3720

2002 Spring Meeting Search Results:

Your query was:

sebestyen

HR:

1330h

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H42D-03

Generation of chemical signatures within stream networks: using synoptic surveys to identify controls on water chemistry in the Lookout Creek Basin, Oregon, USA.

AU:

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Longitudinal sampling along streams can provide valuable insight into chemical signatures, but may not elucidate landscape-level controls because sampling is restricted to a single stream within a network. To better understand how stream networks integrate geochemical signatures from landscapes, we expanded upon a longitudinal sampling approach and collected water samples that were distributed throughout a forested stream network. In this study, 50 water samples were synoptically collected throughout the 6400 ha Lookout Creek basin and subbasins at the HJ Andrews LTER in the Western Cascade Mountains of Oregon, USA. We used a geochemical approach to illustrate that the watershed integrated features and processes of the landscape to produce a signature water chemistry due to changing spatial scales and connectivity within the stream network. Our expanded sampling strategy provides greater insight into how stream networks integrate multiple influences and identifies key spatial positions within the landscape that influence water chemistry.

DE:

1806 Chemistry of fresh water

DE:

1848 Networks

DE: DE:

1860 Runoff and streamflow 1871 Surface water quality

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1886 Weathering (1625)

SC:

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New Search

