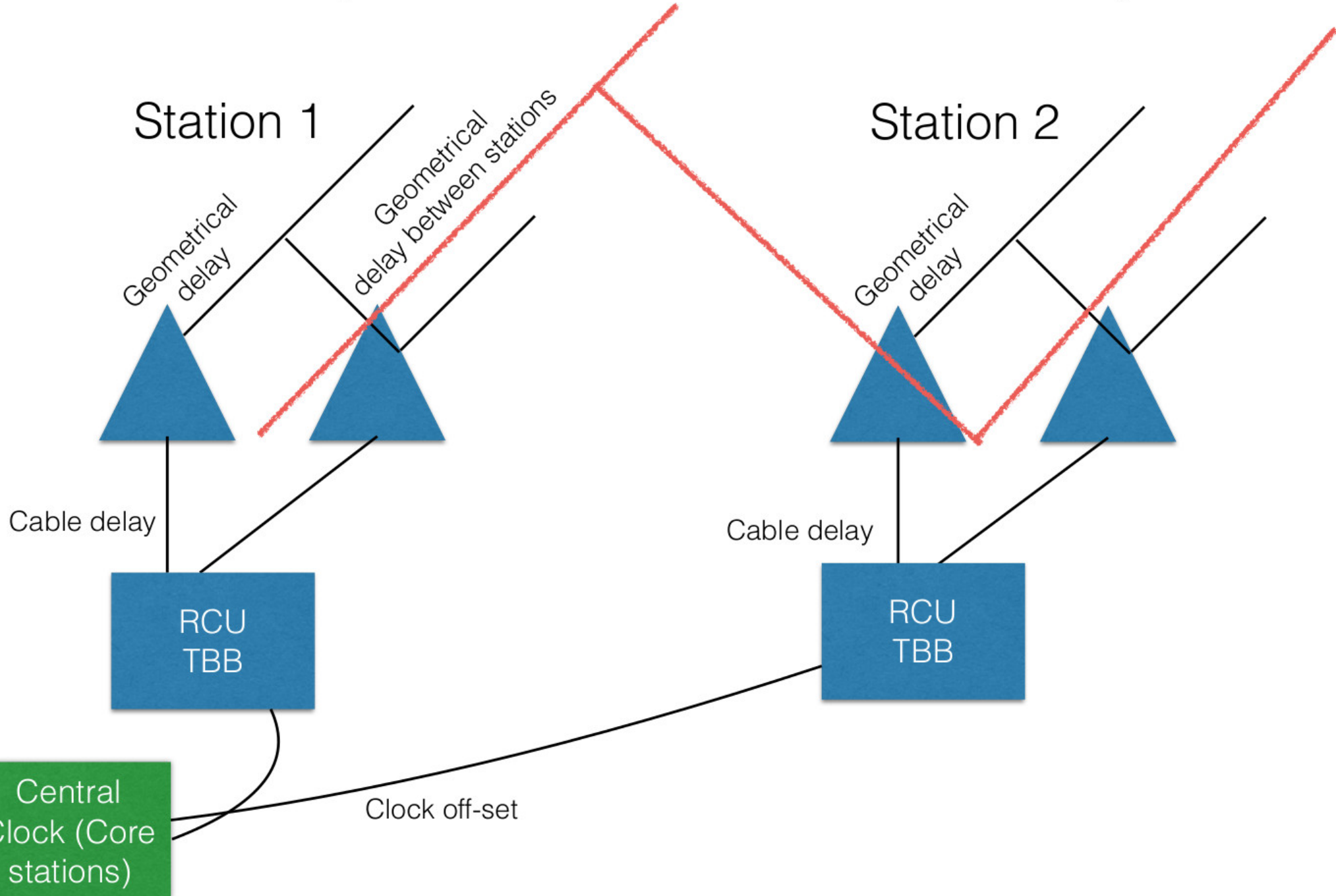


Build your own telescope



Task 5

- Goal: plot a pulse with antenna delays and geometric delays accounted for

1) Plot a single pulse from the data

- The tutorial file gives the location of a pulse to plot
- Find that pulse and plot it
- Try to remove RFI
- NOTE: that RFI removal only works on large blocks of data (2**16 data points)
- You will need to open a large block, remove RFI lines, then find pulse in that block

2) Account for antenna delays and geometric delays

- Find and subtract off antenna delays
- Then find and subtract off geometric delays:

$$T_g = \frac{|\vec{X} - \vec{A}|}{C}$$

\vec{A} - antenna location

\vec{X} - potential source location

C - 3×10^8 m/s

T_g - geometric delay

3) Find the correct source location of this pulse

- Two potential locations are given
- If everything is correct, then the correct source location should be clear