Claims

1. A method, comprising,

receiving a user request for map information at a map tile server;

requesting one or more base map tiles from a remote server based on the user request, the request including zoom level information and tile position information;

at the map tile server:

normalising the request based on the zoom information and the tile position information,

defining a map view area based on the normalised request,

obtaining vessel data relating to a plurality of vessels,

determining for each of the plurality of vessels if the vessel lies within the map view area, and

creating a new map tile comprising the vessel data for the vessels determined to lie within the map view area;

the method further comprising causing display of the user requested base map tiles and overlaying the new map tile at a user device;

wherein defining a map view area further comprises providing the map view with an image buffer to create an extended map area; and

the method further comprising determining for each of the plurality of vessels if the vessel lies within the extended map area, and wherein the step of creating the new map tile includes vessel data for the vessels lying in the extended map area.

2. The method of claim 1, further comprising removing the image buffer prior to causing display of the new map tile at the user device.

3. The method of any preceding claim, wherein determining if a vessel lies in the map area includes converting coordinate information into pixel information.

4. The method of claim 3, wherein the vessel data comprises latitude and longitude information, the method further comprising normalising the latitude and longitude information to correspond with the normalised base map tile data.

5. The method of any preceding claim, further comprising, for the vessels determined to lie within the extended map area, normalising the respective vessel data to conform to the normalised request, and wherein the new map tile is created based on the normalised vessel data.

6. The method of claim 5, wherein normalising the vessel data comprises converting latitude and longitude information to pixel data.

7. The method of any preceding claim, wherein the image buffer is based on the largest vessel in the map view.

8. The method of any one of claims 1 to 6, wherein the image buffer is based on the zoom level.

9. The method of any preceding claim, wherein the vessel data comprises AIS data.

10. The method of any preceding claim, wherein normalising the request comprises converting zoom information and tile position information into world coordinates.

11. The method of any preceding claim, wherein the vessel data comprises comprising coordinate information.

12. The method of any preceding claim wherein the transparent image comprises a position density heat map.

13. A computer program, computer program product or computer readable medium comprising computer-executable instructions which, when executed by a processor, cause the processor to perform the method of any of the preceding claims.