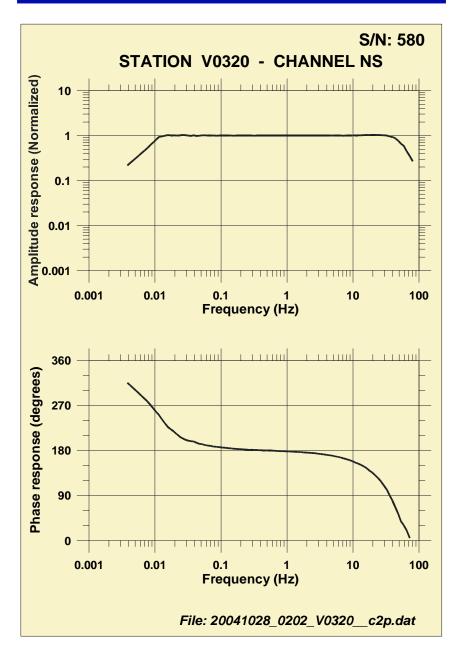
## **FEATURES**

- Easy operation
- Windows application
- Uses sine wave and random binary signals

**CALPLUS** is a relatively new software package for and reliable fast seismometer calibration. It uses the signal generation capability of the SMART-24R® or DL-24 digitizers/ recorders and the recording capability of both seismometer output and calibration input. By deconvolving the input from the output, the complex transfer function of the seismometers is and computed, plotted, saved in a time dependent database. The transfer function given as is normalized to unity at a certain period (calper). The calibration signal used in this case is a pseudo random binary time series, pulses of same amplitude but randomly varying durations. To compute the absolute sensitivity at the calibration period (and from there calib), a sine wave is used. CALPLUS can calibrate both short broadband period and seismometers, as well as accelerometers.



# **CALPLUS Calibration Package**



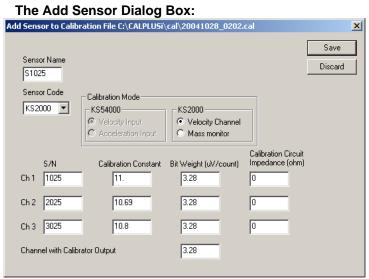
**CALPLUS Graphical Output** 

10755 SANDEN DRIVE, DALLAS, TEXAS 75238-1336 Phone: 214-221-0000 Fax: 214-343-4400 email: info@geoinstr.com Web: www.geoinstr.com

# **CALPLUS WINDOWS**

### The Add Channel Dialog Box:

Add Channel to Calibration File C:\CALPLUSi\cal\20041028_0202.cal							
Station Code		Network NET		Save Discard			
Latitude 15.		Elevation (m) Depth (m) 1000. 0					
Sensor Code KS2000 💌	Calibration Constant	Calibration Circuit Impedance (ohm) 0	Start Date (yymmdd) 041215 /	Stop Date (yymmdd)			
C Acceleration	tion Mode	Sensor Sensitivity (V*s/m) 0	Calibration Period (s) 1.	System Sensitivity (nm/count) 0			
Horizontal Angle	Vertical Angle	Bit Weight (uW/count) 3.2	Sample Rate 200.	Coordinate System WGS-84			



### The SMART-24R® Starting Dialog Box:

CALPLUSi Calibration Software	×				
Help					
DL-24 Data Recorder SMART-24 Data Recorder Calibration Files					
Calibration File :					
C:\CALPLUSi\calfiles320\20041028_020200_B_V					
Output calibration files in SUDS format					
Calibration Type					
Sine Wave     Short Period					
C Random Binary C Broad Band					
Go					

### **Calibration File Handling Dialog Box:**

CALPLUSi Calibration Software	×		
Help			
DL-24 Data Recorder SMART-24 Data Recorder Calibration Files	1		
Station Calibration File			
C:\CALPLUSi\cal\20041028_0202.cal			
View Update Add Channels Add Sensors			
Calibration Results File			
Browse			
View			

### Sine Wave Calibration Output: Eile

	8_0155_¥0320C1P.txt - Notepad ormat View Help			<u>- 🗆 ×</u>
East 1	Buyer Dem Teh			<u>^</u>
	CALIBRATION RESULTS			
	KS-2000 S/N	:	0320	
	Component	:	vertical	
	Sensor Serial No	:	V559	
	velocity Channel Sensitivity	:	2005. Volts/(meter/sec)	
	Calibration Period	:	1.000 sec	

-

### The DL-24 Starting Dialog Box:

CALPLUSi Calibration Software				
Help				
DL-24 Data Recorder SMART-24 Data Recorder Calibration Files				
Sensor Serial Number: 300				
Calibration File with Seismometer Output:				
C:\CALPLUSi\calfilesDL\C3029002.259 Browse				
Calibration File with Calibrator Output: C:\CALPLUSi\califilesDL\C1029002.259 Browse				
Output calibration files in SUDS format				
Calibration Type	Seismometer Type			
<ul> <li>⊂ Sine Wave</li> <li>● Random Binary</li> </ul>	<ul> <li>Short Period</li> <li>Broad Band</li> </ul>			
Go				