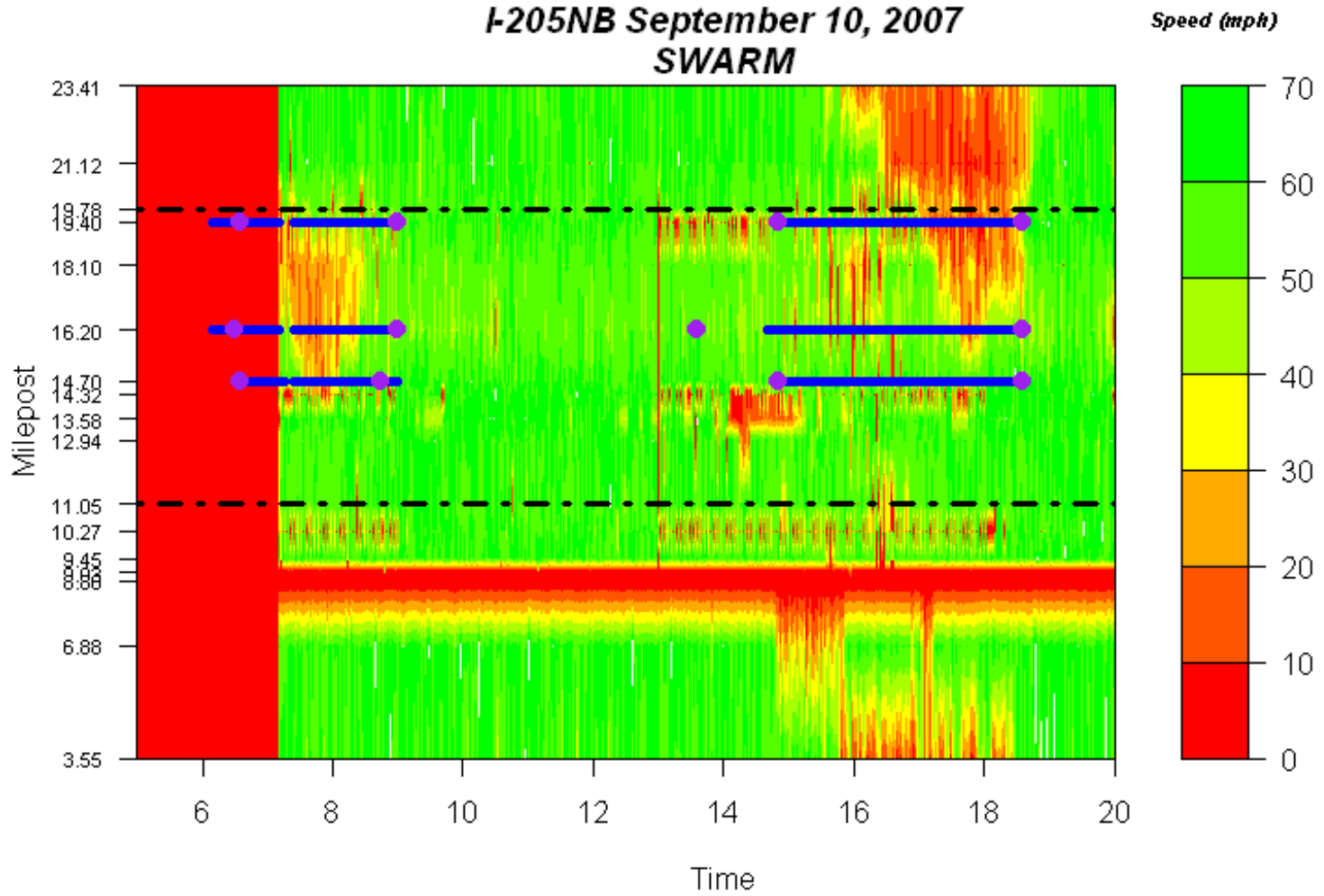


APPENDIX ONLINE-1: I-205 NB TIME- SPACE SPEED CONTOUR PLOTS WITH METER ACTIVATIONS

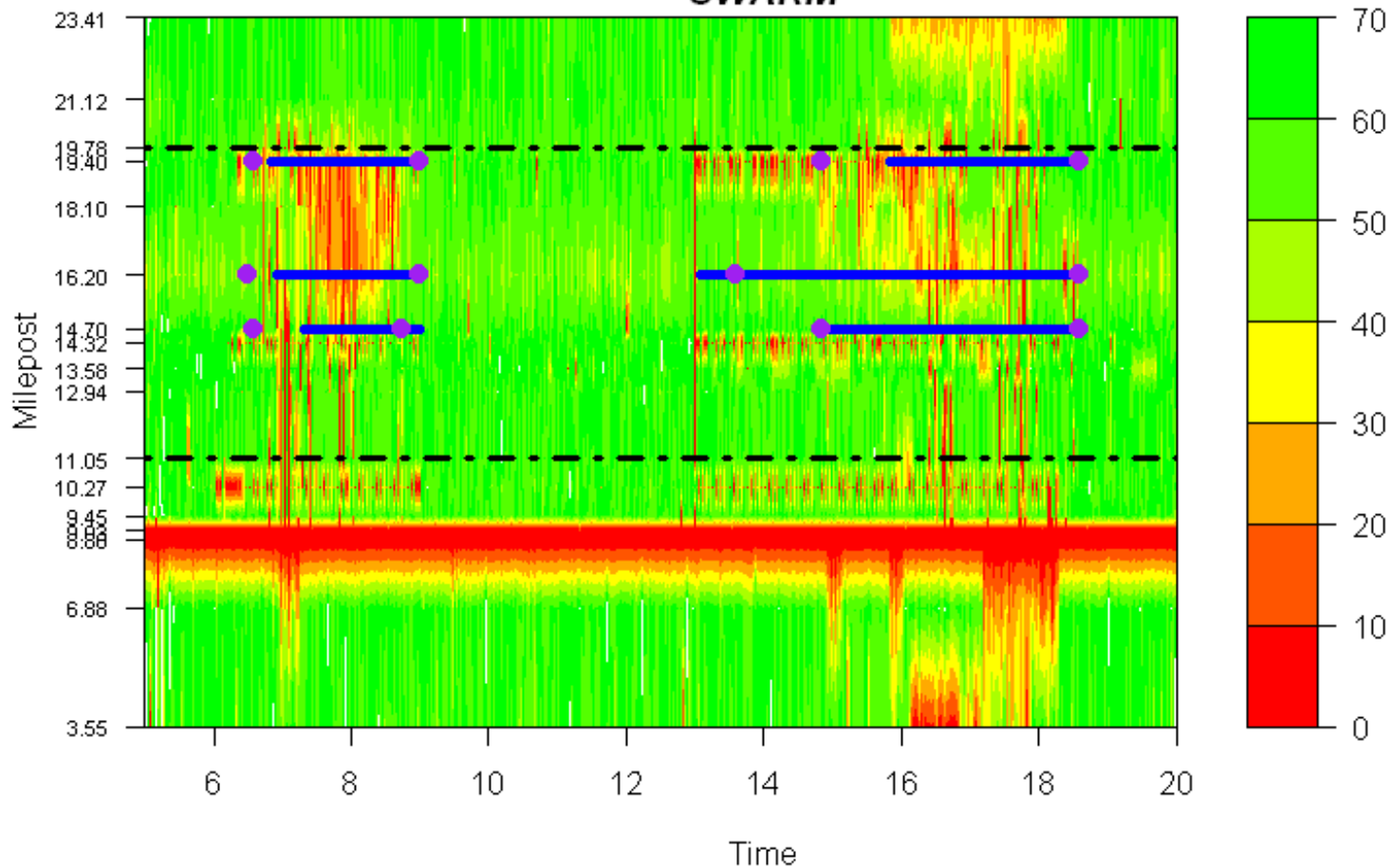
Programmable logic controllers (PLCs) were installed at several key ramps with the assistance of the City of Portland and used to capture additional data about ramp operations that are not otherwise logged. The data include the activation and deactivation of metering. Blue lines represent the duration of metering activation at three ramps: Sunnyside, Johnson Creek, and Powell (from bottom). The purple dots represent the fixed metering on/off times under the pre-timed system

Time Series Speed Contour Plot I-205NB September 10, 2007 SWARM



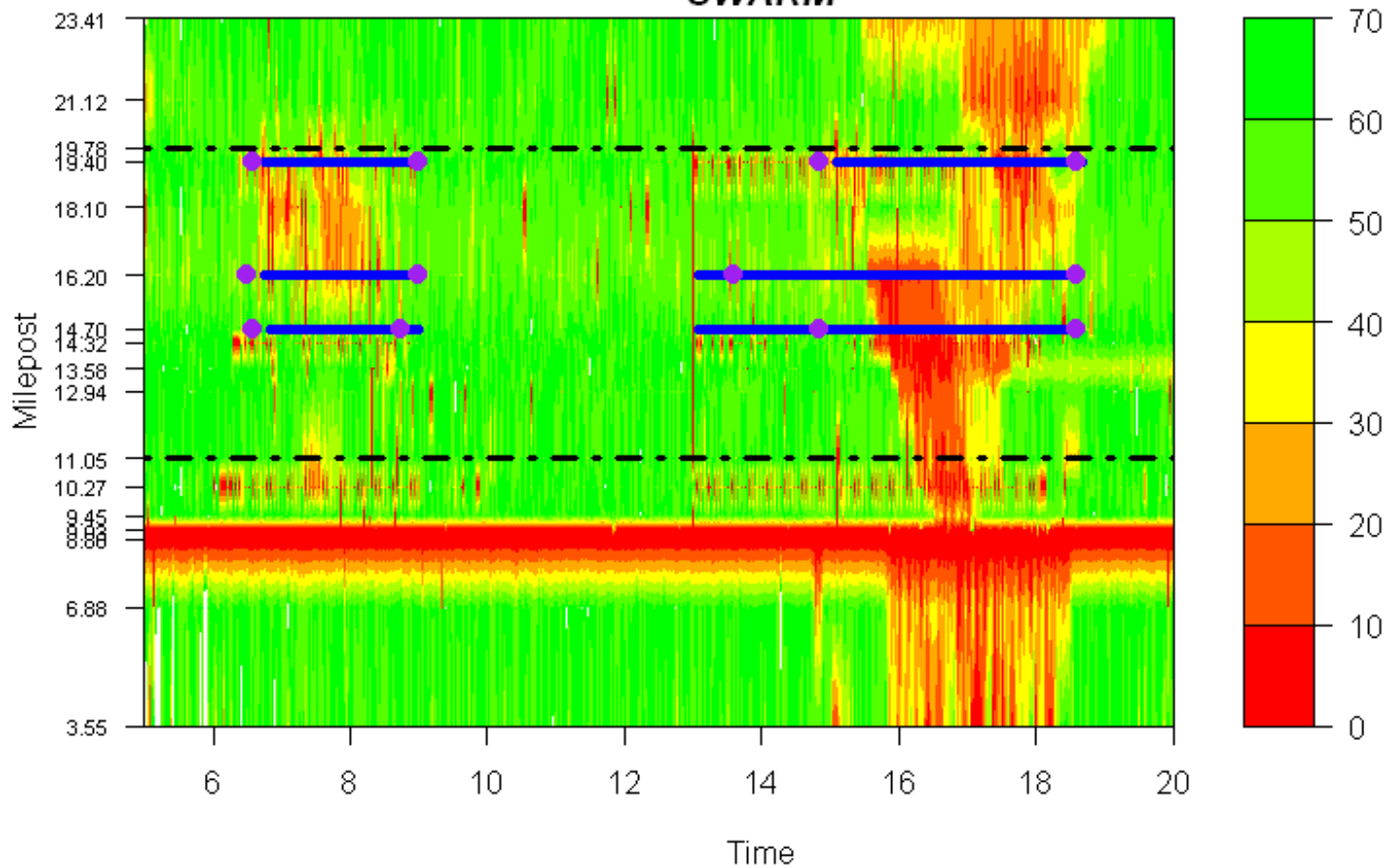
Time Series Speed Contour Plot
I-205NB September 11, 2007
SWARM

Speed (mph)

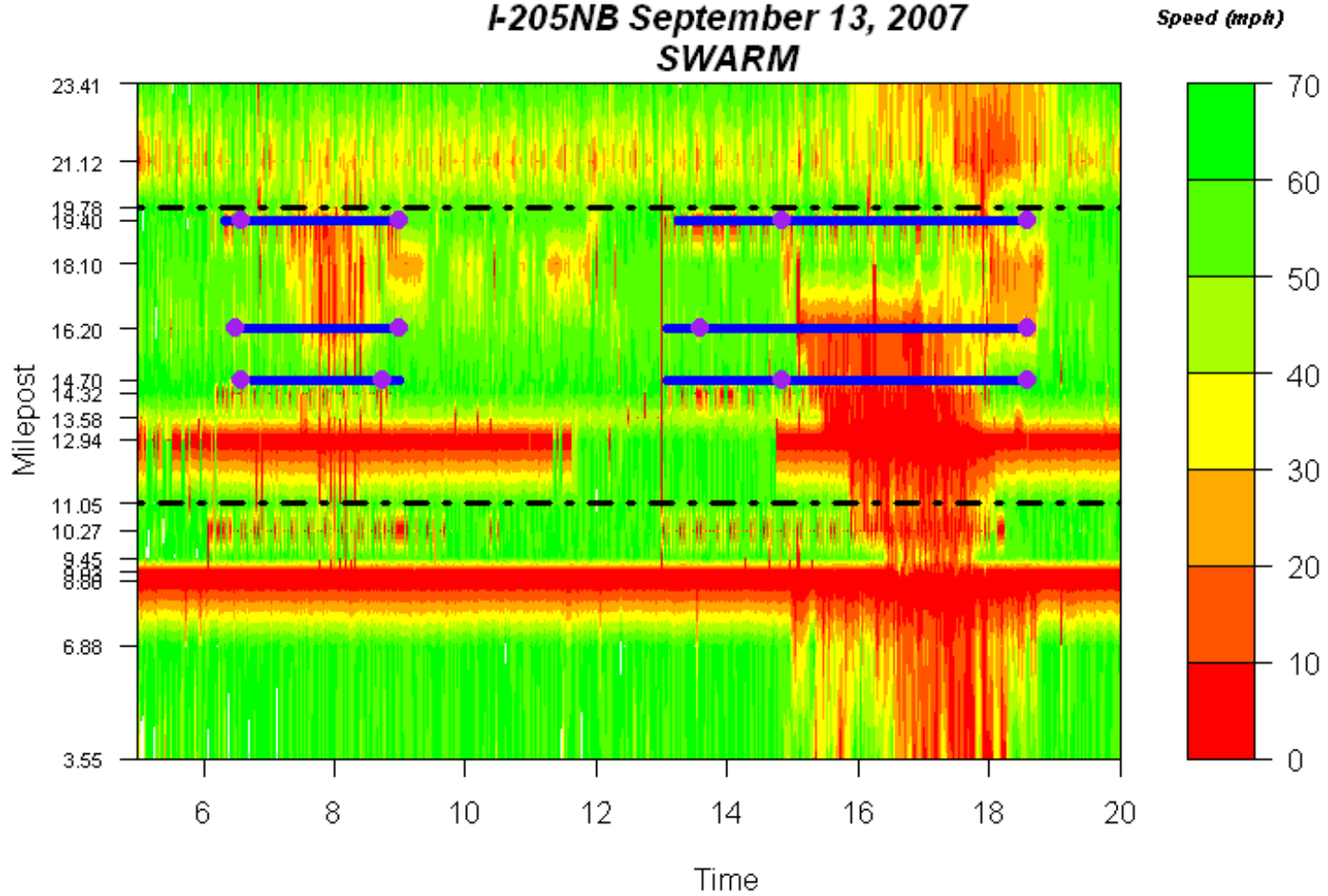


Time Series Speed Contour Plot
I-205NB September 12, 2007
SWARM

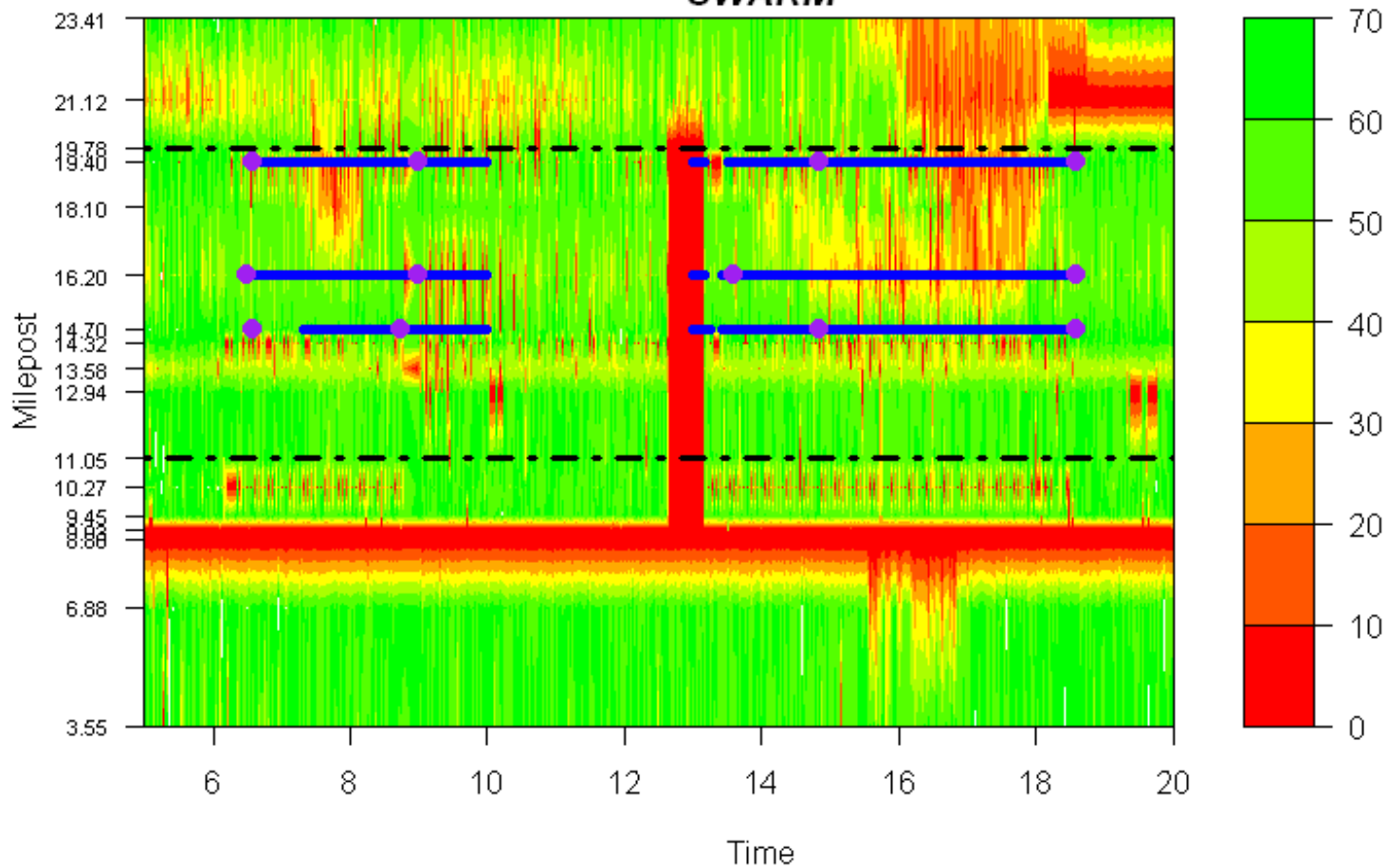
Speed (mph)



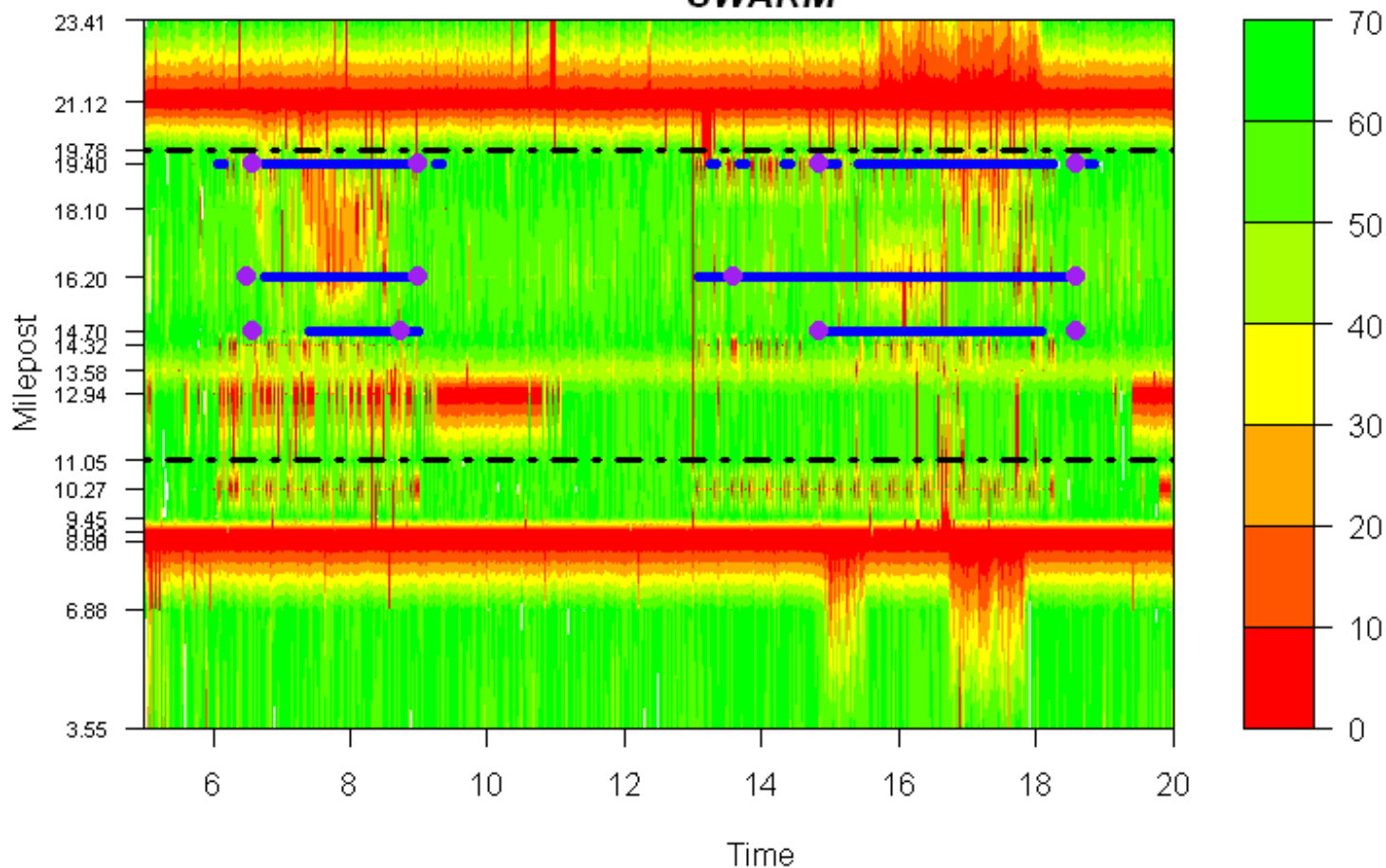
Time Series Speed Contour Plot
I-205NB September 13, 2007
SWARM



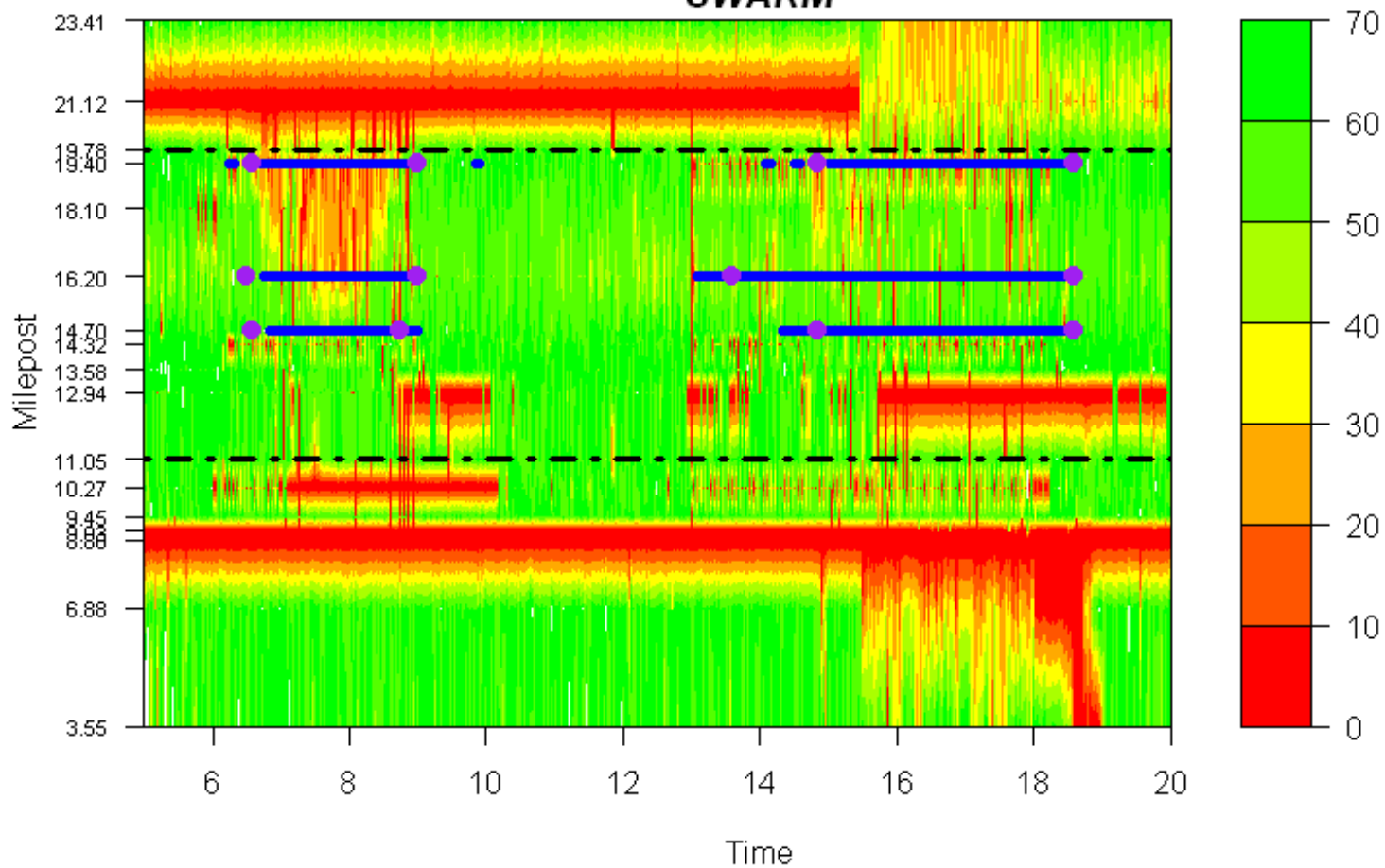
Time Series Speed Contour Plot
I-205NB September 14, 2007
SWARM



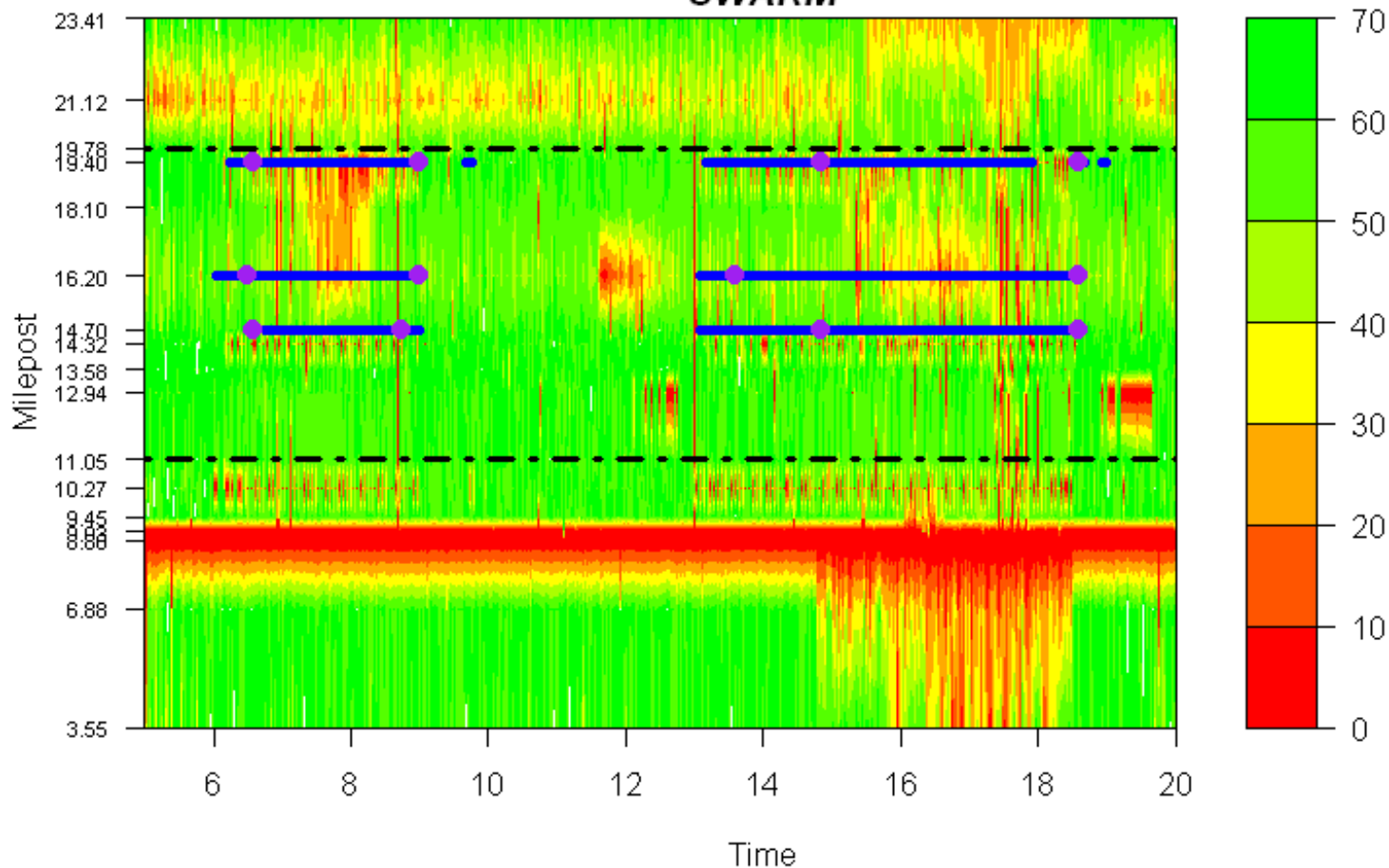
Time Series Speed Contour Plot
I-205NB September 17, 2007
SWARM



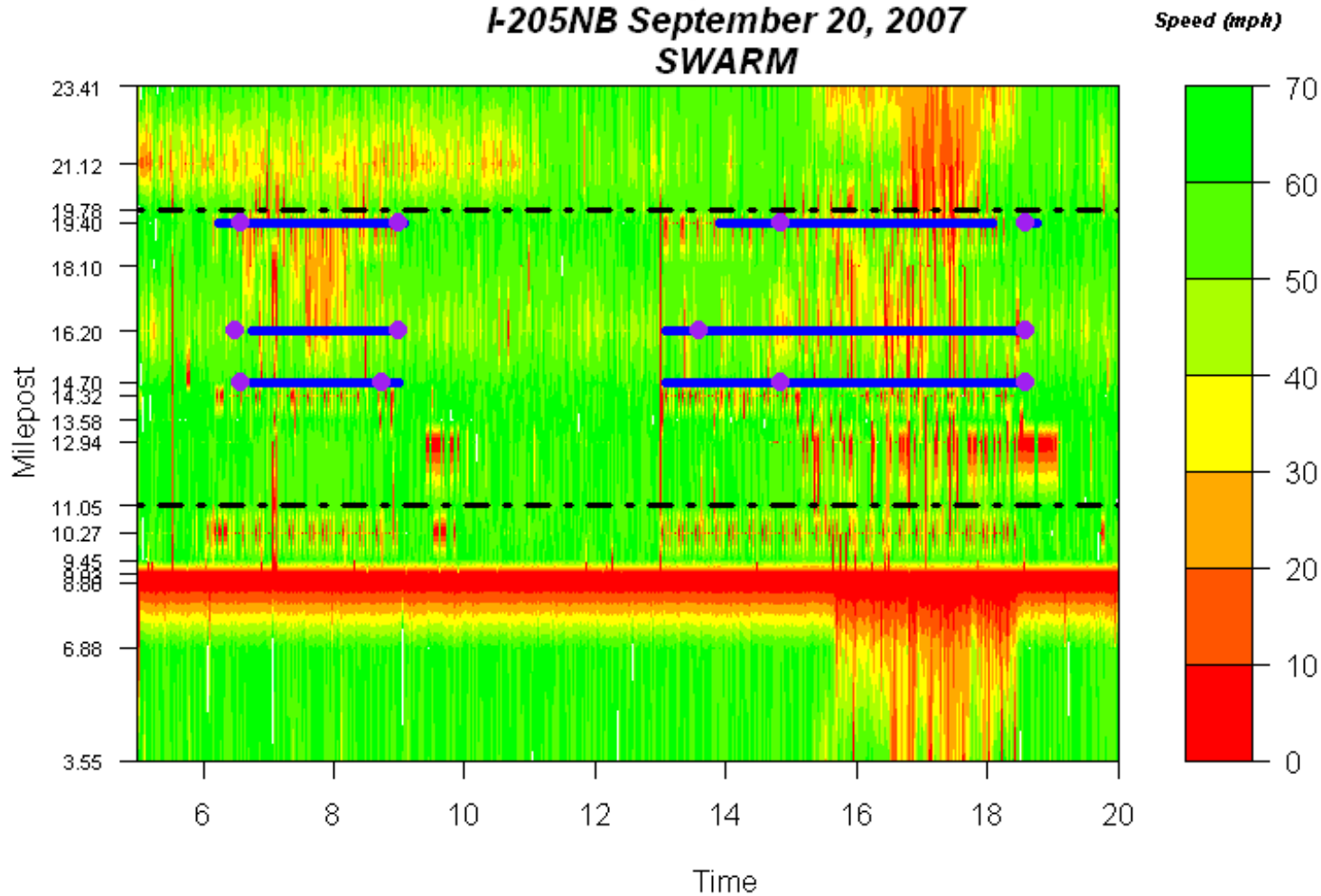
Time Series Speed Contour Plot
I-205NB September 18, 2007
SWARM



Time Series Speed Contour Plot
I-205NB September 19, 2007
SWARM

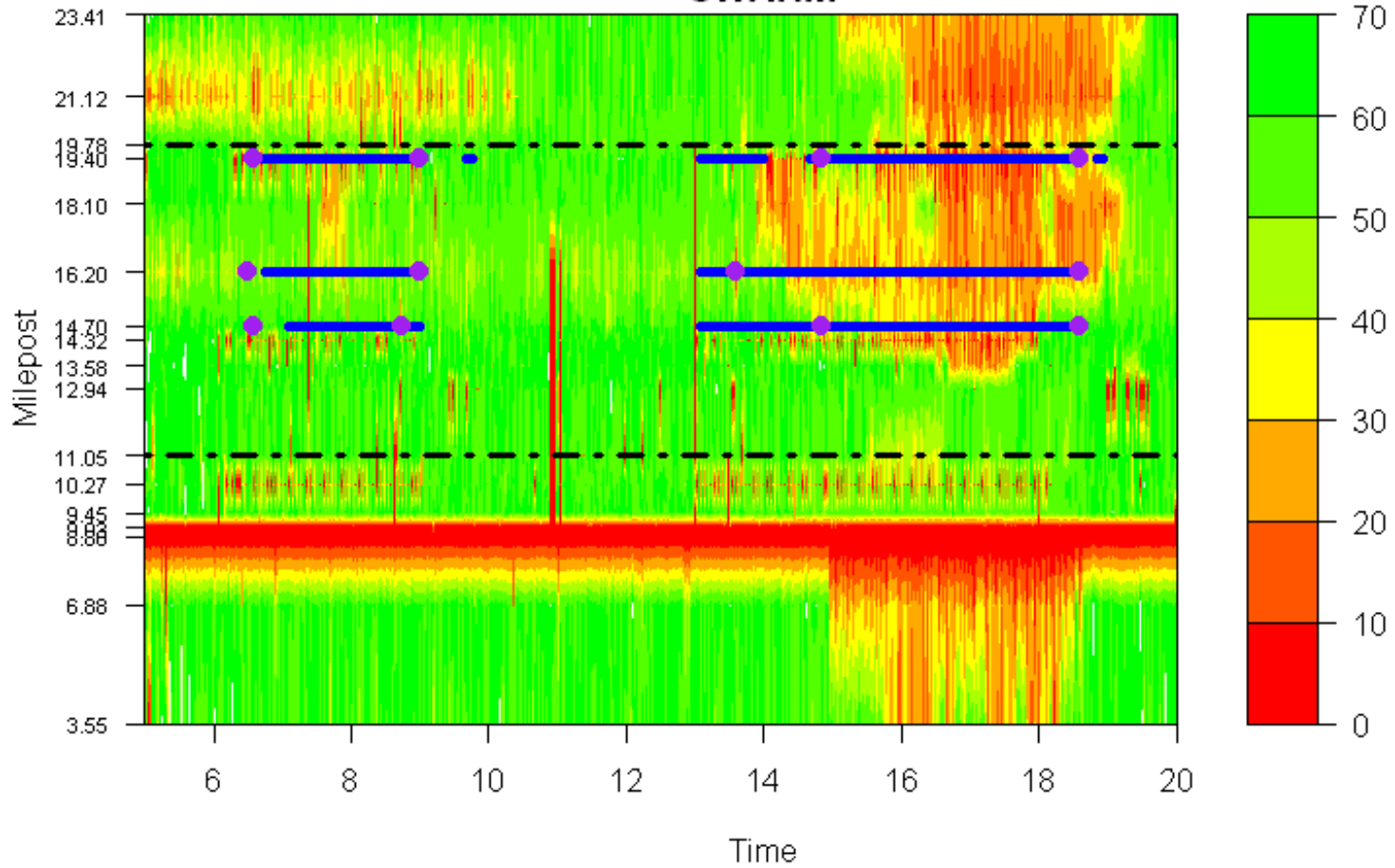


Time Series Speed Contour Plot
I-205NB September 20, 2007
SWARM

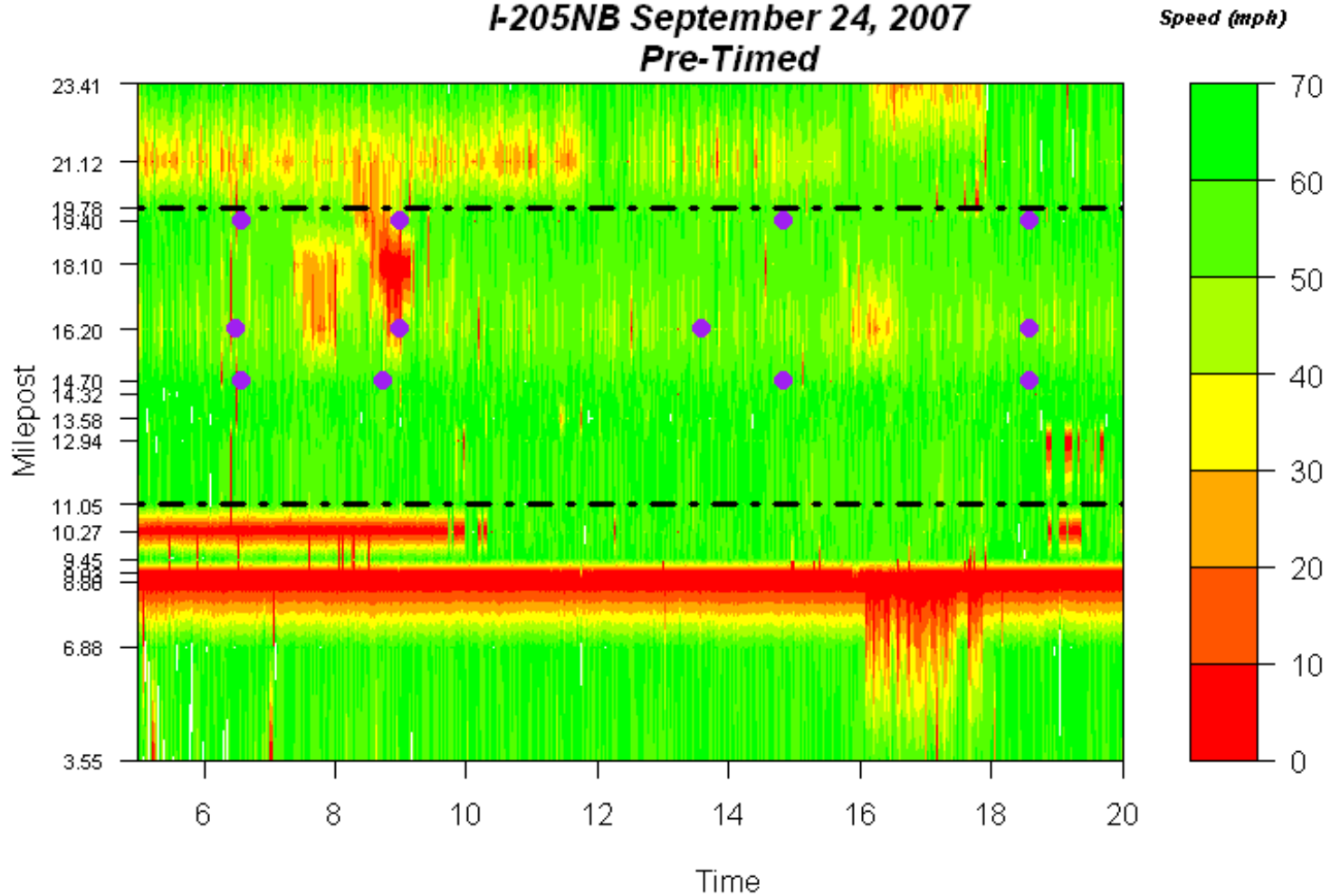


Time Series Speed Contour Plot
I-205NB September 21, 2007
SWARM

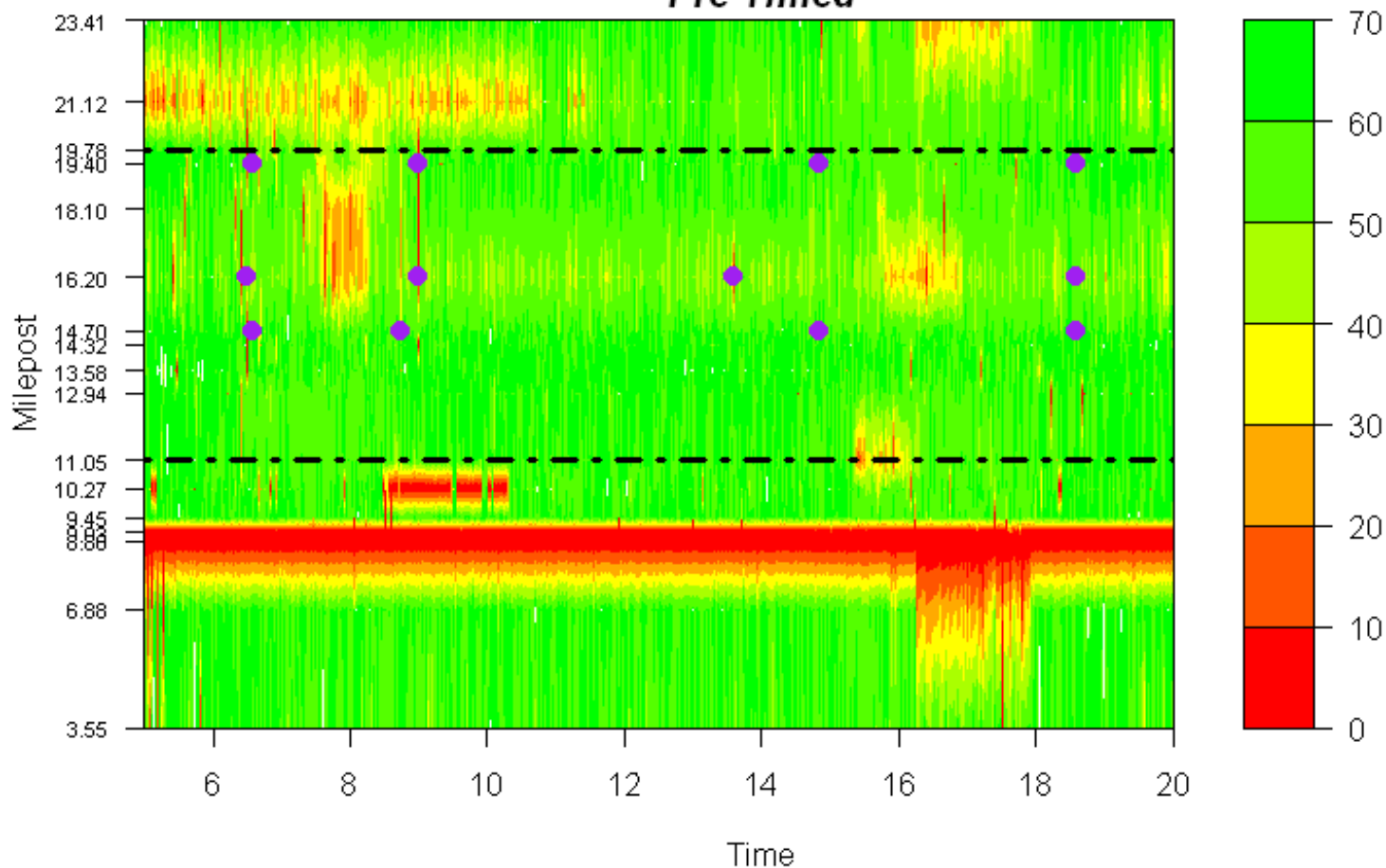
Speed (mph)



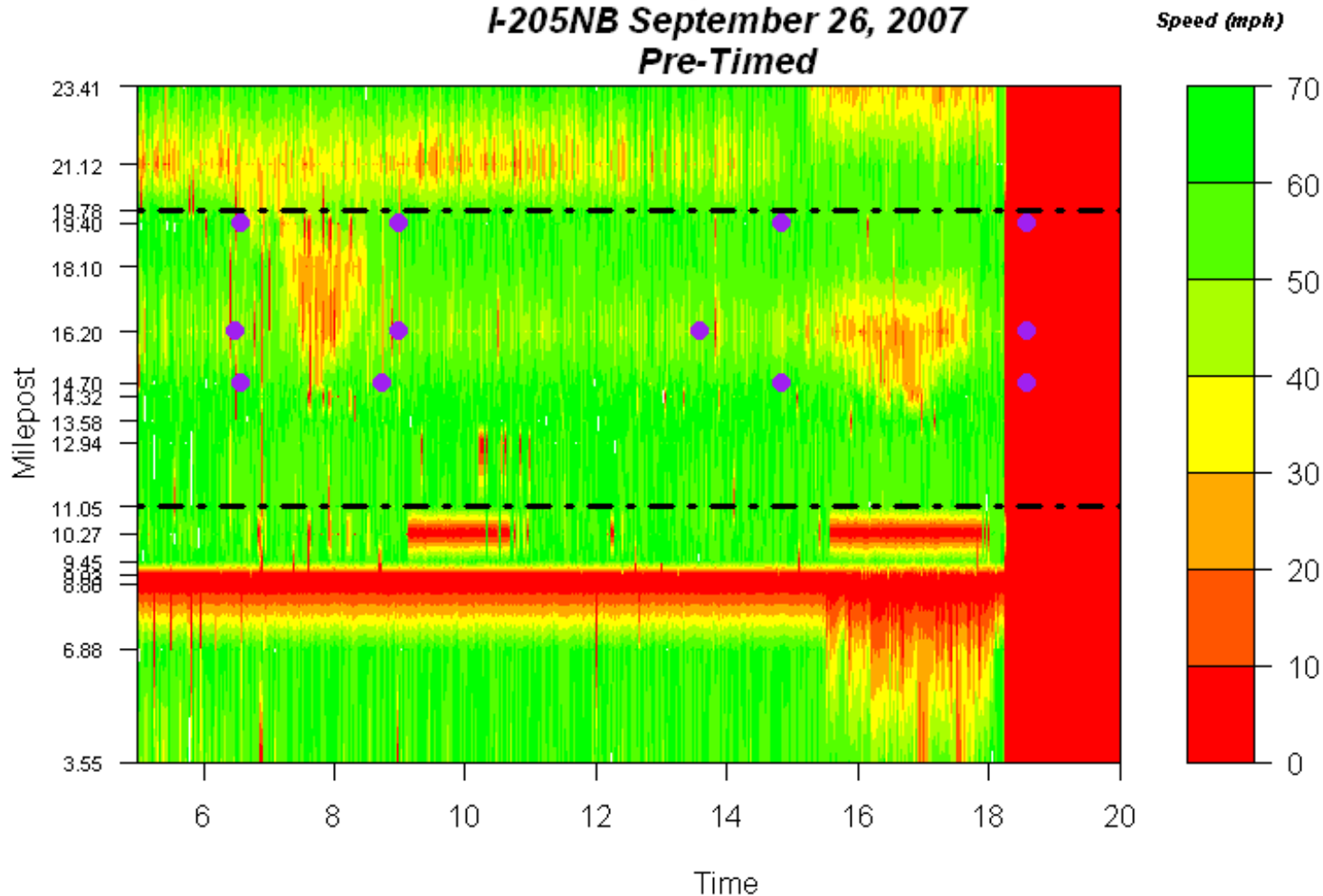
Time Series Speed Contour Plot
I-205NB September 24, 2007
Pre-Timed



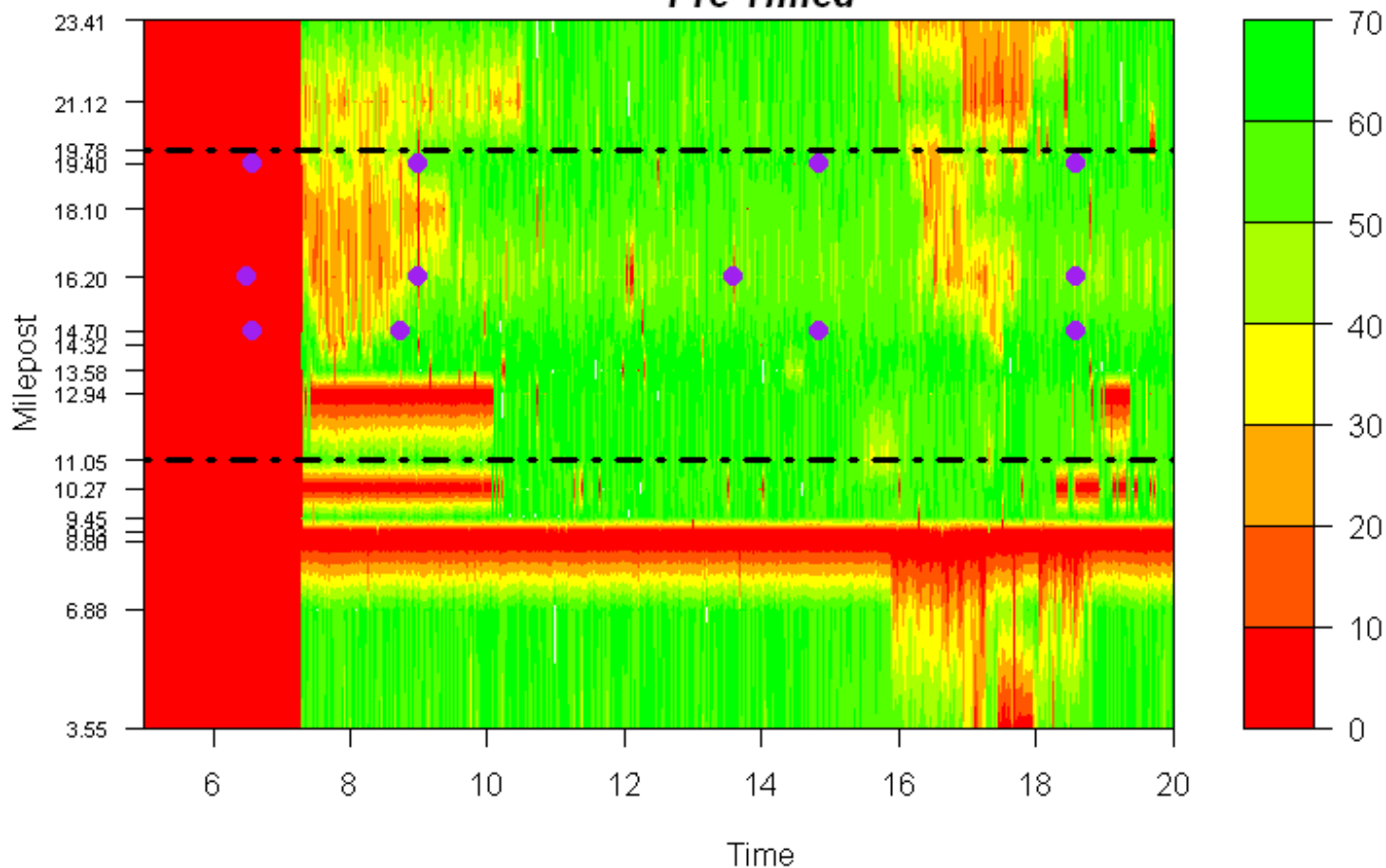
Time Series Speed Contour Plot
I-205NB September 25, 2007
Pre-Timed



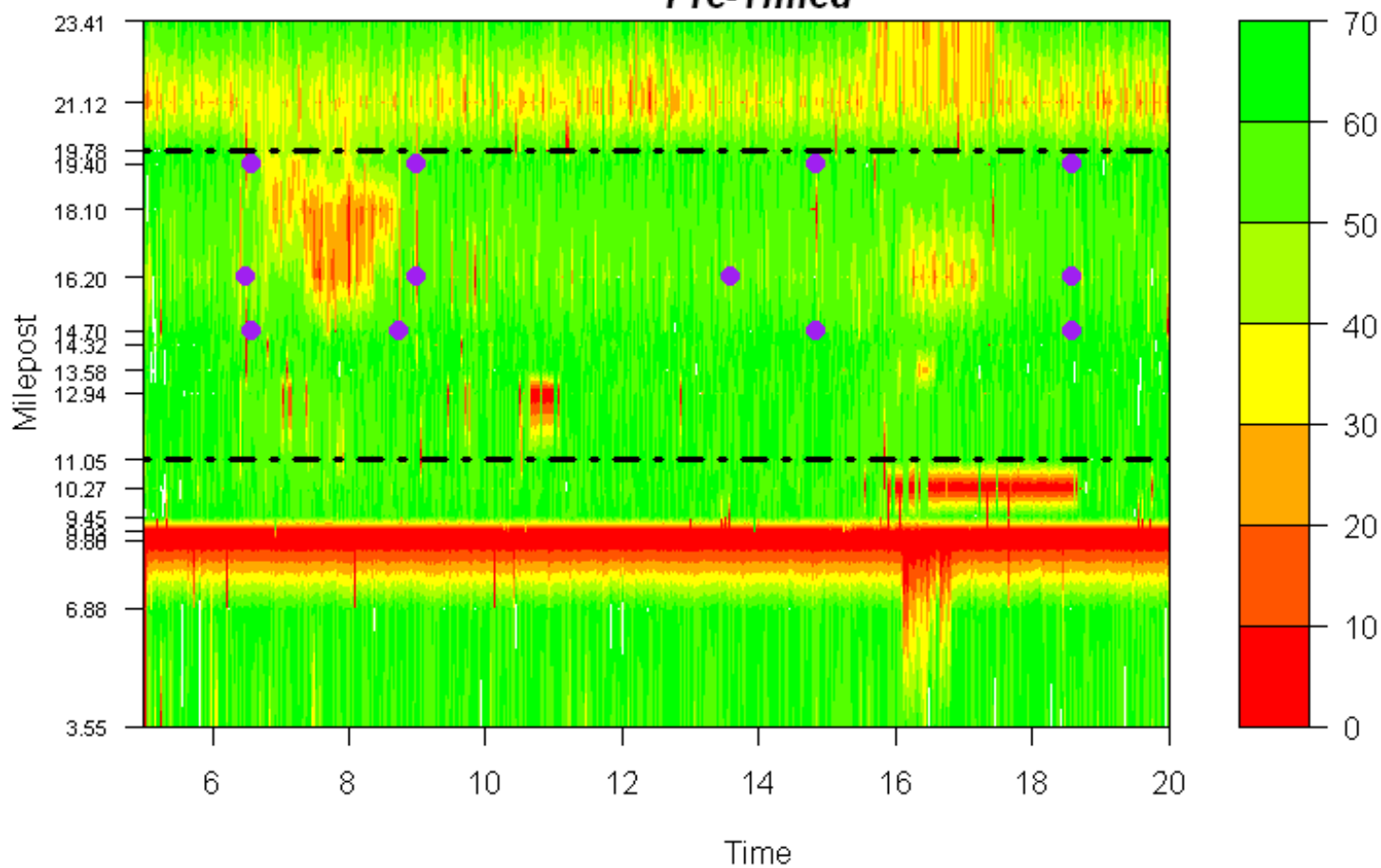
Time Series Speed Contour Plot
I-205NB September 26, 2007
Pre-Timed



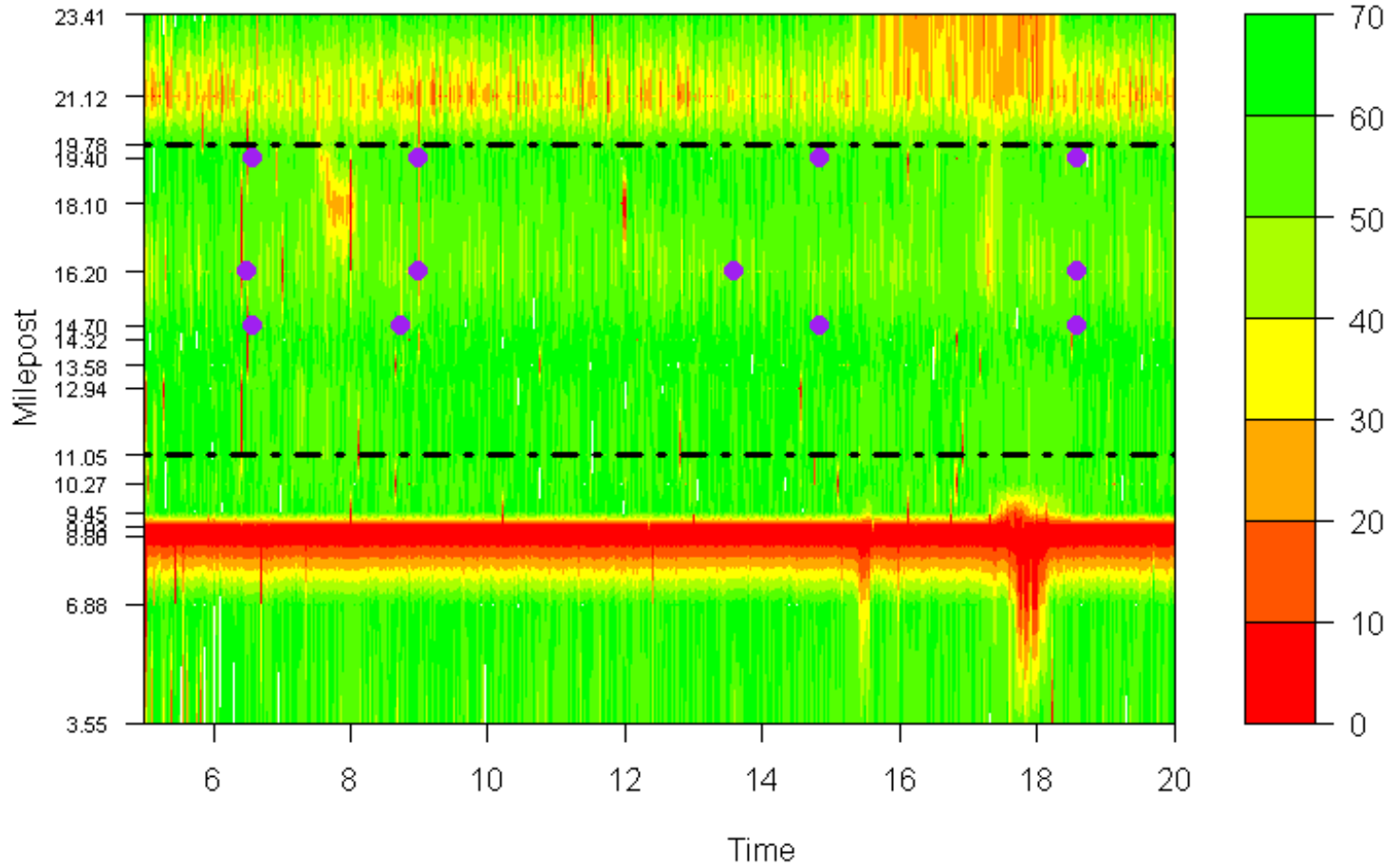
Time Series Speed Contour Plot
I-205NB September 27, 2007
Pre-Timed



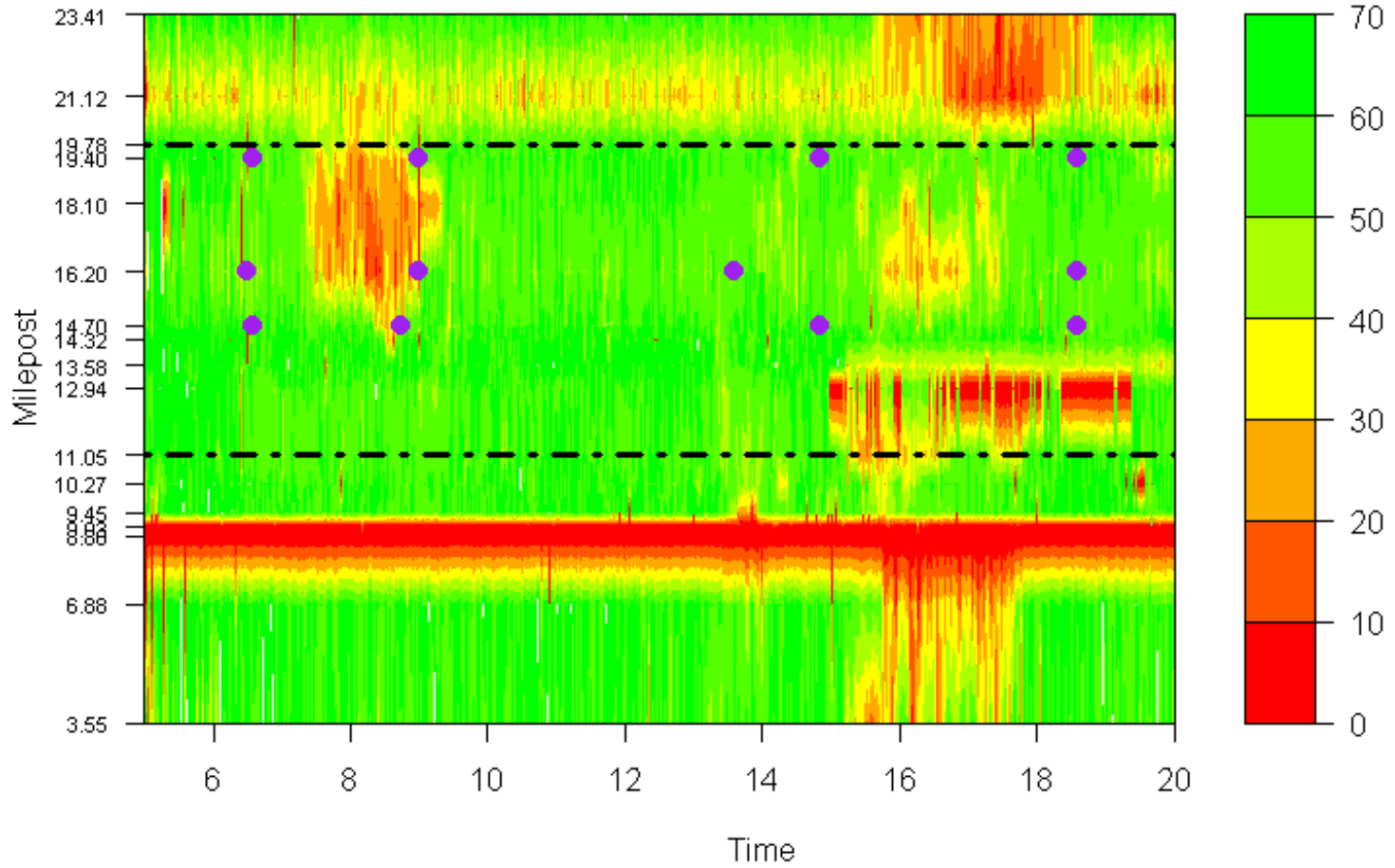
Time Series Speed Contour Plot
I-205NB October 01, 2007
Pre-Timed



Time Series Speed Contour Plot
I-205NB October 02, 2007



**Time Series Speed Contour Plot
I-205NB October 03, 2007**



Time Series Speed Contour Plot
I-205NB October 05, 2007

