

Interactive comment on "Why keep alert sirens in France?" *by* Johnny Douvinet et al.

Johnny Douvinet et al.

johnny.douvinet@univ-avignon.fr

Received and published: 21 July 2020

Abstract

Sirens are intended to interrupt social activities... "Therefore, outdoor warning sirens are a unique part of the tornado warning dissemination process, since one siren may alert thousands of people, even if they are not watching or listening to any type of commercial broadcast." Coleman, T. A., Knupp, K. R., Spann, J., Elliott, J. B., & Peters, B. E. (2011). The History (and Future) of Tornado Warning Dissemination in the United States. Bulletin of the American Meteorological Society, 92(5), 567–582. doi:10.1175/2010bams3062. Yes, the proofreader is right: outdoor alert sirens are one part of the alerting dissemination tools, since one siren may alert thousands of people, but in this article we have estimated the part of the population theoretically covered, by analyzing the siren ranges of the NAS and SAIP network, and the results show that the

C1

rates are not very satisfactory (less than 30.1% in the PACA region for the new SAIP network for example)

Sirens present technical drawbacks "As actually any system presents; the fact that the sirens have drawbacks does not make them unusable in the actual context". The technical limits of sirens and their use (or not) must be effectively dissociated. For 60 years, sirens have rarely been used in the situation of danger or threats (4 times). Interviews conducted with the authorities who have recently activated them show that these actors have triggered them to cover themselves. The doctrine thus remains largely unused in France.

The CAP should sublimate "This statement should be made clearer in English. To sublimate the meaning does not have any sense in this statement and does not make clear what is the main conclusion of the study". This sentence has been deleted.

Introduction

The reasons behind this political choice "This statement needs to be somehow made objective. Scientific studies need objective methods to make such statements". The fact that the choice of warning tools is intimately related to political and budgetary decisions is based on numerous scientific works (Sorensen, 2000). In this article, we set up an objective method by comparing, for example, the population density and the number of sirens per municipality, to see where this logic is respected, and the sectors where precisely this raises questions (with municipalities that are over-equipped or under-equipped). The number of risks and their importance could also play a key role in the siren distribution, but this is not proven in the municipalities over-equipped.

In the reports This statement need an English check, since is not clear what is the point with the two reports. (a word is missing > and) Ok > we add "and".

Limitations#3

This idea is reinforced.... Is this a research produced for this article, or is taken from

other research of one of the authors? The results provided in this paper are original. The idea was yet observed in previous works, but we quantify and evaluate the signification of sirens for population using different surveys. This point will be added in the future version of the paper.

Discussions

Actually, the authorities prefer not to activate This sentence has been deleted.

We go much further... it seems that 112 is already a European call number The 112 is a European call number, and the "Reverse 112" is also a alerting tool that will be deployed in France. But sirens remain the primary tools, so changes will take time.

In addition

Regarding these comments (from RC1 and RC2), we can change the structure of the paper (Introduction, Data and Methods, Results, Discussions), to improve the scientific quality, to further highlight the originality of the results, and to discuss about the evolution in the future.

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., https://doi.org/10.5194/nhess-2019-390, 2020.

C3