



Figure S1. Depth distribution of hypocenters and CMT solutions (for  $M_w \geq 5.0$ ) along NE oriented cross sections (see Figure 1C for locations). Red dots denote events with highly correlated seismograms. Orange lines indicate projected position of plate interface and master splay fault inferred from aftershock analysis along cross section 2-2' (see also Figure 2 and associated text).

Figure S1

Table S1. Fluid flow rates ( $fr$ ), correlation coefficients ( $Cf$ ) estimated from the least square fit of time of occurrence vs. distance to plate interface within the five periods of ascending fluid flow (see Figure 3A), for all events and for events along the two streaks (cross section 2–2' in Figure 1C).  $P$ -values, indicating statistical significance of correlation coefficients, are derived from repeated (5000  $\times$ )  $Cf$  estimates based on re-sampled data vectors. Numbers of events are in parentheses.

		Period 1	Period 2	Period 3	Period 4	Period 5
all events	$fr$ (m/day)	612 (61)	143 (91)	107 (47)	39 (88)	23 (58)
	$Cf$	0.25	0.27	0.36	0.33	0.17
	$p$ -value	0.027	0.004	0.007	0.001	0.101
streaks	$fr$ (m/day)	905 (21)	150 (39)	86 (22)	34 (52)	19 (33)
	$Cf$	0.33	0.39	0.42	0.40	0.17
	$p$ -value	0.072	0.007	0.026	0.002	0.19

Table S1