

Updating collision risk models (CRMs) to quantify cumulative impacts for endangered birds

Goal: Develop a powerful, but user-friendly, CRM for quantifying risk to endangered birds from offshore wind

Audience:



Modeler

Specialist

Non-specialist

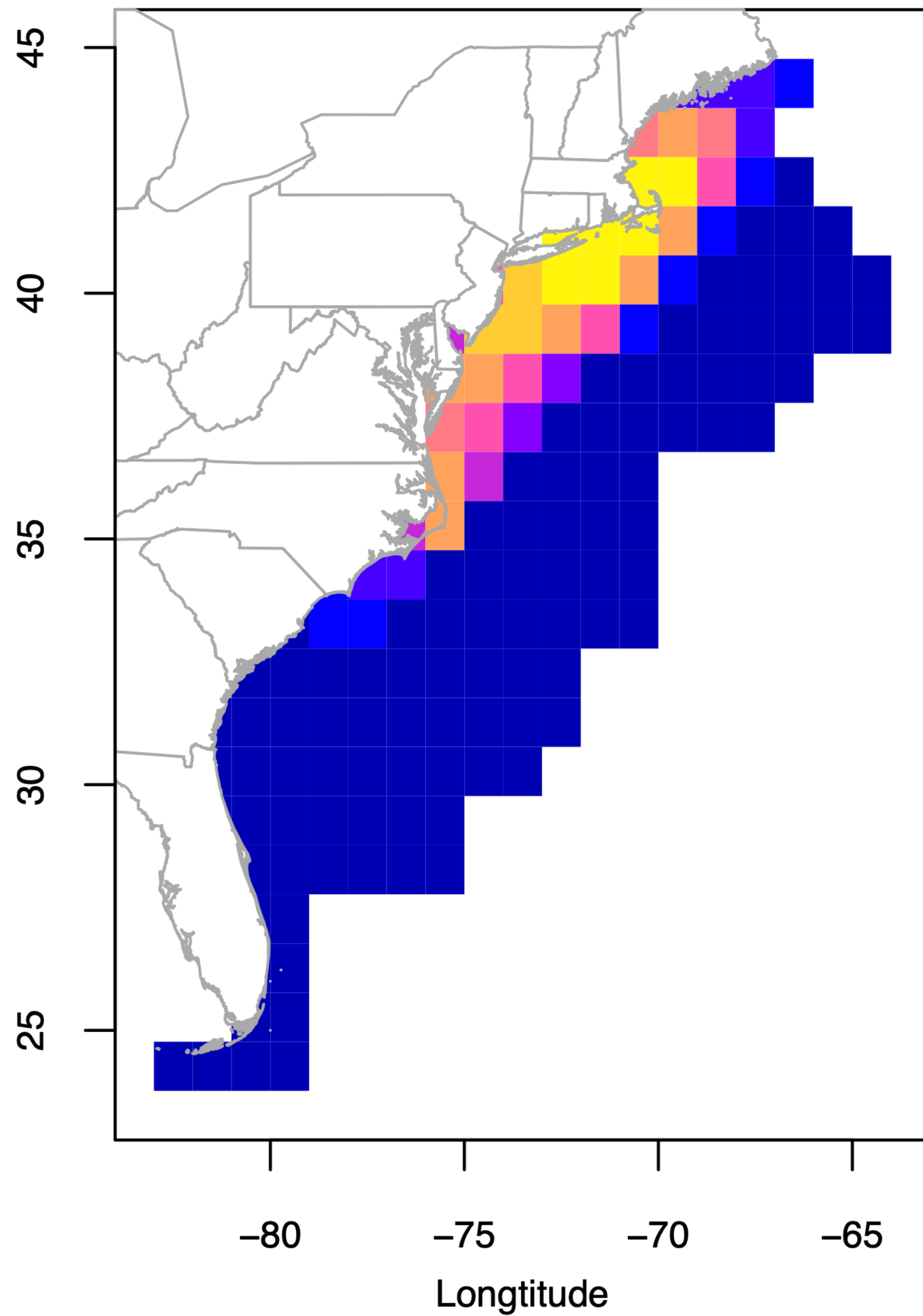
Christopher Field, University of Rhode Island
Pam Loring, U.S. Fish and Wildlife Service
Brian Gerber, University of Rhode Island



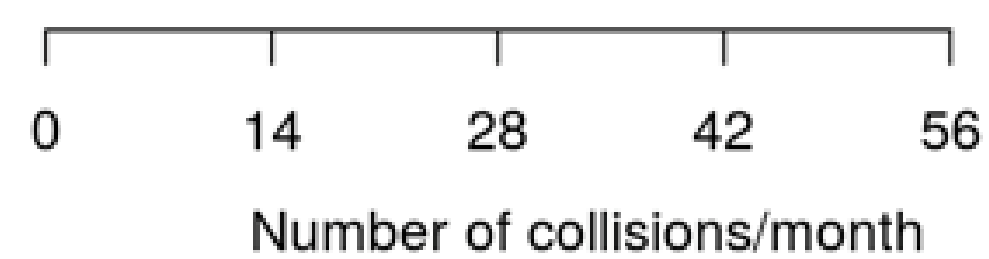
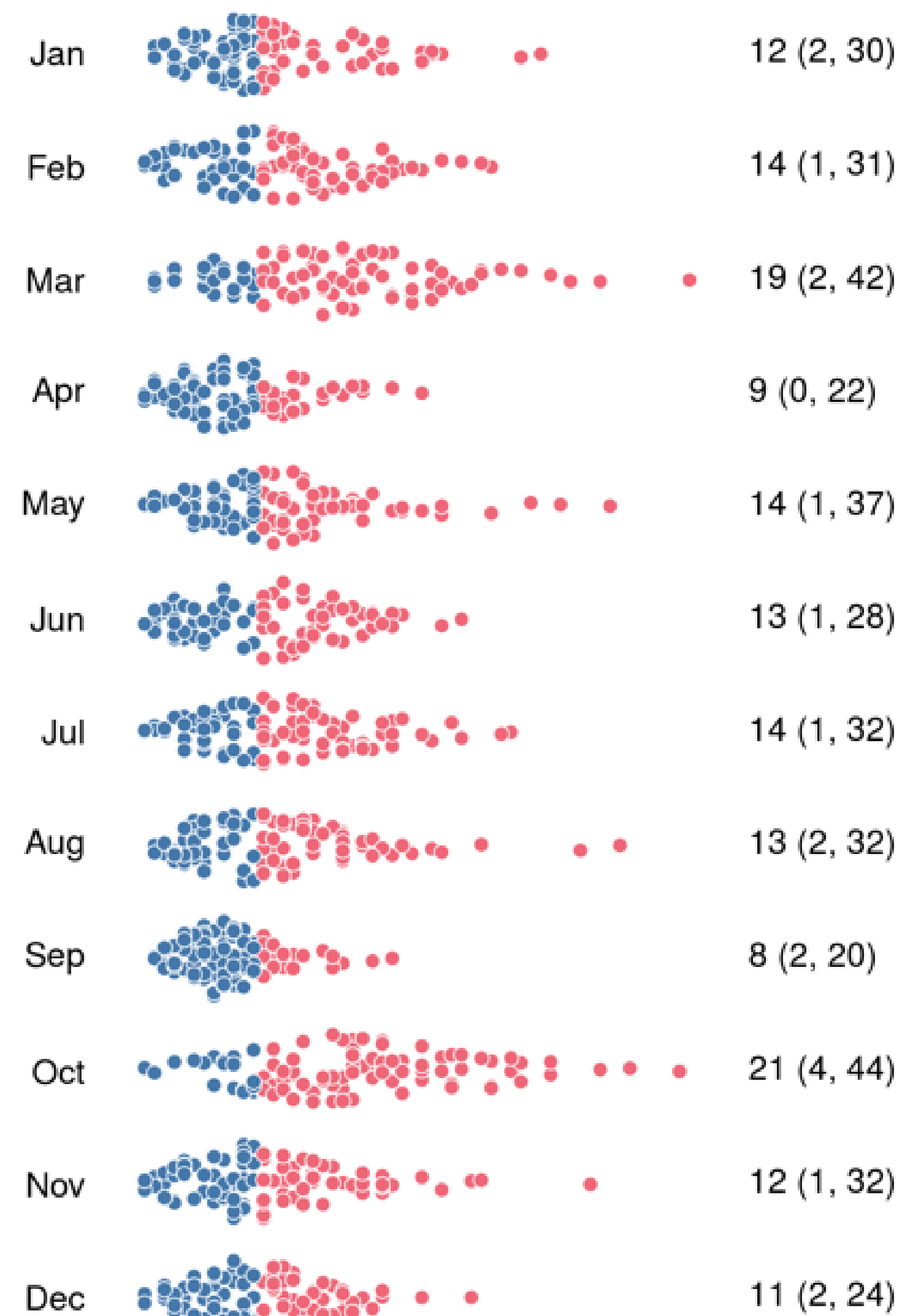
Motus

CT-CRW

Latitude



CRM



URI Collision Risk Model MkIII

Main dashboard

Do you have a flight height distribution?

Yes

No

Collision risk model

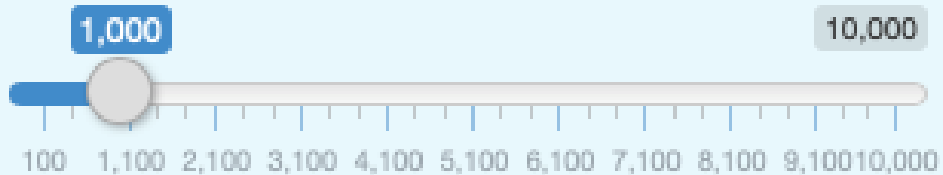
Basic

Approximated

Individual-based

Iterations

1,000 10,000



100 1,100 2,100 3,100 4,100 5,100 6,100 7,100 8,100 9,100 10,000

Threshold

120

run CRM Cancel

Species options

Select species

Red Knot Piping Plover Roseate Tern Common Tern

Download example input file

Upload species data and flight height distributions

Browse... No file selected

Wind farm options

Download example input file

Upload turbine data

Browse... TurbineData_example.csv

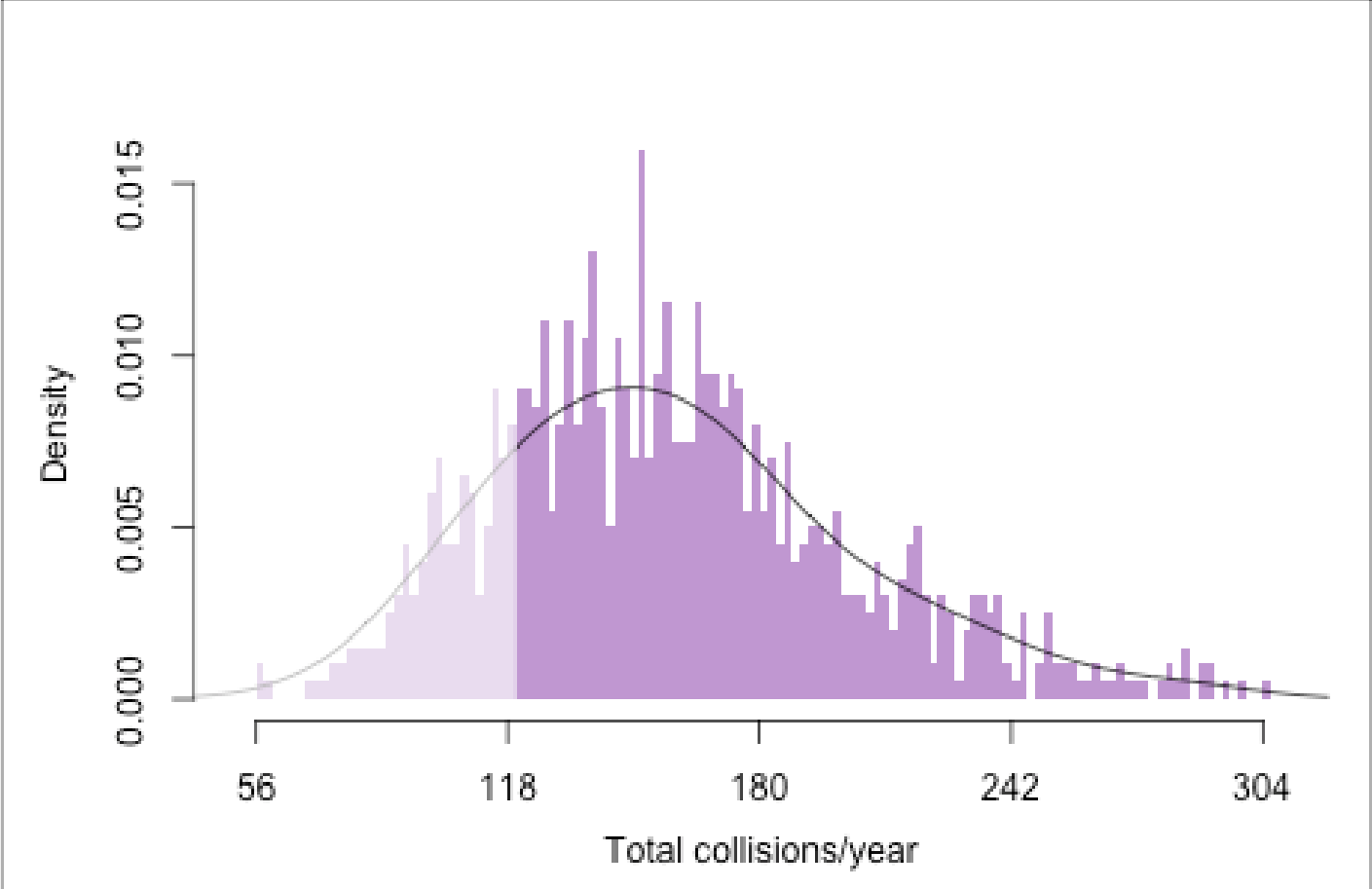
Upload complete

Output dashboard

Run Sensitivity

Download model runs

Generate report



Density

Total collisions/year

The selected option will take ~ 100 seconds to run.

Basic CRM ran successfully.

The probability of exceeding specified threshold is 0.81.