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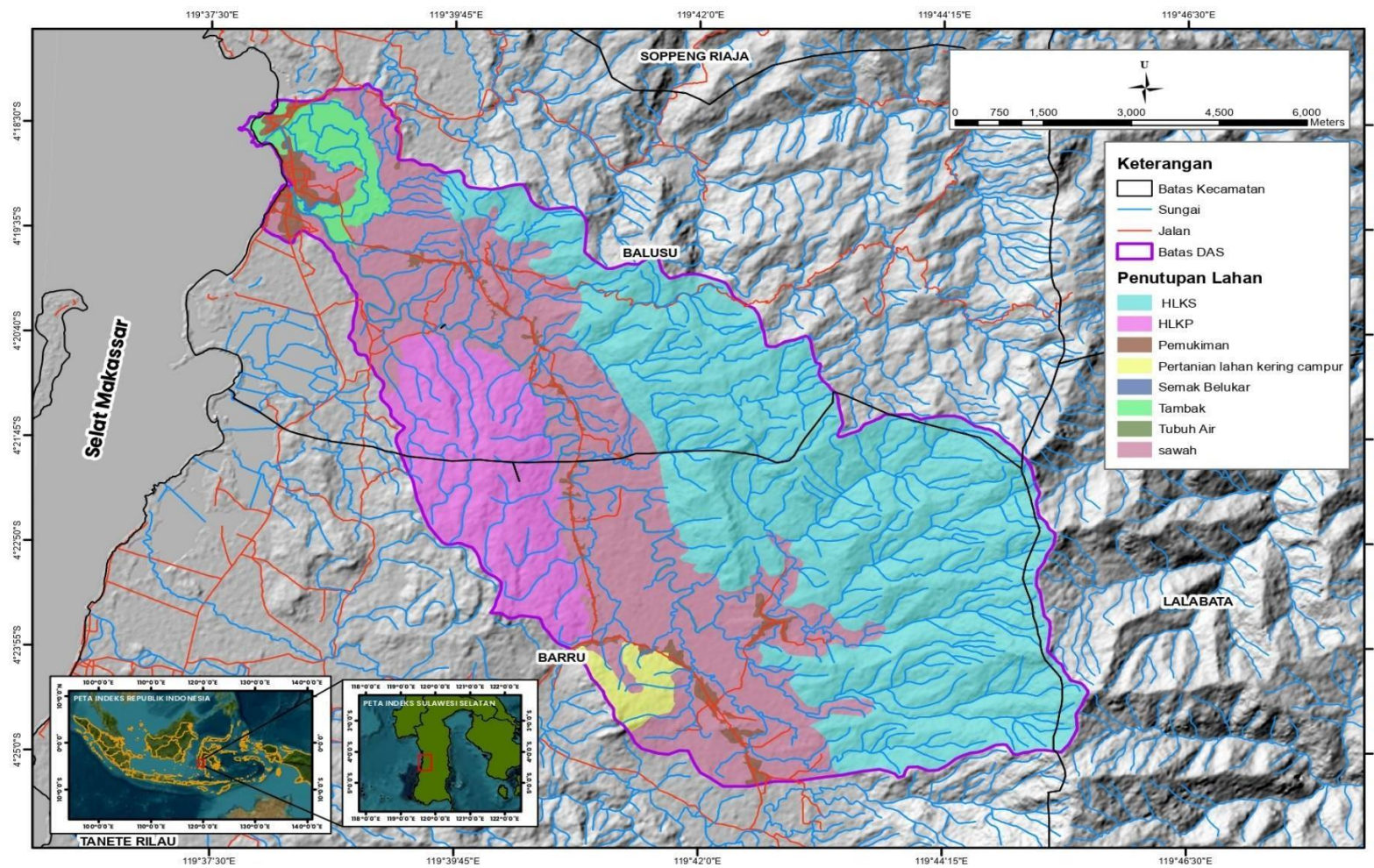
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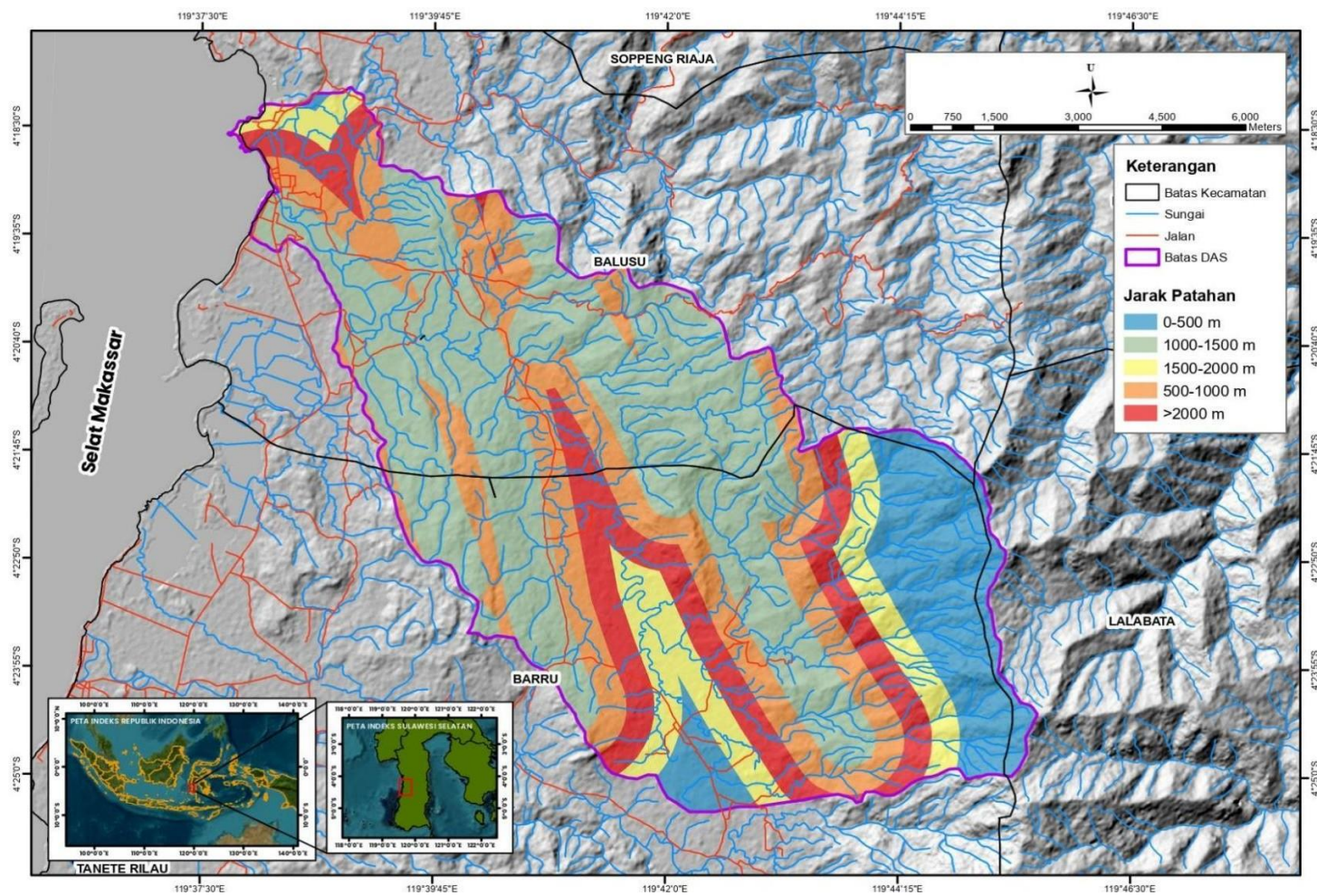
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LAMPIRAN

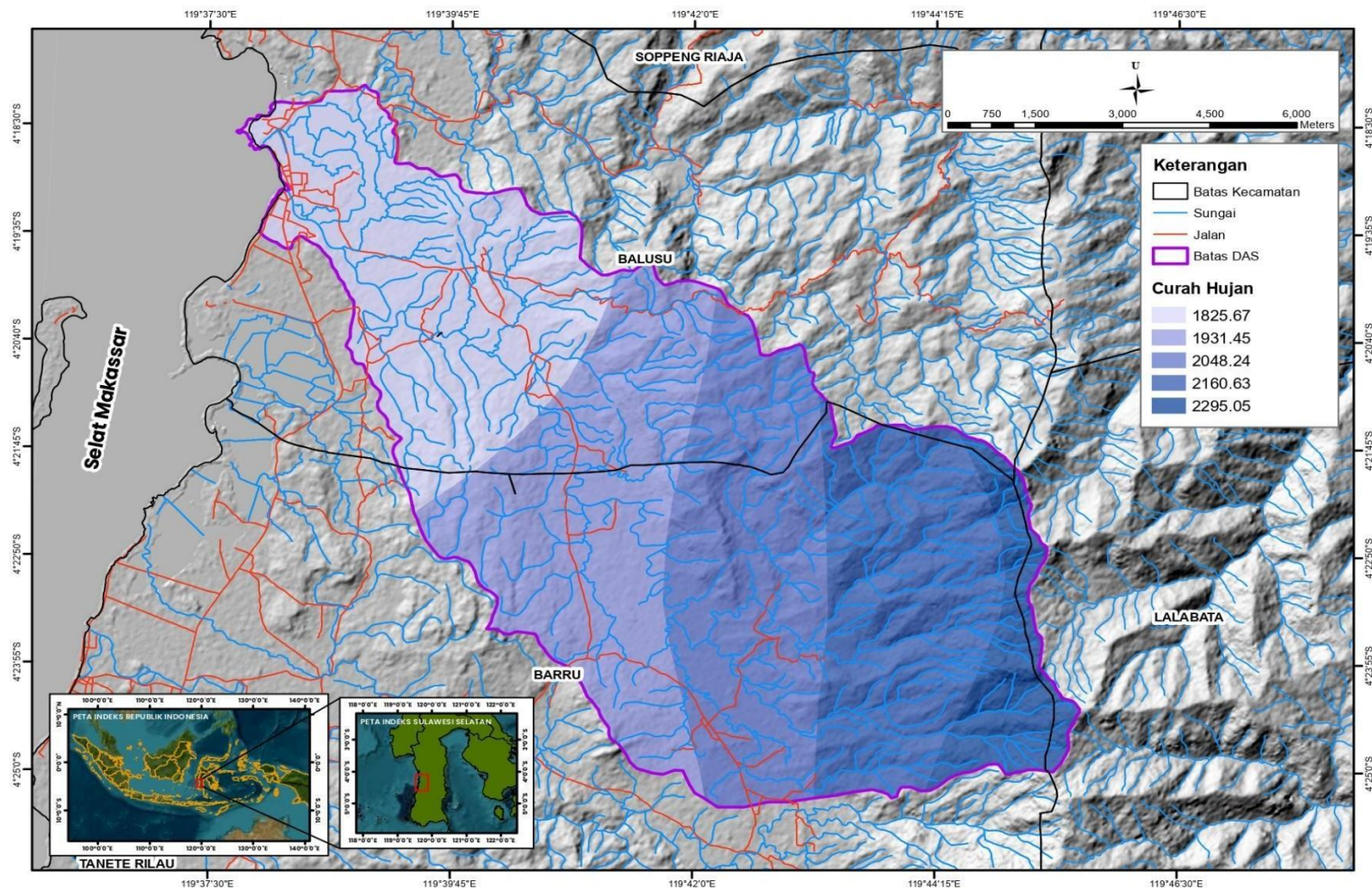
Lampiran 1. Peta Penutupan Lahan



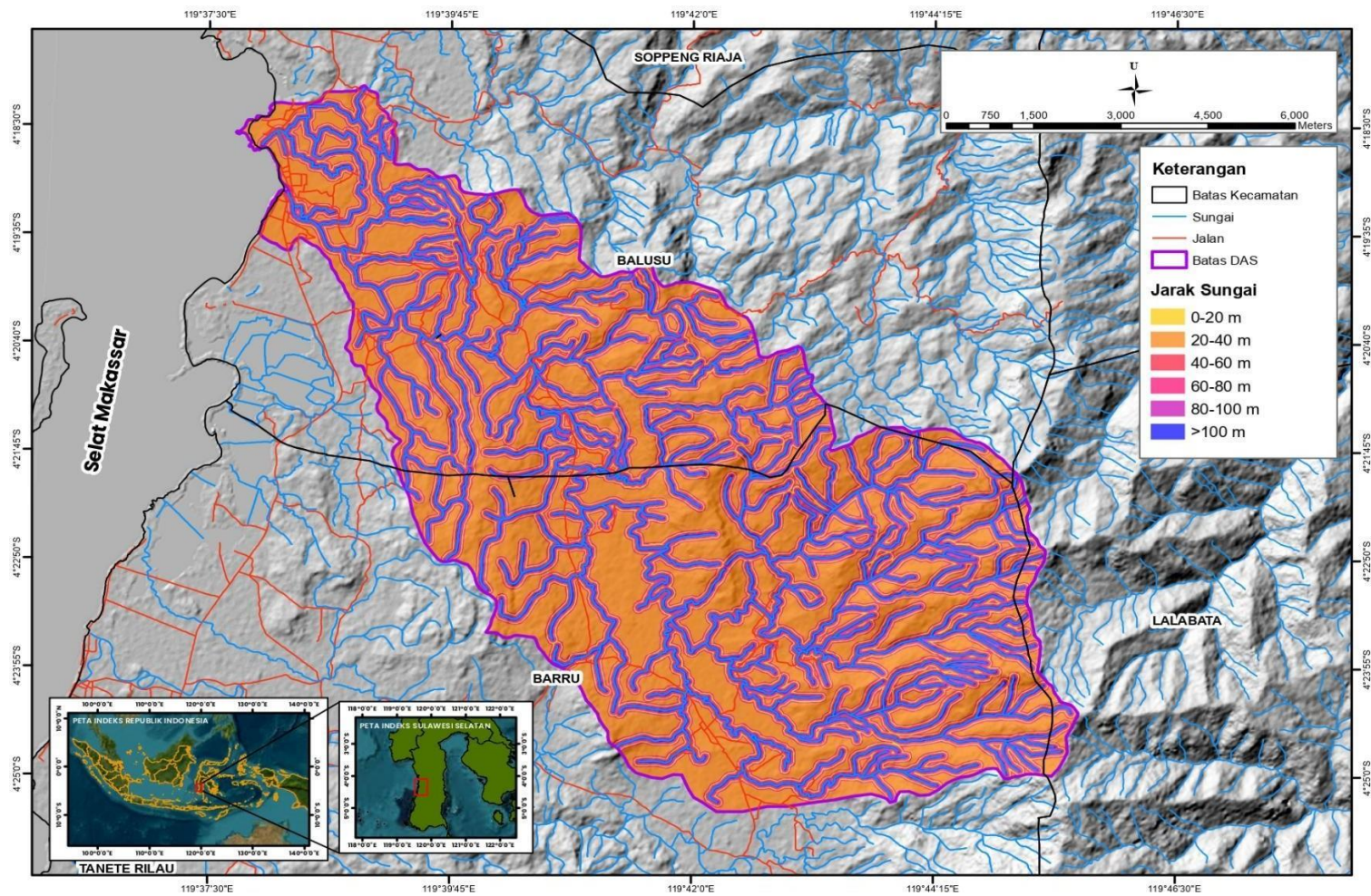
Lampiran 2. Peta Jarak dari Patahan



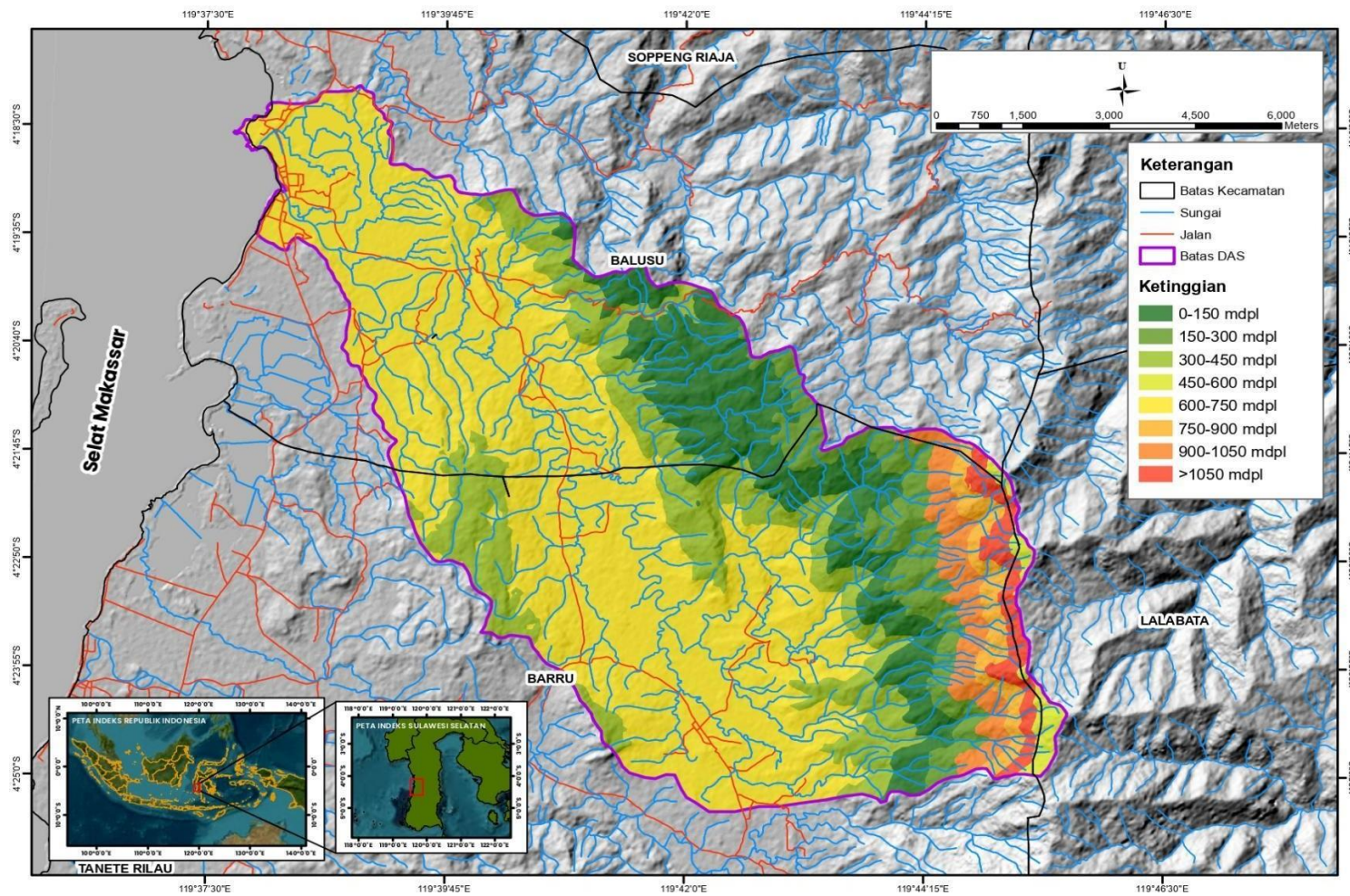
Lampiran 3. Peta Curah Hujan



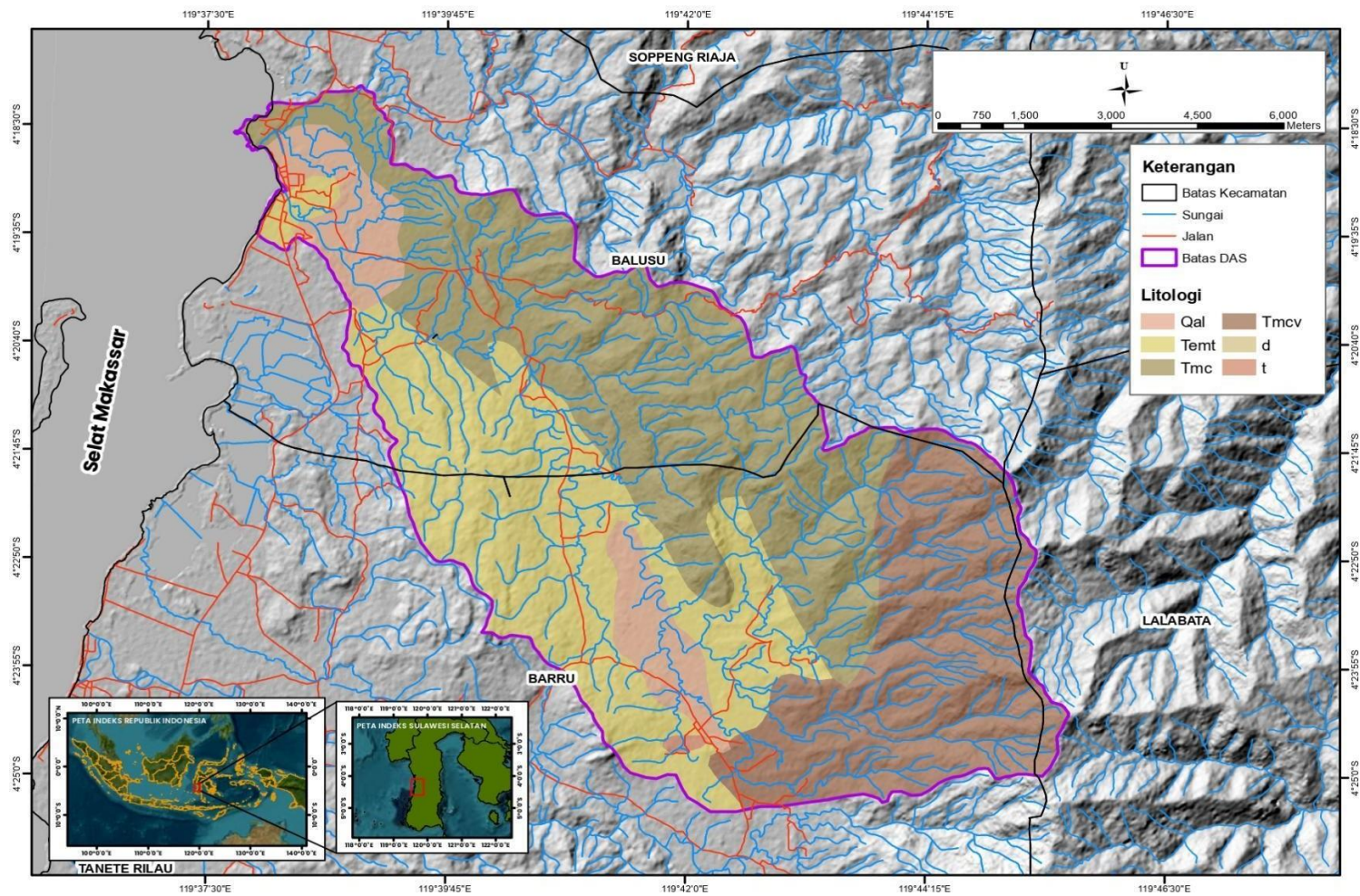
Lampiran 4. Peta Jarak dari Sungai



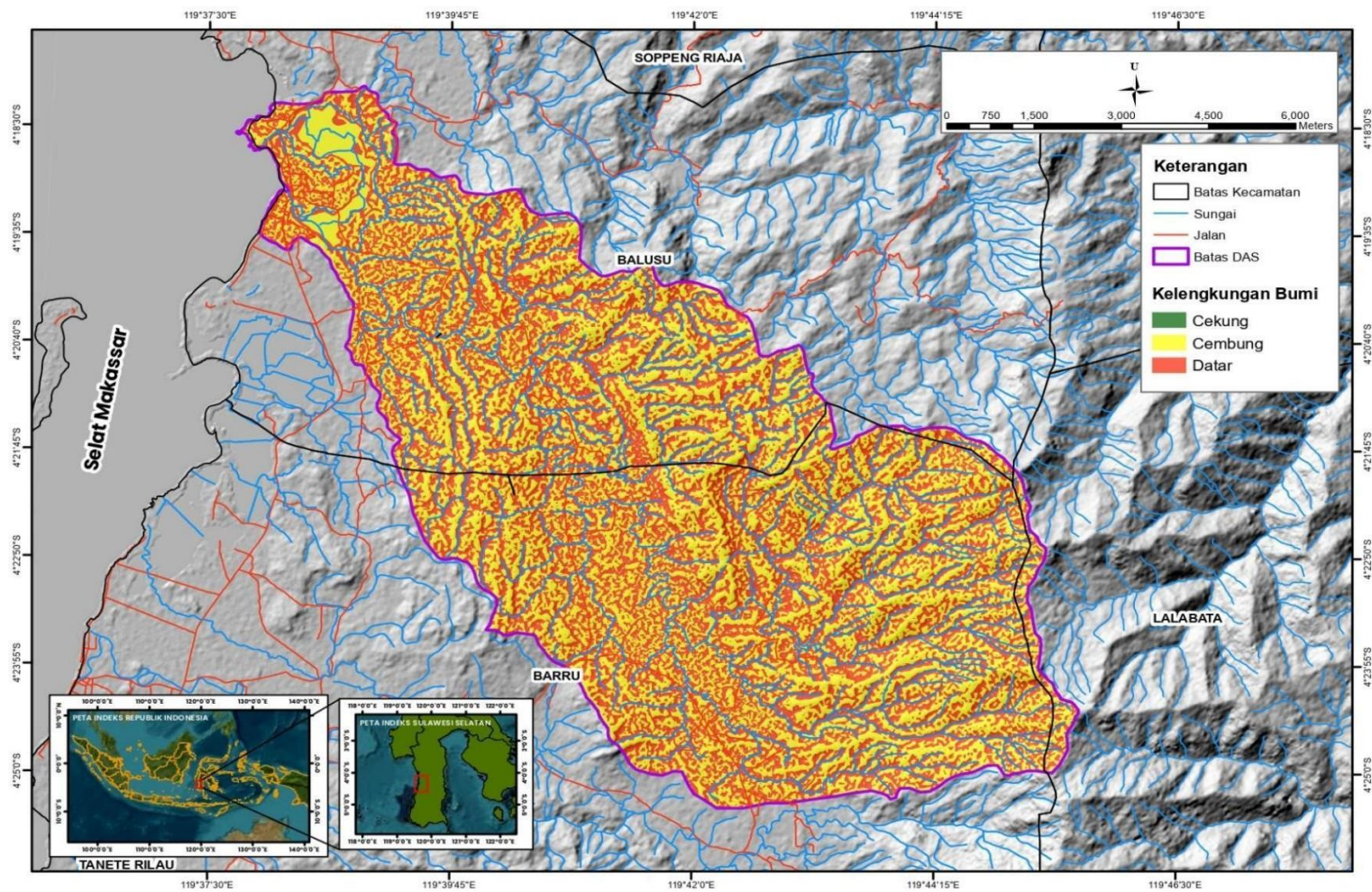
Lampiran 5. Peta Ketinggian



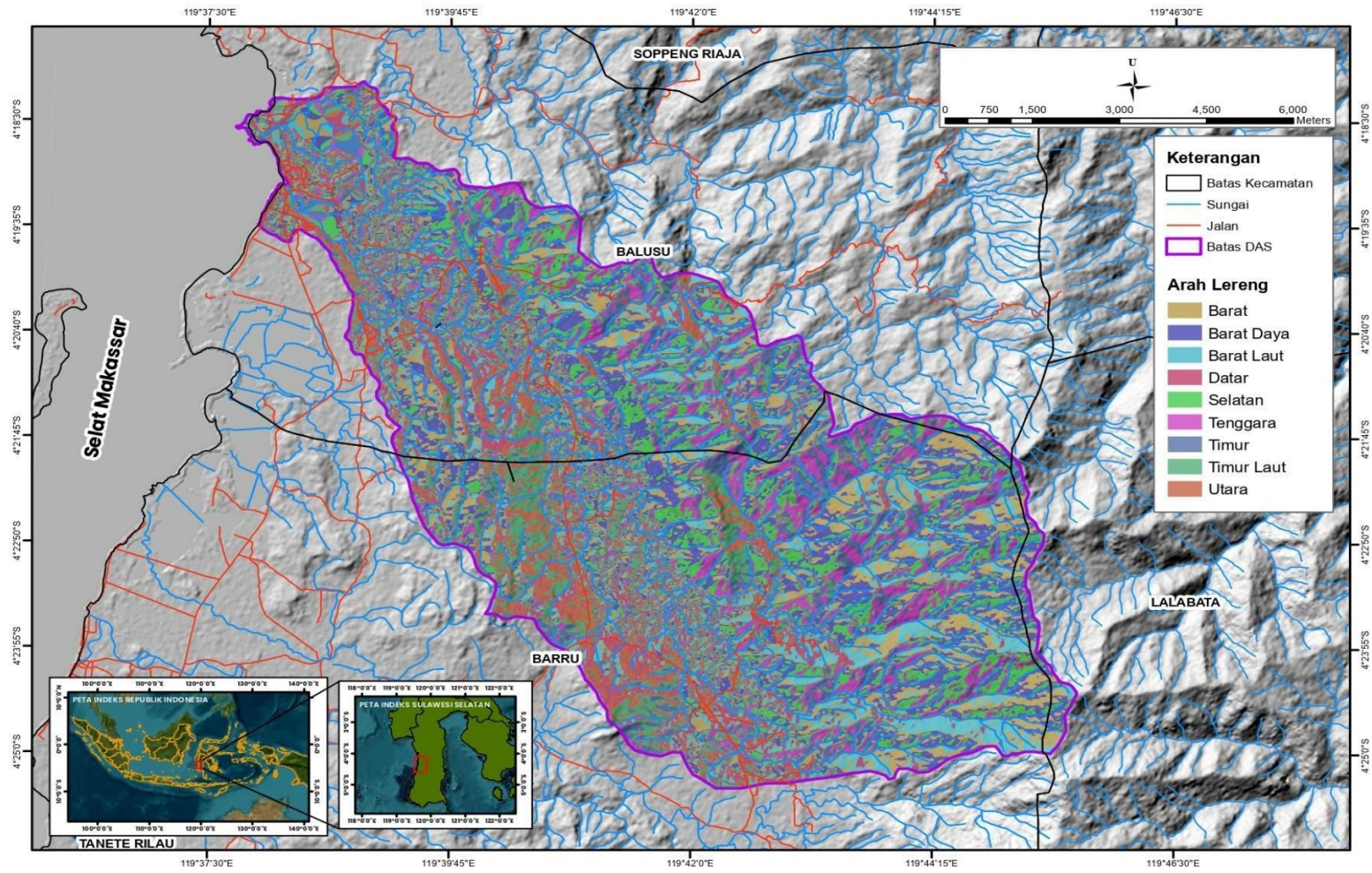
Lampiran 6. Peta litologi



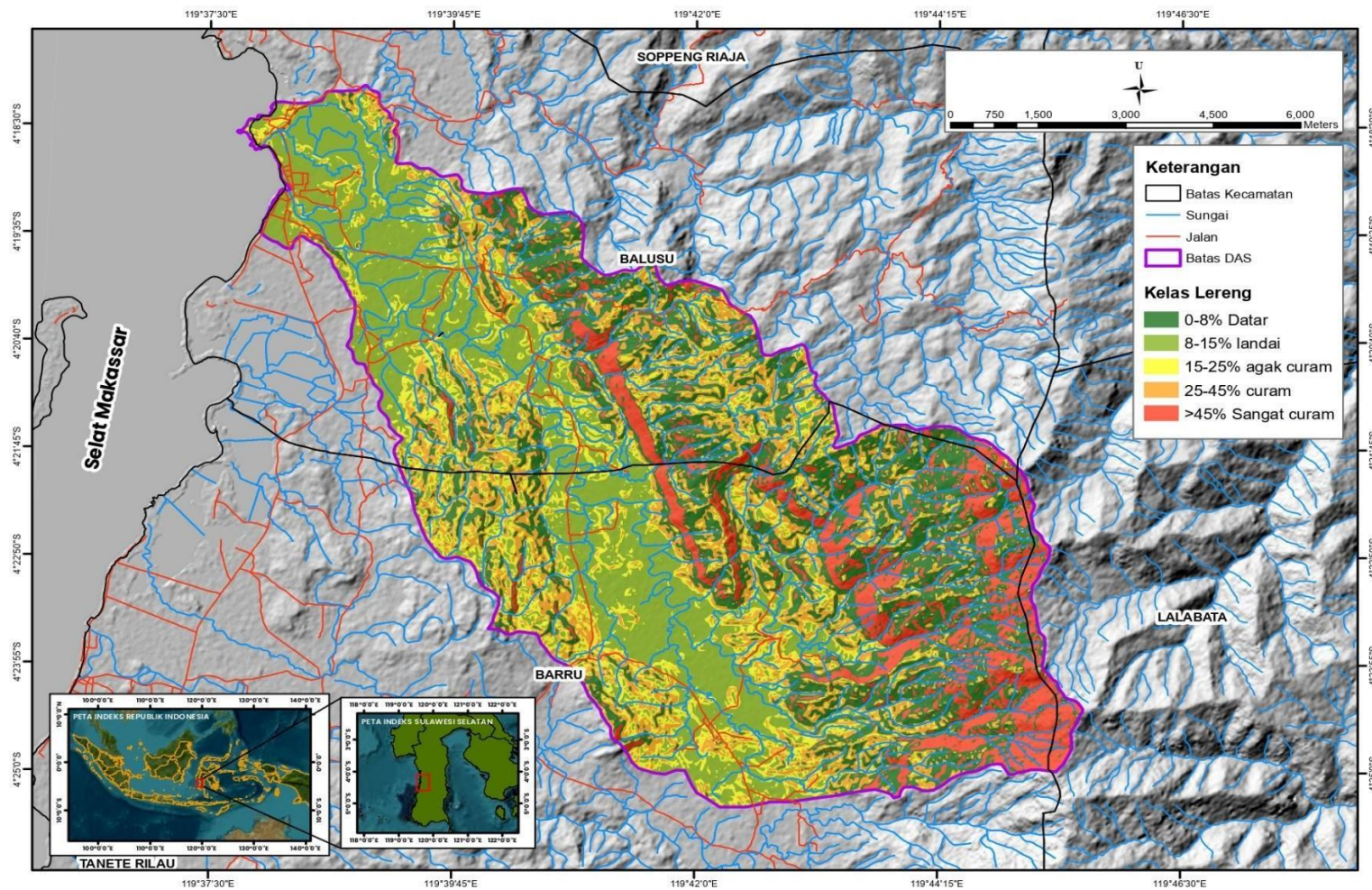
Lampiran 7. Kelengkungan Bumi



Lampiran 8. Peta Aspek Lereng



Lampiran 9. Peta Kemiringan Lereng



Lampiran 10. Validasi Penutupan Lahan (*Confusion Matrix*) DAS Takalasi

Kelas Google / Kelas Referensi	HLKP	HLKS	Semak Belukar	Permukiman	PLKC	Sawah	Tambak	Tubuh air	Total	User's Accuracy
HLKP	19	10	0	0	0	0	0	0	29	65.51724
HLKS	0	64	5	0	0	0	0	0	68	94.11765
Semak Belukar	0	1	4	0	0	0	0	0	5	80
Permukiman	0	0	0	9	0	0	0	0	9	100
PLKC	0	0	0	0	12	5	0	0	12	100
Sawah	0	0	0	0	5	43	0	0	48	89.5833
Tambak	0	0	0	0	0	0	7	0	7	100
Tubuh Air	0	0	0	0	0	0	0	1	1	100
Total	19	75	8	9	17	43	7	1	179	
Producer Accuracy	100	85.33333	16.66666	100	100	100	100	100		159

$$\text{Overall Accuracy} = \frac{159}{179} \times 100\% = 88,82\%$$

$$\text{Kappa Akurasi} = \frac{20.371}{23.951} \times 100\% = 85,05\%$$

Lampiran 11. Tabel titik data Curah Hujan dari Tahun 2018-2022 di DAS Takalasi

Stasiun	Tahun	Rata-rata
p-421197	2018	1533,32
	2019	1060,59
	2020	1737,41
	2021	2140,82
	2022	2139,49
Total Rata-rata		1733,12
p-421200	2018	2118,71
	2019	1499,74
	2020	2491,63
	2021	2851,72
	2022	2606,61
Total Rata-rata		2313,68
p-451197	2018	1533,32
	2019	1060,59
	2020	1737,41
	2021	2140,82
	2022	2139,49
Total Rata-rata		1733,12
p-451200	2018	2118,71
	2019	1499,74
	2020	2491,63
	2021	2851,72
	2022	2606,61
Total Rata-rata		2313,68

Lampiran 12. Hasil analisis statistik Regresi Logistik (RL) pada 10 kali pengulangan. Berturut-turut dengan penamaan iterasi 1, iterasi 2, ..., iterasi 10

Classification Table^a

	Observed	Predicted		
		grid_code		Percentage Correct
		0	1	
Step 1	grid_code 0	1358	397	77,4
	grid_code 1	263	1492	85,0
	Overall Percentage			81,2

a. The cut value is .500

Iterasi 2

Classification Table^a

	Observed	Predicted		
		grid_code		Percentage Correct
		0	1	
Step 1	grid_code 0	1316	439	75,0
	grid_code 1	280	1475	84,0
	Overall Percentage			79,5

a. The cut value is .500

Iterasi 3

Classification Table^a

	Observed	Predicted		
		grid_code		Percentage Correct
		0	1	
Step 1	grid_code 0	1345	410	76,6
	grid_code 1	257	1498	85,4
	Overall Percentage			81,0

a. The cut value is .500

Iterasi 4

Classification Table^a

	Observed	Predicted		
		grid_code		Percentage Correct
		0	1	
Step 1	grid_code 0	1309	446	74,6
	grid_code 1	254	1501	85,5
	Overall Percentage			80,1

a. The cut value is .500

Iterasi 5

Classification Table^a

	Observed	Predicted		
		grid_code		Percentage Correct
		0	1	
Step 1	grid_code 0	1349	406	76,9
	grid_code 1	245	1510	86,0
	Overall Percentage			81,5

a. The cut value is .500

Iterasi 6

Classification Table^a

	Observed	Predicted		
		grid_code		Percentage Correct
		0	1	
Step 1	grid_code 0	1334	421	76,0
	grid_code 1	263	1492	85,0
	Overall Percentage			80,5

a. The cut value is .500

Iterasi 7

Classification Table^a

	Observed	Predicted		
		grid_code		Percentage Correct
		0	1	
Step 1	grid_code 0	1341	414	76,4
	grid_code 1	268	1487	84,7
	Overall Percentage			80,6

a. The cut value is .500

Iterasi 8

Classification Table^a

	Observed	Predicted		
		grid_code		Percentage Correct
		0	1	
Step 1	grid_code 0	1340	415	76,4
	grid_code 1	257	1498	85,4
	Overall Percentage			80,9

a. The cut value is .500

Iterasi 9

Classification Table^a

	Observed	Predicted		
		grid_code		Percentage Correct
		0	1	
Step 1	grid_code 0	1345	410	76,6
	grid_code 1	256	1499	85,4
	Overall Percentage			81,0

a. The cut value is .500

Iterasi 10

Classification Table^a

	Observed	Predicted		
		grid_code		Percentage Correct
		0	1	
Step 1	grid_code 0	1334	421	76,0
	grid_code 1	253	1502	85,6
	Overall Percentage			80,8

a. The cut value is .500

Tabel signifikan secara parsial. Nilai koefisien B artinya digunakan untuk membuat persamaan logit Z sebagai data input dalam pembuatan LSI (indeks probabilitas)

Iterasi 1

Variables in the Equation

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
							Lower	Upper
fr_tuplah	,096	,093	1,077	1	,299	1,101	,918	1,320
fr_litolog	,731	,056	167,751	1	,000	2,076	1,859	2,319
fr_ketingg	,656	,064	106,535	1	,000	1,927	1,701	2,183
fr_curvatu	,922	,310	8,847	1	,003	2,515	1,370	4,617
fr_lereng	1,426	,081	312,523	1	,000	4,163	3,554	4,876
Step 1 ^a fr_aspek	,381	,086	19,435	1	,000	1,464	1,236	1,735
fr_sungai	1,371	,157	76,242	1	,000	3,937	2,895	5,356
fr_patahan	,726	,122	35,489	1	,000	2,067	1,628	2,624
fr_ch	,923	,135	46,678	1	,000	2,517	1,931	3,280
Constant	-8,627	,444	378,263	1	,000	,000		

a. Variable(s) entered on step 1: fr_tuplah, fr_litolog, fr_ketingg, fr_curvatu, fr_lereng, fr_aspek, fr_sungai, fr_patahan, fr_ch.
Iterasi 2

Variables in the Equation

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
							Lower	Upper
							fr_tuplah	,115
fr_litolog	,731	,057	161,899	1	,000	2,077	1,856	2,325
fr_ketingg	,659	,063	108,596	1	,000	1,934	1,708	2,189
fr_curvatu	,414	,311	1,771	1	,183	1,512	,822	2,781
fr_lereng	1,394	,081	299,441	1	,000	4,031	3,443	4,721
Step 1 ^a fr_aspek	,433	,087	24,545	1	,000	1,542	1,299	1,830
fr_sungai	1,387	,158	76,766	1	,000	4,002	2,934	5,457
fr_patahan	,763	,125	37,343	1	,000	2,144	1,679	2,739
fr_ch	,661	,138	23,082	1	,000	1,936	1,479	2,535
Constant	-7,903	,438	326,042	1	,000	,000		

a. Variable(s) entered on step 1: fr_tuplah, fr_litolog, fr_ketingg, fr_curvatu, fr_lereng, fr_aspek, fr_sungai, fr_patahan, fr_ch.
Iterasi 3

Variables in the Equation

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
							Lower	Upper
fr_tuplah	-,071	,094	,568	1	,451	,931	,774	1,120
fr_litolog	,768	,057	183,733	1	,000	2,154	1,928	2,407
fr_ketingg	,692	,063	121,156	1	,000	1,998	1,766	2,260
fr_curvatu	,345	,312	1,223	1	,269	1,411	,766	2,599
fr_lereng	1,436	,084	295,663	1	,000	4,206	3,571	4,954
Step 1 ^a fr_aspek	,477	,089	28,824	1	,000	1,611	1,353	1,917
fr_sungai	1,385	,158	76,437	1	,000	3,997	2,930	5,452
fr_patahan	,765	,121	39,820	1	,000	2,149	1,694	2,725
fr_ch	,859	,136	39,985	1	,000	2,360	1,809	3,080
Constant	-8,024	,440	332,044	1	,000	,000		

a. Variable(s) entered on step 1: fr_tuplah, fr_litolog, fr_ketingg, fr_curvatu, fr_lereng, fr_aspek, fr_sungai, fr_patahan, fr_ch.

Iterasi 4

Variables in the Equation

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
							Lower	Upper
Step 1 ^a fr_tuplah	-,117	,094	1,549	1	,213	,890	,740	1,070
fr_litolog	,744	,056	178,192	1	,000	2,104	1,887	2,347
fr_ketingg	,652	,062	110,078	1	,000	1,919	1,699	2,168
fr_curvatu	,210	,303	,479	1	,489	1,234	,681	2,236
fr_lereng	1,426	,080	315,055	1	,000	4,162	3,556	4,872
fr_aspek	,354	,085	17,519	1	,000	1,425	1,207	1,683
fr_sungai	1,282	,152	71,505	1	,000	3,603	2,677	4,849
fr_patahan	,501	,120	17,295	1	,000	1,650	1,303	2,089
fr_ch	,951	,132	51,660	1	,000	2,588	1,997	3,354
Constant	-7,332	,422	302,458	1	,000	,001		

a. Variable(s) entered on step 1: fr_tuplah, fr_litolog, fr_ketingg, fr_curvatu, fr_lereng, fr_aspek, fr_sungai, fr_patahan, fr_ch.

Iterasi 5

Variables in the Equation

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
							Lower	Upper
Step 1 ^a fr_tuplah	,014	,094	,021	1	,884	1,014	,844	1,218
fr_litolog	,685	,057	146,444	1	,000	1,984	1,775	2,216
fr_ketingg	,601	,063	92,167	1	,000	1,824	1,613	2,062
fr_curvatu	,138	,309	,199	1	,656	1,148	,626	2,104
fr_lereng	1,493	,080	349,596	1	,000	4,449	3,805	5,203
fr_aspek	,427	,086	24,543	1	,000	1,533	1,295	1,816
fr_sungai	1,364	,152	80,378	1	,000	3,910	2,902	5,268
fr_patahan	,831	,119	48,376	1	,000	2,295	1,816	2,901
fr_ch	,884	,134	43,365	1	,000	2,421	1,861	3,149
Constant	-7,812	,432	327,705	1	,000	,000		

a. Variable(s) entered on step 1: fr_tuplah, fr_litolog, fr_ketingg, fr_curvatu, fr_lereng, fr_aspek, fr_sungai, fr_patahan, fr_ch.

Iterasi 6

Variables in the Equation

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
							Lower	Upper
fr_tuplah	,059	,093	,405	1	,525	1,061	,884	1,273
fr_litolog	,690	,056	150,186	1	,000	1,993	1,785	2,225
fr_ketingg	,640	,063	102,038	1	,000	1,896	1,675	2,147
fr_curvatu	,765	,307	6,193	1	,013	2,149	1,176	3,924
fr_lereng	1,412	,079	315,640	1	,000	4,105	3,513	4,797
Step 1 ^a fr_aspek	,471	,088	28,604	1	,000	1,602	1,348	1,904
fr_sungai	1,293	,154	70,270	1	,000	3,643	2,693	4,929
fr_patahan	,791	,123	41,598	1	,000	2,206	1,734	2,805
fr_ch	,823	,135	37,148	1	,000	2,277	1,747	2,966
Constant	-8,310	,436	363,658	1	,000	,000		

a. Variable(s) entered on step 1: fr_tuplah, fr_litolog, fr_ketingg, fr_curvatu, fr_lereng, fr_aspek, fr_sungai, fr_patahan, fr_ch.

Iterasi 7

Variables in the Equation

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
							Lower	Upper
fr_tuplah	,118	,094	1,586	1	,208	1,125	,936	1,353
fr_litolog	,659	,057	134,393	1	,000	1,932	1,728	2,160
fr_ketingg	,589	,062	90,123	1	,000	1,802	1,595	2,034
fr_curvatu	,706	,309	5,210	1	,022	2,025	1,105	3,713
fr_lereng	1,398	,080	303,576	1	,000	4,047	3,458	4,736
Step 1 ^a fr_aspek	,498	,088	32,077	1	,000	1,645	1,385	1,954
fr_sungai	1,186	,155	58,711	1	,000	3,274	2,417	4,435
fr_patahan	,761	,125	37,365	1	,000	2,141	1,677	2,733
fr_ch	,868	,137	40,056	1	,000	2,382	1,821	3,117
Constant	-8,107	,438	342,127	1	,000	,000		

a. Variable(s) entered on step 1: fr_tuplah, fr_litolog, fr_ketingg, fr_curvatu, fr_lereng, fr_aspek, fr_sungai, fr_patahan, fr_ch.

Iterasi 8

Variables in the Equation

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
							Lower	Upper
fr_tuplah	,051	,095	,285	1	,593	1,052	,874	1,267
fr_litolog	,722	,058	154,943	1	,000	2,058	1,837	2,305
fr_ketingg	,646	,064	102,472	1	,000	1,908	1,684	2,162
fr_curvatu	,380	,312	1,477	1	,224	1,462	,792	2,697
fr_lereng	1,475	,083	312,558	1	,000	4,370	3,711	5,146
Step 1 ^a fr_aspek	,357	,086	17,164	1	,000	1,429	1,207	1,691
fr_sungai	1,499	,158	89,483	1	,000	4,478	3,282	6,109
fr_patahan	,781	,126	38,359	1	,000	2,184	1,706	2,796
fr_ch	,960	,139	47,474	1	,000	2,611	1,987	3,430
Constant	-8,249	,442	348,895	1	,000	,000		

a. Variable(s) entered on step 1: fr_tuplah, fr_litolog, fr_ketingg, fr_curvatu, fr_lereng, fr_aspek, fr_sungai, fr_patahan, fr_ch.

Iterasi 9

Variables in the Equation

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
							Lower	Upper
fr_tuplah	,072	,094	,578	1	,447	1,074	,893	1,292
fr_litolog	,749	,057	173,211	1	,000	2,115	1,892	2,364
fr_ketingg	,598	,063	90,917	1	,000	1,818	1,608	2,055
fr_curvatu	,157	,311	,257	1	,612	1,171	,637	2,153
fr_lereng	1,426	,080	316,664	1	,000	4,161	3,557	4,869
Step 1 ^a fr_aspek	,442	,089	24,579	1	,000	1,557	1,307	1,854
fr_sungai	1,363	,155	77,547	1	,000	3,907	2,885	5,291
fr_patahan	,658	,126	27,119	1	,000	1,931	1,507	2,474
fr_ch	,898	,139	41,934	1	,000	2,455	1,871	3,222
Constant	-7,712	,431	319,895	1	,000	,000		

a. Variable(s) entered on step 1: fr_tuplah, fr_litolog, fr_ketingg, fr_curvatu, fr_lereng, fr_aspek, fr_sungai, fr_patahan, fr_ch.

Iterasi 10

Variables in the Equation

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
							Lower	Upper
Step 1 ^a fr_tuplah	-,006	,094	,004	1	,950	,994	,826	1,196
fr_litolog	,748	,057	173,884	1	,000	2,112	1,890	2,361
fr_ketingg	,674	,063	113,436	1	,000	1,962	1,733	2,221
fr_curvatu	,631	,309	4,188	1	,041	1,880	1,027	3,443
fr_lereng	1,418	,081	305,819	1	,000	4,131	3,524	4,842
fr_aspek	,523	,089	34,819	1	,000	1,687	1,418	2,007
fr_sungai	1,315	,156	71,199	1	,000	3,725	2,745	5,056
fr_patahan	,750	,126	35,355	1	,000	2,118	1,654	2,712
fr_ch	,761	,137	30,686	1	,000	2,140	1,635	2,801
Constant	-8,194	,441	345,353	1	,000	,000		

a. Variable(s) entered on step 1: fr_tuplah, fr_litolog, fr_ketingg, fr_curvatu, fr_lereng, fr_aspek, fr_sungai, fr_patahan, fr_ch.

Lampiran 13. Hasil validasi kurva ROC untuk melihat sensitivitas kesuksesan dan prediksi faktor kausatif (variabel independen) terhadap kejadian tanah longsor (variabel independen)

Area Under the Curve

Test Result Variable(s)	Area
Iterasi 10	,847
Iterasi 9	,847
Iterasi 8	,853
Iterasi 7	,854
Iterasi 6	,850
Iterasi 5	,860
Iterasi 4	,855
Iterasi 3	,845
Iterasi 2	,854
Iterasi 1	,853

The test result variable(s): Iterasi 10, Iterasi 9, Iterasi8, Iterasi 7, Iterasi 6, Iterasi 5, Iterasi 4, Iterasi 3, Iterasi 2, Iterasi 1 has at least one tie between the positive actual state group and the negative actual state group. Statistics may be biased.

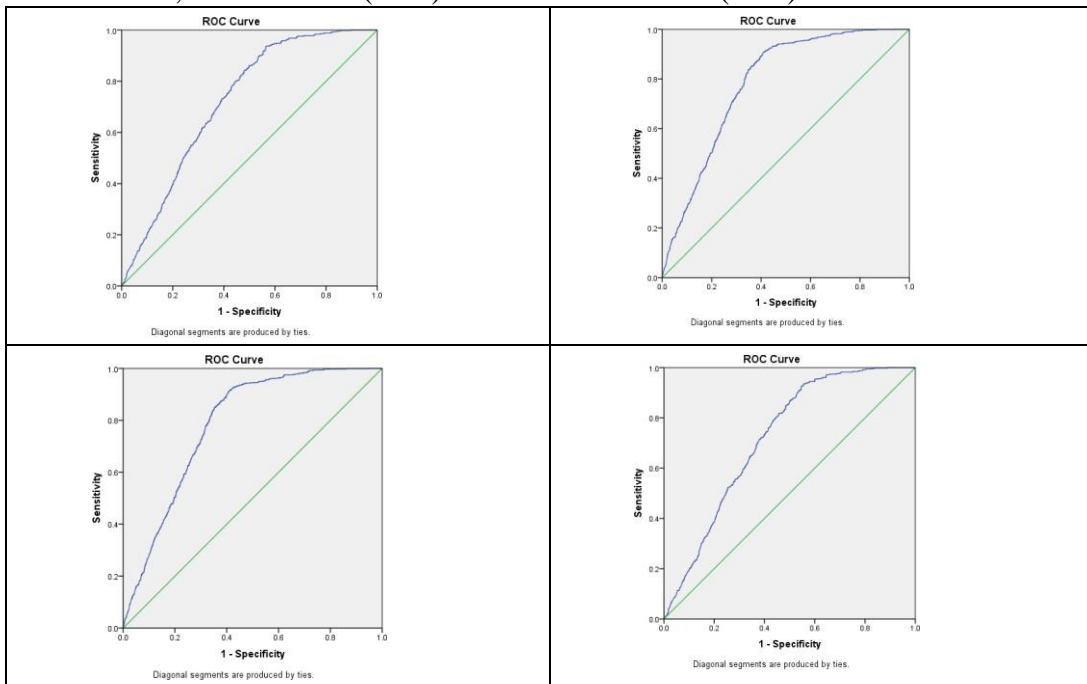
Tabel AUC Predictive 10 iterasi (code; iterasi1, iterasi2,, iterasi 10)

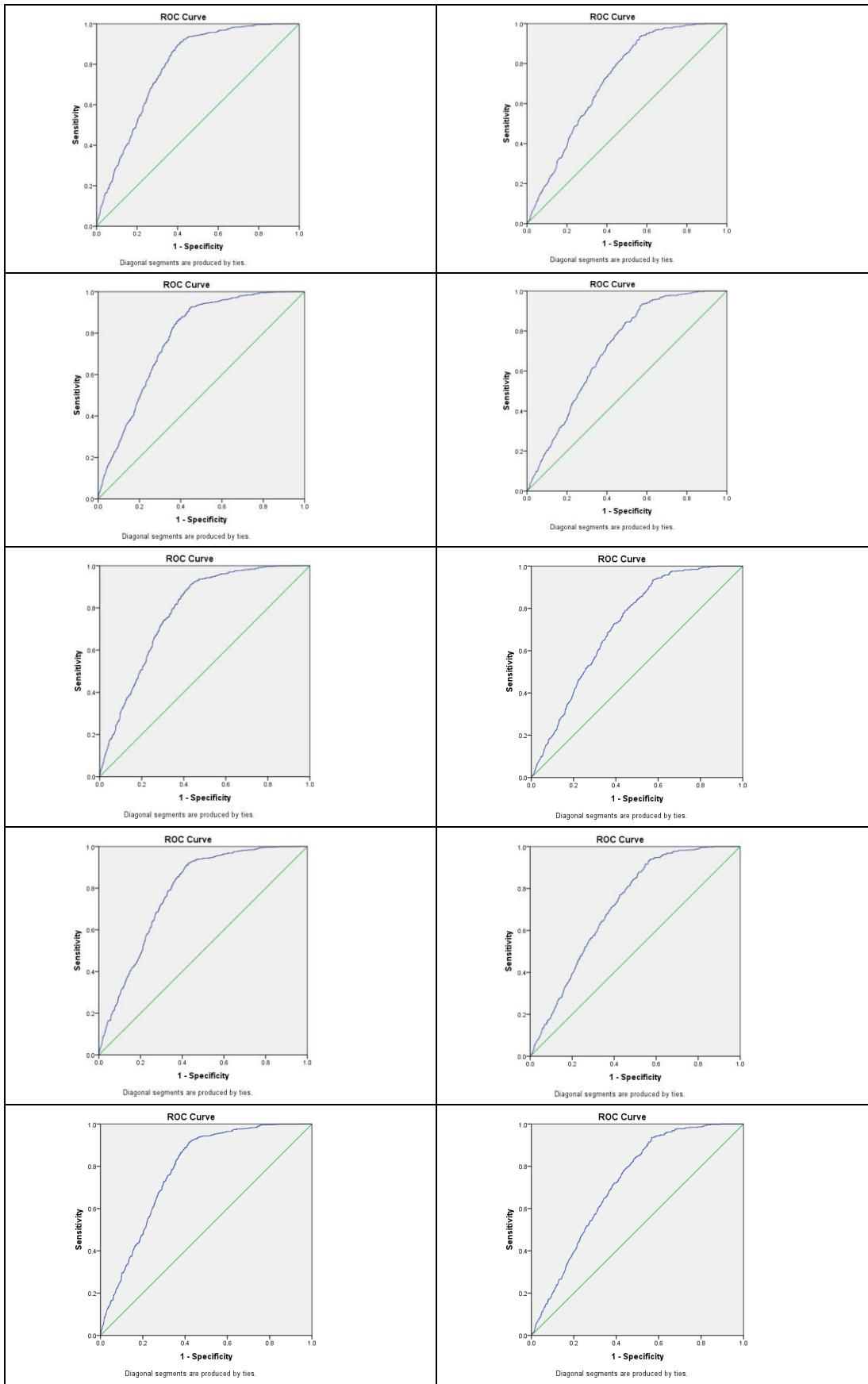
Area Under the Curve

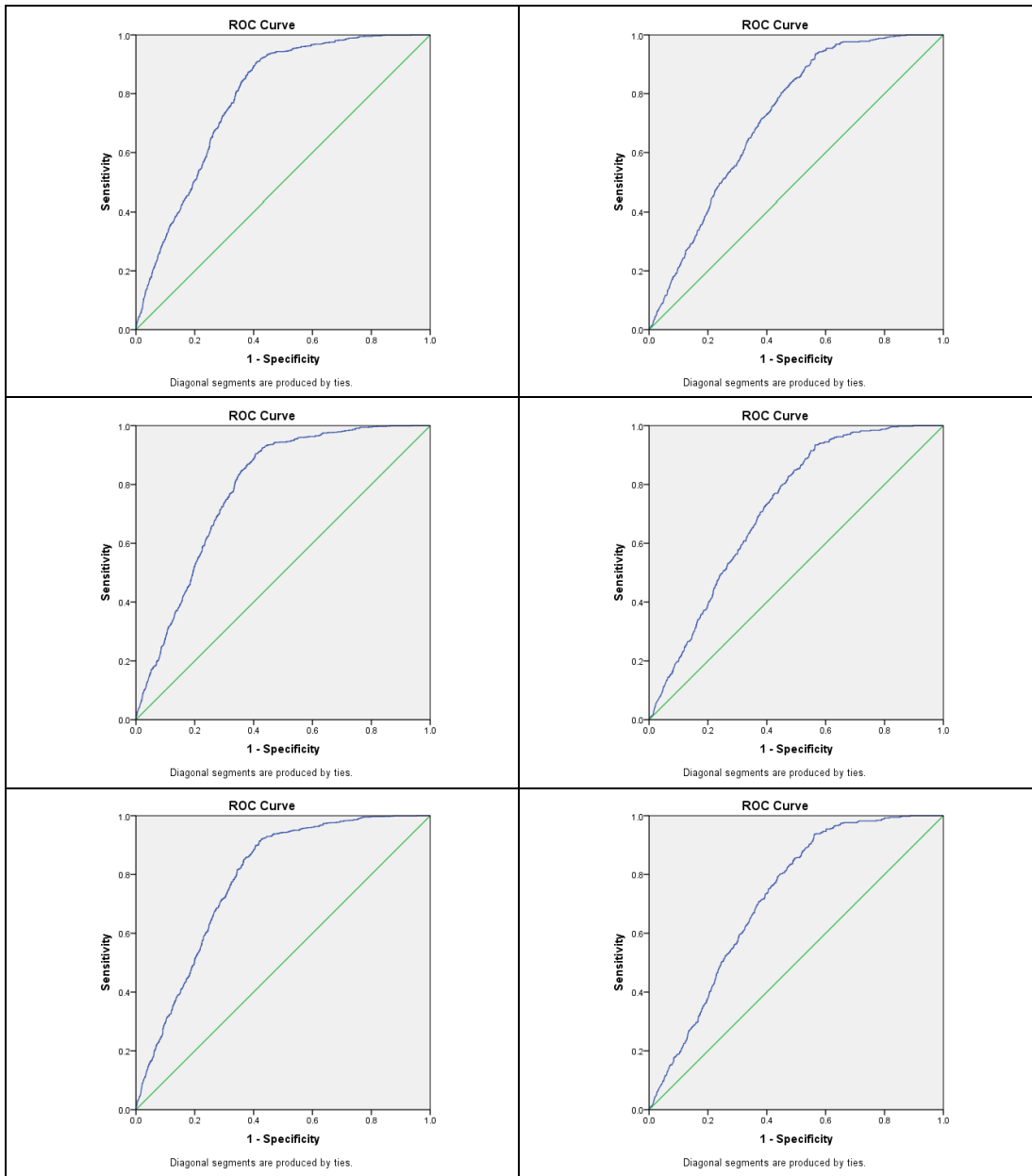
Test Result Variable(s)	Area
iterasi 10	.843
iterasi 9	.839
iterasi 8	.844
iterasi 7	.848
iterasi 6	.843
iterasi 5	.849
iterasi 4	.848
iterasi 3	.843
iterasi 2	.847
iterasi 1	.848

The test result variable(s): RL_value10, RL_value9_, RL_value8_, RL_value7_, RL_value6_, RL_value5_, RL_value4_, RL_value3_, RL_value2_, RL_value1_ has at least one tie between the positive actual state group and the negative actual state group. Statistics may be biased.

Kurva ROC, AUC Succes (70%) dan AUC Predictive (30%)







Lampiran 14. Dokumentasi hasil validasi di lapangan



