**Data are shown in five tabs. These tabs comprise the full dataset needed to replicate the study, including data for descriptive statistics. How data are arranged follows the level structure of the statistical analyses in the published manuscript.**

**Level 1.** Hourly level analyses and single events: nest attentiveness (1a), off-bout duration (1b) and on-bout duration (1c).

**Level 2.** Daily level analyses: Daily nest attentiveness, daily number of off-bout and daily active day duration.

**Level 3.** Full incubation level analyses: Full period nest attentiveness and duration of the incubation period.

**Tab ‘Level 1a’: hourly nest attentiveness.**

**Year:** year when data from a certain nestbox was collected. Either 2015, 2016 or 2017.

**Site:** breeding population where a nestbox belongs: P = Pina, Quintos = Q and S = Sagunto.

**Nest:** Nestbox alphanumeric code. Codes are unique.

**CS:** Clutch size, number of total eggs laid by a female in a nest.

**Nest\_volume:** Nest volume measured as the area of the nestbox bottom multiplied by the height of the nest.

**Date:** Calendar day. 1 = 1st April.

**Inc\_day:** Day 1 equals to the first day the female reaches 50% of nest attentiveness for the first time.

**Hour:** Hour of the day. It comprises 60 minutes from e.g., 6:00 to 6:59.

**Off-duration:** Summed minutes of off-bout within a certain hour.

**On-duration:** Summed minutes of on-bouts within a certain hour.

**Tmean:** Mean ambient temperature (ºC) during a certain hour.

**Tab ‘Level 1b’: off-bout duration.**

**Year:** year when data from a certain nestbox was collected. Either 2015, 2016 or 2017.

**Site:** breeding population where a nestbox belongs: P = Pina, Quintos = Q and S = Sagunto.

**Nest:** Nestbox lphanumeric code. Codes are unique.

**CS:** Clutch size, number of total eggs laid by a female in a nest.

**Nest\_volume:** Nest volume measured as the area of the nestbox bottom multiplied by the height of the nest.

**Date:** Calendar day. 1 = 1st April.

**Inc\_day:** Day 1 equals to the first day the female reaches 50% of nest attentiveness for the first time.

**Off\_hour:** Time of the day when the focal off-bout occurred.

**Off\_duration:** Individual off-bout duration in minutes.

**Temperature:** Ambient temperature (ºC) when an off-bout occurred.

**Tab ‘Level 1c’: on-bout duration.**

**Year:** year when data from a certain nestbox was collected. Either 2015, 2016 or 2017.

**Site:** breeding population where a nestbox belongs: P = Pina, Quintos = Q and S = Sagunto.

**Nest:** Nestbox alphanumeric code. Codes are unique.

**CS:** Clutch size, number of total eggs laid by a female in a nest.

**Nest\_volume:** Nest volume measured as the area of the nestbox bottom multiplied by the height of the nest.

**Date:** Calendar day. 1 = 1st April.

**Inc\_day:** Day 1 equals to the first day the female reaches 50% of nest attentiveness for the first time.

**On\_hour:** Time of the day when the focal off-bout occurred.

**On\_duration:** Individual off-bout duration in minutes.

**Temperature:** Ambient temperature (ºC) when the previous off-bout to the focal on-bout occurred.

**Tab ‘Level 2’: Daily nest attentiveness, daily active day duration and off-bout number.**

**Year:** year when data from a certain nestbox was collected. Either 2015, 2016 or 2017.

**Site:** breeding population where a nestbox belongs: P = Pina, Quintos = Q and S = Sagunto.

**Nest:** Nestbox alphanumeric code. Codes are unique.

**CS:** Clutch size, number of total eggs laid by a female in a nest.

**Nest\_volume:** Nest volume measured as the area of the nestbox bottom multiplied by the height of the nest.

**Date:** Calendar day. 1 = 1st April.

**Inc\_day:** Day 1 equals to the first day the female reaches 50% of nest attentiveness for the first time.

**Sunrise:** Hour of the day for the sunrise.

**Sunset**: Hour of the day for the sunset.

**Daylight:** Daylight duration in minutes. Time between the sunrise and the sunset.

**Start:** Hour of the day that the active day starts (i.e., time of the first off-bout of the day).

**After\_sr:** Minutes after sunrise when the first off-bout of the day happens. Negative values denote first off-bouts happened before the sunrise.

**End:** Hour of the day that the active day ends (i.e., time of the last on-bout of the day).

**Before\_ss:** Minutes before the sunset when the last on-bout happened. Negative values denote last on-bout occurred after the sunset.

**Active\_day:** Daily duration in minutes of the time between the first off-bout in the morning and the last on-bout in the evening.

**Off-bouts:** Daily off-bout number.

**On-bouts:** Daily on-bout number.

**On\_duration:** Sum of daily on-bout duration measured in minutes.

**Off\_duration:** Sum of daily off-bout duration measured in minutes.

**TMean:** Daily mean temperature (ºC) for the daylight period.

**Tab ‘Level 3’: Full incubation nest attentiveness and duration of the incubation period.**

**Year:** year when data from a certain nestbox was collected. Either 2015, 2016 or 2017.

**Site:** breeding population where a nestbox belongs: P = Pina, Quintos = Q and S = Sagunto.

**Nest:** Nestbox alphanumeric code. Codes are unique.

**CS:** Clutch size, number of total eggs laid by a female in a nest.

**Nest\_volume:** Nest volume measured as the area of the nestbox bottom multiplied by the height of the nest.

**Inc\_onset:** Diurnal full incubation onset, date when a female started incubation, i.e., daily nest attentiveness reached 50% of the active day for the first time. 1 = 1st April.

**Inc\_duration:** the elapsed days from onset of full incubation to the day preceding hatching date.

**Attentiveness:** Nest attentiveness rate for the full incubation period. The total on-bout duration compared to the total active time (total on-bout + total off-bout duration).

**On\_duration:** Summed on-bout duration in minutes for the incubation period.

**Off\_duration:** Summed off-bout duration in minutes for the incubation period.

**PI:** Sum of minutes of partial incubation

**Early\_full:** Number of days that the incubation onset happened before the clutch completion.

**Temperature:** Mean temperature (ºC) measured since the sunset previous to the onset of full incubation to the sunset before the hatching date.