

Kansas Earthquake 2D Plot Java Applet

by John R. Victorine

Introduction

This applet is a two dimensional plot of Earthquake Magnitudes versus Dates for Kansas Earthquakes. The Earthquake data is stored in the "gis_webinfo earthquakes" ORACLE Database Table on the Kansas Geological Server.

The plot displays the data collected from 17 July 2014 to present. The Applet accesses the earthquake data using an ORACLE PL/SQL Stored Procedure that will generate an Extensible Markup Language (XML) data stream, the applet will then parse the XML Stream for the earthquake data and plot automatically, the ORALCE PL/SQL Stored Procedure URL is as follows,

http://chasm.kgs.ku.edu/ords/iqstrat.ks_earthquakes_pkg.getXML

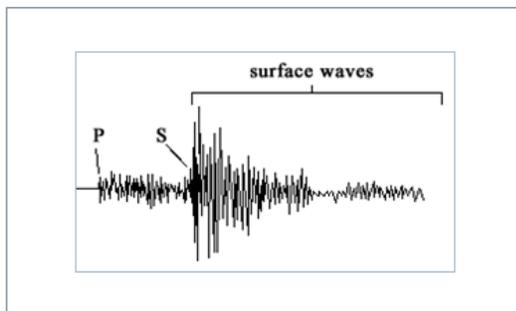
To access the Kansas Earthquakes 2D Plot, go to the web address,

http://www.kgs.ku.edu/PRS/Ozark/Software/KS_Earthquake_2DPlot/index.html at the top



of the web page there is a menu "Main Page|Description|Applet|Help|Copyright & Disclaimer|". Select the "Applet" menu option a "Warning - Security" Dialog will appear (*"Do you want to run this application?"*). The program has to be able to read and write to the user's PC and access the Kansas Geological Survey (KGS) Database and File Server, ORACLE requires this dialog. The program does not save your files to KGS, but allows you to access the KGS for well information. The program does

not use Cookies or any hidden software. The blue shield on the warning dialog is a symbol that the Java web app is created by a trusted source, which is the University of Kansas. Select the "Run" Button, which will display the Seismic Image Icon Button in the "Enter" Panel illustrated below,



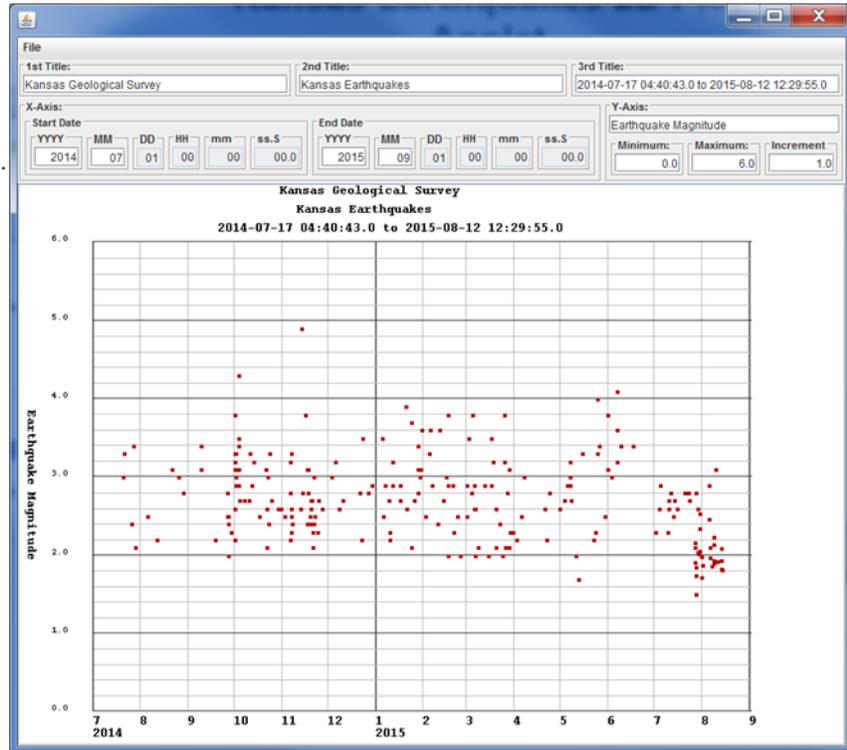
Enter

This program will automatically read the earthquake data from the Kansas Geological Survey (KGS) ORACLE Database and plot the data.

Plot Control Panel:

- Change the Titles on the plot.
- Change the Y-Axis Earthquake Magnitude Limits.
- Change the Start Date and End Date .

Y-Axis
Earthquake
Magnitudes

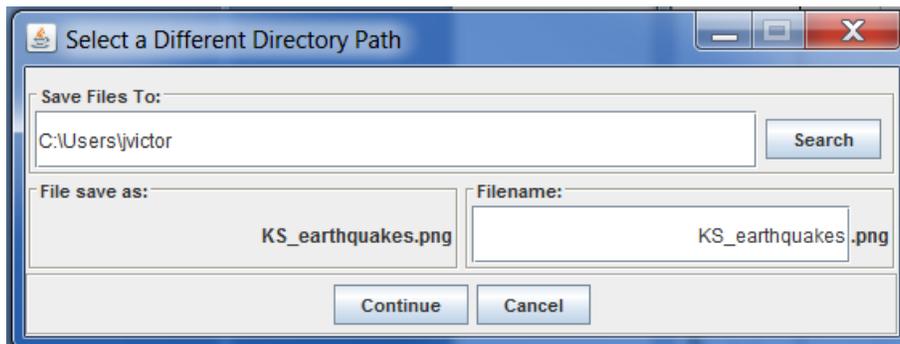


X-Axis – Start & End Dates

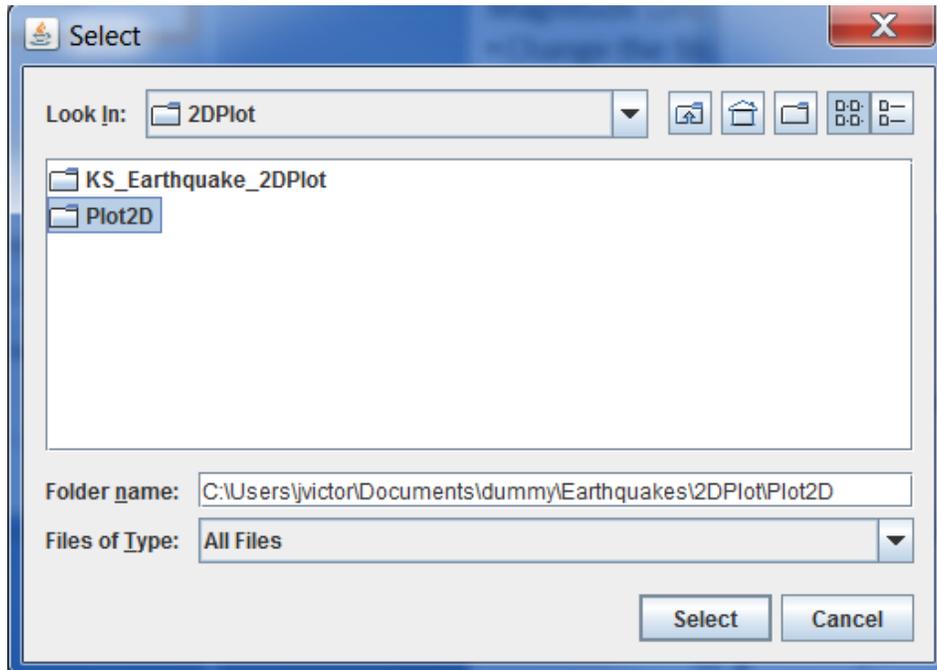
The plot control is in the panel above the 2D Plot. The user can change the 3 titles, both axes limits. The Start Date and End Data are controlled by Year and Month numbers. The program X-Axis will then plot the Months as numbers and show the years below.

Create Portable Network Graphics (PNG) Image and a Portable Document Format (PDF)

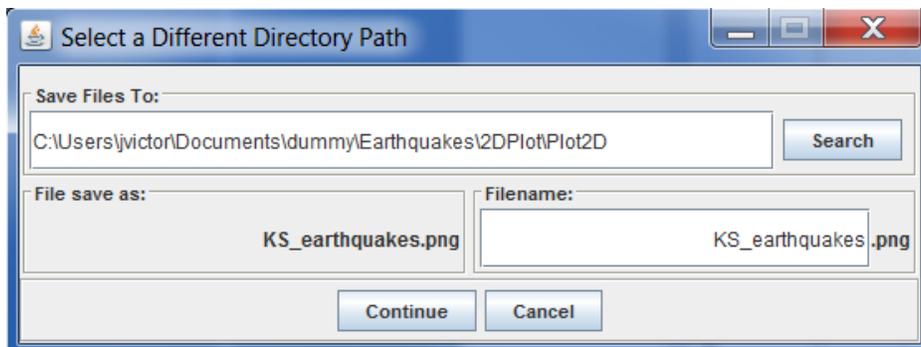
To save the image to your PC as a Portable Network Graphics (PNG) Image select the “File” Menu option and then click on the “Create PDF Document Plot” menu button. This will display the “Select a Different Directory Path” dialog.



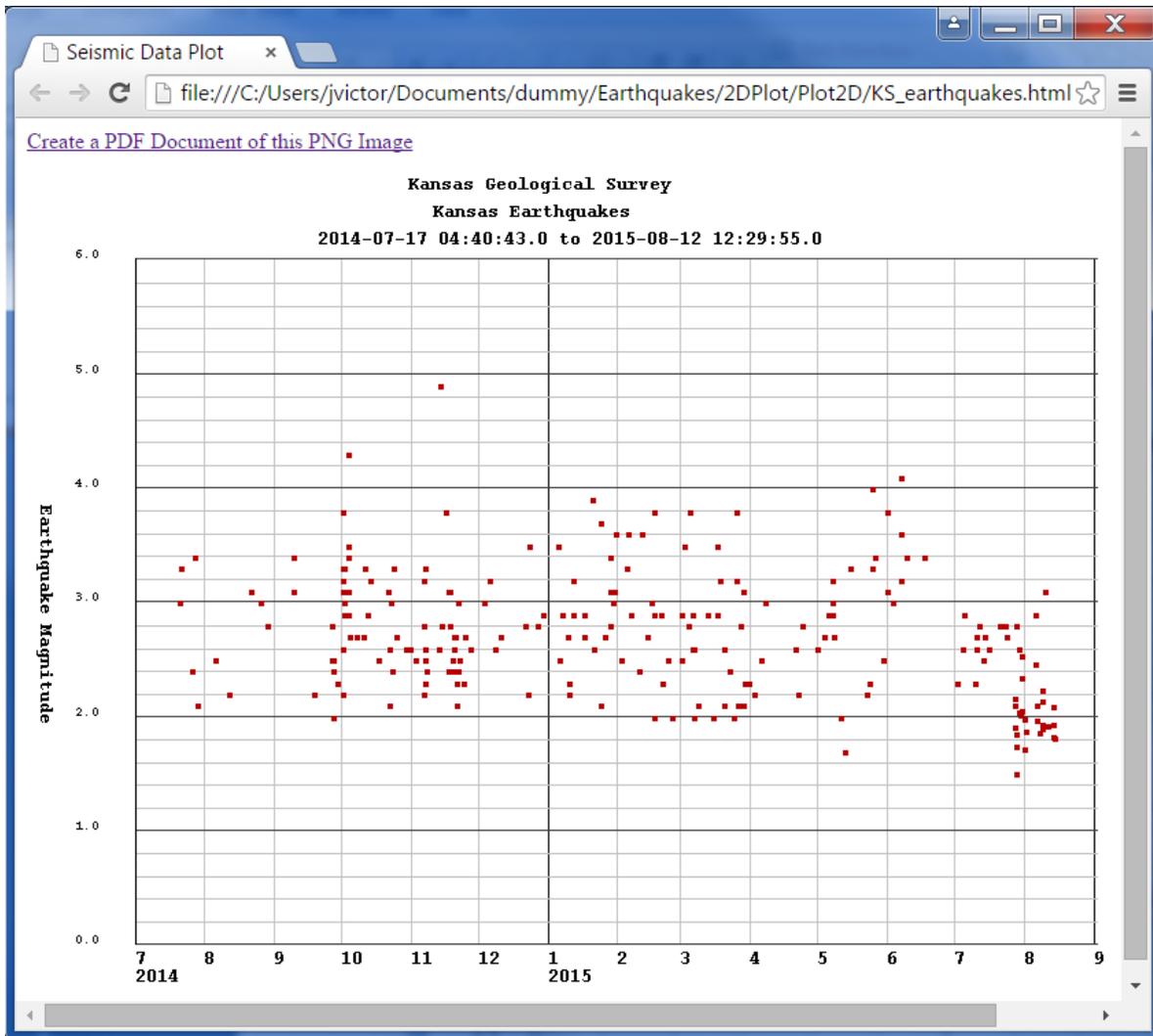
The default directory path is the user's home directory, to change the directory path select the "Search" Button to display the Search Directory Path Frame.



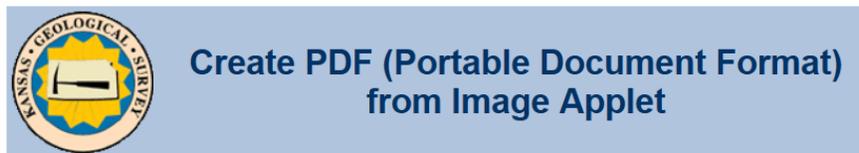
Search your PC directory path to the directory you wish to save the plot then click the "Select" Button to return to the "Select a Different Directory Path" Frame. The directory path will be transferred to the "Save File To" Text field. The default file name of the generated PNG – Portable Network Graphics image and the HTML file is KS_earthquakes, which the user can change to any name they wish.



Select the "Continue" button to generate the report. The web app will automatically collect the data and generate the web page. The web page will automatically display,



To create a Portable Network Document (PDF), click on the “Create a PDF Document of this PNG Image” Link. This will display the “Create PDF (Portable Document Format) from Image” Applet.

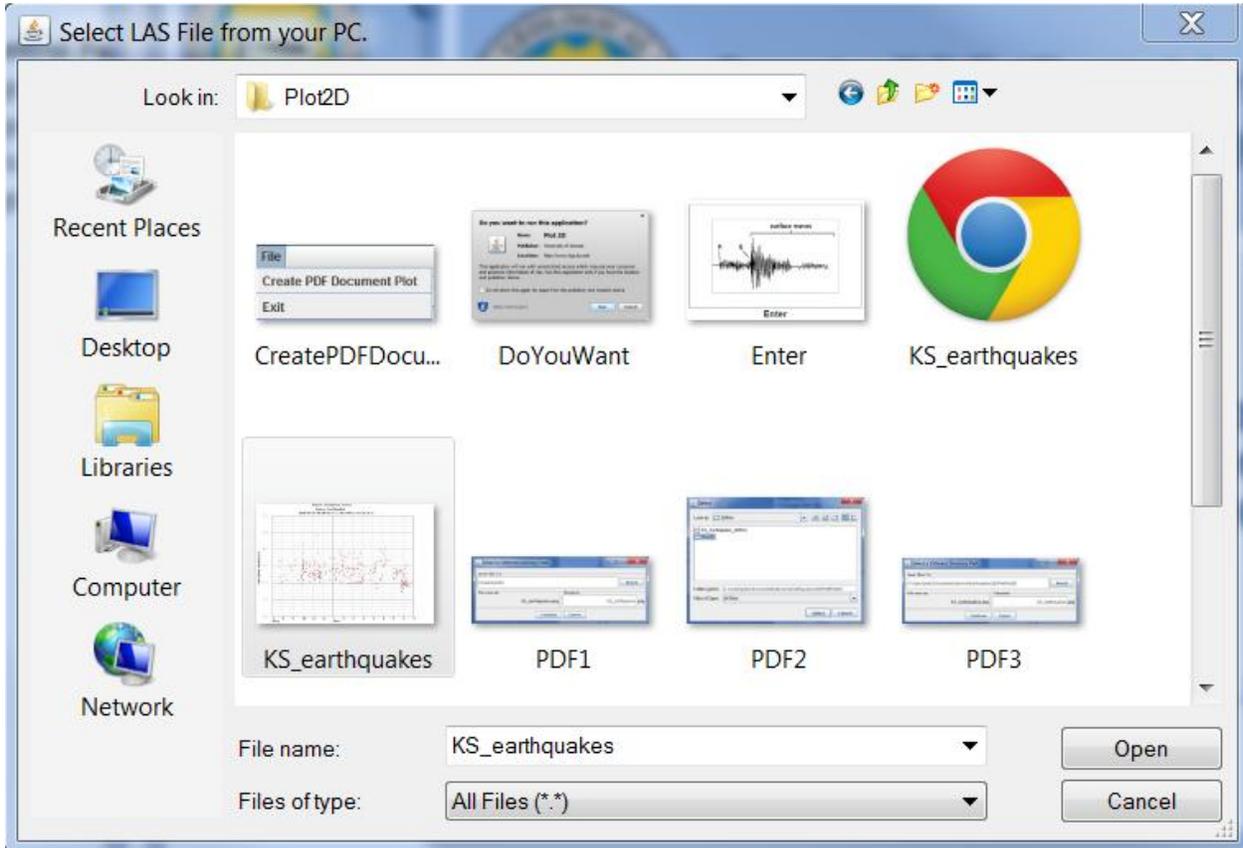


This applet allows the user to create a PDF (Portable Document Format) from a PNG (Portable Network Graphics), JPEG (Joint Photographic Experts Group) or GIF (Graphics Interchange Format) image file.

Author: John R. Victorine jvictor@kgs.ku.edu

The URL for this page is http://www.kgs.ku.edu/PRS/Ozark/TYPE_LOG/PDF.html

A dialog will display that will allow the user to select the PNG image just created and convert that PNG image into a PDF document.



Click on the “KS_earthquakes.png” file to create a PDF document of the image.