A couple of points:

Need to deal with this detecting bottom in 2002

You are right about the market being undefined at the beginning and end of the dataset, that is OK and we can make a 7th state on the output that is “undefined”. We should be able to detect the current market type at the beginning and end of the datasets. This is important because we will want to collect data about the pullbacks and corrections in that period even if we don’t get the overall start and finish of that market. So we can have undefined listed as the market type, but we should still know if the pullbacks and corrections in this period are bear or bull.

For the date of the maximum point, we should include that in the previous state. For instance if we have been in a bull market, and we reach the top, we should include that top in the bull market. This is simply a choice we are making of where to include the actual top.

* Yes, the output .csv file looks good
* running\_min\_max.py looks good
* identify\_markets.py looks good
* market\_adjustment.py looks good