

# Wayback Imagery

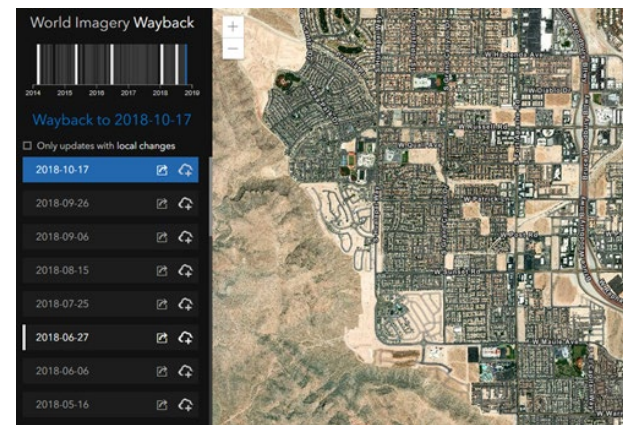
## Fluctuating Lakes

Lake water levels fluctuate. The fluctuation of lakes depends on both the time of the year and the global decline of water. You have been tasked with presenting imagery from the past 5 years to show the fluctuation of the following lakes:

- Poyang Lake, China
- Lake Faguibine, Mali
- Aral Sea (South Aral Sea), Karakalpakstan
- Lake Assal, Djibouti

### Build skills in these areas

- Use temporal images
- Make a swipe story map
- Use an URL in a story map



### What you need

- Account required
- Estimated time: 30 minutes to 1 hour

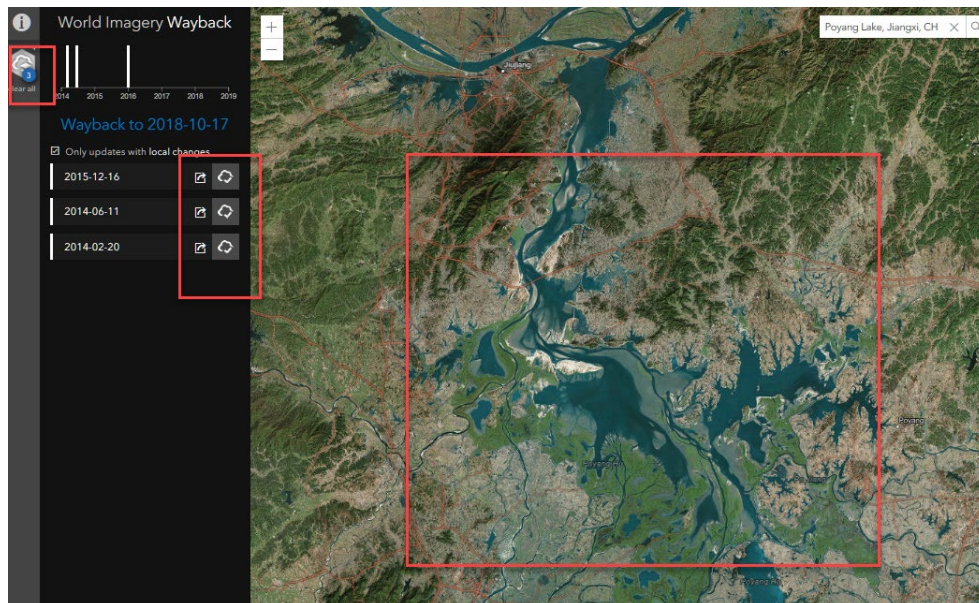
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# 1. Use World Imagery Wayback App

## Find available temporal images of Poyang Lake, China.

Wayback imagery is a digital archive of the World Imagery basemap, enabling users to access different versions of World Imagery captured over the years. Each record in the archive represents World Imagery as it existed on the date new imagery was published. Wayback currently supports all updated versions of World Imagery dating back to February 20, 2014.

1. Open [World Imagery Wayback App](#).
2. Search for Poyang Lake, China in the upper right location tab.
3. Check Only updates with local changes.
4. Check add this update to an ArcGIS online Map. (Checks will appear in designated boxes.)
5. Click the Choose Updates button on the left side of the screen. (Looks like a cloud with the number of layers).
6. Sign into your ArcGIS online account.
7. Click Choose Updates again.
8. Create appropriate metadata: Title, Tags, Description.
9. Create Wayback Map.
10. Open Wayback Map.
11. Sign into your [ArcGIS account](#) again.
12. Select images that are appropriate. The layers load over top the Imagery basemap. Any layers that are the same as the basemap should be removed.
13. Remove Wayback 2015-12-16 and Wayback 2014\_06-11.
14. Save.



*Reminders: The last image shown is usually the same as the Imagery basemap. If change is not visible do not add the date.*

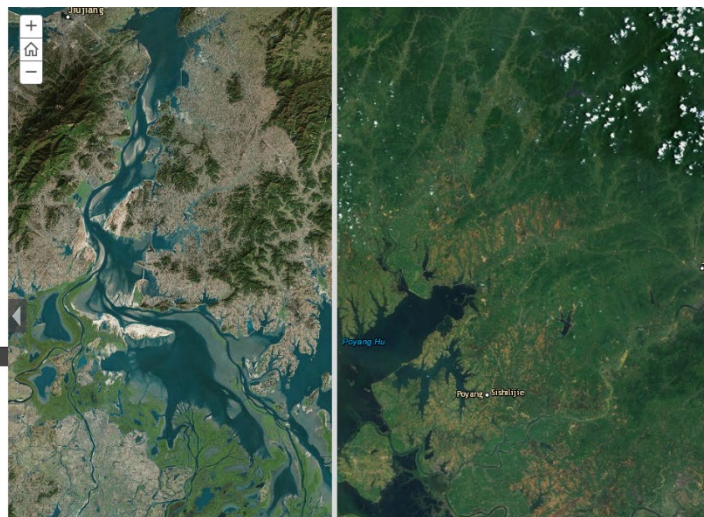
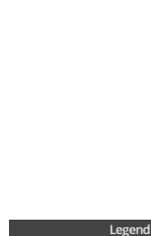
Wayback 2015-12-16 and Wayback 2014-06-11 seem to be nearly the same as the basemap. Since the latest image 2015-12-16 seems to be the same it has already been incorporated in the original basemap

## 2. Constructing a Pre and Post Swipe Map

### Compare images from 2014 to 2016.

1. Turn on Wayback Image 2014 and save the map as **Poyang 2014** with appropriate metadata.
2. Turn off Wayback Image 2014 and save the map with the original Imagery basemap and name **Poyang 2016** with appropriate metadata.
3. On the top ribbon click Share.
4. CREATE A WEB APP.
5. Build a Story Map>>Story Map Swipe and Spyglass.
6. CREATE WEB APP.
7. Title: Summary: Comparison of 2014 and 2016 Poyang Lake>>DONE.
8. Choose Vertical bar style and Next.
9. Select Two web maps.
10. For the Right Web map ID: select **Poyang 2014**.
11. Next>>Next.
12. Open the app.
13. Do research and add text describing each map.
14. Save.
15. View.

Poyang Lake is subjected to seasonal water-level fluctuations. These fluctuations are caused both the natural seasons and can be intensified by irrigation, drought and upstream development.





### 3. Combine Maps into a Cumulative Story Map

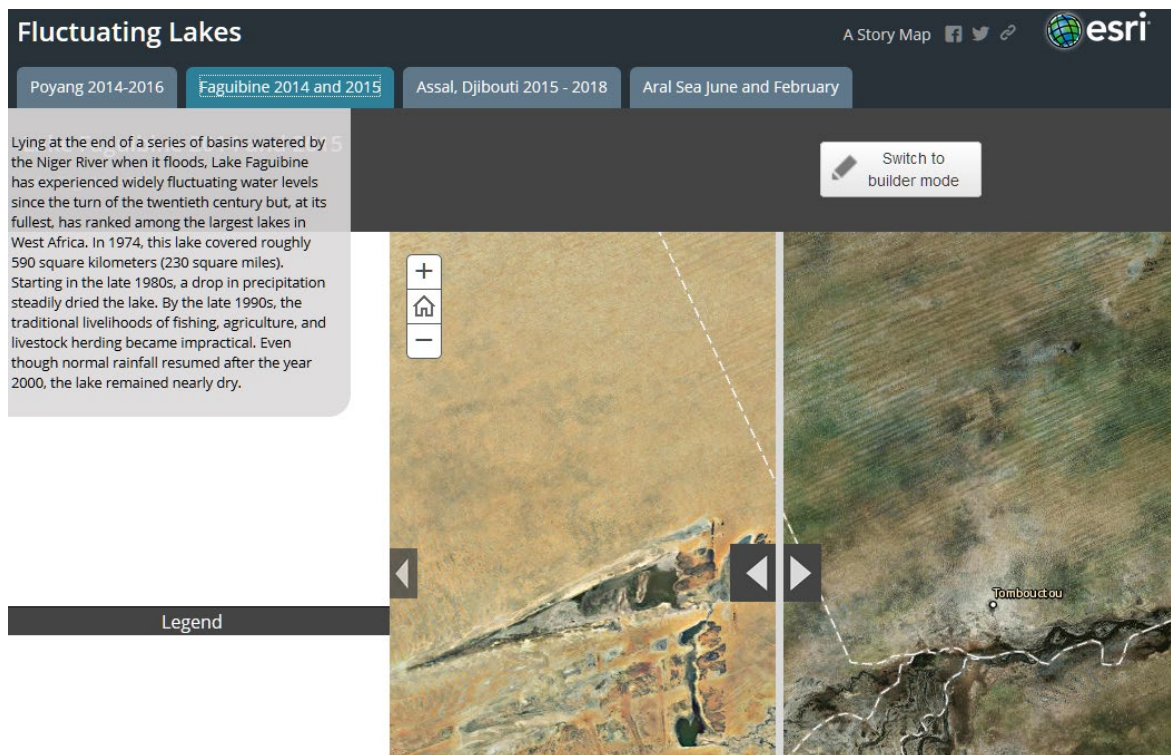
1. Following the above steps make a swipe story map for Lake Faguibine, Mali. Save the Imagery with label basemap which is 2015-12-16 as **Faguibine 2015** and the 2014-02-20 Wayback as **Faguibine 2014**. Remove 2015-12-16 and 2014-06-11.
2. Following the above steps make a swipe story map for the Aral Sea (South Aral Sea), Karakalpakstan. Save way back image 2014-02-20 as **Aral February** and Wayback image 2014-06-11 as **Aral June**. Remove 2015-12-16.
3. Following the above steps make a swipe story map for Lake Assal, Djibouti. Save the Imagery with Labels basemap as **Assal 2018** and the Wayback imagery 2015-12-16 and **Assal 2015**. Remove 1018-03-28 and 2018-01-18. Remove 2018-03-28 and 2018-01-16.

*Now all four swipe story maps need to be combined into one tabbed story map.*

4. Click the back arrow and go back to Content.
5. Click Poyang Lake 2014-2016 web application.
6. Open the web application and copy the URL.
7. Click Poyang 2016.
8. Create Web App>>Using a Template.
9. Build a Story Map>>Story Map Series.
- 10.CREATE WEB APP.
- 11.Name the web app: Fluctuating Lakes and the Summary: Fluctuating Lakes.
- 12.DONE>>Tabbed>>START.
13. Tabbed Map Series: Fluctuating Lakes.
- 14.Click Blue Arrow.
- 15.Title: **Poyang Lake 2014-2016**.
- 16.Click Web Page and paste the URL in the Web Page Link.
- 17.Click Configure and Add.
- 18.Save.
- 19.Repeat steps 16 and 17 for **Lake Faguibine 2014 and 2015**.
- 20.Repeat steps 16 and 17 for **Aral Sea June and Aral Sea February**.
- 21.Repeat steps 16 and 17 for **Lake Assal, Djibouti 2015 – 2018**.

You now have a series of swipe story maps within a tabbed story map.

In this section you have used Wayback Imagery to compare temporal images of four different lakes of the world. You have created four different swipe maps and combined them into one tabbed story map.



## Learn more

Compare different places of change within your county or state using Wayback Imagery. Remember, it is for the last five years.

[Using World Imagery Imagery Wayback by Bern Szukalski](#)

[Story Map Swipe and Spyglass Tutorial](#)

[Embedding a Story Map within a Story Map by Bern Szukalski](#)

