

1 *Supplement of*

2 **A Correction Algorithm for Propeller-Induced Airflow**
3 **and Flight Attitude Changes during Three-**
4 **Dimensional Wind Speed Measurements Made from A**
5 **Rotary Unmanned Aerial Vehicle**

6 Yanrong Yang¹⁺, Yuheng Zhang¹⁺, Tianran Han¹, Conghui Xie¹, Yayong Liu¹, Yufei
7 Huang¹, Jietao Zhou¹, Haijiong Sun¹, Delong Zhao², Kui Zhang³, Shao-Meng Li^{1*}

8 ¹College of Environmental Sciences and Engineering, Peking University, Beijing 100871, China

9 ²Beijing Weather Modification Center, Beijing 100089, China

10 ³Beijing Wisdominc Technology Co., Ltd, Beijing 100070, China

11 ⁺Contributed equally to the work

12 *Correspondence to:* Shao-Meng Li (shaomeng.li@pku.edu.cn)

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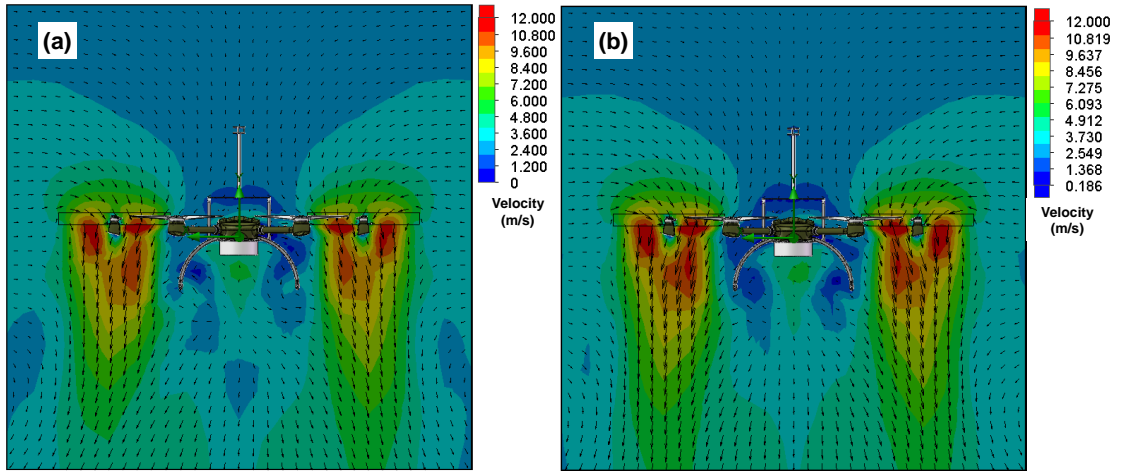
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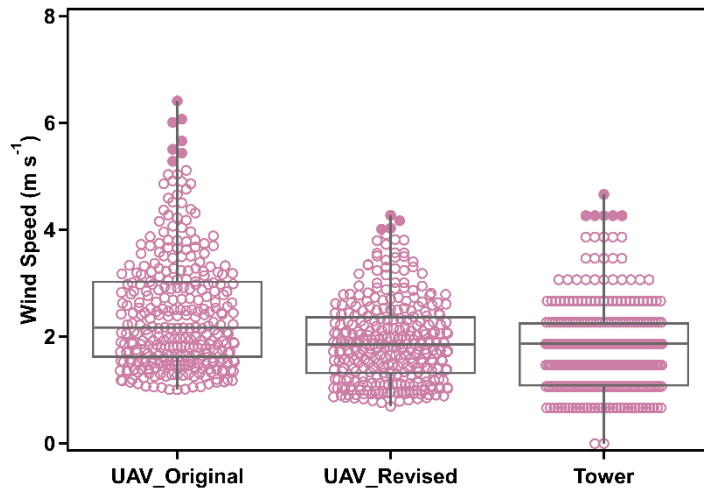
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25 **Figure S1: Example results of Computational Fluid Dynamics (CFD) simulation for the unmanned aerial**
 26 **vehicle. (a) and (b) show the flow field simulation for the UAV flying at ground speed of 8 m s^{-1} with a tailwind**
 27 **speed of 5.4 m s^{-1} at altitudes of 30 meters and 1000 meters, respectively.**



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29 **Figure S2: Comparison between UAV-based and Tower-based wind speed measurements.**



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31 **Figure S3: Boxplots of tower-based wind speed (Tower), UAV-based wind speed corrected for motion and**
 32 **attitude (UAV_Original), and UAV-based wind speed with comprehensive correction for rotor disturbance,**
 33 **motion, and attitude (UAV_Revised).**

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62 **Table S1: Parameters configuration for simulating UAV flight at 30 m altitude.**

Wind Type	Wind Level	Wind Speed (m s ⁻¹)	Air Speed (m s ⁻¹)	Ground Speed (m s ⁻¹)	Attack Angle (°)	Sideslip Angle (°)	Wind Resistance (N)	Pull Force (N)	Rotor Speed (rpm)
	1	1.5	19.5	18	11.77	-	58.96	288.99	2633.11
	2	3.3	21.3	18	14.51	-	73.23	292.24	2647.85
	1	1.5	15.5	14	6.92	-	34.35	284.99	2614.82
	2	3.3	17.3	14	8.90	-	44.30	286.36	2621.10
	3	5.4	19.4	14	11.63	-	58.23	288.85	2632.44
	4	7.9	21.9	14	15.50	-	78.47	293.60	2653.99
Headwind	1	1.5	11.5	10	3.59	-	17.73	283.47	2607.82
	2	3.3	13.3	10	4.92	-	24.35	283.96	2610.08
	3	5.4	15.4	10	6.82	-	33.84	284.93	2614.54
	4	7.9	17.9	10	9.63	-	48.01	286.96	2623.83
	5	10.7	20.7	10	13.56	-	68.23	291.03	2642.36
	1	1.5	9.5	8	2.39	-	11.80	283.16	2606.40
	2	3.3	11.3	8	3.45	-	17.07	283.43	2607.64

	3	5.4	13.4	8	5.00	-	24.76	284.00	2610.24
	4	7.9	15.9	8	7.33	-	36.41	285.25	2615.99
	5	10.7	18.7	8	10.67	-	53.29	287.89	2628.08
	1	1.5	16.5	18	7.98	-	39.67	285.68	2617.98
	2	3.3	14.7	18	6.14	-	30.45	284.55	2612.78
	3	5.4	12.6	18	4.37	-	21.62	283.74	2609.07
	4	7.9	10.1	18	2.72	-	13.43	283.23	2606.74
	5	10.7	7.3	18	1.38	-	6.82	283.00	2605.65
	6	14	4	18	0.41	-	2.00	282.92	2605.30
Tailwind	1	1.5	12.5	14	4.29	-	21.25	283.71	2608.94
	2	3.3	10.7	14	3.07	-	15.18	283.32	2607.15
	3	5.4	8.6	14	1.94	-	9.58	283.08	2606.02
	4	7.9	6.1	14	0.95	-	4.71	282.96	2605.45
	5	10.7	3.3	14	0.28	-	1.36	282.92	2605.29
	1	1.5	8.5	10	1.89	-	9.34	283.07	2605.98
	2	3.3	6.7	10	1.16	-	5.71	282.97	2605.54
	3	5.4	4.6	10	0.54	-	2.66	282.93	2605.33

	4	7.9	2.1	10	0.11	-	0.55	282.92	2605.27
	1	1.5	6.5	8	1.09	-	5.37	282.97	2605.51
	2	3.3	4.7	8	0.56	-	2.77	282.93	2605.33
	3	5.4	2.6	8	0.17	-	0.84	282.92	2605.28
	1	1.5	18.06	18	9.76	-0.06	49.05	287.12	2624.55
	2	3.3	18.30	18	9.76	0.28	50.61	287.31	2625.42
	3	5.4	18.79	18	9.76	0.74	53.93	287.74	2627.37
	4	7.9	19.66	18	9.76	1.62	60.12	288.59	2631.28
	5	10.7	20.94	18	9.76	3.07	70.20	290.16	2638.42
	6	14	22.80	18	9.76	5.51	86.83	293.27	2652.50
Crosswind	1	1.5	14.08	14	5.51	0.06	27.64	284.26	2611.44
	2	3.3	14.38	14	5.51	0.28	29.00	284.36	2611.93
	3	5.4	15.01	14	5.51	0.74	31.90	284.61	2613.06
	4	7.9	16.08	14	5.51	1.62	37.34	285.12	2615.42
	5	10.7	17.62	14	5.51	3.07	46.26	286.12	2619.98
	6	14	19.80	14	5.51	5.51	61.18	288.23	2629.63
	1	1.5	10.11	10	2.66	0.06	13.46	283.23	2606.74

2	3.3	10.53	10	2.66	0.28	14.68	283.29	2606.98
3	5.4	11.36	10	2.66	0.74	17.28	283.42	2607.57
4	7.9	12.74	10	2.66	1.62	22.17	283.71	2608.92
5	10.7	14.65	10	2.66	3.07	30.20	284.34	2611.81
6	14	17.20	10	2.66	5.51	43.73	285.82	2618.60
1	1.5	8.14	8	1.67	0.06	8.54	283.04	2605.86
2	3.3	8.65	8	1.67	0.28	9.70	283.08	2606.02
3	5.4	9.65	8	1.67	0.74	12.20	283.17	2606.43
4	7.9	11.24	8	1.67	1.62	16.89	283.38	2607.42
5	10.7	13.36	8	1.67	3.07	24.60	283.89	2609.74
6	14	16.12	8	1.67	5.51	37.61	285.15	2615.54

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64 **Table S2. Parameters configuration for simulating UAV flight at 1000 m altitude.**

Wind Type	Wind Level	Wind Speed (m s ⁻¹)	Air Speed (m s ⁻¹)	Ground Speed (m s ⁻¹)	Attack Angle (°)	Sideslip Angle (°)	Wind Resistance (N)	Pull Force (N)	Rotor Speed (rpm)
Headwind	1	1.5	19.5	18	10.53	-	52.61	287.77	2754.70

	2	3.3	21.3	18	12.97	-	65.17	290.32	2766.92
	1	1.5	15.5	14	6.22	-	30.85	284.59	2739.47
	2	3.3	17.3	14	7.98	-	39.67	285.68	2744.71
	3	5.4	19.4	14	10.41	-	51.97	287.65	2754.14
	4	7.9	21.9	14	13.85	-	69.78	291.39	2772.01
	1	1.5	11.5	10	3.24	-	16.01	283.37	2733.57
	2	3.3	13.3	10	4.44	-	21.94	283.77	2735.48
	3	5.4	15.4	10	6.13	-	30.40	284.54	2739.24
	4	7.9	17.9	10	8.63	-	42.95	286.16	2746.99
	5	10.7	20.7	10	12.12	-	60.77	289.37	2762.36
	1	1.5	9.5	8	2.16	-	10.68	283.12	2732.36
	2	3.3	11.3	8	3.12	-	15.42	283.34	2733.41
	3	5.4	13.4	8	4.51	-	22.31	283.79	2735.62
	4	7.9	15.9	8	6.59	-	32.68	284.80	2740.45
	5	10.7	18.7	8	9.55	-	47.61	286.89	2750.52
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Tailwind	1	1.5	16.5	18	7.17	-	35.57	285.14	2742.11
	2	3.3	14.7	18	5.53	-	27.38	284.24	2737.76

	3	5.4	12.6	18	3.94	-	19.50	283.59	2734.62
	4	7.9	10.1	18	2.46	-	12.15	283.18	2732.64
	5	10.7	7.3	18	1.25	-	6.18	282.98	2731.71
	6	14	4	18	0.37	-	1.82	282.92	2731.41
	1	1.5	12.5	14	3.88	-	19.17	283.56	2734.51
	2	3.3	10.7	14	2.78	-	13.73	283.25	2732.99
	3	5.4	8.6	14	1.76	-	8.68	283.05	2732.03
	4	7.9	6.1	14	0.87	-	4.28	282.95	2731.54
	5	10.7	3.3	14	0.25	-	1.24	282.92	2731.40
	1	1.5	8.5	10	1.71	-	8.47	283.04	2732.00
	2	3.3	6.7	10	1.05	-	5.18	282.96	2731.61
	3	5.4	4.6	10	0.49	-	2.41	282.93	2731.43
	4	7.9	2.1	10	0.10	-	0.50	282.92	2731.39
	1	1.5	6.5	8	0.99	-	4.87	282.96	2731.59
	2	3.3	4.7	8	0.51	-	2.52	282.93	2731.44
	3	5.4	2.6	8	0.15	-	0.77	282.92	2731.39
Crosswind	1	1.5	18.06	18	8.74	0.05	43.87	286.28	2747.59

2	3.3	18.30	18	8.74	0.25	45.24	286.44	2748.34
3	5.4	18.79	18	8.74	0.68	48.17	286.78	2749.99
4	7.9	19.66	18	8.74	1.47	53.63	287.48	2753.31
5	10.7	20.94	18	8.74	2.78	62.51	288.74	2759.33
6	14	22.80	18	8.74	4.96	77.14	291.21	2771.14
1	1.5	14.08	14	4.96	0.05	24.88	284.00	2736.63
2	3.3	14.38	14	4.96	0.25	26.09	284.09	2737.05
3	5.4	15.01	14	4.96	0.68	28.67	284.29	2738.02
4	7.9	16.08	14	4.96	1.47	33.51	284.71	2740.03
5	10.7	17.62	14	4.96	2.78	41.40	285.52	2743.92
6	14	19.80	14	4.96	4.96	54.57	287.22	2752.06
1	1.5	10.11	10	2.41	0.05	12.18	283.18	2732.64
2	3.3	10.53	10	2.41	0.25	13.27	283.22	2732.86
3	5.4	11.36	10	2.41	0.68	15.61	283.33	2733.37
4	7.9	12.74	10	2.41	1.47	19.99	283.57	2734.52
5	10.7	14.65	10	2.41	2.78	27.16	284.08	2736.99
6	14	17.20	10	2.41	4.96	39.17	285.27	2742.74

1	1.5	8.14	8	1.51	0.05	7.74	283.02	2731.89
2	3.3	8.65	8	1.51	0.25	8.79	283.05	2732.03
3	5.4	9.65	8	1.51	0.68	11.04	283.12	2732.38
4	7.9	11.24	8	1.51	1.47	15.26	283.30	2733.24
5	10.7	13.36	8	1.51	2.78	22.16	283.71	2735.22
6	14	16.12	8	1.51	4.96	33.74	284.73	2740.14

Table S3: Wind speed configuration and simulation results for UAV flight at 30 m altitude.

Wind Type	Wind Level	Wind Speed	Air Speed	Ground Speed	u_{x_air}	u_{y_air}	u_{z_air}	$u_{x_sensor_avg}$	$u_{y_sensor_avg}$	$u_{z_sensor_avg}$	Δu_{x_avg}	Δu_{x_std}	Δu_{y_avg}	Δu_{y_std}	Δu_{z_avg}	Δu_{z_std}
		(m s ⁻¹)	(m s ⁻¹)	(m s ⁻¹)	(m s ⁻¹)	(m s ⁻¹)	(m s ⁻¹)	(m s ⁻¹)	(m s ⁻¹)	(m s ⁻¹)	(m s ⁻¹)	(m s ⁻¹)	(m s ⁻¹)	(m s ⁻¹)	(m s ⁻¹)	(m s ⁻¹)
Headwind	1	1.5	19.5	18	-19.09	0	3.98	-19.74	0.025	-19.737	-0.65	0.0058	0.025	0.015	-2.18	0.024
	2	3.3	21.3	18	-20.62	0	5.34	-20.96	-0.10	-20.965	-0.34	0.26	-0.10	0.061	-2.83	0.16
	1	1.5	15.5	14	-15.39	0	1.87	-15.96	-0.074	-15.961	-0.57	0.13	-0.074	0.0050	-1.44	0.087
	2	3.3	17.3	14	-17.09	0	2.68	-17.76	0.003	-17.757	-0.67	0.042	0.003	0.087	-1.55	0.077
	3	5.4	19.4	14	-19.00	0	3.91	-19.52	0.050	-19.516	-0.51	0.014	0.050	0.0034	-2.13	0.015
	4	7.9	21.9	14	-21.10	0	5.85	-21.64	-0.091	-21.639	-0.54	0.071	-0.091	0.044	-3.18	0.19
	1	1.5	11.5	10	-11.48	0	0.72	-12.20	-0.085	-12.199	-0.72	0.016	-0.085	0.0083	-0.65	0.042
	2	3.3	13.3	10	-13.25	0	1.14	-13.75	-0.11	-13.752	-0.50	0.058	-0.11	0.0085	-1.07	0.078
	3	5.4	15.4	10	-15.29	0	1.83	-15.90	-0.063	-15.903	-0.61	0.15	-0.063	0.0055	-1.46	0.092
	4	7.9	17.9	10	-17.65	0	3.00	-18.24	0.072	-18.242	-0.59	0.067	0.072	0.073	-1.40	0.033
	5	10.7	20.7	10	-20.12	0	4.85	-21.20	-0.029	-21.203	-1.08	0.012	-0.029	0.018	-2.61	0.31
	1	1.5	9.5	8	-9.49	0	0.40	-9.33	-0.0094	-9.328	0.16	0.24	-0.0094	0.026	-0.45	0.069
	2	3.3	11.3	8	-11.28	0	0.68	-11.95	-0.040	-11.950	-0.67	0.0058	-0.040	0.034	-0.60	0.035

	3	5.4	13.4	8	-13.35	0	1.17	-13.86	-0.099	-13.859	-0.51	0.035	-0.099	0.011	-1.09	0.093
	4	7.9	15.9	8	-15.77	0	2.03	-16.48	-0.067	-16.481	-0.71	0.012	-0.067	0.044	-1.47	0.062
	5	10.7	18.7	8	-18.38	0	3.46	-18.71	-0.027	-18.713	-0.34	0.015	-0.027	0.019	-1.82	0.057
	1	1.5	16.5	18	-16.34	0.00	2.29	-16.90	0.021	0.81	-0.56	0.015	0.021	0.044	-1.48	0.025
	2	3.3	14.7	18	-14.62	0.00	1.57	-14.92	-0.038	0.24	-0.30	0.018	-0.038	0.017	-1.33	0.030
	3	5.4	12.6	18	-12.56	0.00	0.96	-13.08	-0.042	0.06	-0.52	0.028	-0.042	0.077	-0.90	0.057
	4	7.9	10.1	18	-10.09	0.00	0.48	-10.24	-0.039	-0.10	-0.15	0.021	-0.039	0.045	-0.58	0.066
	5	10.7	7.3	18	-7.30	0.00	0.18	-7.10	-0.070	-0.034	0.19	0.14	-0.070	0.003	-0.21	0.013
	6	14	4	18	-4.00	0.00	0.03	-3.75	-0.055	0.70	0.25	0.047	-0.055	0.010	0.67	0.021
Tailwind	1	1.5	12.5	14	-12.46	0.00	0.94	-12.94	-0.049	0.015	-0.48	0.065	-0.049	0.028	-0.92	0.065
	2	3.3	10.7	14	-10.68	0.00	0.57	-11.08	0.043	0.12	-0.39	0.028	0.043	0.053	-0.45	0.113
	3	5.4	8.6	14	-8.60	0.00	0.29	-8.26	-0.001	-0.12	0.34	0.027	-0.001	0.045	-0.41	0.063
	4	7.9	6.1	14	-6.10	0.00	0.10	-6.00	-0.067	0.10	0.10	0.013	-0.067	0.013	-0.01	0.065
	5	10.7	3.3	14	-3.30	0.00	0.016	-2.92	-0.041	0.71	0.38	0.054	-0.041	0.003	0.69	0.028
	1	1.5	8.5	10	-8.50	0.00	0.28	-8.20	-0.024	-0.14	0.30	0.063	-0.024	0.047	-0.42	0.054
	2	3.3	6.7	10	-6.70	0.00	0.14	-6.48	-0.058	0.05	0.22	0.066	-0.058	0.011	-0.087	0.027
	3	5.4	4.6	10	-4.60	0.00	0.043	-4.58	0.028	0.68	0.02	0.11	0.028	0.018	0.64	0.135

	4	7.9	2.1	10	-2.10	0.00	0.0041	-1.12	-0.002	0.69	0.98	0.065	-0.002	0.017	0.68	0.015
	1	1.5	6.5	8	-6.50	0.00	0.12	-6.22	-0.063	0.03	0.28	0.057	-0.063	0.014	-0.10	0.028
	2	3.3	4.7	8	-4.70	0.00	0.046	-4.70	-0.025	0.57	0.00	0.030	-0.025	0.029	0.52	0.047
	3	5.4	2.6	8	-2.60	0.00	0.0077	-2.04	0.010	0.70	0.56	0.025	0.010	0.016	0.69	0.018
	1	1.5	18.06	18	-17.80	0.018	3.06	-18.38	-0.04	1.57	-0.58	0.021	-0.062	0.103	-1.49	0.058
	2	3.3	18.30	18	-18.04	0.088	3.10	-18.65	0.18	1.51	-0.62	0.11	0.089	0.016	-1.59	0.043
	3	5.4	18.79	18	-18.52	0.24	3.19	-19.21	0.50	1.65	-0.69	0.075	0.25	0.018	-1.53	0.023
	4	7.9	19.66	18	-19.37	0.56	3.33	-20.21	1.09	1.61	-0.85	0.066	0.53	0.009	-1.72	0.029
	5	10.7	20.94	18	-20.61	1.12	3.55	-21.44	1.76	1.77	-0.83	0.078	0.64	0.024	-1.78	0.041
	6	14	22.80	18	-22.37	2.19	3.86	-23.27	2.60	1.79	-0.90	0.056	0.41	0.046	-2.08	0.038
Crosswind	1	1.5	14.08	14	-14.02	0.014	1.35	-14.35	-0.06	0.17	-0.33	0.12	-0.078	0.012	-1.18	0.063
	2	3.3	14.38	14	-14.32	0.069	1.38	-14.69	-0.01	0.20	-0.38	0.10	-0.084	0.003	-1.18	0.056
	3	5.4	15.01	14	-14.93	0.19	1.44	-15.38	0.31	0.10	-0.44	0.11	0.11	0.025	-1.34	0.080
	4	7.9	16.08	14	-15.99	0.46	1.54	-16.49	0.79	0.16	-0.49	0.14	0.34	0.009	-1.39	0.10
	5	10.7	17.62	14	-17.51	0.94	1.69	-17.78	1.07	0.15	-0.27	0.20	0.13	0.073	-1.54	0.16
	6	14	19.80	14	-19.62	1.90	1.90	-20.04	1.98	0.21	-0.42	0.18	0.082	0.095	-1.69	0.11
	1	1.5	10.11	10	-10.10	0.010	0.47	-10.39	-0.05	-0.065	-0.29	0.11	-0.064	0.021	-0.53	0.042

2	3.3	10.53	10	-10.52	0.051	0.49	-10.84	0.05	-0.16	-0.32	0.13	0.00	0.075	-0.65	0.094
3	5.4	11.36	10	-11.35	0.15	0.53	-11.84	0.19	-0.22	-0.49	0.11	0.037	0.017	-0.75	0.16
4	7.9	12.74	10	-12.73	0.36	0.59	-13.30	0.59	-0.32	-0.57	0.09	0.23	0.023	-0.91	0.15
5	10.7	14.65	10	-14.61	0.78	0.68	-15.24	0.99	-0.40	-0.63	0.11	0.21	0.011	-1.08	0.15
6	14	17.20	10	-17.11	1.65	0.80	-17.93	1.71	-0.48	-0.82	0.14	0.056	0.086	-1.28	0.15
1	1.5	8.14	8	-8.14	0.0080	0.24	-7.83	-0.06	-0.19	0.31	0.15	-0.065	0.047	-0.43	0.015
2	3.3	8.65	8	-8.65	0.042	0.25	-8.44	-0.05	-0.18	0.21	0.22	-0.094	0.085	-0.43	0.053
3	5.4	9.65	8	-9.65	0.13	0.28	-9.58	0.11	-0.25	0.07	0.15	-0.011	0.025	-0.53	0.033
4	7.9	11.24	8	-11.23	0.32	0.33	-11.32	0.35	-0.38	-0.09	0.17	0.030	0.0081	-0.71	0.035
5	10.7	13.36	8	-13.34	0.72	0.39	-13.52	0.44	-0.32	-0.19	0.20	-0.28	0.066	-0.71	0.088
6	14	16.12	8	-16.04	1.55	0.47	-16.33	1.94	-0.45	-0.29	0.29	0.40	0.050	-0.92	0.047

Table S4: Wind speed configuration and simulation results for UAV flight at 1000 m altitude.

Wind Type	Wind Level	Wind Speed (m s ⁻¹)	Air Speed (m s ⁻¹)	Ground Speed (m s ⁻¹)	u_{x_air} (m s ⁻¹)	u_{y_air} (m s ⁻¹)	u_{z_air} (m s ⁻¹)	$u_{x_sensor_avg}$ (m s ⁻¹)	$u_{y_sensor_avg}$ (m s ⁻¹)	$u_{z_sensor_avg}$ (m s ⁻¹)	Δu_{x_avg} (m s ⁻¹)	Δu_{x_std} (m s ⁻¹)	Δu_{y_avg} (m s ⁻¹)	Δu_{y_std} (m s ⁻¹)	Δu_{z_avg} (m s ⁻¹)	Δu_{z_std} (m s ⁻¹)
Headwind	1	1.5	19.5	18	-19.17	0.00	3.98	-19.61	-0.064	1.71	-0.52	0.037	-0.064	0.046	-2.27	0.062

2	3.3	21.3	18	-20.76	0.00	5.34	-21.73	-0.069	2.07	-1.11	0.17	-0.069	0.023	-3.27	0.28	
1	1.5	15.5	14	-15.41	0.00	1.87	-15.77	-0.045	0.29	-0.38	0.13	-0.045	0.017	-1.58	0.027	
2	3.3	17.3	14	-17.13	0.00	2.68	-17.68	-0.016	0.86	-0.59	0.13	-0.016	0.019	-1.82	0.025	
3	5.4	19.4	14	-19.08	0.00	3.91	-19.63	0.018	1.74	-0.63	0.017	0.018	0.013	-2.17	0.072	
4	7.9	21.9	14	-21.26	0.00	5.85	-22.38	-0.049	2.54	-1.28	0.043	-0.049	0.012	-3.31	0.33	
1	1.5	11.5	10	-11.48	0.00	0.72	-11.97	-0.049	-0.15	-0.49	0.12	-0.049	0.088	-0.87	0.14	
2	3.3	13.3	10	-13.26	0.00	1.14	-13.71	-0.033	0.10	-0.46	0.041	-0.033	0.0093	-1.04	0.039	
3	5.4	15.4	10	-15.31	0.00	1.83	-15.64	-0.046	0.25	-0.35	0.11	-0.046	0.026	-1.58	0.049	
4	7.9	17.9	10	-17.70	0.00	3.00	-18.44	-0.060	0.93	-0.79	0.048	-0.060	0.059	-2.06	0.054	
5	10.7	20.7	10	-20.24	0.00	4.85	-21.07	0.024	2.05	-0.94	0.0094	0.024	0.0089	-2.81	0.029	
1	1.5	9.5	8	-9.49	0.00	0.40	-9.26	-0.034	-0.12	0.23	0.21	-0.034	0.058	-0.52	0.036	
2	3.3	11.3	8	-11.28	0.00	0.68	-11.88	0.000	-0.092	-0.60	0.14	0.000	0.055	-0.77	0.069	
3	5.4	13.4	8	-13.36	0.00	1.17	-13.71	-0.094	0.12	-0.36	0.017	-0.094	0.012	-1.05	0.020	
4	7.9	15.9	8	-15.79	0.00	2.03	-16.28	-0.074	0.39	-0.51	0.025	-0.074	0.016	-1.64	0.018	
5	10.7	18.7	8	-18.44	0.00	3.46	-19.05	0.045	1.60	-0.67	0.039	0.045	0.048	-1.86	0.0092	
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Tailwind	1	1.5	16.5	18	-16.37	0.00	2.06	-16.90	-0.028	0.60	-0.56	0.0016	-0.028	0.031	-1.46	0.051
	2	3.3	14.7	18	-14.63	0.00	1.42	-15.10	-0.12	0.23	-0.49	0.010	-0.12	0.019	-1.18	0.0088

3	5.4	12.6	18	-12.57	0.00	0.87	-13.39	-0.083	0.09	-0.83	0.0037	-0.083	0.011	-0.77	0.0050
4	7.9	10.1	18	-10.09	0.00	0.43	-9.85	0.014	0.02	0.24	0.0057	0.014	0.013	-0.41	0.017
5	10.7	7.3	18	-7.30	0.00	0.16	-6.95	-0.047	0.00	0.35	0.0004	-0.047	0.021	-0.16	0.0035
6	14	4	18	-4.00	0.00	0.026	-3.72	-0.024	0.78	0.28	0.028	-0.024	0.002	0.75	0.0057
1	1.5	12.5	14	-12.47	0.00	0.84	-13.25	-0.072	0.07	-0.79	0.025	-0.072	0.027	-0.78	0.049
2	3.3	10.7	14	-10.69	0.00	0.52	-10.98	-0.079	-0.19	-0.29	0.0028	-0.079	0.031	-0.71	0.071
3	5.4	8.6	14	-8.60	0.00	0.26	-8.24	-0.058	-0.16	0.35	0.0091	-0.058	0.007	-0.42	0.013
4	7.9	6.1	14	-6.10	0.00	0.092	-6.07	-0.021	0.27	0.03	0.0035	-0.021	0.018	0.18	0.025
5	10.7	3.3	14	-3.30	0.00	0.014	-2.83	-0.034	0.73	0.47	0.030	-0.034	0.003	0.72	0.0037
1	1.5	8.5	10	-8.50	0.00	0.25	-8.12	-0.056	-0.20	0.38	0.013	-0.056	0.005	-0.45	0.030
2	3.3	6.7	10	-6.70	0.00	0.12	-6.54	-0.052	0.10	0.16	0.017	-0.052	0.011	-0.019	0.0091
3	5.4	4.6	10	-4.60	0.00	0.04	-4.50	-0.017	0.69	0.10	0.071	-0.017	0.042	0.65	0.000
4	7.9	2.1	10	-2.10	0.00	0.0037	-1.24	-0.0082	0.75	0.86	0.049	-0.0082	0.0019	0.75	0.0016
1	1.5	6.5	8	-6.50	0.00	0.11	-6.38	0.0086	0.13	0.12	0.0050	0.0086	0.0068	0.02	0.0028
2	3.3	4.7	8	-4.70	0.00	0.042	-4.60	0.0092	0.68	0.10	0.0088	0.0092	0.039	0.63	0.028
3	5.4	2.6	8	-2.60	0.00	0.0070	-2.00	0.0013	0.77	0.60	0.051	0.0013	0.0055	0.76	0.010

Crosswind	1	1.5	18.06	18	-17.85	0.02	2.75	-18.50	-0.088	0.66	-0.65	0.033	-0.10	0.031	-2.09	0.021
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2	3.3	18.30	18	-18.09	0.08	2.78	-18.87	0.11	0.64	-0.78	0.008	0.027	0.0057	-2.14	0.030
3	5.4	18.79	18	-18.57	0.22	2.86	-19.49	0.44	0.59	-0.91	0.027	0.21	0.069	-2.27	0.021
4	7.9	19.66	18	-19.42	0.51	2.99	-20.34	0.76	0.67	-0.91	0.048	0.25	0.041	-2.32	0.027
5	10.7	20.94	18	-20.67	1.02	3.18	-21.64	1.13	0.66	-0.97	0.018	0.12	0.025	-2.52	0.0079
6	14	22.80	18	-22.45	1.97	3.47	-23.56	2.09	0.76	-1.10	0.019	0.12	0.026	-2.70	0.037
1	1.5	14.08	14	-14.03	0.01	1.22	-14.27	-0.089	0.18	-0.25	0.016	-0.10	0.037	-1.04	0.013
2	3.3	14.38	14	-14.33	0.06	1.24	-14.63	-0.037	0.062	-0.30	0.014	-0.10	0.0029	-1.18	0.0080
3	5.4	15.01	14	-14.95	0.18	1.30	-15.22	0.16	0.37	-0.27	0.14	-0.01	0.12	-0.93	0.42
4	7.9	16.08	14	-16.01	0.41	1.39	-16.61	0.48	0.42	-0.60	0.28	0.068	0.064	-0.97	0.78
5	10.7	17.62	14	-17.53	0.85	1.52	-18.02	1.28	0.078	-0.49	0.030	0.42	0.12	-1.45	0.031
6	14	19.80	14	-19.65	1.71	1.71	-20.00	1.68	0.084	-0.35	0.10	-0.036	0.23	-1.63	0.070
1	1.5	10.11	10	-10.10	0.01	0.42	-9.84	-0.026	-0.09	0.26	0.094	-0.035	0.078	-0.51	0.067
2	3.3	10.53	10	-10.52	0.05	0.44	-10.35	-0.049	-0.17	0.17	0.036	-0.10	0.047	-0.61	0.088
3	5.4	11.36	10	-11.35	0.13	0.48	-11.23	0.16	-0.25	0.12	0.047	0.028	0.028	-0.73	0.018
4	7.9	12.74	10	-12.73	0.33	0.54	-12.52	0.24	-0.27	0.21	0.081	-0.093	0.086	-0.81	0.022
5	10.7	14.65	10	-14.62	0.71	0.62	-14.34	0.83	-0.38	0.27	0.15	0.12	0.11	-1.00	0.044
6	14	17.20	10	-17.13	1.49	0.72	-17.18	1.45	-0.60	-0.05	0.10	-0.037	0.25	-1.32	0.14

1	1.5	8.14	8	-8.14	0.01	0.21	-7.96	-0.073	-0.071	0.17	0.003	-0.080	0.0092	-0.29	0.014
2	3.3	8.65	8	-8.65	0.04	0.23	-8.53	-0.14	-0.12	0.12	0.070	-0.17	0.073	-0.35	0.075
3	5.4	9.65	8	-9.65	0.11	0.25	-9.69	0.019	-0.17	-0.044	0.018	-0.10	0.044	-0.42	0.059
4	7.9	11.24	8	-11.24	0.29	0.30	-11.46	0.19	-0.27	-0.22	0.0078	-0.10	0.014	-0.57	0.010
5	10.7	13.36	8	-13.34	0.65	0.35	-13.68	0.58	-0.29	-0.34	0.044	-0.063	0.21	-0.64	0.051
6	14	16.12	8	-16.06	1.40	0.43	-16.69	1.30	-0.22	-0.64	0.0080	-0.094	0.023	-0.65	0.021
