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Guy R. Martin — Commissioner
Ross G. Schaff — State Geologist

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**This report is preliminary and has
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standards.**

Alaska Open File Report 85
RADIOMETRIC AGE MAP OF ALASKA -
SOUTH-CENTRAL ALASKA
by
Frederic H. Wilson and
Donald L. Turner

RADIOMETRIC AGE MAP OF ALASKA

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Frederic H. Wilson¹ and Donald L. Turner²

This map includes published, thesis, and open-file radiometric data available to us as of June, 1975. Some dates are not plotted because of inadequate location data in the original references.

The map is divided into five sections, based on 1:1,000,000 scale enlargements of the National Atlas maps of Alaska. Within each section (e.g., southeastern Alaska), radiometric dates are plotted and keyed to 1:250,000 scale quadrangles. Accompanying each map section is table 1, listing map numbers and the sample identification numbers used in DGGs Special Report 10: Radiometric Dates from Alaska--A 1975 Compilation³. The reader is referred to Special Report 10 for more complete information on location, rock type, dating method, and literature references for each age entry. A listing of dates in Special Report 10 which require correction or deletion is included as table 2. Corrected and additional entries are listed in table 3. The listings in tables 2 and 3 follow the format of Special Report 10. Table 4 is a glossary of abbreviations used for quadrangle name, rock type, mineral dated, and type of dating method used.

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Table 1. Map numbers and corresponding identification numbers used in Special Report 10; listed by 1:250,000 scale quadrangle - South-Central Alaska.

MT. MCKINLEY

TYONEK

KENAI

<u>Map</u>	<u>Compilation</u>
1	70AR126
2	70AR125
3	71AR-7
4	71AR-9
5	71AR-6

TALKEETNA

<u>Map</u>	<u>Compilation</u>
1	70AR132
2	70AR214
3	70AR31
4	67AR404
5	67AR427
6	70AR104
7	70AR109
8	70AR112
9	70AR114
10	70AR115
11	70AR116
12	70AR117
13	70AR12(70AR1-12)
14	70AR121
15	70AR127
16	69AR305

<u>Map</u>	<u>Compilation</u>
1	70AR134
2	70AR188
3	70AR191
4	70AR194
5	70AR195
6	70AR199
7	70AR200
8	70AR208
9	70AR811 (70AR8-11)
10	60AGZ45
11	60AR1
12	66ALE28
13	66ALE29
14	66ALE30
15	68AR258
16	68AR260
17	69AR207
18	69AR239
19	69AR310
20	69AR328
21	69AR330
22	69AR383
23	69AR388
24	69AR393
25	70AE255 (70AER255)

<u>Map</u>	<u>Compilation</u>
1	70AR175
2	70AR177
3	70AR178
4	70AR179
5	62ALE5
6	62ALE6E
7	66AR1464
8	70AR140
9	70AR146
10	70AR147
11	70AR156
12	70AR158
13	70AR173

SELDOVIA

<u>Map</u>	<u>Compilation</u>
1	SD33
2	SD93

FAIRBANKS

<u>Map</u>	<u>Compilation</u>
1	BB10
2	AWG32

HEALY

<u>Map</u>	<u>Compilation</u>
1	73015
2	73016

HEALY (cont.)

<u>Map</u>	<u>Compilation</u>
3	73020
4	73025
5	73026
6	73047
7	73061
8	73063
9	73068
10	73069
11	73070
12	73091
13	74007
14	74019
15	BB12
16	69AST137
17	69AST1556
18	69AST252
19	69AST252A
20	72011
21	72017
22	72170
23	72172
24	72178
25	72179
26	72180
27	72198
28	72201
29	73008
30	73012
31	73013
32	73014
33	VW1563/1
34	VW1574/17
35	VW1580/42
36	VW1574/3
37	VW1583/17
38	VW1580/16
39	VW1574/18

HEALY (cont.)

<u>Map</u>	<u>Compilation</u>
40	VW1574/19
41	VW1553/7
42	VW1553/4
43	VW1574/7
44	VW1574/6
45	VW1562/1
46	VW1580/15
47	VW1562/2
48	VW1563/3
49	VW1583/30
50	VW1583/18
51	VW1563/2
52	VW1562/4
53	VW1562/3
54	VW1563/4
55	VW1574/4
TALKEETNA MTS.	
<u>Map</u>	<u>Compilation</u>
1	AA169
2	GG1
3	GG2
4	59AGZM25I
5	59AGZM25II
6	59AGZM25II 3=59AGZM25III
7	59AGZM26
8	59AGZM57
9	59AGZM58
10	73064
11	73087
12	74051
13	74052
14	72ACY127
15	72ACY117

ANCHORAGE

<u>Map</u>	<u>Compilation</u>
1	BB1
2	BB2

SEWARD

<u>Map</u>	<u>Compilation</u>
1	PW1
2	PW2
3	PW8
4	PW9

MT. HAYES

<u>Map</u>	<u>Compilation</u>
1	74005
2	74010
3	74013
4	74014
5	74015
6	74016
7	74017
8	74024
9	72206
10	72207
11	72208
12	72210
13	73003
14	73019
15	73022
16	73027
17	73036
18	73039
19	73062
20	73071

MT. HAYES (cont.)

<u>Map</u>	<u>Compilation</u>
21	73072
22	73092
23	73103
24	74001
25	74004
26	72109
27	72111
28	72113
29	72114
30	72115
31	72117
32	72118
33	72119
34	72120
35	72176
36	72181
37	72192
38	72194
39	72197
40	72199
41	72203
42	72205
43	AA78
44	AA79
45	BB18 Not Plotted
46	BB19 Not Plotted
47	BB20
48	BB21
49	BB22
50	BB23
51	71030
52	71031
53	71032
54	71033
55	71035
56	71072
57	71074

MT. HAYES (cont.)

<u>Map</u>	<u>Compilation</u>
58	72006
59	72090
60	AA222
GULKANA	
<u>Map</u>	<u>Compilation</u>
1	BB11
VALDEZ	
<u>Map</u>	<u>Compilation</u>
1	BB48
2	BB49
BIG DELTA	
<u>Map</u>	<u>Compilation</u>
1	BR5
EAGLE	
<u>Map</u>	<u>Compilation</u>
1	BB38
2	BB40
3	BB8
TANACROSS	
<u>Map</u>	<u>Compilation</u>
1	AA164
2	BB39
3	BB42

NABESNA

<u>Map</u>	<u>Compilation</u>
1	AA160
2	BB25
McCARTHY	
<u>Map</u>	<u>Compilation</u>
1	AA37
2	AA38
3	AA39
4	AA40
5	AA41
6	AA42
7	AA43
8	AA44
9	BB15
10	BB16
11	BB17

Table 2. Errata for Special Report 10 (cont.)

SHISF	66/00	ON	66/30	OW	107E000N	PAS	K	WR	0.48	AA130	COX
SHISF	66/00	ON	66/30	OW	107E000N	PAS	K	WR	0.625	AA131	COX
SHISF	66/00	ON	66/30	OW	107E000N	PAS	K	WR	0.67	AA132	COX
SHISF	66/00	ON	66/30	OW	107E000N	PAS	K	WR	0.72	AA133	COX
SHISF	66/00	ON	66/30	OW	107E000N	PAS	K	WR	0.73	AA134	COX
SHISF	66/00	ON	66/30	OW	107E000N	PAS	K	WR	0.79	AA135	COX
SHISF	66/00	ON	66/30	OW	107E000N	PAS	K	WR	0.84	AA136	COX
SHISF	66/00	ON	66/30	OW	107E000N	PAS	K	WR	0.85	AA137	COX
SHISF	66/00	ON	66/30	OW	107E000N	PAS	K	WR	0.85	AA138	COX
SHISF	66/00	ON	66/30	OW	107E000N	PAS	K	WR	0.91	AA139	COX
SHISF	66/00	ON	66/30	OW	107E000N	PAS	K	WR	0.93	AA140	COX
SHISF	66/00	ON	66/30	OW	107E000N	PAS	K	WR	1.51	AA141	COX
SHISF	66/00	ON	66/30	OW	107E000N	PAS	K	WR	1.54	AA142	COX
SHISF	66/00	ON	66/30	OW	107E000N	PAS	K	WR	1.65	AA143	COX
SHISF	66/00	ON	66/30	OW	107E000N	PAS	K	WR	3.127	AA144	COX
SHISF	66/00	ON	66/30	OW	107E000N	PAS	K	WR	3.3	AA145	COX
SHISF	66/00	ON	66/30	OW	107E000N	PAS	K	WR	103	AA151	COX
SHITKA	57/11	5N	135/42	5N	080E033N	GRON	P	ZI	110	BB32	LAP
SHITKA	57/47	ON	135/13	OW	144E137N	GRON	P	ZI	150	BB33	LAP
TAKU	58/44	ON	133/55	OW	133E129N	GRON	K	WR	51.9	EN2	FON
TAKU	58/44	ON	133/59	OW	001E128N	GRON	K	WR	46.6	EN3	FON
TAKU	58/44	ON	134/02	OW	001E117N	GRON	K	WR	49.7	EN4	FON
TAKU	58/44	ON	133/57	OW	000E1129N	GRON	K	WR	43.8	PM51	FON
TYNEK	61/15	4N	152/43	2W	010E129N	GRON	K	WR	52.8	PM52	FON
TYNEK	61/40	ON	152/05	OW	026E052N	GRON	K	WR	57.9	70AR	REL
					078E114N	GRON	K	WR		811	

10 MI N TENAKE
5 TENAKE INLET
10 MI N TENAKE

Table 3. Corrected and additional entries to Special Report 10 (cont.)

SURVY	67/17	7N155/56.5W	005E052N	SCH	K	GI	95.4	72R211	TUR
SURVY	67/05	0N155/55.0W	006E015N	SCH	K	AC	289.1	72F10ARGH	TUR
SURVY	67/05	0N155/55.0W	006E015N	SCH	K	AC	287.1	72F10ARGH	TUR
SURVY	67/05	0N155/55.0W	006E015N	SCH	K	IC	213.1	72F10ARGH	TUR
TAKU	58/44	0N133/55.0W	007E129N	CMON	K	RP	51.1	FM2	FOR
TAKU	58/44	0N133/59.0W	001F120N	CMON	K	WR	45.9	FM3	FOR
TAKU	58/41	0N134/00.0W	000E120N	CMON	K	RI	49.6	FM4	FOR
TAKU	58/44	0N133/37.0W	011E129N	CMON	K	BI	48.7	PMS1	FOR
TAKU	58/44	0N133/53.0W	010E129N	CMON	K	BI	52.8	PMS2	FOR
TYNEK	61/18	4N152/42.2W	026E052N	CDI	K	RI	58.1	70AER255	REL
TYNEK	61/18	4N152/42.2W	026E052N	CDI	K	HO	57.6	70AER255	REL
TYNEK	61/40	0N152/05.0W	078E114N	CMON	K	BI	59.1	70AR8-11	REL

PARAGONITE-ACT.

Table 4. Compilation glossary.

QUADRANGLE		UNALAKLEET	UNLAK
ANAK	ADAK	VALDEZ	VALDZ
PORT ALEXANDER	ALEXR	WISEMAN	WISE
AMBLER RIVER	AMBRI		
ANCHORAGE	ANCH		
ATKA	ATKA		
ATTU	ATTU		
BAIRD MTS	BAIRD		
BENDELEBEN	BENDE		
BETTLES	BETLE		
BIG DELTA	BIG D		
CANDLE	CANDL		
CAPE MENDEHNHALL	CAPMN		
CHANDALAR	CHAND		
CIRCLE	CIRCL		
LAKE CLARK	CLARK		
CRAIG	CRAIG		
DIXON ENTRANCE	DIXON		
EAGLE	EAGLE		
FAIRBANKS	FAIR		
MCGRATH	GRATH		
GULKANA	GULK		
MT. HAYES	HAYES		
HEALY	HEALY		
HOOPER BAY	HOOPR		
HUGHES	HUGHES		
IDITAROD	IDITA		
ILLIAMNA	ILLIAM		
JUNEAU	JUNEU		
MT. KATMAI	KATMI		
KENAI	KENAI		
KETCHIKAN	KETCH		
ST. LAWRENCE	LAWOC		
LIME HILLS	LIME		
LIVENGOOD	LIVEN		
MCCARTHY	MCART		
MT. MCKINLEY	MCKIN		
MEDFRA	MDFRA		
MT. MICHELSON(S)	MICHL		
PORT MOLLER	MOLLER		
NABESNA	NABES		
NAKNEK	NKNEK		
NOME	NOME		
NUKIVAK	NUVK		
(OFFSHORE)	OFFSH		
PERRILOF ISLANDS	PRIIS		
PETERSBURG	PTSBG		
RAT ISLANDS	RATIS		
RUBY	RUBY		
SELDOVIA	SELD		
SELAWIK	SELWK		
SEWARD	SEWRD		
SHISMARFF	SHISF		
SHUNGNAK	SHUNG		
SITKA	SITKA		
SKAGWAY	SKAG		
SOLOMON	SOLOM		
SURVEY PASS	SURVY		
TAKU RIVER	TAKU		
TALKEETNA	TALK		
TALKEETNA MOUNTAINS	TALKM		
TANACROSS	TANAC		
TANANA	TANAN		
TELLER	TELLER		
TESHEKOUK	TESHE		
TYONEK	TYNEK		
UGASHIK	UGSHK		
UMNAK	UMNAK		

DATE TYPE	
PR-ALPHA	A
FISSION-TRACK	F
K-AR	K
PP-U, PP-TH, ETC.	P
RR-SR	R

MINERAL DATED	
ACTINOLITE	AC
AMPHIBOLE	AM
APATITE	AP
ANORTHOCLASE	AW
BIOTITE	BI
CHLORITE	CH
COSSITE	CR
FELDSPAR	FD
GLASS	GL
GLAUCOPHANE	GP
HORNBLEND	HO
ISOCHRON	IC
MICA	MI
MUSCOVITE	MU
PARAGONITE	PA
PHENGITE	PH
PLAGIOCLASE	PL
PYROXENE	PY
RIEBECKITE	RI
SANIDINE	SA
SERICITE	SE
SPHENE	SP
WHOLE ROCK	WR
ZIRCON	ZI

ROCK TYPES	
ADAM	ADAMELLITE
AGNS	AUGEN GNEISS
ALSK	ALASKITE
AMPH	AMPHIBOLITE
AND	ANDESITE
ANOP	ANORTHOSITE
APL	APLITE
BAS	BASALT
BIOT	BIOTITITE
DAC	DACITE
DI	DIORITE
DIA	DIABASE
DUN	DUNIT
ECLG	ECLOGITE
FELS	FELSITE
GAB	GABBRO
GDI	GRANODIORITE
GLASS	GLASS
GNLT	GRANULITE
GNS	GNEISS
GNST	GREENSTONE
GR	GRANITE
GPTD	GRAINOID
GSCH	GREENSCHIST

Table 4. Compilation glossary (cont.)

HRDT	HORNBLENDITE	Q DI	QUARTZ DIORITE
HFLS	HORNFEELS	Q GAB	QUARTZ GABRO
INTR	INTRUSIVE	Q LAT	QUARTZ LATITE
LAMP	LAMPROPHYPE	Q MON	QUARTZ MONZONITE
LAT	LATITE	RHY	RHYOLITE
LTON	LEUCOTONALITE	SCH	SCHIST
MALIG	MALIGNITE	SS	SANDSTONE
META	METAPELITE	SY	SYENITE
MIG	MIGMATITE	THER	THERALITE
MON	MONZONITE	TON	TONALITE
MYLT	MYLONITE	TRCH	TRACHYTE
PEG	PEGMATITE	TROND	TRONDHEMITE
PERD	PERIDOTITE	TUFF	TUFF
PHYL	PHYLLITE	UMAF	ULTRAMAFIC
PYRX	PYROXENITE	VOL	VOLCANIC
Q BAS	QUARTZ BASALT		

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