

Package	Role	Main functions
behavr	utilities	<code>behavr()</code> , <code>meta()</code> , <code>setbehavr()</code> , <code>setmeta()</code>
	metadata operations see S1 Fig.	<code>xmd()</code> , <code>rejoin()</code>
	merge and check several tables	<code>bind.behavr_list()</code> , <code>stitch_on()</code>
ggetho	interface to ggplot (see main text)	<code>ggetho()</code>
	tile and “bar tile” plots (<i>e.g.</i> Fig. 3 and 4A)	<code>stat_tile_etho</code> , <code>stat_bar_tile_etho()</code>
	population trends as lines and error bars	<code>stat_pop_etho()</code>
	circadian biology utilities (<i>e.g.</i> Fig. 4 and 5A)	<code>stat_ld_annotations()</code> , <code>geom_peak()</code>
	visualise spectrograms (<i>e.g.</i> CWT, Fig. 6)	<code>ggspectro()</code>
	smart time scales (auto-adjust labels and ticks)	<code>scale_x_days()</code> , <code>scale_x_hours()</code> , ...
damr	“link” metadata to DAM files (see main text)	<code>link_dam_metadata()</code>
	“load” relevant DAM (2 or 5) data as behavr. Detects daylight-saving bugs and such	<code>load_dam()</code>
scopr	“link” metadata to ethoscope files	<code>link_ethoscope_metadata()</code>
	“load” relevant ethoscope data as behavr	<code>load_ethoscope()</code>
	utilities (list files, fetch remote data,)	<code>experiment_info()</code> , <code>list_result_files()</code> , ...
zeitgebr	compute periodograms (CWT, AC, χ^2 , LS, Fourier)	<code>*_periodogram()</code> ($*$ \in { <code>cwt</code> , <code>ac</code> , <code>chi_sqr</code> , <code>ls</code> , <code>fourrier</code> })
	preprocess and standardise methods	<code>periodogram()</code>
	find peak periods in periodograms (<i>e.g.</i> Fig. 4 and 5A)	<code>find_peaks()</code>
	compute CWT spectrograms	<code>spectrogram()</code>
sleepr	motion thresholding/velocity detection	<code>motion_detectors()</code>
	sleep definition using N-minute rule	<code>sleep_annotation()</code>
	data curation: dead animals scored as asleep	<code>curate_dead_animals()</code>
	discrete behavioural state architecture	<code>bout.analysis()</code>