

C19243F4

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
WASHINGTON, D. C. 20546



FOR RELEASE: March 29, 1974 P.M.

PHOTO NO. 74-H-220
74-HC-143

This photograph is a government publication--not subject to copy-
right.

x-8.979

It may not be used to state or imply the endorsement by NASA or
by any NASA employee of a commercial product, process or service, or
used in any other manner that might mislead. Accordingly, it is re-
commended that if this photograph is used in advertisements and other co-
mmercial publications, the following statement be printed in the same size
font as this photograph: "Photograph by NASA." 174
74

Science: Astronomy

Esta fotografía del cometa Kohoutek fue obtenida por la cámara del Sky-
lab-3 el 25 de diciembre de 1973; es la fotografía más próxima que se ha he-
cho del cometa. C19243F4

JOHNSON SPACE CENTER, HOUSTON, TEXAS

SKYLAB 4 S201 PHOTO -- The hydrogen halo of the Comet Kohoutek was
photographed by the S201 Far-UV Camera on EVA, December 25, 1973,
from Skylab 4, above the Earth's atmosphere. This derivation from
the original photograph was enlarged by Robert Goodding at the
Johnson Space Center on Agfa contour film in four steps, then colored
to show the four levels of brightness. The sky (density 0.4 on the
negative) is colored blue, the next brightest level (density 0.86)
red, the next brightest (density 1.32) green, and the brightest
level (density 1.78) colored yellow. The mottling in the sky back-
ground records graininess in the original Kodak NTB-3 emulsion.
Red streaks and spots are similar photographic defects. During the
original exposure, the spacecraft was rolled so that one of the
Apollo Telescope Mount solar panels shielded the camera from the
Sun, just off the left edge of the 20 per cent circular field of view.
NASA photo number SL4-183-6453 shows the whole field in black and
white, exposure one second. Analysis of this, and similar photographs
in light of 1216 angstroms wavelength, will show the growth and
collapse of the comet's hydrogen halo as it approached and receded
from the Sun. This photograph, taken three days before perihelion
passage, is the closest view of the comet (19 million miles) from the
Sun, when its halo was about one degree (1,600,000 miles) in diameter.
The S201 Camera was designed and built at the U. S. Naval Research
Laboratory, Washington, D. C., by Dr. George Carruthers. Dr. Thornton
Page at JSC is the principal investigator, and William H. Conway is the
project manager.

