

視程障害移動観測車

Visibility Observation Vehicle

道路における吹雪対策施設や吹雪による視程障害を研究する場合、実際のドライバーの視点にたった気象条件を把握することが大変重要です。視程障害移動観測車は、視程計や風速計をはじめとする気象計器を搭載し、道路上を移動しながら精細な吹雪現象を観測できる車両として開発したものです。さらに道路気象のほか、ドライバーの運転挙動の計測も同時に実施できるユニークなものとなっています。

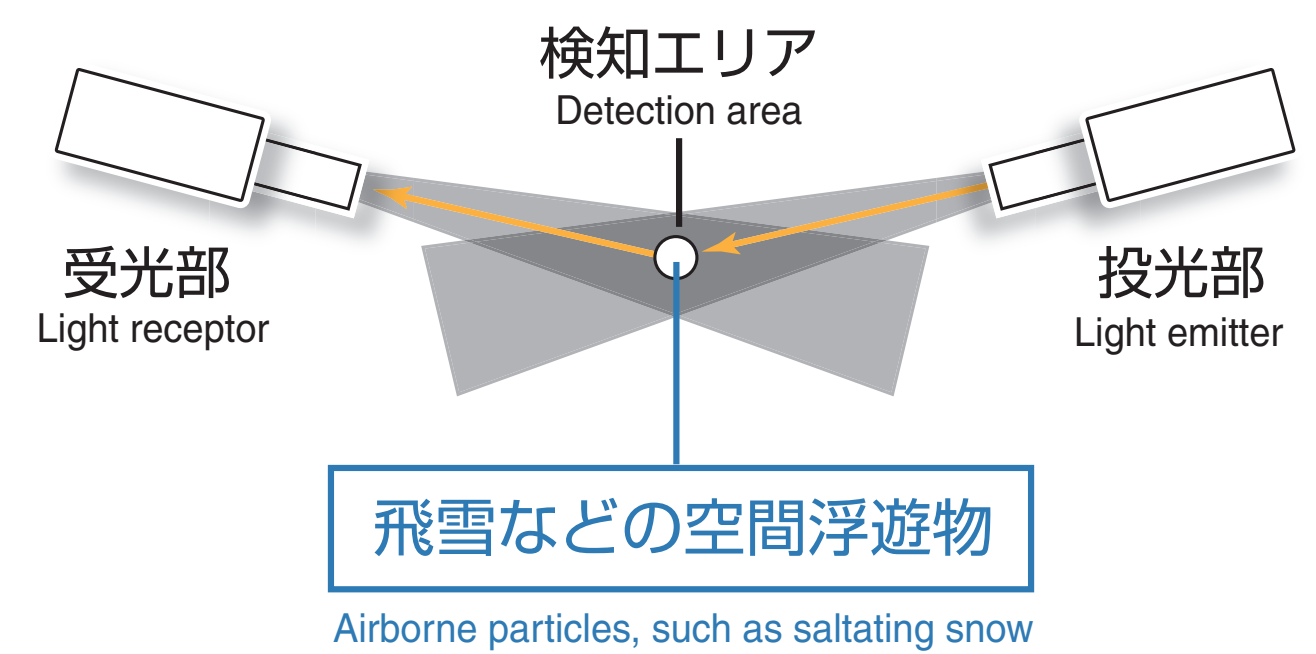
Understanding the weather conditions from the viewpoint of the vehicle driver is very important when studying blowing-snow control facilities and visibility hindrances caused by blowing snow. The visibility observation vehicle was developed as a vehicle that is able to observe snowstorm phenomena in detail while moving on the road by using various meteorological devices, including a visibility meter and an anemometer. The visibility observation vehicle that was developed is unprecedented in its ability to measure and record the driver's behavior in addition to collecting road weather data.

視程障害移動観測車のシステム構成 System Components of the Visibility Observation Vehicle

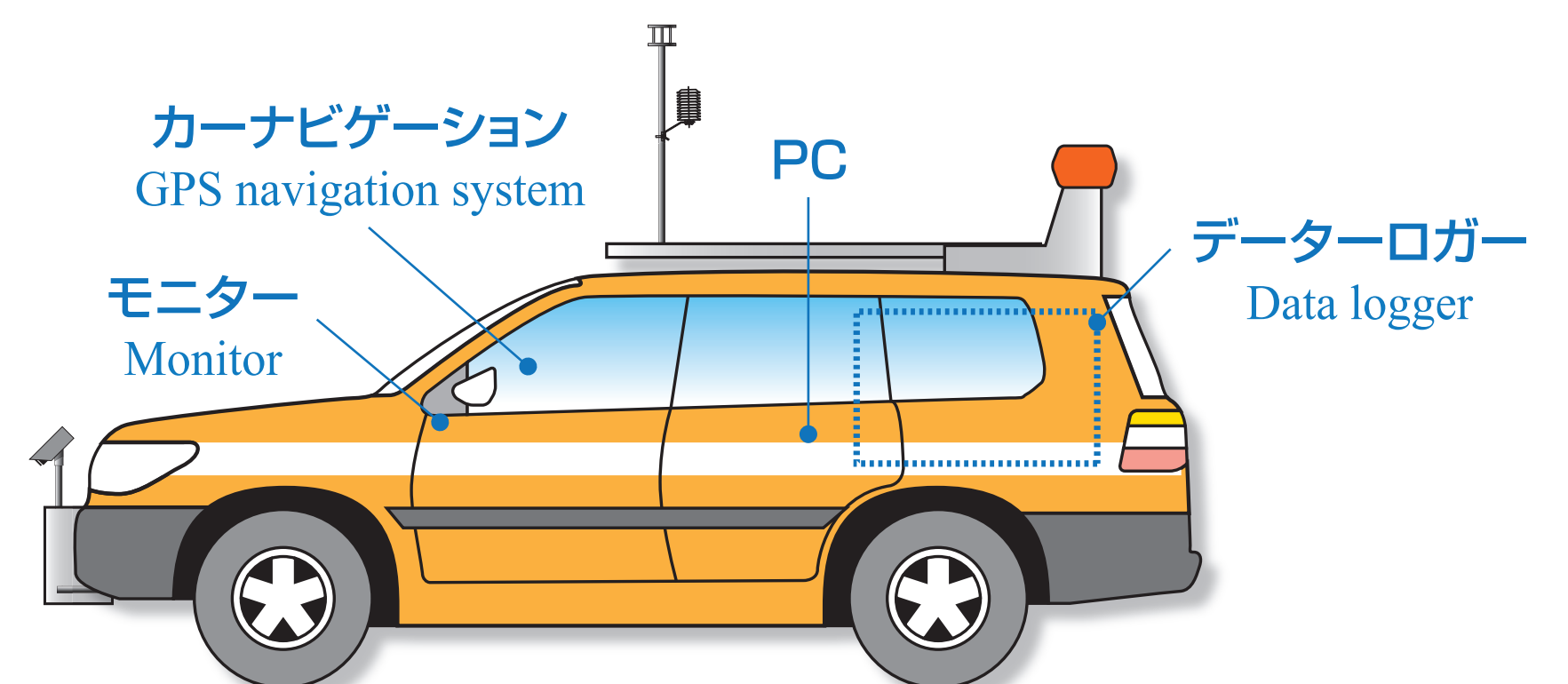


種 別 Categories of Measurement	計 測 項 目 Measured Data
気象状況 Weather condition	視程、風向風速、気温、車外画像 Visibility; wind direction & velocity; temperature; and views from the vehicle
走行状態 Driving condition	GPS位置、速度、加速度 GPS position; driving speed; and acceleration
運転挙動 Driver behavior	操舵角、アクセル踏量、ブレーキ踏力 Steering angle; accelerator position; brake pedal pressure

視程計(側方散乱方式)の動作イメージ Mechanism of the visibility meter (side-scatter)

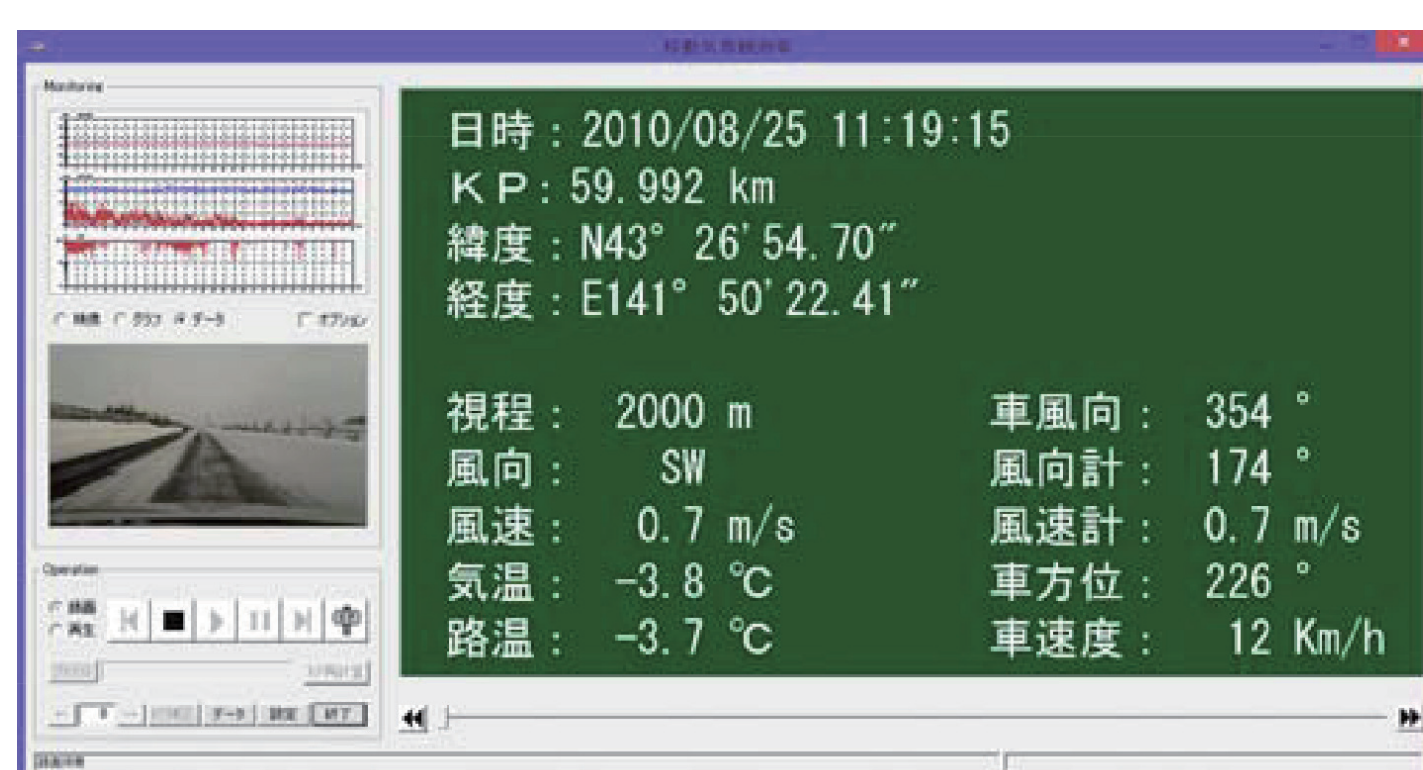


側面図
Side view



視程障害移動観測車は様々な計測機器を搭載し、車載したパソコンに0.1秒間隔でデータを取り込みます。また、車内からの映像を記録します。

The vehicle is equipped with a variety of meters that feed the measured data to the PC on board every tenth of a second. In addition, the view from the vehicle is video-recorded.



▲観測状況
Screen showing observation results

