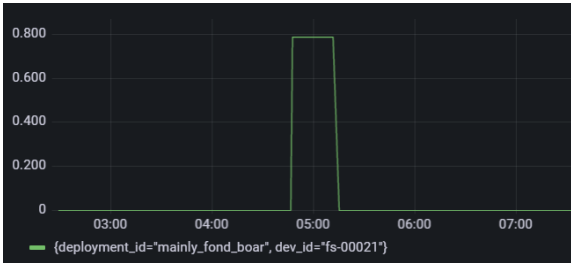
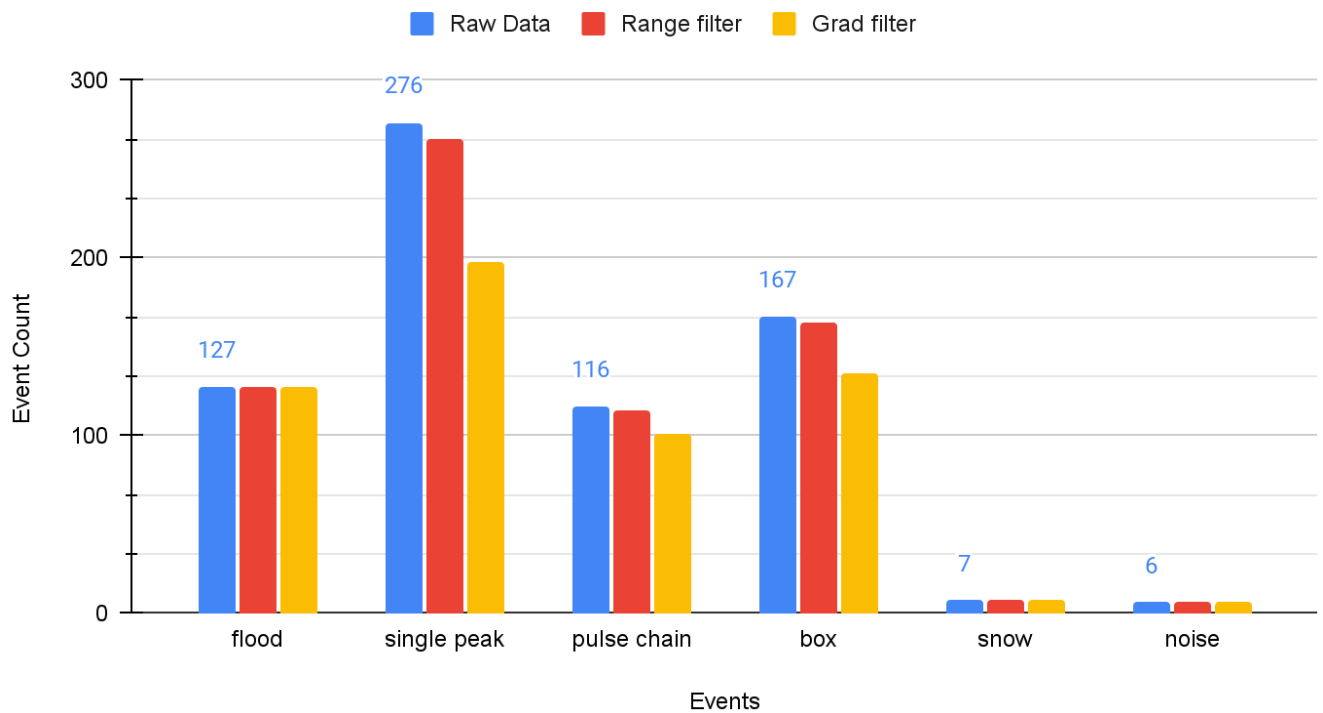


Class	Graph Example
Flood	
Single Peak	
Pulse Chain	
Box	
Snow	

Event Type	Raw Data	Range Filter	Gradient Filter
Flood	127	127	127
Single Peak	276	267	198
Pulse Chain	116	114	101
Box	167	163	135
Snow	7	7	7
Noise	6	6	6
Total	699	684	574
Total Non-Flood	572	557	447

Filter Performance



Range Filter Performance:

- **% Non-Flood Events filtered: 2.62%**
- % Short Pulses filtered: 3.26%

- % Pulse Chains filtered: 1.72%
- % Boxes filtered: 2.40%
- % Snow filtered: 0.00%
- % Noise filtered: 0.00%

Gradient Filter Performance:

- **% Non-Flood Events filtered: 21.85%**
- % Short Pulses filtered: 28.26%
- % Pulse Chains filtered: 12.93%
- % Boxes filtered: 13.17%
- % Snow filtered: 0.00%
- % Noise filtered: 0.00%

Observations:

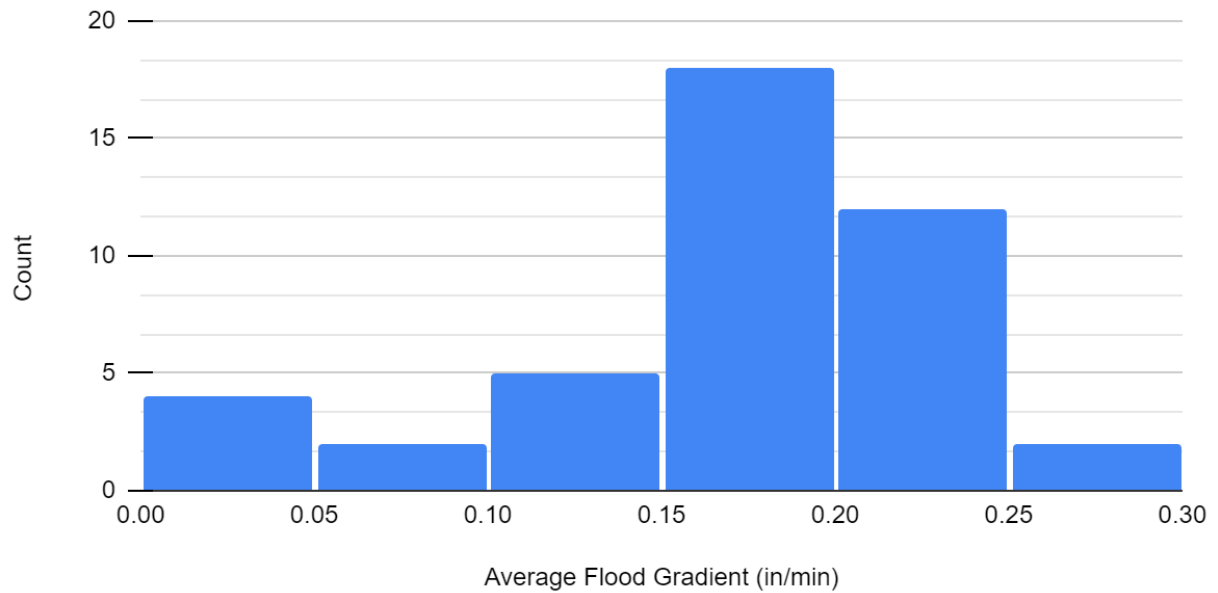
- Filters work better on short pulses
- No floods lost
- Some sensors get filtered better than others:
 - No events filtered at Russell St (easily_dear_mouse), Davenport Ct (mainly_fond_boar), Beach 84 St (daily_happy_satyr)
- In some cases, boxes and pulses below 1 inch also don't get filtered. This isn't included in the stats above since we ignored anything below 1 inch while labeling

To Do/ Ongoing:

- Calculate gradients of floods and other unfiltered events to compare with filtered events

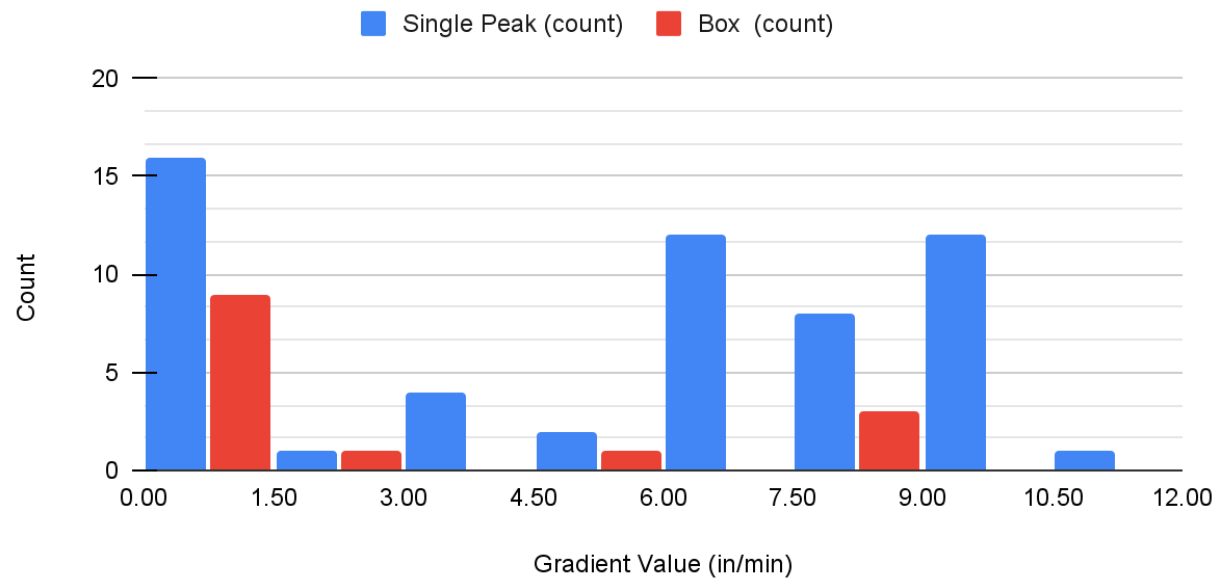
Average Flood Gradient

easily_dear_mouse (Russell St Pipe)



Noise Gradients

easily_dear_mouse (Russell St Pipe)



Noise Gradient

daily_gentle_beetle (BK - 4th Av/Garfield PI)

