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LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
101	N 38 27 460	Haney Sousa Scharer Stal	4-16-14 16:16
	E 05 65 185		Strike/Dip of fault: N 135°E

Note on local lithology:	Note on local geomorphology:
volcanic bedrock covered with big cobbles	shallow channel mantled w/ cobbles

Confident this is a real offset feature?	Confident that the ***geometry*** chosen in screenshot is
(YES) / NO channel is there	ACCURATE? YES / (NO) need to be closer to fault
	Confident that the ***projections*** chosen in screenshot are ACCURATE? YES / (NO) not ⊥ to stream rod one too oblique

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why) 0.5 - 0.8 cm
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?) (see Scharer notes)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, fair, good, or very good (Explain why)

Quality rating of current field measurement: poor, fair, good, or (very good) (include description to support your rating)

176-290 cm well defined ⊥ discrete feature

Photo IDs (If file names are similar, include photographer's initials:
1205—1211 JMS

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LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
102	N 38 27435	Harvey Schaver Stock Sousa	4-16-14 16:02
	E 05 65 204		Strike/Dip of fault:

Note on local lithology:
Soft white volcanic ash/ andesite (platy weathering)

Note on local geomorphology: Thin fan in a broad bedrock channel / alluvial fill

Confident this is a real offset feature?
YES / NO

Confident that the ***geometry*** chosen in screenshot is ACCURATE? YES / NO fault + profile lines OK.
Confident that the ***projections*** chosen in screenshot are ACCURATE? YES / NO

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why) 1.5 m. 1.5 m.
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, fair, good, or very good (Explain why)

Quality rating of current field measurement: poor, fair, good, or very good (include description to support your rating)

1.5 m (eyeball)

tape measure ~~120~~ cm → 150 cm.
110 cm →

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
103	N 38 27 393	Sousa Schaver Harvey Stock	4/16/14 3:17
	E 05 65 233		Strike/Dip of fault:

Note on local lithology:
volcanic rock - prob hb-biot- dacite
big crystals

Note on local geomorphology:
pediment contact w/ steep channel walls (eroding bedrock flanks)

Confident this is a real offset feature?
YES / NO

Confident that the ***geometry*** chosen in screenshot is ACCURATE? YES / NO margin is curved.
Confident that the ***projections*** chosen in screenshot are ACCURATE? YES / NO

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified: need to be closer to the fault to account for curvature of features

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why) 1 meter (other strands 10m away)
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, fair, good, or very good (Explain why) because of overly simplified morphology
Morphology of feature.

Quality rating of current field measurement: poor, fair, good, or very good (include description to support your rating)
none - not a crest. measured on top of hill horiz. (local slope)
120 ± 50 offset measured with tape
no vertical meas. but could have
10 or 20 cm E side ↑

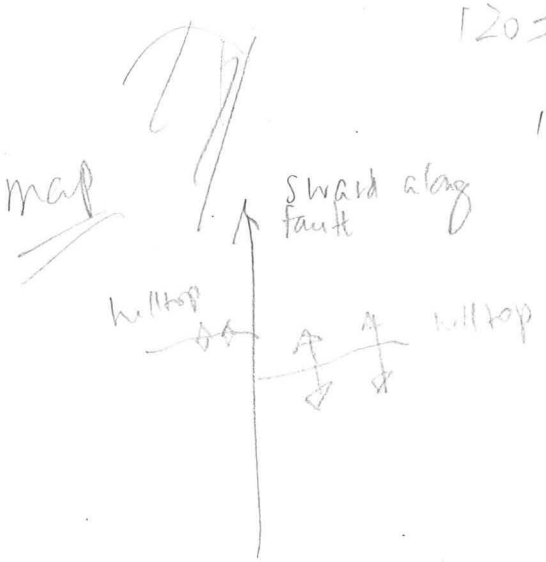

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
104	N 38 27 364 E 05 65 258	Schaver Stark Sousa Harvey	4/16/15 2:30 pm Strike/Dip of fault: 135 subvertical

Note on local lithology:
tuff breccia on E + al-
fine grained on the W.

Note on local geomorphology:
steep slopes
bedrock channel cut into steep slopes

Confident this is a real offset feature?
YES / NO

Confident that the ***geometry*** chosen in screenshot is ACCURATE? YES / NO
Confident that the ***projections*** chosen in screenshot are ACCURATE? YES / NO 3 m away on downstream side it too far away.

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified: Downstream bedrock channel is full of boulders.

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why) 1 m (This strand) * but 2 more mapped strands farther W
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, fair, good, or very good (Explain why)

Quality rating of current field measurement: poor, fair, good, or very good (include description to support your rating)

Kate's
Total range
170 - 300 cm

distinct feature, can see edges of everything
see Kate's field book

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Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
105	N 38 27 090 E 05 65 502	Sara Scharer Harvey Stark	4-16-15 13:00 Strike/Dip of fault:

Note on local lithology:	Note on local geomorphology:
talus slope of volcanic blocks	steep talus slope moderate/

Confident this is a real offset feature?	Confident that the ***geometry*** chosen in screenshot is
YES / NO offset of feature is fine for total offset of Thalweg but ΔT not known	ACCURATE? YES / NO upstream OK – downstream on slope so not OK.
	Confident that the ***projections*** chosen in screenshot are ACCURATE? YES / NO too many fault strands in between

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

The projection lines of the 10 m – distance on either side may encompass pre-existing bends or other earthquake events.

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why)
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, fair, good, or very good (Explain why)

Quality rating of current field measurement: poor, fair, good, or very good (include description to support your rating)

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
106	N 38 27033	Stock Sousa Schperer Harvey	4-16-14 12.38
	E 05 65 554		Strike/Dip of fault: en echelon steps oriented N5°E, N335°W, etc.

Note on local lithology:
Colluvium (Q bedrock)

Note on local geomorphology:
stream channel zone full of huge boulders, inset in debris fan deposits + talus

Confident this is a real offset feature?
YES / NO
channel is a feature. profiles do not span a single channel that crosses the fault.

Confident that the ***geometry*** chosen in screenshot is ACCURATE? YES / NO
Confident that the ***projections*** chosen in screenshot are ACCURATE? YES / NO projection angle on E side is no good.

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:
Profiles are not parallel to the fault. both of them cross the fault obliquely. multiple channels are present upstream.

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why) 10 m — 5 breaks.
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?) Frank's
Feature extents
Quality rating of previous LiDAR measurement : none, poor, fair, good, or very good (Explain why)

Quality rating of current field measurement: poor, fair, good, or very good (include description to support your rating)

fault breaks comprise a series of en echelon steps. upstream: big drainage area, funnels into small downstream drainage area.

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
107	N 38 27 012	Scharer Sousa Stock Harvey	4-16-15 12 noon
	E 05 65 575		Strike/Dip of fault:

Note on local lithology:
Alluvial ?
Q bedrock of unknown thickness
Covered by colluvium + Q talus

Note on local geomorphology:
Channel w/inset terrace downstream.

Confident this is a real offset feature?
YES / NO channel is offset

Confident that the ***geometry*** chosen in screenshot is ACCURATE? YES / NO
Confident that the ***projections*** chosen in screenshot are ACCURATE? YES / NO too simplistic

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset channel width ~~5~~ 7 m
Min offset 4.97 m
Preferred offset, and explain what it is based on
Fault zone width (explain why) 5 m (4.a)
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents because uncertainties should be longer
Quality rating of previous LiDAR measurement : none, poor, fair, good, or very good (Explain why)

Quality rating of current field measurement: poor, fair, good, or very good (include description to support your rating)

field meas: can't see feature very well

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
108	N 38 26 983	Stick Sousa Scharer	4-16-14 11:00
	E 05 65 586		Strike/Dip of fault: ~140°

Note on local lithology:	Note on local geomorphology:
talus covering soft volcanic blocks (stones).	channels in talus covered slopes.

Confident this is a real offset feature?	Confident that the ***geometry*** chosen in screenshot is ACCURATE? YES / NO feature on E side is older - channel bottom Confident that the ***projections*** chosen in screenshot are ACCURATE? YES / NO
YES / NO channel on both profiles	

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset
Preferred offset, and explain what it is based on — wide upstream terrace due to lithology contrasts; downstream channel is bedrock, narrower.
Fault zone width (explain why) 20 m—
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, fair, good, or very good (Explain why)

Quality rating of current field measurement: poor, fair, good, or very good (include description to support your rating)

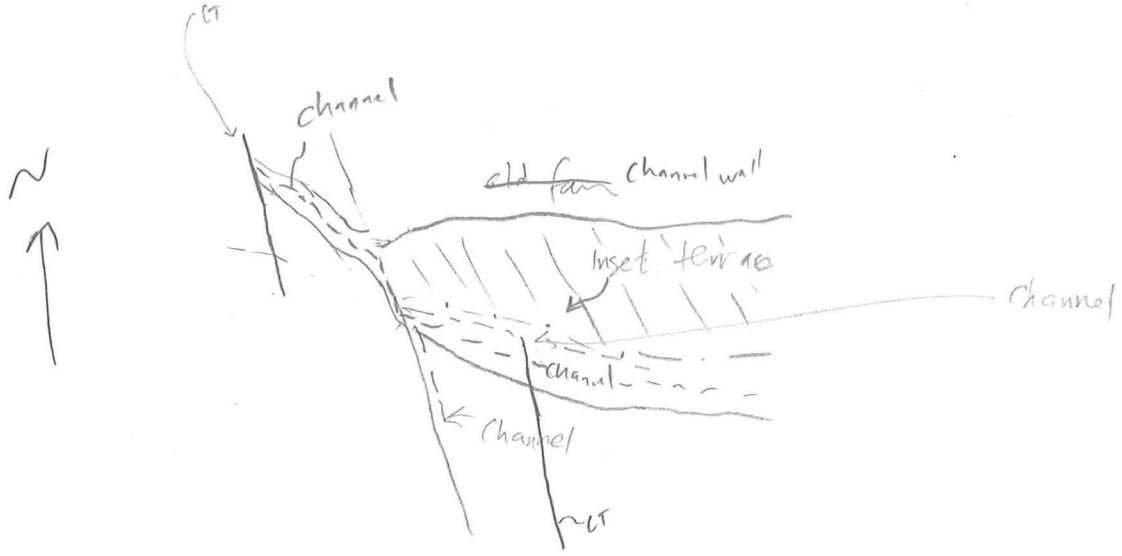


Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
109	N 38 26 941	Sousa Stock Harvey Scharer	4/16/14 10:45
	E 056 5 637		Strike/Dip of fault:

Note on local lithology:	Note on local geomorphology:
talus covered slope, cemented Qf/bedrock clasts	channel cut into caliche + Colluvium
Confident this is a real offset feature? YES / NO channel	Confident that the geometry and projections chosen in screenshot is ACCURATE? YES / NO x directions are wrong.

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Significant curvature prior to faulting

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why) 25 m wide, lots of strands,
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, good, or very good (Explain why)
Quality rating of current field measurement: poor, good, or very good (include description to support the rating given)

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
110	N 38 26 905 E 565 661	Sousa Stock Schaver Harvey	4/16/14 10:00 Strike/Dip of fault:

Note on local lithology:	Note on local geomorphology:
alluvial cover over fine lapilli tuffs and hydrothermal breccia old fault between flow banded lava and white tuffs uphill	bedrock rounded bowl, w/ apex at fault inset terrace in channel
Confident this is a real offset feature? YES / NO it is a hillslope	Confident that the geometry and projections chosen in screenshot is ACCURATE? YES / NO

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Main fault is at apex of Bowl

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why)
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement: none, poor, good, or very good (Explain why)
Quality rating of current field measurement: poor, good, or very good (include description to support the rating given)

current field measurement is on different feature (GeoXH) CT 109-1 see Kate's note

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
111	N 38 38 26 839 E 05 65 723	Sinan, Janet, Kate, Regan, Frank, Joann	4-15-14 · 18:00 hours Strike/Dip of fault: N 140 E subvertical RW

Note on local lithology:	Note on local geomorphology: (Compass)
talus slope w/ volcanic blocks and boulders	stream gully, 2½ m deep channel, w/ 2 levels of inset terrace

Confident this is a real offset feature?	Confident that the ***geometry*** chosen in screenshot is ACCURATE? YES / NO (wide fz, profiles are very far from the fault) Confident that the ***projections*** chosen in screenshot are ACCURATE? YES / NO
YES / NO	

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why) 4 separate scarps
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, fair, good, or very good (Explain why)

Quality rating of current field measurement: poor, fair, good, or very good (include description to support your rating)

160 cm offset thalweg ± 0.5m
or 250 cm from Kate

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
112	N 3826798	w/ Ryan	4/14/14
	E 0565769		Strike/Dip of fault:

Note on local lithology:
This Talus covering volcanic rocks (porphyritic lava)

Note on local geomorphology:
upstream has talus lobes with swales in between
downstream has a prominent channel, but might be following shutter ridge, not go up the swales

Confident this is a real offset feature?
YES / (NO)

Confident that the ***geometry*** chosen in screenshot is ACCURATE? YES / (NO)
Confident that the ***projections*** chosen in screenshot are ACCURATE? YES / (NO) *

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why)
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement: (none), poor, fair, good, or very good (Explain why)

Quality rating of current field measurement: poor, fair, good, or very good (include description to support your rating)
nothing to measure.

* Hard to see. Too zoomed out. No mappable offset feature. Fault zone is also not well located.

Nothing to measure in the field.
Location of blue swale is questionable. No downstream feature to match, despite what profile shows. If our field location of fault and blue profile is correct, it's in this shutter ridge parallel depression.

* It may be possible to find matching features if profiles are drawn closer to fault. It's too subtle to identify in the field, though.

Photo IDs (If file names are similar, include photographer's initials:
1139, 1140, 1141 from Joana's camera.

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
113 CT	N 38 26 770	Sinan, Kate, Ryan, Frank, Joanna, Janet	4-15-14 16:47
	E 05 65 814		Strike/Dip of fault: N125°E subvertical (RW's Brunton)

Note on local lithology:	Note on local geomorphology:
talus slope of volcanic blocks In blue profile a single gully at a large distance from the fault.	rubble piles offset in en echelon left fault steps
Confident this is a real offset feature? YES / NO it is a real feature profiles are in the wrong place so the eastern profile is not on the fault	Confident that the ***geometry*** chosen in screenshot is ACCURATE? YES / NO Confident that the ***projections*** chosen in screenshot are ACCURATE? YES / NO

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

stay the correct distance from the fault.

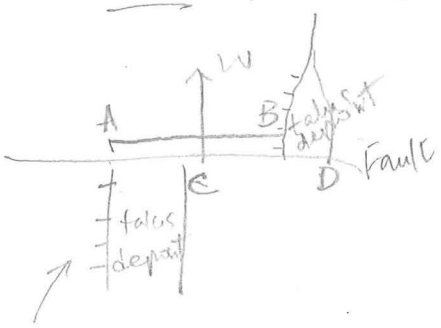
Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why)
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, fair, good, or very good (Explain why)

Quality rating of current field measurement: poor, fair, good, or very good (include description to support your rating)

Note: The real fault geometry is not properly captured by the screenshot and as a result profiles are not equidistant from the fault. Red profile is on the fault. The features captured in the two profiles do not correlate to each other across the fault.

To make correct measurements, move both profiles 3 m east and then you will see 2 gullies in each profile and these could be correlated.

See XII meas. CT113-0 and 113-1



↑ channel

↑ S magnetic bulder field

OB = 2 m. / KS: 220 ± 20

CD = 2.2 m

loc. of C is not precise / within 0.5 m,

CD = 2.2 ± 0.5 m

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
114	N 38 26756	Ryan Jahad	4/14/14
	E 0565824		Strike/Dip of fault: same as before

Note on local lithology:
Unknown (not too thick) ~ 5-10?? me thick talus

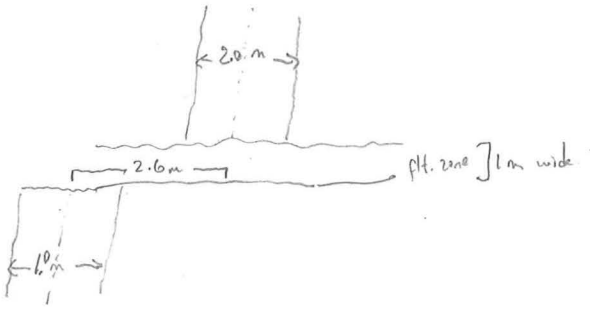
Note on local geomorphology:
~1 m deep channel within talus deposits

Confident this is a real offset feature?
YES / NO
great channel, but the profile only uses 5 edge to make the ~~actual~~ measurement

Confident that the ***geometry*** chosen in screenshot is ACCURATE? YES / NO
Confident that the ***projections*** chosen in screenshot are ACCURATE? YES / NO

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why) ~2 m.
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?) see map.
Feature extents
Quality rating of previous LiDAR measurement : none, poor, fair, good, or very good (Explain why)
profile best to capture channel geometry well. Only projects based on 5 edge. upstream yellow line can be better but hard to see from hillshade.
Quality rating of current field measurement: poor, fair, good, or very good (include description to support your rating)



flt zone narrow
feature linear
might be small curvature of channel right at fault zone
Single trace of fault.
Offset 26 ± 0.5

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME: 3:30 PM
116-115	N 38 26 743	SKJFJ KJSFS JFKSJ	4/15
	E 05 65 847		Strike/Dip of fault: 130°/

Note on local lithology:
Talus (< 10cm) thick, over volcanic breccia.
Scarp exposes in volcanic bedrock.

Note on local geomorphology:
~~offset~~ bedrock incised channel.
↳ unknown substrate. But not very thick (can't be)

Confident this is a real offset feature?
(YES) / NO

Confident that the ***geometry*** chosen in screenshot is ACCURATE? (YES) / NO profiles OK
Confident that the ***projections*** chosen in screenshot are ACCURATE? YES / (NO) see note below on yellow line

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why)
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?) 130°
Feature extents
Quality rating of previous LiDAR measurement : none, poor, (fair), good, or very good (Explain why)
correct feature is picked Trend is not.
Quality rating of current field measurement: poor, fair, good, or very good (include description to support your rating)

Similar to previous location. Oblique profile not capturing good channel morphology.
Channel is offset. Screen Yellow line can be drawn better, on the upstream, taking the entire linear trend of channel. Channel might take a bend in towards the fault that seems to influence upstream trend of the yellow line

Field measurement of thalweg offset is 1.50 - 3.5 m depending on how much deflection you assume prior to rupturing.

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
116	N 38 26132		
	E 05 65 854		Strike/Dip of fault:

Note on local lithology:	Note on local geomorphology:
Confident this is a real offset feature? YES / NO	Confident that the ***geometry*** chosen in screenshot is ACCURATE? YES / NO Confident that the ***projections*** chosen in screenshot are ACCURATE? YES / NO

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why)
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, fair, good, or very good (Explain why)

Quality rating of current field measurement: poor, fair, good, or very good (include description to support your rating)

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
117	N 38 ~~65 81~~ 26723		4-15-14 15:06
	E 05 ~~65~~ 076		Strike/Dip of fault:

Note on local lithology:
talus slope of volcanic rocks

Note on local geomorphology:
channels in talus slope

Confident this is a real offset feature?
YES / (NO) infill, scarp + channels are clear but profiles are not capturing real features that we can observe in the field

Confident that the ***geometry*** chosen in screenshot is
ACCURATE? YES / NO questionable see left-hand comments
Confident that the ***projections*** chosen in screenshot are
ACCURATE? YES / (NO)

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why)
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, fair, good, or very good (Explain why)

Quality rating of current field measurement: poor, fair, good, or very good (include description to support your rating)

none b/c offset feature is wider than the offset

If fault trend is very oblique to channel swales, fault parallel profiles (topographic) will not capture the channel geometry, making it difficult to make offset measurements

Photo IDs (If file names are similar, include photographer's initials:
JMS 1119, 1120

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
118	N 38 26 676	Alex Shaver Stark Sousa Harvey	4/15/14 14:41
	E 05 65 931		Strike/Dip of fault:

Note on local lithology:	Note on local geomorphology:
talus on bedrock	channel in talus

Confident this is a real offset feature?	Confident that the ***geometry*** chosen in screenshot is
YES / NO	ACCURATE? YES / NO There are channels in 4 m wide fault zone
	Confident that the ***projections*** chosen in screenshot are ACCURATE? YES / NO

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset — blue markers on another scarp much more subtle than main scarp- main scarp is 4 m above minor scarp.

Min offset

Preferred offset, and explain what it is based on — projection line directions are fine.

Fault zone width (explain why) 40 m- > 3 strands-

Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)

Feature extents

Quality rating of previous LiDAR measurement : none, poor, fair, good, or very good (Explain why) for location.

Quality rating of current field measurement: poor, fair, good, or very good (include description to support your rating)

12 m – 25 m depending on continuity of downstream channel. Pathway in FZ good for this strand.

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
119	N 38 26 653 E 05 65 960	Arcuz Sousa Scheuer Harvey Stock	4/15/14 14:27 Strike/Dip of fault: N75W here

Note on local lithology:	Note on local geomorphology:
alluvium	mouth alluvial slopes cut by channels

Confident this is a real offset feature?	Confident that the ***geometry*** chosen in screenshot is ACCURATE? YES / NO Confident that the ***projections*** chosen in screenshot are ACCURATE? YES / NO
YES / NO	

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why) tens of meters, many fractures
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, fair, good, or very good (Explain why)

Quality rating of current field measurement: poor, fair, good, or very good (include description to support your rating)

Thalweg offset 1.2 m lowest thalweg 0.5 m wide

1.2 m ± 0.5 m

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
120	N 38 26590	Schauer, Stark Sousa, Akciz, Harvey	4/15/14 12:53 pm
	E 05 06027		Strike/Dip of fault:

Note on local lithology:
pyroclastic density current deposit or lahar deposit

Note on local geomorphology:
smooth alluvial slope with channels in it

Confident this is a real offset feature?
YES / NO (NO) does not have this projects across a wide fault zone

Confident that the ***geometry*** chosen in screenshot is
ACCURATE? (YES) / NO n/a profile locations
Confident that the ***projections*** chosen in screenshot are OK.
ACCURATE? YES / NO n/a
Yellows Times look good-

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:
lots of distributed faulting
red profile is picking data-
blue profile is not-

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why) tens of meters, lots of strands
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, (poor), fair, good, or very good (Explain why) low quality match between either side is not good enough

Quality rating of current field measurement: poor, fair, good, or very good (include description to support your rating)
not possible to measure for confidence.

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
CT 121	N 38 26 530	Stock Sousa	4-15-2014 11:41 AM
	E 05 66074		Strike/Dip of fault:

Note on local lithology:
pumice-bearing tuff overlain by alluvial terrace material

Note on local geomorphology:
Set of terraces adjacent to channel -

Confident this is a real offset feature?
YES / NO
channel, cut by fault

Confident that the ***geometry*** chosen in screenshot is ACCURATE? YES / NO it is a channel
Confident that the ***projections*** chosen in screenshot are ACCURATE? YES / NO prob. highly uncertain. Could include no offset of channel

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset zero
Preferred offset, and explain what it is based on
Fault zone width (explain why) very wide, ca 30 m - 40 m, multiple strands - at least 5 surface breaks here.
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, fair, good, or very good (Explain why) because of problems w/ projection

Quality rating of current field measurement: poor, fair, good, or very good (include description to support your rating)

N edge of channel could have 1 m offset - (Straw).
channel is very sinuous
There was a vertical offset
hill nearby had pre-earthquake scarp probably
tuff exposed on scarp (W-facing) to N of loc. 120-1

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
122	N 38 26 437	Sousa Akcar Stock Scharer Harvey	4/15/14 10:30 AM.
	E 05 66 117		Strike/Dip of fault: N 145°E — fault: Blanton

Note on local lithology:
pyroclastic density Current deposits or block + ash flow - overlain by alluvial deposits w/ angular talus blocks

Note on local geomorphology:
on W side: bedrock channel, talus covered terraces on either side of the stream: on E side, only talus slopes visible on

Confident this is a real offset feature?
YES / NO

Confident that the ***geometry*** chosen in screenshot is ACCURATE? YES / NO
Confident that the ***projections*** chosen in screenshot are ACCURATE? YES / NO
but follow terrace edge, has some uncertainty

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:
because edge of terrace is not quite the same as the bottom of the channel - channel is wide, blocks obscure bottom

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why) scarp is W-facing (uphill facing) w/ E side at least 1 m higher than the W.
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?) Blanton's
Feature extents
Quality rating of previous LiDAR measurement : none, poor, fair, good, or very good (Explain why)
↓ see GeoXH file.

Quality rating of current field measurement: poor, fair, good, or very good (include description to support your rating)

3 m wide
hard to say if this represents localized slip just from this event

there is another main splay to the W of this measurement

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
123	N 38 26 216	Sousa, Witkosky, Stock	4/14/2014 17:40
	E 05 66 244		Strike/Dip of fault: meas. w/ RW & mutag N146°E vertical

Note on local lithology:
alluvial channel dominant with caliche layers + blocky talus of red foliated flow banded fs-bearing lava

Note on local geomorphology:
channel adjacent to shutter ridge formed by lava blocks.

Confident this is a real offset feature?
YES / NO

Confident that the ***geometry*** chosen in screenshot is ACCURATE? YES / NO
Confident that the ***projections*** chosen in screenshot are ACCURATE? YES / NO

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset 4.00 m ± 1.5m in the field measured from center of channel
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why) 1m / witkosky compass
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, fair, good, or very good (Explain why)

Quality rating of current field measurement: poor, fair, good, or very good (include description to support your rating)

1.5 m of uncertainty due to width of channel

Photo IDs (If file names are similar, include photographer's initials:
1067, 1068 JMS DCIM

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
124	N 38	Akers, Selan, Harvey, Sousa, Strick, Witkosky	4/14/2014 17:15
	E 05		Strike/Dip of fault:

Note on local lithology:	Note on local geomorphology:
Confident this is a real offset feature? YES / NO	Confident that the ***geometry*** chosen in screenshot is ACCURATE? YES / NO Confident that the ***projections*** chosen in screenshot are ACCURATE? YES / NO

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Not reproducible. Big rockfall covers W side exposures

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why)
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, fair, good, or very good (Explain why)

Quality rating of current field measurement: poor, fair, good, or very good (include description to support your rating)

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
125	N 3825979		4/14 4:00
	E 566393		Strike/Dip of fault: 147/90 12° declin.

Note on local lithology:	Note on local geomorphology:
~3 colluvium knob	E-side of fault local Peak. Broad colluvium E-facing surface
Confident this is a real offset feature? YES / NO	Confident that the geometry and projections chosen in screenshot is ACCURATE? YES / NO. E-side location will effect measurement uncertainty. Closer to fault, shape would be broader, uncertainty ↑.

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset 125-1 → ~~within~~ 10 m, ~ 3.9 m
Preferred offset, and explain what it is based on
Fault zone width (explain why) ~ 3m.
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?) compass.
Feature extents
Quality rating of previous LiDAR measurement : none, poor, good, or very good (Explain why)
Quality rating of current field measurement: poor, good, or very good (include description to support the rating given)

→ measurements within fault zone. W-profile is difficult to identify in the field.
→ profiles are OK. W side too close to fault. So projection to fault is impossible to do. This makes it difficult to measure offset and also its uncertainty.
→ ~~It~~ Significant vertical component.
→ We couldn't make a field measurement.

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
126	N 38 25915	Kate Sinan Joann Janet Frank Ryan	4/14/14 15:22
	E 56 0449		Strike/Dip of fault: N46°E (RW)

Note on local lithology:	Note on local geomorphology:
2 m of terrace on top of volcanic bedrock (lava)	ridge top w/ 2 obvious fault strands
Confident this is a real offset feature? YES / NO	Confident that the geometry and projections chosen in screenshot is ACCURATE? YES / NO — downstream end has odd yellow line orientation

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why) multiple faults / program cannot deal with those
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, good, or very good (Explain why)
Quality rating of current field measurement: poor, good, or very good (include description to support the rating given)

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
127	N 38 25 861	F. ~~K~~ R.	14th 1500
	E 56 6 485	S. J. J.	Strike/Dip of fault: 150°

Note on local lithology:	Note on local geomorphology:
alluvium	edge of bedrock valley wall w/ 2 m cap of alluvium
Confident this is a real offset feature? YES / NO	Confident that the geometry and projections chosen in screenshot is ACCURATE? YES / NO

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset
Preferred offset, and explain what it is based on — No field measurement possible. Don't know symmetry of original channel wall
Fault zone width (explain why) — 6 m. between tensional gashes / 9 m wide
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, good, or very good (Explain why)
Quality rating of current field measurement: poor, good, or very good (include description to support the rating given)

Fault zone is too wide to make measurement here. Multiple strands

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
128	N 38 25816	Kate+JT+SR	14 2.04pm
	E 56 6512	+F+S	Strike/Dip of fault: 145°

Note on local lithology:	Note on local geomorphology:
volcanic lava Bedrock upstream ~~channel~~ deposits downstream Pyroclastic flow	Downstream broad ridge upstream bedrock shelf.
Confident this is a real offset feature? YES / NO	Confident that the geometry and projections chosen in screenshot is ACCURATE? YES / NO

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Sinan waypoint 34

Max offset

Min offset

Preferred offset, and explain what it is based on

Fault zone width (explain why) — 1.5m

Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)

Feature extents

Quality rating of previous LiDAR measurement : none, poor, good, or very good (Explain why)

Quality rating of current field measurement: poor, good, or very good (include description to support the rating given)

profile drawn too close to fault to capture an offset to topography. (Joann)

upstream

Feature is not linear. Profile downstream is good. upstream profile would change a lot if moved from/to fault.

360 ± 300 cm

profile on upstream side changes dramatically if you move to/from fault.

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
129	N 38	JTJTRTHTS	4/14
	E 56		Strike/Dip of fault: 150°

Note on local lithology:	Note on local geomorphology:
white volcanic rock and weathering sfc. dark volcanic contact ~1m below fault sfc. red ash + pyroclastic flow.	E facing slope, bedrock channels in volcanic unit.
Confident this is a real offset feature? YES / NO	Confident that the geometry and projections chosen in screenshot is ACCURATE? YES / NO

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why) ~1.5m
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, good, or very good (Explain why)
Quality rating of current field measurement: poor, good, or very good (include description to support the rating given)

Many channels including big ch w/ ~8m offset but very hard to be sure of channel match because it is hard to define upstream channel.

projects ch. dir are different

Down stream feature is real, up stream feature not real.
Fault is very close to channel heads!

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
TC130	N 38 25 749	Schaerer Akciz Stock	4/17/14 3:20 PM
	E 05 66 561		Strike/Dip of fault:

Note on local lithology:	Note on local geomorphology:
volcanic talus Colluvial cover on slope	Small channels cut into rounded hills.

Confident this is a real offset feature?	Confident that the ***geometry*** chosen in screenshot is ACCURATE? YES / NO ? Cannot answer Confident that the ***projections*** chosen in screenshot are ACCURATE? YES / NO ? projection lines messy from screenshot.
YES / NO	

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why) 0.5 m horiz distance between top + base of scarp
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, fair, good, or very good (Explain why)

Quality rating of current field measurement: poor, fair, good, or very good (include description to support your rating)

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
131	N 38 25696	Akciz Scharer Stock	4-17-14 16.31
	E 05 66595		Strike/Dip of fault:

Note on local lithology:
uphill W side
volcaniclastic bedrock w/ thin alluvial cover

Note on local geomorphology:
meter scale boulders
talus blocks on surface.

Confident this is a real offset feature?
YES / NO

Confident that the ***geometry*** chosen in screenshot is ACCURATE? YES / NO
Confident that the ***projections*** chosen in screenshot are ACCURATE? YES / NO

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

upstream alluvium thicker - more carbonate rinds

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why) 3 m.
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, fair, good, or very good (Explain why)

Quality rating of current field measurement: poor, fair, good, or very good (include description to support your rating)

see Kate's notebook

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
132	N 38 25 681	Akciz Schaerer Stock	4/17/14 17:00
	E 05 66 602		Strike/Dip of fault:

Note on local lithology:
volcanic rock
talus covered slopes

Note on local geomorphology:
axis of ridge (hilltop)
NE side
apex of ridge has cairn built in previous visit

Confident this is a real offset feature?
(YES) / NO

Confident that the ***geometry*** chosen in screenshot is ACCURATE? (YES) / NO
Confident that the ***projections*** chosen in screenshot are ACCURATE? YES / NO projections are the uncertainties

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why) 2 m
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, fair, good, or very good (Explain why)

Quality rating of current field measurement: poor, fair, (good), or very good (include description to support your rating)

370 cm ± 100 cm

feature is good, it was originally continuous, uncertainty reflects inability of humans to identify apex of ridge because of so many big blocks on the surface

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
133	N 38 25667	Allen Schaefer Stolt	17 APRIL 18:33
	E 05 66604		Strike/Dip of fault:

Note on local lithology:
volcanic bedrock w/ talus covered

Note on local geomorphology:
bedrock channel on E
subtle channel on W

Confident this is a real offset feature?
YES / NO
matching is not good

Confident that the ***geometry*** chosen in screenshot is ACCURATE? YES / NO
Confident that the ***projections*** chosen in screenshot are ACCURATE? YES / NO

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why)
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, fair, good, or very good (Explain why)

Quality rating of current field measurement: poor, fair, good, or very good (include description to support your rating)

6 +40/-70

There is an offset channel but that is not what is being picked
Downstream channel came from somewhere else

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
134	N 38 25 654		4-17-14 18:42
	E 05 66 613		Strike/Dip of fault:

Note on local lithology:	Note on local geomorphology:
volcanic rock w/ talus cover	smooth ridge with irregularly spaced blocks in cover.
Confident this is a real offset feature? YES / NO	Confident that the ***geometry*** chosen in screenshot is ACCURATE? YES / NO Confident that the ***projections*** chosen in screenshot are ACCURATE? YES / NO

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why)
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, fair, good, or very good (Explain why)

Quality rating of current field measurement: poor, fair, good, or very good (include description to support your rating)

~~50~~ 50 ± 100 cm

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
135	N 38 25 611	SA KS JMS	4/17/14 17:09
	E 05 66642		Strike/Dip of fault:

Note on local lithology:
Volcanic bedrock w/ talus cover
big E side uplift

Note on local geomorphology:
Channel in fan
downstream: narrow 1m wide channel w/ boulder levees
upstream: lobate deposits of alluvial fan

Confident this is a real offset feature?
YES / NO

Confident that the ***geometry*** chosen in screenshot is ACCURATE? YES / NO
Confident that the ***projections*** chosen in screenshot are ACCURATE? YES / NO
side slopes
W side proj. incorrect

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Correct projection is true scale feature than will show in LiDAR

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why) 2m
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, fair, good, or very good (Explain why) proj. shows error.

Quality rating of current field measurement: poor, fair, good, or very good (include description to support your rating)

no projection → 280 thalweg (fresh)
370 ↙

Thalweg comes very close to F2 ≈ 50cm

did not use broader floor of channel

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
142 CT	N 38 24 789	Scharer Harvey Stock	4/4/14 18:02
	E 567 047		Strike/Dip of fault:

Note on local lithology:
volcanic bedrock.
dacite? tuff + epiclastic deposits

Note on local geomorphology:
alluvial veneer on bedrock hillslope - Thin colluvial deposit across the profile upstream

Confident this is a real offset feature?
YES / NO

Confident that the geometry and projections chosen in screenshot is ACCURATE? YES / NO
profile is too wide for features

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why) WIDE + hard to see
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, good, or very good (Explain why)
Quality rating of current field measurement: poor, good, or very good (include description to support the rating given)

projection direction is OK; Make profile narrower to only fit channels That contains projection line

fault orientation misses W strand of fault. Downstream profile crosses The W strand of The fault.

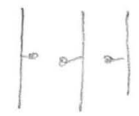
Big left step in fault zone here

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
143 CT	N 38 24 729	Schaerer Stock Harvey	4/04/14 ~~18:00~~ 17:43
	E 567 069		Strike/Dip of fault:

Note on local lithology:
E: bedded volcaniclastic rocks (Quinlan Tuff?)
W: white friable tuff w/ black + ash flow-prob dacite

Note on local geomorphology:
3 fault fissures here – one upslope facing + 2 downslope facing (seen on N side of channel)



Confident this is a real offset feature? YES / NO
black slope (boulders) on S. nice channel

Confident that the geometry and projections chosen in screenshot is ACCURATE? YES / NO

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why) 6 m – meas. separation of 3 scarps
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, good, or very good (Explain why)
Quality rating of current field measurement: poor, good, or very good (include description to support the rating given)

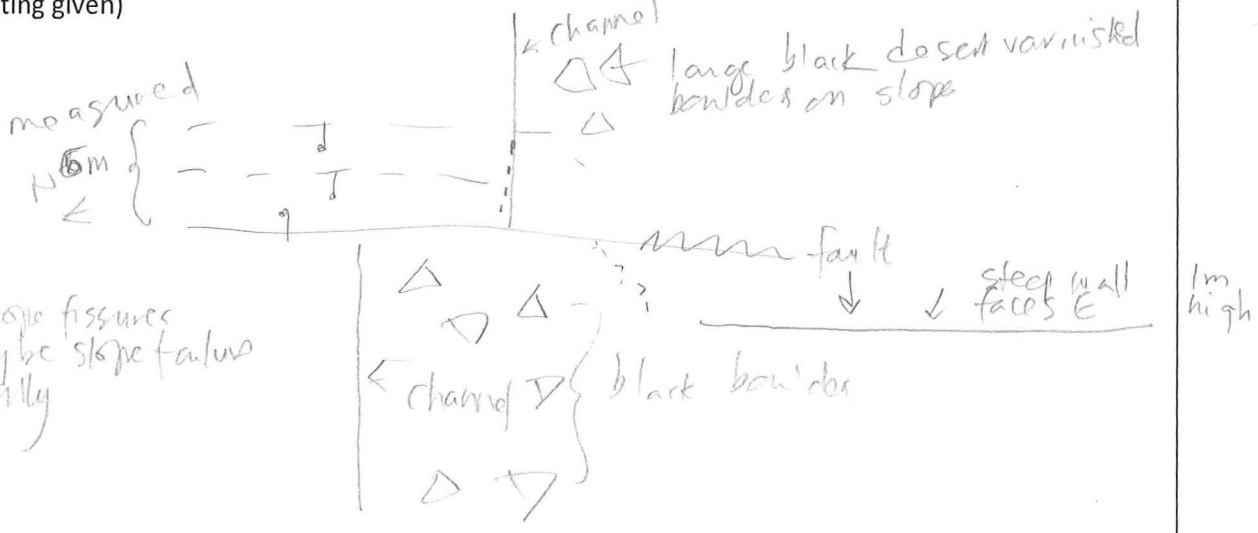


Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
144 CT	N 38 24 655 E 56 7 096	Silvaner Stock Harvey	4/4/2014 17:26 Strike/Dip of fault:

Note on local lithology:	Note on local geomorphology:
bedrock ridges Volcanic (epiclastic beds) on W side E side: green volcanic (intrusive)?	bedrock ridges + hillslopes
Confident this is a real offset feature? YES / (NO)	Confident that the geometry and projections chosen in screenshot is ACCURATE? YES / NO

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset
Preferred offset, and explain what it is based on — of fault
Fault zone width (explain why)
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, good, or very good (Explain why)
Quality rating of current field measurement: poor, good, or very good (include description to support the rating given)

matched a planar upstream hillslope w/ 2 gullies on downstream side

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
145	N 38 24503	SHEARER HARVEY STOCK	4/4/14 16:30
	E 56 7155		Strike/Dip of fault:

Note on local lithology:	Note on local geomorphology:
W side: bedded epiclastic volcanic ss/cgl with dacite (fs porphyry) clasts E: slope covered w/ desert varnished blocks	channel between two bedrock hillslopes
Confident this is a real offset feature? YES / NO	Confident that the geometry and projections chosen in screenshot is ACCURATE? YES / NO

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why)
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?) Kate Scharer
Feature extents
Quality rating of previous LiDAR measurement : none, poor, good, or very good (Explain why)
Quality rating of current field measurement: poor, good, or very good (include description to support the rating given) geomorphic features have same general appearance on either side of the fault

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84 *	TEAM:	DATE (4/2014) / TIME:
146	N 38 24465	SHEARER HARVEY	4/4/14
	E 56 7166		Strike/Dip of fault:

Note on local lithology:	Note on local geomorphology:
E, uphill: mafic volcanic under boulder talus E, downhill: Ash tuff under boulder talus W: boulder talus under bedded volcanic rocks	gully adjacent hill slope subparallel to fault trace
Confident this is a real offset feature? (YES) / NO	Confident that the geometry and projections chosen in screenshot is ACCURATE? (YES) / NO

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why) ~4 m, 2m of distributed deformation on E side
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, good, or very good (Explain why)
Quality rating of current field measurement: poor, (good) or very good (include description to support the rating given)

profile location ok, could be closer on W. side
hill slopes were probably congruent, but variable material under southern portion may have affected hill slopes
stream projection may not be optimum* but best w/ program tools provided (planar matching would be optimum here)
*(considering field measurements found no offset)

field measurement of discrete channel is complicated by hummocky terrain & fault zone deformation & yields no offset

Photo IDs (If file names are similar, include photographer's initials:

* ~start of profiles

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
CT 147	N 38 24 405	Stock	4-18-14 3:30 pm
	E 05 67 194		Strike/Dip of fault:

Note on local lithology:	Note on local geomorphology:
Volcanic bedrock – in stream channel (major arroyo)	bar + swale from distributed drainages in low area
Confident this is a real offset feature? YES / NO	Confident that the ***geometry*** chosen in screenshot is ACCURATE? YES / NO Confident that the ***projections*** chosen in screenshot are ACCURATE? YES / NO

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

upstream channel very broad
downstream channel more confined
upstream in very soft bedrock (tuffs)

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why) 2m — E side up scarp
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, fair, good, or very good (Explain why)

Quality rating of current field measurement: poor, fair, good, or very good (include description to support your rating)

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
148	N 38 24 252 E 05 67 243	K. Schaer J. Stock	4-18-14 12:35 pm Strike/Dip of fault:

Note on local lithology:
Volcanic bedrock (dacite?)

Note on local geomorphology:
bedrock channel + hill
boulder filled channel upstream

Confident this is a real offset feature?
YES / NO

Confident that the ***geometry*** chosen in screenshot is ACCURATE? YES / NO
Confident that the ***projections*** chosen in screenshot are ACCURATE? YES / NO
projection lines are too far away + too long

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset
Preferred offset, and explain what it is based on
his choice is 148-4 ←
our new field number 148-4
Fault zone width (explain why)
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, fair, good, or very good (Explain why)

Quality rating of current field measurement: poor, fair, good, or very good (include description to support your rating)
not on same features
See Kate's notebook
downstream uncertainty

Pinfole lines are too long
projection lines not on features that are not on the same scale as the DEM features (LiDAR)

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
149	N 38 24 219	Scharer Stock	18 APR 2014 11:48
	E 05 67 252		Strike/Dip of fault:

Note on local lithology:
volcanic bedrock
variable hardness

Note on local geomorphology:
upstream bedrock channel
filled with large clasts

Confident this is a real offset feature?
YES / NO

Confident that the ***geometry*** chosen in screenshot is ACCURATE? YES / NO
Confident that the ***projections*** chosen in screenshot are ACCURATE? YES / NO ? too small to see on the screenshot

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why) 1.5 m
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, fair, good, or very good (Explain why)

Quality rating of current field measurement: poor, fair, good, or very good (include description to support your rating)

drainage is a double gully, we have both upstream locations are pinned by bedrock notches

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
150	N 38 24 204	K Sharer	4.18.14 11:40
	E 05 67 255	J. Stock	Strike/Dip of fault:

Note on local lithology:	Note on local geomorphology:
volcanic bedrock softer on W side	rubble-filled bedrock channel (upstream). downstream bedrock channel.
Confident this is a real offset feature? YES / NO high quality feature	Confident that the ***geometry*** chosen in screenshot is ACCURATE? YES / NO Confident that the ***projections*** chosen in screenshot are ACCURATE? YES / NO

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why) 2 m - double strand
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, fair, good, or very good (Explain why)

Quality rating of current field measurement: poor, fair, good, or very good (include description to support your rating)

GeoXH (Kate S.) see her field notes

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
151	N 38 24 195 ~~215~~	Shaver Stock	4-18-14 11:05
	E 05 67 260		Strike/Dip of fault:

Note on local lithology:
volcanic bedrock (dacite?)

Note on local geomorphology:
channels in sft volc bedrock (downstream)
upstream channels in boulder rock

Confident this is a real offset feature?
YES / NO

Confident that the ***geometry*** chosen in screenshot is ACCURATE? YES / NO
Confident that the ***projections*** chosen in screenshot are ACCURATE? YES / NO
downstream ridge lines not correct

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:
in the field — 15° sft?

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why) 1.5 m
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, fair, good, or very good (Explain why)

Quality rating of current field measurement: poor, fair, good, or very good (include description to support your rating)

No field meas. but lidar should be ok b
Profiles are closer to the fault
profiles Do not pick up the scale of topography that is being offset.
Dawnhill contains 3 dawnhill drainages within the profile line Dawnhill yellow line comes from one of the 3 ridges and does not reflect the broader shape of the topography in the profile.

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
153	N 38 24154	STOCK HARVEY LYNCH	4/5/14 17:14
	E 56 7256		Strike/Dip of fault:

Note on local lithology:	Note on local geomorphology:
E: felsic Ash Tuff W: Gl. between mafic lavas & epiclastic volcanic rocks	stream channel w/ alluvial fill draining to fault // channel
Confident this is a real offset feature? YES / NO	Confident that the geometry and projections chosen in screenshot is ACCURATE? YES / NO

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why)
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?) } geoxh & airphotos
Feature extents
Quality rating of previous LiDAR measurement : none, poor, good, or very good (Explain why)
Quality rating of current field measurement: poor, good, or very good (include description to support the rating given)

channel shape varies widely away from fault but profile lines catch a continuous colluvial slope that was apparently planar across the fault

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
153	N 38 24 160	AKH, Z Searcy Stark Whitesby	4/17/14 10:00
	E 05 67 269		Strike/Dip of fault: N 340 E 80 NE

Note on local lithology:
volcanic rocks and colluvium

Note on local geomorphology:
bedrock channel upstream and on N side SC active channel both sides of fault

Confident this is a real offset feature?
YES / NO

Confident that the ***geometry*** chosen in screenshot is ACCURATE? YES / NO using the break in slope on S side
Confident that the ***projections*** chosen in screenshot are ACCURATE? YES / NO

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

TC not using the channels that are easy to identify. Profiles are too long to pick up the channels at the bottom.

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why)
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?) RW compass
Feature extents
Quality rating of previous LiDAR measurement : none, poor, fair, good, or very good (Explain why)

Quality rating of current field measurement: poor, fair, good, or very good (include description to support your rating)
N/A
hillslopes on either side. Scarp are same lithology

Note. also done on 4/4/14
Treman Max site

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
154	N 38 24122 E 56 7278	STOCK HARVEY LYNCH	4/5/14 16:48 Strike/Dip of fault: GeoXH

Note on local lithology:	Note on local geomorphology:
altered felsic ASH TUFF to E(up) mafic lava to W+st(down)	variably incised, colluvium & alluvium choked hillslope channel
Confident this is a real offset feature? YES / NO	Confident that the geometry and projections chosen in screenshot is ACCURATE? YES / NO

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why)
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?) geoXH
Feature extents
Quality rating of previous LiDAR measurement : none, poor, good, or very good (Explain why) FAIR
Quality rating of current field measurement: poor, good, or very good (include description to support the rating given)

projections good
Eastern valley profile varies @ ~2 meter scale due to internal variations w/in erosability. profile may be too far to E of fault - look @ post rupture air photos

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
155	N 38 24092	HARVEY LYNCH STOCK	4/5/14 16:28
	E 56 7278		Strike/Dip of fault: GeoXH

Note on local lithology:	Note on local geomorphology:
erosive mafic lava to w resistant altered Ash tuff toE	well incised V bedrock channel

Confident this is a real offset feature?	Confident that the geometry and projections chosen in screenshot is ACCURATE?
(YES) / NO	YES / (NO)

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

when you need to use a handlens to see the projection lines on the DEM it's too small

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why)
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?) } GeoXH
Feature extents
Quality rating of previous LiDAR measurement : none, (poor), good, or very good (Explain why)
Quality rating of current field measurement: poor, good, or (very good) (include description to support the rating given)

Channel is deeply (relatively) incised into volcanic bedrock & thalweg is well defined @ apex of V
S. channel margins are different slopes & shapes due to variations in bedrock & it appears that the program preferentially aligned the channel margin over thalweg

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
156	N 38 24054	STOCK HARVEY LYNCH	4/5/14 15:48
	E 56 7297		Strike/Dip of fault:

Note on local lithology:	Note on local geomorphology:
E: UP: altered felsic Ash Tuff W: Down: mafic lava	Talus & alluvium choked channel in "bedrock" ridges
Confident this is a real offset feature? YES / NO	Confident that the geometry and projections chosen in screenshot is ACCURATE? YES / NO

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

FAILS TO CAPTURE upper strand

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why)
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?) } GeoXH
Feature extents
Quality rating of previous LiDAR measurement : none, poor, good, or very good (Explain why)
Quality rating of current field measurement: poor, good, or very good (include description to support the rating given)

HS DEM IS WAY TOO SMALL SCALE

Measurement would be improved by using more of southern ridge shape

Ridge edge @ single profile may be affected by internal undulations at E side southern channel margin due to variations in rock erosability

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
157	N 38 24040	STOCK HARVEY LYNCH	4/5/14 15:12
	E 56 7301		Strike/Dip of fault: GeoXH

Note on local lithology:	Note on local geomorphology:
E(up): Silicified volcanic Ash under volcaniclastic cliff w/(dam): mafic lava	up: alluvium/colluvium choked channel in _/ gully down: bedrock channel recently cut through alluvial terrace
Confident this is a real offset feature? YES / NO	Confident that the geometry and projections chosen in screenshot is ACCURATE? YES / NO

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Measurement fails to capture upper strand

Max offset

Min offset

Preferred offset, and explain what it is based on

Fault zone width (explain why)

Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?) } GeoXH

Feature extents

Quality rating of previous LiDAR measurement : none, poor, good, or very good (Explain why)

Quality rating of current field measurement: poor, good, or very good (include description to support the rating given)

* lower projection follows valley axis near fault, upper projection fails to capture apparent valley axis rotation to oblique convergence @ fault. due to rotation between strands? or due to preruptive deflection of valley?

lower thalweg is now incised into dd alluvial fill

upper thalweg is both eroded into older alluvial fill & aggraded above shutter ridge

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
158	N 38 24007	SHEARER HARVEY	4/4/14 13:45
	E 56 7311		Strike/Dip of fault:

Note on local lithology:	Note on local geomorphology:
E: Talus veneer on white xl rich Ash Tuff W: Talus & alluvial veneer on mafic volcanic rocks	Colluvial slope w/ incised gullies between cliff of volcaniclastic rocks & rounded hills of mafic volcanic rocks
Confident this is a real offset feature? YES / NO	Confident that the geometry and projections chosen in screenshot is ACCURATE? YES / NO

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why)
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, good, or very good (Explain why)
Quality rating of current field measurement: poor, good, or very good (include description to support the rating given)

Lidar is overly precise profile positions fail to capture large differences in channel shape, downstream location may be w/in fault zone

E of fault, "channel" shape is determined by convergence of talus slopes @ gully bottom, but projection line doesn't follow gully.

W of fault, "channel" shape is flanked by broad rounded ridges & w/in profile a colluvial wedge from gully determines profile.

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
159 CT	N 38 23939	SHEARER HARVEY	4/4/14 13:10
	E 56 7326		Strike/Dip of fault:

Note on local lithology:	Note on local geomorphology:
E: white xl rich Ash tuff W: weathered mafic volc. rock	SEE BELOW
Confident this is a real offset feature? YES / (NO)	Confident that the geometry and projections chosen in screenshot is ACCURATE? YES / (NO)

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why)
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, good, or very good (Explain why)
Quality rating of current field measurement: poor, good, or very good (include description to support the rating given)

Deleter

slopes are fundamentally different due to diffrent geomorphic origins

E side is fan ~ ⊥ to fault, but ending @ fault ~10° west

W side is a fault // channel @ channel location & further west is mafic boulder field

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
166	N 38	SHEARER HARVEY	4/4/14
	E 56		Strike/Dip of fault: geoxH

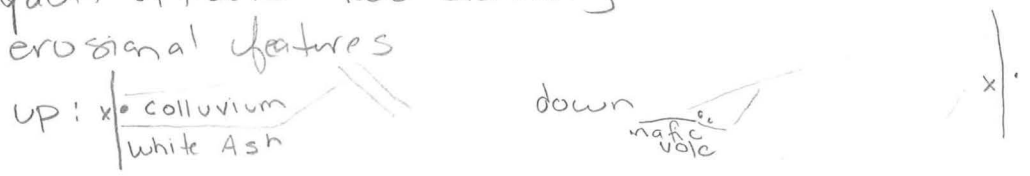
Note on local lithology:	Note on local geomorphology:
alluvial channel cut into white xl rich ash (NE), epiclastic volcanic (SE) colluvium/alluvium over mafic volcanic rocks (W)	broad stream channel from bedrock valley
Confident this is a real offset feature? (YES) / NO	Confident that the geometry and projections chosen in screenshot is ACCURATE? YES / (NO)

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset
Preferred offset, and explain what it is based on geoXH on Southern margin
Fault zone width (explain why) - GeoxH
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, (poor), good, or very good (Explain why) but a good feature w/correct profile of Southern margin
Quality rating of current field measurement: poor, good, or very good (include description to support the rating given)

↑ profile

E profile appears to avoid fault damage zone
W profile (downhill) is too close to avoid the damage zone
8 meters required, 13 m from obvious scarp
fault offsets two distinctly different terrains & erosional features



thus northern channel edge may vary in shape prior to faulting

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
161	N 38 23877	SHEARER	4/4/14 11:31
	E 56 7343	HARVEY	Strike/Dip of fault:

Note on local lithology:	Note on local geomorphology:
Combined talus & alluvium veneer over bedded epiclastic volcanic rocks	Talus slope/alluvial fan apron between cliff & incised stream channel
Confident this is a real offset feature? YES / NO	Confident that the geometry and projections chosen in screenshot is ACCURATE? YES / NO

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why) ~ 4 M - large zone of fissures & push-ups
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, good, or very good (Explain why)
Quality rating of current field measurement: poor, good, or very good (include description to support the rating given)

Upstream & downstream profiles are well positioned to be as close as possible to fault while avoiding damage zone

lower projection may be too oblique & underestimate fault offset

channels & deposits are distinctive above & below fault.

overall, feature is more orthogonal to fault than 162 & more slope ⊥ than other channels on slope

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
162	N 38 23863	SHEARER HARVEY	4/4/14 10:46 AM
	E 567346		Strike/Dip of fault:

Note on local lithology:	Note on local geomorphology:
variable thickness of talus/alluvium over well indurated bedded epiclastic volcanic rocks	Mixed talus slope & alluvial channels oriented obliquely to fault
Confident this is a real offset feature? (YES) / NO	Confident that the geometry and projections chosen in screenshot is ACCURATE? YES / (NO)

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset GeoXH
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why) 4 M - large damage zone of fissures & ridges
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, (GeoXH?))
Feature extents - large - but oblique to fault
Quality rating of previous LiDAR measurement : none, poor, good, or very good (Explain why)
Quality rating of current field measurement: poor, good, or very good (include description to support the rating given)

poor quality of feature due to ambiguity in original geometry -

A) original channel may have been originally sigmoid shaped - diverted along old fault trace

B) in 2014, unable to project lower/west stream channel past wide damage zone except as linear projection from distant point (see geoXH data)

Potential scenario

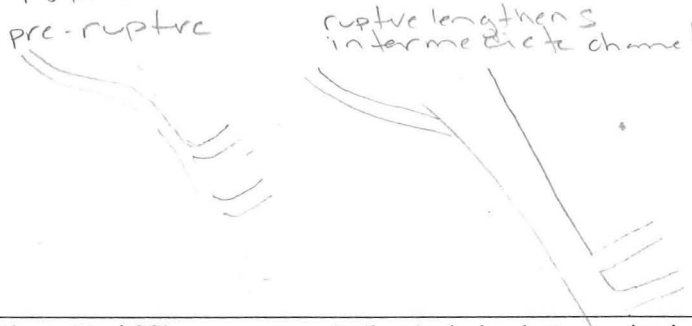


Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
163CT	N 38 23 783	Schaver Harvey Ctod	4-3-14 10:05
	E 56 7372		Strike/Dip of fault:

Note on local lithology:	Note on local geomorphology:
E: bedded epiclastic rk + ss W: lava flow	stream channel w/ 1-2m dia. boulders, low terrace on downstream side of fault no terrace on upstream side of fault
Confident this is a real offset feature? YES / NO	Confident that the geometry and projections chosen in screenshot is ACCURATE? YES / NO n/a

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

clast size + irregular hill slope suggest you should not use hills/ridge possible to get offset

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why)
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, good, or very good (Explain why)
Quality rating of current field measurement: poor, good, or very good (include description to support the rating given)

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
164	N 3823654	Schaver Harvey Stock	3-4-14 18:45
	E 567416		Strike/Dip of fault:

Note on local lithology:	Note on local geomorphology:
E: Talus slope under bedded lahar W: Talus slope down to mafic vdc. In between fault strands are 10 m wide white ash zone	Talus apron between local highs
Confident this is a real offset feature? (YES) / NO	Confident that the geometry and projections chosen in screenshot is ACCURATE? YES / NO Fault zone is impossible to see -

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified: look at orig. air photos

Max offset
Min offset
Preferred offset, and explain what it is based on — see GeoXH data
Fault zone width (explain why)
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, good, or very good (Explain why)
Quality rating of current field measurement: poor, good, or very good (include description to support the rating given)

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
165 TC	N 38 12 6950 E 56 7425	Schaver Stoll Harvey	4-3-14 1900h Strike/Dip of fault:

Note on local lithology:	Note on local geomorphology:
lahars to E silt v-f. colluvial w/ alluvium (debris fans to W.	bedrock channel to E fan (apex) to W
Confident this is a real offset feature? YES / NO	Confident that the geometry and projections chosen in screenshot is ACCURATE? YES / NO

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why) 2m - hard to tell
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, good, or very good (Explain why) medium
Quality rating of current field measurement: poor, good, or very good (include description to support the rating given)

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
166	N 3823563	SHEARER HARVEY	4/4/14 9:15
	E 56 7418		Strike/Dip of fault:

Note on local lithology:	Note on local geomorphology:
W (downstream): thin alluvial veneer over mafic volcanic bedrock E (upstream): variable alluvial veneer (up to 2meters) over mafic volc transitioning to bedded epiclastic	Alluvial & debris flow fan reaching back to high mesa
Confident this is a real offset feature? YES / NO	Confident that the geometry and projections chosen in screenshot is ACCURATE? YES / NO

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset
Preferred offset, and explain what it is based on } GO XH
Fault zone width (explain why) METER -
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents - short + plus large variation aw
Quality rating of previous LiDAR measurement : none, poor, good, or very good (Explain why)
Quality rating of current field measurement: poor, good, or very good (include description to support the rating given) — SEE GeoXH

profiles drawn too far from fault given stream variation projectional to fault for closer profiles
(stream variation possibly not visible @ Lidar resolution

Previous Lidar — poor - Lidar measurements profile position fails to exclude significant channel variation

low stream power leads to ambiguous features & lack of certainty that lower channel region was controlled by this feature, but clearance of lower wedge to a bedrock does indicate recent incision

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
167 CT	N 38 23 512	Schafer Harvey Stark	4/3/14 16:15
	E 56 7 446		Strike/Dip of fault:

Note on local lithology:	Note on local geomorphology:
volcanic bedrock w/ large boulders of vesicular mafic lava rolled down slope felsic volc	slope meets abandoned terrace on E side of fault slope meets active wash on W. side of fault
Confident this is a real offset feature? YES / NO	Confident that the geometry and projections chosen in screenshot is ACCURATE? YES / NO ± concern w/ terrace levels,

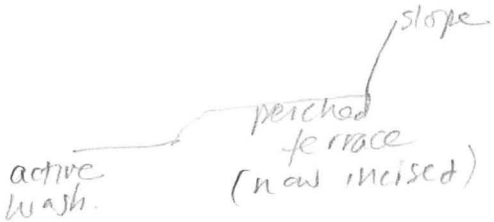
DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Not using same contact on both sides of fault

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why)
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, good, or very good (Explain why)
Quality rating of current field measurement: poor, good, or very good (include description to support the rating given)

~~N~~ looking N:

E side looking N



offset may be underestimated because of this -

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
CT 168	N 38 23 366	Schaer Harvey Stark	4.3.14 15:15
	E 56 7 469		Strike/Dip of fault:

Note on local lithology:	Note on local geomorphology:
channel filled with olive grey gravel clasts. Bedrock to W & S sides of channel is crystal-rich intermed. Volc. rock on W side	E side is covered with lag of large desert varnished blocks E side of fault is bedded volcaniclastic epiclastic volcanic SS
Confident this is a real offset feature? YES / NO	Confident that the geometry and projections chosen in screenshot is ACCURATE? (YES) / NO

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why) ≤ 1 m (40 cm measured w/ ~~meas~~ Kato tape by Schaer)
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, good, or very good (Explain why)
Quality rating of current field measurement: poor, good, or very good (include description to support the rating given) excellent

see Kate's sketch for details.

southern margin was a sharp feature before the earthquake but final ~~distance~~ orientation to fault is uncertain in last 25 m on W side of fault

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
GT 169	N 38 23 171	Harvey Scharer Stock	4.3.14
	E 56 7 520		Strike/Dip of fault:

Note on local lithology:	Note on local geomorphology:
alluvium (active)	active wash
Confident this is a real offset feature? YES / NO Can't evaluate	Confident that the geometry and projections chosen in screenshot is ACCURATE? YES / NO Can't evaluate.

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why)
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, good, or very good (Explain why)
Quality rating of current field measurement: poor, good, or very good (include description to support the rating given)

GT meas. no longer possible - F.Z. eroded out

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
CT 170	N 38 23 033 E 56 7 543	Harvey Scharer Stock	4/3/14 / 14:35 Strike/Dip of fault:

Note on local lithology:	Note on local geomorphology:
active alluvium	active wash (modern bar + swale)
Confident this is a real offset feature? YES / (NO)	Confident that the geometry and projections chosen in screenshot is ACCURATE? YES / (NO)

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why)
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, good, or very good (Explain why)
Quality rating of current field measurement: poor, good, or very good (include description to support the rating given)

remove from data base

cannot see fault location

today, W side of likely fault trace is totally eroded

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
171	N 38 22958	Harvey Scharer Stock	4-3-14 14:05
	E 56 7 558		Strike/Dip of fault:

Note on local lithology:	Note on local geomorphology:
W: smooth weathering felsic volcanic rocks E: felsic lava, blocks, ash flow banding	W of fault: smooth hill wraps toward fault zone E of fault:
Confident this is a real offset feature? YES / NO	Confident that the geometry and projections chosen in screenshot is ACCURATE? YES / NO

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why)
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, good, or very good (Explain why)
Quality rating of current field measurement: poor, good, or very good (include description to support the rating given)

Lithology on E side is not the same as on W so topos are expected to be different. North side slopes might have been curving in map view. This was originally a curved shape and hilltops were not along the same slope. The E hilltop would have been a local high.

possible overestimate due to unknown hillslope geometry

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
CT 172	N 38 22 845	Harvey Schaber Stock	4-3-14 13:42
	E 56 7517		Strike/Dip of fault:

Note on local lithology:	Note on local geomorphology:
In white volc rock (Pyroclastic) or hillslope	trench pits dug by military are nearby

Confident this is a real offset feature?	Confident that the geometry and projections chosen in screenshot is ACCURATE?
YES / (NO)	YES / (NO)

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why)
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, good, or very good (Explain why)
Quality rating of current field measurement: poor, good, or very good (include description to support the rating given)

Cannot see fault plane.
Eliminate measurement ? poor data set
check 1999 photos

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
CT173	N 38 22781	Harvey Schaner Stock	4/3/14 13.15
	E 56 7577		Strike/Dip of fault:

Note on local lithology:	Note on local geomorphology:
E. colluvium W: bedrock of soft volcanic material – pumiceous	rounded hill slopes
Confident this is a real offset feature? YES / NO	Confident that the geometry and projections chosen in screenshot is ACCURATE? YES / NO E side profile may be too close

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why) 3 m colluvium from E side ↓ into gully
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, good, or very good (Explain why) underestimate ?
Quality rating of current field measurement: poor, good, or very good (include description to support the rating given)

Compare E side profile w/ GeoXH – shy est. from LiDAR may be an underestimate.

Slope cover on volc rx on W side of fault is very distinctive + differs from what is seen on E side of fault.

blocks of red-weathering nonvesicular mafic lava on W side surface.

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
174 CT	N 38 22 697 E056 7 589	Harvey Scharer Stock	4/3/14 11:49 Strike/Dip of fault:

Note on local lithology:	Note on local geomorphology:
bedrock up stream vesicular lava bedrock down stream colluvium green weathering volc rock	rounded slopes cliffy zones uphill (E) smooth slopes W of fault

Confident this is a real offset feature?	Confident that the geometry and projections chosen in screenshot is ACCURATE?
(YES) / NO	(YES) / NO

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why)
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, (GeoXH?))
Feature extents
Quality rating of previous LiDAR measurement : none, poor, (good), or very good (Explain why)
Quality rating of current field measurement: poor, good, or very good (include description to support the rating given)

can't do this on fault slope because slope is too unstable uphill (E) of fault

note: form of hill on E side is OK but it is mantled by colluvium + some white coated blocks that have moved.

wide uncertainties are appropriate due to topo. in the ag & slope configuration

can GeoXH the fault but not the offset feature above + below it

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
CT 175	N 38 22 654	Harvey Schaver Stock	4/3/14 11:17
	E 56 7 592		Strike/Dip of fault:

Note on local lithology:	Note on local geomorphology:
bedrock channel upstream in mafic lava downstream green altered vitric rock locally covered by talus	rounded hills w/ small cliffs of bedrock outcrop
Confident this is a real offset feature? YES / NO	Confident that the geometry and projections chosen in screenshot is ACCURATE? YES / NO w/ profile may have projection uncertainty

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why) 1 meter gully visible now /late.
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, good, or very good (Explain why)
Quality rating of current field measurement: poor, good, or very good (include description to support the rating given)

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
176	N 38 22 514	Harvey Stock	4/3/2014 10:00
	E 56 7 609		Strike/Dip of fault:

Note on local lithology:
upstream (E) bedrock channel (gully) in vesicular mafic lava
downstream: talus slope (mantled over lava) ½ m thick talus cover

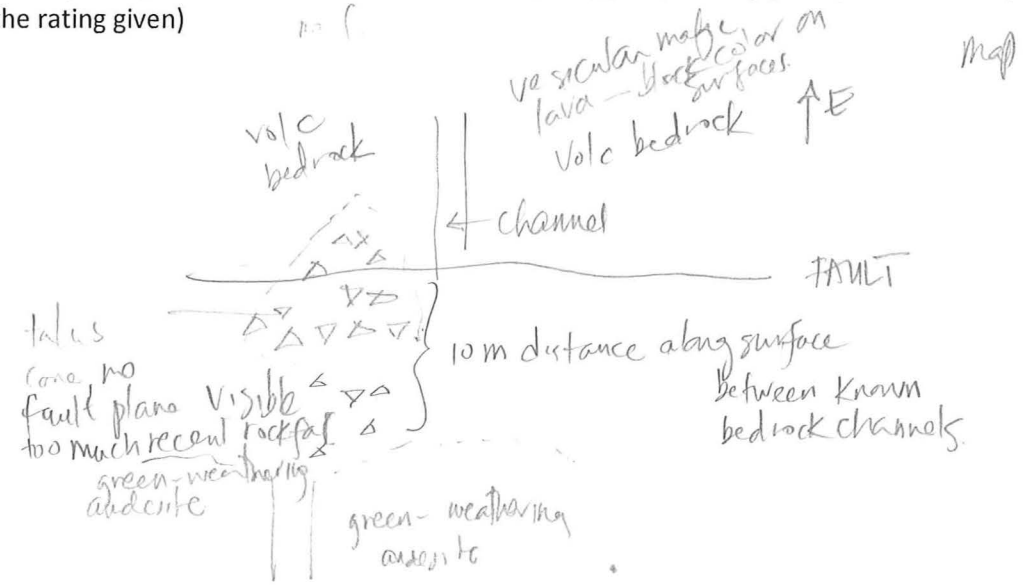
Note on local geomorphology:
rounded hill with planar fracture surfaces — irregular surface of lava (upstream)
fault strand to W not measured here

Confident this is a real offset feature?
YES / NO

Confident that the geometry and projections chosen in screenshot is ACCURATE? YES / NO (strong lithology) geometry poor due to talus blocks + channels

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why) >1m gully present
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, good, or very good (Explain why) geometry uncertainty
Quality rating of current field measurement: poor, good, or very good (include description to support the rating given)



DSCN 0681 0682 0685 0689 0692 0697

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
177	N 38 22 251	Schaver Stock Harvey	4/12/14 18:00
	E 56 7637		Strike/Dip of fault:

Note on local lithology:	Note on local geomorphology:
volc bedrock myarolitic dike intermed compos.	rounded hilltop
Confident this is a real offset feature? YES / NO	Confident that the geometry and projections chosen in screenshot is ACCURATE? YES / NO

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why)
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, good, or very good (Explain why)
Quality rating of current field measurement: poor, good, or very good (include description to support the rating given)

2012 : old full mag = 190 cm

Kate Schaver

DSCN 0652 0657 0661 0666 0670

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
178 CT	N 38	J Stock K Scharer J Harvey	4/2/14 1715
	E 56		Strike/Dip of fault:

Note on local lithology: E of Fault
bedded mafic volc ix intruded by fine grained phaneritic dike
white fine grained soil at scarp has clasts of dike material

Note on local geomorphology:
round hills on S side of channel

Confident this is a real offset feature?
YES / NO

Confident that the geometry and projections chosen in screenshot is ACCURATE? YES / NO
uncertainty re possible original curvature of channel wall

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

no field measurements - see data from 2012 field measurements

Max offset
Min offset
Preferred offset, and explain what it is based on
K. Scharer
Fault zone width (explain why)
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, good, or very good (Explain why)
Quality rating of current field measurement: poor, good, or very good (include description to support the rating given)

DSCN ~~0600~~ 0626 0627 0630 ~~0623~~ 0635

Photo IDs (If file names are similar, include photographer's initials:

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
179 CT	N 38 22155	Harvey, Schaad, Stock	4/2/14 16.52
	E 56 7 648		Strike/Dip of fault:

Note on local lithology:
talus covered alluvial fans w/ bedrock within 5 m of fault. slopes of fault have exposed soil along scarps

Note on local geomorphology:
rounded hills - toes of fans. desert varnish absent on clasts.

Confident this is a real offset feature?
YES / NO

Confident that the geometry and projections chosen in screenshot is ACCURATE? YES / NO
Not missing other strands

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset
Preferred offset, and explain what it is based on — Kate will measure break in slope
Fault zone width (explain why)
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, good, or very good (Explain why)
Quality rating of current field measurement: poor, good, or very good (include description to support the rating given)

Photo IDs (If file names are similar, include photographer's initials:

DSCN 0600, 603, 605, 608, 614, 615, 617, 619, 620, 621, 623, ~~626~~

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
180	N 38 22 036	Scharer Stock	4/2/14 1614
	E 56 7 641		Strike/Dip of fault:

Note on local lithology: thin mantle of alluvium on v.c. rx. eroded / deflated paleosurface

Note on local geomorphology: alluvial fan

Confident this is a real offset feature? (YES) / NO remove from database -

Confident that the geometry and projections chosen in screenshot is ACCURATE? YES / (NO)

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why)
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, (poor), good, or very good (Explain why)
Quality rating of current field measurement: poor, good, or very good (include description to support the rating given) n/a because upstream feature is very bladed- too uncertain - no pick in upstream. Downstream channel is very nice.

Photo IDs (If file names are similar, include photographer's initials:
DSCN 0580 0584 0587 0599 0590 0592 0594 0596

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
CT 181	N 38 21 899 E 56 7 669	Stock, schaver Harvey	4/2/14 12:30 Strike/Dip of fault:

Note on local lithology:	Note on local geomorphology:
alluvial fan subrounded boulders Interbed volcanic ash complex.	rounded hills. beheaded channel — no upstream equiv.
Confident this is a real offset feature? YES / (NO) REMOVE from database for 1999 event	Confident that the geometry and projections chosen in screenshot is ACCURATE? YES / (NO)

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

CT's his E side profile is in the fault zone. There is no channel on the E side here

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why)
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, good, or very good (Explain why)
Quality rating of current field measurement: poor, good, or very good (include description to support the rating given)

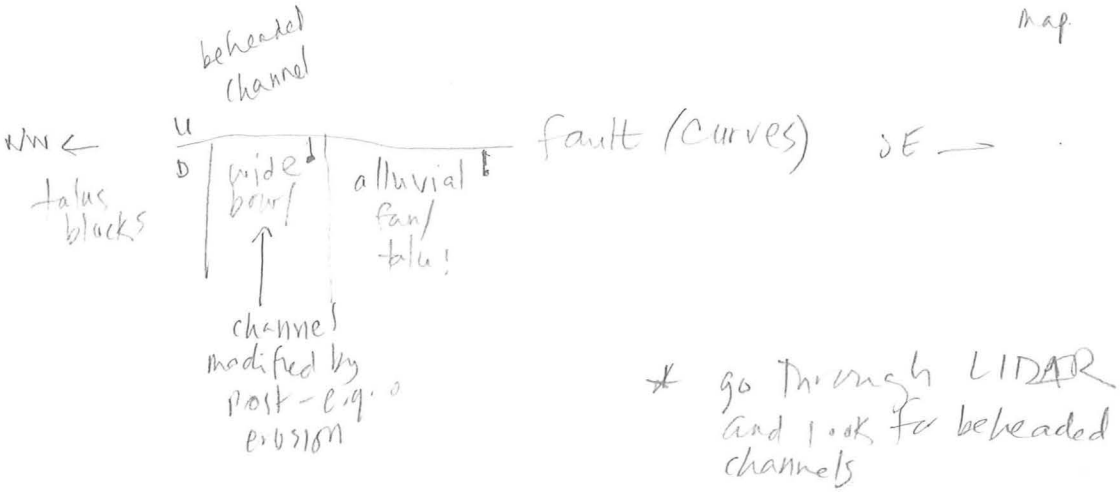


Photo IDs (If file names are similar, include photographer's initials:

DSCN 0556 0559 0561 0564 0565 0568

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
182	N 38 21 774 E 56 7 706	Scharer Stock Harvey Lynch	4/2/14 13:20 Strike/Dip of fault: strike N166E

Note on local lithology:
red weathered volcanic, thin veneer of talus w/ large black varnished blocks, depth of bedrock w/ single sheet wash on top - alluvial fan

Note on local geomorphology:
rounded slopes
broad hillslope

Confident this is a real offset feature? YES / NO

Confident that the geometry and projections chosen in screenshot is ACCURATE? YES / NO / Maybe problems with match on downstream side

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset B - C + (A+B) = 561 + 477 = ~~538~~ 238 cm preexisting left jog
Min offset B - D = 561 - 320 = 241 cm preexisting right jog
Preferred offset, and explain what it is based on (~~average~~) n/a
Fault zone width (explain why) 4 m
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?) Telemeas. N166E file B active labeled CT182
Feature extents
Quality rating of previous LiDAR measurement : none, poor, good, or very good (Explain why)
Quality rating of current field measurement: poor, good, or very good (include description to support the rating given)

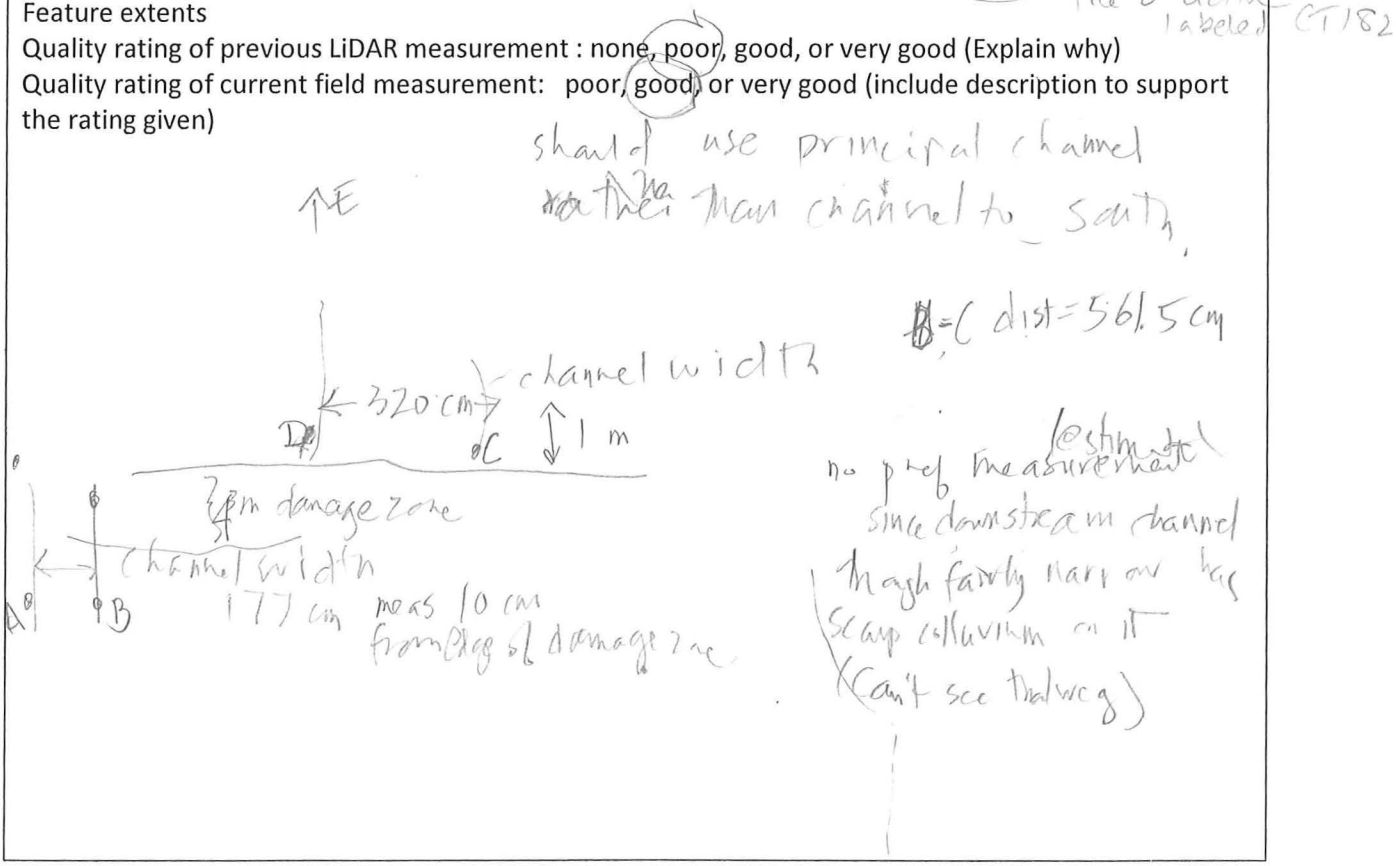


Photo IDs (If file names are similar, include photographer's initials:
PSCN 0542, 0544, 0548

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
183 GT	N 38 21 658	Harvey Lynch Stock	4/2/14 11:40 am
	E 56 7 727		Strike/Dip of fault: N345°E from JPL Brunter

Note on local lithology:	Note on local geomorphology:
talus fans, 1 m high scarp w/ talus and soil carbonate below E side scarp has orange exposure of gouge of volcanic rock (tuff?)	
Confident this is a real offset feature? YES / NO	Confident that the geometry and projections chosen in screenshot is ACCURATE? YES / NO

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why) 1m
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, good, or very good (Explain why)
Quality rating of current field measurement: poor, good, or very good (include description to support the rating given)

files A+B
A = line file
B = points file

GeoXH meas. base of ridge on N side of channel.
↙ GeoXH along here. files A (line) + B (points)

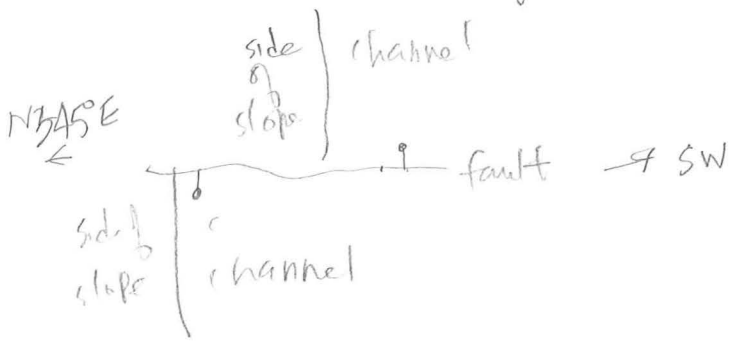


Photo IDs (If file names are similar, include photographer's initials:

JMS: DSCN 0451, 0454

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
CT 184	N 38 21 614 E 56 7 740	Harvey Lynch Stock	4/2/14 10:30 Strike/Dip of fault:

Note on local lithology:	Note on local geomorphology:
talus of int-mafic volc lava angular to subangular blocks, block diam < 20 cm	debris fan n.o bedrock exposure
Confident this is a real offset feature? YES / NO	Confident that the geometry and projections chosen in screenshot is ACCURATE? YES / NO later erosion partially filled in original channel

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset see JMS notebook for sketch of minimum offset
Preferred offset, and explain what it is based on
Fault zone width (explain why) 0.5 m no other strands noted in field
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, good, or very good (Explain why)
Quality rating of current field measurement: poor, good, or very good (include description to support the rating given)

max sketch

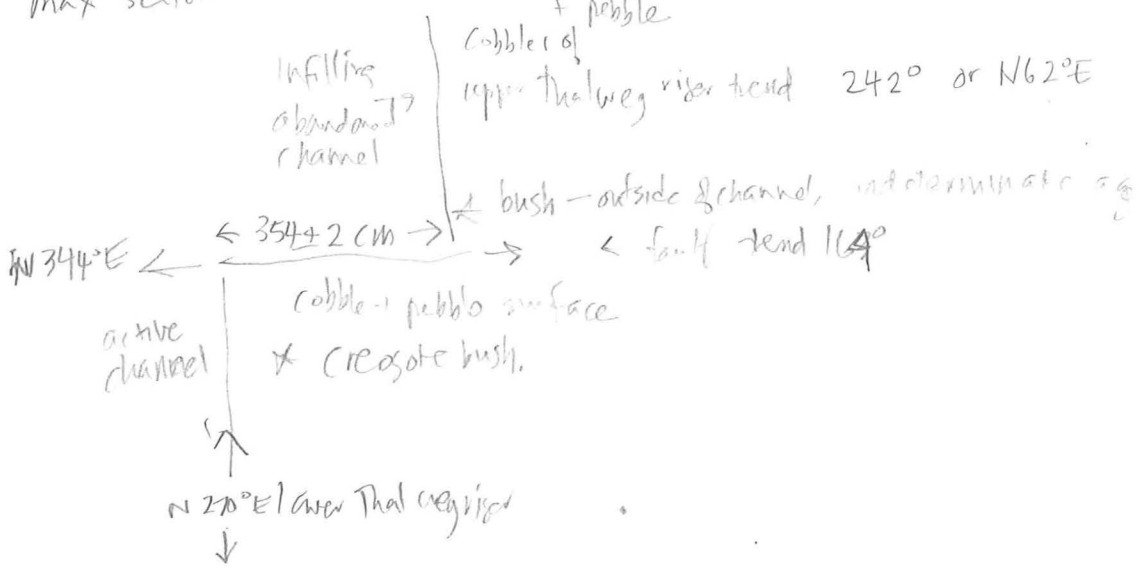


Photo IDs (If file names are similar, include photographer's initials:

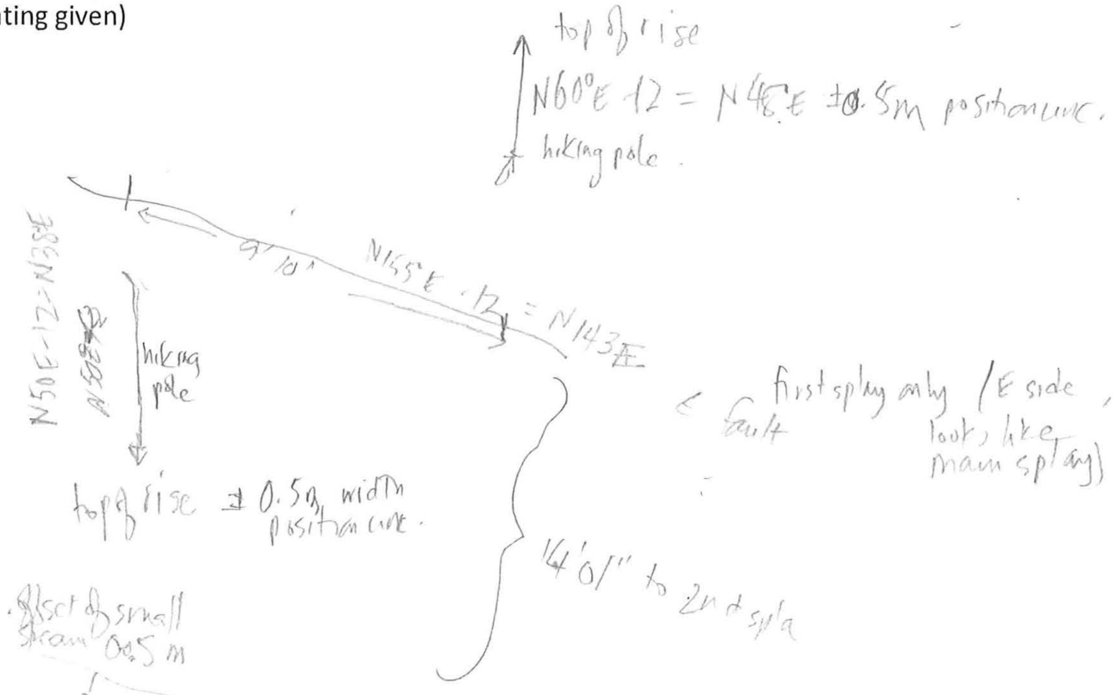
DSCN 0409, 0414, 0419, 0422 0429, 0428

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
185 CT	N 38 21 473	JCH DL JMS	4-1-2014 18:00
	E 567 772		Strike/Dip of fault: N143°E geog.

Note on local lithology:	Note on local geomorphology:
upstream; thin talus on volc andesitic [illegible] w/ amph [illegible] intermed volc rock fractured, downhill similar w/ thin soil	offset ridge crest; E facing scarp.
Confident this is a real offset feature? (YES) / NO ridge crest	Confident that the geometry and projections chosen in screenshot is ACCURATE? (YES) / NO but may not include additional fault strand to W see map.

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why) JMS brunton, decl 0°E, subtract 12°
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?) N143°E sighted along [illegible] scarp.
Feature extents
Quality rating of previous LiDAR measurement : none, poor, (good), or very good (Explain why)
Quality rating of current field measurement: poor, good, or very good (include description to support the rating given)



1+1 ft. offset of small stream 0-0.5 m

0 to 1/2 m see photos

Photo IDs (If file names are similar, include photographer's initials:

DSCN 0391, 0396, 0401, 0404

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
186 CT (Chen Tao)	N 38 21 360	Hudnut, Scharer, Lynch, Stark, Harvey	4/5/2014 10:00
	E 56 7 789		Strike/Dip of fault:

Note on local lithology:	Note on local geomorphology:
mafic bedrock on both sides.	rounded hillslope + thin alluvial cover, significant jasper

Confident this is a real offset feature?	Confident that the geometry and projections chosen in screenshot is ACCURATE?
YES (circled) / NO	YES / NO (circled) — profiles too close to fault

upstream profile is in F-Z. both profiles cross fault

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset 7 m
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why)
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor (circled), good, or very good (Explain why)
Quality rating of current field measurement: poor, good, or very good (circled) (include description to support the rating given)

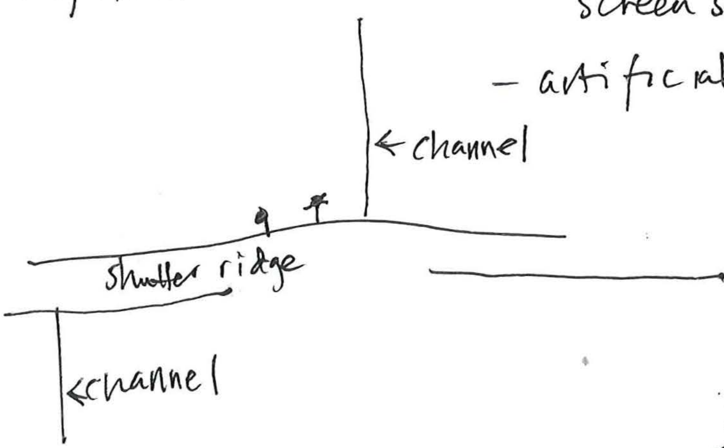
projection lines OK

south side slope of channel is similar in terms of clast morphology

TLS meas. 4/2/2014
quality excellent.

fault orientation is wrong on Lidar screen shot

– artificial illumination.



downstream profile comes up scarp, too short, needs to be longer.

more fault ruptures w/ of trench location?

Photo IDs (If file names are similar, include photographer's initials:

DSCN0405, 0933, 0935, 0936, 0937, FSCN 0934

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
187	N 38 21 050	Harvey Lynch Stark	4-1-2014 16:53
	E 567 842		Strike/Dip of fault:

Note on local lithology:	Note on local geomorphology:
talus covered slopes of soil-	
Confident this is a real offset feature? YES / NO Y-shaped; orig geom uncertain	Confident that the geometry and projections chosen in screenshot is ACCURATE? YES / NO need to measure further away from fault

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why) 9m — two splays based on (1) ponded scts (2) visible scarp in hill to S
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, good, or very good (Explain why) poorly projected
Quality rating of current field measurement: poor, good, or very good (include description to support the rating given) n/a

Photo IDs (If file names are similar, include photographer's initials:

J. Stock: DSCN 0384, 0390

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
189 CT	N 38 20 711	JCH DLS	4/1/2014 6:09
	E 56 7 93		Strike/Dip of fault:

Note on local lithology:	Note on local geomorphology:
upstream (E) 1/4 m of soil on top of brecciated mafic augite-bearing lava (andesite) downstream (W) talus, alluv, sag pond.	
Confident this is a real offset feature? YES / (NO)	Confident that the geometry and projections chosen in screenshot is ACCURATE? YES / NO

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why)
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, good, or very good (Explain why)
Quality rating of current field measurement: poor, good, or very good (include description to support the rating given)

channel on ptE side of fault does not correl to any channel visible on SW.

blue profile also may have crossed a 2nd fault splay

Photo IDs (If file names are similar, include photographer's initials:

J. Stock's DSCN 0355, 0362

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
189 CT	N 38 20 483	Harvey Lynch Stock	14:54
	E 568 067		Strike/Dip of fault:

Note on local lithology:	Note on local geomorphology:
mostly talus of volc rx, soil + colluvium on top of terrace	2 strands of fault w/ small shutter ridge
Confident this is a real offset feature? YES / NO	Confident that the geometry and projections chosen in screenshot is ACCURATE? YES / NO downstream profile may not be on shutter ridge

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why) (0 m — two strands.
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, good, or very good (Explain why)
Quality rating of current field measurement: poor, good, or very good (include description to support the rating given)

lithology change @ fault
upstream is talus + active E-W channel
→ downslope of fault breaks: alluvial terrace Qyc2
w/ reddish clast coatings
therefore ridgeline slopes may not match up — previous scarp here

Photo IDs (If file names are similar, include photographer's initials:
DSCN 0331, 0333, 0337, 0340, 0341, 0342

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
190	N 38 20 267	Stock Lynch Harvey	4/1/2014 1417
	E 56 8068		Strike/Dip of fault:

Note on local lithology:	Note on local geomorphology:
fault gouge @ outcrop	hillslope is oblique to profile, changes uphill + downhill, not easy to correl. features at 1 m scale
Confident this is a real offset feature? YES / NO	Confident that the geometry and projections chosen in screenshot is ACCURATE? YES / NO try profiles that are more closely spaced

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why) 3 m — 2 strands here
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, good, or very good (Explain why)
Quality rating of current field measurement: poor, good, or very good (include description to support the rating given) not possible — prev. visit view this site as ambiguous, could not project gully into ft because of sag pond.

Photo IDs (If file names are similar, include photographer's initials:
JMS: DSCN 0326, 0328

not what his map shows but the screen shot shows.

LiDAR #	UTM in WGS84	TEAM:	DATE (4/2014) / TIME:
191 (TC)	N 38 20 232 E 568 086	Stock Harvey Lynch	4/1/14 11:43 am Strike/Dip of fault: trend 318° (330 -12°) Jayson's dip SW

Note on local lithology:	Note on local geomorphology:
volcaniclastic sed rx E of fault volc rx (andesite?) W of fault.	Talus slopes up ravine floor of coherent volc rx (andesite?) upstream (W) of fault

Confident this is a real offset feature?	Confident that the geometry and projections chosen in screenshot is ACCURATE?
YES / NO	YES / NO

DESCRIBE the extent to which you can/cannot validate the measurement reported within the screenshot. Include a sketch with piercing points, if feature is identified:

Max offset
Min offset
Preferred offset, and explain what it is based on
Fault zone width (explain why) 1 m gap between walls of scarps.
Fault zone trend, and what it is based on (compass? 12°E magnetic declination, GeoXH?)
Feature extents
Quality rating of previous LiDAR measurement : none, poor, good, or very good (Explain why)
Quality rating of current field measurement: poor, good, or very good (include description to support the rating given)

GPS coords given on screenshot do not correspond to his measured feature and seem to be consistently to the south.

bedding measurement dip 78° toward N65°E from JCH (included 12°E decl)

fault 1

Photo IDs (If file names are similar, include photographer's initials:
JMS: DCSN 0302, 0303, 0304, 0309, 0311, 0313, 0318, 0319, 0322