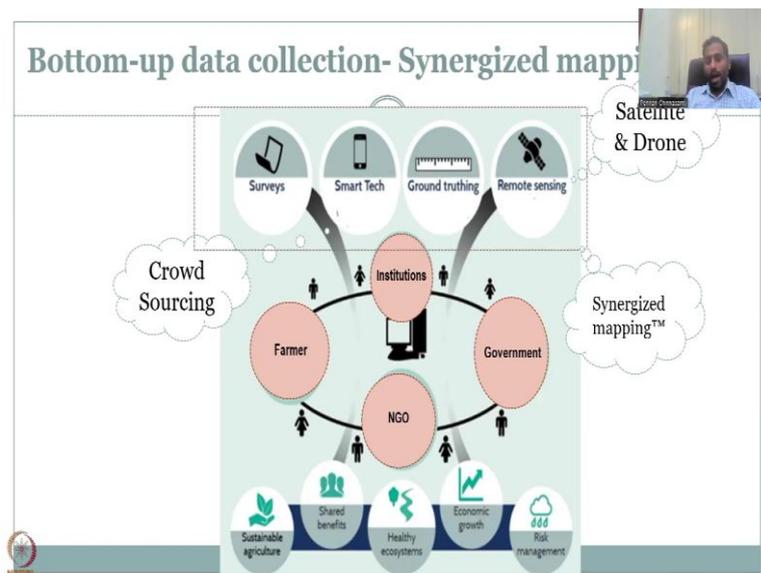


Remote Sensing and GIS for Rural Development
Professor Pennan Chinnasamy
Center for Technology Alternatives for Rural Areas
Indian Institute of Technology, Bombay
Week - 11
Lecture No. 02
Synergized Mapping Using Remote Sensing and
Crowd Sourced Data for Rural Infrastructures

Hello, everyone, welcome to the NPTEL course on remote sensing and GIS for rural development. This is week 11 lecture 2, we are coming close to the end of this wonderful lecture series where I have been getting a lot of comments on how easy it is to use remote sensing for applications for rural development. And, as I said earlier, I have met a lot of people who have expressed their interest in this course, and multiple other ways that could be used for collecting data and working on rural development.

On this note, I have also looked into certain aspects that are new for rural development. And we will be discussing this in the current lecture series. So, while we are on the penultimate week, week 11, I will also showcase one aspect of data collection that is less acknowledged and less used at the real world. However, wherever this methodology has been used, has created considerable impact. Of this, I will be first talking about the synergized mapping. So, let us go into this remote sensing and GIS for Rural Development week 11 lecture 2 where we will be looking at data from other sources that have been used for rural development.

(Refer Slide Time: 1:58)



Let us say for example, we have looked into this pretty much in detail. What is synergized mapping is? There are multiple players, multiple agencies that come in and help to map the

data. And there are institutions and NGOs that create capacity training and update the knowledge of people through on the ground exercises, and farmers stakeholder's rural communities are those who actually engage with the data and the results, because it is for them this data is collected and used. So, we are looking at satellite and drone data. But now we will look at crowdsourcing plus satellite data in a synergized mapping scenario.

In this scenario, what happens is a lot of data can come through. However, not all data can be in a usable format. It is because there could be some data issues, quality issues, what data has been collected is not clear. So, we will look into a schematic where actually this has been done at scale. And lots of people have been using this for the last past 10 years. So, of the crowdsourcing data collection method, let me introduce what crowdsourcing means?

So, crowd is the general public and sourcing means you are sourcing the data from them. For that to happen, there has to be a platform that is given to the locals or crowd, we call it here. And they participate voluntarily, there is no payment here. Like for example, they have to give data and then they get money, or it is not a mandate for them. This is purely volunteer data. So, what we have here is a group of people who are cautious about the system, what they are monitoring, and they collect data and upload it or share it to the platform.

So, the platform has to be robust enough to capture the data and then put it at a larger scale. For example, the farmers might give data on the crop growing scenario is it at what stage, is it at intermediate stages that fully grown stage. So, these stages can be monitored, and then given back to the crowd sourced platform, let us say for example, we have a database I created where we can put the data and then see if it triangulates with what is happening on the ground like other satellite data like rainfall, Land Surface Temperature NDVI.

We can triangulate if the data is working and or if the government schemes are addressing these issues. For example, the Jal Jivan mission is there where every house in the village has to be connected through a tap. And also, there is the grid scheme were across India, the Rural Electrification program has been well received, but the quality could be compromised because of other externalities. So, the pipe might be there, but water coming in or not is very, very crucial. And that relies on the resources available.

So, how do we monitor it is very highly impossible to put meters everywhere. And then monitored given the population we have. So, the best way is to work ground up. So, all the other data is top down, where we call it top-down approach where the government collects

data through the system and then takes it back to the top and then analyses it for policy. When you talk a bottom up the people the crowd who is at the key stakeholder level, they will collect data and then put it up in the system.

So, how is that useful? This is useful because the data goes from the users end for example, I am drinking this water so, I should be able to know what is the quality of the water because it affected me healthy et cetera, rather than trusting the supplier who is giving me the water. So, this at the supply end, there could be data collected from the tap, how the water is coming the quality, but at the end user, how is the water quality I should be able to give and this helps in intermediate issues that can happen the water supply, there could be leakages, there could be mixing of dirty water and drinking water et cetera.

So, all these can be done if the end user gives the data. So, sensors is an end user data. You do not monitor from the top people go door by door collect the number of people living, number of households, and then issue the data and from there the electoral data is created and from there, your population is also assessed. These are important scenarios for any government to develop both urban and rural, but very much it is important in the rural entity. Because at the rural level, what happens is we have to have clarity on the data, we need to have better infrastructures planned and for which you have a lot of data that is needed.

In the cities, it is almost easy to collect, because the representativeness is that as a community of houses. So, one house reflects all the other houses, whereas rural, it is not. It is very, very scattered and hamlet us or there were a group of 30 to 20 houses will be there. And then suddenly after that there is there is a big land of agricultural land, and then another 20 houses, 30 houses, 10 houses et cetera. So, to address this, the best way is to go bottom up where crowdsourcing is key.

And I have been advocating this a lot, because if you use open-source software, open-source instruments, then you could definitely collect data at a very, very high spatial and temporal resolution and rural villages. For the fraction of the cost. For example, the farmers can take just an image, they do not have to use an app to take an image already the camera is there in the smartphone, and almost 90 percent of people have smartphones, if they can afford it like economically. Along the average line, there are multiple phones now available, which are not that too costly, and does the job.

So, one quick check of the fact is that you do see a lot of TikTok videos and Instagrams, Facebook videos, YouTube videos from villages, and all of that using smartphone, you do not have to have fancy devices. So, moving on, there is potential to collect data and put it so now why do not we use this for geospatial location data GIS data is the key and this is what our company has been working on. And looking at this data in a long-term fashion. Let us look at this app that has been created in recent times.

(Refer Slide Time: 9:43)

Open Street Map (OSM)

- What is OSM?
 - Found by Steve Coast in 2009
 - Free open geographic database
 - Community of volunteers
 - <https://www.openstreetmap.org/communities>
 - Freely licensed
- <https://www.openstreetmap.org/#map=4/21.84/82.79>

The slide also features a screenshot of the OpenStreetMap website. The website header includes 'OpenStreetMap' and 'Welcome to OpenStreetMap!'. Below the header is a map of India. A section titled 'Planet OSM' provides information about the OpenStreetMap project, including a link to the 'Planet OSM' page. The website footer contains sections for 'Complete OSM Data', 'Using The Data', and 'Extracts & Mirrors'.

So, Open Street Map has been widely used. It is a very, very sophisticated system. We will discuss this system in today's lecture and also download the plugin in the QGIS software and see how it works and reflects the data. So, I would like to install the plugin in the current series. And then we will take a call on how this map works? So, what we have here is Open Street Map is a tool that everyone uses for looking at certain data that has been collected and shared by public.

So, what is the OSM? It was found by Steve coast in 2009. It is a free open geographic database, it has data attributes, we call them. So, some data about what are the locations, amenities, schools, crops, everything, you will be amazed to see the quality of the data. Not all data is there, because this is not run by a organisation to collect data. It is free open-source volunteer data. So, only if people pitching data, you will get data. So, let us look at this at a very close angle.

My point here is when I say that all areas not covered, the point I am trying to make is most of the data is covered. And we will be able to use it wisely if we know that most of the data is

covered. So, starting with no data, at least we have a data that can be used. That is the question. So, we will be able to look at in the next lecture, a particular state and a particular district, we will download the map, and then we will apply it in this OSM software app will install I this plugin in QGIS. And then we will extract data.

So, this is based on community of volunteers, this data collection, initially, it was very small in 2009, when Steve Coast had started it, but slowly the momentum grows. So, that like any other company, any other product, it starts slow. But then when people momentum start, a lot of data comes in. Data quality could be an issue, I will open this link pretty soon now. And it is freely licensed but again, let us not talk about the negatives right away, there is not a lot of positives, I would say that this is one of the highest updated data that any government would like to use.

Because it comes from the bottom, not from the top where top donors you will send a person to go collect data. So, he or she will travel, go collect data, and then come back sit and map it takes time. Whereas here with the click of a button from the volunteer, it comes straight to the location, database and volunteers already sitting in the village. So, you do not need to have, super time taken for these kinds of activities. So, let us open the free open street map dot org and what we will be looking at is?

We will be looking at the data set the metadata about the data as I usually am telling you that it is very, very important to have metadata for all the data products that we have. The boundaries may not be correct, because they may use different boundaries, but we are going to we are more important and we are more focused on the attributes.

(Refer Slide Time: 13:29)

Open Street Map (OSM) Plugin

4

QuickOSM

Download OSM data thanks to the Overpass API. You can also open local OSM or PBF files. A special parser, on top of OGR, is used to let you see all OSM keys available.

Execute custom Overpass queries in QGIS to get OSM data.

★★★★★ 250 rating vote(s), 1127603 downloads

Tags [osm](#), [openstreetmap](#), [overpass](#), [download](#), [osmdownload](#), [josm](#), [remote](#), [pbf](#), [processing](#), [modeller](#)

More info [homepage](#) [bug tracker](#) [code repository](#)

Author Etienne Tremeale

Installed version 2.1.1

Available version (stable) 2.1.1 updated at Sun Aug 21 04:09:28 2022

Changelog

Version 2.1.1:

- * Add a warning if the key has a trailing white space (contribution from @kannes)
- * Improve help how to create map preset on the online help
- * Fix some Python exceptions which weren't displayed to the user
- * Switch to POST HTTP request instead of GET for QGIS > 3.22
- * Fix an issue when installing QuickOSM plugin

Version 2.1.0:

- * Check that QGIS Processing algorithm is available before opening the QuickOSM dialog
- * Improve help how to create map preset on the online help
- * Improve the help about add some QM in queries
- * Fix Python exception if the user input is not recognised as a valid preset
- * Update default JOSM/Vespucci presets from 2.5.0 to 4.8.0

Version 2.0.1:

- * Fix blank roads to Urban visualization preset (contribution from @Rikuqja)
- * Fix an error when running Python 3.10



Open Street Map (OSM)

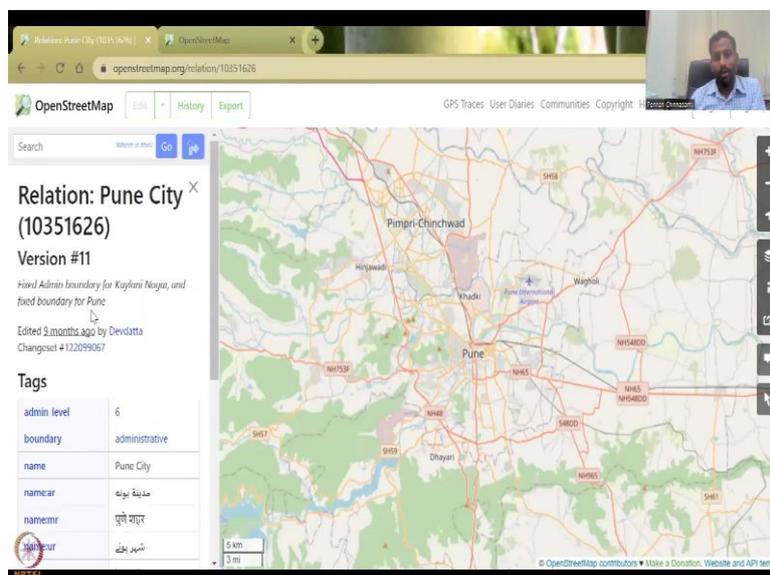
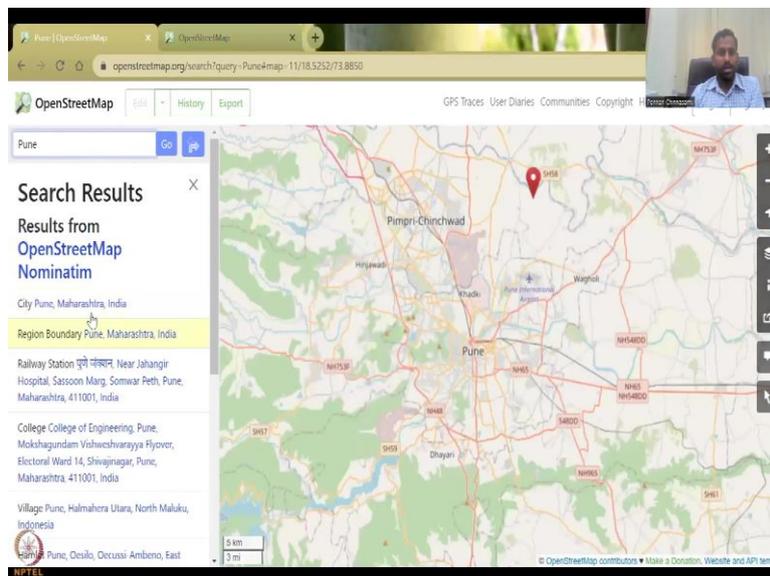
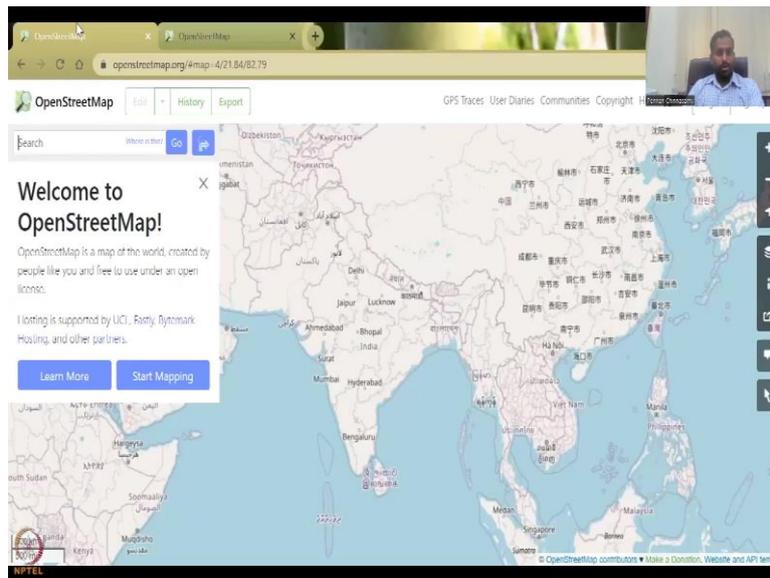
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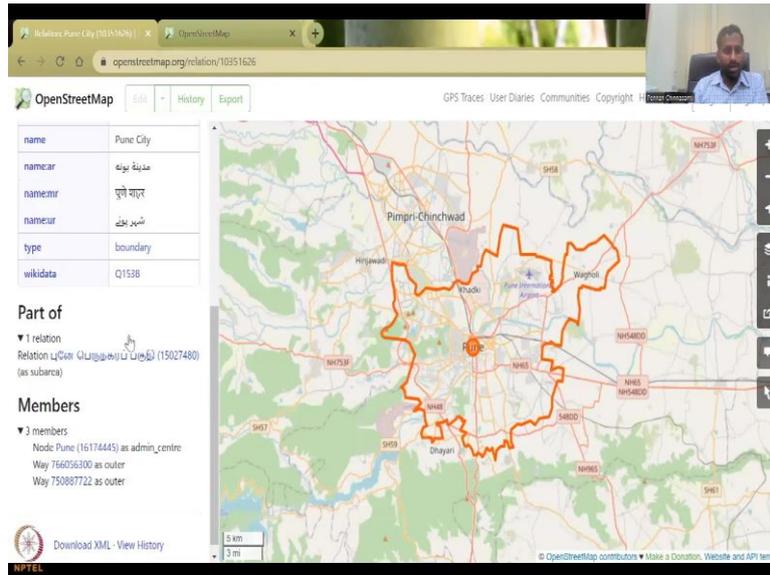
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So, let me quickly open it and while we go to the website, this is the OSM plugin that I would like you to install. I hope you will know how to install it because we have given you the tutorials on installing plugins. However, if there is time enough, we could also show quickly how to install the quick OSM. So, I will go back to this opening this links please allow me to share.

(Refer Slide Time: 14:08)

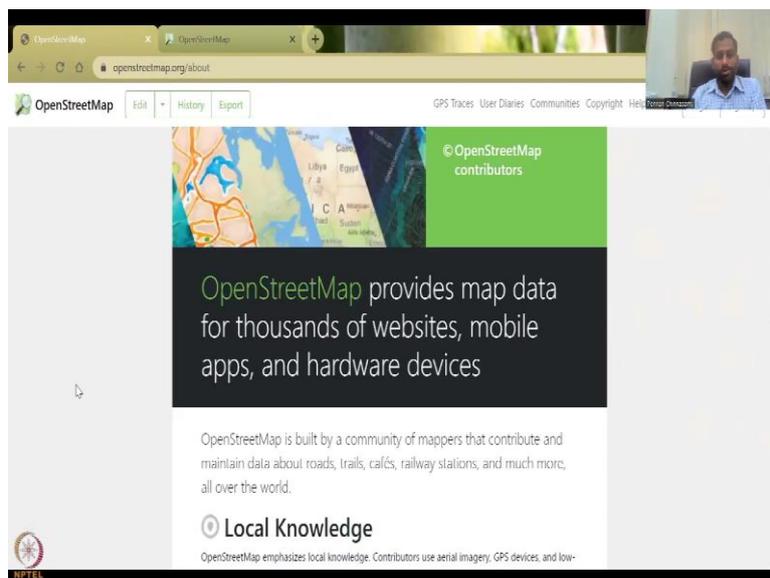




So, this is the first link when we open, open street map dot org you have the map coming up you can search a location so let us say you can search Pune as we have been doing for the past lecture series. Yes, I would like to see the Pune and there is multiple other things in Pune but let us go here. So, you here you have the boundaries also fixed admin boundary for Kalyani Nagar fixed boundary for Pune. These are the data that are there in different languages also you can have and in Tamil also it is showing. So, there are different, different languages and parts available.

So, this is the one when you when you open on Google, in search Open Street Maps, most probably this will come up. Because this is the basics.

(Refer Slide Time: 15:09)



OpenStreetMap

openstreetmap.org/about

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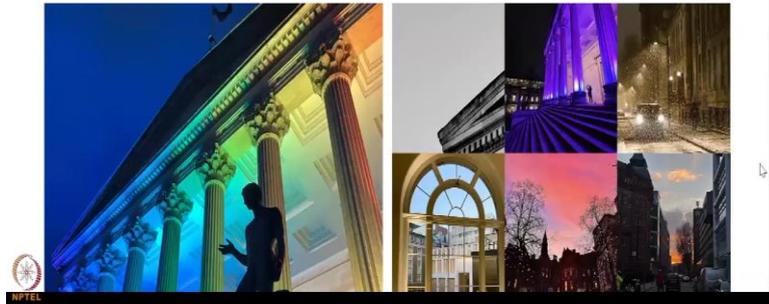
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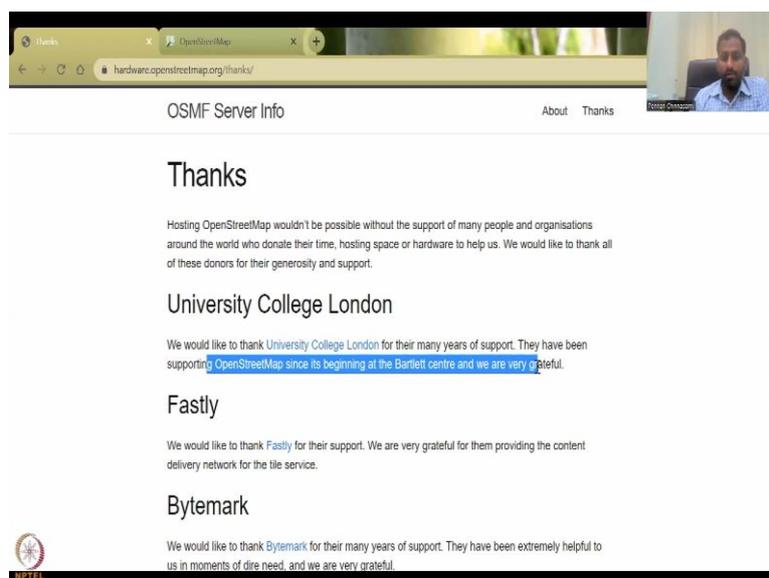
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You can say learn more and then see where it goes in terms of who is the local knowledge and then how the community is driven. But I would like to see here show you hear it is hosted and supported by UCL. UCL is the London's global university homepage. So, it is actually pretty good that a university is giving these spaces because someone would have asked me, how do you get a big database and managing the database, all of that is done in this UCL, which is good, because some of these cannot be by itself. done.

So, UCL stands for University College London, and a lot of research activities have been done here, you could see that the database it stores is pretty historic, and it will actually do a wonder, because they cannot afford to do it as a volunteering company, you cannot afford to all of it. So, and also, they supported by Fastly, Byte mark hosting, and other partners. Byte mark hosting is also a cloud space, but other partners are also there.

(Refer Slide Time: 16:22)



The screenshot shows a web browser window with the URL `hardware.openstreetmap.org/thanks/`. The page title is "OSMF Server Info" and it has navigation links for "About" and "Thanks". The main content is a "Thanks" section with the following text:

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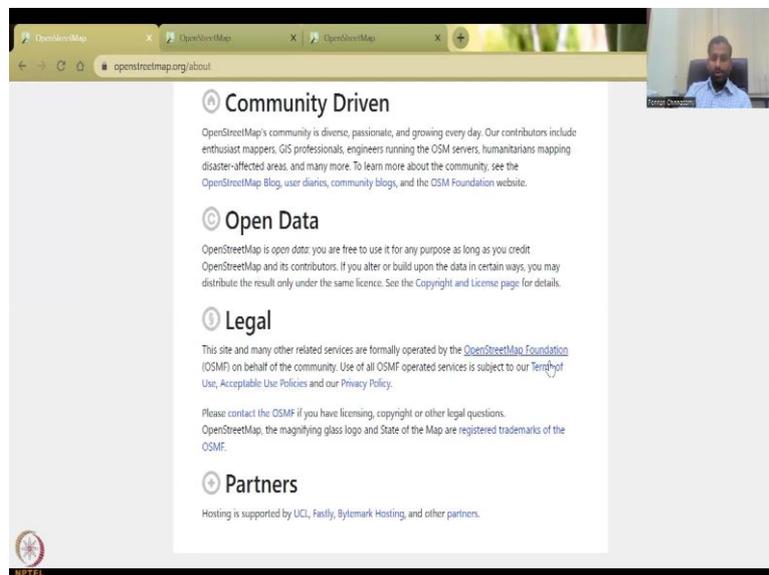
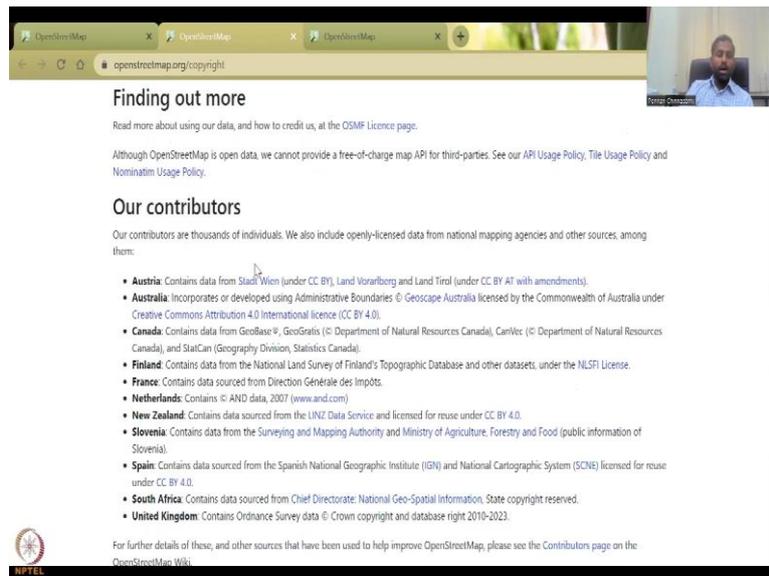
Although OpenStreetMap is open data, we cannot provide a free-of-charge map API for third parties. See our API Usage Policy, Tile Usage Policy and Nominatim Usage Policy.

Our contributors

Our contributors are thousands of individuals. We also include openly licensed data from national mapping agencies and other sources, among them:

- **Austria:** Contains data from Stadt Wien (under CC BY), Land Vorarlberg and Land Tirol (under CC BY AT with amendments).
- **Australia:** Incorporated or downloaded using Administrative Boundaries 4; Geoscience Australia licensed by the Commonwealth of Australia under

NPTEL



So, let us first acknowledge all the partners from they have been supporting OpenStreetMap from the beginning, at the Bartlett center, and we are very grateful. Bartlett center is the hopefully the data center that creates all these locations or built environment is having some data input and data access. Fastly, byte mark for many years, they have been extremely helpful for supporting them, and many, many others, many, many others are here, you will see mostly you do not see the proprietary software here. Because for them, this is kind of not they are just cutting in their business and profit.

So, proprietary software, have always business these, whereas this is open source, it is free for everyone to use. You can learn more about OpenStreetMap. So, let us go quickly and learn more. So, you see the local knowledge. What is the local know about a particular data set, let us say water body, what is the name of the water body? Everything is contributed,

contributors use aerial imagery, GPS, and low-tech field maps to verify that OSM is accurate and up to date.

So, for example, OSM might contact you after you give data to show that this image we have taken can you check if this image is correct, let us say the Powai Lake boundary, we know that the Powai Lake boundary has been changing because of the developments around the lake. So, they will ask me, is it correct? Is it changing? And then those kinds of things we can take from the aerial imagery.

Then we have the GPS devices, some people may not have a handheld GPS device to monitor and take data. However, your phones are pretty good. Your phones can take very good amount of data. So, please try to see if you could use your phones for these kinds of data collection. And so, there is multiple apps for GPS, please look into your Play Store Apple Store for downloading, accurate GPS, free open-source software's that gives you the location and, in the location, you can mark, school education, crop type, everything that you can mark.

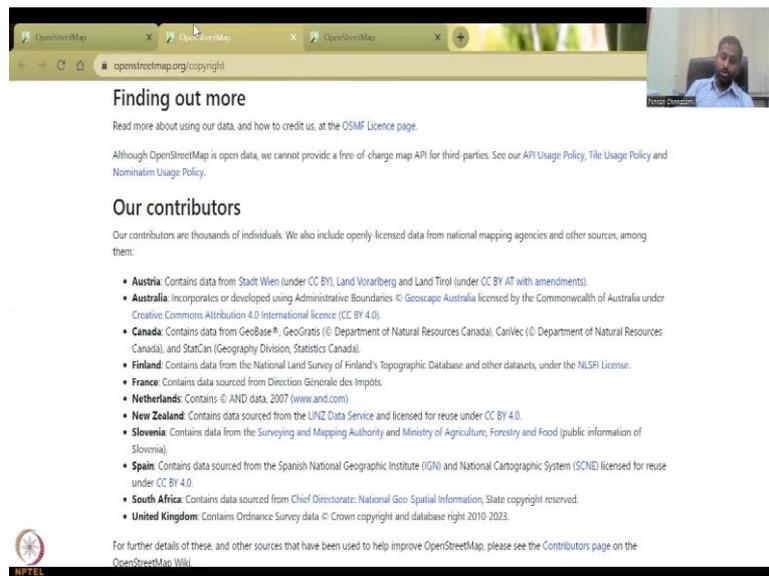
Low field tech maps, so some maps that needs to be updated. And then those are being used and is community driven. A lot of passionate youngsters are giving a lot of their time to develop this database. And then they are very, who are they? They are very fond of mapping GIS professionals, engineers, humanitarians, disaster relief workers, NGOs, industries, colleges, institutes, et cetera. And open street maps are free data OSM is free open data, you are free to use for any purpose as long as credit the Open Street Map and its contributors. I do not see them pull you down.

But as I said it is ethical to thank the contributors and acknowledge them so please feel free I take it as a duty to acknowledge them and to use their data. So, you will see that on my slides when I am using OSM I still have the logos. So, the logo is meaning of not showing that it is my work it is OSM work. So, copyright and open data statement as that it is free and open for anyone to use.

So, this is very important because a lot of people give money for them so as a free open-source system, they cannot sustain by themselves. A lot of people have put in money when they put in money, they want it to be not commercialized but available for the people. If they start commercializing, then it becomes a company. And I demand share on the profit. So, if I am putting money, and they are using for commercial, then I demand money for my services and budget.

But here since it is full open source, it is important to understand that there is need for acknowledging them, and it has to be kept open source. The legal documents are there, if you would like to see. And then these are the partners hosting partners. Again, UCL, as I said, hosts the data part of the data, it is better to break it into smaller bins and then store it. Let us say Asia region is not one database, the US region is in one database, et cetera, or some attributes.

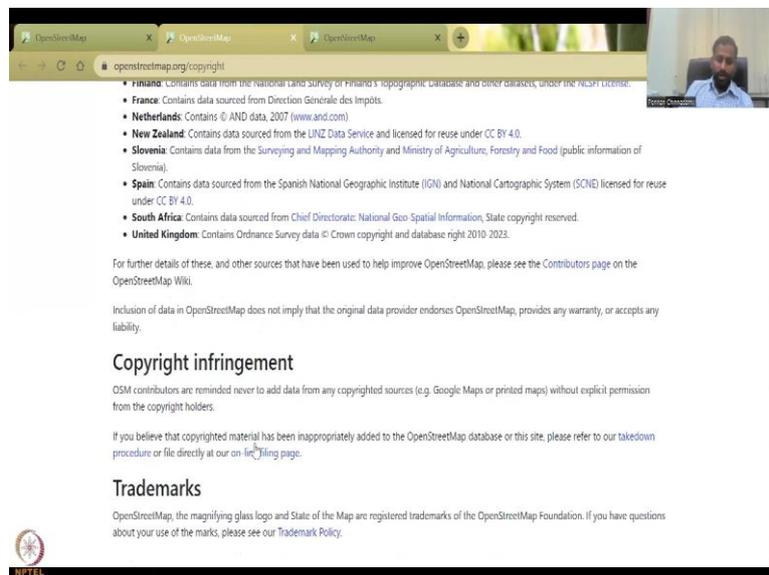
(Refer Slide Time: 20:57)



The screenshot shows the OpenStreetMap website's copyright page. The browser address bar displays 'openstreetmap.org/copyright'. The page title is 'Finding out more'. Below the title, there is a section titled 'Our contributors' which lists various countries and their data sources. The list includes:

- Austria:** Contains data from Stadt Wien (under CC BY), Land Vorarlberg and Land Tirol (under CC BY AT with amendments).
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- France:** Contains data sourced from Direction Générale des Impôts.
- Netherlands:** Contains © AND data, 2007 (www.and.com)
- New Zealand:** Contains data sourced from the LINZ Data Service and licensed for reuse under CC BY 4.0.
- Slovenia:** Contains data from the Surveying and Mapping Authority and Ministry of Agriculture, Forestry and Food (public information of Slovenia).
- Spain:** Contains data sourced from the Spanish National Geographic Institute (IGN) and National Cartographic System (SONE) licensed for reuse under CC BY 4.0.
- South Africa:** Contains data sourced from Chief Directorate: National Geo-Spatial Information, State copyright reserved.
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At the bottom of the list, it says: 'For further details of these, and other sources that have been used to help improve OpenStreetMap, please see the Contributors page on the OpenStreetMap Wiki.'



The screenshot shows the OpenStreetMap website's copyright page, specifically the 'Copyright infringement' and 'Trademarks' sections. The browser address bar displays 'openstreetmap.org/copyright'. The page title is 'Finding out more'. Below the title, there is a section titled 'Copyright infringement' which states:

OSM contributors are reminded never to add data from any copyrighted sources (e.g. Google Maps or printed maps) without explicit permission from the copyright holders.

If you believe that copyrighted material has been inappropriately added to the OpenStreetMap database or this site, please refer to our takedown procedure or file directly at our on-line filing page.

Below this is a section titled 'Trademarks' which states:

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OpenStreetMap

openstreetmap.org/about

Community Driven

OpenStreetMap's community is diverse, passionate, and growing every day. Our contributors include enthusiast mappers, GIS professionals, engineers running the OSM servers, humanitarians mapping disaster-affected areas, and many more. To learn more about the community, see the OpenStreetMap Blog, user diaries, community blogs, and the OSM Foundation website.

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NPTEL

OpenStreetMap

openstreetmap.org/#map=11/18.5252/73.7650

OpenStreetMap Edit History Export

GPS Traces User Diaries Communities Copyright

Search

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openstreetmap.org/history#map=11/18.5252/73.8851

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Search

Changesets

- Updated a dairy shop
- Closed about 8 hours ago by wakadkar #133844477
- अदालतचे बंदीकरण, पर दफ्तरी बंदी
- Closed about 8 hours ago by wakadkar #133844306
- Updated a kindergarten
- Closed about 8 hours ago by wakadkar #133844242
- परिभाषित पर्यायनाम पर इकाई जोडले
- Closed about 2 hours ago by wakadkar #133844224
- Updated 7 residential and a building

NPTEL

OpenStreetMap history4map: 9/18.7841/73.8968

OpenStreetMap Edit History Export GPS Traces User Diaries Communities Copyright

Search Where is that? Go

Chang

university GIS

Specify whether cobira idralis

Closed about 2 hours ago by ravidwivedi - #133850848

Specify whether public transport stops have benches

Closed about 2 hours ago by ravidwivedi - #133850658

Specify road surface

Closed about 2 hours ago by ravidwivedi - #133850627

Specify whether public transport stops have shelters

NPTEL

OpenStreetMap node: 3233393892

OpenStreetMap Edit History Export GPS Traces User Diaries Communities Copyright

Search Where is that? Go

Node: Chennai (3233393892)

Version #43

name correction for Urdu

Edited 9 months ago by Jacksonville Changeset #122564423 Location: 13.0836939, 80.2701860

Tags

alt name:ur	چنائی
alt name:Zur	چنائی
capital	4
gns:disg	ADM2
gns:sumi	-2919695
is:capital	state

NPTEL

OpenStreetMap node: 3233393892#map: 13/13.0816/80.2675

OpenStreetMap Edit History Export GPS Traces User Diaries Communities Copyright

Search Where is that? Go

Node: Chennai (3233393892)

Version #43

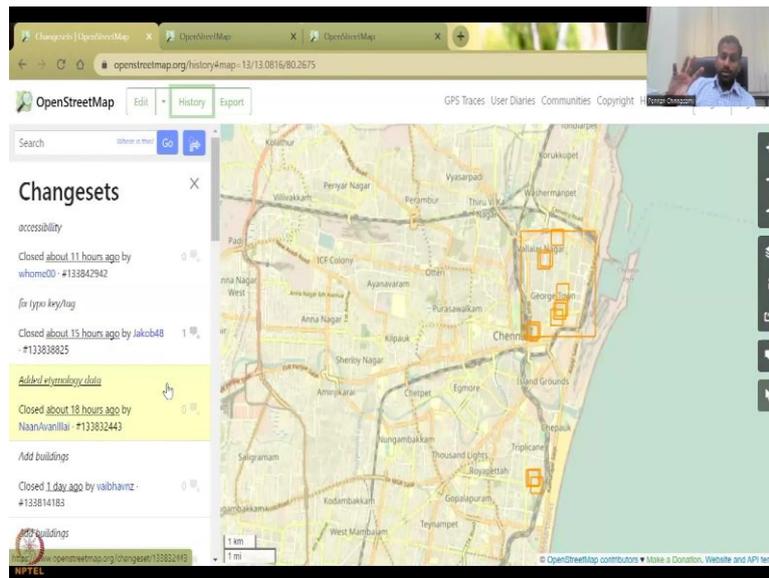
name correction for Urdu

Edited 9 months ago by Jacksonville Changeset #122564423 Location: 13.0836939, 80.2701860

Tags

alt name:ur	چنائی
alt name:Zur	چنائی
capital	4
gns:disg	ADM2
gns:sumi	-2919695
is:capital	state

NPTEL



So, they will say all the schools are in one location, all the hospitals are in another location, et cetera. So, the key contributor is if you see you would see multiple countries, you do not see India yet, maybe it is not picking up yet. So, hopefully if you pick up and then there are trademarks for the brand, OSM as the brand has been trademarked. So, in the opposite communities, if you go to the community part, I will go back to what is open street maps, we have learned a lot.

So, you can see the history of your searching, and how people have updated, as I said, in this location who is updating. So, if I change the location, and then go to let us say Chennai. So, Chennai is there 9 months ago, someone has input some data, and then you can go to see the history. In the history also, you can see now the name changes for so for this region. So, the box you see, for the box, who has input data, and how old, so close about 11 hours ago, someone has input data on accessibility, added elementary etymology data added buildings.

(Refer Slide Time: 22:23)

Changeset: 133814183

Add buildings

Closed 1 day ago by vaibhavr

Tags

changesets count	10236
created by	ID 2.25.1
host	https://www.openstreetmap.org/edit
imagery used	Esri World Imagery
locale	en GB
resolved crossing ways building-highway	2
crossings crossing_w	

Nodes (1-20 of 123 ... 23 448)

- 1155189453, v1
- 1155189454, v1
- 1155189455, v1
- 1155189456, v1
- 1155189457, v1
- 1155189458, v1
- 1155189459, v1
- 1155189460, v1
- 1155189461, v1
- 1155189462, v1
- 1155189463, v1
- 1155189464, v1
- 1155189465, v1
- 1155189466, v1
- 1155189467, v1
- 1155189468, v1
- 1155189469, v1
- 1155189470, v1
- 1155189471, v1
- 1155189472, v1

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#133770444

Cornish translations for countries and continents

Closed 2 days ago by joshhood · #133769862

Created 5 community centres and a chalet

Closed 3 days ago by Kjell999 · #133762864

Fixing OSM Ibaah PKX

Closed 3 days ago by Kavithapipm · #133753044

les halimeth

Closed 3 days ago by Sakita Adamou Yahayya · #133748816

fixing oam roads

Closed 3 days ago by Subbu@adrinath · #133738429

Sakita Adamou Yahayya | User

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Sakita Adamou Yahayya

Edits 71 | Map Notes 0 | Traces 0 | Send Message | Diary 0 | Comments | Add Friend

Mapper since June 21, 2021



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Search

Changesets

accessibility

Closed about 11 hours ago by whom00 · #133842942

fix typo key/tag

Closed about 15 hours ago by Jakob48 · #133838825

Added etymology data

Closed about 18 hours ago by Naan@vanilali · #133832443

Add buildings

Closed 1 day ago by viabhavit · #133814183

Add buildings

Closed 1 day ago by viabhavit · #133814183

Changesets | OpenStreetMap

openstreetmap.org/history#map=14/13.0846/80.2835

OpenStreetMap Edit History Export GPS Traces User Diaries Communities Copyright

Search

Changesets

accessibility

- Closed about 11 hours ago by whom00 - #133842942
- fix typo keytag*
- Closed about 15 hours ago by Jakob48 - #133838825
- Added etymology data*
- Closed about 18 hours ago by NaanAvanilai - #133832443
- Add buildings*
- Closed 1 day ago by vaibhavz - #133814183
- add buildings*
- Closed 1 day ago by vaibhavz - #133814183

Changesets | OpenStreetMap

openstreetmap.org/history#map=12/13.0612/80.2770

OpenStreetMap Edit History Export GPS Traces User Diaries Communities Copyright

Search

Changesets

accessibility

- Closed about 11 hours ago by whom00 - #133842942
- fix typo keytag*
- Closed about 15 hours ago by Jakob48 - #133838825
- Added etymology data*
- Closed about 18 hours ago by NaanAvanilai - #133832443
- Add buildings*
- Closed 1 day ago by vaibhavz - #133814183
- add buildings*
- Closed 1 day ago by vaibhavz - #133814183

OpenStreetMap

openstreetmap.org/#map=12/13.0611/80.2170

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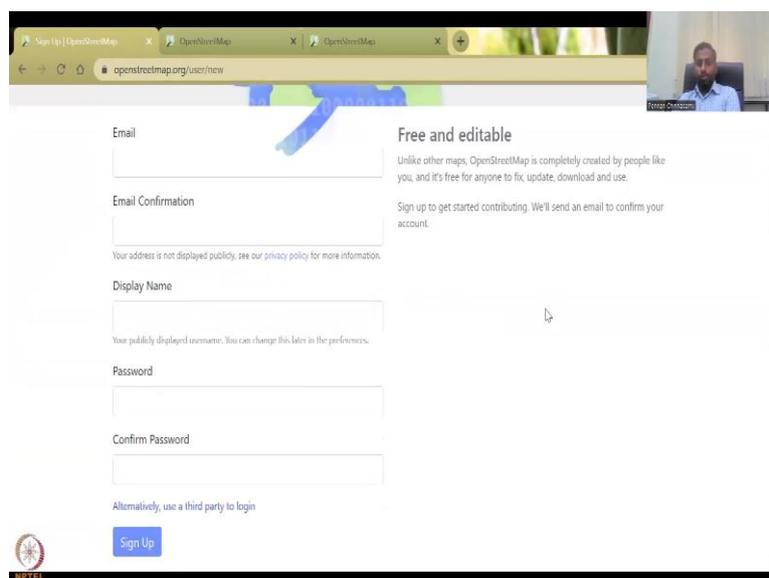
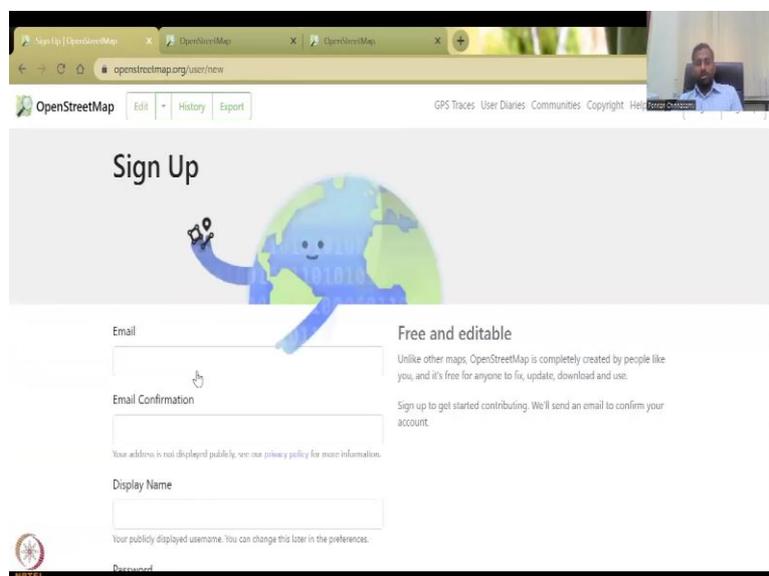
LiDAR is supported by UCL, Esri, Flytag, Housling, and other partners.

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So, you can click here and see what buildings were added. So, someone added this building in Open Street Map, which is really good, and other nodes, locations, et cetera, can be taken up. So, in the history side, we do see a lot of these data. 2 to 3 days ago, 3 days ago, and somewhere your name and other stuff has been added, because they say how many edits, Map notes, et cetera. So, here is where sometimes you may not get very, very accurate data.

But it is your role as a researcher, as a student, to make sure you verify the data. Because it is open source, people can put data that is not correct and accurate. And that is not purposely done. It is done also, because maybe they did not know the correct way of doing it. So, it is up to you to correctly map.

(Refer Slide Time: 23:25)



Public GPS Traces | OpenStreetMap

openstreetmap.org/traces

OpenStreetMap Edit History Export GPS Talks User Diaries Communities Copyright Help

Public GPS Traces

Browse recent GPS trace uploads

All Traces Upload a trace

Newer Traces Page 1 Older Traces

PENDING 2023_03_18T01_38_41.794265Z.gpx **IDENTIFIABLE**
 less than a minute ago by dragongpilot
 Routes from dragongpilot 2023.02.18 (TOYOTA PRIUS 2017)

2023_03_18T01_36_08.390685Z.gpx 878 points **IDENTIFIABLE** View Map Edit Map
 less than a minute ago by dragongpilot
 Routes from dragongpilot 2023.02.18 (TOYOTA PRIUS 2017)

2023_03_18T01_34_06.496186Z.gpx 476 points **IDENTIFIABLE** View Map Edit Map
 less than a minute ago by dragongpilot
 Routes from dragongpilot 2023.02.18 (TOYOTA PRIUS 2017)

2023_03_18T01_32_29.600473Z.gpx 738 points **IDENTIFIABLE** View Map Edit Map
 less than a minute ago by dragongpilot
 Routes from dragongpilot 2023.02.18 (TOYOTA PRIUS 2017)

NPTEL

openstreetmap.org/traces

2023_03_18T01_32_29.600473Z.gpx 738 points **IDENTIFIABLE** View Map Edit Map
 less than a minute ago by dragongpilot
 Routes from dragongpilot 2023.02.18 (TOYOTA PRIUS 2017)

2023_03_18T01_30_23.825113Z.gpx 1158 points **IDENTIFIABLE** View Map Edit Map
 less than a minute ago by dragongpilot
 Routes from dragongpilot 2023.02.18 (TOYOTA PRIUS 2017)

PENDING 2023_03_18T01_19_49.989954Z.gpx **IDENTIFIABLE**
 less than a minute ago by dragongpilot
 Routes from dragongpilot 2023.02.18 (TOYOTA PRIUS 2017)

2023_03_18T01_18_46.494640Z.gpx 329 points **IDENTIFIABLE** View Map Edit Map
 1 minute ago by dragongpilot
 Routes from dragongpilot 2023.02.18 (TOYOTA PRIUS 2017)

2023_03_18T01_17_34.799881Z.gpx 458 points **IDENTIFIABLE** View Map Edit Map
 1 minute ago by dragongpilot
 Routes from dragongpilot 2023.02.18 (TOYOTA PRIUS 2017)

2023_03_18T01_14_44.191035Z.gpx 1069 points **IDENTIFIABLE** View Map Edit Map
 1 minute ago by dragongpilot
 Routes from dragongpilot 2023.02.18 (TOYOTA PRIUS 2017)

2023_03_18T01_14_23.189048Z.gpx 86 points **IDENTIFIABLE** View Map Edit Map
 1 minute ago by dragongpilot
 Routes from dragongpilot 2023.02.18 (TOYOTA PRIUS 2017)

2023_03_18T01_14_07.019910Z.gpx 13 points **IDENTIFIABLE** View Map Edit Map
 1 minute ago by dragongpilot
 Routes from dragongpilot 2023.02.18 (TOYOTA PRIUS 2017)

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openstreetmap.org/traces

1 minute ago by dragongpilot
 Routes from dragongpilot 2023.02.18 (TOYOTA PRIUS 2017)

2023_03_18T01_00_53.288950Z.gpx 183 points **IDENTIFIABLE** View Map Edit Map
 1 minute ago by dragongpilot
 Routes from dragongpilot 2023.02.18 (TOYOTA PRIUS 2017)

2023_03_18T01_00_18.986749Z.gpx 194 points **IDENTIFIABLE** View Map Edit Map
 1 minute ago by dragongpilot
 Routes from dragongpilot 2023.02.18 (TOYOTA PRIUS 2017)

2023_03_18T00_56_22.587184Z.gpx 23 points **IDENTIFIABLE** View Map Edit Map
 1 minute ago by dragongpilot
 Routes from dragongpilot 2023.02.18 (TOYOTA PRIUS 2017)

2023_03_18T00_52_31.887962Z.gpx 81 points **IDENTIFIABLE** View Map Edit Map
 1 minute ago by dragongpilot
 Routes from dragongpilot 2023.02.18 (TOYOTA PRIUS 2017)

2023_03_18T00_52_37.501042Z.gpx 251 points **IDENTIFIABLE** View Map Edit Map
 1 minute ago by dragongpilot
 Routes from dragongpilot 2023.02.18 (TOYOTA PRIUS 2017)

2023_03_18T00_50_10.596422Z.gpx 1177 points **IDENTIFIABLE** View Map Edit Map
 1 minute ago by dragongpilot
 Routes from dragongpilot 2023.02.18 (TOYOTA PRIUS 2017)

Newer Traces Page 1 Older Traces

NPTEL

feeling this pain a bit more.)

Still questioning

That still leaves the other sort of corral, the sort that animals are herded into, but still "temporary accomodation" in the words of the Riding wiki page, to label. Suggestions on that arena described as a corral were: `landuse=animal_keeping`, `animal_keeping=horse`, `animal_keeping=type=paddock`. Whatever a paddock is. Apparently there's a difference of opinion between the English speakers and the German writing the wiki page. I've encountered the word, but not entirely sure what it means. Something horse-y, a place to keep. It probably doesn't apply anyway.

Tried something like that at the sheep corral on Lizard Head Pass. Pretty sure it's not correct. What would be? `id` suggests `landuse=animal_enclosure` as an option, but there's nothing in the wiki about this. What talk I can find about it is tagging in zoos. Here is a cow corral in Pueblo Park that I've made a similar attempt at. (Didn't tag it from like the first.) It feels at least fairly correct except maybe the type.

Looks like this might just get called a "pen", but seems far too general to be useful as well as not capturing the essential feature that keeping animals here is only temporary. Using that as a thread to pull, I come to "farmyard=stockyard" which "is an area used to temporarily hold livestock, generally with many fences". This seems like it's getting close. But this comes from "landuse=farmyard", but there are no dwelling or other buildings. This is public land! Public Department of Agriculture. land of many uses, land. Maybe this is still closer to what I want? Nothing is certain.

Location: [XS X Ranch, Grant County, New Mexico, United States](#)

Comment on this entry · Send a message to the author · 3 comments

 **Shane Leslie Braddick**

Posted by shanebraddick on 15 March 2023 in English (English)

Shane Braddick is here. Hello everyone. Love this mapping site.

Comment on this entry · Send a message to the author · No comments

Posted by shanebraddick on 15 March 2023 in English (English)

Shane Braddick is here. Hello everyone. Love this mapping site.

Comment on this entry · Send a message to the author · No comments

How to tag areas where camping is prohibited?

Posted by valhalla on 15 March 2023 in English (English)

I expect this is only a problem in those places that have wild camping allowed as the norm. Bureau of Land Management and Forest Service lands fall into this category and cover a lot of the western United States and a little of the eastern ones. I've failed at finding an answer via search engine. There could be something on the wiki for the `tourism=camp_site` tag, but it's not there now.

For me, this question has come up specifically in mapping backcountry (hiking) areas where camping is generally allowed wherever a person might want to settle for the night, but there is often a lake where camping has been banned outright. This is more than the usual banning of camping within 100 feet of water that is often found in Congressionally designated Wilderness areas. This is for singled out areas.

Some examples:

- Sheep Lake in West Elk Wilderness. (38.7534N, 107.2366W – See rule 6 here.) No camping within ¼ mile.
- Gilpin Lake, Gold Creek Lake, and Three Island Lake in Mount Zirkel Wilderness. (40.7825N, 106.6793W – See here.) No camping within ¼ mile.
- Shadow Lake in Ansel Adams Wilderness. (37.6946N, 119.1243W – See here.) No camping at the lake or between the trail and creek.
- Thousand Island Lake in Ansel Adams Wilderness. (37.7202N, 119.1796W – Same link) No camping within ¼ mile of the outlet.
- Lower Golden Trout Lake in John Muir Wilderness. (37.2410N, 118.7207W – Same link) No camping within 500 feet of the lake.

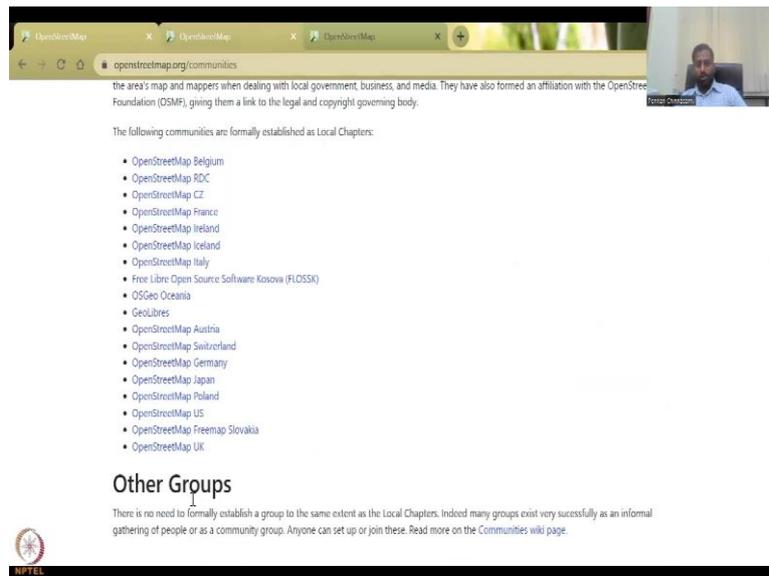
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- Lower Golden Trout Lake in John Muir Wilderness. (37.2410N, 118.7207W – Same link) No camping within 500 feet of the lake.
- Crystal Lake in Hoover Wilderness. (38.0003N, 119.2454W – Same link) No camping at lake. There's quite a few more at this link, but this covers all the wildernesses represented.
- Geneva Lake (and many more) in Maroon Bells Snowmass Wilderness. (39.0969N, 107.0775W – See here.) Camping in designated (numbered) sites only. Sites have been marked at Geneva Lake, but not at Capitol Lake, for instance. Included to show a less restrictive case.

While I wouldn't expect to see the blanket regulation (no camping within 100 feet of water) represented on the map, I would like to see these special cases.

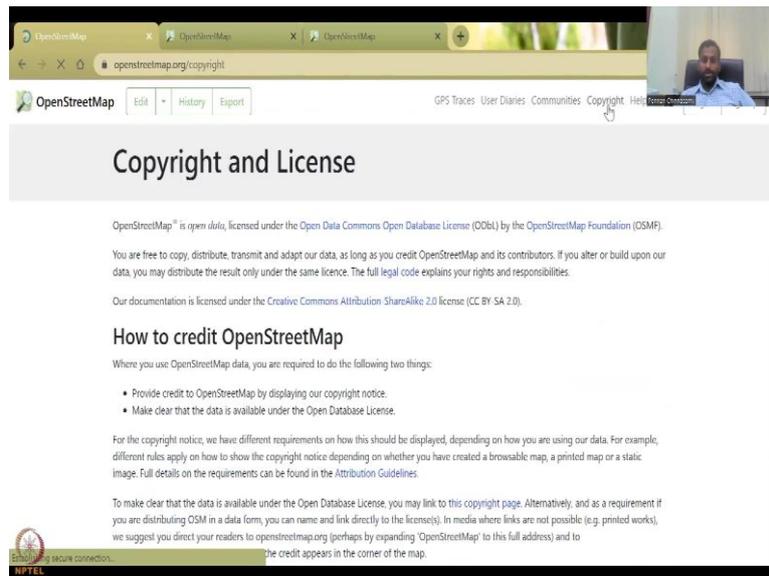
As a second subject, it would be nice if larger areas could be marked for camping or no, particularly when the answer is an unexpected one. Bureau of Land Management generally allows camping wherever you like, but the Lacks Creek Management Area (boundaries seem to be unmarked currently) only allows camping in designated sites. The Forest Service also generally allows dispersed camping, but not in particular areas like the Turquoise Lake Recreation Area (another missing thing). My local California State Parks are pretty clear: only in designated sites, but the National Parks can get a little complicated. Usually it is a no. Nearby Redwood National Park is designated only except for seasonal dispersed backpacking camps on Redwood Creek gravel bars. Congressionally designated wilderness areas of Sequoia National Park, Kings Canyon National Park, and



So, when you start mapping, you will have to sign up display name, your profile. And then you can create the maps where you want to put data and other sources. This is about Open Street Maps. You have GPS traces where it tells you someone has traced a route from drag point Toyota Prius from a car. And then a lot of other people have done traces using their GPS data. So, basically, they have taken the GPS location and road and path. And they are putting it into it. So, user diaries are about users and how they have map how it has helped, et cetera, Hospitals, locations.

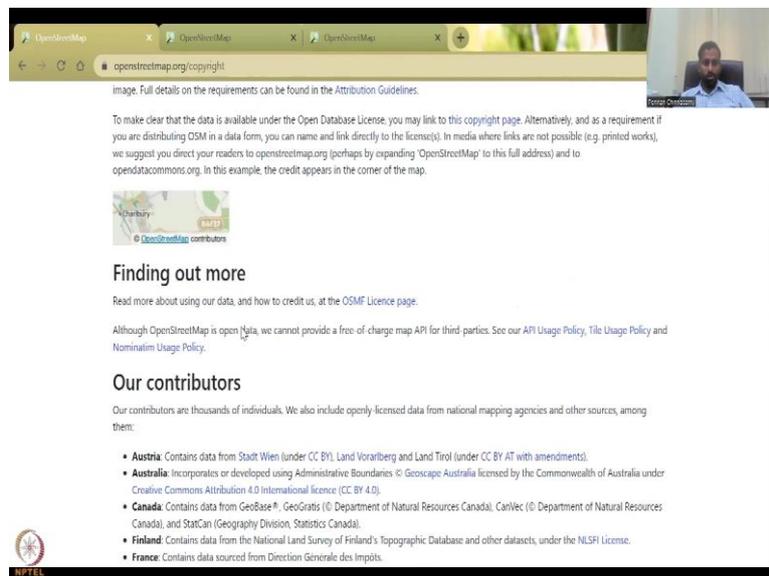
If you see it is mostly very, very useful in developing and underdeveloped nations, because you do not have a set agency like NASA or ESA for helping them using remote sensing data. So, crowdsourcing is the way forward and then we have the communities as we said, we already saw the communities, multiple open street communities, we do not have one for India yet. And I really hope a lot of communities can be set up and users can like you who are taking this class can also be part of this community.

(Refer Slide Time: 24:47)



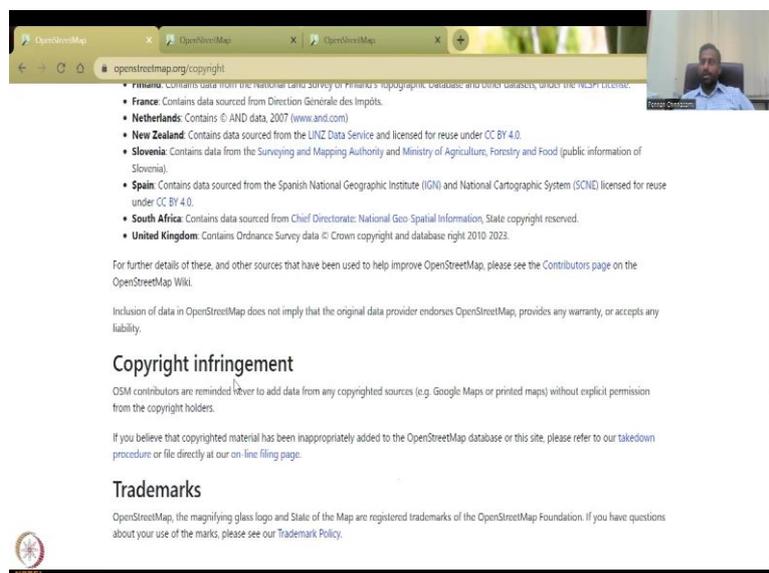
The screenshot shows the OpenStreetMap website's 'Copyright and License' page. The browser address bar displays 'openstreetmap.org/copyright'. The page title is 'Copyright and License'. The main content includes:

- A paragraph stating: "OpenStreetMap[®] is open data, licensed under the Open Data Commons Open Database License (ODbL) by the OpenStreetMap Foundation (OSMF). You are free to copy, distribute, transmit and adapt our data, as long as you credit OpenStreetMap and its contributors. If you alter or build upon our data, you may distribute the result only under the same licence. The full legal code explains your rights and responsibilities. Our documentation is licensed under the Creative Commons Attribution ShareAlike 2.0 license (CC BY SA 2.0)." (Note: The original text in the image contains some typos like 'open data', 'transmit and adapt', and 'ShareAlike' which have been corrected).
- A section titled 'How to credit OpenStreetMap' with the text: "Where you use OpenStreetMap data, you are required to do the following two things:" followed by a bulleted list:
 - Provide credit to OpenStreetMap by displaying our copyright notice.
 - Make clear that the data is available under the Open Database License.
- Further text explaining requirements for displaying the copyright notice and providing a link to the license.



The screenshot shows the 'Attribution Guidelines' page on OpenStreetMap. The browser address bar displays 'openstreetmap.org/copyright'. The page title is 'Attribution Guidelines'. The main content includes:

- A paragraph: "Image. Full details on the requirements can be found in the Attribution Guidelines." (Note: The original text in the image contains a typo 'Image' which has been corrected).
- A paragraph: "To make clear that the data is available under the Open Database License, you may link to this copyright page. Alternatively, and as a requirement if you are distributing OSM in a data form, you can name and link directly to the license(s). In media where links are not possible (e.g. printed works), we suggest you direct your readers to openstreetmap.org (perhaps by expanding 'OpenStreetMap' to this full address) and to opendatacommons.org. In this example, the credit appears in the corner of the map." (Note: The original text in the image contains a typo 'opendatacommons.org' which has been corrected).
- A small map snippet showing a credit: "© OpenStreetMap contributors".
- A section titled 'Finding out more' with the text: "Read more about using our data, and how to credit us, at the OSMF Licence page." (Note: The original text in the image contains a typo 'OSMF' which has been corrected).
- A paragraph: "Although OpenStreetMap is open data, we cannot provide a free-of-charge map API for third parties. See our API Usage Policy, Tile Usage Policy and Nominatim Usage Policy." (Note: The original text in the image contains a typo 'Nominatim' which has been corrected).
- A section titled 'Our contributors' with the text: "Our contributors are thousands of individuals. We also include openly licensed data from national mapping agencies and other sources, among them:" followed by a bulleted list:
 - **Austria:** Contains data from Stadt Wien (under CC BY), Land Vorarlberg and Land Tirol (under CC BY AT with amendments).
 - **Australia:** Incorporates or developed using Administrative Boundaries © Geoscience Australia licensed by the Commonwealth of Australia under Creative Commons Attribution 4.0 International licence (CC BY 4.0).
 - **Canada:** Contains data from GeoBase®, GeoGratis (© Department of Natural Resources Canada), CanVec (© Department of Natural Resources Canada), and StatCan (Geography Division, Statistics Canada).
 - **Finland:** Contains data from the National Land Survey of Finland's Topographic Database and other datasets, under the NLSFI License.
 - **France:** Contains data sourced from Direction Générale des Impôts.



The screenshot shows the 'Contributors' page on OpenStreetMap. The browser address bar displays 'openstreetmap.org/copyright'. The page title is 'Contributors'. The main content includes:

- A bulleted list of contributors and their data sources:
 - **Finland:** Contains data from the National Land Survey of Finland's topographic database and other datasets, under the NLSFI license.
 - **France:** Contains data sourced from Direction Générale des Impôts.
 - **Netherlands:** Contains © AND data, 2007 (www.and.com)
 - **New Zealand:** Contains data sourced from the LINZ Data Service and licensed for reuse under CC BY 4.0.
 - **Slovenia:** Contains data from the Surveying and Mapping Authority and Ministry of Agriculture, Forestry and Food (public information of Slovenia).
 - **Spain:** Contains data sourced from the Spanish National Geographic Institute (IGN) and National Cartographic System (SCNE) licensed for reuse under CC BY 4.0.
 - **South Africa:** Contains data sourced from Chief Directorate: National Geo-Spatial Information, State copyright reserved.
 - **United Kingdom:** Contains Ordnance Survey data © Crown copyright and database right, 2010-2023.
- A paragraph: "For further details of these, and other sources that have been used to help improve OpenStreetMap, please see the Contributors page on the OpenStreetMap Wiki." (Note: The original text in the image contains a typo 'OpenStreetMap Wiki' which has been corrected).
- A paragraph: "Inclusion of data in OpenStreetMap does not imply that the original data provider endorses OpenStreetMap, provides any warranty, or accepts any liability." (Note: The original text in the image contains a typo 'OpenStreetMap' which has been corrected).
- A section titled 'Copyright infringement' with the text: "OSM contributors are reminded never to add data from any copyrighted sources (e.g. Google Maps or printed maps) without explicit permission from the copyright holders." (Note: The original text in the image contains a typo 'OSM' which has been corrected).
- A paragraph: "If you believe that copyrighted material has been inappropriately added to the OpenStreetMap database or this site, please refer to our takedown procedure or file directly at our on-line filing page." (Note: The original text in the image contains a typo 'takedown' which has been corrected).
- A section titled 'Trademarks' with the text: "OpenStreetMap, the magnifying glass logo and State of the Map are registered trademarks of the OpenStreetMap Foundation. If you have questions about your use of the marks, please see our Trademark Policy." (Note: The original text in the image contains a typo 'State of the Map' which has been corrected).

OpenStreetMap Help

Getting Help

OpenStreetMap has several resources for learning about the project, asking and answering questions, and collaboratively discussing and documenting mapping topics.

Beginners' Guide Community maintained guide for beginners. https://wiki.openstreetmap.org/wiki/Beginner%27s_Guide	Help Forum Ask a question or look up answers on OpenStreetMap's question-and-answer site. https://help.openstreetmap.org/	Mailing Lists Ask a question or discuss interesting matters on a wide range of topical or regional mailing lists. https://lists.openstreetmap.org/
Community forum A shared place for conversations about OpenStreetMap. https://community.openstreetmap.org/	IRC Interactive chat in many different languages and on many topics. https://irc.openstreetmap.org/	switch2osm Help for companies and organisations switching to OpenStreetMap based maps and other services. https://switch2osm.org/

documenting mapping topics.

Beginners' Guide Community maintained guide for beginners. https://wiki.openstreetmap.org/wiki/Beginner%27s_Guide	Help Forum Ask a question or look up answers on OpenStreetMap's question-and-answer site. https://help.openstreetmap.org/	Mailing Lists Ask a question or discuss interesting matters on a wide range of topical or regional mailing lists. https://lists.openstreetmap.org/
Community forum A shared place for conversations about OpenStreetMap. https://community.openstreetmap.org/	IRC Interactive chat in many different languages and on many topics. https://irc.openstreetmap.org/	switch2osm Help for companies and organisations switching to OpenStreetMap based maps and other services. https://switch2osm.org/
For Organizations With an organization making plans for OpenStreetMap? Find what you need to know in the Welcome Mat. https://wiki.openstreetmap.org/wiki/Welcome_Mat	OpenStreetMap Wiki Browse the wiki for in-depth OpenStreetMap documentation. https://wiki.openstreetmap.org/	

wiki.openstreetmap.org/wiki/Main_Page

Main Page - Other languages

[Afrikaans](#)
[asturianu](#)
[azərbaycanca](#)
[Bahasa Indonesia](#)
[Bahasa Melayu](#)
[bosanski](#)
[brezhoneg](#)
[català](#)
[čeština](#)
[dansk](#)
[Deutsch](#)
[eesti](#)
[English](#)
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[Esperanto](#)
[euskara](#)
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[Frysk](#)
[galego](#)
[hrvatski](#)
[interlingua](#)
[italiano](#)
[kryštyl gvaadelupjèen](#)
[kurdî](#)
[latviešu](#)
[Lëtzebuergesch](#)
[lietuvių](#)
[magyar](#)
[Nederlands](#)
[norsk](#)
[occitan](#)
[polski](#)
[português](#)
[română](#)
[shqip](#)
[slovenščina](#)
[slovenščina srpski \(latinica\)](#)
[suomi](#)
[svenska](#)
[Türkçe](#)
[Türkçe Zazaki](#)
[Ελληνικά](#)
[Ελληνικά](#)
[Ελληνικά](#)
[македонски](#)
[русский](#)
[орпос](#)
[орпос](#)
[srpski](#)
[yepaññawka](#)
[татарча](#)
[татарча](#)
[فارسی](#)

[Other languages - Translate](#)

Welcome to OpenStreetMap, the project that creates and distributes free geographic data for the world. We started it because most maps you think of as free actually have legal or technical restrictions on their use, holding back people from using them in creative, productive, or unexpected ways.

[More about OpenStreetMap](#) | [How to contribute](#) | [Where to get help](#)

Use OpenStreetMap Using OpenStreetMap Browse our world map Check the ready-to-use products for your... ...more on contributing map data	Contribute free map data Beginners' Guide Browse the map feature documentation Browse the Mapping projects ...more on contributing map data	Software Development Develop and use the Platform Use OpenStreetMap for your software Contribute to the OpenStreetMap software
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OpenStreetMap Wiki

wiki.openstreetmap.org/wiki/Main_Page

Tools

What links here
Related changes
Special pages
Printable version
Permanent link
Page information
Click this page

Using OpenStreetMap

- Browse our world map!
- Check the ready-to-use products for your mobile device, your desktop computer or the web services
- ...more on using OpenStreetMap

Beginners' Guide

- Browse the map feature documentation
- Browse the Mapping projects
- ...more on contributing map data

Develop and use the Platform

- Use OpenStreetMap for your software
- Contribute to the OpenStreetMap software

News

2023

15 Jan The wiki was updated to MediaWiki 1.39.

2022

3 Aug The wiki's configuration has been updated so that pages load faster, especially those with many images.

2 Aug Tag usage statistics in infoboxes are now displayed in the correct language and number format according to your interface language setting (technical details, contribute a translation).

19 May When you search for or follow a link to a key or tag description page that does not exist, an infobox now shows any available details from the data item associated with the key or tag. If it is a compound key, each part of the key is described automatically.

Upcoming events (past) - See also: Past Events | Event archive 2004-2020

8th-22nd March Let's Digital! for Women

18th March A Synaesthesia Atlas - Eric Theise & Brett Danting

19th March ラネコの朝礼(デジタル/ライブ!)

20th March Découverte d'OpenStreetMap

21st March OSMF Engineering Working Group meeting

21st March Réunion du groupe local de Lyon

21st March 161. Treffen des OSM-Stammesches Bonn

21st March OSM Edinburgh Social

OpenStreetMap Wiki

wiki.openstreetmap.org/wiki/Browsing

Wiki

Page Discussion

Read View source View history Search OpenStreetMap Wiki

Browsing

Browsing - Other languages

catàla català dèlma dansk Deutsch English español français galego italiano magyar Nederlands polski português shqip Türkçe EMywãd pycckoe yepèkècukà 𐌿𐌿𐌿𐌿

Other languages - Translate

Get help About OpenStreetMap **Browsing** How to contribute Contribute map data Editors Glossary Beginners' guide

The following is concerning basic **browsing** of OpenStreetMap on www.openstreetmap.org:

Contents [hide]

1 Browsing the Map

1.1 Finding Places

1.2 Layers

1.2.1 Key

1.2.2 Other designs

1.3 Notes

1.4 Map Data layer

1.5 Public GPS tracks

2 Sharing a link to the maps

2.1 Adding a Marker

2.2 Short links

2.3 Other URL tricks

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11

OpenStreetMap Wiki

wiki.openstreetmap.org/wiki/Browsing

4 Alternative map browsing options

5 Technical Details

Browsing the Map

To browse OpenStreetMap, open the www.openstreetmap.org homepage. This viewer allows you to Find Places by name (see next section) and/or to zoom in and scroll around our world map.

- To **zoom in** click the plus icon (1) in the top-right or press your keyboard's plus (+) key. This will zoom towards the centre of the currently displayed map.
 - Holding down shift while clicking zooms by three levels.
 - You can also zoom in with your mouse's scroll wheel, by double-clicking on the map. This will zoom towards the current mouse pointer position.
 - You could also zoom in by holding down the shift key and dragging a box with your mouse over the area you want to zoom in on.
- If you have a multi-touch device you can use zoom and pinch gestures to zoom the map in or out.
- To **zoom out** click the minus icon (2) in the top-right or the minus (-) key or use your mouse's scroll wheel. Shift-click also works here.
- To **pan and scroll around** simply drag the map with your mouse or use the arrow keys.
- To centre the map where you are (on the geolocation supplied by your browser) click the arrow icon (3).

You will see a general coastal layout of countries at high zoom levels, but as you zoom in, you can find roads and all sorts of other details which we have in our data.

Finding Places

In the search box appearing beside the map (10), enter the name of a town/city/road, a shop's name, or combined searches like "bakery tour Eiffel", "fast food Piraeus" etc. - see Nominatim for more information. Some places are also described on this wiki under Mapping projects.

Layers

You can switch between different "layers" offering different views of the same mapping data. Do this by clicking

Map Layers

And then copyright, yes, there is a lot of copyright that can be shared and use so we can see as I have already said, what are the copyrights that are available for public, you can pick and choose your copyright status, depending on how you use the map and for what you use it? The trademark is there, the magnifying glass logo and the state map are registered trademarks of open street Foundation. We will not go into open street foundation, but understand that it is part of their logo and trademark.

So, we will now go into the other aspect let me, where we have the help section where we can see like Beginners Guide, help forum, mailing list, you can be part of a community, you can open the Open Street Map Wiki, to look at documentation about the OSM here, the beginner's guide, developers and user's platform et cetera. This gets back to your browsing Open Street Maps, how to browse, what are these low points, it is like a tutorial for you to use, and then use it for your learning and understand we will do some quick tutorials. I believe in doing it and learning it. So, it is better to do that way also. So, we have come here. Then we also have other platforms forums, asking questions.

(Refer Slide Time: 26:28)



Download international boundaries

Completely new with OSM, I try to download all international boundaries. Is that possible, and if yes, how?

answered 13 hours ago
nebelbach
11+1
accept rate: 0%

Be the first one to answer this question!

Follow this question
By Email: Once you sign in you will be able to subscribe for any updates here
By RSS: Answers
Answers and Comments

This is the support site for OpenStreetMap.

Question tags:
download +269
boundaries +127
question asked: 13 hours ago
question was seen: 24 times
last updated: 13 hours ago

Download international boundaries

answered 13 hours ago
nebelbach
11+1
accept rate: 0%

Be the first one to answer this question!

Answers and Comments

This is the support site for OpenStreetMap.

Question tags:
download +269
boundaries +127
question asked: 13 hours ago
question was seen: 24 times
last updated: 13 hours ago

Related questions
How do I export map images of larger areas?
How can I use OpenStreetMap data in my GIS program?
How to download OSM maps
How to download rendered OSM maps?
How do I tag parks with a legal status lower than national?
Is it possible to get a list of objects with two specific tags?

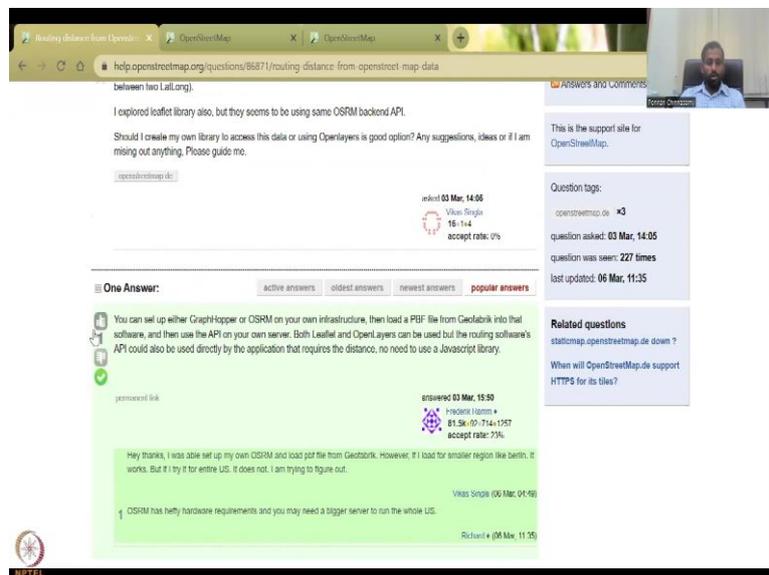
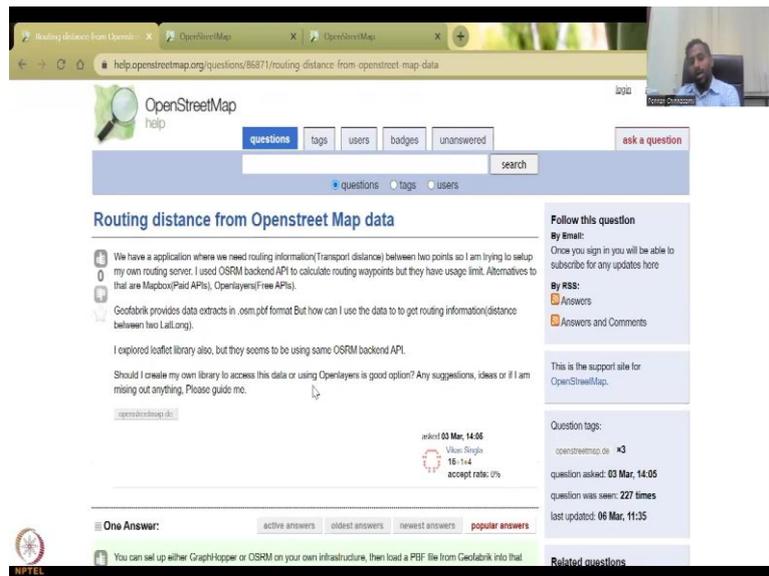
First time here? Check out the FAQ!

0	0	23	Download international boundaries	13 hours ago nebelbach 11
0	0	21	Show coordinates in uMap popup	14 hours ago Pathe 11
0	2	787	How can I search for keywords within a layer in uMap?	yesterday Denitok 1
0	0	49	Display result (from local db) by location distance.	yesterday Rick from C-137 16
0	0	60	"Do you want to open or save map.osm from api.openstreetmap.org?"	yesterday SomeoneElse +36.3k
0	0	438	sort the contents of a layer alphabetically.	yesterday Grads 11
0	1	152	Routing backend server Setup	2 days ago scsl +33.2k
0	1	166	Why are certain Hungarian bicycle routes no longer shown?	2 days ago scsl +33.2k
2	5	3.7k	Tagging planters	15 Mar, 20:05 Mikoy Co 101

16798 questions
22791 answers
Most recently updated questions

This is the support site for OpenStreetMap.

Recent tags
placehold, exposure, how:find, longstreet, pylons, place:water, places, service, openstreetmap, newspaper, service, gettyburg, vintages, european, egypt, distance-ways, open-ways, urban



So, normally, as I said, there is a lot of open-source community helps people just help you to do it. So, for example, here show coordinates on Map, Download internal international boundaries. So, maybe someone has an issue in downloading. Completely new with OSM, I try to download all international boundaries, is that possible and yes how? And then the answer is given. So, on so yet, the answer is not given? Because it is a very recent question. Let us go to some questions the answer is their routing distance from OpenStreetMap.

So, someone is asking I used OSRM back to API driver routing waypoints but they have usage limit. So, what should I do? You can set up the graph hopper or OSRM on your infrastructures, then load the PDF file for calculating the distance. But the point here is, so, basically any question is you have if it is a legit question and a serious question, they will be answering it because people take the time looking at it and answering it. So, let me while we

before we go to the next session, I would like to open the plugin and then show you how to download your plugins.

Because that is very important at this stage for which you will have to you have to make sure that is it useful? And do you have the bandwidth for keeping the store data in your computer? So, with this, let me open my QGIS page so, let it open in the background. I am going to open my QGIS while we go back to the previous slide and then open this link.

(Refer Slide Time: 28:27)

Open Street Map (OSM)

- What is OSM?
 - Found by Steve Coast in 2009
 - Free open geographic database
 - Community of volunteers
 - <https://www.openstreetmap.org/communities>
 - Freely licensed
- <https://www.openstreetmap.org/#map=4/21.84/82.79>

Planet OSN

The files found here are regularly-updated, complete copies of the OpenStreetMap.org database, and those published before the 12 September 2012 are distributed under a Creative Commons Attribution-ShareAlike 2.0 license, those published after are Open Data Commons Open Database License 1.0 licensed. For more information, [see the project wiki](#).

WARNING Download speeds are currently restricted to 4096 KB/s due to limited available capacity on our Internet connection. [Please use torrents](#) or [a mirror](#) if possible.

Complete OSM Data

[Latest Weekly Planet XML File \(torrent\) \(RSS\)](#)
125 GB, created 2 days ago.
m5f: a8705a005484947952084c467d5cae.

[Latest Weekly Changesets \(torrent\) \(RSS\)](#)
5.6 GB, created 2 days ago.
m5f: 14d1f66dc1ef49a6ac30a833b8b65148.

[Latest Weekly Planet PBF File \(torrent\) \(RSS\)](#)
125 GB, created 2 days ago.

Using The Data

You are granted permission to use OpenStreetMap data by the [OpenStreetMap License](#), which also describes your obligations.

You can [process the file](#) or extracts with a variety of tools. [Osmosis](#) is a general-purpose command-line tool for converting the data among different formats and databases, and [Osm2pgsql](#) is a tool for importing the data into a Postgis database.

Extracts & Mirrors

The complete planet is very large, so you may prefer to use one of [several periodic extracts](#) (individual countries or states) from third parties. [GeoFabrik.de](#) and [BBBike.org](#) are two providers of extracts with up-to-date worldwide coverage.

planet.openstreetmap.org

Complete OSM Data

[Latest Weekly Planet XML File \(torrent\) \(RSS\)](#)
125 GB, created 2 days ago.
m5f: a0705ad05484847952064a467d5ca0.

[Latest Weekly Changesets \(torrent\) \(RSS\)](#)
5.6 GB, created 2 days ago.
m5f: 14d1f060c1e1498ac30a83c8b65148.

[Latest Weekly Planet PBF File \(torrent\) \(RSS\)](#)
88 GB, created 2 days ago.
m5f: adab690595c265c344882731cbcc.

Each week, a new and complete copy of all data in OpenStreetMap is made available as both a compressed XML file and a custom PBF format file. Also available is the [history](#) file which contains not only up-to-date data but also older versions of data and deleted data items.

A smaller file with complete metadata for all changes ('changesets') in XML format is also available.

Using The Data

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You can [process the file](#) or extracts with a variety of tools. [Osmosis](#) is a general-purpose command-line tool for converting the data among different formats and databases, and [Osm2pgsql](#) is a tool for importing the data into a Postgis database for rendering maps.

[Processed coastline data](#) derived from OSM data is also needed for rendering usable maps.

Extracts & Mirrors

The complete planet is very large, so you may prefer to use one of [several periodic extracts](#) (individual countries or states) from third parties. [GeoFabrik.de](#) and [BBBike.org](#) are two providers of extracts with up-to-date worldwide coverage.

planet.openstreetmap.org

Planet OSM

Vector Editor Database Web Mesh Processing Help

projects

- OSM**
D:\family\MP71\GIS_GIS_Jurnal
Dev\GIS\OSM.gpr
EPSG:4326 (EPSG:4326 WGS 84)
- Georef**
D:\family\MP71\GIS_GIS_Jurnal
Dev\GIS\Georef.gpr
EPSG:4326 (EPSG:4326 WGS 84)

News

Join the QGIS User Conference 2023

The QGIS User Conference '23 is an international 2-day event on April 18 and 19 2023 in The Netherlands. There will be presentations and workshops to get your QGIS knowledge up to date. There will also be space for "unconference" type of meetings, where you can bring your own topics for discussions or workshops, and find people who are interested.

Project Templates

New Empty Project
EPSG:4326 WGS 84

Latest QGIS version available: Visit <https://qgis.org> to get your copy of version 3.26.1

[Latest Weekly Planet PBF File \(torrent\) \(RSS\)](#)
88 GB, created 2 days ago...

databases, and [Osm2pgsql](#) is a tool for importing the data into a Postgis database

Untitled Project - QGIS

Project File View Layers Settings Plugins Vector Reader Database Web Mesh Processing Help

Recent Projects

- OSM**
D:\family\MP71\GIS_GIS_Jurnal
Dev\GIS\OSM.gpr
EPSG:4326 (EPSG:4326 WGS 84)
- Georef**
D:\family\MP71\GIS_GIS_Jurnal
Dev\GIS\Georef.gpr
EPSG:4326 (EPSG:4326 WGS 84)
- test**
C:\Users\jabin\Documents\test\1-4.gpr
EPSG:4326 (EPSG:4326 WGS 84)
- Basemap**
D:\family\MP71\GIS_GIS_Jurnal
Dev\GIS\Basemap.gpr
EPSG:4326 (EPSG:4326 WGS 84)

News

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Project Templates

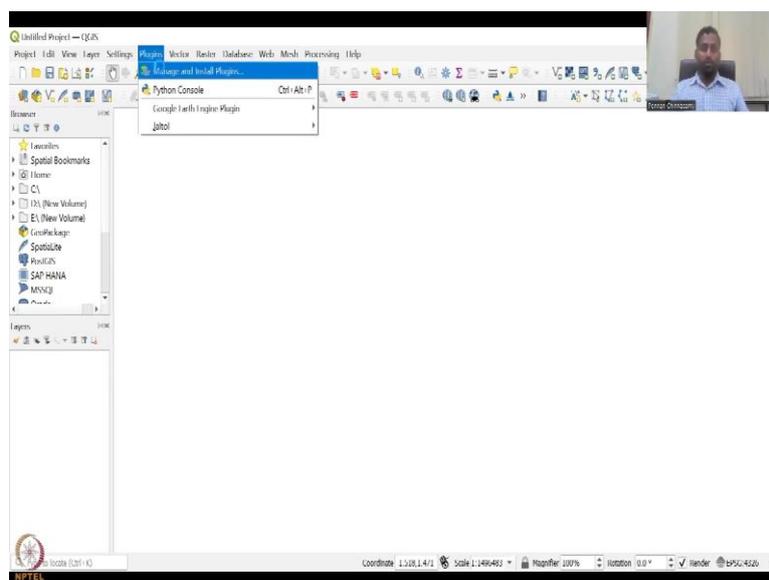
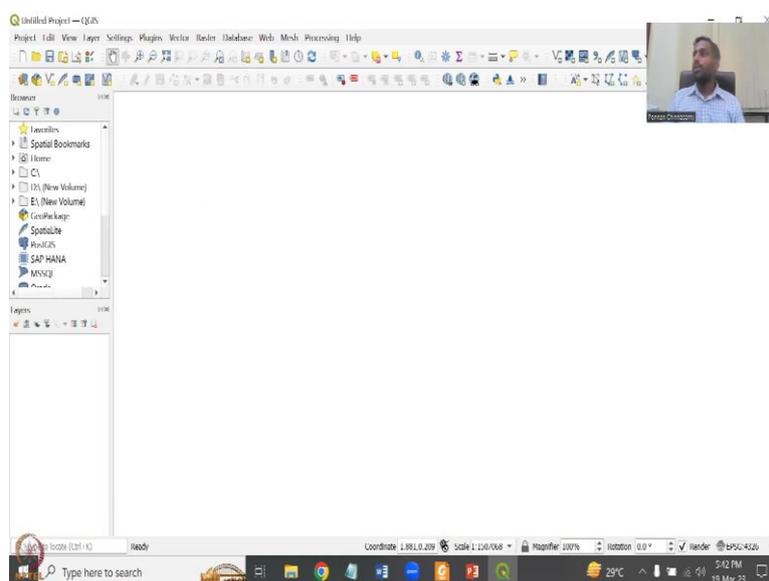
New Empty Project
EPSG:4326 WGS 84

Latest QGIS version available: Visit <https://qgis.org> to get your copy of version 3.26.1

So, we will also look at the files the metadata as promised let me open so just here on the web in the page bottom right I am going to open the planet OSM, which is the metadata. Download speeds are currently restricted, so you can download the data. So, here is where you can learn about the data and download the data. So, latest torrent file on data that is existed 125 GB created 2 days ago, latest weekly changesets all in a torrent site, you will have to use torrent to download it.

And again, this is if you want to download the entire data. But I will be showing you without this, how to download the data as a QGIS package. So, for that, let me open my QGIS and share with you so.

(Refer Slide Time: 29:42)



QGIS Plugins dialog window showing installed plugins. The left pane lists installed plugins with checkboxes, and the right pane shows a list of installed plugins.

Installed Plugins

- DB Manager
- DEMto3D
- Geometry Checker
- Google Earth Engine
- GRASS 7
- GRASS GIS provider
- Jobot
- MetaSearch Catalog Client
- OnlineEditing
- OrfeoToolbox provider
- Processing
- qgisWeb
- QuickMapServices
- SAGA GIS provider
- Topology Checker

Buttons: Upgrade All, Uninstall Plugin, Reinstall Plugin, Close, Help

QGIS Plugins dialog window showing all available plugins. The left pane lists all plugins, and the right pane shows a list of all plugins.

All Plugins

- Ac4SMa
- Actions for relations
- Active Fire
- Add a point road sign
- Aderyn Data Search
- AdresseFr
- Advanced Line Editor
- Arc4GIS
- AGS
- agileflow for QGIS
- AGT - Archaeological Geophysics Toolbox
- Alloy Search Here
- ALS Downloader
- AmigoCloud
- AMM - Assistente de Mapa Interativo Leaflet
- ANM Data Acquisition
- Anaimonde
- Ardalunan Population
- Animate OSM
- Animove
- Annotation to Label
- AnnotationManager
- AnotherQGISresponse
- Append Features to Layer
- ArcGIS ImageServer Connector
- ArcheoCAD
- Archivaria Ortofotomappa

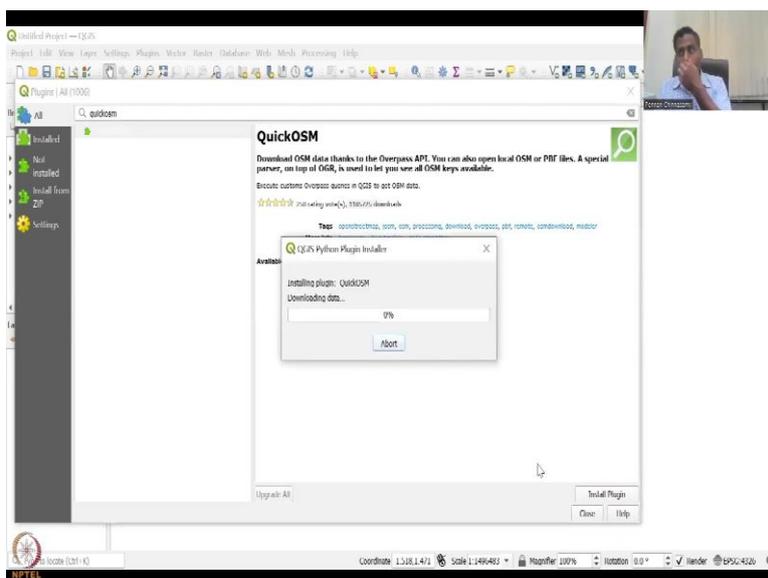
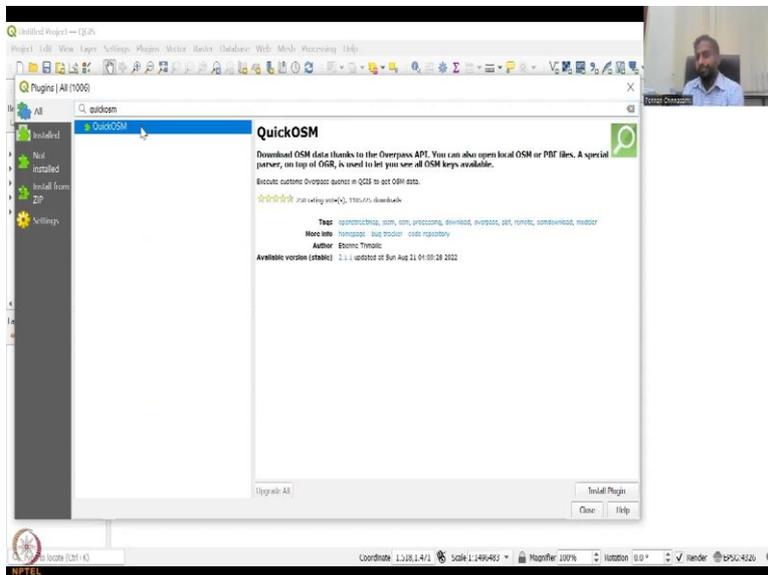
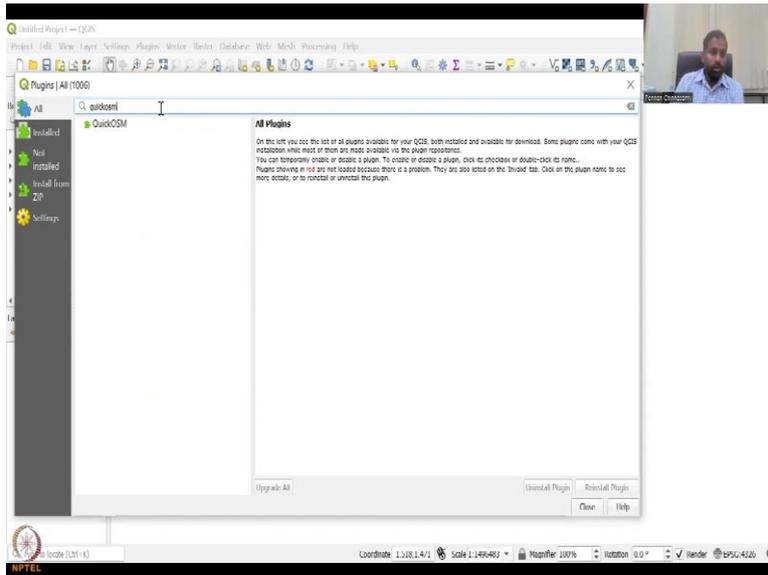
Buttons: Upgrade All, Uninstall Plugin, Reinstall Plugin, Close, Help

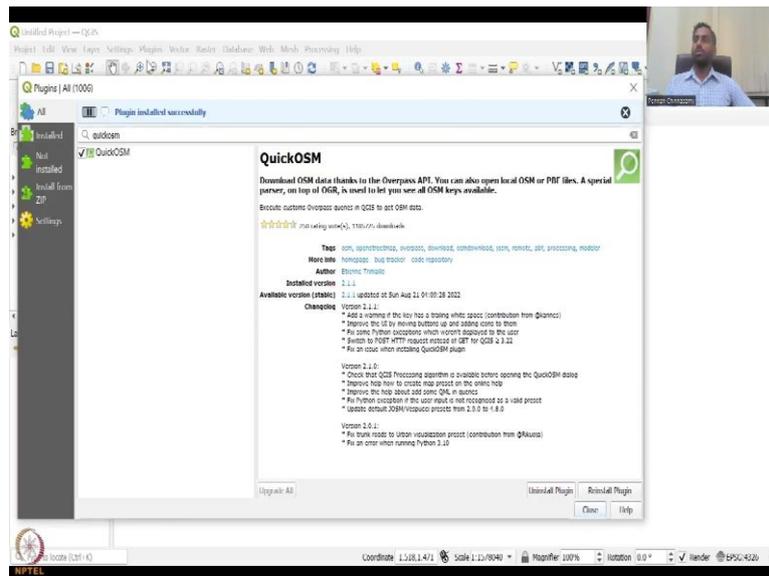
QGIS Plugins dialog window showing search results for 'quick'. The search bar contains 'quick' and the list of plugins is filtered.

All Plugins

- EasyCustomLabeling
- Field find/replace
- F53
- Get Them Filtered
- HouseNumbering?
- Layer Tree Toggle Labels Widget
- MapTiler
- One Click Raster Stacking
- Plover Explorer
- Quick Attribution
- Quick GeoJSON
- Quick Layer
- Quick STEP GEOSIA
- QuickEMAP
- Quickly save default OML
- QuickMapServices
- QuickMapAttributesEdiG
- QuickOSM
- QuickPrint
- QuickWKT
- Red Layer
- Species Explorer
- UAV Mapping Path Generator (for Litchi)
- Vertical Photo Plicer

Buttons: Upgrade All, Uninstall Plugin, Reinstall Plugin, Close, Help



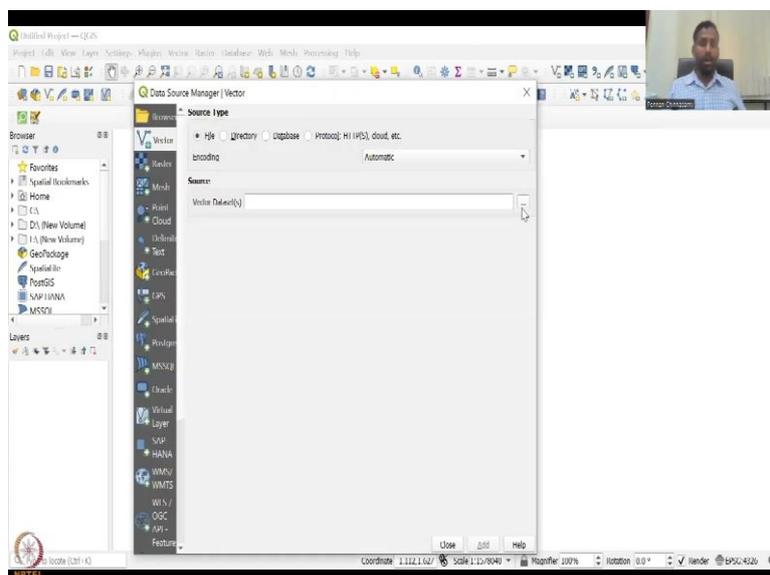
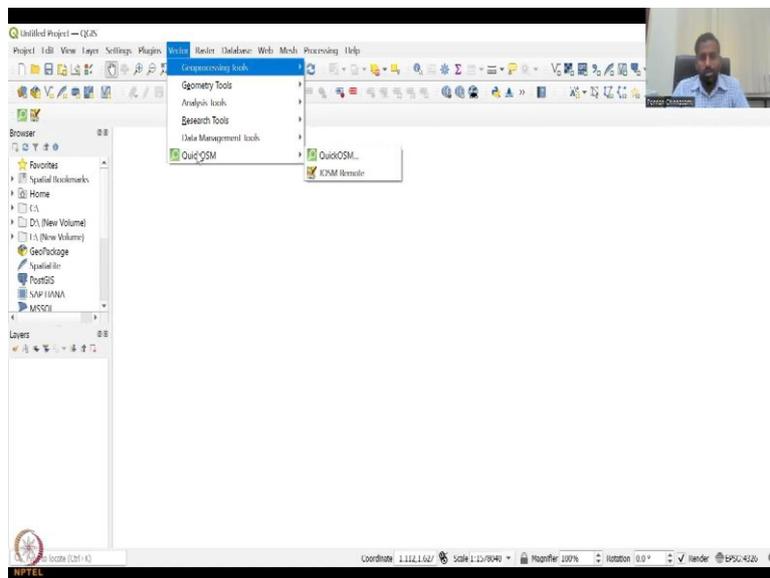
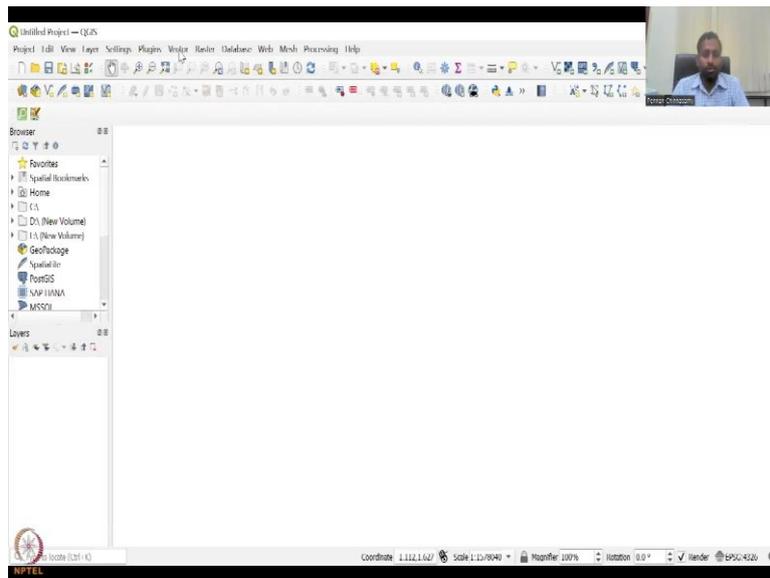


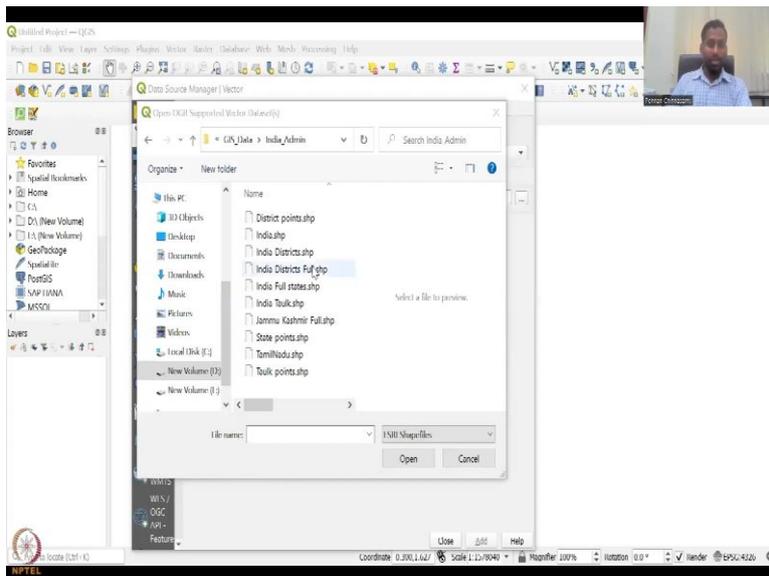
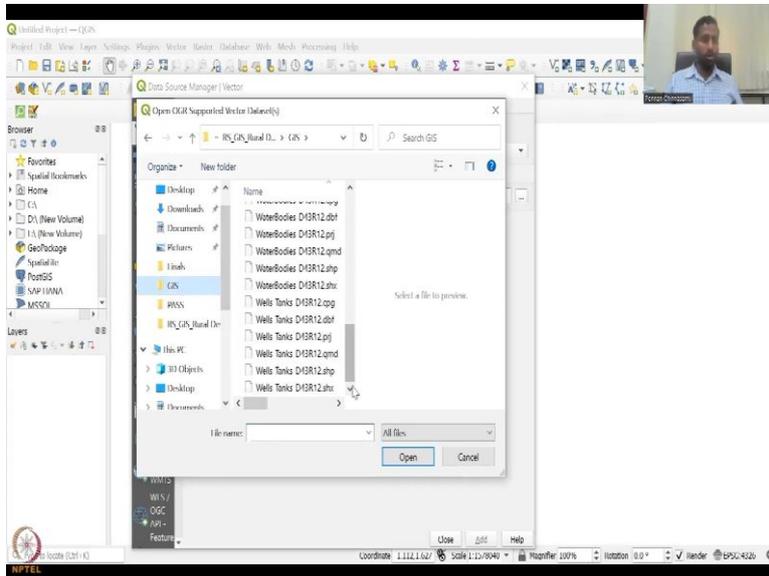
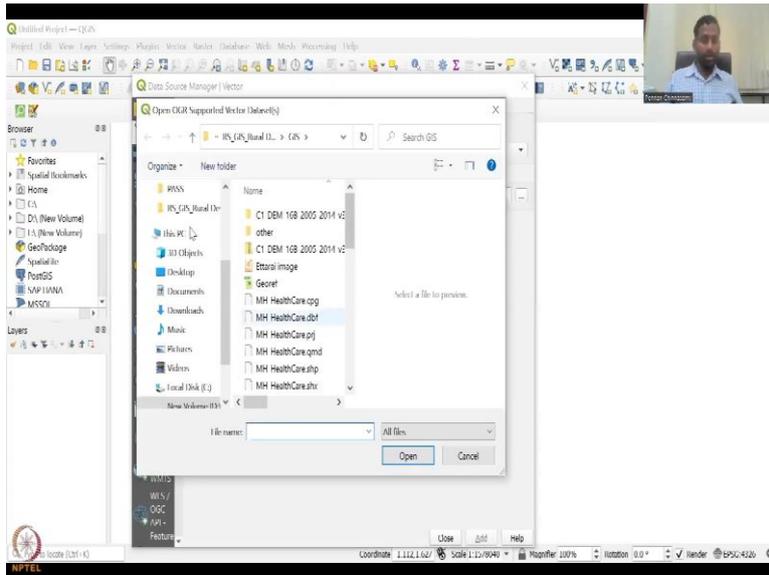
So, I am going to share my QGIS yes, we have my QGIS. So, what do you see here is an empty slide. I am going to go to plugin manage and install plugins. It will first open that pop up, it says I am going to download the repository, let it download and then this happens. So, in the install, I have all these installs for my previous maps. Now, I am going to type Quick OSM. So, Quick OSM is the tool that we will be using. So, let us first read about it here. So, it says download OSM data thanks to the overpass API, you can also open local OSM or a PDF file. This is also the logo trademarked by them.

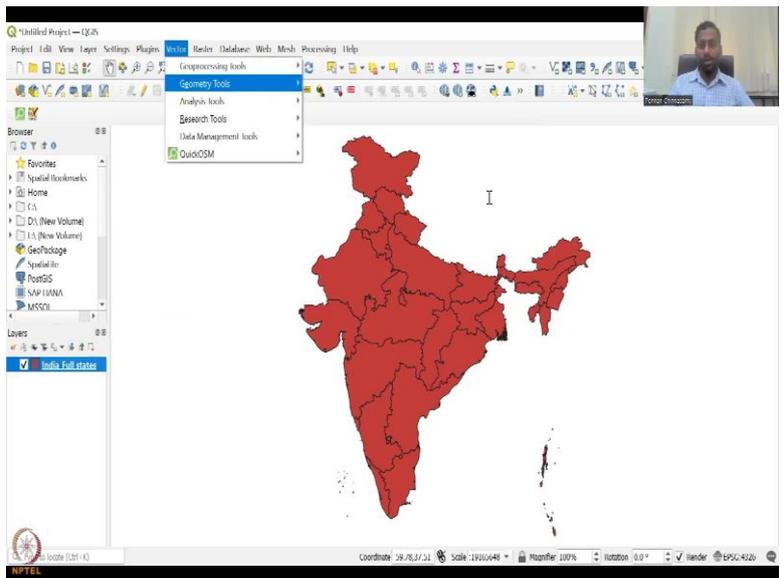
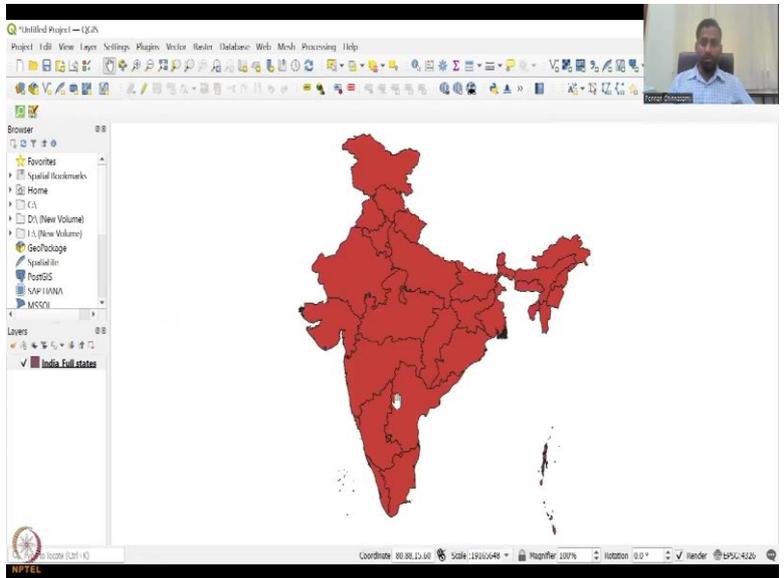
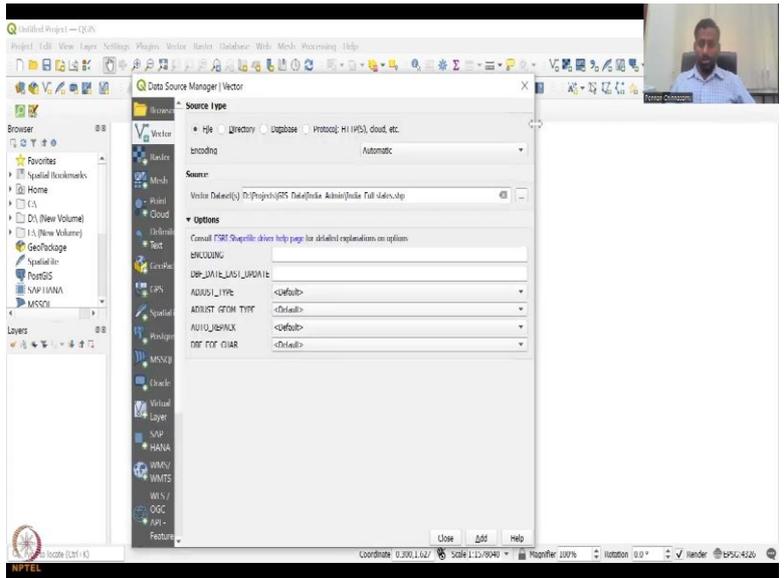
In terms of using, it for data parser, top OGR is used to let you see all the OSM keys. Look at the ratings, look at the number of downloads, literally a lot of downloads, and then the tags are OpenStreetMap et cetera. So, OpenStreetMap is what we want, we will click it and then once this happens, we say install plugin, let it install, depending on your internet speed, and internet bandwidth, it will take some time.

So, now it has done. So, quickly, this will get updated. Just see it, here is what happens plugin installed successfully. And we have the Q OSM page that we have. So, it says the version. So, usually these were not there. Now, its 2.1.1 updated August 21. And these are the versions add a warning key how this is improved, then these. So, we had 2.01, 2.10, 2.1.1. We are going to use the recent one. So, this is about learning on what are the issues in the previous and how they fix it? Fix an issue install link, Quick care, some plugin. And then we will close it.

(Refer Slide Time: 31:52)





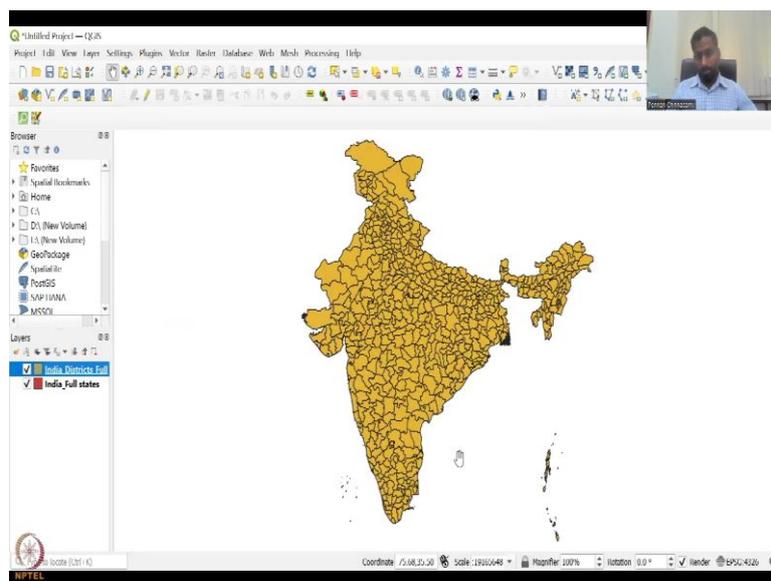


So, now if you go to vectors, and then say see the vector tools, you will see Q OSM, do not open this. Now, we do not want that. But Q OSM is what we will be using for our lecture in the next lecture. Because right now, let us set it up. And I also wanted to show you something that is needed for collecting data quickly from OSM. So, I am going to add my India layer. So, we will go here in my GIS layers we have, so I already have some data that is downloaded for this class.

But I also want you to download some data that is very important for you, let us say you are going to download a particular database, which is having a lot of information on your project. So, let us say you want to do a rural project in India, Tamil Nādu and within that particular district. So, how do you go about it is the question. So, here we will look into particular database, and then we will see if how we could download the data, use it in the following ways.

So, I am going to now download, first attach my district and full states, I am going to show you quickly how to take data. So, this data was taken from a previous Geological Survey of India data in the previous version, because I was doing something previous before the Andhra Telangana was divided. So, you could see that the full Andhra is there. So, this was used for my particular research interests. And then you also have vector data, you can add more vector data, click on what else data I have, you have India districts shapefile. And then you will see the whole of India with my districts.

(Refer Slide Time: 34:07)



Unlabeled Project - QGIS

Project | File | View | Layers | Settings | Plugins | Vector | Raster | Database | Web | Mesh | Processing | Help

India Districts Full - 1 features, total: 617, filtered: 617

Shape_Leng	Shape_Area	ID 0	ISO	NAME 0	ID 1	NAME 1	ID 2	NAME 2	TYPE 2
1	0	0	105 IND	India	32	Telangana	479	Adilabad	District
2	0	0	105 IND	India	34	Uttar Pradesh	491	Agra	District
3	0	0	105 IND	India	12	Gujarat	114	Ahmedabad	District
4	0	0	105 IND	India	21	Maharashtra	796	Ahmednagar	District
5	0	0	105 IND	India	24	Mizoram	346	Aizawl	District
6	0	0	105 IND	India	29	Rajasthan	413	Ajmer	District
7	0	0	105 IND	India	21	Maharashtra	297	Akola	District
8	0	0	105 IND	India	18	Kerala	733	Alappuzha	District
9	0	0	105 IND	India	34	Uttar Pradesh	494	Aligarh	District
10	0	0	105 IND	India	34	Uttar Pradesh	495	Alhambur	District
11	0	0	105 IND	India	35	Uttaranchal	563	Almora	District
12	0	0	105 IND	India	29	Rajasthan	414	Alwar	District
13	0	0	105 IND	India	13	Haryana	139	Ambala	District
14	0	0	105 IND	India	34	Uttar Pradesh	496	Ambedkar Nagar	District
15	0	0	105 IND	India	21	Maharashtra	298	Amravati	District
16	0	0	105 IND	India	17	Gujarat	115	Anand	District
17	0	0	105 IND	India	28	Punjab	396	Amritsar	District
18	0	0	105 IND	India	17	Gujarat	116	Anand	District
19	0	0	105 IND	India	2	Andhra Pradesh	3	Anantapur	District

Type here to search

India Districts Full - 1 features, total: 617, filtered: 617, Selected: 0

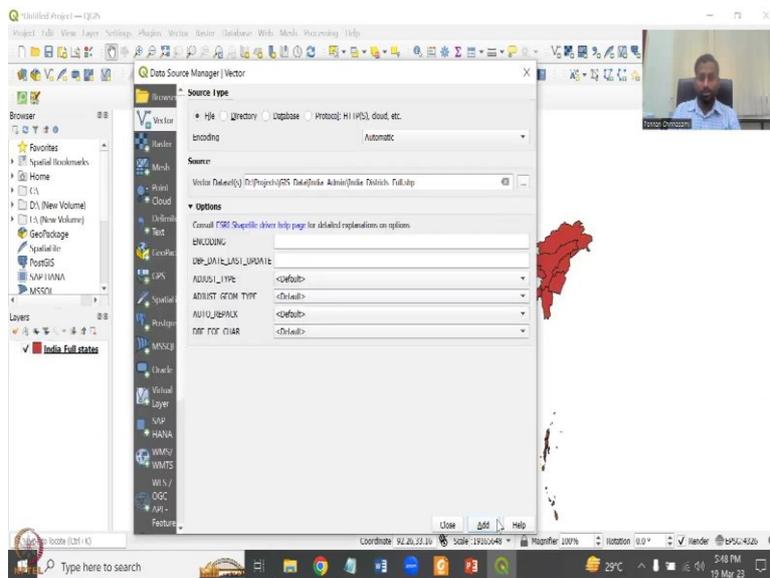
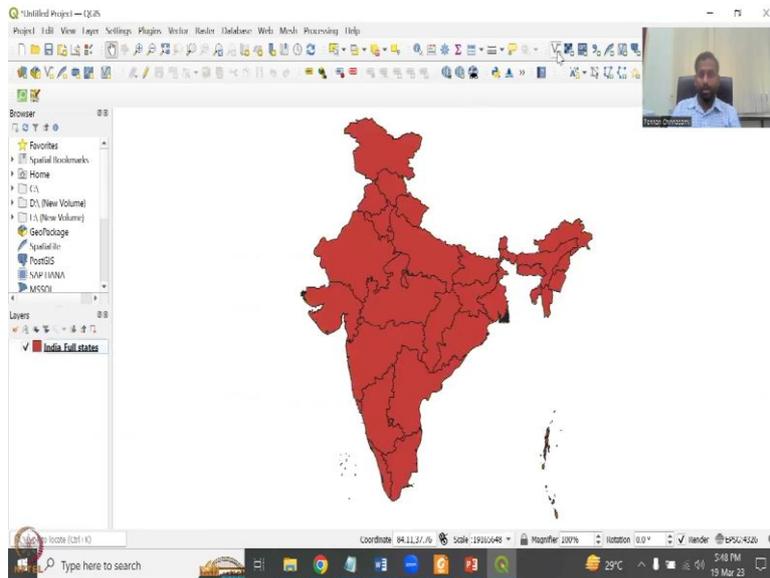
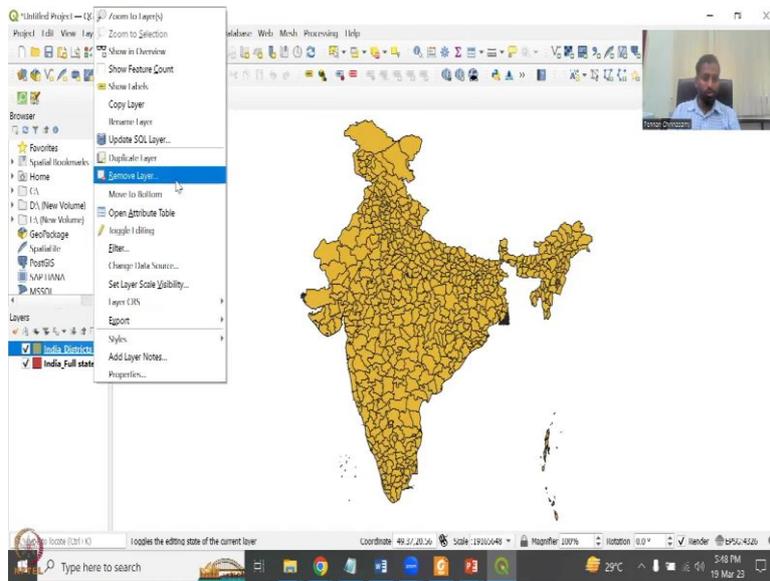
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3	0	0	105 IND	India	12	Gujarat	114	Ahmedabad	District
4	0	0	105 IND	India	21	Maharashtra	796	Ahmednagar	District
5	0	0	105 IND	India	24	Mizoram	346	Aizawl	District
6	0	0	105 IND	India	29	Rajasthan	413	Ajmer	District
7	0	0	105 IND	India	21	Maharashtra	297	Akola	District
8	0	0	105 IND	India	18	Kerala	733	Alappuzha	District
9	0	0	105 IND	India	34	Uttar Pradesh	494	Aligarh	District
10	0	0	105 IND	India	34	Uttar Pradesh	495	Alhambur	District
11	0	0	105 IND	India	35	Uttaranchal	563	Almora	District
12	0	0	105 IND	India	29	Rajasthan	414	Alwar	District
13	0	0	105 IND	India	13	Haryana	139	Ambala	District
14	0	0	105 IND	India	34	Uttar Pradesh	496	Ambedkar Nagar	District
15	0	0	105 IND	India	21	Maharashtra	298	Amravati	District
16	0	0	105 IND	India	17	Gujarat	115	Anand	District
17	0	0	105 IND	India	28	Punjab	396	Amritsar	District
18	0	0	105 IND	India	17	Gujarat	116	Anand	District
19	0	0	105 IND	India	2	Andhra Pradesh	3	Anantapur	District

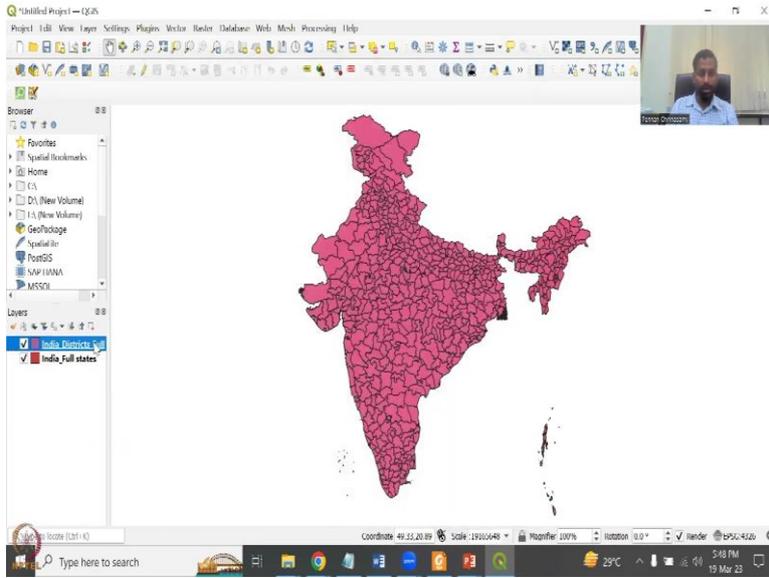
Type here to search

India Districts Full - 1 features, total: 617, filtered: 617, Selected: 0

Shape_Leng	Shape_Area	ID 0	ISO	NAME 0	ID 1	NAME 1	ID 2	NAME 2	TYPE 2
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2	0	0	105 IND	India	34	Uttar Pradesh	491	Agra	District
3	0	0	105 IND	India	12	Gujarat	114	Ahmedabad	District
4	0	0	105 IND	India	21	Maharashtra	796	Ahmednagar	District
5	0	0	105 IND	India	24	Mizoram	346	Aizawl	District
6	0	0	105 IND	India	29	Rajasthan	413	Ajmer	District
7	0	0	105 IND	India	21	Maharashtra	297	Akola	District
8	0	0	105 IND	India	18	Kerala	733	Alappuzha	District
9	0	0	105 IND	India	34	Uttar Pradesh	494	Aligarh	District
10	0	0	105 IND	India	34	Uttar Pradesh	495	Alhambur	District
11	0	0	105 IND	India	35	Uttaranchal	563	Almora	District
12	0	0	105 IND	India	29	Rajasthan	414	Alwar	District
13	0	0	105 IND	India	13	Haryana	139	Ambala	District
14	0	0	105 IND	India	34	Uttar Pradesh	496	Ambedkar Nagar	District
15	0	0	105 IND	India	21	Maharashtra	298	Amravati	District
16	0	0	105 IND	India	17	Gujarat	115	Anand	District
17	0	0	105 IND	India	28	Punjab	396	Amritsar	District
18	0	0	105 IND	India	17	Gujarat	116	Anand	District
19	0	0	105 IND	India	2	Andhra Pradesh	3	Anantapur	District

Type here to search





India_Districts_Jul1 - Features: total: 617, filtered: 617, selected: 0

Shape Leng	Shape Area	ID 0	ISO	NAME 0	ID 1	NAME 1	ID 2	NAME 2	TYPE 2
3418374	2185873	105 IND	India	14 Jammu and Kas...	200 LoC	District	District		
0	0	105 IND	India	14 Jammu and Kas...	158 Chambe	District	District		
0	0	105 IND	India	14 Himachal Pradesh	164 Lahul and Spiti	District	District		
0	0	105 IND	India	15 Jammu and Kas...	170 Anantnag (Kash.)	District	District		
0	0	105 IND	India	15 Jammu and Kas...	171 Baramulla (Kash.)	District	District		
0	0	105 IND	India	15 Jammu and Kas...	172 Doda	District	District		
0	0	105 IND	India	15 Jammu and Kas...	174 Jammu	District	District		
0	0	105 IND	India	15 Jammu and Kas...	175 Kargil	District	District		
0	0	105 IND	India	15 Jammu and Kas...	176 Kathua	District	District		
0	0	105 IND	India	15 Jammu and Kas...	177 Kupwara (Muzaffar)	District	District		
0	0	105 IND	India	15 Jammu and Kas...	178 Ladakh (Leh)	District	District		
0	0	105 IND	India	15 Jammu and Kas...	179 Pulwama	District	District		
0	0	105 IND	India	15 Jammu and Kas...	180 Poonch	District	District		
0	0	105 IND	India	15 Jammu and Kas...	181 Rajouri	District	District		
0	0	105 IND	India	15 Jammu and Kas...	182 Srinagar	District	District		
0	0	105 IND	India	15 Jammu and Kas...	183 Udhampur	District	District		
0	0	105 IND	India	20 Punjab	401 Gurdaspur	District	District		
0	0	105 IND	India	1 Andaman and Nicobar	1 Andaman Islands	District	District		

India_Districts_Jul1 - Features: total: 617, filtered: 617, selected: 0

Shape Leng	Shape Area	ID 0	ISO	NAME 0	ID 1	NAME 1	ID 2	NAME 2	TYPE 2	ENGTYP 2	NL_NAME 2	VAR 2
0	0	105 IND	India	2 Andhra Pradesh	8 Krishna	District	District					Krishna
0	0	105 IND	India	14 Jammu and Kas...	163 Kullu	District	District					
0	0	105 IND	India	15 Jammu and Kas...	177 Kupwara (Muzaffar)	District	District					
0	0	105 IND	India	15 Jammu and Kas...	177 Kupwara (Muzaffar)	District	District					
0	0	105 IND	India	2 Andhra Pradesh	9 Kurnool	District	District					
0	0	105 IND	India	11 Jharkhand	149 Kurukh	District	District					
0	0	105 IND	India	3 Arunachal Pradesh	19 Kurung Kumey	District	District					
0	0	105 IND	India	34 Jammu and Kas...	515 Kullu	District	District					
0	0	105 IND	India	15 Jammu and Kas...	178 Ladakh (Leh)	District	District					
0	0	105 IND	India	15 Jammu and Kas...	178 Ladakh (Leh)	District	District					
0	0	105 IND	India	14 Himachal Pradesh	164 Lahul and Spiti	District	District					
0	0	105 IND	India	14 Himachal Pradesh	164 Lahul and Spiti	District	District					
0	0	105 IND	India	4 Assam	46 Lakhimpur	District	District					North L...
0	0	105 IND	India	34 Jammu and Kas...	516 Lakhimpur Kheri	District	District					Kheri
0	0	105 IND	India	5 Bihar	70 Lakhisarai	District	District					
0	0	105 IND	India	34 Jammu and Kas...	517 Lalitpur	District	District					
0	0	105 IND	India	16 Jharkhand	196 Latehar	District	District					
0	0	105 IND	India	21 Madhya Pradesh	317 Jabalpur	District	District					Kat...
0	0	105 IND	India	24 Mizoram	349 Lunglei	District	District					

India Districts List - 1 features, total: 617, filtered: 617, selected: 0

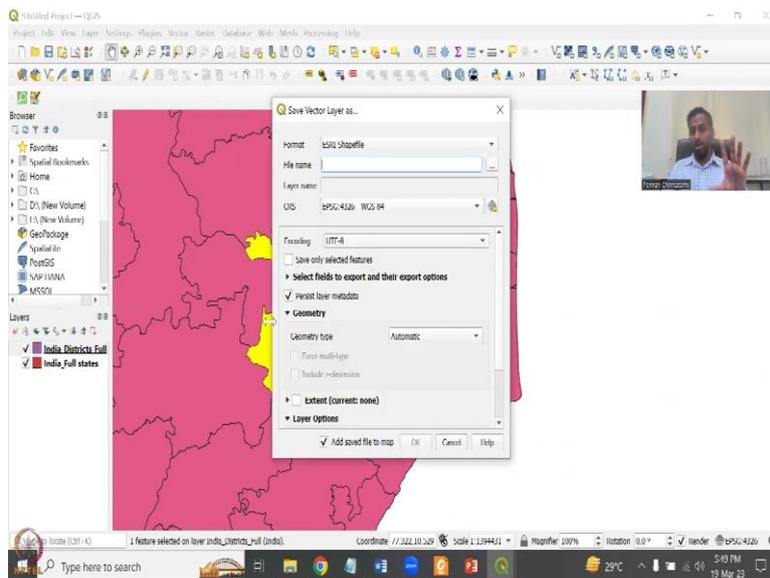
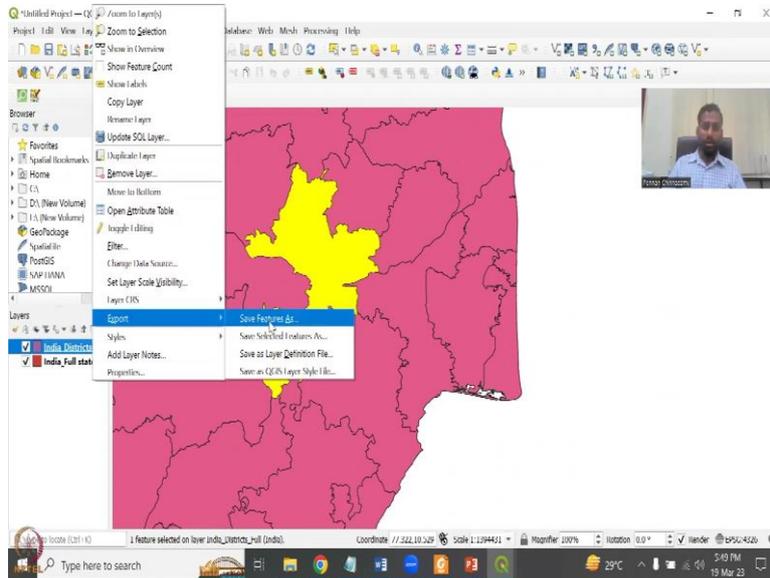
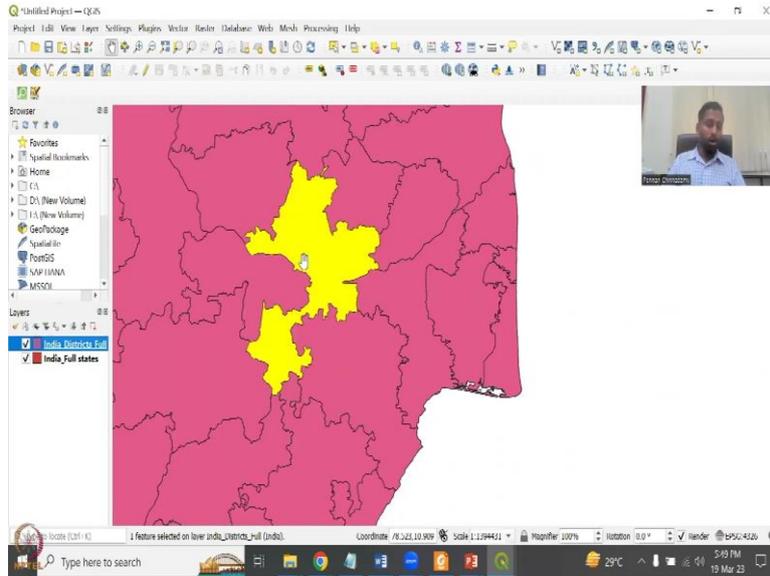
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493	0	0	105 IND	India	34	Uttar Pradesh	554	Sant Ravi Das Nagar	District	District	NULL	NULL
494	0	0	105 IND	India	16	Jharkhand	204	Sarakola Khora	District	District	NULL	NULL
495	0	0	105 IND	India	5	Bihar	84	Naxos	District	District	NULL	NULL
496	0	0	105 IND	India	21	Maharashtra	323	Satara	District	District	NULL	North
497	0	0	105 IND	India	20	Madhya Pradesh	781	Sahejpur	District	District	NULL	NULL
498	0	0	105 IND	India	29	Rajasthan	440	Sawai Madhopur	District	District	NULL	NULL
499	0	0	105 IND	India	20	Madhya Pradesh	794	Saundhar	District	District	NULL	NULL
500	0	0	105 IND	India	22	Manipur	334	Senapati	District	District	NULL	NULL
501	0	0	105 IND	India	20	Madhya Pradesh	785	Seoni	District	District	NULL	NULL
502	0	0	105 IND	India	24	Mizoram	353	Serdhip	District	District	NULL	NULL
503	0	0	105 IND	India	20	Madhya Pradesh	786	Shahdol	District	District	NULL	Shahdol
504	0	0	105 IND	India	34	Uttar Pradesh	555	Shahjahanpur	District	District	NULL	Shahjahanpur
505	0	0	105 IND	India	20	Madhya Pradesh	787	Shajapur	District	District	NULL	NULL
506	0	0	105 IND	India	5	Bihar	85	Sheikhpura	District	District	NULL	NULL
507	0	0	105 IND	India	5	Bihar	86	Sheerbar	District	District	NULL	NULL
508	0	0	105 IND	India	20	Madhya Pradesh	288	Sheopur	District	District	NULL	Sheopur
509	0	0	105 IND	India	14	Tamil Nadu	166	Shivakasi	District	District	NULL	Shivakasi
510	0	0	105 IND	India	17	Karnataka	229	Shimoga	District	District	NULL	NULL

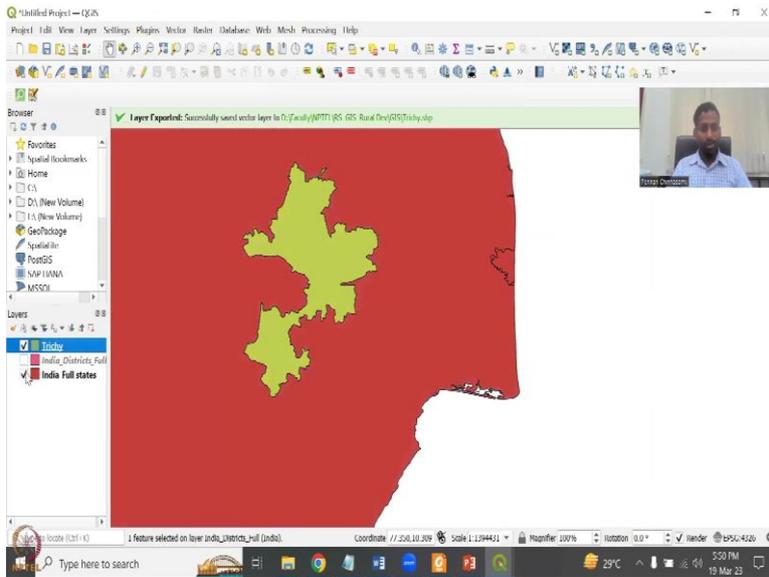
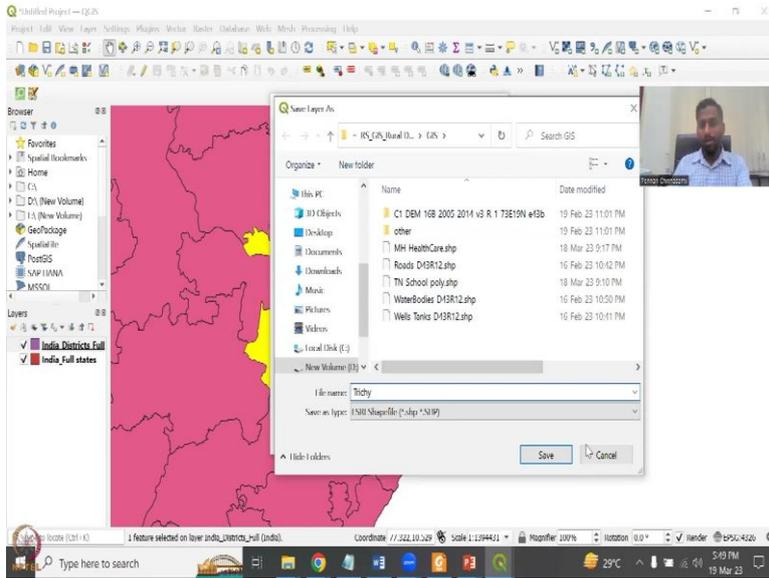
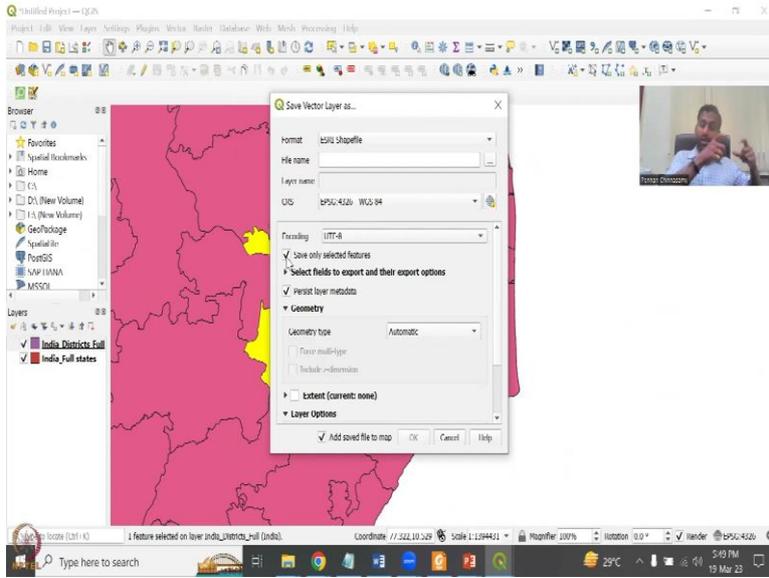
India Districts List - 1 features, total: 617, filtered: 617, selected: 0

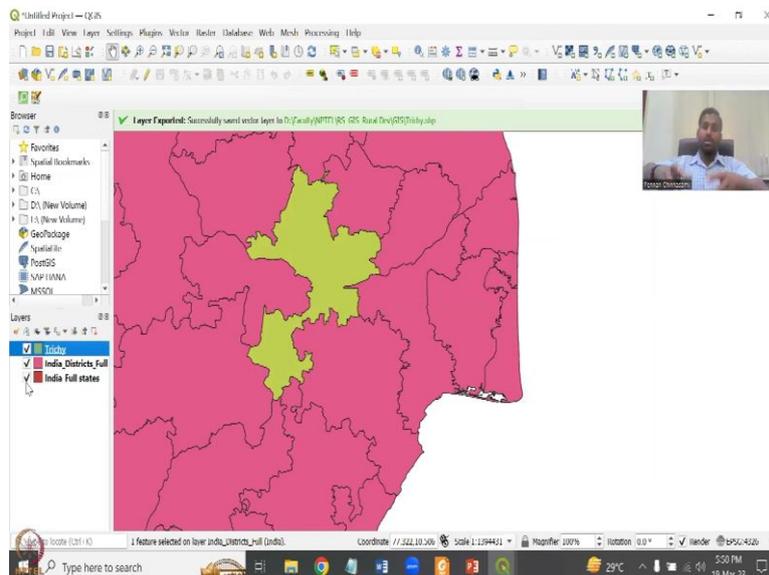
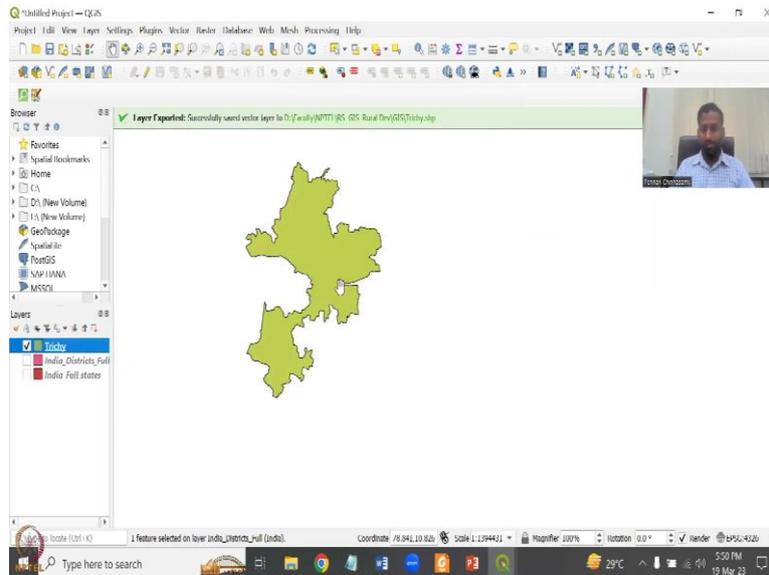
Shape Leng	Shape Area	ID 0	ISO	NAME 0	ID 1	NAME 1	ID 2	NAME 2	TYPE 2	ENGTYP2	NL_NAME 2	VAR
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520	0	0	105 IND	India	31	Tamil Nadu	468	Thiruvananthapuram	District	District	NULL	Thiruvananthapuram
521	0	0	105 IND	India	12	Gujarat	136	The Dangs	District	District	NULL	Dangs
522	0	0	105 IND	India	31	Tamil Nadu	469	Thiruvallur	District	District	NULL	Thiruvallur
523	0	0	105 IND	India	31	Tamil Nadu	470	Thiruvallur	District	District	NULL	Thiruvallur
524	0	0	105 IND	India	18	Kerala	744	Thiruvananthapuram	District	District	NULL	Thiruvananthapuram
525	0	0	105 IND	India	31	Tamil Nadu	471	Thiruvannur	District	District	NULL	Thiruvannur
526	0	0	105 IND	India	31	Tamil Nadu	472	Thiruvannur	District	District	NULL	Thiruvannur
527	0	0	105 IND	India	22	Manipur	336	Thoubhal	District	District	NULL	Thoubhal
528	0	0	105 IND	India	18	Kerala	745	Thiruvananthapuram	District	District	NULL	Thiruvananthapuram
529	0	0	105 IND	India	20	Madhya Pradesh	291	Tikamgarh	District	District	NULL	NULL
530	0	0	105 IND	India	4	Assam	51	Tirunelveli	District	District	NULL	NULL
531	0	0	105 IND	India	3	Andhra Pradesh	25	Tirup	District	District	NULL	Tirup
532	0	0	105 IND	India	31	Tamil Nadu	473	Tiruchirappalli	District	District	NULL	Thiruvannur
533	0	0	105 IND	India	31	Tamil Nadu	474	Tirunelveli	District	District	NULL	Thiruvannur
534	0	0	105 IND	India	31	Tamil Nadu	475	Tiruvannur	District	District	NULL	Thiruvannur
535	0	0	105 IND	India	29	Rajasthan	443	Tonk	District	District	NULL	NULL
536	0	0	105 IND	India	25	Nagaland	159	Tumkur	District	District	NULL	Tumkur
537	0	0	105 IND	India	17	Karnataka	230	Tumkur	District	District	NULL	NULL

India Districts List - 1 features, total: 617, filtered: 617, selected: 0

Shape Leng	Shape Area	ID 0	ISO	NAME 0	ID 1	NAME 1	ID 2	NAME 2	TYPE 2	ENGTYP2	NL_NAME 2	VAR
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538	0	0	105 IND	India	15	Jammu and Kashmir	187	Srinagar	District	District	NULL	Srinagar
539	0	0	105 IND	India	15	Jammu and Kashmir	182	Srinagar	District	District	NULL	Srinagar
540	0	0	105 IND	India	34	Uttar Pradesh	560	Sultanpur	District	District	NULL	NULL
541	0	0	105 IND	India	26	Orissa	301	Sundargarh	District	District	NULL	Sundargarh
542	0	0	105 IND	India	5	Bihar	89	Surgaul	District	District	NULL	NULL
543	0	0	105 IND	India	12	Gujarat	134	Surat	District	District	NULL	NULL
544	0	0	105 IND	India	17	Gujarat	115	Sureshpur	District	District	NULL	NULL
545	0	0	105 IND	India	7	Chhattisgarh	107	Surguja	District	District	NULL	NULL
546	0	0	105 IND	India	27	Manipur	315	Surepung	District	District	NULL	Manipur
547	0	0	105 IND	India	3	Andhra Pradesh	24	Tawang	District	District	NULL	NULL
548	0	0	105 IND	India	25	Nagaland	173	Tawang	District	District	NULL	NULL
549	0	0	105 IND	India	21	Maharashtra	326	Thane	District	District	NULL	Thane
550	0	0	105 IND	India	31	Tamil Nadu	468	Thiruvananthapuram	District	District	NULL	Thiruvannur
551	0	0	105 IND	India	12	Gujarat	136	The Dangs	District	District	NULL	Dangs
552	0	0	105 IND	India	31	Tamil Nadu	469	Thiruvallur	District	District	NULL	Thiruvannur
553	0	0	105 IND	India	31	Tamil Nadu	470	Thiruvallur	District	District	NULL	Thiruvannur
554	0	0	105 IND	India	18	Kerala	744	Thiruvananthapuram	District	District	NULL	Thiruvannur
555	0	0	105 IND	India	31	Tamil Nadu	471	Thiruvannur	District	District	NULL	Thiruvannur







So, let us say I need a particular district, I have a particular district in mind that I would like to use for my analysis. So, I am just going to open my attribute table, you can search for it using the search box. Or you can actually, if you know the district name, you can come down and then look at it. So, this is the name zero is the India level. Then you have the state level, and then you have a district name in here. So, let us first click the button here.

So, once you click the Open Attribute Table, I think my Open Attribute Table is not visible because of my screen. So, I hope now it is visible. So, all I have done is I have opened the India districts file and then the Open Attribute Table has come I have clicked the name zero as India, name 1 is state, and then name 2 is your district. So, I clicked this arrow mark, so that it does it into alphabetical order. Let me do it again, just to show you how to do it with the layer, I am adding a vector layer.

Now, the vector layer has been added, I am going to open the Open Attribute Table. So, this is a name state name, 0 is India country name. And then the district name is name 2. So, you can see that randomly it has been arranged, let me click that button and then it goes up. So, now I want p so I let me come down to chapter Tiruchirappalli, because that is what I am going to use for my study ST.

So, we have Tiruvallur, Thanjavur starting from, Thoothukudi, Tiruvallur so we can just come down to see which districts that we want to use. So, Tiruchirappalli is what so right here, I am going to click it. So, that whole line is being selected. So, now if you come down and then see the district has been selected. So, all you have to do is right click, export, export, save feature as in this page, make sure this is clicked save only selected features because you are clicked a entire district shapefile we are not going to do the entire district, we only want to do a particular district.

So, I am extracting it is kind of extracting. So, I am going to say that I want to save it as Trichy, a short form of Tiruchirappalli. So, we will save and then the default other things default can be saved add save file on to it. So, now if I remove the India district, we still have Trichy. So, the idea is, you can take a whole dataset, and from there, just extract what you want, and keep it ready for your analysis in the next class.

So, OSM does require this aspect, a shapefile to feed in, or you can use your internet and then use OSM to have good data extraction. So, with this, I will stop here. I will see you in the next class. Please be prepared with the OSM plugin and also some shapefiles of your interest. Thank you.