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Supplemental Material

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Supplementary Material:
Monitoring of Drought Awareness from Google Trends: A Case Study of the 2011-17 California Drought

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S1. Comparison between “Drought” and “Love Drought”

Figure S1 shows monthly time series of relative search activities for the terms “drought” and “love drought” from Google Trends.

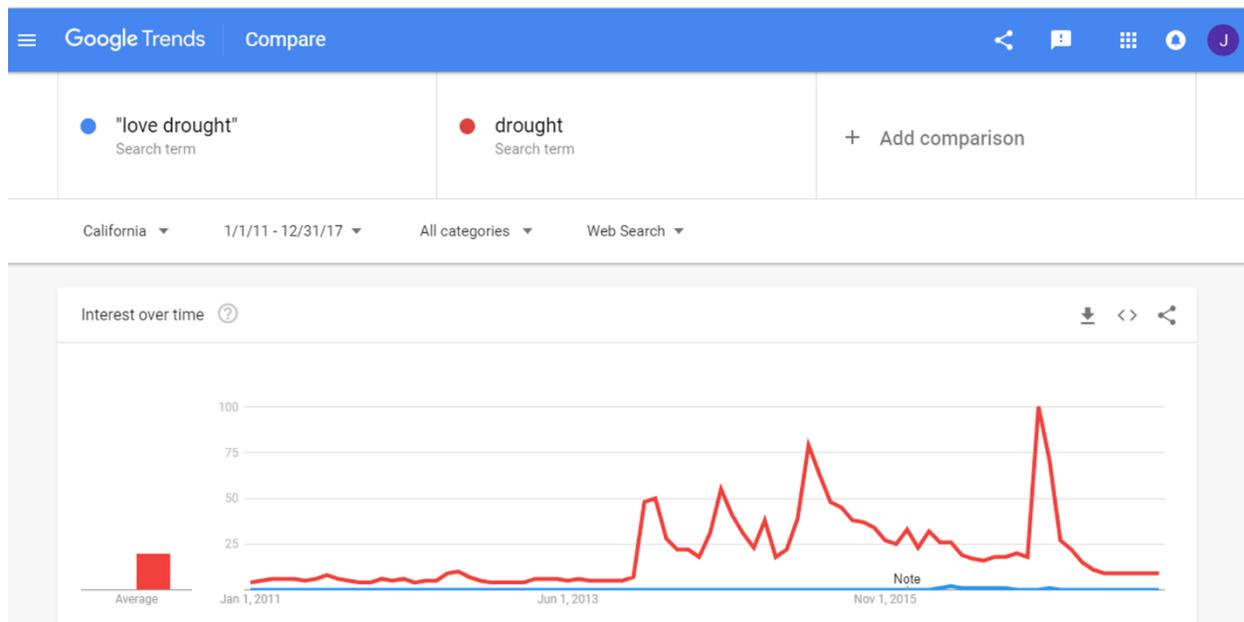


Fig. S1: Monthly time series of search interest with the search terms “drought” and “love drought” over 2011–17.

S2. Growth of Available Information about Drought

Figure S2 shows monthly and annual time series of relative search activities for the term “California drought,” from Google Search (representing available information) data, Google Scholar, and Web of Science.

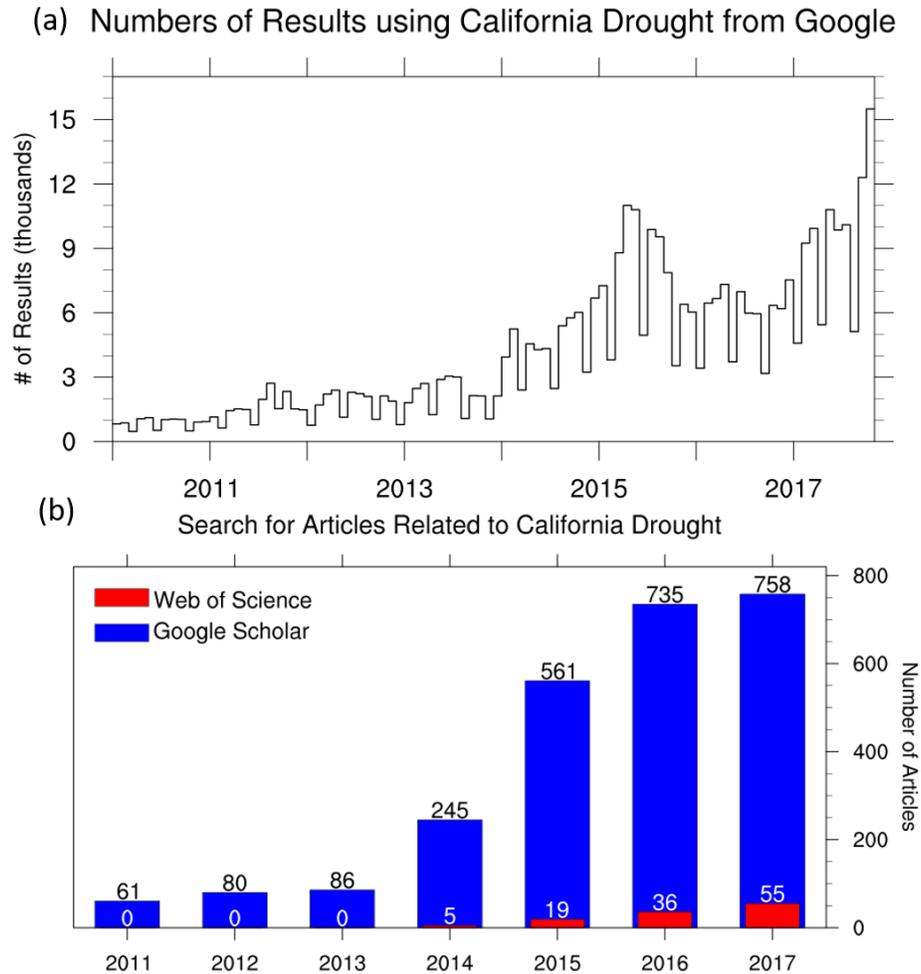


Fig. S2: (a) Monthly time series of the total number of results using “California drought” from Google Search. (b) Annual time series of articles including “California drought” from 2011 through 2017 from Google Scholar (blue bars) and the Web of Science (red bars).

S3. Method for collecting the total number and topics of results from Google Search

We collected the monthly data for the total number of search results and the related topics from news articles and other sources using the term “California drought” from Google search, turning on and off the “Tools” function from January 2010 through October 2017.

(a)



(b)

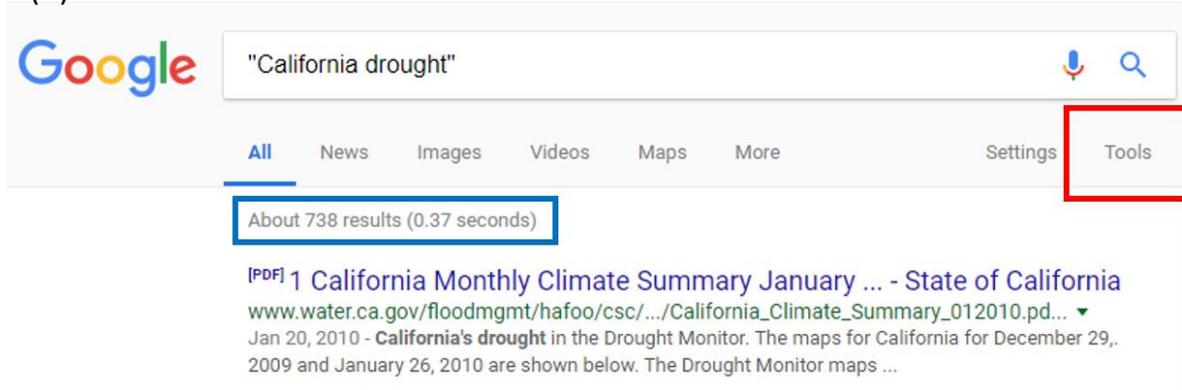


Fig. S3: An example of screen shots of the first page after searching “California drought” from Google Search. The search period is customized [blue box in (a)] (a) turning on the “Tools” function [red box in (a)] and (b) turning off the “Tools” function [red box in (b)]. The total number of search results for the term “California drought” is shown in the blue box in (b). (Source: Google Trends)

S4. Comparison of search interest activities in California between “Drought” and “El Niño”

Figure S4 shows monthly times series of search interest in California using the search terms “Drought” and “El Niño.” Blue and red solid lines depict relative activities using the search terms “Drought” and “El Niño”, respectively.

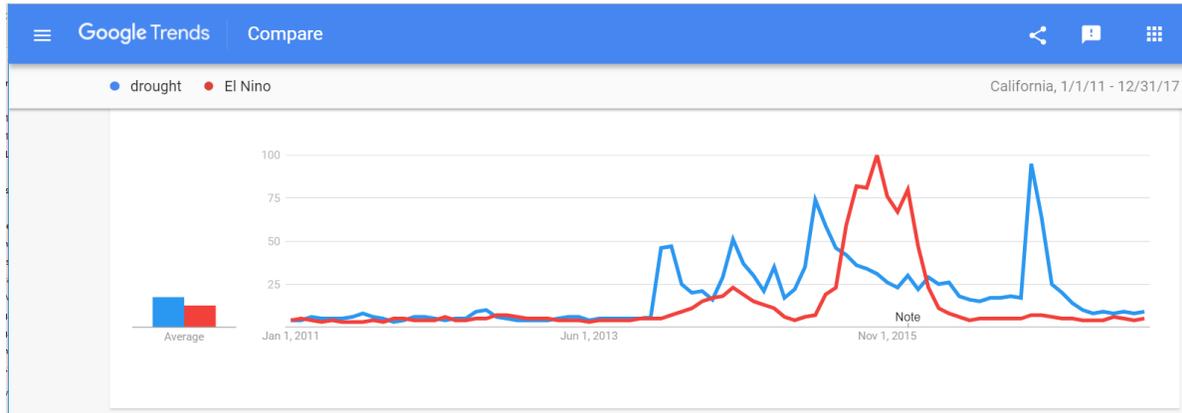


Fig. S4: An example of screen shots of the first page after searching “Drought” and “El Niño” from Google Search.