

What is adaptation?

Ian Bateman

Climate Change Officer

Devon County Council



DEVON COUNTY COUNCIL

Climate Change Agendas

Mitigation = An anthropogenic intervention to reduce the sources or enhance the sinks of greenhouse gases.

- Causes of climate change.
- Reducing greenhouse gas emissions.

*This is **NOT** about reducing (mitigating) the effects of climate change.*

Adaptation = Adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects.

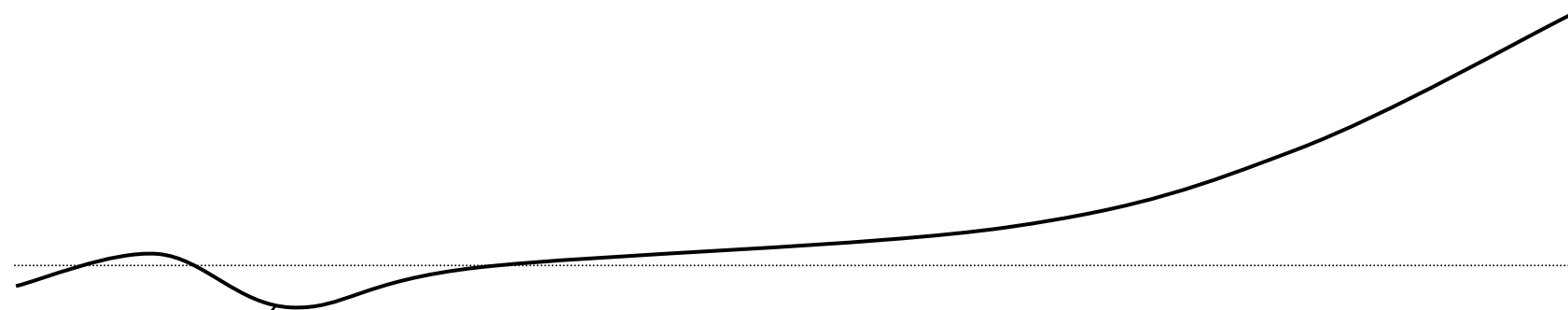
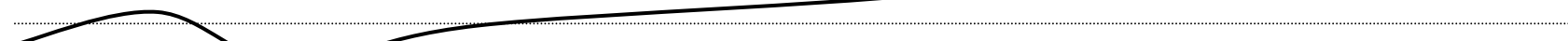
- Effects of climate change.
- Dealing with the impacts.

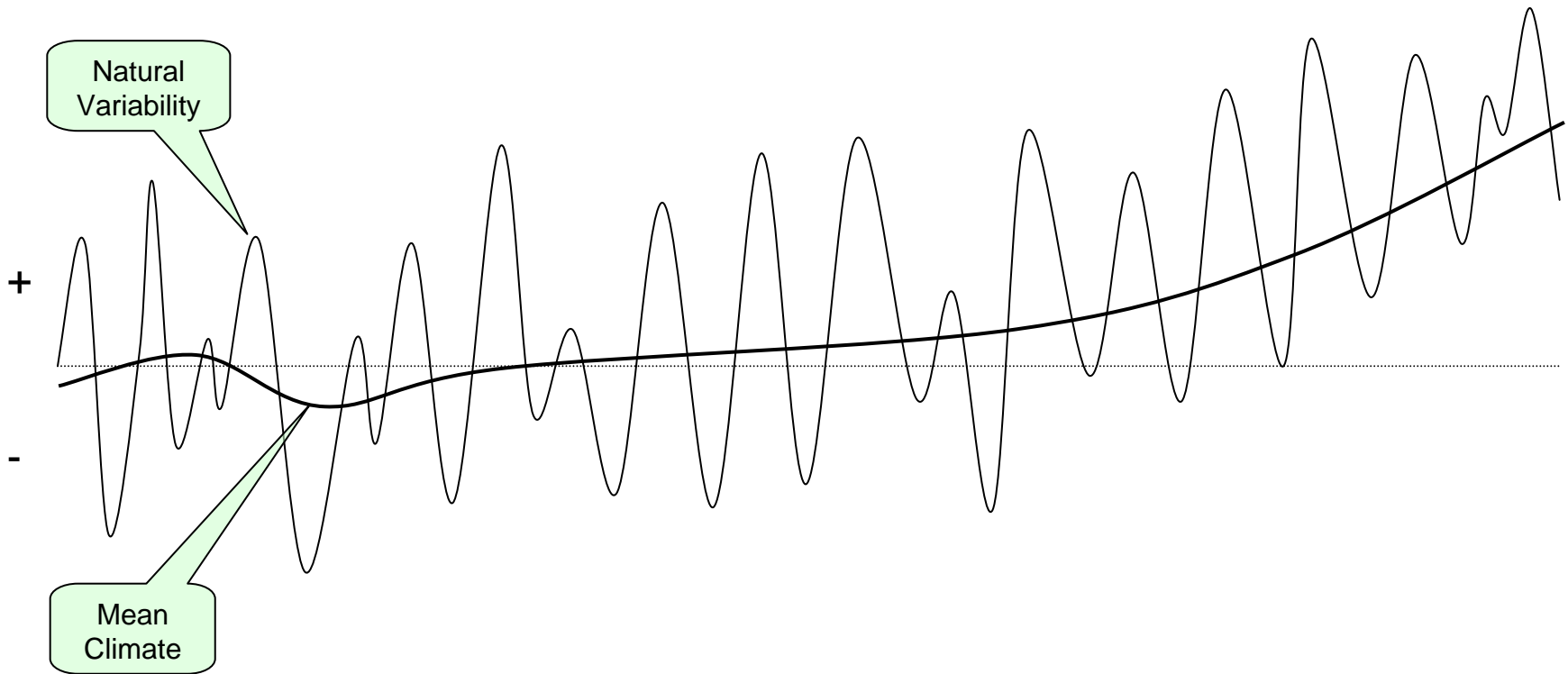
*This is **NOT** about changing (adapting) our lifestyles to a low carbon economy.*

+

-

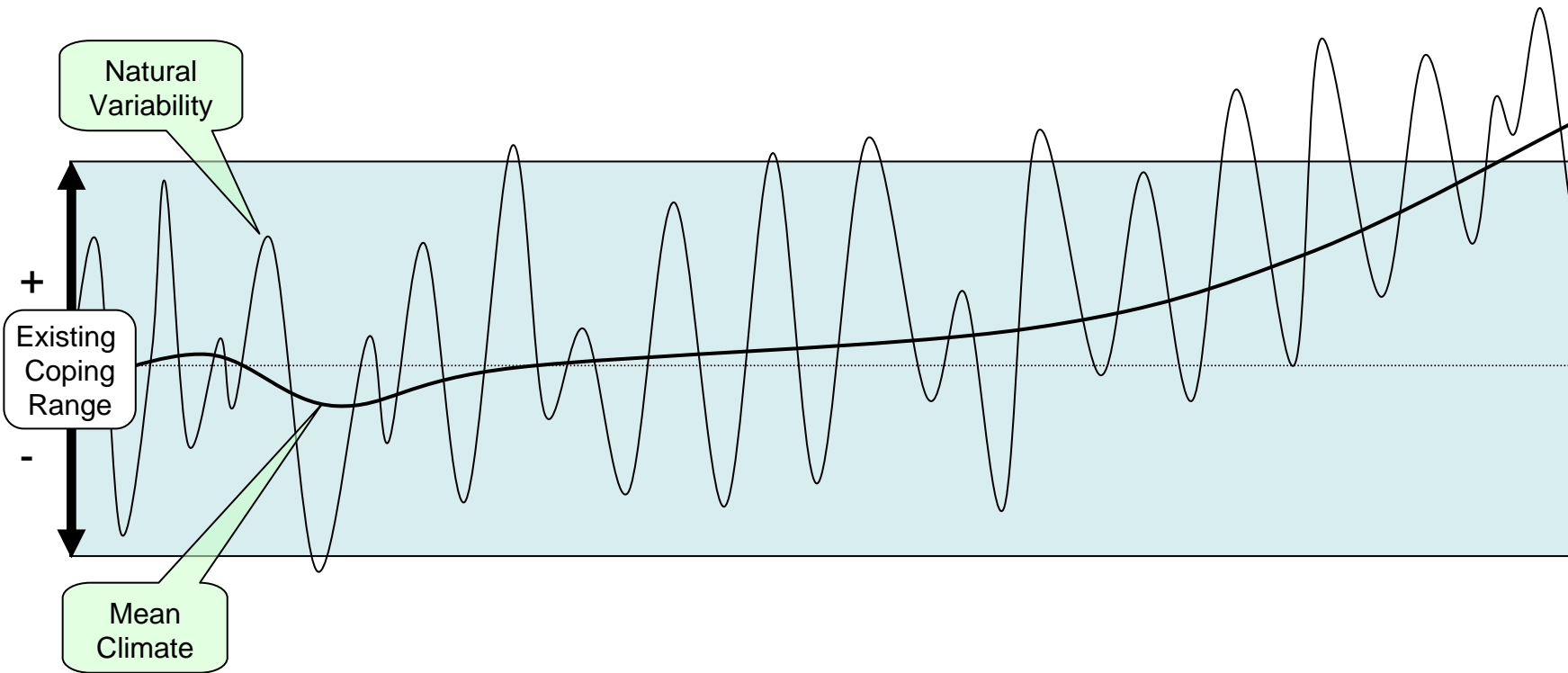
Mean
Climate

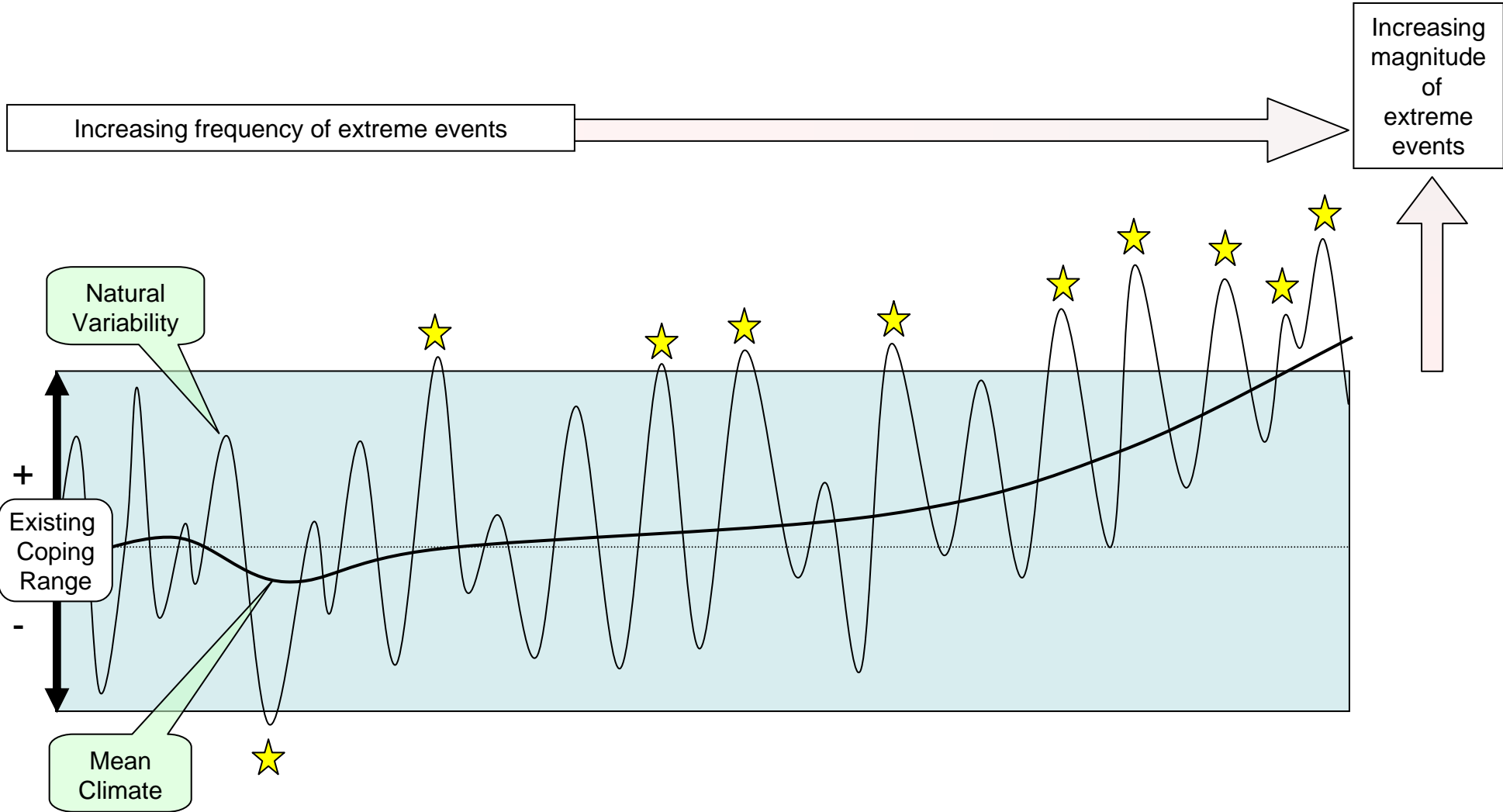


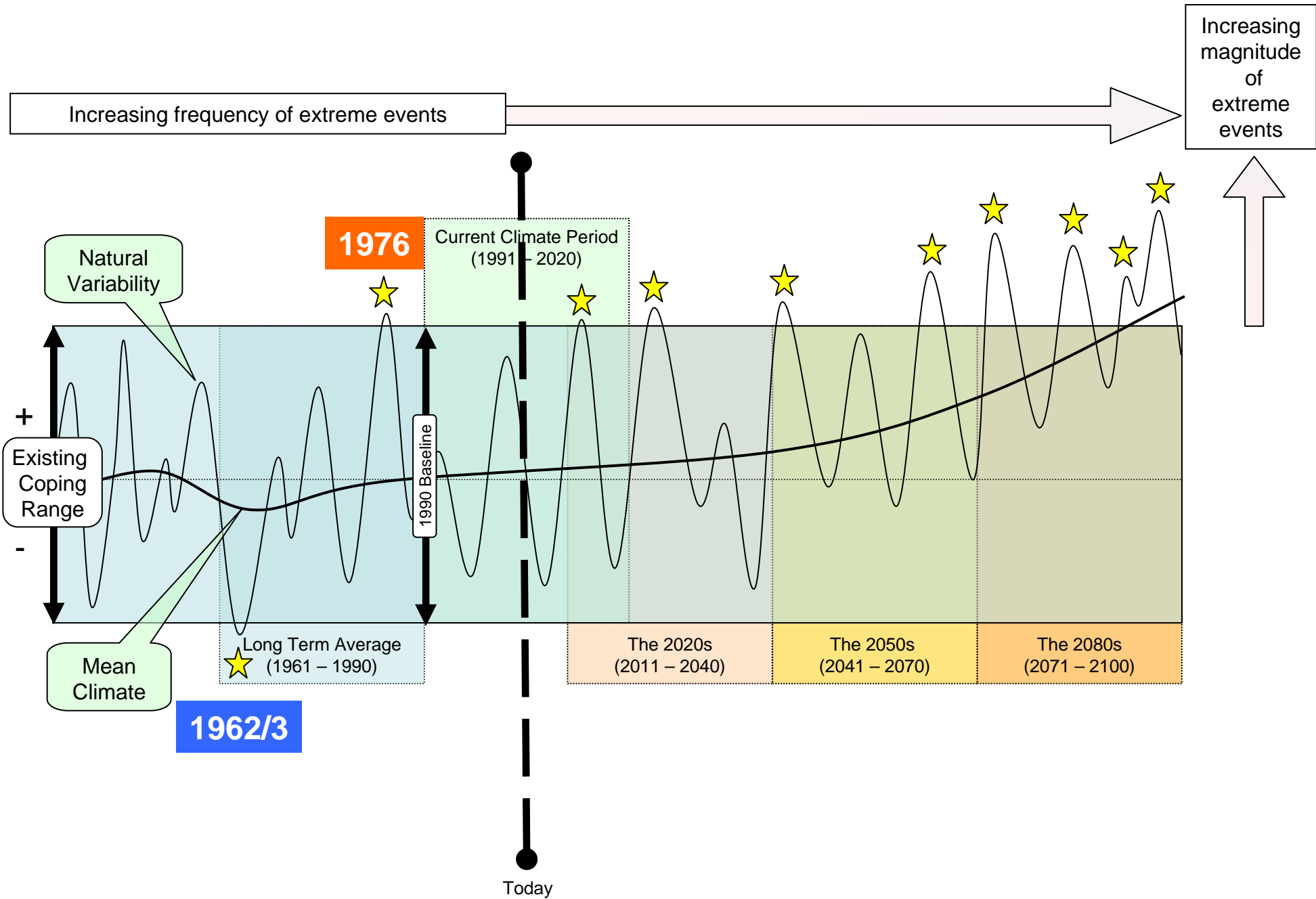


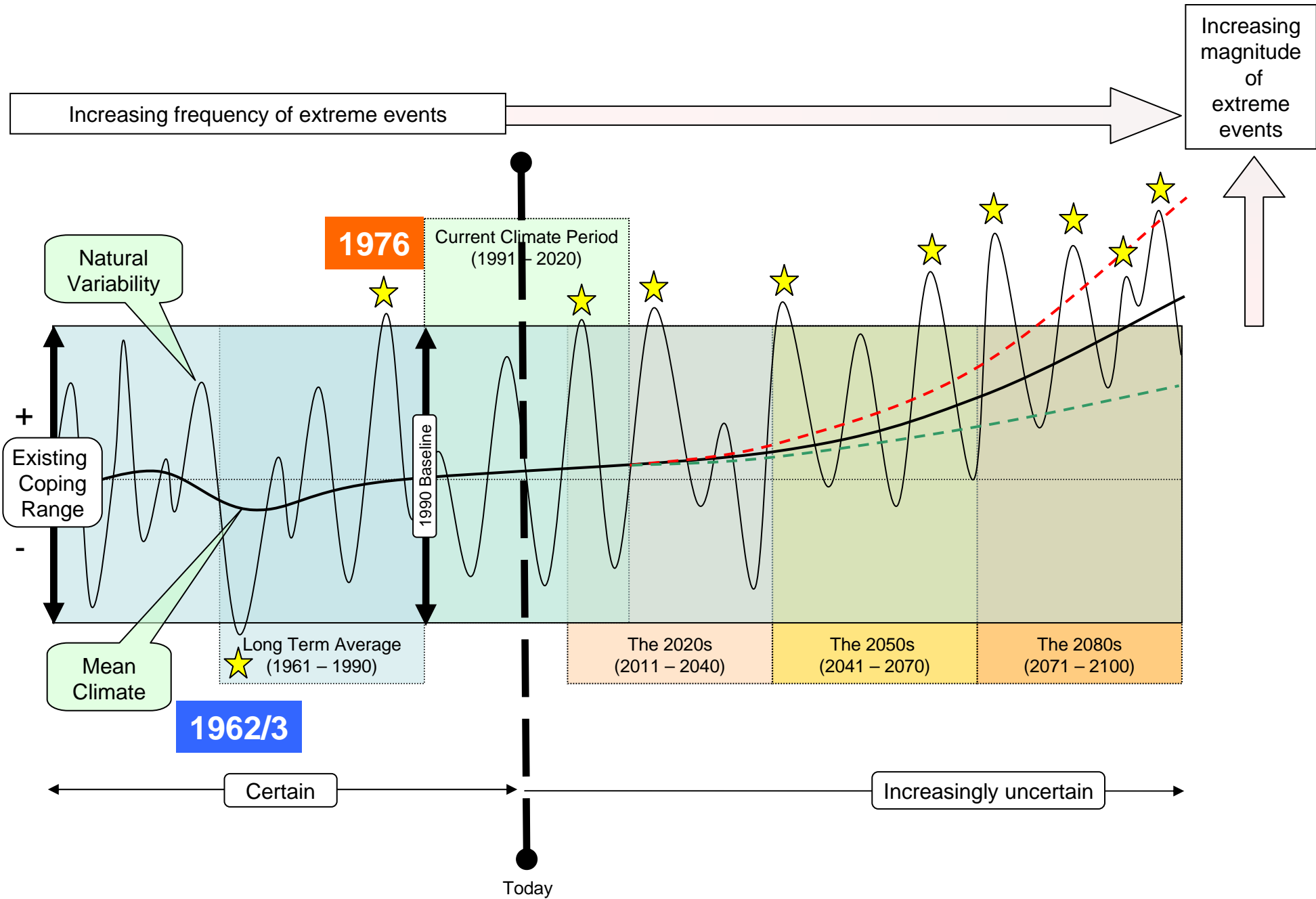
Natural
Variability

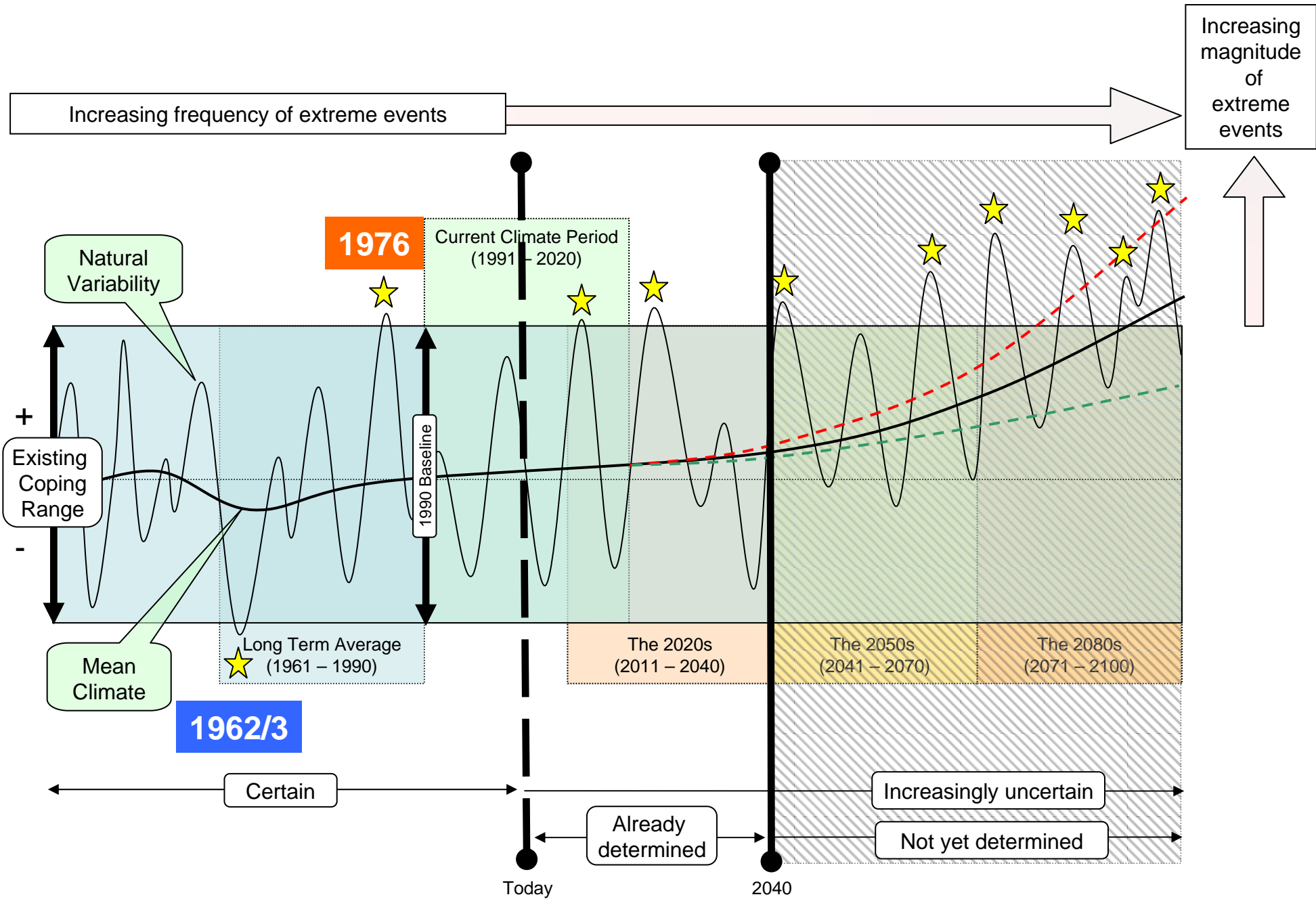
Mean
Climate

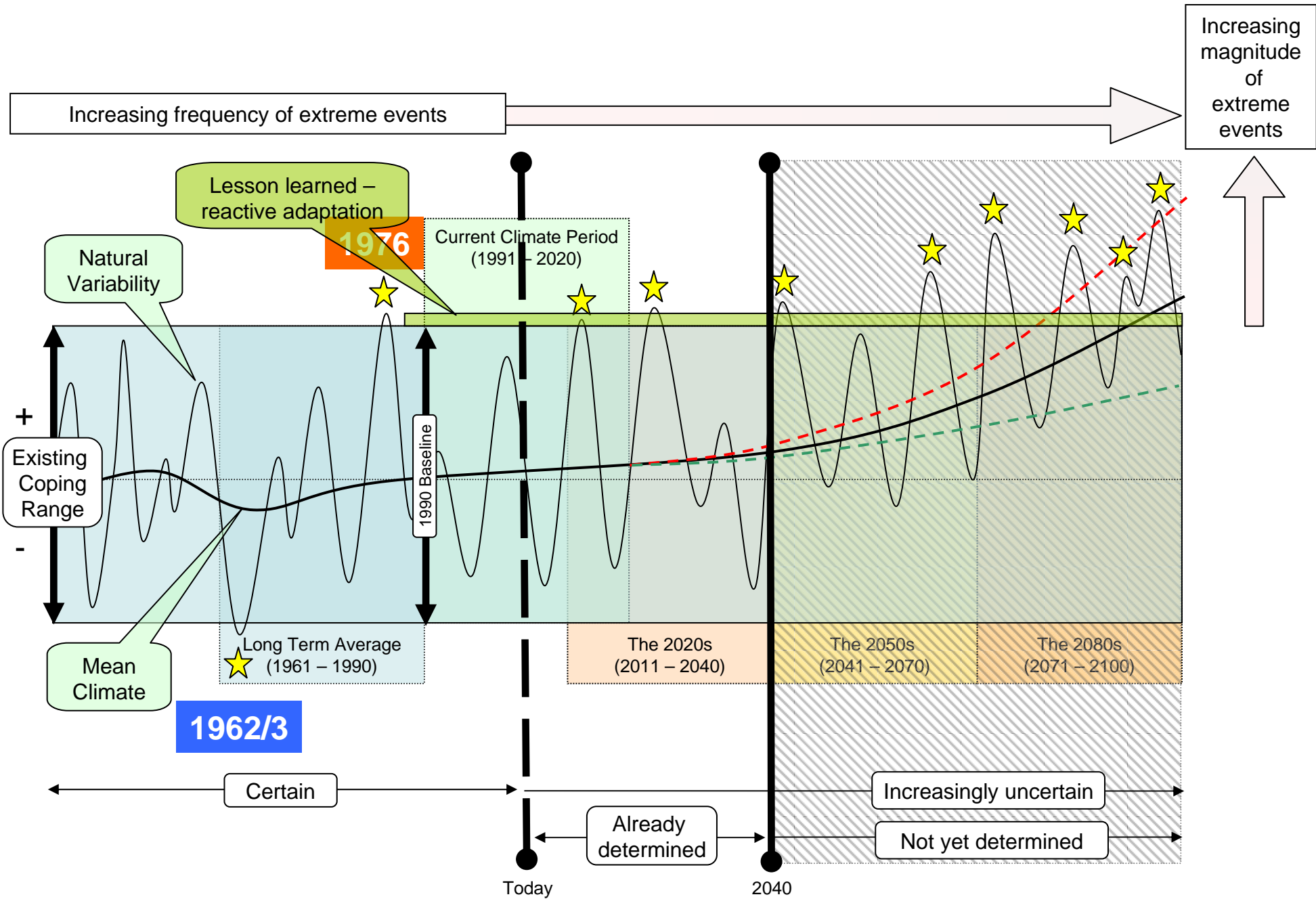












Increasing frequency of extreme events

Increasing magnitude of extreme events

Lesson learned – reactive adaptation

1976

Natural Variability

Existing Coping Range

Mean Climate

1962/3

Current Climate Period (1991 – 2020)

Long Term Average (1961 – 1990)

The 2020s (2011 – 2040)

The 2050s (2041 – 2070)

The 2080s (2071 – 2100)

Today

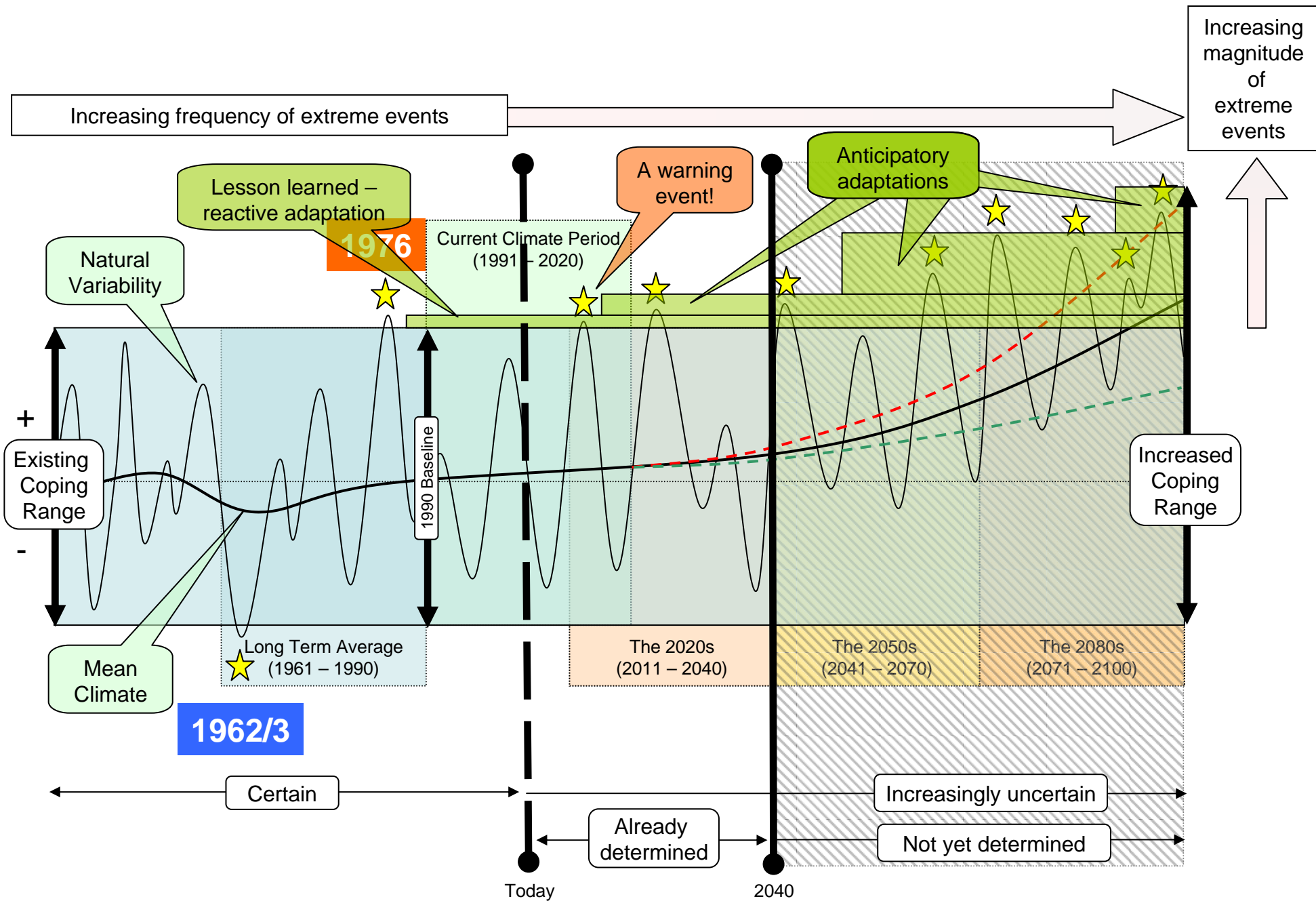
2040

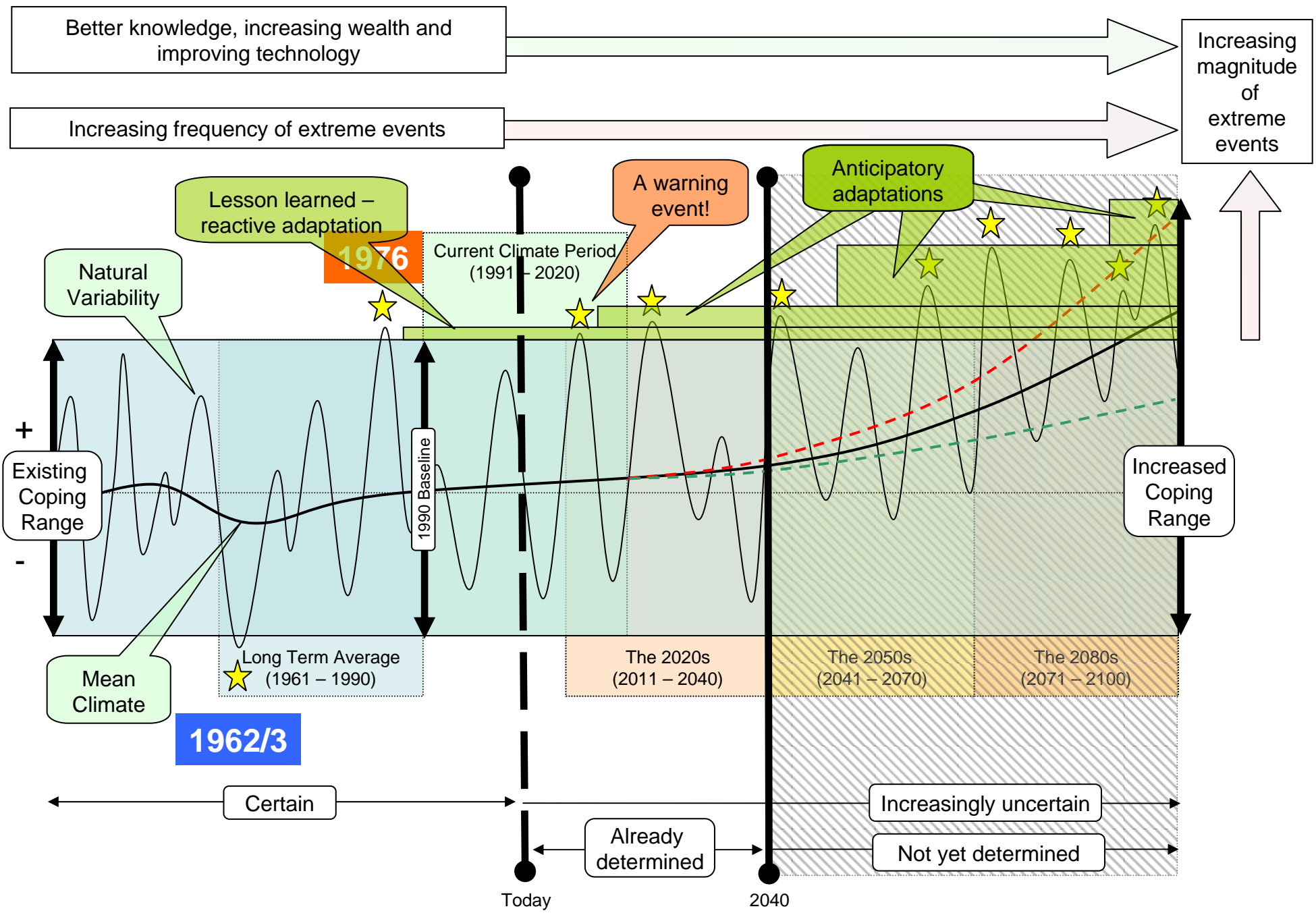
Certain

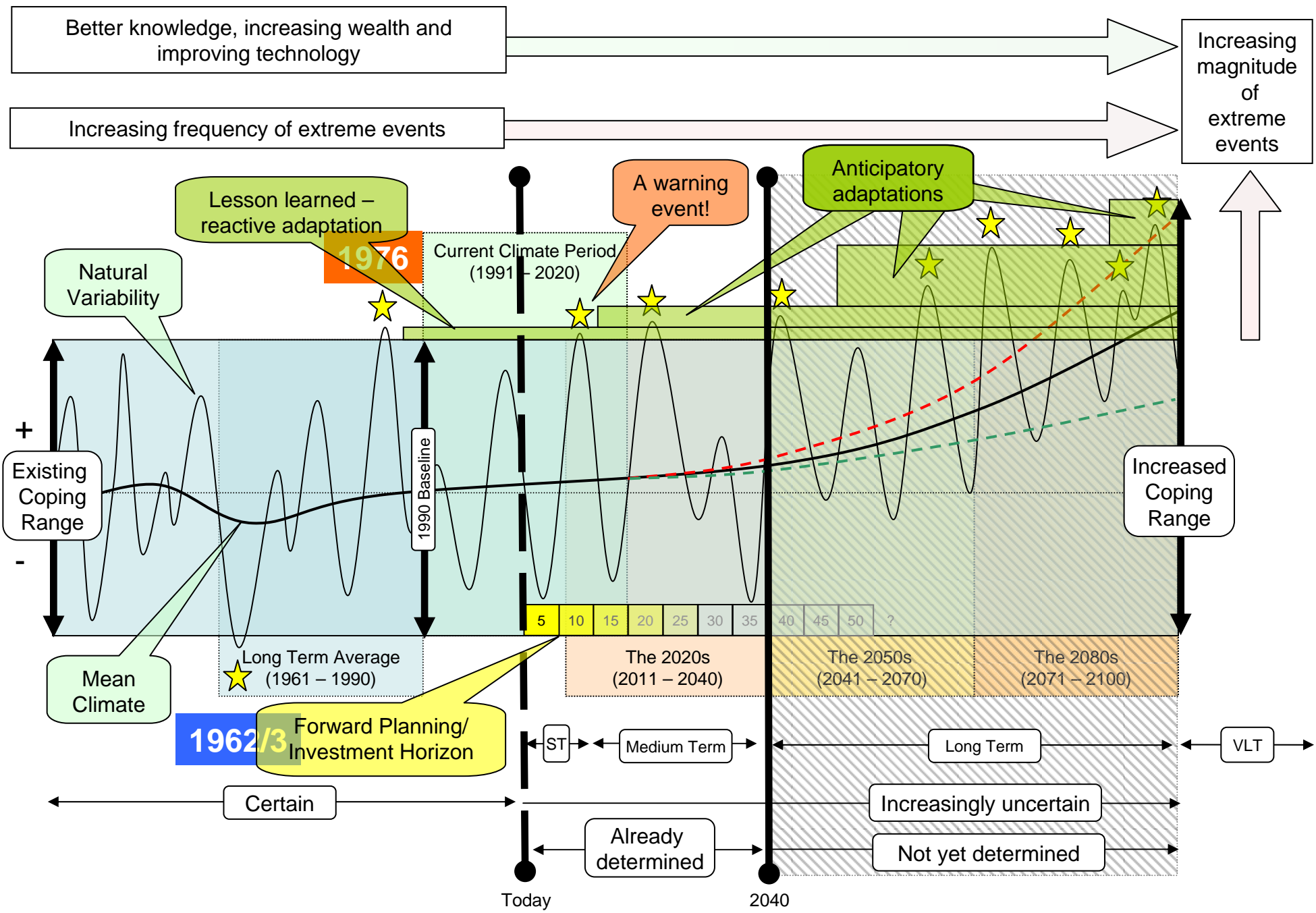
Already determined

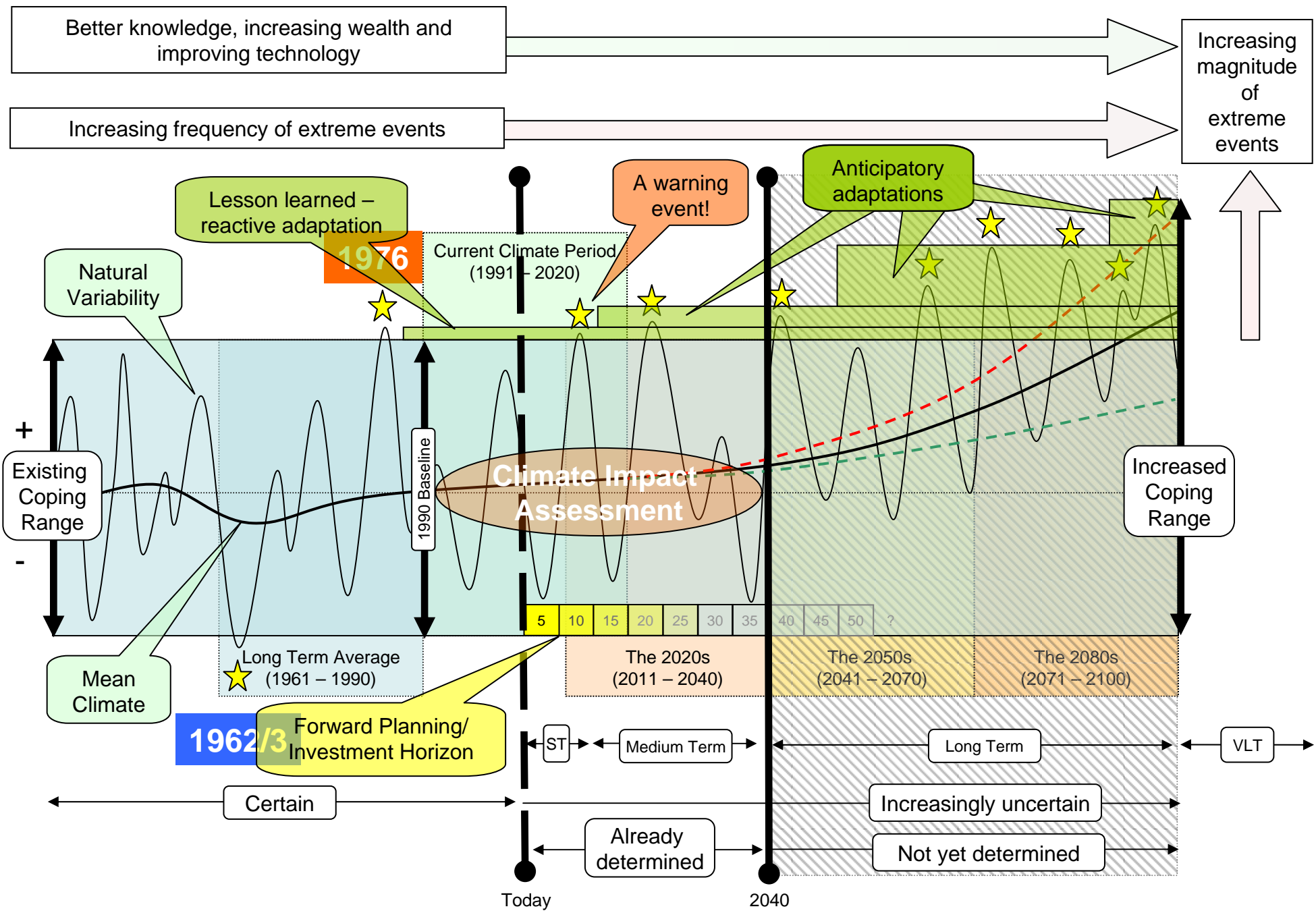
Increasingly uncertain

Not yet determined









**But we don't know
WHEN, WHERE or
HOW MUCH!**

“Adapt to what?”

A

B

C

List services

**So how can I build
a business case for
adaptation?**



So what do I know?

- Certain about what has happened.
- Certain about what is vulnerable NOW.
- Understand the broad “direction of travel” of climate.
 - Warmer wetter winters
 - Hotter drier summers
 - More extreme weather events
 - A rising sea level

Work in the present to identify and climate-proof current

VULNERABILITIES