Intelligent Compaction

and Cloud technology

sitelink3D
REAL-TIME 3D MANAGEMENT

This presentation

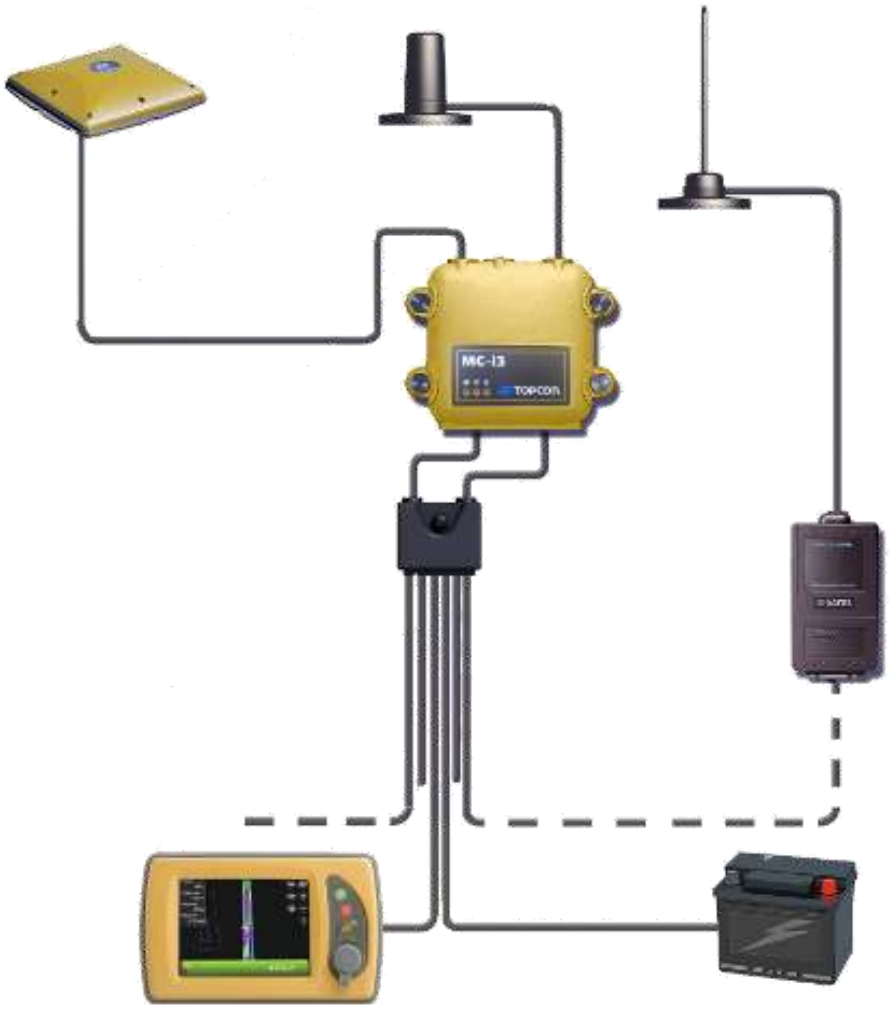
- Hardware
- User interface – operator’s experience
- Cloud technology
  - Sitelink3D Enterprise
  - Multiple machines
  - Live updates
  - Reporting

Hardware

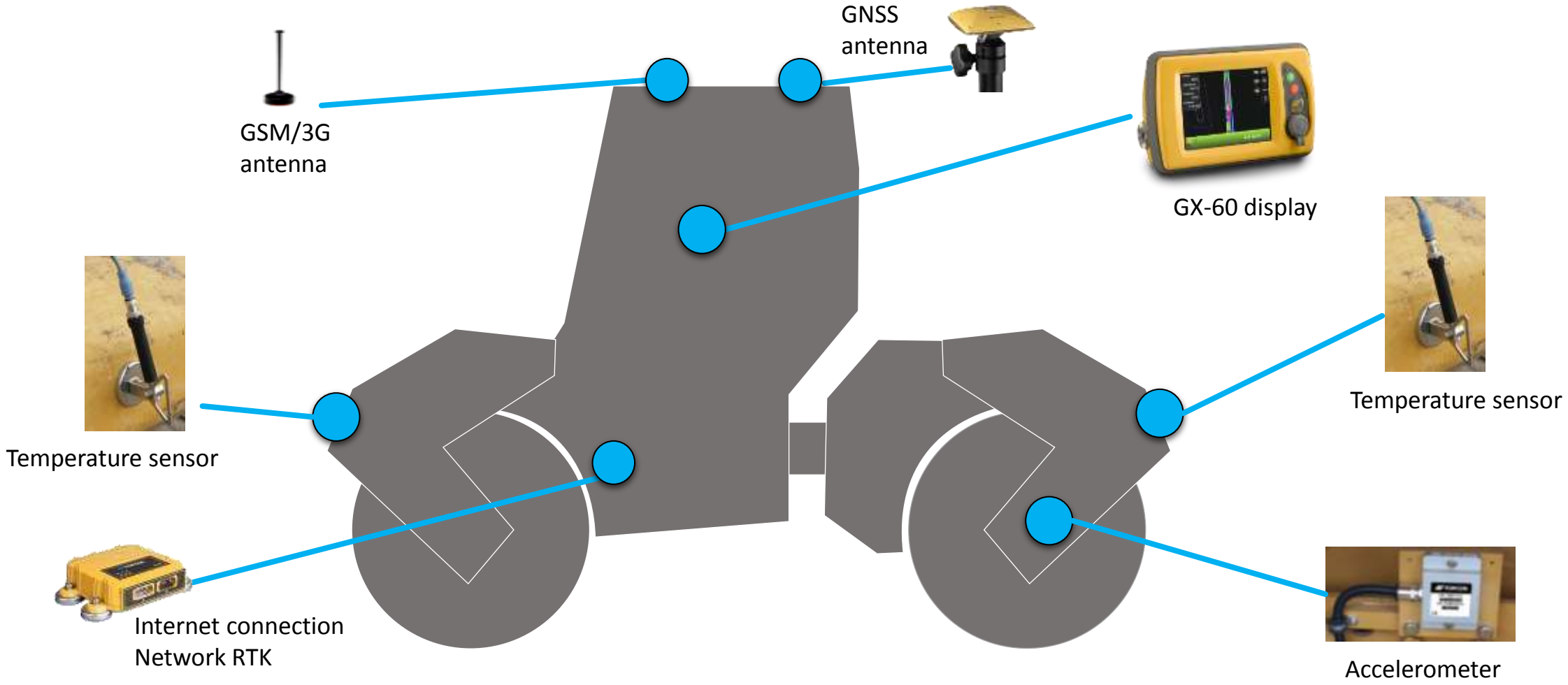
Topcon’s IC solution

Topcon's IC solution

- GNSS antenna
- MC-i3 GNSS receiver
  - RTK Network correction
  - Gateway to Sitelink3D (Topcon's Cloud)
- GX-60 display
  - 6.5" with touch screen
- Optional Radio for use with base station
- Optional Temperature kit (front / rear)
- Optional Accelerometer kit



Components locations



User experience

It is not just about creating reports

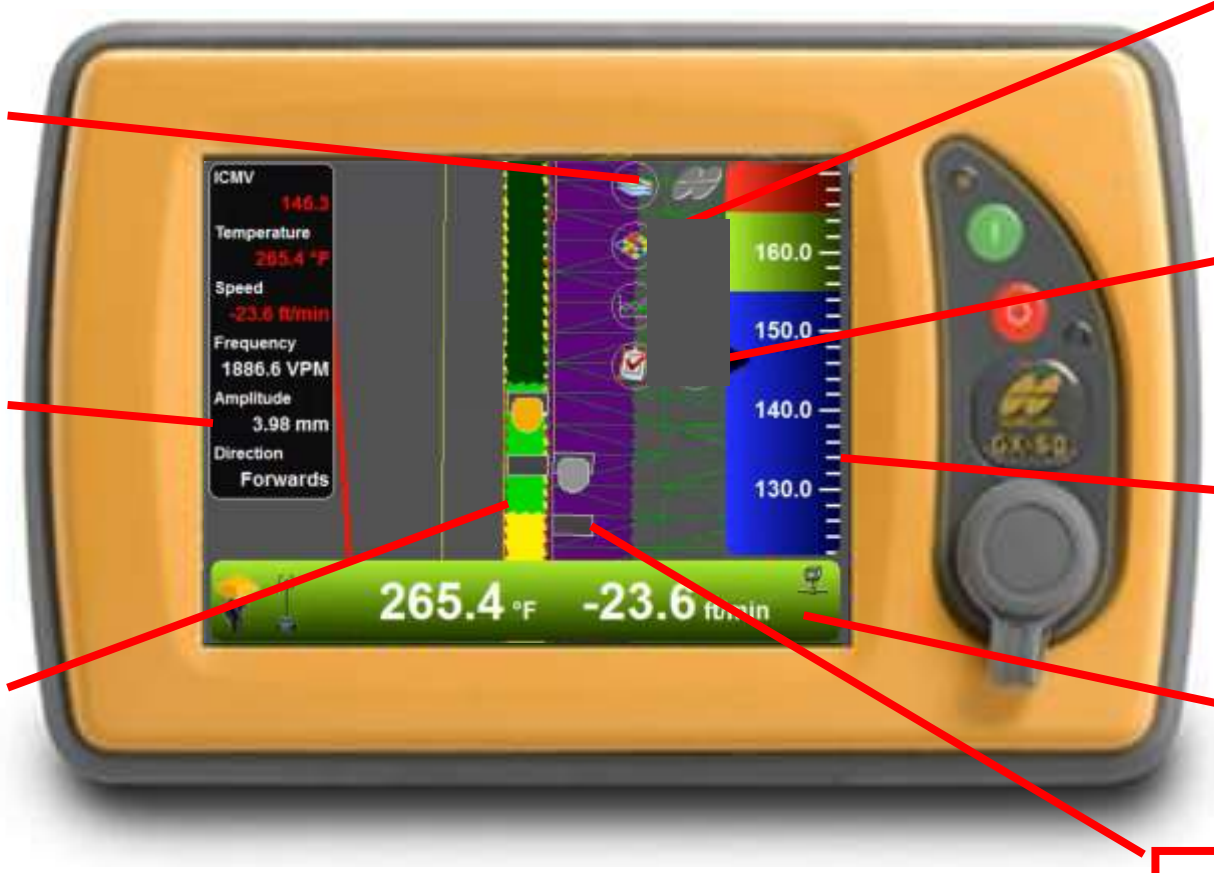
GX-60 Display

- Configurable interface:

Cycle as-built type (ICMV, Temp, Passes)

Configurable text overlay

Customizable as-builts mapping colors, showing updates of ALL rollers live



Toggle as-built mapping

Automatic forward/reverse detection with override

ICMV indictor

Configurable bar

Other roller

User experience - no design

- Switch it on and go
- No Alignment required
- Clean interface

User experience – with design file

- Using After Market kit
- Or OEM connection
- Full design visible
- Multiple alignments
- Forward / Reverse detection based signal

User experience – with ICMV indicator

- Quick at-a-glance assessment
- Much easier to read than jumpy number

User experience – boundaries and colors

- Set boundaries according to test strip data
- As-built colors automatically updated
- And adjustable

Key features

- Touch screen
- From basic…
- …to design with alignments
- At a glance ICMV indicator
- Works with any projection, localization, etc…
- As-built color range are boundaries dependent (and adjustable)

Benefits of using ‘the Cloud’

It is not just about creating reports

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Sitelink3D Enterprise – the components

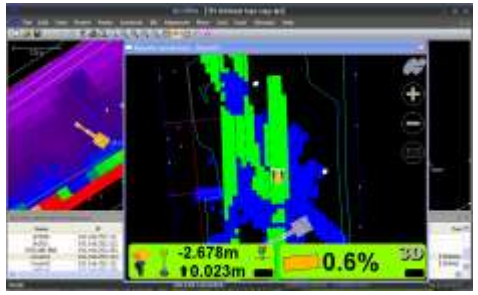
File Transfer

Visibility/Tracking

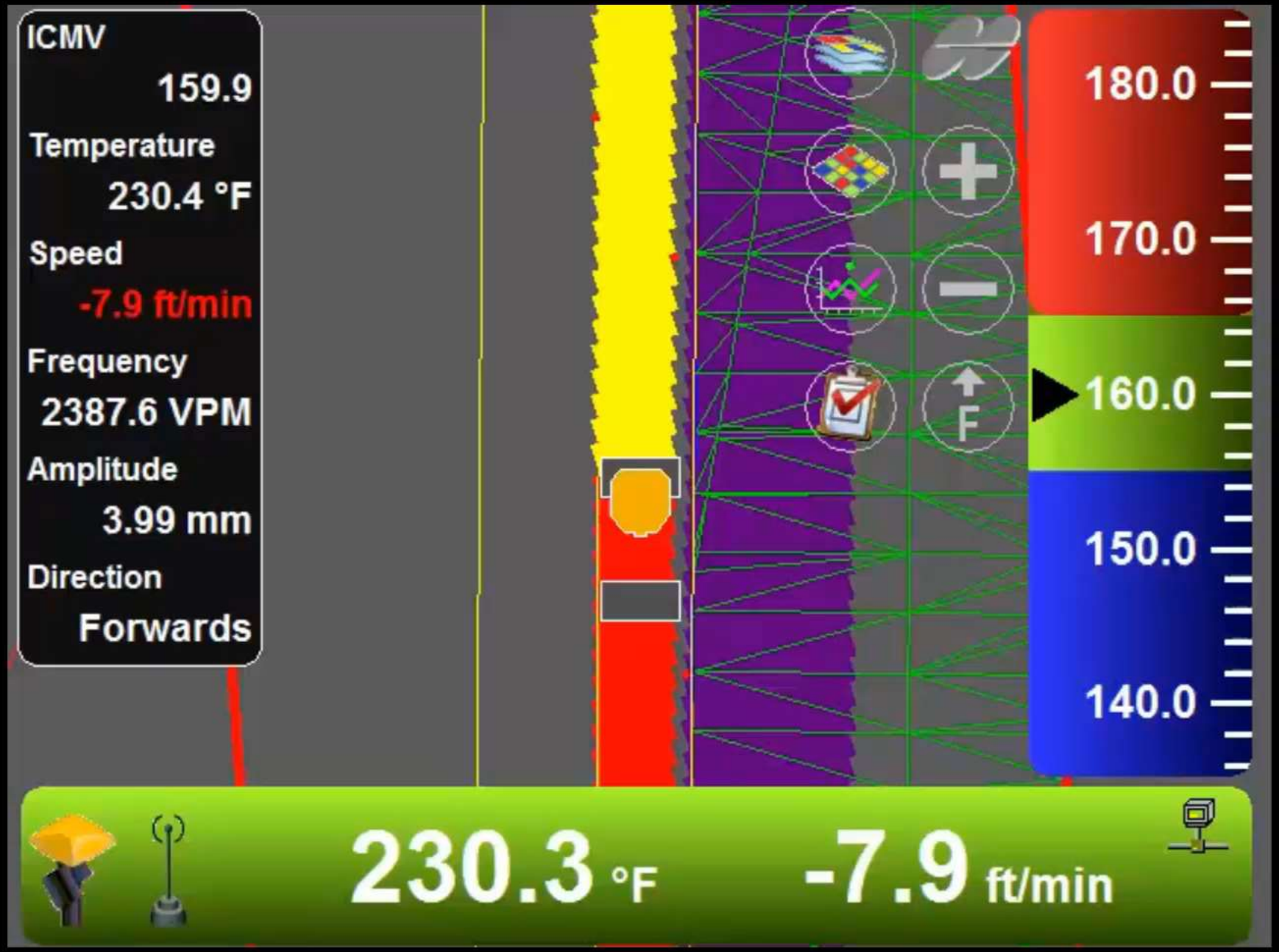
Text Messaging

Remote Access & Support

Machines & Rovers



As-built Mapping


ICMV
159.9
Temperature
230.4 °F
Speed
-7.9 ft/min
Frequency
2387.6 VPM
Amplitude
3.99 mm
Direction
Forwards
180.0
170.0
160.0
150.0
140.0
F
230.3 °F
-7.9 ft/min

Reports

Delivering the proof

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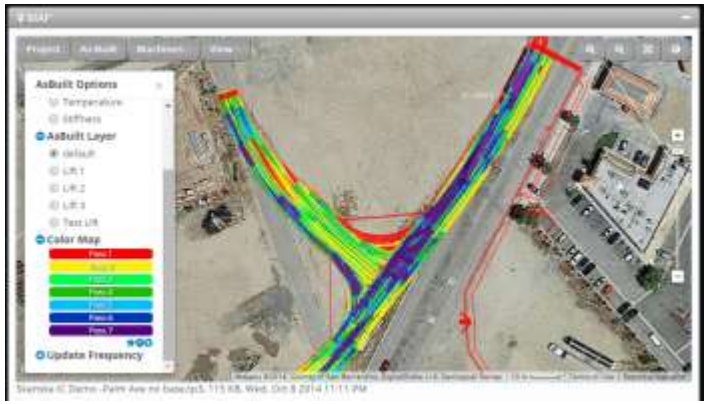
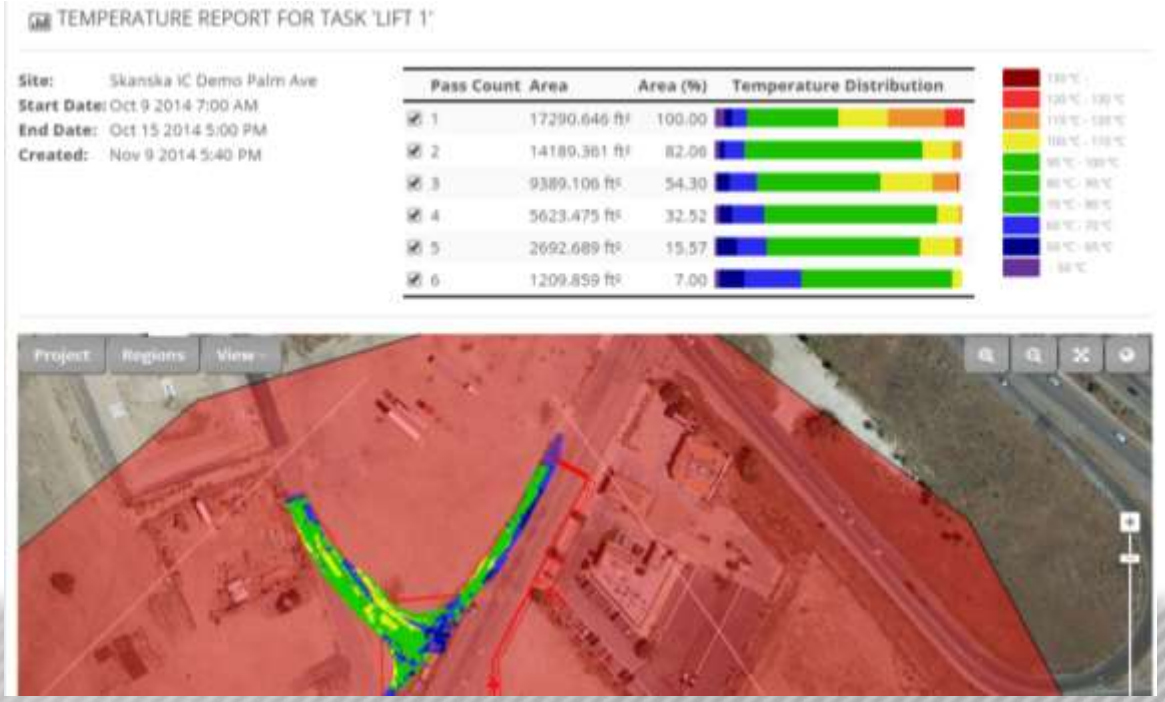
Reports and web-based info

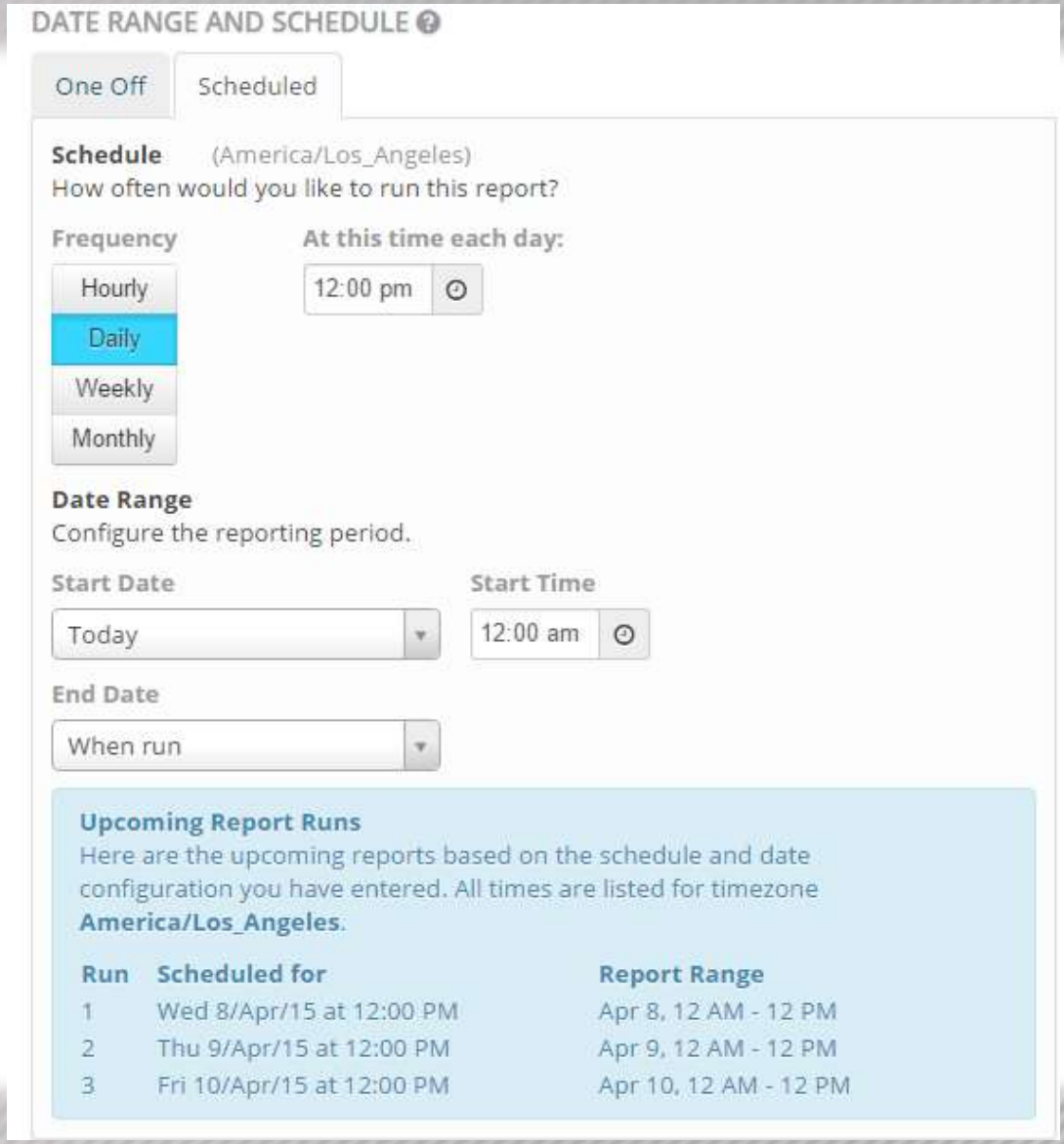
- Dashboard
  - ICMV, Temperature, Pass count
- Reports
  - ICMV, Temperature, Pass count, Compaction Curve
  - Note:
    - ICMV report includes temperature filtering
- Export
  - Veda





Scheduled reports

- All reports can be scheduled (including generation of Veda files)
- Notification via email when report is done



Few important aspects

- For IC:
  - No data loss
  - Real-time updates for all operators and on-line
  - Be pro-active: deal with issues before it becomes a problem
  - Scheduled reports
- In general:
  - File transfer: no more driving around with USB drives
  - Remote connection: training and support
  - Fleet easier to manage: see progress all the time

TOPCON

Thank you
for your attention.