

TABLE 1

Region	Uplift rate (V_z)	Thermal gradients	Topographic gradients	Structure			Fluid chemistry			Dominant driving force for fluid flow		
				Dip of shear planes	Volume change	Permeability	Depth*	Temperature estimates ($^{\circ}\text{C}$)	Comp		Isotopes	C
Inboard	>5 mm/y	High	<i>Long wavelength:</i> steep $\approx 11^{\circ}$ <i>Short wavelength:</i> steep $\approx 4.5^{\circ}$	Steep	Minor	<5 km; $>10^{14}\text{m}^2$ near-surface $>5\text{km}$; dynamic only A, B	≤ 3 km C	250 - 350	H_2O , variable CO_2 , NaCl H_2O	Partially exchanged meteoric rock	Partially exchanged meteoric rock	Topographic gradients Thermal gradients Dilatancy kneading
Main Divide +	1-2 mm/y	Moderate	<i>Long and short wavelength:</i> steep $\approx 3.5^{\circ}$	Steep and mixed	(+)	Static; moderate to high at shallow levels	Near-surface F_1 F	Variable, 50 - 250	H_2O minor CO_2 H_2O	Meteoric, rock-exchanged Meteoric	? Rock-exchanged Organic-exchanged	Net volume increase
Outboard	0.5-1.0 mm/y	Low	<i>Long wavelength:</i> moderate $\approx 5^{\circ}$	Moderate	(-)	$>10^{15}\text{m}^2$	Near-surface in basement	<100	H_2O	Meteoric	Organic-exchanged	Topographic gradients sediment compaction

* Letters refer to sample locations in Figure 2 and text
+ Mixer is beneath 15km, not sampled, and not included in this table