

- EO 
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# SE-SIGNAL-VIEWER



**SE-SIGNAL-VIEWER IS A GRAPHICAL TOOL FOR VIEWING AND ANALYSING SPS IMAGES**

**FAST** 

Spectral data files provided by the SE-Workbench contains radiance values as a function of the wavelength for each pixel of the sensor. SE-SIGNAL-VIEWER is an easy user interface to post process those data and to display images either of raw data (radiances) or after applying the sensor effects

## Features

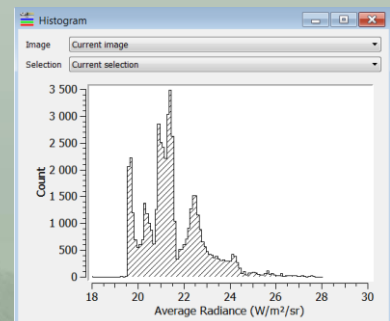
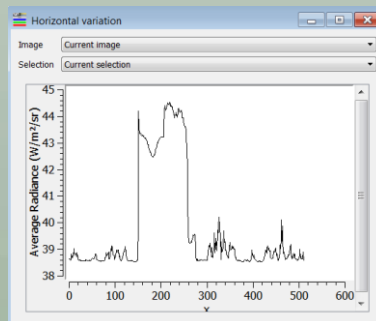
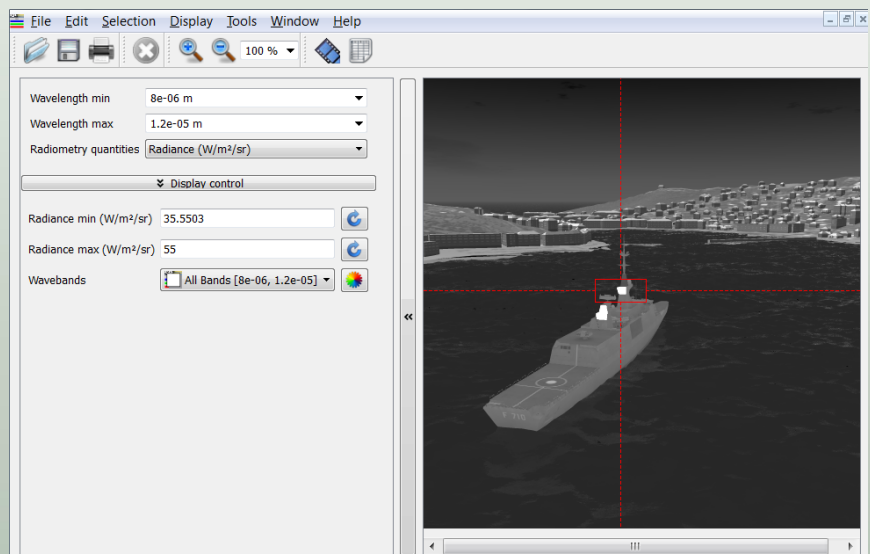
- Multiple Document Interface (MDI) allowing to open several images at the same time
- Advanced analysing tools: rectangular zone selection with radiance statistics (average, minimum and maximum values, standard deviation), histograms, horizontal and vertical variations
- Various display modes: standard, LUT ...
- Create a movie (raw AVI format) from a sequence of SPS images
- Image comparison tool
- Image filtering: convolution, spectral response
- Export to BMP, JPG, PNG...
- Printing

## Basic Usage

In a first approach, SE-SIGNAL-VIEWER can be used a spectral file editor that converts radiance data into images. The basic functions are:

- Open an image
- Export capacity
- Display control
- Image analysis

Spectral data can be explored for each sub-band of the sensor defined in SE-Workbench. The obtained images can be analysed in terms of radiance statistics on any chosen area



## Benefits

- Direct post processing of SE-Workbench spectral output data
- Easy User Interface to implement sensor effects (due to optics, electronics, thermal effects)
- Radiance images comparison
- Various output format: BMP, JPG, PNG, AVI,...

## System requirements



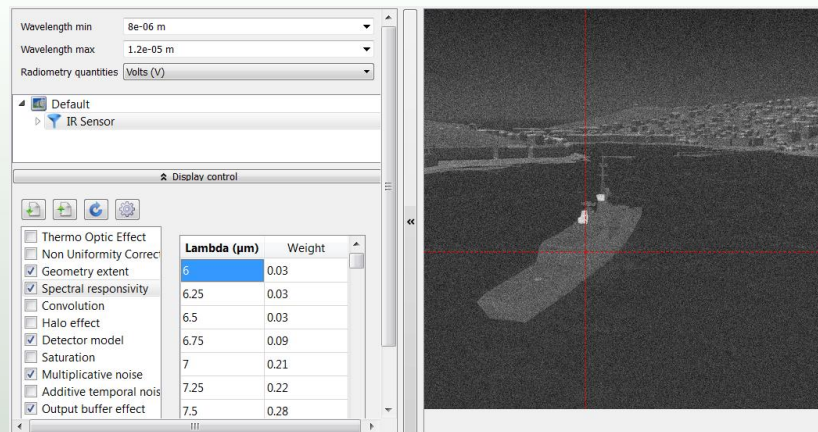
## Advanced Usage

In a second step, SE-SIGNAL-VIEWER can post process the calculated data by doing:

- Image filtering
- Convolution
- Spectral response
- Black body equivalent temperature computation

For example, the spectral response of the sensor which can be defined directly in the SE-Workbench can be also set in SE-SIGNAL-VIEWER as post processing

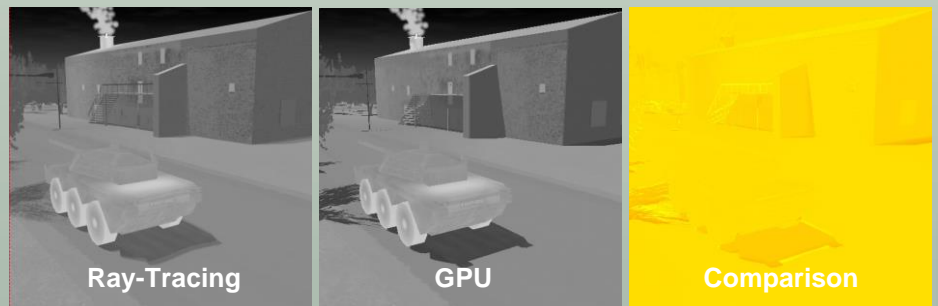
SE-SIGNAL-VIEWER can be also used as a Graphical Interface to run the sensor effect API (SE-IR-SENSOR)



## Comparing Two Images

The comparison of the radiance images is a key feature in the SE-Workbench approach where both ray-tracing and real-time GPU rendering technics are available

This tool is intensively used by engineers who need to assess the reliability of the real-time rendering versus the reference data provided by the high fidelity ray-tracing tool



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