2023 COLLECTION

YellowScan

Dataset

Catalog.



Summary.

VOYAGER	03	MAPPER+OEM	33
– EXPLORER	10	SURVEYOR ULTRA	41
– MAPPER+	15	VX15 SERIES	53
- MAPPER	22	- VX20 SERIES	57



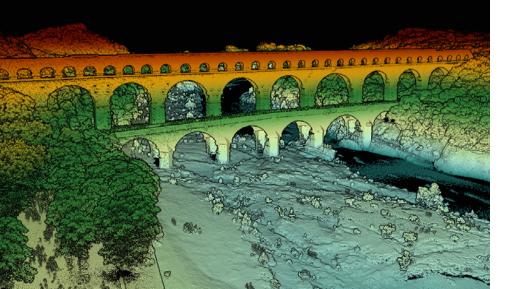
/ APPLICATION

VOYAGER

Archaeology

Survey of the Pont du Gard in France. Acquired with Voyager!

It features the beautiful aqueduct as well as some typical Southern France vegetation, the Gardon River and great density even under vegetation.



/ DATA RELATED

Survey location	France
Survey date	03-Aug-22
Accessories	NA
EPSG code	2154
Raw data	yes
Confidentiality	public
Software used	POSPac / CloudStation

Post-processing	Strip Adjusted /
	Classified

/ PLATFORM RELATED

Platform	ULM Savannah
Total survey time	17min
Flight height	180mAGL
Flight speed	31m/s

Get data produced from **CloudStation**

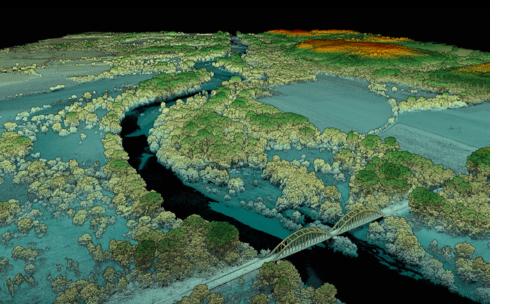
File size: 5014ME

/ APPLICATION

VOYAGER

Topography

The Gardon River located in South of France has heavily dried out during the theat wave of Summer 2022. This 3500x2000m survey features a segment of the Gardon River, as well as typical dense Mediterranean vegetation. The flight was also a test of the maximization of echoes and point density of the Voyager unit.



/ DATA RELATED

Survey location	France
Survey date	03-Aug-22
Accessories	NA
EPSG code	2154
Raw data	yes
Confidentiality	public
Software used	POSPac / CloudStation

Post-processing	Strip Adjusted /
	Classified

/ PLATFORM RELATED

Platform	ULM Savannah
Total survey time	46min
Flight height	250mAGL
Flight speed	31m/s

Get data produced from CloudStation

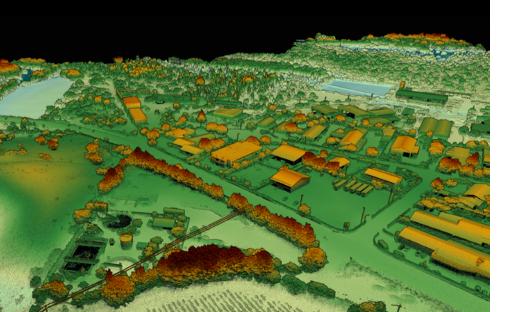
File size: 8800MB

/ APPLICATION

VOYAGER

Urban

Quick, low altitude and low density survey of the industrial activity zone of the village of Saint-Hippolyte-du-Fort. It features various sizes of buildings, low voltage distribution powerlines, sparce vegetation and a bridge.



/ DATA RELATED

Survey location	France
Survey date	03-Aug-22
Accessories	NA
EPSG code	2154
Raw data	yes
Confidentiality	public
Software used	POSPac / CloudStation

Post-processing	Strip Adjusted /
	Classified

/ PLATFORM RELATED

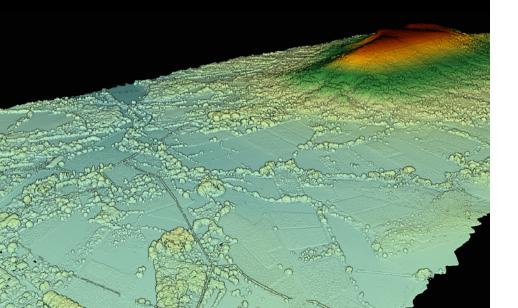
Platform	ULM Savannah
Total survey time	16min
Flight height	150mAGL
Flight speed	31m/s

Get data produced from **CloudStation**

File size: 2300ME / LIDAR SYSTEM / APPLICATION

VOYAGER Topography

Dataset captured in Pompignan, France. It features a 935 ha (1700 x 5500 m) survey, with a 235 m elevation difference between lowest and highest point. The area covered has the village of Pompignan, featuring narrow streets, a church and various infrastructures. Next to it is a large hill atop of which are nested the ruins of an old castle.



/ DATA RELATED

Survey location	France
Survey date	04-Aug-22
Accessories	NA
EPSG code	2154
Raw data	yes
Confidentiality	public
Software used	POSPac / CloudStation

Post-processing	Strip Adjusted /
	Classified

/ PLATFORM RELATED

Platform	ULM Savannah
Total survey time	41min
Flight height	200mAGL
Flight speed	31m/s

Get data produced from CloudStation

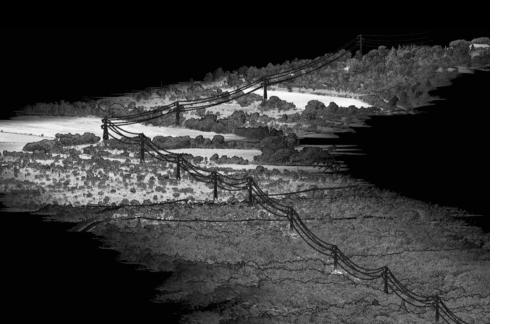
7500ME

/ APPLICATION

VOYAGER

Utility

Single line flight line (one pass) at 150m AGL to survey 20 km of high voltage powerlines over varying topography. Can you spot the crop circles in the dataset?



/ DATA RELATED

Survey location	France
Survey date	03-Aug-22
Accessories	NA
EPSG code	2154
Raw data	yes
Confidentiality	public
Software used	POSPac / CloudStation

Post-processing	Strip Adjusted
	Classified

/ PLATFORM RELATED

Platform	ULM Savannah
Total survey time	14min
Flight height	150mAGL
Flight speed	31m/s

Get data produced from CloudStation

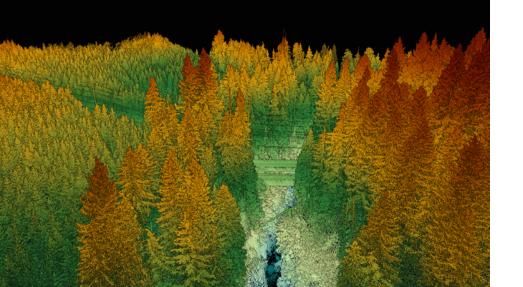
File size: 2800MB

/ APPLICATION

VOYAGER

Forestry

Flight demo in Seattle of the Voyager to compare it to Ultra2 and Mapper+ over a dense redwood tree forest. It features a steep dropdown, with a bridge over it and some powerlines along the road. You can even pick up a fallen tree over the creviss.



/ DATA RELATED

Survey location	USA
Survey date	14-Sep-22
Accessories	NA
EPSG code	32610
Raw data	yes
Confidentiality	public
Software used	POSPac / CloudStation

Post-processing	Strip Adjusted
	Classified

/ PLATFORM RELATED

Platform	Freefly AltaX
Total survey time	5min
Flight height	100mAGL
Flight speed	10m/s

Get data produced from CloudStation

File size

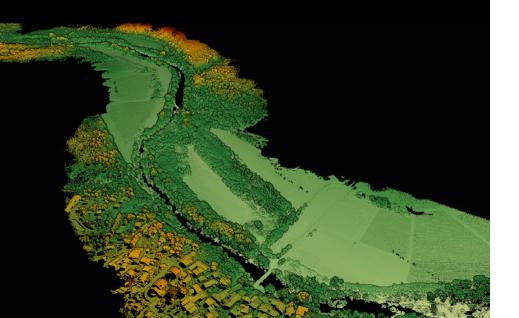
YellowScan Explorer.



/ APPLICATION

EXPLORER Topography

Dataset covering a 8km linear segment of the Vidourle river, Southern France. The interest of this flight was the river surroundings. Flown areas includes the village of Lecques and riparian vegetation surrounding the Vidourle. The Explorer lidar system was installed on a Savannah microlight aircraft fitted on an opening at the passanger seat. Flying heights varied from 150 to 250mAGL as this variable is difficult to maintain constant in habited flights.



/ DATA RELATED

Survey location	France
Survey date	25-Jun-21
Accessories	NA
EPSG code	2154
Raw data	yes
Confidentiality	public
Software used	POSPac / CloudStation

Post-processing	Strip Adjusted /
	Classified

/ PLATFORM RELATED

Platform	ULM Savannah
Total survey time	14min
Flight height	220mAGL
Flight speed	35m/s

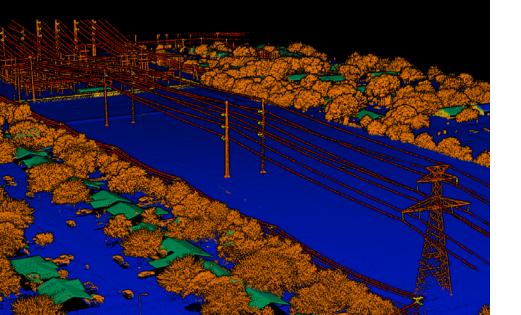
Get data produced from CloudStation

File size 245MB / LIDAR SYSTEM / APPLICATION

EXPLORER Utility

Short flight over an electric substation. 4 strips were collected focusing on catpuring electric lines and the associated infrastructure.

The process was done from the CloudStation for the Strip Adjustment and from Terrasolid via auto and manual classification steps.



/ DATA RELATED

Survey location	USA
Survey date	15-Nov-21
Accessories	NA
EPSG code	32614
Raw data	yes
Confidentiality	public
Software used	POSPac / CloudStation / Terrasolid
Post-processing	Strip Adjusted / Classified

/ PLATFORM RELATED

Platform	DJI M600
Total survey time	8min
Flight height	100mAGL
Flight speed	7m/s

Get data produced from **CloudStation**

File size 92MB / LIDAR SYSTEM / APPLICATION

EXPLORER Utility

Dataset covering linear segment of high power line Southern France.

The interest of this flight was the electric power line and towers.

The Explorer lidar system was installed on a Savannah microlight aircraft fitted on an opening at the passanger seat. Flying heights varied from 150 to 250mAGL as this variable is difficult to maintain constant in habited flights.



/ DATA RELATED

Survey location	France
Survey date	25-Jun-21
Accessories	NA
EPSG code	32631
Raw data	yes
Confidentiality	public
Software used	POSPac / CloudStation

Post-processing	Strip Adjusted A
	Classified

/ PLATFORM RELATED

Platform	ULM Savannah
Total survey time	7min
Flight height	200mAGL
Flight speed	35m/s

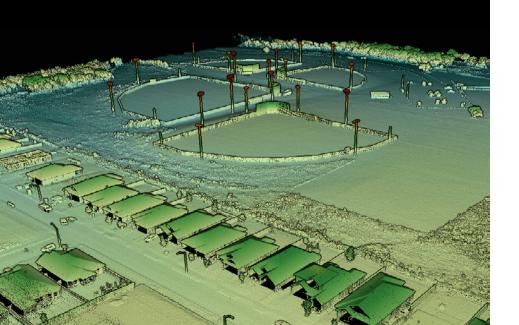
Get data produced from **CloudStation**

/ APPLICATION

EXPLORER

Utility

Short 4 strips over a baseball ground. The site displays surrounding house infrastructures and poles. The process was kept within CloudStation through Strip Adjustment and Terrain modules.



/ DATA RELATED

Survey location	USA
Survey date	15-Nov-21
Accessories	NA
EPSG code	32614
Raw data	yes
Confidentiality	public
Software used	POSPac / CloudStation

Post-processing	Strip Adjusted
	Classified

/ PLATFORM RELATED

Platform	DJI M600
Total survey time	7min
Flight height	100mAGL
Flight speed	7m/s

Get data produced from **CloudStation**

File size 199MB

YellowScan Mapper+



/ LIDAR SYSTEM MAPPER+

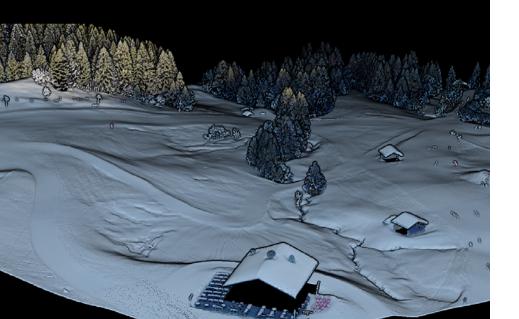
/ APPLICATION

Snow



Compare with:
- Ultra

Dataset collected over ski slopes of a French Alps resort at le Grand Bornand. In total, 6 strips were generated over a levelled flight plan at 80mAGL from the take-off point. The laser points are therefore shot from various heights spanning from 50 to 100mAGL. This site was also recorded with an Ultra scanner and makes a good comparison dataset for these 2 lidars.



/ DATA RELATED

Survey location	France
Survey date	09-Feb-22
Accessories	YS Camera Module
EPSG code	2154
Raw data	yes
Confidentiality	public
Software used	POSPac / CloudStation

Post-processing Strip Adjusted / Classified / Colorized

/ PLATFORM RELATED

Platform	DJI M600
Total survey time	10min
Flight height	80mAGL
Flight speed	8m/s

Get data produced from CloudStation



/ LIDAR SYSTEM
MAPPER+

/ APPLICATION

Snow



Compare with:
- Ultra

Dataset collected over the side of a natural valley covered by snow in the French Alps next to the resort of le Grand Bornand. In total, 3 strips were generated from various heights from 60 to 30mAGL from the take-off point. The site is entirely covered with snow and sparse vegetation. A stream and a path can be seen crossing the middle of the scene. This site was also recorded with an Ultra scanner and makes a good comparison dataset for these 2 lidars.



/ DATA RELATED

Survey location	France
Survey date	09-Feb-22
Accessories	YS Camera Module
EPSG code	2154
Raw data	yes
Confidentiality	public
Software used	POSPac / CloudStation

Post-processing	Strip Adjusted /
	Classified / Colorized

/ PLATFORM RELATED

Platform	DJI M600
Total survey time	6min
Flight height	60mAGL
Flight speed	8m/s

Get data produced from CloudStation

File size 178MB / LIDAR SYSTEM MAPPER+

/ APPLICATION
Topography



Compare with:
- Ultra

LiDAR survey collected over a natural escarpment eroded off by surrounding streams. The lidar flight plan was designed along the long axis of the natural benches and captured 8 strips from about 80mAGL. The site features mostly steep to vertical slopes and mediteraneean vegetation. The Processing was taken through the routine CloudStation Strip Adjustment, Terrain and Colorization steps. This site was also recorded with the Ultra running the same flight plan and is therefore a good comparison dataset.



/ DATA RELATED

Survey location	France
Survey date	04-Feb-22
Accessories	YS Camera Module
EPSG code	2154
Raw data	yes
Confidentiality	public
Software used	POSPac / CloudStation

Post-processing Strip Adjusted / Classified / Colorized

/ PLATFORM RELATED

Platform	DJI M300
Total survey time	12min
Flight height	80mAGL
Flight speed	8m/s

Get data produced from CloudStation

File size 792MB / LIDAR SYSTEM MAPPER+

/ APPLICATION **Topography**



LiDAR survey over private property displaying a house and forested land in the surroundings. The capture shows massive oak trees that had no leaf on at the time of the survey which allowed laser signal penetration. The flight plan was designed in a mesh pattern to favor high density. The processing went through CloudStation Strip Adjustment, Terrain and Colorization modules. Smoothing and classification was further processed with Terrasolid drone wizard. The exact same flight was done with the Ultra for comparison purpose.



/ DATA RELATED

Survey location	France
Survey date	04-Feb-22
Accessories	YS Camera Module
EPSG code	2154
Raw data	yes
Confidentiality	public
Software used	POSPac / CloudStation / Terrasolid
Post-processing	Strip Adjusted / Classified / Colorized

/ PLATFORM RELATED

Platform	DJI M300
Total survey time	10min
Flight height	80mAGL
Flight speed	8m/s





Get data produced from Terra

File size: 185MB

/ LIDAR SYSTEM MAPPER+

/ APPLICATION

Topography



Compare with:

- Ultra
- Vx20-300

Single flight over the Château de Restinclières located very close to YellowScan headoffice. The site was flown with a meshed flight plan allowing to scan the facade of the infrastructure. The site also features 'jardins à la Française' and natural vegetation in the surroundings. Several lidar systems were flown with the same conditions. The VX20-300 but also the Ultra, the Mapper and the Mapper+ which makes this dataset a good benchmark. Processing mostly used CloudStation with all its modules but an extra step was done with the Terrasolid drone wizard. Both products are available for download.



/ DATA RELATED

Survey location	France
Survey date	18-Feb-22
Accessories	YS Camera Module
EPSG code	2154
Raw data	yes
Confidentiality	public
Software used	POSPac / CloudStation / Terrasolid
Post-processing	Strip Adjusted / Classified / Colorized

/ PLATFORM RELATED

Platform	DJI M300
Total survey time	10min
Flight height	50mAGL
Flight speed	8m/s



Get data produced from Terra



File size: 157MB

/ APPLICATION

MAPPER+

Forestry

20 min flight over forested site centered on a farm land. The flight covers different types of trees, mostly coniferous including Larch trees that had no leafs on at the time of the capture allowing a good laser penetration in those areas. The flight includes 12 strips flown from 100mAGL following the terrain height. Processing was entirely produced from CloudStation and its entire module suite.



/ DATA RELATED

Survey location	United Kingdom
Survey date	02-Feb-22
Accessories	YS Camera Module
EPSG code	32630
Raw data	yes
Confidentiality	public
Software used	POSPac / CloudStation

Post-processing Strip Adjusted / Classified / Colorized

/ PLATFORM RELATED

Platform	DJI M300
Total survey time	20min
Flight height	100mAGL
Flight speed	8m/s

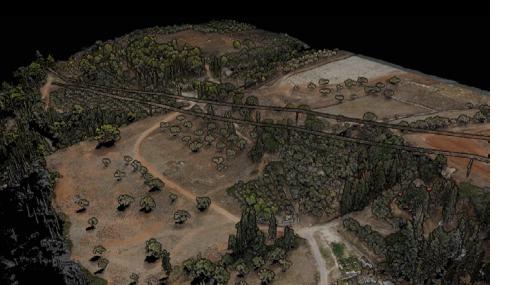
Get data produced from CloudStation

File size: 1596ME YellowScan
Mapper.



/ LIDAR SYSTEM / APPLICATION
MAPPER Topography

Dataset from a Mapper demo in Greece flying over the country side. The site displays olive tree plantations, natural forest over the median bank and bee hives. The flight plan comprises 7 strips, 50 to 70mAGL with 20m line spacing. Initial strip adjustment, classification and colorization was conducted in CloudStation. The process has been taken one step further with Terrasolid wizard processing drone data applying smoothing and cut overlap routine functions. This allowed to remove ranging noise from the Mapper point cloud.



/ DATA RELATED

Survey location	Greece
Survey date	14-0ct-21
Accessories	YS Camera Module
EPSG code	32634
Raw data	yes
Confidentiality	public
Software used	POSPac / CloudStation / Terrasolid
Post-processing	Strip Adjusted / Classified / Colorized

/ PLATFORM RELATED

Platform	Velos
Total survey time	10min
Flight height	60mAGL
Flight speed	10m/s

Get data produced from CloudStation

File size: 208MB / LIDAR SYSTEM / APPLICATION
MAPPER Topography

Dataset from a Mapper demo in Scotland flying over the unmissable Hopetoun house located in the outskirts of Edinburgh. The flight at 50mAGL was designed in a cross pattern 30m spaced generating 11 strips. The build up noise due to this excessive overlap was reduced using Terrasolid wizard and applying smoothing and cut overlap routine functions. The strip adjustment and colorization processes were completed inside CloudStation.



/ DATA RELATED

Survey location	United Kingdom
Survey date	19-Aug-21
Accessories	YS Camera Module
EPSG code	NA
Raw data	yes
Confidentiality	public
Software used	POSPac / CloudStation / Terrasolid
Post-processing	Strip Adjusted / Classified / Colorized

/ PLATFORM RELATED

Platform	M300
Total survey time	NA
Flight height	50mAGL
Flight speed	NA

Get data produced from CloudStation

File size

/ APPLICATION

MAPPER

Urban

This dataset shows a colorized and classified sport complex.

This site displays sparse vegetation surrounding the facilities, buildings and sport fields. The rendering of tall public lighting can also be seen in this acquisition.



/ DATA RELATED

Survey location	France
Survey date	05-Aug-20
Accessories	Single Camera A6000
EPSG code	2154
Raw data	yes
Confidentiality	public
Software used	POSPac / CloudStation
Post-processing	Classified / Colorized

/ PLATFORM RELATED

Platform	DJI M600
Total survey time	15min
Flight height	50mAGL
Flight speed	10m/s

Get data produced from CloudStation

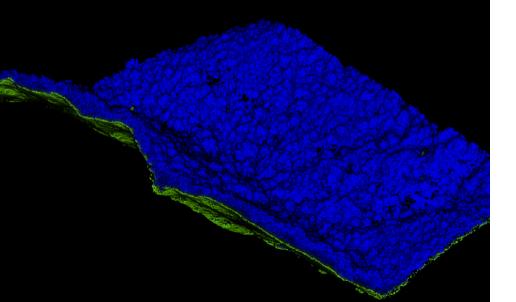
File size 152MB / LIDAR SYSTEM / / MAPPER Fo

/ APPLICATION

Forestry

This survey was conducted over dense forested area in the Languedoc region close to Sumene village. No ground area is visible from a top view as the vegetation is exhaustively covering the entire extent of the survey.

The dataset has been classified in ground / above ground with the CloudStation Terrain module. The ground class allows to identify hidden tracks below the vegetation cover.



/ DATA RELATED

Survey location	France
Survey date	02-Sep-20
Accessories	NA
EPSG code	2154
Raw data	yes
Confidentiality	public
Software used	POSPac / CloudStation

Post-processing	Classified

/ PLATFORM RELATED

Platform	DJI M600
Total survey time	15min
Flight height	50mAGL
Flight speed	10m/s

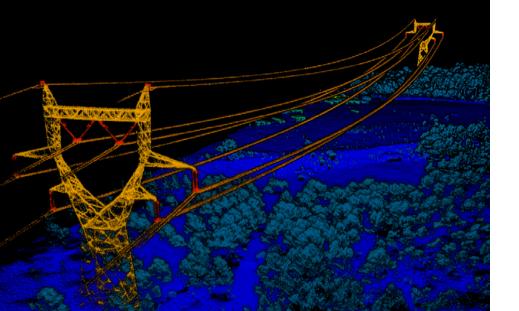
Get data produced from CloudStation

File size

/ LIDAR SYSTEM / APPLICATION
MAPPER Utility

This lidar collect with the Mapper stretches between 2 high voltage power towers and shows a catenary length.

The data was classified with Terrasolid partially by hand and partially by macro. The produced point cloud corresponds to a single flight line shot about 25m above the power cables.



/ DATA RELATED

Survey location	France
Survey date	05-Aug-20
Accessories	NA
EPSG code	2154
Raw data	yes
Confidentiality	public
Software used	POSPac / CloudStation / Terrasolid
Post-processing	Classified

/ PLATFORM RELATED

Platform	DJI M600
Total survey time	10min
Flight height	85mAGL
Flight speed	10m/s

Get data produced from CloudStation

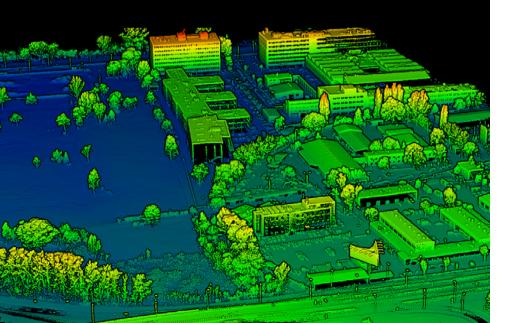
/ APPLICATION

MAPPER

Urban

Routine Mapper collect flight at 65mAGL over an urban area.

The flight line spacing is 40m. At this height, the swath is 110m and therefore produced overlap is about 60%. Building facade coverage is partial due to their overhang nature. Ideally a cross path could have densified the facade perpendicular to the flight orientation. Dataset was strip adjusted using the robust method.



/ DATA RELATED

Survey location	Poland
Survey date	08-Jan-21
Accessories	NA
EPSG code	2178
Raw data	yes
Confidentiality	public
Software used	POSPac / CloudStation
Post-processing	Strip Adjusted

/ PLATFORM RELATED

Platform	DJI M300
Total survey time	8min
Flight height	65mAGL
Flight speed	8m/s

Get data produced from CloudStation

File size: 814MB / LIDAR SYSTEM MAPPER

/ APPLICATION
Topography

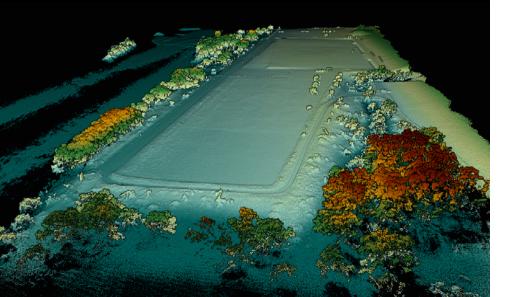


Compare with:

- <u>Ultra</u>

- <u>Vx20-300</u>

Mapper collection of 4 strips at 70mAGL alongside of a river bed. Flight line spacing is 30m and strips are about 500m long. Process was entirely completed inside CloudStation Strip Adjustment and Terrain module. This dataset is part of a comparison exercice between Mapper, Ultra and Vx20 systems. You will find the exact same flight plan and parameters completed by those other lidar system in the catalog.



/ DATA RELATED

Survey location	Japan
Survey date	28-Apr-21
Accessories	NA
EPSG code	32654
Raw data	yes
Confidentiality	public
Software used	POSPac / CloudStation

Post-processing	Strip Adjusted /
	Classified

/ PLATFORM RELATED

Platform	DJI M600
Total survey time	10min
Flight height	70mAGL
Flight speed	5m/s

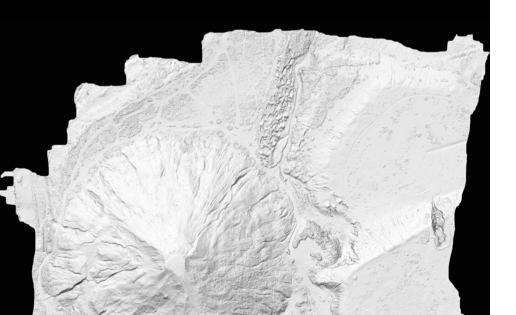
Get data produced from CloudStation

File size 322MB / LIDAR SYSTEM MAPPER

/ APPLICATION

Topography

Single flight, 18ha coverage with 11 strips, 40m spaced at 50mAGL. The site consists of a single tin tailing mount being rehabilitated and vegetated. Open pit tin mining was active in the 50's and abandonned 10 years later. The site is now a recreational area and its erosion is monitored by the BRGM. All processes were conducted in CloudStation.



/ DATA RELATED

Survey location	France
Survey date	02-Mar-21
Accessories	NA
EPSG code	2154
Raw data	yes
Confidentiality	public
Software used	POSPac / CloudStation

Post-processing	Strip Adjusted /
	Classified

/ PLATFORM RELATED

Platform	DJI M300
Total survey time	21min
Flight height	50
Flight speed	10m/s

Get data produced from CloudStation

File size:

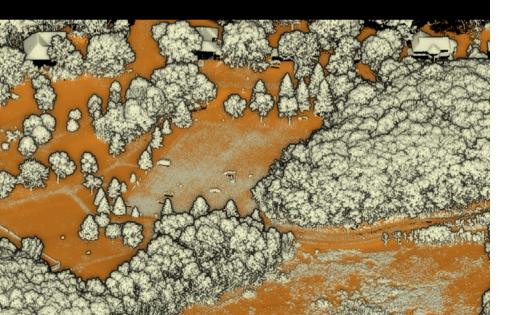
/ LIDAR SYSTEM MAPPER

/ APPLICATION
Topography



11 flight lines, 40m spaced over sport fields and playground in between 2 tree covered patches. The dataset allows to assess vegetation penetration and sport facilities mapping.

This lidar survey was conducted with the Mapper and the same area was covered with the Vx20-200. This allows to compare both lidar systems.



/ DATA RELATED

Survey location	USA
Survey date	04-May-21
Accessories	NA
EPSG code	32615
Raw data	yes
Confidentiality	public
Software used	POSPac / CloudStation

Post-processing	Strip Adjusted /
	Classified

/ PLATFORM RELATED

Platform	DJI M600
Total survey time	10min
Flight height	80mAGL
Flight speed	5m/s

Get data produced from CloudStation

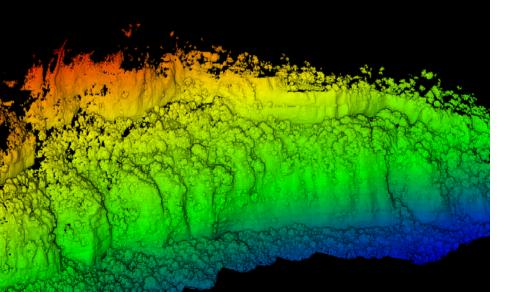
File size: 475MB / LIDAR SYSTEM / APPLICATION
MAPPER Cliff

11 level flight lines completed at various heights alongside of a cliff.

The Mapper lidar system was mounted orientated flat (scanner FOV orientated forward) using 90deg adapters to the M600 mounting bracket.

The dataset provides an example of what can be obtain from orientating the system differently than at nadir when object of interest are vertical.

Here the example is a cliff but similar mount could be used when inspecting a bridge or tower.



/ DATA RELATED

Survey location	France
Survey date	11-Jan-21
Accessories	NA
EPSG code	2154
Raw data	yes
Confidentiality	public
Software used	POSPac / CloudStation
Post-processing	Strip Adjusted

/ PLATFORM RELATED

Platform	DJI M600
Total survey time	19min
Flight height	50mAGL
Flight speed	3m/s

Get data produced from CloudStation

File size: 1493MB

LIDAR SYSTEM YellowScan Mapper+OEM.

/ APPLICATION

QUBE240

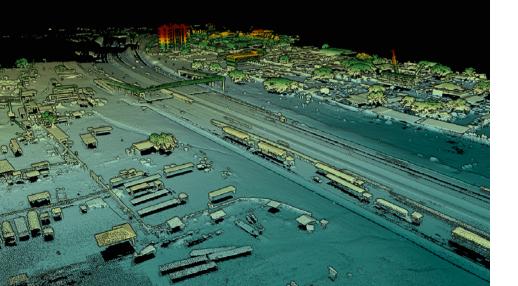
Urban

Data courtesy of Rocketmine covering a highway extension project.

The main feature of the flown area is the highway but the direct environnement is urban and shows numerous buildings.

The area was covered from 100mAGL @22m/s and 70m line spacing.

Produced point density is about 158ppsm all classes. Strip Adjustment and classification process produced in CloudStation.



/ DATA RELATED

Survey location	Ghana
Survey date	03-Jul-21
Accessories	NA
EPSG code	NA
Raw data	yes
Confidentiality	confidential
Software used	POSPac / CloudStation

Post-processing	Strip Adjusted
	Classified

/ PLATFORM RELATED

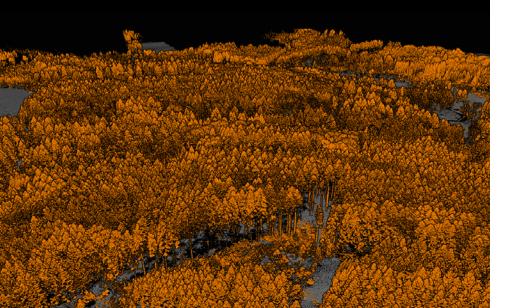
Platform	Quantum Trinity
Total survey time	18min
Flight height	100mAGL
Flight speed	20m/s

Get data produced from CloudStation

-ile size: 990MB / LIDAR SYSTEM / APPLICATION

QUBE240 Archaeology

Dataset generated by Quantum Systems and unveiled during their Dec 2021 webinar. The area is covered by evergreen trees and hides historical earthwork remains. 60ha were covered by 16 flight paths, 50m line spacing at 100mAGL. On average, the produced point density was 200ppsm for all classes and about 100ppsm ground point. Switching off the vegetation allows to clearly distinguish the trench and perimeter of the ancient castle.



/ DATA RELATED

Survey location	Germany
Survey date	07-Dec-21
Accessories	NA
EPSG code	32632
Raw data	yes
Confidentiality	public
Software used	POSPac / CloudStation

Post-processing	Strip Adjusted /
	Classified / Colorized

/ PLATFORM RELATED

Platform	Quantum Trinity
Total survey time	20min
Flight height	100mAGL
Flight speed	20m/s

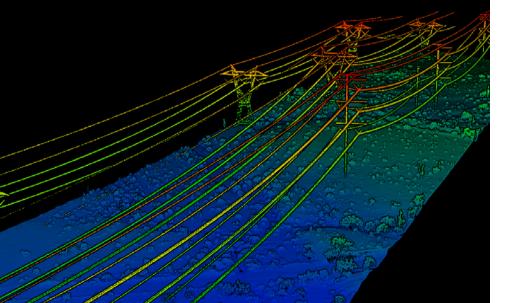
Get data produced from CloudStation

File size: 1196MB / LIDAR SYSTEM / APPLICATION

QUBE240 Utility

Cropped dataset of 7 strips merged together flying over a corridor of high voltage power lines.

Towers are of different types and up to 45m tall. The Trinity was recording 40m above the highest tower providing enough safety for the flight. Strip Adjustement and classification processed within CloudStation. Overall point density obtained is about 270ppsm.



/ DATA RELATED

Survey location	USA
Survey date	17-Aug-21
Accessories	NA
EPSG code	NA
Raw data	no
Confidentiality	confidential
Software used	POSPac / CloudStation

Post-processing	Strip Adjusted /
	Classified

/ PLATFORM RELATED

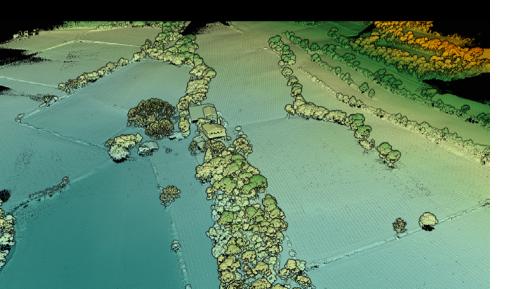
Platform	Quantum Trinity
Total survey time	30min
Flight height	85mAGL
Flight speed	20m/s

Get data produced from CloudStation

File size 182MB / LIDAR SYSTEM / APPLICATION

QUBE240 Topography

Vineyard parcels from Château Laroque located north from Montpellier. This was the site of a public demonstration hosted by l'Avion Jaune in January 2022 featuring the Trinity platform together with the Qube 240 as payload. The survey flight plan was centered on the vineyard building and extends over the surrounding vineyards. The processing was completed in CloudStation. Additional smoothing, cut overlap and noise removal routine functions was applied from Terrasolid drone wizard.



/ DATA RELATED

Survey location	France
Survey date	14-Jan-22
Accessories	NA
EPSG code	2154
Raw data	yes
Confidentiality	public
Software used	POSPac / CloudStation / Terrasolid
Post-processing	Strip Adjusted / Classified

/ PLATFORM RELATED

Platform	Quantum Trinity
Total survey time	15min
Flight height	85mAGL
Flight speed	20m/s



Get data produced from Terra solid

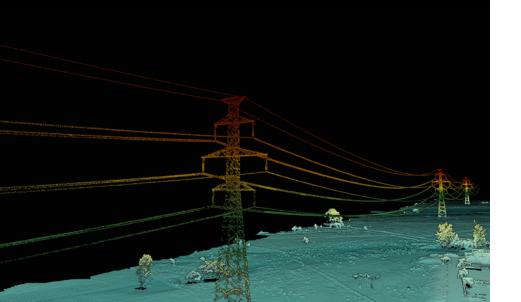


/ APPLICATION

Mapper+OEM VERSION A

Utility

Test flight of the Mapper+ OEM version A on the Fixar 007 VTOL platform, over powerlines spanning 3 segments at 70m AGL and 80m. This dataset is the lower AGL flight.



/ DATA RELATED

Survey location	Latvia
Survey date	16-Jun-22
Accessories	NA
EPSG code	32635
Raw data	yes
Confidentiality	public
Software used	POSPac / CloudStation

Post-processing	Strip Adjusted
	Classified

/ PLATFORM RELATED

Platform	Fixar 007
Total survey time	16min
Flight height	70mAGL
Flight speed	20m/s

Get data produced from CloudStation

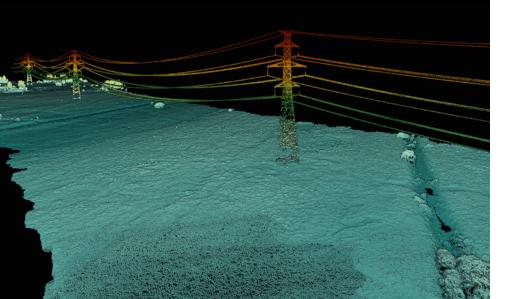
File size 400MB

/ APPLICATION

Mapper+OEM VERSION A

Utility

Test flight of the Mapper+ OEM version A on the Fixar 007 VTOL platform, over powerlines spanning 3 segments at 70m AGL and 80m. This dataset is the higher AGL flight.



/ DATA RELATED

Survey location	Latvia
Survey date	16-Jun-22
Accessories	NA
EPSG code	32635
Raw data	yes
Confidentiality	public
Software used	POSPac / CloudStation

Post-processing	Strip Adjusted
	Classified

/ PLATFORM RELATED

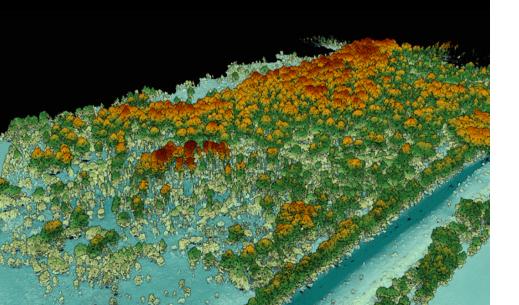
Platform	Fixar 007
Total survey time	16min
Flight height	80mAGL
Flight speed	20m/s

Get data produced from **CloudStation**

File size 400MB / LIDAR SYSTEM / APPLICATION

Mapper+OEM (VERSION B) Topography

Test flight of the Mapper+ OEM version B on the Censys Sentaero 5 BVLOS VTOL platform, over a forest. The forest structure really allows the 3 echoes from the YellowScan Mapper+ OEM version B to shine and be utilized.



/ DATA RELATED

Survey location	United States
Survey date	09-Jan-23
Accessories	NA
EPSG code	32617
Raw data	yes
Confidentiality	public
Software used	POSPac / CloudStation

Post-processing	Strip Adjusted
	Classified

/ PLATFORM RELATED

Platform	Censys Sentaero 5 BVLOS
Total survey time	e 10min
Flight height	60mAGL
Flight speed	20m/s

Get data produced from **CloudStation**

File size



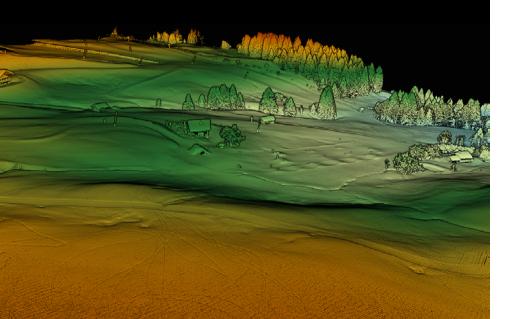
/ LIDAR SYSTEM
ULTRA (NEW GEN)

/ APPLICATION

Snow

Compare with:
- Mapper+

Dataset collected over ski slopes of a French Alps resort at le Grand Bornand. In total, 6 strips were generated over a levelled flight plan at 80mAGL from the take-off point. The laser points are therefore shot from various heights spanning from 50 to 100mAGL. This site was also recorded with an Mapper+scanner and makes a good comparison dataset for these 2 lidars.



/ DATA RELATED

Survey location	France
Survey date	09-Feb-22
Accessories	NA
EPSG code	2154
Raw data	yes
Confidentiality	public
Software used	POSPac / CloudStation

Post-processing	Strip Adjusted /
	Classified

/ PLATFORM RELATED

Platform	DJI M600
Total survey time	10min
Flight height	80mAGL
Flight speed	8m/s

Get data produced from CloudStation

File size: 701MB / LIDAR SYSTEM
ULTRA (NEW GEN)

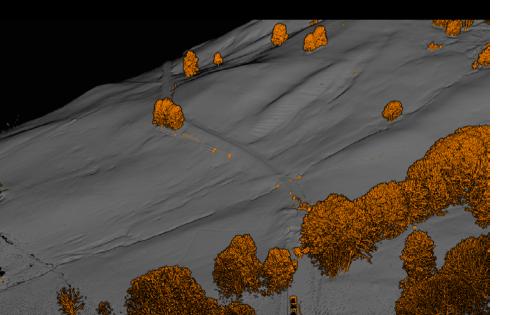
/ APPLICATION

Snow



Compare with:
- <u>Mapper+</u>

Dataset collected over the side of a natural valley covered by snow in the French Alps next to the resort of le Grand Bornand. In total, 4 strips were generated from various heights from 60 to 30mAGL from the take-off point. The site is entirely covered with snow and sparse vegetation. A stream and a path can be seen crossing the middle of the scene. This site was also recorded with an Mapper+ scanner and makes a good comparison dataset for these 2 lidars.



/ DATA RELATED

Survey location	France
Survey date	09-Feb-22
Accessories	NA
EPSG code	2154
Raw data	yes
Confidentiality	public
Software used	POSPac / CloudStation

Post-processing	Strip Adjusted /
	Classified

/ PLATFORM RELATED

Platform	DJI M600
Total survey time	6min
Flight height	60mAGL
Flight speed	8m/s

Get data produced from CloudStation

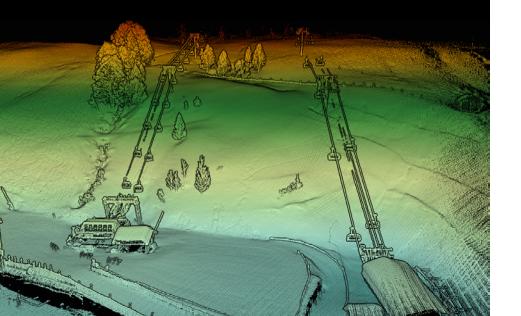
File size

/ LIDAR SYSTEM
ULTRA (NEW GEN)

/ APPLICATION

Utility

Dataset collected over a ski lift in the French Alps at the resort of le Grand Bornand. Only 3 strips were surveyed from about 50mAGL. The site is entirely covered with snow, ski lift infrastructure and sparse vegetation. The flight plan was not directly following the cable lift hence the discontinuities observed along the cable. Processing was pushed a little further using Terrasolid drone wizard.



/ DATA RELATED

Survey location	France
Survey date	09-Feb-22
Accessories	NA
EPSG code	2154
Raw data	yes
Confidentiality	public
Software used	POSPac / CloudStation / Terrasolid
Post-processing	Strip Adjusted / Terrasolid wizard

/ PLATFORM RELATED

Platform	DJI M600
Total survey time	6min
Flight height	50mAGL
Flight speed	4m/s

Get data produced from CloudStation

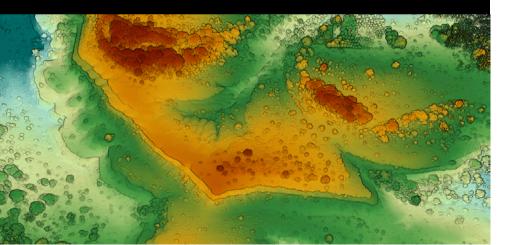
File size 139MB / LIDAR SYSTEM ULTRA NEW GEN

/ APPLICATION **Topography**



Compare with: - Mapper+

LiDAR survey collected over a natural escarpment eroded off by surrounding streams. The lidar flight plan was designed along the long axis of the natural benches and captured 8 strips from about 80mAGL. The site features mostly steep to vertical slopes and mediteraneean vegetation. The Processing was taken through the routine CloudStation Strip Adjustment, Terrain and Colorization steps. Further processing using Terrasolid drone wizard was also completed. Both results extracted from CloudStation and from Terrasolid are available. This site was also recorded with the Mapper+ running the same flight plan and is therefore a good comparison dataset.

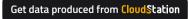


/ DATA RELATED

Survey location	France
Survey date	04-Feb-22
Accessories	NA
EPSG code	2154
Raw data	yes
Confidentiality	public
Software used	POSPac / CloudStation / Terrasolid
Post-processing	Strip Adjusted / Classified

/ PLATFORM RELATED

Platform	DJI M300
Total survey time	12min
Flight height	80mAGL
Flight speed	8m/s



Get data produced from Terra



File size: 234MB

/ LIDAR SYSTEM ULTRA NEW GEN

/ APPLICATION Topography



Compare with: - Mapper+

LiDAR survey over private property displaying a house and forested land in the surroundings. The capture shows massive oak trees that had no leaf on at the time of the survey which allowed laser signal penetration. The flight plan was designed in a mesh pattern to favor high density. The processing went through CloudStation Strip Adjustment, Terrain and Colorization modules. Smoothing and classification was further processed with Terrasolid drone wizard. The exact same flight was done with the Mapper+ for comparison purpose.



/ DATA RELATED

Survey location	France
Survey date	04-Feb-22
Accessories	NA
EPSG code	2154
Raw data	yes
Confidentiality	public
Software used	POSPac / CloudStation / Terrasolid
Post-processing	Strip Adjusted / Classified

/ PLATFORM RELATED

Platform	DJI M300
Total survey time	10min
Flight height	80mAGL
Flight speed	8m/s



Get data produced from Terra solid



File size: 181MB

/ LIDAR SYSTEM ULTRA NEW GEN

/ APPLICATION **Topography**

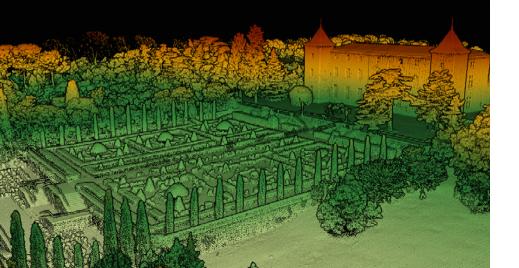


Compare with:

- Mapper+

- Vx20-300

Single flight over the Château de Restinclières located very close to YellowScan headoffice. The site was flown with a meshed flight plan allowing to scan the facade of the infrastructure. The site also features 'jardins à la Française' and natural vegetation in the surroundings. Several lidar systems were flown with the same conditions. The VX20-300 but also the Ultra, the Mapper and the Mapper+ which makes this dataset a good benchmark. Processing mostly used CloudStation with all its modules but an extra step was done with the Terrasolid drone wizard. Both products are available for download.

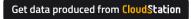


/ DATA RELATED

Survey location	France
Survey date	18-Feb-22
Accessories	NA
EPSG code	2154
Raw data	yes
Confidentiality	public
Software used	POSPac / CloudStation / Terrasolid
Post-processing	Strip Adjusted / Classified

/ PLATFORM RELATED

Platform	DJI M600
Total survey time	10min
Flight height	50mAGL
Flight speed	8m/s



Get data produced from Terra solid



File size: 172MB

/ APPLICATION

ULTRA 1ST GEN

Forestry

Sample dataset cropped out from larger extent.

The point cloud shows very dense tropical forest with tall trees.

This point cloud tells what typical point density can be obtained through thick tropical coverage at 8m/s flying speed.



/ DATA RELATED

Survey location	Republic of Congo
Survey date	NA
Accessories	NA
EPSG code	NA
Raw data	no
Confidentiality	public
Software used	POSPac / CloudStation

ost-processing	Rav

/ PLATFORM RELATED

Platform	DJI M600
Total survey time	10min
Flight height	60mAGL
Flight speed	8m/s

Get data produced from CloudStation

File size 404MB / LIDAR SYSTEM
ULTRA (1ST GEN)

/ APPLICATION

Mining

Public demonstration during a local event. The ULTRA was flown over an abandoned quarry where vegetation has regain control. The quarry depicts very steep pit walls as dimension stones were produced from this site. Very sharp geometrical shapes can be found underneath a thick vegetation coverage of green oaks. Classification and colorisation made in Terrasolid.



/ DATA RELATED

Survey location	France
Survey date	25-May-18
Accessories	Single Camera A6000
EPSG code	2154
Raw data	yes
Confidentiality	public
Software used	POSPac / CloudStation / Terrasolid
Post-processing	Classified / Colorized

/ PLATFORM RELATED

Platform	OnyxStar FoxC8HD
Total survey time	15min
Flight height	50mAGL
Flight speed	5m/s

Get data produced from CloudStation

File size

/ APPLICATION

ULTRA (1ST GEN)

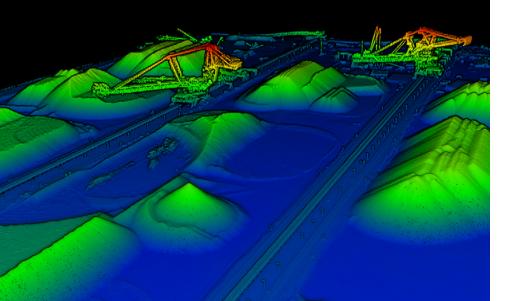
Stockpile

Routine flight covering stockpile facility at one of Anglo's harbor.

The flight was conducted to run a reconciliation exercise between the mine output, rail haulage and the final stockpile tonnage.

4 flight lines were flown at 7m/s and used to measure the volumes.

Additionnal adjacent flights were also conducted to minimize pile shadows.



/ DATA RELATED

Survey location	South Africa
Survey date	27-Sep-18
Accessories	NA
EPSG code	NA
Raw data	yes
Confidentiality	confidential
Software used	POSPac / CloudStation

Rav

/ PLATFORM RELATED

Platform	DJI M600
Total survey time	12min
Flight height	60mAGL
Flight speed	7m/s

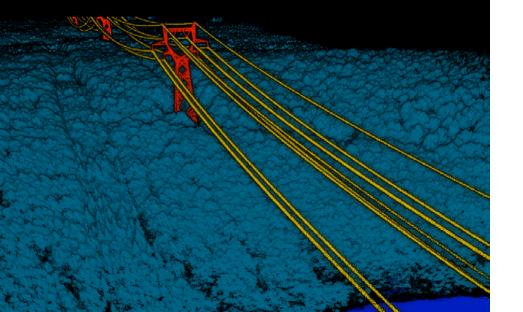
Get data produced from CloudStation

File size 372MB / LIDAR SYSTEM
ULTRA (1ST GEN)

/ APPLICATION

Utility

High voltage corridor of 400x1800m spanning 4 catenary segments and 3 towers. 2 flights were necessary to cover this span distance with 2 strips per flight (one way and back). The flight trajectory was centered on the power line. The Ultra was shooting 40m from the wires. Classification was completed using Terrasolid.



/ DATA RELATED

Survey location	France
Survey date	11-Jul-18
Accessories	NA
EPSG code	2154
Raw data	yes
Confidentiality	confidential
Software used	POSPac / CloudStation / Terrasolid
Post-processing	Strip Adjusted / Classified

/ PLATFORM RELATED

Platform	OnyxStar FoxC8HD
Total survey time	15min
Flight height	100mAGL
Flight speed	5m/s

Get data produced from CloudStation

File size: 1130MB / LIDAR SYSTEM
ULTRA (1ST GEN)

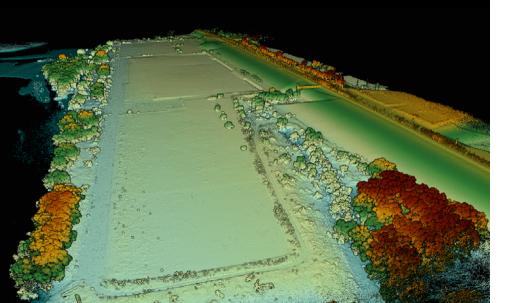
/ APPLICATION
Topography



Compare with:

- <u>Mapper</u> - Vx20-300

Ultra collection of 4 strips at 70mAGL alongside of a river bed. Flight line spacing is 30m and strips are about 500m long. Process was entirely completed inside CloudStation Strip Adjustment and Terrain module. This dataset is part of a comparison exercice between Mapper, Ultra and Vx20 systems. You will find the exact same flight plan and parameters completed by those other lidar system in the catalog.



/ DATA RELATED

Survey location	Japan
Survey date	28-Apr-21
Accessories	NA
EPSG code	32654
Raw data	yes
Confidentiality	public
Software used	POSPac / CloudStation

Post-processing	Strip Adjusted /
	Classified

/ PLATFORM RELATED

Platform	DJI M600
Total survey time	10min
Flight height	70mAGL
Flight speed	5m/s

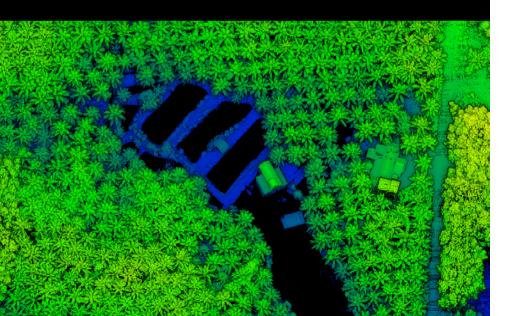
Get data produced from CloudStation

File size 431MB



/ LIDAR SYSTEM / APPLICATION VX15-100 Forestry

Sample extract of a larger coverage over this palm tree farm in Indonesia. This dataset provides a good understanding of what details can be obtained with the VX15 in terms of palm tree description and laser penetration through this type of vegetation.



/ DATA RELATED

Survey location	Indonesia
Survey date	12-Apr-20
Accessories	NA
EPSG code	NA
Raw data	yes
Confidentiality	confidential
Software used	POSPac / CloudStation
Post-processing	Classified

/ PLATFORM RELATED

Platform	DJI M600
Total survey time	18min
Flight height	100mAGL
Flight speed	5m/s

Get data produced from CloudStation

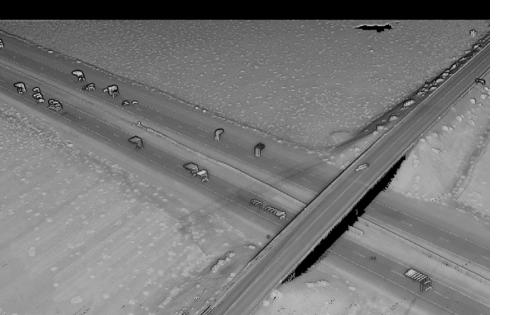
File size

/ APPLICATION

VX15-100

Road

Sample of a larger dataset spanning a long portion of a highway. This sample shows a double lane highway in a flat environment. From the 3 flight lines, one was flown directly above the highway and the 2 adjacent ones covered the surroundings. Paint markings appear clearly together with the traffic that was passing during the survey.



/ DATA RELATED

Survey location	USA
Survey date	NA
Accessories	NA
EPSG code	NA
Raw data	no
Confidentiality	confidential
Software used	POSPac / CloudStation

Post-processing	Raw

/ PLATFORM RELATED

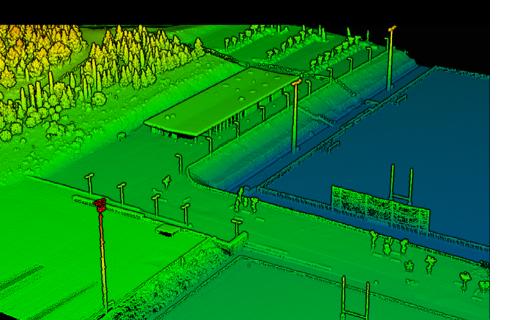
Platform	DJI M600
Total survey time	15min
Flight height	50mAGL
Flight speed	5m/s

Get data produced from CloudStation

/ LIDAR SYSTEM / APPLICATION

VX15-100 Urban

This dataset captures the sport facilities close to YellowScan office. Its coverage is exactly the same as the Mapper dataset also named STSAUVEUR. It provides a good comparison bench for both systems. The strip adjustment and classification has been conducted using CloudStation modules.



/ DATA RELATED

Survey location	France
Survey date	25-Mar-20
Accessories	NA
EPSG code	2154
Raw data	yes
Confidentiality	public
Software used	POSPac / CloudStation

Post-processing	Strip Adjusted /
	Classified

/ PLATFORM RELATED

Platform	DJI M600
Total survey time	12min
Flight height	50mAGL
Flight speed	5m/s

Get data produced from **CloudStation**

File size 42MB



/ APPLICATION

VX20-100

Archaeology

Demo flight in Castries close to Montpellier.

This survey shows:

- -ancient aqueduct through pine dominated vegetation
- -covered with 2 lateral paths
- -arches are not fully covered (shadows)



/ DATA RELATED

Survey location	France
Survey date	30-May-18
Accessories	Dual Camera A6000
EPSG code	32631
Raw data	yes
Confidentiality	public
Software used	POSPac / CloudStation
Post-processing	Classified / Colorized

/ PLATFORM RELATED

Platform	OnyxStar FoxC8HD
Total survey time	15min
Flight height	50mAGL
Flight speed	5m/s

Get data produced from **CloudStation**

File size 84MB

/ APPLICATION

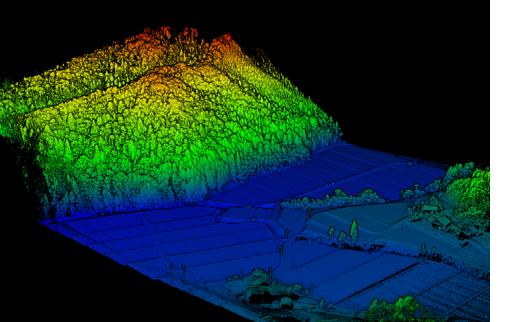
VX20-100

Forestry

Demo flight in Japan.

This survey shows:

- -stepped rice fields area and steep vegetated mountain
- -vegetation capacity of the Vx20



/ DATA RELATED

Survey location	Japan
Survey date	04-Apr-18
Accessories	NA
EPSG code	2445
Raw data	yes
Confidentiality	public
Software used	POSPac / CloudStation

Post-processing	Strip Adjusted /
	Classified

/ PLATFORM RELATED

Platform	DJI M600
Total survey time	15min
Flight height	80mAGL
Flight speed	5m/s

Get data produced from **CloudStation**

File size 152MB

/ APPLICATION

VX20-100

Mining

Demo flight in Beaulieu, close to Montpellier.

This survey shows:

- -dimension stone quarry survey with 2 main pits
- -vertical walls, piles of dimension stones, storage buildings, crane, wires...
- -colorization produced from Terrasolid Tphoto



/ DATA RELATED

Survey location	France
Survey date	22-Feb-19
Accessories	Dual Camera A6000
EPSG code	2154
Raw data	yes
Confidentiality	public
Software used	POSPac / CloudStation / Terrasolid
Post-processing	Strip Adjusted / Colorized

/ PLATFORM RELATED

Platform	DJI M600
Total survey time	15min
Flight height	50mAGL
Flight speed	5m/s

Get data produced from CloudStation

152MB

/ APPLICATION

VX20-100

Railway

POC flight in Lemuy in France. Coordinates reset to 0.

This survey shows:

- -small portion of railway corridor with a bridge structure
- -vegetated area, difficult to penetrate for field crew
- -colorization produced with Terrasolid Tphoto



/ DATA RELATED

Survey location	France
Survey date	09-Apr-19
Accessories	Dual Camera A6000
EPSG code	NA
Raw data	yes
Confidentiality	confidential
Software used	POSPac / CloudStation / Terrasolid
Post-processing	Strip Adjusted / Colorized

/ PLATFORM RELATED

Platform	DJI M600
Total survey time	10min
Flight height	30mAGL
Flight speed	3m/s

Get data produced from **CloudStation**

File size 125MB

/ APPLICATION

VX20-100

Railway

POC flight in Paris. Coordinates reset to 0.

This survey shows:

- -small portion of rail exchanger with catenaries
- -portion with earthworks and equipment
- -colorization produced with Metashape.

LiDAR survey completed by CDGI - contact@cdgi.fr



/ DATA RELATED

Survey location	France
Survey date	13-May-20
Accessories	Single Camera A7R
EPSG code	NA
Raw data	yes
Confidentiality	confidential
Software used	POSPac / CloudStation / Metashape
Post-processing	Strip Adjusted / Colorized

/ PLATFORM RELATED

Platform	DJI M600
Total survey time	10min
Flight height	30mAGL
Flight speed	3m/s

Get data produced from CloudStation

File size 108MB

/ APPLICATION

VX20-100

Topography

Short demo flight at Verchant facility, close to Montpellier.

This survey shows:

- -vineyards, hotel complex with pool and catenaries
- -flat terrane, with mostly man planted vegetation along road access
- -colorization from oblique camera pair and produced from Metashape



/ DATA RELATED

Survey location	France
Survey date	21-Mar-19
Accessories	Dual Camera A6000
EPSG code	2154
Raw data	yes
Confidentiality	public
Software used	POSPac / CloudStation / Metashape
Post-processing	Strip Adjusted / Classified / Colorized

/ PLATFORM RELATED

Platform	DJI M600
Total survey time	8min
Flight height	30mAGL
Flight speed	5m/s

Get data produced from **CloudStation**

File size: 57MB

/ APPLICATION

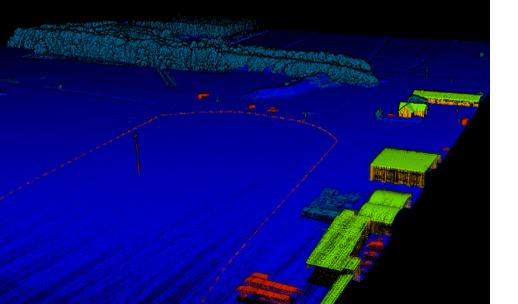
VX20-100

Topography

Demo flight in Amsterdam.

This survey shows:

- -flat and open demo site
- -vegetation capacity of the Vx20
- -classification produced from Terrasolid



/ DATA RELATED

Survey location	Netherlands
Survey date	10-Apr-18
Accessories	NA
EPSG code	32631
Raw data	yes
Confidentiality	public
Software used	POSPac / CloudStation / Terrasolid
Post-processing	Classified

/ PLATFORM RELATED

Platform	DJI M600
Total survey time	15min
Flight height	50mAGL
Flight speed	5m/s

Get data produced from **CloudStation**

File size: 53MB

/ APPLICATION

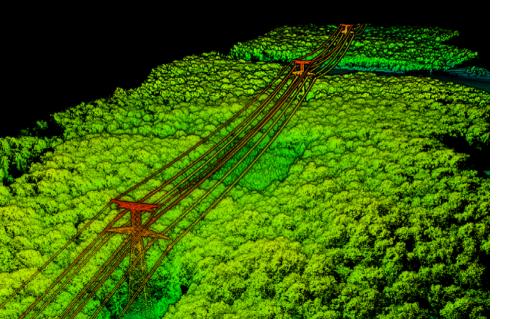
VX20-100

Utility

1.5km long electric powerline corridor.

This survey shows:

- -generally flat terrane covered mostly by dense vegetation and fields
- -multiple electric towers and catenaries surveyed
- -classification produced from Terrasolid, Tscan



/ DATA RELATED

Survey location	France
Survey date	11-Jul-18
Accessories	NA
EPSG code	2154
Raw data	yes
Confidentiality	confidential
Software used	POSPac / CloudStation / Terrasolid
Post-processing	Strip Adjusted / Classified

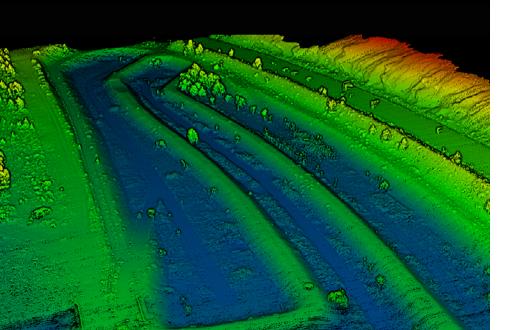
/ PLATFORM RELATED

Platform	Altigator OnyxStar
Total survey time	15min
Flight height	110mAGL
Flight speed	5m/s

Get data produced from **CloudStation**

File size 208MB / LIDAR SYSTEM / APPLICATION VX20-200 Topography

Portion of a water storage facility with embankments displaying slopes in all directions. 3 flightlines were flown to cover the area.



/ DATA RELATED

Survey location	France
Survey date	NA
Accessories	NA
EPSG code	NA
Raw data	yes
Confidentiality	confidential
Software used	POSPac / CloudStation

Post-processing	Rav

/ PLATFORM RELATED

Platform	DJI M600
Total survey time	10min
Flight height	60mAGL
Flight speed	5m/s

Get data produced from **CloudStation**

File size

VX20-200

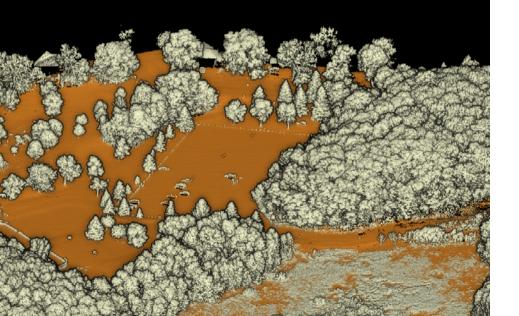
Topography

/ APPLICATION



Compare with:
- Mapper

6 flight lines, 70m spaced over sport fields and playground in between 2 tree covered patches. The dataset allows to assess vegetation penetration and sport facilities mapping. This lidar survey was conducted with the Vx20-200 and the same area was covered with the Mapper. This allows to compare both lidar systems.



/ DATA RELATED

Survey location	USA
Survey date	04-May-21
Accessories	NA
EPSG code	32615
Raw data	yes
Confidentiality	public
Software used	POSPac / CloudStation

Post-processing	Strip Adjusted A
	Classified

/ PLATFORM RELATED

Platform	DJI M600
Total survey time	10min
Flight height	80mAGL
Flight speed	5m/s

Get data produced from CloudStation

File size

VX20-300 Topography

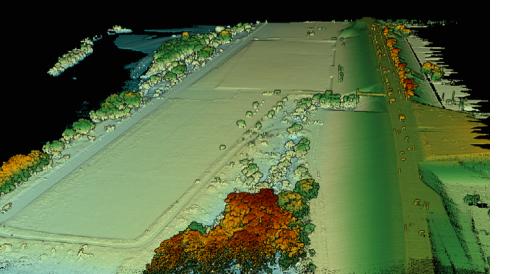


Compare with:

- <u>Mapper</u> - Ultra

VX20-300 collection of 4 strips at 70mAGL alongside of a river bed. Flight line spacing is 30m and strips are about 500m long. Process was entirely completed inside CloudStation Strip Adjustment and Terrain module. This dataset is part of a comparison exercice between Mapper, Ultra and Vx20 systems. You will find the exact same flight plan and parameters completed by those other lidar system in the catalog.

/ APPLICATION



/ DATA RELATED

Survey location	Japan
Survey date	28-Apr-21
Accessories	NA
EPSG code	32654
Raw data	yes
Confidentiality	public
Software used	POSPac / CloudStation

Post-processing	Strip Adjusted /
	Classified

/ PLATFORM RELATED

Platform	DJI M600
Total survey time	10min
Flight height	70mAGL
Flight speed	5m/s

Get data produced from CloudStation

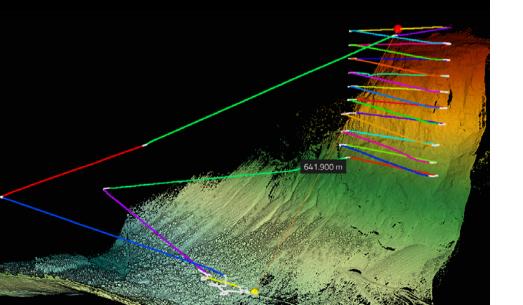
File size:

/ APPLICATION

VX20-300

Cliff

UAV lidar benchmark organized by the Norwegian Staten Vegvesen at Trollstingen. The demonstration was conducted on 3 different sites featuring harsh mountainous terrain. The aim of this capture was to collect lidar data from a 400m tall cliff. The scan was conducted with a level flight plan scanning the target from the side. The extracted point cloud was strip adjusted with CloudStation and further classification steps were completed within Terrasolid Tscan.



/ DATA RELATED

Survey location	Norway
Survey date	26-0ct-21
Accessories	NA
EPSG code	32632
Raw data	yes
Confidentiality	public
Software used	POSPac / CloudStation / Terrasolid
Post-processing	Strip Adjusted / Classified

/ PLATFORM RELATED

Platform	Velos
Total survey time	24min
Flight height	100mAGL
Flight speed	5m/s

Get data produced from CloudStation

File size 100MB

VX20-300

/ APPLICATION
Topography



Compare with:

- <u>Mapper+</u>

- <u>Ultra</u>

Single flight over the Château de Restinclières located very close to YellowScan headoffice. The site was flown with a meshed flight plan allowing to scan the facade of the infrastructure. The site also features 'jardins à la Française' and natural vegetation in the surroundings. Several lidar systems were flown in the same conditions: the VX20-300, Ultra, the Mapper and the Mapper+ which makes this dataset a good benchmark. Processing done with CloudStation and all its modules.



/ DATA RELATED

France
18-Feb-22
Single Camera A7R
2154
yes
public
POSPac / CloudStation
Strip Adjusted / Classified / Colorized

/ PLATFORM RELATED

Platform	DJI M600
Total survey time	10min
Flight height	50mAGL
Flight speed	8m/s

Get data produced from CloudStation

File size 288MB



Designed to Innovate.

FR: +33 411 931 400 US: +1 (801) 876-1007 JP: +81 3 4360 5588 Last update: March 2023