Q: is navState a good way to find yos? (A: no)

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I thought it would be helpful to see whether navState is a good way to find yos. The code/plot given below suggests (quite emphatically) that it is not.

```
prefix <- "02_navState"</pre>
library(oce)
## Loading required package: testthat
## Loading required package: gsw
library(oceanglider)
## Loading required package: knitr
rda <- paste(prefix, ".rda", sep="")</pre>
## Two-level caching for rapid turnaround in an interactive session
if (!exists("g")) {
                                        # no need to read or load, if 'q' already exists
    if (file.exists(rda)) {
                                        # no need to read, if can load
        load(rda)
    } else {
        g <- read.glider.seaexplorer.delayed("/data/glider/sea019/m54/all_data")
        save(g, file=rda)
    }
}
## Skip first
look <- 2:4000
t <- g[["time"]][look]
p <- g[["pressure"]][look]</pre>
navState <- g[["navState"]][look]</pre>
oce.plot.ts(t, p, type='p', pch=20, cex=1/3)
cex <- 1/2
points(t[navState==110], p[navState==110], col="gold", pch=20, cex=cex)
points(t[navState==115], p[navState==115], col="purple", pch=20, cex=cex)
points(t[navState==116], p[navState==116], col="red", pch=20, cex=cex)
points(t[navState==117], p[navState==117], col="green", pch=20, cex=cex)
points(t[navState==118], p[navState==118], col="blue", pch=20, cex=cex)
mtext("navState: gold=110 purple=115 red=116 green=117 blue=118",
      side=3, line=-1, font=3)
```

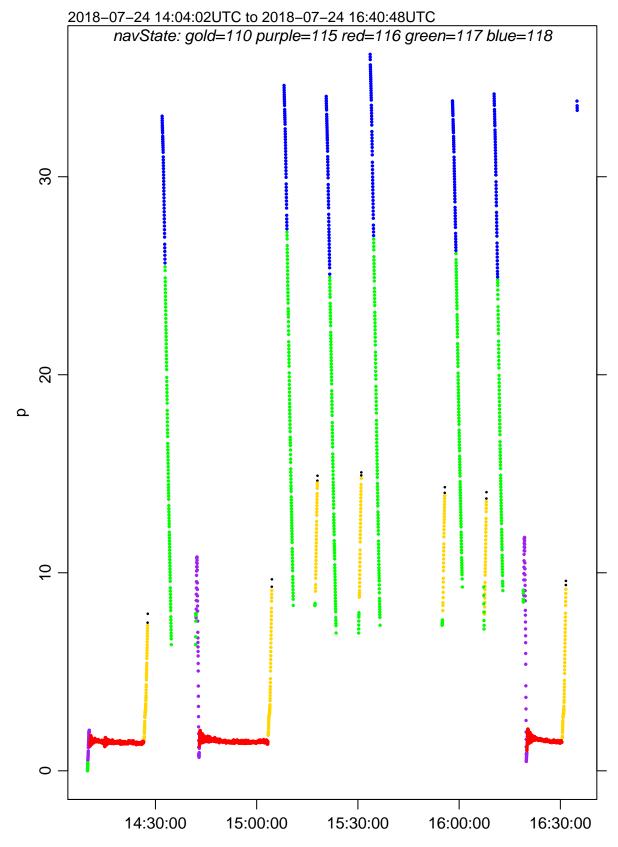


Figure 1: Initial data for sea021 m54 (skipping first point); colours explained at top of plot.