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# Corrigendum: A live fuel moisture climatology in California

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## KEYWORDS

chaparral, drought, fire behavior, fuel moisture content, wildfire, California

## A corrigendum on A live fuel moisture climatology in California

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In the published article, there was an error in Figures 4, 5 as published. The plots originally appearing in Figure 4 should be interchanged with those in Figure 5, and vice versa. The corrected Figure 4 and its caption “**Figure 4.** The general (annual average) (black dashed line), maximum (green dashed line), and minimum (red dashed line) LFMC trends for the (A) Bay Area, (B) Central Coast, and (C) South Coast regions. The differences in the time ranges stem from the length of the data record which varies across the regions” and the corrected Figure 5 along with its caption “**Figure 5.** The general (annual average) (black dashed line), maximum (green dashed line), and minimum (red dashed line) LFMC trends for the (A) Klamath, (B) MODOC, and (C) Sierra Nevada regions. The differences in the time ranges stem from the length of the data record which varies across the regions”, appear below.

In addition, there was an error in the Introduction, Paragraph 2. “Fuel Moisture Repository is divided into two categories” should be “FMC is divided into two categories”. The corrected paragraph is included below.

FMC is divided into two categories, dead fuel moisture content (DFMC), and live fuel moisture content (LFMC). Dead fuels are mainly affected by meteorological conditions, with their drying and moistening rates depending on the fuel size class corresponding to the time lag typically defined as 1 h, 10 h, 100 h, and 1,000 h for fuels in sizes ranging from less than 0.25 inch to more than 3 inches in diameter. While the DFMC can be calculated using meteorological parameters (van Wagner, 1987; Nelson, 2000; Mandel et al., 2012; Vejmelka et al., 2016), due to the more complex dynamics of live fuels, estimating their moisture content based on meteorological conditions alone is problematic. That is because live fuels are also affected by climate trends, plant physiology, soil moisture, and evapotranspiration (Pollet and Brown, 2007; Qi et al., 2012; Matthews, 2014). An example of this complexity can be seen when plants close their stomata to reduce moisture loss via the evapotranspiration process, they reduce their dependence on environmental conditions (van der Molen et al., 2011). The LFMC can vary, both spatially and temporally (Danson and Bowyer, 2004) differently than DFMC and be less dependent on short-term weather conditions (Viegas et al., 2001). The LFMC can be assessed by collecting fuel samples, computing their water content by subtracting the oven dry weight from the wet weight, and normalizing the computed water content by the dry mass. This procedure requires destructive sampling and is very labor intensive. That is why at most fuel moisture content of

live fuels is sampled only biweekly or monthly. Also, since the drying process of the fuels takes 24 h, unlike dead fuels which may be sampled automatically by dead fuel moisture sensors reporting near-real time data to weather stations, live fuel moisture data are available at much lower frequency and with significant delay.

The authors apologize for these errors and state that this does not change the scientific conclusions of the article in any way. The original article has been updated.

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