

Data management and visualization, Transformation table data of discharges to time series in EXCEL

- Introduction to perquisite functions;***
- Explanation and application of each function;***
- Interactive compilation of functions for table data transformation to time series.***

List of functions:

VALUE

RIGHT

DATE

DAY

MONTH

VLOOKUP

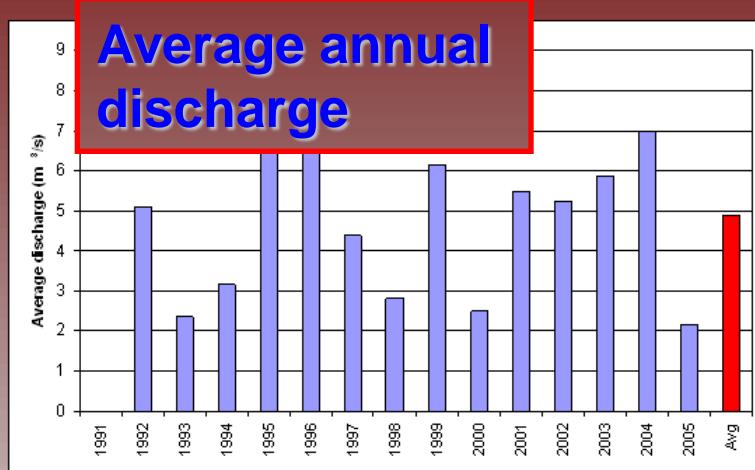
CONCATENATE

MATCH

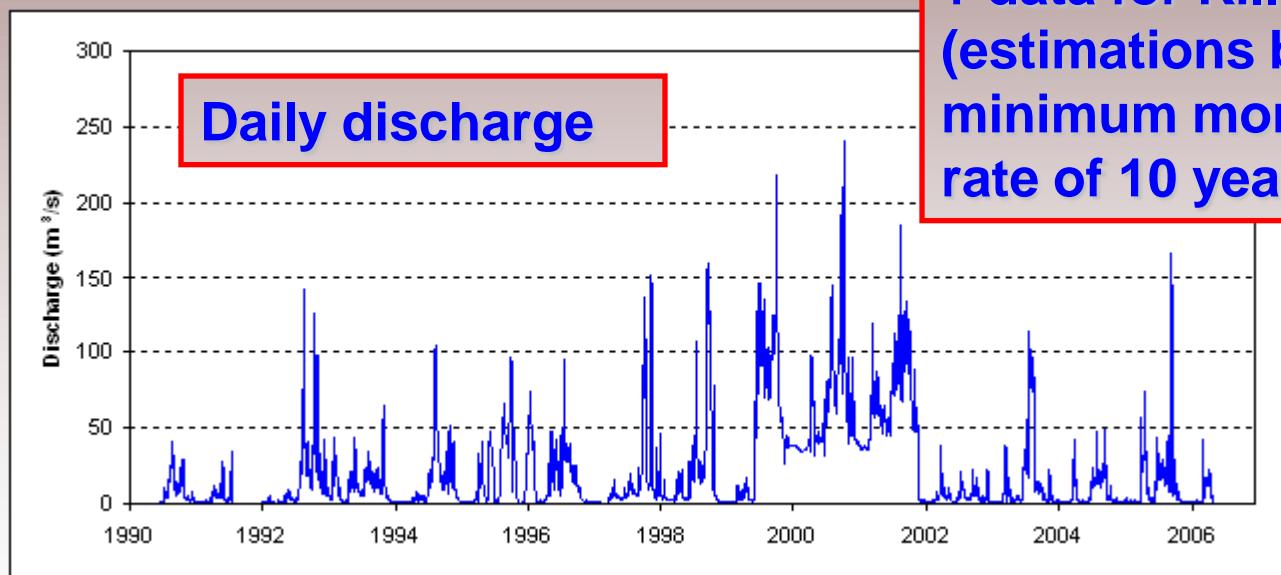
INDIRECT

IF

EXACT



How to process data easily and transform table record to time series?



+ data for Kille method
(estimations based on minimum monthly discharge rate of 10 year time series)

Every year of
discharge records
means one table
(matrix) of daily
measured data

Microsoft Excel - GD_Flow_2011_03_31_19.xls

File Edit View Insert Format Tools Data Window Help

A19 Fx

1

2 Annual Report of Daily Data: Instantaneous Daily Flow

3

4 Station Nu Year: 1990

5 Station Name : Weib @ sofUmer

6 Time-Series Type : Flow (cumecs)

7

8 Latitude : E Longitude Area : 3792.7 sq km

9

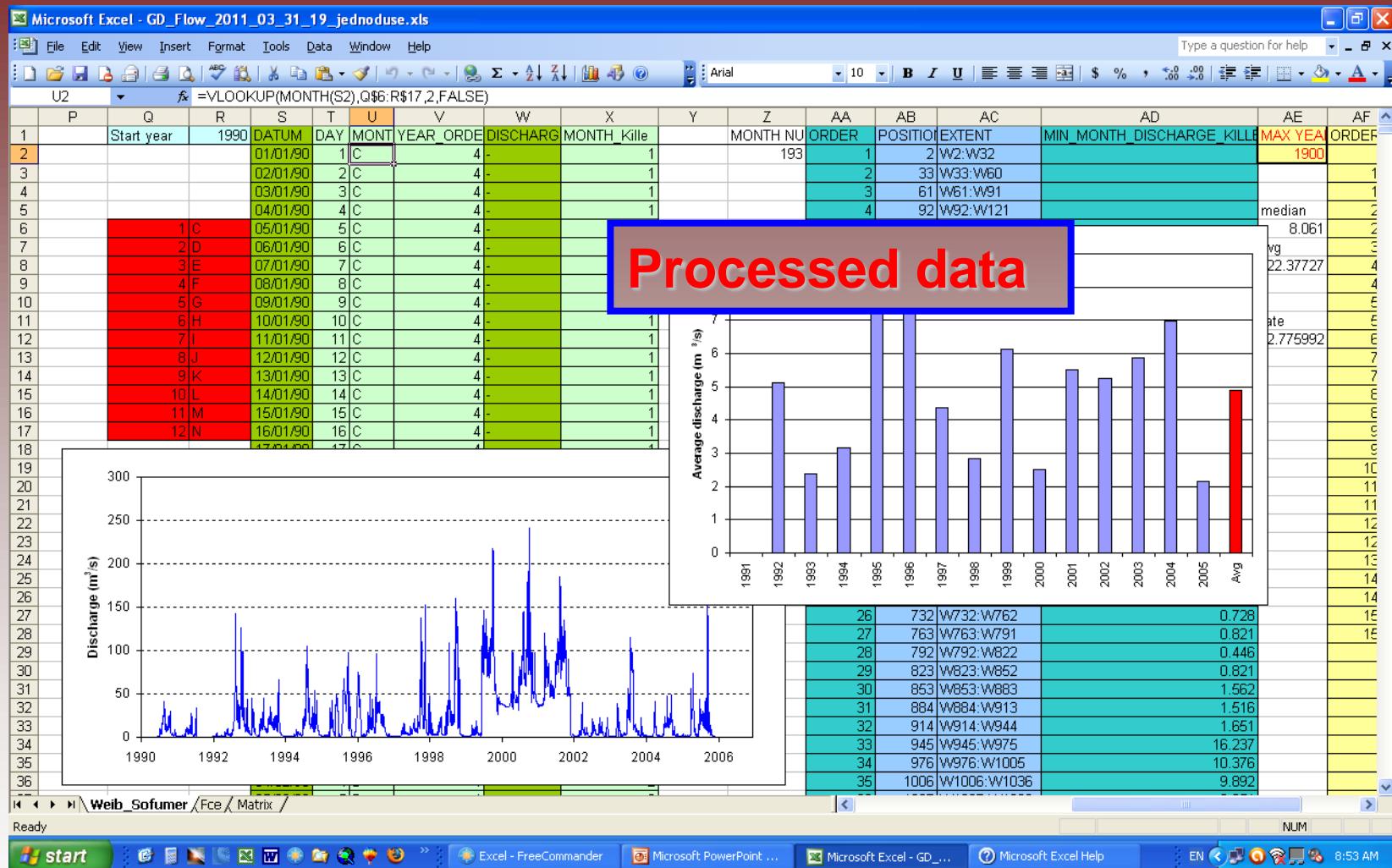
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
12	1	-	-	-	-	-	1.278	5.826	16.129	8.383	4.219	1.651
13	2	-	-	-	-	-	1.122	10.52	15.38	9.128	3.826	1.899
14	3	-	-	-	-	-	1.172	13.839	12.962	11.72	3.476	2.899
15	4	-	-	-	-	-	1.172	15.627	10.665	16.939	3.296	2.932
16	5	-	-	-	-	-	1.25	17.168	9.35	15.985	3.252	2.749
17	6	-	-	-	-	-	2.229	18.991	8.746	14.208	3.122	2.494
18	7	-	-	-	-	-	2.763	24.525	8.599	15.682	3.1	2.494
19	8	-	-	-	-	-	6.969	20.926	9.112	18.483	3.1	2.689
20	9	-	-	-	-	-	9.203	17.176	14.702	23.259	3.166	2.457
21	10	-	-	-	-	-	10.172	17.698	12.17	25.069	3.413	2.199
22	11	-	-	-	-	-	8.977	16.341	9.829	22.272	2.596	2.944
23	12	-	-	-	-	-	7.851	14.446	7.719	19.293	2.494	8.435
24	13	-	-	-	-	-	1.873	8.454	15.238	6.743	17.711	2.79
25	14	-	-	-	-	-	1.76	7.859	19.401	6.023	14.318	3.277
26	15	-	-	-	-	-	1.636	5.887	25.351	5.755	12.498	3.853
27	16	-	-	-	-	-	1.545	4.74	23.737	6.809	12.32	4.635
28	17	-	-	-	-	-	1.62	4.473	24.377	7.001	11.284	5.318
29	18	-	-	-	-	-	1.62	4.578	29.175	7.204	13.327	4.847
30	19	-	-	-	-	-	1.516	4.396	33.389	8.645	19.731	4.196
31	20	-	-	-	-	-	1.415	4.02	41.298	9.973	22.001	3.501
32	21	-	-	-	-	-	1.387	3.804	38.415	9.931	29.336	3.102
33	22	-	-	-	-	-	1.304	4.966	32.84	10.092	29.38	2.769
34	23	-	-	-	-	-	1.277	8.125	29.786	11.498	23.665	2.494
35	24	-	-	-	-	-	1.198	8.457	28.666	12.721	17.532	2.456
36	25	-	-	-	-	-	1.211	7.304	29.582	12.453	13.475	2.418
37	26	-	-	-	-	-	1.211	7.304	29.582	12.453	13.475	2.418

Weib_Sofumer \Fce\Matrix /

Ready Calculate

start Genale_Dawa - Free... Microsoft PowerPoint ... GD_Flow_2011_03_3...

Excel Transformation



Excel Transformation

Processed data

	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF			
1		Start year	1990	DATUM	DAY	MONT	YEAR_ORDE	DISCHARG	MONTH_Kille			MONTH NU	ORDER	POSITION	EXTENT	MIN_MONTH	DISCHARGE	KILLE	MAX YEAD	ORDEF
2				01/01/90	1	C		4			193	1	2	W2:W32					1900	
3				02/01/90	2	C		4				2	33	W33:W80					1	
4				03/01/90	3	C		4				3	61	W61:W91					1	
5				04/01/90	4	C		4				4	92	W92:W121					1	
6		1	C	05/01/90	5	C		4										median		
7		2	D	06/01/90	6	C		4										8.061		
8		3	E	07/01/90	7	C		4										22.37727		
9		4	F	08/01/90	8	C		4										4		
10		5	G	09/01/90	9	C		4										5		
11		6	H	10/01/90	10	C		4										2.775992		
12																				
13																				
14																				
15																				
16																				
17																				
18																				
19																				

Average discharge (m^{3/s})

Month	Average Discharge (m ^{3/s})
Jan	5.2
Feb	1.0
Mar	8.2
Apr	8.0
May	4.5
Jun	2.8
Jul	5.8
Aug	1.5
Sep	6.0
Oct	5.5
Nov	5.8
Dec	7.0
Total	45.0

Source data

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1																			
2	Annual Report of Daily Data: Instantaneous Daily Flow																		
3																			
4	Station Nu	Year: 1990																	
5	Station Name :	Weib @ sofUmer																	
6	Time-Series Type :	Flow (cumecs)																	
7																			
8	Latitude :	Longitude	Area : 3792.7 sq km																
9																			
10		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec						
11																			
12	1	-	-	-	-	-	-	1.278	5.826	16.129	8.383	4.219	1.651						
13	2	-	-	-	-	-	-	1.122	10.52	15.38	9.128	3.826	1.899						
14	3	-	-	-	-	-	-	1.172	13.839	12.962	11.72	3.476	2.899						
15	4	-	-	-	-	-	-	1.172	15.627	10.665	16.939	3.296	2.932						
16	5	-	-	-	-	-	-	1.25	17.168	9.35	15.985	3.252	2.749						
17	6	-	-	-	-	-	-	2.229	18.991	8.746	14.208	3.122	2.494						
18	7	-	-	-	-	-	-	2.763	24.525	8.599	15.682	3.1	2.494						

Excel - GD_Flow_2011_03_31_19_jednoduse.xls

Q	R	S	T	U	V	W	X
Start ye	1990	D	TUM	DAY	MONT	YEAR	ORD
	01/01/90	1	C		4-		1
	02/01/90	2	C		4-		1
	03/01/90	3	C		4-		1
	04/01/90	4	C		4-		1
1 C	05/01/90	5	C		4-		1
2 D	06/01/90	6	C		4-		1
3 E	07/01/90	7	C		4-		1
4 F	08/01/90	8	C		4-		1
5 G	09/01/90	9	C		4-		1
6 H	10/01/90	10	C		4-		1
7 I	11/01/90	11	C		4-		1

Processed data

Microsoft Excel - GD_Flow_2011_03_31_19.xls

A	B	C	D	E	F	G
1						
2	Annual Report of Daily Data: Instantaneous Daily Flow					
3						
4	Station Nu	Year: 1990				
5	Station Name:	Umer				
6	Time-Series Type :	Flow (cumecs)				
7						
8	Latitude : 8	Longitude	Area : 3792.7 sq km			
9						
10		Jan	Feb	Mar	Apr	May
11						Jun
12	1	-	-	-	-	-
13	2	-	-	-	-	-
14	3	-	-	-	-	-
15	4					-
16	5					-
17	6					-
18	7					-

Source data

1. Step = to find the first year of the records beginning

=VALUE(RIGHT(B4,4))

Known position of the first year

A	B	C
1		
2	Annual Report of Daily Data: Insta	
3		
4	Station Nu	Year: 1990
5		
6		
7		

Returns the last characters in a text string = 1990

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Start year	DATUM	DAY	MONT	YEAR	DISCHARG	MONTH	Kille
	01/01/90	1	C		4-		1
	02/01/90	2	C		4-		1
	03/01/90	3	C		4-		1
	04/01/90	4	C		4-		1
1 C	05/01/90	5	C		4-		1
2 D	06/01/90	6	C		4-		1
3 E	07/01/90	7	C		4-		1
4 F	08/01/90	8	C		4-		1
5 G	09/01/90	9	C		4-		1
6 H	10/01/90	10	C		4-		1
7 I							

Processed data

Microsoft Excel - GD_Flow_2011_03_31_19.xls

A	B	C	D	E	F	G
1						
2	Annual Report of Daily Data: Instantaneous Daily Flow					
3						
4	Station Name: Umer	Year: 1990				
5	Station Name: Umer					
6	Time-Series Type : Flow (cumecs)					
7						
8	Latitude : 8	Longitude	Area : 3792.7 sq km			
9						
10		Jan	Feb	Mar	Apr	May
11		-	-	-	-	-
12	1	-	-	-	-	-
13	2	-	-	-	-	-
14	3	-	-	-	-	-
15	4	-	-	-	-	-
16	5	-	-	-	-	-
17	6	-	-	-	-	-
18	7	-	-	-	-	-

Source data

2. Step = time series,
first day is 1.1.1990

=DATE(R\$1,1,1)

The known first
year = 1990

Returns a
certain date.
Syntax:
DATE
(year,month,day)

Excel - GD_Flow_2011_03_31_19_jednoduse.xls

Start year	DATUM	DAY	MONT	YEAR	DISCHARG	MONTH	Kille
1990	01/01/90	1	C		4-		1
	02/01/90	2	C		4-		1
	03/01/90	3	C		4-		1
	04/01/90	4	C		4-		1
1 C	05/01/90	5	C		4-		1
2 D	06/01/90	6	C		4-		1
3 E	07/01/90	7	C		4-		1
4 F	08/01/90	8	C		4-		1
5 G	09/01/90	9	C		4-		1
6 H	10/01/90	10	C		4-		1
7 I							

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Processed data

2. Step = time series,
first day is 1.1.1990

=DATE(R\$1,1,1)

=P2+1

=P3+1

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Source data

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Excel - GD_Flow_2011_03_31_19_jednoduse.xls

	Q	R	S	T	U	V	W	X
Start year	1990	DATUM	DAY	MONTH	YEAR	ORDEN	DISCHARG	MONTH_Kille
	01/01/90		1			4-		1
	02/01/90		2			4-		1
	03/01/90		3			4-		1
	04/01/90		4			4-		1
1 C	05/01/90		5			4-		1
2 D	06/01/90		6	C		4-		1
3 F	07/01/90		7	C		4-		1
4 F	08/01/90		8	C		4-		1
F G	09/01/90		9					

=DAY(S2)

Necessary for definition of relative position (row) of the discharge in the table

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	A	B	C	D	E	F	G	H
1								
2	Annual Report of Daily Data: Instantaneous Daily Flow							
3								
4	Station Nu	Year: 1990						
5	Station Name :	Web @ softUmer						
6	Time-Series Type:	Flow (cumecs)						
7								
8	Latitude :	Longitude	Area :	3792.7 sq km				
9								
10		Jan	Feb		Mar	Apr	May	Jun
11		-	-		-	-	-	-
12	1	-	-		-	-	-	-
13	2	-	-		-	-	-	-
14	3	-	-		-	-	-	-
15	4	-	-		-	-	-	-
16	5	-	-		-	-	-	-
17	6	-	-		-	-	-	-
18	7	-	-		-	-	-	-

3. Step = to find the relative position of daily discharge in the table (matrix)

Q	R	S	T	U	V	W
Start year	990	DATUM	DAY	MONTH	YEAR_OF	DISCHARG
	01/01/90	1	C		4	-
	02/01/90	2	C		4	-
	03/01/90	3	C		4	-
	04/01/90	4	C		4	-
1	05/01/90	5	C		4	-
2	06/01/90	6	C		4	-

4. Step = to find the column in the table (matrix)

=VLOOKUP(MONTH(S2),Q\$6:R\$17,2, FALSE)

P	Q	R	S	T	U	V
1	Start year	1990	DATUM	DAY	MONTH	YEAR_OF
2		01/01/90	1	C		
3		02/01/90	2	C		
4		03/01/90	3	C		
5		04/01/90	4	C		
6		05/01/90	5	C		
7		06/01/90	6	C		
8		07/01/90	7	C		
9		08/01/90	8	C		
10		09/01/90	9	C		
11		10/01/90	10	C		
12		11/01/90	11	C		
13		12/01/90	12	C		
14		13/01/90	13	C		
15		14/01/90	14	C		
16		15/01/90	15	C		
17		16/01/90	16	C		
18		17/01/90	17	C		

Returns number of month from each day of time serie

Searches for a value in the leftmost column of a table, and then returns a value in the second column.

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Q	R	S	T	U	V	W
Start year	990	DATUM	DAY	MONTH	YEAR	ORD
	01/01/90	1	C		4	-
	02/01/90	2	C		4	-
	03/01/90	3	C		4	-
	04/01/90	4	C		4	-
	05/01/90	5	C		4	-
	06/01/90	6	C		4	-

4. Step = to find the column (month) for given discharge in the table (matrix)

=VLOOKUP(MONTH(S2),Q\$6:R\$17,2,FALSE)

Microsoft Excel - GD_Flow_2011_03_31_19.xls

A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	Q	R	S	T	U	V
1														1	Start year	1990	DATUM	DAY	MONTH	YEAR
2	Annual Report of Daily Data: Instantaneous Daily Flow																			
3														2		01/01/90	1	C		
4	Station Number:	1990												3		02/01/90	2	C		
5	Station Name :	Weib @ sofUmer												4		03/01/90	3	C		
6	Time-Series Type :	Flow (cumecs)												5		04/01/90	4	C		
7														6		05/01/90	5	C		
8	Latitude :	0	Longitude	0	Area :	3792.7	sq km							7		06/01/90	6	C		
9														8		07/01/90	7	C		
10														9		08/01/90	8	C		
11														10		09/01/90	9	C		
12	1													11		10/01/90	10	C		
13	2	-	-	-	-	-	-		1.122	10.52	15.38	9.128	3.826	12		11/01/90	11	C		
14	3	-	-	-	-	-	-		1.172	13.839	12.962	11.72	3.476	13		12/01/90	12	C		
15	4	-	-	-	-	-	-		1.172	15.627	10.665	16.939	3.296	14		13/01/90	13	C		
16	5	-	-	-	-	-	-		1.25	17.168	9.35	15.985	3.252	15		14/01/90	14	C		
17	6	-	-	-	-	-	-		2.229	18.991	8.746	14.208	3.122	16		15/01/90	15	C		
18	7	-	-	-	-	-	-		2.763	24.525	8.599	15.682	3.1	17		16/01/90	16	C		

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P	Q	R	S	T	U	V
1	Start year	1990	DATUM	DAY	MONTH	YEAR
2		01/01/90	1	C		
3		02/01/90	2	C		
4		03/01/90	3	C		
5		04/01/90	4	C		
6		05/01/90	5	C		
7		06/01/90	6	C		
8		07/01/90	7	C		
9		08/01/90	8	C		
10		09/01/90	9	C		
11		10/01/90	10	C		
12		11/01/90	11	C		
13		12/01/90	12	C		
14		13/01/90	13	C		
15		14/01/90	14	C		
16		15/01/90	15	C		
17		16/01/90	16	C		
18		17/01/90	17	C		

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	Q	R	S	T	U	V	W
Start year	1990	DATUM	DAY	MONTH	YEAR	GRAD	DISCHARG
	01/01/90	1 C		4			
	02/01/90	2 C		4			
	03/01/90	3 C		4	-		
	04/01/90	4 C		4	-		
	05/01/90	5 C		4	-		
	06/01/90	6 C		4	-		

5. Step = to find of position (row) of the beginning of each annual record

=MATCH(CONCATENATE("Year",":","",YEAR(P2)) B:B,0))

Joins several text strings into one text string.

Finds positions of: Year: 1990, Year: 1991, Year: 1992.....in column B

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Annual Report of Daily Data: Instantaneous Daily Flow							
Station Nu Year: 1990							
Station Name : Weib @ sofUmer							
Time-Series Type : Flow (cumecs)							
8	Latitude :	Longitude	Area :	3792.7	sq km		
9							
10		Jan	Feb	Mar	Apr	May	Jun
11		-	-	-	-	-	-
12	1						

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58	No data st Estimated values "e"
59	
60	
61	Annual Report of Daily Data: Instantaneous Daily Flow
62	
63	3 Station Nu Year: 1991
64	4 Station Name : Weib @ sofUmer
65	5 Time-Series Type : Flow (cumecs)
66	
67	67 Latitude : Longitude Area : 3792.7 sq km
68	
69	Jan Feb Mar Apr May Jun

Excel - GD_Flow_2011_03_31_19_jednoduse.xls						
Q	R	S	T	U	V	W
Start year	1990	DATUM	DAY	MONT	YEAR	ORD
		01/01/90	1	C	1990	1
		02/01/90	2	C	1990	2
		03/01/90	3	C	1990	3
		04/01/90	4	C	1990	4
	1	05/01/90	5	C	1990	5
	2	06/01/90	6	C	1990	6

6. Step = to find whole reference of daily discharge

=INDIRECT(CONCATENATE(U2,V2+7+T2))

Joins several text strings into one text string.

Returns the reference specified by a text string.

A	B	C	D	E	F	G	H
1							
2	Annual Report of Daily Data: Instantaneous Daily Flow						
3							
4	Station Nu Year: 1990						
5	Station Name : Weib @ sofUmer						
6	Time-Series Type : Flow (cumecs)						
7							
8	Latitude : 8 Longitude : Area : 3792.7 sq km						
9							
10		Jan	Feb	Mar	Apr	May	Jun
11		-	-	-	-	-	-
12	1	-	-	-	-	-	-
13	2	-	-	-	-	-	-
14	3	-	-	-	-	-	-
15	4	-	-	-	-	-	-
16	5	-	-	-	-	-	-
17	6	-	-	-	-	-	-
18	7	-	-	-	-	-	-

T	U	V	W	X	Y	Z	AA	AB	AC	AD	
AY	MONTI	YEAR	ORDEN	DISCHARG	MONTH	Value	MONTH NUMBER	ORDER	POSITION	EXTENT	MIN. MONTH
1 C			4-		1		193	1	2	W2:W32	
2 C			4-		1			2	33	W33:W60	
3 C			4-		1			3	61	W61:W91	
4 C			4-		1			4	92	W92:W121	
5 C			4-		1						
6 C			4-		1						

=1

=IF(EXACT(U2,U3),X2,X2+1)

Checks whether two text strings are same

If the end of the month comes, value is increased for one

T	U	V	W	X	Y	Z	AA	AB	AC	AD	
DAY	MONT	YEAR	ORD	DISCHARG	MONTH	Kille	MONTH NU	ORDER	POSITION	EXTENT	MIN MON
1 C			4 -		1		193	1	2	W2:W32	
2 C			4 -		1			2	33	W33:W60	
3 C			4 -		1			3	61	W61:W91	
4 C			4 -		1			4	92	W92:W121	
5 C			4 -		1						
6 C			4 -		1						

Number of months

Order of month

7. Step = to find the beginning and the end of the month

Finds positions
of the beginning
of the month

=MATCH(AA2,X:X,0)

8. Step = to find position of
the beginning of the month
and the extent of the month

Returns a text string
with the extent of the month

=CONCATENATE("W",AB2,":","
W",AB3-1)

W	X	Y	Z	AA	AB	AC	AD
DISCHARG	MONTH_Kille		MONTH_NU	ORDR	POSITION	EXTENT	MIN_MONTH_DISCHA
	1		193	1	1	W2:W32	
	1			2	2	W33:W60	
	1			3	3	W61:W91	
	1			4	4	W92:W121	
	1			5	5	W122:W140	
	1						

Z	AA	AB	AC	AD
MONTH_NU	ORDER	POSITION	EXTENT	MIN_MONTH_DISCHARGE
193	1		W2:W32	
	2	33	W33:W60	
	3	61	W61:W91	

9. Step = to find minimum monthly discharge

=MIN(INDIRECT(AC2))

Returns the reference specified by a text string.

Returns minimum monthly discharge

10. Step = to find annual mean discharge

Microsoft Excel - GD_Flow_2011_03_31_19_jednoduse.xls						
G169	f	A	B	C	D	E
163	Flow (MCM)		2.313	5.801	2.001	3.245
164	Maximum		1.495	5.522	2.476	2.018
165	Minimum		0.728	0.821	0.446	0.821
166	Runoff (mm)		0.61	1.529	0.528	0.856
167						
168	Flow (cumecs)					
169						
170	Annual Statistics					
171	172	Maximum	Minimum	Mean : 15. cumecs		
172	173	Total : 477	Runoff : 125.931 mm			
173	174	Possible data flags				
174	175	No data st Estimated values "e"				
175	176					
176	177					
177	178					
178	179	Annual Report of Daily Data: Instantaneous Daily Flow				
179	180					
180	181	Station Nu Year: 1993				
181	182	Station Name : Weib @ sofUmer				
182	183	Time-Series Type : Flow (cumecs)				
183	184					
184	185	Latitude : 8 Longitude Area : 3792.7 sq km				
185	186					
186	187		Jan	Feb	Mar	Apr
187	188					May
188	189					Jun
189	1		10.292	40.169	9.313	1.387
190	2		9.351	30.334	10.019	1.318
191	3		9.979	26.634	7.903	1.387
192	4		7.839	18.004	6.15	1.401
193	5		5.733	13.388	5.518	1.401
194	6		5.092	11.313	5.064	1.459
195	7		4.818	15.87	4.606	1.826
196	8		4.499	18.293	4.069	1.889
197	9		4.604	18.509	3.802	1.923
198	10		4.527	19.093	3.454	2.164
199						12.122
200						10

AF	AG	AH	AI	AJ
ORDER	MEAN	YEAR	DISCHARGE	
54	Mean : 16.297	1990		
113	Mean :	1991		
172	Mean : 15.104	1992	15.104	
231	Mean : 12.376	1993	12.376	
290	Mean : 13.157	1994	13.157	
349	Mean : 18.297	1995	18.297	
408	Mean : 17.842	1996	17.842	
467	Mean : 14.370	1997	14.370	
526	Mean : 22.825	1998	22.825	
585	Mean : 46.144	1999	46.144	
644	Mean : 62.503	2000	62.503	
703	Mean : 65.507	2001	65.507	
762	Mean : 5.255	2002	5.255	
821	Mean : 15.873	2003	15.873	
880	Mean : 6.969	2004	6.969	
939	Mean : 12.158	2005	12.158	
998	Avg	23.45571429		
1057				
1116				
1175				
1234				
1293				
1352				

Converts a text string to a number.

10. Step = to find annual mean discharge

Position of mean
 $=INDIRECT(CONCATENATE("C",AF4))$

$=VALUE(RIGHT(AG8,6))$

Returns the last characters in a text string

Input data – precipitation

Microsoft Excel - Genale_Dawa_recharge_2011_04_06.xls

A2761 BAGOR031

Element	Daily rainfall in mm	TIME	VAL01	VAL02	VAL03	VAL04	L	M	N	O	P	Q	R	S	T	U	V		
GH ID	NAME																		
2754	BAGOR031	Goro	9:00	0	0	0	0								1.6	0	9.6	20	
2755	BAGOR031	Goro	9:00	0	0	0	0								0	0	0	0	
2756	BAGOR031	Goro	9:00	0	0	0	0								0	0	0	0	
2757	BAGOR031	Goro	9:00	0	0	0	0								0	0	0	0	
2758	BAGOR031	Goro	9:00	0	0	0	0	19.8	11.6	39	4.8	19.6	22.8	0	0	0	16	38	
2759	BAGOR031	Goro	9:00	4.8	0	0	0	0	0	4.2	0	0	0	1.7	23	9.4	0	17.2	8.2
2760	BAGOR031	Goro	9:00	0	0	1.8	8	0	0	0	0	0	0	0	0	0	0	0	0
2761	BAGOR031	Goro	9:00	21.1	7.9	0	0	0	8.7	0	0	0	0	25.3	34	10.5	39.1	3.4	
2762	BAGOR031	Goro	9:00	0	0	0	0	0	0	0	0	0	0	0	0	4.8	28.8	16.6	
2763	BAGOR031	Goro	9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2764	BAGOR031	Goro	9:00	0	0	0	0	0	0	0	17.6	0	14.5	0	0	0	0	0	0
2765	BAGOR031	Goro	9:00	5.4	2.6	0	8.5	21.6	0	21	0	5.2	0	0	0	14.6	0	0	0
2766	BAGOR031	Goro	9:00	0	0	1.6	6.4	0	0	0	0	0	0	0	1.4	0	0	0	0
2767	BAGOR031	Goro	9:00	0	0	5.5	0	0	0	0	0	0	0	0	0	0	0	0	0
2768	BAGOR031	Goro	9:00	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0
2769	BAGOR031	Goro	9:00	0	4.2	5.5	4.5	5.5	4.5	16	9.4	0	0	8.1	0	7.5	0	0	0
2770	BAGOR031	Goro	9:00	0	0	0	0	0	0	0	0	0	0	12.4	8.5	9.2	0	0	0
2771	BAGOR031	Goro	9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2772	BAGOR031	Goro	9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2773	BAGOR031	Goro	9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2774	BAGOR031	Goro	9:00	0	0	0	0	0	0	0	0	0	0	18.5	3	4.6	1.7	0	0.3
2775	BAGOR031	Goro	9:00	26.1	0	0	2.5	0	0	0	3	0	0	0	0	0	22.7	14.5	
2776	BAGOR031	Goro	9:00	22.1	3	20	65.2	5.5	1.2	0	0	0	0	32.4	15	15.5	5.8	8.8	
2777	BAGOR031	Goro	9:00	0	0	0	0	0	0	8.5	0	0	0	0	0	0	0	0	0
2778	BAGOR031	Goro	9:00	0	0	7	5.7	0	0	0	0	0	0	0	0.5	0	7.8	0	0
2779	BAGOR031	Goro	9:00	0	0	0	0	0	0	0	0	0	0	0	2.4	0	0	0	0
2780	BAGOR031	Goro	9:00	0	0	13.5	6.4	5.5	0	0	0	0	0	0	2.5	0	0	0	4.5
2781	BAGOR031	Goro	9:00	25.8	4.2	0	0	2.8	24.6	27.8	0	0	12.4	15	0	8.4	6.4	42.4	
2782	BAGOR031	Goro	9:00	11.6	8.2	2.2	0	0	0	0	0	0	5.4	0	0	0	25.2	0	
2783	BAGOR031	Goro	9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2784	BAGOR031	Goro	9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2785	BAGOR031	Goro	9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2786	BAGOR031	Goro	9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Raw data

Input data – precipitation

