

Explanatory factors of the spatial distribution of summer air temperature in Santiago of Chile

Por: [Smith, P](#) (Smith, Pamela)^[1]; [Romero, H](#) (Romero, Hugo)^[1]

REVISTA DE GEOGRAFIA NORTE GRANDE

Número: 63

Páginas: 45-61

Fecha de publicación: MAY 2016

[Ver impacto de la revista](#)

Resumen

The city of Santiago (Chile) shows significant differences in the distribution of air temperatures within the city due to a set of explanatory factors, such as increased proportions of impermeable surfaces and a reduction in vegetation. This has in turn generated heat islands, which are accentuated and generalized in the summer nights, creating a complex and heterogeneous mosaic of urban landscapes that affect the environment and quality of life of its inhabitants. Based on networks of urban-climate information that link data from fixed stations, mobile transects and thermal satellite imagery, we estimate significant spatial relationships that have allowed us to construct maps that help to explain the temporal and spatial variability of atmospheric temperatures, and thus to suggest measures for mitigating and adapting to the phenomena at both the macro- and meso-scale.

Palabras clave

Palabras clave de autor: [urban climate](#); [spatial distribution of temperatures](#); [regression models](#)

KeyWords Plus: [URBAN HEAT-ISLAND](#)

Información del autor

Dirección para petición de copias: Smith, P (autor para petición de copias)

+ Univ Chile, Dept Geog, Santiago, Chile.

Direcciones:

+ [1] Univ Chile, Dept Geog, Santiago, Chile

Direcciones de correo electrónico: pesmith@uc.cl; hromero@uchilefau.cl

Editorial

PONTIFICA UNIV CATOLICA CHILE, INST GEOGRAFIA, AV VICUNA MACKENNA 4860,
SANTIAGO, 00000, CHILE

Categorías / Clasificación

Áreas de investigación: Geography; Physical Geography

Categorías de Web of Science:Geography; Geography, Physical

Información del documento

Tipo de documento:Article

Idioma:Spanish

Número de acceso: **WOS:000386712400004**

ISSN: 0718-3402

Información de la revista

- **Impact Factor:** [Journal Citation Reports](#)

Otra información

Número IDS: EA6CH

Referencias citadas en la Colección principal de Web of Science: **49**

Veces citado en la Colección principal de Web of Science: **0**