ABSTRAK

ANALISIS PERGERAKAN TANAH METODE X,Y,Z STUDI KASUS AIA DINGIN KECAMATAN LEMBAH GUMANTI KABUPATEN SOLOK

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Penelitian analisis pergerakan tanah metode X,Y,Z ini berlokasi di daerah Bukit Saroban yang bertujuan untuk mengetahui nilai pergerakan tanah dilokasi penelitian pengumpulan data dalam pengamatan koordinat menggunakan metode SurveiGPS sedangkan untuk pengamatan beda tinggi menggunakan Waterpass. Berdasarkan pengamatan selama 2 periode menunjukkan adanya pergerakan tanah menggunakan Survei GPS yaitu pada ITP.1 = 0 Cm/satu bulan, ITP.3 = 2 Cm/satu bulan, ITP.4 = 11 Cm/satu bulan, ITP.5 =13 Cm/satu bulan, dan pada ITP.6 = 5 Cm/satu bulan, sedangkan berdasarkan pengamatan Waterpasss terdapat penurunan tanah yaitu pada ITP.1 = -32,5 Mm/satu bulan, ITP.3 = 0 Mm/satu bulan, ITP.4 = -5,5 Mm/satu bulan, ITP.5 = -12 Mm/satu bulan, dan pada ITP.6 = -18Mm/satu bulan. Hal ini menunjukkan bahwa pergerakan tanah terbesar secara horizontal terjadi pada titik ITP.5 yaitu 13 Cm/satu bulan sedangkan pergerakan terkecil terjadi pada titik ITP.1 yaitu 0 pergerakan selang waktu satu bulan. Berdasarkan pengamatan mengguanakan waterpass penurunan tanah tertinggi terdapat pada ITP.6 yaitu –18 Mm/satu bulan, sedangkan nilai penurunan terendah terdapat pada ITP.3 yaitu 0 pergerakan/satu bulan.

Kata kunci : Pergerakan Tanah, Survei GPS, Waterpass

ABSTRACT

ANALYSIS OF LAND MOVEMENT METHOD X, Y, Z
(CASE STUDY AIA DINGIN DISTRICT VALLEY GUMANTI SOLOK DISTRICT)

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Land movement analysis research Methods X, Y, Z is located in the area of Bukit Saroban which aims to determine the value of ground movement in the research location of data collection in coordinate observation using GPS Survey method while for observation of high difference using Waterpass. Based on observations for 2 periods indicating the presence of land movement using GPS Survey is at ITP.1 = 0 Cm / July 20 until August 22, 2017, ITP.3 = 2 Cm / July 20 until August 22, 2017, ITP.4 = 11 Cm / 20 July to 22 August 2017, ITP.5 = 13 Cm / July 20 until August 22, 2017, and at ITP.6 = 5 Cm / July 20 until August 22, 2017, whereas based on Waterpass observations there is a decrease in the soil ITP.1 = -32 Mm / July 20 until August 22, 2017, ITP.3 = 0Mm / 20 July to 22 August 2017, ITP.4 = -5.5 Mm / July 20 up to August 22, 2017, ITP. 5 = -12 Mm / July 20 until August 22, 2017, and at ITP.6 = -18 Mm / July 20 until August 22, 2017. This indicates that the largest horizontal soil movement occurs at the point ITP.5 ie 13 Cm , while the smallest movement occurs at the point ITP.1 is 0 Cm interval 20 July 2017 to August 22, 2017. Based on the observation The highest groundwater decline is in ITP.6 ie -18 Mm / July 20 until August 22, 2017, while the lowest decrease is in ITP.3 ie 0 decrease / 20 July to 22 August 2017.

Keywords: Land Movement, GPS Survey, Waterpass