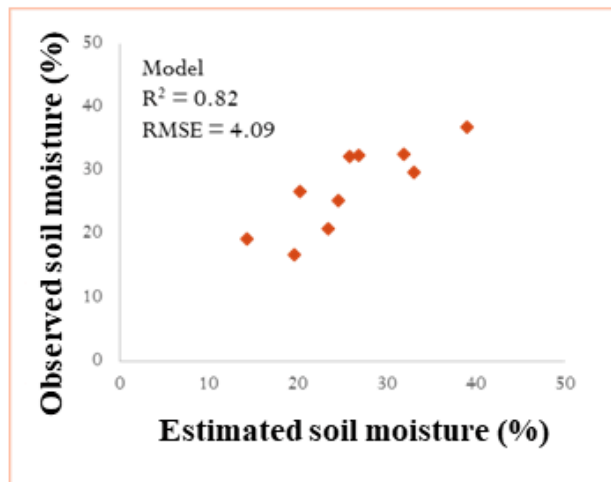
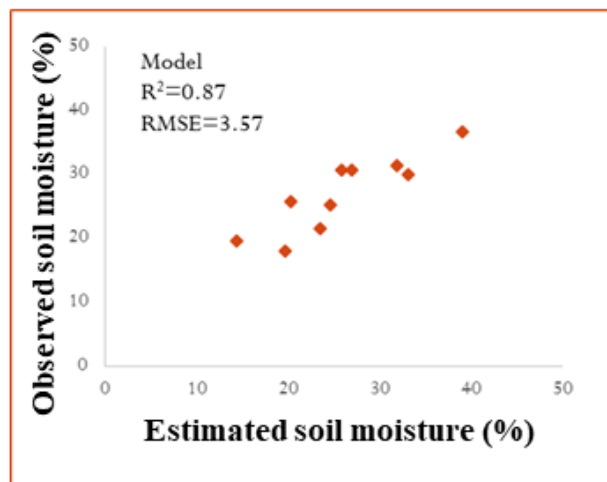


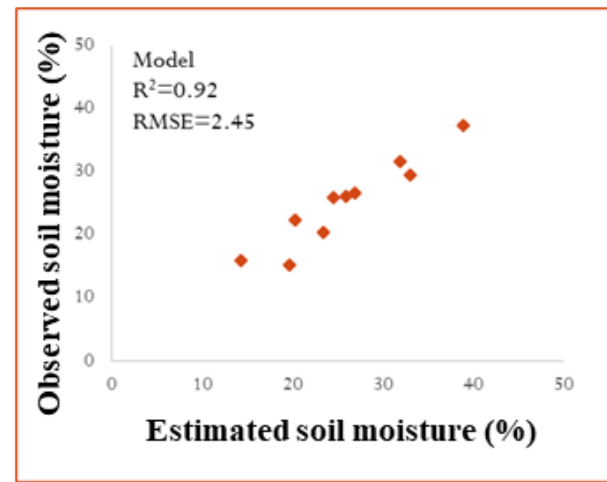
SOIL MOISTURE RETRIEVAL UNDER WHEAT CROP USING RISAT-1 HYBRID POLARIMETRIC SAR DATA



Scatter plot of the observed soil moisture versus the estimated soil moisture using RH and RV



Scatter plot of the observed soil moisture versus the estimated soil moisture using volume parameter



Scatter plot of the observed soil moisture versus the estimated soil moisture using Odd bounce, Even bounce, Volume component

	Model Development			Model Validation	
S.No.	Model	#	R ²	#	RMSE
1	$SM = A + B * \sigma_{RH}^{\circ} + C * \sigma_{RV}^{\circ}$	30	0.82	10	4.09
2	$SM = A + B * \text{Volume Component}$	30	0.87	10	3.57
3	$SM = A + B * (\text{Odd Bounce}) + C * (\text{Even Bounce}) + D * (\text{Volume Component})$	30	0.92	10	2.45