Edge2 v10.5.3 Release Notes
（November 19, 2025）
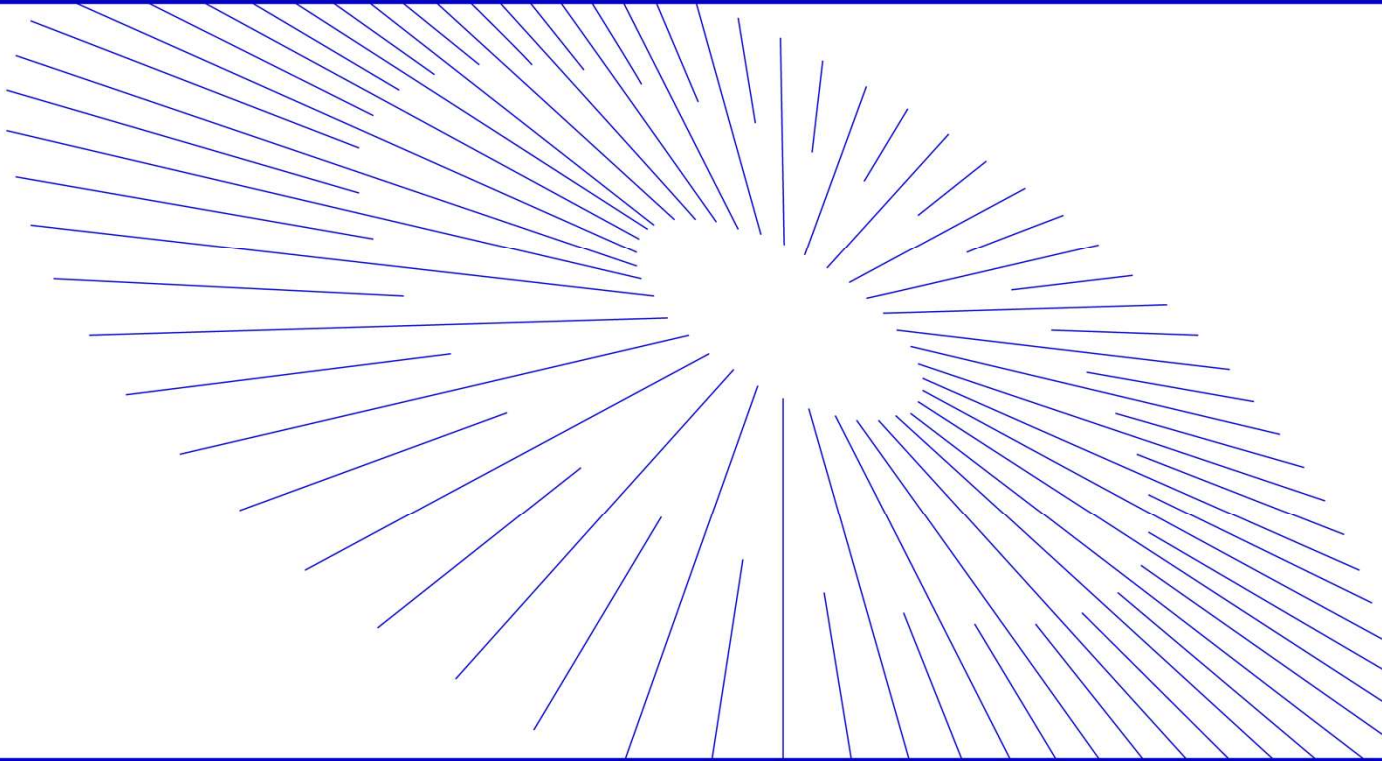
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Classification	Items	Summary	Detail page
New function Improvement	Download Mount Point List	In the Edge2 settings screen, specifying the mount point for the network RTK service has changed from manual entry to a download-based method.	P 4
	GCP annotation improvement	We have introduced a feature that automatically detects some GCP markers when performing SFM processing using aerial target markers （GCP）.	P5～7
	Support a new drone DJI MATRICE400 （Zenmuse P1）	Using DJI Matrice400(with P1 Camera) achieved +/- 5cm level accuracy. https://enterprise.dji.com/jp/matrice-400	P10
	Support a new drone ACSL RTK-SOTEN (Japanese Drone)	Using RTK So-TEN, achieved +/- 10cm level accuracy. https://www.acsl.co.jp/news-release/press-release/3085/	None
	SFM performance improvement	SFM performance (Improve the quality of the point cloud) and DTM quality Improvement (lower noise)	P 8

Update items Edge2 v10.5.3 （Planned to release 11/E）

Classification	Contents
Bug fixes	We have fixed an issue where correction data could not be stopped after being distributed when an external wireless device was not connected.
	We have modified the input screen for known points to display the units.
	Fixed a bug where point cloud generation with GCP failed under certain specific conditions.
	Improvement of the GCP annotation UI: The cross mark was adjusted to make it easier to identify the GCP center (this was addressed because in some cases, accuracy deteriorated when using GCP due to this issue).
	The problem of SFM processing, when merging multiple flight data from DJI M4E, was fixed..
	The SC account authentication error remains even after recovered from offline.

Downloading mount point list

Downloading the mount point list instead of entering the mount point manually.

nRTK setting menu

Select this button to open mount point list.

Show mount point list

GCP annotation improvement

During the GCP annotation, GCPs which is close to the coordinates entered will be automatically detected as shown below, and photo of the detected markers will be highlighted in orange.

Entered GCP coordinates

Automatically detected and highlighted in orange.
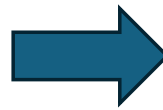
In v10, when performing SFM processing using GCPs, the positions of the following markers can now be automatically detected.

Detectable markers

Confirmed	Possible, but not confirmed	Not detectable
検出可能	検出可能性あり	非対応
Black & White with good contrast		

GCP annotation improvement

Choose one of these orange GCP photos, then you will see the GCP marker automatically be focused in the center. If it is off-center, adjust it manually and tap OK. Once the GCP center is confirmed, it will be marked as located and turn green.

The GCP center is automatically detected

If the GCP center is confirmed will highlighted in green.

DTM quality improvement
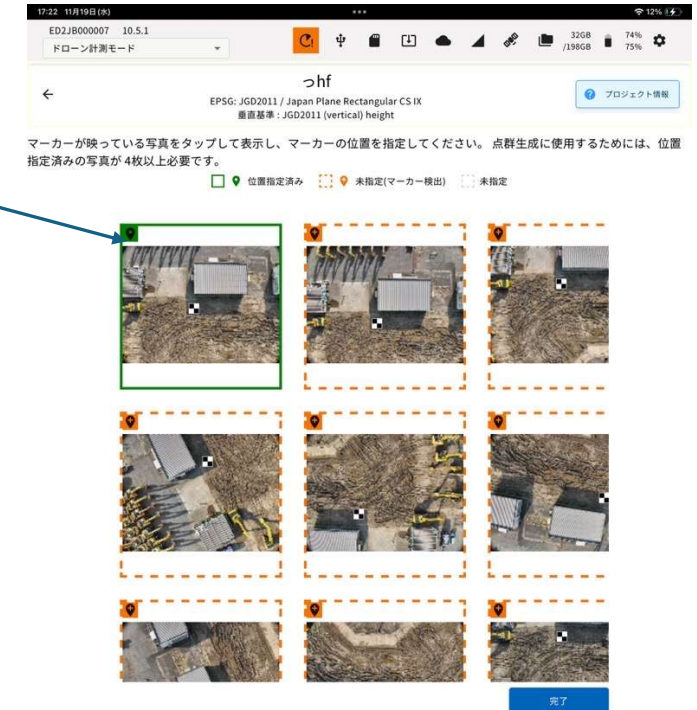
As shown below, the DTM noise was reduced even at the standard density.

Edge2 v10 DTM改善　DTM quality improvement

EB北米指摘箇所
Pointed out from EBNA
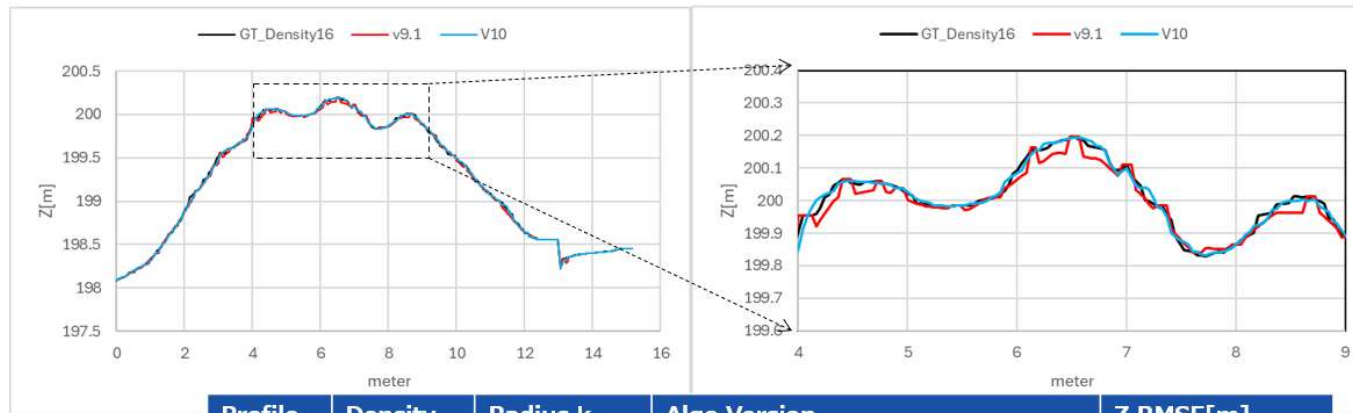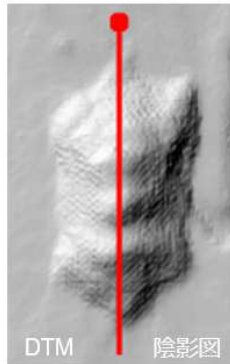
Profile	Density (pts/m2)	Radius k	Algo Version	Z RMSE[m]
GT	16	{0.1, 0.25}	処理時間を度外視したリッチな処理	-
v9.1	16	{0.1, 0.25}	v9.1	0.0217
v10	16	1.1	v10	0.0147

(DTM陰影図)
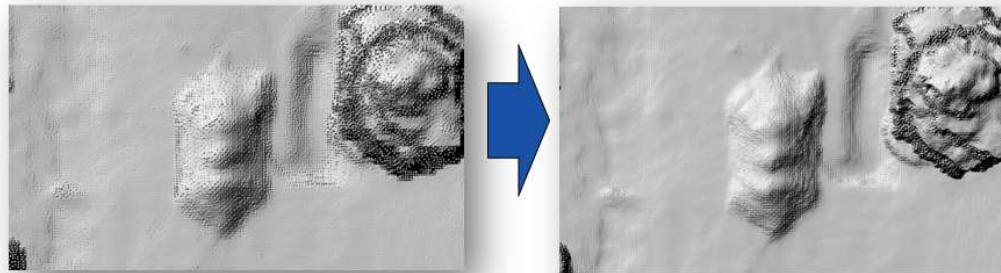
DTM noise低減を確認
(RMSE,DTM陰影図)

SfM quality improvement
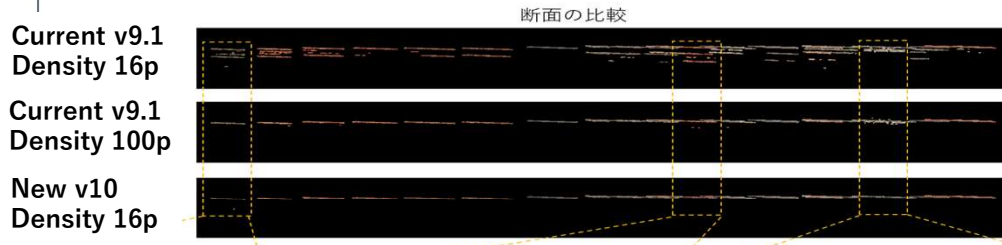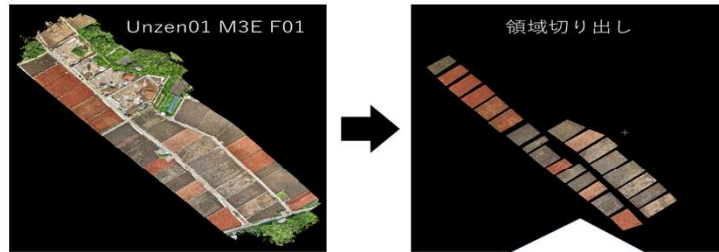
Even in shapes with repetitive patterns where SFM matching errors are likely to occur on certain site terrains, significant improvements in noise and layering problem, which were occurring in v9, have been observed in v10.

DJI Matrice400 Support

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- **DJI Matrice400 Support**

Accuracy check result

Within +/- 5cm in XYZ

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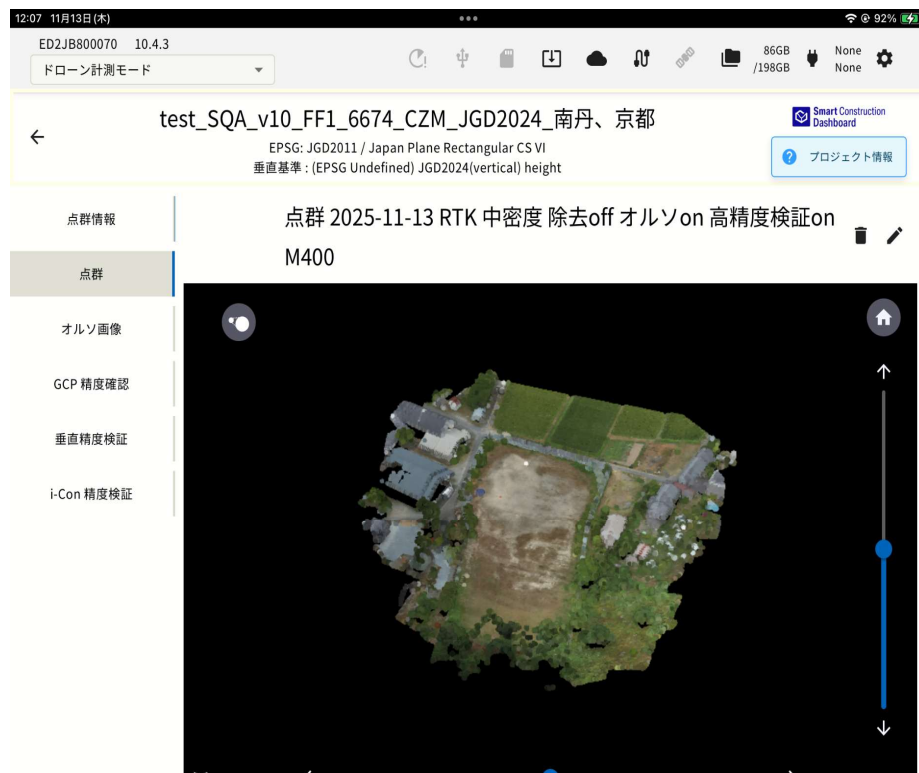
■■ v10.5.3 RC 1

OTA name : "10.5.3"
FW VERSION : "10.5.3"
 OS VERSION : "7.2.0"

・※iPad is recommended to update to IOS 18.7.1 or higher.

<Updating from Edge FW v7 or later>

・Connected to Internet, download the files to update, then press "Restart"

・If the operation LED turns flushing green to solid green,
 update has completed for the both FW and OS.

If you have a good network environment, such as a wired LAN connection, it will take about 30 minutes, while using LTE m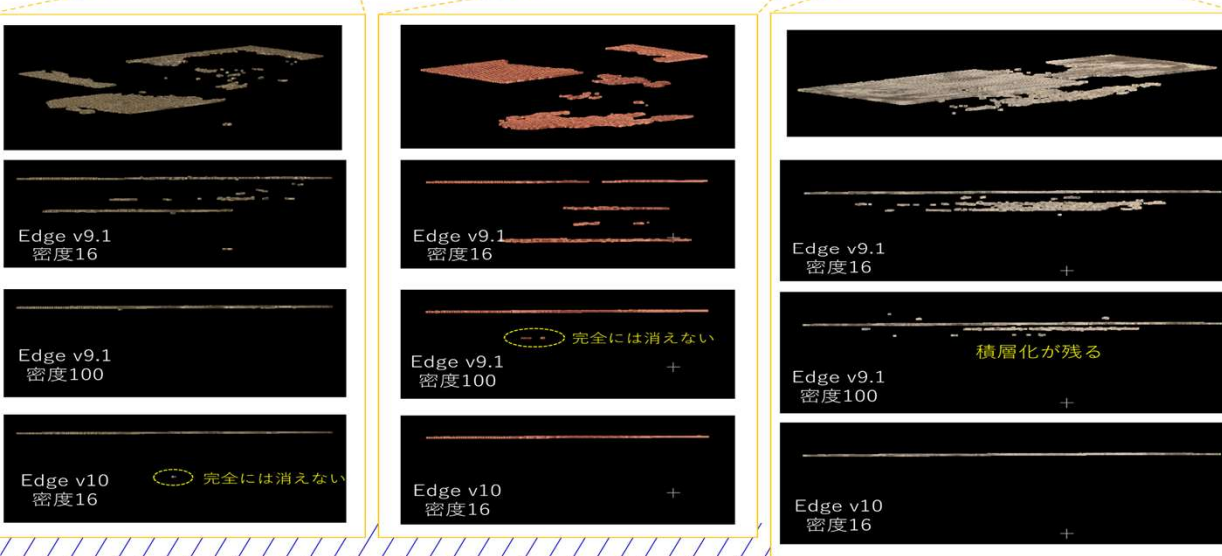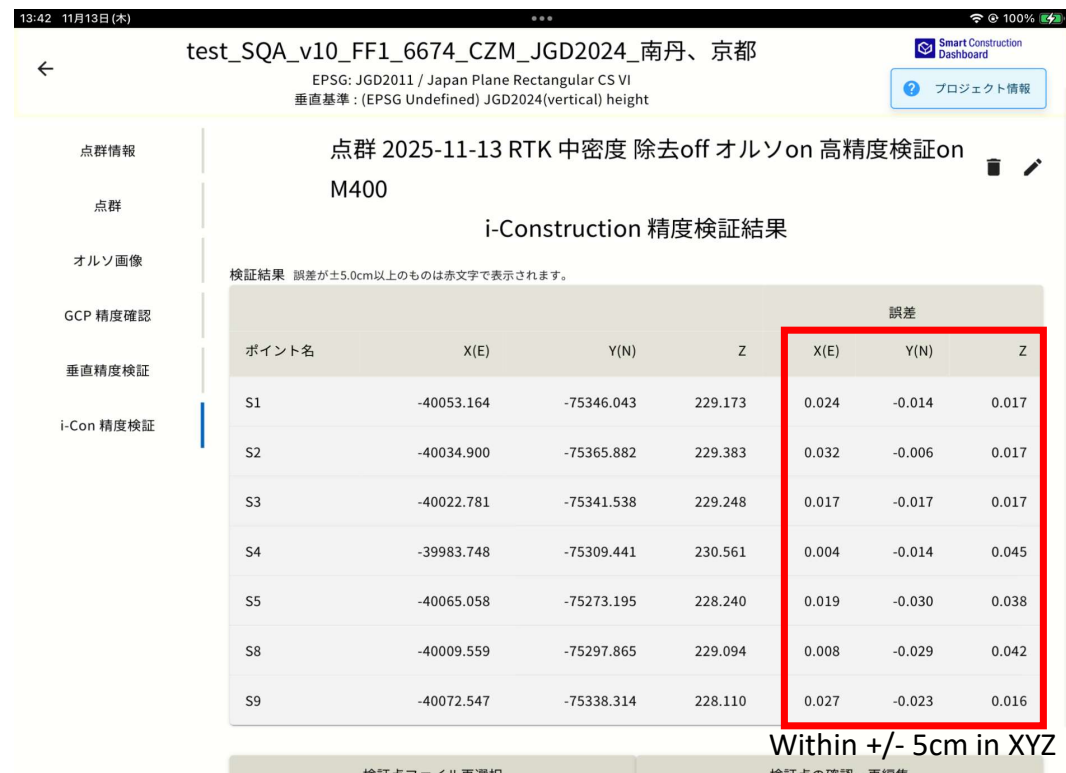ay take over an hour. Depending on the environment, it could take around 3 to 4 hours. Please be aware that updates may take a long time. *The connection speed is assumed to be good at around 50 Mbps downstream.

Update completed and restart

Select "Update via network"

Downloading update files
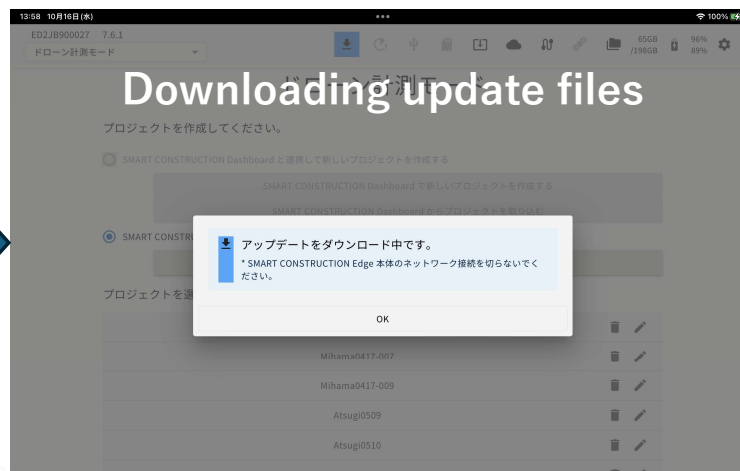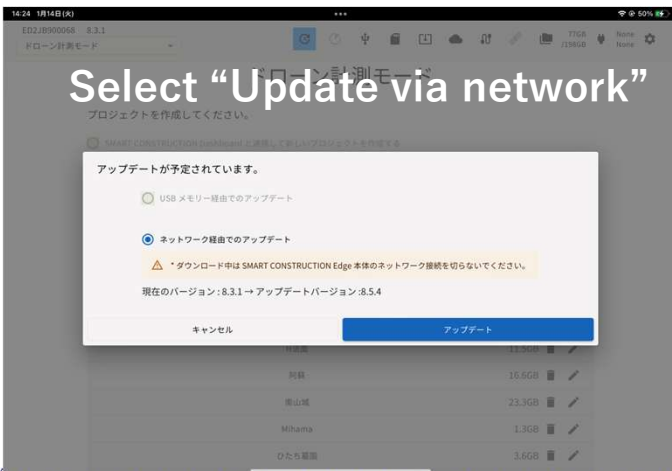
For devices with software earlier than V7, the edge2 app cannot connect due to expired certificates.
Please connect via an iPad browser from http://scedge.local and update the device.
Note that it is http://, not https://.

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<Warning> Malfunction Related to Battery Charging

There have been a few cases in the market where the battery could not be charged before v6. As a fundamental measure, we will update the battery control microcontroller. Consequently, the version upgrade sequence is as follows:
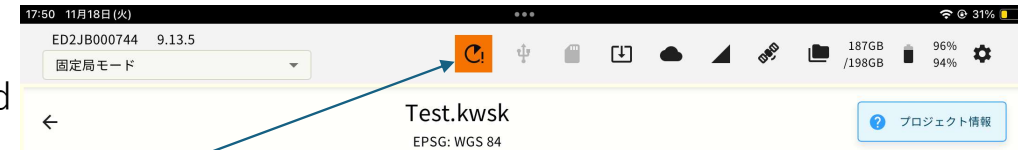
① As usual, the app will be downloaded. (1st download)
② After the download has complete (orange ↓), please restart the unit.
③ The OS download will begin.(2nd download)
④ Once the OS download is completed , the popup on the right will be displayed.
⑤ Connect to AC and press the restart button. The red light on the 4-direction LED will stay on for a while, but please wait as is. Once the power turns OFF, restarting normally will complete the update.

*If AC power is not connected in step ⑤
You can turn the power OFF and ON as usual, but the sub-microcontroller update will not be performed. Once AC power is connected while the power is ON, the update will occur when you turn the power OFF.

Message ifOS download is completed.

17:50 11月18日(火)

ED2JB000744   9.13.5
固定局モード

187GB /198GB   96% 94%

Test.kwsk
EPSG: WGS 84

プロジェクト情報

アップデートの準備ができました。
速やかに SMART CONSTRUCTION Edge 本体を再起動してください。

* アップデート中は AC アダプターを接続してください
* アップデート中は SMART CONSTRUCTION Edge 本体のネットワーク接続を切らないでください。
* アップデートには 5 分程度かかります
* 本体正面のエラー/アップデート LED が点灯している間は電源を切らないでください

次回 SMART CONSTRUCTION Edge 本体の電源を入れた時にネットワークに接続している場合、アップデートが実行されます。

後で再起動   再起動