

1 **Supplementary Material**

2 **Fig. S1.** Measurement of suspended sediment concentration ( $C_w$  in  $\text{kg m}^{-3}$ ; primary y-axis) for  
3 Andit Tid on 7 August 1992. Figure shows instance where discharge measurements ( $q$  in  $\text{m}^3\text{s}^{-1}$ ;  
4 secondary y-axis) were available and where sometimes suspended sediment concentration data  
5 was not available.

— Sediment Concentration  $C_w$   
— Discharge Flow Rate  $q$

6

7 **Fig. S2.** Measurement of suspended sediment concentration ( $C_w$  in  $\text{kg m}^{-3}$ ; primary y-axis) for  
8 Anjeni on 28 July 1993. Figure shows instances where discharge measurements ( $q$  in  $\text{m}^3\text{s}^{-1}$ ;  
9 secondary y-axis) were available and where sometimes suspended sediment concentration data  
10 was not available.

— Sediment Concentration  $C_w$   
— Discharge Flow Rate  $q$

11

12 **Fig. S3.** Measured instantaneous suspended sediment concentration ( $C_w$  in  $\text{kg m}^{-3}$ ; primary y-  
13 axis) and discharge ( $q$  in  $\text{m}^3\text{s}^{-1}$ ; secondary y-axis) for storms in the Andit Tid watershed on 16  
14 July 1992 showing total daily measured flow (left) and total storm measured flow only (right).  
15 Using this method, for a storm event of size  $23 \text{ mm day}^{-1}$  in the beginning of the kreamt rainy  
16 season in Andit Tid would change from a daily storm average sediment concentration of  $1.5 \text{ kg}$   
17  $\text{m}^{-3}$  (a) to  $3.9 \text{ kg m}^{-3}$  (b), due to its use of only storm discharge.

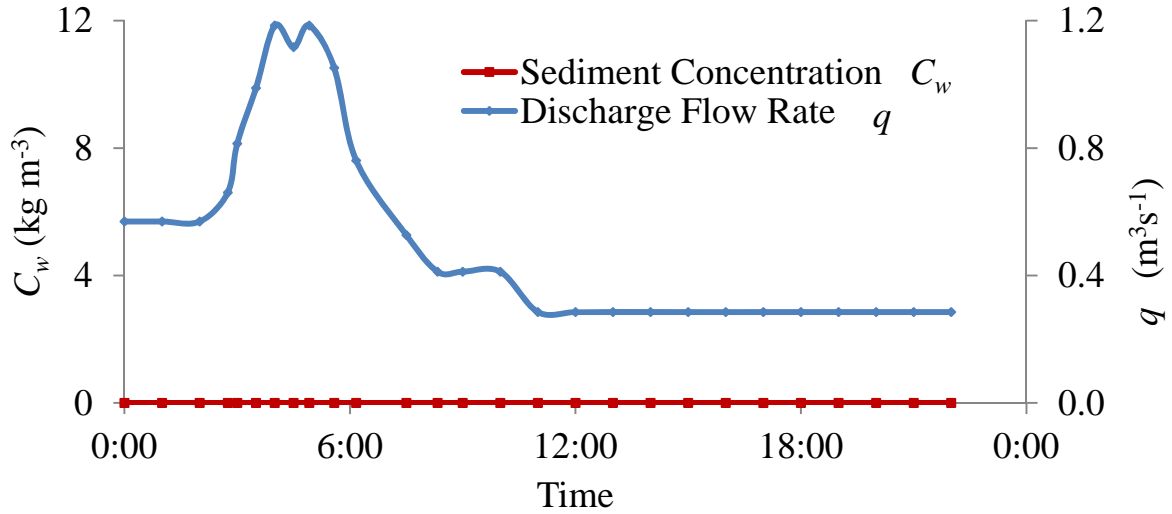
— Sediment Concentration  $C_w$   
— Discharge Flow Rate  $q$

18

19 **Fig. S4.** Measured instantaneous suspended sediment concentration ( $C_w$  in  $\text{kg m}^{-3}$ ; primary y-  
20 axis) and discharge ( $q$  in  $\text{m}^3\text{s}^{-1}$ ; secondary y-axis) for storms in the Andit Tid watershed on 2  
21 September 1992 showing total daily measured flow (left) and total storm measured flow only  
22 (right). Similar to Fig. S1, for a precipitation storm event of a comparable size  $23 \text{ mm day}^{-1}$   
23 toward the late part of the kreamt rainy season, the daily storm average concentration at a daily  
24 time scale would change from  $0.5 \text{ kg m}^{-3}$  (a) to  $2.1 \text{ kg m}^{-3}$  (b).

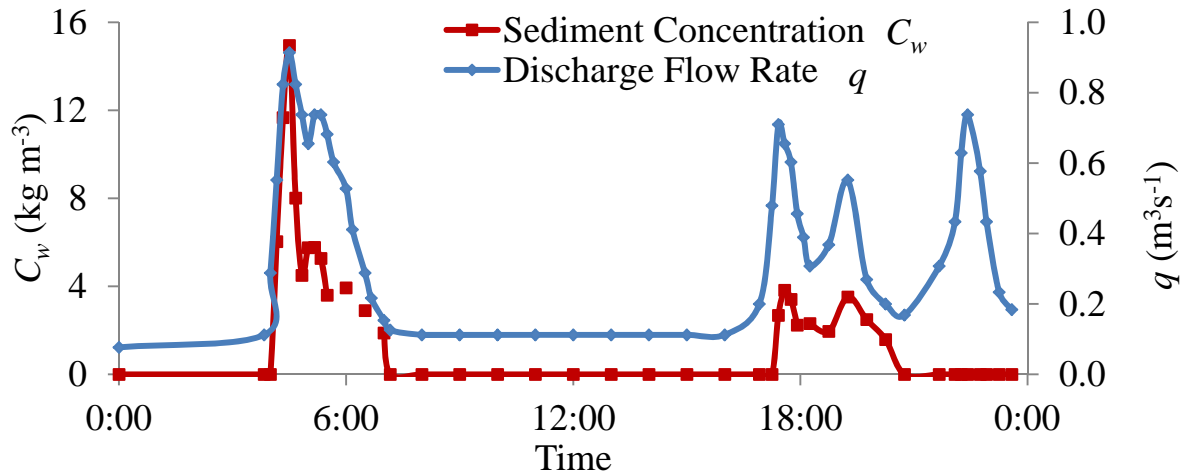
— Sediment Concentration  $C_w$   
— Discharge Flow Rate  $q$

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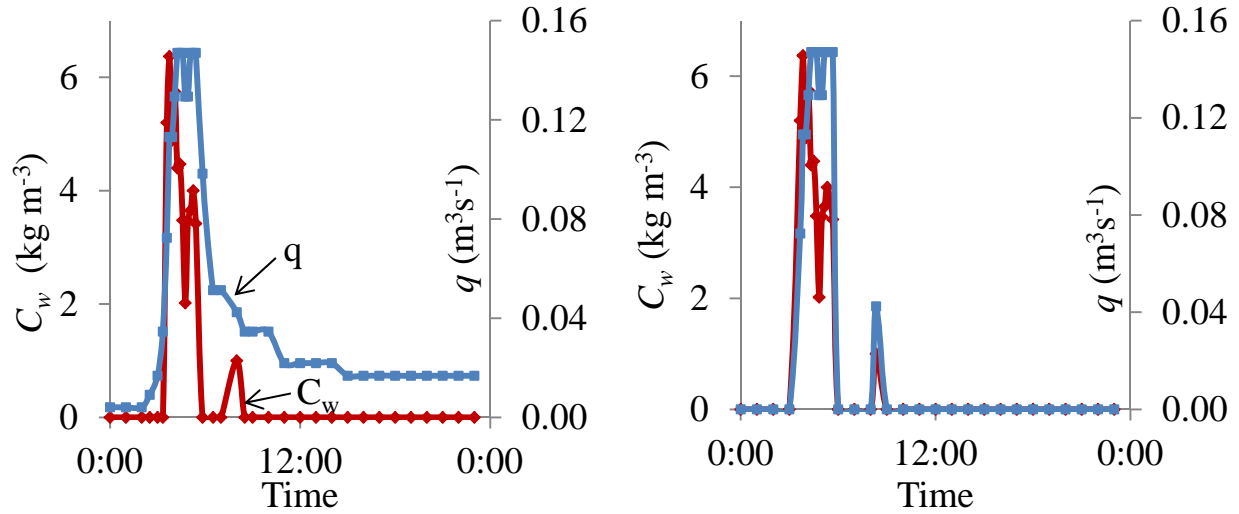
1

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 4 secondary y-axis) were available and where sometimes suspended sediment concentration data  
 5 was not available.



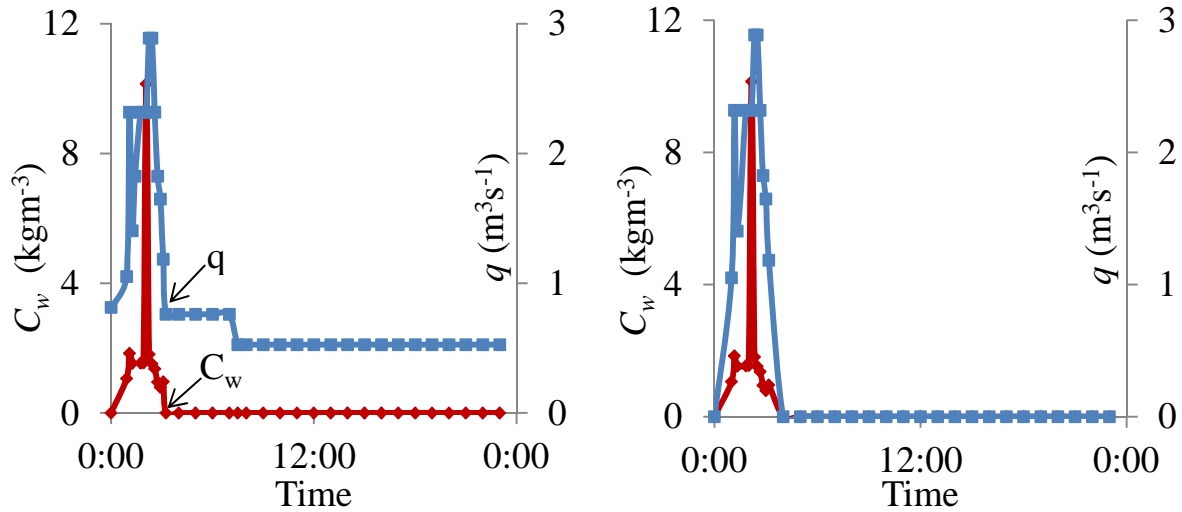
6

7 **Fig. S2.** Measurement of suspended sediment concentration ( $C_w$  in  $\text{kg m}^{-3}$ ; primary y-axis) for  
 8 Anjeni on 28 July 1993. Figure shows instances where discharge measurements ( $q$  in  $\text{m}^3 \text{s}^{-1}$ ;  
 9 secondary y-axis) were available and where sometimes suspended sediment concentration data  
 10 was not available.



1

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 3 axis) and discharge ( $q$  in  $\text{m}^3\text{s}^{-1}$ ; secondary y-axis) for storms in the Andit Tid watershed on 16  
 4 July 1992 showing total daily measured flow (left) and total storm measured flow only (right).  
 5 Using this method, for a storm event of size  $23 \text{ mm day}^{-1}$  in the beginning of the kremt rainy  
 6 season in Andit Tid would change from a daily storm average sediment concentration of  $1.5 \text{ kg}$   
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8

9 **Fig. S4.** Measured instantaneous suspended sediment concentration ( $C_w$  in  $\text{kg m}^{-3}$ ; primary y-  
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