

Wesley  
GCPA  
01/07/24

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## Land Testing



Comparing Current Heading and GPS Heading 01/07/2024



Robot went clock wise.

Results look mostly good, but there are some large changes on the last two way points.

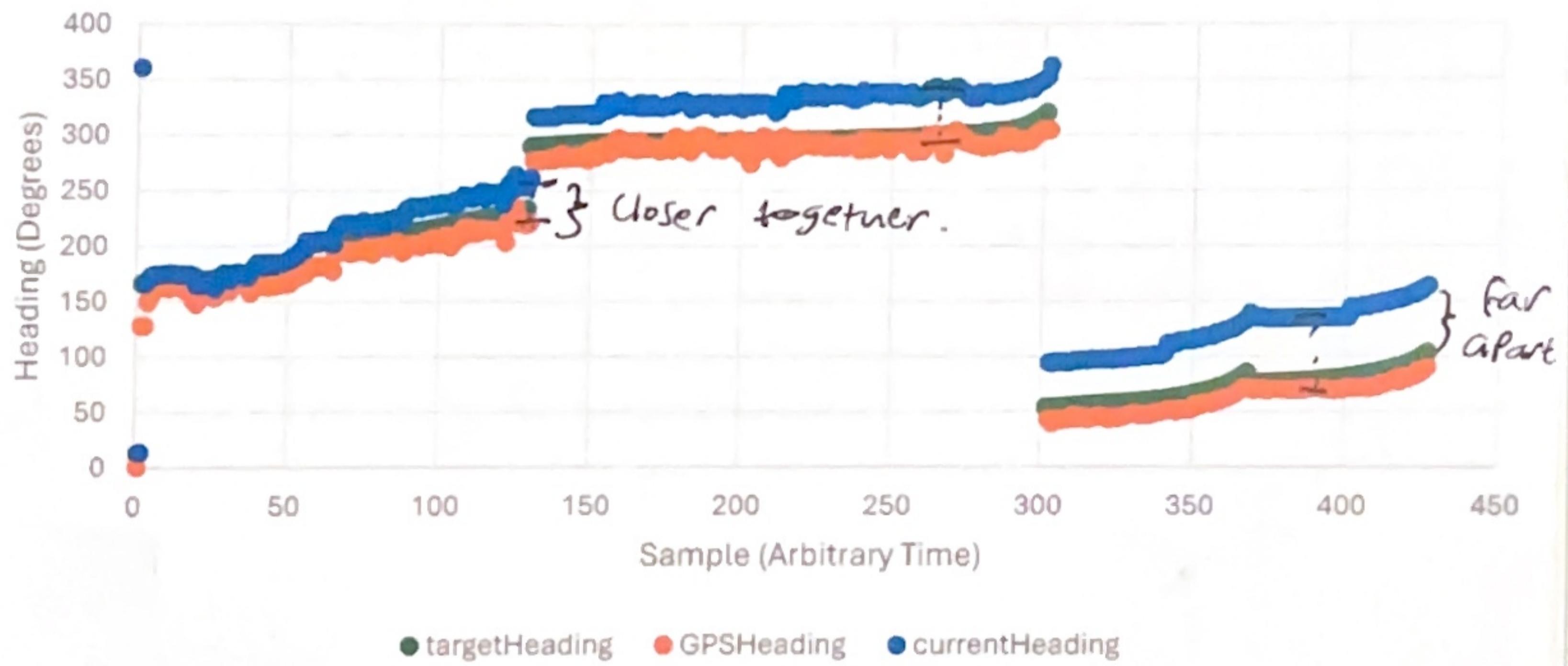
1/08/24  
working code

# Land Testing

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Comparing Current, GPS, and Target Headings from  
01/08/2024



Clockwise path.

Note that the current heading is getting farther away from the target and gps? Code has something wrong.

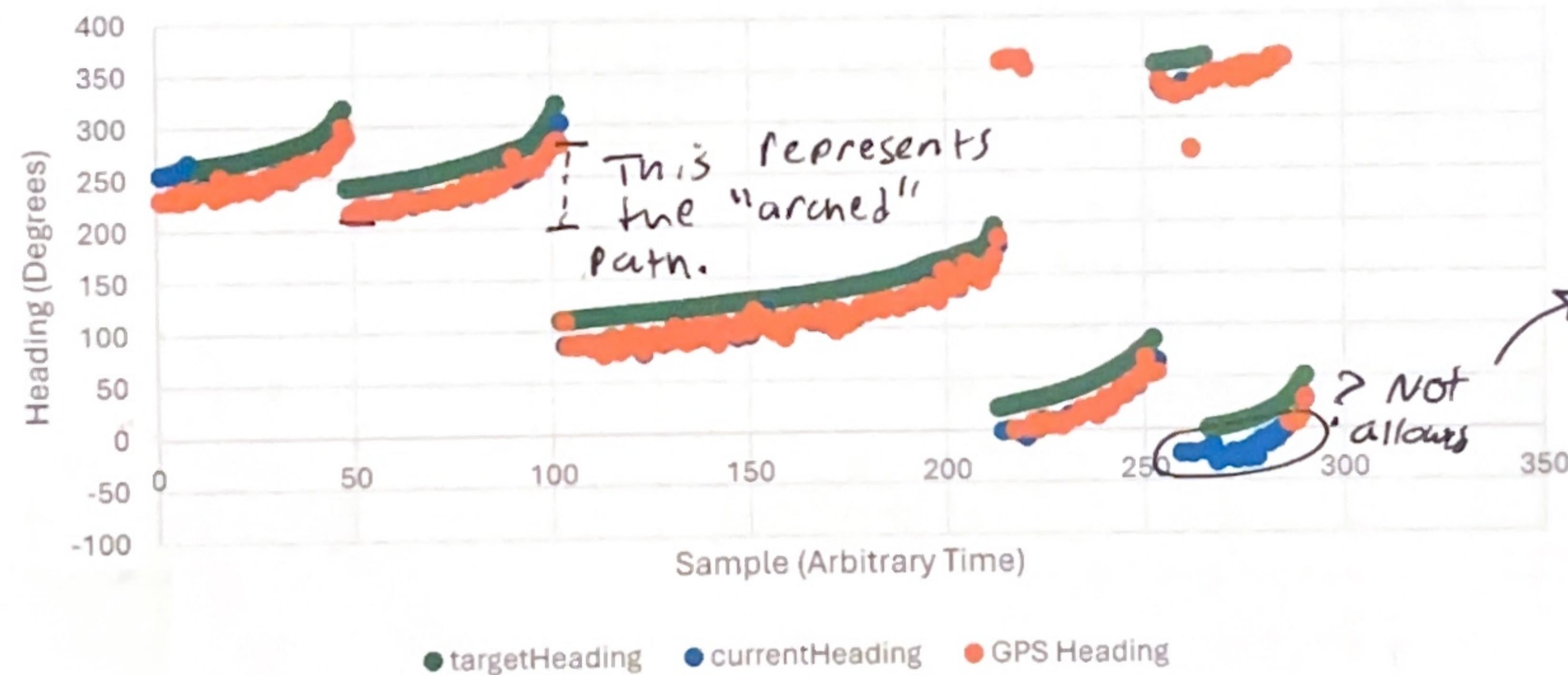
01/15/24  
Wesley Cedar

# Land Testing

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Comparing Current, GPS, and Target Headings from  
01/15/2024



Counter clock wise path. I must have flipped a sign in the code.

Negative values for heading should not be allowed!

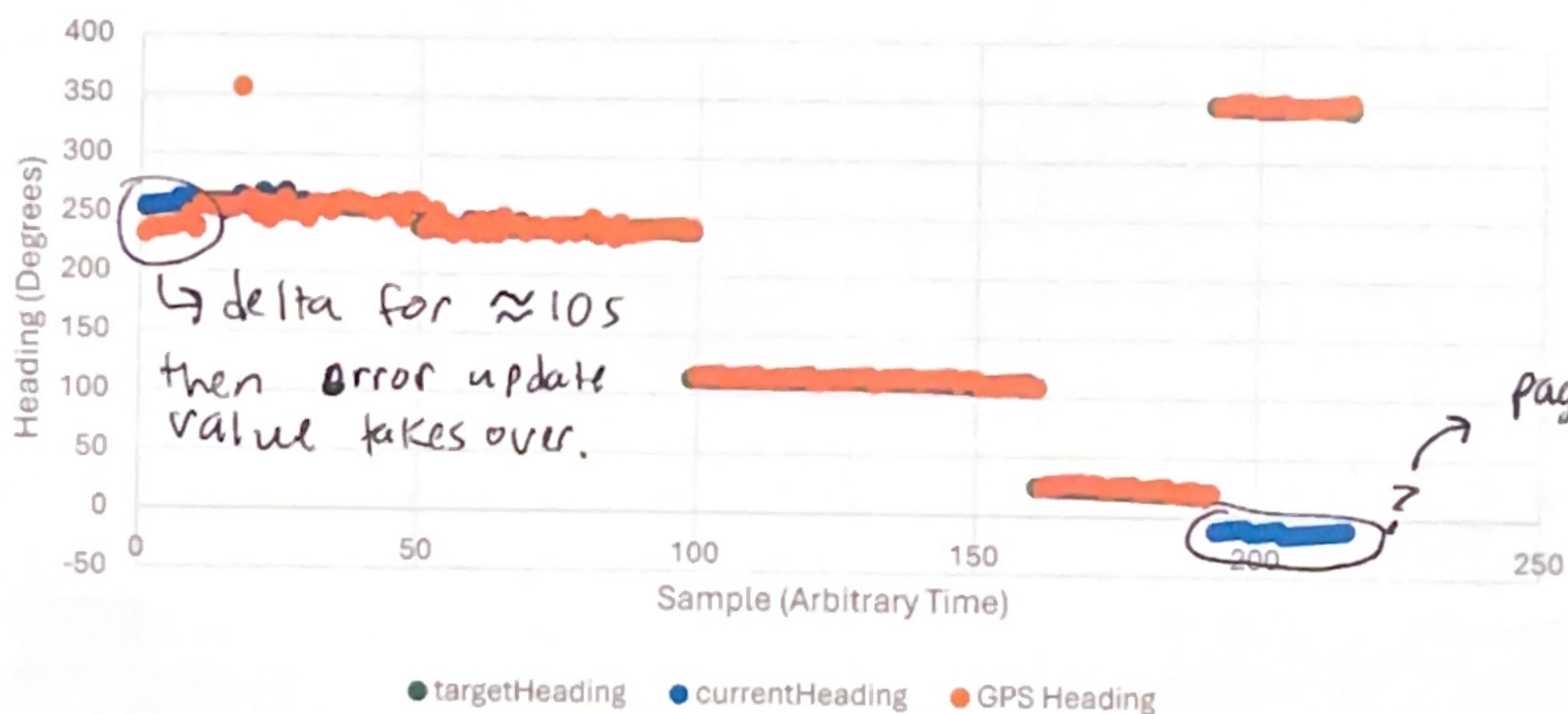
01/15/24  
Wesley  
code

# Land Testing

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Comparing Current, GPS, and Target Headings from  
01/15/2024



Counter-clock wise path. Using an offset average of the BNO and GPS that is updated every 10 seconds. See "Fixing the Arc" on page 139 of book 1 and pages 145-148 for code.

Flat lines are good!