**General-20231016\_083107-Meeting Recording**

0:08  
And we should be pretty much worthy worthy to go one more visit there.

0:18  
So good morning everyone.

0:23  
Today within the selected topics in geinformatics, it's kind of a special theme.

0:33  
So it's just me talking today, not invited lecturers like it will be in the coming weeks.

0:43  
The reason for that being is that I would like to take the opportunity to offer a quick introduction to the Living Atlas to everyone who is currently studying or has been studying is interested in the topic.

1:01  
And I'd like to do that at the beginning of the semester because the Living Atlas is a strong foundation, very, very helpful tool for, I believe, a large number of different classes that can be in visualization, cartography, that of course can be in spatial analytics whenever you do your own individual project, right.

1:31  
So that's why I like to point everyone to the Living Atlas.

1:40  
Let me check.

1:41  
Mr.

1:42  
Schneeberger had a question.

1:46  
Number one, no, you don't have to write any comments or reflections on the first unit.

1:55  
Half a page is OK, not more than one page.

1:59  
And today I plan to be finished in about one hour from now.

2:04  
So that would be my quick questions to Mr.

2:09  
Answers to Mr.

2:10  
Schneider's questions, good admitting, one more participant and then we're pretty much ready to go.

2:19  
So as you can see on my shared screen and most things will be popping up there, the the living Atlas is defined as a collection of geographic information, so Atlas is a valid metaphor for that.

2:39  
Also there is a couple of not restrictions but actually extensions typical and Atlas has to be limited simply because in a book there is only so many pages we can handle in there.

2:55  
Pages in a book in an Atlas as a book have fixed scale, so we cannot go across all different scales in a regular book.

3:09  
Atlas has a focus for a particular target audience.

3:13  
It might be education schools, it might be much better than that.

3:18  
So without going much deeper, I'll just point out that the Atlas is a metaphor, but the Living Atlas is much more than that.

3:29  
And why it's called the Living Atlas, we'll see in a couple of examples.

3:35  
So where do you find that?

3:36  
Where do you find the SV Living Atlas?

3:40  
So first of all, anytime you are in your regular Arc GS online setting, you will increasingly get familiar with the app launcher.

3:55  
So the app launcher.

3:56  
This is this three by three dots menu near the top right hand side where my pointer is right now and I can always launch the Living Atlas White from here.

4:10  
You can of course simply go there and type in livingatlas.arcgis.com.

4:17  
That would be the regular entry point.

4:23  
When you just off to it, you like start.

4:27  
So you either go through the app launcher in Access Online right on here, or you just go straight with the URL I've shared in the chat.

4:43  
So here we are, right, and there's always a couple of news, new additions, new contents, updated contents.

4:53  
And if you have a little time and you're at the moment rather in an exploratory mood, it's always good to have a quick look at what's new in the Living Atlas most of the time.

5:08  
So I would assume that you have any particular purpose in mind.

5:14  
You're looking for something specific, and I will start doing that with going to the Browse menu, which is something between a mix of a search engine and the table of content.

5:34  
It's actually both right?

5:38  
And let me point out some of you might have noticed that I'm locked in here.

5:43  
This is not mandatory, but generally speaking you will have a much better experience if you log in and logging in essentially would mean that you use your standard credentials, your Arcgis Online access, and for most of you at the university right here, it will be your SSO, your single sign on to login essentially use the same login like you're using for Arcgis Online.

6:21  
So again, this is not mandatory, but we will see that you have a better experience.

6:28  
Some of the contents would be available to identified users only.

6:34  
And as you identified as member of the Salzburg University organization, you will see that there are some advantages for being locked in.

6:46  
OK, so back to the kind of discovery environment we are having right here.

6:55  
There's a number of chapters like blending means current stuff.

7:01  
Then we can look for all kinds of base maps for imagery boundaries, which means essentially political and administrative boundaries, People, whatever is about people, means demographic data, population, housing data, income data and you name it, infrastructure.

7:29  
That obviously will be related to transportation to energy and one of my favourite chapters because it's amazingly rich in terms of what's being offered there is under environment.

7:43  
OK.

7:44  
We will by no means have the opportunity today to go really deep into an overview of content.

7:55  
So that's why I'm just pointing you to where do you find and by and large you will find a lot, right.

8:05  
Let me maybe just go for the for the imagery tab by the way and let me select multi spectral imagery, right.

8:17  
So there is obviously satellite data, pretty much all what has ever been acquired by Sentinel and all what has ever been acquired by Landsat.

8:31  
And you would understand that a lot would be accessible through the Living Atlas sometimes views, which means it's kind of, yeah, prepared that you have bookmarks and other prep things and yeah, just go through there.

8:55  
There's a lot of of course, North American specific stuff which might not be that relevant for most of you.

9:06  
And it's not only data, it's models as well.

9:10  
So some of you would be familiar with the relatively new segment.

9:15  
Anything approach, well, you can do it right away, right?

9:19  
So it's not only a collection of data, but it contains maps, it contains apps and it contains in a way, rules, right?

9:31  
So if we for instance would go to The Lancet entry right here, we could open that in the map viewer and that already tells you, well, where do you go with that?

9:49  
All of that is open protocols, open links, but most of the time we would be work either in the RGS Online Map Viewer or Scene Viewer for that matter, or we would go for RGS Pro.

10:09  
Yeah, both would be available and that brings me already to some of the labels we see here.

10:17  
So where I'm right now with my mouse pointer, all of the entries in the Living Atlas are tagged to get a couple of labels.

10:29  
Also, iterative means it's not just me having dreamed up that data set, but it's from some authority.

10:39  
That might be a national mapping organization.

10:42  
That might be AUN organization.

10:45  
In that case, it's also authorized by the USGS.

10:51  
So all of our content, much of our content which we generate ourselves, can be found through the Living Atlas portal as well.

11:02  
But typically it would not be labeled authoritative, right.

11:06  
And then it says it's a living Atlas content, which in that case means it's as we curated.

11:11  
So it's provided by an Also there is a clear also if I put something there or we do that kind of anonymously as the University of Salzburg, it would not be curated by as we as such.

11:27  
And we'll later on explore a couple more of these tags in a moment.

11:33  
Let's just as we found this stuff go right in here.

11:39  
And essentially what we're looking at here is the entire one set archive and typically we would be going to some region of interest.

11:53  
So you see this striping pattern which is the individual orbits which have been taken and we could go to any potential area of interest and then we would go into filtering and say give me the most recent or give me the most historical.

12:15  
Essentially we are looking again at the turn off my phone right here, OK, wasn't going to right.

12:30  
It's the entire archive which means the individual scenes are sitting one on top of the other, right.

12:37  
So I could go into the filtering mechanism and say OK, go for the out cover date of acquisition, right, let's filter all of that.

12:51  
So that'll be one example.

12:53  
And of course this is not only for visualization, but we could do analytics as well.

12:58  
But let's not go too deep wide in here.

13:03  
But let me point out here as well that when I'm searching for stuff, it clearly tells me that I can look for data as services, typically not for download but the services but for maps.

13:22  
So where data already visualized as well As for apps.

13:28  
And we will see a couple of examples of that.

13:33  
Let me simply try out some keyword right here.

13:39  
So when I'm typing into the search box the keyword of population, I can see that what I had mentioned before this exploration interface as in core part of the Living Atlas portal is at the same time a table of content that can go to imagery line set and have kind of an hierarchical approach as well as looking for data and services in the way I did it right now by just searching.

14:14  
So I go for the world population data set, which obviously is a time series because it's 2000 to 2020 with 100 meter resolution.

14:29  
OK, so this is that data set which is a result from the world Pop project.

14:37  
And if I go a little bit deeper into what I found here, I see again this is and just think about that reflect on it.

14:48  
What we're having here is the world total population per 100 meter cell.

14:56  
So this is something which definitely is much finer and much higher spatial resolution then we would have in in any administrative boundary in any census.

15:11  
So where do we get these data from?

15:13  
Where do we get western data population?

15:15  
Well, this has been created in again a project which is the linked here the world pop project by disaggregating data.

15:28  
So what we can see here is that lots of institutions and this is a project which is not one by SV, but it's hosted at A at a British university.

15:44  
So lots of institutions use the Living Atlas framework to have their data, their services hosted in one place.

15:55  
So we have a single point of contact, we don't have to search.

15:59  
Well, who could offer these disaggregated 100 meter world population data?

16:08  
So in in some way the Living Atlas is intended to be kind of a one stop shop.

16:15  
Yeah, I don't promise you'll find absolutely everything there, but you find more than we maybe can reasonably use use in a lifetime.

16:27  
But not everything.

16:29  
What's important here as well, there is a full reference of who has all that stuff coming from what was the method to generate that data set and this is here to report it in quite some detail.

16:45  
And of course I'm a curious person.

16:49  
I chance over that quickly and then I want to look at that.

16:55  
And then again we would go out there, go to some area of interest and OK, let's go right here and see how the population coverage in this area of southern or South eastern Spain is looking like.

17:23  
Sometimes, of course, it might take a little bit to load.

17:28  
Sometimes you have to zoom in because 100 meter resolution is quite fine.

17:34  
Yeah, here we go.

17:37  
Then we do have a legend, and this is an image relayer, and in this cell there is interesting right, 183.42 people.

17:50  
So that's a little bit of a contradiction that we would typically consider a population count, a head count of people.

18:00  
We would consider it integer numbers, right.

18:03  
So why the point for the two?

18:05  
Yeah, simply because it's statistically disaggregated, right.

18:10  
That means in turn if we would go back to the original census area this is coming from, then the total would be correct.

18:21  
So it's an estimate based on density of built up area on street density and a couple of other estimates.

18:32  
That's how this aggregation is being done.

18:36  
And so we can explore each of these cells that's in the periphery only five people living in that Hector here, not even one full person in this Hector and we could go up with that.

18:51  
So let's jump out of that here and go back to the Atlas, maybe to experience a few more things.

19:00  
Let me go into Austria and I'm looking for the average household size or the per capita purchasing power.

19:11  
And you will see in a moment there's a reason why I'm looking for this data set, because that's one of the relatively few examples where again, an external institution is using this platform as a portal, as a hosting portal.

19:39  
Again, thinking point of entry, one stop shop.

19:43  
But this is one of the examples where a data set is not free because that's a commercial data set out of the marketing world and you can immediately tell that that it says premium.

19:59  
So when it's a premium content, it's not freely available.

20:06  
Also you can use it, but it will cost some credits and I take it that you're familiar with the credit pay as you go or pay-per-view approach here.

20:18  
So essentially all the data offered by Esri, all the data provided and supplied by international organisations typically are free, but in some cases high resolution demographics, market research data, they might have this premium tech.

20:41  
And for this of course we need to be signed in and we need to be aware that credits will be used.

20:49  
So you can see the source of this data is a market research company and they update that in yearly or 1 1/2 yearly intervals and there's a nice description of what it's all about and it consumes credits right?

21:08  
So for instance if you develop an app using this data set with the experience builder or star in app, then you would have to take as an author the responsibility for the end users credit usage.

21:27  
But again, in our overall kind of educational framework we don't need to worry and don't need to further consider this at all.

21:37  
I just wanted to show you one example where we have this premium batch right here to be aware of that then maybe let me switch over to one of my absolutely favorite data sets.

21:53  
Yeah, which is terrain.

21:56  
And this is a fascinating offer and I'll go to that terrain data set here.

22:04  
And here we get another example of a type of batch.

22:10  
Here it says this is subscriber content.

22:14  
And subscriber content means you have to be identified as a student.

22:21  
Use an account from an organization.

22:25  
But there is no fee.

22:26  
It's free.

22:27  
It's free to use.

22:28  
Whatever you do, analyze, include in an app you publish to anonymous end users.

22:36  
That's perfectly good, but you need to be identified.

22:41  
So if I had not logged in to RCS Online, then I would not be able to work with that.

22:50  
And apart from that, this is a fascinating data set from several perspectives.

22:57  
First of all, it doesn't look that quite at all, right?

23:02  
Right.

23:03  
Why?

23:03  
Because, well, elevation with a grayscale visualization is not such a good thing.

23:12  
So maybe let me add another layer here.

23:16  
This is purely elevation, right?

23:19  
And with that, I at the same time want to briefly show how to access Living Atlas content not only from the Living Atlas portal, but we have right now.

23:35  
But how do I access it directly from the Arc GS online map viewer?

23:42  
How do I do that?

23:43  
Well simply like with any other data set, I go to add at the top left hand side, browse layers and in this case I'm not browsing my own content, but I drop it down here from the my content tab and say OK let's go for the living Atlas right?

24:10  
So let me just repeat that.

24:12  
I go to add where else layers, put that away and switch from the default my content where I could have my favorites from my groups.

24:25  
My organization, which again would be University of Salzburg purchase online would be everything anyone in the world has put into the living Atlas and shared with everyone.

24:40  
And that would be gazillions of potential data sets.

24:45  
But we go for the more organized Q rated structured living Atlas and here again I could do my search right from the interface in the map viewer.

25:03  
Again I search for terrain and let me go down here you see that there's quite a lot.

25:12  
So I do a multi wreck so I could put in hill shade.

25:15  
But I found what I have right here.

25:18  
So I found the multi directional hill shade.

25:22  
If I want to learn about it I would click on this but I know it.

25:27  
Yeah, so all I do is I add the hill shade right here, or let me use the standard hill shade right here.

25:36  
So this means I'm not only looking at the elevation, but just for better visual communication, I'm looking at the hill shade worldwide.

25:49  
OK, so far so good.

25:53  
But the world in hill shade?

25:54  
Not necessarily so interesting.

25:58  
So let me zoom in and if you watch me zooming in, then you'll see, well, the the detail is actually, let's go where we are right now.

26:12  
The detail is increasing.

26:14  
So always after a short moment like here, we get more detail, more detail, right.

26:21  
And if we go further, well, there's already these little dots in the middle of the screen.

26:28  
This is Festronsberg and Manksberg and Caputina Bag in Sitesburg.

26:35  
So what this actually is, it's what is called a multi resolution layer.

26:42  
It's a worldwide set of elevation data.

26:47  
So it's a little elevation model and it has the spatial resolution recording what's available locally.

26:59  
Like in Austria everything is available at 1 meter spatial resolution.

27:05  
In some areas I think it's currently VN and Upper Austria.

27:10  
As far as I know it's half meter, everything is 1 meter and that means if we zoom in there we get a pretty decent elevation model.

27:25  
For instance, let's go here, here we see even along the Capucina back the fortification balls, the historic ones.

27:35  
So we do have an what's called, yeah, multi resolution layer and the hill shade we are looking at here is actually not stored anywhere.

27:49  
Yeah, it's generated on the fly.

27:53  
So if for instance I change my search keyword, say to slope, and then I go for terrain slope, I add that on top of here and we have enough legend to the right hand side.

28:13  
In this slope view is not by any means anywhere stored anywhere, because it would be actually a huge effort for the entire world at whatever resolution is available to generate slope.

28:30  
Well, it won't be doable even at 1 meter or I think in the Netherlands it's now even less than half a meter.

28:39  
But anytime a new chunk of data is imported in the living Atlas, it would have to be redone again.

28:49  
And that's the main case why doing it on the fly.

28:52  
So the living Atlas is not only a storage for data sets, but it generates views, life.

29:06  
And now I can use this for calculation because each one of the cells I'm clicking it, it tells me that's a 40 degree slope in this elevation and this kind of axis.

29:18  
Yeah, so terrain analysis, which in a way is my my favorite topic in in many ways, is actually very well supported in that way.

29:34  
And I now switched off the view of slope and hill shade.

29:40  
So I'm looking at the elevation layer only and it says well this is for instance the best resolution here is the AT force to a digital terrain Model 1 meter resolution and it's the source and the vertical datum and the product name and all of that.

29:58  
But if I if you look at the top right hand side of my pop up it says this is one out of eight, let's go to the right.

30:08  
So there is a 10 meter data set as well and that is the 2425 Airbus World DN.

30:19  
And this is by the way the worst case resolution.

30:25  
The lowest spatial resolution is a common denominator across the world.

30:31  
So in other words, it's the best possible global data set you can have.

30:37  
So anywhere in the world you always will have this Airbus well DM available and you have it available for free anywhere in the world.

30:47  
You don't have to go to the Airbus site, maybe look for files to download, check the Geo reference, mosaic the tiles and then start doing a slope map or whatever you would maybe need.

31:03  
But you can work quite a way here.

31:06  
And then I keeps again going with my pointer to the right There is the traditional SRTM data set, which is familiar to quite a few of you because for many years this was the best possible global common denominator SRTM for a Shuttle Radar Topography mission.

31:26  
Now it's been supplanted with the higher quality, not so much because of the 25 versus 30 meters, but it doesn't have those gaps inside.

31:38  
And then we have lower resolution, let's go the SRTM with 90 meters.

31:44  
And at the end we have some historic world DM, right?

31:49  
So this is a multi resolution data set in terms of stacks of layers, yeah, the further we zoom in, the better data we use in terms of better spatial resolution.

32:02  
And it doesn't have to be the same everywhere.

32:05  
It can be 1 meter resolution.

32:06  
In Austria, it can be 24 meters of resolution, say in the middle of Siberia, right?

32:14  
So that's a quite kind of smart type of interface.

32:19  
So you see, I quite easily get carried away when I'm going into terrain data, simply because for so many years it was really hard to come by for study areas which are not wide in in your backyard.

32:36  
Let me maybe pop into one or two more topics before we say share more, more broader perspectives out there.

32:46  
So you remember, there was subscriber content, right?

32:50  
So if you don't find terrain and you check it whether you're logged in, you need to be logged in, you can freely use it, you can publish it, you can create an app which is for everyone, but you have to be locked in when you're an author.

33:09  
Yeah, good.

33:13  
Then let me pop into environment, because here is one of my other favorite, yeah, domains in terms of land cover.

33:24  
And much of that is global land cover.

33:29  
But for a change, I'm not going directly into any one of these vignettes, but I'll rather go to the apps which are available.

33:41  
So I'm looking at the land cover data set, land use, land cover, depending on whatever we want to look for.

33:49  
But I'm not browsing it as a data set, and we all know when we talk about a data set, it's the access to the data through an open service.

34:00  
I've not talked about downloading, and downloading is possible, but it's not usually what I would pursue.

34:10  
That's kind of the mechanism of last resort to download stuff and I will briefly point out where and how to do that.

34:20  
But let me go to the apps right here.

34:24  
And there's a couple of highlighted apps.

34:27  
I've seen that before.

34:28  
Actually, I don't know really what it is because it's US specific, but we could for instance go to The Lancet Explorer or the Sentinel Land Cover Explorer.

34:43  
OK, So what I'm doing here.

34:45  
Obviously this app can be installed locally if you want it to.

34:50  
So I was going directly from the Living Atlas to an app which provides an access to a data service, airline cover service.

35:06  
But at the same time it provides richer functionality for visualisation, for statistics, sometimes for further analysis as well.

35:19  
So this is the 10 meter data set and just to kind of demonstrate that this is not just the demo data, but we can go anywhere in the world.

35:34  
And that's actually the main point of the Atlas.

35:38  
It's drives wherever possible to provide global data.

35:42  
Of course, some other data sets, like the market research data set we looked into before, they might be national level.

35:52  
I know there is a lot of work being done by UN and other international organizations for Africa.

35:59  
And so there might be some data sets which are particular to Africa.

36:04  
But by and large, the Living Atlas is always aiming at a wall to wall coverage.

36:09  
It's not a sampling of anything you don't have to download.

36:14  
Whatever you work with, whatever's available, it's there.

36:17  
OK so here I look into Sites book and we have a couple of categories down here.

36:25  
And one of the interesting observations right here is this is actually a time series data set.

36:31  
So it's not only multi resolution like we had discussed it with terrain, but we can step through and animate change and you will see a few pixels changing here and there simply because the land cover change dynamics in this region are not that wild, not in particular in not in that case.

36:56  
And of course we will have a discussion about the quality of these data sets as well.

37:03  
And this is actually a fixed data set which is produced by the land observation people within Copernicus out of Sentinel data.

37:15  
But there's a couple of other data sets where the land cover justification is done on the fly as well.

37:25  
Like we had the deriving slope from elevation before, but the slope is not stored the same In some cases it's being done here.

37:35  
OK, so let me stop this animation here and yeah, stop that.

37:43  
Let me go back and let me zoom in and maybe while I'm panning, assuming look at the bar chart at the bottom, right?

37:53  
OK, so when I'm moving this over, it gives me the statistics for this particular screen extent.

38:02  
I could draw a Polygon here as well, then it would give me that.

38:07  
So it's kind of life, at least statistical aggregation analysis in here, in this particular case focused on this Sentinel data set maybe Let me look at one other app.

38:31  
I think we still have some time to go explore a bit further and to stay within our.

38:39  
Let me go to one of my serious favorite apps right here.

38:44  
Right.

38:45  
That's the sea ice app.

38:50  
We can of course we talk about polar regions.

38:54  
We can swap back and forth between Antarctica and Arctic, right.

39:03  
So let's go for the Arctic right here.

39:07  
And again that's as you see that that's a life map, right.

39:12  
And this again is a time series and if we look at that chart here, it tells us the CS extent in this particular year, right?

39:25  
So I can display it by clicking on the bar chart that was the extent in this year.

39:31  
Let's look for one of the maximum years, 96 that was reaching the coast of Siberia as well as Canada.

39:40  
So the Northeast as well as the Northwest Passage were blocked part of the year.

39:48  
Then let's go for the minimum, which is, well, distinctly less, we will say, right.

39:56  
And when I'm moving across here, it's of course the yearly minimum and maximum.

40:05  
Yeah, that's the stack bar cut.

40:06  
The maximum is the upper end and the less transparent colors done here.

40:12  
But in the lower part of the line graph, we see the annual variation.

40:19  
Yeah, how it So the minimum typically is being reached in September and the maximum would be in, say, late winter, February, March.

40:28  
So that's just one app providing a view of Atlas content.

40:33  
And you already can see there's lots of these apps.

40:37  
They provide direct answers to questions.

40:43  
Well, it's not only you have to download stuff and find the tool and then think up an analysis process.

40:50  
You can we should do all of that.

40:53  
But very clearly these apps help with direct interpretation and access.

41:01  
And again, this helps me with getting back to the point I'd mentioned in the beginning.

41:07  
Why is it called Living Atlas, right.

41:11  
And the reasons for that are that, well, it's first of all not a book which is published in a particular year.

41:19  
And then maybe there might be a supplementary volume published with updates.

41:25  
No, it can change all the time.

41:27  
Every day there is new content coming.

41:30  
For instance, I'm observing, as you had seen, the terrain, the Digital elevation modeling stuff.

41:37  
Well, this is usually updated several times a week.

41:42  
So it's kind of a life and we can see it with this example as well.

41:46  
And I maybe want to take you to one other layer or app.

41:54  
Let's see what's here.

42:00  
OK, I guess I should do away with my search keyboard, because otherwise it gets complicated.

42:06  
We would have thermal hotspots pretty much life.

42:11  
Yeah, and thermal hotspots can be first fires, volcano activity or conflicts, right?

42:20  
There is a live view on earthquakes and you already can see these we use are based on live feeds and my favorite one in this domain is the one which provides access to weather stations, right.

42:41  
So pretty much all the weather stations in the world which are live connected to the Internet, which you can see.

42:49  
It's not the same density everywhere in the world.

42:52  
Yeah, but anyway, let's check out Salzburg Airport.

42:57  
And the reading is from 8:50, so in a few minutes there should be a new 1.

43:03  
So it's a little bit less than half an hour back today.

43:07  
And I don't go into switching that over to Celsius degrees.

43:14  
So it's not at all me 37, but that's our chart.

43:19  
It's Fahrenheit, but let's see how it's, how is it doing in Venice today?

43:24  
It's a bit warmer, yeah.

43:26  
It's warm humidity and wind speed and all of that.

43:32  
So that's the other point, why we call it living Atlas, because it's an interface to live feeds of data streams.

43:41  
It's supporting not only static data, it's not only about historic geography, what has been, but it's also about what is there right now.

43:54  
OK, so that is sort of my my short recap.

44:01  
Why, why do we call it Living Atlas?

44:03  
It's really a portal providing a lot of excess pathways to an enormously witch collection of, yeah, data and services.

44:17  
Now you might have noticed that I have only looked at Axis online right now, right?

44:26  
So maybe for a moment I pop over to Axis Pro.

44:36  
Oh, that works without resharing.

44:38  
I'm happy.

44:40  
But anyway, this I'm aware that the point is, is pretty small in here.

44:46  
So this is Axis Pro.

44:49  
I'm locked in with my usual single sign on credentials, so exactly the same account like in using or have been using in Axis Online.

45:01  
And yeah, I will read to you what I'm clicking on because the point will be a bit small for you.

45:09  
So essentially I've opened the blank map.

45:12  
That's a default map right here.

45:15  
Let's maybe go to some more familiar ground, whether one sites book here.

45:22  
I could of course choose any any other base map if I decided to do so.

45:29  
But I want to do right here is to add data, right?

45:34  
And that's similar to the AD step in the Arcgis Online map viewer workflow.

45:42  
So I go to Add data.

45:44  
That's it.

45:45  
Yeah, add data to the map.

45:48  
And here again I can Scroll down and choose to add data from the Living Atlas.

45:56  
So it's a choice like my local file set on my machine, my content on RTS Online, my group organization content.

46:08  
And with that, I go to the living Atlas and let me look for slope in the living Atlas and I go for in this case, not for the slope map we had seen before, but slope in degrees.

46:25  
Or maybe we can we can choose both at the same time.

46:28  
Let me open both, right?

46:29  
And then, since we already know that the resolution is pretty good, it asks me to sign in.

46:38  
That's interesting, but anyway, this is my standard objects online credentials.

46:53  
I'm a bit.

46:54  
That's it.

46:56  
Why it doesn't?

46:58  
No, no, they want to sign in.

47:03  
Let me try again.

47:07  
I have no idea why.

47:10  
Let me try it here, right.

47:17  
OK, I was mixing up two accounts.

47:20  
Let me go back here.

47:23  
So here we go.

47:29  
Username and password come in pairs and we shouldn't mix them up.

47:34  
And while we're waiting for that, maybe it would be good.

47:38  
I should have done that before to zoom in a bit further.

47:42  
And as you've seen, there is slope and slope in degrees.

47:47  
So you might wonder, what's the difference between these two?

47:50  
Oh, it goes back to the whole world.

47:53  
OK, let's go to some familiar Quiet or Pyrenees would be nice today, right?

47:59  
Let's go here.

48:01  
And if you have the left hand side, while this is loading, you look at the legend on top, there's the slope map.

48:10  
And you have to take the slope map literally, right?

48:14  
That's a view, it's classified, it's pre classified and this is like every other map, it is to be viewed, right?

48:26  
So if I read my slope pixel, it'll tell me it's so many degrees.

48:35  
It's 41 degrees in the mountains here, right?

48:38  
This has been derived from DEM 90 and if we go in then we should be able to get a much nicer detail and get an identified reading in kind of a higher resolution.

48:54  
But again, it's a map, and the map is for visual communication.

48:59  
When I switch off the map I get my slope in degrees and I could use any kind of scalar scale for that.

49:09  
In that case, I think it's good enough to have a grayscale and again I can get my value and its slope in degrees and it tells me it's 32 degrees.

49:20  
So what's the difference?

49:22  
Essentially the slope map is for visual communication.

49:28  
Now when you have a slope map and you want to show the slope if you want to do further calculation, so for instance you want to run a suitability model and want to work with the degrees of the slope, then you have to use that one is a map, the other one is a data set for further analysis.

49:53  
So when I do kind of a multi criteria overlay and slope is one of my criteria, I would use slope in degrees.

50:03  
But anyway, that was kind of an example of how to work with living Atlas data right here.

50:12  
And maybe don't go for any if you maybe want to create thematic maps.

50:22  
Thematic maps for population distribution, election results, average H&H cohorts, you name it.

50:32  
Do not ever go for searching for data sets before.

50:40  
You have not explored whether you don't find it in the living Atlas, right?

50:46  
So I just go for a search, look for a game and then which would be the German term for municipality and I would have the municipal boundaries for 20212223.

50:59  
Things like that happen to change.

51:03  
Of course it won't be right here, so we can assume to the particular data set.

51:11  
But by assuming or panning to the extent, Baba should be somewhere here.

51:19  
But otherwise I guess I could find it this way too.

51:22  
So with command and I have all the municipalities in all of Germany and these political boundaries not always on all levels would be available pretty much anywhere in the world.

51:38  
And you already see well the boundaries are matching, right.

51:43  
There is no issues with projections, with downloading and having to cheer code to transform because that's what the modern GS is simply doing on the fly.

52:00  
So and we we have some basic statistics and there is a municipality number.

52:07  
If I from maybe my state or district open data repository, I download the current data set then I will use the municipal identifier as a join key, join it up with this one and essentially that's where we are.

52:30  
OK, I'm now looking again at your chapter Q&A and before I finish off, I would like to point you to a couple of resources where you would may be able to to get a bit more support and orientation.

52:56  
The first one is right in front of your eyes.

53:01  
I'm going to the main menu here like home browser apps and Devis blog, right.

53:08  
So the blog introduces essentially what's new.

53:13  
Sometimes it's a bit tips and tricks and go to the Landsat way back engine, right?

53:21  
You maybe know the the Internet Way back engine, where you can go back to historical content on the Internet.

53:29  
That would be the way Back engine using this and lots of other stuff.

53:35  
So block to pop in there once in a while.

53:40  
That certainly would be a good idea.

53:43  
Then I point you to OK yeah copy it a bit more than one or two formative X so it should work right now.

54:01  
This is my main recommendation for an living, sorry living Atlas for the SV Academy course.

54:11  
Again, this is freely available, you just need to sign into that and you could take a few hours.

54:20  
Overview course, which is a bit more of a systematic introduction than I was able to author right now here since I popped into the course.

54:30  
So that it's asking me to pick up at the point where I had left off before and this would be a nice online course.

54:41  
Yeah, there is, and that's an example as well.

54:50  
Quite a few story maps available in the Living Atlas introducing you to particular topics.

54:58  
Or in this case, that's a story map by one of my favorite teachers in that domain demonstrating how to leverage the Living Atlas content in your own star map.

55:13  
Yeah, so that's kind of a tutorial.

55:17  
Just to make sure you have access to that, let me put this into the chat as well.

55:25  
That's the story map.

55:28  
How to Yeah, here it goes.

55:31  
And maybe let me take this other thing, the Mainstage SV Academy course here as well.

55:42  
So you do have it in the chat.

55:45  
Yeah, that should work as well.

55:48  
Last point, which is one of the little used, like I say 2 little used resources up there, which is the SV community, which essentially is kind of a social media community of GIS professionals.

56:11  
You can sign in there again with your standard account.

56:16  
Typically we refer to that as the the community, but when we say the community, it actually means it's a lot of communities because that might be people who work with building dashboards or doing quick capture.

56:31  
So it's kind of special interest on one product or one type of usage.

56:36  
So this is in a way the sub community in there and if you need quick help with something you cannot find that doesn't work in the way are you expected to work or you don't find the detailed metadata, that's the fastest way to get help.

56:56  
So if I go back to the top level out of the sub community, to the top level platform, you can see there's currently 1800 people online.

57:07  
Then the last day there was a couple of 100,000 posts and you can filter that by products, by interest.

57:16  
Yeah, I'm looking at kind of all communities.

57:19  
So for instance, if I go to Arcgis Online and I need help for a particular product, then I would go here.

57:29  
If I subscribe, it means new postings I get into my mailbox.

57:36  
That might be too much of a good thing, right?

57:39  
So I'm not subscribing to all the questions, not people who post ideas, but only to blog entries, documents and new videos published and with this is subscribe and then that could change that anytime I want it to I could go back to this.

58:03  
So with that I'd close give you a few minutes if you want to ask any any questions feel free to yeah just unmute yourself.

58:19  
Go ahead.

58:21  
That's the only one way stand so that should be safe.

58:27  
Hi Shabu, can you hear me OK.

58:30  
Helen goes faster you'll go fast.

58:32  
OK.

58:33  
So I just have another a quick question which is so I I noticed that there is this is it live feeds maps that that that you can have.

58:43  
Can you use that also for let's say disaster monitoring and stuff like live disaster monitoring or is the resolution a bit too low?

58:56  
No, the resolution is entirely what the whole thing is, depends on your question.

59:01  
Yeah, that would not be a technology, a platform question.

59:05  
You might or might not have the live feeds already available like we had the example of the earthquakes, these are always used there.

59:15  
That's both like monitoring networks and defeating to that.

59:18  
There might be cases where you need to set up your own life feed, then it's not coming from the living Atlas.

59:25  
So there wouldn't be necessarily everything you need for a particular region in the particular scale for a type of potential disaster or risk.

59:35  
So some might be available, some might not.

59:38  
So quite often you might want to mix it.

59:40  
Yeah, because you there's no need to set up your own slope data set.

59:46  
But if you want to feed in the like flooding levels, then there has to be someone providing that.

59:53  
It could be you or could be some say European agency who is doing that within E cell.

59:59  
So yeah, but there would be no constraints regarding.

1:00:03  
Scale.

1:00:04  
And when I say scale, it might be special, it might be top or well, it might be any other.

1:00:10  
OK.

1:00:11  
Yeah.

1:00:11  
Thank.

1:00:11  
Thank you.

1:00:12  
I I had already posted another of my questions in the Q&A, but later.

1:00:17  
OK Oh, that's interesting because I don't see that yet, but I will go there.

1:00:20  
OK.

1:00:24  
Can you hear me?

1:00:25  
Yes, can hear you well.

1:00:27  
OK, Sir.

1:00:29  
Oh my, my question is a bit different because what I notice from over the weekend when I log into my app GIS online, at the top right hand corner where my name and last name is supposed to show, I don't see my name.

1:00:44  
Rather what I see is first name on the first name\_last name.

1:00:49  
Is that a problem or yeah please go yeah, if it's still sharing go here.

1:00:55  
And I actually want you very much to do that.

1:00:59  
You click on that and so that's empty.

1:01:02  
Then you click on my profile.

1:01:05  
OK and edit your name.

1:01:11  
OK OK yeah, and please do so because I know the way some of your accounts have been set up, they keep it kind of anonymous.

1:01:21  
But whenever any question comes from you, it's pretty hard to deal with.

1:01:25  
So just go here, go to my profile, you can go to my settings for some other stuff.

1:01:32  
My settings is for instance, where you download Actjs Pro.

1:01:36  
Don't ask anyone.

1:01:37  
Get it right from there.

1:01:39  
And in my profile you change your name.

1:01:41  
Yeah.

1:01:41  
OK.

1:01:42  
Thank you, Sarah.

1:01:44  
Sure, let me helm.

1:01:47  
I had the other question you referred to in the Q&A with languages, right.

1:01:56  
First of all that there's two two sides to that.

1:01:59  
It would be the interface language and the content language.

1:02:01  
This is clearly two different beasts.

1:02:04  
You are asking for translation for data sets, right?

1:02:09  
Which would be the content, not the interface thing.

1:02:12  
Interface you can set?

1:02:13  
Yeah, you've set it to your preferred language in the profile.

1:02:19  
There is quite a lot of stuff in the works, essentially with pretty much state-of-the-art AI based translation.

1:02:27  
I've not explored that from the Living Atlas perspective, but I for instance have been using hosted as we content in Survey 123 and there for instance translation of legend items into any language of a choice which is done life and dynamically was I could work with that.

1:02:54  
Yeah.

1:02:55  
So this is certainly a topic which is in flux and a lot is happening out there.

1:03:01  
I'm pretty sure I'm not up to the current state and put in my view.

1:03:07  
It would be a very clear question.

1:03:09  
Look at any particular data set you are interested in.

1:03:12  
But it would apply to your interest and post it in the community.

1:03:18  
Yeah, but yeah, it's.

1:03:20  
I cannot directly answer that with any kind of binary yes or no answer, but I've seen great examples.

1:03:29  
Yeah.

1:03:31  
So last call for any.

1:03:37  
I have one more question.

1:03:39  
Please go ahead.

1:03:40  
What about the data quality?

1:03:42  
Is everything in the Living Atlas as recurred and trustworthy or do we have to check individually?

1:03:50  
Well, the short answer very clearly would be no, because this in a way is a community platform as well.

1:03:59  
You can for instance look for pool for this called community maps where you find university campus maps from around the world.

1:04:07  
Municipalities put in their detailed maps.

1:04:11  
So in order to help with that, there is this one tag I was showing where it says authoritative, then it's curated.

1:04:22  
Curated still means it's a higher level of trust.

1:04:26  
Nothing in life is perfect and in the end you would just need to to look for the description, essentially the metadata and the sources for each and every individual data set.

1:04:42  
In many cases like the European Environmental Agency publishes their data through the Living Atlas, so you refer to that, you would have a link back to the EA.

1:04:56  
So it would be a case by case assessment and the the tag this batch I was showing which said authoritative that helps with that, but it would definitely encourage everyone who goes a bit deeper.

1:05:12  
Where do we have a nice example out there?

1:05:16  
Let me go back here.

1:05:19  
You look for, let me say I'm intentionally going for land use instead of flight cover.

1:05:27  
And I there we go.

1:05:33  
You for instance, you see pretty much everything which is in OSM.

1:05:37  
Yeah, OSM is completely synchronized into the living Atlas in a monthly interval, and I think they're about to switch it over to daily.

1:05:49  
So let's go there.

1:05:51  
OSM land use for Africa, yeah, so no need to grab it yourself.

1:05:57  
And here's a lot of description and link to other sources.

1:06:02  
And what's the OSM policy for the catalogue, which categories to use?

1:06:10  
So essentially going back to my original attempt at an answer, it's a case by case assessment to be how critical to look into metadata and to assess yourself, the trustworthiness of whatever you want to work with.

1:06:28  
That's very good and important question.

1:06:31  
Yeah, it's a platform.

1:06:33  
It doesn't have just one or so like a book Atlas where everything isn't kind of on the same level of authority and and QA here.

1:06:44  
It might be quite mixed good with that.

1:06:49  
I'd close it off for today.