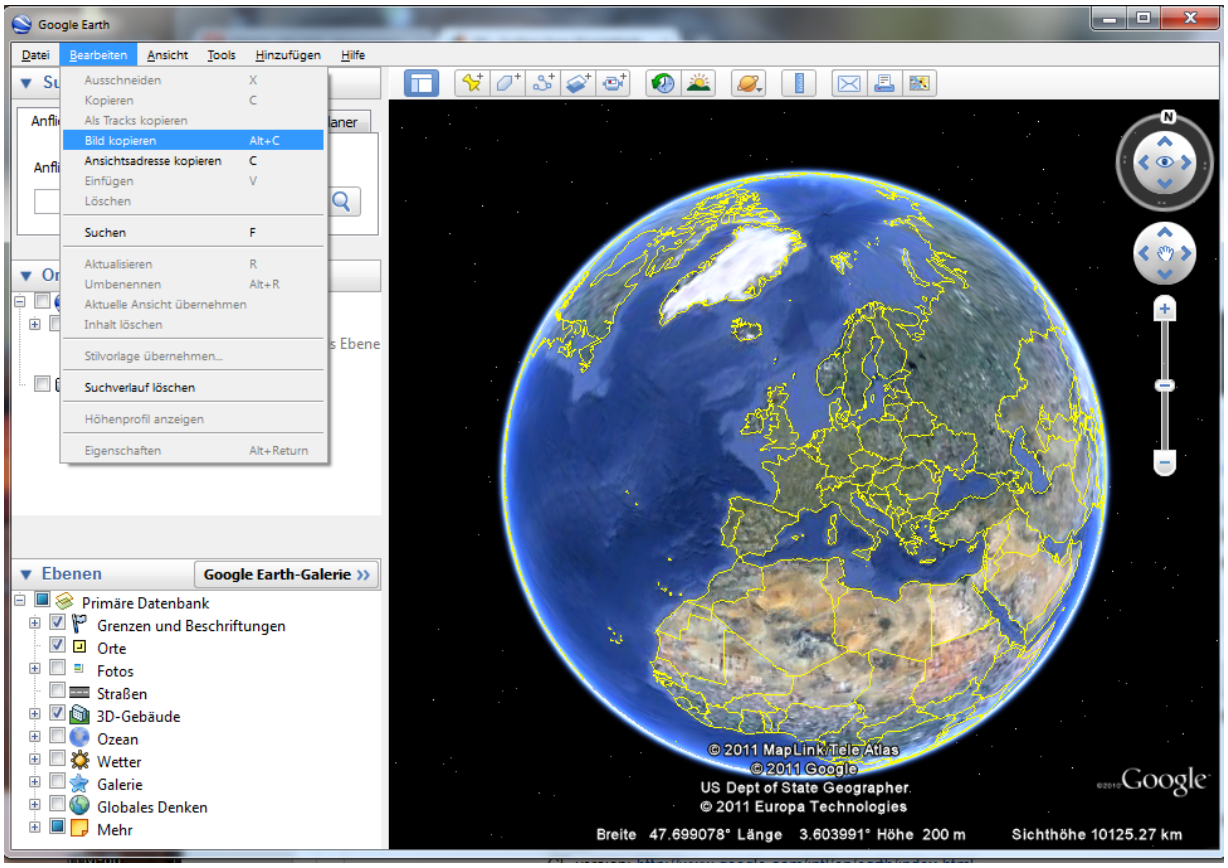
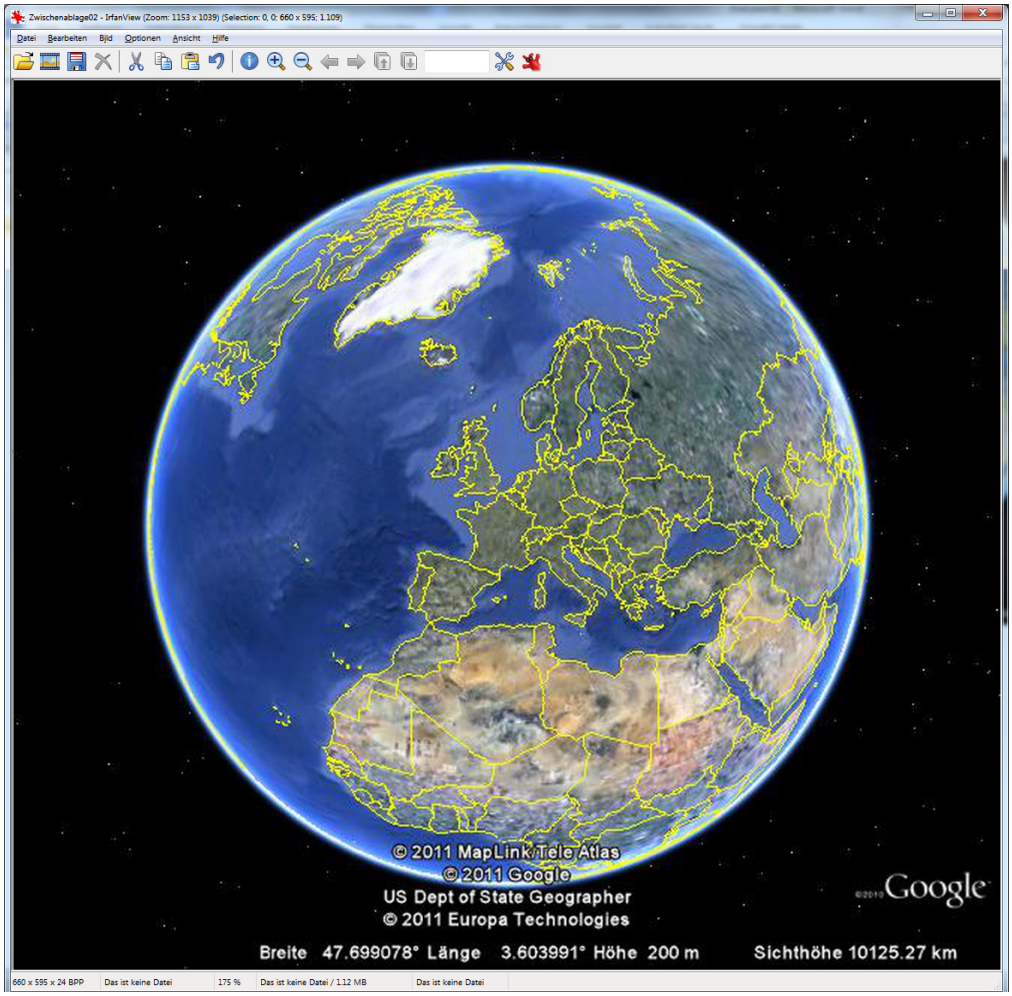
How to use 3D - Surface from GoogleEarth

1. Download and install/ set to Matlab path:
   a. GoogleEath: http://www.google.com/intl/en/earth/index.html
   b. Pos2Dist: http://www.mathworks.com/matlabcentral/fileexchange/5256-pos2dist
   c. JmouseEmu: http://www.mathworks.com/matlabcentral/fileexchange/28357-jmouseemu-mouse-emulator-v2-2
   d. inputEmu: http://www.mathworks.com/matlabcentral/fileexchange/28603
   e. ClipboardImage: http://www.mathworks.com/matlabcentral/fileexchange/14584-clipboardimage

2. Check if in GoogleEarth the “Alt-C” key-combination is available an if it works:
   You will find it under Menu: Edit, Copy Picture



Press “Alt-C” and insert it in an image-program (eg. Irfanview)



If it works, you can go on.

3. Run the Matlab file ge_test1 without a matlab-breakpoint and without playing around with mouse or keyboard. If the surface appears everything is fine. If image data will not appear, you maybe need to change the jmouseemu-parameters (line 72) for monitor position or the pause-time (line 74).

```
61 -          Z(i,j) = pot.Altitude;
62 -      end;
63 -  end;
64
65    % calculate distance an heigt
66 -  X_dist = (X + 1).*0.5.*dist_u;   % distance in km
67 -  Y_dist = (Y + 1).*0.5.*dist_o;   % distance in km
68 -  Z_dist = Z;                      % heigt in meter
69
70
71    % get a colored image from GE --> heavy workaround!!
72 -  jmouseemu([600,500],'normal');      % set actual view active          need: http://www.mathworks.com/matlabcentral/fileexchange/28357-jmouseemu-
73 -  inputemu('key_alt','c');            % copy image to clipboard         need: http://www.mathworks.com/matlabcentral/fileexchange/28603
74 -  pause(2);                           % wait for image in clipboard
75 -  [imdata] = clipboardimage('jpg');   % get image from clipboard;       need: http://www.mathworks.com/matlabcentral/fileexchange/14584-clipboardi
76
77    % Convert to indexed image
78 -  [X2, map2] = rgb2ind(imdata, 256);  % not more than 256 because of uint8 is necessary
79
```

Guess the monitor position of the GoogleEarthPicture in pixel (after Matlab calls it) and take one pixelposition within the picture for the jmousemu-command.
Take more time (4 seconds, …) if the pause is too short, while copying the picture to clipboard.