

# C A M E R A ACQUISITION & DISPLAY S O F T W A R E

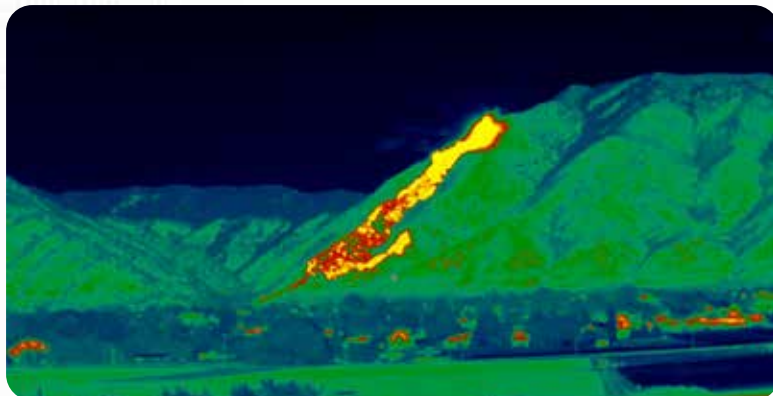
The Space Dynamics Laboratory designed the Camera Acquisition and Display Software to support the collection of imagery for many of its laboratory experiments, ground-based measurements, airborne campaigns, and instrument calibrations.

This software captures and displays images in real time and saves them to disk upon request. The software is able to perform these functions simultaneously, without the loss of frames. It provides a set of plots and tools that can be used to quickly evaluate the integrity of the images and the quality of the scene being observed.

The software can be configured at the source code level to support different types of hardware interfaces, control protocols, and input and output formats. It can also be tailored to create and embed frame headers during image storage, or decode and display metadata that is already embedded in the data stream.



*Two Santa Barbara Focalplane infrared cameras were used to collect high-speed imagery (> 2,000 fps) of a rocket launch at the Kennedy Space Center*



*Forest fire observed with a short-wave infrared camera from SDL's Logan, Utah facilities*

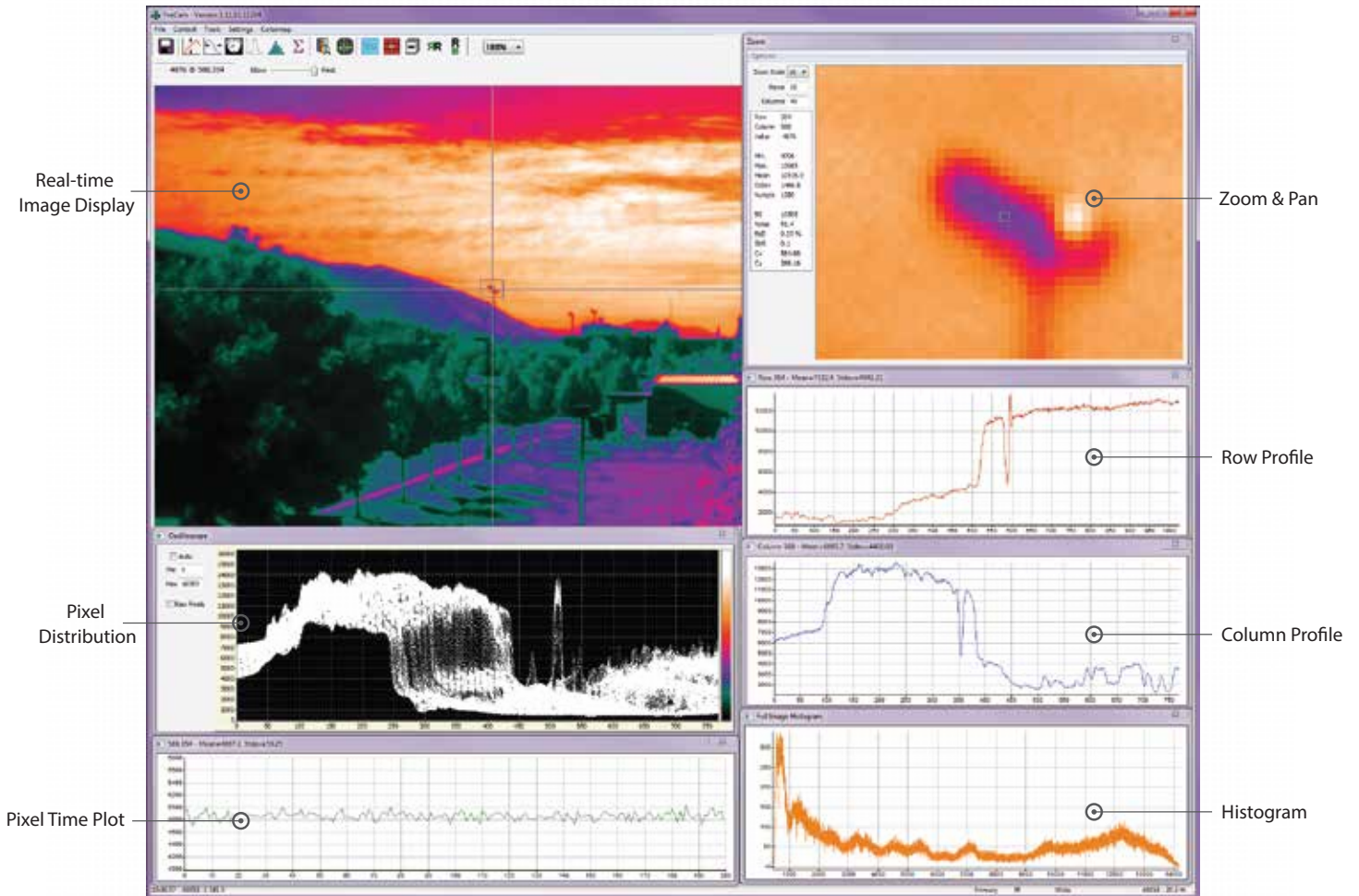
## SPECIFICATIONS

- Support for Camera Link, FireWire & GigE infrared or visible cameras
- Real-time capture of up to 16-bit images
- False-color display of captured images
- Storage of raw images upon request
- Control of camera settings
- Remote control using TCP sockets
- First-order image corrections
- Image histogram & statistics
- Zoom & pan
- Multiple color maps
- Image overlays
- Bad pixel identification & replacement
- Row & column line profile plots
- Time plot & statistics of individual pixels
- Spatial distribution of pixels
- Frequency spectrum of selected pixel
- Display of image metadata, if present



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Screen capture of the Camera Acquisition & Display Software highlighting some of the main features



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