

3D sensors and systems for metrology and industrial vision



ISPRS Commission I WG 5 activities

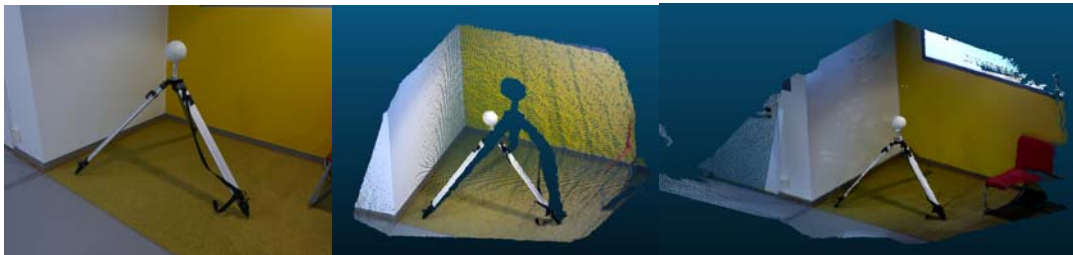
Call for data from 3D sensors

The aim is to provide free samples of 3D a sensor data suitable for industrial vision and close range 3D measurements. If you have access to such devices, we ask you to make test data according to guidelines below and send them (with sensor information) to petri.ronnholm@aalto.fi. However, larger data sets should be delivered using, e.g., some dropbox. In addition, development suggestions and feedback about the development version of WWW-pages (<https://foto.aalto.fi/isprs/wg15/>) are welcomed. The list of sensors is not complete and new sensors constantly appear to markets. Therefore, all hints about potential sensors are welcomed (even if you don't have access to data).

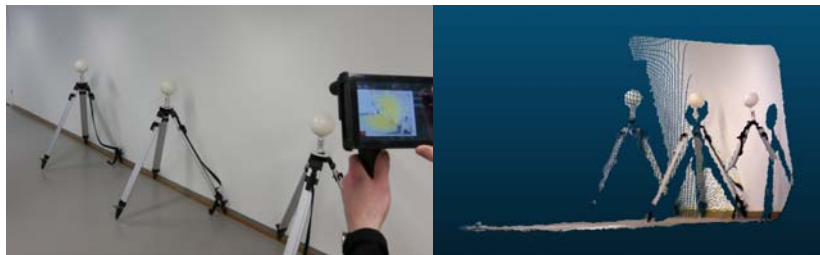
How to collect data?

If possible, make two main variations of data:

- 1) Select a corner in which you place one or more objects. Preferably, add at least one sphere to scene.
 - a. Collect data from one location, if your sensor allows it.
 - b. Collect data from many locations and merge all sub data to one data using only tools by the manufacturer, if the nature of data acquisition requires it.



- 2) Select a corridor in which you place objects (prefer spheres) in regular intervals covering the measuring distance of the instrument.
 - a. Collect data from one location, if sensor allows it aiming along the corridor.
 - b. If the sensor (or the nature of data collection with this sensor) requires movement, move only to across direction and not along the corridor. In this way, data gives information how distance affects to data.



Do not make any post-processing of data if the system is not making it automatically. Preferably, deliver a 3D point cloud in ASCII xyz + colour/intensity or in .las formats.