LUCIAD

high performance visualization

Standardized Styling of Digital NOTAMs: SAE-G10 & OGC

Daniel Balog

Who is Luciad?

- **Software Components**
- **Technology for Geospatial Situational Awareness**
- **Focus on Aviation, Maritime, Defense & Security**
- **Cross-platform**
  - ✓ Control center
  - ✓ Mobile
  - ✓ On-board

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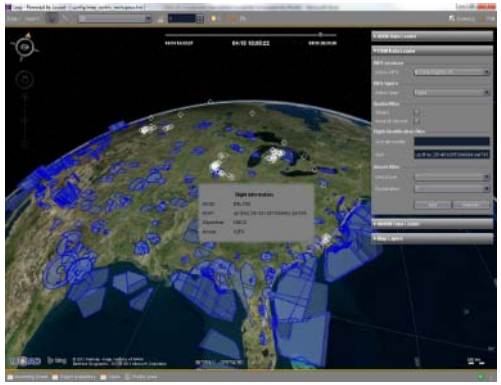
high performance visualization

Digital NOTAM research in OGC OWS-10

- **Research project to advance OGC & open industry standards**
  - ✓ Aviation examples: AIXM, Digital NOTAMs, FIXM, WXXM, OGC web services, …
  - ✓ Collaboration between OGC, Eurocontrol, FAA, industry, universities …



- **Digital NOTAM research goals**
  - ✓ Visualization of Digital NOTAM 2.0 events
  - ✓ Using SAE-G10 recommendations
  - ✓ Standardized representation using OGC Symbology Encoding

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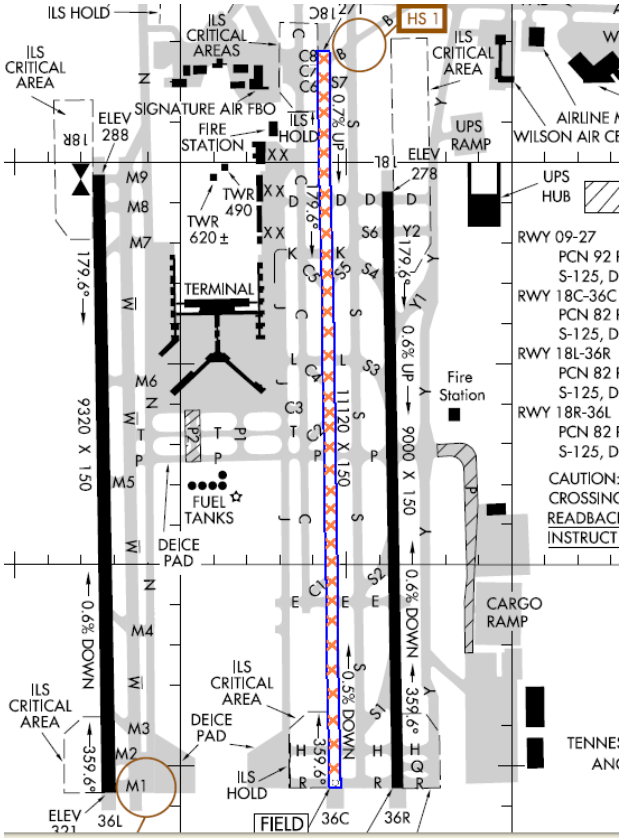
Runway Closure



Source: SAE-G10

Source: Luciad Aviation Client

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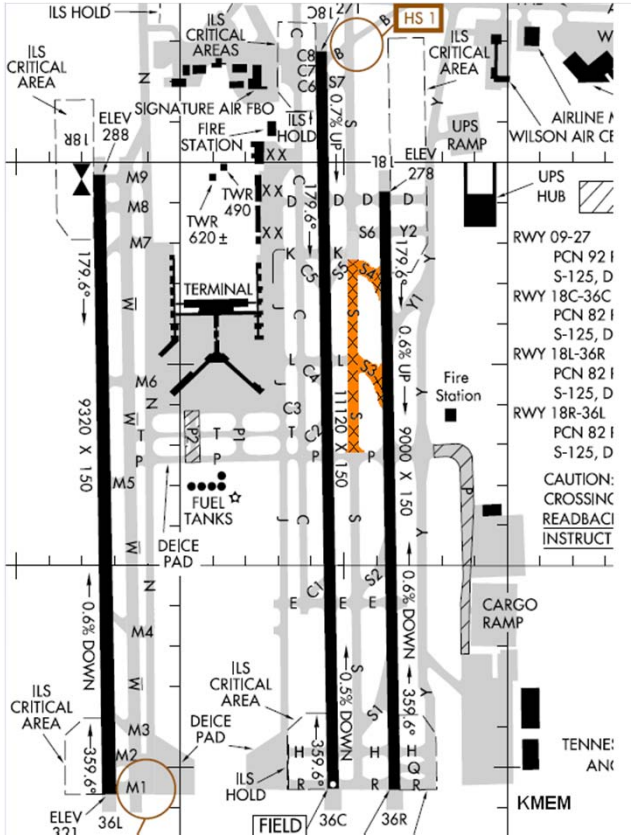
Taxiway Closure



Source: SAE-G10

Source: Luciad Aviation Client

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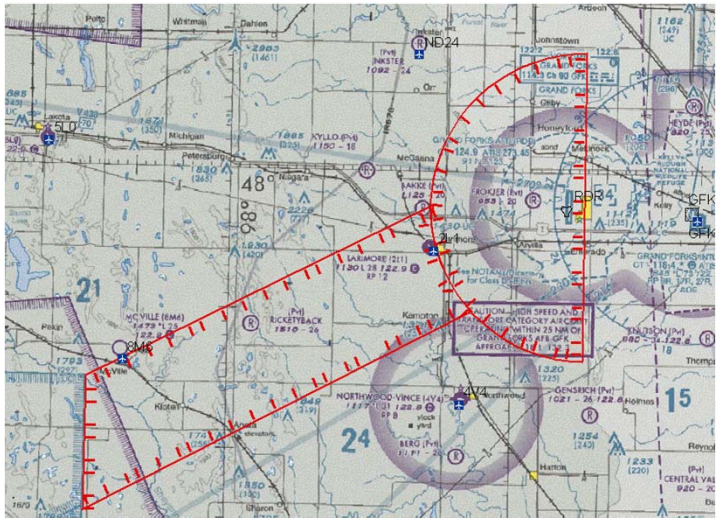
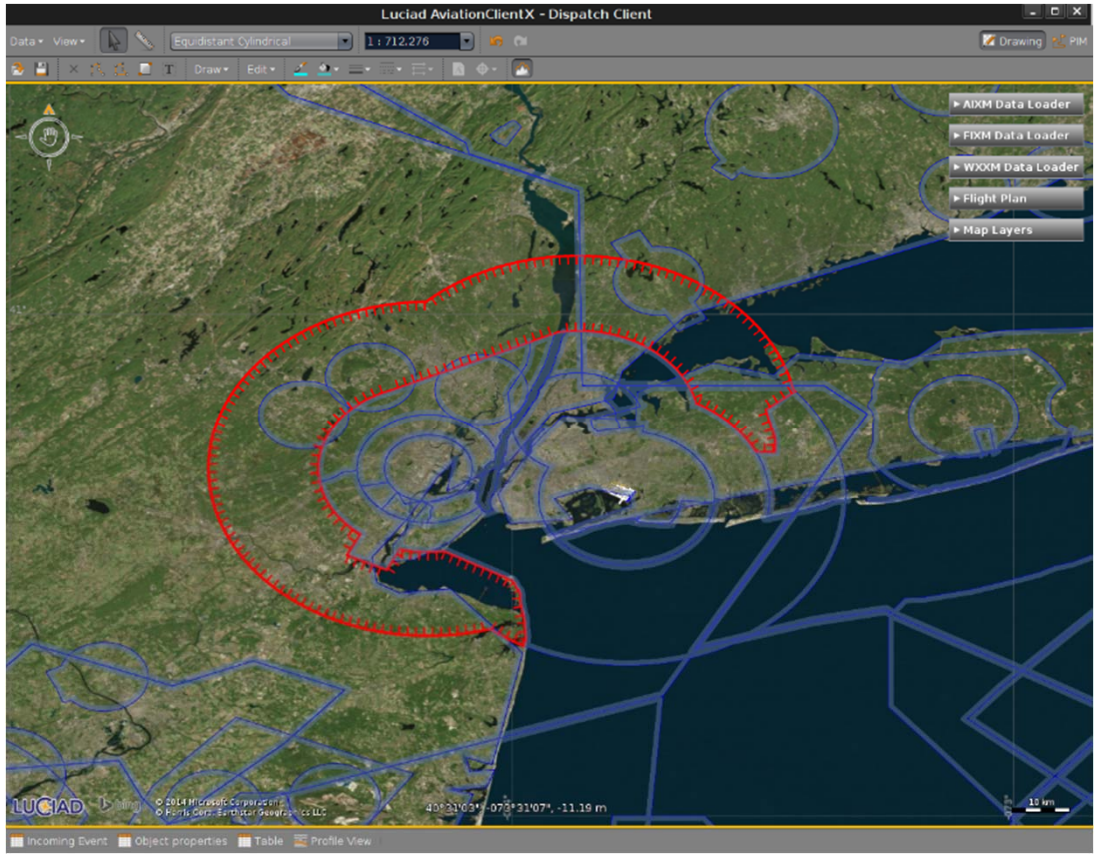
Temporary Flight Restriction



Source: SAE-G10



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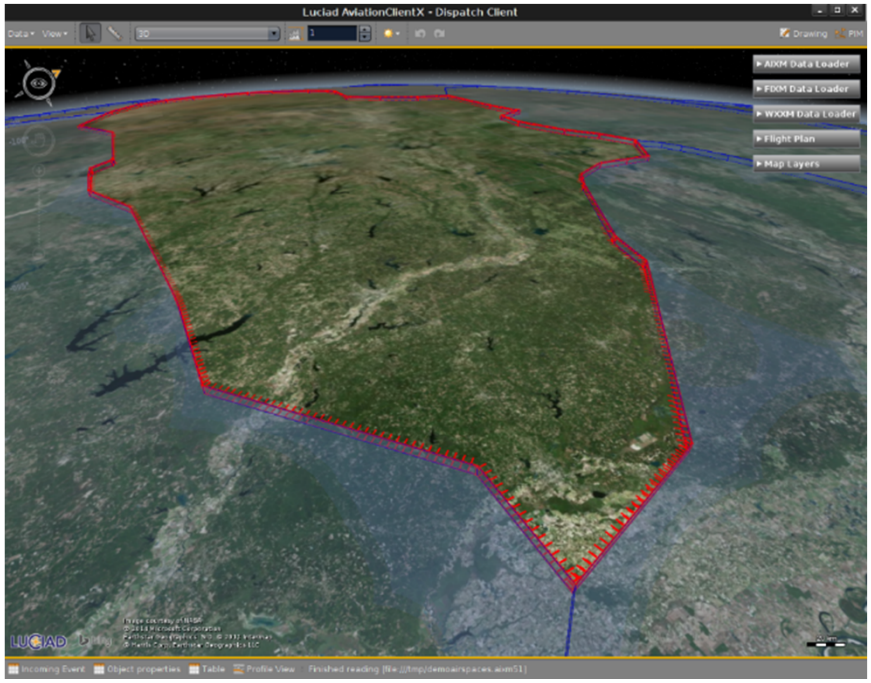
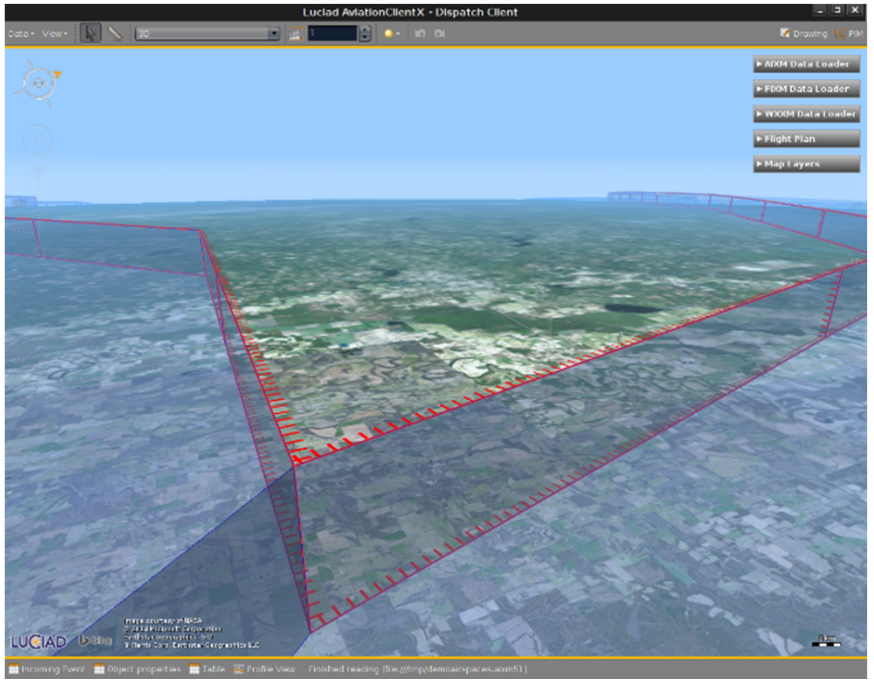
Temporary Flight Restriction in 3D





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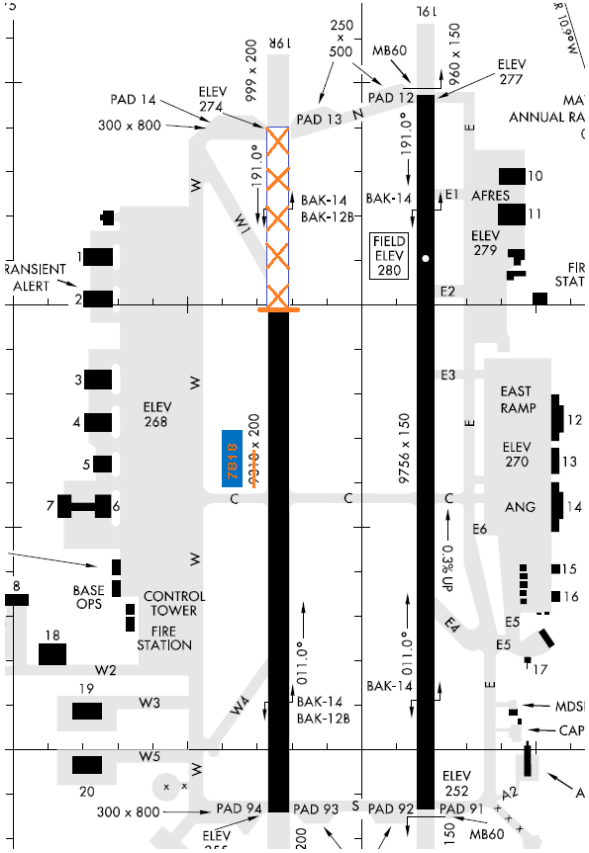
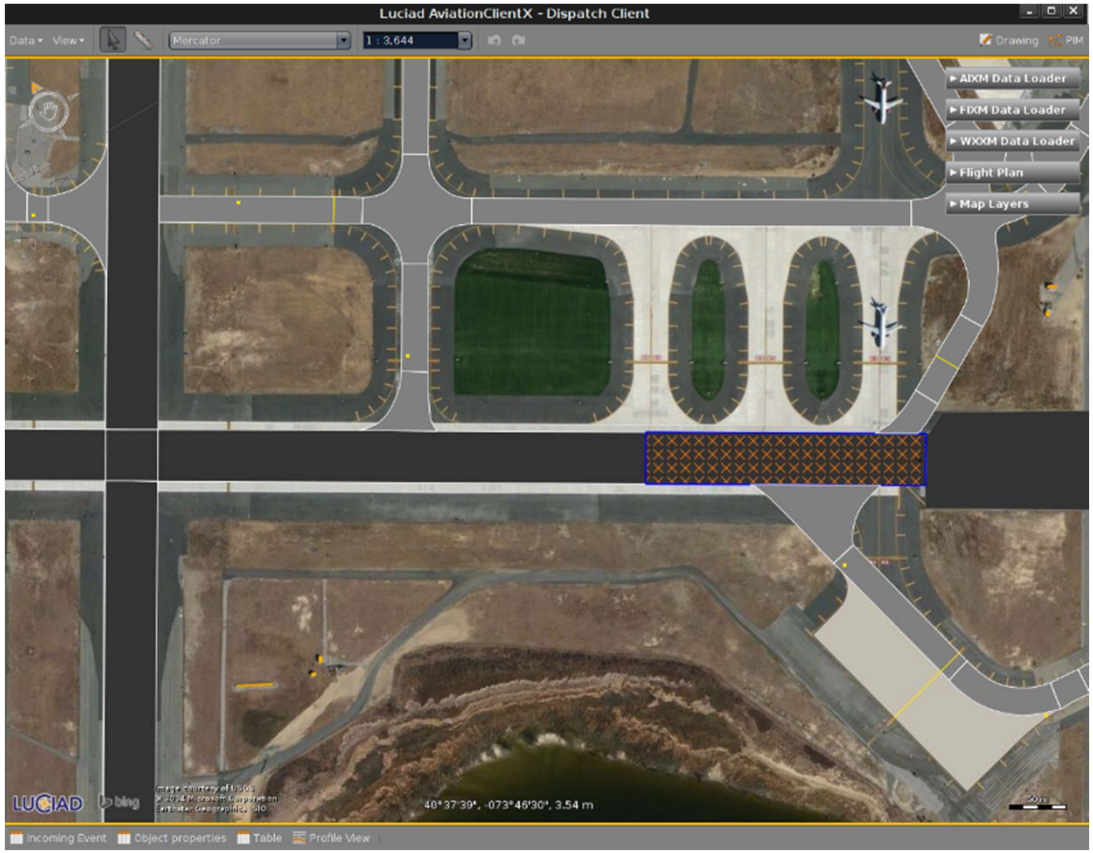
Runway Shortened



Source: SAE-G10



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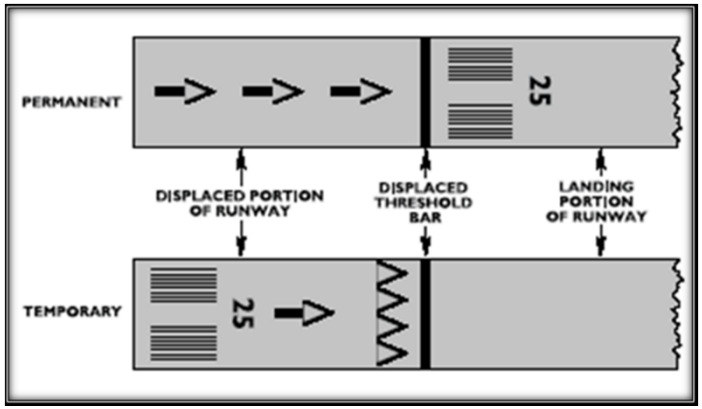
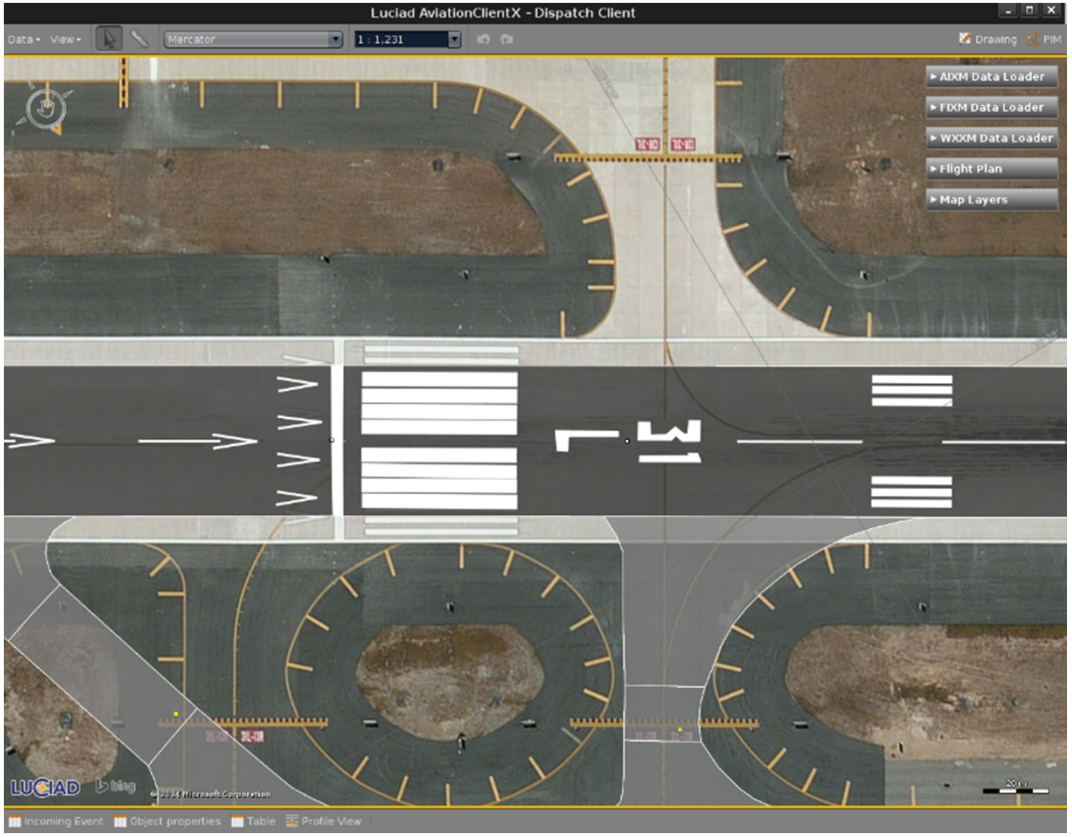
Displaced Threshold Runway



Source: SAE-G10



Source: Luciad Aviation Client

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Advancements and Benefits

- **Advancements**
  - ✓ The ability to visualize a number of key DNOTAM 2.0 events graphically using SAE-G10 guidelines

- **Benefits**
  - ✓ Use of core Symbology Encoding 1.1 ensures that any AIXM 5.1/DNOTAM 2.0 capable client can now visualize DNOTAMs in a uniform and standardized way.

- **Ongoing Research**
  - ✓ Feedback welcome for continuous improvements

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More information

- **Exhibition**

- **Aviation Webinar**
  - ✓ May 27th
  - ✓ Registration: https://www4.gotomeeting.com/register/585676831

- **OGC Engineering Report**
  - ✓ OGC 14-039: Human Factor Based Portrayal of Digital NOTAMs

- **Luciad AIXM Viewer**

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