NL 2020 Selected Samples prediction using all regions training set,
Use of SCN features: Yes Learning with selected samples classes with no low global training instances, with extra regional training categories,
Max learning objects: Maximum objects/class
No Anthoathecata, Calanoida, Copepoda, Zooplankton classes in learning set

max	Classification Report Matrix x available learning objects per class											
	precision	recall	f1-score									
Temora spp. (n=18103-train=7347)	0.85	0.47	0.61									
Acartia spp. (n=13302-train=111319)	0.57	0.91	0.70									
Evadne spp. (n=5228-train=11064)	0.85	0.86	0.86									
Pseudocalanus spp. (n=3053-train=4845)	0.44	0.26	0.33									
Centropages spp. (n=330-train=3620)	0.66	0.72	0.69	1.0								
Podon/Pleopsis spp. (n=253-train=7347)	0.10	0.15	0.12									
Eurytemora spp. (n=178-train=1818)	0.26	0.20	0.23									
Gastropoda (larvae/Limacina) (n=112-train=3272)	0.55	0.60	0.57									
Oithona spp. (n=98-train=5881)	0.32	0.78	0.45	0.8								
Bivalvia (larvae) (n=92-train=3764)	0.90	0.88	0.89									
Oikopleura spp. (n=70-train=5305)	0.87	0.77	0.82									
Hydrozoa (medusa) (n=64-train=4052)	0.16	0.33	0.21									
Harpacticoida- epibenthic (n=50-train=555)	0.00	0.00	0.00	0.6								
Calanus spp. (n=25-train=359)	0.71	0.68	0.69									
Chaetognatha (n=15-train=89)	0.86	0.80	0.83									
Fritillaria spp. (n=7-train=6992)	0.10	0.43	0.16									
Echinodermata (larvae) (n=5-train=3043)	0.00	0.00	0.00	0.4								
Decapoda-non brachyura (larvae) (n=2-train=423)	0.05	1.00	0.10									
Obelia spp. (medusa) (n=1-train=1003)	0.02	1.00	0.04									
Polychaeta (larvae) (n=1-train=1577)	0.00	0.00	0.00									
Bryozoa (larvae) (n=0-train=1142)	-	-	-	0.2								
Calanoida (ci-ciii) (n=0-train=5557)	-	-	-									
Cirripedia (larvae) (n=0-train=7685)	-	-	-									
Copepoda (nauplii) (n=0-train=11555)	-	-	-	0.0								
Microcalanus spp. (n=0-train=80)	-	-	-	0.0								
Euphausiacea (larvae) (n=0-train=87)	-	-	-									
Euphausiacea (nauplii) (n=0-train=145)	-	-	-									
macro avg (corr)	0.41	0.54	0.41									

weighted avg 0.72 0.65

precision recall f1-score

rategy N° 8													,			,		1	,	ı							
										Conf	fusion	Mat	rix – I	n per	cent	of Act	tual V	alue									
Temora spp.	47%	40%	3%	5%	<1%	<1%	<1%	<1%	<1%			<1%						<1%		<1%	<1%	1%	<1%	<1%	<1%		
Acartia spp.	6%	91%	1%	<1%	<1%	<1%	<1%		<1%		<1%					<1%			<1%	<1%		<1%	1%	<1%	<1%		
Evadne spp.	<1%	<1%	86%	<1%		5%		<1%	<1%	<1%		2%	<1%			<1%	<1%		<1%	<1%	<1%	<1%	4%				
Pseudocalanus spp.	19%	52%	<1%	26%	1%	<1%	<1%							<1%		<1%		<1%		<1%		<1%	<1%				
Centropages spp.	8%	18%		2%	7 2%									<1%				<1%	<1%				<1%				
Podon/Pleopsis spp.	32%	4%	11%	2%		15%		<1%										7%	<1%	18%		<1%	9%				
Eurytemora spp.	<1%	71%	5%	<1%		<1%	20%															1%	2%				
Gastropoda (larvae/Limacina)			<1%			22%		60%		7%		4%								3%		2%	<1%				
Oithona spp.		17%	1%						78%							1%						1%	2%				
Bivalvia (larvae)								9%		88%		3%															
Oikopleura spp.		1%									77%			1%	3%	10%		7%									
Hydrozoa (medusa)	3%	2%	5%									33%		5%		2%		3%	45%	2%		2%					
Harpacticoida- epibenthic	8%	82%		6%	2%																	2%					
Calanus spp.				4%										68%				28%									
Chaetognatha				7%							13%				80%												
Fritillaria spp.		29%									14%					43%	14%										
Echinodermata (larvae)						20%					20%					20%							40%				
Decapoda-non brachyura (larvae)																		100%									
Obelia spp. (medusa)																			100%								
Polychaeta (larvae)				100%																							
	Temor	Acarr	Spp.	De Spp.	ocalanus ?	Podo	Curya.	Castro emora Spp.	Oithon Opor	Bivalve	Oixople (lande)	Hydro	Harpar Ros Par	Calant	Chaele Spp.	Pritille	Stic Spp.	Decap	Obelia Obelia	Polych	Bryon	Calano (larvae)	Cirripo Oido (ci.cil	Copepi dia (larvae	Microd (naupl	Edphaus Sp.	Euphausia
		<i>∞</i> ,	% .	%	Centro Centro	500. 500.	Euryn Pleopsis	500.	Oithol Opoda (lar	Pp.	(dride)	10 Spp.	Harpar (nedl)	Oida (Sa)	Pp.	" the	Shine	Mata	Ton barren	D. Med	Bryon (lone	Per Paris	Cich	i) (land	(naup	in Sp.	Sidea (lange
										Macli	120)				Thic				9	YUTA	Bryon (lande)						
													Predi	cted V	/alues											_	Extra trainii classe

Actual Values

Predictions of discarded taxa from training 100 0.0% 0.0% 50.0% (n=16) 0.0% 0.0% 52.2% (n=2381 0.0% Acartia spp. 0.0% 0.0% 7.8% (n=88) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% Bivalvia (larvae) 3.1% (n=35) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.1% (n=3) 0.0% 0.0% Bryozoa (larvae) 0.4% (n=5) Calanoida (ci-ciii) 50.0% (n=1) 2.1% (n=24) 0.0% 0.0% 0.0% 0.0% 0.0% 4.7% (n=214) 0.0% 0.0% 0.0% Calanus spp. 40.0% (n=4) 100.0% (n=1) 50.0% (n=3) 42.9% (n=6) 0.0% 0.0% (n=2) 50.0% (n=1) 0.0% 0.0% 80 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.5% (n=23) 0.0% 0.0% 0.1% (n=1) Centropages spp. 0.0% Cirripedia (larvae) 0.0% 0.0% 0.0% 0.0% 0.0% 4.8% (n=217) 0.0% 0.0% 5.2% (n=58) Copepoda (nauplii) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.1% (n=5) 0.0% 0.0% 0.1% (n=1) 0.0% 0.0% 0.0% 0.0% Decapoda-non brachyura (larvae) 0.0% 7.1% (n=1) 0.0% 0.0% (n=2) 0.0% 0.1% (n=1) 0.2% (n=2) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.1% (n=3) 0.0% 0.0% Echinodermata (larvae) 60 Euphausiacea (nauplii) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% (n=1) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.7% (n=34) 0.0% 0.1% (n=1) 0.0% Predicted Eurytemora spp. 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% Evadne spp. 13.8% (n=631) 0.0% 28.9% (n=324) 0.0% 0.0% Fritillaria spp. 0.0% 0.0% 16.7% (n=1) 0.0% 0.0% 0.2% (n=8) 0.0% 0.2% (n=2) 40 0.0% 0.0% 0.0% 0.0% 0.4% (n=19) 0.0% Gastropoda (larvae/Limacina) 0.0% 0.0% 0.0% 6.3% (n=71) 0.0% 0.0% 0.0% Hydrozoa (medusa) 20.0% (n=2) 0.0% 0.0% 0.0% 0.2% (n=8) 0.0% 7.4% (n=83) Microcalanus spp. 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.1% (n=5) 0.0% 0.0% 0.0% 0.0% Obelia spp. (medusa) 40.0% (n=4) 0.0% 33.3% (n=2) 0.0% 0.0% 0.0% 0.0% (n=2) 0.0% 0.4% (n=4) 100.0% (n=1) Oikopleura spp. 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.1% (n=3) 0.0% 0.6% (n=7) 20 0.0% Oithona spp. 0.0% 0.0% 0.0% 0.0% 0.0% 3.0% (n=137) 0.0% 0.0% 1.9% (n=21) Podon/Pleopsis spp. 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 3.2% (n=147) 29.9% (n=336) Polychaeta (larvae) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 1.2% (n=55) 0.0% 0.0% 3.3% (n=37) 0.0% 0.0% 0.0% 40.6% (n=13) 42.9% (n=6) 0.0% 0.0% Pseudocalanus spp. 3.4% (n=156) 50.0% (n=1) 0.3% (n=3) 0.0% 0.0% 0.0% 0.0% 1.7% (n=19) 50.0% (n=1) 11.1% (n=506) 0.0% Temora spp. 9.4% (n=3) 7.1% (n=1) 0 Aglantha spp. (medusa) Anthoathecata (medusa) Calanoida (unid) Cnidaria (larvae) Metridia spp. Tomopteris spp. Zooplankton (unid) Chiridius spp. Amphipoda Copepode "=< "=4562 (unid) n=1123 n=2 Extra training classes

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

