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IRIS thermovision

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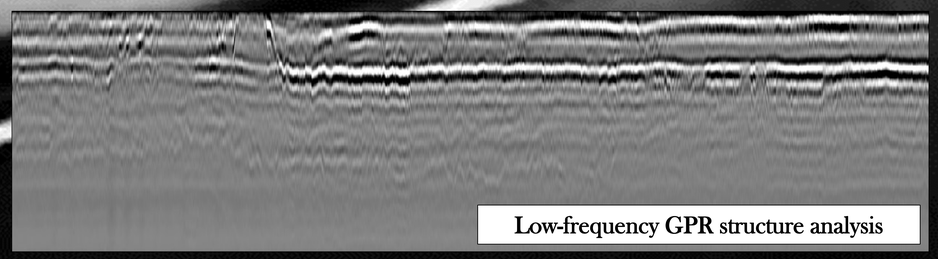
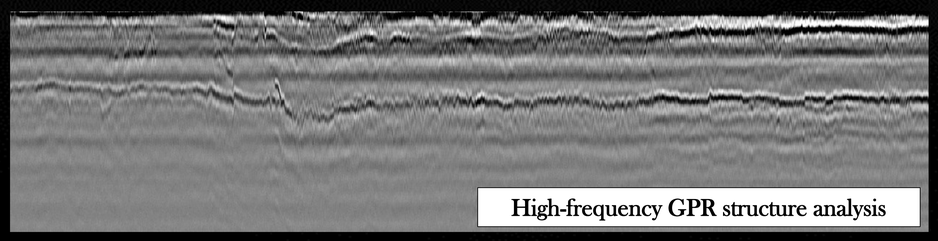
RPB HEALTEC

www.fp7-rpbhealtec.org

Road Pavements & Bridge deck Health monitoring / early warning using advanced inspection Technologies

Grant Agreement 606645: 06/2014 - 05/2016


Low-frequency GPR structure analysis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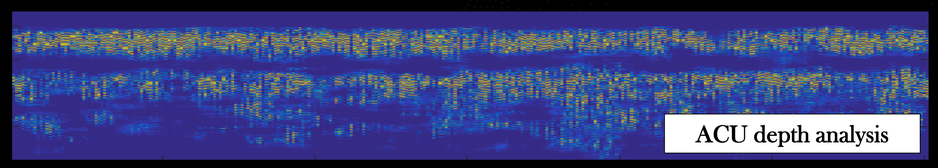
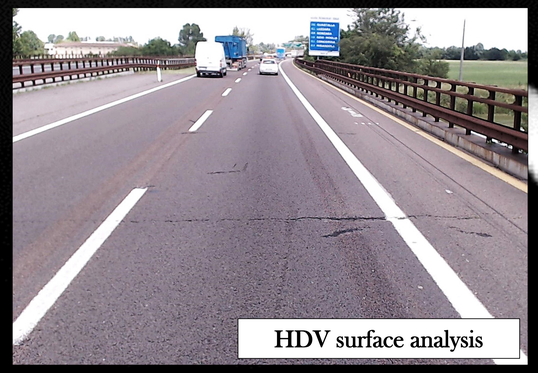

ACU depth analysis

The **RPB HealTec** system is an automated and integrated NDT (Non-Destructive Testing) solution for high speed analysis and evaluation of road pavement/bridge deck condition.

The major aim of the project is to upgrade and optimize road pavement inspection procedures. This should assist decision making related to increasing the life expectancy of road infrastructure and help reduce the cost of future construction and maintenance to the European road network.


IRT segregation analysis


HDV surface analysis

Integration of Ground Penetrating Radar (**GPR**), Infrared Thermography (**IRT**) and Air-Coupled Ultrasound (**ACU**) NDT techniques provides multidimensional information on the road pavement condition. The system employs high accuracy spatial mapping with **GNSS/INS** and **HD** Video and **DMI**-based synchronised data acquisition.

Further processing and fusion of the sensor data is used for the automatic detection of subsurface and surface defects such as delaminations and cracking, as well as structural changes. This analysis provides the basis for further assessment of the extent, severity and causes of deterioration.

GNSS mapping

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