Credimension Viewer Instruction Manual

Revision Update Date			
Date	Revision	Description	Editor
September 27，2021	V1.0.0		Daisy
November 16，2021	V2.0.0		Daisy
September 26，2022	V3.0.0	Upgrade SDK+GUI	Daisy
March 29，2022	V3.1.0	Add filtering function	Daisy

Contents

1. Tool Introduction

Tool name：Credimension Viewer

Tool description：

Credimension Viewer is CS20 series windows demo GUI Tool. This tool is mainly used to obtain and save Depth, IR, Point cloud, RGB picture information, at the same time, it supports functions such as viewing the basic information of the device and setting the solution and integration time.

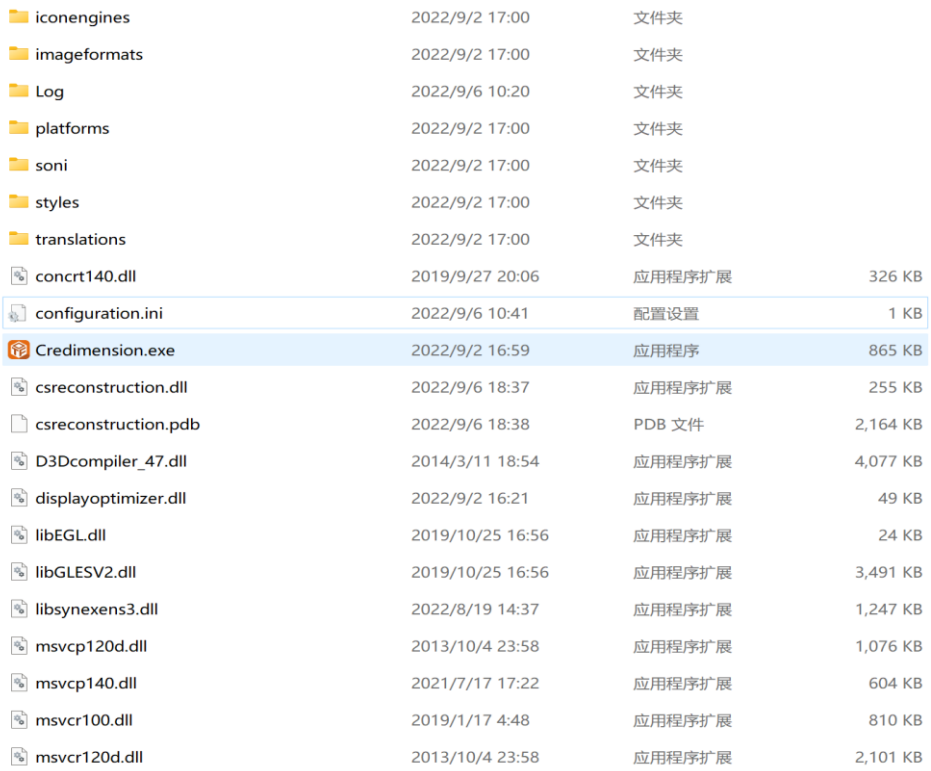
2. Installation Instructions

2.1. System requirements

The current Credimension Viewer supports the Windows 10 system.

2.2. Credimension Viewer Installation

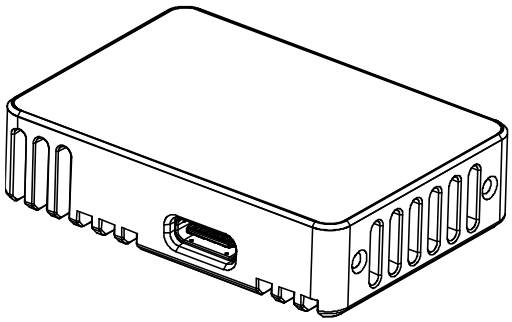
Credimension Viewer is a green version and does not need to be installed.



iconengines	2022/9/2 17:00	文件夹	
imageformats	2022/9/2 17:00	文件夹	
Log	2022/9/6 10:20	文件夹	
platforms	2022/9/2 17:00	文件夹	
soni	2022/9/2 17:00	文件夹	
styles	2022/9/2 17:00	文件夹	
translations	2022/9/2 17:00	文件夹	
concrt140.dll	2019/9/27 20:06	应用程序扩展	326 KB
configuration.ini	2022/9/6 10:41	配置设置	1 KB
Credimension.exe	2022/9/2 16:59	应用程序	865 KB
csreconstruction.dll	2022/9/6 18:37	应用程序扩展	255 KB
csreconstruction.pdb	2022/9/6 18:38	PDB 文件	2,164 KB
D3Dcompiler_47.dll	2014/3/11 18:54	应用程序扩展	4,077 KB
displayoptimizer.dll	2022/9/2 16:21	应用程序扩展	49 KB
libEGL.dll	2019/10/25 16:56	应用程序扩展	24 KB
libGLESV2.dll	2019/10/25 16:56	应用程序扩展	3,491 KB
libsynexens3.dll	2022/8/19 14:37	应用程序扩展	1,247 KB
msvcp120d.dll	2013/10/4 23:58	应用程序扩展	1,076 KB
msvcp140.dll	2021/7/17 17:22	应用程序扩展	604 KB
msvcr100.dll	2019/1/17 4:48	应用程序扩展	810 KB
msvcr120d.dll	2013/10/4 23:58	应用程序扩展	2,101 KB

2.3. Hardware connection

Connect the CS20 camera to the USB interface of the PC computer through the data cable：

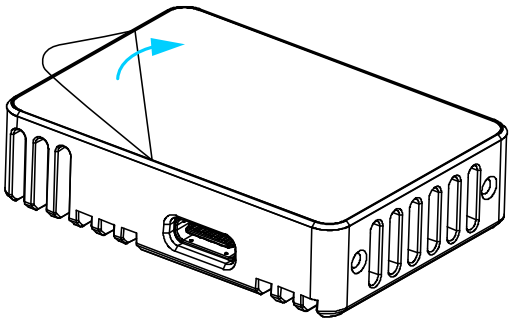


CS20 outside view

After the device is connected normally, Running the Credimension Viewer tool (double-click the Credion.exe execution file), click Choose Module, and CS20 will appear:

Note: Turn off others camera devices in the computer before turning CS20 on, otherwise the CS20 camera will be occupied and there will be no screen display.

Warm tip: Please tear off the protective film on the top of the glass cover plate of CS20 module before use. If there is no protective film, this tip can be ignored.



3. Tool instruction

3.1. Turn on the device

Select the current camera device, it will display Depth Camera, click the button.

Warm tip: this window size can be adjusted manually drag.

3.2. Obtain Device Information

Click the Device Information button to get the basic information of the current device.

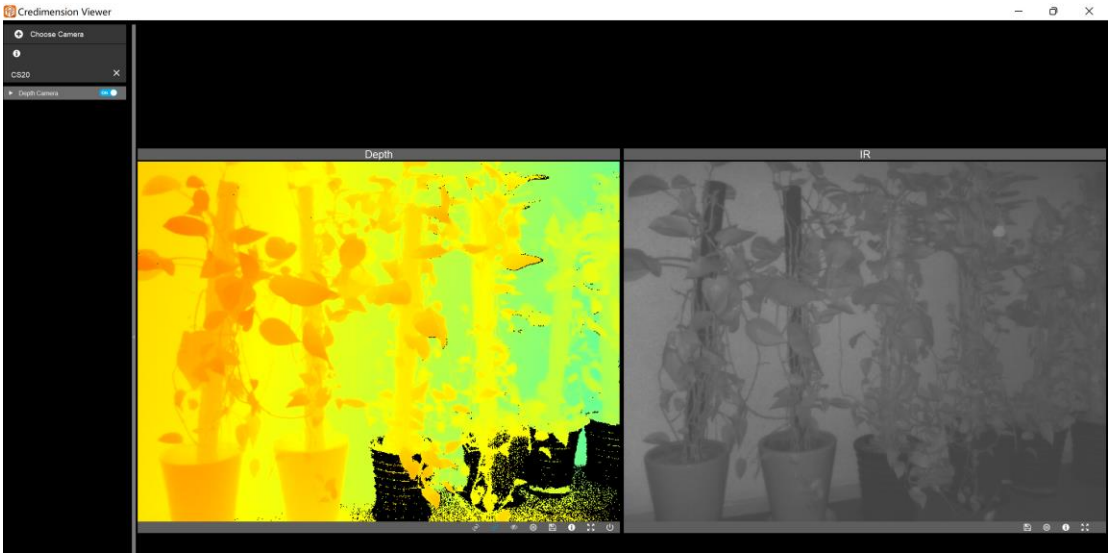
The basic information includes: product name, product SN number, firmware version, SDK and Viewer version.

3.3. Display 2D depth image

Click the Depth Camera switch button, after waiting 5 seconds can see the picture.

Click the mouse on the depth screen to view the depth value of the currently clicked pixel.

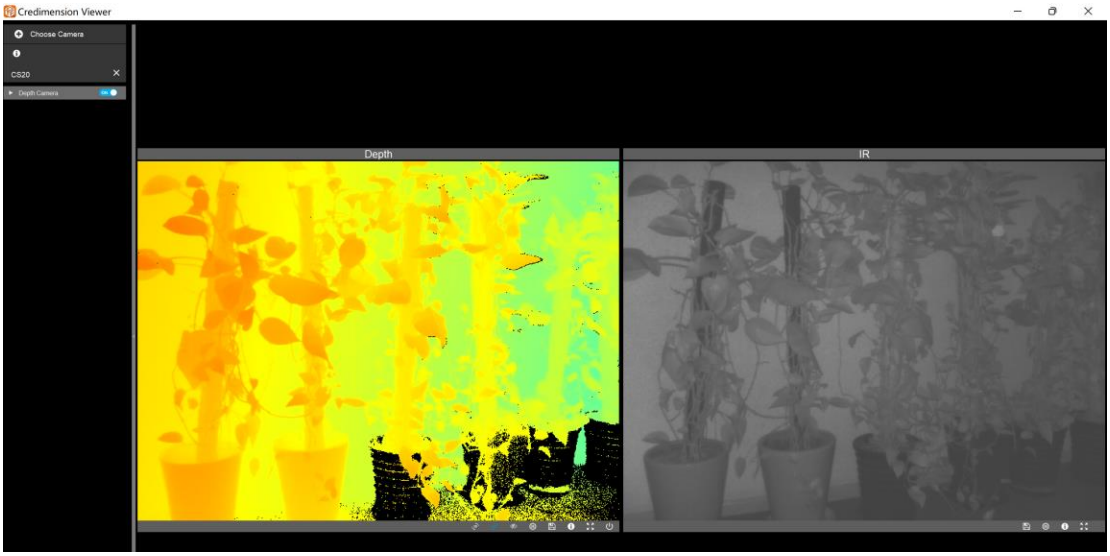
(Note: When the module is opened for the first time, the download time is set to about 40 seconds. Do not close the module or the GUI during the download.)



The IR chart is displayed on the right side of the Depth screen. You can view the picture. Click the IR screen to view the IR intensity value of the current position.

3.4. Enlarge and restore the window

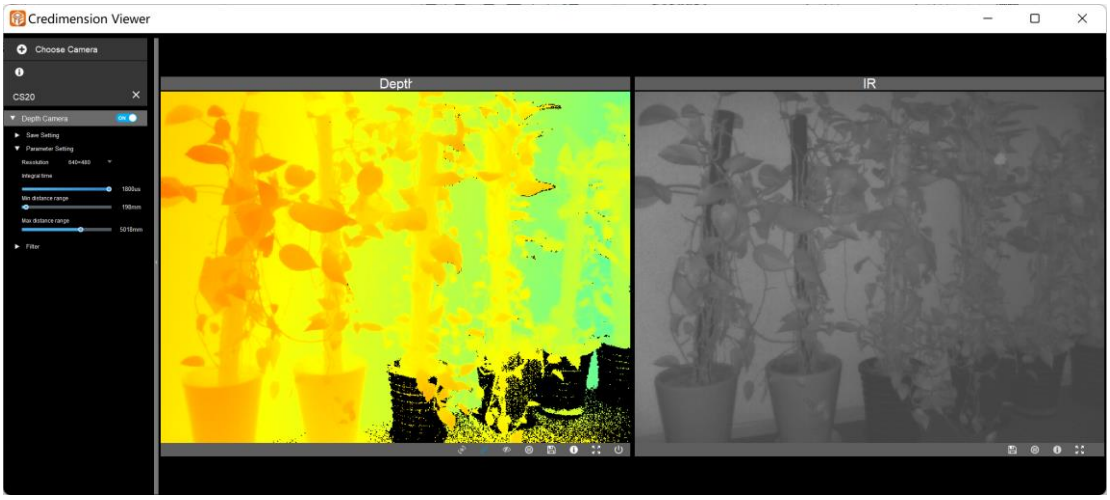
Click to enlarge or restore the depth window or IR window



3.5. Adjustment parameters

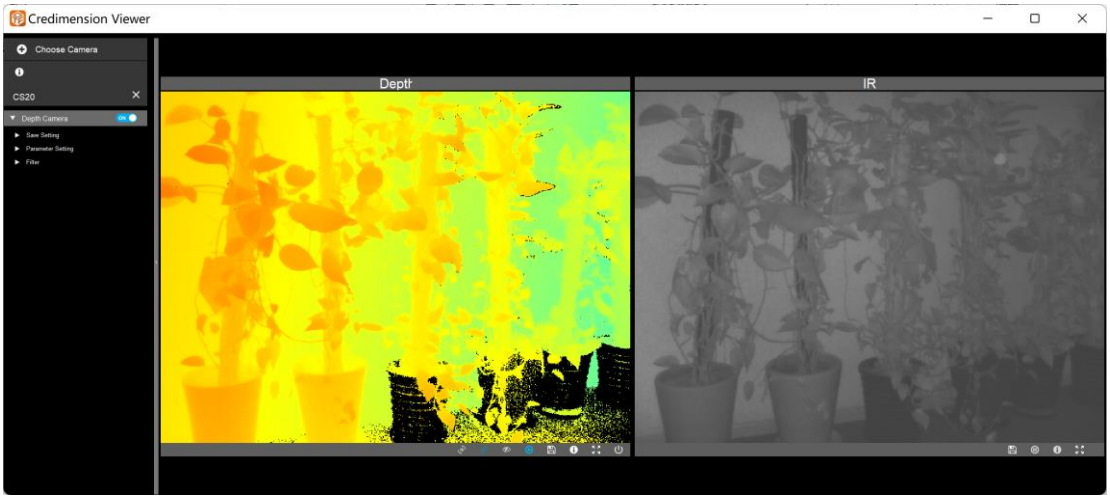
Click the drop-down arrow on the left side of Depth Camera to set saving information,

adjusting parameter information, setting screen, etc. Click parameter setting to display the parameter adjustment box, you can choose the resolution 320*240 (default) or 640*480; adjust the exposure time; the minimum distance display range; the maximum distance display range.



3.6. Pause the depth image screen

Click the pause button at the bottom of the screen to pause the depth image screen or IR image screen.

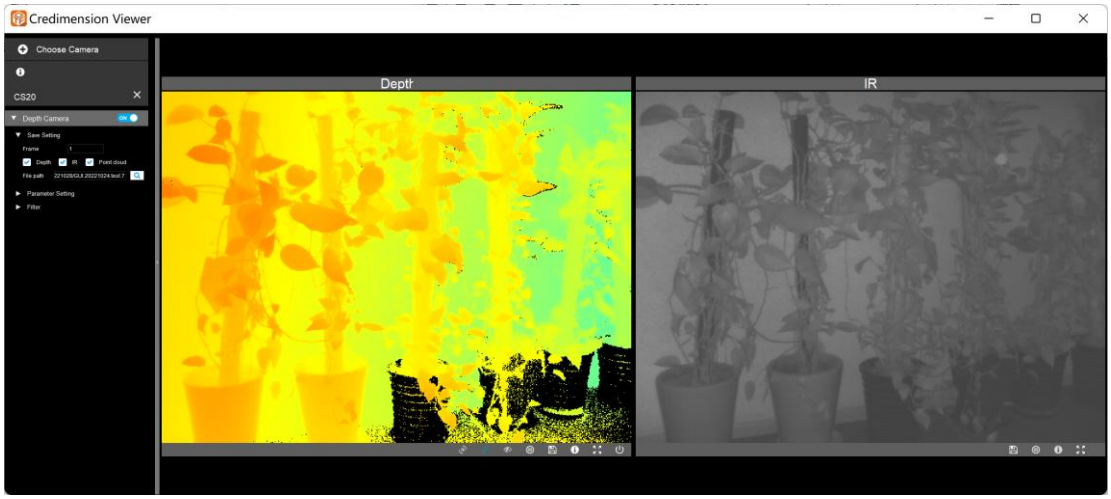


3.7. Image saving

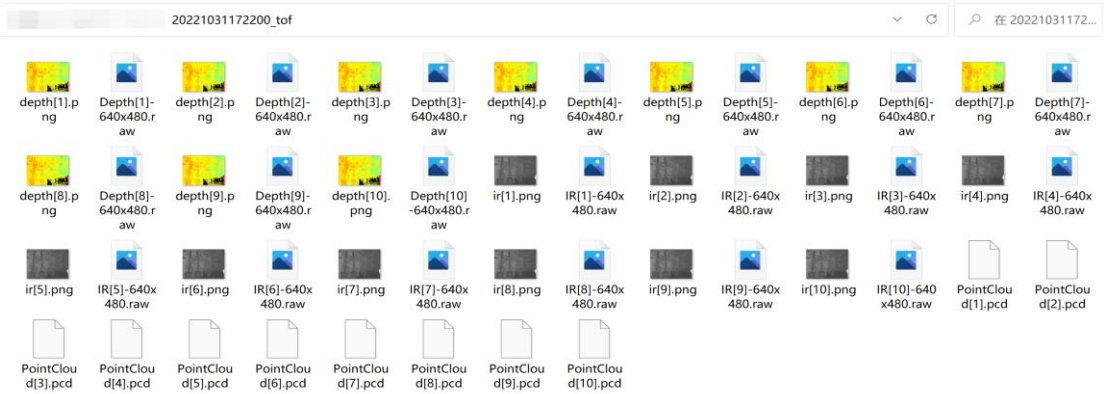
Click the drop-down arrow on the left side of Depth Camera to set saving information, adjusting parameter information, setting screen, etc. Click the drop-down button on the left

side of save setting to set the number of data frames to be saved. Check the type Depth, IR or Point cloud, and select the file path to save the data. After setting, t when it starts again, the software will default to the latest save path, save frame number.

Click the Save button at the bottom of the Depth screen or the bottom of the IR image to save successfully.

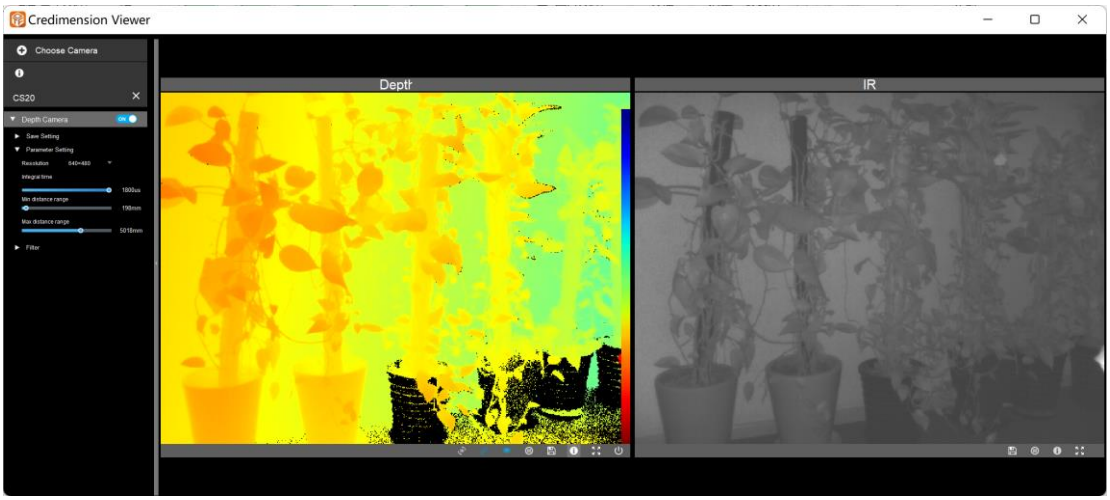


After saving, create a folder in chronological order to automatically save data, save depth png and raw data formats, IR png and raw data formats, and point clouds save pcd data formats.



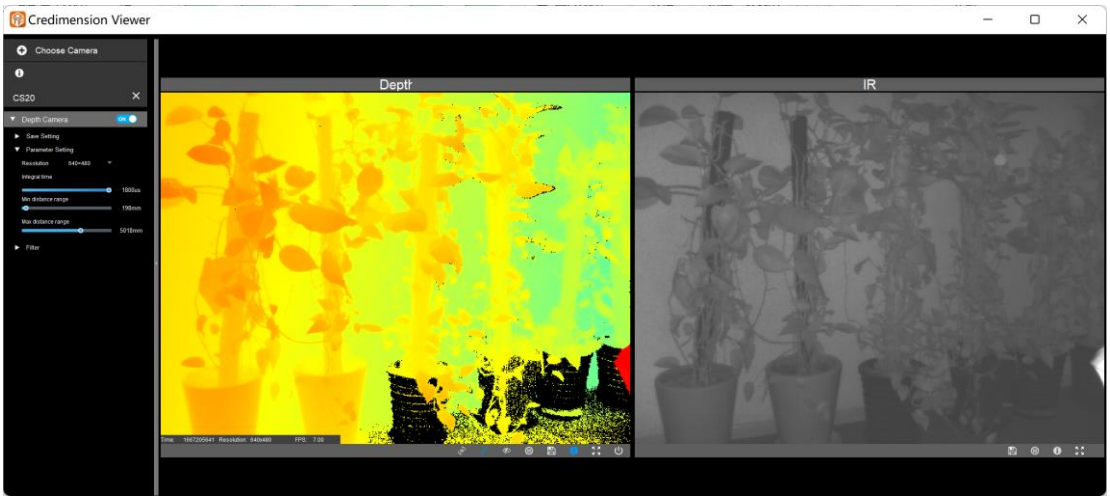
3.8. Display color bar

Click the View color bar button at the bottom of the screen to display the color bar.



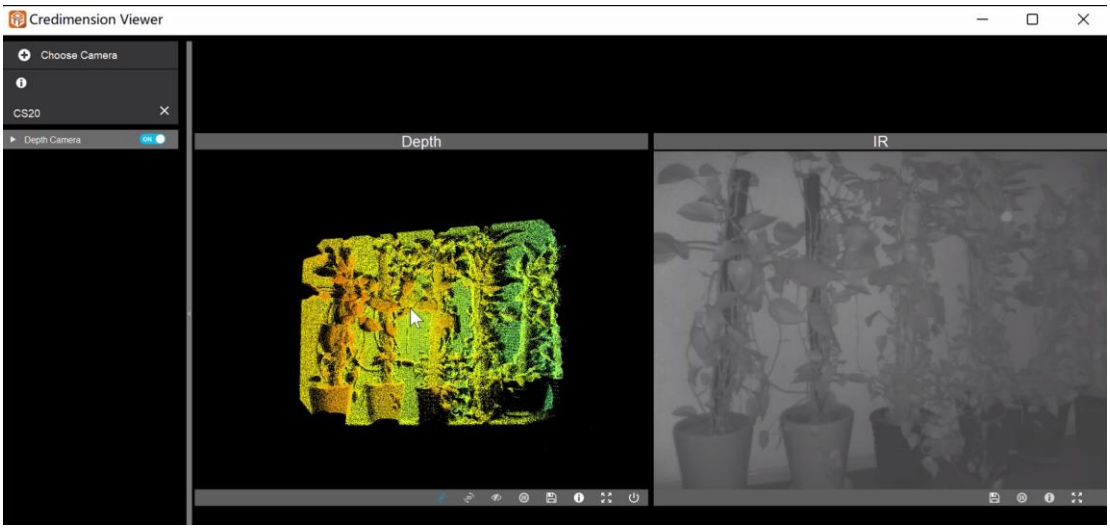
3.9. Display screen information

Click the picture information button at the bottom of the picture to display the current time stamp, current resolution, and current frame rate information at the lower left corner of the picture.



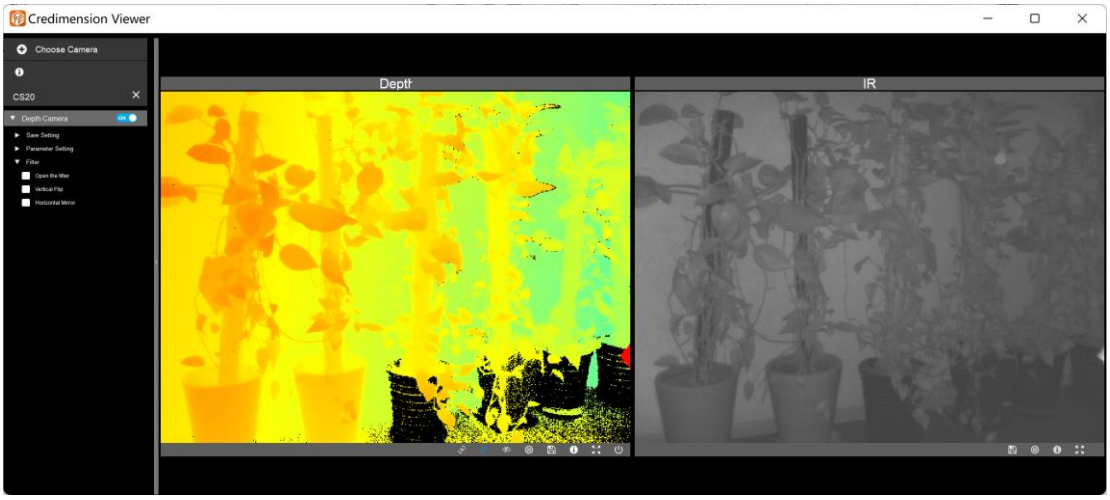
3.10. Display point cloud

Click the 3D display button to display the point cloud image, Drag the mouse to zoom in and out to view the point cloud:

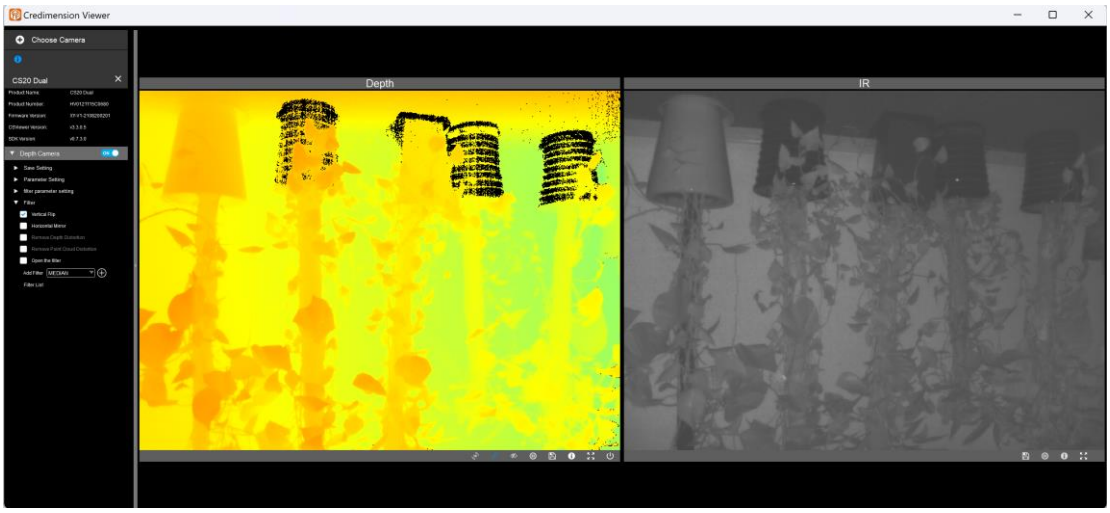


3.11. Screen settings- Flip

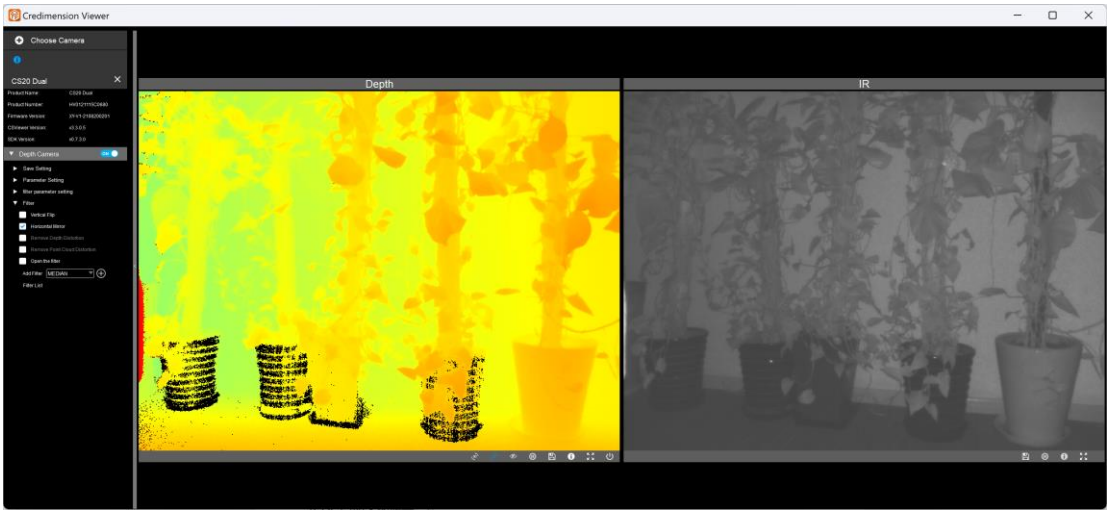
Click the drop-down button on the left side of the fitter to set whether to add filtering to the screen, and whether to flip it horizontally or vertically.



Vertical flip：：



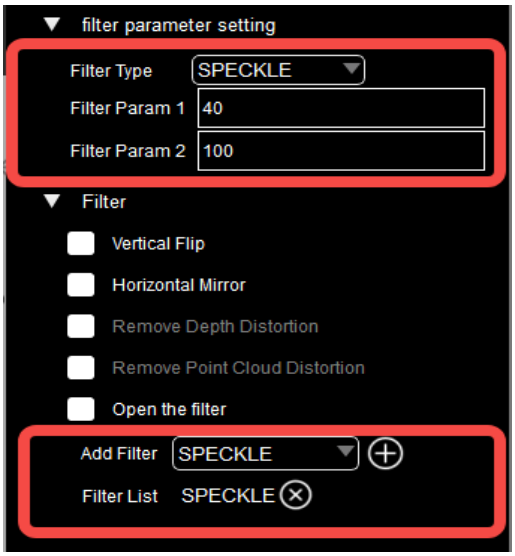
Horizontal mirror：



3.12. Screen settings- Filter

The configurable parameter is SPECKLE, as shown in the figure below. When setting speckle filtering, select Filter. Type as speckle

Click "Add Filter" in the Filter parameter, and click "plus" to add spots in the filter List (as shown in the figure below) to successfully set spot filtering.

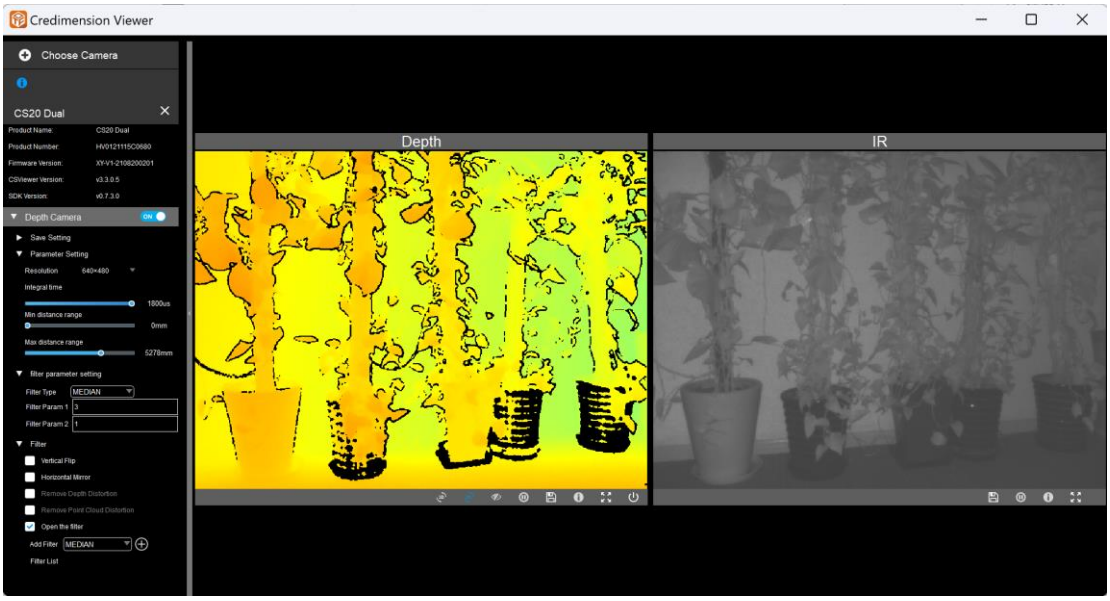


Amplitude：The default value is 6, the number of parameters is 1, and the value range is 0 to 100

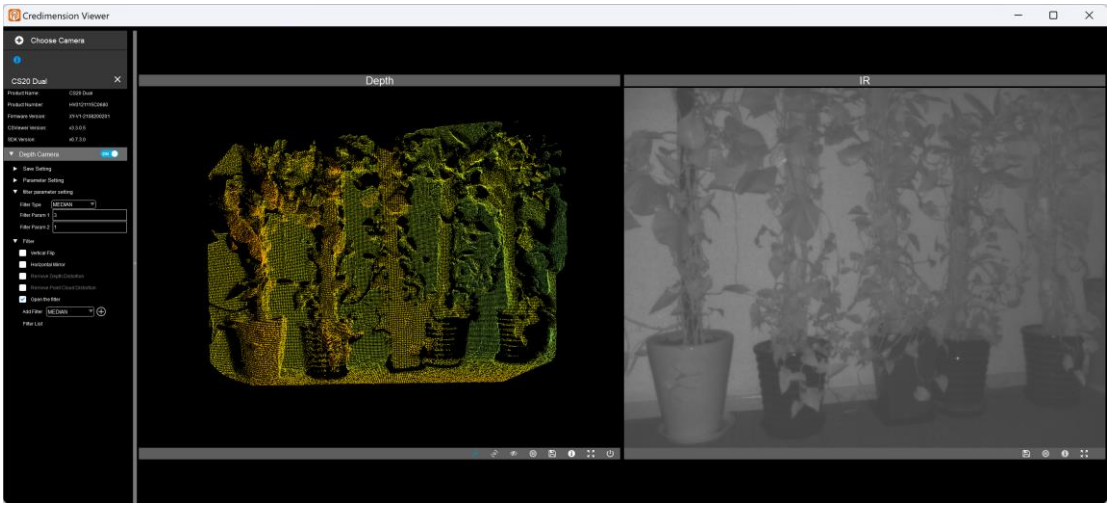
Median：The default value of the first parameter is 3, which can be set to 3 or 5. The default value of the second parameter is 1, which can be set to 0 to 5.

Edge：The default value is 50. The value ranges from 20 to 200.

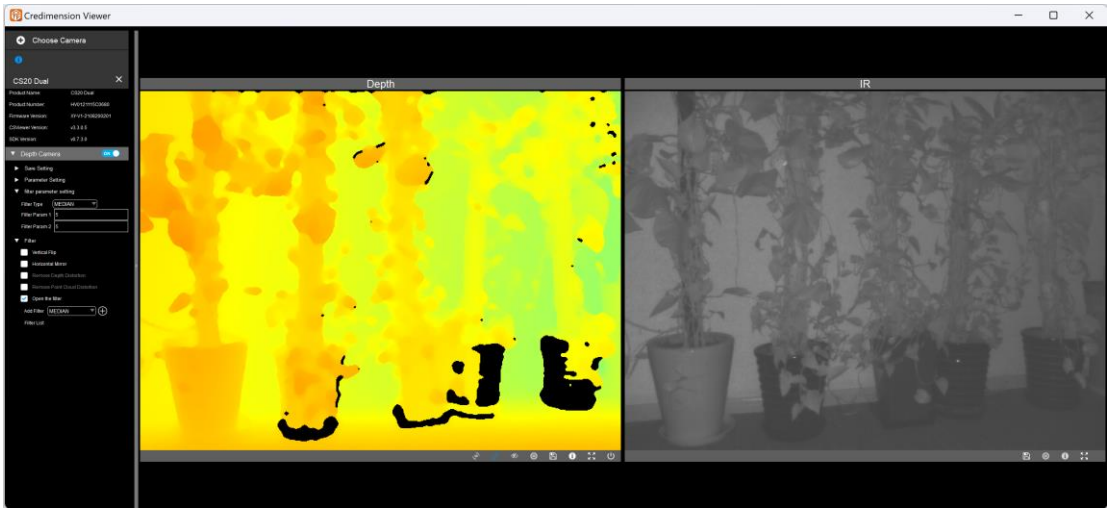
The depth effect of default filter parameters:



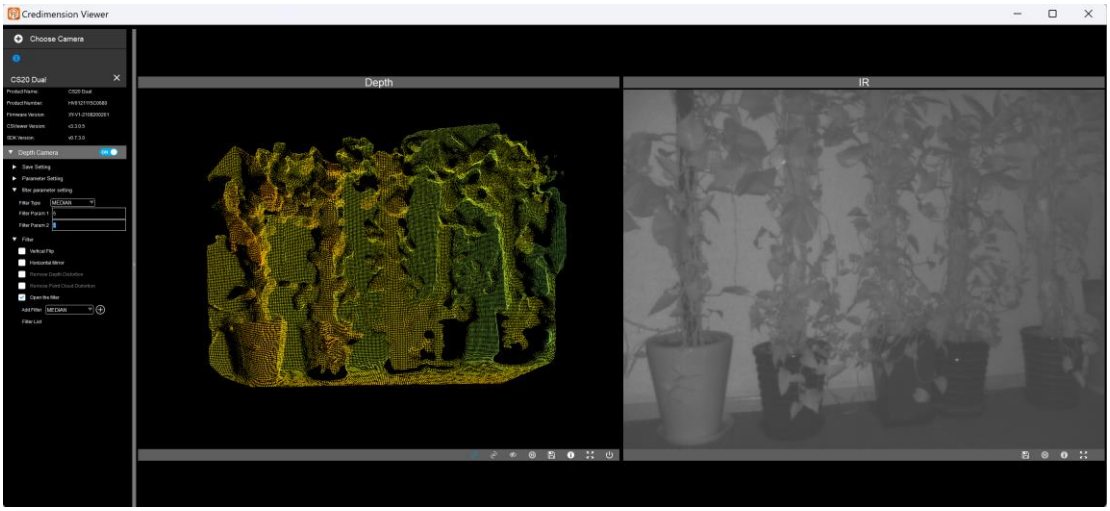
The point cloud effect of default filter parameters:



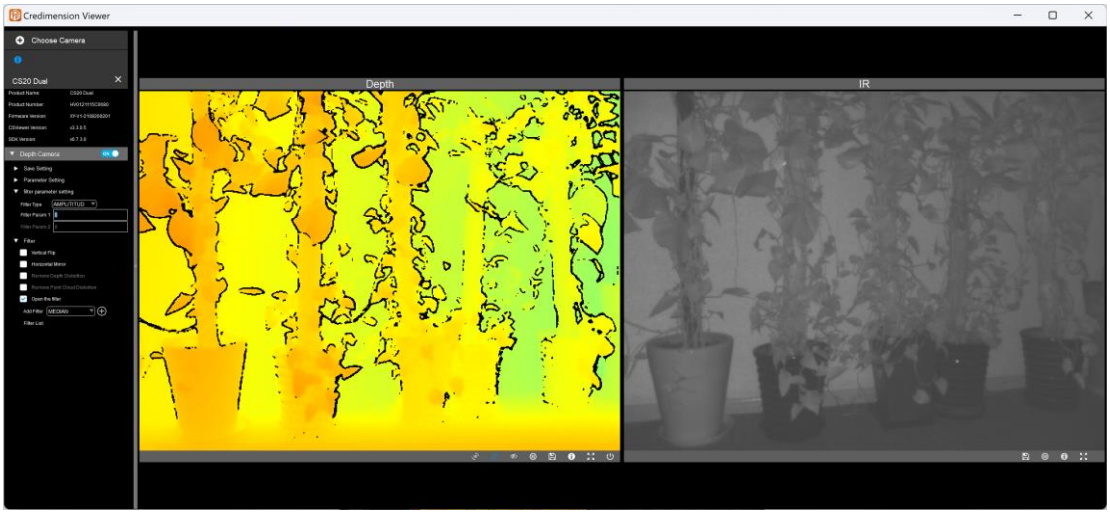
The depth effect of setting maximal median filter parameter:



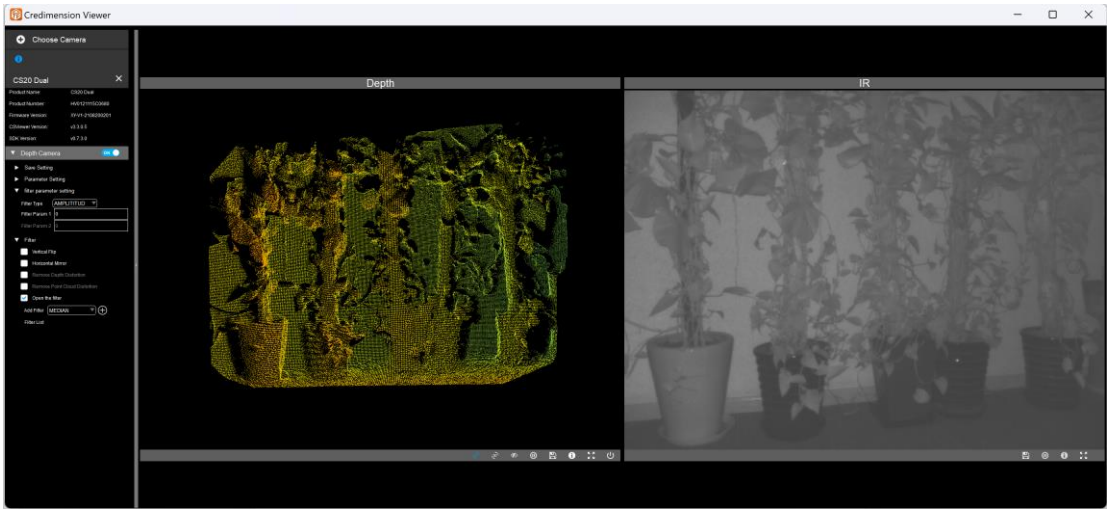
The point cloud effect of setting maximal median filter parameter:



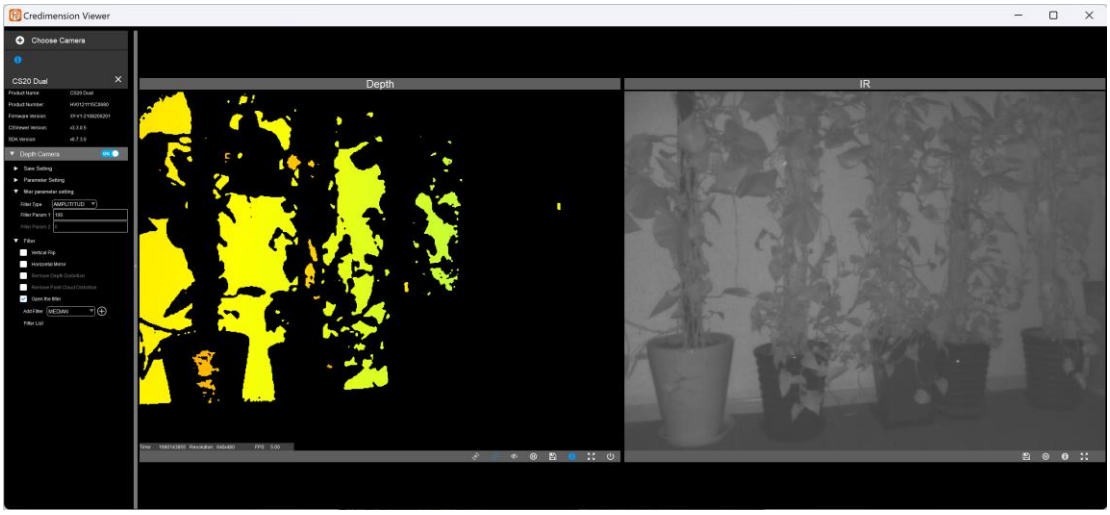
The depth effect of setting minimum amplitude filter parameter:



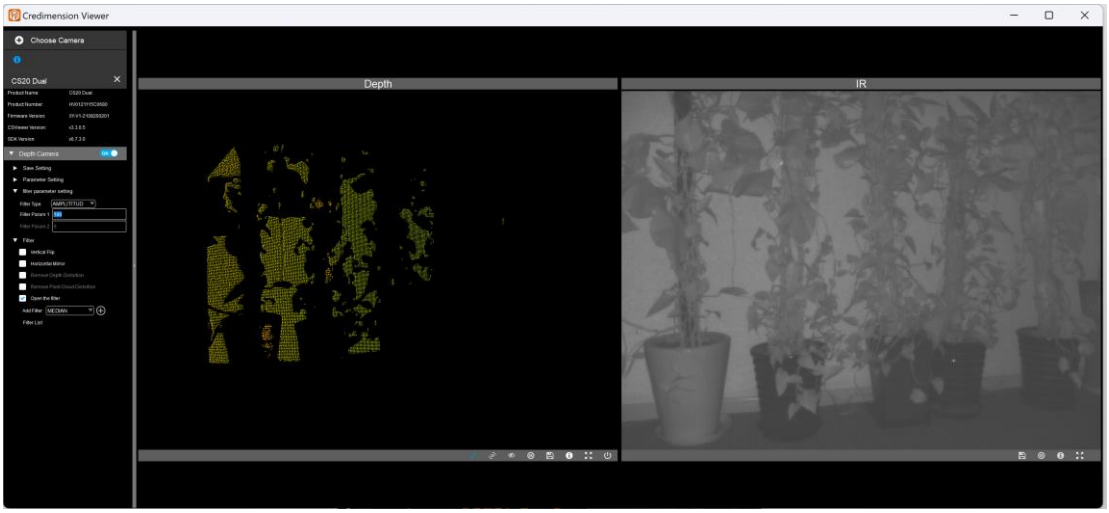
The point cloud effect of setting minimum amplitude filter parameter:



The depth effect of setting maximal amplitude filter parameter:

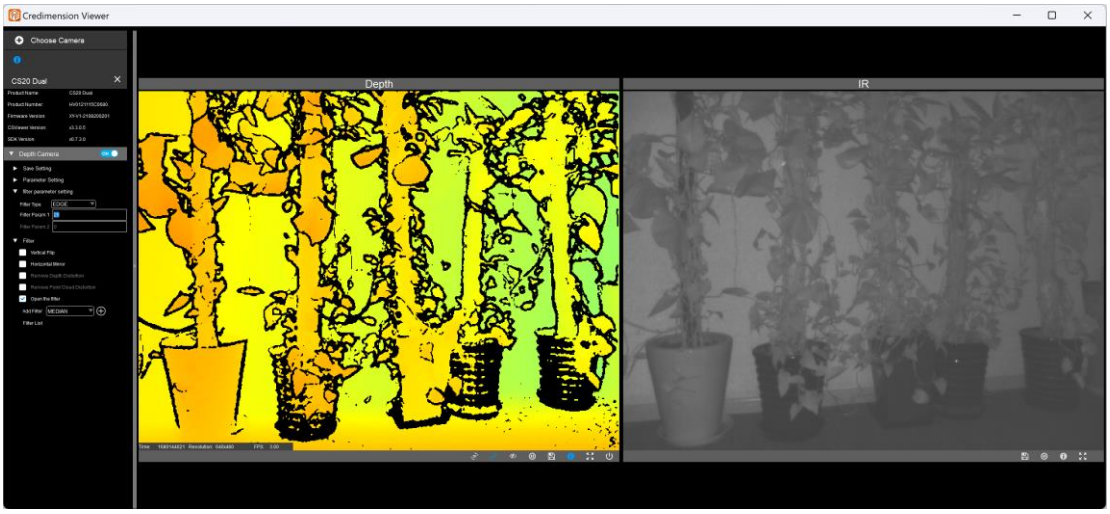


The point cloud effect of setting maximal amplitude filter parameter:

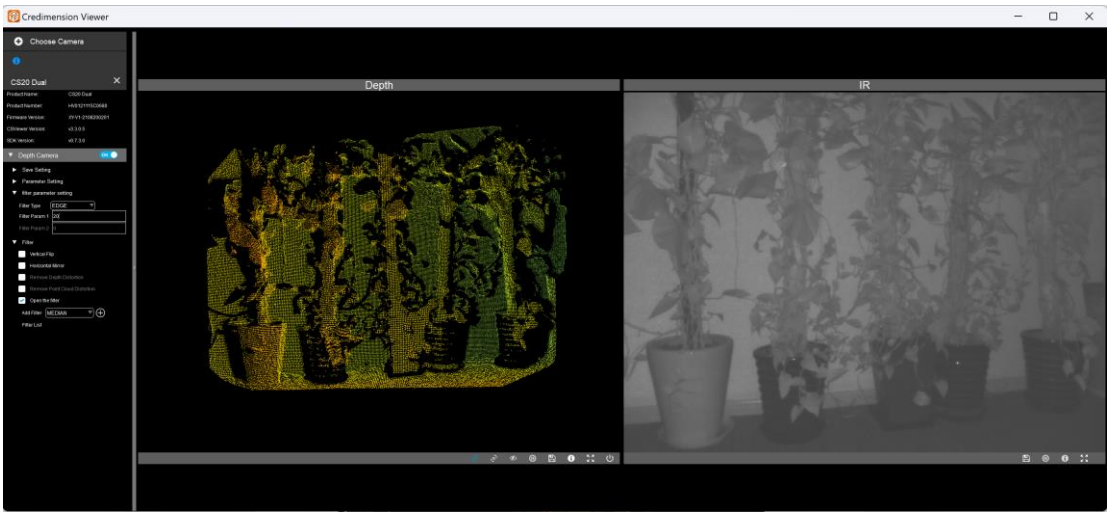


Note: The larger value of setting amplitude filtering, the more data will be filtered out (as shown above). You can set the filtering values as required.

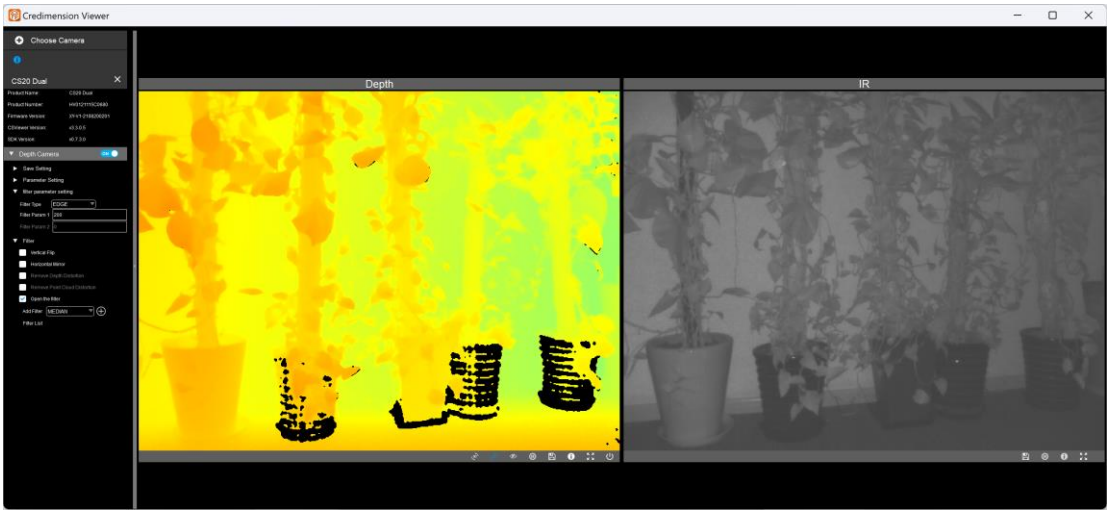
The depth effect of setting minimum edge filter parameter:



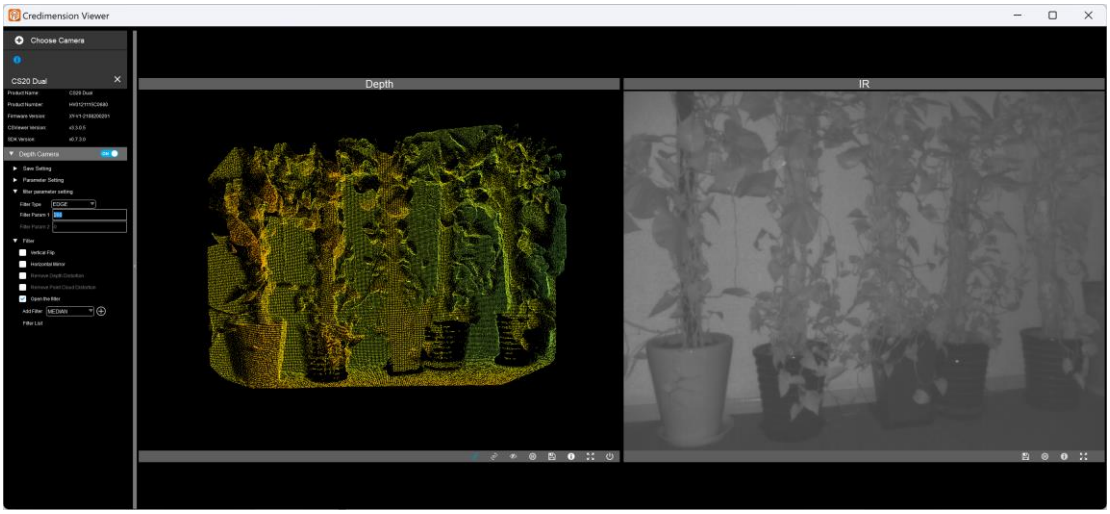
The point cloud effect of setting minimum edge filter parameter:



The depth effect of setting maximal edge filter parameter:



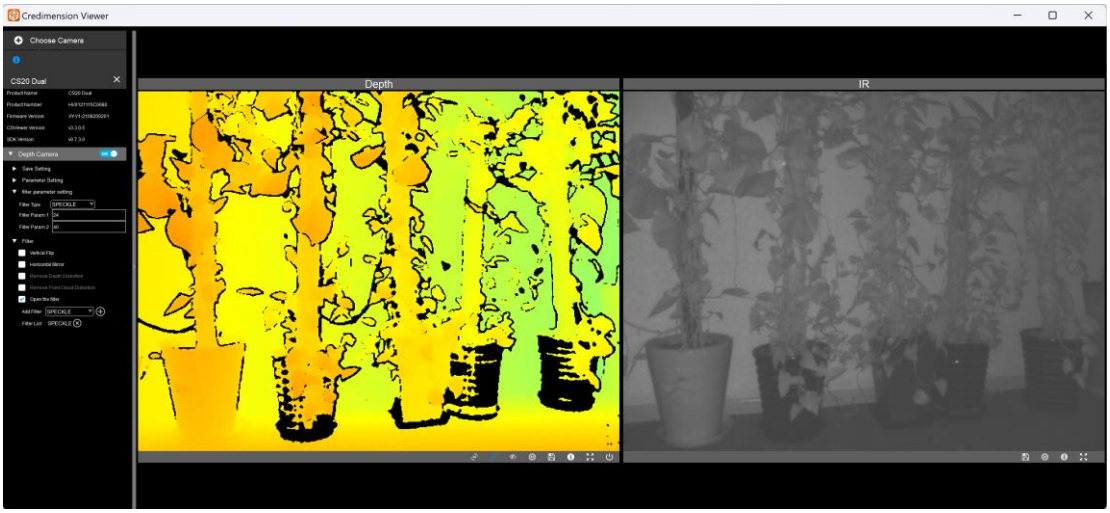
The point cloud effect of setting maximal edge filter parameter:



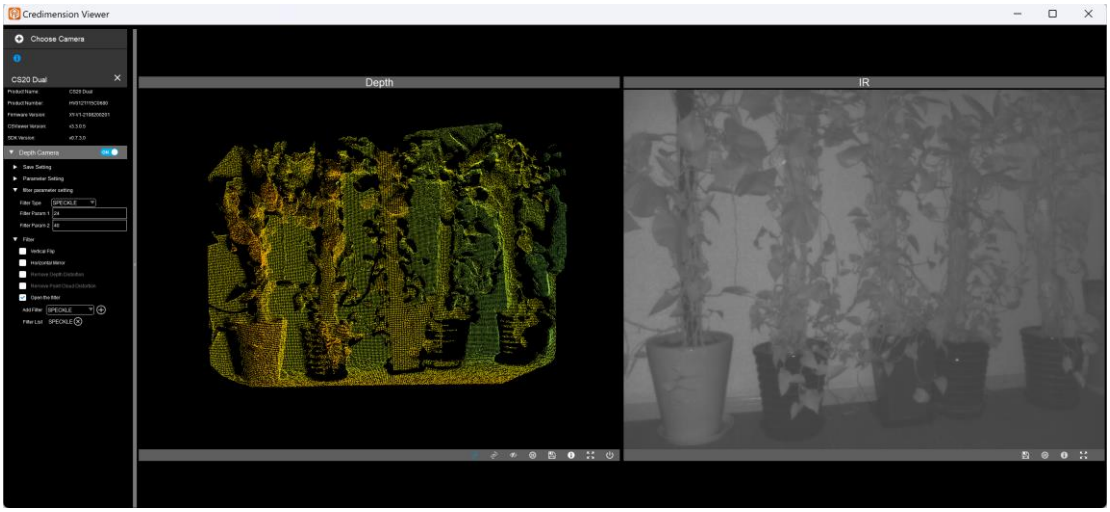
Speckle：The default value is 40. The value ranges from 24 to 200，

The default value of the second parameter is 100. The value ranges from 40 to 200.

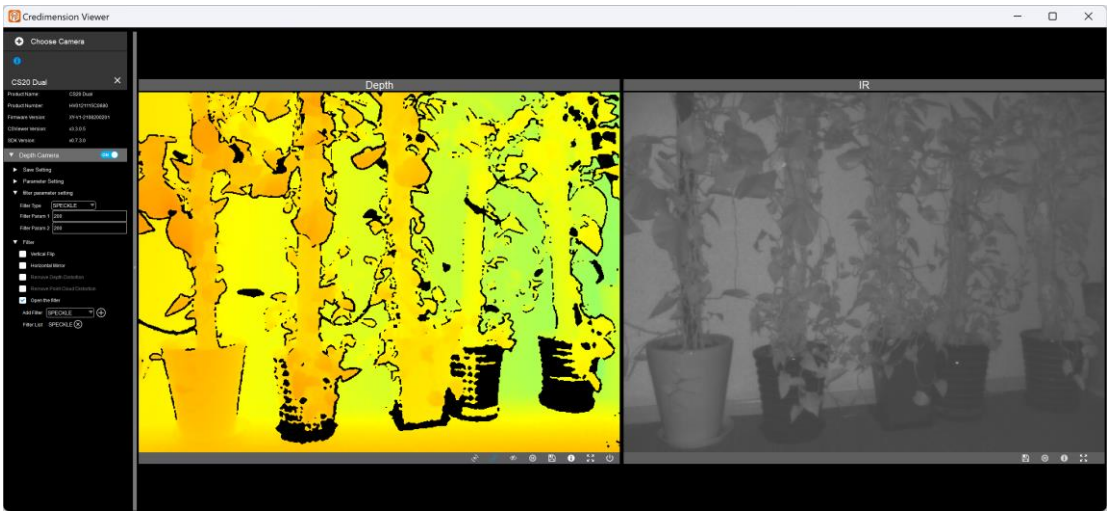
The depth effect of setting minimum Speckle parameter:



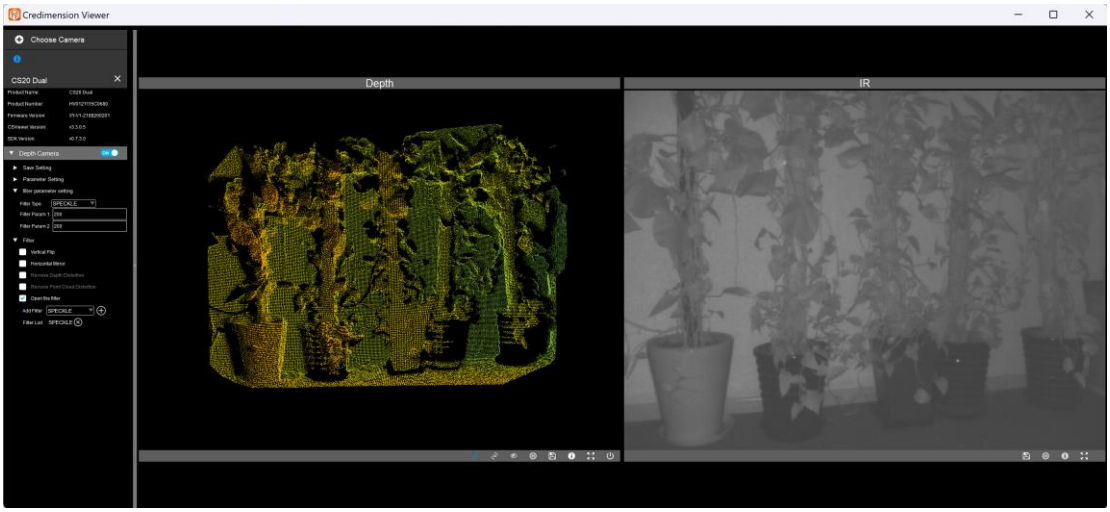
The point cloud effect of setting minimum Speckle parameter:



The depth effect of setting maximal Speckle parameter:



The point cloud effect of setting maximal Speckle parameter:



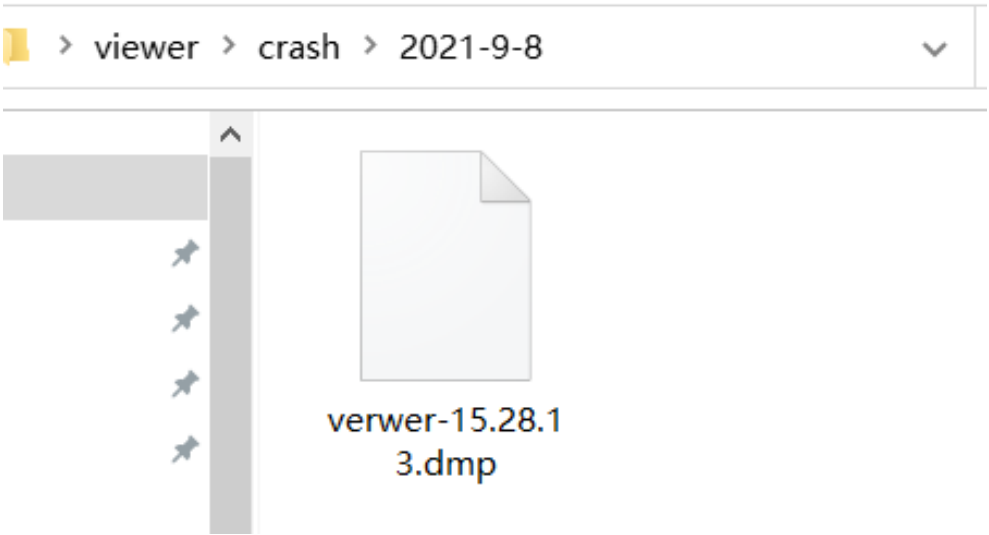
3.13. Version Update information

The version. txt file in the same installation directory contains the updated Version information and optimized content, as shown in the following figure:

pcl_io_release.dll	2017/8/8 17:22	应用程序扩展	6,178 KB
pcl_kdtree_release.dll	2017/8/8 16:58	应用程序扩展	992 KB
pcl_visualization_release.dll	2017/8/8 18:03	应用程序扩展	8,504 KB
pthreadVC2.dll	2012/5/27 14:44	应用程序扩展	81 KB
Qt5Core.dll	2022/9/2 17:00	应用程序扩展	5,881 KB
Qt5Gui.dll	2019/10/25 16:56	应用程序扩展	6,314 KB
Qt5Svg.dll	2019/10/25 20:40	应用程序扩展	328 KB
Qt5Widgets.dll	2019/10/25 16:56	应用程序扩展	5,453 KB
Qt5Xml.dll	2019/10/25 16:56	应用程序扩展	192 KB
SonixCamera.dll	2022/3/25 21:03	应用程序扩展	1,756 KB
vcruntime140.dll	2019/9/27 20:06	应用程序扩展	88 KB
vcruntime140_1.dll	2021/7/17 17:34	应用程序扩展	44 KB
Version.txt	2022/9/2 16:59	文本文档	1 KB
vtkalglib-8.0.dll	2018/12/16 14:02	应用程序扩展	113 KB
vtkCommonColor-8.0.dll	2018/12/16 14:10	应用程序扩展	120 KB

3.14. Error message dmp address

Under the crash folder at the same level of the installation directory, Find the folder with the error date to find the dmp file, as below:



4. Disclaimer

The device application information and other similar content described in this publication is provided for your convenience only and may be superseded by updated information. It is your responsibility to ensure the application meets the technical specifications. Regarding this information, our company does not make any express or implied, written or oral, statutory or other statements or guarantee, including, but not limited to, representations or warranties with respect to its use, quality, performance, merchantability or fitness for a particular purpose. Our company does not assume any responsibility for this information and the consequences arising from its use. This product must not be used as a critical component in life support systems without the written approval of the company.