**Topic 2: Physical Basis of Climate Change**

Video Links:

1. What Is the Greenhouse Effect? <https://www.youtube.com/watch?v=SN5-DnOHQmE>
2. Climate Change: How humans have caused the enhanced greenhouse effect <https://www.youtube.com/watch?v=UhRA7xBu37I>
3. Data analytics helps to understand drivers of climate change <https://www.youtube.com/watch?v=t95WeTVTVGU>

Weblinks:

**The Physical Basis of Climate Change**

* The Intergovernmental Panel on Climate Change (IPCC) <https://www.ipcc.ch/>
* The National Aeronautics and Space Administration (NASA) <https://climate.nasa.gov/>
* The United States Environmental Protection Agency (EPA) <https://www.epa.gov/climatechange>

**General Information and Overview**

* **NASA Climate Change:** Provides comprehensive information on climate science, impacts, and solutions. Link: <https://climate.nasa.gov/>
* **National Oceanic and Atmospheric Administration (NOAA):** Offers data, tools, and resources to understand climate change. Link: <https://www.noaa.gov/climate>

**Greenhouse Effect and Radiation Balance**

* **EPA Greenhouse Effect:** Explains the greenhouse effect and its role in climate change. Link: <https://www.epa.gov/climatechange/science/causes-greenhouse-effect>
* **NASA Earth Observatory: Earth's Energy Budget:** Details the balance of incoming and outgoing energy on Earth.

Link: <https://earthobservatory.nasa.gov/features/EnergyBalance>

**Enhanced Greenhouse Effect and Climate Change**

* **Intergovernmental Panel on Climate Change (IPCC):** Provides authoritative assessments of the science related to climate change. Link: <https://www.ipcc.ch/>
* **NOAA Climate Change Impacts:** Discusses the impacts of climate change on various sectors. Link: <https://www.climate.gov/news-features/understanding-climate/climate-change-global-temperature>

**Climate Forcing and Drivers**

* **Climate Forcing | NOAA Climate.gov:** Provides a comprehensive overview of climate forcings, including natural and human-caused drivers. Link: <https://www.climate.gov/maps-data/climate-data-primer/predicting-climate/climate-forcing>
* **Radiative Forcing of Climate Change: Expanding the Concept and Addressing Uncertainties:** In-depth discussion on climate forcings, including natural and anthropogenic factors. Link: <https://nap.nationalacademies.org/read/11175/chapter/3>
* **Physical Drivers of Climate Change:** Covers both natural and human-caused climate drivers, with a focus on the industrial era. Link: <https://science2017.globalchange.gov/chapter/2/>
* **Climate Forcings and Climate Models:** Discusses climate forcings in the context of climate models and historical reconstructions. Link: <https://nap.nationalacademies.org/read/11676/chapter/13>
* **Climate Change Indicators:** Provides data and visualizations on climate forcings and their impacts. Link: <https://www.epa.gov/climate-indicators>