

CROSS Zlín
Road Traffic Technology



GPS and Winter Road Maintenance

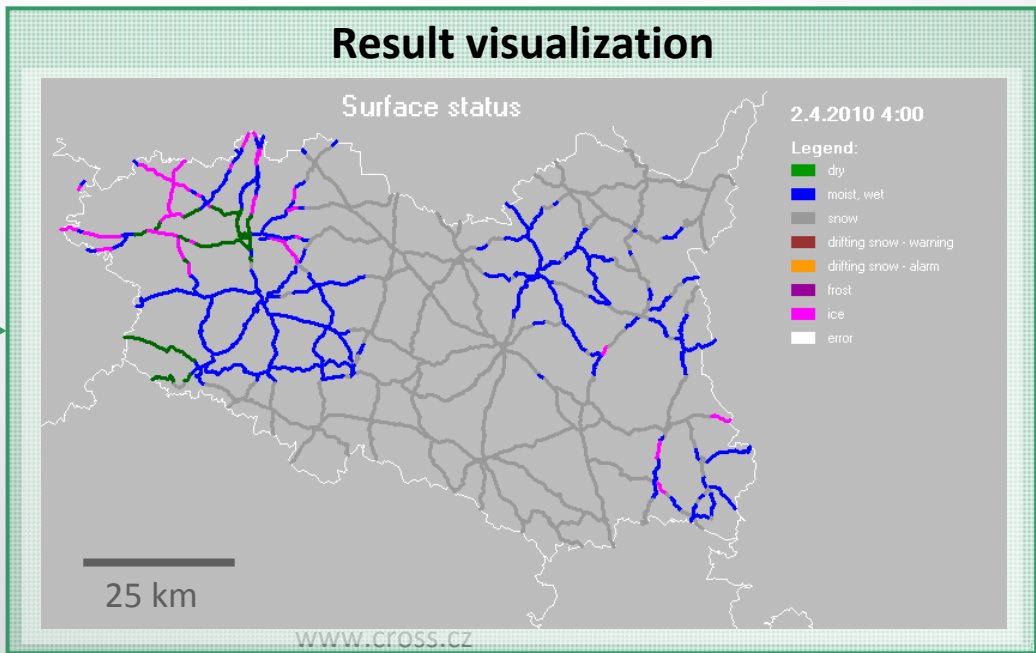
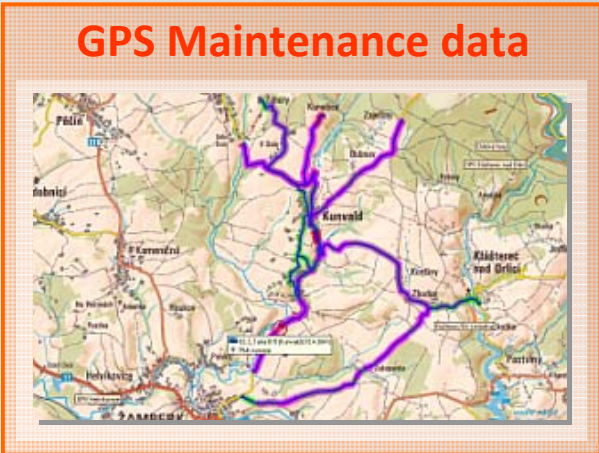
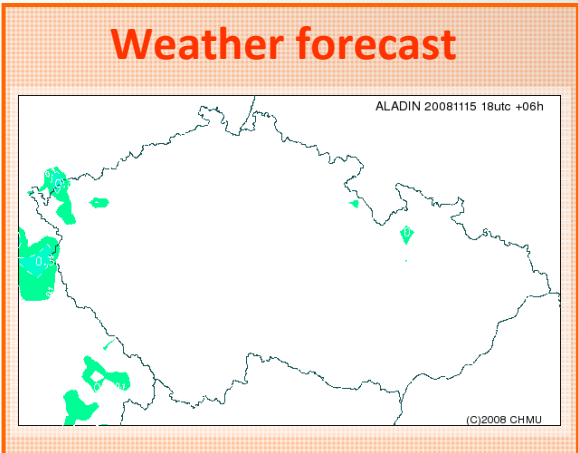
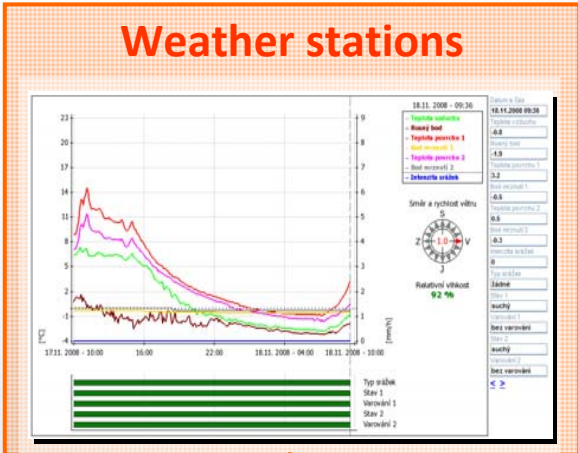
Winter Road Maintenance Decision Support System

- » **MDSS is complex system,**
- » which processes **geographical information** on current weather and local conditions,
- » to provide **short-time road condition forecast** during the winter.
- » <http://www.cross.cz/en/meteorological-systems/mdss.html>



MDSS computing

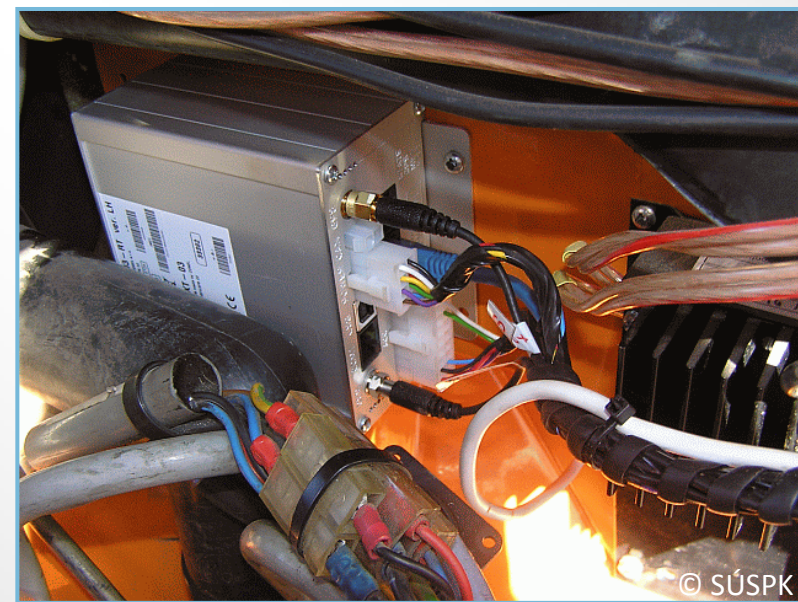
GPS and Winter Road Maintenance



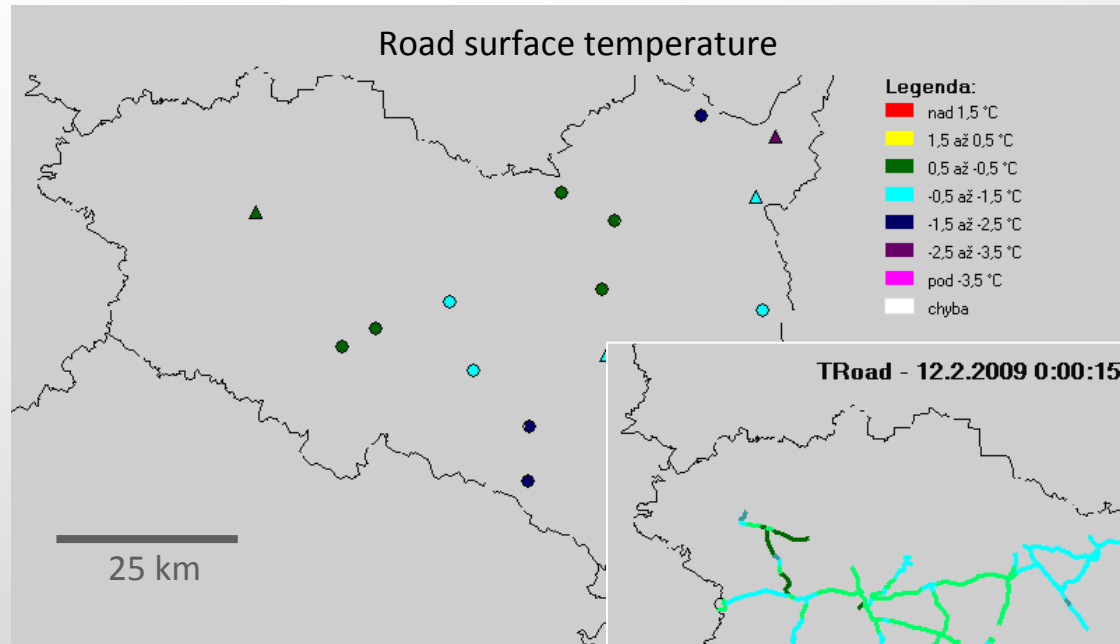
Fleet Management

- » Online GPS surveillance of location and activity of maintenance vehicles

Snow removal, scattering yes/no	Type of scattered material	Scattering rate and width	Road surface temp. Air temp.
---------------------------------	----------------------------	---------------------------	---------------------------------



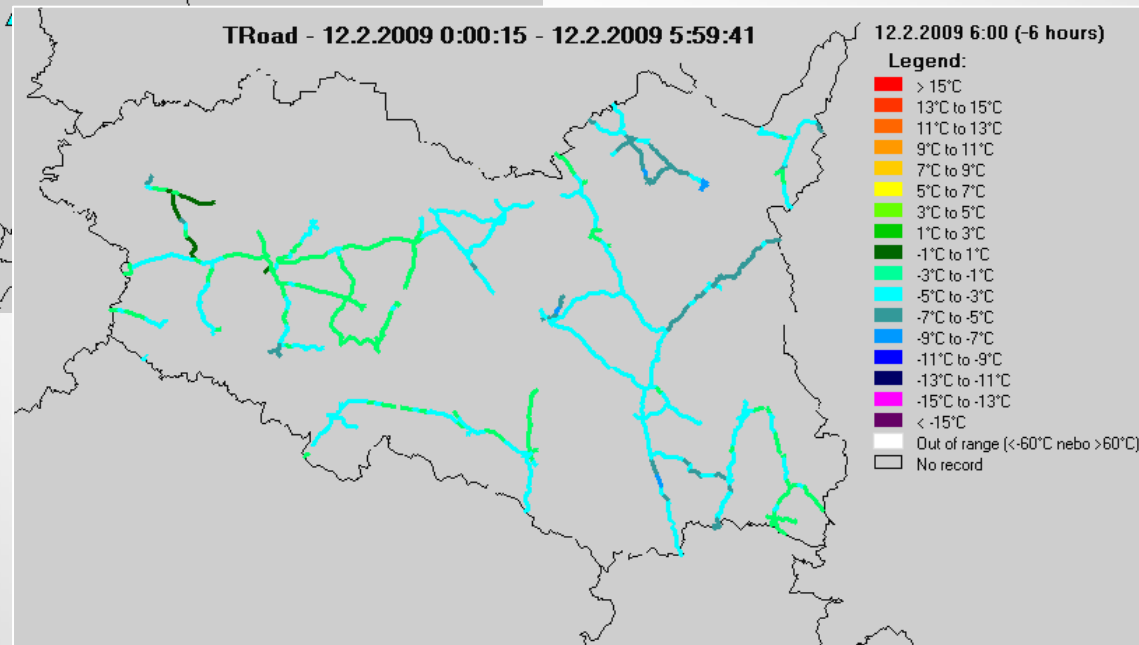
GPS floating car data – Road surface thermal mapping



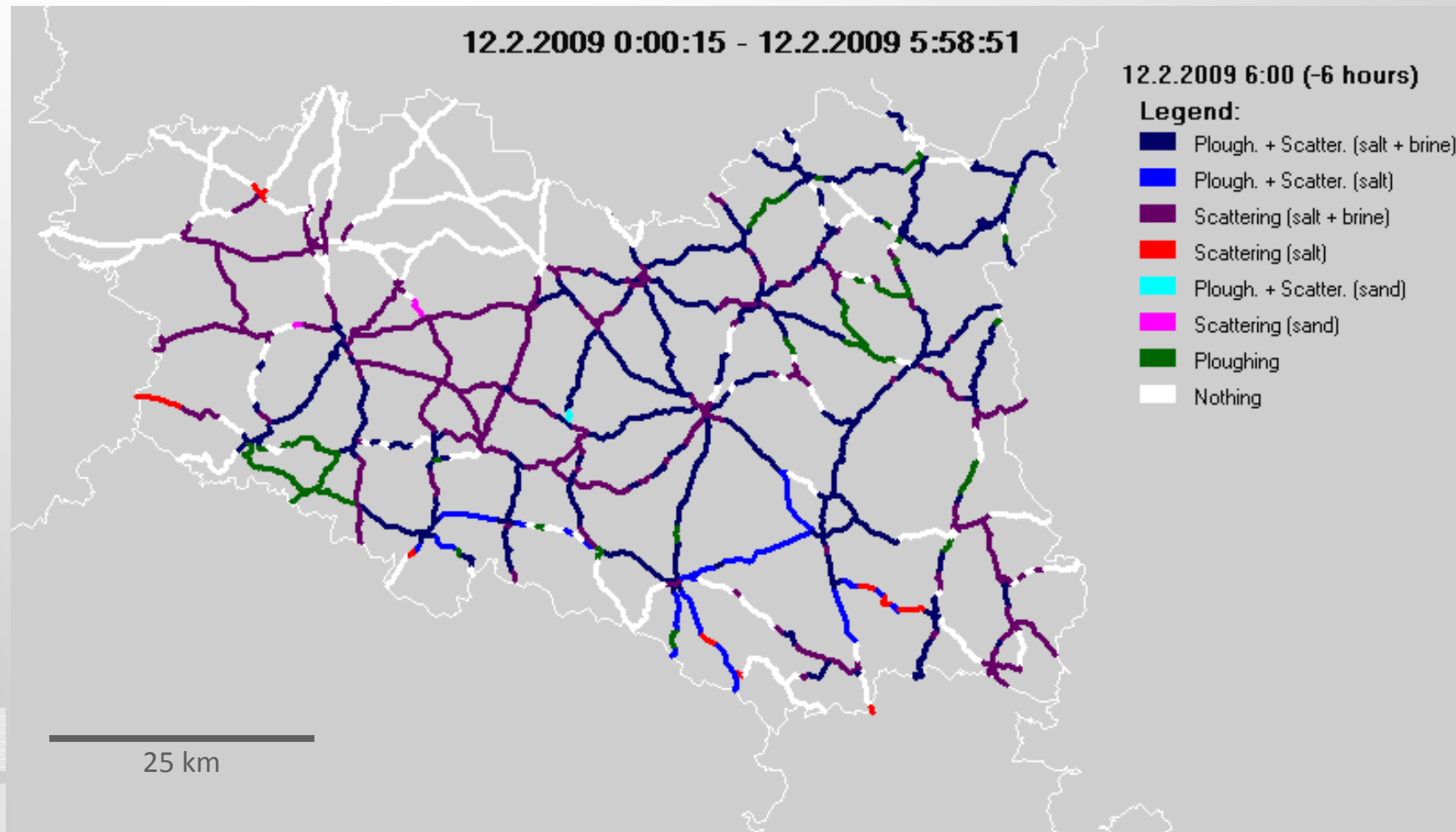
Weather stations

X

Floating Car GPS Data



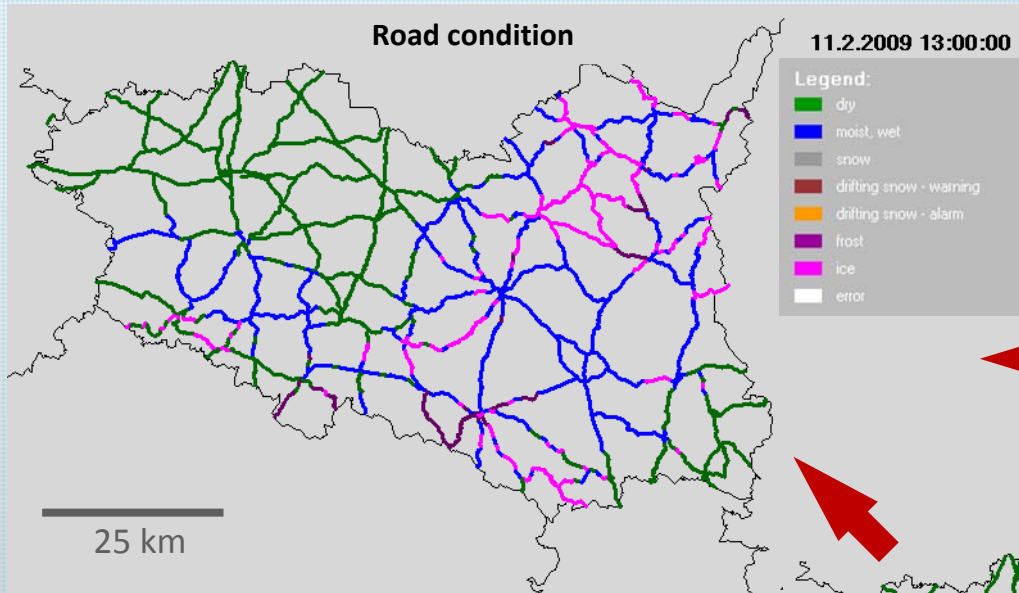
GPS floating car data – Maintenance map



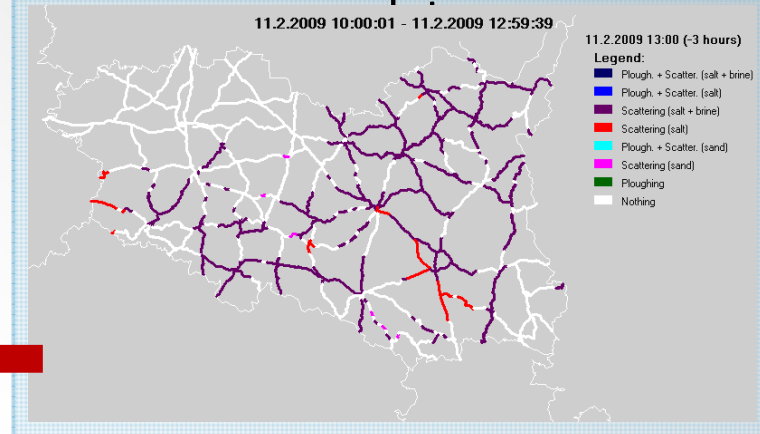
GPS data influence on MDSS

GPS and Winter Road Maintenance

GPS Maintenance data incorporated



Performed treatment - GPS



Without maintenance

