

# Airbeo Sanitizer

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## Introduction

This is developed by Andrew Pethick using JavaFX

**What does Airbeo Sanitizer do?** Airbeo sanitizer turns airbeo 1D inversion output files (.inv) files into formatted text files

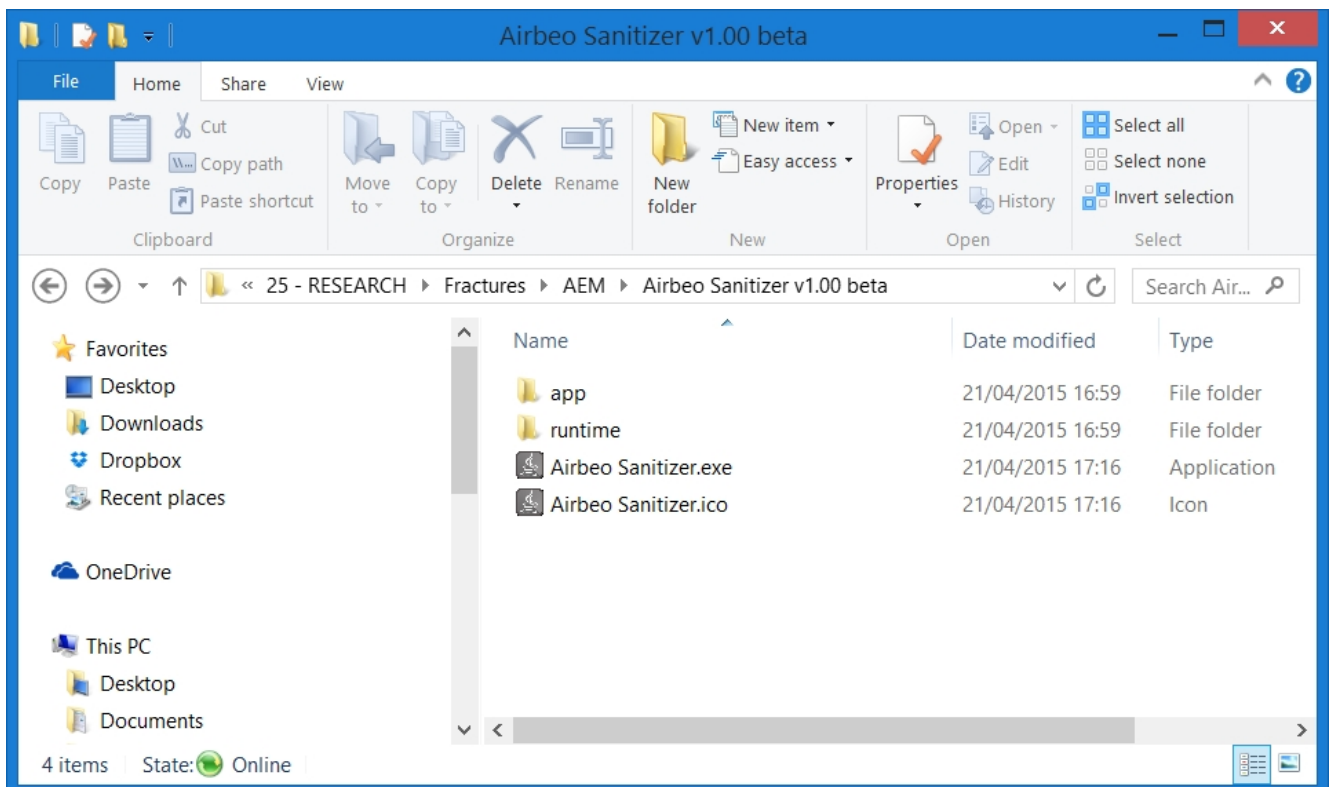
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Version: 1.00 Alpha  
Java SDK: 1.8.05

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## Running Airbeo Sanitizer

To run airbeo sanitizer run "Airbeo Sanitizer.exe"



## Input Files Required

After running Airbeo Sanitizer.exe this is what you should see

You need two things to run your inversion,

1. the input directory where all your inversions are stored
2. The dtm file. Since airbeo can be run without the dtm of the earth you will need to put this into the inversion.

### The DTM file consists of

- i. A single line header (just for reference and can be left blank)
- ii. All the transmitter locations in X and Y along with the corresponding DTM

**AIRBEO SANITIZER 1.0 ALPHA - DEVELOPED BY AMP**

Takes in a directory with many airbeo files and combines them into a single file. Will also export inline lines and plan grid depth slices for Oasis

**I/O SELECTION**

Input Directory  ... (NOTE: THIS RECURSES THROUGH DIRECTORIES)

DTM File  ... Contains all Transmitter X Y Z coords

Combine INV

Enable Lines

Enable Grids

**DTM FILE FORMAT EXAMPLE**

Row 1 : line# easting northing dtm

Row 2..N: 1000101.0 351826.61 6537636.71 -0.1

**EXPORT PARAMETERS**

bid - Basement Blanking Distance (m)  Distance past the end of the basement to include

min - Minimum Elevation above ground level to include (m)

max - Max Elevation above ground level (m)

dzLine - vertical cell distance (meters)

dzGrid - vertical grid separation (meters)

**EXECUTE!**

### Example DTM File

Example DTM FILE

LINE	EASTING	NOTHING	DTM
1000	1000.0	2000.0	25.0
1000	1100.0	2000.0	26.0
1000	1200.0	2000.0	27.0

It can be tabbed or spaced delimited.

## Input/Output Selection

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I/O selection

You can create multiple types of output files. You can export it as a single combined file

### **COMBINE INV will create a file with the following properties**

- rms
- rsvt
- l\_1\_res [ALL THE RESISTIVITIES]
- ...
- l\_N\_res
- l\_1\_thick [ALL THE THICKNESSES]
- ...
- l\_(N-1)\_thick
- l\_1\_res\_importance [ALL THE RESISTIVITY AND THICKNESS IMPORTANCES]
- ...
- l\_N\_res\_importance
- ...
- l\_(N-1)\_thick\_importance
- line
- stat
- dum1
- te
- tn
- tz
- dum2
- re
- rn
- rz
- ch01\_z [ALL OF THE CHANNELS]
- ch01\_x
- ...
- chN\_z
- chN\_x
- l\_1\_cond [ALL THE CONDUCTIVITIES JUST 1/RESISTIVITIES]
- ...
- l\_N\_cond
- l\_1\_cond\_ms [ALL THE CONDUCTIVITIES IN MILLI SEIMENS PER METRE]
- ...
- l\_N\_cond\_ms
- dtm

### **COMBINE LINES will create a file with the following properties for EACH line**

dtm  
 easting  
 northing  
 depth  
 depth\_10 [depth \* 10]  
 res\_ohm\_m  
 cond\_sei\_m [conductivity derived from res]

cond\_msei\_m [conductivity in mS/m derived from res]  
resImp [importances]  
thickImp

## **COMBINE GRIDS will create a file with the following properties at EACH depth**

dtm  
easting  
northing  
depth  
depth\_10 [depth \* 10]  
res\_ohm\_m  
cond\_sei\_m [conductivity derived from res]  
cond\_msei\_m [conductivity in mS/m derived from res]  
resImp [importances]  
thickImp

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Takes in a directory with many airbeo files and combines them into a single file. Will also export inline lines and plan grid depth slices for Oasis

**I/O SELECTION**

Input Directory  ... (NOTE: THIS RECURSES THROUGH DIRECTORIES)

DTM File  ... Contains all Transmitter X Y Z coords

Combine INV  
 Enable Lines  
 Enable Grids

**DTM FILE FORMAT EXAMPLE**

Row 1 : line# easting northing dtm  
Row 2..N: 1000101.0 351826.61 6537636.71 -0.1

**EXPORT PARAMETERS**

bid - Basement Blanking Distance (m)  Distance past the end of the basement to include

min - Minimum Elevation above ground level to include (m)

max - Max Elevation above ground level (m)

dzLine - vertical cell distance (meters)

dzGrid - vertical grid separation (meters)

**!EXECUTE!**

## Parameters

- bid - include the last x meters past the final layer
- min - minimum depth to include in lines and grids export (negative is below sea level)
- max - maximum depth to include in lines and grids export (positive is above sea level)
- dzLine - The vertical cell size in single line export
- dzGrid - Grid slices will be taken from min to max at dzGrid increments
- noise - Soundings that are above this RMS level will not be included in export.

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**I/O SELECTION**

Input Directory  ... (NOTE: THIS RECURSES THROUGH DIRECTORIES)

DTM File  ... Contains all Transmitter X Y Z coords

Combine INV  
 Enable Lines  
 Enable Grids

**DTM FILE FORMAT EXAMPLE**

Row 1 : line# easting northing dtm  
Row 2..N: 1000101.0 351826.61 6537636.71 -0.1

**EXPORT PARAMETERS**

bid - Basement Blanking Distance (m)	<input type="text" value="50.0"/>	Distance past the end of the basement to include
min - Minimum Elevation above ground level to include (m)	<input type="text" value="-550.0"/>	
max - Max Elevation above ground level (m)	<input type="text" value="300.0"/>	
dzLine - vertical cell distance (meters)	<input type="text" value="4.0"/>	
dzGrid - vertical grid separation (meters)	<input type="text" value="50.0"/>	
noise - Max Noise Allowable	<input type="text" value="8.0"/>	%

**!EXECUTE!**