

**Table S1.** Table of sensitivity analysis of the artificial neural network models for PMI estimation.

Model	GDD	Green	NIR	Red	Red Edge	NDRE	NDVI	NLI	SR	Cigreen	Cireg	MNLireg	MSRreg	NLIreg	SRreg
Irrigated															
RBF	1	2	6	4	3	-	-	8	-	-	5	-	-	7	-
MLP	3			8	6	-	-		-	7	4	-	2	5	1
Rainfed															
RBF	1	-	-	-	-	-	-	-	-	-	-	-	-	2	3
MLP	1	-	-	-	3	-	5	-	-	-	-	-	-	4	2
Overall															
RBF	1	-	-	7	5	-	4	6	3	2	-	-	-	-	-
MLP	1	-	-	8	-	3	7	-	2	-	5	9	4	6	-