

*

(/ / / / / / / / / /)

GSI

s m

GSI_m GSI_s

- GSI :

GSI

[]

[]

GSI

s m

[]

φ c

GSI

φ c

[]

(m_b s a)

GSI

[]

GSI

$$m_b = m_i \cdot \exp\left(\frac{GSI - 100}{b_m}\right) \quad b_m = (16 - 28)$$

()

$$b_m = 3.14 \times \ln\left(\frac{d_f}{d_f + 340(1 - d_f)}\right) + 28$$

()

$$s = \exp\left(\frac{GSI - 100}{b_s}\right) \quad b_s = (6 - 9)$$

(c φ)

()

.....

F

$$b_s = 0.67 \times \ln \frac{d_f}{d_f + 340(1 - d_f)} + 9 \quad ()$$

(G)

$$\begin{aligned} GSI > 30 & \quad a = 0.5 \\ GSI < 30 & \quad a = 0.65 - (GSI / 2000) \end{aligned} \quad ()$$

s , m_b

d_f

m_i

GW

m_b s

/

:

•

•

•

GSI

)

()

s m_b

•

(UCS)

•

m_i

s , GSI

m_b

(GSI)

GSI

s m_b

[]

GSI

[]

F

[]

$$F = f\{GSI(m_b, S), GW, G\}$$

()

s m_b)

GSI

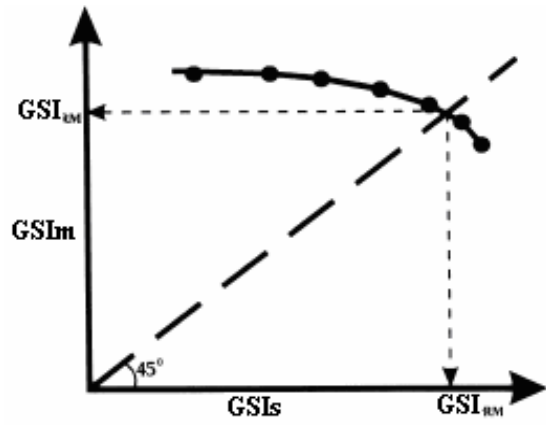
GW (

GSI

s , m_b

G

(m_b



GeoLink

GeoLink

GSI

Visual c++

GeoLink

[]

GeoSlope 6.02

GeoSlope

- d_f
- γ
- UCS
- m_i
- H
- GSI_s

GSI (F=) , s)

GSI :

(GSI , m_b , s)

() s

)

GSI

(

GSI_s s

m_b

GSI

GSI_s

(GSI_m)

[]

GSI_s

GSI_s

GSI_m

GSI_s

GSI_m

)

()

(GSI

s m_b

GSI

()

$GSI_s - GSI_m$

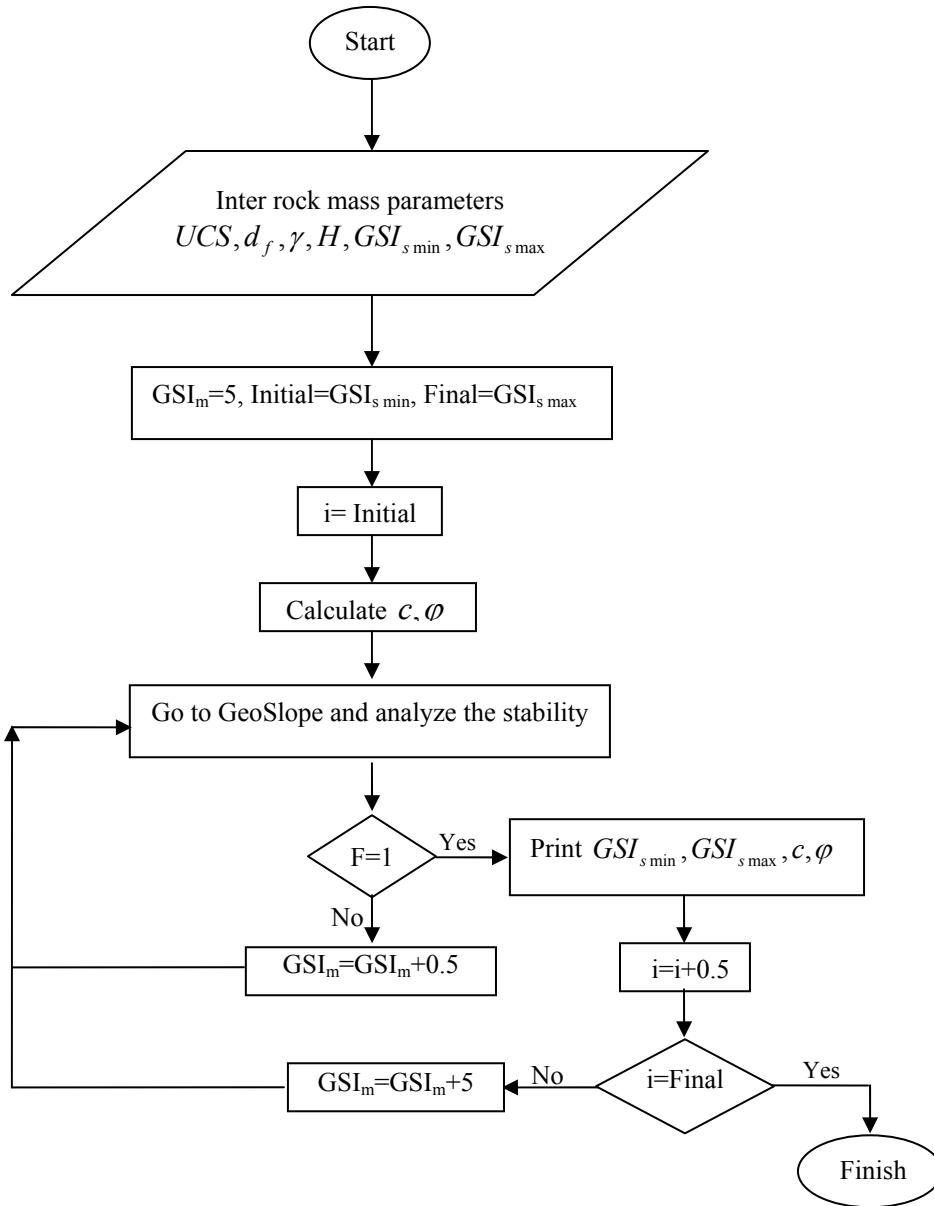
GSI

GSI_{RM}

GSI

GSI_{RM}

s m_b



. GeoLink

:

GeoSlope

	c, ϕ	GSI_m	GSI_s	GeoSlope
geo-temp				GeoLink
result		C		
			γ	$[] d_f$
			m_i	UCS

:

()

()

[]

)

(

()

() A-A'

GeoSlope

GeoSlope

GeoLink

m s

(GSI_s, GSI_m)

GSI

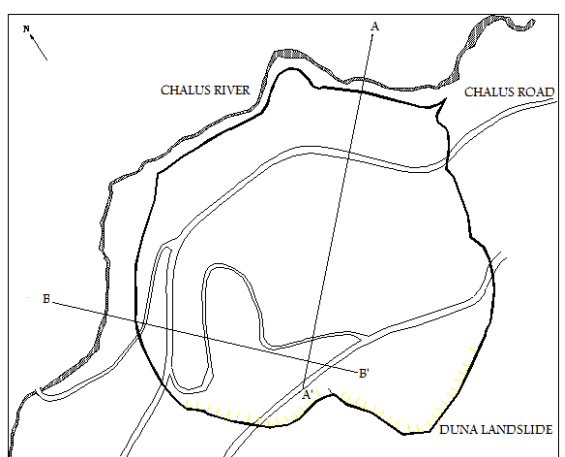
GeoLink

()

GeoLink

()

GSI_s GSI_m



:

B-B'

y=x

GeoLink

()

B-B'

$$GSI_m = GSI_s$$

GeoLink

Geoslope

GSI

()

()

kPa

()

y=x

$$GSI_m = GSI_s$$

GSI

kPa

$\leq F \leq /$

GSI

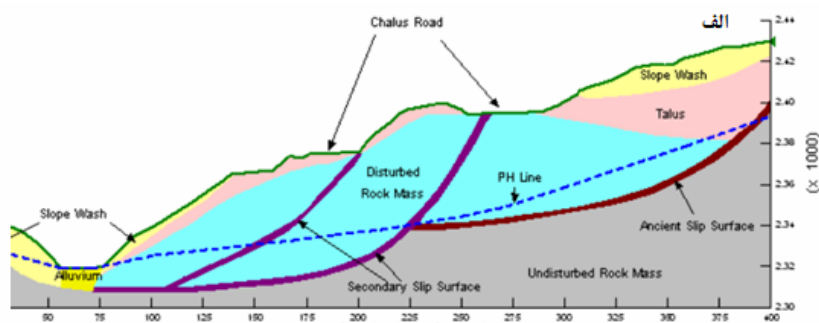
A-A'

B-B'

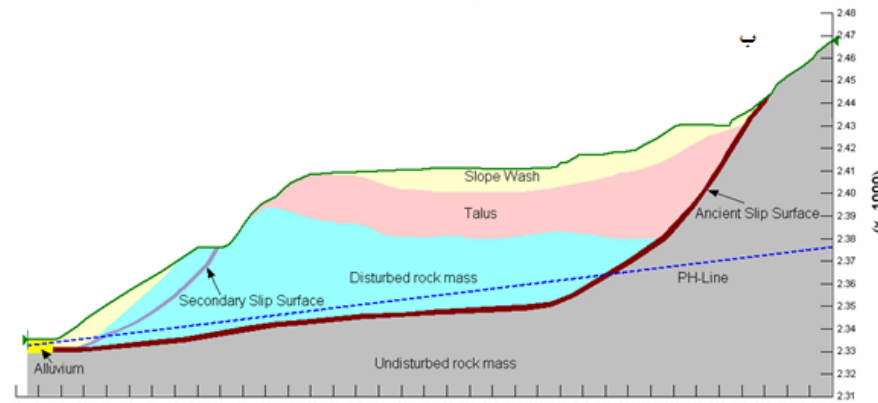
()

GSI

()



Duna Landslide, Section A-A'



Duna Landslide, Section B-B'

. B-B': A-A':

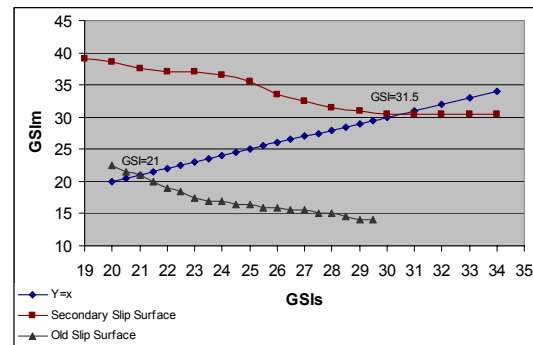
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GeoLink :

Material	UCS (MPa)	m_i	d_f	Unit weight (kN/m^3)	Slope height (m)	$GSI_{m \text{ min}}$	$GSI_{m \text{ max}}$
Secondary slip surface	5	6	0.99	26	35,45	5	30
Ancient slip surface	5	6	0.99	26	60	10	40

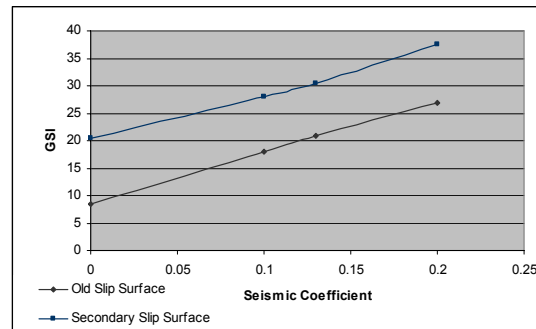
GeoLink :

Ancient slip surface		Secondary slip surface 1		Secondary slip surface 2	
GSI_m	GSI_s	GSI_m	GSI_s	GSI_m	GSI_s
35.5	25	33	25	22.5	20
33.5	26	32.5	26	21	21
32.5	27	32	27	19	22
31.5	28	32	28	17.5	23
31	29	31.5	29	16.5	25
30.5	30	30.5	30	16	26
30.5	31	30.5	31	15.5	27
30.5	32	30.5	32	15	28
30.5	33	30.5	33		
30.5	34	30.5	34		
$GSI_m=21$	$GSI_s=21$	$GSI_m=30.5$		$GSI_s=30.5$	



GeoLink :

GSI



GSI :

($s \ m \ GSI$)

GSI ($\phi \ c$)

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