

Appendix (to be available online)

1. Terms used for the estimation of the seeded topic models
2. Seeded topic models
3. Regression models with interaction effects

1. Terms used for the estimation of the seeded topic models

Table A1: Key terms used for the estimation of the seeded topic models

Frequency	Biodiversity	Climate change	Fisheries	Pollution
1	biodiversity	climate	fish stocks	pollution
2	biological diversity	acidification	sustainable fisheries	land-based
3	species	sea-level	fisheries management	waste
4	living resources	carbon	illegal, unreported and unregulated fishing	oil
5	living marine resources	warming	IUU	nuclear
6	coral	greenhouse	tuna	radioactive
7	genetic resources	adaptation	catch	debris
8	marine protected areas	temperatures	fishing practices	plastic
9	reefs	mitigation	RFMOs	Global Programme of Action
10	habitats	temperature	overfishing	hazardous
11	marine areas	extreme weather	drift-net fishing	atomic
12	BBNJ		trawling	plastics
13			by-catch	dumping
14			discards	wastes

Note: These terms were selected on the basis of their frequency in the statements made in UNGA annual reviews between 1993 and 2020 (the order of the terms reflects their exact frequency in the statements).

2. Seeded topic models

The following tables show the topics contained in the estimated topic models. For each topic, a table displays 40 words that have the highest probability of association with the respective topic (the words are ordered by their probability). The words in bold are those that signify the given topic.

Table A2: Seeded topic models (1993-2009)

1. Pollution	2. Fisheries	3. Biodiversity	4. Climate	5. Unclear topic I.
marine	fisheries	marine	world	process
developing	fishing	international	us	general
countries	fish_stocks	maritime	ocean	assembly
states	conservation	security	many	issues
development	states	piracy	new	also
oceans	management	safety	change	one
environment	agreement	navigation	climate	meeting
sustainable	oceans	areas	resources	must
pollution	united	beyond	can	informal
also	year	measures	challenges	particular
island	draft	also	impact	time
protection	resolution	ships	however	take
regional	regional	efforts	must	within
coastal	organizations	biodiversity	potential	many
small	measures	including	one	like
integrated	sustainable	environment	given	need
programme	nations	armed	recent	group
need	resolutions	ecosystems	possible	report
support	high	issue	challenge	years
coordination	highly	robbery	per	can
consultative	pacific	national	major	state
assistance	process	well	problems	delegations
resources	migratory	cooperation	practices	opportunity
community	issues	imo	task	two
region	ensure	use	find	fact
area	organization	relevant	forward	provides
activities	important	coastal	years	aspects
particularly	action	within	developed	already
caribbean	implementation	assessment	role	last
member	consultative	straits	much	debate
scientific	seas	biological_diversity	now	place
continue	marine	capacitybuilding	critical	jurisdiction
ocean	straddling	framework	people	today
action	work	state	collective	continue
agenda	fisheries_management	protect	addressing	work
therefore	pleased	like	difficult	areas
global	including	passage	yet	statement
technology	forward	jurisdiction	still	ambassador
fund	sustainable_fisheries	living_marine_	able	including
capacity	global	resources	experience	manner
		working		

Table A2: Seeded topic models (1993-2009) - cont.

6. UNCLOS institutions	7. Unclear topic II.	8. Unclear topic III.	9. Disputes and security	10. Resources
states	draft	sea	international	convention
commission	law	law	sea	agreement
sea	resolution	international	countries	part
international	sea	convention	south	nations
parties	convention	nations	maritime	force
law	states	oceans	chinese	law
tribunal	provisions	cooperation	viet	seabed
authority	united	resources	nam	conference
continental	nations	seas	region	united
convention	international	united	disputes	provisions
shelf	like	development	community	new
work	delegation	delegation	rights	entry
limits	paragraph	legal	government	universal
affairs	however	ocean	declaration	implementation
year	item	economic	nations	international
report	contained	importance	peaceful	xi
secretarygeneral	general	countries	conduct	adoption
made	agenda	efforts	treaty	community
seabed	make	order	country	secretarygeneral
important	adopted	role	negotiations	sea
meeting	relating	implementation	territorial	common
division	made	great	also	consultations
session	based	marine	delimitation	now
note	document	maritime	asean	regime
number	assembly	national	made	heritage
also	certain	regard	norms	participation
institutions	regard	government	peace	mankind
relating	upon	important	sovereignty	relating
assembly	national	among	islands	legal
established	wishes	framework	situation	since
united	efforts	country	exclusive	possible
ocean	able	environment	concerned	interests
importance	entitled	necessary	security	years
comprehensive	position	use	zones	authority
general	can	protection	landlocked	mining
rules	become	also	states	instrument
information	remain	effective	principles	november
members	system	reports	stability	future
may	parties	area	transit	well
respect	us	well	two	ratification
	case		delegation	

Table A3: Seeded topic models (2010-2020)

1. Pollution	2. Fisheries	3. Biodiversity	4. Climate	5. Disputes and Security I.
well	resolution	marine	ocean	international
also	states	sustainable	climate	maritime
member	agreement	oceans	development	sea
important	fish_stocks	use	oceans	states
coastal	management	resources	developing	convention
regional	fisheries	international	sustainable	commission
part	conservation	seas	island	law
session	sustainable_fisheries	must	change	seabed
agreement	resolutions	conservation	small	authority
scientific	fishing	importance	pacific	countries
one	measures	biodiversity	nations	shelf
pollution	implementation	cooperation	action	continental
area	convention	efforts	economic	piracy
new	law	biological_diversity	fisheries	parties
like	highly	protection	acidification	limits
adoption	like	order	world	tribunal
protect	regard	national	united	cooperation
concern	including	security	conference	developing
human	adopted	within	need	security
trade	nations	global	management	state
necessary	united	call	impacts	including
research	food	made	effects	peace
done	general	like	fishing	area
organization	assembly	committed	ensure	order
today	recommendations	species	health	seas
organizations	relating	take	region	legal
measures	fisheries_management	challenges	us	efforts
focus	relevant	legally	critical	disputes
since	organizations	environmental	goal	relevant
existing	regional	environment	economy	work
programme	migratory	regard	per	safety
particularly	ecosystems	therefore	future	role
yet	review	goals	cent	settlement
energy	illegal_unreported_and_unregulated_fishing	ecosystems	sids	exploration
political	straddling	achieve	countries	affairs
information	marine	change	many	management
undertaken	consensus	contribute	agenda	ensure
initiatives	therefore	context	look	activities
develop	ensure	illegal	support	support
fish	continental	strengthen	forward	ships

Table A3: Seeded topic models (2010-2020) - cont.

6. Disputes and Security II.	7. Unclear topic I.	8. Resources	9. Unclear topic II.	10. BBNJ treaty
sea	development	convention	law	draft
rights	international	states	sea	work
law	oceans	resources	convention	sea
international	community	countries	nations	year
unclos	implementation	years	united	resolution
jurisdiction	first	world	unclos	also
must	environment	today	oceans	marine
south	meeting	common	international	law
economic	continue	one	legal	oceans
tribunal	activities	therefore	development	united
exclusive	number	like	delegation	states
maritime	held	humankind	country	beyond
article	report	however	provisions	ocean
assembly	world	heritage	seas	process
zone	appreciation	principle	national	areas
coastal	consultations	challenges	sustainable	issues
shelf	secretarygeneral	high	framework	nations
states	view	way	also	jurisdiction
convention	three	contribution	party	assembly
sovereignty	continues	become	resources	conference
respect	attention	ambassador	state	including
can	actively	allow	future	general
peaceful	together	time	related	important
disputes	remains	part	principles	national
one	many	parties	republic	working
sovereign	past	based	activities	welcome

rules	june	indeed	instrument	thank
established	concerned	benefit	universal	group
dispute	regular	special	agenda	informal
territorial	delegations	participation	item	sustainable
declaration	promote	always	instruments	support
obligations	two	right	relating	issue
general	express	general	various	pleased
statement	hoc	even	set	use
zones	time	upon	negotiations	division
vessels	bodies	still	regime	particular
court	trust	provide	economic	importance
application	fund	adopted	adoption	framework
pv	governance	take	december	resolutions
balance	president	achieved	established	global
	caribbean		commitment	
	last			

3. Regression models with interaction effects

The tables report only the models in which both the main factor and its interaction effect are statistically significant (or close to being significant at the 0.1 level).

Table A4: Regression models with interaction effects, 1993-2009

	Climate	Fisheries	Fisheries	Pollution	Pollution
Marine territory	-0.127 (0.083)	0.663** (0.198)	0.614** (0.193)	-0.083 (0.146)	-0.163 (0.146)
Marine/land territory	1.075*** (0.196)	0.474 (0.435)	0.426 (0.435)	1.103** (0.326)	1.534*** (0.365)
Development	-0.274 (0.301)	0.660 (0.720)	0.365 (0.697)	-0.999' (0.512)	-1.017' (0.527)
Democracy	0.267 (0.212)	0.873' (0.494)	0.975' (0.491)	0.333 (0.365)	0.222 (0.373)
Multilateralism	-0.009 (0.009)	-0.061* (0.023)	-0.053* (0.022)	-0.022 (0.016)	-0.023 (0.017)
Statements	0.000 (0.000)	0.000** (0.000)	0.000*** (0.000)	-0.000 (0.000)	0.000 (0.000)
Marine territory*Development		0.224* (0.102)			
Marine territory*Democracy			0.225* (0.093)		
Marine/land territory*Development				0.661** (0.235)	
Marine/land territory*Democracy	-0.181* (0.084)				
Marine/land territory*Multilateralism					0.011 (0.008)
Constant	5.850*** (0.294)	8.709*** (0.656)	8.643*** (0.655)	7.603*** (0.494)	8.115*** (0.498)
Observations	106	106	106	106	106
R2	0.311	0.335	0.342	0.271	0.229

Note: 'p<0.1; *p<0.05; **p<0.01; ***p<0.001

Table A5: Regression models with interaction effects, 2010-2020

	Climate	Fisheries
Marine territory	-0.051 (0.282)	0.603* (0.266)
Marine/land territory	1.620** (0.585)	-0.505 (0.434)
Development	-0.231 (0.899)	0.722 (0.861)
Democracy	0.248 (0.587)	0.498 (0.535)
Multilateralism	-0.069* (0.032)	-0.027 (0.029)
Statements	-0.000 (0.000)	0.000** (0.000)
Marine territory*Development		0.235 (0.160)
Marine/land territory*Multilateralism	-0.031* (0.013)	
Constant	9.141 (0.831)	7.023*** (0.740)
Observations	82	82
R2	0.441	0.175

Note: 'p<0.1; *p<0.05; **p<0.01; ***p<0.001