<u>Help</u>

sandipan_dey >

<u>Calendar</u> **Discussion** <u>Notes</u> <u>Course</u> <u>Progress</u> <u>Dates</u>

☆ Course / Unit 1: Functions of two variab... / Lecture 1: Level curves and partial derivati...

(1)

You are taking "Exam (Timed, No Correctness Feedback)" as a timed exam. Show more

End My Exam

Previous

44:56:51





☐ Bookmark this page



Apply

There are many real world examples of contour plots being used to understand functions of many variables.

One example is the use of contour plots to show the altitude along hiking trails. In the image below of the White Mountains in New Hampshire, USA, the independent variables are represented by the position (latitude and longitude). You can see level curves with numbers indicating altitudes, which is the dependent variable. Note that there are some additional lines that are not contours, including the blue lines indicating rivers, and thicker green lines indicating national parks and hiking trails.

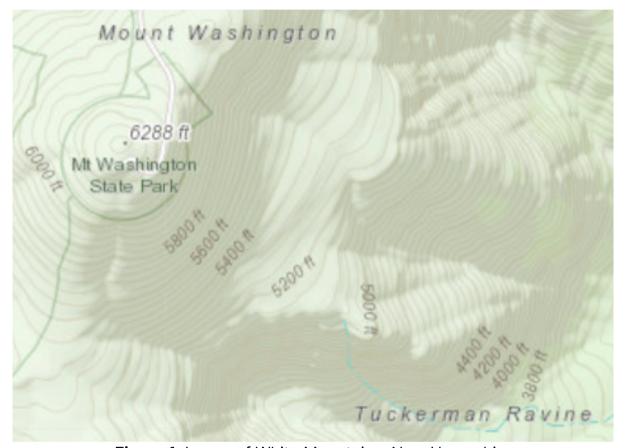
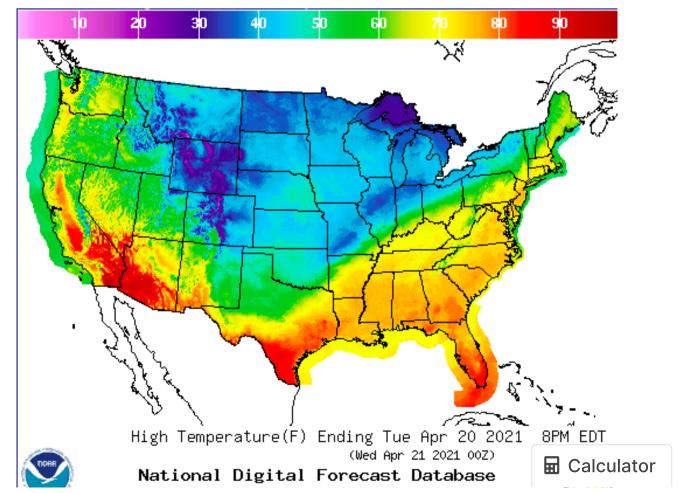


Figure 1: Image of White Mountains, New Hampshire

Image accessed April 24, 2021 from (https://www.nps.gov/neen/planyourvisit/maps.htm)

Another real world image that is common can be found in temperature maps. Below is a temperature map of the United States. The independent variables are represented by the position (latitude and longitude) while the dependent variable is temperature. You can see that rather than curves, the level curves of temperature are indicated through regions of the same color.



19z issuance Graphic created-Apr 20 3:12PM EDT

Figure 2: Temperature map of the United States

Image accessed April 20, 2021 from (https://graphical.weather.gov/)

7. Real world examples of contour plots

Previous

Topic: Unit 1: Functions of two variables / 7. Real world examples of contour plots

Add a Post

Hide Discussion

Show all posts 💙	by recent activity 🗸
Reproduce Visualization of Temperature using Python	10
? Temperature Map Question Wouldn't the wether map be a level curve rather than a contour plot, since the temperatures are given for a single process.	8 olane, rather than
Staff] Minor Text Corrections	4

Next >

© All Rights Reserved



edX

About

Affiliates

edX for Business

Open edX

<u>Careers</u>

<u>News</u>

Legal

Terms of Service & Honor Code

Privacy Policy

Accessibility Policy

Trademark Policy

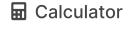
<u>Sitemap</u>

Connect

<u>Blog</u>

Contact Us

Help Center



Media Kit **Donate**















© 2021 edX Inc. All rights reserved.

深圳市恒宇博科技有限公司 <u>粤ICP备17044299号-2</u>