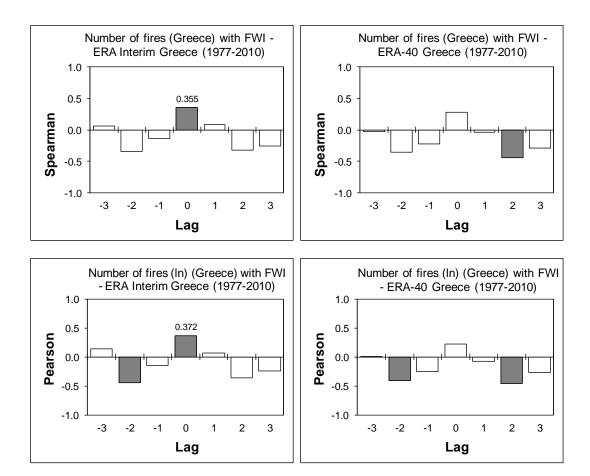
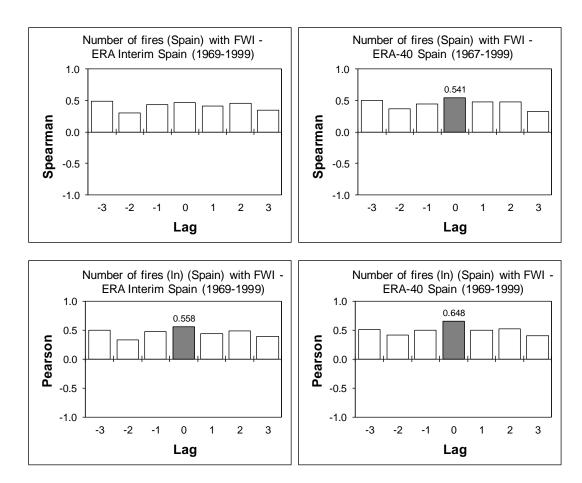
## **SUPPLEMENTARY MATERIAL** to manuscript

"Temporal variations and change of forest fire danger in Europe in 1960-2012" by A. Venäläinen, , N. Korhonen, O. Hyvärinen, N. Koutsias, F. Xystrakis, I.R. Urbieta and J.M. Moreno

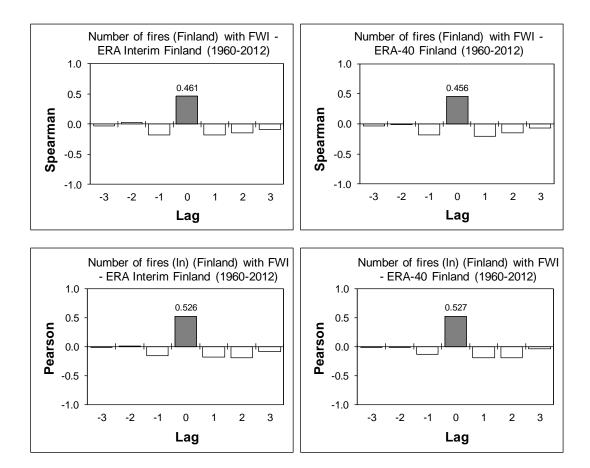
To widen the research on the relationship between FWI and the occurrence of fires we calculated the cross correlations between the number of fires and mean FWI for the three studied countries Greece, Spain and Finland. According to the results the cross-correlations (Supplementary Figures 1, 2 and 3). in case of all studied three countries are lower than in cease when the correlation was calculated between FWI and burned area This can be explained by lower reliability of number of fires data compared with the burned area data.



Supplementary Figure 1. Cross-correlation graphs between number of fires (original and In transformed) at national scale in Greece and FWI values estimated from ERA-40 and ERA Interim Greek data for the period 1977-2010 (gray columns indicate significant values at 95% confidence level).



Supplementary Figure 2. Cross-correlation graphs between number of fires (original and In transformed) at national scale in Spain and FWI values estimated from ERA-40 and ERA Interim Spain data for the period 1969-1999 (gray columns indicate significant values at 95% confidence level).



Supplementary Figure 3. Cross-correlation graphs between number of fires (original and In transformed) at national scale in Finland and FWI values estimated from ERA-40 and ERA Interim Finish data for the period 1960-2012 (gray columns indicate significant values at 95% confidence level).