Observer statements calculated as rates, and ODDS trip-logging compliance rates

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Standard Metric: Number of 'Statements'

What does it mean when the number of statements changes from year to year in a given statement category?

- Changes in fishing effort

- Changes in coverage rate

- Differences in total time spent deployed to vessels/plants across varying vessel/plant types

- More or fewer 'Incidents' contained within statements

- Attempts to answer the question:

- "How often do incidents occur in some of the different deployment situations in which observers find themselves placed into, and how do patterns change when we group the data by factors associated with certain fisheries?"

- … have proven difficult to answer without controlling for how many observers are deployed, and how many days they are deployed.

Alternative Approach: 'Incidents' per…

- Factors were identified from observer and CAS data (e.g., gear type, vessel type, observer role, general fishing area) to summarize by

- Statements may incorporate multiple incidents of a potential violation (e.g, number of hauls). This method used 'number of incidents' rather than 'number of statements'

- The number of incidents were linked to the factors where they applied (i)

- The number of total deployment days were linked to the factors where they applied (d)

- The number of observer assignments (cruise/vessel combinations) were linked to the factors where they applied (a)
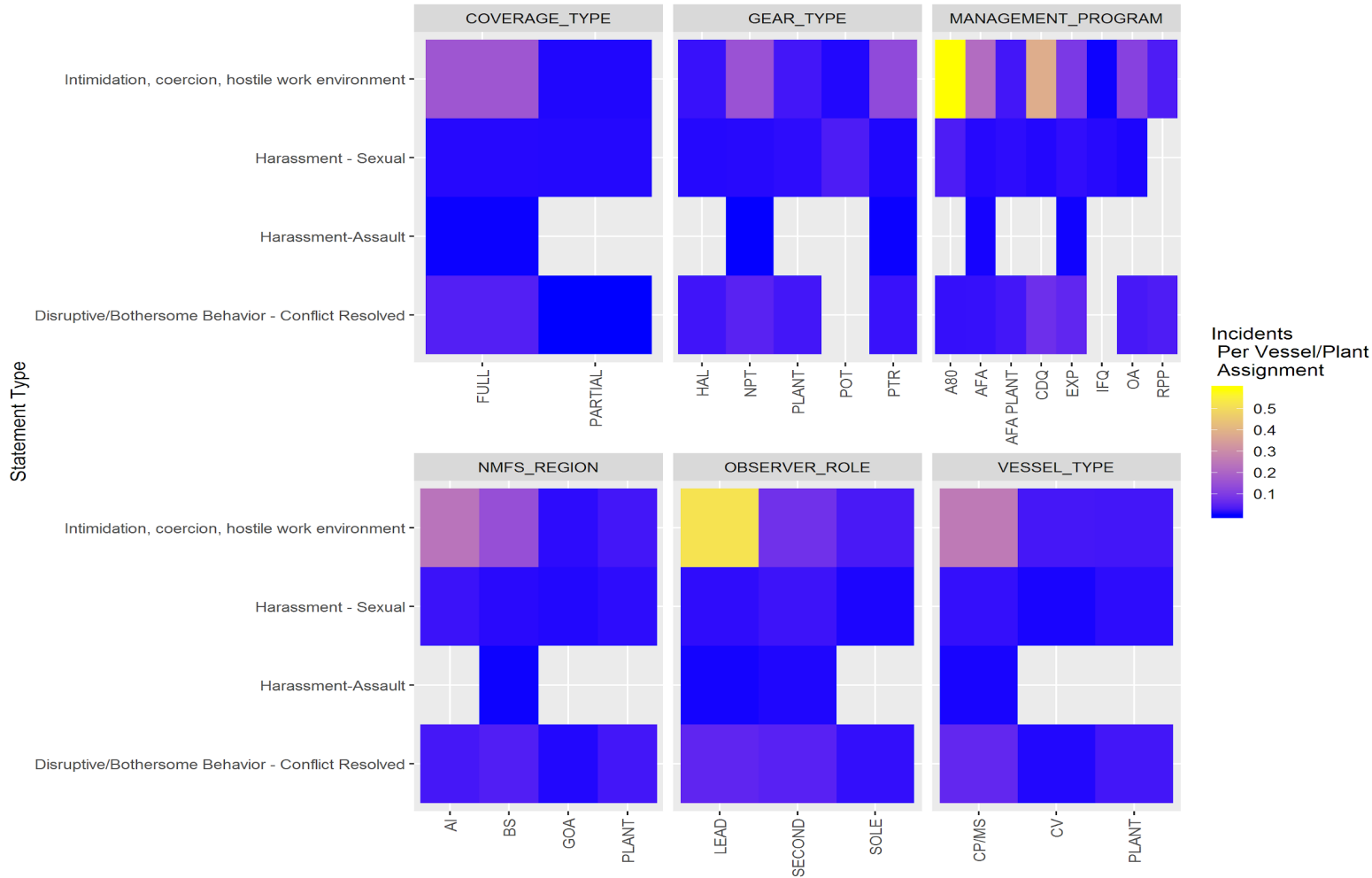
- For each factor:

$$(i/d)*1000 = incidents\ per\ 1000\ deployed\ days$$
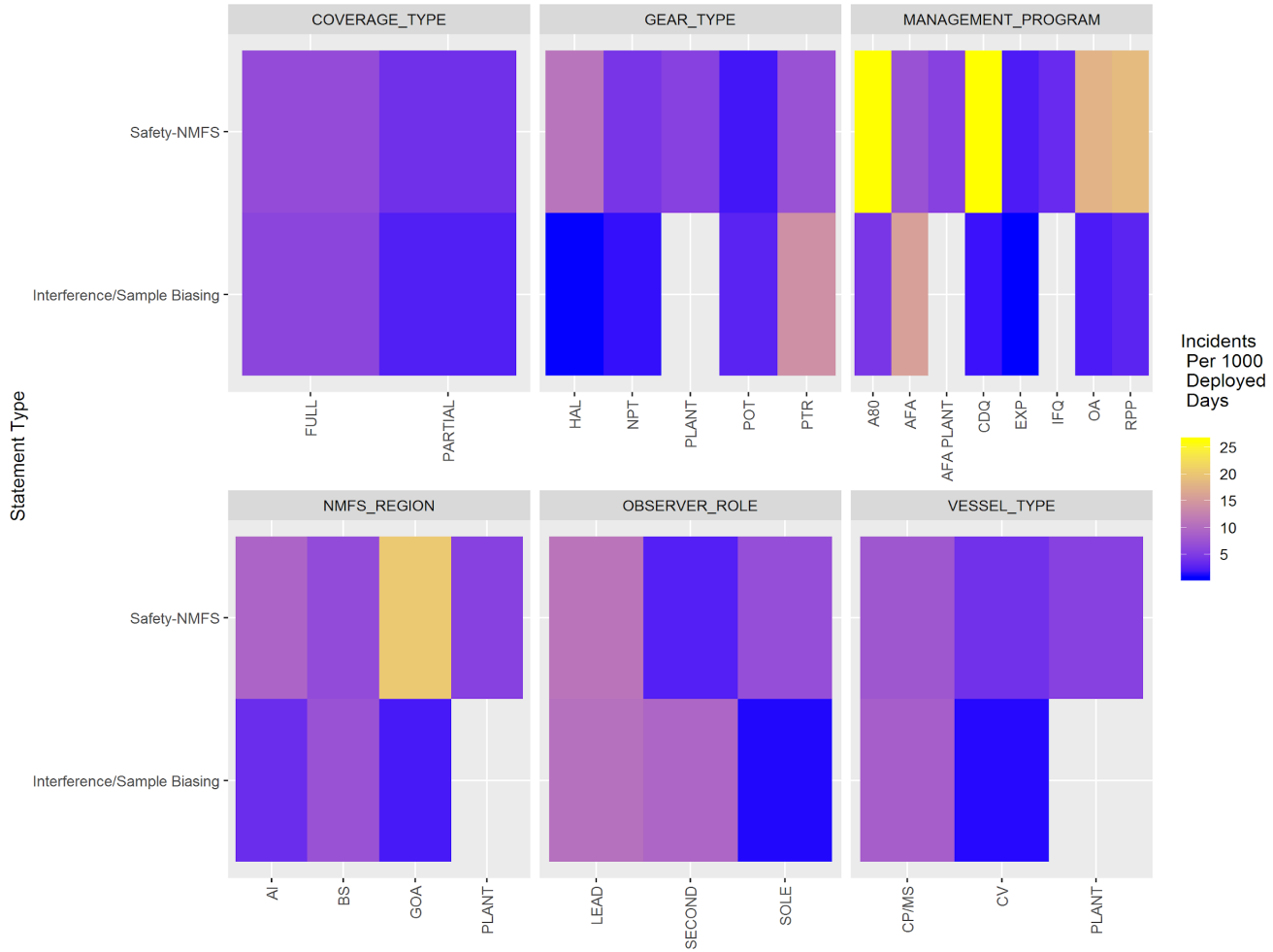
$$(i/a) = incidents\ per\ observer\ assignment$$

- Factors are independent of each other

Factor	Value	Statement types: OLE PRIORITY (Inter-Personal)	
		Incidents per assignment	Incidents per 1000 deployed days
COVERAGE TYPE	FULL	0.22	5.7
	PARTIAL	0.02	3.2
VESSEL TYPE	CP/MS	0.34	7
	CV	0.04	3.2
	PLANT	0.07	2.1
OBSERVER ROLE	LEAD	0.59	12.2
	SECOND	0.15	3.6
	SOLE	0.06	3.2
NMFS REGION	AI	0.29	11.4
	BS	0.2	5.8
	GOA	0.03	4.2
	PLANT	0.07	2.1

OLE PRIORITY: INTER-PERSONAL

OLE PRIORITY: SAFETY AND DUTIES

Discussion

- Future direction:

  - Determine which factors are most informative and report incident rates for those factors in annual reports

  - Explore time trends for these rates

  - Continue to work with OLE to identify the best use of this information

  - Overhaul the observer statement database to more clearly define the 'incident units', as applicable to various statement types (2020)

ODDS trip-logging compliance rates