

[geoide@ipmtf63 tclight]\$ **./tclight**

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.....TCLIGHT ver. 3.0.....
.....
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REMOVE Procedure or RESTORE Procedure (1-2) ? **1**

-> DTM File

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INPUT DTM FILE: **etna_igmi.dat**

-> Sparse Stations

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TC ESTIMATES ON GRID OR SPARSE STATIONS (1-2) ? **1**
MIN DIST BETWEEN COMPUTATION STATIONS AND DTM BOUNDARIES (M): **5000**

-> Density for the terrain

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TERRAIN DENSITY (GR/CM**3): **2.67**

-> Epsilon O

.....

APRIORI E0 (=0: NO APRIORI E0): **0**
MAX VARIOGRAM VALUE FOR INNER DOMAIN DEFINITION: **0.75**
MAX RADIUS FOR VARIOGRAM SEARCHING: **10000**

-> DTM computation in Inner Domain

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BILINEAR INNER INTEGRATION: PRISM NUMBER (ODD): **15**

-> DTM computation in Outer Domain

.....
RADIUS FOR USING AVERAGED DTM IN OUTER INTEGRAL COMPUTATION (0: NO AVERAGE): 0

COMPLETE TOPOGRAPHIC CORRECTION OR WITHOUT BOUGUER PLATE (1-2) ? 1

-> Zero padding

.....
FFT COMPUTATION: ZERO PADDING (0.5<ZP<1): 0.5

-> Partial Result

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SAVE PARTIAL RESULTS (1 YES -2 NO) ? 1

-> Output files

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OUTPUT FILE NAME

etnagrid.rtc

.....
(From here on is the screen output)

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tcLight ver 3.0
... working : REMOVE

.....
WAIT....
Load DTM file

---> DTM <---
X min -> 4150050.000
X max -> 4199950.00000
Y min -> 470050.00000
Y max -> 529950.00000
Xdx -> 100.00000
Ydx -> 100.00000

---> DTM Heights <---
Num -> 300000
Mean -> 590.73551
RMS -> 554.68624
Min -> 0.00000
Max -> 3293.00000

-> Load DTM file - Working for 0.1 seconds

.....
tcLight ver 3.0
... working : REMOVE
.....

WAIT....
Initialization for TC matrices

---> TC Initialization <---
X start -> 50.000
X end -> 450.000
Y start -> 50.000
Y end -> 550.000
X num -> 400
Y num -> 500
Max radius -> 70922.63390

.....
tcLight ver 3.0
... working : REMOVE
.....

WAIT....
Compute E0

---> E0 estimate <---
E0 mean -> 100.00000
E0 def -> 150.00000
E0 int -> 1

---> E0 Estimate <---
Num -> 200000
Mean -> 0.00000
RMS -> 0.00000
Min -> 0.00000
Max -> 0.00000

-> E0 Estimate - Working for 0.2 seconds

.....
tcLight ver 3.0
... working : REMOVE
.....

WAIT....
External integrals on actual DTM: initialization for FFT matrices

---> Outer Initialization <---
Outer Init, call, -> 1

---> FFT parameter <---
Inner Radius -> 150.000
External Radius -> 70922.634
Kernel size -> 709
Zero padding -> 354
FFT X start -> 354
FFT X end -> 854
FFT Y start -> 354
FFT Y end -> 954
FFT X num -> 1208
FFT y num -> 1308

.....
tcLight ver 3.0
... working : REMOVE
.....

WAIT....
KgGamma3o: kernel padding

KERNEL Padding: call num.-> 1

Computing KERNEL FFT

WAIT....
Load DTM file

---> DTM <---
X min -> 4150050.000
X max -> 4199950.00000
Y min -> 470050.00000
Y max -> 529950.00000
Xdx -> 100.00000
Ydx -> 100.00000

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tcLight ver 3.0
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tcLight ver 3.0
... working : REMOVE
.....

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Compute E0

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Max -> 0.00000

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.....
tcLight ver 3.0
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.....
tcLight ver 3.0
... working : REMOVE
.....

WAIT....
KgGamma3o: kernel padding

KERNEL Padding: call num.-> 1

Computing KERNEL FFT

.....
tcLight ver 3.0
... working : REMOVE
.....

WAIT....
KgGamma3o: integral estimate

Computing KgGamma3o, power: 0
-> DTM FFT
-> Convolved Kernel-DTM inverse FFT

Computing KgGamma3o, power: 1
-> DTM FFT
-> Convolved Kernel-DTM inverse FFT

Computing KgGamma3o, power: 2
-> DTM FFT
-> Convolved Kernel-DTM inverse FFT

---> KgGamma3o External step1 estimates <---
Num -> 200000
Mean -> -5.95510
RMS -> 6.83933
Min -> -80.28550
Max -> -0.37092

-> First Component - Working for 16.9 seconds

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tcLight ver 3.0
... working : REMOVE
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WAIT....
KgGamma4o: X component, kernel padding

KERNEL Padding: call num.-> 2

Computing KERNEL FFT

.....

tcLight ver 3.0
... working : REMOVE

WAIT....
KgGamma4o: X component

Computing KgGamma4o, Component 1, Power: 0
-> DTM FFT
-> Convolved KERNEL-DTM Inverse FFT

Computing KgGamma4o, Component 1, Power: 1
-> DTM FFT
-> Convolved KERNEL-DTM Inverse FFT

Computing KgGamma4o, Component 1, Power: 2
-> DTM FFT
-> Convolved KERNEL-DTM Inverse FFT

Computing KgGamma4o, Component 1, Power: 3
-> DTM FFT
-> Convolved KERNEL-DTM Inverse FFT

tcLight ver 3.0
... working : REMOVE

WAIT....
KgGamma4o: Y component, kernel padding

KERNEL Padding: call num.-> 3

Computing KERNEL FFT

tcLight ver 3.0
... working : REMOVE

WAIT....
KgGamma4o: Y component

Computing KgGamma4o, Component 2, Power: 0
-> DTM FFT
-> Convolved KERNEL-DTM Inverse FFT

Computing KgGamma4o, Component 2, Power: 1
-> DTM FFT
-> Convolved KERNEL-DTM Inverse FFT

Computing KgGamma4o, Component 2, Power: 2
-> DTM FFT
-> Convolved KERNEL-DTM Inverse FFT

Computing KgGamma4o, Component 2, Power: 3
-> DTM FFT

-> Convolved KERNEL-DTM Inverse FFT

---> KgGamma4o External step1 estimates <---

Num -> 200000
Mean -> 0.08400
RMS -> 0.22396
Min -> 0.00070
Max -> 3.93582

-> Second Component - Working for 43.7 seconds

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tcLight ver 3.0
... working : REMOVE
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WAIT....
Closing FFT matrices

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tcLight ver 3.0
... working : REMOVE
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WAIT....
Inner Terms estimate

---> E0 estimate <---

Real E0 -> 150.00000
Integer E0 -> 1.000
Inner X num -> 45
Inner Y num -> 45

Inner, Point 0
Inner, Point 1000
Inner, Point 2000
Inner, Point 3000
Inner, Point 4000
Inner, Point 5000
Inner, Point 6000
Inner, Point 7000
Inner, Point 8000
Inner, Point 9000
Inner, Point 10000
Inner, Point 11000
Inner, Point 12000
Inner, Point 13000
Inner, Point 14000
Inner, Point 15000
Inner, Point 16000
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Inner, Point 20000

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Inner, Point 194000
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Inner, Point 197000
Inner, Point 198000
Inner, Point 199000

---> -Kg(gamma3-gamma4)i <---
Num -> 200000
Mean -> -0.13227
RMS -> 0.20126
Min -> -2.64763
Max -> -0.00000

-> Inner Estimate - Working for 4 minutes, 56 seconds

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tcLight ver 3.0
... working : REMOVE
.....

WAIT....
Quadratic Terms estimate

---> Kg(gamma1-gamma2) <---
Num -> 200000
Mean -> -0.60958
RMS -> 0.99139
Min -> -8.54512
Max -> -0.00000

-> Quad Estimate - Working for 0.2 seconds

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... working : REMOVE
.....

WAIT....
Final result

---> Final TC estimate <---
Num -> 200000
Mean -> 67.93651
RMS -> 57.54025
Min -> -3.19403
Max -> 285.34048

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TCLIGHT ver. 3.0
Stop Working, Thank You
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->Total Time - 0 hour, 5 minutes, 57 second