

28 Appendices

Appendix 28.1 Radiata pine throughfall data

| Source | Where | Duration | Age (years) | Height (m) | Basal area (m ² /ha) | DBH (cm) | Density (sph) | PTTN (mm) | Throughfall (mm) | TF (%) |
|-------------------------------|-------------|----------|----------------|---------------|---------------------------------------|-------------|------------------|--------------|---------------------|-----------|
| Baker & Attiwill 1987 | Victoria | 1 | 18 | 28 | 38 | | 870 | 942 | 552 | 59 |
| Baker & Attiwill 1987 | Victoria | 2 | 22 | 31 | 42 | | 610 | 892 | 448 | 50 |
| Baker & Attiwill 1987 | Victoria | 1 | 20 | 28 | 41 | | 560 | 980 | 605 | 62 |
| Baker & Attiwill 1987 | Victoria | 2 | 18 | 25 | 44 | | 1400 | 902 | 542 | 60 |
| Bell & Gatenby 1969 | NSW | 1 | 31 | 25 | | | | 402 | 293 | 73 |
| Crockford & Khanna 1997 | ACT | 2 | 12 | 14.5 | 24 | | 625 | 578 | 434 | 75 |
| Crockford & Khanna 1997 | ACT | 2 | 12 | 13.8 | 24.7 | | 599 | 578 | 442 | 76 |
| Crockford & Khanna 1997 | ACT | 2 | 12 | 15.8 | 38.2 | | 746 | 578 | 385 | 67 |
| Davidson 1967 | ACT | 0.75 | 23 | | 45.6 | | | 790 | 467 | 59 |
| Feller 1981 | Victoria | 1 | 37 | 27.5 | 51.2 | 29 | 690 | 1150 | 791 | 69 |
| Feller 1981 | Victoria | 1 | 38 | 28 | 52 | 30 | 690 | 1147 | 893 | 78 |
| Langford & O'Shaughnessy 1977 | Victoria | 8 | 13 | 29 | 58 | | 1745 | 1600 | 1088 | 68 |
| Millett 1944 | ACT | 1 | 17 | | 49.5 | | | 734 | 457 | 62 |
| Millett 1944 | ACT | 6 | 18 | | | | | 603 | 367 | 61 |
| Ruiter 1964 | S Australia | | 16 | | 37.9 | | | 658 | 478 | 73 |

| Source | Where | Duration | Age | Height | Basal area | DBH | Density | PTTN | Throughfall | TF |
|--------------------------|-------------|----------|---------|--------|----------------------|------|---------|------|-------------|-----|
| | | | (years) | (m) | (m ² /ha) | (cm) | (sph) | (mm) | (mm) | (%) |
| Smethurst & Nambier 1990 | S Australia | 1 | 37 | 37 | 33.9 | 51 | 162 | 754 | 517 | 69 |
| Smith et al. 1974 | NSW | 2.6 | 36 | 27 | 31 | | | 849 | 670 | 79 |
| Thistlethwaite 1970 | ACT | 0.75 | 24 | | 43.8 | | | 1641 | 1072 | 65 |
| Baker et al. 1985 | Auckland | 1 | 14 | 19 | 42 | | 2100 | 895 | 512 | 57 |
| Baker et al. 1986 | Auckland | 1 | 14 | 16.4 | 29.9 | | 2000 | 822 | 551 | 67 |
| Baker et al. 1986 | Auckland | 1 | 14 | 18.2 | 36.1 | | 2000 | 822 | 484 | 59 |
| Baker et al. 1986 | Auckland | 1 | 14 | 19.8 | 38.9 | | 2000 | 822 | 484 | 59 |
| Baker et al. 1986 | Auckland | 1 | 14 | 20 | 47.5 | | 2000 | 822 | 459 | 56 |
| Duncan 1980 | Nelson | 1 | 4 | | | | 1500 | 1265 | 1088 | 86 |
| Duncan 1980 | Nelson | 1 | 6 | | | | 500 | 1238 | 1028 | 83 |
| Duncan 1980 | Nelson | 1 | 7 | | | | 500 | 938 | 750 | 80 |
| Duncan 1980 | Nelson | 1 | 8 | | | | 500 | 800 | 608 | 76 |
| Fahey 1964 | Otago | 0.75 | 30 | 21 | 102 | 25 | 2080 | 1227 | 587 | 48 |
| Fahey et al. 2001 | Hororata | 1.67 | 18 | 20 | 46 | 30 | 650 | 950 | 715 | 75 |
| Jackson 1985 | Ashley | 4 | mix | | | | | 855 | 556 | 65 |
| McGregor 1983 | Central NI | 0.5 | | | | | | | | 75 |
| Will 1959a | Kaingaroa | 1 | 28 | 36.5 | | | 300 | 1854 | 1346 | 73 |
| Will 1959a | Kaingaroa | 1 | 29 | 36.5 | | | 300 | 1168 | 800 | 68 |
| Will 1959b | Rotorua | 1 | 7 | 10.7 | | | 3700 | 1510 | 905 | 60 |
| Will 1959b | Rotorua | 1 | 39 | 35 | | | 250 | 1510 | 980 | 65 |

| Source | Where | Duration | Age | Height | Basal area | DBH | Density | PTTN | Throughfall | TF |
|---------------------------|--------------|----------|---------|--------|----------------------|------|---------|------|-------------|-----|
| | | | (years) | (m) | (m ² /ha) | (cm) | (sph) | (mm) | (mm) | (%) |
| Pienaar 1964 | South Africa | 1 | 10 | 12.3 | 22.5 | 14 | 1480 | 1400 | 1092 | 78 |
| Amezaga et al. 1997 | Spain | 1 | 15 | 7 | | | 1750 | 1427 | 904 | 63 |
| Amezaga et al. 1997 | Spain | 1 | 15 | 10 | | | 1025 | 1071 | 749 | 70 |
| Calvo de Anta et al. 1979 | Spain | | 20 | | 48 | | | 1360 | 862 | 63 |
| Huber & Iroume 2001 | Valdivia | 1 | 25 | | 60 | | 733 | 2389 | 1824 | 76 |
| Huber & Iroume 2001 | Valdivia | 1 | 26 | | 60 | | 733 | 1628 | 1225 | 75 |
| Huber & Iroume 2001 | Valdivia | 1 | 27 | | 60 | | 733 | 2059 | 1477 | 72 |
| Huber & Iroume 2001 | Valdivia | 1 | 28 | | 60 | | 733 | 2295 | 1651 | 72 |
| Huber & Iroume 2001 | Valdivia | 1 | 29 | | 60 | | 733 | 2341 | 1697 | 73 |
| Huber & Iroume 2001 | Valdivia | 1 | 30 | | 60 | | 733 | 1841 | 1386 | 75 |
| Huber & Iroume 2001 | Valdivia | 1 | 31 | | 60 | | 733 | 1364 | 954 | 70 |
| Huber & Iroume 2001 | Valdivia | 1 | 18 | | 65.9 | | 973 | 2925 | 2083 | 72 |
| Huber & Iroume 2001 | Valdivia | 1 | 19 | | 65.9 | | 973 | 2075 | 1459 | 70 |
| Huber & Iroume 2001 | Valdivia | 1 | 18 | | 51.6 | | 467 | 2925 | 2204 | 75 |
| Huber & Iroume 2001 | Valdivia | 1 | 19 | | 51.6 | | 467 | 2075 | 1525 | 74 |
| Huber & Iroume 2001 | Valdivia | 1 | 20 | | 51.6 | | 467 | 2394 | 1766 | 74 |
| Huber & Iroume 2001 | Valdivia | 1 | 21 | | 51.6 | | 467 | 2574 | 1988 | 77 |
| Huber & Iroume 2001 | Valdivia | 1 | 22 | | 51.6 | | 467 | 1676 | 1314 | 78 |
| Huber & Iroume 2001 | Valdivia | 1 | 17 | | 34.9 | | 194 | 2925 | 2311 | 79 |
| Huber & Iroume 2001 | Valdivia | 1 | 18 | | 34.9 | | 194 | 2075 | 1639 | 79 |

| Source | Where | Duration | Age | Height | Basal area | DBH | Density | PTTN | Throughfall | TF |
|----------------------|---------------|----------|---------|--------|----------------------|------|---------|------|-------------|-----|
| | | | (years) | (m) | (m ² /ha) | (cm) | (sph) | (mm) | (mm) | (%) |
| Huber & Iroume 2001 | Valdivia | 1 | 19 | | 34.9 | | 194 | 2394 | 1929 | 81 |
| Huber & Iroume 2001 | Valdivia | 1 | 21 | | 34.9 | | 194 | 2574 | 2091 | 81 |
| Huber & Iroume 2001 | Valdivia | 1 | 22 | | 34.9 | | 194 | 1676 | 1377 | 82 |
| Huber & Iroume 2001 | Nacimiento | 1 | 23 | | | | 2000 | 1971 | 1369 | 69 |
| Huber & Iroume 2001 | Nacimiento | 1 | 13 | | | | 443 | 1971 | 1557 | 79 |
| Huber & Iroume 2001 | Collipulli | 1 | 15 | | 19.5 | | 460 | 1039 | 667 | 64 |
| Huber & Iroume 2001 | Collipulli | 1 | 16 | | 19.5 | | 460 | 1858 | 1268 | 68 |
| Huber & Iroume 2001 | Collipulli | 1 | 15 | | 12 | | 220 | 1039 | 706 | 68 |
| Huber & Iroume 2001 | Collipulli | 1 | 16 | | 12 | | 220 | 1858 | 1311 | 71 |
| Huber & Iroume 2001 | Collipulli | 1 | 8 | | 13.4 | | 833 | 1039 | 690 | 66 |
| Huber & Iroume 2001 | Collipulli | 1 | 9 | | 13.4 | | 833 | 1858 | 1374 | 73 |
| Huber & Iroume 2001 | Collipulli | 1 | 10 | | 13.4 | | 833 | 734 | 505 | 69 |
| Huber & Iroume 2001 | Collipulli | 1 | 8 | | 608 | | 395 | 1039 | 758 | 73 |
| Huber & Iroume 2001 | Los Angeles 1 | 1 | 12 | | 27.1 | | 1206 | 1005 | 562 | 56 |
| Huber & Iroume 2001 | Los Angeles 1 | 1 | 12 | | 13.7 | | 549 | 1005 | 721 | 72 |
| Huber & Iroume 2001 | Los Angeles 1 | 1 | 16 | | 22.1 | | 143 | 1005 | 550 | 55 |
| Huber & Iroume 2001 | Los Angeles 1 | 1 | 16 | | 8.8 | | 417 | 1005 | 677 | 67 |
| Huber & Iroume 2001 | Los Angeles 2 | 1 | 6 | | 11 | | 926 | 1038 | 745 | 72 |
| Huber & Iroume 2001 | Los Angeles 2 | 1 | 10 | | 16.5 | | 1087 | 1038 | 721 | 69 |
| Huber & Oyarzun 1983 | Chile | 1 | 26 | 32 | 57 | | 733 | 1769 | 1379 | 78 |

| Source | Where | Duration | Age | Height | Basal area | DBH | Density | PTTN | Throughfall | TF |
|----------------------|-------|----------|---------|--------|----------------------|------|---------|------|-------------|-----|
| | | | (years) | (m) | (m ² /ha) | (cm) | (sph) | (mm) | (mm) | (%) |
| Huber & Oyarzun 1990 | Chile | 1 | 25 | 32 | 60 | 35 | 733 | 2389 | 1824 | 76 |
| Huber & Oyarzun 1990 | Chile | 1 | 26 | 32 | 60 | 35 | 733 | 1628 | 1229 | 75 |
| Huber & Oyarzun 1990 | Chile | 1 | 27 | 32 | 60 | 35 | 733 | 2059 | 1472 | 71 |
| Huber & Oyarzun 1990 | Chile | 1 | 28 | 32 | 60 | 35 | 733 | 2165 | 1651 | 76 |
| Huber & Oyarzun 1990 | Chile | 1 | 29 | 32 | 60 | 35 | 733 | 2341 | 1697 | 72 |
| Huber & Oyarzun 1990 | Chile | 1 | 30 | 32 | 60 | 35 | 733 | 1841 | 1386 | 75 |
| Huber & Oyarzun 1990 | Chile | 1 | 31 | 32 | 60 | 35 | 733 | 1364 | 954 | 70 |
| Oyarzun et al. 1985 | Chile | 1.75 | 9 | 11 | 19.8 | 17 | 1392 | 1732 | 1055 | 61 |
| Oyarzun et al. 1985 | Chile | 1.75 | 9 | 11 | 10.5 | 14 | 443 | 1732 | 1380 | 80 |
| Oyarzun et al. 1985 | Chile | 1.75 | 26 | 32 | 57.1 | 32 | 733 | 1732 | 1290 | 74 |

Appendix 28.2 Douglas fir throughfall

| | Duration (years) | Age (years) | Height (m) | Basal area (m ² /ha) | DBH (cm) | Density (sph) | PTTN (mm) | Throughfall (mm) | TF (%) |
|-------------------------------|---------------------|----------------|---------------|------------------------------------|-------------|------------------|--------------|---------------------|-----------|
| Plantation | | | | | | | | | |
| Bouten et al. 1992 | | 30 | 20 | | 21 | 885 | 800 | 480 | 60 |
| Fahey et al. 2001 | 1.54 | 18 | 11 | 38 | 19 | 1350 | 950 | 637 | 67 |
| Fahey et al. 2001 | 1.54 | 54 | 28 | 67 | 38 | 550 | 837 | 551 | 66 |
| Farrell et al. 1994 | 3 | 35 | 18 | 30 | 20 | 992 | 858 | 544 | 63 |
| Huber & Iroume 2001 | 1 | 27 | | 97 | | 1143 | 1346 | 812 | 60 |
| Kreutzer et al. 1998 | 3 | | | | | | 776 | 469 | 60 |
| Langford & O'Shaughnessy 1977 | 8 | 44 | 30.2 | 55 | | 668 | 1600 | 928 | 58 |
| Mitscherlich & Moll 1970 | 1 | 39 | | | | 1090 | 1547 | 861 | 56 |
| Mitscherlich & Moll 1970 | 1 | 30 | | | | 2016 | 1011 | 563 | 56 |
| Mitscherlich & Moll 1970 | 1 | 13 | | | | 2308 | 1154 | 577 | 50 |
| Mitscherlich & Moll 1970 | 1 | 38 | | | | 1257 | 1011 | 510 | 50 |
| Mitscherlich & Moll 1970 | 1 | 31 | | | | 1267 | 1547 | 901 | 58 |
| Mitscherlich & Moll 1970 | 1 | 15 | | | | 2308 | 1547 | 904 | 58 |
| Mitscherlich & Moll 1970 | 1 | 42 | | | | 533 | 1547 | 910 | 59 |
| Mitscherlich & Moll 1970 | 1 | 40 | | | | 533 | 1154 | 684 | 59 |
| Mitscherlich & Moll 1970 | 1 | 14 | | | | 2308 | 1011 | 772 | 76 |
| Mitscherlich & Moll 1970 | 1 | 37 | | | | 1257 | 1154 | 556 | 48 |
| Mitscherlich & Moll 1970 | 1 | 39 | | | | 800 | 1547 | 929 | 60 |
| Mitscherlich & Moll 1970 | 1 | 38 | | | | 1090 | 1011 | 587 | 58 |
| Mitscherlich & Moll 1970 | 1 | 41 | | | | 533 | 1011 | 611 | 60 |
| Mitscherlich & Moll 1970 | 1 | 39 | | | | 1257 | 1547 | 744 | 48 |

| | Duration (years) | Age (years) | Height (m) | Basal area (m ² /ha) | DBH (cm) | Density (sph) | PTTN (mm) | Throughfall (mm) | TF (%) |
|-----------------------------|---------------------|----------------|---------------|------------------------------------|-------------|------------------|--------------|---------------------|-----------|
| Mitscherlich & Moll 1970 | 1 | 29 | | | | 2016 | 1154 | 618 | 54 |
| Mitscherlich & Moll 1970 | 1 | 38 | | | | 800 | 1011 | 642 | 64 |
| Mitscherlich & Moll 1970 | 1 | 37 | | | | 800 | 1154 | 747 | 65 |
| Mitscherlich & Moll 1970 | 1 | 31 | | | | 2016 | 1547 | 835 | 54 |
| Mitscherlich & Moll 1970 | 1 | 29 | | | | 1267 | 1154 | 843 | 73 |
| Mitscherlich & Moll 1970 | 1 | 37 | | | | 1090 | 1154 | 776 | 67 |
| Mitscherlich & Moll 1970 | 1 | 30 | | | | 1267 | 1011 | 679 | 67 |
| Mitscherlich et al. 1966 | 1.9 | 35 | | | | 1257 | 1030 | 520 | 51 |
| Mitscherlich et al. 1966 | 1.9 | 35 | | | | 800 | 1030 | 570 | 57 |
| Rutter et al. 1975 | 1.5 | | | | | | 783.6 | 306 | 39 |
| Will 1959a | 1 | 34 | 27 | | | 1240 | 1930 | 927 | 48 |
| Will 1959a | 1 | 33 | 27 | | | 1240 | 1448 | 800 | 55 |
| Plantation – 5 years | | | | | | | | | |
| Mitscherlich & Moll 1970 | 1 | 5 | | | | | 1547 | | 96 |
| Plantation – summer | | | | | | | | | |
| Aussenac & Boulangeat 1980 | 0.3 | 23 | | | | 2229 | 148 | 76 | 51 |
| Aussenac & Boulangeat 1980 | 0.3 | 23 | | | | 1030 | 148 | 81 | 55 |
| Aussenac & Boulangeat 1980 | 0.3 | 23 | | | | 535 | 148 | 89 | 60 |
| Aussenac & Boulangeat 1980 | 0.3 | 11 | | | | 3086 | 148 | 96 | 65 |
| Aussenac & Granier 1987 | 0.4 | 20 | 11.5 | 39 | 40 | 2932 | 382 | 265 | 69 |
| Aussenac & Granier 1987 | 0.4 | 19 | 11.5 | 39 | 40 | 2932 | 388 | 178 | 46 |
| Aussenac & Granier 1987 | 0.4 | 19 | 11.5 | 20 | 40 | 1447 | 388 | 240 | 62 |
| Aussenac & Granier 1987 | 0.4 | 20 | 11.5 | 20 | 40 | 1447 | 382 | 296 | 77 |
| Heuveldop et al. 1972 | 0.5 | 42 | | | | | 436 | 259 | 59 |

| | Duration (years) | Age (years) | Height (m) | Basal area (m ² /ha) | DBH (cm) | Density (sph) | PTTN (mm) | Throughfall (mm) | TF (%) |
|-----------------------------------|---------------------|----------------|---------------|------------------------------------|-------------|------------------|--------------|---------------------|-----------|
| Heuveldop et al. 1972 | 0.35 | 35 | | | | | 355 | 234 | 66 |
| Heuveldop et al. 1972 | 0.5 | 36 | | | | | 471 | 313 | 66 |
| Heuveldop et al. 1972 | 0.35 | 41 | | | | | 270 | 195 | 72 |
| Plantation – pooled annual | | | | | | | | | |
| Houdijk & Roelofs 1991 | 1 | | | | | | 1037 | 674 | 65 |
| Houdijk & Roelofs 1991 | 1 | | | | | | 1044 | 669 | 64 |
| Houdijk & Roelofs 1991 | 1 | | | | | | 1125 | 550 | 49 |
| van Ek & Draaijers 1994 | 1 | 35 | 20 | | 23.5 | 662 | 714 | 523 | 75 |
| Plantation – pooled summer | | | | | | | | | |
| Draaijers et al. 1992 | 0.33 | | | | | | 164 | 124 | 76 |
| Natural forest | | | | | | | | | |
| Cole & Johnson 1977 | 2 | 2nd g | | | | | 1400 | | 79 |
| Rothacher 1963 | | 300 | | | | | | | 76 |

Appendix 28.3 Stemflow data – radiata pine

| | Where | Duration (years) | Age (years) | Height (m) | Basal area (m ² /ha) | DBH (cm) | Density (sph) | PTTN (mm) | Stemflow (mm) | SF (%) |
|-------------------------------|----------------|---------------------|----------------|---------------|------------------------------------|-------------|------------------|--------------|------------------|-----------|
| Baker & Attiwill 1987 | Victoria | 2 | 18 | 25 | 44 | | 1400 | 902 | 57 | 6 |
| Baker & Attiwill 1987 | Victoria | 2 | 22 | 31 | 42 | | 610 | 892 | 52 | 6 |
| Bell & Gatenby 1969 | Lidsdale, NSW | 1 | 31 | 25 | | | | 402 | 12 | 3 |
| Crockford & Khanna 1997 | Canberra | 2 | 12 | 13.8 | 24.7 | | 599 | 578 | 18 | 3 |
| Crockford & Khanna 1997 | Canberra | 2 | 12 | 15.8 | 38.2 | | 746 | 578 | 23 | 4 |
| Crockford & Khanna 1997 | Canberra | 2 | 12 | 14.5 | 24 | | 625 | 578 | 22 | 4 |
| Feller 1981 | Victoria | 1 | 37 | 27.5 | 51.2 | 29 | 690 | 1150 | 12 | 1 |
| Feller 1981 | Victoria | 1 | 38 | 28 | 52 | 30 | 690 | 1147 | 16 | 1 |
| Langford & O'Shaughnessy 1977 | Victoria | 8 | 13 | 29 | 58 | | 1745 | 1600 | 170 | 11 |
| Smith et al. 1974 | Lidsdale, NSW | 2.6 | 36 | 27 | 31 | | | 849 | 19 | 2 |
| Thistlethwaite 1970 | Cotter | 0.75 | 24 | | 43.8 | | | 1641 | 108 | 7 |
| Fahey et al. 2001 | Mid-Canterbury | 20 months | 18 | 20 | 46 | 30 | 650 | 950 | 55 | 6 |
| Huber & Iroume 2001 | Collipulli | 1 | 8 | | 13.4 | | 833 | 1039 | 22 | 2 |
| Huber & Iroume 2001 | Collipulli | 1 | 8 | | 608 | | 395 | 1039 | 12 | 1 |
| Huber & Iroume 2001 | Collipulli | 1 | 16 | | 19.5 | | 460 | 1858 | 49 | 3 |
| Huber & Iroume 2001 | Collipulli | 1 | 15 | | 12 | | 220 | 1039 | 15 | 1 |
| Huber & Iroume 2001 | Collipulli | 1 | 10 | | 13.4 | | 833 | 734 | 17 | 2 |
| Huber & Iroume 2001 | Collipulli | 1 | 9 | | 13.4 | | 833 | 1858 | 40 | 2 |
| Huber & Iroume 2001 | Collipulli | 1 | 15 | | 19.5 | | 460 | 1039 | 28 | 3 |
| Huber & Iroume 2001 | Collipulli | 1 | 16 | | 12 | | 220 | 1858 | 37 | 2 |
| Huber & Iroume 2001 | Los Angeles 1 | | 16 | | 22.1 | | 143 | 1005 | 64 | 6 |
| Huber & Iroume 2001 | Los Angeles 1 | | 16 | | 8.8 | | 417 | 1005 | 12 | 2 |

| | Where | Duration (years) | Age (years) | Height (m) | Basal area (m ² /ha) | DBH (cm) | Density (sph) | PTTN (mm) | Stemflow (mm) | SF (%) |
|---------------------|---------------|---------------------|----------------|---------------|------------------------------------|-------------|------------------|--------------|------------------|-----------|
| Huber & Iroume 2001 | Los Angeles 1 | | 12 | | 13.7 | | 549 | 1005 | 44 | 4 |
| Huber & Iroume 2001 | Los Angeles 1 | | 12 | | 27.1 | | 1206 | 1005 | 54 | 5 |
| Huber & Iroume 2001 | Los Angeles 2 | | 10 | | 16.5 | | 1087 | 1038 | 25 | 3 |
| Huber & Iroume 2001 | Los Angeles 2 | | 6 | | 11 | | 926 | 1038 | 14 | 1 |
| Huber & Iroume 2001 | Nacimiento | 1 | 13 | | | | 443 | 1971 | 68 | 3 |
| Huber & Iroume 2001 | Nacimiento | 1 | 23 | | | | 2000 | 1971 | 88 | 5 |
| Huber & Iroume 2001 | Valdivia | | | | | | | 1676 | 92 | 5 |
| Huber & Iroume 2001 | Valdivia | | | | | | | 2075 | 97 | 5 |
| Huber & Iroume 2001 | Valdivia | 1 | 25 | | 60 | | 733 | 2389 | 311 | 13 |
| Huber & Iroume 2001 | Valdivia | | | | | | | 2394 | 108 | 5 |
| Huber & Iroume 2001 | Valdivia | 1 | 31 | | 60 | | 733 | 1364 | 108 | 8 |
| Huber & Iroume 2001 | Valdivia | | | | | | | 2574 | 134 | 5 |
| Huber & Iroume 2001 | Valdivia | 1 | 22 | | 51.6 | | 467 | 1676 | 139 | 8 |
| Huber & Iroume 2001 | Valdivia | 1 | 30 | | 60 | | 733 | 1841 | 159 | 9 |
| Huber & Iroume 2001 | Valdivia | 1 | 18 | | 65.9 | | 973 | 2925 | 302 | 10 |
| Huber & Iroume 2001 | Valdivia | 1 | 19 | | 51.6 | | 467 | 2075 | 165 | 8 |
| Huber & Iroume 2001 | Valdivia | 1 | 17 | | 34.9 | | 194 | 2925 | 171 | 6 |
| Huber & Iroume 2001 | Valdivia | 1 | 20 | | 51.6 | | 467 | 2394 | 186 | 8 |
| Huber & Iroume 2001 | Valdivia | 1 | 19 | | 65.9 | | 973 | 2075 | 187 | 9 |
| Huber & Iroume 2001 | Valdivia | 1 | 28 | | 60 | | 733 | 2295 | 253 | 11 |
| Huber & Iroume 2001 | Valdivia | 1 | 26 | | 60 | | 733 | 1628 | 202 | 12 |
| Huber & Iroume 2001 | Valdivia | 1 | 27 | | 60 | | 733 | 2059 | 241 | 12 |
| Huber & Iroume 2001 | Valdivia | 1 | 21 | | 51.6 | | 467 | 2574 | 208 | 8 |
| Huber & Iroume 2001 | Valdivia | 1 | 29 | | 60 | | 733 | 2341 | 237 | 10 |

| | Where | Duration (years) | Age (years) | Height (m) | Basal area (m ² /ha) | DBH (cm) | Density (sph) | PTTN (mm) | Stemflow (mm) | SF (%) |
|----------------------|----------|---------------------|----------------|---------------|------------------------------------|-------------|------------------|--------------|------------------|-----------|
| Huber & Iroume 2001 | Valdivia | 1 | 18 | | 51.6 | | 467 | 2925 | 228 | 8 |
| Huber & Oyarzun 1983 | Chile | 1 | 26 | 32 | 57 | | 733 | 1769 | 208 | 12 |
| Huber & Oyarzun 1990 | Chile | 1 | 25 | 32 | 60 | 35 | 733 | 2389 | 311 | 13 |
| Huber & Oyarzun 1990 | Chile | 1 | 29 | 32 | 60 | 35 | 733 | 2341 | 237 | 10 |
| Huber & Oyarzun 1990 | Chile | 1 | 27 | 32 | 60 | 35 | 733 | 2059 | 241 | 12 |
| Huber & Oyarzun 1990 | Chile | 1 | 31 | 32 | 60 | 35 | 733 | 1364 | 108 | 8 |
| Huber & Oyarzun 1990 | Chile | 1 | 28 | 32 | 60 | 35 | 733 | 2165 | 253 | 12 |
| Huber & Oyarzun 1990 | Chile | 1 | 26 | 32 | 60 | 35 | 733 | 1628 | 202 | 12 |
| Huber & Oyarzun 1990 | Chile | 1 | 30 | 32 | 60 | 35 | 733 | 1841 | 159 | 9 |
| Oyarzun et al. 1985 | Chile | 21 months | 26 | 32 | 57.1 | 32 | 733 | 1732 | 205 | 12 |
| Oyarzun et al. 1985 | Chile | 21 months | 9 | 11 | 10.5 | 14 | 443 | 1732 | 210 | 12 |
| Oyarzun et al. 1985 | Chile | 21 months | 9 | 11 | 19.8 | 17 | 1392 | 1732 | 355 | 21 |

Appendix 28.4 Interception loss for radiata pine

| Source | Where | Duration | Age (years) | Height (m) | Basal area (m ² /ha) | Diameter (cm) | Density (sph) | PTTN (mm) | Interception (mm) | loss (%) |
|-------------------------------|---------------|----------|----------------|---------------|------------------------------------|------------------|------------------|--------------|----------------------|-------------|
| Bell & Gatenby 1969 | Lidsdale, NSW | 1 | 31 | 25 | | | | 402 | 97 | 24 |
| Baker & Attiwill 1987 | Victoria | 2 | 22 | 31 | 42 | | 610 | 892 | 392 | 44 |
| Baker & Attiwill 1987 | Victoria | 2 | 18 | 25 | 44 | | 1400 | 902 | 303 | 34 |
| Crockford & Khanna 1997 | Canberra | 2 | 12 | 14.5 | 24 | | 625 | 578 | 122 | 21 |
| Crockford & Khanna 1997 | Canberra | 2 | 12 | 13.8 | 24.7 | | 599 | 578 | 118 | 21 |
| Crockford & Khanna 1997 | Canberra | 2 | 12 | 15.8 | 38.2 | | 746 | 578 | 170 | 29 |
| Feller 1981 | Victoria | 1 | 37 | 27.5 | 51.2 | 29 | 690 | 1150 | 347 | 30 |
| Feller 1981 | Victoria | 1 | 38 | 28 | 52 | 30 | 690 | 1147 | 238 | 21 |
| Langford & O'Shaughnessy 1977 | Victoria | 8 | 13 | 29 | 58 | | 1745 | 1600 | 342 | 21 |
| Pilgrim et al. 1982 | NSW | 3 | 42 | 31 | 19 | | | 842 | 183 | 22 |
| Smith et al. 1974 | Lidsdale, NSW | 2.6 | 36 | 27 | 31 | | | 854 | 160 | 19 |
| Duncan 1980 | Nelson, NZ | 1 | 4 | | | | 1500 | 1265 | 114 | 9 |
| Duncan 1995a | Nelson, NZ | 1 | 6 | | | | 500 | 1300 | 307 | 24 |
| Duncan 1995a | Nelson, NZ | 1 | 7 | | | | 500 | 963 | 177 | 18 |
| Duncan 1995a | Nelson, NZ | 1 | 8 | | | | 500 | 855 | 236 | 28 |
| Duncan 1995a | Nelson, NZ | 1 | 9 | | | | 500 | 1028 | 284 | 28 |
| Duncan 1995a | Nelson, NZ | 1 | 11 | | | | 300 | 938 | 134 | 14 |
| Duncan 1995a | Nelson, NZ | 1 | 12 | | | | 300 | 834 | 183 | 22 |
| Duncan 1995a | Nelson, NZ | 1 | 13 | | | | 300 | 1284 | 179 | 14 |

| Source | Where | Duration | Age (years) | Height (m) | Basal area (m ² /ha) | Diameter (cm) | Density (sph) | PTTN (mm) | Interception (mm) | loss (%) |
|---------------------|----------------|----------|----------------|---------------|------------------------------------|------------------|------------------|--------------|----------------------|-------------|
| Duncan 1995a | Nelson, NZ | 1 | 14 | | | | 300 | 1027 | 273 | 27 |
| Duncan 1995a | Nelson, NZ | 1 | 15 | | | | 300 | 1214 | 259 | 21 |
| Fahey et al. 2001 | Canterbury, NZ | 1.7 | 18 | 20 | 46 | 30 | 650 | 950 | 180 | 20 |
| Pearce et al. 1987 | Mangatu | | 26 | | | | | 1350 | 472.5 | 35 |
| Pienaar 1964 | South Africa | 1 | 10 | 12.3 | 22.5 | 14 | 1480 | 1400 | 171 | 12 |
| Calvo et al. 1979 | Spain | | 20 | | 48 | | | 1360 | 397 | 29 |
| Huber & Iroume 2001 | Valdivia | 1 | 25 | | 60 | | 733 | 2389 | 254 | 11 |
| Huber & Iroume 2001 | Valdivia | 1 | 26 | | 60 | | 733 | 1628 | 199 | 12 |
| Huber & Iroume 2001 | Valdivia | 1 | 27 | | 60 | | 733 | 2059 | 346 | 17 |
| Huber & Iroume 2001 | Valdivia | 1 | 28 | | 60 | | 733 | 2295 | 291 | 17 |
| Huber & Iroume 2001 | Valdivia | 1 | 29 | | 60 | | 733 | 2341 | 408 | 17 |
| Huber & Iroume 2001 | Valdivia | 1 | 30 | | 60 | | 733 | 1841 | 296 | 16 |
| Huber & Iroume 2001 | Valdivia | 1 | 31 | | 60 | | 733 | 1364 | 303 | 22 |
| Huber & Iroume 2001 | Valdivia | 1 | 18 | | 65.9 | | 973 | 2925 | 540 | 18 |
| Huber & Iroume 2001 | Valdivia | 1 | 19 | | 65.9 | | 973 | 2075 | 429 | 21 |
| Huber & Iroume 2001 | Valdivia | 1 | 18 | | 51.6 | | 467 | 2925 | 494 | 17 |
| Huber & Iroume 2001 | Valdivia | 1 | 20 | | 51.6 | | 467 | 2394 | 442 | 18 |
| Huber & Iroume 2001 | Valdivia | 1 | 21 | | 51.6 | | 467 | 2574 | 378 | 15 |
| Huber & Iroume 2001 | Valdivia | 1 | 22 | | 51.6 | | 467 | 1676 | 222 | 13 |
| Huber & Iroume 2001 | Valdivia | 1 | 17 | | 34.9 | | 194 | 2925 | 443 | 15 |
| Huber & Iroume 2001 | Valdivia | 1 | 18 | | 34.9 | | 194 | 2075 | 339 | 16 |

| Source | Where | Duration | Age (years) | Height (m) | Basal area (m ² /ha) | Diameter (cm) | Density (sph) | PTTN (mm) | Interception (mm) | loss (%) |
|---------------------|---------------|----------|----------------|---------------|------------------------------------|------------------|------------------|--------------|----------------------|-------------|
| Huber & Iroume 2001 | Valdivia | 1 | 19 | | 34.9 | | 194 | 2394 | 357 | 15 |
| Huber & Iroume 2001 | Valdivia | 1 | 21 | | 34.9 | | 194 | 2574 | 349 | 14 |
| Huber & Iroume 2001 | Valdivia | 1 | 22 | | 34.9 | | 194 | 1676 | 207 | 12 |
| Huber & Iroume 2001 | Valdivia | 1 | 23 | | 33.2 | | 467 | 2373 | 367 | 16 |
| Huber & Iroume 2001 | Valdivia | 1 | 20 | | 58 | | 1250 | 2648 | 579 | 22 |
| Huber & Iroume 2001 | Valdivia | 1 | 20 | | 35 | | 423 | 2648 | 538 | 20 |
| Huber & Iroume 2001 | Valdivia | 1 | 20 | | 32 | | 217 | 2648 | 515 | 19 |
| Huber & Iroume 2001 | Nacimiento | 1 | 23 | | | | 2000 | 1971 | 523 | 27 |
| Huber & Iroume 2001 | Nacimiento | 1 | 13 | | | | 443 | 1971 | 338 | 17 |
| Huber & Iroume 2001 | Collipulli | 1 | 15 | | 19.5 | | 460 | 1039 | 344 | 33 |
| Huber & Iroume 2001 | Collipulli | 1 | 16 | | 19.5 | | 460 | 1858 | 540 | 29 |
| Huber & Iroume 2001 | Collipulli | 1 | 15 | | 12 | | 220 | 1039 | 318 | 31 |
| Huber & Iroume 2001 | Collipulli | 1 | 16 | | 12 | | 220 | 1858 | 510 | 28 |
| Huber & Iroume 2001 | Collipulli | 1 | 8 | | 13.4 | | 833 | 1039 | 326 | 31 |
| Huber & Iroume 2001 | Collipulli | 1 | 9 | | 13.4 | | 833 | 1858 | 471 | 25 |
| Huber & Iroume 2001 | Collipulli | 1 | 8 | | 608 | | 395 | 1039 | 268 | 26 |
| Huber & Iroume 2001 | Los Angeles 1 | 1 | 12 | | 27.1 | | 1206 | 1005 | 389 | 39 |
| Huber & Iroume 2001 | Los Angeles 1 | 1 | 12 | | 13.7 | | 549 | 1005 | 240 | 24 |
| Huber & Iroume 2001 | Los Angeles 1 | 1 | 16 | | 22.1 | | 143 | 1005 | 391 | 39 |
| Huber & Iroume 2001 | Los Angeles 1 | 1 | 16 | | 8.8 | | 417 | 1005 | 306 | 30 |
| Huber & Iroume 2001 | Los Angeles 2 | 1 | 6 | | 11 | | 926 | 1038 | 280 | 27 |

| Source | Where | Duration | Age (years) | Height (m) | Basal area (m ² /ha) | Diameter (cm) | Density (sph) | PTTN (mm) | Interception (mm) | loss (%) |
|---------------------|---------------|----------|----------------|---------------|------------------------------------|------------------|------------------|--------------|----------------------|-------------|
| Huber & Iroume 2001 | Los Angeles 2 | 1 | 10 | | 16.5 | | 1087 | 1038 | 292 | 28 |
| Oyarzun et al. 1985 | Chile | 1.75 | 9 | 11 | 19.8 | 17 | 1392 | 1732 | 240 | 14 |
| Oyarzun et al. 1985 | Chile | 1.75 | 9 | 11 | 10.5 | 14 | 443 | 1732 | 320 | 18 |
| Oyarzun et al. 1985 | Chile | 1.75 | 26 | 32 | 57.1 | 32 | 733 | 1732 | 160 | 9 |

Appendix 28.5 Transpiration data

| Source | Where | Age (years) | Height (m) | Basal area (m ² /ha) | Density (sph) | Water | Month | Days | Transpiration (mm) |
|-----------------------|--------------|----------------|---------------|------------------------------------|------------------|-------|----------|------|-----------------------|
| Arneth et al. 1998 | N Canterbury | 8 | 8.5 | | 1200 | wet | July | 5 | 0.8 |
| Arneth et al. 1998 | N Canterbury | 8 | 8.5 | | 1200 | wet | October | 5 | 1.6 |
| Arneth et al. 1998 | N Canterbury | 8 | 8.5 | | 1200 | wet | November | 5 | 3.6 |
| Arneth et al. 1998 | N Canterbury | 8 | 8.5 | | 1200 | dry | March | 2 | 2.3 |
| Arneth et al. 1998 | N Canterbury | 8 | 8.5 | | 1200 | dry | January | 5 | 1 |
| Arneth et al. 1998 | N Canterbury | 8 | 8.5 | | 1200 | dry | March | 5 | 1 |
| Jackson 1983 | Ashley | mix | | | | | December | | 2.25 |
| Jackson 1983 | Ashley | mix | | | | | February | | 0.5 |
| Jackson 1983 | Ashley | mix | | | | | July | | 0.75 |
| Kelliher et al. 1990 | Kaingaroa | 4 | 2.5 | | 2900 | well | March | 1 | 3.2 |
| Kelliher et al. 1990 | Kaingaroa | 4 | 2.5 | | 2900 | well | March | 1 | 2.7 |
| Kelliher et al. 1990 | Kaingaroa | 7 | 9 | | 450 | well | April | 1 | 1.9 |
| Kelliher et al. 1990 | Kaingaroa | 7 | 9 | | 450 | well | April | 1 | 1.5 |
| Miller et al.1998 | Eyrewell | 4 | 5 | | 4444 | | December | 10 | 1 |
| Miller et al.1998 | Eyrewell | 4 | 5 | | 4444 | | March | 10 | 1.2 |
| Miller et al.1998 | Lincoln | 4 | 5 | | 400 | | February | 10 | 1.8 |
| Miller et al.1998 | Lincoln | 4 | 5 | | 400 | | February | 10 | 2.5 |
| Whitehead et al. 1994 | Kaingaroa | 7 | 7.5 | | 450 | | November | 1 | 2.3 |
| Whitehead et al. 1994 | Kaingaroa | 7 | 7.5 | | 450 | | January | 1 | 1.8 |

| Source | Where | Age (years) | Height (m) | Basal area (m ² /ha) | Density (sph) | Water | Month | Days | Transpiration (mm) |
|----------------------------|---------------|----------------|---------------|------------------------------------|------------------|-------|-----------|------|-----------------------|
| Whitehead et al. 1994 | Kaingaroa | 7 | 7.5 | | 450 | | February | 1 | 2.5 |
| Whitehead et al. 1994 | Kaingaroa | 7 | 7.5 | | 450 | | April | 1 | 1.8 |
| Whitehead et al. 1994 | Kaingaroa | 7 | 7.5 | | 450 | | July | 1 | 0.8 |
| Whitehead et al. 1994 | Kaingaroa | 7 | 7.5 | | 450 | | October | 1 | 0.9 |
| Whitehead & Kelliher 1991b | Whakarewarewa | 11 | 17 | | 754 | | December | 1 | 3.4 |
| Whitehead & Kelliher 1991b | Whakarewarewa | 12 | | | 754 | | April | 1 | 2.5 |
| Whitehead & Kelliher 1991b | Whakarewarewa | 12 | | | 754 | | July | 1 | 1.4 |
| Whitehead & Kelliher 1991b | Whakarewarewa | 12 | | | 754 | | September | 1 | 2.1 |
| Whitehead & Kelliher 1991b | Whakarewarewa | 13 | | | 334 | | January | 1 | 2.4 |
| Whitehead & Kelliher 1991b | Whakarewarewa | 13 | | | 334 | | April | 1 | 2 |
| Whitehead & Kelliher 1991b | Whakarewarewa | 13 | | | 334 | | August | 1 | 1.2 |
| Whitehead & Kelliher 1991b | Whakarewarewa | 13 | | | 334 | | October | 1 | 1.6 |
| Denmead 1969 | Canberra | 7 | 7.5 | | 1736 | dry | October | 1 | 3.8 |
| Denmead 1969 | Canberra | 7 | 7.5 | | 1736 | | November | 1 | 5.3 |
| Denmead 1969 | Canberra | 7 | 7.5 | | 1736 | | October | 1 | 5.2 |
| Denmead 1969 | Canberra | 7 | 7.5 | | 1736 | wet | November | 1 | 7.5 |
| Moore 1976 | S Australia | | | | | | October | 1 | 3.2 |
| Hatton & Vertessy 1990 | SE Australia | 8 | 10.5 | | | wet | October | 1 | 4.1 |
| Hatton & Vertessy 1990 | SE Australia | 8 | 10.5 | | | wet | October | 1 | 3.1 |
| Hatton & Vertessy 1990 | SE Australia | 8 | 10.5 | | | wet | October | 1 | 5 |
| Hatton & Vertessy 1990 | SE Australia | 8 | 10.5 | | | wet | October | 1 | 5.3 |

| Source | Where | Age (years) | Height (m) | Basal area (m ² /ha) | Density (sph) | Water | Month | Days | Transpiration (mm) |
|-------------------------|-------------|----------------|---------------|------------------------------------|------------------|-------|-----------|------|-----------------------|
| Greenwood et al. 1981 | W Australia | 16 | 16 | 8 | 200 | | May | 1 | 1.7 |
| Greenwood et al. 1981 | W Australia | 16 | 16 | 8 | 200 | | June | 1 | 1.9 |
| Greenwood et al. 1981 | W Australia | 16 | 16 | 8 | 200 | | July | 1 | 3.2 |
| Greenwood et al. 1981 | W Australia | 16 | 16 | 8 | 200 | | August | 1 | 2.3 |
| Greenwood et al. 1981 | W Australia | 16 | 16 | 8 | 200 | | September | 1 | 3.3 |
| Greenwood et al. 1981 | W Australia | 16 | 16 | 8 | 200 | | October | 1 | 2.9 |
| Greenwood et al. 1981 | W Australia | 16 | 16 | 8 | 200 | | November | 1 | 3.6 |
| Greenwood et al. 1981 | W Australia | 16 | 16 | 8 | 200 | | December | 1 | 2.9 |
| Greenwood et al. 1981 | W Australia | 16 | 16 | 8 | 200 | | February | 1 | 1 |
| Greenwood et al. 1981 | W Australia | 16 | 16 | 8 | 200 | | March | 1 | 1.4 |
| Greenwood et al. 1981 | W Australia | 16 | 16 | 8 | 200 | | April | 1 | 1 |
| Greenwood et al. 1981 | W Australia | 16 | 16 | 8 | 200 | | May | 1 | 0.5 |
| Greenwood et al. 1981 | W Australia | 16 | 16 | 8 | 200 | | June | 1 | 0.7 |
| Hicks et al. 1975 | S Australia | | 13 | | | | October | 9 | 2.31 |
| Holmes & Olszyczka 1982 | S Australia | 7 | 1.5 | | | | August | 1 | 0.8 |
| Holmes & Olszyczka 1982 | S Australia | 7 | 1.5 | | | | August | 1 | 3.8 |
| Holmes & Olszyczka 1982 | S Australia | 7 | 1.5 | | | | December | 1 | 3.3 |
| Holmes & Olszyczka 1982 | S Australia | 7 | 1.5 | | | | December | 1 | 6.2 |
| Holmes & Olszyczka 1982 | S Australia | 7 | 1.5 | | | | August | 29 | 1.9 |
| Holmes & Olszyczka 1982 | S Australia | 7 | 1.5 | | | | December | 29 | 4.7 |
| Black et al. 1980 | Canada | 22 | 8 | | 1840 | | July | 11 | 2.9 |

| Source | Where | Age (years) | Height (m) | Basal area (m ² /ha) | Density (sph) | Water | Month | Days | Transpiration (mm) |
|-------------------------|--------|----------------|---------------|------------------------------------|------------------|-------|--------|------|-----------------------|
| Black et al. 1980 | Canada | 22 | 8 | | 1840 | | August | 8 | 2.5 |
| Black et al. 1980 | Canada | 22 | 8 | | 1840 | | August | 8 | 1.9 |
| Black et al. 1980 | Canada | 22 | 8 | | 1840 | | August | 8 | 1 |
| Black et al. 1980 | Canada | 22 | 8 | | 840 | | July | 7 | 3.6 |
| Black et al. 1980 | Canada | 22 | 8 | | 840 | | July | 6 | 3.4 |
| Black et al. 1980 | Canada | 22 | 8 | | 840 | | July | 8 | 2.3 |
| Black et al. 1980 | Canada | 22 | 8 | | 840 | | July | 8 | 1.8 |
| Black et al. 1980 | Canada | 22 | 8 | | 840 | | July | 8 | 1.2 |
| Kelliher et al. 1986 | Canada | 32 | 14 | | 800 | | August | 1 | 1.8 |
| Kelliher et al. 1986 | Canada | 32 | 14 | | 800 | | August | 1 | 2.2 |
| Kelliher et al. 1986 | Canada | 32 | 14 | | 800 | | August | 1 | 1.8 |
| McNaughton & Black 1973 | Canada | | 7.8 | | | | July | 18 | 3.3 |