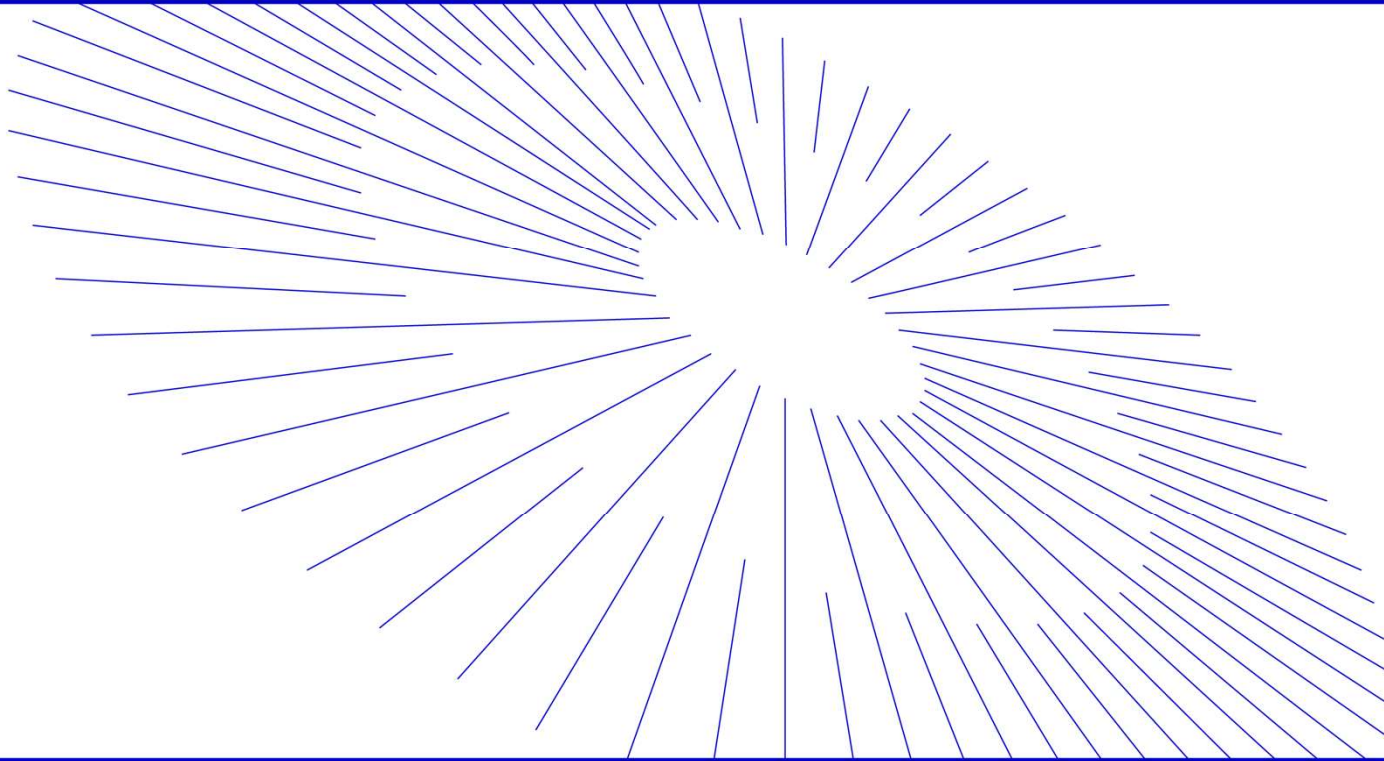


Edge2 V6 Release Note

2024/06/26 note ver. 1.1



Edge2 v6 Update item

Application	Development items	Release Area	Contents/Use case	Release/Ver	Release/Date	UI Image
New feature	Improved object removal performance	ALL	Add a setting to remove or not remove blue sheets, etc. in your site. The colors of sheets that can be removed are explained in the reference UI image.	v6-hotfix	8/21	None yet.
	Flight map display	ALL	This document will be used for i-contraction submitted document in Japan and will export document to USB that proves that an 80% overlap rate is guaranteed.	v6-hotfix	8/21	None yet.
	Point cloud density output of 120 points/m2	ALL	Add a mode with a point cloud density of approximately 120 points/m2	v6-hotfix	8/21	None yet.
	Upload 3D accuracy check reports and camera calibration parameters to Dashboard	ALL	Currently, i-con reports output is possible via USB, but in this Ver, possible to transfer camera calibration and accuracy check reports to Groupware. This function mainly meets the needs of the Japanese market.	V6	7/10	P4
	Automated processing from PPK to Upload-to-Dashboard without manual intervention	ALL	Currently, automatic processing from PPK to point cloud generation and uploading of generated data can be done automatically, including queuing. However, if "automated processing from PPK to Upload-to-Dashboard without manual intervention" can be performed a series of processes can be performed in the middle of the night, eliminating waiting time for users.	V6	7/10	P5

New feature	Rename point cloud after point cloud generation	ALL	Point cloud names can now be changed even after the point cloud has been generated	V6	7/10	P6
	Latitude and longitude display to 9 decimal places	ALL	After the update, the display will be 9 digits.	V6	7/10	P7
	Numerical selection of object removal	ALL	The intensity setting of object removal is currently controlled by a slider, but the slider is sometimes difficult to adjust, so the intensity can now be set numerically.	V6	7/10	P8
	Full display of flight data names	ALL	Display the flight name as well as the site name when displaying the point cloud. Full display is now possible for areas where the point cloud name is too long to be fully displayed.	V6	7/10	P9
	Addition of point cloud name display	ALL	User-defined point cloud names can now be displayed on the point cloud display screen and on the screen during point cloud processing.	V6	7/10	P10
	Processing time display (actual time taken)	ALL	The time taken for point cloud processing and updating to cloud can now be checked later.	V6	7/10	P11
	Inherit points from Dashboard	ALL	Project inheritance from Dashboard and GC3 parameter inheritance function already exists, but it is now possible to import the points from Dashboard.	V6	7/10	P12
Performance Improvement	Improved accuracy in untextured areas	ALL	By improving SFM performance addressing a situation in which texture could not be detected properly in black soil areas in some on sites, resulting in point cloud will doubling to prevents.	v6-hotfix	8/21	None yet.



- ① Tap "3D accuracy check"
- ② Tap "Upload the validation result to the cloud"

Point Cloud information

Point Cloud

Ortho Photo

DSM

DTM

Unnecessary Item Removal

Vertical Accuracy Check

3D accuracy check

Point Cloud 2024-7-2

3D accuracy check results

Validation Results Characters will be displayed in red, if the error was out of +/- 5cm. Lat./Lon.:DMS

Point Name	Latitude	Longitude	Ellipsoid Height	X(N)	Y(E)	Z	Error
HT.8	35.361063440	140.050615840	39.608				

Re-select the check point file.

Export the accuracy check result to USB.

Confirm and edit the check points

Upload the validation result to the cloud



- ③ Select your data.
- ④ Tap "Send"

13:41 7月2日(火)

ED2JB000007 6.7.0-dis

Drone Survey Mode

Mihama demo

EPSG: WGS 84

Project information

Data to be sent

Point cloud data

Accuracy check report

3D accuracy check report

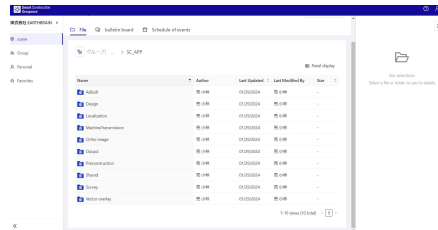
You can export 3D accuracy check report only when the point cloud was generated in Ultra high density and executed a 3D accuracy check.

Select point cloud you want to send to SMART CONSTRUCTION Dashboard.

Generated data	Vertical accuracy check	3D accuracy check	Sending in progress
<input checked="" type="checkbox"/> point Cloud 2024-7-2	Incomplete	Complete	

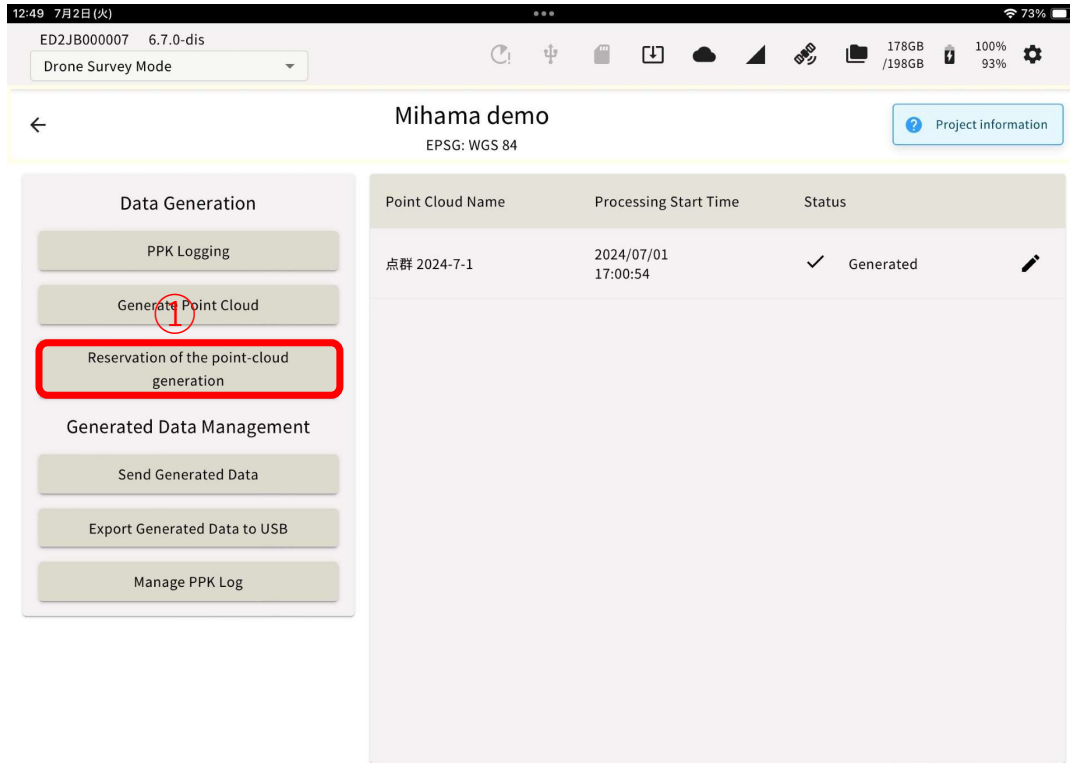
Destination SCサポートD_Simulation

Send



Groupware→In the SC_APP folder→It will be saved in the SCEDGE folder

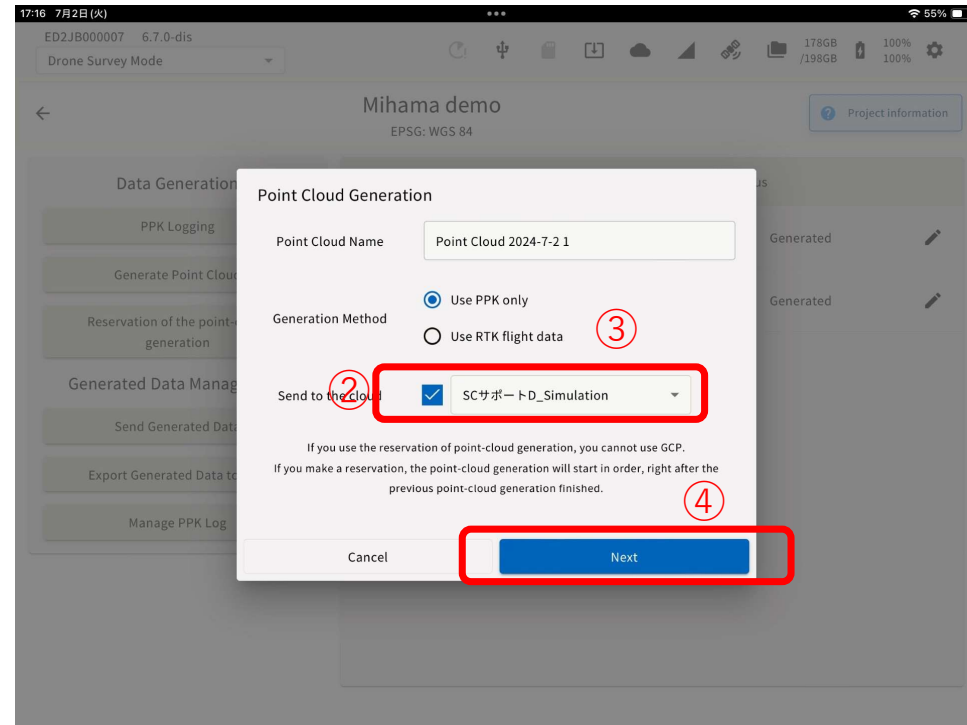
① Tap "Reservation of the point-cloud generation"



② Tap 'Send to the cloud'

③ Select a project to send.

④ Select "Next" to move to the flight data selection screen.

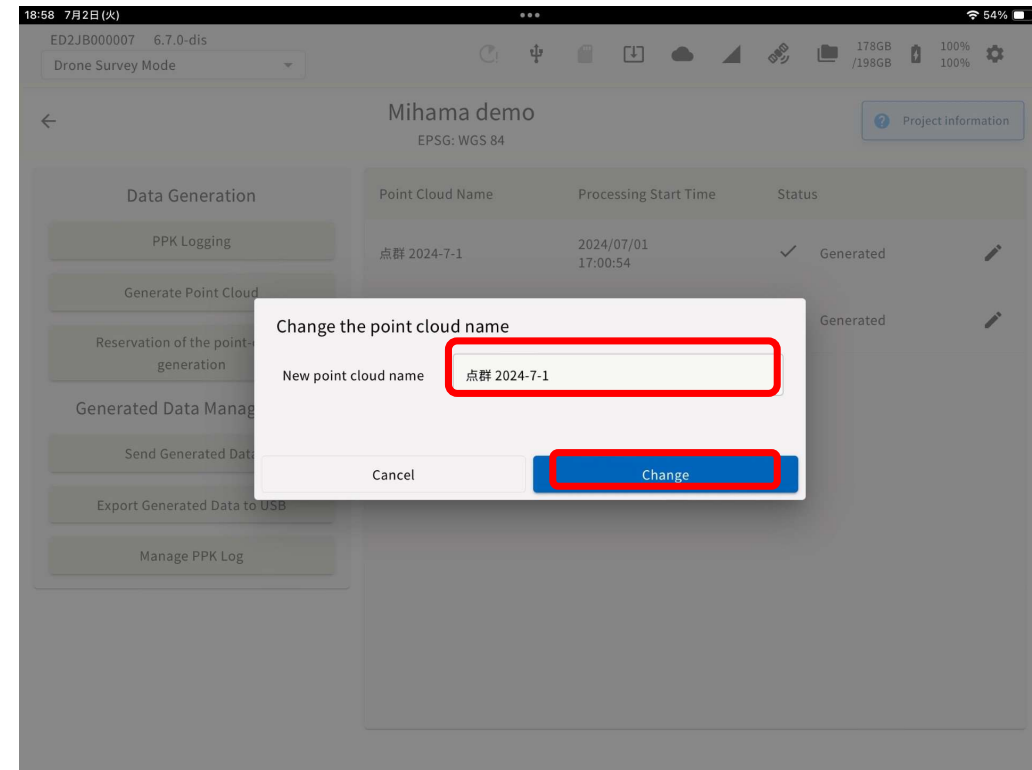
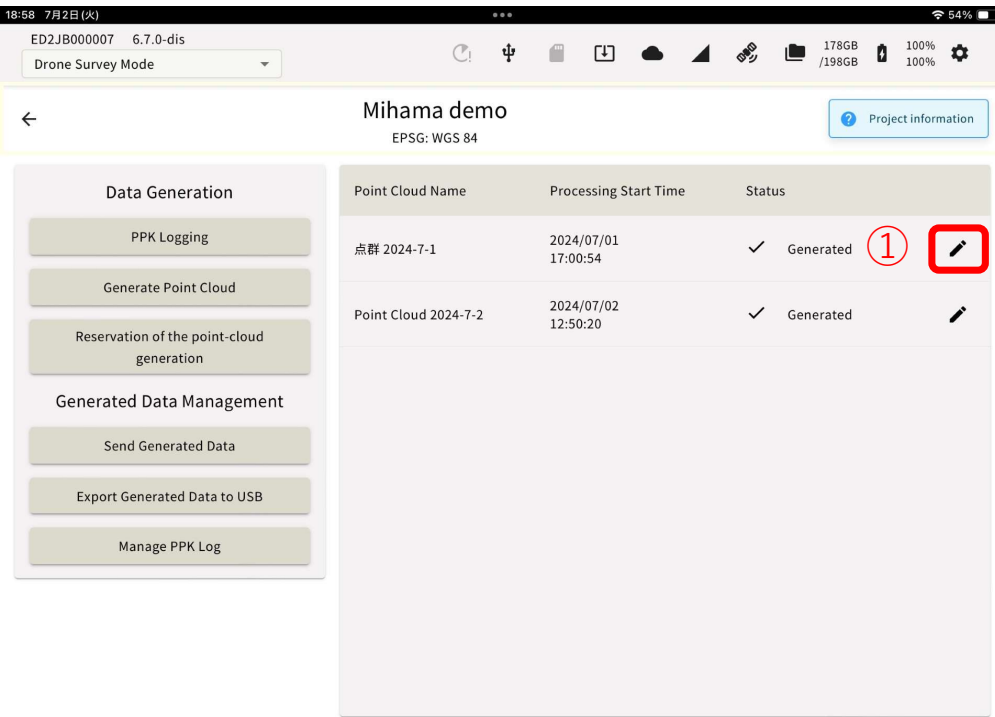


※If there is no network connection via wired LAN or LTE at the time of SC Edge2 startup, items (2) and (3) will not be displayed.

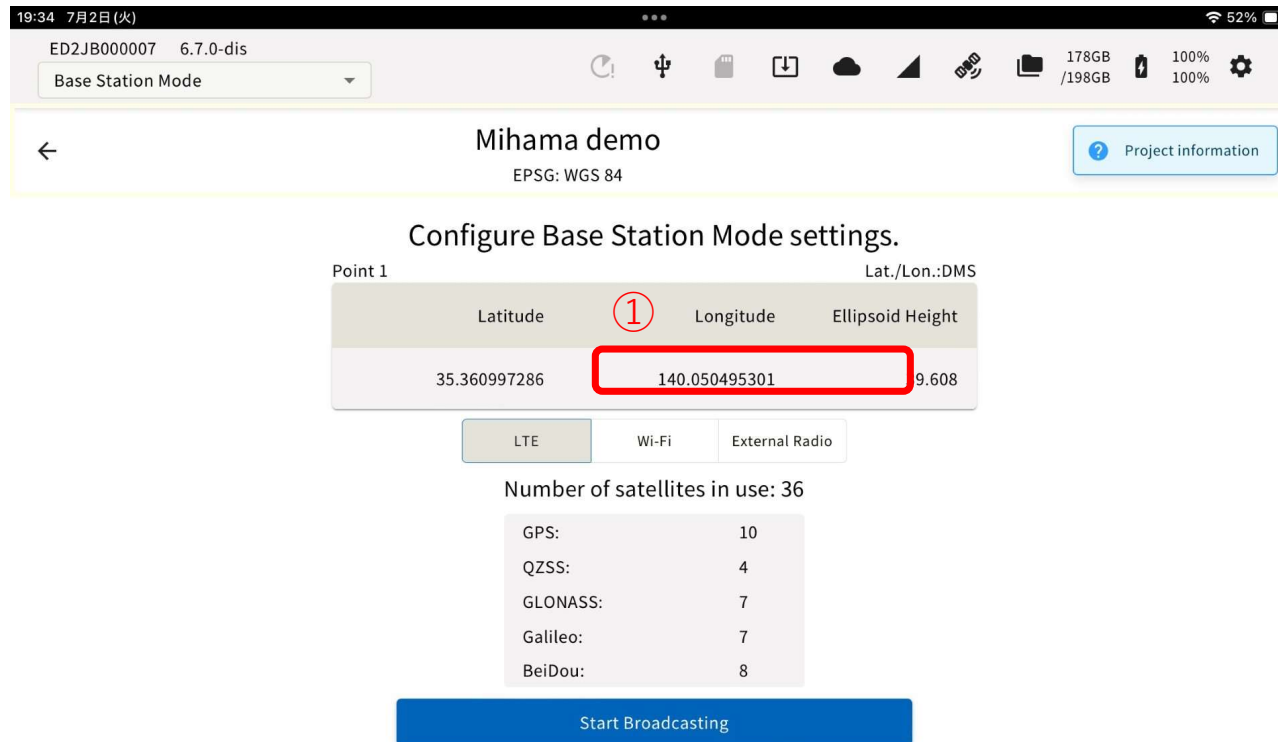
① Press the pen icon at the right end of the point cloud name display.

② Enter a new point cloud name.

③ Tap "Change"



① Latitude and longitude displays have been changed to 9 decimal places.



The screenshot shows the 'Configure Base Station Mode settings' screen. At the top, it displays 'Mihama demo' and 'EPSON: WGS 84'. Below this is a table for 'Point 1' with columns for 'Latitude', 'Longitude', and 'Ellipsoid Height'. The 'Longitude' value '140.050495301' is highlighted with a red box and a circled '1' above it. Below the table are radio buttons for 'LTE', 'Wi-Fi', and 'External Radio'. Further down, it shows 'Number of satellites in use: 36' and a list of satellite systems: GPS (10), QZSS (4), GLONASS (7), Galileo (7), and BeiDou (8). A 'Start Broadcasting' button is at the bottom.

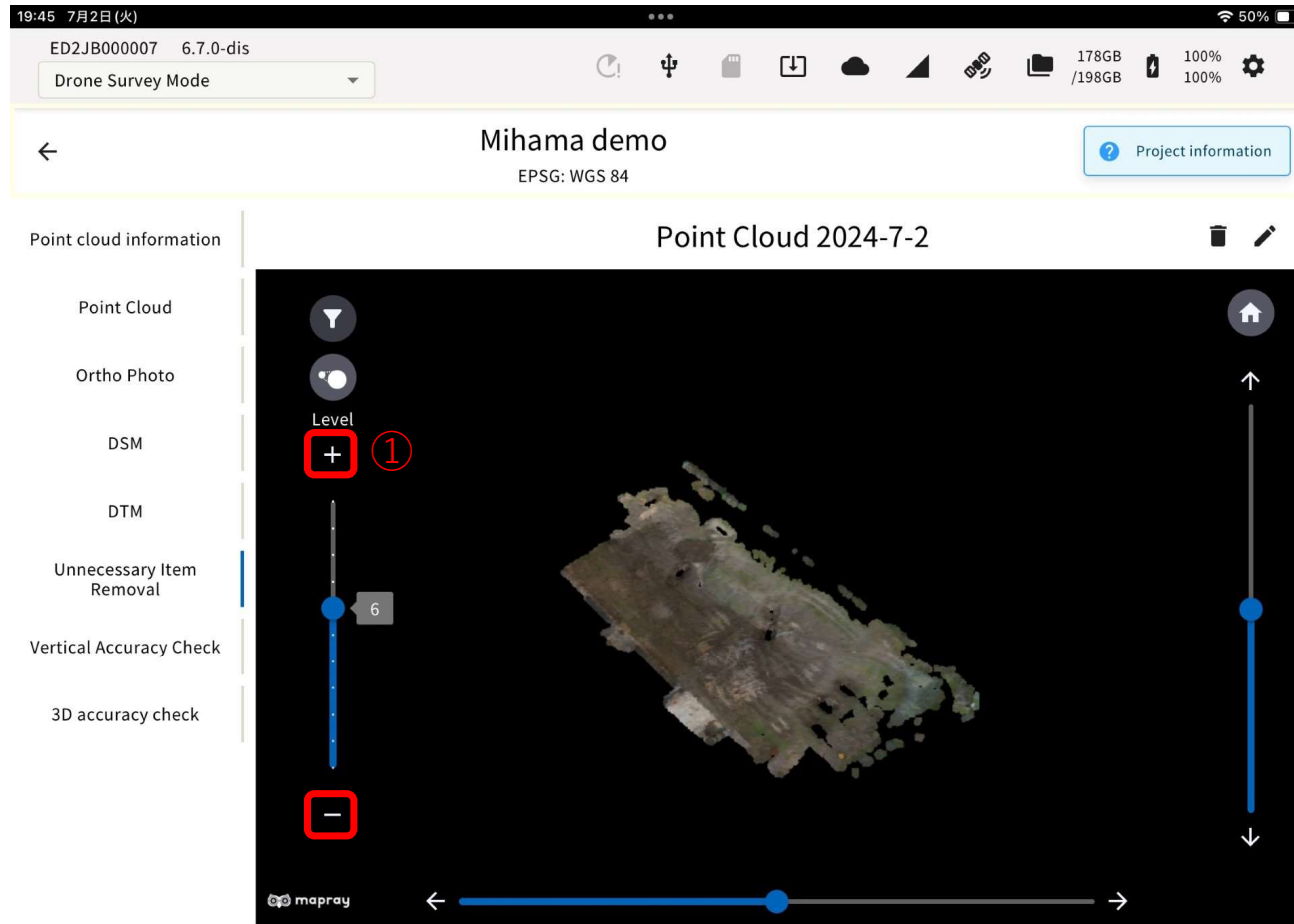
Point 1	Latitude	Longitude	Ellipsoid Height
	35.360997286	140.050495301	9.608

Number of satellites in use: 36

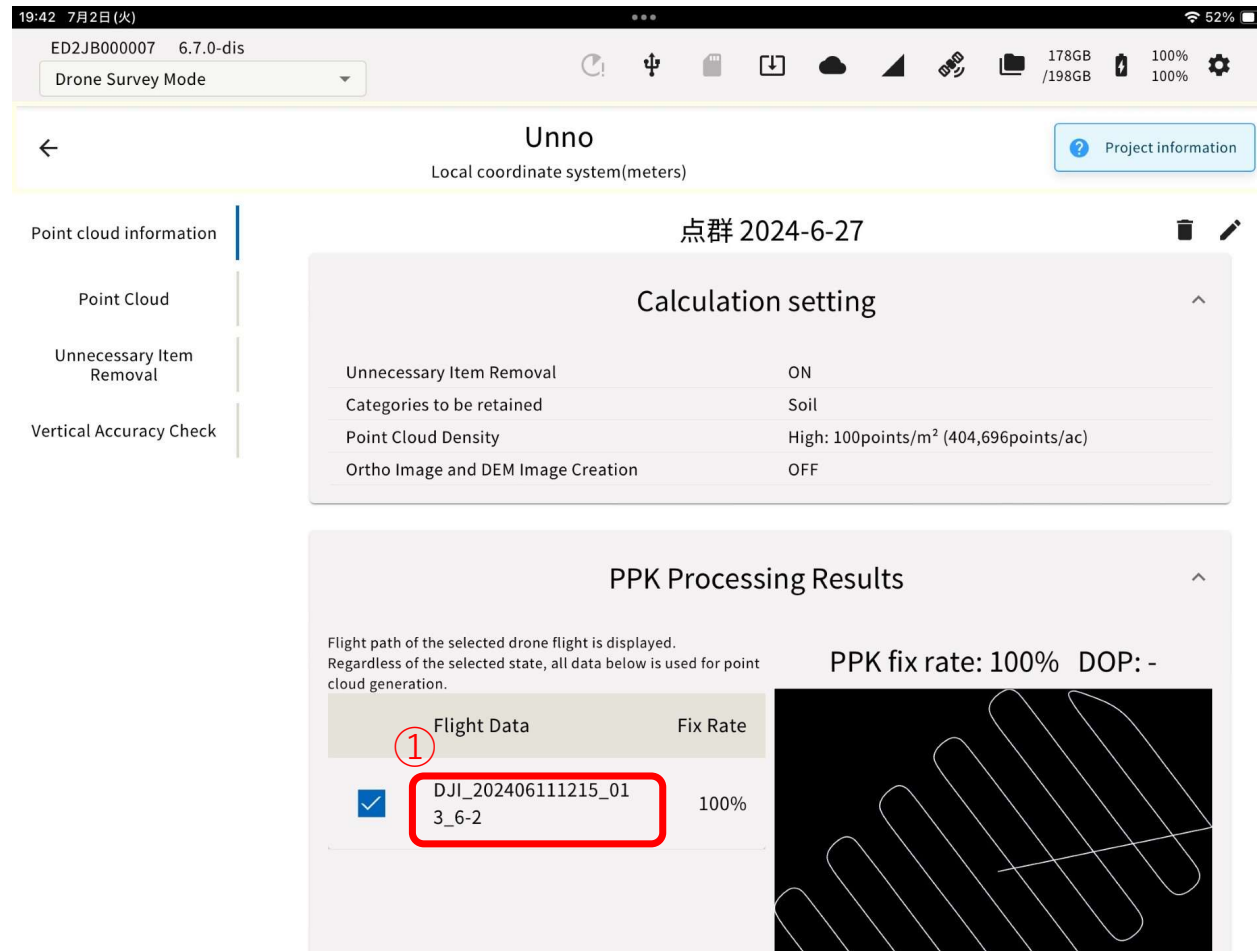
- GPS: 10
- QZSS: 4
- GLONASS: 7
- Galileo: 7
- BeiDou: 8

Start Broadcasting

- ① The intensity of object removal can now be changed with the +/- buttons as well as the slide bar.



① Flight data names are now displayed on multiple lines without being cut off in the middle.

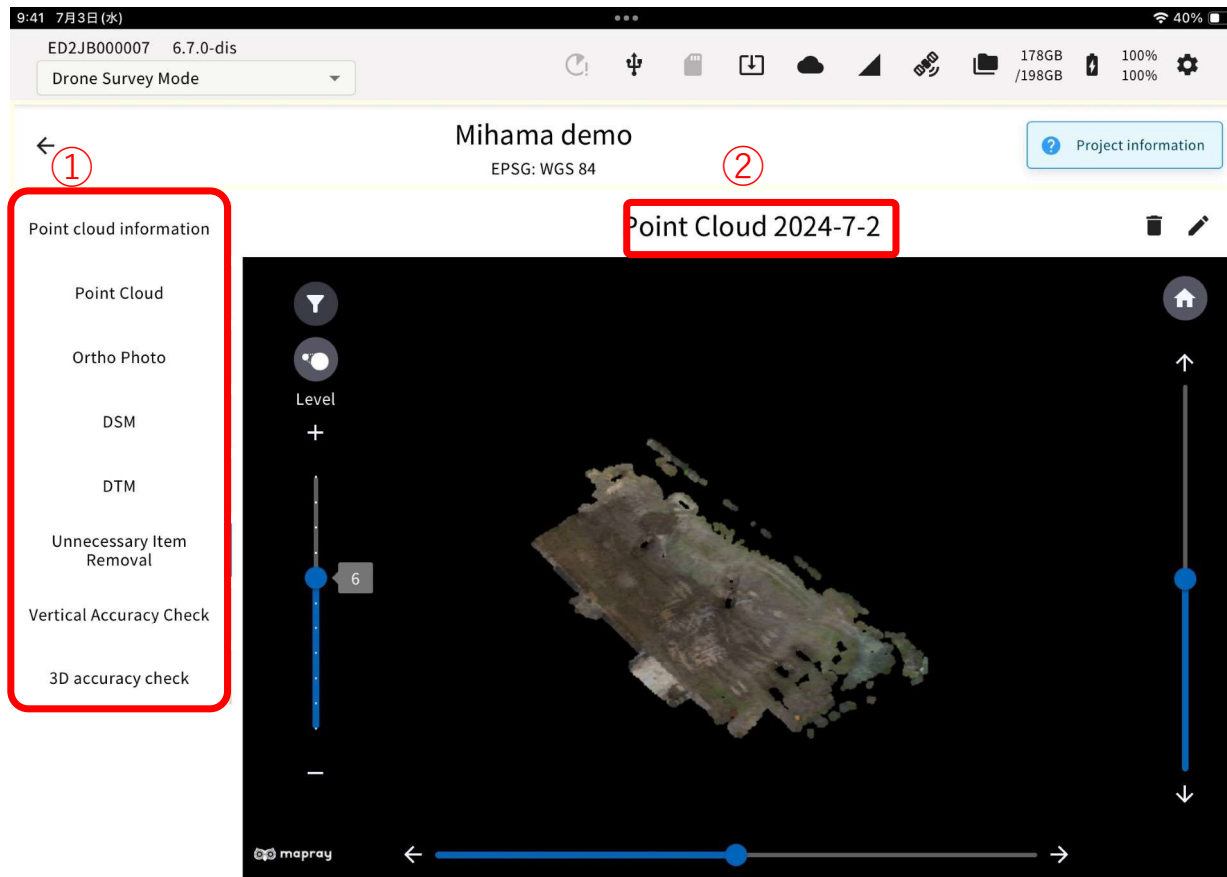


The screenshot shows the Earth Brain mobile application interface. At the top, the status bar displays the time 19:42, date 7月2日 (火), and battery level 52%. Below the status bar, the app header shows 'ED2JB000007 6.7.0-dis' and 'Drone Survey Mode'. The main content area is titled 'Unno' and 'Local coordinate system(meters)'. A sidebar on the left contains navigation options: 'Point cloud information', 'Point Cloud', 'Unnecessary Item Removal', and 'Vertical Accuracy Check'. The main content area is divided into two sections: '点群 2024-6-27' and 'Calculation setting'. The 'Calculation setting' section includes options for 'Unnecessary Item Removal' (ON), 'Categories to be retained' (Soil), 'Point Cloud Density' (High: 100points/m² (404,696points/ac)), and 'Ortho Image and DEM Image Creation' (OFF). Below this is the 'PPK Processing Results' section, which displays a table of flight data and a PPK fix rate of 100%. The table has two columns: 'Flight Data' and 'Fix Rate'. The first row shows a flight data name 'DJI_202406111215_01 3_6-2' and a fix rate of 100%. The flight data name is highlighted with a red box and a circled '1'. To the right of the table is a black image showing a white flight path.

Flight Data	Fix Rate
DJI_202406111215_01 3_6-2	100%

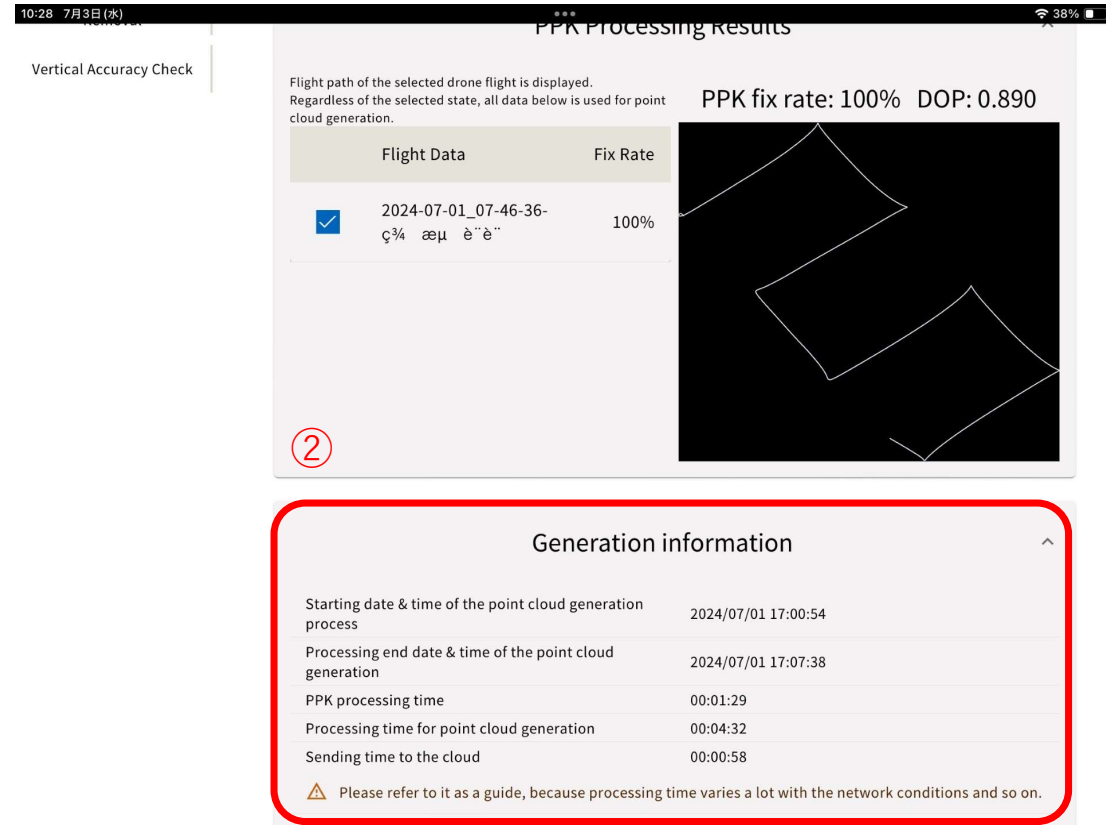
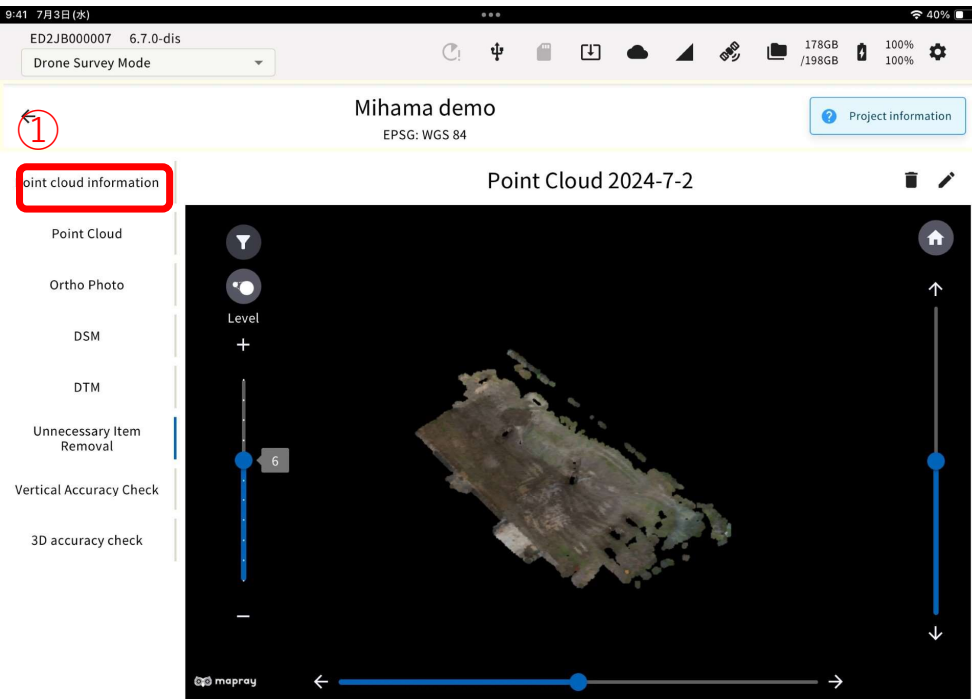
• Addition of point cloud name display

- ① Select one of the screens on the far left.
- ② Point cloud name display is added.



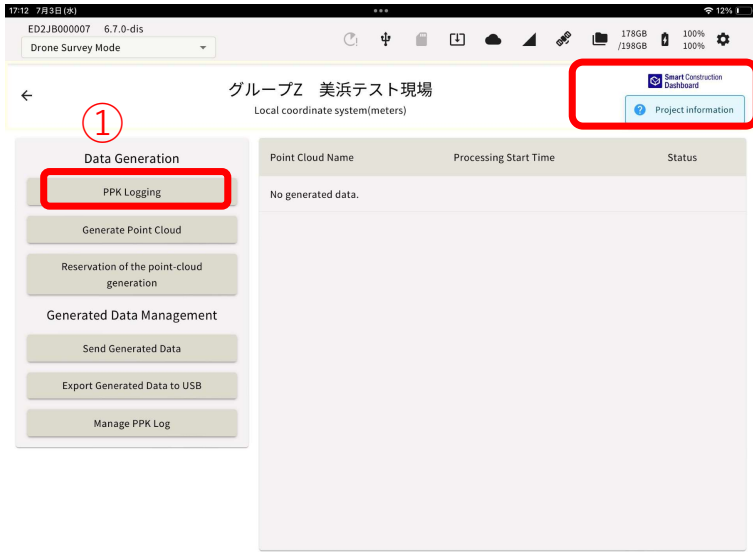
① Tap "Point cloud information"

② Scroll down to "Generated Information" is displayed

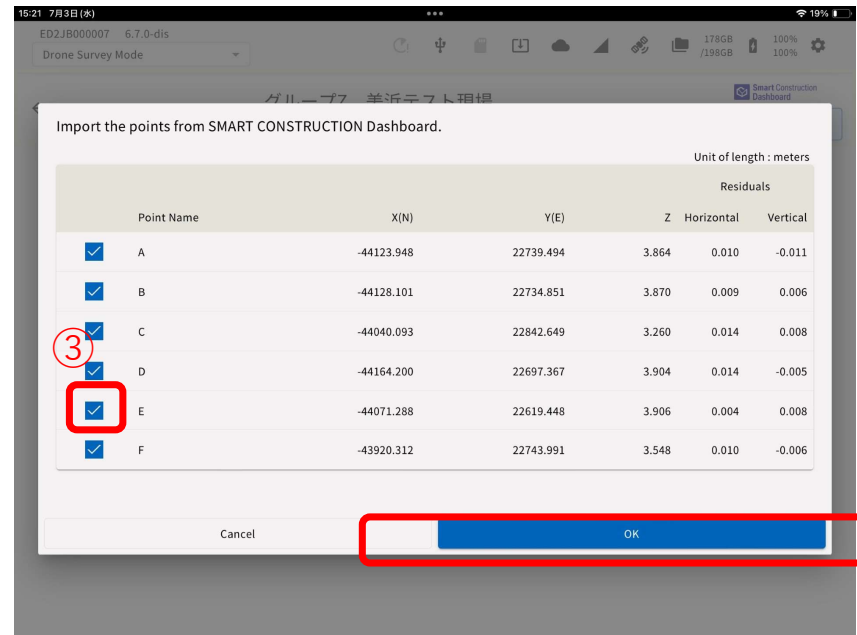


① Tap 「PPK Logging」

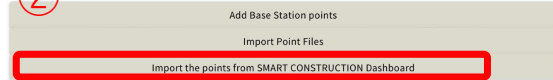
The dashboard icon is displayed for projects linked to the dashboard, and tapping the "project information" icon to view the GC3 information that has been loaded.



③ A list of points registered on the Dashboard is displayed. Select control point and press OK.



Select or add a base station installation point of SMART CONSTRUCTION Edge.



• Update Procedure

■ v6-RC1.1

OTA Name : “v6-RC1.1”

FW VERSION : ” 6.7.1”

OS VERSION : ”4.1.4 “

(1) Turn on the Edge 2 and make sure you are online on the Internet with the l-pad.
Wired LAN is recommended since the data size may be up to a gigabyte.

(2) Please wait for the application to finish downloading.

In a good network environment, such as a wired LAN connection, it will take approximately 30 minutes.

For LTE, it may take 1 hour or more.

By good internet connection, we mean a downstream speed of around 50Mbps.

If the internet connection is poor, the update may take around 3 to 4 hours, and in some cases, considerably longer.

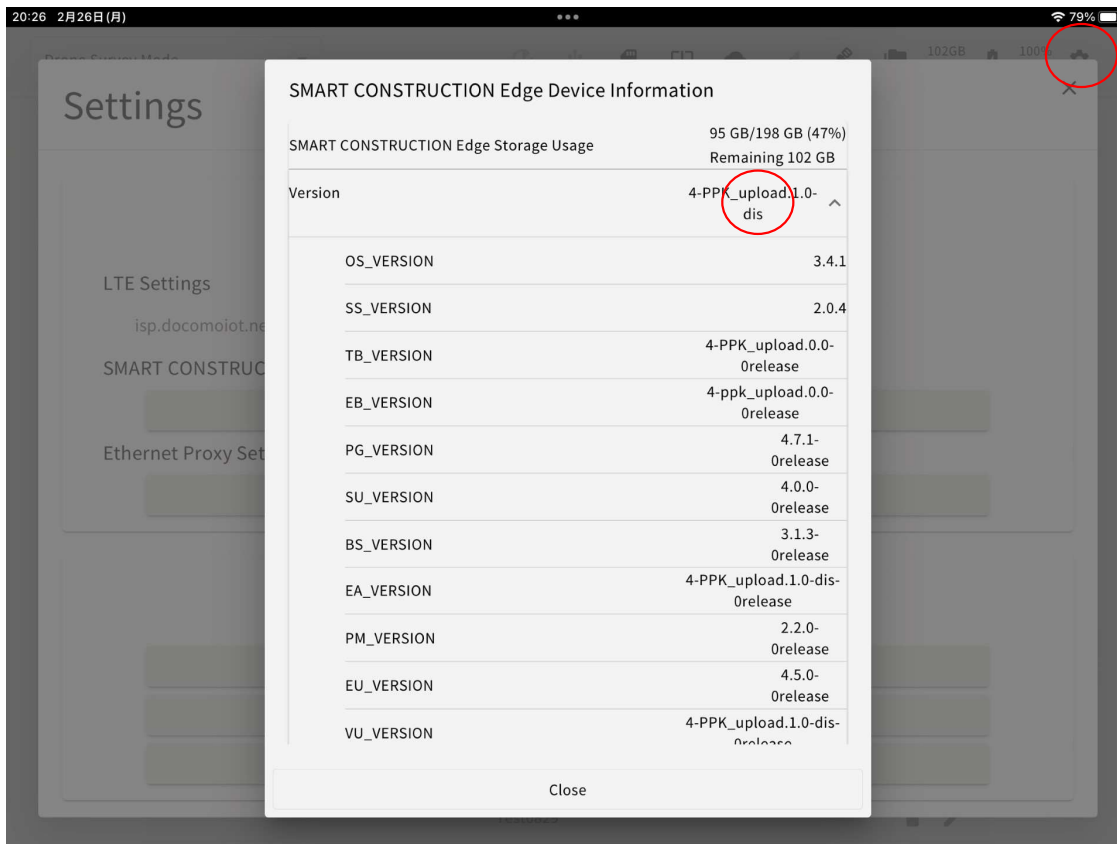


(3) Turn power off/on

Check the Firmware version. Go to the Settings screen -> SMART CONSTRUCTION

Edge Device information, Confirm that the version is "6.7.1". If not, start over from

(1). If it is, proceed to (4).



(4) Please wait for the OS to finish downloading.

In a good network environment 15 minutes for wired LAN connection, etc.; 30 minutes or more for LTE, etc.

(5) Turn power OFF/ON

Check the OS version. Go to the Settings screen -> SMART CONSTRUCTION Edge Device information, Confirm that the version is "4. 1. 4 ".If not, start over from (4). If the OS Ver is confirmed, you are done!

