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ACPR2019 Workshop, Auckland (New Zeeland) Towards an Automatic Data Processing Chain for Airborne and Spaceborne Sensors

Prof. Ralf Reulke
German Aerospace Center, Institute of Optical Sensor Systems
Humboldt-Universität zu Berlin, Computer Vision, Berlin, Germany

DLR

Institut für Informatik
Computer Vision

HUMBOLDT-UNIVERSITÄT ZU BERLIN

Towards an Automatic Data Processing Chain for Airborne and Spaceborne Sensors

- Processing and imaging processing of data from (electro-optical) sensors on airborne and space platforms is a challenging task
- The causes lie in the mostly complicated detectors and sensors, which have a large radiometric dynamic, and require special correction and pre-processing tasks
- On the other hand, these sensors can be spatially, radiometrically and spectrally calibrated
- In addition, a permanent (also automatic) determination of the sensor performance (spatial, radiometric and spectral) is necessary
- The aim of this workshop is to bring together engineers and scientists from academia, industry and government to exchange results and ideas for future applications of electro-optical remote sensing

Aspects

- Lab - Calibration & Verification
  - Fast calc and visualisation
  - Model based apprach
- Real time processing on board of the satellite
- Instrument and data processing software as well as instrument in-flight calibration and product quality operations
  - DSNU, PRNU, linearity, etc. correction
  - Level x processing
- Validation of remote sensing data

Agenda, 1300-1700, Venue: Hunua 3 @Aotea

13:00-13:10	Ralf Reulke (Humboldt-Universität zu Berlin)	Welcome and introduction to the workshop
13:10-13:45	Andreas Eckard (German Aerospace Center)	Real time data information technology based on in Orbit data processing (Invited Talk)
	Session 1	
14:00-14:30	Winfried Halle (German Aerospace Center)	Infrared-Image Processing for the DLR FireBIRD Mission
14:30-15:00	Ralf Reulke (Humboldt-Universität zu Berlin)	Temperature Dependence of Dark Signal for Sentinel-4 Detector
15:00-15:30	Break	
	Session 2	
15:30-16:00	Hongmou Zhang (German Aerospace Center)	An extended stochastic cloning method for fusing multi-relative measurements
16:00-16:30	Claas Ziemke (German Aerospace Center)	The PLATO on-board data processing system architecture in comparison to past and future missions
16:30-17:00	Ralf Reulke (Humboldt-Universität zu Berlin)	Summary, outlook and farewell