

Global health-care facilities their **monitoring** and **adequacy** to cope with the Covid19 emergency (data requirements and future prospective)

Andreas Skouloudis
28 days in lockdown (expected 27 days more)

John Balbus
9 days (in partial) lockdown



3 Apr. 2020
(950 down to 720 fatalities/d)

GEO GROUP ON
EARTH OBSERVATIONS

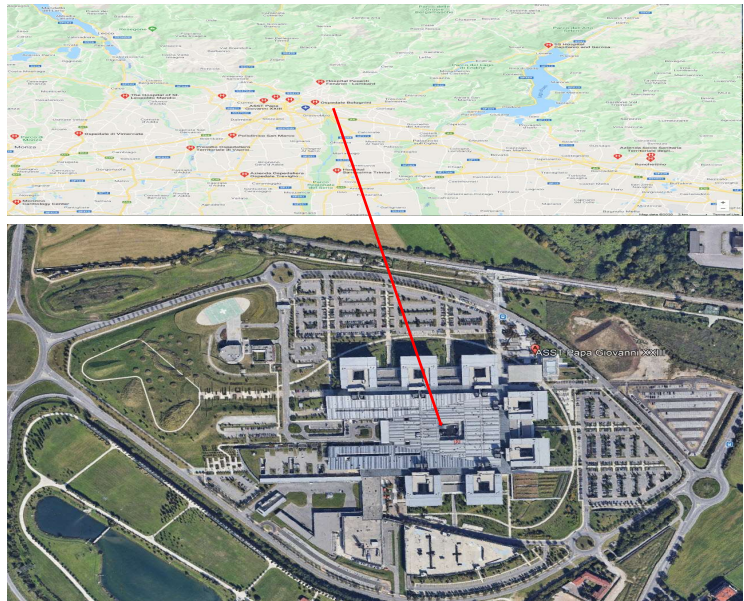
*Serving society
Stimulating innovation
Supporting legislation*

Emergency Hospitals constructed (at ...exhibition buildings)

Current HCF (all levels):

In Italy 3816.
In Lombardy 737 and in the counties:

- Milano **260**;
- Brescia **77**;
- Bergamo **76**;
- Monza 63;
- Varese 57;
- Pavia 50;
- Mantova 49;
- Cremona 31;
- Como 30;
- Lecco 26;
- Lodi **10**;
- Sondrio 8.



Emergency Hospitals constructed (at ...exhibition buildings)

Components:

From [static](#) data (anticipatory)
(facility, its management, supply facilities
systems, technical & medical equipment, ICT
etc.) to...

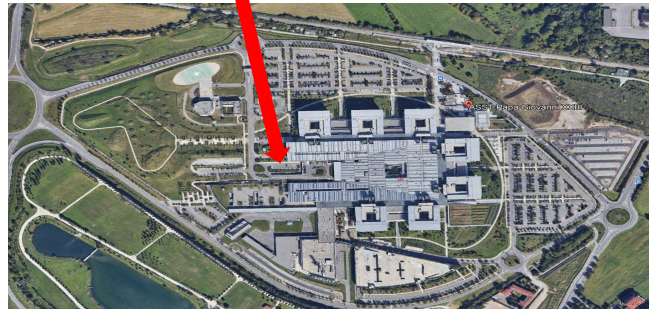
Time [evolving](#) data (during the crisis):

- Land-use of vicinity adaptation from daily images if possible.
- Assessment of capacity vs critical status.
- Monitoring of daily admission statistics in-situ.
- Evolution of Healthcare employees.

(Images from Google maps/earth)

[Postdicting](#) data (in the aftermath):

(New concepts of sensitive/reliable data)



GEO Health Community of Practice (EO4HEALTH 2020-2022)

...and the need of horizontal collaboration several teams

Elements from satellite observations:

For the Health Care Facilities subgroup:

- Enhancing the infrastructure data images and the verification of the capabilities of specific departments
- Visual images for change of landscape and speed of new deployments and reactivation of old healthcare or large hotel facilities.

For Collaborative work between subgroups :

- Temperature and humidity maps in (at least) 1x1km² resolution.
- CO columns (more closely related to traffic – NO₂ as potetial surrogate).
- Lights at night (useful for the daily variations).

**Thank you for your attention.
@ the GEO Health Community of Practice**

For involvement in HCF Assessments
subgroup,

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Planned publications (CoP contributions invited)

- What determines the critical operational conditions beyond which health infrastructures are not be able to cope.
- What monitoring knowledge and data might be missing for a reliable containment of epidemics/pandemics.
- Involvement in H2020 calls in July and Oct as well as to NASA's A.28 Rapid response and novel research.