# StoryScapes101: Introduction to the StoryScapes platform

## Module 3 - Collecting StoryLayer Data

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## Introduction

In this module, students will learn to import data to make point, line and polygon StoryLayers. A StoryLayer is a data file that is used to display geographic information with temporal attribute(s) on StoryScapes.

This module includes the following lessons:

- Lesson 1 – Importing point StoryLayers
- Lesson 2 – Importing polygon StoryLayers
- Lesson 3 – Write High Quality Metadata

## Lesson 1: Importing point StoryLayers

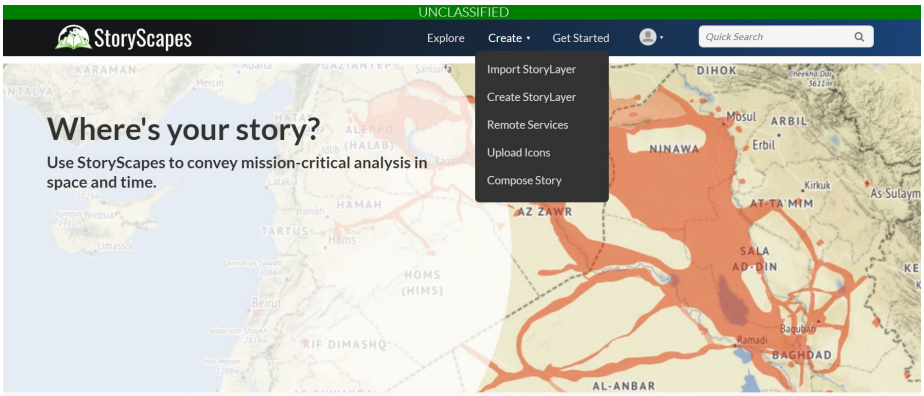
### Objective

In this lesson students will learn to import a `.CSV` file with point features and write high-quality metadata.

### Lecture

### Get your data "StoryScapes Ready"

To import data, you'll use the import modal, which is accessible from your profile, from the header, or from the StoryScapes homepage.




To successfully import your data into StoryScapes, you'll need to make sure your data conforms to the required *file, projection, and time* formatting types.

Required file types

- StoryScapes supports data imports in the **.csv** format (for points) and the **.shp** format (for points, lines or polygons)

Required projections

- StoryScapes requires all data to be projected using the 4326 projection.

Required formatting

- StoryScapes requires that all data imported have time attributes, as well as location/geometry information (Lat, Lon).
- Time attributes should be presented in **ISO 8601** or one of the following formats:
  - yyyy
  - Jun 2012—MMM-y
  - May/15/2012—MMM/d/yyyy
  - 11/1/2012—M/d/y
  - yyyy-MM-dd'T'HH:mm:ss.SSS'Z'
  - yyyy-MM-dd'T'HH:mm:sss'Z'
  - yyyy-MM-dd'T'HH:mm:ss'Z'
  - yyyy-MM-dd'T'HH:mm'Z'
  - yyyy-MM-dd'T'HH'Z'
  - yyyy-MM-dd
  - yyyy-MM

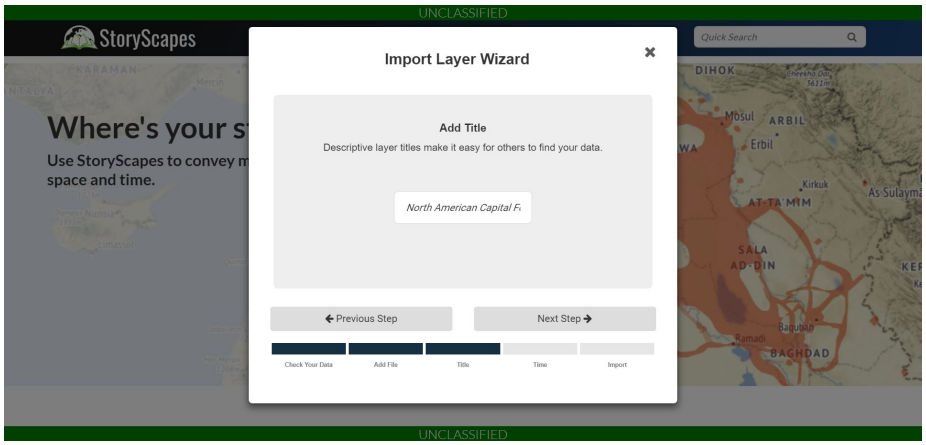
Here is an example of a dataset that is ready for import into StoryScapes. See: `module-3-csv-points.csv`

| | A | B | C | D | E | F |
|---|---|---|---|---|---|---|
| 1 | NAME | COUNTRY | POP | EST_DATE | LAT | LONG |
| 2 | Mexico City DF | MX | 8,918,653 | 1842-11-18 | 19.43333 | -99.1333 |
| 3 | Ottawa | CA | 964,743 | 1855-01-01 | 45.42472 | -75.695 |
| 4 | Washington DC | US | 702,445 | 1790-07-16 | 38.90472 | -77.0164 |
| 5 | | | | | | |
| 6 | | | | | | |

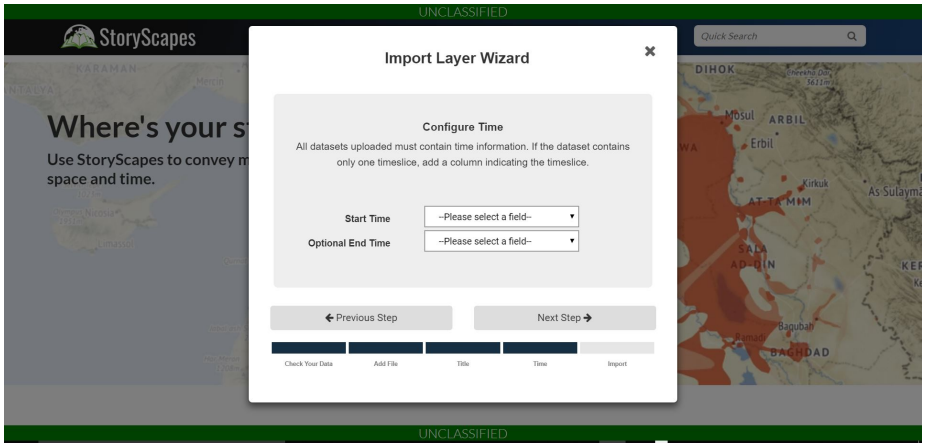
#### Importer Modal

Once you have your data prepared, the Importer modal will walk you through the following steps:

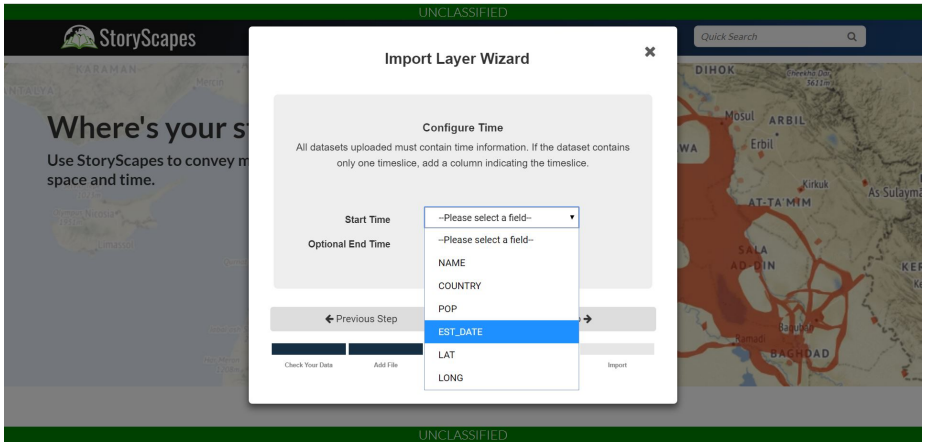
1. Name your StoryLayer.




2. Confirm that the storylayer has time attributes.



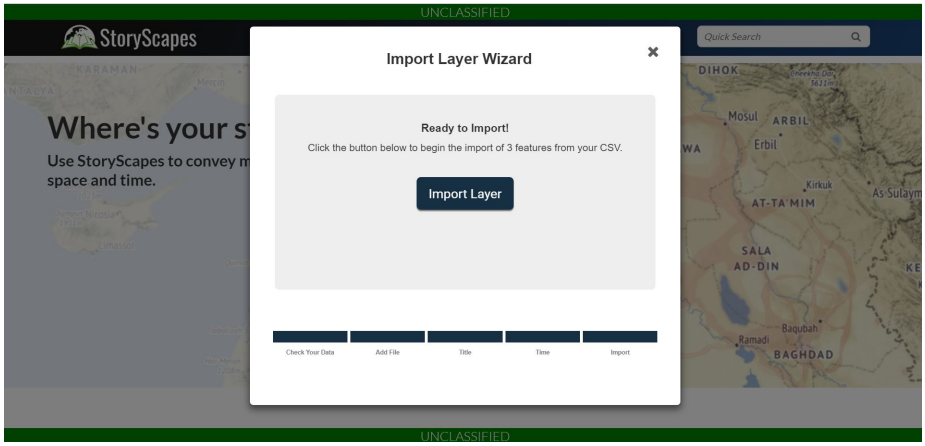

3. Configure time information.




~~4. Enable versioned editing.~~

~*SCREENSHOT*~

5. Finalize upload.




### Tasks

Now it's your turn! Try importing a point-based StoryLayer of your own. Try finding a dataset by searching publicly available repositories like the ones linked to below, or maybe you have access to some data of your own.

## Lesson 2: Importing Polygon StoryLayers

### Objective

In this lesson, students will learn how to import a Shapefile with polygon or line features.

### Lecture

### Get your data "StoryScapes Ready"

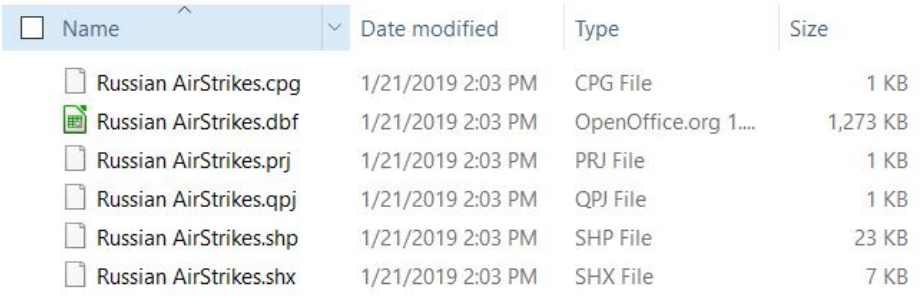
To import a polygon StoryLayer, you will likely use a Shapefile. Currently, our importer accepts **zipped** shapefiles for points, lines and polygons. If you have experience with common GIS workflows, this will be familiar to you. If not, it is a good idea to consult more comprehensive lessons on how to work with GIS data.

### Importer Modal

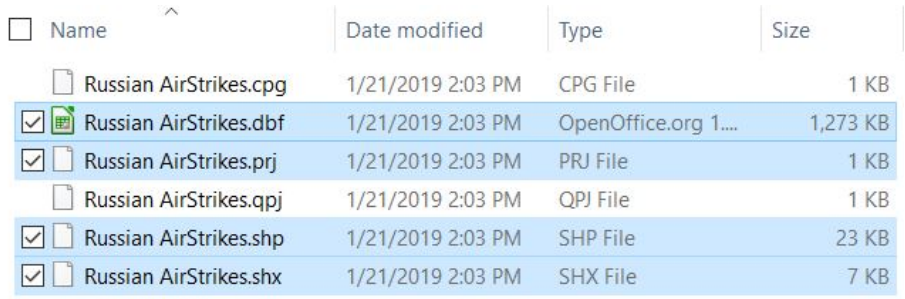
Importing a polygon layer with a Shapefile is very similar to importing a point layer with a .CSV file.

A key difference is that you must first zip the constitutent files into a single zipped files.

for example, if you export your shapefile you will have several files that are siblings of each other




When you zip these files, make sure to include *only* the `SHP`, `SHX`, `DBF`, and `PRJ` files.




#### A Note on Temporal Data Format

StoryScapes reads a temporal attribute (or two temporal attributes) to iterate

over time. Therefore, each feature must have a *geometry* and *time* attribute. If you're data is arranged so that each temporal value is an attribute you will have to "stack" them.

So Data like the following:

| | A | B | C | D | E |
|---|---|---|---|---|---|
| 1 | **FID** | **Country** | **2001** | **2002** | **2003** |
| 2 | 1 | USA | 5.2 | 6.3 | 7.4 |
| 3 | 2 | CAN | 8.5 | 7 | 6.4 |
| 4 | 3 | MEX | 6.5 | 9.4 | 7.2 |

Would become something like this:

| | A | B | C | D |
|---|---|---|---|---|
| 1 | **FID** | **Country** | **Year** | **Attribute** |
| 2 | 1 | USA | 2001 | 5.2 |
| 3 | 2 | USA | 2002 | 6.3 |
| 4 | 3 | USA | 2003 | 7.4 |
| 5 | 4 | CAN | 2001 | 8.5 |
| 6 | 5 | CAN | 2002 | 7 |
| 7 | 6 | CAN | 2003 | 6.4 |
| 8 | 7 | MEX | 2001 | 6.5 |
| 9 | 8 | MEX | 2002 | 9.4 |
| 10 | 9 | MEX | 2003 | 7.2 |

### Tasks

Now it's your turn! Try importing a Shapefile of your own. Try finding a dataset by searching publicly available repositories or maybe you have access to some data of your own.

## Lesson 3: Writing High-Quality metadata

### Write High-Quality Metadata

### Objective

In this Lesson students will learn how and why to write metadata once they have successfully imported a StoryLayer.

### Lecture

Once your StoryLayer is successfully created, you will be taken to the Metadata Modal to complete your metadata.

Completing high-quality metadata (or "data about the data") for StoryLayers is absolutely vital when using StoryScapes. Without metadata, other users have no way to adjudicate the quality and reliability of content shared. StoryScapes requires the following Metadata fields for all StoryLayers:

- **Title**: The title should make it clear what the StoryScape is about. It is also appropriate to include the start and end dates for the StoryScape in the Title. Here's an example Title: "Patterns of US Population Growth (1790-Present)".
- **Summary**: The Summary is where you provide a brief description so that the reader will quickly understand what the content is about.
- **Language**: Language of Source Data
- **Data Source(s)**: Write where you got your data here. Include hyperlinks to the original data source if available. Here is an example of a data source statement, which was used for a StoryLayer on global border changes: *The Humanitarian Information Unit in the Department of State provided Simplified World Polygons at https://hiu.state.gov/data/data.aspx.*
- **Data Quality Statement**: The Data Quality Statement is a general explanation of the data producer's knowledge about the lineage of a dataset. This is your opportunity to admit the limits in your data and areas where it could be improved by others.
- **Purpose**: Under purpose, write about why you created this StoryLayer. This information will help others learn whether they should use your StoryLayer in their StoryScape. For example, a StoryLayer depicting country border changes by decade would not be a good StoryLayer to use in a StoryScape about the changing territorial control of the Syrian Government by month during the Syrian Civil War.

The Metadata Modal also allows the StoryLayer owner to determine if the StoryLayer should be published and therefore viewable by anyone, or private and only viewable by the StoryLayer owner. If you own the StoryLayer, you can return to the Metadata Modal and update the metadata at any time.

### Tasks

Now it's your turn! Go to one of the StoryLayers you imported in a previous lesson and click `Edit StoryLayer` and then `Metadata`. Take the time to write as high-quality metadata as you can, paying particular attention to your data sources.

## Conclusion

Over the course of this module, you've learned how to get data from files and schema uploaded and imported into the platform. You've also seen how to update and maintain good metadata which is important for data validity and usability.

This creates the foundation for developing rich and meaningful storyscapes.

## Discussion Questions

Before moving on to the next Module, reflect independently or in a group on the following questions:

1. What kids of data sources are you aware of that we could look to for data to import into StoryScapes?
2. What are some of the issues that we need to think about in terms of data that is appropriate or inappropriate for import into StoryScapes?
3. What other kinds of data formats besides .csv and .shp do you work with and feel StoryScapes should be able to support?
4. How does adding the dimension of *time* to geospatial data change the field of GIS? What are the benefits you see, and the drawbacks?
5. What other comments, questions or concerns do you have about this Module?