**Using Celine’s multi-day 2p scripts (designed for DART experiments)**

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| **File name** | **Use** |
| multiDay\_cellSelect\_Celine | Run this on *each* day individually to register and segments that day. |
| multiDay\_reverseMatch\_newMask\_Celine | Run this to match one day to the reference day.  Considerations:   * Which day to use as the reference |
| multiDay\_reverseMatched\_extraction\_Celine | Run this on the matched data to prepare it for analysis, including:   * Find cells that are responsive on at least one day (“keep cells”) * Identify preferred direction for each cell * Extract time courses at the preferred direction for each cell (these tcs are now averaged over trials at that direction) * Identifies trials on each day when the mouse was running   Considerations:   * What criteria to use for inclusion – responsive on either day, responsive on both days, responsive on a particular day…? |
| multiDay\_reverseMatched\_sharedConConcat\_Celine | Run this on the matched data *after the extraction script* to visualize and analyze matched data, including:   * Concatenate multiple experiments – or you can use this for a single experiment * Dictate what contrasts to look for in each * Finds cells that had running trials at preferred direction on both days * Plot TCs pre- and post-DART for stationary and running conditions * Get response means for each day/stimulus condition * Plot contrast-response curves and normalized tuning curve for each day   Considerations   * When to use cells that were simply responsive, vs. when to use cells that additionally had running trials, and whether they need to have running trails at *all* contrasts or only some |