Use of SCN features: Yes Max learning objects: 200 objects/class Strategy N° 9

Actual Values

Gulf Selected Samples prediction using Gulf training set, Learning with all classes present in the selected samples, with extra training categories, With Calanoida, Cyclopoida, NO Zooplankton classes in learning set

Confusion Matrix – In percent of Actual Value

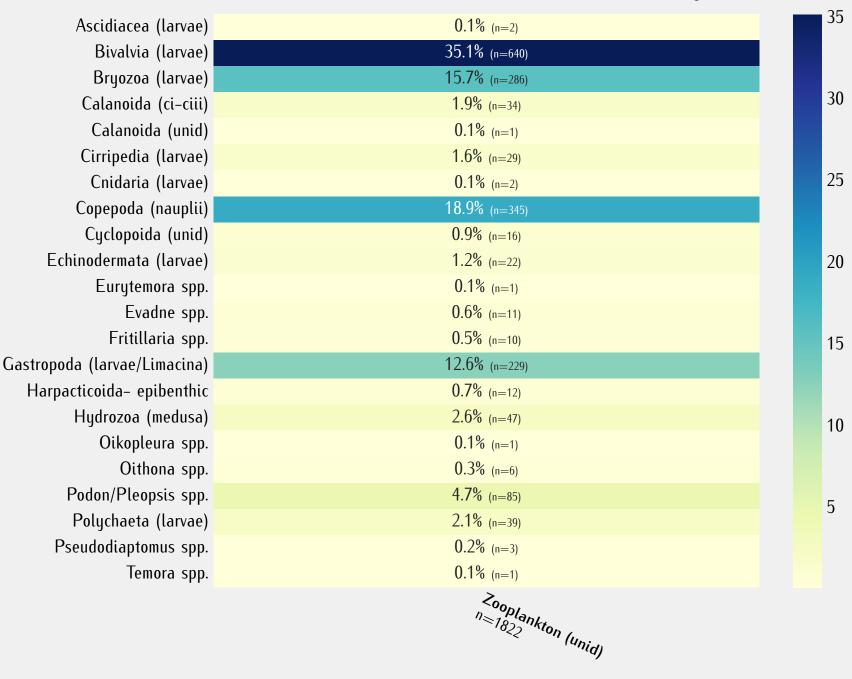
ification learning	Matrix s per class
	 64

precision recall

f1-score

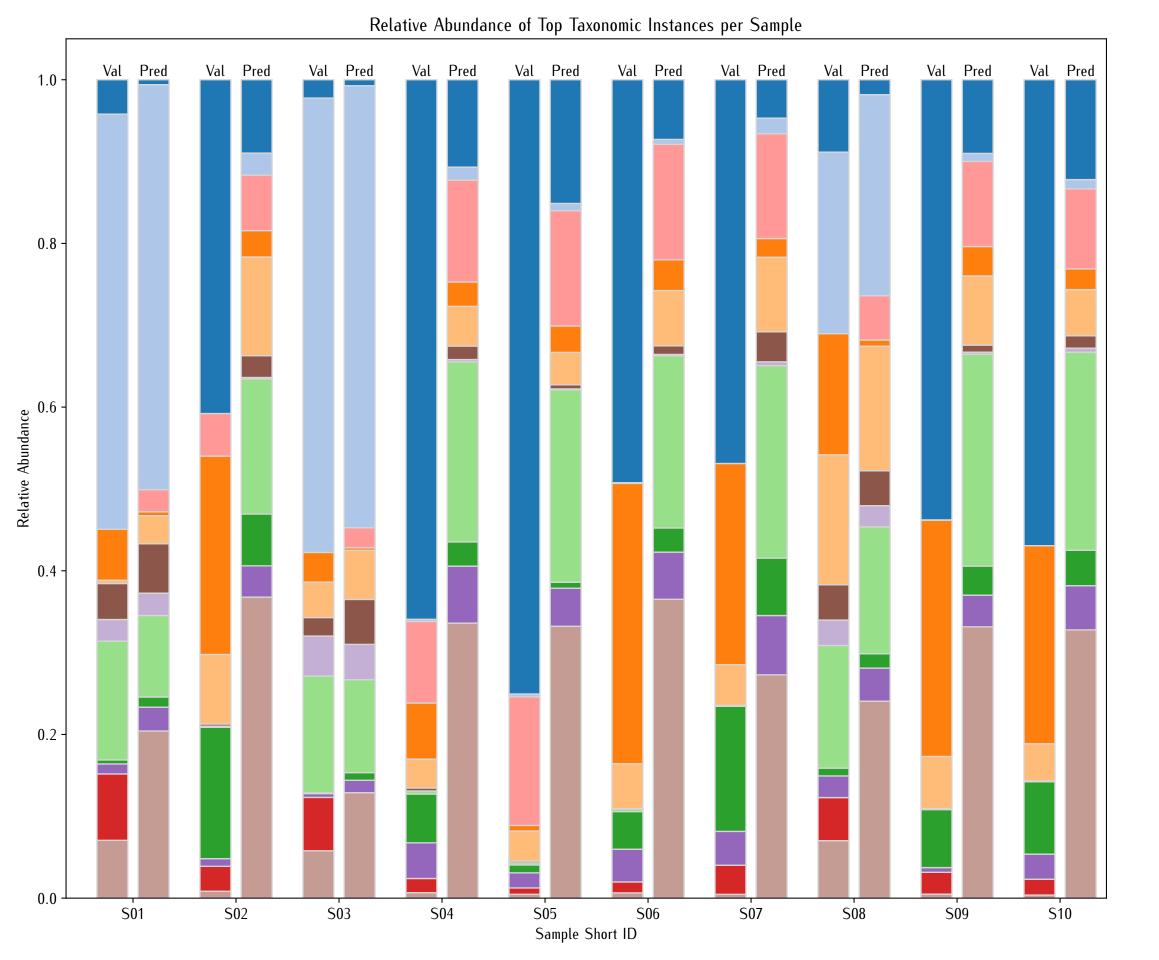
	Confusion Matrix – In percent of Actual Value												ts per class	6																						
																															A	precisio	n re	call	f1-score	
Acartia spp. 17%		4% <							2% <1%	6	<19	4%	1% <	<1% <	(1% <	<1% 2	% <	1% <1	% <1%	6 4%	<1%	<1%	<1% <19	5 < 1%	2%	<19	б	16% <	<1%	2%	Acartia spp (n=18062-train=200	0.90	0	.17	0.29	
Bivalvia (larvae)	91% <	<1% 19	% <	1% <19	% <19	% <1%	1%	5%	<1%	<1	% <19	% <1%	•	<1% <	(1%		<	1%				<1%									Bivalvia (larvae (n=7955-train=200	0.95	0	.91	0.93	
Calanoida (unid) <1%	<1%	3% 39	% 1	% 14%	31%	10%	<1%	<1%	(1% 4%	<1	% <19	8 9%	<1%	5%	ĵ% <	<1% 6	% 2	<1 <1	% <1%	6 < 1%		2%		<1%	<1%	K < 19	6 <1%	<1%		<1%	Calanoida (unid (n=7711-train=200	0.26	0	.03	0.06	
Copepoda (nauplii)	3%	81	1% <	1% <19	% <19	%		<1%	4%	39	б	<1%		3%	3%		1	%	<1%	б		<1%									Copepoda (nauplii (n=2753-train=200		0	.81	0.74	
Podon/Pleopsis spp.	7%	16	6% 42	2% <19	% <19	% <1%	2%	15% <	1% 10%	39	6 <1 ⁹	% <1%		<1%	<	<1% <	1% 4	%	<1%	б	<1%				<1%	K <19	б	<1%		<1%	n=2753-train=200) Podon/Pleopsis spp		_			
Oithona spp. <1%	<	<1% <1	1% <	1% 71%	6%	5 5%		<	(1% <1%	√ ₆ <1	% <19	10%		2%	3%	1	% <	1%		<1%		1% <	<1%				<1%	<1%		<1%	(n=2715-train=200 Oithona spp	0.03	_	.42	0.56	
Calanoida (ci-ciii)		3% 39	% 1	% 9%	35%	10%		<1%	5%	<1	%	12%		4%	5 %	8	% 3	%	<1%	б		1%									(n=2572-train=200	0.20	0	.71	0.31	1.0
Pseudodiaptomus spp. <1%	<	<1% <1	1% <	1% 18%	13%	31%		<1% <	(1% <1%	½ <1	%	18%	<1%	5%	3%	2	% <	1%	<1%	6 <1%					<1%	6		2%		<1%	Calanoida (ci-ciii (n=1348-train=200	0.12	0	.35	0.17	1.0
Hydrozoa (medusa) <1%	2% <	<1%	3	% 1%		<1%	70%	5%	2%			<1%		<1% <	(1%	4% 5	% 2	2% <1	% <1%	6 < 1%	<1%	<1%			<1%	6		1%		<1%	Pseudodiaptomus spp (n=1059-train=200	0.15	0	.31	0.20	
Gastropoda (larvae/Limacina)	17%	99	% 8	%	<19	%	3%	52% <	(1% 5%	29	ó	<1%				<	1% 2	2%	<1%	6 <1%				<1	%						Hydrozoa (medusa (n=671-train=200	0.73	0	.70	0.71	
Temora spp. <1%		3% <	1% <	1% 3%	7%	12%		<1% 2	0% 2%			5%	6%	3%	1%	8	% 3	%		7%	1%			<1%	5%	1%		5%	2%	<1%	Gastropoda (larvae/Limacina	0.27	0	.52	0.36	
· ·	2%			1% <19			<1%		53%		6	1%						1%	<1%				<1%		<1%						(n=629-train=200 Temora spp					
Polychaeta (larvae) <1%								<1%		47		1%		5%	1% <	-1% 6					1%			<1%		<19	6				(n=308-train=200	0.10		.20	0.18	
Ascidiacea (larvae) <1%		<1%	0 1	2%		<1%		110	1.0	17		2%		3.0		(1.0 0		<1	0,		<1%			3%				<1%			Bryozoa (larvae (n=247-train=200		0	.53	0.21	0.8
Harpacticoida- epibenthic		39	%			< 1% % 4%			(1% <1%	<u> </u>		120		2% 1	0%		1% 2		. 0	3%				3/0	<19	k	<1%				Polychaeta (larvae (n=237-train=200	0.32	0	.47	0.38	
		3,	70	200	0 11/					0		43/0		Z/0 I	0/0		1/0 2	.′0			< 1/0	∠′0					< 1/0				Ascidiacea (larvae (n=194-train=200	0.61	0	.90	0.73	
Centropages spp. 20%		2/	0 5	39%	0	2%		1	1%	20		2%	14%	270			40 0	40		5%		20			2%			5%		20	Harpacticoida- epibenthi	0.02	0	.43	0.04	
Echinodermata (larvae)			% 5	% 3%	11%	5%				39	ó			27%		14	1% 24					3%								3%	(n=108-train=200 Centropages spp	. 0.02		.14	0.04	
Cyclopoida (unid)		99	%					4%	9%			22%		4	8%		4										4%				(n=44-train=200 Echinodermata (larvae	0.02				
Obelia spp. (medusa)				19%	ó		10%					5%			1	9% 19												5%	5%		(n=37-train=118	0.01	0	.27	0.03	0.6
Evadne spp.							6%	(6%					6%		62	2% 6	%							6%						Cyclopoida (unid (n=23-train=64	0.01	0	.48	0.02	
Cirripedia (larvae)		31	1%		6%	ó		6%		12	%			12%			3′	1%													Obelia spp. (medusa (n=21-train=200	0.04	0	.19	0.07	
Chaetognatha				8%	;						8%					8%		389	%					38%							Evadne spp (n=16-train=200	0.01	0	.62	0.02	
Cnidaria (larvae)		29	9%		29%	%											29	9%	14%	i											Cirripedia (larvae	0.01	0	.31	0.02	
Pseudocalanus spp. 29%								1	4%											43%					14%	5					(n=16-train=200 Chaetognath a	0.26		.38	0.37	
Decapoda-non brachyura (larvae)																					50%			25%					25%		(n=13-train=18 Cnidaria (larvae	0.50				0.4
Fritillaria spp.				33%	ó																	67%									(n=7-train=20	0.04	0	.14	0.06	
Oikopleura spp.																					,	100%									Pseudocalanus spp (n=7-train=200	0.00	0	0.43	0.01	
Monstrillidae																							1009	6							Decapoda-non brachyura (larvae (n=4-train=197	0.04	0	.50	0.07	
Osteichthyes (larvae)																													100%		Fritillaria spp (n=3-train=200	0.00	0	.67	0.01	
Ostracoda							100%																								Oikopleura spp	. 0.00	0	0.00	0.00	
Paracalanus spp.																												100%			(n=2-train=37 Monstrillida e	0.20		.00	0.33	0.3
Decapoda-brachyura (zoeae)																													100%		(n=2-train=27 Osteichthyes (larvae					0.2
Microsetella spp.																10	0%														(n=1-train=43	0.00	0	.00	0.00	
Eurytemora spp.								10	00%																						Ostracoda (n=1-train=1	0.00	0	.00	0.00	
	<i>∕</i> 2.	C = C) /	2 0.	· C	<i>∧</i>	4			\(\alpha\)	2 4	4	C	<u> </u>	C	0, 6	\ \(\)). ()	k C	\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	0	<u>^</u>	0: 4	0 0			1.	Ć.	0 6	<i>\(\)</i>	Paracalanus spp (n=1-train=82	0.00	0	.00	0.00	
·cdrtte	Bivalvica Spp.	Calanoide (larvae)	Popo	00/01/21	Thong St.	anoid	Idod: Gdro	Castrop	Penora Spr.	totod	Olychaeta (larvae)	idiaco de	Centrol (Arvae)	Chinol	4000	Obelia Sp. Clar.	adno	Ciripedia Sop.	Sactognati (lary)	idaria (lar	10 CO	Octilla	Oitopleura Spp.	Osteichthi Spr	Tracon di		Micro Spoda bi	OSO TOPOL	Calanus Spp.	Portanus Spp.	Decapoda-brachyura (zoeae (n=1-train=200	0.00	0	.00	0.00	
	1/2	(larvage)	(uni	(nau)	005/5/	50 A	(i. Apro	m. med			Jana Co	(6)	Coids.	" Ses S	CIMALA	(da) (4p.	90 % . (m.	00 0	(land)	the Can	Jalany (5 70/		Sport of Sport	les (1	M	550.6		Ora Spor	To Spp Spp.	Microsetella spp	0.00	0	.00	0.00	
		9		odon/plo		<i>30</i> .	(ii)	Castrop Onus Spp.	Penora Sp. John de Jande	?(/;	9	, de	Centrol de Cicoida	Chinologes Sh. epibeni	o.	(larvage)		Ciripedia Spp.	de	,	*%)	Sp	Drachy.	Osteichthy Spp.	, OU		%	TYUTA	Calanus SPP. Dp. (Socae)	~	(n=1-train=4 Eurytemora spp)		.00	0.00	0.0
								• -•		Mal	Cina			1/6	hic	9							JUF A	% .				/-	TORDRI		(n=1-train=200 Calanus spp	0.00	U	.00	0.00	
											ソ													Osteichthi Spp.						Extra	(n=0-train=109	_		-	-	
														D	۱: ۱	۱۱ لي	1													training	Labidocera spp (n=0-train=200	_		-	_	
														Pre	alct	ed Va	lues													classes	Tortanus spp (n=0-train=111	_		-	_	
																															macro avg (corr		0	.37	0.20	
																															weighted avo			.38	0.41	
																															weighted dvg		U	.50	64	

Predictions of discarded taxa from training



Predicted Taxa

Actual discarded Taxa





Relative Abundance of Top Taxonomic Instances per Sample (Redistributed)

