Region: Hirakud | Training Data: 100%

Model Performance Metrics

• Region: Hirakud | Training Data: 80%

• Model Performance Metrics

• Region: Hirakud | Training Data: 50%

Model Performance Metrics

Region: Hirakud | Training Data: 20%

Model Performance Metrics

### Region: Hirakud | Training Data: 100%

Test RMSE (Adjusted vs Raw): 1359 8260

#### **Model Performance Metrics**

Step	NSE	RSR	PBIAS (%)	EVOL (%)	PE (%)	TPE (steps)
1	0.9908	0.0960	-1.1100	1.1100	5.0754	0.0000
2	0.9835	0.1286	-1.1163	1.1163	6.4908	0.0000
3	0.9683	0.1782	-1.0006	1.0006	8.5578	0.0000
4	0.9416	0.2417	-2.2860	2.2860	12.7497	0.0000
5	0.9141	0.2932	-3.6289	3.6289	16.3024	0.0000
6	0.8638	0.3691	-3.7269	3.7269	22.4235	0.0000
7	0.8187	0.4258	-5.5222	5.5222	28.2369	0.0000
8	0.7728	0.4767	-6.2747	6.2747	33.0513	0.0000
9	0.7186	0.5305	-7.0970	7.0970	37.0634	0.0000
10	0.6750	0.5701	-8.0854	8.0854	39.5042	0.0000

## Region: Hirakud | Training Data: 80%

Test RMSE (Adjusted vs Raw): 1480.1344

#### **Model Performance Metrics**

Step	NSE	RSR	PBIAS (%)	EVOL (%)	PE (%)	TPE (steps)
1	0.9869	0.1145	-0.3847	0.3847	6.2080	0.0000
2	0.9772	0.1511	-0.1992	0.1992	7.6721	0.0000
3	0.9608	0.1979	-1.6151	1.6151	9.2833	0.0000
4	0.9307	0.2633	-4.1172	4.1172	13.8463	0.0000
5	0.8903	0.3312	-7.0829	7.0829	18.6389	0.0000
6	0.8349	0.4063	-7.6383	7.6383	25.1580	0.0000
7	0.7846	0.4641	-11.6635	11.6635	30.5472	0.0000
8	0.7287	0.5209	-13.0253	13.0253	35.0127	0.0000
9	0.6747	0.5703	-13.0164	13.0164	38.2666	0.0000
10	0.6283	0.6097	-14.3567	14.3567	40.5322	0.0000

## Region: Hirakud | Training Data: 50%

Test RMSE (Adjusted vs Raw): 1614.2357

### **Model Performance Metrics**

Step	NSE	RSR	PBIAS (%)	EVOL (%)	PE (%)	TPE (steps)
1	0.9790	0.1449	-3.4417	3.4417	8.6667	0.0000
2	0.9598	0.2005	-4.4660	4.4660	12.4156	0.0000
3	0.9365	0.2520	-4.0409	4.0409	15.3722	0.0000
4	0.8943	0.3252	-5.7088	5.7088	21.2586	0.0000
5	0.8542	0.3818	-7.1864	7.1864	25.2253	0.0000
6	0.8012	0.4459	-7.3932	7.3932	30.7172	0.0000
7	0.7443	0.5056	-10.1800	10.1800	35.0099	0.0000

Step	NSE	RSR	PBIAS (%)	EVOL (%)	PE (%)	TPE (steps)
8	0.6888	0.5578	-11.3463	11.3463	38.5049	0.0000
9	0.6389	0.6009	-11.1661	11.1661	41.1790	0.0000
10	0.5969	0.6349	-11.0777	11.0777	42.5974	0.0000

# Region: Hirakud | Training Data: 20%

Test RMSE (Adjusted vs Raw): 2058.7428

### **Model Performance Metrics**

Step	NSE	RSR	PBIAS (%)	EVOL (%)	PE (%)	TPE (steps)
1	0.9164	0.2891	-5.9670	5.9670	19.8867	0.0000
2	0.8785	0.3485	-9.0961	9.0961	23.4437	0.0000
3	0.8468	0.3914	-9.0881	9.0881	25.6469	0.0000
4	0.7661	0.4836	-11.1100	11.1100	31.9579	0.0000
5	0.7194	0.5297	-12.8003	12.8003	34.5937	0.0000
6	0.6788	0.5667	-13.5062	13.5062	37.4765	0.0000
7	0.6027	0.6303	-15.9121	15.9121	40.7737	0.0000
8	0.5384	0.6794	-18.5533	18.5533	42.7247	0.0000
9	0.4983	0.7083	-18.4725	18.4725	43.6190	0.0000
10	0.4554	0.7379	-17.1907	17.1907	44.4819	0.0000