APLICACIONES TECNOLÓGICAS | LIGHTNING & EARTHING

ATSTORM®

Expert local early warning system for lightning storm risk prevention

WE **ALERT**

WE **CONNECT**

WE **PROTECT**

at3w.com

When a local lightning warning system is required

Lightning and thunderstorms are unavoidable natural phenomena that pose serious threats to people, goods and services

Lightning is one of the most destructive natural phenomena, responsible for an estimated over 20.000 annual deaths and 240.000 injuries worldwide.
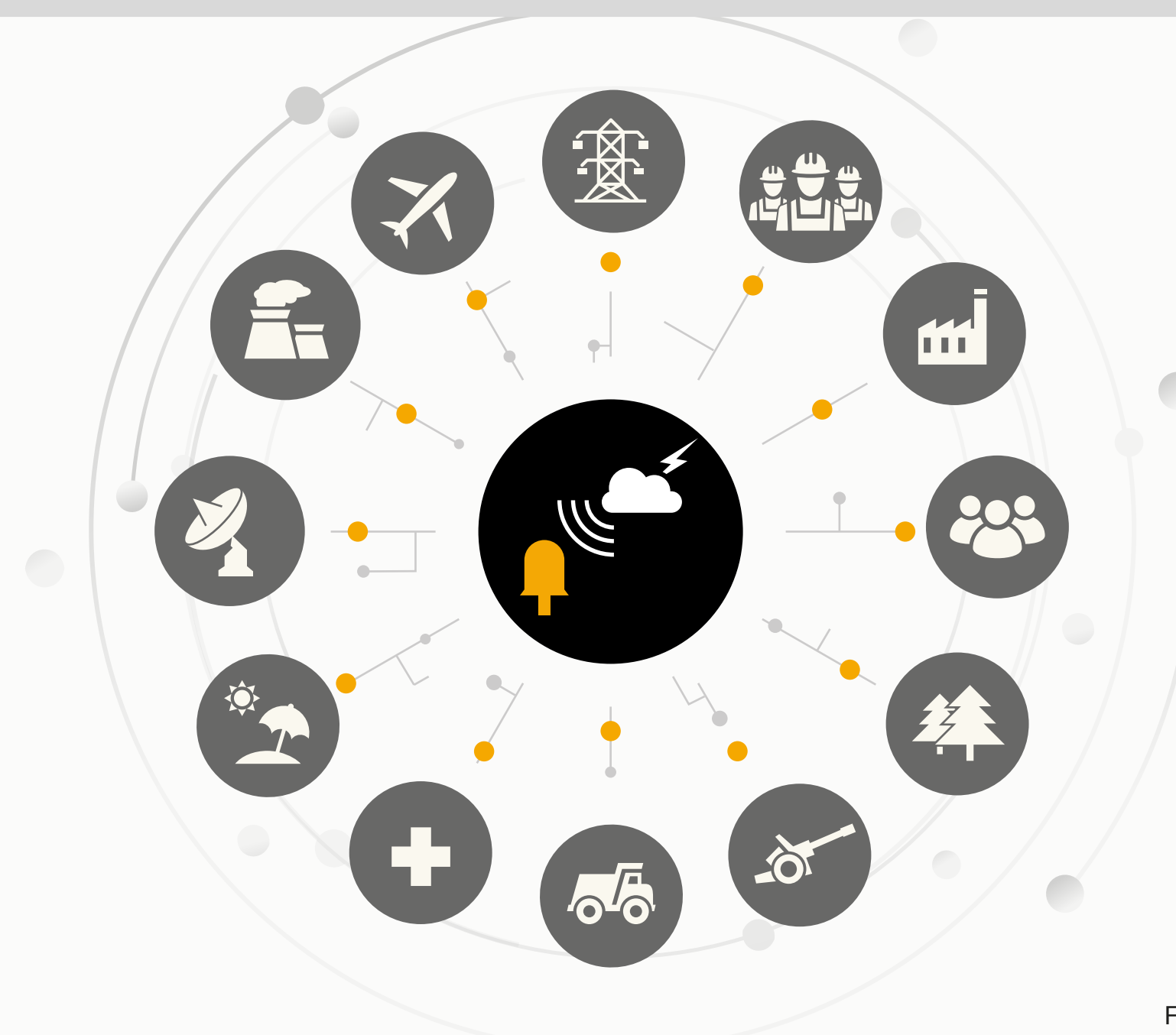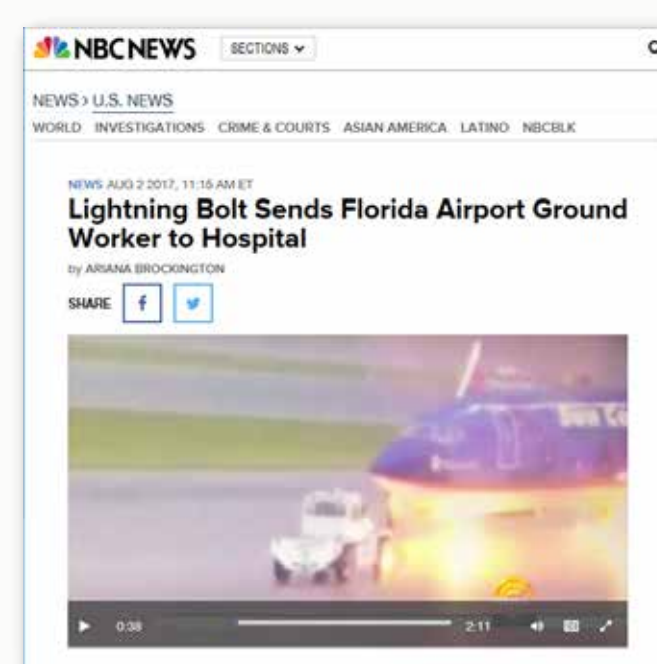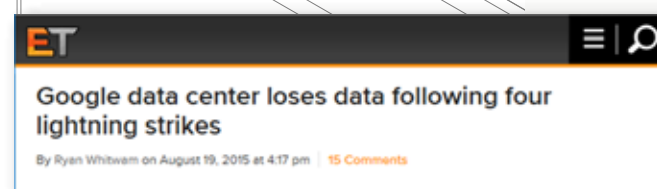
"Thirty percent of US businesses suffer damage from lightning storms"

"Nearly 30% of all utility power outages are lightning-related with total costs approaching one billion dollars"

"In the U.S. 16 out of 20 accidents involving petroleum storage tanks were due to lightning strikes"

Areas of application

- ✓ Health and Safety.

- ✓ Open-pit operations such as mining, shipyards or energy, etc.

- ✓ Potential risk sectors such as oil, gas, chemical, etc.

- ✓ Defence, military equipment, bases, communication sites, etc.

- ✓ Infrastructure operations such as airports, ports, etc.

- ✓ Outdoor activities and events: sports, cultural, tourism, etc.

- ✓ Public administrations responsible for open spaces such as parks, beaches, districts, etc.

- ✓ Environmental risk, disasters, civil protection, etc.

- ✓ Critical electronic environments: data centers, industry, medical centers, laboratories, etc.

ET — Google data center loses data following four lightning strikes
By Ryan Whitwam on August 19, 2015 at 4:17 pm ET · 15 Comments

BBC NEWS — Saturday, March 13, 1999 Published at 01:38 GMT
World: Americas Lightning knocked out Brazil power

cotidiano
Raio mata quatro pessoas e fere outras quatro em Praia Grande, litoral de SP
JULIANA COISSI
LÍGIA MESQUITA
ENVIADAS ESPECIAIS A PRAIA GRANDE

CAMBRIDGE UNIVERSITY PRESS
Cambridge Core
Prehospital and Disaster Medicine
Volume 24, Issue 5 · October 2009 , pp. 430-432
Impact of Lightning Strikes on Hospital Functions

NBC NEWS — NEWS › U.S. NEWS
NEWS AUG 2 2017, 11:16 AM ET
Lightning Bolt Sends Florida Airport Ground Worker to Hospital
by ARIANA BROCKINGTON

INDEPENDENT — News › World › Americas
Jim Beam explosion: Lightning strikes whiskey factory, making rivers flow with fire and alcohol
Flames of alcohol whipped into spirals towards the sky
Siobhan Fenton · @siobhanfenton · Saturday 5 September 2015 10:38 BST
2K shares

Chicago Tribune
Lightning hits refinery in Texas

Objective

The main purpose of a Lightning Warning System is to identify, with the maximum anticipation, the risk posed by both forming and incoming lightning storms.

✓ **Prevention of occupational hazards**

✓ **Suspend work or outdoor activities**

✓ **Suspend or postpone dangerous operations**

✓ **Disconnect electronic equipment**

✓ **Activate auxiliary power systems**

✓ **People evacuation**

Electrostatic field sensor

Detection of thunderstorms forming over the target area by monitoring the increase in electrostatic field:
· **TENS OF MINUTES FOR EARLY ALERT WARNINGS**

Electromagnetic field sensor

Detection of lightning in active thunderstorms approaching the target area:
· **40km / 24,85mi radius**
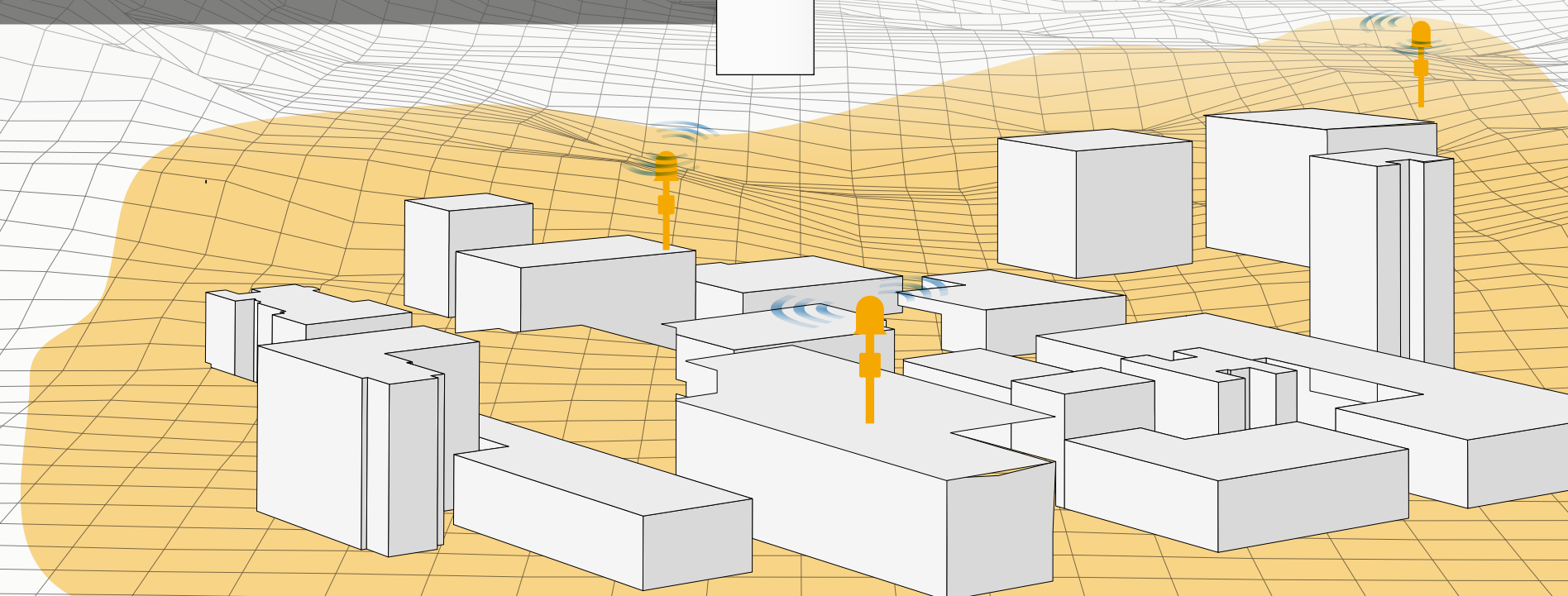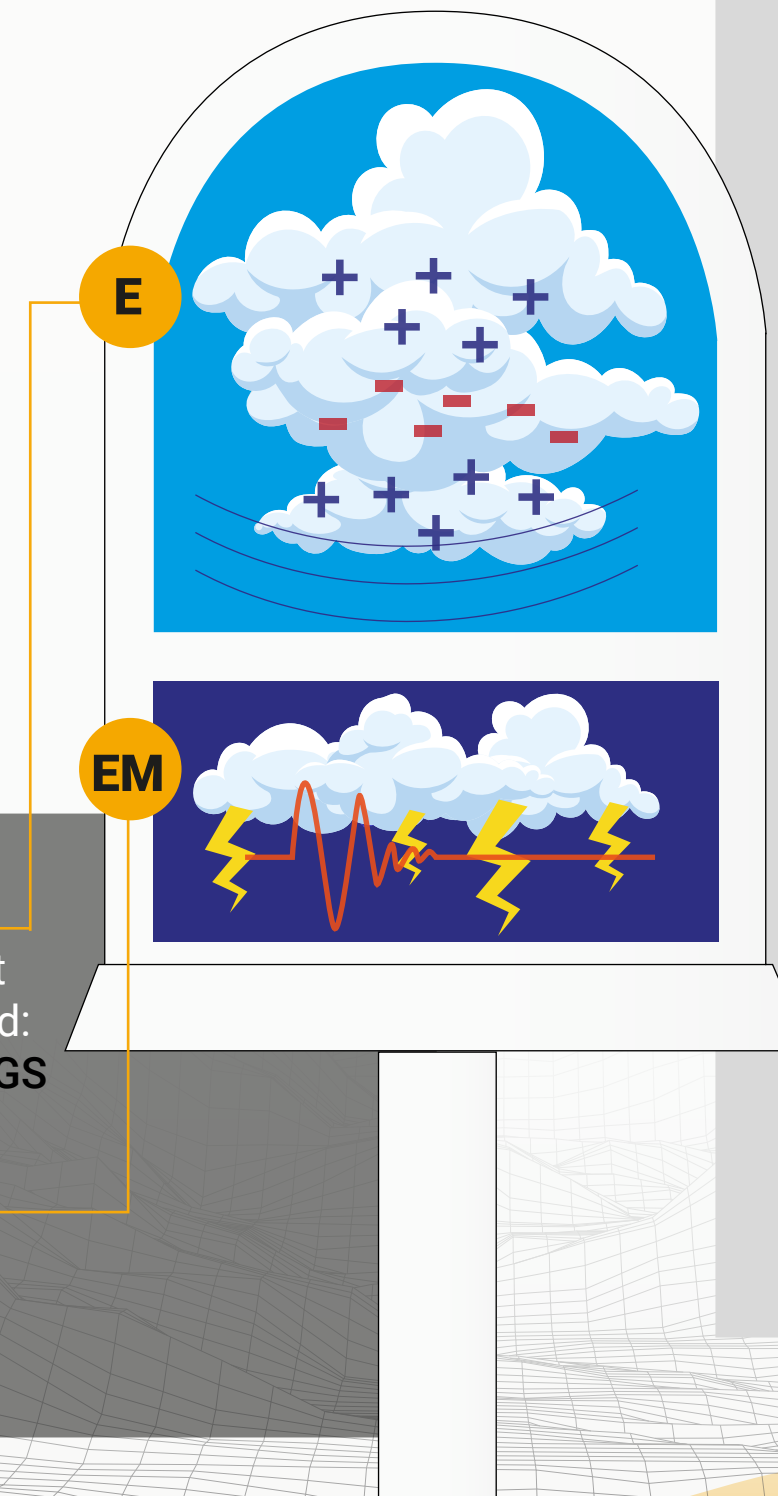
ATSTORM®
Maximum efficiency

E

EM

✓ **Detection during all phases of a thunderstorm**
We monitor both the electrostatic and electromagnetic fields, enabling the maximum anticipation in the risk of a lightning event

✓ **Fully electronic, with no moving parts**
Our equipment does not use moving mechanical parts, preventing blockages, wear and failures.

✓ **Operated by specialists through Internet of Things (IoT)**
The system is remotely operated, ensuring its proper functioning at all times.

✓ **Expert system**
Continuous improvement of its algorithms, increasing their adaptation to the monitored local characteristics.

✓ **Risk alerts via multiple channels**
Our customers receive the risk alerts through multiple means: smartphone, tablet, private web portal, emails and remote activation of alert devices.

✓ **Ad-hoc projects**
We study each location and determine the best system configuration in terms of number and positioning of the detection units.

Thunderstorm detection network

Further information: at3w.com

LOCAL STORM DETECTION

AIR TERMINALS AND ACCESSORIES

EARTHING

EXOTHERMIC WELDING

TRANSIENT OVERVOLTAGES

PERMANENT OVERVOLTAGES

APLICACIONES TECNOLÓGICAS S.A.

Parque Tecnológico de Valencia

C/Nicolás Copérnico, 4 - 46980 Paterna (Valencia), ESPAÑA.

(+34)961 318 250   atsa@at3w.com   at3w.com

Follow us: