Goals for this Area:

**E. Health Care Facility Infrastructure and Status**

1. Develop a **partnership** with UN agencies (WHO, UNISDR, UNEP) and governmental agencies (Australia, Canada, China, European Union, India, United Kingdom, United States) that share an interest in better identifying health care facilities at risk from environmental stressors and extreme weather events.

2. Integrate **EO datasets** (existing in open and possibly commercial sources) in order to develop an informational resource that assesses the vulnerability of health care facilities,

3. To assess their infrastructures **risks to local environmental stressors** (during seasonal loads and local population needs).

4. Develop methods to assess the **adequacy** of these facilities under regional acute catastrophes or during escalating chronic pandemics.

5. This has implications of their **functional status** both real-time operations and for long-term health adaptation planning.

**Particularly thankful to:**

Earth Science Division
NASA Goddard Space Flight Center

**Amos, Helen M.**
[SCIENCE SYSTEMS AND APPLICATIONS INC];

**Binita, KC.**
[ADNET SYSTEMS INC]

**Chapman, Helena**
[BOOZ ALLEN & HAMILTON INC]

**Munasinghe, Thilanka**
[Rensselaer Polytechnic Institute].
Projected Future (2040s) Climate Risks for HCF

Figure credit: Dr. Binita Katherine-Calvin, NASA

Projections of future climate risk: Binita KC et. al (2020)

Geolocation: Covid-19 Short-term Mortality Fluctuations

Data credit of: https://mpidr.shinyapps.io/stmortality/
UK Health Care Facilities (EO4HEALTH 2020-2022)

Goals of the small group for UK:

Health Care Facility **Infrastructure and Status**

1. North East
2. North West
3. Yorkshire and the Humber
4. East Midlands
5. East of England
6. West Midlands
7. South East
8. South West
9. London

…after 14 Feb 2022, 8-) Look for Afro-GEO cases ???

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The automation challenge …

Footprint of the residential structures,
Using deep learning models from the imagery,
Image segmentation and
…no trivial GPU or CPU capacity.
Prospectives 2022-2024 …

HORIZON-HLTH-2022-ENVHLTH-04-01:

Methods for assessing health-related costs of environmental stressors

... methodologies, used in linking scientific knowledge with environmental economics for informing policy action in diverse sectors such as transport, energy, chemicals, occupational health etc.

• This process could identify the areas where additional health Care facilities will be necessary or the resources that could be borrowed from neighboring areas.

• Can assist in the optimization of relief capabilities during emergencies.

• Target to specific vulnerable population groups (child, elderly or …) and

This is a EU funding work (where US participants are allowed)

With aim to set the initial efforts for developing an operational team for health-care resilience.