

Table S2. Results summary.

Date	Time	Flight hight (m)	Tka (°C)	Tkw (°C)	ΔTk a/w (°C)	Rs (W m ⁻²)	ETacc (mm)	Humidity (%)	Wind (m/s)	Image sets	NO	NO ^{TD}	NO ^{TD-FD}	O ^{TD-FD}
22/10/2019	09:15	22	15.8	14.1	1.7	417	0.6	90	1	6				•
		56												•
	12:45	22	24.8	15.9	8.9	635	2.4	48	3.1			•		
		56										•		
	16:00	22	25.8	16.5	9.3	198	3.38	38	3.6		•			
		56									•			
15/02/2020	07:30	22	8.1	7.6	0.5	113	0.25	69	2.4	4				•
		56												•
	15:30	22	16	10.8	5.2	295	2.66	41	4.4					•
		56											•	
16/07/2020	06:00	22	18.3	18.9	-0.6	135	0.34	86	1.8	9				•
		56												•
	07:00	22	20.5	18.8	1.7	325	0.55	78	2.1					•
		56												•
	08:00	22	25	19.2	5.8	527	0.93	64	1.3				•	
		56											•	
	09:00	22	27	19.6	7.4	700	1.47	46	2				•	
		56											•	
	10:00	22	27.6	20.4	7.2	842	2.09	45	4.3		•			•
		56											•	
	11:00	22	28	21.1	6.9	939	2.79	47	4.6		•			
		56									•			
	12:00	22	28.2	21.7	6.5	1001	3.53	44	7.5		•			
		56									•			
	13:00	22	28.5	22.4	6.1	987	4.27	44	8.5		•			
		56									•			
	14:00	22	28.2	22.7	5.5	915	4.97	42	9.1		•			
		56									•			

									Total	28	11	2	6	9
										100%	39.29%	7.14%	21.43%	32.14%

- NO
- W_{DN} not overlapped with other DN ranges
- NO^{TD}
- W_{DN} not overlapped with other DN ranges, with true detection outside the channel
- NO^{TD-FD}
- W_{DN} not overlapped with other DN ranges, with true and false detections outside the channel
- O^{TD-FD}
- W_{DN} overlapped with other DN ranges, with true and false detections outside the channel