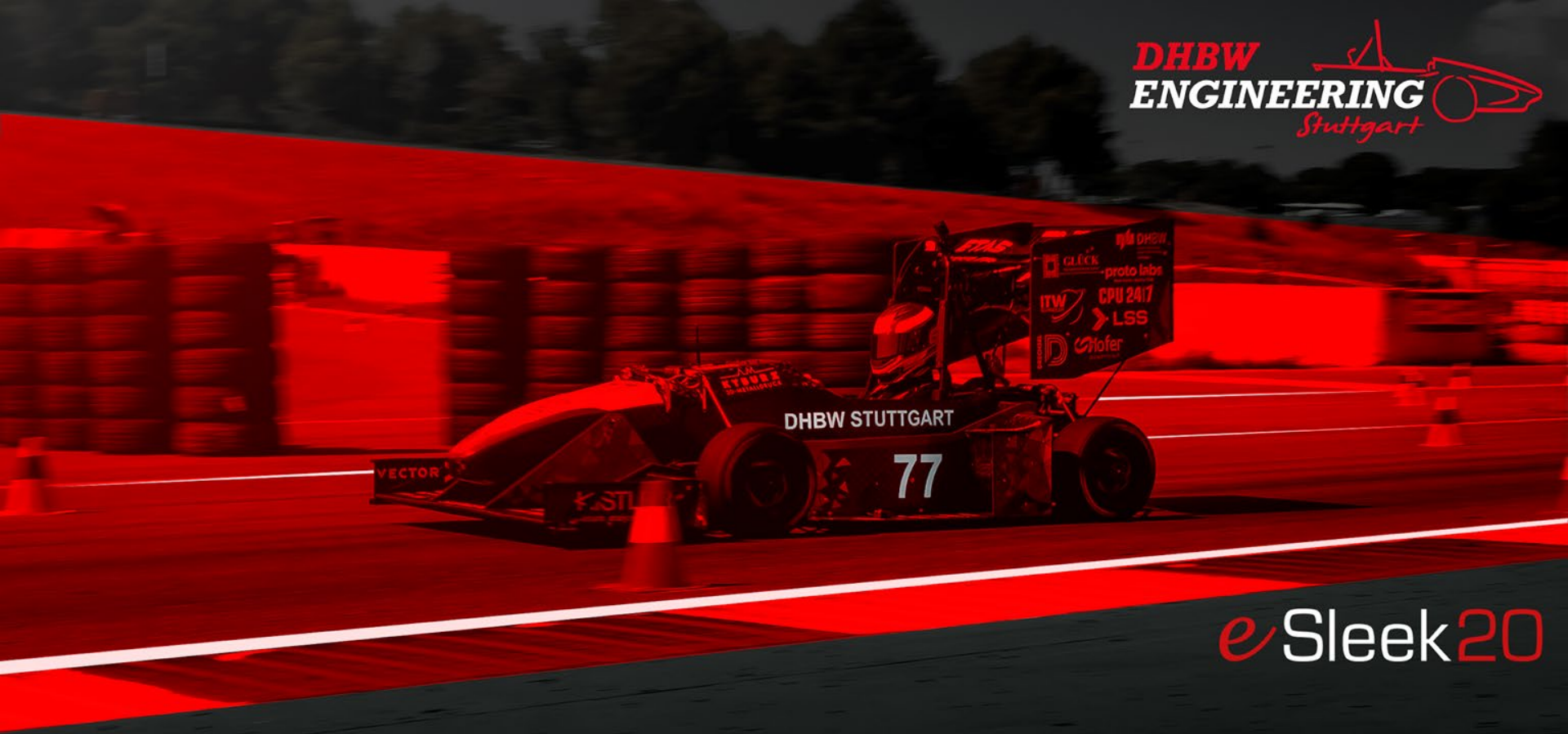
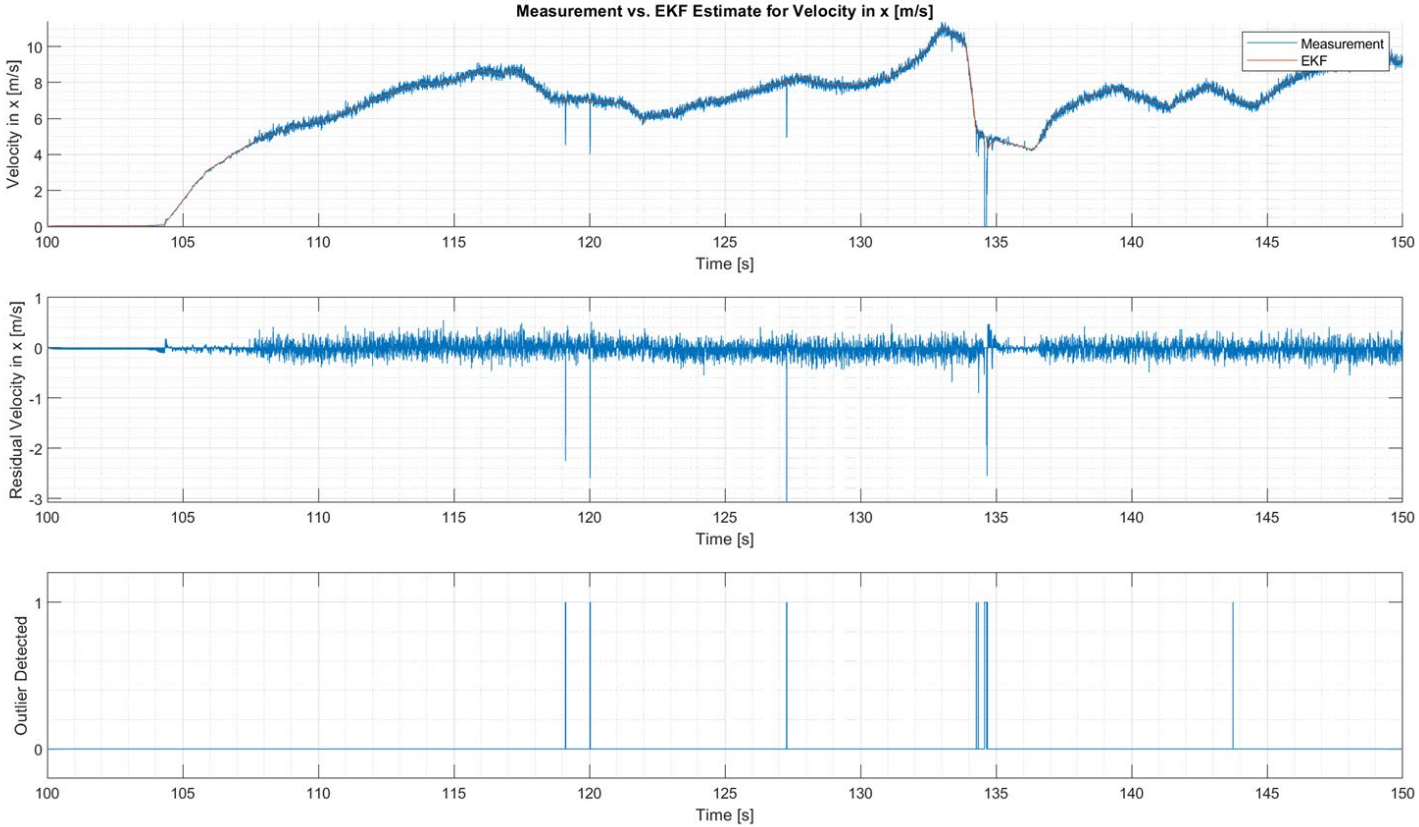


State Estimation

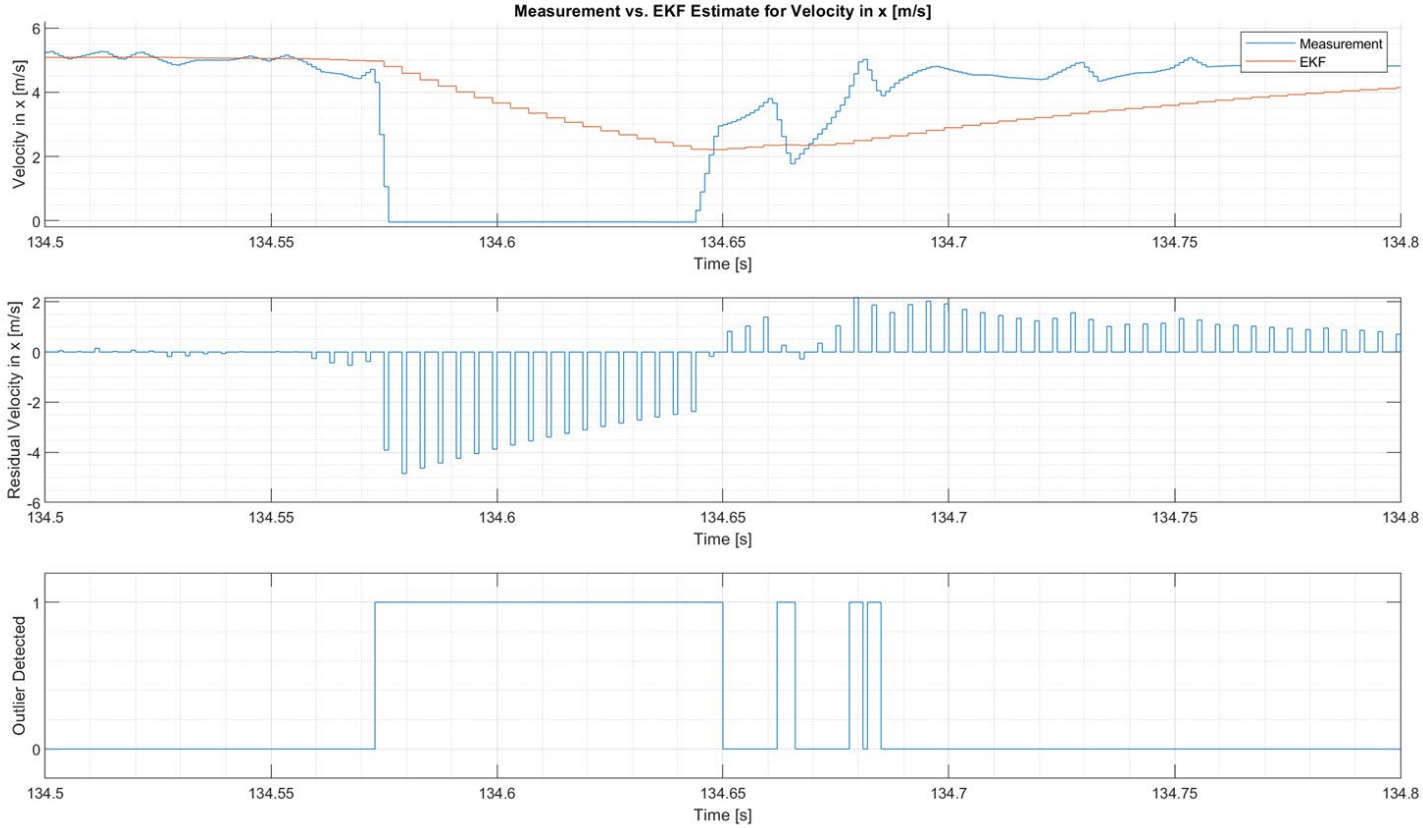
Done

- Plausibility-based outlier detection + debouncing

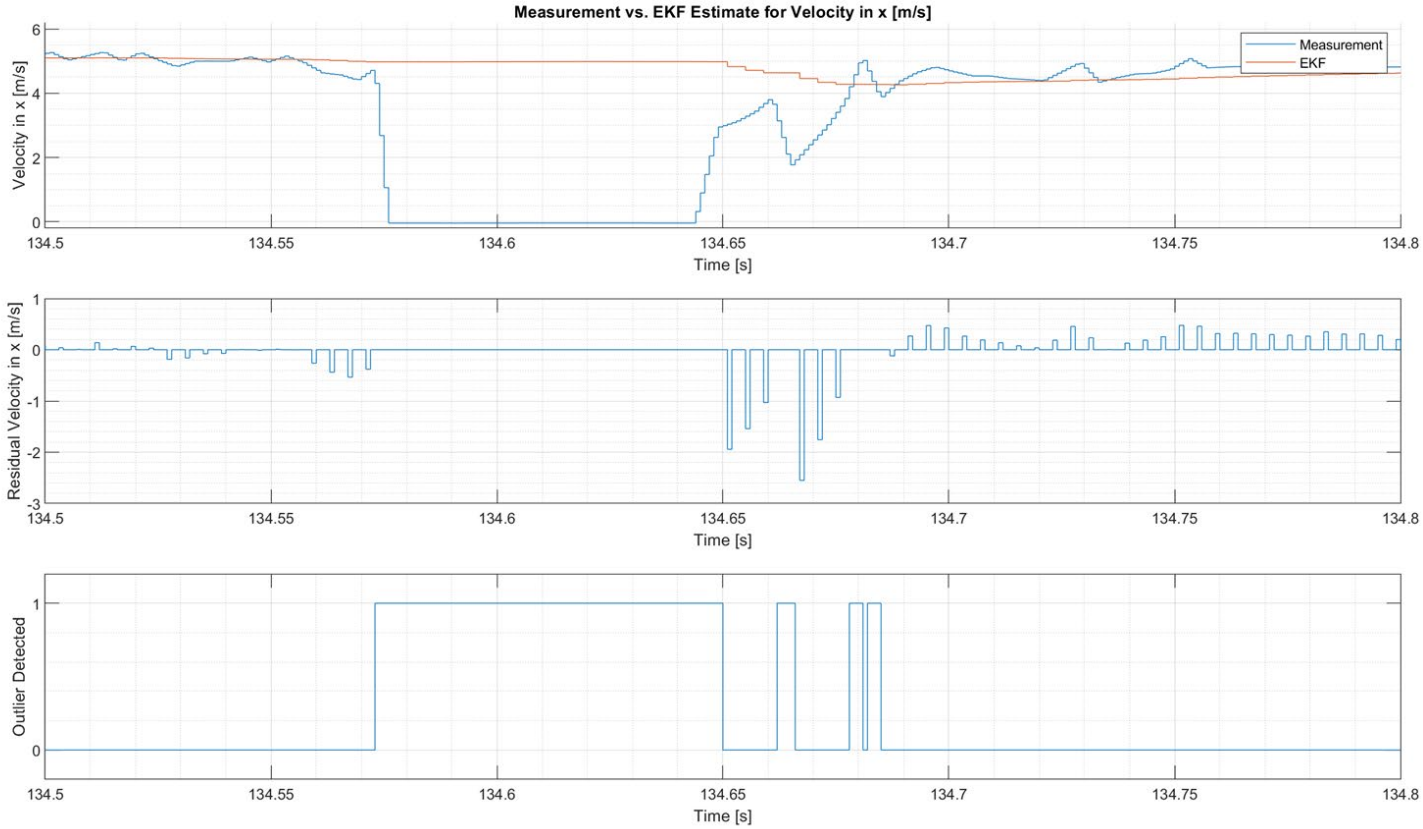
vx with Outlier Detection



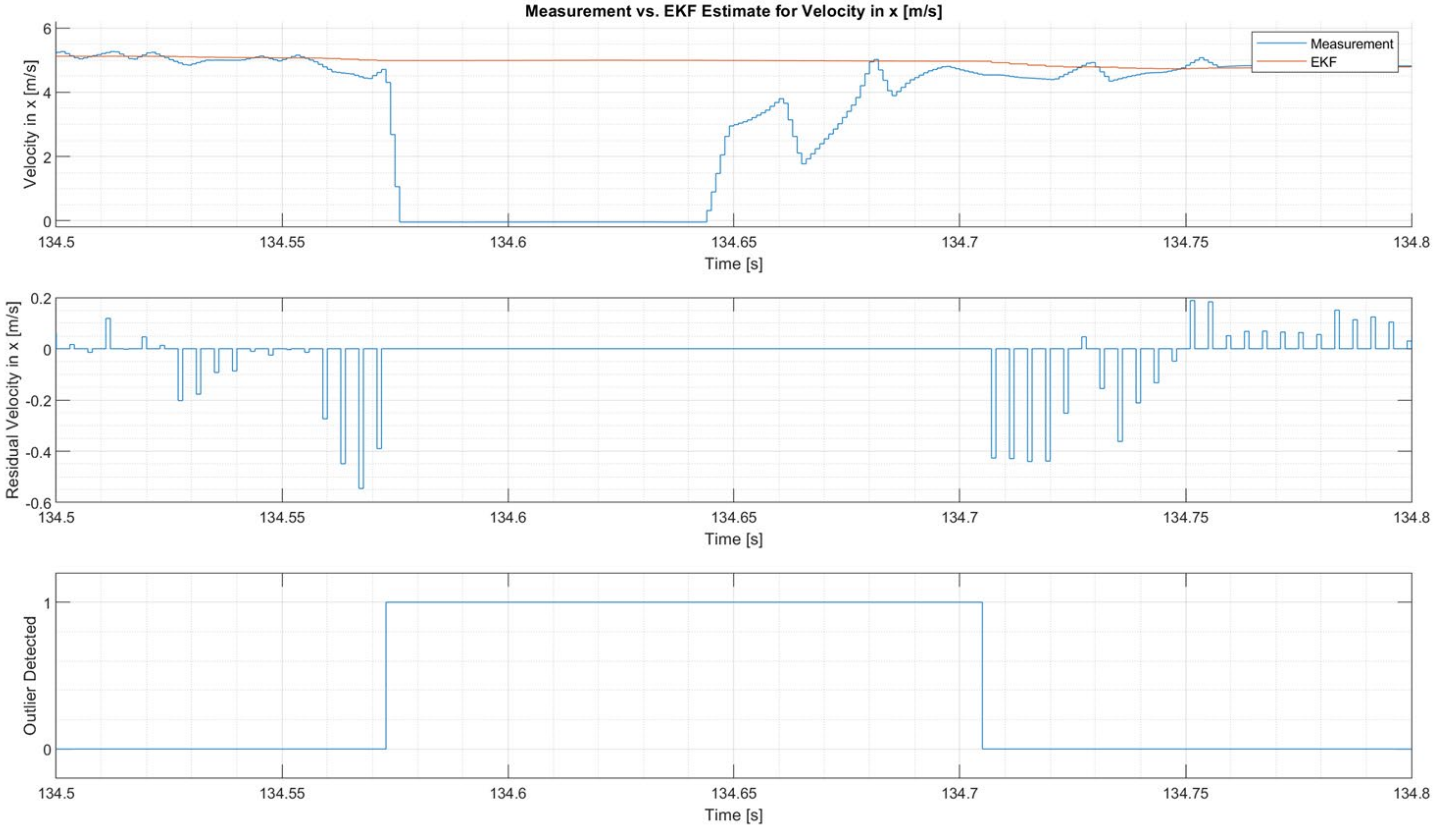
vx without Outlier Detection



vx with Outlier Detection



vx with Outlier Detection + Debouncing (20 ms)



Schedule

Aktuelle KW:	12		Januar					Februar					März					April				
KW/ Bauteil, Verantwortlich	Status [%]	Dead-line	hase					Fertigungsphase														
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
State Estimation (Dominik)																						
Einarbeitung Fahrdynamik	10																					
Einarbeitung State Estimation	80																					
Analyse alte VDC	100																					
Design der Architektur inkl. Schnittstellen	100																					
Aufsetzen des Simulink-Modells	100																					
Pre-Processing-Block	90																					
Input Selector-Block	50																					
Output Selector-Block	50																					
Kalman Filter-Block inkl. Fahrzeugmodell	90																					
Outlier Detection Block	20																					
Wheelspeed-based Velocity verbessern (optional)	0																					
Applikation EV + DV	0																					
Studienarbeit	0																					

Next steps

- Test statistics-based approach instead of max. change rate
- Kalman Filter Bank for vx, vy
  - Able to detect persistent outliers