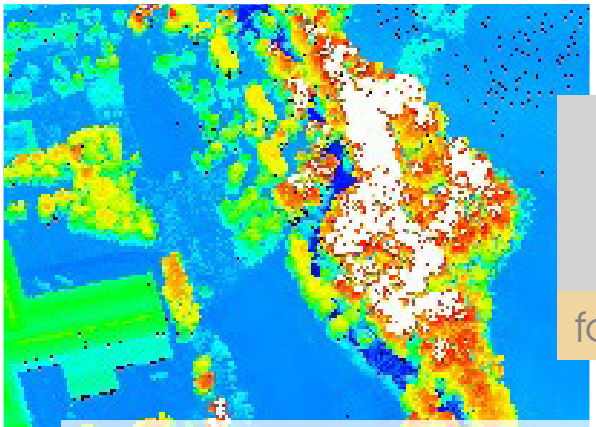
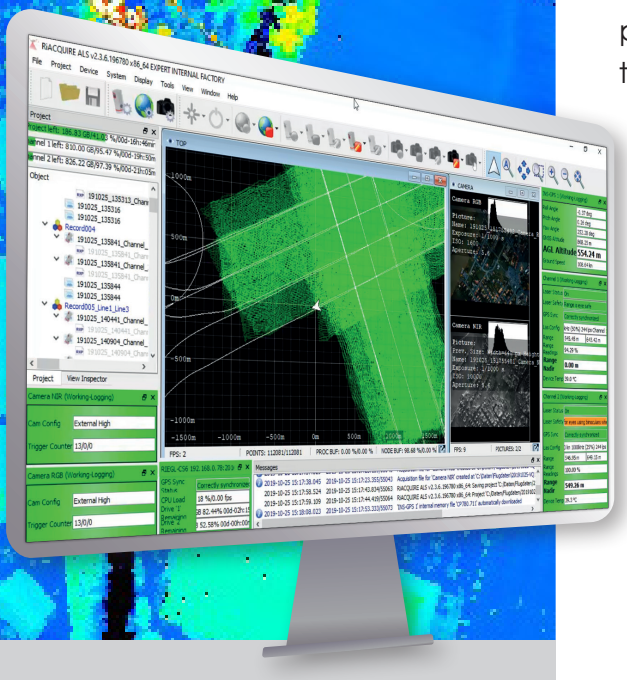
RiACQUIRE

for *RIEGL* Airborne & Mobile Scanner Systems



- *project-oriented scandata acquisition and scanner control*
- *online visualization of geo-referenced monitoring data during acquisition*
- *quality assurance with detailed history of events, system parameters and operator´s interactions*
- *status feedback for fast recognition by the operator*
- *use of flight plan information for automated acquisition (ALS)*



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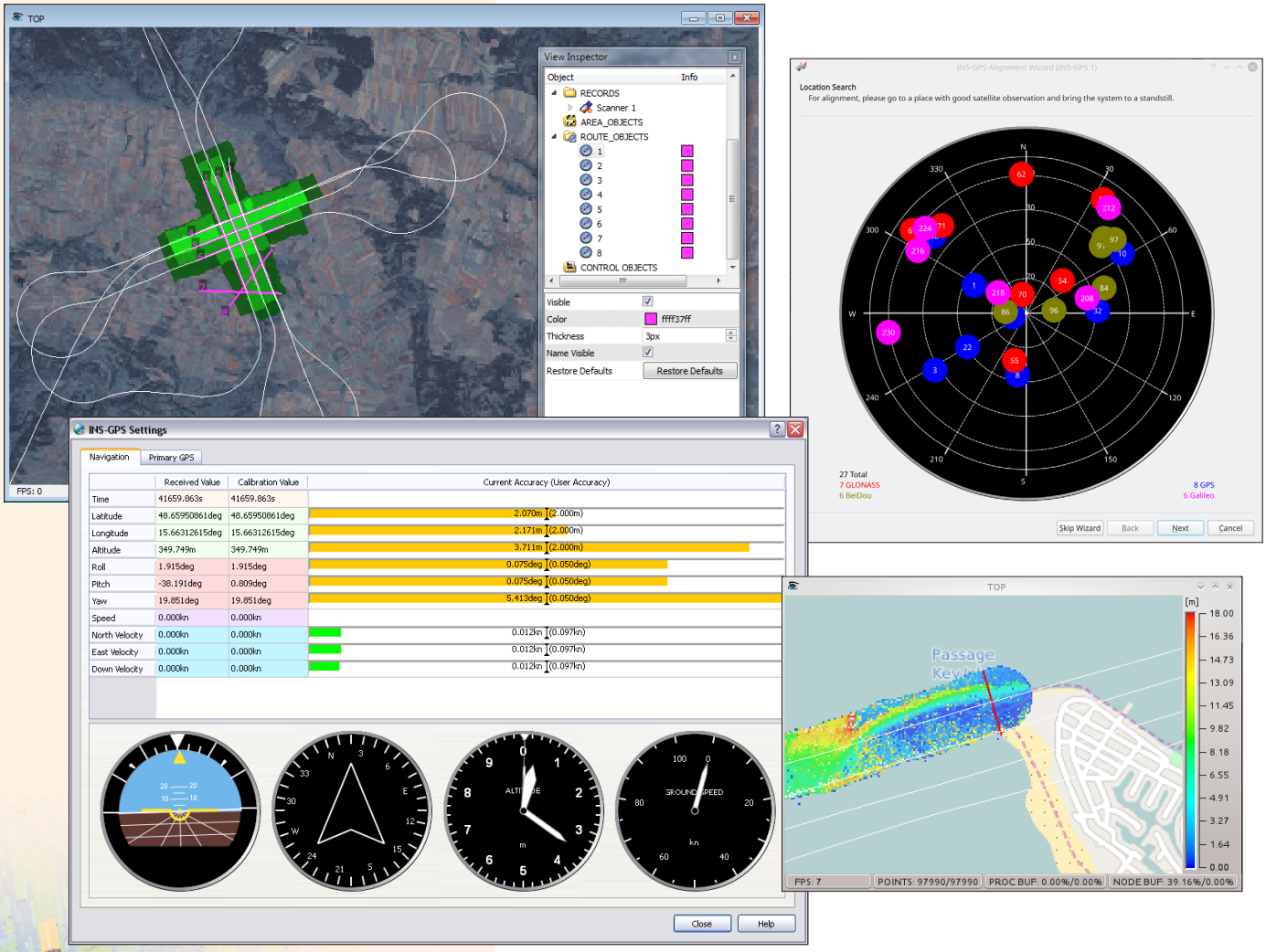
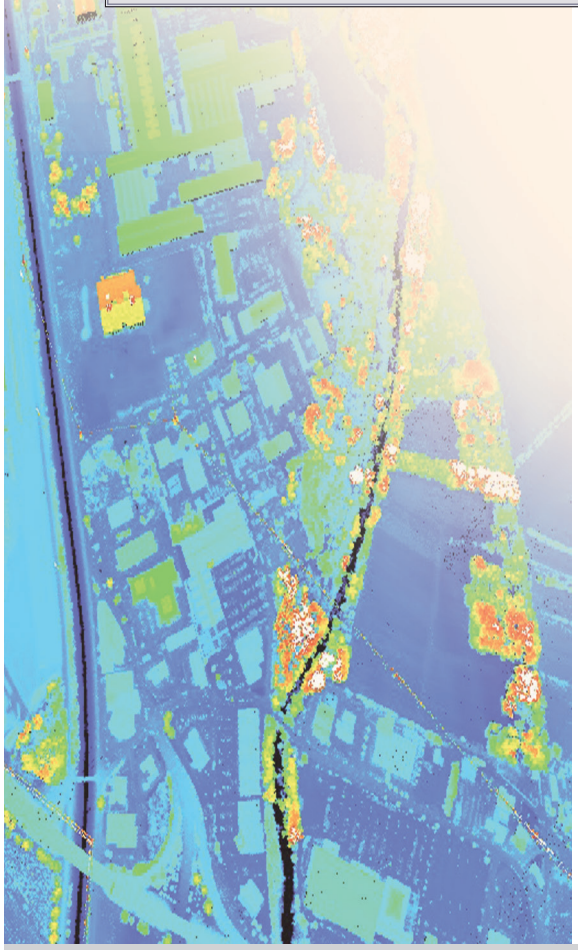
RiACQUIRE covers a wide variety of tasks present in *RIEGL*'s mobile and airborne laser scanning systems. Both, mobile and airborne systems comprise at least one laser scanner, a position and attitude measurement system, and an operator's work station. Many systems further comprise camera sub-systems, additional laser scanners, mass data storage devices, and mechanical subassemblies.

The tasks covered by RiACQUIRE are allocated to the operational data acquisition, the phases of system integration, and system verification & testing. An easy to use but powerful interface enhances communication with the supported *RIEGL* laser scanners. With the aim of reducing the work-load for the system operator, only the most relevant information is displayed and tasks can be executed semi-automatically. Scanning parameters are easily changed by choosing a predefined parameter set. The graphical user interface takes into account the difficult working conditions inside the aircraft, vessel or vehicle by providing large control buttons, easily pushed even in turbulent conditions.

RIEGL®
LASER MEASUREMENT SYSTEMS





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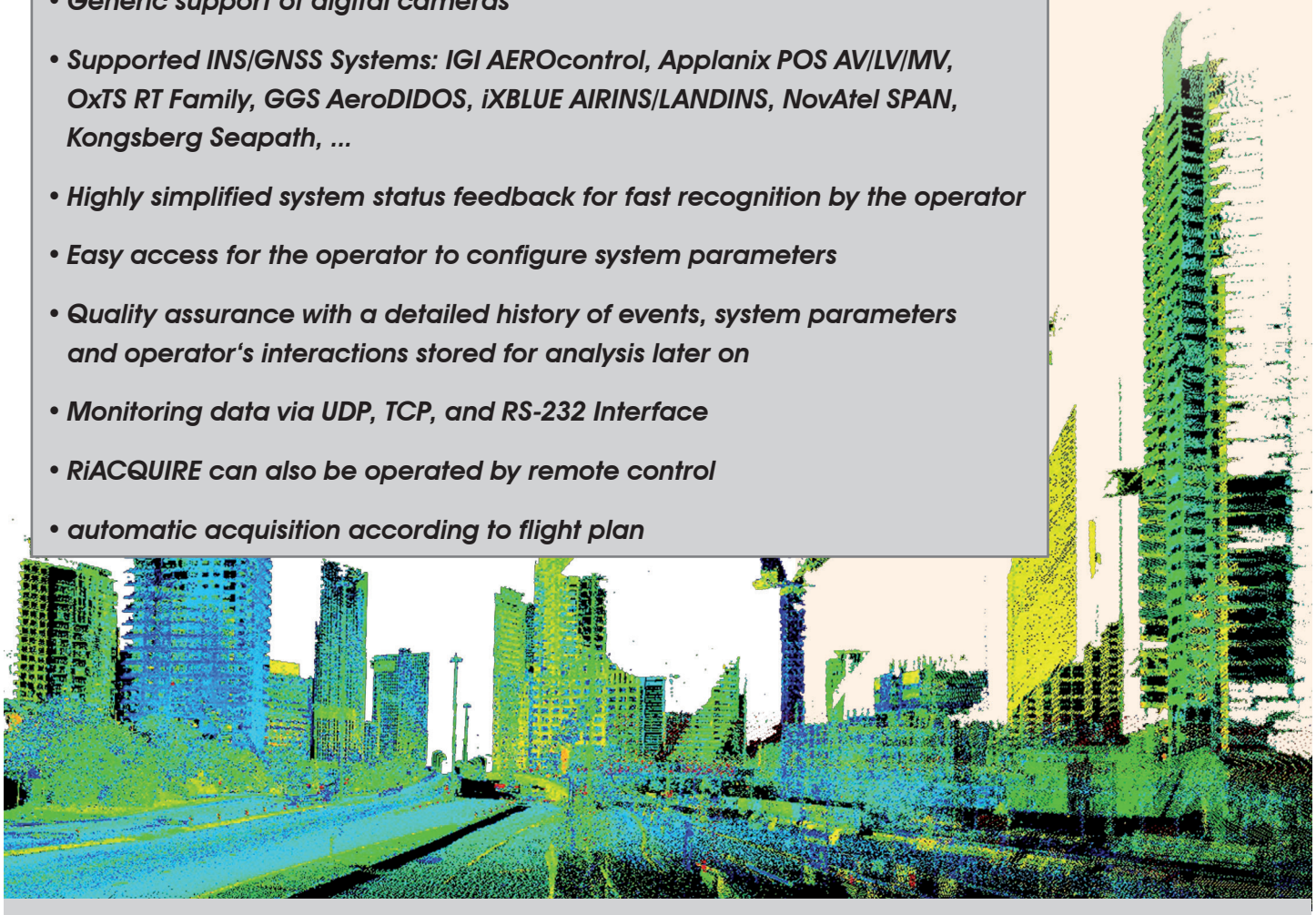
To assure data quality RiACQUIRE is able to collect monitoring data from the laser scanner and online data provided by the INS/GNSS system. RiACQUIRE provides visual information about the actual measurements from the INS/GNSS system to easily check the plausibility of the results. A continuous recording of system status, INS/GNSS attitude and position, and all the interactions of the operator with RiACQUIRE, provides a detailed history of the survey mission, which is stored for analysis and documentation later on.

RiACQUIRE now also supports information from flight guidance software solutions for the automatic data collection according to a predefined flight plan.

System Integration	Verification Testing	Operational Data Acquisition
• identification of system components • definition of interfaces and protocols • configuration of system components	• verification of cabling and communication • verification of configuration • logging of warning and error messages • logging of communication • checking of consistency of project data prior to survey	• acquisition and storage of data • automatic acquisition according to flight plan • management of mass data storage • visualization of system status and navigation information • analysis and visualization of on-line data

RiACQUIRE Key Features

- ***Controlling RIEGL airborne and mobile laser scanners semi-automatically or manually***
- ***Supports all RIEGL scanners for ALS & MLS applications***
- ***Generic support of digital cameras***
- ***Supported INS/GNSS Systems: IGI AEROcontrol, Applanix POS AV/LV/MV, OxTS RT Family, GGS AeroDIDOS, iXBLUE AIRINS/LANDINS, NovAtel SPAN, Kongsberg Seapath, ...***
- ***Highly simplified system status feedback for fast recognition by the operator***
- ***Easy access for the operator to configure system parameters***
- ***Quality assurance with a detailed history of events, system parameters and operator's interactions stored for analysis later on***
- ***Monitoring data via UDP, TCP, and RS-232 Interface***
- ***RiACQUIRE can also be operated by remote control***
- ***automatic acquisition according to flight plan***



RiACQUIRE System Requirements

Tested operating systems:	Microsoft Windows Vista, Microsoft Windows 7, 8, 8.1, 10 Linux Ubuntu/Kubuntu (tested with version 16.4 and 18.04) other Linux distributions or versions may also work but have not been tested
Memory requirements:	8 GB RAM minimum, 16 GB or more recommended
Disk space requirements:	approximately 500 MB of free disk space for the program and plugins
Interfaces:	Network interface (ethernet, LAN) with 1 GBit Serial interface RS-232 (for some INS/GNSS or camera trigger)
Graphics requirements:	Screen resolution at least 1280 by 1024 pixels 64 MB Memory minimum, 128 MB or more recommended OpenGL driver 1.4 or higher
Peripherals:	Pointing device like a mouse, touchpad, trackball or touchscreen, standard keyboard
CPU:	Intel Core i7-6xxx or better

RiACQUIRE Download Information

RiACQUIRE is available for download in the members' area of www.riegl.com

In order to download RiACQUIRE, it is necessary to be registered. After registration and activation, you will be able to download the current version. Subsequently, you will be kept updated in case of later software version releases.

RIEGL® LASER MEASUREMENT SYSTEMS

RIEGL Laser Measurement Systems GmbH
Horn, Austria
Phone: +43 2982 4211 | www.riegl.com

RIEGL USA Inc.
Winter Garden, Florida, USA
Phone: +1 407 248 9927 | www.rieglusa.com

RIEGL Japan Ltd. | www.riegl-japan.co.jp
RIEGL China Ltd. | www.riegl.cn
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