# SEGYlib Namespace

## Classes

|  |  |  |
| --- | --- | --- |
|  | Class | Description |
| Public class | [SEGYFile](#_7731A60B_Topic) | Top level class for reading and writing SEGY files |
| Public class | [SEGYFileHeader](#_5936971D_Topic) | Class for storing and retrieving data stored in the SEGY file Header |
| Public class | [SEGYTrace](#_8E9F9823_Topic) | SEGYTrace is used to access and set SEGY rev 1 trace data |
| Public class | [SEGYTraceData](#_7F71127F_Topic) | SEGYTraceData allows access to the contents of the binary trace data |
| Public class | [SEGYTraceHeader](#_12C8BFA8_Topic) | SEGYTraceHeader is used to access and change contents of the binary trace header data block |
| Public class | [SEGYUtilities](#_C95448F8_Topic) | SEGYUtilities for use in reading and writing SEGY files |

# SEGYFile Class

Top level class for reading and writing SEGY files

## Inheritance Hierarchy

[System.Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b)  
  SEGYlib.SEGYFile

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| [SerializableAttribute] public class SEGYFile |

|  |
| --- |
| VB |
| <SerializableAttribute> Public Class SEGYFile |

|  |
| --- |
| C++ |
| [SerializableAttribute] public ref class SEGYFile |

|  |
| --- |
| F# |
| [<SerializableAttribute>] type SEGYFile = class end |

The **SEGYFile** type exposes the following members.

## Constructors

|  |  |  |
| --- | --- | --- |
|  | Name | Description |
| Public method | [SEGYFile](#_4AD9BF68_Topic) | Initializes a new instance of the **SEGYFile** class |

## Properties

|  |  |  |
| --- | --- | --- |
|  | Name | Description |
| Public property | [currentTrace](#_8D37552F_Topic) | last trace read from file |
| Public property | [FileHeader](#_17874466_Topic) | access to File Header Class |
| Public property | [NumberOfTracesInBuffer](#_7148EDD9_Topic) | number of traces in Trace list |
| Public property | [Traces](#_B35343B3_Topic) | List of traces including data and trace headers |

## Methods

|  |  |  |
| --- | --- | --- |
|  | Name | Description |
| Public method | [AddTrace](#_38925B88_Topic) | add a trace to the end of the Traces list |
| Public method | [Close](#_5A70417B_Topic) | close I/O channels |
| Public method | [CopyAllTraces](#_3C0841C1_Topic) | make a deep copy of the Traces List |
| Public method | [Equals](http://msdn2.microsoft.com/en-us/library/bsc2ak47) | Determines whether the specified [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b) is equal to the current [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b). (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Protected method | [Finalize](http://msdn2.microsoft.com/en-us/library/4k87zsw7) | Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public method | [GetHashCode](http://msdn2.microsoft.com/en-us/library/zdee4b3y) | Serves as a hash function for a particular type. (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public method | [GetType](http://msdn2.microsoft.com/en-us/library/dfwy45w9) | Gets the [Type](http://msdn2.microsoft.com/en-us/library/42892f65) of the current instance. (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public method | [GoToStartOfTrace](#_863430F8_Topic) | position the stream reader/writer at the start of the n'th trace |
| Public method | [isSEGY](#_64BCE4A7_Topic) | test to see if input file is a SEGY file |
| Protected method | [MemberwiseClone](http://msdn2.microsoft.com/en-us/library/57ctke0a) | Creates a shallow copy of the current [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b). (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public method | [MoveFilePointerToStartOfTraces](#_E08127CE_Topic) | move file pointer to the end of the file header blocks |
| Public method | [Open](#_57C30FAD_Topic) | open or create a SEGY file returns 0 if unsuccessful; 1 if non zero length file ; 2 is empty file |
| Public method | [ReadAllTraceHeaders](#_FE2916C_Topic) | read all trace headers but don't load trace data |
| Public method | [ReadAllTraces](#_6EDBF0C0_Topic) | read all trace headers including trace data |
| Public method | [ReadFileHeader](#_9061BF7_Topic) | read the file headers |
| Public method | [ReadNextTrace](#_185766A1_Topic) | read the next trace in the file |
| Public method | [ReadNTraces](#_BC851DC8_Topic) | read the next n traces in the file |
| Public methodStatic member | [ReadXML](#_457A5EB_Topic) | read an SEGY file in XML format |
| Public methodStatic member | [ReadXMLFileHeader](#_A647BBD4_Topic) | read an SEGY file header in XML format |
| Public methodStatic member | [ReadXMLTrace](#_3B656085_Topic) | read an SEGY trace in XML format |
| Public method | [ReindexTracePositions](#_D339817C_Topic) | re-read the file and reindex the trace locations |
| Public method | [RemoveAllTraces](#_51644E44_Topic) | delete all trace storage |
| Public method | [RemoveTrace](#_D4853204_Topic) | remove trace i from the Traces list |
| Public method | [SkipNTracesOnRead](#_F6E4BAB9_Topic) | skip ntraces |
| Public method | [ToString](http://msdn2.microsoft.com/en-us/library/7bxwbwt2) | Returns a string that represents the current object. (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public method | [Write(String)](#_30EB19DA_Topic) | write the entire file to disk |
| Public method | [Write(SEGYFileHeader)](#_47DE64F6_Topic) | write the file header to disk |
| Public method | [Write(SEGYTrace)](#_4E811FD4_Topic) | write a trace to disk |
| Public method | [Write(List(SEGYTrace))](#_AB571614_Topic) | write the list Traces to disk |
| Public method | [WriteXML(String)](#_F798B4E8_Topic) | write the file to XML |
| Public method | [WriteXML(String, SEGYFileHeader)](#_EC3201B8_Topic) | write the file header to XML |
| Public method | [WriteXML(String, SEGYTrace)](#_A740B142_Topic) | write the trace to XML |

## Fields

|  |  |  |
| --- | --- | --- |
|  | Name | Description |
| Public field | [isBigEndian](#_5C5C6506_Topic) | true for big endian file; false little endian |

## See Also

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFile Constructor

Initializes a new instance of the [SEGYFile](#_7731A60B_Topic) class

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public SEGYFile() |

|  |
| --- |
| VB |
| Public Sub New |

|  |
| --- |
| C++ |
| public: SEGYFile() |

|  |
| --- |
| F# |
| new : unit -> SEGYFile |

## See Also

[SEGYFile Class](#_7731A60B_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFile.SEGYFile Properties

The [SEGYFile](#_7731A60B_Topic) type exposes the following members.

## Properties

|  |  |  |
| --- | --- | --- |
|  | Name | Description |
| Public property | [currentTrace](#_8D37552F_Topic) | last trace read from file |
| Public property | [FileHeader](#_17874466_Topic) | access to File Header Class |
| Public property | [NumberOfTracesInBuffer](#_7148EDD9_Topic) | number of traces in Trace list |
| Public property | [Traces](#_B35343B3_Topic) | List of traces including data and trace headers |

## See Also

[SEGYFile Class](#_7731A60B_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFile.currentTrace Property

last trace read from file

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public SEGYTrace currentTrace { get; set; } |

|  |
| --- |
| VB |
| Public Property currentTrace As SEGYTrace  Get  Set |

|  |
| --- |
| C++ |
| public: property SEGYTrace^ currentTrace {  SEGYTrace^ get ();  void set (SEGYTrace^ value); } |

|  |
| --- |
| F# |
| member currentTrace : SEGYTrace with get, set |

#### Property Value

Type: [SEGYTrace](#_8E9F9823_Topic)

## See Also

[SEGYFile Class](#_7731A60B_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFile.FileHeader Property

access to File Header Class

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public SEGYFileHeader FileHeader { get; set; } |

|  |
| --- |
| VB |
| Public Property FileHeader As SEGYFileHeader  Get  Set |

|  |
| --- |
| C++ |
| public: property SEGYFileHeader^ FileHeader {  SEGYFileHeader^ get ();  void set (SEGYFileHeader^ value); } |

|  |
| --- |
| F# |
| member FileHeader : SEGYFileHeader with get, set |

#### Property Value

Type: [SEGYFileHeader](#_5936971D_Topic)

## See Also

[SEGYFile Class](#_7731A60B_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFile.NumberOfTracesInBuffer Property

number of traces in Trace list

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public int NumberOfTracesInBuffer { get; set; } |

|  |
| --- |
| VB |
| Public Property NumberOfTracesInBuffer As Integer  Get  Set |

|  |
| --- |
| C++ |
| public: property int NumberOfTracesInBuffer {  int get ();  void set (int value); } |

|  |
| --- |
| F# |
| member NumberOfTracesInBuffer : int with get, set |

#### Property Value

Type: [Int32](http://msdn2.microsoft.com/en-us/library/td2s409d)

## See Also

[SEGYFile Class](#_7731A60B_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFile.Traces Property

List of traces including data and trace headers

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public List<SEGYTrace> Traces { get; set; } |

|  |
| --- |
| VB |
| Public Property Traces As List(Of SEGYTrace)  Get  Set |

|  |
| --- |
| C++ |
| public: property List<SEGYTrace^>^ Traces {  List<SEGYTrace^>^ get ();  void set (List<SEGYTrace^>^ value); } |

|  |
| --- |
| F# |
| member Traces : List<SEGYTrace> with get, set |

#### Property Value

Type: [List](http://msdn2.microsoft.com/en-us/library/6sh2ey19)([SEGYTrace](#_8E9F9823_Topic))

## See Also

[SEGYFile Class](#_7731A60B_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFile.SEGYFile Methods

The [SEGYFile](#_7731A60B_Topic) type exposes the following members.

## Methods

|  |  |  |
| --- | --- | --- |
|  | Name | Description |
| Public method | [AddTrace](#_38925B88_Topic) | add a trace to the end of the Traces list |
| Public method | [Close](#_5A70417B_Topic) | close I/O channels |
| Public method | [CopyAllTraces](#_3C0841C1_Topic) | make a deep copy of the Traces List |
| Public method | [Equals](http://msdn2.microsoft.com/en-us/library/bsc2ak47) | Determines whether the specified [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b) is equal to the current [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b). (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Protected method | [Finalize](http://msdn2.microsoft.com/en-us/library/4k87zsw7) | Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public method | [GetHashCode](http://msdn2.microsoft.com/en-us/library/zdee4b3y) | Serves as a hash function for a particular type. (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public method | [GetType](http://msdn2.microsoft.com/en-us/library/dfwy45w9) | Gets the [Type](http://msdn2.microsoft.com/en-us/library/42892f65) of the current instance. (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public method | [GoToStartOfTrace](#_863430F8_Topic) | position the stream reader/writer at the start of the n'th trace |
| Public method | [isSEGY](#_64BCE4A7_Topic) | test to see if input file is a SEGY file |
| Protected method | [MemberwiseClone](http://msdn2.microsoft.com/en-us/library/57ctke0a) | Creates a shallow copy of the current [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b). (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public method | [MoveFilePointerToStartOfTraces](#_E08127CE_Topic) | move file pointer to the end of the file header blocks |
| Public method | [Open](#_57C30FAD_Topic) | open or create a SEGY file returns 0 if unsuccessful; 1 if non zero length file ; 2 is empty file |
| Public method | [ReadAllTraceHeaders](#_FE2916C_Topic) | read all trace headers but don't load trace data |
| Public method | [ReadAllTraces](#_6EDBF0C0_Topic) | read all trace headers including trace data |
| Public method | [ReadFileHeader](#_9061BF7_Topic) | read the file headers |
| Public method | [ReadNextTrace](#_185766A1_Topic) | read the next trace in the file |
| Public method | [ReadNTraces](#_BC851DC8_Topic) | read the next n traces in the file |
| Public methodStatic member | [ReadXML](#_457A5EB_Topic) | read an SEGY file in XML format |
| Public methodStatic member | [ReadXMLFileHeader](#_A647BBD4_Topic) | read an SEGY file header in XML format |
| Public methodStatic member | [ReadXMLTrace](#_3B656085_Topic) | read an SEGY trace in XML format |
| Public method | [ReindexTracePositions](#_D339817C_Topic) | re-read the file and reindex the trace locations |
| Public method | [RemoveAllTraces](#_51644E44_Topic) | delete all trace storage |
| Public method | [RemoveTrace](#_D4853204_Topic) | remove trace i from the Traces list |
| Public method | [SkipNTracesOnRead](#_F6E4BAB9_Topic) | skip ntraces |
| Public method | [ToString](http://msdn2.microsoft.com/en-us/library/7bxwbwt2) | Returns a string that represents the current object. (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public method | [Write(String)](#_30EB19DA_Topic) | write the entire file to disk |
| Public method | [Write(SEGYFileHeader)](#_47DE64F6_Topic) | write the file header to disk |
| Public method | [Write(SEGYTrace)](#_4E811FD4_Topic) | write a trace to disk |
| Public method | [Write(List(SEGYTrace))](#_AB571614_Topic) | write the list Traces to disk |
| Public method | [WriteXML(String)](#_F798B4E8_Topic) | write the file to XML |
| Public method | [WriteXML(String, SEGYFileHeader)](#_EC3201B8_Topic) | write the file header to XML |
| Public method | [WriteXML(String, SEGYTrace)](#_A740B142_Topic) | write the trace to XML |

## See Also

[SEGYFile Class](#_7731A60B_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFile.AddTrace Method

add a trace to the end of the Traces list

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public void AddTrace(  SEGYTrace trace ) |

|  |
| --- |
| VB |
| Public Sub AddTrace (   trace As SEGYTrace ) |

|  |
| --- |
| C++ |
| public: void AddTrace(  SEGYTrace^ trace ) |

|  |
| --- |
| F# |
| member AddTrace :   trace : SEGYTrace -> unit |

#### Parameters

trace

Type: [SEGYlib.SEGYTrace](#_8E9F9823_Topic)

add a trace

## See Also

[SEGYFile Class](#_7731A60B_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFile.Close Method

close I/O channels

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public void Close() |

|  |
| --- |
| VB |
| Public Sub Close |

|  |
| --- |
| C++ |
| public: void Close() |

|  |
| --- |
| F# |
| member Close : unit -> unit |

## See Also

[SEGYFile Class](#_7731A60B_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFile.CopyAllTraces Method

make a deep copy of the Traces List

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public List<SEGYTrace> CopyAllTraces() |

|  |
| --- |
| VB |
| Public Function CopyAllTraces As List(Of SEGYTrace) |

|  |
| --- |
| C++ |
| public: List<SEGYTrace^>^ CopyAllTraces() |

|  |
| --- |
| F# |
| member CopyAllTraces : unit -> List<SEGYTrace> |

#### Return Value

Type: [List](http://msdn2.microsoft.com/en-us/library/6sh2ey19)([SEGYTrace](#_8E9F9823_Topic))  
pointer to new List of SEGYTraces

## See Also

[SEGYFile Class](#_7731A60B_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFile.GoToStartOfTrace Method

position the stream reader/writer at the start of the n'th trace

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public bool GoToStartOfTrace(  int n ) |

|  |
| --- |
| VB |
| Public Function GoToStartOfTrace (   n As Integer ) As Boolean |

|  |
| --- |
| C++ |
| public: bool GoToStartOfTrace(  int n ) |

|  |
| --- |
| F# |
| member GoToStartOfTrace :   n : int -> bool |

#### Parameters

n

Type: [System.Int32](http://msdn2.microsoft.com/en-us/library/td2s409d)

trace id

#### Return Value

Type: [Boolean](http://msdn2.microsoft.com/en-us/library/a28wyd50)  
true is successful

## See Also

[SEGYFile Class](#_7731A60B_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFile.isSEGY Method

test to see if input file is a SEGY file

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public bool isSEGY() |

|  |
| --- |
| VB |
| Public Function isSEGY As Boolean |

|  |
| --- |
| C++ |
| public: bool isSEGY() |

|  |
| --- |
| F# |
| member isSEGY : unit -> bool |

#### Return Value

Type: [Boolean](http://msdn2.microsoft.com/en-us/library/a28wyd50)  
true is the input file has acceptable FileHeader.dataSampleFormatCode and FileHeader.dataSampleFormatCode

## See Also

[SEGYFile Class](#_7731A60B_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFile.MoveFilePointerToStartOfTraces Method

move file pointer to the end of the file header blocks

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public void MoveFilePointerToStartOfTraces() |

|  |
| --- |
| VB |
| Public Sub MoveFilePointerToStartOfTraces |

|  |
| --- |
| C++ |
| public: void MoveFilePointerToStartOfTraces() |

|  |
| --- |
| F# |
| member MoveFilePointerToStartOfTraces : unit -> unit |

## See Also

[SEGYFile Class](#_7731A60B_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFile.Open Method

open or create a SEGY file returns 0 if unsuccessful; 1 if non zero length file ; 2 is empty file

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public int Open(  string inputFilename ) |

|  |
| --- |
| VB |
| Public Function Open (   inputFilename As String ) As Integer |

|  |
| --- |
| C++ |
| public: int Open(  String^ inputFilename ) |

|  |
| --- |
| F# |
| member Open :   inputFilename : string -> int |

#### Parameters

inputFilename

Type: [System.String](http://msdn2.microsoft.com/en-us/library/s1wwdcbf)

SEGY file name

#### Return Value

Type: [Int32](http://msdn2.microsoft.com/en-us/library/td2s409d)  
0 - not successful; 1 - opened an existing file; 2 - created a new file

## See Also

[SEGYFile Class](#_7731A60B_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFile.ReadAllTraceHeaders Method

read all trace headers but don't load trace data

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public void ReadAllTraceHeaders() |

|  |
| --- |
| VB |
| Public Sub ReadAllTraceHeaders |

|  |
| --- |
| C++ |
| public: void ReadAllTraceHeaders() |

|  |
| --- |
| F# |
| member ReadAllTraceHeaders : unit -> unit |

## See Also

[SEGYFile Class](#_7731A60B_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFile.ReadAllTraces Method

read all trace headers including trace data

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public void ReadAllTraces() |

|  |
| --- |
| VB |
| Public Sub ReadAllTraces |

|  |
| --- |
| C++ |
| public: void ReadAllTraces() |

|  |
| --- |
| F# |
| member ReadAllTraces : unit -> unit |

## See Also

[SEGYFile Class](#_7731A60B_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFile.ReadFileHeader Method

read the file headers

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public bool ReadFileHeader() |

|  |
| --- |
| VB |
| Public Function ReadFileHeader As Boolean |

|  |
| --- |
| C++ |
| public: bool ReadFileHeader() |

|  |
| --- |
| F# |
| member ReadFileHeader : unit -> bool |

#### Return Value

Type: [Boolean](http://msdn2.microsoft.com/en-us/library/a28wyd50)  
true is successful

## See Also

[SEGYFile Class](#_7731A60B_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFile.ReadNextTrace Method

read the next trace in the file

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public bool ReadNextTrace() |

|  |
| --- |
| VB |
| Public Function ReadNextTrace As Boolean |

|  |
| --- |
| C++ |
| public: bool ReadNextTrace() |

|  |
| --- |
| F# |
| member ReadNextTrace : unit -> bool |

#### Return Value

Type: [Boolean](http://msdn2.microsoft.com/en-us/library/a28wyd50)  
true is successful

## See Also

[SEGYFile Class](#_7731A60B_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFile.ReadNTraces Method

read the next n traces in the file

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public bool ReadNTraces(  int n ) |

|  |
| --- |
| VB |
| Public Function ReadNTraces (   n As Integer ) As Boolean |

|  |
| --- |
| C++ |
| public: bool ReadNTraces(  int n ) |

|  |
| --- |
| F# |
| member ReadNTraces :   n : int -> bool |

#### Parameters

n

Type: [System.Int32](http://msdn2.microsoft.com/en-us/library/td2s409d)

number of traces to read

#### Return Value

Type: [Boolean](http://msdn2.microsoft.com/en-us/library/a28wyd50)  
true is successful

## See Also

[SEGYFile Class](#_7731A60B_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFile.ReadXML Method

read an SEGY file in XML format

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public static SEGYFile ReadXML(  string inputXMLFileName ) |

|  |
| --- |
| VB |
| Public Shared Function ReadXML (   inputXMLFileName As String ) As SEGYFile |

|  |
| --- |
| C++ |
| public: static SEGYFile^ ReadXML(  String^ inputXMLFileName ) |

|  |
| --- |
| F# |
| static member ReadXML :   inputXMLFileName : string -> SEGYFile |

#### Parameters

inputXMLFileName

Type: [System.String](http://msdn2.microsoft.com/en-us/library/s1wwdcbf)

input SEGYFile XML file name

#### Return Value

Type: [SEGYFile](#_7731A60B_Topic)  
pointer to SEGYFile

## See Also

[SEGYFile Class](#_7731A60B_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFile.ReadXMLFileHeader Method

read an SEGY file header in XML format

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public static SEGYFileHeader ReadXMLFileHeader(  string inputXMLFileName ) |

|  |
| --- |
| VB |
| Public Shared Function ReadXMLFileHeader (   inputXMLFileName As String ) As SEGYFileHeader |

|  |
| --- |
| C++ |
| public: static SEGYFileHeader^ ReadXMLFileHeader(  String^ inputXMLFileName ) |

|  |
| --- |
| F# |
| static member ReadXMLFileHeader :   inputXMLFileName : string -> SEGYFileHeader |

#### Parameters

inputXMLFileName

Type: [System.String](http://msdn2.microsoft.com/en-us/library/s1wwdcbf)

input SEGYFileHeader XML file name

#### Return Value

Type: [SEGYFileHeader](#_5936971D_Topic)  
point to SEGYFileHeader

## See Also

[SEGYFile Class](#_7731A60B_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFile.ReadXMLTrace Method

read an SEGY trace in XML format

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public static SEGYTrace ReadXMLTrace(  string inputXMLFileName ) |

|  |
| --- |
| VB |
| Public Shared Function ReadXMLTrace (   inputXMLFileName As String ) As SEGYTrace |

|  |
| --- |
| C++ |
| public: static SEGYTrace^ ReadXMLTrace(  String^ inputXMLFileName ) |

|  |
| --- |
| F# |
| static member ReadXMLTrace :   inputXMLFileName : string -> SEGYTrace |

#### Parameters

inputXMLFileName

Type: [System.String](http://msdn2.microsoft.com/en-us/library/s1wwdcbf)

input SEGYTrace XML file name

#### Return Value

Type: [SEGYTrace](#_8E9F9823_Topic)  
pointer to SEGYTrace

## See Also

[SEGYFile Class](#_7731A60B_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFile.ReindexTracePositions Method

re-read the file and reindex the trace locations

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public void ReindexTracePositions() |

|  |
| --- |
| VB |
| Public Sub ReindexTracePositions |

|  |
| --- |
| C++ |
| public: void ReindexTracePositions() |

|  |
| --- |
| F# |
| member ReindexTracePositions : unit -> unit |

## See Also

[SEGYFile Class](#_7731A60B_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFile.RemoveAllTraces Method

delete all trace storage

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public bool RemoveAllTraces() |

|  |
| --- |
| VB |
| Public Function RemoveAllTraces As Boolean |

|  |
| --- |
| C++ |
| public: bool RemoveAllTraces() |

|  |
| --- |
| F# |
| member RemoveAllTraces : unit -> bool |

#### Return Value

Type: [Boolean](http://msdn2.microsoft.com/en-us/library/a28wyd50)  
true is successful

## See Also

[SEGYFile Class](#_7731A60B_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFile.RemoveTrace Method

remove trace i from the Traces list

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public bool RemoveTrace(  int i ) |

|  |
| --- |
| VB |
| Public Function RemoveTrace (   i As Integer ) As Boolean |

|  |
| --- |
| C++ |
| public: bool RemoveTrace(  int i ) |

|  |
| --- |
| F# |
| member RemoveTrace :   i : int -> bool |

#### Parameters

i

Type: [System.Int32](http://msdn2.microsoft.com/en-us/library/td2s409d)

trace number to remove from list

#### Return Value

Type: [Boolean](http://msdn2.microsoft.com/en-us/library/a28wyd50)  
true is successful

## See Also

[SEGYFile Class](#_7731A60B_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFile.SkipNTracesOnRead Method

skip ntraces

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public bool SkipNTracesOnRead(  int skip ) |

|  |
| --- |
| VB |
| Public Function SkipNTracesOnRead (   skip As Integer ) As Boolean |

|  |
| --- |
| C++ |
| public: bool SkipNTracesOnRead(  int skip ) |

|  |
| --- |
| F# |
| member SkipNTracesOnRead :   skip : int -> bool |

#### Parameters

skip

Type: [System.Int32](http://msdn2.microsoft.com/en-us/library/td2s409d)

number of traces to skip

#### Return Value

Type: [Boolean](http://msdn2.microsoft.com/en-us/library/a28wyd50)  
true is successful

## See Also

[SEGYFile Class](#_7731A60B_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFile.Write Method

## Overload List

|  |  |  |
| --- | --- | --- |
|  | Name | Description |
| Public method | [Write(String)](#_30EB19DA_Topic) | write the entire file to disk |
| Public method | [Write(SEGYFileHeader)](#_47DE64F6_Topic) | write the file header to disk |
| Public method | [Write(SEGYTrace)](#_4E811FD4_Topic) | write a trace to disk |
| Public method | [Write(List(SEGYTrace))](#_AB571614_Topic) | write the list Traces to disk |

## See Also

[SEGYFile Class](#_7731A60B_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFile.Write Method (String)

write the entire file to disk

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public bool Write(  string outputFileName ) |

|  |
| --- |
| VB |
| Public Function Write (   outputFileName As String ) As Boolean |

|  |
| --- |
| C++ |
| public: bool Write(  String^ outputFileName ) |

|  |
| --- |
| F# |
| member Write :   outputFileName : string -> bool |

#### Parameters

outputFileName

Type: [System.String](http://msdn2.microsoft.com/en-us/library/s1wwdcbf)

output file name

#### Return Value

Type: [Boolean](http://msdn2.microsoft.com/en-us/library/a28wyd50)  
true is successful

## See Also

[SEGYFile Class](#_7731A60B_Topic)

[Write Overload](#_923708CD_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFile.Write Method (SEGYFileHeader)

write the file header to disk

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public bool Write(  SEGYFileHeader fileHeader ) |

|  |
| --- |
| VB |
| Public Function Write (   fileHeader As SEGYFileHeader ) As Boolean |

|  |
| --- |
| C++ |
| public: bool Write(  SEGYFileHeader^ fileHeader ) |

|  |
| --- |
| F# |
| member Write :   fileHeader : SEGYFileHeader -> bool |

#### Parameters

fileHeader

Type: [SEGYlib.SEGYFileHeader](#_5936971D_Topic)

input file header

#### Return Value

Type: [Boolean](http://msdn2.microsoft.com/en-us/library/a28wyd50)  
true is successful

## See Also

[SEGYFile Class](#_7731A60B_Topic)

[Write Overload](#_923708CD_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFile.Write Method (SEGYTrace)

write a trace to disk

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public bool Write(  SEGYTrace trace ) |

|  |
| --- |
| VB |
| Public Function Write (   trace As SEGYTrace ) As Boolean |

|  |
| --- |
| C++ |
| public: bool Write(  SEGYTrace^ trace ) |

|  |
| --- |
| F# |
| member Write :   trace : SEGYTrace -> bool |

#### Parameters

trace

Type: [SEGYlib.SEGYTrace](#_8E9F9823_Topic)

input trace header

#### Return Value

Type: [Boolean](http://msdn2.microsoft.com/en-us/library/a28wyd50)  
true is successful

## See Also

[SEGYFile Class](#_7731A60B_Topic)

[Write Overload](#_923708CD_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFile.Write Method (List(SEGYTrace))

write the list Traces to disk

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public bool Write(  List<SEGYTrace> traces ) |

|  |
| --- |
| VB |
| Public Function Write (   traces As List(Of SEGYTrace) ) As Boolean |

|  |
| --- |
| C++ |
| public: bool Write(  List<SEGYTrace^>^ traces ) |

|  |
| --- |
| F# |
| member Write :   traces : List<SEGYTrace> -> bool |

#### Parameters

traces

Type: [System.Collections.Generic.List](http://msdn2.microsoft.com/en-us/library/6sh2ey19)([SEGYTrace](#_8E9F9823_Topic))

List of SEGYTrace instances

#### Return Value

Type: [Boolean](http://msdn2.microsoft.com/en-us/library/a28wyd50)  
true is successful

## See Also

[SEGYFile Class](#_7731A60B_Topic)

[Write Overload](#_923708CD_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFile.WriteXML Method

## Overload List

|  |  |  |
| --- | --- | --- |
|  | Name | Description |
| Public method | [WriteXML(String)](#_F798B4E8_Topic) | write the file to XML |
| Public method | [WriteXML(String, SEGYFileHeader)](#_EC3201B8_Topic) | write the file header to XML |
| Public method | [WriteXML(String, SEGYTrace)](#_A740B142_Topic) | write the trace to XML |

## See Also

[SEGYFile Class](#_7731A60B_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFile.WriteXML Method (String)

write the file to XML

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public bool WriteXML(  string outputXMLFileName ) |

|  |
| --- |
| VB |
| Public Function WriteXML (   outputXMLFileName As String ) As Boolean |

|  |
| --- |
| C++ |
| public: bool WriteXML(  String^ outputXMLFileName ) |

|  |
| --- |
| F# |
| member WriteXML :   outputXMLFileName : string -> bool |

#### Parameters

outputXMLFileName

Type: [System.String](http://msdn2.microsoft.com/en-us/library/s1wwdcbf)

output XML file name

#### Return Value

Type: [Boolean](http://msdn2.microsoft.com/en-us/library/a28wyd50)  
true is successful

## See Also

[SEGYFile Class](#_7731A60B_Topic)

[WriteXML Overload](#_9C6F7A63_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFile.WriteXML Method (String, SEGYFileHeader)

write the file header to XML

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public bool WriteXML(  string outputXMLFileName,  SEGYFileHeader fileheader ) |

|  |
| --- |
| VB |
| Public Function WriteXML (   outputXMLFileName As String,  fileheader As SEGYFileHeader ) As Boolean |

|  |
| --- |
| C++ |
| public: bool WriteXML(  String^ outputXMLFileName,   SEGYFileHeader^ fileheader ) |

|  |
| --- |
| F# |
| member WriteXML :   outputXMLFileName : string \*   fileheader : SEGYFileHeader -> bool |

#### Parameters

outputXMLFileName

Type: [System.String](http://msdn2.microsoft.com/en-us/library/s1wwdcbf)

output XML file name

fileheader

Type: [SEGYlib.SEGYFileHeader](#_5936971D_Topic)

input file header

#### Return Value

Type: [Boolean](http://msdn2.microsoft.com/en-us/library/a28wyd50)  
true is successful

## See Also

[SEGYFile Class](#_7731A60B_Topic)

[WriteXML Overload](#_9C6F7A63_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFile.WriteXML Method (String, SEGYTrace)

write the trace to XML

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public bool WriteXML(  string outputXMLFileName,  SEGYTrace trace ) |

|  |
| --- |
| VB |
| Public Function WriteXML (   outputXMLFileName As String,  trace As SEGYTrace ) As Boolean |

|  |
| --- |
| C++ |
| public: bool WriteXML(  String^ outputXMLFileName,   SEGYTrace^ trace ) |

|  |
| --- |
| F# |
| member WriteXML :   outputXMLFileName : string \*   trace : SEGYTrace -> bool |

#### Parameters

outputXMLFileName

Type: [System.String](http://msdn2.microsoft.com/en-us/library/s1wwdcbf)

output XML file name

trace

Type: [SEGYlib.SEGYTrace](#_8E9F9823_Topic)

input trace

#### Return Value

Type: [Boolean](http://msdn2.microsoft.com/en-us/library/a28wyd50)  
true is successful

## See Also

[SEGYFile Class](#_7731A60B_Topic)

[WriteXML Overload](#_9C6F7A63_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFile.SEGYFile Fields

The [SEGYFile](#_7731A60B_Topic) type exposes the following members.

## Fields

|  |  |  |
| --- | --- | --- |
|  | Name | Description |
| Public field | [isBigEndian](#_5C5C6506_Topic) | true for big endian file; false little endian |

## See Also

[SEGYFile Class](#_7731A60B_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFile.isBigEndian Field

true for big endian file; false little endian

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public bool isBigEndian |

|  |
| --- |
| VB |
| Public isBigEndian As Boolean |

|  |
| --- |
| C++ |
| public: bool isBigEndian |

|  |
| --- |
| F# |
| val mutable isBigEndian: bool |

#### Field Value

Type: [Boolean](http://msdn2.microsoft.com/en-us/library/a28wyd50)

## See Also

[SEGYFile Class](#_7731A60B_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFileHeader Class

Class for storing and retrieving data stored in the SEGY file Header

## Inheritance Hierarchy

[System.Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b)  
  SEGYlib.SEGYFileHeader

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public class SEGYFileHeader |

|  |
| --- |
| VB |
| Public Class SEGYFileHeader |

|  |
| --- |
| C++ |
| public ref class SEGYFileHeader |

|  |
| --- |
| F# |
| type SEGYFileHeader = class end |

The **SEGYFileHeader** type exposes the following members.

## Constructors

|  |  |  |
| --- | --- | --- |
|  | Name | Description |
| Public method | [SEGYFileHeader](#_EAC7D017_Topic) | constructor |

## Properties

|  |  |  |
| --- | --- | --- |
|  | Name | Description |
| Public property | [amplitudeRecoveryMethod](#_750D004E_Topic) | attribute defined though segy rev 1 standard |
| Public property | [BinaryFileHeader](#_7029EEB1_Topic) | access to byte block of Binary File header |
| Public property | [binaryGainRecovered](#_CF156A45_Topic) | attribute defined though segy rev 1 standard |
| Public property | [correlatedDataTraces](#_5991347A_Topic) | attribute defined though segy rev 1 standard |
| Public property | [dataSampleFormatCode](#_9374032C_Topic) | attribute defined though segy rev 1 standard |
| Public property | [ensembleFold](#_A3FCB536_Topic) | attribute defined though segy rev 1 standard |
| Public property | [ExtendedTextHeader](#_D693DA4F_Topic) | lead 3200 byte tape header plus any other extended blocks |
| Public property | [fixedLengthTraceFlag](#_507F6EB8_Topic) | attribute defined though segy rev 1 standard |
| Public property | [impulseSignalPolarity](#_480DB560_Topic) | attribute defined though segy rev 1 standard |
| Public property | [jobIdentificationNumberz](#_2D964A8E_Topic) | attribute defined though segy rev 1 standard |
| Public property | [lengthOfFileHeader](#_653A7AE8_Topic) | byte length of file header including extended tape header and binary file header |
| Public property | [lineNumber](#_6BFE33D3_Topic) | attribute defined though segy rev 1 standard |
| Public property | [measurementSystem](#_7D71173B_Topic) | attribute defined though segy rev 1 standard |
| Public property | [numberOfAuxilaryTracesPerEnsemble](#_E6B0EFF7_Topic) | attribute defined though segy rev 1 standard |
| Public property | [numberOfDataTracesPerEnsemble](#_F345CF73_Topic) | attribute defined though segy rev 1 standard |
| Public property | [numberOfExtendedTextualFileHeaderRecordsFollowing](#_734B1C24_Topic) | attribute defined though segy rev 1 standard |
| Public property | [numberOfSamplesPerDataTrace](#_7CE05E91_Topic) | attribute defined though segy rev 1 standard |
| Public property | [numberOfSamplesPerDataTraceForOriginalFieldRecording](#_A62FFE81_Topic) | attribute defined though segy rev 1 standard |
| Public property | [reelNumber](#_9B2E933_Topic) | attribute defined though segy rev 1 standard |
| Public property | [sampleIntervalInMicroseconds](#_75F4EDF4_Topic) | attribute defined though segy rev 1 standard |
| Public property | [sampleIntervalInMicrosecondsInOriginalFieldRecording](#_19A689E4_Topic) | attribute defined though segy rev 1 standard |
| Public property | [segyFormatRevisionNumber](#_4ED6FF45_Topic) | attribute defined though segy rev 1 standard |
| Public property | [sweepCode](#_28099909_Topic) | attribute defined though segy rev 1 standard |
| Public property | [sweepFrequencyEnd](#_7C7B3C37_Topic) | attribute defined though segy rev 1 standard |
| Public property | [sweepFrequencyStart](#_BA53434B_Topic) | attribute defined though segy rev 1 standard |
| Public property | [sweepLength](#_B6D6C63A_Topic) | attribute defined though segy rev 1 standard |
| Public property | [sweepTraceTaperLengthAtEnd](#_3C0B5AEB_Topic) | attribute defined though segy rev 1 standard |
| Public property | [sweepTraceTaperLengthAtStart](#_35822711_Topic) | attribute defined though segy rev 1 standard |
| Public property | [taperType](#_96CEA6F7_Topic) | attribute defined though segy rev 1 standard |
| Public property | [traceNumberSweepChannel](#_C43986FC_Topic) | attribute defined though segy rev 1 standard |
| Public property | [traceSortingCode](#_E0A9EE0A_Topic) | attribute defined though segy rev 1 standard |
| Public property | [verticalSumCode](#_B1477B4B_Topic) | attribute defined though segy rev 1 standard |
| Public property | [vibratoryPolarityCode](#_C32699AC_Topic) | attribute defined though segy rev 1 standard |

## Methods

|  |  |  |
| --- | --- | --- |
|  | Name | Description |
| Public method | [Copy](#_1D7135CC_Topic) | make a deep copy of the Header |
| Public method | [Equals](http://msdn2.microsoft.com/en-us/library/bsc2ak47) | Determines whether the specified [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b) is equal to the current [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b). (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Protected method | [Finalize](http://msdn2.microsoft.com/en-us/library/4k87zsw7) | Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public method | [GetFileHeaderText](#_A8503AC9_Topic) | get a string for the extended tape header |
| Public method | [GetFileHeaderTextByLine](#_EF922777_Topic) | get the Text header by 80 character lines |
| Public method | [GetHashCode](http://msdn2.microsoft.com/en-us/library/zdee4b3y) | Serves as a hash function for a particular type. (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public method | [GetType](http://msdn2.microsoft.com/en-us/library/dfwy45w9) | Gets the [Type](http://msdn2.microsoft.com/en-us/library/42892f65) of the current instance. (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public method | [isBigEndian](#_D5B0682A_Topic) | true for big endian and false for little endian |
| Public method | [isFileHeaderASCII](#_120C4D66_Topic) | is the file header encoded with ASCII or EBCDIC |
| Protected method | [MemberwiseClone](http://msdn2.microsoft.com/en-us/library/57ctke0a) | Creates a shallow copy of the current [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b). (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public method | [ReadFileHeader](#_98066D51_Topic) | read the file header from disk |
| Public method | [SetFileHeader](#_30003FD9_Topic) | set the Text Header by 80 character line |
| Public method | [ToString](http://msdn2.microsoft.com/en-us/library/7bxwbwt2) | Returns a string that represents the current object. (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public method | [WriteFileHeader](#_B2F8F45_Topic) | write the file header to disk |

## Fields

|  |  |  |
| --- | --- | --- |
|  | Name | Description |
| Public field | [isSEGYFileHeaderAscii](#_38070616_Topic) | true if Text Header is ASCII; false if EBCDIC |
| Public field | [positionOfStartOfDataTraces](#_BC8E10A6_Topic) | file position of start of trace data |

## See Also

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFileHeader Constructor

constructor

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public SEGYFileHeader() |

|  |
| --- |
| VB |
| Public Sub New |

|  |
| --- |
| C++ |
| public: SEGYFileHeader() |

|  |
| --- |
| F# |
| new : unit -> SEGYFileHeader |

## See Also

[SEGYFileHeader Class](#_5936971D_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFileHeader.SEGYFileHeader Properties

The [SEGYFileHeader](#_5936971D_Topic) type exposes the following members.

## Properties

|  |  |  |
| --- | --- | --- |
|  | Name | Description |
| Public property | [amplitudeRecoveryMethod](#_750D004E_Topic) | attribute defined though segy rev 1 standard |
| Public property | [BinaryFileHeader](#_7029EEB1_Topic) | access to byte block of Binary File header |
| Public property | [binaryGainRecovered](#_CF156A45_Topic) | attribute defined though segy rev 1 standard |
| Public property | [correlatedDataTraces](#_5991347A_Topic) | attribute defined though segy rev 1 standard |
| Public property | [dataSampleFormatCode](#_9374032C_Topic) | attribute defined though segy rev 1 standard |
| Public property | [ensembleFold](#_A3FCB536_Topic) | attribute defined though segy rev 1 standard |
| Public property | [ExtendedTextHeader](#_D693DA4F_Topic) | lead 3200 byte tape header plus any other extended blocks |
| Public property | [fixedLengthTraceFlag](#_507F6EB8_Topic) | attribute defined though segy rev 1 standard |
| Public property | [impulseSignalPolarity](#_480DB560_Topic) | attribute defined though segy rev 1 standard |
| Public property | [jobIdentificationNumberz](#_2D964A8E_Topic) | attribute defined though segy rev 1 standard |
| Public property | [lengthOfFileHeader](#_653A7AE8_Topic) | byte length of file header including extended tape header and binary file header |
| Public property | [lineNumber](#_6BFE33D3_Topic) | attribute defined though segy rev 1 standard |
| Public property | [measurementSystem](#_7D71173B_Topic) | attribute defined though segy rev 1 standard |
| Public property | [numberOfAuxilaryTracesPerEnsemble](#_E6B0EFF7_Topic) | attribute defined though segy rev 1 standard |
| Public property | [numberOfDataTracesPerEnsemble](#_F345CF73_Topic) | attribute defined though segy rev 1 standard |
| Public property | [numberOfExtendedTextualFileHeaderRecordsFollowing](#_734B1C24_Topic) | attribute defined though segy rev 1 standard |
| Public property | [numberOfSamplesPerDataTrace](#_7CE05E91_Topic) | attribute defined though segy rev 1 standard |
| Public property | [numberOfSamplesPerDataTraceForOriginalFieldRecording](#_A62FFE81_Topic) | attribute defined though segy rev 1 standard |
| Public property | [reelNumber](#_9B2E933_Topic) | attribute defined though segy rev 1 standard |
| Public property | [sampleIntervalInMicroseconds](#_75F4EDF4_Topic) | attribute defined though segy rev 1 standard |
| Public property | [sampleIntervalInMicrosecondsInOriginalFieldRecording](#_19A689E4_Topic) | attribute defined though segy rev 1 standard |
| Public property | [segyFormatRevisionNumber](#_4ED6FF45_Topic) | attribute defined though segy rev 1 standard |
| Public property | [sweepCode](#_28099909_Topic) | attribute defined though segy rev 1 standard |
| Public property | [sweepFrequencyEnd](#_7C7B3C37_Topic) | attribute defined though segy rev 1 standard |
| Public property | [sweepFrequencyStart](#_BA53434B_Topic) | attribute defined though segy rev 1 standard |
| Public property | [sweepLength](#_B6D6C63A_Topic) | attribute defined though segy rev 1 standard |
| Public property | [sweepTraceTaperLengthAtEnd](#_3C0B5AEB_Topic) | attribute defined though segy rev 1 standard |
| Public property | [sweepTraceTaperLengthAtStart](#_35822711_Topic) | attribute defined though segy rev 1 standard |
| Public property | [taperType](#_96CEA6F7_Topic) | attribute defined though segy rev 1 standard |
| Public property | [traceNumberSweepChannel](#_C43986FC_Topic) | attribute defined though segy rev 1 standard |
| Public property | [traceSortingCode](#_E0A9EE0A_Topic) | attribute defined though segy rev 1 standard |
| Public property | [verticalSumCode](#_B1477B4B_Topic) | attribute defined though segy rev 1 standard |
| Public property | [vibratoryPolarityCode](#_C32699AC_Topic) | attribute defined though segy rev 1 standard |

## See Also

[SEGYFileHeader Class](#_5936971D_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFileHeader.amplitudeRecoveryMethod Property

attribute defined though segy rev 1 standard

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort amplitudeRecoveryMethod { get; set; } |

|  |
| --- |
| VB |
| Public Property amplitudeRecoveryMethod As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short amplitudeRecoveryMethod {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member amplitudeRecoveryMethod : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYFileHeader Class](#_5936971D_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFileHeader.BinaryFileHeader Property

access to byte block of Binary File header

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public byte[] BinaryFileHeader { get; set; } |

|  |
| --- |
| VB |
| Public Property BinaryFileHeader As Byte()  Get  Set |

|  |
| --- |
| C++ |
| public: property array<unsigned char>^ BinaryFileHeader {  array<unsigned char>^ get ();  void set (array<unsigned char>^ value); } |

|  |
| --- |
| F# |
| member BinaryFileHeader : byte[] with get, set |

#### Property Value

Type: [Byte](http://msdn2.microsoft.com/en-us/library/yyb1w04y)[]

## See Also

[SEGYFileHeader Class](#_5936971D_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFileHeader.binaryGainRecovered Property

attribute defined though segy rev 1 standard

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort binaryGainRecovered { get; set; } |

|  |
| --- |
| VB |
| Public Property binaryGainRecovered As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short binaryGainRecovered {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member binaryGainRecovered : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYFileHeader Class](#_5936971D_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFileHeader.correlatedDataTraces Property

attribute defined though segy rev 1 standard

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort correlatedDataTraces { get; set; } |

|  |
| --- |
| VB |
| Public Property correlatedDataTraces As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short correlatedDataTraces {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member correlatedDataTraces : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYFileHeader Class](#_5936971D_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFileHeader.dataSampleFormatCode Property

attribute defined though segy rev 1 standard

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public int dataSampleFormatCode { get; set; } |

|  |
| --- |
| VB |
| Public Property dataSampleFormatCode As Integer  Get  Set |

|  |
| --- |
| C++ |
| public: property int dataSampleFormatCode {  int get ();  void set (int value); } |

|  |
| --- |
| F# |
| member dataSampleFormatCode : int with get, set |

#### Property Value

Type: [Int32](http://msdn2.microsoft.com/en-us/library/td2s409d)

## See Also

[SEGYFileHeader Class](#_5936971D_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFileHeader.ensembleFold Property

attribute defined though segy rev 1 standard

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort ensembleFold { get; set; } |

|  |
| --- |
| VB |
| Public Property ensembleFold As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short ensembleFold {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member ensembleFold : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYFileHeader Class](#_5936971D_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFileHeader.ExtendedTextHeader Property

lead 3200 byte tape header plus any other extended blocks

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public List<byte[]> ExtendedTextHeader { get; set; } |

|  |
| --- |
| VB |
| Public Property ExtendedTextHeader As List(Of Byte())  Get  Set |

|  |
| --- |
| C++ |
| public: property List<array<unsigned char>^>^ ExtendedTextHeader {  List<array<unsigned char>^>^ get ();  void set (List<array<unsigned char>^>^ value); } |

|  |
| --- |
| F# |
| member ExtendedTextHeader : List<byte[]> with get, set |

#### Property Value

Type: [List](http://msdn2.microsoft.com/en-us/library/6sh2ey19)([Byte](http://msdn2.microsoft.com/en-us/library/yyb1w04y)[])

## See Also

[SEGYFileHeader Class](#_5936971D_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFileHeader.fixedLengthTraceFlag Property

attribute defined though segy rev 1 standard

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort fixedLengthTraceFlag { get; set; } |

|  |
| --- |
| VB |
| Public Property fixedLengthTraceFlag As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short fixedLengthTraceFlag {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member fixedLengthTraceFlag : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYFileHeader Class](#_5936971D_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFileHeader.impulseSignalPolarity Property

attribute defined though segy rev 1 standard

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort impulseSignalPolarity { get; set; } |

|  |
| --- |
| VB |
| Public Property impulseSignalPolarity As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short impulseSignalPolarity {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member impulseSignalPolarity : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYFileHeader Class](#_5936971D_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFileHeader.jobIdentificationNumberz Property

attribute defined though segy rev 1 standard

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public uint jobIdentificationNumberz { get; set; } |

|  |
| --- |
| VB |
| Public Property jobIdentificationNumberz As UInteger  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned int jobIdentificationNumberz {  unsigned int get ();  void set (unsigned int value); } |

|  |
| --- |
| F# |
| member jobIdentificationNumberz : uint32 with get, set |

#### Property Value

Type: [UInt32](http://msdn2.microsoft.com/en-us/library/ctys3981)

## See Also

[SEGYFileHeader Class](#_5936971D_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFileHeader.lengthOfFileHeader Property

byte length of file header including extended tape header and binary file header

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public int lengthOfFileHeader { get; set; } |

|  |
| --- |
| VB |
| Public Property lengthOfFileHeader As Integer  Get  Set |

|  |
| --- |
| C++ |
| public: property int lengthOfFileHeader {  int get ();  void set (int value); } |

|  |
| --- |
| F# |
| member lengthOfFileHeader : int with get, set |

#### Property Value

Type: [Int32](http://msdn2.microsoft.com/en-us/library/td2s409d)

## See Also

[SEGYFileHeader Class](#_5936971D_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFileHeader.lineNumber Property

attribute defined though segy rev 1 standard

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public uint lineNumber { get; set; } |

|  |
| --- |
| VB |
| Public Property lineNumber As UInteger  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned int lineNumber {  unsigned int get ();  void set (unsigned int value); } |

|  |
| --- |
| F# |
| member lineNumber : uint32 with get, set |

#### Property Value

Type: [UInt32](http://msdn2.microsoft.com/en-us/library/ctys3981)

## See Also

[SEGYFileHeader Class](#_5936971D_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFileHeader.measurementSystem Property

attribute defined though segy rev 1 standard

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort measurementSystem { get; set; } |

|  |
| --- |
| VB |
| Public Property measurementSystem As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short measurementSystem {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member measurementSystem : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYFileHeader Class](#_5936971D_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFileHeader.numberOfAuxilaryTracesPerEnsemble Property

attribute defined though segy rev 1 standard

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort numberOfAuxilaryTracesPerEnsemble { get; set; } |

|  |
| --- |
| VB |
| Public Property numberOfAuxilaryTracesPerEnsemble As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short numberOfAuxilaryTracesPerEnsemble {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member numberOfAuxilaryTracesPerEnsemble : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYFileHeader Class](#_5936971D_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFileHeader.numberOfDataTracesPerEnsemble Property

attribute defined though segy rev 1 standard

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort numberOfDataTracesPerEnsemble { get; set; } |

|  |
| --- |
| VB |
| Public Property numberOfDataTracesPerEnsemble As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short numberOfDataTracesPerEnsemble {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member numberOfDataTracesPerEnsemble : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYFileHeader Class](#_5936971D_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFileHeader.numberOfExtendedTextualFileHeaderRecordsFollowing Property

attribute defined though segy rev 1 standard

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort numberOfExtendedTextualFileHeaderRecordsFollowing { get; set; } |

|  |
| --- |
| VB |
| Public Property numberOfExtendedTextualFileHeaderRecordsFollowing As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short numberOfExtendedTextualFileHeaderRecordsFollowing {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member numberOfExtendedTextualFileHeaderRecordsFollowing : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYFileHeader Class](#_5936971D_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFileHeader.numberOfSamplesPerDataTrace Property

attribute defined though segy rev 1 standard

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort numberOfSamplesPerDataTrace { get; set; } |

|  |
| --- |
| VB |
| Public Property numberOfSamplesPerDataTrace As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short numberOfSamplesPerDataTrace {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member numberOfSamplesPerDataTrace : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYFileHeader Class](#_5936971D_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFileHeader.numberOfSamplesPerDataTraceForOriginalFieldRecording Property

attribute defined though segy rev 1 standard

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort numberOfSamplesPerDataTraceForOriginalFieldRecording { get; set; } |

|  |
| --- |
| VB |
| Public Property numberOfSamplesPerDataTraceForOriginalFieldRecording As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short numberOfSamplesPerDataTraceForOriginalFieldRecording {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member numberOfSamplesPerDataTraceForOriginalFieldRecording : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYFileHeader Class](#_5936971D_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFileHeader.reelNumber Property

attribute defined though segy rev 1 standard

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public uint reelNumber { get; set; } |

|  |
| --- |
| VB |
| Public Property reelNumber As UInteger  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned int reelNumber {  unsigned int get ();  void set (unsigned int value); } |

|  |
| --- |
| F# |
| member reelNumber : uint32 with get, set |

#### Property Value

Type: [UInt32](http://msdn2.microsoft.com/en-us/library/ctys3981)

## See Also

[SEGYFileHeader Class](#_5936971D_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFileHeader.sampleIntervalInMicroseconds Property

attribute defined though segy rev 1 standard

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort sampleIntervalInMicroseconds { get; set; } |

|  |
| --- |
| VB |
| Public Property sampleIntervalInMicroseconds As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short sampleIntervalInMicroseconds {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member sampleIntervalInMicroseconds : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYFileHeader Class](#_5936971D_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFileHeader.sampleIntervalInMicrosecondsInOriginalFieldRecording Property

attribute defined though segy rev 1 standard

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort sampleIntervalInMicrosecondsInOriginalFieldRecording { get; set; } |

|  |
| --- |
| VB |
| Public Property sampleIntervalInMicrosecondsInOriginalFieldRecording As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short sampleIntervalInMicrosecondsInOriginalFieldRecording {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member sampleIntervalInMicrosecondsInOriginalFieldRecording : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYFileHeader Class](#_5936971D_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFileHeader.segyFormatRevisionNumber Property

attribute defined though segy rev 1 standard

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort segyFormatRevisionNumber { get; set; } |

|  |
| --- |
| VB |
| Public Property segyFormatRevisionNumber As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short segyFormatRevisionNumber {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member segyFormatRevisionNumber : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYFileHeader Class](#_5936971D_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFileHeader.sweepCode Property

attribute defined though segy rev 1 standard

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort sweepCode { get; set; } |

|  |
| --- |
| VB |
| Public Property sweepCode As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short sweepCode {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member sweepCode : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYFileHeader Class](#_5936971D_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFileHeader.sweepFrequencyEnd Property

attribute defined though segy rev 1 standard

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort sweepFrequencyEnd { get; set; } |

|  |
| --- |
| VB |
| Public Property sweepFrequencyEnd As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short sweepFrequencyEnd {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member sweepFrequencyEnd : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYFileHeader Class](#_5936971D_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFileHeader.sweepFrequencyStart Property

attribute defined though segy rev 1 standard

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort sweepFrequencyStart { get; set; } |

|  |
| --- |
| VB |
| Public Property sweepFrequencyStart As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short sweepFrequencyStart {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member sweepFrequencyStart : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYFileHeader Class](#_5936971D_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFileHeader.sweepLength Property

attribute defined though segy rev 1 standard

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort sweepLength { get; set; } |

|  |
| --- |
| VB |
| Public Property sweepLength As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short sweepLength {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member sweepLength : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYFileHeader Class](#_5936971D_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFileHeader.sweepTraceTaperLengthAtEnd Property

attribute defined though segy rev 1 standard

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort sweepTraceTaperLengthAtEnd { get; set; } |

|  |
| --- |
| VB |
| Public Property sweepTraceTaperLengthAtEnd As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short sweepTraceTaperLengthAtEnd {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member sweepTraceTaperLengthAtEnd : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYFileHeader Class](#_5936971D_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFileHeader.sweepTraceTaperLengthAtStart Property

attribute defined though segy rev 1 standard

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort sweepTraceTaperLengthAtStart { get; set; } |

|  |
| --- |
| VB |
| Public Property sweepTraceTaperLengthAtStart As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short sweepTraceTaperLengthAtStart {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member sweepTraceTaperLengthAtStart : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYFileHeader Class](#_5936971D_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFileHeader.taperType Property

attribute defined though segy rev 1 standard

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort taperType { get; set; } |

|  |
| --- |
| VB |
| Public Property taperType As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short taperType {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member taperType : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYFileHeader Class](#_5936971D_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFileHeader.traceNumberSweepChannel Property

attribute defined though segy rev 1 standard

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort traceNumberSweepChannel { get; set; } |

|  |
| --- |
| VB |
| Public Property traceNumberSweepChannel As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short traceNumberSweepChannel {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member traceNumberSweepChannel : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYFileHeader Class](#_5936971D_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFileHeader.traceSortingCode Property

attribute defined though segy rev 1 standard

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public short traceSortingCode { get; set; } |

|  |
| --- |
| VB |
| Public Property traceSortingCode As Short  Get  Set |

|  |
| --- |
| C++ |
| public: property short traceSortingCode {  short get ();  void set (short value); } |

|  |
| --- |
| F# |
| member traceSortingCode : int16 with get, set |

#### Property Value

Type: [Int16](http://msdn2.microsoft.com/en-us/library/e07e6fds)

## See Also

[SEGYFileHeader Class](#_5936971D_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFileHeader.verticalSumCode Property

attribute defined though segy rev 1 standard

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort verticalSumCode { get; set; } |

|  |
| --- |
| VB |
| Public Property verticalSumCode As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short verticalSumCode {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member verticalSumCode : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYFileHeader Class](#_5936971D_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFileHeader.vibratoryPolarityCode Property

attribute defined though segy rev 1 standard

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort vibratoryPolarityCode { get; set; } |

|  |
| --- |
| VB |
| Public Property vibratoryPolarityCode As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short vibratoryPolarityCode {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member vibratoryPolarityCode : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYFileHeader Class](#_5936971D_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFileHeader.SEGYFileHeader Methods

The [SEGYFileHeader](#_5936971D_Topic) type exposes the following members.

## Methods

|  |  |  |
| --- | --- | --- |
|  | Name | Description |
| Public method | [Copy](#_1D7135CC_Topic) | make a deep copy of the Header |
| Public method | [Equals](http://msdn2.microsoft.com/en-us/library/bsc2ak47) | Determines whether the specified [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b) is equal to the current [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b). (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Protected method | [Finalize](http://msdn2.microsoft.com/en-us/library/4k87zsw7) | Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public method | [GetFileHeaderText](#_A8503AC9_Topic) | get a string for the extended tape header |
| Public method | [GetFileHeaderTextByLine](#_EF922777_Topic) | get the Text header by 80 character lines |
| Public method | [GetHashCode](http://msdn2.microsoft.com/en-us/library/zdee4b3y) | Serves as a hash function for a particular type. (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public method | [GetType](http://msdn2.microsoft.com/en-us/library/dfwy45w9) | Gets the [Type](http://msdn2.microsoft.com/en-us/library/42892f65) of the current instance. (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public method | [isBigEndian](#_D5B0682A_Topic) | true for big endian and false for little endian |
| Public method | [isFileHeaderASCII](#_120C4D66_Topic) | is the file header encoded with ASCII or EBCDIC |
| Protected method | [MemberwiseClone](http://msdn2.microsoft.com/en-us/library/57ctke0a) | Creates a shallow copy of the current [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b). (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public method | [ReadFileHeader](#_98066D51_Topic) | read the file header from disk |
| Public method | [SetFileHeader](#_30003FD9_Topic) | set the Text Header by 80 character line |
| Public method | [ToString](http://msdn2.microsoft.com/en-us/library/7bxwbwt2) | Returns a string that represents the current object. (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public method | [WriteFileHeader](#_B2F8F45_Topic) | write the file header to disk |

## See Also

[SEGYFileHeader Class](#_5936971D_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFileHeader.Copy Method

make a deep copy of the Header

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public SEGYFileHeader Copy() |

|  |
| --- |
| VB |
| Public Function Copy As SEGYFileHeader |

|  |
| --- |
| C++ |
| public: SEGYFileHeader^ Copy() |

|  |
| --- |
| F# |
| member Copy : unit -> SEGYFileHeader |

#### Return Value

Type: [SEGYFileHeader](#_5936971D_Topic)  
a deep copy of the SEGYFileHeader structure

## See Also

[SEGYFileHeader Class](#_5936971D_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFileHeader.GetFileHeaderText Method

get a string for the extended tape header

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public string GetFileHeaderText(  int block ) |

|  |
| --- |
| VB |
| Public Function GetFileHeaderText (   block As Integer ) As String |

|  |
| --- |
| C++ |
| public: String^ GetFileHeaderText(  int block ) |

|  |
| --- |
| F# |
| member GetFileHeaderText :   block : int -> string |

#### Parameters

block

Type: [System.Int32](http://msdn2.microsoft.com/en-us/library/td2s409d)

extended trace header block number

#### Return Value

Type: [String](http://msdn2.microsoft.com/en-us/library/s1wwdcbf)  
a 3200 character string ; null if the block number is invalid

## See Also

[SEGYFileHeader Class](#_5936971D_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFileHeader.GetFileHeaderTextByLine Method

get the Text header by 80 character lines

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public string GetFileHeaderTextByLine(  int block,  int line ) |

|  |
| --- |
| VB |
| Public Function GetFileHeaderTextByLine (   block As Integer,  line As Integer ) As String |

|  |
| --- |
| C++ |
| public: String^ GetFileHeaderTextByLine(  int block,   int line ) |

|  |
| --- |
| F# |
| member GetFileHeaderTextByLine :   block : int \*   line : int -> string |

#### Parameters

block

Type: [System.Int32](http://msdn2.microsoft.com/en-us/library/td2s409d)

extended trace header block number

line

Type: [System.Int32](http://msdn2.microsoft.com/en-us/library/td2s409d)

linb number ( 0 to 39)

#### Return Value

Type: [String](http://msdn2.microsoft.com/en-us/library/s1wwdcbf)  
an 80 character string ; null if the block number is invalid

## See Also

[SEGYFileHeader Class](#_5936971D_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFileHeader.isBigEndian Method

true for big endian and false for little endian

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public bool isBigEndian() |

|  |
| --- |
| VB |
| Public Function isBigEndian As Boolean |

|  |
| --- |
| C++ |
| public: bool isBigEndian() |

|  |
| --- |
| F# |
| member isBigEndian : unit -> bool |

#### Return Value

Type: [Boolean](http://msdn2.microsoft.com/en-us/library/a28wyd50)  
true if the file header is big endian

## See Also

[SEGYFileHeader Class](#_5936971D_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFileHeader.isFileHeaderASCII Method

is the file header encoded with ASCII or EBCDIC

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public bool isFileHeaderASCII() |

|  |
| --- |
| VB |
| Public Function isFileHeaderASCII As Boolean |

|  |
| --- |
| C++ |
| public: bool isFileHeaderASCII() |

|  |
| --- |
| F# |
| member isFileHeaderASCII : unit -> bool |

#### Return Value

Type: [Boolean](http://msdn2.microsoft.com/en-us/library/a28wyd50)  
true if file header text is ASCII formatted

## See Also

[SEGYFileHeader Class](#_5936971D_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFileHeader.ReadFileHeader Method

read the file header from disk

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public bool ReadFileHeader(  BinaryReader br ) |

|  |
| --- |
| VB |
| Public Function ReadFileHeader (   br As BinaryReader ) As Boolean |

|  |
| --- |
| C++ |
| public: bool ReadFileHeader(  BinaryReader^ br ) |

|  |
| --- |
| F# |
| member ReadFileHeader :   br : BinaryReader -> bool |

#### Parameters

br

Type: [System.IO.BinaryReader](http://msdn2.microsoft.com/en-us/library/a4b8basy)

binary reader stream

#### Return Value

Type: [Boolean](http://msdn2.microsoft.com/en-us/library/a28wyd50)  
true if successful

## See Also

[SEGYFileHeader Class](#_5936971D_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFileHeader.SetFileHeader Method

set the Text Header by 80 character line

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public void SetFileHeader(  int block,  int line,  string str ) |

|  |
| --- |
| VB |
| Public Sub SetFileHeader (   block As Integer,  line As Integer,  str As String ) |

|  |
| --- |
| C++ |
| public: void SetFileHeader(  int block,   int line,   String^ str ) |

|  |
| --- |
| F# |
| member SetFileHeader :   block : int \*   line : int \*   str : string -> unit |

#### Parameters

block

Type: [System.Int32](http://msdn2.microsoft.com/en-us/library/td2s409d)

extended block number

line

Type: [System.Int32](http://msdn2.microsoft.com/en-us/library/td2s409d)

line number ( 0 to 39)

str

Type: [System.String](http://msdn2.microsoft.com/en-us/library/s1wwdcbf)

input string

## See Also

[SEGYFileHeader Class](#_5936971D_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFileHeader.WriteFileHeader Method

write the file header to disk

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public bool WriteFileHeader(  BinaryWriter bw ) |

|  |
| --- |
| VB |
| Public Function WriteFileHeader (   bw As BinaryWriter ) As Boolean |

|  |
| --- |
| C++ |
| public: bool WriteFileHeader(  BinaryWriter^ bw ) |

|  |
| --- |
| F# |
| member WriteFileHeader :   bw : BinaryWriter -> bool |

#### Parameters

bw

Type: [System.IO.BinaryWriter](http://msdn2.microsoft.com/en-us/library/ft83zssf)

output binary writer stream

#### Return Value

Type: [Boolean](http://msdn2.microsoft.com/en-us/library/a28wyd50)  
true if successful

## See Also

[SEGYFileHeader Class](#_5936971D_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFileHeader.SEGYFileHeader Fields

The [SEGYFileHeader](#_5936971D_Topic) type exposes the following members.

## Fields

|  |  |  |
| --- | --- | --- |
|  | Name | Description |
| Public field | [isSEGYFileHeaderAscii](#_38070616_Topic) | true if Text Header is ASCII; false if EBCDIC |
| Public field | [positionOfStartOfDataTraces](#_BC8E10A6_Topic) | file position of start of trace data |

## See Also

[SEGYFileHeader Class](#_5936971D_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFileHeader.isSEGYFileHeaderAscii Field

true if Text Header is ASCII; false if EBCDIC

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public bool isSEGYFileHeaderAscii |

|  |
| --- |
| VB |
| Public isSEGYFileHeaderAscii As Boolean |

|  |
| --- |
| C++ |
| public: bool isSEGYFileHeaderAscii |

|  |
| --- |
| F# |
| val mutable isSEGYFileHeaderAscii: bool |

#### Field Value

Type: [Boolean](http://msdn2.microsoft.com/en-us/library/a28wyd50)

## See Also

[SEGYFileHeader Class](#_5936971D_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYFileHeader.positionOfStartOfDataTraces Field

file position of start of trace data

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public long positionOfStartOfDataTraces |

|  |
| --- |
| VB |
| Public positionOfStartOfDataTraces As Long |

|  |
| --- |
| C++ |
| public: long long positionOfStartOfDataTraces |

|  |
| --- |
| F# |
| val mutable positionOfStartOfDataTraces: int64 |

#### Field Value

Type: [Int64](http://msdn2.microsoft.com/en-us/library/6yy583ek)

## See Also

[SEGYFileHeader Class](#_5936971D_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTrace Class

SEGYTrace is used to access and set SEGY rev 1 trace data

## Inheritance Hierarchy

[System.Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b)  
  SEGYlib.SEGYTrace

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public class SEGYTrace |

|  |
| --- |
| VB |
| Public Class SEGYTrace |

|  |
| --- |
| C++ |
| public ref class SEGYTrace |

|  |
| --- |
| F# |
| type SEGYTrace = class end |

The **SEGYTrace** type exposes the following members.

## Constructors

|  |  |  |
| --- | --- | --- |
|  | Name | Description |
| Public method | [SEGYTrace](#_D8CCEFBD_Topic) | constructor |

## Properties

|  |  |  |
| --- | --- | --- |
|  | Name | Description |
| Public property | [codedTime](#_72ED43B_Topic) | trace time in DDDHHHMMSSmmm |
| Public property | [Data](#_136E3687_Topic) | signal amplitude |
| Public property | [groupPositionXGSCDIG](#_A24DC0C2_Topic) | GSCA implemententation of group position |
| Public property | [groupPositionYGSCDIG](#_D4A94E30_Topic) | GSCA implemententation of group position |
| Public property | [isBigEndian](#_A6976861_Topic) | true if big endian |
| Public property | [isLatLon](#_AC78C502_Topic) | is it a lat/lon position or projected |
| Public property | [positionOfTraceInFile](#_14D17532_Topic) | position in bytes |
| Public property | [sourcePositionX](#_BF60BB5_Topic) | source position X corrected for scaling factors |
| Public property | [sourcePositionY](#_D5ED49B5_Topic) | source position Y corrected for scaling factors |
| Public property | [timeTracedRecorded](#_A216ED57_Topic) | DateTime of trace instance |
| Public property | [totalLengthOfTraceData](#_A3DBE1AC_Topic) | total number of bytes of trace data in including trace header |
| Public property | [TraceData](#_DB68C9A4_Topic) | access to underlying Trace Data Class |
| Public property | [TraceHeader](#_8E195EFB_Topic) | access to underlying Trace Header Class |

## Methods

|  |  |  |
| --- | --- | --- |
|  | Name | Description |
| Public method | [Copy](#_3385B011_Topic) | make a deep copy of a SEGY Trace |
| Public method | [Equals](http://msdn2.microsoft.com/en-us/library/bsc2ak47) | Determines whether the specified [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b) is equal to the current [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b). (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Protected method | [Finalize](http://msdn2.microsoft.com/en-us/library/4k87zsw7) | Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public method | [FixMsecField](#_EA9812FB_Topic) | transcribe msec field in old GSC format the old GSC formatted files used the Time Basis Field 166-167 for storing msec field should use lag b or lag A field this copies 166-167 to 106-107 |
| Public method | [GetHashCode](http://msdn2.microsoft.com/en-us/library/zdee4b3y) | Serves as a hash function for a particular type. (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public method | [GetType](http://msdn2.microsoft.com/en-us/library/dfwy45w9) | Gets the [Type](http://msdn2.microsoft.com/en-us/library/42892f65) of the current instance. (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public method | [Intialize](#_280BB5E2_Topic) | initilize trace structure |
| Protected method | [MemberwiseClone](http://msdn2.microsoft.com/en-us/library/57ctke0a) | Creates a shallow copy of the current [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b). (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public method | [ToString](http://msdn2.microsoft.com/en-us/library/7bxwbwt2) | Returns a string that represents the current object. (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public method | [Write](#_70982223_Topic) | write a trace to a BinaryWriter stream |

## See Also

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTrace Constructor

constructor

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public SEGYTrace() |

|  |
| --- |
| VB |
| Public Sub New |

|  |
| --- |
| C++ |
| public: SEGYTrace() |

|  |
| --- |
| F# |
| new : unit -> SEGYTrace |

## See Also

[SEGYTrace Class](#_8E9F9823_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTrace.SEGYTrace Properties

The [SEGYTrace](#_8E9F9823_Topic) type exposes the following members.

## Properties

|  |  |  |
| --- | --- | --- |
|  | Name | Description |
| Public property | [codedTime](#_72ED43B_Topic) | trace time in DDDHHHMMSSmmm |
| Public property | [Data](#_136E3687_Topic) | signal amplitude |
| Public property | [groupPositionXGSCDIG](#_A24DC0C2_Topic) | GSCA implemententation of group position |
| Public property | [groupPositionYGSCDIG](#_D4A94E30_Topic) | GSCA implemententation of group position |
| Public property | [isBigEndian](#_A6976861_Topic) | true if big endian |
| Public property | [isLatLon](#_AC78C502_Topic) | is it a lat/lon position or projected |
| Public property | [positionOfTraceInFile](#_14D17532_Topic) | position in bytes |
| Public property | [sourcePositionX](#_BF60BB5_Topic) | source position X corrected for scaling factors |
| Public property | [sourcePositionY](#_D5ED49B5_Topic) | source position Y corrected for scaling factors |
| Public property | [timeTracedRecorded](#_A216ED57_Topic) | DateTime of trace instance |
| Public property | [totalLengthOfTraceData](#_A3DBE1AC_Topic) | total number of bytes of trace data in including trace header |
| Public property | [TraceData](#_DB68C9A4_Topic) | access to underlying Trace Data Class |
| Public property | [TraceHeader](#_8E195EFB_Topic) | access to underlying Trace Header Class |

## See Also

[SEGYTrace Class](#_8E9F9823_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTrace.codedTime Property

trace time in DDDHHHMMSSmmm

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public long codedTime { get; set; } |

|  |
| --- |
| VB |
| Public Property codedTime As Long  Get  Set |

|  |
| --- |
| C++ |
| public: property long long codedTime {  long long get ();  void set (long long value); } |

|  |
| --- |
| F# |
| member codedTime : int64 with get, set |

#### Property Value

Type: [Int64](http://msdn2.microsoft.com/en-us/library/6yy583ek)

## See Also

[SEGYTrace Class](#_8E9F9823_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTrace.Data Property

signal amplitude

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public double[] Data { get; set; } |

|  |
| --- |
| VB |
| Public Property Data As Double()  Get  Set |

|  |
| --- |
| C++ |
| public: property array<double>^ Data {  array<double>^ get ();  void set (array<double>^ value); } |

|  |
| --- |
| F# |
| member Data : float[] with get, set |

#### Property Value

Type: [Double](http://msdn2.microsoft.com/en-us/library/643eft0t)[]

## See Also

[SEGYTrace Class](#_8E9F9823_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTrace.groupPositionXGSCDIG Property

GSCA implemententation of group position

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public double groupPositionXGSCDIG { get; set; } |

|  |
| --- |
| VB |
| Public Property groupPositionXGSCDIG As Double  Get  Set |

|  |
| --- |
| C++ |
| public: property double groupPositionXGSCDIG {  double get ();  void set (double value); } |

|  |
| --- |
| F# |
| member groupPositionXGSCDIG : float with get, set |

#### Property Value

Type: [Double](http://msdn2.microsoft.com/en-us/library/643eft0t)

## See Also

[SEGYTrace Class](#_8E9F9823_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTrace.groupPositionYGSCDIG Property

GSCA implemententation of group position

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public double groupPositionYGSCDIG { get; set; } |

|  |
| --- |
| VB |
| Public Property groupPositionYGSCDIG As Double  Get  Set |

|  |
| --- |
| C++ |
| public: property double groupPositionYGSCDIG {  double get ();  void set (double value); } |

|  |
| --- |
| F# |
| member groupPositionYGSCDIG : float with get, set |

#### Property Value

Type: [Double](http://msdn2.microsoft.com/en-us/library/643eft0t)

## See Also

[SEGYTrace Class](#_8E9F9823_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTrace.isBigEndian Property

true if big endian

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public bool isBigEndian { get; set; } |

|  |
| --- |
| VB |
| Public Property isBigEndian As Boolean  Get  Set |

|  |
| --- |
| C++ |
| public: property bool isBigEndian {  bool get ();  void set (bool value); } |

|  |
| --- |
| F# |
| member isBigEndian : bool with get, set |

#### Property Value

Type: [Boolean](http://msdn2.microsoft.com/en-us/library/a28wyd50)

## See Also

[SEGYTrace Class](#_8E9F9823_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTrace.isLatLon Property

is it a lat/lon position or projected

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public bool isLatLon { get; set; } |

|  |
| --- |
| VB |
| Public Property isLatLon As Boolean  Get  Set |

|  |
| --- |
| C++ |
| public: property bool isLatLon {  bool get ();  void set (bool value); } |

|  |
| --- |
| F# |
| member isLatLon : bool with get, set |

#### Property Value

Type: [Boolean](http://msdn2.microsoft.com/en-us/library/a28wyd50)

## See Also

[SEGYTrace Class](#_8E9F9823_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTrace.positionOfTraceInFile Property

position in bytes

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public long positionOfTraceInFile { get; set; } |

|  |
| --- |
| VB |
| Public Property positionOfTraceInFile As Long  Get  Set |

|  |
| --- |
| C++ |
| public: property long long positionOfTraceInFile {  long long get ();  void set (long long value); } |

|  |
| --- |
| F# |
| member positionOfTraceInFile : int64 with get, set |

#### Property Value

Type: [Int64](http://msdn2.microsoft.com/en-us/library/6yy583ek)

## See Also

[SEGYTrace Class](#_8E9F9823_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTrace.sourcePositionX Property

source position X corrected for scaling factors

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public double sourcePositionX { get; set; } |

|  |
| --- |
| VB |
| Public Property sourcePositionX As Double  Get  Set |

|  |
| --- |
| C++ |
| public: property double sourcePositionX {  double get ();  void set (double value); } |

|  |
| --- |
| F# |
| member sourcePositionX : float with get, set |

#### Property Value

Type: [Double](http://msdn2.microsoft.com/en-us/library/643eft0t)

## See Also

[SEGYTrace Class](#_8E9F9823_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTrace.sourcePositionY Property

source position Y corrected for scaling factors

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public double sourcePositionY { get; set; } |

|  |
| --- |
| VB |
| Public Property sourcePositionY As Double  Get  Set |

|  |
| --- |
| C++ |
| public: property double sourcePositionY {  double get ();  void set (double value); } |

|  |
| --- |
| F# |
| member sourcePositionY : float with get, set |

#### Property Value

Type: [Double](http://msdn2.microsoft.com/en-us/library/643eft0t)

## See Also

[SEGYTrace Class](#_8E9F9823_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTrace.timeTracedRecorded Property

DateTime of trace instance

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public DateTime timeTracedRecorded { get; set; } |

|  |
| --- |
| VB |
| Public Property timeTracedRecorded As DateTime  Get  Set |

|  |
| --- |
| C++ |
| public: property DateTime timeTracedRecorded {  DateTime get ();  void set (DateTime value); } |

|  |
| --- |
| F# |
| member timeTracedRecorded : DateTime with get, set |

#### Property Value

Type: [DateTime](http://msdn2.microsoft.com/en-us/library/03ybds8y)

## See Also

[SEGYTrace Class](#_8E9F9823_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTrace.totalLengthOfTraceData Property

total number of bytes of trace data in including trace header

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public int totalLengthOfTraceData { get; set; } |

|  |
| --- |
| VB |
| Public Property totalLengthOfTraceData As Integer  Get  Set |

|  |
| --- |
| C++ |
| public: property int totalLengthOfTraceData {  int get ();  void set (int value); } |

|  |
| --- |
| F# |
| member totalLengthOfTraceData : int with get, set |

#### Property Value

Type: [Int32](http://msdn2.microsoft.com/en-us/library/td2s409d)

## See Also

[SEGYTrace Class](#_8E9F9823_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTrace.TraceData Property

access to underlying Trace Data Class

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public SEGYTraceData TraceData { get; set; } |

|  |
| --- |
| VB |
| Public Property TraceData As SEGYTraceData  Get  Set |

|  |
| --- |
| C++ |
| public: property SEGYTraceData^ TraceData {  SEGYTraceData^ get ();  void set (SEGYTraceData^ value); } |

|  |
| --- |
| F# |
| member TraceData : SEGYTraceData with get, set |

#### Property Value

Type: [SEGYTraceData](#_7F71127F_Topic)

## See Also

[SEGYTrace Class](#_8E9F9823_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTrace.TraceHeader Property

access to underlying Trace Header Class

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public SEGYTraceHeader TraceHeader { get; set; } |

|  |
| --- |
| VB |
| Public Property TraceHeader As SEGYTraceHeader  Get  Set |

|  |
| --- |
| C++ |
| public: property SEGYTraceHeader^ TraceHeader {  SEGYTraceHeader^ get ();  void set (SEGYTraceHeader^ value); } |

|  |
| --- |
| F# |
| member TraceHeader : SEGYTraceHeader with get, set |

#### Property Value

Type: [SEGYTraceHeader](#_12C8BFA8_Topic)

## See Also

[SEGYTrace Class](#_8E9F9823_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTrace.SEGYTrace Methods

The [SEGYTrace](#_8E9F9823_Topic) type exposes the following members.

## Methods

|  |  |  |
| --- | --- | --- |
|  | Name | Description |
| Public method | [Copy](#_3385B011_Topic) | make a deep copy of a SEGY Trace |
| Public method | [Equals](http://msdn2.microsoft.com/en-us/library/bsc2ak47) | Determines whether the specified [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b) is equal to the current [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b). (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Protected method | [Finalize](http://msdn2.microsoft.com/en-us/library/4k87zsw7) | Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public method | [FixMsecField](#_EA9812FB_Topic) | transcribe msec field in old GSC format the old GSC formatted files used the Time Basis Field 166-167 for storing msec field should use lag b or lag A field this copies 166-167 to 106-107 |
| Public method | [GetHashCode](http://msdn2.microsoft.com/en-us/library/zdee4b3y) | Serves as a hash function for a particular type. (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public method | [GetType](http://msdn2.microsoft.com/en-us/library/dfwy45w9) | Gets the [Type](http://msdn2.microsoft.com/en-us/library/42892f65) of the current instance. (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public method | [Intialize](#_280BB5E2_Topic) | initilize trace structure |
| Protected method | [MemberwiseClone](http://msdn2.microsoft.com/en-us/library/57ctke0a) | Creates a shallow copy of the current [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b). (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public method | [ToString](http://msdn2.microsoft.com/en-us/library/7bxwbwt2) | Returns a string that represents the current object. (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public method | [Write](#_70982223_Topic) | write a trace to a BinaryWriter stream |

## See Also

[SEGYTrace Class](#_8E9F9823_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTrace.Copy Method

make a deep copy of a SEGY Trace

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public SEGYTrace Copy() |

|  |
| --- |
| VB |
| Public Function Copy As SEGYTrace |

|  |
| --- |
| C++ |
| public: SEGYTrace^ Copy() |

|  |
| --- |
| F# |
| member Copy : unit -> SEGYTrace |

#### Return Value

Type: [SEGYTrace](#_8E9F9823_Topic)  
pointer to a deep copy of the input trace

## See Also

[SEGYTrace Class](#_8E9F9823_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTrace.FixMsecField Method

transcribe msec field in old GSC format the old GSC formatted files used the Time Basis Field 166-167 for storing msec field should use lag b or lag A field this copies 166-167 to 106-107

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public void FixMsecField() |

|  |
| --- |
| VB |
| Public Sub FixMsecField |

|  |
| --- |
| C++ |
| public: void FixMsecField() |

|  |
| --- |
| F# |
| member FixMsecField : unit -> unit |

## See Also

[SEGYTrace Class](#_8E9F9823_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTrace.Intialize Method

initilize trace structure

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public void Intialize(  bool isBigEndian,  int format ) |

|  |
| --- |
| VB |
| Public Sub Intialize (   isBigEndian As Boolean,  format As Integer ) |

|  |
| --- |
| C++ |
| public: void Intialize(  bool isBigEndian,   int format ) |

|  |
| --- |
| F# |
| member Intialize :   isBigEndian : bool \*   format : int -> unit |

#### Parameters

isBigEndian

Type: [System.Boolean](http://msdn2.microsoft.com/en-us/library/a28wyd50)

is the file big endian or little endian

format

Type: [System.Int32](http://msdn2.microsoft.com/en-us/library/td2s409d)

format of data word length according to SEGY standard

## See Also

[SEGYTrace Class](#_8E9F9823_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTrace.Write Method

write a trace to a BinaryWriter stream

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public bool Write(  BinaryWriter bw ) |

|  |
| --- |
| VB |
| Public Function Write (   bw As BinaryWriter ) As Boolean |

|  |
| --- |
| C++ |
| public: bool Write(  BinaryWriter^ bw ) |

|  |
| --- |
| F# |
| member Write :   bw : BinaryWriter -> bool |

#### Parameters

bw

Type: [System.IO.BinaryWriter](http://msdn2.microsoft.com/en-us/library/ft83zssf)

output stream pointer

#### Return Value

Type: [Boolean](http://msdn2.microsoft.com/en-us/library/a28wyd50)  
true if successful

## See Also

[SEGYTrace Class](#_8E9F9823_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceData Class

SEGYTraceData allows access to the contents of the binary trace data

## Inheritance Hierarchy

[System.Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b)  
  SEGYlib.SEGYTraceData

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public class SEGYTraceData |

|  |
| --- |
| VB |
| Public Class SEGYTraceData |

|  |
| --- |
| C++ |
| public ref class SEGYTraceData |

|  |
| --- |
| F# |
| type SEGYTraceData = class end |

The **SEGYTraceData** type exposes the following members.

## Constructors

|  |  |  |
| --- | --- | --- |
|  | Name | Description |
| Public method | [SEGYTraceData](#_70061EBD_Topic) | SEGYTraceData allows access to the contents of the binary trace data |

## Properties

|  |  |  |
| --- | --- | --- |
|  | Name | Description |
| Public property | [Data](#_283DBE77_Topic) | a double precision view of the trace data use this to read and change the contents of the trace data buffer |
| Public property | [DataCopy](#_ECDE3424_Topic) | Use this if you want to change the data values as SEGYTraceData.Data always returns values in the trace data buffer |
| Public property | [TraceDataBuffer](#_44CB7C64_Topic) | access to byte[] trace data block |

## Methods

|  |  |  |
| --- | --- | --- |
|  | Name | Description |
| Public method | [Equals](http://msdn2.microsoft.com/en-us/library/bsc2ak47) | Determines whether the specified [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b) is equal to the current [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b). (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Protected method | [Finalize](http://msdn2.microsoft.com/en-us/library/4k87zsw7) | Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public method | [GetHashCode](http://msdn2.microsoft.com/en-us/library/zdee4b3y) | Serves as a hash function for a particular type. (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public method | [GetType](http://msdn2.microsoft.com/en-us/library/dfwy45w9) | Gets the [Type](http://msdn2.microsoft.com/en-us/library/42892f65) of the current instance. (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public method | [Initialize](#_510C9C6B_Topic) | Initialize the class |
| Protected method | [MemberwiseClone](http://msdn2.microsoft.com/en-us/library/57ctke0a) | Creates a shallow copy of the current [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b). (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public method | [ToString](http://msdn2.microsoft.com/en-us/library/7bxwbwt2) | Returns a string that represents the current object. (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |

## See Also

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceData Constructor

SEGYTraceData allows access to the contents of the binary trace data

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public SEGYTraceData() |

|  |
| --- |
| VB |
| Public Sub New |

|  |
| --- |
| C++ |
| public: SEGYTraceData() |

|  |
| --- |
| F# |
| new : unit -> SEGYTraceData |

## See Also

[SEGYTraceData Class](#_7F71127F_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceData.SEGYTraceData Properties

The [SEGYTraceData](#_7F71127F_Topic) type exposes the following members.

## Properties

|  |  |  |
| --- | --- | --- |
|  | Name | Description |
| Public property | [Data](#_283DBE77_Topic) | a double precision view of the trace data use this to read and change the contents of the trace data buffer |
| Public property | [DataCopy](#_ECDE3424_Topic) | Use this if you want to change the data values as SEGYTraceData.Data always returns values in the trace data buffer |
| Public property | [TraceDataBuffer](#_44CB7C64_Topic) | access to byte[] trace data block |

## See Also

[SEGYTraceData Class](#_7F71127F_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceData.Data Property

a double precision view of the trace data use this to read and change the contents of the trace data buffer

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public double[] Data { get; set; } |

|  |
| --- |
| VB |
| Public Property Data As Double()  Get  Set |

|  |
| --- |
| C++ |
| public: property array<double>^ Data {  array<double>^ get ();  void set (array<double>^ value); } |

|  |
| --- |
| F# |
| member Data : float[] with get, set |

#### Property Value

Type: [Double](http://msdn2.microsoft.com/en-us/library/643eft0t)[]

## See Also

[SEGYTraceData Class](#_7F71127F_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceData.DataCopy Property

Use this if you want to change the data values as SEGYTraceData.Data always returns values in the trace data buffer

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public double[] DataCopy { get; set; } |

|  |
| --- |
| VB |
| Public Property DataCopy As Double()  Get  Set |

|  |
| --- |
| C++ |
| public: property array<double>^ DataCopy {  array<double>^ get ();  void set (array<double>^ value); } |

|  |
| --- |
| F# |
| member DataCopy : float[] with get, set |

#### Property Value

Type: [Double](http://msdn2.microsoft.com/en-us/library/643eft0t)[]

## See Also

[SEGYTraceData Class](#_7F71127F_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceData.TraceDataBuffer Property

access to byte[] trace data block

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public byte[] TraceDataBuffer { get; set; } |

|  |
| --- |
| VB |
| Public Property TraceDataBuffer As Byte()  Get  Set |

|  |
| --- |
| C++ |
| public: property array<unsigned char>^ TraceDataBuffer {  array<unsigned char>^ get ();  void set (array<unsigned char>^ value); } |

|  |
| --- |
| F# |
| member TraceDataBuffer : byte[] with get, set |

#### Property Value

Type: [Byte](http://msdn2.microsoft.com/en-us/library/yyb1w04y)[]

## See Also

[SEGYTraceData Class](#_7F71127F_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceData.SEGYTraceData Methods

The [SEGYTraceData](#_7F71127F_Topic) type exposes the following members.

## Methods

|  |  |  |
| --- | --- | --- |
|  | Name | Description |
| Public method | [Equals](http://msdn2.microsoft.com/en-us/library/bsc2ak47) | Determines whether the specified [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b) is equal to the current [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b). (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Protected method | [Finalize](http://msdn2.microsoft.com/en-us/library/4k87zsw7) | Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public method | [GetHashCode](http://msdn2.microsoft.com/en-us/library/zdee4b3y) | Serves as a hash function for a particular type. (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public method | [GetType](http://msdn2.microsoft.com/en-us/library/dfwy45w9) | Gets the [Type](http://msdn2.microsoft.com/en-us/library/42892f65) of the current instance. (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public method | [Initialize](#_510C9C6B_Topic) | Initialize the class |
| Protected method | [MemberwiseClone](http://msdn2.microsoft.com/en-us/library/57ctke0a) | Creates a shallow copy of the current [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b). (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public method | [ToString](http://msdn2.microsoft.com/en-us/library/7bxwbwt2) | Returns a string that represents the current object. (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |

## See Also

[SEGYTraceData Class](#_7F71127F_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceData.Initialize Method

Initialize the class

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public void Initialize(  int format,  bool bigendian ) |

|  |
| --- |
| VB |
| Public Sub Initialize (   format As Integer,  bigendian As Boolean ) |

|  |
| --- |
| C++ |
| public: void Initialize(  int format,   bool bigendian ) |

|  |
| --- |
| F# |
| member Initialize :   format : int \*   bigendian : bool -> unit |

#### Parameters

format

Type: [System.Int32](http://msdn2.microsoft.com/en-us/library/td2s409d)

segy rev 1 data format

bigendian

Type: [System.Boolean](http://msdn2.microsoft.com/en-us/library/a28wyd50)

true if data is big endian

## See Also

[SEGYTraceData Class](#_7F71127F_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader Class

SEGYTraceHeader is used to access and change contents of the binary trace header data block

## Inheritance Hierarchy

[System.Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b)  
  SEGYlib.SEGYTraceHeader

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public class SEGYTraceHeader |

|  |
| --- |
| VB |
| Public Class SEGYTraceHeader |

|  |
| --- |
| C++ |
| public ref class SEGYTraceHeader |

|  |
| --- |
| F# |
| type SEGYTraceHeader = class end |

The **SEGYTraceHeader** type exposes the following members.

## Constructors

|  |  |  |
| --- | --- | --- |
|  | Name | Description |
| Public method | [SEGYTraceHeader](#_CF3074BF_Topic) | SEGYTraceHeader is used to access and change contents of the binary trace header data block |

## Properties

|  |  |  |
| --- | --- | --- |
|  | Name | Description |
| Public property | [aliasFilterSlopeDBOctave](#_67046EAF_Topic) | refer to SEGY rev 1 documentation |
| Public property | [aliasFrequencyHz](#_4D802DAB_Topic) | refer to SEGY rev 1 documentation |
| Public property | [bigEndian](#_12628735_Topic) | true if big endian |
| Public property | [coordinateUnits](#_2DC9301E_Topic) | refer to SEGY rev 1 documentation |
| Public property | [correlated](#_C9E25A0B_Topic) | refer to SEGY rev 1 documentation |
| Public property | [crossLineNumber3D](#_15D82575_Topic) | refer to SEGY rev 1 documentation |
| Public property | [dataUse](#_D726EB17_Topic) | refer to SEGY rev 1 documentation |
| Public property | [datumElevationAtReceiverGroup](#_57AD495_Topic) | refer to SEGY rev 1 documentation |
| Public property | [datumElevationAtSource](#_7E65CF40_Topic) | refer to SEGY rev 1 documentation |
| Public property | [dayOfYear](#_4B96C782_Topic) | refer to SEGY rev 1 documentation |
| Public property | [delayRecordingTimeMsec](#_7964CFD4_Topic) | refer to SEGY rev 1 documentation |
| Public property | [deviceTraceIdentifier](#_FF7C480D_Topic) | refer to SEGY rev 1 documentation |
| Public property | [distanceFromCenterOfSourcePointToCenterOfGroup](#_C41BCC03_Topic) | refer to SEGY rev 1 documentation |
| Public property | [energySourcePointNumber](#_BFCD3EB_Topic) | refer to SEGY rev 1 documentation |
| Public property | [ensembleNumber](#_ECC5C0D7_Topic) | refer to SEGY rev 1 documentation |
| Public property | [gainTypeOfFieldInstruments](#_2AFF8B49_Topic) | refer to SEGY rev 1 documentation |
| Public property | [gapSize](#_DC49763A_Topic) | refer to SEGY rev 1 documentation |
| Public property | [geophoneGroupNumberofLastTraceWithinOriginalFieldRecord](#_F394A767_Topic) | refer to SEGY rev 1 documentation |
| Public property | [geophoneGroupNumberOfRollSwitchPositionOne](#_EDB07501_Topic) | refer to SEGY rev 1 documentation |
| Public property | [geophoneGroupNumberofTraceNumberOneWithinOriginalFieldRecord](#_A3C26015_Topic) | refer to SEGY rev 1 documentation |
| Public property | [groupCoordinateX](#_F8D2FBEF_Topic) | refer to SEGY rev 1 documentation |
| Public property | [groupCoordinateY](#_A8A3D849_Topic) | refer to SEGY rev 1 documentation |
| Public property | [groupStaticCorrectionMsec](#_5B134FEC_Topic) | refer to SEGY rev 1 documentation |
| Public property | [highCutFrequencyHz](#_766628E2_Topic) | refer to SEGY rev 1 documentation |
| Public property | [highCutSlopeDBOctave](#_3797D601_Topic) | refer to SEGY rev 1 documentation |
| Public property | [hourOfDay](#_DD09B99A_Topic) | refer to SEGY rev 1 documentation |
| Public property | [inLineNumber3D](#_1029CCAD_Topic) | refer to SEGY rev 1 documentation |
| Public property | [instrumentEarlyOrIntialGainDB](#_D9EFFA98_Topic) | refer to SEGY rev 1 documentation |
| Public property | [instrumentGainConstantDB](#_22C33763_Topic) | refer to SEGY rev 1 documentation |
| Public property | [lagTimeAMsec](#_C40E26E6_Topic) | refer to SEGY rev 1 documentation |
| Public property | [lagTimeBMsec](#_8FA9198B_Topic) | refer to SEGY rev 1 documentation |
| Public property | [lowCutFrequencyHz](#_B06A592E_Topic) | refer to SEGY rev 1 documentation |
| Public property | [lowCutSlopeDBOctave](#_A1EFB3EC_Topic) | refer to SEGY rev 1 documentation |
| Public property | [minuteOfHour](#_F6627BF5_Topic) | refer to SEGY rev 1 documentation |
| Public property | [muteTimeEndTimeMsec](#_2C910E7C_Topic) | refer to SEGY rev 1 documentation |
| Public property | [muteTimeStartTimeMsec](#_4C2907C4_Topic) | refer to SEGY rev 1 documentation |
| Public property | [notchFilterSlopeDBOctave](#_4F626AFC_Topic) | refer to SEGY rev 1 documentation |
| Public property | [notchFrequencyHz](#_B45A33FD_Topic) | refer to SEGY rev 1 documentation |
| Public property | [numberOfHorizonatallySummedTracesYieldingThisTrace](#_71DF2E1_Topic) | refer to SEGY rev 1 documentation |
| Public property | [numberOfSamplesInTrace](#_997B5B10_Topic) | refer to SEGY rev 1 documentation |
| Public property | [numberOfVerticallySummedTracesYieldingThisTrace](#_A2494C48_Topic) | refer to SEGY rev 1 documentation |
| Public property | [originalFieldRecordNumber](#_49077951_Topic) | refer to SEGY rev 1 documentation |
| Public property | [overTravel](#_8D338C9D_Topic) | refer to SEGY rev 1 documentation |
| Public property | [receiverGroupElevation](#_C3D32E94_Topic) | refer to SEGY rev 1 documentation |
| Public property | [sampleIntervalUsec](#_221ACEB_Topic) | refer to SEGY rev 1 documentation |
| Public property | [scalarAppliedToShotPointNumber](#_5B8CA857_Topic) | refer to SEGY rev 1 documentation |
| Public property | [scalarForAllElevationsAndDepths](#_3E0AC4F0_Topic) | refer to SEGY rev 1 documentation |
| Public property | [scalarToBeAppliedToAllCoordinates](#_A514CB1D_Topic) | refer to SEGY rev 1 documentation |
| Public property | [scalarUsedToScaleTraceHeaderMSecTimes](#_1424EEFC_Topic) | refer to SEGY rev 1 documentation |
| Public property | [secondOfMinute](#_2DAC0AE3_Topic) | refer to SEGY rev 1 documentation |
| Public property | [shotpointNumber](#_F36FE86E_Topic) | refer to SEGY rev 1 documentation |
| Public property | [souceStaticCorrectionMsec](#_AE5925CB_Topic) | refer to SEGY rev 1 documentation |
| Public property | [sourceCoordinateX](#_C202E602_Topic) | refer to SEGY rev 1 documentation |
| Public property | [sourceCoordinateY](#_A2227FE3_Topic) | refer to SEGY rev 1 documentation |
| Public property | [sourceDepthBelowSurface](#_E3C9F62A_Topic) | refer to SEGY rev 1 documentation |
| Public property | [sourceEnergyDirectionExponent](#_826048E7_Topic) | refer to SEGY rev 1 documentation |
| Public property | [sourceEnergyDirectionMantissa](#_42587D50_Topic) | refer to SEGY rev 1 documentation |
| Public property | [sourceMeasurementExponent](#_2D0EEF87_Topic) | refer to SEGY rev 1 documentation |
| Public property | [sourceMeasurementMantissa](#_5084E8D9_Topic) | refer to SEGY rev 1 documentation |
| Public property | [sourceMeasurementUnit](#_F5A7779_Topic) | refer to SEGY rev 1 documentation |
| Public property | [sourceType](#_75CDE9A8_Topic) | refer to SEGY rev 1 documentation |
| Public property | [subweatheringVelocity](#_5397862F_Topic) | refer to SEGY rev 1 documentation |
| Public property | [surfaceElevationAtSource](#_45D9CE88_Topic) | refer to SEGY rev 1 documentation |
| Public property | [sweepFrequencyAtEnd](#_59B748F3_Topic) | refer to SEGY rev 1 documentation |
| Public property | [sweepFrequencyAtStart](#_2A300C59_Topic) | refer to SEGY rev 1 documentation |
| Public property | [sweepLengthInMsec](#_705F9A83_Topic) | refer to SEGY rev 1 documentation |
| Public property | [sweepTaperLenghtAtEndMsec](#_1AE24016_Topic) | refer to SEGY rev 1 documentation |
| Public property | [sweepTaperLengthAtStartMsec](#_B86A7BDC_Topic) | refer to SEGY rev 1 documentation |
| Public property | [sweepType](#_B9220484_Topic) | refer to SEGY rev 1 documentation |
| Public property | [taperType](#_3A17D93B_Topic) | refer to SEGY rev 1 documentation |
| Public property | [timeBasis](#_8F1184C8_Topic) | refer to SEGY rev 1 documentation |
| Public property | [totalStaticMsec](#_B5E0E8AD_Topic) | refer to SEGY rev 1 documentation |
| Public property | [TraceHeaderBuffer](#_3389049B_Topic) | SEGYTraceHeader storage block |
| Public property | [traceIdentificationCode](#_6D20F04_Topic) | refer to SEGY rev 1 documentation |
| Public property | [traceNumberWithinEnsemble](#_36FF5B22_Topic) | refer to SEGY rev 1 documentation |
| Public property | [traceNumberWithinOriginalFieldRecord](#_1E7CC6A1_Topic) | refer to SEGY rev 1 documentation |
| Public property | [traceSequenceNumberWithinFile](#_BE9DE2B1_Topic) | refer to SEGY rev 1 documentation |
| Public property | [traceSequenceNumberWithinLine](#_4DFF6B9C_Topic) | refer to SEGY rev 1 documentation |
| Public property | [traceValueMeasurementUnit](#_1AB92AA2_Topic) | refer to SEGY rev 1 documentation |
| Public property | [traceWeightingFactor](#_FA7C5B56_Topic) | refer to SEGY rev 1 documentation |
| Public property | [transductionConstantExponent](#_F924656A_Topic) | refer to SEGY rev 1 documentation |
| Public property | [transductionConstantMantissa](#_4A786468_Topic) | refer to SEGY rev 1 documentation |
| Public property | [transductionUnits](#_7D8B797A_Topic) | refer to SEGY rev 1 documentation |
| Public property | [upholeTimeAtGroupMsec](#_93A1B54F_Topic) | refer to SEGY rev 1 documentation |
| Public property | [upholeTimeAtSourceMsec](#_31931EDC_Topic) | refer to SEGY rev 1 documentation |
| Public property | [waterDepthAtGroup](#_E66790EA_Topic) | refer to SEGY rev 1 documentation |
| Public property | [waterDepthAtSource](#_B64F4DC_Topic) | refer to SEGY rev 1 documentation |
| Public property | [weatheringVelocity](#_113957A9_Topic) | refer to SEGY rev 1 documentation |
| Public property | [xCoordinateOfEnsemble](#_554E5B1B_Topic) | refer to SEGY rev 1 documentation |
| Public property | [yCoordinateOfEnsemble](#_B5FDF44_Topic) | refer to SEGY rev 1 documentation |
| Public property | [yearDataRecorded](#_56226E96_Topic) | refer to SEGY rev 1 documentation |

## Methods

|  |  |  |
| --- | --- | --- |
|  | Name | Description |
| Public method | [Equals](http://msdn2.microsoft.com/en-us/library/bsc2ak47) | Determines whether the specified [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b) is equal to the current [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b). (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Protected method | [Finalize](http://msdn2.microsoft.com/en-us/library/4k87zsw7) | Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public method | [GetHashCode](http://msdn2.microsoft.com/en-us/library/zdee4b3y) | Serves as a hash function for a particular type. (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public method | [GetType](http://msdn2.microsoft.com/en-us/library/dfwy45w9) | Gets the [Type](http://msdn2.microsoft.com/en-us/library/42892f65) of the current instance. (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public method | [Initialize](#_58220C61_Topic) | initialize object |
| Protected method | [MemberwiseClone](http://msdn2.microsoft.com/en-us/library/57ctke0a) | Creates a shallow copy of the current [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b). (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public method | [ToString](http://msdn2.microsoft.com/en-us/library/7bxwbwt2) | Returns a string that represents the current object. (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |

## See Also

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader Constructor

SEGYTraceHeader is used to access and change contents of the binary trace header data block

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public SEGYTraceHeader() |

|  |
| --- |
| VB |
| Public Sub New |

|  |
| --- |
| C++ |
| public: SEGYTraceHeader() |

|  |
| --- |
| F# |
| new : unit -> SEGYTraceHeader |

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.SEGYTraceHeader Properties

The [SEGYTraceHeader](#_12C8BFA8_Topic) type exposes the following members.

## Properties

|  |  |  |
| --- | --- | --- |
|  | Name | Description |
| Public property | [aliasFilterSlopeDBOctave](#_67046EAF_Topic) | refer to SEGY rev 1 documentation |
| Public property | [aliasFrequencyHz](#_4D802DAB_Topic) | refer to SEGY rev 1 documentation |
| Public property | [bigEndian](#_12628735_Topic) | true if big endian |
| Public property | [coordinateUnits](#_2DC9301E_Topic) | refer to SEGY rev 1 documentation |
| Public property | [correlated](#_C9E25A0B_Topic) | refer to SEGY rev 1 documentation |
| Public property | [crossLineNumber3D](#_15D82575_Topic) | refer to SEGY rev 1 documentation |
| Public property | [dataUse](#_D726EB17_Topic) | refer to SEGY rev 1 documentation |
| Public property | [datumElevationAtReceiverGroup](#_57AD495_Topic) | refer to SEGY rev 1 documentation |
| Public property | [datumElevationAtSource](#_7E65CF40_Topic) | refer to SEGY rev 1 documentation |
| Public property | [dayOfYear](#_4B96C782_Topic) | refer to SEGY rev 1 documentation |
| Public property | [delayRecordingTimeMsec](#_7964CFD4_Topic) | refer to SEGY rev 1 documentation |
| Public property | [deviceTraceIdentifier](#_FF7C480D_Topic) | refer to SEGY rev 1 documentation |
| Public property | [distanceFromCenterOfSourcePointToCenterOfGroup](#_C41BCC03_Topic) | refer to SEGY rev 1 documentation |
| Public property | [energySourcePointNumber](#_BFCD3EB_Topic) | refer to SEGY rev 1 documentation |
| Public property | [ensembleNumber](#_ECC5C0D7_Topic) | refer to SEGY rev 1 documentation |
| Public property | [gainTypeOfFieldInstruments](#_2AFF8B49_Topic) | refer to SEGY rev 1 documentation |
| Public property | [gapSize](#_DC49763A_Topic) | refer to SEGY rev 1 documentation |
| Public property | [geophoneGroupNumberofLastTraceWithinOriginalFieldRecord](#_F394A767_Topic) | refer to SEGY rev 1 documentation |
| Public property | [geophoneGroupNumberOfRollSwitchPositionOne](#_EDB07501_Topic) | refer to SEGY rev 1 documentation |
| Public property | [geophoneGroupNumberofTraceNumberOneWithinOriginalFieldRecord](#_A3C26015_Topic) | refer to SEGY rev 1 documentation |
| Public property | [groupCoordinateX](#_F8D2FBEF_Topic) | refer to SEGY rev 1 documentation |
| Public property | [groupCoordinateY](#_A8A3D849_Topic) | refer to SEGY rev 1 documentation |
| Public property | [groupStaticCorrectionMsec](#_5B134FEC_Topic) | refer to SEGY rev 1 documentation |
| Public property | [highCutFrequencyHz](#_766628E2_Topic) | refer to SEGY rev 1 documentation |
| Public property | [highCutSlopeDBOctave](#_3797D601_Topic) | refer to SEGY rev 1 documentation |
| Public property | [hourOfDay](#_DD09B99A_Topic) | refer to SEGY rev 1 documentation |
| Public property | [inLineNumber3D](#_1029CCAD_Topic) | refer to SEGY rev 1 documentation |
| Public property | [instrumentEarlyOrIntialGainDB](#_D9EFFA98_Topic) | refer to SEGY rev 1 documentation |
| Public property | [instrumentGainConstantDB](#_22C33763_Topic) | refer to SEGY rev 1 documentation |
| Public property | [lagTimeAMsec](#_C40E26E6_Topic) | refer to SEGY rev 1 documentation |
| Public property | [lagTimeBMsec](#_8FA9198B_Topic) | refer to SEGY rev 1 documentation |
| Public property | [lowCutFrequencyHz](#_B06A592E_Topic) | refer to SEGY rev 1 documentation |
| Public property | [lowCutSlopeDBOctave](#_A1EFB3EC_Topic) | refer to SEGY rev 1 documentation |
| Public property | [minuteOfHour](#_F6627BF5_Topic) | refer to SEGY rev 1 documentation |
| Public property | [muteTimeEndTimeMsec](#_2C910E7C_Topic) | refer to SEGY rev 1 documentation |
| Public property | [muteTimeStartTimeMsec](#_4C2907C4_Topic) | refer to SEGY rev 1 documentation |
| Public property | [notchFilterSlopeDBOctave](#_4F626AFC_Topic) | refer to SEGY rev 1 documentation |
| Public property | [notchFrequencyHz](#_B45A33FD_Topic) | refer to SEGY rev 1 documentation |
| Public property | [numberOfHorizonatallySummedTracesYieldingThisTrace](#_71DF2E1_Topic) | refer to SEGY rev 1 documentation |
| Public property | [numberOfSamplesInTrace](#_997B5B10_Topic) | refer to SEGY rev 1 documentation |
| Public property | [numberOfVerticallySummedTracesYieldingThisTrace](#_A2494C48_Topic) | refer to SEGY rev 1 documentation |
| Public property | [originalFieldRecordNumber](#_49077951_Topic) | refer to SEGY rev 1 documentation |
| Public property | [overTravel](#_8D338C9D_Topic) | refer to SEGY rev 1 documentation |
| Public property | [receiverGroupElevation](#_C3D32E94_Topic) | refer to SEGY rev 1 documentation |
| Public property | [sampleIntervalUsec](#_221ACEB_Topic) | refer to SEGY rev 1 documentation |
| Public property | [scalarAppliedToShotPointNumber](#_5B8CA857_Topic) | refer to SEGY rev 1 documentation |
| Public property | [scalarForAllElevationsAndDepths](#_3E0AC4F0_Topic) | refer to SEGY rev 1 documentation |
| Public property | [scalarToBeAppliedToAllCoordinates](#_A514CB1D_Topic) | refer to SEGY rev 1 documentation |
| Public property | [scalarUsedToScaleTraceHeaderMSecTimes](#_1424EEFC_Topic) | refer to SEGY rev 1 documentation |
| Public property | [secondOfMinute](#_2DAC0AE3_Topic) | refer to SEGY rev 1 documentation |
| Public property | [shotpointNumber](#_F36FE86E_Topic) | refer to SEGY rev 1 documentation |
| Public property | [souceStaticCorrectionMsec](#_AE5925CB_Topic) | refer to SEGY rev 1 documentation |
| Public property | [sourceCoordinateX](#_C202E602_Topic) | refer to SEGY rev 1 documentation |
| Public property | [sourceCoordinateY](#_A2227FE3_Topic) | refer to SEGY rev 1 documentation |
| Public property | [sourceDepthBelowSurface](#_E3C9F62A_Topic) | refer to SEGY rev 1 documentation |
| Public property | [sourceEnergyDirectionExponent](#_826048E7_Topic) | refer to SEGY rev 1 documentation |
| Public property | [sourceEnergyDirectionMantissa](#_42587D50_Topic) | refer to SEGY rev 1 documentation |
| Public property | [sourceMeasurementExponent](#_2D0EEF87_Topic) | refer to SEGY rev 1 documentation |
| Public property | [sourceMeasurementMantissa](#_5084E8D9_Topic) | refer to SEGY rev 1 documentation |
| Public property | [sourceMeasurementUnit](#_F5A7779_Topic) | refer to SEGY rev 1 documentation |
| Public property | [sourceType](#_75CDE9A8_Topic) | refer to SEGY rev 1 documentation |
| Public property | [subweatheringVelocity](#_5397862F_Topic) | refer to SEGY rev 1 documentation |
| Public property | [surfaceElevationAtSource](#_45D9CE88_Topic) | refer to SEGY rev 1 documentation |
| Public property | [sweepFrequencyAtEnd](#_59B748F3_Topic) | refer to SEGY rev 1 documentation |
| Public property | [sweepFrequencyAtStart](#_2A300C59_Topic) | refer to SEGY rev 1 documentation |
| Public property | [sweepLengthInMsec](#_705F9A83_Topic) | refer to SEGY rev 1 documentation |
| Public property | [sweepTaperLenghtAtEndMsec](#_1AE24016_Topic) | refer to SEGY rev 1 documentation |
| Public property | [sweepTaperLengthAtStartMsec](#_B86A7BDC_Topic) | refer to SEGY rev 1 documentation |
| Public property | [sweepType](#_B9220484_Topic) | refer to SEGY rev 1 documentation |
| Public property | [taperType](#_3A17D93B_Topic) | refer to SEGY rev 1 documentation |
| Public property | [timeBasis](#_8F1184C8_Topic) | refer to SEGY rev 1 documentation |
| Public property | [totalStaticMsec](#_B5E0E8AD_Topic) | refer to SEGY rev 1 documentation |
| Public property | [TraceHeaderBuffer](#_3389049B_Topic) | SEGYTraceHeader storage block |
| Public property | [traceIdentificationCode](#_6D20F04_Topic) | refer to SEGY rev 1 documentation |
| Public property | [traceNumberWithinEnsemble](#_36FF5B22_Topic) | refer to SEGY rev 1 documentation |
| Public property | [traceNumberWithinOriginalFieldRecord](#_1E7CC6A1_Topic) | refer to SEGY rev 1 documentation |
| Public property | [traceSequenceNumberWithinFile](#_BE9DE2B1_Topic) | refer to SEGY rev 1 documentation |
| Public property | [traceSequenceNumberWithinLine](#_4DFF6B9C_Topic) | refer to SEGY rev 1 documentation |
| Public property | [traceValueMeasurementUnit](#_1AB92AA2_Topic) | refer to SEGY rev 1 documentation |
| Public property | [traceWeightingFactor](#_FA7C5B56_Topic) | refer to SEGY rev 1 documentation |
| Public property | [transductionConstantExponent](#_F924656A_Topic) | refer to SEGY rev 1 documentation |
| Public property | [transductionConstantMantissa](#_4A786468_Topic) | refer to SEGY rev 1 documentation |
| Public property | [transductionUnits](#_7D8B797A_Topic) | refer to SEGY rev 1 documentation |
| Public property | [upholeTimeAtGroupMsec](#_93A1B54F_Topic) | refer to SEGY rev 1 documentation |
| Public property | [upholeTimeAtSourceMsec](#_31931EDC_Topic) | refer to SEGY rev 1 documentation |
| Public property | [waterDepthAtGroup](#_E66790EA_Topic) | refer to SEGY rev 1 documentation |
| Public property | [waterDepthAtSource](#_B64F4DC_Topic) | refer to SEGY rev 1 documentation |
| Public property | [weatheringVelocity](#_113957A9_Topic) | refer to SEGY rev 1 documentation |
| Public property | [xCoordinateOfEnsemble](#_554E5B1B_Topic) | refer to SEGY rev 1 documentation |
| Public property | [yCoordinateOfEnsemble](#_B5FDF44_Topic) | refer to SEGY rev 1 documentation |
| Public property | [yearDataRecorded](#_56226E96_Topic) | refer to SEGY rev 1 documentation |

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.aliasFilterSlopeDBOctave Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public short aliasFilterSlopeDBOctave { get; set; } |

|  |
| --- |
| VB |
| Public Property aliasFilterSlopeDBOctave As Short  Get  Set |

|  |
| --- |
| C++ |
| public: property short aliasFilterSlopeDBOctave {  short get ();  void set (short value); } |

|  |
| --- |
| F# |
| member aliasFilterSlopeDBOctave : int16 with get, set |

#### Property Value

Type: [Int16](http://msdn2.microsoft.com/en-us/library/e07e6fds)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.aliasFrequencyHz Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort aliasFrequencyHz { get; set; } |

|  |
| --- |
| VB |
| Public Property aliasFrequencyHz As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short aliasFrequencyHz {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member aliasFrequencyHz : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.bigEndian Property

true if big endian

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public bool bigEndian { get; set; } |

|  |
| --- |
| VB |
| Public Property bigEndian As Boolean  Get  Set |

|  |
| --- |
| C++ |
| public: property bool bigEndian {  bool get ();  void set (bool value); } |

|  |
| --- |
| F# |
| member bigEndian : bool with get, set |

#### Property Value

Type: [Boolean](http://msdn2.microsoft.com/en-us/library/a28wyd50)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.coordinateUnits Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort coordinateUnits { get; set; } |

|  |
| --- |
| VB |
| Public Property coordinateUnits As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short coordinateUnits {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member coordinateUnits : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.correlated Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort correlated { get; set; } |

|  |
| --- |
| VB |
| Public Property correlated As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short correlated {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member correlated : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.crossLineNumber3D Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public uint crossLineNumber3D { get; set; } |

|  |
| --- |
| VB |
| Public Property crossLineNumber3D As UInteger  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned int crossLineNumber3D {  unsigned int get ();  void set (unsigned int value); } |

|  |
| --- |
| F# |
| member crossLineNumber3D : uint32 with get, set |

#### Property Value

Type: [UInt32](http://msdn2.microsoft.com/en-us/library/ctys3981)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.dataUse Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort dataUse { get; set; } |

|  |
| --- |
| VB |
| Public Property dataUse As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short dataUse {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member dataUse : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.datumElevationAtReceiverGroup Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public int datumElevationAtReceiverGroup { get; set; } |

|  |
| --- |
| VB |
| Public Property datumElevationAtReceiverGroup As Integer  Get  Set |

|  |
| --- |
| C++ |
| public: property int datumElevationAtReceiverGroup {  int get ();  void set (int value); } |

|  |
| --- |
| F# |
| member datumElevationAtReceiverGroup : int with get, set |

#### Property Value

Type: [Int32](http://msdn2.microsoft.com/en-us/library/td2s409d)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.datumElevationAtSource Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public int datumElevationAtSource { get; set; } |

|  |
| --- |
| VB |
| Public Property datumElevationAtSource As Integer  Get  Set |

|  |
| --- |
| C++ |
| public: property int datumElevationAtSource {  int get ();  void set (int value); } |

|  |
| --- |
| F# |
| member datumElevationAtSource : int with get, set |

#### Property Value

Type: [Int32](http://msdn2.microsoft.com/en-us/library/td2s409d)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.dayOfYear Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort dayOfYear { get; set; } |

|  |
| --- |
| VB |
| Public Property dayOfYear As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short dayOfYear {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member dayOfYear : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.delayRecordingTimeMsec Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public short delayRecordingTimeMsec { get; set; } |

|  |
| --- |
| VB |
| Public Property delayRecordingTimeMsec As Short  Get  Set |

|  |
| --- |
| C++ |
| public: property short delayRecordingTimeMsec {  short get ();  void set (short value); } |

|  |
| --- |
| F# |
| member delayRecordingTimeMsec : int16 with get, set |

#### Property Value

Type: [Int16](http://msdn2.microsoft.com/en-us/library/e07e6fds)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.deviceTraceIdentifier Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public short deviceTraceIdentifier { get; set; } |

|  |
| --- |
| VB |
| Public Property deviceTraceIdentifier As Short  Get  Set |

|  |
| --- |
| C++ |
| public: property short deviceTraceIdentifier {  short get ();  void set (short value); } |

|  |
| --- |
| F# |
| member deviceTraceIdentifier : int16 with get, set |

#### Property Value

Type: [Int16](http://msdn2.microsoft.com/en-us/library/e07e6fds)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.distanceFromCenterOfSourcePointToCenterOfGroup Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public int distanceFromCenterOfSourcePointToCenterOfGroup { get; set; } |

|  |
| --- |
| VB |
| Public Property distanceFromCenterOfSourcePointToCenterOfGroup As Integer  Get  Set |

|  |
| --- |
| C++ |
| public: property int distanceFromCenterOfSourcePointToCenterOfGroup {  int get ();  void set (int value); } |

|  |
| --- |
| F# |
| member distanceFromCenterOfSourcePointToCenterOfGroup : int with get, set |

#### Property Value

Type: [Int32](http://msdn2.microsoft.com/en-us/library/td2s409d)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.energySourcePointNumber Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public uint energySourcePointNumber { get; set; } |

|  |
| --- |
| VB |
| Public Property energySourcePointNumber As UInteger  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned int energySourcePointNumber {  unsigned int get ();  void set (unsigned int value); } |

|  |
| --- |
| F# |
| member energySourcePointNumber : uint32 with get, set |

#### Property Value

Type: [UInt32](http://msdn2.microsoft.com/en-us/library/ctys3981)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.ensembleNumber Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public uint ensembleNumber { get; set; } |

|  |
| --- |
| VB |
| Public Property ensembleNumber As UInteger  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned int ensembleNumber {  unsigned int get ();  void set (unsigned int value); } |

|  |
| --- |
| F# |
| member ensembleNumber : uint32 with get, set |

#### Property Value

Type: [UInt32](http://msdn2.microsoft.com/en-us/library/ctys3981)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.gainTypeOfFieldInstruments Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort gainTypeOfFieldInstruments { get; set; } |

|  |
| --- |
| VB |
| Public Property gainTypeOfFieldInstruments As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short gainTypeOfFieldInstruments {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member gainTypeOfFieldInstruments : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.gapSize Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort gapSize { get; set; } |

|  |
| --- |
| VB |
| Public Property gapSize As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short gapSize {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member gapSize : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.geophoneGroupNumberofLastTraceWithinOriginalFieldRecord Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort geophoneGroupNumberofLastTraceWithinOriginalFieldRecord { get; set; } |

|  |
| --- |
| VB |
| Public Property geophoneGroupNumberofLastTraceWithinOriginalFieldRecord As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short geophoneGroupNumberofLastTraceWithinOriginalFieldRecord {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member geophoneGroupNumberofLastTraceWithinOriginalFieldRecord : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.geophoneGroupNumberOfRollSwitchPositionOne Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort geophoneGroupNumberOfRollSwitchPositionOne { get; set; } |

|  |
| --- |
| VB |
| Public Property geophoneGroupNumberOfRollSwitchPositionOne As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short geophoneGroupNumberOfRollSwitchPositionOne {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member geophoneGroupNumberOfRollSwitchPositionOne : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.geophoneGroupNumberofTraceNumberOneWithinOriginalFieldRecord Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort geophoneGroupNumberofTraceNumberOneWithinOriginalFieldRecord { get; set; } |

|  |
| --- |
| VB |
| Public Property geophoneGroupNumberofTraceNumberOneWithinOriginalFieldRecord As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short geophoneGroupNumberofTraceNumberOneWithinOriginalFieldRecord {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member geophoneGroupNumberofTraceNumberOneWithinOriginalFieldRecord : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.groupCoordinateX Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public int groupCoordinateX { get; set; } |

|  |
| --- |
| VB |
| Public Property groupCoordinateX As Integer  Get  Set |

|  |
| --- |
| C++ |
| public: property int groupCoordinateX {  int get ();  void set (int value); } |

|  |
| --- |
| F# |
| member groupCoordinateX : int with get, set |

#### Property Value

Type: [Int32](http://msdn2.microsoft.com/en-us/library/td2s409d)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.groupCoordinateY Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public int groupCoordinateY { get; set; } |

|  |
| --- |
| VB |
| Public Property groupCoordinateY As Integer  Get  Set |

|  |
| --- |
| C++ |
| public: property int groupCoordinateY {  int get ();  void set (int value); } |

|  |
| --- |
| F# |
| member groupCoordinateY : int with get, set |

#### Property Value

Type: [Int32](http://msdn2.microsoft.com/en-us/library/td2s409d)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.groupStaticCorrectionMsec Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort groupStaticCorrectionMsec { get; set; } |

|  |
| --- |
| VB |
| Public Property groupStaticCorrectionMsec As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short groupStaticCorrectionMsec {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member groupStaticCorrectionMsec : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.highCutFrequencyHz Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort highCutFrequencyHz { get; set; } |

|  |
| --- |
| VB |
| Public Property highCutFrequencyHz As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short highCutFrequencyHz {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member highCutFrequencyHz : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.highCutSlopeDBOctave Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public short highCutSlopeDBOctave { get; set; } |

|  |
| --- |
| VB |
| Public Property highCutSlopeDBOctave As Short  Get  Set |

|  |
| --- |
| C++ |
| public: property short highCutSlopeDBOctave {  short get ();  void set (short value); } |

|  |
| --- |
| F# |
| member highCutSlopeDBOctave : int16 with get, set |

#### Property Value

Type: [Int16](http://msdn2.microsoft.com/en-us/library/e07e6fds)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.hourOfDay Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort hourOfDay { get; set; } |

|  |
| --- |
| VB |
| Public Property hourOfDay As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short hourOfDay {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member hourOfDay : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.inLineNumber3D Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public uint inLineNumber3D { get; set; } |

|  |
| --- |
| VB |
| Public Property inLineNumber3D As UInteger  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned int inLineNumber3D {  unsigned int get ();  void set (unsigned int value); } |

|  |
| --- |
| F# |
| member inLineNumber3D : uint32 with get, set |

#### Property Value

Type: [UInt32](http://msdn2.microsoft.com/en-us/library/ctys3981)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.instrumentEarlyOrIntialGainDB Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public short instrumentEarlyOrIntialGainDB { get; set; } |

|  |
| --- |
| VB |
| Public Property instrumentEarlyOrIntialGainDB As Short  Get  Set |

|  |
| --- |
| C++ |
| public: property short instrumentEarlyOrIntialGainDB {  short get ();  void set (short value); } |

|  |
| --- |
| F# |
| member instrumentEarlyOrIntialGainDB : int16 with get, set |

#### Property Value

Type: [Int16](http://msdn2.microsoft.com/en-us/library/e07e6fds)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.instrumentGainConstantDB Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public short instrumentGainConstantDB { get; set; } |

|  |
| --- |
| VB |
| Public Property instrumentGainConstantDB As Short  Get  Set |

|  |
| --- |
| C++ |
| public: property short instrumentGainConstantDB {  short get ();  void set (short value); } |

|  |
| --- |
| F# |
| member instrumentGainConstantDB : int16 with get, set |

#### Property Value

Type: [Int16](http://msdn2.microsoft.com/en-us/library/e07e6fds)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.lagTimeAMsec Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public short lagTimeAMsec { get; set; } |

|  |
| --- |
| VB |
| Public Property lagTimeAMsec As Short  Get  Set |

|  |
| --- |
| C++ |
| public: property short lagTimeAMsec {  short get ();  void set (short value); } |

|  |
| --- |
| F# |
| member lagTimeAMsec : int16 with get, set |

#### Property Value

Type: [Int16](http://msdn2.microsoft.com/en-us/library/e07e6fds)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.lagTimeBMsec Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public short lagTimeBMsec { get; set; } |

|  |
| --- |
| VB |
| Public Property lagTimeBMsec As Short  Get  Set |

|  |
| --- |
| C++ |
| public: property short lagTimeBMsec {  short get ();  void set (short value); } |

|  |
| --- |
| F# |
| member lagTimeBMsec : int16 with get, set |

#### Property Value

Type: [Int16](http://msdn2.microsoft.com/en-us/library/e07e6fds)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.lowCutFrequencyHz Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort lowCutFrequencyHz { get; set; } |

|  |
| --- |
| VB |
| Public Property lowCutFrequencyHz As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short lowCutFrequencyHz {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member lowCutFrequencyHz : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.lowCutSlopeDBOctave Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public short lowCutSlopeDBOctave { get; set; } |

|  |
| --- |
| VB |
| Public Property lowCutSlopeDBOctave As Short  Get  Set |

|  |
| --- |
| C++ |
| public: property short lowCutSlopeDBOctave {  short get ();  void set (short value); } |

|  |
| --- |
| F# |
| member lowCutSlopeDBOctave : int16 with get, set |

#### Property Value

Type: [Int16](http://msdn2.microsoft.com/en-us/library/e07e6fds)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.minuteOfHour Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort minuteOfHour { get; set; } |

|  |
| --- |
| VB |
| Public Property minuteOfHour As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short minuteOfHour {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member minuteOfHour : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.muteTimeEndTimeMsec Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort muteTimeEndTimeMsec { get; set; } |

|  |
| --- |
| VB |
| Public Property muteTimeEndTimeMsec As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short muteTimeEndTimeMsec {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member muteTimeEndTimeMsec : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.muteTimeStartTimeMsec Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort muteTimeStartTimeMsec { get; set; } |

|  |
| --- |
| VB |
| Public Property muteTimeStartTimeMsec As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short muteTimeStartTimeMsec {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member muteTimeStartTimeMsec : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.notchFilterSlopeDBOctave Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public short notchFilterSlopeDBOctave { get; set; } |

|  |
| --- |
| VB |
| Public Property notchFilterSlopeDBOctave As Short  Get  Set |

|  |
| --- |
| C++ |
| public: property short notchFilterSlopeDBOctave {  short get ();  void set (short value); } |

|  |
| --- |
| F# |
| member notchFilterSlopeDBOctave : int16 with get, set |

#### Property Value

Type: [Int16](http://msdn2.microsoft.com/en-us/library/e07e6fds)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.notchFrequencyHz Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort notchFrequencyHz { get; set; } |

|  |
| --- |
| VB |
| Public Property notchFrequencyHz As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short notchFrequencyHz {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member notchFrequencyHz : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.numberOfHorizonatallySummedTracesYieldingThisTrace Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort numberOfHorizonatallySummedTracesYieldingThisTrace { get; set; } |

|  |
| --- |
| VB |
| Public Property numberOfHorizonatallySummedTracesYieldingThisTrace As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short numberOfHorizonatallySummedTracesYieldingThisTrace {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member numberOfHorizonatallySummedTracesYieldingThisTrace : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.numberOfSamplesInTrace Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort numberOfSamplesInTrace { get; set; } |

|  |
| --- |
| VB |
| Public Property numberOfSamplesInTrace As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short numberOfSamplesInTrace {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member numberOfSamplesInTrace : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.numberOfVerticallySummedTracesYieldingThisTrace Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort numberOfVerticallySummedTracesYieldingThisTrace { get; set; } |

|  |
| --- |
| VB |
| Public Property numberOfVerticallySummedTracesYieldingThisTrace As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short numberOfVerticallySummedTracesYieldingThisTrace {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member numberOfVerticallySummedTracesYieldingThisTrace : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.originalFieldRecordNumber Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public uint originalFieldRecordNumber { get; set; } |

|  |
| --- |
| VB |
| Public Property originalFieldRecordNumber As UInteger  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned int originalFieldRecordNumber {  unsigned int get ();  void set (unsigned int value); } |

|  |
| --- |
| F# |
| member originalFieldRecordNumber : uint32 with get, set |

#### Property Value

Type: [UInt32](http://msdn2.microsoft.com/en-us/library/ctys3981)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.overTravel Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort overTravel { get; set; } |

|  |
| --- |
| VB |
| Public Property overTravel As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short overTravel {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member overTravel : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.receiverGroupElevation Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public int receiverGroupElevation { get; set; } |

|  |
| --- |
| VB |
| Public Property receiverGroupElevation As Integer  Get  Set |

|  |
| --- |
| C++ |
| public: property int receiverGroupElevation {  int get ();  void set (int value); } |

|  |
| --- |
| F# |
| member receiverGroupElevation : int with get, set |

#### Property Value

Type: [Int32](http://msdn2.microsoft.com/en-us/library/td2s409d)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.sampleIntervalUsec Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort sampleIntervalUsec { get; set; } |

|  |
| --- |
| VB |
| Public Property sampleIntervalUsec As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short sampleIntervalUsec {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member sampleIntervalUsec : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.scalarAppliedToShotPointNumber Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public short scalarAppliedToShotPointNumber { get; set; } |

|  |
| --- |
| VB |
| Public Property scalarAppliedToShotPointNumber As Short  Get  Set |

|  |
| --- |
| C++ |
| public: property short scalarAppliedToShotPointNumber {  short get ();  void set (short value); } |

|  |
| --- |
| F# |
| member scalarAppliedToShotPointNumber : int16 with get, set |

#### Property Value

Type: [Int16](http://msdn2.microsoft.com/en-us/library/e07e6fds)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.scalarForAllElevationsAndDepths Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public short scalarForAllElevationsAndDepths { get; set; } |

|  |
| --- |
| VB |
| Public Property scalarForAllElevationsAndDepths As Short  Get  Set |

|  |
| --- |
| C++ |
| public: property short scalarForAllElevationsAndDepths {  short get ();  void set (short value); } |

|  |
| --- |
| F# |
| member scalarForAllElevationsAndDepths : int16 with get, set |

#### Property Value

Type: [Int16](http://msdn2.microsoft.com/en-us/library/e07e6fds)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.scalarToBeAppliedToAllCoordinates Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public short scalarToBeAppliedToAllCoordinates { get; set; } |

|  |
| --- |
| VB |
| Public Property scalarToBeAppliedToAllCoordinates As Short  Get  Set |

|  |
| --- |
| C++ |
| public: property short scalarToBeAppliedToAllCoordinates {  short get ();  void set (short value); } |

|  |
| --- |
| F# |
| member scalarToBeAppliedToAllCoordinates : int16 with get, set |

#### Property Value

Type: [Int16](http://msdn2.microsoft.com/en-us/library/e07e6fds)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.scalarUsedToScaleTraceHeaderMSecTimes Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public short scalarUsedToScaleTraceHeaderMSecTimes { get; set; } |

|  |
| --- |
| VB |
| Public Property scalarUsedToScaleTraceHeaderMSecTimes As Short  Get  Set |

|  |
| --- |
| C++ |
| public: property short scalarUsedToScaleTraceHeaderMSecTimes {  short get ();  void set (short value); } |

|  |
| --- |
| F# |
| member scalarUsedToScaleTraceHeaderMSecTimes : int16 with get, set |

#### Property Value

Type: [Int16](http://msdn2.microsoft.com/en-us/library/e07e6fds)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.secondOfMinute Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort secondOfMinute { get; set; } |

|  |
| --- |
| VB |
| Public Property secondOfMinute As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short secondOfMinute {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member secondOfMinute : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.shotpointNumber Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public uint shotpointNumber { get; set; } |

|  |
| --- |
| VB |
| Public Property shotpointNumber As UInteger  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned int shotpointNumber {  unsigned int get ();  void set (unsigned int value); } |

|  |
| --- |
| F# |
| member shotpointNumber : uint32 with get, set |

#### Property Value

Type: [UInt32](http://msdn2.microsoft.com/en-us/library/ctys3981)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.souceStaticCorrectionMsec Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort souceStaticCorrectionMsec { get; set; } |

|  |
| --- |
| VB |
| Public Property souceStaticCorrectionMsec As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short souceStaticCorrectionMsec {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member souceStaticCorrectionMsec : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.sourceCoordinateX Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public int sourceCoordinateX { get; set; } |

|  |
| --- |
| VB |
| Public Property sourceCoordinateX As Integer  Get  Set |

|  |
| --- |
| C++ |
| public: property int sourceCoordinateX {  int get ();  void set (int value); } |

|  |
| --- |
| F# |
| member sourceCoordinateX : int with get, set |

#### Property Value

Type: [Int32](http://msdn2.microsoft.com/en-us/library/td2s409d)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.sourceCoordinateY Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public int sourceCoordinateY { get; set; } |

|  |
| --- |
| VB |
| Public Property sourceCoordinateY As Integer  Get  Set |

|  |
| --- |
| C++ |
| public: property int sourceCoordinateY {  int get ();  void set (int value); } |

|  |
| --- |
| F# |
| member sourceCoordinateY : int with get, set |

#### Property Value

Type: [Int32](http://msdn2.microsoft.com/en-us/library/td2s409d)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.sourceDepthBelowSurface Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public int sourceDepthBelowSurface { get; set; } |

|  |
| --- |
| VB |
| Public Property sourceDepthBelowSurface As Integer  Get  Set |

|  |
| --- |
| C++ |
| public: property int sourceDepthBelowSurface {  int get ();  void set (int value); } |

|  |
| --- |
| F# |
| member sourceDepthBelowSurface : int with get, set |

#### Property Value

Type: [Int32](http://msdn2.microsoft.com/en-us/library/td2s409d)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.sourceEnergyDirectionExponent Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public short sourceEnergyDirectionExponent { get; set; } |

|  |
| --- |
| VB |
| Public Property sourceEnergyDirectionExponent As Short  Get  Set |

|  |
| --- |
| C++ |
| public: property short sourceEnergyDirectionExponent {  short get ();  void set (short value); } |

|  |
| --- |
| F# |
| member sourceEnergyDirectionExponent : int16 with get, set |

#### Property Value

Type: [Int16](http://msdn2.microsoft.com/en-us/library/e07e6fds)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.sourceEnergyDirectionMantissa Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public int sourceEnergyDirectionMantissa { get; set; } |

|  |
| --- |
| VB |
| Public Property sourceEnergyDirectionMantissa As Integer  Get  Set |

|  |
| --- |
| C++ |
| public: property int sourceEnergyDirectionMantissa {  int get ();  void set (int value); } |

|  |
| --- |
| F# |
| member sourceEnergyDirectionMantissa : int with get, set |

#### Property Value

Type: [Int32](http://msdn2.microsoft.com/en-us/library/td2s409d)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.sourceMeasurementExponent Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public short sourceMeasurementExponent { get; set; } |

|  |
| --- |
| VB |
| Public Property sourceMeasurementExponent As Short  Get  Set |

|  |
| --- |
| C++ |
| public: property short sourceMeasurementExponent {  short get ();  void set (short value); } |

|  |
| --- |
| F# |
| member sourceMeasurementExponent : int16 with get, set |

#### Property Value

Type: [Int16](http://msdn2.microsoft.com/en-us/library/e07e6fds)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.sourceMeasurementMantissa Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public int sourceMeasurementMantissa { get; set; } |

|  |
| --- |
| VB |
| Public Property sourceMeasurementMantissa As Integer  Get  Set |

|  |
| --- |
| C++ |
| public: property int sourceMeasurementMantissa {  int get ();  void set (int value); } |

|  |
| --- |
| F# |
| member sourceMeasurementMantissa : int with get, set |

#### Property Value

Type: [Int32](http://msdn2.microsoft.com/en-us/library/td2s409d)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.sourceMeasurementUnit Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public short sourceMeasurementUnit { get; set; } |

|  |
| --- |
| VB |
| Public Property sourceMeasurementUnit As Short  Get  Set |

|  |
| --- |
| C++ |
| public: property short sourceMeasurementUnit {  short get ();  void set (short value); } |

|  |
| --- |
| F# |
| member sourceMeasurementUnit : int16 with get, set |

#### Property Value

Type: [Int16](http://msdn2.microsoft.com/en-us/library/e07e6fds)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.sourceType Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public short sourceType { get; set; } |

|  |
| --- |
| VB |
| Public Property sourceType As Short  Get  Set |

|  |
| --- |
| C++ |
| public: property short sourceType {  short get ();  void set (short value); } |

|  |
| --- |
| F# |
| member sourceType : int16 with get, set |

#### Property Value

Type: [Int16](http://msdn2.microsoft.com/en-us/library/e07e6fds)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.subweatheringVelocity Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort subweatheringVelocity { get; set; } |

|  |
| --- |
| VB |
| Public Property subweatheringVelocity As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short subweatheringVelocity {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member subweatheringVelocity : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.surfaceElevationAtSource Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public int surfaceElevationAtSource { get; set; } |

|  |
| --- |
| VB |
| Public Property surfaceElevationAtSource As Integer  Get  Set |

|  |
| --- |
| C++ |
| public: property int surfaceElevationAtSource {  int get ();  void set (int value); } |

|  |
| --- |
| F# |
| member surfaceElevationAtSource : int with get, set |

#### Property Value

Type: [Int32](http://msdn2.microsoft.com/en-us/library/td2s409d)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.sweepFrequencyAtEnd Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort sweepFrequencyAtEnd { get; set; } |

|  |
| --- |
| VB |
| Public Property sweepFrequencyAtEnd As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short sweepFrequencyAtEnd {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member sweepFrequencyAtEnd : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.sweepFrequencyAtStart Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort sweepFrequencyAtStart { get; set; } |

|  |
| --- |
| VB |
| Public Property sweepFrequencyAtStart As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short sweepFrequencyAtStart {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member sweepFrequencyAtStart : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.sweepLengthInMsec Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort sweepLengthInMsec { get; set; } |

|  |
| --- |
| VB |
| Public Property sweepLengthInMsec As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short sweepLengthInMsec {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member sweepLengthInMsec : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.sweepTaperLenghtAtEndMsec Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort sweepTaperLenghtAtEndMsec { get; set; } |

|  |
| --- |
| VB |
| Public Property sweepTaperLenghtAtEndMsec As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short sweepTaperLenghtAtEndMsec {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member sweepTaperLenghtAtEndMsec : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.sweepTaperLengthAtStartMsec Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort sweepTaperLengthAtStartMsec { get; set; } |

|  |
| --- |
| VB |
| Public Property sweepTaperLengthAtStartMsec As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short sweepTaperLengthAtStartMsec {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member sweepTaperLengthAtStartMsec : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.sweepType Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort sweepType { get; set; } |

|  |
| --- |
| VB |
| Public Property sweepType As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short sweepType {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member sweepType : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.taperType Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort taperType { get; set; } |

|  |
| --- |
| VB |
| Public Property taperType As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short taperType {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member taperType : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.timeBasis Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort timeBasis { get; set; } |

|  |
| --- |
| VB |
| Public Property timeBasis As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short timeBasis {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member timeBasis : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.totalStaticMsec Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public short totalStaticMsec { get; set; } |

|  |
| --- |
| VB |
| Public Property totalStaticMsec As Short  Get  Set |

|  |
| --- |
| C++ |
| public: property short totalStaticMsec {  short get ();  void set (short value); } |

|  |
| --- |
| F# |
| member totalStaticMsec : int16 with get, set |

#### Property Value

Type: [Int16](http://msdn2.microsoft.com/en-us/library/e07e6fds)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.TraceHeaderBuffer Property

SEGYTraceHeader storage block

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public byte[] TraceHeaderBuffer { get; set; } |

|  |
| --- |
| VB |
| Public Property TraceHeaderBuffer As Byte()  Get  Set |

|  |
| --- |
| C++ |
| public: property array<unsigned char>^ TraceHeaderBuffer {  array<unsigned char>^ get ();  void set (array<unsigned char>^ value); } |

|  |
| --- |
| F# |
| member TraceHeaderBuffer : byte[] with get, set |

#### Property Value

Type: [Byte](http://msdn2.microsoft.com/en-us/library/yyb1w04y)[]

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.traceIdentificationCode Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public short traceIdentificationCode { get; set; } |

|  |
| --- |
| VB |
| Public Property traceIdentificationCode As Short  Get  Set |

|  |
| --- |
| C++ |
| public: property short traceIdentificationCode {  short get ();  void set (short value); } |

|  |
| --- |
| F# |
| member traceIdentificationCode : int16 with get, set |

#### Property Value

Type: [Int16](http://msdn2.microsoft.com/en-us/library/e07e6fds)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.traceNumberWithinEnsemble Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public uint traceNumberWithinEnsemble { get; set; } |

|  |
| --- |
| VB |
| Public Property traceNumberWithinEnsemble As UInteger  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned int traceNumberWithinEnsemble {  unsigned int get ();  void set (unsigned int value); } |

|  |
| --- |
| F# |
| member traceNumberWithinEnsemble : uint32 with get, set |

#### Property Value

Type: [UInt32](http://msdn2.microsoft.com/en-us/library/ctys3981)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.traceNumberWithinOriginalFieldRecord Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public uint traceNumberWithinOriginalFieldRecord { get; set; } |

|  |
| --- |
| VB |
| Public Property traceNumberWithinOriginalFieldRecord As UInteger  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned int traceNumberWithinOriginalFieldRecord {  unsigned int get ();  void set (unsigned int value); } |

|  |
| --- |
| F# |
| member traceNumberWithinOriginalFieldRecord : uint32 with get, set |

#### Property Value

Type: [UInt32](http://msdn2.microsoft.com/en-us/library/ctys3981)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.traceSequenceNumberWithinFile Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public uint traceSequenceNumberWithinFile { get; set; } |

|  |
| --- |
| VB |
| Public Property traceSequenceNumberWithinFile As UInteger  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned int traceSequenceNumberWithinFile {  unsigned int get ();  void set (unsigned int value); } |

|  |
| --- |
| F# |
| member traceSequenceNumberWithinFile : uint32 with get, set |

#### Property Value

Type: [UInt32](http://msdn2.microsoft.com/en-us/library/ctys3981)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.traceSequenceNumberWithinLine Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public uint traceSequenceNumberWithinLine { get; set; } |

|  |
| --- |
| VB |
| Public Property traceSequenceNumberWithinLine As UInteger  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned int traceSequenceNumberWithinLine {  unsigned int get ();  void set (unsigned int value); } |

|  |
| --- |
| F# |
| member traceSequenceNumberWithinLine : uint32 with get, set |

#### Property Value

Type: [UInt32](http://msdn2.microsoft.com/en-us/library/ctys3981)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.traceValueMeasurementUnit Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public short traceValueMeasurementUnit { get; set; } |

|  |
| --- |
| VB |
| Public Property traceValueMeasurementUnit As Short  Get  Set |

|  |
| --- |
| C++ |
| public: property short traceValueMeasurementUnit {  short get ();  void set (short value); } |

|  |
| --- |
| F# |
| member traceValueMeasurementUnit : int16 with get, set |

#### Property Value

Type: [Int16](http://msdn2.microsoft.com/en-us/library/e07e6fds)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.traceWeightingFactor Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort traceWeightingFactor { get; set; } |

|  |
| --- |
| VB |
| Public Property traceWeightingFactor As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short traceWeightingFactor {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member traceWeightingFactor : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.transductionConstantExponent Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public short transductionConstantExponent { get; set; } |

|  |
| --- |
| VB |
| Public Property transductionConstantExponent As Short  Get  Set |

|  |
| --- |
| C++ |
| public: property short transductionConstantExponent {  short get ();  void set (short value); } |

|  |
| --- |
| F# |
| member transductionConstantExponent : int16 with get, set |

#### Property Value

Type: [Int16](http://msdn2.microsoft.com/en-us/library/e07e6fds)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.transductionConstantMantissa Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public int transductionConstantMantissa { get; set; } |

|  |
| --- |
| VB |
| Public Property transductionConstantMantissa As Integer  Get  Set |

|  |
| --- |
| C++ |
| public: property int transductionConstantMantissa {  int get ();  void set (int value); } |

|  |
| --- |
| F# |
| member transductionConstantMantissa : int with get, set |

#### Property Value

Type: [Int32](http://msdn2.microsoft.com/en-us/library/td2s409d)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.transductionUnits Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public short transductionUnits { get; set; } |

|  |
| --- |
| VB |
| Public Property transductionUnits As Short  Get  Set |

|  |
| --- |
| C++ |
| public: property short transductionUnits {  short get ();  void set (short value); } |

|  |
| --- |
| F# |
| member transductionUnits : int16 with get, set |

#### Property Value

Type: [Int16](http://msdn2.microsoft.com/en-us/library/e07e6fds)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.upholeTimeAtGroupMsec Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort upholeTimeAtGroupMsec { get; set; } |

|  |
| --- |
| VB |
| Public Property upholeTimeAtGroupMsec As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short upholeTimeAtGroupMsec {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member upholeTimeAtGroupMsec : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.upholeTimeAtSourceMsec Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort upholeTimeAtSourceMsec { get; set; } |

|  |
| --- |
| VB |
| Public Property upholeTimeAtSourceMsec As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short upholeTimeAtSourceMsec {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member upholeTimeAtSourceMsec : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.waterDepthAtGroup Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public int waterDepthAtGroup { get; set; } |

|  |
| --- |
| VB |
| Public Property waterDepthAtGroup As Integer  Get  Set |

|  |
| --- |
| C++ |
| public: property int waterDepthAtGroup {  int get ();  void set (int value); } |

|  |
| --- |
| F# |
| member waterDepthAtGroup : int with get, set |

#### Property Value

Type: [Int32](http://msdn2.microsoft.com/en-us/library/td2s409d)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.waterDepthAtSource Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public int waterDepthAtSource { get; set; } |

|  |
| --- |
| VB |
| Public Property waterDepthAtSource As Integer  Get  Set |

|  |
| --- |
| C++ |
| public: property int waterDepthAtSource {  int get ();  void set (int value); } |

|  |
| --- |
| F# |
| member waterDepthAtSource : int with get, set |

#### Property Value

Type: [Int32](http://msdn2.microsoft.com/en-us/library/td2s409d)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.weatheringVelocity Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort weatheringVelocity { get; set; } |

|  |
| --- |
| VB |
| Public Property weatheringVelocity As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short weatheringVelocity {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member weatheringVelocity : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.xCoordinateOfEnsemble Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public int xCoordinateOfEnsemble { get; set; } |

|  |
| --- |
| VB |
| Public Property xCoordinateOfEnsemble As Integer  Get  Set |

|  |
| --- |
| C++ |
| public: property int xCoordinateOfEnsemble {  int get ();  void set (int value); } |

|  |
| --- |
| F# |
| member xCoordinateOfEnsemble : int with get, set |

#### Property Value

Type: [Int32](http://msdn2.microsoft.com/en-us/library/td2s409d)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.yCoordinateOfEnsemble Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public int yCoordinateOfEnsemble { get; set; } |

|  |
| --- |
| VB |
| Public Property yCoordinateOfEnsemble As Integer  Get  Set |

|  |
| --- |
| C++ |
| public: property int yCoordinateOfEnsemble {  int get ();  void set (int value); } |

|  |
| --- |
| F# |
| member yCoordinateOfEnsemble : int with get, set |

#### Property Value

Type: [Int32](http://msdn2.microsoft.com/en-us/library/td2s409d)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.yearDataRecorded Property

refer to SEGY rev 1 documentation

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public ushort yearDataRecorded { get; set; } |

|  |
| --- |
| VB |
| Public Property yearDataRecorded As UShort  Get  Set |

|  |
| --- |
| C++ |
| public: property unsigned short yearDataRecorded {  unsigned short get ();  void set (unsigned short value); } |

|  |
| --- |
| F# |
| member yearDataRecorded : uint16 with get, set |

#### Property Value

Type: [UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.SEGYTraceHeader Methods

The [SEGYTraceHeader](#_12C8BFA8_Topic) type exposes the following members.

## Methods

|  |  |  |
| --- | --- | --- |
|  | Name | Description |
| Public method | [Equals](http://msdn2.microsoft.com/en-us/library/bsc2ak47) | Determines whether the specified [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b) is equal to the current [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b). (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Protected method | [Finalize](http://msdn2.microsoft.com/en-us/library/4k87zsw7) | Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public method | [GetHashCode](http://msdn2.microsoft.com/en-us/library/zdee4b3y) | Serves as a hash function for a particular type. (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public method | [GetType](http://msdn2.microsoft.com/en-us/library/dfwy45w9) | Gets the [Type](http://msdn2.microsoft.com/en-us/library/42892f65) of the current instance. (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public method | [Initialize](#_58220C61_Topic) | initialize object |
| Protected method | [MemberwiseClone](http://msdn2.microsoft.com/en-us/library/57ctke0a) | Creates a shallow copy of the current [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b). (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public method | [ToString](http://msdn2.microsoft.com/en-us/library/7bxwbwt2) | Returns a string that represents the current object. (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYTraceHeader.Initialize Method

initialize object

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public void Initialize(  bool bigEndian ) |

|  |
| --- |
| VB |
| Public Sub Initialize (   bigEndian As Boolean ) |

|  |
| --- |
| C++ |
| public: void Initialize(  bool bigEndian ) |

|  |
| --- |
| F# |
| member Initialize :   bigEndian : bool -> unit |

#### Parameters

bigEndian

Type: [System.Boolean](http://msdn2.microsoft.com/en-us/library/a28wyd50)

[Missing <param name="bigEndian"/> documentation for "M:SEGYlib.SEGYTraceHeader.Initialize(System.Boolean)"]

## See Also

[SEGYTraceHeader Class](#_12C8BFA8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYUtilities Class

SEGYUtilities for use in reading and writing SEGY files

## Inheritance Hierarchy

[System.Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b)  
  SEGYlib.SEGYUtilities

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public class SEGYUtilities |

|  |
| --- |
| VB |
| Public Class SEGYUtilities |

|  |
| --- |
| C++ |
| public ref class SEGYUtilities |

|  |
| --- |
| F# |
| type SEGYUtilities = class end |

The **SEGYUtilities** type exposes the following members.

## Constructors

|  |  |  |
| --- | --- | --- |
|  | Name | Description |
| Public method | [SEGYUtilities](#_B7918C9F_Topic) | Initializes a new instance of the **SEGYUtilities** class |

## Methods

|  |  |  |
| --- | --- | --- |
|  | Name | Description |
| Public methodStatic member | [Bytes2Int](#_F969481C_Topic) | convert bytes to long int |
| Public methodStatic member | [ConvertAsciiToEbcdic](#_26AA8F04_Topic) | convert an ASCII byte array to an EBCDIC byte array |
| Public methodStatic member | [ConvertEbcdicToAscii](#_EEF98F2D_Topic) | convert an EBCDIC byte array to an ASCII byte array |
| Public methodStatic member | [convertPositionToint](#_9A2384E6_Topic) | convert a position to a SEGY trace header integer |
| Public methodStatic member | [convertToPosition](#_D45B0B39_Topic) | convert a SEGY trace header positional value to position |
| Public methodStatic member | [decimalDegreesToDMS](#_1A08E272_Topic) | convert decimal degrees to degrees-minutes-seconds |
| Public methodStatic member | [degreesToSecondsOfArc](#_6BAE6BDD_Topic) | convert decimal degrees to seconds of arc |
| Public methodStatic member | [dmsToDecimalDegrees](#_8D42F0AB_Topic) | convert degrees-minutes-seconds to decimal degrees |
| Public method | [Equals](http://msdn2.microsoft.com/en-us/library/bsc2ak47) | Determines whether the specified [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b) is equal to the current [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b). (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Protected method | [Finalize](http://msdn2.microsoft.com/en-us/library/4k87zsw7) | Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public method | [GetHashCode](http://msdn2.microsoft.com/en-us/library/zdee4b3y) | Serves as a hash function for a particular type. (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public method | [GetType](http://msdn2.microsoft.com/en-us/library/dfwy45w9) | Gets the [Type](http://msdn2.microsoft.com/en-us/library/42892f65) of the current instance. (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public methodStatic member | [Int2Bytes](#_3DB1D82B_Topic) | convert a long int to bytes |
| Protected method | [MemberwiseClone](http://msdn2.microsoft.com/en-us/library/57ctke0a) | Creates a shallow copy of the current [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b). (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public methodStatic member | [secondsOfArctoDegrees](#_324E4916_Topic) | convert seconds of arc to decimal degrees |
| Public method | [ToString](http://msdn2.microsoft.com/en-us/library/7bxwbwt2) | Returns a string that represents the current object. (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |

## See Also

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYUtilities Constructor

Initializes a new instance of the [SEGYUtilities](#_C95448F8_Topic) class

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public SEGYUtilities() |

|  |
| --- |
| VB |
| Public Sub New |

|  |
| --- |
| C++ |
| public: SEGYUtilities() |

|  |
| --- |
| F# |
| new : unit -> SEGYUtilities |

## See Also

[SEGYUtilities Class](#_C95448F8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYUtilities.SEGYUtilities Methods

The [SEGYUtilities](#_C95448F8_Topic) type exposes the following members.

## Methods

|  |  |  |
| --- | --- | --- |
|  | Name | Description |
| Public methodStatic member | [Bytes2Int](#_F969481C_Topic) | convert bytes to long int |
| Public methodStatic member | [ConvertAsciiToEbcdic](#_26AA8F04_Topic) | convert an ASCII byte array to an EBCDIC byte array |
| Public methodStatic member | [ConvertEbcdicToAscii](#_EEF98F2D_Topic) | convert an EBCDIC byte array to an ASCII byte array |
| Public methodStatic member | [convertPositionToint](#_9A2384E6_Topic) | convert a position to a SEGY trace header integer |
| Public methodStatic member | [convertToPosition](#_D45B0B39_Topic) | convert a SEGY trace header positional value to position |
| Public methodStatic member | [decimalDegreesToDMS](#_1A08E272_Topic) | convert decimal degrees to degrees-minutes-seconds |
| Public methodStatic member | [degreesToSecondsOfArc](#_6BAE6BDD_Topic) | convert decimal degrees to seconds of arc |
| Public methodStatic member | [dmsToDecimalDegrees](#_8D42F0AB_Topic) | convert degrees-minutes-seconds to decimal degrees |
| Public method | [Equals](http://msdn2.microsoft.com/en-us/library/bsc2ak47) | Determines whether the specified [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b) is equal to the current [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b). (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Protected method | [Finalize](http://msdn2.microsoft.com/en-us/library/4k87zsw7) | Allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection. (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public method | [GetHashCode](http://msdn2.microsoft.com/en-us/library/zdee4b3y) | Serves as a hash function for a particular type. (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public method | [GetType](http://msdn2.microsoft.com/en-us/library/dfwy45w9) | Gets the [Type](http://msdn2.microsoft.com/en-us/library/42892f65) of the current instance. (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public methodStatic member | [Int2Bytes](#_3DB1D82B_Topic) | convert a long int to bytes |
| Protected method | [MemberwiseClone](http://msdn2.microsoft.com/en-us/library/57ctke0a) | Creates a shallow copy of the current [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b). (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |
| Public methodStatic member | [secondsOfArctoDegrees](#_324E4916_Topic) | convert seconds of arc to decimal degrees |
| Public method | [ToString](http://msdn2.microsoft.com/en-us/library/7bxwbwt2) | Returns a string that represents the current object. (Inherited from [Object](http://msdn2.microsoft.com/en-us/library/e5kfa45b).) |

## See Also

[SEGYUtilities Class](#_C95448F8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYUtilities.Bytes2Int Method

convert bytes to long int

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public static long Bytes2Int(  byte[] byteArray,  int startPosition,  int length,  bool signed,  bool swap ) |

|  |
| --- |
| VB |
| Public Shared Function Bytes2Int (   byteArray As Byte(),  startPosition As Integer,  length As Integer,  signed As Boolean,  swap As Boolean ) As Long |

|  |
| --- |
| C++ |
| public: static long long Bytes2Int(  array<unsigned char>^ byteArray,   int startPosition,   int length,   bool signed,   bool swap ) |

|  |
| --- |
| F# |
| static member Bytes2Int :   byteArray : byte[] \*   startPosition : int \*   length : int \*   signed : bool \*   swap : bool -> int64 |

#### Parameters

byteArray

Type: [System.Byte](http://msdn2.microsoft.com/en-us/library/yyb1w04y)[]

input byte array

startPosition

Type: [System.Int32](http://msdn2.microsoft.com/en-us/library/td2s409d)

starting position

length

Type: [System.Int32](http://msdn2.microsoft.com/en-us/library/td2s409d)

length of byte array

signed

Type: [System.Boolean](http://msdn2.microsoft.com/en-us/library/a28wyd50)

is the value signed

swap

Type: [System.Boolean](http://msdn2.microsoft.com/en-us/library/a28wyd50)

swap the bytes first

#### Return Value

Type: [Int64](http://msdn2.microsoft.com/en-us/library/6yy583ek)  
long integer converted from byte array

## See Also

[SEGYUtilities Class](#_C95448F8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYUtilities.ConvertAsciiToEbcdic Method

convert an ASCII byte array to an EBCDIC byte array

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public static byte[] ConvertAsciiToEbcdic(  byte[] asciiData ) |

|  |
| --- |
| VB |
| Public Shared Function ConvertAsciiToEbcdic (   asciiData As Byte() ) As Byte() |

|  |
| --- |
| C++ |
| public: static array<unsigned char>^ ConvertAsciiToEbcdic(  array<unsigned char>^ asciiData ) |

|  |
| --- |
| F# |
| static member ConvertAsciiToEbcdic :   asciiData : byte[] -> byte[] |

#### Parameters

asciiData

Type: [System.Byte](http://msdn2.microsoft.com/en-us/library/yyb1w04y)[]

input ASCII-formatted byte array

#### Return Value

Type: [Byte](http://msdn2.microsoft.com/en-us/library/yyb1w04y)[]  
byte array containing EBCDIC formatted text data

## See Also

[SEGYUtilities Class](#_C95448F8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYUtilities.ConvertEbcdicToAscii Method

convert an EBCDIC byte array to an ASCII byte array

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public static byte[] ConvertEbcdicToAscii(  byte[] ebcdicData ) |

|  |
| --- |
| VB |
| Public Shared Function ConvertEbcdicToAscii (   ebcdicData As Byte() ) As Byte() |

|  |
| --- |
| C++ |
| public: static array<unsigned char>^ ConvertEbcdicToAscii(  array<unsigned char>^ ebcdicData ) |

|  |
| --- |
| F# |
| static member ConvertEbcdicToAscii :   ebcdicData : byte[] -> byte[] |

#### Parameters

ebcdicData

Type: [System.Byte](http://msdn2.microsoft.com/en-us/library/yyb1w04y)[]

input EBCDIC array

#### Return Value

Type: [Byte](http://msdn2.microsoft.com/en-us/library/yyb1w04y)[]  
byte array containing ASCII formatted text data

## See Also

[SEGYUtilities Class](#_C95448F8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYUtilities.convertPositionToint Method

convert a position to a SEGY trace header integer

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public static int convertPositionToint(  double d,  ushort coordinateSystem,  double scalarToBeAppliedToAllCoordinates ) |

|  |
| --- |
| VB |
| Public Shared Function convertPositionToint (   d As Double,  coordinateSystem As UShort,  scalarToBeAppliedToAllCoordinates As Double ) As Integer |

|  |
| --- |
| C++ |
| public: static int convertPositionToint(  double d,   unsigned short coordinateSystem,   double scalarToBeAppliedToAllCoordinates ) |

|  |
| --- |
| F# |
| static member convertPositionToint :   d : float \*   coordinateSystem : uint16 \*   scalarToBeAppliedToAllCoordinates : float -> int |

#### Parameters

d

Type: [System.Double](http://msdn2.microsoft.com/en-us/library/643eft0t)

input position

coordinateSystem

Type: [System.UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

segy rev 1 trace header coordinate system

scalarToBeAppliedToAllCoordinates

Type: [System.Double](http://msdn2.microsoft.com/en-us/library/643eft0t)

segy rev 1 trace header scalarToBeAppliedToAllCoordinates

#### Return Value

Type: [Int32](http://msdn2.microsoft.com/en-us/library/td2s409d)  
an integer value calculated using coordinateSystem and scalarToBeAppliedToAllCoordinates

## See Also

[SEGYUtilities Class](#_C95448F8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYUtilities.convertToPosition Method

convert a SEGY trace header positional value to position

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public static double convertToPosition(  int x,  ushort coordinateSystem,  double scalarToBeAppliedToAllCoordinates ) |

|  |
| --- |
| VB |
| Public Shared Function convertToPosition (   x As Integer,  coordinateSystem As UShort,  scalarToBeAppliedToAllCoordinates As Double ) As Double |

|  |
| --- |
| C++ |
| public: static double convertToPosition(  int x,   unsigned short coordinateSystem,   double scalarToBeAppliedToAllCoordinates ) |

|  |
| --- |
| F# |
| static member convertToPosition :   x : int \*   coordinateSystem : uint16 \*   scalarToBeAppliedToAllCoordinates : float -> float |

#### Parameters

x

Type: [System.Int32](http://msdn2.microsoft.com/en-us/library/td2s409d)

segy rev 1 trace header position

coordinateSystem

Type: [System.UInt16](http://msdn2.microsoft.com/en-us/library/s6eyk10z)

segy rev 1 trace header coordinate system

scalarToBeAppliedToAllCoordinates

Type: [System.Double](http://msdn2.microsoft.com/en-us/library/643eft0t)

segy rev 1 trace header scalarToBeAppliedToAllCoordinates

#### Return Value

Type: [Double](http://msdn2.microsoft.com/en-us/library/643eft0t)  
a decimal position calculated using coordinateSystem and scalarToBeAppliedToAllCoordinates

## See Also

[SEGYUtilities Class](#_C95448F8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYUtilities.decimalDegreesToDMS Method

convert decimal degrees to degrees-minutes-seconds

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public static double decimalDegreesToDMS(  double dg ) |

|  |
| --- |
| VB |
| Public Shared Function decimalDegreesToDMS (   dg As Double ) As Double |

|  |
| --- |
| C++ |
| public: static double decimalDegreesToDMS(  double dg ) |

|  |
| --- |
| F# |
| static member decimalDegreesToDMS :   dg : float -> float |

#### Parameters

dg

Type: [System.Double](http://msdn2.microsoft.com/en-us/library/643eft0t)

input decimal degrees

#### Return Value

Type: [Double](http://msdn2.microsoft.com/en-us/library/643eft0t)  
DDDMMSS

## See Also

[SEGYUtilities Class](#_C95448F8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYUtilities.degreesToSecondsOfArc Method

convert decimal degrees to seconds of arc

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public static double degreesToSecondsOfArc(  double degrees ) |

|  |
| --- |
| VB |
| Public Shared Function degreesToSecondsOfArc (   degrees As Double ) As Double |

|  |
| --- |
| C++ |
| public: static double degreesToSecondsOfArc(  double degrees ) |

|  |
| --- |
| F# |
| static member degreesToSecondsOfArc :   degrees : float -> float |

#### Parameters

degrees

Type: [System.Double](http://msdn2.microsoft.com/en-us/library/643eft0t)

input decimal degrees

#### Return Value

Type: [Double](http://msdn2.microsoft.com/en-us/library/643eft0t)  
seconds of arc

## See Also

[SEGYUtilities Class](#_C95448F8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYUtilities.dmsToDecimalDegrees Method

convert degrees-minutes-seconds to decimal degrees

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public static double dmsToDecimalDegrees(  double DDDMMSS ) |

|  |
| --- |
| VB |
| Public Shared Function dmsToDecimalDegrees (   DDDMMSS As Double ) As Double |

|  |
| --- |
| C++ |
| public: static double dmsToDecimalDegrees(  double DDDMMSS ) |

|  |
| --- |
| F# |
| static member dmsToDecimalDegrees :   DDDMMSS : float -> float |

#### Parameters

DDDMMSS

Type: [System.Double](http://msdn2.microsoft.com/en-us/library/643eft0t)

input DDDMMSS

#### Return Value

Type: [Double](http://msdn2.microsoft.com/en-us/library/643eft0t)  
a decimal position

## See Also

[SEGYUtilities Class](#_C95448F8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYUtilities.Int2Bytes Method

convert a long int to bytes

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public static void Int2Bytes(  long integer,  bool signed,  byte[] byteArray,  int start,  int length,  bool swap ) |

|  |
| --- |
| VB |
| Public Shared Sub Int2Bytes (   integer As Long,  signed As Boolean,  byteArray As Byte(),  start As Integer,  length As Integer,  swap As Boolean ) |

|  |
| --- |
| C++ |
| public: static void Int2Bytes(  long long integer,   bool signed,   array<unsigned char>^ byteArray,   int start,   int length,   bool swap ) |

|  |
| --- |
| F# |
| static member Int2Bytes :   integer : int64 \*   signed : bool \*   byteArray : byte[] \*   start : int \*   length : int \*   swap : bool -> unit |

#### Parameters

integer

Type: [System.Int64](http://msdn2.microsoft.com/en-us/library/6yy583ek)

input long int

signed

Type: [System.Boolean](http://msdn2.microsoft.com/en-us/library/a28wyd50)

is the value signed

byteArray

Type: [System.Byte](http://msdn2.microsoft.com/en-us/library/yyb1w04y)[]

output byte array

start

Type: [System.Int32](http://msdn2.microsoft.com/en-us/library/td2s409d)

starting position in output array

length

Type: [System.Int32](http://msdn2.microsoft.com/en-us/library/td2s409d)

length of output word

swap

Type: [System.Boolean](http://msdn2.microsoft.com/en-us/library/a28wyd50)

swap the output byte array

#### Return Value

Type:   
byte array converted from long integer

## See Also

[SEGYUtilities Class](#_C95448F8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)

# SEGYUtilities.secondsOfArctoDegrees Method

convert seconds of arc to decimal degrees

**Namespace:** [SEGYlib](#_626DD6B0_Topic)  
**Assembly:** SEGYlib (in SEGYlib.dll) Version: 1.0.0.0 (1.0.0.0)

## Syntax

|  |
| --- |
| C# |
| public static double secondsOfArctoDegrees(  double secOfArc ) |

|  |
| --- |
| VB |
| Public Shared Function secondsOfArctoDegrees (   secOfArc As Double ) As Double |

|  |
| --- |
| C++ |
| public: static double secondsOfArctoDegrees(  double secOfArc ) |

|  |
| --- |
| F# |
| static member secondsOfArctoDegrees :   secOfArc : float -> float |

#### Parameters

secOfArc

Type: [System.Double](http://msdn2.microsoft.com/en-us/library/643eft0t)

input seconds of arc

#### Return Value

Type: [Double](http://msdn2.microsoft.com/en-us/library/643eft0t)  
a decimal position calculated using seconds of arc

## See Also

[SEGYUtilities Class](#_C95448F8_Topic)

[SEGYlib Namespace](#_626DD6B0_Topic)