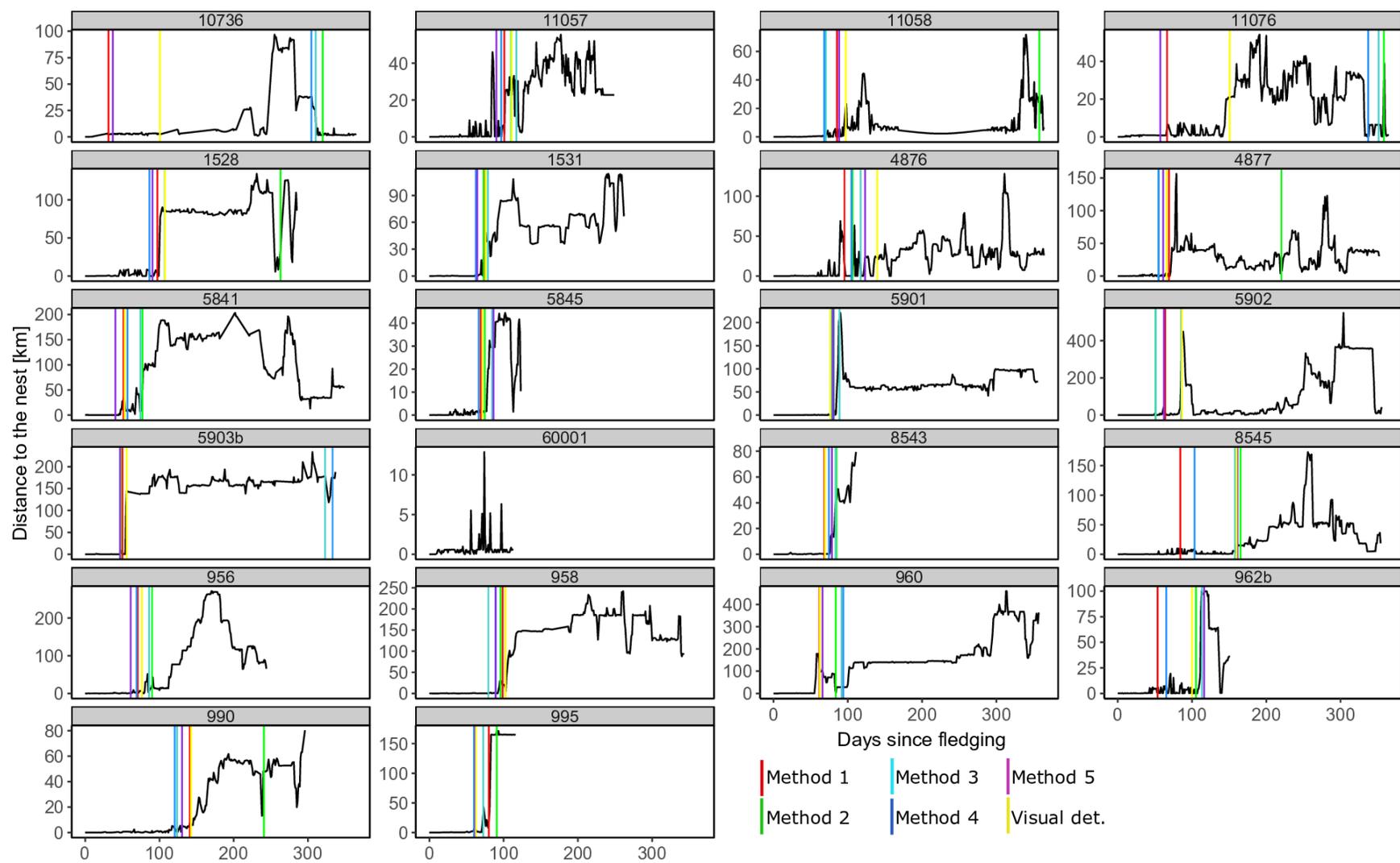


## **Supplementary information**

Marc Engler & Oliver Krone 2023: Estimating the onset of natal dispersal for a large diurnal raptor: A methodological comparison. — *Ornis Fennica* 100: 00–00.

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**Fig. S1.** First-year movements of all individuals shown as distance to the nest (km). Colored vertical lines represent the dispersal onset estimates according to the six respective methods. For individuals with no estimates displayed (e.g. 60001), the dispersal has not happened within the time period in which data was available. Stopping GPS data was the result of early technical failure of the transmitter.



**Table S1.** Individual-wise (n=21) estimates of dispersal onset as days since fledging for all methods.

	<b>Distance threshold</b>	<b>Coefficient of variance</b>				
<b>Animal ID</b>	<b>Method 1</b>	<b>Method 2</b>	<b>Method 3</b>	<b>Method 4</b>	<b>Method 5</b>	<b>Visual determination</b>
10736	23	311	312	314	29	101
11057	102	101	121	89	98	102
11058	95	352	73	75	95	95
11076	66	360	361	334	66	144
1528	100	255	98	77	100	100
1531	73	70	70	71	73	73
4876	89	108	109	98	122	135
4877	71	219	46	48	71	71
5841	48	67	67	64	48	48
5845	78	77	76	74	77	78
5901	85	85	86	88	84	84
5902	57	49	50	81	57	81
5903b	55	56	330	325	55	55
8543	77	77	78	80	76	77
8545	94	159	158	105	155	160
956	80	85	86	76	70	80
958	93	103	83	91	93	93
960	56	83	84	85	56	56
962b	47	111	110	73	108	108
990	131	239	122	124	126	137
995	71	81	80	68	71	71

**Table S2.** Estimates of dispersal onset for two exemplary individuals for low (one relocation per day) and high (one relocation every 30min) temporal resolution. Values are given as days since fledging for all methods.

		<b>Distance threshold</b>	<b>Coefficient of variance</b>				<b>Visual determination</b>
<b>Animal ID</b>	<b>Temporal resolution</b>	<b>Method 1</b>	<b>Method 2</b>	<b>Method 3</b>	<b>Method 4</b>	<b>Method 5</b>	<b>Method 6</b>
4876	low	89	108	109	98	122	135
	high	60	98	99	101	88	135
4877	low	71	219	46	48	71	71
	high	34	72	70	72	71	71