

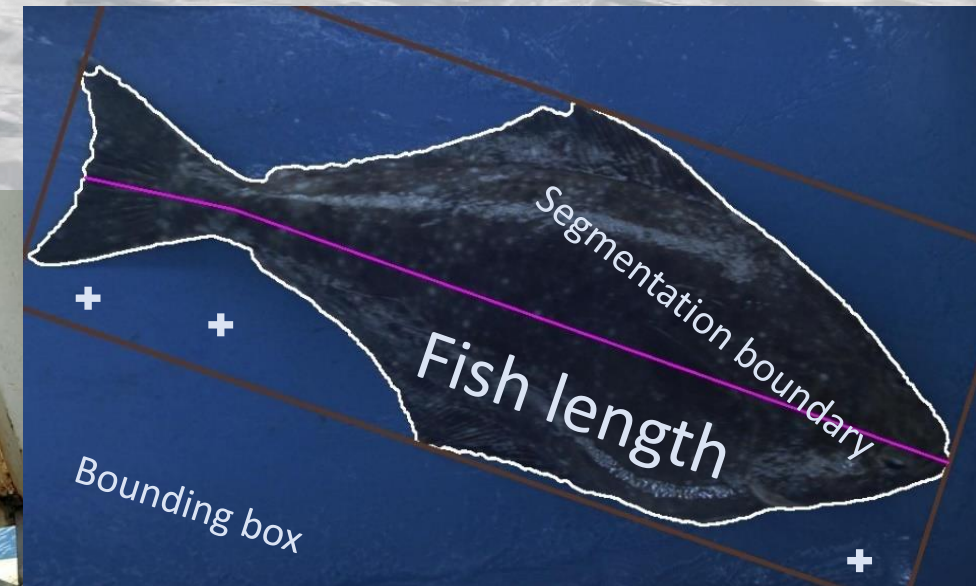
The Chute Camera

**Developing an automated tool to measure
halibut bycatch onboard trawlers**

**Dr. Craig Rose
FishNext Research**

Camera Chute

- Measures fish (can also identify species)
- Initial application:
 - Halibut discard accounting
 - Provides on-board total discarded weight



Recent Software Improvements

- Halibut shape matching
 - Improves measure of poor images
 - Allows measurement of partial fish
- Analysis from video as well as single images
 - Multiple measurements – select best combination
 - Wider range of available cameras

Recent Hardware Improvements

- Line-scan camera detector
- Testing of video camera collection
 - Salmon chute
- Automated port washing

Halibut chute development path

Deck sorting, expedited release

- Remaining 2018 – complete testing
- 2019 – Deploy and compare with observer data
- Implement for full halibut weight accounting

Image analysis capability/applications

- Detect, identify and measure fish on longlines, chutes and conveyors
- Other applications for trawl fisheries:
 - Catch / Bycatch / discard accounting
 - CP factories
 - CV deck discard (particularly prohibited spp)
- Application developments each take time

AFSC FMA EM Innovation Project (EM development)

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