Model and loss	Location	IoU	Accuracy	Precision	Recall	f1 - Score	Kappa	Mean IoU
ResUNet Dice + BCE	Himachal	0.838692	0.980577	0.914357	0.910193	0.91227	0.90135	
	Himachal Ladakh	0.78497	0.97793	0.907835	0.852942	0.879533	0.867397	
	Sikkim	0.635909	0.989136	0.82777	0.732876	0.777438	0.771889	
	Kashmir	0.760902	0.992935	0.843791	0.885659	0.864218	0.860592	
	Uttrakhand	0.821908	0.940939	0.896747	0.907821	0.90225	0.859939	**0.7684762**
ResUNet Dice + IoU + SSIM	Himachal	0.814322	0.976801	0.87908	0.917042	0.89766	-	
	Himachal Ladakh	0.80622	0.979379	0.877664	0.908291	0.892715	-	
	Sikkim	0.652876	0.989705	0.837171	0.74784	0.789988	-	
	Kashmir	0.758754	0.992768	0.832066	0.895959	0.862831	-	
	Uttrakhand	0.818914	0.939667	0.892315	0.90872	0.900443	-	**0.7702172**
ResUNet Focal + Dice + Tversky	Himachal	0.876076	0.985612	0.945632	0.922543	0.933945	0.925873	
	Himachal Ladakh	0.818378	0.98203	0.922468	0.878826	0.900118	0.890251	
	Sikkim	0.763275	0.993283	0.89716	0.83646	0.865747	0.862305	
	Kashmir	0.791271	0.994015	0.873367	0.893818	0.883474	0.880401	
	Uttrakhand	0.848972	0.952881	0.934492	0.902694	0.918318	0.885222	**0.8195944**
Segformer B4 Dice + BCE	Himachal	0.896682	0.987921	0.940313	0.950799	0.945527	0.938734	
	Himachal Ladakh	0.8129	0.980948	0.895224	0.898372	0.896795	0.8863	
	Sikkim	0.66127	0.989743	0.820254	0.773332	0.796102	0.790845	
	Kashmir	0.765961	0.993222	0.861129	0.87391	0.867472	0.863993	
	Uttrakhand	0.82799	0.94463	0.903475	0.908342	0.905902	0.866677	**0.7929606**
Segformer B4 Dice + IoU + SSIM	Himachal	0.847534	0.981601	0.907547	0.927625	0.917476	0.907124	
	Himachal Ladakh	0.798011	0.978887	0.87069	0.905304	0.887659	0.876012	
	Sikkim	0.608459	0.986152	0.694297	0.831124	0.756574	0.749505	
	Kashmir	0.749551	0.992635	0.84567	0.868329	0.85685	0.853069	
	Uttrakhand	0.781385	0.925563	0.849674	0.906736	0.877278	0.82394	**0.756988**
Segformer B4 Focal + Dice + Tversky	Himachal	0.880589	0.986084	0.94232	0.930758	0.936504	0.928689	
	Himachal Ladakh	0.802182	0.979992	0.900083	0.888598	0.890234	0.879227	
	Sikkim	0.671684	0.98935	0.768966	0.841504	0.803601	0.798138	
	Kashmir	0.762116	0.993352	0.89264	0.839022	0.865001	0.861595	
	Uttrakhand	0.823518	0.943615	0.909842	0.896691	0.903219	0.863441	**0.7880178**