

Global Climate Change and Warming, 1998

Contributed by Lawrence Jorgensen

- Indicators point to increasingly severe and costly disasters ahead, in part the result of man-made changes in climate. Deaths from natural disasters rose from 1,000 to 13,000 in 1997. Best News, 1/1/98
- El Nino was blamed for forest fires in Indonesia and Australia, floods in Somalia and South America, and a number of hurricanes along the Pacific coast of Mexico. Best News, 1/1/98
- The vast pool of warm pacific water called El Nino lifted the earth's average surface temperature in 1997 to the highest levels ever recorded. Even if El Nino had not been a factor, the 1997 readings would have extended a broad, general trend that has made the 1990's the world's warmest decade since people began measuring temperatures with thermometers in the mid-19th century. NYTimes, 1/9/98
- Tosco Corporation announced today that it would support an Environmental Protection Agency mandate to dramatically improve gasoline quality to reduce air pollution throughout the United States. PR Newswire, 1/11/98
- With emissions standards much on the auto industry's mind, the nation's two largest automakers are intensifying their race to create more environmentally friendly vehicles. AP, 1/11/98
- As the economy grows, pressure on the earth's natural systems and resources intensify. Forests are shrinking, water tables are falling, soils are eroding, wetland are disappearing, fisheries are collapsing, rangelands are deteriorating, rivers are running dry, temperatures are rising and coral reefs are dying. AP 1/11/98
- Use of ethanol instead of conventional gasoline sharply reduces both greenhouse gas emissions and fossil energy use, a new study by the Argonne National Laboratory says. PR Newswire, 1/24/98
- Clinton seeks \$6.3 billion to fight global warming with tax breaks for energy-efficient cars and buildings and more spending on research to further reduce heat-trapping industrial emissions. Reuters, 1/31/98
- Fierce winds and drenching rains hit northern California causing mudslides and closing roads. Swollen rivers overran their banks, emergency crews struggled to shore up collapsing hillsides and hundreds were evacuated due to the storm. Reuters, 2/6/98
- About 22,000 people were without power after torrential rains, howling winds and tornadoes ripped through Southern Florida in the worst storm to hit the area in 5 years. Reuters, 2/6/98
- The Central Research Institute of the Electric Power Industry has succeeded in developing technology cutting in half the time required to recharge lead batteries for electric cars. Comline, 2/14/98
- California will suffer an estimated \$1 billion in El Nino spawned earthslide damages this year, every penny of it uninsured, AP, 2/14/98
- Wind-driven rain pelted already soggy California renewing the threat of landslides along the northern coast and swelling rivers already flowing at the warning stage. Ten people have died and preliminary damage is estimated at \$300 million from the series of storms in the last month. AP, 2/2/98
- At least 5 people died and another was missing in southern Alabama, where the governor has declared a state of emergency due to the flooding. Six feet of water has filled the streets of downtown Elba, causing about 2,000 people to be evacuated. Reuters, 3/9/98
- Australia's remote tropical north has been hit by the worst flooding in seven years with water covering an area of almost half the size of Britain, leaving some towns isolated for the next two months. Reuters, 3/9/98
- Two weeks of power blackouts in Auckland have made elevators risky, spoiled food and frustrated residents. A hot, humid simmer is blamed for the failure of four underground power cables supplying electricity from a hydroelectric plant. This power crisis could put 2,000 of the area's 8,000 companies out of business. AP, 3/9/98
- Wide areas of the United States began counting the cost of three days of floods, blizzards and tornadoes that have been blamed for 11 deaths. The death toll in southern States stood at 7 after thunderstorms turned streets from Louisiana to Georgia into rivers. In the Midwest, a cold front dumped snow and froze road surfaces causing 4 car accident deaths. Reuters, 3/9/98
- In Central Florida, tornadoes killed 42 people as storms continue to damage mobile homes and roofs of buildings. Reuters, 3/9/98
- White House economist Janet Yellen stood by her finding that the administration's plan to fight global warming would have little effect on the economy. Reuters, 3/9/98
- The message that hydrogen is a commercial-ready solution for many of the world's energy needs is facing a more receptive audience in the U.S. Congress as it faces issues of global warming and dependence on fossil fuels. PR Newswire, 3/9/98
- The first 2 months of 1998 were the warmest and wettest on record for the lower 48 states, based on 104 years of weather data. Reuters, 3/9/98
- A creek swollen by four days of rain burst through a levee, flooding a southeast Alabama town and forced 2,000 people out of their homes. Five deaths were blamed on the weather, AP 3/9/98
- A late-winter blast of arctic air settled across the Southeast, killing crops of peaches and strawberries in South Carolina. AP 3/12/98
- The Flint River, swollen by El Nino-fueled storms, has driven thousands from their homes in a chilling echo of the state's worst natural disaster just 4 years ago. At least 15 people have died in the Midwest due to the storms. AP, 3/12/98
- A blinding snowstorm in New Hampshire led to a 40-vehicle pile-up that injured at least 24 people. AP, 3/15/98
- Rising global temperatures could bring more than floods and severe weather, they may allow for the wider spread of

tropical illnesses like dengue fever. Reuters, 3/15/98

- Fires threatening Brazil's rainforest are the worst in recent memory and have been fueled by the long drought attributed to El Nino. Reuters, 3/19/98
- Heavy rains and mudslides damage 7 homes and 5 condominium units in Laguna Niguel, California. LATimes, 3/20/98
- A crumbling hillside finally gave way sending two luxury homes down the slope and leaving others in danger. Heavy rains and mudslides caused the homes to slide in Laguna Niguel. AP, 3/20/98
- About 70 people were killed and hundreds were injured when tornadoes swept through parts of eastern India. AFP, 3/24/98
- A tornado tore through a rural area of Georgia, ripping apart homes and damaging farm buildings, and at least 11 people were killed and about 80 injured. AP, 3/24/98
- Stormy winds hit Japan leaving the ground and air traffic in disarray. Winds blasted at 25 mph and caused the airport to shut down. NewsEdge, 3/24/98
- Scientists speculate that global warming may actually speed up hurricanes, MSNBC, 3/25/98
- Diarrhea and water-borne disease have broken out among flooded villages in Indonesia's West Java province. Reuters, 3/30/98
- Almost a quarter of Athens 5 million people remained without electricity while crews struggled to clear fallen trees and fight back flood waters in the wake of a violent storm that battered Greece. AP, 3/30/98
- Unusually warm weather caused a rapid melt of last weeks heavy snowfall, and the flooding would worsen if the bad weather continues. The flooding forces evacuations in southern Quebec and at least one man drowns. AP, 3/31/98
- Residents shoveled broken glass and hacked through fallen trees following rare March tornadoes that destroyed or severely damaged an estimated 819 homes in southern Minnesota. AP, 4/1/98
- All 60 residents of a remote Iranian village were feared dead after torrential rain set off a landslide that swept over the town. AP, 4/6/98
- Nearly 1,000 houses in five villages in Jakarta were inundated with meter-high floodwater following torrential rains. AP, 4/7/98
- A fading El Nino warm-weather phenomenon in the Pacific Ocean will lead to a more active hurricane season than normal. Over 10 tropical storms are expected to form in the Atlantic Ocean between June and November 6 would become hurricanes, with winds exceeding 75mph - 110mph. Reuters, 4/8/98
- Tornadoes ripped through the southeastern United States, killing at least 37 people in Alabama, Georgia and Mississippi and striking some areas with the force of a bomb blast. Reuters, 4/11/98
- Water faucets have run dry in the homes of more than a half-million people in Malaysia as water authorities blame Mother Nature for the most severe shortage in decades. AP, 4/11/98
- Powerful tornadoes continue to rip through the southern states, killing 44 people and destroying 2,000 homes in Alabama. MSNBC, 4/12/98
- At least 100 miners are feared to have drowned when heavy rains flooded their shafts in northern Tanzania. AP, 4/13/98
- Floodwaters receded today in central and eastern England, where a massive clean up was under way after the worst flooding in more than a century. Four people died from drowning. AP 4/15/98
- A strong band of storms moved across southern Illinois sparking tornadoes that damaged homes and businesses in three counties. Minor injuries were reported. More tornadoes killed 4 in Tennessee and injured 19. AP, 4/17/98
- A tornado struck Nashville, punching out office windows, damaging buildings and injuring at least 75 people in another outbreak of violent weather. Reuters, 4/20/98
- At least 12 people were reported missing after a dust storm with gale force winds lashed China's northwestern region. Reuters, 4/21/98
- A cyclone hit parts of Bangladesh for the second day, killing nine people and injuring more than 1,500. AP, 4/24/98
- Fist-sized hailstones have killed nine people in the central Chinese city of Changde; just one day after vicious hail killed 12 people on the east coast. Reuters, 4/27/98
- A windstorm that hit a northwest region of China has killed 6 people, injured 265 and left 44 missing. Xinhua, 4/27/98
- At least 8 people died and 11 injured as heavy rains from a tropical depression triggered landslides in French Polynesia. Reuters, 4/27/98
- A severe drought in Brazil could threaten more than 9 million people with famine. This is the worst drought in Brazil in 15 years. AP, 4/27/98
- A major food-producing area in southwest China is suffering crop losses from a severe drought that has lasted since last summer. AP, 4/30/98
- Two weeks of heavy rain have sent brown flooding waters into fields and homes in river towns up and down Argentina's northeast delta. AP, 5/1/98
- Flooding may have left about 30,000 people homeless in a remote area of Papua New Guinea following heavy rains. Reuters, 5/4/98
- At least 10 people were killed when heavy rains caused an avalanche of mud and rock to bury a coastal shantytown in Ecuador. AP, 5/4/98
- A powerful windstorm killed 12 fishermen and left others missing in central Vietnam. Twenty fishing boats were destroyed or sunk and 18 others are still missing. AP, 5/7/98
- As the death toll from mudslides caused by torrential rains in southern Italy rose to 135, officials prepared for more rain. Reuters, 5/12/98
- Torrential rains in East Africa have supported a large outbreak of Rift Valley fever in Kenya. CDC, 5/12/98

- Heavy rains have inundated farmlands, caused landslides and swept away bridge in flooding that has killed 11 people in southeast China. AP, 5/18/98
- Severe thunderstorms rumbled over the Midwest, bringing tornadoes, heavy rain and hail. One person was killed and 67 others were injured. AP, 5/18/98
- Mexico is suffering its worst drought in 70 years due to El Nino, and a deadly series of forest fires threaten to turn the southern part of the country into an environmental catastrophe. Reuters, 5/18/98
- Floods caused by torrential rains have killed 27 people in Iran. Reuters, 5/18/98
- A cyclone with winds up to 165 kph hit the Bangladesh coast killing 14 people, destroying thousands of homes and cutting off communication. AP, 5/21/98
- A weekend of violent weather killed 16 people from the upper Midwest to New England, while a small South Dakota town wiped off the map by a tornado pondered its future. Six people were killed in that town, and most buildings were destroyed completely. Reuters, 6/3/98
- 14 tornadoes devastate southwestern Pennsylvania, two elderly people killed, 15 injured, more than 100 homes damaged, state of emergency declared in 4 counties Reuters, 6/4/98
- Severe thunderstorm kills three people and damages dozens of homes in Mississippi. AP, 6/8/98
- Grasshoppers attack crops, home gardens and pastures in Texas. Presswire, 6/8/98
- Drought plagues Malaysia's water supply. AP, 6/12/98
- Government rescue workers lit funeral pyres for the 655 victims of a cyclone that hit India's western coast. AP, 6/12/98
- Rescue workers found 97 corpses on an island off western India, raising the death toll to 931. AP, 6/17/98
- Tornadoes touched down from Michigan to Kansas to New England, killing one person, injuring others, uprooting trees and damaging homes. Reuters, 6/17/98
- Over 50,000 people have been made homeless and 15 people have died in floods which are sweeping through Russia's Siberian republic of Yakutia. InterPress, 6/17/98
- Floods and landslides have killed 46 people in southern China, bringing the nationwide death toll from the annual flood season to around 350. Reuters, 6/17/98
- Health workers tried to prevent cholera and malaria from spreading among survivors of the cyclone ravaged area of western India, where the death toll reached 1,000. AP 6/17/98
- More than 5 million people in a central China province are bracing for more flooding after heavy rains devastated the region. Reuters, 6/19/98
- The death toll in a week of storms and flooding in Romania rose to 16, with more rain and hail expected. Reuters, 6/22/98
- Torrential rains have engulfed houses, livestock and cultivated lands in central China, killing 63 people and leaving millions of people trapped in flooded areas. Xinhua. 6/22/98
- China copes with floods: Flooding kills 212 people and causes millions in economic losses as crops are destroyed. Reuters, 6/26/98
- More than 100 hospitalized as heat wave sweeps through Athens. AP, 6/26/98
- The first hurricane of the 1998 season churns hundreds of miles off Mexico's pacific coast, with winds of 115 mph and gusts over 132mph. AP, 6/26/98
- Flash floods and landslides triggered by heavy rains kill 23 in Nepal. Reuters, 6/29/98
- Severe thunderstorms flooded parts of seven states, requiring helicopter rescues. The extreme weather caused a train to derail, killing 5 people. AP, 6/29/98
- Rescue crews in boats went door to door taking people to dry ground, after thousands in West Virginia were cut off by flooding. At least 20 people were dead or missing after a weekend of storms. MSNBC, 6/29/98
- Landslides and Hailstorms kill 22 people in Eastern and Central China. AP, 6/30/98
- Floods in Romania kill 31 and damage to crops, homes and roads is estimated at \$150 million. Reuters, 7/2/98
- Thunderstorms and tornadoes swept through the Midwest from Nebraska to Indiana after three days of blazing heat and storms killed at least 20 people. Reuters, 7/2/98
- Hundreds of homes near the Kennedy Space Center were evacuated as firefighters battled new blazes in Florida's month-long fight against drought-induced brush fires. Reuters 7/2/98
- Rain and hail storms and drought could cause the former Soviet republic to lose up to 2.5 million tonnes from this year's planned 35 million tonne harvest. Reuters, 7/3/98
- A La Nina weather pattern, the counterpart to the devastating El Nino of last year, might be forming in the Pacific. Reuters, 7/3/98
- Drought ruins 20% of crops in central Russia. AP, 7/3/98
- White House declares disaster in Maine and New Hampshire after severe thunderstorms and flooding. State and local recovery efforts ordered. U.S. Newswire, 7/3/98
- Five days of heavy rain and flooding in Bangladesh kills 24 people, and leaves 400,00 people homeless. Reuters, 7/9/98
- La Nina has appeared sooner than expected and looks sets to further disrupt global climate patterns. La Nina is characterized by abnormally cold ocean conditions in the eastern pacific. Reuters, 7/10/98
- Torrential rain and flooding since late June has killed 170 people in Southwest China. Property losses were estimated at 2.5 billion yuan. Xianhua News, 7/10/98
- Due to effects of El Nino, a food shortage threatens 38 countries. Xinhua News, 7/10/98
- Record heat wave in Texas is killing people and the state's crops. 21 people have died heat-related deaths. Temperatures hover near 112. Losses of cotton crops could exceed \$500 million. MSNBC, 7/13/98

- Flood kills 234 people in two Chinese provinces. The death toll in this year's deadly annual flood season may exceed 650. AP, 7/13/98
- A severe drought has forced Cuba to adopt emergency measures in eastern communities, where crops have suffered serious damage. AP, 7/13/98
- The heat wave in Texas is now being blamed for 50 deaths and for ruining crops across thousands of acres. Forecasters say no relief is in sight. MSNBC, 7/15/98
- Drought conditions in Georgia have left all but 4 counties as disaster areas. Damage is estimated at \$400 million. This is the driest April-June period for Georgia, Florida, Louisiana, New Mexico and Texas since record keeping began more than 100 years ago. MSNBC, 7/15/98
- Scientist stated that the first 7 months of 1998 are the hottest ever recorded worldwide, dating back 120 years. MSNBC, 7/15/98
- A tidal wave has killed at least 70 people after it hit a village on New Guinea's coast in Jakarta. Kyodo News, 7/20/98
- Bangladesh's worst floods in 10 years kill 111 people. Reuters, 7/28/98
- Flashfloods caused by persistent monsoon rains have killed at least 18 people in Nepal, officials expect that the situation could get worse. Reuters, 7/30/98
- Central Vietnam is suffering from a severe drought. Nearly 55,000 hectares of rice will be damaged by the drought if no rain comes in the next 10 days. Also, 1.1 million local inhabitants are suffering from serious water shortages. Xinhua, 7/31/98
- Heavy rains along the Yangtze lakes in China have risen to the highest levels in four decades, killing thousands and causing at least \$4.8 billion in damage. Reuters, 8/4/98
- At least 43 people died and 52 were missing as a result of floods and landslides in one of the worst natural disasters to hit South Korea. Reuters, 8/4/98
- Floods in eastern Russia leave 6,000 homeless. AP, 8/6/98
- Flooding causes evacuations in Indiana when the Mississippi River spilled over a levee and created the worst flooding to hit Marion in decades. AP, 8/8/98
- Fourteen people dies and 4,000 families were left homeless after floods from heavy rain swept through villages in western Sudan. Reuters, 8/8/98
- A mountain of mud buried a village in northern India, trapping at least 178 villagers who are feared dead. AAP 8/20/98
- Researchers estimate that this year's drought in Texas will cost the state \$2.1 billion in agricultural losses. Cotton and corn crops are devastated after 29 days straight of 100-plus temperatures. AP, 8/21/98
- At least 16 dead in Texas flooding. Officials say heavy rains from a tropical storm have turned rivers into raging torrents that killed 16 people and forced thousands from their homes. Reuters, 8/25/98
- Most of Del Rio was under water today as a tropical storm pounded the city, killing 16 people and leaving 20 or more missing. Reuters, 8/25/98
- The Indian army was called in to help relief efforts for up to 200,00 people marooned by floodwaters in northern India. Reuters, 8/25/98
- Half a million people were ordered to evacuate the Carolina coast as Hurricane Bonnie roared toward the U.S. eastern seaboard with winds up to 100mph. Reuters, 8/26/98
- In the northern Himalayas, boulders and sludge buried the remains of a remote village where 202 people were already feared dead from an earlier landslide. AP 8/27/98
- Typhoon brings heavy rain to central Japan with winds up to 126 kilometers per hour. Nikkei News, 8/28/98
- BP and Statoil, the largest integrated oil companies in Britain and Norway, are going to combine their technical resources to deal with the challenges of climate change. Their goal is to reduce carbon dioxide emissions by 30 percent. M2 Presswire, 8/29/98
- Scientists believe the earth's climate is changing because of the amount of "greenhouse" gases pouring into the atmosphere. They think these gases are causing unnatural climatic warming that could have unimaginable effects on life. MSNBC, 8/29/98
- Hurricane Bonnie claims total \$375 million in property damages in North Carolina and Virginia. Best News, 9/1/98
- Villagers in northern India left homeless by a flood pushed each other in struggle over donated food as the death toll in the worst flood in decades rose to nearly 1,350 people. AP, 9/3/98
- Hurricane Isis slammed into the Mexico mainland, breaking windows, knocking out electricity and littered the streets with downed posts and tree limbs. Winds reached 75mph, but rapidly dissipated into a rainstorm. AP, 9/4/98
- Flood disasters in Mexico kill 25 after six days of continuous rain swollen rivers washed away bridges, cut off towns and swept away houses. Many more people are feared missing. Reuters, 9/9/98
- Floods in northern India kill 162 animals, including 17 endangered Rhinos. AP, 9/10/98
- Schools and businesses closed as torrential rains from Tropical storm Frances flooded freeways and pushed bayous out of their banks and into neighborhoods. Southeast Texas received up to a foot of rain with winds up to 65 mph. MSNBC, 9/11/98
- Floods and heavy rains have destroyed 119 thousand homes and left more than 200,000 people homeless in nine Sudanese states. This is the worst flooding along the Nile River in half a century. AP, 9/11/98
- Tropical Storm Frances continues to sweep cross Texas, creating a virtual moat around Houston, cutting off freeways. AP, 9/14/98
- At least 100 dead in Southern Mexico after flash floods and mudslides. Reuters, 9/14/98
- Four killed and 25 injured as another typhoon sweeps through Japan with winds up to 90mph. Kyodo, 9/17/98

- Death toll from Mexico floods rises above 400 and 849 people are still missing, possibly buried under tons of mud. Reuters, 9/17/98
- One of the strongest hurricanes in recent history bore down on the Caribbean's eastern islands, with howling winds and high seas. Reuters, 9/21/98
- Heavy rains destroyed a portion of a dike protecting residents from mudflows from Mount Pinatubo in the Philippines, endangering more than 100,000 people. AP, 9/21/98
- 9 people died and 2 people are missing after Typhoon number 7 swept across central Japan, leaving a trail of damage and triggering a power outage that left 1.25 million homes without electricity. Kyodo, 9/24/98
- Hurricane Georges destroys Hispaniola after ravaging Puerto Rico and leaving three people dead. It also uprooted trees and forced tourists to flee to shelters in the Dominican Republic. AP, 9/24/98
- A 75-square-mile piece of Antarctica's ice shelf recently broke off; adding to researcher's fears that global warming will eventually melt most of the ice shelf's 58,000 square miles. MSNBC, 9/24/98
- Diarrhea and other water-borne diseases have killed at least 580 people in Bangladesh, raising the death toll from recent floods to more than 1,500. Reuters, 9/30/98
- Hurricane Georges weakened after howling with winds up to 174mph and as much as 20 inches of rain. Thousands of people fled to shelters from Louisiana to Florida. AP 9/30/98
- Heavy rains triggered flooding in northwestern Liberia, forcing more than 5,000 people to leave their homes to escape rising waters. AP, 10/2/98
- Heavy rains sent a 5-foot wall of water down an irrigation canal in the hills of central Mexico, killing 12 people when it washed away homes. AP, 10/2/98
- Mexico's capital is on red alert following deaths, floods, traffic accidents and widespread damage to infrastructure caused by the heaviest prolonged rainfall since 1887. Interpress, 10/5/98
- Floods in the Kansas City area killed at least nine people as a violent storm dropped heavy rain and snow across the United States. Reuters, 10/6/98
- The death toll rises in Haitian town washed away by Hurricane Georges. Searchers found more bodies from tons of gravel deposited by the storm, pushing the death toll to over 150. AP, 10/6/98
- August 1998 was the hottest month on record and the eighth month in a row to set a new average high temperature worldwide. MSNBC, 10/7/98
- Storms in the Kansas City area swept away cars, collapsed a bridge and left seven people dead and two missing while tornadoes in Oklahoma injured at least 13 people. AP, 10/7/98
- Researchers indicate that the Antarctic glacier could melt, causing global sea levels to rise up to 20 feet. MSNBC, 10/7/98
- Three consecutive days of rain are causing problems for the southern cities of Italy. In Bari, Salerno and Palermo, rivers overflowed their banks and floods washed away roads and other facilities. NewsEdge, 10/8/98
- The Dominican Republic government reports more than 1,000 people died as a result of Hurricane Georges. Reuters, 10/8/98
- At least 5,000 people fled their homes when heavy rains caused flash floods near a southern Philippine city. Officials report at least 900 homes near the river were swept away. Floods also destroyed \$395 thousand worth of rice. AP, 10/8/98
- Statistics for damage caused by severe floods in Bangladesh: Xinhua, 10/8/98 Deaths 1,050
Highways and roads 15,000 kilometers
Homes damaged 550,000
Crops damaged 1,565,390 hectares
Estimated economic loss \$3.4 billion
- A landslide hit a remote part of New Guinea, killing 32 people and reportedly burying a church congregation. Unconfirmed reports put the death toll as high as 140. AP, 10/9/98
- Heavy rains caused widespread damage due to flooding and a tornado killed a man near Houston as the death toll from a weekend of severe weather rises to 10. Reuters, 10/19/98
- At least 15 people were feared dead when a glacier slid down a mountainside in the Himalayan region of India. Reuters, 10/19/98
- Nearly 200 fishermen were missing after cyclonic winds lashed coastal areas of India's western states. Reuters, 10/19/98
- Nearly a month after Hurricane Georges struck Haiti; the Caribbean nation's death toll has risen to 213 and is likely to exceed 240. AP, 10/21/98
- Flooding following heavy rain has made 20,000 people homeless in central Africa. Reuters, 10/23/98
- A typhoon sweeps across the Philippines toward Manila, triggering landslides and forcing thousands of people from their homes. AP, 10/23/98
- Extreme weather in the U.S. in the first eight months of this year, phenomenon scientists traced to global warming, resulted in the death of 376 people and economic losses of 1.4 billion dollars. The average number of disaster declarations in the U.S. has increased from 25 per year between 1979 to 1983 to 46.6 per year between 1994 to 1998, representing an 80% increase. NewsEdge, 10/23/98
- The climate center reported that average temperatures in the contiguous United States beat the record heat during the Dust Bowl years of the 1930s. September had an average temperature of 69.1 degrees Fahrenheit, surpassing the previous record of 68.4 degrees, set in September 1931. AP, 10/23/98
- Floods have ravaged south and central Texas since the weekend, when as much as 2 feet of rain fell, and damage has

- been put at \$400 million. So far, 22 people have died in their cars at flooded roads and crossings. Reuters, 10/23/98
- Mudslides buried several communities near Nicaragua's northwestern border, killing 5 people and injuring 3 others, pushing the death toll from one of the strongest hurricanes to hit the Caribbean to at least 4050. MSNBC, 11/1/98
 - The Kyoto Protocol continues to face opposition from major American energy producers and consumers who say it will be too expensive. The Clinton administration agreed to cut the U.S. emissions over the next 10 years. NY Times, 11/2/98
 - The Pew Center on Global Climate Change announced that CH2m Hill and DuPont are joining the Pew Center's growing efforts to address the problem of climate change. NewsEdge, 11/2/98
 - Officials of Nicaragua and Honduras said they fear that more than 7,000 people died in flooding and mudslides caused by Hurricane Mitch. More than 1 million were displaced from their homes and 70 % of the crops have been destroyed. NBC, 11/3/98
 - Hurricane Mitch said to be one of the deadliest Atlantic hurricanes ever. The death toll continues to rise to over 7,000 storm victims. On Tuesday Mitch destroyed a tropical island off Honduras. Reuters, 11/4/98
 - Typhoon Babs is one of the strongest ever to hit the Philippines. Damage estimates are at 1 billion pesos. Xinhua, 11/4/98
 - Baden-Baden, Germany saw its worst flooding in decades as heavy rains hit the area. The Oos river is finally starting to recede. AP, 11/4/98
 - A new poll indicates that many Americans favor increasing federal government purchases of renewable energy such as solar and wind to help reduce pollution and save money. The government currently spends \$8 billion per year for all of its energy needs. PR NewsWire, 11/4/98
 - Storms and tornadoes destroy 85 percent of the trees in Omaha, where Arbor Day was established in the 19th century. NYTimes, 11/5/98
 - Heavy rains and strong winds from typhoon Babs caused massive destruction of major national highways and vital road links in the Philippines. Xinh, 11/5/98
 - Hurricane Mitch's rising death toll could make it one of the deadliest Atlantic Hurricanes on record. The latest report confirmed 1,300 deaths. Reuters, 11/5/98
 - Officials in Honduras report an estimated 7,000 dead, 1 million driven from their homes, most highways and bridges damaged, 70 percent of the crops destroyed. AP, 11/5/98
 - Varying official reports of 1,800 to 2,400 killed, most at the Casitas volcano in Nicaragua. Damage to 500,000 homes, many cities cut off and widespread crop damage. AP, 11/5/98
 - Massive flooding in El Salvador leaves at least 239 dead, 135 missing, 50,000 forced from their homes and about 60 percent of the roads need repairs. There is also widespread crop damage. AP, 11/5/98
 - Flooding in Guatemala causes mudslides, killing 194, including 11 Americans in a plane crash. At least 77,900 people have been evacuated, 28 bridges destroyed and 31 highways blocked. AP, 11/5/98
 - The rain-swollen Walnut River, east of the Oklahoma state line, broke through a levee inundating about 300 homes. AP, 11/5/98
 - Thousands of people had to be evacuated from Indonesia's Central Java province as floods hit the two regions in the wake of incessant heavy rains for two days. AP 11/6/98
 - With winter approaching, Russia is locked in a primordial struggle to feed its citizens and prevent them from freezing. Their disastrous harvest, the worst in 45 years is the problem. NY Times, 11/8/98
 - About 30,000 people were evacuated from their settlements in Kiev, Ukraine. No fatalities were reported. Floods and landslides have also damaged roads and railroad in the area. AP, 11/9/98
 - In Romania, police evacuated 6,000 people from nine villages after the Tisa River overflowed following days of heavy rains. Many people were forced to spend the night outdoors in the pouring rain. AP, 11/9/98
 - Computer models suggest global warming might make hurricanes and typhoons 5-12 percent stronger. MSNBC, 11/9/98
 - Survivors of Central America's worst disaster in memory pleaded for help as anger grows over the slow pace of relief in the devastated countryside. Doctors rationed out slim medical supplies to the sick and injured refugees. AP, 11/9/98
 - Tens of thousands of Bangladesh villagers are suffering and dying of mass poisoning from arsenic in the water supply. The ghastly decay affects their hands and feet. Arsenic in the drinking water poses the highest risk of cancer. NY Times, 11/12/98
 - The first big snowstorm of the season swept across the northern Plains today, shutting down a major highway, and sending hundreds of cars skidding into ditches. AP, 11/12/98
 - The most recent projections by an international panel of experts predict that global temperatures could rise by an average of 6.3 degrees Fahrenheit. Such increases in sea level, to the northward spread of malaria into what are now temperate zones. News Edge, 11/12/98
 - Hurricane Mitch destroys dozens of schools in Honduras. School has now been canceled and teachers are helping to distribute medicine and clean the streets. It will cost at least \$35 million to rebuild the schools. AP, 11/12/98
 - The administration signed the international agreement to fight global warming. This reinforces their commitment to reduce emissions of industrial gases from burning coal, oil, wood and natural gas. To fulfill this agreement, the U.S. would have to cut its emissions by about 7 percent from the 1990 level over the next 10 to 15 years. NY Times, 11/12/98
 - The cost to American's to reduce greenhouse-gas emissions under the Kyoto climate accord could be as high as 53 to 86 percent higher on gas and electricity prices. This is a worst case scenario according to a federal report. AP, 11/12/98
 - Delegates from around the world have been conferring on the status of the Kyoto climate change treaty. Nearly 160

nations had agreed on what greenhouse gases to reduce, but left unanswered how to do it. They also agreed the scientific evidence for global warming was significant. AP, 11/12/98

- Negotiators in Buenos Aires are trying to work out details for decreasing emissions of heat-trapping greenhouse gases, a new report has shown that developing countries are already taking necessary action. News Edge, 11/12/98

- Japanese delegates set the year 2000 as the deadline for creating a global mechanism to police efforts to reduce emissions of greenhouse gases that cause global warming and to hold accountable the nations that fail to comply. LA Times, 11/15/98

- Flooding in the Carpathian Mountains of western Ukraine killed 12 people and left thousands homeless. AP, 11/16/98

- Residents of Arecibo, Puerto Rico and two government agencies are preparing to go to court as the residents seek compensation for the devastation of their property caused by Hurricane Georges. Six people were killed and, thousands were left homeless and damage to property is estimated at billions of dollars. AP, 11/16/98

- A cyclone with winds of 110 mph hit a coastal town of southeastern India causing extensive damage to property. Seventy-four villages were evacuated. AP, 11/17/98

- Two weeks after the storm killed 10,000 people in its rampage through Central America, Honduras begins the most difficult task of rebuilding the 94 bridges that were destroyed. AP, 11/17/98

- A tropical storm hit Vietnam's central coastal provinces causing huge losses in property and lives. Many highway sections and roads were flooded, and 260 bridges were swept away, causing traffic jams. Approximately 4100 homes were flooded and over 150 completely destroyed. Xinhua, 11/19/98

- Floods from monsoon rains forced more than 7,000 people from their homes in Malaysia. Annual monsoon rains have been heavier than usual due to La Nina. Reuters, 11/19/98

- U.S. environmental groups are urging President Clinton to adopt a national plan to reduce greenhouse gas emissions, which have been blamed for global warming. Inter Press, 11/19/98

- Hurricane Mitch has killed an estimated 11,000 people in Central America, caused billion of dollars of damage and crippled the economies of Honduras and Nicaragua. In Nicaragua, health officials are battling outbreaks of leptospirosis, a disease that domestic animals spreads to humans under conditions like those left by Mitch. There are 104 cases and 7 confirmed deaths. Reuters, 11/20/98

- Deregulation forces electric utilities to develop "green marketing" strategies to sell their power and gain market share. Green electricity represents the fastest growing consumer market in the U.S. As the green market grows, it will force the construction of renewable energy plants. News Edge, 11/25/98

- Eight of the ten warmest years in recorded history have been in the last decade. The first nine months of 1998 rank as the hottest months on record. This strange weather is bound to increase during the next few years, as global warming causes more frequent and severe storms and drought. As the climate changes, the population will grow, and the effects will overwhelm the financial system. The Future in Plain Sight, Simon & Schuster, 1988

- A blizzard hit Romania last weekend, killing 60 people and seriously injuring more than 200. Romania's only seaport was closed due to the fast moving blizzard. News Edge, 11/25/98

- The Red Cross has been forced to spend more on disaster relief in 1998 than any previous year due to the amount of damage caused by Hurricanes Georges, Bonnie and Tropical storms. They have responded to 239 disasters affecting 300,000 families in 41 states. The President of the Red Cross said they have spent more than \$104 million. AP, 11/25/98

- Early arctic cold waves and blizzards are reported to have killed at least 70 people across Europe. Temperatures in central and eastern Poland dipped to four below zero. The lowest reported temperature was 15 below in northeast Poland. AP, 11/25/98

- Tropical Storm Elvis has caused flooding in central Vietnam, killing 151 people. Until mid-August, the area was suffering from its worst drought in at least half a century. AP, 11/27/98

- The 1998 Atlantic Hurricane season got off to a slow start, but turned out to be the most catastrophic nightmare on record. Former President Carter said it may take 10 to 15 years to fully recover from the damage from the constant disasters. Officials state that this season's hurricanes have been the most destructive ever in terms of loss of life and property damage. Reuters, 11/28/98

- Heavy rains caused a mudslide that buried 30 vehicles in a small town in St. Kitts. No deaths were reported. AP, 11/30/98

- Two severe tropical storms battered central Vietnam killing 203 people. Reuters, 11/30/98

- Three successive typhoons left 267 people dead, 92 injured and 16 still missing in central Vietnam. Kyodo, 12/2/98

- Professors at Johns Hopkins School of Public Health have found that "longer term increased rates of hypertension, heart disease, arthritis and diabetes following an earthquake may be related to the intensity of exposure to disaster related damage and losses." NewsEdge, 12/2/98

- Officials in Russia's Pacific port city of Vladivostok declared a state of emergency because half of the buildings in the city are without heat and temperatures have dropped below freezing. If the situation does not improve soon, hospitals will have to be evacuated. AP, 12/8/98

- Natural disasters have killed 403 people and caused 1.5 billion worth of damage in South Korea. Another 237 people were wounded and 180,000 displaced by catastrophes, such as floods and typhoons. News Edge, 12/8/98

- Consumers are seeing new labels on products describing the variety of resources used to generate California's electricity, such as natural gas, coal, large hydroelectric projects and nuclear plants. News Edge, 12/9/98

- China has relocated more than 49,000 people to make way for the giant Three Gorges dam project. The project is scheduled to be complete in 2009 at a cost of \$4.8 billion. NY Times, 12/9/98

- The cost of natural disasters is rising, both in terms of financial costs and human lives, despite improvements in risk forecasting. The U.S. Department of Commerce says the disaster costs are doubling or tripling every 10 years. AP,

12/11/98

- Weather turns weird in Phoenix and Las Vegas and record cold and even snow has been happening in the desert.

MSNBC, 12/12/98

- A recent cold snap claims the lives of 100 people in Poland. MSNBC, 12/12/98

- A new statistical analysis shows more evidence that the earth is getting warmer and that humans are to blame. From 1900-1940 and from 1970 to present, temperatures have been rapidly increasing. Discover Magazine, 12/12/98

- The latest rains brought more flooding to Hanoi, Vietnam, killing 22 people. Tropical storms Gil and Faith hit the area on the same day dumping 25 inches of rain and submerged large areas of land. AP, 12/16/98

- Port-Au-Prince, Haiti has the worst case of deforestation in the Western Hemisphere because of the primary use of charcoal as fuel. Haiti's forests are disappearing at a rate of 15 to 20 million trees per year. Every rainfall now sends mud and debris onto roads and into the ocean. Erosion and lack of ground coverage is turning the region into a desert. Reuters, 12/17/98

- Flooding and other natural disasters in 1998 have seriously damaged and destroyed tens of thousand of school facilities, from China to Central America. According to UNICEF, China was hit the hardest with more than 9 million children being affected by the disasters. News, 12/18/98

- In February of 1999, top automotive executives will meet with fuel providers, fuel technology developers and environmentalists to discuss "The Road to Fuel Cell Vehicles." NewsEdge, 12/18/98

- Common wealth Energy Corporation announced today that it has launched its Green Smart program that will deliver environmental friendly power to consumers throughout the state. Green Power is electricity produced from renewable sources such as wind, solar geothermal and hydro. These sources greatly reduce pollution. News Edge, 12/18/98

- A study reveals that the Great Plains could see even worse droughts over the next century. Two human factors could make the Great Plains even more susceptible to a severe drought in the future. These are land-use practices and global warming. AP, 12/22/98

- An Atlantic cyclone brought fierce winds and heavy snowfall to Murmansk. Traffic was brought to a standstill because of zero visibility and many houses were damaged. News Edge, 12/23/98

- Toyota and GM are discussing joint development of advanced vehicle technologies such as electric vehicles and fuel cells. News Edge, 12/23/98

- Primary Energy and Amoco announced plans to negotiate an agreement to develop, engineer and construct a natural gas-fired cogeneration facility at Amoco's Whiting Refinery. News Edge, 12/23/98

- The South finally gets light and heat turned back on after ice storm snapped power lines across the country. About 180,000 residences and businesses were blacked out and shivering over Christmas. La Nina being blamed for arctic cold snap. AP, 12/27/98

- Planned development and expansion of new natural gas pipeline could add as much as 16 billion cubic feet per day capacity to the national transmission network over the next two years. Supporting this expansion is the growing demand for natural gas to generate electricity. PressWire, 12/28/98

- 11 people have died in the last 24 hours due to the cold weather in Guatemala. The temperature has dropped to minus five centigrade. Xinhua, 12/28/98

- An ice storm coated roads and runways and caused traffic problems across the south, caused by arctic cold and moisture from the Gulf of Mexico. The state of Tennessee was under an ice storm warning and people were urged to stay home. Reuters, 12/28/98

- Farmers in southern California fought to protect their orange and lemon groves from the frost. As much as 15% of the state's crops were severely damaged. Reuters, 12/28/98

- Oregon and Washington cope with floods and San Francisco is socked in with heavy fog. It stretched from Marin County all the way to Santa Barbara. AP, 12/29/98

- In Virginia, about 42,000 people still had no lights or heat, 2 elderly people were found dead of hypothermia after they lost their electricity and heat. The damage will cost at least \$13 million. AP, 12/29/98

- In the past 8 years, California has experienced a series of emergencies: fires, earthquakes, severe winter weather and floods. Damages have exceeded \$50 billion, and claimed 237 lives. In 1995, floods resulted in every county, declaring a state of emergency in each one. 1997 floods required the largest evacuations in the state's history. PRNewsWire, 12/31/9