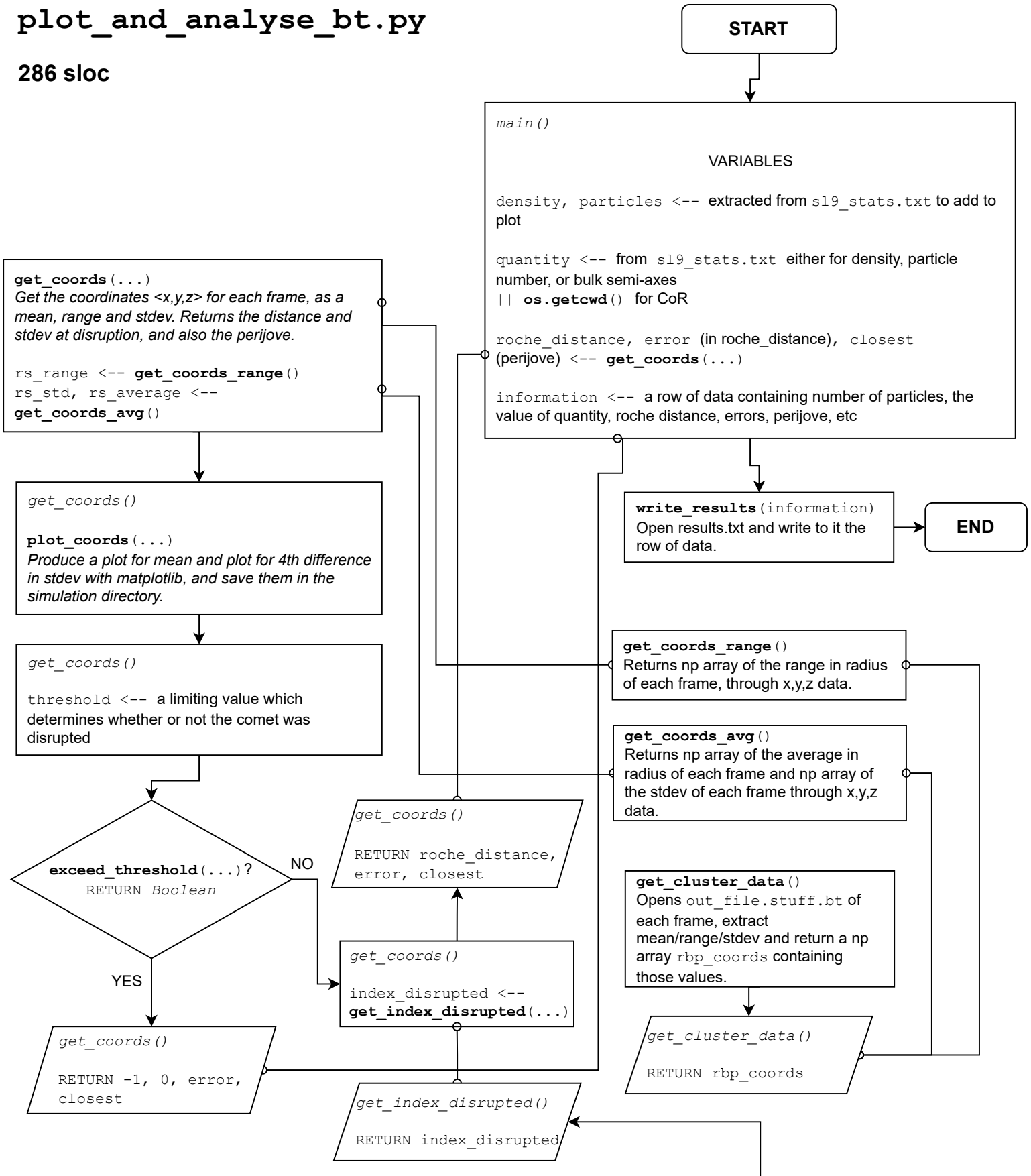
plot_and_analyse_bt.py

286 sloc



get_index_disrupted(...)
Use **np.diff**(), which reveals a spike roughly where the comet seems to break apart, however, some simulation seems to have spikes occurring before the "correct" spike, therefore some logic was applied to try and get the most correct place this occurs, does not work 100% of the time, can implement more logic to improve on this.

```
smooth_std <-- np.diff(rs_std, 4)
```
If the difference between the biggest trough and peak is more than 10 (usually the biggest absolute value is where disruption occurs)
```
IF smooth_std.argmax() - smooth_std.argmin() >= 10
    index_disrupted <-- get_biggest_index()
```
Else, the dip and peak occurred within the same rise and fall (@ disruption distance, o/w need something better), so we want the lower index (earliest spike/dip)
```
ELSE
    index_disrupted <-- np.min(...argmin(), ...argmax())
```