Overall, this is a very interesting and relevant piece of work. However, authors tend to generalize and leave the reader hanging in some cases which raises some questions. Please see below specific comments for your attention.

Title needs modification, it does not communicate the focus of the study, especially after reading the first sentence of the abstract.

Abstract
Did authors focus on the effect of drought on shifts in precipitation-runoff relationships and the performance of the model?
Authors need to clarify the catchment/s studies. Or they use one catchment with sub-basins, and if so, the results reported should be for the basins?? The abstract has to be summarized and comprehensive.

Introduction
The motivation and novelty of the study is very week. The introduction lacks coherence. For example, the reader has to be able to identify:
1. overall effect of droughts on water balance in Med climate, with specific examples.
2. The approaches of examining precipitation-runoff relationships and how successful they have been in the same climate.
3. What has been done so far in relation to precipitation-runoff relationships or water balance studies within the same climate. This indicate the contribution of the work and its novelty.

Research questions: Authors need to improve and rewrite all their research questions to be clear. It's very difficult for the reader to understand them. They raise a lot of questions: what is the water-balance predictive skill? Are the authors referring to the potential of the model to predict shifts during drought and non-drought periods???
What is the suitability of the generalized additive model in predicting ET for the catchment? Was it used before?

Method
What were the characteristics of the Landsat-based annual-averaged NDVI? How was it derived? Is it a product or authors derived their own product through estimation? Any preprocessing of the image?

Discussion,
I suggest authors use their main objectives as subheadings for the reader to understand the findings and their implications.