Use of SCN features: No

Actual Values

Max learning objects: 5000 objects/class Strategy N° 6

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

Classification Report Matrix
max 5000 learning objects per class

precision recall f1-score

	Confusion Matrix – In percent of Actual Value															n	nax 5000	learning c	bjects	ects per class																	
																																T	precisio	on recall	l f1-	-score	
Temora spp	54%	9%	3%	ó 1	6% 3	% <	<1%	6%	<1%	<1%		<1%	<1%	<1%			•	<1%		<1%		<1%	1% <19	%	<1%	3%	2% <1	% <1%	<1% <1%	ó		Temora spp (n=18103-train=5000	0.72	0.54	•	0.62	
Acartia spp	. 22%	48%	s <1	% 1	1% 6	% <	<1%	4%		1%		<1%	•	<1%			•	<1%				<1% <	<1%			2%	1% <1	% <1%	<1% <1%	ó		Acartia spp (n=13302-train=5000	0.75	0.48		0.59	
Evadne spp	. <19	<19	81	% <	1%		6% <	<1%	1%	<1% <	<1%		3%	<1%					<1%			<1% <	<1%		<1%	<1%	5%	<1%				Evadne spp (n=5228-train=5000	0.87	0.81		0.84	
Pseudocalanus spp	. 26%	14%	s <1	% 4	4% 7	%		6%		<1%			•	<1%	<1%					<1%		<1% <	<1%			2%	<1%	<1%	<1% <1%	<u> </u>		Pseudocalanus spp (n=3053-train=4845	0.23	0.44		0.31	
Centropages spp	. 8%	3%		1	87	7%								<1%						<1%		<1%										Centropages spp (n=330-train=3620	0.16	0.87		0.27	
Podon/Pleopsis spp							3%	3%					<1%							7%		2% 3	31%			2%	7%	1%				Podon/Pleopsis spp (n=253-train=5000	0.07	0.13		0.09	1
Eurytemora spp										2%				1%												7%			<1%	6		Eurytemora spp (n=178-train=1818	0.05	0.60		0.10	1.1
Gastropoda (larvae/Limacina)		13	<1				20%		61%		7%		4%										4%			2%					Gastrop	oda (larvae/Limacina (n=112-train=3272	0.45	0.61		0.52	
. ,		C0.		70			20/0		01/0	OE%	/ 10			10,				204	204				7/0									Oithona spp (n=98-train=5000	0.17	0.85		0.28	
Oithona spp		6%							5 0	85%	200			1%				2%	2%							2%	2%					Bivalvia (larvae (n=92-train=3764	0.00	0.92		0.91	
Bivalvia (larvae)									5%	9)2%		2%																			Oikopleura spp (n=70-train=5000	0.74	0.80		0.77	0.8
Oikopleura spp).				1	%						80%			1% 6%			4%		7%												Hydrozoa (medusa (n=64-train=4052	0.11	0.30		0.16	
Hydrozoa (medusa)) 5%		3%	ó									30%		2%		11%	2%				41%	6%			2%					Har	pacticoida- epibenthio (n=50-train=555	0.07	0.36		0.12	
Harpacticoida- epibenthic	c 8%	12%	6	3	0%			10%						36%						2%						2%						Calanus spp (n=25-train=359	0.72	0.84		0.78	
Calanus spp).			8	3%										84%					8%												Chaetognatha (n=15-train=89	0.76	0.87		0.81	
Chaetognatha	a			7	7%							7%			87%																	Chiridius spp (n=14-train=1	0.00	0.00		0.00	0.0
Chiridius spp	. 7%			4	3%										14%					36%											A	glantha spp. (medusa n=10-train=22	0.46	0.60		0.52	
Aglantha spp. (medusa))																60%					40%										Fritillaria spp (n=7-train=5000	0.05	0.43		0.09	
Fritillaria spp).	14%	ó									29%						43%	14%												E	chinodermata (larvae (n=5-train=3043	0.00	0.00		0.00	
Echinodermata (larvae))		209	%		2	20%											20%								20%	20%					Metridia spp (n=2-train=16	0.00	0.00	(0.00	
Metridia spp).			5	0%										50%																Decapoda-n	n=2-train=10 non brachyura (larvae (n=2-train=423	0.02	0.50		0.04	0.4
npoda–non brachyura (larvae))														 50%					50%												Cnidaria (larvae (n=2-train=25	0.00	0.00		0.00	
Cnidaria (larvae)) 50%	ó																								50%						Obelia spp. (medusa (n=1-train=1003	0.01	1.00		0.02	
Obelia spp. (medusa)																						100%										Polychaeta (larvae (n=1-train=1577	0.00	0.00		0.00	
Polychaeta (larvae)				10	00%																											Amphipoda (n=1-train=27		0.00	(0.00	0.2
Amphipoda					,0.0										100%																	Tomopteris spp (n=1-train=1	0.00	0.00	(0.00	
												00%		-	100%																	Bryozoa (larvae (n=0-train=1142		_		_	
Tomopteris spp		4			o ())	<i>⊳</i>	✓		0.		00%	4	4	C		4	☆	<i>^</i> 1	'a 0		0,	B A	>	 		\sim	12	× ×			Calanoida (ci-ciii (n=0-train=5000		_		_	
	· 6/	nora Spp.	Prio Sp	adnes	Selidoca,	Chtrop	Podon), Iges Sp	Euryte, Pleapsis	Morting	Oithona Oboda (la	Sivalvie S.	Oikople (lange	Hydrox Spp.	PALPAL	Calanus Sp.	Chirian Chirian	Islanti	Sa Titille	Chinodel Aria Sp. (medusa)	Actricia Spp.	nida noda	ria la	Polychaeta (medis	Ohipod	Oteris Sp.	Calando (larvo	Ciripedia Pel Ciclii	Depoda (no (no	Ocalanus Sp.	Phausiacea (naupli		Cirripedia (larvae		_		_	
		~ 2	~ %	? ′	%. ·	dnus s	905 SO	1000 (S		o de lan	<i>70</i> .	(drage	1 2/2	Med	,010g DD.	Otho .	500	500	(max	Maka Mar	"nor	o brande	De Medi	(larvage)	<i>%</i>	o land	Ci Ciii)	(lande)	Puplin Sp.	a Con han		(n=0-train=5000 Copepoda (nauplii (n=0-train=5000		_		_	0.0
							~		.20		lim	Cin			Calanus Spo.	nhic			(IISA)	NAP	/	Chyur	\$ (1	シッ						'ae Yoll		Microcalanus spp		_		_	
		Temora Cartia Pseudo Chiropada Chiro												- xtra	ı	(n=0-train=80 Euphausiacea (larvae		_		_																	
																Predic	ted V	alue	S										1	training classes	E	(n=0-train=87 Euphausiacea (nauplii		_		_	
																																(n=0-train=145 macro avg (corr		0.46	(0.30	
																																weighted avo				0.60	
																																weighted ave	0.70	0.55		3.30	

Predictions of discarded taxa from training

	Acartia spp.	0.0%	6.2% (n=2)	16.0% (n=729)	3.1% (n=35)		70
	Aglantha spp. (medusa)	33.3% (n=2)	0.0%	0.0%	0.0%		/ 0
	Amphipoda	0.0%	0.0%	0.0% (n=1)	0.0%		
	Bivalvia (larvae)	0.0%	0.0%	0.0%	2.9% (n=33)		
	Bryozoa (larvae)	0.0%	0.0%	0.3% (n=12)	1.7% (n=19)		60
	Calanoida (ci-ciii)	0.0%	0.0%	11.1% (n=506)	3.0% (n=34)		
	Calanus spp.	16.7% (n=1)	0.0%	0.0% (n=1)	0.0%		
	Centropages spp.	0.0%	3.1% (n=1)	2.0% (n=90)	1.2% (n=13)		
	Cirripedia (larvae)	0.0%	0.0%	4.6% (n=210)	5.6% (n=63)		50
	Copepoda (nauplii)	0.0%	0.0%	0.1% (n=3)	0.0%		
Э	Decapoda-non brachyura (larvae)	0.0%	0.0%	0.1% (n=3)	0.2% (n=2)		
aX	Echinodermata (larvae)	0.0%	0.0%	0.1% (n=4)	0.3% (n=3)		40
<u>—</u>	Euphausiacea (nauplii)	0.0%	0.0%	0.4% (n=17)	0.0%		40
tec	Eurytemora spp.	0.0%	12.5% (n=4)	9.4% (n=431)	1.4% (n=16)		
Predicted Taxa	Evadne spp.	0.0%	0.0%	11.5% (n=523)	23.4% (n=263)		
	Fritillaria spp.	0.0%	0.0%	0.2% (n=11)	0.6% (n=7)		30
Д	Gastropoda (larvae/Limacina)	0.0%	0.0%	0.2% (n=8)	7.7% (n=87)		30
	Harpacticoida- epibenthic	0.0%	0.0%	1.1% (n=51)	0.4% (n=5)		
	Hydrozoa (medusa)	0.0%	0.0%	0.2% (n=8)	9.3% (n=105)		
	Microcalanus spp.	0.0%	0.0%	0.7% (n=32)	0.1% (n=1)		20
	Obelia spp. (medusa)	33.3% (n=2)	0.0%	0.6% (n=26)	0.9% (n=10)		
	Oikopleura spp.	16.7% (n=1)	0.0%	0.2% (n=7)	0.7% (n=8)		
	Oithona spp.	0.0%	0.0%	6.2% (n=283)	1.8% (n=20)		
	Podon/Pleopsis spp.	0.0%	0.0%	3.1% (n=140)	27.2% (n=306)		10
	Polychaeta (larvae)	0.0%	0.0%	2.8% (n=127)	6.1% (n=69)		
	Pseudocalanus spp.	0.0%	71.9% (n=23)	11.3% (n=517)	0.5% (n=6)		
	Temora spp.	0.0%	6.2% (n=2)	18.0% (n=822)	1.6% (n=18)		Λ
	Extra training classes	Anthology of the contraction $Anthology of the contraction of the co$	$C_{al_{a}n_{o}i_{da}}$ $C_{al_{a}n_{o}i_{da}}$ $C_{al_{a}n_{o}i_{da}}$ $C_{al_{a}n_{o}i_{da}}$ $C_{al_{a}n_{o}i_{da}}$	$C_{oldsymbol{opepo}_{oldsymbol{n} pprox 4562}}$ $C_{oldsymbol{opep}_{oldsymbol{ope}}oldsymbol{od}_{oldsymbol{a}}}$	Zooplanktoi n≥1123 (unid)	n (unid)	0

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

Sample Short ID

S26

S27

S28

S29

S30

S21

S22

S23

S24

