

Supplement of Hydrol. Earth Syst. Sci., 20, 2779–2800, 2016
<http://www.hydrol-earth-syst-sci.net/20/2779/2016/>
doi:10.5194/hess-20-2779-2016-supplement
© Author(s) 2016. CC Attribution 3.0 License.



Supplement of

Estimating drought risk across Europe from reported drought impacts, drought indices, and vulnerability factors

V. Blauhut et al.

Correspondence to: Veit Blauhut (veit.blauhut@hydrology.uni-freiburg.de)

The copyright of individual parts of the supplement might differ from the CC-BY 3.0 licence.

1

2 **Supplements**

3 Table S1, European countries with insufficient vulnerability data

| |
|------------------------|
| Albania |
| Armenia |
| Azerbaijan |
| Bosnia and Herzegovina |
| Belarus |
| Georgia |
| Moldavia |
| Montenegro |
| Macedonia |
| Serbia |
| Russia |
| Slovenia |
| Turkey |

4

1 Table S 2 Results of binary logistic model performance (step one), drought indices used in EDO
 2 (2001-2014), I: Maritime Europe, II: Southeastern Europe, III: Northeastern Europe, IV:
 3 Western-Mediterranean; white coloring + no '*': no robust model identified, light green
 4 coloring + '*': 'poor' model performance, green coloring + '**': 'good' model performance,
 5 dark green coloring + '***': 'excellent' model performance

| | Impact category | A&L | | Fo | | A&F | | E&I | | WT | | T&R | | PWS | | WQ | | FE | | TE | | SS | | Wf | | A | | H&P | | Co | |
|-------|-----------------|-----|----|-----|----|-----|----|-----|----|----|----|-----|----|-----|----|-----|----|----|----|-----|----|----|----|-----|----|---|----|-----|----|----|----|
| | | I | II | III | IV | I | II | III | IV | I | II | III | IV | I | II | III | IV | I | II | III | IV | I | II | III | IV | I | II | III | IV | I | II |
| fAPAR | fAPAR Jan | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | fAPAR Feb | * | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | fAPAR Mar | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | fAPAR Apr | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | fAPAR May | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | fAPAR Jun | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | fAPAR Jul | * | * | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | fAPAR Aug | * | * | * | * | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | fAPAR Sep | * | * | * | * | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | fAPAR Oct | | * | * | * | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | fAPAR Nov | * | * | * | * | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | fAPAR Dec | * | * | * | * | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | fAPAR AVG | * | * | * | * | | * | | | | | | | | | | * | | | | | | | | * | | | * | | | |
| pF | pF Jan | * | * | * | * | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | pF Feb | * | * | * | * | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | pF Mar | * | * | * | * | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | pF Apr | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | |
| | pF May | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | |
| | pF Jun | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | |
| | pF Jul | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | |
| | pF Aug | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | |
| | pF Sep | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | |
| | pF Oct | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | |
| | pF Nov | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | |
| | pF Dec | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | |
| | pF AVG | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | |
| CDI | CDI Jan | * | * | * | * | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | CDI Feb | * | * | * | * | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | CDI Mar | * | * | * | * | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | CDI Apr | * | * | * | * | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | CDI May | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | | |
| | CDI Jun | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | | |
| | CDI Jul | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | | |
| | CDI Aug | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | | |
| | CDI Sep | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | | |
| | CDI Oct | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | | |
| | CDI Nov | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | | |
| | CDI Dec | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | | |
| | CDI annual MAX | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | | |

6
 7
 8
 9

10 Table S 3 Results of binary logistic model performance (step one), SPEI 1, 3, 6, 12, 24; (1970-
 11 2012), I: Maritime Europe, II: Southeastern Europe, III: Northeastern Europe, IV: Western-
 12 Mediterranean, white coloring + no '*': no robust model identified, light green coloring + '*':
 13 'poor' model performance, green coloring + '**': 'good' model performance, dark green
 14 coloring + '***': 'excellent' model performance

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22

23 Table S 4 Results of binary logistic model performance (step one), vulnerability factors, I:
24 Maritime Europe, II: Southeastern Europe, III: Northeastern Europe, IV: Western-
25 Mediterranean; A. = Area of, dens. = density, EC= European Commission, GDP = Gross
26 Domestic Product, GW = Groundwater, norm. = normalised, NC = NUTS-combo region, N2 =
27 NUTS-2, SR = Socioeconomic Relevance, WR= Water Use Relevance

