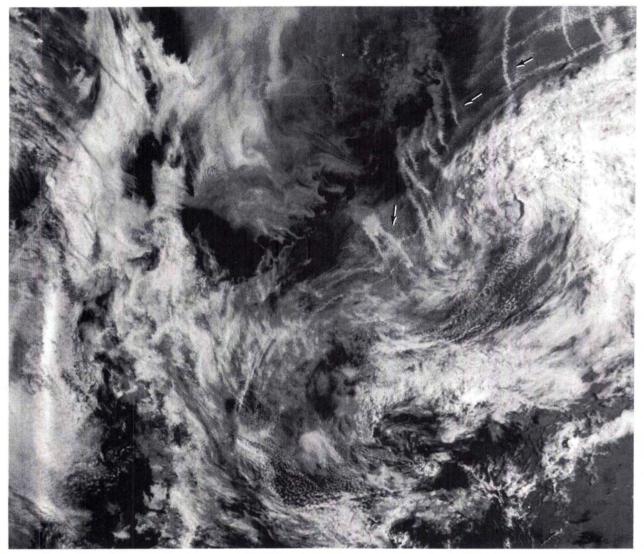


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SHIP "TRACKS" DETECTED ON AVHRR IMAGERY



AVHRR imagery often shows geophysical events related to manmade activities. This visible band image was taken over the Kurile Islands, USSR, on 12 July 1989 at 2219 GMT. Just east of the Kurile Islands are several "filament-like" features extending over large distances (some of them pointed out by the arrows on the image).

Similar features have been seen in AVHRR imagery of the ocean areas west of California and were created by ship exhaust (Coakley *et al.*, 1987). The exhaust serves as a source of cloud condensation nuclei and the result is a "cloud track" marking a ship's passage. In the Kurile Island image, the cloud tracks may be a result of Soviet naval exercises as one of their main naval ports, Petropavlovsk, is located just north of this area on the Kamchatcka peninsula. Coakley *et al.* state cloud tracks from ships may occur in 5 to 10% of all AVHRR orbital passes. This image was provided by the *Polar Orbiter Newsletter*, a biweekly newsletter listing AVHRR images of interest to the meteorologic, oceanographic, and land sciences communities. For further information, contact Will Gould, *Polar Orbiter Newsletter*, PO Box 8313, Temple Hills, MD 29748, 301-257-3923.

## REFERENCES

*Coakley, J.A., R.L. Bernstein,* and *P.A. Durkee,* 1987. Effect of Ship-Stack Effluents on Cloud Reflectivity. *Science,* Vol. 237, No. 4818, pp. 1020-1022.