remote sensing

Supplementary Material: Landslide susceptibility mapping and comparison using Decision Tree models: A case study of Jumunjin Area, Korea

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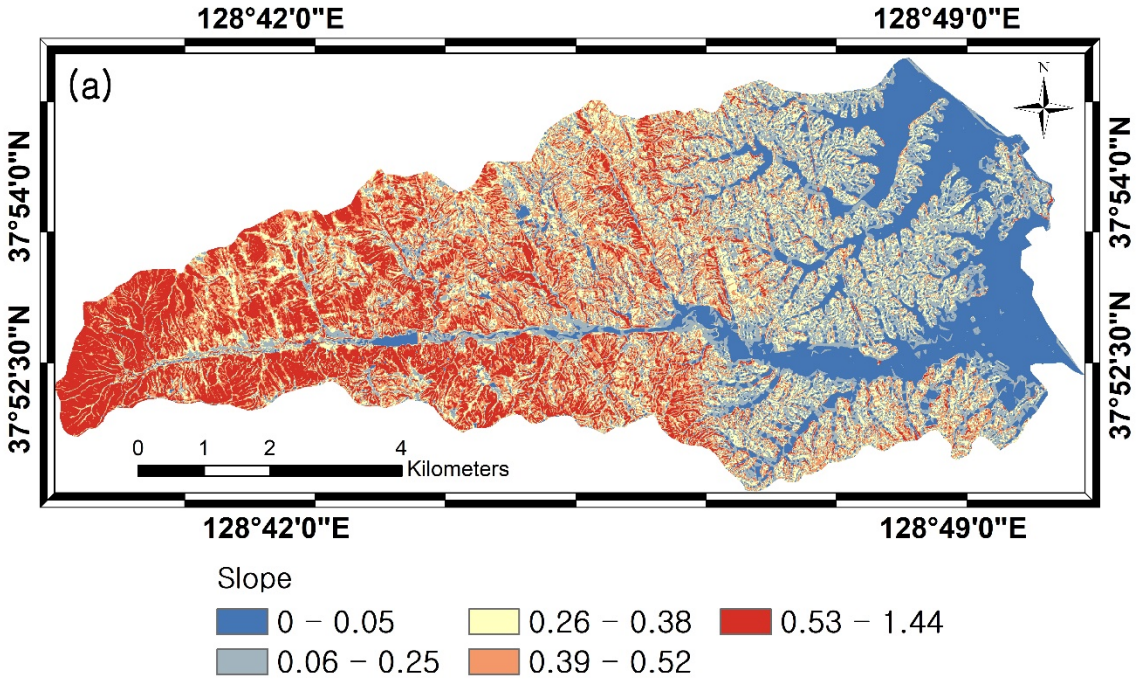
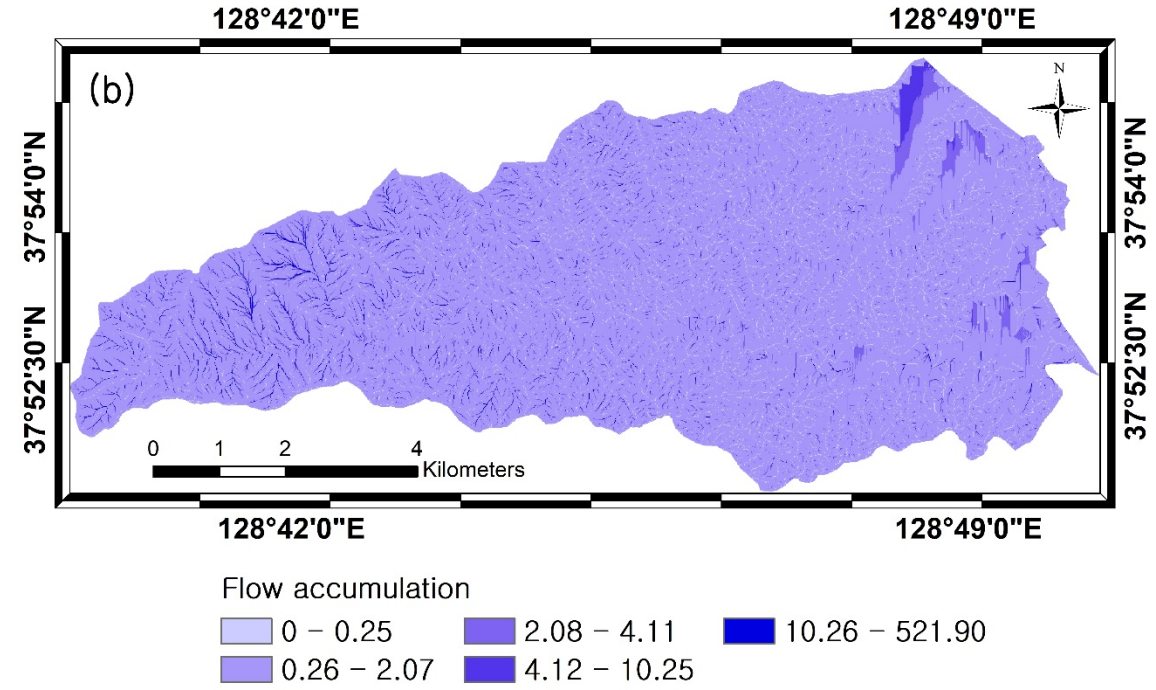
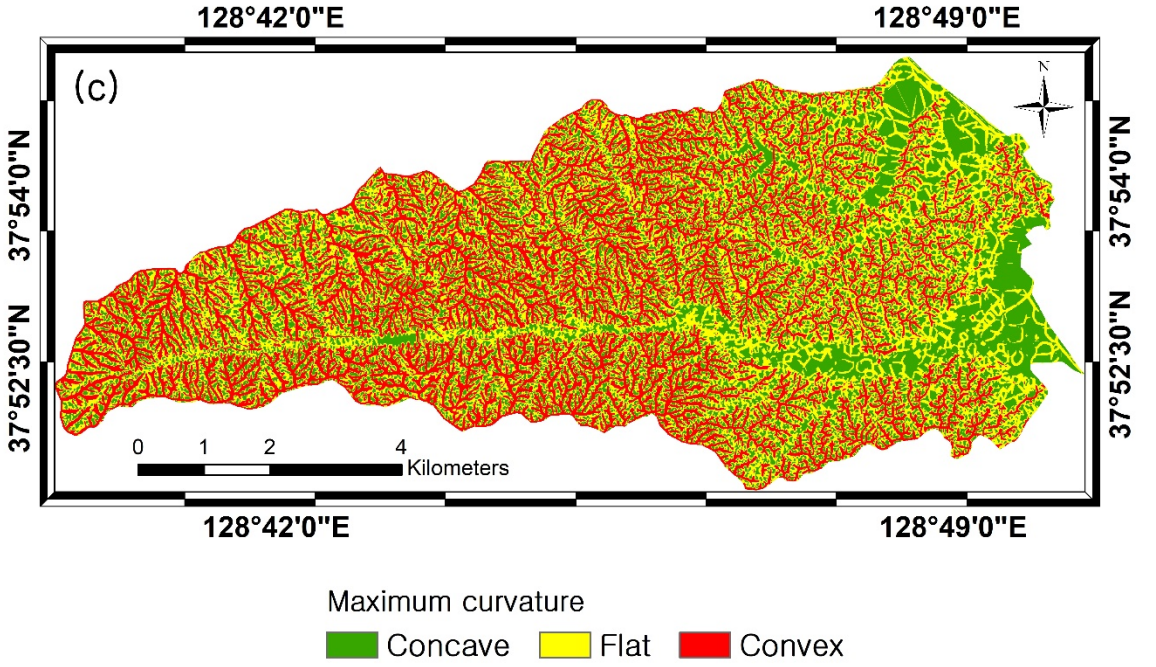
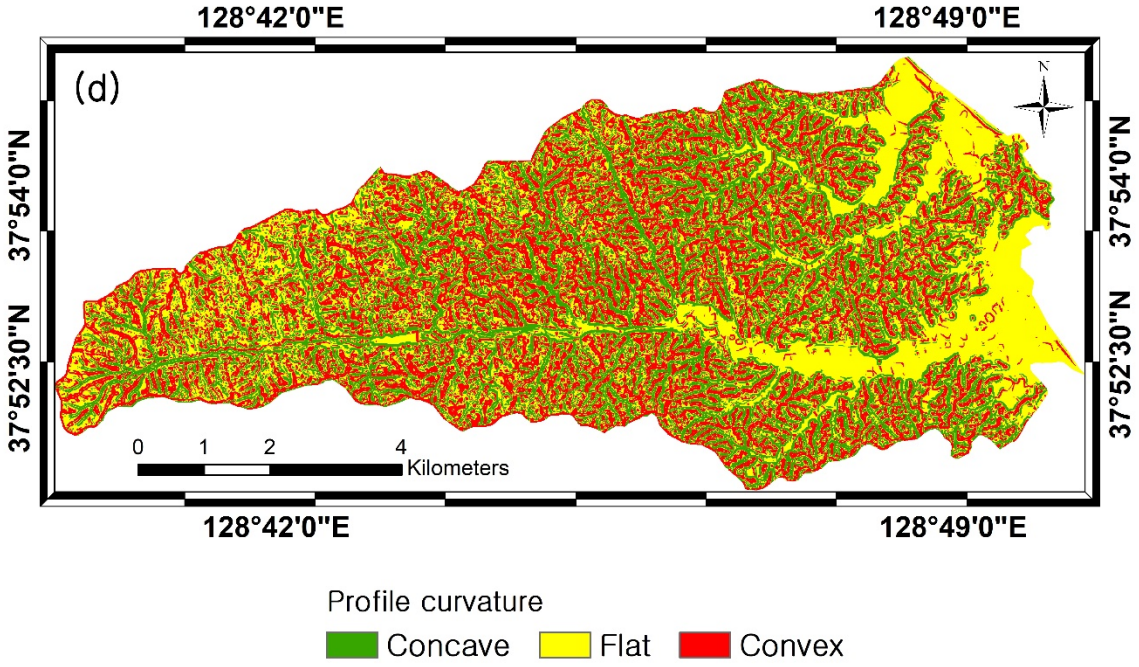
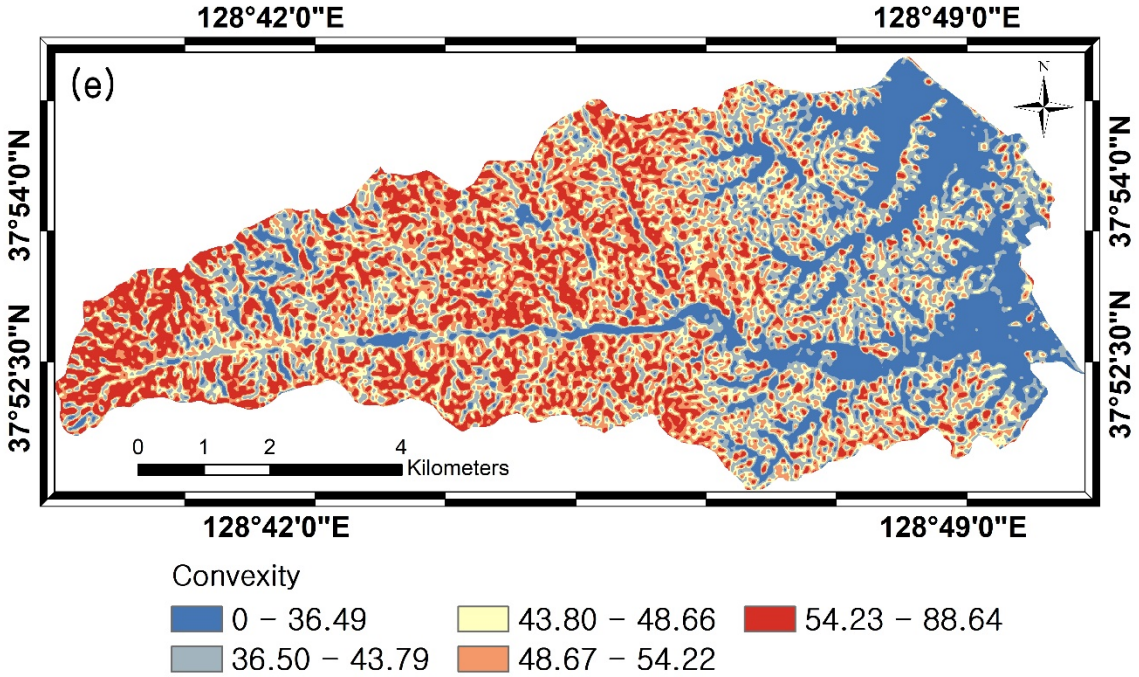
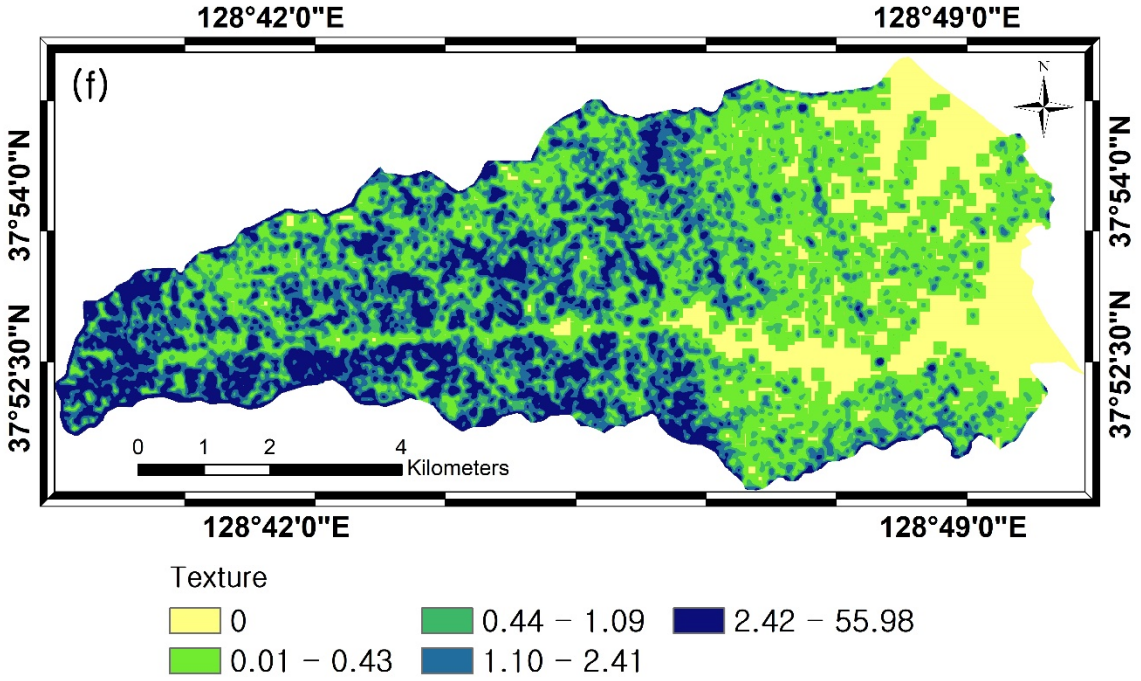


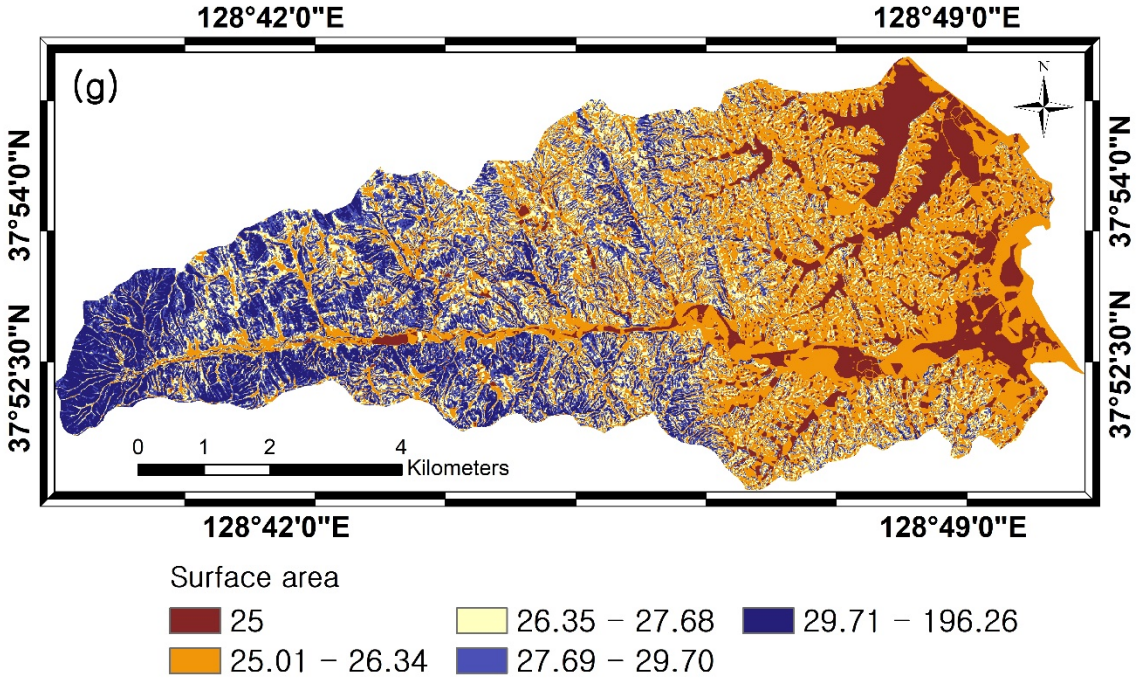

128°42'0"E
128°49'0"E
(b)
N
37°54'0"N
37°52'30"N
0 1 2 4
Kilometers
Flow accumulation
0 – 0.25
0.26 – 2.07
2.08 – 4.11
4.12 – 10.25
10.26 – 521.90

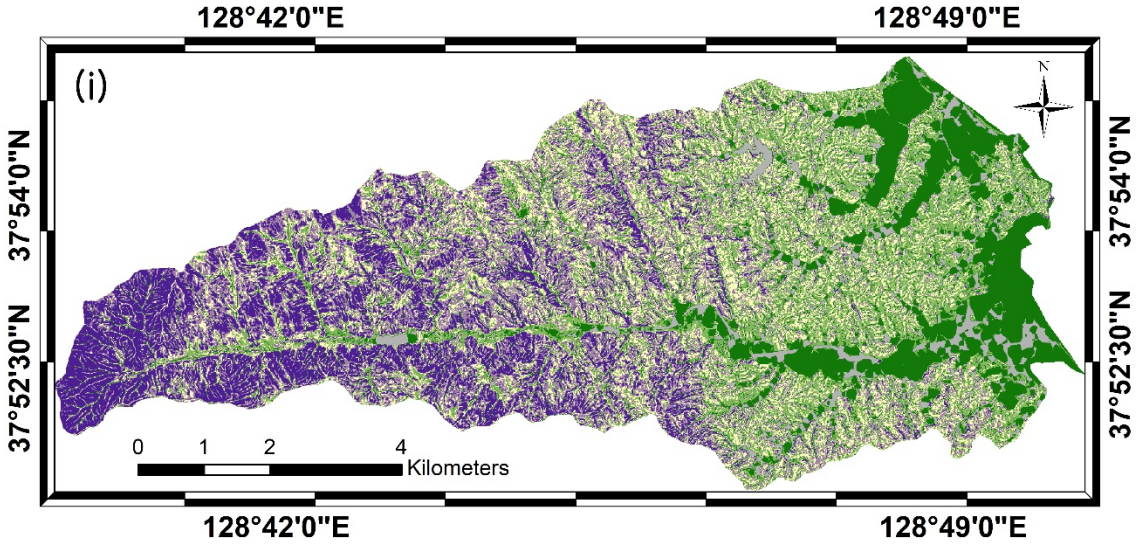

128°42'0"E
128°49'0"E
(c)
N
37°54'0"N
37°52'30"N
0 1 2 4
Kilometers
Maximum curvature
Concave
Flat
Convex

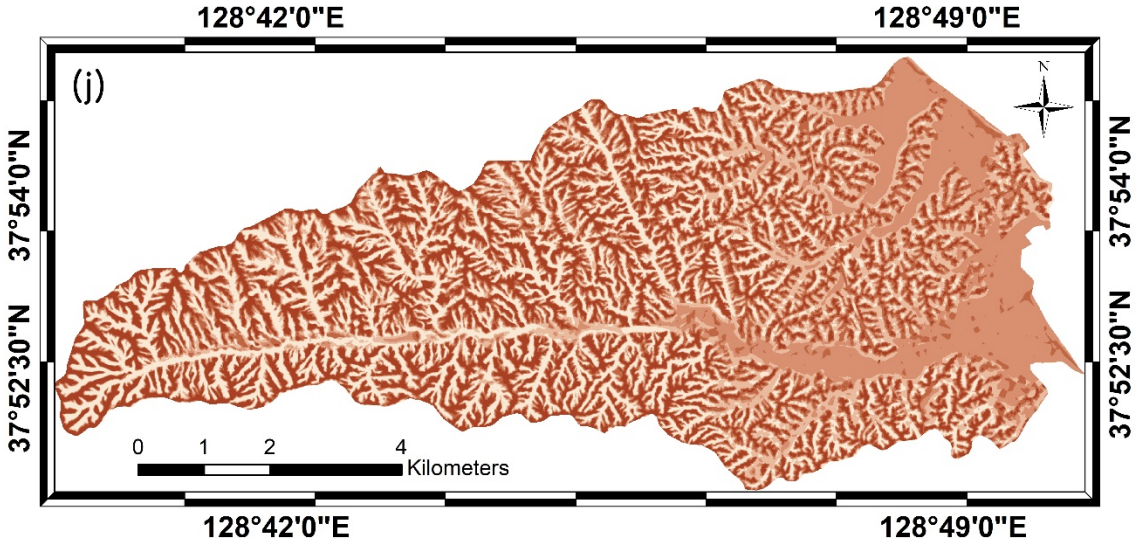

128°42'0"E
128°49'0"E
(d)
37°54'0"N
37°52'30"N
0 1 2 4
Kilometers
Profile curvature
Concave
Flat
Convex

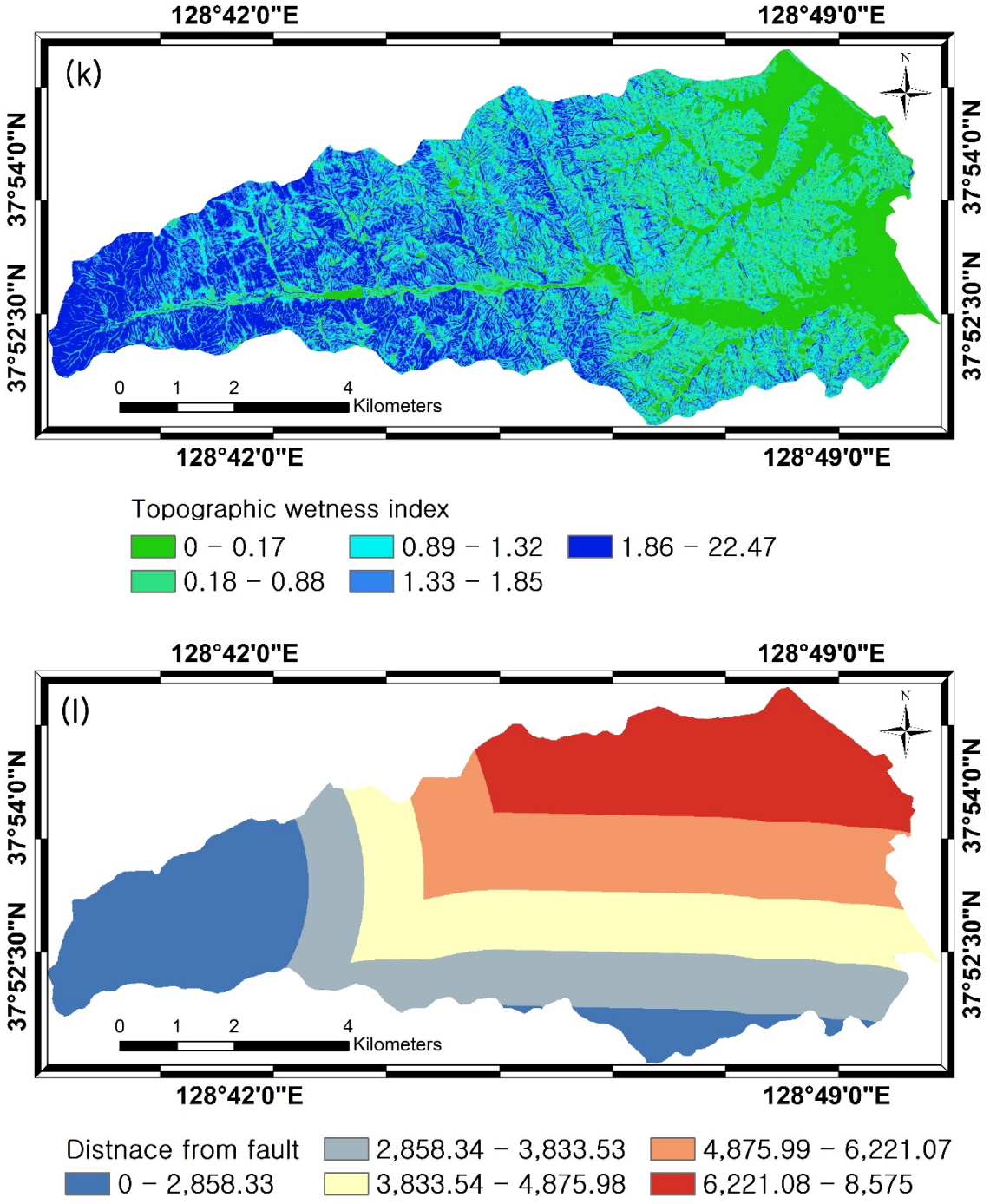

128°42'0"E
128°49'0"E
(e)
37°54'0"N
37°52'30"N
0 1 2 4
Kilometers
Convexity
0 – 36.49
36.50 – 43.79
43.80 – 48.66
48.67 – 54.22
54.23 – 88.64

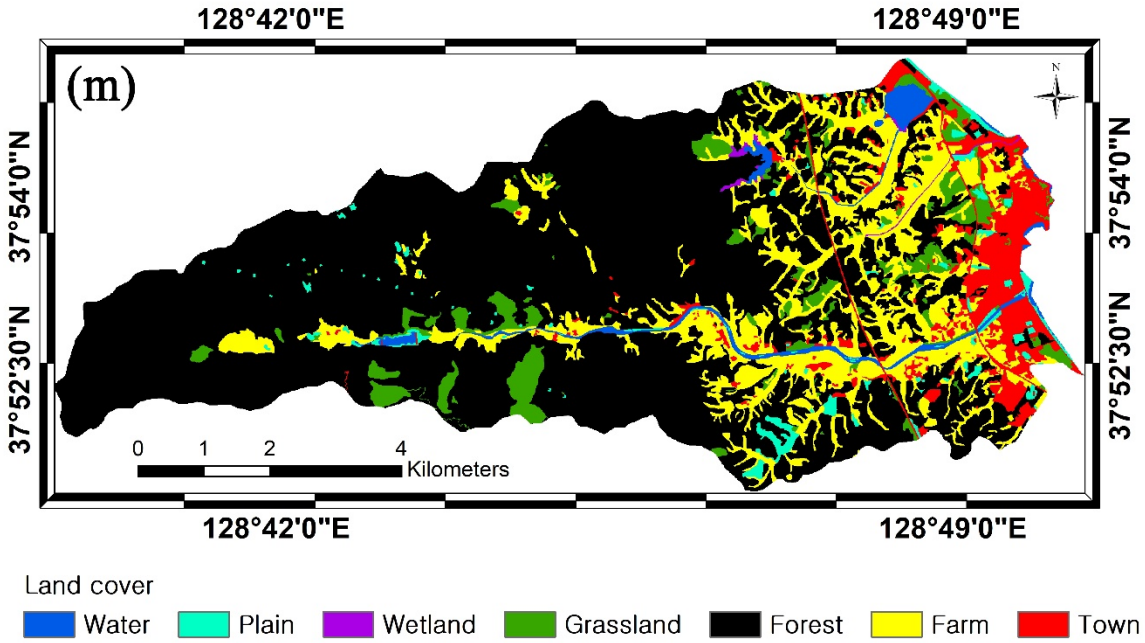

128°42'0"E
128°49'0"E
(f)
N
37°54'0"N
37°52'30"N
0 1 2 4
Kilometers
Texture
0
0.01 – 0.43
0.44 – 1.09
1.10 – 2.41
2.42 – 55.98

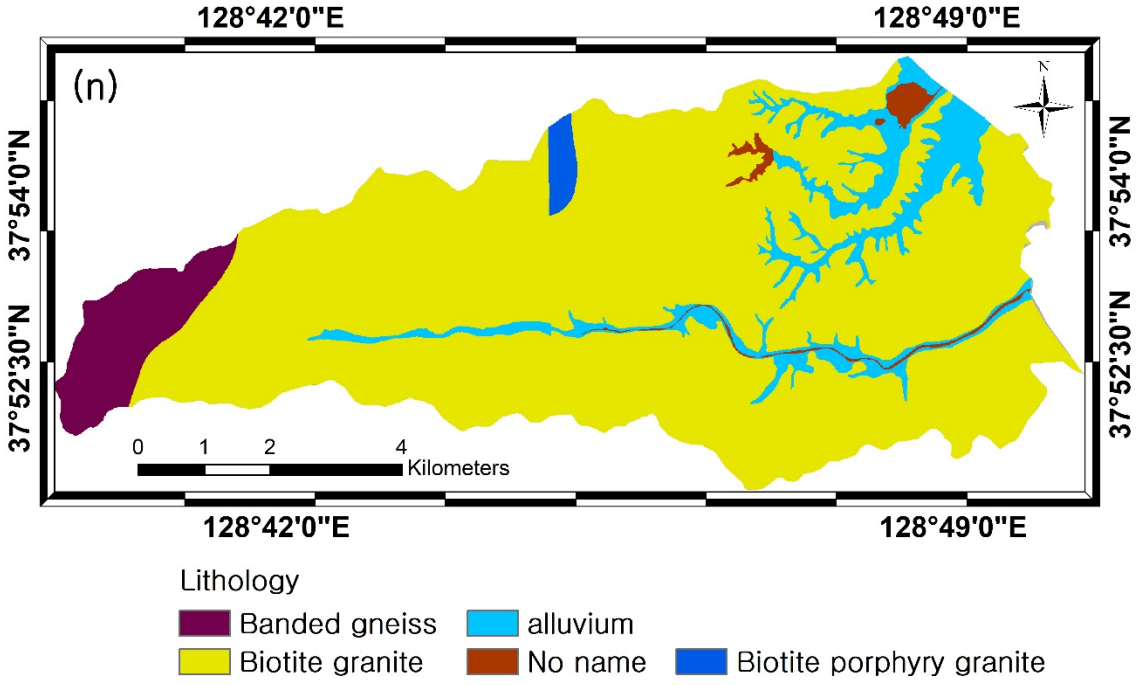

128°42'0"E
128°49'0"E
(g)
N
37°54'0"N
37°52'30"N
0 1 2 4
Kilometers
Surface area
25
25.01 – 26.34
26.35 – 27.68
27.69 – 29.70
29.71 – 196.26

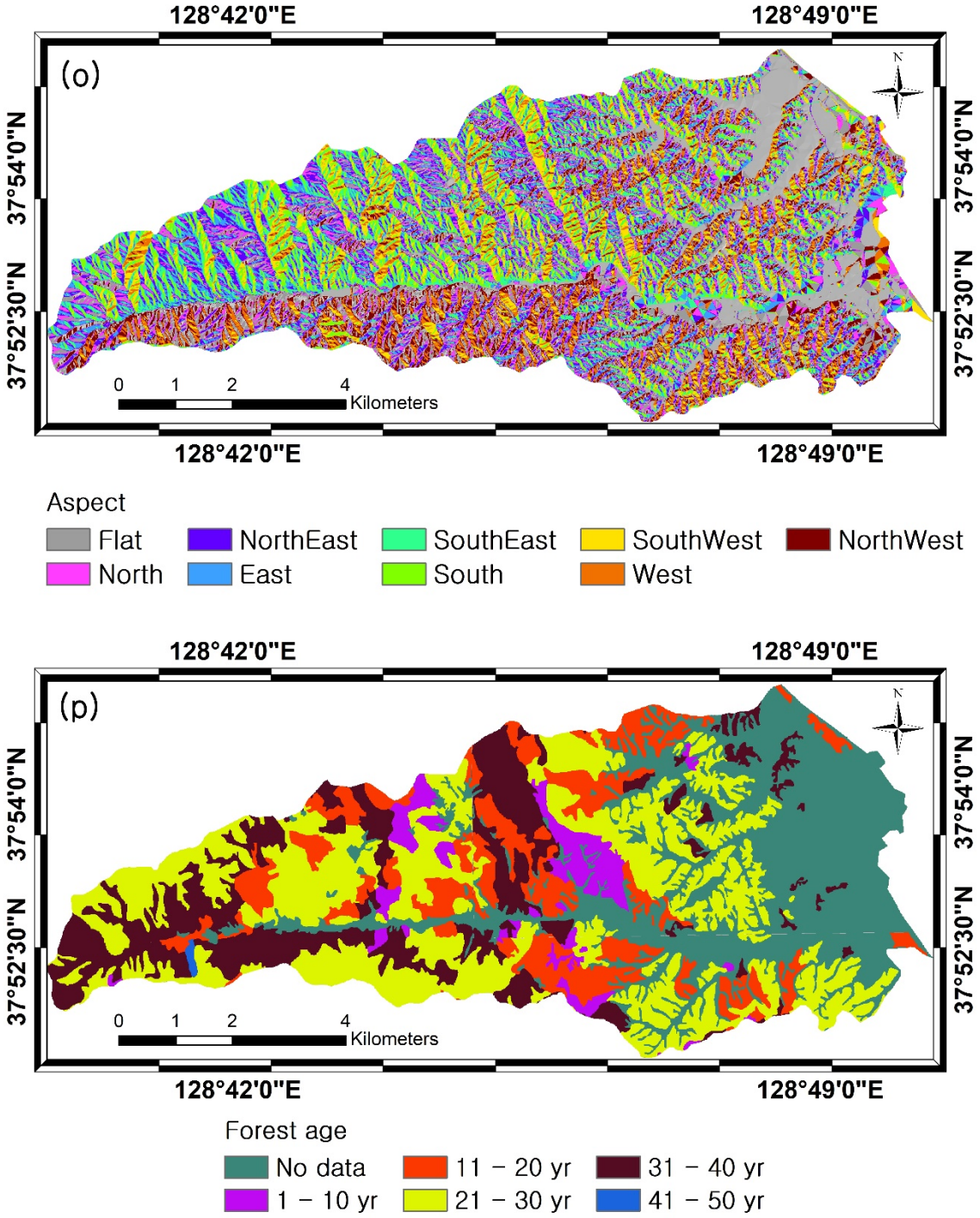

128°42'0"E
128°49'0"E
(i)
37°54'0"N
37°52'30"N
0 1 2 4
Kilometers
Terrain ruggedness index
3.41 – 5.18
5.19 – 5.53
5.54 – 5.95
5.96 – 7.15
7.16 – 21.42

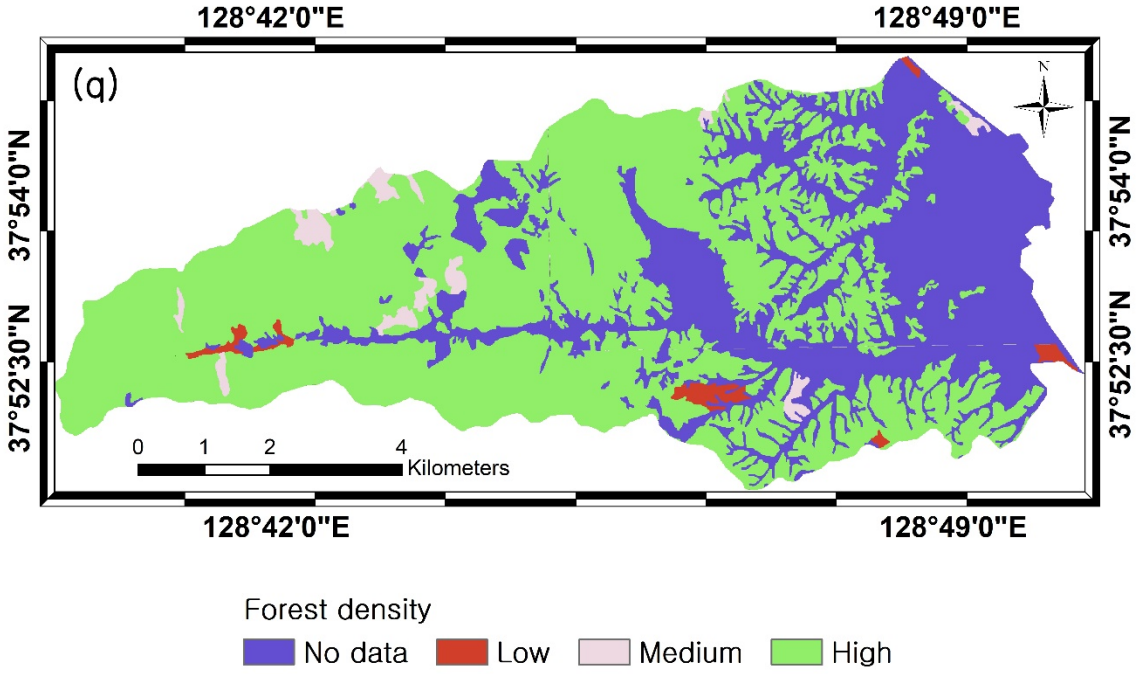

128°42'0"E
128°49'0"E
(j)
37°54'0"N
37°52'30"N
0 1 2 4
Kilometers
Topographic position index
−30.86 – −5.64
−5.65 – −1.81
−1.82 – 0.41
0.42 – 5.84
5.85 – 50.53

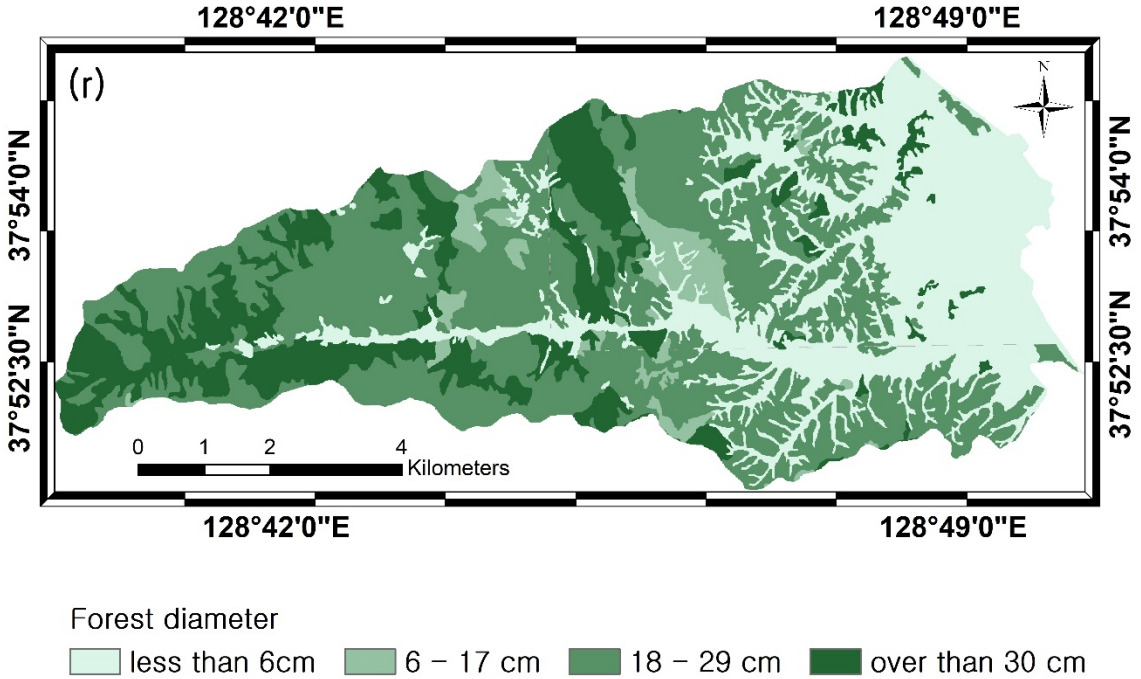

128°42'0"E
128°49'0"E
(k)
37°54'0"N
37°52'30"N
N
0 1 2 4
Kilometers
Topographic wetness index
0 – 0.17
0.18 – 0.88
0.89 – 1.32
1.33 – 1.85
1.86 – 22.47
(l)
37°54'0"N
37°52'30"N
Distnace from fault
0 – 2,858.33
2,858.34 – 3,833.53
3,833.54 – 4,875.98
4,875.99 – 6,221.07
6,221.08 – 8,575

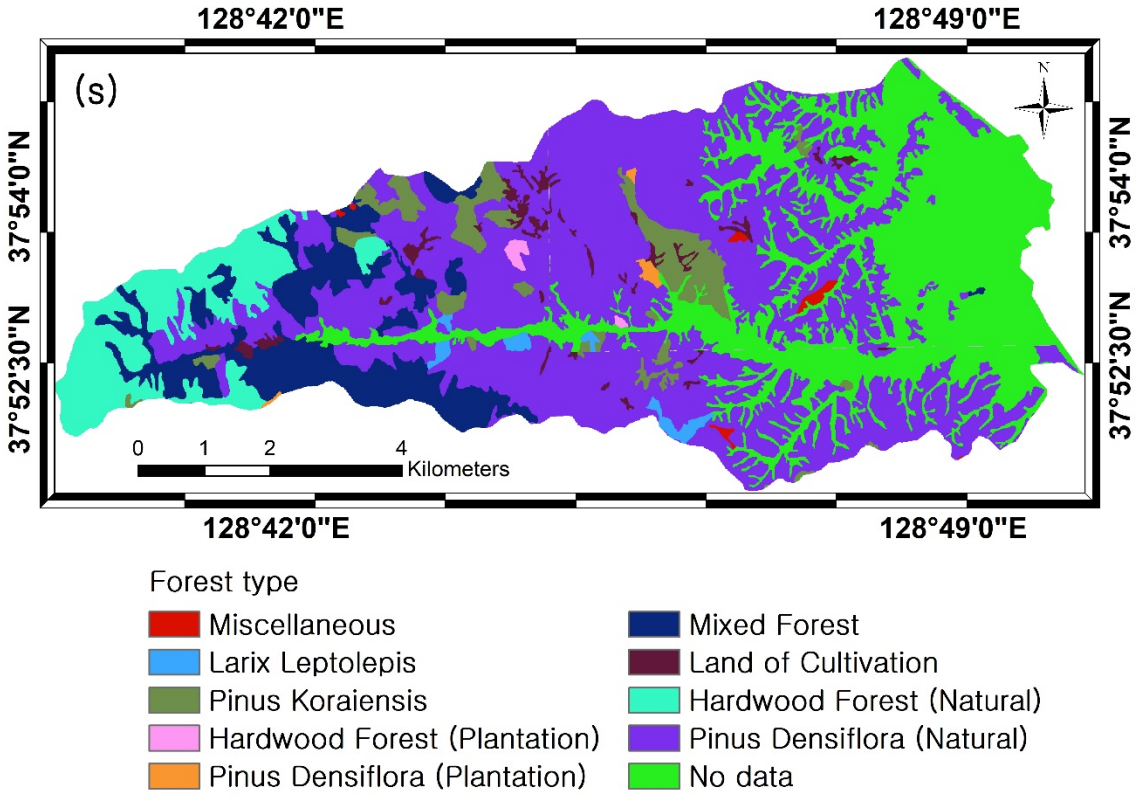

(m)
128°42'0"E
128°49'0"E
37°54'0"N
37°52'30"N
0 1 2 4
Kilometers
Land cover
Water
Plain
Wetland
Grassland
Forest
Farm
Town


(n)
128°42'0"E
128°49'0"E
37°54'0"N
37°52'30"N
0 1 2 4
Kilometers
Lithology
Banded gneiss
alluvium
Biotite granite
No name
Biotite porphyry granite


(o)
128°42'0"E
128°49'0"E
37°54'0"N
37°52'30"N
N
0 1 2 4
Kilometers
Aspect
Flat
NorthEast
SouthEast
SouthWest
NorthWest
North
East
South
West
(p)
Forest age
No data
11 – 20 yr
31 – 40 yr
1 – 10 yr
21 – 30 yr
41 – 50 yr


128°42'0"E
128°49'0"E
(q)
37°54'0"N
37°52'30"N
0 1 2 4
Kilometers
Forest density
No data
Low
Medium
High


128°42'0"E
128°49'0"E
(r)
37°54'0"N
37°52'30"N
0 1 2 4
Kilometers
Forest diameter
less than 6cm
6 – 17 cm
18 – 29 cm
over than 30 cm


128°42'0"E
128°49'0"E
(s)
N
37°54'0"N
37°52'30"N
0 1 2 4
Kilometers
Forest type
Miscellaneous
Larix Leptolepis
Pinus Koraiensis
Hardwood Forest (Plantation)
Pinus Densiflora (Plantation)
Mixed Forest
Land of Cultivation
Hardwood Forest (Natural)
Pinus Densiflora (Natural)
No data

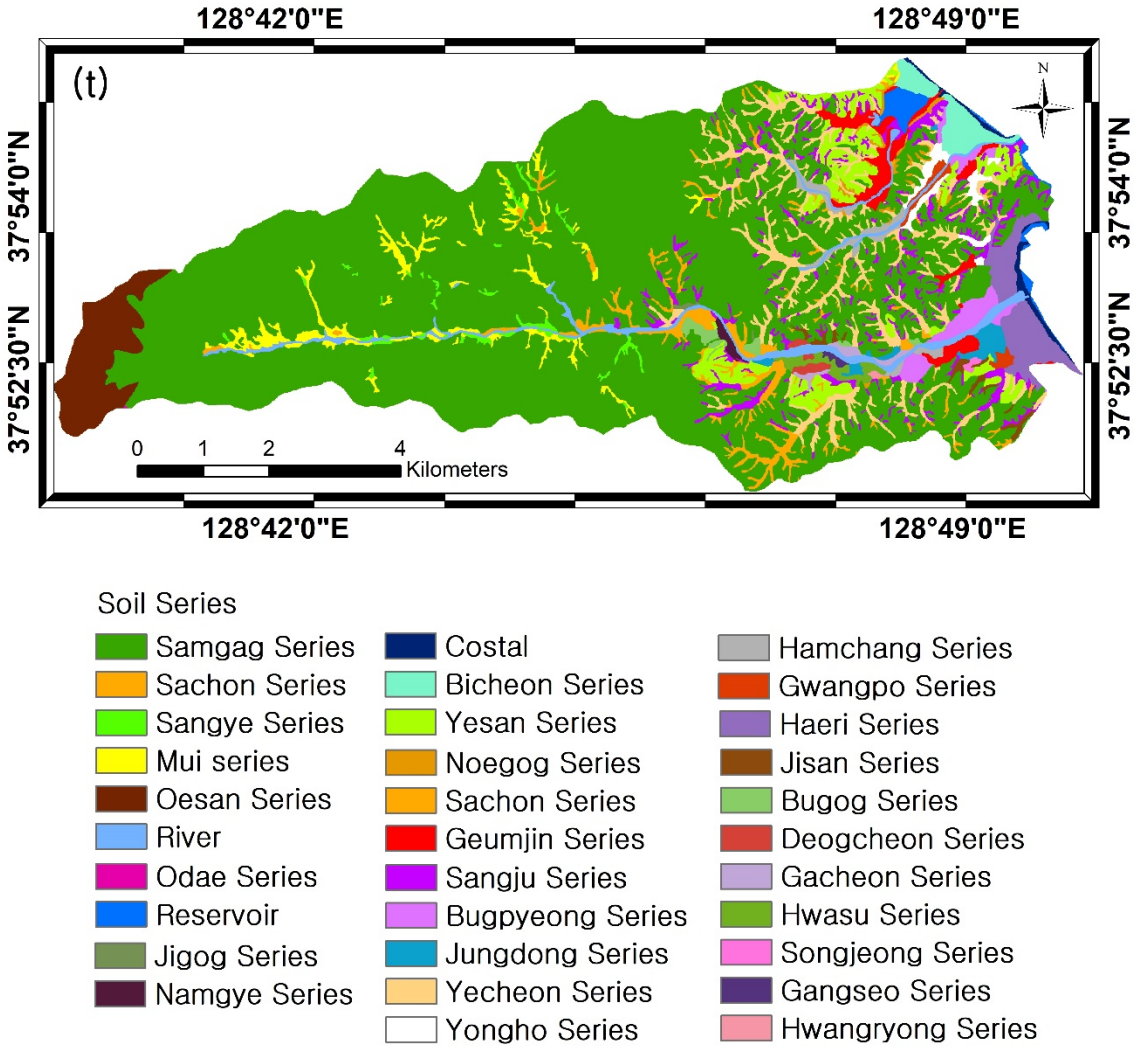


Figure S1. Spatial database of factors in Jumunjin area, slope (a), flow accumulation (b), maximum curvature (c), profile curvature (d), convexity (e), texture (f), surface area (g), mid-slope position (h), terrain ruggedness index (i), topographic position index (j), topographic wetness index (k), distance from fault (l), land cover (m), lithology (n), aspect (o), forest age (p), forest density (q), forest diameter (r), forest type (s), soil material (t).