Supplementary Materials for

Impact of an extreme typhoon event on subsequent sediment discharges and rainfall-driven landslides in affected mountainous regions of Taiwan

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Fig. S1
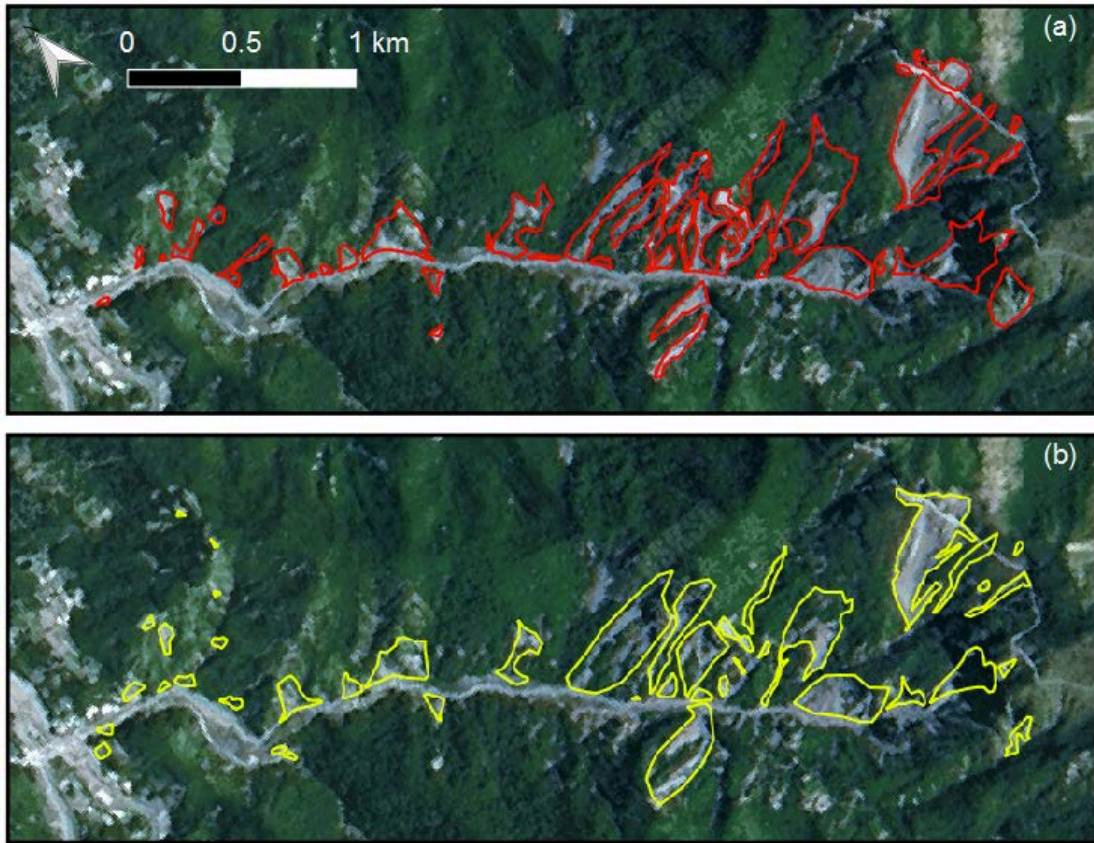
Table S1

Table S2

Table S3

Fig. S1. Comparison of landslides inventory maps of manual and automated identification. (a) Manual identification of landslides after Typhoon Morakot using aerial photos. (b) Automated identification of landslides after Typhoon Morakot using SPOT satellite images. The automated identification has been validated with an accuracy of 92.5 % against a subcatchment of the Zhoushui River, in which, the accuracy was estimated via a confusion matrix by dividing the sum of the true positive and true negative identification areas from the total testing area: *Accuracy = (True Positive Identification Area + True Negative Identification Area) / Total Testing Area*.

Table S1. The yearly rating curves and observation days of SSD and water discharge: Zhoushui River (1510H057)

Year	Yearly rating curves				Observation days	
	κ	b	β	r^2	SSD	Water discharge
1997	0.6	2.1	0.1	0.86	30	365
1998	2.0	1.9	-0.2	0.94	30	365
1999	2.1	1.9	0.2	0.94	30	365
2000	0.3	2.3	-0.2	0.87	30	366
2001	0.5	2.3	0.1	0.95	31	365
2002	4.3	1.8	0.7	0.71	34	362
2003	5.1	1.7	2.7	0.84	31	365
2004	5.0	1.8	-0.1	0.94	30	366
2005	2.0	1.9	-0.3	0.92	30	365
2006	0.9	2.0	-0.1	0.94	28	365
2007	0.9	2.0	0.2	0.85	29	364
2008	1.8	1.9	0.4	0.92	31	366
2009	1.0	2.0	0.0	0.95	22	365
2010	3.7	1.9	0.8	0.94	21	365
2011	1.9	2.0	0.3	0.93	29	365
2012	1.2	2.0	-0.2	0.98	31	366
2013	3.8	1.8	-0.4	0.93	29	365
2014	1.9	2.0	0.5	0.93	27	365
2015	1.1	2.0	0.3	0.94	30	365
2016	1.3	2.0	0.4	0.81	27	366

Table S2. The yearly rating curves and observation days of SSD and water discharge: Zengwen River (1630H019)

Year	Yearly rating curves				Observation days	
	κ	b	β	r^2	SSD	Water discharge
1997	1.6	2.2	0.1	0.88	7	365
1998	1.3	2.2	-0.2	0.94	15	365
1999	10.2	1.7	-0.5	0.93	10	365
2000	0.1	2.5	0.3	0.94	11	366
2001	3.2	1.6	1.4	0.89	20	365
2002	30.4	1.2	5.4	0.93	28	365
2003	25.1	1.3	3.6	0.93	26	365
2004	21.6	1.2	6.4	0.91	28	366
2005	14.1	1.3	1.4	0.94	26	365
2006	17.8	1.2	1.7	0.97	30	365
2007	23.2	1.3	0.7	0.96	28	365
2008	16.9	1.3	1.2	0.95	29	366
2009	5.8	1.5	6.0	0.80	18	234
2010	7.3	1.1	13.3	0.71	32	365
2011	19.5	1.4	3.8	0.73	25	225
2012	7.2	1.4	1.7	0.92	31	366
2013	22.3	1.2	1.1	0.96	32	365
2014	20.6	1.2	6.6	0.89	30	365
2015	28.0	1.2	0.9	0.96	31	365
2016	17.6	1.3	-0.2	0.95	32	366

Table S3. The yearly rating curves and observation days of SSD and water discharge: Gaoping River (1730H043)

Year	Yearly rating curves				Observation days	
	κ	b	β	r^2	SSD	Water discharge
1997	1.6	1.7	0.1	0.78	14	365
1998	0.9	1.8	0.0	0.96	17	365
1999	3.4	1.4	6.0	0.80	30	365
2000	0.8	1.7	1.5	0.91	32	366
2001	2.6	1.6	3.7	0.73	31	365
2002	0.8	1.7	-0.3	0.66	30	365
2003	0.4	1.7	0.9	0.77	29	365
2004	0.8	1.6	-0.8	0.54	18	366
2005	0.4	2.0	0.1	0.94	22	254
2006	0.9	1.7	0.3	0.91	30	365
2007	0.8	1.6	-0.3	0.84	18	365
2008	0.4	1.9	0.6	0.97	31	366
2009	0.9	2.0	1.1	0.89	30	365
2010	23.5	1.4	-0.3	0.86	31	365
2011	13.7	1.3	0.0	0.70	30	365
2012	31.5	1.1	1.3	0.77	30	342
2013	64.5	1.0	1.1	0.84	30	365
2014	4.1	1.5	0.1	0.79	30	334
2015	2.9	1.5	0.1	0.94	30	365
2016	5.5	1.3	0.0	0.81	30	366