

## GOOS GRA Modeling Inventory - Overview and Analysis

**Summary:**

-Inventories received from 9 GRAs (Black Sea GOOS, EUROGOOS, IOCARIBE, IOGOOS, MONGOOS, IMOS, PI-GOOS, SEAGOOS, and U.S. IOOS).

-OCEATLAN and GRASP indicated they do not have operational models.

-No inventory received from GOOS for Africa or NEARGOOS.

-Majority of models being run are circulation or wave models, with a handful of ecological models (Harmful Algal Bloom, Hypoxia, Coral Bleaching, and other Biogeochemical models).

-Operating at varying degrees of horizontal resolution, though the majority fall in the 500m - 4km range.

**Methodology for Analysis:** An attempt was made to categorize/classify the models into the following groups. A column has been added to each inventory to reflect this classification. Models were classified into the most prominent model type group, but there is potential a model could fall into various groups. One group was selected for this analysis.

GRA	Circulation	Wave	Tsunami	Oil Spill	Ecosystem	HAB	Hypoxia	Coral Bleaching	Inundation/ Water Level/ Storm Surge/ Tides	Sea Level	Biogeochemical	Sea Ice	Atmospheric	Other	Totals
Black Sea GOOS	10			1											11
EUROGOOS	75	40		9	7				16	2	3	4	2	1	159
GOOS for Africa															
GRASP															
IOCARIBE	34	4	2	2	3				1		1		22	1	70
IOGOOS	8	3											1		12
MONGOOS	28	34		2						3	1				68
NEARGOOS															
OCEATLAN															
IMOS	4	1			2										7
PIGOOS	3	1						1		1					6
SEAGOOS		1													1
U.S. IOOS	51	18		4	4	3	1		6				1	2	90
<b>Totals:</b>	<b>213</b>	<b>102</b>	<b>2</b>	<b>18</b>	<b>16</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>23</b>	<b>6</b>	<b>5</b>	<b>4</b>	<b>26</b>	<b>4</b>	<b>424</b>
<b>Percentage:</b>	<b>50.2%</b>	<b>24.1%</b>	<b>0.5%</b>	<b>4%</b>	<b>4%</b>	<b>1%</b>	<b>0%</b>	<b>0%</b>	<b>5%</b>	<b>1%</b>	<b>1%</b>	<b>1%</b>	<b>6%</b>	<b>1%</b>	<b>100.0%</b>