

Adopting ICT-based solutions for lessening the impacts of heatwaves



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Recent Temperature Extremes

Canada 2018

Montreal

Quebec says up to 70 people may have died in connection with heat wave



Most of the deaths occurred in Montreal, with 34 cases reported to authorities

The Canadian Press - Posted: Jul 09, 2018 7:23 PM ET | Last Updated: July 10, 2018



Health officials have said many of the people who died didn't have air conditioning in their homes and had existing conditions. (Simon-Marc Charron/Radio-Canada)

Japan 2019

South China Morning Post

East Asia

Health warnings for tourists as Japan swelters during record heatwave

- More than 460 people were admitted to hospitals for treatment for heatstroke over the weekend
- Japan's Environment Ministry has even launched a campaign encouraging men to carry parasols



Julian Ryall

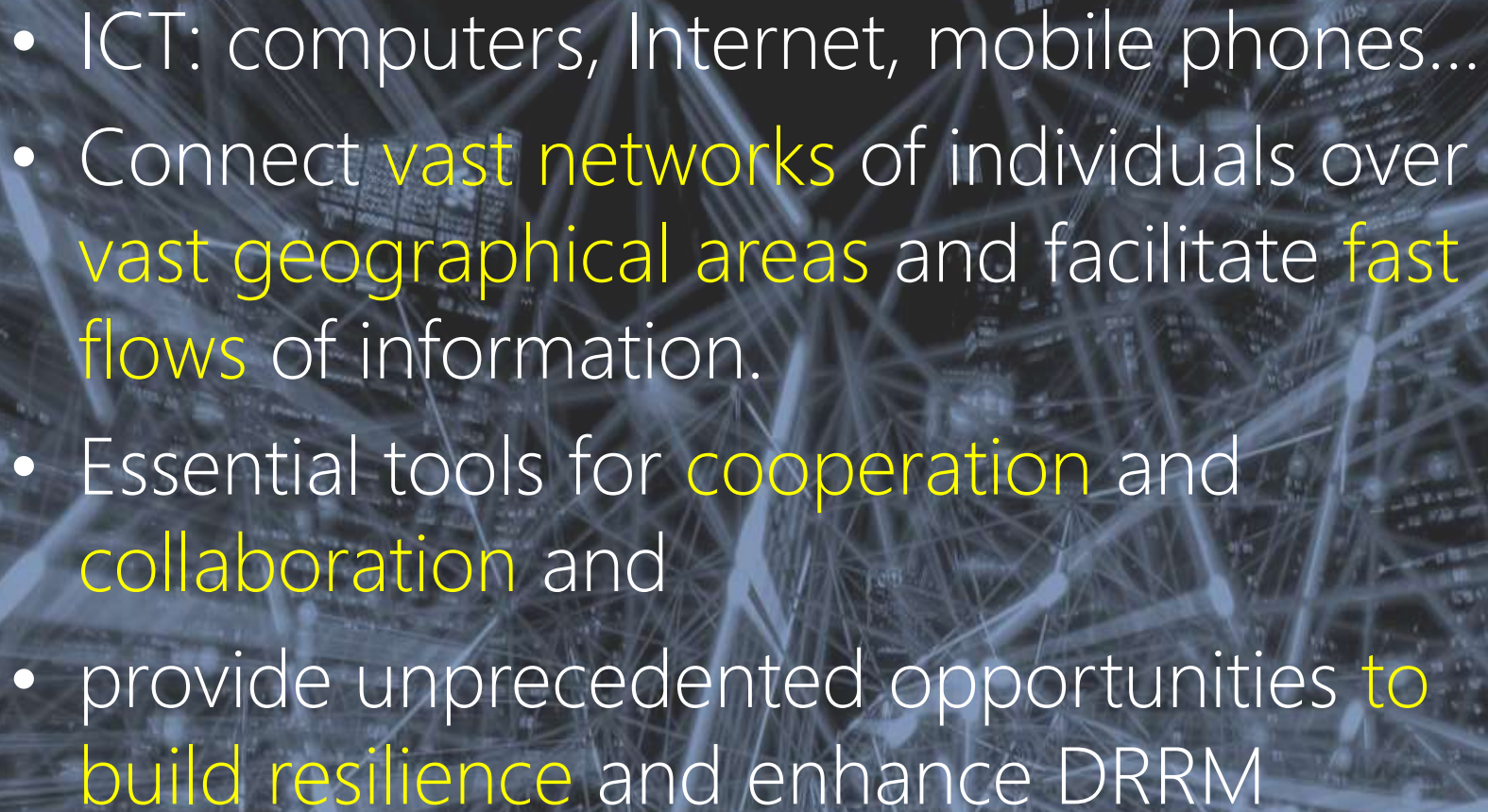
Published: 1:38pm, 27 May, 2019



The Urban Heat Island Effect

- Cities are warmer than rural areas.
- UHI affects the magnitude and duration of **Heatwaves**
- Heatwaves are the natural disasters that cause the most fatalities.

Why ICT-based approaches matter?

- 
- ICT: computers, Internet, mobile phones...
 - Connect vast networks of individuals over vast geographical areas and facilitate fast flows of information.
 - Essential tools for cooperation and collaboration and
 - provide unprecedented opportunities to build resilience and enhance DRRM

0 2000 km

Sharing best practices
Learn from each other





- A **tool for Authorities** for central management of heat waves **and Citizens** for personalized heat risk assessment and guidance
- EXTREMA offers **temperature surveillance and evaluation of heat health risk** during the ongoing event
- **Global** relevance, global interest, **share experiences**
- **Support Cities** to become healthier (Ostrava priority)

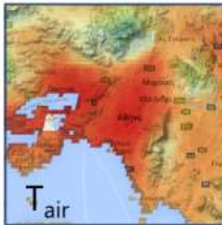
1. City Authorities



Dashboard

- Alerts 
- Cooling centers 

- Real-time Maps from satellite data



[All the icons are from flaticon.com]



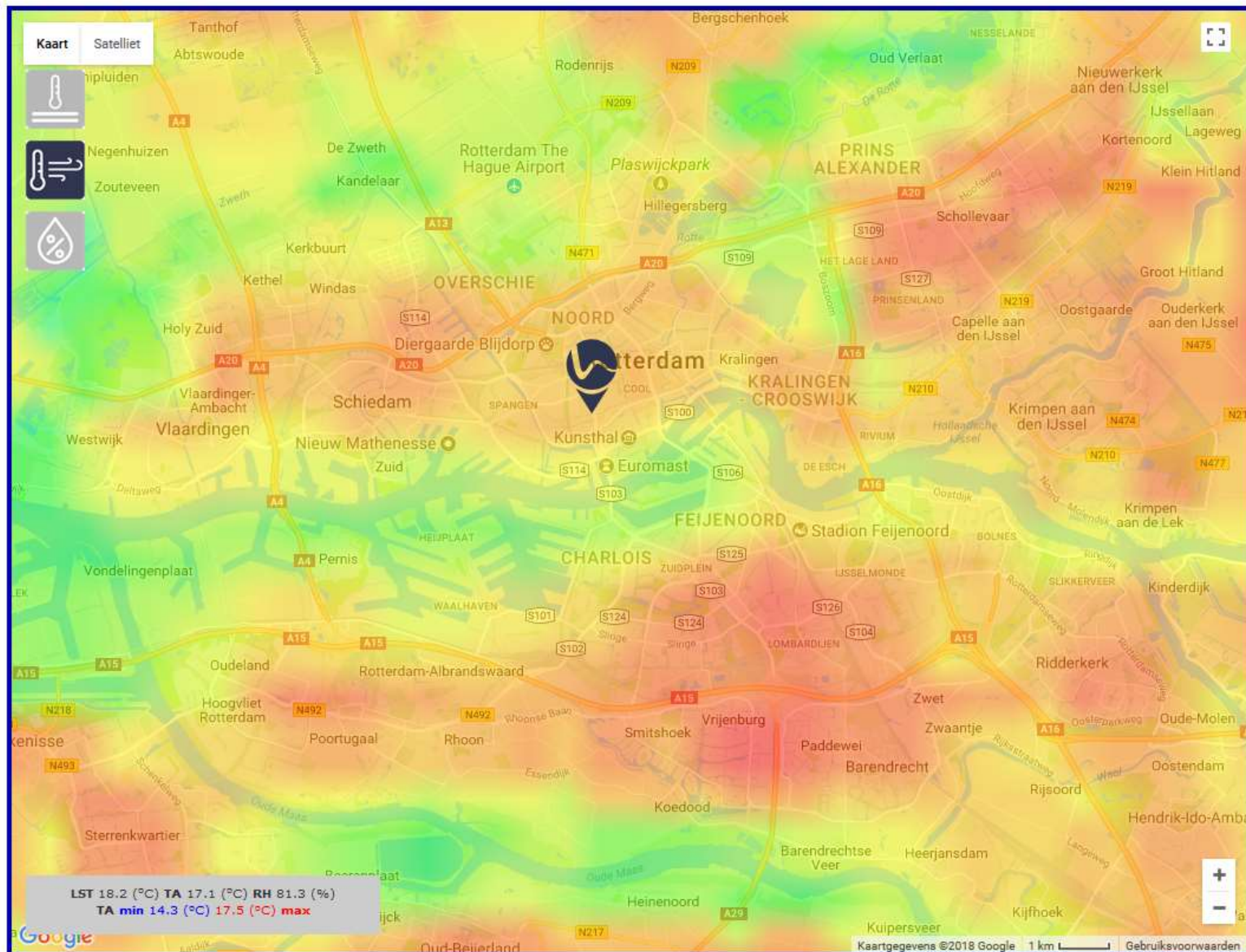
2. Citizens

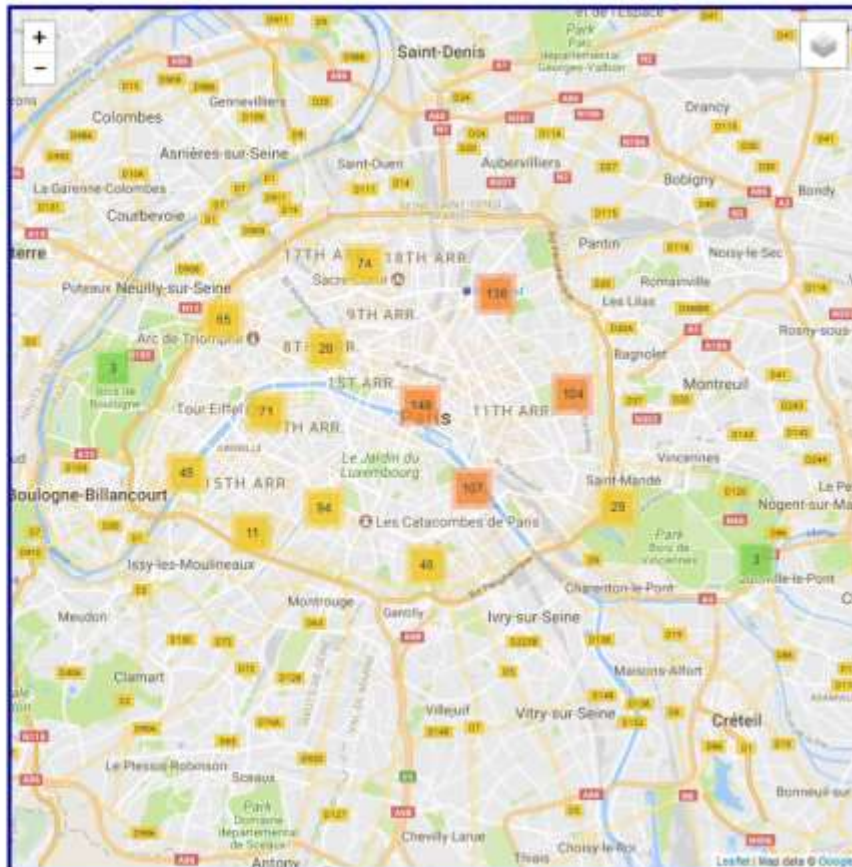


Mobile Application

- Personalised risk estimations 
- Advice 
- Nearby cooling centers 



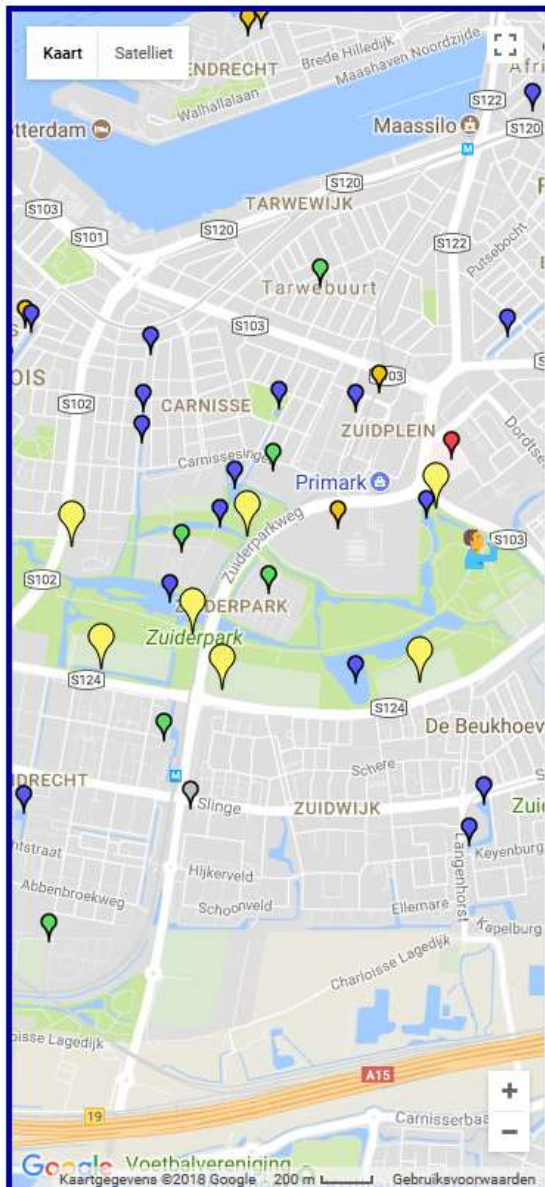




Search in Records :

#	Status	Name	Type	Address
1		Sainte-Chapelle de Palais	lieu de culte	Paris, France
2		Ombrière fraîche Paris Plage	ombrière fraîche	Paris, France
3		Brunisateur au Square Emmanuel Fleury	brumisateur ou jeu d'eau	Paris, France
4	✓	Brunisateur au Square du Docteur Jacques-Joseph C.	brumisateur ou jeu d'eau	21 Rue de la Bic
5		Brunisateur au Jardin de la Gare de Charonne	brumisateur ou jeu d'eau	Paris, France
6		Brunisateur au Jardin Casque d'Or	brumisateur ou jeu d'eau	Paris, France
7		Brunisateur au Jardin de l'Hospice Debrousse	brumisateur ou jeu d'eau	Paris, France
8		Brunisateur au Square Edouard Vaillant	brumisateur ou jeu d'eau	Paris, France

1 2 3 4 5 ... 30



Search in Records :

#	Status	Name	Type
1		Wijk en speeltuinvereniging Tarwewijk	Groene plek
2		Zuiderpark	Groene plek
3		Kinderboerderij de Kraal	Groene plek

< 1 2 3 4 5 ... 13 >

Features

Address

Zuiderpark

Give Cooling Center Name

Groene plek

Day

Free

Give Cooling Center Type, Schedule and Access

Give Cooling Center Opening Hours ...

Give Cooling Center Opening Hours

EXTREMA in Google Play & Apple Store

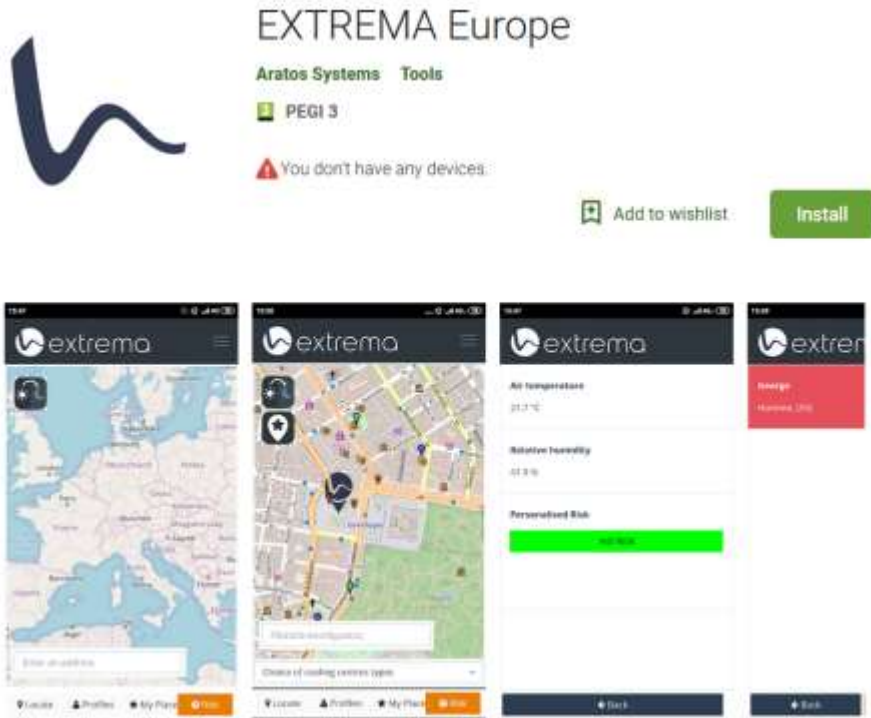


EXTREMA Europe 4+

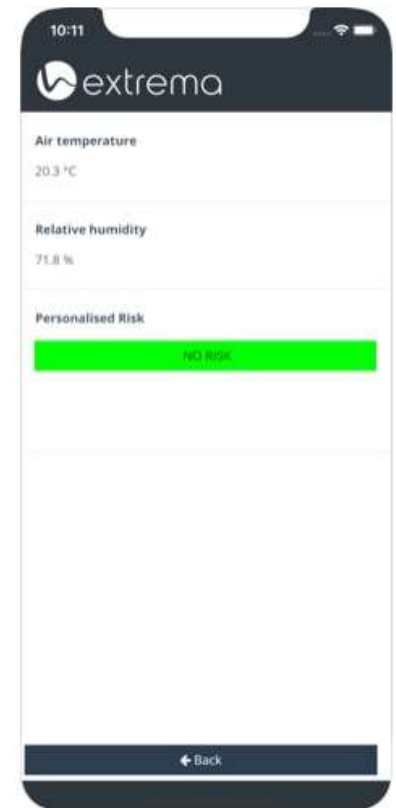
Aratos Systems

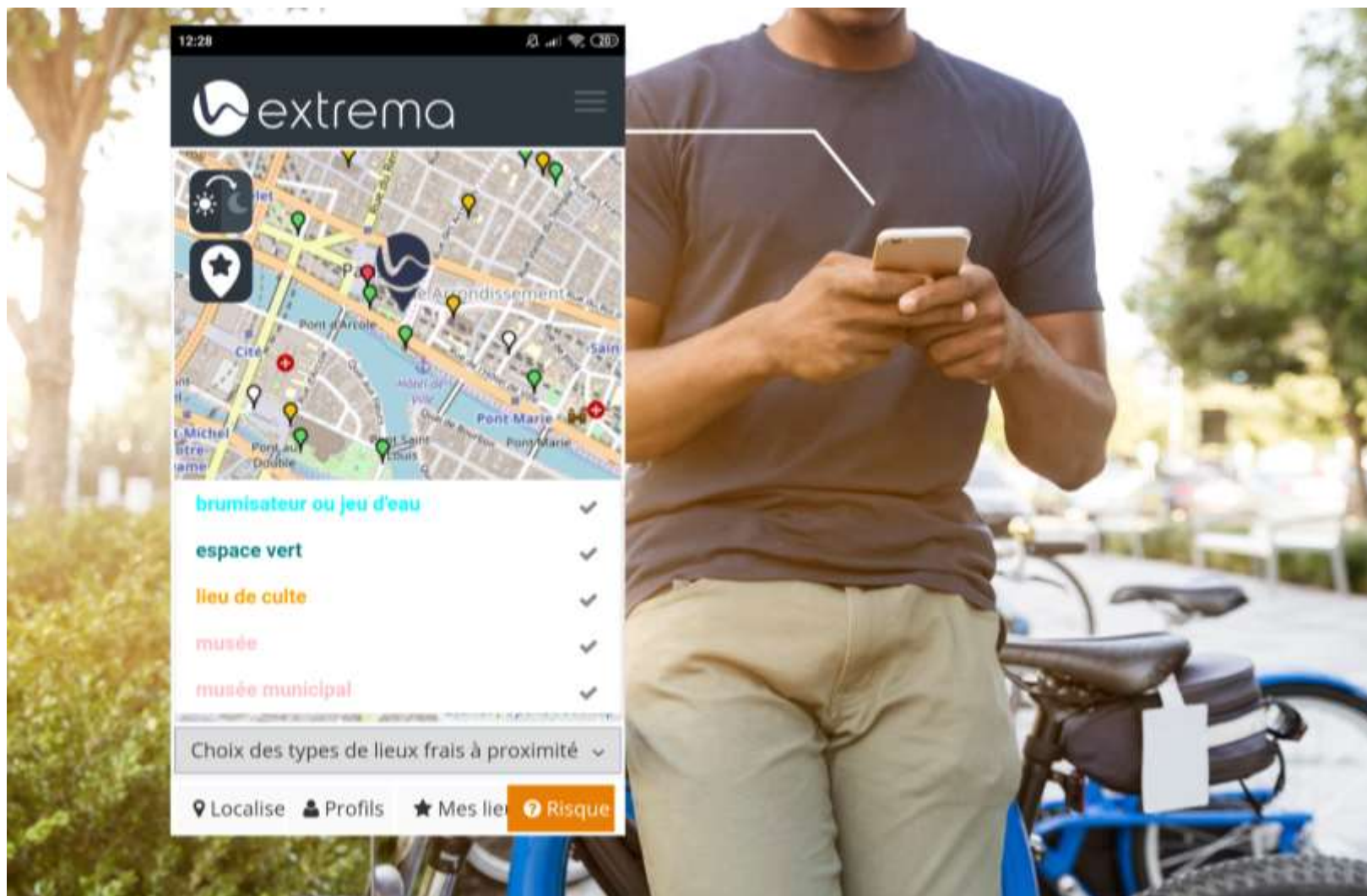
★★★★★ 5.0, 1 Rating

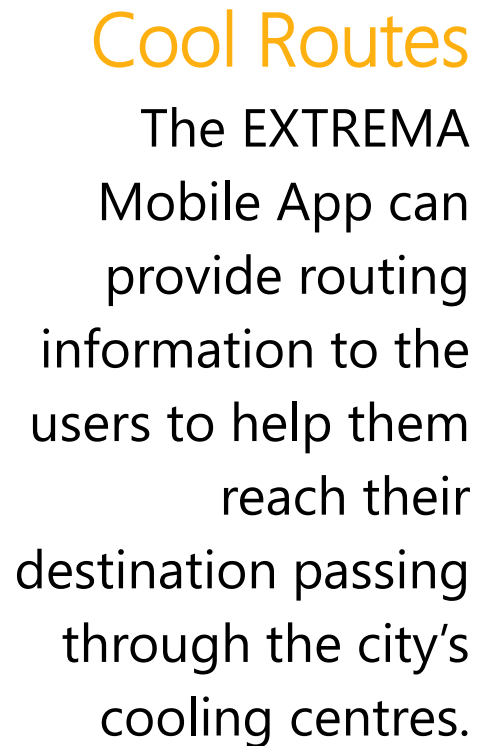
Free



Screenshots [iPhone](#) [iPad](#)

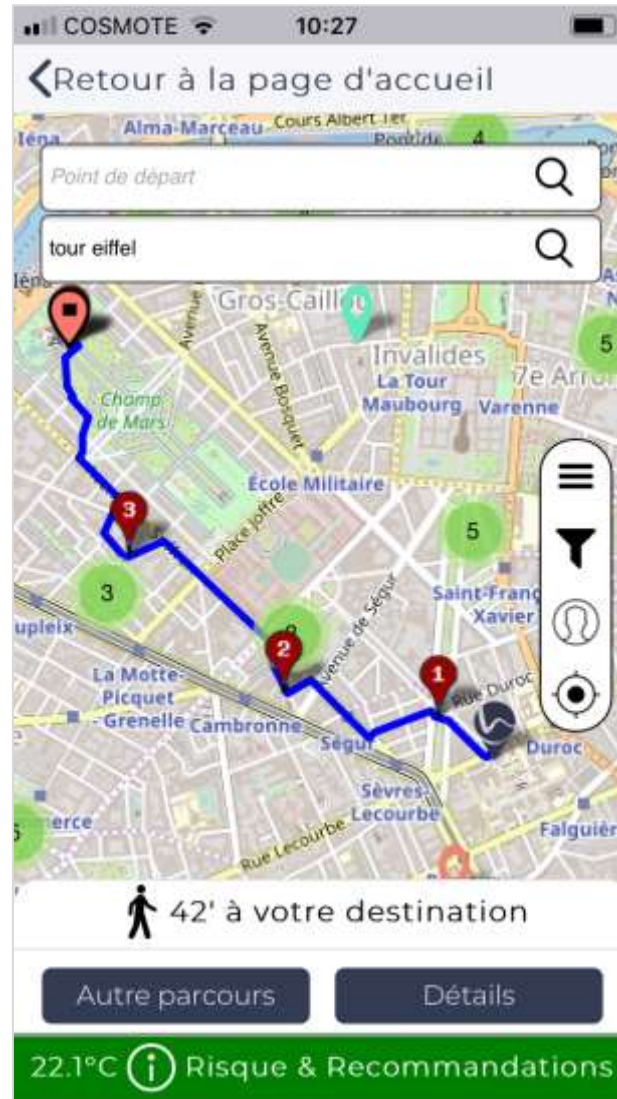
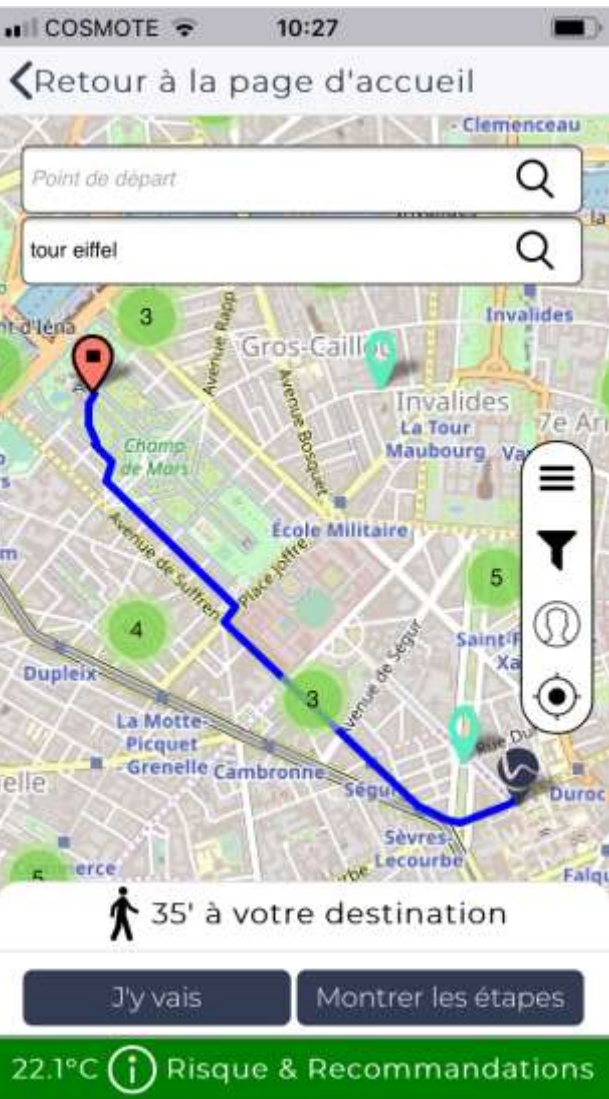






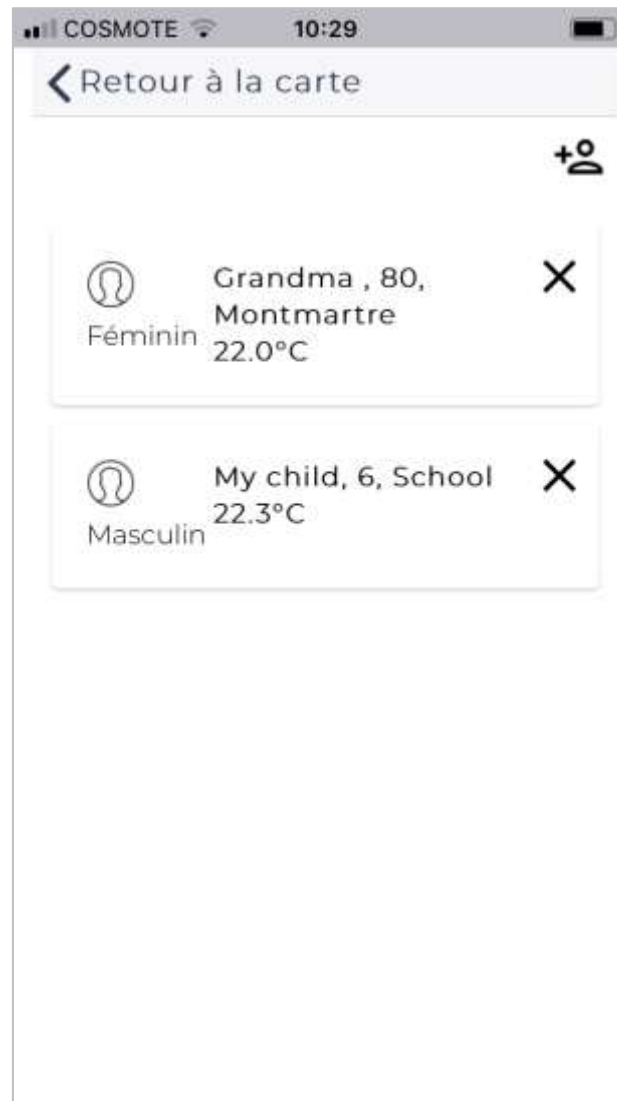
Nearest Cooling Centres





Mobile Application

Risk, Profiles, Recommendations



Paris: in Top10 software



O1net.com

Rechercher un produit, un logiciel, une application

VIDEOS ACTUALITÉS TESTS ASTUCES TELECHARGER.COM JEUX VIDEO PLUGIN

Produits Apps Logiciels Jeux Techniques Sécurité Santé Société Télécoms Culture médias Politique Droits

O1net > Actualités > Apps, logiciels

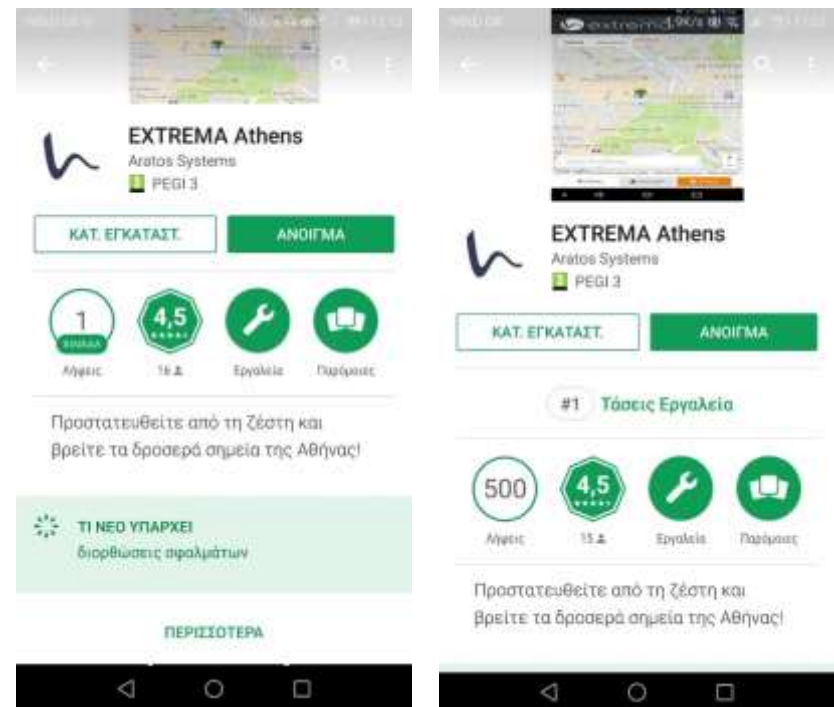
Téléchargement : les dix meilleurs logiciels et applications de la semaine

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7. EXTREMA Paris



Athens: #1 Trend in Tools



EXTREMA Athens

Aratos Systems

PEGI 3

KAT. ΕΓΚΑΤΑΣΤ. ΑΝΟΙΓΜΑ

1 Αξιολόγηση 4,5 15+ Εργαλεία Παράνομοι

Προστατευθείτε από τη ζέστη και βρείτε τα δροσερά σημεία της Αθήνας!

ΤΙ ΝΕΟ ΥΠΑΡΧΕΙ

διορθώσεις σφαλμάτων

ΠΕΡΙΣΣΟΤΕΡΑ

EXTREMA Athens

Aratos Systems

PEGI 3

KAT. ΕΓΚΑΤΑΣΤ. ΑΝΟΙΓΜΑ

#1 Τάσεις Εργαλεία

500 Αξιολόγηση 4,5 15+ Εργαλεία Παράνομοι

Προστατευθείτε από τη ζέστη και βρείτε τα δροσερά σημεία της Αθήνας!

Targeted Actions

STAY COOL

Tap your NFC enabled smartphone to get info about the city and the extreme temperatures



- ① Use your WiFi
- ② Turn on your NFC connector
- ③ Tap your phone on the «COOL ATHENS» logo



خونسرد باش

کلید کنید تا با تلفن هوشمند خود بتوانید اطلاعات راجع به شهر و حداکثر دما دریافت کنید. NFC روی



- ① ۱. به وای فای وصل شوید
- ② ۲. خود را روشن کنید. NFC. رابط
- ③ ۳. در تلفن کلیک کنید. (COOL ATHENS) بر روی آرام



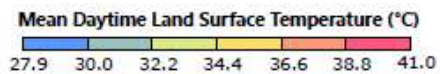
Additional Features

- **Analytics** – Optimise resources and Help stakeholders plan their network of cooling centres
- **Detailed** Land Surface Temperature map (100m) with hot spots
- **Walking Officers** to Notify Vulnerable Population

Daytime Surface Temperature Hotspots

City of Milan, Italy

 Green Space  Landmark  Railway Station



Map Projection: ETRS89 / UTM Europe

Linate
Airport



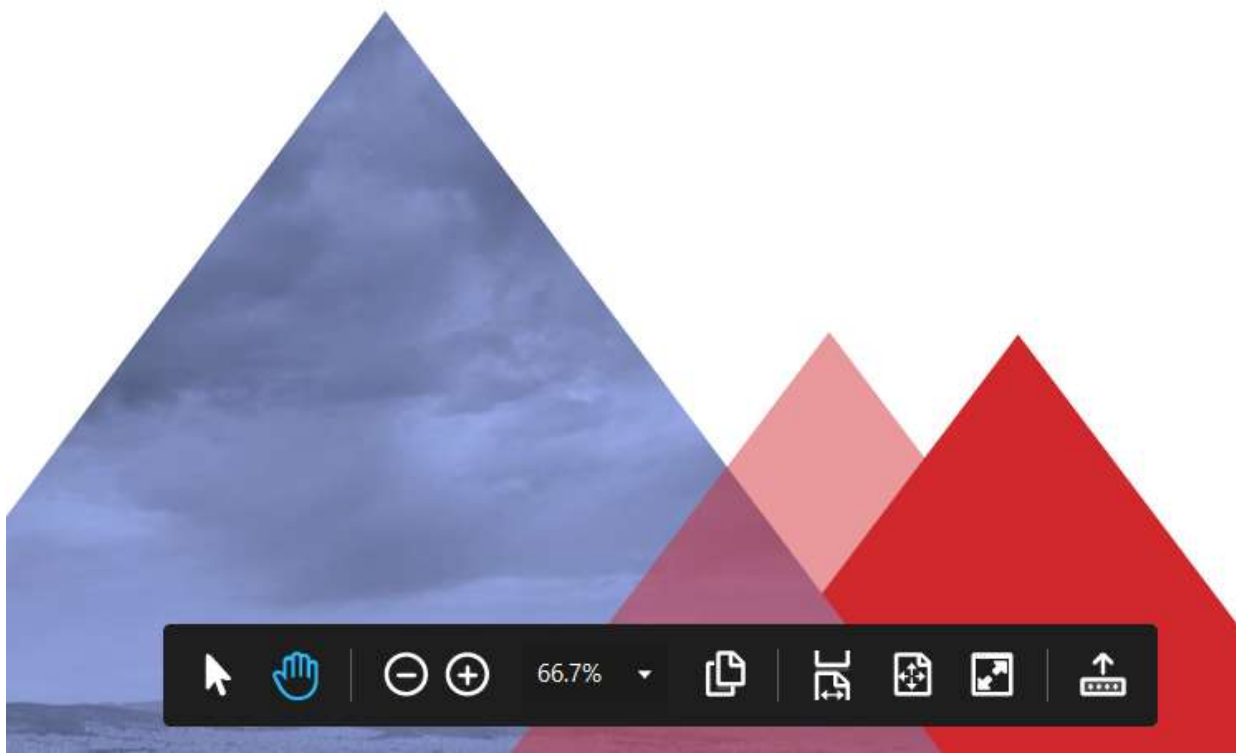
Vice Mayor Myrivili (C. Athens) being interviewed on TV for EXTREMA





How Local Governments Can Promote Disaster Risk Management Through Adopting ICT-based Solutions?

The case of lessening the impacts of heatwaves on
public health through a mobile application



EXHIBITORS



EXTREMA

EXTREMA is a service for Cities to manage efficiently extreme temperature events. EXTREMA provides a mobile application for citizens and a dashboard for City Authorities. It is implemented in Athens, Paris, Rotterdam, Milan, Lisbon and the Island of Mallorca.



Aratos Systems B.V.

Aratos Systems B.V., member of Aratos Group, is a Dutch SME that is very active in the fields of Space & Satellites, Information & Communication Technology and Homeland Security.

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