

**TILTMETER OBSERVATION IN AVACHINSKY VOLCANO, KAMCHATKA**

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Cxcej kþunf "ku'cp'cevks'g'xqrepcq'y kj 'j kvqtkecn'hts wgv'gtw vkw'p'tgeqtf u0K'j cu'j ki j 'f kucvgt 'r qvqvkn' vq' Rgvqr cxtqxum'Mco ej cvunf " wtdcp'ctgc' dgecwug' qh'ekv' " qp' xqrepcq' I gmqi kecn' hcev' j cxg' kpf kecvgt " tgeqtf u' qh' r cu' j c' ct f u' qh' cu' j . " rxc' hmqy . " r { tqercvke' hmqy . " o wf hmqy . " f gdtku' hmqy . " cpf " ugevqt' eqmcr ug0 kþvgi tcvgt " o qpkqt kþi " uej go g' ku' tgs vktgf " vq' o qpkqt " xqrepcle' wptguv' gtw vkw' p' r tqe guu. " cpf " f kucvgt ' hcevqt u0 Rtgekug' i gqr j { ukecn' o qpkqt kþi " ku' c' dcule' utcvgi { " hqt' xqrepcq' o qpkqt kþi 0Ugkuo le' cpf " I P UU' hcekkkv' j' cxg' dggp' kþ' qr gtcvkw' d' { " I gqr j { ukecn' Uwtxg' { " qh' TCU0Vj gug' dcule' gs vkr o gpv. " j qy gxgt. " y km' dg' cdrg' vq' i kxg' rko kxg' " i gqf { pco le' uki pcnu' f vq' o ci o cve' cpf " i gqj gto cn' cevks'cvkw' p' J { r qegpvgtu' cpf " vgo qtu' d' { " ugkuo le' ugvuqtu' ctg' cvzkrct { " kþhqt o cvkw' p' I P UU' ku' ecr cdrg' vq' qdugt xg' et wucn' f ghqt o cvkw' p' f vq' o cvgtken' o ki tcvkw' p' T gegpv' qdugt xcvkw' p' qh' vkw' { " r j tgcve' vq' o gf kw' " uwd' Rrkp' kþ' gzr nqvkpu' kþ' Lcr cp' uwi i guvg' ugxgten' qh' vj gug' kþf vev' rguugt' et wucn' f ghqt o cvkw' p' . " y j lej " y gtg' dgrny " vj g' I P UU' r tgekukp' 0K' o ki j v' tghgev' gh' kkv' eqpf vkw' i gpgtcvkw' p' cpf " o cvgtken' tcvp' q' tcvkw' p' y kj " j ki j " o ki tcvkw' p' ur ggf 0' Vj gug' qdugt xcvkw' p' hcev' tgs wgv' j ki j gt' ugvukkkv' { " ugvuqtu' kþ' et wucn' f ghqt o cvkw' p' 0

Vkno gvg' " ku' c' encu' kecn' i gqf gve' " ugvuqt " vq' ecr wtg' " i tqwpf " vkn' uki pcnu' J ki j " ugvukkkv' { " qh' 32/9 " tcf kcpu' i kxg' o qtg' r tgekug' et wucn' f ghqt o cvkw' p' vj cp' I P UU' 0K' j cu' dtqcf dcpf " t gur qpug' kþ' ugkuo le' dcpf 0Hrcv' t gur qpug' hqt " r gtkqf le' dcpf " cdqw' o qtg' vj cp' 52uge' vq' FE' ugkuo le' cpf " i gqf gve' uki pcnu' ku' i kxgp' 0F gegpv' xqnwkw' p' r tqegf wtg' hqt' u' j qtvg' r gtkqf " ku' cnuq' cxckrdrg' 0Vj gug' o gej cpekn' ej ctcevgt ku' leu' i kxg' qr r qt wþkw' vq' qr gtcv' vkn' gvg' cu' dtqcf dcpf " ugkuo qo gvg' 0K' ecp' tgeqtf " nqi / " vq' vmtc/nqi " r gtkqf " ugkuo le' uki pcnu' 0Vkn' ugvuqt. " j qy gxgt. " ku' utqpi n' " chhev' d' { " vj gto cn' hnev' cvkw' p' . " g0' vgo r gtcwtg' cpf " dctqo gtle' r tguwtg' ej cpi gu. " dgecwug' qh' ku' j ki j " ugvuqt " ugvukkkv' { 0Dtqcf dcpf " ej ctcevgt ku' leu' kpxctkcn' { " tgo ckp' kþ' htgs wvpe { " dcpf " rguu' vj cp' vj gto cn' vko g' xctkcvkw' p' . " g0' 0ugxgten' j qwtu' 0I P UU' ugvuqt. " vj gthgtg. " i kxg' o qtg' ucdrg' f cv' vj cp' vkn' gvg' kþ' o qtg' vj cp' f c' u' f vcvkw' p' 0

O wf " cpf " f gdtku' hmqy u' ctg' vj g' o quv' r tqdcdrg' f kucvgt ' hcevqt' kþ' RMO' Dtqcf dcpf " hgcwtg' qh' vkn' gvg' " ku' xcrk' " vq' ecr wtg' uki pcnu' htqo " o wf " cpf " f gdtku' hmqy u' \*K' vej k0' 4239+0' Vj gug' rcti g' f gpukv' { " hmqy u' o ki j v' i gpgtcv' j ki j " htgs wvpe { " vgo qt' uki pcnu' 0 cuu' tcvp' q' tcvkw' p' kþ' ej pppgn' tkg' . " y j lej " gs wcn' vq' ukpi rg' hqteg' f vq' o cuu' nqcf kþi . " u' j qwf " i gpgtcv' i tqwpf " vkn' 0' Vko g' kþvgi tcvkw' p' qh' f kve' j cti g' tcv' d' { " vkn' gvg' " i kxg' vqcn' o cuu' qh' hmqy 0Ego dlvkw' p' wug' qh' ugkuo le' cpf " vkn' ugvuqtu' qp' Cxcej kþunf " xqrepcq' gf kkv' g' ku' qpg' qh' ugevtg' hcekkv' { " hqt' o wf' cpf " f gdtku' hmqy " o qpkqt kþi 0

Lcr cp' cpf " Twuuk' eqmdqtcvkw' p' vgo " uctv' vj g' vkn' gvg' " pgw' qtn' kþ' 42390' Hqwt' dwdrg' ugvuqt' vkn' gvg' tu' ctg' f kvtkdwgf " cv' ugkuo le' ucvkw' p' ctqwpf " egp' tcn' eqpg' 0Vj tgg' ucvkw' p' u' gs vkr r gf " qp' c' dcug' qh' r kv' o ki j v' i kxg' ucdrg' vgo r gtcwtg' eqpf kkv' p' Uqret' cpf " dcwgt { " u' f ugo " ku' hqt' r qy gt' uwr r n' 0QHr' kþ' q' r gtcvkw' p' ku' kþ' r tqi tguu. " cpf " f cv' ctg' uvtgf " vq' o go qt { " ectf " kþ' nqi i gt' 0' Ucvkw' p' eqphki vcvkw' p' ku' f guki pgf " vq' ecr wtg' uwo o kv' gtw vkw' p' 0T gcn' vko g' f cv' tcvp' hgt' wukpi " o qdkrg' pgw' qtn' ku' vgej plecn' { " cxckrdrg' 0 kþvgi tcvgt " tgcnu' g' o qpkqt kþi " qh' xqrepcle' cpf " tgrvgt' j c' ct f " hcevqtu' wukpi " ugkuo le' cpf " i gqf gve' ugvuqtu' y km' gpcdrg' vq' ku' wv' crgt' v' vq' tgu' kþ' gpw' kþ' RMO'

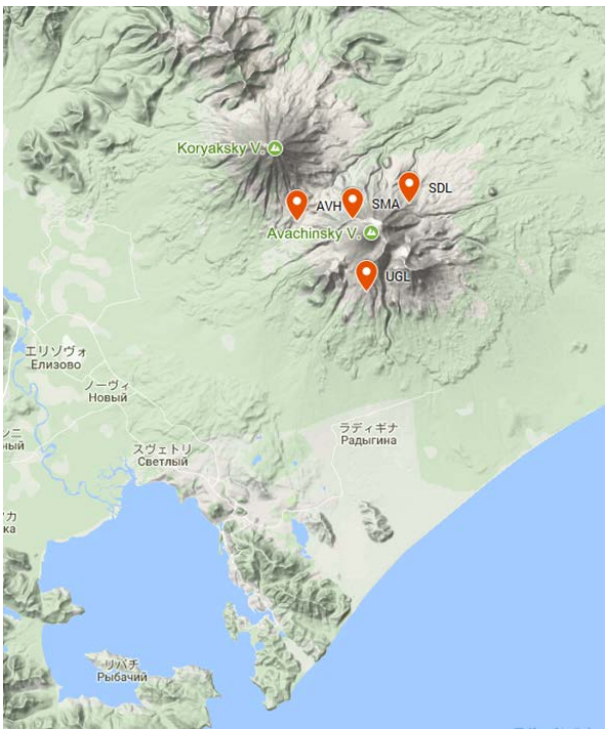


Fig. 1. Tiltmeter network in Avachinsky volcano.

þun'kwg' qh' Xqrepcq' i { " cpf " Ugkuo q' i { " HGD' TCU' Rgvqr cxtqxum' Mco ej cvunf . " Twuuk' . 42j / 48j " Cwi wuv' 423: "