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Lampiran 1. Data curah hujan selama 10 tahun (1974 s/d 1983) dari stasiun pengamat Playen Gunung Kidul.

No.	Bulan	1974 hh	1974 ch	1975 hh	1975 ch	1976 hh	1976 ch	1977 hh	1977 ch	1978 hh	1978 ch	1979 hh	1979 ch	1980 hh	1980 ch	1981 hh	1981 ch	1982 hh	1982 ch	1983 hh	1983 ch	rata2 hh	rata2 ch
1	Januari	24	351	11	227	27	497	22	495	20	354	23	528	24	492	26	363	21	168	16	323	21,4	379,8
2	Pebruari	23	349	26	563	8	253	19	289	11	172	15	251	20	239	20	241	22	575	18	379	18,2	331,1
3	Maret	18	325	27	568	14	575	21	356	22	346	23	445	11	164	22	372	15	194	10	166	18,3	351,1
4	April	13	316	19	452	2	168	10	104	10	169	19	247	15	108	11	211	13	224	16	331	12,8	233,0
5	Mei	10	108	12	276	0	0	2	17	11	347	19	334	3	15	9	146	0	0	16	376	8,2	161,9
6	Juni	1	2	0	0	0	0	7	69	19	316	5	105	2	26	6	110	0	0	1	50	4,1	67,8
7	Juli	1	24	2	34	1	4	0	0	12	195	1	2	1	7	12	111	0	0	0	0	3,0	37,7
8	Agustus	15	101	0	0	1	9	0	0	5	56	2	4	3	17	5	34	0	0	0	0	3,1	22,1
9	September	18	218	10	253	0	0	0	0	7	61	4	18	1	3	3	57	0	0	0	0	4,3	61,0
10	Oktober	9	156	28	671	7	249	0	0	8	137	2	21	4	42	11	119	0	0	11	369	8,0	176,4
11	Nopember	11	244	28	426	9	340	6	231	12	169	7	87	21	250	19	511	3	38	23	601	13,9	289,7
12	Desember	12	269	30	606	1	160	12	256	25	346	17	333	22	318	17	294	18	390	11	228	16,5	320,0
	J u m l a h	155	2463	193	4076	70	2255	99	1817	162	2668	137	2375	127	1681	161	2569	92	1589	122	2823	131,8	
																							2431,6

Keterangan: hh — hari hujan.

ch — curah hujan

Lampiran 2. Banyaknya curah hujan dan hari hujan, temperatur, kelembaban rata-rata dan evaporasi yang tercatat selama tahun 1981 sampai dengan 1983.

Tahun	1981					1982					1983						
Bulan	hujan		temp(°C)			hujan		temperatur(°C)			hujan		temperatur(°C)			kelemba-ban rata rata (%)	evaporasi (mm)
	hh	ch (mm)	min	max	rata2	hh	ch (mm)	min	max	rata2	hh	ch (mm)	min	max	rata2		
Januari	26	363	21,00	32,64	25,58	21	168	16,18	32,71	32,06	16	323	16,15	36,70	26,42	89,29	169,32
Pebruari	20	241	20,48	33,01	25,62	22	575	16,70	33,00	26,64	18	379	15,90	35,12	25,50	86,50	113,96
Maret	22	372	20,35	33,27	26,39	15	194	17,04	33,06	26,50	10	166	15,60	35,10	25,30	87,03	165,90
April	11	211	20,25	33,00	26,84	13	224	x)	33,25	27,02	16	331	15,60	35,10	25,30	87,15	133,60
Mei	9	146	18,70	33,17	27,05	0	0	19,69	34,88	27,16	16	376	15,60	35,10	25,30	87,70	102,78
Juni	6	110	18,16	33,70	27,08	0	0	18,50	33,30	32,70	1	50	15,40	35,20	25,30	89,00	106,14
Juli	12	111	18,55	34,00	26,18	0	0	17,11	33,03	25,50	0	0	15,18	35,20	20,23	85,30	149,70
Agustus	5	34	20,25	34,28	26,50	0	0	16,86	33,00	25,02	0	0	14,70	35,20	24,90	86,00	177,34
September	3	57	20,12	33,97	27,14	0	0	16,50	33,08	26,25	0	0	14,60	35,20	25,05	88,50	134,75
Oktober	11	119	17,54	33,33	27,66	0	0	16,50	34,31	27,40	11	369	14,70	35,20	24,95	88,50	87,88
Nopem.	19	511	14,60	35,00	27,42	3	38	16,03	35,30	28,50	23	601	14,70	35,16	24,93	88,03	104,88
Desem.	17	294	15,30	33,50	33,10	18	390	16,00	35,50	27,00	11	228	14,70	35,20	24,90	86,66	112,90
Jumlah	161	2569	225,30	402,87	326,56	92	1589	187,11	404,42	331,75	122	2823	182,83	495,30	298,08	1049,66	1559,15
Rata-2	13,42	214,08	18,78	33,57	27,21	15,33	264,83	15,59	33,70	27,65	10,17	313,67	15,24	41,28	24,84	87,47	129,93

Sumber: Direktorat Penyelidikan Masalah Air Seksi Pengairan DPUP DIY urusan Hidrologi Stasiun Pengamatan Playen Gunung Kidul.

Lampiran 3. Jenis-jenis tanaman yang berbentuk tegakan
di Wanagama I Gunung Kidul.

Nomor urut	Nama-nama tanaman yang berupa tegakan hutan
1	Pinus merkusii Jung et de Vriese
2	Tectona grandis (Jati).
3	Swietenia macrophylla King (Mahoni)
4	Acacia auriculiformis
5	Albizia falcataria
6	Calliandra callothyrsus
7	Adenanthera pavonina
8	Dalbergia latifolia
9	Dialium indum (Asem landa)
10	Enterolobium saman (Samania saman)
11	Melaleuca leucadendron
12	Anthocephallus cadamba
13	Eucalyptus sp.
14	Podocarpus
15	Acacia caphyllacanta
16	Buah - buahan
17	Cinnamomum burmanii (kayu manis)
18	Morus sp.
19	Ochroma sp. (balsa)
20	Aleurites moluccana
21	Santalum album
22	Acacia oraria
23	Bauhinia purpurea (Tayuman/kupu-kupu)
24	Schleichera oleosa
25	Vitex pubescens Vahl
26	Anacardium occidentale Linn
27	Acacia sp.
28	Gliricidia maculata
29	Mimosop elingi Linn (Tanjung)
30	Manilkara kauki

Lampiran 4. Matrix X'X, matrix invers X'X
dan matrix X'Y dari variabel in
dependen (X) dan dependen(Y)
hasil pengamatan untuk tegakan
Kemiri

MATRIK X'X :

37.0000	6.4200	22749.0000	12.1200	25.0000	4.0000	3.0000	3.0000	10.0000	16.0000	2.0000	7.0000
6.4200	1.9618	2968.6400	2.2167	3.7600	0.4500	0.5800	1.1900	1.7000	2.2000	1.1600	0.9200
22749.0000	2968.6400	15161300.0000	7296.9200	16304.0000	2425.0000	1238.0000	1462.0000	6292.0000	10632.0000	1330.0000	3435.0000
12.1200	2.2167	7296.9200	4.5526	7.8900	1.1400	0.9300	1.6000	3.0900	5.4400	0.9100	1.6900
25.0000	3.7600	16304.0000	7.8800	25.0000	0.0000	0.0000	0.0000	7.0000	14.0000	1.0000	3.0000
4.0000	0.4500	2425.0000	1.1400	0.0000	4.0000	0.0000	0.0000	1.0000	2.0000	0.0000	1.0000
3.0000	0.5800	1238.0000	0.9300	0.0000	0.0000	3.0000	0.0000	0.0000	0.0000	0.0000	2.0000
3.0000	1.1900	1462.0000	1.6000	0.0000	0.0000	0.0000	3.0000	1.0000	0.0000	1.0000	0.0000
10.0000	1.7000	6292.0000	3.0900	7.0000	1.0000	0.0000	1.0000	10.0000	0.0000	0.0000	0.0000
16.0000	2.2000	10632.0000	5.4400	14.0000	2.0000	0.0000	0.0000	0.0000	16.0000	0.0000	0.0000
2.0000	1.1600	1330.0000	0.9100	1.0000	0.0000	0.0000	1.0000	0.0000	0.0000	2.0000	0.0000
7.0000	0.9200	3435.0000	1.6900	3.0000	1.0000	2.0000	0.0000	0.0000	0.0000	0.0000	7.0000

MATRIK INVERS X'X :

3.2067	-0.8617	-0.0012	-1.7863	-0.7185	-0.7890	-1.0949	-0.8617	-1.0631	-0.9328	-0.2827	-1.3226
-0.8617	3.2571	-0.0000	0.6209	0.3416	0.4050	-0.0117	-0.2634	-0.1079	-0.1159	-1.3181	0.1056
-0.0012	-0.0000	0.0000	0.0005	0.0001	0.0001	0.0003	0.0003	0.0002	0.0001	-0.0000	0.0003
-1.7863	0.6209	0.0005	3.0212	0.1665	0.2407	0.1313	-0.3644	0.3216	0.1585	-0.1892	0.5814
-0.7185	0.3416	0.0001	0.1664	0.6426	0.6009	0.5087	0.5189	-0.0088	-0.0816	-0.1953	0.0832
-0.7890	0.4050	0.0001	0.2407	0.6009	0.8571	0.5270	0.4978	0.0085	-0.0672	-0.1906	0.0838
-1.0949	-0.0117	0.0003	0.1313	0.5087	0.5270	1.0463	0.6656	0.3714	0.3196	0.2333	0.3091
-0.8617	-0.2634	0.0003	-0.3644	0.5189	0.4978	0.6656	1.2097	0.2924	0.3020	0.1123	0.3503
-1.0631	-0.1979	0.0002	0.3216	-0.0088	0.0085	0.3714	0.2924	0.9445	0.8552	0.7174	0.8074
-0.9328	-0.1159	0.0001	0.1585	-0.0816	-0.0672	0.3196	0.3020	0.8552	0.9506	0.7311	0.7991
-0.2827	-1.3181	-0.0000	-0.1892	-0.1953	-0.1906	0.2333	0.1123	0.7174	0.7311	1.6829	0.5519
-1.3226	0.1056	0.0003	0.5814	0.0832	0.0838	0.3091	0.3503	0.8074	0.7991	0.5519	1.0069

MATRIK X'Y :

44.5200
7.5158
22857.4000
14.9634
34.7200
3.4900
2.9200
3.2000
15.4200
19.9800
1.5500
6.2300

Lampiran 5. Matrix X'X, matrix invers X'X
dan matrix X'Y dari variabel
dependen (Y) dan independen
(X) hasil pengamatan untuk te
gakan Sonokeling.

MATRIK X'X :

25.0000	4924.7100	2343.0000	13.0000	7.0000	5.0000	2.0000	2.0000	11.0000	9.0000	8.0000
4924.7200	877992.0000	341152.0000	2123.6800	1105.9500	646.5900	382.5000	222.2200	2109.7900	1303.5000	914.2100
2343.0000	341152.0000	180909.0000	930.0000	425.0000	369.0000	113.0000	162.0000	772.0000	589.0000	526.0000
13.0000	2123.6800	930.0000	13.0000	0.0000	0.0000	0.0000	2.0000	8.0000	2.0000	1.0000
7.0000	1105.9500	425.0000	0.0000	7.0000	0.0000	0.0000	0.0000	3.0000	4.0000	0.0000
5.0000	646.5900	369.0000	0.0000	0.0000	5.0000	0.0000	0.0000	0.0000	2.0000	3.0000
2.0000	382.5000	113.0000	0.0000	0.0000	0.0000	2.0000	0.0000	0.0000	1.0000	1.0000
2.0000	222.2200	162.0000	2.0000	0.0000	0.0000	0.0000	2.0000	0.0000	0.0000	0.0000
11.0000	2109.7900	772.0000	8.0000	3.0000	0.0000	0.0000	0.0000	11.0000	0.0000	0.0000
9.0000	1303.5000	589.0000	2.0000	4.0000	2.0000	1.0000	0.0000	0.0000	9.0000	0.0000
8.0000	914.2100	526.0000	1.0000	0.0000	3.0000	1.0000	0.0000	0.0000	0.0000	8.0000

MATRIK INVERS X'X :

0.3819	-0.0005	-0.0025	-0.0350	-0.0564	0.0066	-0.0127	-0.0928	-0.0771	-0.1186	-0.1611
-0.0005	0.0000	-0.0000	-0.0001	-0.0001	-0.0002	-0.0008	-0.0001	-0.0009	-0.0004	-0.0001
-0.0025	-0.0000	0.0000	0.0007	0.0011	0.0001	0.0012	-0.0017	-0.0010	-0.0009	-0.0005
-0.0350	-0.0001	0.0007	0.8143	0.7197	0.4621	0.5143	-0.8266	-0.7829	-0.6571	-0.3398
-0.0564	-0.0001	0.0011	0.7197	0.8936	0.4868	0.5533	-0.7398	-0.7635	-0.7244	-0.3440
0.0066	-0.0002	0.0001	0.4621	0.4868	0.6025	0.4327	-0.4581	-0.4475	-0.4882	-0.3311
-0.0127	-0.0008	0.0012	0.5143	0.5533	0.4327	1.0206	-0.5131	-0.4483	-0.5238	-0.3321
-0.0928	-0.0001	-0.0017	-0.8266	-0.7398	-0.4581	-0.5131	1.5680	1.0359	0.8908	0.5555
-0.0771	-0.0009	-0.0010	-0.7829	-0.7635	-0.4475	-0.4483	1.0359	1.1799	0.9290	0.5623
-0.1186	-0.0004	-0.0009	-0.6571	-0.7244	-0.4882	-0.5238	0.8908	0.9290	0.9777	0.5516
-0.1611	-0.0001	-0.0005	-0.3398	-0.3440	-0.3311	-0.3321	0.5555	0.5623	0.5516	0.5418

MATRIK X'Y :

26.6030
4323.2000
1752.1600
16.0200
5.7200
2.3100
1.2800
3.8100
11.9600
6.5600
3.8900

Lampiran 6. Matrix X'X, matrix invers
            X'X dan matrix X'Y dari
            variabel dependen(Y) dan
            independen (X) hasil peng
            amatan untuk tegakan Mahoni

MATRIK X'X :

89.0000	1130.4100	48.0000	23.0000	10.0000	7.0000	28.0000	32.0000	15.0000	12.0000
1130.4100	16155.6000	593.8600	311.0100	131.1300	86.9300	379.8400	449.4800	178.3200	112.4300
48.0000	593.8600	48.0000	0.0000	0.0000	0.0000	14.0000	18.0000	4.0000	5.0000
23.0000	311.0100	0.0000	23.0000	0.0000	0.0000	9.0000	8.0000	6.0000	1.0000
10.0000	131.1300	0.0000	0.0000	10.0000	0.0000	2.0000	5.0000	2.0000	3.0000
7.0000	86.9300	0.0000	0.0000	0.0000	7.0000	3.0000	1.0000	2.0000	3.0000
28.0000	379.8400	14.0000	9.0000	2.0000	3.0000	28.0000	3.0000	4.0000	1.0000
32.0000	449.4800	18.0000	8.0000	5.0000	1.0000	3.0000	32.0000	1.0000	0.0000
15.0000	178.3200	4.0000	6.0000	2.0000	2.0000	4.0000	1.0000	15.0000	0.0000
12.0000	112.4300	5.0000	1.0000	3.0000	3.0000	1.0000	0.0000	0.0000	12.0000

MATRIK INVERS X'X :

1.1664	-0.0056	-1.0579	-1.0327	-1.0219	-1.0132	-0.0231	-0.0366	-0.1242	-0.0760
-0.0056	0.0007	-0.0023	-0.0029	-0.0032	-0.0033	-0.0008	-0.0010	0.0007	0.0023
-1.0579	-0.0023	1.1081	1.0771	1.0819	1.0761	-0.0140	-0.0067	0.0748	-0.0108
-1.0327	-0.0029	1.0771	1.1152	1.0756	1.0718	-0.0220	-0.0118	0.0547	-0.0165
-1.0219	-0.0032	1.0819	1.0756	1.1514	1.0873	-0.0241	-0.0296	0.0460	-0.0560
-1.0132	-0.0033	1.0761	1.0718	1.0873	1.2347	-0.0352	-0.0200	0.0379	-0.0711
-0.0231	-0.0008	-0.0140	-0.0220	-0.0241	-0.0352	0.0781	0.0436	0.0287	0.0461
-0.0366	-0.0010	-0.0067	-0.0118	-0.0296	-0.0200	0.0436	0.0883	0.0440	0.0584
-0.1242	0.0007	0.0748	0.0547	0.0460	0.0379	0.0287	0.0440	0.1191	0.0587
-0.0760	0.0023	-0.0108	-0.0165	-0.0560	-0.0711	0.0461	0.0584	0.0587	0.1714

MATRIK X'Y :

63.9200
1191.9700
51.9000
21.2700
9.7400
5.9500
35.5400
36.2900
13.9700
9.6600

<u>Lampiran</u> 7. Matrix X'X, matrix invers X'X
dan matrix X'Y dari variabel
dependen (Y) dan independen (X)
hasil pengamatan untuk tegakan
Jati.

MATRIK X'X :

```
   95.0000  1142.3100  38125.0000     36.0000     36.0000    15.0000     3.0000     7.0000    32.0000    35.0000    15.0000
 1142.3100 15394.2000 515148.0000    542.6400    412.0100   158.4200    29.2400   115.3900   458.8400   415.8000   143.2200
38126.0000515148.000017443300.0000 16281.0000  12588.0000  4345.0000   912.0000  3641.0000 15553.0000 13222.0000  3580.0000
   36.0000   542.6400  16281.0000     36.0000      0.0000     0.0000     0.0000     5.0000    21.0000     9.0000     1.0000
   36.0000   412.0100  12588.0000      0.0000     36.0000     0.0000     0.0000     2.0000     9.0000    17.0000     8.0000
   15.0000   158.4200   4345.0000      0.0000      0.0000    15.0000     0.0000     0.0000     2.0000     8.0000     4.0000
    3.0000    29.2400    912.0000      0.0000      0.0000     0.0000     3.0000     0.0000     0.0000     1.0000     2.0000
    7.0000   115.3900   3641.0000      5.0000      2.0000     0.0000     0.0000     7.0000     0.0000     0.0000     0.0000
   32.0000   458.8400  15553.0000     21.0000      9.0000     2.0000     0.0000     0.0000    32.0000     0.0000     0.0000
   35.0000   415.8000  13222.0000      9.0000     17.0000     8.0000     1.0000     0.0000     0.0000    35.0000     0.0000
   15.0000   142.2200   3580.0000      1.0000      8.0000     4.0000     2.0000     0.0000     0.0000     0.0000    15.0000
```

MATRIK INVERS X'X :

```
%-233017.0000  -0.0025  -0.0003%233017.0000%233017.0000%233017.0000%233017.0000  -0.5284  -0.5460  -0.5660  -0.6019
    -0.0272     0.0027  -0.0000    0.0100    0.0116    0.0109    0.0139  -0.0023   0.0020   0.0027   0.0017
     0.0005    -0.0000   0.0000   -0.0003   -0.0003   -0.0002   -0.0003  -0.0001  -0.0002  -0.0002  -0.0001
233018.0000    -0.0146   0.0004%-233017.0000%-233017.0000%-233017.0000%-233017.0000  -0.5260  -0.5320  -0.4945  -0.4559
233018.0000    -0.0131   0.0005%-233017.0000%-233017.0000%-233017.0000%-233017.0000  -0.5187  -0.5232  -0.5043  -0.4697
233019.0000    -0.0138   0.0005%-233017.0000%-233017.0000%-233017.0000%-233017.0000  -0.4382  -0.4483  -0.4370  -0.4031
233018.0000    -0.0108   0.0004%-233017.0000%-233017.0000%-233017.0000%-233017.0000  -0.4963  -0.4985  -0.4896  -0.4957
    -0.9674    -0.0023  -0.0001   -0.1870   -0.1797   -0.0991   -0.1573   1.2892   1.1321   1.0978   1.0707
    -0.9034     0.0020  -0.0002   -0.1746   -0.1658   -0.0910   -0.1411   1.1321   1.1566   1.0950   1.0687
    -0.9064     0.0027  -0.0002   -0.1542   -0.1639   -0.0967   -0.1492   1.0978   1.0950   1.1061   1.0603
    -0.9018     0.0017  -0.0001   -0.1560   -0.1598   -0.1031   -0.1958   1.0707   1.0687   1.0603   1.1239
```

MATRIK X'Y :

```
   68.0700
  995.2950
33145.0000
   37.3900
   33.0500

    6.4500

    5.3100
```