

Module List

Category : Input/Output

DISCGATH	Reads any-sort SEG-Y file and outputs traces in CDP-sort
DISCGATHM	Reads multiple any-sort SEG-Y files and outputs traces in CDP-sort
DISCREAD	Reads SEG-Y or Claritas disc files
DISCSORT	Reads SEG-Y file and outputs sorted traces (no scratch file)
DISCWRITE	Writes seismic traces to Claritas SEG-Y disc file
DSORT_OFF	Version of DISCSORT configured for offset panels for DMO_FK
DSORT_SPS	Version of DISCSORT configured for SPSTAT
READGRID	Reads GMT,NetCDF,MatLab (etc) binary grid files
READSAC	Reads lists of SAC-formatted (usually earthquake) input
READSEGB	Reads SEG-B format data from tape
READSEGD	Reads SEG-D format data from disc/tape
READSEGY	Reads SEG-Y format data from disc/tape
READTSDB	Reads a Claritas time-slice database (.tsdb) file
REREAD	Reads Claritas DISCWRITE files in the middle of jobs
SCINTREX	Reads SEG-1 formatted seismic data
SEISREAD	reads GLOBE Claritas format HDF5 files from disc
SEISWRITE	writes out a GLOBE Claritas format HDF5 file
WRITEGRID	Output seismic data as Matlab or NetCDF file.
WRITESEGY	SEG-Y output to disc or tape
WRITETSDB	Sort into timeslices and create TS Database

Category : Job control

DO	First part of iterative DO-ENDDO construct
ENDDO	Second part of iterative DO-ENDDO construct
ELSE	Part of IF-ELSEIF-ELSE-ENDIF construct
ELSEIF	Part of IF-ELSEIF-ELSE-ENDIF construct
ENDIF	Part of IF-ELSEIF-ELSE-ENDIF construct
END_64BIT	Copies 64-bit pseudotrace back to 32-bit seismic trace
HOLDIF	First part of HOLDIF-RECALL construct
IF	Part of IF-ELSEIF-ELSE-ENDIF construct
IFINFILE	Conditional branch using trace list file
IFNOT	Part of IF-ELSEIF-ELSE-ENDIF construct
JCS_UPDATE	Module for updating job control system files
MPIEND	End of parallel cluster block
MPISTART	Start of parallel cluster block
RECALL	End part of HOLDIF-RECALL construct
REPEAT	Repeats ensembles to produce test panels etc.
SEISJOB	Defines project name, line ID, JCS parameters etc.

Category : Trace scaling & math

AGC	Automatic Gain Control
UNAGC	Removes saved AGC gain functions
BALANCE	Trace balance
UNBALANCE	Removes the effect of a previous trace BALANCE or EBALANCE
CLIP	Clips trace values between two limits
CONVCORR	Convolves or correlates with a user-supplied filter
DECAY	Calculates trace amplitude decay functions
DIFF1	DIFF1 and DIFF2 are used to calculate the difference

DIFF2	between the seismic data at different parts of the job
DYFF1	DYFF1 and DYFF2 provide another
DYFF2	DIFF1/DIFF2 pair should 2 sets be needed
EBALANCE	Ensemble-consistent trace balance
FFT1D	Forward 1-D Fourier transform (FFT)
FFT2D	Forward or inverse 2-D Fourier transform (FFT)
IFFT1D	Inverse 1-D Fourier transform (FFT)
INTEGRATE	Integrates trace data samples
OFFWT	Multiplies trace by offset-dependent scalar
POWER	Raises data samples to specified power
RANDOM	Adds random noise to input traces
RMSPOWER	Calculates surface-consistent RMS power for SCBALANCE
SCALE	Two-key time-variant trace scaling
SCBALANCE	Surface-consistent trace balance application
SPHDIV	Spherical divergence operator
TAPER	Tapers ends of seismic traces
TDERIV	Differentiates the seismic trace
UNAGC	Removes saved AGC gain functions
AMPSELECT	Selects the N largest amplitude ensembles from the datastream
UNBALANCE	Removes the effect of a previous trace BALANCE or EBALANCE
VIBCORR	Vibroseis Correlation

Category : 1-D filtering

BUTTERFIL	Zero/Minimumphase Butterworth filter
DEBIAS	Removes DC bias from trace
FDLIT	Frequency-domain time and spatially varying filter
NOTCH	Monofrequency noise removal
PHASESHF	Applies a phase shift
RESAMPLE	Resamples - optional anti-alias filter
RHO	Frequency-domain rho filter for Tau-P applications
TVFIL	Time-domain time-varying filter

Category : Deconvolution & demultiple

DECONW	Wiener deconvolution (gapped or spike, time-varying)
DECONW_AC	Wiener deconvolution using previously saved operators
INVERSEQ	Post-stack inverse-Q deconvolution
INVERSEQ2	stabilized inverse Q filter (phase and amplitude)
MEDEC	Minimum entropy deconvolution
MONKSUBT	Adaptive subtraction by constrained cross-equalisation
MULMOD	Multiple modeling by constant velocity multiple moveout calculation
OCTAVE_FK	Deghosting - Constant Cable Acquisition.
OCTAVE	Deghosting - Constant or Slant Cable Acquisition.
PRT_DEMULT	Parabolic Radon Demultiple
PSDECON	Post-stack Wiener deconvolution (gapped or spike) with mix
SCDECON	Surface-consistent Wiener deconvolution (gapped or spike)
SCSPEQ	Surface-consistent, zero-phase spectral equalisation
SOURCESIG	Extraction of wavelet using primaries and multiples
SPEQ	Zero-phase frequency-domain spectral equalisation
SPEW	Zero-phase frequency-domain spectral weighting
SRME	Surface consistent multiple computation phase
SRME2D	Surface Related Multiple Elimination, modeling phase
SRME3D	Surface Related Multiple Elimination, modeling phase
TVSPEQ	Time-varying Zero-phase spectral equalisation
WANGSUBT	Addaptive subtraction with a multichannel matching filter
WAVELET	Wavelet operations

Category : Statics

ADDPICK	Adds pick times from *.pic file into trace headers
AUTOPICK	Automatic first-break picking
BULKSHIFT	Application of bulk static shift
CDPSHIFT	Applies non-surface-consistent shifts from RESSTAT
DATUM_FIX	Elevation static correction-fixed datum
DATUM_FLT	Elevation static correction-floating datum
DATUM_SRD	Elevation static correction from floating datum to SRD
FLATTEN	Flatten and unflatten from a .dig file or trace headers
MAKESHF	Extracts static shifts from trace header and writes *.shf file
READSHF	Reads a Claritas static shift file and puts times into trace headers
RESSTAT	CDP-domain statics (SC,Non-SC,Time-variant etc)
SCSTAT	Converts DIPSTAT and CDPSTAT output to surface-consistent shifts
SPSTAT	Robust stack-power surface-consistent residual statics
SRDFILT	Filters static output from SRDSTAT
SRDSTAT	Source-receiver differential surface-consistent statics
STATIC	Application of elevation, residual, bulk statics etc.
UPHOLE	Extracts uphole times from raw traces
WRITEPICK	Extracts picks from trace headers and outputs to pic file

Category : Trace editing and kill

AIRWAVE	Linear noise mute defined by velocity and offset
AMPEDIT	Trace edit based on average amplitudes in window
AUTOMUTE	Automatic trace muting
COMBINE	Re-combines parts of a shot/CDP split by SPLIT
DESPIKEH	Automatic long, horizontally non-coherent spike muting
DESPIKEV	Automatic spike muting (vertical)
FILLHOLES	Fill holes in data (designed for sharkattacks)
HDRMUTE	Inner and outer trace muting from trace headers
MERGE	STORE1/STORE2/MERGE split and combine data streams
MUTE	Generalised muting of seismic data
POLYMUTE	Polygonal trace mute (*.pol file)
POLYSELECT	Removes/edits traces with {x,y} outside of a polygon
SMUTE	Surgical or end mute with interpolation
SPLIT	Splits a gather so part can be filtered (see COMBINE)
STORE1	STORE1/STORE2/MERGE split and combine data streams
STORE2	STORE1/STORE2/MERGE split and combine data streams
TREDIT	Whole trace edit (*.tre file)
TREMOVE	Totally removes the trace from the processing flow
TRFLAG	Flags traces (eg noisy traces) listed in *.ifl file
TRFLIP	Trace polarity reversal
TRMUTE	Whole or polygonal trace mute (*.trm file)
ZAP	Spike muting using sqc output files (*.dsp)
ZEROMUTE	Stores first non-zero sample; mutes to that position

Category : 2-D filtering

DUSWELL	Swell noise attenuation
FKMUTE	Generalised muting of FK spectra
FK_ALIAS	Used to determine effect of non-aliasing FK filter
FK_FILTER	Frequency-domain FK filter by polygon or dip
FK_TIME	Time-domain FK filter by polygon

KFILT	K-filter for 2D seismic MEDIAN_H Horizontal (1-D) median filter	SHIPTRACK	Uses time,x,y file to add source coordinates into trace header	XVIEW	Interactive seismic data display
NORMCDP	Repeated-offset trace averaging within CDP's	SHOTINT	Interpolate new shots between existing shot records	Category : Synthetic modeling	
PRTF	Forward Parabolic Radon Transform	SHOTPOINT	Adds shotpoint information into stacked trace headers	SYN2WAVE	2D synthetic waveform generator
PRTI	Inverse Parabolic Radon Transform	STITCH_PREP	Creates a map file that defines the traces to be used to populate any given offset bin	SYNGEOM	Creates dataset from geometry database
QFK	Fast frequency-domain FK dip filter	STITCH	N-dimensional parallel pre-stack interpolationbased on map file from STITCH_PREP module	SYNHORIZ	Synthetic horizon generator from .dig file
RADIAL	Radial trace transform (forward & inverse)	SUPERGATH	Form super-gathers from input ensembles	SYNRAY	2D synthetic raytracing generator
SUHARLAN	Harlan transform (SU)	TRSWAP	Swaps the trace data samples for a pair of receivers	SYNSHOT	Modelling of synthetic shots for horizontal layering
SURADON	Generalised Radon transform (SU)	Category : Migration			
TAUP	Forward Tau-P process by slant-stack	DMO3D	3D DMO in T-X domain (Integral method)	SYNVERT	Vertical synthetic using reflectivity method
TAUPFK	FK-domain Tau-P process	DMO_FK	FK-domain depth-variable DMO	SYNWAWE	1-D synthetic waveform generator
TAUPINV	Inverse Tau-P process	DMO_TX	Kirchhoff common-offset DMO	Category : VSP processing	
TRINTERP	Trace interpolation/extrapolation	EOM	Equivalent offset migration	CDEM0D	Calculates complex demodulate
Category : Analysis processors					
AREAL	Outputs text file with areal data attributes	FDMIG	Finite-difference post-stack migration	ROTATE	3-Component trace rotation
ATTRIBUTE	Outputs Hilbert transform, instantaneous attributes etc.	FDMIG25	2.5D Finite-difference post-stack migration	ROTATE4C	4-Component trace rotation for VSP analysis
AUTOCOR	Calculates autocorrelation function	GAZDAG	Jeno Gazdag's phase-shift migration	ROTATE6C	6-Component source equalisation for VSP analysis
HVA	Horizon velocity spectrum analysis	IMAGE_3DKP	3D Kirchhoff pre-stack time migration	SEPPS	Frequency-domain P and S wave separation for VSP
NOISE_QC	Creates AMP/Noise QC headers for data QC in the AREAL application.	IMAGE_K3D	3D Kirchhoff pre-stack depth migration	VSPSTACK	Stack VSP data with some migration
NMOPICK	Automatic semblance picker - takes VELSPEC traces & outputs *.nmo file	IMAGE_K2T	Kirchhoff 2D pre-stack time migration	Category : Trace headers & data	
SPECTRAN	Hardcopy plot of spectral analysis (power, phase etc)	IMAGE_K3T	Kirchhoff 3D pre-stack time migration	ADDDIG	Adds digitised horizon times into trace header location
VELSPEC	Velocity spectrum analysis for sqc picking, or hardcopy plot	KIRCHHOFFT	Post-stack Kirchhoff time migration	ADDHDR	Adds tabulated values into trace headers
VELSPEC4	4th order velocity spectrum analysis	KIRCHHOFFV	Poststack Kirchhoff Time migration with variable velocity	CHECKGEOM	Checks geometry in headers for possible problems
Category : NMO and stack					
ANGLE	Produces angle gathers from offset gathers for AVO	KPRET2D	Prestack Kirchhoff Time migration (Single-CPU)	CHECKHDR	Checks for problems in trace headers
ANGLETIMES	Adds angle mute times into trace headers	KPRET3D	3D Prestack Kirchhoff Time migration – non-parallel	CHECKTR	Checks for possible floating-point problems in trace data
AUTOSTACK	Automatic adaptive stack	POSTDM2D	2D Kirchoff post-stack depth migration	DELHDR	Deletes an extended trace header entry
AVOSTACK	Outputs AVO attribute traces	POSTDM3D	3D Kirchoff post-stack depth migration	HDRMATH	Header math manipulation
LMO	Linear Move-out operator	PRESDM	Prestack Kirchhoff Depth migration (Single-CPU)	JULIANSEC	Add a timestamp to the trace headers
NMO	Forward and inverse NMO with optional stretch mute	PSMIG	Phase-shift migration with turning rays	NAVHDR	Defines new trace header names for 3D marine navigation
NMO4	Forward and inverse 4th order NMO with optional stretch mute	PSMIG25	2.5D phase-shift migration with turning rays	NEWHDR	Define a new trace header name
NMOTRACE	Replaces data traces with NMO traces	STOLT	FK-domain Stolt migration	OFFBIN	Migrate trace header offsets to binned values
PSTACK	Partial stack processor	STOLT25	2.5D FK-domain Stolt migration	PSEUDOMATH	Mathematical operations on the contents of a trace and/or a pseudotrace
RMO	Residual Moveout Application with optional Stretch mute	TDCONV1	Time to depth conversion	RANGE	Prints the maximum/minimum range of header values
STACK	Stack of CDP (or shot) gathers	TKMIG	Time-wavenumber migration	RENUMBER	Renumbers the output primary and/or secondary key values
STACKSHOTS	Vertical stack (eg of repeated shots) etc.	Category : Coherency filtering			
TRSUM	N:1 trace sum by trace or ensemble	FXDECON	FX-domain complex Wiener deconvolution	RHEADER	Inserts ASCII text into 3200-byte SEG-Y reel header
Category : Geometry, sorting & fill					
ADDGEOM	Adds geometry database information into trace headers	FXRUNMIX	FX-domain weighted running mix	RHEADER2	Inserts ASCII text into 3200-byte SEG-Y reel header
ADDLLD	Adds marine latitude/longitude, water-depth, etc into trace headers	QFKPS	Post-stack version of QFK	RUNPYTHON	Applies a custom Python code to the trace headers and data
ADDNAV	Adds marine navigation into headers from UKOOA P1 input	RUNMIX	Time-domain running mix(pre/post-stack)	SETCHANNEL	Sets values in the reel or trace header
ADDSPTS	Reads SPS files in a job flow and writes the survey information into trace headers	SEEP	Signal Enhancement using Envelope Processing	SETHEADER	Sets values in the reel/trace header
ADDP190	Adds marine geometry information into trace headers from P190	SEMBSMOOTH	Semblance-smoothing coherency filter	SETKEY	Resets the primary and/or secondary key index for a dataset
BIN3D	Sets 3D CDP binning geometry into trace headers	SLSLSD	Spatial Linear Signal Detector (Tau-P)	SETLASTTR	Sets last trace flag for the last trace in an ensemble
BINSORT1	Forwards binned sort (any trace header key)	SVDILT	Zero-lag Karhunen-Loeve transform	SETSCALES	Sets or modifies the COORD_SCALE or HT_SCALE header
BINSORT2	Inverse (un)sort to follow BINSORT1	Category : Plotting			
CDPSORT	CDP gather using *.geom database	BACKGROUND	Display data attributes in background of plot	TRFUDGE	Allows user-written code to be applied to seismic data
CDP_XYZ	Adds CDP coords & elevations into stacked trace headers	BITPLOT	Quick, small, trace plot - a line of bits is set on or off	TRPRINT	Lists trace data samples and header variables
CHECKGEOM	Checks geometry in headers for possible problems	DATUMPLOT	Puts tick on trace to indicate position of floating datum or elevation	TXTHDR	Add any-text-file columns into trace headers
CUBE	Forms a 3-D data cube from ragged-edged CDP list	HDRPLOT	Plots trace header values on RASTER output file	Category : Miscellaneous	
DEOFFREG	Undo regularisation of the offset distribution	HDRTICK	Plots trace header values by adding a tick to trace	COMMAND	Runs a command before or after a flow
GENSORT	Generalised trace sort on any trace header key	HORIZONS	Adds digitised horizons to RASTER output file	COMMENT	Puts a comment in the job display
MAKEGEOM	Writes a *.geom file using trace-header information	IVSPLOT	Plot module for Input Vertical Seismic Object utility	EXAMPLE	Example processor for \$GNS_HOME/local/modules
MGEOM	Add marine geometry to headers	PANELTEXT	User-specified strings for parameter labelling in XVIEW/PLOTLABEL	HISTORY	Displays/clears processing history
MISSING	Flags or fills in missing traces/gathers	PLOTLABEL	Produces full plot labelling to attach to RASTER output	MULTI	Template for multi-channel processors in Fortran
MRECYX	Adds receiver/CMP X,Y given .nav file of shotid,x,y and offsets	RASTER	Produces raster plot file for HP DesignJet or Versatec	MULTI2	Template for multi-channel processors in Fortran (ntr_in != ntr_out)
OFFREG	Regularise the offset distribution	SIDELABEL	Side label for adding to RASTER hardcopy output	MULTI_C	Template for multi-channel processors in C
PAD	Pads end of sections with zero or repeated traces	TIMESLICE	Convert to timeslices, or graphical timeslice display	PS3D	Template for 3-D post-stack processing
REORDER	Re-orders the traces within an ensemble by any header key	TOPLABEL	Top plot (elevation, statics, comments, v elocities etc.) for RASTER output	ROLLING	Template for rolling-buffer multi- channel module
		TRACEPLOT	Produces hardcopy plot at irregular trace spacing	SINGLE	Template for single-channel processors
		UNSLICE	Convert back from timeslice to conventional seismic	SINGLE_C	Template for trace-by-trace processor in C
				SNOOP	Prints message every n'th trace or ensemble
				SU	Pipes data to & from an SU processor module