

Soil Water dynamics and water balance on a coral island: Zhaoshu Island, Xisha Archipelago

Shengsheng Han¹, Suxia Liu², Xingguo Mo², Lihu Yang³, and XF Song⁴

¹Institute of Geographic Sciences and Natural Resources Research CAS

²Institute of Geographical Sciences and Natural Resources Research, CAS

³Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences

⁴Institute of Geographic Sciences and Natural Resources Research Chinese Academy of Sciences

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Abstract

Studying soil water dynamics and water balance on coral islands is important to utilize and manage the limited freshwater resources of these islands. In this study, we investigated the soil water dynamics of Zhaoshu Island, Xisha Archipelago, using observed data and the Richards equation and analyzed the water balance of this island from October 2018 to September 2019. The precipitation, the water change values in the entire flow domain (V_{olume}), the bottom boundary flux (v_{Bot}), transpiration (Er), and evaporation (Es)

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Shengsheng. Han ^{ab}, Suxia. Liu^{ac*}, Xingguo. Mo ^{ac}, Lihu. Yang^a, and Xianfang. Song ^{ac}

^aKey Laboratory of Water Cycle and Related Land Surface Processes, Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences, Beijing 100101, PR China, ^bUniversity of Chinese Academy of Sciences, Beijing 100049, PR China, ^c College of Resources and Environment, Sino-Danish Center, University of Chinese Academy of Sciences, Beijing 100049, PR China.

* Corresponding author at: 11A, Datun Road, Chaoyang District, Beijing 100101, China.

* Email address: liusx@igsrr.ac.cn (Suxia. Liu)

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Availability of data:

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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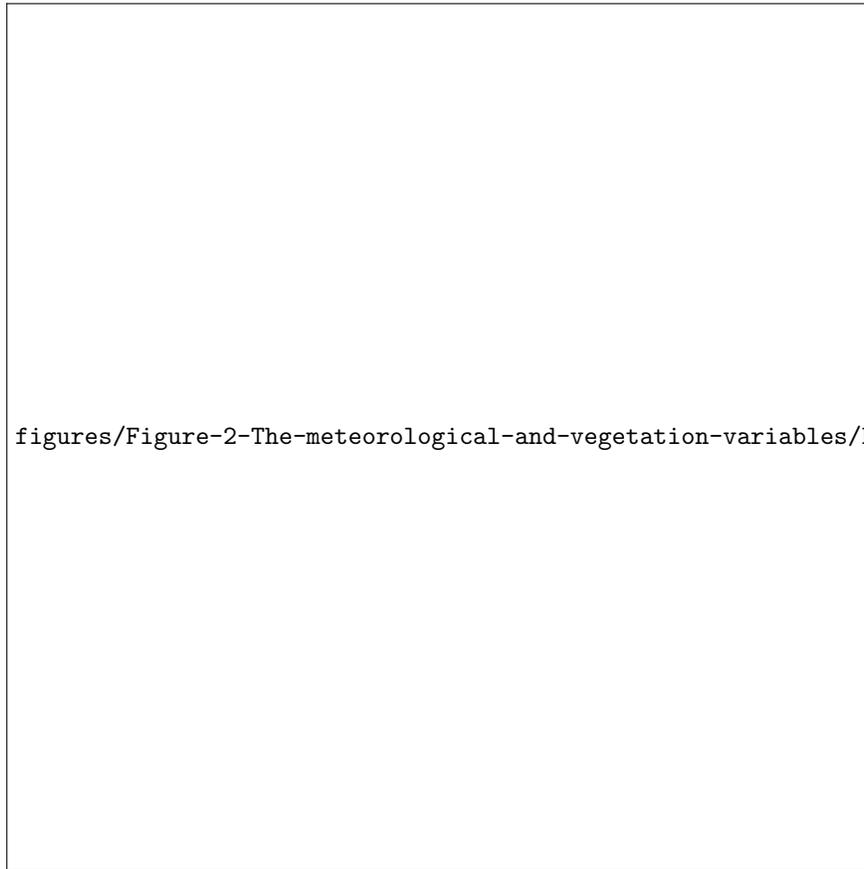
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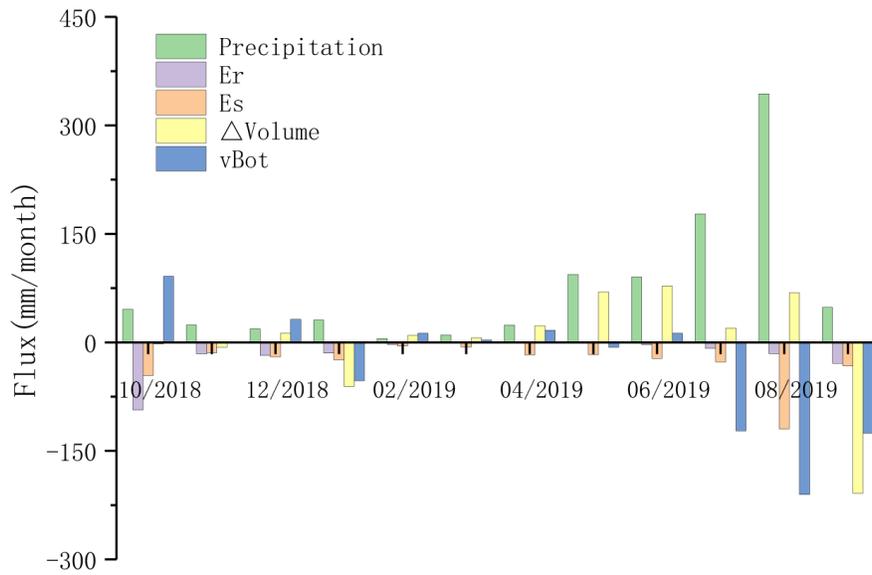
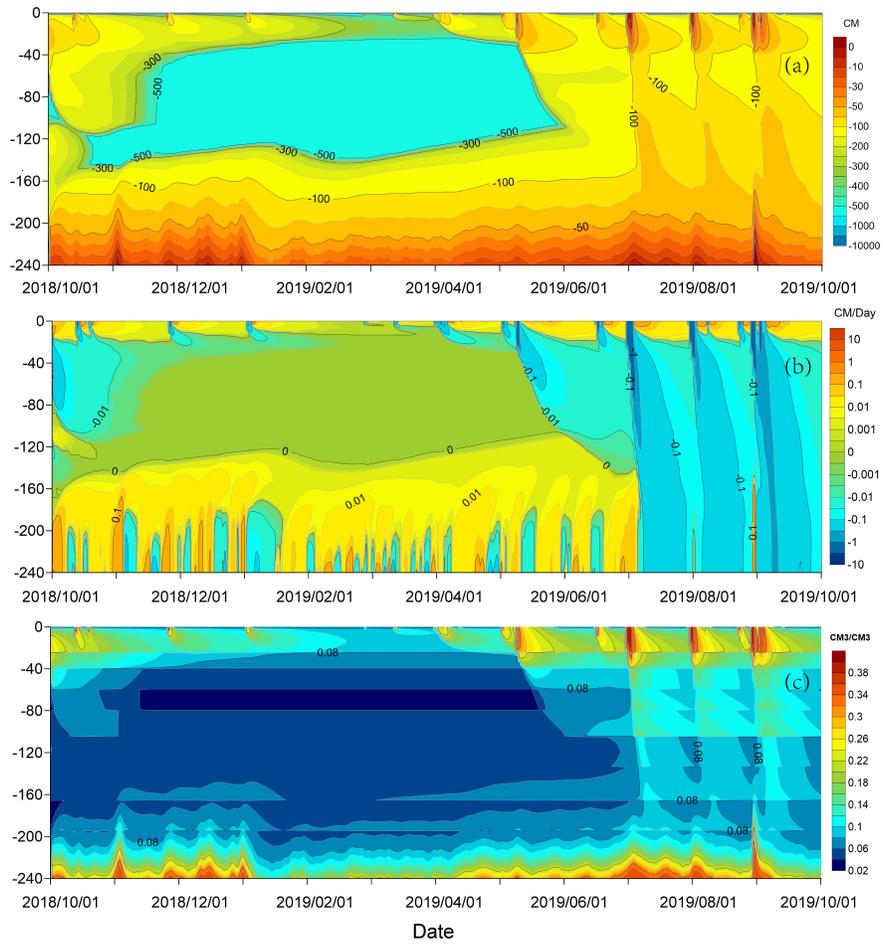
Figure 1 Location of a) South China Sea, b) Xisha archipelago, c) Zhaoshu Island, and d) the soil water available at <https://authorea.com/users/346360/articles/476744-soil-water-dynamics-and-water-balance-on-a-coral-island-zhaoshu-island-xisha-archipelago>



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figures/Figure-8-a)-Relationship-among-precipitation,-transpiration,-and-evaporation;-b)-