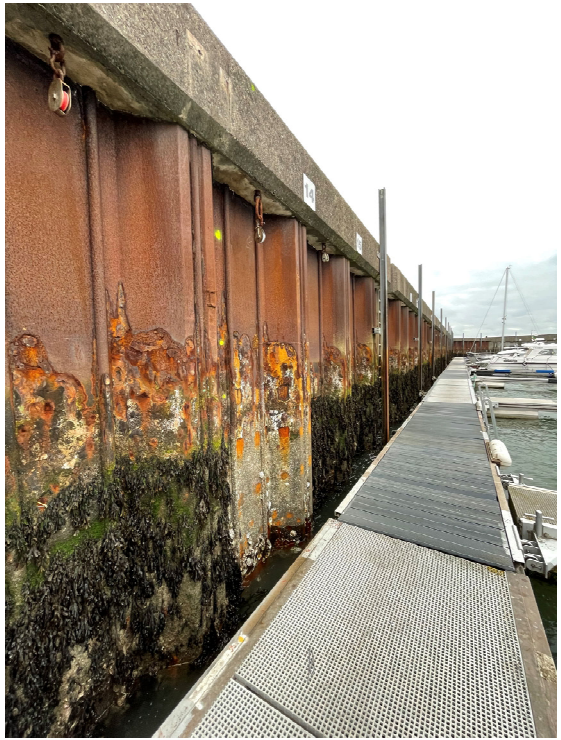
Aus der Tiefe in die Cloud

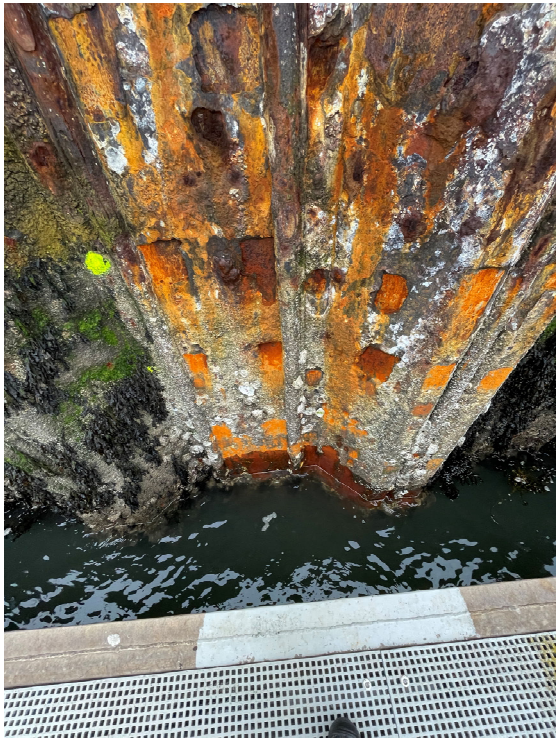
Hafeninfrastruktur erfassen, analysieren und managen

HydroMapper
make visible

Berit Jost
25.06.2026
38. Hydrographentag

Alternde Hafeninfrastruktur



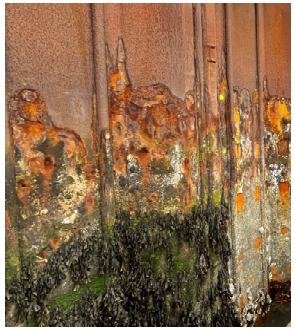


In Deutschland:

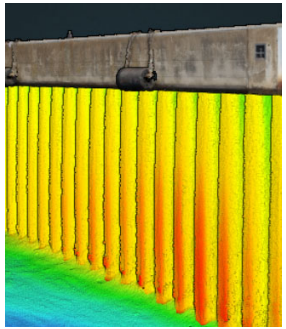
- Mehr als 2.500 Wasserbauwerke
- Meist nach dem Zweiten Weltkrieg errichtet
- 70 % befinden sich in einem schlechten oder sehr schlechten Zustand (BAW)

Typische Schäden

Korrosion

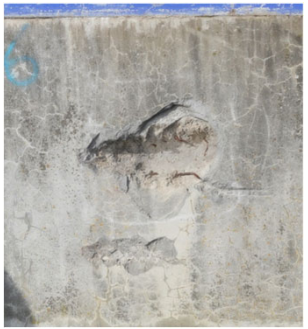


Deformation

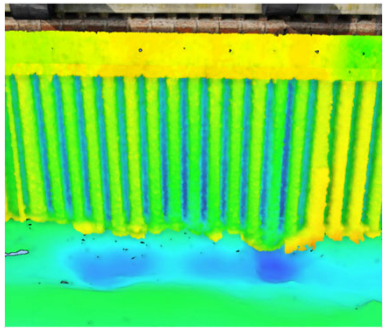


Schlossprengungen

Abplatzungen



Kolkbildung



Zur Vermeidung ressourcenintensiver Neubauten müssen wir …

Hafeninfrastruktur…

…erfassen

…analysieren

…managen

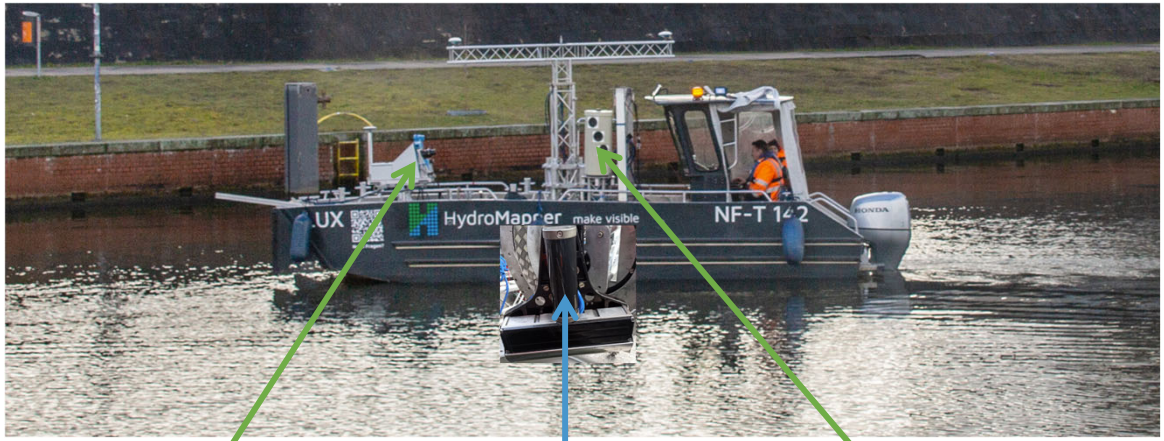
… im Kontext der Nachhaltigkeit

Erfassung

Anforderungen:

- Hohe Dichte
- Gutes Auflösungsvermögen
- Genaue Daten
- Sichtbarkeit kleinster Schäden

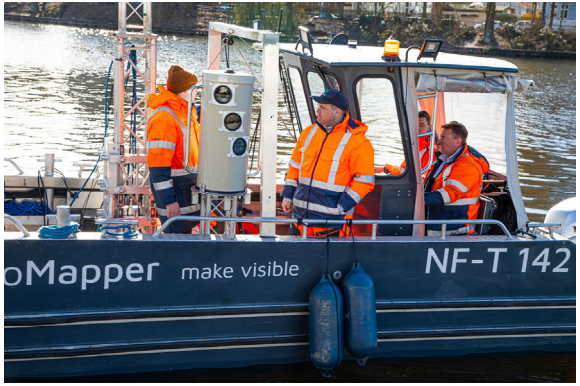
Messsystem

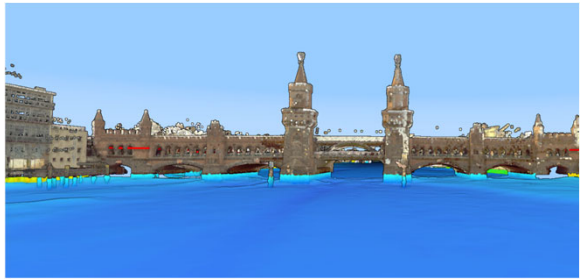


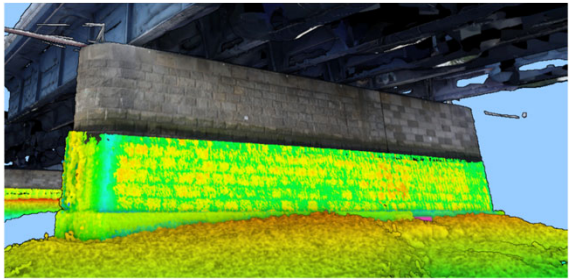
Produkte:

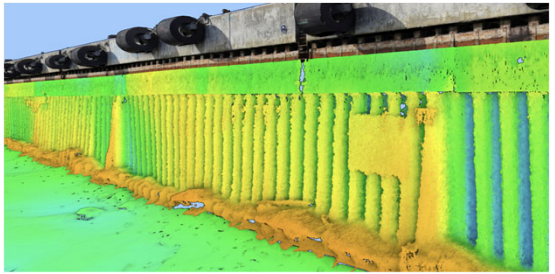
- Über Wasser: Laserscanner Punktwolke
- Über Wasser: Vermaschung
- Unter Wasser: Sonarpunktwolke

Datenaufnahme

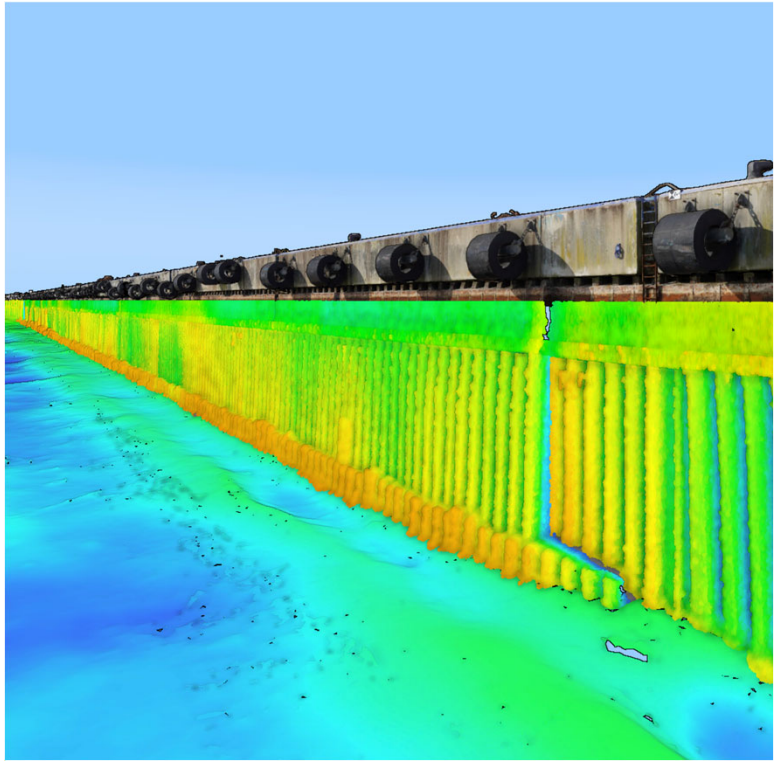


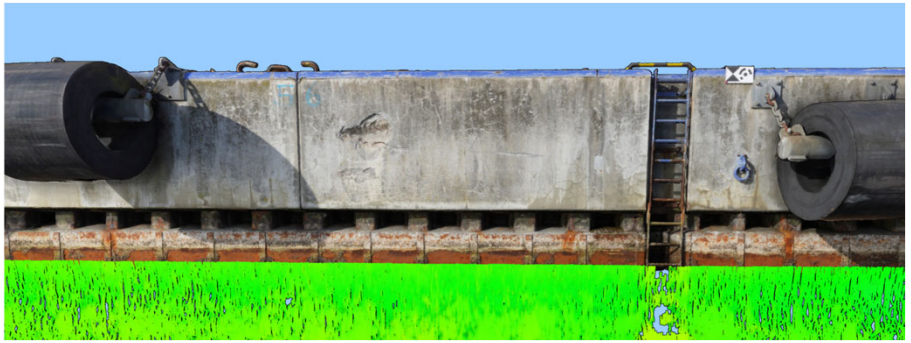


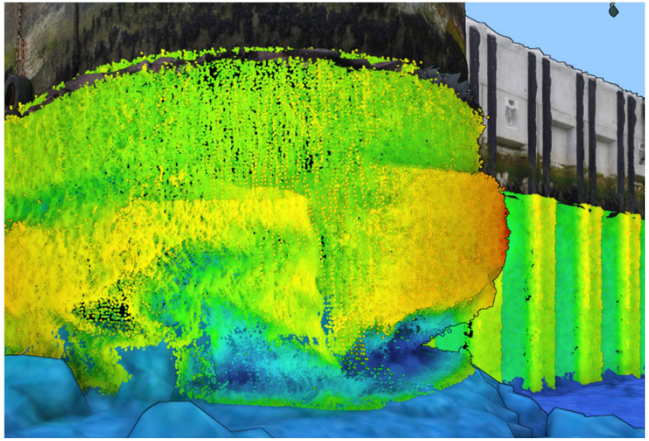


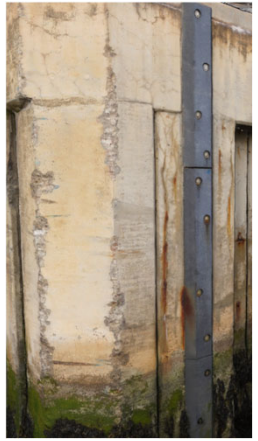


Die Daten

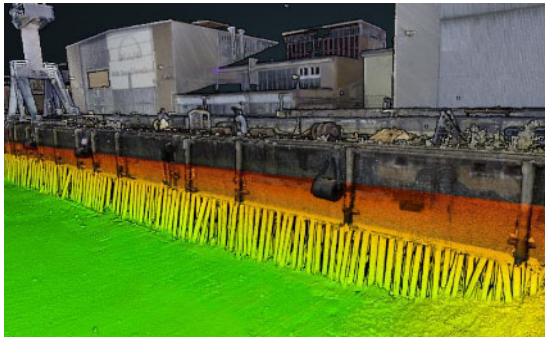


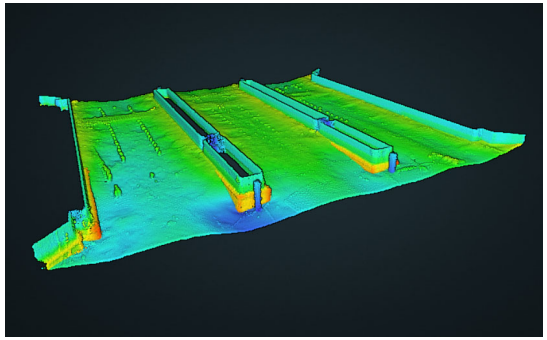


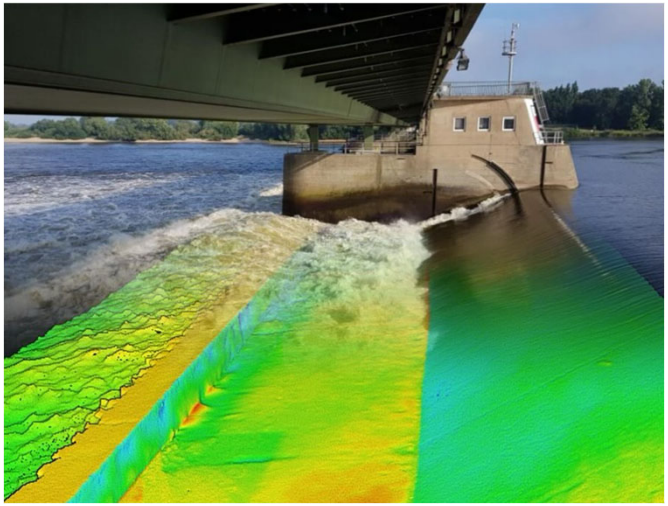




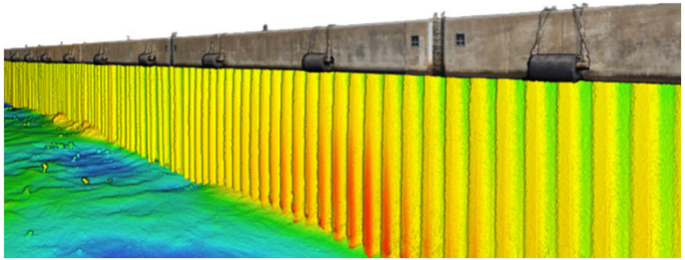
Anwendungsbeispiele







- Schleusen
- Kaimauern
- Brücken
- Staustufen
- Pfahlbauten
- …

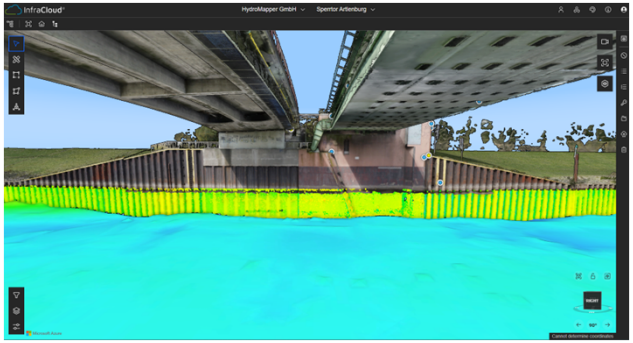


Hafeninfrastruktur…

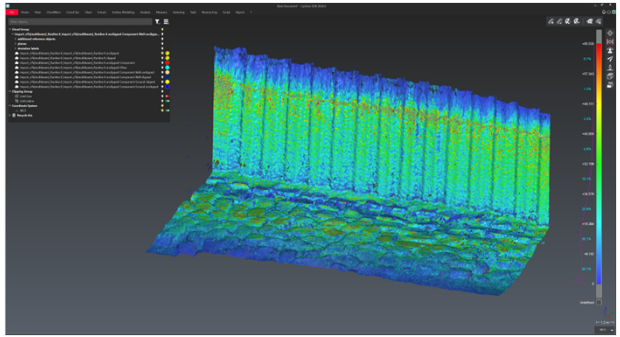
…erfassen

…analysieren

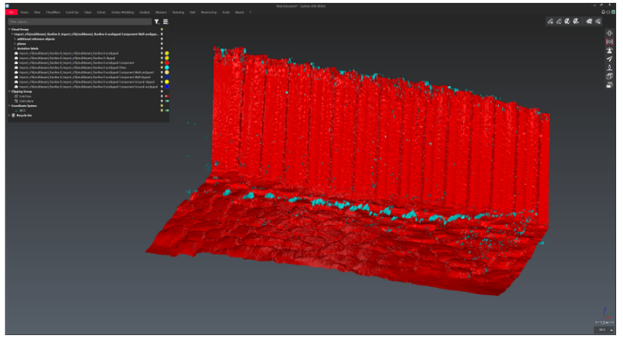
…managen



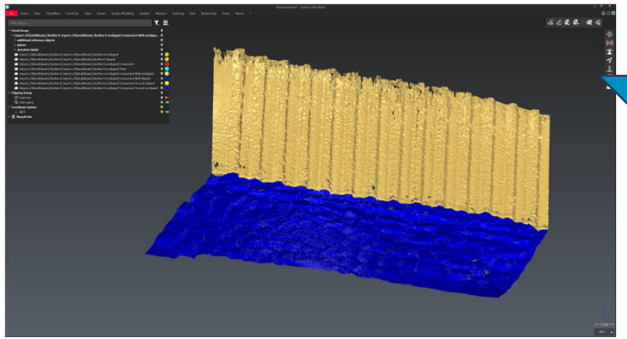
Prozessierungsschritte



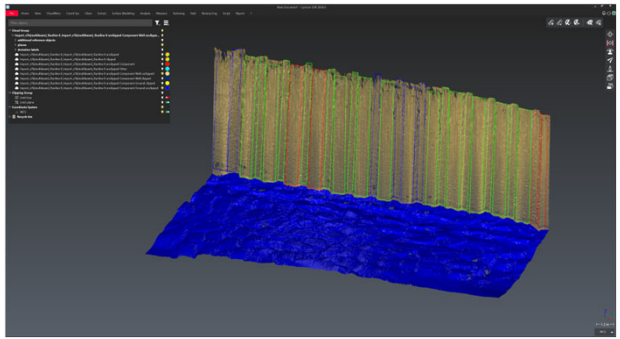
Reinigen



Segmentieren

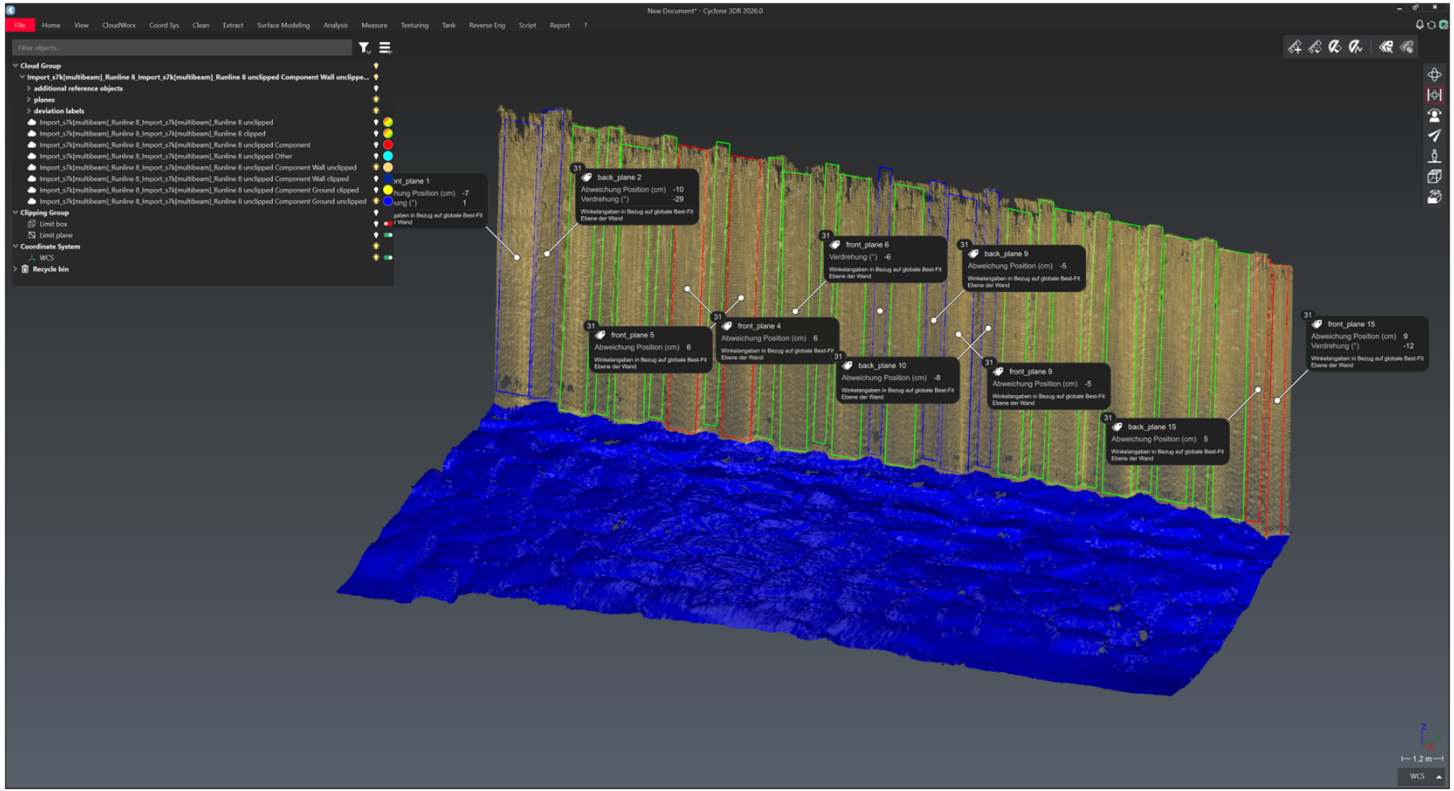


Analysieren



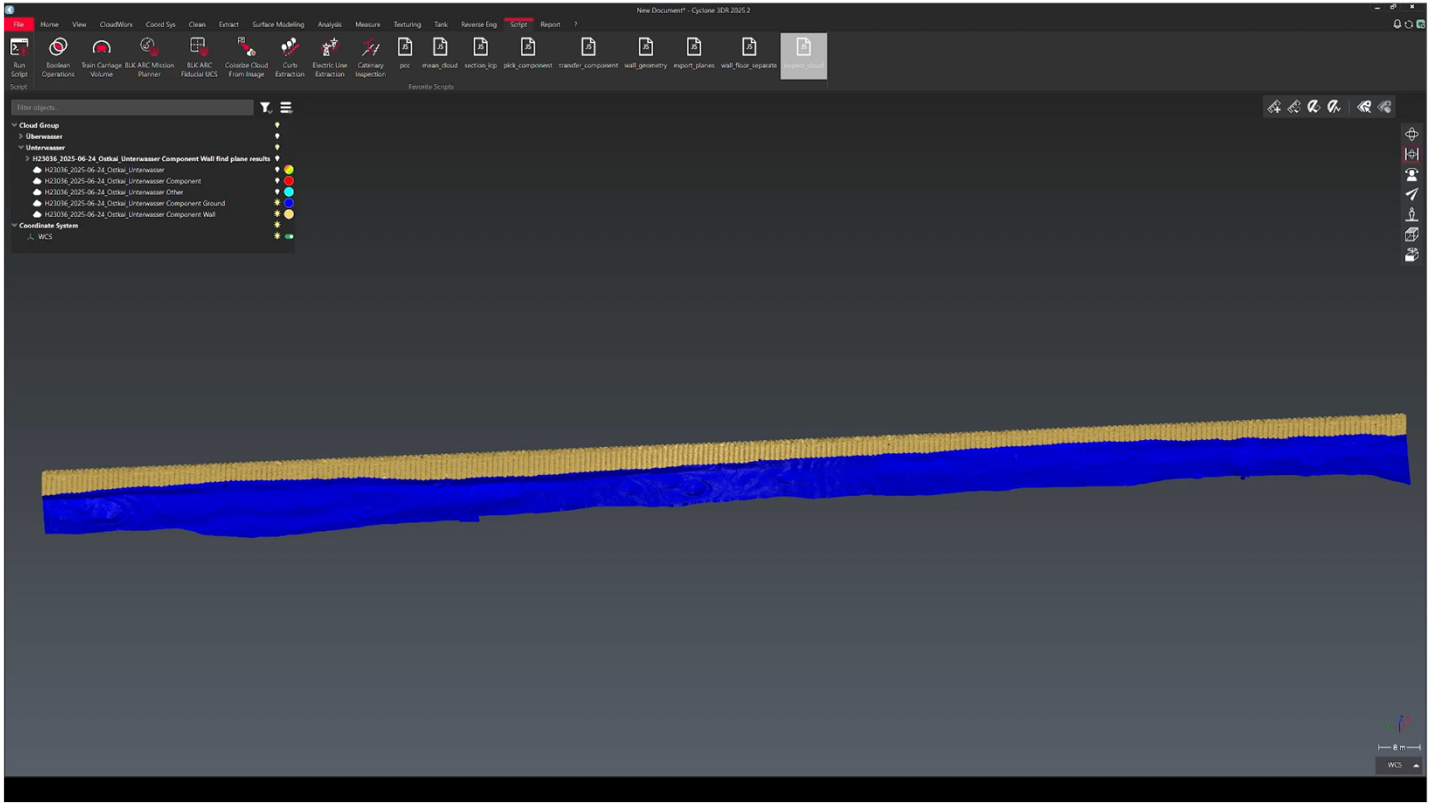
HydroMapper

Analyse

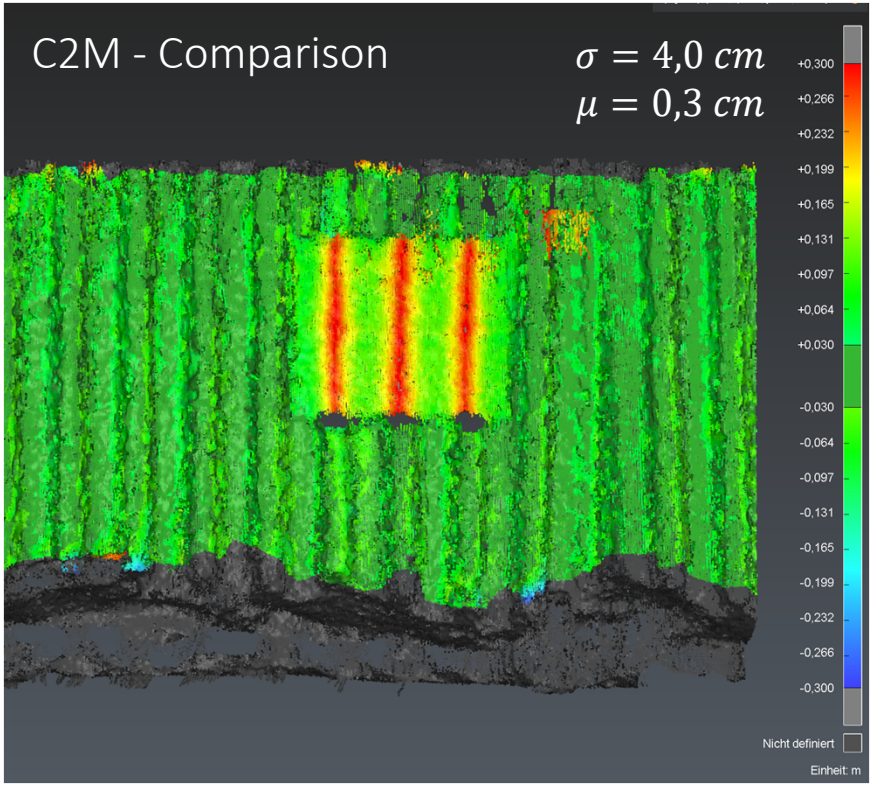


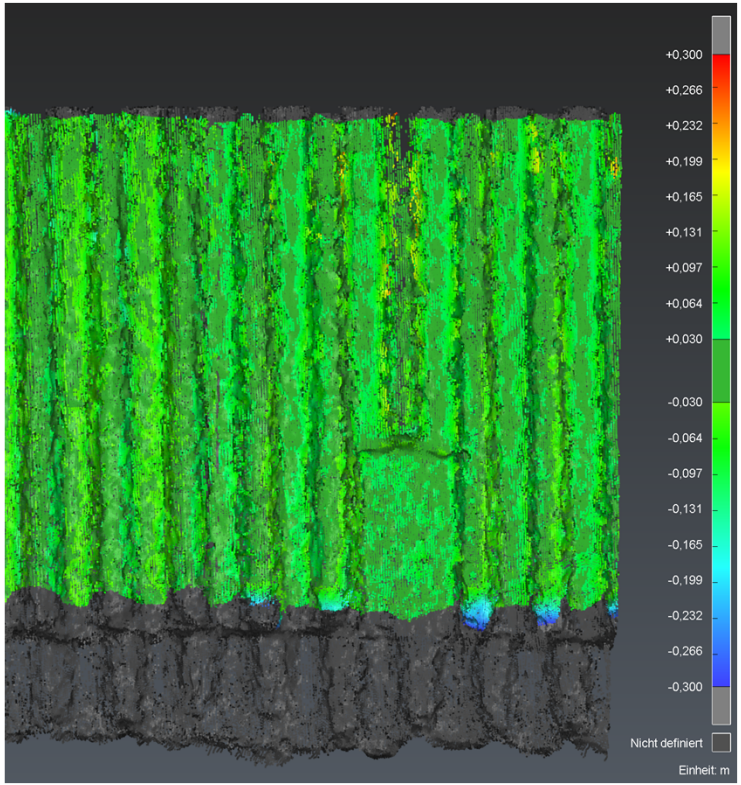
HydroMapper

Analyse



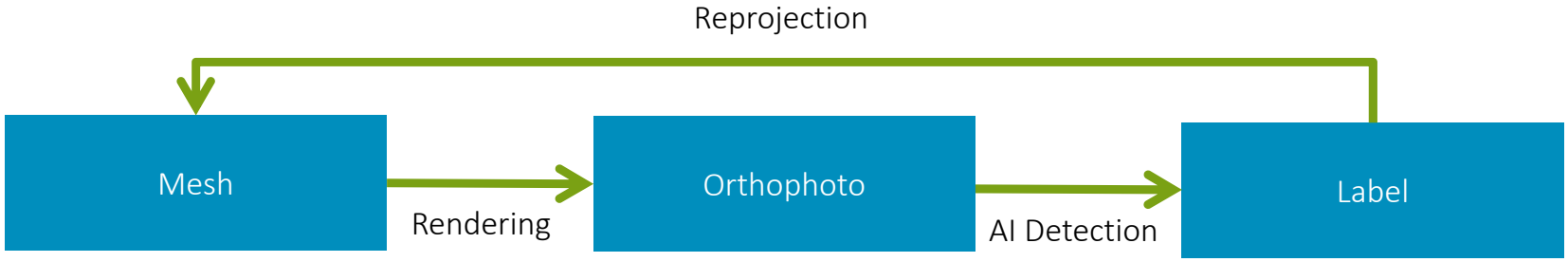
Punktwolkenvergleich 2022-2026

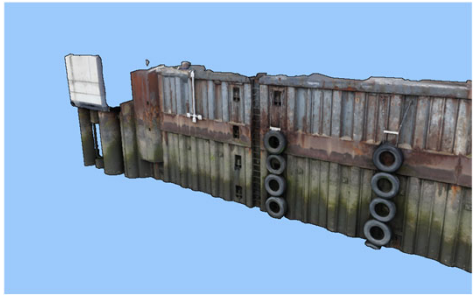




HydroMapper

Analyse über Wasser





Hafeninfrastruktur…

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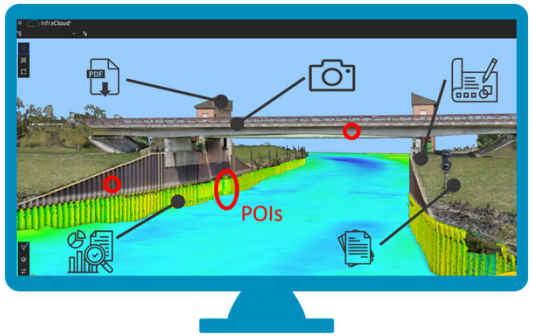
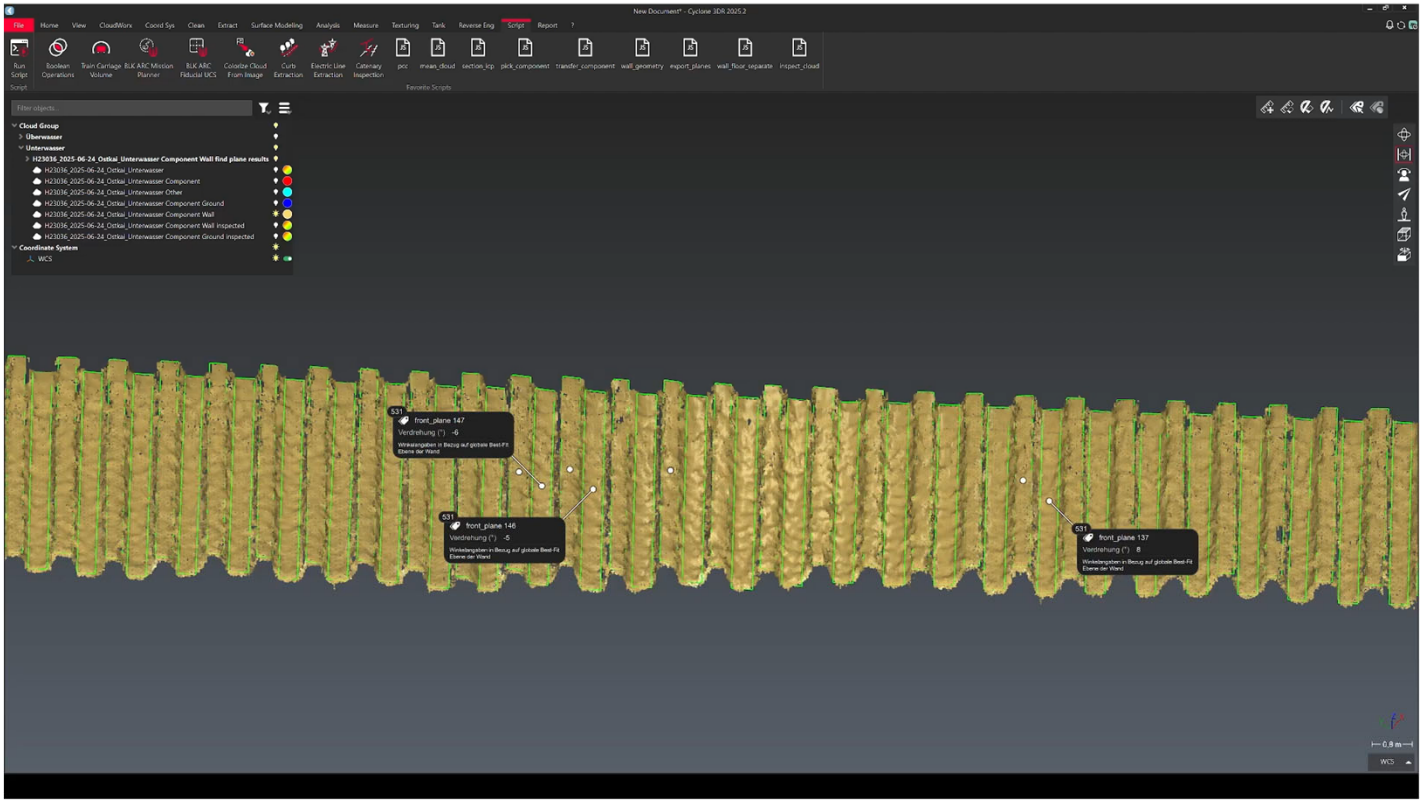
…analysieren

…managen



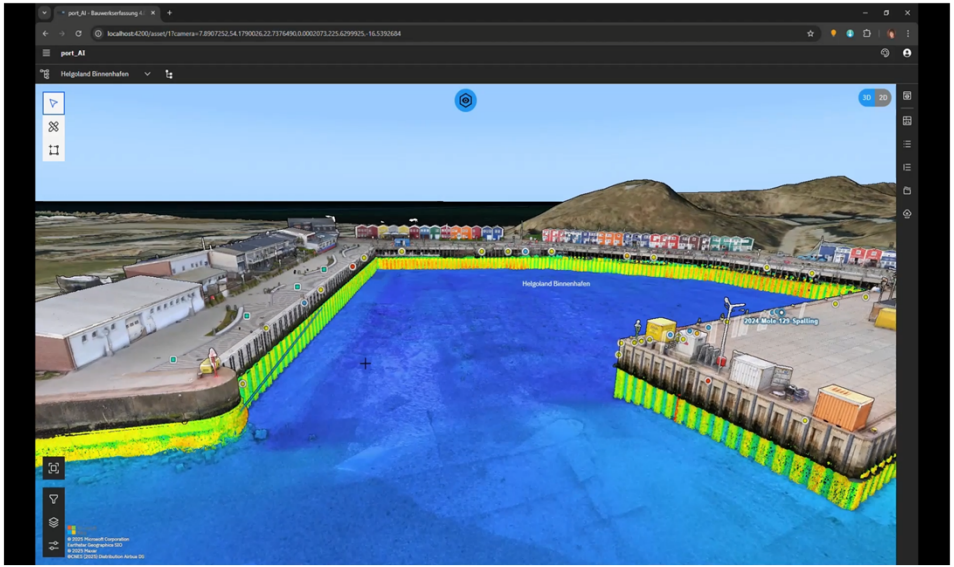
HydroMapper

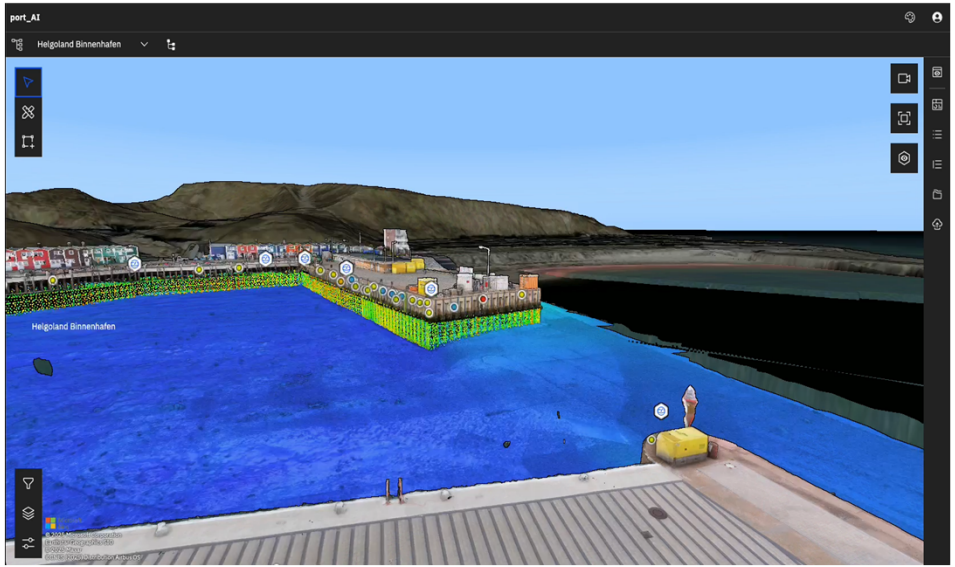
Cloud upload



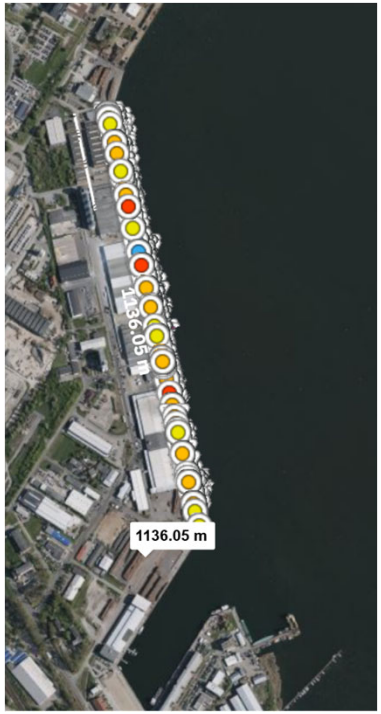
HydroMapper

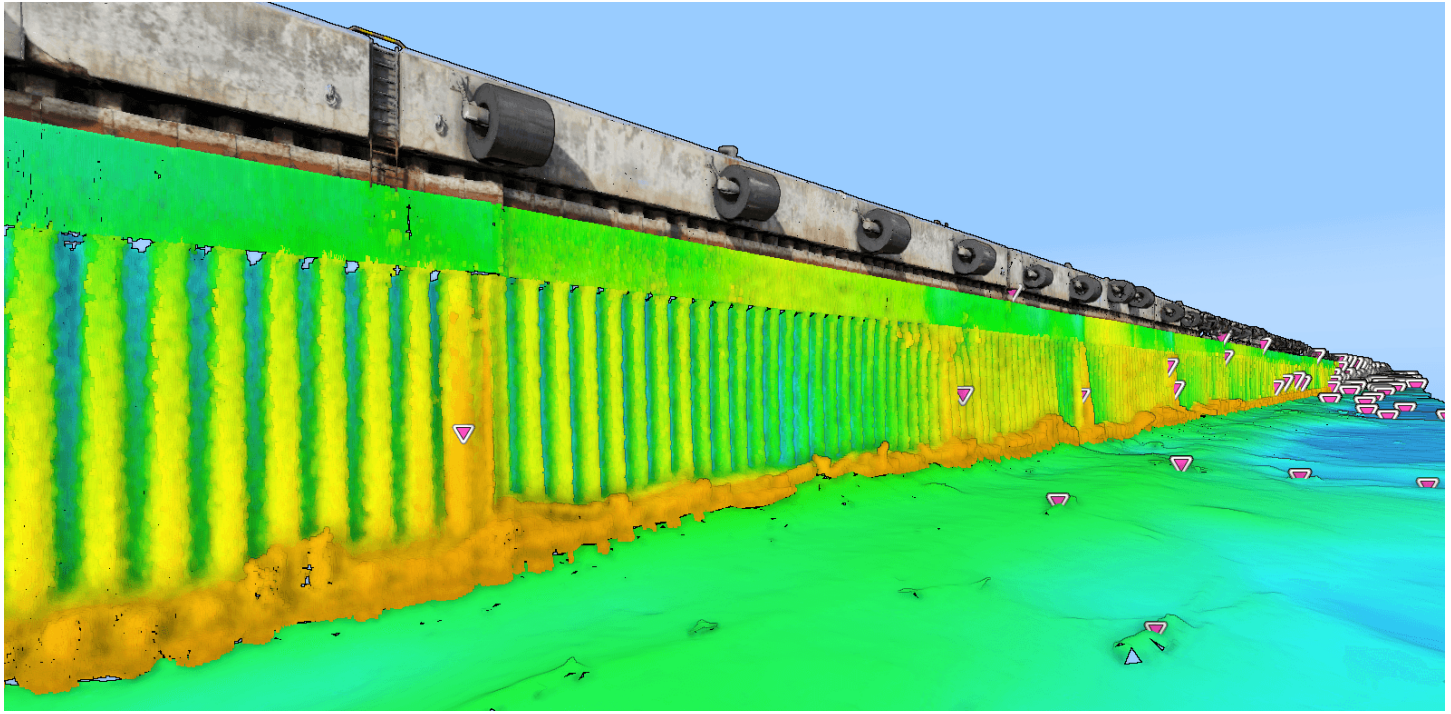
Managen in der InfraCloud



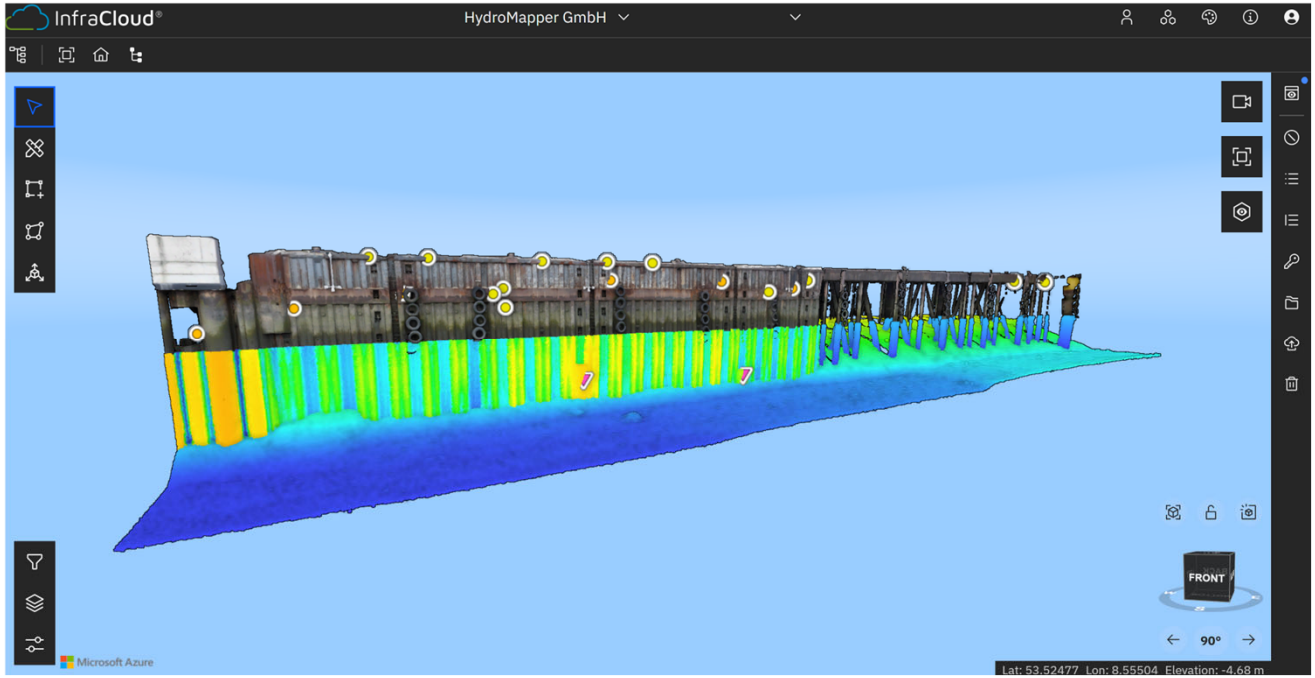


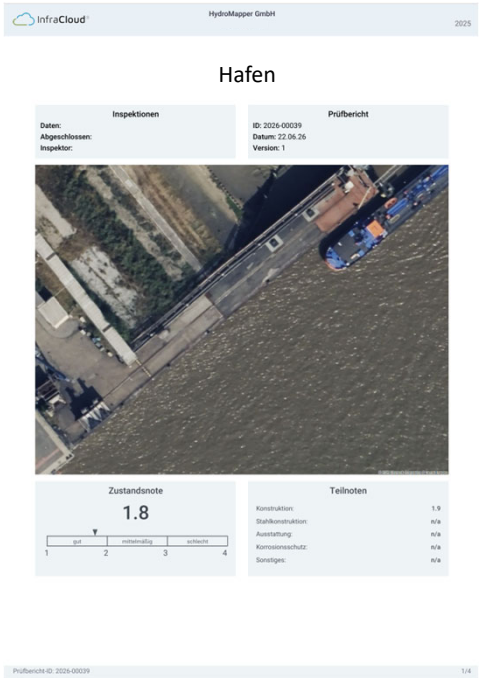
Managen – alles auf einen Blick





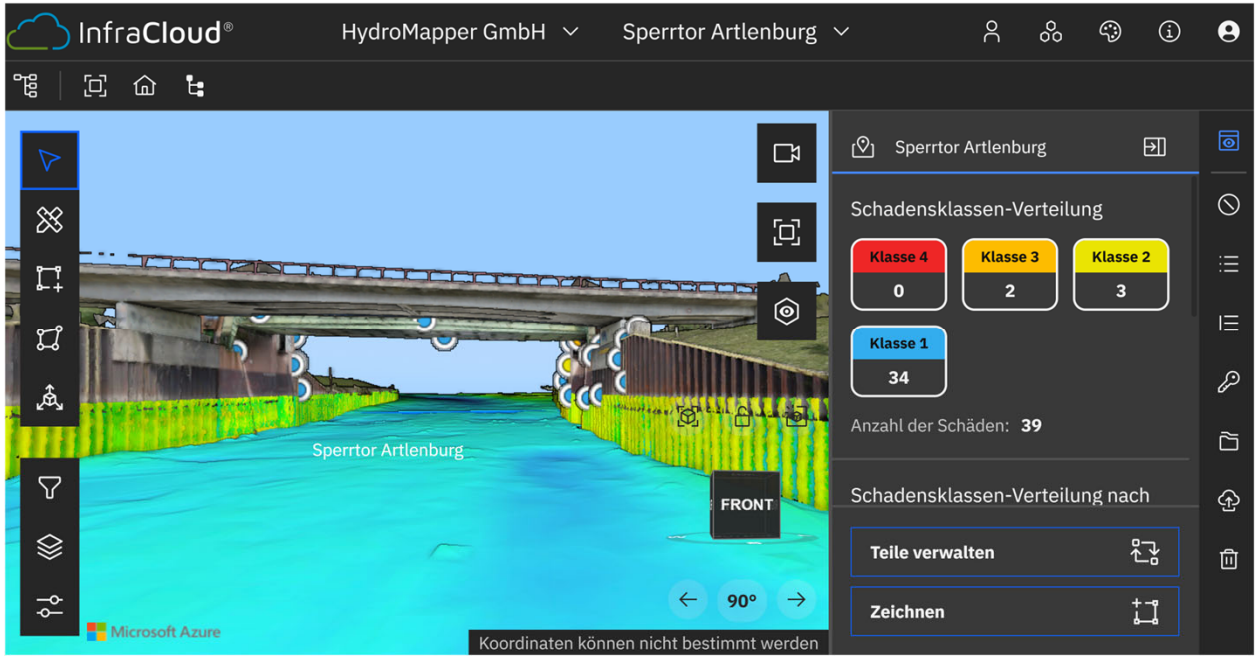
Dokumentation





HydroMapper

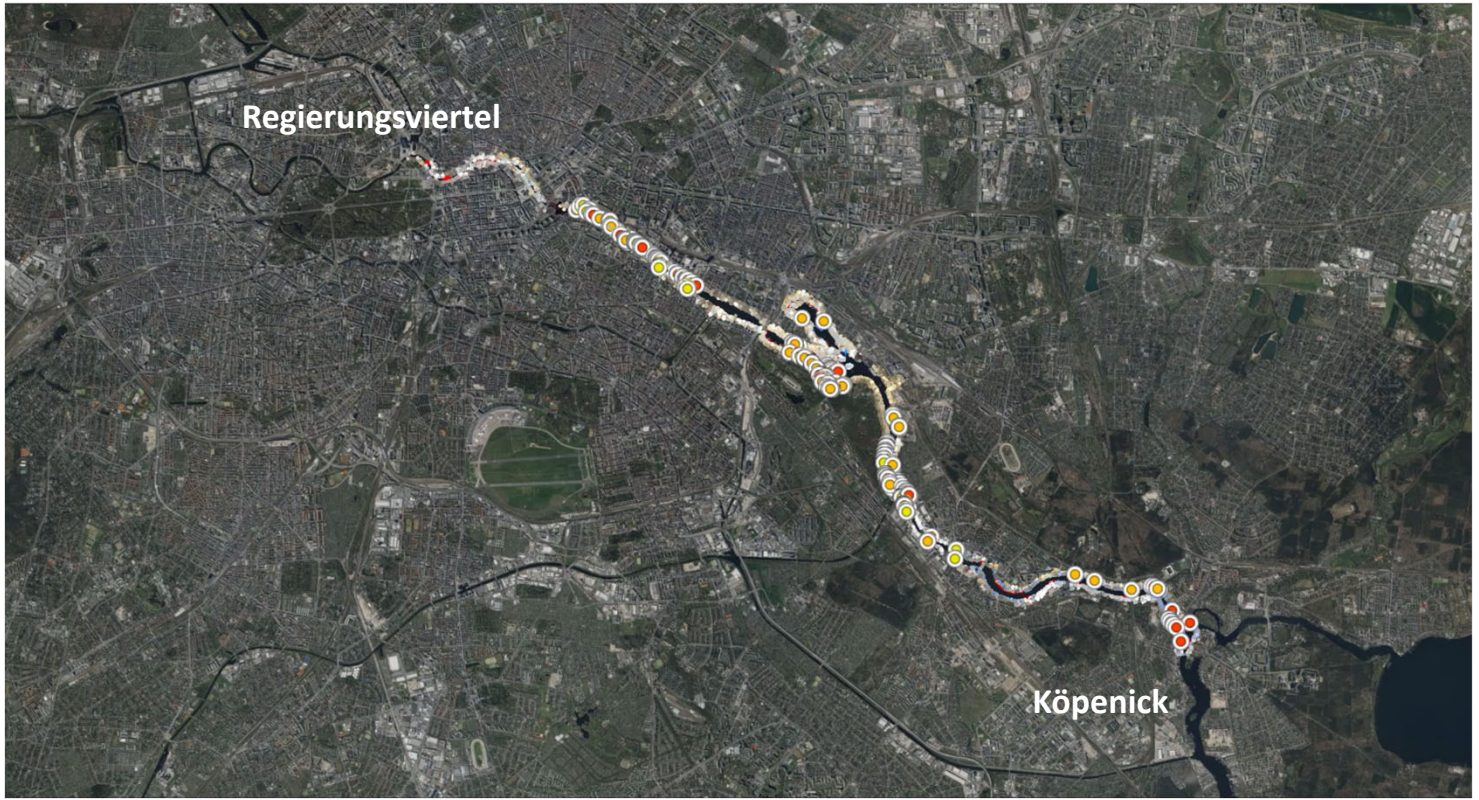
Ganzheitliches Assetmanagement



- ✓ Historie anzeigen
- ✓ Prüfbericht erstellen
- ✓ Instandsetzung priorisieren
- ✓ Instandsetzung planen
- ✓ Kostenschätzung für Instandsetzung
- ✓ Nachunternehmern Arbeitspakete zuweisen
- ✓ Schäden abmelden
- ✓ Reparierte Flächen prüfen

HydroMapper

Projekt: SOW Berlin



HydroMapper

Aus der Tiefe in die Cloud

Eine zentrale Datenquelle

- Status Quo
- Gesamtes Bild

Ortsunabhängige Kollaboration in Echtzeit

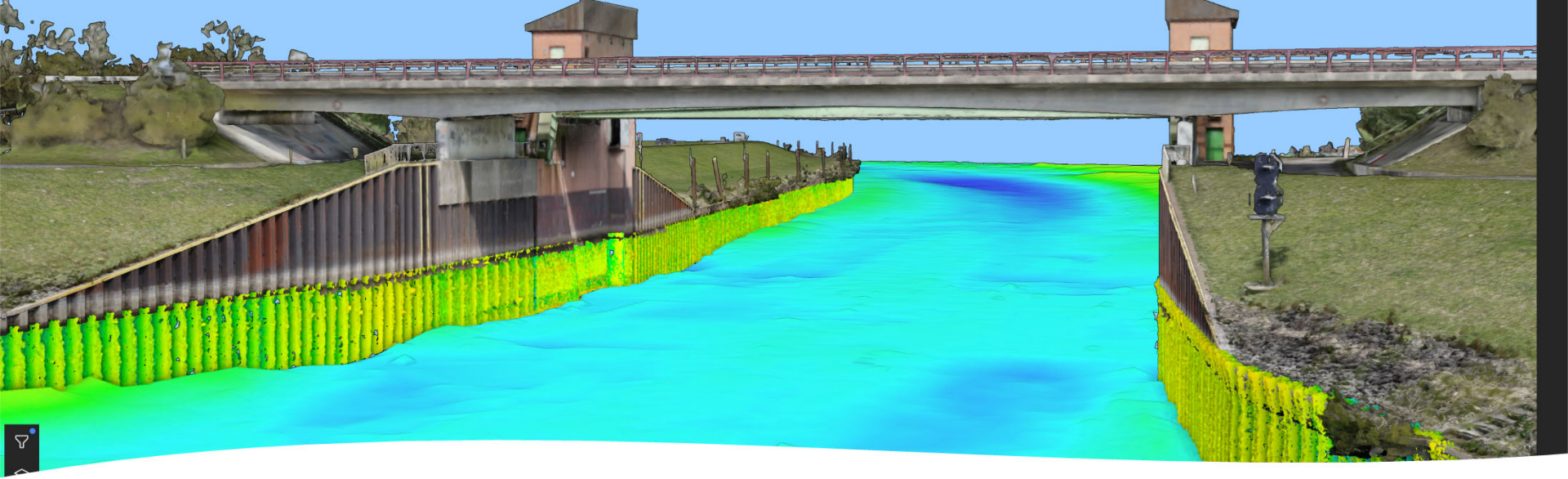
- Effizienz in Teams
- Einfacher Zugang

Prädiktive Instandhaltung

- Veränderungen messbar machen
- Kostenexplosionen verhindern

Automatisierung und KI-Unterstützung

- Intelligente Schadenserkennung
- Automatisches Reporting



Vielen Dank!

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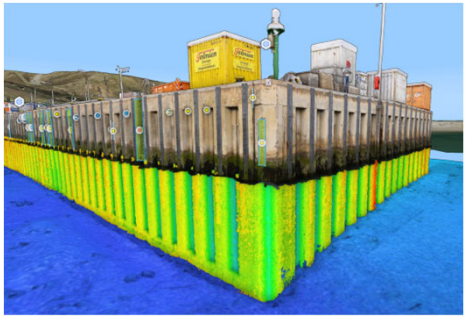
+49 160 9779 5849

www.hydromapper.de

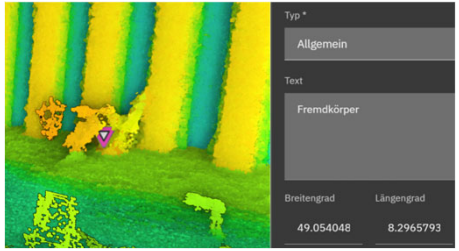
Workflow

Erfassung



Daten + Cloud

Labeling



Gezielter Taucheinsatz

Weitere Planungen