

FILE: ZOBO.AS.MXZ.sem.sac	FILE:ZOBO.AS.LXZ.modes.sac	SEM and MODE seismograms*
NPTS = 37200	NPTS = 3000	number of points per data component
B = -1.211250e+00	B = 0.000000e+00	beginning value of time array
E = 6.006428e+03	E = 5.998000e+03	end value of time array
IFTYPE = TIME SERIES FILE	IFTYPE = TIME SERIES FILE	type of file
LEVEN = TRUE	LEVEN = TRUE	TRUE if data is evenly spaced
DELTA = 1.615000e-01	DELTA = 2.000000e+00	sampling rate (s)
IDEP = DISPLACEMENT (NM)	IDEP = DISPLACEMENT (NM)	type of seismograms**
DEPMIN = -2.312220e-07	DEPMIN = -2.241141e-07	minimum displacement value
DEPMAX = 2.821137e-07	DEPMAX = 2.505626e-07	maximum displacement value
DEPMEN = -2.960369e-10	DEPMEN = -7.030198e-09	mean displacement value
OMARKER = 0	OMARKER = 0	reference time in synthetics***
KZDATE = FEB 08 (039), 2011	KZDATE = FEB 08 (039), 2011	event date
KZTIME = 22:02:02.500	KZTIME = 22:02:02.500	event origin time (centroid time)
IZTYPE = EVENT ORIGIN TIME	IZTYPE = EVENT ORIGIN TIME	reference time
KSTNM = ZOBO	KSTNM = ZOBO	station name
CMPAZ = 0.000000e+00	CMPAZ = 0.000000e+00	component azimuth (degrees clockwise from north)
CMPINC = 0.000000e+00	CMPINC = 0.000000e+00	component incident angle (degrees from vertical)
STLA = -1.627000e+01	STLA = -1.627000e+01	station latitude (degrees, north positive)
STLO = -6.812500e+01	STLO = -6.812500e+01	station longitude (degrees, east positive)
STEL = 4.450000e+03	STEL = 4.450000e+03	station elevation (meters)
STDP = 3.000000e+02	STDP = 3.000000e+02	station depth below surface (meters)
KEVNM = C201102082202A	KEVNM = C201102082202A	event name
EVLA = 4.331000e+01	EVLA = 4.331000e+01	event CMT latitude (degrees, north positive)
EVLO = -1.275400e+02	EVLO = -1.275400e+02	event CMT longitude (degrees, east positive)
EVDP = 2.220000e+01	EVDP = 2.220000e+01	event CMT depth (km)
IEVTYP = EARTHQUAKE	IEVTYP = EARTHQUAKE	event type
DIST = 8.948153e+03	DIST = 8.948153e+03	great circle distance between event and station (km)
AZ = 1.230154e+02	AZ = 1.230154e+02	event to station azimuth (degrees)
BAZ = 3.204107e+02	BAZ = 3.204107e+02	station to event azimuth (backazimuth, degrees)
GCARC = 8.042076e+01	GCARC = 8.042076e+01	great circle distance between event and station (degrees)
LOVROK = TRUE	LOVROK = TRUE	TRUE if is ok to write the file on disk
USER0 = 0.000000e+00	USER0 = 0.000000e+00	source half-duration (s)
USER1 = 1.700000e+01	USER1 = 8.000000e+00	shortest period at which simulations are accurate (s)
USER2 = 5.000000e+02	USER2 = 1.949300e+04	longest period at which simulations are accurate (s)
KUSER0 = SEM	KUSER0 = MODES	method used to compute synthetic seismograms
KUSER1 = v5.1.0	KUSER1 = ---	version of the SEM and MODES codes
KUSER2 = PRINCETN	KUSER2 = PRINCETN	synthetics computed at Princeton University
NVHDR = 6	NVHDR = 6	header version number
SCALE = 1.000000e+09	SCALE = 1.000000e+09	scale factor to convert the unit of synthetics from meters to nanometers
LPSPOL = TRUE	LPSPOL = TRUE	TRUE if station components have positive polarity
LCALDA = TRUE	LCALDA = TRUE	TRUE if DIST, AZ, BAZ and GCARC are calculated from station and event coordinates
KCMPNM = MXZ	KCMPNM = LXZ	station component name
KNETWK = AS	KNETWK = AS	station network name

SEM: Spectral Element Method, **MODES:** Normal Mode Summation, **CMT:** Centroid Moment Tensor

* the format of the file names is STA.NT.?X?.MT.sac where STA and NT are the station and network names, ?X? is the component name (MXZ/MXN/MXE and LXZ/LXN/LXE for sem and modes seismograms, respectively), MT is the method used to compute the synthetics (SEM/MODES) and sac represents that the synthetics are in SAC binary format.

** the unit of synthetic seismograms is "meters". The seismograms should be scaled by the header SCALE to obtain units of nanometers.

*** zero time in the synthetics corresponds to the centroid time of earthquake (CMT time).