

Kaustisen seutukunta

Matkapuhelinverkkojen mittausten analyysi

20.10.2022 – mittatunti 8.



Euroopan maaseudun
kehittämisen maatalousrahasto:
Eurooppa investoi maaseutualueisiin



Mittaukset perustuvat kolmelta modeemilta saatuihin mittaustuloksiin. Jokaisella operaattorilla on oma modeemi. 5G tulokset (SS-RSRP, Band, Physical Cell ID) esitetään vain, jos siitä on havaittu mittadataa kyseiseltä ajanjaksolta.

Parametrien tarkasteluun voidaan käyttää oheisia taulukoita:

Lähde: <https://www.netvault.net.au/netmon-4g-signal-statistics-explained>

| RSRP | Signal strength | Description |
|---------------------|-----------------|---|
| >= -80 dBm | Excellent | Strong signal with maximum data speeds |
| -80 dBm to -90 dBm | Good | Strong signal with good data speeds |
| -90 dBm to -100 dBm | Fair to poor | Reliable data speeds may be attained, but marginal data with drop-outs is possible. When this value gets close to -100, performance will drop drastically |
| <= -100 dBm | No signal | Disconnection |

| RSRQ | Signal quality | Description |
|------------------|----------------|--|
| >= -10 dB | Excellent | Strong signal with maximum data speeds |
| -10 dB to -15 dB | Good | Strong signal with good data speeds |
| -15 dB to -20 dB | Fair to poor | Reliable data speeds may be attained, but marginal data with drop-outs is possible. When this value gets close to -20, performance will drop drastically |
| <= -20 dB | No signal | Disconnection |

| SINR | Signal strength | Description |
|----------------|-----------------|--|
| >= 20 dB | Excellent | Strong signal with maximum data speeds |
| 13 dB to 20 dB | Good | Strong signal with good data speeds |
| 0 dB to 13 dB | Fair to poor | Reliable data speeds may be attained, but marginal data with drop-outs is possible. When this value gets close to 0, performance will drop drastically |
| <= 0 dB | No signal | Disconnection |

RSRP = Reference Signal Received Power
= tukiasemalta vastaanotetun signaalin teho

RSRQ = Reference Signal Received Quality
= tukiasemalta vastaanotetun signaalin laatu

SINR = Signal to Interference plus Noise Ratio
= signaali-kohinasuhde

Lisäksi esitetty:

Band = taajuusalue missä modeemi ollut kiinni

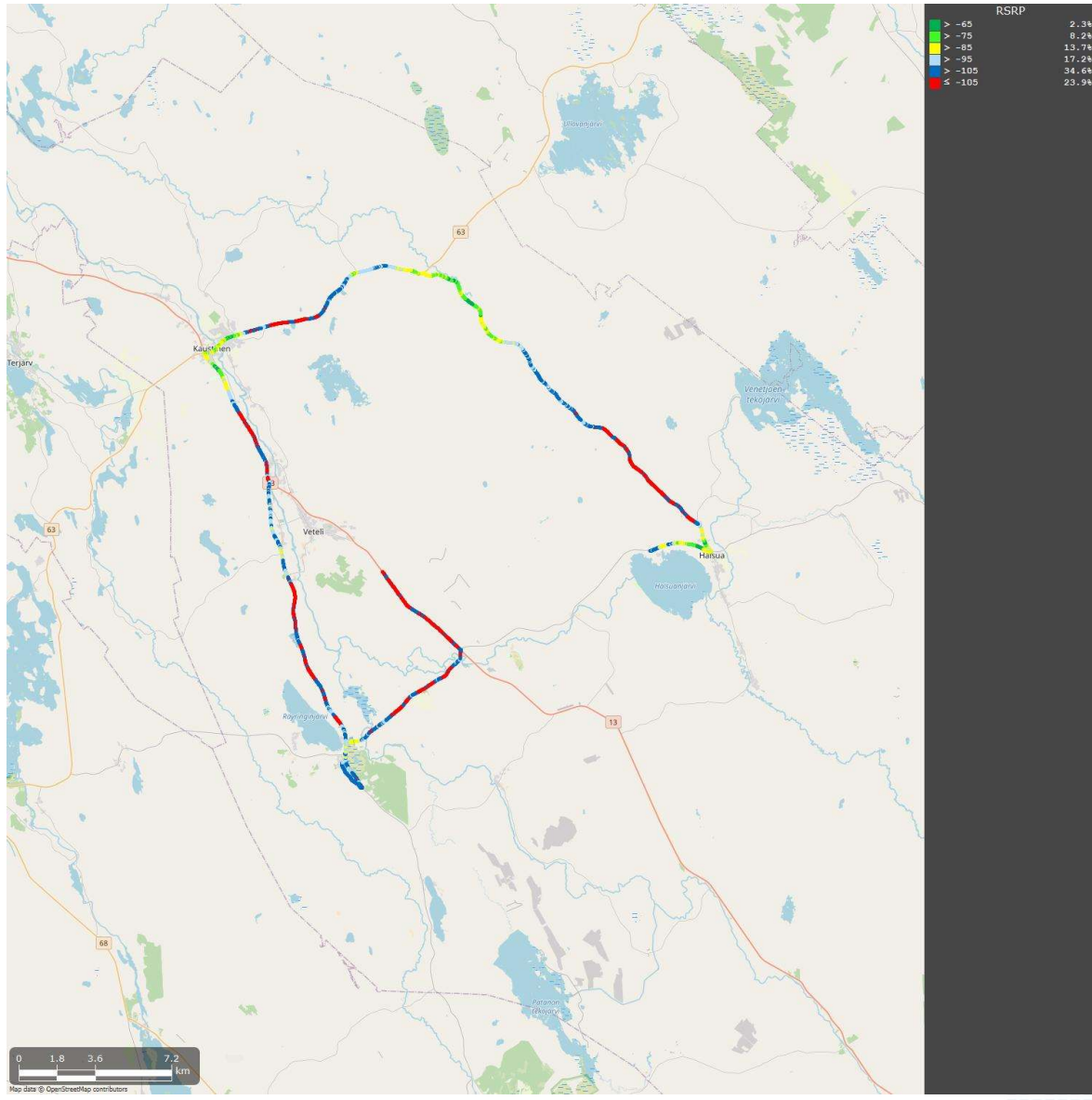
Cell id = solu missä modeemi ollut kiinni

Speed = mittausauton nopeus m/s

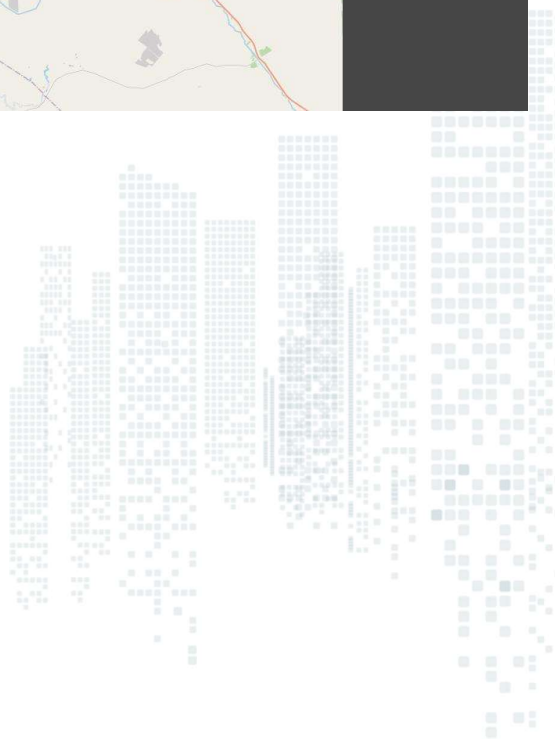
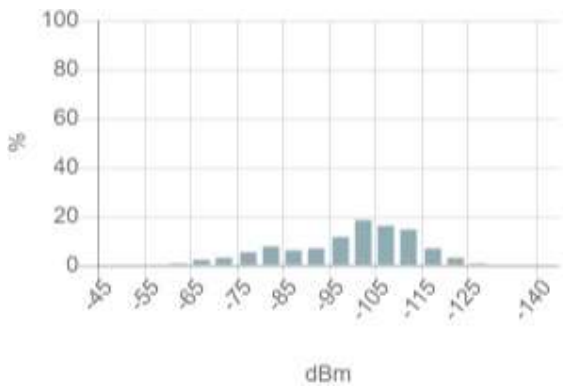


Telia mittatunti 8

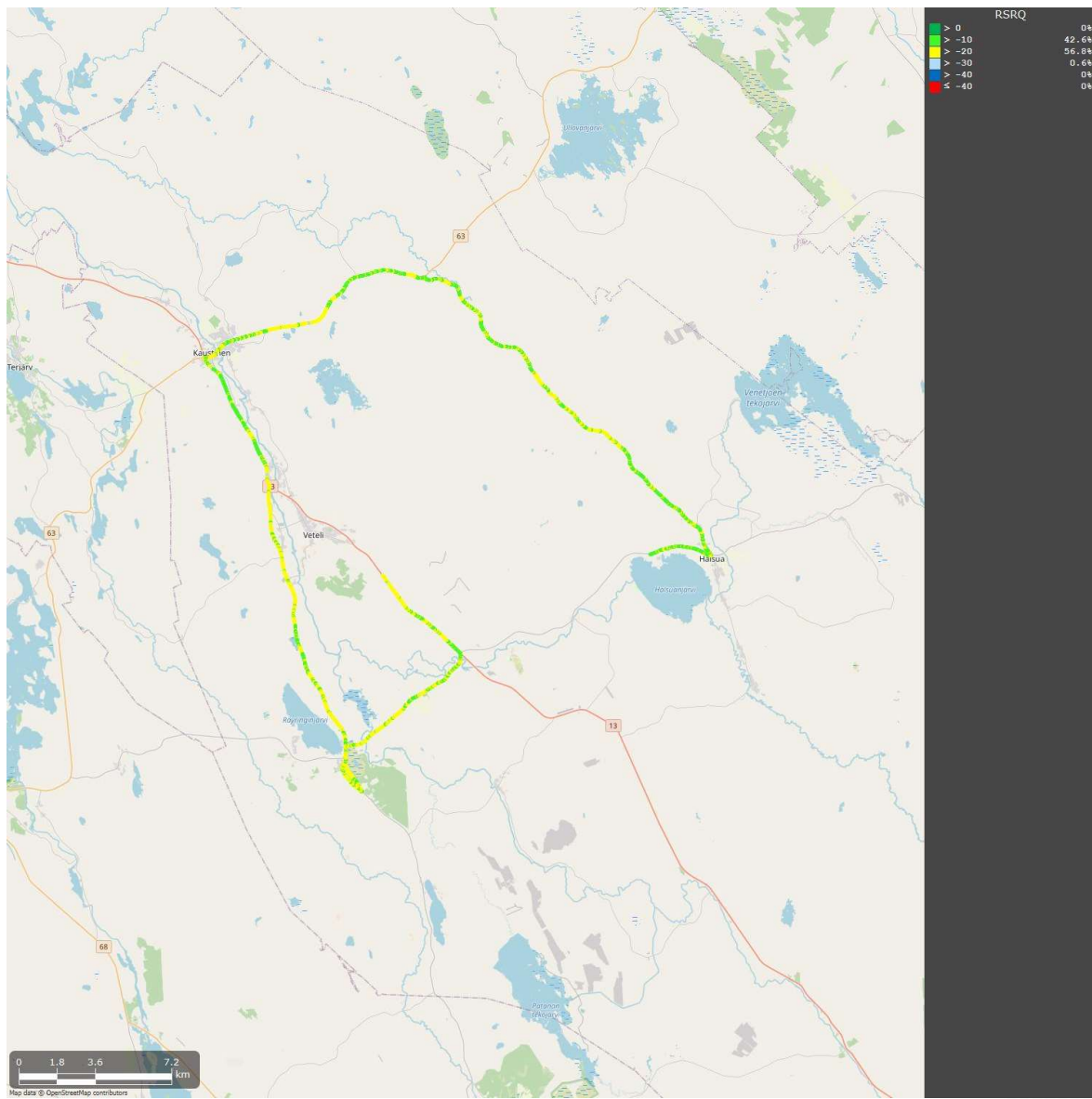
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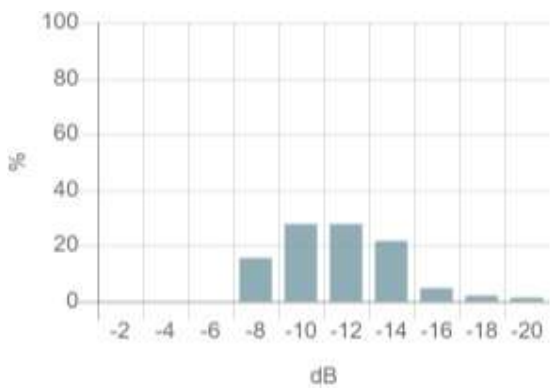
RSRP



RSRP

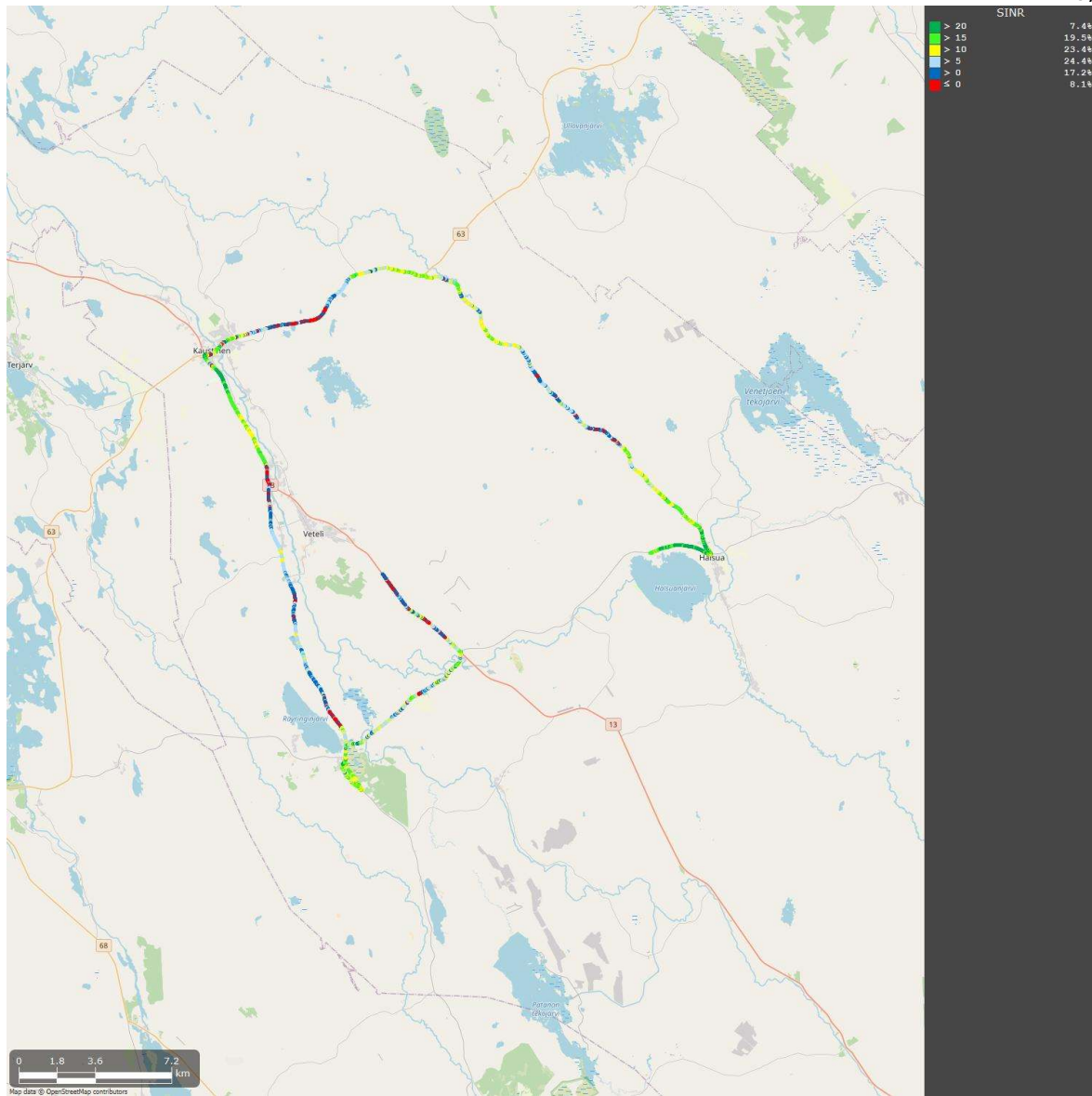


RSRQ

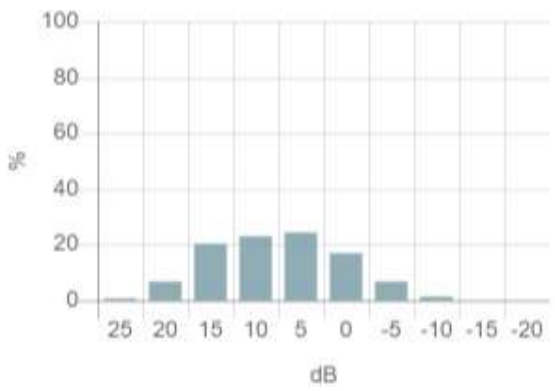


RSRQ



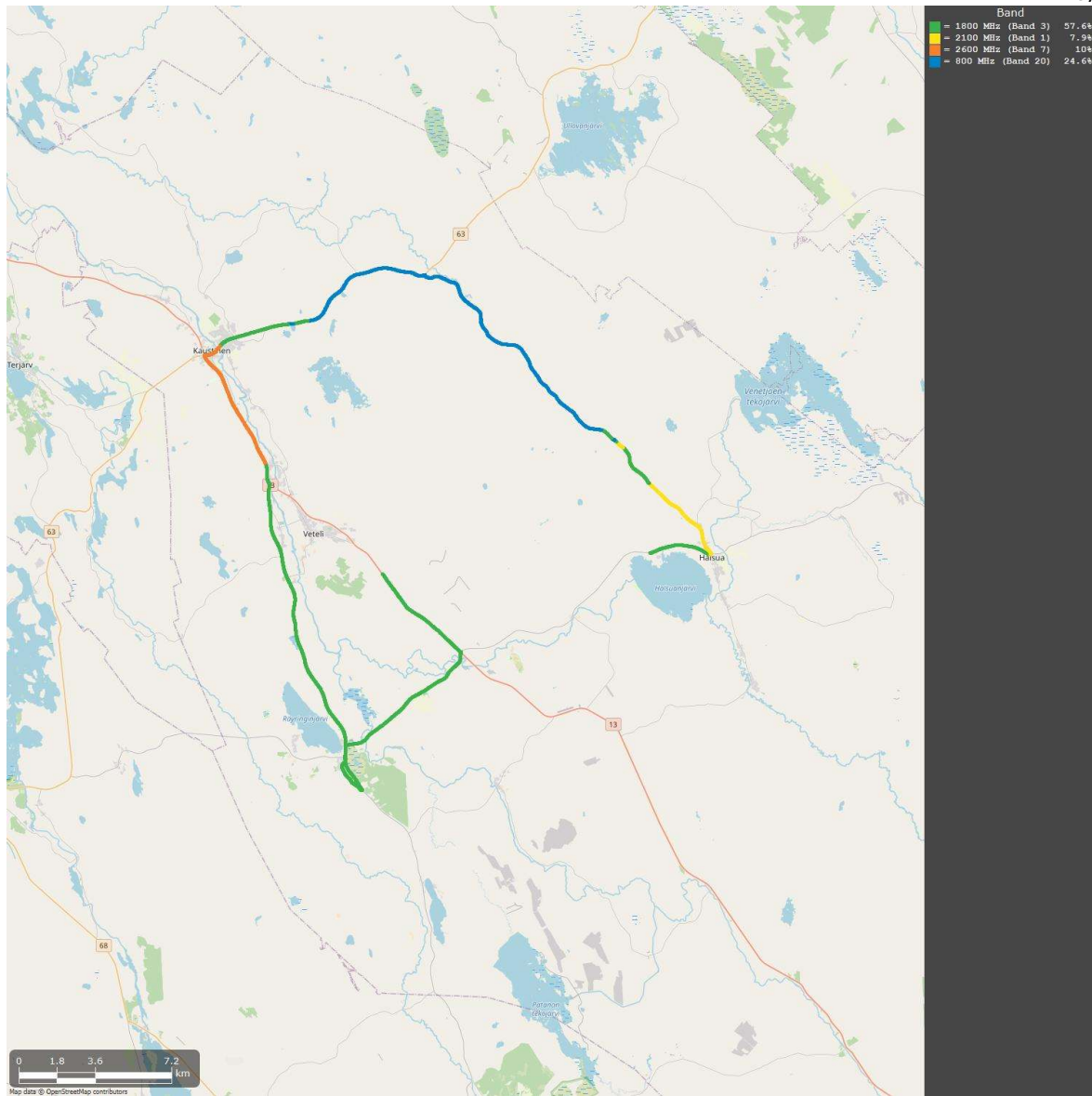


SINR



SINR



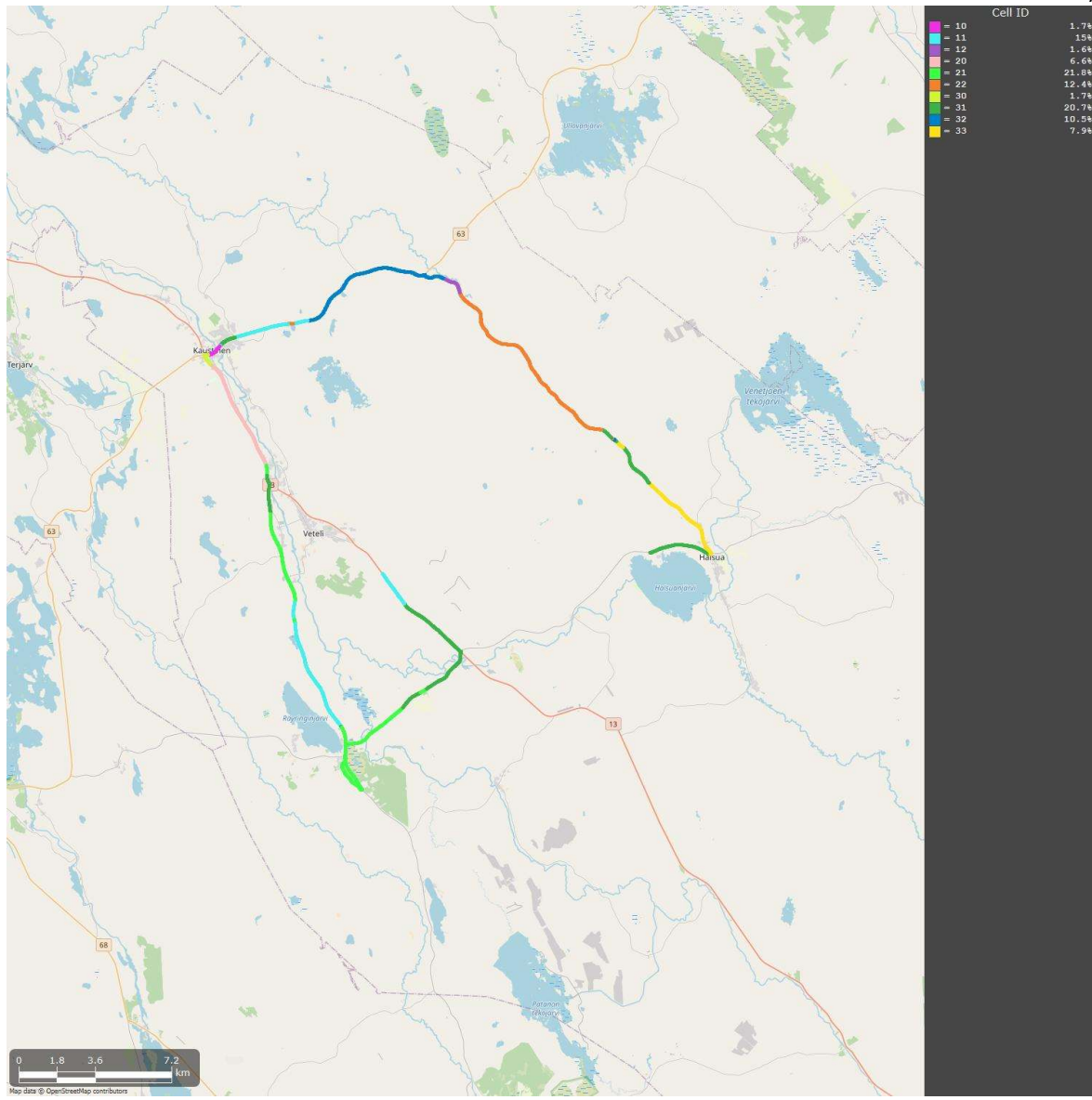


Band



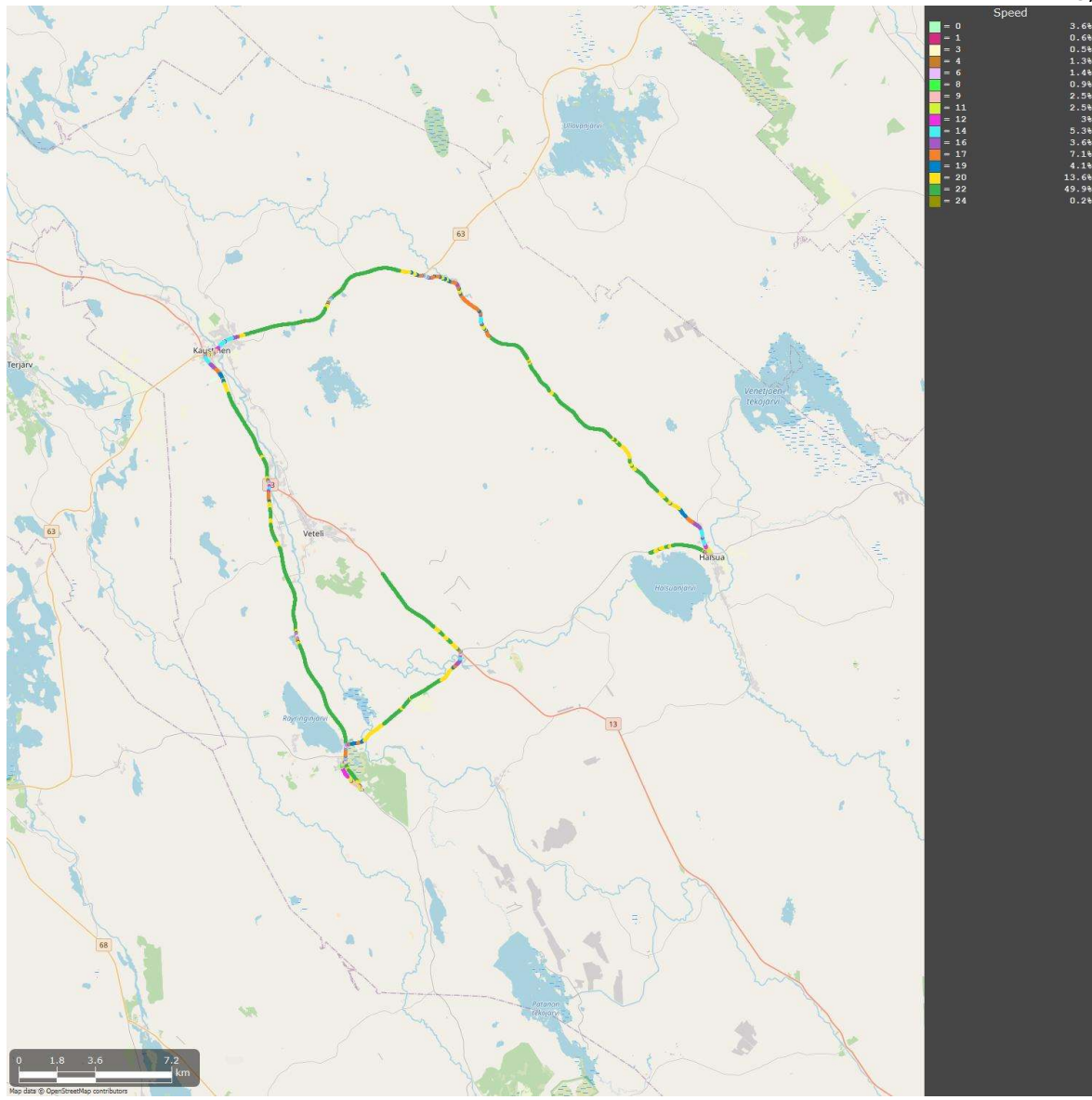
Band





Cell ID



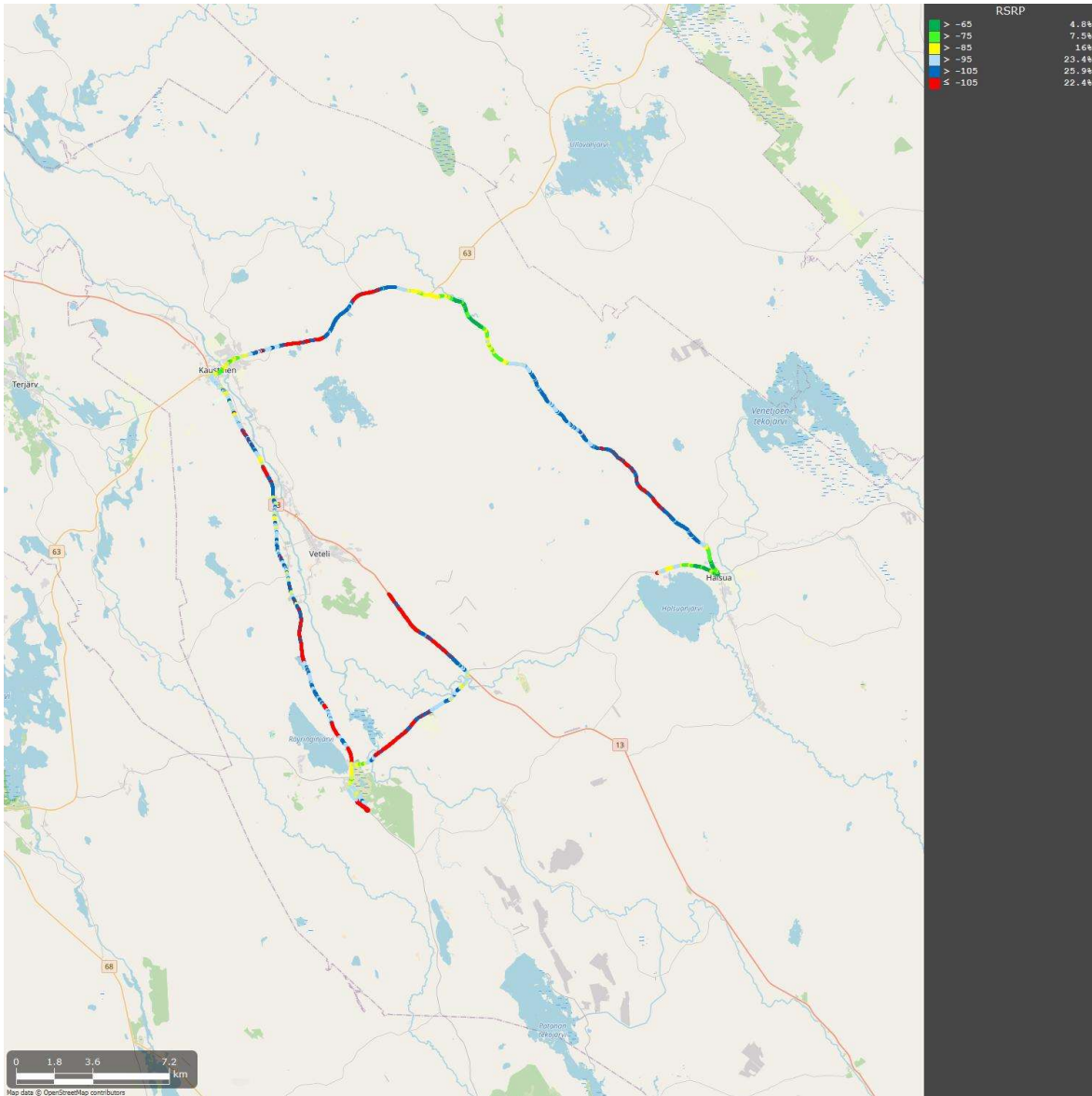


Speed

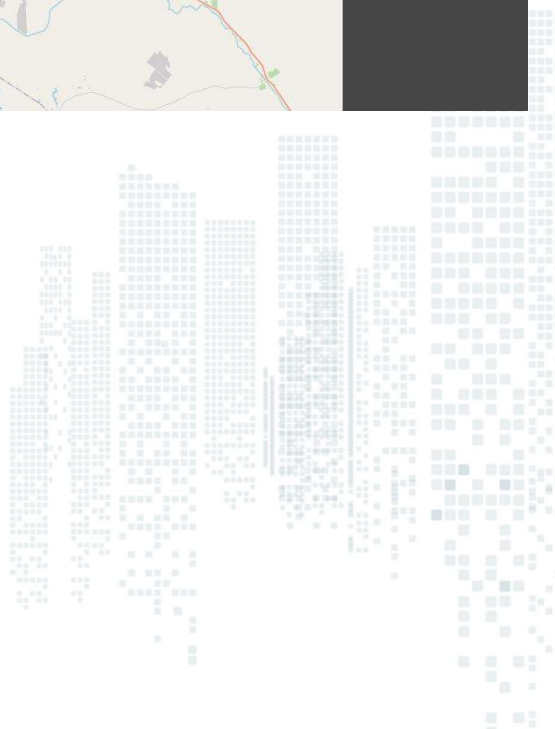
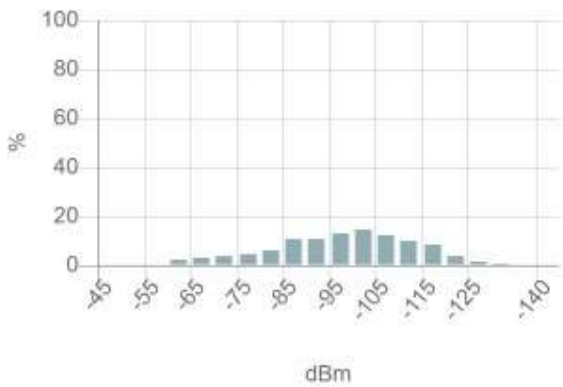


Elisa mittatunti 8

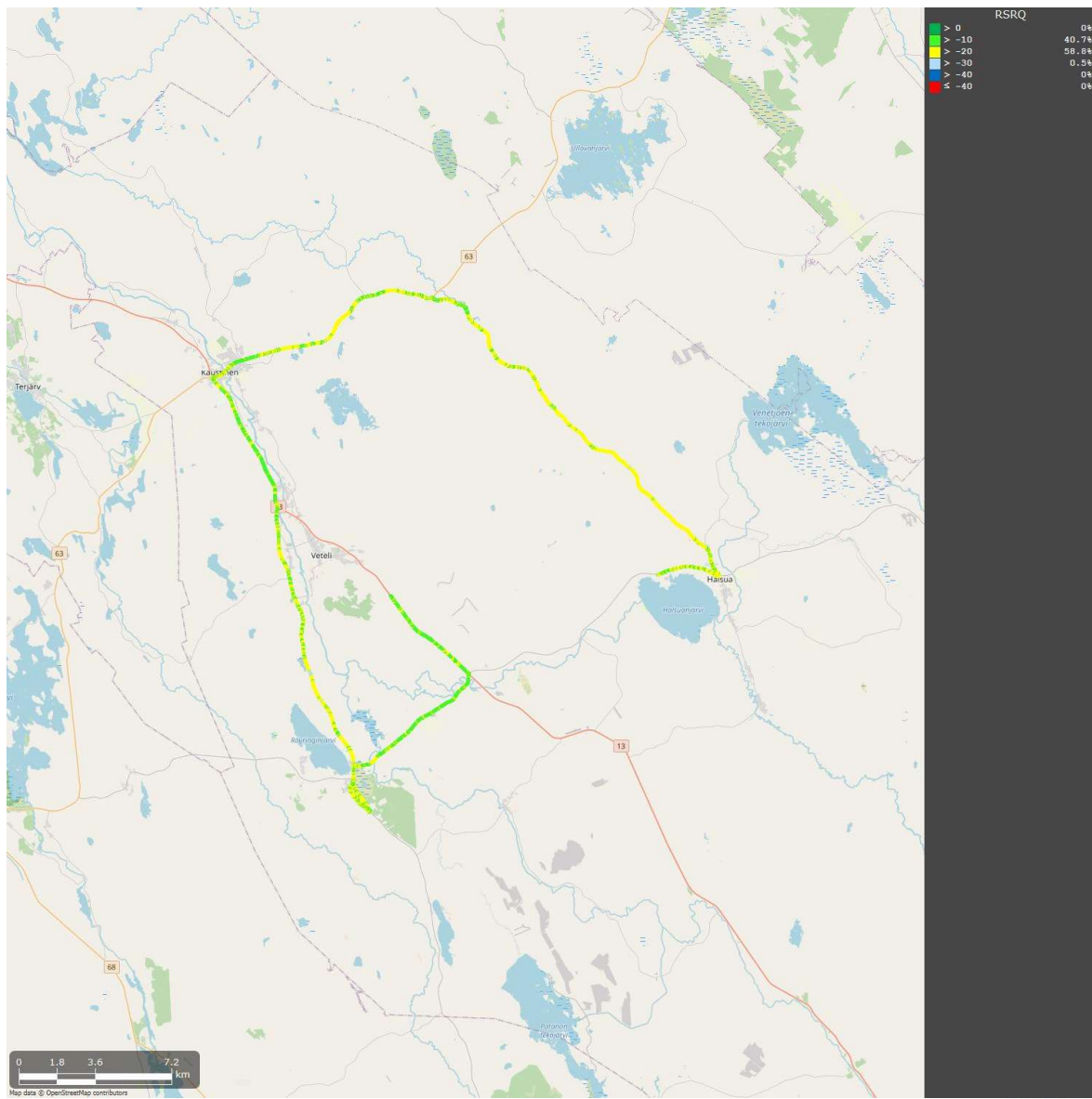
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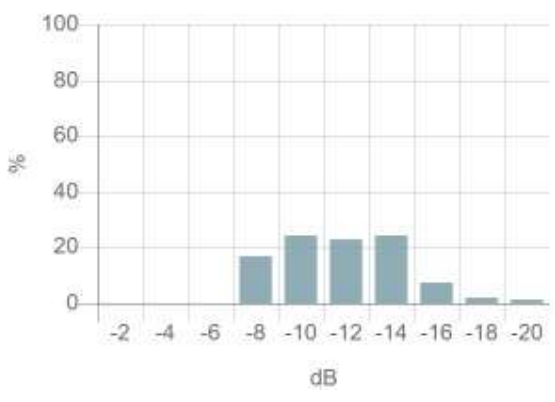
RSRP



RSRP

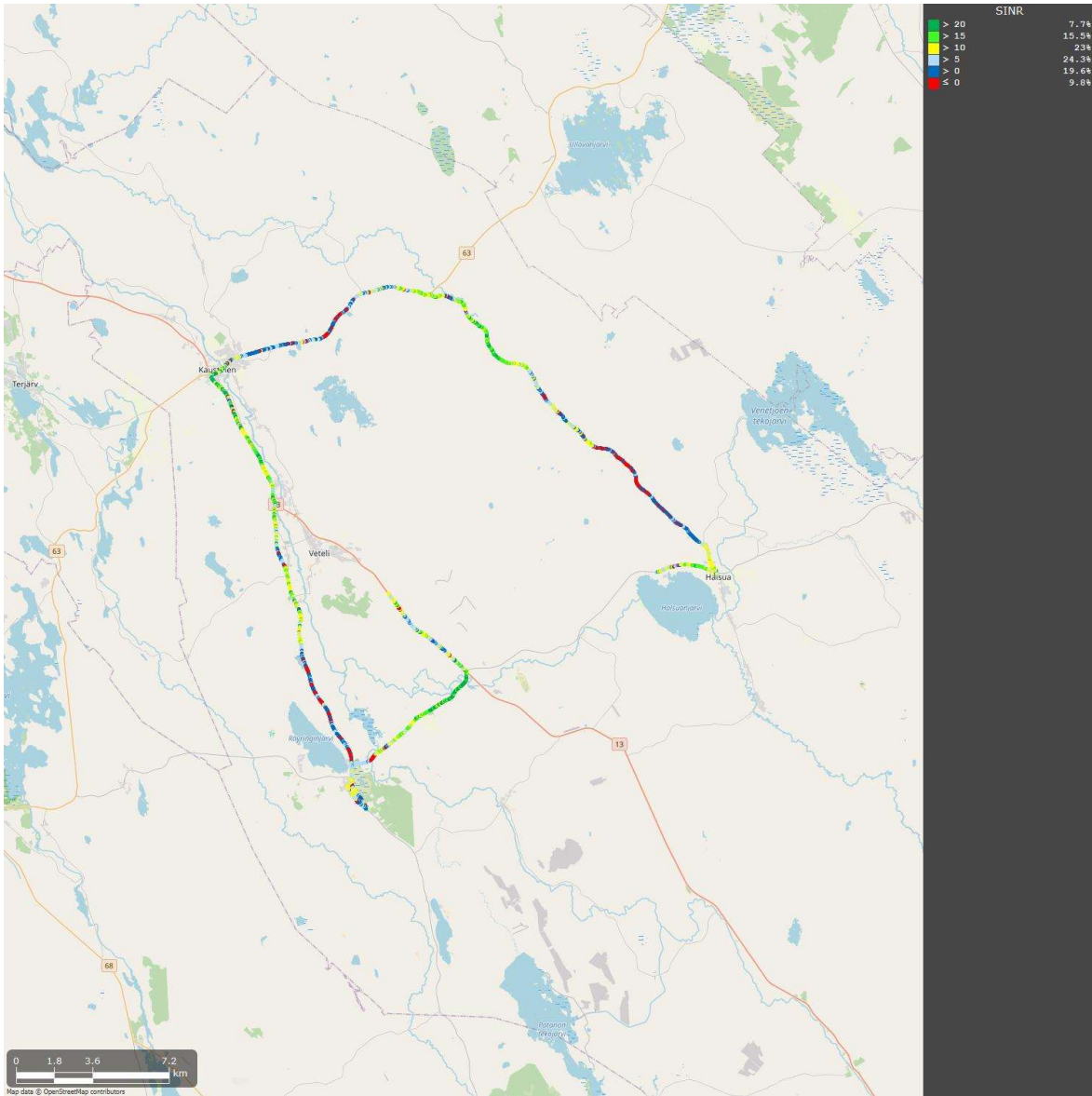


RSRQ

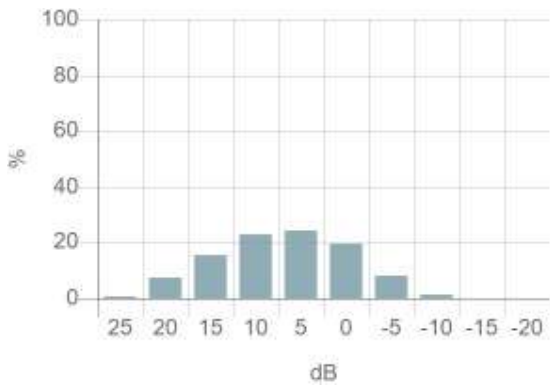


RSRQ



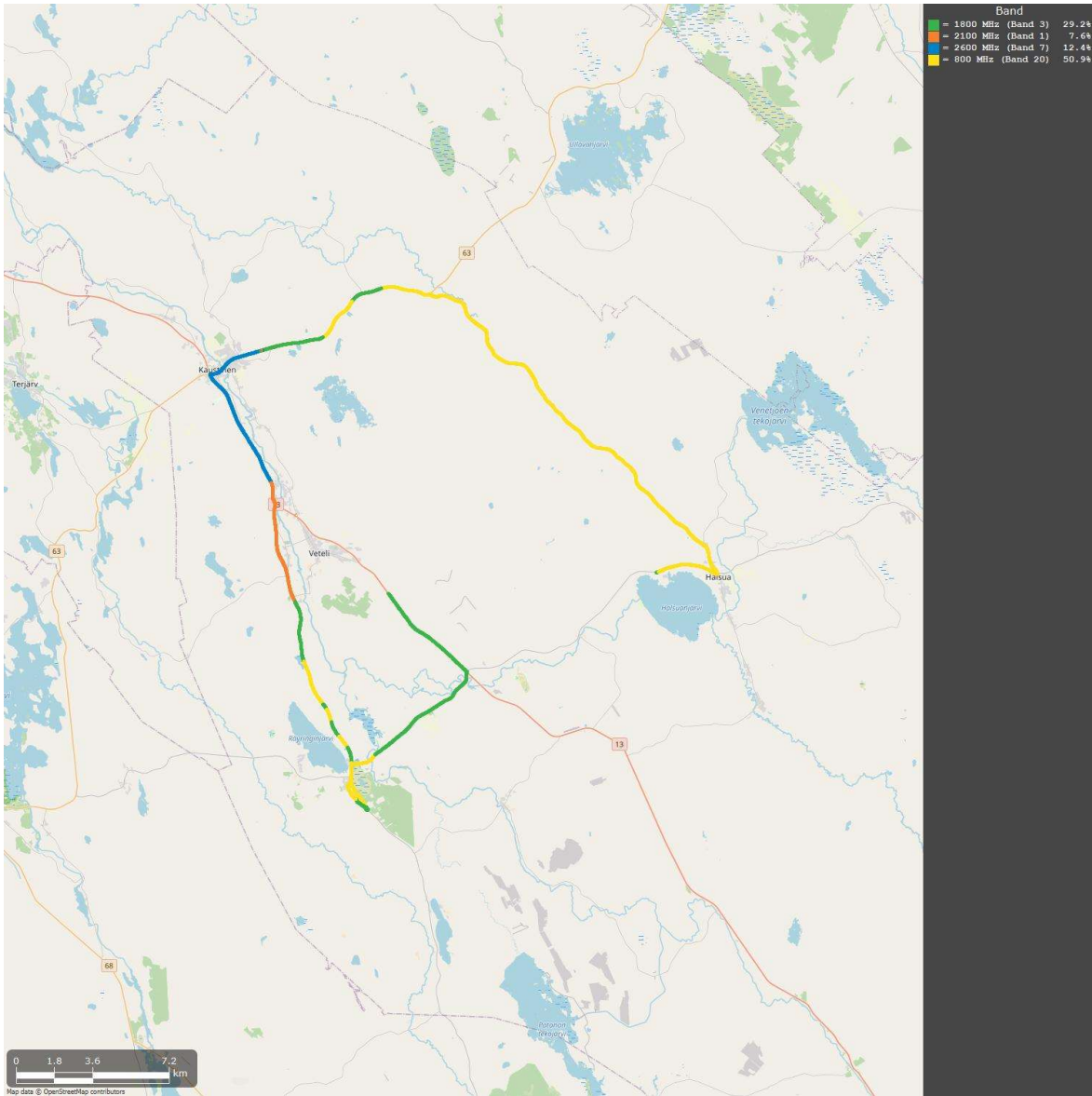


SINR

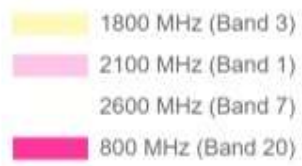


SINR

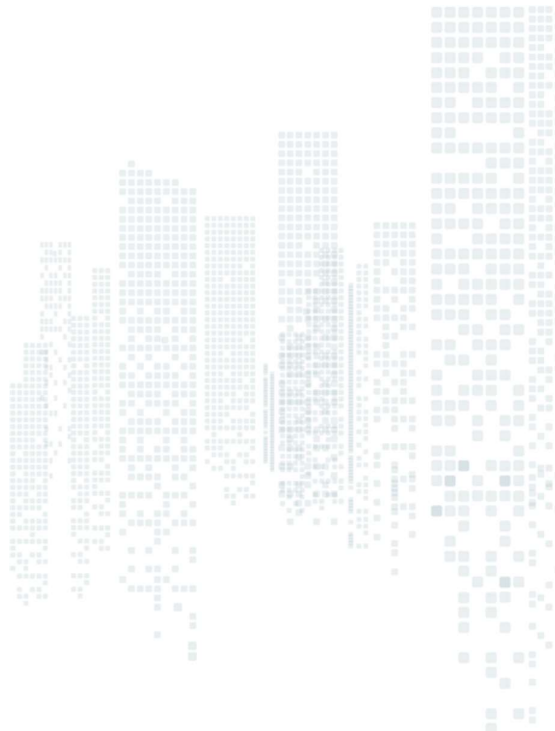


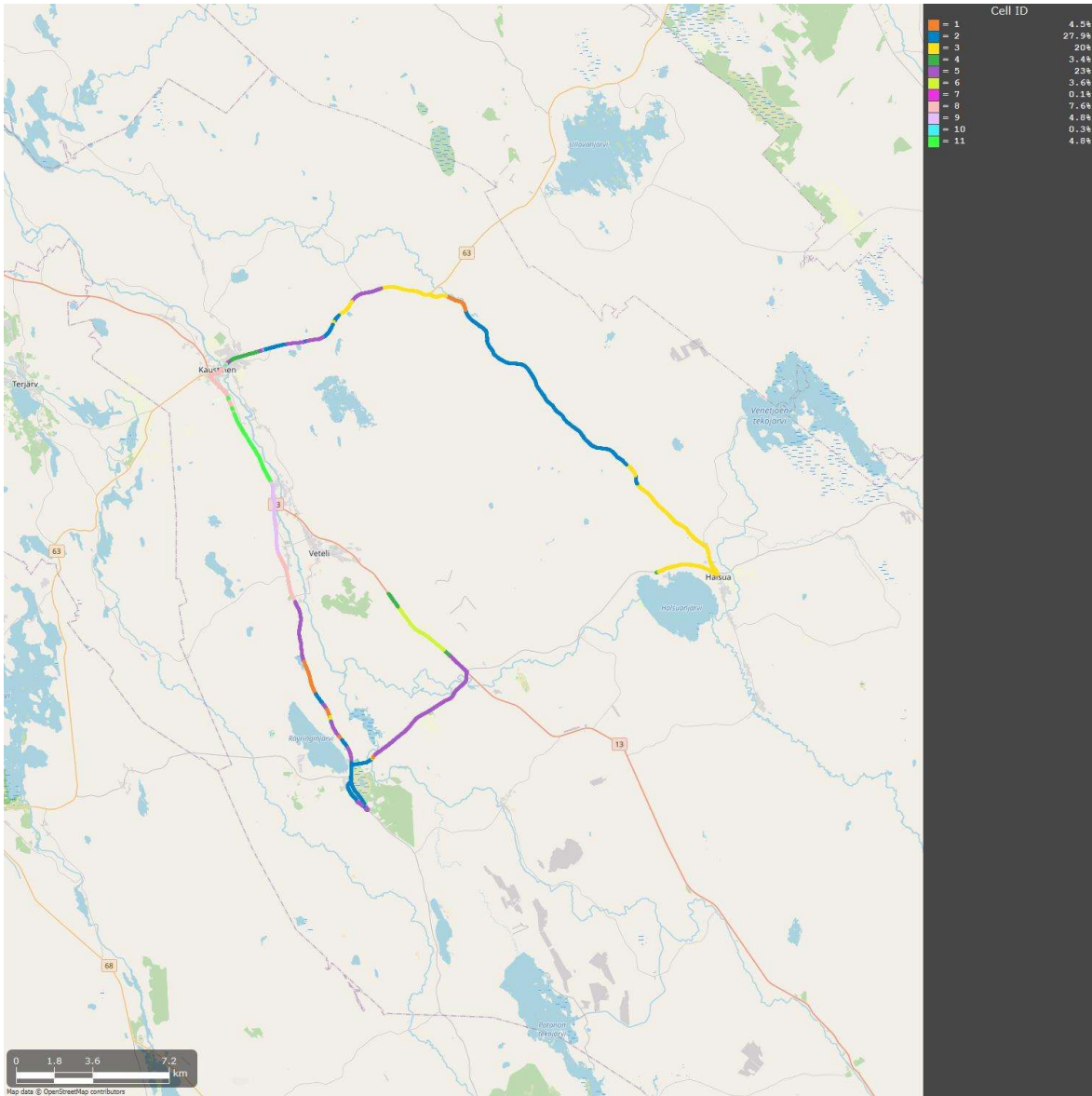


Band



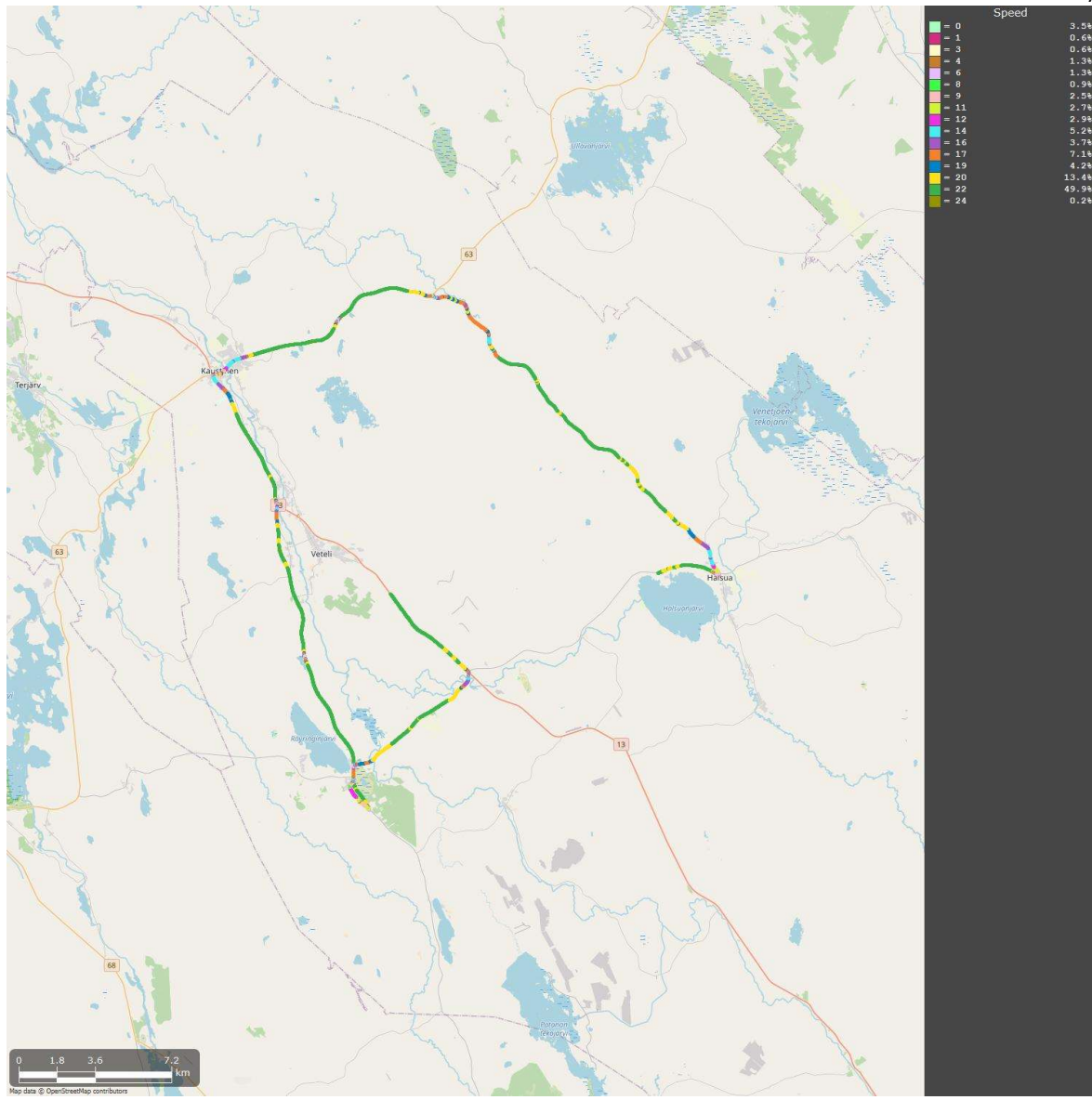
Band





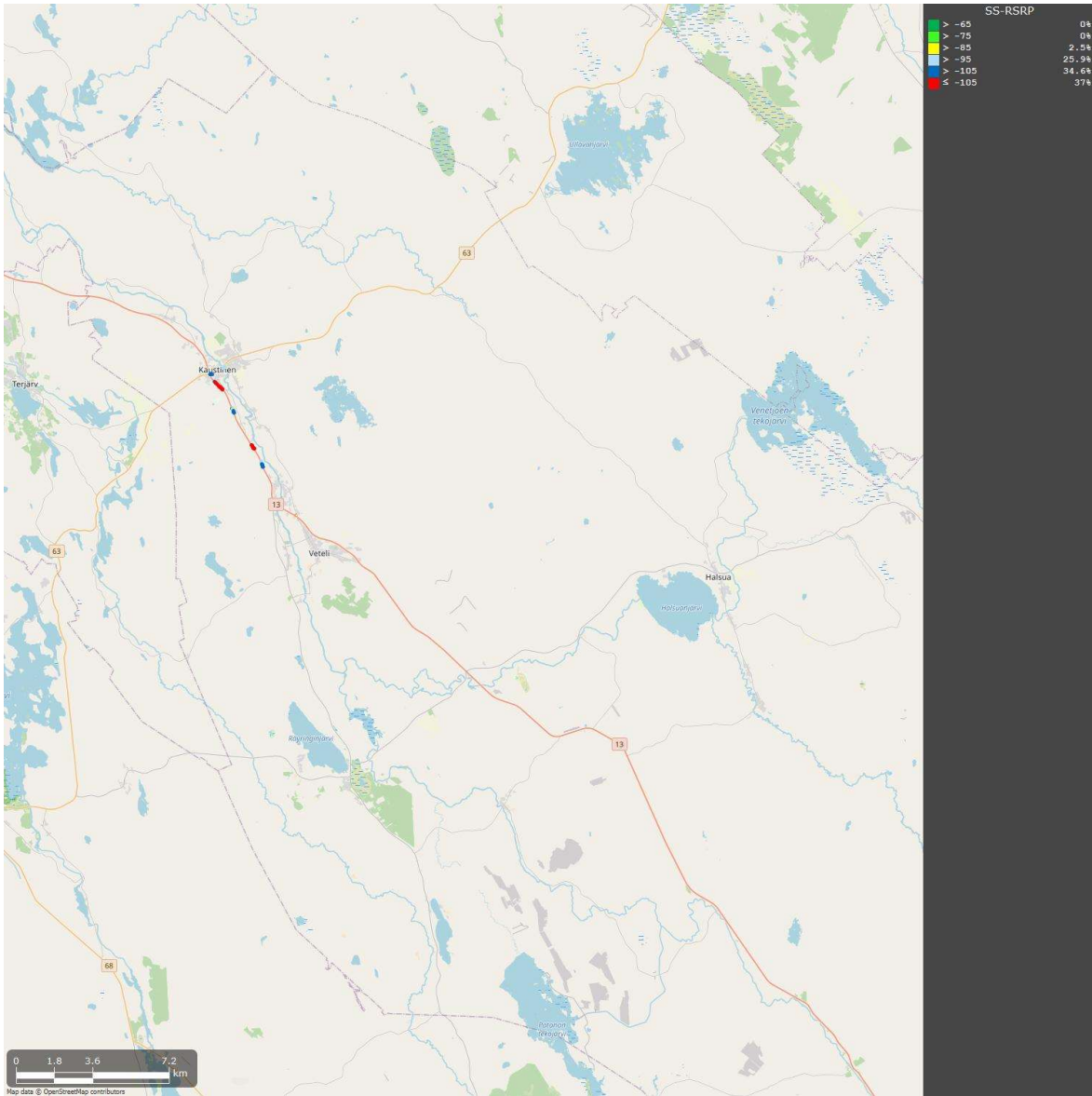
Cell ID



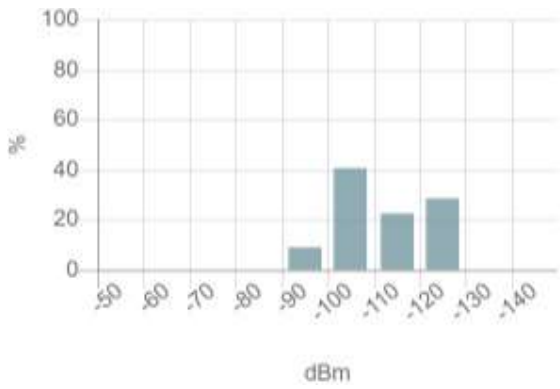


Speed



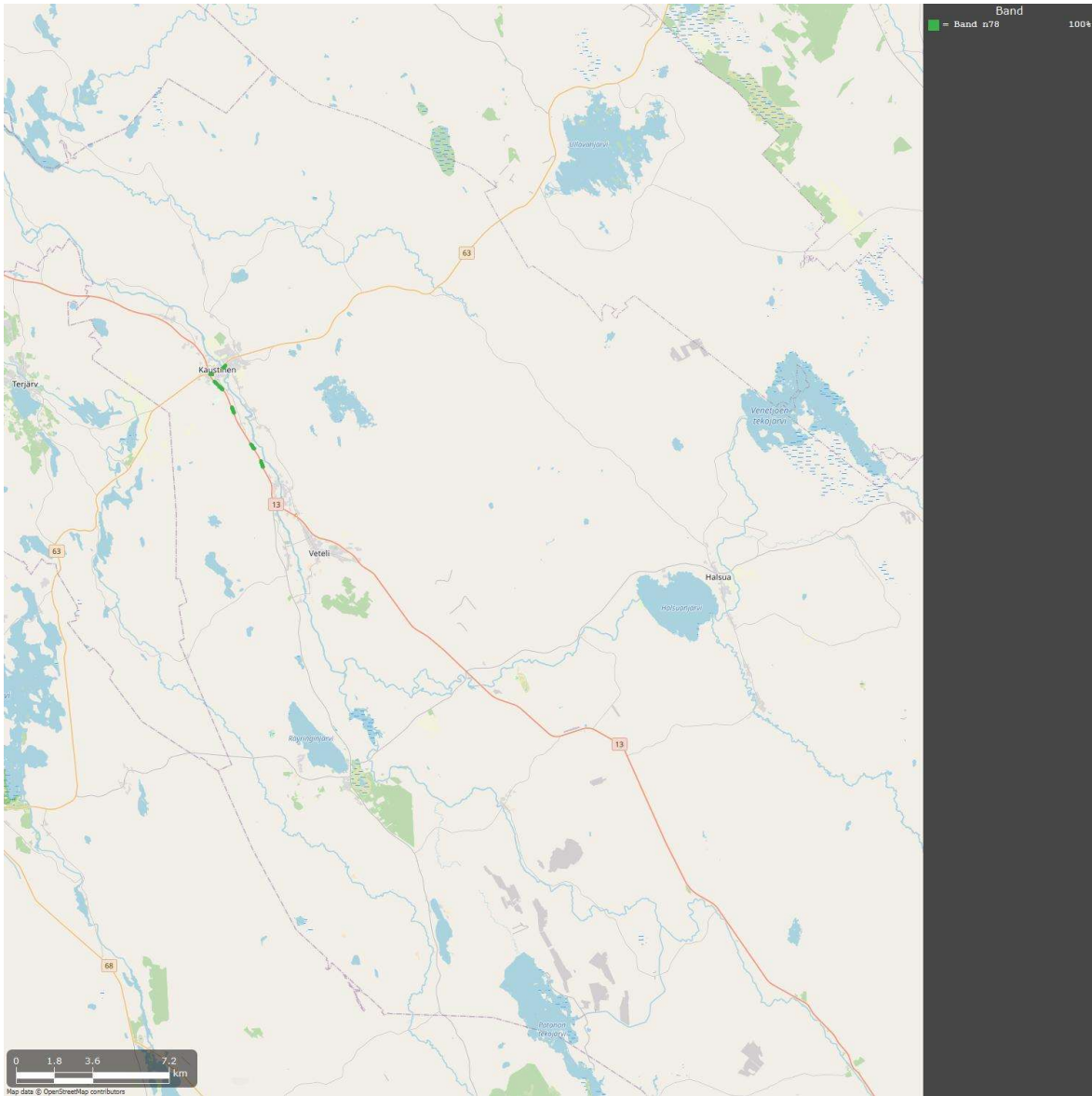


SS-RSRP

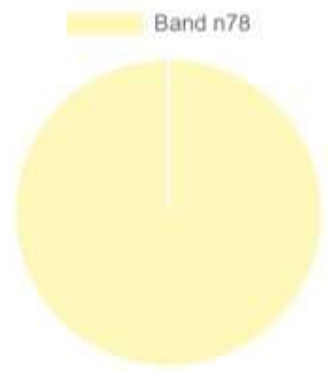


SS-RSRP



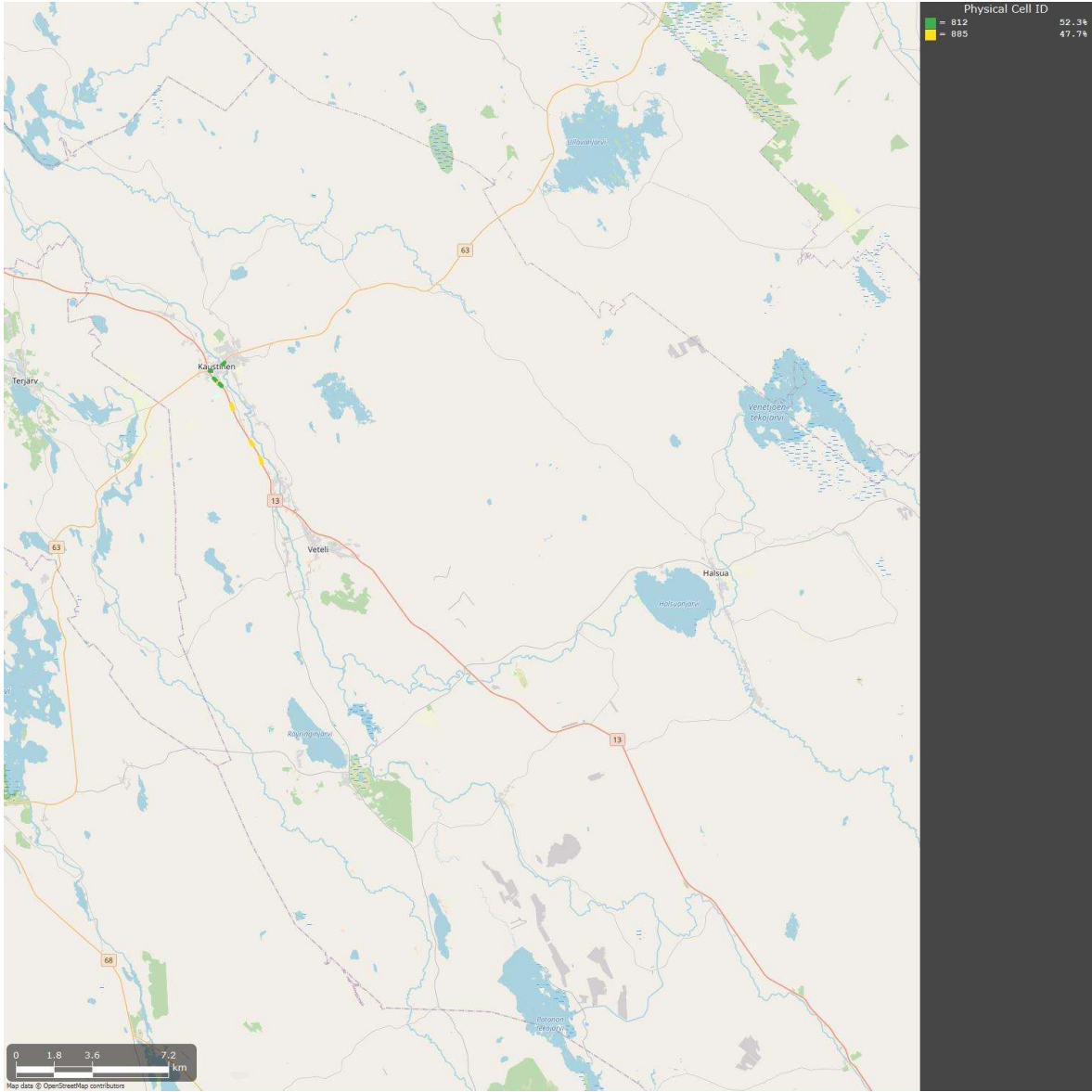


Band



Band



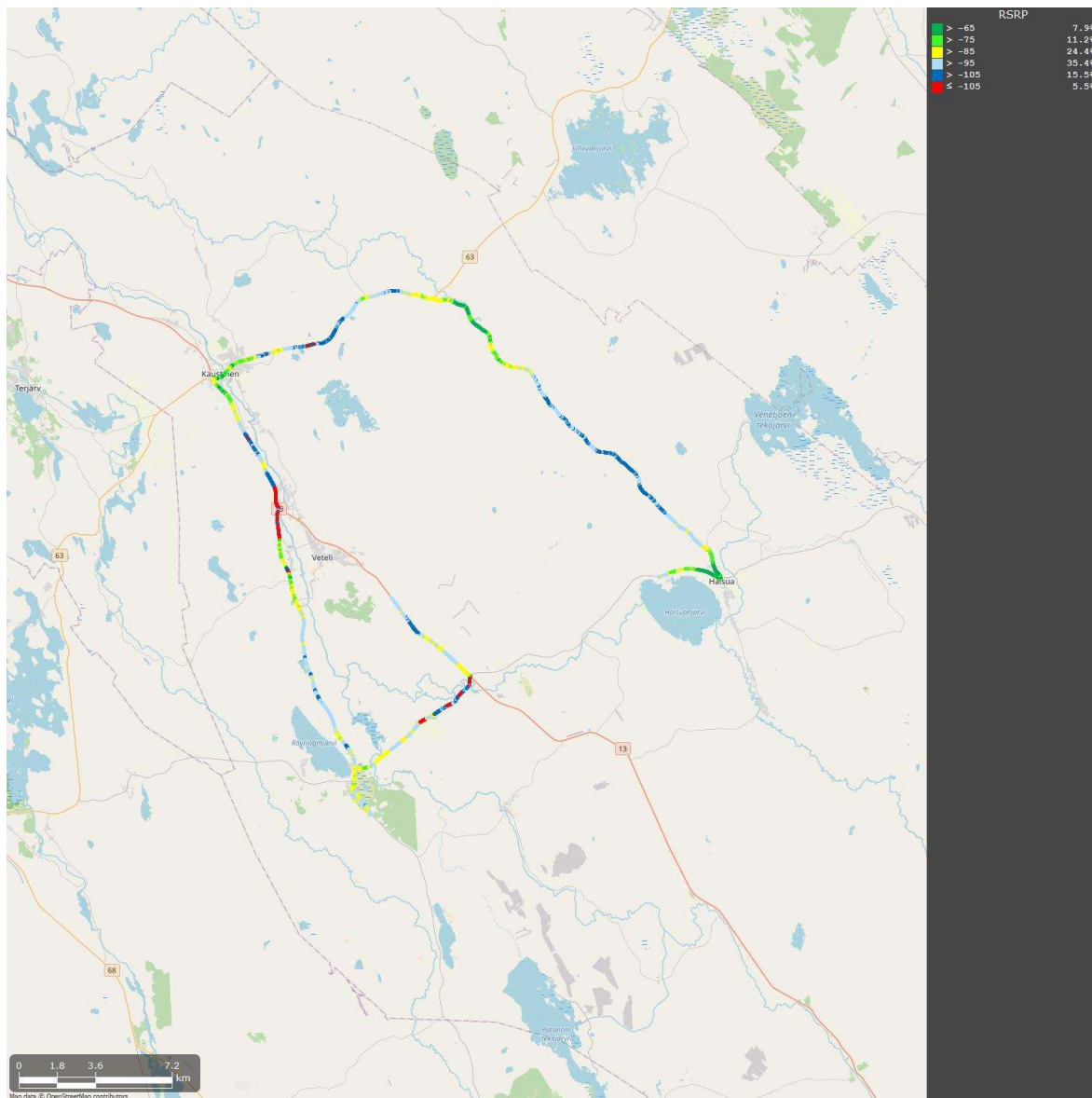


Physical Cell ID

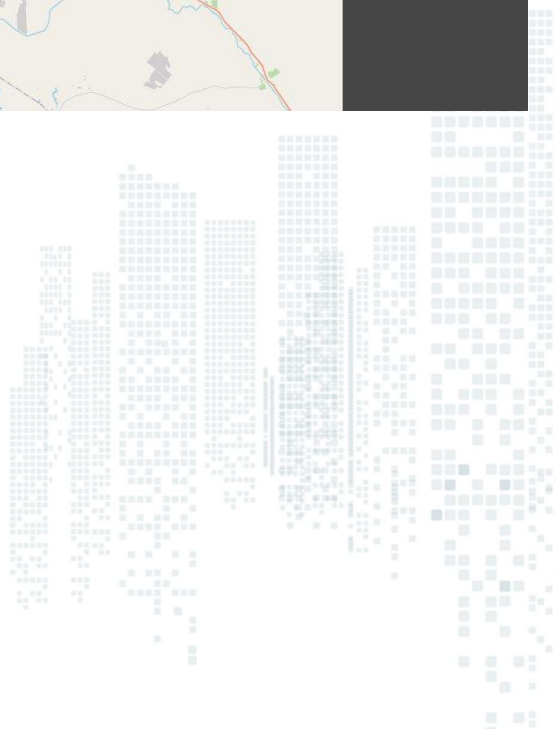
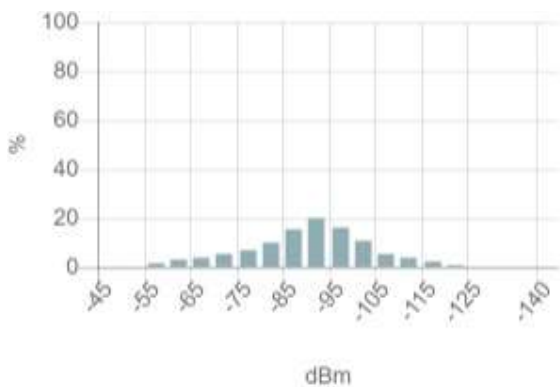


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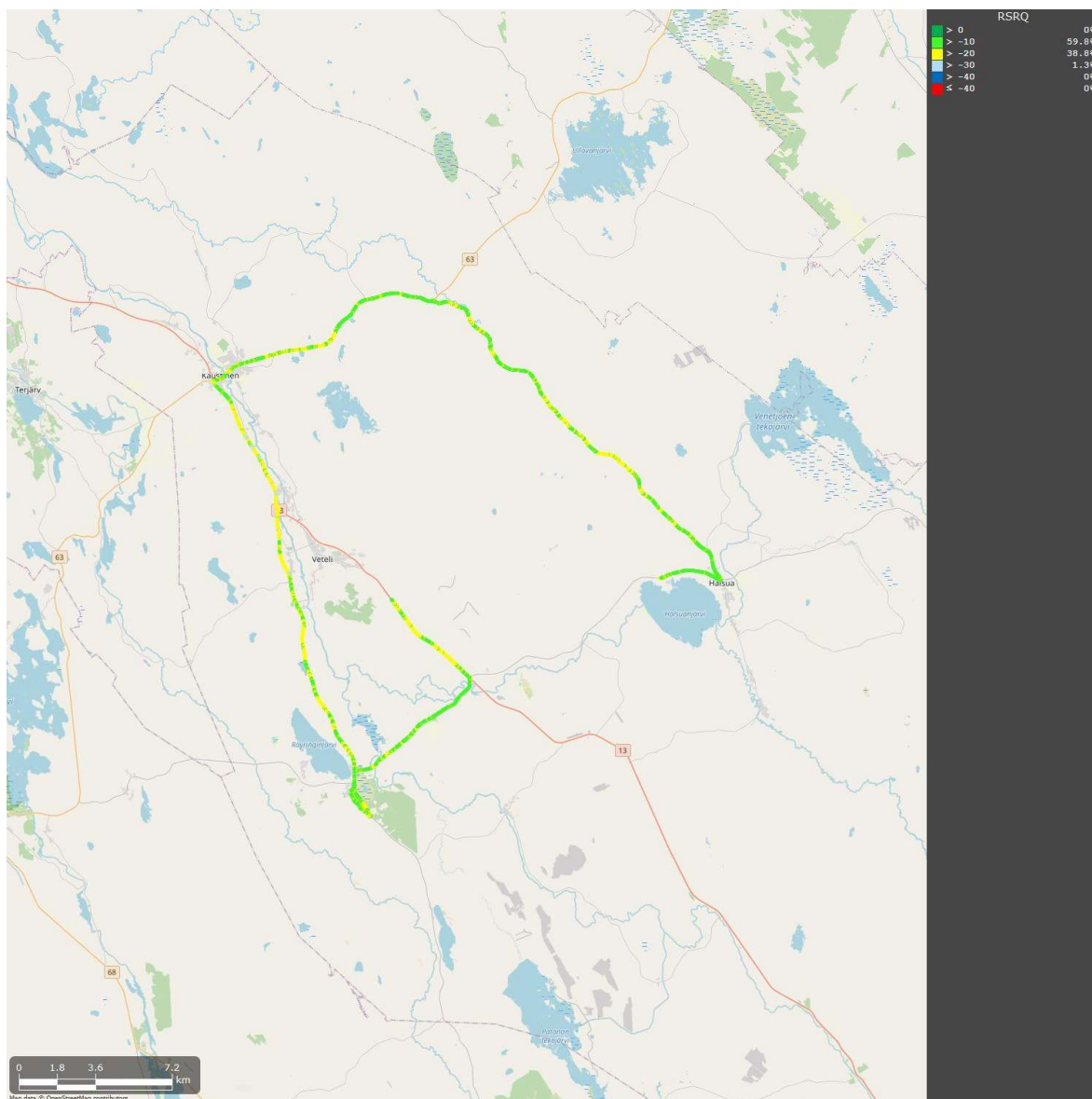
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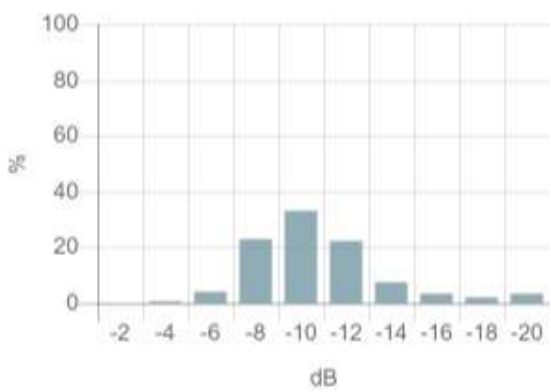
RSRP



RSRP

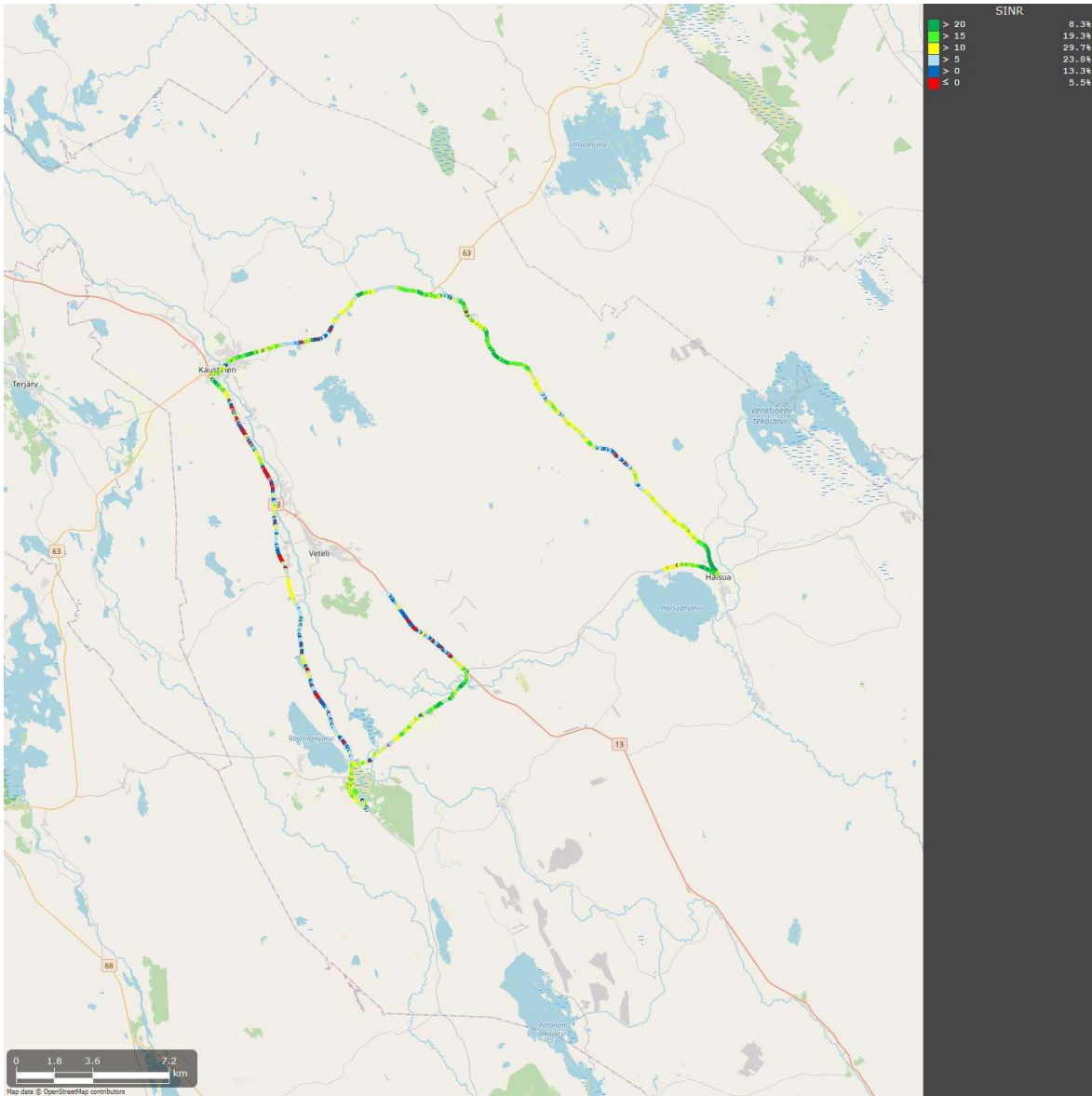


RSRQ

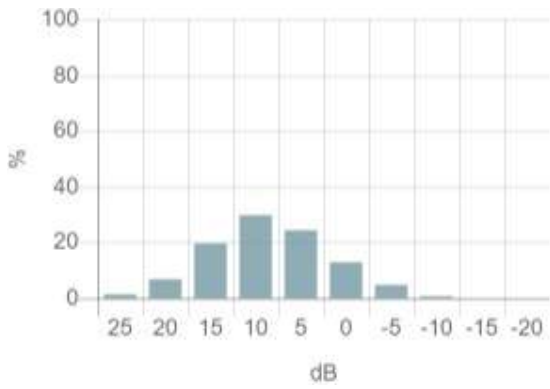


RSRQ



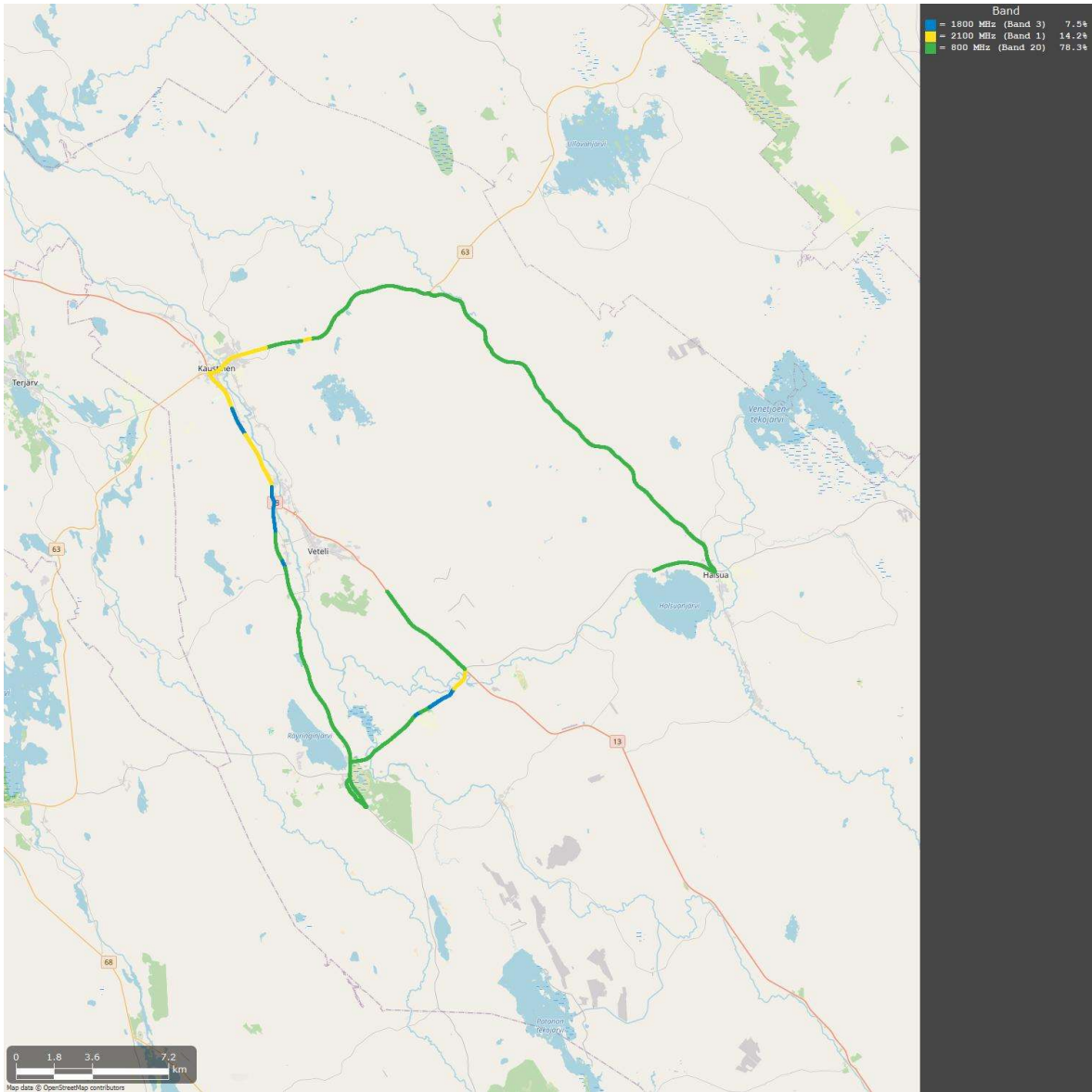


SINR



SINR



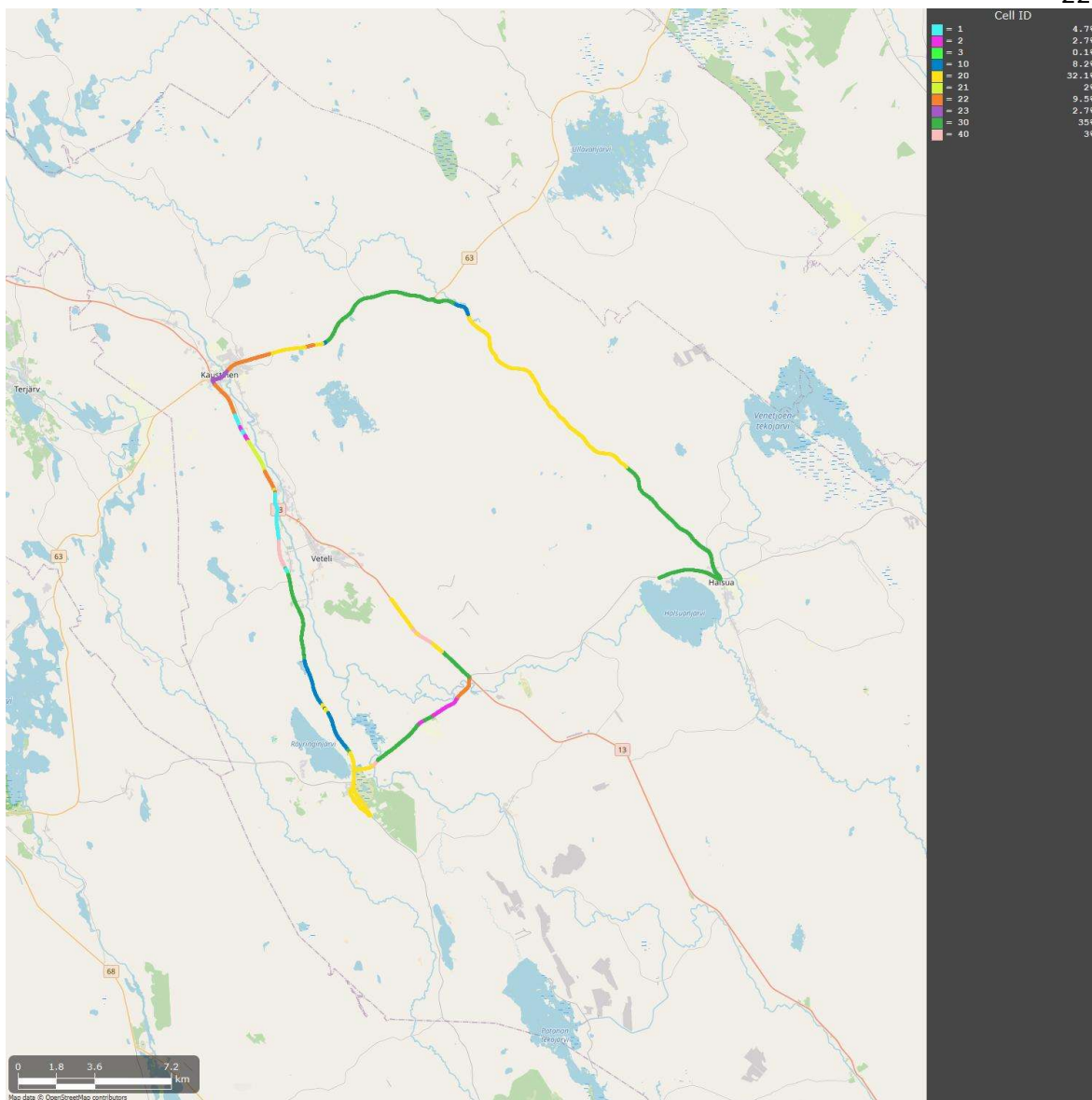


Band

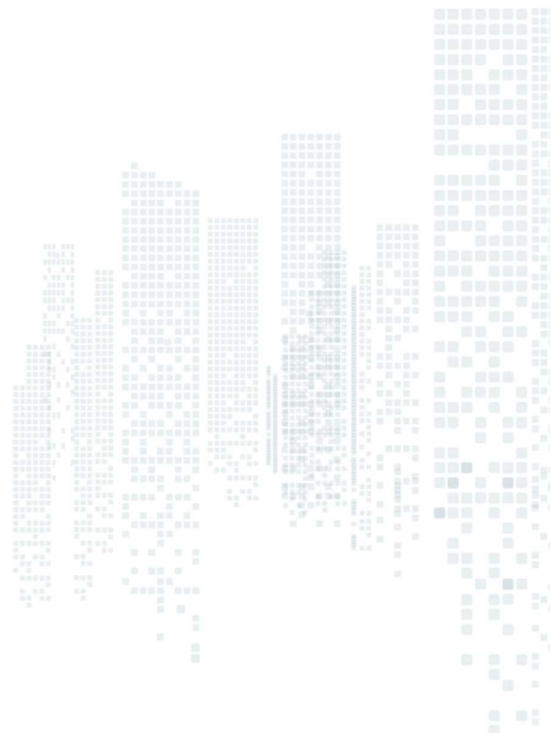


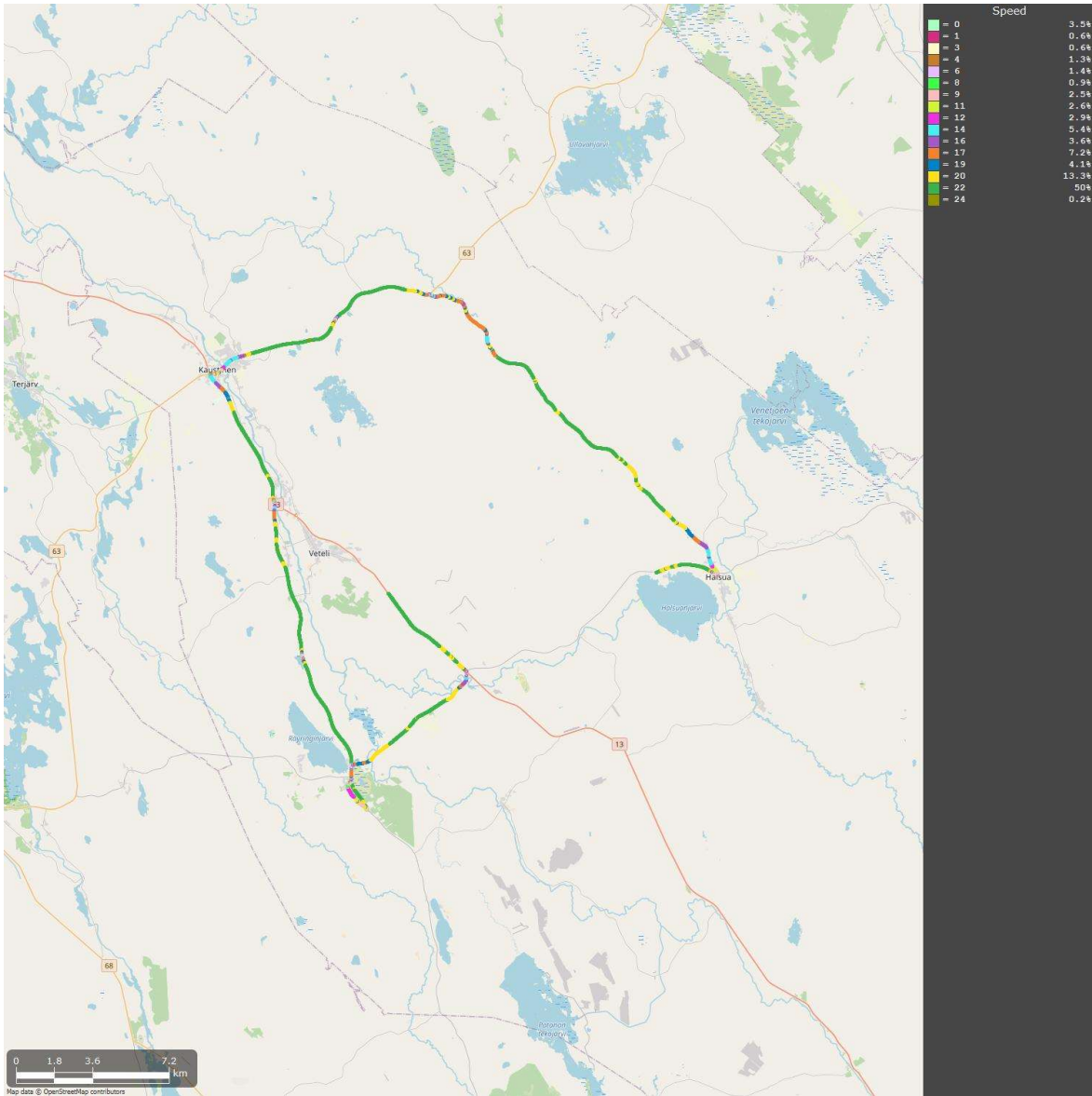
Band





Cell ID





Speed

