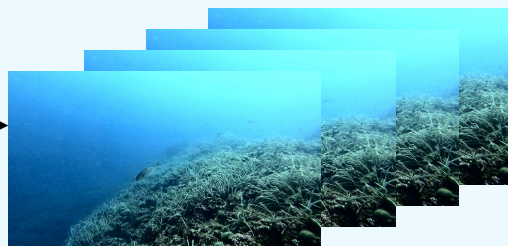




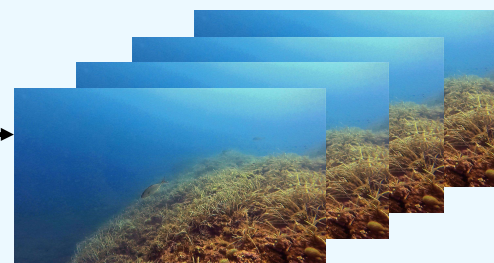
Original video

Frame
extraction
(5 FPS)



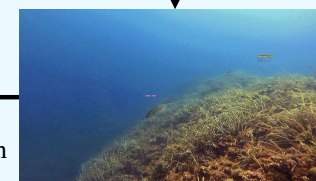
Videoframes 1920x1080

Color
correction
UIEC²Net



Videoframes
& resolution
corrected
modified 960x960

Detection by
YOLOv7
model



11 0.784896 0.285185 0.0416667 0.0259259 0.839355
6 0.449479 0.5625 0.8885417 0.130556 0.933594

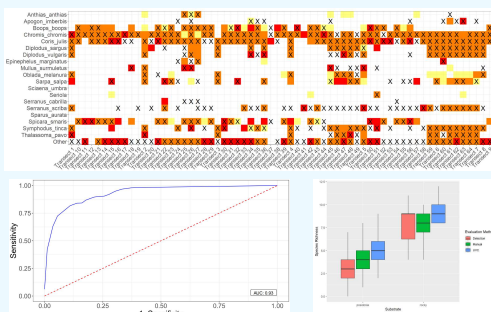
Frames with detections &
txt label files

Concatenation of
labels
& data preparation

	A	B	C	D	E	F	G	H
1	the	Boops,boops	Seriola	Sparus,sparus	Chromis,chromis	Other	Serranus,serranus	Goni,goni
2	OH010401	0	0	0	0	0	0	0
3	OH010779	172	2	89	0	0	0	0
4	OH011369	0	0	14	414	2	2	0
5	OH010785	11	0	9	144	0	0	5
6	OH010389	20	91	25	172	0	0	0
7	OH011372	46	0	12	1054	7	11	18
8	OH010424	1	0	0	1264	5	0	43
9	OH010417	8	0	28	735	4	0	3
10	OH010400	0	0	0	196	1	0	0
11	OH010788	0	0	1	125	0	2	8
12	OH010783	0	0	4	2038	0	0	0
13	OH010789	6	0	0	1483	0	7	49
14	OH010463	21	0	4	7	2	0	40
15	OH010387	2012	0	605	6339	21	0	108
16	OH010784	7	0	249	2284	1	0	0
17	OH010783	2	0	2	0	821	0	116
18	OH010782	26	4	1	1989	182	0	169
19	OH011373	19	0	1	4	1	0	34
20	OH011371	29	18	50	1364	1	0	13
21	OH011368	1992	0	229	502	0	1	1

Traditional presence/absence table

Metric evaluation
& graphical
representation



Variable output depending on task