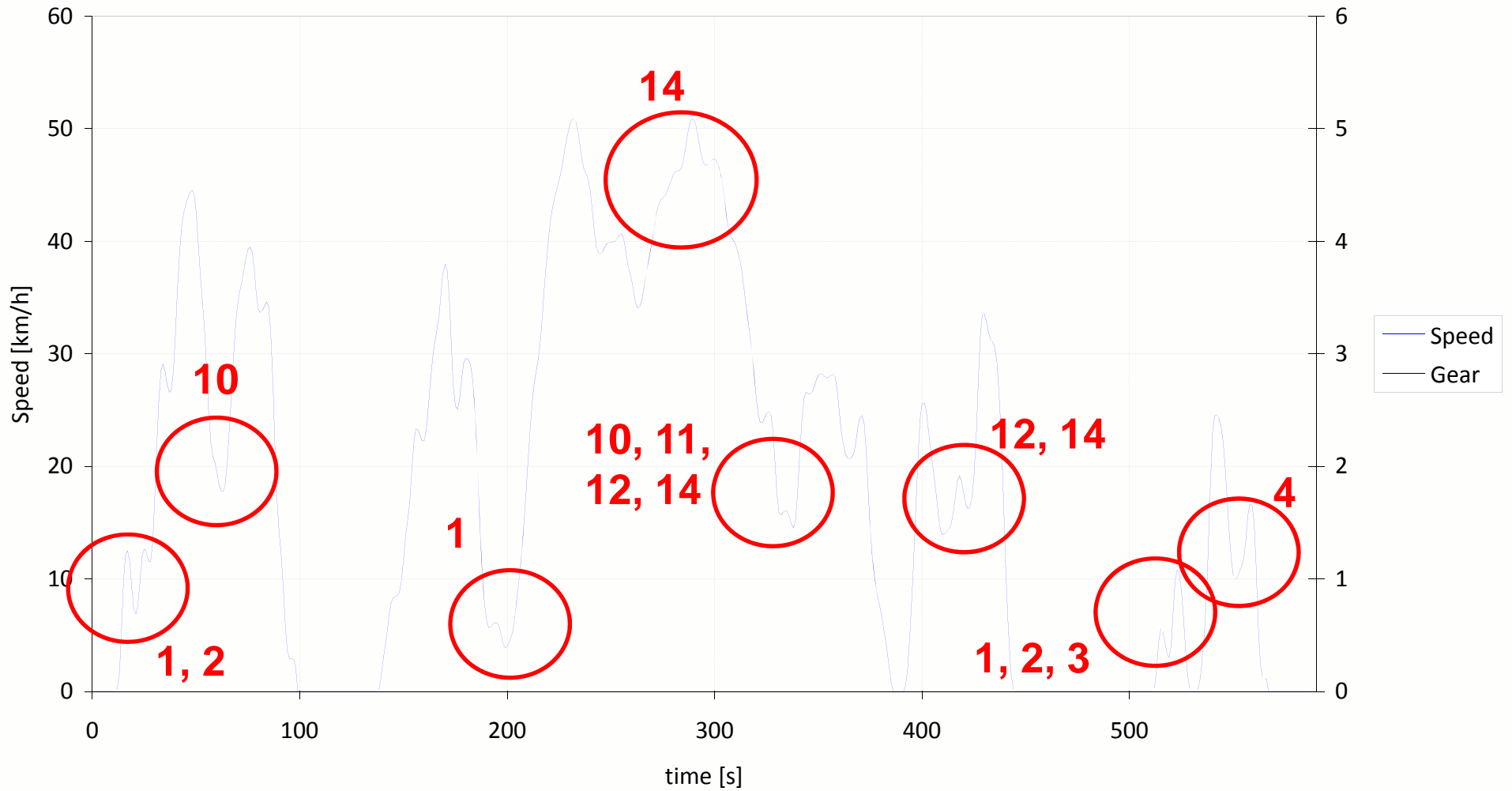
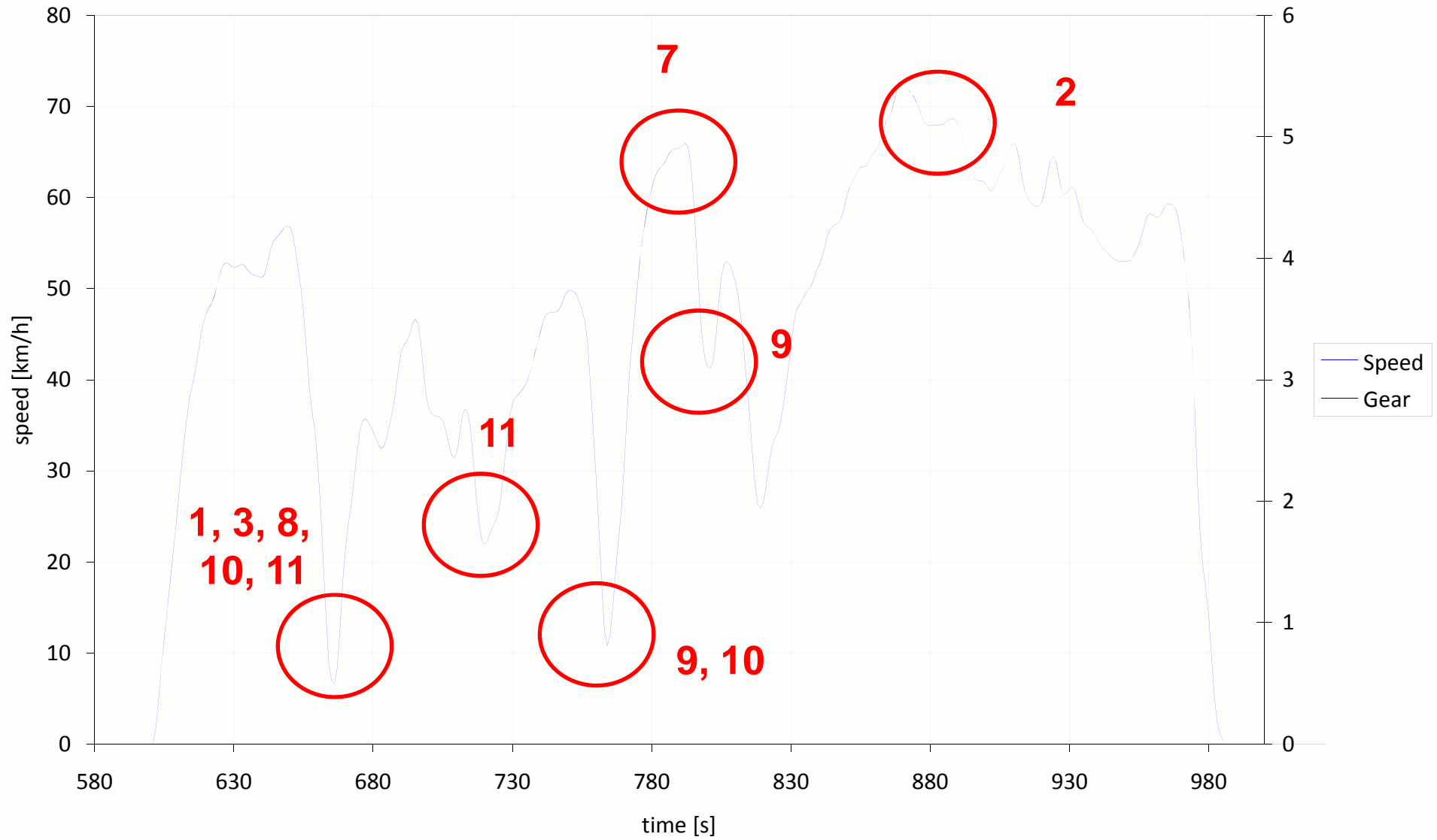


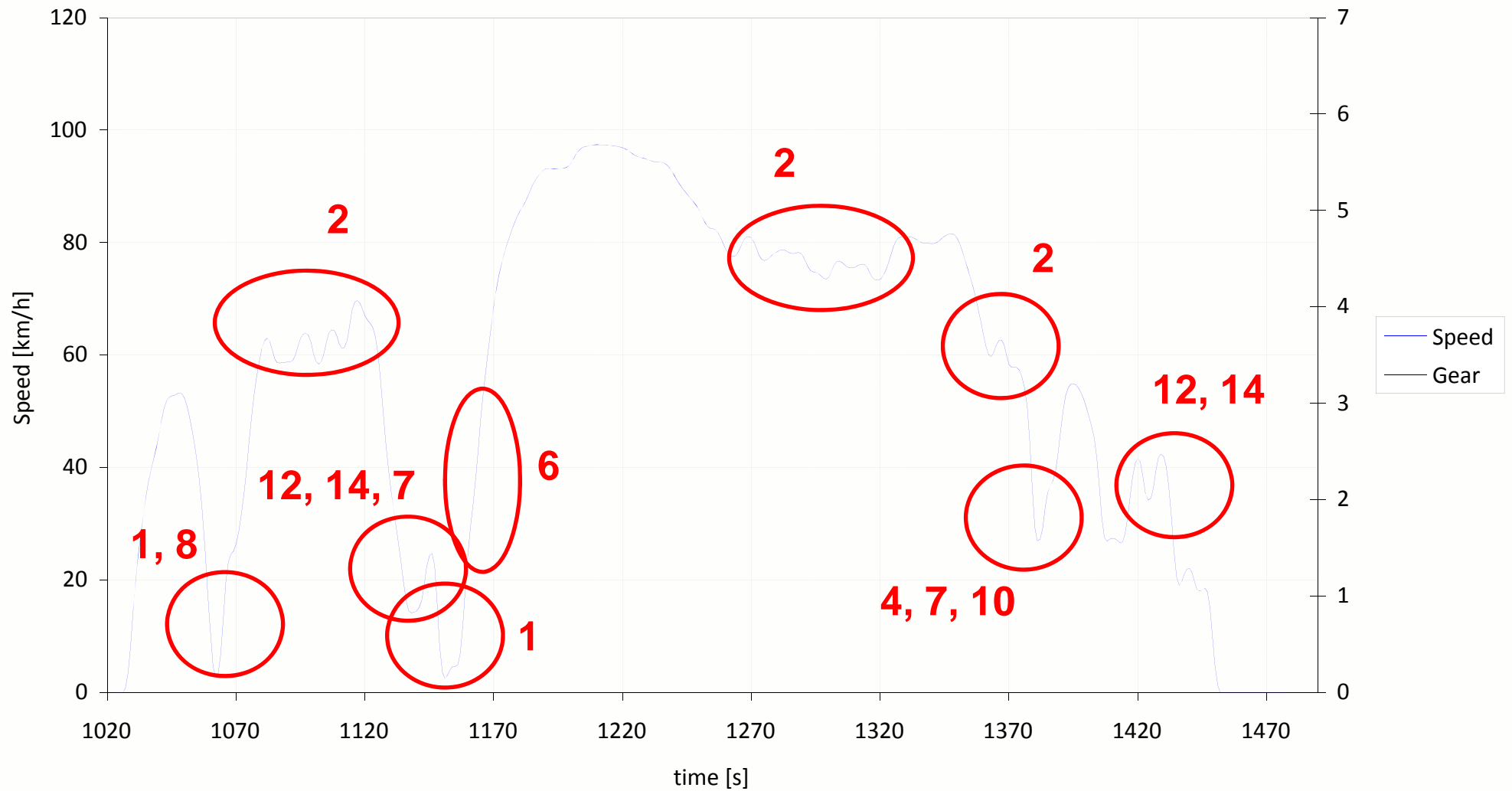
ACEA observations – Low speed WLTP cycle part:



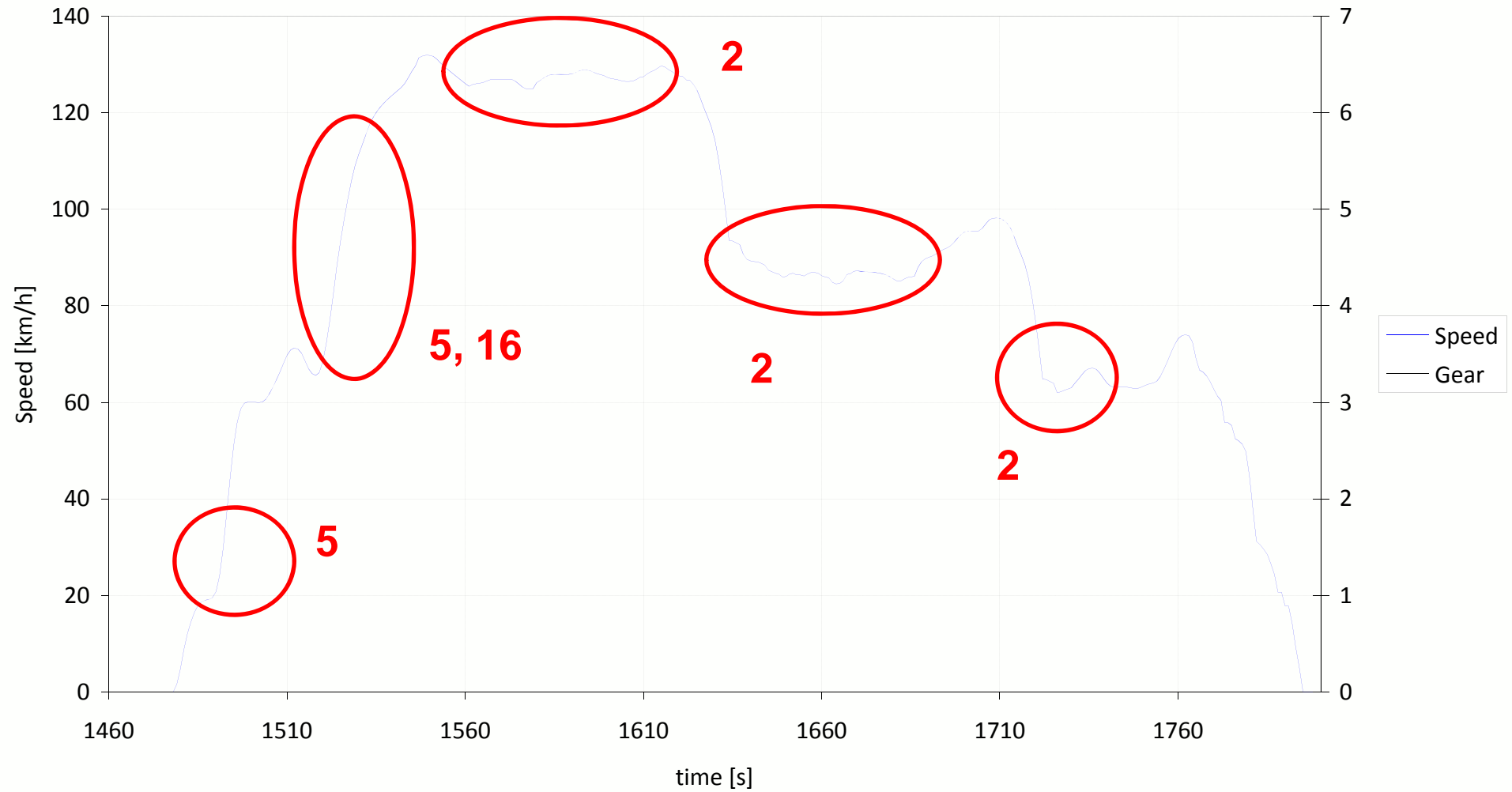
ACEA observations – Mid speed WLTP cycle part:



ACEA observations – High speed WLTP cycle part:



ACEA observations – Extra-High speed WLTP cycle part:



Concern #	Vehicle	Gear Shift	Vehicle Condition	Test series #	Comments				Remarks
					Low	Middle	High	Ex-High	
1					15s, 200s, 520s	665s	1061s, 1153s		Driving at v <12 km/h could be avoided in order to reduce variability. Low engine speed. <u>must slip clutch.</u>
2					15s, 520s	890s	1080s, 1270s, 1363s	1560s, 1640s, 1730s	Micro transients tempting to cut corners
3					520s				Short trip should be replaced
4					553s	665s	1382s		Busy driving: accel, shift gear - decel. Timing is difficult.
5								1490s, 1520s	Hard acceleration. Cannot follow cycle. Gear shift schedule and/or cycle needs to be adapted.
6							1165s		Hard acceleration. Possible torque steer effect. Gear shift schedule and/or cycle needs to be adapted.
7						793s	1146s, 1382s		Transition from acceleration to sharp deceleration difficult to follow (auto gearbox)
8						665s	1061s		Transition from sharp deceleration to acceleration at very low speed difficult to drive
9						765s, 800s			Transition from sharp deceleration to acceleration difficult to drive

10		Japan			63s, 340s		1382s		Down shift in transition from decel to accel should be avoided. Down shift before transition to allow
11		Steven			63s, 340s	665s, 720s			Down shift in transition from decel to accel should be avoided. Down shift before transition to allow engine braking.
12		Japan			330s, 412s		1140s, 1440s		Low engine speed
13		Japan							High engine speed
14		Steven			278s, 295s, 330s, 412s		1140s, 1440s		Low engine speed
15		Steven							High engine speed
16		Japan						1520s	Rapid gear changes for LCV