

"NUCLEAR SUMMER"

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On Saturday, 26 April 1986, at 0623 GMT the Soviet Union's Chernobyl Nuclear Power Plant exploded and burned, spewing ionized radioactive debris into the atmosphere along with steam and hot air.

On 2 May 1986, at approximately 1200 GMT, a DMSP visual (.4–1.1 microns) photo (Fig. 1) with resolution of near 0.3 nm was taken of the Soviet Union. Downstream from Chernobyl was a clearing swath thru the cumulus cloud lines (Brandli, 2) aligned to the gradient level flow. This melting of the clouds is similar to a distrail (Corfidi & Brandli, 3). Fig. 2 shows the surface weather map about the same time as the DMSP photo.

The DMSP photo is a one-of-a-kind which shows weather and environmental implications of the worst nuclear disaster of all time.

NOTES AND REFERENCES

1. Henry W. Brandli is Chairman, NWA Satellite Meteorology Committee.
2. Brandli, H.W., 1974: "Cumulus Cloud Lines or Streets Near the Equator" *Bull. Amer. Meteor. Soc.* Vol. 5 No. 4 pp. 315–317.
3. Corfidi, S. & Brandli, H.W., 1986: "GOES Views Aircraft Distrails," *Nat. Wea. Dig.* Vol 2, No. 2 pp. 37–39.

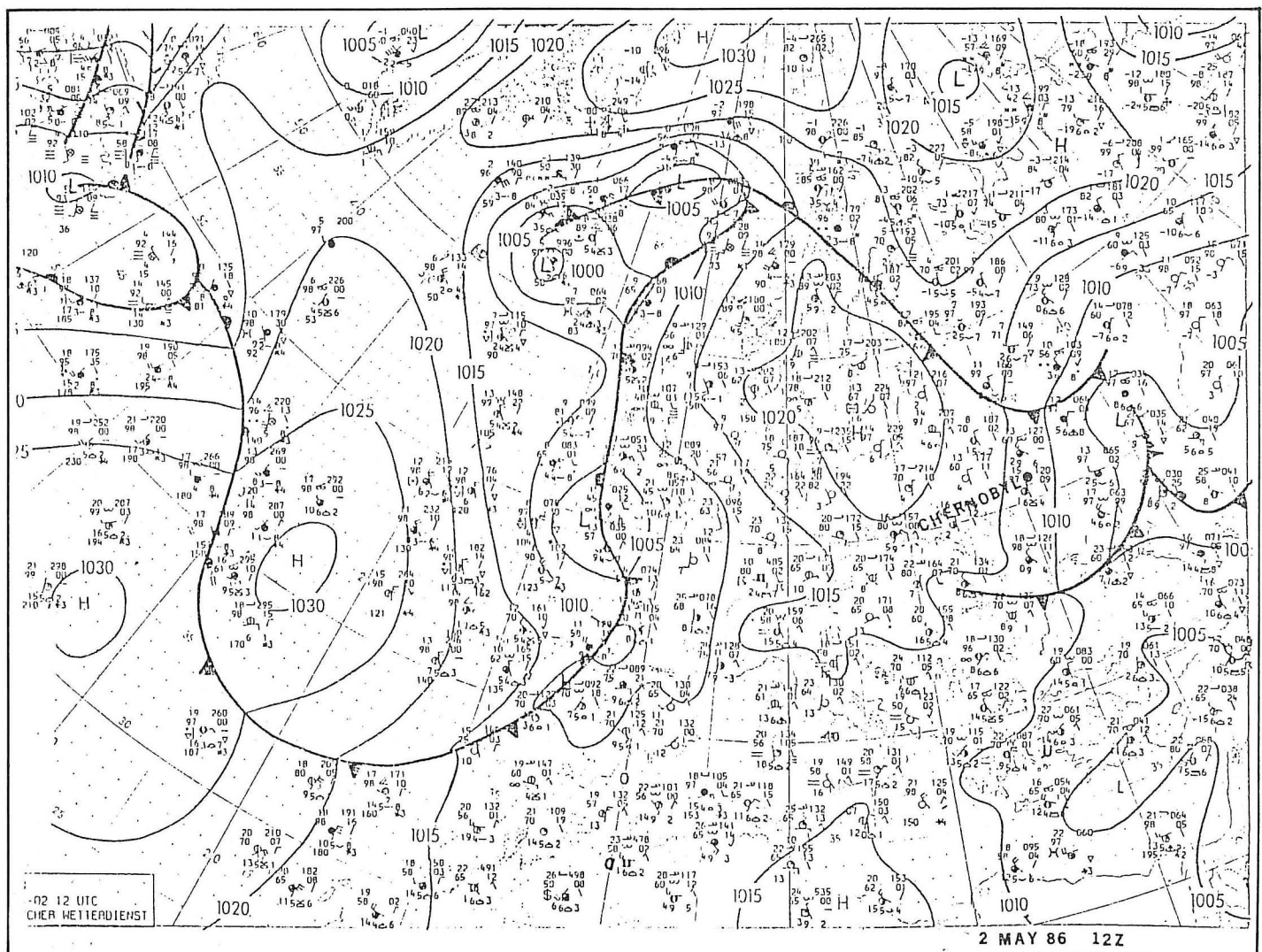


Fig. 2. Surface weather chart 1200 GMT 2 May 1986.

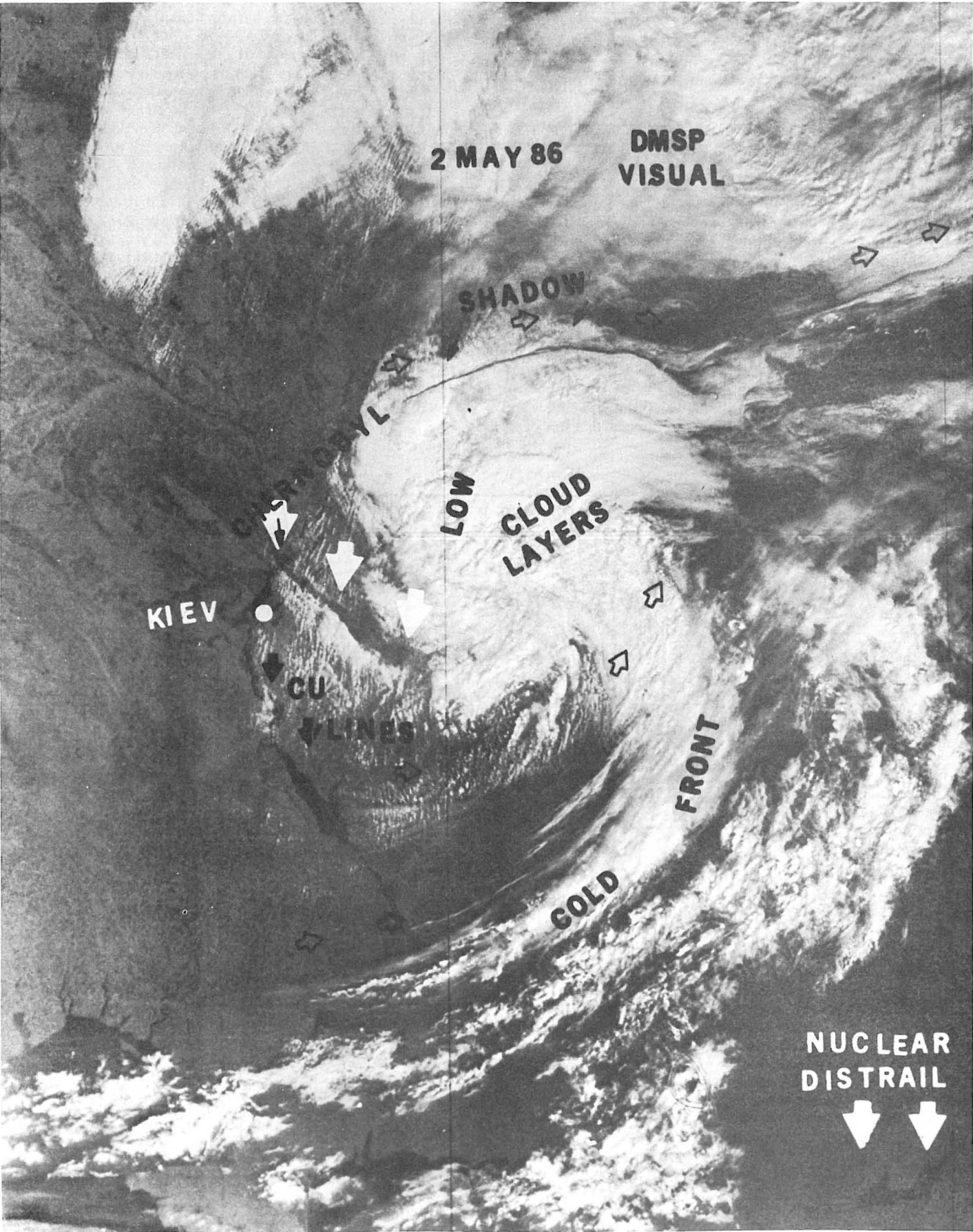


Fig. 1. DMSP visual imagery 1200 GMT 2 May 1986.