Original Datasets

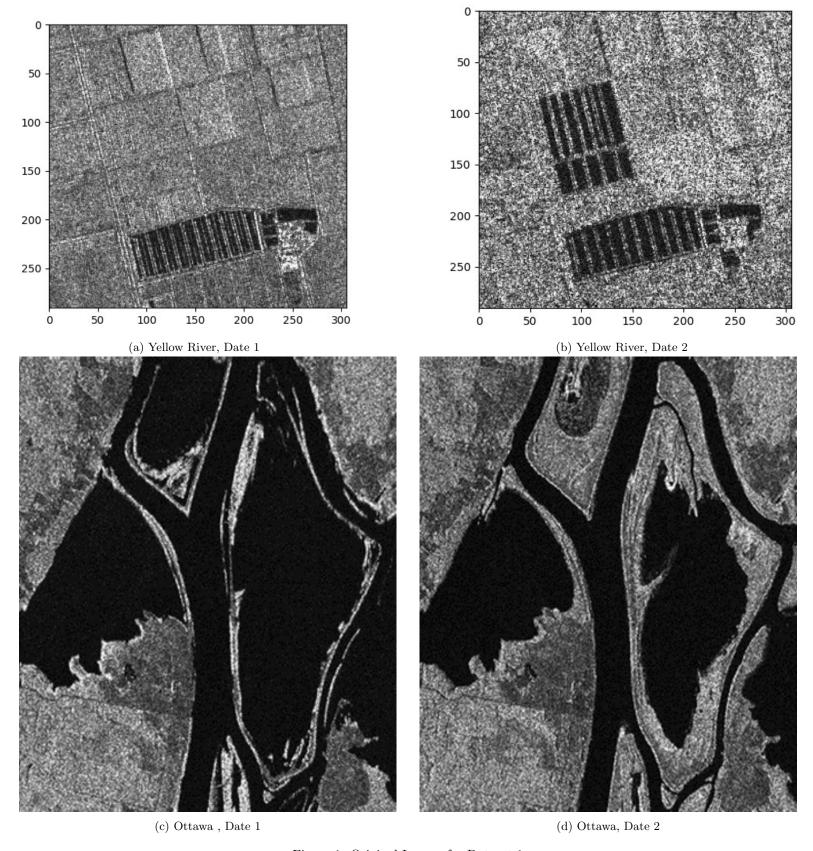


Figure 1: Original Images for Dataset 1

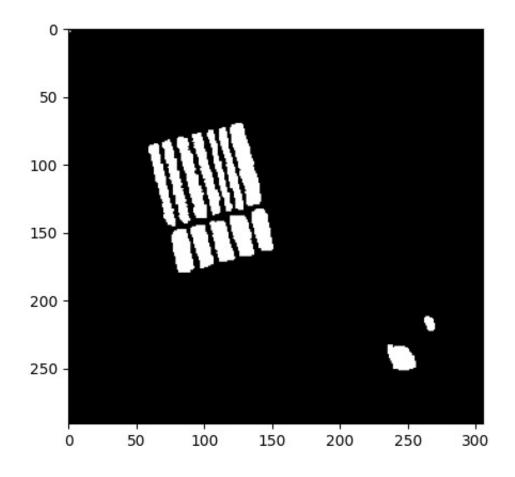
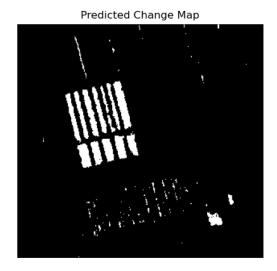


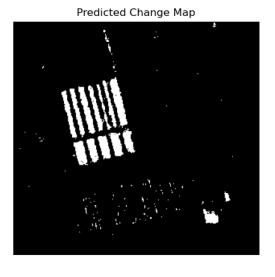


Figure 2: Expected Change Maps

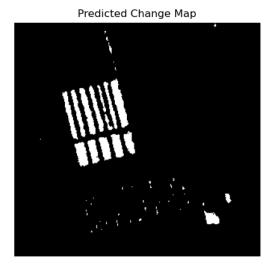
Predicted Change Maps and Metrics



(a) SAFNet Benchmark on Yellow River



(b) SCNN on Yellow River



(c) SCNN with Attention on Yellow River

Predicted Change Map



(a) SAFNet Benchmark on Ottawa

Predicted Change Map



(b) SCNN on Ottawa

Predicted Change Map



(c) SCNN with Attention on Ottawa

Metric	Ottawa	Yellow River
False Positives	448	61
False Negatives	246	845
Overall Error (%)	1.2746451104100947	0.3448508267433501
Precision (Class 0)	0.9901501375483751	0.9504360499283044
Recall (Class 0)	0.9947535454556101	0.9992462249462472
F1 Score (Class 0)	0.9924465033678197	0.974230157582767
Precision (Class 1)	0.9713774597495528	0.7767630644342973
Recall (Class 1)	0.9473487444700605	0.9256348246674728
F1 Score (Class 1)	0.959212643134286	0.8446896551724138
Accuracy (%)	98.7253548895899	94.27457764198418
Kappa	0.9497177076188303	0.3380892993339105

Table 1: SAFNet Benchmark

Metric	Ottawa	Yellow River
False Positives	332	102
False Negatives	1067	313
Overall Error (%)	1.3791403785488958	0.46728971962616817
Precision (Class 0)	0.9876111743259876	0.9492506811989101
Recall (Class 0)	0.9961120024358538	0.9987272322862862
F1 Score (Class 0)	0.9918433741261798	0.9733606310591919
Precision (Class 1)	0.9783204910539376	0.7719072164948454
Recall (Class 1)	0.9335161069225497	0.9053808948004837
F1 Score (Class 1)	0.9553932978350286	0.833333333333333334
Accuracy (%)	98.6208596214511	94.15213874910137
Kappa	0.9425501463128623	0.31315757539281985

Table 2: SCNN

Metric	Ottawa	Yellow River
False Positives	559	34
False Negatives	591	178
Overall Error (%)	1.1336750788643535	0.23813803019410495
Precision (Class 0)	0.9930814885920654	0.951883362163307
Recall (Class 0)	0.9934536426555491	0.9995798630847935
F1 Score (Class 0)	0.9932675307644573	0.9751487279017762
Precision (Class 1)	0.9650995816944496	0.7741775908978481
Recall (Class 1)	0.9631752757181132	0.9461910519951633
F1 Score (Class 1)	0.9641364685336493	0.8515848183920555
Accuracy (%)	98.86632492113566	94.38129043853343
Kappa	0.9555121276711366	0.2917827783593786

Table 3: SCNN with Attention