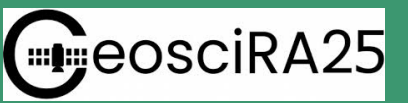


BEYOND ENVIRONMENTAL CONTEXT: A FRAMEWORK TO LINK SOLAR ACTIVITY AND FLOOD-INDUCED DISPLACEMENT



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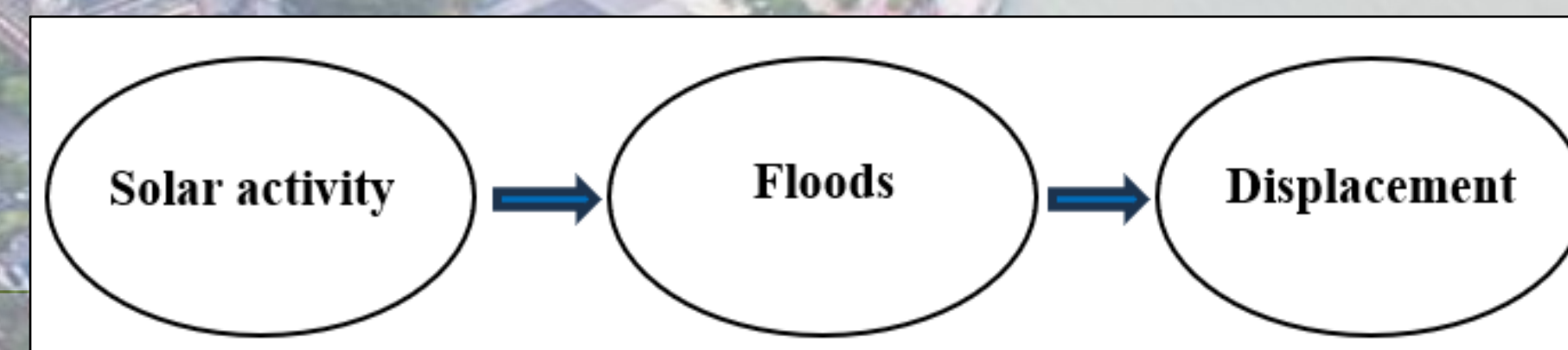
Introduction

Solar activity, as the Sun's most defining feature, influences nature, technology, human life, and a range of activities on Earth.

The central hypothesis of this research is that all processes within the solar-terrestrial environment are interconnected, such that changes in one element of the system can lead to alterations in other elements.

Accordingly, this paper aims to explore the connections between solar activity, floods, and population displacement in Europe during Solar Cycle 24.

Concept of the research



Methodology



Internal Displacement Monitoring Centre IDMC

<https://www.internal-displacement.org/>

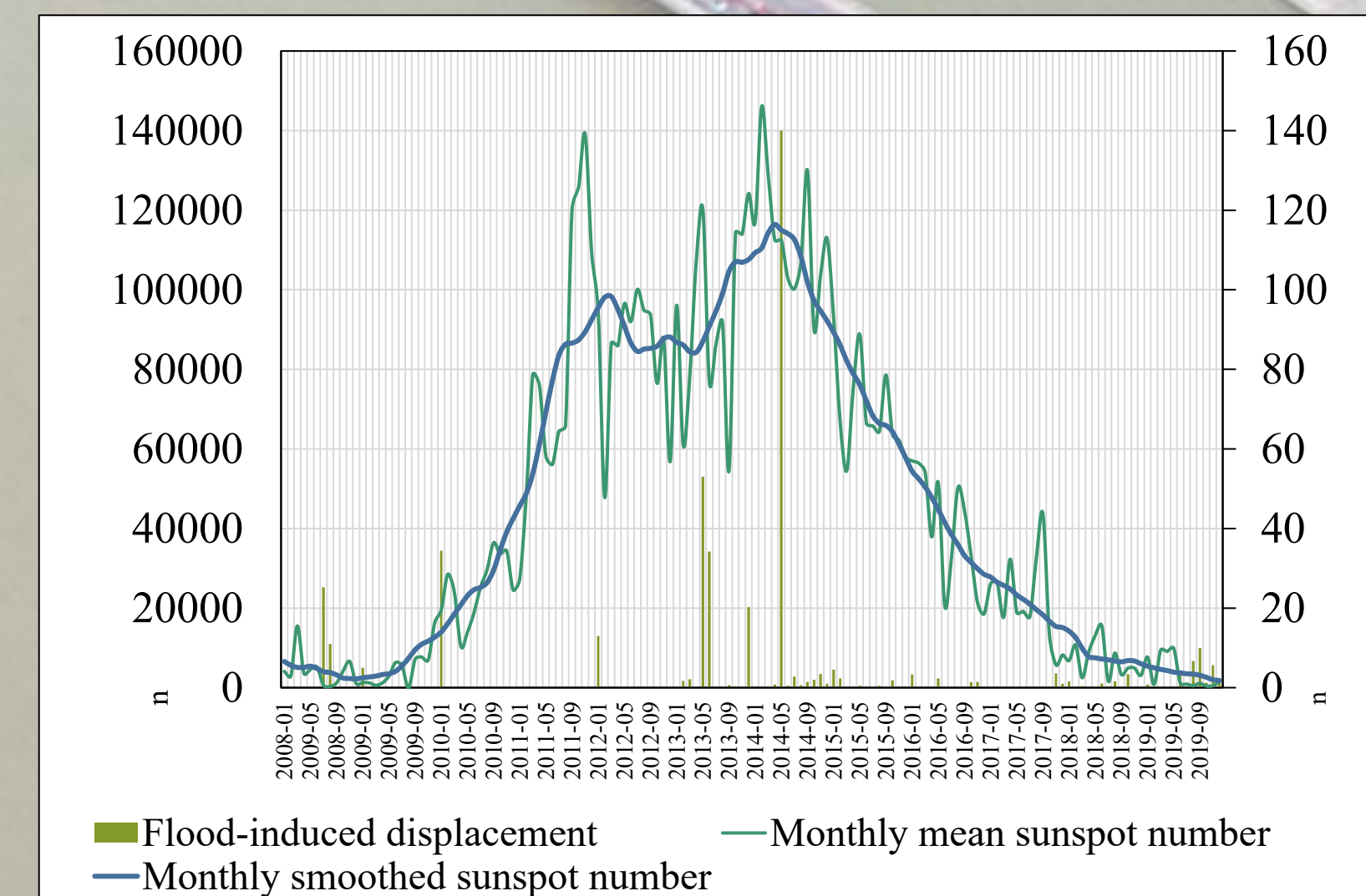
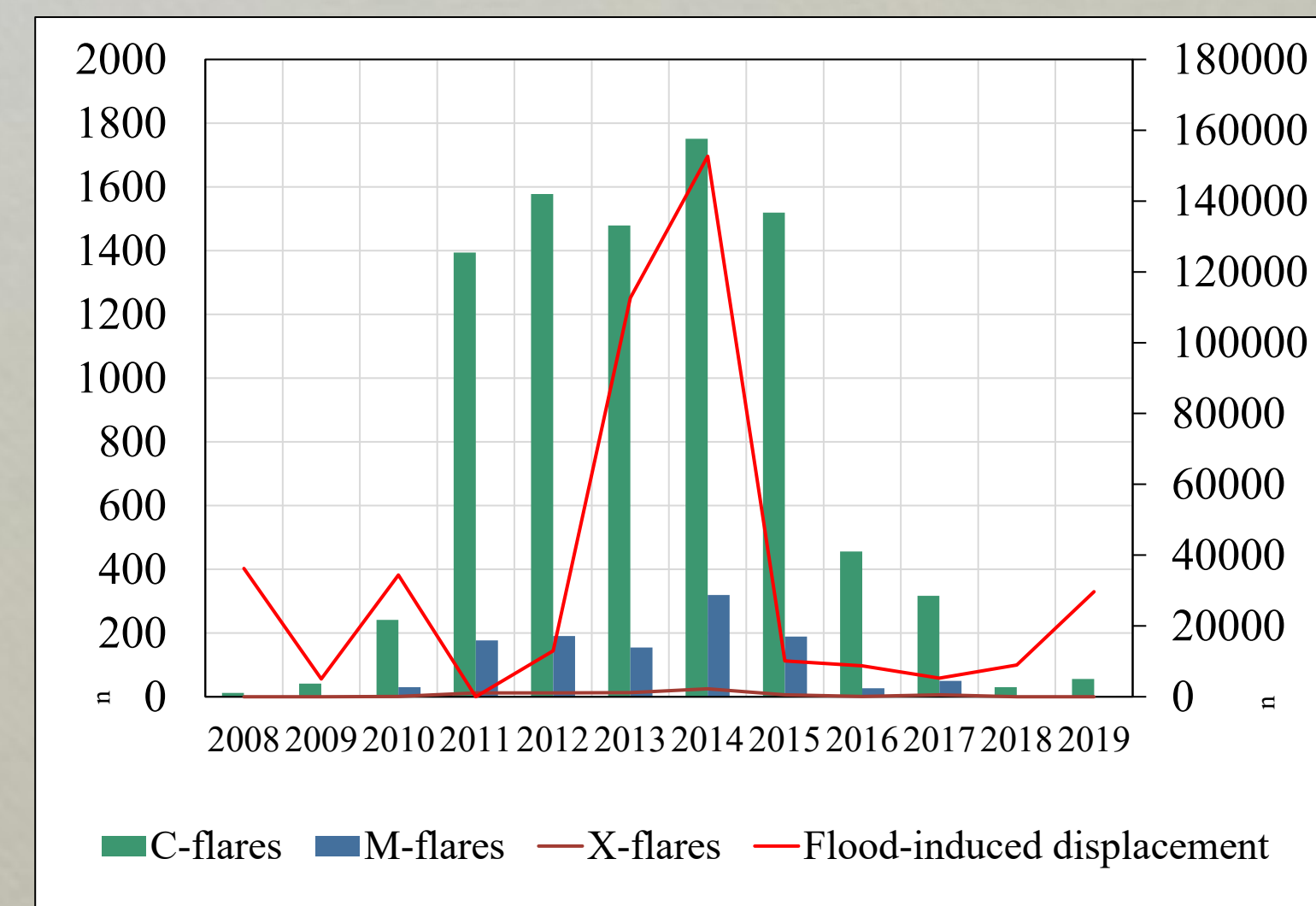
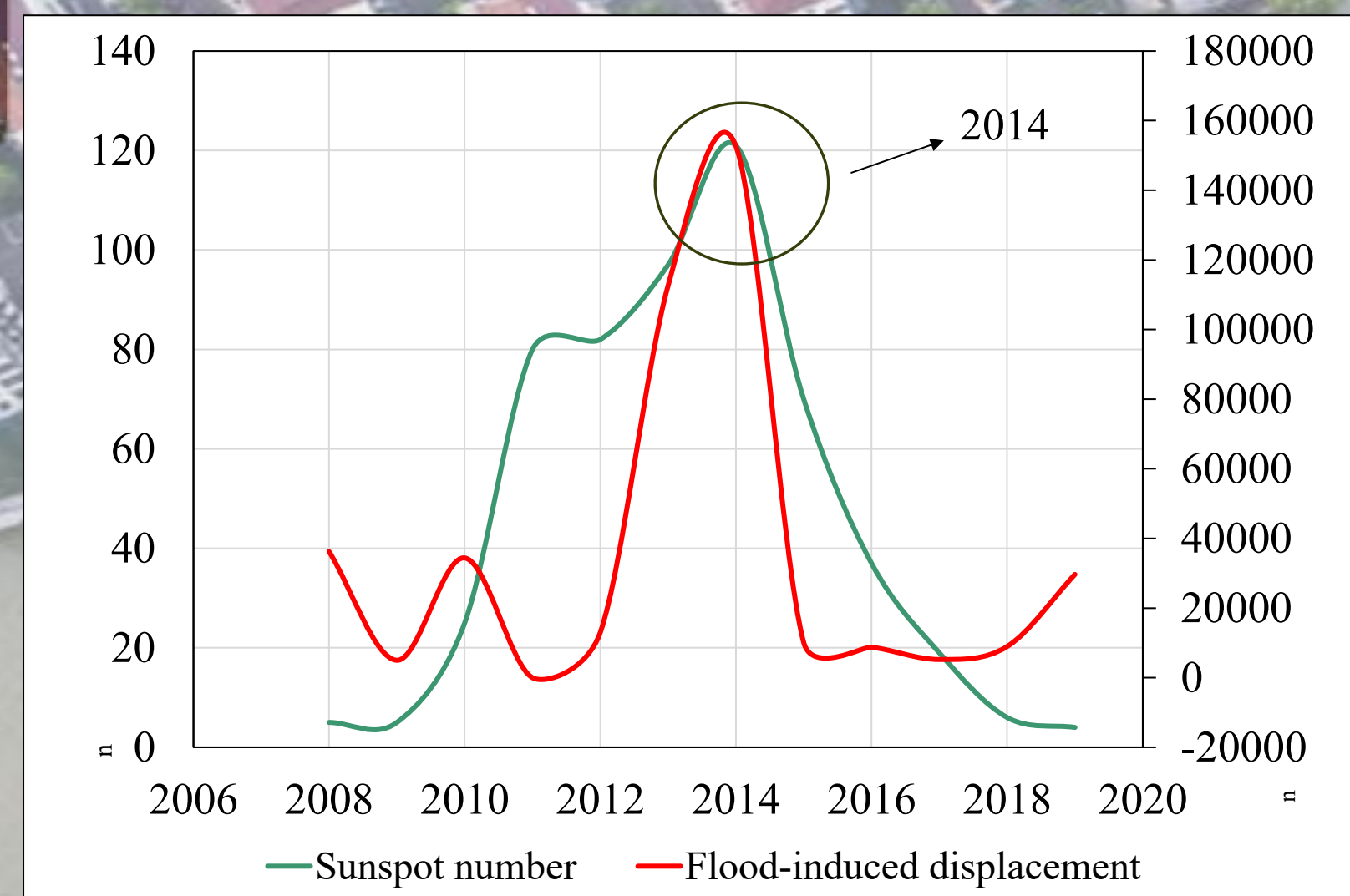
SpaceWeatherLive.com

<https://www.spaceweatherlive.com/en/news.html>

Solar Cycle 24: 2008 (12) – 2019 (12)

SPSS Statistics

Results



Categories	Max. (years)	Min. (years)
Flood induced displacement	2014	2011
Sunspot number	2014	2019
C-flares	2014	2008/18
M-flares	2014	2008/18
X-flares	2014	2008/09/18/19
Correlation analysis	p	r
Flood induced displacement / Monthly mean sunspot number	0.045	0.167
Flood induced displacement / Monthly smoothed sunspot number	0.050	0.164

Conclusion

- Weak statistically significant positive correlation between monthly solar activity indicators and flood-induced displacement
- During the period of solar maximum, the most intense displacements caused by floods were recorded
- Future research perspectives

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