

**Lampiran 1**

Hubungan suhu (t) dengan nilai ea (mbar), W, (1-W) dan f(t).

suhu (t)	ea mbar	elevasi 1-250 m		f(t)
		w	(1-w)	
24.0	29.845	0.735	0.265	15.400
24.2	30.213	0.737	0.263	15.445
24.4	30.581	0.739	0.261	15.491
24.6	30.950	0.741	0.259	15.536
24.8	31.319	0.743	0.257	15.581
25.0	31.688	0.745	0.255	15.627
25.2	32.073	0.747	0.253	15.672
25.4	32.458	0.749	0.251	15.717
25.6	32.844	0.751	0.249	15.763
25.8	33.230	0.753	0.247	15.808
26.0	33.617	0.755	0.245	15.853
26.2	34.024	0.757	0.243	15.898
26.4	34.431	0.759	0.241	15.944
26.6	34.839	0.761	0.239	15.989
26.8	35.247	0.763	0.237	16.034
27.0	35.666	0.765	0.235	16.079
27.2	36.085	0.767	0.233	16.124
27.4	36.515	0.769	0.231	16.170
27.6	36.945	0.771	0.229	16.215
27.8	37.376	0.773	0.227	16.260
28.0	37.807	0.775	0.225	16.305
28.2	38.259	0.777	0.223	16.350
28.4	38.711	0.779	0.221	16.395
28.6	39.163	0.781	0.219	16.440
28.8	39.616	0.783	0.217	16.485
29.0	40.070	0.785	0.215	16.530
29.2	40.544	0.787	0.213	16.575
29.4	41.019	0.789	0.211	16.620
29.6	41.494	0.791	0.209	16.666
29.8	41.969	0.793	0.207	16.711
30.0	42.445	0.795	0.205	16.755

## Lampiran 2

Besaran nilai angot ( $R_a$ ) dalam evaporasi ekuivalen (mm/hari) dalam hubungannya dengan letak lintang (untuk daerah Indonesia, antara 5 LU sampai 10 LS)

Bulan	Lintang Utara				Lintang Selatan				
	5	4	2	0	2	4	6	8	10
Januari	13.00	14.30	14.70	15.00	15.30	15.50	15.80	16.10	16.10
Pebruari	14.00	15.00	15.30	15.50	15.70	15.80	16.00	16.10	16.00
Maret	15.00	15.50	15.60	15.70	15.70	15.60	15.60	15.50	15.30
April	15.10	15.50	15.30	15.30	15.10	14.90	14.70	14.40	14.00
Mei	15.30	14.90	14.60	14.40	14.10	13.80	13.40	13.10	12.60
Juni	15.00	14.40	14.20	13.90	13.50	13.20	12.80	12.40	12.60
Juli	15.10	14.60	14.30	14.10	13.70	13.40	13.10	12.70	11.80
Agustus	15.30	15.10	14.90	14.80	14.50	14.30	14.00	13.70	12.20
September	15.10	15.30	15.30	15.30	15.20	15.10	15.00	14.90	13.30
Oktober	15.70	15.10	15.30	15.40	15.50	15.60	15.70	15.80	14.60
Nopember	14.80	14.50	14.80	15.10	15.30	15.50	15.80	16.00	15.60
Desember	14.60	14.10	14.40	14.80	15.10	15.40	15.70	16.00	16.00
min	13.00	14.10	14.20	13.90	13.50	13.20	12.80	12.40	11.80
maks	15.70	15.50	15.60	15.70	15.70	15.80	16.00	16.10	16.10
rerata	14.83	14.86	14.89	14.94	14.89	14.84	14.80	14.73	14.18

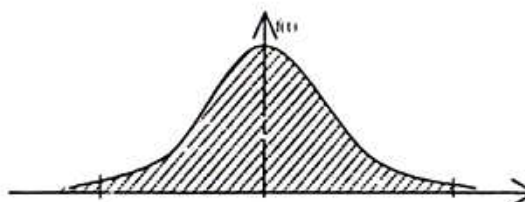
### Lampiran 3

Besaran angka koreksi (c) bulanan untuk rumus Penman (berdasarkan perkiraan perbandingan kecepatan angin siang / malam di daerah Indonesia)

Bulan	angka koreksi (c)		
	Blaney-Criddle	Radiasi	Penman
Januari	0.80	0.80	1.10
Pebruari	0.80	0.80	1.10
Maret	0.75	0.75	1.00
April	0.75	0.75	1.00
Mei	0.70	0.70	0.95
Juni	0.70	0.70	0.95
Juli	0.75	0.75	1.00
Agustus	0.75	0.75	1.00
September	0.80	0.80	1.10
Oktober	0.80	0.80	1.10
Nopember	0.83	0.83	1.15
Desember	0.83	0.83	1.15
min	0.70	0.70	0.95
maks	0.83	0.83	1.15
rerata	0.77	0.77	1.05

### Lampiran 4a

Tabel Luas daerah di bawah kurva normal.



$t$	0	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
-3.4	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0002
-3.3	0.0005	0.0005	0.0005	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0003
-3.2	0.0007	0.0007	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0005	0.0005
-3.1	0.0010	0.0009	0.0009	0.0009	0.0008	0.0008	0.0008	0.0008	0.0007	0.0007
-3.0	0.0013	0.0013	0.0013	0.0012	0.0012	0.0011	0.0011	0.0011	0.0010	0.0010
-2.9	0.0019	0.0018	0.0017	0.0017	0.0016	0.0016	0.0015	0.0015	0.0014	0.0014
-2.8	0.0026	0.0025	0.0024	0.0023	0.0022	0.0022	0.0021	0.0021	0.0020	0.0019
-2.7	0.0036	0.0034	0.0033	0.0032	0.0030	0.0030	0.0029	0.0028	0.0027	0.0026
-2.6	0.0047	0.0045	0.0044	0.0043	0.0040	0.0040	0.0039	0.0038	0.0037	0.0036
-2.5	0.0062	0.0060	0.0059	0.0057	0.0055	0.0054	0.0052	0.0051	0.0049	0.0048
-2.4	0.0082	0.0080	0.0078	0.0075	0.0073	0.0071	0.0069	0.0068	0.0066	0.0064
-2.3	0.0107	0.0104	0.0102	0.0099	0.0096	0.0094	0.0091	0.0089	0.0087	0.0084
-2.2	0.0139	0.0136	0.0132	0.0129	0.0125	0.0122	0.0119	0.0116	0.0113	0.0110
-2.1	0.0179	0.0174	0.0170	0.0166	0.0162	0.0158	0.0154	0.0150	0.0146	0.0143
-2.0	0.0228	0.0222	0.0217	0.0212	0.0207	0.0202	0.0197	0.0192	0.0188	0.0183
-1.9	0.0287	0.0281	0.0274	0.0268	0.0262	0.0256	0.0250	0.0244	0.0239	0.0233
-1.8	0.0359	0.0352	0.0344	0.0336	0.0329	0.0322	0.0314	0.0307	0.0301	0.0294
-1.7	0.0446	0.0436	0.0427	0.0418	0.0409	0.0401	0.0392	0.0384	0.0375	0.0367
-1.6	0.0546	0.0537	0.0526	0.0516	0.0505	0.0495	0.0485	0.0475	0.0465	0.0455
-1.5	0.0668	0.0655	0.0643	0.0630	0.0618	0.0606	0.0594	0.0582	0.0571	0.0559
-1.4	0.0808	0.0793	0.0778	0.0764	0.0749	0.0735	0.0722	0.0708	0.0694	0.0681
-1.3	0.0968	0.0951	0.0934	0.0918	0.0901	0.0885	0.0869	0.0853	0.0838	0.0823
-1.2	0.1151	0.1131	0.1112	0.1093	0.1075	0.1056	0.1038	0.1020	0.1003	0.0985
-1.1	0.1357	0.1335	0.1314	0.1292	0.1271	0.1251	0.1230	0.1210	0.1190	0.1170
-1.0	0.1587	0.1562	0.1539	0.1515	0.1492	0.1469	0.1446	0.1423	0.1401	0.1379
-0.9	0.1841	0.1814	0.1788	0.1762	0.1736	0.1711	0.1685	0.1660	0.1635	0.1611
-0.8	0.2119	0.2090	0.2061	0.2033	0.2006	0.1977	0.1949	0.1922	0.1894	0.1867
-0.7	0.2420	0.2389	0.2358	0.2327	0.2296	0.2266	0.2236	0.2206	0.2177	0.2148
-0.6	0.2743	0.2709	0.2676	0.2643	0.2611	0.2578	0.2546	0.2514	0.2483	0.2451
-0.5	0.3085	0.3050	0.3015	0.2981	0.2946	0.2912	0.2877	0.2843	0.2810	0.2776
-0.4	0.3446	0.3409	0.3372	0.3336	0.3300	0.3264	0.3228	0.3192	0.3156	0.3121
-0.3	0.3831	0.3783	0.3745	0.3707	0.3669	0.3632	0.3594	0.3557	0.3520	0.3483
-0.2	0.4207	0.4168	0.4129	0.4090	0.4052	0.4013	0.3974	0.3936	0.3897	0.3859
-0.1	0.4602	0.4562	0.4522	0.4483	0.4443	0.4404	0.4364	0.4325	0.4286	0.4247
0.0	0.5000	0.4960	0.4920	0.4880	0.4840	0.4801	0.4761	0.4721	0.4681	0.4641

Sumber : Suripin 2004

## Lampiran 4b

Tabel Luas daerah di bawah kurva normal.

<i>t</i>	0	0,01	0,02	0,03	0,04	0,05	0,06	0,07	0,08	0,09
0,0	0,5000	0,5040	0,5080	0,5120	0,5160	0,5199	0,5239	0,5279	0,5319	0,5359
0,1	0,5398	0,5438	0,5478	0,5517	0,5557	0,5596	0,5636	0,5675	0,5714	0,5753
0,2	0,5793	0,5832	0,5871	0,5910	0,5948	0,5987	0,6026	0,6064	0,6103	0,6141
0,3	0,6179	0,6217	0,6255	0,6293	0,6331	0,6368	0,6406	0,6443	0,6480	0,6517
0,4	0,6554	0,6591	0,6628	0,6664	0,6700	0,6736	0,6772	0,6808	0,6844	0,6879
0,5	0,6915	0,6950	0,6985	0,7019	0,7054	0,7088	0,7123	0,7157	0,7190	0,7224
0,6	0,7257	0,7291	0,7324	0,7357	0,7389	0,7422	0,7454	0,7486	0,7517	0,7549
0,7	0,7580	0,7611	0,7642	0,7673	0,7704	0,7734	0,7764	0,7794	0,7823	0,7852
0,8	0,7881	0,7910	0,7939	0,7967	0,7995	0,8023	0,8051	0,8078	0,8106	0,8133
0,9	0,8159	0,8186	0,8212	0,8238	0,8264	0,8289	0,8315	0,8340	0,8365	0,8389
1,0	0,8413	0,8438	0,8463	0,8485	0,8508	0,8531	0,8554	0,8577	0,8599	0,8621
1,1	0,8643	0,8665	0,8686	0,8708	0,8729	0,8749	0,8770	0,8790	0,8810	0,8830
1,2	0,8849	0,8869	0,8888	0,8907	0,8925	0,8944	0,8962	0,8980	0,8997	0,9015
1,3	0,9032	0,9049	0,9066	0,9082	0,9099	0,9115	0,9131	0,9147	0,9162	0,9177
1,4	0,9192	0,9207	0,9222	0,9236	0,9251	0,9265	0,9278	0,9292	0,9306	0,9319
1,5	0,9332	0,9345	0,9357	0,9370	0,9382	0,9394	0,9406	0,9418	0,9429	0,9441
1,6	0,9452	0,9463	0,9474	0,9484	0,9493	0,9505	0,9515	0,9525	0,9535	0,9545
1,7	0,9554	0,9564	0,9573	0,9582	0,9591	0,9599	0,9608	0,9616	0,9625	0,9633
1,8	0,9641	0,9649	0,9656	0,9664	0,9671	0,9678	0,9686	0,9693	0,9699	0,9706
1,9	0,9713	0,9717	0,9726	0,9732	0,9738	0,9744	0,9750	0,9756	0,9761	0,9767
2,0	0,9772	0,9778	0,9783	0,9788	0,9793	0,9798	0,9803	0,9808	0,9812	0,9817
2,1	0,9821	0,9826	0,9830	0,9834	0,9838	0,9842	0,9846	0,9850	0,9854	0,9857
2,2	0,9861	0,9864	0,9868	0,9871	0,9875	0,9878	0,9881	0,9884	0,9887	0,9890
2,3	0,9893	0,9896	0,9896	0,9901	0,9904	0,9906	0,9909	0,9911	0,9913	0,9916
2,4	0,9918	0,9920	0,9922	0,9925	0,9927	0,9929	0,9931	0,9932	0,9934	0,9936
2,5	0,9938	0,9940	0,9941	0,9943	0,9945	0,9946	0,9948	0,9949	0,9951	0,9952
2,6	0,9953	0,9955	0,9956	0,9957	0,9959	0,9960	0,9961	0,9962	0,9963	0,9964
2,7	0,9965	0,9966	0,9967	0,9968	0,9969	0,9970	0,9971	0,9972	0,9973	0,9974
2,8	0,9974	0,9975	0,9976	0,9977	0,9977	0,9978	0,9979	0,9979	0,9980	0,9981
2,9	0,9971	0,9982	0,9982	0,9983	0,9984	0,9984	0,9985	0,9985	0,9986	0,9986
3,0	0,9987	0,9987	0,9987	0,9988	0,9988	0,9989	0,9989	0,9989	0,9990	0,9990
3,1	0,9990	0,9991	0,9991	0,9991	0,9991	0,9992	0,9992	0,9992	0,9993	0,9993
3,2	0,9993	0,9993	0,9994	0,9994	0,9994	0,9994	0,9994	0,9995	0,9995	0,9995
3,3	0,9995	0,9995	0,9995	0,9996	0,9996	0,9996	0,9996	0,9996	0,9996	0,9997
3,4	0,9997	0,9997	0,9997	0,9997	0,9997	0,9997	0,9997	0,9997	0,9997	0,9998

<i>z</i>	0	0,01	0,02	0,03	0,04	0,05	0,06	0,07	0,08	0,09
0,0	0,0000	0,0040	0,0080	0,0120	0,0160	0,0199	0,0239	0,0279	0,0319	0,0359
0,1	0,0398	0,0438	0,0478	0,0517	0,0557	0,0596	0,0636	0,0675	0,0714	0,0753
0,2	0,0793	0,0832	0,0871	0,0910	0,0948	0,0987	0,1026	0,1064	0,1103	0,1141
0,3	0,1179	0,1217	0,1255	0,1293	0,1331	0,1368	0,1406	0,1443	0,1480	0,1517
0,4	0,1554	0,1591	0,1628	0,1664	0,1700	0,1736	0,1772	0,1808	0,1844	0,1879
0,5	0,1915	0,1950	0,1985	0,2019	0,2054	0,2088	0,2123	0,2157	0,2190	0,2224
0,6	0,2257	0,2291	0,2324	0,2357	0,2389	0,2422	0,2454	0,2486	0,2517	0,2549
0,7	0,2580	0,2611	0,2642	0,2673	0,2704	0,2734	0,2764	0,2794	0,2823	0,2852
0,8	0,2881	0,2910	0,2939	0,2967	0,2995	0,3023	0,3051	0,3078	0,3106	0,3133
0,9	0,3159	0,3186	0,3212	0,3238	0,3264	0,3289	0,3315	0,3340	0,3365	0,3389

Sumber : Suripin 2004

### Lampiran 4c

Tabel Luas daerah di bawah kurva normal.

1.0	0,3413	0,3438	0,3461	0,3485	0,3508	0,3531	0,3554	0,3577	0,3599	0,3621
1.1	0,3643	0,3665	0,3686	0,3708	0,3729	0,3749	0,3770	0,3790	0,3810	0,3830
1.2	0,3849	0,3869	0,3888	0,3907	0,3925	0,3944	0,3962	0,3980	0,3997	0,4015
1.3	0,4032	0,4049	0,4066	0,4082	0,4099	0,4115	0,4131	0,4147	0,4162	0,4177
1.4	0,4192	0,4207	0,4222	0,4236	0,4251	0,4265	0,4278	0,4292	0,4306	0,4319
1.5	0,4332	0,4345	0,4357	0,4370	0,4382	0,4394	0,4406	0,4418	0,4429	0,4441
1.6	0,4452	0,4463	0,4474	0,4484	0,4495	0,4505	0,4515	0,4525	0,4535	0,4545
1.7	0,4554	0,4564	0,4573	0,4582	0,4591	0,4599	0,4608	0,4616	0,4625	0,4633
1.8	0,4641	0,4649	0,4656	0,4664	0,4671	0,4678	0,4686	0,4693	0,4699	0,4706
1.9	0,4713	0,4717	0,4726	0,4732	0,4738	0,4744	0,4750	0,4756	0,4761	0,4767
2.0	0,4772	0,4778	0,4783	0,4788	0,4793	0,4798	0,4803	0,4808	0,4812	0,4817
2.1	0,4821	0,4826	0,4830	0,4834	0,4838	0,4842	0,4846	0,4850	0,4854	0,4857
2.2	0,4861	0,4864	0,4868	0,4871	0,4875	0,4878	0,4881	0,4884	0,4887	0,4890
2.3	0,4893	0,4896	0,4899	0,4901	0,4904	0,4906	0,4909	0,4911	0,4913	0,4916
2.4	0,4918	0,4920	0,4922	0,4925	0,4927	0,4929	0,4931	0,4932	0,4934	0,4936
2.5	0,4938	0,4940	0,4941	0,4943	0,4945	0,4946	0,4948	0,4949	0,4951	0,4952
2.6	0,4953	0,4955	0,4956	0,4957	0,4959	0,4960	0,4961	0,4962	0,4963	0,4964
2.7	0,4965	0,4966	0,4967	0,4968	0,4969	0,4970	0,4971	0,4972	0,4973	0,4974
2.8	0,4974	0,4975	0,4976	0,4977	0,4977	0,4978	0,4979	0,4979	0,4980	0,4981
2.9	0,4971	0,4982	0,4982	0,4983	0,4984	0,4984	0,4985	0,4985	0,4986	0,4986
3.0	0,4987	0,4987	0,4987	0,4988	0,4988	0,4989	0,4989	0,4989	0,4990	0,4990
3.1	0,4990	0,4991	0,4991	0,4991	0,4991	0,4992	0,4992	0,4992	0,4993	0,4993
3.2	0,4993	0,4993	0,4994	0,4994	0,4994	0,4994	0,4994	0,4995	0,4995	0,4995
3.3	0,4995	0,4995	0,4995	0,4996	0,4996	0,4996	0,4996	0,4996	0,4996	0,4997
3.4	0,4997	0,4997	0,4997	0,4997	0,4997	0,4997	0,4997	0,4997	0,4997	0,4998

Sumber : Suripin 2004

**Lampiran 5**

Tabel Nilai Variabel Reduksi Gauss.

No.	Periode ulang T (tahun)	Peluang	$K_T$
1	1,001	0,999	-3,050
2	1,005	0,995	-2,580
3	1,010	0,990	-2,330
4	1,050	0,950	-1,640
5	1,110	0,900	-1,280
6	1,250	0,800	-0,840
7	1,330	0,750	-0,670
8	1,430	0,700	-0,520
9	1,670	0,600	-0,250
10	2,000	0,500	0,000
11	2,500	0,400	0,250
12	3,330	0,300	0,520
13	4,000	0,250	0,670
14	5,000	0,200	0,840
15	10,000	0,100	1,280
16	20,000	0,050	1,640
17	50,000	0,020	2,050
18	100,000	0,010	2,330
19	200,000	0,005	2,580
20	500,000	0,002	2,880
21	1000,000	0,001	3,090

*Sumber : Suripin 2004*

## Lampiran 6

Tabel Nilai K untuk distribusi Log-Person III

Koef, G	interval kejadian ( <i>Recurrence interval</i> ), tahun (periode ulang)							
	1,0101	1,250	2	5	10	25	50	100
Koef, G	Persentase peluang terlampaui ( <i>Percent chance of being exceeded</i> )							
	99	80	50	20	10	4	2	1
3,000	-0,667	-0,636	-0,396	0,420	1,180	2,278	3,152	4,051
2,800	-0,714	-0,666	-0,384	0,460	1,210	2,275	3,114	3,973
2,600	-0,769	-0,696	-0,368	0,499	1,238	2,267	3,071	2,889
2,400	-0,832	-0,725	-0,351	0,537	1,262	2,256	3,023	3,800
2,200	-0,905	0,752	-0,330	0,574	1,284	2,240	2,970	3,705
2,000	-0,990	-0,777	-0,307	0,609	1,302	2,219	2,192	3,605
1,800	-1,087	-0,799	-0,282	0,643	1,318	2,193	2,848	3,499
1,600	-1,197	-0,817	-0,254	0,675	1,329	2,163	2,780	3,388
1,400	-1,318	-0,832	-0,225	0,705	1,337	2,128	2,706	3,271
1,200	-1,449	-0,844	-0,195	0,732	1,340	2,087	2,626	3,149
1,000	-1,588	-0,852	-0,164	0,758	1,340	2,043	2,542	3,022
0,800	-1,733	-0,856	-0,132	0,780	1,336	1,993	2,453	2,891
0,600	-1,880	-0,857	-0,099	0,800	1,328	1,939	2,359	2,755
0,400	-2,029	-0,855	-0,066	0,816	1,317	1,880	2,231	2,615
0,200	-2,178	-0,850	-0,033	0,830	1,301	1,818	2,159	2,472
0,000	-2,326	-0,842	0,000	0,842	1,282	1,751	2,051	2,326
-0,200	-2,472	-0,830	0,033	0,850	1,258	1,680	1,945	2,178
-0,400	-2,615	-0,816	0,066	0,855	1,231	1,606	1,834	2,029
-0,600	-2,755	-0,800	0,099	0,857	1,200	1,528	1,720	1,880
-0,800	-2,891	-0,780	0,132	0,856	1,166	1,448	1,606	1,733
-1,000	-3,022	-0,758	0,164	0,852	1,280	1,366	1,492	1,588
-1,200	-2,149	-0,732	0,195	0,844	1,086	1,282	1,379	1,449
-1,400	-2,271	-0,705	0,225	0,832	1,041	1,198	1,270	1,318
-1,600	-2,388	-0,675	0,254	0,817	0,994	1,116	1,166	1,197
-1,800	-3,499	-0,643	0,282	0,799	0,945	1,035	1,069	1,087
-2,000	-3,605	-0,609	0,307	0,777	0,895	0,959	0,980	0,990
-2,200	-3,705	-0,574	0,330	0,752	0,844	0,888	0,900	0,905
-2,400	-3,800	-0,537	0,351	0,725	0,795	0,823	0,830	0,832
-2,600	-3,889	-0,490	0,368	0,696	0,747	0,764	0,768	0,769
-2,800	-3,973	-0,469	0,384	0,666	0,702	0,712	0,714	0,714
-3,000	-7,051	-0,420	0,396	0,636	0,660	0,666	0,666	0,667

Sumber : Suripin 2004



## Lampiran 7

Tabel Reduced Mean, Yn.

N	0	1	2	3	4	5	6	7	8	9
10	0,4952	0,4996	0,5035	0,5070	0,5110	0,5128	0,5157	0,5181	0,5202	0,5520
20	0,5236	0,5252	0,5268	0,5283	0,5296	0,5309	0,5320	0,5532	0,5343	0,5353
30	0,5362	0,5371	0,5380	0,5388	0,8396	0,5403	0,5410	0,5418	0,5424	0,5436
40	0,5436	0,5442	0,5554	0,5453	0,5458	0,5463	0,5463	0,5473	0,5477	0,5481
50	0,5485	0,5489	0,5493	0,5497	0,5501	0,5504	0,5508	0,5511	0,5515	0,5518
60	0,5521	0,5524	0,5527	0,5530	0,5533	0,5535	0,5538	0,5540	0,5543	0,5545
70	0,5548	0,5550	0,5552	0,5555	0,5557	0,5559	0,5561	0,5563	0,5565	0,5567
80	0,5569	0,5570	0,5572	0,5574	0,5576	0,5578	0,5580	0,5581	0,5583	0,5585
90	0,5586	0,5587	0,5589	0,5591	0,5592	0,5593	0,5595	0,5596	0,5598	0,5599
100	0,5600	0,5602	0,5603	0,5604	0,5604	0,5607	0,5608	0,5609	0,5610	0,5611

*Sumber : Suripin 2004*

**Lampiran 8**

Tabel Reduced Standard Deviation, Sn

<b>N</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>
<b>10</b>	0,9496	0,9676	0,9833	0,9971	1,0095	1,0206	1,0316	1,0411	1,0493	1,0565
<b>20</b>	1,0628	1,0696	1,0754	1,0811	1,0846	1,0945	1,0961	1,1004	1,1047	1,1080
<b>30</b>	1,1124	1,1159	1,1193	1,1226	1,1255	1,1285	1,1313	1,1339	1,1363	1,1388
<b>40</b>	1,1413	1,1436	1,1458	1,1480	1,1499	1,1519	1,1538	1,1557	1,1574	1,1590
<b>50</b>	1,1607	1,1623	1,1638	1,1628	1,1667	1,1681	1,1696	1,1708	1,1721	1,1734
<b>60</b>	1,1747	1,1759	1,1770	1,1782	1,1793	1,1803	1,1814	1,1824	1,1834	1,1844
<b>70</b>	1,1854	1,1863	1,1873	1,8810	1,1890	1,1898	1,1906	1,1915	1,1923	1,1930
<b>80</b>	1,1938	1,1945	1,1953	1,1959	1,1967	1,1973	1,1980	1,1987	1,1994	1,2001
<b>90</b>	1,2007	1,2013	1,2020	1,2026	1,2032	1,2038	1,2044	1,2049	1,2055	1,2060
<b>100</b>	1,2056	1,2069	1,2073	1,2077	1,2081	1,2084	1,1087	1,2209	1,2093	1,2096

*Sumber : Suripin 2004*

### Lampiran 9

Tabel Reduced Variate,  $Y_{Tr}$  sebagai fungsi periode ulang

<b>periode ulang, <math>T_r</math>(tahun)</b>	<b>Reduced Variate, <math>Y_{Tr}</math></b>	<b>periode ulang, <math>Tr</math> (tahun)</b>	<b>Reduced Variate, <math>Y_{Tr}</math></b>
2	0,3668	100	4,6012
5	1,5004	200	5,2969
10	2,5100	250	0,5206
20	2,9709	500	6,2149
25	3,1993	1000	6,9087
50	3,9028	5000	8,5188
75	4,3117	10000	9,2121

*Sumber : Suripin 2004*

### Lampiran 10

Tabel Uji Smirnov Kolmogorof : Nilai Kritis ( $\Delta_{cr}$ ) Smirnov-Kolmogorof

Ukuran Sampel (n)	Level of Significance $\alpha$ (persen)				
	20	15	10	5	1
1	0,900	0,925	0,950	0,975	0,995
2	0,684	0,726	0,776	0,842	0,929
3	0,565	0,597	0,642	0,708	0,829
3	0,494	0,525	0,564	0,624	0,734
5	0,446	0,474	0,510	0,563	0,669
6	0,410	0,436	0,470	0,521	0,618
7	0,381	0,405	0,438	0,486	0,577
8	0,358	0,381	0,411	0,457	0,543
9	0,339	0,360	0,388	0,432	0,514
10	0,322	0,342	0,368	0,409	0,486
11	0,307	0,326	0,352	0,391	0,468
12	0,295	0,313	0,338	0,375	0,450
13	0,284	0,302	0,325	0,361	0,433
14	0,274	0,292	0,314	0,349	0,418
15	0,266	0,283	0,304	0,338	0,404
16	0,258	0,274	0,295	0,328	0,391
17	0,250	0,266	0,286	0,318	0,380
18	0,244	0,259	0,278	0,309	0,370
19	0,237	0,252	0,272	0,301	0,361
20	0,231	0,246	0,264	0,294	0,352
Rumus	$\frac{1,07}{\sqrt{n}}$	$\frac{1,14}{\sqrt{n}}$	$\frac{1,22}{\sqrt{n}}$	$\frac{1,36}{\sqrt{n}}$	$\frac{1,63}{\sqrt{n}}$
Asimotik	$\frac{1,07}{\sqrt{n}}$	$\frac{1,14}{\sqrt{n}}$	$\frac{1,22}{\sqrt{n}}$	$\frac{1,36}{\sqrt{n}}$	$\frac{1,63}{\sqrt{n}}$

Sumber : Lily motarcih, 2009 : 73

### Lampiran 11a

Tabel Faktor Sifat Distribusi Log Person Tipe III untuk CS Positif

Skew Coef. (Cs)	1,0191	1,053	1,1111	1,2500	2	5	10	25	50	100	200
	99	95	90	80	Percent Change			4	2	1	0,5
					50	20	10				
3.0	-0,667	-0,665	-0,660	-0,636	-0,396	0,420	1,180	2,278	3,152	4,061	4,970
2.9	-0,690	-0,688	-0,681	-0,651	-0,390	0,440	1,196	2,277	3,134	4,013	4,909
2.8	-0,714	-0,711	-0,702	-0,666	-0,384	0,460	1,210	2,275	3,114	3,973	4,847
2.7	-0,740	-0,736	-0,724	-0,681	-0,376	0,479	1,224	2,272	3,097	3,932	4,783
2.6	-0,769	-0,762	-0,747	-0,695	-0,368	0,499	1,238	2,267	3,071	3,889	4,718
2.5	-0,799	-0,790	-0,771	-0,711	-0,360	0,518	1,250	2,262	3,048	3,845	4,652
2.4	-0,832	-0,819	-0,795	-0,725	-0,351	0,537	1,262	2,256	3,029	3,800	4,584
2.3	-0,867	-0,850	-0,819	-0,739	-0,341	0,555	1,274	2,248	2,997	3,753	4,515
2.2	-0,905	-0,882	-0,844	-0,752	-0,330	0,574	1,284	2,240	2,970	3,705	4,454
2.1	-0,946	-0,914	-0,869	-0,765	-0,319	0,592	1,294	2,230	2,942	3,656	4,372
2.0	-0,990	-0,949	-0,896	-0,777	-0,307	0,609	1,302	2,219	2,912	3,605	4,298
1.9	-1,037	-0,984	-0,920	-0,788	-0,294	0,627	1,310	2,207	2,881	3,553	4,223
1.8	-1,087	-1,020	-0,945	-0,799	-0,282	0,643	1,318	2,193	2,848	3,499	4,147
1.7	-1,140	-1,056	-0,970	-0,808	-0,268	0,660	1,324	2,179	2,815	3,444	4,069
1.6	-1,197	-1,093	-0,994	-0,817	-0,254	0,675	1,329	2,163	2,780	3,388	3,990
1.5	-1,256	-1,131	-1,018	-0,825	-0,240	0,690	1,333	2,146	2,745	3,330	3,910
1.4	-1,318	-1,163	-1,041	-0,832	-0,225	0,705	1,337	2,128	2,706	3,271	3,828
1.3	-1,388	-1,206	-1,064	-0,838	-0,210	0,719	1,339	2,108	2,666	3,211	3,745
1.2	-1,447	-1,243	-1,086	-0,844	-0,195	0,732	1,340	2,087	2,626	3,149	3,661
1.1	-1,518	-1,280	-1,107	-0,848	-0,180	0,745	1,341	2,066	2,585	3,087	3,575
1.0	-1,588	-1,317	-1,128	-0,852	-0,164	0,758	1,340	2,043	2,542	3,022	3,489
0.9	-1,660	-1,353	-1,147	-0,854	-0,148	0,769	1,339	2,018	2,498	2,967	3,401
0.8	-1,733	-1,388	-1,166	-0,856	-0,132	0,780	1,336	1,993	2,453	2,891	3,312
0.7	-1,806	-1,423	-1,183	-0,857	-0,116	0,790	1,333	1,967	2,407	2,824	3,223
0.6	-1,880	-1,458	-1,200	-0,857	-0,099	0,800	1,328	1,939	2,359	2,755	3,123
0.5	-1,965	-1,491	-1,216	-0,856	-0,083	0,808	1,323	1,910	2,311	2,686	3,041
0.4	-2,029	-1,524	-1,231	-0,855	-0,066	0,816	1,317	1,880	2,261	2,615	2,949
0.3	-2,104	-1,555	-1,245	-0,853	-0,050	0,824	1,309	1,849	2,211	2,544	2,856
0.2	-2,175	-1,586	-1,258	-0,850	-0,033	0,830	1,301	1,818	2,159	2,472	2,763
0.1	-2,225	-1,616	-1,270	-0,846	-0,017	0,836	1,292	1,785	2,107	2,400	2,670
0	-2,326	-1,645	-1,282	-0,842	0,000	0,842	1,282	1,751	2,064	2,064	2,576

Sumber : Lily motarcih, 2009 : 67

## Lampiran 11b

Tabel Faktor Sifat Distribusi Log Person Tipe III untuk CS Negatif

Skew Coef. (Cs)	1,0101	1,0526	1,1111	1,2500	2	5	10	25	50	100	200
	99	95	90	80	Percent Change			4	2	1	0,5
					50	20	10				
0	-2,336	-1,645	-1,282	-0,824	0,000	0,842	1,282	1,750	2,054	2,326	2,576
-0.1	-2,400	-1,673	-1,292	-0,836	0,017	0,846	1,270	1,716	2,000	2,252	2,482
-0.2	-2,472	-1,700	-1,301	-0,830	0,033	0,850	1,258	1,680	1,945	2,178	2,388
-0.3	-2,544	-1,762	-1,309	-0,824	0,050	0,853	1,245	1,663	1,890	2,104	2,294
-0.4	-2,615	-1,750	-1,317	-0,816	0,066	0,855	1,231	1,606	1,834	2,029	2,201
-0.5	-2,686	-1,774	-1,323	-0,808	0,083	0,856	1,216	1,567	1,777	1,955	2,108
-0.6	-2,755	-1,797	-1,328	-0,800	0,099	0,857	1,200	1,528	1,720	1,880	2,016
-0.7	-2,824	-1,819	-1,333	-0,790	0,116	0,857	1,183	1,488	1,633	1,800	1,936
-0.8	-2,891	-1,839	-1,336	-0,780	0,132	0,856	1,166	1,484	1,608	1,733	1,837
-0.9	-2,957	-1,858	-1,339	-0,769	0,148	0,854	1,147	1,407	1,549	1,660	1,749
-1.0	-3,022	-1,877	-1,340	-0,758	0,164	0,852	1,108	1,366	1,492	1,588	1,664
-1.1	-3,087	-1,894	-1,341	-0,745	0,180	0,848	1,107	1,324	1,435	1,518	1,581
-1.2	-3,149	-1,910	-1,340	-0,732	0,195	0,844	1,086	1,282	1,379	1,449	1,501
-1.3	-3,211	-1,925	-1,339	-0,719	0,210	0,838	1,064	1,240	1,324	1,383	1,424
-1.4	-3,271	-1,938	-1,337	-0,705	0,225	0,832	1,041	1,196	1,270	1,316	1,351
-1.5	-3,330	-1,961	-1,333	-0,690	0,240	0,825	1,018	1,157	1,217	1,256	1,282
-1.6	-3,388	-1,962	-1,329	-0,675	0,254	0,817	0,994	1,116	1,168	1,197	1,216
-1.7	-3,444	-1,972	-1,324	-0,660	0,268	0,808	0,970	1,075	1,116	1,140	1,155
-1.8	-3,499	-1,981	-1,318	-0,643	0,282	0,799	0,945	1,035	1,069	1,087	1,097
-1.9	-3,553	-1,989	-1,310	-0,627	0,294	0,788	0,920	0,996	1,023	1,037	1,044
-2.0	-3,605	-1,996	-1,302	-0,609	0,307	0,777	0,895	0,969	0,980	0,990	0,995
-2.1	-3,656	-2,001	-1,294	-0,592	0,319	0,765	0,869	0,923	0,939	0,346	0,949
-2.2	-3,705	-2,006	-1,284	-0,574	0,330	0,732	0,849	0,888	0,900	0,905	0,907
-2.3	-3,753	-2,009	-1,274	-0,555	0,341	0,739	0,819	0,855	0,864	0,867	0,869
-2.4	-3,800	-2,011	-1,262	-0,537	0,351	0,725	0,795	0,823	0,830	0,832	0,833
-2.5	-3,845	-2,012	-1,250	-0,518	0,360	0,711	0,771	0,793	0,796	0,799	0,800
-2.6	-3,889	-2,013	-1,238	-0,499	0,368	0,696	0,747	0,764	0,767	0,769	0,769
-2.7	-3,932	-2,011	-1,224	-0,479	0,376	0,681	0,724	0,738	0,740	0,740	0,741
-2.8	-3,973	-2,010	-1,210	-0,460	0,384	0,666	0,702	0,712	0,714	0,734	0,714
-2.9	-4,013	-2,007	-1,195	-0,440	0,330	0,651	0,681	0,683	0,689	0,690	0,690
-3.0	-4,051	-2,003	-1,180	-0,420	0,390	0,636	0,660	0,666	0,666	0,667	0,657

Sumber : Lily motarcih, 2009 : 67

## Lampiran 12

Tabel Chi Square : Nilai Kritis untu Distribusi Chi Square ( $X^2$ )

$d^k$	$\alpha$ derajat kepercayaan							
	$t_{0,995}$	$t_{0,99}$	$t_{0,975}$	$t_{0,95}$	$t_{0,05}$	$t_{0,025}$	$t_{0,01}$	$t_{0,005}$
1	0.039	0.016	0.098	0.393	3.841	5.024	6.635	7.879
2	0.1	0.201	0.506	0.103	5.991	0.738	9.21	10.597
3	0.717	0.115	0.216	0.352	7.815	9.348	11.345	12.838
4	0.207	0.297	0.484	0.711	9.488	11.143	13.277	14.86
5	0.412	0.554	0.831	1.145	11.07	12.832	15.086	16.75
6	0.676	0.872	1.237	1.635	12.592	14.449	16.812	18.548
7	0.989	1.239	1.69	2.167	14.067	16.013	18.475	20.278
8	1.344	1.646	2.18	2.733	15.507	17.535	20.09	21.925
9	1.735	2.088	2.7	3.325	16.919	19.023	21.666	23.589
10	2.156	2.558	3.247	3.94	18.307	20.483	23.209	25.188
11	2.603	3.053	3.816	4.575	19.675	21.92	24.725	26.757
12	3.074	3.571	4.404	5.226	21.026	23.337	26.217	28.3
13	3.565	4.107	5.009	5.892	22.362	24.736	27.688	29.819
14	4.075	4.66	5.629	6.571	23.685	26.119	29.141	31.319
15	4.601	5.229	6.262	7.261	24.996	27.488	30.578	32.801
16	5.142	5.812	6.908	7.962	26.296	28.845	32	34.267
17	5.697	6.408	7.564	8.672	27.587	30.191	33.409	35.718
18	6.265	7.015	8.231	9.39	28.869	31.526	34.805	37.156
19	6.884	7.633	8.907	10.117	30.144	32.852	36.191	38.582
20	7.434	8.26	9.591	10.851	31.41	34.17	37.566	39.997
21	8.034	8.897	10.283	11.591	32.671	35.479	38.932	41.401
22	8.643	9.542	10.982	12.338	33.924	36.781	40.289	42.796
23	9.26	10.196	11.689	13.091	36.172	38.076	41.638	44.181
24	9.886	10.856	12.401	13.848	36.415	39.364	42.982	45.558
25	10.52	11.524	13.12	14.611	37.652	40.646	44.314	46.928
26	11.16	12.198	13.844	15.379	38.885	41.923	45.642	48.29
27	11.808	12.879	14.573	16.151	40.113	43.194	46.963	49.645
28	12.461	13.565	15.308	16.928	41.337	44.461	48.278	50.993
29	13.121	14.256	16.047	17.708	42.557	45.722	49.588	52.336
30	13.787	14.953	16.791	18.493	43.773	46.979	50.892	53.672

Sumber : Lily motarcih, 2009 : 77

### Lampiran 13

Tabel Harga creep ratio (C) tergantung dari material yang dibawa oleh sungai

Material	C Lane	C Bligh
Pasir amat halus	8,5	18
Pasir halus	7,0	15
Pasir sedang	6,0	-
Pasir kasar	5,0	12
Kerikil halus	4,0	-
Kerikil sedang	3,5	-
Kerikil campur pasir	-	9
Kerikil kasar termasuk batu-batu kecil	3,0	-
Boulder dengan batu-batu kecil dan kerikil kasar	2,5	-
Boulder, batu-batu kecil dan kerikil	-	4 - 6
Lempung lunak	3,0	-
Lempung sedang	1,8	-
Lempung sedang'lempung keras	1,8	-
Lempung sangat keras atau padas	1,6	-

Sumber : Soenarno, 1972



### Lampiran 15

Tabel Koefisien daya dukung tanah dari terzaghi

$\Phi^0$	$N_c$	$N_4$	$N_\gamma$	$N'_c$	$N'_4$	$N'_\gamma$
$0^0$	5,71	1,00	0	3,81	1,00	0
$5^0$	7,32	1,64	0	4,48	1,39	0
$10^0$	9,64	2,70	1,2	5,34	1,94	0
$15^0$	12,80	4,44	2,4	6,46	2,73	1,2
$20^0$	17,70	7,43	4,6	7,90	3,88	2,0
$25^0$	25,10	12,70	9,2	9,86	5,60	3,3
$30^0$	37,20	22,50	20,0	12,70	8,32	5,4
$35^0$	57,80	41,40	44,0	16,80	12,80	9,6
$40^0$	95,60	81,20	114,0	23,20	20,50	19,1
$45^0$	172,00	173,00	320,0	34,10	35,10	27,0

Sumber : Soenarno, 1972

**Lampiran 16**

Tabel Harga-harga perkiraan untuk koefisien

<b>Bahan/Material</b>	<b>Koefisien ( f )</b>
Pasangan batu pada pasangan batu	0,6 – 0,75
Batu keras berkualitas baik	0,75
Kerikil	0,5
Pasir	0,4
lempung	0,3

Sumber : Standart Perencanaan Irigasi KP 02

## **ABSTRAK**

### **KAJIAN TEKNIS DAM SEMBAH PATRANG KABUPATEN JEMBER**

Oleh :

**Zeny kurniawan**

**1110611002**

Pembimbing :

**DR Ir. Noor Salim, M.Eng**

**Amri Gunasti, ST, MT**

Rangkuman, saya melaksanakannya dengan aturan yang sesuai dan yang ada. Dalam suatu penelitian berbagai bidang. Saya meneliti dan mengkaji bidang air, perencanaan yang saya lakukan ini adalah salah satu kegiatan merencanakan ulang suatu bangunan air, yaitu tepatnya adalah mengkaji ulang DAM (Bendung). Kajian ini digunakan untuk mendapatkan hasil perbandingan atau hasil dari perencanaan ulang suatu bangunan air atau DAM yang sudah ada dengan yang akan direncanakan ulang.

Tugas saya adalah memodifikasi maupun merencanakan ulang bentuk maupun kekuatan dari bangunan air atau DAM tersebut agar mendapatkan hasil yang lebih baik ataupun lebih bisa dimanfaatkan dari bangunan air atau DAM yang sudah ada.

Saya berharap bisa mendapat hasil yang sesuai dengan target yang diinginkan dan mendapat hasil yang baik dalam memodifikasi dan mengkaji ulang bangunan air atau DAM Sembah, Patrang tersebut.

**ABSTRACT**  
**TECHNICAL STUDIES RE-DAM SEMBAH PATRANG KABUPATEN**  
**JEMBER**

By :

**Zeny kurniawan**

**1110611002**

Advisor :

**Dr. Ir. Noor Salim, M.Eng**

**Amri Gunasti, ST, MT**

To summarize, I do so with the appropriate rules and existing. In a study of various fields. I research and study areas of water, which I am planning to do this is one of the activities planned over a waterworks, which is precisely re planning DAM (Weir). This study is used to obtain the results of the comparison or the results of re-planning of a waterworks or existing DAM to be planned again.

My job is to modify or re planning a building form and strength of water or DAM proficiency level in order to get better results or more can be used from the waterworks or existing DAM.

I hope to get the results that correspond to the desired target and got a good result in modifying and re-building plan water or DAM Sembah, the Patrang.