

Labelling Workflow Concept

ProRes Digitized Video
target: 300-500 meter transects
ROV/AUV



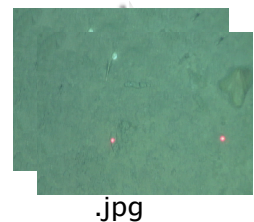
Extract and Deinterlace Frames
[Raw data]
Convert ProRes to jpeg images; one every 5 seconds

Saliency Detection (optional)
[Bounding Box]
Automatically create bounding boxes

Annotations Guidelines



Images 1920x1080



RectLabel Tool
[Label]
Label with bounding boxes

Higher-level Taxa



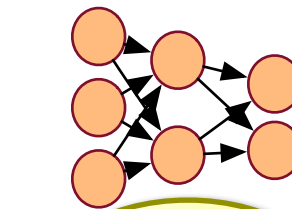
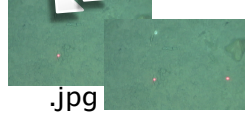
Preprocess
[tf records]
Convert annotations to tf Scale as needed for model, train different levels of taxa

TF records
Train/Test



Faster RCNN or RFCN YOLO ?
[Train/Test]

Images 960x540, 600x600, depends on model



CNN

Echnocrepis
Score: 0.7

PeniagoneSpA
Score: 0.1

ScotoplanesGlobosa
Score: 0.2

PASCAL Annotations
Correct or Insert



Faster RCNN or RFCN YOLO ?
[Inference]

Trained Models
(checkpoints)

