

DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

Catalog of available clear mylar templates used to
determine latitude and longitude of sample localities
at scales of 1:24,000, 1:62,500, 1:100,000,
and 1:250,000 between the latitude
of 25°30' and 49°00' north or south latitude

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Open-File Report 81-746
1981

This report is preliminary and has not been
edited or reviewed for conformity with U.S.
Geological Survey standards.

ABSTRACT

The present use of electro-mechanical plotting of sample points can give rise to location errors, particularly when map scale changes are involved, unless careful control is maintained. The following catalog of computer-generated mylar templates, with plots of latitude and longitude (longitudes are uniformly spaced North to South), sufficient to cover the latitudes between 25°30' and 49°00' N. or S., will help facilitate the plotting of points when there is a map scale change for four different map scales (1:24,000, 1:62,500, 1:100,000, and 1:250,000). Using the template overlays (available as individual page numbers in Open-File Report 81-747 xerographic clear film overlays from U.S. Geological Survey Open-File Services Section, Branch of Distribution, U.S.G.S., Box 25425, Denver, Colorado 80225, telephone (303) 234-5888) the point plotted on a composite final copy may be checked against field maps and notes when only degrees latitude and longitude are given.

INTRODUCTION

Electro-mechanical plotting of sample locations may give rise to location errors, particularly when a change in map scale is involved. This potential source of error is reduced if a scale stable overlay is available. It is now possible to have any map scale template generated within minutes, using a computer program, which was modified by George VanTrump (oral commun., 1981) with the aid of a plotter. This is a catalog of available templates generated to cover continuous latitudes north or south starting at 25°30' through 49°00', at four frequently used map scales. These templates are available as single page, clear xerographic reproductions from the U.S. Geological Survey Open-File Services Section.

DISCUSSION

The mylar templates cover from 25°30' N. or S., latitude to 48°30' N. or S., latitude at scales of 1:100,000 and 1:250,000. They cover from 26°00' N. or S., latitude to 49°00' N. or S., latitude at scales of 1:24,000 and 1:62,500. The latitudes selected are such that all points on the templates are within one percent of true position. That is, all points should be able to be plotted within 100', or one to five seconds of a given location, depending on the scale used.

To use the templates, select the template with the latitude closest to that which you are using at the appropriate scale.

The following is a list of available templates given in Open-File Report 81-747.

AVAILABLE TRANSPARENT OVERLAYS 2 1/2' X 2 1/2' mylars at 1:24,000 scale

<u>°Latitude</u>	<u>Page</u>	<u>°Latitude</u>	<u>Page</u>
26°00'	1	31°30'	7
27°00'	2	32°00'	8
28°00'	3	32°30'	9
29°00'	4	33°00'	10
30°00'	5	33°30'	11
31°00'	6	34°00'	12

AVAILABLE TRANSPARENT OVERLAYS--Continued
 2 1/2' X 2 1/2' mylars at 1:24,000 scale--Continued

<u>°Latitude</u>	<u>Page</u>	<u>°Latitude</u>	<u>Page</u>
34°30'	13	44°00'	34
35°00'	14	44°15'	35
35°30'	15	44°30'	36
36°00'	16	44°45'	37
36°30'	17	45°00'	38
37°00'	18	45°15'	39
37°30'	19	45°30'	40
38°00'	20	45°45'	41
38°30'	21	46°00'	42
39°00'	22	46°15'	43
39°30'	23	46°30'	44
40°00'	24	46°45'	45
40°30'	25	47°00'	46
41°00'	26	47°15'	47
41°30'	27	47°30'	48
42°00'	28	47°45'	49
42°30'	29	48°00'	50
43°00'	30	48°15'	51
43°15'	31	48°30'	52
43°30'	32	48°45'	53
43°45'	33	49°00'	54

AVAILABLE TRANSPARENT OVERLAYS
 5' X 5' mylars at 1:62,500 scale

<u>°Latitude</u>	<u>Page</u>	<u>°Latitude</u>	<u>Page</u>
26°00'	55	40°30'	73
27°00'	56	41°00'	74
28°00'	57	41°30'	75
29°00'	58	42°00'	76
30°00'	59	42°30'	77
31°00'	60	43°00'	78
32°00'	61	43°30'	79
33°00'	62	44°00'	80
34°00'	63	44°30'	81
35°00'	64	45°00'	82
36°00'	65	45°30'	83
37°00'	66	46°00'	84
37°30'	67	46°30'	85
38°00'	68	47°00'	86
38°30'	69	47°30'	87
39°00'	70	48°00'	88
39°30'	71	48°30'	89
40°00'	72	49°00'	90

AVAILABLE TRANSPARENT OVERLAYS
10' X 10' mylars at 1:100,000 scale

<u>°Latitude</u>	<u>Page</u>	<u>°Latitude</u>	<u>Page</u>
25°30'	91	37°30'	103
26°30'	92	38°30'	104
27°30'	93	39°30'	105
28°30'	94	40°30'	106
29°30'	95	41°30'	107
30°30'	96	42°30'	108
31°30'	97	43°30'	109
32°30'	98	44°30'	110
33°30'	99	45°30'	111
34°30'	100	46°30'	112
35°30'	101	47°30'	113
36°30'	102	48°30'	114

AVAILABLE TRANSPARENT OVERLAYS
25' X 25' mylars at 1:250,000 scale

<u>°Latitude</u>	<u>Page</u>	<u>°Latitude</u>	<u>Page</u>
25°30'	115	37°30'	127
26°30'	116	38°30'	128
27°30'	117	39°30'	129
28°30'	118	40°30'	130
29°30'	119	41°30'	131
30°30'	120	42°30'	132
31°30'	121	43°30'	133
32°30'	122	44°30'	134
33°30'	123	45°30'	135
34°30'	124	46°30'	136
35°30'	125	47°30'	137
36°30'	126	48°30'	138

REFERENCES CITED

Campbell, W. L., and VanTrump, G., 1981, Clear mylar templates used to measure latitude and longitude of sample localities at scales of 1:24,000, 1:62,500, 1:100,000, and 1:250,000: U.S. Geological Survey Open-File Report 81-747.