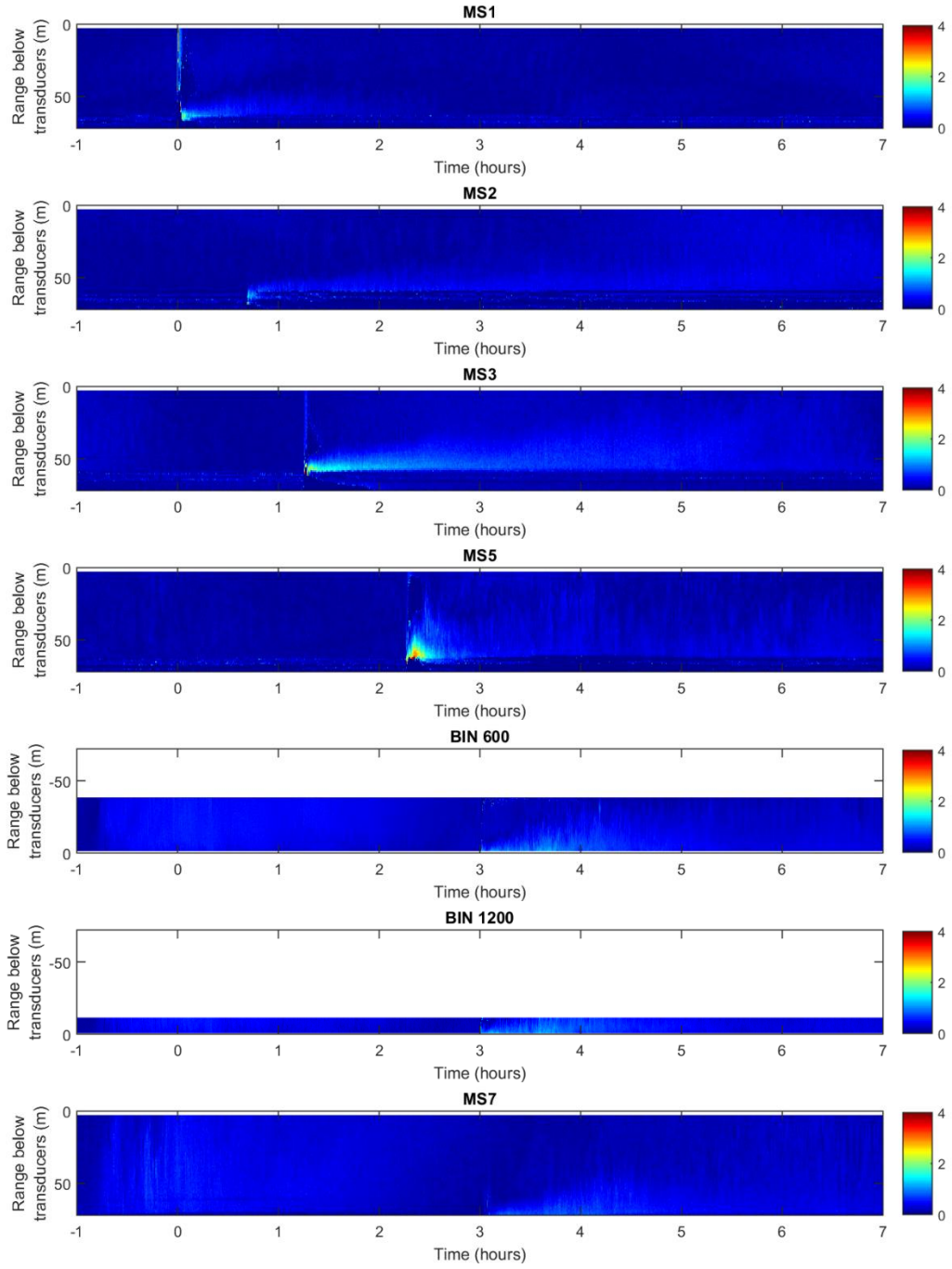
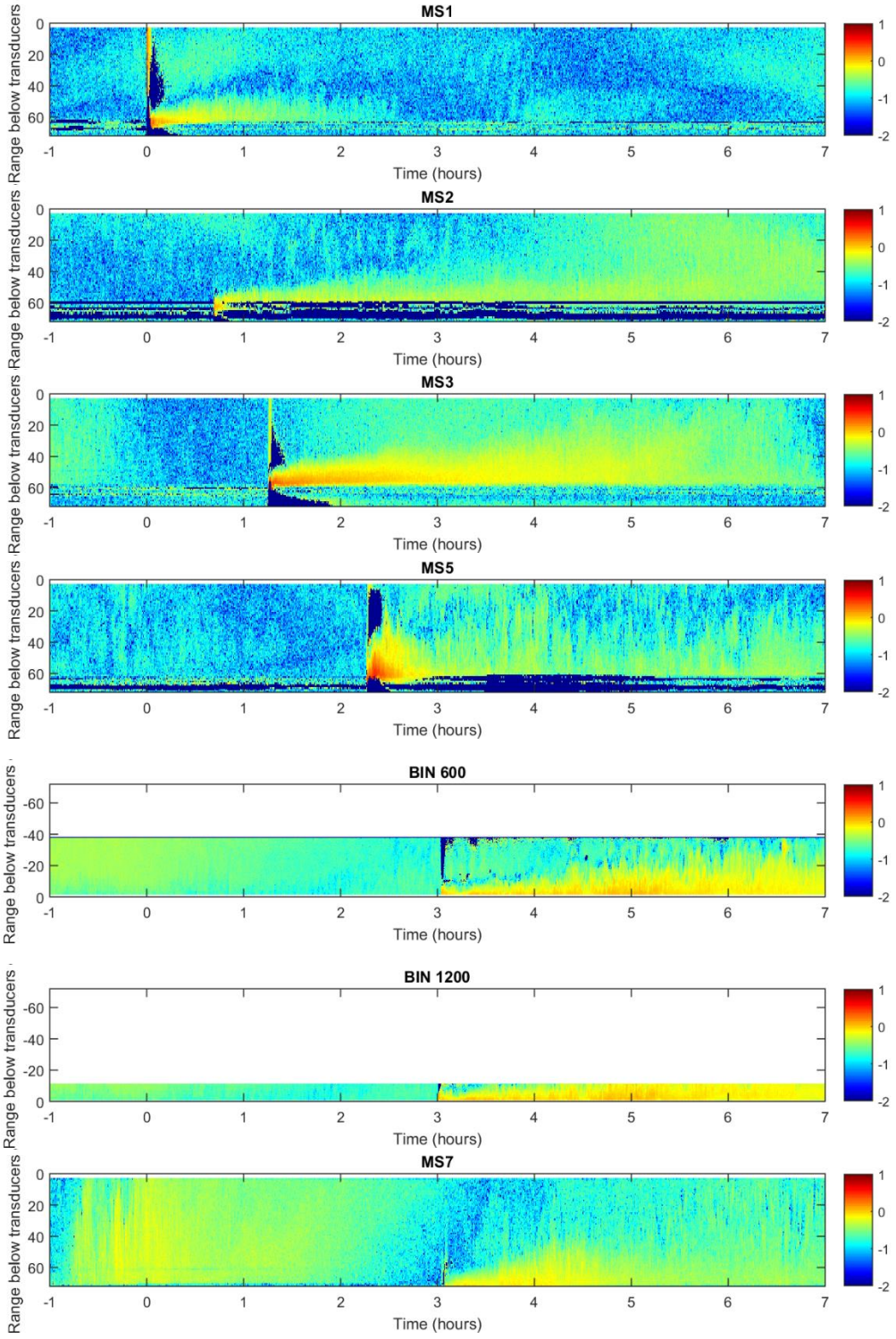
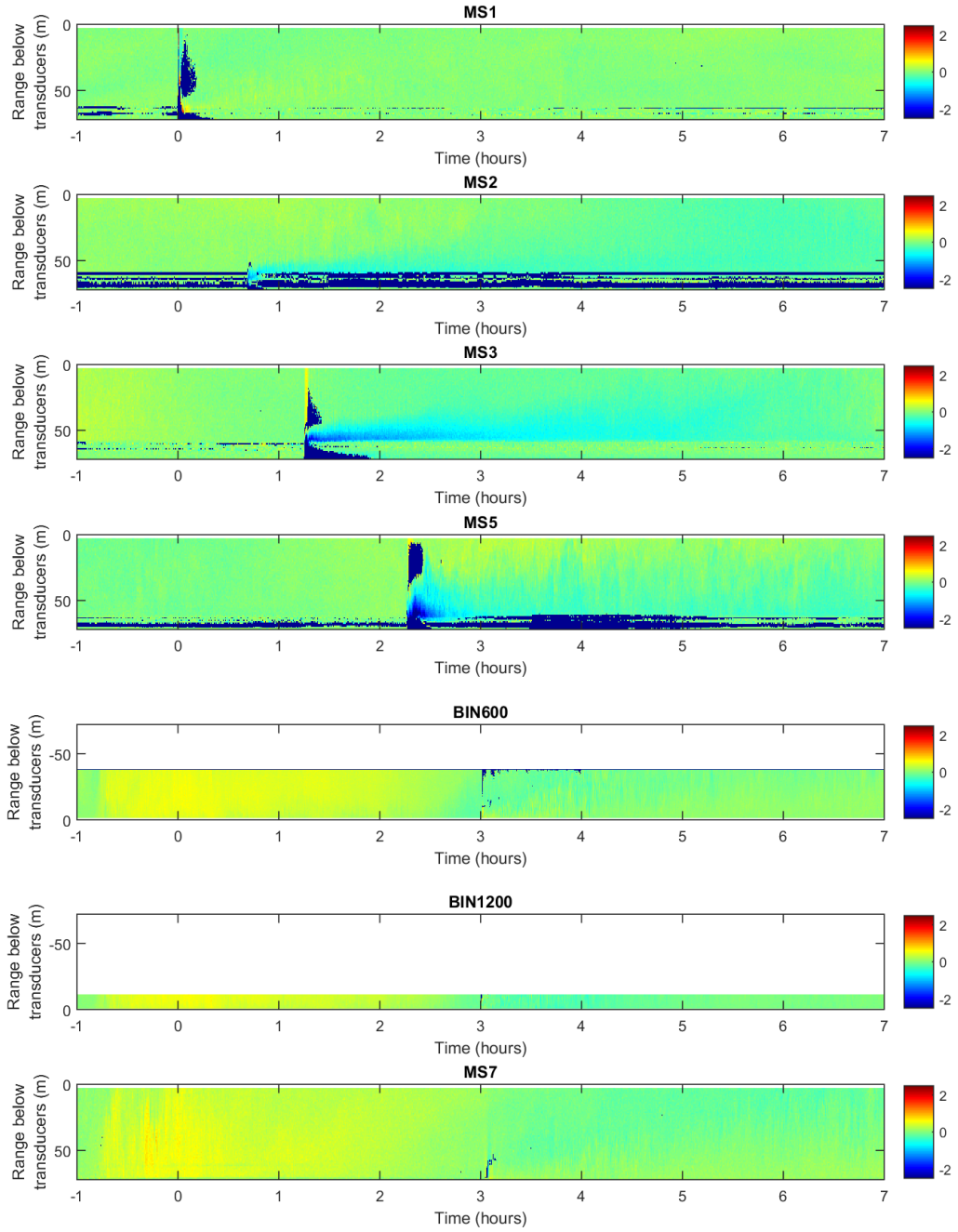
Velocity Magnitude (m/s) – Sep 1



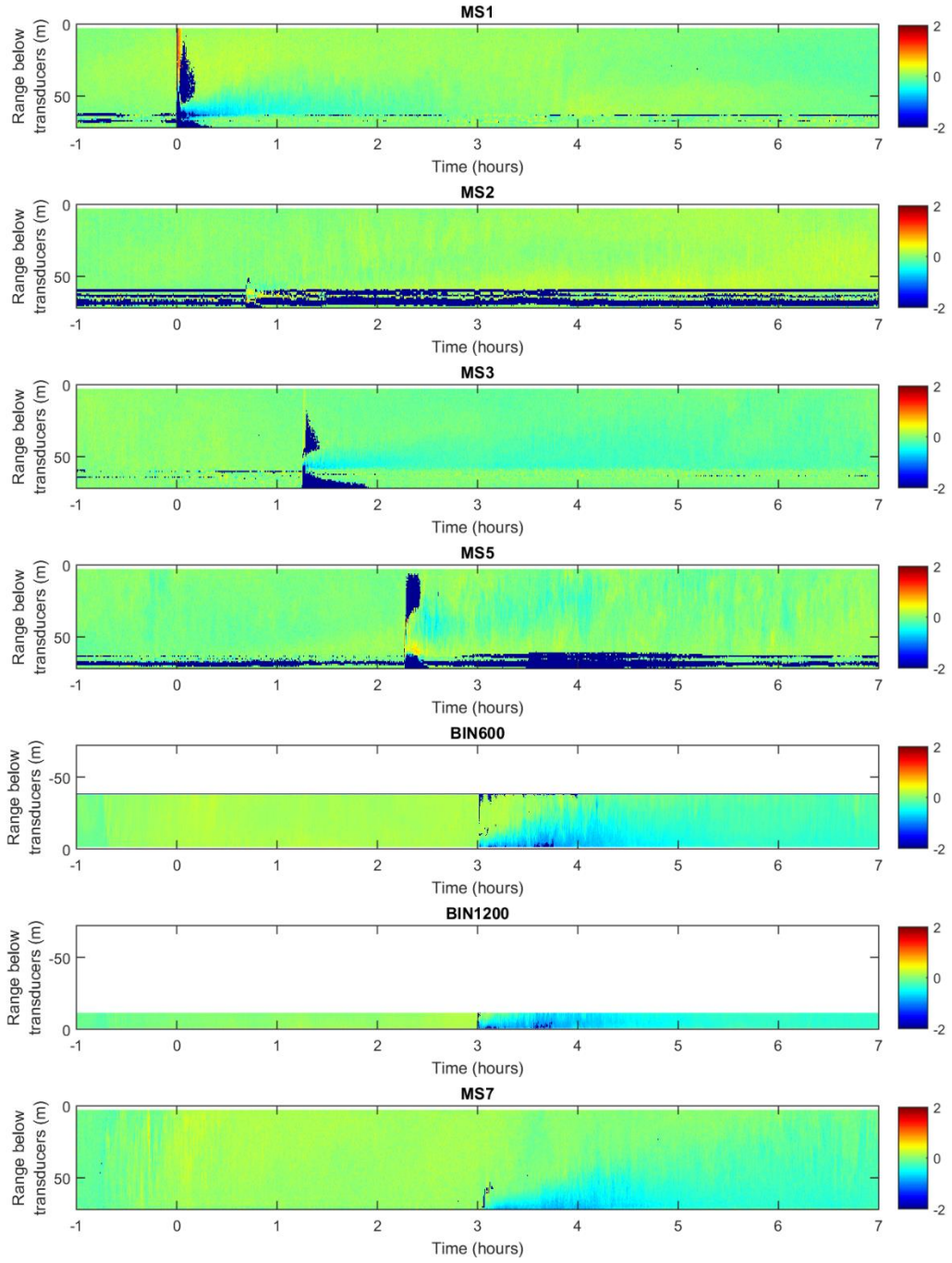
Log_{10}(Velocity Magnitude) – Sep 1



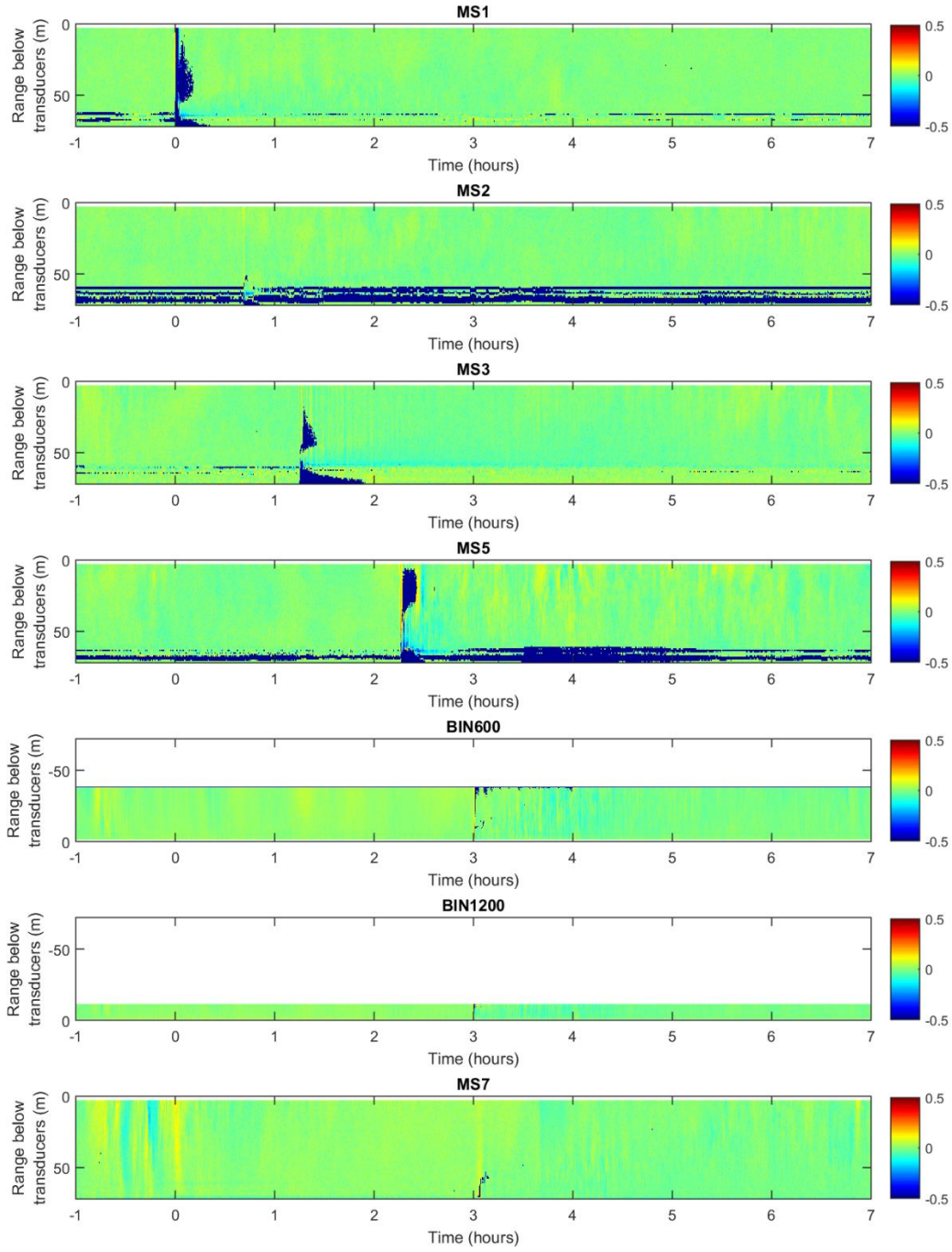
Speed North (m/s) – Sep 1



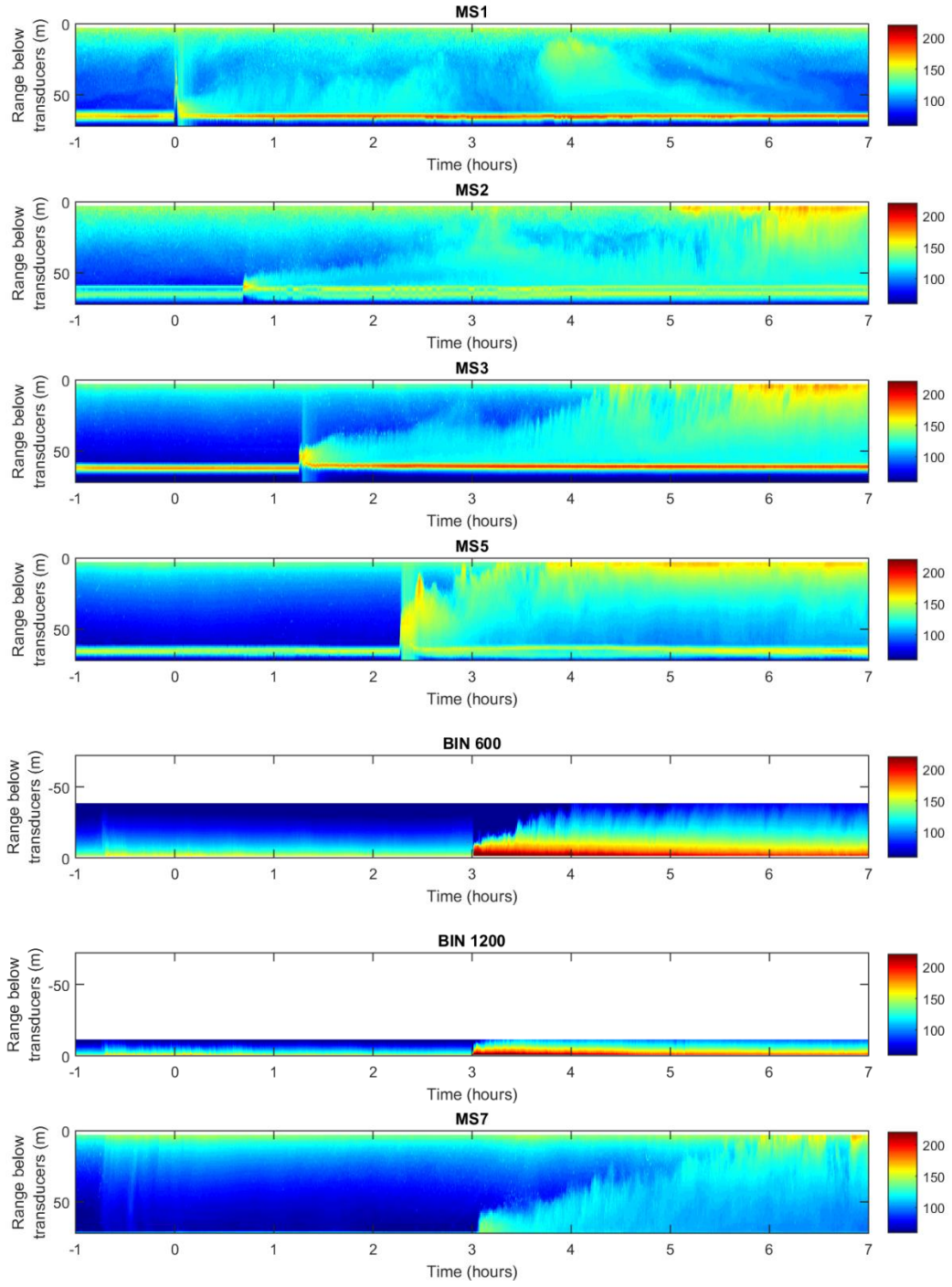
Speed East (m/s) – Sep 1



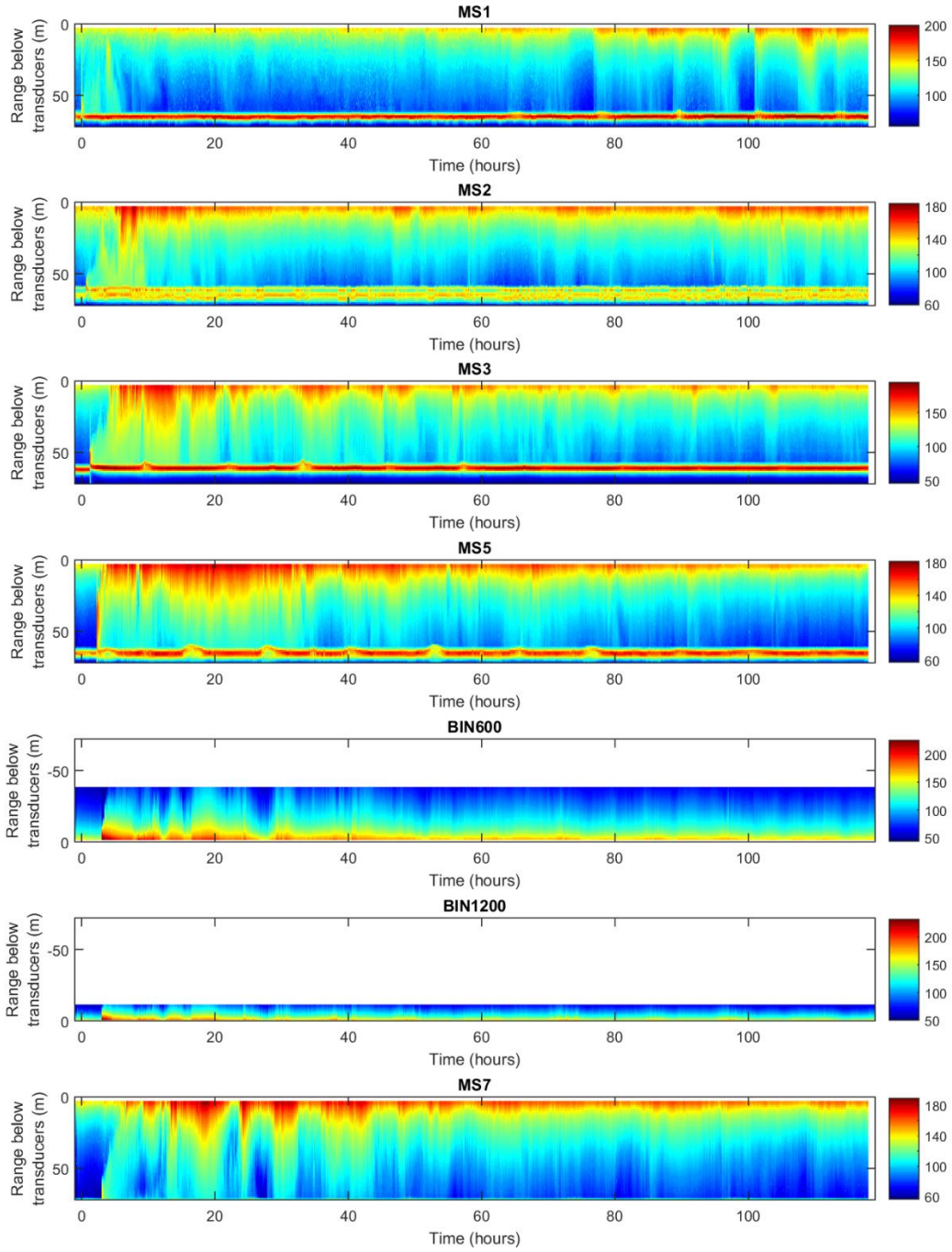
Speed Vertical (m/s) – Sep 1



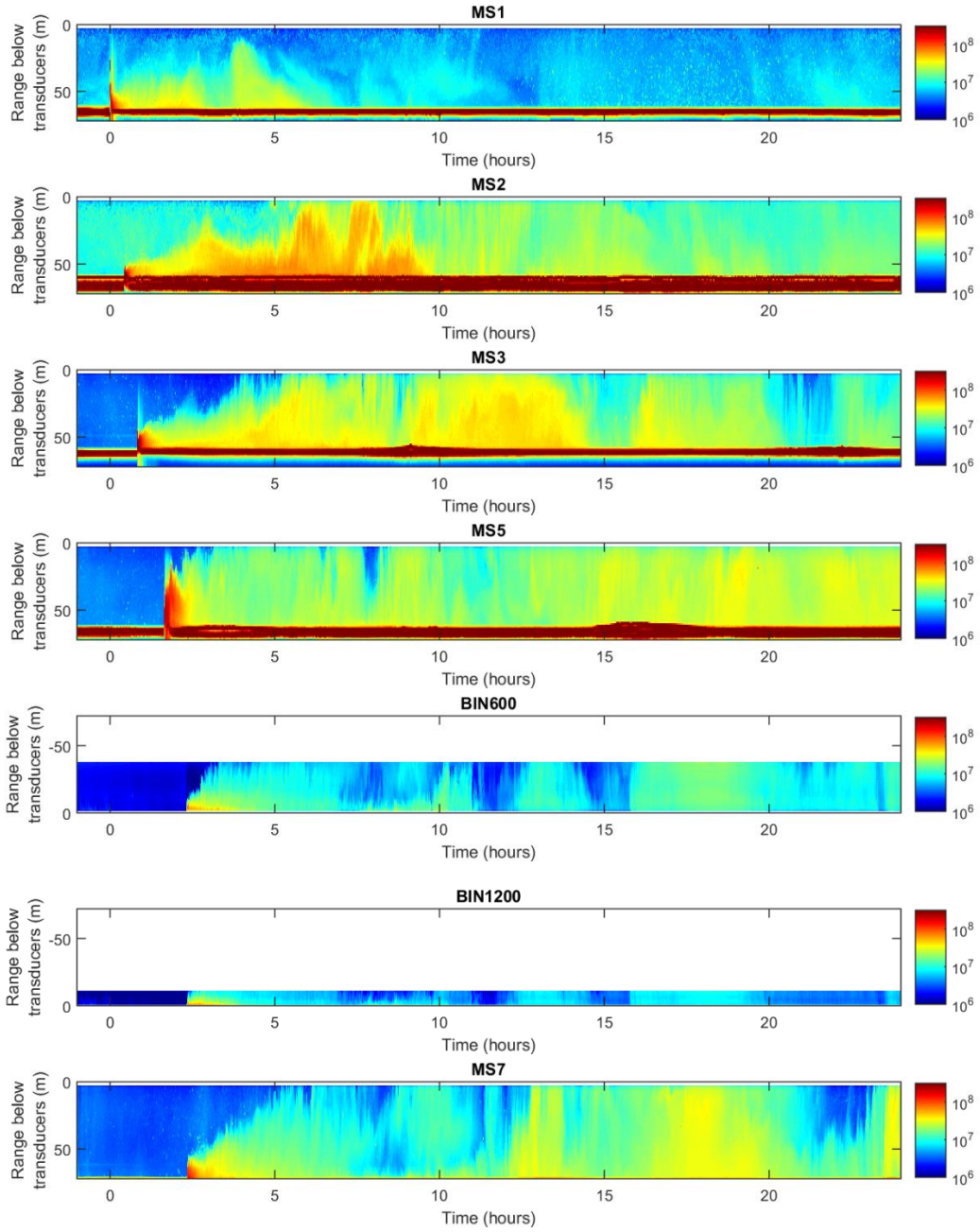
Echo amplitude averaged over four beams – Sep 1



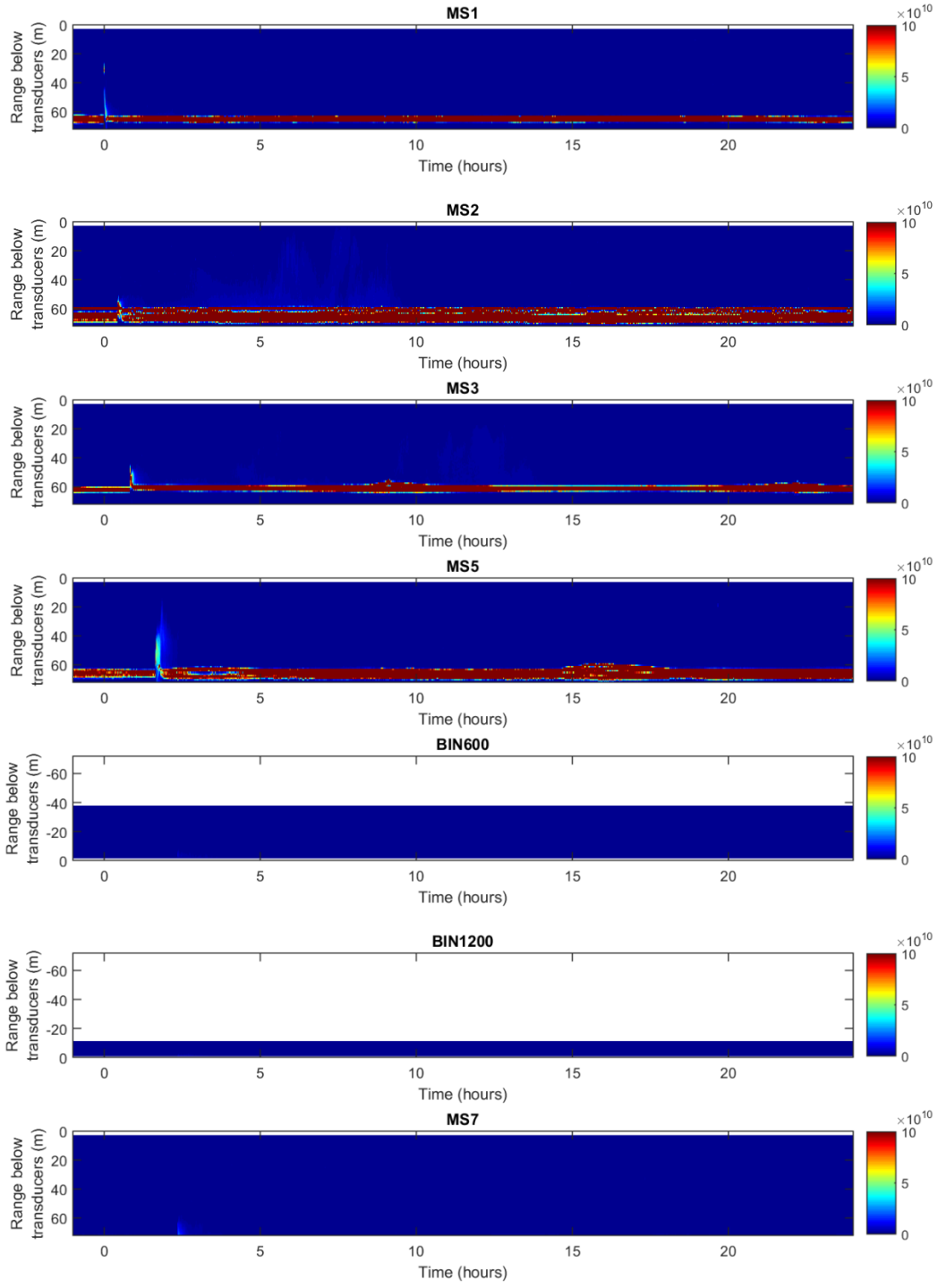
Echo amplitude averaged over four beams – Sep 1



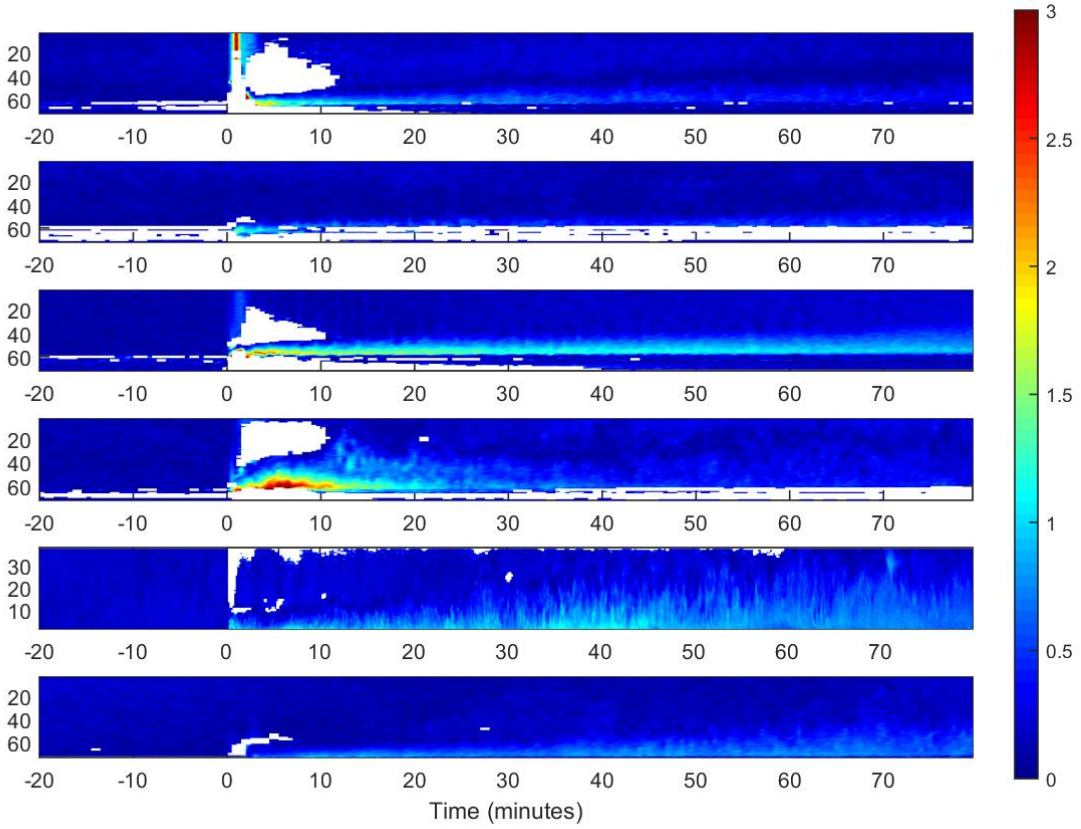
Log10 of backscatter corrected for spherical spreading and water attenuation – Sep 1



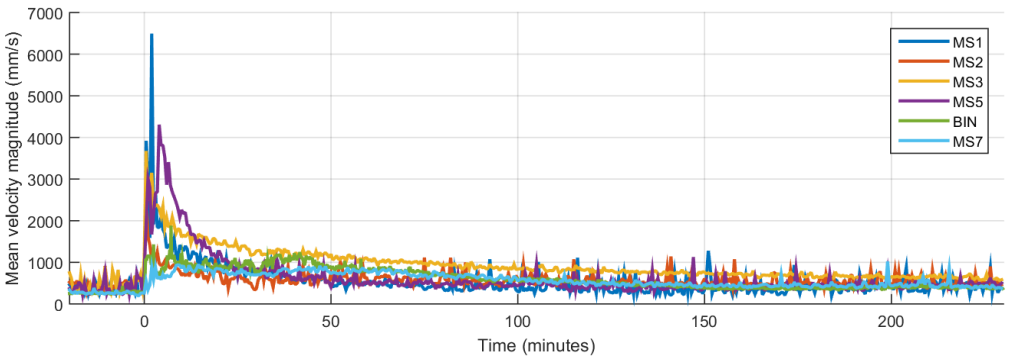
Backscatter corrected for spherical spreading and water attenuation – Sep 1



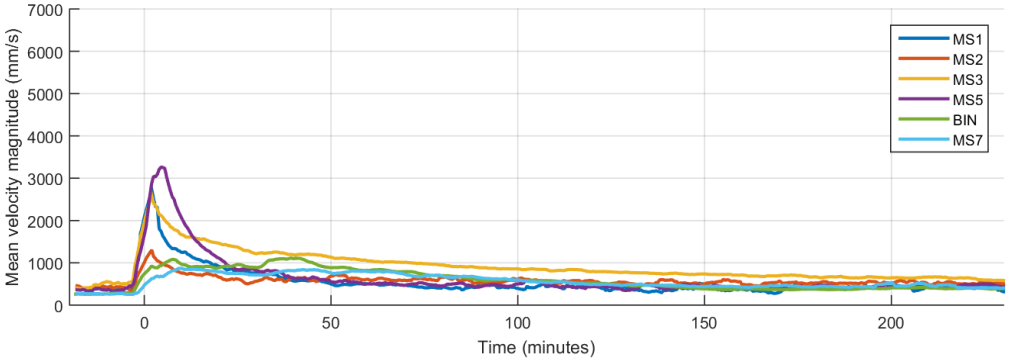
Velocity magnitude plots for all 300kHz ADCPs for the Sep 1st event aligned with t=0 at the event arrival for each location:



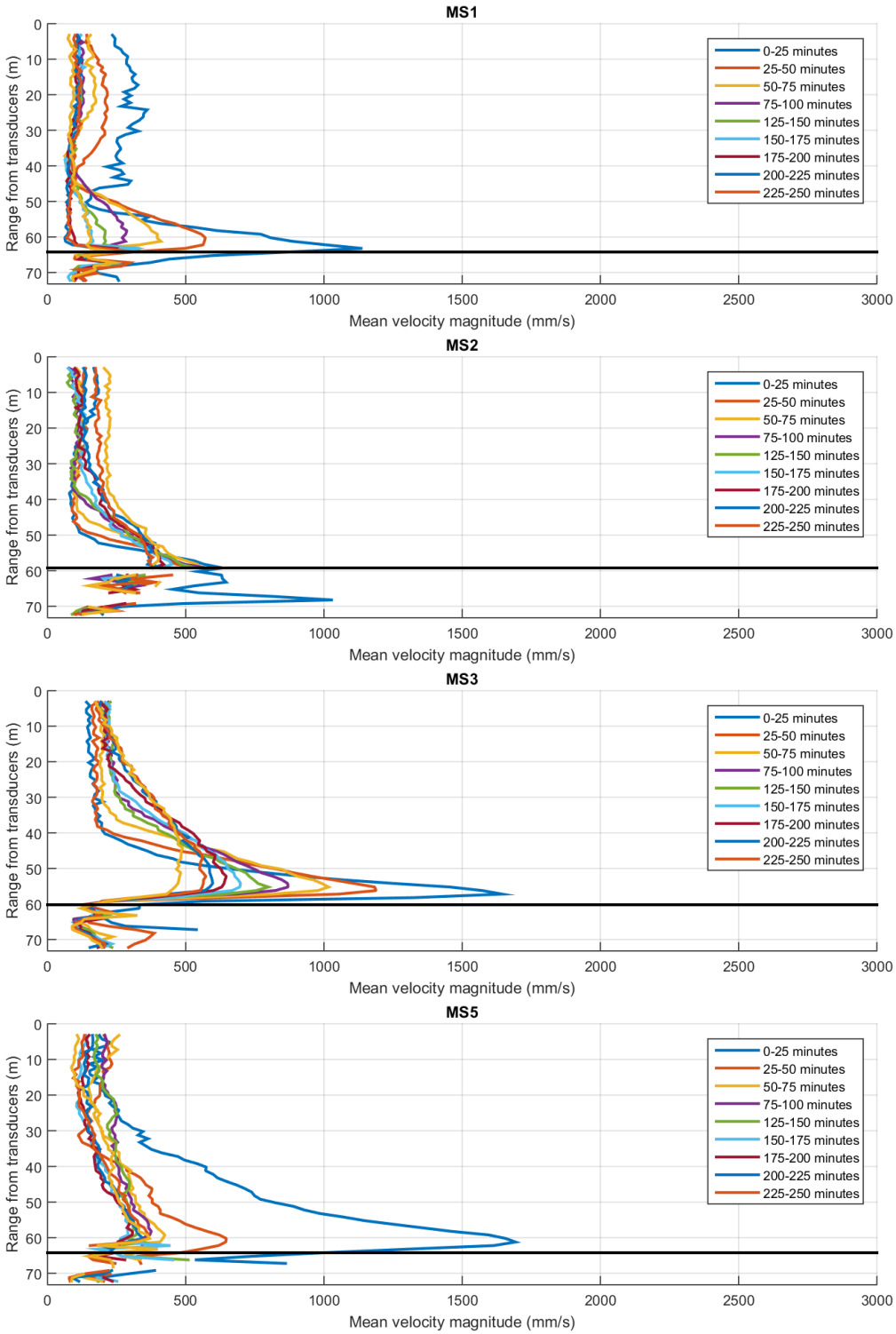
Velocity magnitude maximum for all 300kHz ADCPs aligned to start of flow at each location:

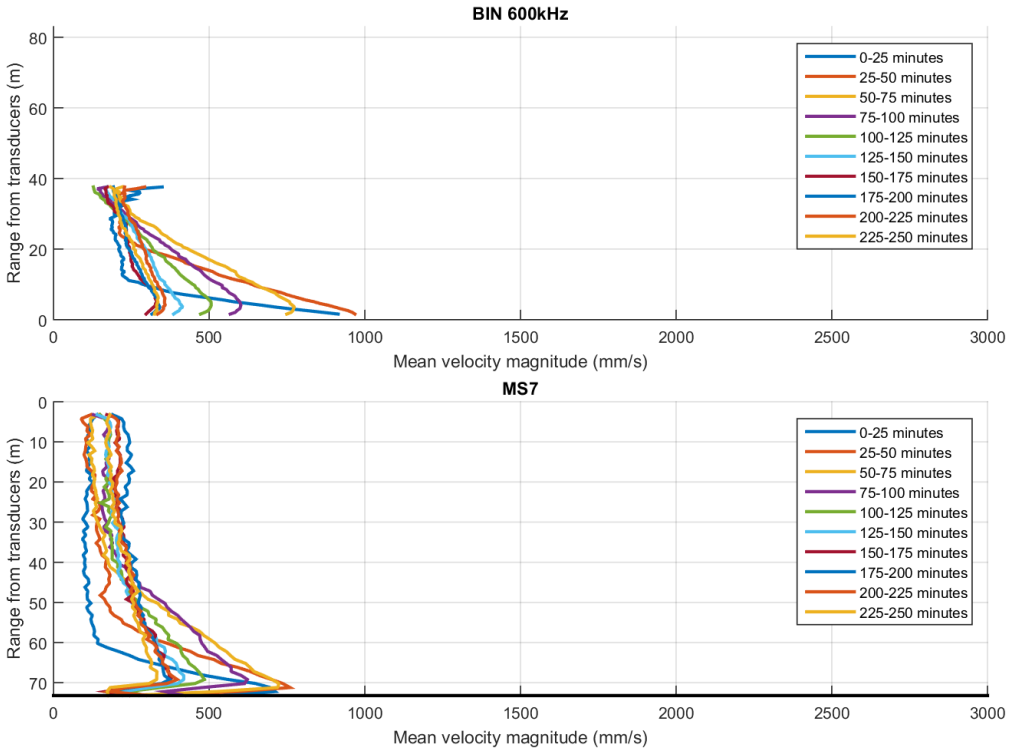


As above but with moving average of 5 minutes applied:



The plots below show vertical profiles averaged over periods of 25 minutes from the arrival of the flow event at that location. The horizontal black line shows the approximate location of the bed, however, variations due to ADCP motion have not yet been taken into account. MS2 has a particularly uneven bathymetry so the bed varies between the black line and a further range. All the mooring plots are affected by sidelobes in the 2-3 m above the bed giving poor velocity values in the region below the velocity maximum, with the exception of the early stages of MS7 where higher levels of backscatter near the bed enable more accurate velocity values down to the bed.




BIN 600kHz
Range from transducers (m)
Mean velocity magnitude (mm/s)
0-25 minutes
25-50 minutes
50-75 minutes
75-100 minutes
100-125 minutes
125-150 minutes
150-175 minutes
175-200 minutes
200-225 minutes
225-250 minutes

MS7
Range from transducers (m)
Mean velocity magnitude (mm/s)
0-25 minutes
25-50 minutes
50-75 minutes
75-100 minutes
100-125 minutes
125-150 minutes
150-175 minutes
175-200 minutes
200-225 minutes
225-250 minutes