30 November 13:00 CAT

Meeting connection details:

https://events.zoom.us/ev/Amef4UgZFh7Bj7XT-X2bCl-CZAkRarUaFpg1OwNz6JFJDNDuYfwA~AggLXsr32QYFjq8BlYLZ5l06Dg?lmt=1669125523000

Code of conduct:

https://afrimapr.github.io/afrimapr.website/code-conduct/

Link to presentation: http://rpubs.com/boniale/949552

Schedule:

5 minutes	Give everyone a chance to join
5 minutes	Anelda - Welcome
30 minutes	Reflection and feedfback
15 minutes	Q&A and discussion
5 minutes	Wrap up

Please introduce yourself -

(Name, affiliation, country, tell us a bit about your work and interest in maps in Africa)

- Anelda van der Walt (Director & Trainer at Talarify https://talarify.co.za). Based in South Africa
- Nomalungelo Maphanga (Project manager & Data Science Mentor at Talarify) Based in

30 September 11:00 CAT

Meeting connection details:

https://events.zoom.us/ev/AttSVi5dyB4Mz9x4RnV5H8FKtTM5IIaGco6m4gEICZvcDLDj8ulb~AggLXsr32QYFjq8BIYLZ5I06Dg?Imt=1663161445000

Code of conduct:

https://afrimapr.github.io/afrimapr.website/code-conduct/

Link to presentation: http://rpubs.com/boniale/949552

Schedule:

5 minutes	Give everyone a chance to join
5 minutes	Noma Maphanga - Welcome
30 minutes	Boni Ale
15 minutes	Q&A and discussion
5 minutes	Wrap up

About the speaker:

Dr Boni Maxime Ale, MD, MSc, MPH - Physician - Scientist, Co-Founder of Health Data Acumen

In his research management work, Boni mainly manages large scale research studies including clinical trials with complex governance in developing countries. Another aspect of his work is processing data for generating actionable information. Most of his work is done using open data science tools (R and Python) to find, understand, and communicate knowledge hidden in the growing global health data.

Please introduce yourself -

- Anelda van der Walt (Director & Trainer at Talarify https://talarify.co.za). Based in South Africa
- Nomalungelo Maphanga (Project manager & Data Science Mentor at Talarify) Based in

• Shweta Dixit (Biostatistician) Based in India

Questions for the speaker/organisers:

- 1.
- 2.
- 3.

24 August 12:00 CAT

Meeting connection details:

https://zoom.us/j/99253079752?pwd=MVE3VXpiMGVSWFZXQIpVcEc4NEhvdz09

Meeting ID: 992 5307 9752

Passcode: 085119

Code of conduct:

https://afrimapr.github.io/afrimapr.website/code-conduct/

Link to presentation: Will share after the presentation

Schedule:

5 minutes	Give everyone a chance to join
5 minutes	Noma Maphanga - Welcome
30 minutes	Alastair Otter
15 minutes	Q&A and discussion
5 minutes	Wrap up

About the speaker:

Alastair Otter is a journalist, programmer and designer with more than 20 years experience in print and digital media. He co-founded Media Hack Collective, a data journalism team in South Africa. Media Hack publishes The Outlier, an independent data-focused publication covering key

issues in South Africa and Africa. Media Hack has won numerous awards for its data journalism both in South Africa and internationally.

Please introduce yourself -

(Name, affiliation, country, tell us a bit about your work and interest in maps in Africa)

- Anelda van der Walt (Director & Trainer at Talarify https://talarify.co.za). Based in South Africa
- Nomalungelo Maphanga (Project manager & Data Science Mentor at Talarify) Based in South Africa
- Mark Heringer (healthsites.io) Based in the Netherlandshttps://www.linkedin.com/feed/update/urn:li:activity:6965930661194911744/

Questions for the speaker/organisers:

- 4. Is QGIS free? Buhle
 - QGIS A Free and Open Source Geographic Information System https://www.ggis.org/en/site/
- 5. Beside QGIS, Are the other tools opensource?
 - Everything that was spoken about is either opensource or 'on the free side'
 - Leaflet is opensource
 - R
- 6. Has Media Hack worked with https://jupyter.org/?
 - Very interesting space, specifically JavaScript notebook
 - See also https://observablehg.com/
- 7. Is it compulsory to provide a disclaimer in the maps if your media data is arguably opinionated
 - o Disclaimers are generally good.
 - Don't stretch the truth
- 8.
- 9.
- 10.
- 11.
- ullet
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27 July 2022 16:30 CAT / 17:30 EAT / 14:30 UTC

Meeting connection details:

Code of conduct:

https://afrimapr.github.io/afrimapr.website/code-conduct/

Link to presentation:

Schedule:

5 minutes	Give everyone a chance to join
5 minutes	Anelda vd Walt - Welcome
30 minutes	Prof Ghislain Nono Gueye
15 minutes	Q&A and discussion
5 minutes	Wrap up

About the speaker:

G. Nono Gueye is an Ivorian-Cameroonian economics professor at Louisiana Tech University (USA). He obtained his Bachelor's in Economics at Central University (Accra, Ghana) and his Master's and Ph.D. in Economics at Auburn University (Alabama, USA). Having been introduced to coding in high school, he learned several programming languages until he discovered R in graduate school. R became his language of choice because of its expansive suite of analytical/statistical tools. He soon discovered that R could do more: web applications, dashboards, reports, presentations, and even geospatial analysis and mapping. Today, he is a data science trainer and consultant as part of the team at Kingdom Academy.

Please introduce yourself -

- Mark Herringer The Global Healthsites Mapping project https://healthsites.io/ is building a baseline of health facility data with OpenStreetMap
- Anne Treasure, based in Cape Town, South Africa. Research Analyst and Trainer for <u>Talarify</u>. Part of the <u>afrimapr</u> team.

• Victor Ordu, based in Abuja, Nigeria. Independent Consultant and Freelancer. Founding Partner, DevSolutions Ltd. a public health/developmtn consulting firm.

Buhle based in easterncqpe Is qGis free?

Questions for the speaker/organisers:

- 12. How can we apply Spatial Analysis to Strategic purchasing in the context of Emergency health services? Emergency Health data validation | https://sparc.africa/ Answer: Depends on the application. You can reach out to Prof Nono for more information/assistance.
- 13. How can we apply Spatial Analysis in support of health policy improvement? -
- 14. Is there a good open data policy (from a Ministry of Health) we can view? Look at data policies in the West, Europe etc https://data.humdata.org/
- 15.
- 16.
- 17.
- 18.
- 19.
- 20.

Notes:

- https://health-catchment-areas-working-g.gitbook.io/health-catchment-areas/
- Shape files The humanitarian Data Exchange -
- Good books https://www.paulamoraga.com/book-geospatial/
- R Spatial Data sources https://rspatialdata.github.io/

Connect with us

Website: https://afrimapr.github.io/afrimapr.website/

Twitter: https://twitter.com/afrimapr

Google Group:

25 May 2022 12:00 CAT

Meeting connection details: Code of conduct:

https://afrimapr.github.io/afrimapr.website/code-conduct/

Link to presentation:

https://slides.com/maartenzam/afrimapr

Schedule:

5 minutes	Give everyone a chance to join
5 minutes	Anelda vd Walt - Welcome
30 minutes	Maarten Lambrechts
15 minutes	Q&A and discussion
5 minutes	Wrap up

About the speaker:

After graduating as a Master in Bio-engineering (where he first learned to make maps) Maarten spent some years working as an engineer and agricultural economist in Belgium and Latin America. Since the beginning of 2017 Maarten has been working as a data visualisation consultant. He gives training and workshops about data visualisation, produces charts and

maps for media, governments and other organisations and helps to build new visualisation tools.

Please introduce yourself -

(Name, affiliation, country, tell us a bit about your work and interest in maps in Africa)

 Anelda van der Walt, based in Kleinmond, South Africa. Founder of Talarify (https://talarify.co.za) . We work in open science, reproducible research, capacity development around research data science in Africa

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- Anne Treasure, based in Cape Town, South Africa. Research Analyst and Trainer for <u>Talarify</u>. Part of the <u>afrimapr</u> team.
- Gemma Ritchie, based in Johannesburg, South Africa. Data journalist for <u>The Outlier</u> and part of the <u>Media Hack Collective</u> team.
- Miguel Alvarez, based in Bonn, Germany. Vegetation Ecologist with experience working in Eastern Africa (Kenya, Tanzania, Uganda, Ethiopia). Also R Programmer and teaching GIS applications on R.
- Victor Korir, based in Bonn, Germany, Geoinformatics masters student at the University of Bonn. R and GIS user, participating in research projects in Africa.
- Gbemisola Esho from Nigeria Datajournalist and Cloud Engineer. I will love to know more about maps for visualisation and reporting.
- William Okech, based in Nairobi, Kenya. Science Editor. Interested in learning about mapping and visualization.
- Nomalungelo Maphanga, based in Pretoria, South Africa. Project Manager & Data Science Mentor - Talarify
- Eldon ager from Nairobi Kenya. MSc student, I would like to learn mapping to visualize the global antimicrobial resistance
- patterns
- Freda Victor, based in Lagos. Data Analyst at Code for Africa.
- Christian ZANOU, Data Analyst at Qotto, I got a Msc in Biostatistic; I would like to learn mapping to visualize the global dispersion some solar equipement resistance
- John Mukela, Based in Lusaka. Editor at MakanDay Investigative Journalism Centre in Zambia

Questions for the speaker/organisers:

- 21.
- 22.
- 23.
- 24.
- 25.
- 26.
- 27.

Notes:

- Adobe Illustrator free and open source alternative GIMP (https://www.gimp.org/)
 - https://www.figma.com/ have free version
- Comparison of D3 vs leaflet https://stackshare.io/stackups/d3-vs-leaflet
- https://docs.ropensci.org/rnaturalearth/articles/rnaturalearth.html
- Mapbox open-source alternative https://maplibre.org/
- 30 day map challenge November! https://30daymapchallenge.com/
- https://www.amazon.com/Cartography-Kenneth-Field/dp/1589484398
- R package to interact with <u>Natural Earth</u>: https://docs.ropensci.org/rnaturalearth/articles/rnaturalearth.html
- https://rstudio.github.io/r2d3/
- Colour brewer for colours https://colorbrewer2.org/#type=sequential&scheme=BuGn&n=3
- R colour palettes https://r-charts.com/color-palettes/ and https://towardsdatascience.com/generating-color-palettes-in-r-64394117a662
-)
- Other slide decks by Maarten https://slides.com/maartenzam

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Connect with us

Website: https://afrimapr.github.io/afrimapr.website/

Twitter: https://twitter.com/afrimapr

Google Group:

20 April 2022: 10 UTC, 12 pm SAST,

Aims of today's meeting:

- 1. Meet community members
- 2. Anne Treasure: An automated data pipeline using R and GitHub Actions
- 3. Q&A and discussion
- 4. Wrap up and next steps

Meeting connection details:

Join Zoom Meeting

https://zoom.us/j/99253079752?pwd=MVE3VXpiMGVSWFZXQlpVcEc4NEhvdz09

Meeting ID: 992 5307 9752

Passcode: 085119

• Find your local number: https://zoom.us/u/achKqRKuv

Code of conduct:

https://afrimapr.github.io/afrimapr.website/code-conduct/

Link to presentation:

https://docs.google.com/presentation/d/19eZKfUILTI_Q7Y8nEFf3Y8a5p9BIPOWBwIAvuToxZgA/edit#slide=id.g11eb8603442_0_30

Schedule:

5 minutes	Give everyone a chance to join
5 minutes	Anelda vd Walt - Welcome introducing Anne Treasure
25 minutes	Anne Treasure - An automated data pipeline using R and GitHub Actions
20 minutes	Q&A and discussion
5 minutes	Wrap up

Please complete our new community feedback form to help us understand how you have benefited from the afrimapr project and what we can do better https://forms.gle/Kdr7PEgBbHYxriph8

Please introduce yourself - 10 participants

(Name, affiliation, country, tell us a bit about your work and interest in maps in Africa)

- Andy South, afrimapr co-lead, based in Norwich & Liverpool UK
- Anelda van der Walt, Talarify & afrimapr. Based in South Africa http://www.talarify.co.za.
 Co-lead on afrimapr. Open science advocate with a background in Bioinformatics. These days work mostly in interdisciplinary projects.
- Anne Treasure, based in Cape Town, South Africa. Research Analyst and Trainer for <u>Talarify</u>. Part of the <u>afrimapr</u> team.
- Amanyiraho Robinson, based in Uganda. R shiny developer at AFENET
- Arthur Shem Kasambula, Uganda.
- Humphrey Mwinamo from Kenya...working with Kenya Red cross society
- Tuli Amutenya, Namibia, Organiser NamibiaR, I am interested in spatial data analysis and demography
- Kevin Christian ZANOU , Benin , Msc in Biostatistic

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Questions for the speaker/organisers:

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Notes:

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- Remember to join the R for Data Science Slack workspace where we are hosting a channel for discussions/questions around maps/African data and R https://www.rfordatasci.com/
 - More info https://afrimapr.github.io/afrimapr.website/blog/2021/afrimapr-joins-online-learning-community/
- Join our Google Group for info and also welcome to ask questions there https://groups.google.com/g/afrimapr
- useR! 2022 (https://user2022.r-project.org/) Conference dates: 20-23 June 2022. Early registration opens 01 March 2022
- https://twitter.com/afrimapr
- code on github : https://github.com/afrimapr
- Opportunities in Africa:
 - https://opportunities.codeforafrica.org/
 - https://shecodeafrica.org/

Aims of today's meeting:

- 5. Meet community members
- 6. Introduce useR!2022 keynote and community feedback form
- 7. Anelda van der Walt: R packages for Open Data from Africa
- 8. Q&A and discussion
- 9. Wrap up and next steps

Meeting connection details:

Code of conduct:

https://afrimapr.github.io/afrimapr.website/code-conduct/

Schedule:

5 minutes	Give everyone a chance to join
5 minutes	Anelda vd Walt - Welcome & brief intro to feedback form and plans for useR!2022 keynote
25 minutes	Anelda vd Walt - R Packages for Open Data from Africa
20 minutes	Q&A and discussion
5 minutes	Wrap up

Please complete our new community feedback form to help us understand how you have benefited from the afrimapr project and what we can do better https://forms.gle/Kdr7PEgBbHYxriph8

Please introduce yourself - 10 participants

- Andy South, afrimapr co-lead, based in Norwich & Liverpool UK
- Anelda van der Walt, Talarify & afrimapr. Based in South Africa http://www.talarify.co.za.
 Co-lead on afrimapr. Open science advocate with a background in Bioinformatics. These days work mostly in interdisciplinary projects.

- Anne Treasure, based in Cape Town, South Africa. Research Analyst and Trainer for Talarify. Part of the afrimapr team.
- Rene Stander, University of Pretoria
- Miguel Alvarez, vegetation ecologist based in Bonn, has worked in East Africa in projects assessing human impact on vegetation. Developer of packages to work with vegetation-plot databases in R.
- Victor Korir, Bonn- Geodetic engineering masters student at the University of Bonn.
- Annrose Mwangi, Kenya, Geospatial consultant, Nairobi, agriculture
- Aurel Ephie, Kenya,

link to SLIDES FOR THE MEETING

Here is the <u>Google Sheet</u> where you can contribute packages/data/resources that's specific to Africa or developed by Africans.

ranoa or adveloped by ranoano.		
Questions for the speaker/organisers:		

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Notes:

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 Remember to join the R for Data Science Slack workspace where we are hosting a channel for discussions/questions around maps/African data and R https://www.rfordatasci.com/

More info https://afrimapr.github.io/afrimapr.website/blog/2021/afrimapr-joins-online-learning-community/

- Join our Google Group for info and also welcome to ask questions there https://groups.google.com/g/afrimapr
- useR! 2022 (https://user2022.r-project.org/) Conference dates: 20-23 June 2022. Early registration opens 01 March 2022
- https://twitter.com/afrimapr
- code on github : https://github.com/afrimapr
- Opportunities in Africa:
 - o https://opportunities.codeforafrica.org/
 - o https://shecodeafrica.org/

23 February 2022: 10 UTC, 12 pm SAST,

Aims of today's meeting:

- 10. Meet community members
- 11. Ahmadou Dicko: Getting KoBoToolbox in R with the robotoolbox package
- 12. Q&A and discussion
- 13. Wrap up and next steps

Meeting connection details:

Join Zoom Meeting

https://zoom.us/j/99253079752?pwd=MVE3VXpiMGVSWFZXQlpVcEc4NEhvdz09

Meeting ID: 992 5307 9752

Passcode: 085119

• Find your local number: https://zoom.us/u/achKqRKuv

Code of conduct:

https://afrimapr.github.io/afrimapr.website/code-conduct/

Schedule:

5 minutes	Give everyone a chance to join
5 minutes	Welcome and plans for this session Andy - Introduce Ahmadou
25 minutes	Ahmadou Dicko - Getting KoBoToolbox in R with the robotoolbox package
20 minutes	Q&A and discussion
5 minutes	Wrap up

Please introduce yourself - 17 participants

(Name, affiliation, country, tell us a bit about your work and interest in maps in Africa)

Andy South, afrimapr co-lead, based in Norwich & Liverpool UK

- Anelda van der Walt, Talarify & afrimapr. Based in South Africa http://www.talarify.co.za. Co-lead on afrimapr. Open science advocate with a background in Bioinformatics. These days work mostly in interdisciplinary projects.
- Anne Treasure, based in Cape Town, South Africa. Research Analyst and Trainer for <u>Talarify</u>. Part of the <u>afrimapr</u> team.
- Ahmadou Dicko. Statistician working at UNHCR and part of the afrimapr team
- Celestine Buyu, University of Maryland Baltimore, working in Botswana
- Ernest Moyo, Regional Epidemiologistsss
- Peter Macharia, University of Lancaster
- Laura Mugeha, Nairobi, Geospatial eng with an interest in open spatial data, FOSS4G & development.
- Arsene Daniel Nyalundja, Research Fellow in Global Neurosurgery and Neurosurgery, Association of Futures African Neurosurgeons (AFAN)
- Modou Mbaye, based in Senegal, Research Drone/ Satellite Phenotyping
- Laurissa Suiyanka Health Geography and Spatial data science.
- Asiwome Ameko, Health Information Officer, Tamale Teaching Hospital, Ghana

Questions for the speaker/organisers:

- How do we proceed to have a multi language survey form in KoboToolBox? https://xlsform.org/en/#multiple-language-support the xlsform documentation is really good - you put each language into its own column (survey questions go in rows) Andy
 - This package can be used seamlessly for SurveyCTO, confirm?
 - Can you do your analysis as you go I'm curious on how you go about the data cleaning side, because Kobo data can be messy sometimes?
 - Can you design forms from R (the way you would do in XIs file) or change questions?

Notes:

- robotoolbox package : https://github.com/dickoa/robotoolbox
- labelled package for labelling data : https://dickoa.gitlab.io/robotoolbox/articles/language-labelled.html
- dm package for 1 to many relational data models: https://github.com/cynkra/dm

- Remember to join the R for Data Science Slack workspace where we are hosting a channel for discussions/questions around maps/African data and R https://www.rfordatasci.com/
 - More info https://afrimapr.github.io/afrimapr.website/blog/2021/afrimapr-joins-online-learnin q-community/
- Join our Google Group for info and also welcome to ask questions there https://groups.google.com/g/afrimapr

- We will be submitting a proposal to run an afrimapr tutorial at useR! 2022 (https://user2022.r-project.org/). Conference dates: 20-23 June 2022. Early registration opens 01 March 2022
- https://twitter.com/afrimapr
- code on github : https://github.com/afrimapr
- Opportunities in Africa:
 - o https://opportunities.codeforafrica.org/
 - o https://shecodeafrica.org/

26 January 2022: 10 UTC, 12 pm SAST,

Aims of today's meeting:

- 14. Meet community members
- 15. Brief chat about plans for 2022 from afrimapr team and community members
- 16. Community discussion
- 17. Wrap up and next steps

Meeting connection details:

Join Zoom Meeting

https://zoom.us/j/99253079752?pwd=MVE3VXpiMGVSWFZXQlpVcEc4NEhvdz09

Meeting ID: 992 5307 9752

Passcode: 085119

• Find your local number: https://zoom.us/u/achKqRKuv

Code of conduct:

https://afrimapr.github.io/afrimapr.website/code-conduct/

Schedule:

5 minutes	Give everyone a chance to join
10 minutes	Welcome and plans for this session Anelda & Anne
5 minutes	Andy South
30 minutes	Community members introductions and plans for 2022
10 minutes	Wrap up

Please introduce yourself -

(Name, affiliation, country, tell us a bit about your work and interest in maps in Africa)

• Andy South, afrimapr co-lead, based in Norwich & Liverpool UK

- Anelda van der Walt, Talarify & afrimapr. Based in South Africa http://www.talarify.co.za.
 Co-lead on afrimapr. Open science advocate with a background in Bioinformatics. These days work mostly in interdisciplinary projects.
- Anne Treasure, based in Cape Town, South Africa. Research Analyst and Trainer for Talarify. Part of the afrimapr team.
- Shweta Dixit, New job working in Public Health Institute India. Working on CHAIR project Climate Health Air Quality. Machine learning. GIS mapping. WIll share details of the project when she gets started. She will keep in touch.
- Aurel Ephie, Bachelors graduation in April, grateful that we put her in contact with WiGISKe & Carol. Starting to study R, looking for opportunities. Offering help from Kenya.

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Notes:

- Remember to join the R for Data Science Slack workspace where we are hosting a channel for discussions/questions around maps/African data and R -https://www.rfordatasci.com/
 - More info <u>https://afrimapr.github.io/afrimapr.website/blog/2021/afrimapr-joins-online-learning-community/</u>
- Join our Google Group for info and also welcome to ask questions there -https://groups.google.com/g/afrimapr
- We will be submitting a proposal to run an afrimapr tutorial at useR! 2022 (https://user2022.r-project.org/). Conference dates: 20-23 June 2022. Early registration opens 01 March 2022
- https://twitter.com/afrimapr
- code on github : https://github.com/afrimapr
- Opportunities in Africa:
 - https://opportunities.codeforafrica.org/
 - https://shecodeafrica.org/

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Aims of today's meeting:

- 18. Meet community members
- 19. R presentation by McEwen Khundi Using R to measure road distances between TB patients and treatment
- 20. Q&A
- 21. Community discussion
- 22. Wrap up and next steps

Meeting connection details:

Join Zoom Meeting

https://zoom.us/i/99253079752?pwd=MVE3VXpiMGVSWFZXQlpVcEc4NEhvdz09

Meeting ID: 992 5307 9752

Passcode: 085119

• Find your local number: https://zoom.us/u/achKqRKuv

Code of conduct:

https://afrimapr.github.io/afrimapr.website/code-conduct/

We will be recording today's session. We will only record McEwan's presentation. Please do not unmute your microphone or switch on your camera during the presentation if you do not want to be recorded. We will not record the introductions or discussion.

Schedule:

5 minutes - Give everyone a chance to join 5 minutes - Welcome and introduce speaker 15 - 20 minutes - **McEwen Khundi** 25 minutes - Q&A with speaker / Community discussion 5 minutes - wrap up

Please introduce yourself -

- Andy South, afrimapr co-lead, based in Norwich & Liverpool UK
- Anne Treasure, based in Cape Town, South Africa. Research Analyst and Trainer for Talarify. Part of the afrimapr team.

- Mark Herringer Healthsites.io Team leader
- Anelda van der Walt, Talarify & afrimapr. Based in South Africa - http://www.talarify.co.za. Co-lead on afrimapr. Open science advocate with a background in Bioinformatics. These days work mostly in interdisciplinary projects.
- Enock, Ghana, OpenStreetMap contributor
- Fai Karl, Cameroon
- McEwen Khundi, speaker, Malawi & LSHTM
- Dominic Lucero, CHAI, Malaria
- Mark Herringer
- Mkupte Jah
- Paulina Morales
- Shweta Dixit, India
- SriRam, Netherlands
- Humphrey Mwinamo
- Hilary Odhiambo

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Questions for speaker

McEwens paper :

https://www.cambridge.org/core/journals/epidemiology-and-infection/article/clinical-health-systems-and-neighbourhood-determinants-of-tuberculosis-case-fatality-in-urban-blantyre-malawi-a-multilevel-epidemiological-analysis-of-enhanced-surveillance-data/F18F42BE454F5EAFDB2FDD27DDDACC1E#fig01

- **stplanr** is a package for sustainable transport planning with R: https://docs.ropensci.org/stplanr/
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Questions for afrimapr team

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Useful resources

- afrimapr
 - Our website (http://afrimapr.org)
 - Find us on GitHub (https://github.com/afrimapr)

- Our other online tutorials : (https://afrimapr.github.io/afrilearnr/)
- Follow us on Twitter (@afrimapr)
- Google group for discussion (https://groups.google.com/g/afrimapr)
- #chat-african_maps channel on R4DS Online Learning Community Slack Workspace - http://r4ds.io/join
- Megan Beckett's presentation and code about travel time to Cape Town clinics https://github.com/MeganBeckett/capetown clinic access (R and OSRM)
- Sharing a link to some info on MAP's friction surface- there's a blog post about using it here:
 - https://medium.com/@abertozz/mapping-travel-times-with-malariaatlas-and-friction-surfaces-f4960f584f08
 - And an R script that they've shared here: r script:
 https://map.ox.ac.uk/wp-content/uploads/accessibility/R generic accessibility ma
 pping_script.r
- LearnOSM is a good starting pointing https://learnosm.org/en/

Aims of today's meeting:

- 23. Meet community members
- 24. R presentation by Xavier Bosch-Capblanch an amateur perspective on mapping in R
- 25. Q&A
- 26. Community discussion
- 27. Wrap up and next steps

Meeting connection details:

Join Zoom Meeting

https://zoom.us/i/99253079752?pwd=MVE3VXpiMGVSWFZXQlpVcEc4NEhvdz09

• Meeting ID: 992 5307 9752

Passcode: 085119

• Find your local number: https://zoom.us/u/achKqRKuv

Code of conduct:

https://afrimapr.github.io/afrimapr.website/code-conduct/

Schedule:

5 minutes - Give everyone a chance to join 5 minutes - Welcome and introduce speaker 15 - 20 minutes - **Xavier Bosch-Capblanch** 25 minutes - Q&A with speaker / Community discussion 5 minutes - wrap up

Please introduce yourself - Number of participants 22

Ghana, Guinea, Nigeria, Kenya, South Africa, India,

- Mark Herringer, healthsites.io, Holland, Healthsites.io is building a baseline of health facility data with OpenStreetMap @sharehealthdata
- Shweta Dixit, Biostatistician, CDSA, India. New to this community but happy to join and learn through this initiative.
- Andy South, co-leading afrimapr, based in UK in Norwich & Liverpool School of Tropical Medicine

- Asiwome Ameko, Health Information Officer, Teaching Hospital, Ghana. Happy to be here to learn GIS using R
- Anelda van der Walt, Talarify & afrimapr. Based in South Africa http://www.talarify.co.za
- Anne Treasure, based in Cape Town, South Africa. Research Analyst and Trainer for <u>Talarify</u>. Part of the <u>afrimapr</u> team.
- Angela N. Gitau, technical officer, Lead-EHA (Leadership and Environment, Development - East and Horn of Africa), I'd like to learn how to create maps using R so I can map SDGs progress in Kenya.
- Inger Fabris-Rotelli, Department of Statistics, University of Pretoria
- Victor Ordu, from Abuja, Nigeria. DevSolutions Ltd.
- Punam Amratia, Malaria Atlas Project, Telethon Kids Institute here out of curiosity.

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Questions for speaker

- Suggestions: look at using
 - sf package = https://r-spatial.github.io/sf/
 - tmap https://r-tmap.github.io/tmap/
 - mapsf https://riatelab.github.io/mapsf/

Questions for afrimapr team

- McEwan: can afrimapr run a session on how to ask coding questions in online spaces e.g. slack, r4ds, stackoverflow
- Xavier: can afrimapr run some collaborative coding sessions where people can bring
 their code and a small group can work through ways of improving it. (Andy: this would be
 great maybe the best way to start would be to share a small sample of code before so
 that a few participants can have a look & think about it before the session itself. We
 should try to setup something like this in the next few weeks).

Useful resources

- afrimapr
 - Our website (http://afrimapr.org)
 - Find us on GitHub (https://github.com/afrimapr)
 - Our other online tutorials : (https://afrimapr.github.io/afrilearnr/)
 - Follow us on Twitter (@afrimapr)
 - Google group for discussion (https://groups.google.com/g/afrimapr)
 - #chat-african_maps channel on R4DS Online Learning Community Slack
 Workspace http://r4ds.io/join

Aims of today's meeting:

- 28. Meet community members
- 29. R presentation by Jon Harmon, R for Data Science Online Learning Community
- 30. Q&A
- 31. Community discussion
- 32. Wrap up and next steps

Meeting connection details:

Code of conduct:

https://afrimapr.github.io/afrimapr.website/code-conduct/

Schedule:

5 minutes - Give everyone a chance to join 5 minutes - Welcome and introduce speaker 15 - 20 minutes - Jon Harmon 25 minutes - Q&A with speaker / Community discussion 5 minutes - wrap up

Please introduce yourself

- Ryan Metcalf, R4DS community member, United States. I represent a Global Organization deploying a rail/transportation application to Kamsar, Guinea. I'm excited to contribute to the community and excited to interact with everyone!
- Gbemisola Esho based In Nigeria upcoming Datajournalist I feel mapping would help a lot with my work(Got to know through Code4Africa)
- Anne Treasure, based in Cape Town, South Africa. Research Analyst and Trainer for <u>Talarify</u>. Part of the <u>afrimapr</u> team.
- Anelda van der Walt, based in Kleinmond, South Africa. Project co-lead for afrimapr and director of Talarify - a small consultancy that works with researchers to help them grow their digital/computational research skills.
- Peter Macharia- NRB, Kenya- spatial epidemiologist
- Andy South, afrimapr, UK
- Jon Harmon, Admin, R4DS Online Learning Community. Happy to meet everyone!
- Sriram, R4DS community member, Netherlands. I worked in Africa for 6 years before this. I am into infrastructure planning.

Questions for speaker

- Is the Shiny app dashboard for monitoring the questions re-usable in other Slack communities? Sounds really useful for another community I'm involved in (Anelda)
 - https://github.com/r4ds/mentordash
- When asking & answering questions is it a good idea to put all in one message or have smaller messages that break a problem/solution down into parts?
 - One message per separate question, but keep it threaded together if it's all one question.
- Is there a way of linking between slack messages?
 - Yes, use the curved-arrow "Share" button.

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Useful resources

- afrimapr
 - Our website (http://afrimapr.org)
 - Find us on GitHub (https://github.com/afrimapr)
 - o Our other online tutorials : (https://afrimapr.github.io/afrilearnr/)
 - Follow us on Twitter (@afrimapr)
 - Google group for discussion (https://groups.google.com/g/afrimapr)
- R4DS Slides: r4ds.io/introdeck
- TidyTuesdays on Twitter:
 - https://twitter.com/hashtag/TidyTuesday?src=hashtag_click&f=live
- <u>Tidytuesday.rocks</u>
- https://github.com/yonicd/slackthreads
- https://mrkaye97.github.io/slackr/

Aims of today's meeting:

- 33. Meet community members
- 34. R presentation by Megan Beckett, Fathom Data & RLadies Cape Town
- 35. Q&A
- 36. Community discussion
- 37. Wrap up and next steps

Meeting connection details:

Code of conduct:

https://afrimapr.github.io/afrimapr.website/code-conduct/

Schedule:

5 minutes - Give everyone a chance to join 5 minutes - Welcome and introduce speakers (Anelda) 15 - 20 minutes - Megan Beckett 25 minutes - Q&A with speaker / Community discussion 5 minutes - wrap up (Andy)

Please introduce yourself

- Inger Fabris-Rotelli, Department of Statistics, University of Pretoria work in spatial statistics, image processing, GIS
- Shimelis Abebe, Department of Water resources engineering and management, Ethiopian Institute of water resources Addis Ababa University,a PhD candidate working on Modeling the Impact of climate change on groundwater resources and interest know more friendly how to make spatial analysis using programming language R and to know more people like me. I.
- Matt Dennis, Fathom Data, colleague of Megan :) Keenly interested in spatial data but haven't done much work using spatial data as of yet.
- Peter Macharia- postdoc- spatial health metrics
- Anelda van der Walt, Talarify (small consultancy in South Africa), I'm co-lead on afrimapr (a Wellcome Trust funded project that started in 2020).
- Anne Treasure, based in Cape Town, South Africa. Research Analyst and Trainer for Talarify. Part of the afrimapr team.
- Laura Grant, journalist @ Media Hack Collective. Have recently started to use R to make maps. Want to learn more about it.

- Andrew Collier (<u>Fathom Data</u>, also working with Megan)
- •
- •
- •
- •

Questions for speaker

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- •

Useful resources

- Link to Github repo from talk today: bit.ly/clinic-mapping
- afrimapr
 - Our website (http://afrimapr.org)
 - Find us on GitHub (https://github.com/afrimapr)
 - o Our other online tutorials : (https://afrimapr.github.io/afrilearnr/)
 - Follow us on Twitter (@afrimapr)
 - Google group for discussion (https://groups.google.com/g/afrimapr)

Aims of today's meeting:

- 38. Meet community members
- 39. R presentation by Dr Anwar Musah
- 40. R Universe presentation by Jeroen Ooms, ROpenSci
- 41. Q&A
- 42. Wrap up and next steps

Meeting connection details:

Code of conduct:

https://afrimapr.github.io/afrimapr.website/code-conduct/

Schedule:

5 minutes - Give everyone a chance to join

5 minutes - Welcome and introduce speakers (Anelda)

15 minutes - Anwar Musah

15 minutes - Jeroen Ooms

15 minutes - Q&A with speakers

5 minutes - wrap up (Andy)

Please introduce yourself

- Hi everyone! I'm Anelda van der Walt, South African running a small consulting company
 that supports students and researchers to adopt various types of technology in their
 research and to connect with communities. I work with Andy on afrimapr
- Hello All, I'm Andy South, based in the UK, leading the afrimapr project with Anelda. Fan
 of R & maps.
- Hi all, I'm Anne Treasure, I'm a research analyst and trainer I work with Anelda in South Africa, and am based in Cape Town. I am part of the afrimapr team.
- Peter Macharia a spatial epidemiologist. A postdoc with Lancaster University, UK and KEMRI-Wellcome Trust Research programme, Kenya working on disease mapping
- Mary Nthambi (PhD), Environmental and One Health Economist, working in University of Glasgow, on a project - Supporting National Action Plan for Antimicrobial Resistance (SNAP-AMR), in northern Tanzania.

- Hi, I am Markus Kainu, developer of <u>geofi-package</u> and researcher from Finland. Just finalising my user2021 presentation here and wanted to have a look at this project as it is mentioned in my slides.
- Hey All, I am Alice Kamau based at the KEMRI-Wellcome Trust Research Programme, Kenya. An early Postdoc with a background in Statistics.
- I'm Mark Padgham. I work with Jeroen at rOpenSci, and also develop a lot of spatial software such as osmdata. I collaborate with Robin Lovelace, including on work in Africa such as mapping and analysing transport systems.
- Hi, I'm Clinton Nkolokosa, a researcher at Malawi-Liverpool-Wellcome Trust, Blantyre Malawi, and part of the afrimapr team.
- Hi all, myself Kshitiz Shrestha, 2nd year PhD candidate at the Faculty of Veterinary science, University of Melbourne, Victoria, Australia working on Australian horses project.
- Hi everyone :), I am Julius Nyerere based in Nairobi a spatial epidemiologist with a bias towards space-time models.
- Hi all. I am Pamela Ochungo (PhD). Geospatial scientist based at the Technical University of Kenya and Postdoc in remote sensing at the British Institute in Eastern Africa.
- Athanase Badolo, Medical entomologist from Universiteé Joseph Ki-Zerbo, Ouagadougou, Burkina Faso.

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Anwar's talk

Nice work from Anwar mapping different admin levels using tmap:

```
Basic visualization of the outline of study area using tm_shape() & tm_polygons()

# Example for visualizing neighbourhood boundaries with tm_shape() and tm_polygons()

# i.e., an empty map

tm_shape(recife.neighbourhoods) + tm_polygons(border.alpha = 0.75) +

tm_shape(recife.healthzone) + tm_polygons(alpha = 0, border.alpha = 0.9)
```



Summing data collected by inspectors to neighbourhoods:

· Code for aggregating the counts of houses and number of those deemed infested to neighbourhood-level



Joining surveillance & weather data using merge:

· Code for performing a left-join (joining the weather data to mosquito dataset)

Joining data to the spatial data prior to mapping

```
# the analysis data frame (with risk estimates) to the shapefile
recife.neighbourhoods <- merge(recife.neighbourhoods, analysis.data, by.x = "ID", by.y = "district_id")</pre>
```

Recommended books for the modelling

- Geospatial Health Data: Modeling & Visualisation with R-INLA and Shiny (by Paula Moraga)
- Spatial and Spatio-temporal Bayesian Models with R-INLA (by Marta Blangiardo and Michela Cameletti)

Links to different colour code scheme: https://www.december.com/html/spec/colorhslhex10.html

```
Relative Risk

-0.10
-0.10
-0.25
-0.25 to 0.55
-0.25 to 0.
```

```
# map of relative risk of infestation

tm_shape(mecife.neighbourhoods) +

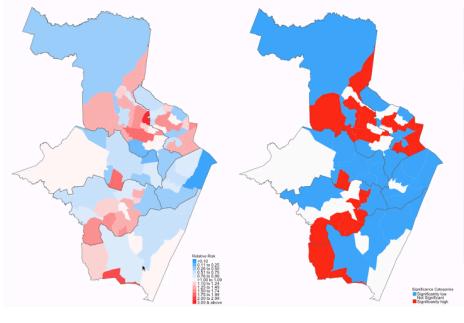
tm_fill("RelativeRiskCat",
    style = "cat",
    title = "Relative Risk",
    palette = RRPalette,
    labels = RiskCategorylist) +

tm_shape(recife.healthzone) +

tm_polygons(alpha = 0.05, border.alpha = 0.90) +

tm_layout(frame = FALSE,
    legend.position = c("right", "bottom"),
    legend.outside = FALSE,
    legend.title.size = 0.8,
    legend.text.size = 0.7)
```

Summary



#List of packages needed

library("sf")
library("tmap")
library("spdep")
library("INLA")

#List of functions

setwd()
read.csv()
read_sf()

#data managing in R
aggregate()
View()
names()
merge()

#GIS visualization in R

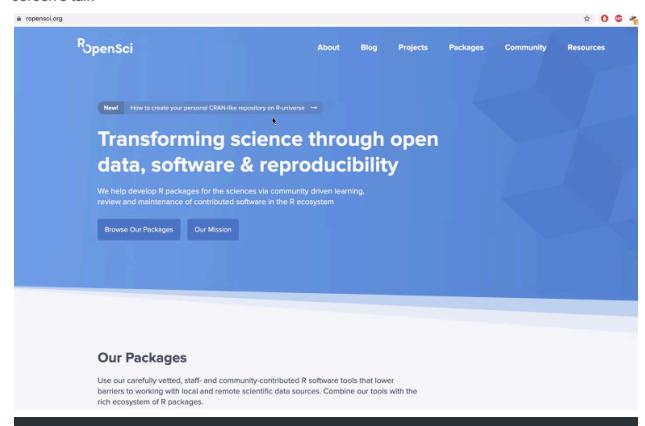
#directory loading data

#GIS VISUALIZATION IN I
tm_shape()
tm_fill()
tm_polygons()
tm_layout()

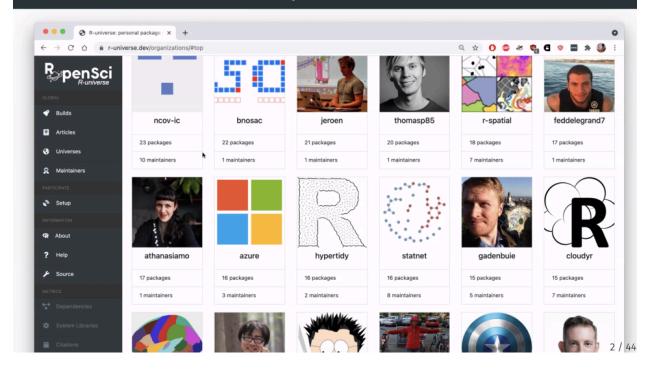
List of hexadecimal colour codes

https://www.december.com/html/spec/colorhslhex10.html

Jeroen's talk



R-universe is for everyone!



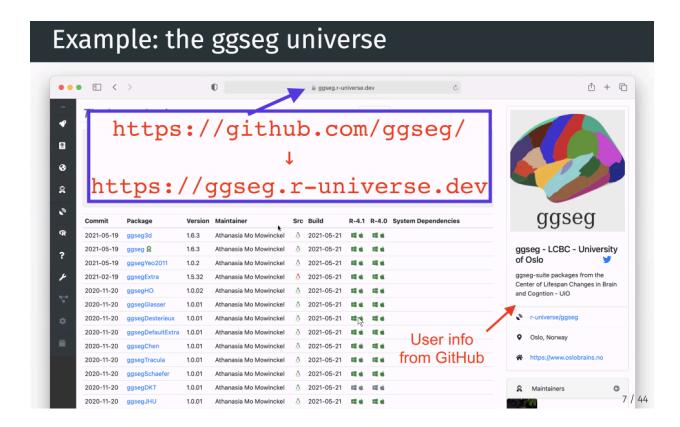
What is R-universe?

R-universe is new platform by rOpenSci for *publishing* and *discovering* R packages, Rmd articles, and other R based content.

https://<user>.r-universe.dev

Every user or organization has a personal domain for publishing their content. On this domain you can find:

- CRAN-like repo with any R packages + win/mac binaries
- · Live rendered Rmd articles
- · Programmable API access
- · Interactive dashboard for browsing and monitoring activity
- · Everything is fully automated
- Metrics and other meta functionality (planned later 2021)



Example: the ggseg universe (packages)

Users install simply using install.packages.

```
# Enable this universe
options(repos = c(
    ggseg = 'https://ggseg.r-universe.dev',
    CRAN = 'https://cloud.r-project.org'))
# Install some packages
install.packages('ggseg3d')
```

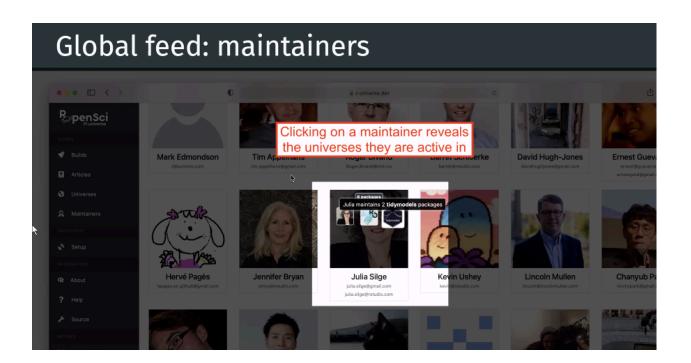
For who is R universe intended?

Anyone can start a universe!

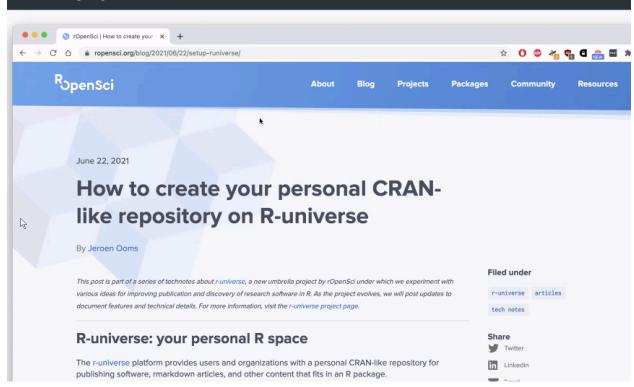
Example use cases

- · Both for personal and organizations.
- Packages do NOT need to be on CRAN. In your universe you make the rules!
- · Experimental projects
- · Research compendia packages
- · Homework assignments
- Dev versions of CRAN packages

Package git repos do not need to be in the same GitHub user/org as the universe. You can even add packages from Gitlab or another Git server. You only need the GitHub username for the universe itself.



Setup your own universe



Conclusion

What is R-universe and why is it useful?

- R-universe is an open platform that provides users and organizations with a personal space for publishing R content
- The system automatically tracks your git repos, builds and distributes binary versions of your packages for Mac and Windows.
- Users can easily install packages from your personal CRAN-like repository, without complex configuration of compile tools and dependencies
- The dashboard showcases a collection of R packages and vignette content, even when spread across multiple GitHub organizations
- R-universe can be used as a simple zero-configuration CI/CD system, running the standard checks on the most important platforms.
- R-universe is very easy to set up! We have dealt with lots of challenges related to dependencies, platforms, etc., for you. You can have a universe with just a few clicks.
- R-universe combines the best features of hosting your packages on GitHub and CRAN, without being exclusive to either.
- Anyone, from novice R user to veteran package developer, can setup their own universe.

26 May 2021, 10 am UTC, 11 am GMT, 12 am SAST, 1 pm EAT

Aims of today's meeting:

- 43. Meet community members
- 44. Introduce the idea of these community meetups
- 45. Discuss what the community wants from the meetings going forward
- 46. Wrap up and next steps

Meeting connection details:

Code of conduct:

https://afrimapr.github.io/afrimapr.website/code-conduct/

Schedule:

5 minutes - give everyone a chance to join

5 minutes - Andy introduces afrimapr

10 minutes - break out groups to meet community members

10 minutes - explain the aim of the community meetings

10 minutes - breakout groups to discuss expectations for the meetings

15 minutes - feedback from small groups

5 minutes - wrap up

Order for introductions:

- Andy
- Anwar
- Megan
- Anne
- Sirri
- Brian
- Larisse
- Alice
- Xavier
- Peter
- Tatiana
- Arsène
- Anelda

Athanase

- **Andy South**, afrimapr, Liverpool School of Tropical Medicine, UK. Keen to promote reproducible, open-source R mapping from data.
- **Xavier Bosch-Capblanch**, Swiss Tropical and Public Health Institute, Switzerland. Evidence / Decision Making and Health systems, particularly vaccination. Lover of R. Interested in programmatic data, including paper systems.
- Larisse Bolton, South African Centre for Epidemiological Modelling and Analysis (SACEMA), Stellenbosch, South Africa. I am postdoctoral research fellow focussing on blood systems analysis.
- Anwar Musah, UCL Institute for Risk and Disaster Reduction, UK. I am a research
 fellow and interested in combining statistical modelling, GIS and data sciences to
 epidemiology and social science problems.
- **Anne Treasure**, based in Cape Town, South Africa. I work as a Research Analyst and Trainer with Anelda in Talarify (anne@talarify.co.za) and am part of the afrimapr team
- Peter Macharia: I am a spatial epidemiologist at Centre for Health Informatics,
 Computing, and Statistics (CHICAS), Lancaster University, UK and at Population Health
 Unit (PHU), KEMRI Wellcome Trust Research Programme, Kenya. I am interested in
 spatial health metrics to aid in a better understanding of health inequalities,
 vulnerabilities, and population health using conditional autoregressive and geostatistical
 models. I also map physical access, marginalization, and vulnerability indices.
- Megan Beckett, Data Scientist at Fathom Data (consultancy), South Africa. I think maps
 are incredibly powerful as communication tools, especially to highlight issues and bring
 about action. Keen to get involved in some projects and discover more openly available
 data sets in Africa.
- I am *Sirri Nelly Forbi* from Cameroon. I am a researcher and an environmentalist. Worked on Leaf Area Index and aboveground biomass estimation. Presently working on wood anatomy. I use the R studio software, but not too experienced. I'm open to Learning new things.
- *Brian*, Uganda
- Larisse Bolton, Cape Town,
- Alice Kamau, based in the KEMRI-Wellcome Trust Research Programme, Kenya. An
 early Postdoc with a background in Statistics. My interests have mainly involved
 describing the epidemiology of malaria in Africa. Keen R user.
- Tatiana Alonso Amor, Swiss TPH, mathematical modelling of malaria for decision making.
- Athanase Badolo, , medical entomologist. Interested in mapping density of mosquitos for malaria & dengue.
- My name is *MOMO Stéphane*, I am an ecologist-biometrician and I use LiDAR technology to carry out my work. R/Rstudio helps me to perform statistical analysis but vet, I don't have the skills to make maps.
- Hello. Yvan Zolo final year medical student from Cameroon.

- Hello. Arsene Daniel NYALUNDJA, doctor of medicine from the Democratic Republic of Congo
- Jeroen Ooms, rOpenSci, UC Berkeley.

What would you like to get out of these community meetups?

(e.g. presentations, training, focussed discussions on specific topics, networking, data, etc)

Group 1:

Anwar:

- Presentations opportunity for us to present work we are doing
- Is this limited to just Africa? Or what about global south, e.g. doing work in Brazil (building early warning system for mosquitoes for cities in Brazil)
- Andy: yes, this is relevant. Focus on Africa has helped us achieve in a more targeted manner, but we recognise useful things from other areas
- Involved in covid research in Nigeria, there is high resolution spatial data for events, working on spatial temporal models to predict risk

Megan:

- Keen to hear where there are opportunities where people need help with their projects
- E.g. afrimapr suggestions and requests repo maybe include how the community can help? E.g. improving a data set, cleaning a Shiny app, etc
- Keen on tutorials as well as presentations, maybe using the existing afrimapr tutorials, or people using their own work
- Andy: yes, we can run a session where we go through these tutorials
 - Good to go through to find technical issues as well

Tatiana:

- presentations, where main focus would be on e.g. which package should be used, the more technical scripting part than the scientific methodology
- Which tools people are using to make our work easier
- Useful data sources
- Having a small project to help on, e.g. data visualisation, volunteering, over a longer time frame?

Peter:

 I support regular meets-ups, people sharing their ongoing work, technical sessions, sharing useful resources across the group etc. and having collaborative manuscripts.

Xavier:

- Advocate for the use of data, enjoy technical, but would like to emphasise use of data where it makes a difference, e.g. policy
- Good if we can build this awareness
- Gap between research and policy, also see it in data, e.g. covid
- Would like allies in this

Group 2:

- _
- Learn from more experienced people to apply in my own work (Larisse)
- Really liked the online tutorials from afrimapr (Larisse)
- Combination of a tutorial one month then a person demonstrating where to find data eg. or demo another skill or demo as part of a presentation
- Make own map and use statistics need more practice. Realise we don't have exactly
 the same objectives but would appreciate more practice and more support from more
 experienced people
- I have some level of skill that I would like to share with people and I would also like to learn from others to make what I'm doing better
- Presentations of different maps development e.g. raster vs simple maps
- Short courses
- Anelda thank you already, I am a novice and this will be very helpful.
- Mentorship programme

Next month's meeting

- Anwar volunteered to present. Thank you Anwar! :-)
- Anelda: Keep presentations to practical steps to make a map for other people to take something away within the context of your work
- Send info a week before so that we can advertise it to the community

Interesting resources:

- https://uksa.statisticsauthority.gov.uk/publication/ethical-considerations-in-the-use-of-geo spatial-data-for-research-and-statistics/
- https://geocompr.robinlovelace.net/

Meeting chat:

12:08:41 From Anne Treasure to Everyone:

https://docs.google.com/document/d/1CUarxHww2TI48GF11jn8vTAPZsw07NInAwGO0-eUdHU/edit?ts=60adfc1c#

12:13:26 From Anelda Van der Walt to Everyone : Megan

Anne

Sirri

Brian

Larisse

Alice

Xavier

Peter

Tatiana

Arsène

Anelda

12:14:35 From Sirri Nelly to Everyone : Hello everyone, please I can't talk right now will just type

12:15:41 From Andy South to Everyone: Thanks Sirri:-)

12:19:10 From Sirri Nelly to Everyone: I am Sirri Nelly Forbi from Cameroon. I am a researcher and an environmentalist. Worked on Leaf Area Index and aboveground biomass estimation. Presently working on wood anatomy. I use the R studio software, but not too experienced. I'm open to Learning new things.

12:23:14 From Andy South to Everyone : repeating the google doc link, all are welcome to introduce yourselves there :-)

https://docs.google.com/document/d/1CUarxHww2TI48GF11jn8vTAPZsw07NInAwGO0-eUdHU/edit?ts=60adfc1c#

12:34:10 From Peter Macharia to Everyone : My contribution will be limited to chats, My apartment is under renovations and pretty noisy at the moment. I support regular meets-ups, people sharing their ongoing work, technical sessions, sharing useful resources across the group etc. and having collaborative manuscripts.

12:50:28 From Anelda Van der Walt to Everyone:

https://docs.google.com/document/d/1CUarxHww2TI48GF11jn8vTAPZsw07NInAwGO0-eUdHU/edit#

12:50:33 From Andy South to Everyone: Welcome Yvan:-)

12:50:46 From Yvan Zolo to Everyone : Hello. Yvan Zolo final year medical student from Cameroon.

12:51:32 From Andy South to Everyone : Hi Yvan, welcome, we are just talking about next months meeting.

12:52:27 From Yvan Zolo to Everyone : Thank you. Unfortunately I couldn't make it earlier. 12:55:23 From Yvan Zolo to Everyone : Thanks for the briefing. I am glad to be here :)