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Recommended By:

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		1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
		24.0324	27.6253	28.28619	33.70	29.66491	34.95715	28.2489	19.68926	39.70421	16.23511	21.89011	17.54133
1995	24.0324		1	1	1	1	1	1	-1	1	-1	-1	-1
1996	27.6253			1	1	1	1	1	-1	1	-1	-1	-1
1997	28.28619				1	1	1	-1	-1	1	-1	-1	-1
1998	33.69624					-1	1	-1	-1	1	-1	-1	-1
1999	29.66491						1	-1	-1	1	-1	-1	-1
2000	34.95715							-1	-1	1	-1	-1	-1
2001	28.2489								-1	1	-1	-1	-1
2002	19.68926									1	-1	1	-1
2003	39.70421										-1	-1	-1
2004	16.23511											1	1
2005	21.89011												-1
2006	17.54133												
2007	23.24371												
2008	24.1937												
2009	21.10402												
2010	23.1869												
2011	23.62413												
2012	19.85899												
2013	29.98054												
2014	20.55781												

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2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
23.24371	24.1937	21.10402	23.1869	23.62413	19.85899	29.98	20.55781	19.73937	28.33259	23.42463	15.85299	18.27255	30.5202	30.95216	25.30703
-1	1	-1	-1	-1	-1	1	-1	-1	1	-1	-1	-1	1	1	1
-1	-1	-1	-1	-1	-1	1	-1	-1	1	-1	-1	-1	1	1	-1
-1	-1	-1	-1	-1	-1	1	-1	-1	1	-1	-1	-1	1	1	-1
-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
-1	-1	-1	-1	-1	-1	1	-1	-1	-1	-1	-1	-1	1	1	-1
-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
-1	-1	-1	-1	-1	-1	1	-1	-1	1	-1	-1	-1	1	1	-1
1	1	1	1	1	1	1	1	1	1	1	-1	-1	1	1	1
-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
1	1	1	1	1	1	1	1	1	1	1	-1	1	1	1	1
1	1	-1	1	1	-1	1	-1	-1	1	1	-1	-1	1	1	1
1	1	1	1	1	1	1	1	1	1	1	-1	1	1	1	1
	1	-1	-1	1	-1	1	-1	-1	1	1	-1	-1	1	1	1
		-1	-1	-1	-1	1	-1	-1	1	-1	-1	-1	1	1	1
			1	1	-1	1	-1	-1	1	1	-1	-1	1	1	1
				1	-1	1	-1	-1	1	1	-1	-1	1	1	1
					-1	1	-1	-1	1	-1	-1	-1	1	1	1
						1	1	-1	1	1	-1	-1	1	1	1
							-1	-1	-1	-1	-1	-1	1	1	-1
								-1	1	1	-1	-1	1	1	1

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		1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
		24.0324	27.6253	28.28619	33.70	29.66491	34.95715	28.2489	19.68926	39.70421	16.23511	21.89011	17.54133
2015	19.73937												
2016	28.33259												
2017	23.42463												
2018	15.85299												
2019	18.27255												
2020	30.5202												
2021	30.95216												
2022	25.30703												

prel	0	0	0	0	0	0	0	0	0	0	0	0
ties	0	0	0	0	0	0	0	0	0	0	0	0
freq	0	0	0	0	0	0	0	0	0	0	0	0
	0											

Result

n	28
alpha	0.05
MK-stat	-44
s.e.	50.6162
Z-stat	-0.84953
p-value	0.395586
trend	Thre is no significant trend

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2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
23.24371	24.1937	21.10402	23.1869	23.62413	19.85899	29.98	20.55781	19.73937	28.33259	23.42463	15.85299	18.27255	30.5202	30.95216	25.30703
								0	1	1	-1	-1	1	1	1
									0	-1	-1	-1	1	1	-1
										0	-1	-1	1	1	1
											0	1	1	1	1
												0	1	1	1
													0	1	-1
														0	-1
															0

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Description/Data Series	Man-Kendall's statistical value	Man-Kendall's tau	Man-Kendall's P-value	Apparent trend
Mean Annual Discharge	-64	-0.2133	0.1409	-0.1962
5-Years moving average	-16	-0.0533	0.7279	-0.2181
10-Years moving average	22	0.1158	0.4986	-0.1913
Baishakh	57	0.1624	0.2440	0.0447
Jestha	7	0.0215	0.8955	-0.0923
Ashadh	-56	-0.1481	0.2785	-0.1749
Shrawan	-54	-0.1429	0.2964	-0.6388
Bhadra	-120	-0.2956	0.02421 **	-0.9571
Ashwin	52	0.1281	0.3404	0.3175
Karkit	58	0.1432	0.3901	0.2515
Mangsir	-20	-0.0493	0.7231	0.0097
Poush	-42	-0.1114	0.4177	0.0006
Magh	-5	-0.0133	0.9370	0.0047
Falgun	-18	-0.0476	0.7385	-0.0092
Chaitra	2	0.0057	0.9834	-0.0066

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Year	**Mean Annual Disch**	**5-year movi ng**	**10-year moving averag e**	Remark	Year	Annaul Discharge	Year	5-year moving average	Year	10-year moving average
51/52	17.8			Irrigation	51/52		55/56	25.8	60/61	27.6
52/53	20.2				52/53	20.16	56/57	28.9	61/62	27.4
53/54	29.3				53/54	29.27	57/58	31.2	62/63	27.7
54/55	30.6				54/55	30.64	58/59	30.7	63/64	26.4
55/56	31.1	25.8			55/56	31.13	59/60	30.2	64/65	25.8
56/57	33.1	28.9			56/57	33.05	60/61	29.4	65/66	24.9
57/58	32.1	31.2			57/58	32.06	61/62	26.0	66/67	23.7
58/59	26.8	30.7			58/59	26.76	62/63	24.2	67/68	23.0
59/60	28.0	30.2		hw meainte	59/60		63/64	22.0	68/69	22.5
60/61	27.2	29.4	27.6		60/61	27.17	64/65	21.5	69/70	22.2
61/62	16.0	26.0	27.4	Jestha NA	61/62		65/66	20.4	70/71	22.0
62/63	23.2	24.2	27.7		62/63	23.25	66/67	21.4	71/72	22.5
63/64	15.7	22.0	26.4		63/64	15.7	67/68	21.8	72/73	22.3
64/65	25.3	21.5	25.8		64/65	25.31	68/69	23.0	73/74	23.7
65/66	21.5	20.4	24.9		65/66	21.53	69/70	23.0	74/75	23.1
66/67	21.3	21.4	23.7		66/67	21.34	70/71	23.7	75/76	22.6
67/68	25.1	21.8	23.0		67/68	25.06	71/72	23.6	76/77	22.9
68/69	21.8	23.0	22.5		68/69	21.77	72/73	22.8	77/78	23.2
69/70	25.1	23.0	22.2		69/70	25.13	73/74	24.5	78/79	24.0
70/71	25.3	23.7	22.0		70/71	25.27	74/75	23.2	79/80	26.1
71/72	20.6	23.6	22.5		71/72	20.6	75/76	21.4		
72/73	21.5	22.8	22.3		72/73	21.47	76/77	22.2		
73/74	29.8	24.5	23.7		73/74	29.8	77/78	23.6		
74/75	18.8	23.2	23.1		74/75	18.82	78/79	23.5		
75/76	16.5	21.4	22.6		75/76	16.5	79/80	29.0		
76/77	24.3	22.2	22.9		76/77	24.33				
77/78	28.3	23.6	23.2		77/78	28.34				
78/79	29.4	23.5	24.0		78/79	29.43				
79/80	46.6	29.0	26.1	incomplete	79/80					

Mean Annaul Discharge

File: 'D:\...........'Mean_Annaul_Nepali_Months.txt'

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Statistics : Start = 2052 End = 2078 Length = 25

Mean	SD	Skew	SE	CV
24.96	4.811	-0.1222	0.9623	0.1928

Summary : Start = 2052 End = 2078 Length = 25

Min	Q1	Median	Q3	Max
15.70	21.44	25.13	29.31	33.05

Persistence test :

Series Start = 2052 End = 2078 Length = 25

Null hypothesis: There is no lag-1 persistence in the series

r(1) = 0.395

Alpha	0.10	0.05	0.02	0.01
UCL	0.329	0.392	0.465	0.515
LCL	-0.329	-0.392	-0.465	-0.515

Mann-Kendall trend test :

Series Start = 2052 End = 2078 Length = 25

Null hypothesis: There is no trend in the series

S = -64
tau = -0.2133
p = 0.1409

Since P>0.01, no significant trend

Apparent trend : Start = 2052 End = 2078 Length = 25

	Estimate	SE	t-stat	Pr(>|t|)	
Const	27.31	1.820	15.00	<0.0001	***

Slope -0.1962 0.1300 -1.509 0.1449

Residual SE: 4.688 Regression DF: 23
R-squared: 0.09007 Adj R-squared: 0.05051

5-year moving average
File: 'D:\.....'Jhimruk_mean_annual_5-year_moving_average.txt'

Statistics : Start = 2055 End = 2079 Length = 25

Mean	SD	Skew	SE	CV
24.68	3.284	0.7499	0.6568	0.1331

Summary : Start = 2055 End = 2079 Length = 25

Min	Q1	Median	Q3	Max
20.40	22.15	23.60	26.73	31.20

Persistence test :
Series Start = 2055 End = 2079 Length = 25

Null hypothesis: There is no lag-1 persistence in the series

r(1) = 0.804

Alpha	0.10	0.05	0.02	0.01
UCL	0.329	0.392	0.465	0.515
LCL	-0.329	-0.392	-0.465	-0.515

Persistence test (pre-white) :
Series Start = 2055 End = 2079 Length = 25

Null hypothesis: There is no lag-1 persistence in the series

r(1) = 0.285

Alpha	0.10	0.05	0.02	0.01
UCL	0.329	0.392	0.465	0.515
LCL	-0.329	-0.392	-0.465	-0.515

Mann-Kendall trend test (pre-white) :

Series Start = 2055 End = 2079 Length = 25

Null hypothesis: There is no trend in the series

S = -16

tau = -0.05333

p = 0.7279

Since P>0.01, no significant trend

Apparent trend : Start = 2055 End = 2079 Length = 25

	Estimate	SE	t-stat	Pr(>|t|)	
Const	27.30	1.136	24.02	<0.0001	***
Slope	-0.2181	0.08118	-2.686	0.01318	**

Residual SE: 2.927 Regression DF: 23

R-squared: 0.2388 Adj R-squared: 0.2057

10-year moving average

File: 'D:\....'Jhimruk_mean_annual_10-year_moving_average .txt'

Statistics : Start = 2060 End = 2079 Length = 20

Mean	SD	Skew	SE	CV
24.18	1.950	0.6430	0.4359	0.08063

Summary : Start = 2060 End = 2079 Length = 20

Min	Q1	Median	Q3	Max
22.00	22.55	23.45	25.95	27.70

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Persistence test :

Series Start = 2060 End = 2079 Length = 20

Null hypothesis: There is no lag-1 persistence in the series

r(1) = 0.801

Alpha	0.10	0.05	0.02	0.01
UCL	0.368	0.438	0.520	0.576
LCL	-0.368	-0.438	-0.520	-0.576

Persistence test (pre-white) :

Series Start = 2060 End = 2079 Length = 20

Null hypothesis: There is no lag-1 persistence in the series

r(1) = 0.285

Alpha	0.10	0.05	0.02	0.01
UCL	0.368	0.438	0.520	0.576
LCL	-0.368	-0.438	-0.520	-0.576

Mann-Kendall trend test (pre-white) :

Series Start = 2060 End = 2079 Length = 20

Null hypothesis: There is no trend in the series

S = 22

tau = 0.1158

p = 0.4986

Since P>0.01, no significant trend

Apparent trend : Start = 2060 End = 2079 Length = 20

Estimate	SE	t-stat	Pr(>|t|)

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Const	26.00	0.7029	36.99	<0.0001	***
Slope	-0.1913	0.06325	-3.024	0.007289	***

Residual SE: 1.631 Regression DF: 18

R-squared: 0.3369 Adj R-squared: 0.3001

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Years	Baishakh
2051	
2052	2.25
2053	2.09
2054	3.94
2055	4.64
2056	2.32
2057	5.43
2058	5.32
2059	6.09
2061	2.93
2062	2.43
2063	4.68
2064	3.81
2065	2.77
2066	1.64
2067	1.90
2068	2.61
2069	2.07
2070	3.33
2071	2.42
2072	4.77
2073	2.57
2074	5.09
2075	2.67
2076	2.86
2077	8.25
2078	5.31
2079	5.46

Open a time series file to start

File: 'D:\..01baisakh.txt'

Persistence test :

Series Start = 2052 End = 2079 Length = 27

Null hypothesis: There is no lag-1 persistence in the series

r(1) = 0.221

Alpha	0.10	0.05	0.02	0.01
UCL	0.317	0.377	0.448	0.496
LCL	-0.317	-0.377	-0.448	-0.496

Mann-Kendall trend test :

Series Start = 2052 End = 2079 Length = 27

Null hypothesis: There is no trend in the series

S = 57

tau = 0.1624

p = 0.2440

Since P>0.01, no significant trend

Apparent trend : Start = 2052 End = 2079 Length = 27

	Estimate	SE	t-stat	Pr(>|t|)	
Const	3.110	0.6050	5.141	<0.0001	***
Slope	0.04468	0.03992	1.119	0.2736	

Residual SE: 1.616 Regression DF: 25

R-squared: 0.04772 Adj R-squared: 0.009632

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	Jestha
2051	
2052	
2053	2.82
2054	3.19
2055	3.98
2056	9.95
2057	25.83
2058	10.67
2059	5.89
2060	
2061	4.49
2062	1.83
2063	11.04
2064	4.02
2065	6.78
2066	4.99
2067	2.62
2068	5.58
2069	1.55
2070	11.67
2071	3.77
2072	2.60
2073	5.44
2074	6.34
2075	3.54
2076	3.17
2077	8.83
2078	8.05
2079	7.31

File: 'D:\...\02jeth.txt'

Persistence test :

Series Start = 2053 End = 2079 Length = 26

Null hypothesis: There is no lag-1 persistence in the series

r(1) = 0.214

Alpha	0.10	0.05	0.02	0.01
UCL	0.323	0.384	0.456	0.505
LCL	-0.323	-0.384	-0.456	-0.505

Mann-Kendall trend test :

Series Start = 2053 End = 2079 Length = 26

Null hypothesis: There is no trend in the series

S = 7
tau = 0.02154
p = 0.8955

Since P>0.01, no significant trend

Apparent trend : Start = 2053 End = 2079 Length = 26

	Estimate	SE	t-stat	Pr(>|t|)	
Const	7.536	1.899	3.969	0.0005703	***
Slope	-0.09228	0.1303	-0.7084	0.4855	

Residual SE: 4.982 Regression DF: 24
R-squared: 0.02048 Adj R-squared: -0.02033

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	Ashadh
2051	
2052	43.02
2053	28.79
2054	46.51
2055	68.41
2056	38.92
2057	57.25
2058	39.45
2059	23.50
2060	45.84
2061	24.20
2062	19.97
2063	33.47
2064	19.37
2065	41.60
2066	14.92
2067	19.00
2068	36.65
2069	19.60
2070	70.99
2071	20.76
2072	18.77
2073	44.83
2074	55.60
2075	9.41
2076	14.81
2077	73.22
2078	56.02
2079	29.32

File: 'D:\....s\03asar.txt'

Persistence test :

Series Start = 2052 End = 2079 Length = 28

Null hypothesis: There is no lag-1 persistence in the series

r(1) = -0.045

Alpha	0.10	0.05	0.02	0.01
UCL	0.311	0.370	0.440	0.487
LCL	-0.311	-0.370	-0.440	-0.487

Mann-Kendall trend test :

Series Start = 2052 End = 2079 Length = 28

Null hypothesis: There is no trend in the series

S = -56

tau = -0.1481

p = 0.2785

Since P>0.01, no significant trend

Apparent trend : Start = 2052 End = 2079 Length = 28

	Estimate	SE	t-stat	Pr(>|t|)
Const	38.58	6.789	5.683	<0.0001 ***
Slope	-0.1749	0.4315	-0.4054	0.6885

Residual SE: 18.44 Regression DF: 26

R-squared: 0.006281 Adj R-squared: -0.03194

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	Shrawan
2051	
2052	65.77
2053	97.31
2054	125.20
2055	96.43
2056	60.75
2057	90.97
2058	81.16
2059	55.83
2060	94.43
2061	50.57
2062	61.74
2063	53.57
2064	68.52
2065	67.09
2066	71.93
2067	74.61
2068	68.27
2069	64.82
2070	110.65
2071	73.94
2072	67.39
2073	130.71
2074	68.64
2075	48.65
2076	41.23
2077	83.26
2078	73.54
2079	53.42

File: 'D:\Andhi Khola and Jhimruk\Dscreen\average flows\04shrawann.tx

Persistence test :

Series Start = 2052 End = 2079 Length = 28

Null hypothesis: There is no lag-1 persistence in the series

r(1) = 0.085

Alpha	0.10	0.05	0.02	0.01
UCL	0.311	0.370	0.440	0.487
LCL	-0.311	-0.370	-0.440	-0.487

Mann-Kendall trend test :

Series Start = 2052 End = 2079 Length = 28

Null hypothesis: There is no trend in the series

S = -54

tau = -0.1429

p = 0.2964

Since P>0.01, no significant trend

Apparent trend : Start = 2052 End = 2079 Length = 28

	Estimate	SE	t-stat	Pr(>|t|)
Const	83.64	8.037	10.41	<0.0001 ***
Slope	-0.6388	0.5109	-1.250	0.2223

Residual SE: 21.84 Regression DF: 26

R-squared: 0.05672 Adj R-squared: 0.02044

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Bhadra	**5-year moving average**
66.04	
69.93	
92.85	
70.75	
123.97	84.71
110.91	93.68
117.17	103.13
113.74	107.31
65.02	106.16
92.61	99.89
34.17	84.54
83.78	77.86
40.97	63.31
90.88	68.48
66.96	63.35
68.34	70.18
74.60	68.35
70.30	74.21
65.48	69.13
76.76	71.09
59.78	69.38
58.64	66.19
44.64	61.06
57.67	59.50
64.63	57.07
63.80	57.87
81.71	62.49
104.51	74.46
54.42	73.81

File: 'D:\...\05bhadra.txt'

Persistence test :

Series Start = 2051 End = 2079 Length = 29

Null hypothesis: There is no lag-1 persistence in the series

r(1) = 0.214

Alpha	0.10	0.05	0.02	0.01
UCL	0.305	0.364	0.432	0.478
LCL	-0.305	-0.364	-0.432	-0.478

Mann-Kendall trend test :

Series Start = 2051 End = 2079 Length = 29

Null hypothesis: There is no trend in the series

S = -120

tau = -0.2956

p = 0.02421 **

Since P>0.01, no significant trend

Apparent trend : Start = 2051 End = 2079 Length = 29

	Estimate	SE	t-stat	Pr(>|t|)
Const	88.75	7.829	11.34	<0.0001 ***
Slope	-0.9571	0.4800	-1.994	0.05635 *

Residual SE: 21.63 Regression DF: 27

R-squared: 0.1283 Adj R-squared: 0.09607

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	Ashwin
2051	30.03
2052	26.75
2053	50.07
2054	34.59
2055	45.18
2056	73.76
2057	64.71
2058	35.92
2059	30.40
2060	55.66
2061	31.65
2062	33.34
2063	26.49
2064	40.89
2065	57.39
2066	40.60
2067	55.24
2068	50.33
2069	39.76
2070	30.81
2071	34.14
2072	35.21
2073	54.54
2074	39.64
2075	23.31
2076	47.03
2077	56.91
2078	45.67
2079	83.81

File: 'D:\...\06asoj.txt'

Persistence test :

Series Start = 2051 End = 2079 Length = 29

Null hypothesis: There is no lag-1 persistence in the series

r(1) = 0.158

Alpha	0.10	0.05	0.02	0.01
UCL	0.305	0.364	0.432	0.478
LCL	-0.305	-0.364	-0.432	-0.478

Mann-Kendall trend test :

Series Start = 2051 End = 2079 Length = 29

Null hypothesis: There is no trend in the series

S = 52
tau = 0.1281
p = 0.3404

Since P>0.01, no significant trend

Apparent trend : Start = 2051 End = 2079 Length = 29

	Estimate	SE	t-stat	Pr(>|t|)
Const	39.48	5.279	7.478	<0.0001 ***
Slope	0.3175	0.3237	0.9808	0.3354

Residual SE: 14.58 Regression DF: 27

R-squared: 0.03440 Adj R-squared: -0.001361

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	Kartik
2051	10.83
2052	10.51
2053	20.31
2054	14.88
2055	18.23
2056	20.94
2057	17.11
2058	15.04
2059	13.66
2060	15.02
2061	14.04
2062	17.11
2063	10.40
2064	17.22
2065	16.36
2066	18.74
2067	17.75
2068	16.41
2069	13.72
2070	18.60
2071	16.52
2072	12.89
2073	22.45
2074	13.72
2075	10.55
2076	15.20
2077	16.99
2078	39.52
2079	27.69

File: 'D:\...\07kartik.txt'

Persistence test :

Series Start = 2051 End = 2079 Length = 29

Null hypothesis: There is no lag-1 persistence in the ser

r(1) = 0.282

Alpha	0.10	0.05	0.02	0.01
UCL	0.305	0.364	0.432	0.478
LCL	-0.305	-0.364	-0.432	-0.478

Mann-Kendall trend test :

Series Start = 2051 End = 2079 Length = 29

Data contain ties: using z-score

Null hypothesis: There is no trend in the series

S = 58
tau = 0.1432
SD = 53.29
z = 1.070
p = 0.2848

Since P>0.01, no significant trend

Apparent trend : Start = 2051 End = 2079 Length = 29

	Estimate	SE	t-stat	Pr(>|t|)	
Const	13.46	1.967	6.843	<0.0001	***
Slope	0.2515	0.1206	2.086	0.04656	**

Residual SE: 5.433 Regression DF: 27

R-squared: 0.1388 Adj R-squared: 0.1069

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	Mangsir
2051	7.51
2052	8.21
2053	9.50
2054	11.49
2055	11.39
2056	10.40
2057	10.14
2058	8.67
2059	7.10
2060	8.68
2061	8.07
2062	9.25
2063	7.28
2064	9.45
2065	8.39
2066	8.82
2067	9.32
2068	8.61
2069	7.64
2070	9.77
2071	9.06
2072	7.89
2073	10.11
2074	7.65
2075	6.66
2076	8.14
2077	8.42
2078	14.68
2079	10.80

File: 'D:\Andhi Khola and Jhimruk\Dscreen\average flows\08mangsr.txt'

Persistence test :

Series Start = 2051 End = 2079 Length = 29

Null hypothesis: There is no lag-1 persistence in the series

r(1) = 0.285

Alpha	0.10	0.05	0.02	0.01
UCL	0.305	0.364	0.432	0.478
LCL	-0.305	-0.364	-0.432	-0.478

Mann-Kendall trend test :

Series Start = 2051 End = 2079 Length = 29

Null hypothesis: There is no trend in the series

S = -20

tau = -0.04926

p = 0.7231

Since P>0.01, no significant trend

Apparent trend : Start = 2051 End = 2079 Length = 29

	Estimate	SE	t-stat	Pr(>|t|)
Const	8.937	0.6044	14.79	<0.0001 ***
Slope	0.009670	0.03706	0.2609	0.7961

Residual SE: 1.670 Regression DF: 27

R-squared: 0.002515 Adj R-squared: -0.03443

HYDRO-CONSULT ENGINEERING

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	Poush
2051	6.15
2052	6.12
2053	6.95
2054	8.04
2055	7.08
2056	7.57
2057	7.34
2058	6.71
2059	4.60
2060	7.22
2061	6.37
2062	6.38
2063	5.70
2064	6.83
2065	6.32
2066	6.73
2067	6.61
2068	6.89
2069	5.77
2070	7.13
2071	8.26
2072	5.91
2073	6.97
2074	5.69
2075	5.32
2076	6.32
2077	6.12
2078	9.47
2079	

File: 'D:\...\09poush.txt'

Persistence test :

Series Start = 2051 End = 2078 Length = 28

Null hypothesis: There is no lag-1 persistence in the seri

r(1) = -0.015

Alpha	0.10	0.05	0.02	0.01
UCL	0.311	0.370	0.440	0.487
LCL	-0.311	-0.370	-0.440	-0.487

Mann-Kendall trend test :

Series Start = 2051 End = 2078 Length = 28

Data contain ties: using z-score

Null hypothesis: There is no trend in the series

S = -42
tau = -0.1114
SD = 50.60
z = -0.8103
p = 0.4177

Since P>0.01, no significant trend

Apparent trend : Start = 2051 End = 2078 Length = 28

	Estimate	SE	t-stat	Pr(>|t|)	
Const	6.655	0.3618	18.39	<0.0001	***
Slope	0.0006212	0.02300	0.02701	0.9787	

Residual SE: 0.9831 Regression DF: 26
R-squared: 2.806e-05 Adj R-squared: -0.03843

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	Magh
2051	4.67
2052	6.63
2053	6.31
2054	5.51
2055	5.73
2056	6.48
2057	6.05
2058	6.60
2059	4.42
2060	6.56
2061	6.18
2062	4.97
2063	4.63
2064	5.59
2065	4.71
2066	5.24
2067	5.04
2068	5.79
2069	5.63
2070	6.51
2071	6.06
2072	5.27
2073	5.79
2074	4.81
2075	6.12
2076	6.05
2077	4.81
2078	8.03
2079	

File: 'D:\....\10maghh.txt'

Persistence test :

Series Start = 2051 End = 2078 Length = 28

Null hypothesis: There is no lag-1 persistence in the series

r(1) = -0.167

Alpha	0.10	0.05	0.02	0.01
UCL	0.311	0.370	0.440	0.487
LCL	-0.311	-0.370	-0.440	-0.487

Mann-Kendall trend test :

Series Start = 2051 End = 2078 Length = 28

Data contain ties: using z-score

Null hypothesis: There is no trend in the series

S = -5
tau = -0.01328
SD = 50.59
z = -0.07907
p = 0.9370

Since P>0.01, no significant trend

Apparent trend : Start = 2051 End = 2078 Length = 28

	Estimate	SE	t-stat	Pr(>|t|)
Const	5.657	0.3067	18.45	<0.0001 ***
Slope	0.004737	0.01949	0.2430	0.8099

Residual SE: 0.8332 Regression DF: 26

R-squared: 0.002266 Adj R-squared: -0.03611

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	Falgun
2051	4.37
2052	6.14
2053	4.40
2054	5.09
2055	4.51
2056	5.29
2057	5.31
2058	5.42
2059	5.40
2060	4.46
2061	4.63
2062	4.16
2063	5.73
2064	4.43
2065	3.77
2066	4.27
2067	4.39
2068	4.15
2069	4.84
2070	5.45
2071	5.64
2072	3.94
2073	4.81
2074	3.76
2075	5.50
2076	5.32
2077	3.78
2078	5.81
2079	

File: 'D:\....\11falgun.txt'

Persistence test :

Series Start = 2051 End = 2078 Length = 28

Null hypothesis: There is no lag-1 persistence in the series

r(1) = -0.172

Alpha	0.10	0.05	0.02	0.01
UCL	0.311	0.370	0.440	0.487
LCL	-0.311	-0.370	-0.440	-0.487

Mann-Kendall trend test :

Series Start = 2051 End = 2078 Length = 28

Null hypothesis: There is no trend in the series

S = -18

tau = -0.04762

p = 0.7385

Since P>0.01, no significant trend

Apparent trend : Start = 2051 End = 2078 Length = 28

	Estimate	SE	t-stat	Pr(>|t|)
Const	4.938	0.2568	19.23	<0.0001 ***
Slope	-0.009231	0.01632	-0.5656	0.5765

Residual SE: 0.6976 Regression DF: 26

R-squared: 0.01215 Adj R-squared: -0.02584

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	Chaitra
2051	2.81
2052	3.85
2053	4.49
2054	5.10
2055	3.78
2056	3.97
2057	4.12
2058	6.75
2060	4.22
2061	3.69
2062	3.71
2063	3.90
2064	3.97
2065	3.16
2066	3.12
2067	3.47
2068	3.66
2069	3.01
2070	3.96
2071	5.09
2072	3.29
2073	4.19
2074	4.20
2075	4.27
2076	4.90
2077	3.09
2078	4.21
2079	

File: 'D:\...\12chaitra.txt'

Persistence test :

Series Start = 2051 End = 2078 Length = 27

Null hypothesis: There is no lag-1 persistence in the series

r(1) = 0.091

Alpha	0.10	0.05	0.02	0.01
UCL	0.317	0.377	0.448	0.496
LCL	-0.317	-0.377	-0.448	-0.496

Mann-Kendall trend test :

Series Start = 2051 End = 2078 Length = 27

Data contain ties: using z-score

Null hypothesis: There is no trend in the series

S = 2
tau = 0.005706
SD = 47.96
z = 0.02085
p = 0.9834

Since P>0.01, no significant trend

Apparent trend : Start = 2051 End = 2078 Length = 27

	Estimate	SE	t-stat	Pr(>|t|)
Const	4.085	0.3094	13.20	<0.0001 ***
Slope	-0.006606	0.02041	-0.3236	0.7489

Residual SE: 0.8262 Regression DF: 25

R-squared: 0.004171 Adj R-squared: -0.03566