ClimApp background

Heat waves and cold spells have severe health consequences - increasing deaths and illnesses, especially for vulnerable groups such as the elderly. Heat and cold also affects health and productivity of millions of European workers. Climate change will increase the frequency and intensity of these extreme weather events.

ClimApp logotype

Improvements in climate services – the quality and delivery method of weather and climate information - are therefore necessary in order to help minimise the negative impact of these events. However, the impact of heat and cold stress on health and productivity are dependent not only on climate factors, but also on human physiology, body heat production, and clothing. Clothing influences the heat exchange between the human body and the environment. For the purpose of warning and preparedness, weather forecasts will be more valuable if combined with individual characteristics and translated into personalized adaptation strategies.

ClimApp objectives

1. To develop an advanced ClimApp that integrates climate forecast data into human thermal models and combined with individual user characteristics and human physiology
2. To provide a user-friendly and interactive mobile tool (including feedback module)
3. To improve decision-making for adaptation strategies when facing thermal climate challenges

ClimApp overall aim

The overall aim of this project is to develop an advanced mobile phone App that integrates weather forecast data into human heat balance models. The personalized App takes into account individual factors and predicts body responses, provides health risk warning and advice for individuals, public and private sectors, to support decision-making to cope with heat and cold stress when facing extreme weather events such as heat waves and cold spells.