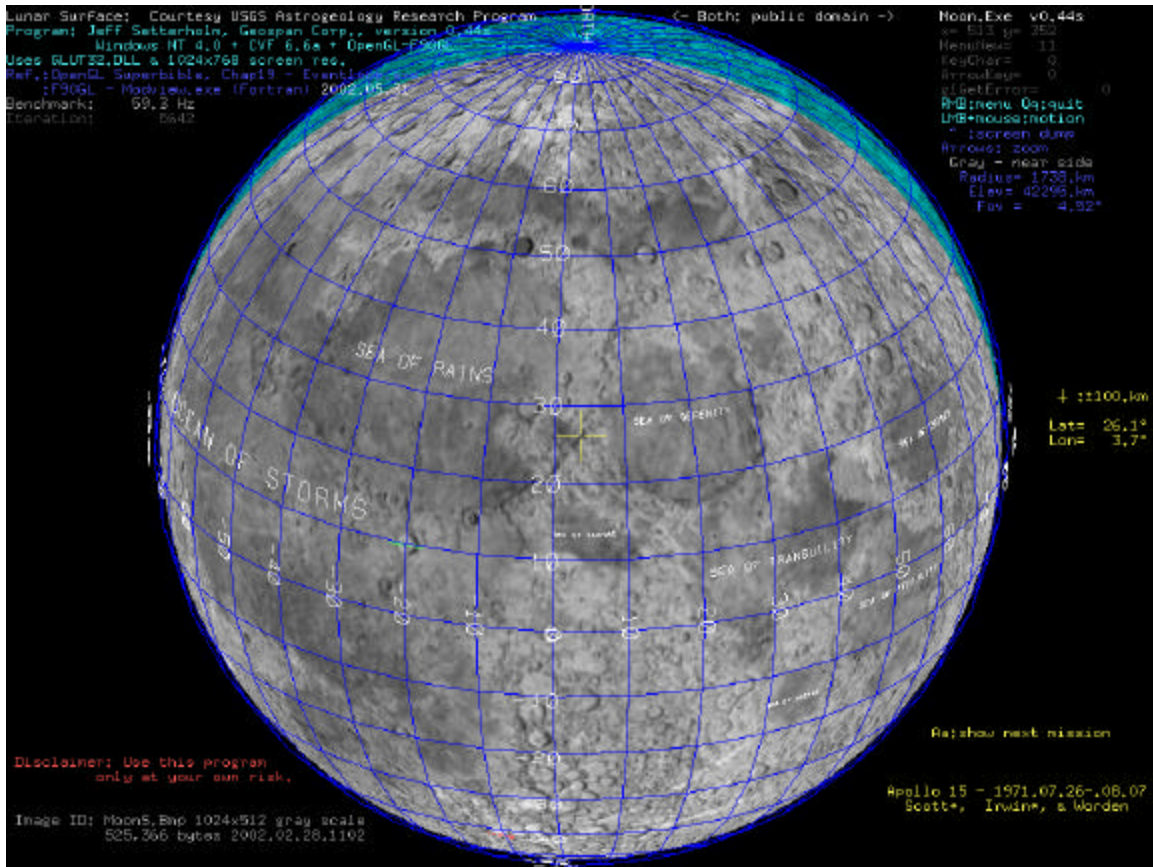# Moon.Exe Version 0.44s

A download from www.setterholm.com

Moon.Exe   Jeff Setterholm,   Geospan Corp.,   Maple Grove, MN   **2002.05.31**
                    (My affiliation with Geospan ended on 2003.06.18)
-BETA- Public Domain

2002.05.31 Version 0.44s   "Use this program only at your own risk."
                    Close other applications before testing this software.
 ...because...   This software may lock out for no apparent reason.

Supercedes: 2002.05.18 Moon.Exe Version 0.43s

Further development: has been on Globe.Exe, presently version 0.71
                                with documentation version 0.72.

This program displays "MoonS.Bmp", a 1024 x 512 pixel down sample of USGS grayscale image "Shaderel". (A 2048x1024 down sample version would not run on most people's computers.)

Moon.Exe was programmed on an Athlon 700 processor with a GeForce3 video card

under **Windows NT** 4.0 service pack 6. **Compaq Visual Fortran** 6.6a and **NIST**'s "**F90GL**" Fortran bindings to **OpenGL** were used. The intended screen resolution is 1024 x 768 with "32bit" color.

GLUT32.DLL should be in the same directory with Moon.Exe and MoonS.Bmp, if it is not already in your computer's path elsewhere. (At runtime, **Windows 2000** automatically looked for the **Glut32**.DLL in the same directory, and found it.) (**GLUT** is an alternative to **GLAUX** which bypasses almost all the complexities of **Microsoft** "**Windows**" programming.)

Features include:
>A menu accessed by pressing the right mouse button.
>Parellel implementation of menu options via function keys F1 - F9
>F9 Stereo... Mono : Left-Right : Right-Left
>Zoom via up and down arrows. Farthest zoom out is approximately the distance
  from the Earth when the moon is on the horizon.
>Display of Model Moon radius (Spherical R=1738. km.), field of view, and distance
  above the surface.
>Lat/Lon Grid & readout.
>+-100km cursor.
>Apollo Mission landing sites, crews, and dates. Note: e.g. "Aa" means press either
  upper or lower case "A". "Qq": quit
>A few place names
>Active & passive mouse motion, including
  glutWarpPointer control of mouse-x during auto-rotate.
>Benchmark: In seconds below 5 hz. In hz above 5 hz. My system:~60hz mono
        (Approximate sample interval: 1 second.)
>Exact-screen-dump (-to ScrnDmp*.Bmp) capability   *: [1,5] directly from the
  OpenGL frame buffer, accessed via " ~ " key when any graphics are displayed.
  Beeps on completion of each screen dump. The program halts after the 5th dump.
>On screen credits
>glGetError output - upper right of screen. Checked once per iteration. (Not robust.)
  Non-zero values are display in red.

Date	Bytes	Filename	description
01/12/04 12:35p	~1,043,261	Moon044s.Zip	
01/12/04 12:35p	~ 1,073,560	Moon044s.Exe	self-extracts the files below
05/31/02 11:35a	462,848	Moon.Exe	version0.44s
02/28/02 11:02a	525,366	MoonS.Bmp	courtesy USGS Astrogeology Research .
11/08/01 02:27a	237,568	**GLUT32**.DLL	which came from the WINNT\System32\ in NT4.0 (Modifying this subdirectory is not an amateur sport. Very important files reside there.)
01/12/04 12:35p	~176,990	Moon044s.Pdf	(this file)
11/17/03 04:22p	137,147	ScrnDmp1.Jpg	

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