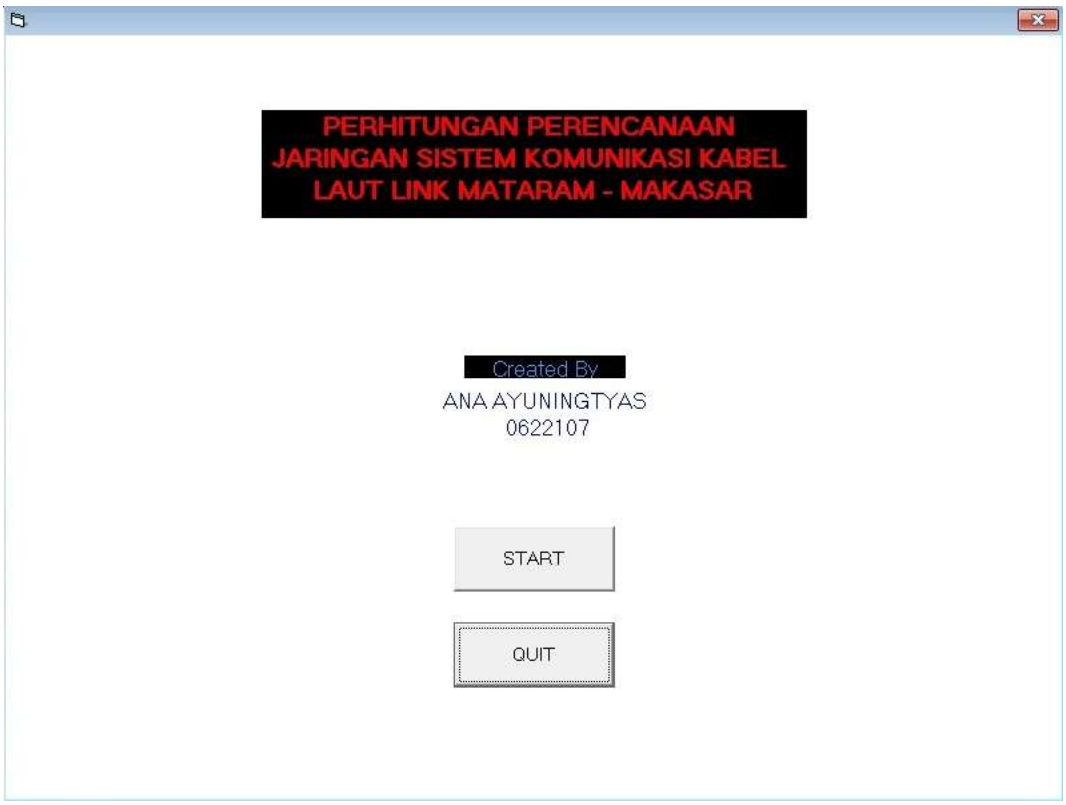
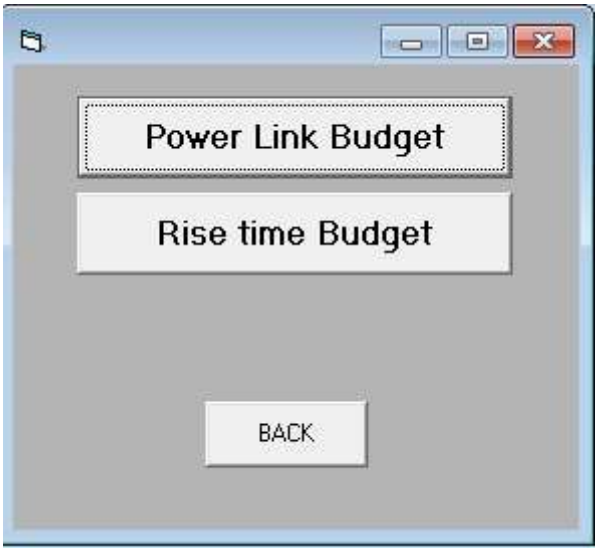
# LAMPIRAN A

# TAMPILAN SIMULASI SKKL

# PADA VISUAL BASIC

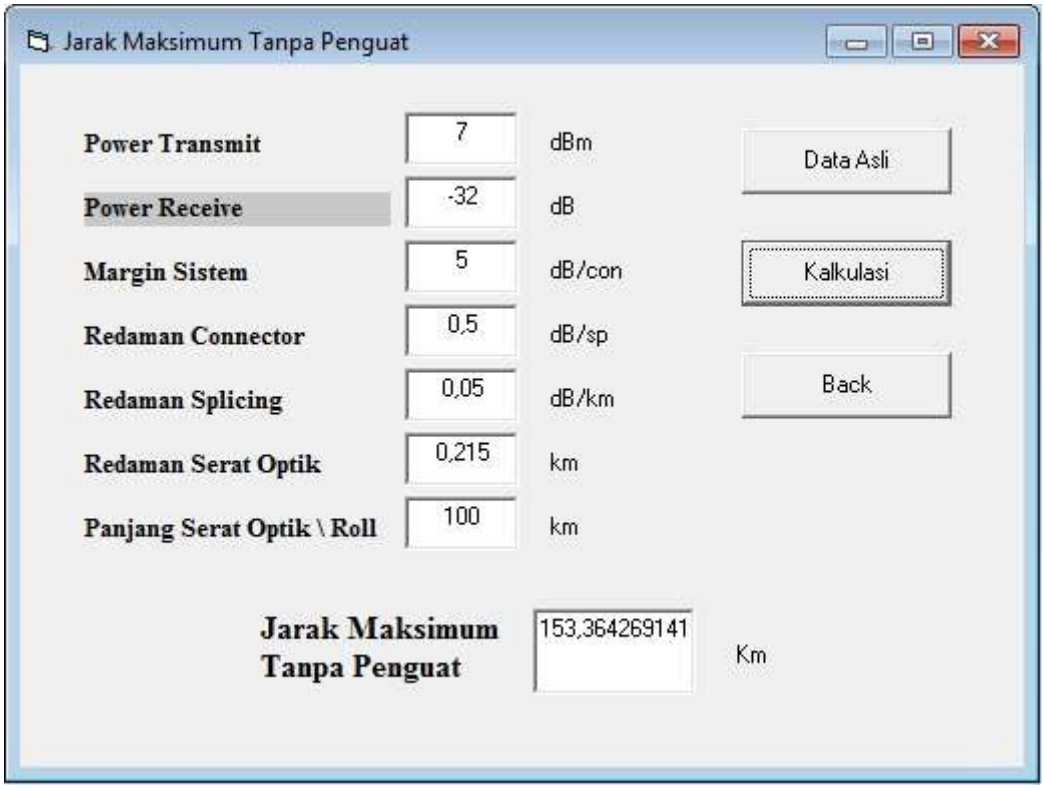



Pembukaan

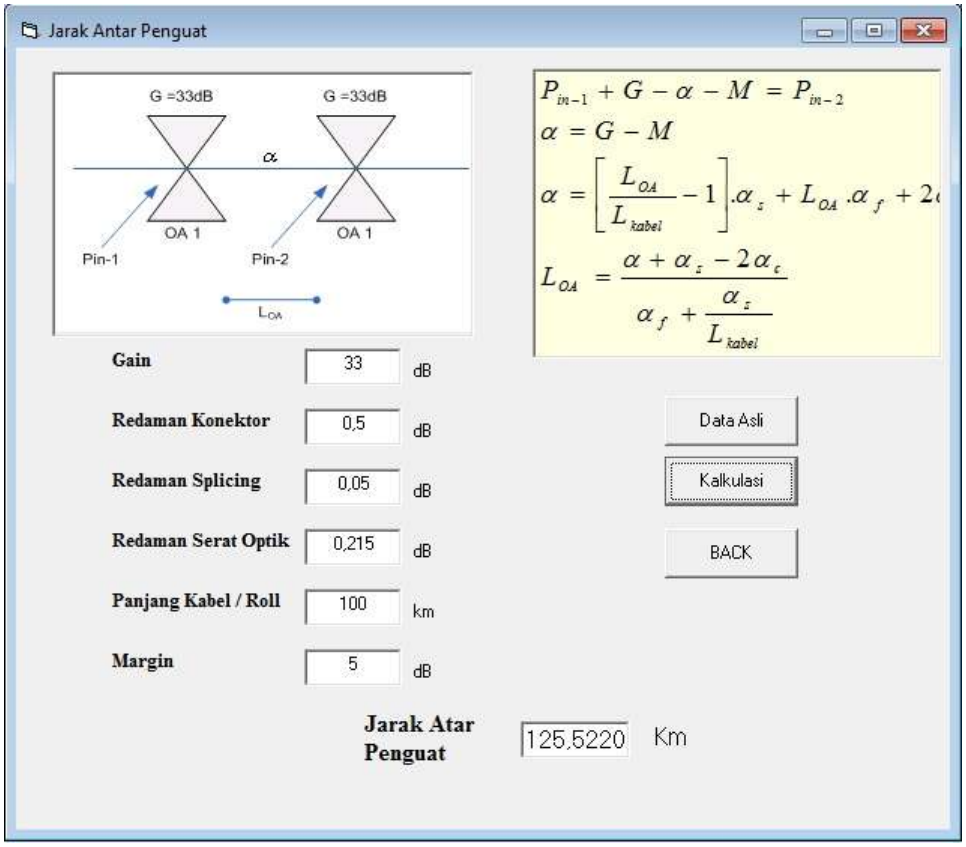



Pilihan

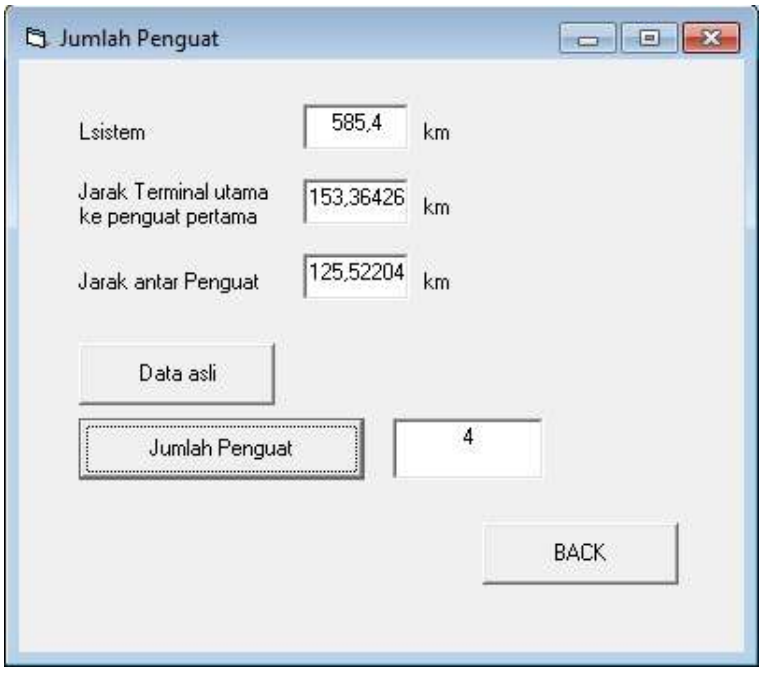

Power Link Budget



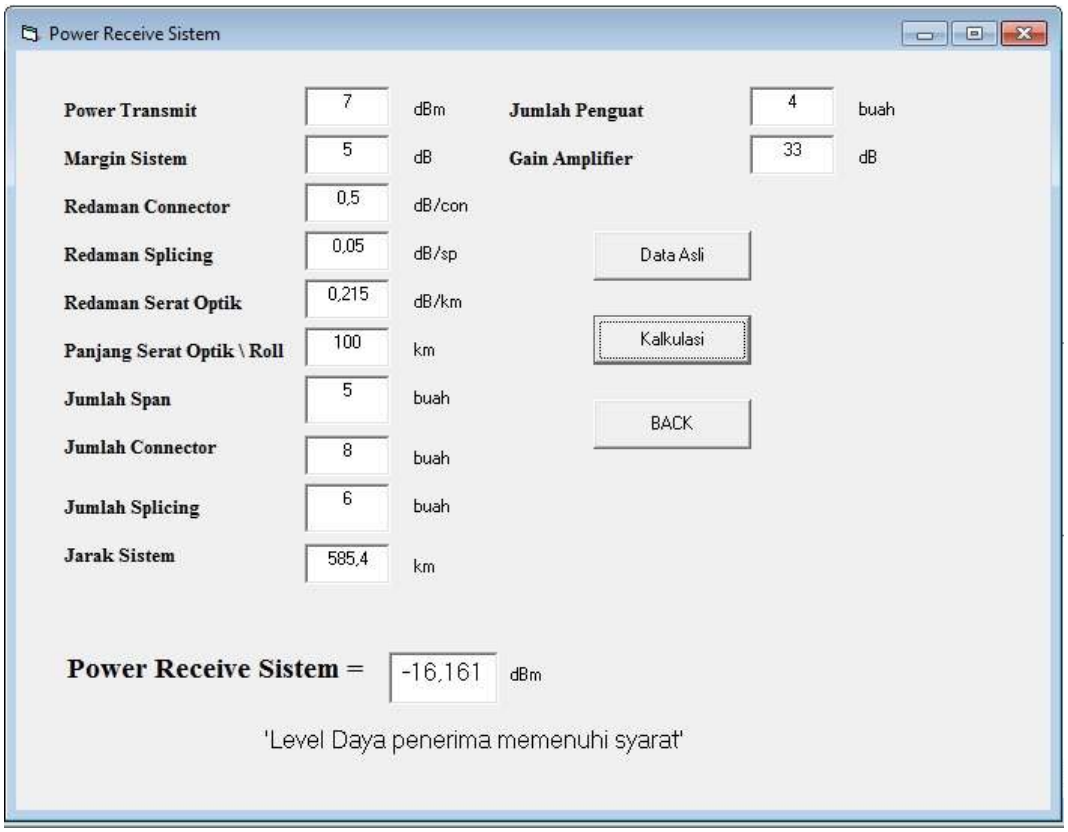

Jarak Maksimum Tanpa Penguat




Jarak Antar Penguat

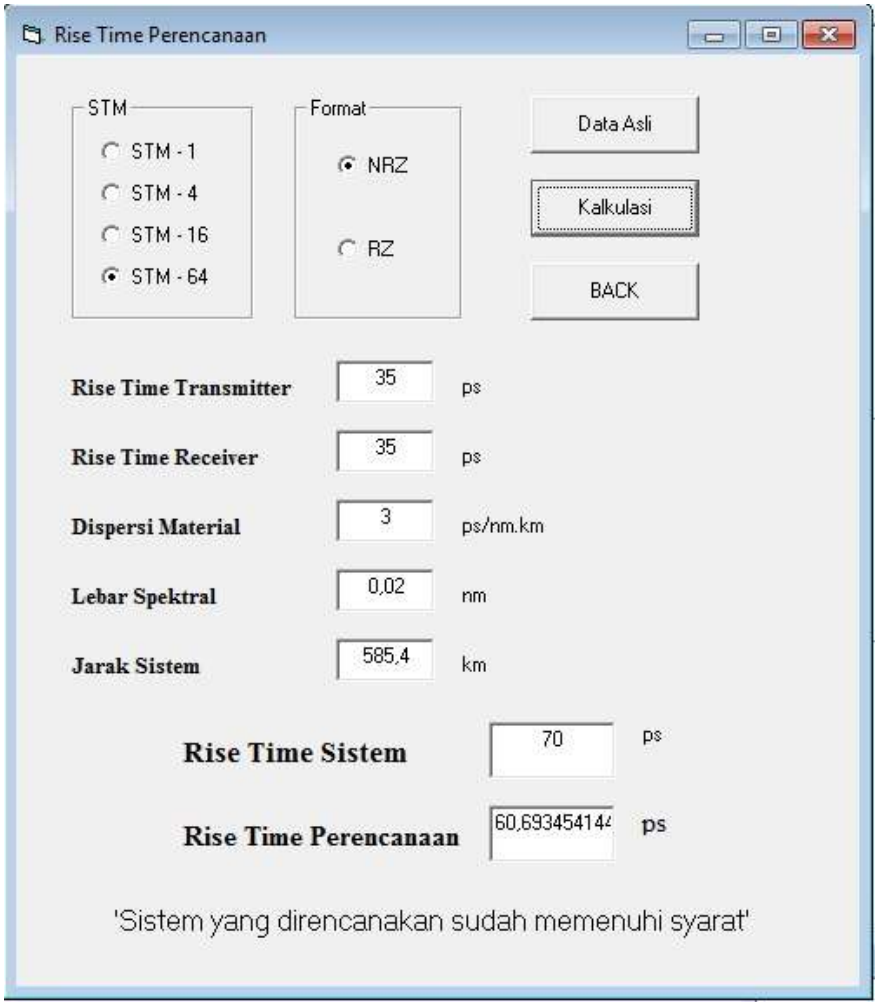



Jumlah Penguat

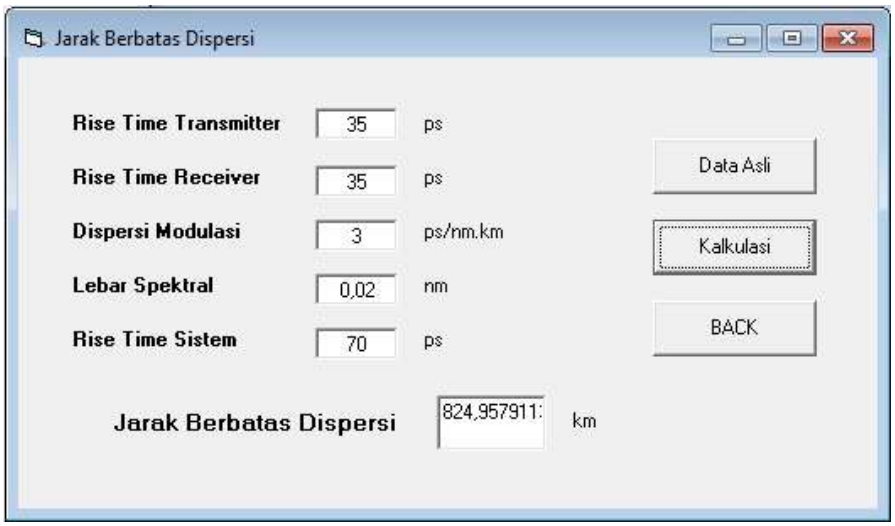



*Power Receive Sistem*


Rise Time Budget




Rise Time Perencanaan




Jarak Berbatas Dispersi

# LAMPIRAN B
# PROGRAM SIMULASI SKKL
# PADA VISUAL BASIC

**Form 1 (Pembukaan)**

```
Private Sub Command1_Click()
Load Form2
Form2.Show
Form1.Hide
End Sub

Private Sub Command2_Click()
End
End Sub

Private Sub Form_Load()
End Sub
```

**Form 2 (Pilihan)**

```
Private Sub Command2_Click()
Load Form1
Form1.Show
Form2.Hide
End Sub

Private Sub Command3_Click()
Load Form10
Form10.Show
Form2.Hide
End Sub

Private Sub Command4_Click()
```

```
Load Form15
Form15.Show
Form2.Hide
End Sub

Private Sub Form_Load()
End Sub
```

**Form 4 (Jarak Berbatas Dispersi)**

```
Private Sub Command1_Click()
Load Form15
Form15.Show
Form4.Hide
End Sub

Private Sub Command2_Click()
Text1.Text = 35
Text2.Text = 35
Text3.Text = 3
Text4.Text = 0.02
Text5.Text = 70
End Sub

Private Sub Command3_Click()
Dim tTx
    tTx = Text1.Text
Dim tRx
    tRx = Text2.Text
Dim D
```

```
    D = Text3.Text
Dim Tou
    Tou = Text4.Text
Dim ts
    ts = Text5.Text

 Text6.Text = ((ts ^ 2 - tTx ^ 2 - tRx ^ 2) / (D * Tou) ^ 2) ^ (1 / 2)
End Sub

Private Sub Form_Load()
End Sub
```

**Form 10 (Power link Budget)**

```
Private Sub Command1_Click()
Load Form11
Form11.Show
Form10.Hide
End Sub

Private Sub Command2_Click()
Load Form12
Form12.Show
Form10.Hide
End Sub

Private Sub Command3_Click()
Load Form13
Form13.Show
Form10.Hide
```

```
End Sub

Private Sub Command4_Click()
Load Form14
Form14.Show
Form10.Hide
End Sub

Private Sub Command5_Click()
Load Form2
Form2.Show
Form10.Hide
End Sub

Private Sub Form_Load()
End Sub
```

**Form 11 ( Jarak maksimum tanpa penguat)**

```
Private Sub Command1_Click()
Load Form10
Form10.Show
Form11.Hide
End Sub

Private Sub Command3_Click()
Text1.Text = 7
Text2.Text = -32
Text3.Text = 5
Text4.Text = 0.5
```

```
Text5.Text = 0.05
Text6.Text = 0.215
Text7.Text = 100
End Sub

Private Sub Command2_Click()
Dim Pt
    Pt = Text1.Text
Dim Pr
    Pr = Text2.Text
Dim Ms
    Ms = Text3.Text
Dim Ac
    Ac = Text4.Text
Dim Asp
    Asp = Text5.Text
Dim Af
    Af = Text6.Text
Dim Lkbl
    Lkbl = Text7.Text

Text8.Text = (Pt - Pr - (2 * Ac) + Asp - Ms) / ((Asp / Lkbl) + Af)

Form13.Text2 = Text8.Text
End Sub

Private Sub Form_Load()
End Sub
```

**Form 12 (Jarak antar penguat)**

```
Private Sub Command1_Click()
Load Form10
Form10.Show
Form12.Hide
End Sub

Private Sub Command2_Click()
Dim Red
    Red = Text1.Text
Dim Ac
    Ac = Text2.Text
Dim Asp
    Asp = Text3.Text
Dim Af
    Af = Text4.Text
Dim Lkbl
    Lkbl = Text5.Text
Dim M
    M = Text7.Text

Text6.Text = (Red - M + Asp - (2 * Ac)) / ((Asp / Lkbl) + Af)

 Form13.Text3 = Text6.Text
 Form14.Text11 = Text1.Text
End Sub

Private Sub Command3_Click()
Text1.Text = 33
```

```
Text2.Text = 0.5
Text3.Text = 0.05
Text4.Text = 0.215
Text5.Text = 100
Text7.Text = 5
End Sub

Private Sub Form_Load()
End Sub
```

**Form 13 (Jumlah Penguat)**

```
Private Sub Command1_Click()
Load Form10
Form10.Show
Form13.Hide
End Sub

Private Sub Command2_Click()
L = Val(Text1.Text)
P = Val(Text2.Text)
M = L - P
N = Val(Text3.Text)


If L < P Then
    Text4.Text = 0
Else
    O = M \ N
    If M Mod N > 0 Then
```

```
        O = O + 1
    Else: O = O
    End If
    Text4.Text = O
End If

Form14.Text7 = Text1.Text
Form14.Text10 = Text4.Text
End Sub

Private Sub Command3_Click()
Text2.Text = 153
Text3.Text = 125.5
End Sub

Private Sub Form_Load()
End Sub
```

**Form 14 (*Power receive sistem*)**

```
Private Sub Command1_Click()
Dim Pt
   Pt = Text1.Text
Dim Ms
   Ms = Text2.Text
Dim Ac
   Ac = Text3.Text
Dim Asp
   Asp = Text4.Text
Dim Af
```

```
    Af = Text5.Text
Dim Lkabel
    Lkabel = Text6.Text
Dim Lsist
    Lsist = Text7.Text
Dim nc
    nc = Text9.Text
Dim nA
    nA = Text10.Text
Dim G
    G = Text11.Text
Dim nSplice
    nSplice = Text12.Text
Dim nSpan
    nSpan = Text13.Text

Text8.Text = Pt - ((Lsist * Af) + (nc * Ac) + (nSplice * Asp)) - (nSpan * Ms) +
(nA * G)

Pr = Val(Text8.Text)
If Pr >= -32 Then
    Label19.Caption = "'Level Daya penerima memenuhi syarat'"
    Else
    Label19.Caption = "'Level Daya penerima tidak memenuhi syarat'"
End If
End Sub

Private Sub Command2_Click()
Load Form10
Form10.Show
```

```
Form14.Hide
End Sub

Private Sub Command3_Click()
Text1.Text = 7
Text2.Text = 5
Text3.Text = 0.5
Text4.Text = 0.05
Text5.Text = 0.215
Text6.Text = 100
Text9.Text = 8
Text11.Text = 33
Text12.Text = 6
Text13.Text = 5
End Sub

Private Sub Form_Load()
End Sub
```

**Form 15 (Rise time budget)**

```
Private Sub Command1_Click()
Load Form2
Form2.Show
Form15.Hide
End Sub

Private Sub Command2_Click()
Load Form4
Form4.Show
```

```
Form15.Hide
End Sub

Private Sub Command3_Click()
Load Form16
Form16.Show
Form15.Hide
End Sub

Private Sub Form_Load()
End Sub
```

**Form 16 (Rise time perencanaan)**

```
Private Sub Command1_Click()
Dim tTx
   tTx = Text1.Text
Dim tRx
   tRx = Text2.Text
Dim Dm
   Dm = Text3.Text
Dim Tou
   Tou = Text4.Text
Dim Ls
   Ls = Text6.Text

Text5.Text = ((tTx ^ 2) + (tRx ^ 2) + (Dm * Ls * Tou) ^ 2) ^ (1 / 2)

tp = Val(Text5.Text)
```

```
If Option1.Value = True Then
   BR = 155.52 * 10 ^ 6
End If
If Option2.Value = True Then
   BR = 622.08 * 10 ^ 6
End If
If Option3.Value = True Then
   BR = 2.5 * 10 ^ 9
End If
If Option4.Value = True Then
   BR = 10 * 10 ^ 9
End If

If Option5.Value = True Then
   ts = 0.7 * 10 ^ 12 / BR
End If
If Option6.Value = True Then
   ts = 0.35 * 10 ^ 12 / BR
End If
Text7.Text = ts

If tp <= ts Then
   Label13.Caption = "'Sistem yang direncanakan sudah memenuhi syarat'"
   Else
   Label13.Caption = "'Sistem yang direncanakan tidak memenuhi syarat'"
End If
End Sub

Private Sub Command2_Click()
Load Form15
```

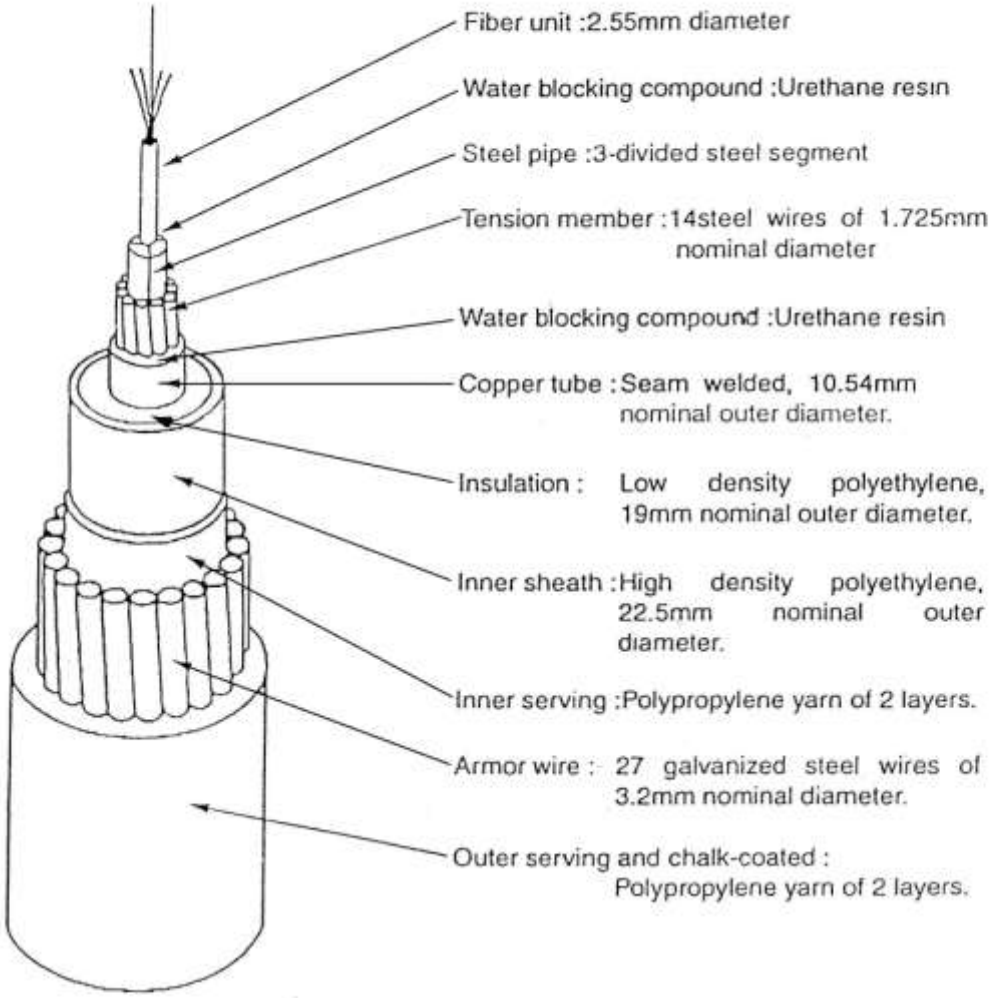
```
Form15.Show
Form16.Hide
End Sub

Private Sub Command3_Click()
Text1.Text = 35
Text2.Text = 35
Text3.Text = 3
Text4.Text = 0.02
End Sub

Private Sub Form_Load()
End Sub
```

# LAMPIRAN C

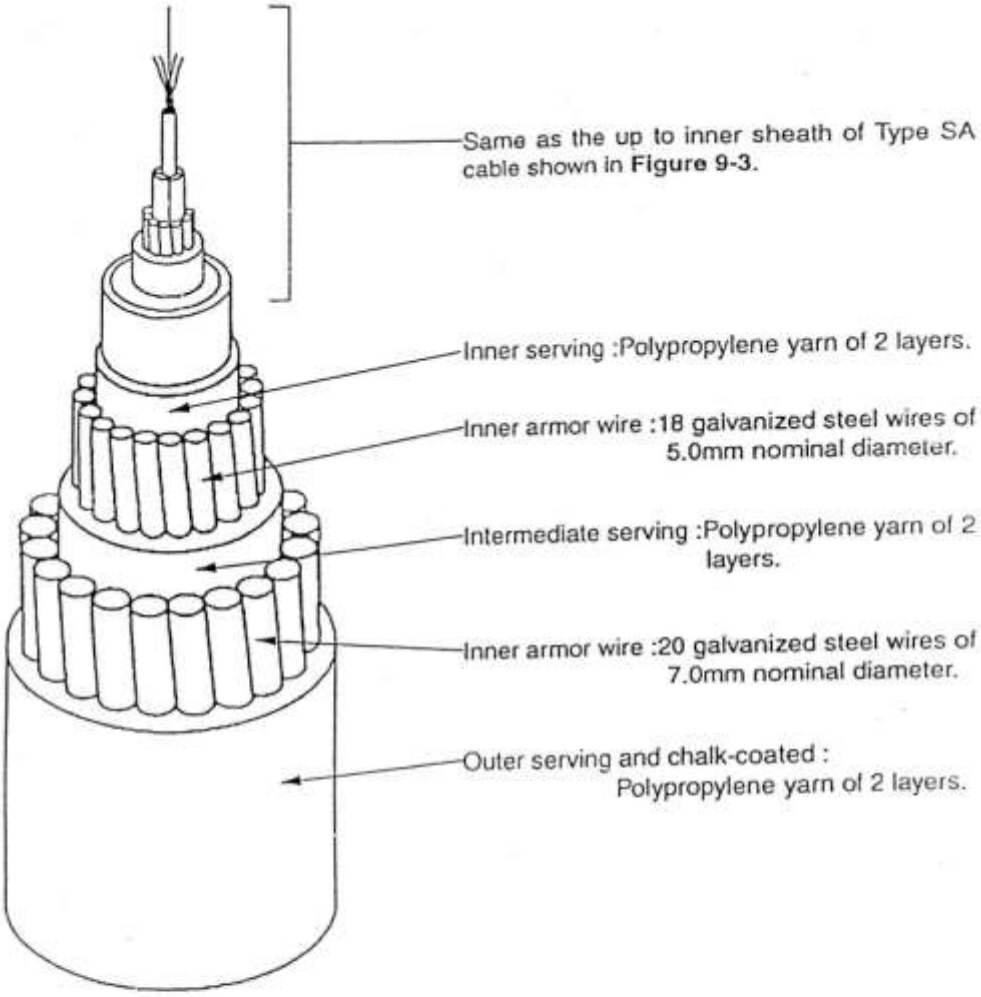
# DATA SHEET




Cable characteristic

| | |
|---|---|
| Cable nominal diameter | 38 mm |
| Cable weight in air | 29.9 kN |
| Cable weight in water | 19.9 kN |
| Minimum breaking load | 157 kN |
| Minimum bending radius | 900 mm |

Figure 9-3 Type Single Armored (SA) Cable

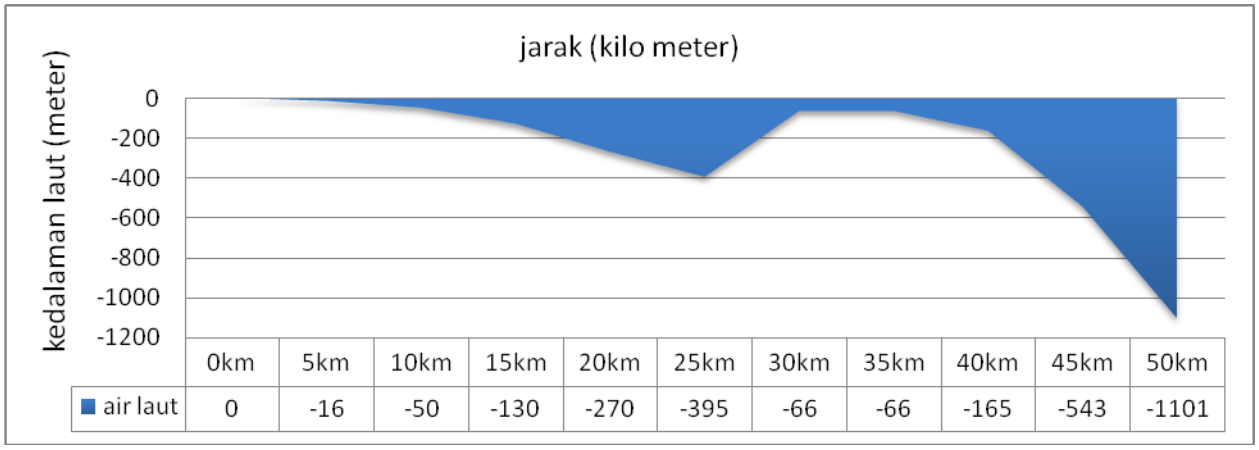


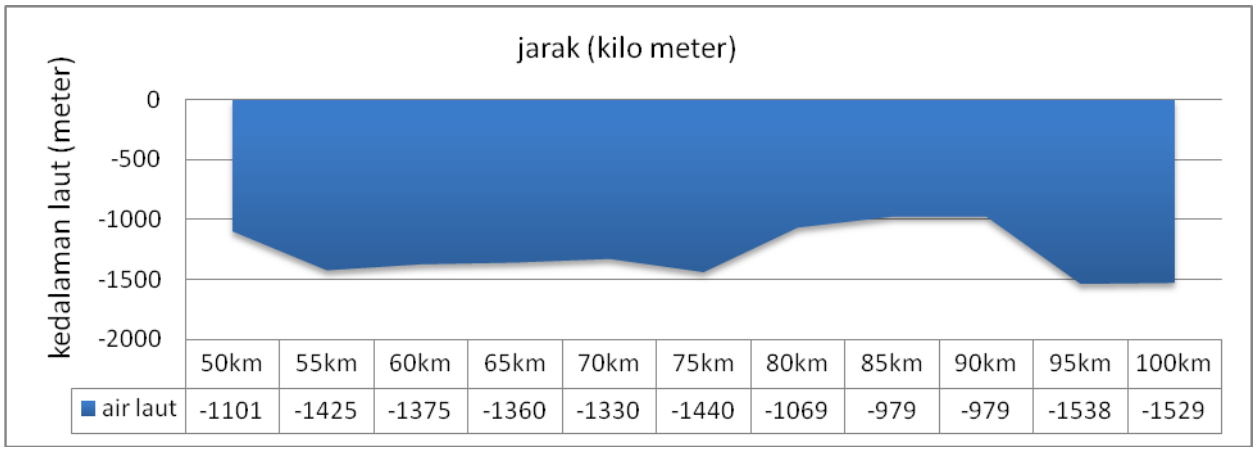

Cable characteristic

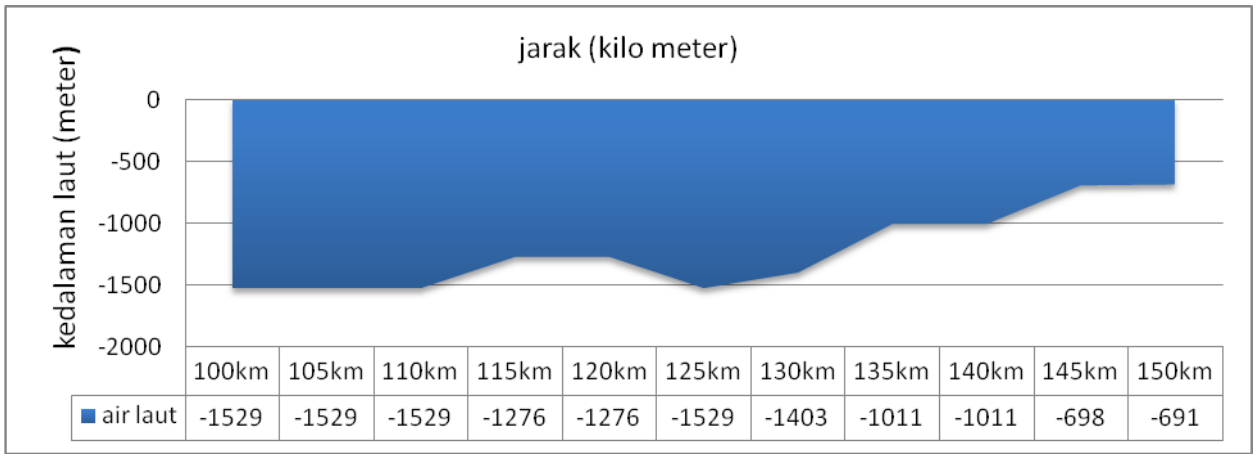
| | |
|---|---|
| Cable nominal diameter | 60 mm |
| Cable weight in air | 107 kN |
| Cable weight in water | 82.2 kN |
| Minimum breaking load | 434 kN |
| Minimum bending radius | 900 mm |

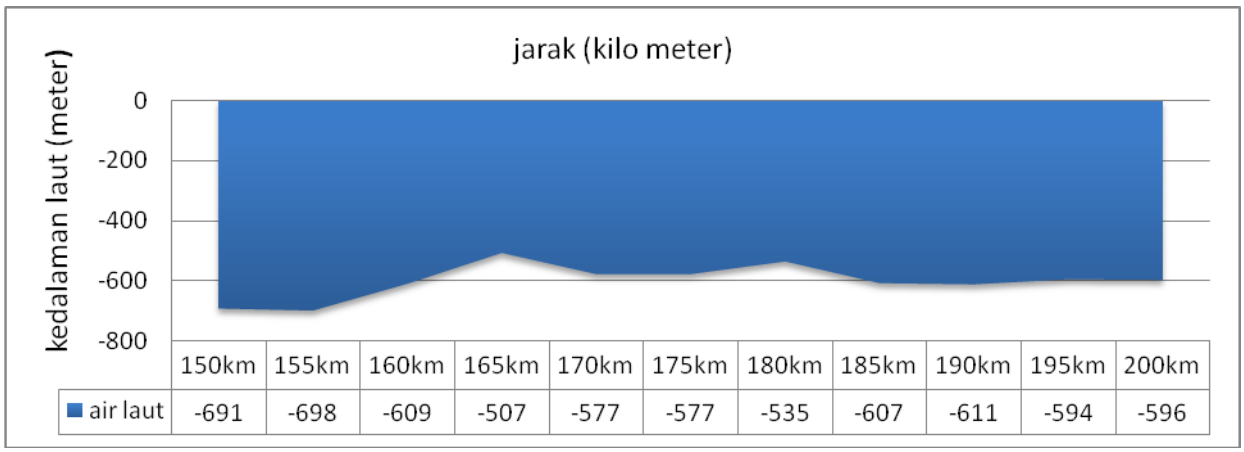
Figure 9-4 Type Double Armored (DA) Cable

# LAMPIRAN D
# KONTUR DASAR LAUT
# LINK MATARAM – MAKASAR

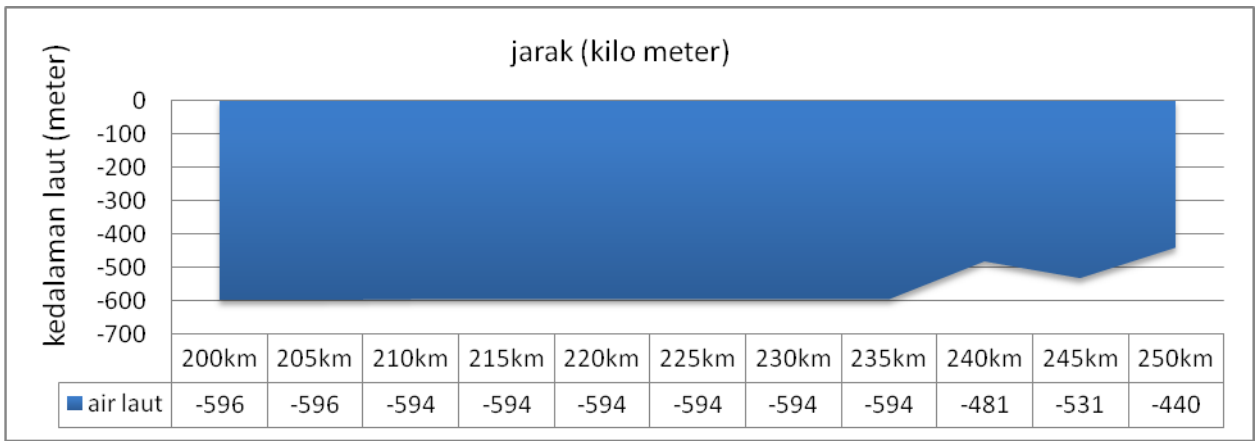

jarak (kilo meter)
kedalaman laut (meter)
0
-200
-400
-600
-800
-1000
-1200
0km 5km 10km 15km 20km 25km 30km 35km 40km 45km 50km
air laut 0 -16 -50 -130 -270 -395 -66 -66 -165 -543 -1101


jarak (kilo meter)
kedalaman laut (meter)
0
-500
-1000
-1500
-2000
50km 55km 60km 65km 70km 75km 80km 85km 90km 95km 100km
air laut -1101 -1425 -1375 -1360 -1330 -1440 -1069 -979 -979 -1538 -1529

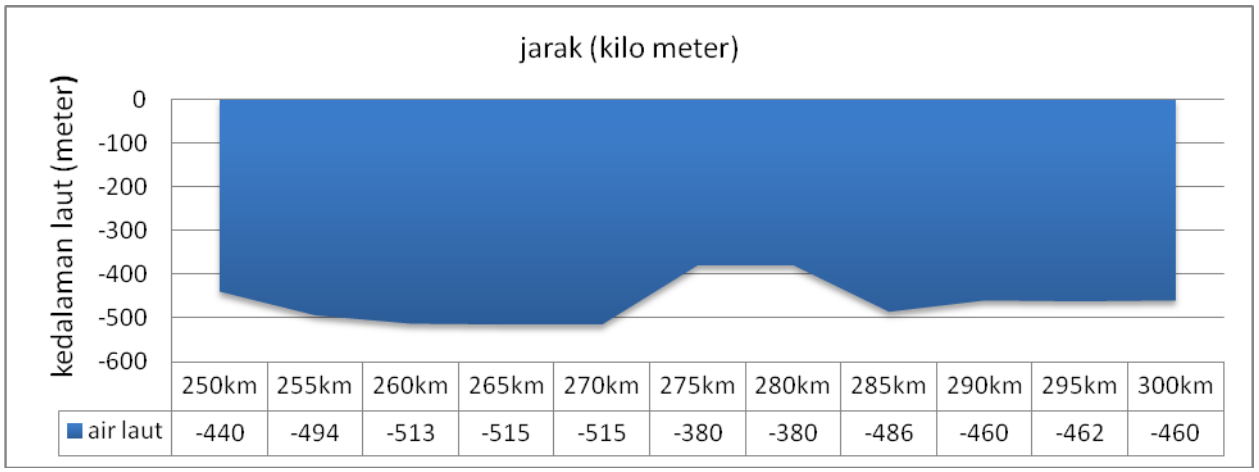

jarak (kilo meter)
kedalaman laut (meter)
0
-500
-1000
-1500
-2000
100km 105km 110km 115km 120km 125km 130km 135km 140km 145km 150km
air laut -1529 -1529 -1529 -1276 -1276 -1529 -1403 -1011 -1011 -698 -691



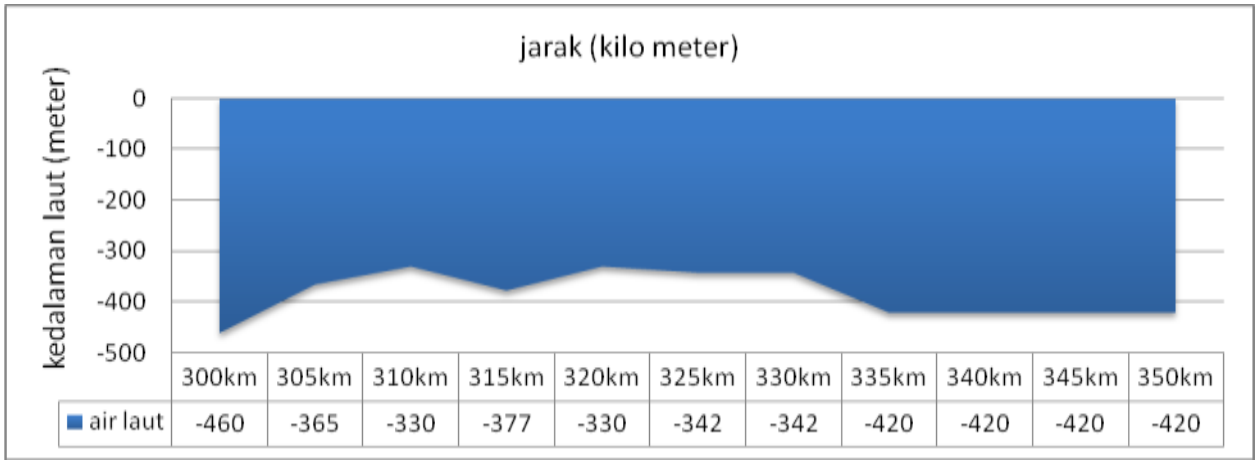

| | 150km | 155km | 160km | 165km | 170km | 175km | 180km | 185km | 190km | 195km | 200km |
|---|---|---|---|---|---|---|---|---|---|---|---|
| air laut | -691 | -698 | -609 | -507 | -577 | -577 | -535 | -607 | -611 | -594 | -596 |

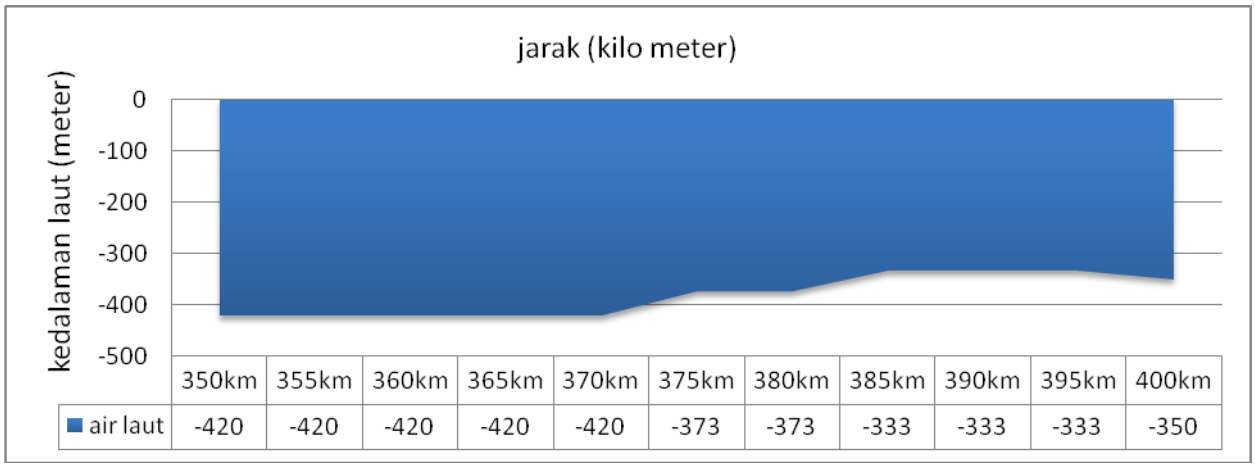


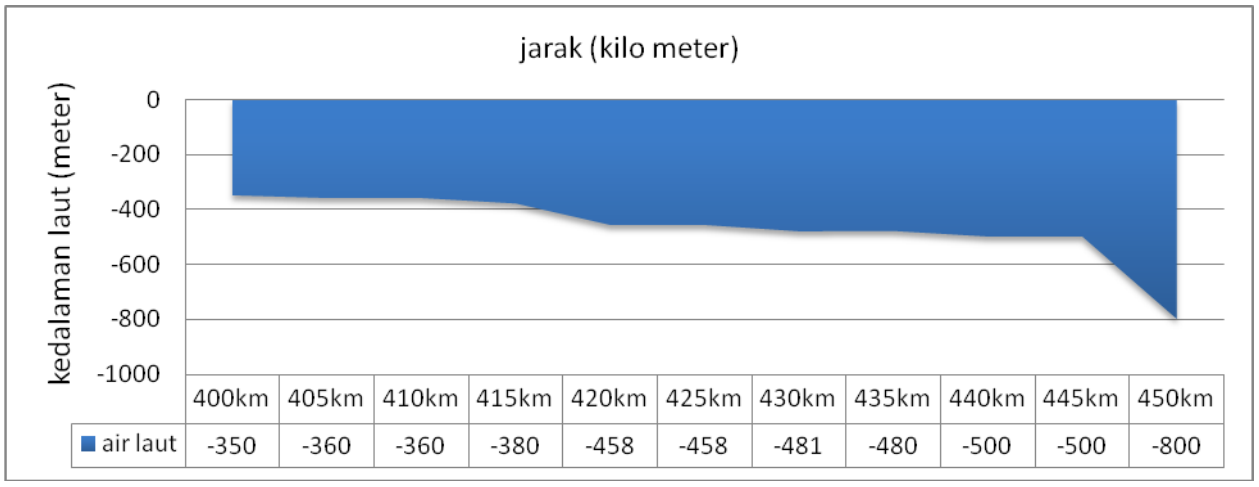

| | 200km | 205km | 210km | 215km | 220km | 225km | 230km | 235km | 240km | 245km | 250km |
|---|---|---|---|---|---|---|---|---|---|---|---|
| air laut | -596 | -596 | -594 | -594 | -594 | -594 | -594 | -594 | -481 | -531 | -440 |

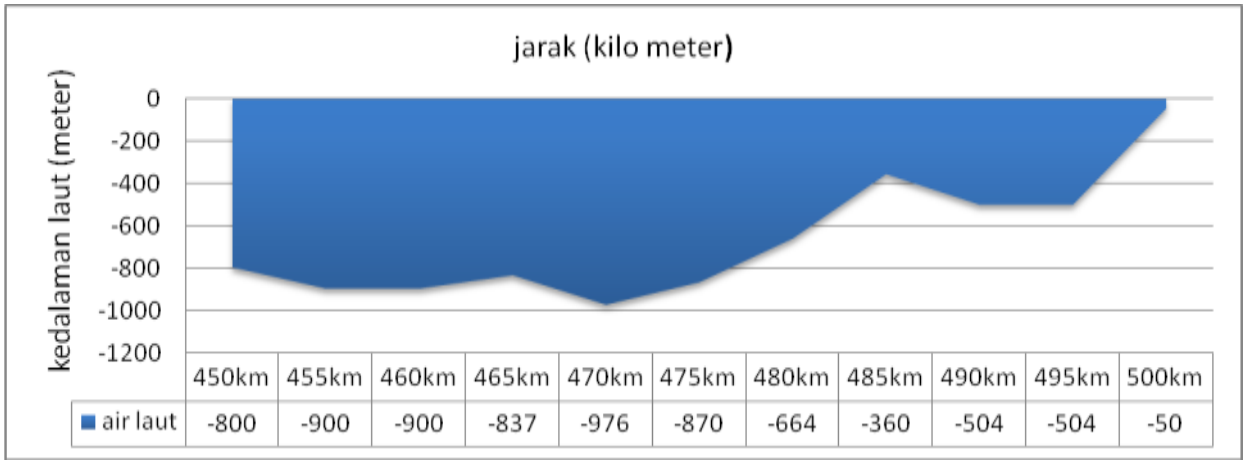


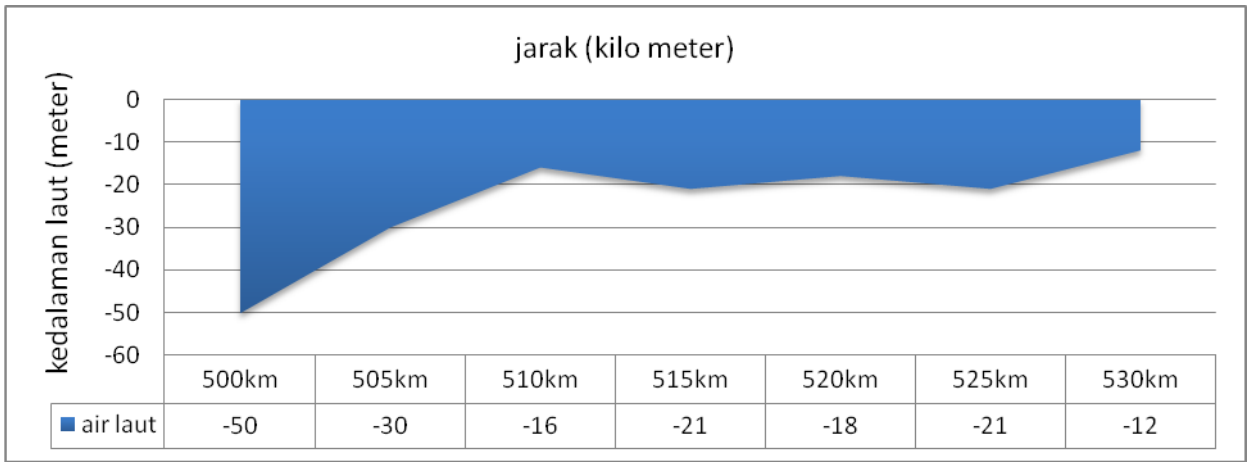

| | 250km | 255km | 260km | 265km | 270km | 275km | 280km | 285km | 290km | 295km | 300km |
|---|---|---|---|---|---|---|---|---|---|---|---|
| air laut | -440 | -494 | -513 | -515 | -515 | -380 | -380 | -486 | -460 | -462 | -460 |


jarak (kilo meter)
kedalaman laut (meter)
0
-100
-200
-300
-400
-500
300km 305km 310km 315km 320km 325km 330km 335km 340km 345km 350km
air laut -460 -365 -330 -377 -330 -342 -342 -420 -420 -420 -420


jarak (kilo meter)
kedalaman laut (meter)
0
-100
-200
-300
-400
-500
350km 355km 360km 365km 370km 375km 380km 385km 390km 395km 400km
air laut -420 -420 -420 -420 -420 -373 -373 -333 -333 -333 -350


jarak (kilo meter)
kedalaman laut (meter)
0
-200
-400
-600
-800
-1000
400km 405km 410km 415km 420km 425km 430km 435km 440km 445km 450km
air laut -350 -360 -360 -380 -458 -458 -481 -480 -500 -500 -800


jarak (kilo meter)
kedalaman laut (meter)
0
-200
-400
-600
-800
-1000
-1200
450km 455km 460km 465km 470km 475km 480km 485km 490km 495km 500km
air laut -800 -900 -900 -837 -976 -870 -664 -360 -504 -504 -50


jarak (kilo meter)
kedalaman laut (meter)
0
-10
-20
-30
-40
-50
-60
500km 505km 510km 515km 520km 525km 530km
air laut -50 -30 -16 -21 -18 -21 -12