

Hello.

You can find lots of information about MBTiles and how to use them at <https://TheChartLocker.com>. There's even a video tutorial. Other MBTile charts can be downloaded as well and you can sign up for our infrequent newsletter which will let you know when new charts are available or older charts are updated.

If you find these charts useful, please consider making a donation via the website. Because we believe in the free sharing of cruising information, and abhor the monetization of the cruising life by both cruisers (especially YouTubers) and corporations, EVERY SINGLE CENT COLLECTED IS DONATED to organizations dedicated to protecting our oceans. Isn't that a much better thing to do with your money than give it to some cruiser making videos? Or to cruisers who charge to provide information that other cruisers will gladly share for free? That's a silly use for your hard-earned cash when you could be doing some real good.

Lastly, support OpenCPN. Many people put in a lot of time to create the best navigation program available... and it's free!
<https://opencpn.org/OpenCPN/info/supportopencpn.html>

Bonne navigation!
Bruce Balan & Alene D. Rice
s/v Migration
svMigration.com
28 March 2023

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READ THIS VERY IMPORTANT NOTICE!

It's up to you -- not these files or the people who made them -- to keep you, your crew, and your boat safe. We did our best with these files, but we make no promises.

These files have errors and do not display all possible dangers. Compare and use other chart sources. Don't be lazy. You are responsible for navigating your vessel safely.

Always use multiple sources when navigating -- including your eyes looking at the real world, not just at the chartplotter.

SHARING THESE FILES

We encourage you to share The Chart Locker MBTiles with other cruisers. Please include this readme file so others will have all the information they need to use the files effectively Thanks.

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HOW TO USE THESE FILES

OpenCPN 5.x is required to use mbtiles. They will not work in OpenCPN 4.x.

Folder Structure :: Create an organized folder structure on your computer. Unzip, and copy files into folders. For example:

```
C:/charts
C:/charts/Mexico_mbtiles
C:/charts/Mexico_mbtiles/Overview
C:/charts/Mexico_mbtiles/Mainland Pacific
C:/charts/Mexico_mbtiles/Sea Of Cortez
etc.
```

Overviews :: Many areas have a separate overview. You should include these files when you use the more detailed files for an area; it will look better when using quilting.

Zoom levels :: Overviews are Z8 & Z10, and occasionally Z12.

Coastal and island charts are Z15 & Z18, and sometimes Z12. If a single mbtile covers an entire region, it may have Z8, 10, 12, 15, & 18 and there will be no overview. Some locations may not have all zoom levels. If that is the case, charts usually include the best zoom level available. For example, some Society Islands only have Z14 with Bing Satellite.

Type of Charts :: Each zip file contains separate folders containing mbtiles based on Bing or Google Satellite imagery and vector nautical charts. Remember, the mbtiles based on vector nautical charts ARE NO LONGER TRUE VECTOR CHARTS; they are raster mbtiles at various zoom levels.

Load What You Need :: When "installing" charts in OpenCPN, you will find OpenCPN much more responsive if you only choose those folders with the charts you currently need to use. For example, if you are sailing in Mexico, don't include charts for French Polynesia.

Chart Groups :: USE CHART GROUPS! We highly recommend reviewing OpenCPN's Chart Group documentation and using chart groups with MBTiles. For example, if you are sailing in the Sea of Cortez, create three groups: Nav, BingSat, and GoogleSat. Put the Sea of Cortez Navionics charts in one group, the Sea of Cortez Bing satellite charts in another, and the Google satellite charts in another. Then you can easily switch back and forth between the type of chart you want to view. To switch chart groups, use the 1, 2, 3, etc. keys, or right-click and select Chart Groups. Again, read OpenCPN's Chart Group documentation. It's a cool feature; another proof that OpenCPN is the best charting program out there. Thanks OpenCPN Developers!

Quilting :: Sometimes using these charts in OpenCPN works best with Quilting turned off (Press the 'Q' key). This is especially true if you are not limiting the active charts by using chart groups. Experiment to see what works best for you. This is really important: Clicking on a chart in the OpenCPN chartbar at the bottom of the screen excludes the chart when quilting is off, and selects the chart when quilting

is on.

OpenCPN 5.0 Release Notes about MBTiles ::

OpenCPN treats the MBTile format different from normal raster and vector charts. MBtiles are NOT fully capable and quiltable charts. They are used as switchable overlays. This is seen as the best compromise considering the unknowable zoom composition and accuracy of tilesets loaded from unknown sources.

MBTiles are shown as switchable overlays to whatever base chart sets are loaded. In the picture below, the background map is the base-map and the MBTiles is a satpic overlay. There are four charts in the chart-bar. All are MBTiles. Three are of a darker shade with a red "X". One is a lighter shade of violet and represents the visible satpic. Left click on a MBTiles piano key is a visibility toggle shortcut. Same effect as Right-click->"hide" on a piano key. Clicking on one of the darker shade buttons makes that MBTile chart visible. The button changes to a lighter shade and the red "X" disappears.

With MBTiles it's advisable to show the charts outline - use the "O" shortcut key. If a chart is not visible, and there is no red "X" on the piano key, zoom in until it's visible.

MBTiles use the Web Mercator projection, with possible quite large errors in geo referencing. In real life these large errors are hard to find.