Whitewashing the Whirlwind

Understatements of Chernobyl's radioactive fallout dispersal

"When the Chernobyl reactor melted down, the resulting steam explosion poured atomic radiation equal to 100 Hiroshima bombs into the air, much of which settled on surrounding regions of Ukraine, Russia, and Belarus."
— *Christian Science Monitor*, August 11, 2010

"… the Chernobyl nuclear power plant's reactor No.4 exploded during a pre-dawn test on April 26, 1986, spewing radioactive clouds over much of western Soviet Union and Northern Europe."
— Associated Press, August 12, 2010

"Government officials said [August 11] that at least six wildfires hit the Bryansk region of Russia this week, the area hardest hit by the Chernobyl disaster in 1986. The nuclear catastrophe left the soil and forested areas contaminated, and there are fears the wildfires could fill the air with radioactive particles."
— *New York Daily News*, August 11, 2010

"The 1986 reactor explosion sent a cloud of radiation over much of Europe and severe health problems persist."
— Associated Press, April 26, 2010

"The disaster occurred on April 26, 1986 at 1:23 a.m., when one of the reactors exploded — contaminating the Soviet states of Ukraine, Russia and Belarus with the fallout also spreading to other parts of Europe."
— "Ukraine marks Chernobyl's 23rd anniversary," Agence France-Presse, Kiev, April 26, 2009

"Radioactive material continued to be released for another 10 days, spreading across Europe."
— Peter Finn, "Chernobyl's Harm Was Far Less Than Predicted, U.N. Report Says," *Washington Post*, Sept. 6, 2005

"Winds carried fallout into Belarus, as well as Russia, Poland, the Baltic region and Scandinavia."
— *Sunday Patriot News* (Harrison, Pennsylvania), Feb. 29, 2004

Chernobyl reactor "No. 4 exploded in 1986, spewing radiation over much of Europe."
— "Last Working Chernobyl Reactor is Restarted," Associated Press, *New York Times*, Nov. 27, 1999

"The blast killed at least 32 people and sent a deadly cloud of radiation across large sections of Russia and Europe."
— Harry Dumply, Associated Press, June 1, 1998

"Chernobyl's reactor No. 4 exploded during a test April 26, 1986 … sending a deadly cloud of radiation across large sections of Russia and Europe." **— Milwaukee *Journal-Sentinel*, April 27, 1998**

"Ukraine and parts of Russia were hard hit by radiation that spewed into the atmosphere." **—Appleton, WI *Post Crescent*, April 26, 1998**

"A soviet-designed reactor exploded April 26, 1986, spreading a poisonous radioactive cloud north of Kiev.
— Reuters, *New York Times*, April 23, 1998

"During those days, with the world unaware, a plume of toxic gases and dust, laced with plutonium, iodine 131, strontium-90 and cesium-137, some of the most deadly elements in the universe, spread across the western Soviet Union, Eastern Europe and Scandinavia."
— "Chernobyl Reconsidered," *New York Times*, editorial notebook, April 26, 1996

"When an explosion at the Chernobyl nuclear power station sent a radioactive cloud across Ukraine, Russia and parts of Europe on April 26, 1996, the disaster turned those nations into laboratories and the populations into guinea pigs." **— Carol Williams, *L. A. Times* and *St. Paul Pioneer Press*, April 27, 1995**

"The world's worst nuclear disaster spewed tons of radioactive material over more than 10,000 square miles. Traces were found as far away as Scotland and Wales."
— *Milwaukee Journal*, AP, March 27, 1995

"Radiation from the plant spread over a wide area surrounding the plant." **— "196 Chernobyl Children Go To Israel," Associated Press, *St. Louis Post Dispatch*, August 5, 1990**

"As radioactive poisons spread into Western Europe, it is time to ask some questions of our own nuclear power program."
— Arizona governor Bruce Babbitt, "Chernobyl disaster offers lesson to U.S.," commentary, Minneapolis *Star-Tribune*, May 2, 1986

"An invisible cloud of radioactivity spewed over the western Soviet Union and Europe, and has worked its way gradually around the world." **— *St. Paul Pioneer Press*, May 14, 1986**

Actual dispersal

"Throughout the Northern Hemisphere radioactivity covered most living spaces and became a source of potential harm for all living things. … Chernobyl fallout covered the entire Northern Hemisphere."
— Alexey V. Yablokov, et al, *Chernobyl: Consequences of the Catastrophe for People and the Environment*, Annals of the New York Academy of Sciences, Vol. 1181, Blackwell Publishing, Boston, 2009, pp. vii, & 1

"From 1988 there was a marked increase in papillary thyroid cancer incidence in women, which may partly be explained by Chernobyl radiation. In Connecticut there were two separate fallouts of Chernobyl radionuclides (in the middle of May and the second half of June, 1986) resulting in a 7- to 28-fold increased level of I-131 in milk. The rate of thyroid cancer among Connecticut children under the age of 15 years rose sharply (from 0.16 to 0.31 per 100,000) from 1985-1989 to 1990-1992. During the same period, rates of thyroid cancer for all age groups jumped to 23 percent (from 3.46 to 4.29 per 100,000), after 10 previous years without change.
— Alexey V. Yablokov, et al, *Chernobyl: Consequences of the Catastrophe for People and the Environment*, Annals of the New York Academy of Sciences, Vol. 1181, Blackwell Publishing, Boston, 2009, p. 174

"The releases of radioactive materials were such that contamination of the ground was found to some extent in every country in the Northern Hemisphere."
— "The Chernobyl Disaster: Cancer following the Accident at the Chernobyl Nuclear Power Plant," *Oxford Journals*, Medicine, Epidemiologic Reviews, Vol. 27, Issue 1, pp. 56-66, March 30, 2005

Chernobyl "… was the largest accidental release of radioactive materials to the environment and caused contamination in most countries in the northern hemisphere."
— Chris Busby, Ed., *2003 Recommendations of the European Committee on Radiation Risk - Health Effects of Ionizing Radiation Exposure at Low Doses for Radiation Protections Purposes*, Green Audit, 2003, p. 109

"There were measurable amounts throughout the Northern Hemisphere. For example, an increase of 6,574 picocuries per liter of rainwater recorded on May 12 in Washington State was more than 140 times the background level measured immediately before the Chernobyl cloud reached the USA."
— J. Donald Hughes, "Bryansk in the Aftermath of Chernobyl," *An Environmental History of the World*, Routledge, London, 2002

"Although the releases were considerably reduced on 5 and 6 May (days 9 and 10 after the accident), continuing low-level releases occurred in the following week and for up to 40 days after the accident, particularly on 15 and 16 May, attributable to continuing outbreaks of fires or to hot areas in the reactor. … Radioactive contamination of the ground was found to some extent in practically every country of the northern hemisphere."
— French Nuclear Energy Agency, "2002 Update of Chernobyl Ten Years On," Chap. II, "The release, dispersion and deposition of radionuclides," April 2002, p. 3 (http://www.oecd-nea.org/rp/chernobyl/c02.html)

"Radiation contamination was detectable over the entire Northern Hemisphere." **— *Bulletin of the Atomic Scientists*, May 1996, p. 38**

"Plutonium and other dangerous particles re-leased in the accident ... have now found their way to Ukraine's major waterways. 'We have billions of tons of radiated earth that can't be dumped anywhere, and which will pour plutonium, cesium and strontium into Europe for decades,' [the chief consultant to the Ukrainian parliament's Chernobyl commission] said." **— Associated Press, April 4, 1996**

"… this was a prolonged release, continuing at dangerous levels from April 26 until early that October, Medvedev says." ("It was only in October, about six months after the accident … that it stopped contaminating the environment." — Zhores Medvedev, *The Legacy of Chernobyl*, Norton, 1990, p. 80)
— Howard Goldfinger, "Under the Chernobyl cloud," the *Milwaukee Journal*, July 23, 1990

"…a giant plume containing millions of curies of deadly radioactive aerosol … within a few days had reached nearly every country in the northern hemisphere."
— Zhores Medvedev, *The Legacy of Chernobyl*, Norton, New York, 1990, p. ix

"Chernobyl, once home to 10,000 people, was evacuated in April 1986 after a fire at the power plant with the same name spewed radiation worldwide."
— Associated Press, "Soviets raze town of Chernobyl," *Duluth News Tribune*, October 9, 1988

"Although it was the countries of Europe that were most affected by the Chernobyl accident, the radioactive materials became dispersed throughout the northern hemisphere…"
— **UNSCEAR, United Nations Scientific Committee on the Effects of Atomic Radiation,** "**Sources, Effects and Risks of Ionizing Radiation: 1988 Report to the General Assembly," New York, UN sales publication no. E.88.IX.7, 1988, p. 316, par. 50**

"About 800 tons of clay and sand were dropped as well. The core was then insulated, and there was no natural circulation Decay heat caused the core temperature to increase, and the amount of radioactivity released also increased. The rise in radionuclide release from days 6 through 9 involved particularly volatile species. This rise provides an explanation for some reports that perhaps a second accident had occurred, because radionuclide measurements outside the Soviet Union suddenly increased."
— *Science*, Vol. 236, May 8, 1987, p. 676

"For the second time since the [Chernobyl disaster] last month, a slightly elevated level of radioactive iodine has been found in a Minnesota milk sample, state health officials said. … The amount of iodine-131 in the air also increased slightly [May 19] after several days of decline, health officials said."
— **"Slight rise in radioactivity found again in state milk," *Duluth News-Tribune & Herald*, May 22, 1986**

"… low levels of radiation have been discovered in a sample of raw milk from a Minnesota dairy, state health officials said [May 16]. Since radiation from the Chernobyl nuclear accident began floating over Minnesota last week …"
— Kate Parry, "Low radiation dose found in area milk," Minneapolis *Star-Tribune*, May 17, 1986

"In Minnesota, meanwhile, tiny amounts of radioactive material thought to have come from the Soviet disaster have been found in a milk sample, the state Health Department said Friday [May 16, 1986]. … The amount of radioactive gas in Minnesota's air began to decline after two days of increasing levels, the [State Health] department said. Both the air and milk levels were very small and not believed to be harmful, the department said."
— "Radiation kills Chernobyl firemen," AP, *St. Paul Pioneer Press & Dispatch*, May 17, 1986

"Airborne radioactivity from the Chernobyl nuclear accident is now so widespread that it is likely to fall to the ground wherever it rains in the United States, the Environmental Protection Agency said."
— The Associated Press, *Duluth Herald*, May 15, 1986

"State authorities in Oregon have warned residents dependent solely on rainwater for drinking that they should arrange other supplies for the time being." **— The Associated Press, May 15, 1986**

"An invisible cloud of radioactivity spewed over the Soviet Union and Europe, and has worked its way gradually around the world."
— The Associated Press, May 14, 1986

Time magazine reported that the burning graphite reactor core blazed white-hot at up to 5000°F, twice the temperature of molten steel. "No one knows how to stop it. It could take weeks to burn itself out."
— *Time*, May 12, 1986, p. 39-40

"On April 26, 1986, two violent explosions destroyed the core of unit 4 of the power plant and the roof of the building, resulting in a series of fires and in massive releases of radioactive materials into the atmosphere. The releases consisted of gases, aerosols, and finely fragmented nuclear fuel particles. From the [long-term] radiologic point of view, iodine-131 and cesium-137 are the most important radionuclides to consider. During the 10 days of massive releases, the wind direction changed frequently, so that all areas surrounding the reactor received some fallout at one time or another. In addition, rainfall occurred in an irregular pattern, causing varying degrees of deposition. The releases of radioactive materials were such that contamination of the ground was found to some extent in every country in the Northern Hemisphere."
— Maureen Hatch, et al, "The Chernobyl Disaster: Cancer following the Accident at the Chernobyl Nuclear Power Plant," *Oxford Journals*, Oxford University Press, Vol. 27, Issue 1, March 30, 2005, pp. 56-66

Nation-wide warnings of Chernobyl's fallout are nearly forgotten, but a May 14, 1986, U.S. Environmental Protection Agency bulletin said, "airborne radioactivity from the Chernobyl nuclear accident is now so widespread that it is likely to fall to the ground wherever it rains in the United States."
— tempest/cyclone/typhoon/downpour/ cloudburst/torrent/terror