

# ITS Sensing Vehicle ARGUS and MAESTRO

## for Virtual City Modeling and Driver Behavior Analysis

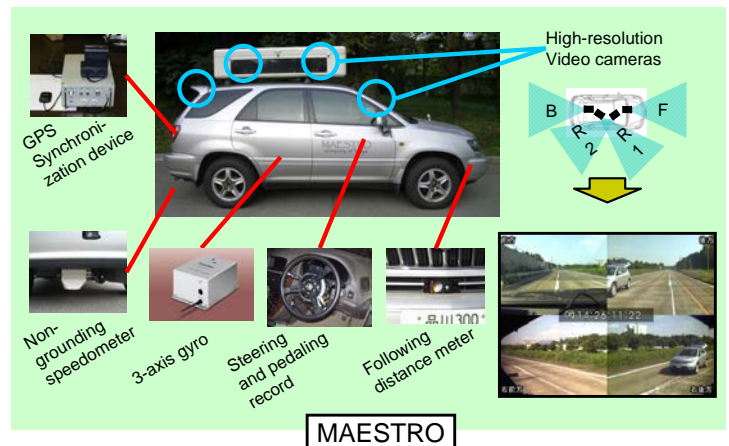
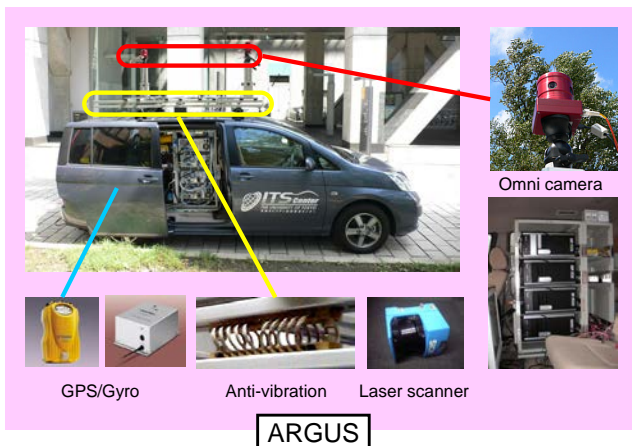
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In recent ITS, quality levels required in reconstruction/representation of virtual city models, analysis of drivers behavior and driving environment, etc. have been becoming more higher. Meanwhile, technologies for acquiring and processing real-world information for such issues are still not well-established.

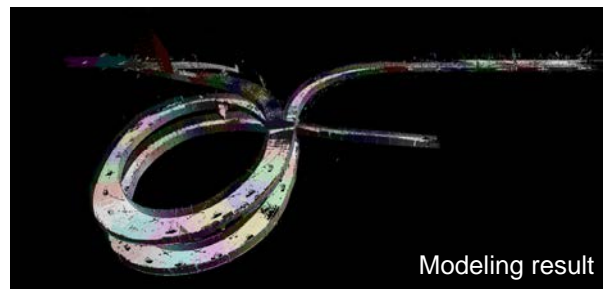
The members of our ITS Center have been developing platforms and methods to acquire and process real-world information through designing a special sensing vehicle: ARGUS, the novel one, is mainly for static environment i.e. geometric/photometric information of constructs. MAESTRO, originally developed by Kuwahara and Akahane Lab, is mainly for dynamic behaviors including self/peripheral vehicles and drivers.

In March 2010, we had a chance to measure the Ohashi Junction in Metropolitan Expressway before it is opened to traffic. Ohashi Jct. connects the new underground route #C2 and existing route #3 with the double-looped tunnel, which is one of the most complicated road structure in Japan. We have applied our 3D modeling technology, which had been developed through the mission of digitally archiving of cultural assets, and succeeded to construct the 3D model of the Jct. in around 6 hours.

### ITS sensing vehicles



### Modeling Ohashi Jct. in MEX



From a brochure issued by Metropolitan Expressway Co. Ltd.

Modeling result