Field Tests of Alternative Covers in the Alternative Cover Assessment Program (ACAP)

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UNIVERSITY OF WISCONSIN MADISON 150 YEARS

DRI Desert Research Institute

Why ACAP?

- Provide field-scale data for alternative designs
- Provide field-scale data for conventional designs
- Side-by-side field tests answer question of equivalency
- Additional instrumentation to advance the science and practice of engineering

ACAP Field Sites


DEERE
10 20 '00

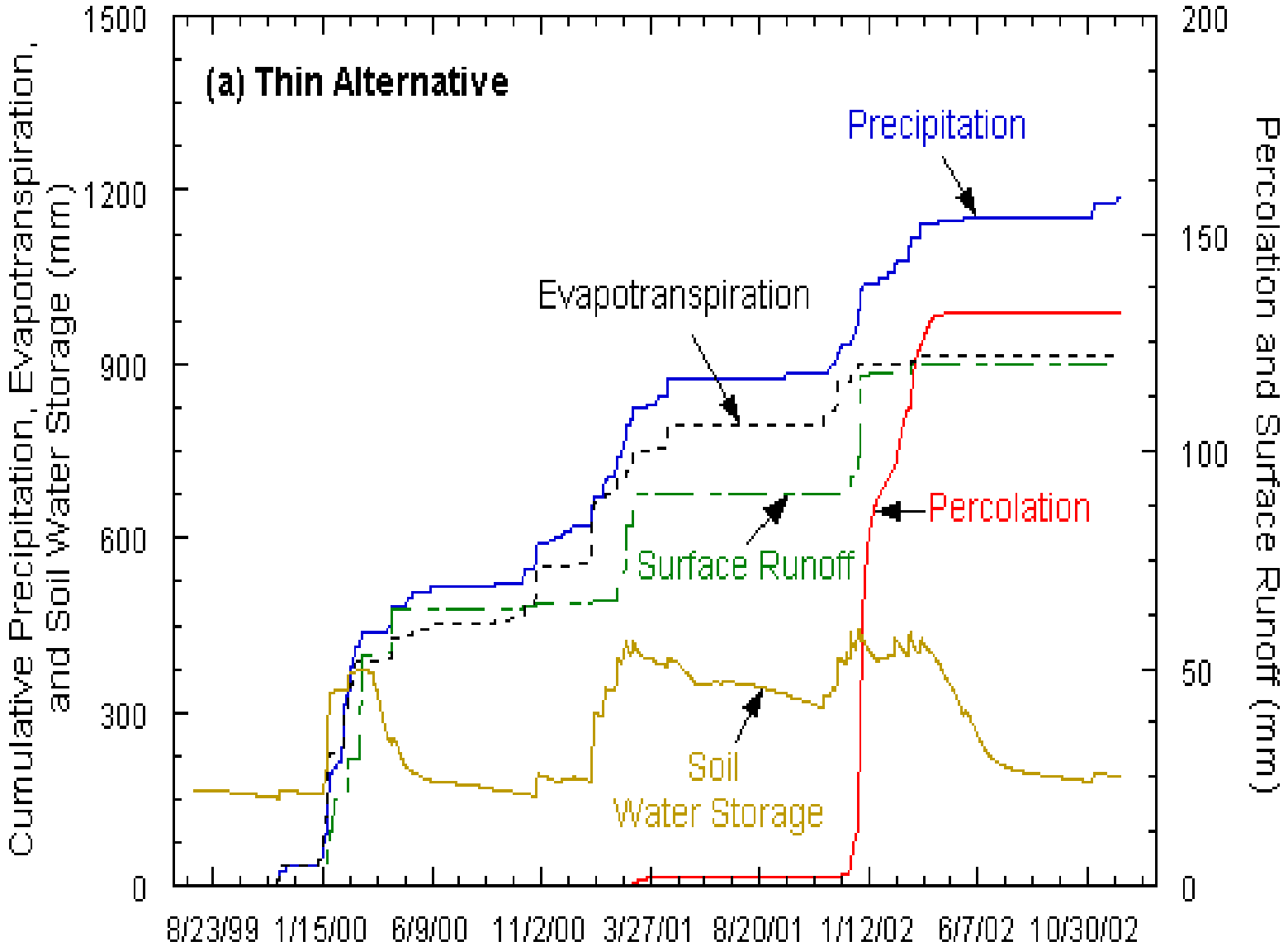

10 25 '00

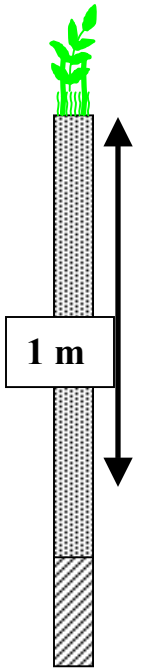

TROXLER
MS
DS
MC
DC
3411-B


10 25 '00

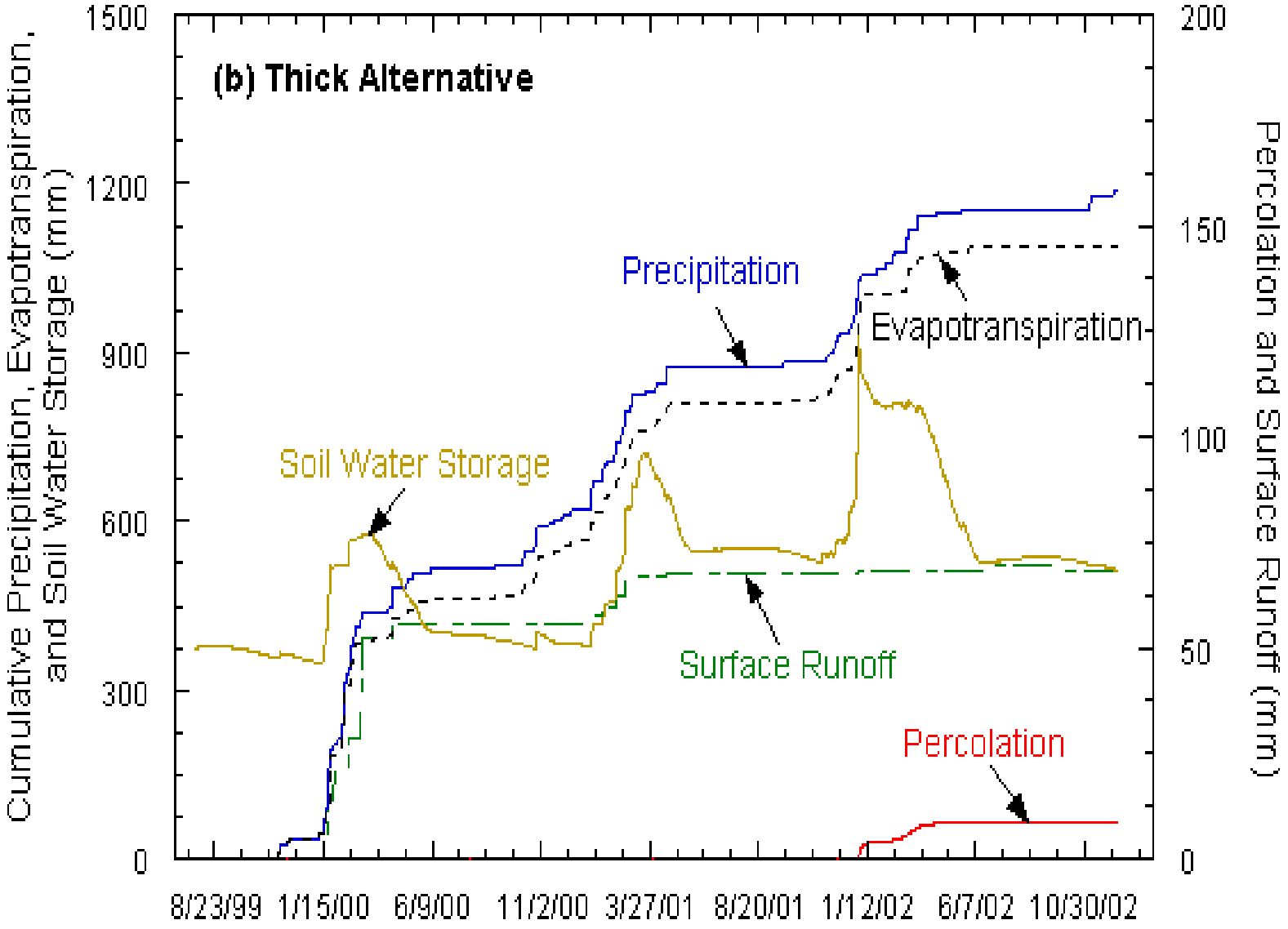

ASTMD1785 ASTMD2
10 25 '00

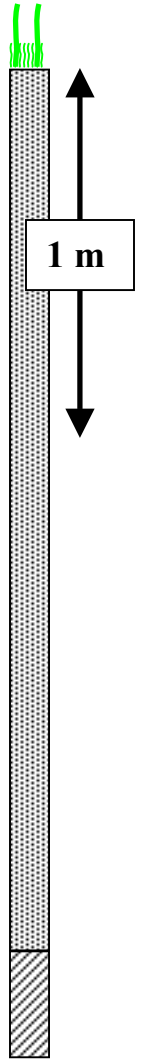
Sacramento CA Thin Alternative



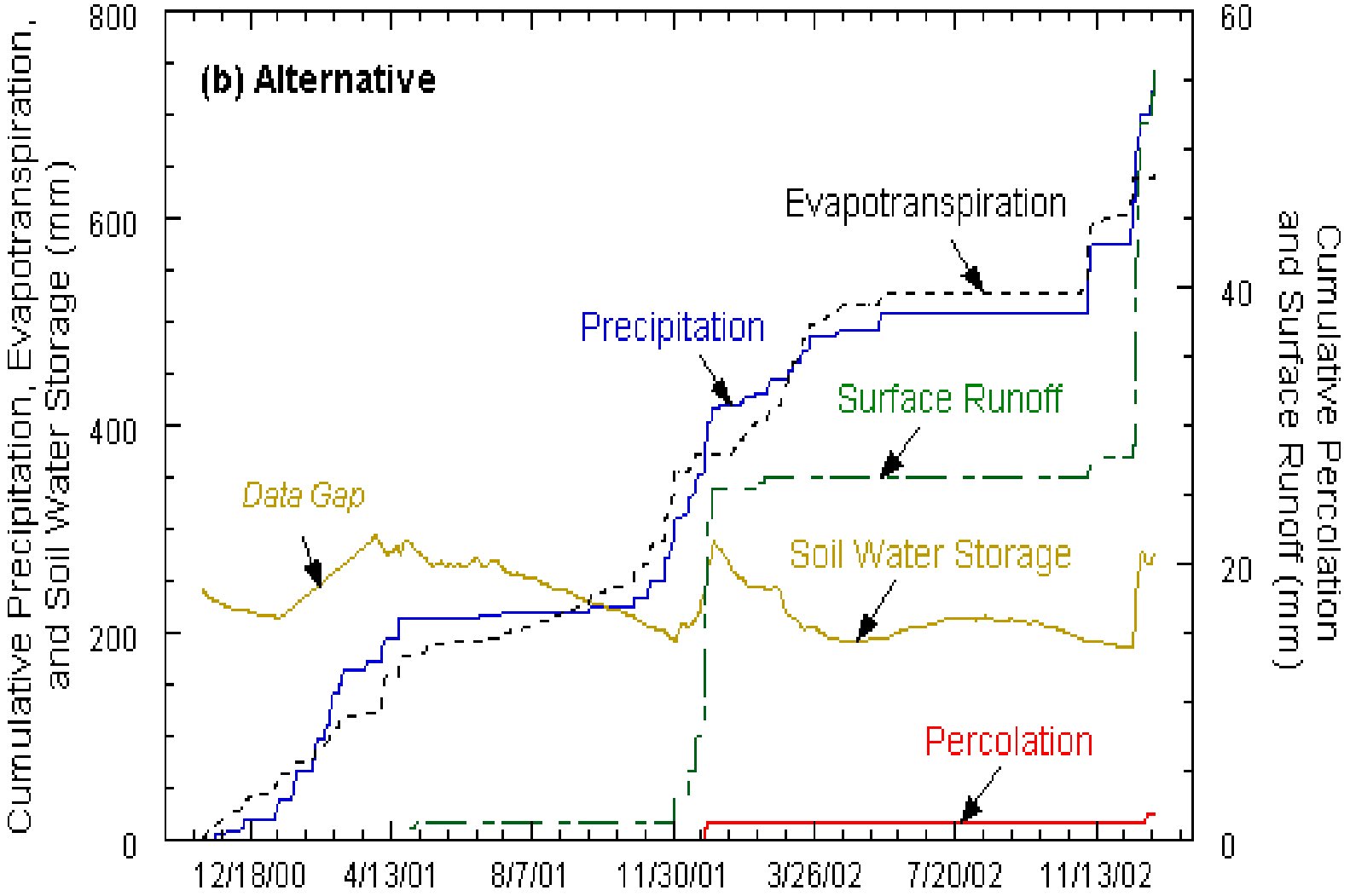


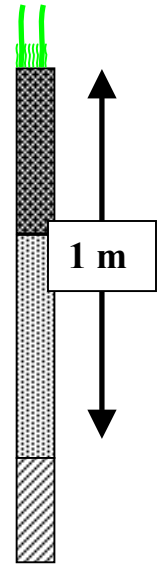
Sacramento CA Thick Alternative



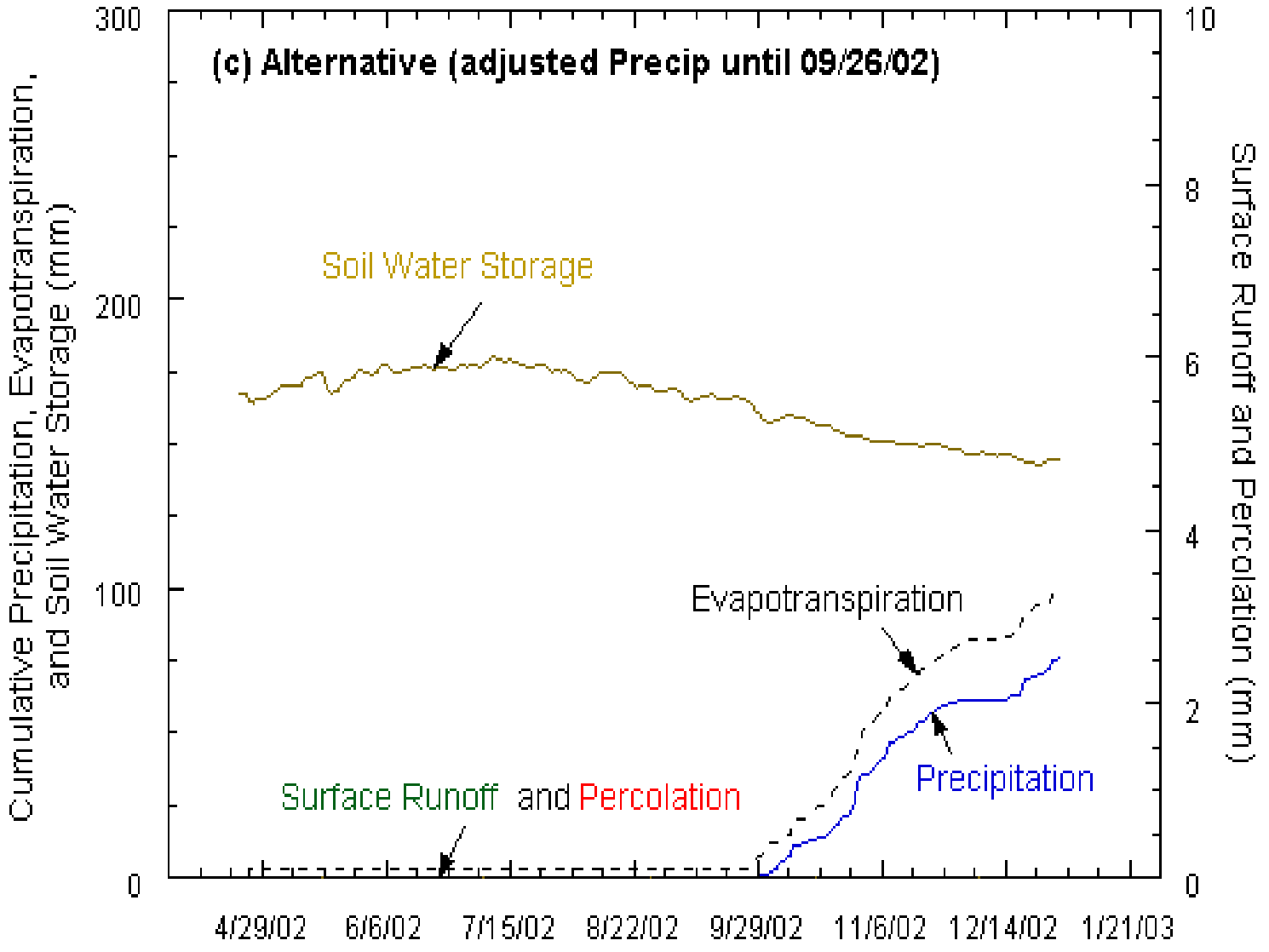


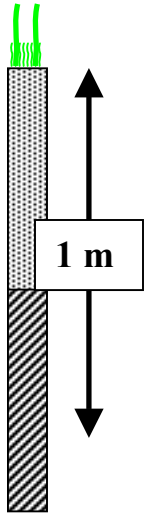
Altamont CA Alternative



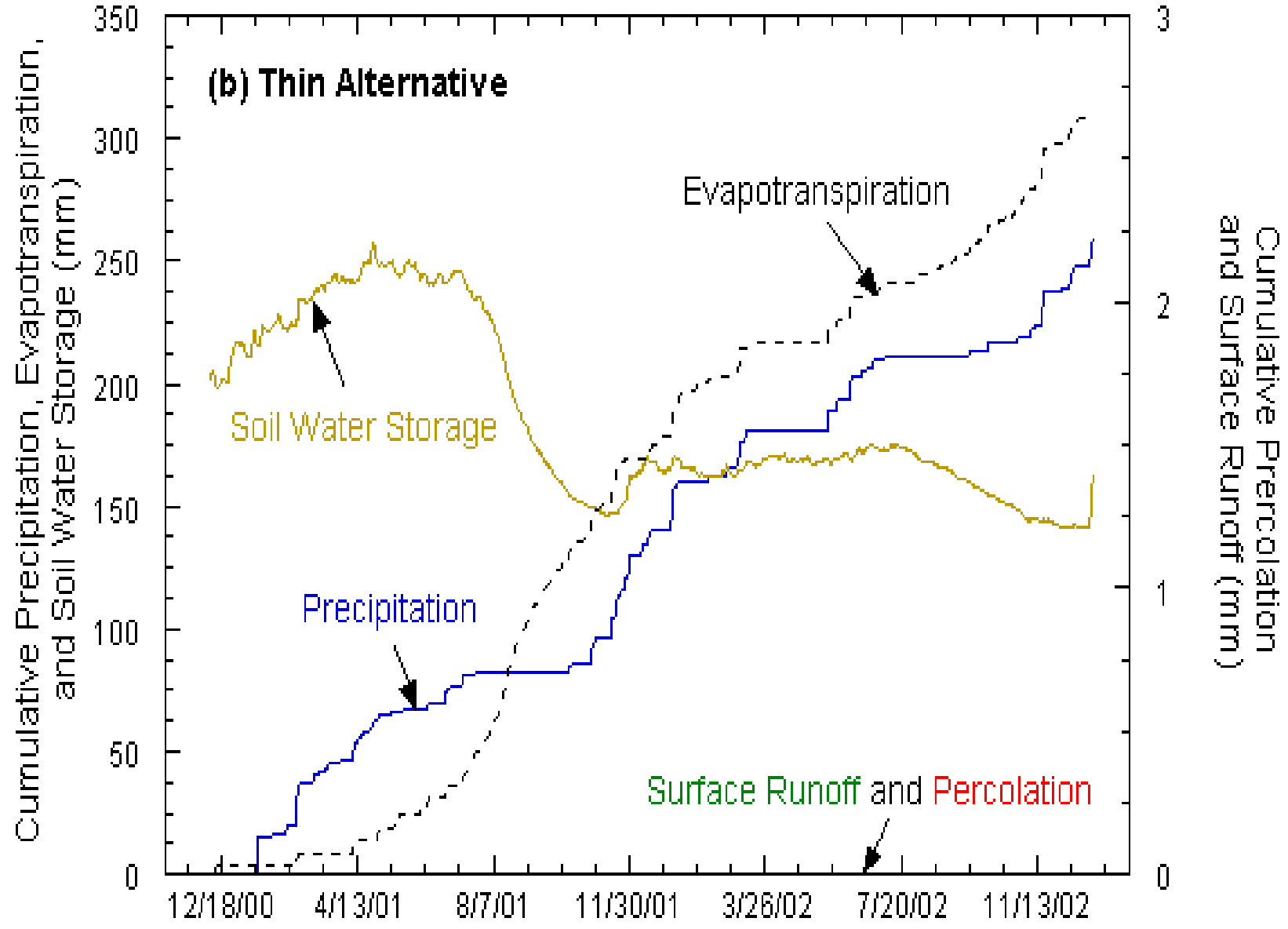


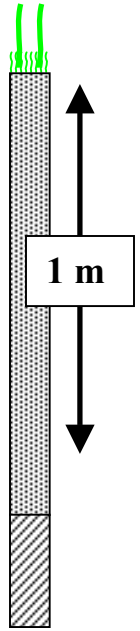
Apple Valley CA Alternative



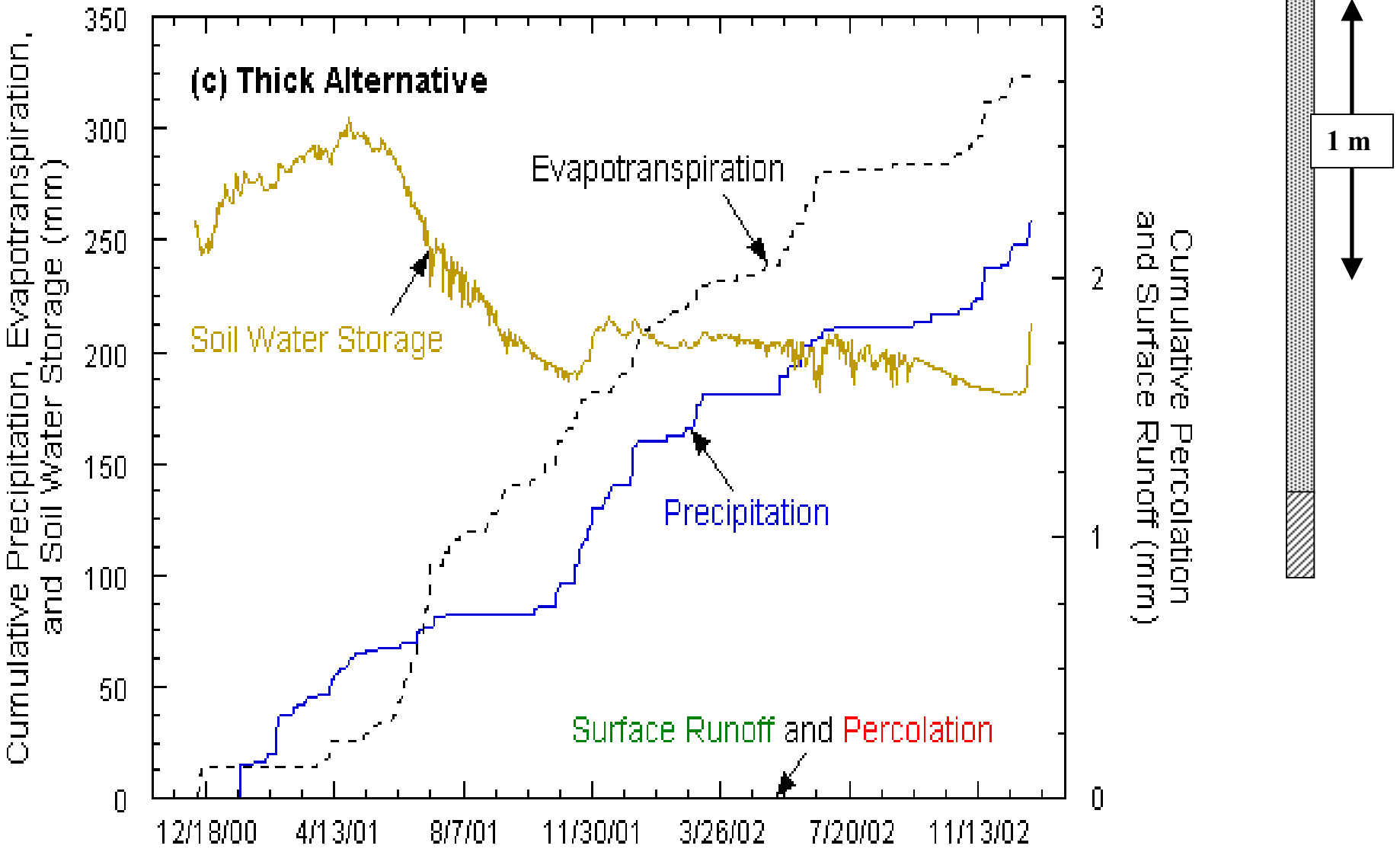


Boardman OR Thin Alternative

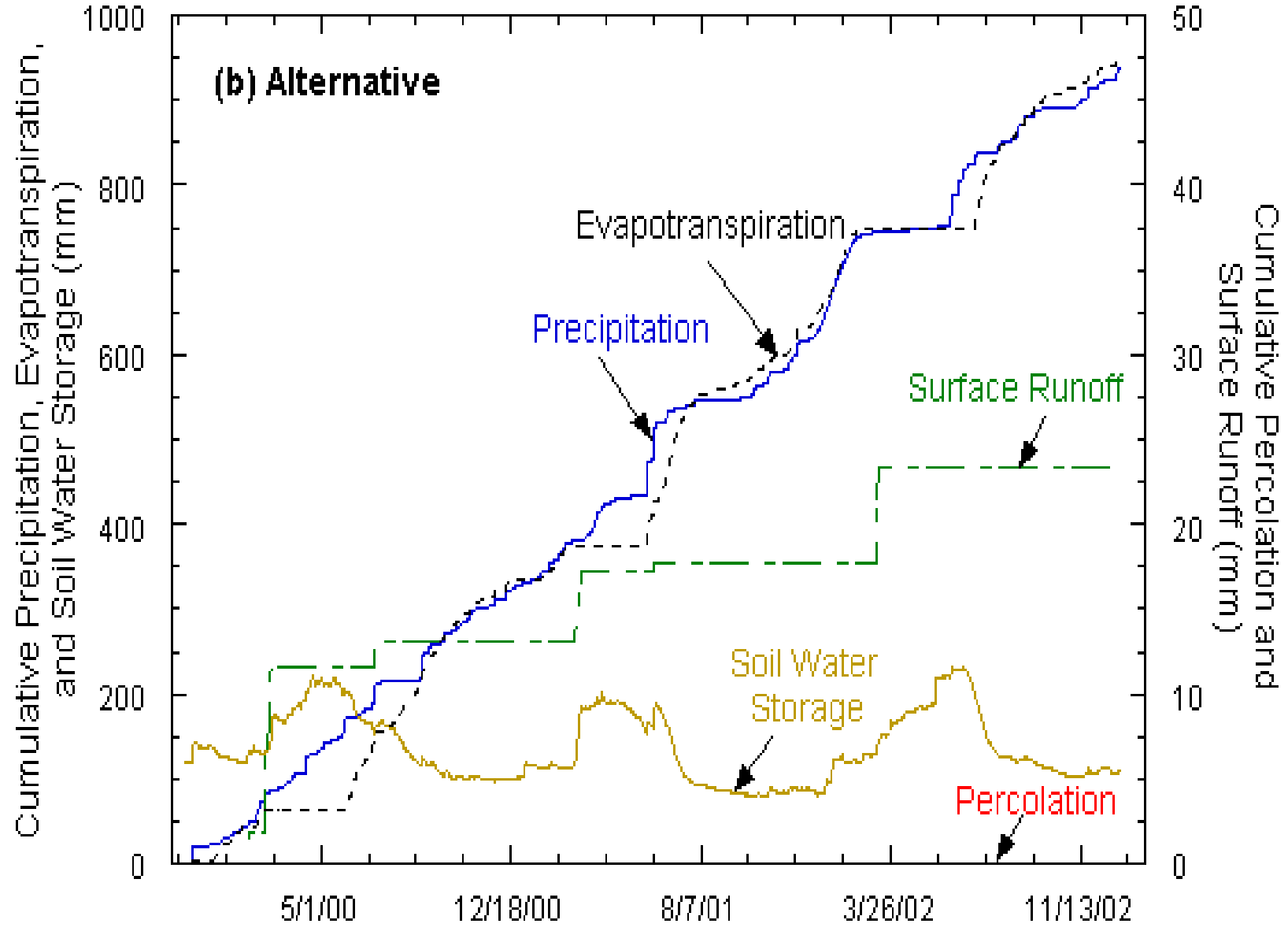


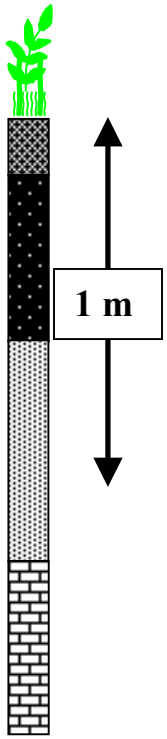


Boardman OR Thick Alternative

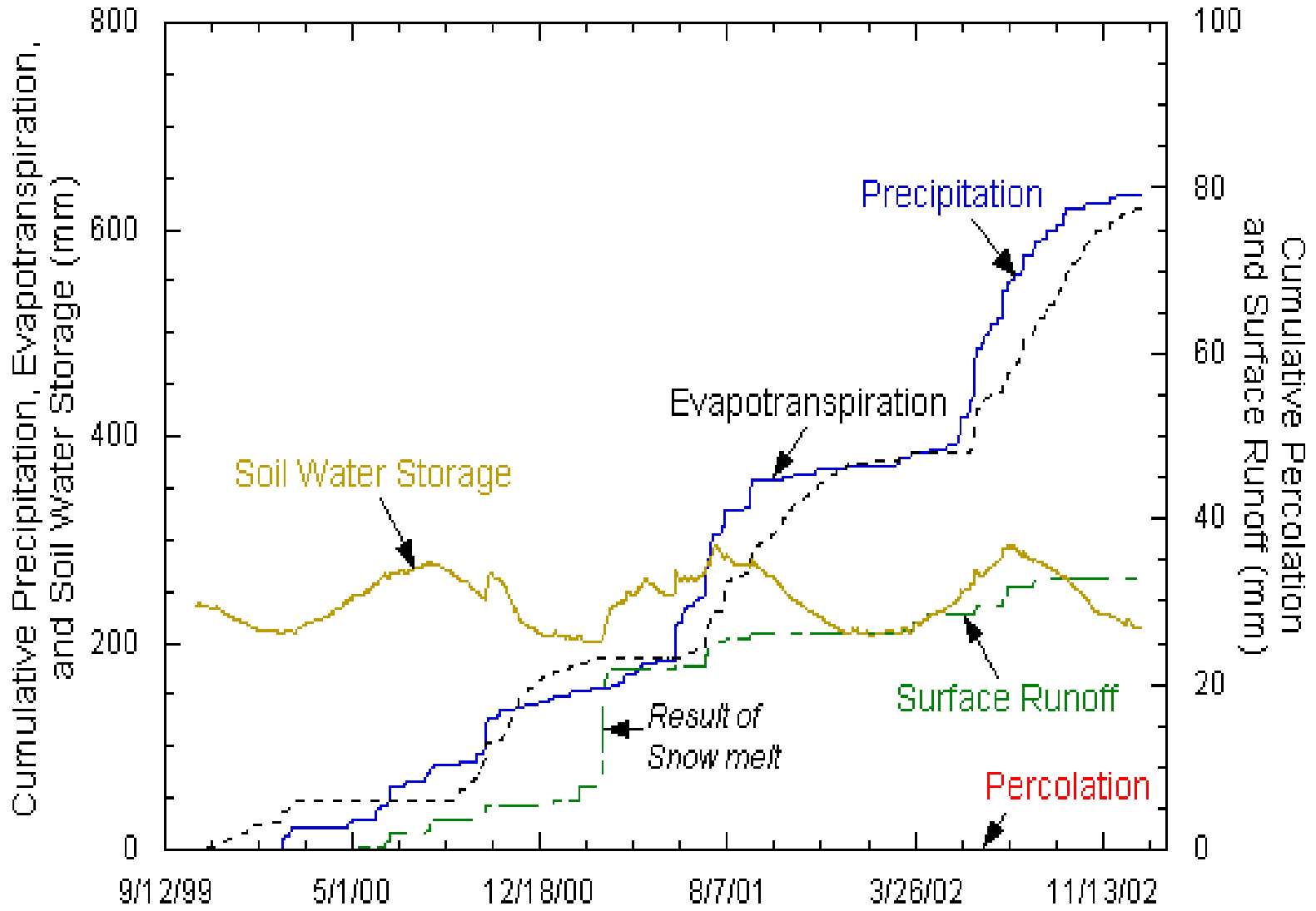


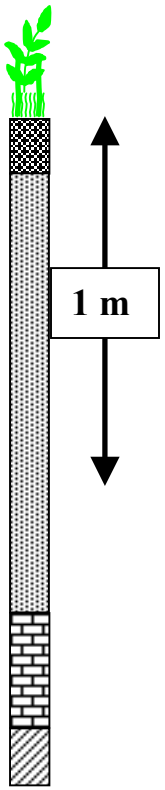
Polson MT Alternative



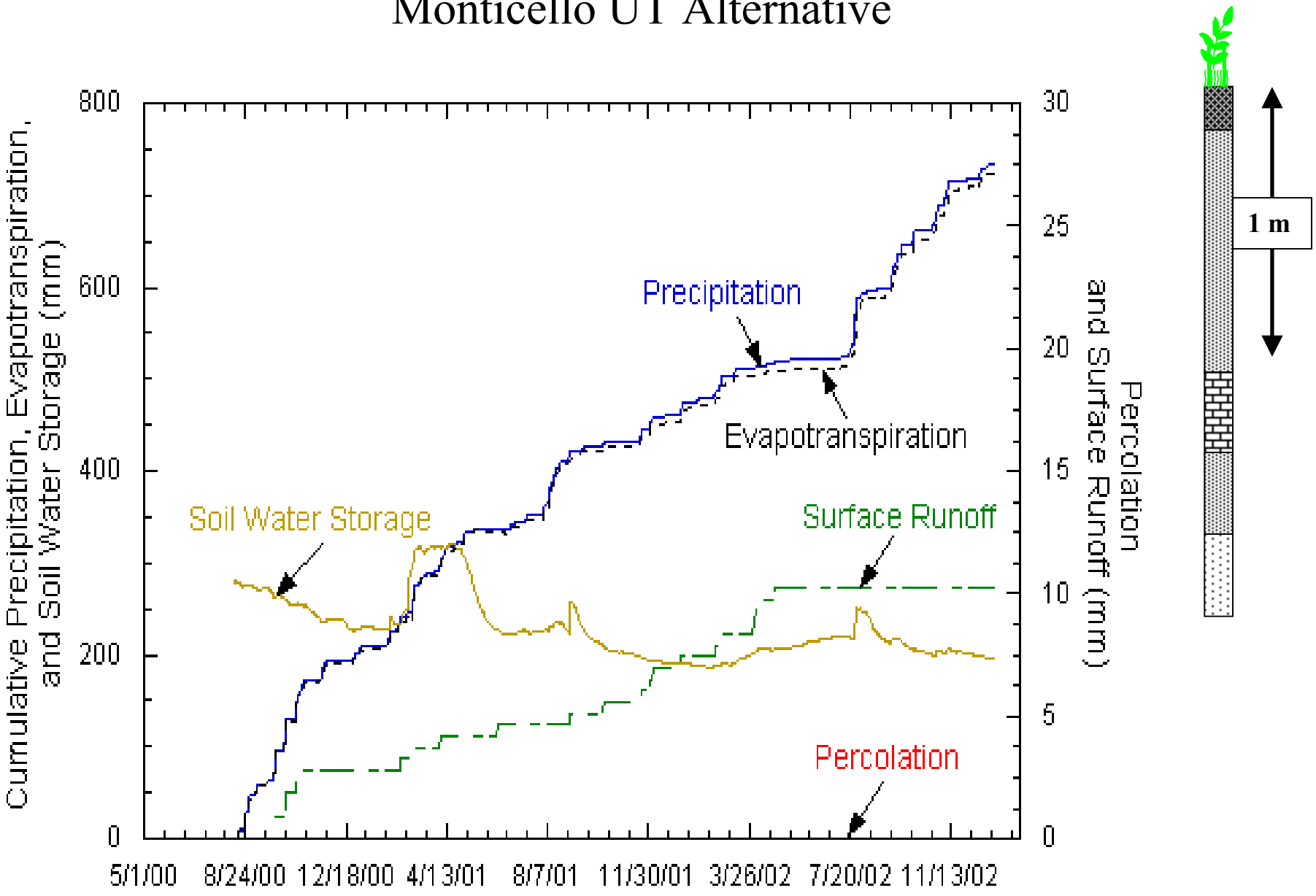


Helena MT Alternative

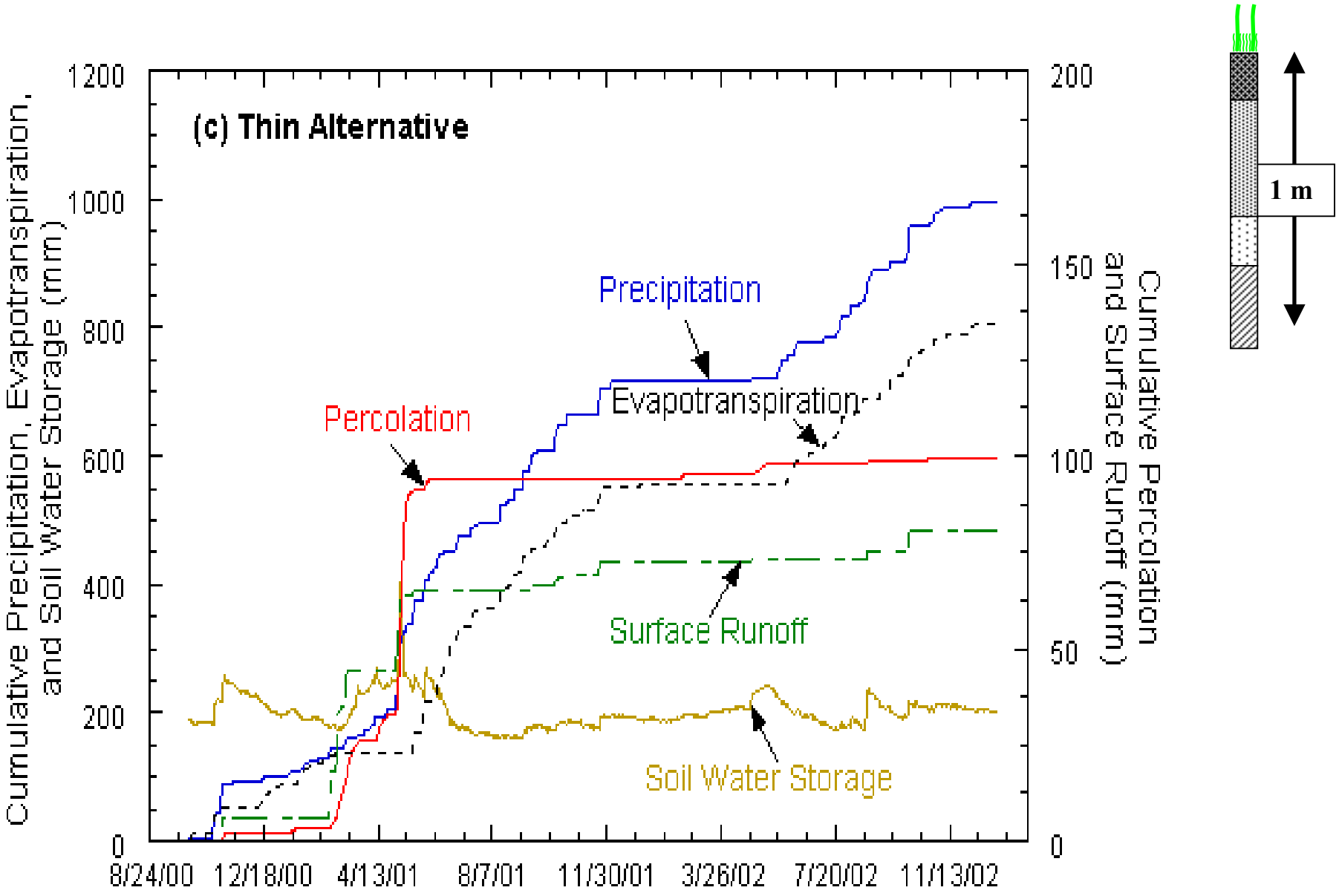




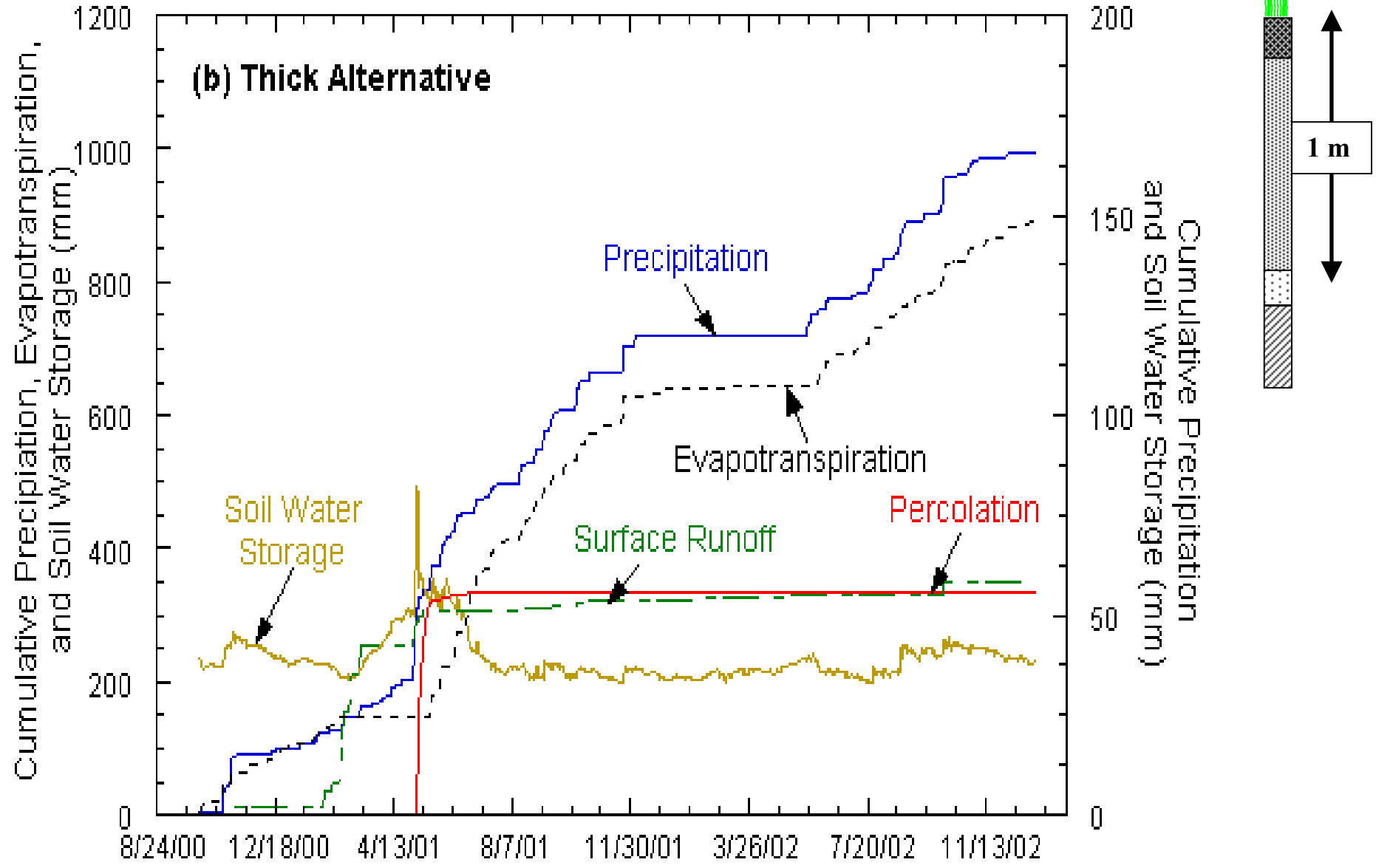
Monticello UT Alternative



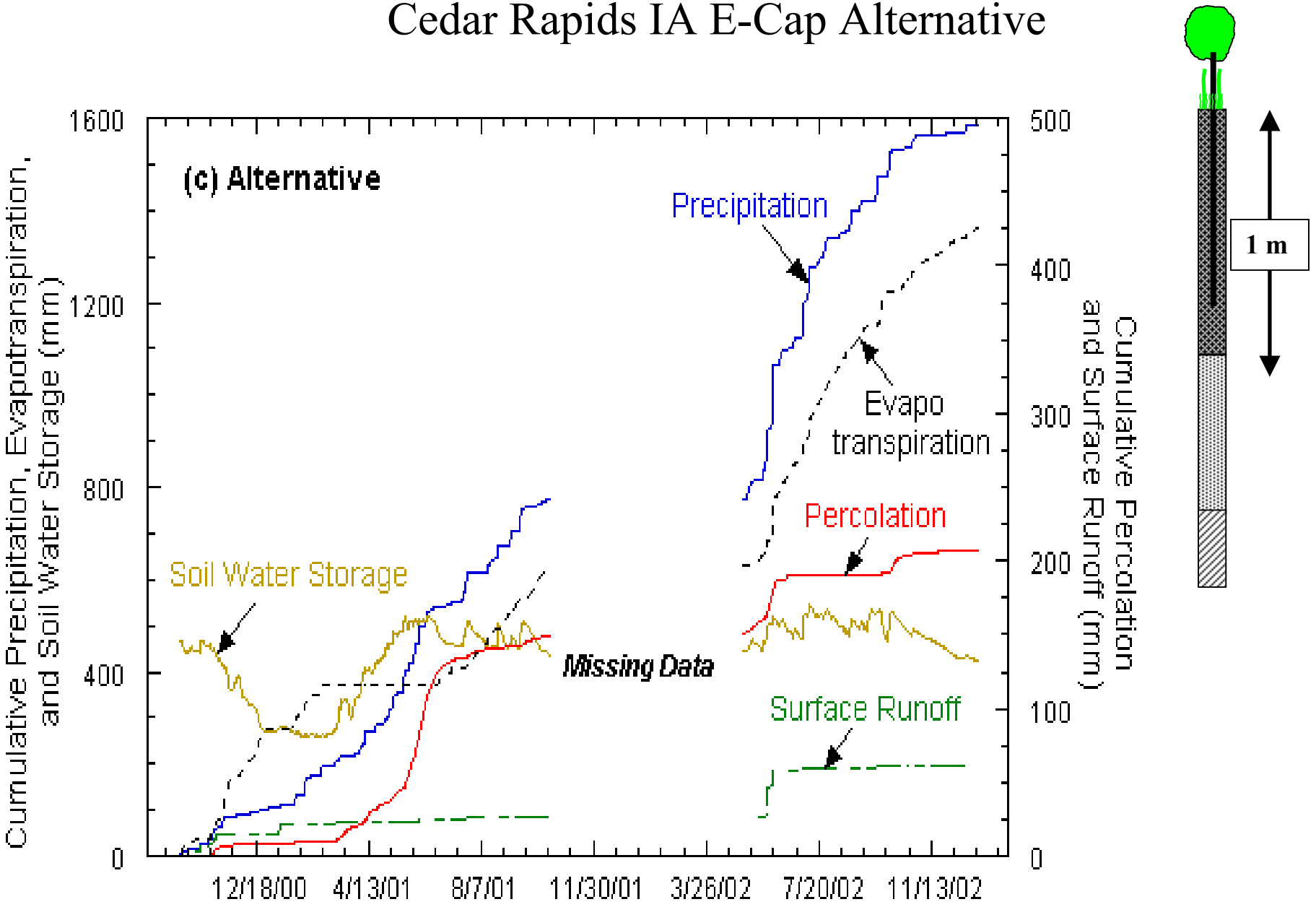
Omaha NE Thin Alternative



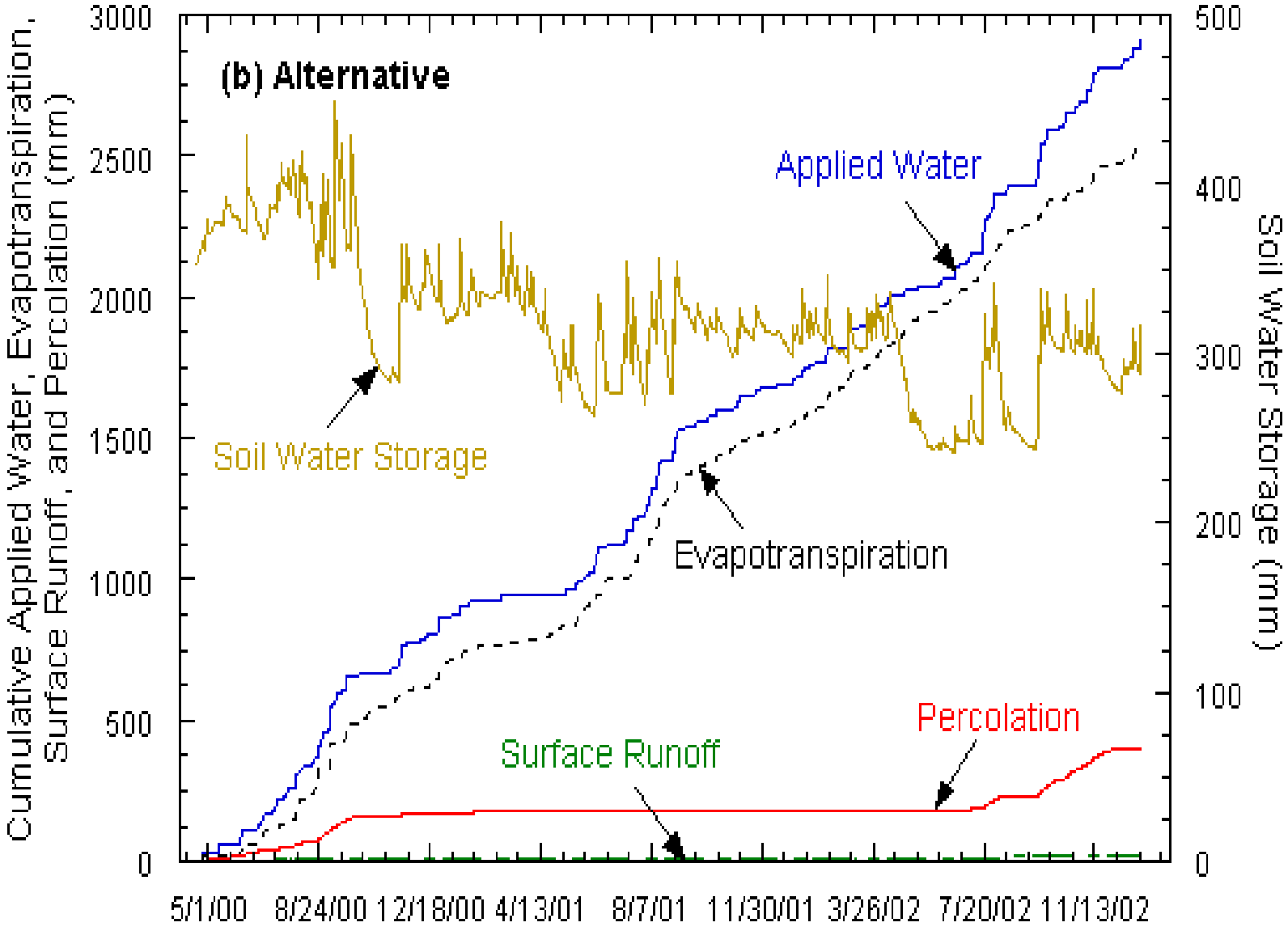
Omaha NE Thick Alternative

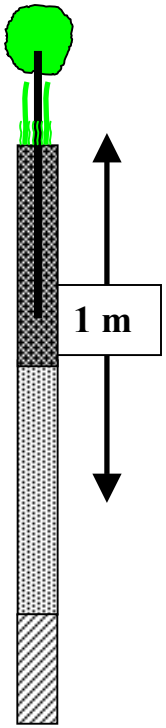


Cedar Rapids IA E-Cap Alternative

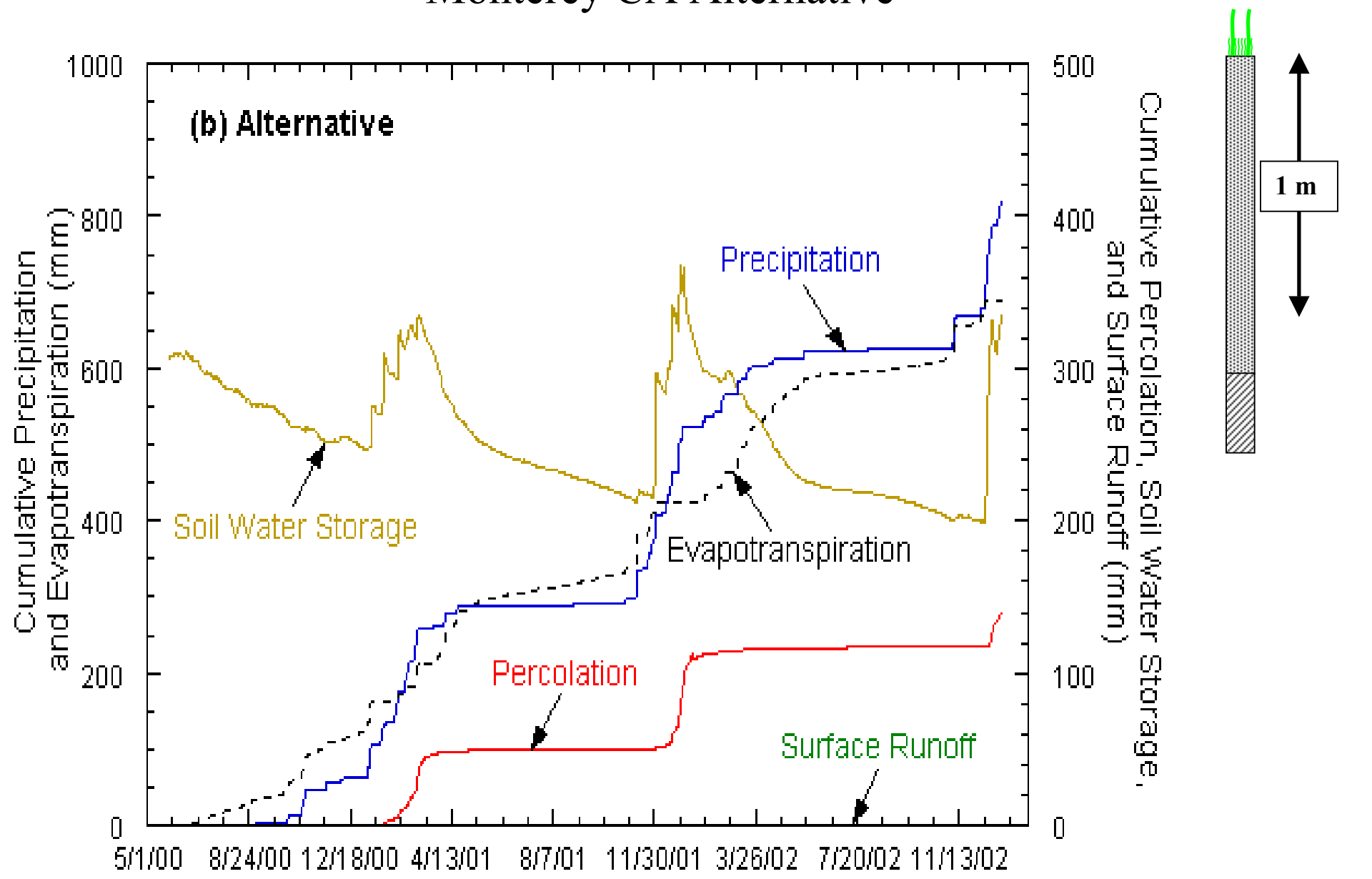


Albany GA E-Cap Alternative





Monterey CA Alternative



Summary

- At some arid and semi-arid locations properly designed alternative covers can limit percolation to ~1-2 mm/yr
- At humid and sub-humid locations inadequate water storage capacity and/or lower than expected transpiration rates can result in high rates of percolation
- Field data suggest that performance predictions for AEFCs are more complicated than currently believed