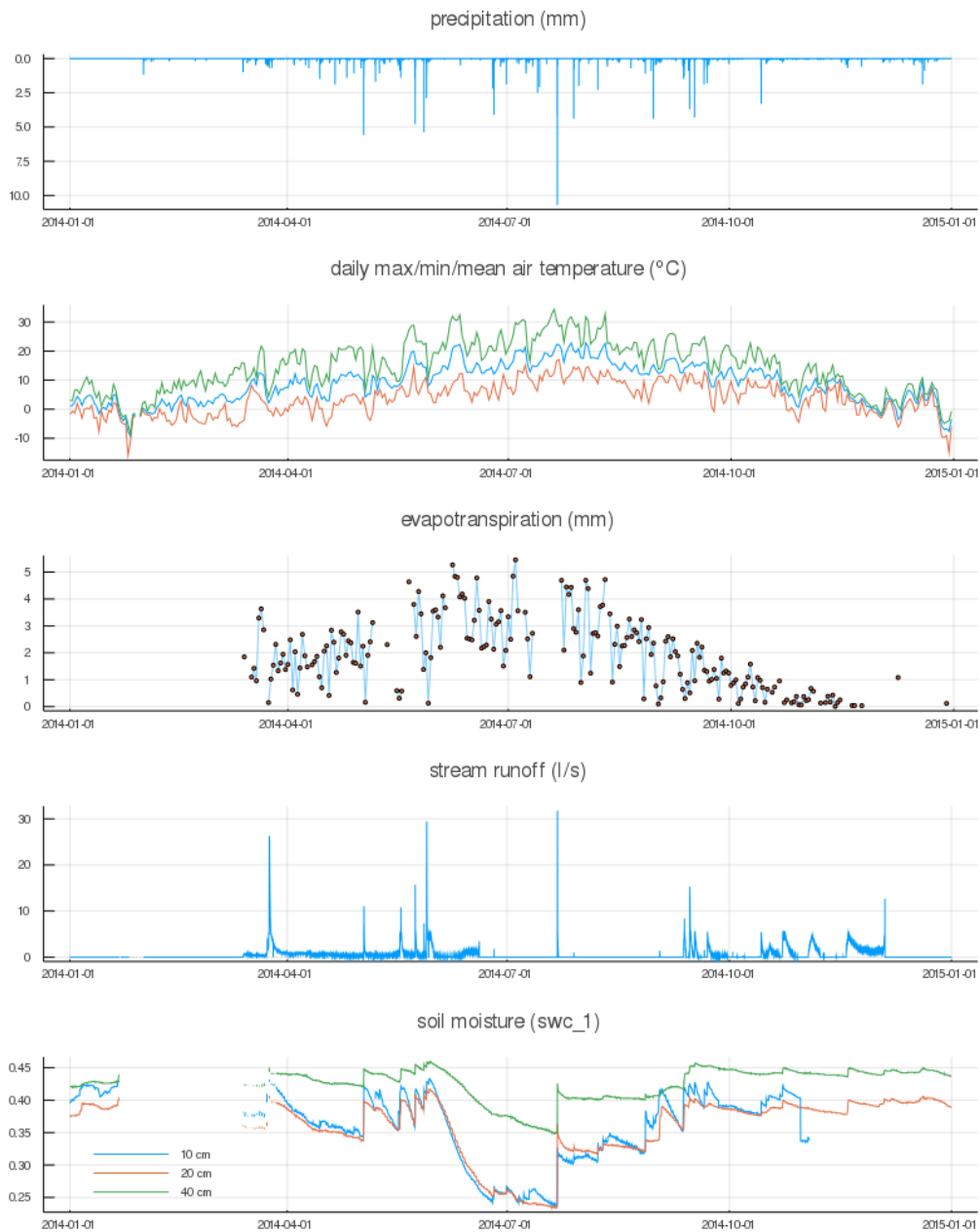


Data description for Nučice catchment 2014

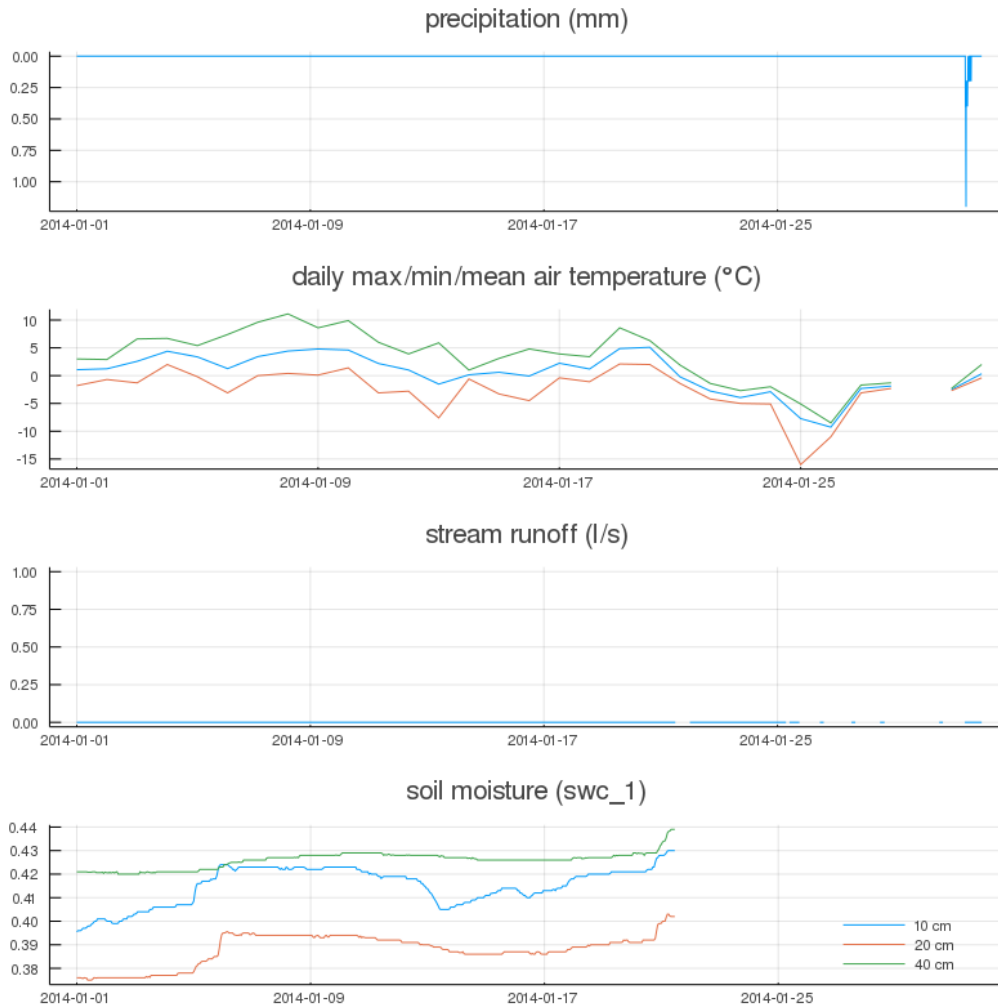
1. Summary



Precipitation, air temperature, reference evapotranspiration, stream discharge, and soil moisture were recorded for most of the year. The highest precipitation is 10.7 mm (in July) and the largest discharge is 31.8 l/s (in July). The lowest/highest temperature were -16.0 °C (in January) and 34.4 °C (in July), respectively.

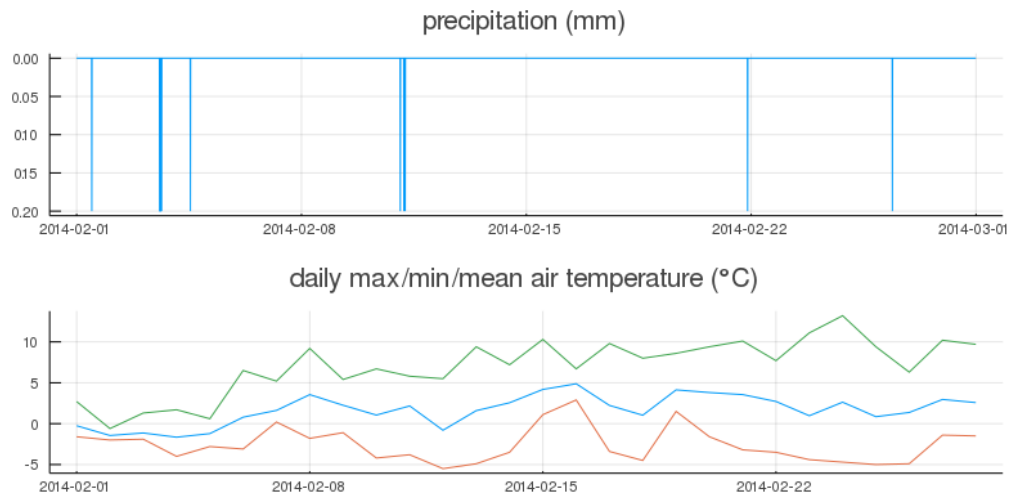
2. Monthly analysis

2.1. January



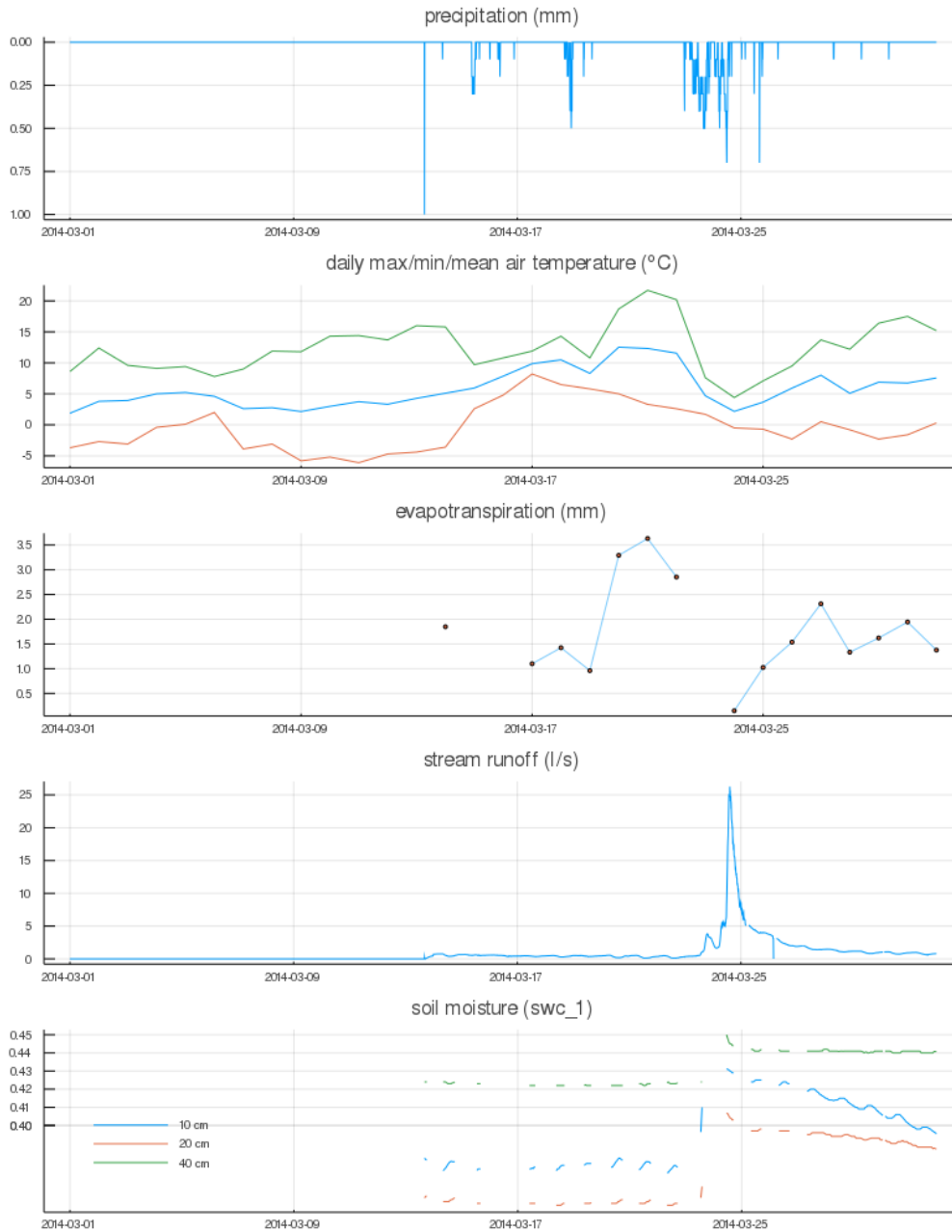
The recorded data includes precipitation, temperature, stream discharge at the outlet, and soil water content at 3 depths. Precipitation only occurred in the end of the month. The average precipitation is about 0.001 mm, the maximum precipitation is 1.2 mm. The mean temperature is 0.5 °C. The minimum and maximum temperature are -16.0 °C and 11.1 °C. No stream discharge was measured in this month (Measurement error with the devices). Soil moisture sensors had some measurement errors in the end of the month.

2.2. February



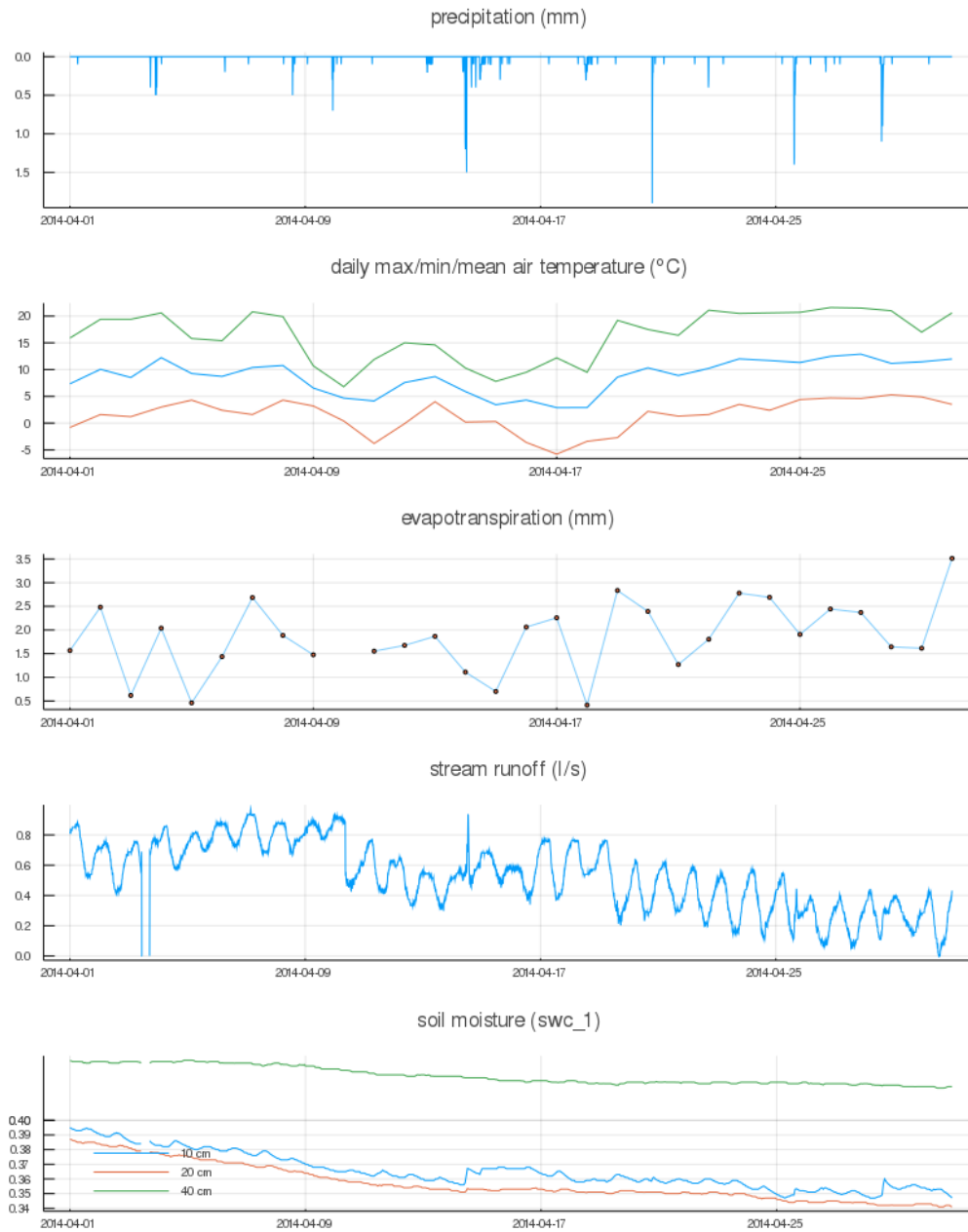
The recorded data only includes precipitation and temperature. Precipitation distributed evenly over the month. The average precipitation is about 0.0006 mm, the maximum precipitation is 0.2 mm. The mean temperature is 1.7 °C. The minimum and maximum temperature are -5.5 °C and 13.2 °C.

2.3. March



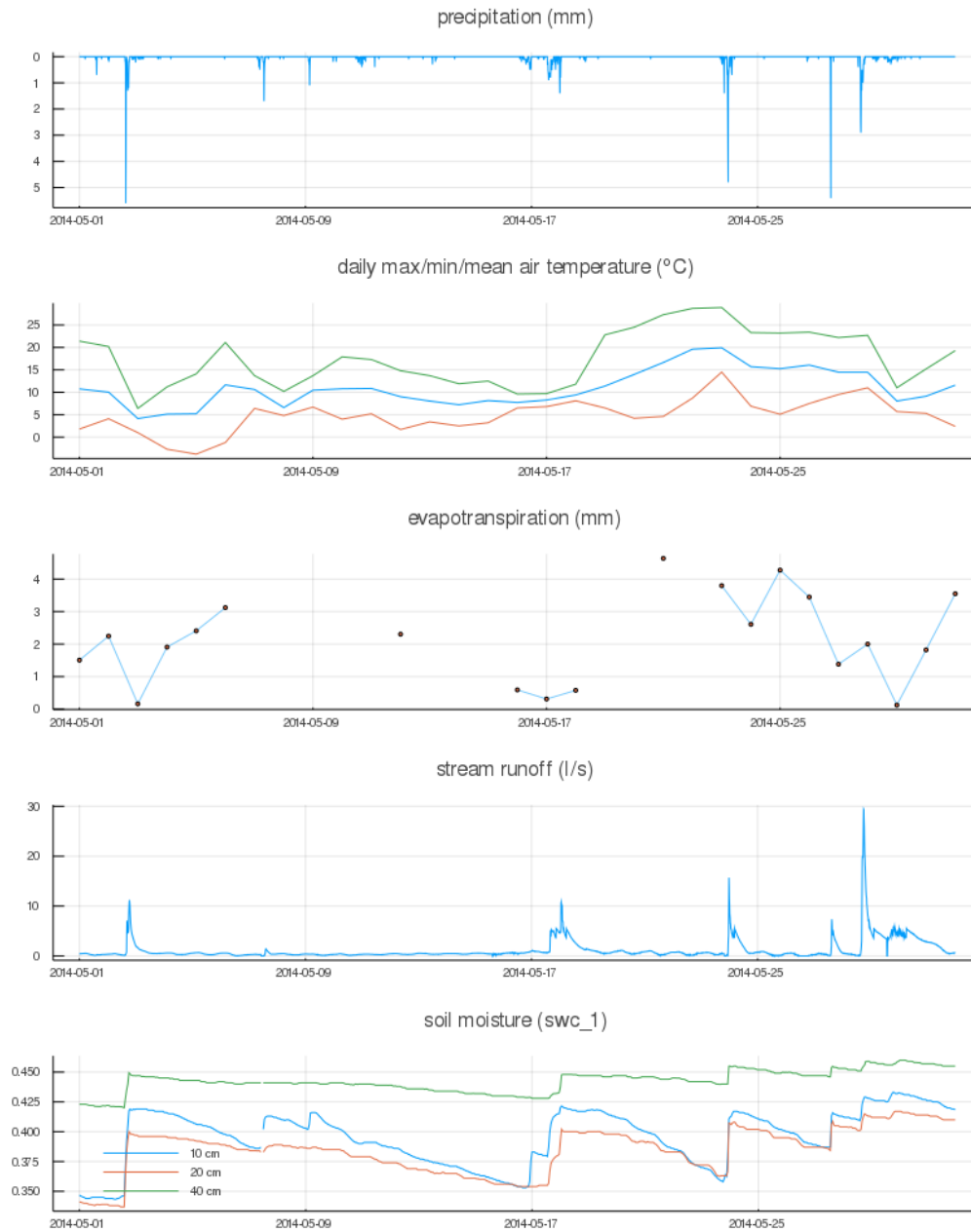
The recorded data includes precipitation, temperature, reference evapotranspiration, stream discharge at the outlet, and soil water content at 3 depths. Precipitation mainly occurred in the second half of the month. The average precipitation is about 0.012 mm, the maximum precipitation is 1.0 mm. The mean temperature is 5.8 °C. The minimum and maximum temperature are -6.1 °C and 21.7 °C. The reference evapotranspiration was only partially recorded. The mean value among the recorded days is 1.76 mm. The stream had highest discharge with value of 26.27 l/s after a heavy rainfall event in the end of the month. Soil moisture sensors had some measurement errors but the trend still could be identified.

2.4. April



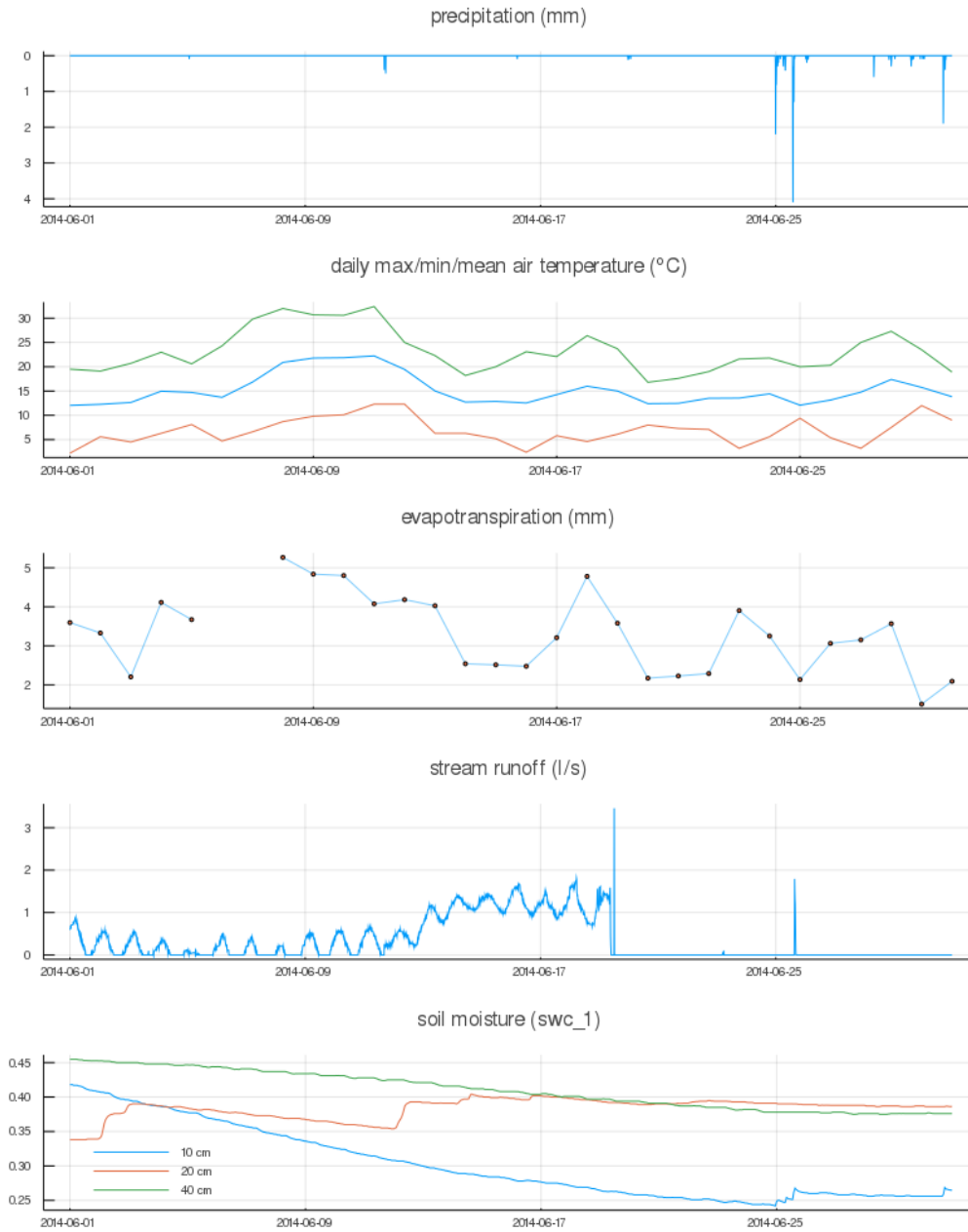
The recorded data includes precipitation, temperature, reference evapotranspiration, stream discharge at the outlet, and soil water content at 3 depths. The average precipitation is about 0.008 mm, the maximum precipitation is 1.9 mm. The mean temperature is 8.7 °C. The minimum and maximum temperature are -5.8 °C and 21.6 °C. The reference evapotranspiration was recorded for most of the month. The mean value among the recorded days is 1.84 mm. The stream had diurnal fluctuation with the amplitude of 0.4 l/s. The mean stream discharge is about 0.52 l/s. Soil moisture in the top soil (10 cm and 20 cm) shows a decline trend within the month, while the subsoil (40 cm) soil moisture remained a stable statue.

2.5. May



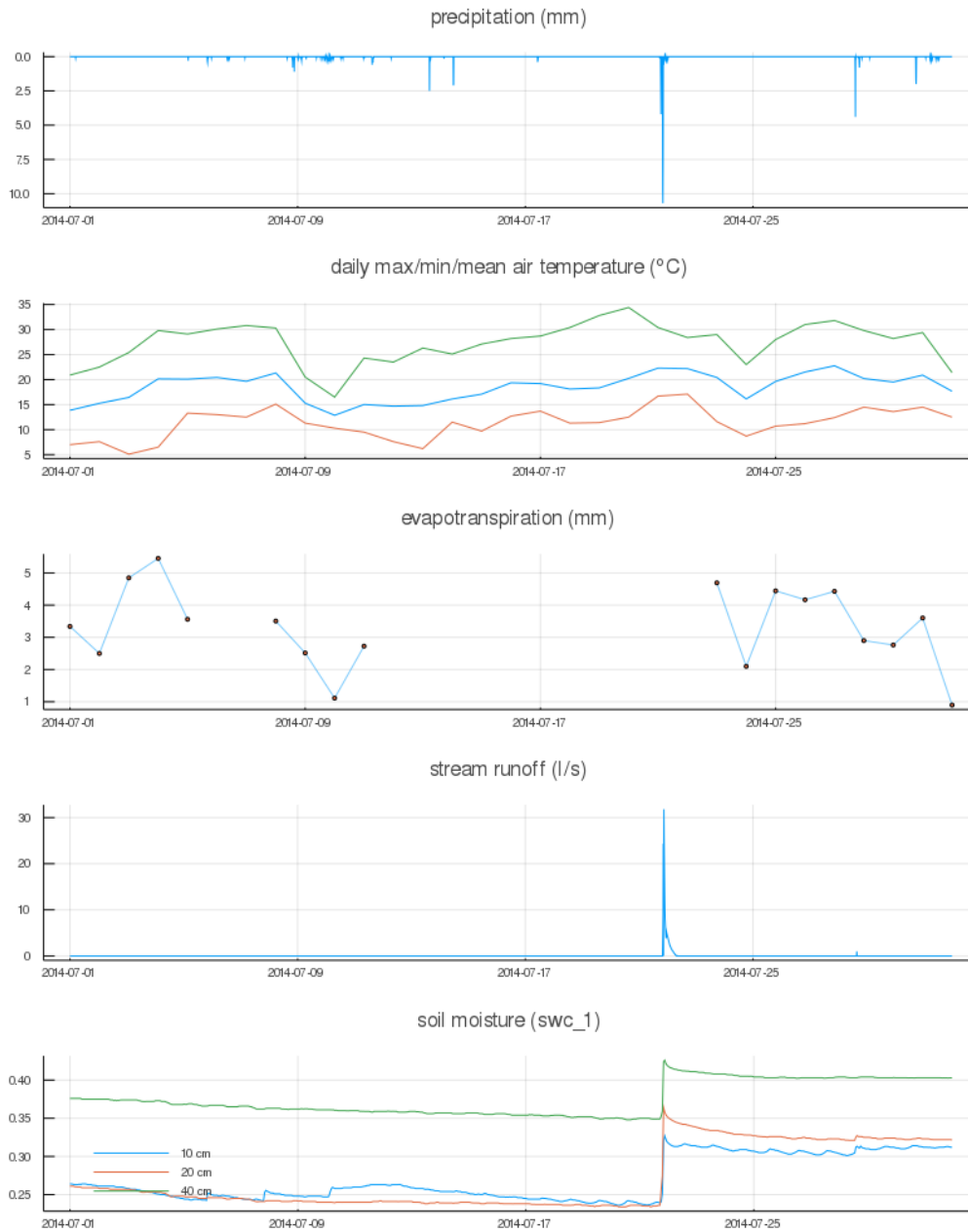
The recorded data includes precipitation, temperature, reference evapotranspiration, stream discharge at the outlet, and soil water content at 3 depths. The average precipitation is about 0.028 mm, the maximum precipitation is 5.6 mm. The mean temperature is 11.0 °C. The minimum and maximum temperature are -3.8 °C and 28.9 °C. The reference evapotranspiration was recorded partially in the month. The mean value among the recorded days is 2.14 mm. The stream had many peaks after heavy rainfall events. The highest peak is about 29.4 l/s. Soil moisture also fluctuated dramatically after the heavy rainfall events.

2.6. June



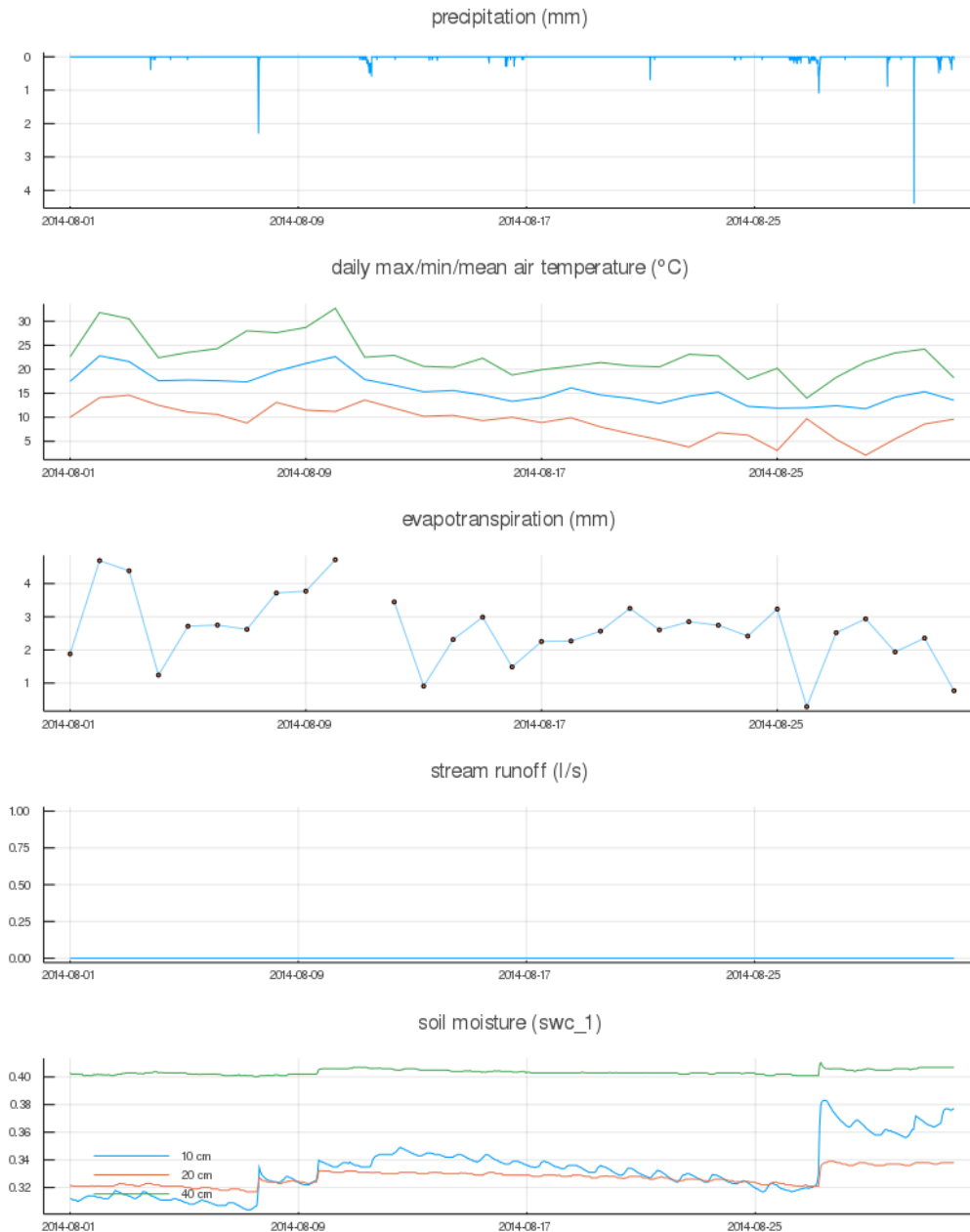
The recorded data includes precipitation, temperature, reference evapotranspiration, stream discharge at the outlet, and soil water content at 3 depths. The average precipitation is about 0.006 mm, the maximum precipitation is 4.1 mm. The mean temperature is 15.2 °C. The minimum and maximum temperature are 2.2 °C and 32.4 °C. The reference evapotranspiration was recorded for the most of the month. The mean value among the recorded days is 3.31 mm. The stream had diurnal fluctuation with the amplitude of 0.5 l/s. The stream had two peaks: one after a heavy rainfall event, the other one occurred under only a small rainfall event (either something wrong with the precipitation record or there was a maintenance at the gauging station). Soil moisture also fluctuated dramatically after the heavy rainfall events, however, the top soil moisture content shows a decline trend within the month.

2.7. July



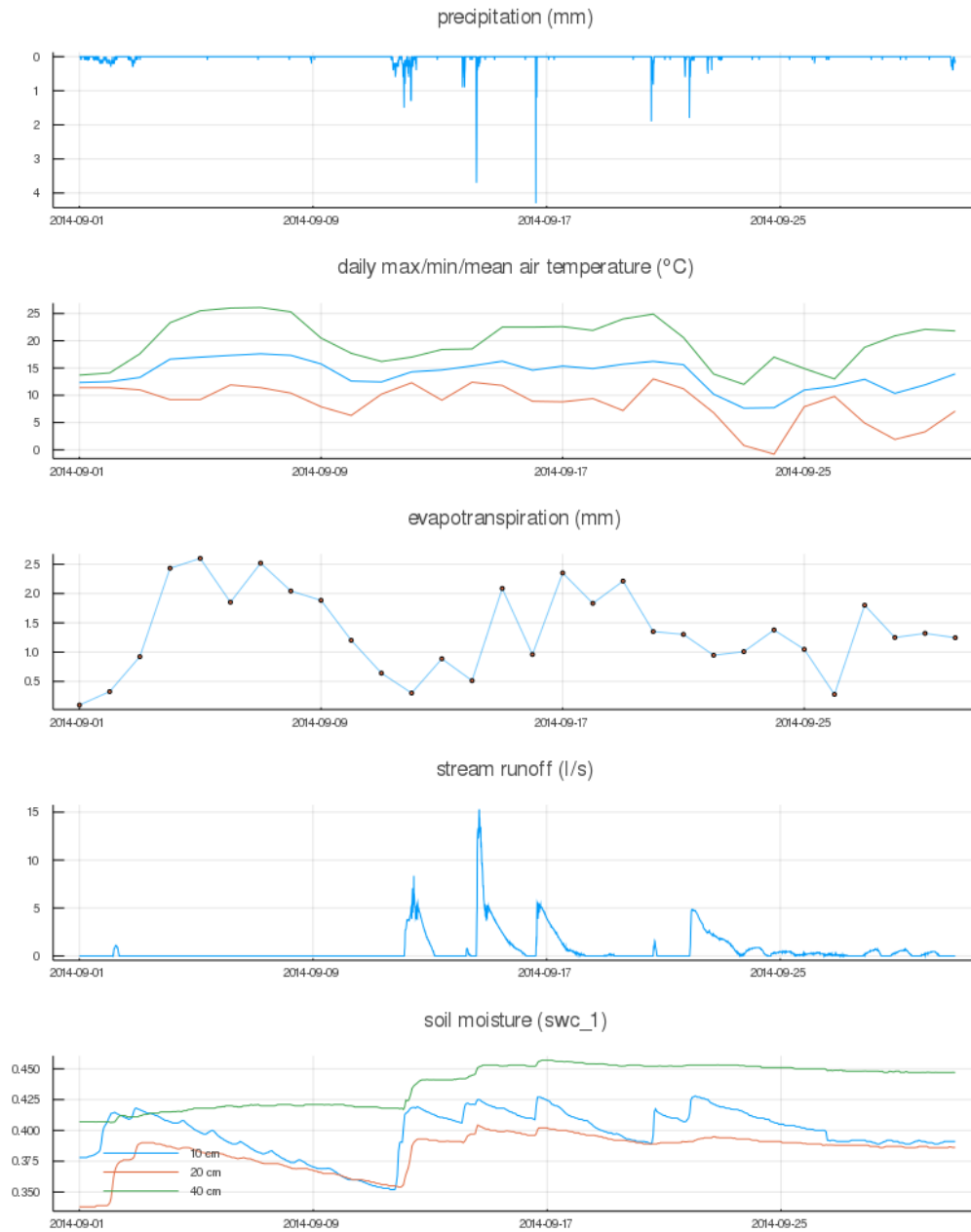
The recorded data includes precipitation, temperature, reference evapotranspiration, stream discharge at the outlet, and soil water content at 3 depths. The average precipitation is about 0.018 mm, the maximum precipitation is 10.7 mm. The mean temperature is 18.4 °C. The minimum and maximum temperature are 5.1 °C and 34.4 °C. The reference evapotranspiration was recorded partially in the month. The mean value among the recorded days is 3.30 mm. The stream had almost on flow for the most of the days. Only one peaks occurred after a heavy rainfall event with the maximum value of 31.8 l/s. Soil moisture also fluctuated dramatically after the heavy rainfall event.

2.8. August



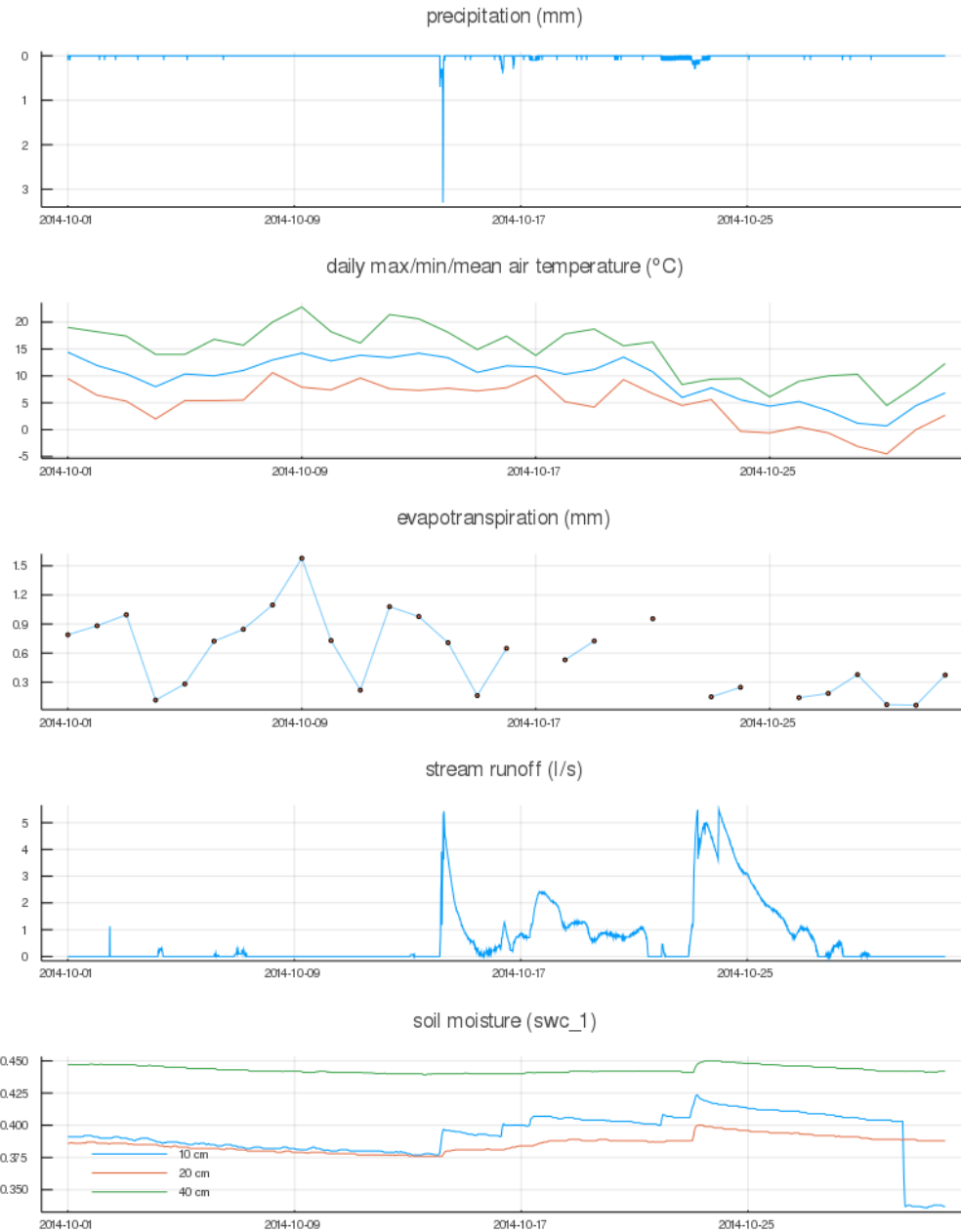
The recorded data includes precipitation, temperature, reference evapotranspiration, stream discharge at the outlet, and soil water content at 3 depths. The average precipitation is about 0.018 mm, the maximum precipitation is 4.4 mm. The mean temperature is 15.9 °C. The minimum and maximum temperature are 2.1 °C and 32.7 °C. The reference evapotranspiration was recorded for the most of the month. The mean value among the recorded days is 2.62 mm. No runoff was observed in the stream (Measurement errors or maintenance of the gauging station). Soil moisture also increased sharply after a heavy rainfall event in the end of the month.

2.9. September



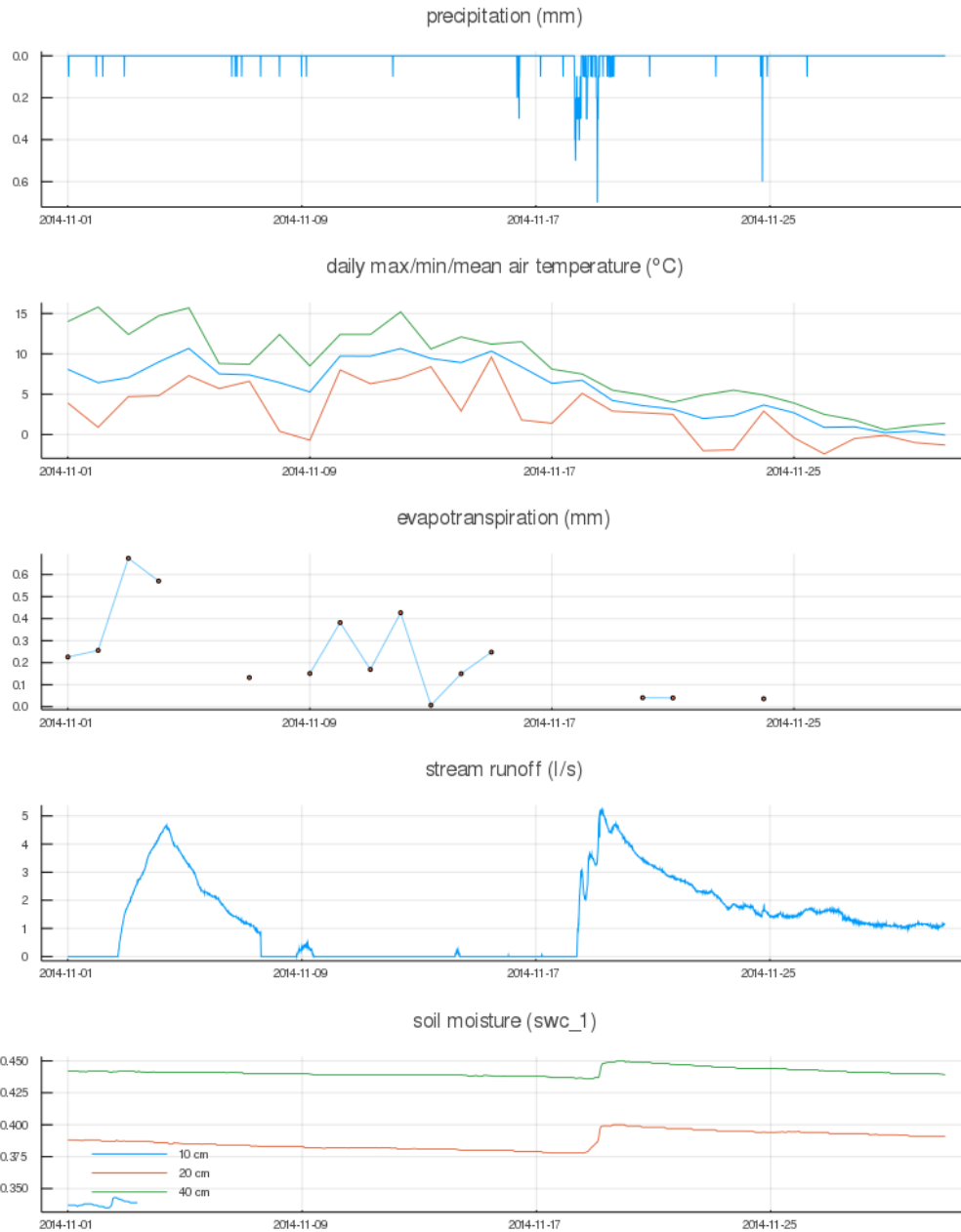
The recorded data includes precipitation, temperature, reference evapotranspiration, stream discharge at the outlet, and soil water content at 3 depths. The average precipitation is about 0.021 mm, the maximum precipitation is 4.3 mm. The mean temperature is 13.8 °C. The minimum and maximum temperature are -0.8 °C and 26.1 °C. The reference evapotranspiration was recorded for the most of the month. The mean value among the recorded days is 1.35 mm. The stream had almost on flow for the most of the days. There were some peaks occurred after a few heavy rainfall events. The maximum stream discharge is 15.3 l/s. Soil moisture also fluctuated dramatically after the heavy rainfall event.

2.10. October



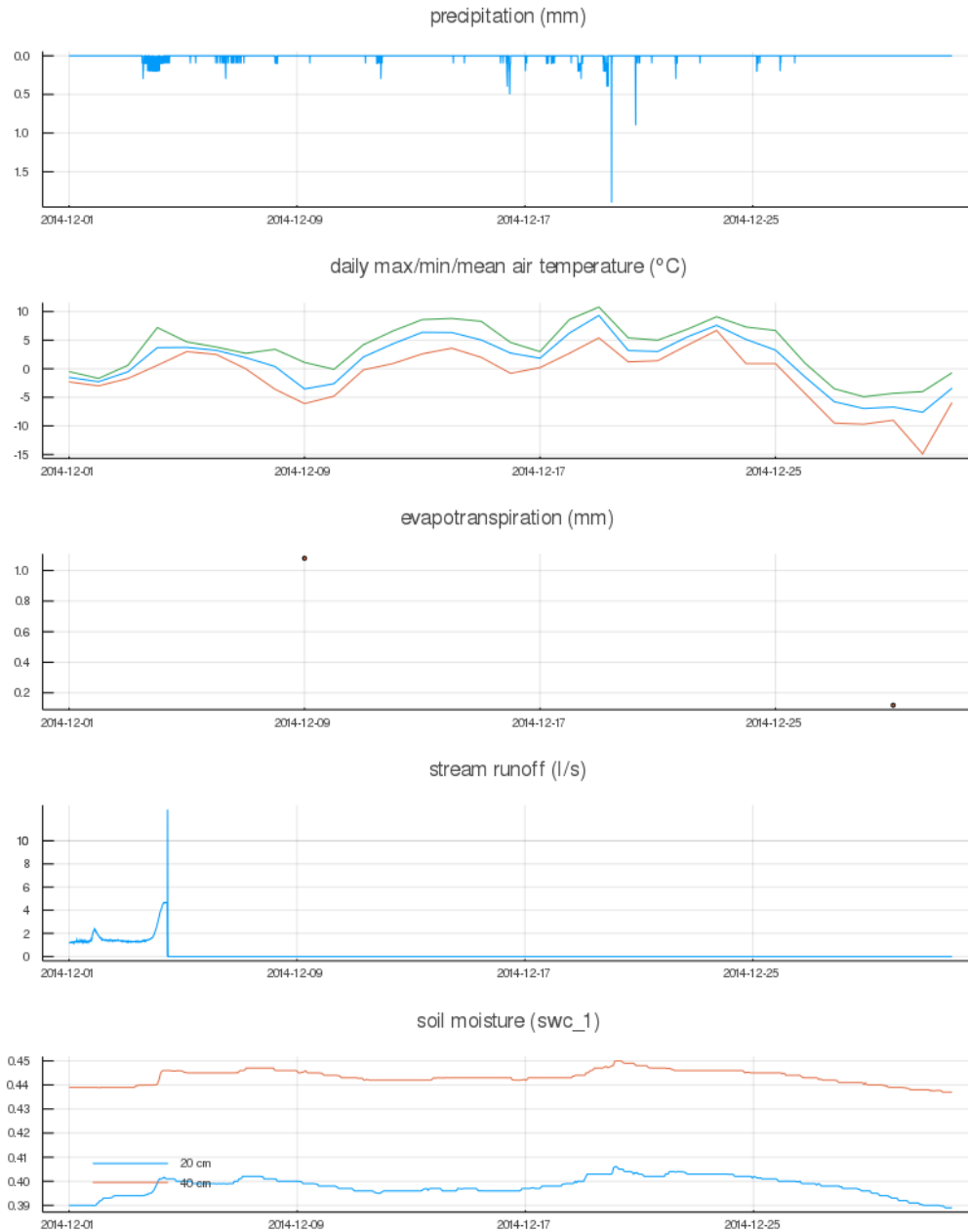
The recorded data includes precipitation, temperature, reference evapotranspiration, stream discharge at the outlet, and soil water content at 3 depths. The average precipitation is about 0.010 mm, the maximum precipitation is 3.3 mm. The mean temperature is 9.6 °C. The minimum and maximum temperature are -4.5 °C and 22.8 °C. The reference evapotranspiration was recorded for the most of the month. The mean value among the recorded days is 0.58 mm. The stream had almost on flow for the most of the days. There were some peaks occurred after a few heavy rainfall events. The maximum stream discharge is 5.49 l/s. Soil moisture also fluctuated dramatically after the heavy rainfall event. However, there was a significant decline on the topsoil (10 cm) water content in the end of the month.

2.11. November



The recorded data includes precipitation, temperature, reference evapotranspiration, stream discharge at the outlet, and soil water content at 3 depths. The average precipitation is about 0.004 mm, the maximum precipitation is 0.7 mm. The mean temperature is 5.7 °C. The minimum and maximum temperature are -2.4 °C and 15.8 °C. The reference evapotranspiration was recorded partially in the month. The mean value among the recorded days is 0.23 mm. The stream had almost on flow for the most of the days. There were some peaks occurred after a few heavy rainfall events. The maximum stream discharge is 5.22 l/s. Soil moisture was in a relatively stable statue. There was only a small increase of soil water content in the subsoil after a heavy rainfall event. The topsoil sensor only worked in a few days at the beginning of the month.

2.12. December



The recorded data includes precipitation, temperature, reference evapotranspiration, stream discharge at the outlet, and soil water content at 2 depths. The average precipitation is about 0.008 mm, the maximum precipitation is 1.9 mm. The mean temperature is 1.4 °C. The minimum and maximum temperature are -14.9 °C and 10.8 °C. The reference evapotranspiration was recorded for only two days in the month with the values of 1.1 mm and 0.11 mm, respectively. The stream only showed a small peak of 12.7 l/s at the beginning of the month, then no runoff was observed (possibly errors with devices after the peak). Only two soil moisture sensors (20 cm and 40 cm) remained in this month. Soil moisture was in a relatively stable statue. There was only a small increase of soil water content in the subsoil after heavy rainfall events.