RIS Hi-BrigHT
Sherbrooke bridge deck surveying
RIS Hi-BrigHT: applications

- Asphalt thickness
- Damage areas detection
- Reinforcement cover depth
- Rebars position and slab geometry in reinforced concrete
- Bridge deck condition assessment
Sherbrooke bridge: surveyed area
Sherbrooke bridge: surveyed area
Results: Asphalt Thickness

Thickness > 5cm
Standard Thickness: 5cm
Thickness < 2 cm
**Results: Power Map**

XYZ: 30.930; -10.896; -0.155 m

V11 - Amplitude (Volts)
Window: 2
Level: 1.2

Slice: 159
Swath: 4 - Scan: 4
Zone: 1 - Array: HH_2000MHz
Picked Point: -0.315; -0.269; -0.155 m

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**High Power**

**Low Power**
Results: Moisture Map

XYZ: 30.930; -11.536; -0.155 m

V12 - Moisture
Window: 0.18
Level: 1.02

Slice: 159
Swath: 1 - Scan: 1
Zone: 1 - Array: HH_2000MHz
Picked Point: -0.408; -0.308; -0.155 m
Results: Analysis of maps

Area 1 has the following characteristics:

- Low Asphalt Thickness (m)
- High Power (V)
- Low Moisture
Results: Analysis of maps

Area 2 has the following characteristics:

- Low Asphalt Thickness (m)
- Low Power (V)
- Low Moisture
Results: Analysis of Maps and Automatic Rebar Detection

Asphalt Thickness map

Transition Zone

Zoom of longitudinal radar section around the Transition zone

Legend
- Asphalt base
- Rebar layer

Different rebar layers detection on a longitudinal radar section and different asphalt thickness