



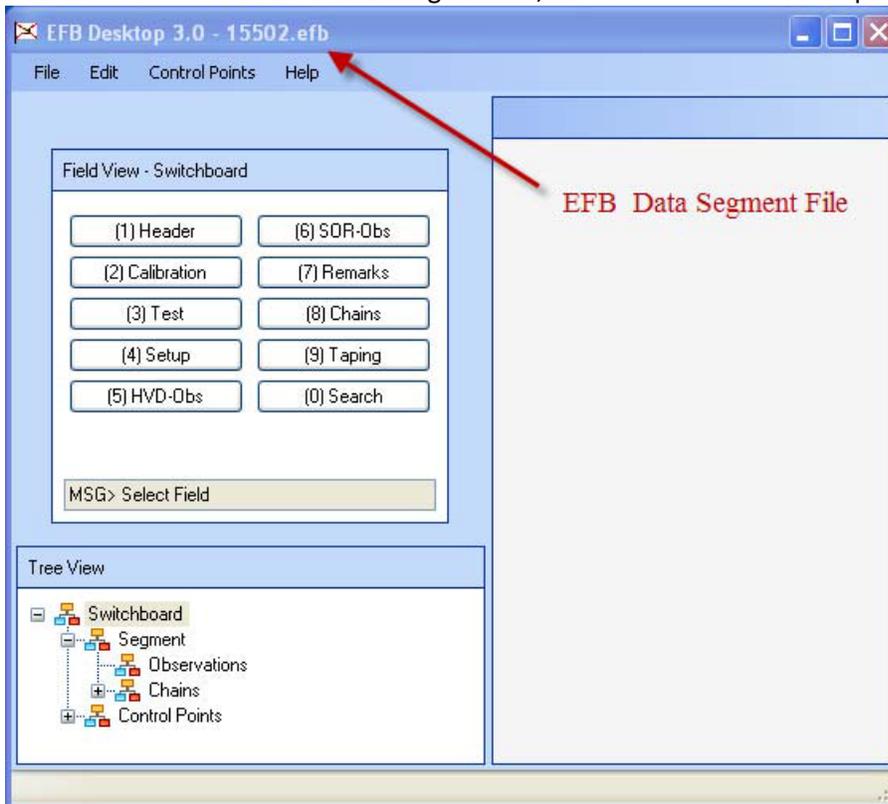
Knowledge Base Topic:

## Survey Export from EFB

Software: Menu Add-on FDOT2010, FDOT2012.C3D

*FDOT uses the department's Electronic Field Book (EFB) for gather and processing conventional surveying data. This program can export processed LandXML files and CAiCE SRV format files for import into Civil 3D. EFB can export points (control & computed points) and survey chains that pass through those points. When EFB data segment has been processed and the results of the Least Squares adjustment are satisfactory, data is ready to begin processing for Civil 3D.*

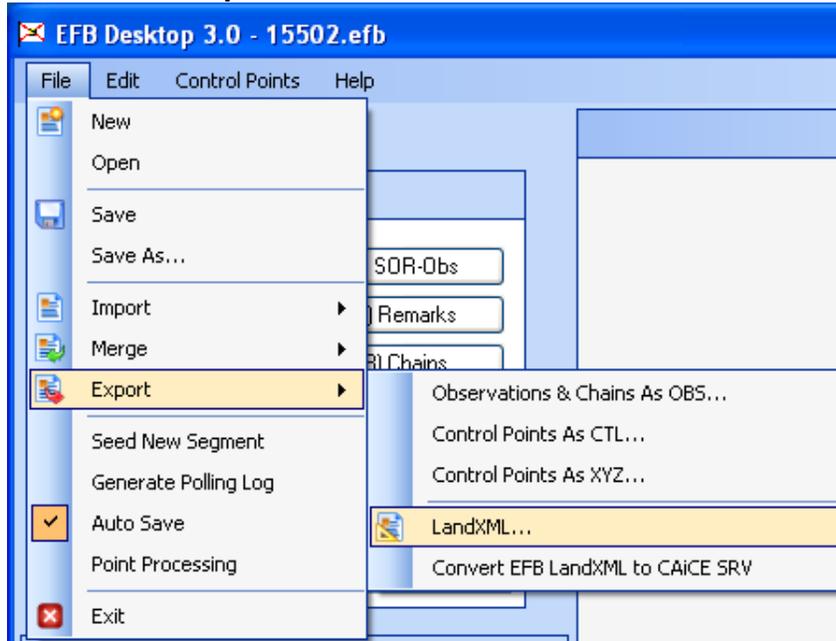
This workflow will not cover the usage of EFB, however will cover the export of data for use by Civil 3D.



Once the EFB data segment has been processed, and the results of the Least Squares adjustment are satisfactory, data is ready to begin processing for Civil 3D. The data that can be transmitted to Civil 3D will consist of the points (both control points and computed points) and the survey chains that pass through those points.

## Creating a LandXML file of the EFB Segment

Select: **File > Export > LandXML**



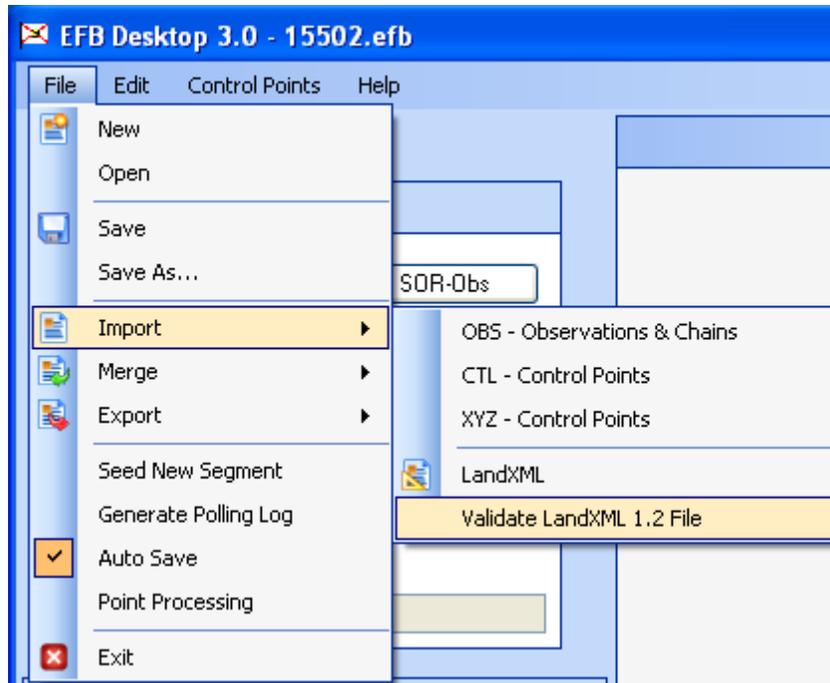
Save the .XML with the name of your choice.

*Note: that it is recommended to save the XML file with the same filename as the .EFB file, as it represents the same data just in a different format.*

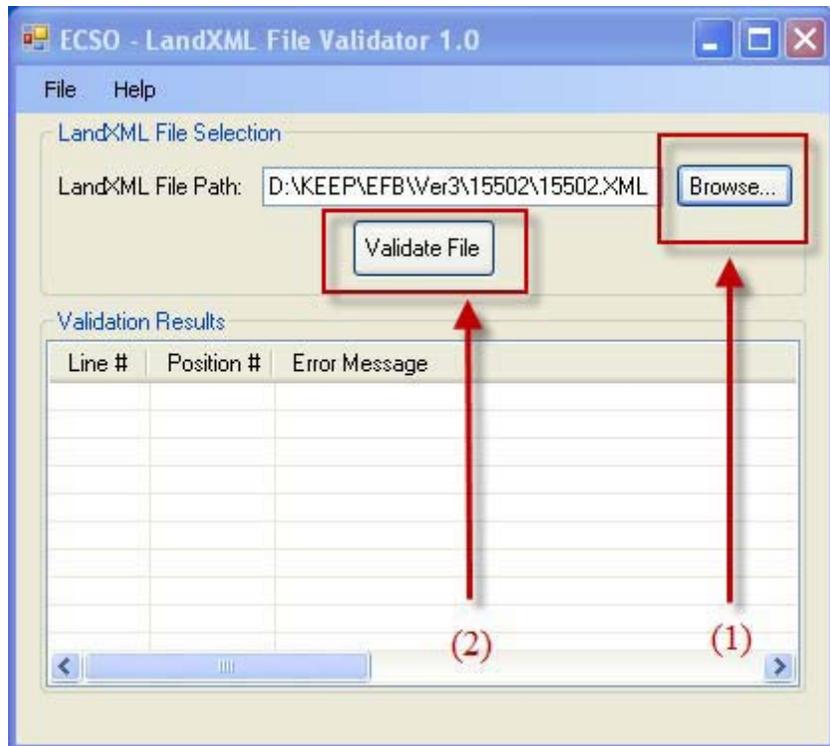
## Validate LandXML file

This step is not necessary, but it does a very strict validation to insure it complies with LandXML 1.2 schema per <http://www.landxml.org/>

Select: **File > Import > Validate LandXML 1.2 file.**



Browse to the LandXML file to validate, or use the **File** menu. After setting proper path, select 'Validate File'. Any errors found will be written to the data grid area, by line and column in the XML file.

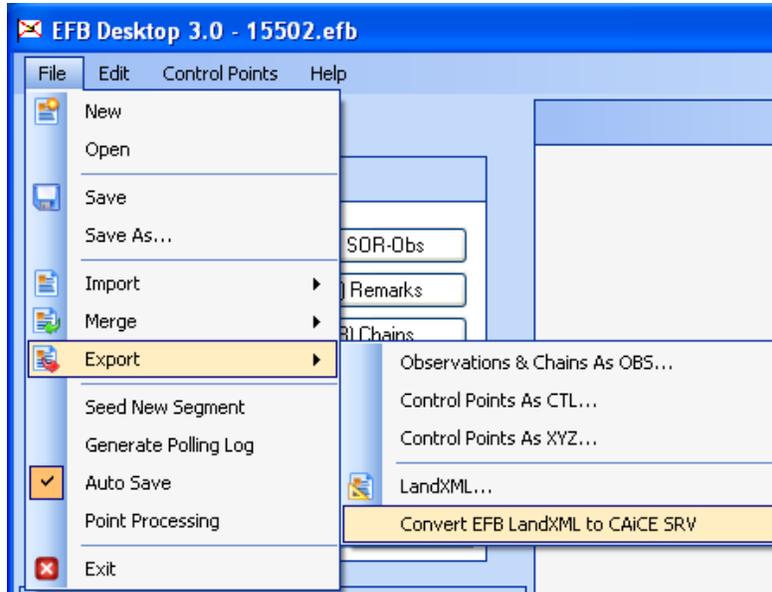


### Convert LandXML into CAiCE (SRV) file and GEOPAK Input (INP) File

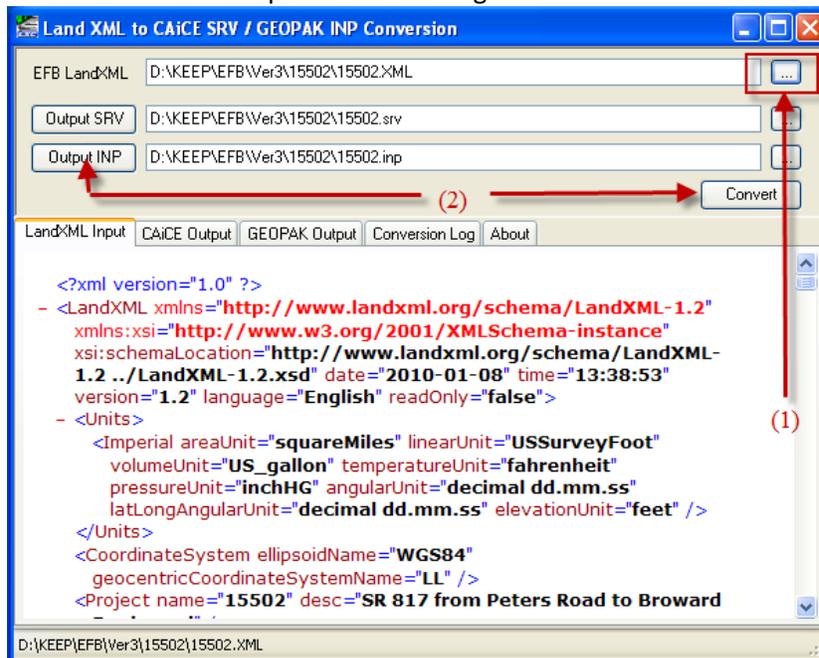
Note: This is for quality control but is not critical. It insures Civil 3D will interpret the LandXML data. This process will help identify:

- Points that have only Z, or no coordinate values (which are not much use in Civil 3D)
- Points Chains that include points with no 2-D or 3-D coordinate definitions
- Various other missing or mal-formed data components

Select: **File > Export > Convert EFB LandXML to CAiCE SRV**



This opens the following window:



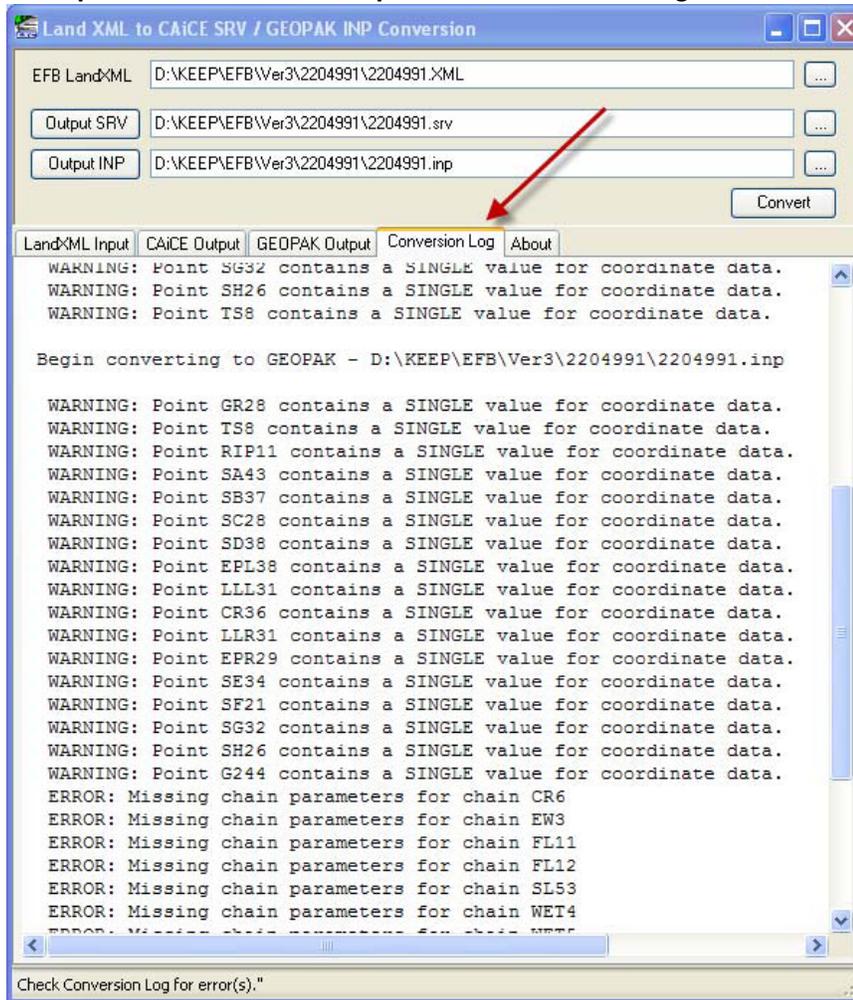
- 1) **EFB LandXML** > Use the [...] ellipsis button to select the LandXML file to convert.
  - Creates LandXML file (XML) for import into Civil 3D
- 2) Set Output Paths for conversion and then select **Convert**

*NOTE: The [...] ellipsis button next to Output name path fields allows a filename to be keyed into the fields directly to overwrite automatically populated path.*

**Output SRV** > Creates CAiCE (SRV) for import into CAiCE

**Output INP** > Creates Geopak (INP) for Geopak

**CAiCE Output** tab and **GEOPAK Output** tab show the resulting conversion.



**IMPORTANT:** The **Conversion Log** tab shows any warnings and errors detected as in screen shot below. The contents of the Conversion Log Tab are written to the folder of the source LandXML into a file named to match the source LandXML file, i.e.: filename\_log.txt

If warnings and errors are detected, (*as in example shown for project 2204991*) the user can use this log to investigate the data at any stage along the way through EFB data processing. It is highly recommended the clean-up occur as close to source of the data in the field measurements or control points themselves. The data can then be reprocessed and these steps repeated. This will ensure the raw data matches the resulting LandXML to the extent possible. As a last resort, the LandXML file itself can be edited to make data cleanup.