

Study Report

**Stem Volume Table, Site Index Curve and Yield Prediction Table  
of *Acacia mangium* in SAFODA Plantation.**

Reported by:

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**SAFODA**

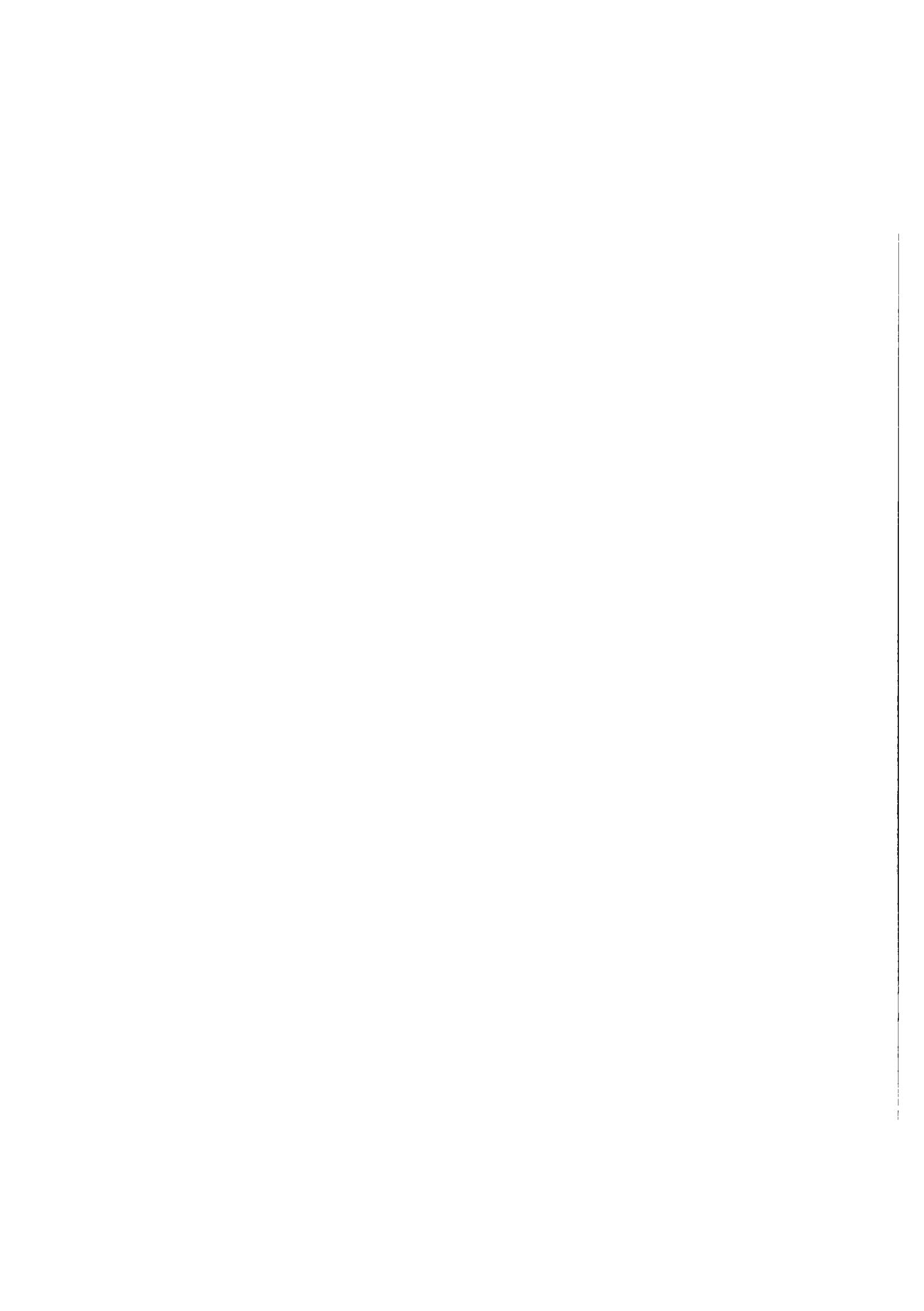
Sabah Forestry Development  
Authority



**JIFPRO**

Japan International Forestry Promotion  
and Cooperation Center





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## **1. Introduction.**

In Sabah State of Malaysia, *Acacia mangium* has been planted by Sabah Forestry Development Authority (SAFODA) to convert wasteland and marginal agricultural land to productive forest. It is expected to make a renewable natural resource for pulp wood and timber production.

Those forest plantations have increasingly become important due to the need in providing alternative materials to the growing timber markets as the supply from natural forests declines.

It is very important for the plantation management to predict the yield as the basic information for forest planning. Therefore, SAFODA and JICA made the Yield Prediction Table on *Acacia mangium* in 1991 (1).

The Yield Prediction Table was made from the data which consisted of young aged forest in those days. But, forest plantations have grown more than 20 years at present.

Now, we had a chance to revise the Stem Volume Table and the Yield Prediction Table assisted by JIFPRO- SAFODA Carbon Sequestration project.

We are sure that these results will be utilized for actual forest management on *Acacia mangium* efficiently.

## **2. Methods and Materials.**

2.1 The list of the data were shown on Appendix 1 and Appendix 2. It consists of the following;

- 1) Stem analysis data (144).
- 2) Old P.S.P 32 plots (180 periodical data).
- 3) Old T.S.P plots data 77.
- 4) Bengkoka P.S.P 69 plots (626 periodical data).
- 5) JIFPRO P.S.P data 19.
- 6) Top tree height data 14 (collected at 2Bengkoka in 2003yr.)

Total data were 916.

2.2 Analyzing methods are shown as follows:

- 1) The Yamamoto-Schumacher equation was adapted for 2 variable stem volume table.
- 2) The Mitscherlich equation was adapted for the site index curve.
- 3) The relationship between tree stand age, mean diameter at breast height, mean top height, mean piece volume and volume per hectare were analyzed by statistical method (SPSS 10.0j software was used).
- 4) Relative spacing (Sr.) method was adapted for selecting data suitable for relationship between tree number and mean diameter.

By these results, we decided the most suitable path, which contained minimum error and made it possible to predict the yield precisely.

### **3. Results and discussion.**

#### **3.1 Making a Stem Volume Table.**

SAFODA already had 135 stem analysis data of young trees under 12 year old, and made an inner bark volume table using above mentioned data (in 1991yr.). At present, manmade forests of *Acacia mangium* grow older than 20 years .Then, it is needed to revise the volume table fitting to older and bigger trees. Therefore, in 2002 we collected 9 stem analysis data of taller and bigger trees than the previous data

By using those 144 data, we analyzed the relationship among stem volume (V:overbark volume, V<sub>i</sub>:inner bark volume), diameter at breast height(D), tree height(H) and bark volume (B<sub>v</sub>).

Range of diameter of breast height is 4.1cm-43.1cm. And, range of tree height is 5.9m-33.6m.

#### **1) Relationship between D and H.**

It's relationship shows strong goodness of fit (Ratio of contribution ( $R^*R = 0.962$ )). It was shown in Fig 1. H was estimated from D with the follwing equation:

$$H = 1.3 + (D^2)/(a+bD)^2 \quad (1)$$

here, a = 1.2928, b = 0.1676 , / : division, ^ : power

#### **2) Relationship between D and V**

It shows good relationship ( Fig 2 ).

$$V = a*D^b \quad (2)$$

here, a = 0.000156 , b = 2.48158 , \* : multiplication  $(R^*R = 0.952)$

#### **3) Relationship between H and V**

It shows good relation ( Fig 3 ).

$$V = a*H^b \quad (3)$$

here, a = 0.00001692 , b = 3.27018  $(R^*R = 0.872)$

#### **4) Relationship between D, H and V**

V was estimated from D and H.

$$V = a*(D^b)*(H^c) \quad (4)$$

here, a = 0.0000711 , b = 1.697498 , c = 1.078157  $(R^*R = 0.990)$

In this case,  $R^*R$  was more higher than the value of  $R^*R$  caluculated by equation (2) and equation (3). Equation (4) was selected as the suitable way for the estimation of V.

##### 5) Relationship between $B_v$ and $V$

Fig 4. shows the relationship between  $B_v$  and  $V$

$B_v$  was estimated from  $V$  with the following Equation at first

$$B_v = a \cdot V^b \quad (5)$$

here,  $a = 0.11654$ ,  $b = 0.722791$  ( $R^2 = 0.929$ )

##### 6) Relationship between $B_v$ and $D$

Fig. 5 shows the relationship between  $B_v$  and  $D$ .

$B_v$  was estimated from  $D$  with the following Equation at second.

$$B_v = a \cdot D^b \quad (6)$$

here,  $a = 0.0002083$ ,  $b = 1.79522$  ( $R^2 = 0.937$ )

##### 7) Relationship between $V_i$ and $V$

It shows good relationship ( Fig 6 ).

$$V_i = a \cdot V^b \quad (7)$$

here,  $a = 0.8817$ ,  $b = 1.05005$  ( $R^2 = 0.999$ )

In this case,  $R^2$  was more higher than the value of  $R^2$  calculated by equation (5) and equation (6). Finally, Equation (7) was selected as the suitable way for the estimation of  $B_v$ .

Hence,  $B_v$  was estimated with following equation correctly.

$$B_v = V - V_i \quad (8)$$

##### 8) Stem Volume Table

We made a stem volum table on Acacia mangium by using equation (4).

It is shown in Table 1 ( a, b, c )

### 3.2 Making a Site Index Curve

#### 1) Relationship between dominant tree height and tree stand age.

In this case, all dominant tree height data were used (data of 1991, Bengkoka area, results of 2003.11 survey and JIFPRO plots ).

By using above mentioned data, the relationship between stand age (TA) and dominant tree height (DTH) was plotted as shown in Fig. 7.

To estimate the growth curve, some non-linear models were reported. In this report, Mitcherlich curve was selected as the growth curve of Acacia mangium since it had the least sum of residuals. The equation of this model is as follows.

$$DTH = k * (1 - a * EXP(b^TA)) \quad (9)$$

here,  $k = 27770$ ,  $a = 1.02199$ ,  $b = -0.184866$ , EXP · Exponential, ( $R^2 = 0.832$ )

## 2) Site Index Curve

Dominant tree height at each site index is estimated by following equation (base age = 10).

$$TH=SI \cdot Hx/H10 \quad (10)$$

here, TH:dominant tree height at each site index, SI: site index, Hx:dominant tree height at age TA on guide curve, H10:dominant tree height at age 10 years old on guide curve .

Site index curve at each site index were shown in Fig. 8 and Table 2.

### 3.3 Making a Yield Prediction Table.

Making procedures of *Acacia mangium* yield prediction table are as follows.

#### 1) Calculate mean tree height (HM) from DTH.

Relationship between HM and DTH was shown in Fig. 9.

HM was estimated from DTH with the following Equation.

$$HM = a \cdot DTH^b \quad (11)$$

here,  $a = 0.9158$ ,  $b = 0.9778$  ( $R^2 = 0.937$ )

#### 2) Calculate mean diameter at breast height (DM) from mean tree height (HM)

Relationship between HM and DM was shown in Fig.10.

HM was estimated from DM with the following Equation.

$$HM = 1.3 + DM^2 / (a + b \cdot DM)^2 \quad (12)$$

here,  $a = 1.8577$ ,  $b = 0.1389$  ( $R^2 = 0.868$ )

hence,

$$DM = \sqrt{(HM - 1.3) / (1 - 0.1389 \cdot HM)} \quad (13)$$

here, SQR · Square root.

#### 3) Calculate mean stem volume (vm) from DM and HM

Relationship between vm and DM was shown in Fig.11.

vm was estimated from DM with the following Equation.

$$vm = a \cdot DM^b \quad (14)$$

here,  $a = 0.00031$ ,  $b = 2.2909$  ( $R^2 = 0.980$ )

Relationship between vm and HM is shown in Fig.12.

vm was estimated from HM with the following Equation.

$$vm = a \cdot HM^b \quad (15)$$

here,  $a = 0.0000528$ ,  $b = 2.89278$   $(R^2 = 0.899)$

$vm$  was estimated from DM and HM with following equation.

$$vm = a * (DM^b) * (HM^c) \quad (16)$$

here,  $a = 0.000145$ ,  $b = 1.7652$ ,  $c = 0.7829$   $(R^2 = 0.990)$

In this case,  $R^2$  was more higher than the value of  $R^2$  calculated by equation (14) and equation (15). Finally, Equation (16) was selected as the suitable way for the estimation of  $vm$ .

4) Calculate number per hectare (N) from D.

In this case, We select data by Sr formula as follows.

Sr means Relative spacing index.

$$Sr = 100 / SQR(N * TH) \quad (17)$$

Data are rejected if its value was under 0.27.

(It was supposed that data should be chosen from closed stand )

Relationship between N and DM was shown in Fig.13.

N was estimated from DM with the following equation.

$$N = a * DM^b \quad (18)$$

here,  $a = 8078.5$ ,  $b = -0.8237$ ,  $(R^2 = 0.512)$

5) Calculate volume per hectare (VT) from  $vm$  and N.

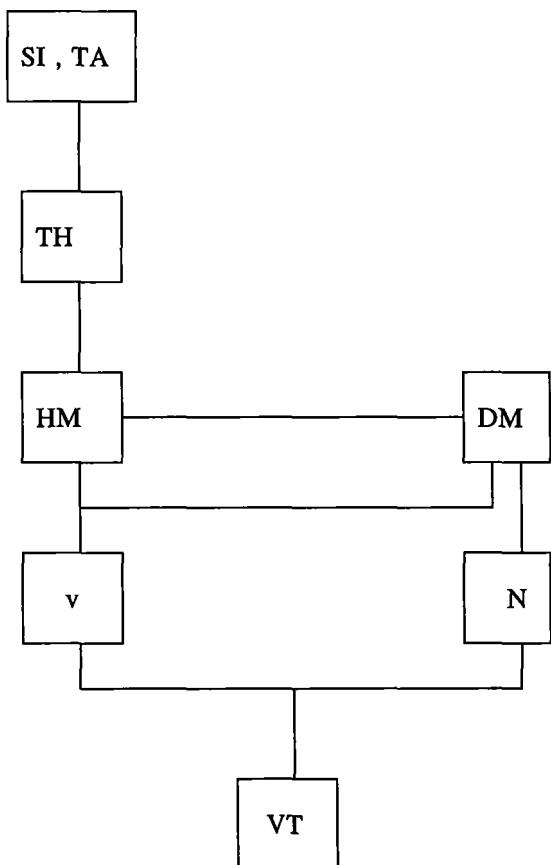
VT was estimated from  $vm$  and N with following equation.

$$VT = vm * N \quad (19)$$

6) We can make a new yield prediction table using above equations from (9) to (17) (except (14) and (15)).

7) Flowchart of the Yield Prediction.

The flowchart of these procedure is shown below.



8) Yield Prediction Table of *Acacia mangium*.

The Yield Prediction Table calculated by these procedures is shown in Table 3.

#### 4. Conclusion.

Final results are shown as follows:

1) Stem Volume Table.

Stem volume table was revised by following equation.

$$V = a * (D^b) * (H^c)$$

here,  $a = 0.0000711$  ,  $b = 1.697498$  ,  $c = 1.078157$       ( $R^2 = 0.990$ )

It was shown in Table 1 .

2) Site index.

Guide curve was adapted by Mitscherlich curve.

Site index curves were estimated by equation (9) and the formula below (base age is 10 year).

$$TH = SI * Hx / H10$$

here, TH:dominant tree height at each site index, SI. site index, Hx:dominant tree height at age TA on guide curve, H10:dominant tree height at age 10 years old on guide curve .

### 3) Yield Prediction Table.

The relations among some important items such as mean diameter, mean tree height, stand density, mean piece volume, total stand volume were examined.

By these results, four relations were selected as follows:

- (1) Relationship between DTH and HM.
- (2) Relationship between DM and HM.
- (3) Relationship between DM and N.
- (4) Relationship between DM, HM and vm.

Finally, yield prediction tables were calculated by following procedure.

- (1) TA, SI - DTH,
- (2) DTH - HM,
- (3) HM - DM,
- (4) HM, DM - vm,
- (5) DM - N,
- (6) N, vm - VT .

Yield Prediction Table was shown in Table 3.

These results were reasonable and this yield prediction tables would be suitable for actual use in the plantation without thinning.

### 5. Acknowledement.

We wish to thank to Mr. Crispin Datuk Kitingan, the Director of Research & Development Division of SAFODA, and all the relevant SAFODA staff for their supports during this study.

We also wish to express our thanks to Mr. Yoichi Nagatsuka, the Director of Planning & Coordination Division of JIFPRO for his kind cooperation.

### 6. Reference.

- 1)Mitsuo INOSE, Takeshi Nakamura, Zainal Bin SARIDI(1991): Yield Prediction Table and Estimation of Site-Class by Site-Class Indicators on *Acacia mangium* in SAFODA Plantation, Sabah Re-Afforestation Technical Development And Training Project, JICA.
- 2)Takeshi NAKAMURA, Zainal SARIDI(1991):Study For Individual Tree Volume of *Acacia mangium*, SAFODA-JICA Kinarut Project.

### 7. Tables and Figures.

Tables and Figures are shown as follows.

### 8. Appendix.

Source data of stem volume and yield prediction table are shown in App.1 and 2 respectively.

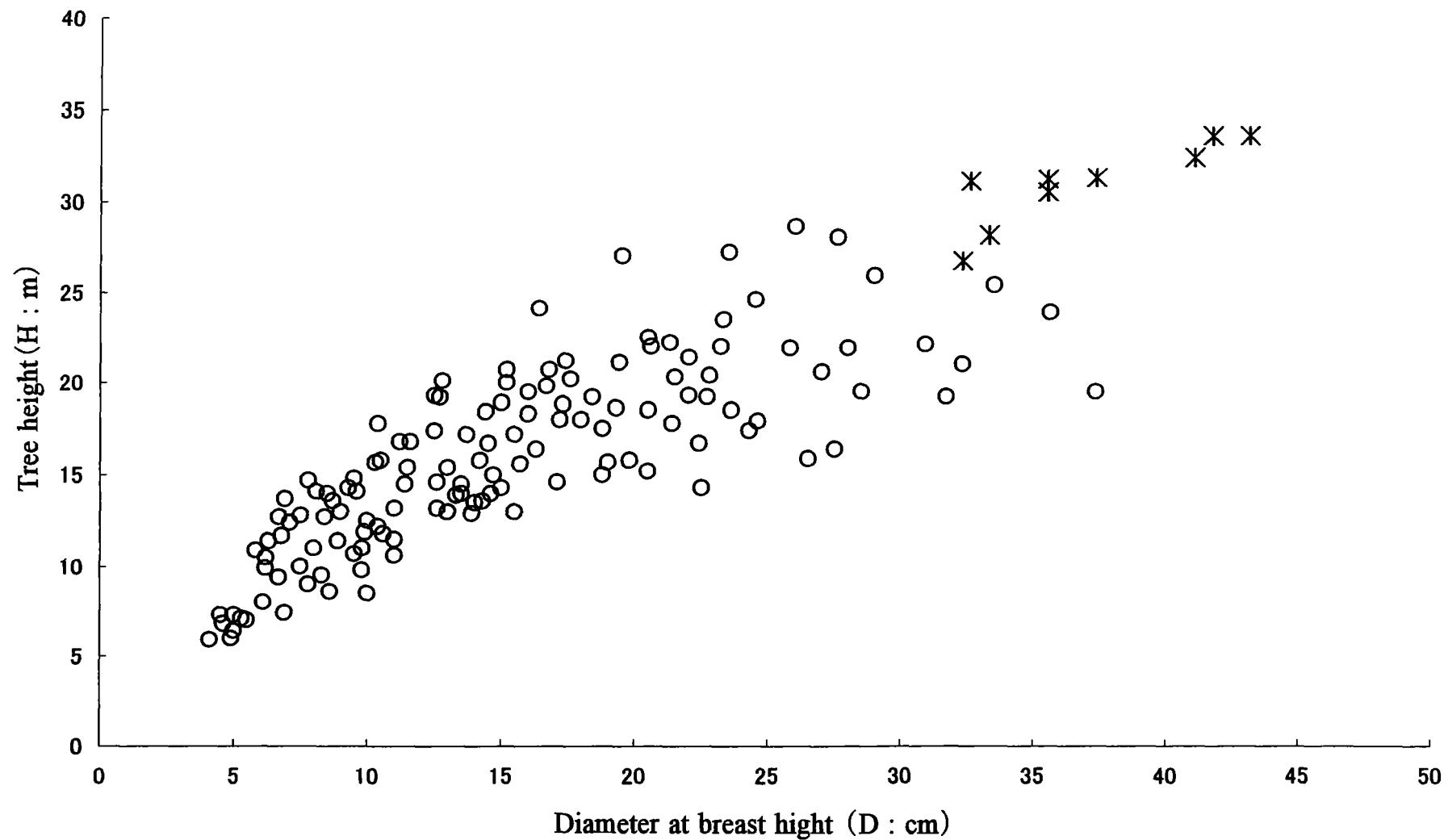


Fig.1 Relationship between diameter at breast height (D) and tree height (H)

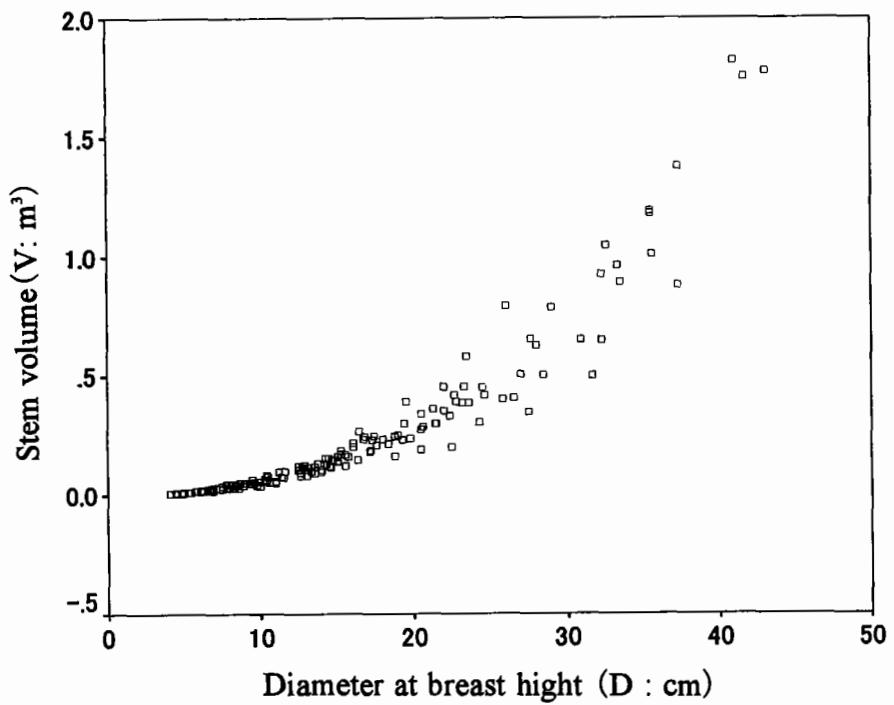


Fig.2 Relationship between D and stem volume (V)

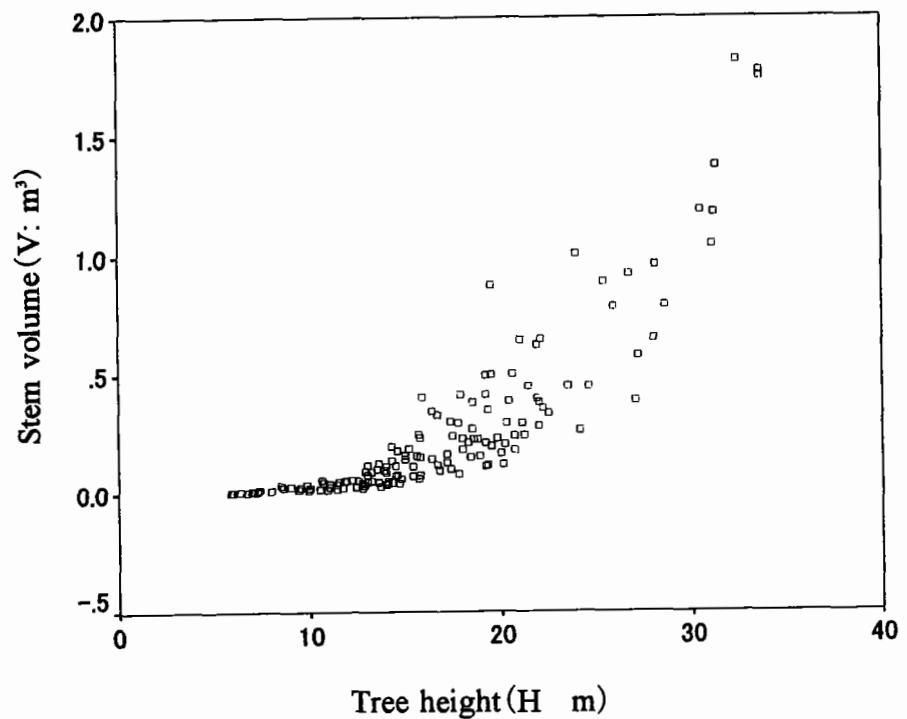


Fig.3 Relationship between H and V

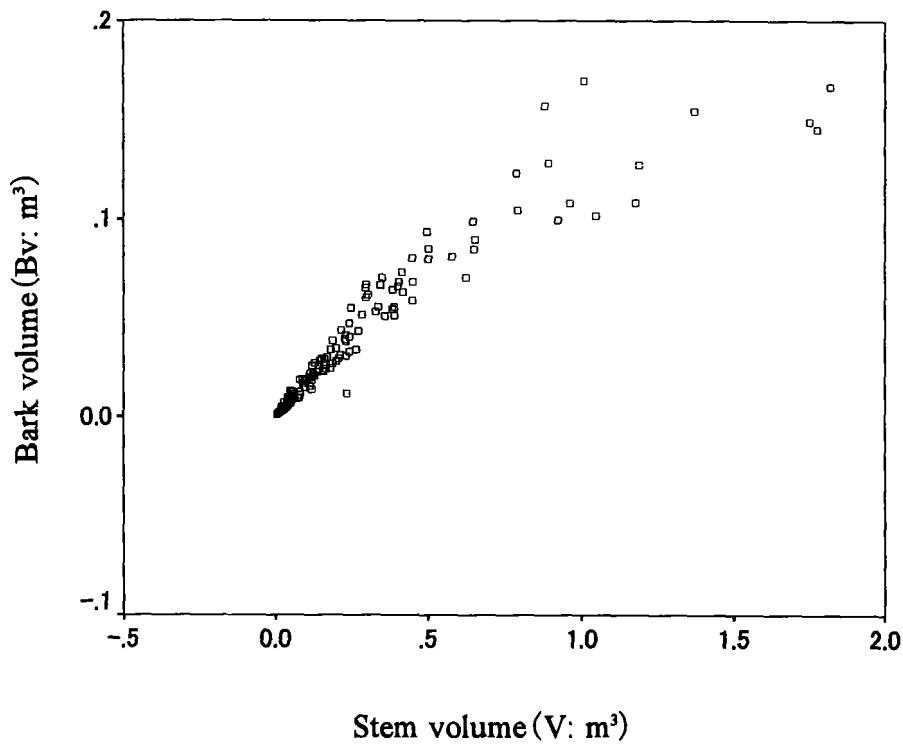


Fig.4 Relationship between bark volume (Bv) and V

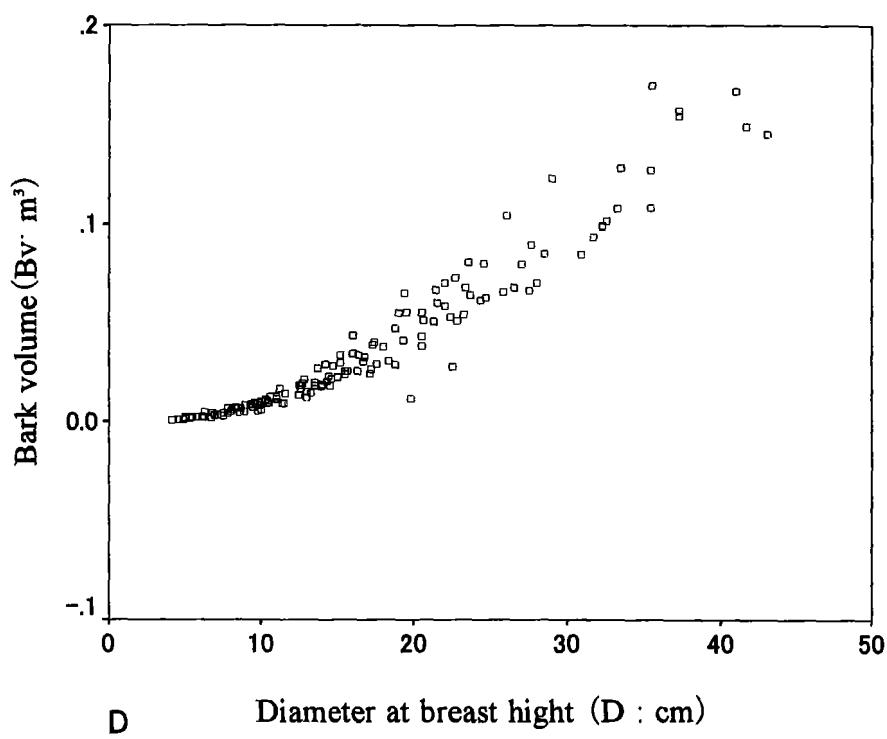
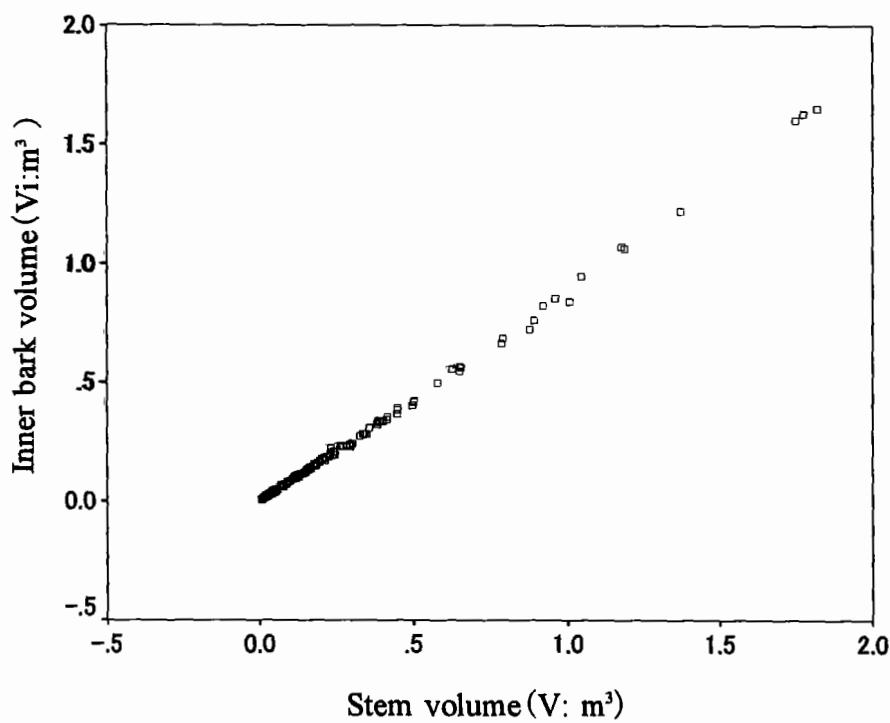
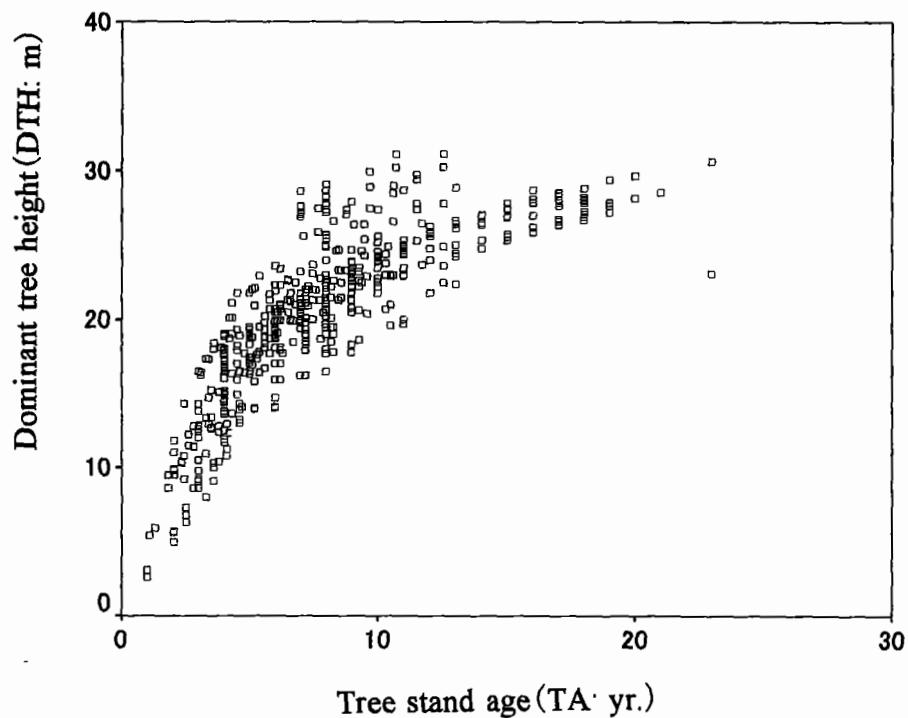


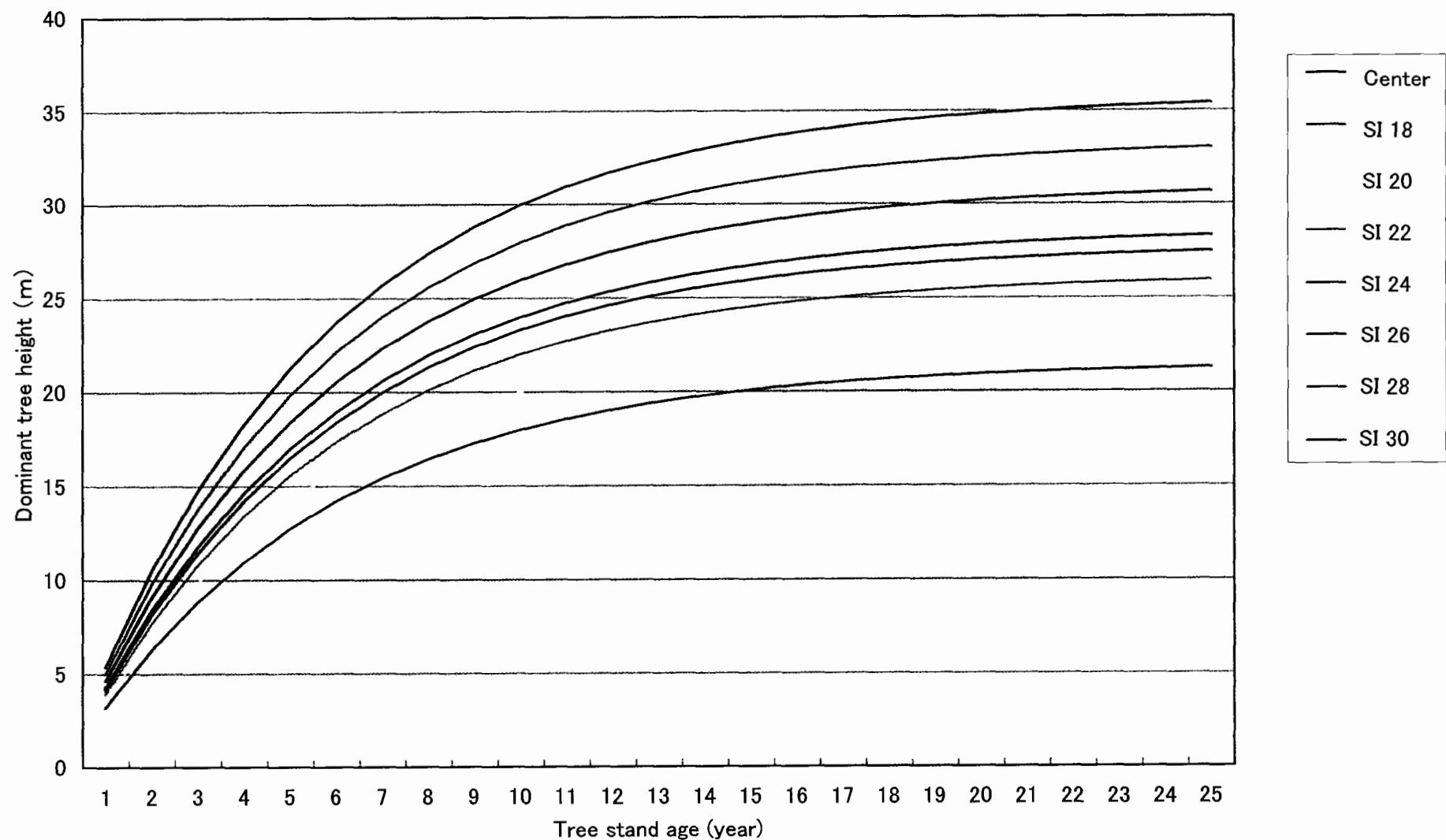
Fig.5 Relationship between Bv and D



**Fig.6 Relationship between inner bark volume ( $V_i$ ) and  $V$**



**Fig.7 Relationship between dominant tree height (DTH) and tree stand age (TA)**



**Fig.8 Site Index Curve at each site index**

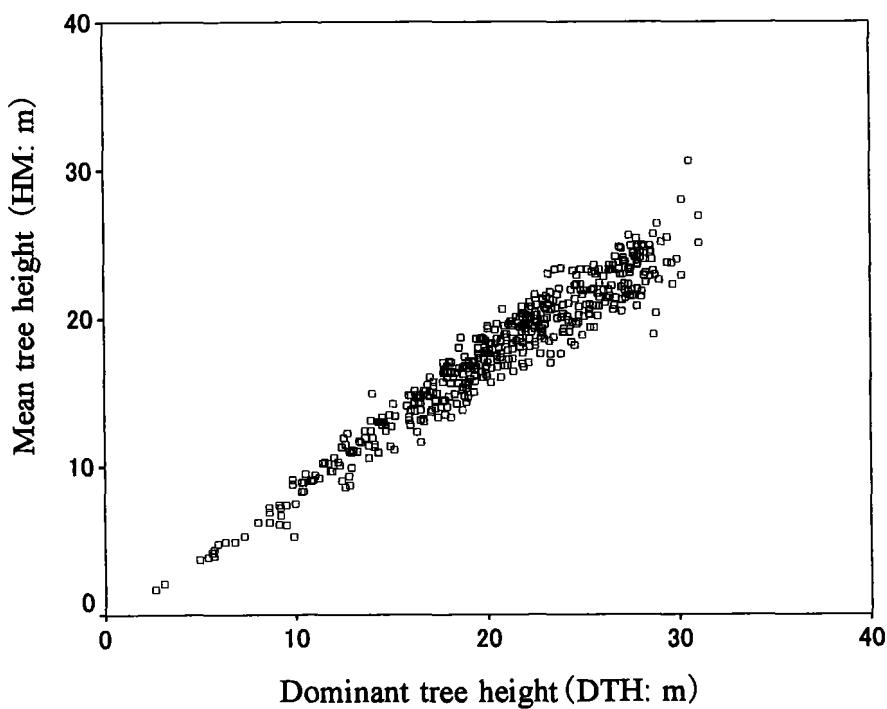


Fig.9 Relationship between mean tree height (HM)  
and dominant tree height (DTH)

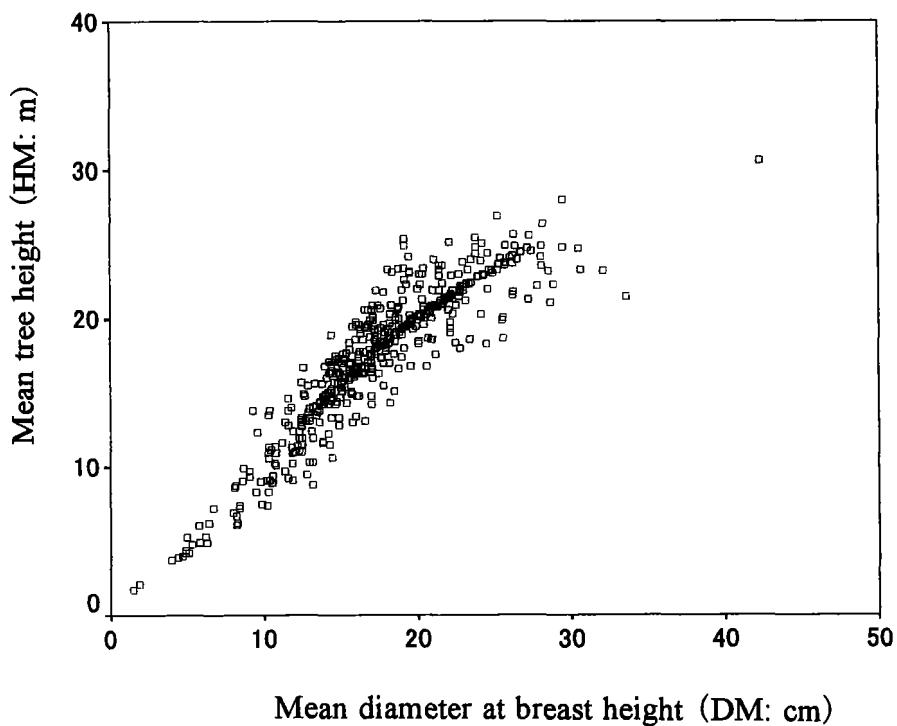


Fig.10 Relationship between mean diameter at breast height (DM)  
and HM

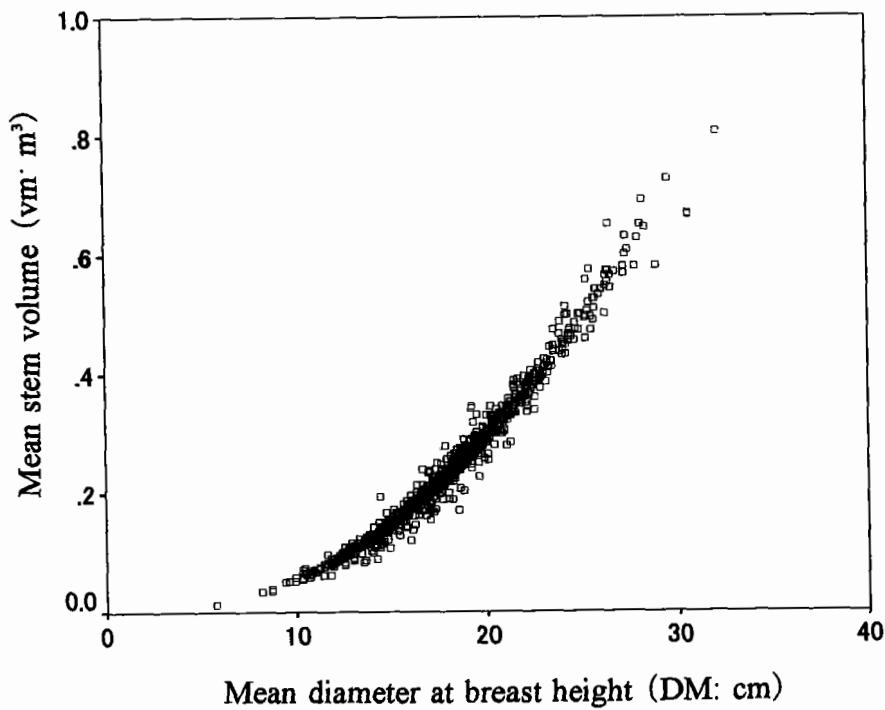


Fig.11 Relationship between mean stem volume (vm) and DM

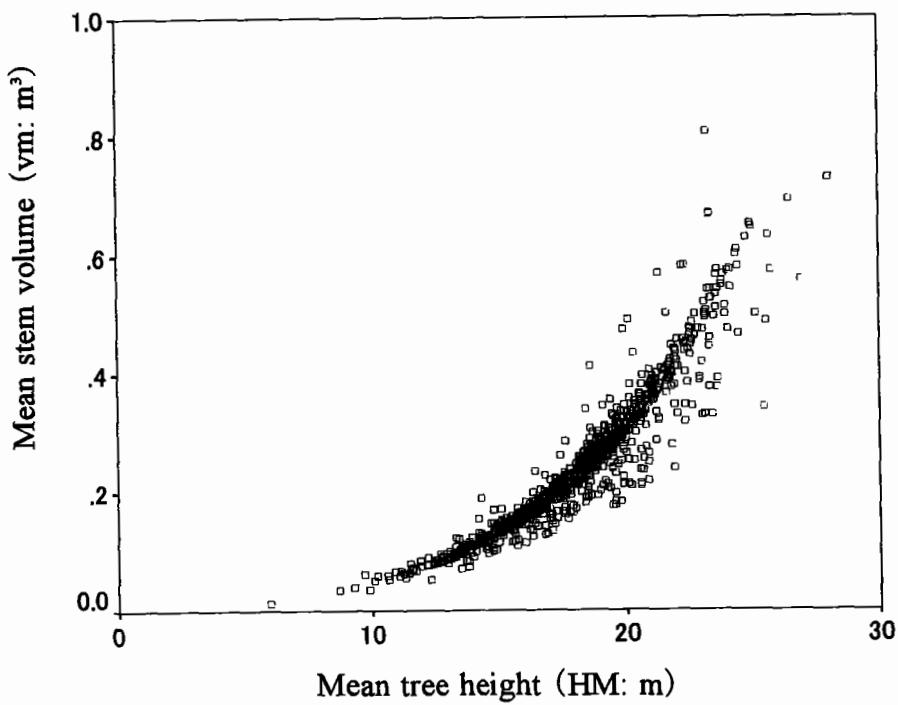


Fig.12 Relationship between vm and HM

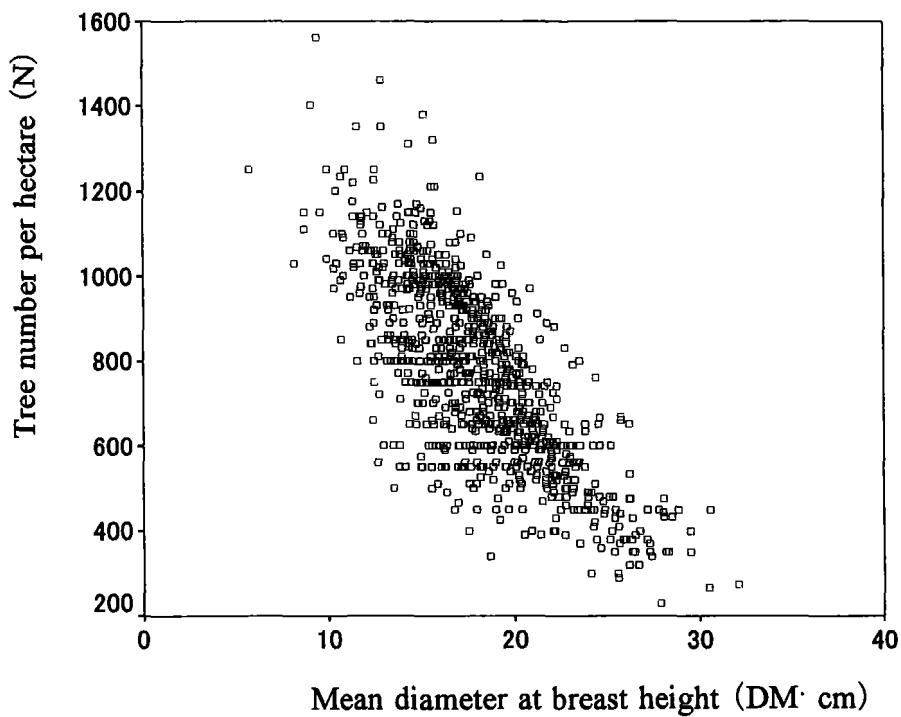


Fig.13 Relationship between tree number per hectare (N) and DM

Table 1-a. Stem Volume

DBH\H DBH(cm)	Tree	height(m)																		
			5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
5		00062	0.0075	0.0089	0.0103	0.0117	0.0131		0.0145	0.0159										
6		00084	0.0103	0.0121	0.0140	0.0159	0.0178		0.0198	0.0217	0.0236									
7		00110	0.0133	0.0158	0.0182	0.0207	0.0232		0.0257	0.0282	0.0307	0.0333	0.0358							
8		00138	0.0167	0.0198	0.0228	0.0259	0.0290		0.0322	0.0354	0.0385	0.0417	0.0450	0.0482						
9		00168	0.0204	0.0241	0.0279	0.0317	0.0355		0.0393	0.0432	0.0471	0.0510	0.0549	0.0589						
10		00201	0.0245	0.0289	0.0333	0.0379	0.0424		0.0470	0.0516	0.0563	0.0610	0.0657	0.0704						
11		00236	0.0287	0.0339	0.0392	0.0445	0.0499		0.0553	0.0607	0.0662	0.0717	0.0772	0.0828						
12		00274	0.0333	0.0393	0.0454	0.0516	0.0578		0.0641	0.0704	0.0767	0.0831	0.0895	0.0959						
13			0.0382	0.0451	0.0521	0.0591	0.0662		0.0734	0.0806	0.0879	0.0952	0.1025	0.1099						
14			0.0433	0.0511	0.0590	0.0670	0.0751		0.0832	0.0914	0.0996	0.1079	0.1163	0.1246						
15			0.0575	0.0664	0.0754	0.0844		0.0936	0.1028	0.1120	0.1213	0.1307	0.1401							
16			0.0641	0.0741	0.0841	0.0942		0.1044	0.1147	0.1250	0.1354	0.1458	0.1563							
17				0.0821	0.0932	0.1044		0.1157	0.1271	0.1385	0.1501	0.1616	0.1733							
18				0.0904	0.1027	0.1150		0.1275	0.1400	0.1527	0.1653	0.1781	0.1910							
19				0.0991	0.1126	0.1261		0.1397	0.1535	0.1673	0.1812	0.1952	0.2093							
20					0.1228	0.1376		0.1525	0.1675	0.1825	0.1977	0.2130	0.2284							
21					0.1334	0.1495		0.1656	0.1819	0.1983	0.2148	0.2314	0.2481							
22					0.1444	0.1617		0.1792	0.1969	0.2146	0.2325	0.2504	0.2685							
23						0.1744		0.1933	0.2123	0.2314	0.2507	0.2700	0.2895							
24								0.2078	0.2282	0.2488	0.2695	0.2903	0.3112							
25								0.2227	0.2446	0.2666	0.2888	0.3111	0.3335							
26									0.2614	0.2850	0.3087	0.3325	0.3565							
27									0.2787	0.3038	0.3291	0.3545	0.3801							
28										0.3232	0.3500	0.3771	0.4043							
29										0.3430	0.3715	0.4002	0.4291							
30										0.3633	0.3935	0.4239	0.4545							
31											0.4161	0.4482	0.4805							
32											0.4391	0.4730	0.5071							
33											0.4627	0.4984	0.5343							
34												0.5243	0.5621							
35												0.5507	0.5904							
36												0.5777	0.6193							
37													0.6488							
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Table 1-b. Stem Volume

DBH\H DBH(cm)	Tree height(m)													
	17	18	19	20	21	22	23	24	25	26	27	28		
5														
6														
7														
8	0.0515													
9	0.0629	0.0668												
10	0.0752	0.0799	0.0847											
11	0.0884	0.0940	0.0996	0.1053	0.1110									
12	0.1024	0.1089	0.1155	0.1220	0.1286									
13	0.1173	0.1248	0.1323	0.1398	0.1474	0.1549								
14	0.1331	0.1415	0.1500	0.1585	0.1671	0.1757	0.1843							
15	0.1496	0.1591	0.1686	0.1782	0.1879	0.1975	0.2072	0.2170						
16	0.1669	0.1775	0.1882	0.1989	0.2096	0.2204	0.2312	0.2421	0.2530					
17	0.1850	0.1968	0.2086	0.2204	0.2323	0.2443	0.2563	0.2683	0.2804					
18	0.2039	0.2168	0.2298	0.2429	0.2560	0.2692	0.2824	0.2957	0.3090	0.3223				
19	0.2234	0.2377	0.2519	0.2662	0.2806	0.2951	0.3095	0.3241	0.3387	0.3533				
20	0.2438	0.2593	0.2748	0.2905	0.3061	0.3219	0.3377	0.3536	0.3695	0.3854	0.4014			
21	0.2648	0.2817	0.2986	0.3155	0.3326	0.3497	0.3669	0.3841	0.4014	0.4187	0.4361	0.4535		
22	0.2866	0.3048	0.3231	0.3415	0.3599	0.3784	0.3970	0.4156	0.4343	0.4531	0.4719	0.4908		
23	0.3090	0.3287	0.3484	0.3682	0.3881	0.4081	0.4281	0.4482	0.4684	0.4886	0.5089	0.5293		
24	0.3322	0.3533	0.3745	0.3958	0.4172	0.4387	0.4602	0.4818	0.5035	0.5252	0.5470	0.5689		
25	0.3560	0.3787	0.4014	0.4242	0.4471	0.4701	0.4932	0.5164	0.5396	0.5629	0.5863	0.6097		
26	0.3805	0.4047	0.4290	0.4534	0.4779	0.5025	0.5272	0.5519	0.5768	0.6017	0.6267	0.6517		
27	0.4057	0.4315	0.4574	0.4834	0.5095	0.5357	0.5620	0.5884	0.6149	0.6415	0.6681	0.6948		
28	0.4316	0.4590	0.4865	0.5142	0.5420	0.5699	0.5978	0.6259	0.6541	0.6823	0.7107	0.7391		
29	0.4580	0.4872	0.5164	0.5458	0.5752	0.6048	0.6345	0.6643	0.6942	0.7242	0.7543	0.7844		
30	0.4852	0.5160	0.5470	0.5781	0.6093	0.6407	0.6721	0.7037	0.7353	0.7671	0.7990	0.8309		
31	0.5130	0.5456	0.5783	0.6112	0.6442	0.6773	0.7106	0.7440	0.7774	0.8110	0.8447	0.8785		
32	0.5414	0.5758	0.6103	0.6450	0.6799	0.7148	0.7499	0.7851	0.8205	0.8559	0.8915	0.9271		
33	0.5704	0.6066	0.6431	0.6796	0.7163	0.7532	0.7901	0.8272	0.8645	0.9018	0.9393	0.9768		
34	0.6000	0.6382	0.6765	0.7149	0.7536	0.7923	0.8312	0.8702	0.9094	0.9487	0.9881	1.0276		
35	0.6303	0.6704	0.7106	0.7510	0.7916	0.8323	0.8731	0.9141	0.9553	0.9965	1.0379	1.0794		
36	0.6612	0.7032	0.7454	0.7878	0.8303	0.8731	0.9159	0.9589	1.0021	1.0453	1.0888	1.1323		
37	0.6926	0.7367	0.7809	0.8253	0.8699	0.9146	0.9595	1.0046	1.0498	1.0951	1.1406	1.1862		
38	0.7247	0.7708	0.8171	0.8635	0.9102	0.9570	1.0040	1.0511	1.0984	1.1458	1.1934	1.2411		
39	0.7574	0.8055	0.8539	0.9024	0.9512	1.0001	1.0492	1.0985	1.1479	1.1975	1.2472	1.2971		
40	0.7907	0.8409	0.8914	0.9421	0.9930	1.0440	1.0953	1.1467	1.1983	1.2501	1.3020	1.3540		
41	0.8245	0.8769	0.9295	0.9824	1.0355	1.0887	1.1422	1.1958	1.2496	1.3036	1.3577	1.4120		
42	0.8589	0.9135	0.9684	1.0234	1.0787	1.1342	1.1899	1.2457	1.3018	1.3580	1.4144	1.4710		
43		0.9508	1.0078	1.0651	1.1227	1.1804	1.2383	1.2965	1.3548	1.4134	1.4720	1.5309		
44		0.9886	1.0479	1.1075	1.1673	1.2274	1.2876	1.3481	1.4087	1.4696	1.5306	1.5918		
45			1.0887	1.1506	1.2127	1.2751	1.3377	1.4005	1.4635	1.5267	1.5901	1.6537		
46				1.1301	1.1943	1.2588	1.3236	1.3885	1.4537	1.5192	1.5848	1.6506	1.7166	
47				1.1721	1.2387	1.3056	1.3728	1.4402	1.5078	1.5756	1.6437	1.7120	1.7804	
48					1.2838	1.3531	1.4227	1.4926	1.5627	1.6330	1.7035	1.7743	1.8452	
49					1.3295	1.4013	1.4734	1.5457	1.6183	1.6911	1.7642	1.8375	1.9109	
50					1.3759	1.4502	1.5248	1.5997	1.6748	1.7501	1.8257	1.9016	1.9776	
51						1.4998	1.5769	1.6544	1.7320	1.8100	1.8882	1.9666	2.0452	
52						1.5501	1.6298	1.7098	1.7901	1.8706	1.9514	2.0325	2.1137	
53						1.6010	1.6833	1.7660	1.8489	1.9321	2.0156	2.0993	2.1832	
54						1.6526	1.7376	1.8229	1.9085	1.9944	2.0805	2.1669	2.2536	
55						1.7049	1.7926	1.8806	1.9689	2.0575	2.1464	2.2355	2.3249	
56							1.8483	1.9390	2.0301	2.1214	2.2130	2.3049	2.3971	
57							1.9046	1.9981	2.0920	2.1861	2.2805	2.3752	2.4702	
58							2.0580	2.1547	2.2516	2.3489	2.4464	2.5442		
59							2.1186	2.2181	2.3179	2.4180	2.5184	2.6191		
60							2.1799	2.2823	2.3850	2.4880	2.5913	2.6949		

Table 1 - c Stem Volume

DBH\H DBHcm)	Tree height(m)	29	30	31	32	33	34	35	36	37	38	39	40
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													
23	05497												
24	05908	06128											
25	06332	06568	06805										
26	06768	07020	07273	07526									
27	07216	07485	07754	08024									
28	07676	07961	08248	08535	08823								
29	08147	08450	08754	09059	09365	09671							
30	08629	08951	09273	09596	09919	10244							
31	09123	09463	09804	10145	10487	10830	11174						
32	09629	09987	10346	10707	11068	11430	11793	12156					
33	10145	10523	10901	11281	11661	12043	12425	12808	13192				
34	10672	11070	11468	11867	12267	12669	13071	13474	13878				
35	11210	11628	12046	12466	12886	13308	13730	14154	14578	15003			
36	11760	12197	12636	13076	13517	13960	14403	14847	15292	15738			
37	12319	12778	13238	13699	14161	14624	15088	15554	16020	16487	16956		
38	12890	13370	13851	14333	14817	15301	15787	16274	16762	17251	17741		
39	13471	13973	14475	14979	15485	15991	16499	17008	17518	18029	18541	19054	
40	14063	14586	15111	15637	16165	16693	17223	17755	18287	18820	19355	19890	
41	14665	15210	15758	16307	16857	17408	17961	18515	19070	19626	20183	20742	
42	15277	15846	16416	16987	17560	18135	18711	19288	19866	20445	21026	21608	
43	15899	16491	17085	17680	18276	18874	19473	20074	20675	21279	21883	22488	
44	16532	17148	17765	18383	19003	19625	20248	20872	21498	22125	22754	23383	
45	17175	17814	18455	19098	19742	20388	21035	21684	22334	22986	23639	24293	
46	17828	18492	19157	19824	20493	21163	21835	22508	23183	23859	24537	25216	
47	18491	19179	19869	20561	21255	21950	22647	23345	24045	24747	25449	26154	
48	19164	19877	20592	21309	22028	22749	23471	24195	24920	25647	26375	27105	
49	19846	20585	21326	22068	22813	23559	24307	25057	25808	26561	27315	28071	
50	20539	21303	22070	22838	23609	24381	25155	25931	26708	27487	28268	29050	
51	21241	22031	22824	23619	24416	25214	26015	26817	27621	28427	29234	30043	
52	21953	22770	23589	24411	25234	26059	26887	27716	28547	29380	30214	31050	
53	22674	23518	24364	25213	26063	26916	27770	28627	29485	30345	31207	32070	
54	23405	24276	25150	26026	26904	27784	28666	29550	30435	31323	32213	33104	
55	24145	25044	25945	26849	27755	28663	29572	30484	31398	32314	33232	34152	
56	24895	25822	26751	27683	28617	29553	30491	31431	32374	33318	34264	35212	
57	25655	26610	27567	28527	29490	30454	31421	32390	33361	34334	35309	36286	
58	26423	27407	28393	29382	30373	31367	32362	33360	34361	35363	36367	37374	
59	27201	28214	29229	30247	31267	32290	33315	34343	35372	36404	37438	38474	
60	27989	29030	30075	31122	32172	33225	34279	35337	36396	37458	38522	39588	

Table 2 Dominant tree height in each Site Index (SI : 18-30)

TA	DTH	SI 18	SI 19	SI 20	SI 21	SI 22	SI 23
1	4.18	3.23	3.41	3.59	3.77	3.95	4.13
2	8.16	6.30	6.65	7.00	7.36	7.71	8.06
3	11.47	8.86	9.35	9.85	10.34	10.83	11.32
4	14.22	10.99	11.60	12.21	12.82	13.43	14.04
5	16.51	12.75	13.46	14.17	14.88	15.59	16.30
6	18.41	14.22	15.01	15.80	16.59	17.38	18.17
7	19.99	15.44	16.30	17.16	18.01	18.87	19.73
8	21.30	16.46	17.37	18.28	19.20	20.11	21.03
9	22.39	17.30	18.26	19.22	20.18	21.14	22.10
10	23.30	18.00	19.00	20.00	21.00	22.00	23.00
11	24.06	18.58	19.61	20.65	21.68	22.71	23.74
12	24.68	19.07	20.13	21.19	22.24	23.30	24.36
13	25.20	19.47	20.55	21.63	22.71	23.80	24.88
14	25.64	19.80	20.90	22.00	23.10	24.20	25.31
15	26.00	20.08	21.20	22.31	23.43	24.54	25.66
16	26.30	20.31	21.44	22.57	23.70	24.83	25.96
17	26.55	20.51	21.64	22.78	23.92	25.06	26.20
18	26.75	20.67	21.81	22.96	24.11	25.26	26.41
19	26.92	20.80	21.95	23.11	24.26	25.42	26.58
20	27.07	20.91	22.07	23.23	24.39	25.55	26.72
21	27.19	21.00	22.17	23.33	24.50	25.67	26.83
22	27.28	21.08	22.25	23.42	24.59	25.76	26.93
23	27.37	21.14	22.31	23.49	24.66	25.84	27.01
24	27.43	21.19	22.37	23.55	24.72	25.90	27.08
25	27.49	21.24	22.42	23.60	24.78	25.96	27.13

TA	SI 24	SI 25	SI 26	SI 27	SI 28	SI 29	SI 30
1	4.30	4.48	4.66	4.84	5.02	5.20	5.38
2	8.41	8.76	9.11	9.46	9.81	10.16	10.51
3	11.81	12.31	12.80	13.29	13.78	14.28	14.77
4	14.65	15.26	15.87	16.48	17.09	17.70	18.31
5	17.00	17.71	18.42	19.13	19.84	20.55	21.25
6	18.96	19.75	20.54	21.33	22.12	22.91	23.70
7	20.59	21.45	22.30	23.16	24.02	24.88	25.74
8	21.94	22.86	23.77	24.68	25.60	26.51	27.43
9	23.07	24.03	24.99	25.95	26.91	27.87	28.83
10	24.00	25.00	26.00	27.00	28.00	29.00	30.00
11	24.78	25.81	26.84	27.87	28.91	29.94	30.97
12	25.42	26.48	27.54	28.60	29.66	30.72	31.78
13	25.96	27.04	28.12	29.20	30.29	31.37	32.45
14	26.41	27.51	28.61	29.71	30.81	31.91	33.01
15	26.78	27.89	29.01	30.12	31.24	32.35	33.47
16	27.08	28.21	29.34	30.47	31.60	32.73	33.86
17	27.34	28.48	29.62	30.76	31.90	33.04	34.18
18	27.55	28.70	29.85	31.00	32.15	33.29	34.44
19	27.73	28.89	30.04	31.20	32.35	33.51	34.66
20	27.88	29.04	30.20	31.36	32.52	33.69	34.85
21	28.00	29.17	30.33	31.50	32.67	33.83	35.00
22	28.10	29.27	30.44	31.61	32.79	33.96	35.13
23	28.19	29.36	30.53	31.71	32.88	34.06	35.23
24	28.26	29.43	30.61	31.79	32.97	34.14	35.32
25	28.31	29.49	30.67	31.85	33.03	34.21	35.39

Table 3 Yield Prediction Table at each Site Index (SI = 18-30)

SI = 18						
TA	DM	HM	TH	N	VM	TV
1	2.83	2.88	3.23	3429	0.0021	7.1419
2	5.36	5.54	6.30	2026	0.0107	21.7483
3	7.27	7.73	8.86	1576	0.0239	37.6205
4	8.87	9.54	10.99	1338	0.0399	53.4553
5	10.23	11.04	12.75	1190	0.0576	68.5503
6	11.40	12.28	14.22	1088	0.0758	82.5226
7	12.41	13.31	15.44	1015	0.0938	95.1850
8	13.28	14.16	16.46	960	0.1109	106.4776
9	14.01	14.87	17.30	918	0.1268	116.4221
10	14.65	15.46	18.00	885	0.1413	125.0912
11	15.18	15.95	18.58	860	0.1542	132.5865
12	15.63	16.36	19.07	839	0.1657	139.0233
13	16.02	16.69	19.47	822	0.1757	144.5205
14	16.34	16.97	19.80	809	0.1844	149.1937
15	16.61	17.21	20.08	798	0.1919	153.1514
16	16.84	17.40	20.31	789	0.1983	156.4925
17	17.03	17.56	20.51	782	0.2037	159.3057
18	17.19	17.69	20.67	776	0.2083	161.6693
19	17.32	17.81	20.80	771	0.2122	163.6515
20	17.43	17.90	20.91	767	0.2155	165.3114
21	17.53	17.97	21.00	764	0.2183	166.6997
22	17.60	18.04	21.08	761	0.2206	167.8595
23	17.67	18.09	21.14	759	0.2226	168.8277
24	17.72	18.14	21.19	757	0.2242	169.6354
25	17.77	18.17	21.24	755	0.2255	170.3086

SI = 19						
TA	DM	HM	TH	N	VM	TV
1	3.00	3.04	3.41	3271	0.0024	7.8574
2	5.63	5.84	6.65	1947	0.0122	23.7226
3	7.64	8.15	9.35	1513	0.0271	41.0705
4	9.33	10.06	11.60	1283	0.0456	58.4665
5	10.79	11.64	13.46	1139	0.0660	75.1253
6	12.05	12.94	15.01	1040	0.0872	90.6072
7	13.14	14.03	16.30	968	0.1081	104.6874
8	14.08	14.93	17.37	915	0.1282	117.2832
9	14.88	15.68	18.26	874	0.1470	128.4052
10	15.57	16.30	19.00	842	0.1641	138.1232
11	16.16	16.81	19.61	817	0.1795	146.5421
12	16.65	17.24	20.13	796	0.1931	153.7844
13	17.08	17.60	20.55	780	0.2050	159.9785
14	17.43	17.89	20.90	767	0.2154	165.2505
15	17.73	18.14	21.20	756	0.2244	169.7199
16	17.98	18.34	21.44	748	0.2320	173.4963
17	18.19	18.51	21.64	741	0.2386	176.6784
18	18.37	18.66	21.81	735	0.2441	179.3536
19	18.52	18.77	21.95	730	0.2488	181.5982
20	18.64	18.87	22.07	726	0.2527	183.4787
21	18.74	18.95	22.17	723	0.2561	185.0520
22	18.83	19.02	22.25	720	0.2589	186.3669
23	18.90	19.07	22.31	718	0.2612	187.4647
24	18.96	19.12	22.37	716	0.2632	188.3807
25	19.01	19.16	22.42	714	0.2648	189.1444

	SI =			20		
TA	DM	HM	TH	N	VM	TV
1	3.16	3.19	3.59	3131	0.0027	8.5898
2	5.89	6.14	7.00	1875	0.0137	25.7600
3	8.01	8.57	9.85	1456	0.0307	44.6506
4	9.81	10.58	12.21	1232	0.0517	63.6922
5	11.36	12.23	14.17	1091	0.0751	82.0115
6	12.71	13.61	15.80	995	0.0996	99.1069
7	13.89	14.75	17.16	925	0.1240	114.7113
8	14.91	15.70	18.28	873	0.1475	128.7154
9	15.78	16.48	19.22	833	0.1695	141.1155
10	16.53	17.14	20.00	801	0.1896	151.9764
11	17.17	17.68	20.65	777	0.2078	161.4050
12	17.72	18.13	21.19	757	0.2240	169.5303
13	18.18	18.50	21.63	741	0.2382	176.4901
14	18.57	18.82	22.00	728	0.2505	182.4215
15	18.90	19.07	22.31	718	0.2612	187.4554
16	19.18	19.29	22.57	709	0.2703	191.7127
17	19.41	19.47	22.78	702	0.2782	195.3027
18	19.60	19.61	22.96	696	0.2848	198.3228
19	19.77	19.74	23.11	692	0.2904	200.8582
20	19.90	19.84	23.23	688	0.2951	202.9833
21	20.02	19.93	23.33	685	0.2991	204.7619
22	20.11	20.00	23.42	682	0.3025	206.2488
23	20.19	20.05	23.49	680	0.3053	207.4907
24	20.26	20.10	23.55	678	0.3076	208.5270
25	20.31	20.14	23.60	676	0.3096	209.3913

	SI =			21		
TA	DM	HM	TH	N	VM	TV
1	3.32	3.35	3.77	3007	0.0031	9.3393
2	6.15	6.44	7.36	1809	0.0154	27.8608
3	8.38	8.99	10.34	1403	0.0345	48.3627
4	10.28	11.09	12.82	1185	0.0583	69.1373
5	11.94	12.83	14.88	1047	0.0852	89.2188
6	13.39	14.28	16.59	953	0.1134	108.0380
7	14.66	15.47	18.01	885	0.1416	125.2807
8	15.76	16.47	19.20	834	0.1689	140.8065
9	16.71	17.29	20.18	794	0.1946	154.5939
10	17.53	17.97	21.00	764	0.2183	166.7005
11	18.23	18.54	21.68	739	0.2397	177.2333
12	18.82	19.02	22.24	720	0.2588	186.3272
13	19.33	19.41	22.71	704	0.2756	194.1291
14	19.76	19.73	23.10	692	0.2902	200.7872
15	20.12	20.01	23.43	682	0.3029	206.4443
16	20.43	20.23	23.70	673	0.3138	211.2332
17	20.69	20.42	23.92	666	0.3231	215.2749
18	20.90	20.57	24.11	661	0.3310	218.6773
19	21.08	20.70	24.26	656	0.3377	221.5354
20	21.23	20.81	24.39	652	0.3434	223.9320
21	21.36	20.90	24.50	649	0.3482	225.9386
22	21.46	20.97	24.59	646	0.3522	227.6168
23	21.55	21.03	24.66	644	0.3556	229.0188
24	21.62	21.09	24.72	642	0.3584	230.1890
25	21.68	21.13	24.78	641	0.3607	231.1652

	SI =			22		
TA	DM	HM	TH	N	VM	TV
1	3.48	3.51	3.95	2895	0.0035	10.1059
2	6.41	6.74	7.71	1748	0.0172	30.0250
3	8.75	9.41	10.83	1353	0.0386	52.2085
4	10.77	11.61	13.43	1141	0.0656	74.8073
5	12.53	13.43	15.59	1007	0.0961	96.7577
6	14.09	14.94	17.38	914	0.1284	117.4182
7	15.45	16.19	18.87	847	0.1610	136.4216
8	16.64	17.23	20.11	797	0.1927	153.5918
9	17.67	18.09	21.14	758	0.2227	168.8856
10	18.56	18.81	22.00	728	0.2504	182.3504
11	19.33	19.41	22.71	704	0.2755	194.0917
12	19.98	19.90	23.30	685	0.2980	204.2489
13	20.54	20.31	23.80	670	0.3178	212.9775
14	21.01	20.65	24.20	658	0.3352	220.4372
15	21.41	20.94	24.54	648	0.3502	226.7831
16	21.75	21.17	24.83	639	0.3631	232.1607
17	22.03	21.37	25.06	633	0.3742	236.7031
18	22.27	21.53	25.26	627	0.3836	240.5298
19	22.47	21.67	25.42	622	0.3916	243.7462
20	22.63	21.78	25.55	619	0.3984	246.4447
21	22.77	21.87	25.67	616	0.4041	248.7052
22	22.89	21.95	25.76	613	0.4088	250.5962
23	22.99	22.01	25.84	611	0.4129	252.1765
24	23.07	22.07	25.90	609	0.4162	253.4959
25	23.13	22.11	25.96	608	0.4190	254.5967

	SI =			23		
TA	DM	HM	TH	N	VM	TV
1	3.63	3.66	4.13	2794	0.0039	10.8895
2	6.67	7.04	8.06	1692	0.0191	32.2531
3	9.12	9.83	11.32	1307	0.0430	56.1902
4	11.25	12.12	14.04	1100	0.0734	80.7079
5	13.14	14.03	16.30	968	0.1081	104.6400
6	14.80	15.60	18.17	878	0.1450	127.2665
7	16.27	16.91	19.73	812	0.1825	148.1623
8	17.55	18.00	21.03	763	0.2191	167.1099
9	18.68	18.90	22.10	725	0.2539	184.0402
10	19.65	19.65	23.00	695	0.2863	198.9869
11	20.48	20.27	23.74	672	0.3157	212.0517
12	21.20	20.78	24.36	653	0.3421	223.3771
13	21.81	21.21	24.88	638	0.3655	233.1270
14	22.33	21.57	25.31	626	0.3860	241.4721
15	22.76	21.87	25.66	616	0.4037	248.5804
16	23.13	22.11	25.96	608	0.4191	254.6105
17	23.45	22.32	26.20	601	0.4322	259.7088
18	23.71	22.49	26.41	595	0.4434	264.0071
19	23.93	22.63	26.58	591	0.4529	267.6224
20	24.11	22.75	26.72	587	0.4610	270.6571
21	24.27	22.84	26.83	584	0.4677	273.2004
22	24.40	22.92	26.93	582	0.4734	275.3288
23	24.50	22.99	27.01	579	0.4782	277.1081
24	24.59	23.05	27.08	578	0.4822	278.5940
25	24.67	23.09	27.13	576	0.4856	279.8340

	SI =				24	
TA	DM	HM	TH	N	VM	TV
1	3.78	3.82	4.30	2702	0.0043	11.6900
2	6.93	7.34	8.41	1639	0.0211	34.5453
3	9.50	10.24	11.81	1264	0.0477	60.3102
4	11.75	12.64	14.65	1061	0.0818	86.8454
5	13.75	14.62	17.00	932	0.1211	112.8778
6	15.53	16.27	18.96	843	0.1631	137.6039
7	17.11	17.63	20.59	779	0.2061	160.5336
8	18.50	18.76	21.94	730	0.2484	181.4030
9	19.72	19.70	23.07	693	0.2887	200.1120
10	20.77	20.48	24.00	664	0.3264	216.6769
11	21.69	21.13	24.78	641	0.3608	231.1926
12	22.47	21.67	25.42	622	0.3918	243.8032
13	23.14	22.12	25.96	607	0.4193	254.6799
14	23.71	22.49	26.41	595	0.4434	264.0043
15	24.19	22.80	26.78	586	0.4644	271.9576
16	24.60	23.05	27.08	578	0.4826	278.7124
17	24.95	23.27	27.34	571	0.4981	284.4290
18	25.24	23.44	27.55	566	0.5114	289.2526
19	25.48	23.59	27.73	561	0.5227	293.3124
20	25.68	23.71	27.88	557	0.5323	296.7223
21	25.85	23.81	28.00	554	0.5404	299.5814
22	26.00	23.90	28.10	552	0.5472	301.9751
23	26.12	23.97	28.19	550	0.5529	303.9768
24	26.22	24.03	28.26	548	0.5576	305.6491
25	26.30	24.08	28.31	547	0.5617	307.0448

	SI =				25	
TA	DM	HM	TH	N	VM	TV
1	3.93	3.97	4.48	2617	0.0048	12.5074
2	7.20	7.64	8.76	1590	0.0232	36.9020
3	9.88	10.66	12.31	1224	0.0527	64.5708
4	12.26	13.15	15.26	1025	0.0909	93.2264
5	14.38	15.22	17.71	899	0.1352	121.4847
6	16.29	16.93	19.75	811	0.1830	148.4525
7	17.99	18.35	21.45	748	0.2322	173.5690
8	19.49	19.53	22.86	700	0.2808	196.5174
9	20.80	20.50	24.03	663	0.3275	217.1612
10	21.95	21.32	25.00	634	0.3712	235.4946
11	22.95	21.99	25.81	612	0.4114	251.6027
12	23.81	22.55	26.48	593	0.4477	265.6290
13	24.54	23.02	27.04	579	0.4800	277.7507
14	25.17	23.40	27.51	567	0.5084	288.1602
15	25.70	23.72	27.89	557	0.5332	297.0518
16	26.15	23.99	28.21	549	0.5547	304.6129
17	26.53	24.21	28.48	543	0.5731	311.0186
18	26.86	24.40	28.70	537	0.5889	316.4282
19	27.12	24.55	28.89	533	0.6023	320.9848
20	27.35	24.68	29.04	529	0.6137	324.8143
21	27.54	24.78	29.17	526	0.6233	328.0268
22	27.70	24.87	29.27	524	0.6313	330.7177
23	27.83	24.94	29.36	522	0.6381	332.9687
24	27.94	25.01	29.43	520	0.6438	334.8497
25	28.03	25.06	29.49	519	0.6486	336.4202

	SI = 26					
TA	DM	HM	TH	N	VM	TV
1	4. 08	4. 13	4. 66	2539	0. 0053	13. 3417
2	7. 46	7. 94	9. 11	1544	0. 0255	39. 3237
3	10. 27	11. 08	12. 80	1186	0. 0581	68. 9746
4	12. 77	13. 67	15. 87	991	0. 1008	99. 8580
5	15. 03	15. 81	18. 42	867	0. 1505	130. 4749
6	17. 07	17. 59	20. 54	781	0. 2048	159. 8366
7	18. 89	19. 07	22. 30	718	0. 2609	187. 3051
8	20. 51	20. 29	23. 77	671	0. 3167	212. 5039
9	21. 94	21. 31	24. 99	635	0. 3707	235. 2539
10	23. 19	22. 15	26. 00	606	0. 4214	255. 5223
11	24. 28	22. 85	26. 84	584	0. 4682	273. 3804
12	25. 22	23. 43	27. 54	566	0. 5106	288. 9685
13	26. 03	23. 92	28. 12	551	0. 5486	302. 4682
14	26. 72	24. 32	28. 61	540	0. 5820	314. 0821
15	27. 30	24. 65	29. 01	530	0. 6113	324. 0177
16	27. 80	24. 93	29. 34	522	0. 6367	332. 4778
17	28. 22	25. 16	29. 62	516	0. 6585	339. 6530
18	28. 58	25. 35	29. 85	511	0. 6772	345. 7182
19	28. 88	25. 51	30. 04	506	0. 6931	350. 8311
20	29. 13	25. 64	30. 20	503	0. 7066	355. 1309
21	29. 34	25. 75	30. 33	500	0. 7180	358. 7401
22	29. 51	25. 84	30. 44	497	0. 7276	361. 7646
23	29. 66	25. 92	30. 53	495	0. 7357	364. 2957
24	29. 78	25. 98	30. 61	493	0. 7425	366. 4115
25	29. 88	26. 04	30. 67	492	0. 7482	368. 1784

	SI = 27					
TA	DM	HM	TH	N	VM	TV
1	4. 22	4. 28	4. 84	2467	0. 0058	14. 1928
2	7. 72	8. 24	9. 46	1501	0. 0279	41. 8109
3	10. 66	11. 49	13. 29	1150	0. 0639	73. 5247
4	13. 30	14. 18	16. 48	959	0. 1113	106. 7480
5	15. 69	16. 41	19. 13	836	0. 1672	139. 8637
6	17. 87	18. 25	21. 33	752	0. 2285	171. 7823
7	19. 82	19. 78	23. 16	690	0. 2925	201. 7816
8	21. 58	21. 05	24. 68	644	0. 3565	229. 4180
9	23. 13	22. 11	25. 95	608	0. 4187	254. 4630
10	24. 49	22. 98	27. 00	580	0. 4775	276. 8513
11	25. 68	23. 71	27. 87	558	0. 5320	296. 6354
12	26. 71	24. 31	28. 60	540	0. 5816	313. 9493
13	27. 60	24. 81	29. 20	525	0. 6261	328. 9772
14	28. 36	25. 23	29. 71	514	0. 6655	341. 9306
15	29. 00	25. 58	30. 12	504	0. 7000	353. 0305
16	29. 55	25. 87	30. 47	497	0. 7300	362. 4953
17	30. 02	26. 11	30. 76	490	0. 7558	370. 5321
18	30. 41	26. 30	31. 00	485	0. 7780	377. 3326
19	30. 74	26. 47	31. 20	481	0. 7969	383. 0701
20	31. 02	26. 61	31. 36	477	0. 8130	387. 8988
21	31. 25	26. 72	31. 50	474	0. 8265	391. 9542
22	31. 45	26. 82	31. 61	472	0. 8380	395. 3544
23	31. 61	26. 89	31. 71	470	0. 8476	398. 2012
24	31. 75	26. 96	31. 79	468	0. 8557	400. 5816
25	31. 86	27. 01	31. 85	467	0. 8625	402. 5702

	SI = 28					
TA	DM	HM	TH	N	VM	TV
1	4.36	4.44	5.02	2400	0.0063	15.0606
2	7.98	8.54	9.81	1460	0.0304	44.3642
3	11.05	11.91	13.78	1117	0.0701	78.2239
4	13.83	14.69	17.09	928	0.1227	113.9045
5	16.37	17.00	19.84	808	0.1853	149.6677
6	18.69	18.91	22.12	724	0.2545	184.3180
7	20.80	20.50	24.02	663	0.3272	217.0417
8	22.69	21.81	25.60	617	0.4006	247.3207
9	24.37	22.91	26.91	582	0.4722	274.8695
10	25.85	23.81	28.00	554	0.5404	299.5831
11	27.15	24.57	28.91	532	0.6038	321.4906
12	28.28	25.19	29.66	515	0.6618	340.7151
13	29.26	25.71	30.29	501	0.7139	357.4412
14	30.10	26.15	30.81	489	0.7602	371.8880
15	30.81	26.50	31.24	480	0.8009	384.2895
16	31.42	26.80	31.60	472	0.8364	394.8800
17	31.94	27.05	31.90	466	0.8670	403.8843
18	32.37	27.26	32.15	461	0.8933	411.5116
19	32.74	27.43	32.35	456	0.9158	417.9526
20	33.05	27.57	32.52	453	0.9349	423.3776
21	33.31	27.69	32.67	450	0.9510	427.9368
22	33.53	27.79	32.79	448	0.9647	431.7614
23	33.71	27.87	32.88	446	0.9762	434.9649
24	33.86	27.94	32.97	444	0.9859	437.6448
25	33.99	27.99	33.03	443	0.9940	439.8841

	SI = 29					
TA	DM	HM	TH	N	VM	TV
1	4.51	4.59	5.20	2337	0.0068	15.9452
2	8.24	8.84	10.16	1422	0.0330	46.9841
3	11.45	12.32	14.28	1085	0.0766	83.0754
4	14.37	15.21	17.70	899	0.1349	121.3360
5	17.07	17.59	20.55	780	0.2049	159.9045
6	19.55	19.57	22.91	698	0.2829	197.4742
7	21.81	21.21	24.88	638	0.3655	233.1328
8	23.85	22.58	26.51	593	0.4494	266.2792
9	25.67	23.71	27.87	558	0.5318	296.5628
10	27.29	24.65	29.00	530	0.6107	323.8313
11	28.71	25.42	29.94	508	0.6845	348.0837
12	29.96	26.07	30.72	491	0.7523	369.4281
13	31.03	26.61	31.37	477	0.8134	388.0457
14	31.95	27.06	31.91	466	0.8680	404.1617
15	32.75	27.43	32.35	456	0.9160	418.0222
16	33.42	27.74	32.73	449	0.9580	429.8777
17	33.99	27.99	33.04	443	0.9943	439.9715
18	34.48	28.21	33.29	437	1.0255	448.5317
19	34.89	28.38	33.51	433	1.0522	455.7676
20	35.23	28.53	33.69	430	1.0750	461.8672
21	35.52	28.65	33.83	427	1.0942	466.9970
22	35.76	28.76	33.96	424	1.1105	471.3028
23	35.97	28.84	34.06	422	1.1243	474.9111
24	36.14	28.91	34.14	421	1.1358	477.9308
25	36.28	28.97	34.21	419	1.1455	480.4550

TA	SI =			30	VM	TV
	DM	HM	TH	N		
1	4.65	4.75	5.38	2279	0.0074	16.8464
2	8.51	9.13	10.51	1385	0.0359	49.6715
3	11.85	12.74	14.77	1054	0.0836	88.0827
4	14.93	15.72	18.31	872	0.1481	129.0518
5	17.79	18.19	21.25	754	0.2261	170.5931
6	20.43	20.23	23.70	673	0.3139	211.2840
7	22.86	21.93	25.74	614	0.4076	250.1064
8	25.06	23.34	27.43	569	0.5035	286.3676
9	27.05	24.51	28.83	534	0.5983	319.6423
10	28.81	25.48	30.00	507	0.6896	349.7226
11	30.37	26.28	30.97	486	0.7755	376.5701
12	31.73	26.95	31.78	468	0.8547	400.2717
13	32.92	27.51	32.45	454	0.9265	421.0016
14	33.94	27.97	33.01	443	0.9907	438.9883
15	34.82	28.35	33.47	434	1.0475	454.4892
16	35.56	28.67	33.86	426	1.0972	467.7709
17	36.20	28.94	34.18	420	1.1403	479.0958
18	36.74	29.16	34.44	415	1.1774	488.7122
19	37.20	29.34	34.66	411	1.2093	496.8496
20	37.58	29.49	34.85	407	1.2364	503.7152
21	37.90	29.62	35.00	405	1.2594	509.4936
22	38.18	29.73	35.13	402	1.2789	514.3470
23	38.40	29.81	35.23	400	1.2953	518.4164
24	38.59	29.89	35.32	399	1.3092	521.8234
25	38.75	29.95	35.39	397	1.3208	524.6726

## App.1 Data list for Stem Volume Table

	d	h	v	vi	bv
1	14.30	13.60	.1279	.1074	.0205
2	4.60	6.80	.0062	.0052	.0010
3	13.90	12.90	.0958	.0778	.0180
4	9.90	11.90	.0547	.0460	.0087
5	6.20	10.50	.0188	.0160	.0028
6	21.40	17.80	.2958	.2289	.0669
7	27.50	16.40	.3439	.2822	.0667
8	24.60	17.90	.4167	.3536	.0631
9	17.10	14.60	.1793	.1546	.0247
10	16.80	20.70	.2425	.2095	.0330
11	28.00	21.90	.6245	.5541	.0704
12	22.00	21.40	.4512	.3924	.0588
13	22.40	16.70	.3285	.2751	.0534
14	23.50	27.20	.5780	.4970	.0810
15	12.50	17.40	.1028	.0842	.0186
16	14.70	15.00	.1443	.1159	.0284
17	17.40	21.20	.2440	.2036	.0404
18	7.50	10.00	.0234	.0202	.0032
19	12.60	13.20	.0911	.0745	.0166
20	15.00	14.30	.1377	.1151	.0226
21	19.00	15.70	.2474	.1923	.0551
22	6.20	9.90	.0170	.0142	.0028
23	21.30	22.20	.3586	.3076	.0510
24	16.40	24.10	.2642	.2302	.0340
25	15.50	17.20	.1648	.1405	.0243
26	20.50	18.50	.2723	.2287	.0436
27	9.30	14.30	.0454	.0366	.0088
28	8.10	14.10	.0440	.0376	.0064
29	11.20	16.80	.0963	.0795	.0168
30	27.60	28.00	.6530	.5632	.0898
31	5.50	7.00	.0107	.0083	.0024
32	10.00	8.50	.0348	.0286	.0062
33	4.90	6.00	.0062	.0052	.0010
34	4.10	5.90	.0064	.0054	.0010
35	5.30	7.10	.0096	.0080	.0016
36	9.80	9.80	.0386	.0328	.0058
37	6.90	7.40	.0166	.0132	.0034
38	8.60	8.60	.0280	.0234	.0046
39	17.60	20.20	.2052	.1758	.0294
40	12.70	19.20	.1129	.0931	.0198
41	14.20	15.80	.1512	.1217	.0295
42	15.70	15.60	.1569	.1310	.0259
43	26.50	15.90	.4053	.3372	.0681
44	14.50	16.70	.1192	.1008	.0184
45	6.10	8.00	.0128	.0104	.0024
46	10.50	15.80	.0773	.0676	.0097
47	12.50	19.30	.1189	.1051	.0138
48	6.90	13.70	.0296	.0260	.0036
49	16.00	18.30	.2143	.1705	.0438
50	11.50	15.40	.0724	.0628	.0096
51	21.50	20.30	.2974	.2371	.0603



	d	h	v	v <sub>i</sub>	bv
52	7.80	14.70	.0422	.0353	.0069
53	5.00	6.40	.0091	.0075	.0016
54	8.70	13.60	.0501	.0430	.0071
55	5.00	7.30	.0109	.0086	.0023
56	8.90	11.40	.0371	.0318	.0053
57	13.00	15.40	.1142	.0988	.0154
58	11.40	14.50	.0726	.0632	.0094
59	16.00	19.50	.1971	.1625	.0346
60	17.20	18.00	.1856	.1586	.0270
61	18.00	18.00	.2314	.1930	.0384
62	8.40	12.70	.0424	.0352	.0072
63	7.80	9.00	.0307	.0265	.0042
64	10.40	12.20	.0558	.0458	.0100
65	13.50	14.50	.1158	.0959	.0199
66	12.80	20.10	.1232	.1017	.0215
67	15.20	20.00	.1674	.1372	.0302
68	13.70	17.20	.1292	.1021	.0271
69	12.60	14.60	.0796	.0610	.0186
70	9.60	14.10	.0506	.0408	.0098
71	20.50	22.50	.3371	.2816	.0555
72	15.20	20.70	.1816	.1476	.0340
73	6.70	12.70	.0243	.0197	.0046
74	6.30	11.40	.0194	.0145	.0049
75	10.30	15.70	.0614	.0498	.0116
76	18.80	17.50	.2417	.1943	.0474
77	17.30	18.80	.2277	.1885	.0392
78	22.80	20.40	.3897	.3383	.0514
79	18.40	19.20	.2130	.1820	.0310
80	24.30	17.40	.3028	.2411	.0617
81	22.00	19.30	.3505	.2800	.0705
82	11.00	13.20	.0548	.0432	.0116
83	16.30	16.40	.1435	.1177	.0258
84	14.60	14.00	.1138	.0918	.0220
85	28.50	19.50	.5009	.4157	.0852
86	22.70	19.20	.4153	.3421	.0732
87	13.30	13.90	.0989	.0840	.0149
88	9.50	14.80	.0614	.0520	.0094
89	4.50	7.30	.0069	.0056	.0013
90	7.50	12.80	.0340	.0294	.0046
91	8.50	14.00	.0370	.0300	.0070
92	19.40	21.10	.2953	.2300	.0653
93	24.50	24.60	.4482	.3680	.0802
94	11.60	16.80	.0968	.0824	.0144
95	6.70	9.40	.0182	.0159	.0023
96	29.00	25.90	.7862	.6630	.1232
97	10.40	17.80	.0812	.0704	.0108
98	9.00	13.00	.0495	.0408	.0087
99	6.80	11.70	.0256	.0209	.0047
100	27.00	20.60	.5018	.4218	.0800
101	31.70	19.20	.4973	.4035	.0938
102	25.80	21.90	.4003	.3343	.0660

	d	h	v	v <sub>i</sub>	bv
103	37.30	19.50	.8785	7217	1568
104	7.10	12.40	.0282	.0244	.0038
105	23.30	23.50	.4510	.3829	.0681
106	20.60	22.00	.2836	.2320	.0516
107	32.30	21.00	.6458	.5469	.0989
108	23.20	22.00	.3826	.3280	.0546
109	5.80	10.90	.0164	.0140	.0024
110	19.50	27.00	.3893	.3337	.0556
111	26.00	28.60	.7906	.6861	.1045
112	33.50	25.40	.8902	.7619	.1283
113	30.90	22.10	.6496	.5646	.0850
114	35.60	23.90	1.0091	.8393	.1698
115	8.00	11.00	.0285	.0233	.0052
116	11.00	10.60	.0559	.0433	.0126
117	9.80	11.00	.0405	.0307	.0098
118	15.50	13.00	.1198	.0938	.0260
119	19.80	15.80	.2338	.2219	.0119
120	20.50	15.20	.1871	.1486	.0385
121	10.00	12.50	.0556	.0452	.0104
122	14.00	13.50	.1037	.0846	.0191
123	13.00	13.00	.0787	.0663	.0124
124	22.50	14.30	.1978	.1696	.0282
125	16.70	19.80	.2323	.2016	.0307
126	15.00	18.90	.1577	.1348	.0229
127	14.40	18.40	.1534	.1302	.0232
128	19.30	18.60	.2286	.1872	.0414
129	9.50	10.70	.0474	.0398	.0076
130	13.50	14.00	.0886	.0701	.0185
131	18.80	15.00	.1602	.1312	.0290
132	8.30	9.50	.0269	.0195	.0074
133	11.00	11.50	.0484	.0352	.0132
134	10.60	11.80	.0519	.0390	.0129
135	23.60	18.50	.3837	.3195	.0642
136	35.50	30.50	1.1907	1.0635	.1272
137	32.60	31.10	1.0468	.9450	.1018
138	33.30	28.10	.9619	.8539	.1080
139	32.30	26.70	.9229	.8234	.0995
140	43.10	33.60	1.7741	1.6289	.1452
141	41.70	33.60	1.7497	1.6006	.1490
142	35.50	31.20	1.1790	1.0707	.1083
143	37.30	31.30	1.3742	1.2200	.1542
144	41.00	32.40	1.8177	1.6508	.1669

## App.2 Data list for Site Index Curve and Yield Prediction Table

Data No	Plot No	Place	Age	DM	HM	Vmin	Vmout	Tno	Vtn	Vtout	DTH	Sr
1	104	MonpilisA	47	12.5	11.5	0.0695	0.0789	800	55.6	63.1316	14.1	0.251
2	105	MonpilisA	53	13.2	14	0.0945	0.1073	800	75.6	85.8408	17.6	0.201
3	106	MonpilisA	58	13.7	14.4	0.1018	0.1155	800	81.4	92.4264	17.7	0.200
4	107	MonpilisA	67	13.8	15.6	0.1153	0.1309	800	92.2	104.6894	18.5	0.191
5	108	MonpilisA	7	15.9	16.2	0.1475	0.1674	750	110.6	125.5819	19.9	0.183
6	109	MonpilisA	79	15.8	17.5	0.1645	0.1888	750	123.4	140.1158	20.5	0.178
7	11	MonpilisA	9	16.9	18.8	0.2059	0.2338	750	154.4	175.3150	22.8	0.160
8	111	MonpilisA	11	18.1	19.3	0.2309	0.2622	650	150.1	170.4325	22.9	0.171
9	20.5	MonpilisB	48	14.5	14.6	0.1011	0.1148	750	75.8	86.0679	16.4	0.223
10	206	MonpilisB	53	14.8	14.4	0.1069	0.1214	750	80.2	91.0639	17.3	0.211
11	207	MonpilisB	58	15	16.2	0.1208	0.1372	750	90.6	102.8727	18.7	0.195
12	208	MonpilisB	66	15.6	17	0.1429	0.1623	750	107.2	121.7213	20	0.183
13	209	MonpilisB	75	16.2	17.6	0.1525	0.1732	750	114.4	129.8966	20	0.183
14	21	MonpilisB	86	17.6	18.5	0.1768	0.2007	750	132.6	150.5620	21.5	0.170
15	211	MonpilisB	106	18.6	19.9	0.2417	0.2745	750	181.3	205.8589	23	0.159
16	306	HobutA	43	16.1	14.8	0.1215	0.1379	550	66.8	75.8487	16.3	0.262
17	307	HobutA	48	17	17	0.1502	0.1705	550	82.6	93.7890	17.7	0.241
18	3.08	HobutA	5.6	17.7	17.4	0.1665	0.1891	550	91.6	104.0081	18.8	0.227
19	309	HobutA	65	18.3	18.6	0.1978	0.2246	550	108.8	123.5380	20.5	0.208
20	31	HobutA	76	19.5	20.2	0.2484	0.2820	500	124.2	141.0241	22	0.203
21	311	HobutA	88	20.3	21.3	0.2844	0.3229	500	142.2	161.4624	23.3	0.192
22	3.12	HobutA	96	20.3	21.3	0.2816	0.3187	500	140.8	159.8728	22.9	0.195
23	405	HobutB	33	14.4	14.5	0.0957	0.1087	650	62.2	70.6256	17.3	0.227
24	406	HobutB	39	15.3	15.6	0.1194	0.1356	650	77.6	88.1117	18.1	0.217
25	407	HobutB	43	16.2	17.6	0.1428	0.1621	650	92.8	105.3707	20.1	0.195
26	408	HobutB	51	17.2	19.1	0.1852	0.2103	650	120.4	136.7094	22	0.178
27	409	HobutB	6	18.7	20.7	0.2246	0.2550	650	146	165.7772	23.6	0.166
28	41	HobutB	71	20	22	0.2907	0.3300	600	174.4	198.0242	25.6	0.159
29	411	HobutB	83	21.4	23.3	0.3317	0.3766	600	199	225.9565	26.6	0.153
30	412	HobutB	91	21.4	23.6	0.3303	0.3751	600	198.2	225.0482	26.4	0.155
31	501	HobutC	62	16.4	16.8	0.1500	0.1703	800	120	136.2552	20.9	0.169
32	502	HobutC	68	18.6	18.5	0.1833	0.2081	700	128.3	145.6795	21	0.180
33	503	HobutC	73	19.2	19.5	0.2126	0.2414	700	148.8	168.9564	20.9	0.181
34	504	HobutC	78	19.9	19.5	0.2283	0.2592	700	159.8	181.4465	21.3	0.177
35	505	HobutC	85	20.4	18.6	0.2471	0.2806	700	173	196.4346	21.3	0.177
36	506	HobutC	94	20.8	20.4	0.2640	0.2998	700	184.8	209.8330	22.5	0.168
37	507	HobutC	10.5	21.5	21.2	0.2936	0.3333	700	205.5	233.3370	22.9	0.165
38	508	HobutC	117	22.2	21.6	0.3230	0.3668	600	193.8	220.0521	23.7	0.172
39	509	HobutC	125	22.2	21.6	0.3223	0.3660	600	193.4	219.5980	22.5	0.181
40	601	Rampayan	67	20.1	18.5	0.2247	0.2551	600	134.8	153.0600	19.9	0.205
41	602	Rampayan	72	21	18.6	0.2458	0.2791	600	147.5	167.4804	19.8	0.206
42	603	Rampayan	75	22.1	19.8	0.2955	0.3355	600	177.3	201.3171	21.3	0.192
43	604	Rampayan	83	22.5	20.9	0.3180	0.3611	600	190.8	216.6458	22.6	0.181
44	605	Rampayan	93	23.1	21.2	0.3397	0.3857	600	203.8	231.4067	23.5	0.174
45	606	Rampayan	103	24.6	22	0.4022	0.4566	600	241.3	273.9865	23.8	0.172
46	607	Rampayan	11.5	25.2	23.3	0.4045	0.4593	600	242.7	275.5761	25.3	0.161
47	608	Rampayan	125	25.2	23.3	0.4043	0.4591	600	242.6	275.4626	23.6	0.173
48	701	Timbang	62	21.2	17.6	0.2509	0.2849	550	138	156.6935	20.7	0.206
49	702	Timbang	6.8	22.5	18.4	0.2989	0.3394	450	134.5	152.7194	22.5	0.210

50	7 03 Timbang	7 3	23 4	18 6	0 3627	0 4118	450	163 2	185 3071	22 2	0 212
51	7 04 Timbang	7 8	25 5	19 9	0 4173	0 4739	450	187 8	213 2394	22 8	0 207
52	7 05 Timbang	8 4	27 2	21 3	0 5007	0 5685	450	225 3	255 8191	24 6	0 192
53	7 06 Timbang	9 4	27 8	22 2	0 5116	0 5809	450	230 2	261 3829	24 6	0 192
54	7 07 Timbang	10 4	28 9	22 3	0 5118	0 5811	450	230 3	261 4964	24 9	0 189
55	7 08 Timbang	11 7	30 6	23 3	0 5900	0 6699	450	265 5	301 4646	26 5	0 178
56	7 09 Timbang	12 5	30 6	23 3	0 5880	0 6677	450	264 6	300 4427	24 9	0 189
57	8 01 MalimaA80	4	13 6	13	0 0765	0 0869	800	61 2	69 4902	14 6	0 242
58	8 02 MalimaA80	4 5	14 4	14 7	0 0983	0 1116	800	78 6	89 2472	17	0 208
59	8 03 MalimaA80	5	15 3	15 4	0 1203	0 1366	750	90 2	102 4185	17 2	0 212
60	8 04 MalimaA80	5 6	15 7	15 1	0 1341	0 1523	750	100 6	114 2273	16 7	0 219
61	8 05 MalimaA80	6 1	16 6	16 8	0 1496	0 1699	750	112 2	127 3986	19 1	0 181
62	8 06 MalimaA80	6 6	16 5	17 8	0 1565	0 1777	750	117 4	133 3030	19 9	0 183
63	8 07 MalimaA80	7 2	16 9	17 9	0 1555	0 1765	750	116 6	132 3846	20 1	0 182
64	8 08 MalimaA80	8 2	17 2	17 8	0 1472	0 1671	750	110 4	125 3548	20 1	0 182
65	8 09 MalimaA80	9 3	17 3	18	0 1515	0 1720	750	113 6	128 9883	20 6	0 177
66	8 1 MalimaA80	10 3	18	18 4	0 1677	0 1904	600	100 6	114 2273	20 7	0 197
67	9 03 MalimaB80	5	14 1	14 6	0 0960	0 1080	800	76 8	87 2033	16 3	0 217
68	9 04 MalimaB80	5 6	14 4	16 8	0 1118	0 1269	800	89 4	101 5101	19 3	0 183
69	9 05 MalimaB80	6 1	15 4	17 7	0 1355	0 1539	800	108 4	123 0839	19 9	0 178
70	9 06 MalimaB80	6 6	15 8	19 5	0 1560	0 1771	800	124 8	141 7054	21 8	0 162
71	9 07 MalimaB80	7 2	16 2	19 6	0 1618	0 1837	800	129 4	146 9285	21 1	0 168
72	9 08 MalimaB80	8 2	16 8	20 6	0 1850	0 2101	800	148	168 0481	22 2	0 159
73	9 09 MalimaB80	9 3	17 1	20 9	0 1920	0 2180	800	153 6	174 4067	23 2	0 152
74	9 1 MalimaB80	10 3	17 3	21 9	0 2103	0 2387	800	168 2	190 9844	24 4	0 145
75	10 01 MalimaC80	4	14	14 8	0 0885	0 1005	850	75 2	85 3866	16 9	0 203
76	10 02 MalimaC80	4 5	14 1	16	0 1002	0 1138	850	85 2	96 7412	18 2	0 188
77	10 03 MalimaC80	5	14 6	15 7	0 1045	0 1186	850	88 8	100 8288	19	0 181
78	10 04 MalimaC80	5 6	15 3	17 2	0 1282	0 1456	850	109	123 7651	19 8	0 173
79	10 05 MalimaC80	6 1	16	18 6	0 1558	0 1769	850	132 4	150 3349	20 5	0 167
80	10 06 MalimaC80	6 6	16	19 8	0 1605	0 1822	850	136 4	154 8767	21 2	0 162
81	10 07 MalimaC80	7 2	16 8	19 6	0 1739	0 1974	850	147 8	167 8210	22	0 156
82	10 08 MalimaC80	8 2	17 1	19 9	0 1983	0 2251	800	158 6	180 0840	22 2	0 159
83	10 09 MalimaC80	9 3	17 1	20 2	0 1852	0 2103	850	157 4	178 7214	22 6	0 152
84	10 1 MalimaC80	10 3	17 6	20 7	0 2080	0 2362	850	176 8	200 7483	23	0 149
85	11 06 MalimaA82	4 6	12 5	13	0 0705	0 0800	800	56 4	64 0399	14 3	0 247
86	11 07 MalimaA82	5 2	13 4	14 1	0 0870	0 0988	800	68 6	79 0280	15 8	0 224
87	11 08 MalimaA82	6 2	14 3	16 3	0 1103	0 1252	800	88 2	100 1476	17 9	0 198
88	11 09 MalimaA82	7 2	14 6	17 1	0 1178	0 1337	800	94 2	106 9603	19 3	0 183
89	11 1 MalimaA82	8 3	14 9	17 3	0 1366	0 1551	700	95 6	108 5500	19 5	0 194
90	12 07 MalimaB82	5 2	12 5	11 9	0 0736	0 0836	750	55 2	62 6774	14	0 261
91	12 08 MalimaB82	6 2	14 2	15	0 1008	0 1145	750	75 6	85 8408	17	0 215
92	12 09 MalimaB82	7 2	14 8	16 3	0 1189	0 1350	750	89 2	101 2830	18 3	0 200
93	12 1 MalimaB82	8 3	15 1	17	0 1360	0 1544	750	102	115 8169	19	0 192
94	13 08 MalimaC82	6 2	13	13 1	0 0763	0 0867	600	45 8	52 0041	15 9	0 257
95	13 09 MalimaC82	7 2	13 5	13 7	0 0737	0 0836	600	44 2	50 1873	16 2	0 252
96	13 1 MalimaC82	8 3	13 9	14 5	0 0913	0 1036	550	50 2	57 0001	17 8	0 240
97	15 04 DelayanB81	4 6	15 4	14 3	0 1137	0 1291	600	68 2	77 4384	16 5	0 247
98	15 05 DelayanB81	5 1	15 8	14 9	0 1253	0 1423	600	75 2	85 3866	17 4	0 235
99	15 06 DelayanB81	5 6	16 2	16 3	0 1430	0 1624	600	85 8	97 4225	18 1	0 226

100	15 07 DelayanB81	6 2	16 4	16 4	0 1437	0 1631	600	86 2	97 8767	18 1	0 226
101	15 08 DelayanB81	7 2	17 1	16 6	0 1530	0 1737	600	91 8	104 2352	18 5	0 221
102	15 09 DelayanB81	8 2	17 2	17 6	0 1691	0 1920	550	93	105 5978	19 5	0 219
103	15 1 DelayanB81	10 5	20 9	18 6	0 2698	0 3063	400	107 9	122 5161	19 6	0 255
104	16 02 DelayanC81	3 5	16	13 4	0 1063	0 1207	600	63 8	72 4423	15 2	0 269
105	16 03 DelayanC81	4	18 5	15 1	0 1503	0 1707	600	90 2	102 4185	16 8	0 243
106	16 04 DelayanC81	4 6	18 8	16 6	0 1787	0 2029	600	107 2	121 7213	18 9	0 216
107	16 05 DelayanC81	5 1	19 6	16 8	0 2000	0 2271	550	110	124 9006	18 8	0 227
108	16 06 DelayanC81	5 6	20 1	18 3	0 2338	0 2655	550	128 6	146 0202	20 2	0 211
109	16 07 DelayanC81	6 2	20 7	18 7	0 2640	0 2998	550	145 2	164 8688	21	0 203
110	16 08 DelayanC81	7 2	24 1	20 3	0 3820	0 4337	300	114 6	130 1237	21 8	0 265
111	16 09 DelayanC81	8 2	25 6	20 1	0 4313	0 4898	300	129 4	146 9285	21 5	0 269
112	17 03 DelayanA83	3 1	14 2	14 2	0 0989	0 1123	550	54 4	61 7690	16 4	0 260
113	17 04 DelayanA83	3 6	15 6	16 3	0 1340	0 1522	500	67	76 0758	18 4	0 243
114	17 05 DelayanA83	4 2	17	16 7	0 1585	0 1800	550	87 2	89 0121	18 7	0 228
115	17 06 DelayanA83	5 2	19	18 9	0 2227	0 2528	450	100 2	113 7731	20 9	0 226
116	17 07 DelayanA83	6 2	20 4	20 6	0 2787	0 3164	450	125 4	142 3867	23 4	0 201
117	17 08 DelayanA83	8 5	22 8	21 8	0 3308	0 3756	500	165 4	187 8051	23 3	0 192
118	18 04 DelayanB83	3 6	16 8	17 1	0 1427	0 1620	450	64 2	72 8965	18	0 262
119	18 05 DelayanB83	4 2	18	18 2	0 1760	0 1998	450	79 2	89 9284	20 1	0 235
120	18 06 DelayanB83	5 2	19 7	20	0 2333	0 2649	450	105	119 2233	22 1	0 213
121	18 07 DelayanB83	6 2	20 9	20 1	0 2675	0 3037	400	107	121 4942	22 3	0 224
122	18 08 DelayanB83	8 5	23 2	22 3	0 3536	0 4014	450	159 1	180 6517	24 7	0 191
123	19 01 KaramatoiA	7	23 8	24 4	0 4109	0 4666	550	226	256 6140	27 6	0 154
124	19 02 KaramatoiA	7 7	23 3	23 3	0 3916	0 4447	550	215 4	244 5781	25 9	0 165
125	19 03 KaramatoiA	8 8	24 1	23 9	0 4520	0 5132	450	203 4	230 9526	27 1	0 174
126	19 04 KaramatoiA	9 7	24 9	23 1	0 4409	0 5006	450	198 4	225 2753	27 5	0 171
127	19 05 KaramatoiA	11 5	24 1	23 9	0 4393	0 4988	450	197 7	224 4804	27 8	0 170
128	20 01 KaramotoiB	7	25 4	24 1	0 5069	0 5755	350	177 4	201 4306	27 1	0 197
129	20 02 KaramotoiB	7.7	26 4	24 9	0 5743	0 6521	350	201	228 2275	27 5	0 194
130	20 03 KaramotoiB	8 8	27 3	25 6	0 5557	0 6310	350	194 5	220 8470	27 4	0 185
131	20 04 KaramotoiB	9.7	28 2	26 4	0 6097	0 6923	350	213 4	242 3072	28 9	0 185
132	KaramotoiB	10 7	29 5	28	0 6411	0 7280	350	224 4	254 7972	30 2	0 177
133	21 01 KaramatoiC	7	21 4	21 9	0 3341	0 3784	680	227 2	257 9765	27 6	0 139
134	21 02 KaramatoiC	7 7	21 6	22 4	0 3378	0 3836	650	219 6	249 3470	25 9	0 151
135	21 03 KaramatoiC	8 8	22 7	23	0 3686	0 4185	650	239 6	272 0562	27 1	0 145
136	21 04 KaramatoiC	9 7	23 5	24	0 4177	0 4742	600	250 6	284 5463	29 9	0 137
137	21 05 KaramatoiC	10 7	24 2	25 1	0 4400	0 4986	600	264	299 7614	31 1	0 131
138	22 01 BahmuraA	8 6	19 6	19 8	0 2213	0 2513	750	166	188 4864	22 5	0 162
139	22 04 BahmuraA	11 5	23 8	25 5	0 4289	0 4870	650	278 8	316 5662	29 4	0 133
140	22 05 BahmuraA	12.5	25 2	26 9	0 4913	0 5579	600	294 8	334 7336	31 1	0 131
141	23 01 BahmuraB	8 6	16 8	17	0 1686	0 1925	900	152 6	173 2712	23 3	0 143
142	23 02 BahmuraB	9.5	18 1	19.1	0 2118	0 2405	900	190 6	216 4187	24 3	0 137
143	23 03 BahmuraB	10 6	19 2	22 6	0 3038	0 3449	900	273 4	310 4348	29	0 115
144	23 04 BahmuraB	11 5	20 2	22 3	0 3042	0 3454	900	273 8	310 8889	29 7	0 112
145	23 05 BahmuraB	12 5	21 4	22 9	0 3419	0 3882	850	290 6	329 8647	30 2	0 114
146	24 01 BahmuraC	8.6	15 2	17 6	0 1466	0 1665	1000	146 6	166 4584	23 3	0 136
147	24 02 BahmuraC	9 5	16 7	19 4	0 1814	0 2060	1000	181 4	205 8724	25 4	0 124
148	24 03 BahmuraC	10 6	17	20 6	0 2088	0 2371	1000	208 8	237 0840	26 6	0 119
149	24 04 BahmuraC	11 5	17 8	21 8	0 2446	0 2778	950	232 4	263 8809	27 4	0 118

150	24 05	BahmuraC	12.5	19.2	25.4	0.3009	0.3417	850	255.8	290 4507	27.8	0 123
151	25 02	BunangA	3.4	8.7	9.9	0.0313	0.0355	1150	36	40 8766	12.9	0 229
152	25 03	BunangA	4.3	9.6	12.3	0.0456	0.0517	1150	52.4	59 4981	16.3	0 181
153	25 04	BunangA	5.4	10.3	13.5	0.0624	0.0708	1100	68.6	77 8926	17.8	0.169
154	26 02	BunangB	3.4	11.9	12.4	0.0678	0.0770	1100	74.6	84 7053	14.7	0 205
155	26 03	BunangB	4.3	13.3	15.6	0.1024	0.1162	1100	112.6	127 8528	19	0 159
156	26 04	BunangB	5.4	14.7	17.5	0.1466	0.1665	1000	146.6	166 4584	19.5	0 162
157	27 01	BunangC	2.4	10.8	10.9	0.0571	0.0648	1100	62.8	71 3069	14.3	0 211
158	27 01	BunangC	3.4	13	13.9	0.0855	0.0970	1100	94	106 7332	17.3	0 174
159	27 01	BunangC	4.3	14.7	17.2	0.1287	0.1462	1100	141.6	160 7811	21.1	0 143
160	27 01	BunangC	5.4	16.3	19	0.1774	0.2014	1000	177.4	201.4306	22.9	0 138
161	28 01	PuntehA	4.5	15.6	16.6	0.1473	0.1673	600	88.4	100 3747	19.3	0 212
162	28 02	PuntehA	5.8	17.6	19.4	0.2183	0.2479	600	131	148 7453	21.7	0 188
163	28 03	PuntehA	6.5	18.4	19.5	0.2397	0.2721	600	143.8	163 2791	22.7	0 180
164	28 04	PuntehA	7.5	18.8	20	0.2547	0.2892	600	152.8	173 4983	23.7	0.172
165	29 01	PuntehB	4.5	14.4	16.9	0.1136	0.1289	1150	130.6	148 2911	21.8	0 135
166	29 02	PuntehB	5.8	15.6	17.9	0.1454	0.1651	1150	167.2	189 8489	21.3	0 138
167	29 03	PuntehB	6.5	16	18.6	0.1728	0.1962	1050	181.4	205.9724	21.3	0.145
168	29 04	PuntehB	7.5	16.3	19.3	0.1878	0.2132	1000	187.8	213 2394	22	0 144
169	30 01	PuntehC	4.5	15.7	16	0.1268	0.1439	650	82.4	93 5619	17.9	0 218
170	30 02	PuntehC	5.8	17.3	18.5	0.1668	0.1894	650	108.4	123 0839	20.7	0 189
171	30 03	PuntehC	6.5	18.2	19.7	0.2160	0.2453	600	129.6	147.1556	22.6	0 181
172	30 04	PuntehC	7.5	18.7	20.6	0.2373	0.2695	600	142.4	161 6895	23.1	0 177
173	31 03	Lumat	3	11.6	13.8	0.0724	0.0822	1350	87.7	110 9344	16.5	0 165
174	31 04	Lumat	4	12.9	15.5	0.1010	0.1147	1350	136.4	154 8767	19	0 143
175	32 02	Langkong	5.4	13.8	14.2	0.1147	0.1302	600	68.8	78 1196	16.4	0 249
176	32 03	Langkong	6.3	15.1	15.7	0.1513	0.1718	550	83.2	94 4703	17.7	0 241
177	32 04	Langkong	7.2	15.6	16.9	0.1525	0.1732	550	83.9	95 2651	19	0 224
178	32 05	Langkong	8.2	16.3	17.8	0.1725	0.1959	550	94.9	107 7552	20.1	0 212
179	32 06	Langkong	9.6	17.3	18.3	0.1862	0.2114	550	102.4	116 2711	20.4	0 209
180	32 07	Langkong	10.5	17.8	18.9	0.2112	0.2398	500	105.6	119 9046	21	0 213
181	33	Delayan	6	17.8	19.6	0.2037	0.2313	725	147.7	167 7074	21.9	0 170
182	34	Patau	6	18.2	20.3	0.2220	0.2520	1233	273.7	310 7754	21.9	0 130
183	35	Malima	6	14.4	16.5	0.1256	0.1426	1033	129.7	147.2692	19.3	0 161
184	36	Malima	6	11.6	12.8	0.0728	0.0826	800	58.2	66 0838	14.7	0 241
185	37	Malima	8	17.1	20.1	0.1872	0.2126	833	174.7	198 3649	21.7	0 151
186	38	Karamatoi	8	18.3	20.9	0.2334	0.2650	733	171.1	194 2772	24	0 154
187	39	Karamatoi	8	14.4	18.9	0.1700	0.1930	833	141.6	160.7811	28.7	0 121
188	40	Karamatoi	8	17	16.4	0.2071	0.2351	467	86.7	109 7990	19.7	0 235
189	41	Karamatoi	8	19.5	23.1	0.2912	0.3306	633	184.3	209 2653	28.3	0 140
190	42	Tanaku	4	10.7	10.2	0.0520	0.0580	1233	64.1	72 7830	11.7	0.243
191	43	Tanaku	4	11.4	13	0.0710	0.0806	1175	83.4	94 6974	16.7	0 175
192	44	Tanaku	4	14.5	16.5	0.1246	0.1415	1100	137.1	155 6716	17.7	0 170
193	45	Punteh	6	17.1	16	0.1613	0.1831	800	129	146 4743	17	0 208
194	46	Punteh	6	14.3	17.1	0.1326	0.1505	967	128.2	145 5660	19	0 169
195	47	Punteh	6	17.9	19.1	0.2259	0.2565	633	143	162 3708	22.3	0 178
196	48	Punteh	4	10.4	13.8	0.0653	0.0741	1200	78.3	88 9065	16	0 180
197	49	Punteh	5	15.2	17.3	0.1461	0.1659	725	105.9	120 2452	19.5	0 190
198	50	Punteh	5	12.7	14.8	0.0930	0.1057	1050	97.7	110 9344	16.5	0 187
199	51	Punteh	6	15.2	16.7	0.1430	0.1624	1380	197.4	224 1398	19.4	0 139

200	52 Punteh	6	15.7	17	0.1507	0.1711	1320	198.9	225 8430	19.2	0.143
201	54 Kinarut	6	12.6	14.9	0.0896	0.1018	1050	94.1	106 8468	14	0.220
202	55 Bongkol	8	18.2	17	0.1933	0.2195	550	106.3	120 6994	18	0.237
203	56 Ulukukut	8	26.2	21.6	0.4411	0.5008	475	208.5	237 8789	25	0.184
204	57 Kinarut	5	15.7	15	0.1275	0.1448	875	111.6	126 7173	17.2	0.197
205	58 Bongkol	7	17.2	19.3	0.1820	0.2067	1025	186.6	211 8768	20	0.156
206	59 Delayan	7	17.4	19.2	0.1918	0.2178	720	138.1	156 8070	20.4	0.183
207	60 Patau	5	15.6	18.4	0.1602	0.1820	1210	193.9	220 1657	21.8	0.132
208	61 Patau	4	11.4	9.7	0.0548	0.0622	1220	66.8	75 8487	11.9	0.241
209	62 Malima	5	11.6	14.6	0.0850	0.0965	1067	90.7	102 9862	19	0.161
210	63 Malima	9	16.9	19.9	0.1866	0.2119	1040	194.1	220 3928	22.2	0.140
211	64 Malima	9	16.6	20.6	0.1876	0.2130	1080	202.6	230 0442	22.2	0.137
212	65 Bahmula	10	21.6	23.6	0.3435	0.3900	740	254.2	288 6339	25.6	0.144
213	66 Bahmula	10	19.3	22.3	0.2799	0.3178	900	251.9	286 0224	27.4	0.122
214	67 Tanaki	4	14.9	16.4	0.1290	0.1464	1067	137.6	156 2393	17.7	0.173
215	69 Kinarut	8	14	16.8	0.1253	0.1423	1125	141	160 0999	19	0.157
216	70 Kinarut	8	11.2	11.6	0.0644	0.0731	950	61.2	69 4902	16.5	0.187
217	71 Lumat	8	19.2	18	0.2186	0.2482	425	92.9	105 4842	19.5	0.249
218	72 Lumat	8	17.5	16.3	0.1748	0.1985	850	148.6	168 7294	17.7	0.194
219	73 Lumat	4	12.5	15.7	0.0959	0.1089	1225	117.5	133 4166	17.2	0.166
220	74 Lumat	4	11.8	14	0.0798	0.0906	975	77.8	88 3388	17.9	0.179
221	76 Sarang	4	14.9	13.3	0.0947	0.1076	950	90	102 1914	14.5	0.224
222	77 Ulukukut	4	17	14.8	0.1497	0.1699	600	89.8	101 9643	16	0.255
223	78 Langkong	4	12.5	12.7	0.0835	0.0948	950	79.3	90 0420	15	0.216
224	80 Ulukukut	4	15	14.7	0.1204	0.1469	575	74.4	84 4782	18	0.232
225	81 Toporoi	8	19.5	18.9	0.2375	0.2696	550	130.6	148 2911	23	0.185
226	82 Kinarut	6	10.3	11.3	0.0493	0.0559	1017	50.1	56 8865	14.1	0.222
227	83 Kinarut	6	14.4	13.3	0.1077	0.1223	922	89.3	112 7512	18.1	0.182
228	85 Mandahan	5.6	17	14.2	0.1356	0.1539	1153	156.3	177 4724	18.4	0.160
229	86 Timbang	4.5	13	13.3	0.0794	0.0902	1161	92.2	104 6894	15.9	0.185
230	87 Langkong	6	16.2	14.8	0.1295	0.1470	594	76.9	87 3169	15.9	0.258
231	88 Langkong	8	20.4	20.8	0.2741	0.3112	792	217.1	246 5084	22.3	0.158
232	89 Mantanau	3.5	14.2	12.2	0.0788	0.0894	1036	81.6	92.6535	12.7	0.245
233	92 Bunang	3.8	11.8	11.3	0.0548	0.0622	1138	62.4	70 8527	12.4	0.239
234	94 Rampayan	12	22.1	19.1	0.3034	0.3446	725	220	249 8012	21.8	0.170
235	95 Hobut	9	16.5	16.3	0.1619	0.1839	725	117.4	133 3030	18.3	0.203
236	96 Hobut	9	15.6	16.5	0.1440	0.1635	1075	154.8	175 7692	17.8	0.171
237	97 Ulukukut	9	28.1	24.9	0.5735	0.6512	475	272.4	309 2993	27.9	0.164
238	98 Kumbatang	10	17.4	20.9	0.2205	0.2504	800	176.4	200 2951	25.2	0.140
239	99 Kumbatang	10	18.6	20.1	0.2233	0.2535	825	184.2	209 1517	23.9	0.146
240	100 Lajong	9	19	17.4	0.2298	0.2608	450	103.4	117 4066	20.5	0.230
241	101 Lajong	9	22.2	22.9	0.3458	0.3926	400	138.3	157 0341	24.7	0.202
242	102 Mompilis	11	19.3	19.5	0.2333	0.2649	1025	239.1	271.4885	20	0.156
243	103 Mompilis	11	18.1	18.7	0.2121	0.2409	725	153.8	174.6337	19.7	0.189
244	104 Timug	10	19.1	21.2	0.2522	0.2864	475	119.8	136 0281	23.5	0.195
245	105 Delayan	8	23	21.9	0.3739	0.4246	575	215	244 1239	24.9	0.167
246	106 Bunang	7	20.3	23	0.2892	0.3284	750	216.9	246 2813	23.2	0.157
247	107 Punteh	9	22	20.6	0.3087	0.3505	550	169.8	192 8011	20.8	0.205
248	108 Malima	9	20.4	23.4	0.2897	0.3289	725	210	238 4466	23.9	0.155
249	109 Malima	8	21	21.9	0.3046	0.3459	625	190.4	216 1916	25.5	0.157

250	110 Patau	10	18.8	20.8	0.2422	0.2750	600	145.3	164.9823	21.8	0.187
251	111 Bahmula	13	16.6	19.5	0.2102	0.2386	767	161.2	183.0362	22.4	0.161
252	112 Karamatoi	11	26.3	25.7	0.5048	0.5732	475	239.8	272.2833	28.7	0.160
253	113 Punteh	8	22.1	19.4	0.3133	0.3557	400	125.3	142.2731	22.7	0.220
254	114 Punteh	9	17.2	18.6	0.1908	0.2167	1100	209.9	238.3331	21.7	0.139
255	115 Punteh	7	18.2	14.3	0.1669	0.1895	525	87.6	99.4663	16.2	0.269
256	116 Tanaku	7	16.5	18.6	0.1692	0.1921	850	143.8	163.2791	19.4	0.177
257	117 Karamatoi	11	32.1	23.2	0.7102	0.8064	275	195.3	221.7553	24.5	0.246
258	101 PSP1	5	12.39	13.09	0.0876	0.0995	840	73.6	83.5699	14.05	0.246
259	102 PSP1	6	13.67	14.29	0.1110	0.1260	840	93.2	105.8249	14.66	0.235
260	103 PSP1	7	14.8	15.28	0.1365	0.1550	840	114.7	130.2373	18.14	0.190
261	104 PSP1	8	16.01	16.33	0.1616	0.1835	810	130.9	148.6317	19.18	0.183
262	105 PSP1	9	17.11	17.26	0.1878	0.2133	780	146.5	166.3449	20.91	0.171
263	106 PSP1	10	18.03	18.11	0.2056	0.2334	720	148	168.0481	22.17	0.168
264	107 PSP1	11	18.88	18.8	0.2269	0.2577	720	163.4	185.5342	22.95	0.162
265	108 PSP1	12	19.09	18.85	0.2334	0.2650	710	165.7	188.1457	23.4	0.160
266	109 PSP1	13	19.83	19.47	0.2566	0.2913	700	179.6	203.9286	24.86	0.152
267	11 PSP1	14	20.23	19.36	0.2700	0.3066	690	186.3	211.5362	26.22	0.145
268	111 PSP1	15	20.9	20.26	0.2902	0.3295	650	188.6	214.1478	26.83	0.146
269	112 PSP1	16	21.65	20.82	0.3125	0.3548	610	190.6	216.4187	26.81	0.151
270	113 PSP1	17	21.98	21.03	0.3245	0.3684	580	188.2	213.6936	27	0.154
271	114 PSP1	18	22.6	21.45	0.3459	0.3927	560	193.7	219.8386	29.08	0.145
272	115 PSP1	19	22.99	21.66	0.3627	0.4118	560	203.1	230.6119	29.25	0.144
273	201 PSP2	5	13.59	14.28	0.1051	0.1193	850	89.3	101.3966	18.89	0.182
274	202 PSP2	6	14.46	15.08	0.1223	0.1388	840	102.7	116.6117	19.31	0.179
275	203 PSP2	7	15.83	16.27	0.1529	0.1736	830	126.9	144.0899	21.34	0.163
276	204 PSP2	8	16.1	16.49	0.1593	0.1809	830	132.2	150.1078	21.88	0.159
277	205 PSP2	9	16.95	17.16	0.1821	0.2068	810	147.5	167.4804	23.84	0.147
278	206 PSP2	10	17.57	17.71	0.1954	0.2219	760	148.5	168.6158	24.56	0.148
279	207 PSP2	11	18.46	18.37	0.2219	0.2519	750	166.4	188.9405	24.95	0.146
280	208 PSP2	12	19.04	18.81	0.2384	0.2707	740	176.4	200.2951	25.59	0.144
281	21 PSP2	14	20.76	20.04	0.2930	0.3327	670	196.3	222.8908	27.05	0.143
282	211 PSP2	15	21.23	20.34	0.3106	0.3527	650	201.9	229.2494	27.84	0.141
283	212 PSP2	16	22.04	20.95	0.3336	0.3788	610	203.5	231.0661	28.07	0.144
284	213 PSP2	17	23.93	22.29	0.3952	0.4488	460	181.8	206.4266	28.53	0.163
285	214 PSP2	18	24.3	22.49	0.4112	0.4669	420	172.7	196.0939	28.21	0.173
286	215 PSP2	19	25.7	23.38	0.4638	0.5266	370	171.6	194.8449	27.87	0.187
287	216 PSP2	20	26.49	23.82	0.4986	0.5661	350	174.5	198.1378	28.16	0.190
288	217 PSP2	21	27.41	24.37	0.5359	0.6085	340	182.2	206.8808	28.58	0.190
289	301 PSP3	4	14.86	15.6	0.1222	0.1388	1170	143	162.3708	18.89	0.155
290	302 PSP3	5	15.07	15.77	0.1271	0.1443	1160	147.4	167.3668	19.35	0.152
291	303 PSP3	8	17.73	17.98	0.1914	0.2173	1090	208.6	236.8570	23.24	0.130
292	304 PSP3	10	18.55	18.62	0.2141	0.2431	1050	224.8	255.2514	23.95	0.129
293	305 PSP3	11	19.38	19.24	0.2388	0.2711	980	234	265.6976	24.66	0.130
294	306 PSP3	12	20.13	18.76	0.2630	0.2986	940	247.2	280.6857	25.8	0.126
295	307 PSP3	13	21.21	20.51	0.2993	0.3399	910	272.4	309.2893	26.66	0.124
296	308 PSP3	14	21.74	20.86	0.3183	0.3614	890	283.3	321.6758	27.06	0.124
297	309 PSP3	15	22.15	21.11	0.3340	0.3792	880	293.9	333.7117	27.5	0.123
298	31 PSP3	16	22.76	21.49	0.3565	0.4048	830	295.9	335.9826	27.86	0.125
299	311 PSP3	17	23.5	21.96	0.3851	0.4373	800	308.1	349.8352	28.32	0.125



300	3 12 PSP3	18	24.36	22.48	0.4193	0.4761	760	318.7	361.8711	28.81	0.126
301	3 13 PSP3	19	25.78	23.33	0.4770	0.5416	660	314.8	357.4428	29.41	0.132
302	3 14 PSP3	20	26.23	23.56	0.4982	0.5656	650	323.8	367.6619	29.64	0.132
303	4 02 PSP4	5	13.29	13.92	0.1082	0.1229	850	92	104.4623	15.03	0.228
304	4.03 PSP4	6	14.6	15.1	0.1323	0.1502	830	109.8	124.6735	19.74	0.176
305	4 04 PSP4	7	15.57	15.97	0.1505	0.1709	800	120.4	136.7094	20.72	0.171
306	4 05 PSP4	8	18.69	18.44	0.2341	0.2658	340	78.6	90.3826	20.74	0.261
307	4.07 PSP4	10	18.43	18.29	0.2246	0.2550	650	146	165.7772	22.34	0.176
308	4 08 PSP4	11	19.69	19.28	0.2592	0.2943	610	158.1	179.5162	23.54	0.172
309	4 09 PSP4	12	21.51	20.56	0.3194	0.3626	470	150.1	170.4325	24.63	0.187
310	4.1 PSP4	13	22.22	21.04	0.3430	0.3885	430	147.5	167.4804	25.44	0.190
311	4 11 PSP4	14	23.5	21.91	0.3878	0.4404	370	143.5	162.9385	25.25	0.206
312	4 12 PSP4	15	25.61	23.31	0.4631	0.5258	280	134.3	152.4923	25.75	0.228
313	4 14 PSP4	17	27.91	24.71	0.5530	0.6280	230	127.2	144.4305	27.45	0.240
314	5 01 PSP5	3	8.16	8.72	0.0303	0.0344	1030	31.2	35.4264	12.81	0.243
315	5 02 PSP5	4	10.48	11.22	0.0552	0.0627	1030	56.9	64.6077	15.13	0.206
316	5 03 PSP5	5	12.49	13.23	0.0854	0.0970	1030	88	99.8205	17.43	0.179
317	5 04 PSP5	6	13.86	14.56	0.1081	0.1227	990	107	121.4942	18.8	0.169
318	5 05 PSP5	7	14.81	15.4	0.1287	0.1461	990	127.4	144.6576	20.2	0.157
319	5 06 PSP5	8	15.1	15.66	0.1348	0.1532	980	132.2	150.1078	20.69	0.154
320	5 07 PSP5	9	16.19	16.57	0.1609	0.1827	950	152.9	173.6118	22.15	0.146
321	5 08 PSP5	10	17.03	17.25	0.1762	0.2001	950	167.4	190.0760	22.78	0.142
322	5 09 PSP5	11	17.84	17.9	0.2040	0.2316	880	179.5	203.8151	24.39	0.138
323	5 1 PSP5	12	19.53	19.32	0.2445	0.2776	760	185.8	210.9685	24.77	0.146
324	5 11 PSP5	13	20	19.7	0.2568	0.2915	740	190	215.7374	25.06	0.147
325	5.12 PSP5	14	20.4	19.98	0.2694	0.3059	720	194	220.2792	25.35	0.147
326	5 13 PSP5	15	20.96	20.38	0.2877	0.3267	660	189.8	215.6239	25.72	0.151
327	5 14 PSP5	16	21.52	20.73	0.3081	0.3499	640	197.2	223.9127	26.21	0.151
328	5.15 PSP5	17	22.03	21.02	0.3298	0.3745	570	188	213.4665	26.74	0.157
329	5 16 PSP5	18	22.26	21.13	0.3411	0.3873	530	180.8	205.2912	27.25	0.159
330	5 17 PSP5	19	22.71	21.4	0.3589	0.4075	530	190.2	215.9645	27.64	0.157
331	6.02 PSP6	4	10.73	11.49	0.0572	0.0649	850	48.6	55.1834	14.93	0.230
332	6 03 PSP6	5	12.91	13.69	0.0896	0.1018	850	76.2	86.5221	17.04	0.201
333	6 04 PSP6	6	14.37	15.05	0.1175	0.1334	850	99.9	113.4325	18.68	0.184
334	6 05 PSP6	7	15.28	15.85	0.1369	0.1555	850	116.4	132.1675	19.78	0.173
335	6 06 PSP6	8	15.86	16.36	0.1493	0.1695	830	123.9	140.6835	20.21	0.172
336	6 07 PSP6	9	16.6	16.97	0.1682	0.1810	830	139.6	158.5102	21.32	0.163
337	6 08 PSP6	10	17.44	17.68	0.1879	0.2133	800	150.3	170.6596	22.2	0.159
338	6 09 PSP6	11	18.2	18.25	0.2096	0.2380	800	167.7	190.4166	23.49	0.151
339	6.1 PSP6	12	18.99	18.86	0.2305	0.2618	760	175.2	198.9326	24.02	0.151
340	6 11 PSP6	13	19.57	19.32	0.2476	0.2811	740	183.2	208.0163	24.47	0.150
341	6 12 PSP6	14	20.15	19.72	0.2657	0.3017	680	180.7	205.1776	25.34	0.151
342	6 13 PSP6	15	20.94	20.35	0.2873	0.3263	640	183.9	208.8111	25.56	0.155
343	6.14 PSP6	16	21.87	21.01	0.3170	0.3600	610	193.4	219.5980	25.9	0.156
344	6 15 PSP6	17	22.78	21.64	0.3466	0.3935	580	201	228.2275	26.37	0.157
345	6.16 PSP6	18	22.98	21.75	0.3554	0.4036	570	202.6	230.0442	27.08	0.155
346	6 17 PSP6	19	23.38	21.99	0.3704	0.4205	560	207.4	235.4944	27.2	0.155
347	7.03 PSP7	4	12.72	13.53	0.0846	0.0961	560	47.4	53.8208	16.52	0.256
348	7 04 PSP7	5	15.02	15.71	0.1267	0.1439	550	69.7	79.1416	18.74	0.228
349	7 05 PSP7	6	16.36	16.88	0.1558	0.1769	550	85.7	97.3089	19.85	0.215

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354	7 1 PSP7	11	21 14	20 45	0 2960	0 3361	520	153 9	174 7473	25 36	0 173
355	7 11 PSP7	12	21 75	20 86	0 3176	0 3606	500	158 8	180 3110	26 27	0 170
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358	7 14 PSP7	15	24 67	22 83	0 4183	0 4750	360	150 6	171 0003	27 49	0 192
359	7 15 PSP7	17	26 23	23 74	0 4828	0 5482	320	154 5	175 4286	27 87	0 201
360	7 16 PSP7	18	26 71	24	0 5031	0 5713	320	161	182 8081	28 01	0 200
361	8 03 PSP8	4	13 59	14 36	0 1004	0 1140	500	50 2	57 0001	17 11	0 261
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374	9 04 PSP9	4	12 42	13 25	0 0795	0 0903	660	52 5	59 6117	15 98	0 244
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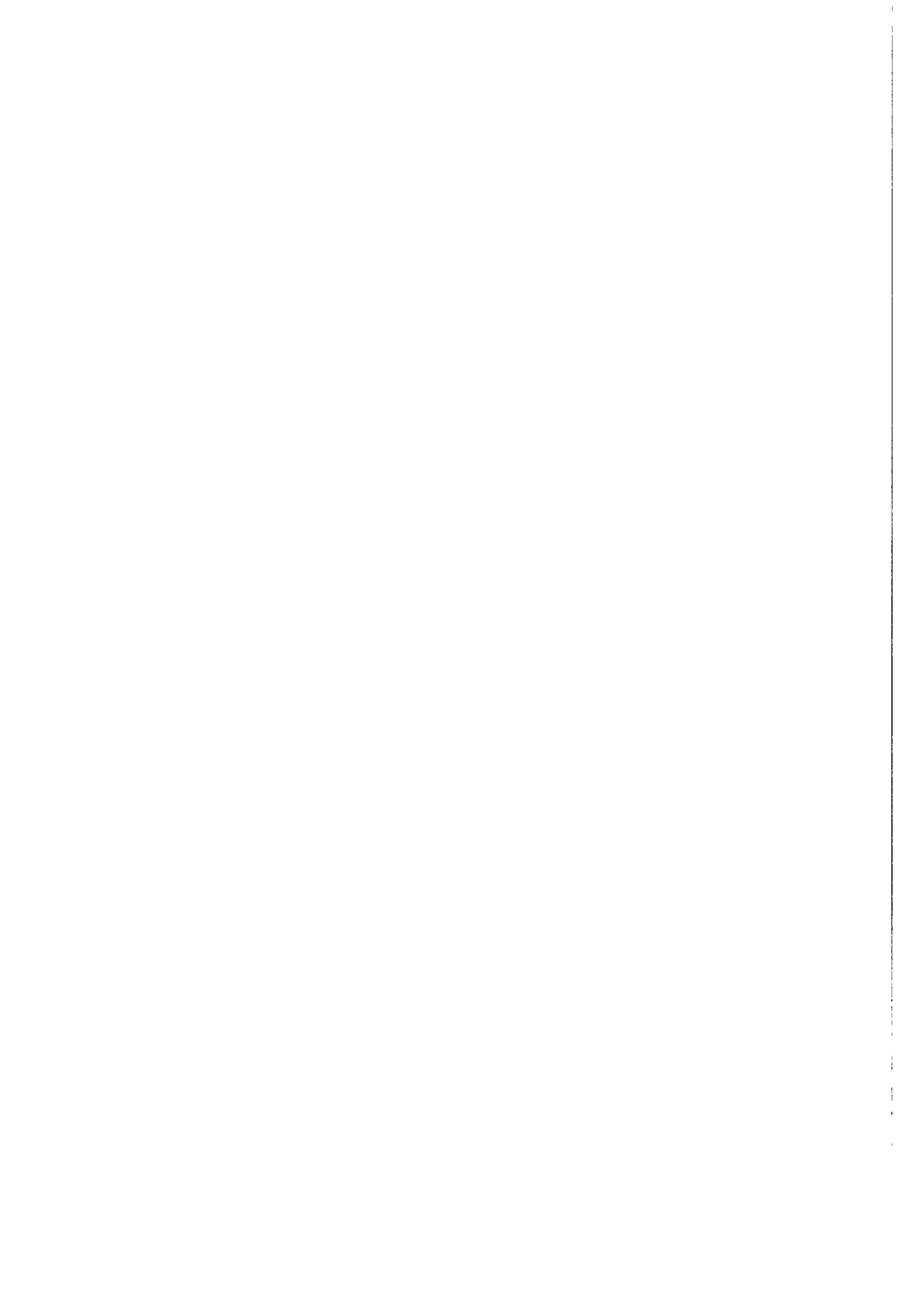
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402	11.01 PSP11	4	11.9	12.71	0.0722	0.0819	1060	76.5	86.8627	12.98	0.237
403	11.02 PSP11	6	13.94	14.66	0.1085	0.1232	1060	115	130.5779	15.93	0.193
404	11.03 PSP11	7	14.47	15.13	0.1197	0.1359	1060	126.9	144.0899	17	0.181
405	11.04 PSP11	8	15.96	16.38	0.1552	0.1763	1050	163	185.0800	18.45	0.167
406	11.05 PSP11	9	16.92	17.19	0.1785	0.2027	1020	182.1	206.7673	19.58	0.160
407	11.06 PSP11	10	17.62	17.76	0.1964	0.2230	990	194.4	220.7334	21.31	0.149
408	11.07 PSP11	11	18.26	18.25	0.2140	0.2430	950	203.3	230.8390	24.42	0.133
409	11.08 PSP11	12	19.93	19.58	0.2582	0.2931	760	196.2	222.7773	24.56	0.148
410	11.09 PSP11	13	20.74	20.14	0.2851	0.3238	700	199.6	226.6378	25.25	0.150
411	12.03 PSP12	5	13.84	14.62	0.1040	0.1181	990	103	116.9524	14.79	0.215
412	12.04 PSP12	6	14.34	15.07	0.1140	0.1204	980	111.7	126.8309	15.68	0.204
413	12.05 PSP12	7	15.61	16.19	0.1416	0.1608	980	138.8	157.6018	17.52	0.182
414	12.06 PSP12	8	16.48	16.92	0.1624	0.1844	970	157.5	178.8350	18.5	0.174
415	12.07 PSP12	9	17.45	17.69	0.1882	0.2137	940	176.9	200.8629	20.75	0.157
416	12.08 PSP12	10	17.86	17.99	0.2004	0.2276	840	188.4	213.9207	22.25	0.147
417	12.09 PSP12	11	18.28	18.31	0.2125	0.2413	930	197.6	224.3669	22.68	0.145
418	12.11 PSP12	12	18.81	18.72	0.2272	0.2580	860	195.4	221.8689	23.63	0.144
419	12.11 PSP12	14	19.84	19.52	0.2558	0.2905	740	189.3	214.9426	24.25	0.152
420	13.01 PSP13	5	13.52	14.29	0.0997	0.1132	960	95.7	108.6635	15.68	0.206
421	13.02 PSP13	7	15.56	16.14	0.1407	0.1598	950	133.7	151.8110	18.25	0.178
422	13.03 PSP13	8	16.16	16.65	0.1546	0.1756	950	146.9	166.7991	19.36	0.168
423	13.04 PSP13	9	17.22	17.51	0.1823	0.2069	930	169.5	182.4605	20.86	0.157
424	13.05 PSP13	10	18.03	18.18	0.2021	0.2295	900	181.9	206.5402	21.89	0.152
425	13.06 PSP13	11	18.45	18.48	0.2150	0.2441	900	193.5	219.7115	23.44	0.142
426	13.07 PSP13	12	18.42	18.35	0.2209	0.2509	850	187.8	213.2394	25.16	0.136
427	13.08 PSP13	13	19.88	19.58	0.2550	0.2895	760	193.8	220.0521	25.42	0.143
428	13.09 PSP13	14	21.29	20.61	0.2986	0.3391	590	176.2	200.0681	25.7	0.160
429	13.11 PSP13	15	21.93	21.03	0.3211	0.3645	570	183	207.7892	26.08	0.161
430	14.03 PSP14	5	15.79	16.43	0.1415	0.1607	710	100.5	114.1137	15.22	0.247
431	14.04 PSP14	6	17.42	17.77	0.1814	0.2060	710	128.8	146.2472	18.16	0.207
432	14.05 PSP14	7	18.28	18.43	0.2055	0.2333	710	145.9	165.6636	19.66	0.191
433	14.06 PSP14	8	19.16	19.07	0.2323	0.2637	710	164.9	187.2374	20.59	0.182
434	14.07 PSP14	9	20.23	19.82	0.2671	0.3032	680	181.6	206.1995	21.39	0.179
435	14.08 PSP14	10	21.13	20.4	0.3000	0.3406	660	198	224.8211	21.97	0.177
436	14.09 PSP14	11	22.3	21.15	0.3436	0.3902	610	209.6	237.0924	23.32	0.174
437	14.11 PSP14	12	23.18	21.75	0.3729	0.4234	560	208.8	237.0840	24.6	0.172
438	14.11 PSP14	13	24.35	22.51	0.4161	0.4724	510	212.2	240.9446	25.25	0.175
439	14.12 PSP14	14	25.35	23.09	0.4575	0.5195	480	219.6	248.3470	26.25	0.174
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442	15.04 PSP15	5	16.79	17.29	0.1640	0.1862	770	126.3	143.4086	18.42	0.196
443	15.05 PSP15	6	17.63	17.96	0.1853	0.2104	770	142.7	162.0301	20.55	0.175
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446	15.08 PSP15	9	20.29	19.94	0.2643	0.3001	740	195.6	222.0960	23.6	0.156
447	15.09 PSP15	10	21.13	20.55	0.2900	0.3293	680	197.2	223.9127	24.6	0.156
448	15.11 PSP15	11	21.79	21.02	0.3106	0.3527	620	192.6	218.6896	25.48	0.158
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511	22 07 PSP22	8	17 96	18 19	0 1962	0 2227	940	184 4	209 3788	21 58	0 151
512	22 08 PSP22	9	18 48	18 6	0 2102	0 2387	920	193 4	219 5980	22 45	0 147
513	22 09 PSP22	10	18 95	18 98	0 2228	0 2530	900	200 5	227 6597	23 24	0 143
514	22 11 PSP22	11	19.58	19 47	0 2393	0 2717	860	205 8	233 6777	24 17	0 141
515	22 11 PSP22	12	20 5	20 15	0 2664	0 3025	810	215 8	245 0323	24 61	0 143
516	23 02 PSP23	3	11 8	12 54	0 0742	0 0842	1120	83.1	94 3567	12 33	0 242
517	23 03 PSP23	4	12 85	13 55	0 0930	0 1056	1120	104 2	118 3149	14 69	0 203
518	23 04 PSP23	5	14 69	15 2	0 1312	0 1480	1080	141.7	160 8847	17 19	0 177
519	23 05 PSP23	6	15 83	16 16	0 1582	0 1797	1020	161 4	183 2632	19 59	0 160
520	23 06 PSP23	7	17.21	17 28	0 1944	0 2208	970	188.6	214 1478	21.79	0 147
521	23 07 PSP23	8	18 27	18 1	0 2232	0 2535	930	207 6	235 7215	23 25	0 141
522	23 08 PSP23	9	18.62	18 34	0 2355	0.2674	930	219	248 6657	24 35	0 135
523	23 09 PSP23	10	19 79	19 2	0 2717	0 3085	870	236 4	268 4227	25 45	0 133
524	23 11 PSP23	11	20 26	19 51	0 2881	0 3271	830	239.1	271 4885	26 4	0 131
525	23 11 PSP23	12	21 77	20 62	0 3355	0 3809	750	251 6	285 6817	26 65	0 137
526	23 12 PSP23	13	22 28	20 91	0 3569	0 4052	740	264 1	299 8750	26 7	0 138
527	24 03 PSP24	5	14 03	14 69	0 1128	0 1280	830	93 6	106 2791	14 68	0 236
528	24 04 PSP24	6	14 96	15 53	0 1322	0.1501	830	109 7	124 5600	16.11	0 215
529	24 05 PSP24	7	16 61	16 93	0 1705	0 1936	810	138 1	156 8070	19 04	0 185
530	24 07 PSP24	10	18 67	18.59	0 2239	0 2542	750	167 9	190 6437	22 79	0 160
531	24 08 PSP24	11	19 19	18 99	0 2395	0 2719	730	174 8	198 4784	22 9	0 162
532	24 09 PSP24	12	19 8	19 43	0 2580	0 2929	700	180 6	205 0641	23.3	0.162
533	24 11 PSP24	13	20 27	19.74	0 2742	0 3113	690	189.2	214 8280	23 3	0 163
534	25 02 PSP25	3	11.42	12 19	0 0672	0 0763	1020	68 5	77 7790	11 6	0 270
535	25 03 PSP25	4	12 64	13 4	0 0869	0 0987	1010	87 8	99 6934	13.78	0 228
536	25 04 PSP25	5	14 42	15 04	0 1211	0 1375	1000	121 1	137 5042	16 4	0 193
537	25 05 PSP25	6	15 3	15 8	0 1414	0 1606	1000	141 4	160 5540	19 13	0 165
538	25 06 PSP25	7	16 46	16 76	0 1696	0 1926	980	166 2	188 7135	21.7	0 147
539	25 07 PSP25	8	17 14	17 3	0 1880	0 2135	970	182 4	207 1079	21.72	0 148
540	25 08 PSP25	9	17 81	17 9	0 2022	0 2296	910	184	208 9246	23 73	0.140
541	25 09 PSP25	10	18 53	18 43	0 2233	0 2535	890	198 7	225 6159	24 35	0 138
542	25 11 PSP25	11	18 87	18 69	0.2333	0 2649	880	205 3	233 1099	25 3	0 133
543	25 11 PSP25	12	19 63	19 26	0 2559	0 2805	820	209.8	238 2195	25 88	0 135
544	25 12 PSP25	13	20 1	19 6	0 2707	0 3074	810	218 3	249 0064	25 86	0 136
545	26 02 PSP26	3	12.78	13 49	0 0910	0 1033	720	65 5	74 3726	12 84	0 290
546	26 03 PSP26	4	13 91	14 56	0.1118	0 1270	710	79 4	90 1555	14 43	0 260
547	26 04 PSP26	5	15 66	16 08	0 1507	0.1711	700	105 5	119 7910	17 4	0 217
548	26 05 PSP26	6	16.89	17 1	0 1804	0 2049	690	124 5	141 3648	19 5	0 195
549	26 06 PSP26	7	18.47	18 36	0 2221	0 2522	660	146 6	166 4584	20 95	0 186

550	26 07 PSP26	8	19 65	19.23	0 2575	0 2924	650	167.4	190 0760	22 4	0 175
551	26 08 PSP26	9	20	19 46	0 2703	0 3069	650	175.7	199 5003	25 06	0 157
552	26 09 PSP26	10	20 47	19 8	0 2849	0 3235	650	185 2	210 2872	24 53	0 160
553	26 1 PSP26	11	21 47	20.53	0 3158	0 3586	620	195 8	222 3231	25 94	0 155
554	26 11 PSP26	12	22 18	21	0 3405	0 3866	600	204 3	231 9745	26 5	0 154
555	26 12 PSP26	13	22 5	21 2	0 3525	0 4002	600	211 5	240 1498	26 44	0 154
556	27 02 PSP27	5	14 84	15 44	0 1286	0 1460	700	90	102 1914	16 08	0 235
557	27 03 PSP27	6	16 84	17 14	0 1756	0 1994	680	119 4	135 5739	18.5	0 207
558	27 04 PSP27	7	18 02	18 05	0 2090	0 2373	680	142 1	161 3489	21 19	0 181
559	27 05 PSP27	8	19 29	18 99	0 2466	0 2800	670	165 2	187 5780	22 86	0 169
560	27 06 PSP27	9	20 28	18 69	0 2786	0 3164	660	183 9	208 8111	23 91	0 163
561	27 07 PSP27	10	20 66	19 92	0 2936	0 3334	660	193 8	220 0521	24 63	0 158
562	27 08 PSP27	11	21 5	20 51	0 3217	0 3653	630	202 7	230 1577	26 21	0 152
563	27 09 PSP27	12	22 27	21 02	0 3488	0 3961	590	205 8	233 6777	26 29	0 157
564	27 1 PSP27	13	23 48	21 81	0 3934	0 4467	560	220 3	250 1418	26 5	0 159
565	28 06 PSP28	8	18 6	18 71	0 2128	0 2416	540	114 9	130 4644	16 75	0 257
566	28 07 PSP28	9	19 79	19 59	0 2481	0 2818	540	134	152 1516	17 92	0 240
567	28 08 PSP28	10	20 87	20 33	0 2841	0 3226	540	153 4	174 1796	18 97	0 227
568	28 09 PSP28	11	21 7	20 89	0 3119	0 3541	540	168 4	191 2115	20 69	0 208
569	28 1 PSP28	12	22 03	21 12	0 3229	0 3666	520	167 9	190 6437	21 59	0 203
570	28 11 PSP28	13	22 83	21 64	0 3518	0 3995	500	175 9	199 7274	21 88	0 204
571	28 12 PSP28	14	24 01	22 35	0 3978	0 4516	490	194 9	221 3012	23 57	0 192
572	29 04 PSP29	5	14 74	15 52	0 1180	0 1340	650	76 7	87 0898	14 48	0 271
573	29 06 PSP29	7	17 76	18 1	0 1872	0 2126	650	121.7	138 1855	19 95	0 197
574	29 07 PSP29	8	18 58	18 74	0 2095	0 2379	650	136 2	154 6497	20 69	0 180
575	29 08 PSP29	9	19 21	19 2	0 2281	0 2590	640	146	165 7772	21 38	0 185
576	29 09 PSP29	10	19 97	19 75	0 2517	0 2858	640	161 1	182 8226	22 35	0 177
577	29 1 PSP29	11	20 18	19 89	0 2583	0 2932	630	162 7	184 7393	22 83	0 175
578	29 11 PSP29	12	21 25	20 68	0 2902	0 3295	560	162 5	184 5123	24 17	0 175
579	30 05 PSP30	6	16 28	16 84	0 1525	0 1732	590	90	102 1914	16 33	0 252
580	30 06 PSP30	7	17 74	18 05	0 1880	0 2146	590	111 5	126 6038	18 92	0 218
581	30 07 PSP30	8	18 73	18 81	0 2161	0 2454	590	127 5	144 7712	19 17	0 215
582	30 08 PSP30	9	19 29	19 23	0 2327	0 2642	590	137 3	155 8987	20 84	0 198
583	30 09 PSP30	10	19 99	19.72	0 2546	0 2891	590	150 2	170 5461	22 44	0 183
584	30 1 PSP30	11	20 4	20 03	0 2661	0 3022	570	151 7	172 2493	22 88	0 183
585	30 11 PSP30	12	21 17	20 58	0 2906	0 3299	530	154	174 8608	23 86	0 182
586	31 01 PSP31	4	12 31	13 09	0 0804	0 0912	840	67 5	76 6436	11 86	0 291
587	31 02 PSP31	6	15	15 62	0 1303	0 1479	800	104 2	118 3149	14.16	0 250
588	31 03 PSP31	7	15 96	16 45	0 1518	0 1724	780	118 4	134 4385	15 88	0 225
589	31 04 PSP31	8	17 44	17 64	0 1905	0 2163	770	146 7	166 5720	18 47	0 195
590	31 05 PSP31	9	18 36	18 33	0 2170	0 2464	760	164 9	187 2374	18 13	0 190
591	31 06 PSP31	10	19 01	18 81	0 2364	0 2684	750	177 3	201 3171	20	0 183
592	31 07 PSP31	11	19 52	19.18	0 2521	0 2863	710	179	203 2473	20 29	0 185
593	31 08 PSP31	12	20 37	19 8	0 2778	0 3154	670	186 1	211 3091	21	0 184
594	31 09 PSP31	13	21 11	20 3	0 3032	0 3443	650	197 1	223 7092	21 15	0 185
595	32 04 PSP32	5	16 31	16 85	0 1546	0 1756	690	106 7	121 1536	16	0 238
596	32 05 PSP32	6	17 61	17 92	0 1869	0 2122	680	127 1	144 3170	17 79	0 216
597	32 06 PSP32	7	18 3	18 43	0 2068	0 2348	680	140 6	159 6457	20 17	0 190
598	32 07 PSP32	8	19 59	19 43	0 2427	0 2756	660	160 2	181 9007	21 75	0 179
599	32 08 PSP32	9	19 97	19 7	0 2547	0 2892	660	168 1	190 8708	22 33	0 174



600	32.09 PSP32	10	20.92	20.41	0.2831	0.3214	620	175.5	199.2732	22.71	0.177
601	32.1 PSP32	11	21.85	21.03	0.3152	0.3579	600	189.1	214.7155	23.8	0.172
602	33.03 PSP33	3	12.66	13.45	0.0854	0.0970	1010	86.3	97.9902	12.03	0.262
603	33.04 PSP33	4	14.65	15.26	0.1252	0.1422	1010	126.5	143.6357	16.48	0.191
604	33.05 PSP33	5	15.79	16.25	0.1511	0.1716	980	148.1	168.1616	17.85	0.178
605	33.06 PSP33	6	16.91	17.16	0.1789	0.2031	960	171.7	194.9585	19.73	0.164
606	33.07 PSP33	7	18.1	18.12	0.2098	0.2382	910	180.9	216.7593	22.72	0.146
607	33.08 PSP33	8	18.62	18.51	0.2249	0.2554	890	200.2	227.3191	22.92	0.146
608	33.09 PSP33	9	19.6	19.31	0.2504	0.2843	840	210.3	238.7872	23	0.150
609	33.1 PSP33	10	20.96	20.22	0.2962	0.3363	780	231	262.2913	24.16	0.148
610	34.04 PSP34	5	16.66	17.15	0.1627	0.1847	640	104.1	118.2014	16.5	0.240
611	34.05 PSP34	6	17.76	18.04	0.1906	0.2164	640	122	138.5261	19	0.208
612	34.06 PSP34	7	18.64	18.72	0.2147	0.2438	640	137.4	156.0122	20.04	0.197
613	34.07 PSP34	8	19.56	19.4	0.2425	0.2753	640	155.2	176.2234	21.71	0.182
614	34.08 PSP34	9	20.18	19.85	0.2606	0.2960	620	161.6	183.4903	22.89	0.175
615	34.09 PSP34	10	20.72	20.23	0.2779	0.3155	620	172.3	195.6398	23.42	0.171
616	35.04 PSP35	4	13.01	13.73	0.0948	0.1077	1060	100.5	114.1137	14.68	0.209
617	35.05 PSP35	5	14.24	14.85	0.1189	0.1351	1040	123.7	140.4564	17.6	0.176
618	35.06 PSP35	6	15.71	16.17	0.1491	0.1693	980	146.1	165.8907	18.73	0.171
619	35.07 PSP35	7	16.73	17	0.1752	0.1989	970	169.9	192.9147	20.83	0.154
620	35.08 PSP35	8	17.29	17.49	0.1875	0.2129	920	172.5	195.8669	22.11	0.149
621	35.09 PSP35	9	18.58	18.57	0.2186	0.2482	840	183.6	208.4705	23.49	0.147
622	35.1 PSP35	10	19.61	19.33	0.2500	0.2839	820	205	232.7693	24.31	0.144
623	36.03 PSP36	4	11.41	12.2	0.0669	0.0760	1030	68.9	78.2332	11.58	0.269
624	36.04 PSP36	5	12.78	13.54	0.0883	0.1003	1020	80.1	102.3049	13.33	0.235
625	36.05 PSP36	6	15.17	15.74	0.1353	0.1536	990	133.9	152.0381	16.2	0.196
626	36.06 PSP36	7	16.05	16.52	0.1544	0.1753	960	148.2	168.2752	17.47	0.185
627	36.07 PSP36	8	16.8	17.13	0.1732	0.1966	950	164.5	186.7832	18.68	0.174
628	36.08 PSP36	9	17.48	17.68	0.1910	0.2168	940	179.5	203.8151	19.88	0.164
629	36.09 PSP36	10	17.79	17.92	0.1997	0.2267	920	183.7	208.5840	21.41	0.154
630	36.1 PSP36	11	19.3	19.15	0.2378	0.2700	780	185.5	210.6278	21.86	0.164
631	37.03 PSP37	3	14.69	15.39	0.1215	0.1379	1080	131.2	148.9724	17.64	0.173
632	37.04 PSP37	4	15.16	15.81	0.1307	0.1484	1060	138.5	157.2612	17.88	0.172
633	37.05 PSP37	5	16.83	17.27	0.1675	0.1802	1000	167.5	190.1896	20.7	0.153
634	37.07 PSP37	7	18.07	18.22	0.2033	0.2308	1000	203.3	230.8390	22.6	0.140
635	37.08 PSP37	8	19.01	18.98	0.2265	0.2572	980	222	252.0721	23	0.139
636	37.09 PSP37	9	19.88	19.6	0.2541	0.2885	960	243.9	276.8387	23.15	0.139
637	37.1 PSP37	10	20.84	20.26	0.2859	0.3246	970	277.3	314.8631	23.55	0.136
638	38.03 PSP38	3	12.76	13.54	0.0869	0.0986	990	86	97.6496	12.56	0.253
639	38.04 PSP38	4	13.48	14.24	0.0994	0.1129	990	98.4	111.7293	13.5	0.235
640	38.05 PSP38	5	14.67	15.34	0.1222	0.1388	980	118.8	136.0281	15.81	0.202
641	38.06 PSP38	6	15.29	15.89	0.1360	0.1544	980	133.3	151.3568	16.44	0.194
642	38.07 PSP38	7	16.17	16.66	0.1548	0.1758	940	145.5	165.2094	18.31	0.178
643	38.08 PSP38	8	16.86	17.25	0.1710	0.1942	900	153.9	174.7473	19.88	0.168
644	38.09 PSP38	9	17.58	17.79	0.1925	0.2186	880	169.4	192.3469	21.25	0.159
645	38.1 PSP38	10	17.81	17.98	0.1975	0.2242	870	171.8	195.0720	22.38	0.151
646	39.01 PSP39	6	13.93	14.66	0.1077	0.1223	1050	113.1	128.4205	14.38	0.215
647	39.02 PSP39	7	14.53	15.2	0.1198	0.1360	1040	124.6	141.4783	15.38	0.202
648	39.03 PSP39	8	15.06	15.67	0.1313	0.1490	1040	136.5	154.9903	17.3	0.179
649	39.04 PSP39	9	16.03	16.5	0.1534	0.1742	1030	158	179.4027	17.8	0.175



650	39 05 PSP39	10	16 54	16 96	0 1641	0 1864	990	162 5	184 5123	18 63	0 171
651	39 06 PSP39	11	16 92	17 27	0 1743	0 1980	990	172 6	195 9804	19 33	0 164
652	39 07 PSP39	12	17 28	17 55	0 1837	0 2086	980	180	204 3828	20 06	0 159
653	39 08 PSP39	13	17 76	17 96	0 1948	0 2212	900	175 3	199 0461	21 19	0 157
654	39 09 PSP39	14	18 44	18 49	0 2135	0 2424	860	183 6	208 4705	21 5	0 159
655	39 1 PSP39	15	19 05	18 95	0 2321	0 2635	820	190 3	216 0780	21 83	0 160
656	40 03 PSP40	5	13 83	14 47	0 1106	0 1256	770	85 2	96 7412	14 79	0 244
657	40 04 PSP40	6	15 28	15 71	0 1441	0 1636	760	109 5	124 3329	17 13	0 212
658	40 05 PSP40	7	16 84	17 08	0 1786	0 2028	700	125	141 9325	18 72	0 202
659	40 06 PSP40	8	18 18	18 13	0 2148	0 2439	670	143 9	163 3927	20 5	0 188
660	40 07 PSP40	9	19 4	19 12	0 2463	0 2797	630	155 2	176 2234	21 78	0 183
661	40 08 PSP40	10	20 92	20 36	0 2854	0 3240	540	154 1	174 9744	22 31	0 193
662	40 09 PSP40	11	21 97	21 07	0 3202	0 3636	480	153 7	174 5202	23 17	0 197
663	40 1 PSP40	12	22 41	21 38	0 3346	0 3799	480	160 6	182 3549	23 58	0 194
664	41 03 PSP41	4	12 16	12 98	0 0757	0 0860	1150	87 1	98 8986	13 27	0 222
665	41 05 PSP41	6	14 44	15 13	0 1176	0 1335	1150	135 2	153 5142	18 68	0 158
666	41 06 PSP41	7	15 28	15 9	0 1344	0 1526	1130	151 9	172 4764	20 33	0 146
667	41 07 PSP41	8	15 74	16 3	0 1446	0 1642	1120	162	183 9445	21 4	0 140
668	41 08 PSP41	9	16 92	17 29	0 1729	0 1963	1080	186 7	211 9904	22 8	0 133
669	42 03 PSP42	4	11 8	12 53	0 0750	0 0852	1140	85 5	97 0818	12 53	0 236
670	42 04 PSP42	5	13 59	14 26	0 1059	0 1203	1110	117 6	133 5301	14 85	0 202
671	42 05 PSP42	6	14 47	15 02	0 1252	0 1421	1080	135 2	153 5142	16 95	0 180
672	42 06 PSP42	7	15 66	16 09	0 1505	0 1709	1000	150 5	170 8867	19 61	0 161
673	42 07 PSP42	8	16 42	16 75	0 1677	0 1904	940	157 6	178 9485	21 53	0 151
674	42 08 PSP42	9	17 47	17 55	0 1983	0 2251	920	182 4	207 1079	21 82	0 151
675	43 02 PSP43	5	15 1	15 71	0 1326	0 1505	700	92 8	105 3707	14 88	0 254
676	43 03 PSP43	6	16 69	17 04	0 1706	0 1837	700	119 4	135 5739	17 58	0 215
677	43 04 PSP43	7	17 12	17 38	0 1826	0 2073	680	126	143 0680	18 13	0 210
678	43 05 PSP43	8	18 32	18 3	0 2161	0 2454	690	149 1	169 2971	20 04	0 190
679	43 06 PSP43	9	19 3	19 06	0 2442	0 2773	670	163 6	185 7613	21 79	0 177
680	43 07 PSP43	10	19 96	19 51	0 2658	0 3018	660	175 4	199 1597	22 8	0 171
681	43 08 PSP43	11	20 28	19 72	0 2776	0 3152	630	174 9	198 5920	23 4	0 170
682	43 09 PSP43	12	20 56	19 91	0 2868	0 3256	580	169 2	192 1198	23 5	0 175
683	43 1 PSP43	13	22 08	20 96	0 3382	0 3841	510	172 5	195 8669	23 7	0 187
684	43 11 PSP43	14	24 78	22 71	0 4404	0 5001	470	207	235 0402	24 2	0 191
685	44 02 PSP44	4	12 65	13 46	0 0840	0 0954	930	78 1	88 6794	13 35	0 246
686	44 03 PSP44	5	13 61	14 38	0 1011	0 1148	930	94	106 7332	14 27	0 230
687	44 04 PSP44	6	15	15 64	0 1281	0 1466	930	120 1	136 3687	16 6	0 198
688	44 05 PSP44	7	15 54	16 1	0 1412	0 1603	930	131 3	149 0859	18 1	0 181
689	44 06 PSP44	8	16 52	16 91	0 1655	0 1879	930	153 9	174 7473	20 4	0 161
690	44 07 PSP44	9	17 22	17 46	0 1845	0 2094	920	168 7	192 6876	21 33	0 155
691	44 08 PSP44	10	17 86	17 95	0 2026	0 2300	900	182 3	206 9944	22 5	0 148
692	44 09 PSP44	11	18 41	18 38	0 2178	0 2472	890	193 8	220 0521	23 2	0 144
693	44 1 PSP44	12	18 74	18 64	0 2263	0 2570	870	196 9	223 5721	24 25	0 140
694	44 11 PSP44	13	19 57	19 24	0 2520	0 2862	790	199 1	226 0701	24 33	0 146
695	45 02 PSP45	3	12 25	13 04	0 0783	0 0889	880	68 9	78 2332	12 67	0 266
696	45 03 PSP45	4	13 42	14 17	0 0990	0 1124	860	85 1	96 6276	13 14	0 260
697	45 04 PSP45	5	14 77	15 38	0 1271	0 1444	840	106 8	121 2671	15 2	0 227
698	45 05 PSP45	6	15 98	16 43	0 1540	0 1749	800	123 2	139 8887	16 94	0 209
699	45 06 PSP45	7	16 69	16 97	0 1744	0 1980	820	143	162 3708	19 41	0 180



700	45 07 PSP45	8	17 67	17.72	0 2021	0.2295	810	163 7	185 8748	20 06	0 175
701	45 08 PSP45	9	18 34	18 21	0 2229	0.2531	800	178 3	202 4525	21 44	0 165
702	45 09 PSP45	10	18 98	18 64	0 2441	0.2772	800	195 3	221 7553	21 78	0 162
703	45 1 PSP45	11	18 34	18 92	0 2548	0.2893	790	201 3	228 5681	23,94	0 149
704	45 11 PSP45	12	20 26	19 6	0 2829	0.3213	750	212 2	240 9446	23 04	0 158
705	45.12 PSP45	13	20 8	19 93	0 3041	0.3453	750	228 1	258 9984	24 88	0 147
706	46 02 PSP46	4	12 82	13 61	0 0877	0 0996	890	86 8	98 5579	13 12	0 242
707	46 03 PSP46	5	13 5	14 27	0 0991	0 1125	980	97 1	110 2532	13 78	0 232
708	46 04 PSP46	6	14 59	15 25	0 1213	0 1377	990	120,1	136 3687	15 45	0 206
709	46 05 PSP46	7	15 04	15 65	0 1313	0 1491	890	130	147 6098	16 75	0 190
710	46 06 PSP46	8	16 15	16 61	0 1561	0 1772	970	151 4	171 9086	18 63	0 172
711	46 07 PSP46	9	16 93	17 25	0.1755	0 1993	960	168 5	191 3250	18 45	0 175
712	46 08 PSP46	10	17 33	17 56	0 1869	0 2122	960	179,4	203 7015	19 52	0 165
713	46 09 PSP46	11	18 3	18 37	0 2101	0 2386	880	184 9	209 9466	20 2	0 167
714	46 1 PSP46	12	18 66	18,66	0 2194	0 2491	810	177,7	201 7712	21 07	0 167
715	46 11 PSP46	13	19 34	19 16	0 2401	0 2727	790	189 7	215 3968	24 5	0 145
716	46 12 PSP46	14	20 45	19 96	0 2749	0 3121	680	186 9	212 2175	23 04	0 166
717	47 04 PSP47	5	14 73	15 33	0 1273	0 1446	670	85 3	96 8547	14 54	0 266
718	47 05 PSP47	6	15 98	16 39	0.1563	0 1774	670	104 7	118 8827	16 08	0 240
719	47 06 PSP47	7	17 18	17 32	0 1896	0 2152	670	127	144 2034	18 92	0 204
720	47 07 PSP47	8	18 13	18 02	0 2181	0 2476	670	146 1	165 8907	20 04	0 193
721	47 09 PSP47	10	19 37	18 86	0 2603	0 2956	660	171 8	195 0720	21 83	0 178
722	47 1 PSP47	11	19 8	19 18	0 2738	0 3109	650	178	202 1119	22 9	0 171
723	47 11 PSP47	12	20 53	19 66	0 2998	0 3404	600	179 9	204 2693	23 38	0 175
724	47 12 PSP47	13	21 38	20 17	0 3346	0 3789	590	197 4	224 1398	23,75	0 173
725	48 02 PSP48	3	10 7	11 47	0 0554	0.0629	890	54 8	62 2232	12 6	0 252
726	48 03 PSP48	4	11 73	12 53	0 0700	0 0795	960	67 2	76 3029	13 95	0 231
727	48 04 PSP48	5	13 35	14 08	0 0884	0 1117	830	91 5	103 8946	16 05	0 204
728	48 05 PSP48	6	14 05	14 72	0 1125	0 1277	920	103 5	117 5201	18,15	0 182
729	48 06 PSP48	7	15 42	15 9	0 1437	0 1632	910	130 8	148 5182	19 95	0 166
730	48 07 PSP48	8	16 21	16 55	0 1633	0 1854	850	138 8	157 6018	21 03	0 163
731	48 08 PSP48	9	16 98	17 15	0 1844	0 2094	790	145 7	165 4365	21,73	0 164
732	48 09 PSP48	10	17 52	17 57	0 2000	0 2271	770	154	174 8608	22 85	0 158
733	48 1 PSP48	11	18 21	18 1	0 2189	0 2485	720	157 6	178 9485	22 2	0 168
734	48 11 PSP48	12	18 99	18 67	0 2429	0 2758	650	157 9	179 2891	22 63	0 173
735	49 02 PSP49	4	11 4	12 15	0.0681	0 0773	1140	77,6	88 1117	13 22	0 224
736	49 03 PSP49	5	11 85	12 6	0 0750	0 0852	1130	84 8	96 2870	14 86	0 200
737	49 04 PSP49	6	13 5	14 19	0 1030	0.1169	1080	111 2	126 2632	16 8	0 181
738	49 05 PSP49	7	13 93	14 58	0.1122	0 1274	1080	121 2	137 6178	18 02	0 169
739	49 06 PSP49	8	14 9	15,42	0 1339	0 1521	1070	143 3	162 7114	19 9	0 154
740	49 07 PSP49	9	15 65	16 07	0 1509	0 1713	1040	156 9	178 1537	20 45	0 152
741	49 8 PSP49	10	16 17	16 47	0 1653	0 1877	1010	167	189 6218	21 35	0 147
742	49 9 PSP49	11	16 54	16 75	0 1760	0 1999	1010	177 8	201 8848	22 2	0 142
743	49 1 PSP49	12	17 11	17 24	0 1890	0 2146	930	175 8	199 6139	22 65	0 145
744	49 11 PSP49	13	17 85	17 8	0 2105	0 2390	860	181	205 5183	22 86	0 149
745	49 12 PSP49	14	18 36	18 15	0 2271	0 2579	840	190 8	216 6458	23 17	0 149
746	50 04 PSP50	6	13 1	13 78	0.0972	0.1104	980	95 3	108 2093	13 25	0 241
747	50 05 PSP50	7	13 67	14 31	0 1085	0 1231	970	105 2	119 4504	13 63	0 236
748	50 06 PSP50	8	15 06	15 5	0 1398	0 1587	970	135 6	153 9684	16 4	0 196
749	50 07 PSP50	9	16 05	16 37	0 1621	0 1840	910	147 5	167 4804	17 9	0 185



750	50 08 PSP50	10	17 09	17 21	0 1891	0.2147	890	168 3	191 0979	18 52	0 181
751	50 09 PSP50	11	17 85	17 81	0 2095	0.2379	850	178 1	202 2254	19 72	0 174
752	50 1 PSP50	12	18 69	18 52	0 2296	0.2607	770	176 8	200 7493	21 47	0 168
753	50 11 PSP50	13	19 43	19 05	0 2528	0.2870	750	189 6	215 2832	21 84	0 167
754	50 12 PSP50	14	20 35	19 66	0 2854	0.3241	740	211 2	239 8092	22 44	0 164
755	51 02 PSP51	3	12 5	13 26	0 0841	0.0955	920	77 4	87 8846	13 13	0 251
756	51 03 PSP51	4	13 25	13 98	0 0977	0.1110	920	89 9	102 0779	14 3	0 231
757	51 04 PSP51	5	14 96	15 51	0 1330	0.1510	900	119 7	135 9146	16 8	0 198
758	51 05 PSP51	6	15 83	16 24	0 1537	0.1745	890	136 8	155 3309	18 23	0 184
759	51 06 PSP51	7	16 89	17 08	0 1822	0.2068	880	160 3	182 0142	20 4	0 165
760	51 07 PSP51	8	17 58	17 58	0 2034	0.2310	870	177	200 9764	21 5	0 158
761	51 08 PSP51	9	18 32	18 1	0 2274	0.2582	880	200 1	227 2055	22 45	0 150
762	51 09 PSP51	10	18 85	18 44	0 2461	0.2794	870	214 1	243 1020	22 73	0 149
763	51 1 PSP51	11	19 06	18 57	0 2542	0.2887	850	216 1	245 3729	22 95	0 149
764	51 11 PSP51	12	20 24	19 45	0 2906	0.3300	800	232 5	263 9945	24 25	0 146
765	51 12 PSP51	13	20 52	19 65	0 2999	0.3405	790	236 9	268 9905	24 25	0 147
766	52 02 PSP52	3	11 78	12 6	0 0702	0 0787	1030	72 3	82 0938	12 84	0 243
767	52 03 PSP52	4	12 43	13 23	0 0806	0 0915	1030	83	94 2432	13 64	0 228
768	52 04 PSP52	5	13 89	14 6	0 1083	0 1230	1030	111 6	126 7173	16 6	0 188
769	52 05 PSP52	6	14 42	15 06	0 1197	0 1359	1030	123 3	140 0022	18 11	0 172
770	52 06 PSP52	7	15 52	16	0 1457	0 1655	1030	150 1	170 4325	20	0 156
771	52 07 PSP52	8	16 53	16 82	0 1711	0 1943	1010	172 8	196 2075	20 35	0 155
772	52 08 PSP52	9	17 38	17 5	0 1940	0 2203	970	188 2	213 6936	21 16	0 152
773	52 09 PSP52	10	18 27	18 2	0 2182	0 2477	920	200 7	227 8868	22 18	0 149
774	52 1 PSP52	11	19 25	19 04	0 2412	0 2739	830	200 2	227 3191	23 5	0 148
775	52 11 PSP52	12	20 29	19 77	0 2749	0 3122	770	211 7	240 3769	23 86	0 151
776	52 12 PSP52	13	21 16	20 36	0 3051	0 3465	740	225 8	256 3869	24 75	0 149
777	53 04 PSP53	4	12 21	13 03	0 0773	0 0877	1060	81 9	92 9942	12 85	0 239
778	53 05 PSP53	5	12 54	13 34	0 0830	0 0943	1060	88	99 9205	13 83	0 222
779	53 06 PSP53	6	13 91	14 62	0 1088	0 1235	1050	114 2	129 6695	16 85	0 183
780	53 07 PSP53	7	15 16	15 77	0 1334	0 1514	1010	134 7	152 9465	17 45	0 180
781	53 08 PSP53	8	15 97	16 47	0 1515	0 1720	990	150	170 3180	18 8	0 169
782	53 09 PSP53	9	16 65	17 03	0 1680	0 1907	980	164 6	186 8967	20 38	0 157
783	53 1 PSP53	10	17 31	17 62	0 1823	0 2069	930	169 5	192 4605	21 83	0 150
784	53 11 PSP53	11	18 67	18 71	0 2179	0 2474	810	176 5	200 4087	23 18	0 152
785	53 12 PSP53	12	19 67	19 44	0 2485	0 2821	780	193 8	220 0521	24 04	0 149
786	54 04 PSP54	4	11 89	12 67	0 0735	0 0835	1140	83 8	95 1515	11 92	0 248
787	54 05 PSP54	5	12 49	13 26	0 0833	0 0946	1140	95	107 8687	12 69	0 233
788	54 06 PSP54	6	13 78	14 45	0 1087	0 1234	1140	123 9	140 6835	15 33	0 193
789	54 07 PSP54	7	14 68	15 24	0 1283	0 1457	1120	143 7	163 1656	17 06	0 175
790	54 08 PSP54	8	15 4	15 85	0 1451	0 1647	1120	162 5	184 5123	18 17	0 164
791	54 09 PSP54	9	16 4	16 7	0 1687	0 1915	1050	177 1	201 0900	18 38	0 168
792	54 1 PSP54	10	17 03	17 28	0 1811	0 2057	960	173 9	197 4565	20 38	0 158
793	54 11 PSP54	11	18 69	18 57	0 2271	0 2579	840	190 8	216 6458	21 08	0 164
794	54 12 PSP54	12	19 3	18 98	0 2475	0 2810	830	205 4	233 2235	22 9	0 152
795	55 03 PSP55	3	12 35	13 17	0 0786	0 0892	1060	83 3	94 5838	12 35	0 249
796	55 04 PSP55	4	14 38	15 09	0 1157	0 1314	1050	121 5	137 9584	17 3	0 178
797	55 05 PSP55	5	15 43	16 03	0 1379	0 1565	1030	142	161 2353	19 1	0 163
798	55 07 PSP55	7	17 28	17 57	0 1829	0 2077	960	175 6	199 3868	21 25	0 152
799	55 08 PSP55	8	17 53	17 76	0 1900	0 2157	960	182 4	207 1079	23	0 140



800	55 09 PSP55	9	19 21	19 12	0 2332	0 2648	840	195 9	222 4366	23 38	0 148
801	55 1 PSP55	10	19 77	19 51	0 2507	0 2847	820	205 6	233 4506	23 58	0 148
802	56 01 PSP56	1	5 75	5 99	0 0113	0 0128	1250	14 1	16 0100	5 38	0 526
803	56 02 PSP56	2	9 93	10 65	0 0464	0 0527	1250	58	65 8567	10 5	0 269
804	56 03 PSP56	3	10 95	11 72	0 0594	0 0675	1250	74 3	84 3647	12 3	0 230
805	56 04 PSP56	4	12 55	13 3	0 0857	0 0973	1250	107 1	121 6078	14 86	0 180
806	56 05 PSP56	5	13 85	14 53	0 1088	0 1235	1170	127 3	144 5441	16 15	0 181
807	56 06 PSP56	6	14 78	15 35	0 1292	0 1467	1150	148 6	168 7294	18 02	0 164
808	56 07 PSP56	7	15 53	15 99	0 1471	0 1670	1130	166 2	188 7135	20 67	0 144
809	56 08 PSP56	8	16 38	16 73	0 1659	0 1884	1030	170 9	194 0501	21 85	0 143
810	56 09 PSP56	9	18 04	18 12	0 2063	0 2342	860	177 4	201 4306	22 84	0 149
811	56 1 PSP56	10	18 49	18 44	0 2205	0 2503	860	189 6	215 2832	24	0 142
812	57 04 PSP57	4	12 17	12 93	0 0783	0 0900	1150	91 2	103 5540	13 35	0 221
813	57 05 PSP57	5	13 55	14 27	0 1026	0 1165	1090	111 8	126 8444	15 1	0 201
814	57 06 PSP57	6	14 69	15 3	0 1258	0 1428	1060	133 3	151 3568	17 5	0 176
815	57 07 PSP57	7	15 39	15 87	0 1428	0 1622	1060	151 4	171 9086	19 95	0 154
816	57 08 PSP57	8	15 98	16 42	0 1546	0 1755	980	151 5	172 0222	21 14	0 151
817	57 09 PSP57	9	16 98	17 21	0 1814	0 2060	930	168 7	191 5521	22 57	0 145
818	60 03 PSP60	4	11 21	11 95	0 0658	0 0748	1060	69 8	79 2551	11 88	0 259
819	60 04 PSP60	5	11 95	12 69	0 0771	0 0875	1070	82 5	93 6755	14 1	0 217
820	60 05 PSP60	6	13 67	14 35	0 1068	0 1212	1050	112 1	127 2851	16 4	0 188
821	60 06 PSP60	7	15 21	15 74	0 1379	0 1565	1030	142	161 2353	19 02	0 164
822	60 07 PSP60	8	15 55	16 03	0 1459	0 1657	1030	150 3	170 6596	20 06	0 155
823	60 08 PSP60	9	16 38	16 73	0 1653	0 1877	1000	165 3	187 6915	21 16	0 149
824	60 09 PSP60	10	16 97	17 22	0 1799	0 2043	1000	179 9	204 2693	21 56	0 147
825	61 03 PSP61	4	9 94	10 6	0 0515	0 0585	1040	53 6	60 8607	11 33	0 274
826	61 04 PSP61	5	10 46	11 12	0 0587	0 0667	1030	60 5	68 6953	12 68	0 246
827	61 05 PSP61	6	12 25	12 94	0 0839	0 0953	950	79 7	90 4962	14 9	0 218
828	61 06 PSP61	7	13 18	13 81	0 1015	0 1153	930	94 4	107 1874	16 8	0 194
829	61 07 PSP61	8	13 55	14 16	0 1083	0 1230	900	97 5	110 7074	17.73	0 188
830	61 08 PSP61	9	16 4	16 75	0 1659	0 1884	490	81 3	92 3129	20 5	0 220
831	61 09 PSP61	10	17 56	17 66	0 1983	0 2251	400	79 3	90 0420	22	0 227
832	62 02 PSP62	4	13 28	14	0 0980	0 1113	860	84 3	95 7193	14.63	0 233
833	62 03 PSP62	5	14.17	14 82	0 1159	0 1316	860	88 7	113 2054	17 78	0 182
834	62 04 PSP62	6	15 11	15 63	0 1372	0 1558	860	118	133 9843	18 28	0 187
835	62 05 PSP62	7	16 33	16 65	0 1668	0 1894	850	141 8	161 0082	19 28	0 178
836	62 06 PSP62	8	17 27	17 39	0 1924	0 2184	840	161 6	183 4903	20 59	0 168
837	62 07 PSP62	9	17 83	17.79	0 2102	0 2387	840	176 6	200 5222	21 31	0 162
838	62 08 PSP62	10	18.29	18 12	0 2244	0 2548	820	184	208 9246	23 29	0 150
839	62 09 PSP62	11	18 81	18 5	0 2411	0 2738	820	197 7	224 4804	23 54	0 148
840	62 1 PSP62	12	19 47	18 93	0 2653	0 3012	810	214 9	244 0104	24 04	0 146
841	63 01 PSP63	4	11 99	12 81	0 0733	0 0832	1000	73 3	83 2292	12 7	0 249
842	63 02 PSP63	5	13 59	14 36	0.1003	0 1138	1000	100 3	113 8866	15	0 211
843	63 03 PSP63	6	14 3	15 01	0 1147	0 1302	1000	114 7	130 2373	17 17	0 184
844	63 04 PSP63	7	15 3	15 88	0 1364	0 1549	1000	136 4	154 8767	18 56	0 170
845	63 05 PSP63	8	16 22	16 66	0 1580	0 1794	990	156 4	177 5859	19 4	0 164
846	63 06 PSP63	9	16 95	17 25	0 1770	0 2010	980	173 5	197 0023	20 65	0 155
847	63 07 PSP63	10	17 44	17 62	0 1911	0 2170	980	187 3	212 6717	22 5	0 142
848	63 08 PSP63	11	17 63	17 77	0 1966	0 2233	980	192 7	218 8031	22 78	0 140
849	63 09 PSP63	12	18 53	18 47	0 2217	0 2517	940	208 4	236 6299	23 28	0 140

850	63 1 PSP63	13	18 98	18 76	0 2379	0 2701	950	226	256 6140	23 4	0 139
851	64 02 PSP64	4	12 48	13 29	0 0813	0 0924	890	72 4	82 2073	12 83	0 261
852	64 03 PSP64	5	13 34	14 11	0 0966	0 1097	880	86	97 6496	14 81	0 226
853	64.04 PSP64	6	14 1	14 79	0 1124	0 1276	880	100	113 5460	16 59	0 202
854	64 05 PSP64	7	15 11	15 66	0 1351	0 1534	890	120 2	136 4823	17 31	0 194
855	64 06 PSP64	8	15 88	16 28	0 1552	0 1762	880	138 1	156 8070	18 44	0 182
856	64 07 PSP64	9	16 61	16 9	0 1728	0 1962	850	146 9	166 7991	19 56	0 175
857	64 08 PSP64	10	17 11	17 3	0 1860	0 2112	830	154 4	175 3150	22 05	0 157
858	64 09 PSP64	11	18 37	18 3	0 2199	0 2497	760	167 1	189 7354	22 63	0 160
859	64 1 PSP64	12	19 03	18 77	0 2412	0 2739	750	180 9	205 4047	24	0 152
860	65 03 PSP65	4	13 2	13 95	0 0957	0 1087	930	89	101 0559	13 11	0 250
861	65 04 PSP65	5	15 5	16 01	0 1437	0 1631	900	129 3	146 8150	15 75	0 212
862	65 05 PSP65	6	16 64	16 94	0 1723	0 1957	770	132 7	150 6755	18	0 200
863	65 06 PSP65	7	18 55	18 39	0 2276	0 2585	720	163 9	186 1019	19 58	0 190
864	65 07 PSP65	8	19 44	19	0 2565	0 2913	690	177	200 9764	21 13	0 180
865	65 08 PSP65	9	21.12	20 13	0 3146	0 3572	610	191 9	217 8948	19 67	0 206
866	65 09 PSP65	10	21 96	20 64	0 3486	0 3959	590	205 7	233 5641	21 5	0 191
867	66 02 PSP66	2	8 71	9 31	0 0345	0 0392	1110	38 3	43 4881	12 08	0 248
868	66 03 PSP66	3	10 87	11 6	0 0606	0 0689	1080	66 1	75 0539	14 4	0 210
869	66 04 PSP66	4	12 1	12 81	0 0804	0 0913	1070	86	97 6496	16 1	0 190
870	66.05 PSP66	5	12 98	13 63	0 0973	0 1104	1020	99 2	112 6376	17 75	0 176
871	67 02 PSP67	5	17 03	17 51	0 1687	0 1916	790	133 3	151 3568	16 44	0 216
872	67 03 PSP67	6	18 04	18 33	0 1945	0 2208	780	151 7	172 2493	17 91	0 200
873	67 04 PSP67	8	19 29	19 28	0 2295	0 2606	780	179	203 2473	20 03	0 179
874	67 05 PSP67	9	19 76	19 62	0 2440	0 2770	780	190 3	216 0780	21 5	0 167
875	67 06 PSP67	10	20 72	20 28	0 2749	0.3122	750	206 2	234 1319	23 06	0 158
876	68 02 PSP68	2	10 85	11 58	0 0622	0 0706	1000	62 2	70 6256	11 95	0 265
877	68 03 PSP68	4	15	15 53	0 1350	0 1533	860	129 6	147 1556	20 05	0 161
878	68 04 PSP68	5	16 59	17	0 1659	0 1883	870	144 3	163 8469	22 13	0 153
879	68 05 PSP68	6	18 32	18 39	0 2106	0 2391	690	145 3	164 9823	23 08	0 165
880	69 02 PSP69	2	9 42	10 07	0 0446	0 0506	1560	69 5	78 9145	10 91	0 232
881	69 03 PSP69	4	12 91	13 58	0 0851	0 1080	1460	138 9	157 7154	17 8	0 147
882	69 04 PSP69	5	14 4	15 02	0 1206	0 1369	1310	158	179 4027	18 98	0 146
883	69 05 PSP69	6	15 77	-16 19	0 1526	0.1732	1210	184 6	209 6059	18 8	0 153
884	1 S1	17	28 1	23 55			433			26 6	0 181
885	2 S2	17	24 6	24 43			666			28 5	0 136
886	3 S4	16	26 24	21 82			533			28 1	0 154
887	4 S5	16	28 54	23 23			433			28 7	0 167
888	5 S6	16	30 5	24 76			267			27	0 227
889	6 S7	18	29 5	24 82			400			26 9	0 186
890	7 S8	18	25 76	24 96			667			28 1	0 138
891	8 S9	18	28 05	24 17			443			26 7	0 178
892	9 S10	7	21 05	23 98			667			28.6	0.135
893	10 S11	7	22 96	23 84			633			27 2	0 146
894	11 S12	7	18 82	23 33			600			26 9	0 152
895	12 S13	8	22 08	25 18			667			29 1	0 133
896	13 S14	8	23 8	24 84			633			28 2	0 141
897	14 S16	8	19 46	24 16			600			27 7	0 147
898	15 S17	8	19	21 9			733			27 2	0.136
899	16 S18	8	19 12	23 4			633			27 4	0 145
900	17 S19	8	18 39	23 11			767			25 5	0 142
901	18 S20	8	20 13	23 02			767			25 7	0 140
902	19 S21	8	19 5	23 17			633			25 7	0 155
903	/ BEN	14 2								25 4	
904	≥ BEN	18 1								28 35	
905	≤ BEN	18 1								22 6	
906	¤ BEN	16 1								27 7	
907	¤ BEN	19 1								24 45	
908	¤ BEN	19 1								29 8	

909	7 BEN	17	20.75
910	8 BEN	17	21.75
911	9 BEN	17	30.6
912	10 BEN	17	26.2
913	11 BEN	15.9	25.5
914	12 BEN	15.9	27.95
915	13 BEN	16.1	24.85
916	14 BEN	14.1	29.13

