Tempest™ DCS Toolkit

Overview

Retrieve, Decode, Process & Store DCP Data from any LRGS Satellite Receiver: DOMSAT, GOES, NOAAPORT, LRIT

Features

▸ Works for any LRGS Satellite Receiver (DOMSAT, GOES, NOAAPORT, LRIT)

▸ Data logger files collected manually, via modem or automated download.

▸ Iridium Short Burst Data Interface

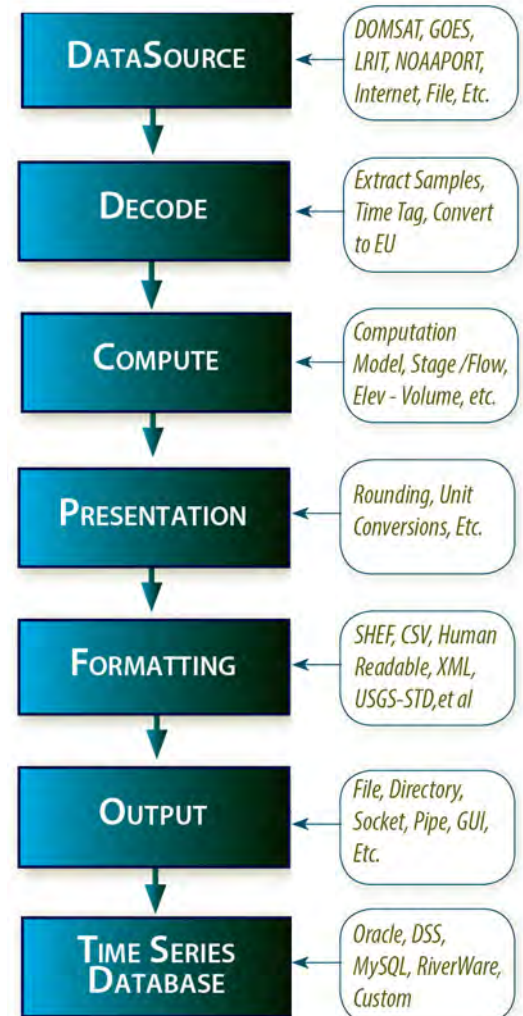▸ Data available via web (data mining via web)

▸ Custom interfaces

The Toolkit is 100% Java and will run on any modern OS (Solaris, Linux, Windows, AIX.). It provides a low-cost, reliable means of acquiring DCS data in near real-time. Moreover, it can work in real-time or in periodic batches on a schedule you set.

The figure at the right shows a typical application of the toolkit. The toolkit is implemented as a set of pluggable modules for maximum flexibility. It is designed to conform to the way you work rather than the other way around.

The Toolkit can pull data from your own satellite receiver, or from the public servers operated by NOAA in Wallops, VA.

The Toolkit can save raw or decoded data into local files on your machine, or you can pipe the data into your own programs in real-time. You can run the toolkit interactively, or in the background using the built-in scheduler module.

▸ Retrieve DCP data from wide variety of sources.

▸ Run in real-time, interactively, or in periodic batches.

▸ Easy-to-use scheduler to automatically run retrieval processes at set times

▸ Receive data from a list of servers, automatic switching to backup server in case of failures.

▸ Select DCP messages by combination of time range, network list,

▸ DCP name, DCP address, GOES channel, or data source.

▸ Command-line interface runs toolkit components from your scripts.

▸ GUI to monitor real-time status of servers & to select most reliable data source.

▸ Data can be retrieved in real-time from any Tempest™ Receive system (DOMSAT, LRIT, GOES, Internet) or from pre-stored files

▸ Supports a variety of output formats including SHEF, Human-Readable,

▸ EMIT-ASCII, XML, STDFMT, Transmit- Monitor, and CSV table.

▸ Network browser for interactively retrieving and decoding DCP message data.

▸ Converts data into standard engineering units. Standard English-Metric conversions built-in.

▸ Uses a database of DCP specifications stored either in a SQL or XML.

▸ Software is easily expandable by adding custom classes, algorithms, etc.

DATASOURCE — DOMSAT, GOES, LRIT, NOAAPORT, Internet, File, Etc.

DECODE — Extract Samples, Time Tag, Convert to EU

COMPUTE — Computation Model, Stage /Flow, Elev - Volume, etc.

PRESENTATION — Rounding, Unit Conversions, Etc.

FORMATTING — SHEF, CSV, Human Readable, XML, USGS-STD,et al

OUTPUT — File, Directory, Socket, Pipe, GUI, Etc.

TIME SERIES DATABASE — Oracle, DSS, MySQL, RiverWare, Custom

▸ Direct Support for USGS 'RDB' Rating Tables.

▸ Run in real-time, interactively, or in periodic batches.

▸ Easy-to-use scheduler will automatically run your retrieval processes at set times of the day.

▸ Receive data from a list of servers, automatically switching to a backup server in case of failures.

▸ Select DCP messages by combination of time range, network list, DCP name, DCP address, GOES channel, or data source.

▸ Data can be retrieved in real-time from any Tempest™ Receive system (DOMSAT, LRIT, GOES, Internet) or from pre-stored files.

ORDERING	
9400-0002	Tempest DCS Toolkit
9400-0101	Annual Maintenance Contract Required for updates and phone support

Retrieval Process Editor

Easily build a schedule of retrieval processes that pull data from multiple servers, feeding it to your own programs and databases.

Specify up to 3 data sources (server, file, directory, etc.)

Run interactively, continuously or in periodic batches

Raw Data or Decoded, Variety of Formats

Store in files, or pipe to your program

Process Monitor & Control

View real-time status of each process. Buttons for process control.