Comparison of baseline length change observed by the VLBI, SLR, and GPS system collocated at the Keystone sites

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In the Key Stone Project performed by the Communications Research Laboratory, the crustal deformation has been observed in the Tokyo metropolitan area by the three independent techniques collocated at each site, which are VLBI, SLR and GPS. The baseline length change determined by each technique are compared. Since the GPS receivers of GEONET maintained by the Geographical Survey Institute, are located at two sites of the network, it will be also compared. Using these systems, significant crustal deformation associated with the seismic and volcanic activities of Izu islands in the summer of 2000 was detected. This is the first case to monitor the significant crustal deformation by the array of sites, where space geodetic systems are collocated.