## DJI Terra Reconstruction Error and Operation Suggestions (Frequent updates are available)

In case of an error, there are three ways to troubleshoot errors by yourself:

1. Perform operations based on the instructions prompted in the dialog box (applicable to v3.5.0 and later versions).
2. Click the Export Log button on the pop-up dialog box (applicable to v3.5.0 and later versions) to export the error log of the mission to the selected folder (file name of the error log: mission name_error.log). Search the keyword [exit with] and the number after the keyword is the error code. Perform operations provided in the following table based on error codes.
3. Find time log of the mission, search the keyword [runPicMapGen exit], and the number after the keyword is the error code. Perform operations provided in the following table based on error codes. The log can be obtained in the following ways:
   (1) Open storage path: C:\Users\<Computer User Name>\AppData\Roaming\DJI Terra\log
   (2) Run DJI Terra and open the log storage path via the shortcut Ctrl+Alt+L.

If the issue persists after using the above three methods, contact DJI Support.

| Error Code | Error Message | Operation Suggestion |
|---|---|---|
| General | | |
| 0001 | No usage permissions for this function | 1. Use the license containing this feature |
| 0004 | NVIDIA graphics card (4GB or above) required | 1. Please check if the graphics card configuration of the computer meets the requirements |
| 0009 | Photos taken with non-DJI cameras | 1. Only the DJI TerraAPI will return this error code. The DJI TerraAPI currently does not support photos taken with non-DJI cameras. |
| 1001 | Invalid permissions | 1. Check whether the license is successfully bound;<br>2. Check whether the license is within the validity period. |
| 1002 | JSON file read error | 1. Create another mission and check if the error still persists;<br>2. Change cache directory and create another mission;<br>3. Uninstall DJI Terra and then install it again. |
| 1003 | NVIDIA graphics card not detected | 1. If the error prompt is displayed at the beginning of the reconstruction, please check whether the graphics card meets the requirements (refer to the Purchase and Preparation section of DJI Terra FAQs for computer configuration requirements); if the requirements are met, please download the graphics card driver from NVIDIAs official website and upgrade it to the latest version;<br>2. If the error prompt is displayed after the |

| | | |
|---|---|---|
| | | reconstruction has started for a period of time, try planning the region of interest to remove the edge region and perform the reconstruction again. |
| 1004 | DMV file read error | 1. Perform the reconstruction of Aerotriangulation again |
| 1005 | FILE_System_ERROR | 1. Check if the disk space of cache directory is sufficient;<br>2. If it is a cluster reconstruction, check whether the local area network connection is normal, whether the shared directory storage space is sufficient, and whether the local temporary storage directory space of the worker device is sufficient;<br>3. Re-importing photos required if users modify file directory or change file folder name after photos imported to DJI Terra. |
| 1007 | Aerotriangulation block splitting error. Check available memory space or reduce distance to ground/subjects | 1. Please check the available memory space or reduce the distance to Ground/Subjects. |
| 1008 | Input less than 3 photos | 1. Please import more photos. |
| 2001 | Structure from motion (SFM) failed. | 1. Check whether the imported image is damaged, and the image thumbnail can be viewed in the folder where the image is stored to check whether the image is abnormal (all black, failure to display, the image seriously overexposed or underexposed);<br>2. The imported image cannot be a thumbnail;<br>3. Check whether there is a common view area between images to ensure sufficient overlap rate;<br>4. In case of adding GCPs or image POS data, please check whether the coordinate system is set correctly, whether the marked points of the control point are correct, whether longitude and latitude order is correct, and whether the POS accuracy and control point accuracy are correct;<br>5. Check whether input intrinsic camera parameters are correct when importing photos from third-party cameras in DJI Terra v3.6.0 or later versions. |
| 2002 | Image correction (distortion and color correction) failed | 1. Check if the disk space of cache directory is sufficient;<br>2. If it is a cluster reconstruction, check whether the local area network connection is normal, whether the shared directory storage space is sufficient. |
| 2003 | Reconstruction densification failed | 1. Check if the graphics card has a memory greater than 4 GB;<br>2. Try planning the region of interest to remove the edge region and perform the reconstruction again. |

| | | |
|---|---|---|
| 2004 | Grid reconstruction failed | 1. Check if the disk space of cache directory and shared directory (cluster) is sufficient;<br>2. Try planning the region of interest to remove the edge region and perform the reconstruction again. |
| 2005 | Scene divide error | 1. Try planning the region of interest to remove the edge region and perform the reconstruction again |
| 2006 | LOD error | 1. Check if the disk space of cache directory is sufficient;<br>2. If it is a cluster reconstruction, check whether the local area network connection is normal, whether the shared directory storage space is sufficient, and whether the local temporary storage directory space of the worker device is sufficient;<br>3. Try planning the region of interest to remove the edge region and perform the reconstruction again;<br>4. Update graphic card driver version to v452.39 or later. |
| 2007 | MVS error | 1. Check if the disk space of cache directory is sufficient;<br>2. Try planning the region of interest to remove the edge region and perform the reconstruction again;<br>3. If it is a cluster reconstruction, check whether the local area network connection is normal, whether the shared directory storage space is sufficient;<br>4. Check if the graphics card has a memory greater than 4 GB;<br>5. Check the quality report of Aerotriangulation and check whether the optimized camera's internal parameters are significantly different from initial internal parameters |
| 2008 | Failed to generate XML file | 1. Make sure the image data are within the coverage of the XML output coordinate system |
| 2010 | Refining water surfaces failed | 1. Check whether your computer has an NVIDIA graphics card and that the memory of the NVIDIA graphics card is greater than 4 GB<br>2. If the requirements of step 1 are met, try using a graphics card with a higher performance and try again |
| 3001 | Semantic identification error | 1. Check if the graphics card has a memory greater than 4GB |
| 3002 | Digital Surface Model (DSM) generation failed | 1. Check the resource manager of the computer, check the memory usage, and close other memory-occupied programs;<br>2. Check if the disk space of cache directory is sufficient. |
| 3003 | Orthorectification failed | 1. Check if the disk space of cache directory is sufficient |
| 3004 | Orthophoto mosaic failed | 1. Check if the disk space of cache directory is sufficient |

| | | |
|---|---|---|
| 3005 | Generating 2D map tile failed | 1. Check if the disk space of cache directory is sufficient;<br>2. If it is a cluster reconstruction, check whether the local area network connection is normal, whether the shared directory storage space is sufficient;<br>3. Try planning the region of interest to remove the edge region and perform the reconstruction again. |
| 3006 | Generating 2D map report failed | 1. Check if the disk space of cache directory is sufficient;<br>2. If it is a cluster reconstruction, check whether the local area network connection is normal, whether the shared directory storage space is sufficient. |
| 3007 | Writing image failed | 1. Check if the disk space of cache directory is sufficient;<br>2. If it is a cluster reconstruction, check whether the local area network connection is normal, whether the shared directory storage space is sufficient. |
| 3008 | Projecting reconstruction output result failed | 1. Check if the disk space of cache directory is sufficient;<br>2. If it is a cluster reconstruction, check whether the local area network connection is normal, whether the shared directory storage space is sufficient;<br>3. The region where the reconstruction data are located is not within the coverage of the set projection coordinate system. |
| 3009 | Invalid image data | 1. The angle between the camera of image and the vertical angle is greater than 15° (35° for V3.1.0 and later versions);<br>2. If the image data are not of the above types, please check whether the result of Aerotriangulation is abnormal. If so, try the following operations:<br>a) Check whether the imported image is damaged, and the image thumbnail can be viewed in the folder where the image is stored to check whether the image is abnormal (all black, failure to display, the image seriously overexposed or underexposed);<br>b) The imported image cannot be a thumbnail;<br>c) Check whether there is a common view area between images to ensure sufficient overlap rate;<br>d) In case of adding a GCP or importing custom image POS data, please check whether the |

| | | |
|---|---|---|
| | | coordinate system is set correctly, whether the marked points of the control point are correct, whether longitude and latitude order is correct, and whether the POS accuracy and control point accuracy are correct. |
| 3010 | Preprocessing image failed | 1. Check if the disk space of cache directory is sufficient;<br>2. If it is a cluster reconstruction, check whether the local area network connection is normal, whether the shared directory storage space is sufficient. |
| 3016 | The number of grid of points for 3D reconstruction of visible light is too small | 1. Check whether the mapping area is too small or Sample Distance is too large<br>2. Reduce Sample Distance and try again |
| 4002 | Insufficient memory | 1. Check the resource manager of the computer, and close other programs occupying the memory;<br>2. Try planning the region of interest to remove the edge region and perform the reconstruction again;<br>3. LiDAR point cloud processing: Users can try reducing the density of the point cloud, or adjust the point cloud effective distance to reduce the processing of invalid regions;<br>4. Check available memory size and photo number limit. Make sure the number of imported photos meets the requirement;<br>5. For 2D reconstruction, if the overlap rate of images taken in a local area or all areas is too high, delete some images with a high overlap rate (when selecting images from a folder on Windows operating system, users can select images sorted by name at intervals). |
| 4003 | Insufficient VRAM | 1. Check the resource manager of the computer, check the use of the graphics card and memory, and close other programs occupying the video memory;<br>2. Try planning the region of interest to remove the edge region and perform the reconstruction again. |
| 5001 | Output coordinate system error | 1. Check if the output coordinate system is set correctly;<br>2. If the image does not have POS information, the result cannot be set to the known coordinate system;<br>3. If the GCP is used and it is an arbitrary coordinate system, the result should be set to the arbitrary coordinate system;<br>4. User's customized PRJ file contains a special elevation system, but DJI Terra does not support this elevation system for the moment;<br>5. The region where the reconstructed data are located is |

| | | |
|---|---|---|
| | | not within the coverage of the set elevation system. |
| 5002 | Quality report export error | 1. Please check whether the mission folder and the report folder where the quality report is stored have the write permission |
| 6001<br>/<br>6002 | Abnormal error | 1. Check if the disk space of cache directory is sufficient;<br>2. If it is a cluster reconstruction, check whether the local area network connection is normal, whether the shared directory storage space is sufficient, and whether the local temporary storage directory space of the worker device is sufficient. |
| LiDAR point cloud reconstruction | | |
| 8001 | Raw data missing LDR type file or file path error | 1. Check if LDR type file is missing from the raw data;<br>2. Check if the suffix of LDR file is only in ".LDR~1". If so, remove "~1" from the suffix. |
| 8002 | CLI file missing in original data or file path error | 1. Check if CLI type file is missing from the raw data;<br>2. Format SD card or replace SD card and collect data again;<br>3. If data missing occurs inevitably, send device to DJI for maintenance. |
| 8005 | No overlap between the collection periods of attitude data and LiDAR point cloud data | 1. Make sure RTK status is FIX during the whole flight;<br>2. Make sure to enable IMU calibration in flight route mission;<br>3. Perform IMU calibration before and after data collection when flying manually. Perform IMU calibration every 100s in flight. |
| 8007 | The pose data is abnormal, please check the base station data and RTK data, and perform calibration flight before and after collecting the data | Re-collecting Zenmuse L1 data required. Check the following:<br>1. Check if base station data and RTK data are missing;<br>2. Make sure to enable IMU calibration in flight route mission;<br>3. Perform IMU calibration before and after data collection when flying manually. Perform IMU calibration every 100s in flight;<br>4. When flying manually, make sure aircraft is not hovering for a long period to collect data. |
| 8008 | Optimizing LiDAR point cloud accuracy failed | Re-collecting Zenmuse L1 data required. Check the following:<br>1. Make sure to perform IMU calibration at the start and end of the flight route. Perform IMU calibration every 100s in flight. |
| 8009 | File read and write error | 1. Check if the disk space of cache directory is sufficient |
| 8010 | CLC file missing in original data or file path error | 1. Check if CLC type file exists in raw data;<br>2. Format SD card or replace SD card and collect data |

| | | |
|---|---|---|
| | | again;<br>3. If data missing occurs inevitably, send device to DJI for maintenance. |
| 8012 | Zenmuse L1 calibration failed. Insufficient number of images | 1. Make sure the number of images imported is greater than 3 |
| 8015 | Zenmuse L1 calibration failed. Different device data or several subfolders in the same imported folder currently not supported | 1. Import of data from multiple devices in the same folder or folder containing multiple folders is not supported for the moment |
| 8016 | LiDAR raw data error | 1. Check whether the imported folder contains files with the suffix LDR<br>2. Check whether the collection time of raw data is too short<br>3. If the issue persists after the above requirements are met, try recollecting data and perform reconstruction again |
| 8017 | 3D mesh model cannot be generated because the number of photos used for reconstruction is too small | 1. Check whether the number of photos is more than 3<br>2. Check whether the overlap ratio requirements are met when collecting data. If the above requirements are met, try again later |
| 8020 | Error in parsing the base station data file to the RINEX format | 1. Check the RINEX file format. Only v2.1.x and v3.0.x format supported. |
| 8022 | Attitude initialization failed | 1. Make sure to enable IMU calibration in flight route mission;<br>2. Perform IMU calibration before and after data collection when flying manually. Perform IMU calibration every 100s in flight |
| 8027 | Precision optimization of LiDAR point cloud failed | 1. Try increasing the data collection overlap rate before data processing |
| 8028 | File read/write abnormal | 1. Check if the disk space of cache directory is sufficient; |
| 8029 | File path error or the raw data is missing CLC type file | 1. Please check if CLC type file is missing from the raw data |
| 8030 | Error of CLC type file format for raw data | 1. Please check if CLC type file is missing from the raw data |
| 8031 | Zenmuse L1 self-calibration failed: Insufficient number of images in raw data | 1. Refer to Zenmuse L1 User Manual and follow instructions on calibration to collect data |
| 8102 | Base station data file missing in original data. Check if any of the following files are missing: RTB, OEM, RINEX, RTCM 3, and UBX | 1. Please check if one of the following format file is missing from raw data: RTB file, OEM file, RINEX file, RTCM 3 file, UBX file |
| 8104 | RTK file missing in original data or file path error | 1. Check if RTK type file exists in raw data;<br>2. Format SD card or replace SD card and collect data |

| | | |
|---|---|---|
| | | again;<br>3. If data missing occurs inevitably, send device to DJI for maintenance. |
| 8108 | Parsing base station data file failed. Make sure one of the following formats is used: RTB, OEM, RINEX, RTCM 3, or UBX | 1. Check if the base station data file is in one of the following formats: RTB file, OEM file, RINEX file, RTCM 3 file, UBX file |
| 8109 | No overlap between the collection periods of base station data and aircraft data | 1. Data from base station should cover full flight duration of aircraft. Make sure base station data period is set correctly |
| 8122 | IMU file missing in original data or file path error. Check if file is missing | 1. Check if IMU type file exists in raw data;<br>2. Format SD card or replace SD card and collect data again;<br>3. If data missing occurs inevitably, send device to DJI for maintenance. |
| 8124 | RTL file missing in original data or file path error. Check if file is missing | 1. Check if RTL type file exists in raw data;<br>2. Format SD card or replace SD card and collect data again;<br>3. If data missing occurs inevitably, send device to DJI for maintenance. |
| 8133 | Orientation initialization failed. Perform Calibration Flight before and after data collection | 1. Please calibrate the flight before and after data collection |
| Cluster Reconstruction | | |
| 1006 | JPEG images required for reconstruction | 1. Image cannot be synced. Please check whether the local area network connection is normal, and whether the shared directory storage space is sufficient |
| 7001 | No available worker device | 1. Make sure that there are worker devices in the LAN that are enabled and available;<br>2. Refresh the worker device list in the cluster reconstruction device list of the control device to ensure that the worker device can be searched, and check it and apply it for reconstruction;<br>3. If the firewall is enabled, make sure that DJIPicMapGen.exe has the local area network (LAN) access permission in the firewall settings. |
| 7002 | Unable to visit control device shared directory. Check device connection | 1. Check the LAN connection to ensure that the control device can access the shared directory normally |
| 7003 | Worker device disconnected | 1. Check whether the LAN connection is stable. If the problem occurs frequently, it is recommended to replace the network cable |
| 7004 | File folder not found | 1. Check if the shared directory set by the control device is properly accessible on the worker device (the mapped drive letter path is not available for the |

| | | |
|---|---|---|
| | | moment) |
| 7005 | Unable to write file folder | 1. Check if the shared folder has the write permission enabled |
| 7703 | Searching for worker device. Port error | 1. Check if the control device has the write permission for the shared directory |