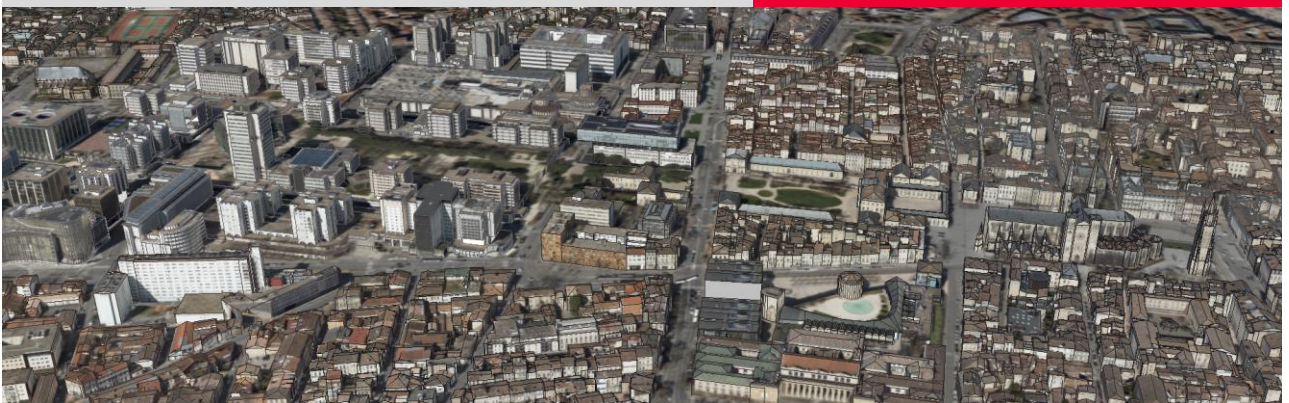## Leica RealCity – options for 3D modelling

René Rothe, Product Management

EuroSDR/ISPRS Workshop Oblique 2017, Barcelona

- when it has to be **right**

Leica **Geosystems**

Leica RealCity

Hardware
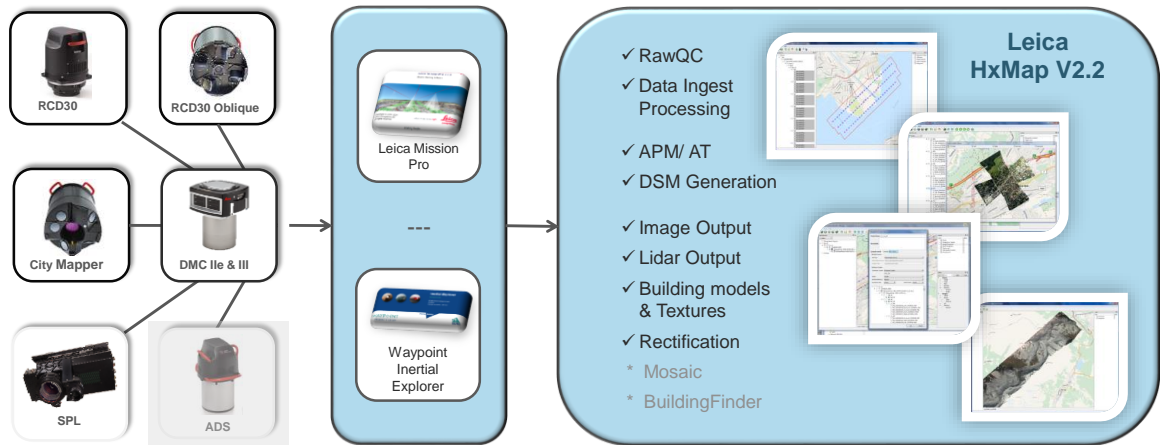- **RCD30 Penta Oblique**
- **CityMapper**

Software
- **HxMap**

Final Products
- **3D object model**
- **3D mesh model**
- **Orthophotos**
- **Terrain model**
- **...**

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Leica **Geosystems**

HxMap – The concept

- ✓ RawQC
- ✓ Data Ingest Processing
- ✓ APM/ AT
- ✓ DSM Generation
- ✓ Image Output
- ✓ Lidar Output
- ✓ Building models & Textures
- ✓ Rectification
- * Mosaic
- * BuildingFinder

Leica HxMap V2.2

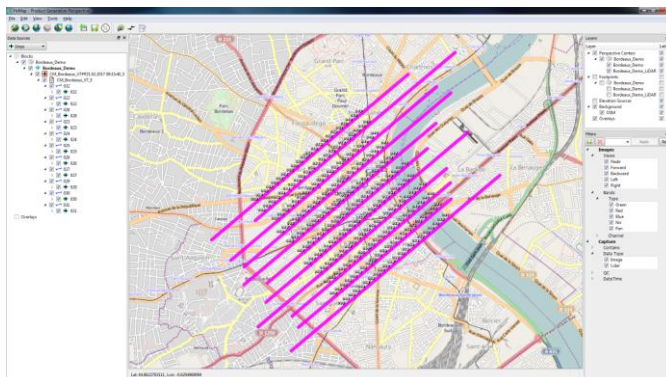- when it has to be **right**

HxMap – The concept

- Is the core application to process Leicas airborne sensors from raw data to final output using one single, common interface

- Is a scalable application usable on single workstation as well as high-end processing cluster
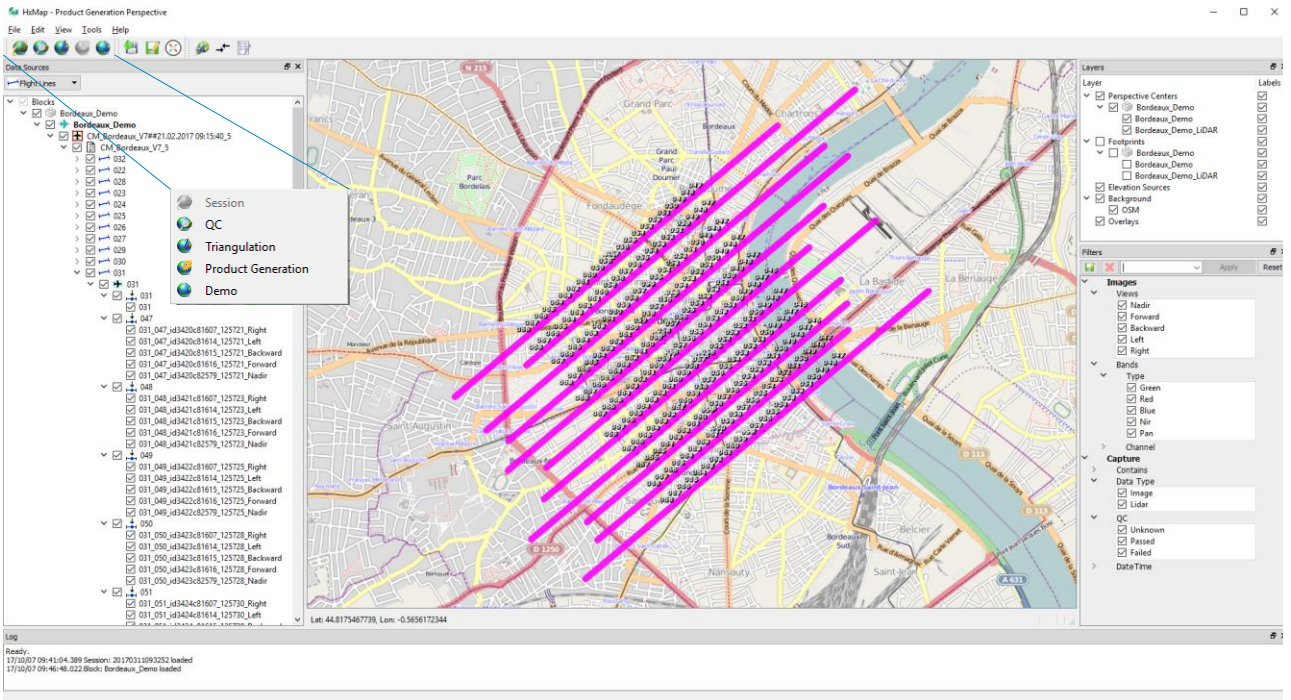

Leica HxMaps heart is the Workflow Manager, a GUI

- which allows to access and present data of the supported sensor types and

- guides the user through the post-processing workflow from QuickQC, Ingest, Radiometry setup, Georeferencing to final product generation using the concept of **Perspectives**
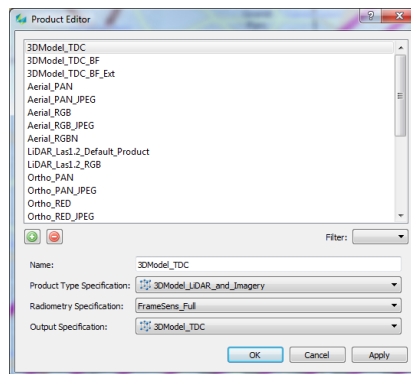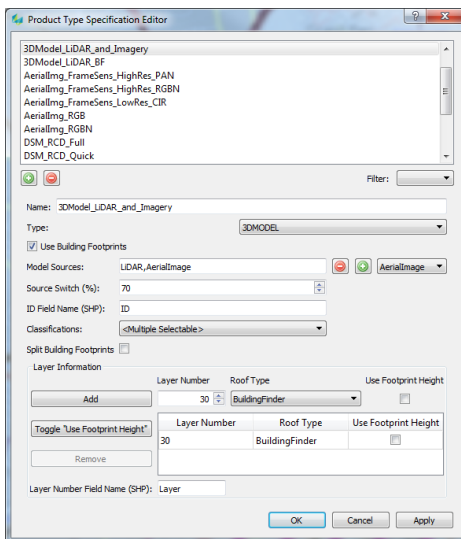
- when it has to be **right**

HxMap – 3D modelling workflow
Product Templates

3

HxMap – 3D modelling workflow
Project Specification

- when it has to be **right**

HxMap – 3D modelling workflow
QC with 3D Editor
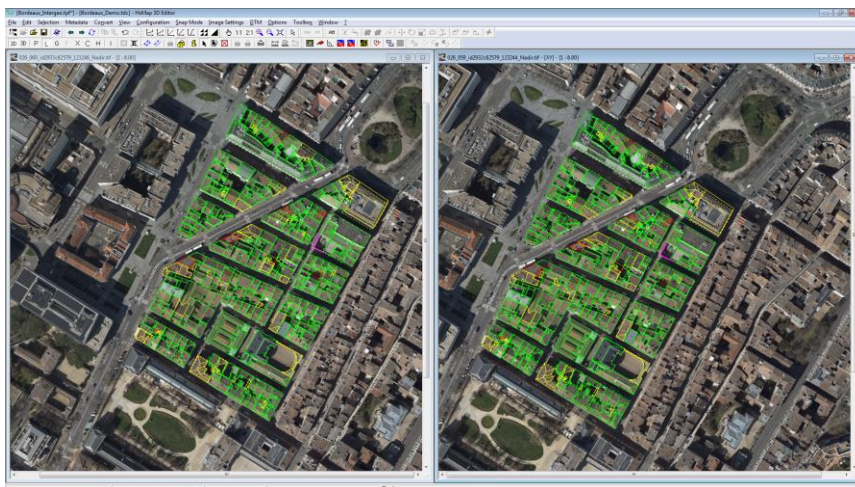
- when it has to be **right**
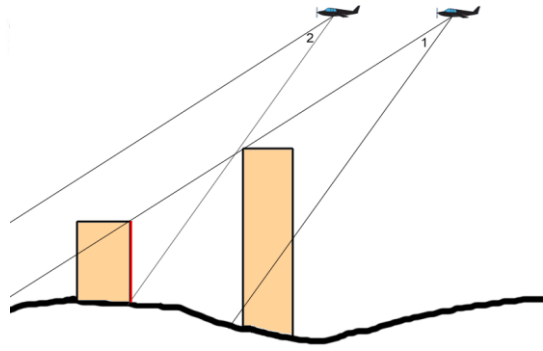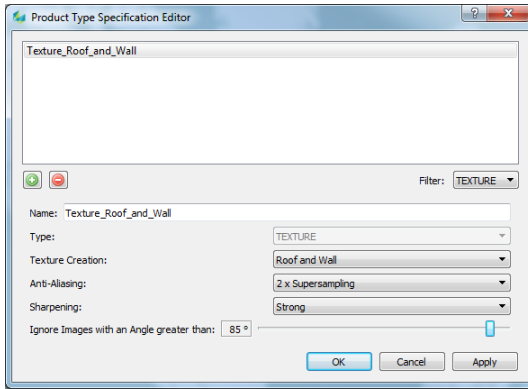
4

HxMap – 3D modelling workflow
Texture Mapping

- when it has to be **right**

HxMap – 3D modelling workflow
Texture Mapping
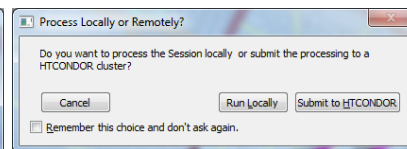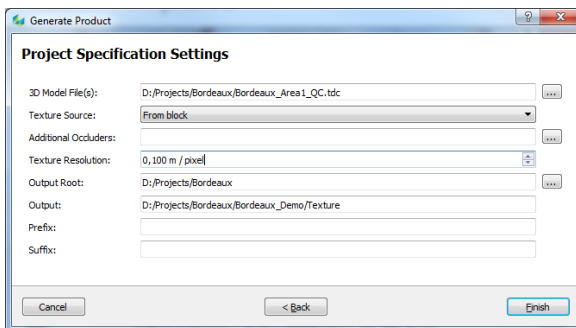
- when it has to be **right**

HxMap – 3D modelling workflow
Texture Mapping
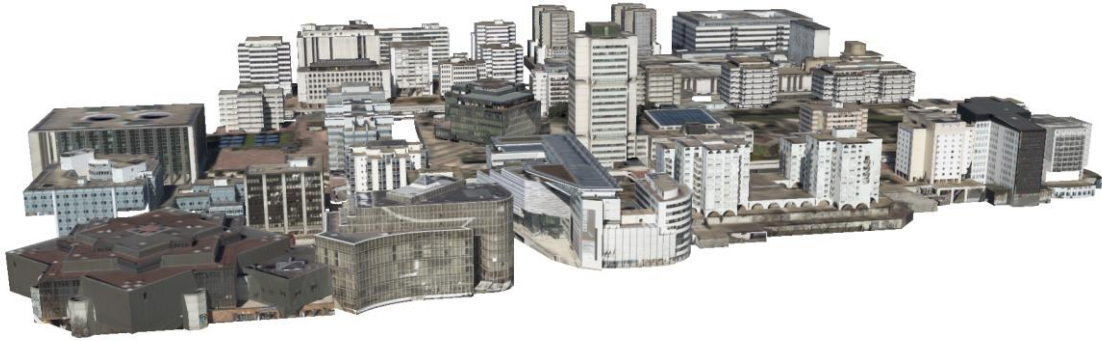
- when it has to be **right**

HxMap – 3D modelling workflow
Export
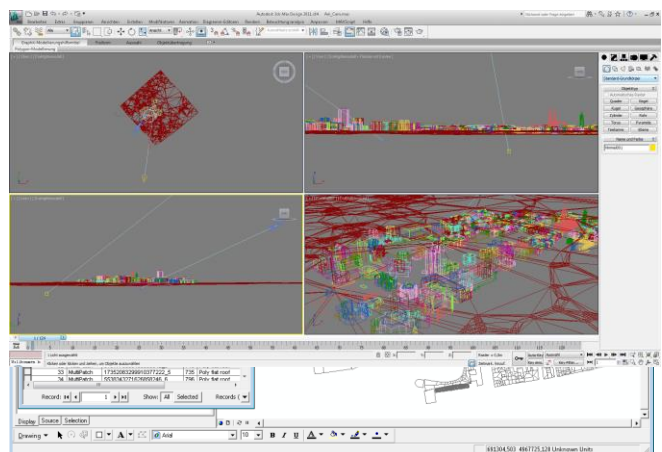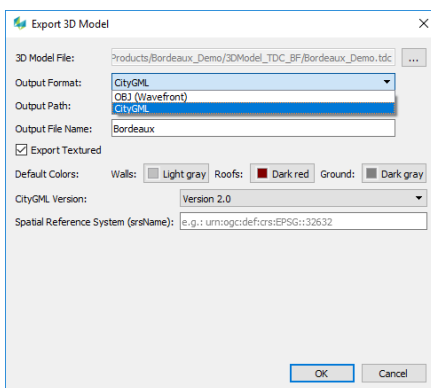
- when it has to be **right**

HxMap – 3D modelling workflow
Visualization

- when it has to be **right**   *Leica*
Geosystems

HxMap – 3D modelling workflow
3D Editor future improvements
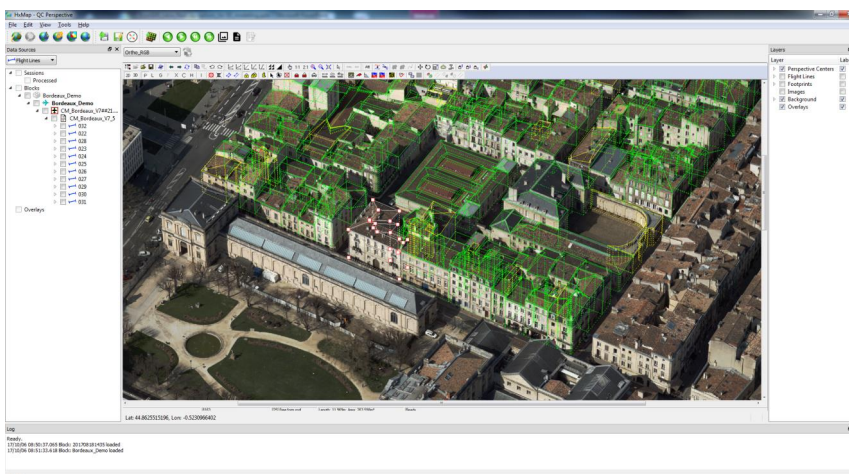
- autom. image pair selection

- oblique stereo

- texture editing

- pointcloud support

- CityGML import

- when it has to be **right**
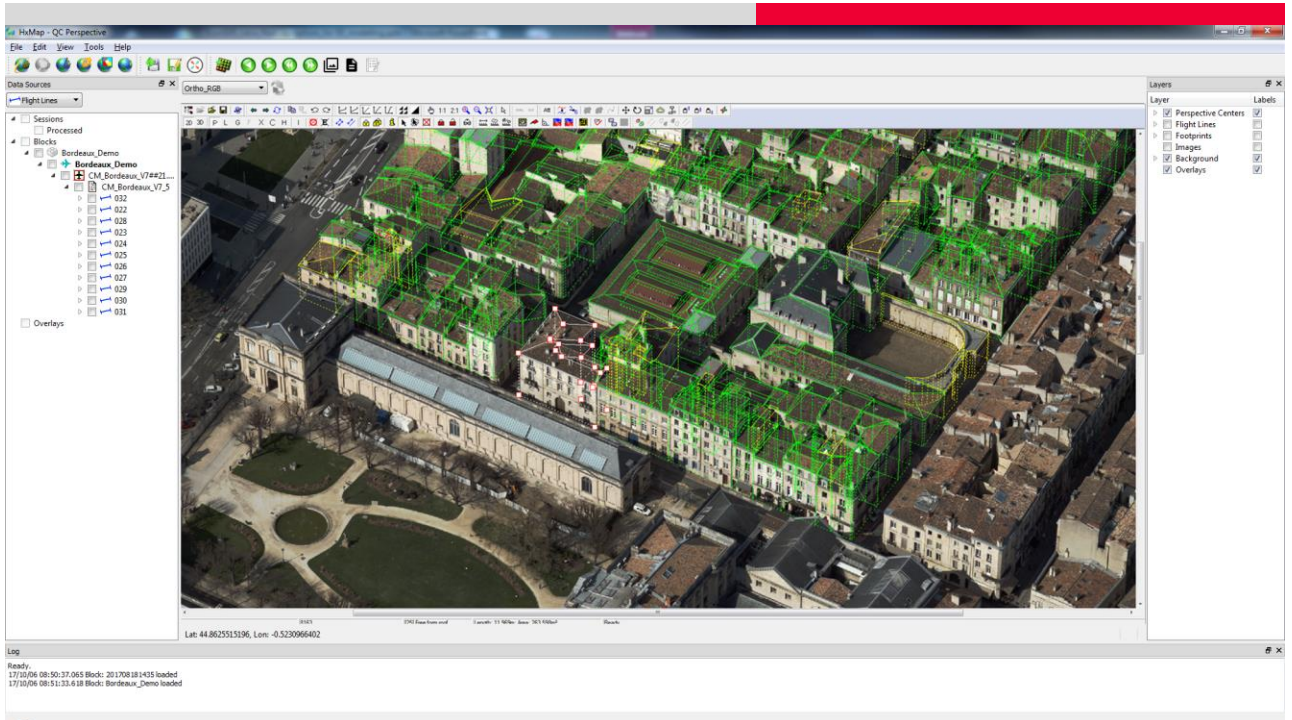
Leica
Geosystems

HxMap – 3D modelling workflow
BuildingFinder future improvements

- Building outline detection with wall points

LiDAR DSM

Building outline

- when it has to be **right**

9

HxMap – 3D modelling workflow
BuildingFinder future improvements

- Building outline detection with wall points

LiDAR DSM

Oblique image DSM

- when it has to be **right**

HxMap – 3D modelling workflow
BuildingFinder future improvements

- Enhanced roof modelling
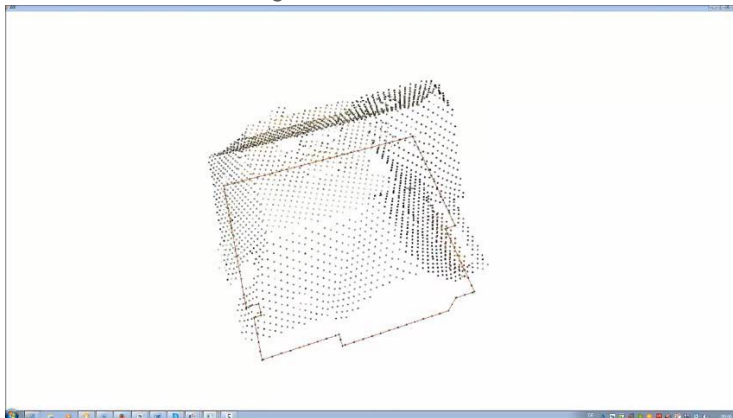
- when it has to be **right**

Airborne User Group Meeting 2018

Reality Capture – taken to the next dimension

- when it has to be **right**

The next dimension of airborne innovation

Dear Valued Customers,

We hereby invite you to attend the **Airborne User Group Meeting 2018** which will take place from 21 - 23 February in Lisbon/Estoril, Portugal.

Please join us at this exclusive conference for airborne imaging and LiDAR mapping solutions and get the latest news on the HxGN Content Program. We will present market updates, customer case studies, future development plans, and insights on new sensors and software; all close to the beach in Portugal's capital city, where seven cinematic hillsides overlook the Rio Tejo, in an exclusive but affordable five-star conference venue.

We look forward to welcoming you at the next Airborne User Group Meeting where you can network with fellow industry experts, partners, friends and colleagues.

Kind regards,

John Welter
President: Geospatial Solutions Division and Content & Engineering Services

Register at
www.leica-geosystems.com/UGM2018

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leica-geosystems.com

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- when it has to be **right**

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Join us at this exclusive conference for airborne imaging and LiDAR mapping solutions and get the latest news on the HxGN Content Program. We will present market updates, customer case studies, future development plans, and insights on new sensors and software.

Venue & accommodation

The event will take place at the iconic Palácio Estoril Hotel. The hotel was a major location during the sixth film of the James Bond saga, On Her Majesty's Secret Service, and the cast stayed at the Palácio during the shoot. The exterior of the Hotel, the lobby, the pool and the rooms' view, are an integral part of many scenes of the film that was released in 1969.
www.palacioestorilhotel.com | Room price incl. breakfast: EUR 140.00

Registration rates

Early bird rate: EUR 95.00*
Normal rate: EUR 195.00

* Early bird rate applies until 30 November 2017

Special offer

Companies with Gold or Silver Customer Care Packages attend free of charge.

GOLD   **SILVER**
CCP»   **CCP»**

Register at **www.leica-geosystems.com/UGM2018**

Preliminary agenda at a glance

	WEDNESDAY 21 FEBRUARY	THURSDAY 22 FEBRUARY	FRIDAY 23 FEBRUARY	SATURDAY 24 FEBRUARY
08:00 - 09:00		Breakfast at hotel	Breakfast at hotel	
09:00 - 09:45		1802 High efficient urban city mapping with Leica CityMapper in Florida & Denver Mike Bernau, Fugro, USA	1810 Special airborne projects around the world Customer	
09:45 - 10:30	Arrival	1803 HxMap - RealWorld, RealCity, RealTerrain: The processing power tool Kristin Klimek, Tauno Saks, Leica Geosystems	1811 The HxGN Content Program Projects / Applications Bruce Wald, Hexagon	
10:30 - 11:00	Shuttle Busses	Coffee Break	Coffee Break	
11:00 - 11:45	Airport - Hotel Palacio	1804 High-resolution 3D data capturing over Bordeaux/ Southern France with Leica CityMapper Bruno Calabal, APEI, France	1812 Airborne Customer Survey Results Leica Geosystems	Tuk tuk tour, Lisbon 18 holes golf, Estoril Tennis, Estoril
11:45 - 12:30		1805 3D product portfolio - hybrid, imaging & LiDAR Poul Nørgård, Leica Geosystems	1813 Future Talk - Panel Discussion Airborne Experts	
12:30 - 13:30		Lunch	Lunch	
13:30 - 14:15		1806 3D oblique data capturing of the Olympic Park in Rio de Janeiro Valther / Esteio, Brazil	1814 Mobile Mapping Project Portugal Update 1830 Product Portfolio Customer & Leica Geosystems	
14:15 - 15:00	HxMap workshop Hotel Palacio 14:00 - 16:00	1807 Smart City Rio project Merging airborne & mobile mapping data: Analysis, simulation, incident mapping Hexagon Geospatial	1815 UAV Project UAV Services: Update & Roadmap Customer & Valentin Fuchs, Leica	
15:00 - 15:30		Coffee Break		
15:30 - 16:15		1808 SPL & Linear LiDAR mode projects Paul Nørgård, Ron Roth, Leica Geosystems		
16:15 - 17:00		1809 Airborne bathy LiDAR Customer Anders Ekelund, Leica Geosystems		
17:00 - 18:30		Free Time	Individual Programme	
18:30 - 19:00	1801 Welcome / Program		Departure	
19:00 - 20:00	Welcome Reception			
20:00 - 22:00	Dinner Hotel	Dinner Out		
22:00 - 22:30		Shuttle		

This programme is subject to change. Last updated - 09.17. More detailed programme to follow.

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Leica Geosystems

Destination

PALÁCIO ESTORIL
HOTEL, GOLF & WELLNESS

Hotel | Rooms & Suites | Restaurants | Events | Weddings | Estoril Golf | Wellness | Banyan Tree Spa | Gallery | Packages | Contact

WELCOME TO HOTEL PALÁCIO ESTORIL

Questions?

HEXAGON