

Table S1: Results of FFBPNN for Yerli station

<b>Transfer Function</b>	<b>Network Architecture</b>	<b>Number of Neurons</b>	<b>MSE</b>	<b>RMSE</b>	<b>R</b>
Transig	6-2-1	10	0.7905	0.8891	0.94204
Transig	6-3-1	10	0.6872	0.8289	0.91321
Transig	6-4-1	10	0.6618	0.8135	0.92072
Transig	6-2-1	20	0.6028	0.7764	0.94418
Transig	6-3-1	20	0.5750	0.7582	0.93744
Transig	6-4-1	20	0.4982	0.7056	0.96213
Logsig	6-2-1	10	1.2126	1.1011	0.94575
Logsig	6-3-1	10	1.0872	1.0426	0.91362
Logsig	6-4-1	10	0.9861	0.9930	0.83050
Logsig	6-2-1	20	0.9812	0.9905	0.93820
Logsig	6-3-1	20	0.9794	0.9896	0.94116
Logsig	6-4-1	20	0.9713	0.9532	0.95182
purelin	6-2-1	10	1.3811	1.1752	0.77560
purelin	6-3-1	10	1.2972	1.1389	0.81533
purelin	6-4-1	10	1.1988	1.0948	0.88452
purelin	6-2-1	20	1.1697	1.0815	0.77055
purelin	6-3-1	20	1.0836	1.0409	0.86730
purelin	6-4-1	20	0.9891	0.9945	0.90754

Table S2: Results of CFBPNN for Yerli station

<b>Transfer Function</b>	<b>Network Architecture</b>	<b>Number of Neurons</b>	<b>MSE</b>	<b>RMSE</b>	<b>R</b>
Transig	6-2-1	10	1.6720	1.2930	0.91317
Transig	6-3-1	10	1.5852	1.2590	0.91972
Transig	6-4-1	10	1.5169	1.2316	0.92880
Transig	6-2-1	20	1.4723	1.2134	0.92438
Transig	6-3-1	20	1.0288	1.0142	0.94060
Transig	6-4-1	20	0.8813	0.9387	0.96096
Logsig	6-2-1	10	1.2124	1.1010	0.92847
Logsig	6-3-1	10	1.0696	1.0342	0.90271
Logsig	6-4-1	10	0.9713	0.9855	0.89329
Logsig	6-2-1	20	0.9644	0.9829	0.90213
Logsig	6-3-1	20	0.9277	0.9631	0.93750
Logsig	6-4-1	20	0.8904	0.9436	0.94575
Purelin	6-2-1	10	1.5135	1.2302	0.76575
Purelin	6-3-1	10	1.3866	1.1775	0.82150
Purelin	6-4-1	10	1.2052	1.0978	0.89772

<b>Purelin</b>	6-2-1	20	1.1745	1.0837	0.76613
<b>Purelin</b>	6-3-1	20	1.0289	1.0143	0.86520
<b>Purelin</b>	6-4-1	20	0.9916	0.9957	0.98270

Table S3: Results of NNSTART for Yerli station

<b>Algorithm</b>	<b>Number of Neurons</b>	<b>MSE</b>	<b>RMSE</b>	<b>R</b>
<b>LM</b>	10	0.9774	0.9886	0.89887
<b>LM</b>	20	0.8557	0.9250	0.90763
<b>LM</b>	30	0.7279	0.8531	0.95057
<b>BR</b>	10	1.1745	1.0837	0.85428
<b>BR</b>	20	0.9669	0.9833	0.91349
<b>BR</b>	30	0.8133	0.9018	0.92790
<b>CGS</b>	10	1.7262	1.3138	0.91291
<b>CGS</b>	20	1.1680	1.0807	0.92185
<b>CGS</b>	30	0.9086	0.9532	0.94573