

AIS Training Tuesday, 17 September, 2019 7-10.40 AM EST

Video

Part I. Overview on AIS and UNGP 00:07 – 26:24

Part II. UNGP GitLab 26:25 – 58:49

Part III. UNGP Spark for AIS 58:50 – 1:51:46

Part IV. UNGP Port Traffic 1:51:47 – 3:06:46

Part V. AIS Handbook Outline 3:06:47 – 3:12:46

Part IV. UNGP Time-Spent in Port 3:12:47– 3:32:20

Chat Transcript

Good day! You are in AIS training session

Hi

Good afternoon

Let's wait until 7.05

Current session: AIS + UN Global Platform Overview

If you have question, please ask; or you can put your question here.

Thank you Markie, I wanna ask about the AIS data in general, do we need to concern with the data confidentiality? Or everything is just fine by collecting the data from the aggregator

AIS is global dataset and publicly available ; therefore there is no confidentiality issue. The main challenge is the size of data

Now: SESSION on GITLAB (by Sean - UNSD)

How big it is? Let say for 1 year series dataset

It's about 1.5 million messages per hour

This is a global coverage, if you focus on specific area (such as port of Tanjung Priuk), it would be much less, and easier to handle and analyse

Its quite big. Agree with you, it will be easier if we only focus on some specific region for the exploration.

Next session will show us how to filter AIS messages based on longitude and latitude.

In my understanding, these data are kept in each country or even in each port repository, is it that way? No. The data is kept all together in one big database

I will cover this in the next session

Great. Thanks Alex

Thanks, I missed the second slide of Ann

AIS is analogously with MPD I think

In term of functionally yes, MPD (mobile phone data) "tracks" people, and AIS tracks ships. However, MPD is confidential due to data protection and privacy. AIS is naturally public.

Markie please, I can't hear anything but maybe you are not speaking?

I'm not speaking, but Sean is. Try to check your setting. If it does not work, this training session is recorded

Try to use laptop. Built-in audio usually works better

Ok Markie thanks

As AIS is naturally public, does it mean that we can use for inter country analysis?

Yes. AIS is global dataset. In UN Global Platform, you have access to worldwide AIS data

no question from me

excellent

Is there any shared display. I don't see anything yet.

me too

Soon.

thx

:)

Young people should be more patient.

yes

Now Session on AIS - UK ONS indicators

I still can't see the screen. Are others also having trouble?

Can see

Its not his screen, its the video

a video of the guest Alex you should see

no, i only see an icon. but if others see it i will troubleshoot :)

In the white board, there is a picture of UK and a box on a port of east side.

I see Alex in video. Must enlarge as well

Everything is fine in here

ah ok i called back in and now it works 8-)

Here also fine

thanks all

So the high correlation value is enough?

(y)

Thanks Alex. Nice explanation. Thank you

hello, did the sound end?

No, it did not for me

Since in real condition not all of the vessels using AIS, could AIS data representing population?

good so fare

yes all sorted now, thanks!

or just gives the patterns

support@officialstatistics.org I think you can usually access the command line from jupyter by prefacing the command with !

eg !pip install numpy
to add packages via jupyter

Its not work

ah sorry i missed that

It seems that we lost connection with Alex. Let's wait until reconnecting

BREAK for COFFEE time ...

This message wasn't sent to Robbie Singer.

Oh, i thought it was my connection

(y)

Thanks for the explanation on representativeness by ...

It was Stellios from Marine Traffic

AIS should cover any ships > 300 gross tonnage or ships carrying passengers

where is the coffe ? ^^

(coffee) ha ha

Is it compulsory for every country? is there any legal act on it?

Stellios, can you answer this?

Can we get information about ship's identity like homeport and registered owner from AIS data?

6 months? full days?

As data scientist, do we need to understand all the mechanism behind the system completely, ie. spark?

(thanks excellent! this answer help us to arganize our IT work time in case!)

Wahyu: AIS static message has limited information ship characteristics. The plan is to try linking AIS messages to ship registers which contains more information on ships

About AIS: https://en.wikipedia.org/wiki/Automatic_identification_system

Thanks Stellios

Also, can we work with R language within the UN Global Platform?

yes we can

though - I must say this may not be the case for the location service for the moment

I think that with the help of Alex code, it is an easier starting point for the analysis of AIS data at the UN Global Platform, he has done great work!

So, AIS is mandatory for subject vessels. Also, contained information in a nutshell: <https://help.marinetraffic.com/hc/en-us/articles/205426887-What-kind-of-information-is-AIS-transmitted->

thank you stellios

thanks stellios

Amanda: regarding numpy, Sean said you can install it "!pip install numpy " but only on Python3 kernel.

Thanks Markie, I'll try it later..

Any questions? don't be shy

As I know, we work in the PySpark3 kernel, not in the Python3 kernel

Amanda PP: You can send request to UNGP helpdesk : support@officialstatistics.org

This message wasn't sent to Govindaraj Rangaraj.

Ok then..

Sorry i ask about the basic thing : Do we need to install or extract geomesa_pyspark before run the code ?. And is it same if we use jupyter from anaconda navigator not from the link that UN global mailed us. coz when i upload the code that alex mailed us in jupyter using conda navigator i cant find pyspark kernel. Only find python3 kernel.

As far as I know, you can only get the access to the data by the jupyter notebook provided by the Global platform

Dear Wahyu,

the access is though web browser client only after entering your username and pwd for a specific url. Therefore you can't have access on your local machine anaconda installation at this time.

oh i see..

With Danish AIS data, I have defined port polygon using AIS data itself looking at concentration on vessels (distance to nearest vessels and number of vessels in a close group)

As a side remark (not question). A good pragmatic choice would be to use two stage selection: 1. the fast rectangular bounding box for a rough selection, and then the more sophisticated geomesa functions on shape files or whatever, on the already much smaller set of messages satisfying the bounding box criteria. That way you lose less performance while still achieving higher accuracy.

yes

see the screen now

Peter, Frank: thanks for the comment. From Alex's explanation, there are few layer of filtering:

1. Sampling on global datasets (optional)
2. First bounding box on UK territory

3. Second bounding boxes on UK ports

I agree on methodology of "bounding" would impact the result.

absolutely, i merely meant adding one further level of nesting for speed but I agree otherwise of course.

The two stage selection concept logically acceptable, thanks.

Thanks for today's session - we will catch up utilising the recording for the latest part. All the best from Konstantinos & Stellos.

Thanks for attending.

future work from UNCTAD! interesting !

Jan Hoffmann

and you for trade data linking of course

Yes! exciting. so thank you very much for this interesting session and look forward to work on the database with Jan!
thanks Markie. I need to leave now.:)

Ok bye ... bonne après midi

Thanks for the webinar. Very informative and interesting.

thank you all

Thank you Ann Kristin,Sean,Alex n Markie...

Bye..

Pls share the link to the recording. Thx

Bye

Thank you and good bye.

oh yes the link to the recording would be great to get