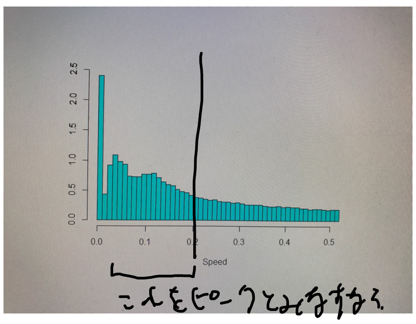
Bazazi et al. 2012 PLOS Comp 読んで勉強

The ob- served motion of individual locusts was made up of moves and pausing bouts of variable length (see Figure 1). Thus the motion of individuals can be discretized into a series of moves and pauses with "moving" defined as displacement greater than 0.3 cm between successive frames (0.2 s) and a pause as displacement less than or equal to 0.3 cm (during which a locust can show resting or fidgeting behaviour [43]). The threshold for moving was calculated by plotting histograms of locusts' speeds between successive frames and selecting the speed just below the second peak in the distribution (the first peak was at speed = 0). This threshold is similar to that used in Bazazi et al. [40,41] and Buhl et al. [42]. Using these criteria we determined whether a locust was moving in each frame, and therefore the duration of moves and pausing bouts. Data from individuals that were found within 3 cm of the outer wall and central dome were excluded from the analysis to remove edge effects (analysis with the inclusion of data from

Rsで確認してみると、現在の0.2mmというthresh は
ちょうど2つ目のピークのend of
となっている。



or 0.03mm (2つ目のピーク)

⇒ このthreshold については、もう少し動画と見比べたくはある。

or 0.11mm (3つ目のピーク)

動画をみていると 止まるというイベントのほとんどが壁の影響によるもののように思われる。

→ なかなか Lévy 関連の解析は難しいかもしれない。