



(a) Initial soil moisture Nocturnal 1  
**Level 1**  $sm = sm(20 \text{ UTC})$   
**Level 2**  $sm = sm(20 \text{ UTC})$

(b) Initial soil moisture Diurnal 2  
**Level 1**  $sm = sm(27 \text{ UTC})$   
**Level 2**  $sm = 0.99 \times sm(27 \text{ UTC})$