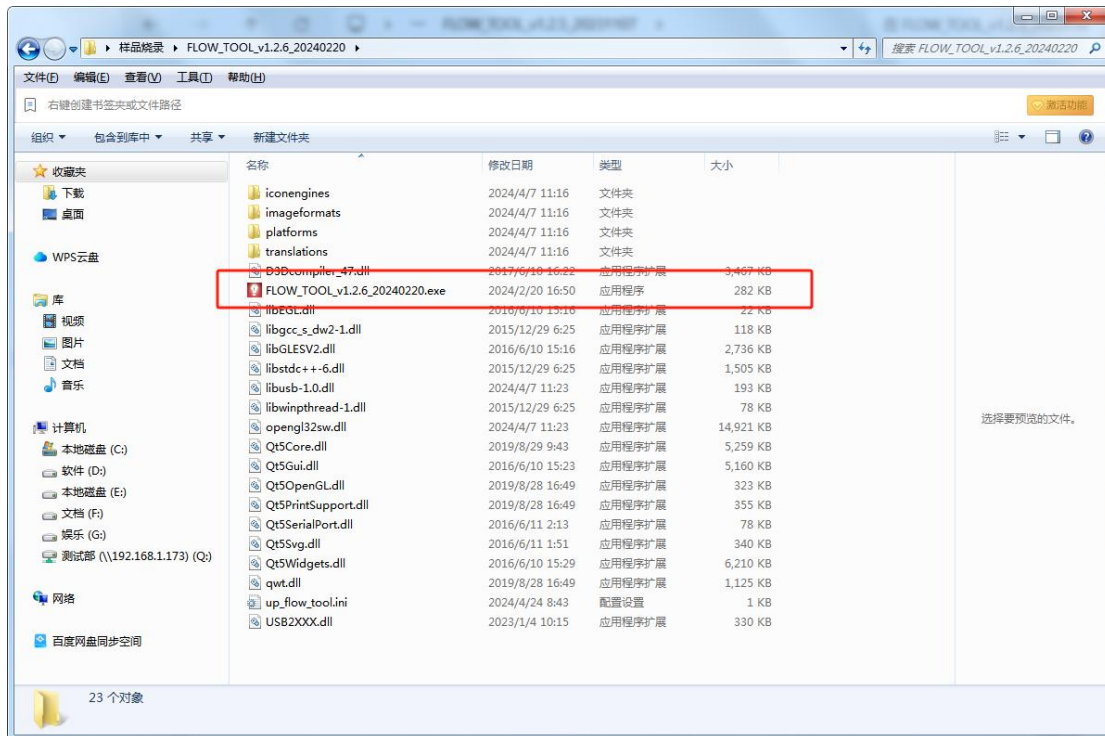


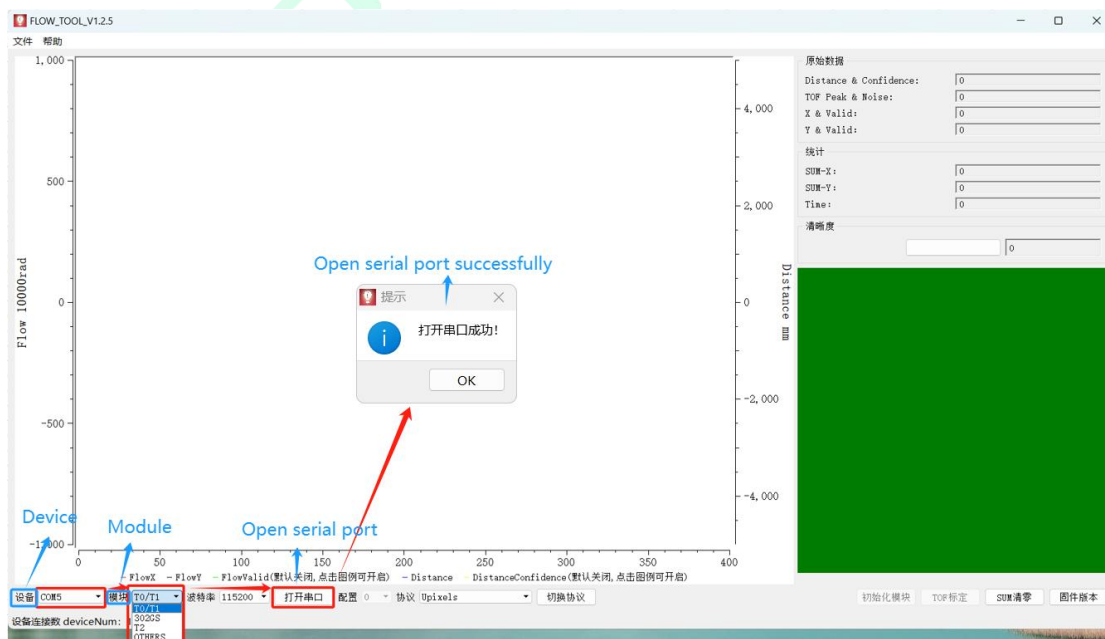
Upper computer operation guide

1.Double-click “FLOW_TOOL_v1.2.6_20240220.exe” to open upper computer.



2.Select the corresponding device and module, and click Open Serial Port. The message "Open serial port successfully" will be displayed.

(1)If the serial port fails to be opened, you can replace the serial port board and cable, or check whether the selected device matches.

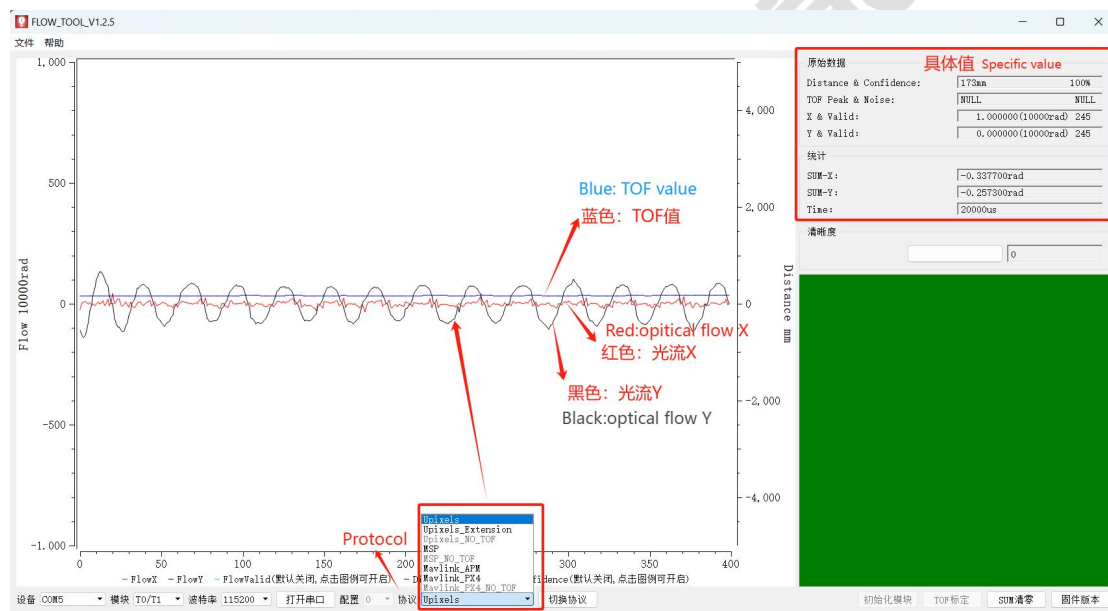


3. Select the "protocol" that matches the module, the waveform will be automatically output, and the TOF and optical flow data will be displayed by default. The blue waveform is the TOF value, the red waveform is the optical flow X, and the black waveform is the optical flow Y. The upper right corner is the specific value.

(1) Confirm the protocol of the module: you can select the highlighted protocol content to check one by one, and the waveform output after selection represents the protocol; Or directly select the required protocol, click "Switch protocol", the waveform output can be successfully switched.

(2) Determine the availability of TOF data: the distance between the tested surface and the module is correct.

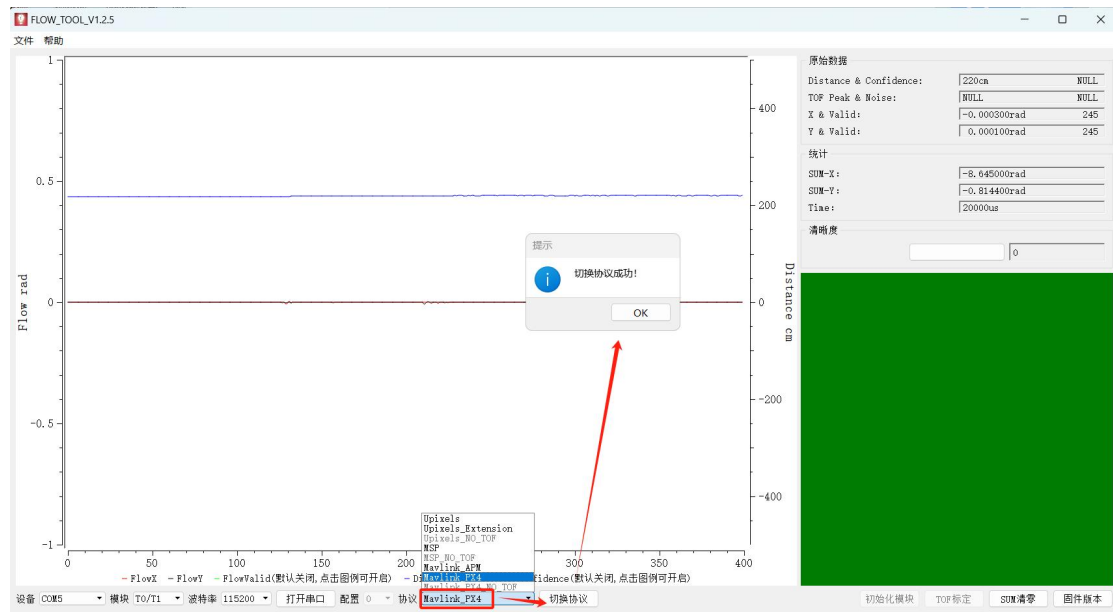
(3) Determine the availability of optical flow data: with a textured object, such as a palm, a book with words, etc., placed in a position about 10cm away from the chip, sliding evenly back and forth or left and right, you can see the optical flow XY waveform uniform and orderly output.



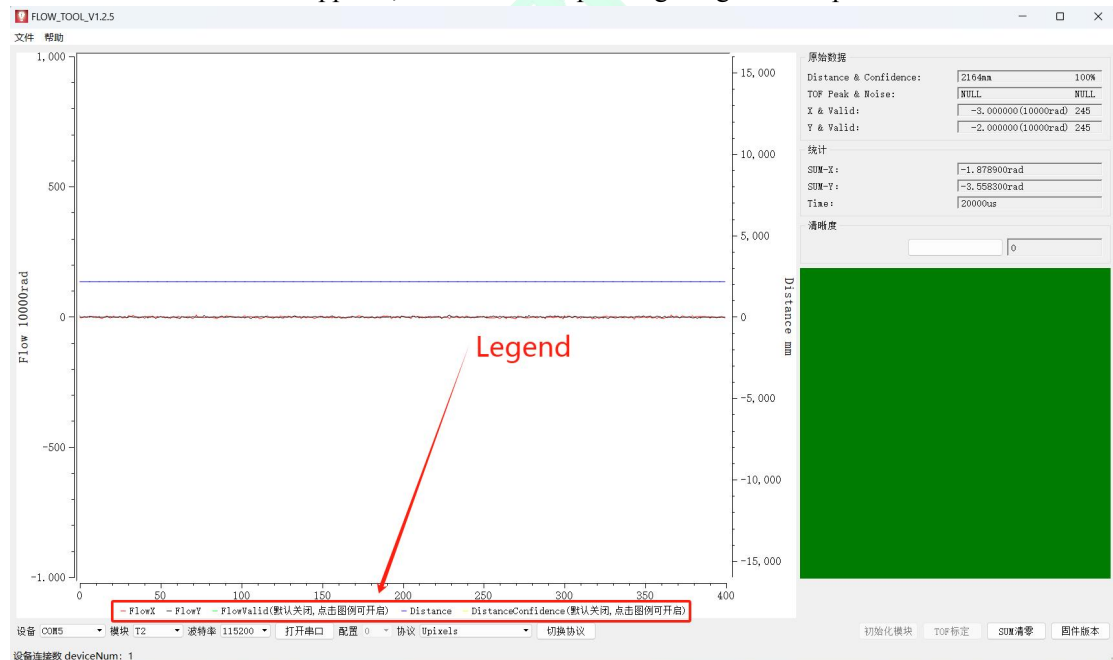
4. Switch protocol: If the current protocol is Upixels, switch to PX4.

(1) Protocol Select Mavlink_PX4, click "Switching protocol" button, prompt "Switching protocol successful", normal waveform output.

(2) If the protocol switchover fails, power on the module again, and switch on the software again.



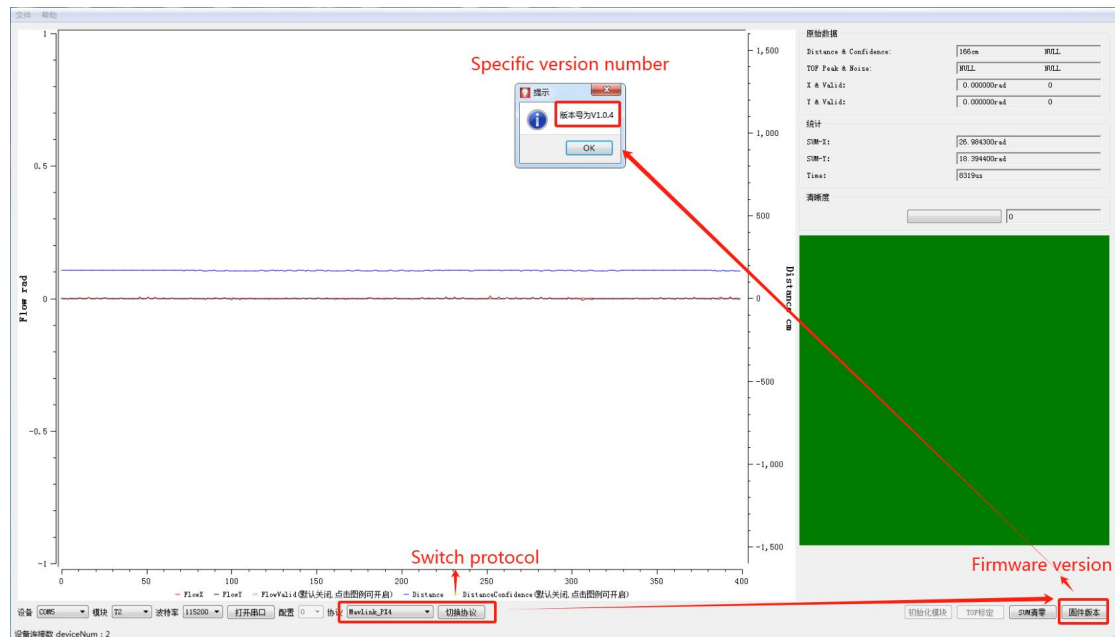
5. When the waveform disappears, click the corresponding "Legend" to open it.



6. View the module firmware version

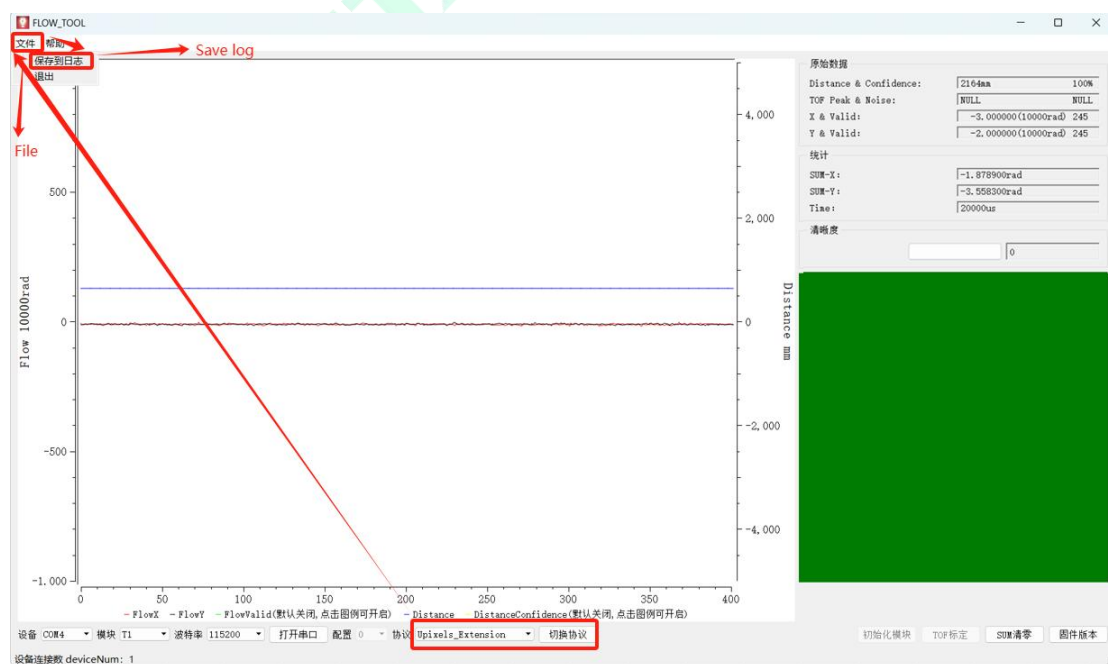
(1) Switch to PX4 protocol: Select "Mavlink_Px4" and click [Switch protocol]. After the switch is

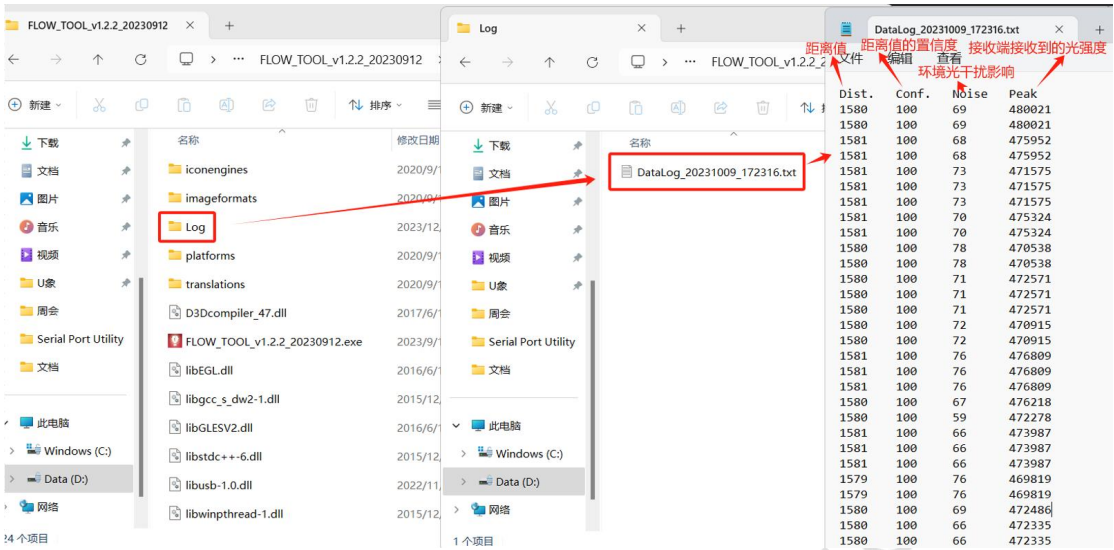
successful, click [Firmware version]. The specific version number prompt box will pop up.



7. Print logs: When the TOF high-low distance is switched, you can check whether there is an intermediate value

- (1) Switch to Upixels_Extension protocol: Select "Upixels_Extension" and click [Switch protocol];
- (2) Click the file in the upper left corner and click Save Log;
- (3) The logs are saved in the log folder of the application program, and the latest logs are displayed according to the time.





Note:Dist represents distance,Conf represents Confidence of the distance value,Noise represents ambient light interference,Peak represents illumination intensity.