Use of SCN features: No Max learning objects: 5000 objects/class Strategy N° 5

Actual Values

NL 2020 Selected Samples prediction using all regions training set, Learning with all classes present in the selected samples, no extra training categories, No Anthoathecata, Calanoida, Copepoda, Zooplankton classes in learning set

Classification Report Matrix max 5000 learning objects per class

weighted avg

0.69

precision

0.57

recall

0.61

f1-score

Confusion Matrix – In percent of Actual Value														max 5000 learning objects per class														
																									precision	recall	f1-score	
Temora spp.	57%	9%	3%	17%	3%	<1%	6%	<1%	1%			<1%	<1%				<19	ó		<1%	<1%	1%		Temora sp (n=18103-train=500	p. 0.71	0.57	0.63	
Acartia spp.			_				4%		2%		<1%		<1%				<19	б			<1%	<1%		Acartia sp (n=13302-train=500	p. 0.75	0.48	0.59	
Evadne spp.							<1%	1%		<1%		3%	<1%					<1%	á		<1%			Evadne sp (n=5228-train=500	p. 0.85	0.84	0.85	
Pseudocalanus spp.			<1%		6%	<1%	6%		<1%				<1%	<1%						<1%	<1%	<1%		Pseudocalanus sp	p. 0.23	0.46	0.31	
Centropages spp.					87%								<1%							<1%	<1%			(n=3053-train=484 Centropages sp	p. 0.47	0.87	0.29	_
Podon/Pleopsis spp.					40		2%		40			<1%	<1%	<1%						6%	3%	29%		(n=330-train=362 Podon/Pleopsis sp	0)			
Eurytemora spp.		13%		4%	<1%		66%	600	4%	70.		40.	1%									40.		(n=253-train=500	0)	0.21	0.11	
Gastropoda (larvae/Limacina)		C0.	2%			24%		60%	0.70	7%		4%	20.				20.	20.				4%		Eurytemora sp (n=178-train=181	p. 0.06	0.66	0.11	
Oithona spp.		6%	1%					5%	87%			2%	2%				2%	2%						Gastropoda (larvae/Limacin (n=112-train=327	a) 0.44	0.60	0.51	
Bivalvia (larvae) Oikopleura spp.					1%			3%		92%	76%	Ζ⁄0		1%	7%		7%			7%				Oithona sp (n=98-train=500	p. 0.15	0.87	0.26	
Hydrozoa (medusa)			3%		1/0						7 0 10	28%		2%	7 ′0	1′	2% 2%			7.0	41%	8%		Bivalvia (larva (n=92-train=376	e) 0.90	0.92	0.91	П
Harpacticoida- epibenthic		20%	3/0	24%	2%		8%					20'0	40%	۷٬0		12					1170	0/0		Oikopleura sp	p. 0.62	0.76	0.68	
Calanus spp.		200		8%	4%		0 0						10 0	76%						12%				(n=70-train=500 Hydrozoa (medus	-)	_		
Chaetognatha				7%							7%				87%									(n=64-train=405 Harpacticoida- epibenth	2) 0.11	0.28	0.15	
Chiridius spp.				50%										14%						29%				(n=50-train=55	5) 0.07	0.40	0.12	
Aglantha spp. (medusa)														10%		50)%				40%			Calanus sp (n=25-train=35	p. 0.66	0.76	0.70	П
Fritillaria spp.											29%						57%	14%						Chaetognatl (n=15-train=8	0.72	0.87	0.79	П
Echinodermata (larvae)						20%			20%		40%							20%						Chiridius sp (n=14-train=	p. 0.00	0.00	0.00	
Metridia spp.				50%										50%										Aglantha spp. (medus (n=10-train=2	a) 0.38	0.50	0.43	П
Decapoda-non brachyura (larvae)														50%						50%				Fritillaria sp	p. 0.05	0.57	0.09	
Cnidaria (larvae)	50%																					50%		(n=7-train=500 Echinodermata (larva	0)			
Obelia spp. (medusa)																					100%			(n=5-train=304	3) 0.05	0.20	0.08	
Polychaeta (larvae)				100%																				Metridia sp (n=2-train=1	p. 0.00	0.00	0.00	
Amphipoda														100%										Decapoda-non brachyura (larva (n=2-train=42	e) 3) 0.03	0.50	0.05	
Tomopteris spp.											100%													Cnidaria (larva (n=2-train=2	e) 0.00	0.00	0.00	
	Temol	Acarre Spp.	Spp.	De Spp.	To Centre	Podlo	Curyn	Castle Castle	Oithon	Do Birahi	Oikopl	Hydro	Harpac	Calany	Chactogness Spp.	Chiridius St.	glanth Fri	Tillaria Sp.	inor Men	Pidis Capor Chida	Obelia	Polycho Al	Pohipoda Pomopteris	Obelia spp. (medus (n=1-train=100	a) 0.01	1.00	0.01	
		<i>S</i> 00.	<i>Sp</i> .	50/0	Jocalanus S	Pode Pode Sp.	Pleansis	Castle Spp.	opoda (lan		ia (lange)	Alydrox Spp.	nedy.	Coida	Chaetogne Spp. Pibenthic	The Sh	Alantha SPA	(m. 50)	Crmata	Pidio Chidal Chidal Pop Chidal Po	(lande)	Polychaeta (Pohipoda Preris Spary	% Polychaeta (larva	e) 000	0.00	0.00	
					•	%		<i>9</i> 0.	•	olimacio			30)		libenthic			(COUSA)	,	drae	achyura (1	11/50)	* e <i>)</i>	(n=1-train=157 Amphipod	/) la 0.00	0.00		
											"									Pecapoda Crida, Spp. Crida, Non bi	(6)	raej		(n=1-train=2 Tomopteris sp	7) 0.00		0.00	
												Pr	edicted	l Valu	es									(n=1-train=	0.00 1)	0.00	0.00	
																								macro av	g 0.27	0.47	0.30	

Predictions of discarded taxa from training

	Acartia spp.	0.0%	6.2% (n=2)	18.5% (n=843)	3.9% (n=44)		
	Aglantha spp. (medusa)	33.3% (n=2)	0.0%	0.0%	0.0%		70
	Bivalvia (larvae)	0.0%	0.0%	0.0%	3.2% (n=36)		
	Calanus spp.	$16.7\% \ (n=1)$	0.0%	0.0% (n=1)	0.0%		CO
	Centropages spp.	0.0%	0.0%	1.9% (n=85)	0.9% (n=10)		60
	Decapoda-non brachyura (larvae)	0.0%	0.0%	0.1% (n=3)	0.2% (n=2)		
	Echinodermata (larvae)	0.0%	0.0%	0.1% (n=6)	0.7% (n=8)		50
	Eurytemora spp.	0.0%	12.5% (n=4)	10.6% (n=485)	1.4% (n=16)		
Predicted Taxa	Evadne spp.	0.0%	0.0%	13.6% (n=621)	26.6% (n=299)		
_ pa	Fritillaria spp.	0.0%	0.0%	0.4% (n=17)	0.6% (n=7)		40
licte	Gastropoda (larvae/Limacina)	0.0%	0.0%	0.2% (n=9)	7.7% (n=87)		
rec	Harpacticoida- epibenthic	0.0%	0.0%	1.7% (n=77)	1.1% (n=12)		30
	Hydrozoa (medusa)	0.0%	0.0%	0.2% (n=9)	9.5% (n=107)		30
	Obelia spp. (medusa)	33.3% (n=2)	0.0%	0.7% (n=34)	1.3% (n=15) 0.8% (n=9)		
	Oikopleura spp.	$16.7\% \ (n=1)$	0.0%	0.2% (n=9)			20
	Oithona spp.	0.0%	0.0%	7.7% (n=352)	2.0% (n=23)		
	Podon/Pleopsis spp.	0.0%	0.0%	6.4% (n=291)	30.0% (n=337)		
	Polychaeta (larvae)	0.0%	0.0%	3.7% (n=168)	7.3% (n=82)		10
	Pseudocalanus spp.	0.0%	75.0% (n=24)	11.9% (n=544)	0.5% (n=6)		
	Temora spp.	0.0%	6.2% (n=2)	22.1% (n=1008)	2.0% (n=23)		0
		$A_{nthoathe}$	Calanoida n > 32	(u_{nid})	≥ooplanktor n≥1123 (unid)		0
			$C_{alanoida} \ N_{lpha > 32} \ N_{alanoida} \ N_$	^(unid)	(unid)	(unid)	

Actual discarded Taxa

Relative Abundance of Top Taxonomic Instances per Sample Val Pred 1.0 -0.8 -Relative Abundance 0.4 0.2 -0.0 S25 S21 S22 S23 S24 S26 S27 S28 S29 S30

Sample Short ID

