DynaMIT2.0: architecture design and preliminary results on real-time data fusion for traffic prediction and crisis management - DTU Orbit (08/11/2017)

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The ability to monitor and predict in real-time the state of the transportation network is a valuable tool for both transportation administrators and travellers. While many solutions exist for this task, they are generally much more successful in recurrent scenarios than in non-recurrent ones. Paradoxically, it is in the latter case that such tools can make the difference. Therefore, the dynamic traffic assignment and simulation based prediction system such as DynaMIT (1) demonstrates high effectiveness in the context of sudden network disturbance or demand pattern changes. This paper presents the design, development and implementation of new components and modules of DynaMIT 2.0 which is an extension of its predecessor with recent enhancements on online calibration, context mining, scenario analyser and strategy simulation capability. Also, some preliminary results are presented using Singapore expressway to show the actual benefit of the system.

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