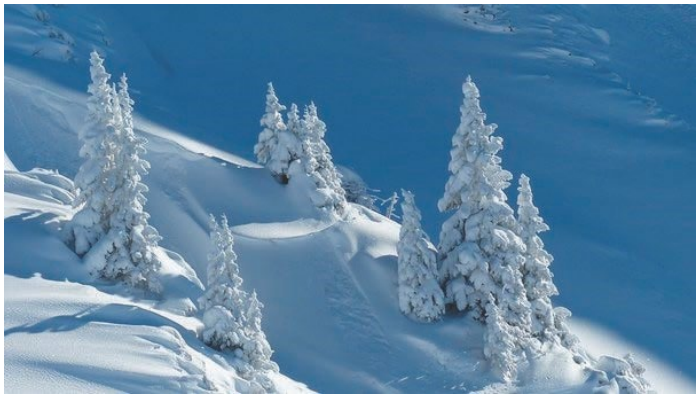
Visualizing seasonal climate patterns with imagery

Every image has an acquisition date making it possible to view change over time by displaying a sequence of images that were each collected on different dates. The Seasonal Changes web app is an example of just such a sequence; it is designed to show the monthly average global snowpack depth. Test your climate and geography IQ with the following activity.

What you need

- Account not required
- Estimated time: under 30 minutes

Test your climate know-how with the Seasonal Changes web app.



esri THE SCIENCE OF WHERE™

Publication date: March 14, 2019

Before you look at the Seasonal Changes app, take this simple quiz.

For each pair of cities or places, identify the one that is most likely to be snow-covered in the given month by putting a check next to the name.

Month	City/place 1	City/place 2
January	Sapporo, Japan	Vienna, Austria
February	Quebec City, Canada	Copenhagen, Denmark
March	Seoul, South Korea	Murmansk, Russia
April	Barrow, Alaska, USA	Bucharest, Romania
May	Cape Dyer, Canada	Reykjavik, Iceland
June	Helsinki, Finland	Valle Nevado, Chile
July	Auckland, New Zealand	Thredbo Village, Australia
August	Whakapapa Glacier, New Zealand	Valparaiso, Chile
September	Toronto, Canada	Yellowknife, NW Terr., Canada
October	Berne, Switzerland	Okha, Russia
November	Van, Turkey	Minneapolis, USA
December	Beijing, China	Riga, Latvia

Link to the Seasonal Changes app.

Notes on using the app:

- Each map in the app has a time frame such as December–January. This simply means that the average snowpack shown on this map represents the period from the end of December to the end of January--i.e., the month of January.
- If you use the search function to locate a place, you'll need to zoom out to see its location in relation to the snowpack.

If you scored 11 or 12, you are a climate aficionado and should go straight to NOAA!\