

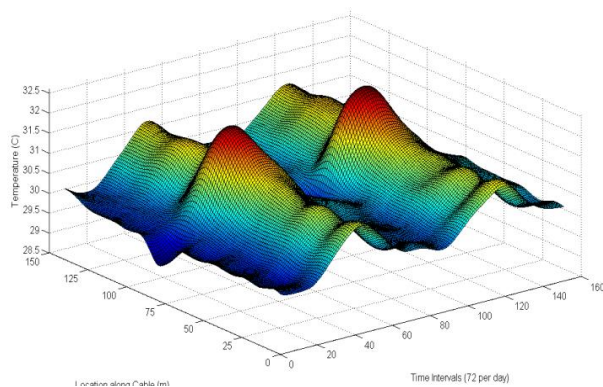
SelkerMetrics LLC specializes in environmental and industrial sensing, including distributed temperature sensing. Better information helps our clients make better investments, better operating decisions, and effectively communicate with regulators and stakeholders.

SelkerMetrics specializes in **fiber optic distributed temperature** measurement systems (DTS). DTS systems continuously and precisely monitor thousands of locations across large areas. SelkerMetrics also applies and pioneers other innovative monitoring methods, with applications including:

- **Locating groundwater seeps into sediments** and water bodies to focus remediation efforts and track contaminant sources and movement
- **Monitoring water movement** in soils, water bodies, and aquifers with innovative surface and bore-hole technologies
- **Pipeline and equipment monitoring** with distributed temperature and acoustic sensing
- **Detecting in-flows and measuring temperature** in streams, sewers, and lakes
- **Monitoring equipment and bearings** in large equipment for vibration and temperature variations



SelkerMetrics works with leading firms worldwide in energy, mining, and environmental consulting. Examples of clients include ExxonMobil, Ford, National Grid, legal firms, CH2MHill, Golder and Associates, Newmont Mining, and Anchor QEA.



*Sediment Temperature Image*

Fiber optic systems can monitor **large equipment and areas** across kilometers in distance. Cables are tough and carry no electricity, allowing use in rugged, spark-sensitive applications.

DTS monitoring is also continuous, revealing changes with operations, weather, tides, remedial actions, and other variables.

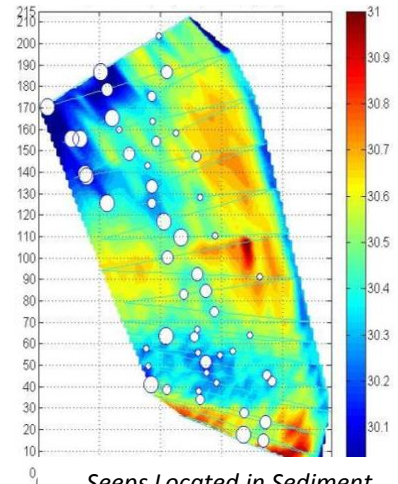
SelkerMetrics provides **full service** including:

- Design
- Deployment
- Operation
- Data collection and analysis
- Visualizing results, reporting, and presentations

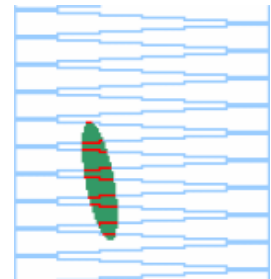
We welcome demanding applications requiring innovative design, custom fiber optic cables, special deployment equipment, high precision, and sophisticated data and image processing.

Examples of **tools and expertise** include:

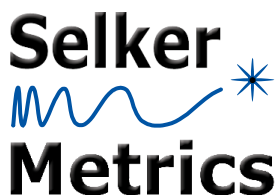
- **Modeling** of applications and cable layouts using finite difference, finite element, and proprietary models.
- **Proprietary, field-proven equipment**, including custom fiber optic cable packages, deployment and retrieval equipment, and cable cleaning equipment. Details are critical when handling and securing a system, and SelkerMetrics has developed tools and systems for challenging applications and enhanced performance.
- **Data Analysis and Presentation.** High resolution across large areas creates large data sets, making the analysis and presentation critical. We use methods from signal processing and statistics, vivid 2-d, 3-d graphics, and animations to make measurements work for clients.
- **We develop new methods and equipment** for solving the toughest monitoring challenges.



*Seeps Located in Sediment  
using DTS system*



*Monte Carlo Simulation of DTS  
Cable Layout*



**Frank Selker**  
(541) 829-9781  
fselker@selkermetrics.com  
[www.SelkerMetrics.com](http://www.SelkerMetrics.com)

