An Intro to Satellite Chart Making

Overview

- What is Sat2Chart
- Why SasPlanet vs Google Earth
- SasPlanet Intro
- Sat2Chart Intro
- Make a few charts

Sherry McCampbell
s/v Soggy Paws

What is Sat2Chart?

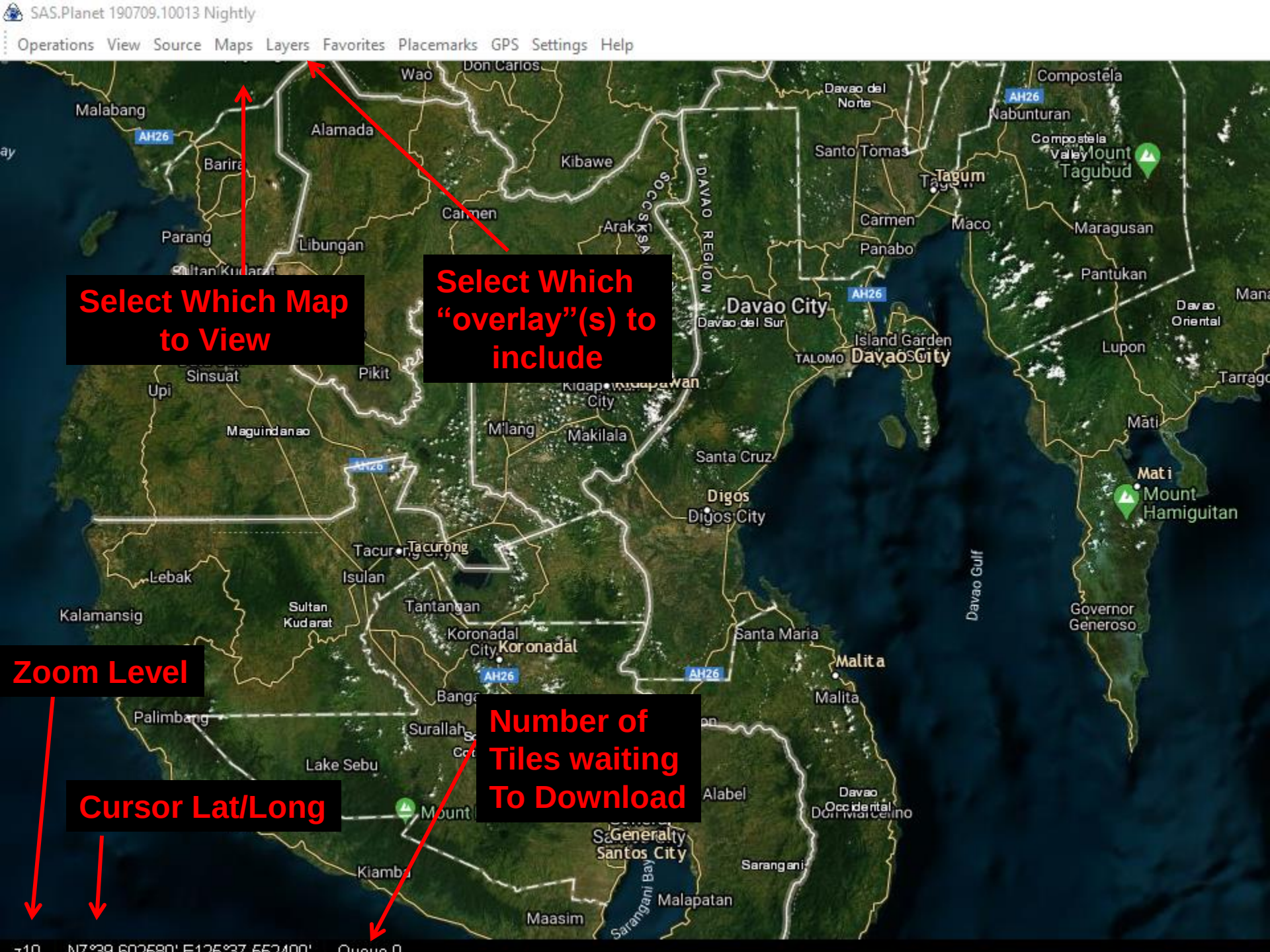
- Formerly named GE2KAP
- A free program that facilitates creating geo-referenced chart files from satellite pictures for use in marine navigation
- Interfaces to GoogleEarth and SasPlanet for satellite imagery
- Outputs files in KAP, mbtile, and KMZ format for use in charting programs
- Runs only on Windows, and requires install of ooRex software (free)

What is SasPlanet?

- Some Russians made an alternative to GoogleEarth.
- Written and documented in Russian
- Hugely more flexible than GoogleEarth

Why SasPlanet vs GoogleEarth

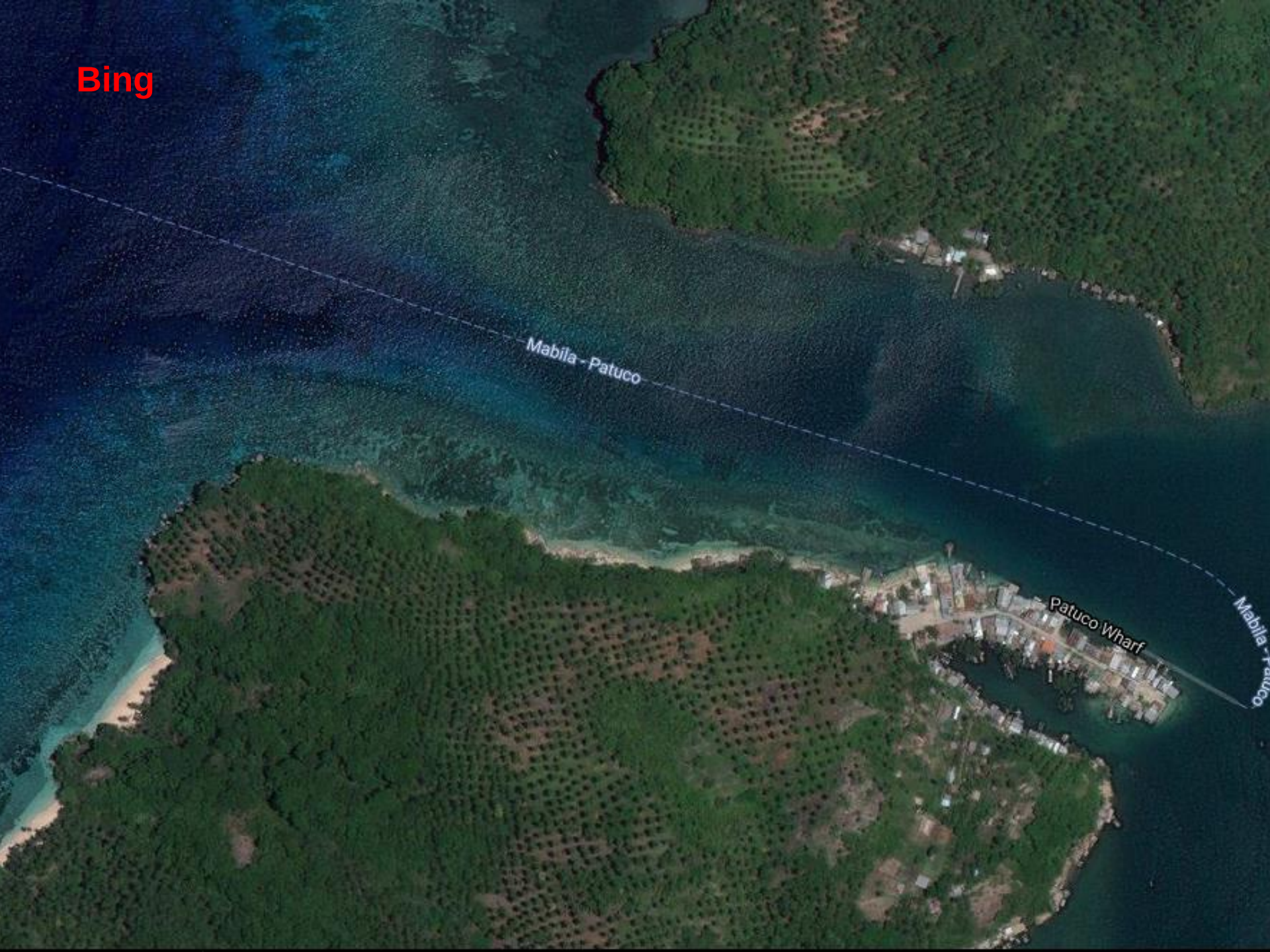
- GoogleEarth current version has removed the interface that Sat2Chart uses (though older versions still work)
- GE limits downloaded imagery to 2GB and whimsically removes pre-downloaded stuff when it reaches 2GB.
- SASPlanet is hugely more flexible than GE
- 4 Major world-wide satellite picture sources (and lots of other stuff)
- Navionics and CMap
- Overlays similar to GoogleEarth
- Easy to run off external drive, and easy to share via USB drive.


SAS.Planet 190709.10013 Nightly
Operations View Source Maps Layers Favorites Placemarks GPS Settings Help
Select Which Map to View
Select Which "overlay"(s) to include
Zoom Level
Cursor Lat/Long
Number of Tiles waiting To Download
Malabang
Wao
Don Carlos
Davao del Norte
Compostela
Nabunturan
Alamada
Kibawe
Santo Tomas
Tagum
Mount Tagubud
Barira
Carmen
Parang
Libungan
Maco
Maragusan
Panabo
Pantukan
Davao City
Davao del Sur
Davao Oriental
Island Garden
Davao City
Lupon
Sinsuat
Pikit
Upi
Maguindanao
M'lang
Makilala
Santa Cruz
Digos
Digos City
Mati
Mount Hamiguitan
Tacurong
Lebak
Isulan
Kalamansig
Sultan Kudarat
Tantangan
Koronadal City
Santa Maria
Malita
Davao Gulf
Governor Generoso
Palimbang
Surallah
Lake Sebu
Alabel
Davao Occidental
Santos City
Kiamba
Sarangani
Malapatan
Maasim
AH26
DAVAO REGION
SOCCSKSA

Switching Maps in SAS

	Map Hotkey
• Maps / Google / Google Satellite	“G”
• Maps / Bing / Bing Satellite	“B”
• Maps / ESRI / ArgGIS.Imagery	“A”
• Maps / Yandex / Satellite (Yandex Maps)	“Y”
• Maps / Marine / Navionics Marine Charts	“N”
• Maps / Marine / Navionics Sonar Charts	“S”
• Maps / Marine / CMAP	“C”

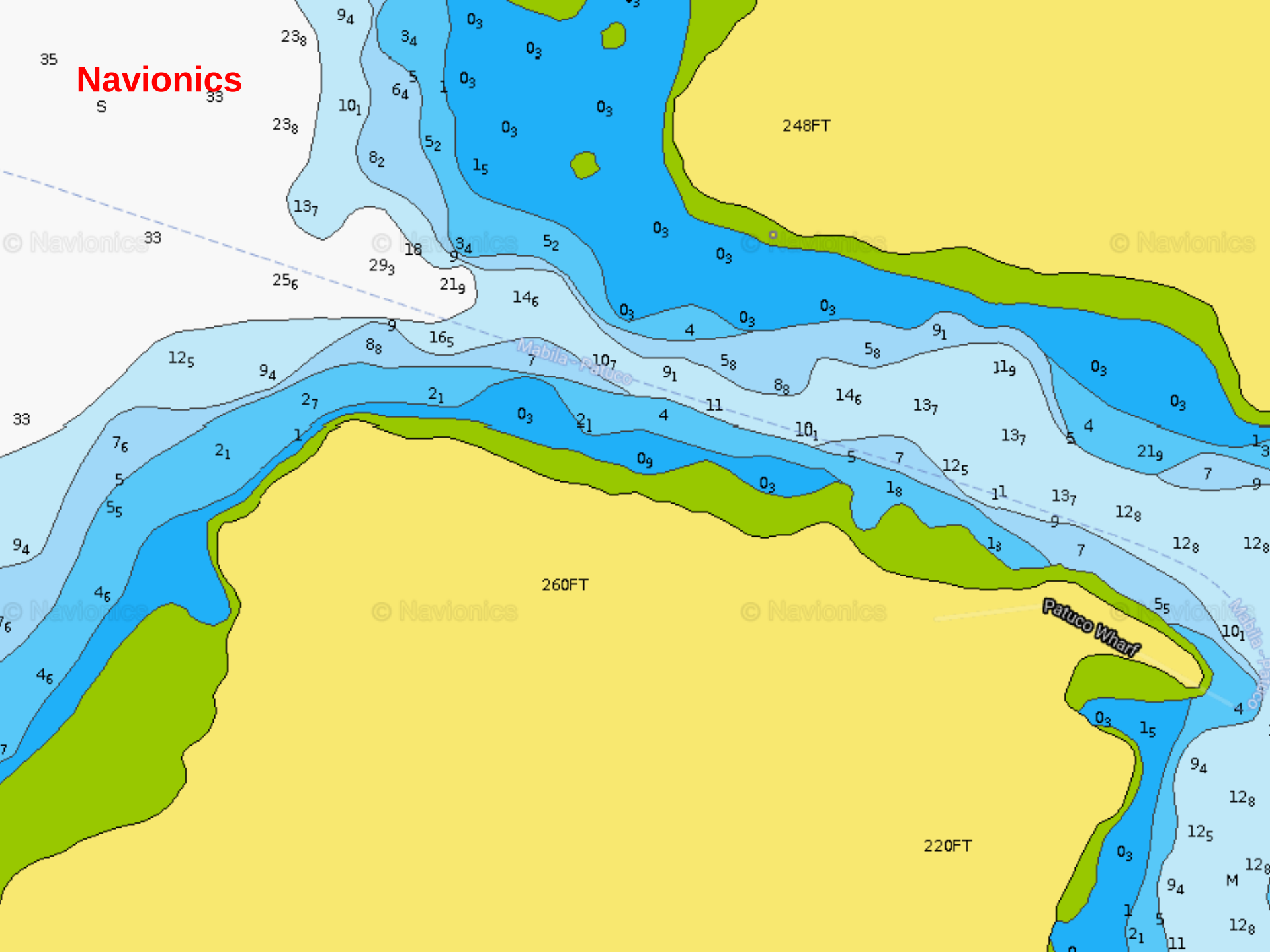
One keystroke to change maps!!!

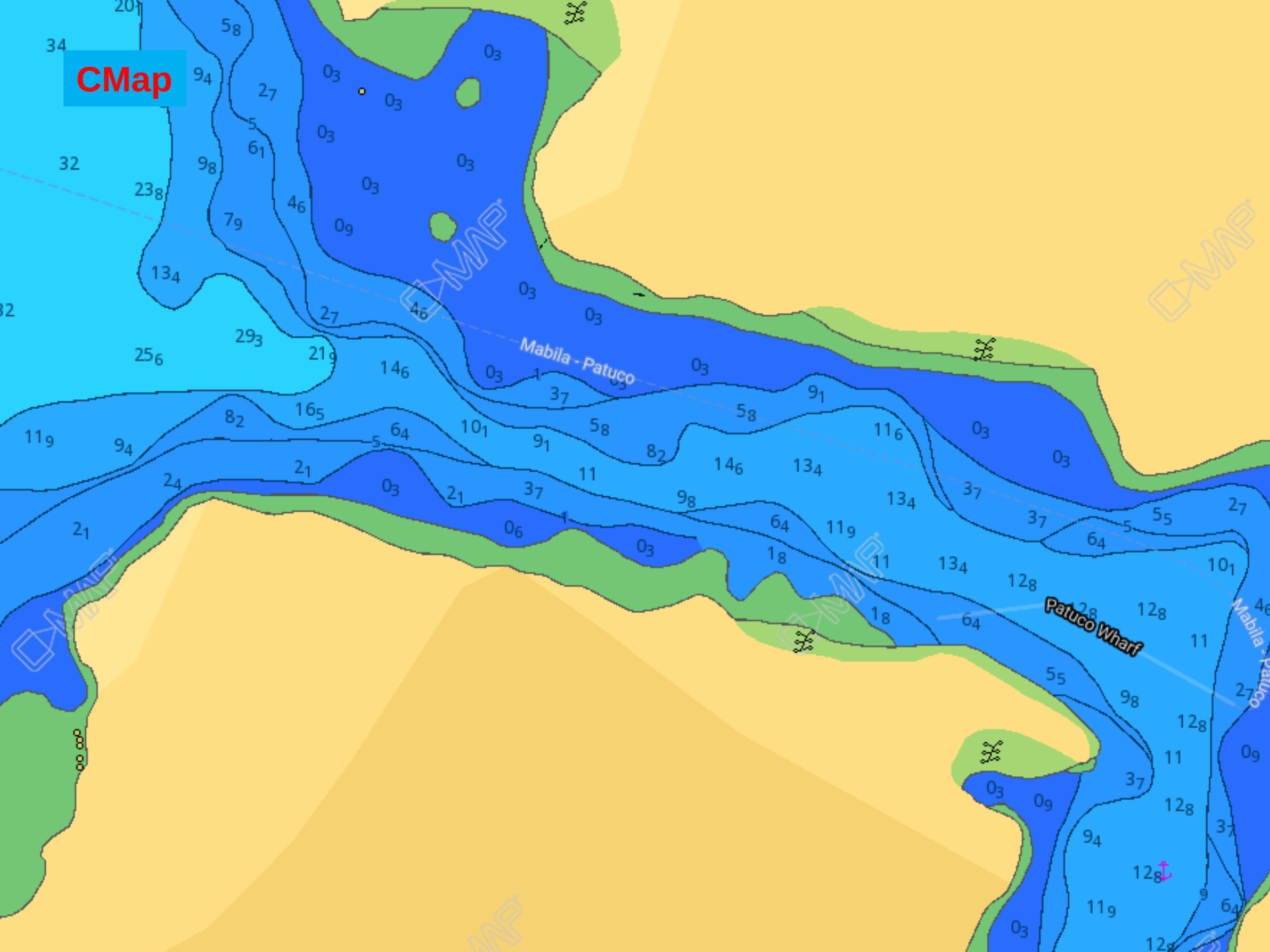

Bing
Mabila - Patuco
Patuco Wharf
Mabila - Patuco

ArcGIS
Mabila - Patuco
Patuco Wharf
Mabila - Patuco

Yandex
Yandex
Mabila - Patuco
Patuco Wharf
Mabila - Patuco

Google
Mabila - Patuco
Patuco Wharf
Mabila - Patuco


Navionics
248FT
260FT
220FT
Mabila - Pafuco
Pafuco Wharf

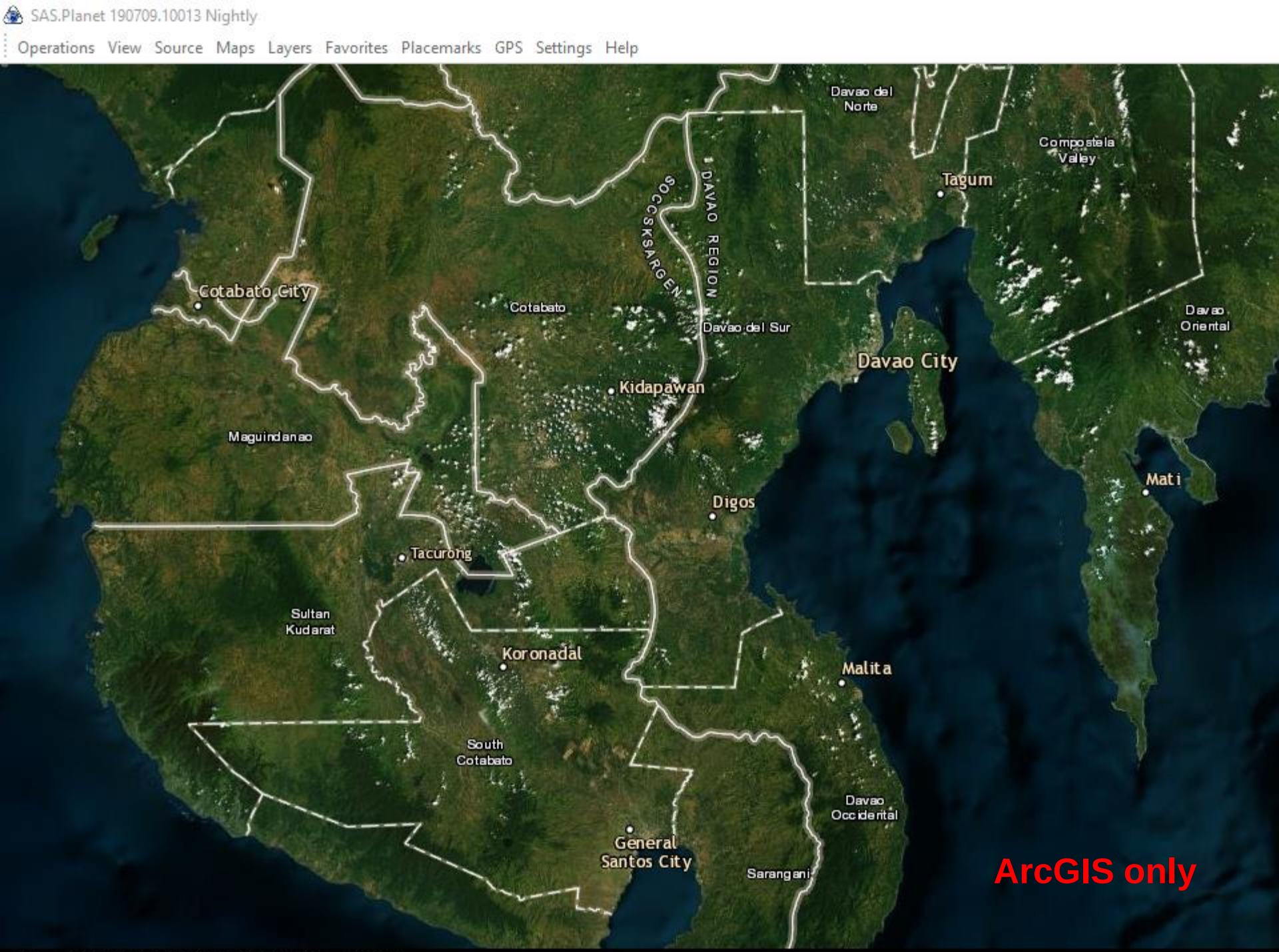

CMap
Mabila - Patuco
Patuco Wharf
Mabila - Patuco

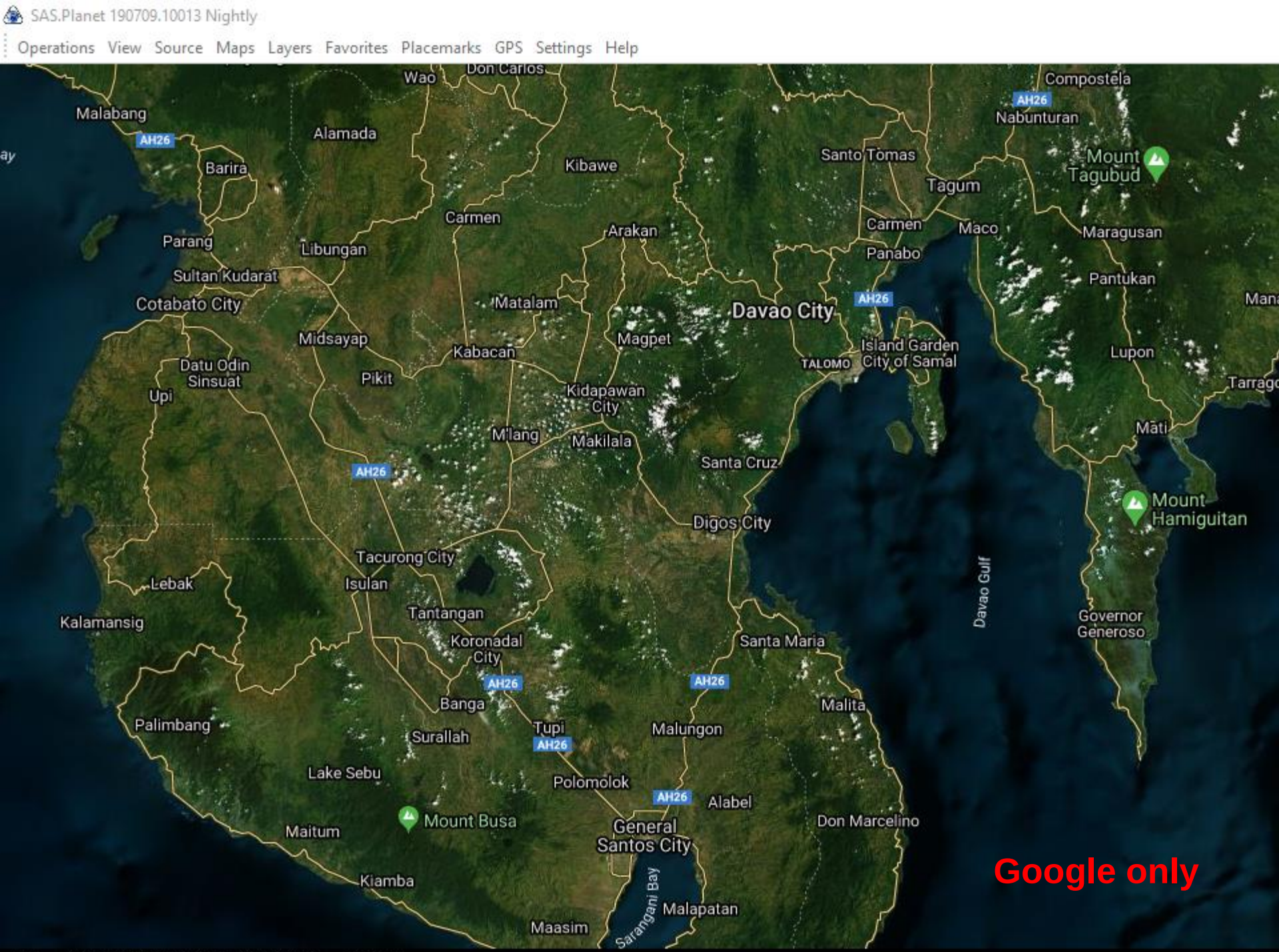
Layers

- Layers are “overlays” to the map that add information
- Roads, country boundaries, place names, points of interest, etc.
- I mainly use
  - Google Hybrid
  - ArcGIS Hybrid
  - sometimes one, sometimes both, sometimes none.

SAS.Planet 190709.10013 Nightly

Operations View Source Maps Layers Favorites Placemarks GPS Settings Help


SAS.Planet 190709.10013 Nightly
Operations View Source Maps Layers Favorites Placemarks GPS Settings Help
Davao del Norte
Compostela Valley
Tagum
SOCCSKSARGEN
DAVAO REGION
Cotabato City
Cotabato
Davao del Sur
Davao Oriental
Davao City
Kidapawan
Maguindanao
Mati
Digos
Tacurong
Sultan Kudarat
Koronadal
Malita
South Cotabato
Davao Occidental
General Santos City
Sarangani
ArcGIS only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Wao
Don Carlos
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Malabang
AH26
Alamada
Nabunturan
Barira
Kibawe
Santo Tomas
Mount Tagubud
Tagum
Carmen
Arakan
Carmen
Maco
Maragusan
Parang
Libungan
Panabo
Sultan Kudarat
Pantukan
Cotabato City
Matalam
Davao City
AH26
Midsayap
Magpet
Island Garden City of Samal
Lupon
Datu Odin Sinsuat
Kabacan
TALOMO
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Digos City
Tacurong City
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Governor Generoso
Kalamansig
Santa Maria
Koronadal City
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AH26
Banga
Malita
Palimbang
Surallah
Tupi
Malungon
AH26
Lake Sebu
Polomolok
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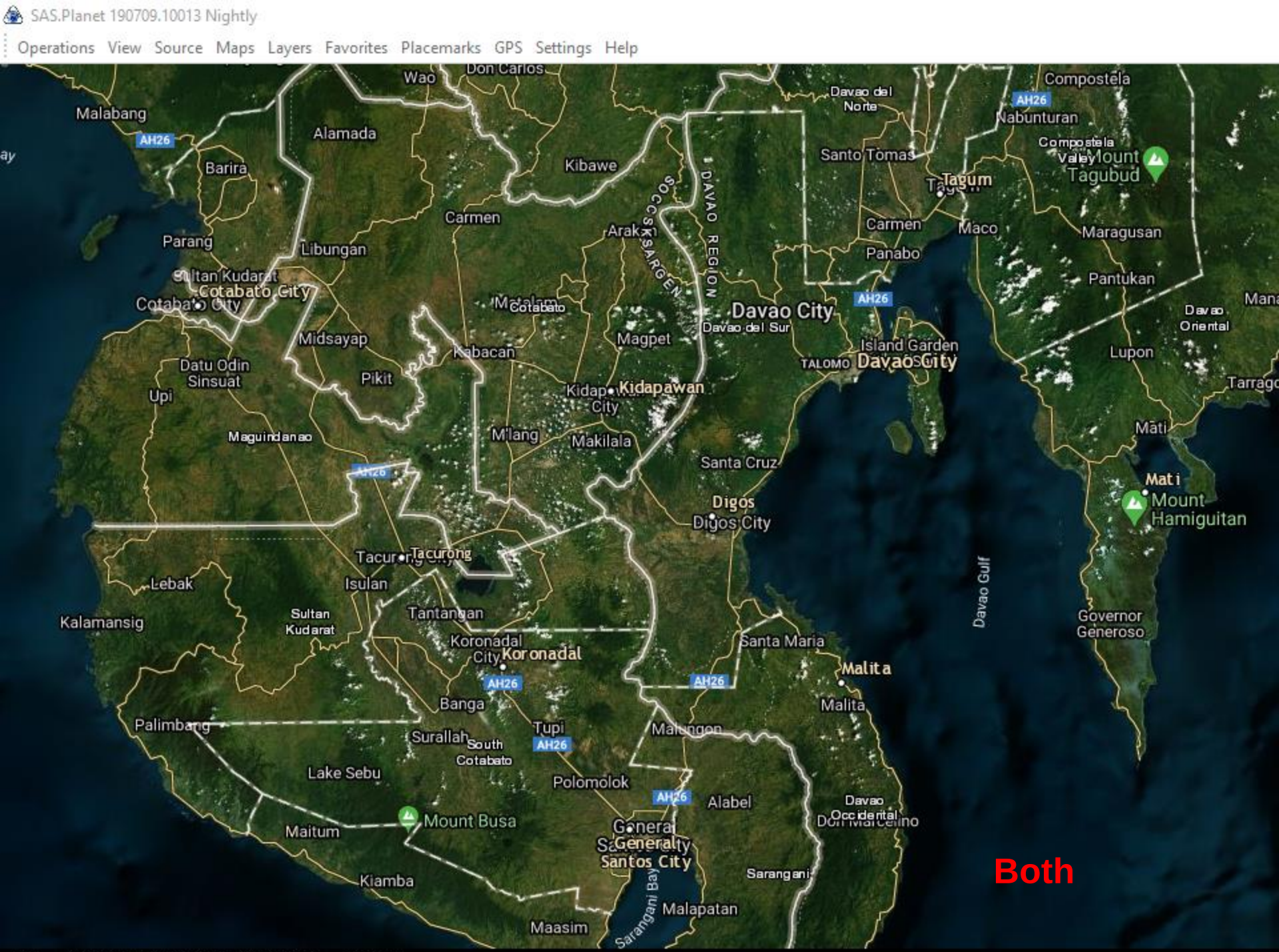
Alabel
Mount Busa
Don Marcelino
Maitum
General Santos City
Kiamba
Sarangani Bay
Malapatan
Maasim
Google only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Digos City
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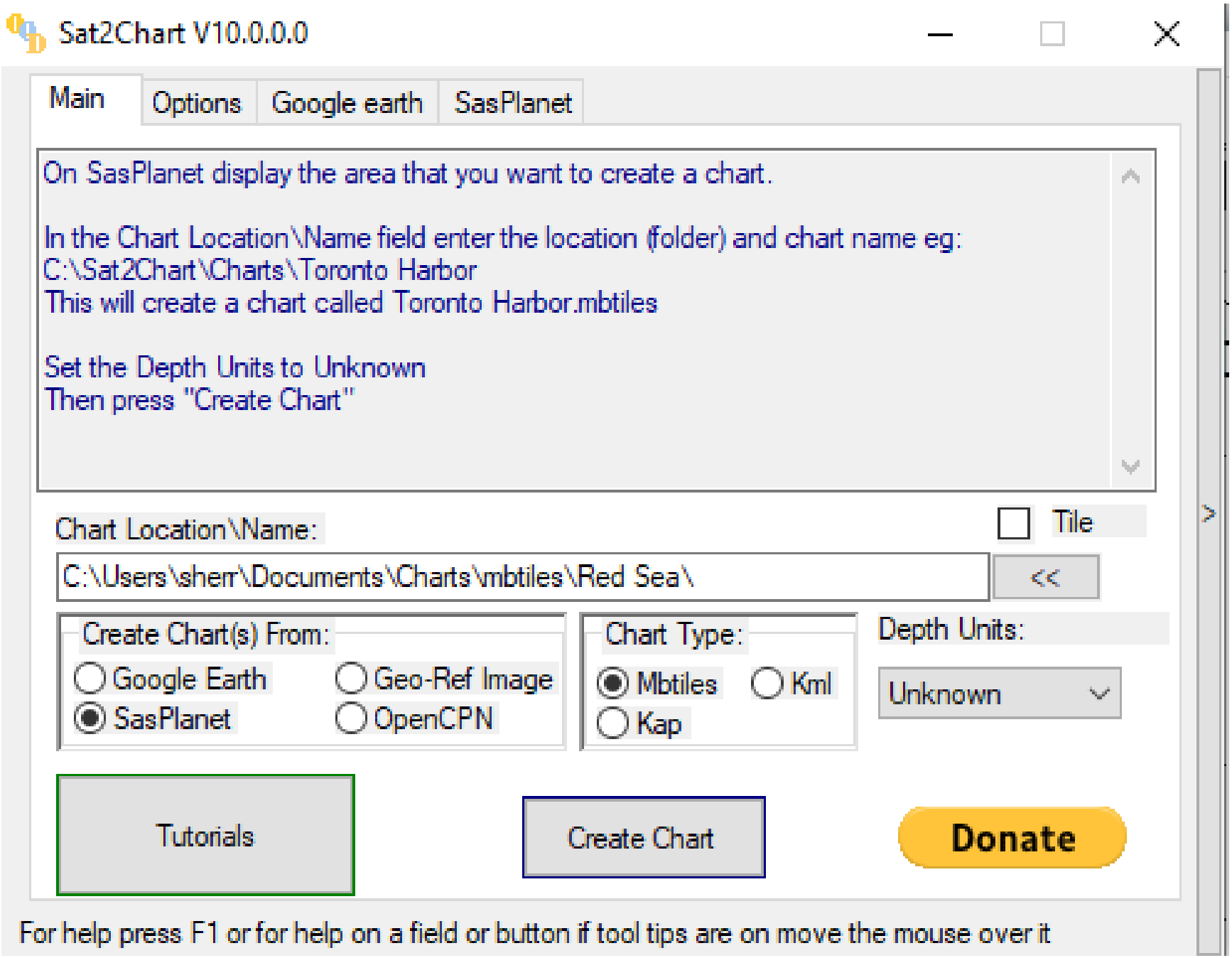
Maragusan
Pantukan
Davao Oriental
Lupon
Mati
Mount Hamiguitan
Governor Generoso
Both

Sat2Chart Basics

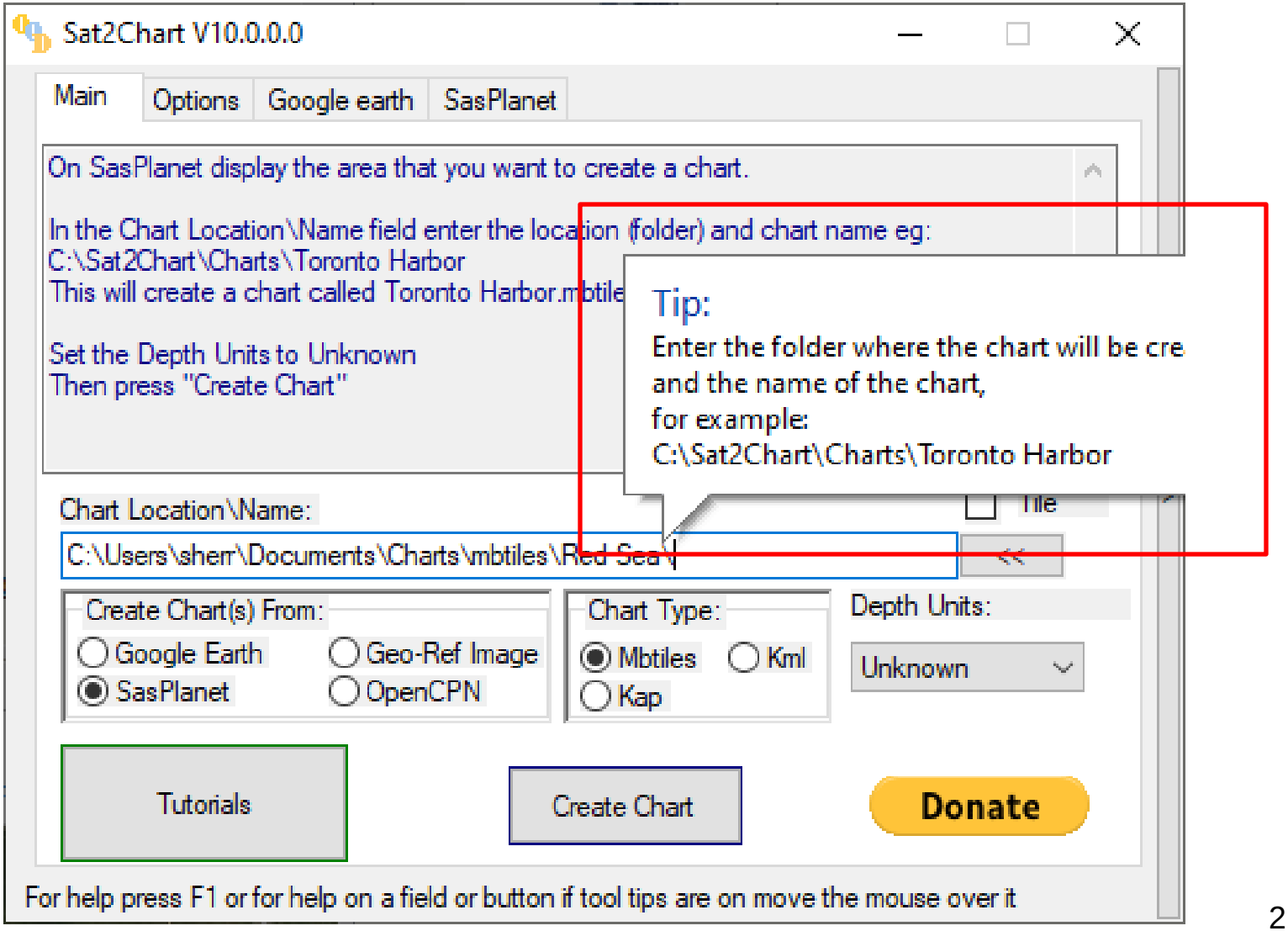
- First: Watch the tutorials, detailed, step by step (click on Tutorials button on Sat2Chart main screen)
  - Sat2Chart Overview (10 minutes)
  - Sat2Chart Basics (10 minutes)
- Make 1 single chart
- Make a chart of a route
- Make a chart of an area


Sat2Chart V10.0.0.0
Main
Options
Google earth
SasPlanet
On SasPlanet display the area that you want to create a chart.
In the Chart Location\Name field enter the location (folder) and chart name eg:
C:\Sat2Chart\Charts\Toronto Harbor
This will create a chart called Toronto Harbor.mbtiles
Set the Depth Units to Unknown
Then press "Create Chart"
Chart Location\Name:
Tile
C:\Users\sherr\Documents\Charts\mbtiles\Red Sea\
<<
Create Chart(s) From:
Google Earth
Geo-Ref Image
SasPlanet
OpenCPN
Chart Type:
Mbtiles
Kml
Kap
Depth Units:
Unknown
Tutorials
Create Chart
Donate
For help press F1 or for help on a field or button if tool tips are on move the mouse over it

Tool Tips

- Turn on “Field and Buttons Tips” on Options page
- Hover your cursor over any item on the screen
- See pop-up with explanation of what that does.

Tool Tips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C:\Sat2Chart\Charts\Toronto Harbor
This will create a chart called Toronto Harbor.mbtile
Set the Depth Units to Unknown
Then press "Create Chart"
Tip:
Enter the folder where the chart will be cre
and the name of the chart,
for example:
C:\Sat2Chart\Charts\Toronto Harbor
Chart Location\Name:
C:\Users\sherr\Documents\Charts\mbtiles\Red Sea
Tile
Create Chart(s) From:
Google Earth
Geo-Ref Image
SasPlanet
OpenCPN
Chart Type:
Mbtiles
Kml
Kap
Depth Units:
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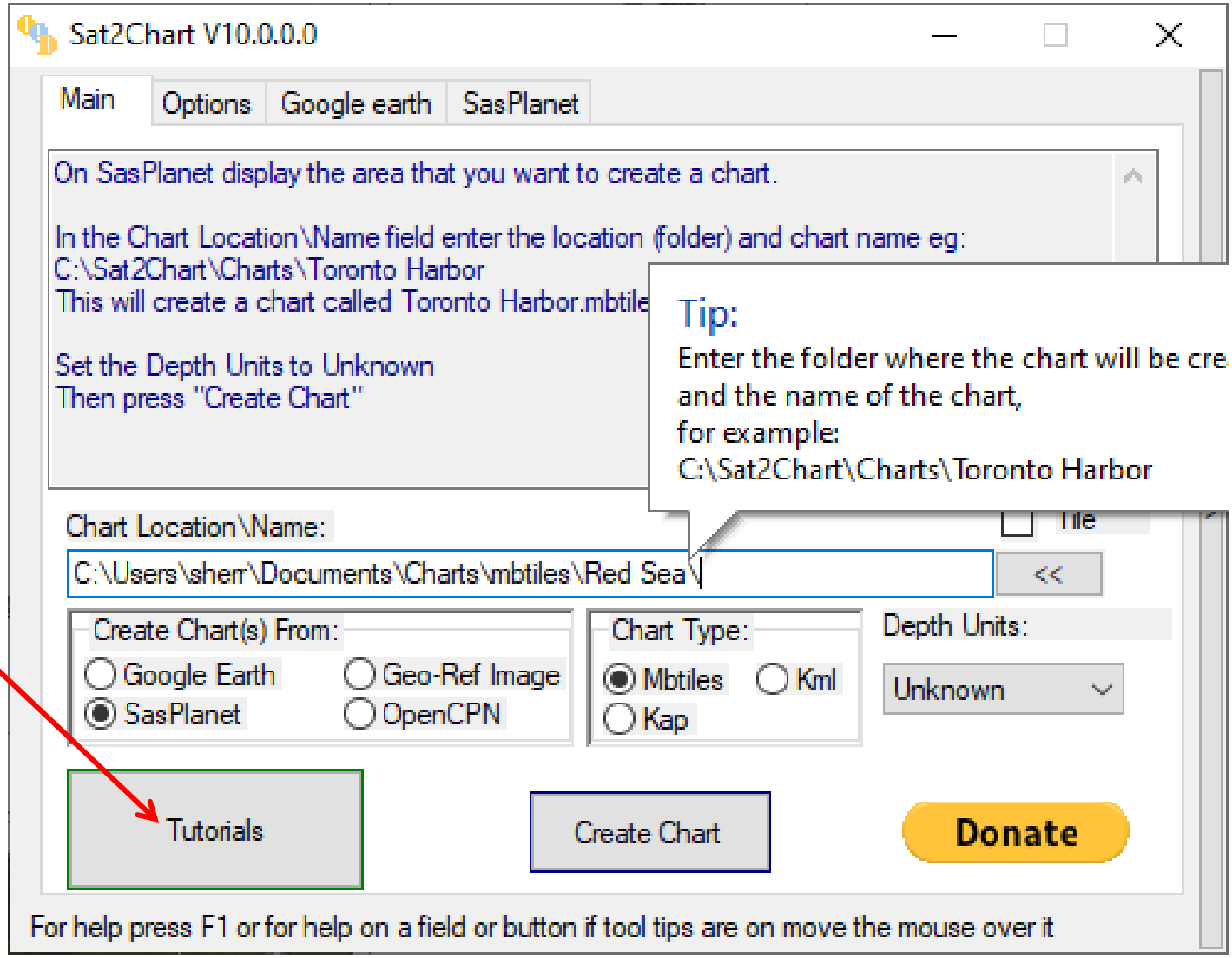
Accessing Tutorials



Click This Button

Tutorials Available

Internet Access Required

Sat2Chart Overview
Sat2Chart General
Creating a Chart from Google earth
Creating a Chart from SasPlanet
Creating a Tiled Chart from Google earth
Creating a Tiled Chart from SasPlanet
Creating Paths and Polygons Using OpenCPN and Google earth
Creating Paths and Polygons Using SasPlanet
Creating Charts from Paths and Polygons Using SasPlanet
Creating Charts from Paths and Polygons Using Google earth
Overlaying OpenCPN onto Google earth
Editing a Chart with the View Image Editor
Editing an Existing Chart with an Advanced Image Editor
Creating a Chart From a Geo_Referenced Image
Mbtiles Multi-Map Support
Mbtiles_Viewer Utility
Merge_Mbtiles Utility
Extract_High_Zoom Utility
Merging Paths and Polygons
Creating a KML Chart from OpenCPN

Links

- Sat2Chart download site http://www.gdayii.ca/Downloads.php
- SASPlanet download (already set up for Sat2Chart) http://www.gdayii.ca/Downloads/Sasplanet.zip
- GoogleEarth download (other newer versions won't work with Sat2Chart) http://www.gdayii.ca/Downloads/googleearth-win-bundle-7.1.2.2041.1.exe
- Sat2Chart (GE2KAP) Facebook Group https://web.facebook.com/groups/880328018749097/
- Presentation on why Satellite Charts are necessary http://svsoggypaws.com/files/presentations/SoggyPaws-ElectronicNavigationAlternatives.pdf

Questions?

The End
www.SVSoggyPaws.com