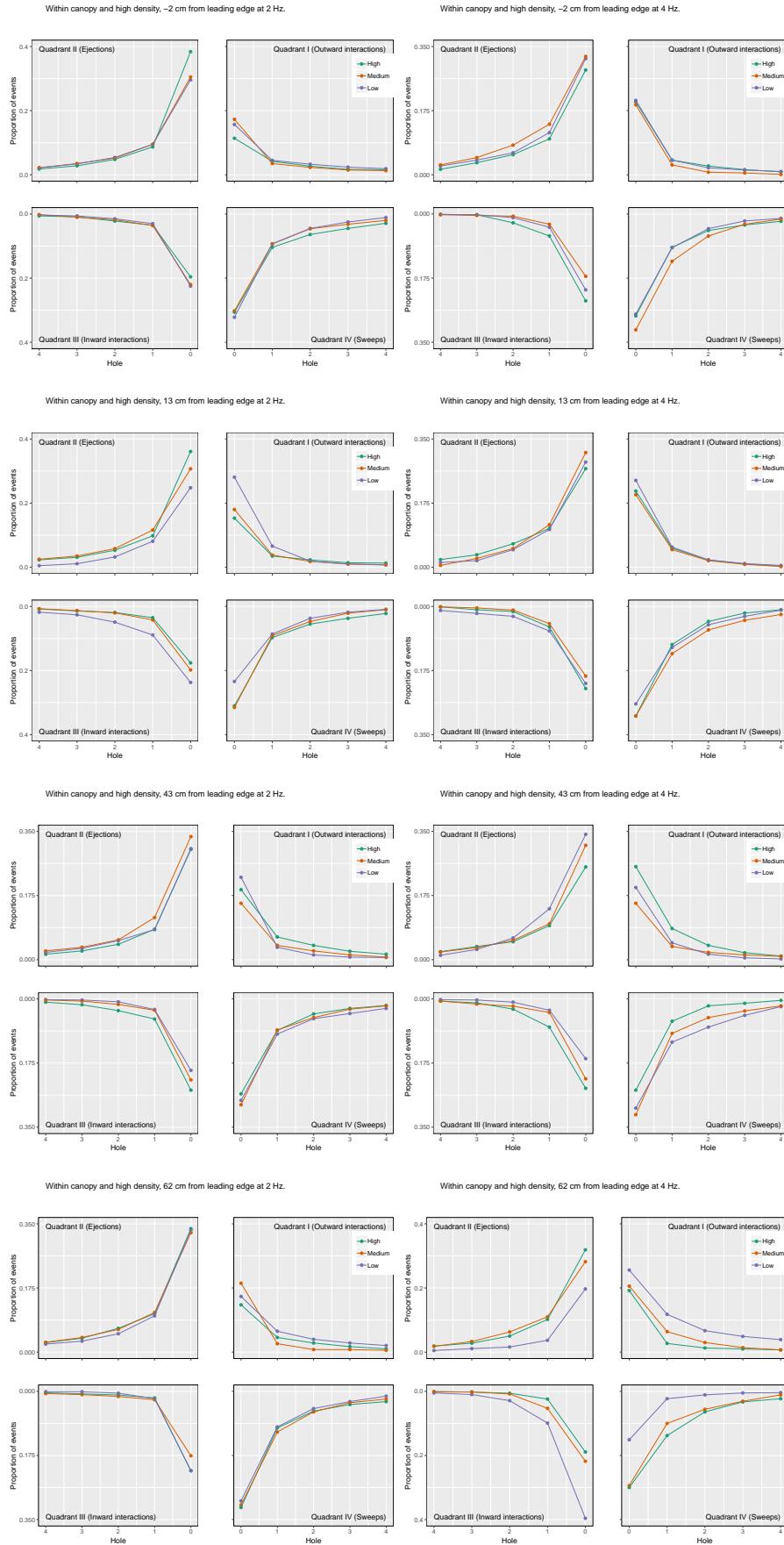


Figure 23: Variation in the proportion of events over hole size within the canopy.

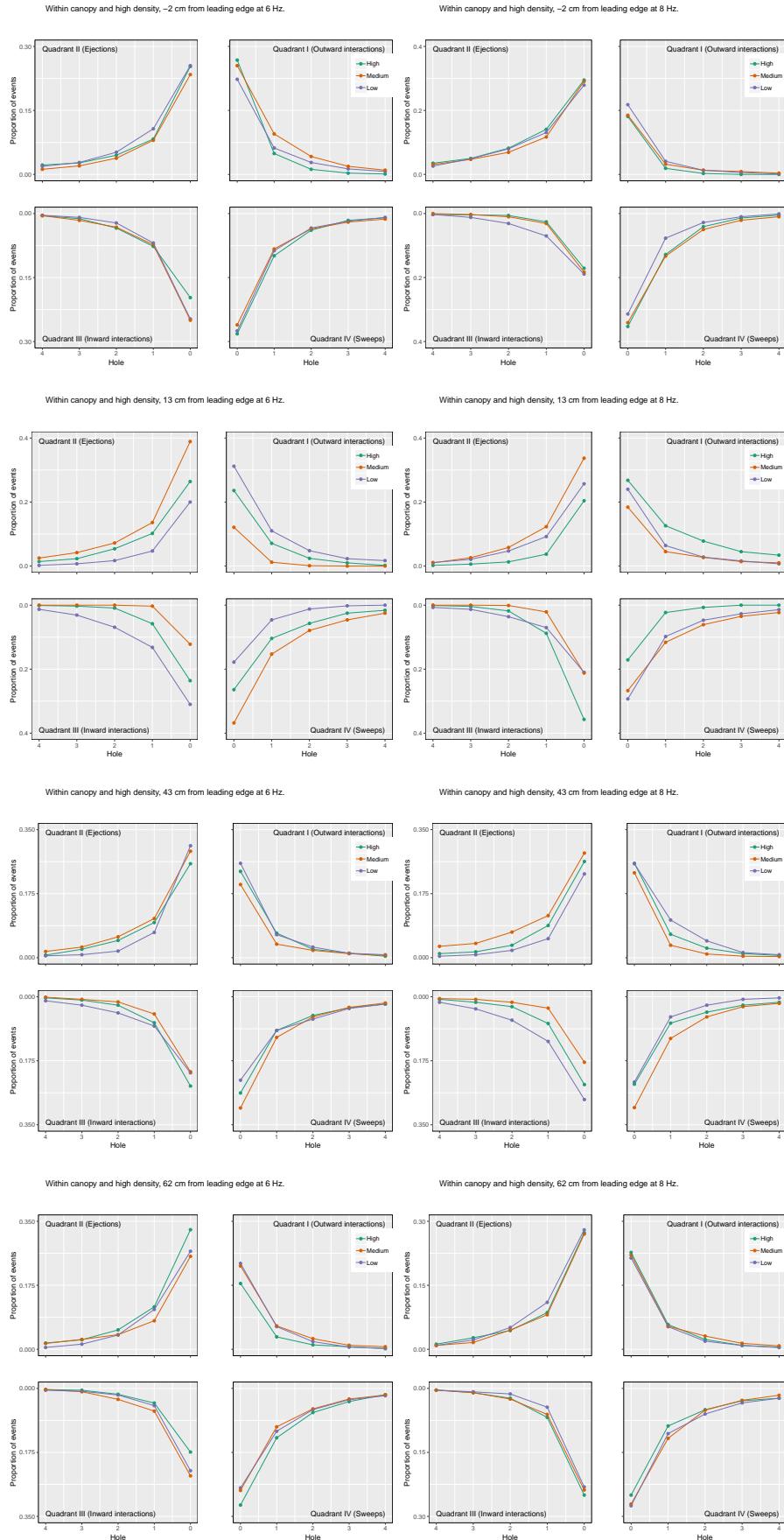


Figure 24: Variation in the proportion of events over hole size within the canopy.

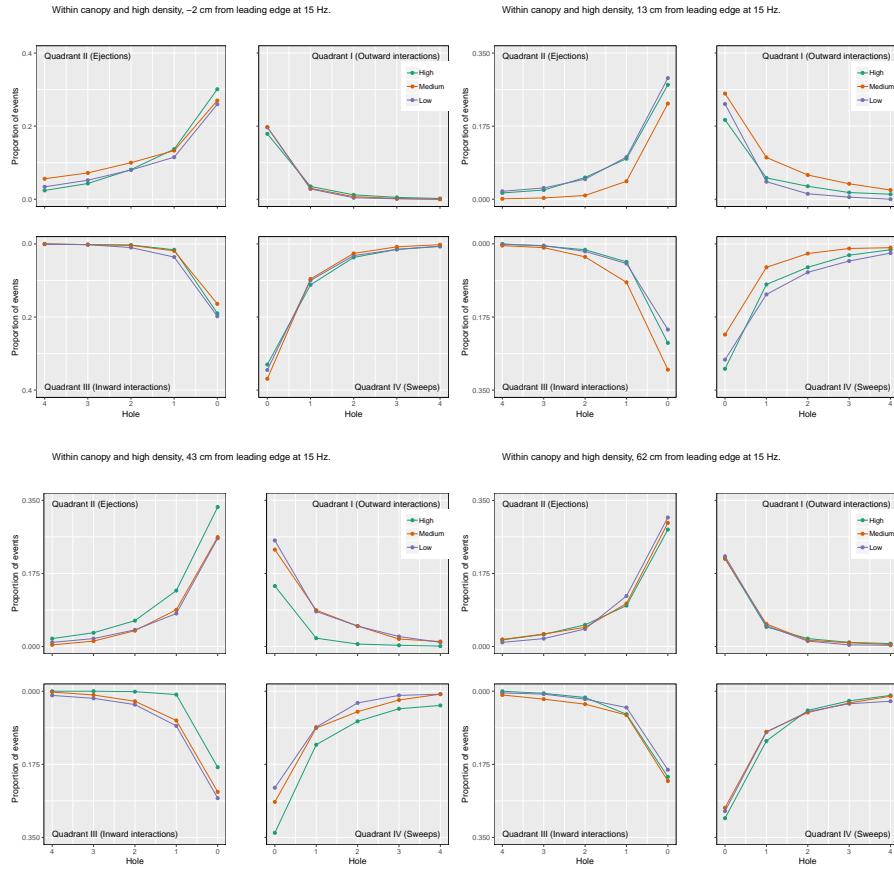


Figure 25: Variation in the proportion of events over hole size within the canopy.

6.2 Plots of stress

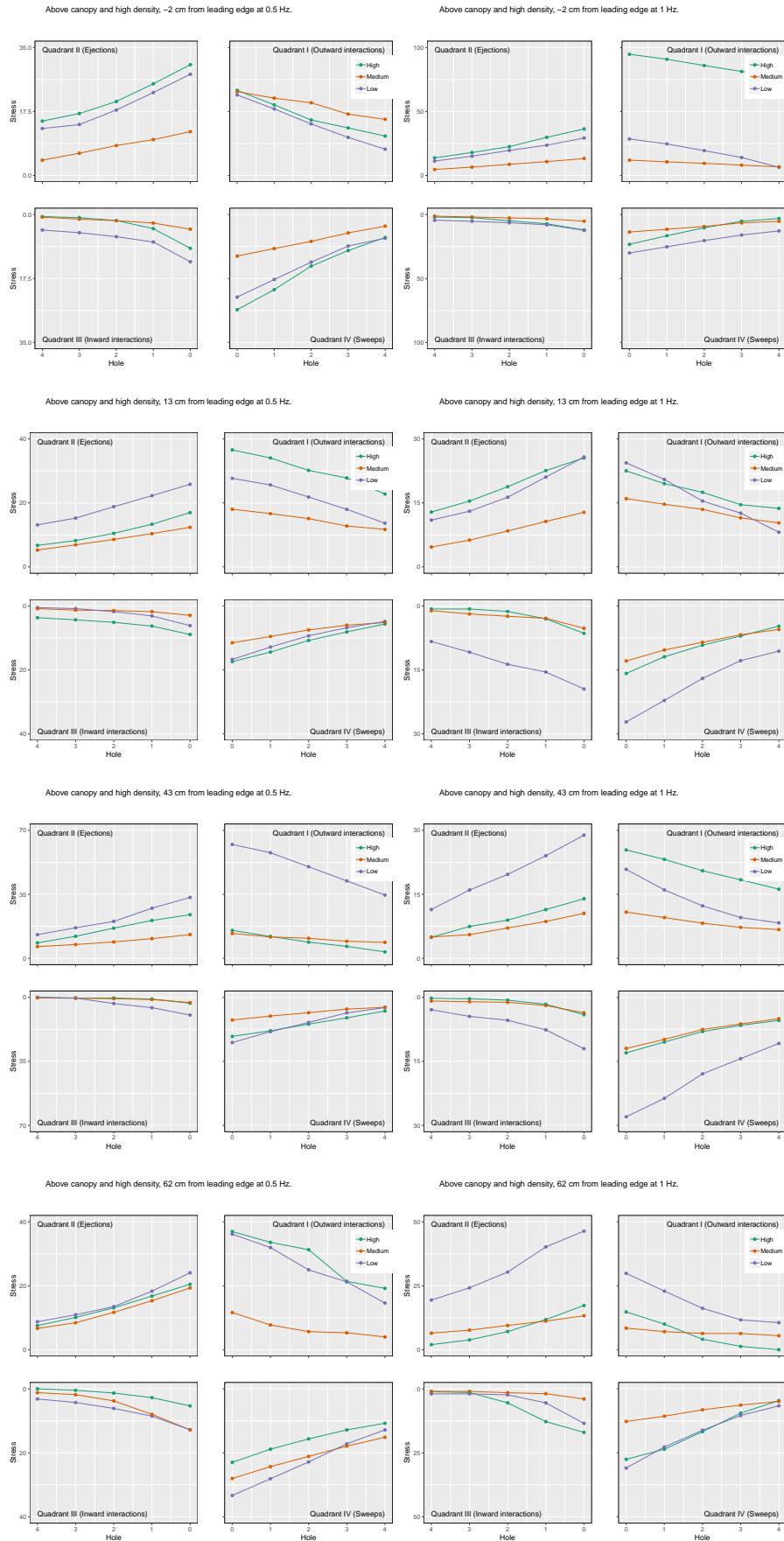


Figure 26: Variation in the negative momentum stress over hole size above the canopy.

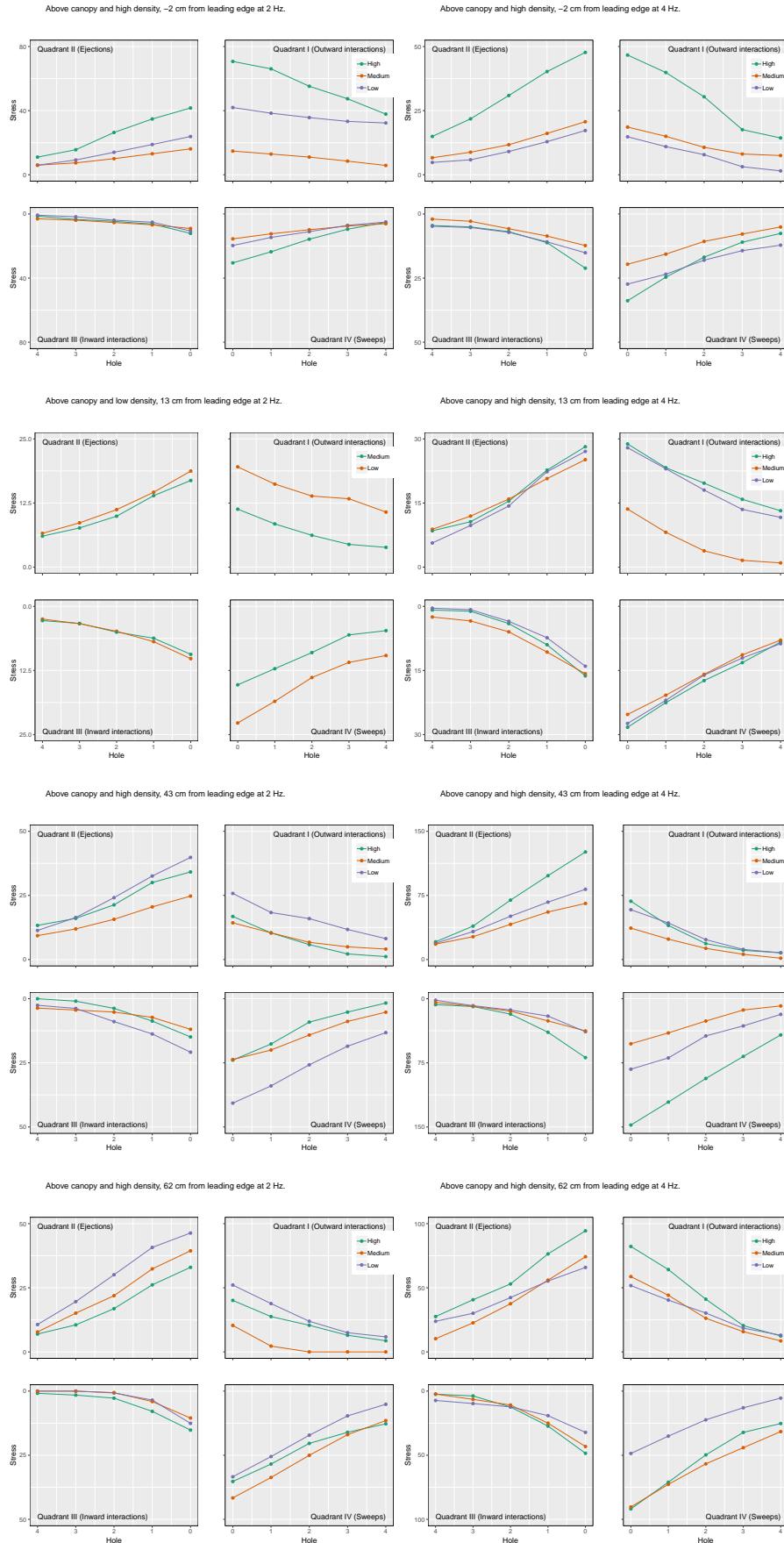


Figure 27: Variation in the negative momentum stress over hole size above the canopy.

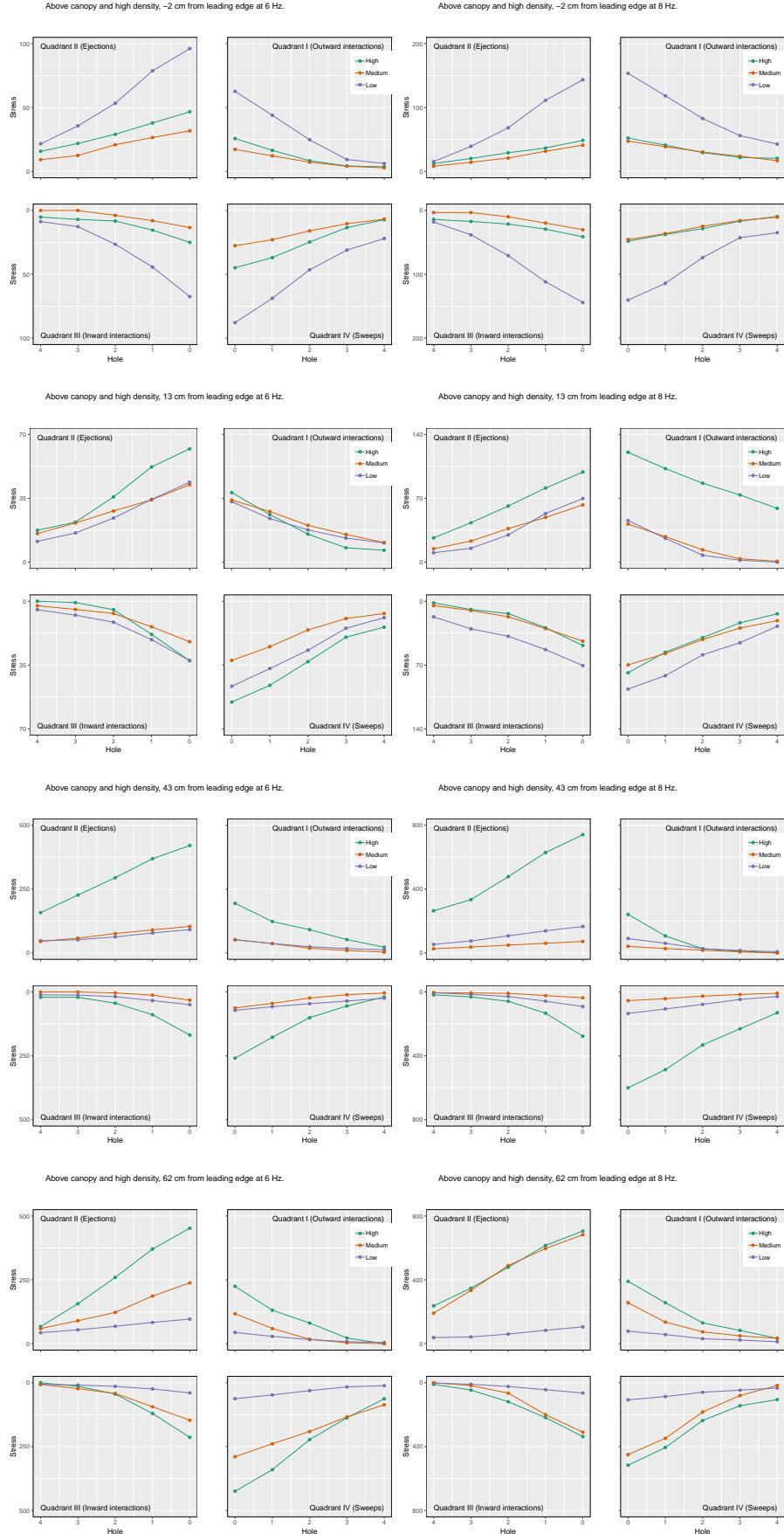


Figure 28: Variation in the negative momentum stress over hole size above the canopy.

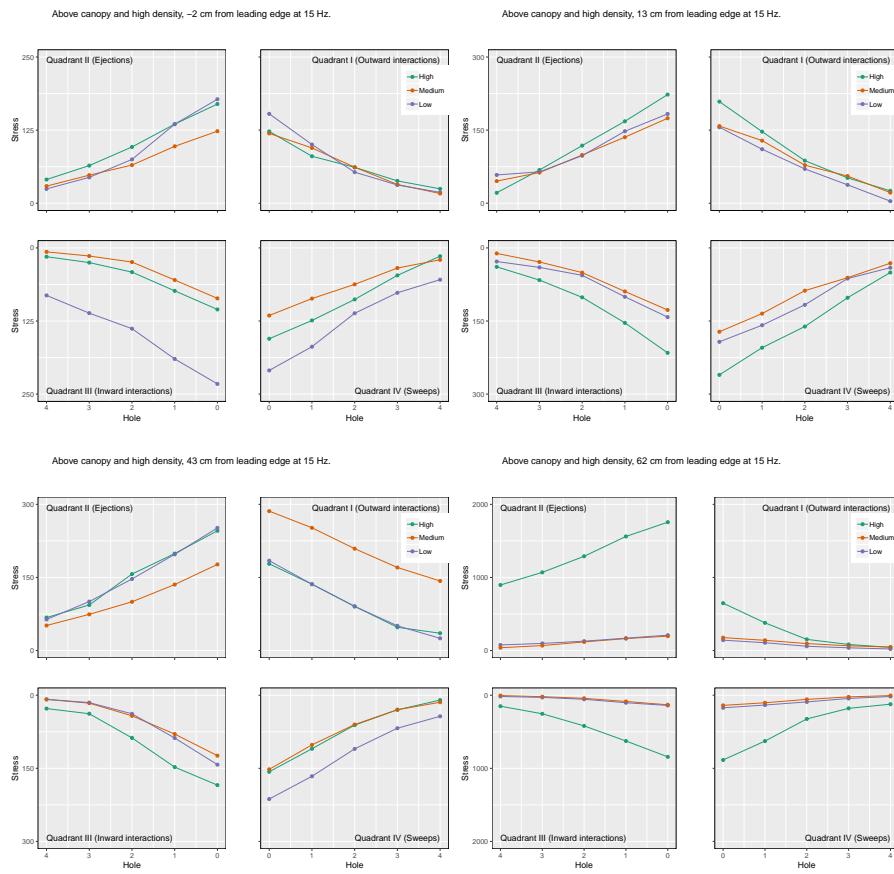


Figure 29: Variation in the negative momentum stress over hole size above the canopy.

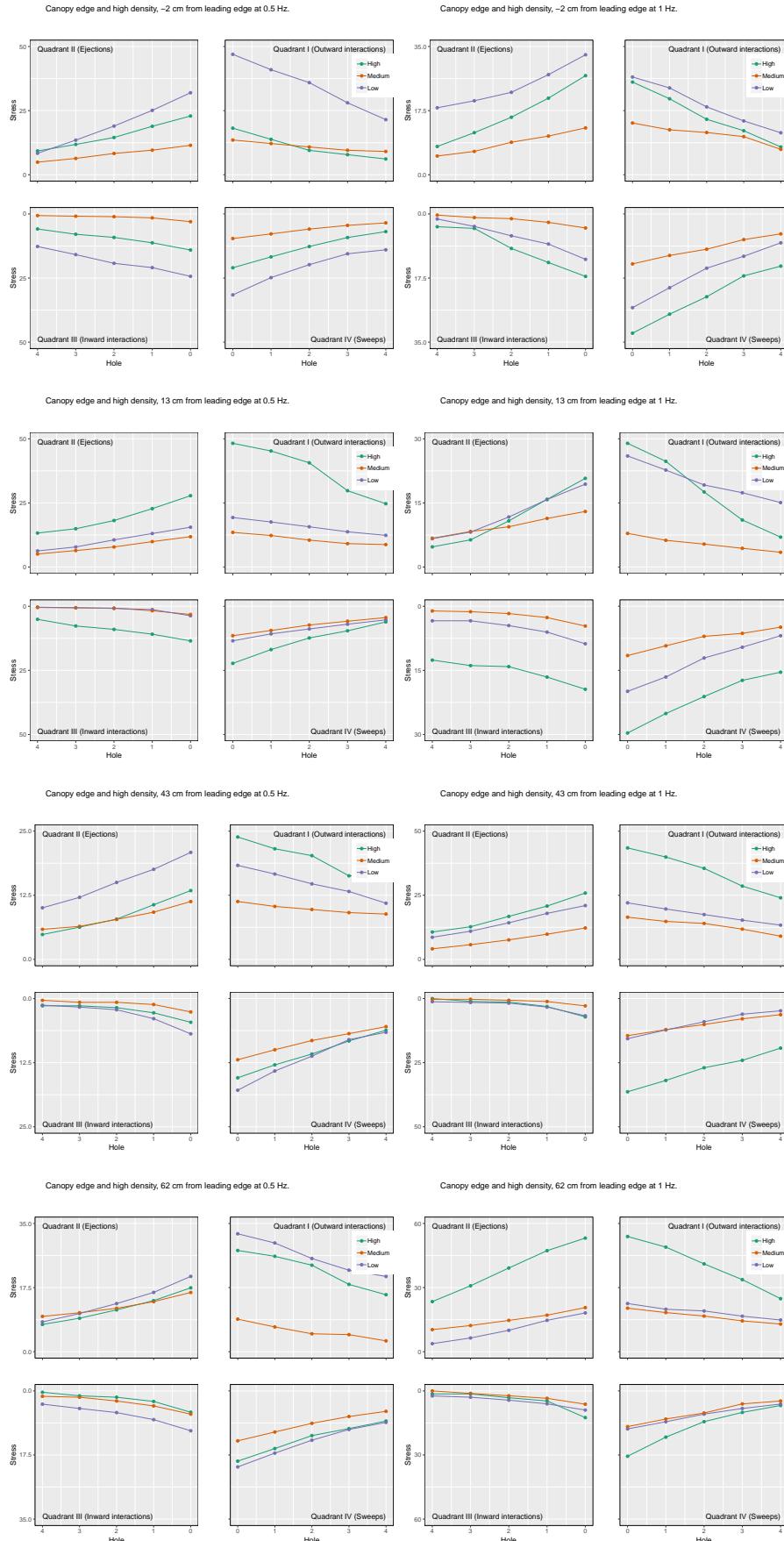


Figure 30: Variation in the negative momentum stress over hole size at the canopy edge.

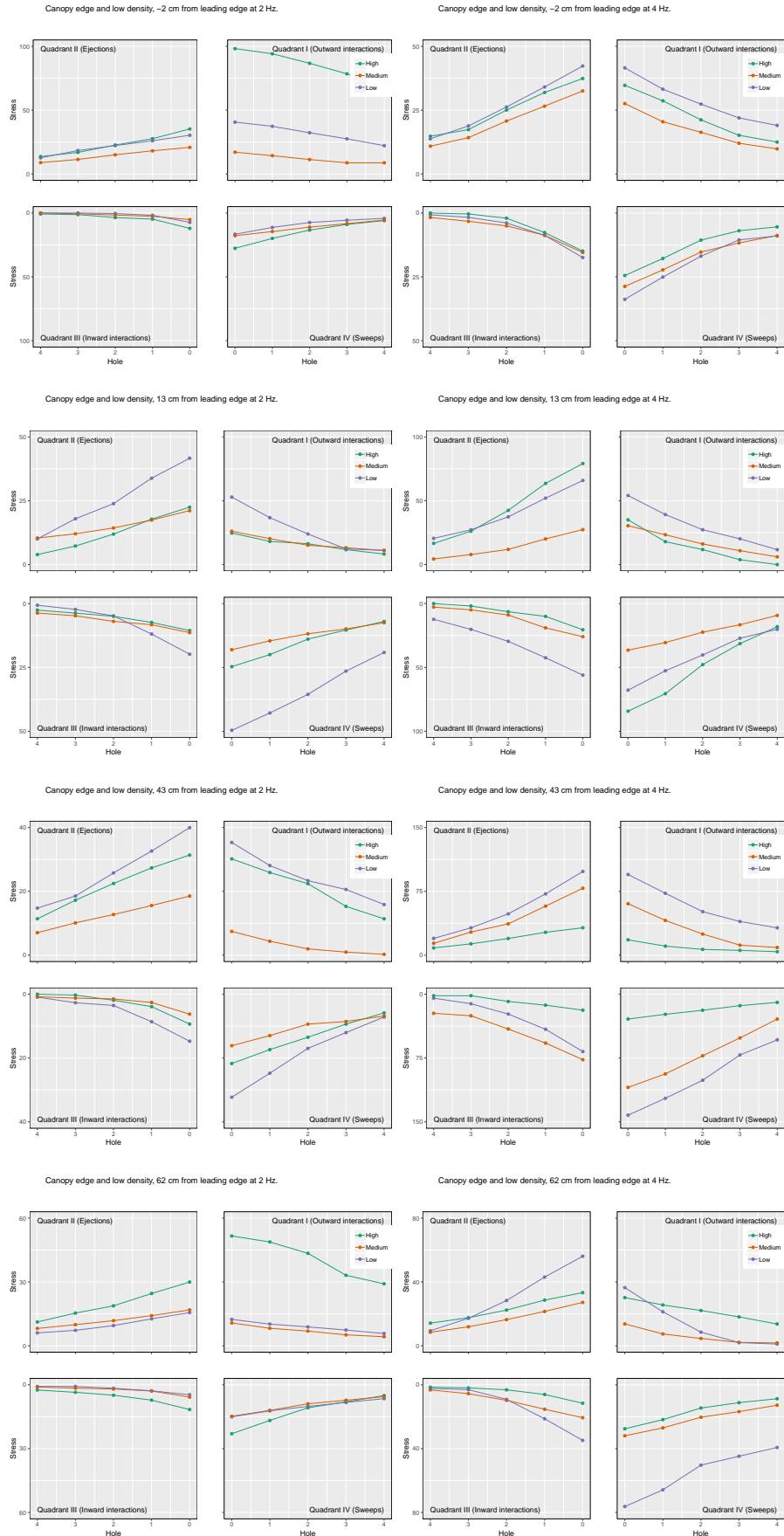


Figure 31: Variation in the negative momentum stress over hole size at the canopy edge.

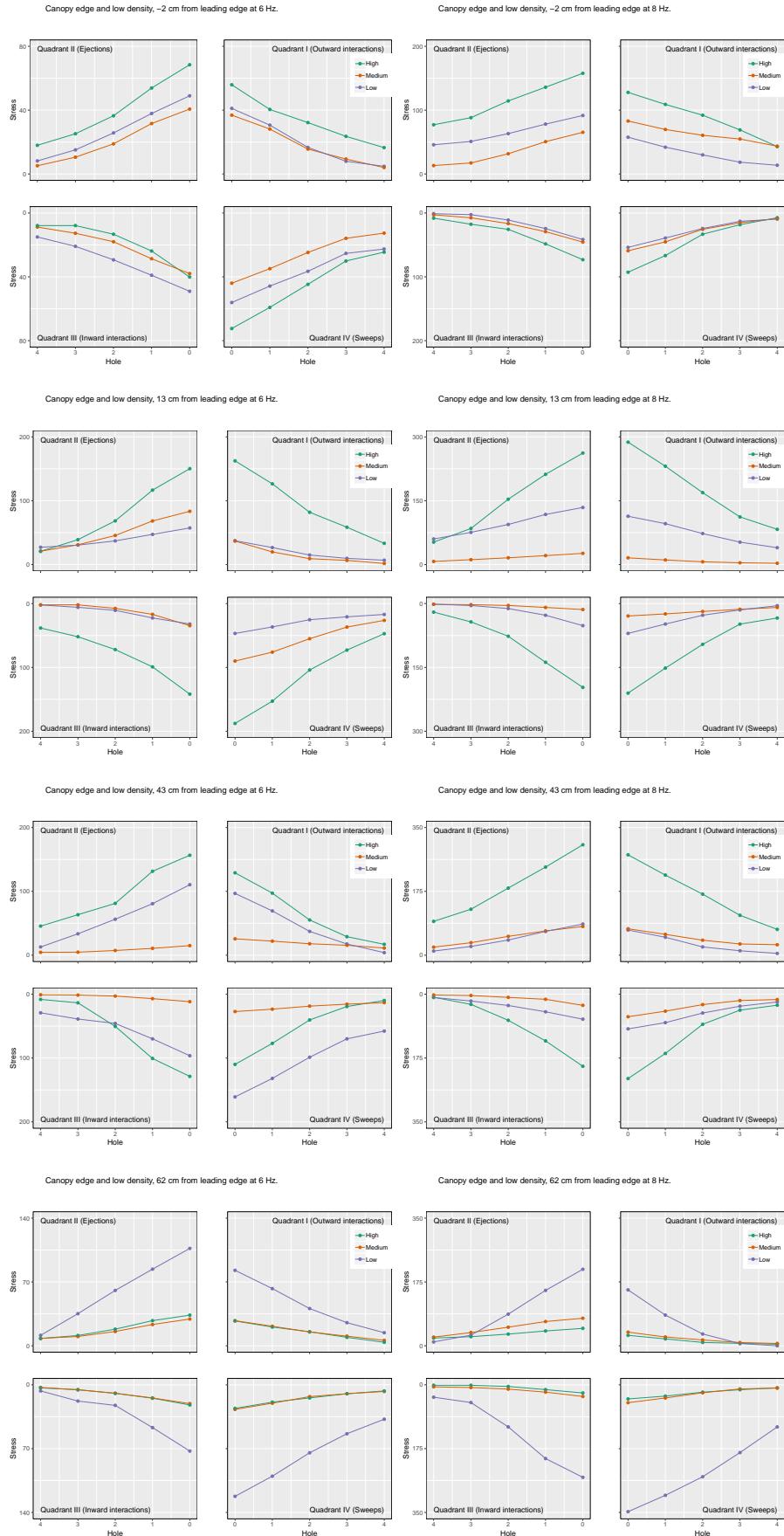


Figure 32: Variation in the negative momentum stress over hole size at the canopy edge.

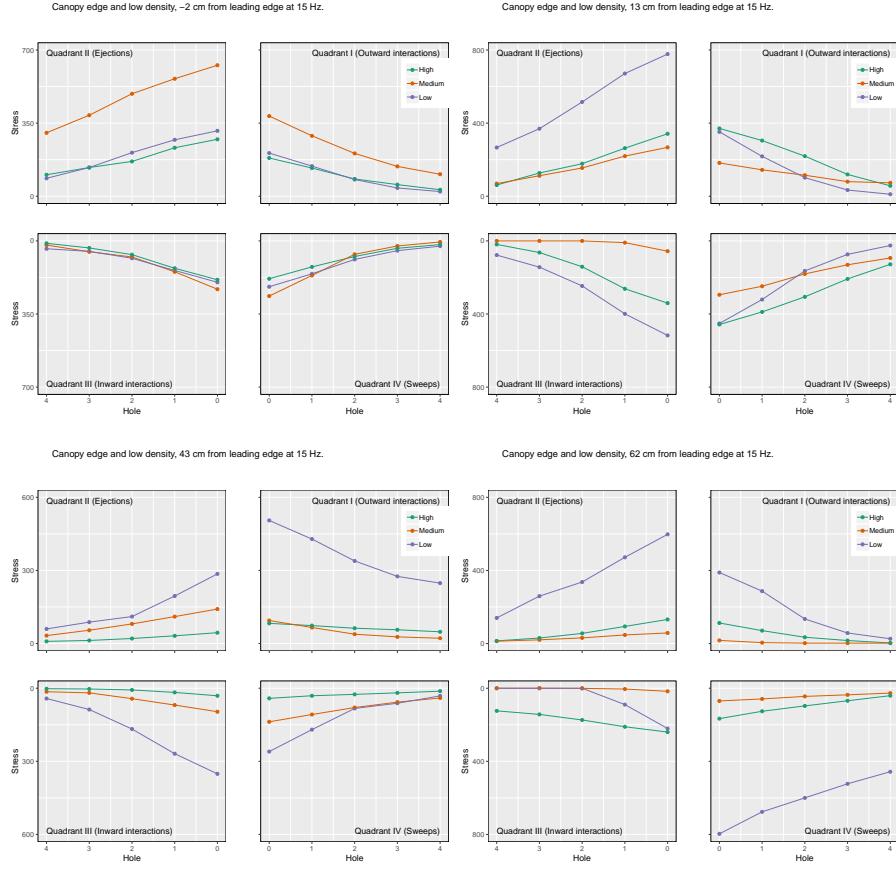


Figure 33: Variation in the negative momentum stress over hole size at the canopy edge.

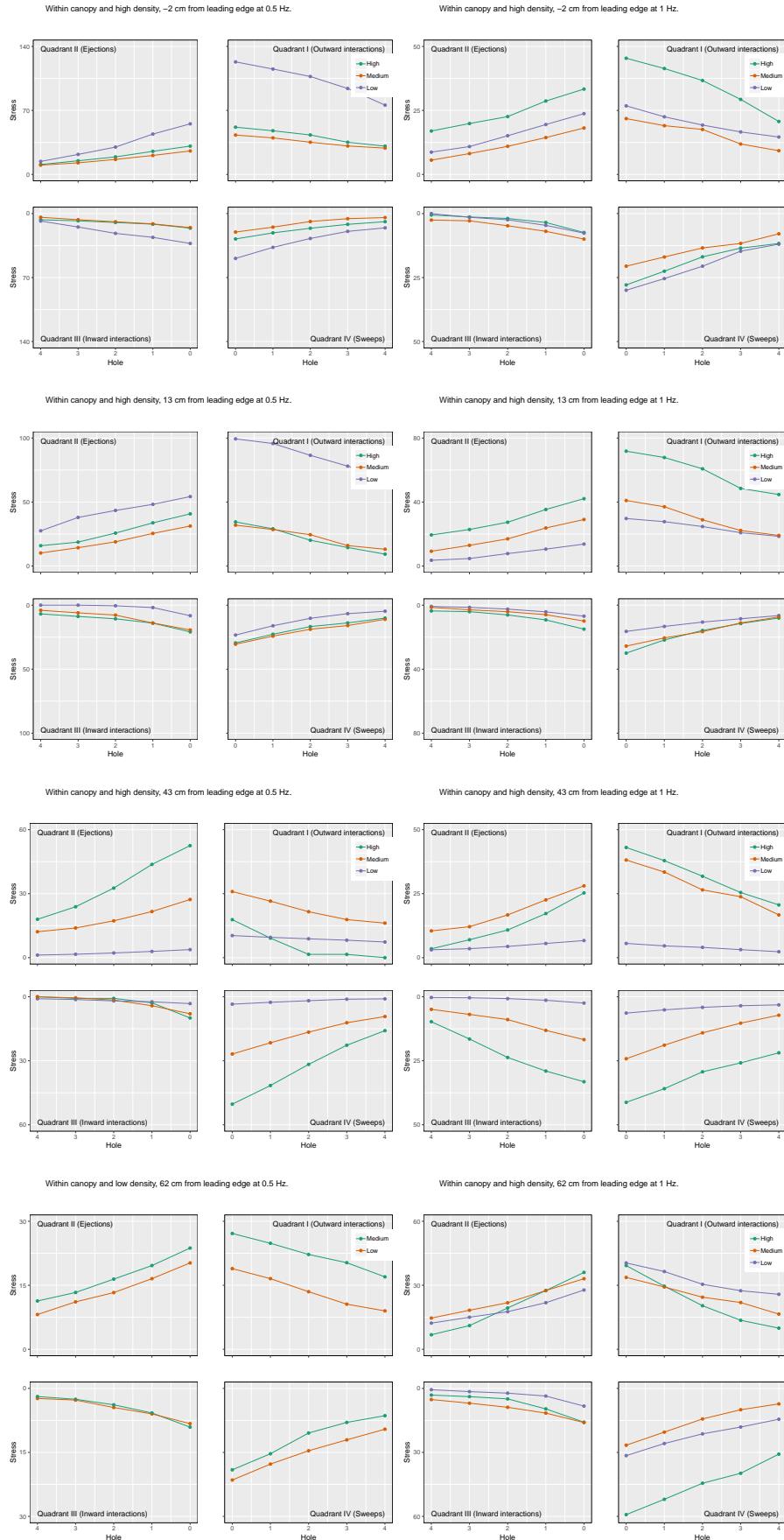


Figure 34: Variation in the negative momentum stress over hole size within the canopy.

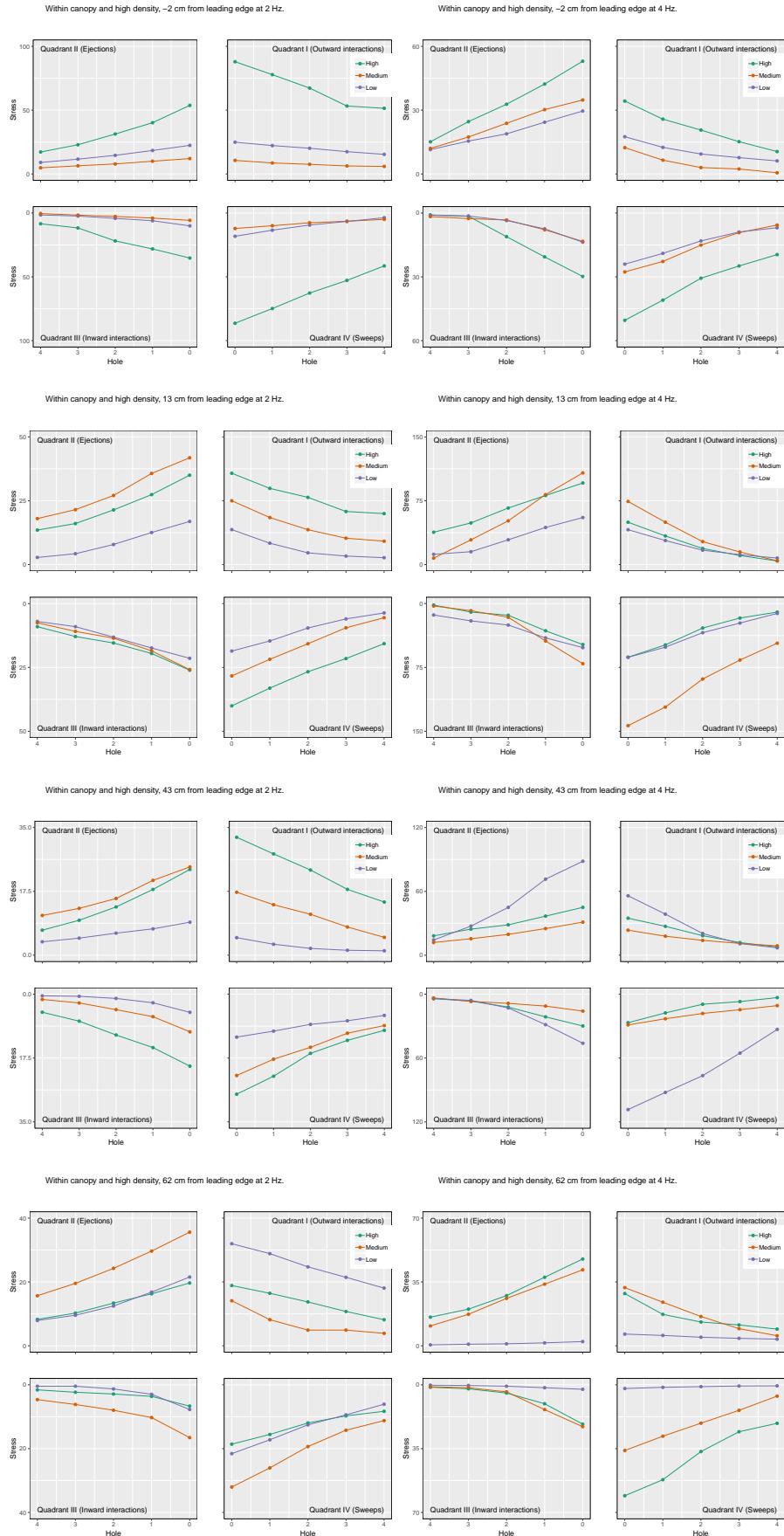


Figure 35: Variation in the negative momentum stress over hole size within the canopy.

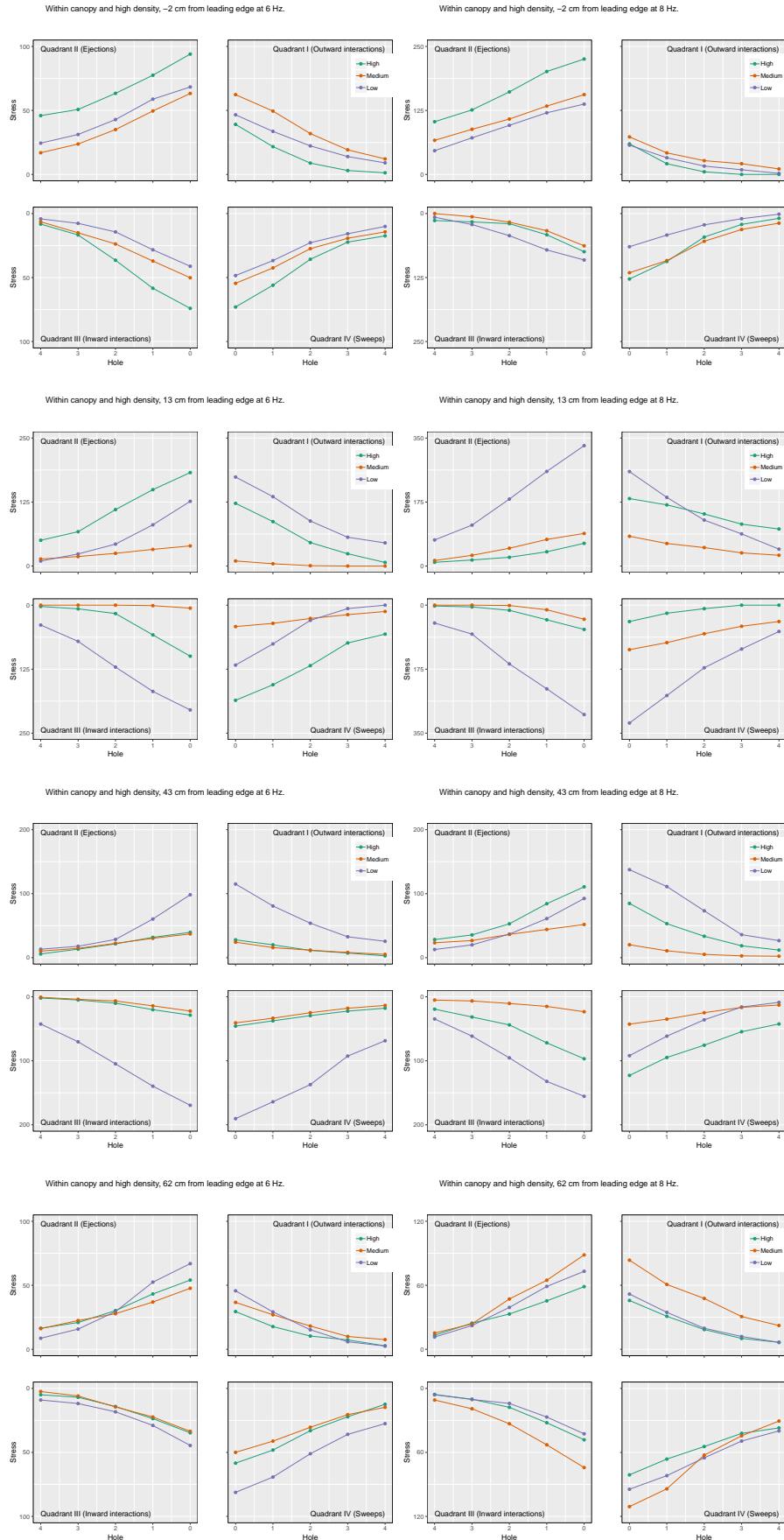


Figure 36: Variation in the negative momentum stress over hole size within the canopy.

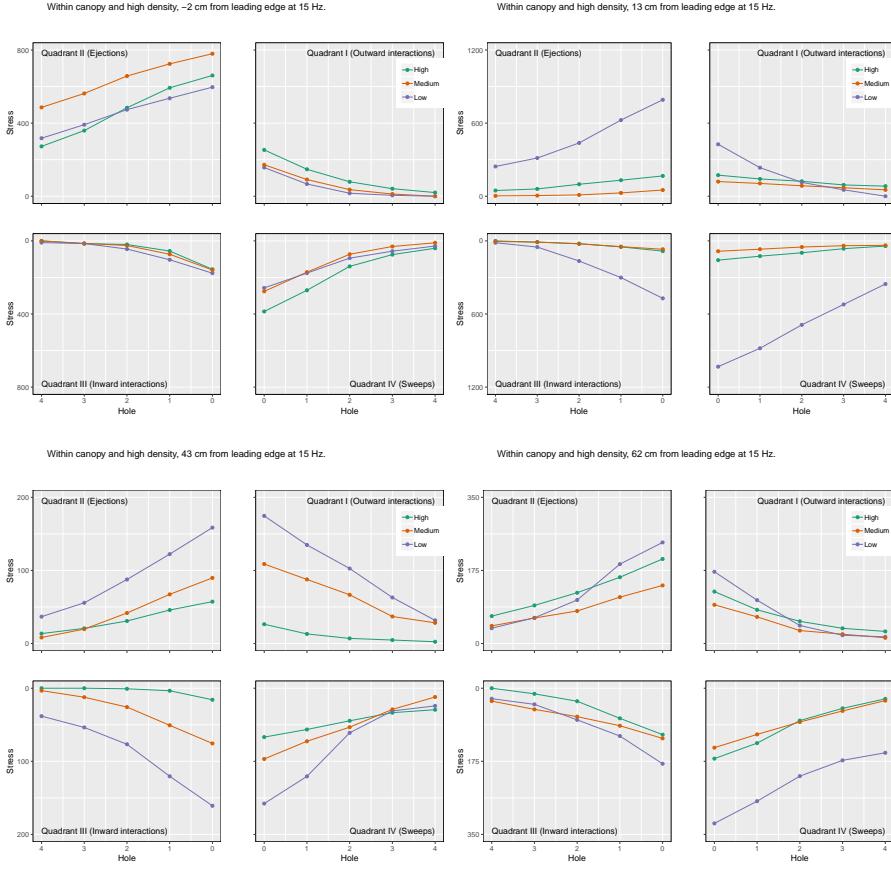


Figure 37: Variation in the negative momentum stress over hole size within the canopy.

6.3 Plots of total kinetic energy

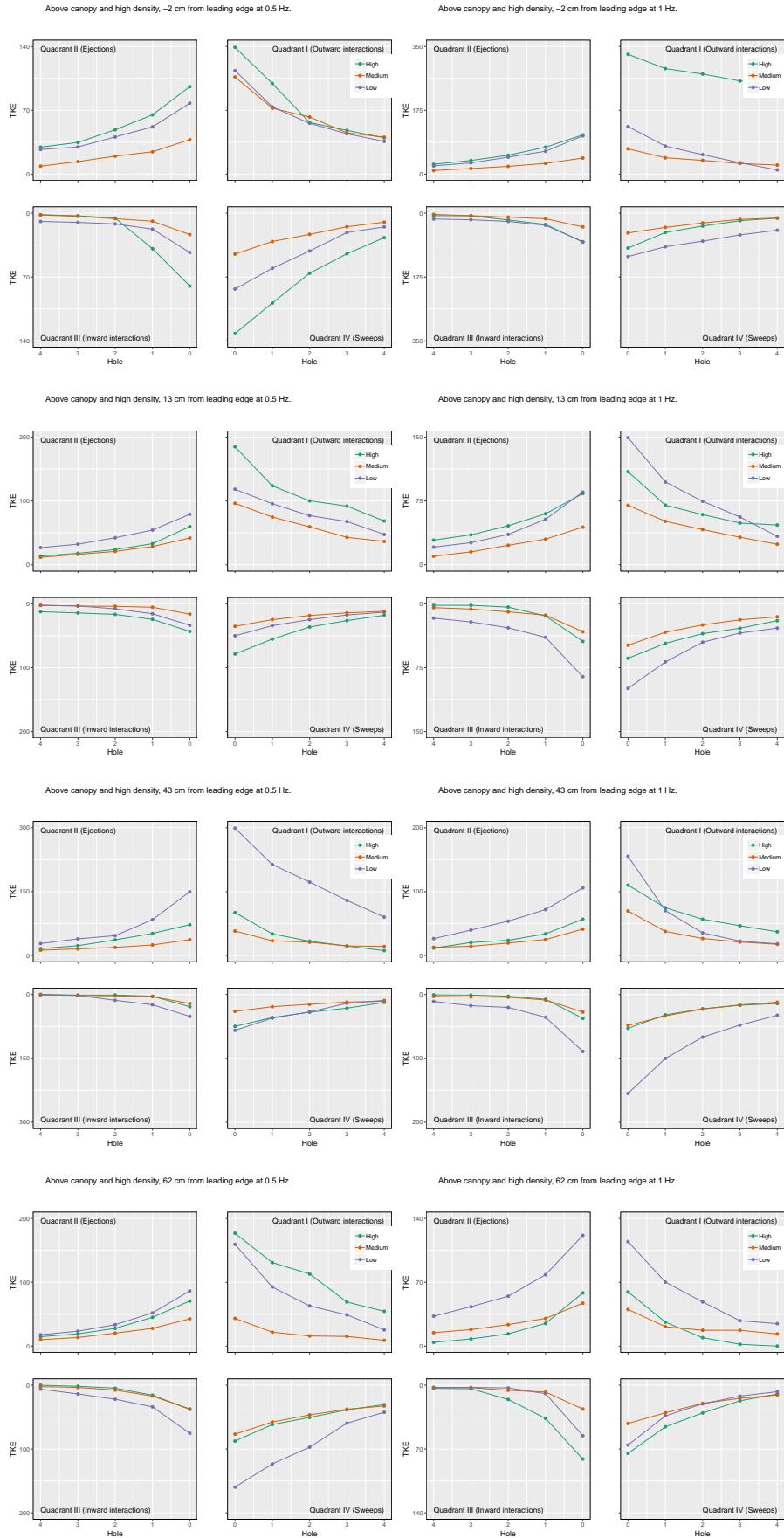


Figure 38: Variation in the total kinetic energy over hole size above the canopy.

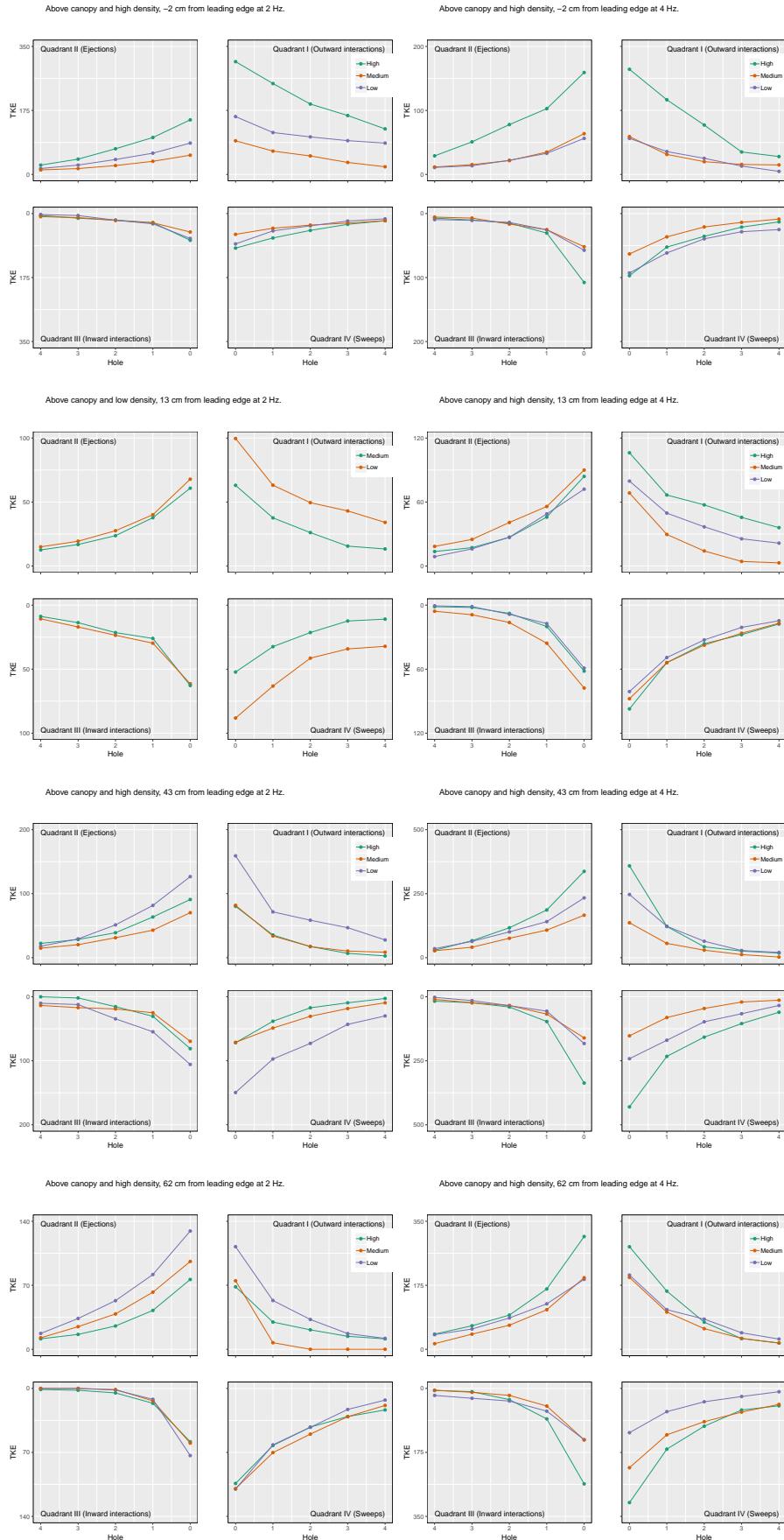


Figure 39: Variation in the total kinetic energy over hole size above the canopy.

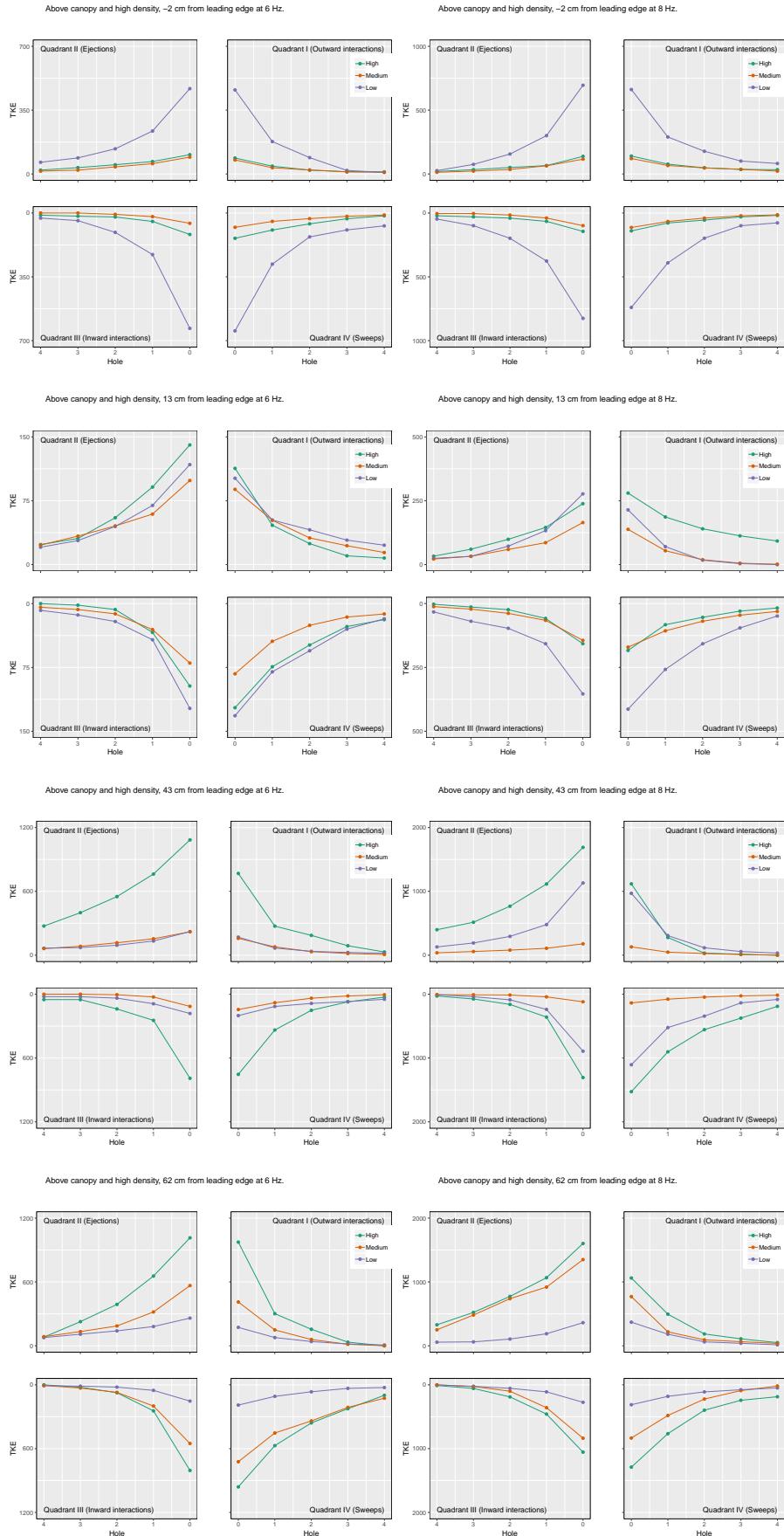


Figure 40: Variation in the total kinetic energy over hole size above the canopy.

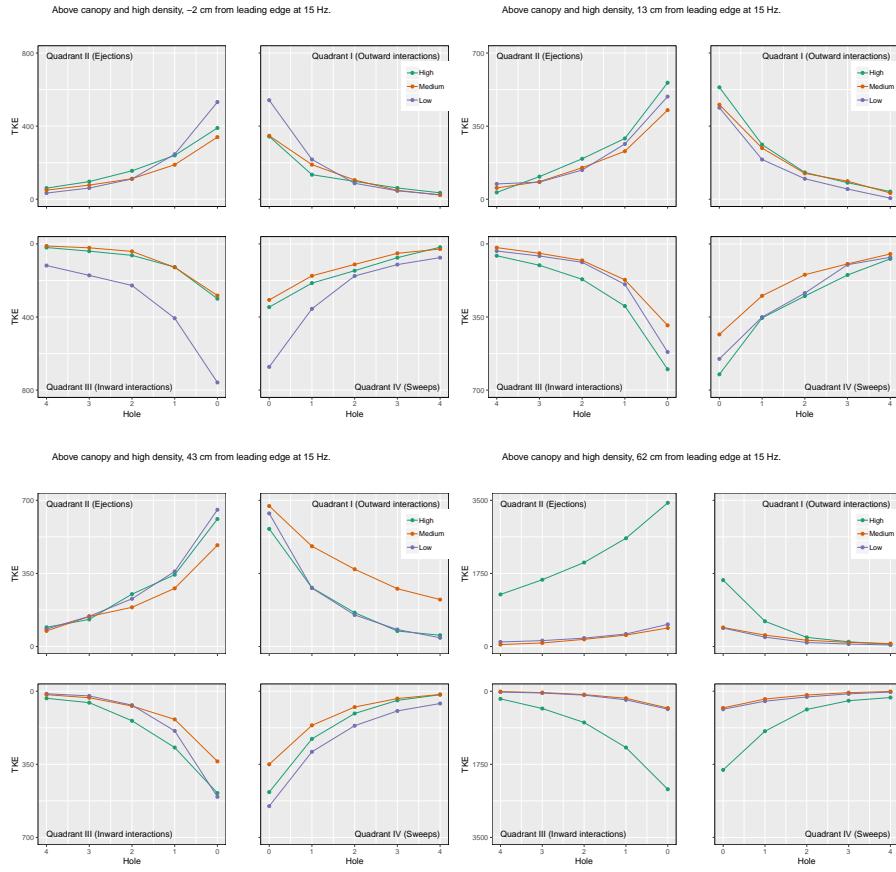


Figure 41: Variation in the total kinetic energy over hole size above the canopy.

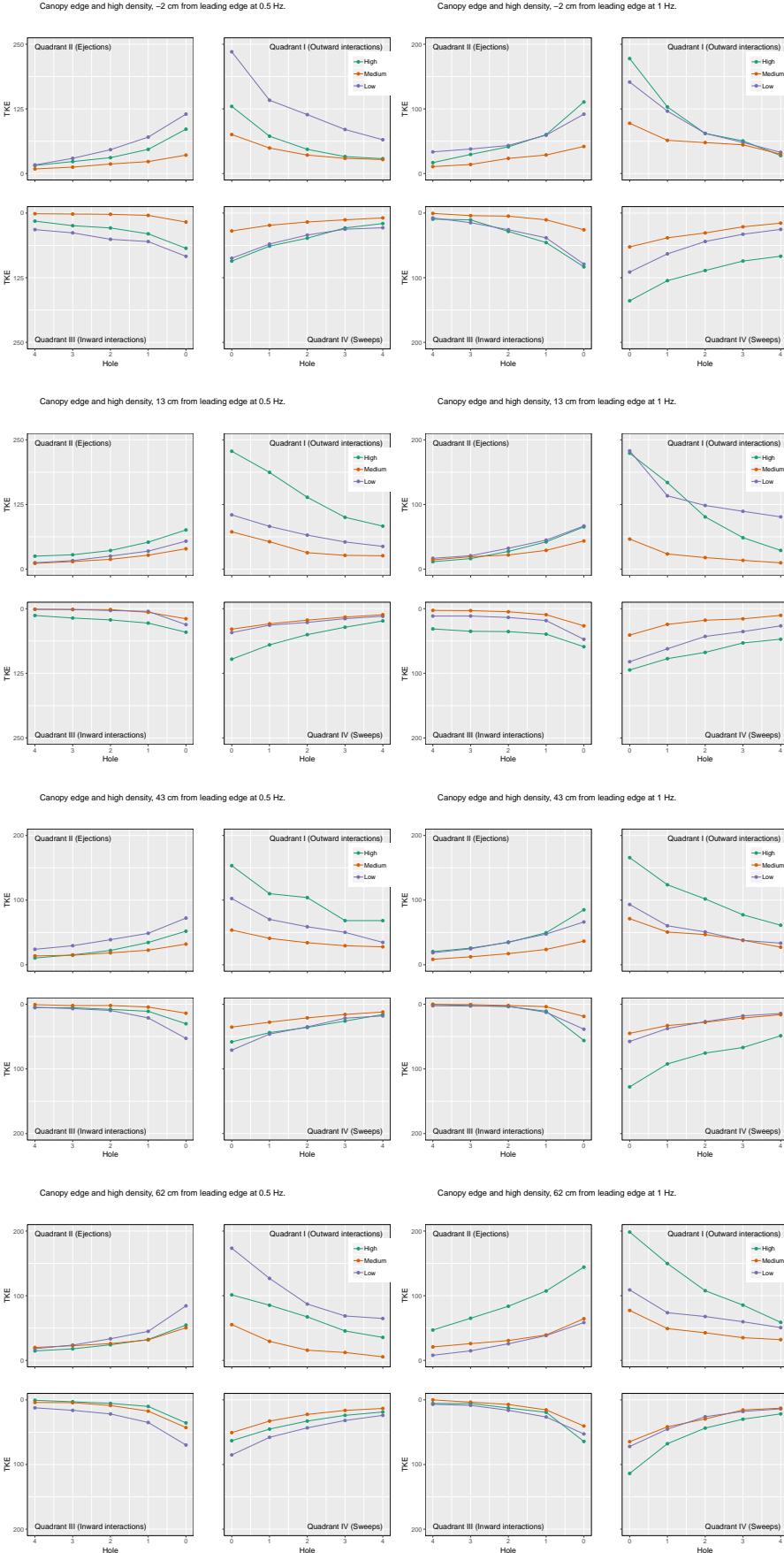


Figure 42: Variation in the total kinetic energy over hole size at the canopy edge.

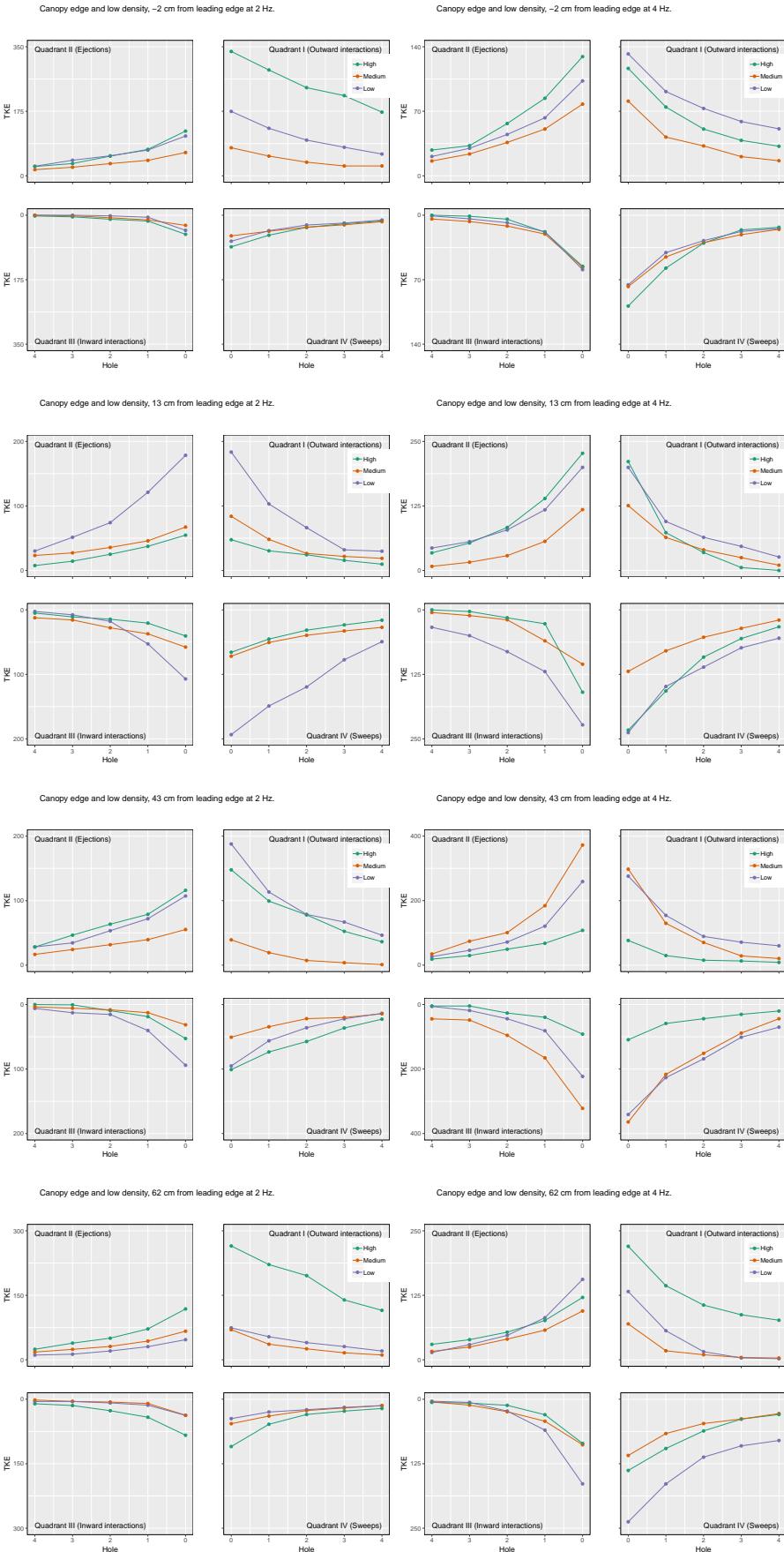


Figure 43: Variation in the total kinetic energy over hole size at the canopy edge.

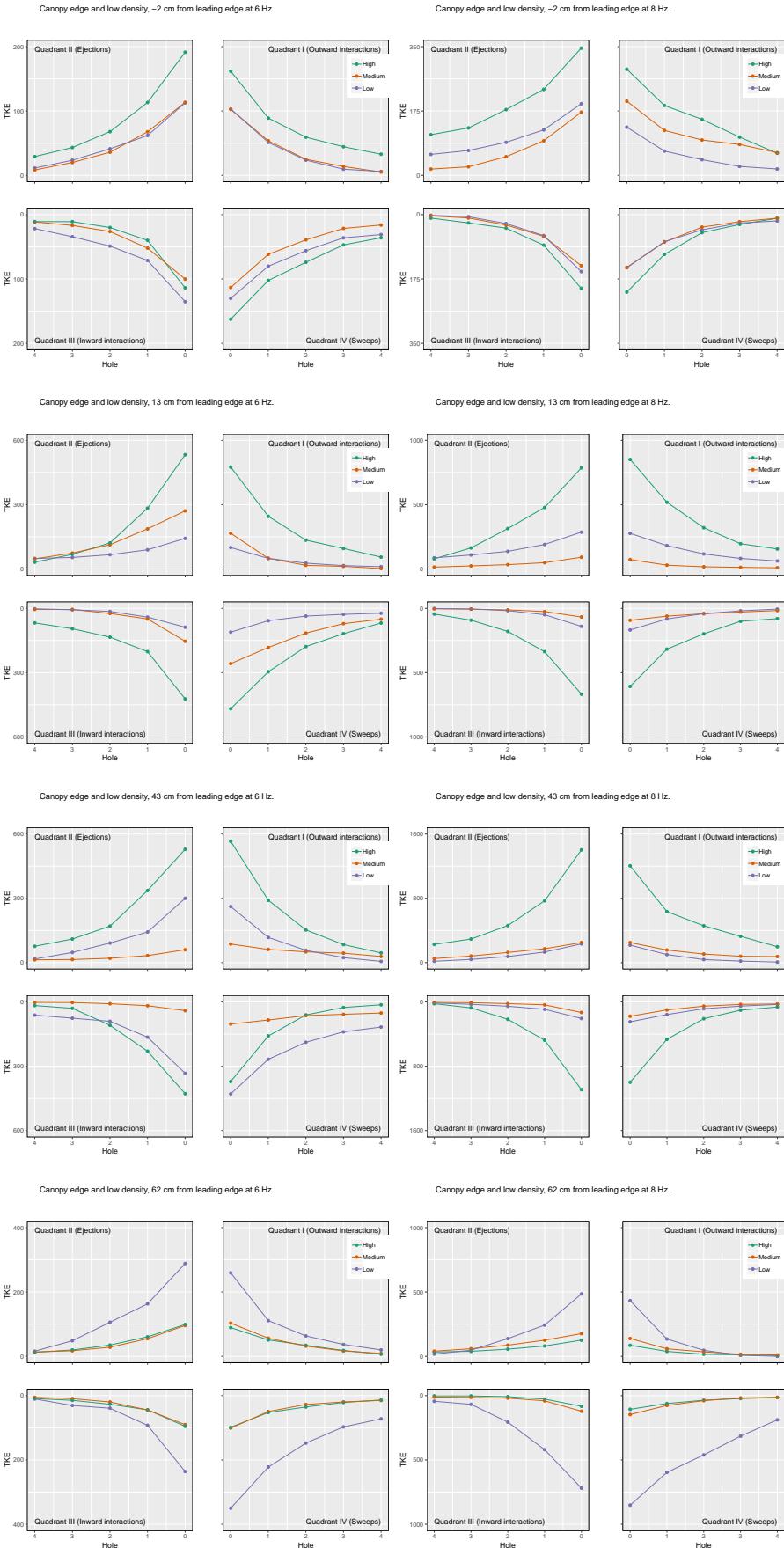


Figure 44: Variation in the total kinetic energy over hole size at the canopy edge.

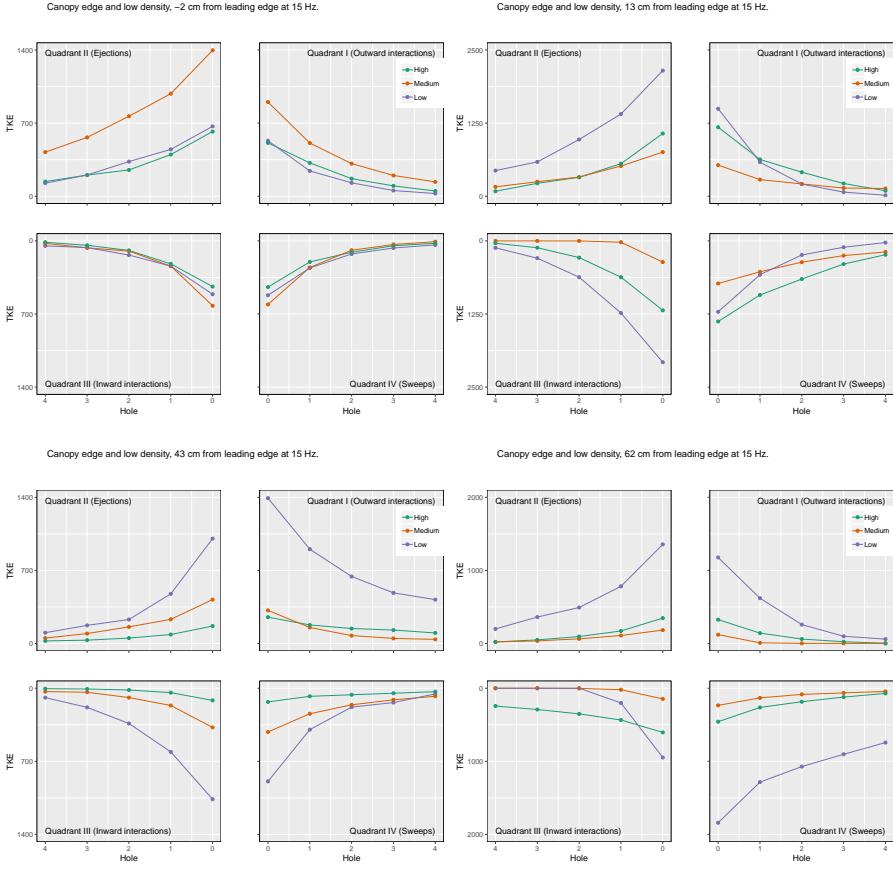


Figure 45: Variation in the total kinetic energy over hole size at the canopy edge.

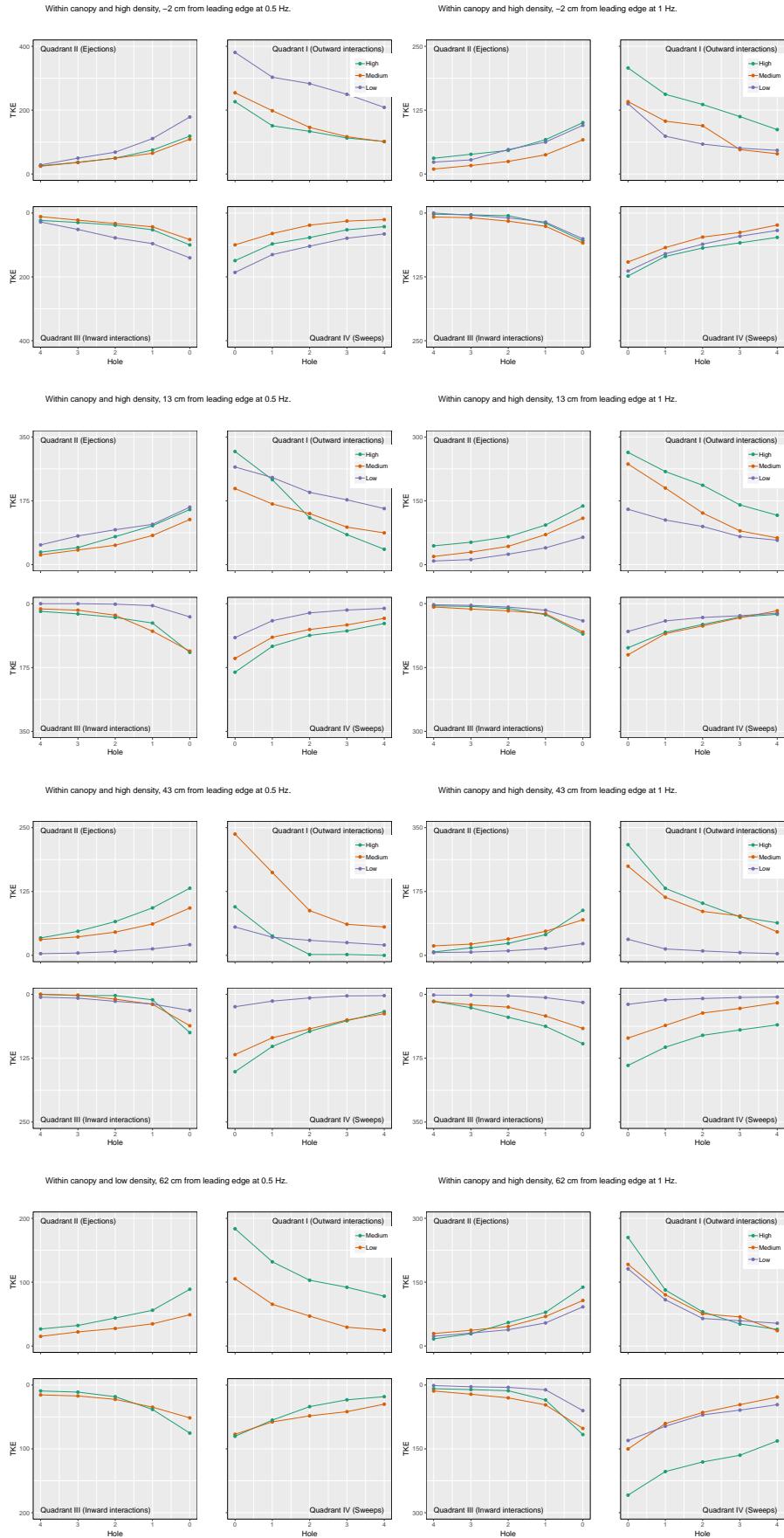


Figure 46: Variation in the total kinetic energy over hole size within the canopy.

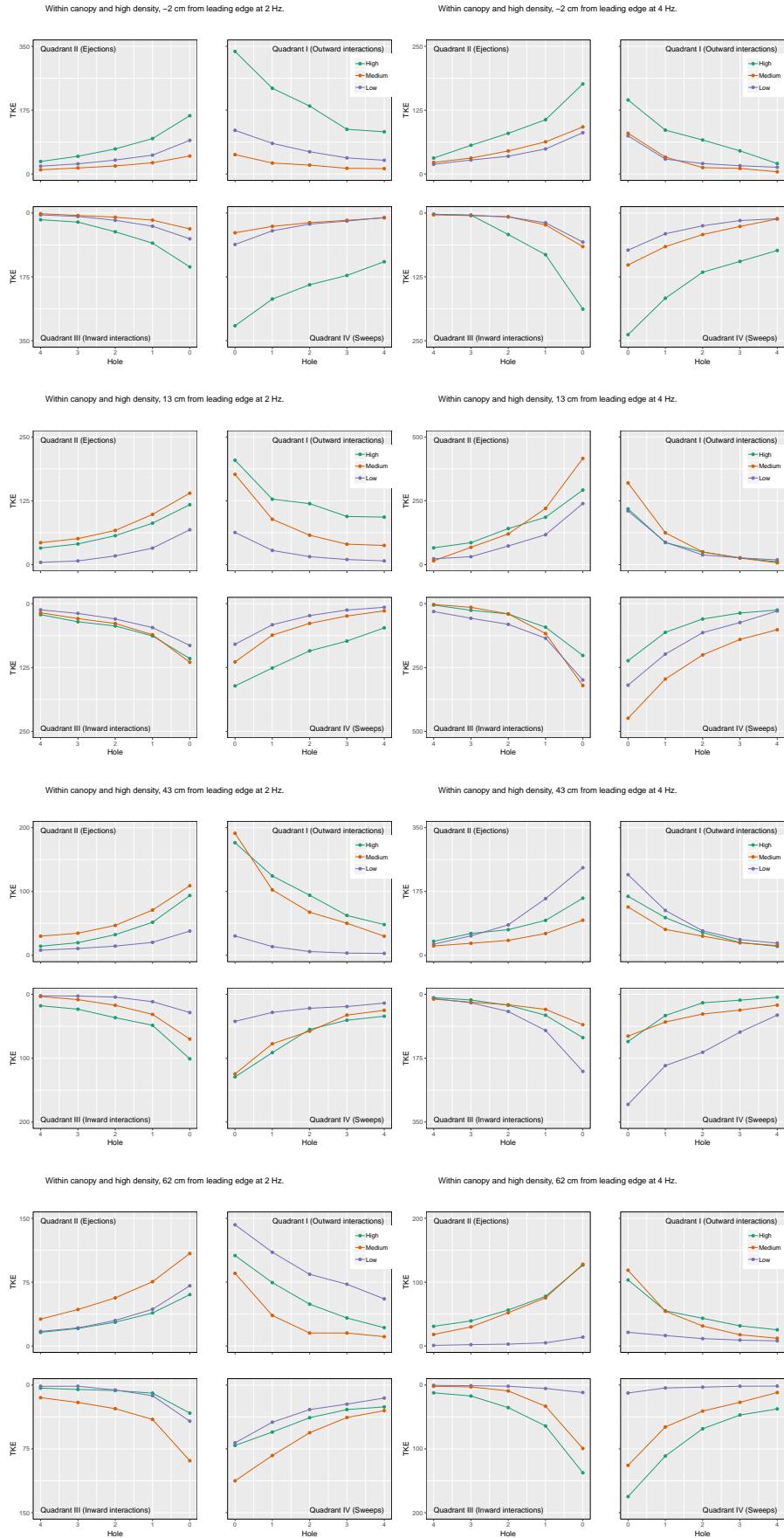


Figure 47: Variation in the total kinetic energy over hole size within the canopy.

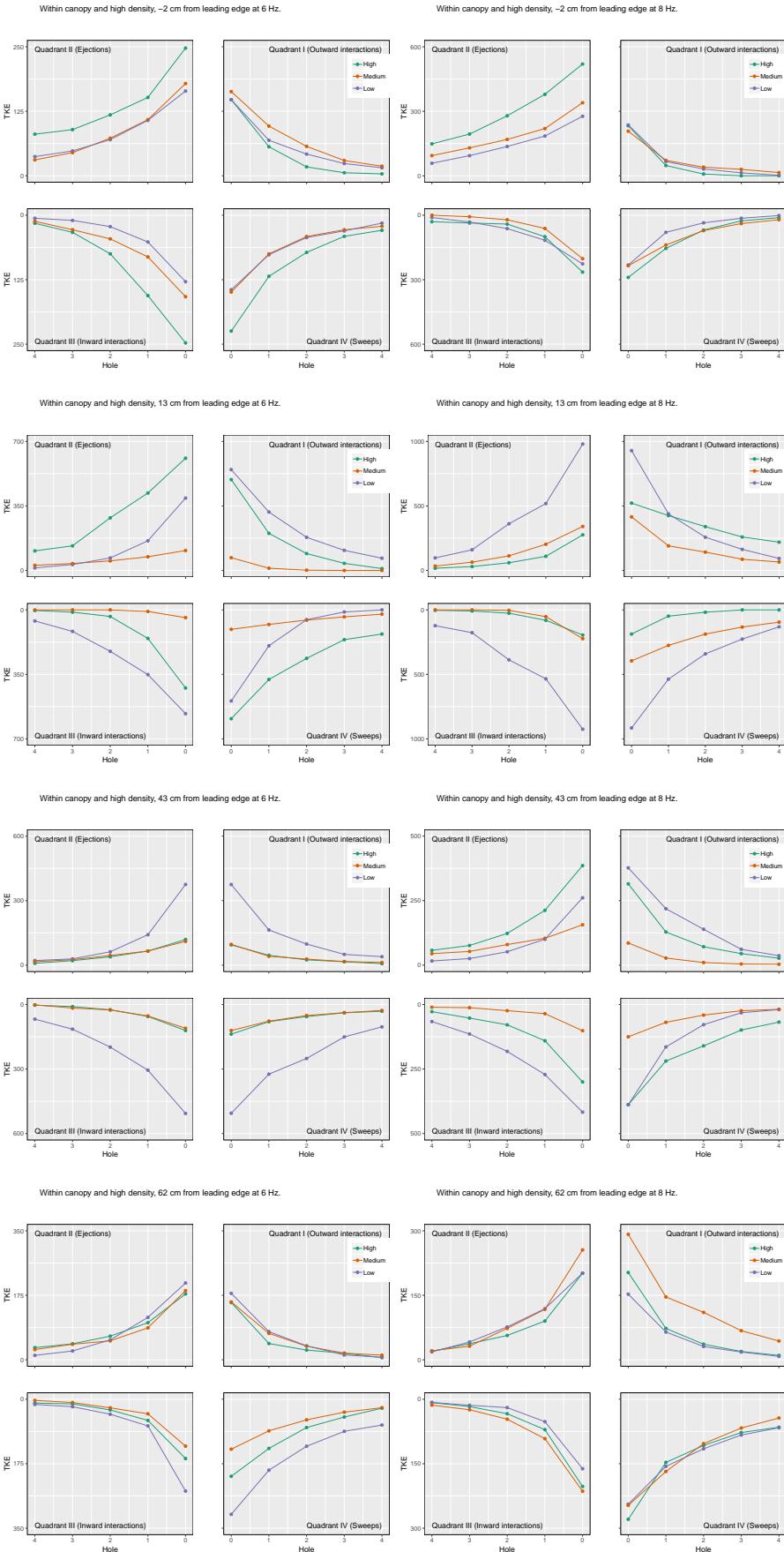


Figure 48: Variation in the total kinetic energy over hole size within the canopy.

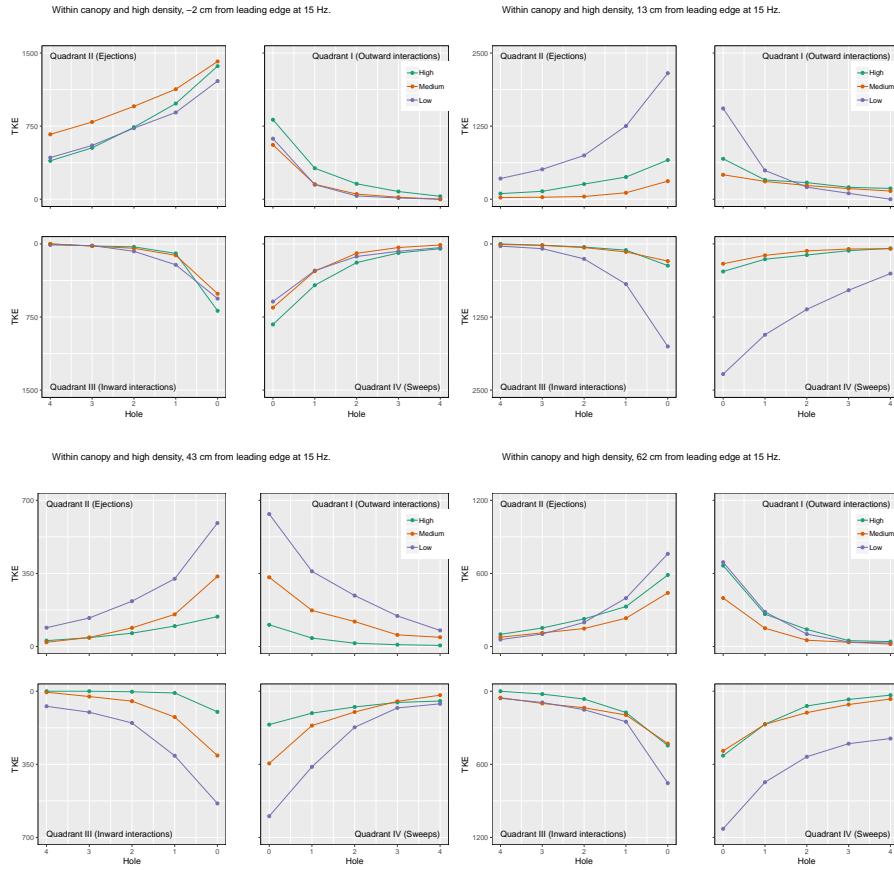


Figure 49: Variation in the total kinetic energy over hole size within the canopy.

7 Total kinetic energy analysis

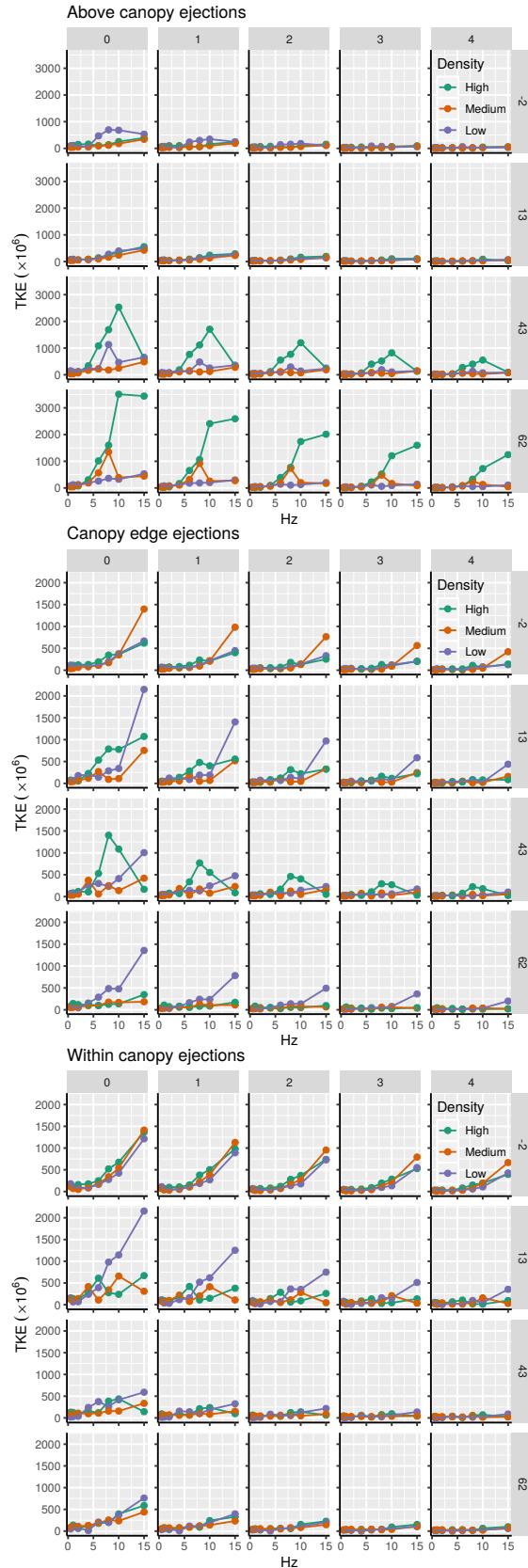


Figure 50: Variation in total kinetic energy of the ejections with Hz.

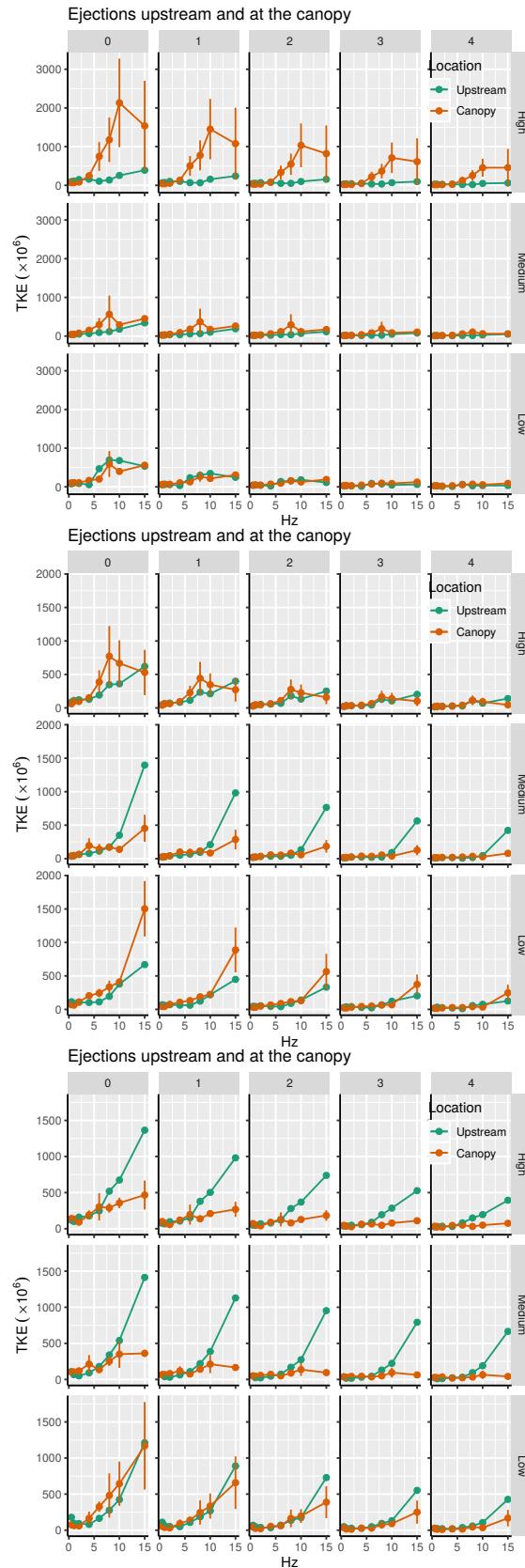


Figure 51: Variation in mean total kinetic energy upstream of the ejections upstream and at the canopy with Hz.

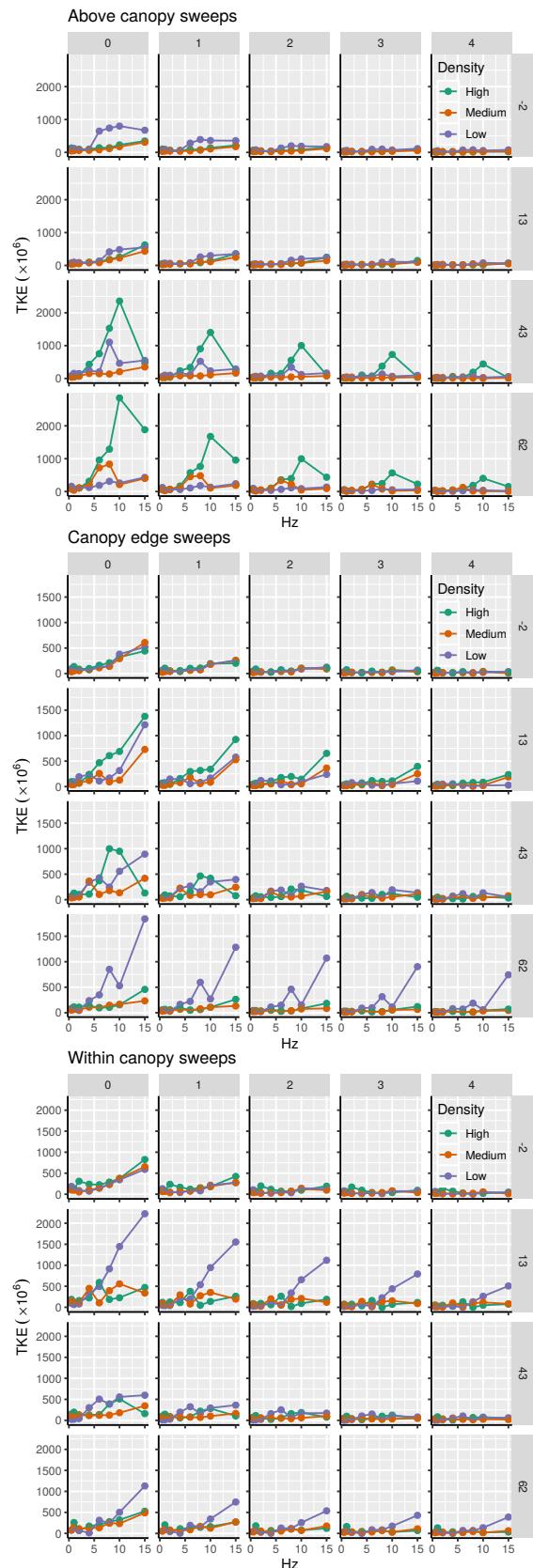


Figure 52: Variation in total kinetic energy of the sweeps with Hz.

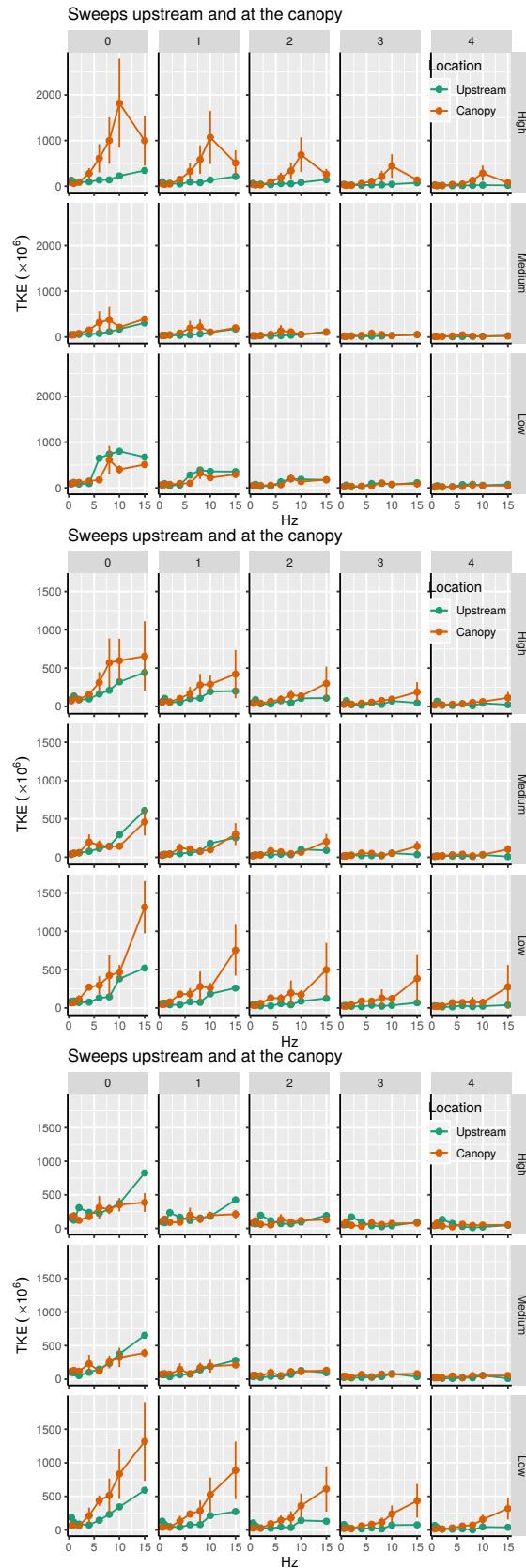


Figure 53: Variation in mean total kinetic energy upstream of the sweeps upstream and at the canopy with Hz.

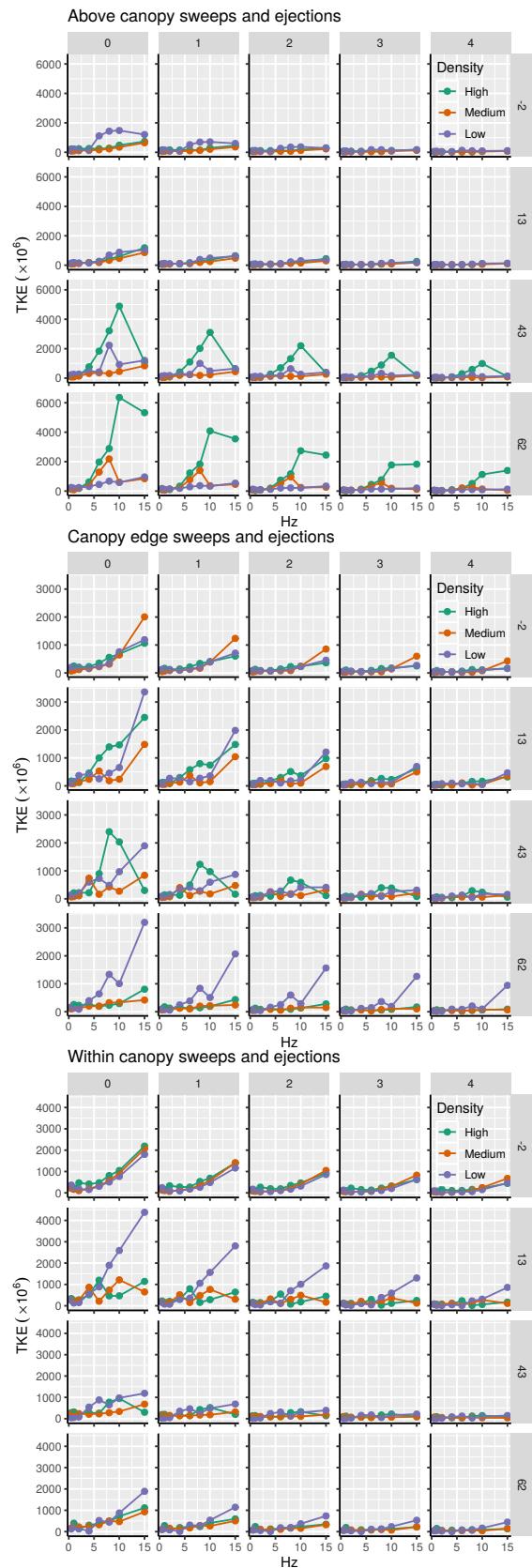


Figure 54: Variation in total kinetic energy of the both the ejections and sweeps with Hz.

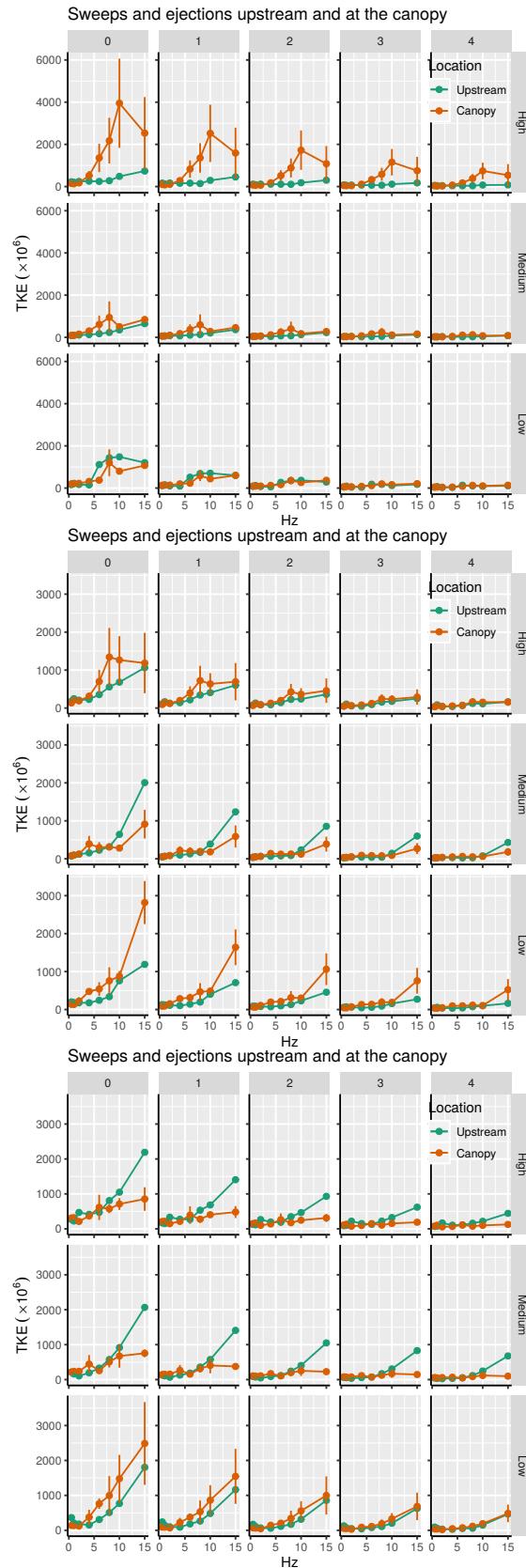


Figure 55: Variation in mean total kinetic energy of the sweeps and ejections upstream and at the canopy with Hz.

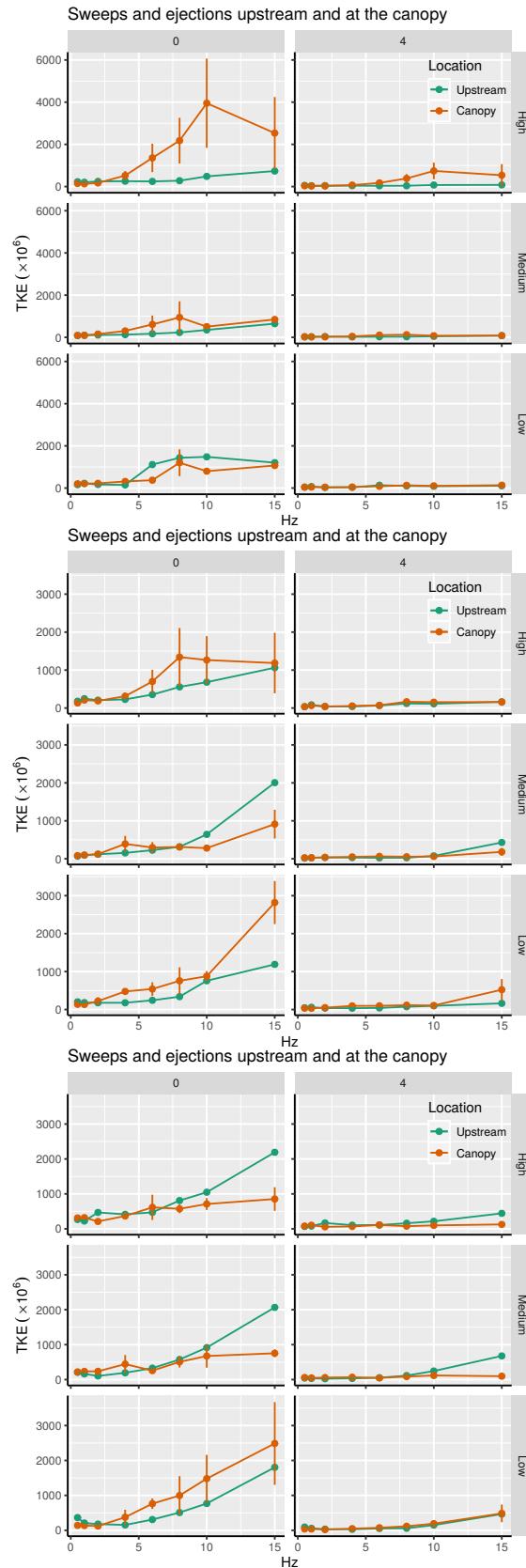


Figure 56: Variation in mean total kinetic energy of the sweeps and ejections upstream and at the canopy with Hz for a hole size of 0 and 4.

8 Negative momentum stress analysis

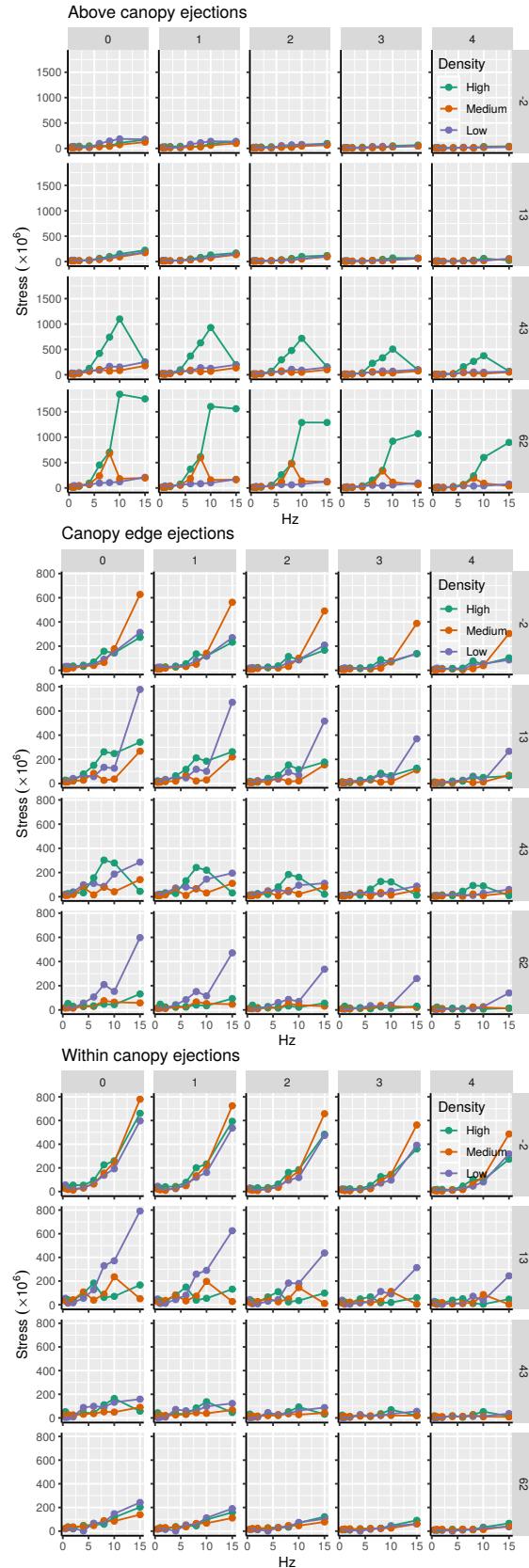


Figure 57: Variation in negative momentum flux of the ejections with Hz.

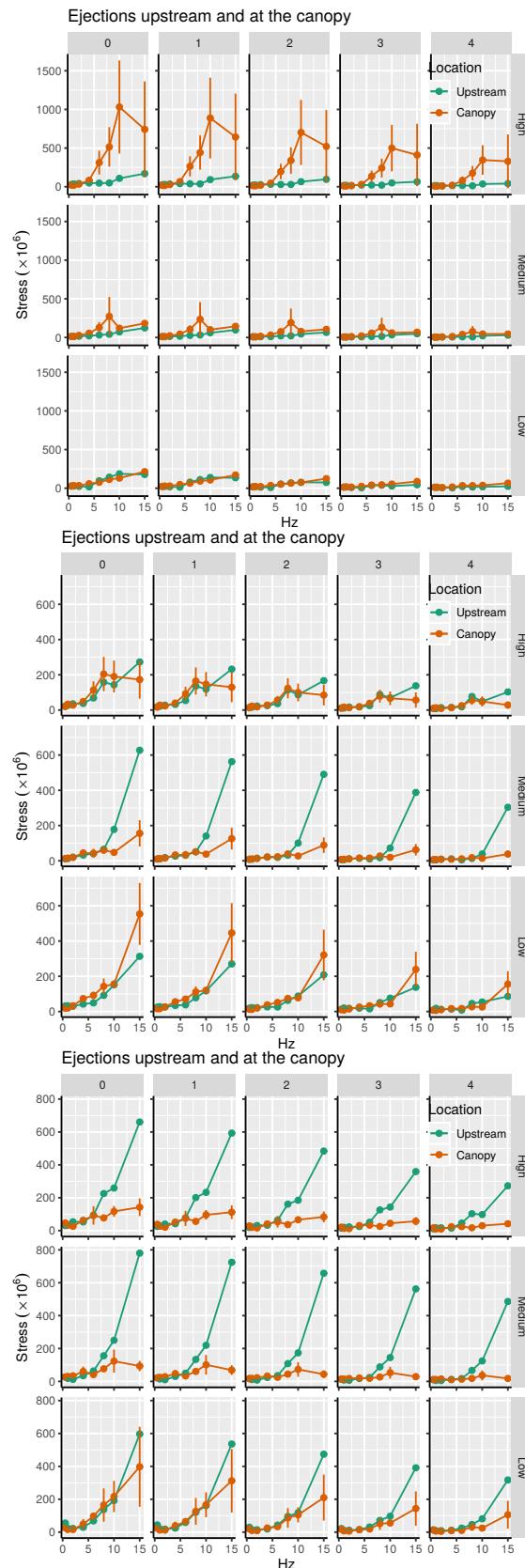


Figure 58: Variation in mean negative momentum flux upstream of the ejections upstream and at the canopy with Hz.

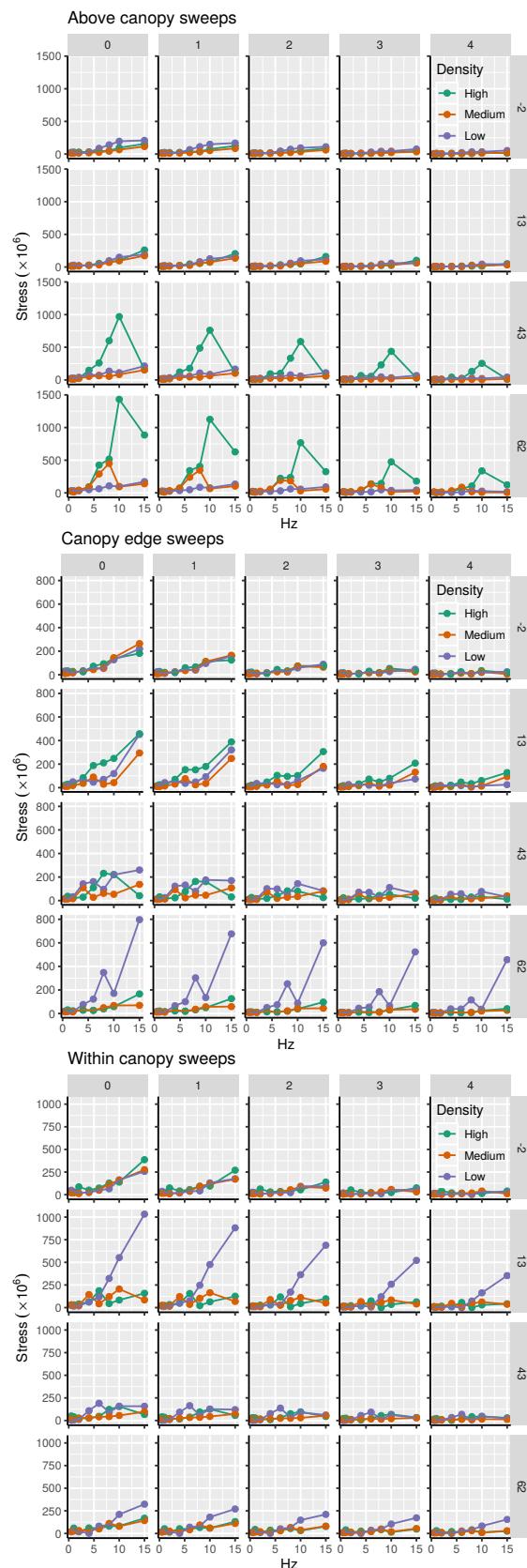


Figure 59: Variation in negative momentum flux of the sweeps with Hz.

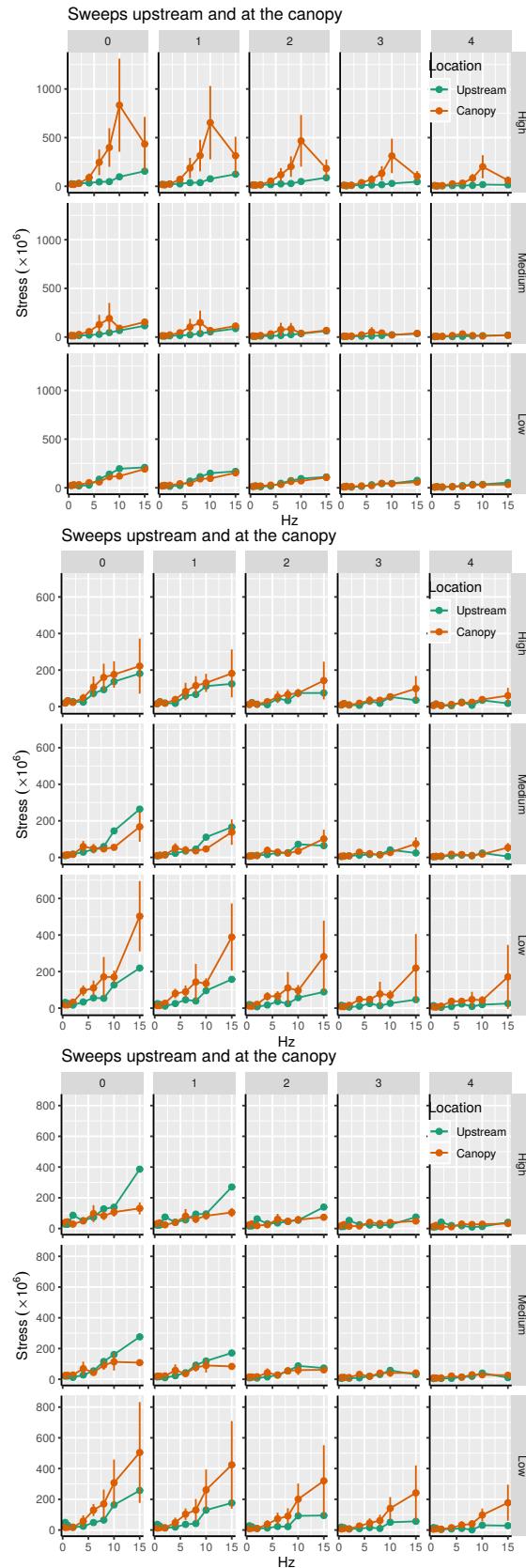


Figure 60: Variation in mean negative momentum flux upstream of the sweeps upstream and at the canopy with Hz.

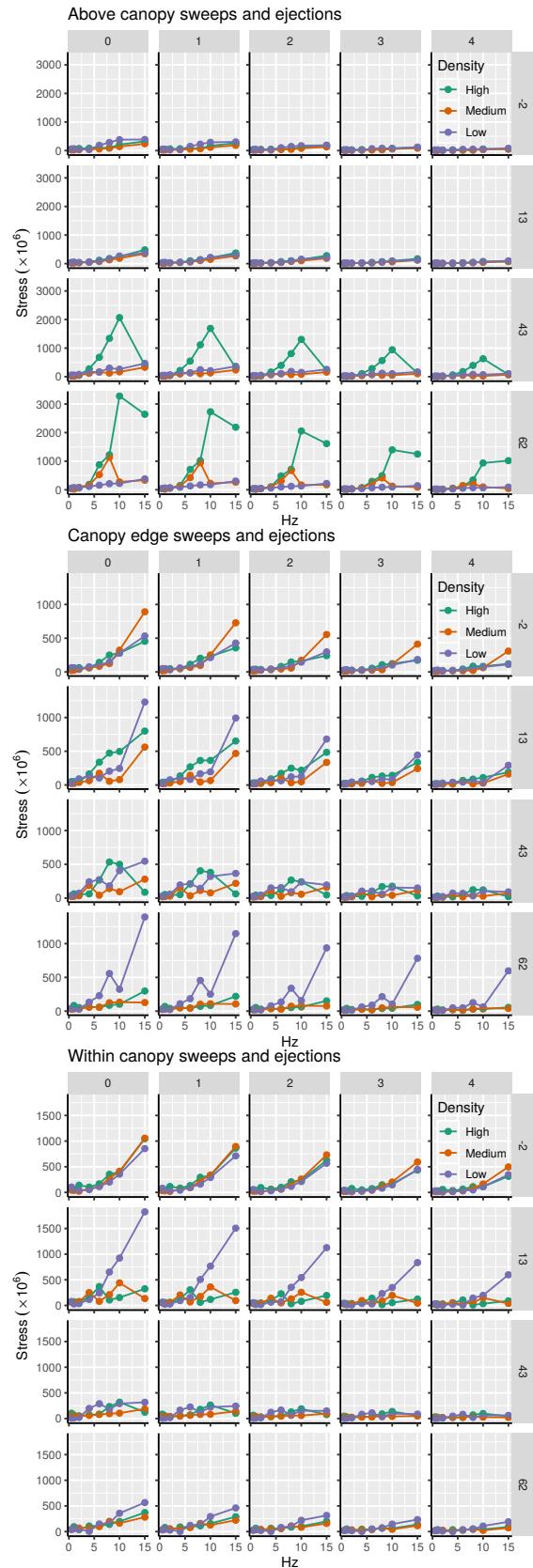


Figure 61: Variation in negative momentum flux of the both the ejections and sweeps with Hz.

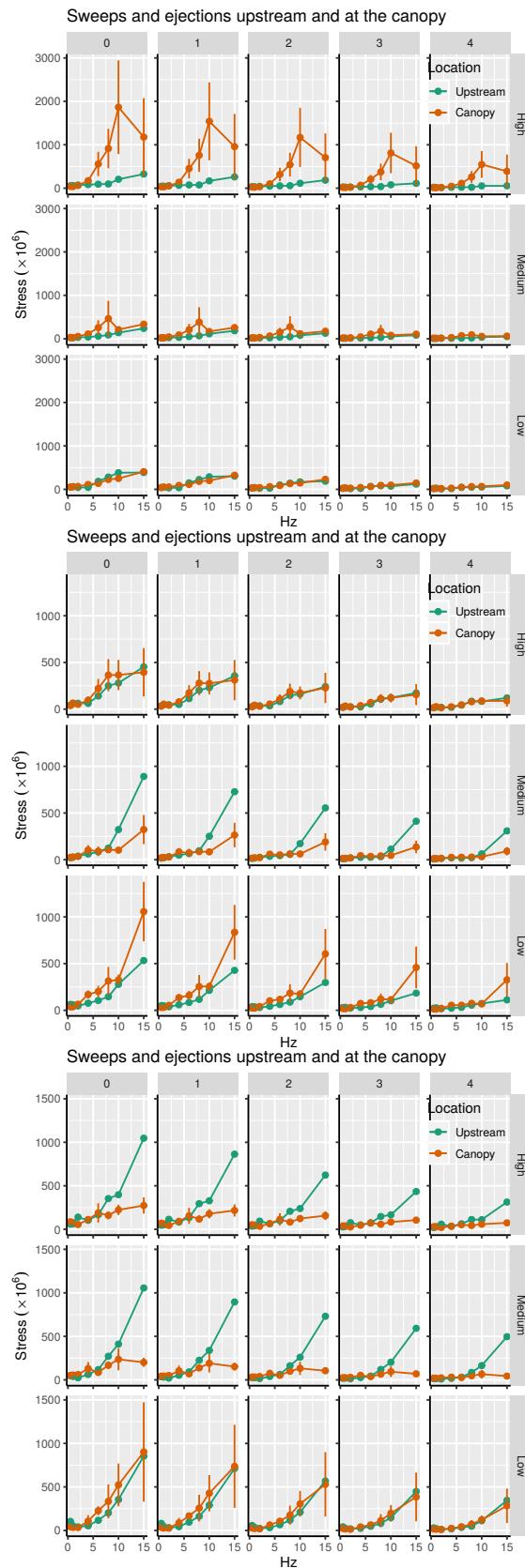


Figure 62: Variation in mean negative momentum flux of the sweeps and ejections upstream and at the canopy with Hz.

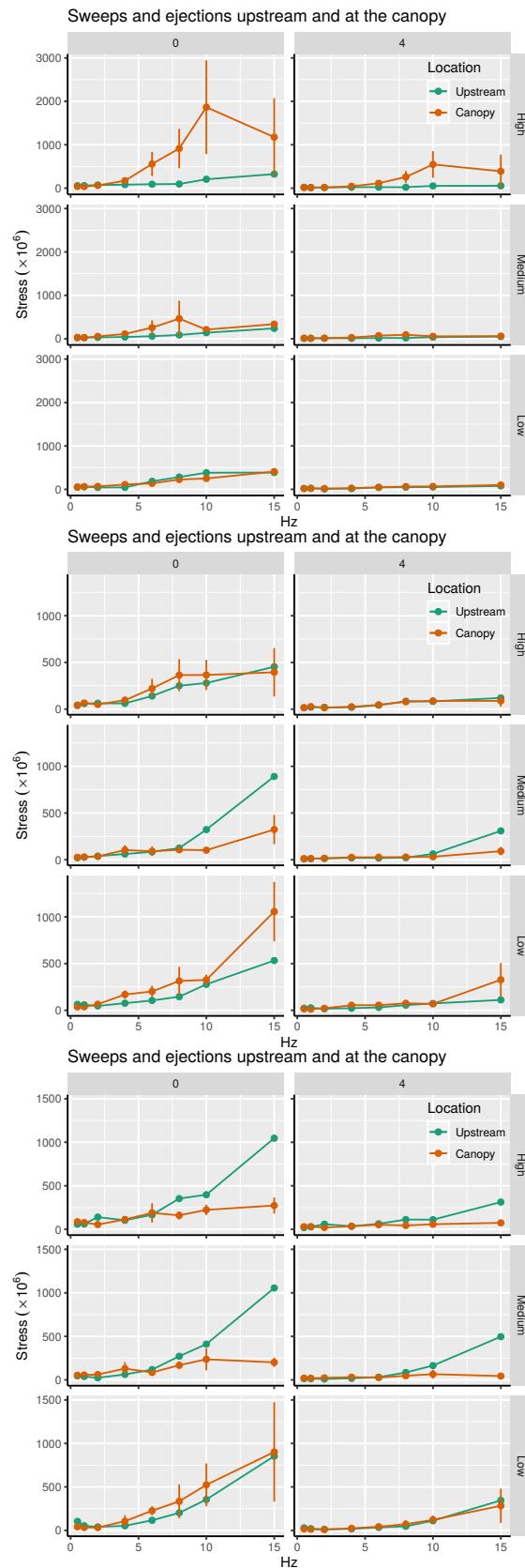


Figure 63: Variation in mean negative momentum flux of the sweeps and ejections upstream and at the canopy with Hz for a hole size of 0 and 4.

9 Event duration analysis

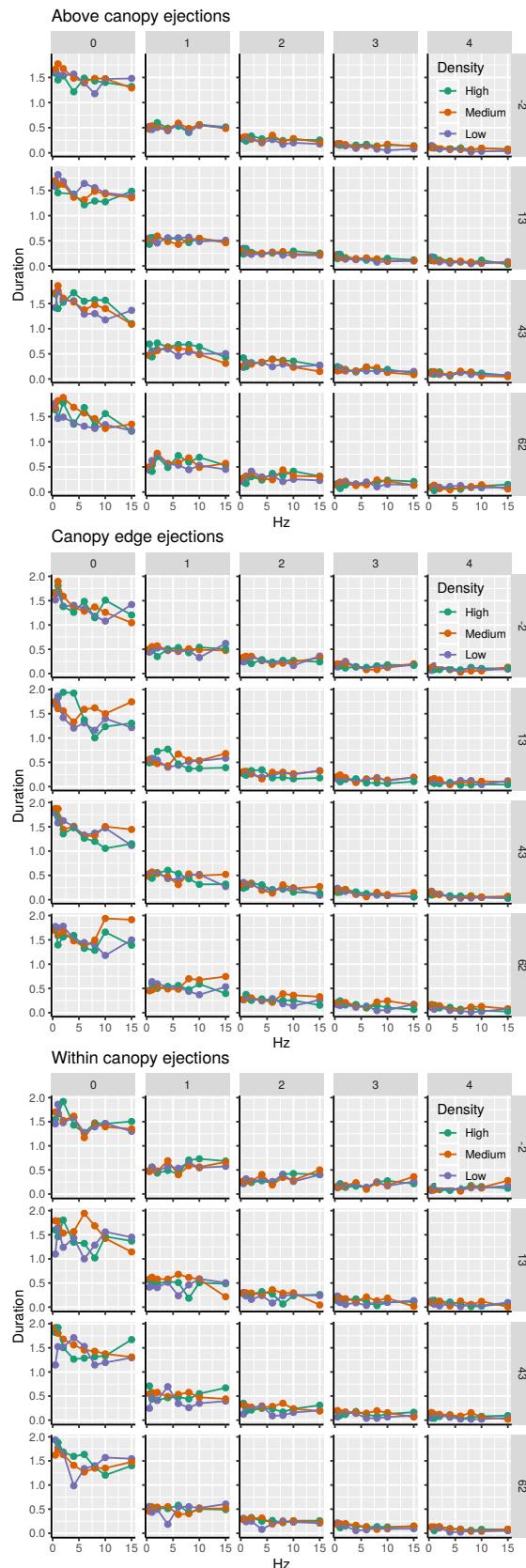


Figure 64: Variation in duration of the ejections with Hz.

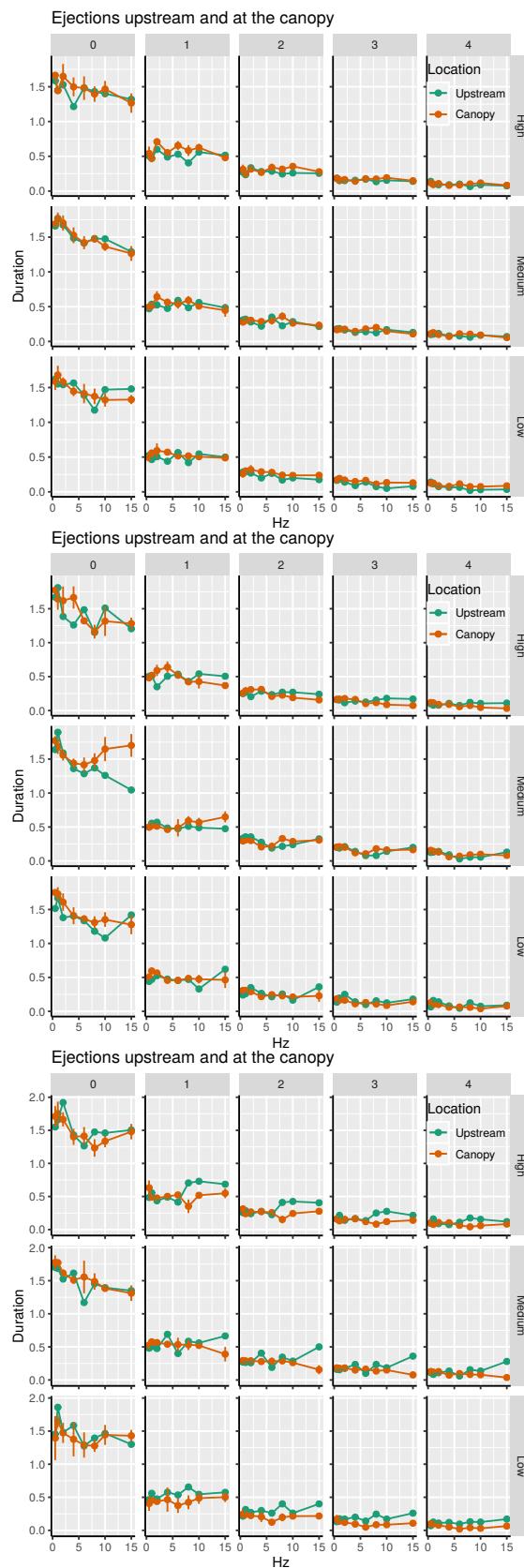


Figure 65: Variation in mean duration upstream of the ejections upstream and at the canopy with Hz.

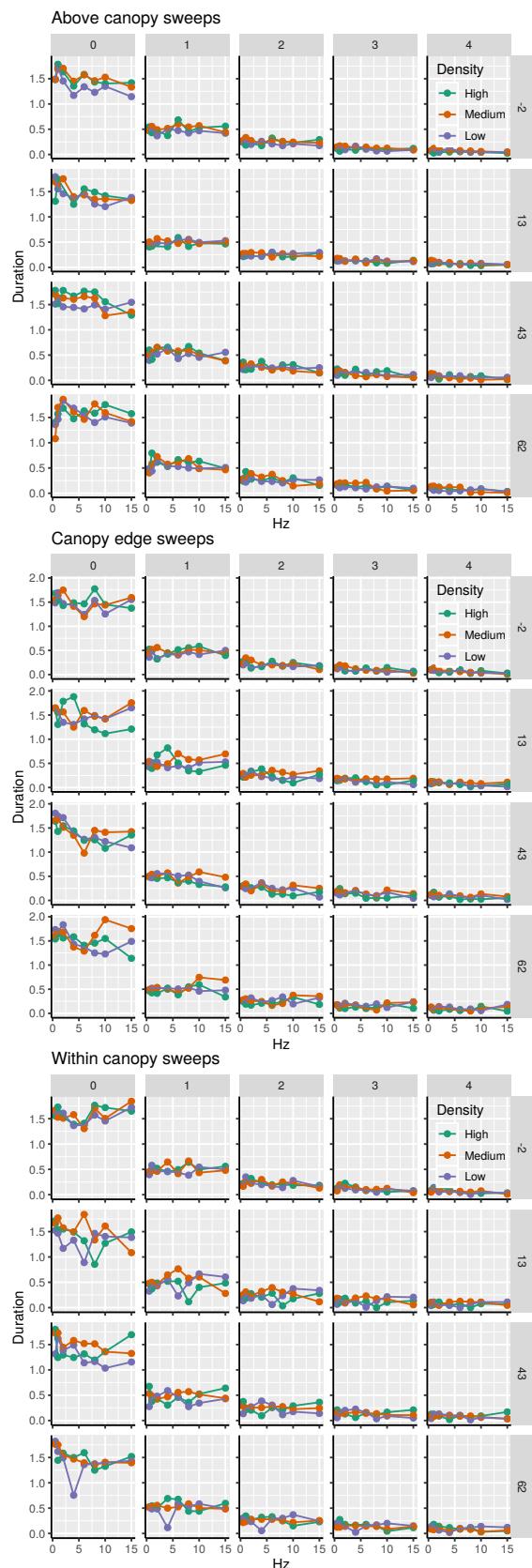


Figure 66: Variation in duration of the sweeps with Hz.

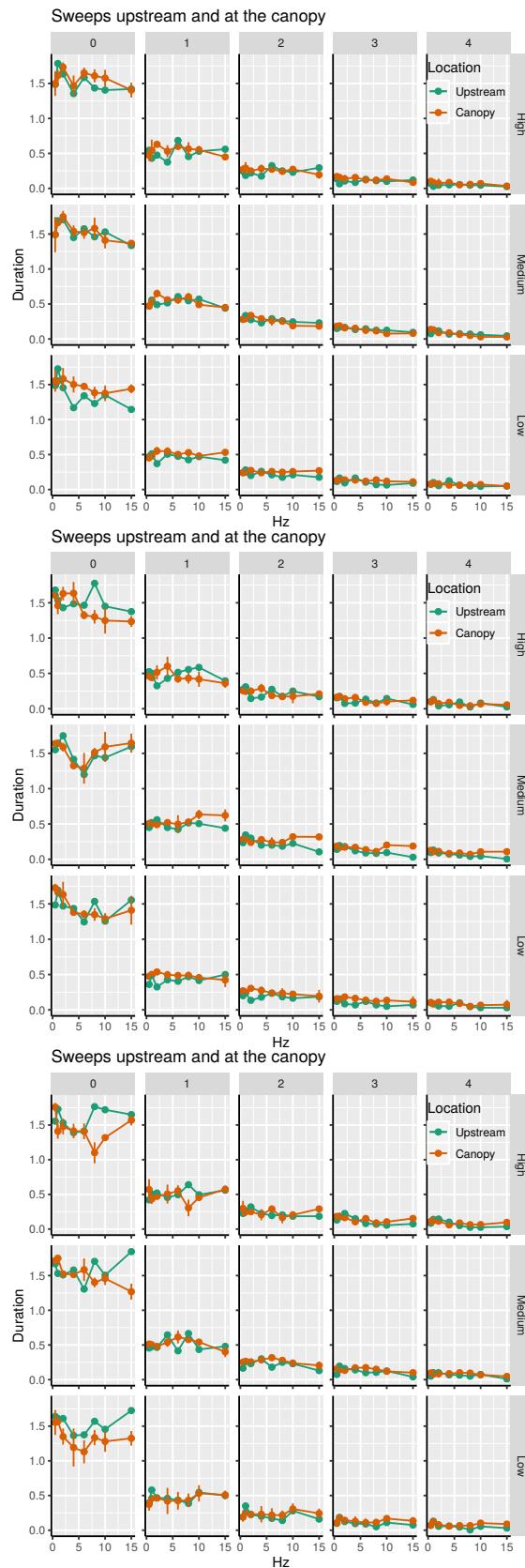


Figure 67: Variation in mean duration upstream of the sweeps upstream and at the canopy with Hz.

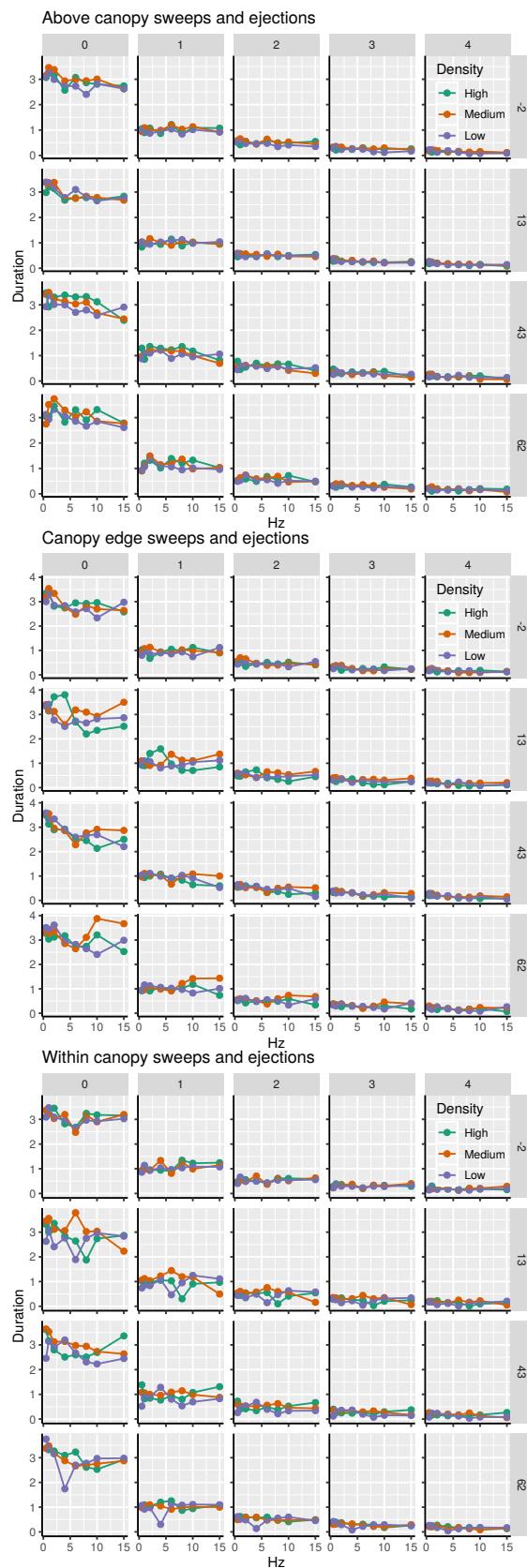


Figure 68: Variation in duration of the both the ejections and sweeps with Hz.

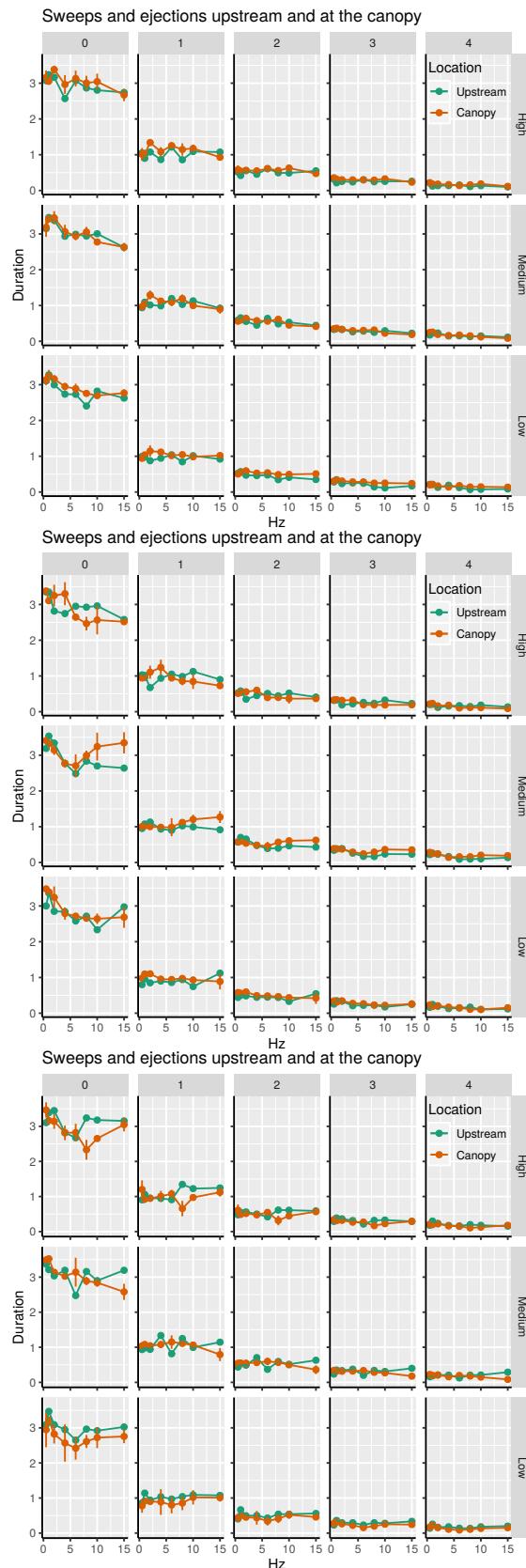


Figure 69: Variation in mean duration of the sweeps and ejections upstream and at the canopy with Hz.

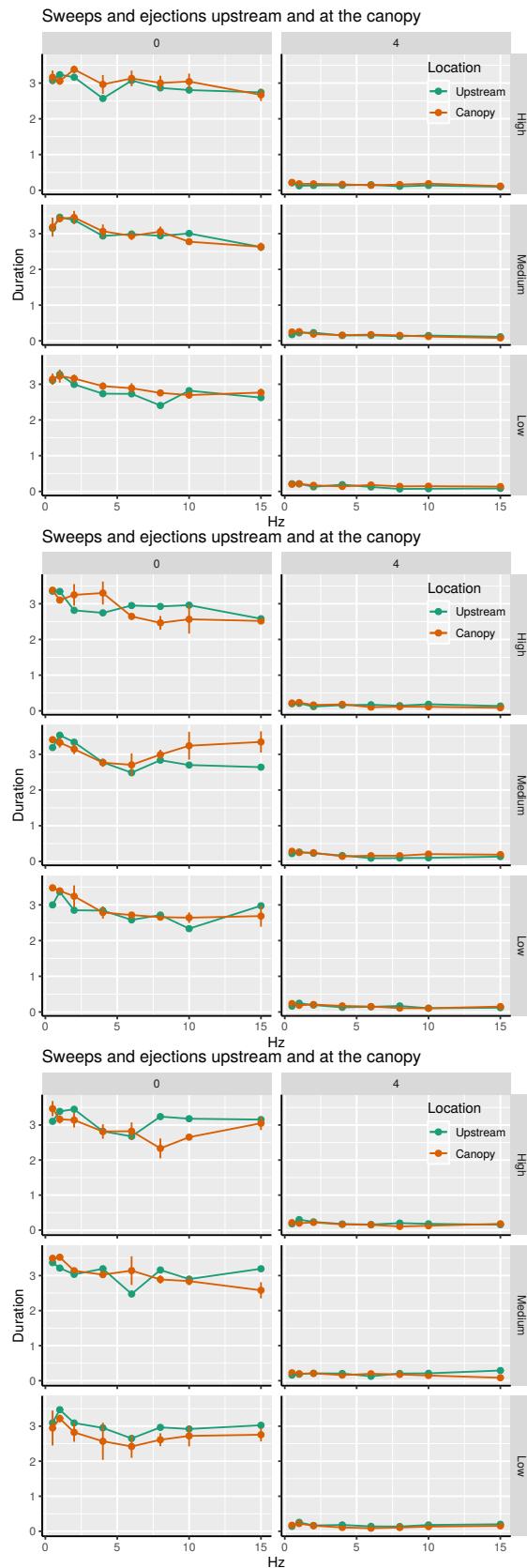


Figure 70: Variation in mean duration of the sweeps and ejections upstream and at the canopy with Hz for a hole size of 0 and 4.

10 Stress fraction analysis

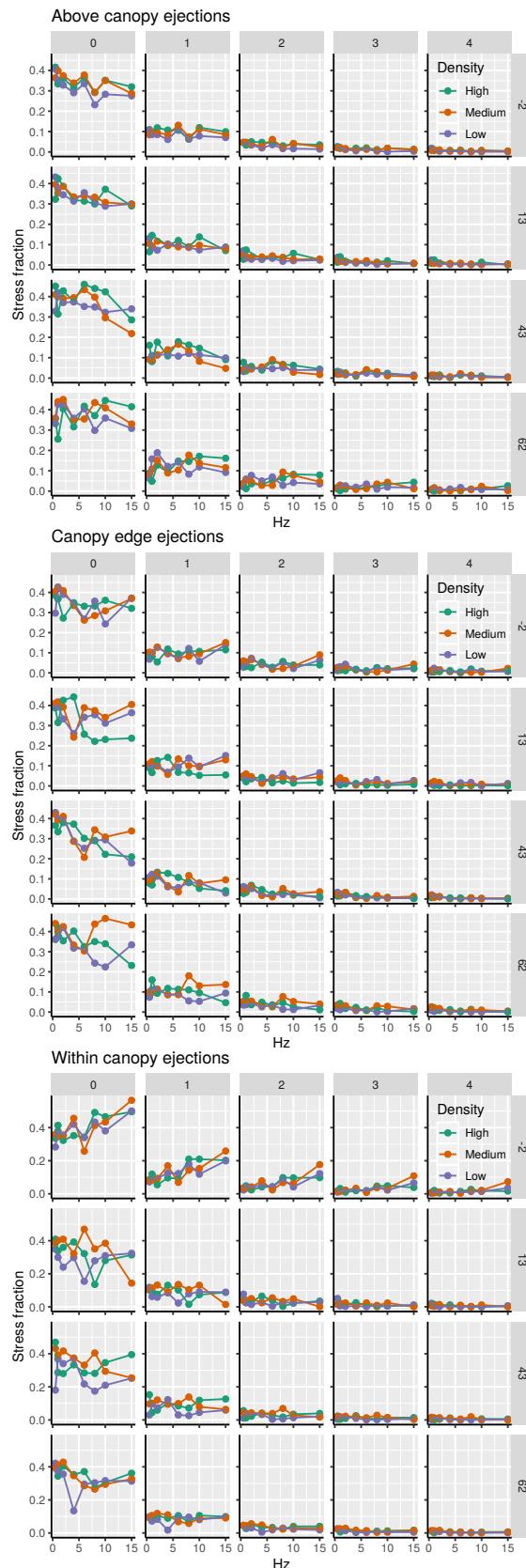


Figure 71: Variation in stress fraction of the ejections with Hz.

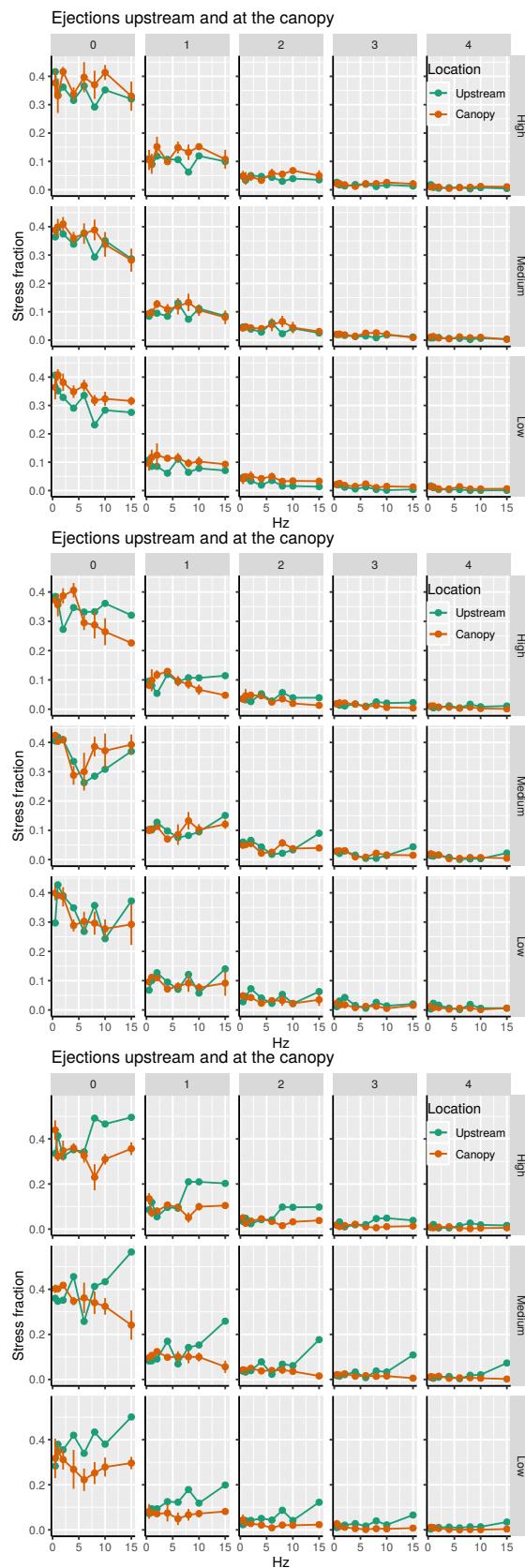


Figure 72: Variation in mean stress fraction upstream of the ejections upstream and at the canopy with Hz.

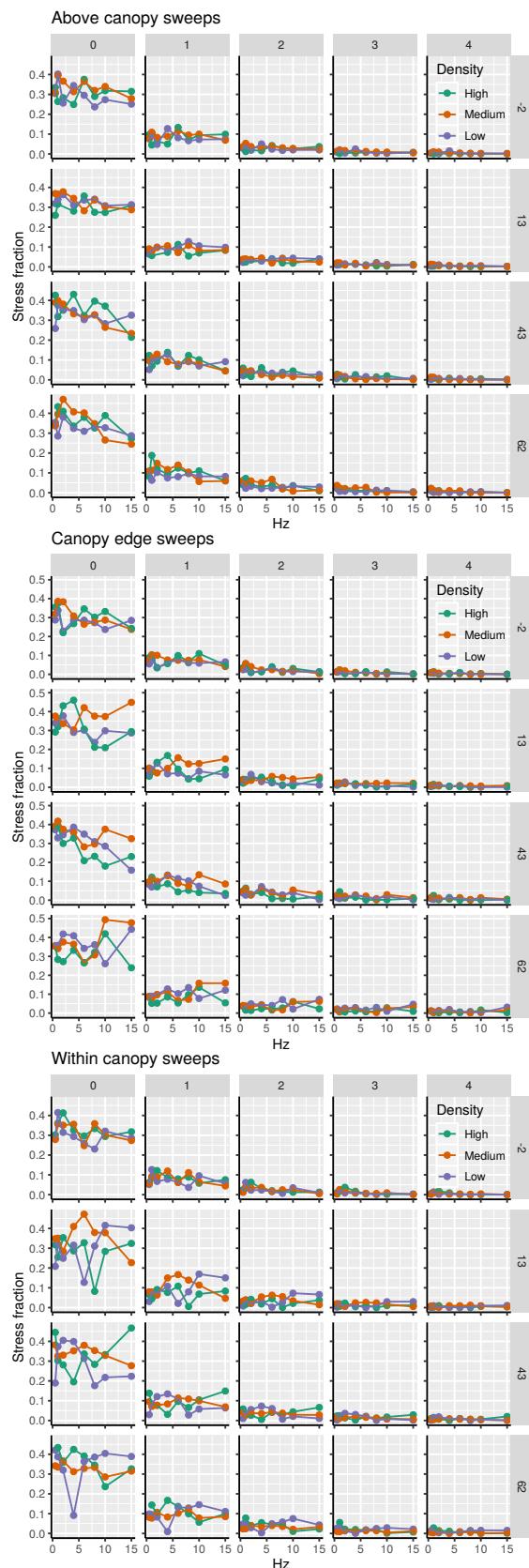


Figure 73: Variation in stress fraction of the sweeps with Hz.

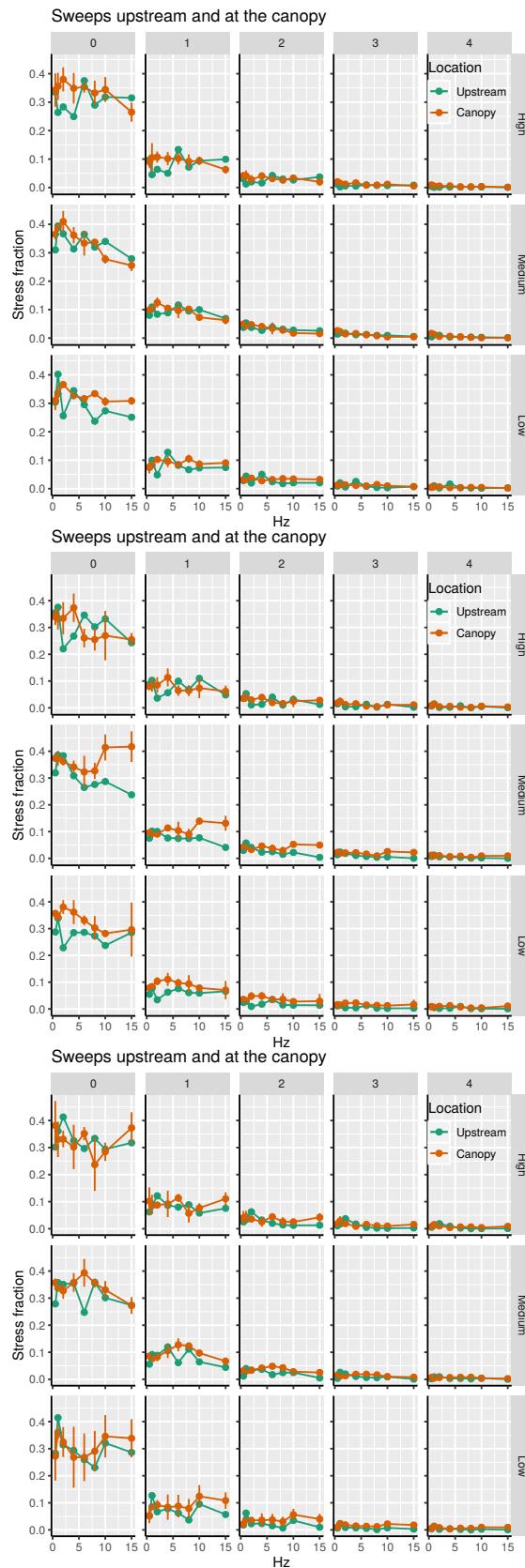


Figure 74: Variation in mean stress fraction upstream of the sweeps upstream and at the canopy with Hz.

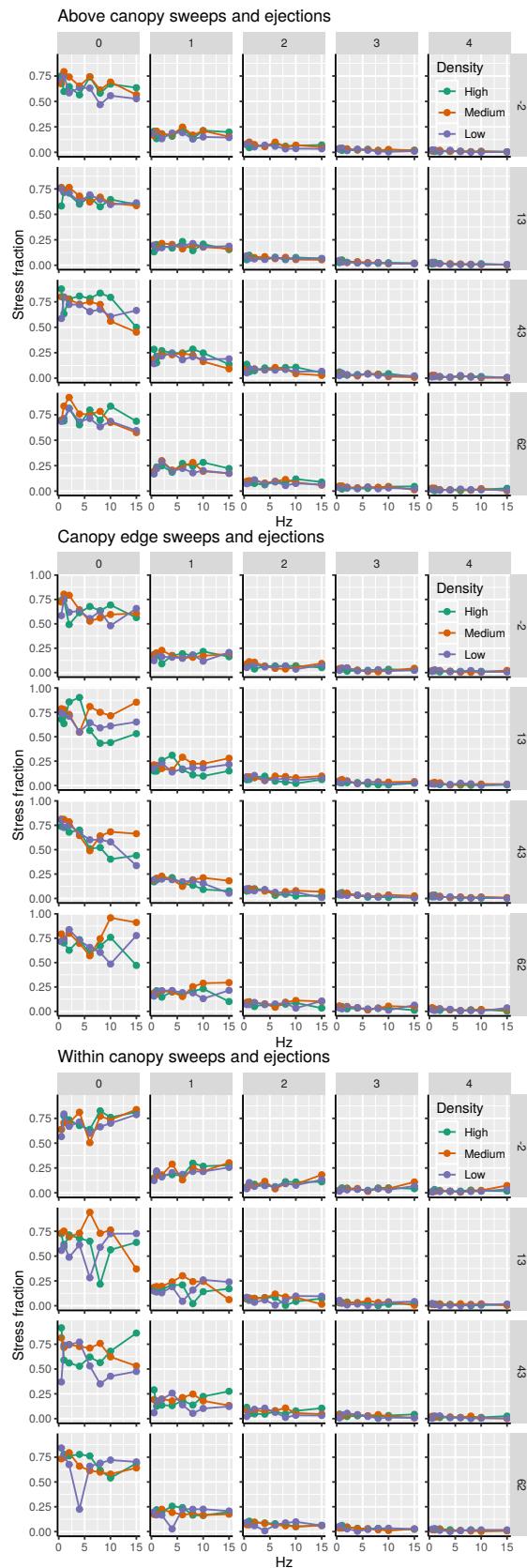


Figure 75: Variation in stress fraction of the both the ejections and sweeps with Hz.

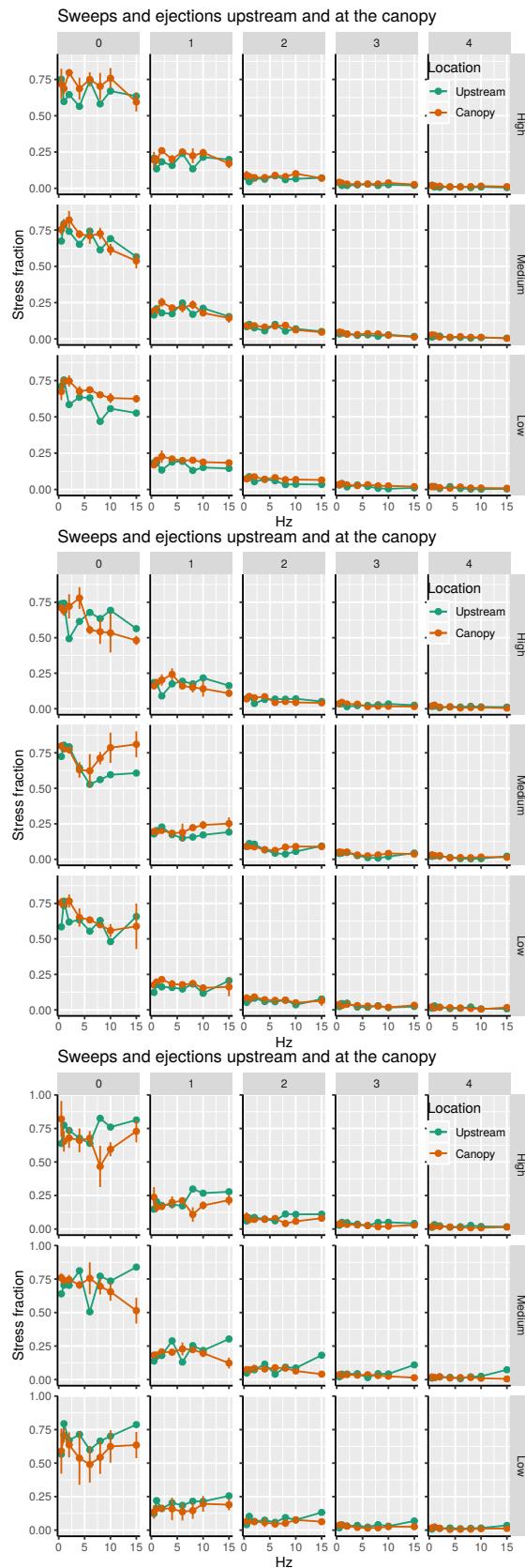


Figure 76: Variation in mean stress fraction of the sweeps and ejections upstream and at the canopy with Hz.

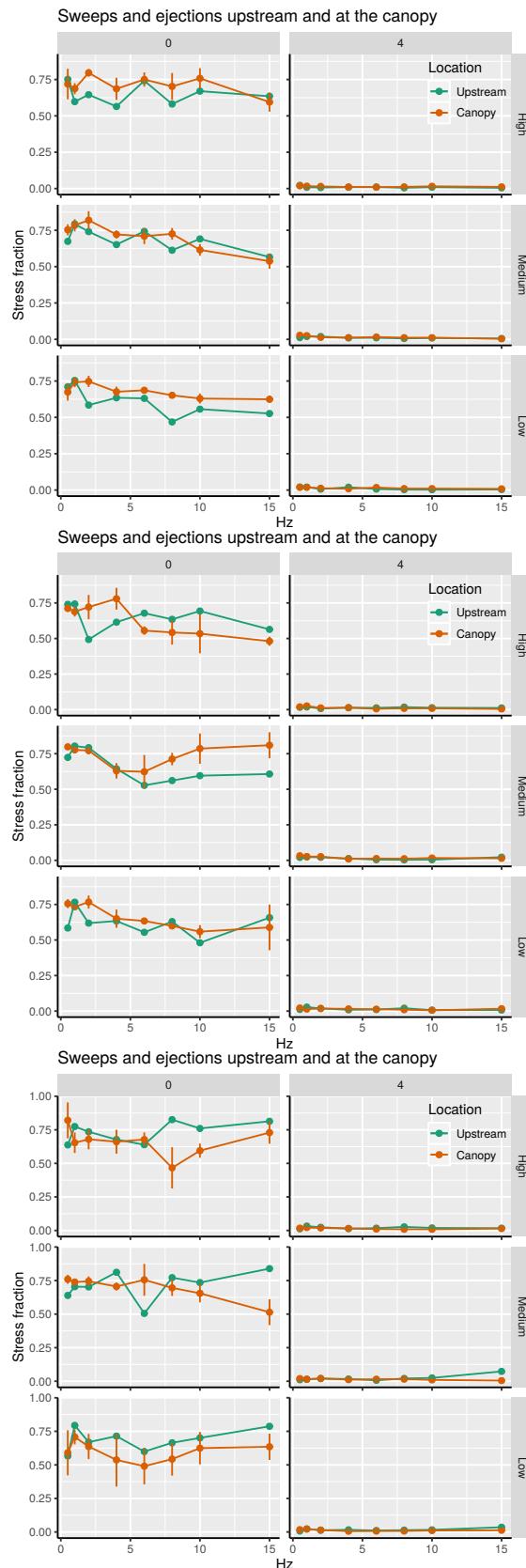


Figure 77: Variation in mean stress fraction of the sweeps and ejections upstream and at the canopy with Hz for a hole size of 0 and 4.

11 TKE fraction analysis

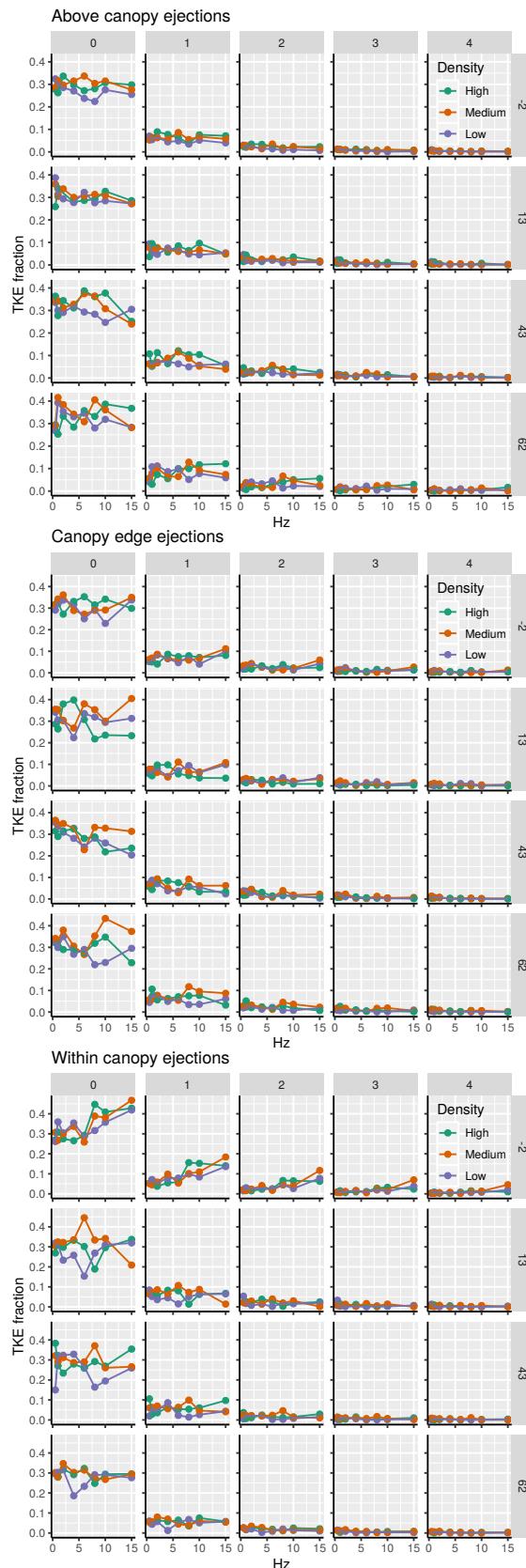


Figure 78: Variation in TKE fraction of the ejections with Hz.

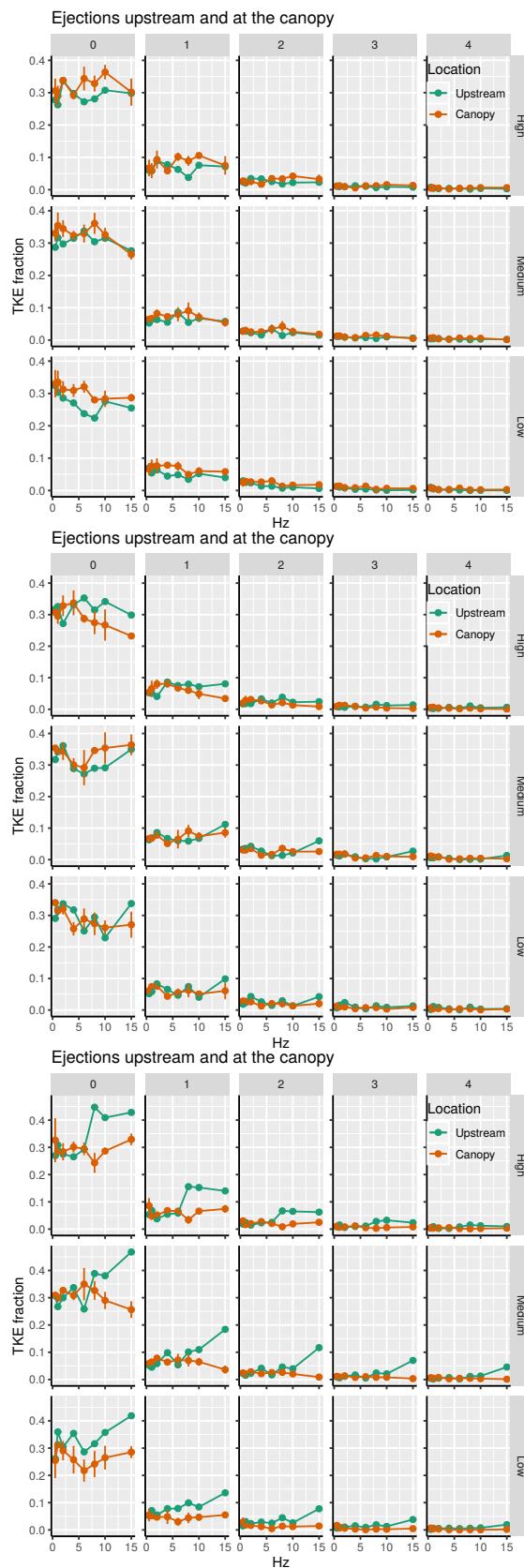


Figure 79: Variation in mean TKE fraction upstream of the ejections upstream and at the canopy with Hz.

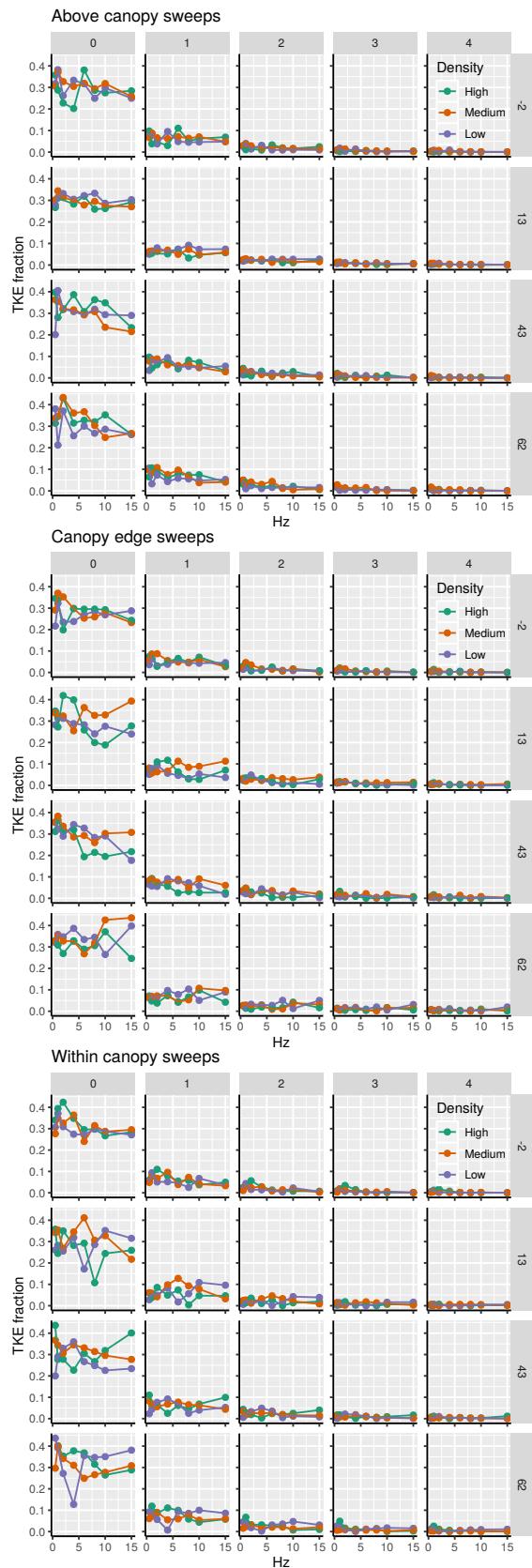


Figure 80: Variation in TKE fraction of the sweeps with Hz.

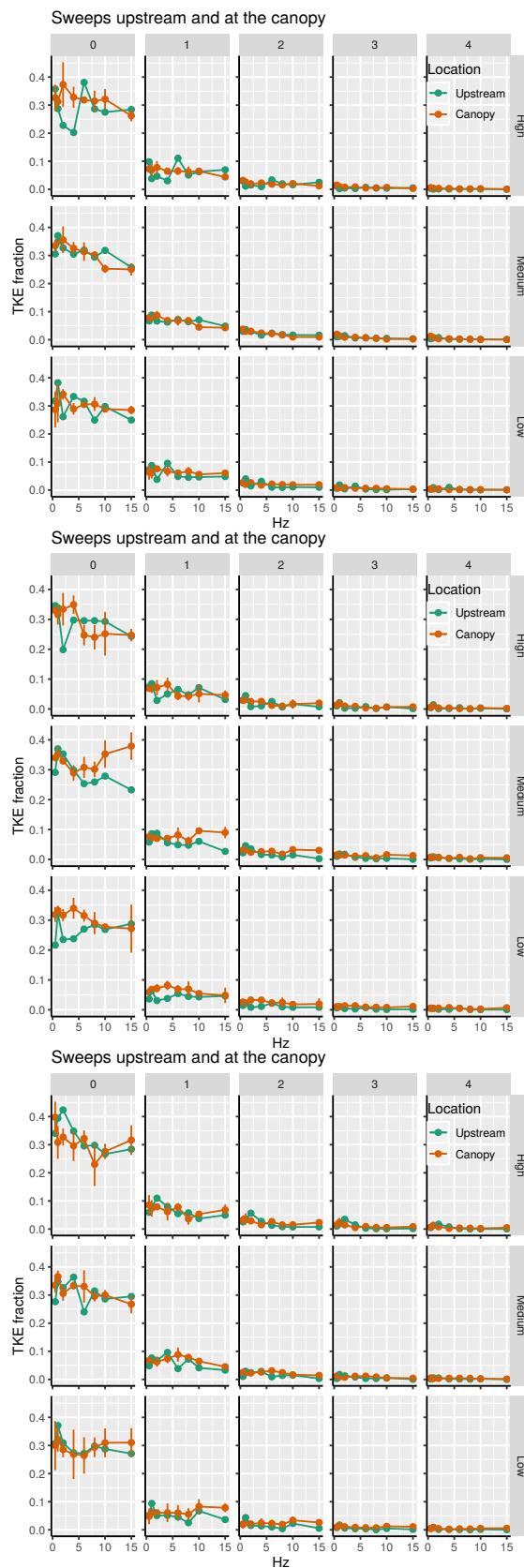


Figure 81: Variation in mean TKE fraction upstream of the sweeps upstream and at the canopy with Hz.

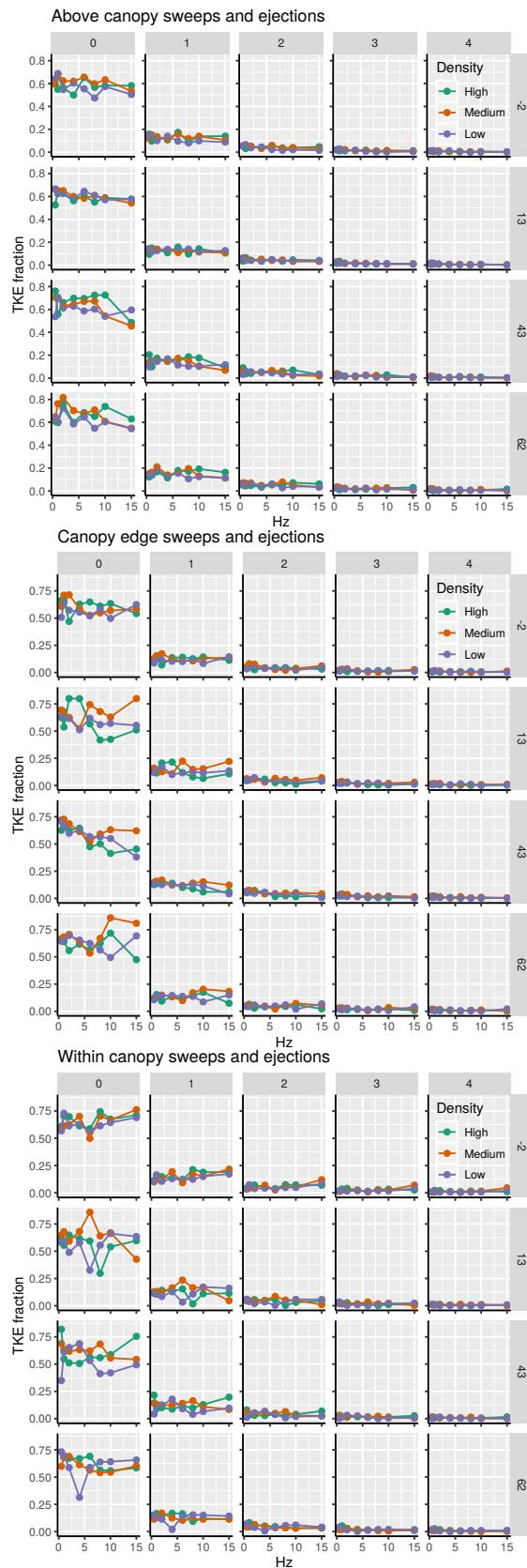


Figure 82: Variation in TKE fraction of the both the ejections and sweeps with Hz.

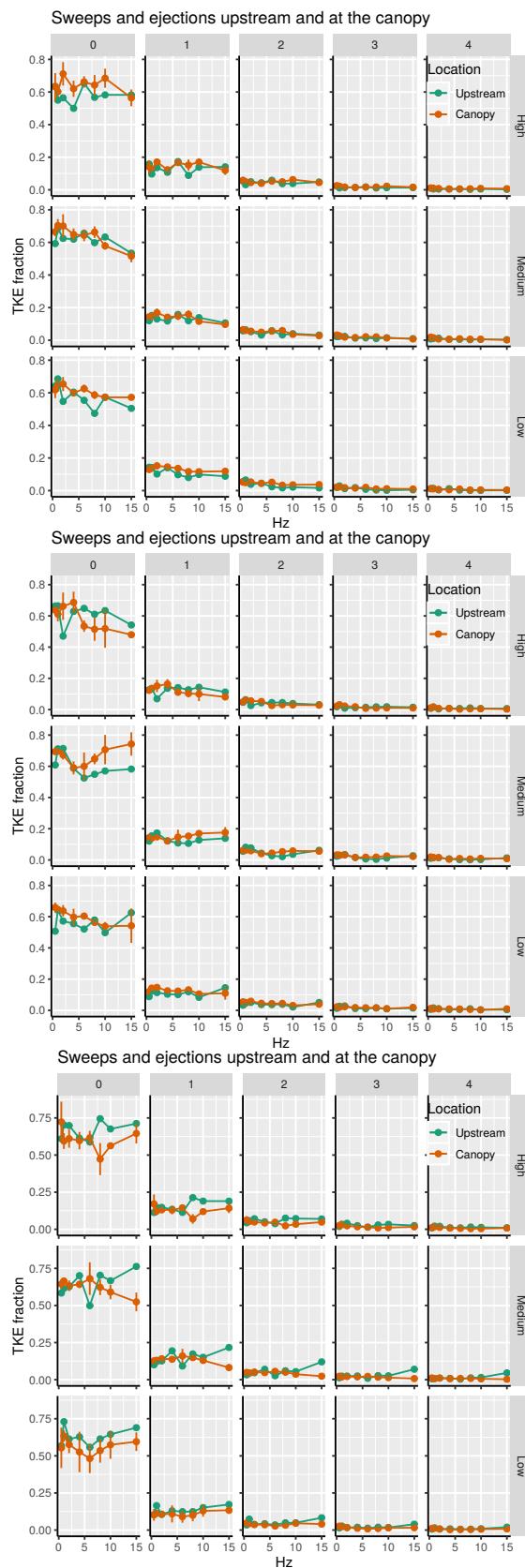


Figure 83: Variation in mean TKE fraction of the sweeps and ejections upstream and at the canopy with Hz.

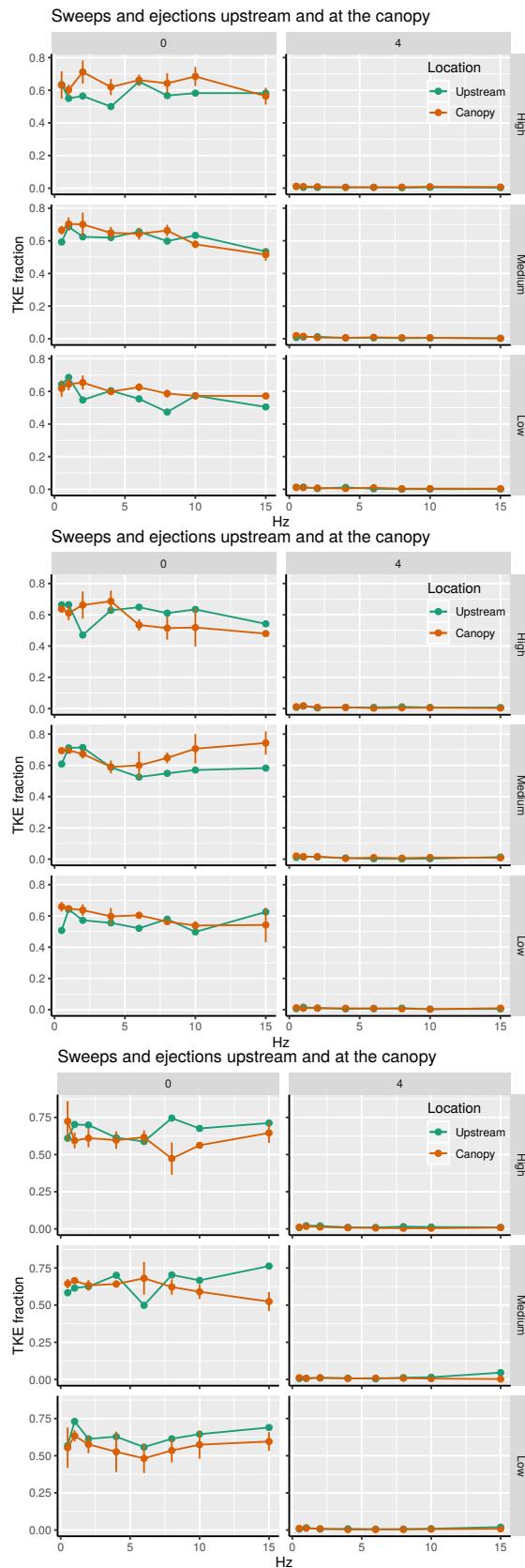


Figure 84: Variation in mean TKE fraction of the sweeps and ejections upstream and at the canopy with Hz for a hole size of 0 and 4.

12 Events across the canopy length

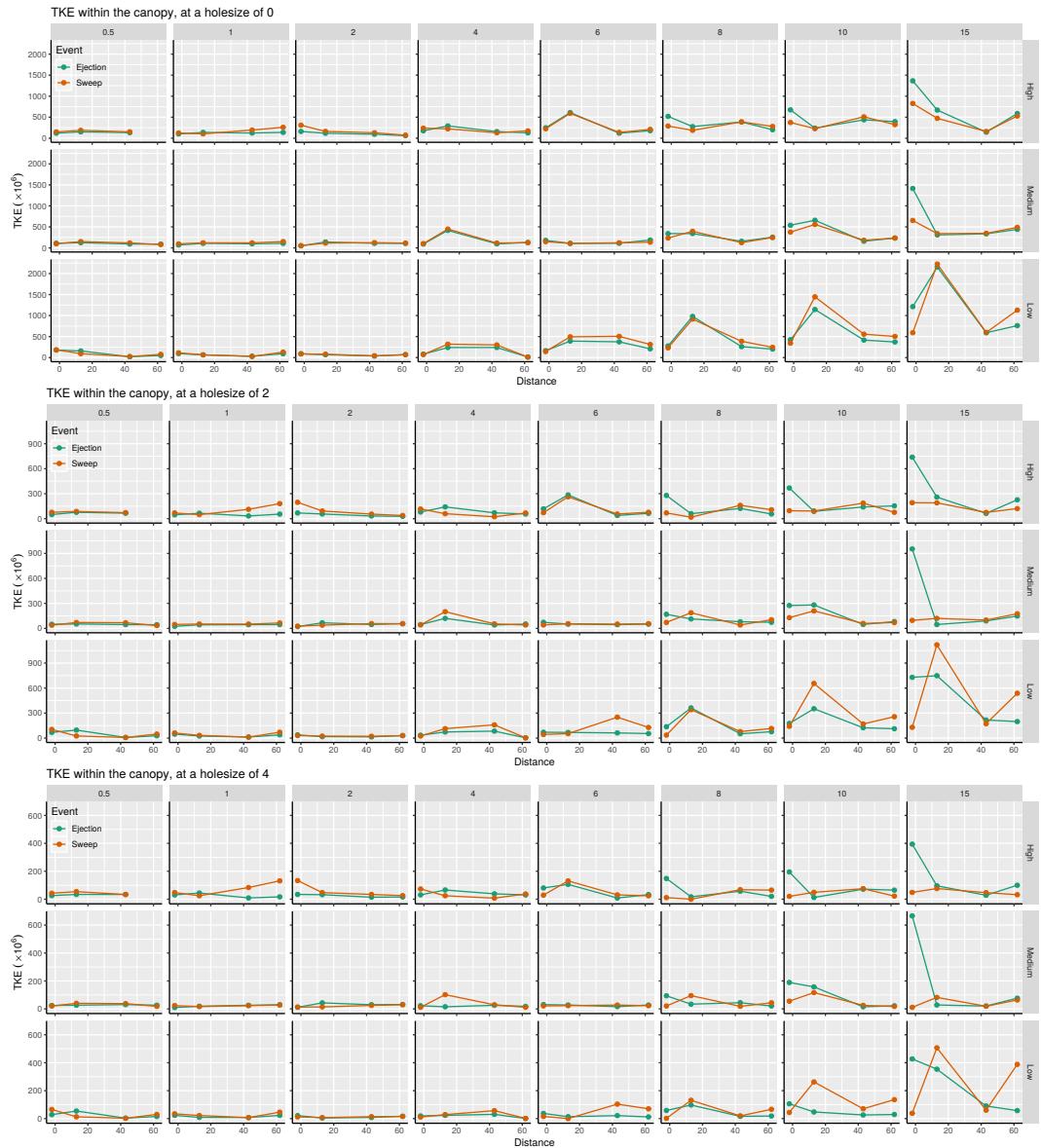


Figure 85: Variation in TKE along the length of the canopy at a hole size of 0, 2, and 4.

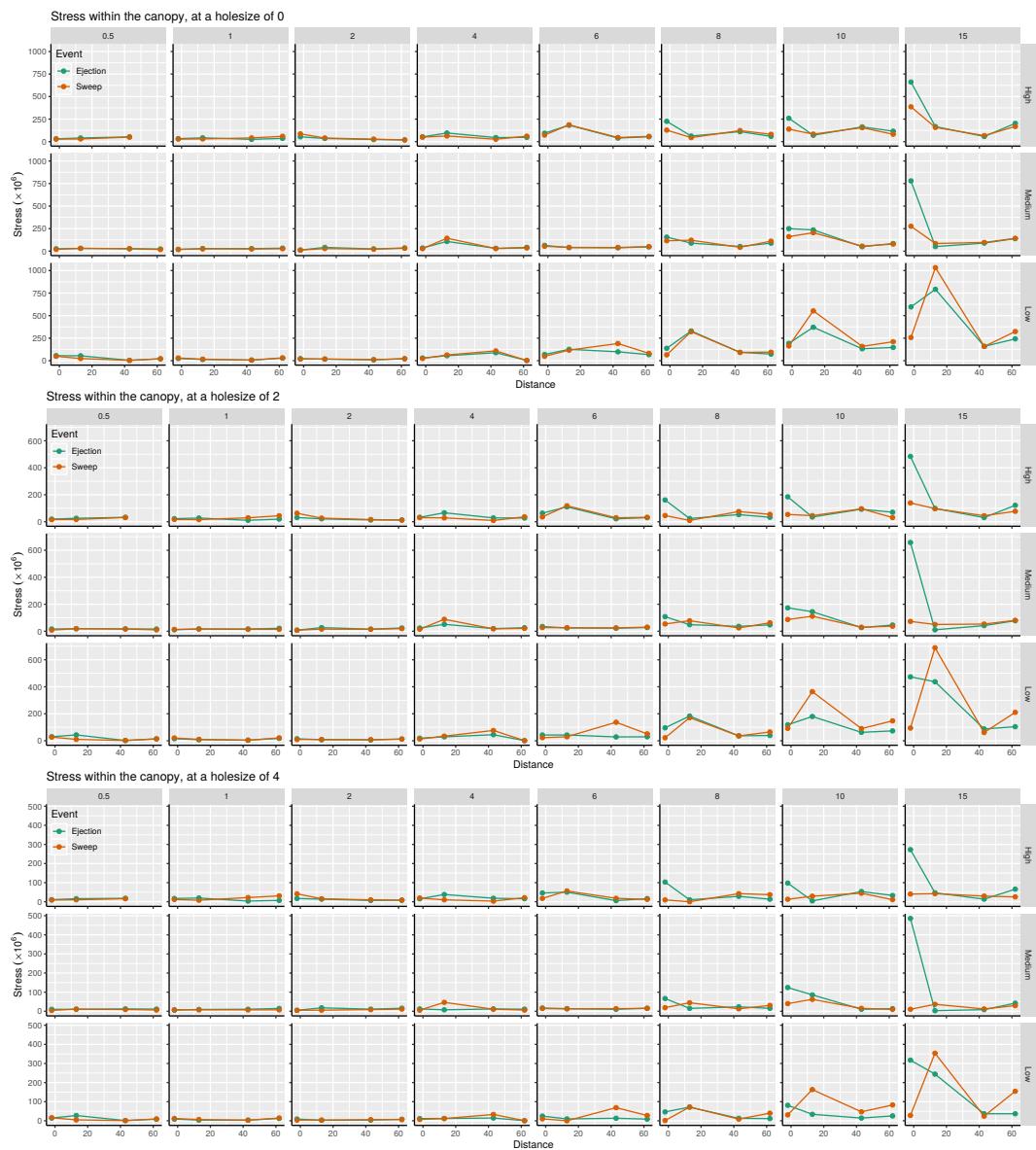


Figure 86: Variation in negative momentum flux along the length of the canopy at a hole size of 0, 2, and 4.

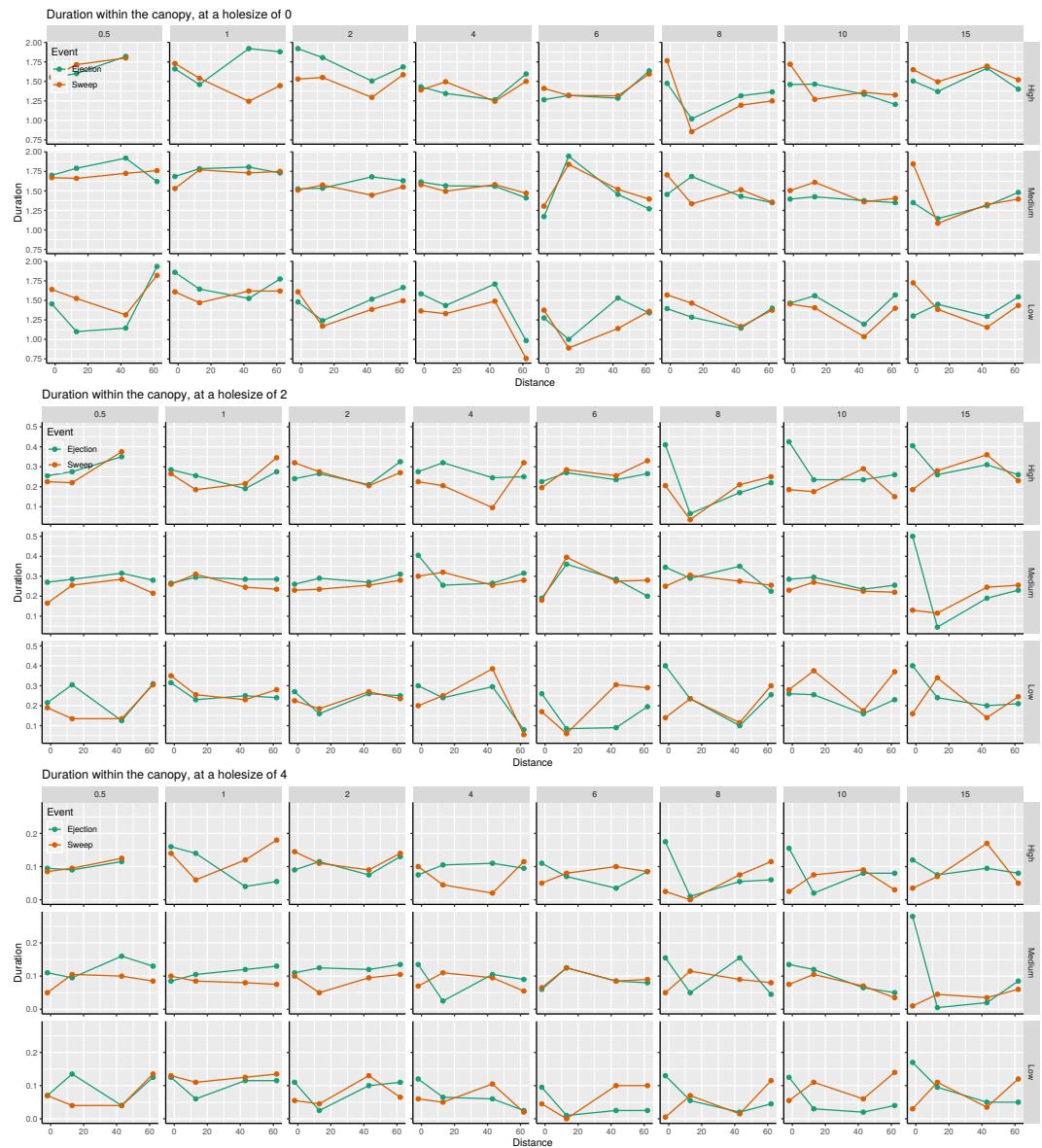


Figure 87: Variation in duration of events along the length of the canopy at a hole size of 0, 2, and 4.

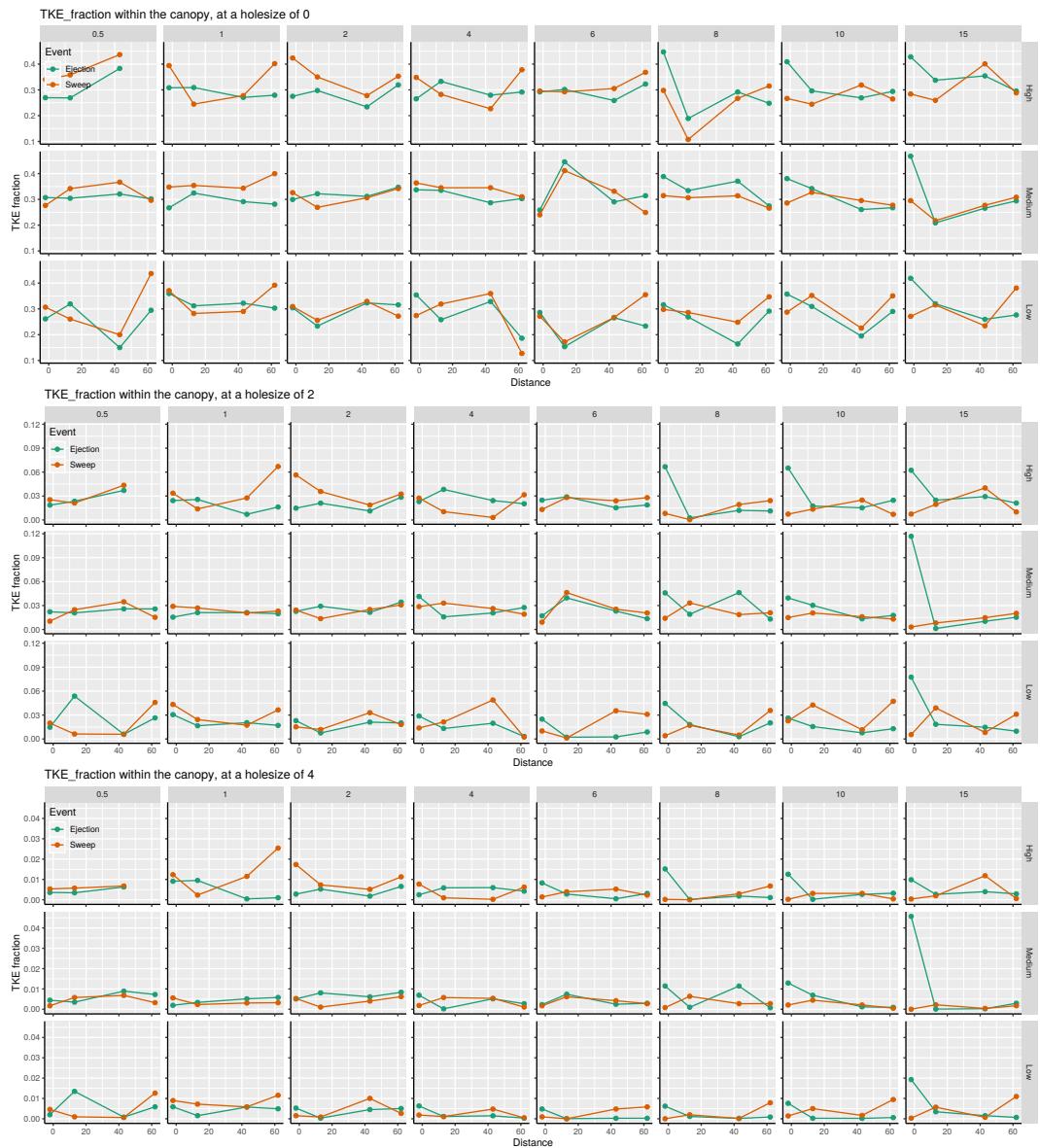


Figure 88: Variation in TKE fraction along the length of the canopy at a hole size of 0, 2, and 4.

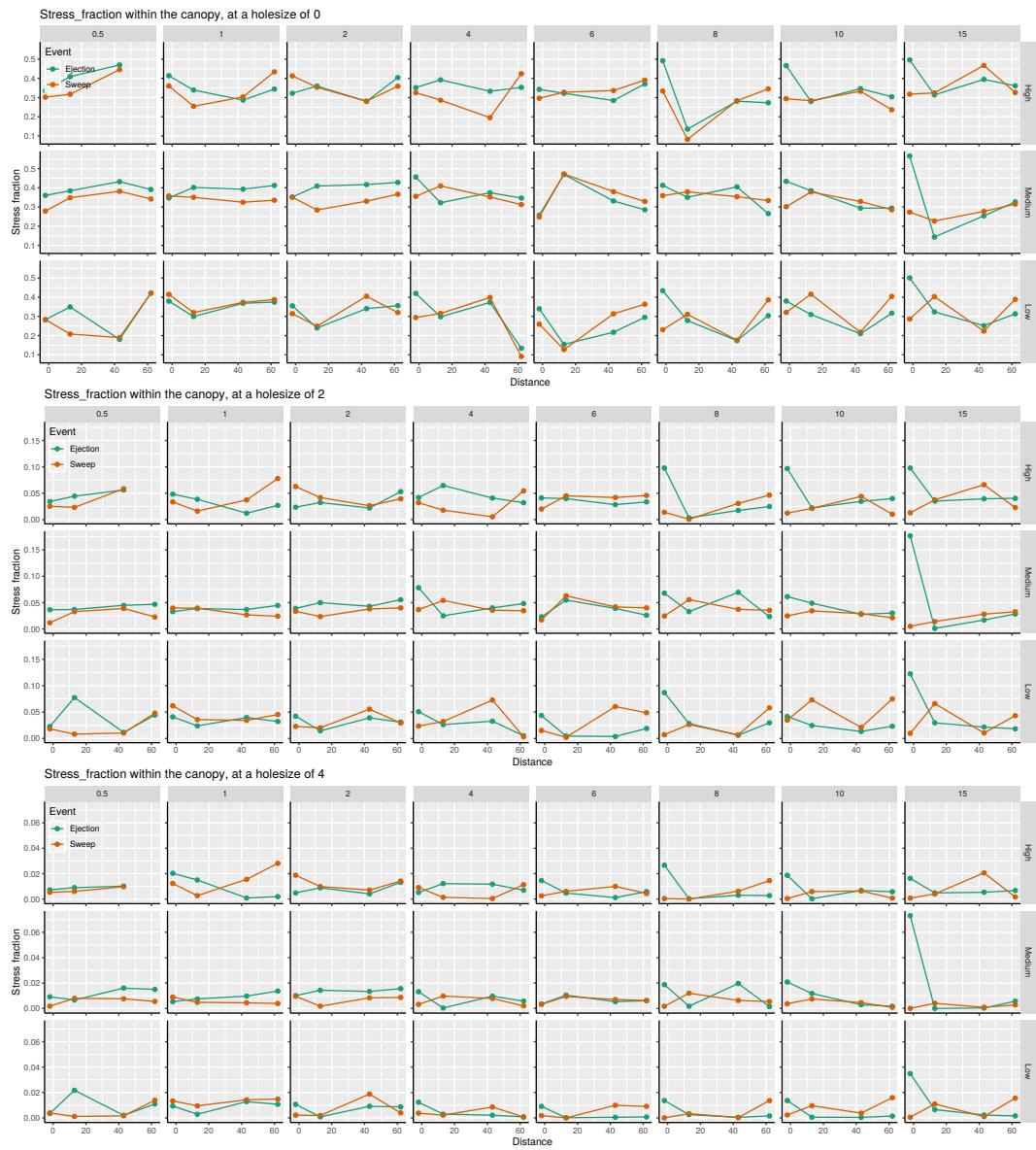


Figure 89: Variation in stress fraction along the length of the canopy at a hole size of 0, 2, and 4.