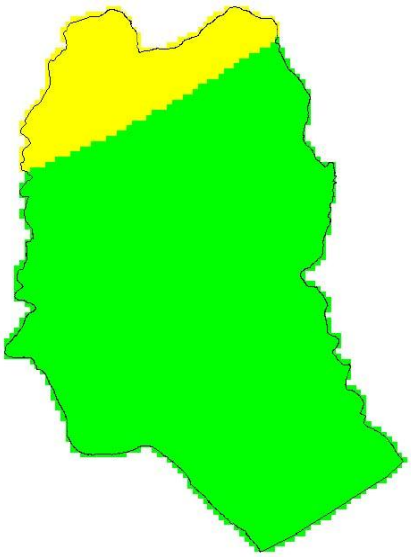
PGA at Engineering Seismic Baserock (Vs30=760 m/sec) in Dhaka



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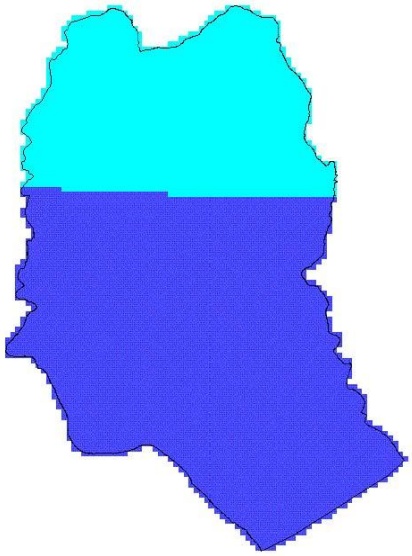

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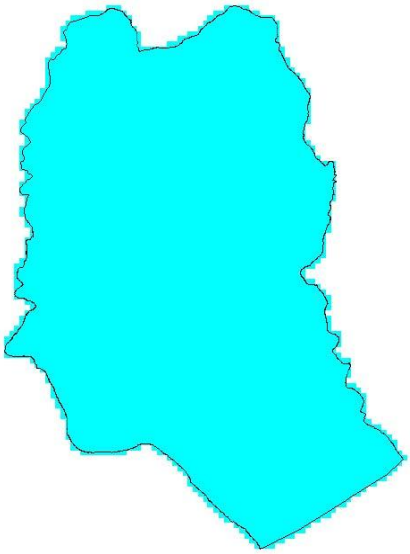

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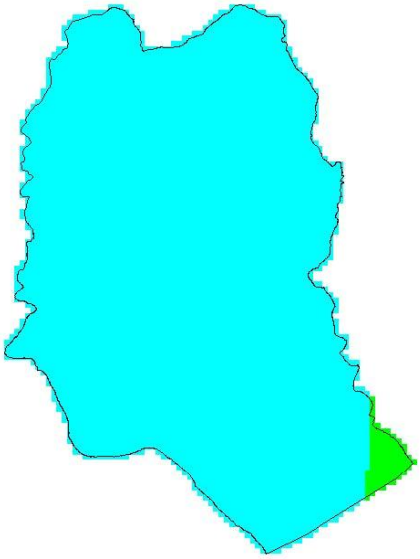

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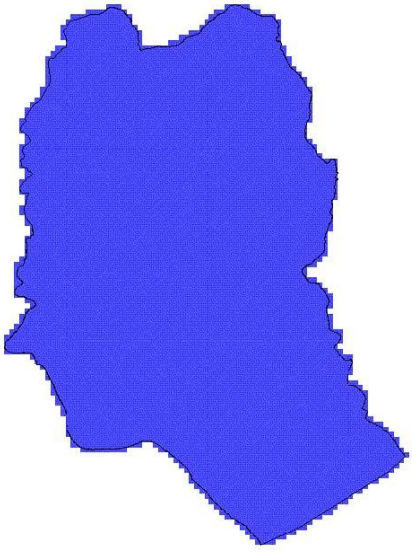

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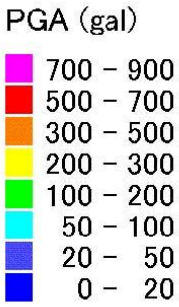
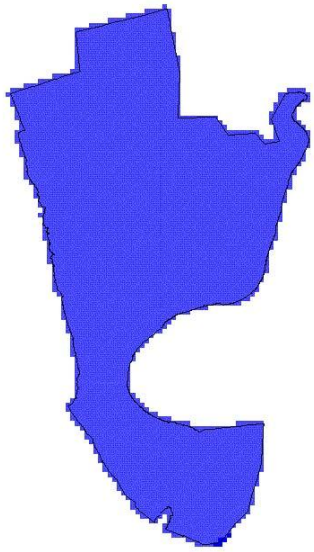


PGA at Engineering Seismic Baserock (Vs30=760 m/sec) in Chittagong



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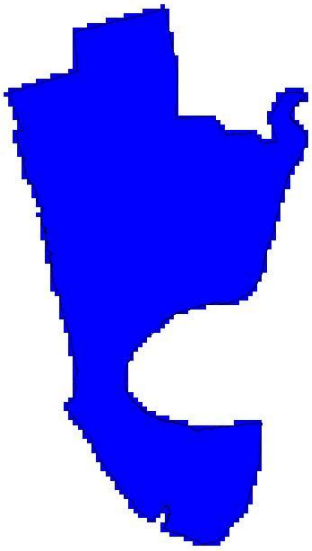

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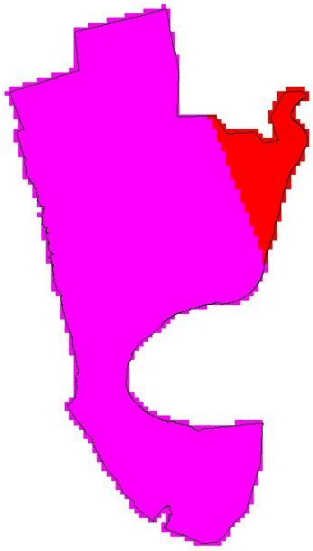

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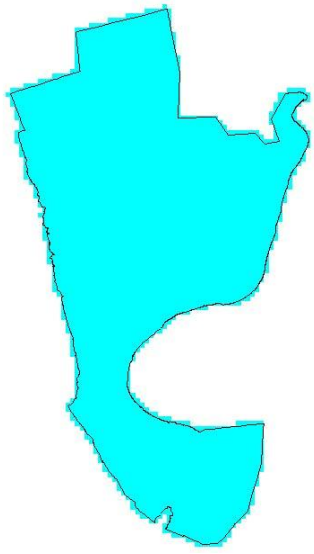

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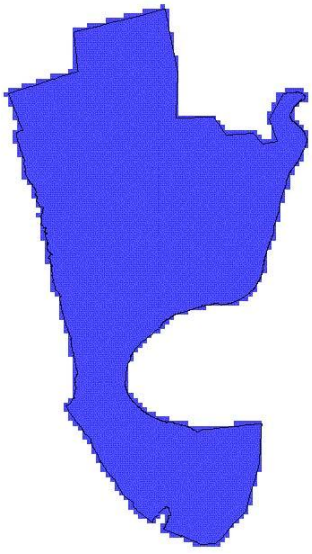

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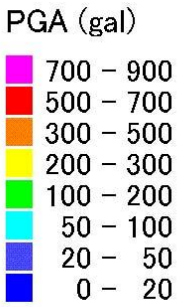
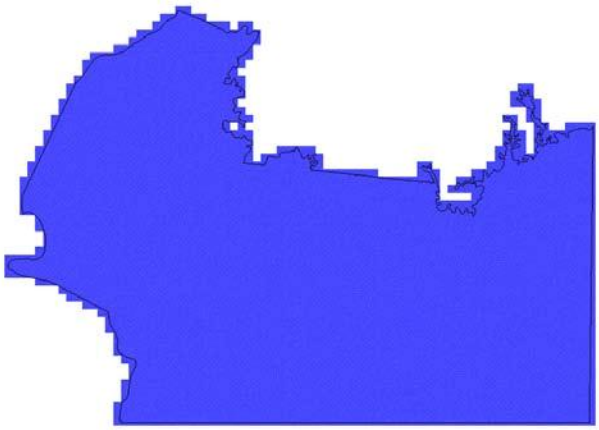


PGA at Engineering Seismic Baserock (Vs30=760 m/sec) in Sylhet



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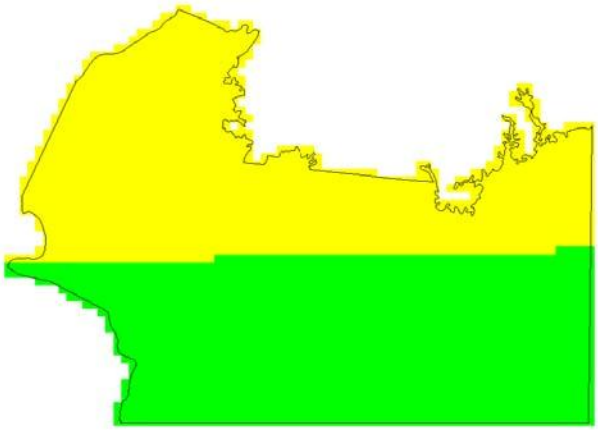

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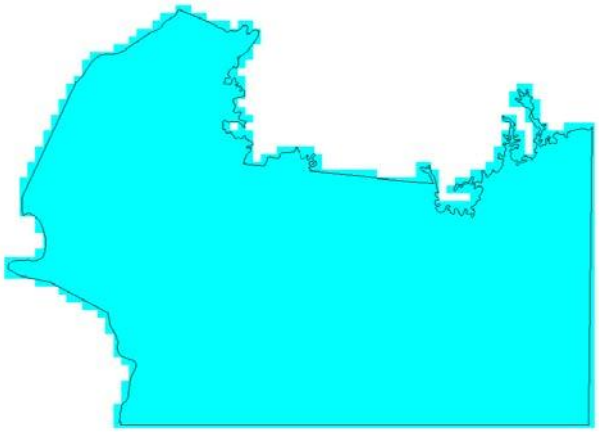

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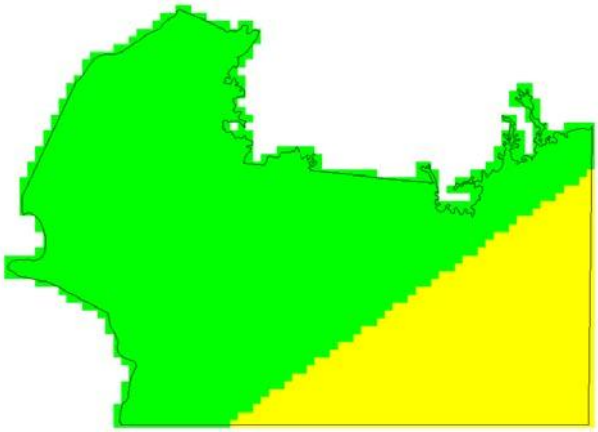

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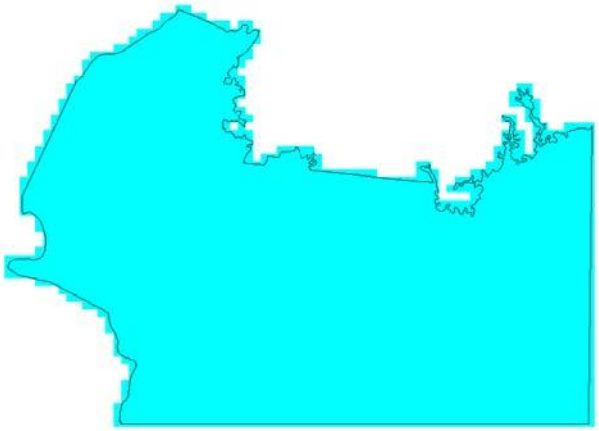

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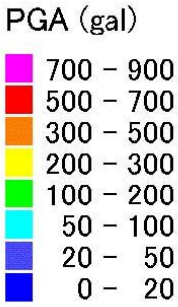
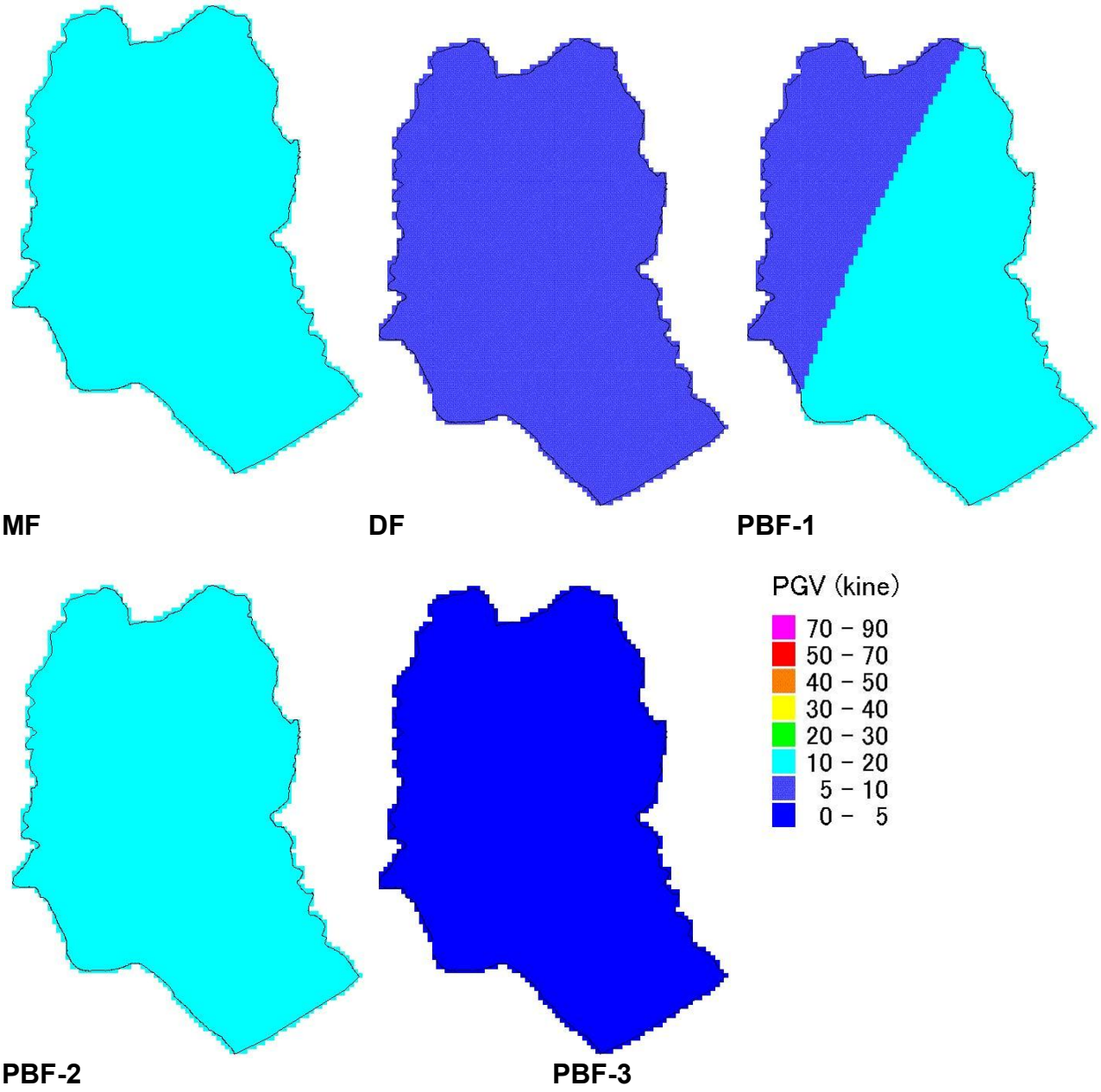
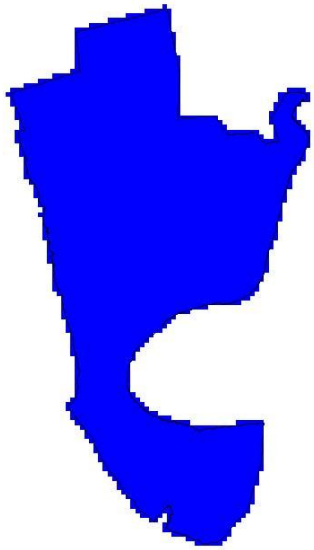


PGV at Engineering Seismic Baserock (Vs30=760 m/sec) in Dhaka



PGV at Engineering Seismic Baserock (Vs30=760 m/sec) in Chittagong



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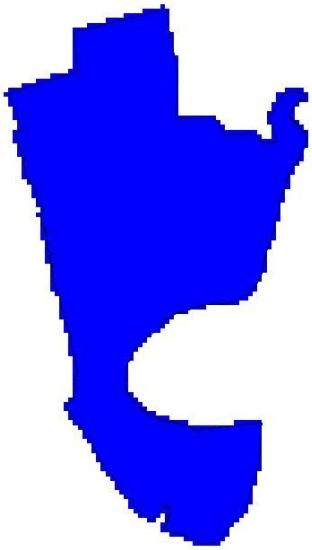

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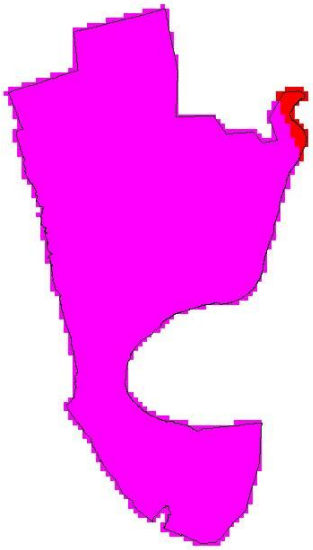

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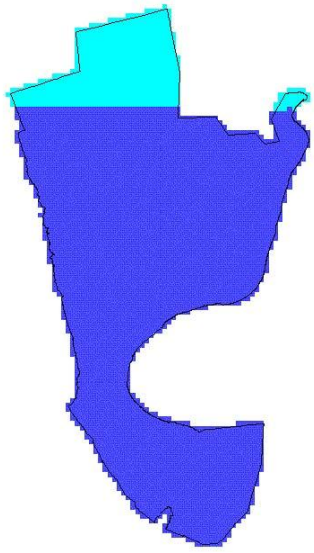

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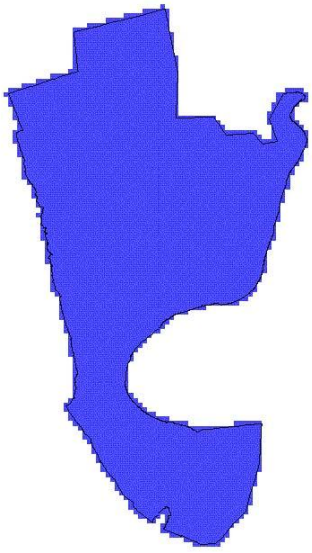

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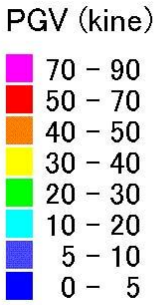
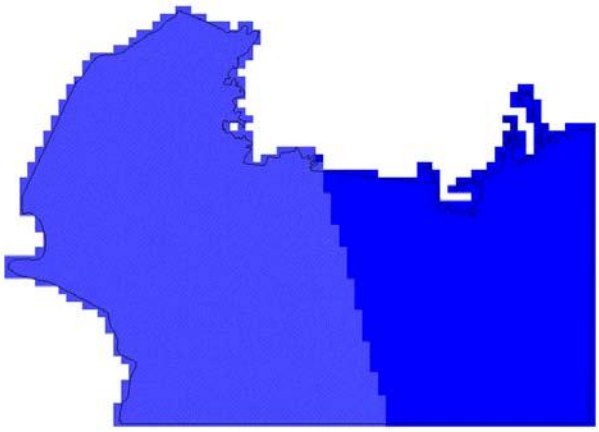


PGV at Engineering Seismic Baserock (Vs30=760 m/sec) in Sylhet



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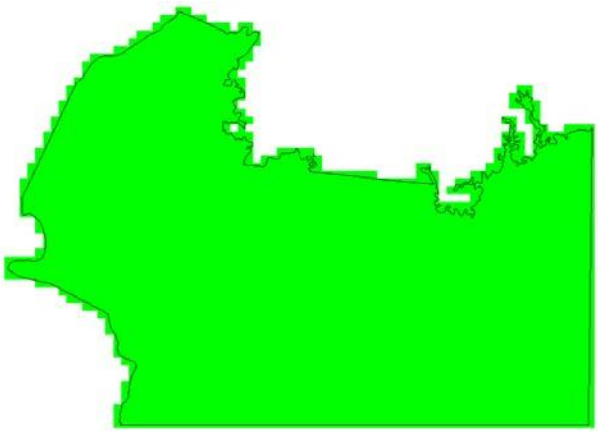

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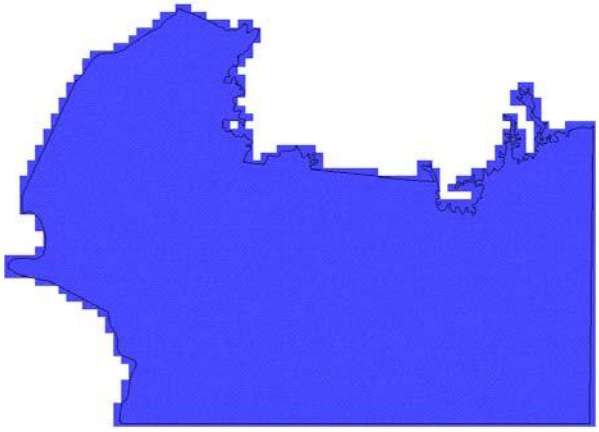

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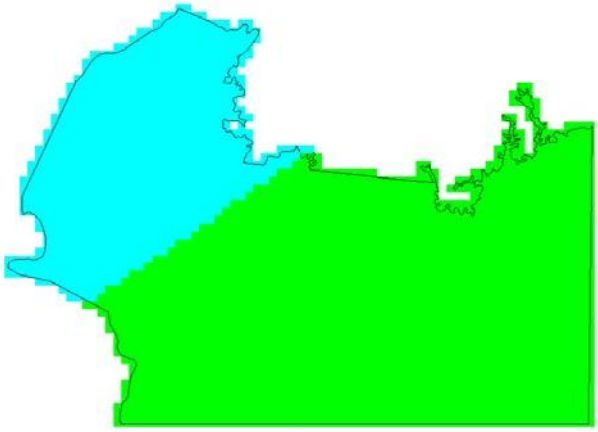

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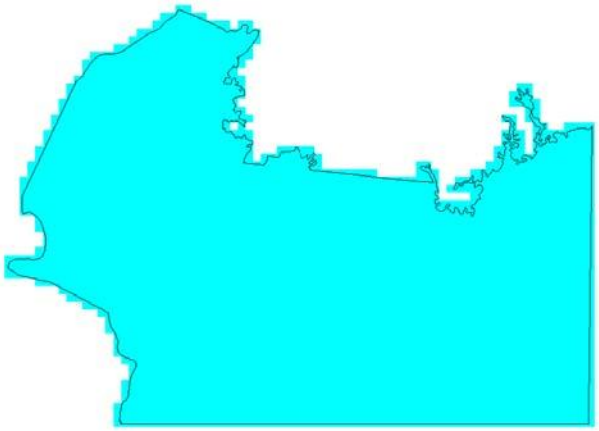

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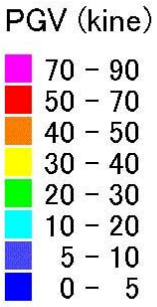
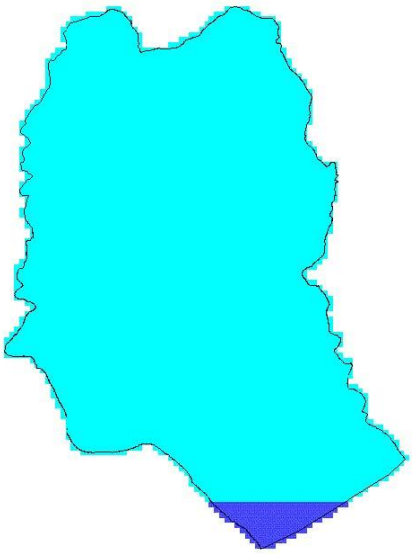


Sa (h=5%) for T=0.3 sec at Engineering Seismic Baserock (Vs30=760 m/sec) in Dhaka

MF



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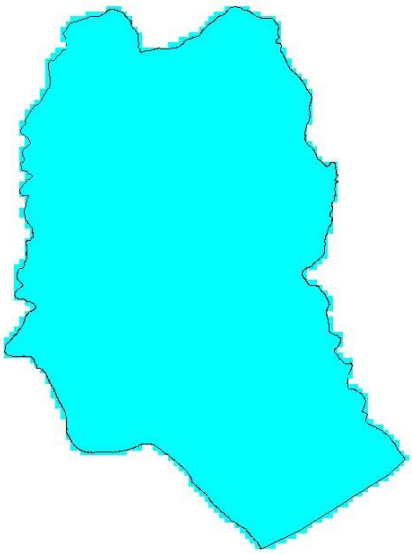

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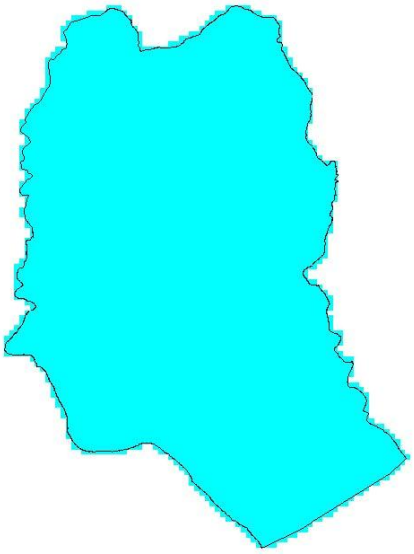

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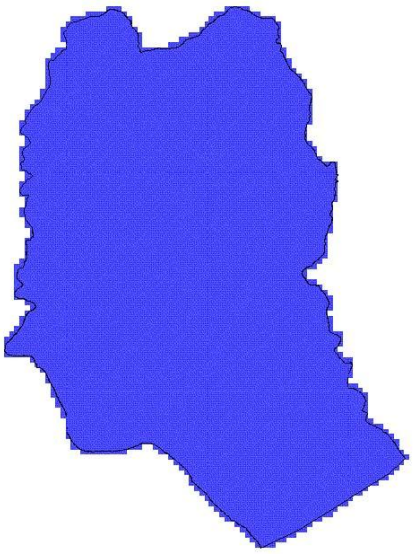

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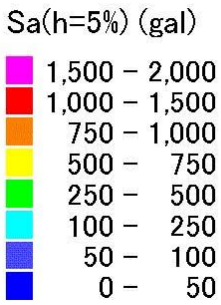
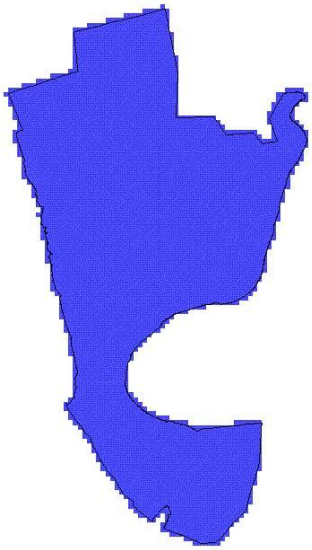


Sa (h=5%) for T=0.3 sec at Engineering Seismic Baserock (Vs30=760 m/sec) in Chittagong



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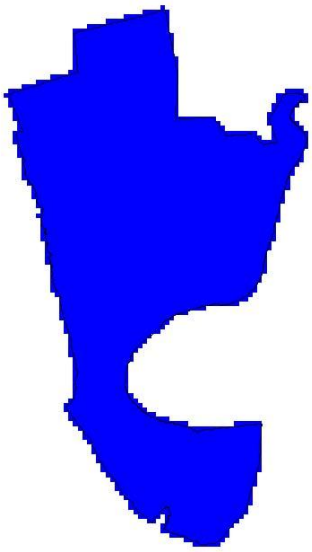

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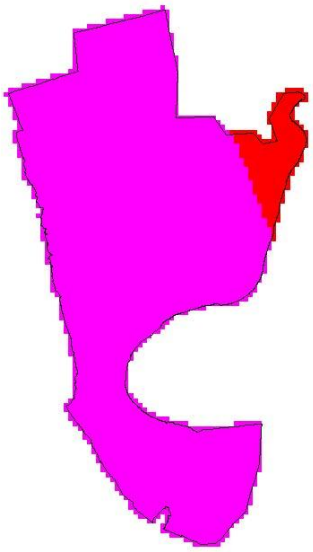

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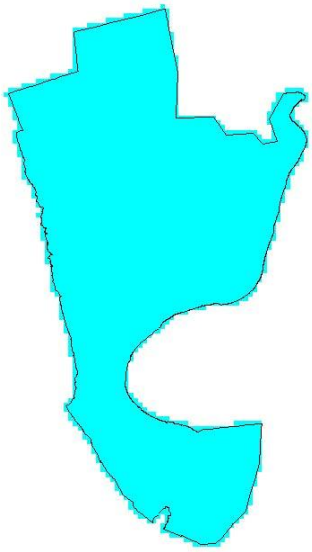

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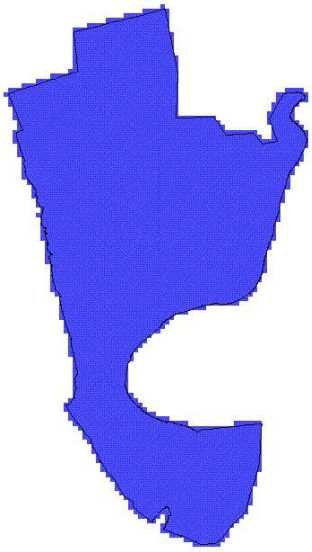

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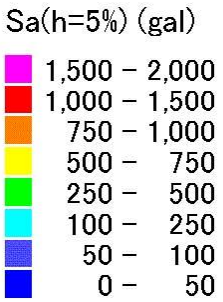
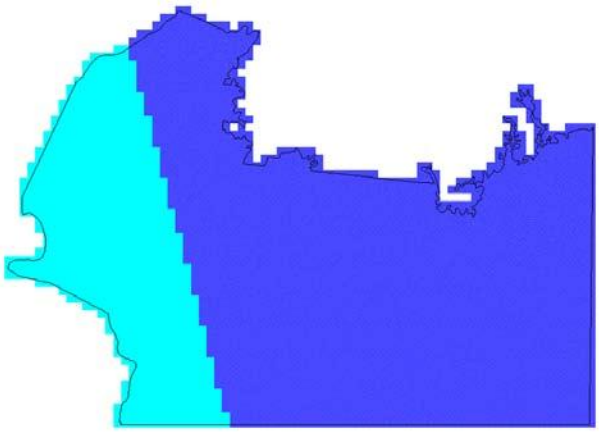


Sa (h=5%) for T=0.3 sec at Engineering Seismic Baserock (Vs30=760 m/sec) in Sylhet



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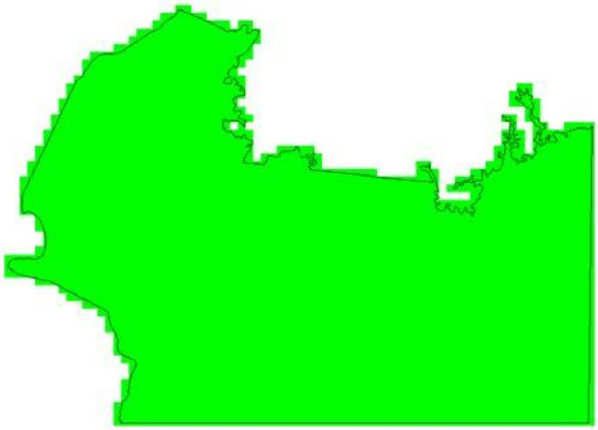

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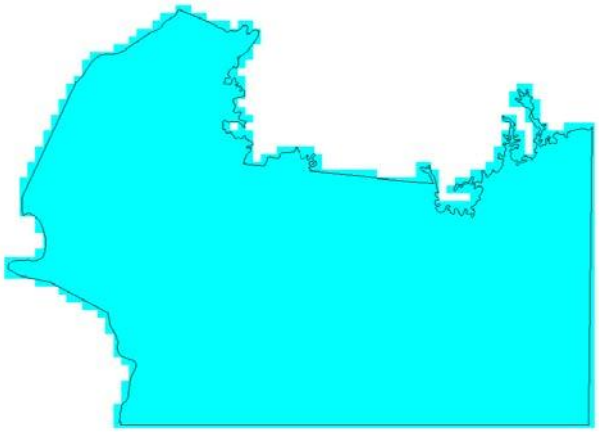

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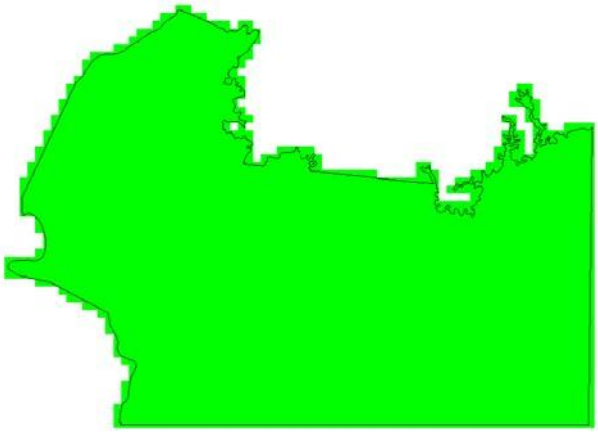

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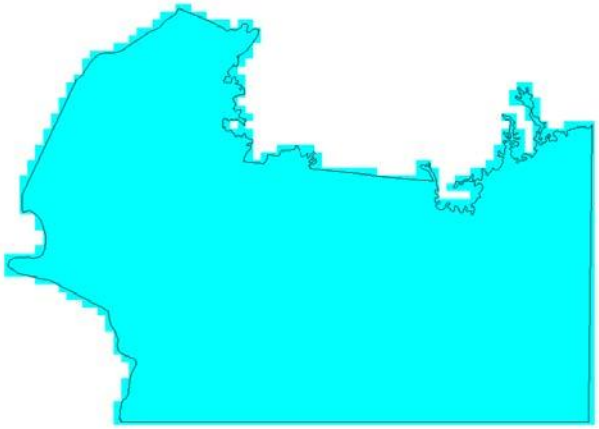

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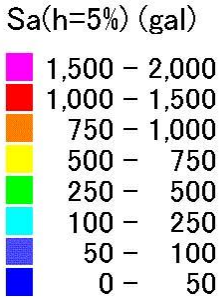
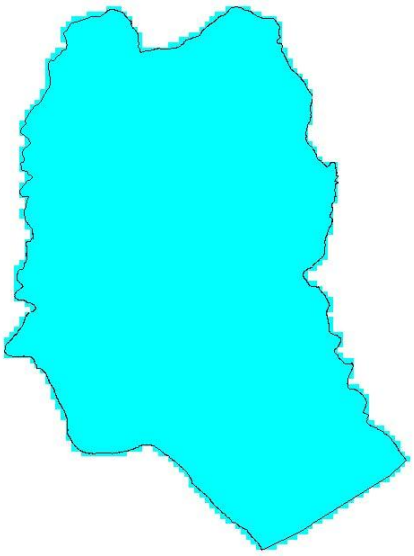


Sa (h=5%) for T=1.0 sec at Engineering Seismic Baserock (Vs30=760 m/sec) in Dhaka



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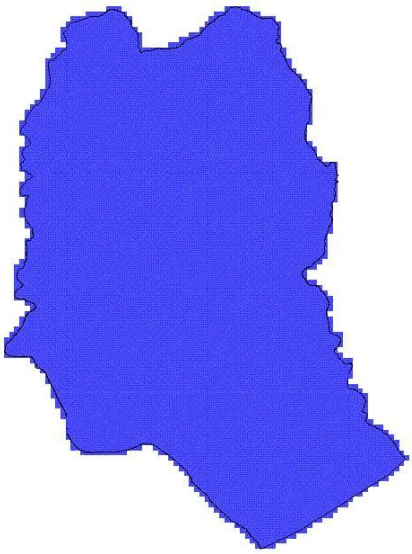

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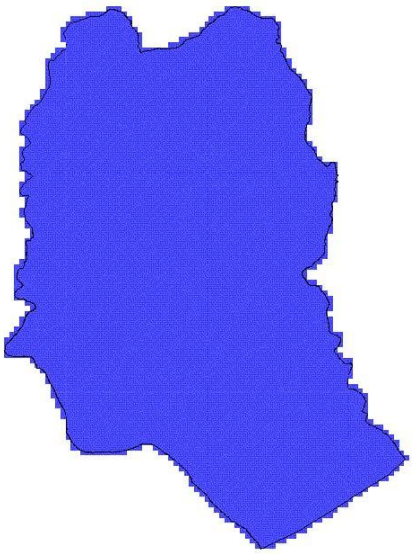

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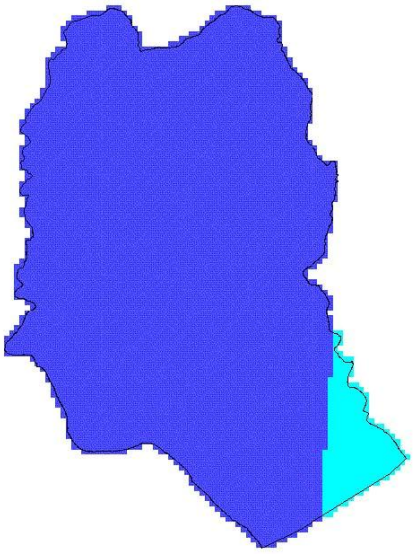

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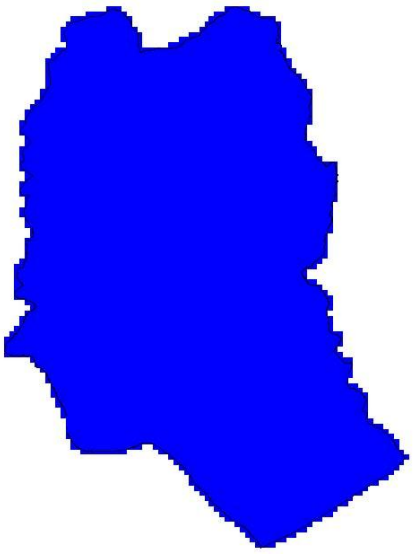

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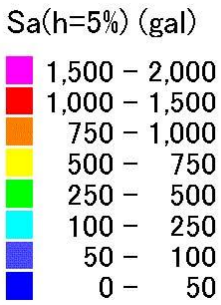
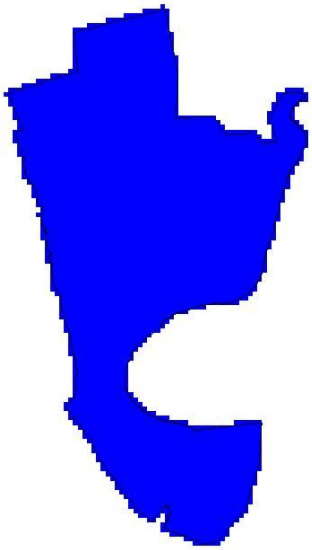


Sa (h=5%) for T=1.0 sec at Engineering Seismic Baserock (Vs30=760 m/sec) in Chittagong



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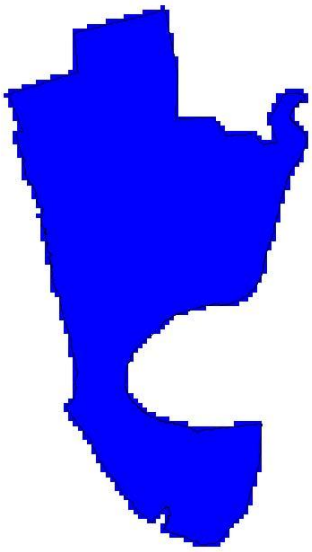

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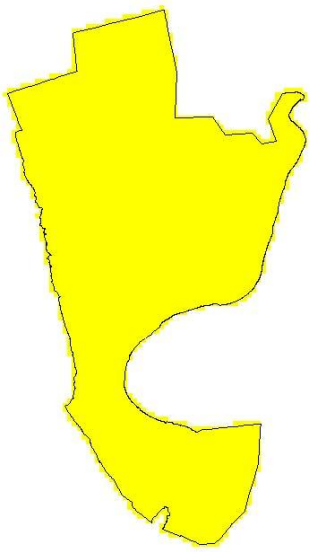

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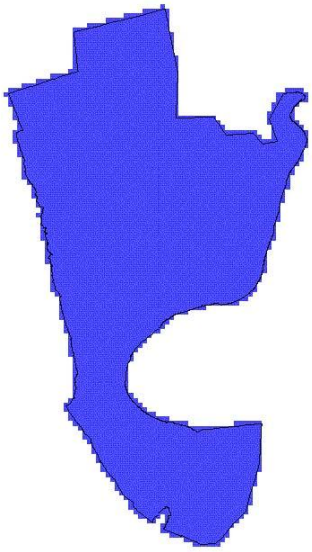

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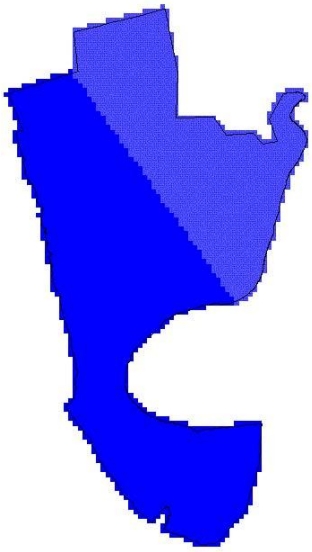

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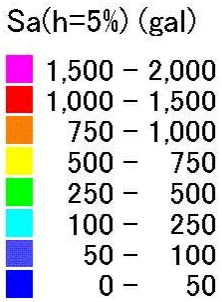
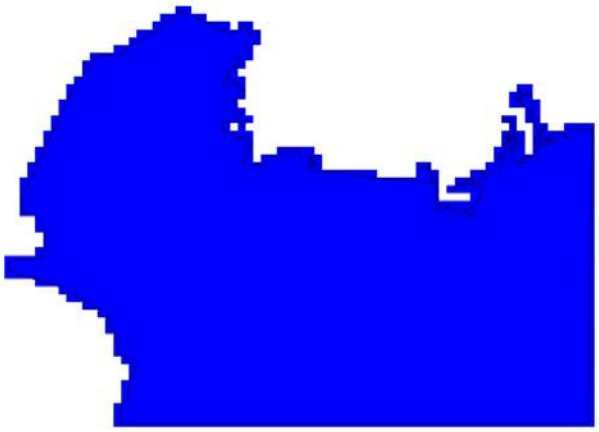


Sa (h=5%) for T=1.0 sec at Engineering Seismic Baserock (Vs30=760 m/sec) in Sylhet



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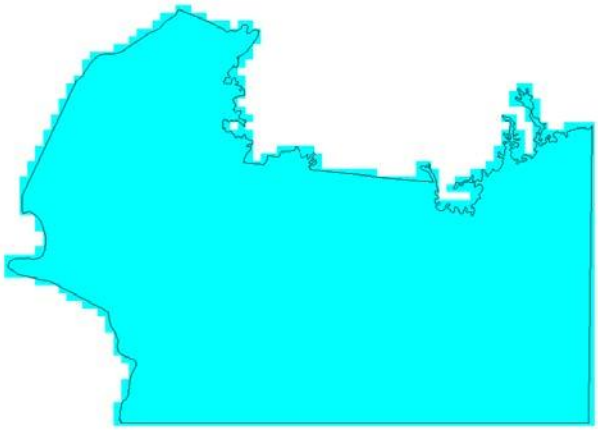

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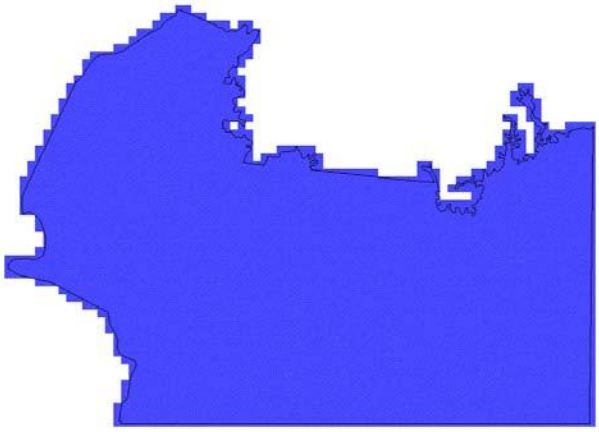

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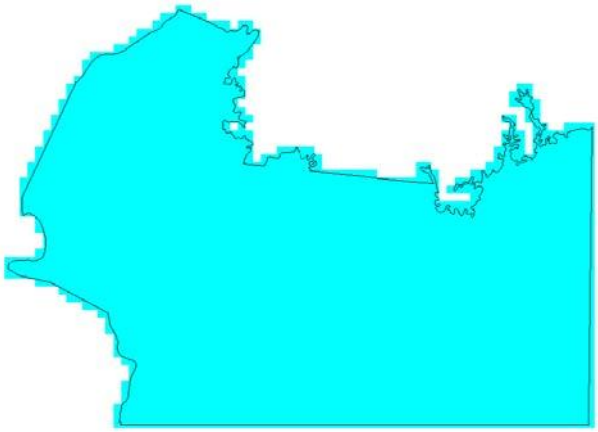

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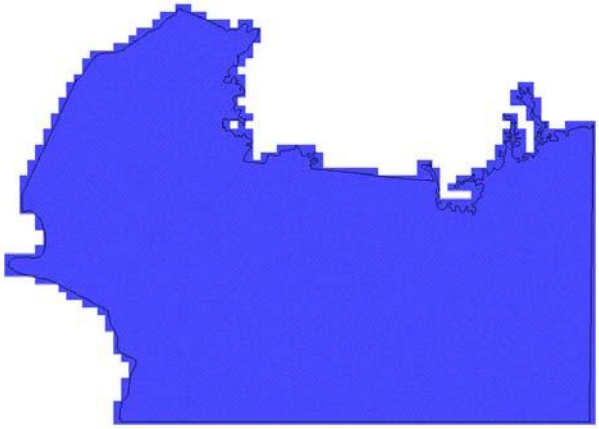

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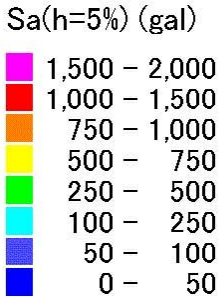
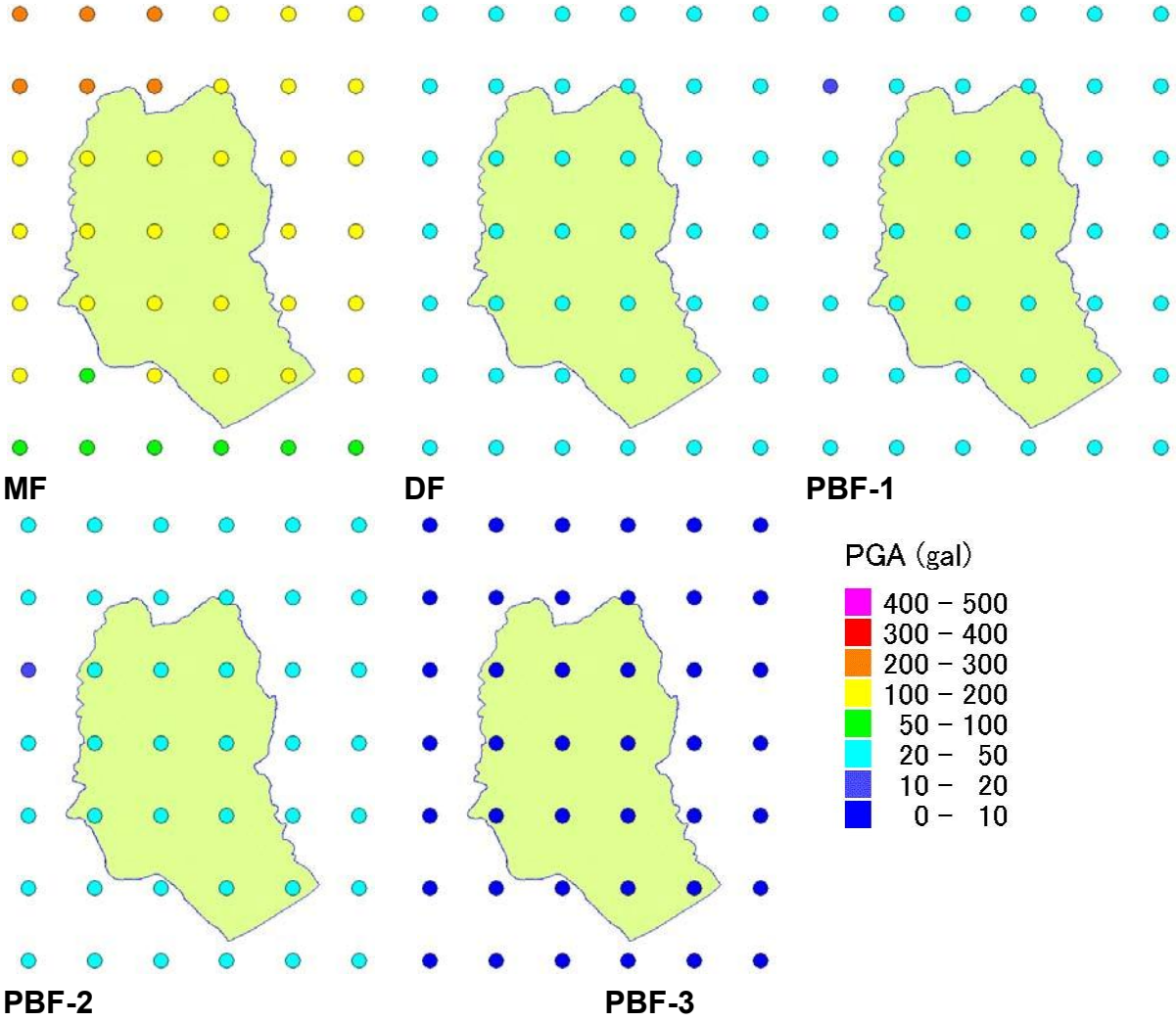
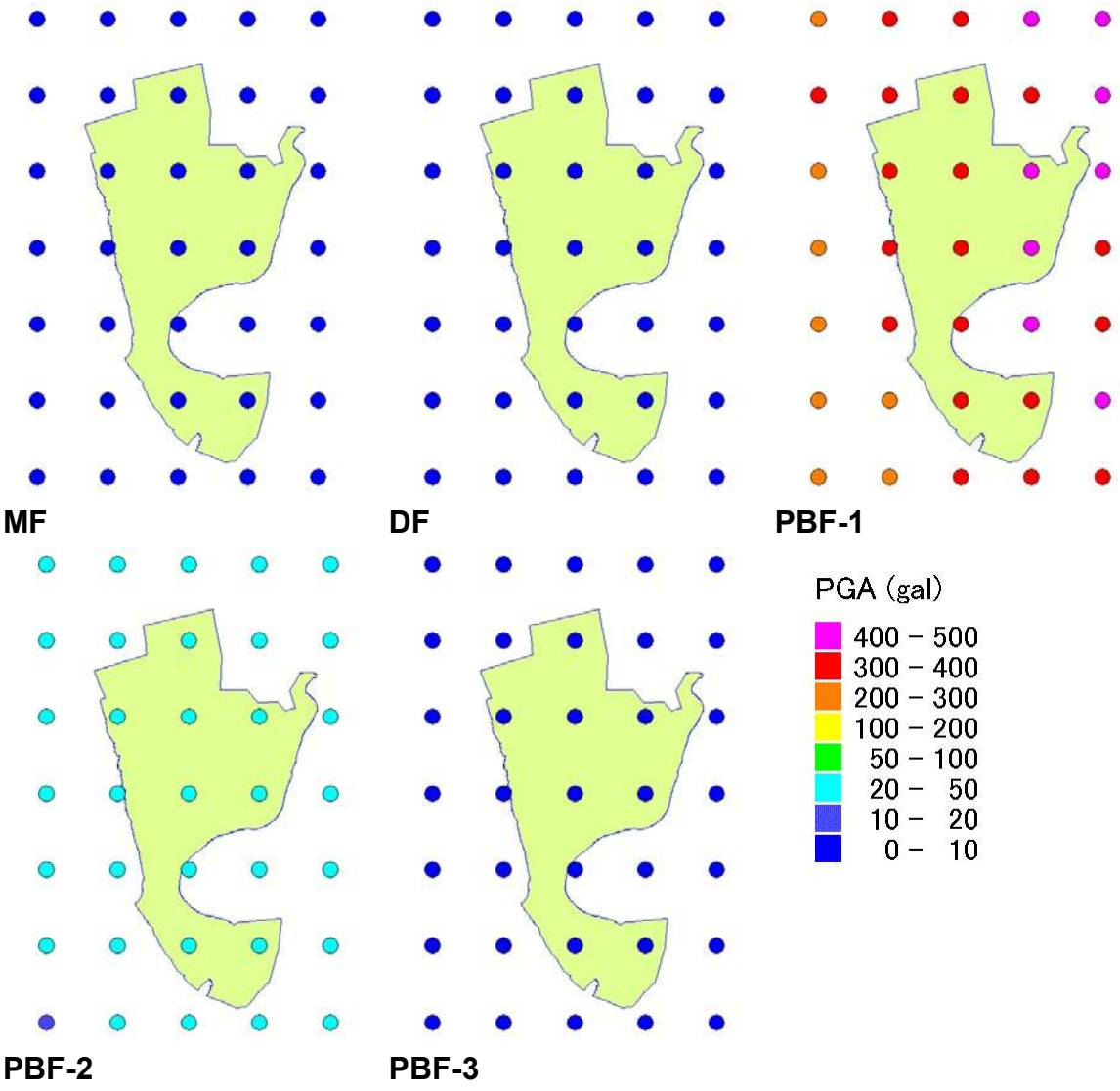


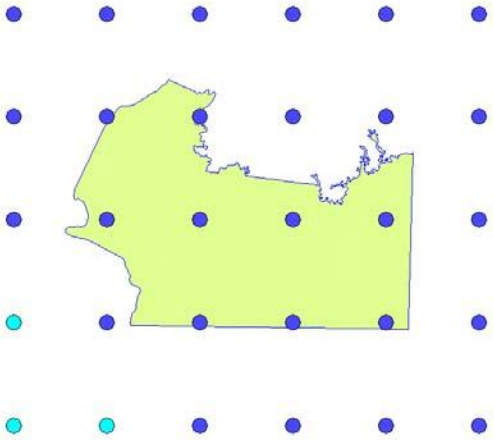
PGA at Ground of Vs=400 m/sec in Dhaka



PGA at Ground of Vs=400 m/sec in Chittagong



PGA at Ground of Vs=400 m/sec in Sylhet



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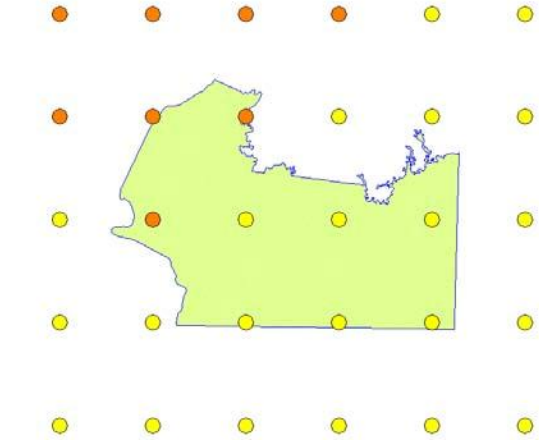

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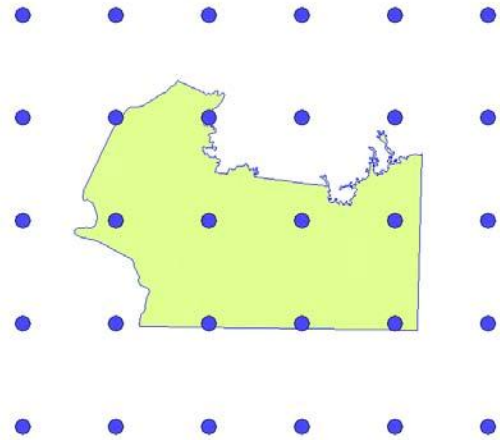

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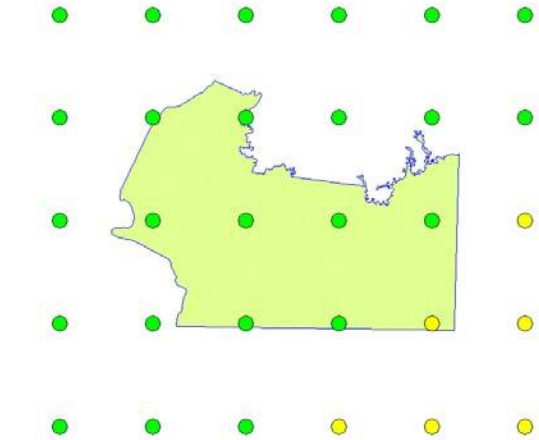

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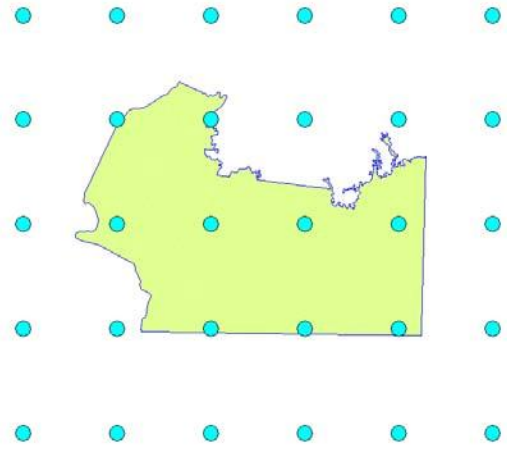

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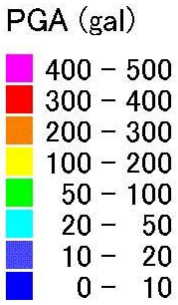
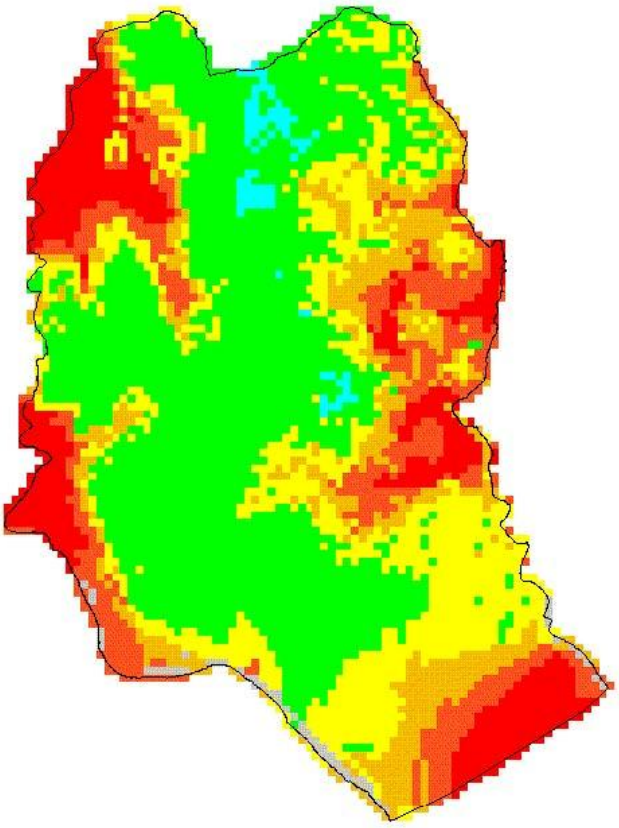
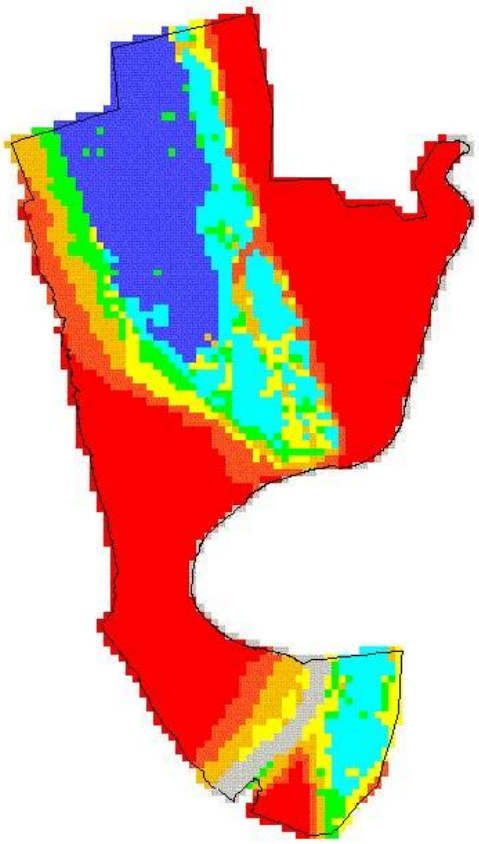


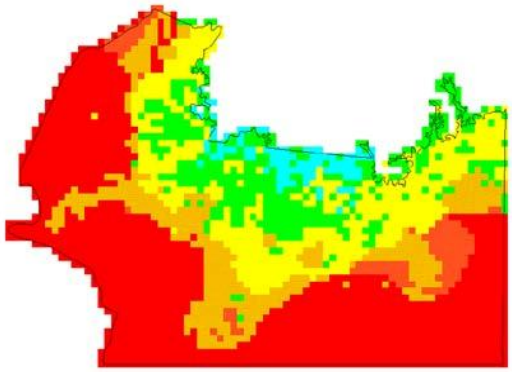
Ground Classification based on Vs30



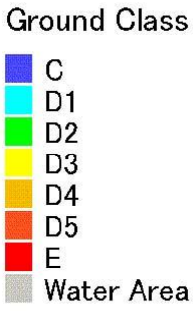
Dhaka



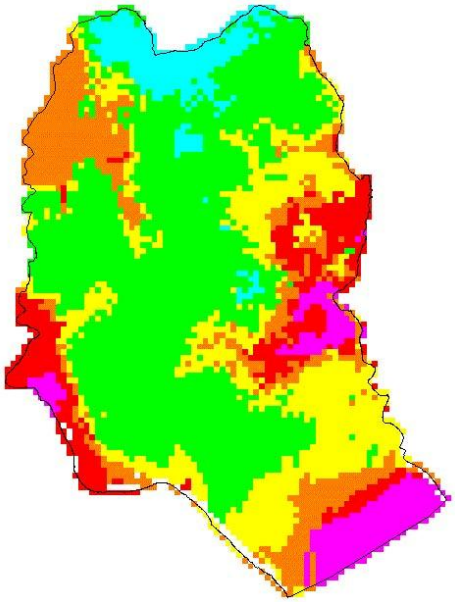
Chittagong



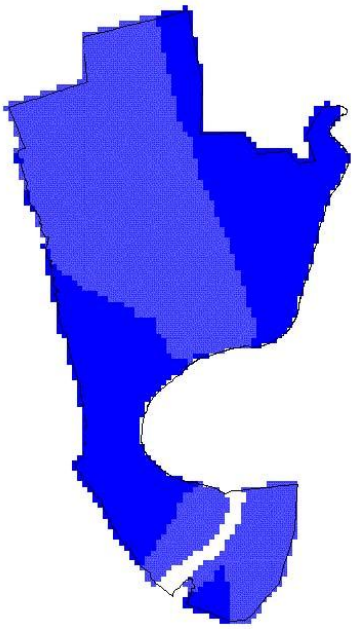
Sylhet



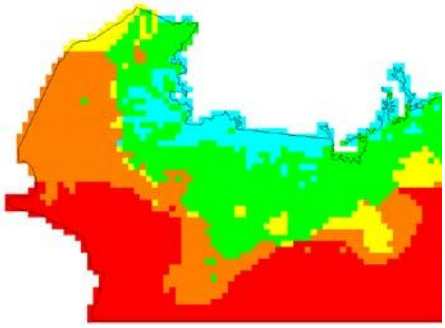
Amplification for PGA and Sa(0.3sec)



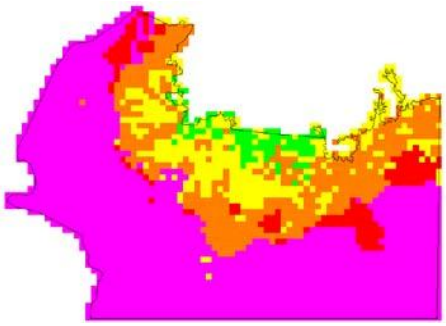
MF DF, PBF-1, PBF-2, PBF-3



PBF-1 MF, DF, PBF-2, PBF-3

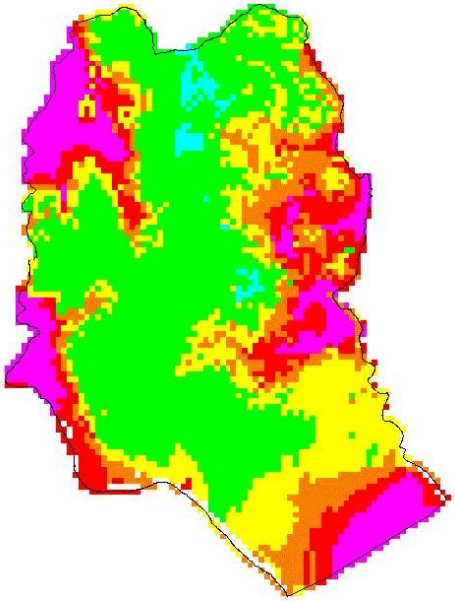


DF PBF-2

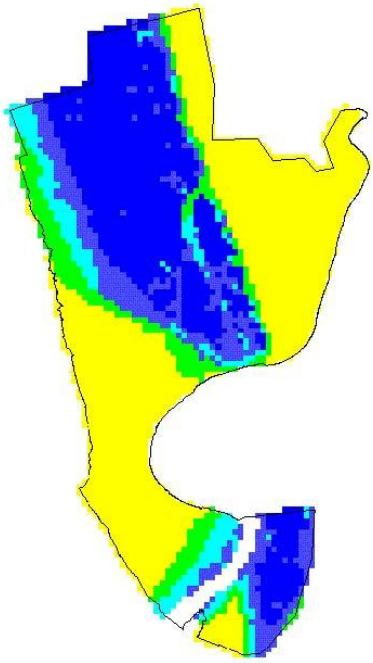


MF, PBF-1, PBF-3

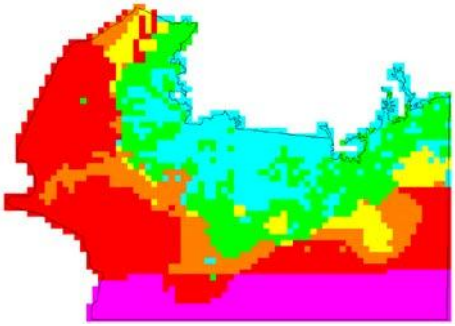
Amplification for PGV and Sa(1.0sec)



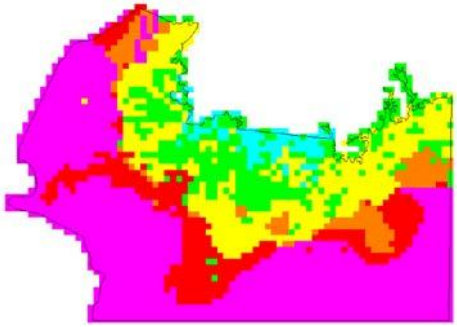
MF, DF, PBF-1, PBF-2, PBF-3



PBF-1 MF, DF, PBF-2, PBF-3



DF PBF-2

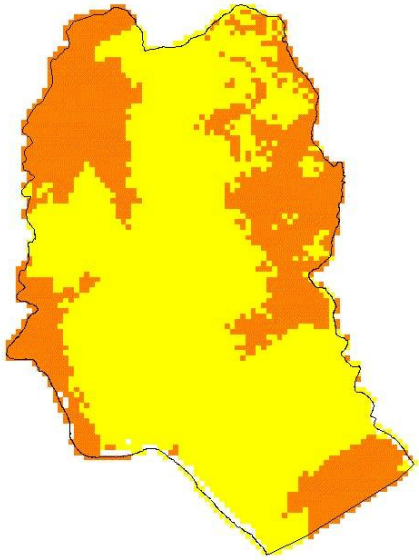


MF, PBF-1, PBF-3

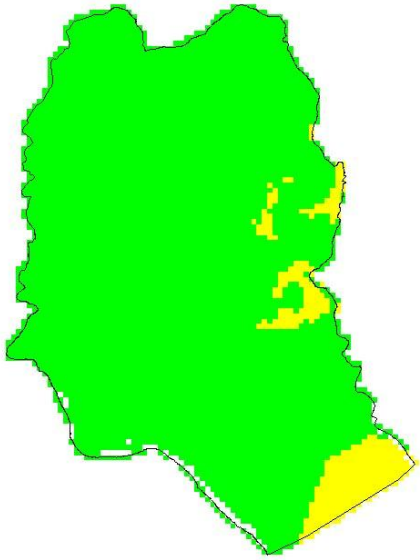
Long Period Amp.

- 3.2 – 3.5
- 3 – 3.3
- 2.7 – 3
- 2.4 – 2.7
- 2.1 – 2.4
- 1.8 – 2.1
- 1.5 – 1.8
- 1.3 – 1.5

PGA at Ground Surface in Dhaka

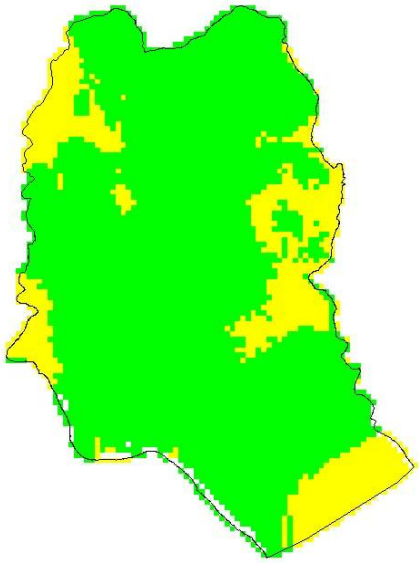


MF



DF

PBF-1



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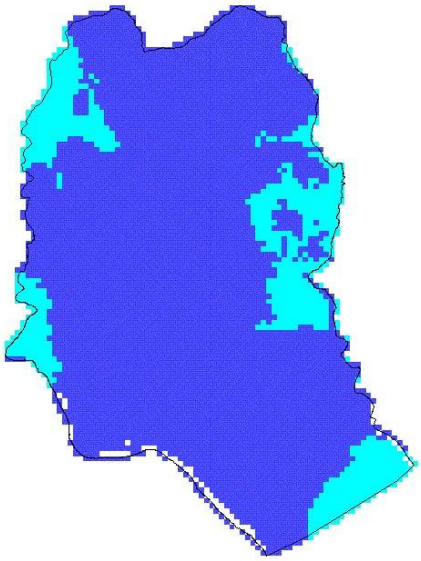
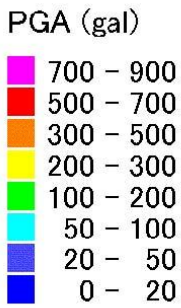
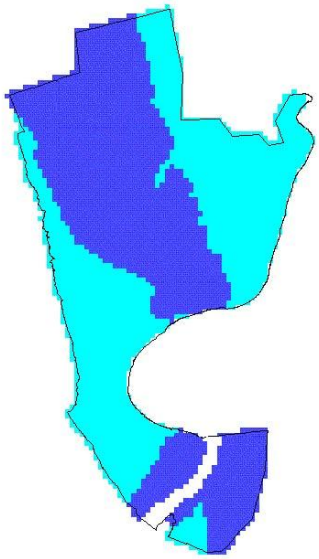


PBF-3



PGA at Ground Surface in Chittagong



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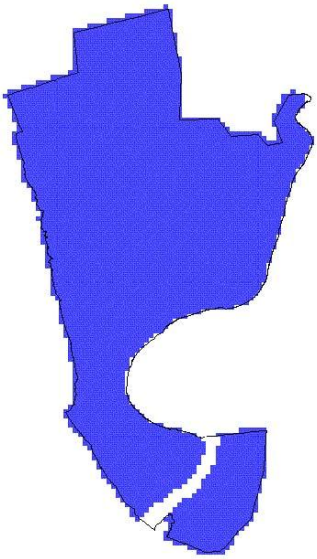

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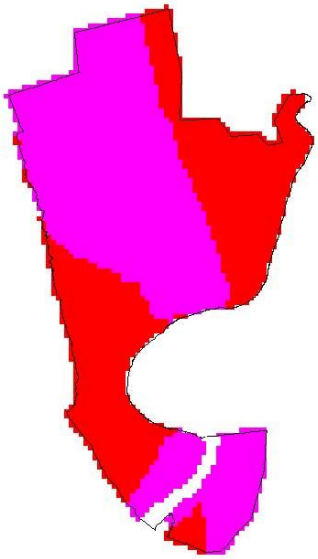
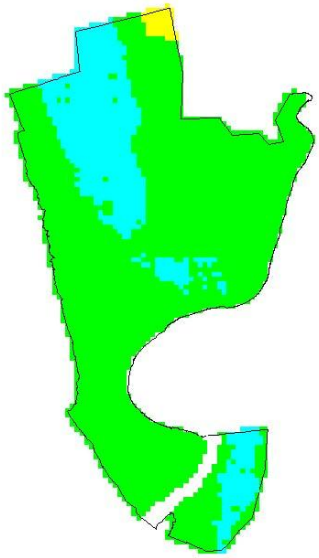


PBF-1



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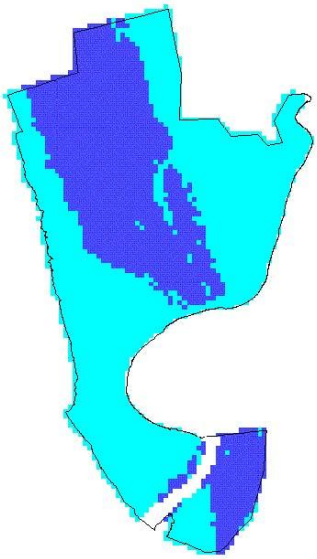

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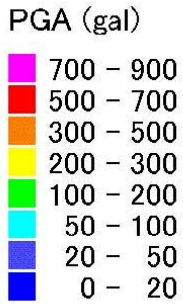
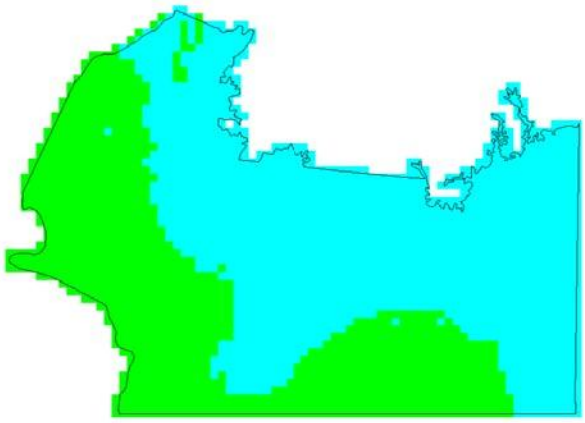


PGA at Ground Surface in Sylhet



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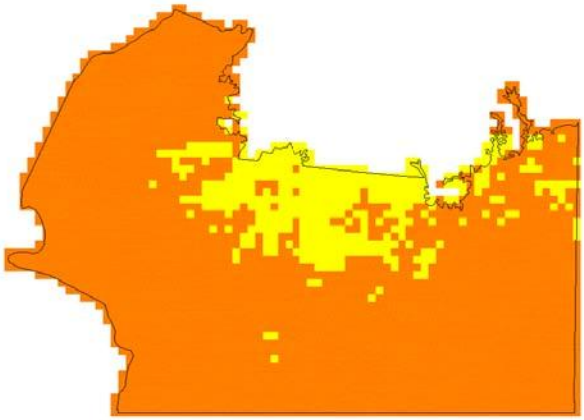

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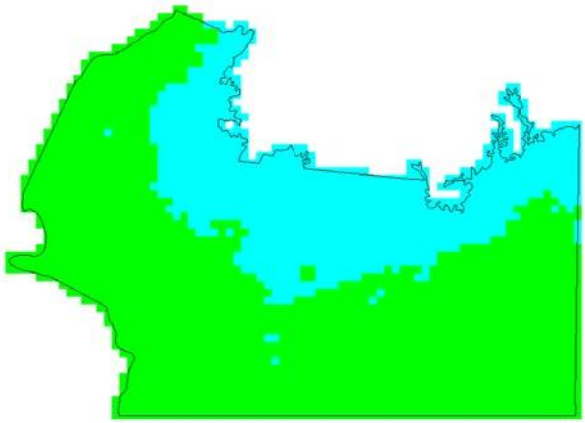

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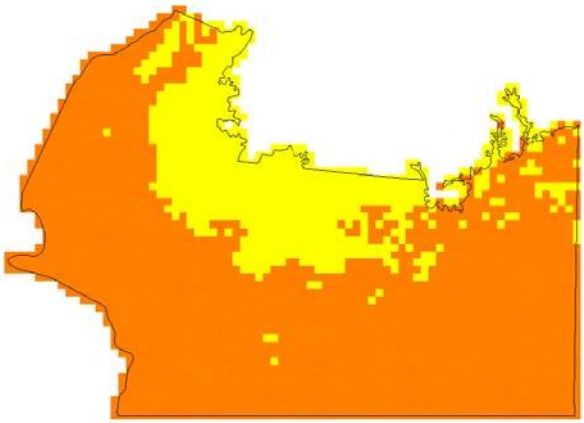

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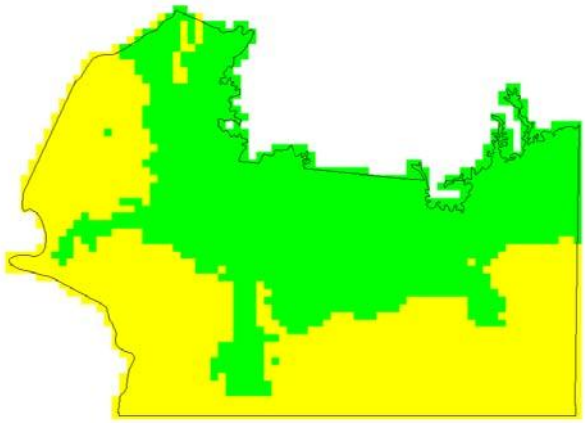

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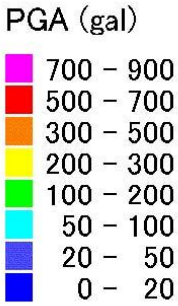
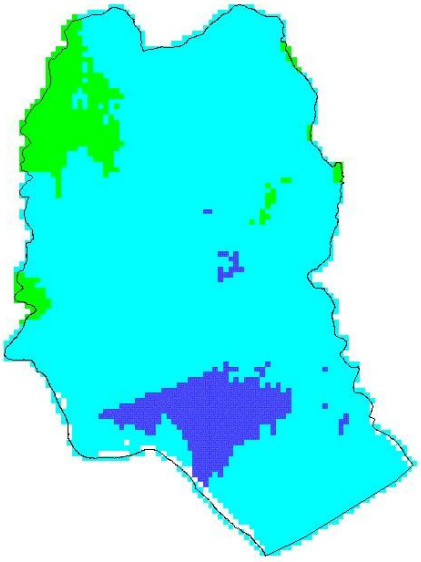


PGV at Ground Surface in Dhaka



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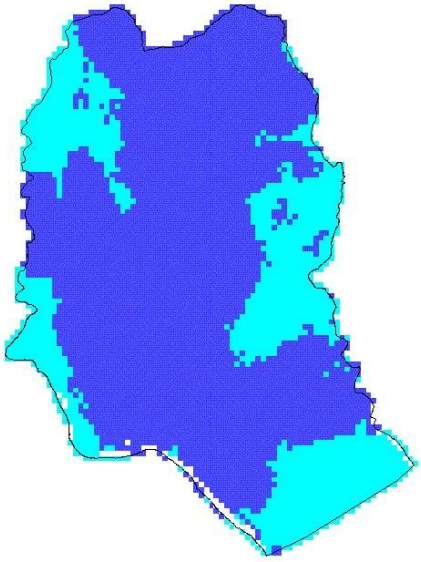

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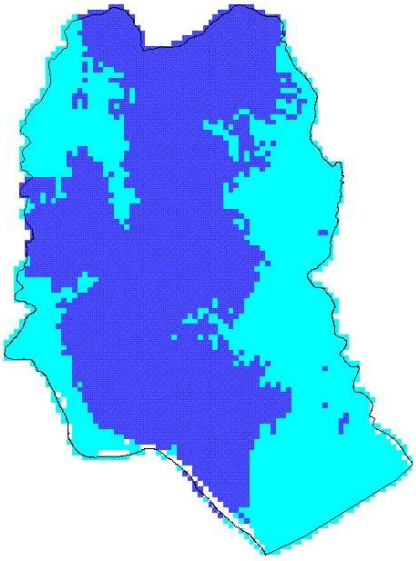
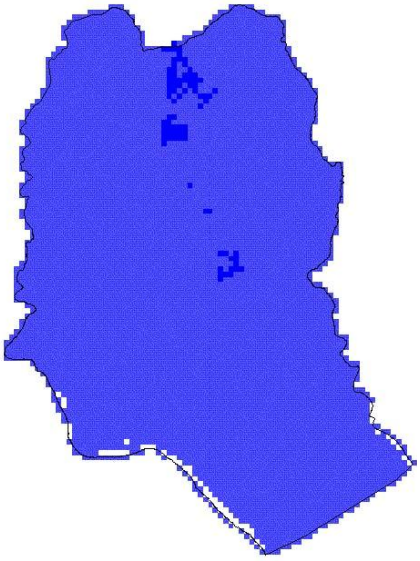


PBF-1



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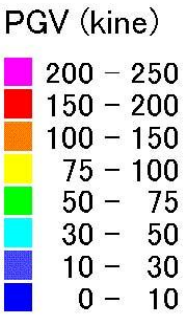
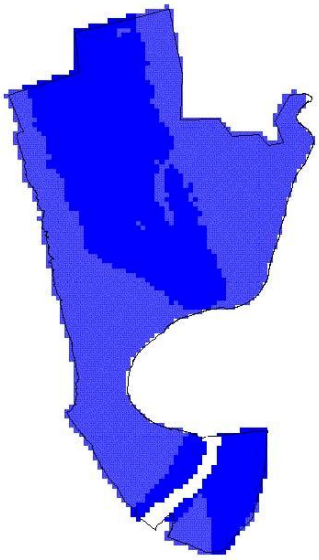
PBF-3



PGV at Ground Surface in Chittagong



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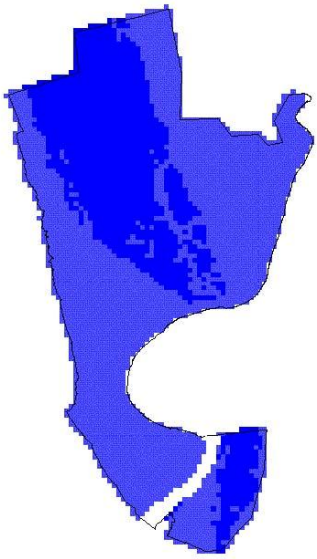

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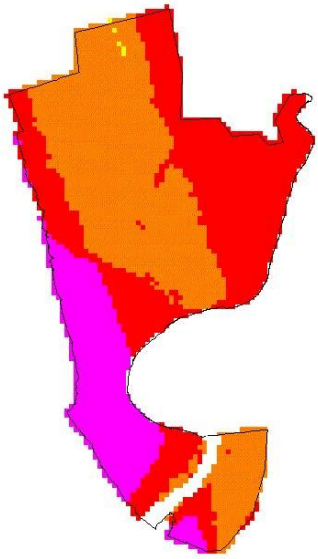

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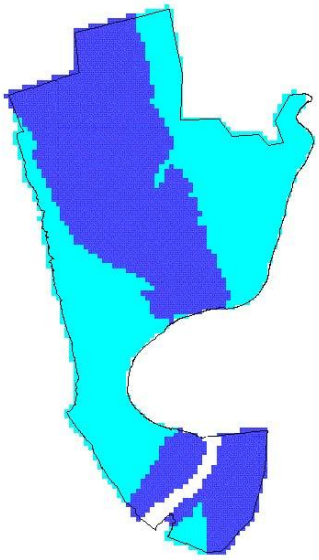

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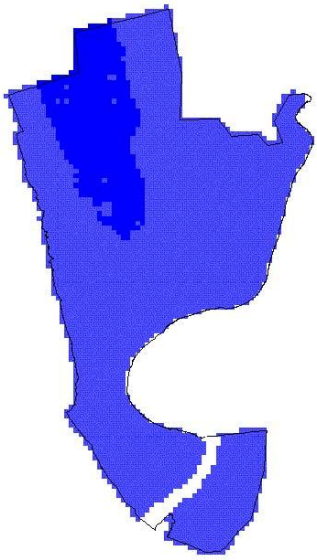

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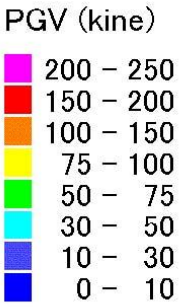
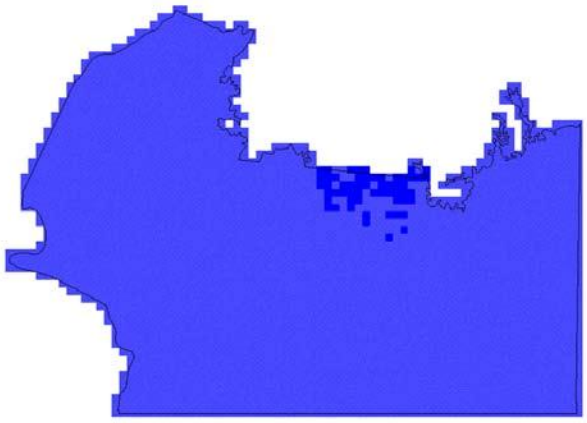


PGV at Ground Surface in Sylhet



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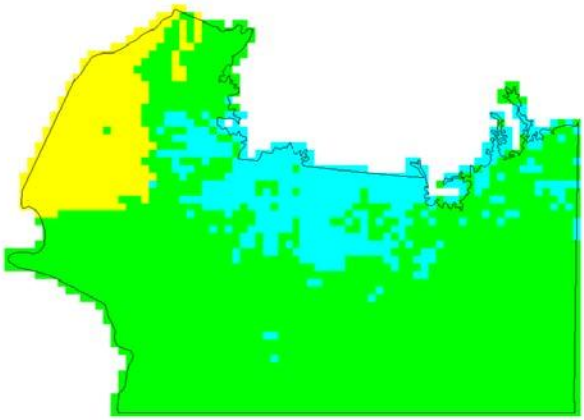

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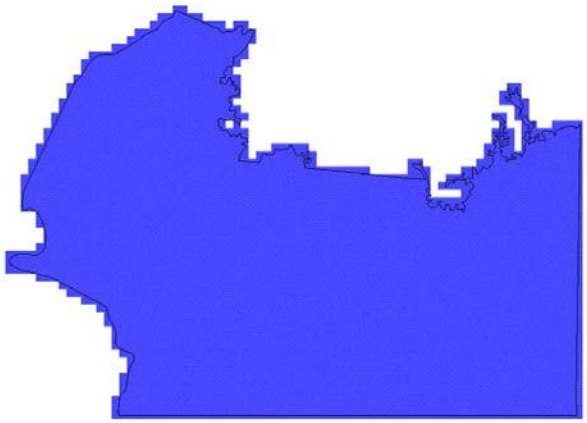

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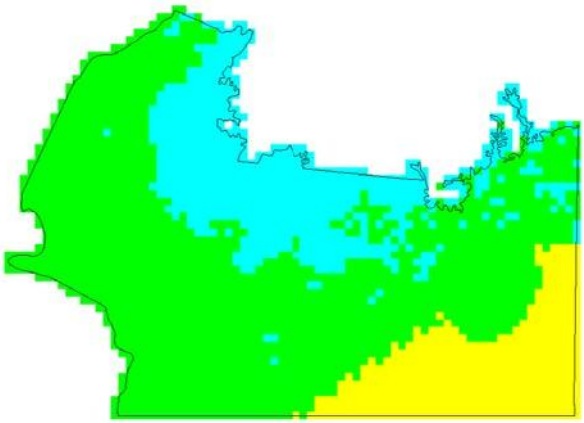

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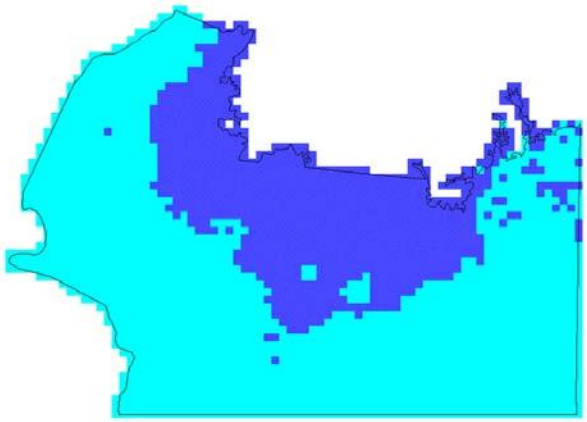

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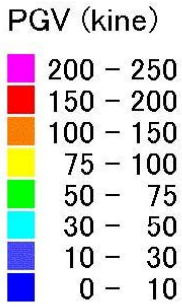
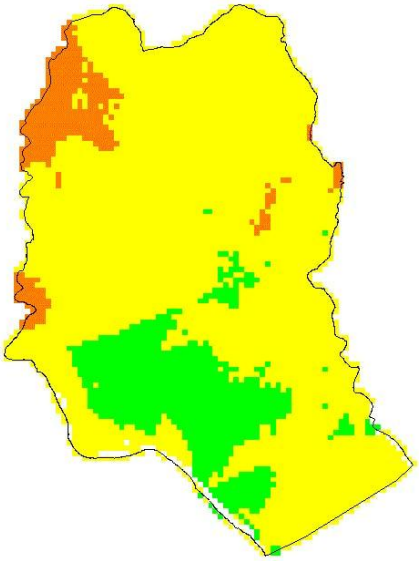


Sa (h=5%) for T=0.3 sec at Ground Surface in Dhaka



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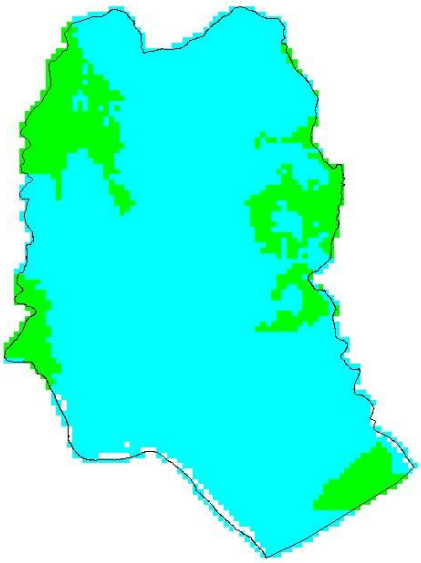

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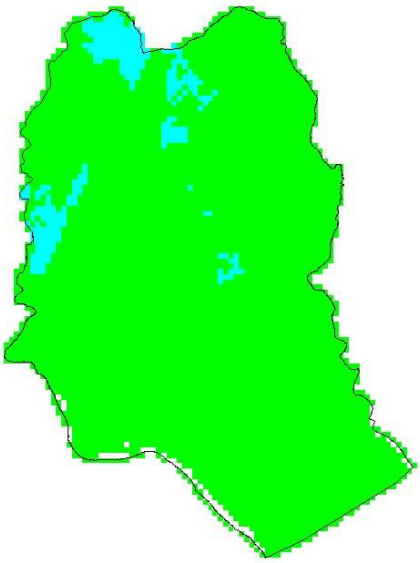

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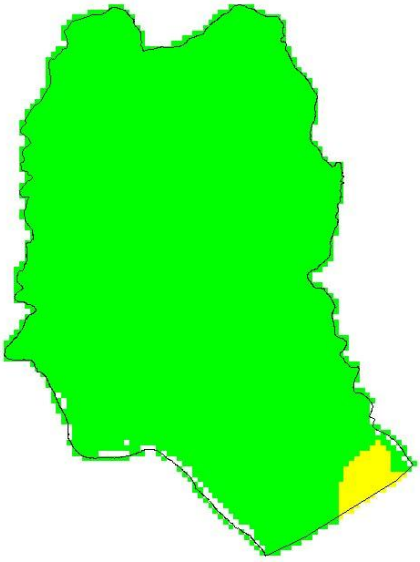

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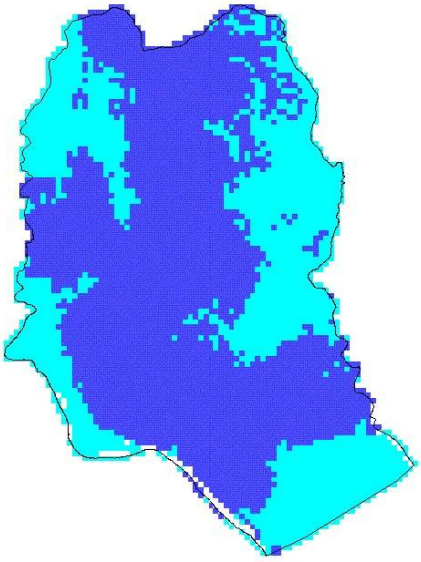

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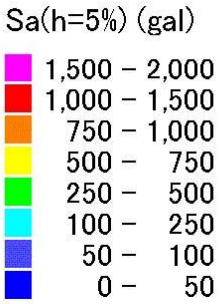
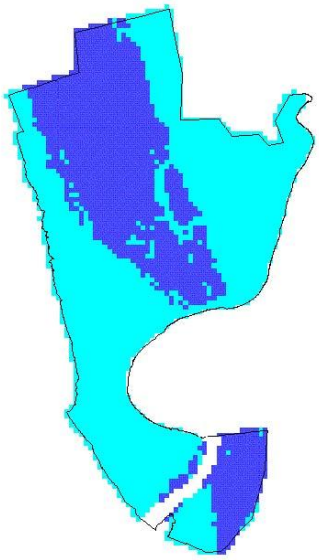


Sa (h=5%) for T=0.3 sec at Ground Surface in Chittagong



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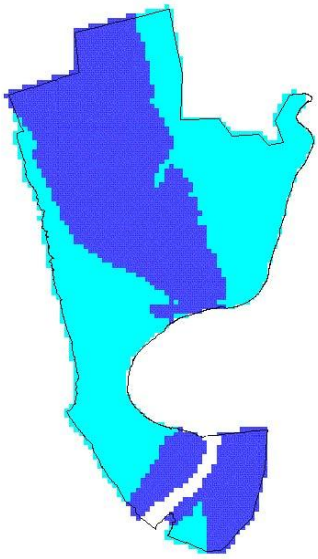

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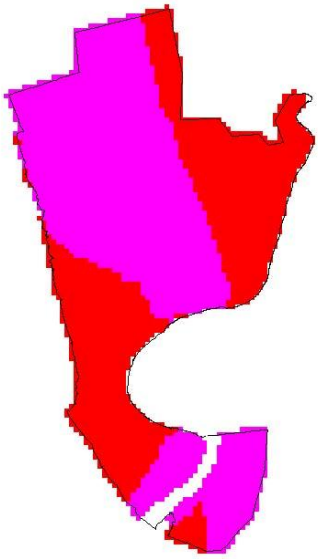

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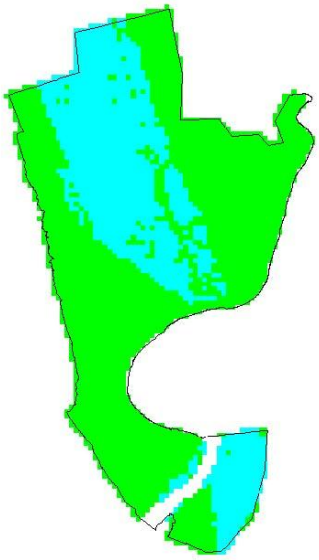

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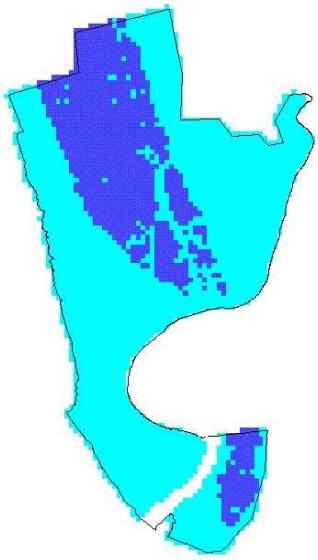

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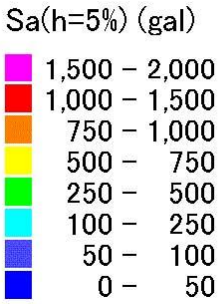
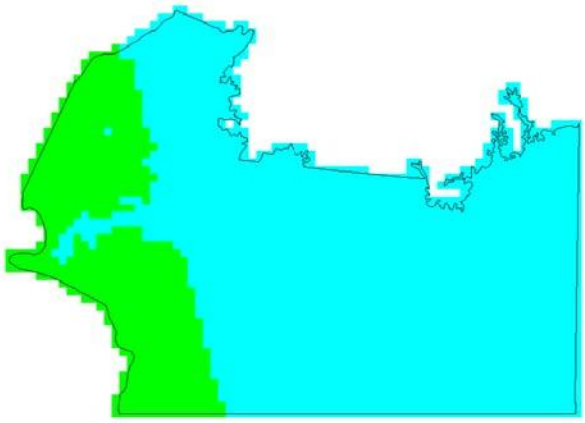


Sa (h=5%) for T=0.3 sec at Ground Surface in Sylhet



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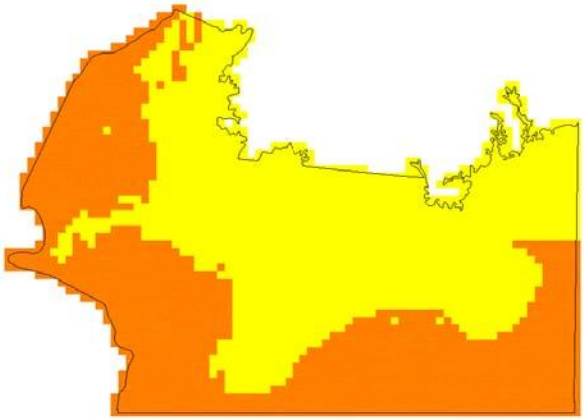

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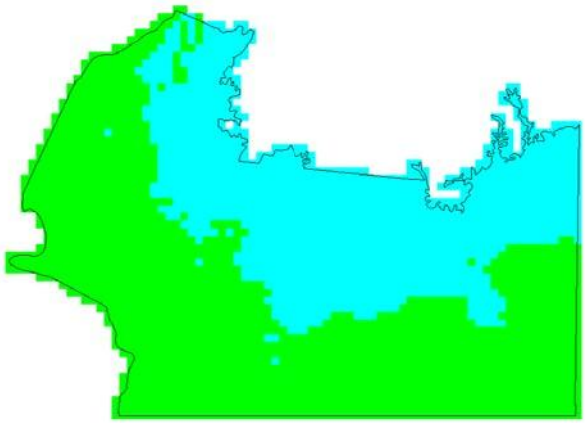

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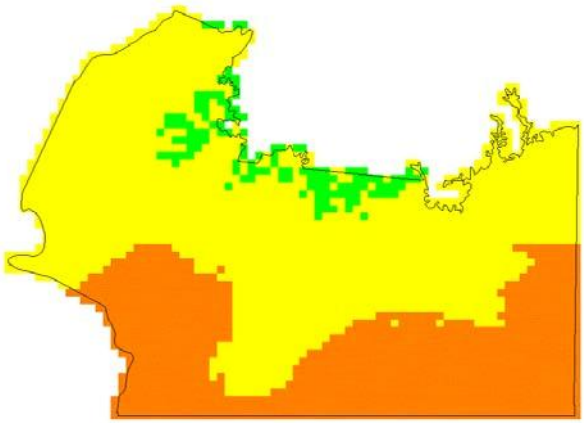

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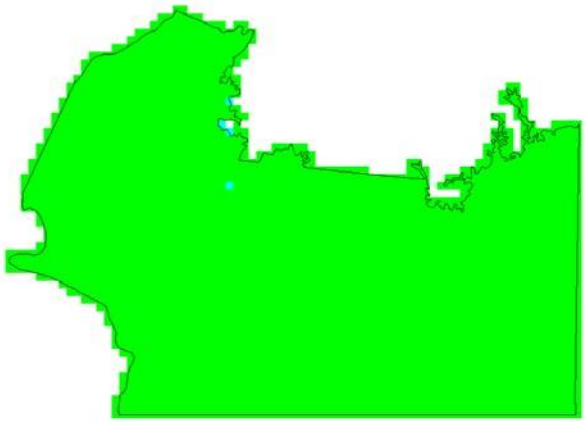

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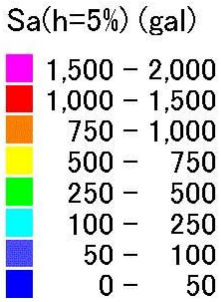
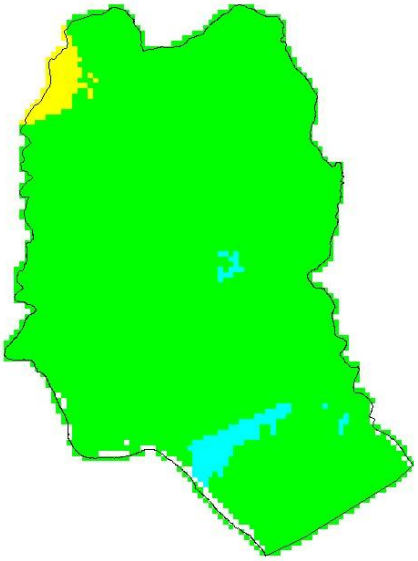


Sa (h=5%) for T=1.0 sec at Ground Surface in Dhaka



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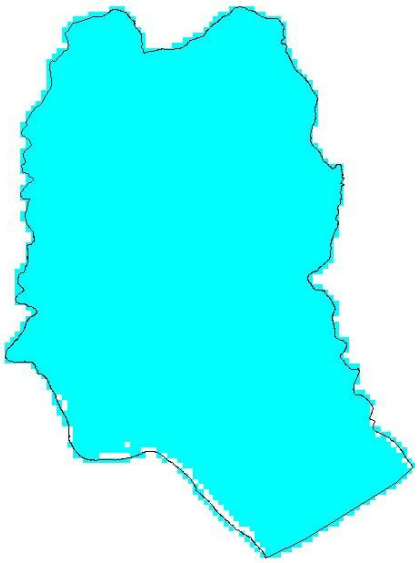

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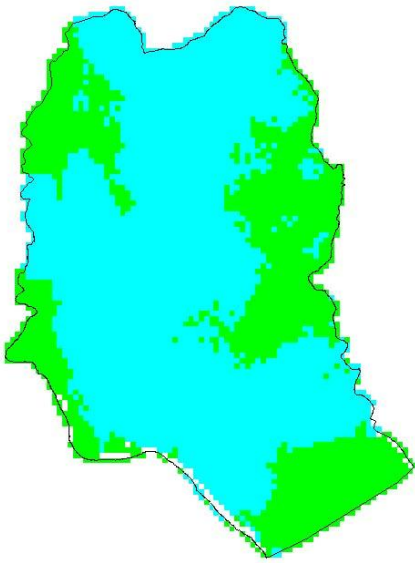

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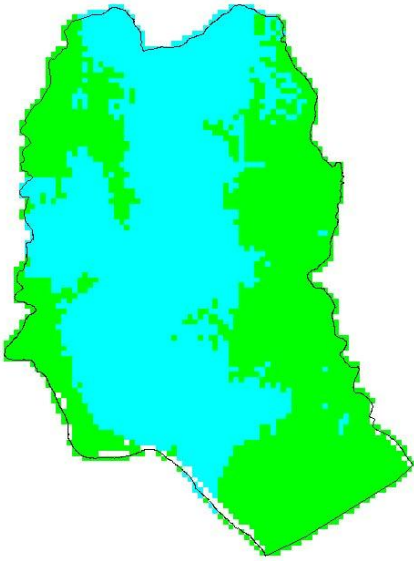

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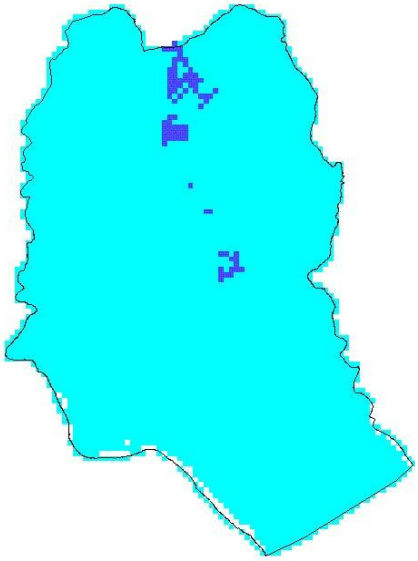

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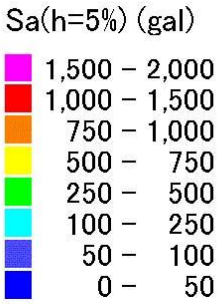
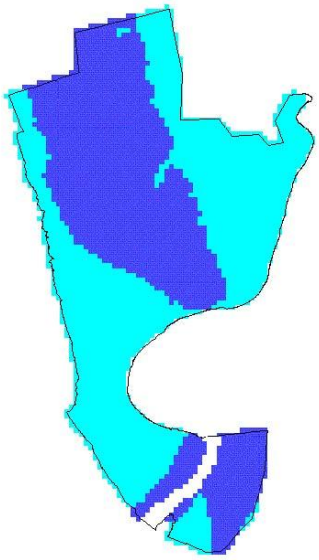


Sa (h=5%) for T=1.0 sec at Ground Surface in Chittagong



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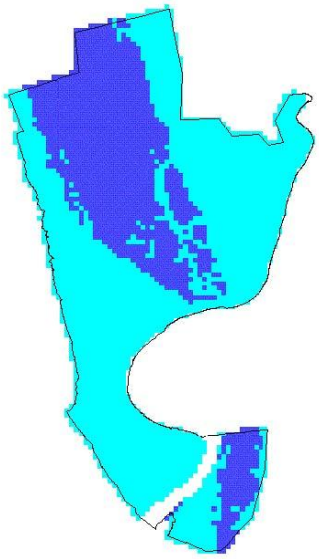

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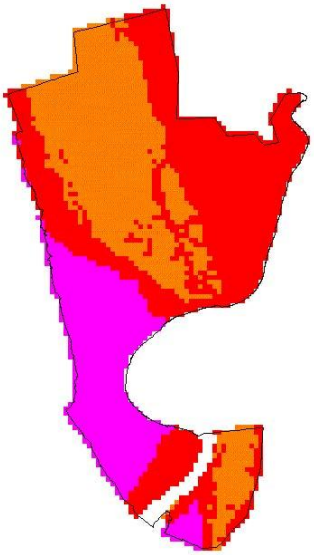

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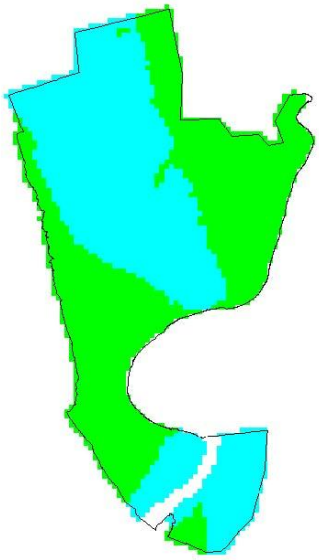

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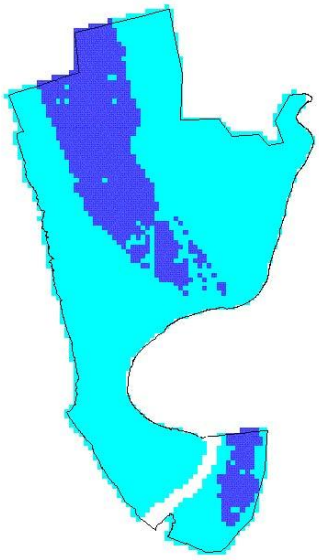

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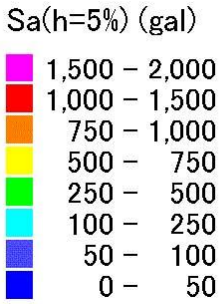
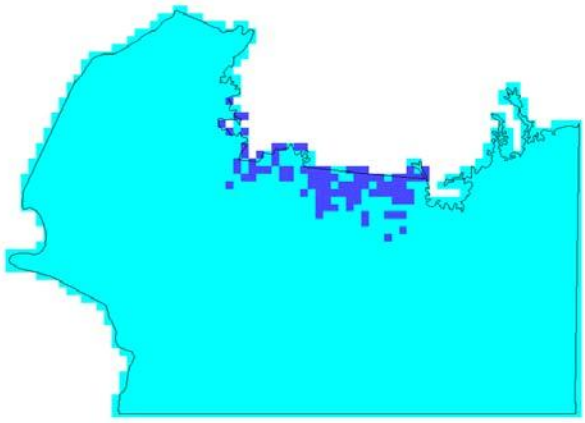


Sa (h=5%) for T=1.0 sec at Ground Surface in Sylhet



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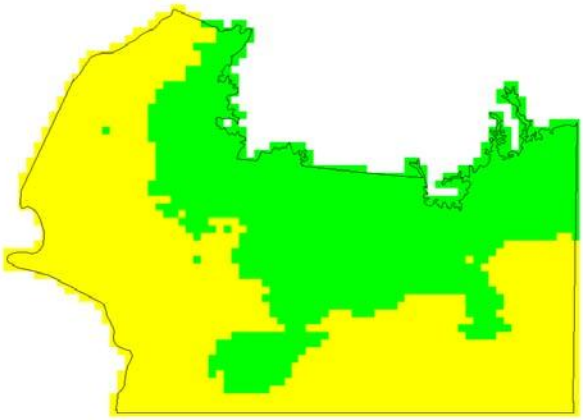

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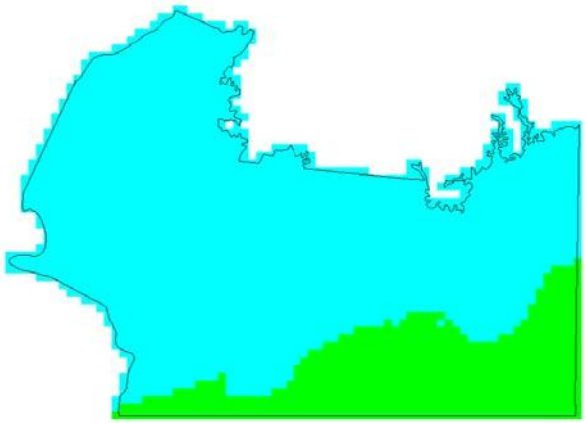

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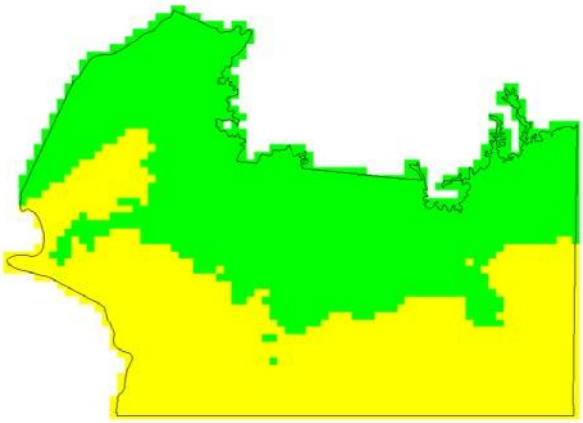

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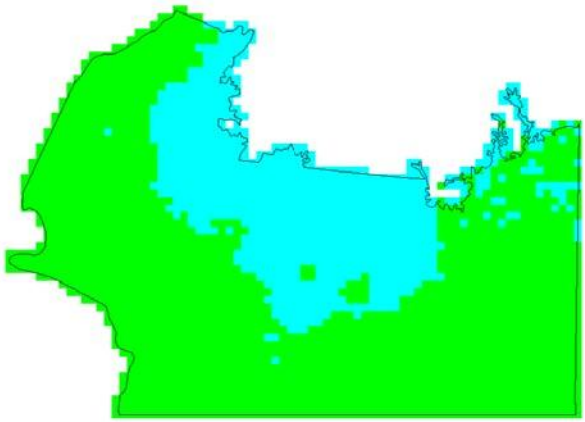

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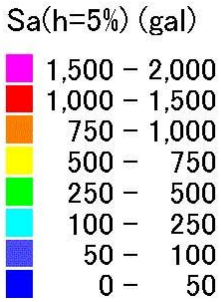
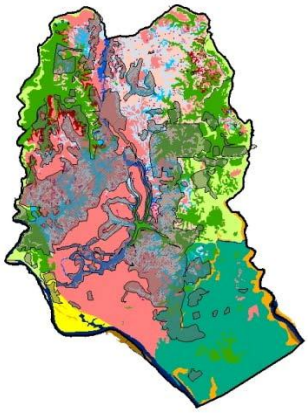
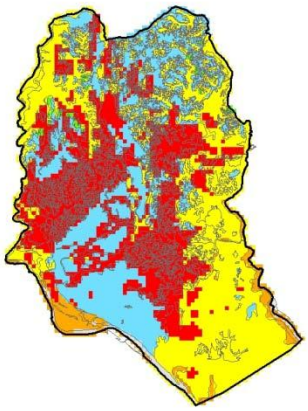


Fill Area

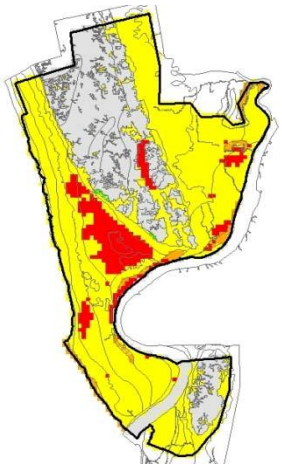
Liquefaction Susceptibility

Dhaka

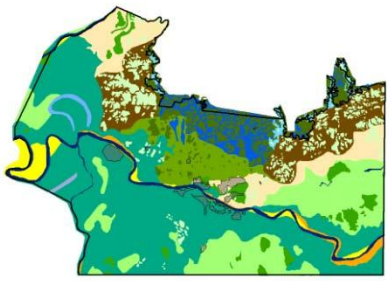


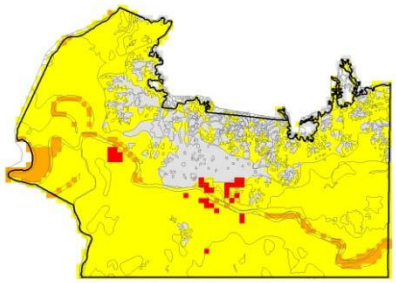


Chittagong



Sylhet





Legend

Fill Area

Liquefaction Susceptibility

None

Very Low

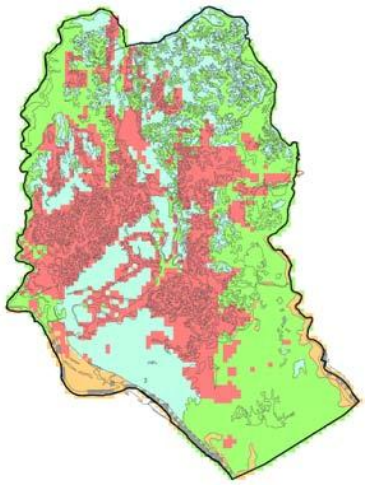
Low

Moderate

High

Very High

Liquefaction Probability for 5 Scenario Earthquakes in Dhaka



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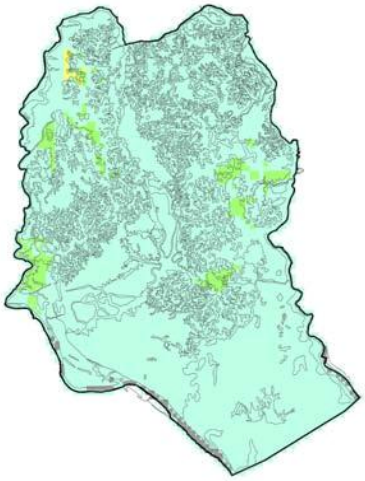

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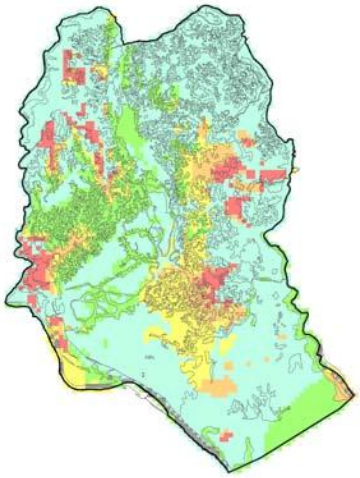

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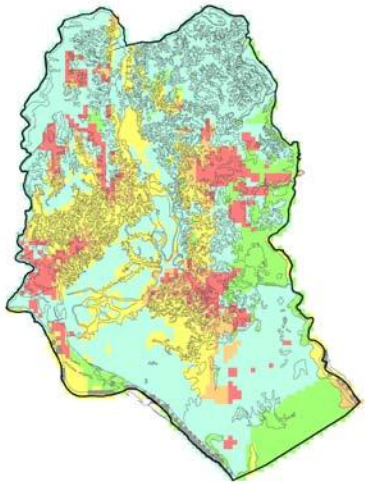

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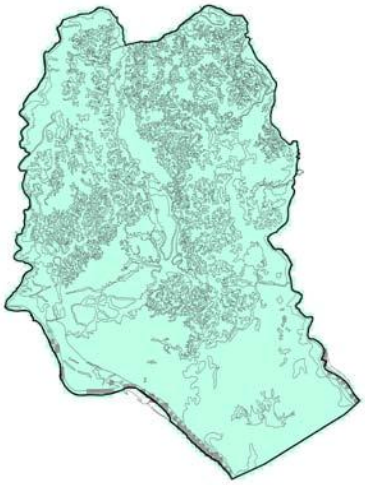

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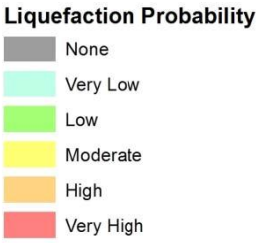
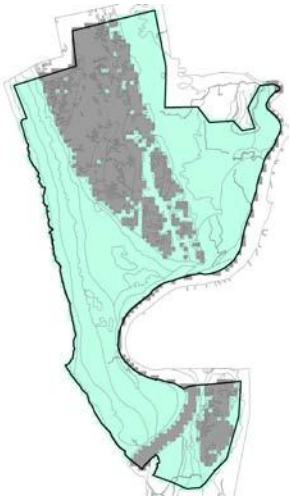


Liquefaction Probability for 5 Scenario Earthquakes in Chittagong



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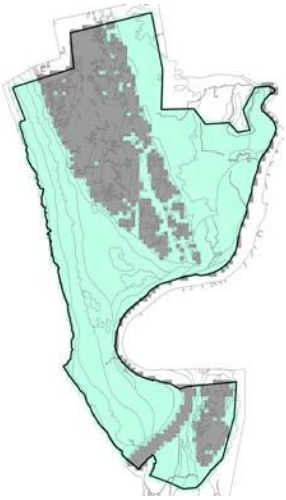

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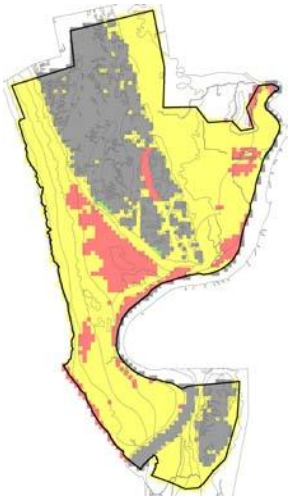

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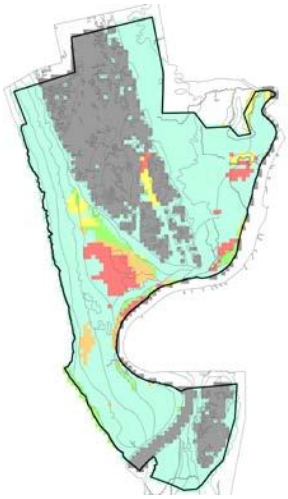

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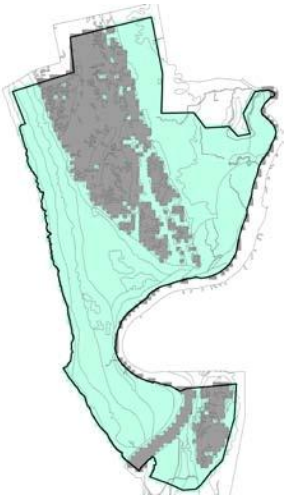

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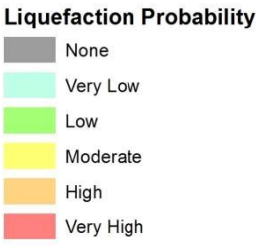
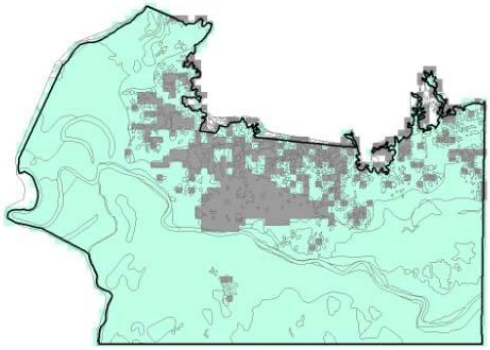


Liquefaction Probability for 5 Scenario Earthquakes in Sylhet



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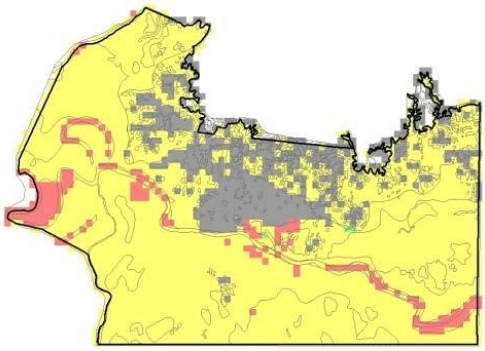

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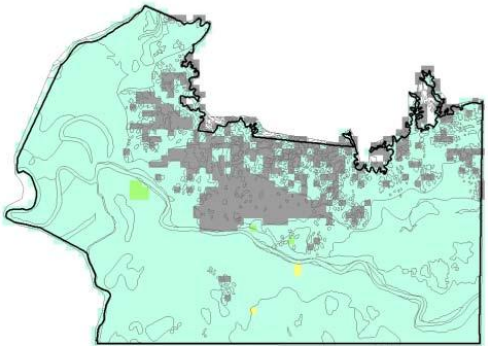

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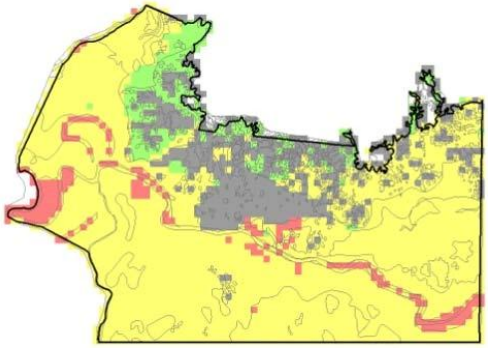

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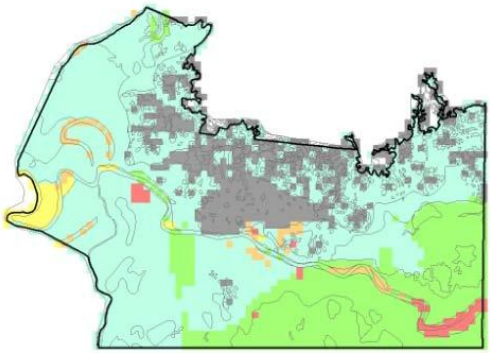
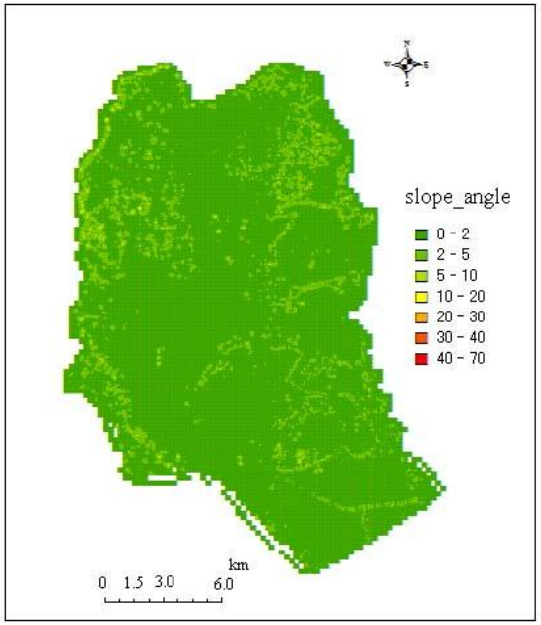


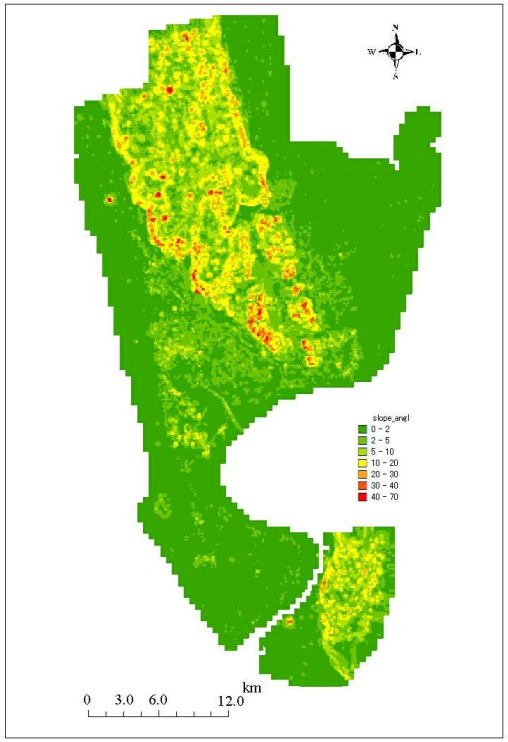
PBF-3

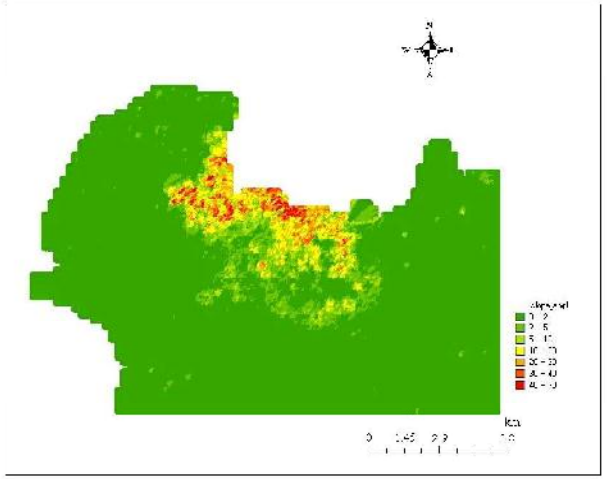
Liquefaction Probability

- None
- Very Low
- Low
- Moderate
- High
- Very High

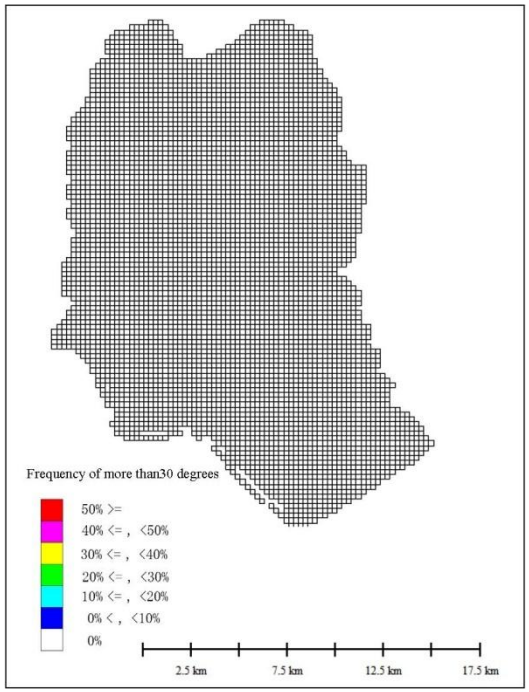
Distribution of Slope Angle

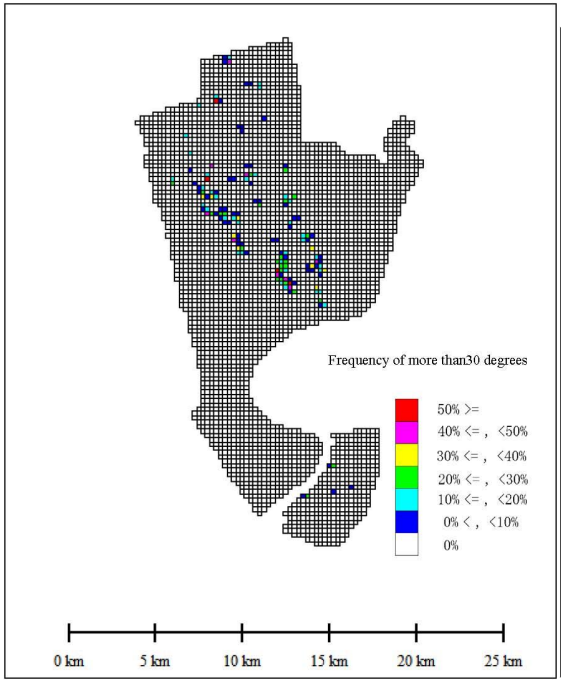


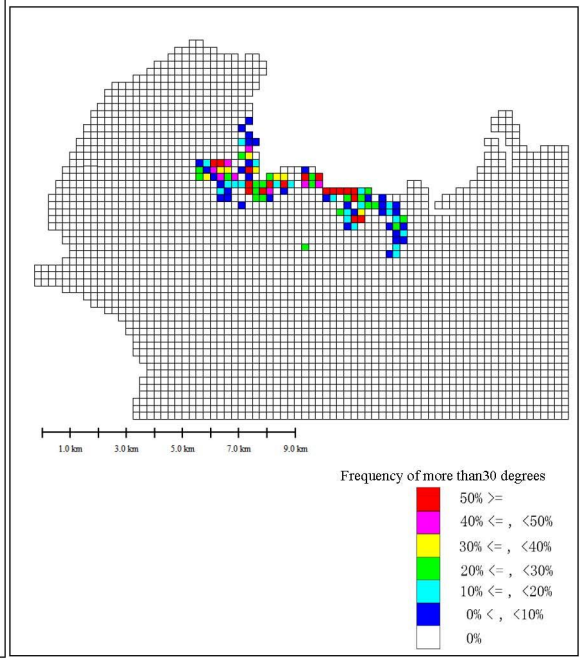




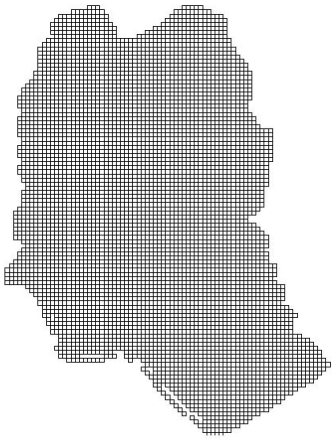
Frequency of more than 30 Degrees of the Slope Angle per One Grid



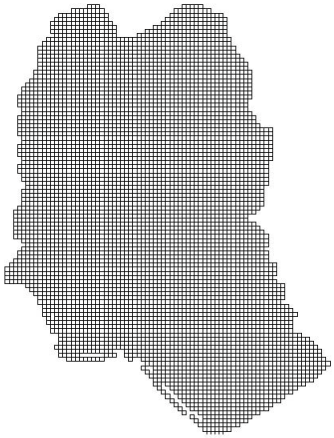




The Frequency of Fs<=1.2 by Wilson's Method in Dhaka



MF



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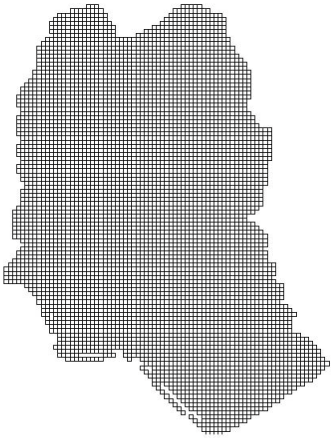

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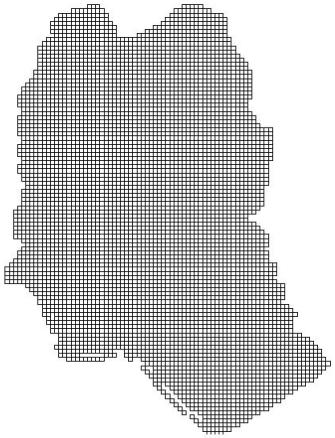

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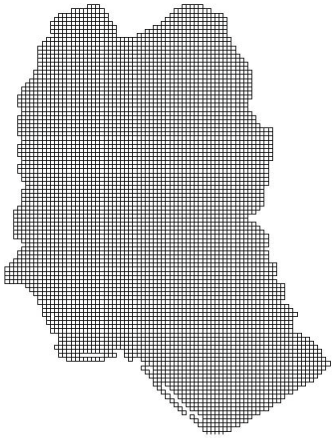

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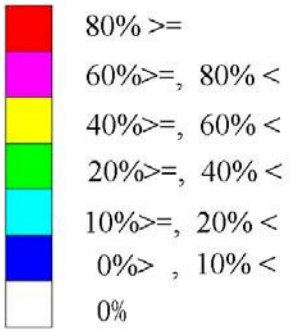
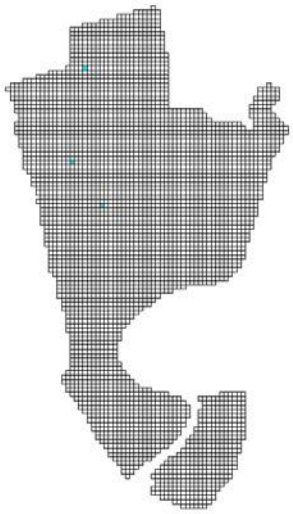


Frequency of Fs<=1.2

The Frequency of Fs<=1.2 by Wilson's Method in Chittagong



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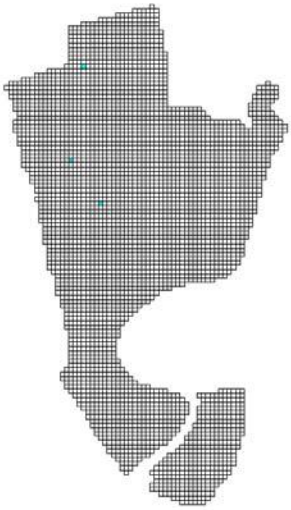

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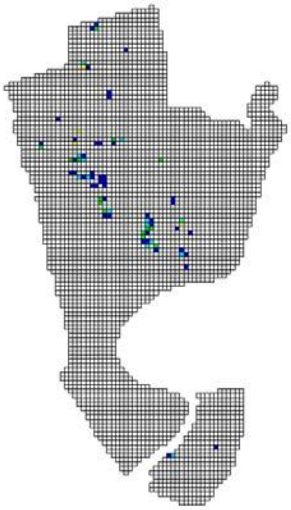

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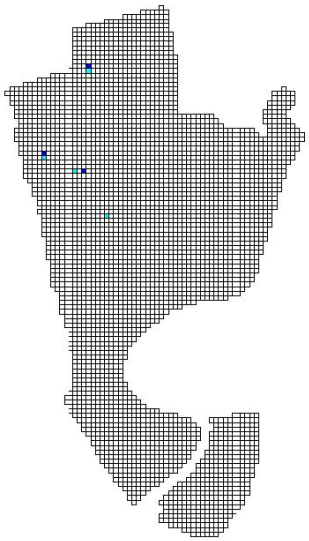

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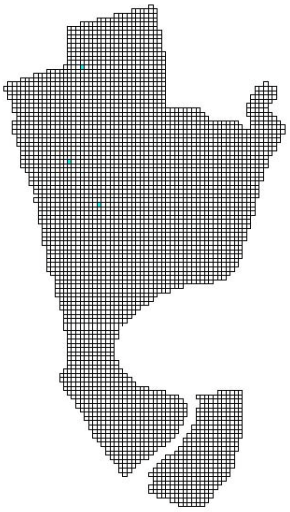

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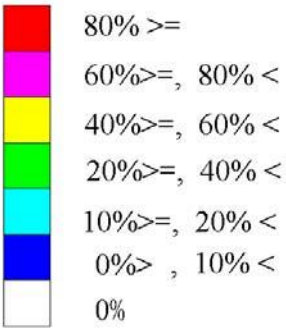
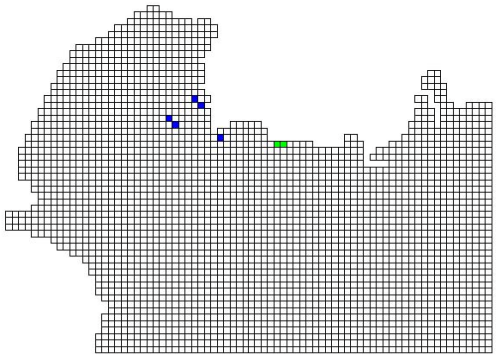


Frequency of Fs<=1.2

The Frequency of Fs<=1.2 by Wilson's Method in Sylhet



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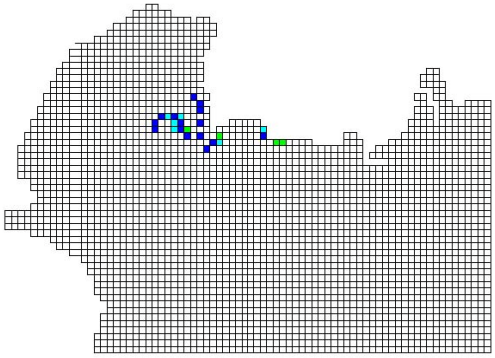

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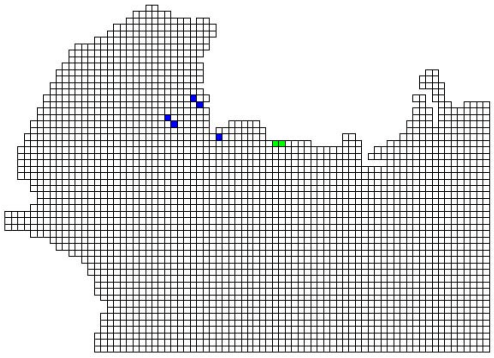

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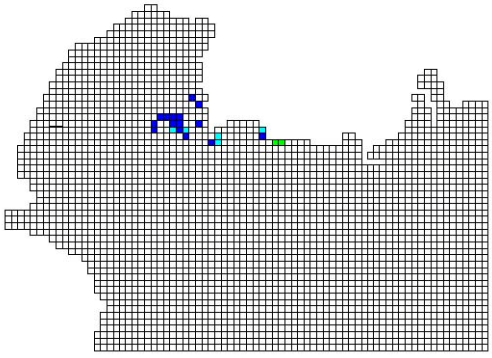

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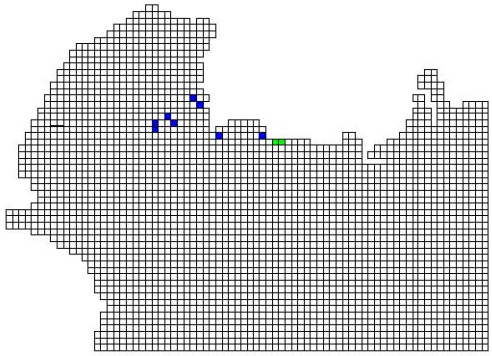

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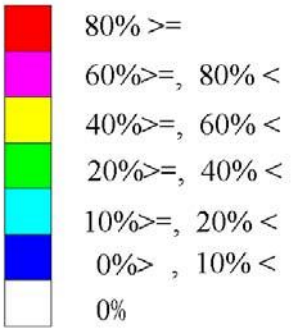
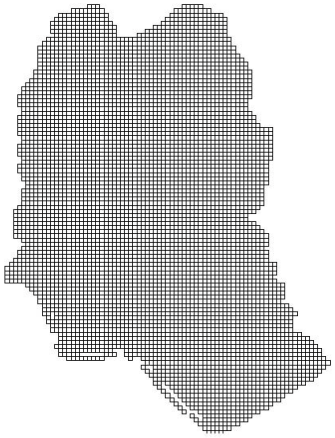


Frequency of Fs<=1.2

The Frequency of Fs<=1.2 by Koppula's Method in Dhaka



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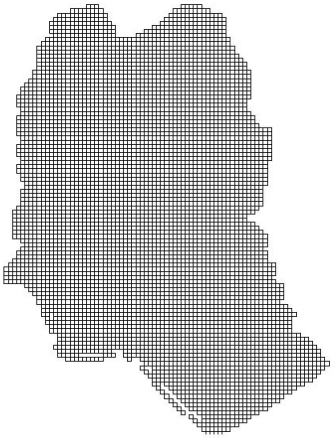

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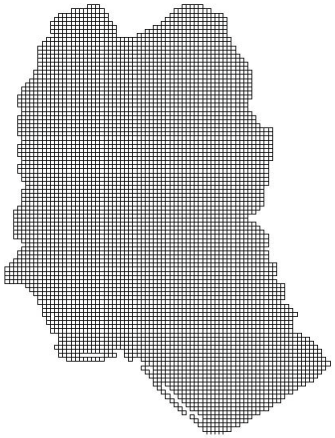

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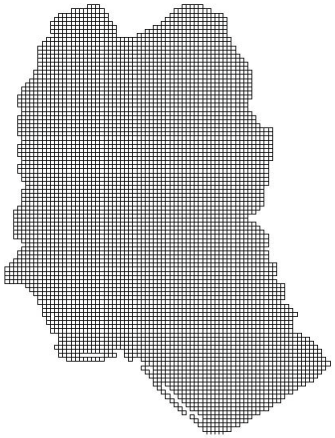

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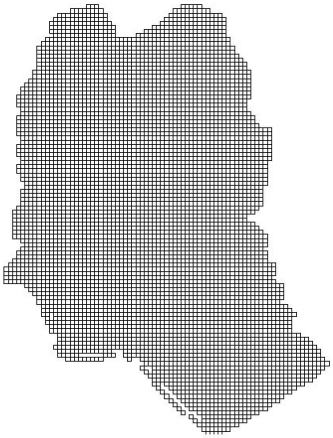

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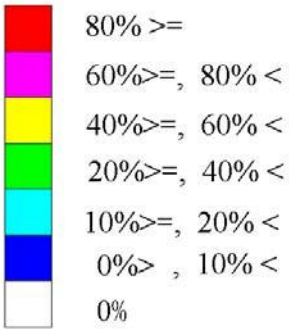
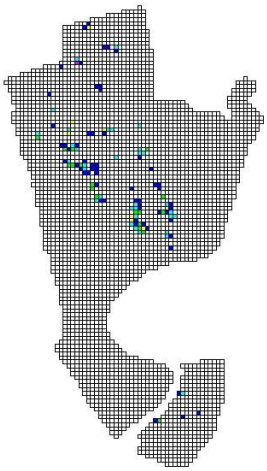


Frequency of Fs<=1.2

The Frequency of Fs<=1.2 by Koppula's Method in Chittagong



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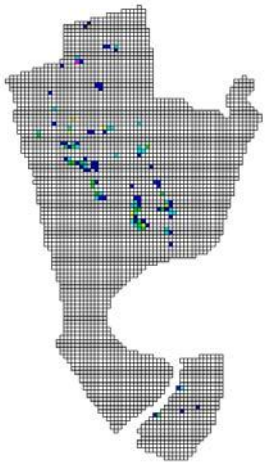

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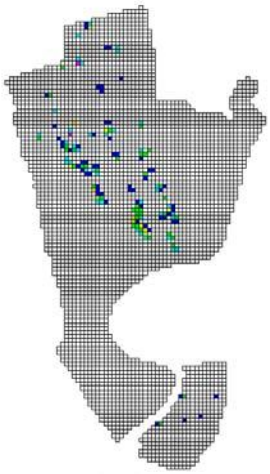

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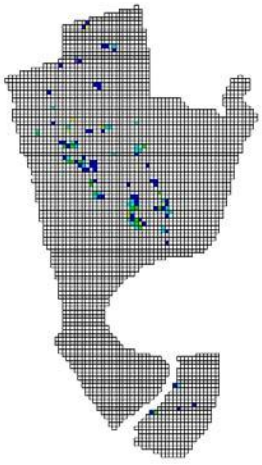

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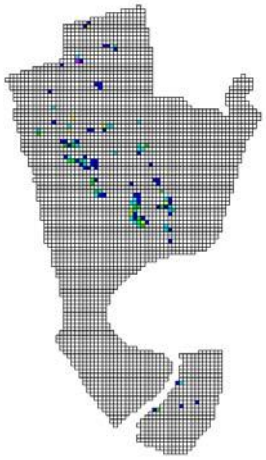
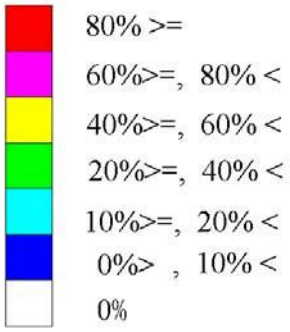
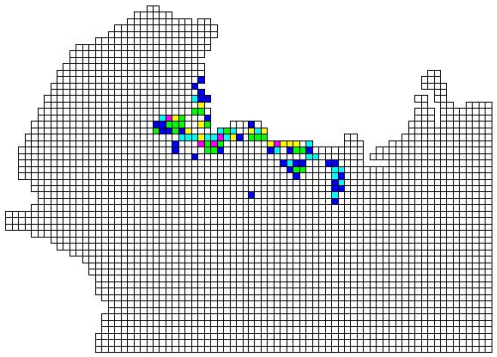


PBF-3



Frequency of Fs<=1.2

The Frequency of Fs<=1.2 by Koppula's Method in Sylhet



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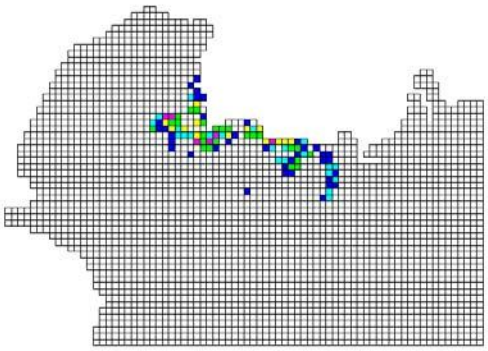

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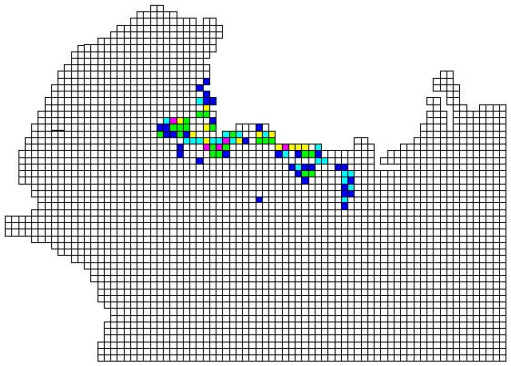

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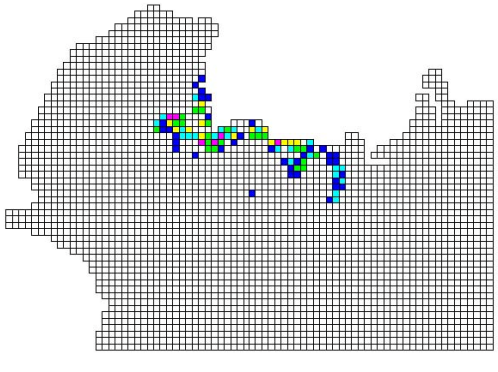

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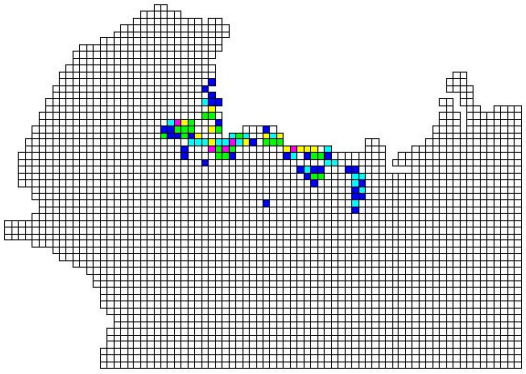
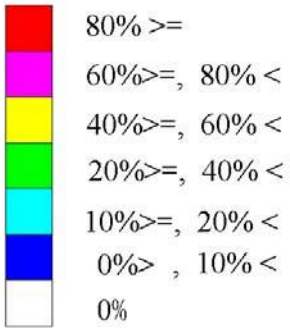
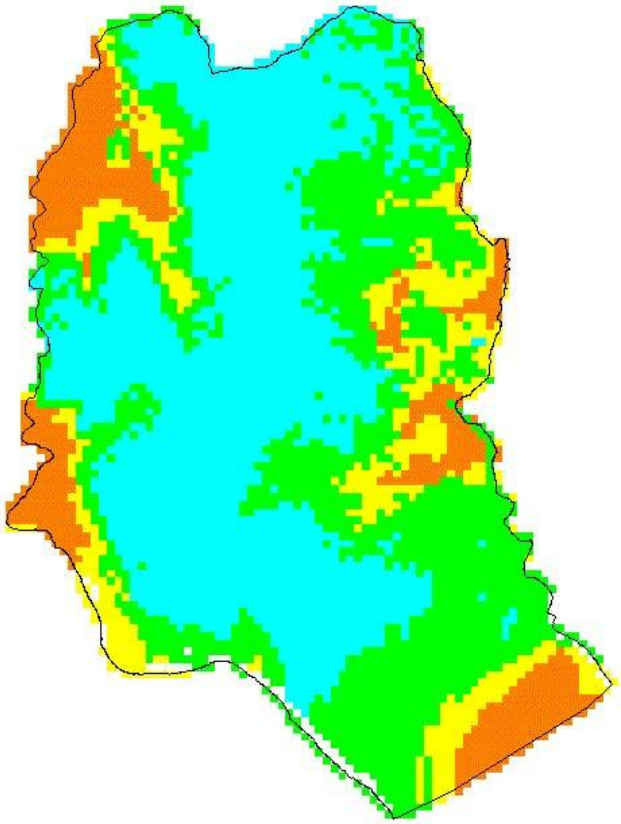




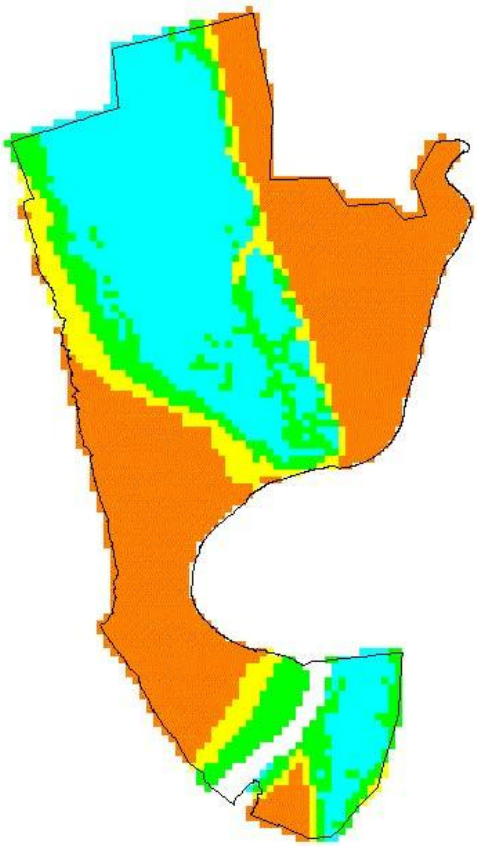
PBF-3

Frequency of Fs<=1.2

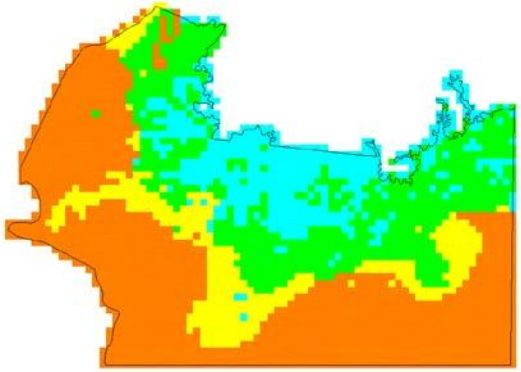
PGA at Ground Surface for M6 Earthquake occurring directly Underneath



Dhaka



Chittagong

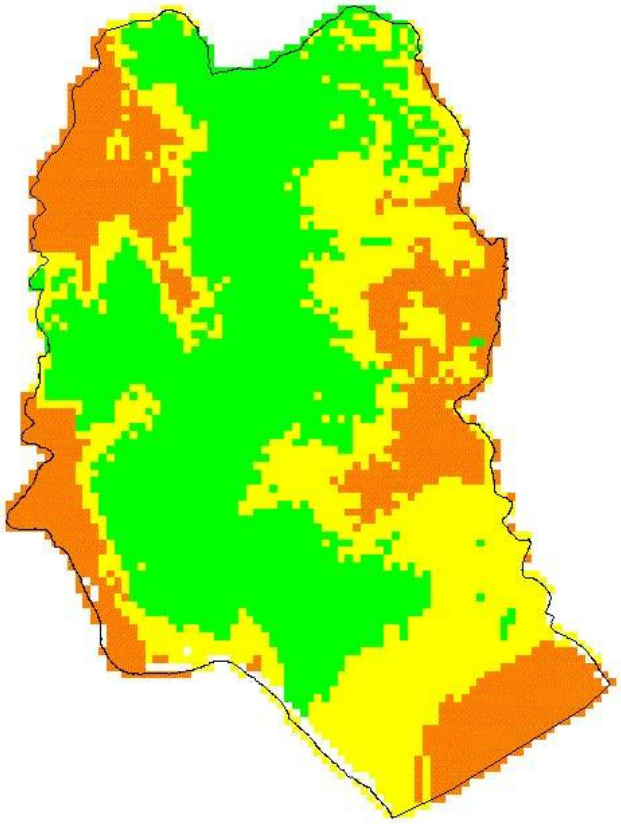


Sylhet

PGA (gal)

- 450 – 500
- 400 – 450
- 350 – 400
- 300 – 350

PGV at Ground Surface for M6 Earthquake occurring directly Underneath



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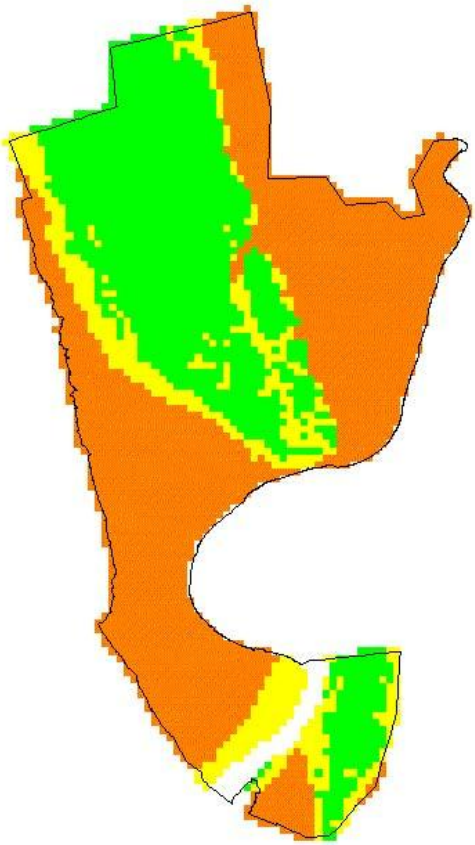
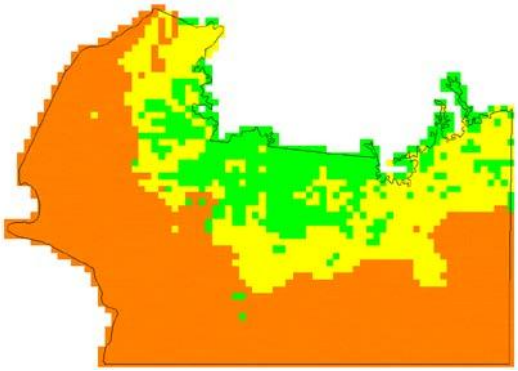


Chittagong



Sylhet

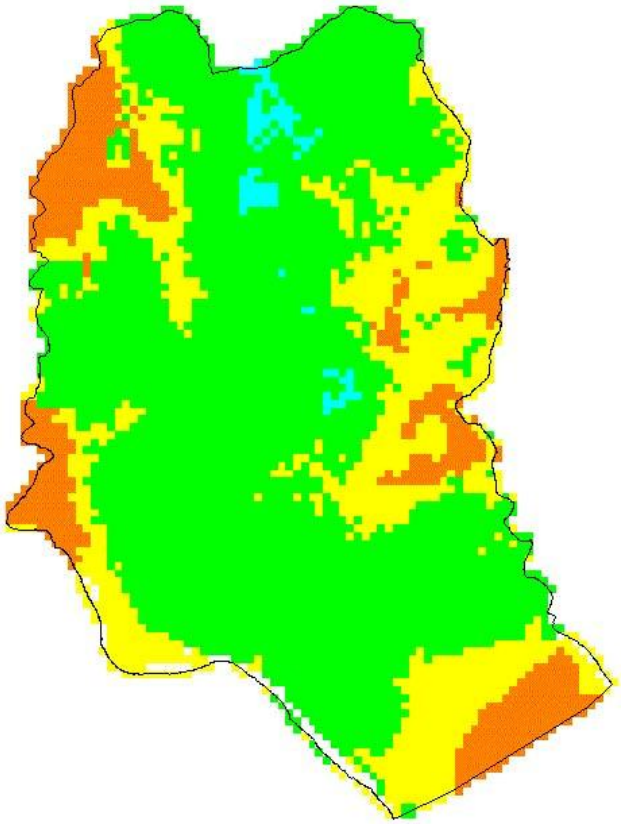
PGV (kine)

40 – 50

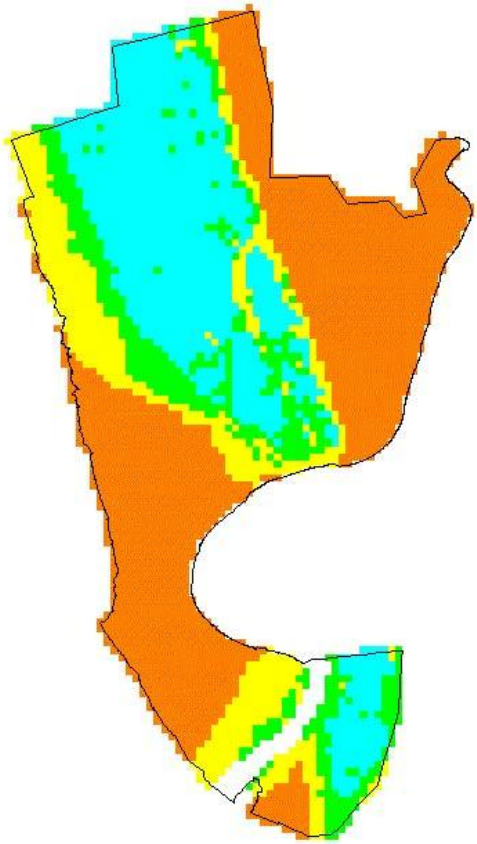
30 – 40

20 – 30

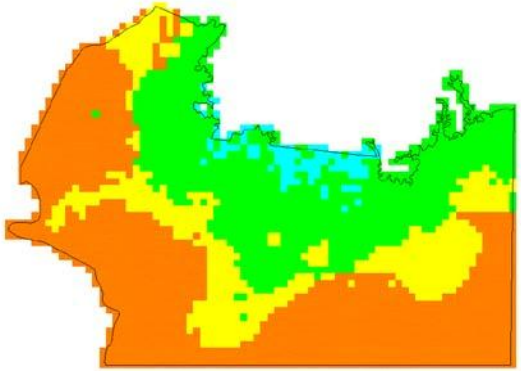
Sa(h=5%) for T=0.3 sec at Ground Surface for M6 Earthquake occurring directly Underneath



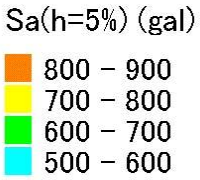
Dhaka



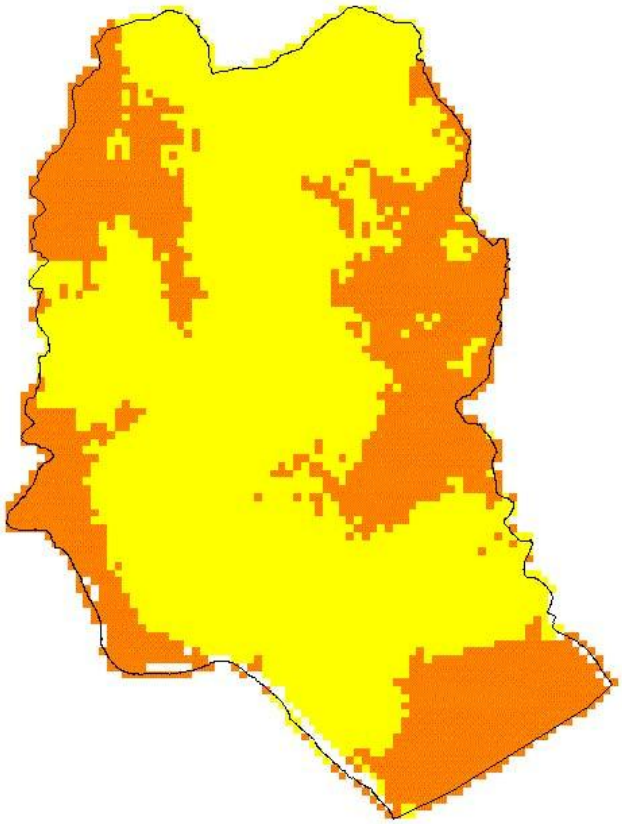
Chittagong



Sylhet



Sa(h=5%) for T=1.0 sec at Ground Surface for M6 Earthquake occurring directly Underneath



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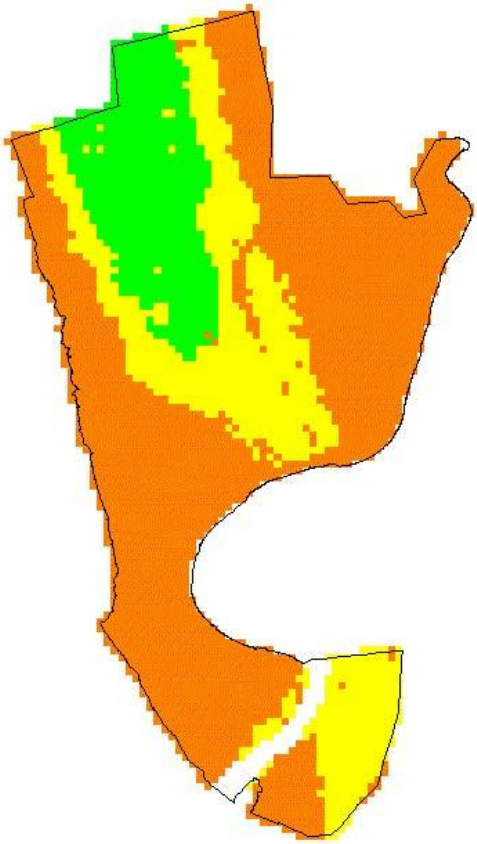
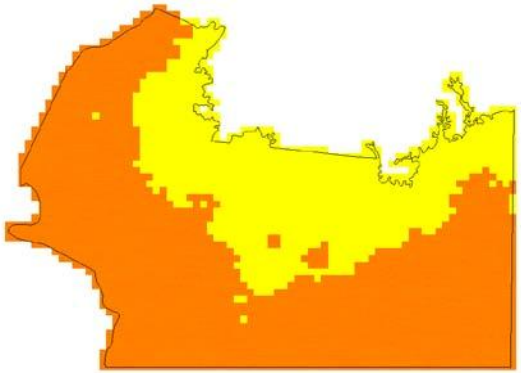


Chittagong



Sylhet

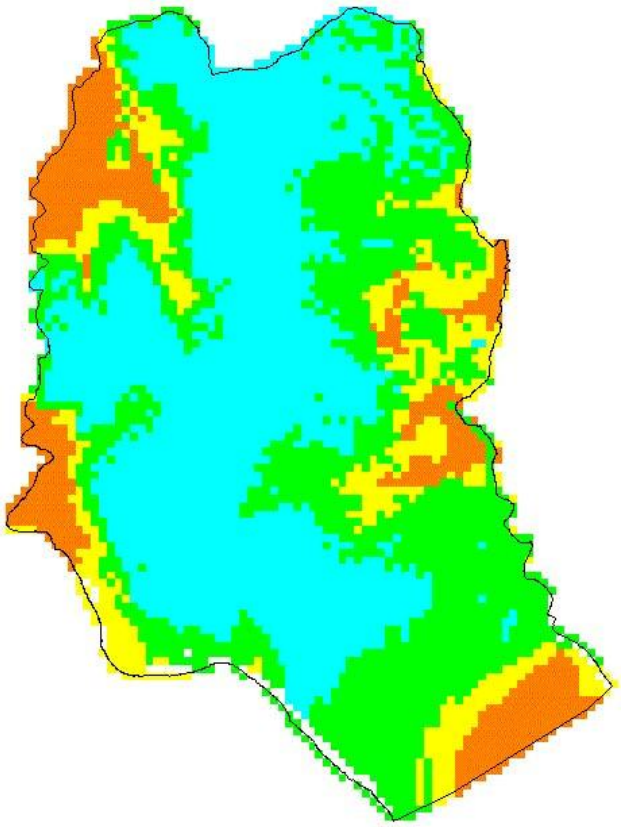
Sa(h=5%) (gal)

300 – 400

200 – 300

100 – 200

PGA and Sa(0.3 sec) Amplification for M6 Earthquake occurring directly Underneath



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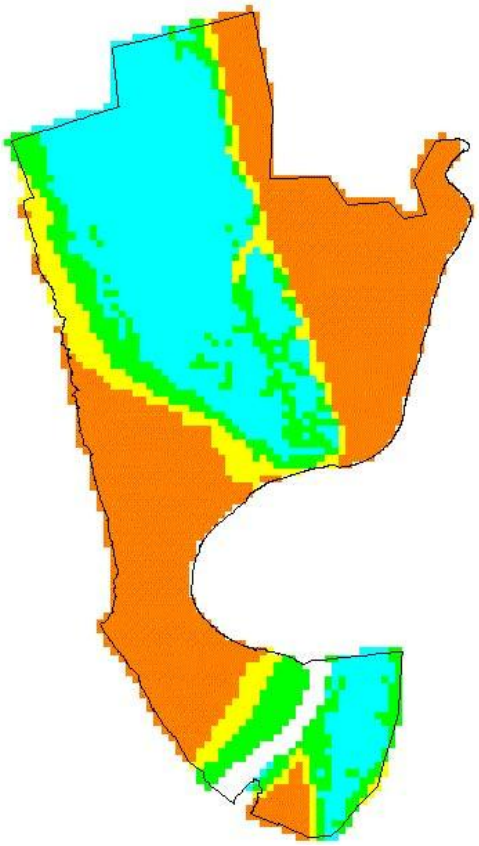
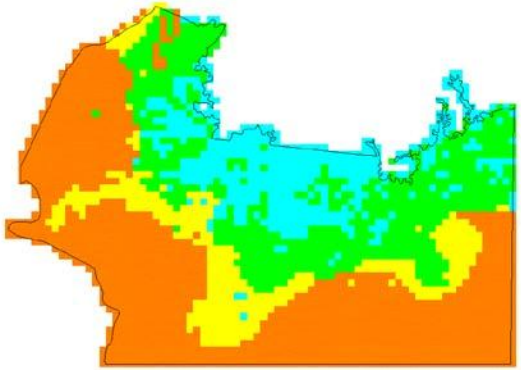
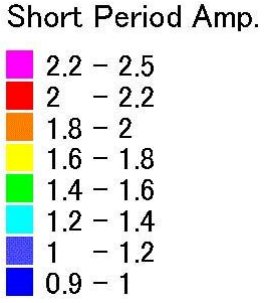


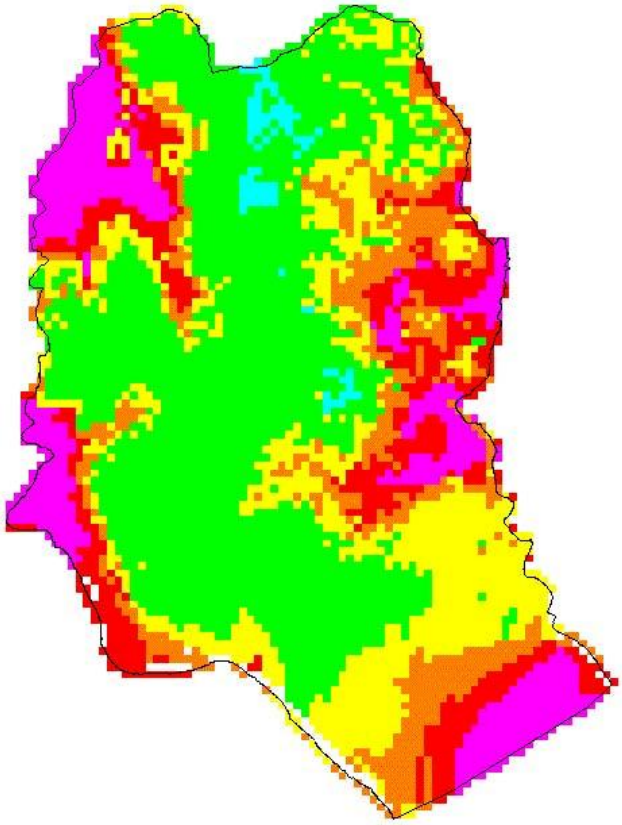
Chittagong



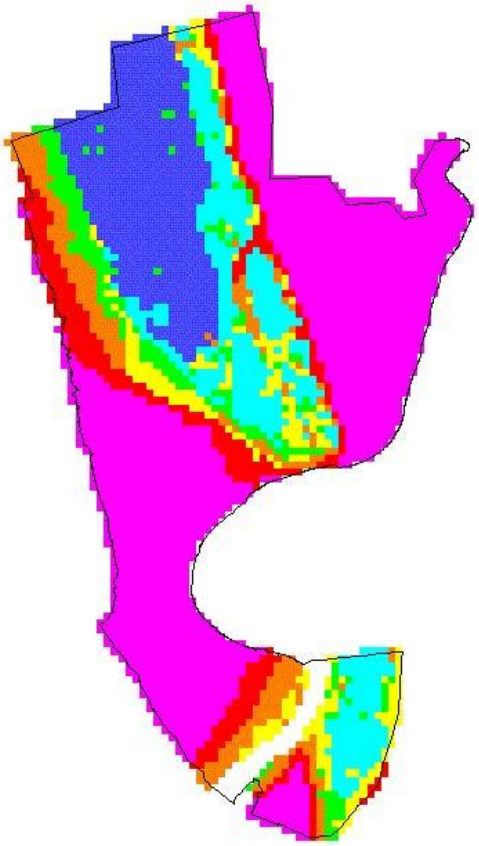
Sylhet



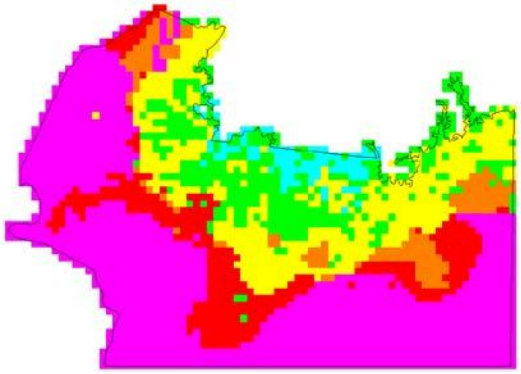
PGV and Sa(1.0 sec) Amplification for M6 Earthquake occurring directly Underneath



Dhaka



Chittagong



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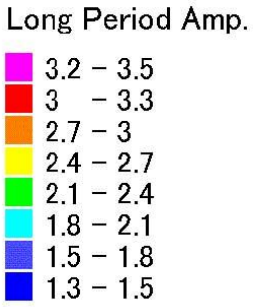
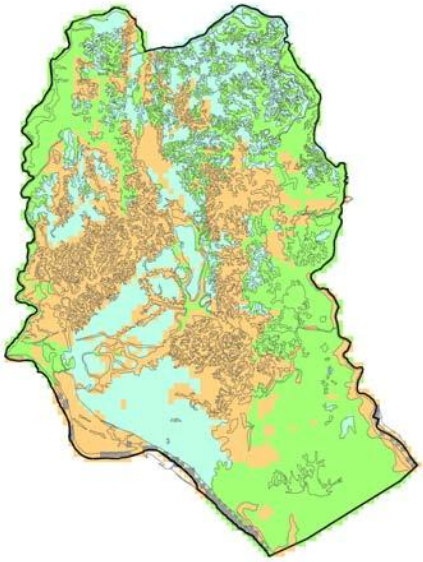


Liquefaction Probability for M6 Earthquake occurring directly Underneath



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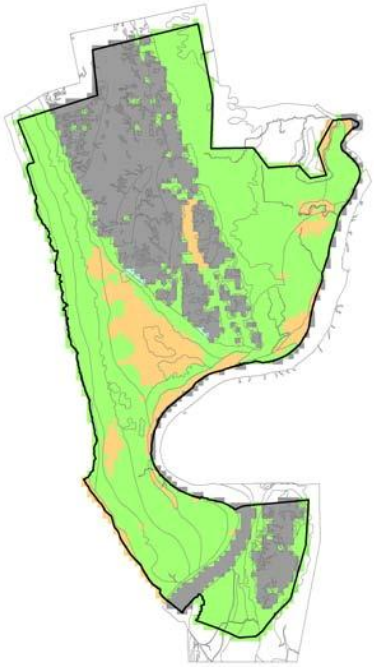
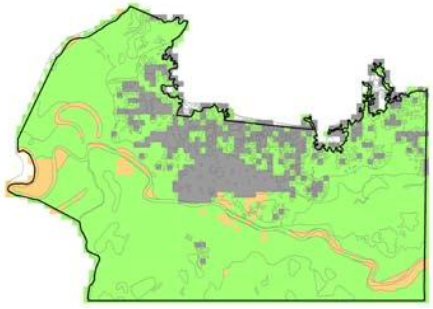


Chittagong

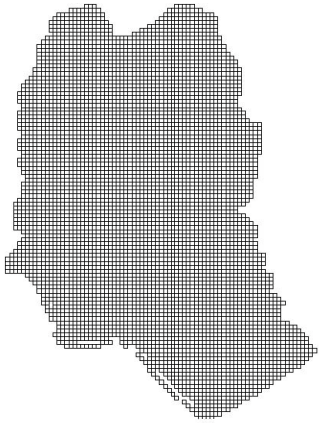


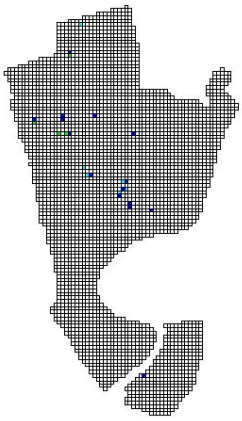
Sylhet

Liquefaction Probability

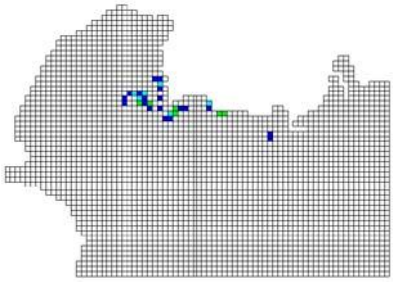
- None
- Very Low
- Low
- Moderate
- High
- Very High

Slope Hazard Probability

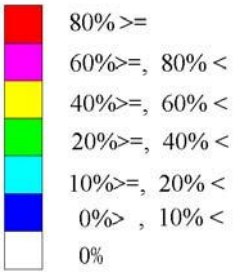




Dhaka **Chittagong**

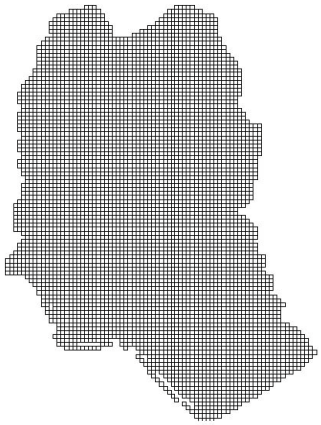


Frequency of Fs<=1.2

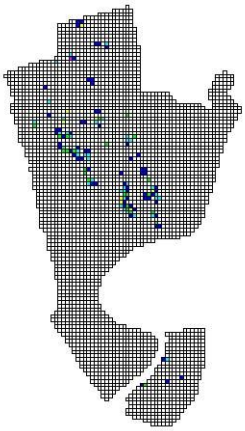


Sylhet

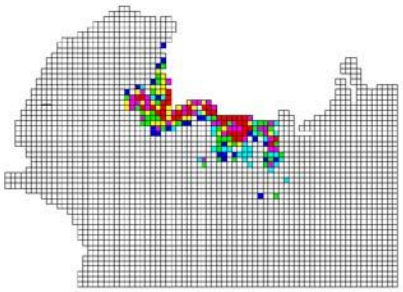
[The Frequency of Fs<=1.2 by Wilsonˆs Method]



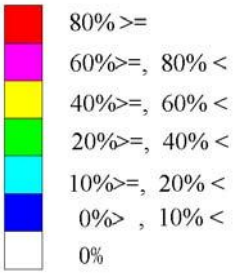
Dhaka



Chittagong



Frequency of Fs<=1.2



Sylhet

[The Frequency of Fs<=1.2 by Koppulaâs Method]