

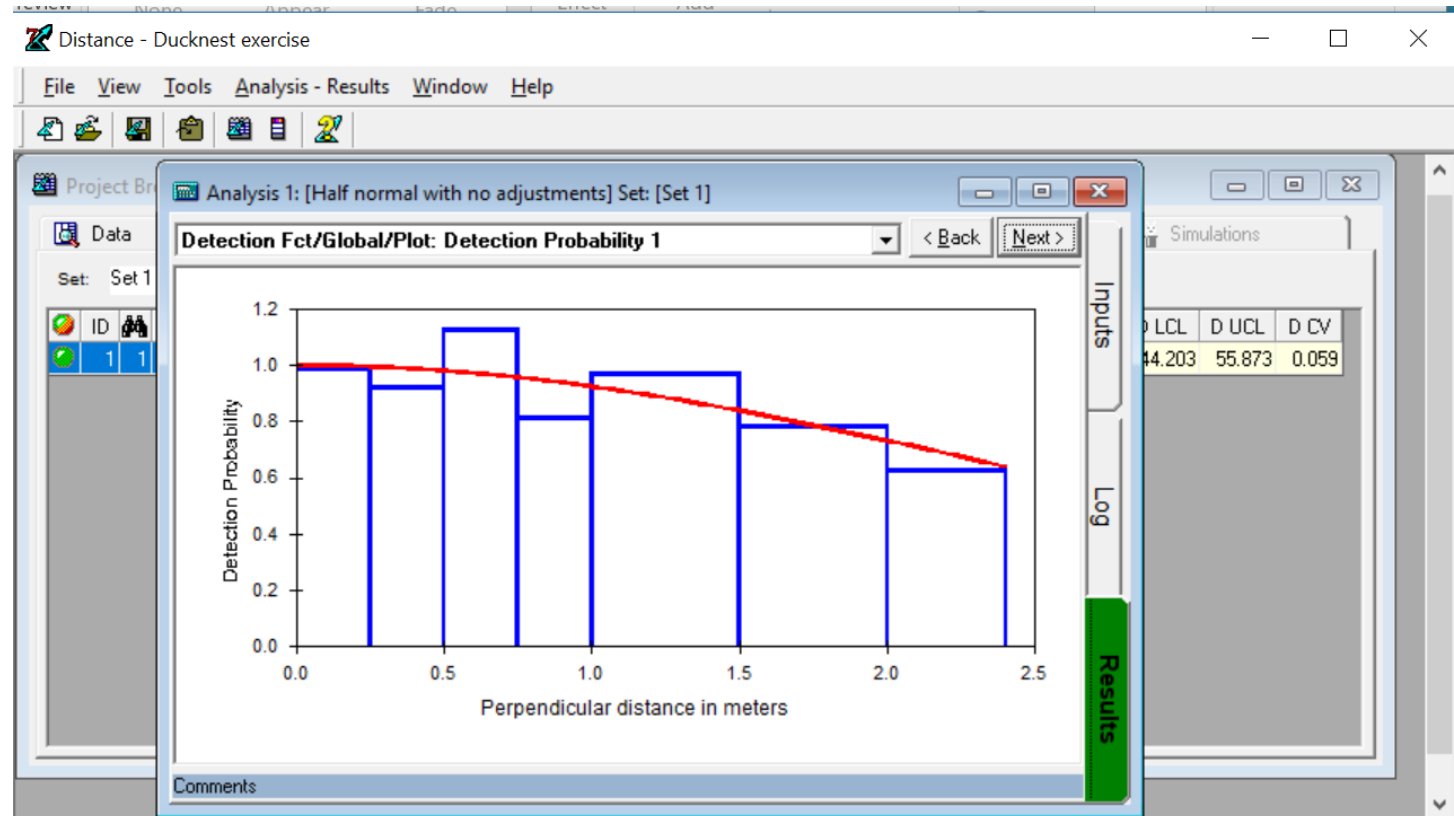
# Overview of Distance software

# What is Distance?

Windows software for design and analysis of distance sampling surveys

Free to download from [distancesampling.org](http://distancesampling.org)

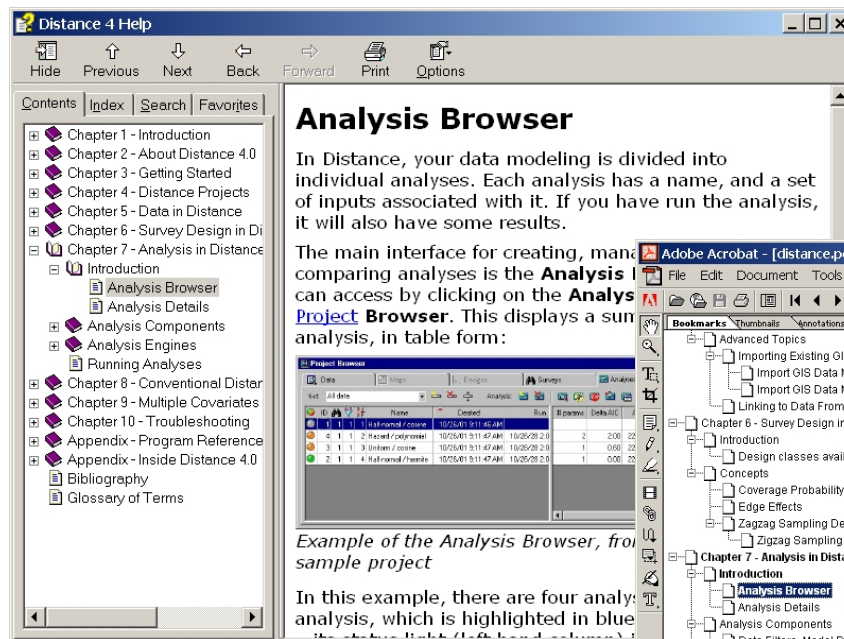
Analysis methods are also available as a set of R packages.



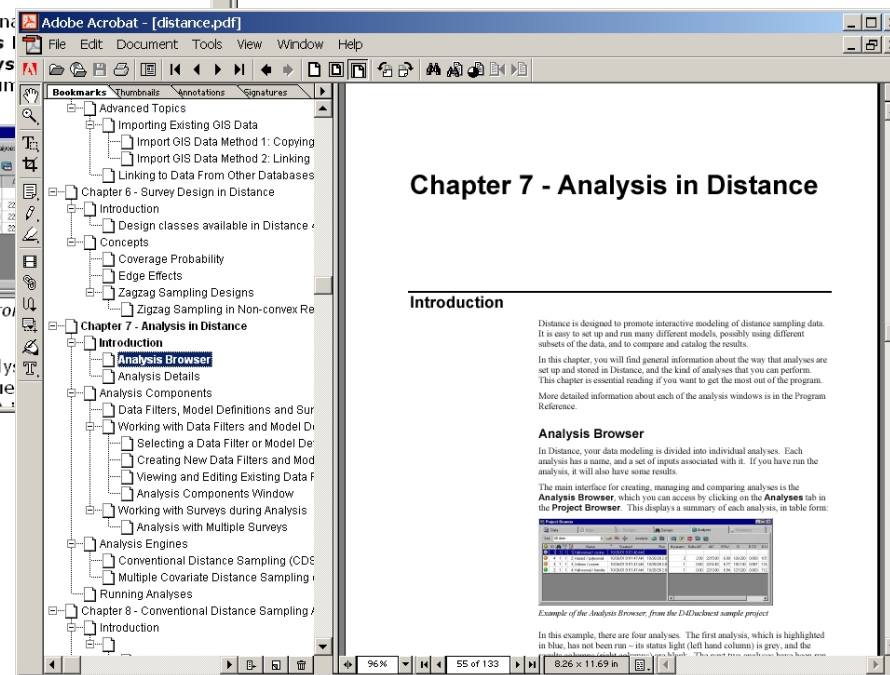
# Introduction

# Distance Manuals

## Users Guide – pdf



## Distance help



# Introduction

## Support

distance-sampling email list

To join, send a message to

[distance-sampling+subscribe@googlegroups.com](mailto:distance-sampling+subscribe@googlegroups.com)

with a blank subject and message

You will receive a confirmation from Google

*(check you spam filter)*

Because the list is maintained by Google,

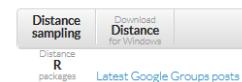
*the messages dating back to 1998, are searchable*

Distance home page

[distancesampling.org](http://distancesampling.org)



Information on the development of Distance and Distance-related R packages.



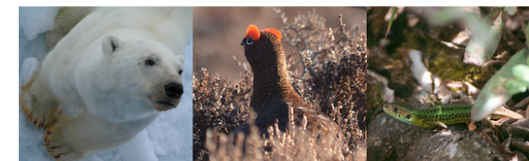
check for possible analysis approach  
by Joaquin Aldebe - 19 hours ago  
Hello all, I'm trying to assess if there are differences in the density of grassland shorebirds (*Pluvialis dominica* and ...  
Disabled researcher looking for an assistant to help Analyse data  
by Lamine M Bensabeh - 21 hours ago  
Hello, I am new to Distance and have been watching the different tutorial videos with no success. I am deaf and partially ...

### Welcome to the Distance project website

The Distance project provides software for the design and analysis of distance sampling surveys of wildlife populations. This software takes two forms: a Windows-based program and a suite of packages for the statistical programming language R.

[What is distance sampling?](#)

UPCOMING: Distance sampling workshops at St Andrews in August 2014

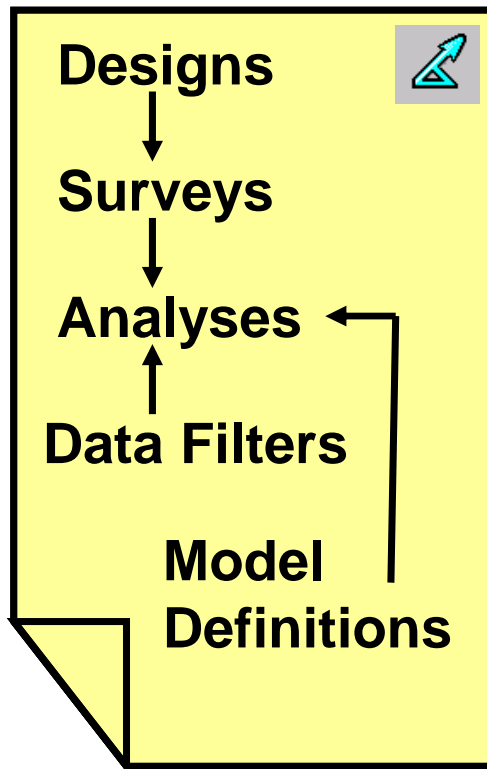


Distance for Windows

# Distance Projects

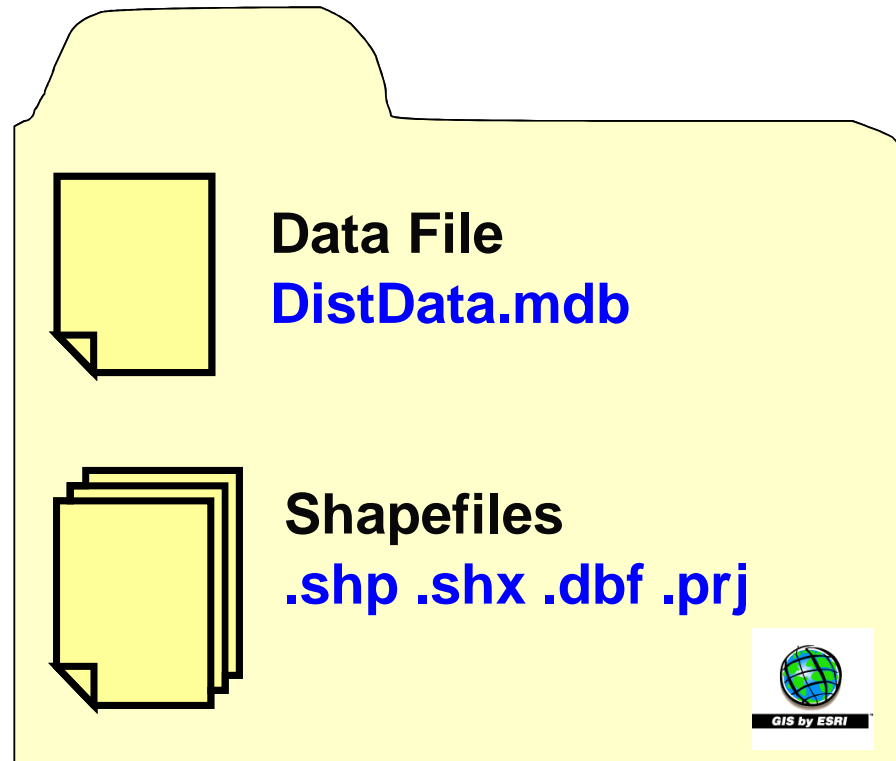
## Project File

**MyProject.dst**



## Data Folder

**MyProject.dat**



# Distance Projects

To create a New Project:

New Project Setup Wizard (File | New Project)

To open a Project:

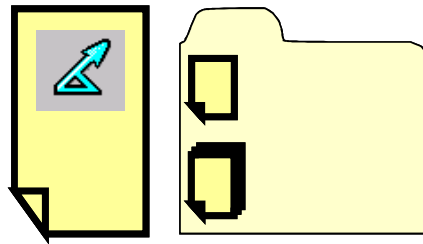
File | Open Project

To check Project Settings:

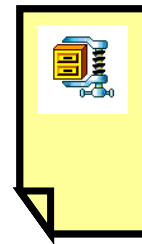
Project Properties (File | Project properties)

# Distance Projects

**Project File + Project Folder**



**Zip archive file**



To export a project to zip archive:

File | Export Project

Save as type “zip archive files \*.zip”

To unpack a project from zip archive, and open:

File | Open

Files of type “zip archive files \*.zip”

# Survey data in Distance

Data Layers

**Global layer**



**Stratum layer**



**Sample layer**



**Observation  
layer**





# Survey data in Distance

## Data Layers

Global

Stratum

Sample

Observation

Project Browser

Data Maps Designs Surveys Analyses Simulations

Data layers

- Study Area
  - Region
    - Line transect
      - Observation

Contents of Observation layer 'Observation' and all fields from higher layers

Study Area			Region			Line transect			Observation		
ID	Label		ID	Label	Area	ID	Label	Line length	ID	Perp distance	Cluster size
ID	Label		ID	Label	Decimal	ID	Label	Decimal	ID	Decimal	Integer
n/a	n/a		n/a	n/a	nautmi2	n/a	n/a	nautmi	n/a	nautmi	[None]
Int	Int		Int	Int	Int	Int	Int	Int	Int	Int	Int
						8	8	59	29	0.6	1
									30	0.1	2
						9	9	10			
						10	10	13			
						11	11	56			
						12	12	1			
			1	Ideal Habitat	85000				31	0.1	1
									32	0.68	1
									33	0.31	2
									34	0.58	2
						13	13	80	35	0.49	1
									36	0.46	2
									37	0.36	2
									38	0.09	2
									39	0.03	2
									40	0.49	1
									41	1.94	8
									42	1.1	10
			2	Marginal Habitat	600000	14	14	75	43	0.85	5
									44	0.63	7
									45	0.38	2

# Survey data in Distance

## Data Fields

Line transect			Observation		
ID	Label	Line length	ID	Perp distance	Cluster size
ID	Label	Decimal	ID	Decimal	Integer
n/a	n/a	nautmi	n/a	nautmi	[None]
Int	Int	Int	Int	Int	Int
8	8	59	29	0.6	1
			30	0.1	2
9	9	10			
10	10	13			
11	11	56			
12	12	1			
13	13	80	31	0.1	1
			32	0.68	1
			33	0.31	2
			34	0.58	2
			35	0.49	1
			36	0.46	2
			37	0.36	2
			38	0.09	2
			39	0.03	2
14	14	75	40	0.49	1
			41	1.94	8
			42	1.1	10
			43	0.85	5
			44	0.63	7

Field name

Field type (**Integer**,  
**Decimal**, **Text**, **ID**,  
**Label**)

Units

# Survey data in Distance

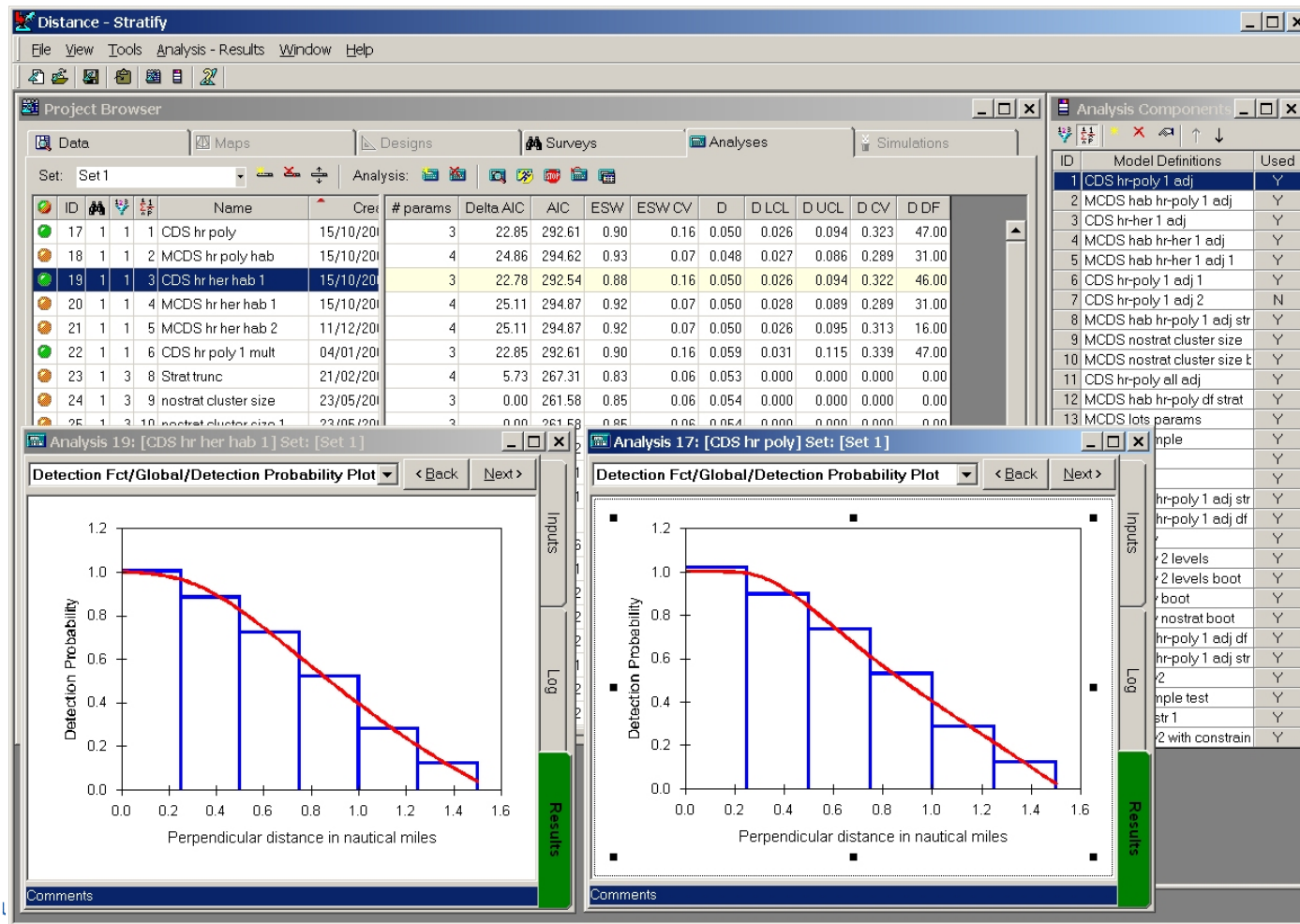
## **Getting data into Distance:**

Data Entry Wizard

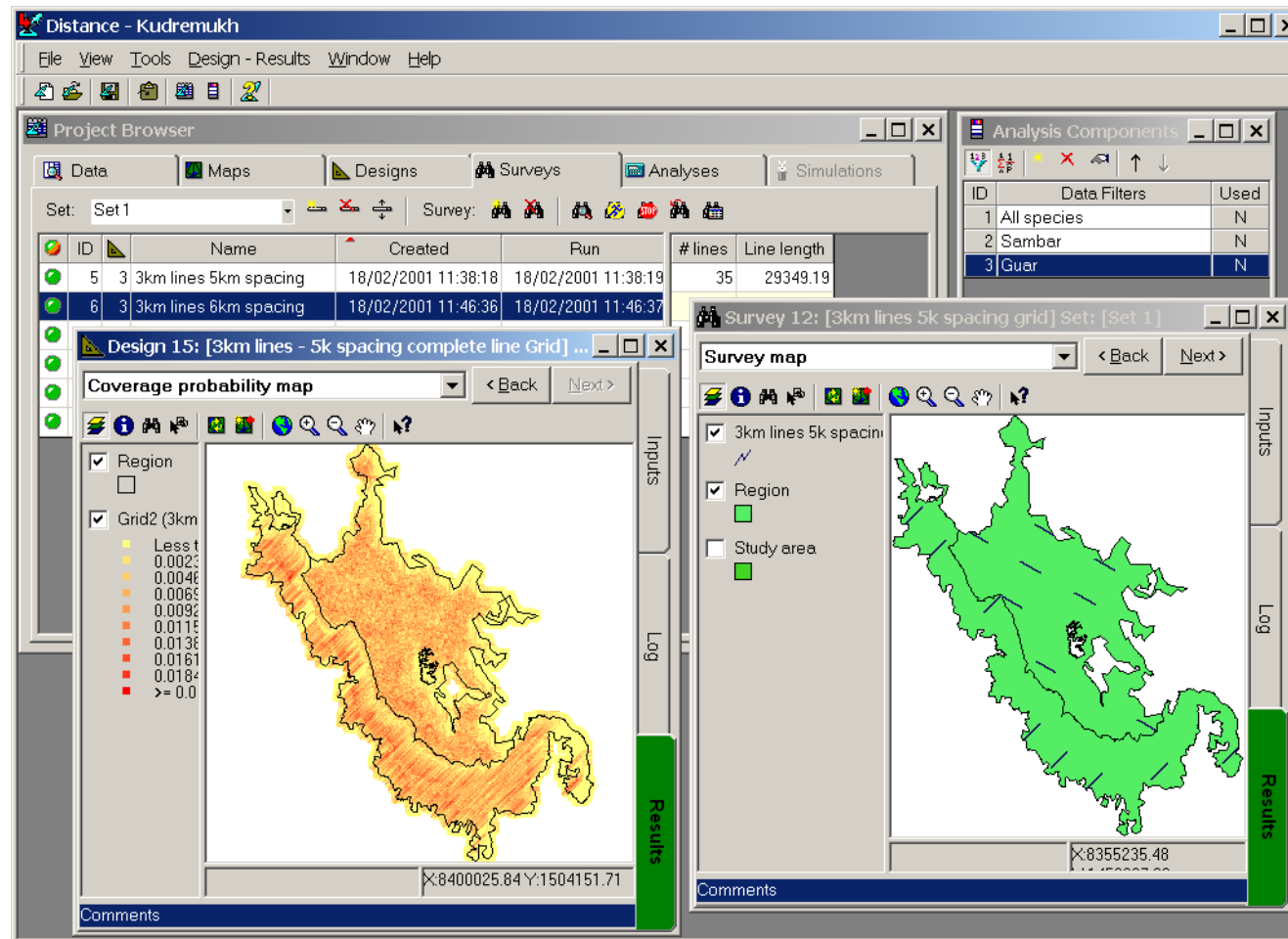
Data Explorer

Data Import Wizard

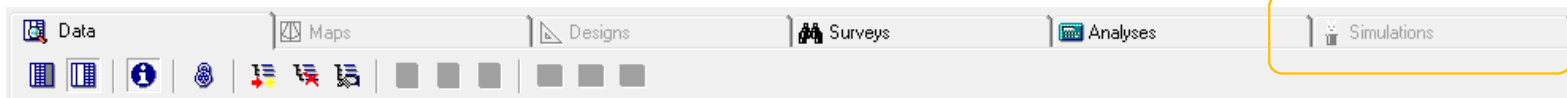
# Analysis in Distance



# Survey Design in Distance



# Distance Sampling simulation



The simulation engine permits assessment of estimator or survey design performance by generating populations, sampling from them and estimating density or abundance using the sampled data

