

# CTA200H Project

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In this project, we transform Tomographic Ionized Carbon Intensity Mapping Experiment (TIME) data into maps through intensity mapping of ionized carbon ( $C_{II}$ ). The region in the sky scanned in our set of data, described by right ascension and declination, is shown in Figure 1. We can see some jumps in the telescope's movement, resulting in a map that was not exactly quadrilateral. A polynomial fit of degree 2 was removed from the time ordered data and then mapped. The data was taken with a variety of detectors; an example timestream and map are shown in Figure 2.

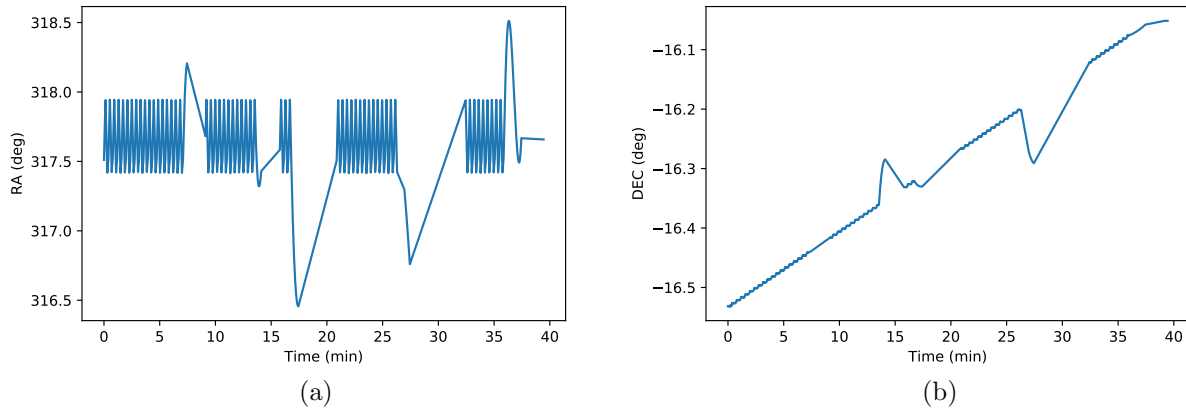
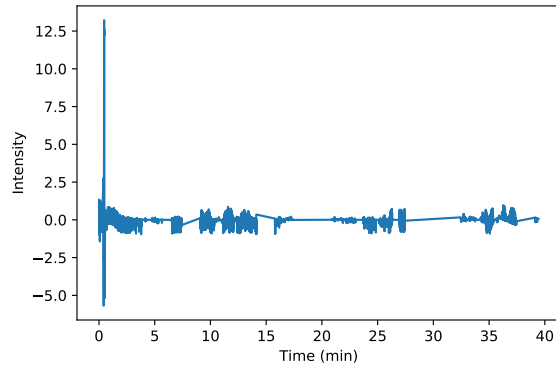
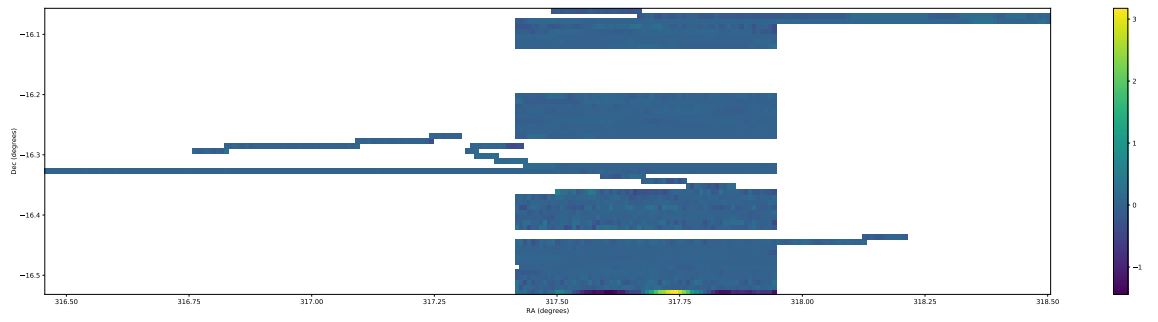


Figure 1: Right ascension (left) and declination (right) throughout timestream.



(a)



(b)

Figure 2: Timestream (top) and map (bottom) from feed horn 3, channel 6.