# The Weather Network (Pelmorex Media)

Ontario, Canada

## Case Study

## Key Facts

**Industry:**  Communications

**Solutions:**  FME® Server

Travelling at speeds of up to 270,000 miles per hour, lightning strikes can ignite forests in an instant or damage and sometimes destroy expensive and critical infrastructure, such as power transformers and transmission lines. That's why Pelmorex Media Inc. – "The Weather Network" in English Canada and "MétéoMédia" in Quebec – developed the Pelmorex Lightning Detection Network (PLDN). FME® Server plays an important role in its operation.

Using the PLDN, insurance companies, government agencies, transportation companies, and public utilities can access both real-time and archived data on the millions of annual lightning strikes in Canada. Across the vast Canadian landscape, Pelmorex has deployed numerous state-of-the-art sensors. Whenever a lightning strike occurs from coast-to-coast, strike data is picked up by multiple sensors and then triangulated to determine its location and other key information.

Using FME Server's data streaming and data download services, this strike data is restructured from non-spatial lat/long queries into a styled KML file. With updates occurring every 20 to 30 seconds, Pelmorex's clients have access to near real-time data which is made accessible via Google Earth™, an ArcGIS® Flex™ Viewer, email alerts, and more.

Developing this functionality with FME Server was quick and easy. "Without FME Server, we would have had to build a custom solution and the estimate, just for a prototype solution, was six to seven months," says Jim Saini, Manager of Profiling at Pelmorex.

Choosing FME Server also enabled the team to move with agility. "The beauty of FME Server lays in its flexibility," explains Candy Lam, GIS Profiling Specialist. "When we needed to convert Epoch Time to Standard Time, we found that it was easy to use TCL script with FME Server to provide this functionality."

After only a three week development cycle, FME Server was in place, enabling the Pelmorex Lightning Detection Network to spatially query and retrieve lightning data exactly how and where it was needed. Now when a lightning strike occurs, clients immediately know where it struck, what type of strike it was, the polarity of discharge, and other key attributes. With instant access to this information, users can immediately take action. Historical strike data is also archived in Microsoft SQL Server for future analysis.

After recently taking an FME Server training course, Pelmorex is already contemplating new uses for FME Server. Laura Cerquozzi, GIS and Profiling Coordinator remarks, "We're thinking of using FME Server to automate several resource-intensive tasks. Using FME Server, we'll be able to free up resources and give others more control over their requests."

Thanks to the PLDN and FME Server, Pelmorex can easily share its lightning strike data – something we feel is worthy of thunderous applause.
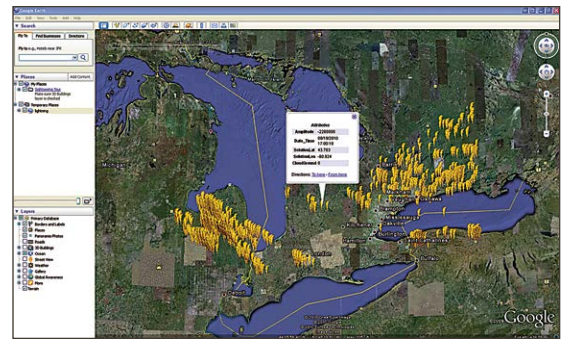


**Lightning strike data from Southwestern Ontario is displayed in Google Earth courtesy of the Pelmorex Lightning Detection Network.**

This article was featured in our Autumn 2010 issue of the FME Insider newsletter. For more case studies and articles, please visit our newsletter archive at **www.safe.com/newsletter**

3102-02-A