

KRM App

Two tabs:

Run KRM – Runs the KRM model

Shape Generator – Extract shape information from Images or X Rays

Run KRM

Run KRM

Shape Generator

Minimum Frequency (kHz):	Maximum Frequency (kHz):	N Frequency values:
<input type="text" value="10"/>	<input type="text" value="260"/>	<input type="text" value="251"/>
Minimum rotation:	Maximum rotation:	N rotation values:
<input type="text" value="65"/>	<input type="text" value="115"/>	<input type="text" value="41"/>
Ambient Sound speed (m/s):	Sound speed Body:	Sound speed Swimbladder:
<input type="text" value="1490"/>	<input type="text" value="1570"/>	<input type="text" value="345"/>
Ambient Denisty (kg/m3):	Body Density (kg/m3):	Swimbladder Density (kg/m3):
<input type="text" value="1030"/>	<input type="text" value="1070"/>	<input type="text" value="1,24"/>
Minimum Length (m):	Maximum Length (m):	N Length values:
<input type="text" value="0,25"/>	<input type="text" value="0,25"/>	<input type="text" value="1"/>

Upload Shape File

Browse...

KRMshp.csv

Upload complete

Run KRM

Download KRM Results

Results in:

frequency	TS	c_w	rho_w	theta	c_fb	c_sb	rho_sb	rho_fb	L
10000.00	-34.98	1490.00	1030.00	65.00	1570.00	345.00	1.24	1070.00	0.25
11000.00	-35.15	1490.00	1030.00	65.00	1570.00	345.00	1.24	1070.00	0.25
12000.00	-35.40	1490.00	1030.00	65.00	1570.00	345.00	1.24	1070.00	0.25
13000.00	-35.71	1490.00	1030.00	65.00	1570.00	345.00	1.24	1070.00	0.25
14000.00	-36.07	1490.00	1030.00	65.00	1570.00	345.00	1.24	1070.00	0.25
15000.00	-36.47	1490.00	1030.00	65.00	1570.00	345.00	1.24	1070.00	0.25
16000.00	-36.92	1490.00	1030.00	65.00	1570.00	345.00	1.24	1070.00	0.25
17000.00	-37.42	1490.00	1030.00	65.00	1570.00	345.00	1.24	1070.00	0.25
18000.00	-37.98	1490.00	1030.00	65.00	1570.00	345.00	1.24	1070.00	0.25

Shape Generator

First upload both images (Left Side View, Right: Top View).

Upload Image

Browse...

D1VW8ME0.jpg

Upload complete

Rotation:

-45

Polygon name

SWB_Side

Upload Image

Browse...

D1VY6MU0.jpg

Upload complete

Rotation:

-45

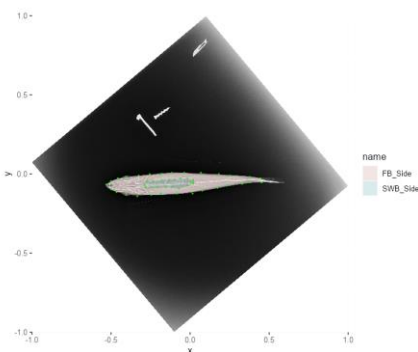
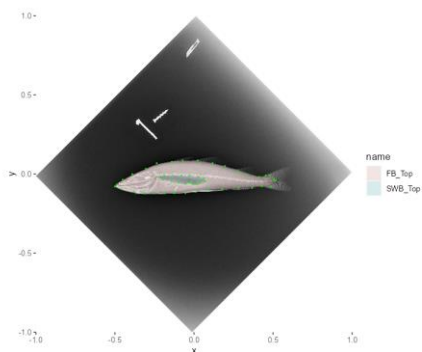
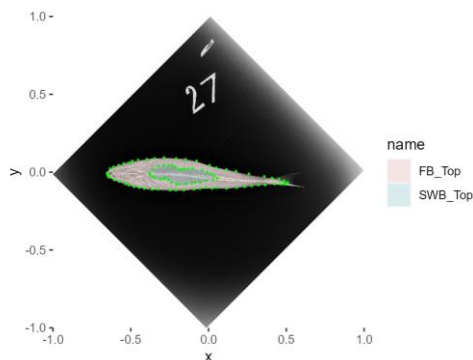
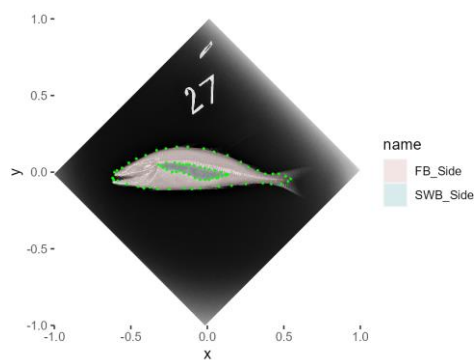
Polygon name

SWB_Top

Adjust the rotation of the input images, such that the fish is orientated “normally” (For example fish 27 was -45, -45, fish 1 was -45, -40).

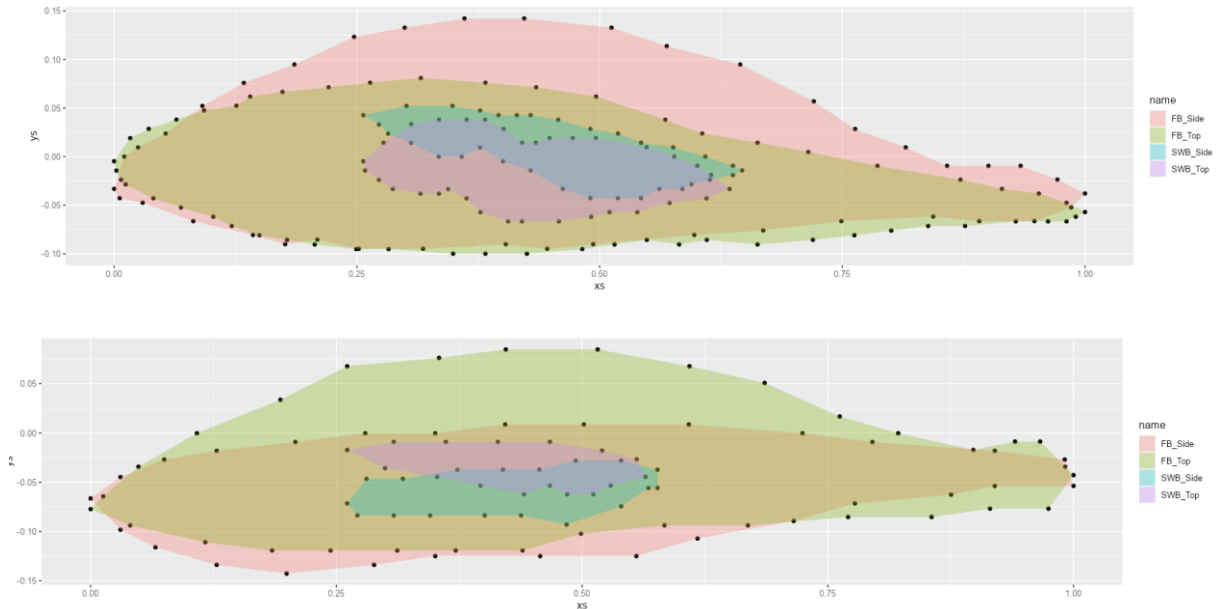
Make sure the correct name is filled in in the Polygon name boxes for both images (for example: FB_Side, FB_Top). Zooming on the images is currently not possible, but CTRL+Scroll will zoom in in the browser window and work as well. Start clicking on the image to define the fish body polygon. Continue with the second image. The polygons for the fish body look alright on both side and top images, proceed to the swimbladder (if present). Make sure the Polygon name boxes are updated (for example (SWB_Side, SWB_Top)).

Examples:



The Polygon plot, with scaled values will update automatically as more points and polygons are added. It is good practice to check if the shapes overlap, if not this should be adjusted, either through rotation or by adjusting the points.

Examples:



Once all polygons are generating, click plot KRM shape to check what the KRM shape will look like and Download KRM shape to download the shape coordinates as a csv file.

Examples:

