NOAA's Climate B-Roll

(release date 11/1/98)

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| Duration | Description | |
|------------------------------|---|--|
| :05 | Earth revolving | |
| :11 | Earth's Water Vapor: Spinning Earth Animation | |
| :08 | Earth's Winds: Spinning Earth Animation | |
| :25 | 3D Animation demonstrating Greenhouse Effect | |
| :07 | Earth's views: Roiling ocean | |
| :10 | Earth's views: Blue ocean flyover | |
| :08 | Earth's views: Dark clouds, ocean at dusk | |
| :20 | Earth's views: Clouds from above (plane) | |
| :04 | Earth's views: Clouds from above (space) | |
| :11 | El Niño: Spinning Earth Animation (sea surface temperature by color) | |
| :15 | El Niño: World Map (sea surface temperature by color) | |
| Observing the Climate System | | |
| :12 | Toga Coare Experiment diagram (1983 El Niño) Aircraft/Buoy/Ship/Satellite deployment | |
| :13 | P3 views (Hurricane Research Aircraft) | |
| :26 | Buoy deployment from ship | |
| :03 | ER-2 takeoff | |
| :02 | GOES satellite image, color enhanced | |
| :02 | Above GOES image onscreen, technician watching | |
| :04 | Weather balloon deployment from ship | |
| :02 | Polar orbiting satellite | |
| :03 | Satellite dish | |
| :20 | Tropical Atmosphere Ocean (TAO) Array Buoy: 1998 deployment (measures air temperature, humidity, wind speed, ocean temperature to 500 meters in the tropical pacific) | |
| :44 | Weather balloon deployment | |
| :07 | NOAA Research Vessel Rudé at sea | |
| :13 | Air Sampling Operations: CU of tools used to monitor air samples | |
| :10 | Arctic Research | |
| Climate Data and Trends | | |
| :37 | Interview: (former) Dr. D. James Baker; Undersecretary of Commerce for Oceans and Atmosphere Discusses emerging climate patterns and concerns that human populations may contribute to global warming. (Cutaways to smokestacks, traffic) | |

| :32 | Interview: Tom Karl, Senior Scientist; NOAA Nat'l Climatic Data Center 1) There are natural climate variations, but in recent years the rapid changes are now much more in evidence 2) The burning of fossil fuels & operation of cars leads to an increase in CO2 |
|------------|--|
| :10 | Animation: CO2 Pollution |
| :06 | 3D Animation demonstrating Greenhouse Effect continued, with smokestacks |
| :11 | Interveiw: Tom Karl, cont'd: Discusses Earth's temperature record |
| :12 | 3D Animation of change in the Nation's precipitation levels over the last 100 years |
| :12 | Interview: Dan Albritton, Ph. D. Director, NOAA Aeronomy Laboratory 1) Scientists now believe that the first signs of human influence on global |
| :13 :22 | climate are now just emerging. 2) Areas in the midpoints of large continents are likely to be warmer 3) Potential for temperature increase by end of century that is larger than any natural change since the ice age |
| :39 | Mauna Loa Observatory, Hawaii: Climate monitoring (this section not slated on tape) • Onscreen moving graph: CO2 levels 1958-1984 • NOAA/Scripps CO2 data from Mauna Loa |
| :11 | Animation: CO2, temperature change 100,000 BC – Present |
| :11 | Animation: CO2, temperature change 1850 - Present - projection to 2100 |
| :30 | Model Output: 6 year projection of CO2 level increases by NOAA's Environmental Research Laboratory |
| :38 | Model Output for 2x and 4x CO2 Increases in Earth's temperature Source: NOAA Geophysical Fluid Dynamics Lab Animation of Earth, showing projections of CO2 levels if they were to double or quadruple from the present to 200 years hence |
| :18 | Greenhouse Warming animation: change over 150 years |
| :24 | Past Ozone Hole Animation models 1991, '90, '87, '89 |
| | Impacts of Climate Change |
| :13 | Exhaust from buses |
| :16 | Traffic on highway: light, heavy |
| :08 | Flood damage |
| :07 | Animation: Sea level rise |
| :03 | Flooded wetland |
| :13 | Public Beach: UV Radiation |
| :08 | Flood aftermath |

| :05 | Erosion: house near the edge of bluff |
|-----|--|
| :12 | Winter in suburban area, heavy snow (fallen) |
| :12 | Winter weather in remote locations, several scenes |
| :17 | Drought conditions |
| :10 | Australian brushfires |
| :06 | High winds and flooding |
| :13 | Australian brushfires continued |
| :12 | high winds and flooding |
| | NOAA Seal |

Total Running Time = 15:11