Analysis of Annual Arctic Sea Ice Minimum 1979-2020

Here is the link to look at the video and basic info on the melting polar cap in the Arctic region.

https://svs.gsfc.nasa.gov/4867

Satellite-based passive microwave images of the sea ice have provided a reliable tool for continuously monitoring changes in the Arctic ice since 1979. Every summer the Arctic ice cap melts down to what scientists call its "minimum" before colder weather begins to cause ice cover to increase. This graph displays the area of the minimum sea ice coverage each year from 1979 through 2020. In 2020, the Arctic minimum sea ice covered an area of 3.36 million square kilometers.

This visualization shows the expanse of the annual minimum Arctic sea ice for each year from 1979 through 2020 as derived from passive microwave data. A graph overlay shows the area in million square kilometers for each year's minimum day.

As per our discussion today, here is the link to download high-res images for Arctic Sea Ice.

Annual Arctic Sea Ice Minimum 1979-2020 rep:

Image size 31 MB/img

https://svs.gsfc.nasa.gov/vis/a000000/a004800/a004867/frames/3840x2160\_16x9\_30p/yearly\_w\_dates/

To do:

First phase : Image analysis to calculate how much area is covered by ice

Table: year, sea ice percentage, change as compared to last year

Excel sheet

Tool(s) : any of your choice

If more than one tool is used then show comparison and take an average.

Second phase: Once the data is available in numeric format, then apply regular Py methods for-

-EDA

-Predictions

More info

https://en.wikipedia.org/wiki/Arctic\_sea\_ice\_decline