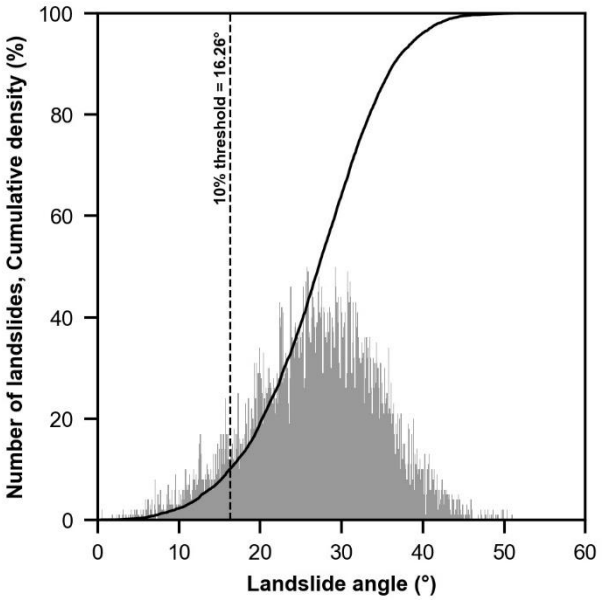
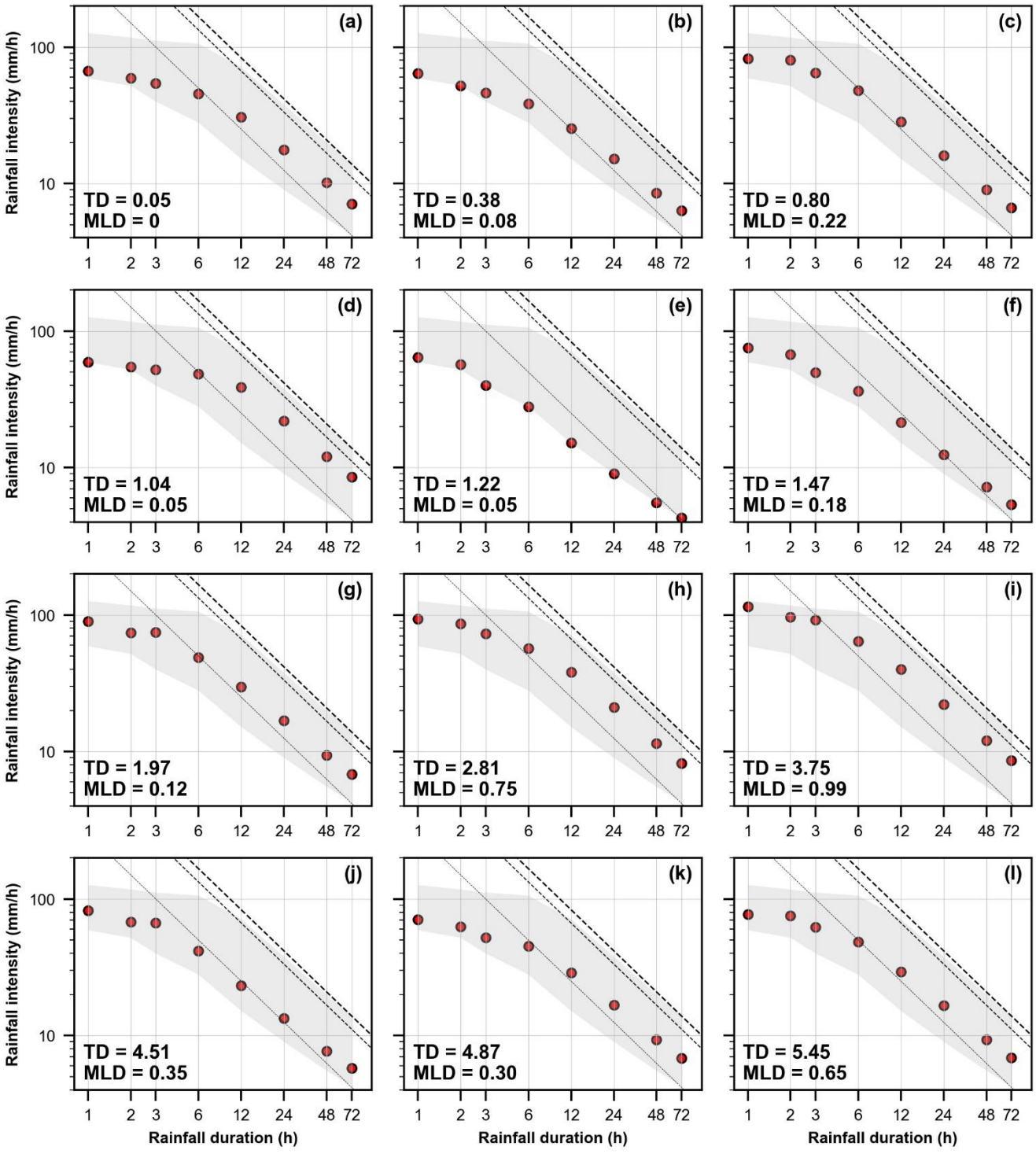


Figure S1: Non-cumulative (gray histogram) and cumulative (black line) frequency distribution of landslide angle


(a)
TD = 0.05
MLD = 0
(b)
TD = 0.38
MLD = 0.08
(c)
TD = 0.80
MLD = 0.22
(d)
TD = 1.04
MLD = 0.05
(e)
TD = 1.22
MLD = 0.05
(f)
TD = 1.47
MLD = 0.18
(g)
TD = 1.97
MLD = 0.12
(h)
TD = 2.81
MLD = 0.75
(i)
TD = 3.75
MLD = 0.99
(j)
TD = 4.51
MLD = 0.35
(k)
TD = 4.87
MLD = 0.30
(l)
TD = 5.45
MLD = 0.65
Rainfall intensity (mm/h)
100
10
1
2
3
6
12
24
48
72
Rainfall duration (h)

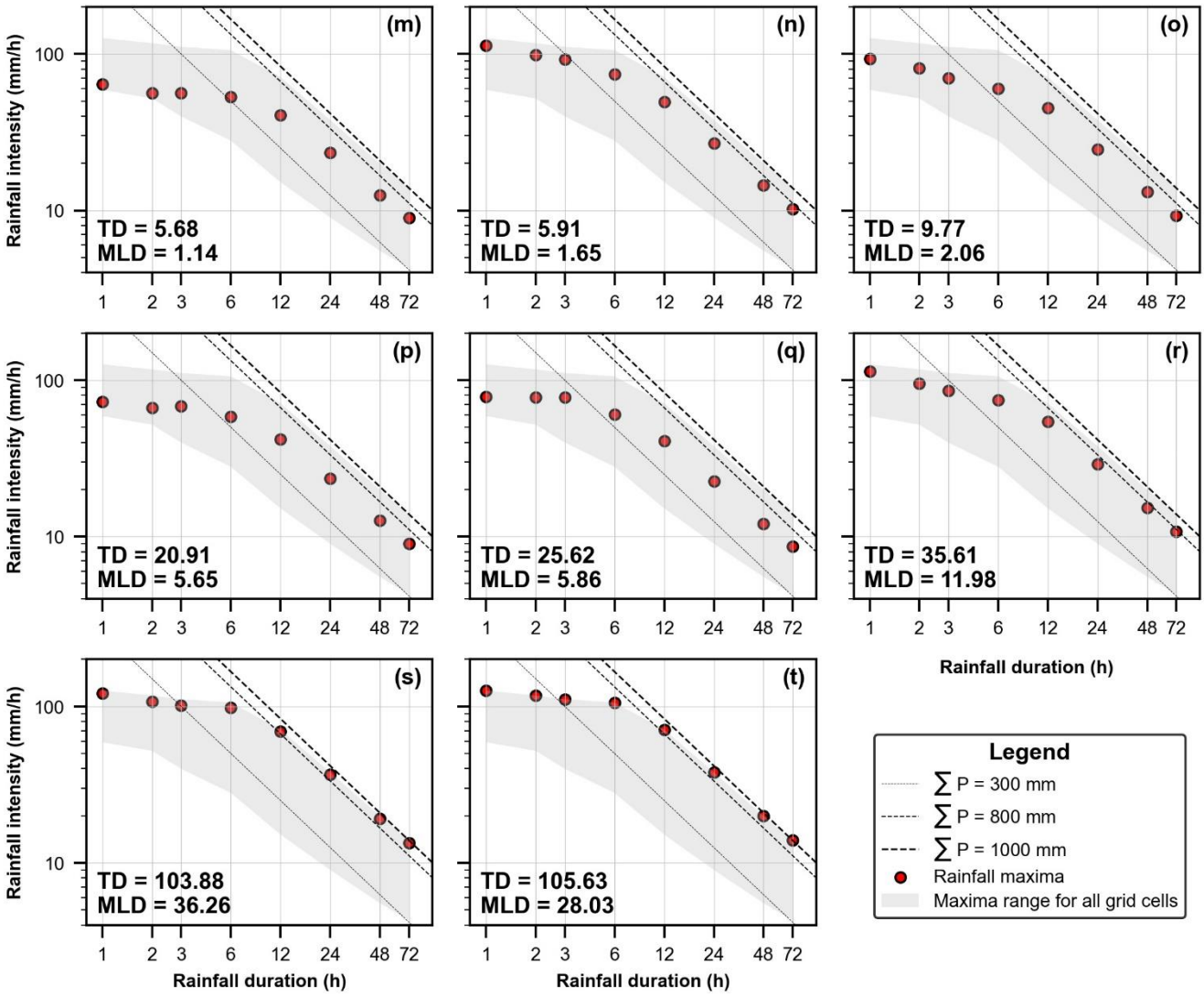


Figure S2: Rainfall intensity maxima over multiple timespans (1 – 72 h) within the P_{std} for the different landslide density grid cells (excluding three grid cells where landslide occurrence was deemed to be affected by anthropogenic activities). Dashed lines correspond to theoretical rainfall totals of 300, 800, and 1000 mm.

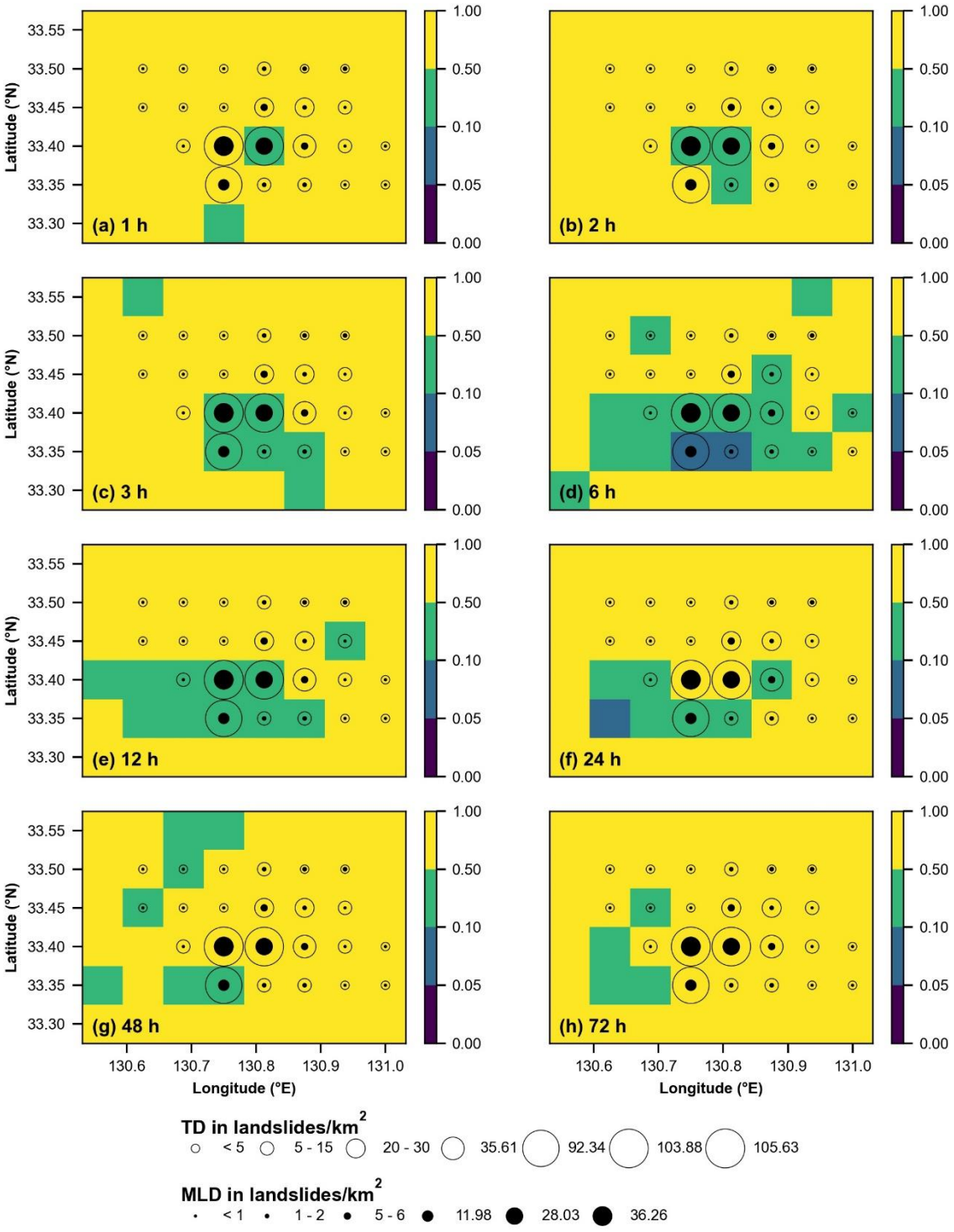


Figure S3: Spatial distribution maps of p-values resulted from the Kolmogorov-Smirnov test

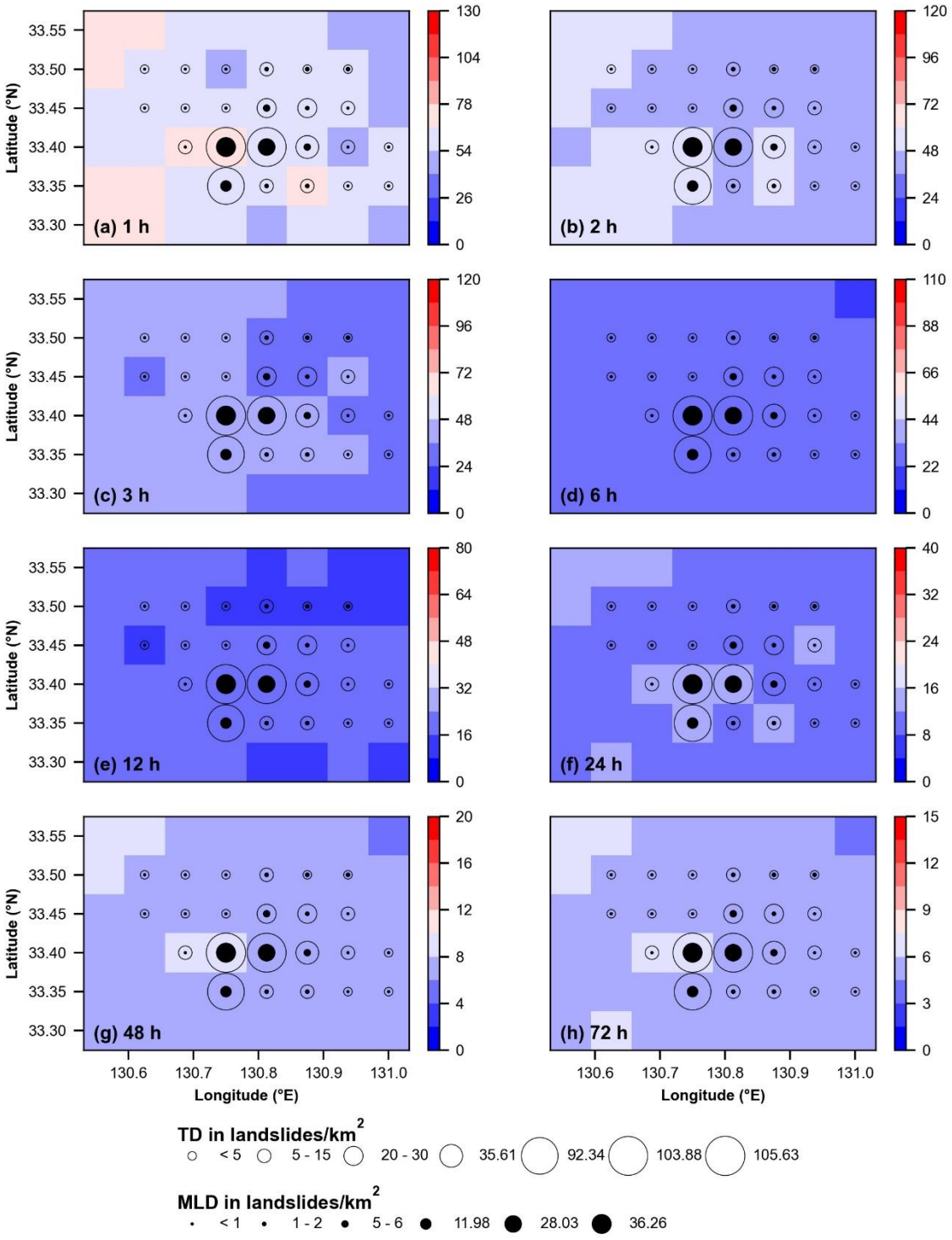
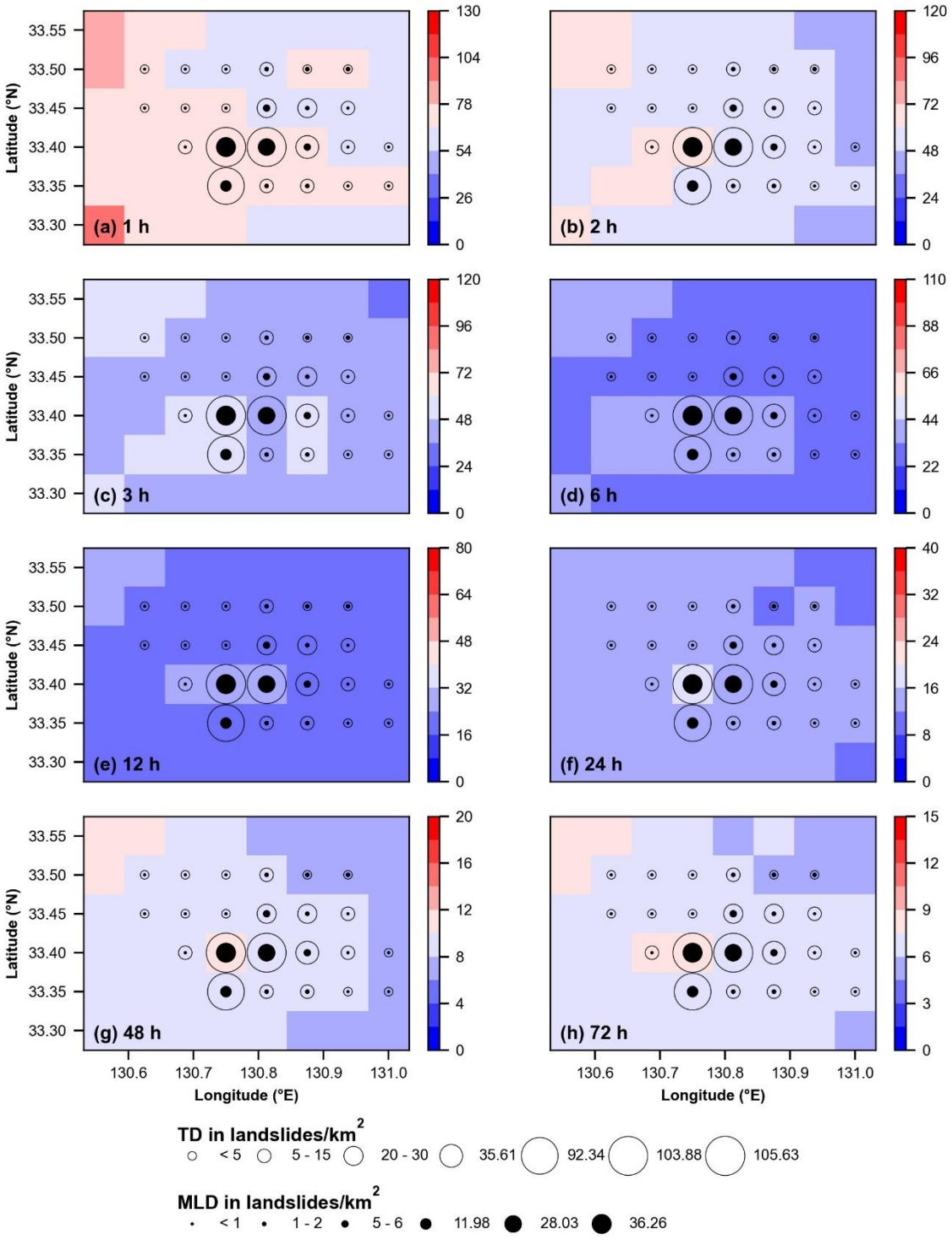


Figure S4: Estimated rainfall intensity maxima for 5-year return period



15 **Figure S5: Estimated rainfall intensity maxima for 10-year return period**

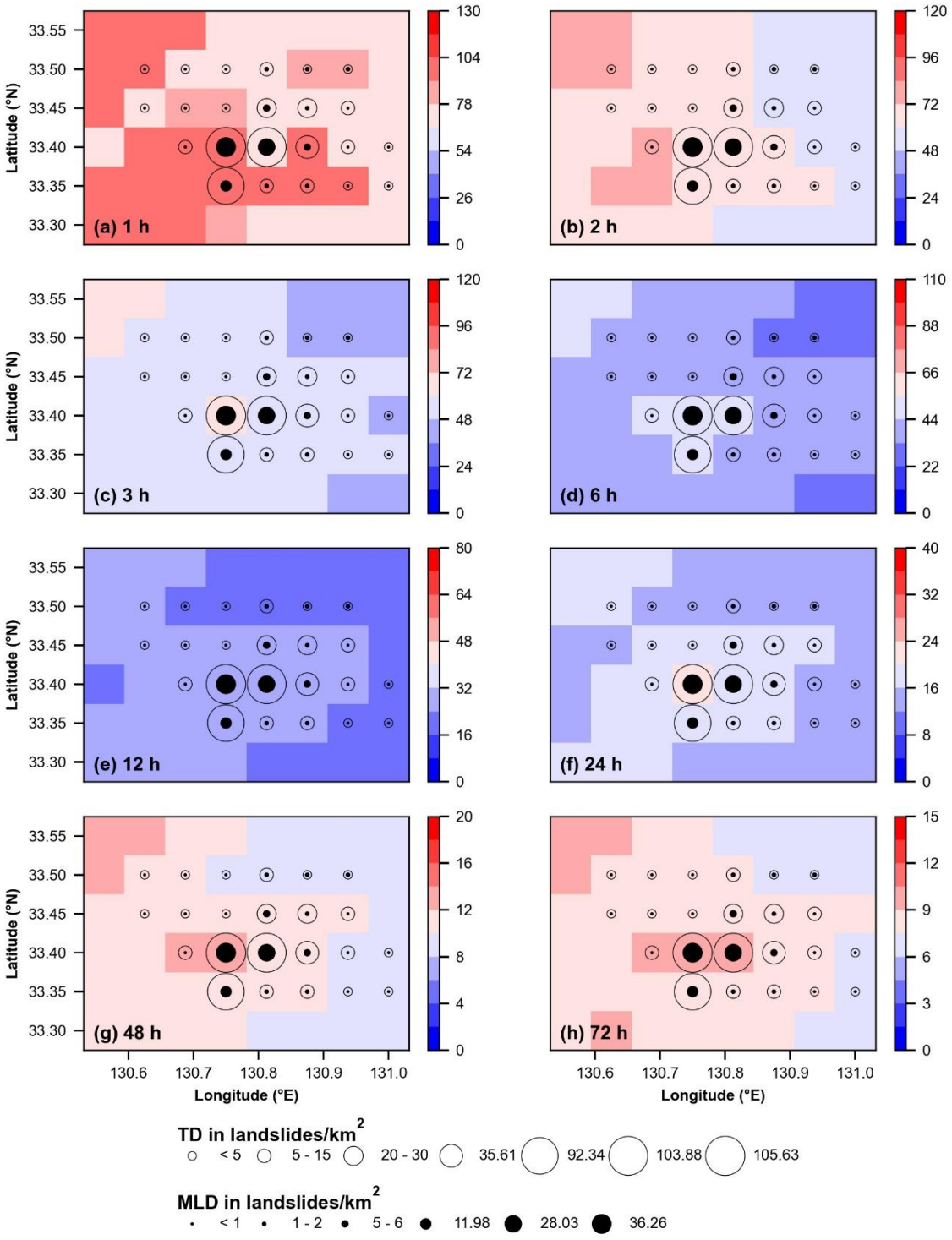


Figure S6: Estimated rainfall intensity maxima for 25-year return period

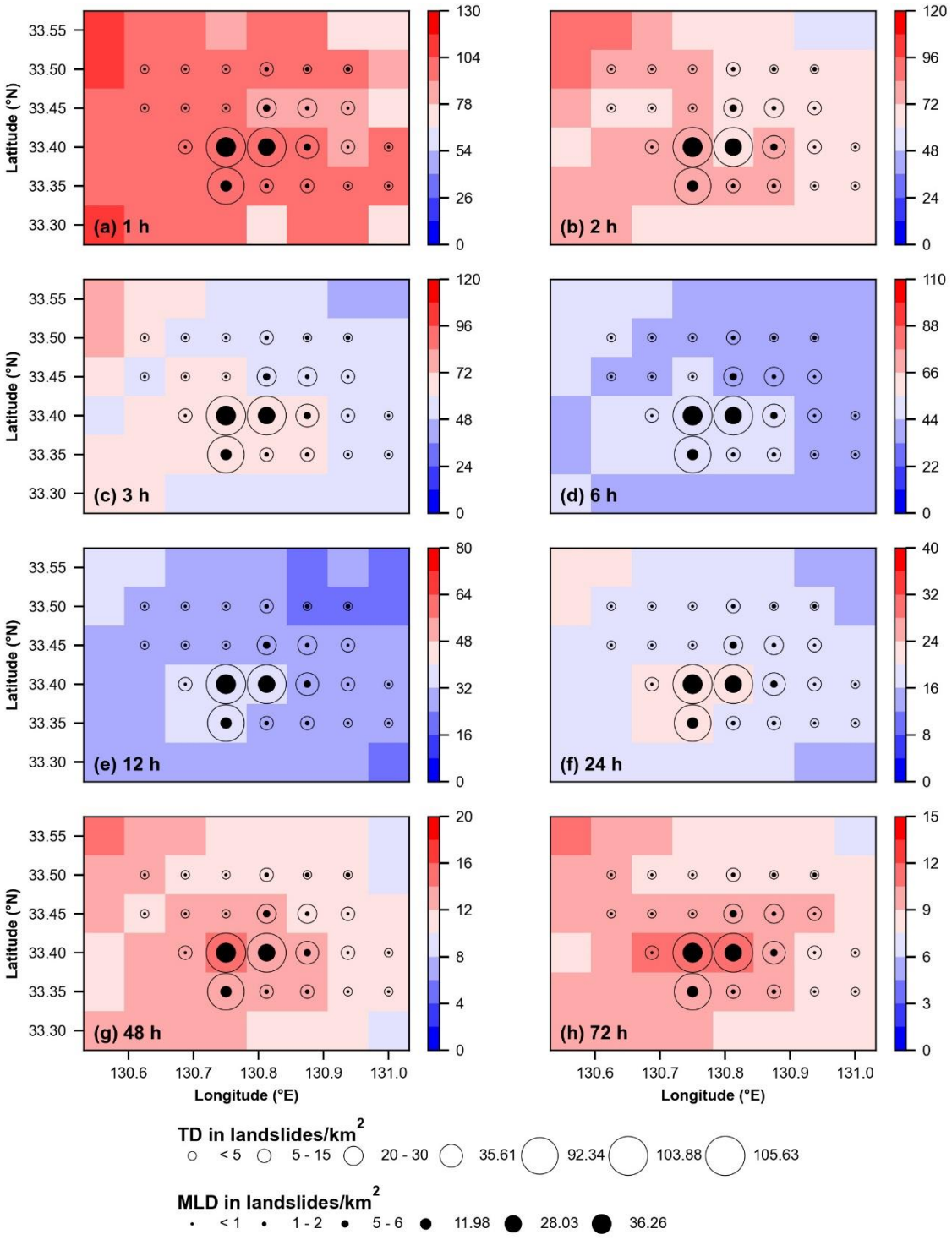


Figure S7: Estimated rainfall intensity maxima for 50-year return period

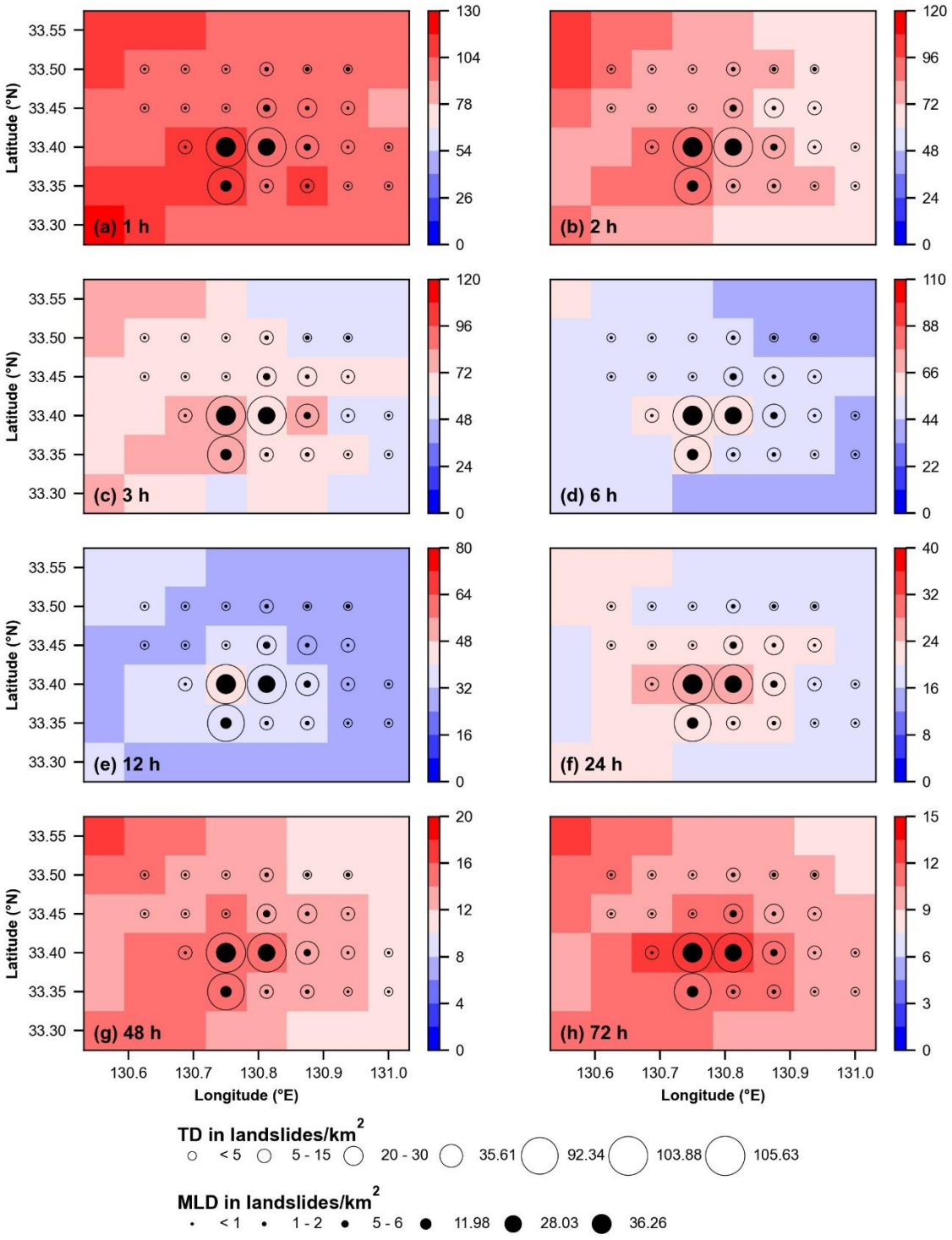
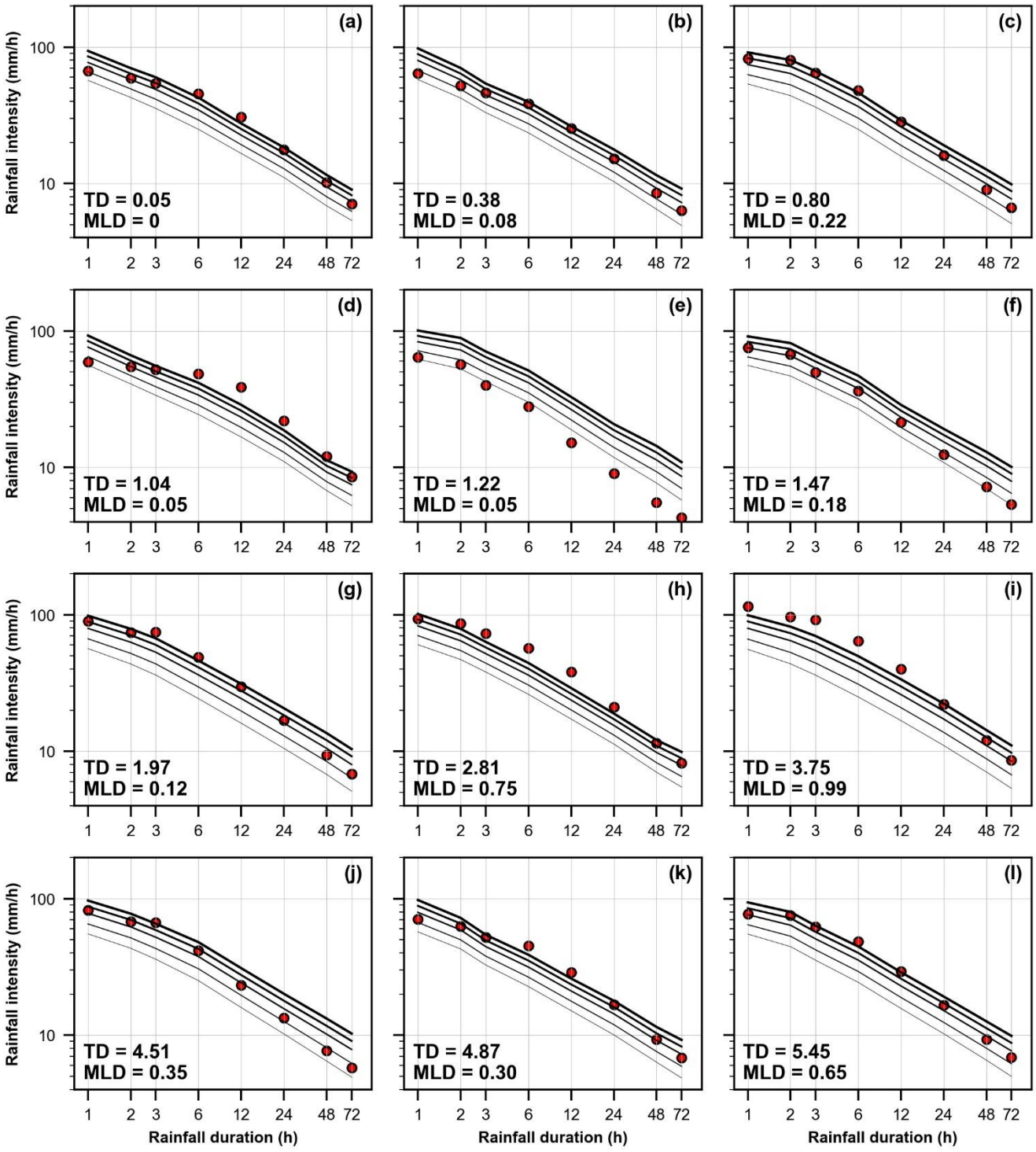


Figure S8: Estimated rainfall intensity maxima for 100-year return period


(a)
TD = 0.05
MLD = 0
(b)
TD = 0.38
MLD = 0.08
(c)
TD = 0.80
MLD = 0.22
(d)
TD = 1.04
MLD = 0.05
(e)
TD = 1.22
MLD = 0.05
(f)
TD = 1.47
MLD = 0.18
(g)
TD = 1.97
MLD = 0.12
(h)
TD = 2.81
MLD = 0.75
(i)
TD = 3.75
MLD = 0.99
(j)
TD = 4.51
MLD = 0.35
(k)
TD = 4.87
MLD = 0.30
(l)
TD = 5.45
MLD = 0.65
Rainfall intensity (mm/h)
100
10
1 2 3 6 12 24 48 72
Rainfall duration (h)

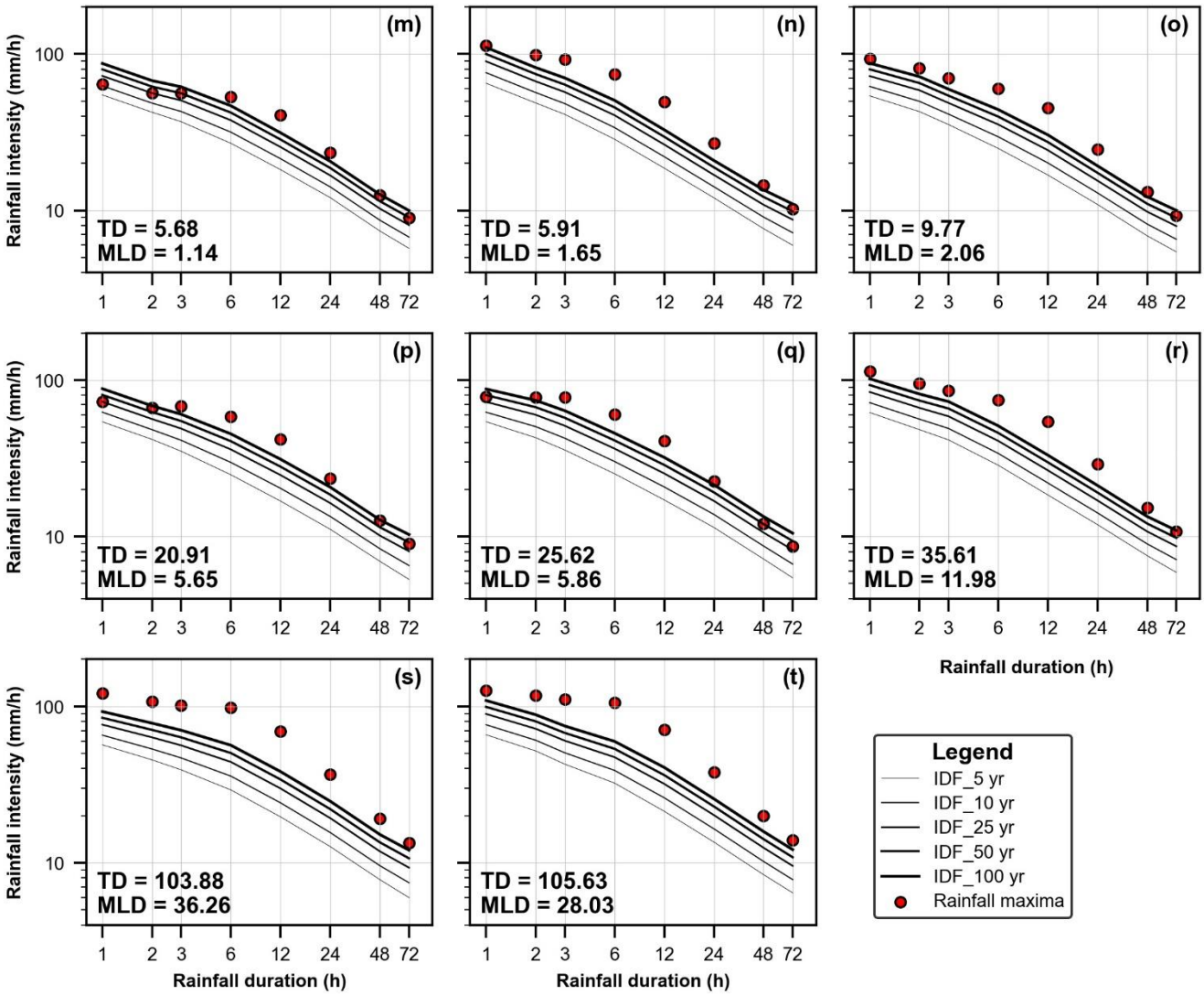


Figure S9: IDF curves and rainfall intensity maxima over multiple timespans (1 – 72 h) within the P_{std} for the different landslide density grid cells (excluding three grid cells where landslide occurrence was deemed to be affected by anthropogenic activities).

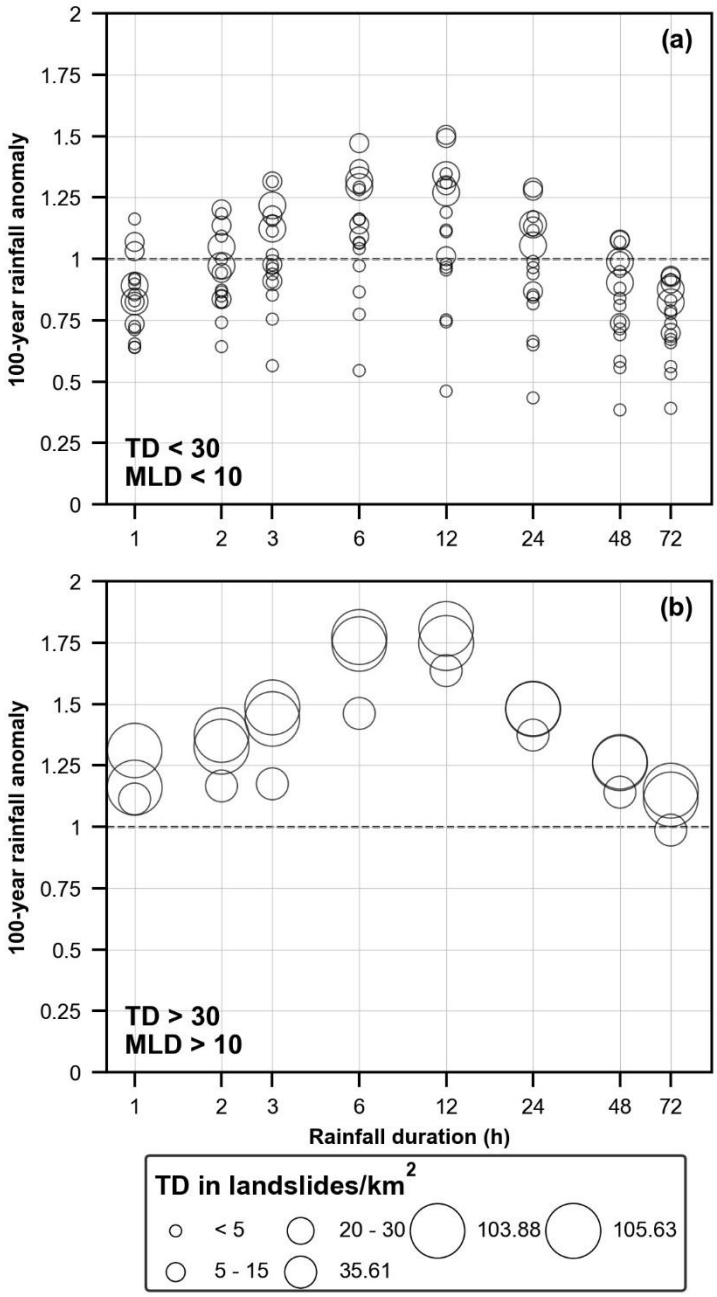


Figure S10: Variation of the 100-year rainfall anomaly at multiple timespans over the grid cells with low (a) and high landslide density (b) (excluding three grid cells where landslide occurrence was deemed to be affected by anthropogenic activities).

Table S1. Adjusted p-values from multiple pairwise comparisons of slope angles (> threshold angle) using the Dunn's test. The analysis expected three grid cells, where most landslides occurred in areas affected by anthropogenic activities (e.g., slopes surrounding cropland and paddy field). The null hypothesis assumes no significant differences in slope conditions. A p-value higher than a significant level of 5 % leads to accept the null hypothesis. The test was applied after rejecting the null hypothesis of the Kruskal-Wallis static, which indicated significant differences in slope conditions within the extent of the R/A grid cells.

TD	0.05	0.38	0.8	1.04	1.22	4.51	2.81	1.47	1.97	3.75	4.87	5.91	5.45	5.68	9.77	20.91	25.26	35.61	105.63	103.88
0.05	1.00																			
0.38	0.00	1.00																		
0.8	0.00	1.00	1.00																	
1.04	1.00	0.00	0.00	1.00																
1.22	0.00	0.00	0.00	0.00	1.00															
4.51	0.00	0.00	0.00	0.00	0.00	1.00														
2.81	0.00	0.00	0.00	0.00	0.00	0.00	1.00													
1.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00												
1.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00											
3.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00										
4.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00									
5.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00								
5.45	0.00	0.01	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00							
5.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00						
9.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00					
20.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00				
25.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00			
35.61	1.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00		
105.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	
103.88	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00

Table S2: Spearman rank correlations between rainfall intensity maxima

Duration (h)	1	2	3	6	12	24	48	72
1	1							
2	0.97	1						
3	0.93	0.93	1					
6	0.83	0.86	0.94	1				
12	0.71	0.74	0.85	0.96	1			
24	0.71	0.73	0.85	0.96	1	1		
48	0.70	0.72	0.84	0.95	1	1	1	
72	0.71	0.74	0.84	0.96	1	1	1	1