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Comparison linear regression method to define TRT vs. FE results

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IWG DPPS – HIT vs. WAD – linear regression – summary

Deviations between linear regression and calculated Head Impact times in all of the cases <3% for certificated HBM's.

No negative effects for TRT observed using linear regression method, TRT does not go lower than head impact time of 6yo child.

Deviation [%]					
#	Certification	6yo Child	5% Female	50% Male	95% Male
1	NO, 40kph	5,0%	-9,0%	4,0%	0,0%
2	NO, 45kph	4,6%	-10,0%	4,2%	1,3%
2	YES, 45kph	0,8%	-2,6%	1,9%	no contact with bonnet
3	YES, 45kph	0,0%	0,1%	0,0%	no contact with bonnet
4	YES, 45kph	1,0%	-1,0%	1,0%	no contact with bonnet
5	YES, 45kph	1,0%	-2,0%	1,0%	no contact with bonnet

$$Deviation = \frac{HIT_{model} - HIT_{Trendline}}{HIT_{model}}$$

Negative Deviation: later head impact in linear regression assumed that calculated in FE model

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