

Figure S1a.Turbidity map of Ramganga River in March 6 2014.

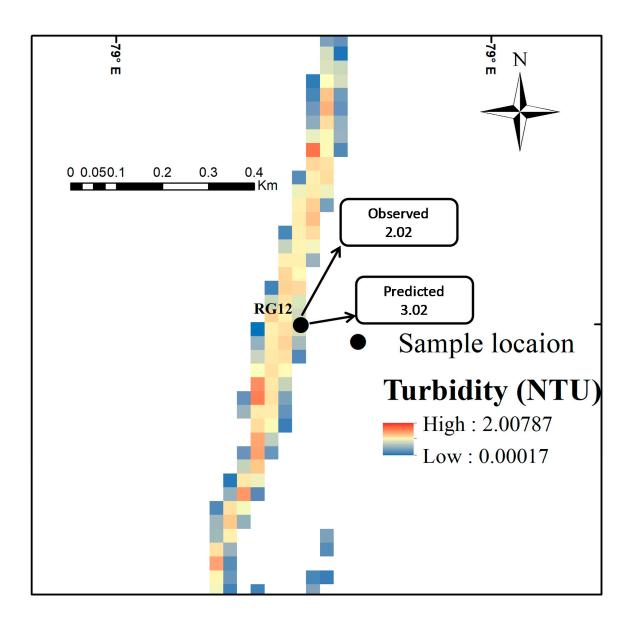


Figure S1b.Turbidity map of Ramganga River in March 6 2014.

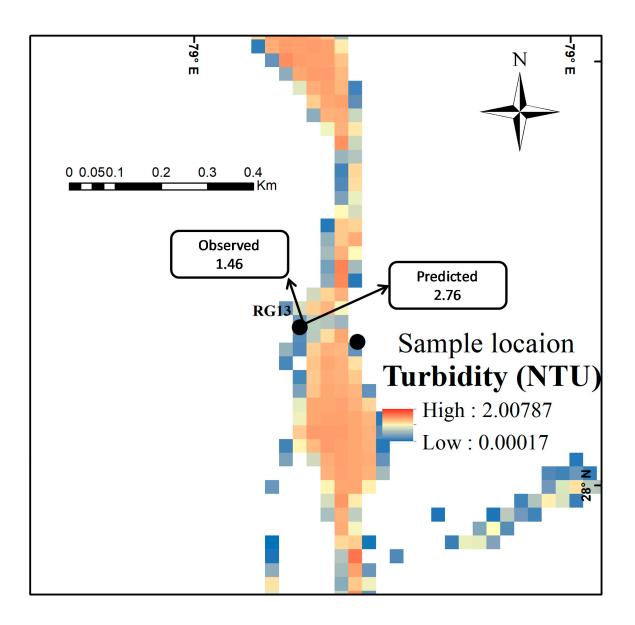


Figure S1c.Turbidity map of Ramganga River in March 6 2014.

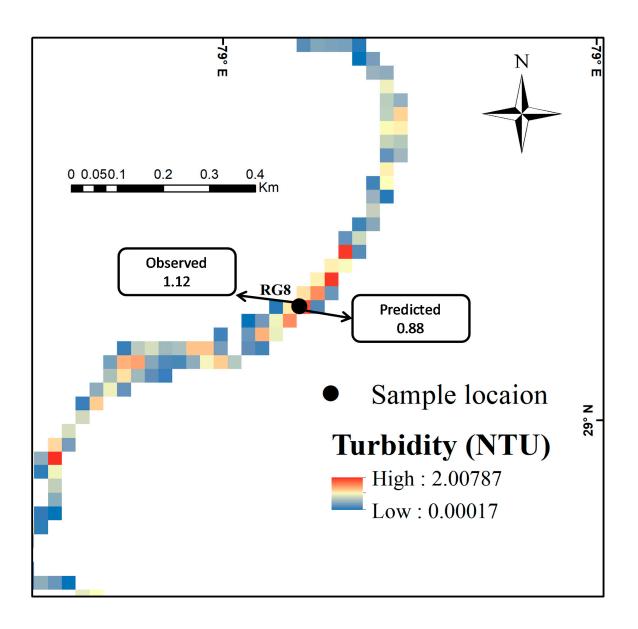


Figure S2a.Turbidity map of Ramganga River in November 11 2014.

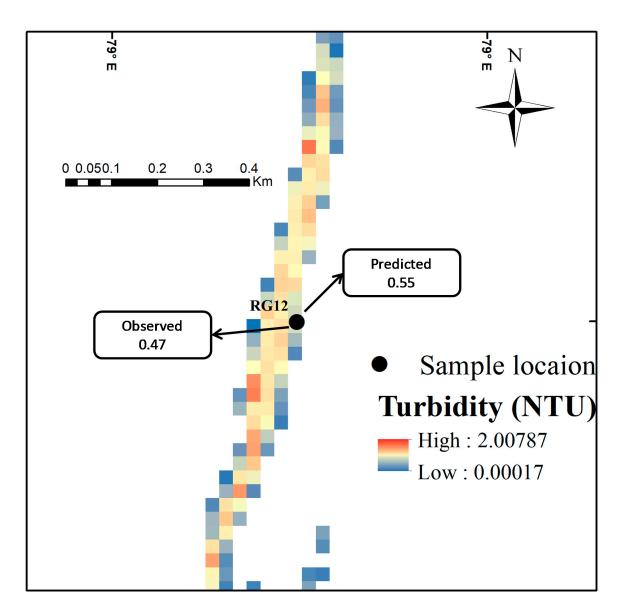


Figure S2b.Turbidity map of Ramganga River in November 11 2014.

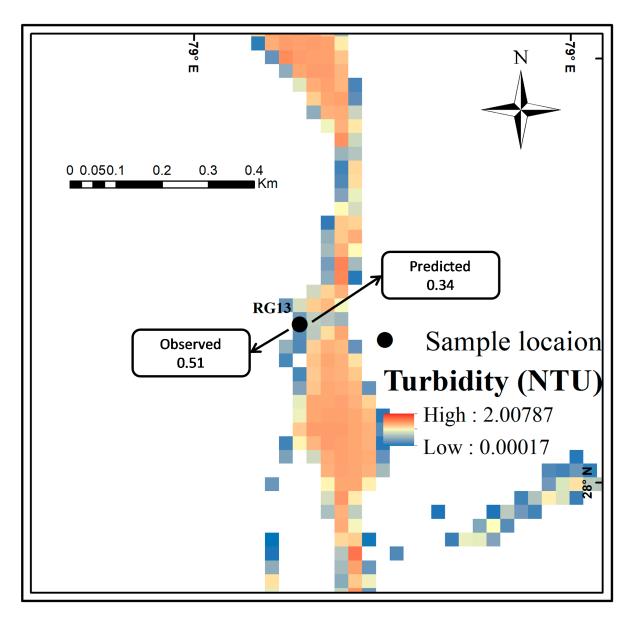


Figure S2c.Turbidity map of Ramganga River in November 11 2014.

	Mod el	R	R <sup>2</sup>	Adjuste d R²	Std. Error of the Estimate		Change Statistics				Durbi n- Watso n
						R <sup>2</sup> Chan ge	F Chan ge	df 1	df 2	Sig. F Chan ge	
March, 2014	1	.748a	0.56	0.5	0.2	-0.08	1.33	1	7	0.02	1.357
November	1	0.854 ь	0.729	0.638	0.217	0.729	8.061	2	6	0.02	
, 2014	2	0.852°	0.726	0.687	0.202	-0.002	0.052	1	6	0.828	1.972

**Table S1.** Models' summary and regression analysis statistics among turbidity concentrations and surface reflectance values for March and November 2014 (dependent variable).

**Table S2.** Variables entered/removed from turbidity predictive models relying upon the regression method utilized for March and November 2014.

	Model	Variable Entered	Variables Removed	Method
	1	b2/b4		Enter
March, 2014				
	1	b2/b4, b2/b3		Enter
				Backward (criterion: Probability of F-to-remove ≥
November, 2014	2		b2/b4	0.100)

Stations	Observed Turbidity	Predicted Turbidity	Square Residual	RMSE	
	March (November)	March (November)	March (November)	March (November)	
RG6	1.391 (1.152)	2.329 (1.33)	0.879 (0.032)		
RG7	1.721 (0.949)	2.731 (0.876)	1.02 (0.005)		
RG8	1.314 (1.124)	2.454 (0.883)	1.3 (0.058)		
RG9	1.88 (1.88)	2.917 (0.939)	1.075 (0.062)		
RG10	2.049 (0.398)	2.684 (0.647)	0.403 (0.062)	1.013 (0.178)	
RG11	2 (0.362)	2.82 (0.406)	0.672 (0.002)		
RG12	2.025 (0.462)	3.023 (0.555)	0.994 (0.009)		
RG13	1.461 (0.505)	2.76 (0.337)	1.687 (0.028)		
RG14	1.62 (0.431)	2.716 (0.603)	1.201 (0.029)		

**Table S3.** Comparison of satellites retrieved and in-situ observed turbidities values at 9 sampling sites of Ramganga River in March and November 2014 with statistical analysis for squared residual, root mean square (RMSE).