

SWWA

SW WASHINGTON REFRACTION EXPERIMENT DATA MERGE

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All the data recorded during the Southwest Washington Refraction Experiment of September, 1995 are included on one 8mm SEG Y tape. The tape has one SEG Y file containing P- and S-wave data. The P-wave data are reduced at 6.0 km/s, the S-wave data are unreduced. The trace length is 60 s, however, only the first 35 s of the P-wave data are live samples (necessary to have same trace-length since P- and S-wave data are in one file). If disk space is an issue (the file is about 1.2 Gbytes), I suggest reading in the P-wave data separately, and trimming the trace length to ≤ 35 s. The sample interval is 8.0 ms for all data. The source and receiver positions are latitude-longitude values multiplied by 10^5 ; elevations for sources and receivers are in meters. I have inserted offsets (in meters) into the P-wave headers in order to reduce the data; these offsets are direct range between source and each receiver position. The data are organized by the header word FFID as follows:

P-wave

FFID	SOURCE	CHAN	STATION	BOX
1-18	1-18	1001-2604	1001-2604	1-4

S-wave [north-south component]

FFID	SOURCE	CHAN	STATION	BOX
101-118	101-118	1486-2122	1486-2122	3-4

S-wave [east-west component]

FFID	SOURCE	CHAN	STATION	BOX
201-218	201-218	1486-2122	1486-2122	3-4

note: \otimes time zero is 5.0 s on reduced (P-wave) data.

FFID is always the same as the surface shot number with the exception of the shear wave data, where either 100 or 200 is added to the surface shot number for the north-south and east-west components respectively. CHAN numbers are equal to the surface station number. If sequential channel numbers are desired, the station numbers are preserved in a non-standard header word called STATION (located at byte 173, 2-byte integer). A second non-standard header word called BOX (located at byte 175, 2 byte integer) has the instrument type as:

Instrument	BOX
SCR	1
SGR	2
PRS	3
REFTEK	4

Note: Many PRS-4 instruments did not turn on during deployment 1 because of a bug that happened to affect only recording times of 103 s. This amounts to about 37 traces that are missing on some shots. Shot 18,118, and 218 is the quarry blast recorded during deployment 2 on vertical, north-south, and east-west channels respectively. I don't have a location for this shot yet; the location used in the headers is that of the nearest station on the line to the shot.

Questions about these data should be addressed to:

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