

Hampson-Russell
A CGGVeritas Company

Release Notes - Software Release CE8/R3

(Last Revision: November 10, 2008)

Software Release Date: October 20, 2008

List of Products:

Product Name:	Features supplied for version CE8/R3:			Comments:
AFI	afi			Must also have AVO.
AVO	avo	geoview pro3d	elog	
eLog	elog	geoview		
EMERGE	emerge	geoview	elog	
GLI3D	gli3d			
ISMap	ismap	Geoview		
Pro4D	pro4d	geoview		
ProMC	promc	geoview		
STRATA	strata	geoview bstrata	elog	
GeoView	geoview	seisloader		Please read a disclaimer notice below.
		view3d		Please read a disclaimer notice below.

Product Name:	Licenses Supplied with Products														
	afi 3.00	avo 7.00	bstrata 7.00	elog 5.00	emerge 5.00	geoview 5.00	gli3d 8.00	glipick 8.00	ismap 6.00	pro3d 7.00	pro4d 3.00	promc 2.00	seisloader 1.00	strata 7.00	view3d 1.00
AFI	+														
AVO		+		+		+				+			+		+
AVO modeling		+		+		+							+		+
AVO processing						+				+			+		+
eLog				+		+									
EMERGE				+	+	+							+		+
GLI3D							+	+							
ISMap						+			+				+		+
Pro4D						+					+		+		+
ProMC						+						+	+		+
STRATA			+	+		+							+	+	+

List of New Features and Enhancements:

Summary

This is a patch release, containing rigorous bug fixes, some enhancements and an expansion of the online help.

The Most Important Features:

1. We have added the use of a Seismic Reference Datum (SRD).
2. You can now remove tops from multiple wells.
3. You can now display the log curves depths as measured from the KB.
4. We now offer a 64-bit compilation of GLI3D.
5. GLI3D now includes OBC handling.
6. View3D has had very major improvements, including combining the data, parameter and display sections into one single window, drag and drop data loading and a simplified menu.
7. The OpenSpirit Well Log Exchange is now available.
8. We have improved ISMap.

Details

Geoview

1. You can now import check shots using the SRD. (#1928)
2. We have added an option to export logs from SRD. (#2346)
3. We now use a space delimiter in the exported interval velocity summary file. (#2423)
4. You can now remove tops from multiple wells simultaneously. (#2434)
5. We have fixed a problem of reading UWI string from a well spots file. (#2440)
6. You can read and load culture data from an AutoCAD DXF file that contains "HATCH" and "SOLID" data structures. (#2477, #2478)
7. We have fixed an error in using deviated well data when loading by dip and azimuth. (#2566)
8. In tops loading, the confirmation page for large numbers of wells is now sized properly. (#2543)
9. In LAS data import, you can select in one step whether to overwrite or not overwrite for all wells in a file, which is useful if you are importing a large file with incomplete well spot data that should not be written over existing data.
10. You can now import v/v logs, such as sandstone volume or shale volume as expressed as a decimal instead of a percentage.

See also the Third party data connections section below for OpenWorks and GeoFrame well, log and tops handling and improvements.

eLOG

11. You can now display the log curves depths measured from the KB as well as from the surface. (#1592)
12. In the Math/Clip option, if you had not initially set the output units correctly, if you go back to the first page and correct them, the new units are used. (#1872)
13. We use a better default value for the linear relationship log math option. (#1959)
14. When splicing logs from a vertical well to a deviated well, the correct depth range is now used for the output well. (#2244)
15. We have widened the Log Math option's field to avoid scrolling. (#2323)
16. We now limit the V_p/V_s value to 10 for Castagna's equation when the calculated V_p/V_s ratio is greater than 10. (#2410)
17. To avoid confusion, the history text in the Check-Shot or Log Correlation now shows only required parameters. (#2539)
18. We now have an AutoStretch function which does the log to seismic correlation automatically.
19. We have ensured that deviated wells display correctly on an arbitrary line when the survey has negative Y coordinates. (#2556)
20. The program uses the correct datum when exporting a depth domain trace from a depth volume to the well database. (#1024)
21. The default parameters and units are now set correctly when using Krief's equation.
22. The unit conversion is now done properly when you change between trace/cm and trace/inch in the Synthetic plot display control. (#2605)

Fluid Replacement Modeling (FRM)

23. The saturation values for the fluid properties graph are displayed correctly.
24. 2-phase saturation ratios are now displayed for 2-phase modeling.

AFI

25. Colors are now shown for the correct well in AFI analyze trend plots. (#2121)

AVO

AVO Analysis and Processing:

26. We have reduced the default maximum time shift parameter in Trim Statics to avoid cycle skipping. (#1976)
27. Processing 2D seismic data using velocities from an external SEG-Y file now uses the correct bin location keys. (#2047)
28. Wavelet matching is now removed from AVO. (#2489)
29. The Gradient Analysis process no longer deletes the previously run process output when the name is exactly "avo". (#2497)
30. The INVEST, AVO Attributes and Range Limited Stack processes now close the previous output windows correctly when the output is regenerated. (#2498)
31. When angle gathers are used as input for AVO attribute calculations, the angles are now correctly scaled in the Curve Display if the offset unit in the line header is in feet. (#2602)
32. The velocity errors in the AVO processing of arbitrary lines have been fixed. (#2635)

See also the General section below for seismic data handling and other general improvements.

AVO Modeling:

33. When creating an AVO model without a measured s-wave log, you can create S-wave values using Krief's Equation in place of Castagna's equation. (#2553)
34. We have fixed a problem of the synthetic generation window not appearing. (#2612)
35. In Elastic Wave modeling, the p-wave transmission coefficients no longer reset themselves when all Up and Down reflection coefficients are zero. (#2591)
36. Fixed synthetic generation so you can now output a 3D AVO synthetic volume in the depth domain. (#2208)
37. You can now show incident angles on gathers when you are using a STRATA internal velocity model as the background color. (#2621)
38. Corrected the Vp data output when a single well depth domain synthetic is generated. (#2606)

See also eLog section above for more log curves related editing and FRM.

EMERGE

39. You can now use Emerge on Depth domain seismic volumes. (#56)
40. Log Predict cross plot no longer has the wrong color key label for the wells. (#2048)
41. You can now clip values to a given range in the EMERGE Apply output to avoid impossible output values. (#2522)

See also the General section below for seismic data handling and other general improvements.

GLI3D

42. A new project cannot be loaded over an existing project. (#800)
43. Inversion no longer gives "NaN" results on a LINUX Platform. (#824)
44. Ocean Bottom Cable surveys are now handled by GLI3D. (#846)
45. We now offer a 64-bits compilation of GLI3D, which allows for larger jobs and geometry files greater than 2 GB in size. (#861)
46. We have added a new data loading option, Merge, which can be used for such operations as combining multiple swaths of a 3D survey. GLI3D will now correctly handle multiple shot and receiver labels. (#2383)
47. We have improved the Geometry Loading Summary.
48. The currently displayed Grid Map values can now be exported as a text file into other applications.

ISMAP

49. We now prevent contour lines from crossing each other when using contour smoothing. (#2424)
50. When cutting the tops, we now use the TVD to post at the correct XY coordinates. (#2427)
51. ISMAP-EMERGE now exports null values for maps. (#2428)
52. We have added an option to extract attributes around the well location through an elliptical search region. (#2455)
53. We have improved the data scaling methodology for cokriging and co-simulation. Now a forced correlation of 1.0 matches the linear regression and the average of co-simulation maps will approach the cokriging result with the same parameters.

PRO4D

54. Difference operations will now work on files greater than 3 Gb. (#296)
55. Restricted zones now work with the Data Slice Time Shift tool. (#2436)
56. Goal post artifacts no longer occur in time shifts and cross correlation cross plots. (#2438)
57. RMS Amplitude Gain parameters are now labelled correctly in volume histories. (#2439)
58. You can now import null values in maps. (#2441)
59. The Null value method options now work for density plot exports. (#2471)
60. The Apply Lateral Interpolation process has been fixed. (#2475)
61. You can use a running average in the shaping filter again. (#2503)
62. Cross-normalization process now works when a restricted zone is turned on and the seismic volume has null traces. (#2527)
63. We have added an option to resample the input traces to 1 ms before cross-correlation, in order to remove clustering artifacts such as anomalous edges or gaps in Cross-correlation and Time shift cross plots. (#2535)

See eLOG above for some items related to well log editing and FRM. See also the General section below for seismic data handling and other general improvements.

PROMC

64. We have added a prewhitening option for the covariance along with other improvements in the interface.
65. The smoothing process has been moved from the model building steps and added to the joint inversion parameters.
66. The domain conversion of composite traces for multiple 2D lines now works properly.
67. Instant calibration and conversion has been improved.
68. Percentages and fractional volumes are now correctly distinguished from each other.

See eLOG above for some items related to well log editing and FRM. See also the General section below for seismic data handling and other general improvements.

STRATA

69. We have improved the well cross plot displays for pre-stack inversions, calculating the auto-covariance and cross-covariance of the elastic parameters, plus the V_s/V_p average.
70. We now use covariance-weighted pre-whitening for pre-stack inversion.
71. We have added more parameter information to the history file for the inversion process. (#1333)
72. Inversion analysis now picks correct angle ranges from the pre-stack Inversion process instead of taking values from previous inversions. (#2595)
73. We have sped up the Inversion Analysis data volume selection page. (#2232)
74. The LPSS inversion no longer ignores the high-cut frequency option in the model option menu when using a smoothed version of the Strata Model as initial guess. (#2531)
75. We have fixed a minor problem in calculating the average global scalers in the pre-stack inversion when using more than one CDP. (#2564)
76. We have fixed the Horizon order when building a model for multiple 2D lines. (#1987)

77. We have fixed the flattened surface values error when building a depth domain Strata model. (2429)
78. You can now export multiple log types at the same time. (#2322)
79. We now handle a constant initial model correctly in pre-stack inversion. (#2572)
80. The Inversion Analysis Tool now can handle volume names with three or less characters. (#2622)

See also the General section below for seismic data handling and other general improvements, and see eLOG above for some items related to well log editing.

GENERAL

Data Slice, Base Map, Horizons

81. The Data slice menu no longer disappears when using volumes of different sizes. (#2437)
82. We have added map shortcuts to display well names, mark seismic lines and annotate the pointer. (#2530)
83. Reusing an existing horizon name in the Map Operations menu now brings up an error message to avoid overwriting the original horizon. (#2537)
84. You can now pick horizons on color attribute in EMERGE because the min. Amp, max. Amp & std. dev. parameters are now set correctly. (#2377)
85. The program remembers the base map size and plotting parameters. (#2528)
86. You can turn resampling off for log cross plots, which is very useful when mapping very thin beds.
87. You can now graphically redefine the linear relationship on a log cross plot.
88. All programs, not only PROMC, can now display offset and angle p-wave synthetics on seismic sections. (#2392)

Installation

89. We do not support a 64-bit Linux installation on Red Hat EL 3. You need Red Hat 4 or you need to install the 32 bit version instead. (#2456)

Cross Plot

90. We have changed the axes fields to button menus to avoid problems with long labels. (#2501)
91. In eLog, cross plotting now uses the range from the selected curves for computed logs. (#2538)

Time-Velocity Table

92. We now have an easy export option for TV tables and velocity field models. (#2499)
93. We have corrected the conversion of RMS velocity fields to give the correct interval velocities. (#2541)

Trace Plotting

94. You can now use the SRD when inserting log curves on a depth domain seismic section. (#1061)
95. The computed impedance is no longer limited only to the P-Wave sample boundaries when density samples are available. (#2368)
96. We have fixed a bug in the interval/RMS/Incident Angle display in the Seismic Window caused by different sample rates. (#2406)
97. View Parameters now lets you specify the first CDP for 2D lines. (#2599)

Wavelet

98. The Full and Constant Phase methods of wavelet extraction from wells now extract the correctly scaled amplitude while retaining the shape. (#2279)
99. In wavelet extraction, you have the option to calculate the correct average amplitudes based on the total number of traces processed. (#2435, #2472)

Third party data connections

Well Exchange / OpenWorks

100. You can now import depth-time or check shot curves from OpenWorks. (#2568)

SeisWorks

101. The program no longer hangs when importing SeisWorks horizons. (#1923)

View3D

102. We have combined the two main windows into one, with full hide and expand control.
103. Major parameter windows now appear and as a tabbed side column for this main window, again with full hide and expand control.
104. A top section (which again can be hidden) lets you easily switch between loaded data sets, such as different volumes and horizons. The color keys can be changed through simple menus, or through a detailed window
105. Data can now be dragged and dropped from the data column to the display column.
106. Data parameters can be viewed and edited by bringing up a secondary tabbed column in the data column.
107. You can display a cross plot zone from a project.
108. The Main menu has been simplified.
109. A new View3D guide has been created for this version.

Hampson-Russell Assistant

110. Updated and more extensively indexed, as usual.

FTP Download

The software installation images can be found at our ftp sites. Please visit <http://www.cggveritas.com/hampson-russell> for instructions and details.

CD and Package Labels

<i>Platform</i>	<i>Version</i>	<i>Date Label</i>
SUN / Sparc Solaris	CE8/R3	October 20, 2008
IRIX/SGI	CE8R3	October 20, 2008
LINUX / Red Hat	CE8/R3	October 20, 2008
PC / Windows	CE8/R3	October 20, 2008

Supported Operating Systems:

1. SUN, Sparc Solaris 8, 9 and 10.
2. SGI, IRIX 6.5x (6.5.12m, 6.5.19f).
3. LINUX 32-bit, Enterprise WS3/ES3/AS3, Enterprise WS4/ES4/AS4.
4. LINUX 64-bit, RedHat Enterprise WS4/ES4/AS4, SuSE 9.2.
5. Windows 2000, XP, Vista 32 and 64 bit.

Note: Some modules are not available for some platforms. See the Compilation Dates table below, visit our web site <http://www.cggveritas.com/hampson-russell>, or contact our support staff for more details.

Compilation Dates

<i>Executable/Module</i>	<i>Solaris</i>	<i>IRIX</i>	<i>Linux</i>	<i>Windows</i>
AFI	Oct 9, 2008	Oct. 9, 2008	Oct 10, 2008	Oct 9, 2008
Autocal(32-bit)	Sept 23, 2008	Oct 21, 2008	Sept 23, 2008	Sept 23, 2008
Autocal(64-bit)	Sept 23, 2008	Not Available	Sept 23, 2008	Sept 23, 2008
Backgroundservices (32-bit)	Sept 23, 2008	Oct. 9, 2008	Sept 23, 2008	Sept 23, 2008
Backgroundservices (64-bit)	Sept 23, 2008	Not Available	Sept 23, 2008	Sept 23, 2008
AVO	Oct 9, 2008	Oct. 9, 2008	Oct 10, 2008	Oct 9, 2008
eLOG	Sept 23, 2008	Oct. 9, 2008	Sept 23, 2008	Sept 22, 2008
EMERGE	Sept 23, 2008	Oct. 9, 2008	Sept 23, 2008	Sept 22, 2008
Geoview(32-bit)	Oct 10, 2008	Oct 21, 2008	Oct 10, 2008	Oct 9, 2008

Geoview (64-bit)	Oct 10, 2008	Not Available	Oct 10, 2008	Oct 9, 2008
logdialog	Sept 22, 2008	Oct. 9, 2008	Sept 23, 2008	Sept 22, 2008
GLI3D (32-bit)	Sept 23, 2008	Oct. 9, 2008	Sept 23, 2008	Not Available
GLI3D (64-bit)	Sept 23, 2008	Not Available	Sept 23, 2008	Not Available
ISMap	Sept 23, 2008	Oct. 9, 2008	Sept 23, 2008	Sept 22, 2008
ismapEmerge (32-bit)	Sept 23, 2008	Oct 21, 2008	Sept 23, 2008	Sept 23, 2008
ismapEmerge (64-bit)	Sept 23, 2008	Not Available	Sept 23, 2008	Sept 23, 2008
Pro4D	Sept 23, 2008	Oct. 9, 2008	Sept 23, 2008	Sept 22, 2008
ProMC	Sept 23, 2008	Oct. 9, 2008	Sept 23, 2008	Sept 22, 2008
SeisLoader (32-bit)	Sept 23, 2008	Oct 21, 2008	Sept 23, 2008	Sept 23, 2008
SeisLoader (64-bit)	Sept 23, 2008	Not Available	Sept 23, 2008	Sept 23, 2008
STRATA	Sept 23, 2008	Not Available	Sept 23, 2008	Sept 22, 2008
strataBatch (32-bit)	Sept 23, 2008	Oct. 9, 2008	Sept 23, 2008	Sept 23, 2008
strataBatch (64-bit)	Sept 23, 2008	Not Available	Sept 23, 2008	Sept 23, 2008
View3D (32-bit)	Not Available	Not Available	Oct 10, 2008	Oct 9, 2008
View3D (64-bit)	Oct 10, 2008	Not Available	Oct 10, 2008	Oct 14, 2008
swsv (SeisWorks) Emerald City R2003.12	Dec 10, 2007	Oct 24, 2008	Dec 11, 2007	Not Available
WLEx (OpenWorks Emerald City R2003.12)	Oct. 10, 2008	Jan 4, 2008	Oct 10, 2008	Not Available
WLEx (GeoFrame 3.8.1)	Oct. 24, 2004	Not Available	Not Available	Not Available
WLEx (GeoFrame 4.0.2)	Feb. 1, 2006	Not Available	Not Available	Not Available
WLEx (GeoFrame 4.04)	Feb. 1, 2006	Not Available	Not Available	Not Available
WLEX (GeoFrame 4.2)	Feb. 1, 2006	Not Available	Feb. 1, 2006	Not Available
WLEX (GeoFrame 4.3)	Sep 7, 2008	Not Available	Sep 7, 2008	Not Available
OpenSpirit Version Supported	2.5, 2.6, 2.7, 2.9, 3.0	Not Available	2.5, 2.6, 2.7, 2.9, 3.0	2.6, 2.7, 2.9, 3.0
OpenSpirit Version Compiled (Hampson-Russell client side)	2.9	Not Available	2.9	2.9
FLEXIm 32-bit	8.1b	8.1b	9.5.0	8.1b

applications				
FLEXlm 64-bit applications	9.5.0	Not Available	9.5.0	FLEXnet 11.4.0
FLEXnet License Manager (Hamp-Russ, and lmgrd package)	11.4.0	FLEXlm 8.1b	11.4.0	11.4.0
	<i>Solaris</i>	<i>IRIX</i>	<i>Linux</i>	<i>Windows</i>
Adobe (Acrobat) Reader is no longer included. If you need Adobe Acrobat, please see your IT department. Our help system is no longer in pdf format, but our tutorial guides are still in that format.				

Disclaimer for SeisLoader and View3D:

SeisLoader is one of the many new features added to the Hampson-Russell suite of software for the CE8 releases. However, we specifically limit the licensing of SeisLoader to the CE8 releases only, due to the nature of this product. Although we think you will find SeisLoader to be an excellent addition to our product line, with its simplified data loading, viewing, and ease of interpretation, SeisLoader is currently a prototype for the new seismic interpretation interface for all of our products.

We hope that you will use, enjoy and provide feedback on the interface over the coming months, and provide us with the information to refine the design and incorporate your ideas. The new seismic interpretation interface will be incorporated into our main product lines and SeisLoader as a stand-alone utility will then be removed in the CE9 release.

Similarly, View3D is a visualization tool which will be incorporated gradually into all our products.