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## Interactive comment on "Hydrogeological settings of a volcanic island (San Cristóbal, Galapagos) from joint interpretation of airborne electromagnetics and geomorphological observations" by A. Pryet et al.

## D. Geist (Referee)

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This is an outstanding contribution, a concise presentation of a novel geophysical method. The data are interpreted mostly in the context of groundwater distribution and flow. Galapagos is severely arid, and groundwater is an incredibly important resource in light of burgeoning development.

I have suggested changes in wording here and there on an annotated manuscript,

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which probably reflects non-native english (although most is written admirably well).

In terms of the science, the relation between the faults, dikes and eruptive fissures is not well known from the geology. My interpretation is that the dikes do NOT follow faults, but the stresses that create the faults also control the orientation of both. The fissure undoubtedly are where dikes intersect the surface.

There is no way to tell the sense of displacement (normal or reverse) on the San Cristobal faults because they are vertical at the surface.

There are more detailed questions and suggestions towards clarity in the annotated manuscript.

Please also note the supplement to this comment: http://www.hydrol-earth-syst-sci-discuss.net/9/C4192/2012/hessd-9-C4192-2012-supplement.pdf

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 9, 9661, 2012.