

**Figure S1.** Activating visual circuits has no effect on sleep in NO-ATR controls (related to Figure 3). A) Diagram of set up (as in Figure 3A). B-F) Quantification of total sleep duration across the day and the night in UAS-Chrimson/+ (genetic control), GMR-gal4/+>UAS-Chrimson/+ (flies expressing Chrimson in photoreceptors), 3A-gal4 > UAS-GFP (HS and VS neurons), R27B03-gal4>UAS-GFP (HS cells), and R79D04/+>UAS-GFP (T5 neurons). No significant differences were observed in day time sleep, when sleep was compared between activation (day 2) to either baseline or recovery days (day 1 and day 3). Furthermore, no differences in sleep were observed following activation (night 2) in comparison to baseline or recovery nights (night 1 and night 2). N = 33 flies in (B,D,E), 26 flies in (C), and 23 flies in (F). Error bars indicate the s.e.m. Comparisons between groups was performed using one-way ANOVA with Tukey's multiple comparisons.