# Increasing the Technology Readiness of SensorML for Sensor Webs

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Objective

We will reduce the current challenges involved in implementing and utilizing SensorML by providing a collection of Open Source tools for creating, viewing, validating, mining, and executing SensorML processes. We will also demonstrate the application of these tools, and indeed the application of SensorML, in an end-to-end scenario of relevance to NASA's Earth Science community, including the derivation of SensorML documents by the initial sensor team, the configuration of OGC sensor web services, the development of product algorithms by research scientists, and the ultimate discovery and application of SensorML within the end user's Decision Support Tools.
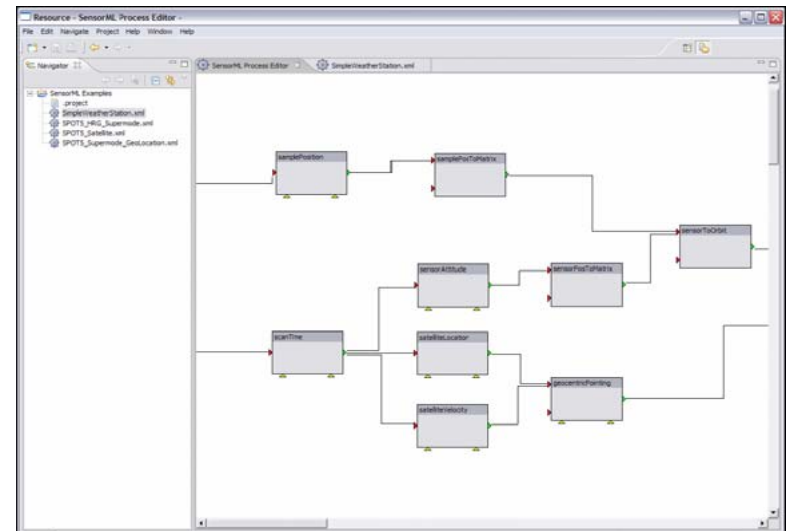
SensorML Process Editor

Approach

Some of the proposed software will be brought to a TRL of 6 since they will be fully used at critical points throughout the framework. These include:
- SensorML Document Parser (target TRL 6/7)
- SensorML Document Validator (target TRL 6/7)
- SensorML Processing Engine (target TRL 6/7)
- SensorML Data Miner (target TRL 6/7)

Some tools will be developed and brought to a TRL of 4 since they will remain experimental.
- SensorML Viewers and Editors (target TRL 5)
- SensorML Distributed Processing Engine (target TRL 5)

Co-I's/Partners

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Key Milestones

- SensorML Parser/Validator, Execution Engine (V1) 3/2007
- SensorML Viewer/Editor (beta)   3/2007
- SensorML Miner & Registry (V1)   9/2007
- SensorML Process Execution engine (V2)   3/2008
- SensorML Editor & Viewer (V1)   3/2008
- Sensor Descriptions/Geolocation/Web Services   9/2008
- Advanced Product Processes   3/2009
- Decision Support Tool / Advanced Tools   3/2009
- End-to-End Demonstration   9/2009

TRL_{in} = 2-4