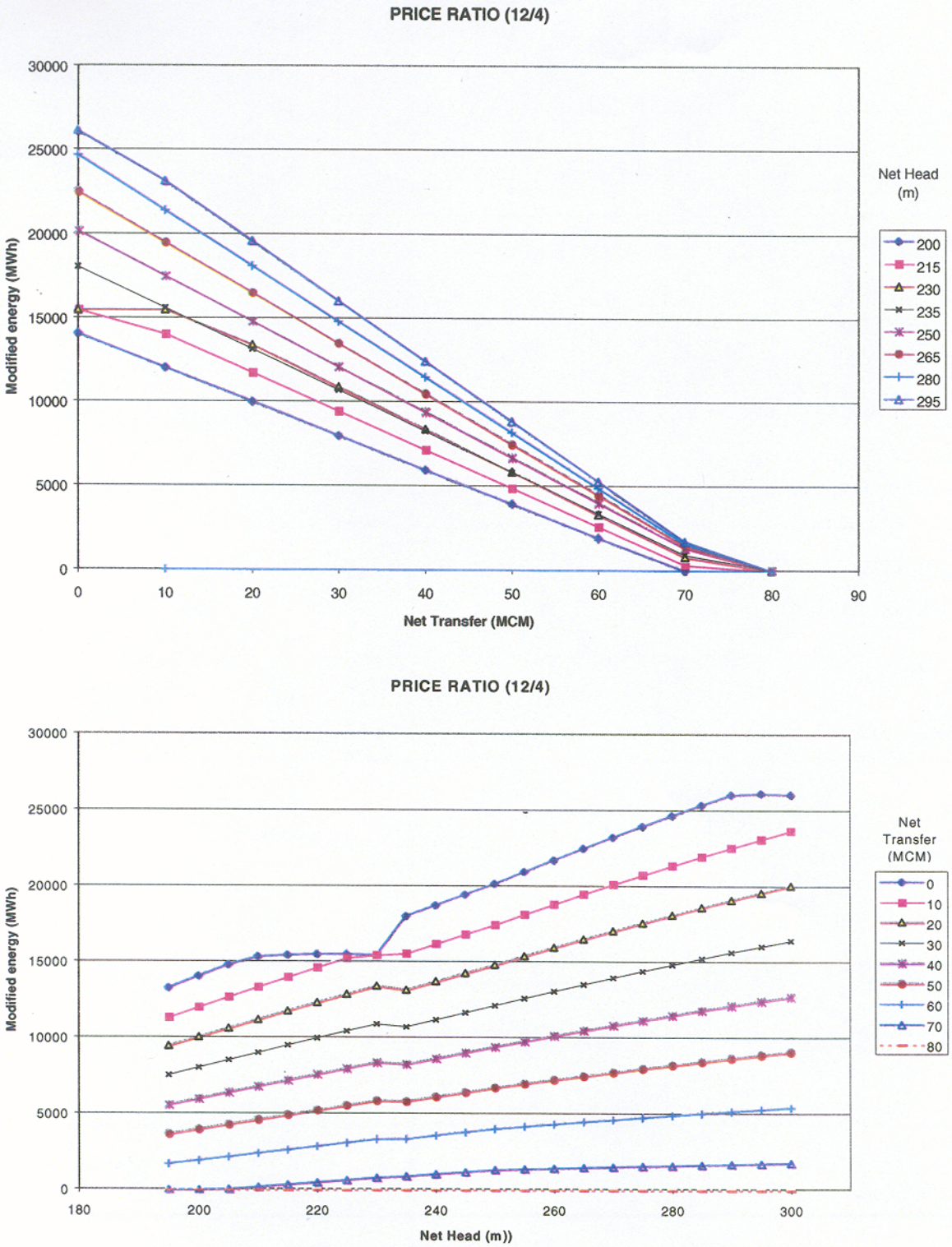


Figure B1: Modified Energy as function of the Net Transfer and Net Head for the 12/4 price ratio.

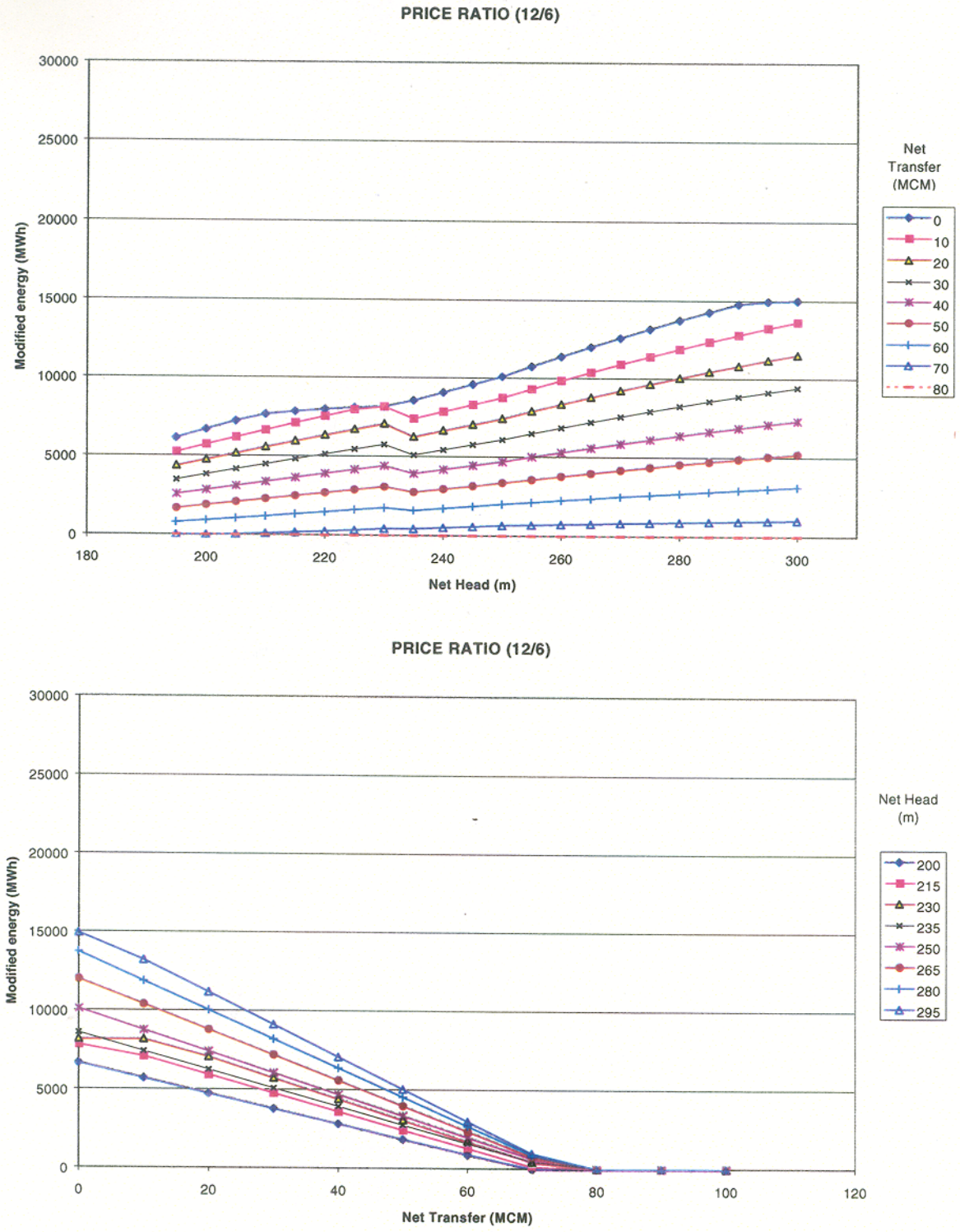
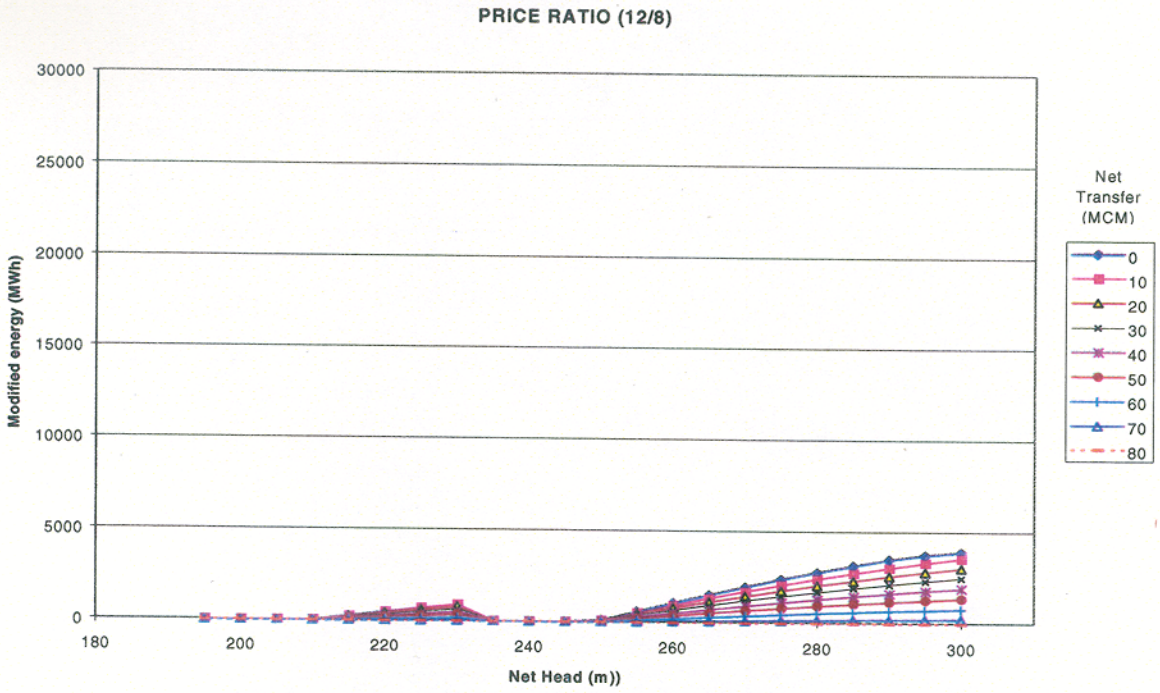


Figure B2: Modified Energy as function of the Net Transfer and Net Head for the 12/6 price ratio.



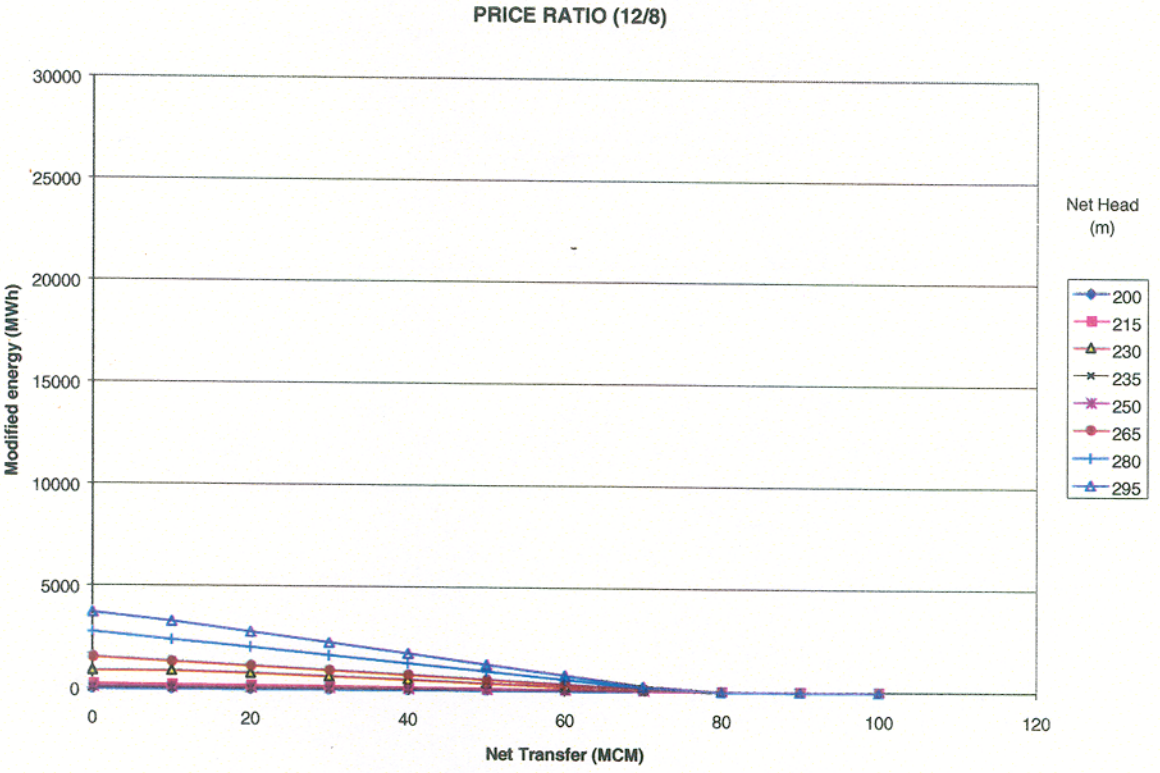
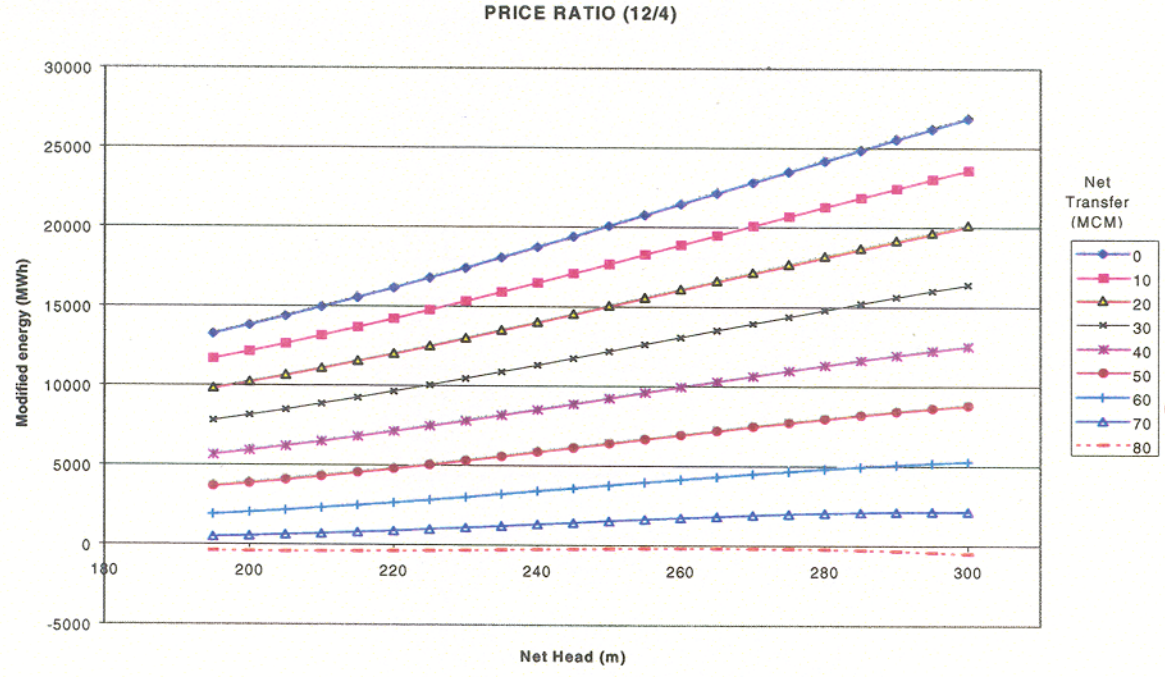


Figure B3: Modified Energy as function of the Net Transfer and Net Head for the 12/8 price ratio.



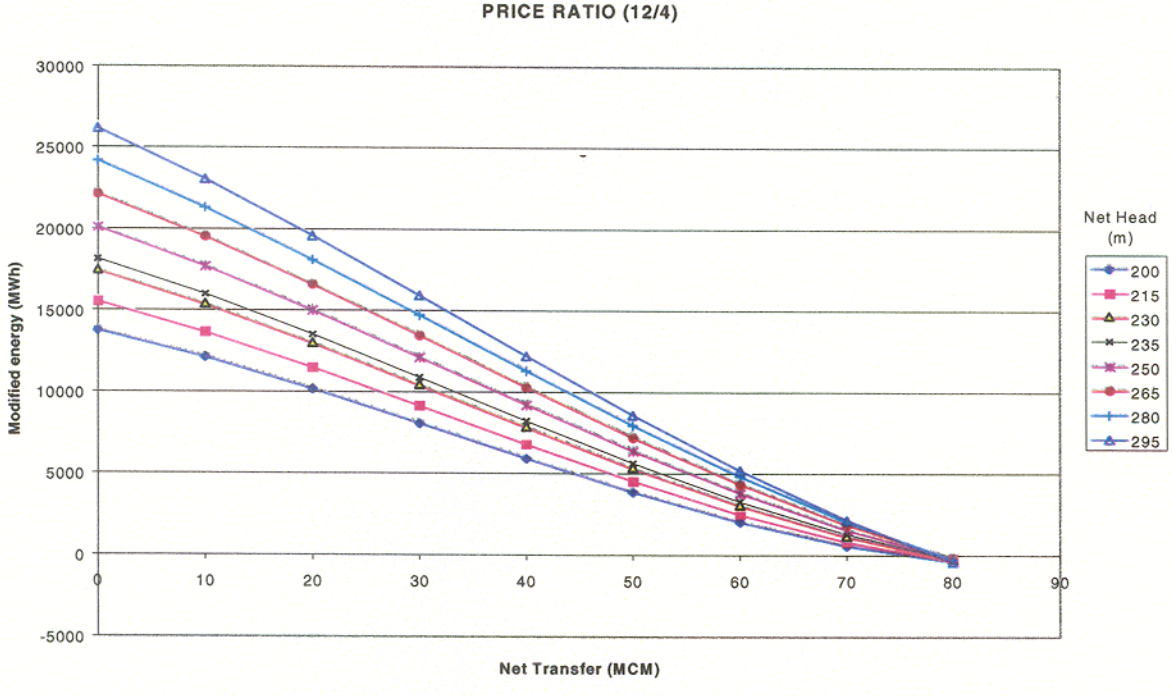
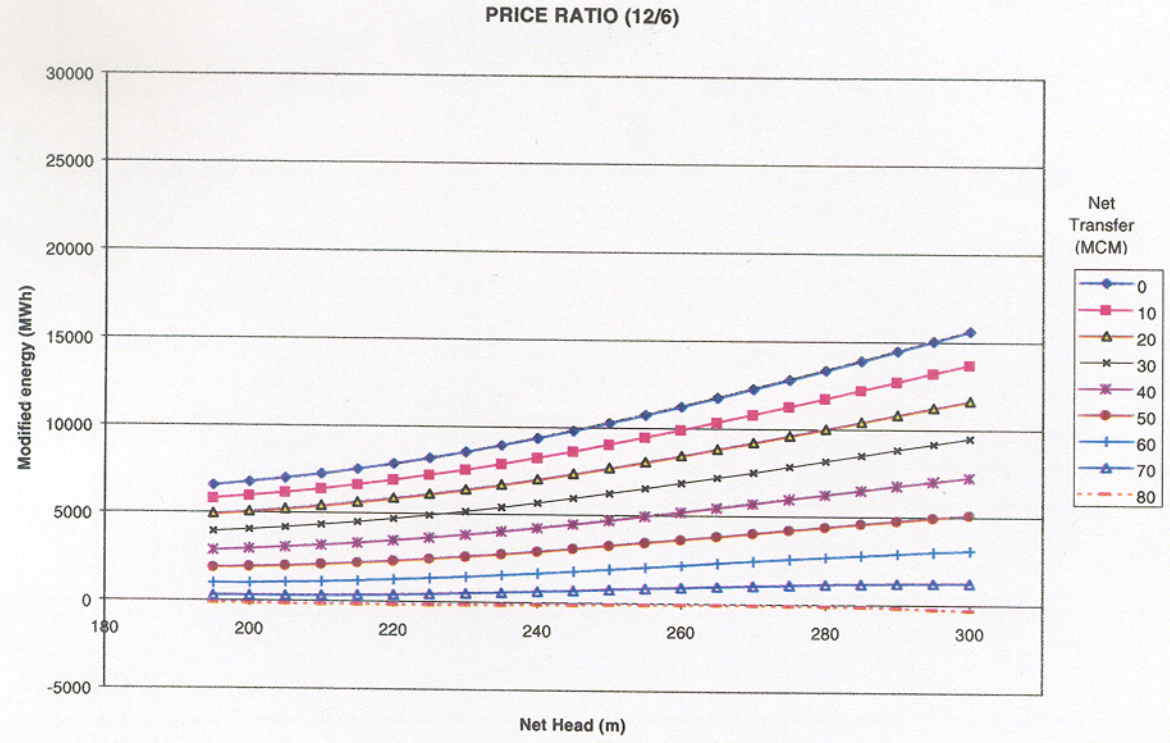


Figure B4: Regression function of the Modified Energy as function of the Net Transfer and Net Head for the 12/4 price ratio.



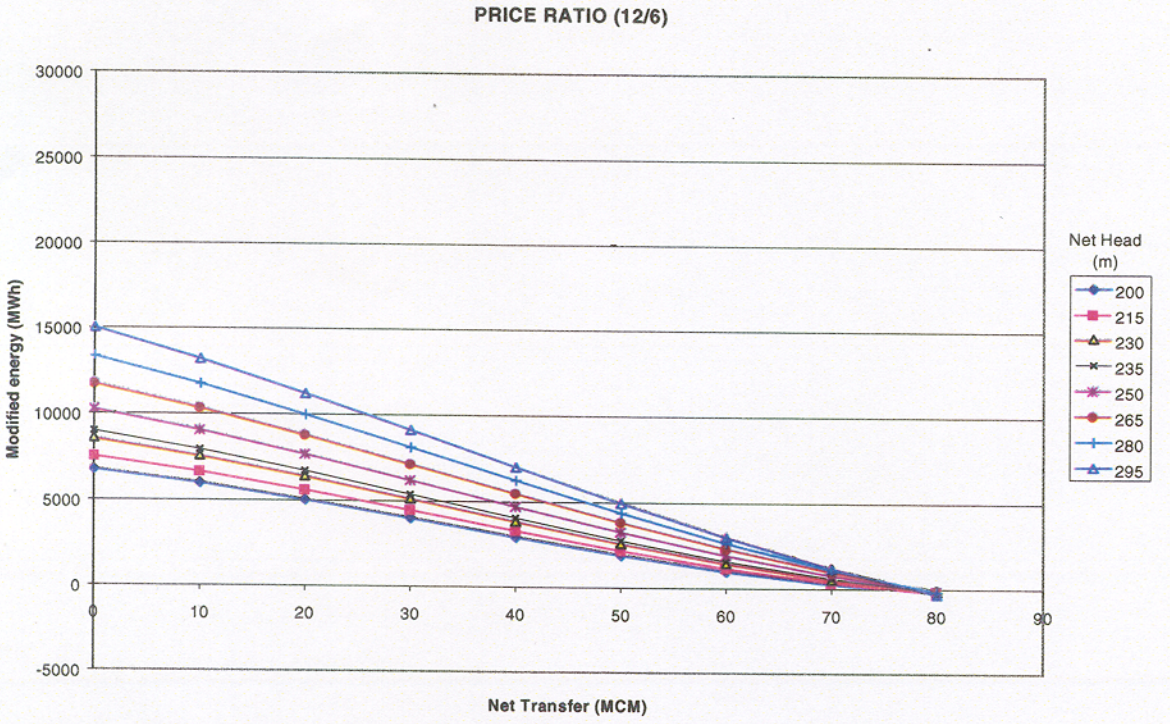
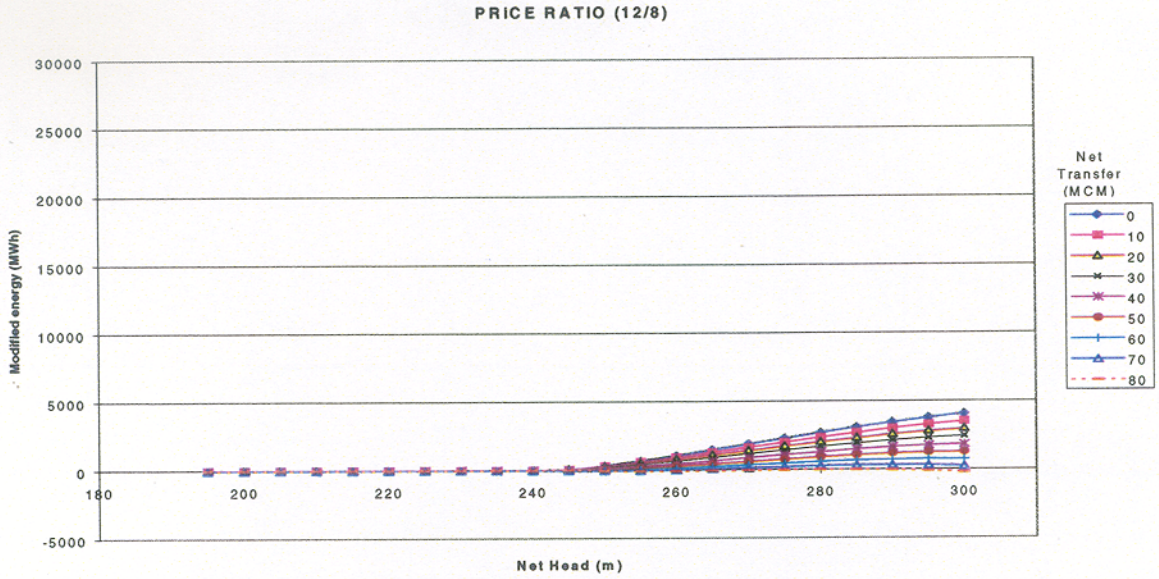


Figure B5: Regression function of the Modified Energy as function of the Net Transfer and Net Head for the 12/6 price ratio.



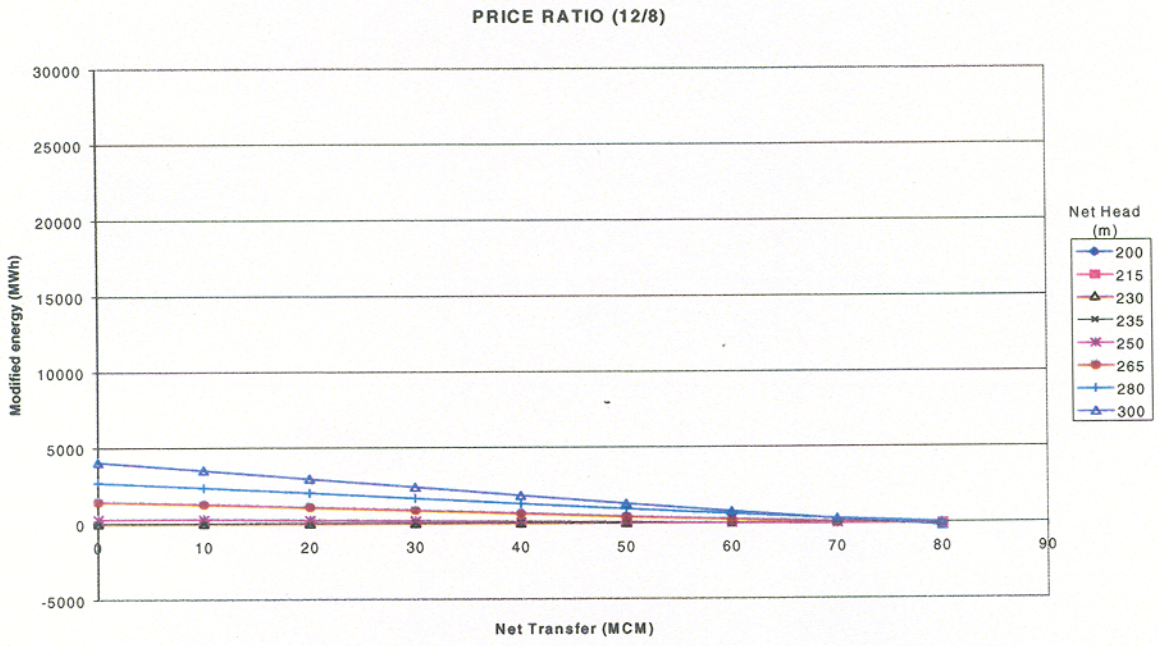


Figure B6: Regression function of the Modified Energy as function of the Net Transfer and Net Head for the 12/8 price ratio.

APPENDIX C

RESULTS OF CONTROL AND SIMULATION STUDIES

C.1: Simulation Statistics of Various Scenarios

Table C.1.1: Simulation Statistics for System Configuration A; No Pumping; Zero Diversion; Corridor Forecast Model; Price Ratio of Primary Energy and Pumping Energy =12:6

```
Annual Inflows (mcm)
   1    747.94
   2    739.47
   3   2160.86
   4    559.95
   5    210.36
   6      0.00
   7      0.00

Annual Release (mcm)
   1    747.94
   2   1487.41
   3   3497.75
   4   4050.54
   5   4132.62
   6      0.00
   7      0.00
   8      0.00

Annual Net Evaporation Loss (mcm)
   1      0.00
   2      0.00
   3     11.75
   4      6.65
   5      2.03
   6      0.00
   7      0.00

Annual Spillage (mcm)
   1      0.00
   2      0.00
   3     55.57
   4      4.62
   5      9.29
   6      0.00
   7      0.00

Annual Deficit(mcm)
   1      0.00
   2      0.00
   3      0.00
   4      0.00
   5      0.00
   6      0.00
   7      0.00

Terminal Storage (mcm)
   1    341.90
```

Table C.1.2: Simulation Statistics for System Configuration B; No Pumping; Zero Diversion; Corridor Forecast Model; Price of Ratio of Primary Energy and Pumping Energy =12:6

Annual Inflows (mcm)

1	747.94
2	739.47
3	2160.86
4	559.95
5	210.36
6	0.00
7	0.00

Annual Release (mcm)

1	706.66
2	1347.08
3	3510.86
4	4063.65
5	4145.74
6	0.00
7	0.00
8	0.00

Annual Net Evaporation Loss (mcm)

1	-4.29
2	-9.01
3	11.85
4	6.65
5	2.03
6	0.00
7	0.00

Annual Spillage (mcm)

1	1.05
2	53.85
3	55.93
4	4.75
5	9.12
6	0.00
7	0.00

Annual Deficit(mcm)

1	0.00
2	0.00
3	0.00
4	0.00
5	0.00
6	0.00
7	0.00

Terminal Storage (mcm)

1	285.64
2	405.62
3	2625.97
4	789.36
5	72.14
6	65.19
7	202.41

Annual Irrigation Value (Bdr.)

1	0.00
2	0.00
3	0.00
4	0.00
5	9.25
6	0.00

Table C.1.3: Simulation Statistics for System Configuration C; No Pumping; 600 mcm/yr Diversion; Corridor Forecast Model; Price of Ratio of Primary Energy and Pumping Energy =12:6

```
Annual Inflows (mcm)
   1    747.94
   2    739.47
   3   2160.86
   4    559.95
   5    210.36
   6      0.00
   7    114.53

Annual Release (mcm)
   1    707.89
   2    758.53
   3   2930.50
   4   3483.31
   5   3565.40
   6      0.00
   7    710.56
   8    597.73

Annual Net Evaporation Loss (mcm)
   1     -4.08
   2     -6.21
   3     11.78
   4      6.65
   5      2.03
   6      0.00
   7     -0.82

Annual Spillage (mcm)
   1      1.05
   2     27.26
   3     31.97
   4      4.75
   5      8.91
   6      0.00
   7      0.00

Annual Deficit(mcm)
   1      0.04
   2      1.69
   3      0.00
   4      0.00
   5      0.13
   6      0.00
   7      3.91

Terminal Storage (mcm)
   1    245.42
   2    197.83
   3   2364.69
   4    789.57
   5     72.16
   6     65.19
   7     68.58

Annual Irrigation Volume  (mcm) and Value (Bdr)
   1      0.00      0.00
   2      0.00      0.00
   3      0.00      0.00
```

Table C.1.4: Simulation Statistics for System Configuration D; Pefkofito Pumping; 600 mcm/yr Diversion; Corridor Forecast Model; Price of Ratio of Primary Energy and Pumping Energy =12:6

```
Annual Inflows (mcm)
   1    747.94
   2    739.47
   3   2160.86
   4    559.95
   5    210.36
   6      0.00
   7    114.53

Annual Release (mcm)
   1    707.92
   2    758.24
   3   2930.56
   4   3483.31
   5   3565.38
   6      0.00
   7    710.90
   8    597.81

Annual Net Evaporation Loss (mcm)
   1     -4.05
   2     -6.19
   3     11.76
   4      6.65
   5      2.03
   6      0.00
   7     -0.79

Annual Spillage (mcm)
   1      1.05
   2     27.34
   3     31.97
   4      4.75
   5      8.91
   6      0.00
   7      0.00

Annual Deficit(mcm)
   1      0.04
   2      1.86
   3      0.00
   4      0.00
   5      0.00
   6      0.00
   7      4.15

Terminal Storage (mcm)
   1    243.71
   2    217.74
   3   2356.48
   4    789.56
   5     72.16
   6     65.19
   7     51.30

Annual Irrigation Volume  (mcm) and Value (Bdr)
   1      0.00      0.00
   2      0.00      0.00
   3      0.00      0.00
   4      0.00      0.00
   5    462.67      9.25
```

Table C.1.5: Simulation Statistics for System Configuration E; Pefkofito Pumping; 600 mcm/yr Diversion; Corridor Forecast Model; Price Ratio of Primary Energy and Pumping Energy =12:6

Annual Inflows (mcm)

1	747.94
2	739.47
3	2160.86
4	559.95
5	210.36
6	163.33
7	114.53

Annual Release (mcm)

1	707.70
2	758.50
3	2930.40
4	3483.15
5	3565.23
6	144.93
7	856.88
8	599.09

Annual Net Evaporation Loss (mcm)

1	-4.04
2	-6.07
3	11.78
4	6.65
5	2.03
6	-0.90
7	-0.86

Annual Spillage (mcm)

1	1.05
2	27.48
3	31.97
4	4.75
5	8.91
6	0.00
7	0.00

Annual Deficit(mcm)

1	0.06
2	3.68
3	0.00
4	0.00
5	0.07
6	0.04
7	2.75

Terminal Storage (mcm)

1	248.71
2	212.15
3	2370.55
4	788.93
5	71.56
6	52.53
7	67.15

Annual Irrigation Volume (mcm) and Value (Bdr)

1	0.00	0.00
2	0.00	0.00
3	0.00	0.00
4	0.00	0.00
5	462.60	9.25
6	4.00	0.08

Table C.1.6: Simulation Statistics for System Configuration E; Pefkofito Pumping; 600 mcm/yr Diversion; Perfect Forecast; Price Ratio of Primary Energy and Pumping Energy =12:6

```
Annual Inflows (mcm)
   1    747.94
   2    739.47
   3   2160.86
   4    559.95
   5    210.36
   6    163.33
   7    114.53

Annual Release (mcm)
   1    706.09
   2    749.73
   3   2882.85
   4   3435.27
   5   3517.34
   6    144.87
   7    858.36
   8    600.00

Annual Net Evaporation Loss (mcm)
   1     -4.28
   2     -6.35
   3     12.28
   4      6.61
   5      2.01
   6     -0.93
   7     -0.84

Annual Spillage (mcm)
   1      0.00
   2      0.00
   3      0.00
   4      0.00
   5      0.00
   6      0.00
   7      0.00

Annual Deficit(mcm)
   1      0.00
   2      0.00
   3      0.00
   4      0.00
   5      0.00
   6      0.00
   7      0.00

Terminal Storage (mcm)
   1    313.51
   2    281.34
   3   3600.00
   4    796.53
   5     73.33
   6     54.27
   7     60.91

Annual Irrigation Volume  (mcm) and Value (Bdr)
   1      0.00      0.00
   2      0.00      0.00
   3      0.00      0.00
   4      0.00      0.00
   5    462.67      9.25
   6      4.00      0.08
```

Table C.1.7: Simulation Statistics for System Configuration E; Pefkofito Pumping; 500 mcm/yr Diversion; Corridor Forecast Model; Price Ratio of Primary Energy and Pumping Energy =12:6

Annual Inflows (mcm)

1	747.94
2	739.47
3	2160.86
4	559.95
5	210.36
6	163.33
7	114.53

Annual Release (mcm)

1	707.38
2	855.26
3	3025.76
4	3578.57
5	3660.65
6	144.93
7	757.35
8	499.46

Annual Net Evaporation Loss (mcm)

1	-4.14
2	-6.61
3	11.79
4	6.65
5	2.03
6	-0.90
7	-0.80

Annual Spillage (mcm)

1	1.05
2	28.70
3	33.98
4	4.75
5	8.91
6	0.00
7	0.00

Annual Deficit(mcm)

1	0.04
2	2.11
3	0.00
4	0.00
5	0.00
6	0.12
7	0.50

Terminal Storage (mcm)

1	262.35
2	252.21
3	2412.58
4	788.97
5	71.98
6	55.16
7	66.23

Annual Irrigation Volume (mcm) and Value (Bdr)

1	0.00	0.00
2	0.00	0.00
3	0.00	0.00
4	0.00	0.00
5	462.67	9.25
6	3.96	0.08

Table C.1.8: Simulation Statistics for System Configuration E; Pefkofito Pumping; 700 mcm/yr Diversion; Corridor Forecast Model; Price Ratio of Primary Energy and Pumping Energy =12:6

```
Annual Inflows (mcm)
   1    747.94
   2    739.47
   3   2160.86
   4    559.95
   5    210.36
   6    163.33
   7    114.53

Annual Release (mcm)
   1    708.00
   2    668.91
   3   2841.45
   4   3394.26
   5   3476.34
   6    145.01
   7    952.64
   8    694.41

Annual Net Evaporation Loss (mcm)
   1     -3.96
   2     -5.67
   3     11.74
   4      6.65
   5      2.04
   6     -0.88
   7     -0.84

Annual Spillage (mcm)
   1      1.05
   2     23.75
   3     30.66
   4      4.75
   5      8.91
   6      0.00
   7      0.00

Annual Deficit(mcm)
   1      0.09
   2      8.57
   3      0.00
   4      0.00
   5      0.16
   6      0.14
   7      5.82

Terminal Storage (mcm)
   1    241.65
   2    178.29
   3   2348.64
   4    788.93
   5     72.09
   6     52.62
   7     57.87

Annual Irrigation Volume  (mcm) and Value (Bdr)
   1      0.00      0.00
   2      0.00      0.00
   3      0.00      0.00
   4      0.00      0.00
   5    462.67      9.25
   6      3.99      0.08
```

Table C.1.9: Simulation Statistics for System Configuration E; Pefkofito Pumping; 600 mcm/yr Diversion; Corridor Forecast Model; Price Ratio of Primary Energy and Pumping Energy =12:8

Annual Inflows (mcm)

1	747.94
2	739.47
3	2160.86
4	559.95
5	210.36
6	163.33
7	114.53

Annual Release (mcm)

1	707.82
2	759.83
3	2931.54
4	3484.30
5	3566.38
6	144.91
7	856.14
8	598.21

Annual Net Evaporation Loss (mcm)

1	-4.07
2	-5.96
3	11.71
4	6.65
5	2.03
6	-0.90
7	-0.87

Annual Spillage (mcm)

1	1.05
2	26.43
3	31.88
4	4.75
5	8.91
6	0.00
7	0.00

Annual Deficit(mcm)

1	0.06
2	3.95
3	0.00
4	0.00
5	0.06
6	0.04
7	2.76

Terminal Storage (mcm)

1	248.05
2	204.32
3	2377.67
4	788.94
5	72.10
6	53.32
7	62.63

Annual Irrigation Volume (mcm) and Value (Bdr)

1	0.00	0.00
2	0.00	0.00
3	0.00	0.00
4	0.00	0.00
5	462.67	9.25
6	4.00	0.08

Table C.1.10: Simulation Statistics for System Configuration E; Pefkofito Pumping; 600 mcm/yr Diversion; Corridor Forecast Model; Price Ratio of Primary Energy and Pumping Energy =12:4

Annual Inflows (mcm)

1	747.94
2	739.47
3	2160.86
4	559.95
5	210.36
6	163.33
7	114.53

Annual Release (mcm)

1	707.77
2	758.55
3	2929.63
4	3482.43
5	3564.51
6	144.86
7	857.18
8	598.89

Annual Net Evaporation Loss (mcm)

1	-4.03
2	-6.18
3	11.83
4	6.66
5	2.03
6	-0.89
7	-0.89

Annual Spillage (mcm)

1	1.05
2	26.88
3	31.97
4	4.75
5	8.91
6	0.00
7	0.00

Annual Deficit(mcm)

1	0.06
2	3.72
3	0.00
4	0.00
5	0.55
6	0.04
7	2.78

Terminal Storage (mcm)

1	249.57
2	219.99
3	2392.80
4	788.97
5	71.94
6	54.59
7	50.13

Annual Irrigation Volume (mcm) and Value (Bdr)

1	0.00	0.00
2	0.00	0.00
3	0.00	0.00
4	0.00	0.00
5	462.67	9.25
6	4.00	0.08

C.2: Reservoir Sequences of Control Model Run

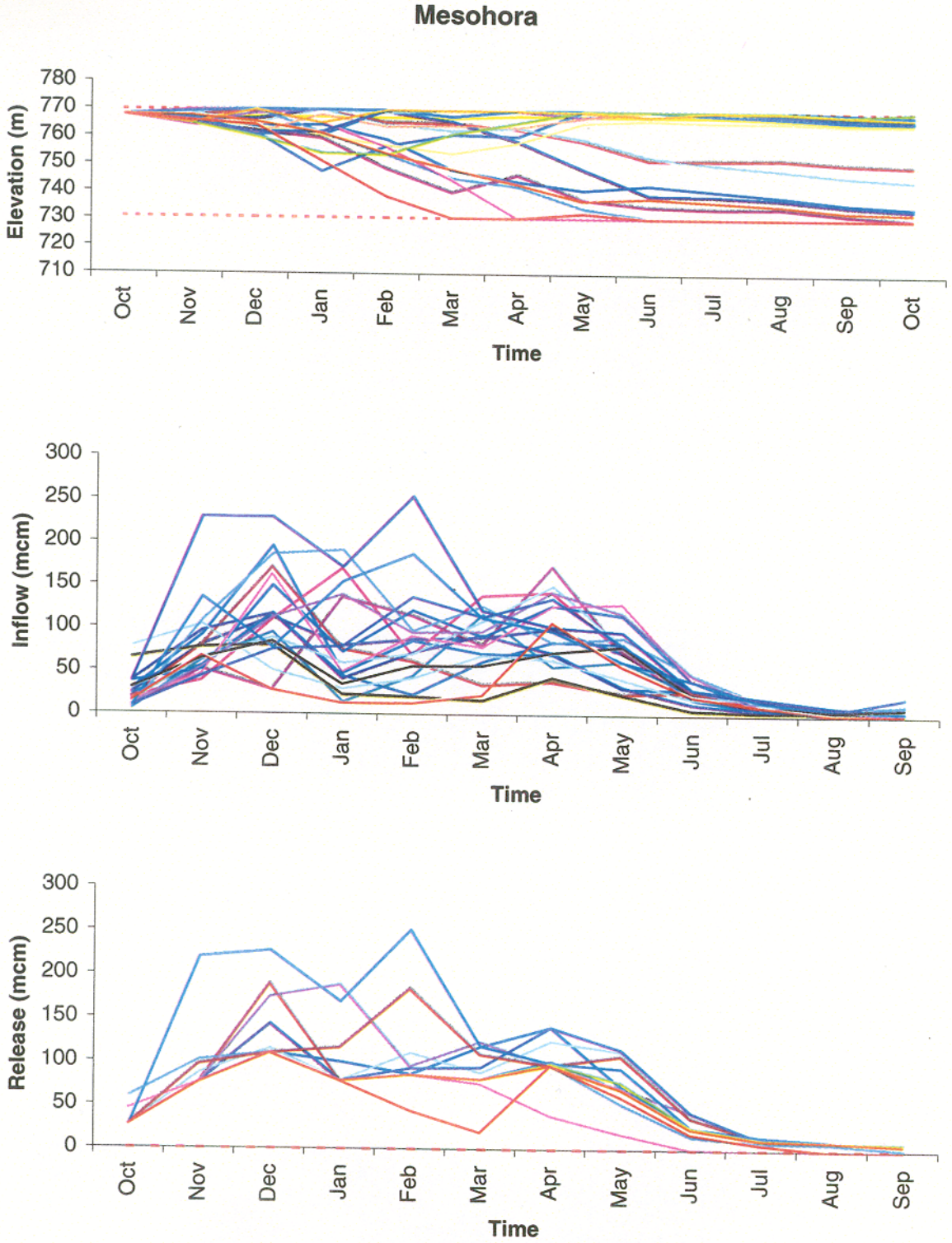
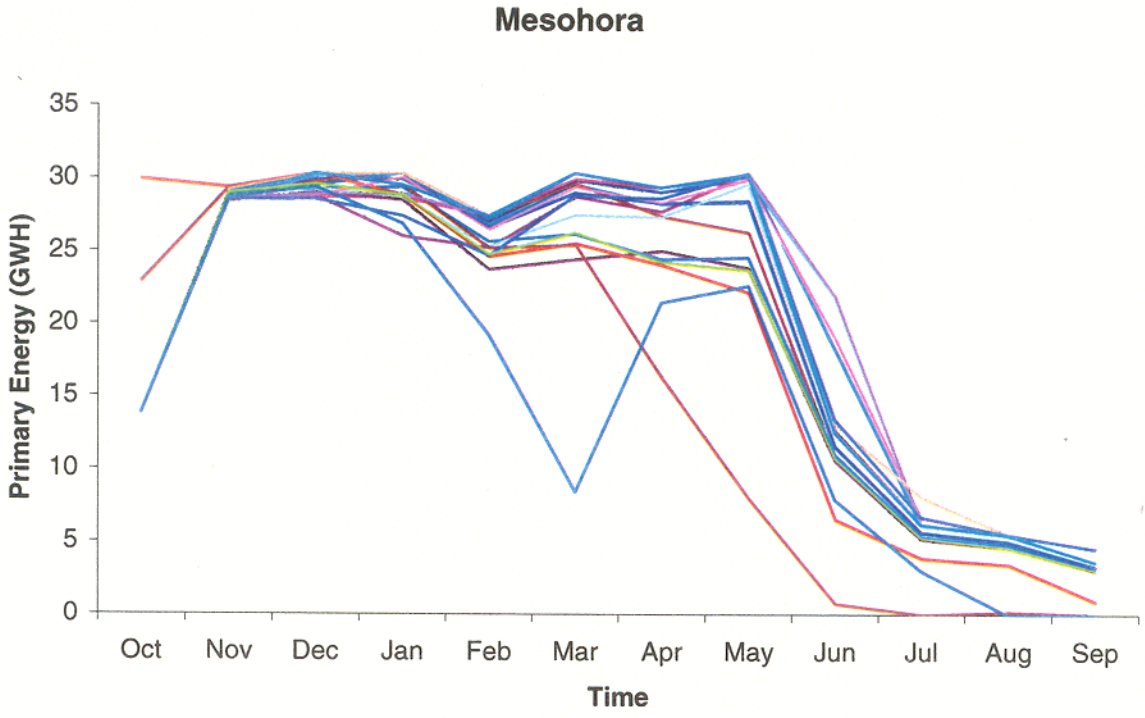


Figure C.2.1: Mesohora Control Sequences (a)



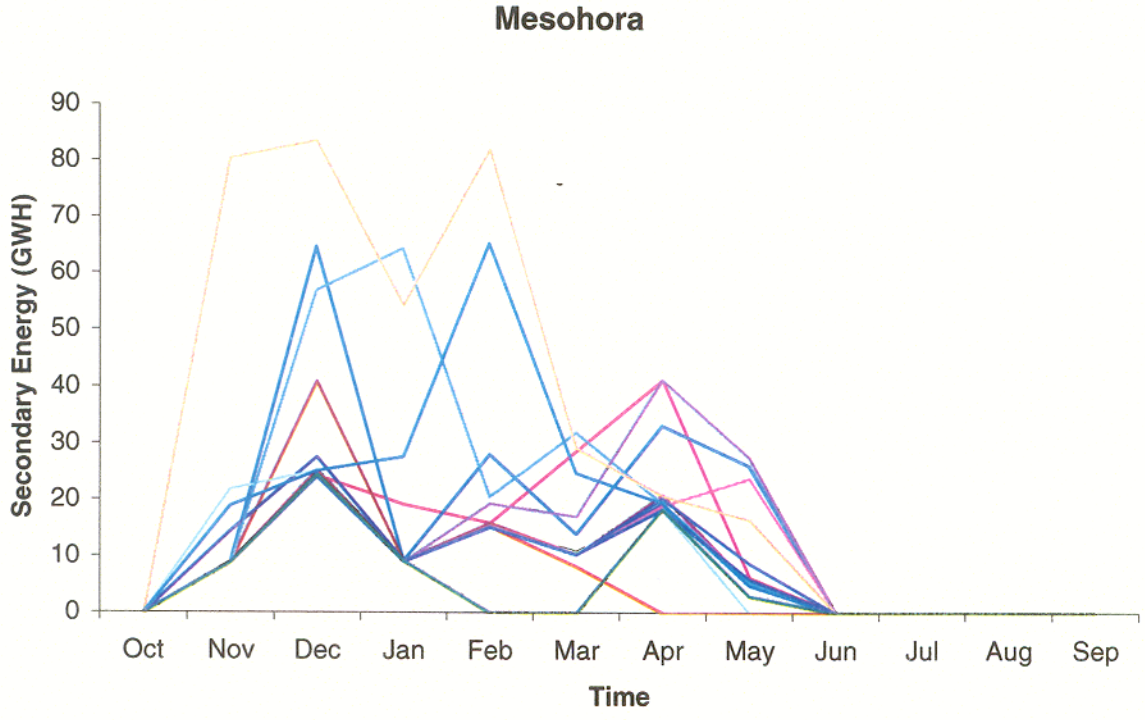


Figure C.2.2: Mesohora Control Sequences (b)

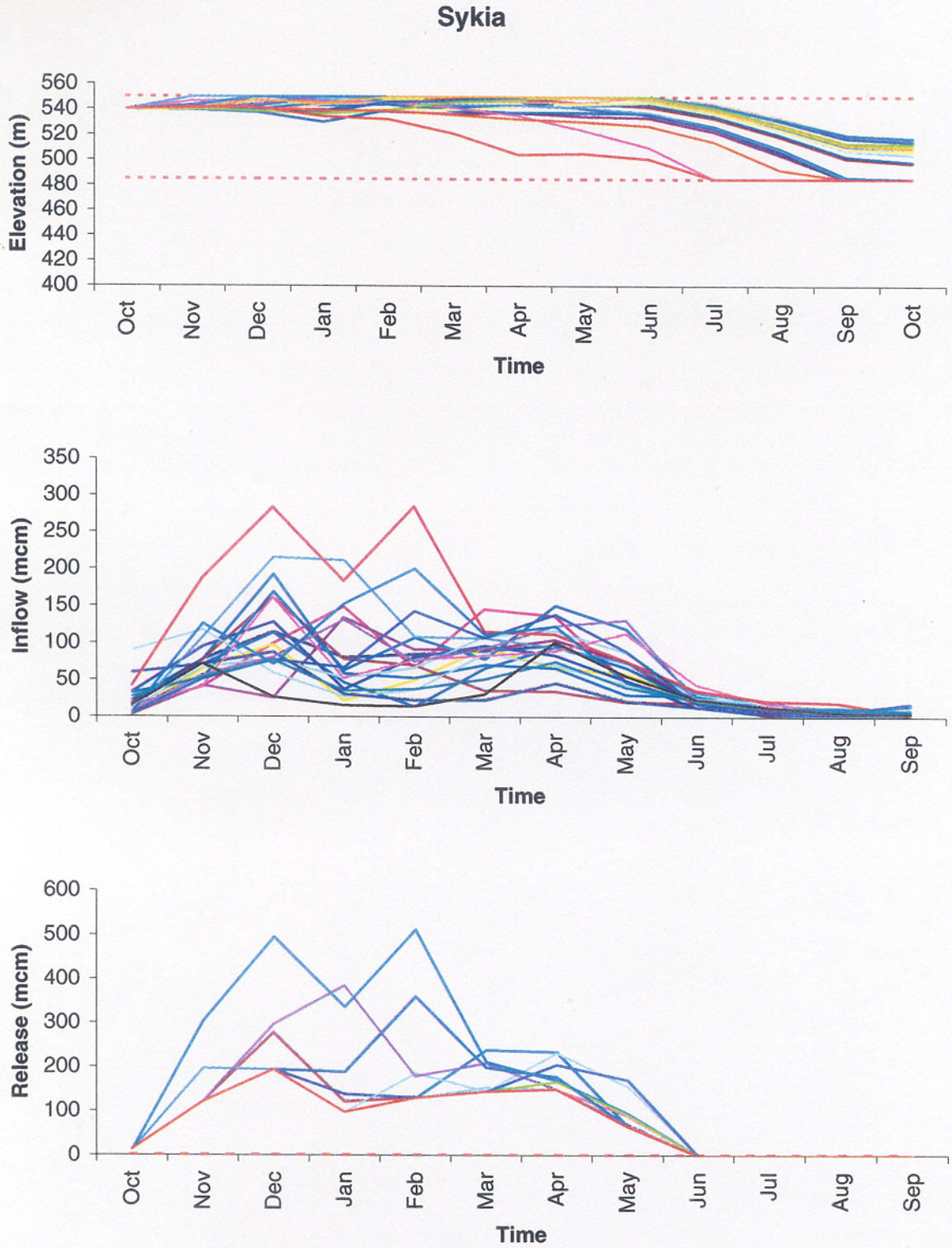
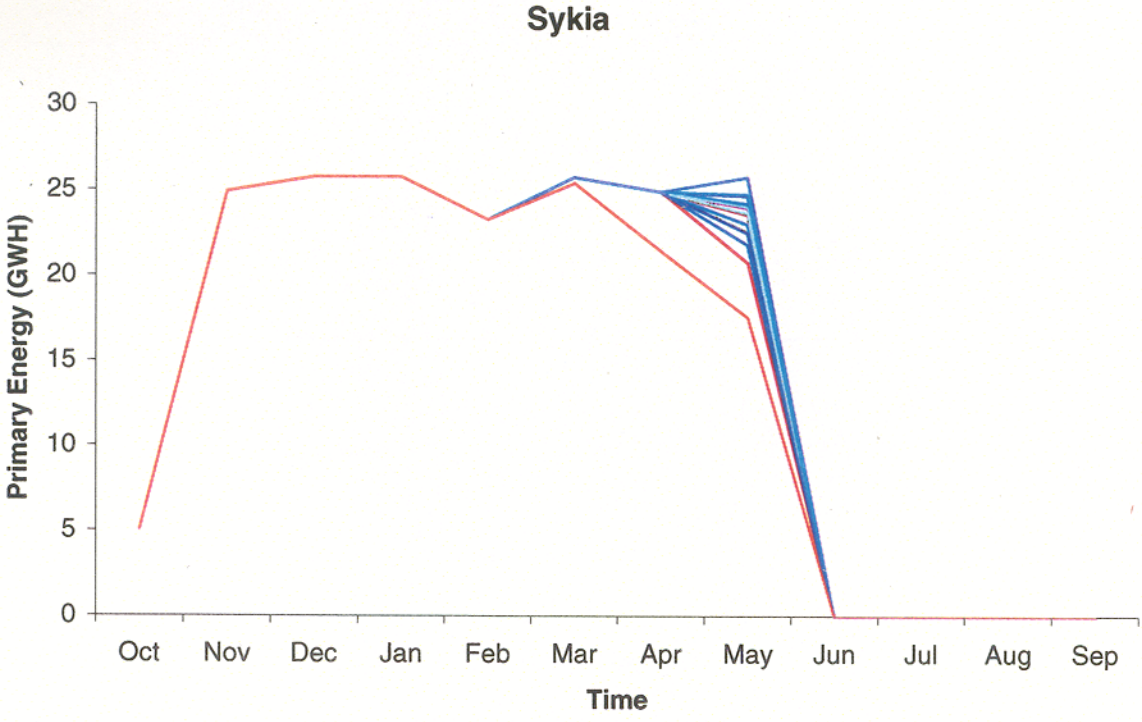


Figure C.2.3: Sykia Control Sequences (a)



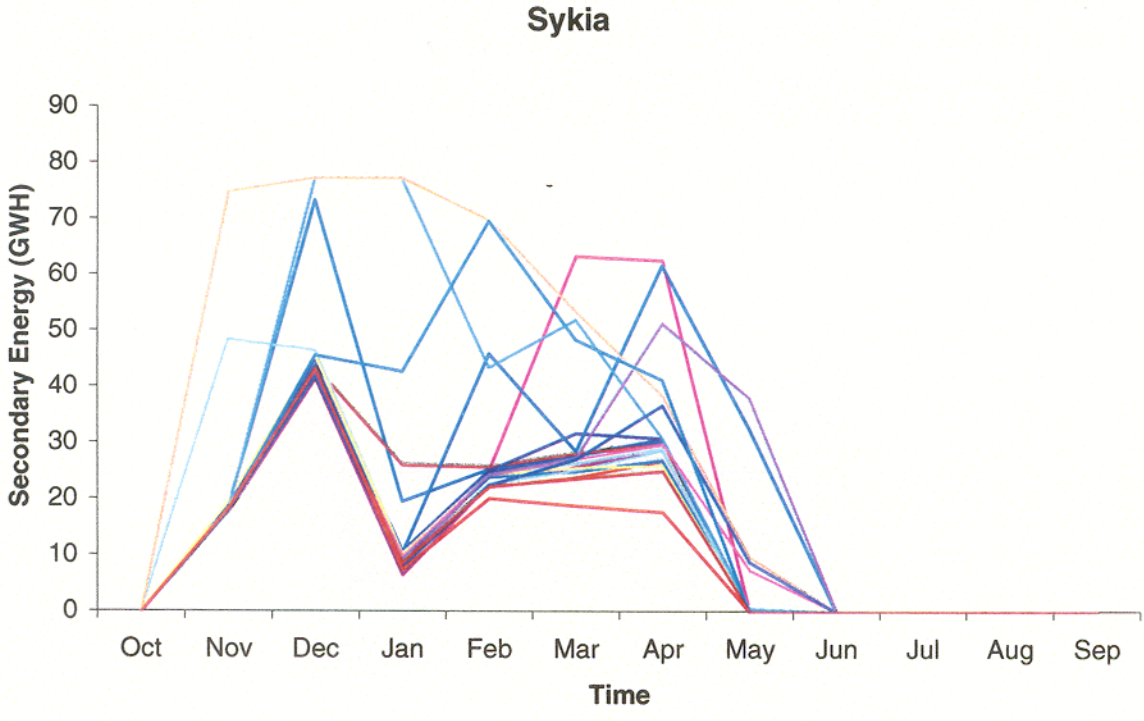


Figure C.2.4: Sykia Control Sequences (b)

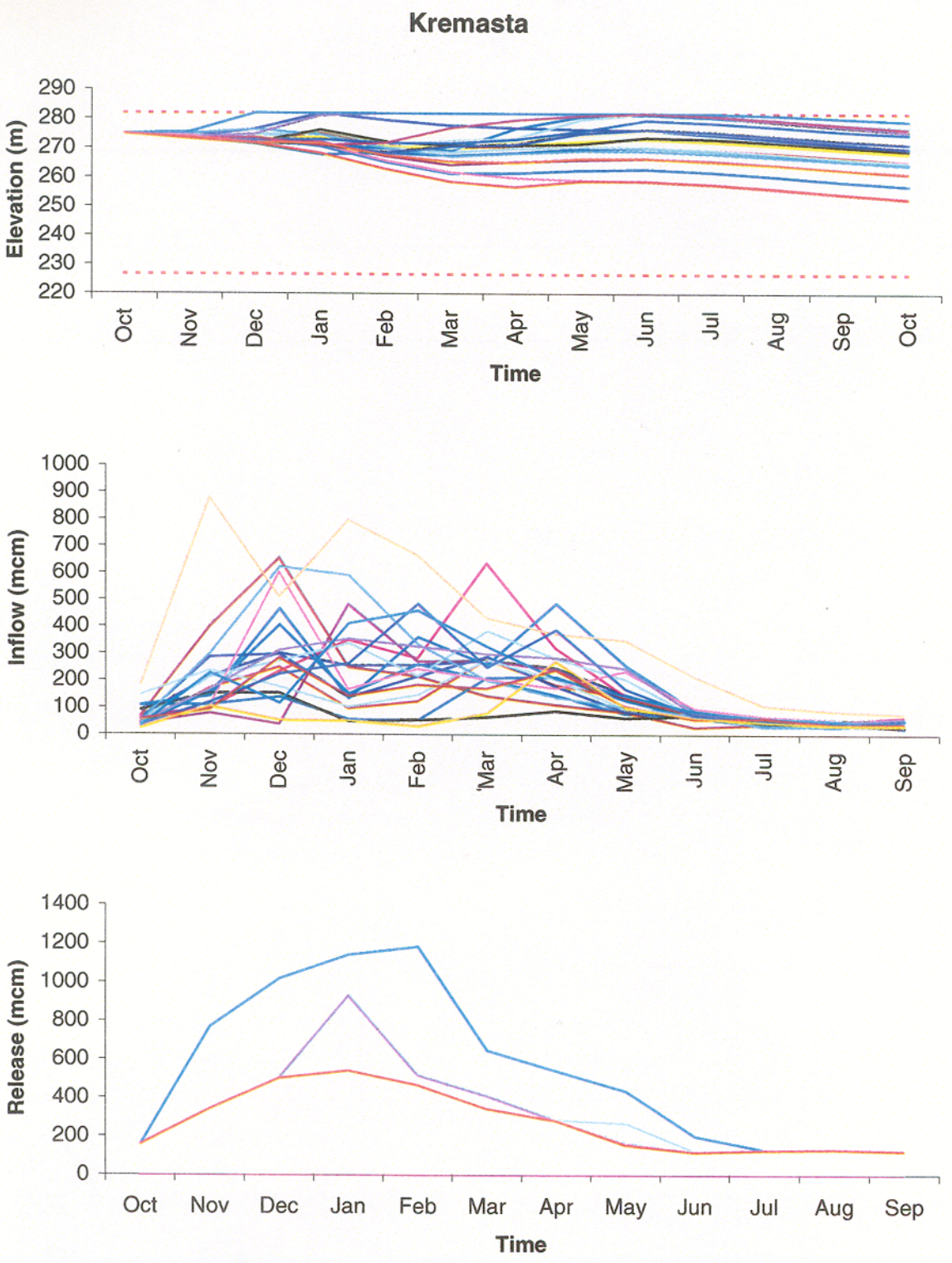
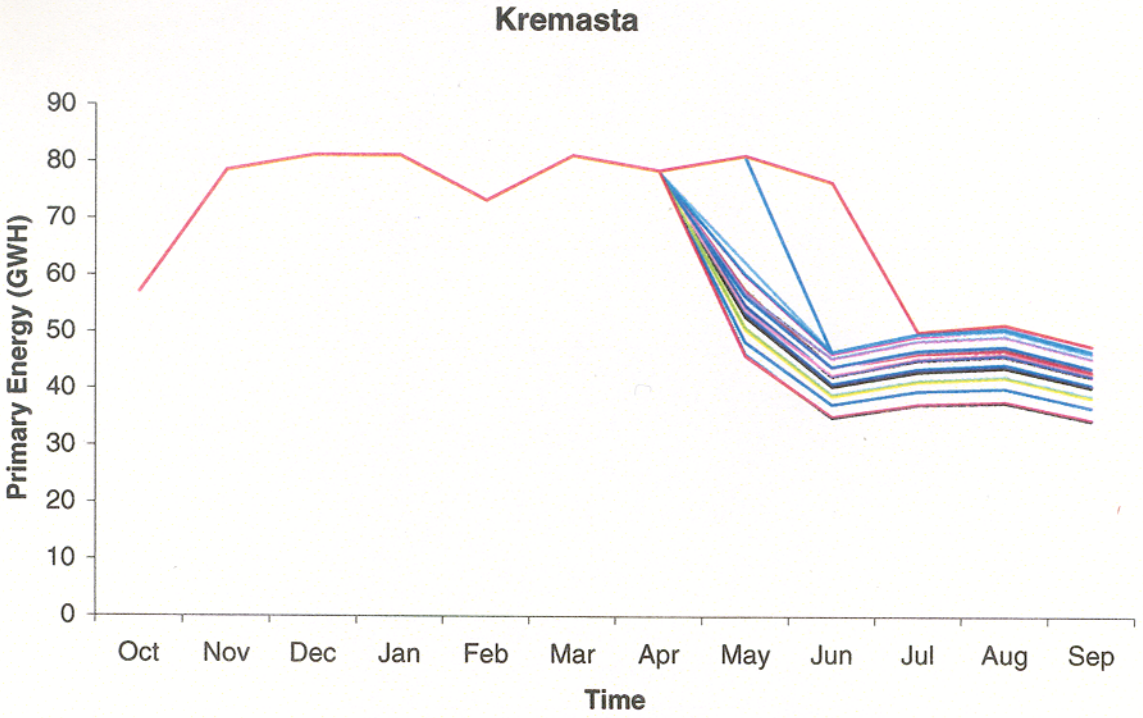


Figure C.2.5: Kremasta Control Sequences (a)



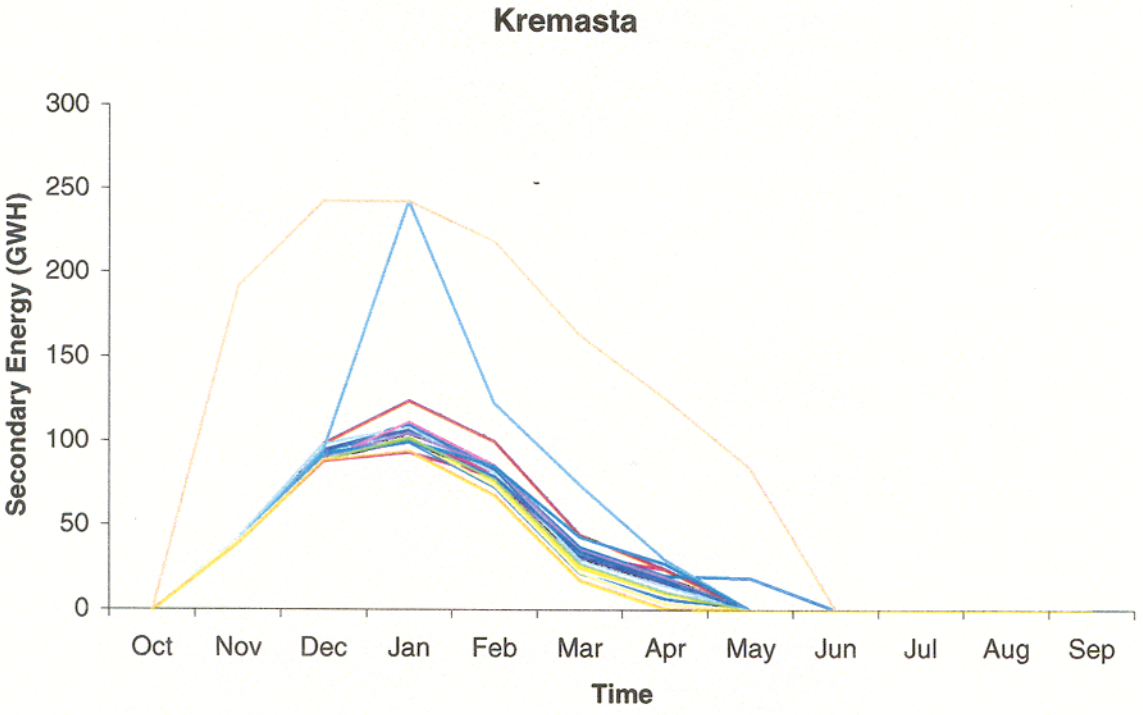


Figure C.2.6: Kremasta Control Sequences (b)

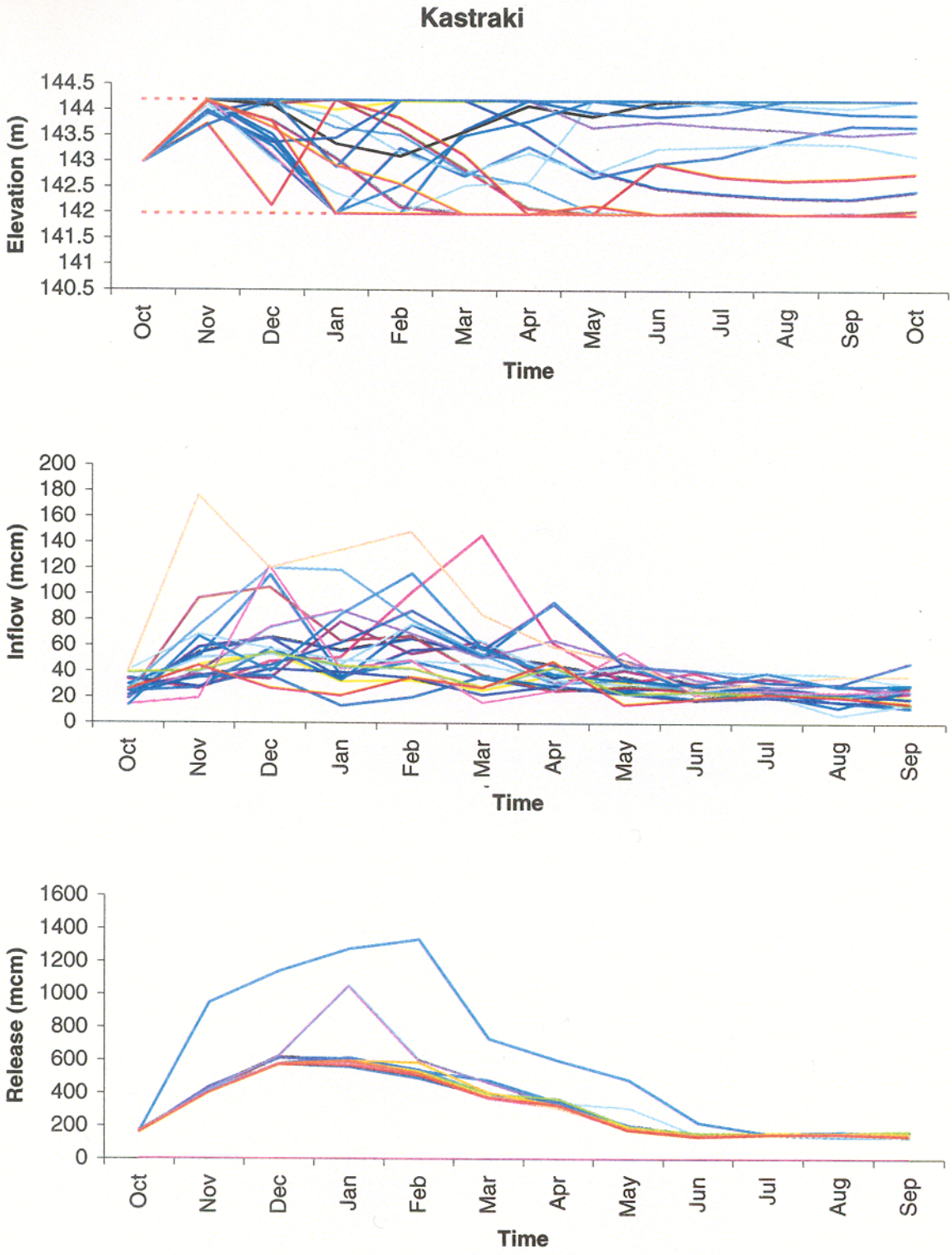
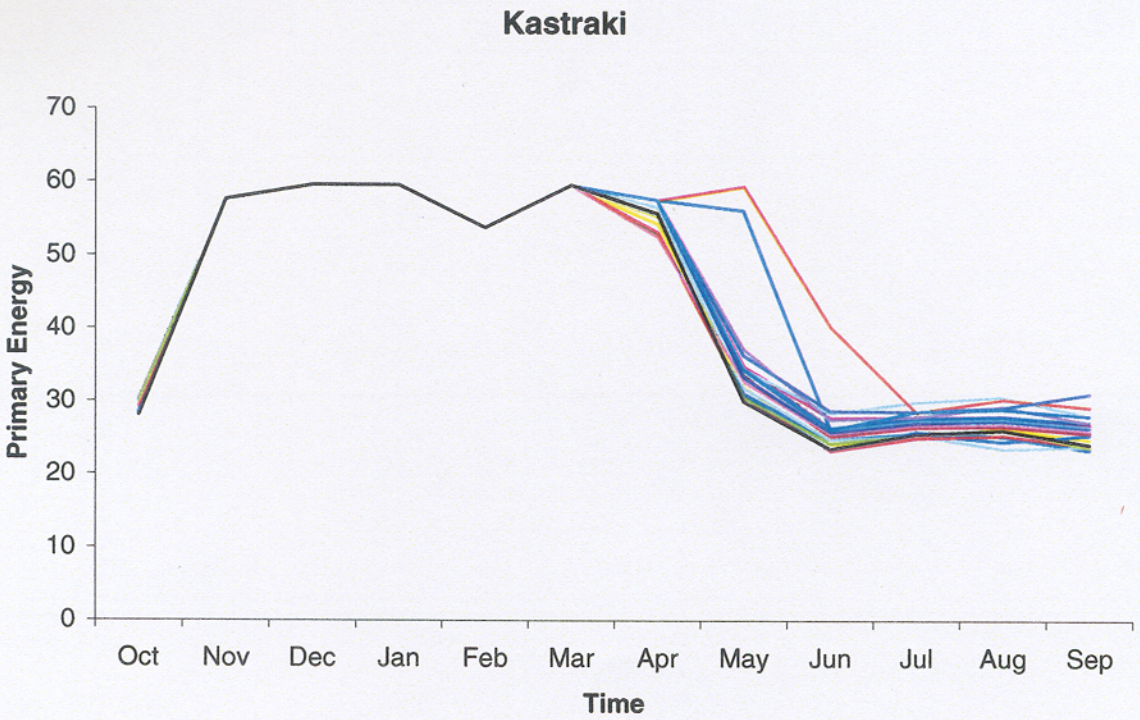


Figure C.2.7: Kastraki Control Sequences (a)



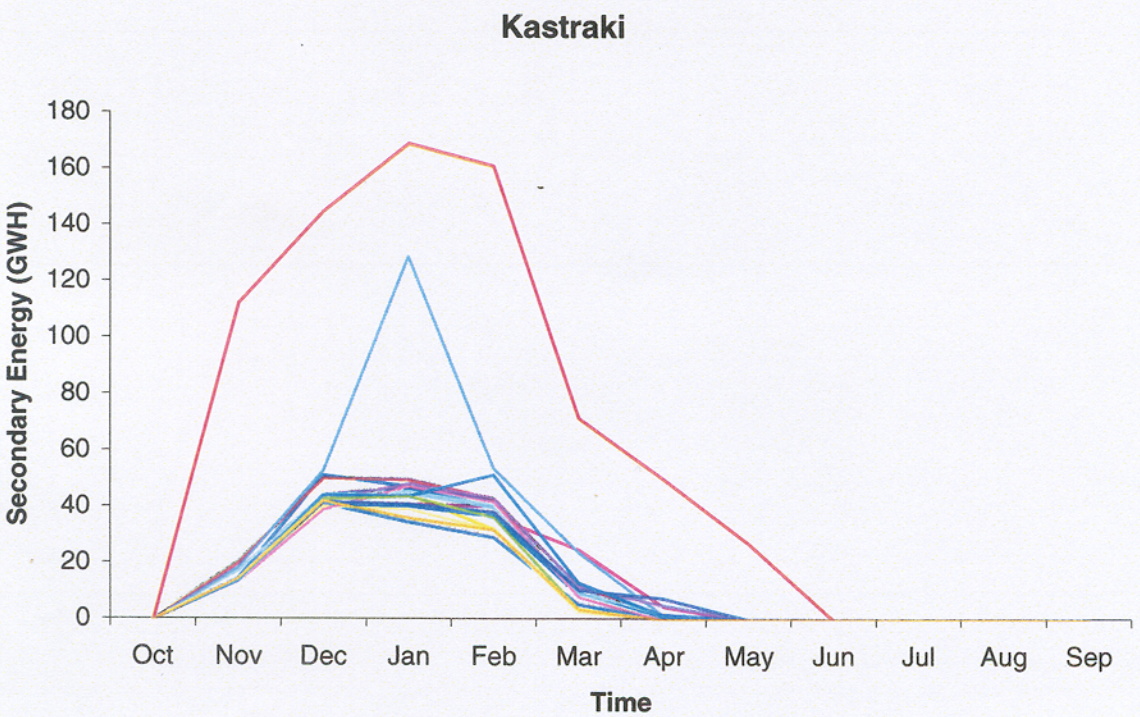


Figure C.2.8: Kastraki Control Sequences (b)

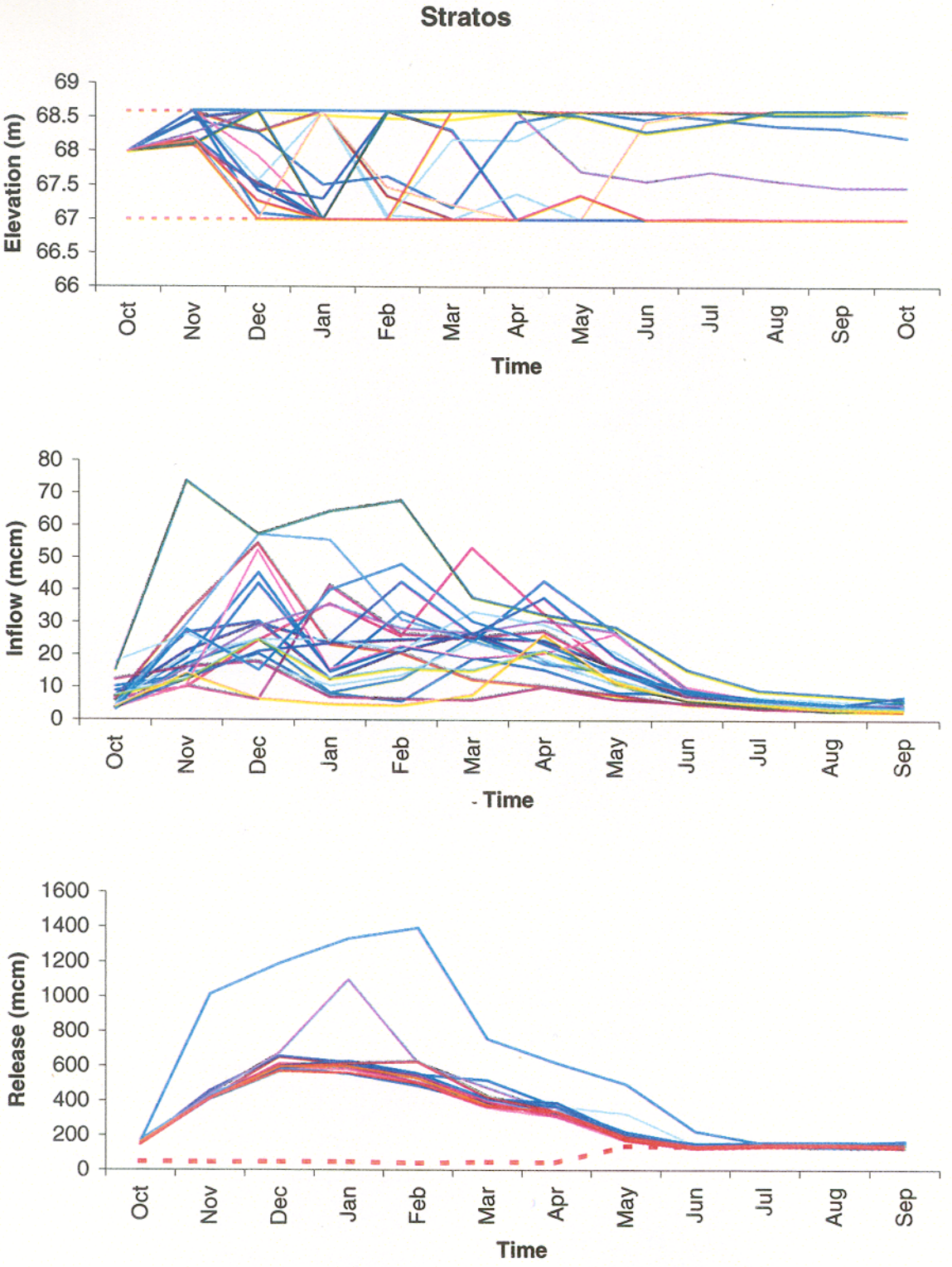
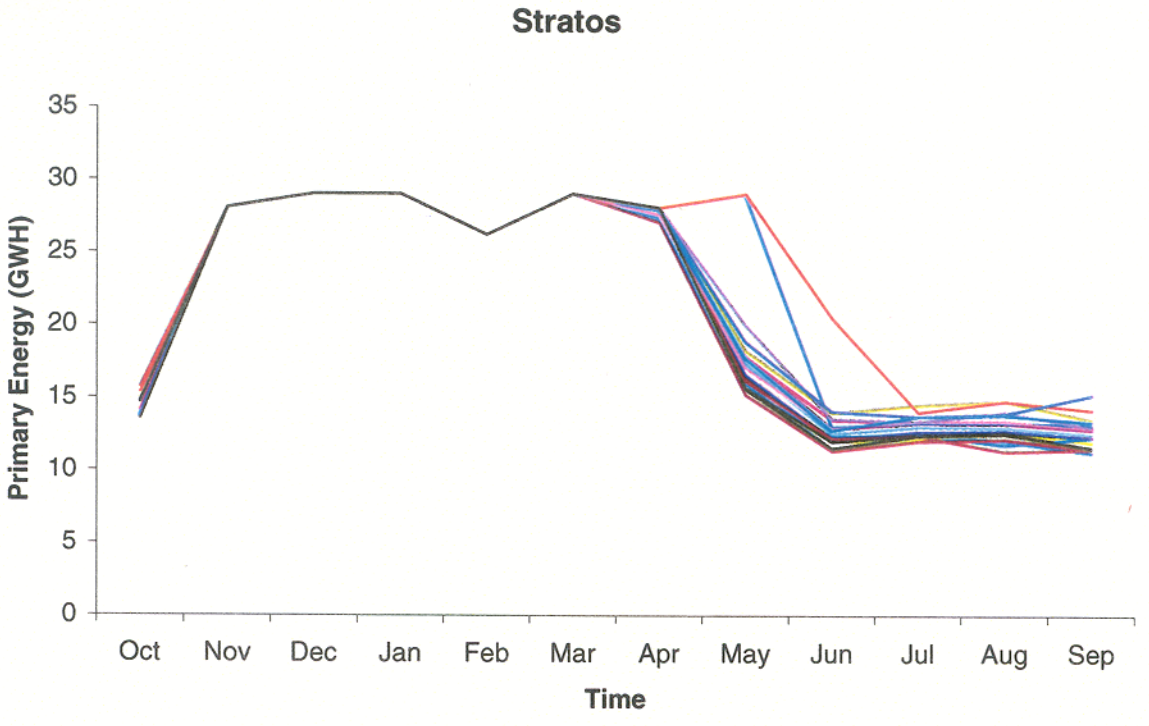


Figure C.2.9: Stratos Control Sequences (a)



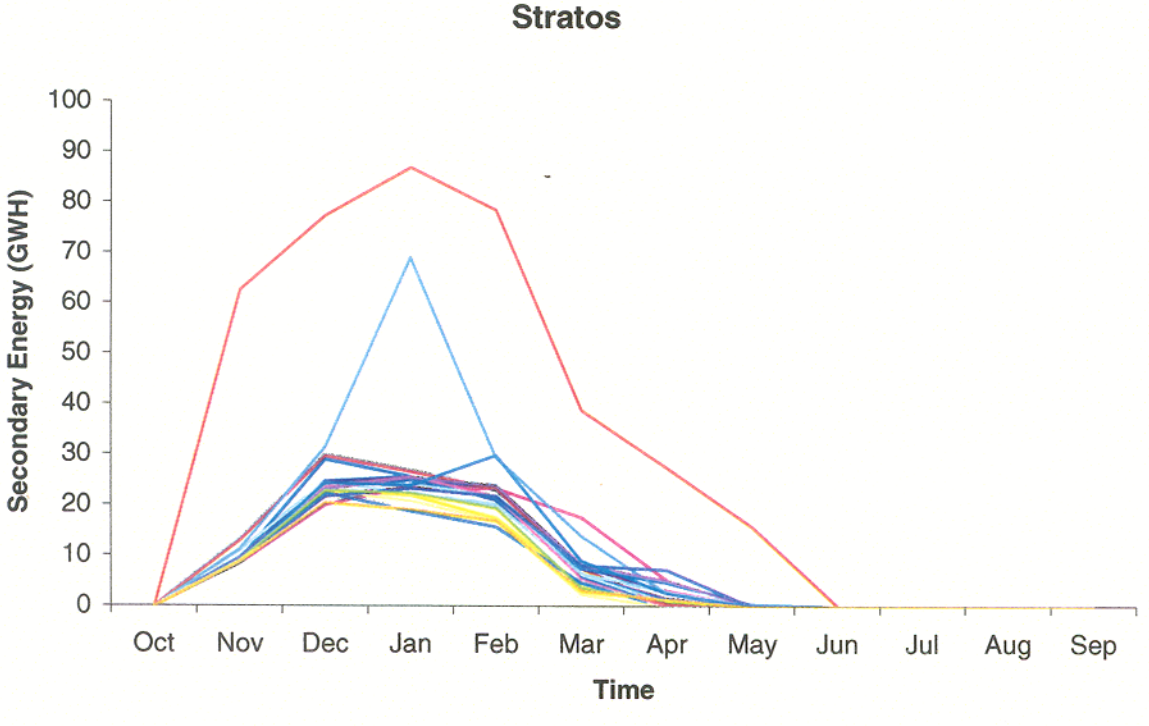


Figure C.2.10: Stratos Control Sequences (b)

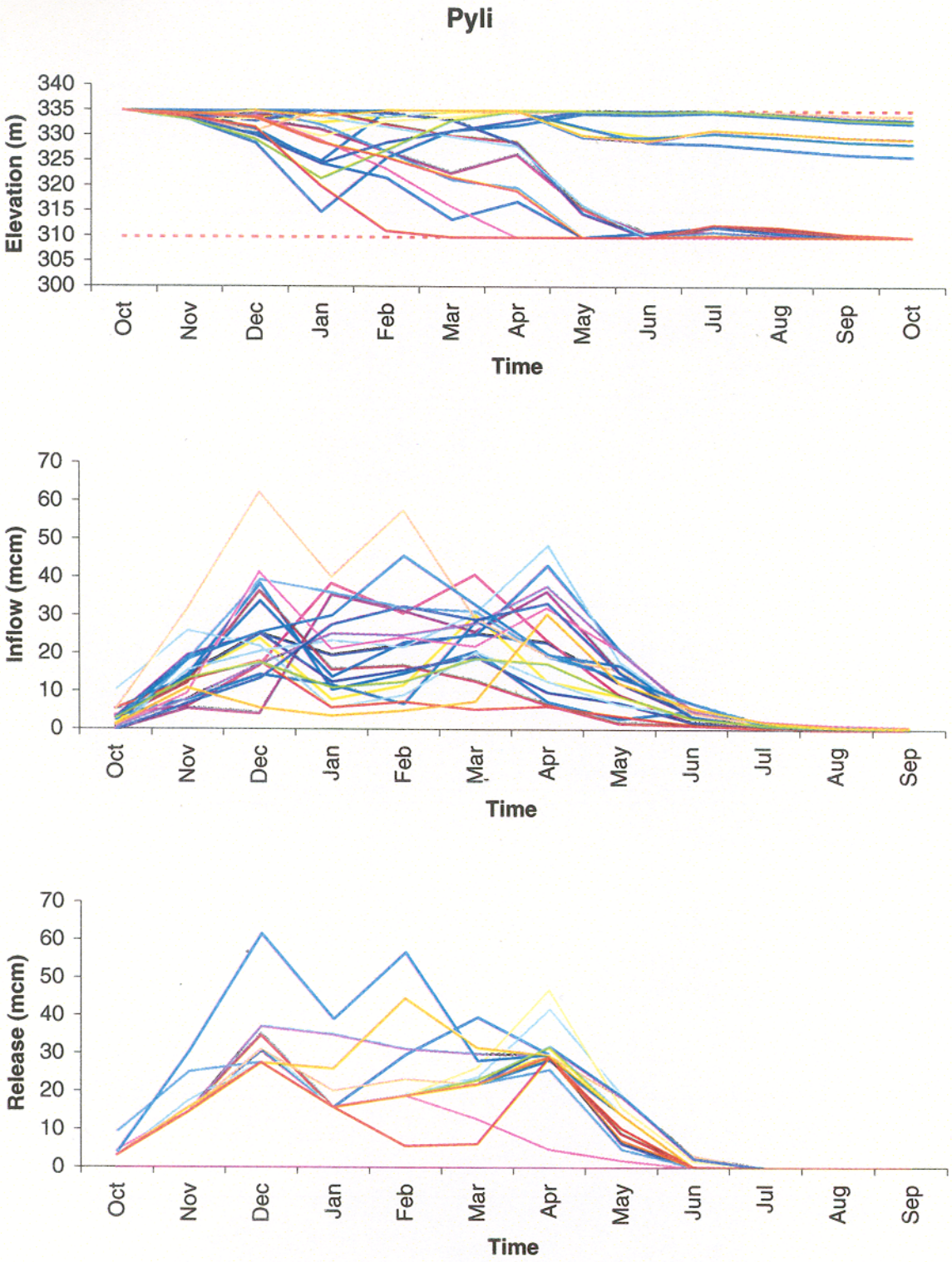


Figure C.2.11: Pyli Control Sequences

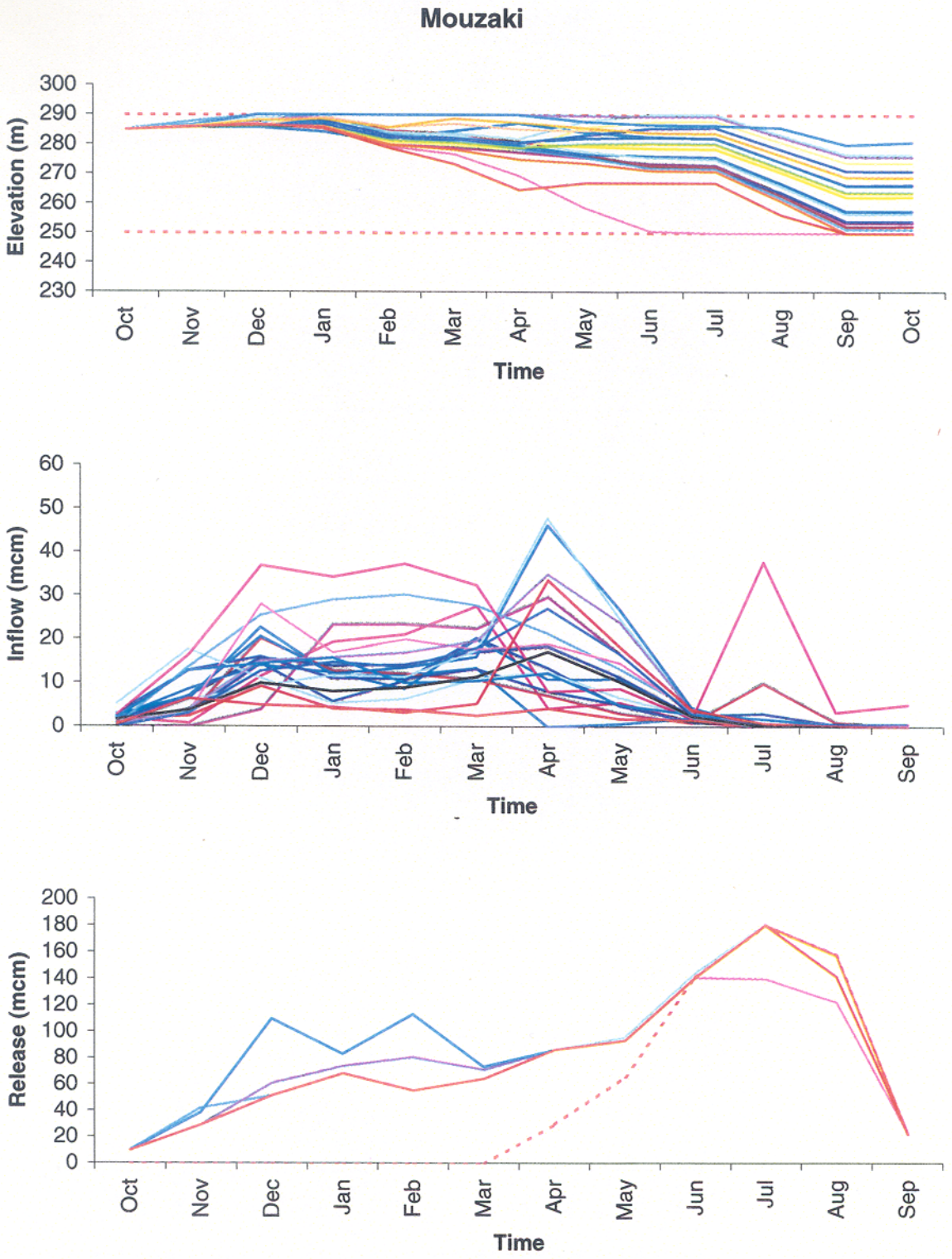
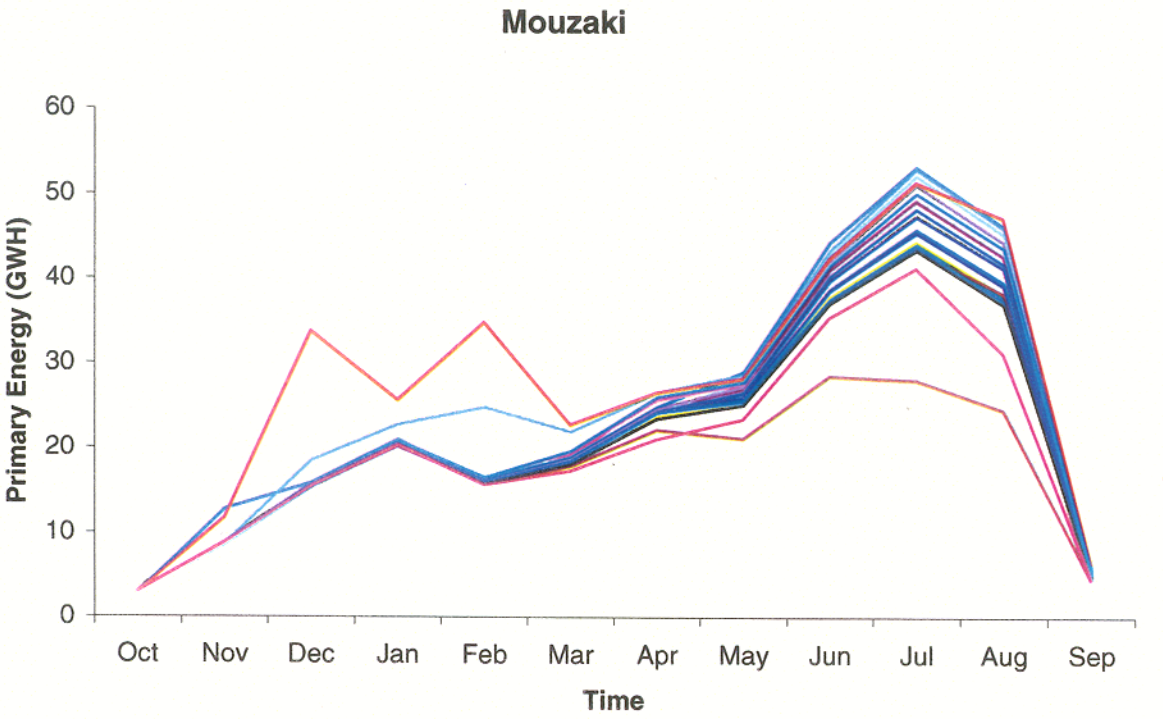


Figure C.2.12: Mouzaki Control Sequences (a)



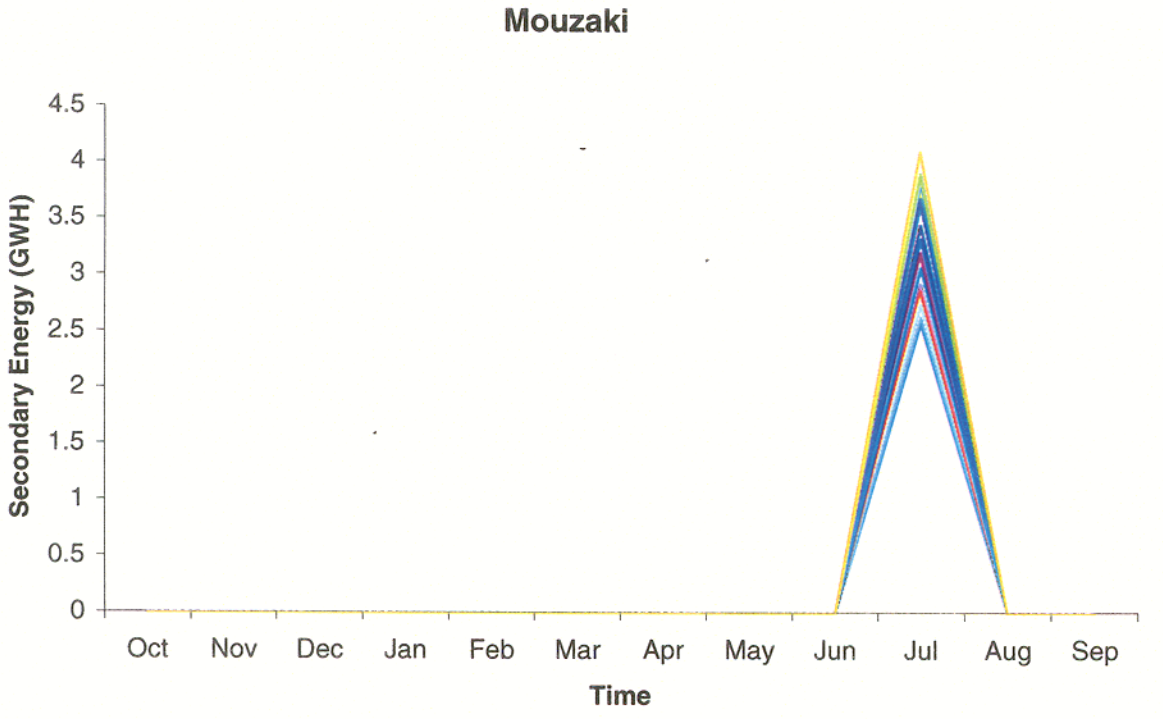


Figure C.2.13: Mouzaki Control Sequences (b)

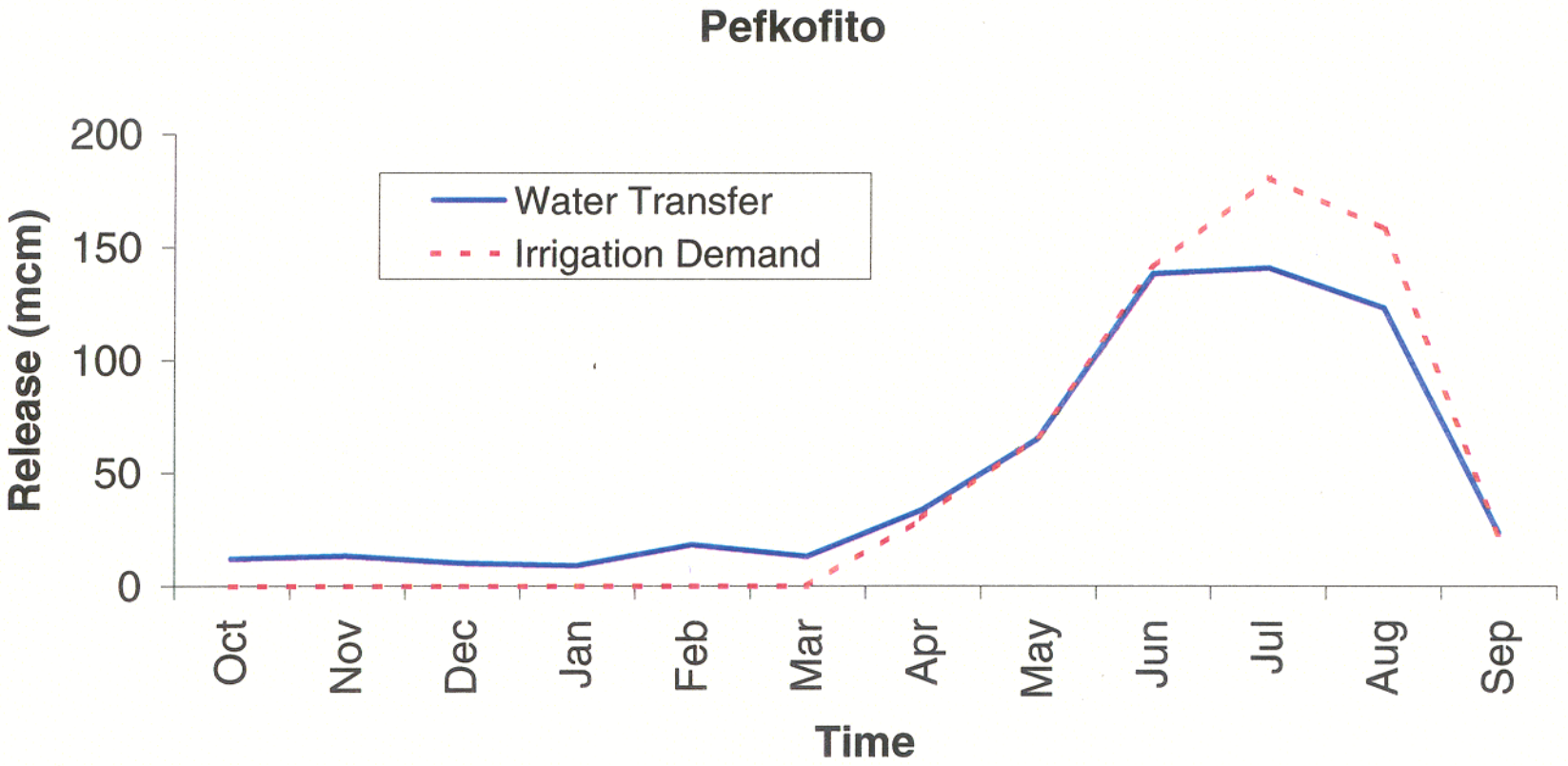


Figure C.2.14: Pefkofito Control Sequences

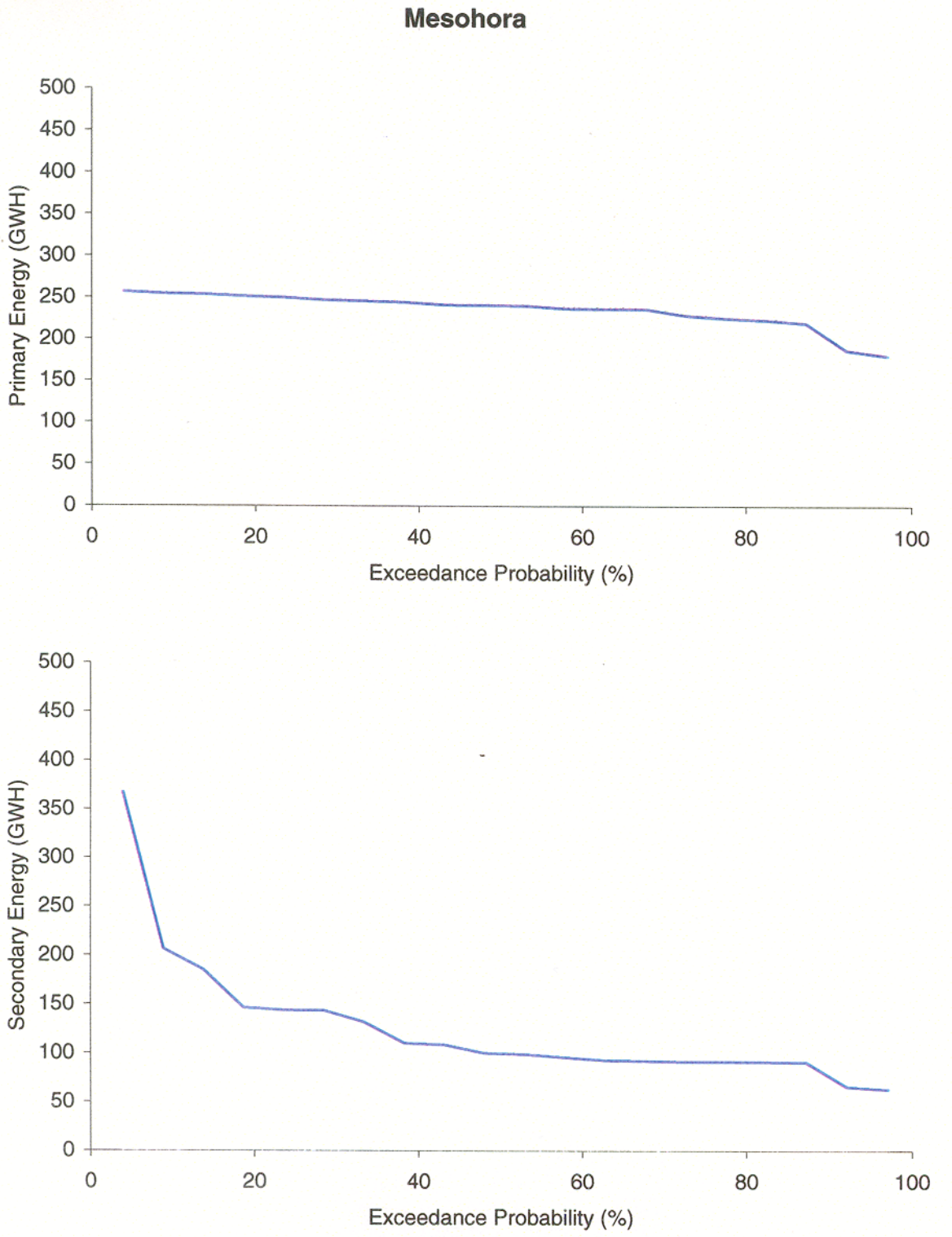


Figure C.2.15: The exceedance probability curves for Mesohora

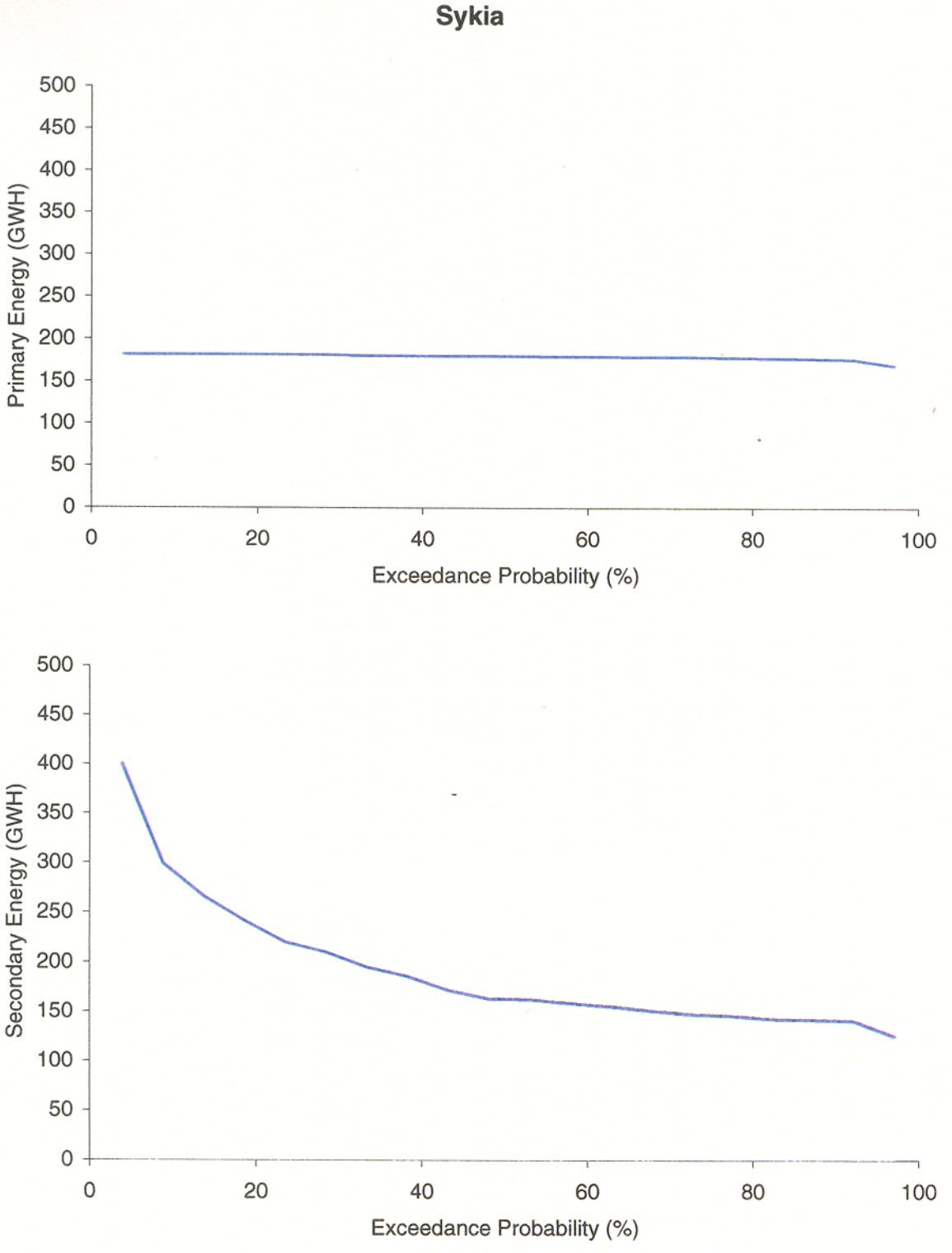


Figure C.2.16: The exceedance probability curves for Sykia

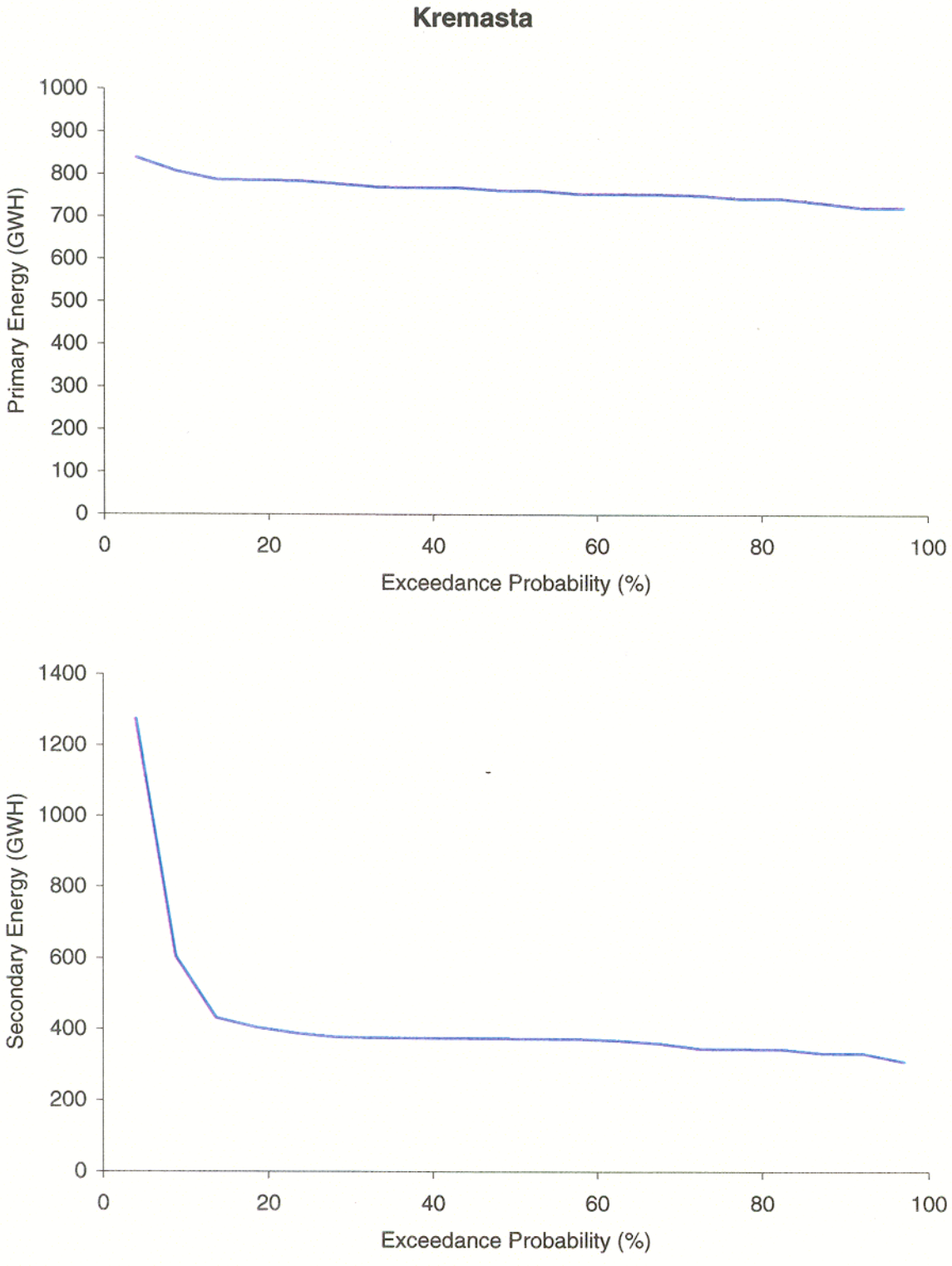


Figure C.2.17: The exceedance probability curves for Kremasta

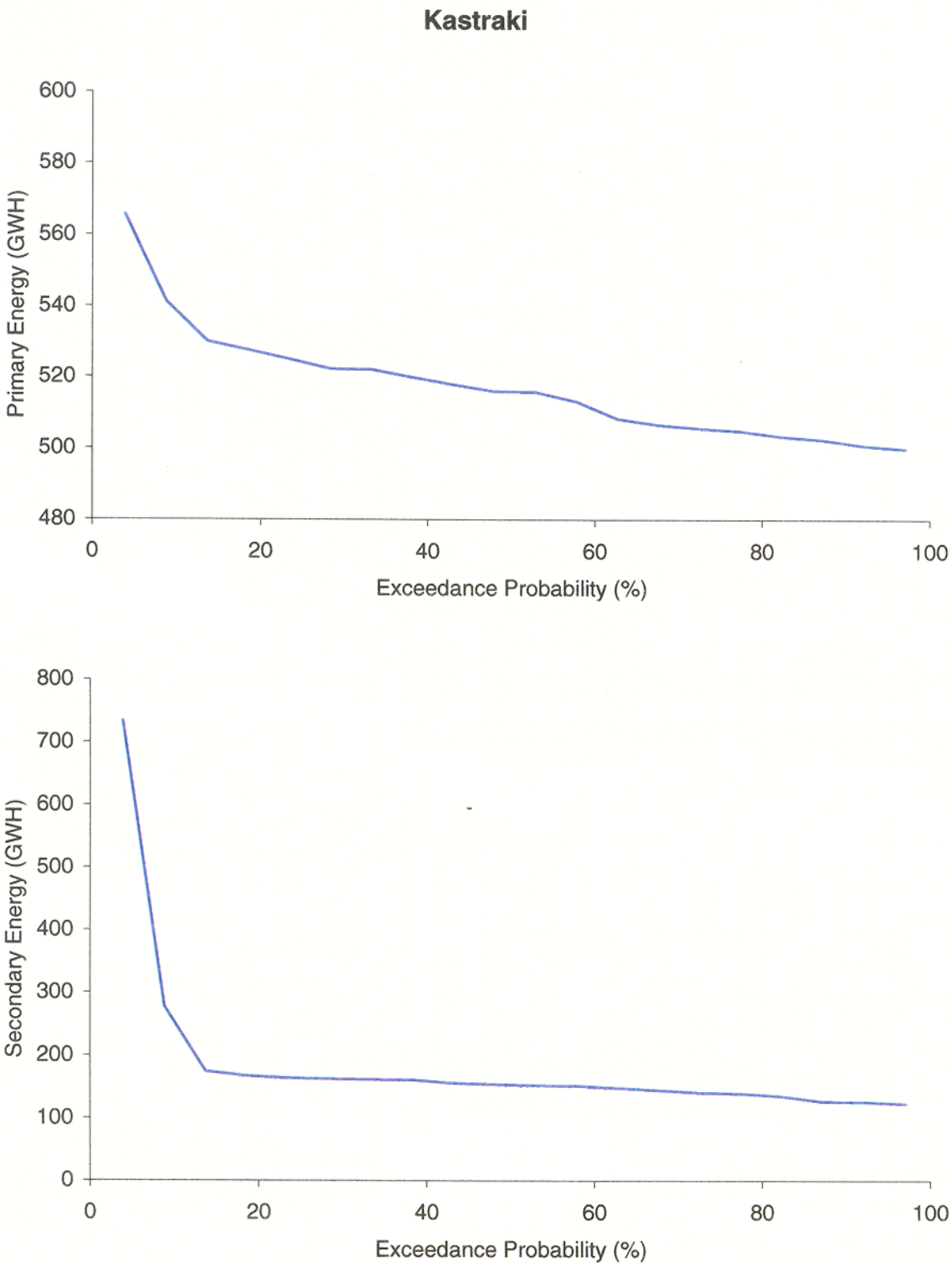


Figure C.2.18: The exceedance probability curves for Kastraki

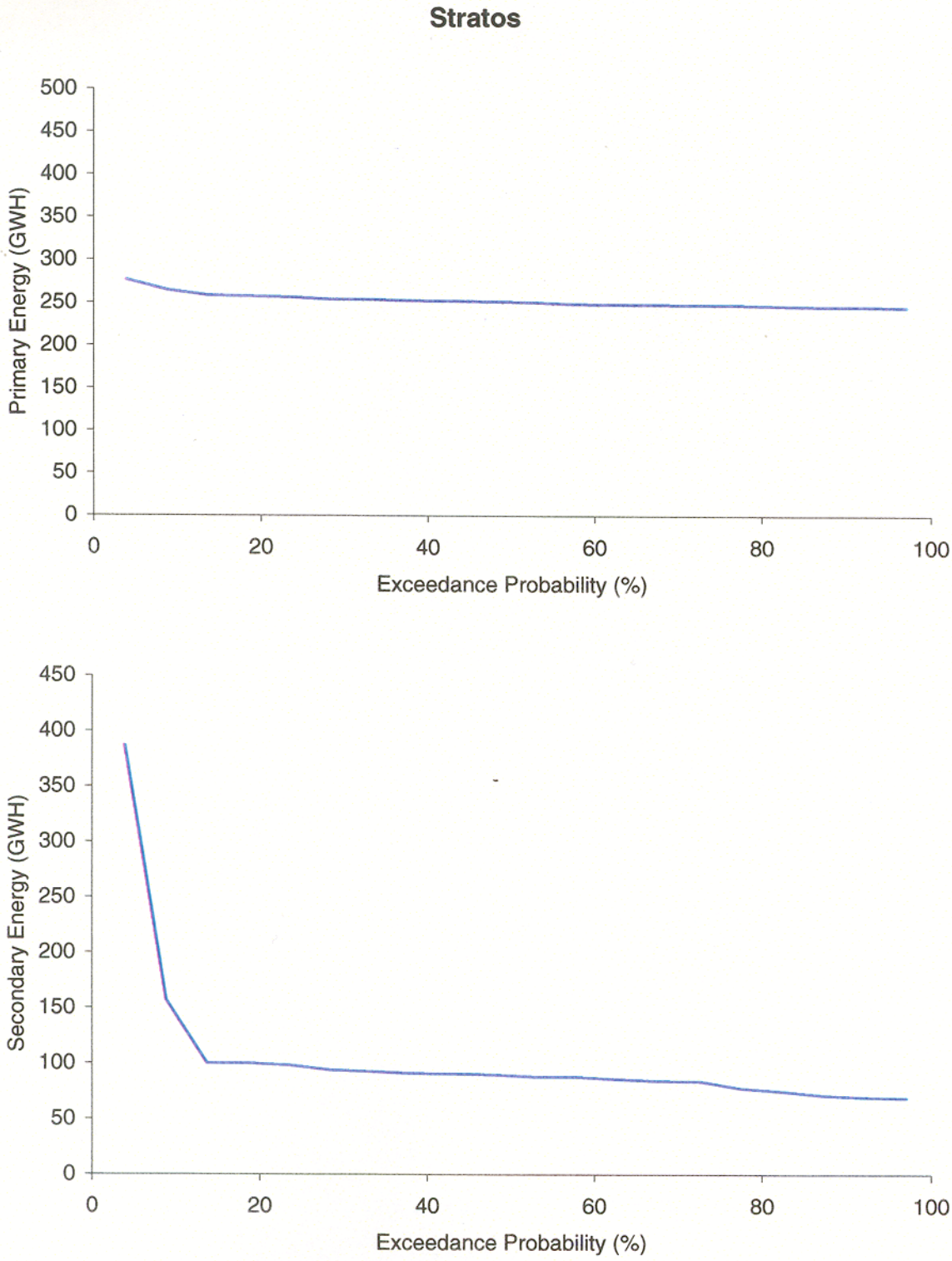


Figure C.2.19: The exceedance probability curves for Stratos

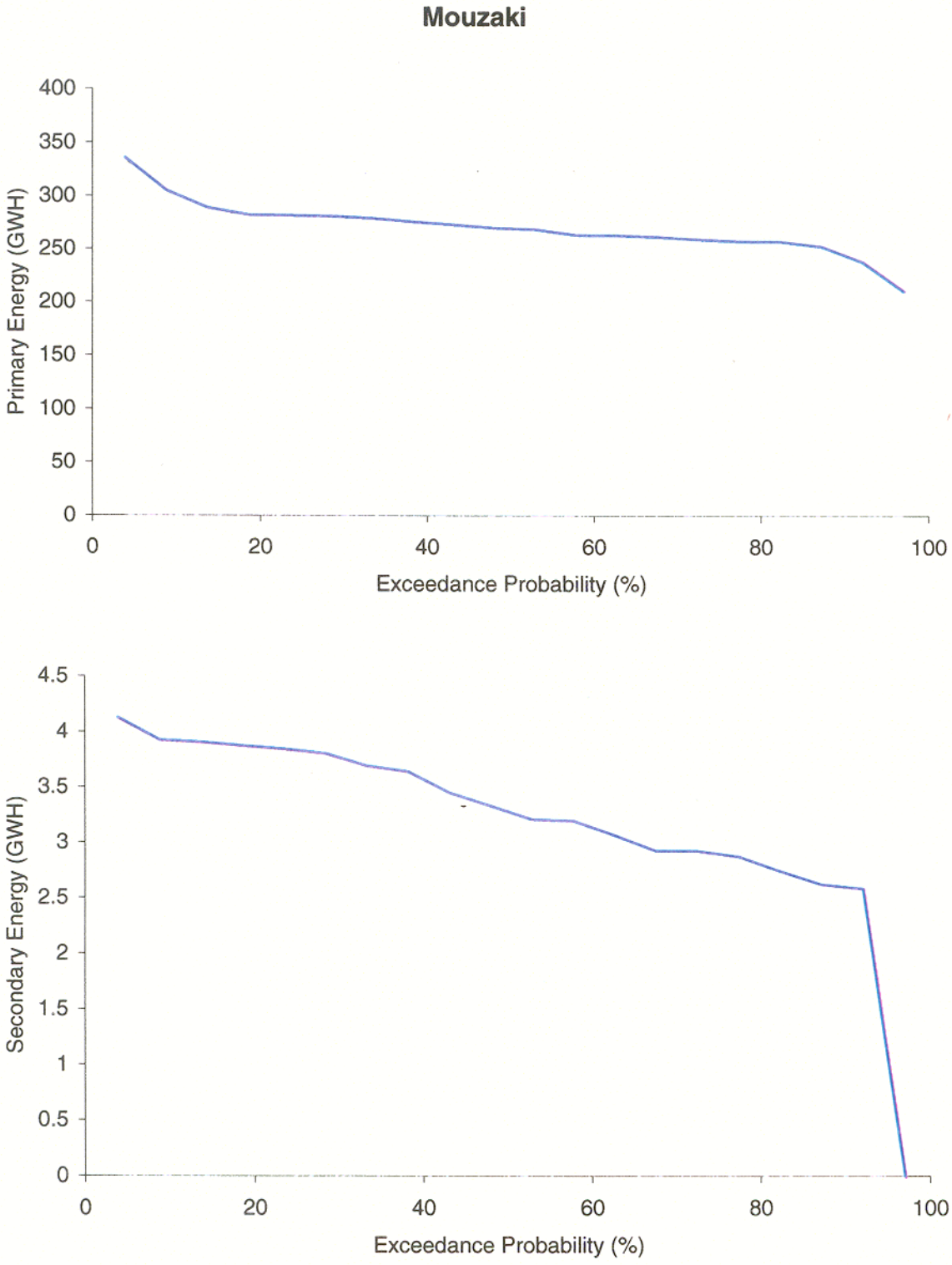


Figure C.2.20: The exceedance probability curves for Mouzaki

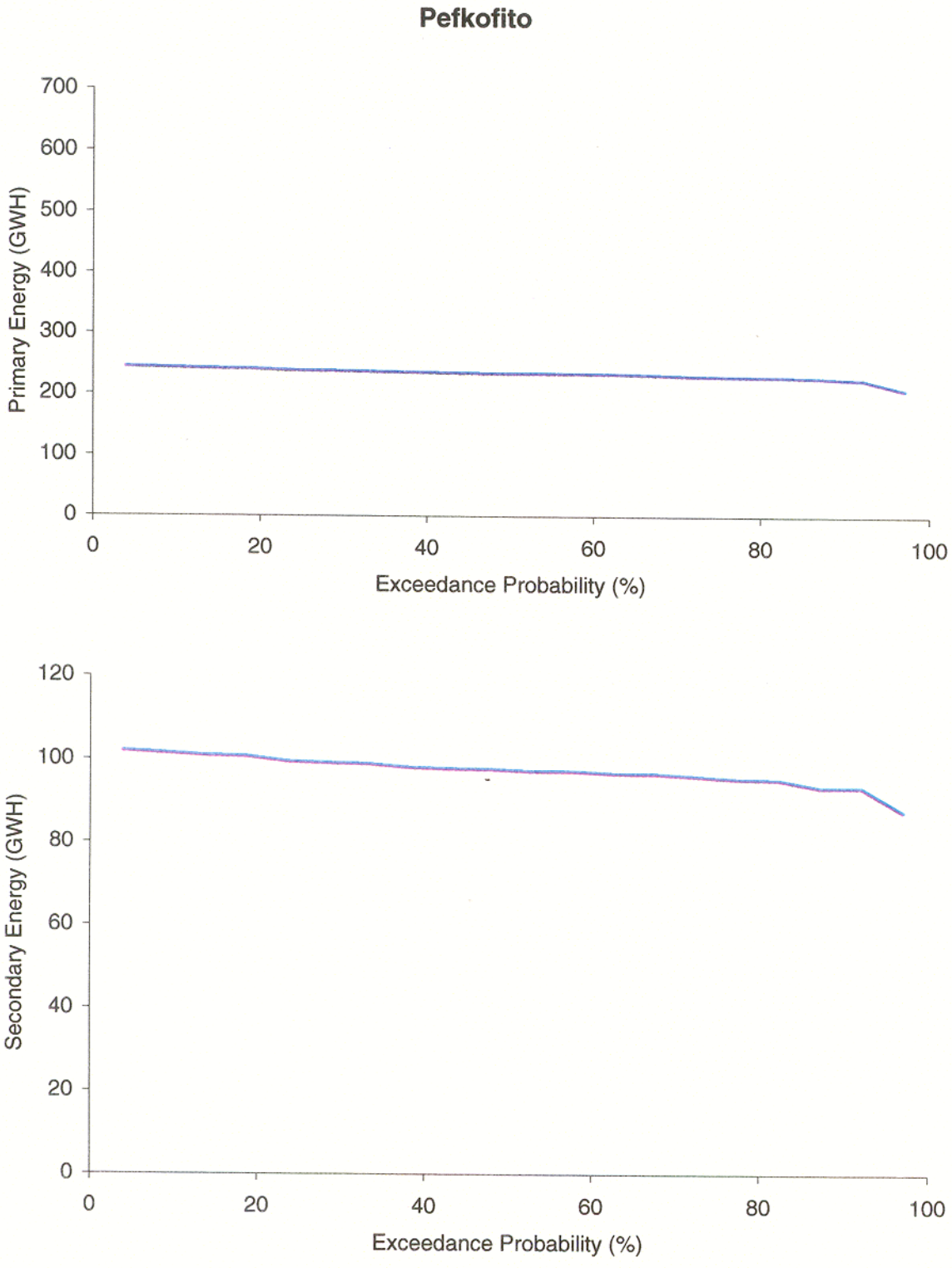


Figure C.2.21: The exceedance probability curves for Pefkofito

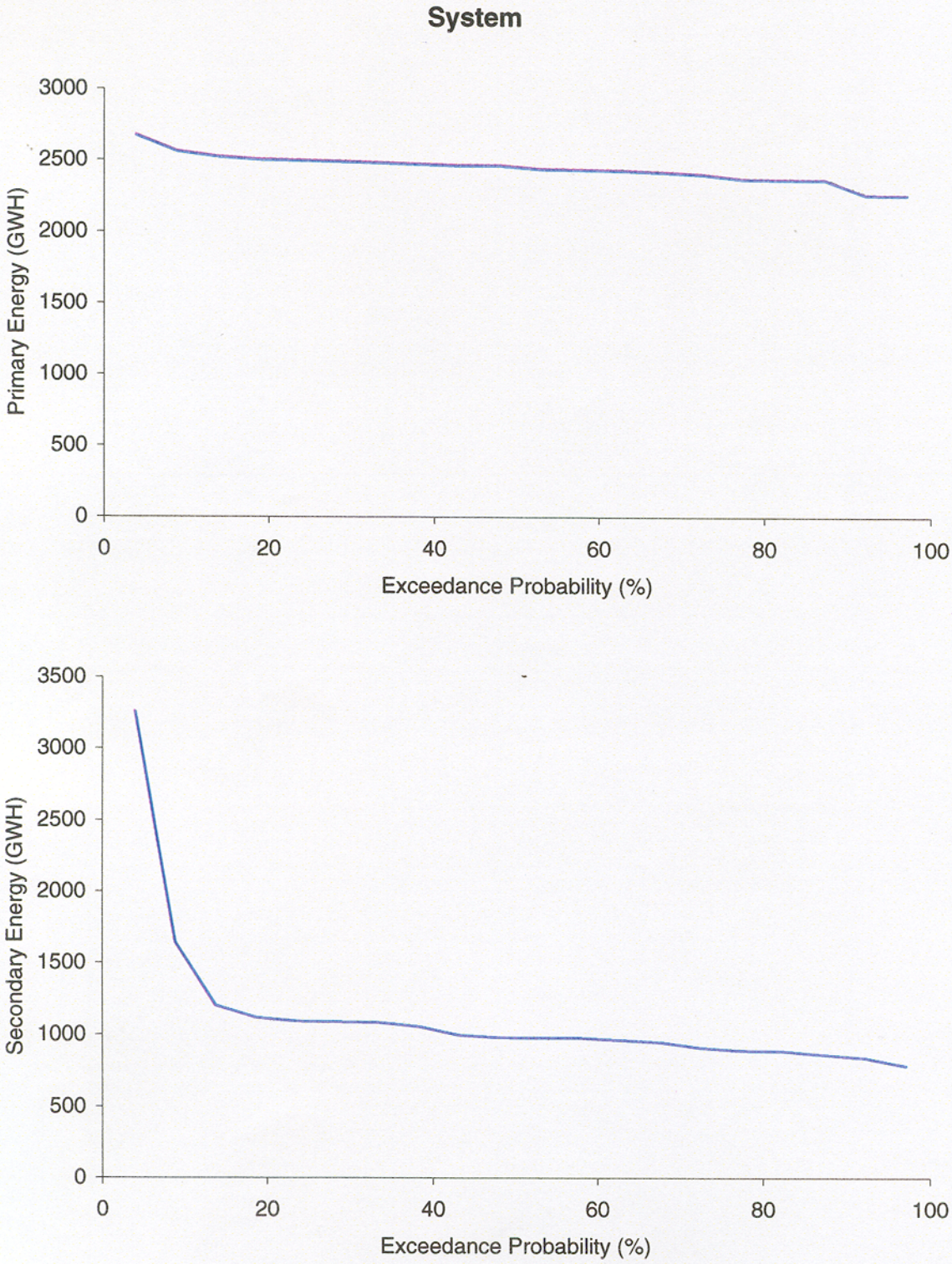


Figure C.2.22: The exceedance probability curves for the entire system