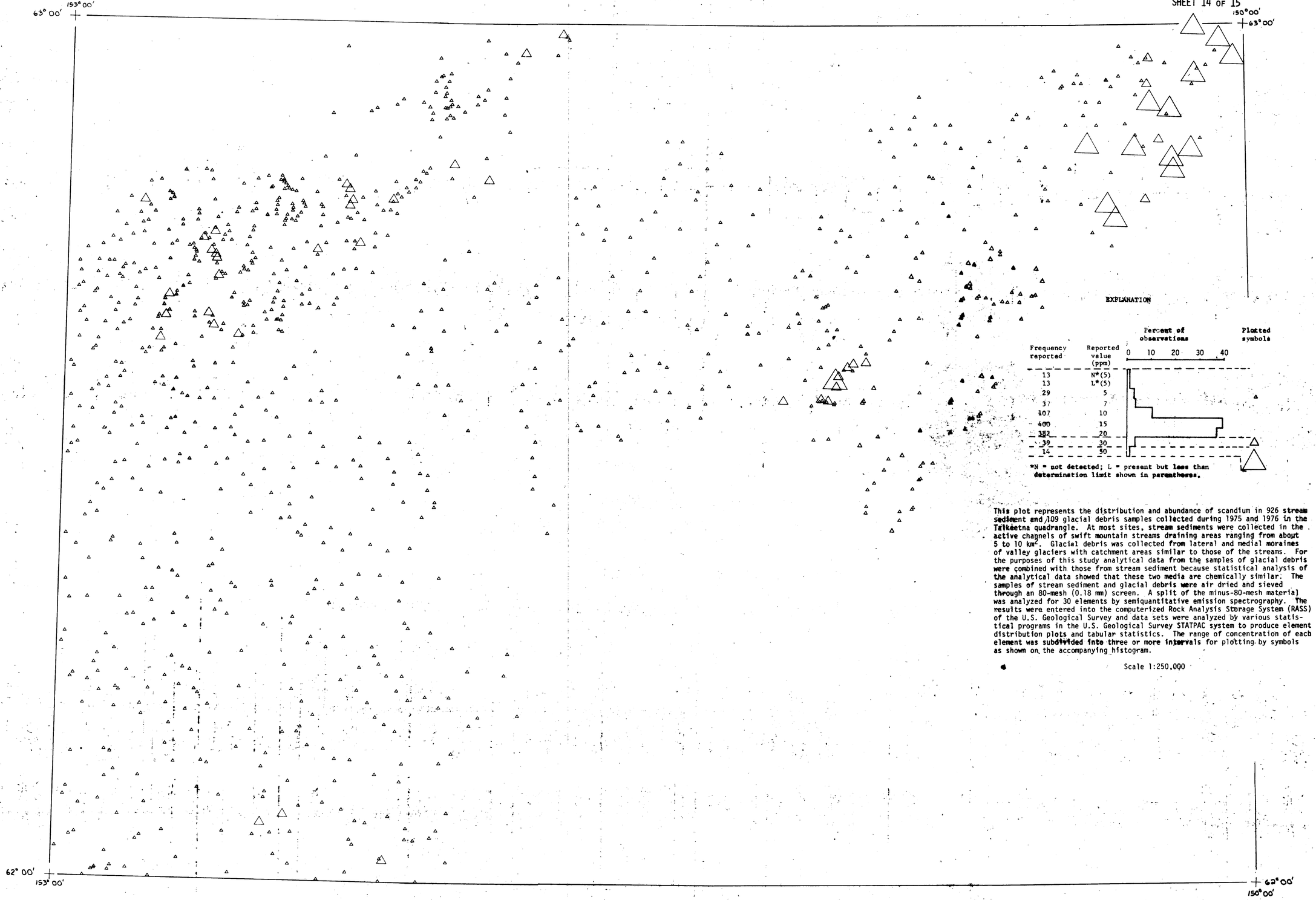
DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

OPEN-FILE REPORT
78-301
SHEET 14 OF 15



EXPLANATION

Frequency reported	Reported value (ppm)	Percent of observations 0 10 20 30 40	Plotted symbols
13	N*(5)		
13	L*(5)		
29	5		
37	7		
107	10		
400	15		
182	20		
39	30		
14	50		

*N = not detected; L = present but less than determination limit shown in parentheses.

This plot represents the distribution and abundance of scandium in 926 stream sediment and 109 glacial debris samples collected during 1975 and 1976 in the Talkeetna quadrangle. At most sites, stream sediments were collected in the active channels of swift mountain streams draining areas ranging from about 5 to 10 km^2. Glacial debris was collected from lateral and medial moraines of valley glaciers with catchment areas similar to those of the streams. For the purposes of this study analytical data from the samples of glacial debris were combined with those from stream sediment because statistical analysis of the analytical data showed that these two media are chemically similar. The samples of stream sediment and glacial debris were air dried and sieved through an 80-mesh (0.18 mm) screen. A split of the minus-80-mesh material was analyzed for 30 elements by semiquantitative emission spectrography. The results were entered into the computerized Rock Analysis Storage System (RASS) of the U.S. Geological Survey and data sets were analyzed by various statistical programs in the U.S. Geological Survey STATPAC system to produce element distribution plots and tabular statistics. The range of concentration of each element was subdivided into three or more intervals for plotting by symbols as shown on the accompanying histogram.

Scale 1:250,000

MAP SHOWING DISTRIBUTION PATTERN OF SCANDIUM IN STREAM SEDIMENT AND GLACIAL DEBRIS SAMPLES

GEOCHEMICAL MAPS SHOWING DISTRIBUTION AND ABUNDANCE OF SELECTED ELEMENTS IN THE TALKEETNA QUADRANGLE, ALASKA

by

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