

Useful Tree Species for Africa

A species selection tool based on The Vegetation Map of Africa

Guidelines for using the tool

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We prepared two kml layers that can be displayed in Google Earth (<http://www.google.com/earth/download/ge/>; see the information provided in an associated document: [AfricaVeg_Main.pdf](#)):

- An interactive vegetation map: Africa_Vegetation.kml
- An interactive physiognomic map: Africa_physiognomic.kml

Opening these layers in Google Earth (either by clicking on the file [Africa_Vegetation.kmz](#) or via the Google Earth menu option of File > Open after saving this file) results in displaying these two layers as an overlay in Google Earth (see figure 1 [next page]). The vegetation layer has transparent polygons with a red outline, whereas the physiognomic map has coloured polygons.

Use the zoom in - zoom out facilities of Google Earth (figure 2) and the facilities to move around the map (figure 3) to locate your area of interest. Get familiarized with [navigation in Google Earth](#) via the computer mouse, keyboards shortcuts or navigation buttons in case you are not.

When clicking in the vegetation layer, a text box will appear that gives the name of the mapping unit, a hyperlink to a more extensive description of this mapping unit and information on the phytochorion (floristic region) to which the mapping unit belongs (figure 4). **It is only possible to click in the vegetation layer when this is the active layer, so it needs to be selected first - this can be done by clicking on the name of this layer from the sidebar (shown on the left in Google Earth).**

Clicking on the hyperlink provided within the text box for a mapping unit takes you to a htm document that gives more information on the mapping unit (figure 5; see also the main documentation [AfricaVeg_Main.pdf](#)). Information for mapping units that are part of **mosaic mapping units** can be accessed by clicking on hyperlinks to these mosaic mapping units (shown at the bottom of figure 6). Information for separate mapping units includes hyperlinks to species composition tables prepared in MS Excel (these files also function in OpenOffice [<http://www.openoffice.org>]; see the associated document of [Suggestions for selecting tree species.pdf](#)).

Be aware that mapping units are named after the main vegetation type that they contain, whereas a mapping unit may contain other vegetation types that are not mapped separately and also may contain smaller areas of the main vegetation types of other mapping units (figure 6; also see main documentation [AfricaVeg_Main.pdf](#)).

Google Earth allows for some additional handling facilities for the physiognomic layer. This layer can be made more transparent (first make the physiognomic layer active by clicking on its name on the sidebar, then use the slider; see figure 7; note that an alternative to making the physiognomic completely transparent is simply by not ticking the box for this layer in the sidebar). The different physiognomic types can be displayed separately in the sidebar by clicking on the + box shown before this type (figure 9). It is possible then to show separate physiognomic types by ticking the boxes in front of these types on the sidebar (figure 9).

Figure 1. Opening the Africa_Vegetation kmz layer results in an overlay of the Vegetation Map of Africa in Google Earth. The vegetation layer consists of transparent polygons with red outline, whereas the physiognomic (vegetation structure) layer has coloured polygons (see figure 7 how to change the transparency of this layer). The vegetation layers are listed under Temporary Places in the sidebar (shown on the left).

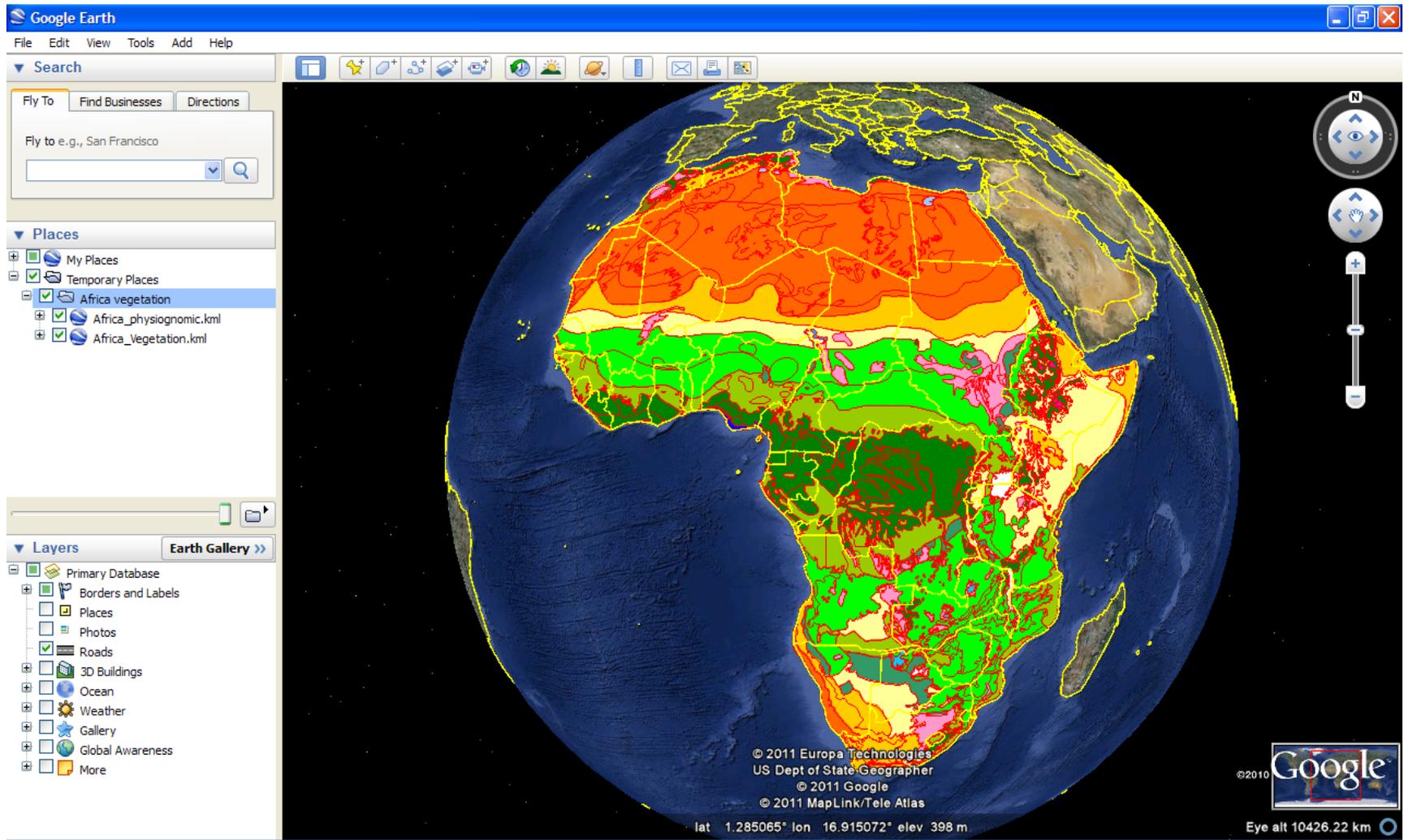


Figure 2. Use the zoom in or zoom out facilities of Google Earth to move to your area of interest (see also figure 7 how the physiognomic layer can be made more transparent)

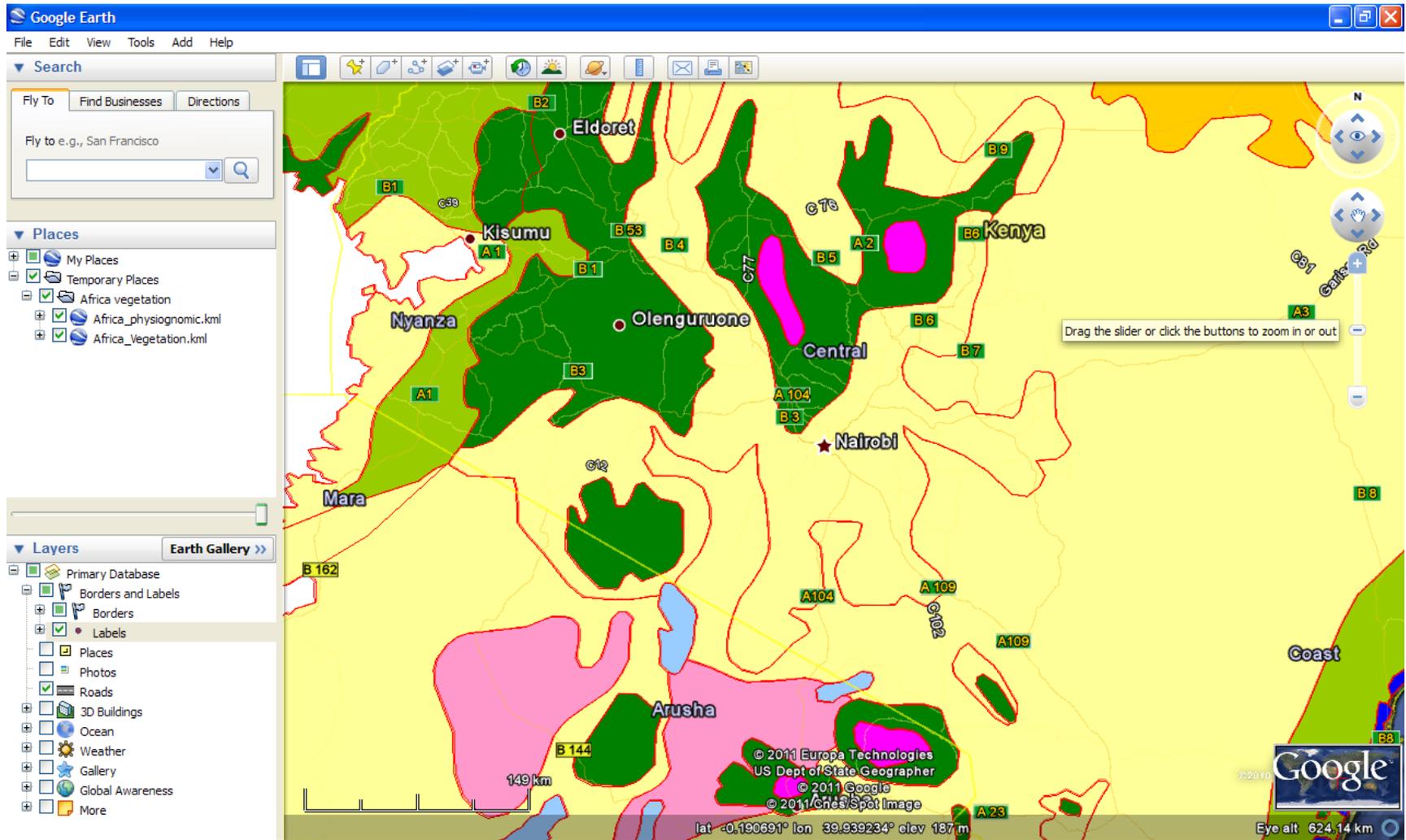


Figure 3. Move around Google Earth to move to your area of interest (see also figure 7 how the physiognomic layer can be made more transparent)

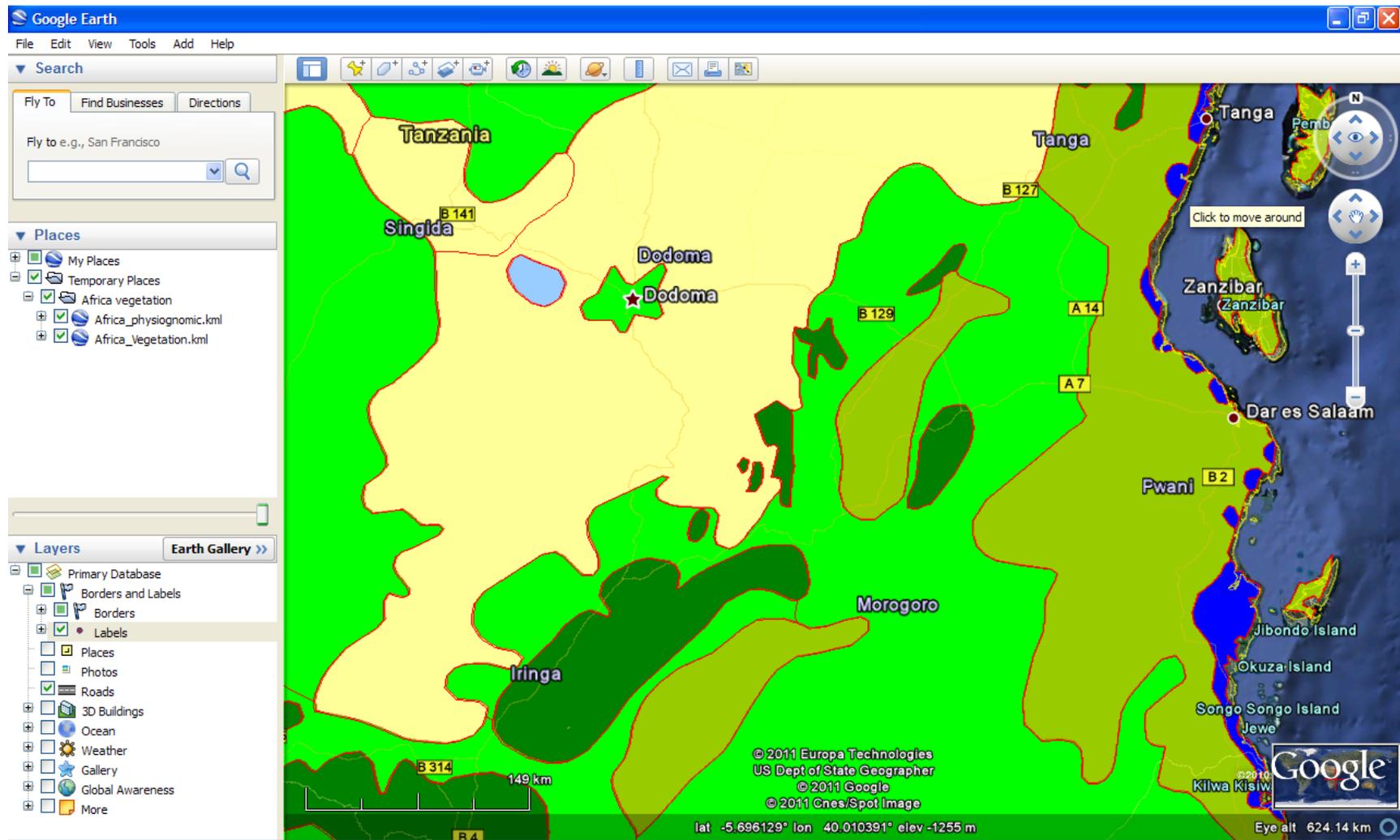


Figure 4. When the vegetation layer is active (after clicking on its name on the sidebar), clicking within a polygon gives the identity of the polygon (polygon 505 in the example), an abbreviation and hyperlink to a more extensive description of the mapping unit ([M45aM](#) in the example), the name of the mapping unit and information on the phytochorion (floristic region) to which this mapping unit belongs (iv SMCE = Somalia-Masai Centre of Endemism; see main documentation [AfricaVeg_Main.pdf](#) for abbreviations of phytochoria)

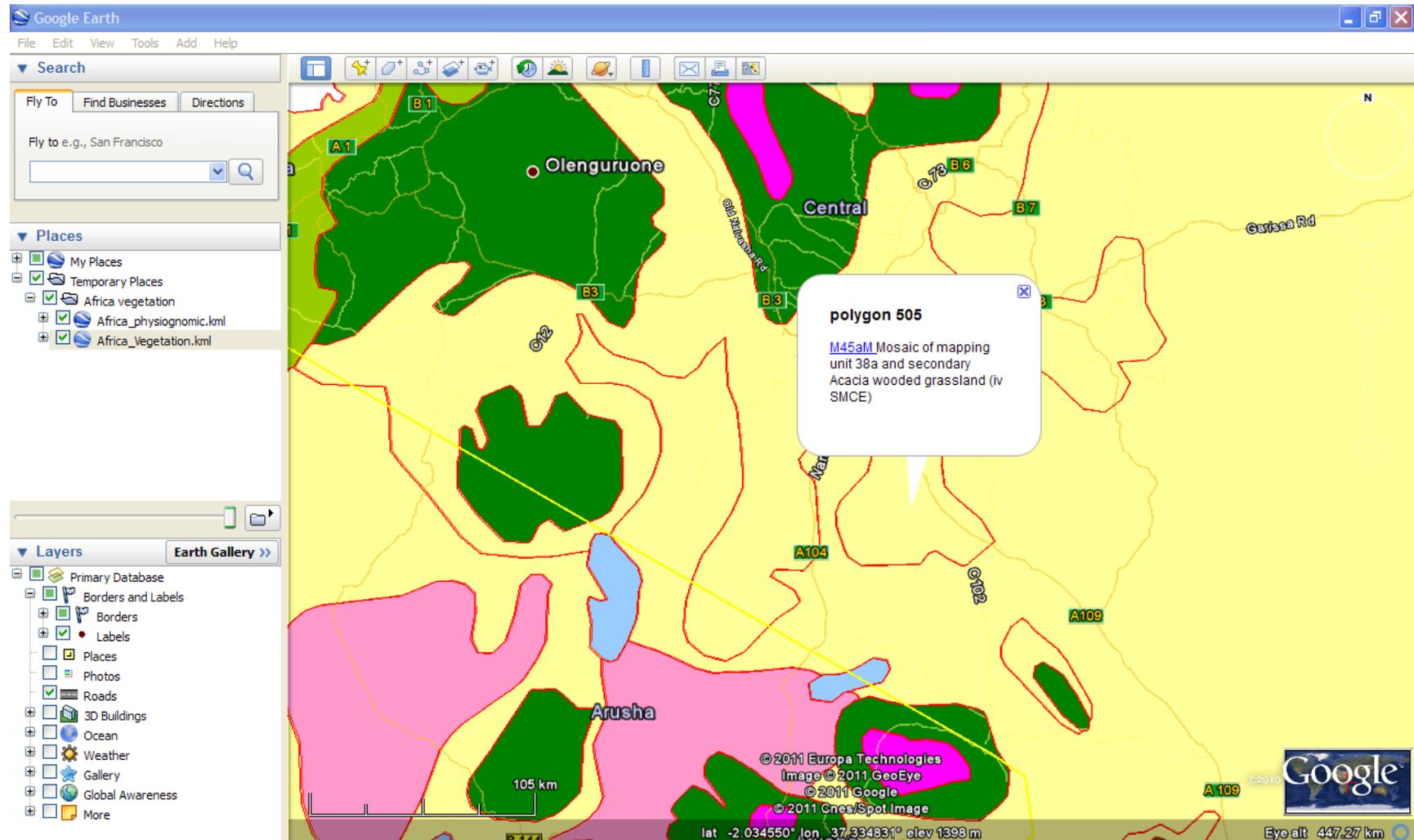


Figure 5. Clicking on the abbreviation and hyperlink of the mapping unit links to a page that provides more information. Page references refer to the memoir that accompanied the original map (see main documentation [AfricaVeg_Main.pdf](#)). Use the button of "Back to Google Earth" to return to the map.

The screenshot shows a Google Earth browser window. The address bar displays the URL: <http://www.worldagroforestry.org/downloads/africamap/M45aM.htm>. The page content is as follows:

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Mapping unit 45aM

- Mosaic of East African evergreen bushland (mapping unit 38a) and secondary Acacia wooded grassland (not mapped separately)
- Major vegetation type: bushland and thicket mosaics
- Phytochorion: Somalia-Masai Region (iv)
- Main types:
 - East African evergreen bushland (see mapping unit 38a)
 - Secondary Acacia wooded grassland (see mapping unit 38a)
- Other type not mapped separately: Somalia-Masai edaphic grassland (see mapping unit 42a)

Species composition

- Mapping unit 38a ([M38a.htm](#))
- Mapping unit 42a ([M42a.htm](#))

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Figure 6. Clicking on the abbreviation and hyperlink of the mapping unit links to a page that provides more information (the figure shows the lower half of this page). Two hyperlinks shown at the bottom ("Link to main composition tables") link to two species composition tables (one that crosstabulates different vegetation types that occur in the mapping unit with plant species that occur within these vegetation types; another one that crosstabulates useful tree species with documented uses for these species; these files were prepared in MS Excel but can also be opened with OpenOffice).

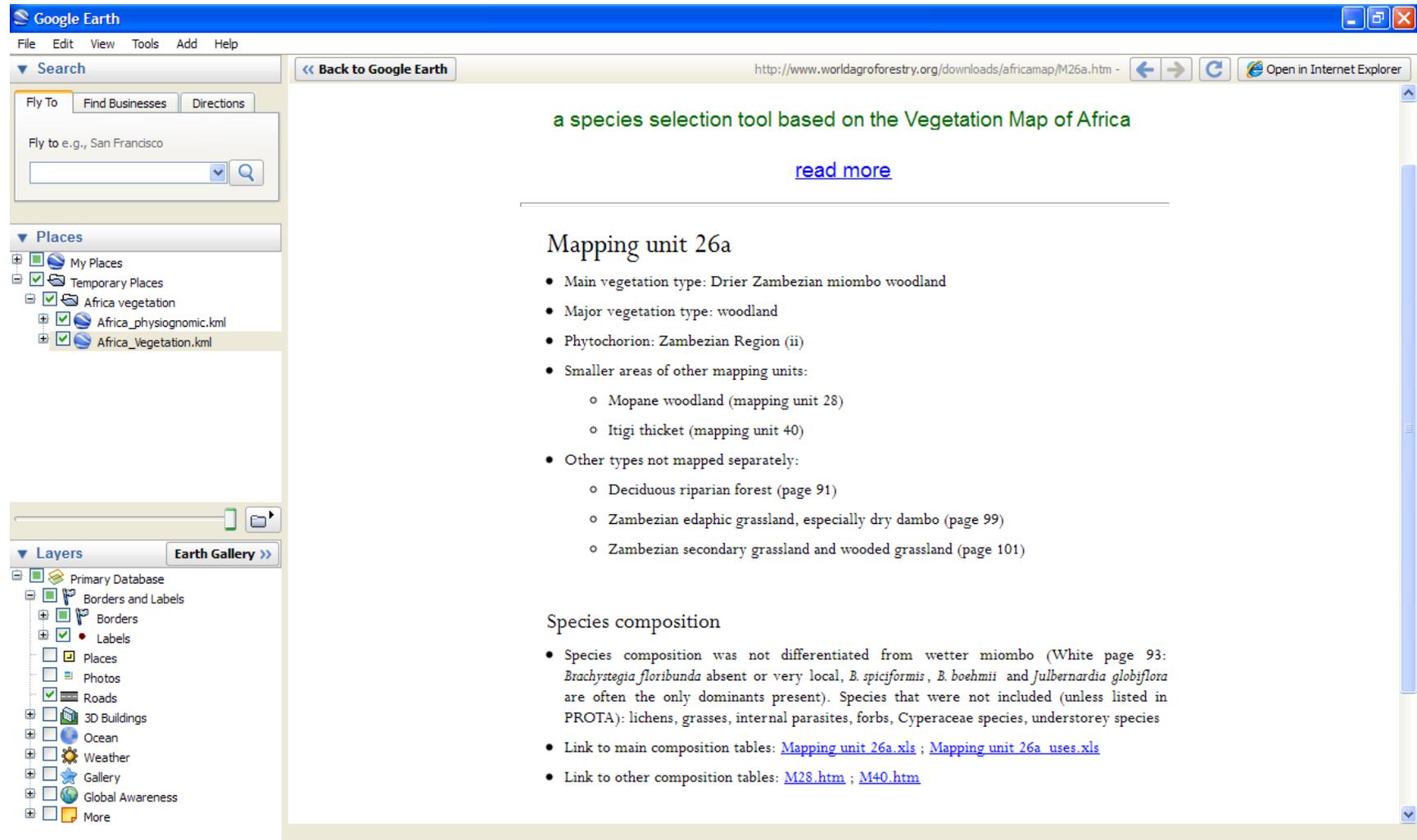


Figure 7. It is possible to make the physiognomic layer more transparent. First make this layer active by clicking on its name from the sidebar, then use the slider from the sidebar to make it more transparent.

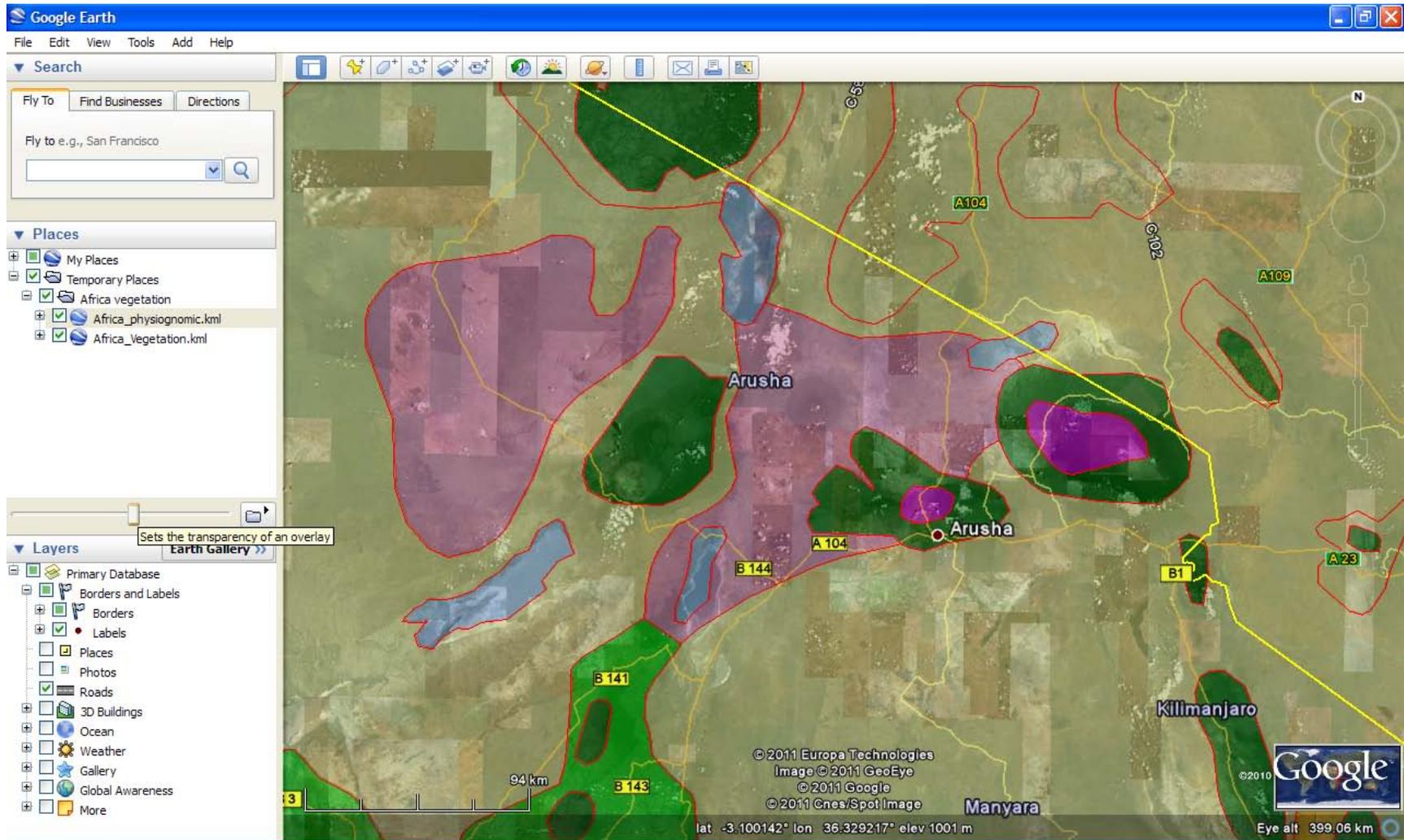


Figure 8. When the box for the vegetation layer is not ticked on the sidebar, whereas the physiognomic layer is the active layer, clicking within a polygon gives the name of the physiognomic type (BUSHLAND AND THICKET in the example) and the criteria by which this physiognomic type was defined.

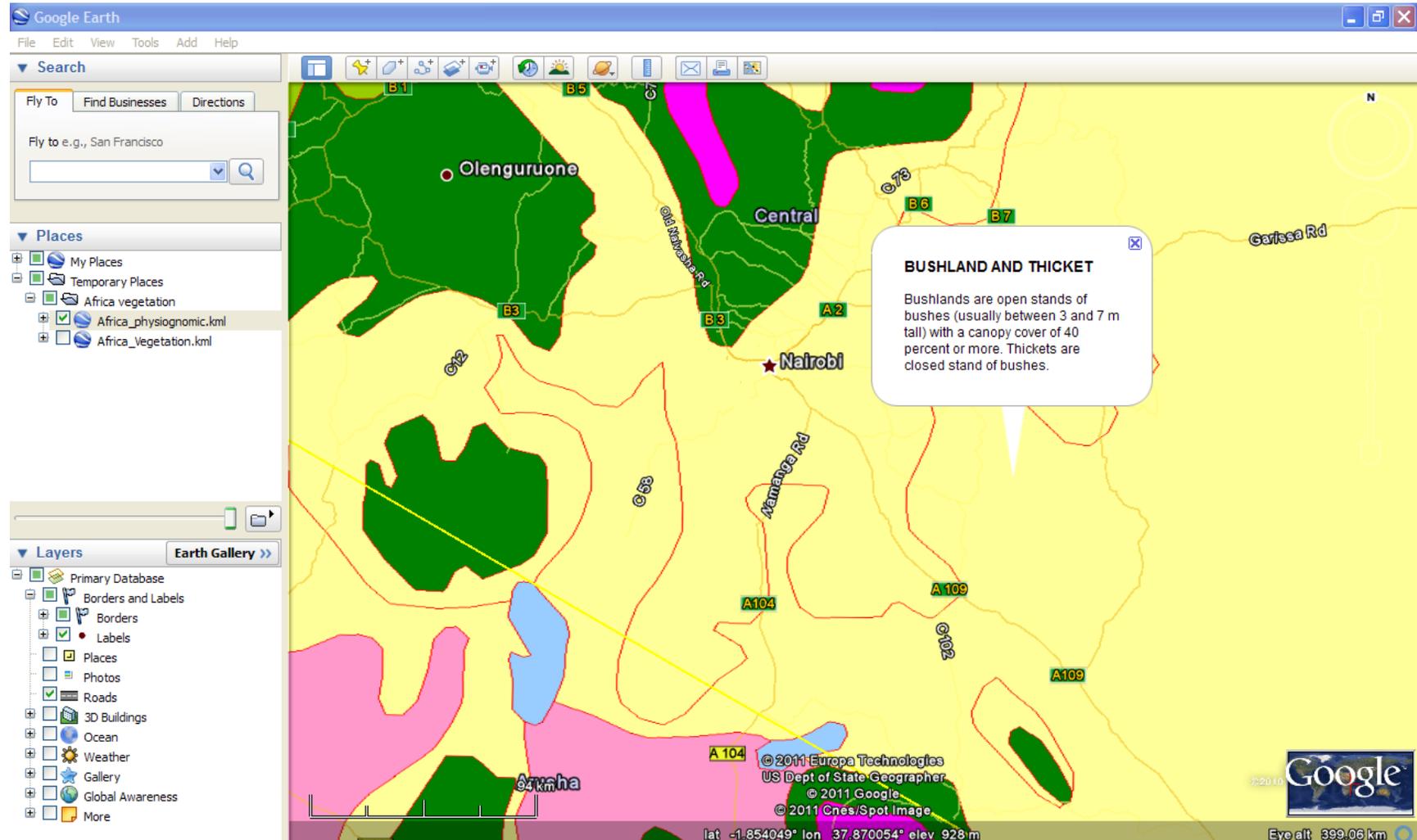


Figure 9. It is possible to show or hide the different physiognomic vegetation types from the sidebar.

