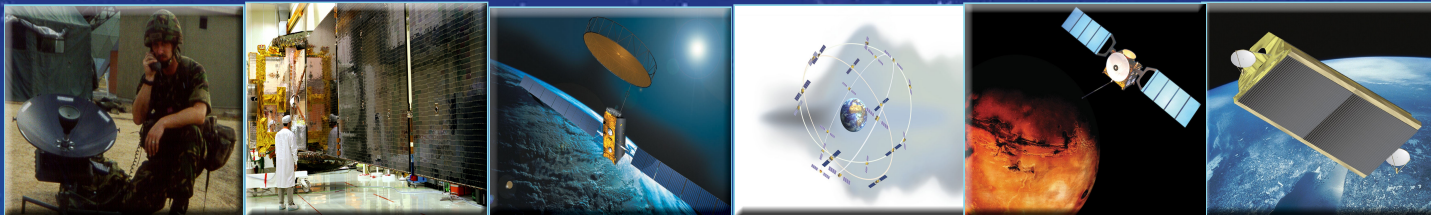


ASG43 TSP use and plans

ASTRIUM satellites simulator department



Claude CAZENAVE

27/03/2007

TSP workshop

All the space you need



Current use : JSynoptic

- JSynoptic is a tool to render information graphically
- A plugin has been developed to feed Jsynoptic with data provided by a generic TSP consumer
- Current plugin is compatible with TSP 0.7
- JSynoptic is an open source development (LGPL)
 - See <http://jsynoptic.sourceforge.net>

JSynoptic visual guide

Edition
toolbar

Shape
selection
panel

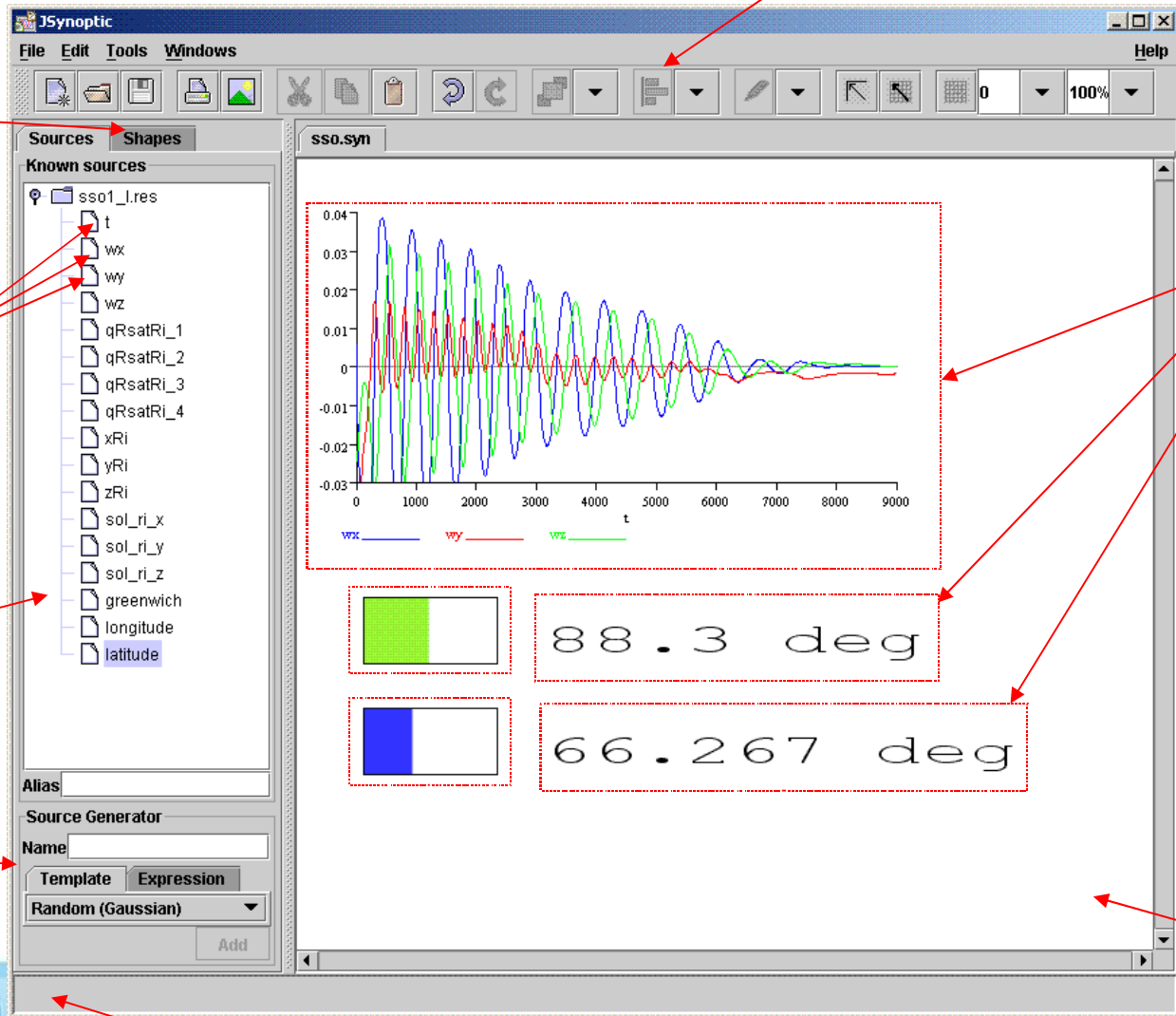
Data source

Data source
panel

Source
generator

Shapes

Edition
panel



Status bar

Current use : SIMOPS

- SIMOPS is a light weight test conducting system
 - Test language is java
 - Test procedures / java source code is interpreted
- Current applications
 - Galileo Avionic Test Bench (connected to the SIF TSP provider)
 - GAIA Software Test Bench (SIF TSP provider)

SIMOPS overview

The screenshot shows the Simops application window with the following components highlighted:

- Test control:** A toolbar at the top center containing icons for running, pausing, and stopping the simulation, along with step-in and step-out buttons.
- Run/pause/stop:** A red box highlights the central toolbar icons.
- Step in and step out:** A red box highlights the step-in and step-out icons.
- Breakpoints:** A red box highlights the breakpoint icon in the toolbar.
- Help area:** A red box highlights the left sidebar containing a tree view of sequence plugins and subscriber help.
- Commands description:** A red box highlights the 'Subscriber set help' section in the sidebar.
- Parameters description:** A red box highlights the 'Subscriber set help' section in the sidebar.
- Drag and drop:** A red box highlights the 'Subscriber set help' section in the sidebar.
- Test procedures editor:** A red box highlights the main code editor window showing Java code for a blackjack simulation.
- Interpreted Java language:** A red box highlights the main code editor window.
- Monitoring:** A red box highlights the right sidebar containing the 'Simulation Browser' and 'Values Failures Schedule Archives' tabs.
- Test overview:** A red box highlights the bottom-left corner of the interface.
- Sub procedures:** A red box highlights the bottom-left corner of the interface.
- Variables:** A red box highlights the bottom-left corner of the interface.
- Test results : traces, loggings:** A red box highlights the bottom-center area of the interface.

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Future use : SIMTG

- SIMTG kernel is the working title for the simulation kernel co developed between ASG41 Friedrichshafen and ASG43 Toulouse
 - Harmonised ASTRIUM satellites simulation infrastructure
 - Based on SIMIX building blocks for the scheduler
 - Enhanced with ObjectSim building blocks for models structure, solver and initialization
 - Will provide SMP2 / ECSS E40 07 compatibility
 - TSP has been selected to generate standard simulation monitoring in addition to PUS packets
 - First TSP version expected for the end of the year

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