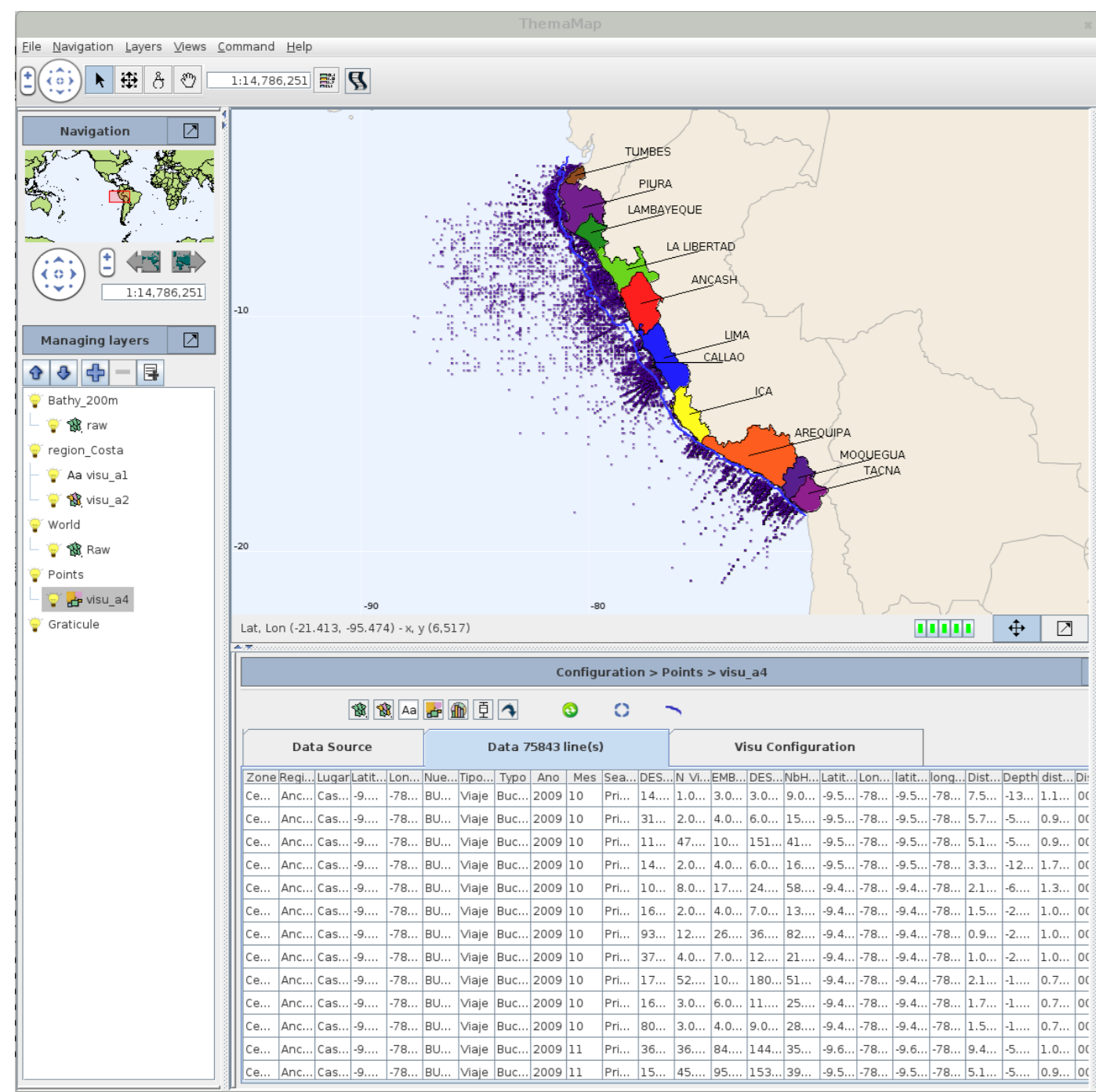


ThemaMap: from data to maps

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Characteristics

- ThemaMap is an free open-source software developed in Java
- Based on OpenMap developed by BBN technologies
- Available as a standalone app or through the Web
- Thematic maps and online atlases production tool

Specificities

- Data Processing Tools



- Various representation modes independent from the data source

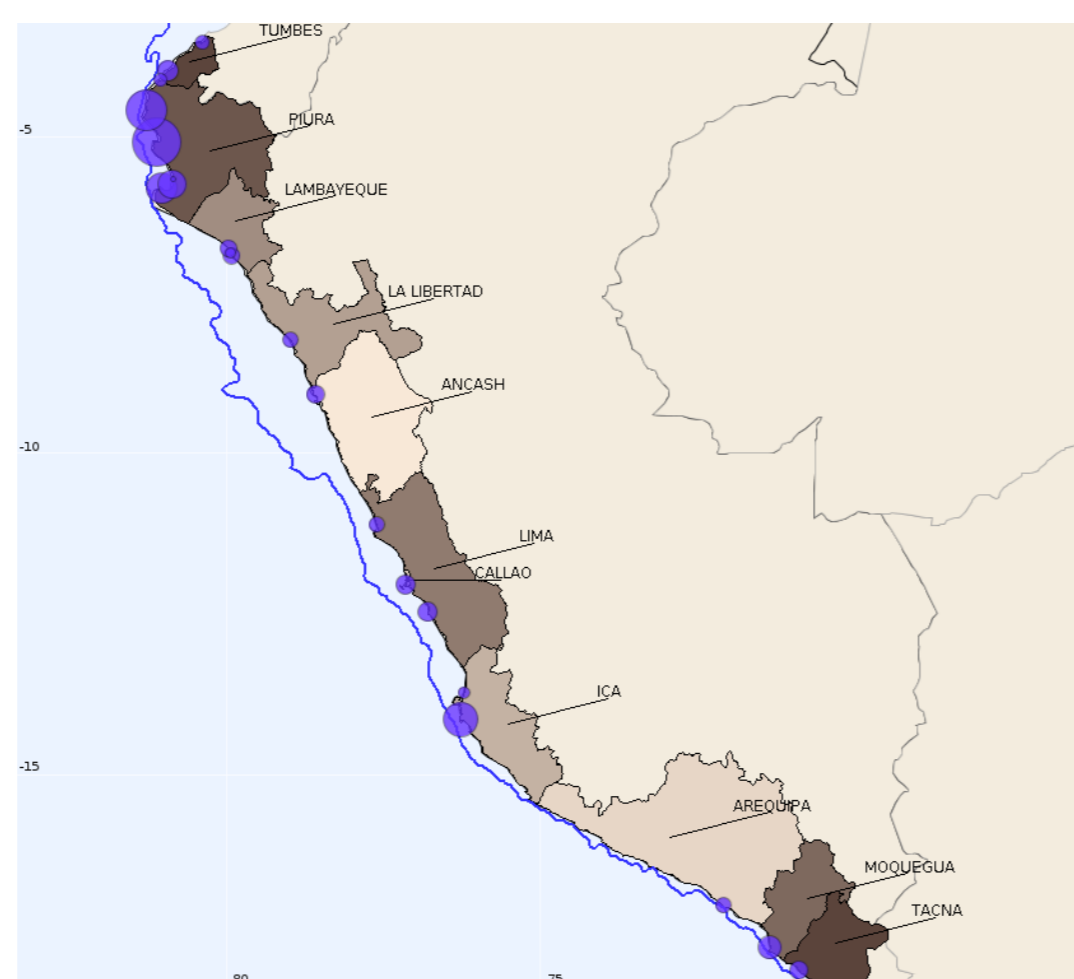


- Animations — Multi dimensional data exploration
- Data export in CSV and GML
- Maps export as raster (PNG) and vectorial (SVG) images or KML
- Projects saved as properties, optionally with bundle data

All the data used to create the maps come from the IMARPE. The first sample comes from the IMARPE monitoring system on fishing activities and landings. The second one is a GPS trace of fishing boats routes.

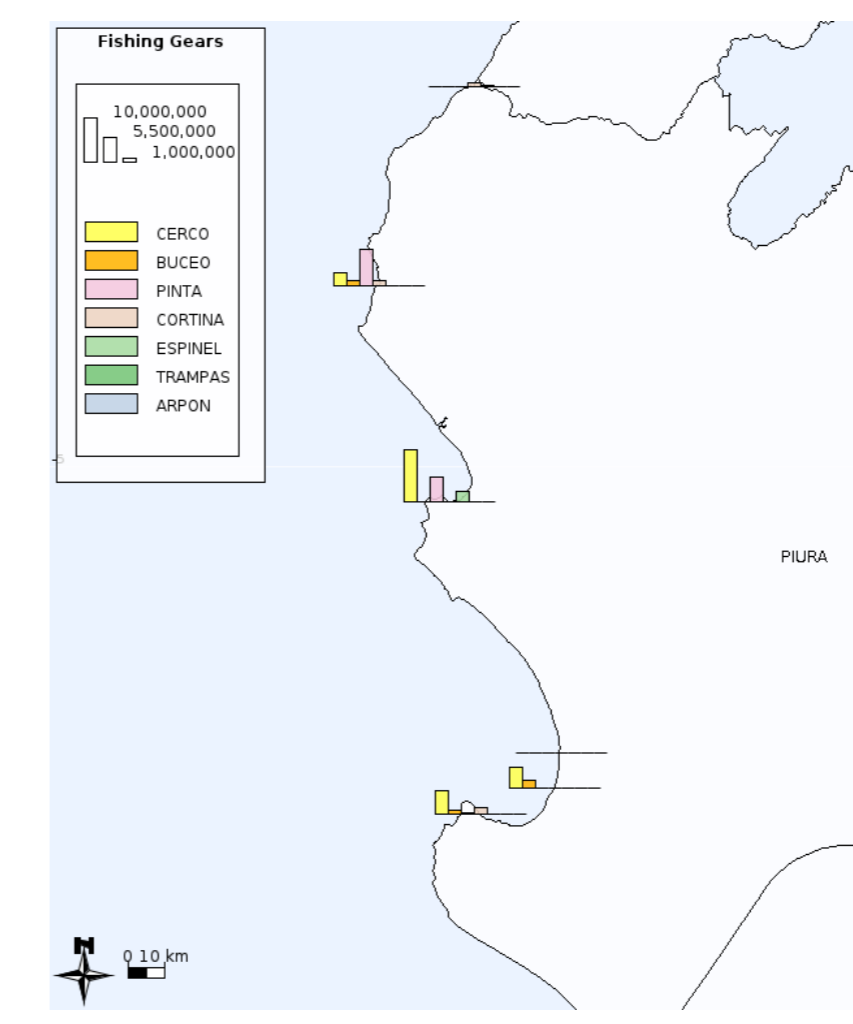
Pivot and Aggregation Tool

Attributes	Discard	Criteria	Pivot	Statistics	Aggregate Fun.
Zone	*				
Region	*				
Lugar		*			
Latitude	*				
Longitude	*				
Nuevo_Arte	*				
Nuevo_Arte	*				
TipEch	*				
Year	*				
Month	*				
Season	*				
DES_NDESEM				*	Sum
N_Vive	*				
EMB_NCAPROD	*				
DES_NNUMTRI	*				
NHoras	*				



Landings per fishing sites

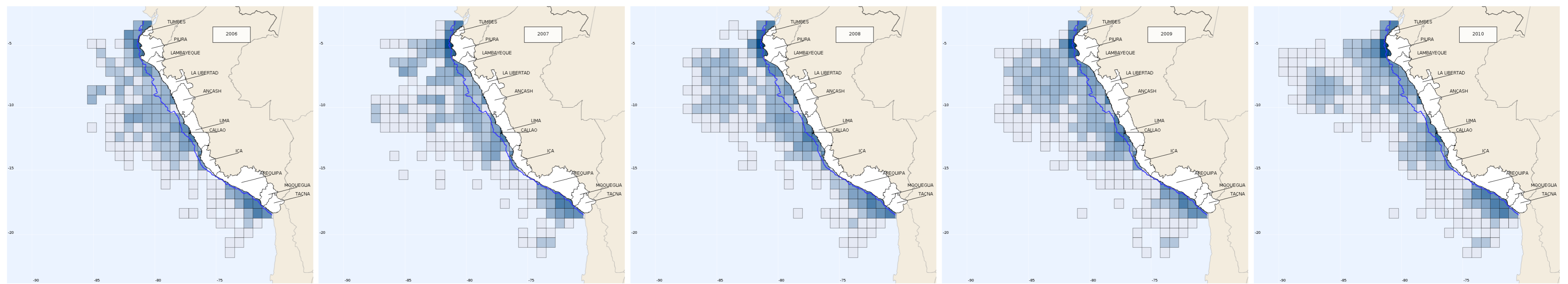
Attributes	Discard	Criteria	Pivot	Statistics	Aggregate Fun.
Zone	*				
Region	*				
Lugar	*	*			
Latitude	*				
Longitude	*				
Nuevo_Arte	*	*			
TipEch	*				
Year	*				
Month	*				
Season	*				
DES_NDESEM				*	Sum
N_Vive	*				
EMB_NCAPROD	*				
DES_NNUMTRI	*				
NHoras	*				



With fishing gears (Nuevo-Arte) selected as criteria, landings per fishing gears can be represented with histograms or pies, here for the Piura region

Grid Construction Tool — Animation Tool

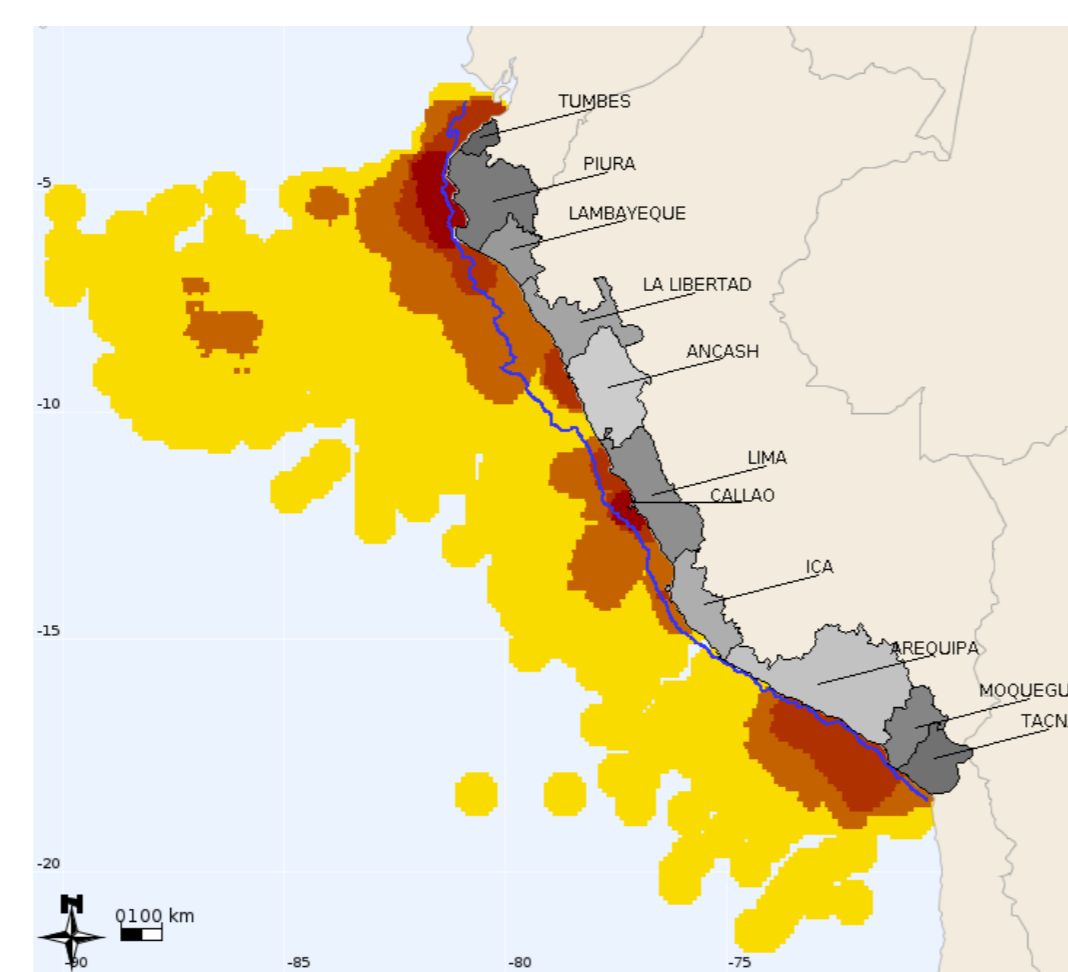
Attributes	Discard	Criteria	Statistics	Aggregate Function
NHoras	*			Sum
N_Vive	*			Sum
DES_NDESEM	*			Sum
Year	*			



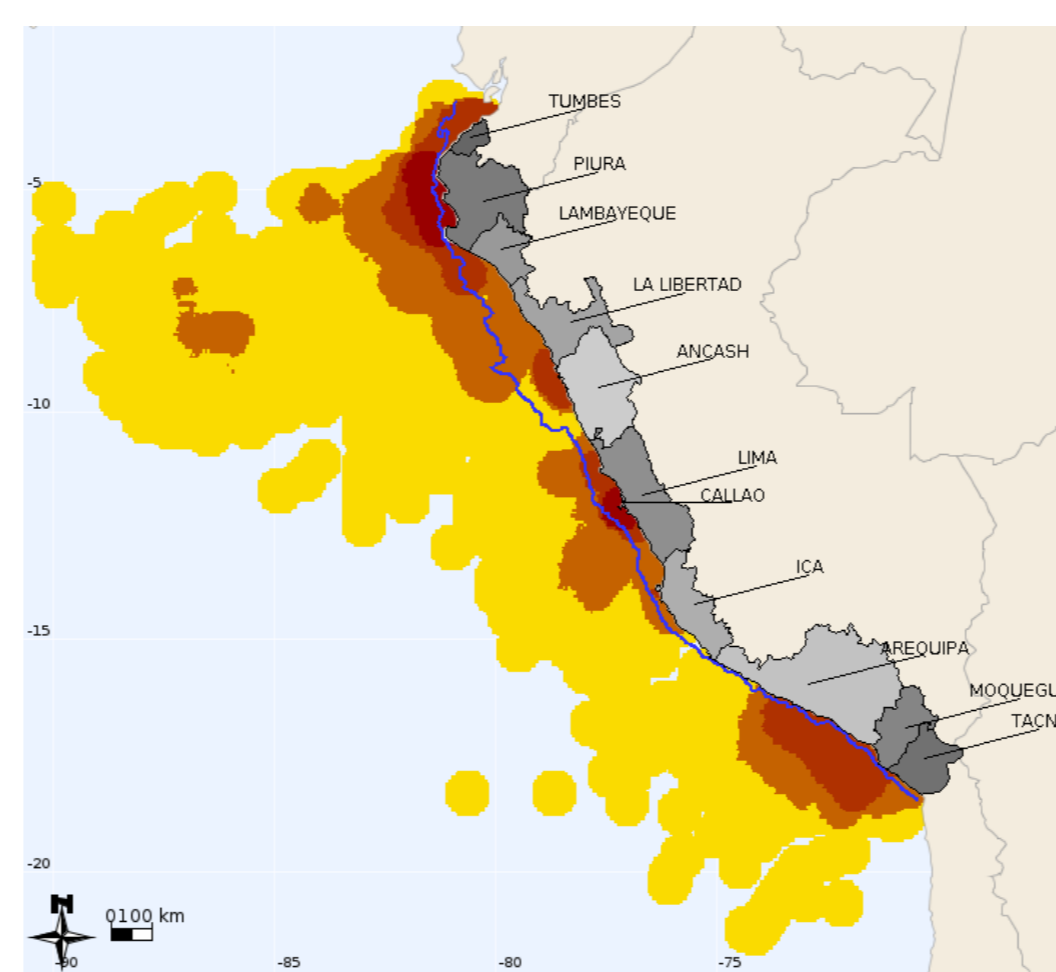
Catches per grid at the different years

Kernel Smoothing Tool

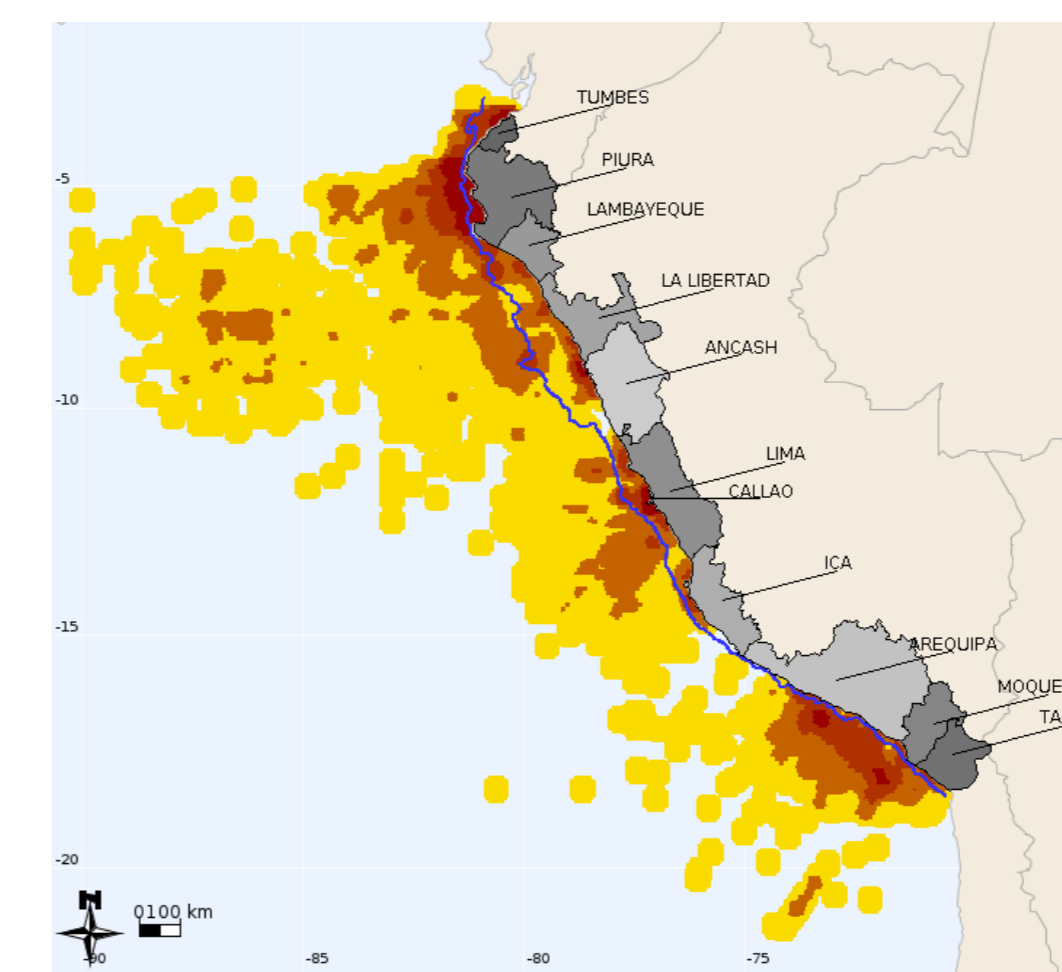
Attributes	Discard	Criteria	Statistics	Aggregate Function
DES_NDESEM	*			Sum
N_Vive	*			Sum
NHoras	*			Sum



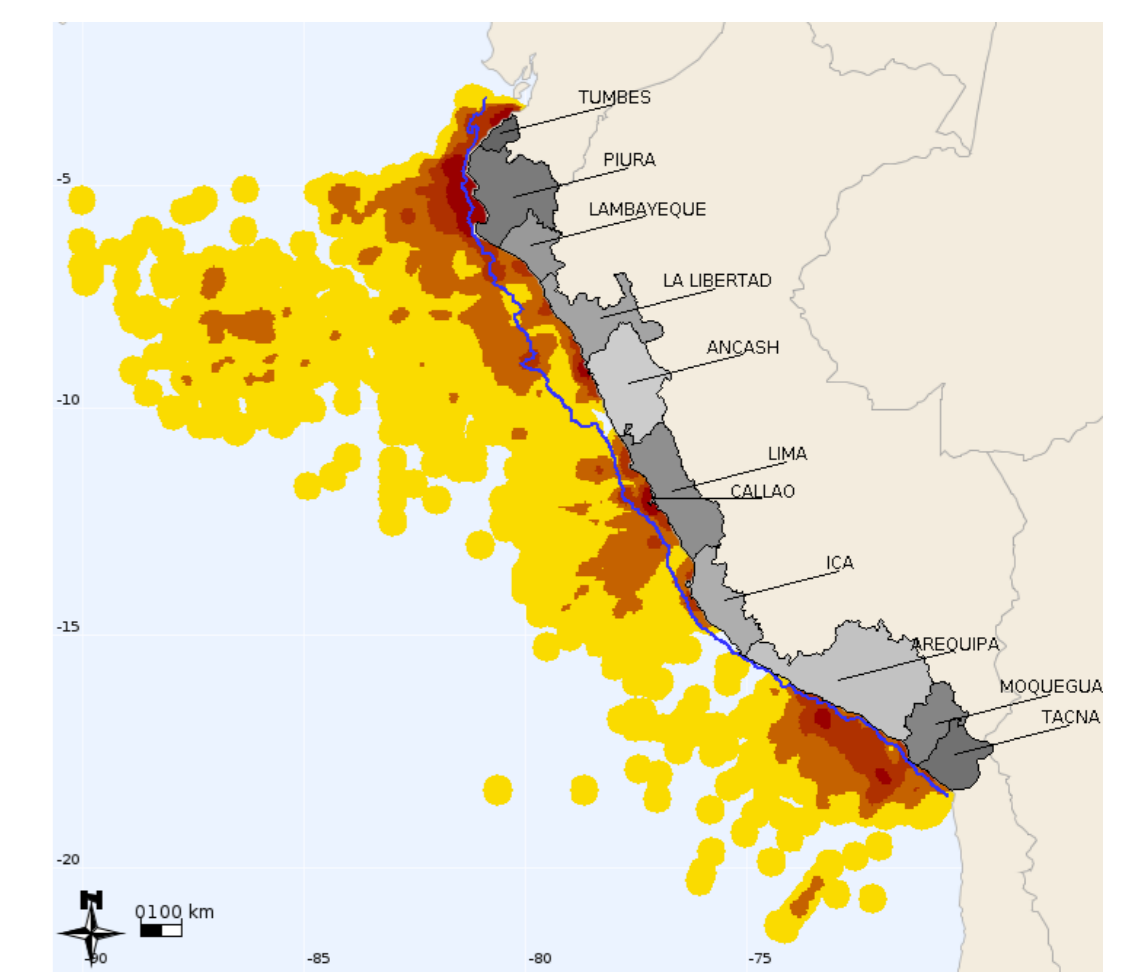
Grid 0.1 x 0.1 Uniform radius 0.5



Grid 0.05 x 0.05 Uniform radius 0.5



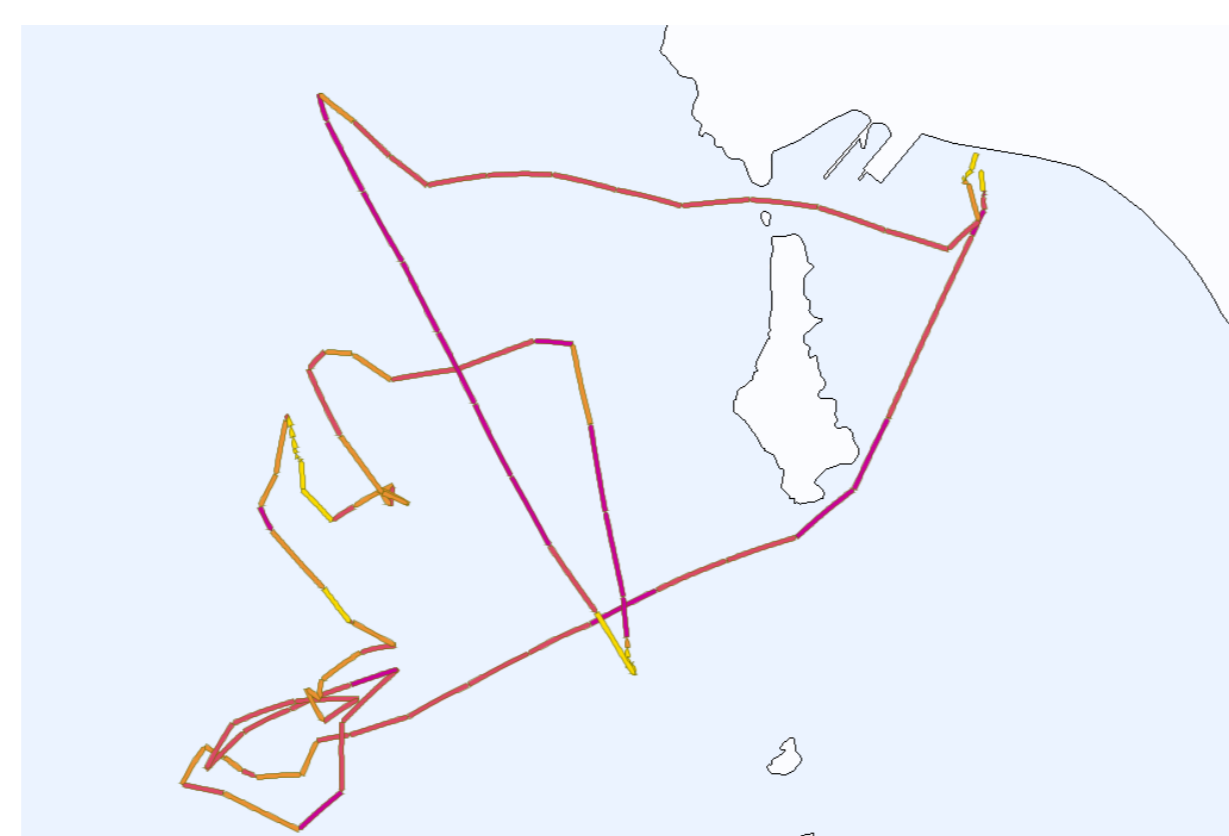
Grid 0.05 x 0.05 Quartic radius 0.3



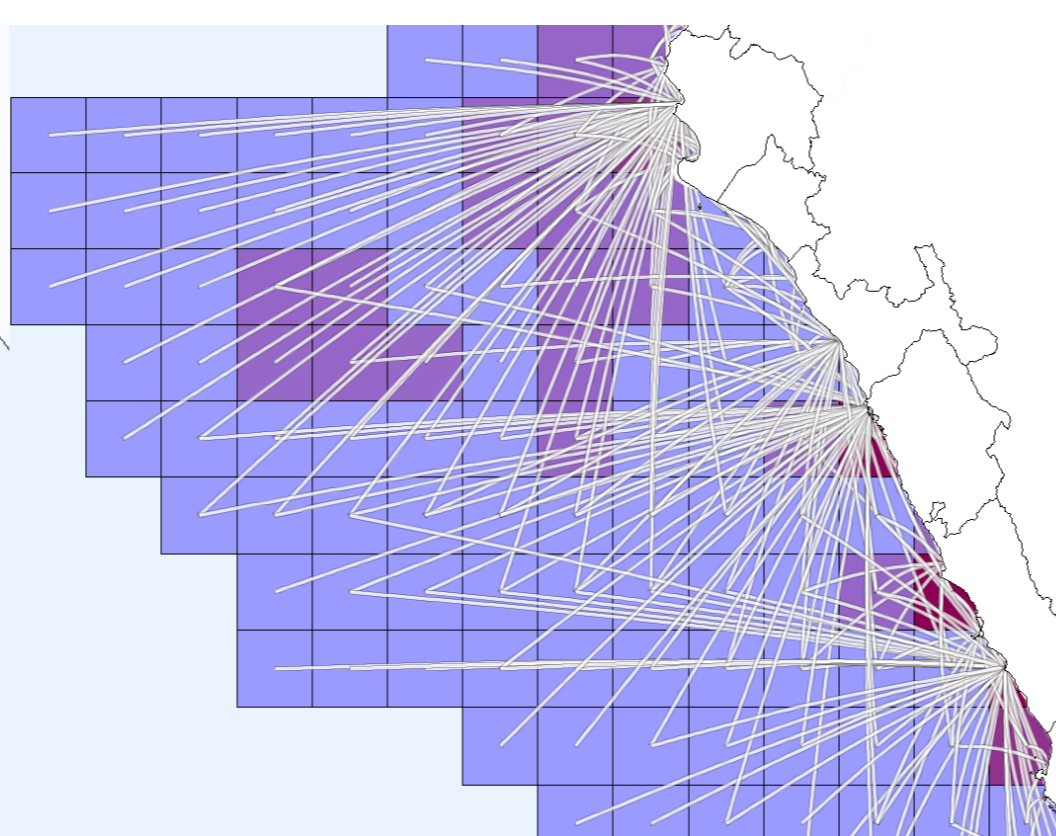
Grid 0.03 x 0.03 Quartic radius 0.3

Add Column Tool — Route and Flow Visualization — Contours — Convex Hull

Expression	Help For Editing
Distance (Distance - Differe - 1000)	Validate
Distance (Distance - Differe - 1000)	Validate
Distance (Distance - Differe - 1000)	Validate



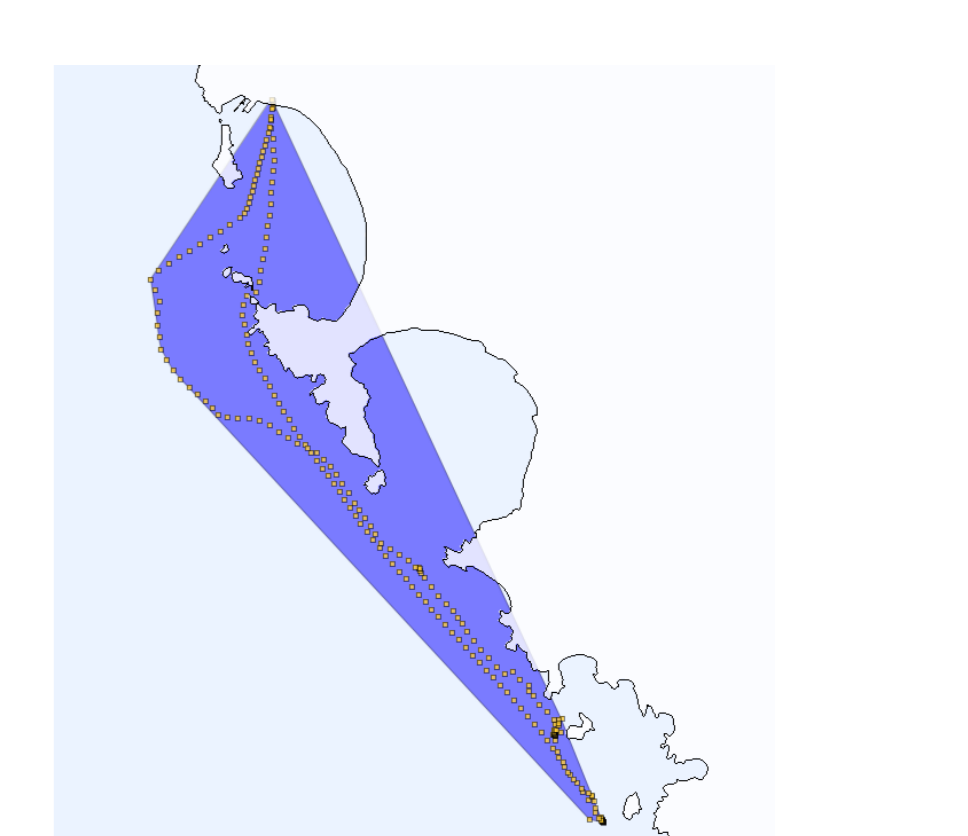
The add column tool is used to compute the speed of the boat between 2 gps samples.



The flow visualization mode is used to link fishing areas with the landing fishing sites



Bathymetry isolines computed with the Contour Tool from Etopo data



Convex Hull of a Fishing Boat Trip