

GEOLOGICAL SURVEY OF CANADA



COMMISSION GÉOLOGIQUE DU CANADA

DEPARTMENT OF ENERGY, MINES AND RESOURCES  
MINISTÈRE DE L'ÉNERGIE DES MINES ET DES RESSOURCES

Airborne Geophysical Survey  
of the  
Schreiber Area  
Ontario  
1991

NTS 42D/14, 42E/3 and part of 42E/2 (W1/2)

Contents include gamma ray spectrometric, VLF and magnetic  
colour maps, flight path map and accompanying stacked profiles



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2514

GEOLOGICAL SURVEY OF CANADA  
COMMISSION GÉOLOGIQUE DU CANADA  
OTTAWA

AIRBORNE GEOPHYSICAL SURVEY

In 1991 a multi-parameter geophysical survey was flown by the Geological Survey of Canada in the Schreiber area of Ontario. The area surveyed is shown on the index map. Gamma ray spectrometric, VLF electromagnetic and total field magnetic data were recorded.

All data were sampled at one second intervals. The airborne radiometric measurements were made using a 256 channel spectrometer, with twelve 102x102x406 mm NaI(Tl) detectors. A Geometrics proton precession airborne magnetometer model G-803 and a Hertz Totem 1A VLF unit were installed as ancillary equipment. The GSC Skyvan was flown at a mean terrain clearance of 125 m with average ground speed of 190 km/h. The main survey grid was flown with a north-south flight line direction and 1000 meter line spacing. A detailed section was flown with 500 meter line spacing.

Data are presented as a set of colour maps at 1 : 250 000 scale and as stacked profiles at 1 : 150 000 scale. Profile data include the seven radiometric parameters, radar terrain clearance, magnetic total field and VLF total field and quadrature components for each flight line. The colour maps include : eight gamma ray spectrometric maps (exposure rate, potassium, equivalent uranium and equivalent thorium concentrations, the eU/eTh, eU/K, eTh/K ratios and a Ternary Radioelement map); a magnetic total field colour map, a calculated magnetic vertical gradient colour map; two GRIDDED VLF total field colour maps (one superimposed with VLF total field PROFILE data the other with quadrature PROFILE data) and a flight path map.

Gamma Ray Spectrometric Data

Potassium is measured directly from the 1.46 MeV gamma ray photons emitted by <sup>40</sup>K, whereas uranium and thorium are measured indirectly from gamma ray photons emitted by daughter products in their decay chains. Uranium is monitored by means of gamma ray photons at approximately 1.76 MeV from <sup>214</sup>Bi, and thorium, from 2.62 MeV photons emitted by <sup>208</sup>Tl. The energy windows used are as follows:

Potassium	<sup>40</sup> K	1.36– 1.56 MeV
Uranium	<sup>214</sup> Bi	1.66– 1.86 MeV
Thorium	<sup>208</sup> Tl	2.41 –2.81 MeV

Uranium, thorium and potassium counts have been corrected for dead time, ambient temperature changes, background radiation, spectral scattering and deviations of terrain clearance from the planned survey altitude. The data as presented represent an average surface concentration which is influenced by varying amounts of outcrop, overburden, vegetation, soil moisture and surface waters. As a result, the concentrations as shown are usually lower than the actual concentrations in the bedrock.

Factors for converting the airborne measurements to concentrations were determined by relating the airborne count rates to the known ground concentrations of a test strip in the Ottawa area. The factors used to convert the airborne measurements to ground concentrations are:

1 % K	91.0 cps
1 ppm eU	9.1 cps
1 ppm eTh	7.0 cps

The exposure rate, in micro Roentgens per hour ( $\mu$ R/h) has been computed from the measured concentrations of potassium, uranium and thorium (Grasty, R.L., Carson, J.M., Charbonneau, B.W., and Holman, P.B., 1984, Natural Background Radiation in Canada, Geol. Sur. Can., Bull. 360). To compare these data with earlier total count maps expressed in Units of Radioelement concentrations (Ur), the conversion factor is  $1 \mu$ R/h = 1.67 Ur.

VLF Data

The primary electromagnetic field is generated by VLF communication stations. For this survey, the receiving coils were tuned to station NAA in Cutler Maine, which transmits at a frequency of 24.0 kHz.

Anomalies reflect distortions in the primary field caused by a secondary electromagnetic field generated by eddy currents flowing in geological and man-made conductors. Anomalies produce positive peaks on the total field trace and are of the cross-over type (negative to positive) on the quadrature trace. Both parameters are plotted with positive deflections toward west. The profiles presented are the total field value (vector sum of the horizontal and vertical components) and the quadrature value (out-of-phase component). The mean value or line average of the total field and quadrature component were removed along each flight line. The resultant values are plotted with a two second lag. The quadrature, which depends on the flight line direction, was inverted for lines flown from north to south. A five point weighted average filter was applied to both total field and quadrature PROFILE data for final presentation. A twenty one point triangular filter was applied to the line data and the resultant was then subtracted before the data was gridded. This effectively removed the long wave length response created by changing field strength, altitude effects, etc.

Magnetic Data

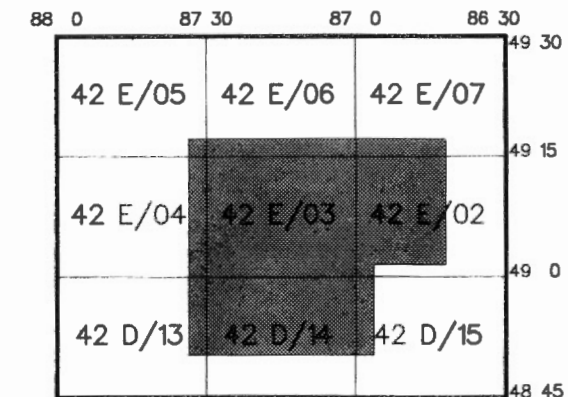
The low resolution aeromagnetic data were acquired using an instrument with one (1) nT sensitivity. Digital processing of the magnetic data supplemented with manual editing was used to remove obvious errors caused by spikes, heading effects or diurnal variations.

Information regarding Open File 2514 may be obtained from: Geological Survey of Canada, 601 Booth St., Ottawa, Ontario, K1A 0E8. Tel. : (613)995-4342. Copies of this Open File release may be purchased directly through: Ashley Reproduction Inc., 386 Bank Street, Ottawa, Ontario K2P 1Y4. Tel. : (613)235-2115

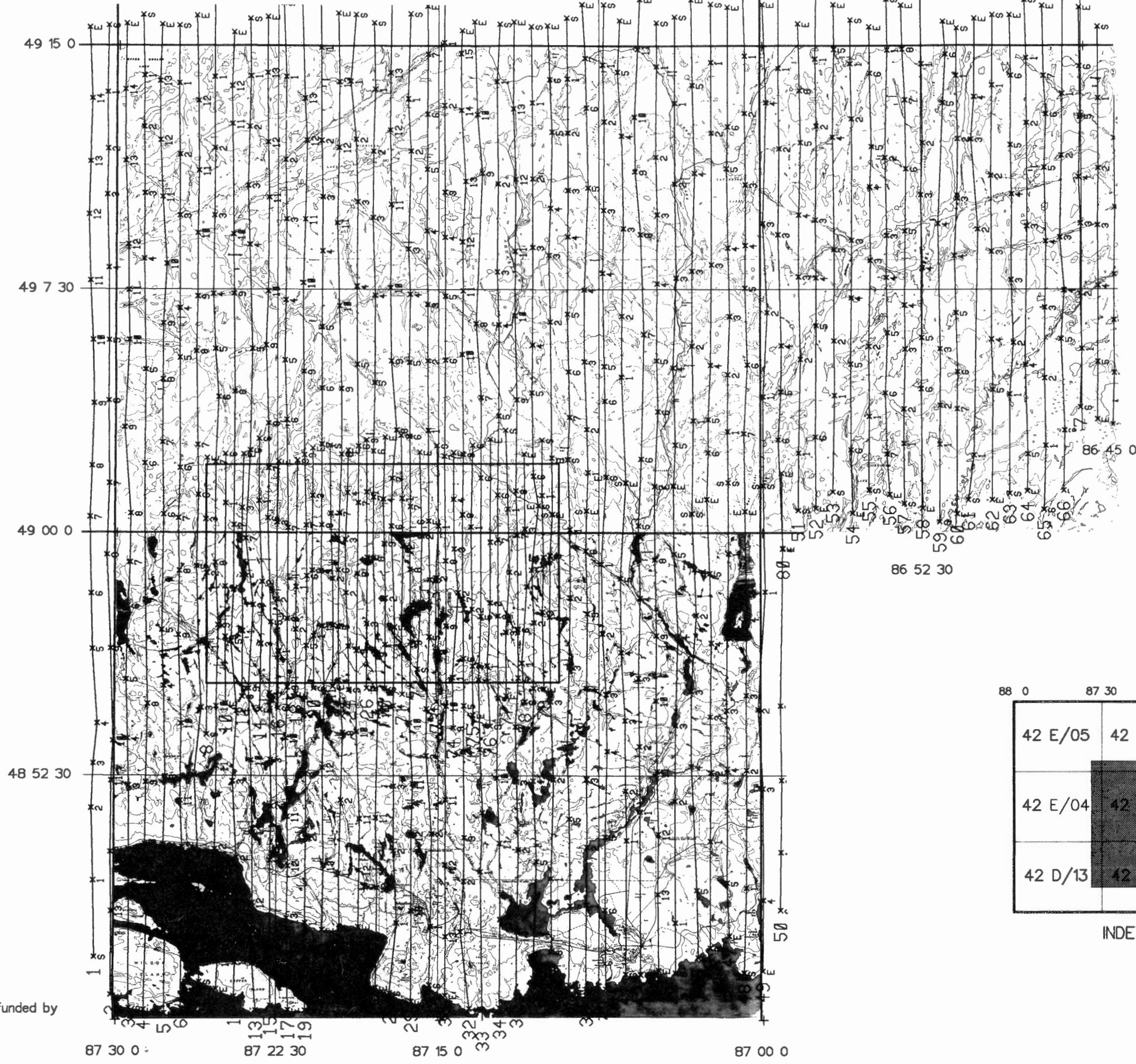
Base map material supplied by Surveys and Mapping Branch

Cartography by Geological Survey of Canada

**Airborne gamma ray spectrometer, VLF and magnetic survey  
flown, compiled and funded by Geological Survey of Canada**

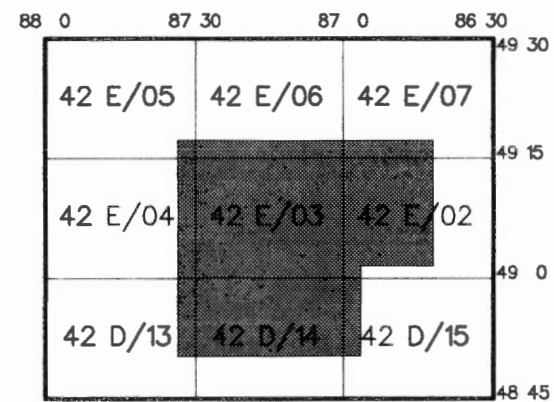


42D/14, 42E/2 (W1/2), 42E/3



Airborne Gamma Ray Spectrometer Survey  
 of the  
 Schreiber Area, Ontario  
 1991  
 Open File 2514

0 2.5 5 7.5 10  
 KILOMETRES  
 Scale = 1:250 000  
 Line spacing = 1 km (100m cells)  
 Compiled by R.J. Hetu & P.B. Holman



INDEX MAP

Survey flown, compiled and funded by  
 Airborne Geophysics Section  
 Mineral Resources Division  
 Geological Survey of Canada

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FLIGHT LINE MAP

**LEGEND**

**CENOZOIC**

**QUATERNARY**

PLEISTOCENE AND RECENT

Sand, gravel, clay.

UNCONFORMITY

**PRECAMBRIAN**

**LATE PRECAMBRIAN**

**KEWEENAWAN**

**CARBONATITE-ALKALIC COMPLEXES**

- 15a Carbonatite, urtite, ijolite.
- 15b Nepheline syenite, augite-nepheline syenite, hastingsite-nepheline syenite, augite syenite, augite-oligoclase syenite, trachyte.
- 15c Nordmarkite.
- 15d Syenodiorite.
- 15e Augite syenite (larvikite).
- 15f Gabbro, olivine gabbro, nepheline-olivine gabbro.
- 15g Lamprophyre.

**CONTACT INDETERMINATE**

**LATE FELSIC IGNEOUS ROCKS**

- 14 Quartz porphyry, felsite.

**INTRUSIVE CONTACT**

**LATE MAFIC IGNEOUS ROCKS<sup>a</sup>**

- 13a Diabase (dikes), lamprophyre.
- 13b Gabbro, anorthositic gabbro, anorthosite, pyroxenite, peridotite, diorite, granophyre.

**INTRUSIVE CONTACT**

**OSLER GROUP<sup>b</sup>**

- 12 Porphyritic rhyolite or dacite, quartz porphyry, felsite.<sup>c</sup>
- 11 Unsubdivided.
- 11c Diabase (sills and flows).
- 11b Basalt (flows) and minor pyroclastic rocks.
- 11a Conglomerate, sandstone.

**CONTACT INDETERMINATE**

**MAFIC IGNEOUS ROCKS<sup>d</sup>**

- 10 Diabase (dikes and sheets).

**INTRUSIVE CONTACT**

**SIBLEY GROUP<sup>b</sup>**

- 9 Unsubdivided.
- 9e Red and purple shale.
- 9d Chert and stromatolitic rock.
- 9c Red, sandy and limey sandstone.
- 9b Sandstone.
- 9a Conglomerate.

**UNCONFORMITY**

**MIDDLE PRECAMBRIAN**

**ANIMIKIE**

Rove Formation

- 8 Argillite, shale, greywacke, minor volcanic rocks.

Gunflint Formation

- 7 Unsubdivided.
- 7a Upper Gunflint: ferruginous carbonate, chert-carbonate, jasper, argillite-tuff.<sup>e</sup>
- 7b Lower Gunflint: conglomerate, ferruginous carbonate, chert, algal chert, chert-carbonate, taconite, hematite iron formation, argillite-tuff.<sup>e</sup>

**UNCONFORMITY**

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- IF Iron formation<sup>k</sup>
- S Sulphide mineralization.



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**Airborne Geophysical Survey**  
of the  
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1991

Metres 5000 0 10 Kilometres

Scale 1:253,440

**SYMBOLS**

- Geological boundary.
- Synclinal axis.
- Anticlinal axis.
- Fault.
- Lineament.
- Altitude in feet above mean sea level.
- Railway with station or flag stop.
- Provincial highway.
- Motor road.
- Other road.
- Aircraft landing facilities.
- Larger community.
- Smaller community.
- Past producing mine.
- Mineral occurrence.
- International boundary.
- Township boundary, base or meridian line.
- Township boundary, unsurveyed.
- Line of section.

**EARLY PRECAMBRIAN (ARCHEAN)  
FELSIC IGNEOUS AND METAMORPHIC  
ROCKS**

- 6 Unsubdivided.
- 6a Granite, quartz monzonite, granodiorite, trondhjemite, alaskite, pegmatite, aplite, syenite, monzonite, quartz diorite.
- 6b Granite gneiss, metasedimentary migmatite, hybrid rocks.
- 6c Quartz porphyry, quartz-feldspar porphyry, feldspar porphyry.<sup>f</sup>

**INTRUSIVE CONTACT**

**MAFIC AND ULTRAMAFIC IGNEOUS  
ROCKS**

- 5 Metagabbro, serpentinite, hornblende, amphibolite.

**INTRUSIVE CONTACT**

**METAVOLCANICS AND  
METASEDIMENTS<sup>g</sup>**

- 4 Conglomerate, greywacke, arkose, quartzite, argillite, slate, mica schist, limestone.

**METASEDIMENTS<sup>h</sup>**

- 3 Conglomerate, greywacke, arkose, quartzite, slate, argillite, mica schist and gneiss, hornblende schist.

**METAVOLCANICS<sup>i</sup>**

- 2 Felsic to intermediate metavolcanics: rhyolite, pillow lava, porphyritic lava, tuff, agglomerate and derived schists.
- 1 Intermediate to mafic metavolcanics: massive lava, schistose lava, pillow lava, porphyritic lava, amygdaloidal lava, tuff, agglomerate and derived schists.

**METAL AND MINERAL  
REFERENCE**

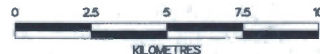
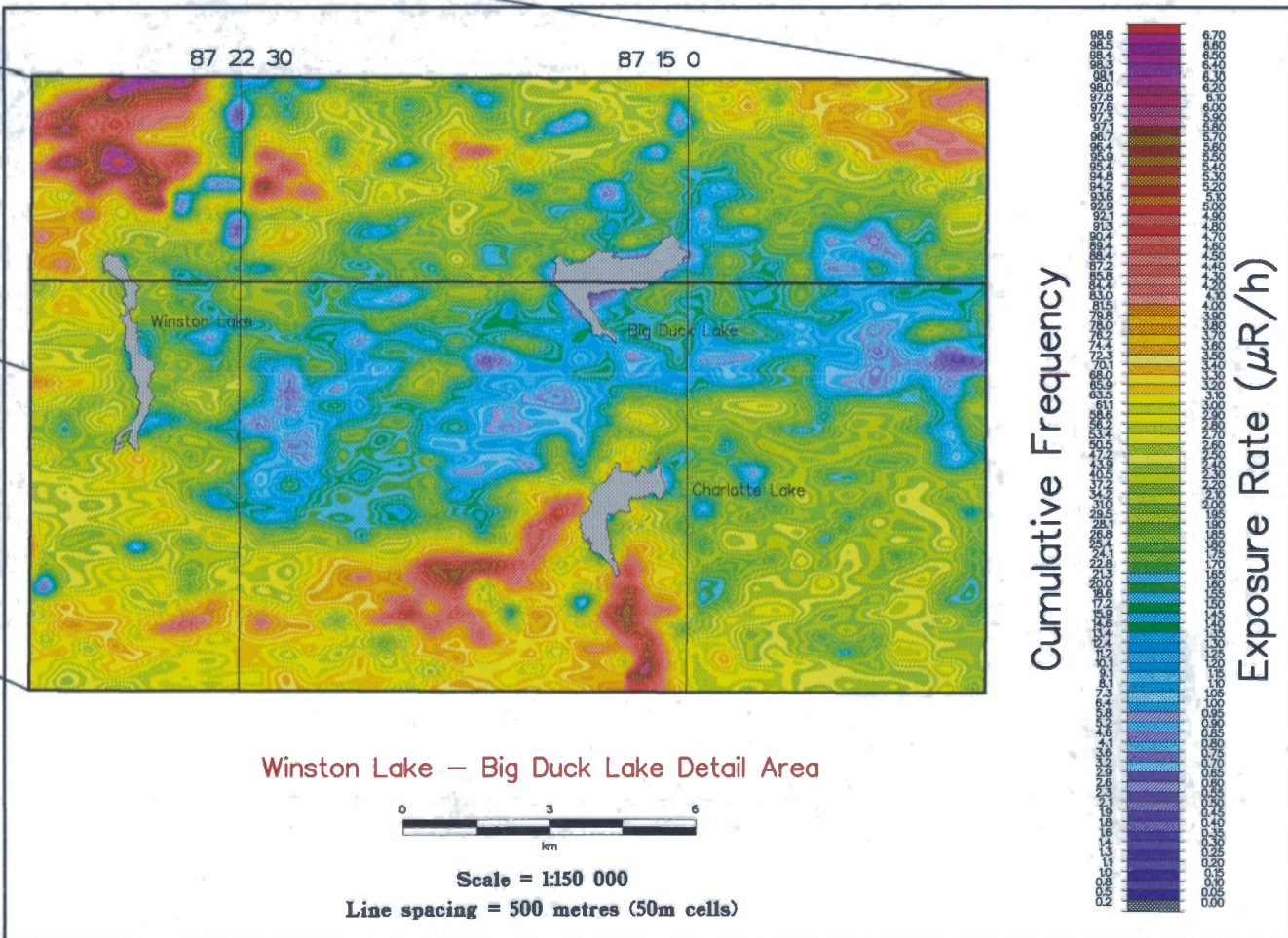
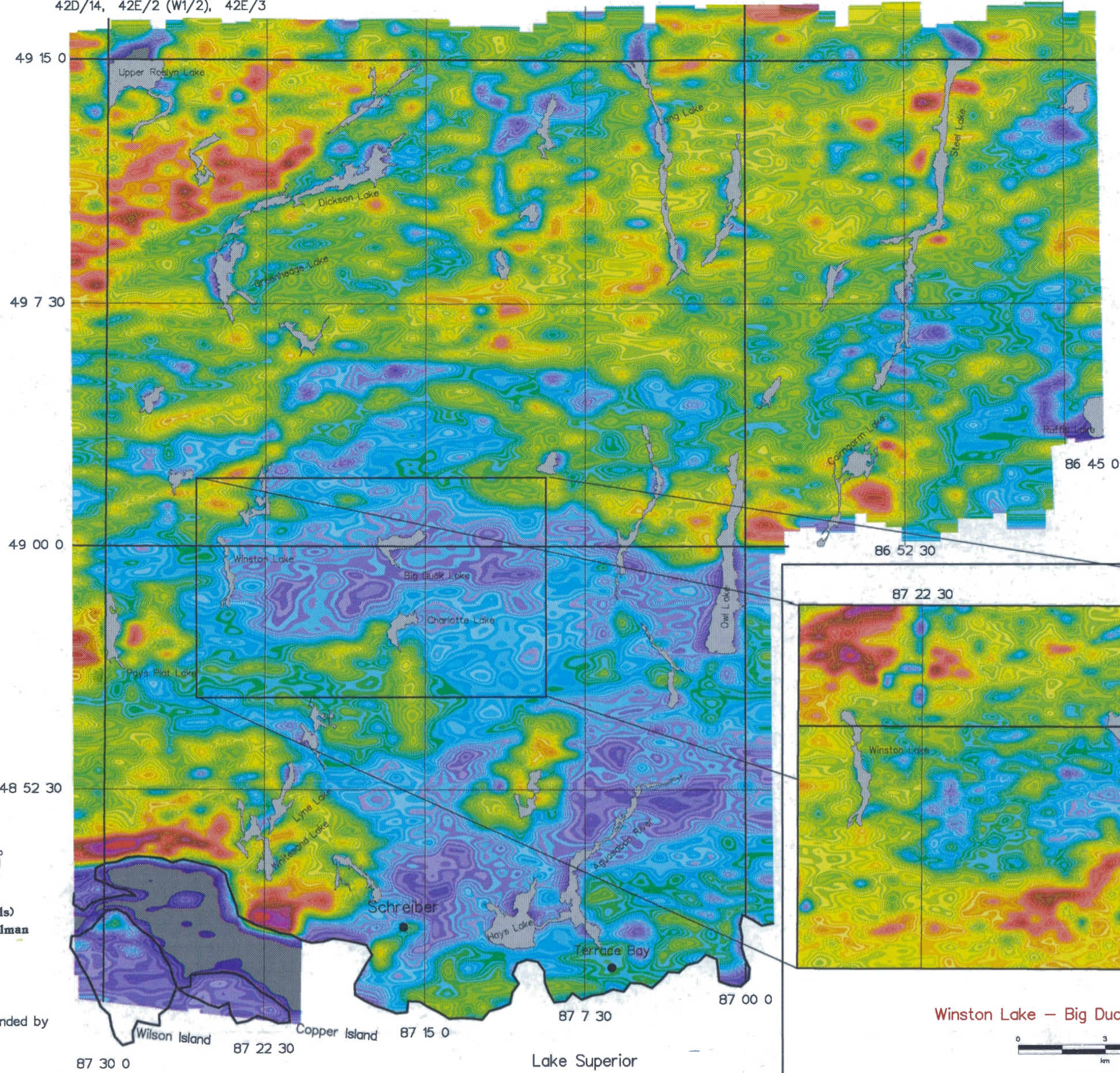
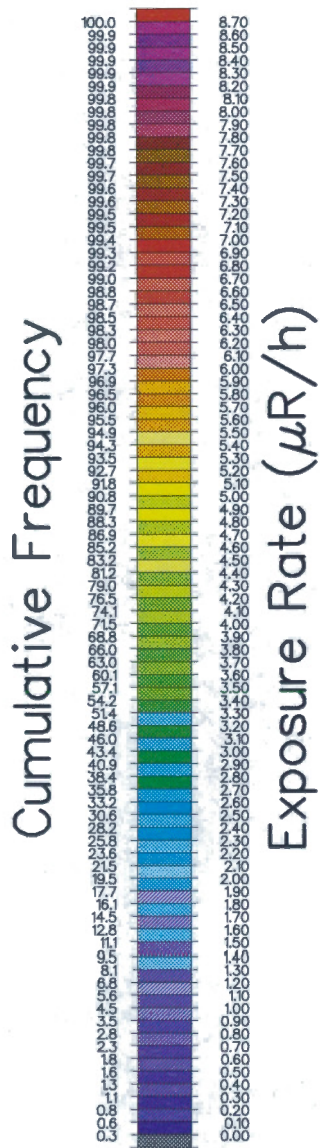
- |                  |                   |
|------------------|-------------------|
| Ag.....Silver    | hem.....Hematite  |
| agate.....Agate  | Li.....Lithium    |
| amy.....Amethyst | ma.....Marl       |
| As.....Arsenic   | Mo.....Molybdenum |
| Au.....Gold      | ne.....Nepheline  |
| ba.....Barite    | Ni.....Nickel     |
| Be.....Beryllium | Pb.....Lead       |
| Cd.....Cadmium   | py.....Pyrite     |
| Cu.....Copper    | Se.....Selenium   |
| ep.....Epidote   | st.....Stone      |
| Fe.....Iron      | Ti.....Titanium   |
| fl.....Fluorite  | U.....Uranium     |
| gf.....Graphite  | Zn.....Zinc       |

**Geology Map**

Colour extraction from Ontario Division of Mines  
Map 2232, Nipigon - Schreiber  
Geological Compilation Series, Thunder Bay District

42D/14, 42E/2 (W1/2), 42E/3

Airborne Geophysical Survey  
of the  
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1991  
Open File 2514



Scale = 1:250 000

Line spacing = 1 km (100m cells)  
Compiled by R.J. Hetu & P.B. Holman

Survey flown, compiled and funded by  
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Geological Survey of Canada

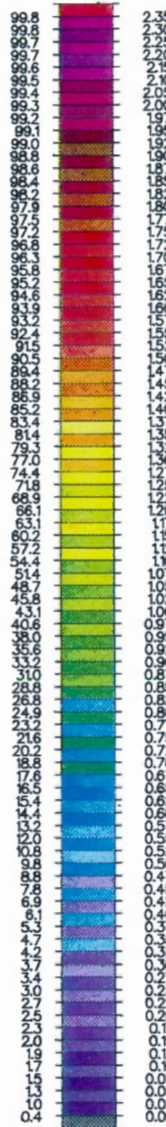


EXPOSURE RATE (µR/H)

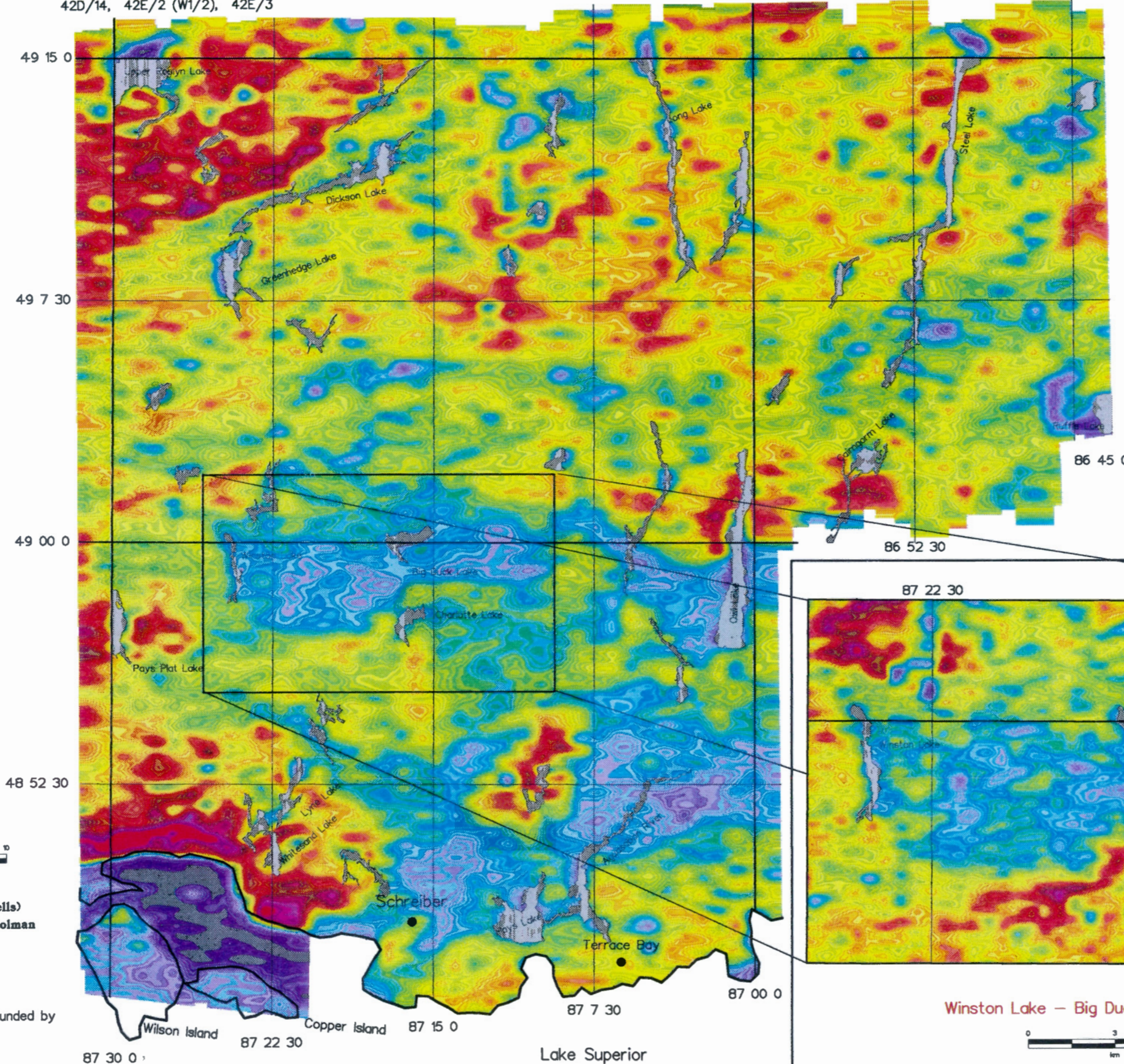
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Cumulative Frequency



Potassium (%)



86 45 0

86 52 30

87 22 30

87 15 0

49 00 0

48 52 30

87 30 0

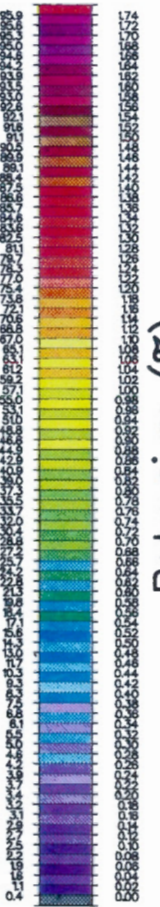
87 22 30

87 15 0

87 7 30

87 00 0

Cumulative Frequency



Potassium (%)



Scale = 1:250 000

Line spacing = 1 km (100m cells)  
Compiled by R.J. Hetu & P.B. Holman



Winston Lake - Big Duck Lake Detail Area

Scale = 1:150 000  
Line spacing = 500 metres (50m cells)

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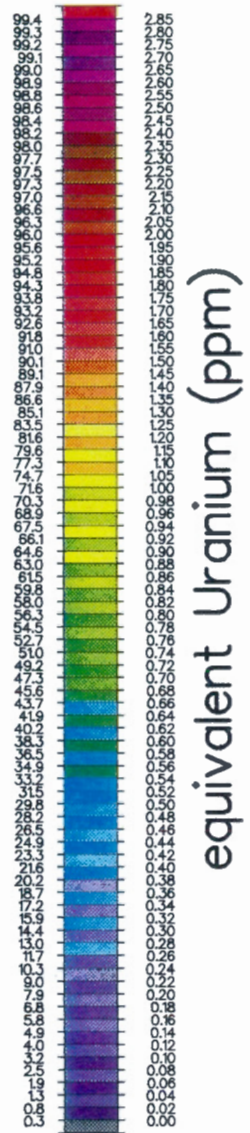
POTASSIUM (%)

42D/14, 42E/2 (W1/2), 42E/3

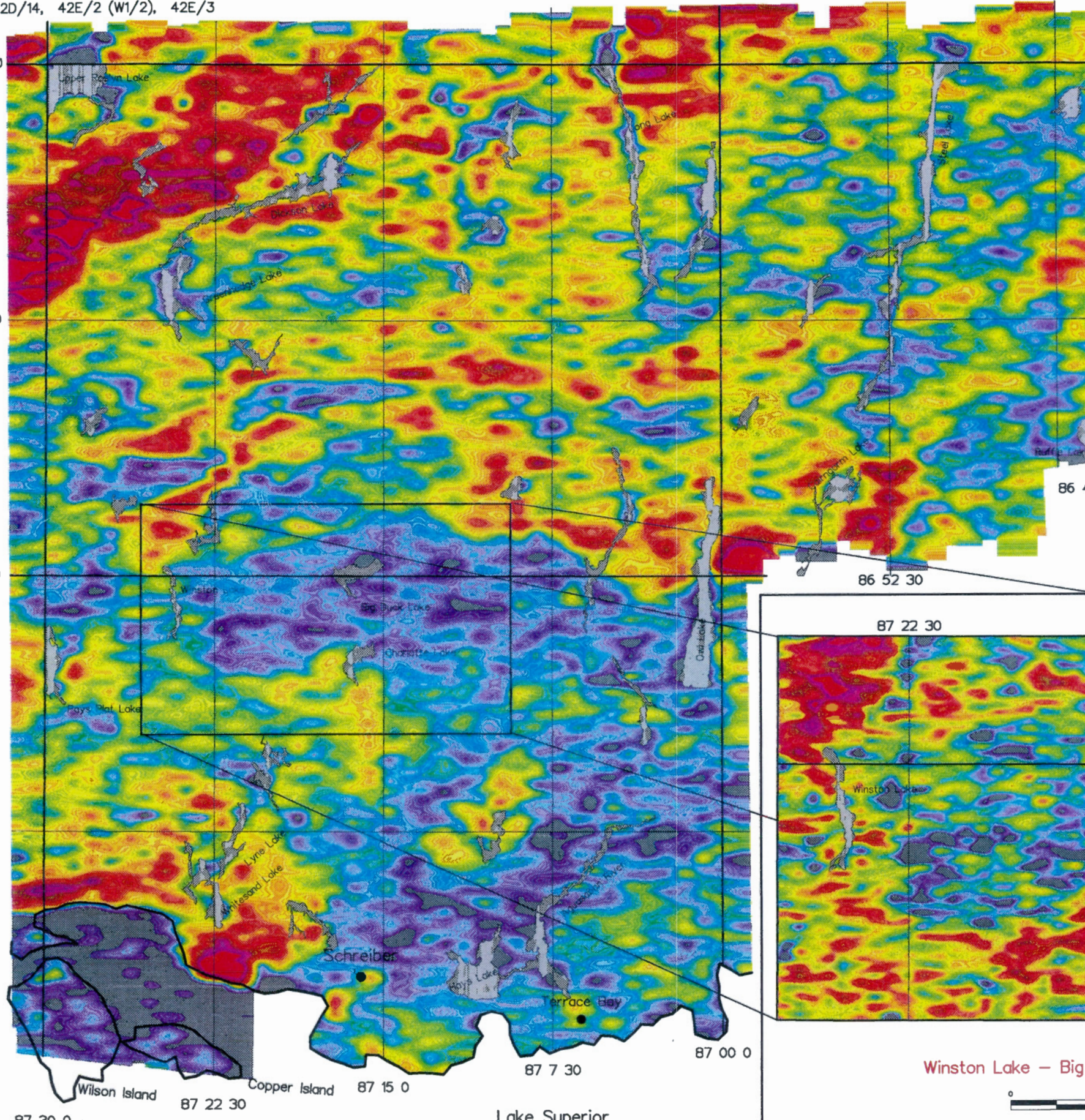
Airborne Geophysical Survey  
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Cumulative Frequency



equivalent Uranium (ppm)



86 45 0

86 52 30

87 22 30

87 15 0

48 52 30

49 00 0

49 7 30

49 15 0

Wilson Island

Copper Island

87 15 0

87 7 30

87 00 0

Lake Superior

Schreiber

Ap's Lake

Terrace Bay

White Sand Lake

Lynx Lake

Boys' Flat Lake

Onizitta Lake

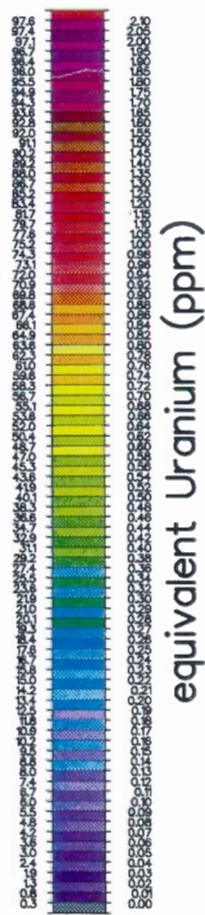
Big Duck Lake

Winston Lake - Big Duck Lake Detail Area



Scale = 1:150 000  
 Line spacing = 500 metres (50m cells)

Cumulative Frequency



equivalent Uranium (ppm)



Scale = 1:250 000  
 Line spacing = 1 km (100m cells)  
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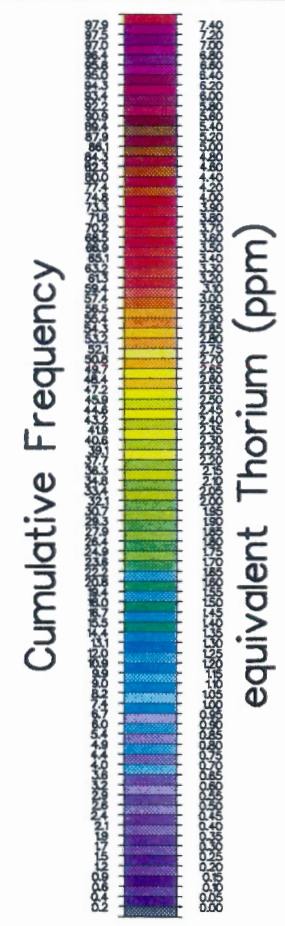
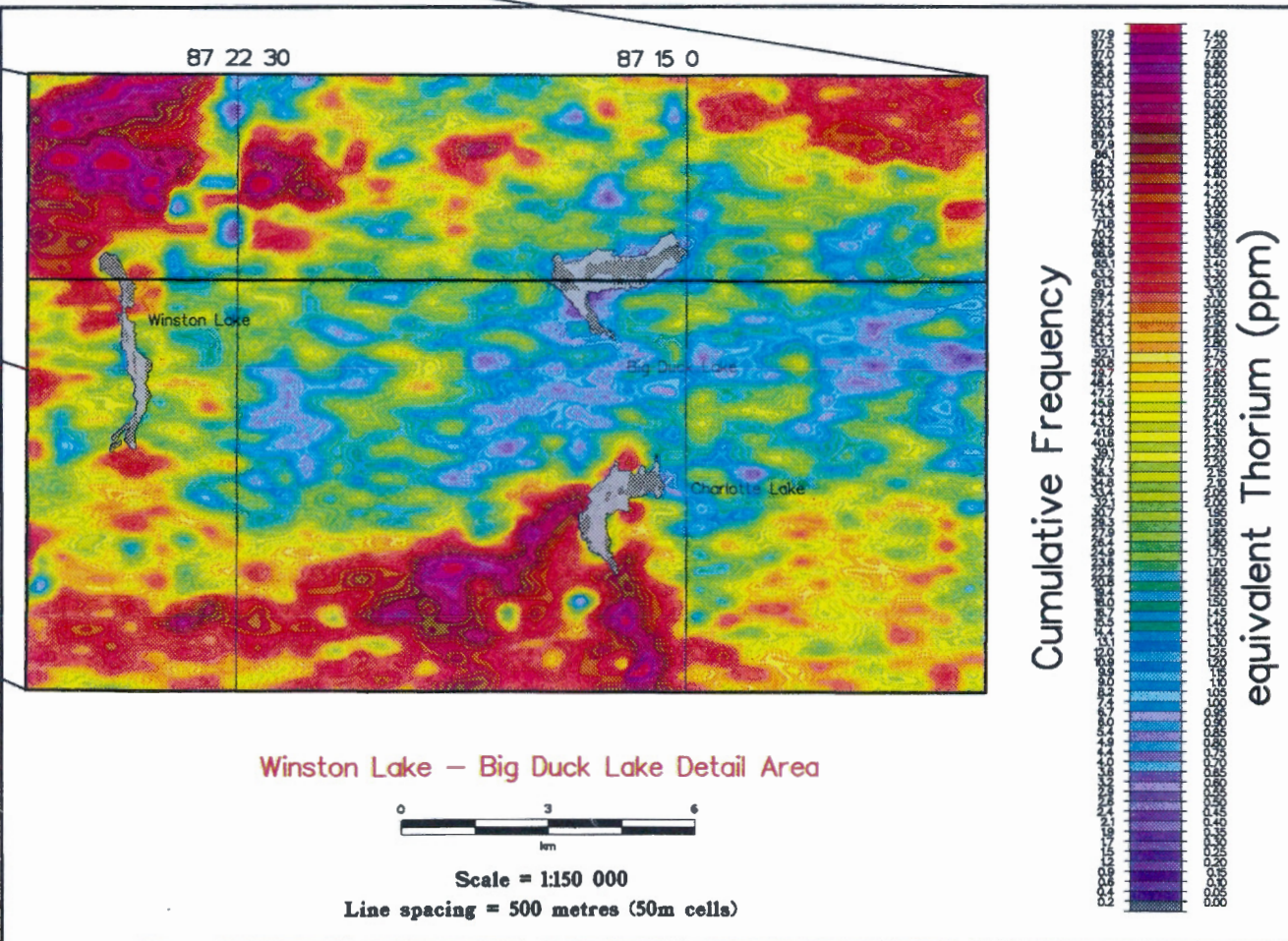
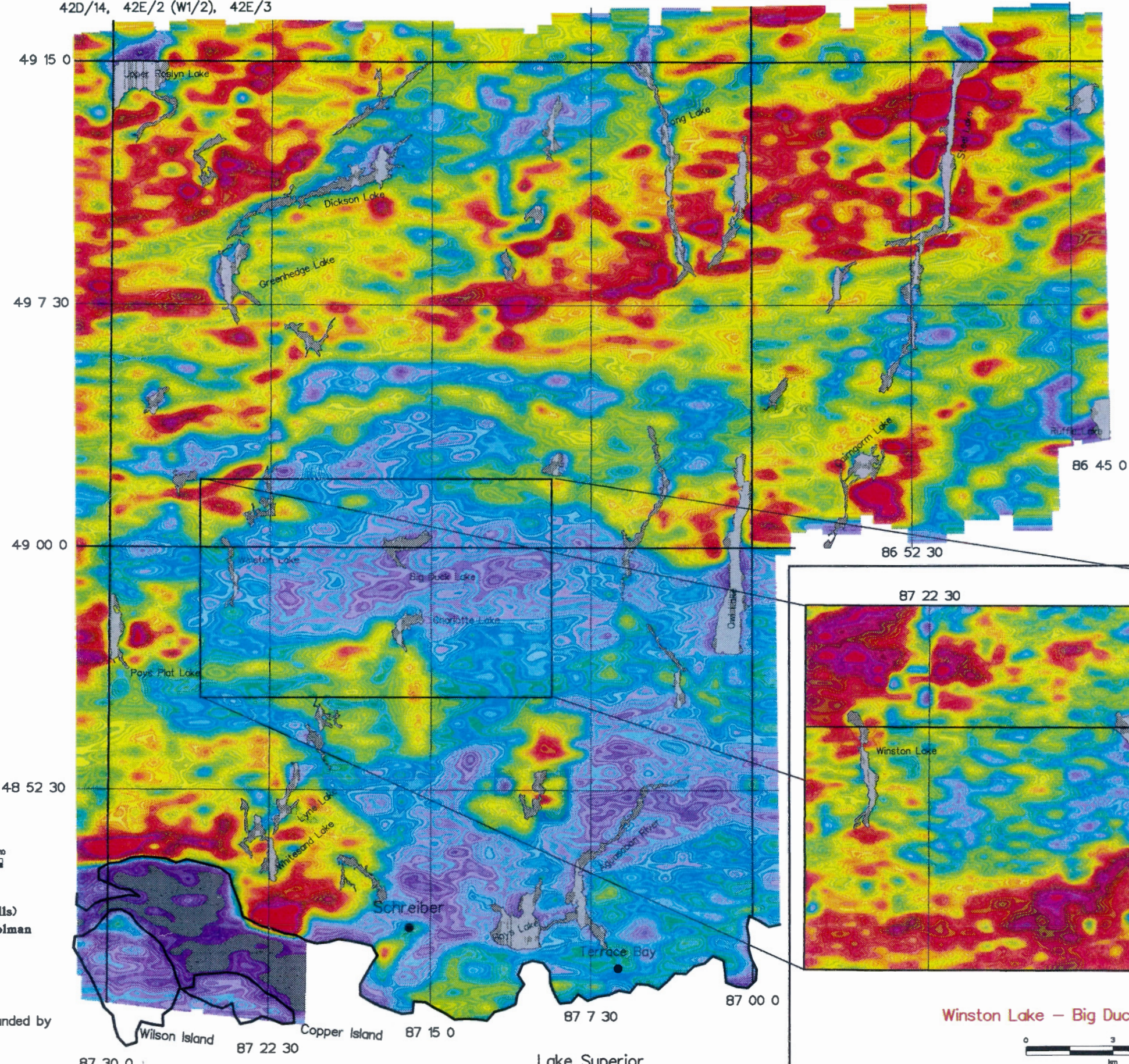
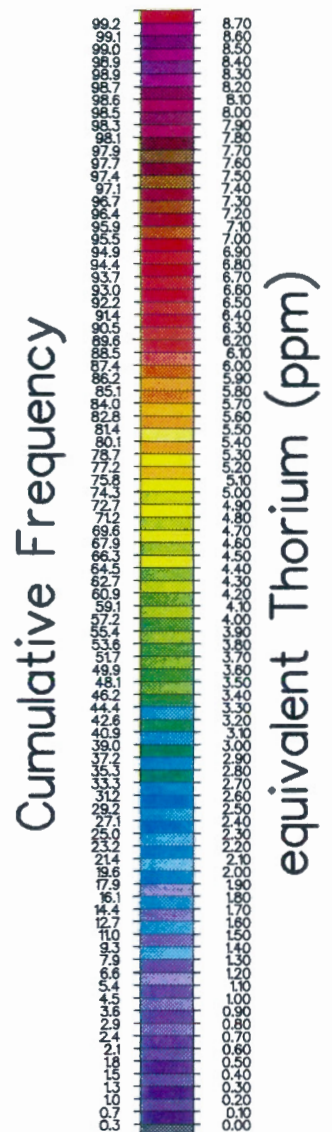
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EQUIVALENT URANIUM (PPM)

42D/14, 42E/2 (W1/2), 42E/3

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 of the  
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Line spacing = 1 km (100m cells)  
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Scale = 1:150 000  
Line spacing = 500 metres (50m cells)

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EQUIVALENT THORIUM (PPM)

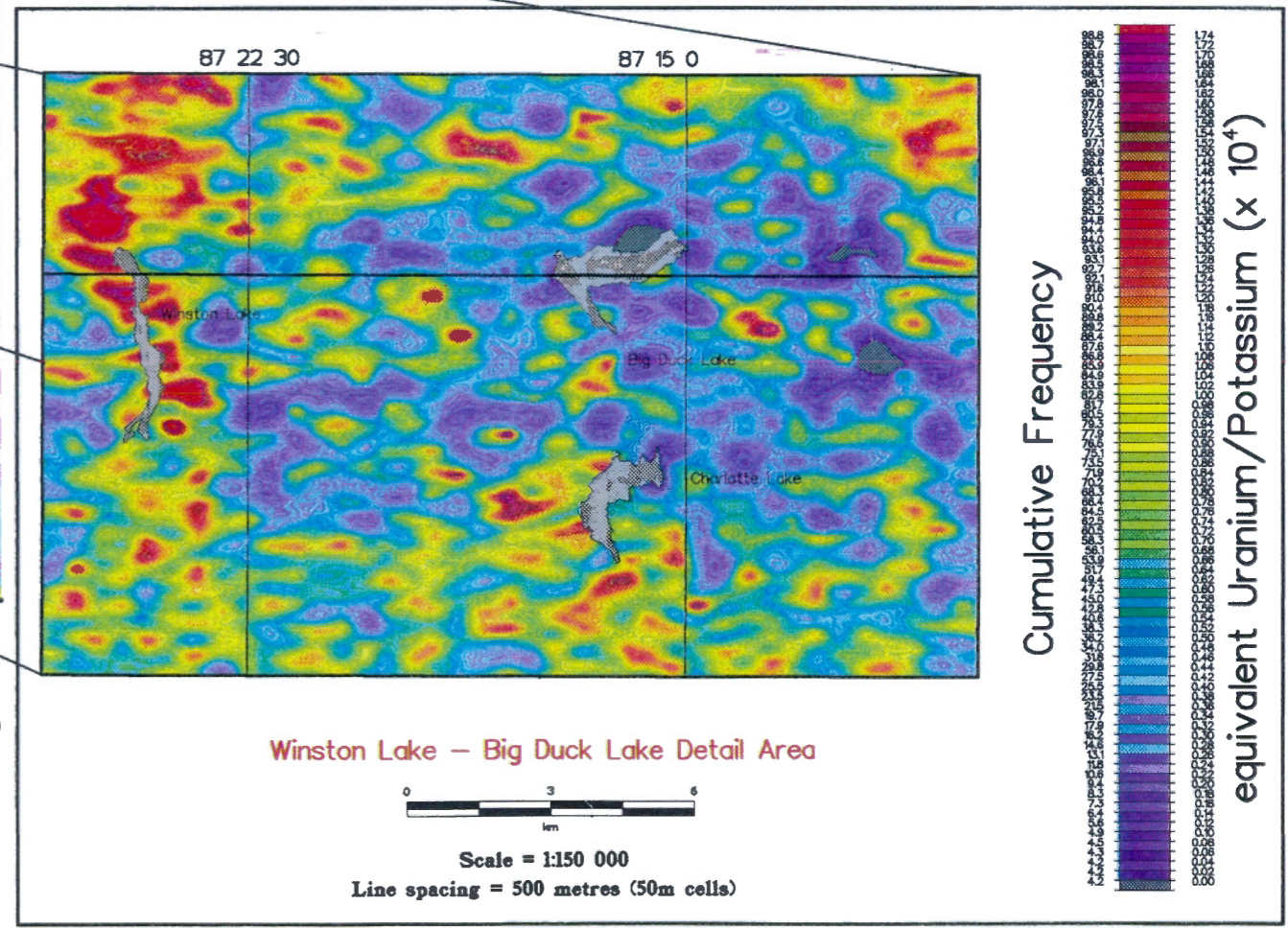
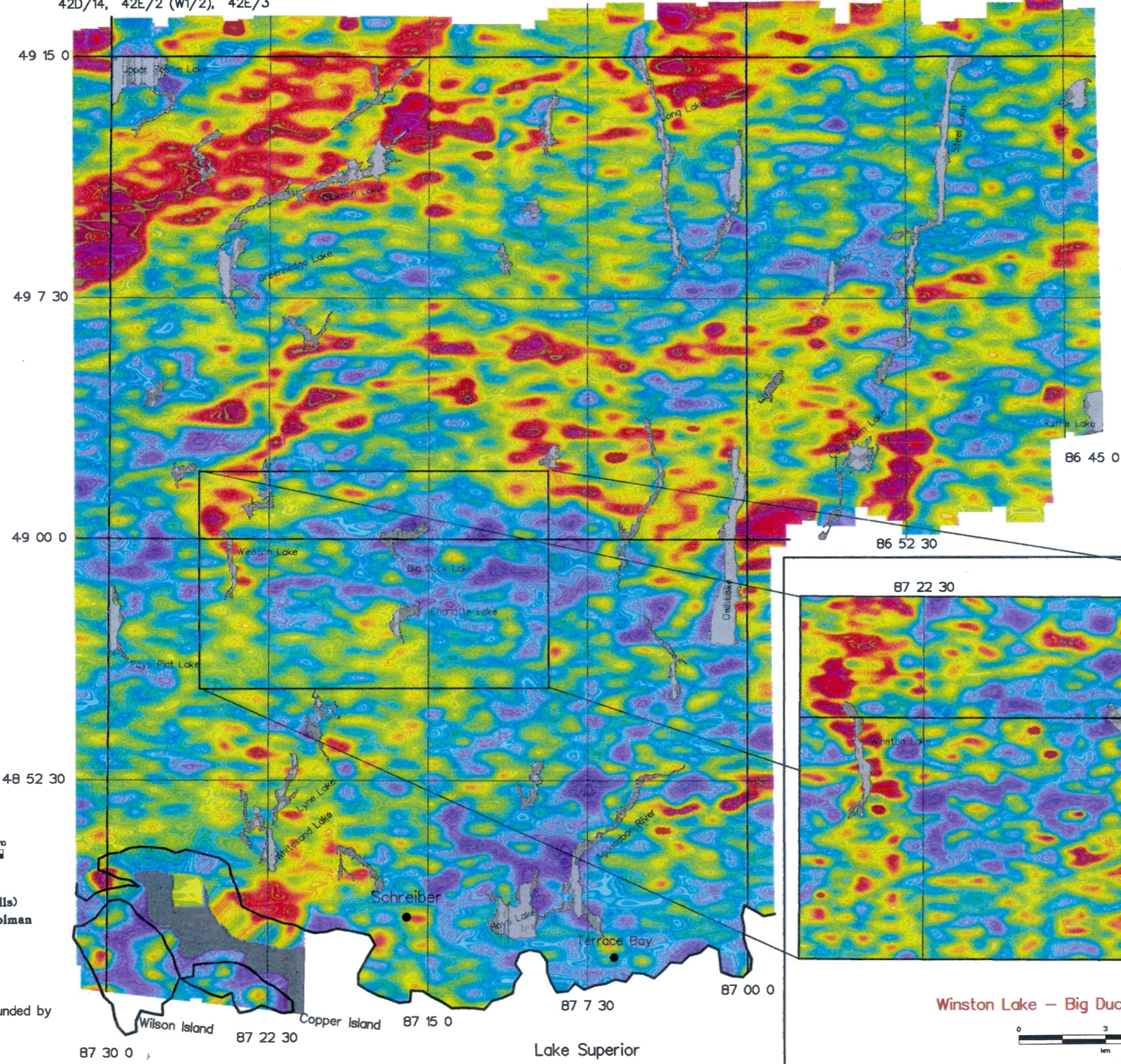
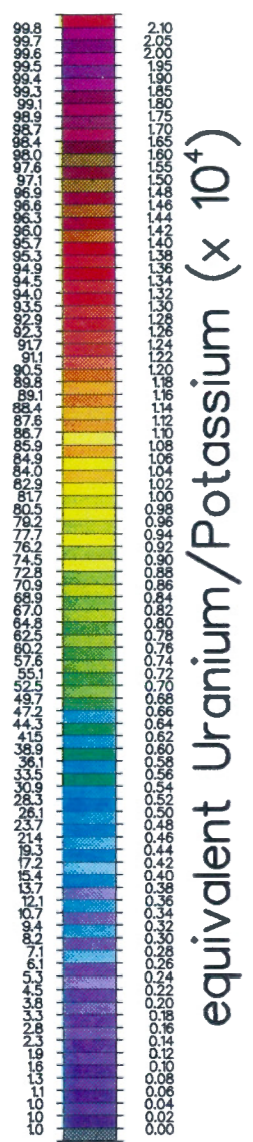


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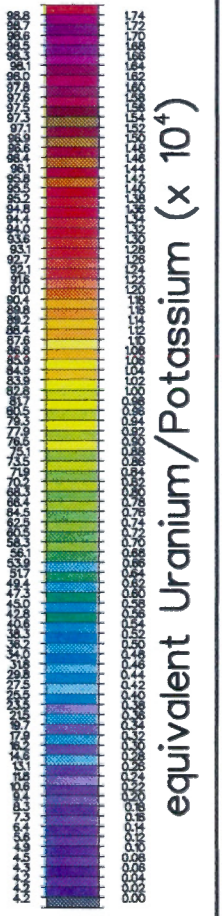
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Cumulative Frequency



Cumulative Frequency



Scale = 1:250 000  
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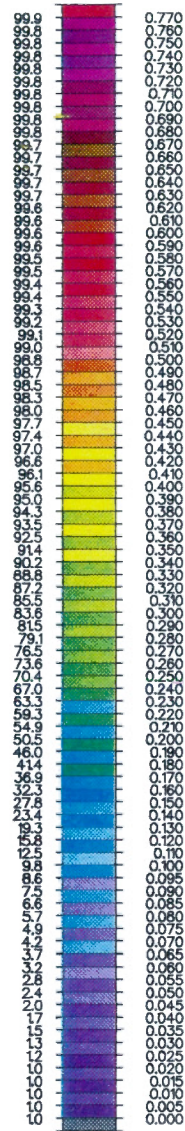
EQUIVALENT URANIUM/POTASSIUM ( $\times 10^4$ )

42D/14, 42E/2 (W1/2), 42E/3

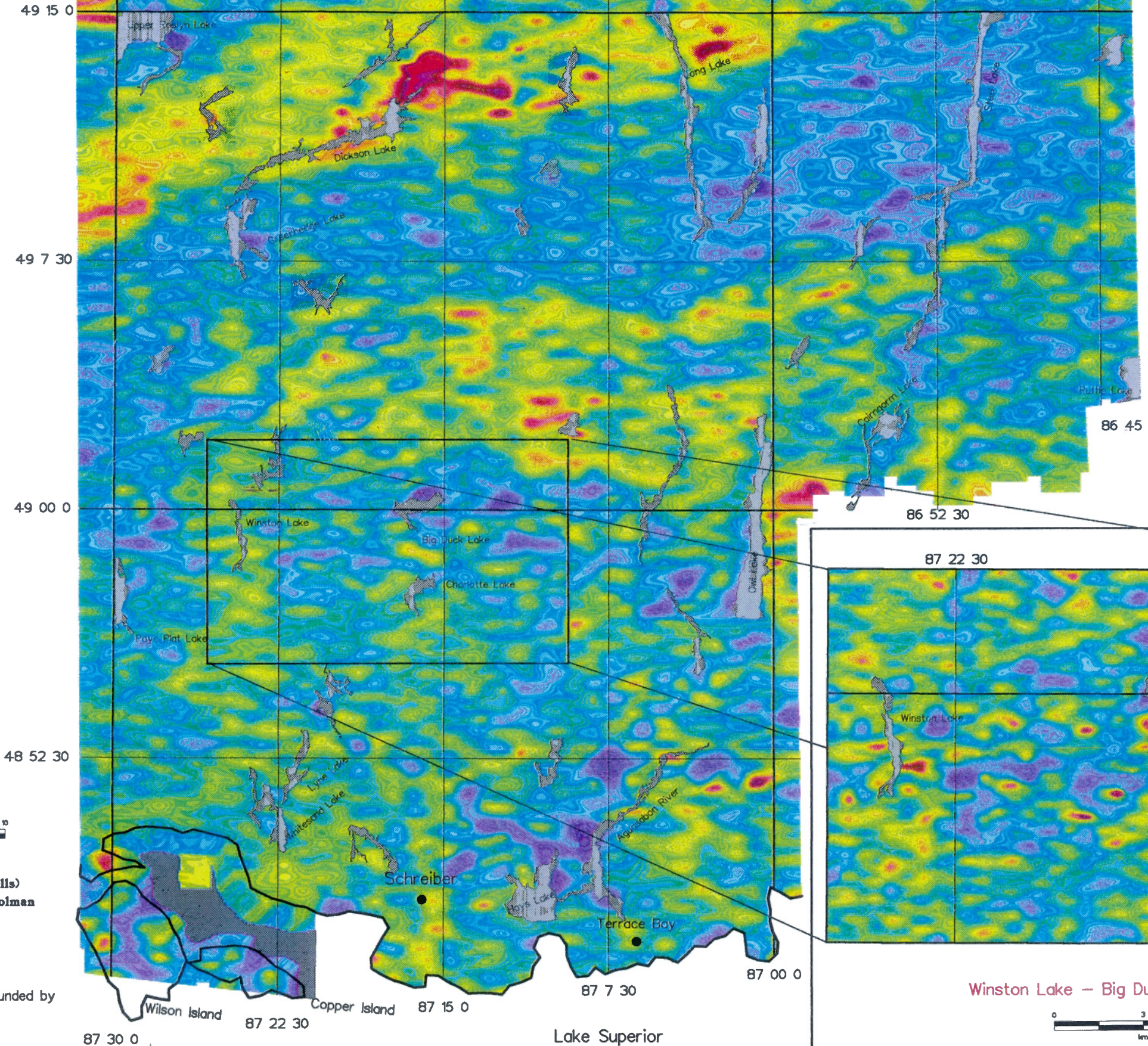
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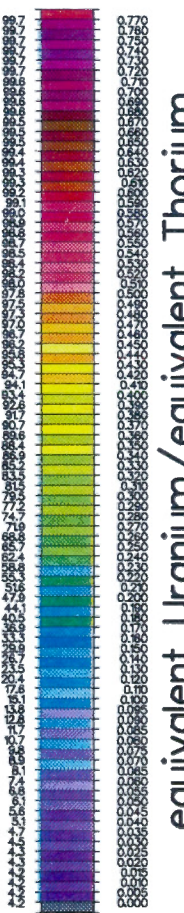
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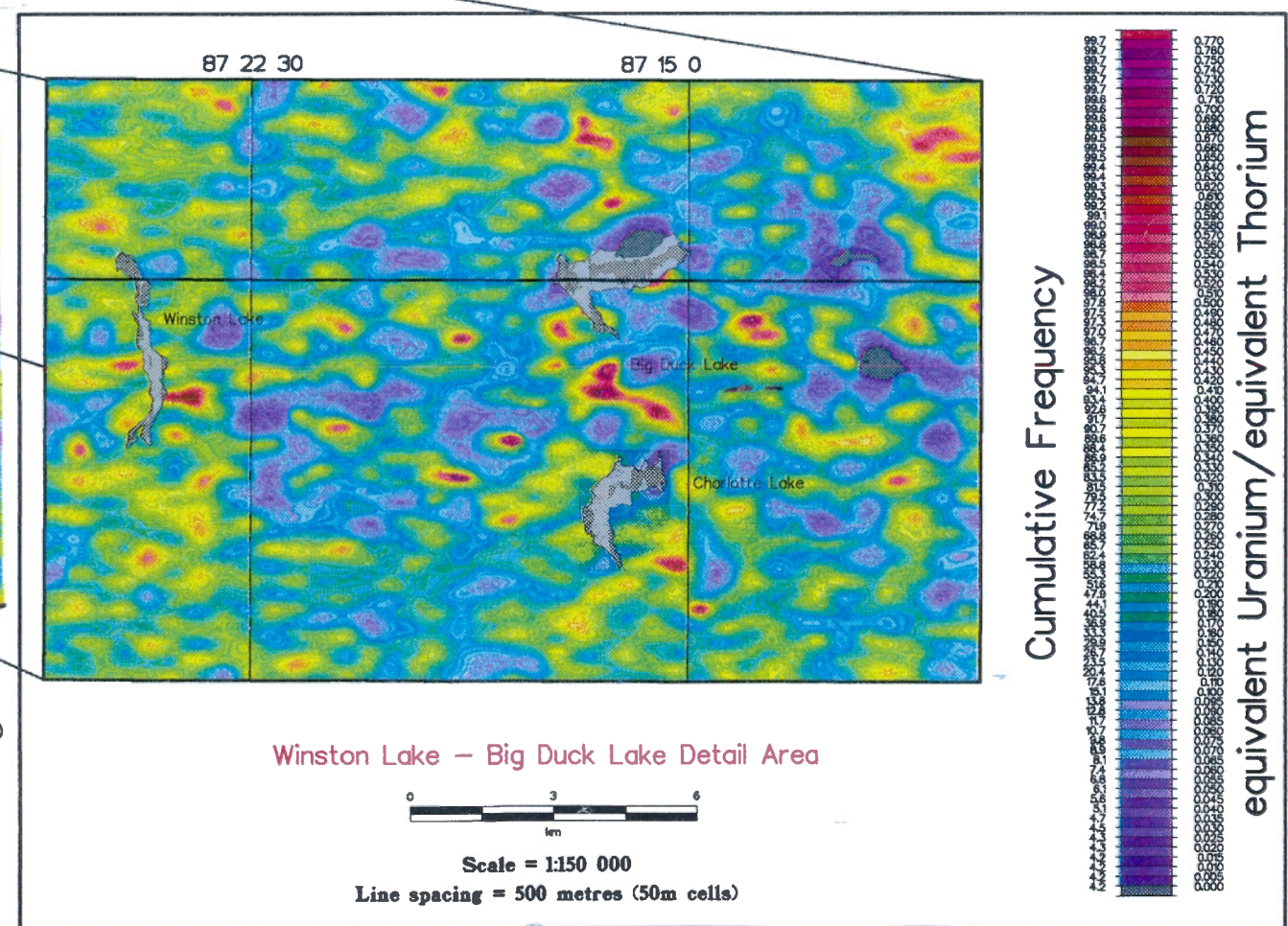
equivalent Uranium/Thorium



Cumulative Frequency



equivalent Uranium/Thorium



Winston Lake - Big Duck Lake Detail Area

Scale = 1:150 000  
Line spacing = 500 metres (50m cells)

Scale = 1:250 000  
Line spacing = 1 km (100m cells)  
Compiled by R.J. Hetu & P.B. Holman

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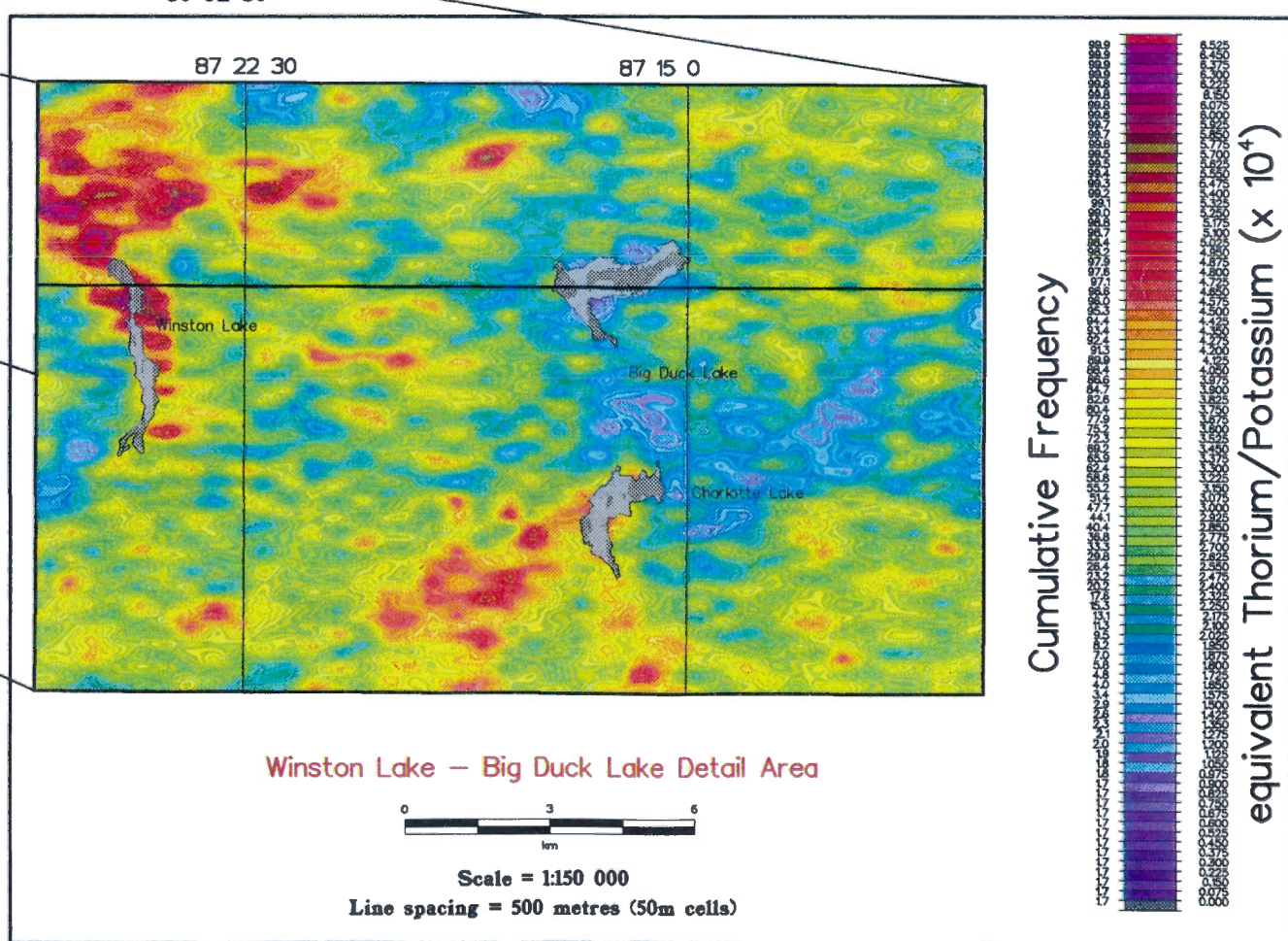
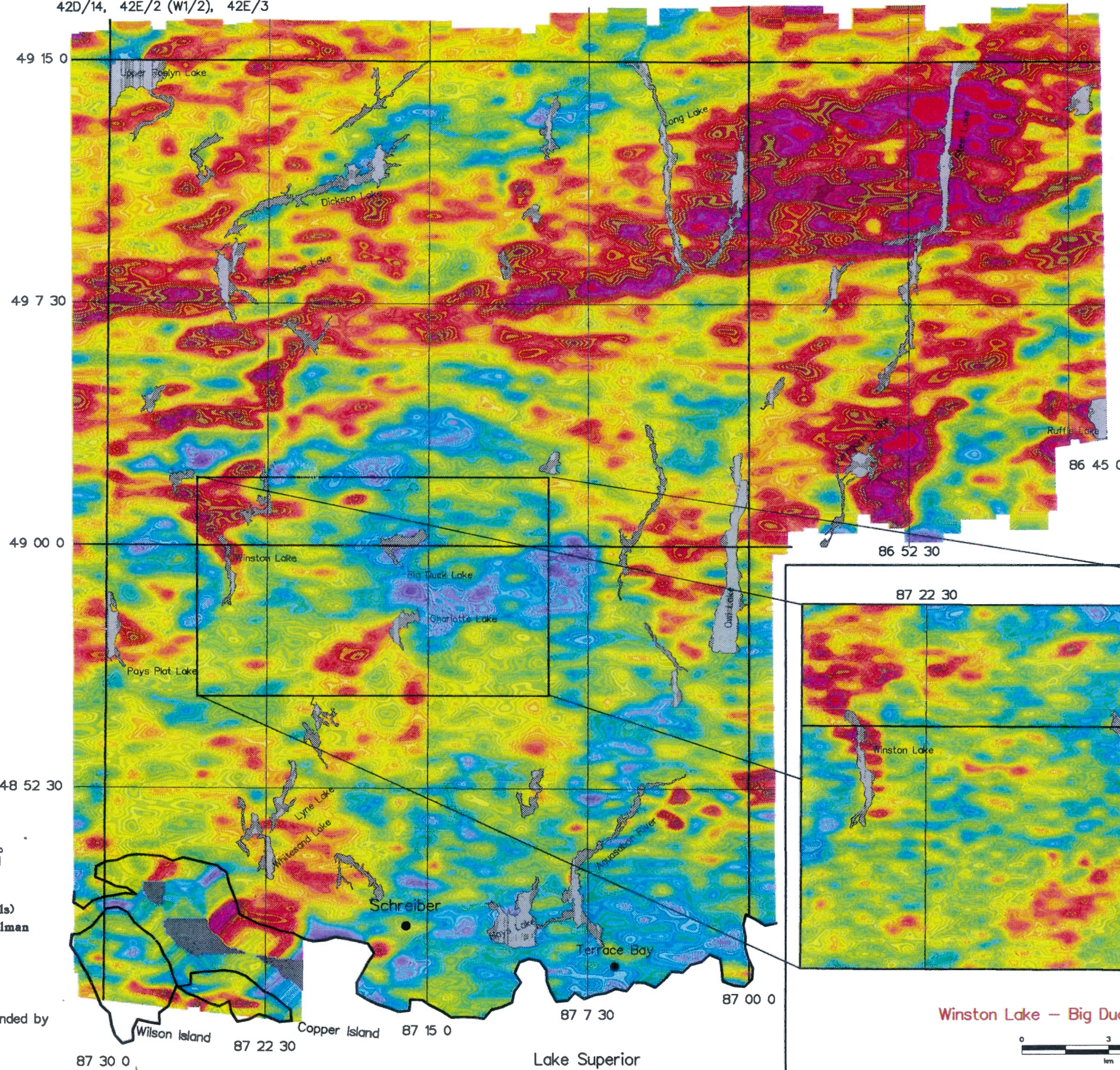
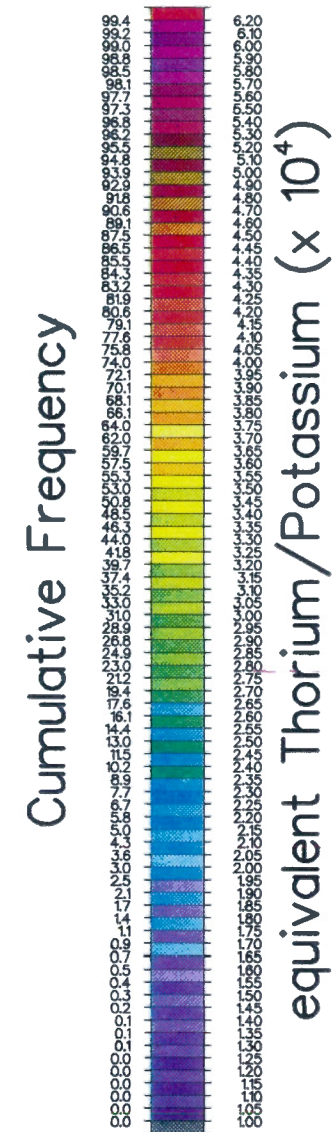
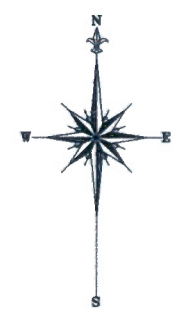
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EQUIVALENT URANIUM/EQUIVALENT THORIUM

42D/14, 42E/2 (W1/2), 42E/3

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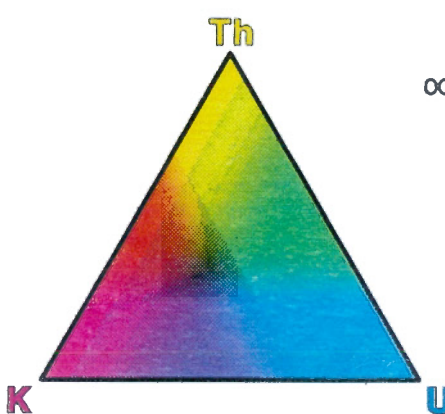
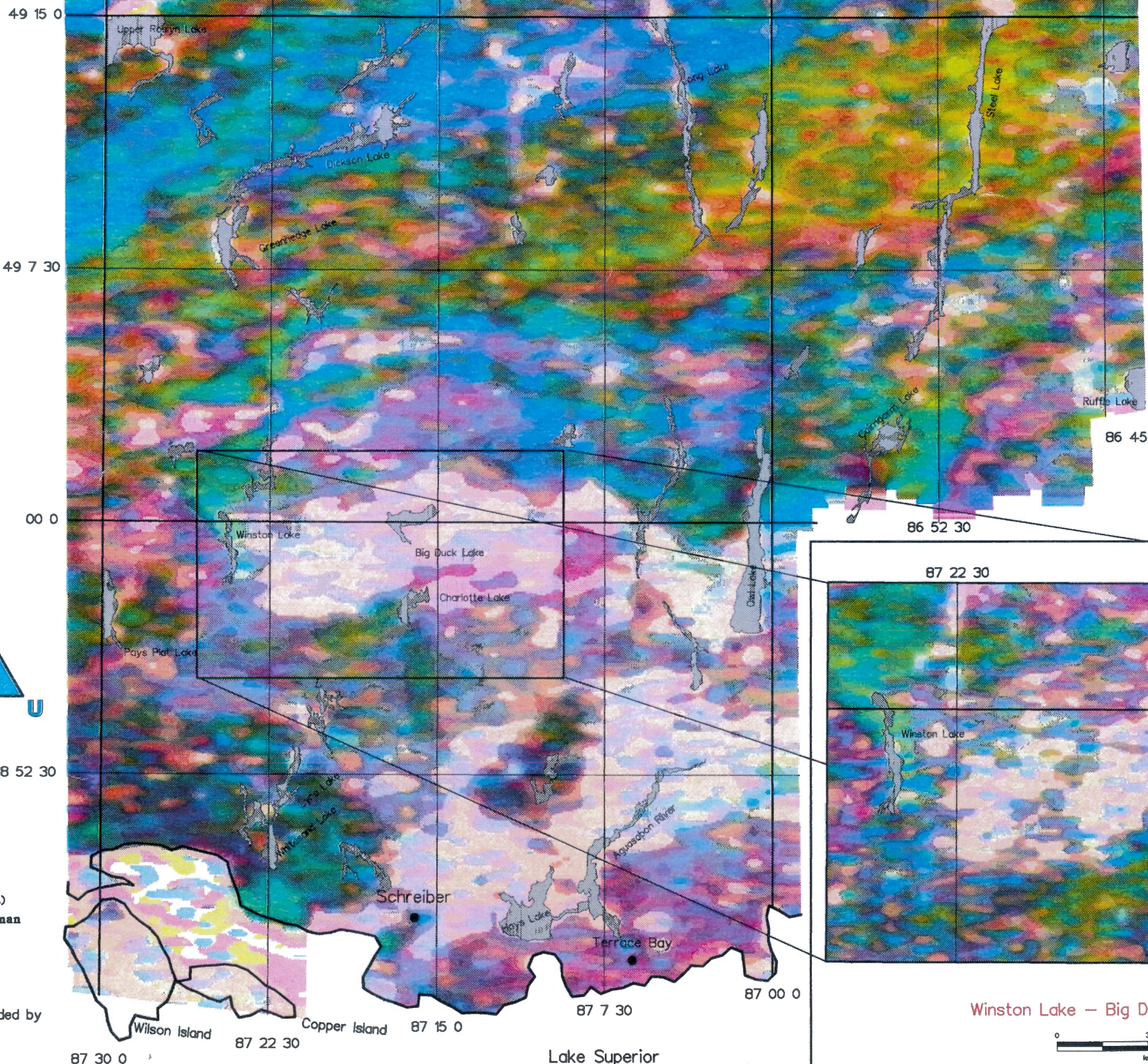
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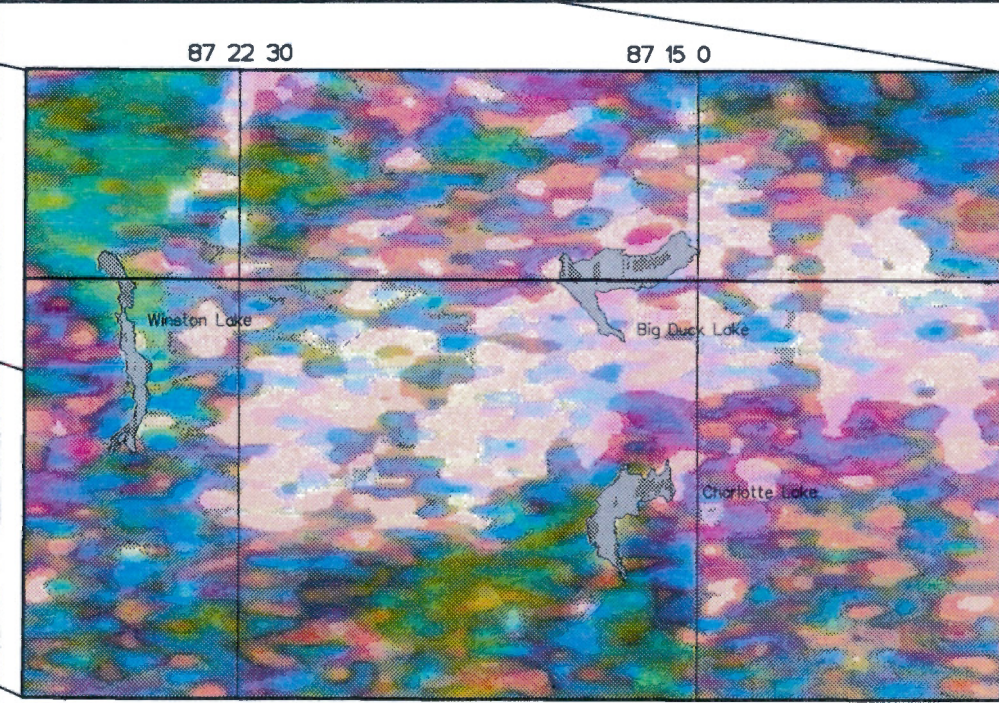
EQUIVALENT THORIUM/POTASSIUM ( $\times 10^4$ )

42D/14, 42E/2 (W1/2), 42E/3

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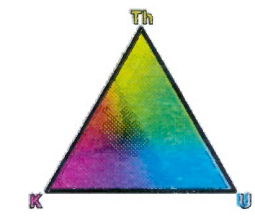
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Winston Lake - Big Duck Lake Detail Area



Scale = 1:150 000  
 Line spacing = 500 metres (50m cells)



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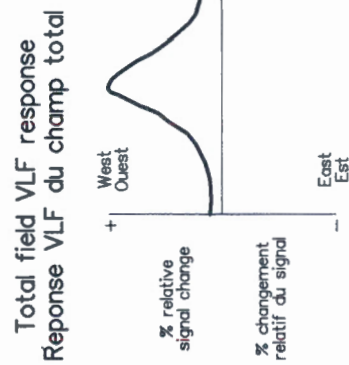
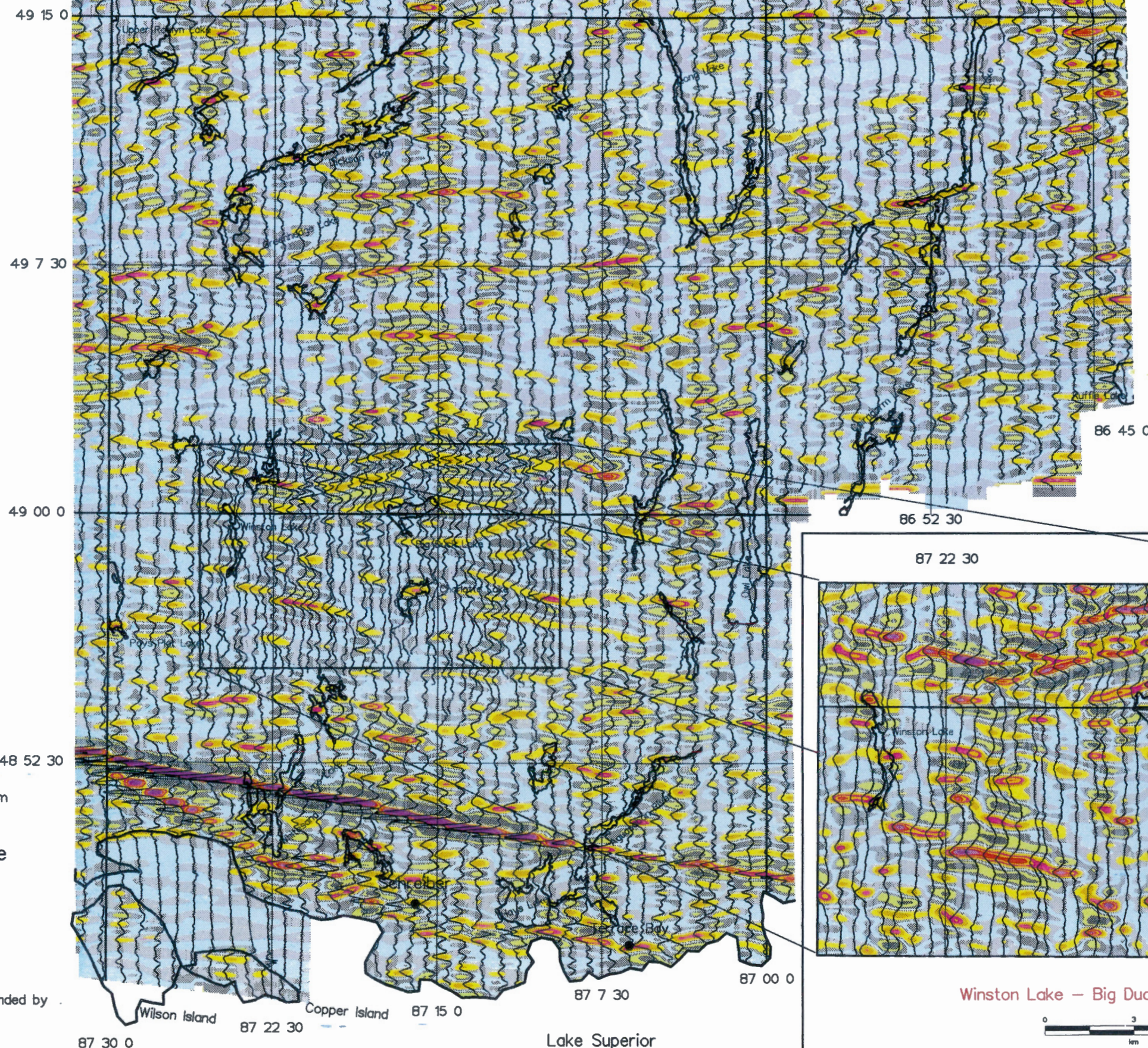
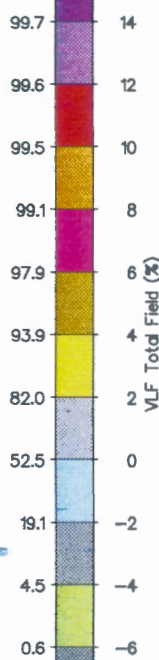
42D/14, 42E/2 (W1/2), 42E/3

Airborne Geophysical Survey  
 of the  
**Schreiber Area, Ontario**  
 1991  
 Open File  
 2514



Scale = 1:250 000  
 Line spacing = 1 km (100m cells)  
 Compiled by R.J. Hetu & P.B. Holman

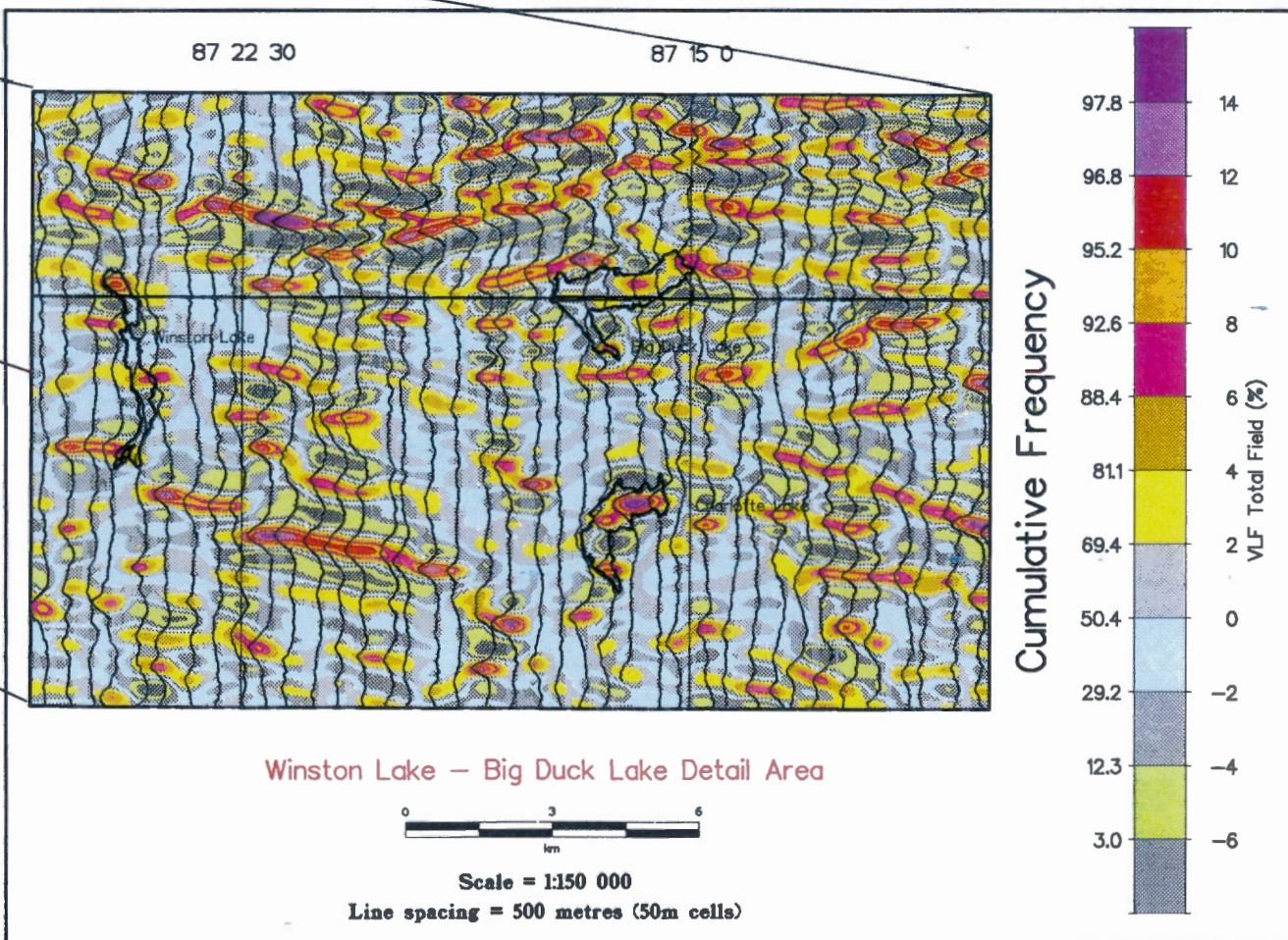
Cumulative Frequency



The profile scale = 150 %/cm  
 The receiving coils were tuned to station NAA at Cutler Maine which transmits at a frequency of 24.0 k Hz.

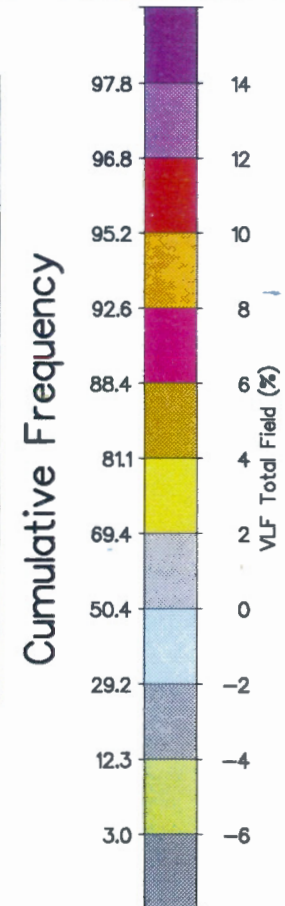
Survey flown, compiled and funded by Airborne Geophysics Section Mineral Resources Division Geological Survey of Canada

Energy, Mines and Resources Canada / Énergie, Mines et Ressources Canada



Winston Lake - Big Duck Lake Detail Area

Scale = 1:150 000  
 Line spacing = 500 metres (50m cells)



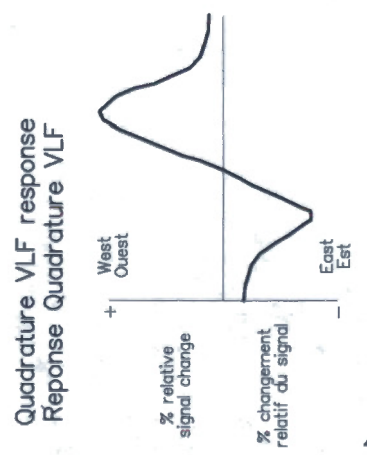
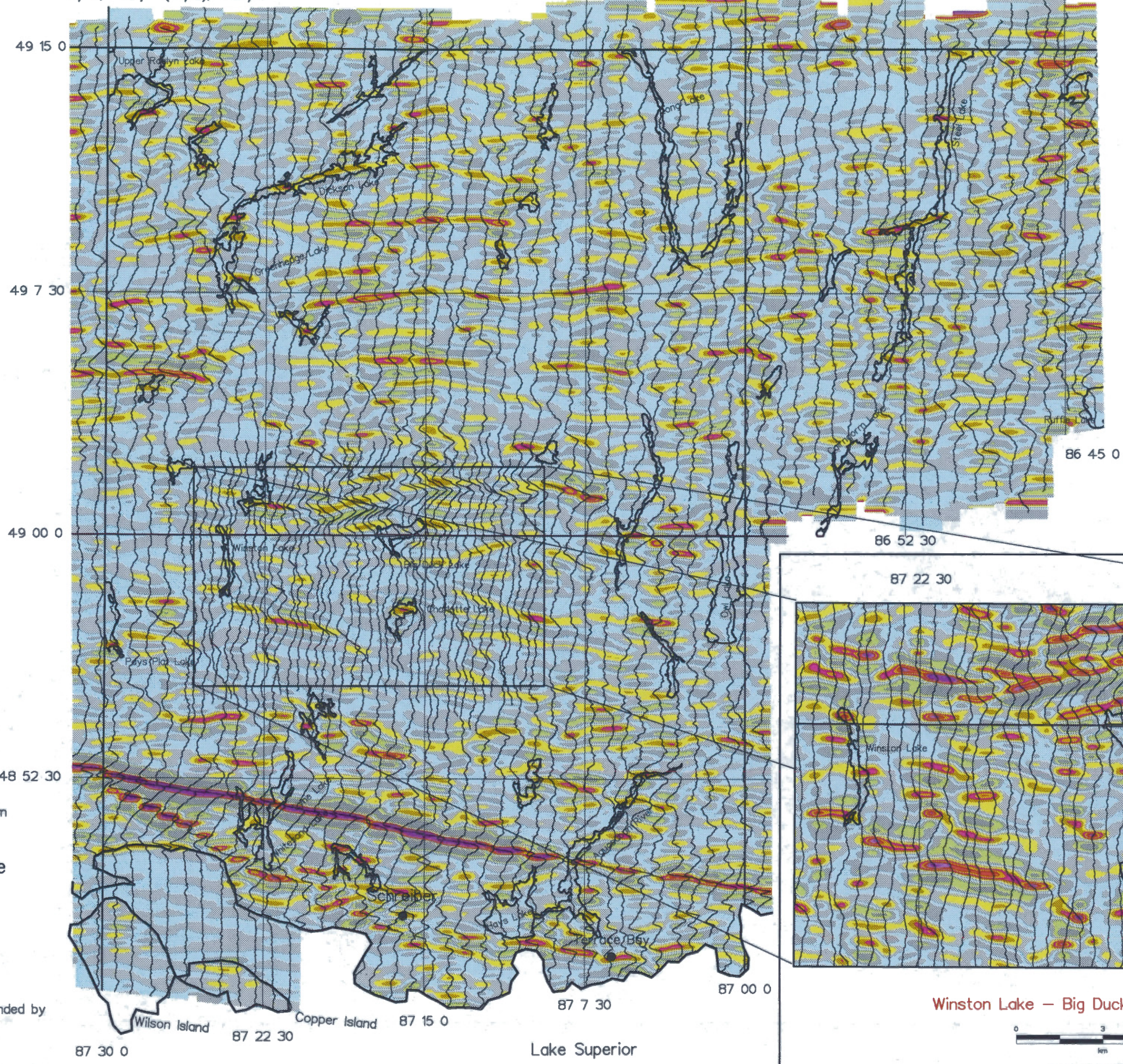
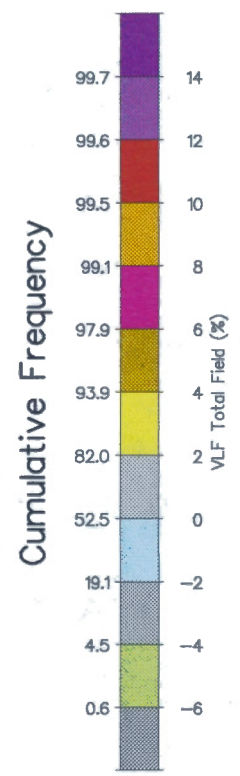
VLF TOTAL FIELD (%)

42D/14, 42E/2 (W1/2), 42E/3

Airborne Geophysical Survey  
 of the  
**Schreiber Area, Ontario**  
 1991  
 Open File 2514



Scale = 1:250 000  
 Line spacing = 1 km (100m cells)  
 Compiled by R.J. Hetu & P.B. Holman

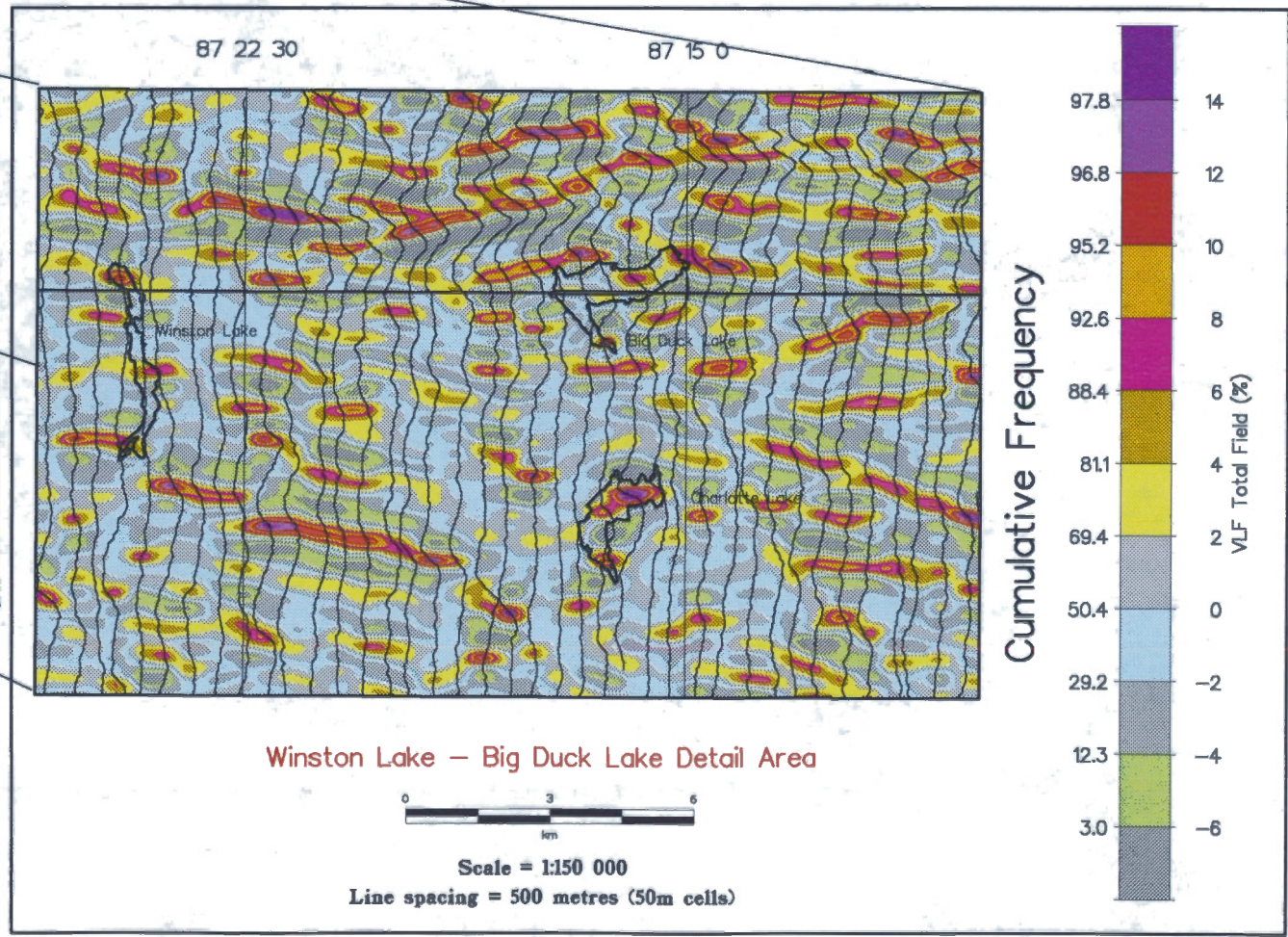


The profile scale = 150 %/cm  
 The receiving coils were tuned to station NAA at Cutler Maine which transmits at a frequency of 24.0 k Hz.

Survey flown, compiled and funded by Airborne Geophysics Section Mineral Resources Division Geological Survey of Canada



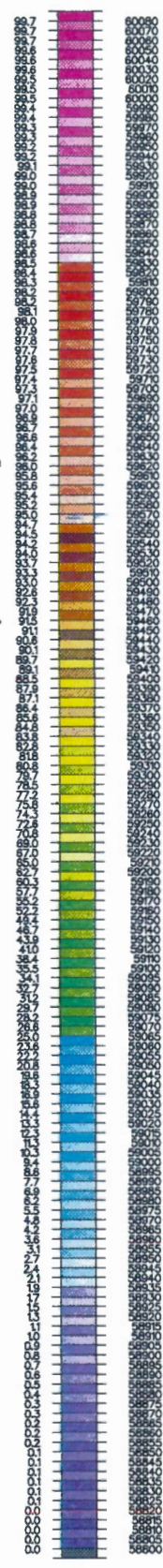
VLF Quadature Profile Data  
 with Total Field gridded data



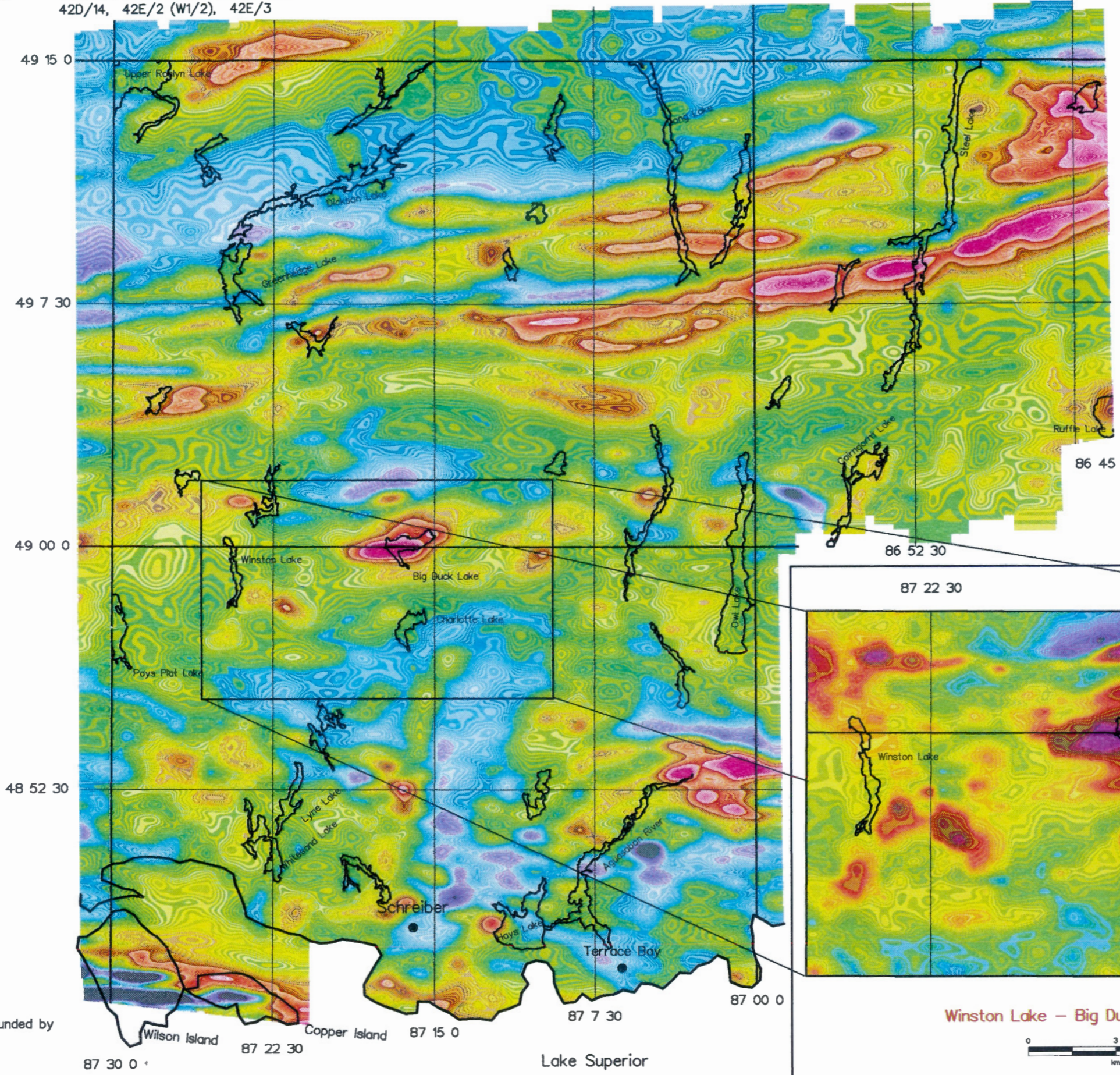
Winston Lake - Big Duck Lake Detail Area

Scale = 1:150 000  
 Line spacing = 500 metres (50m cells)

Cumulative Frequency

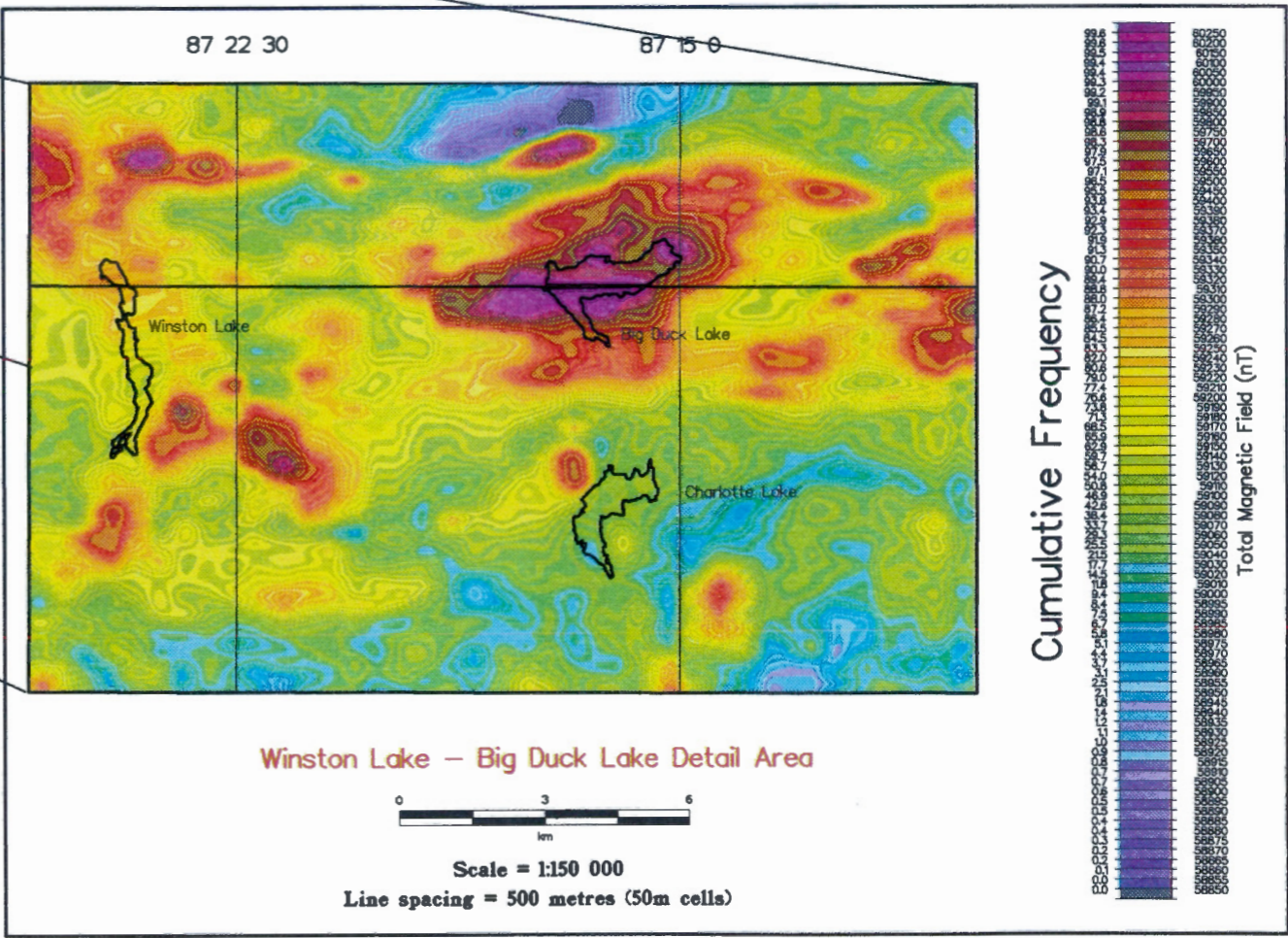


Total Magnetic Field (nT)



Airborne Geophysical Survey of the Schreiber Area, Ontario 1991 Open File 2514

Scale = 1:250 000 Line spacing = 1 km (100m cells) Compiled by R.J. Hetu & P.B. Holman



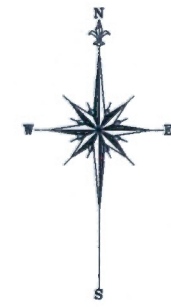
Survey flown, compiled and funded by Airborne Geophysics Section Mineral Resources Division Geological Survey of Canada

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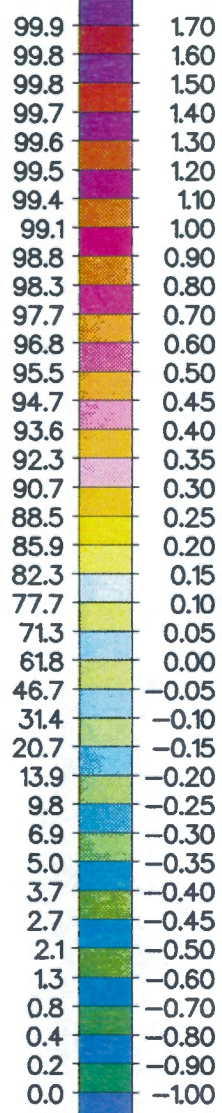


TOTAL MAGNETIC FIELD (NT)

Airborne Geophysical Survey  
 of the  
**Schreiber Area, Ontario**  
 1991  
 Open File 2514



Cumulative Frequency



Calculated Magnetic Vertical Gradient



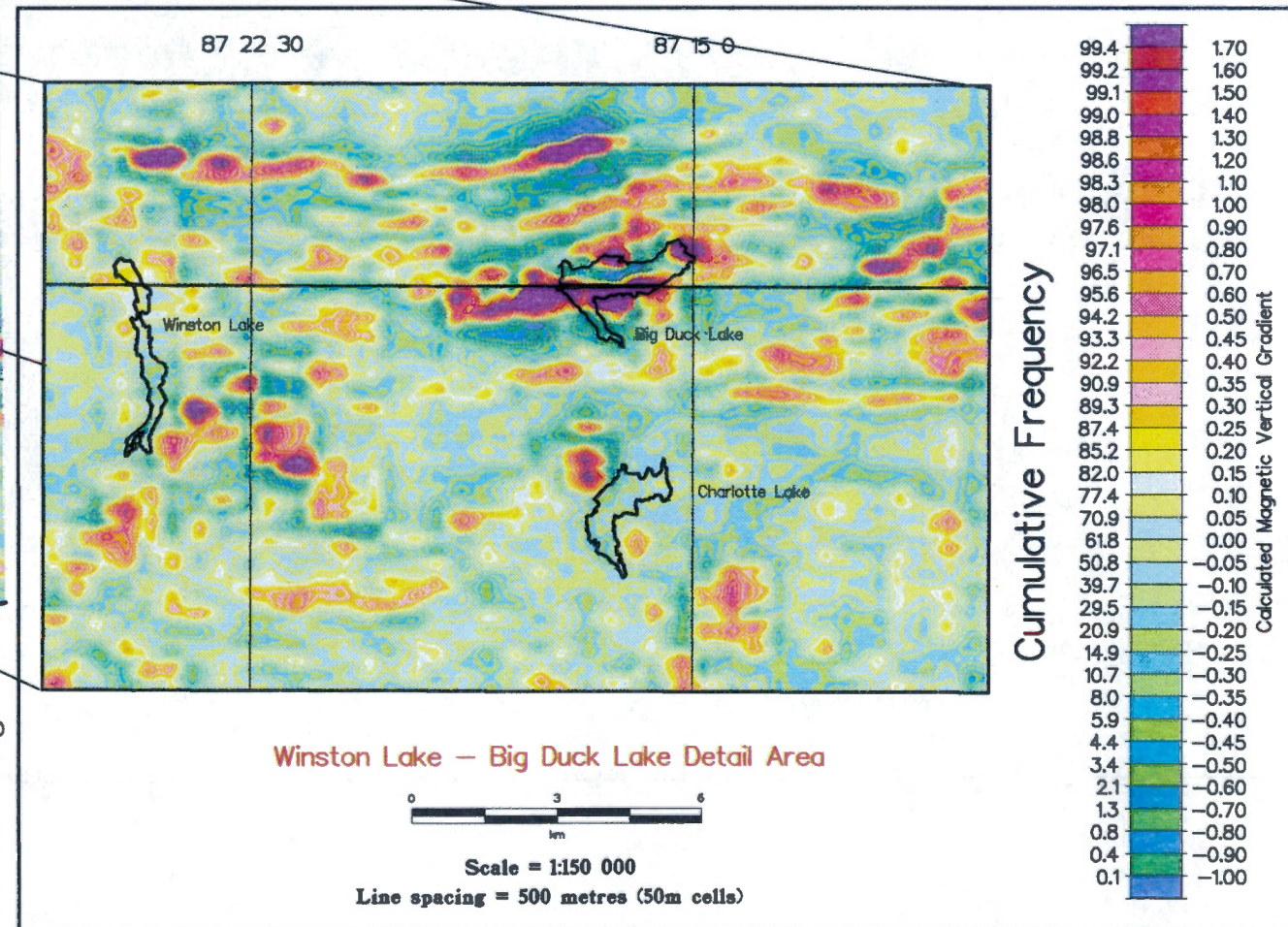
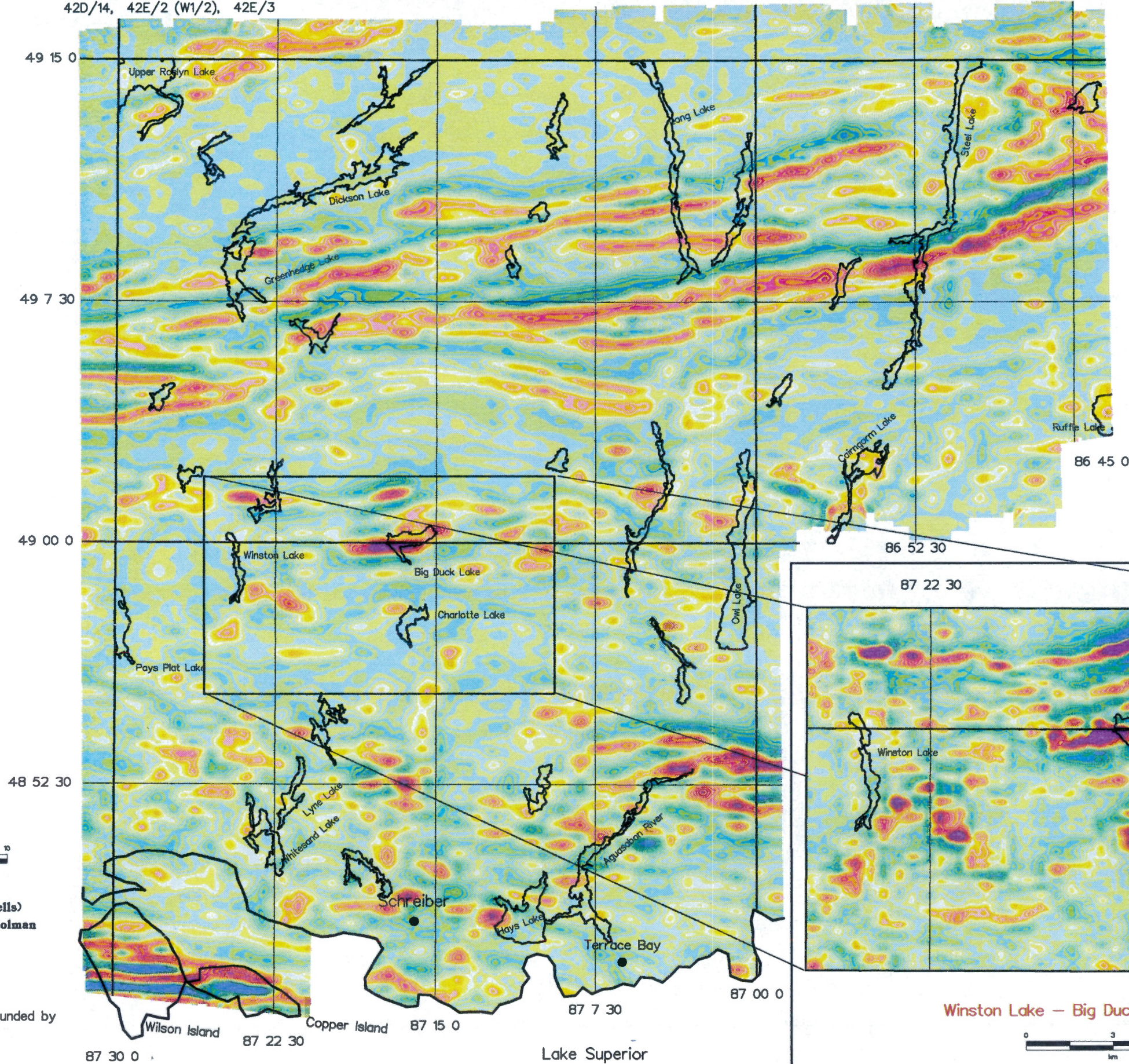
Scale = 1:250 000

Line spacing = 1 km (100m cells)

Compiled by R.J. Hetu & P.B. Holman

Survey flown, compiled and funded by  
 Airborne Geophysics Section  
 Mineral Resources Division  
 Geological Survey of Canada

Energy, Mines and Resources Canada  
 Énergie, Mines et Ressources Canada



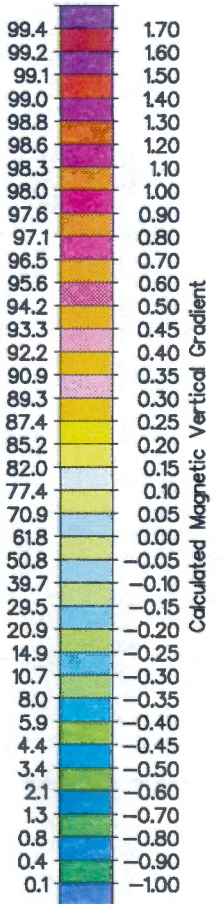
Winston Lake - Big Duck Lake Detail Area



Scale = 1:150 000

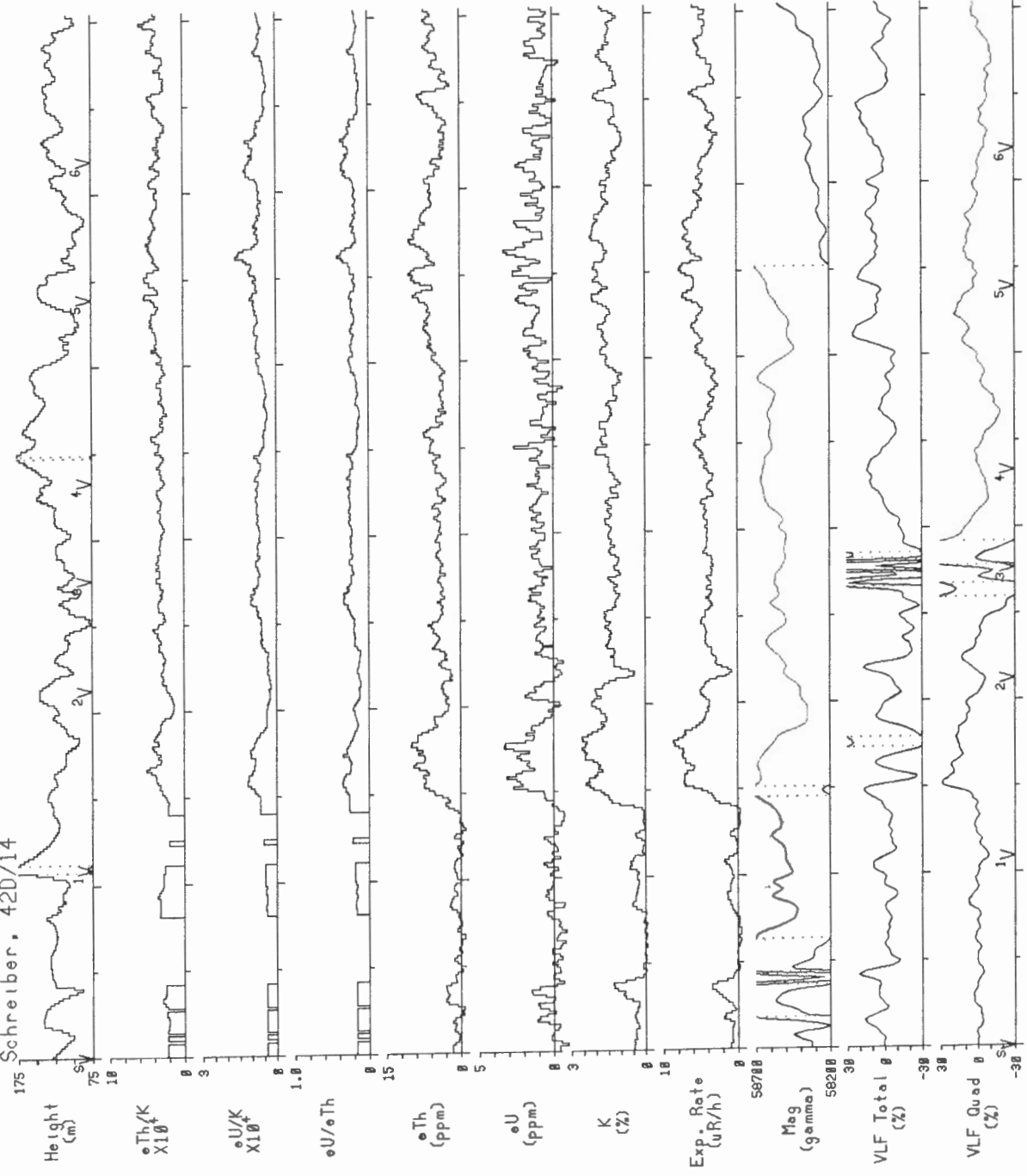
Line spacing = 500 metres (50m cells)

Cumulative Frequency

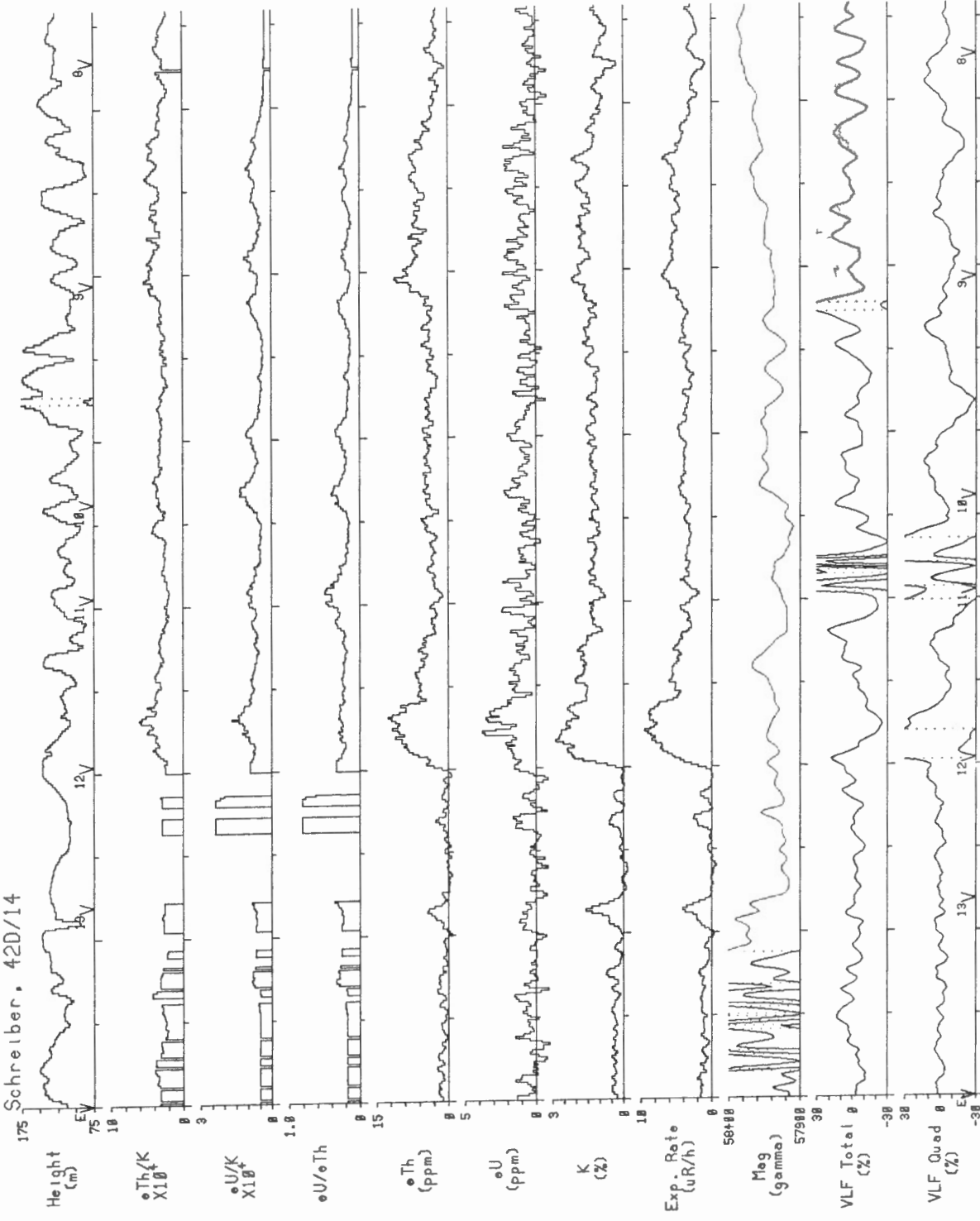




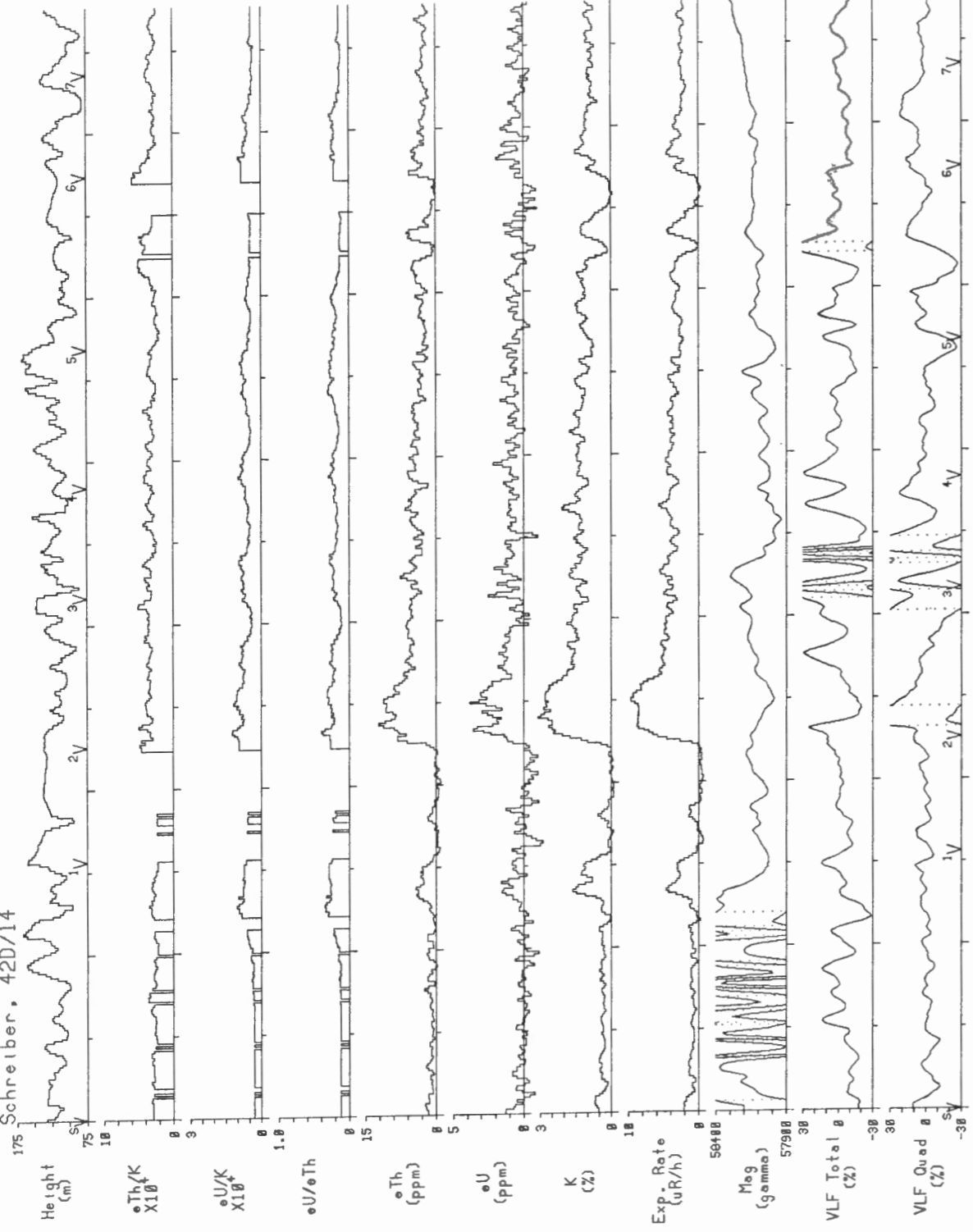
Schreiber Area, Ontario 1991  
Schreiber, 42D/14



Schreiber Area, Ontario 1991  
Schreiber, 42D/14

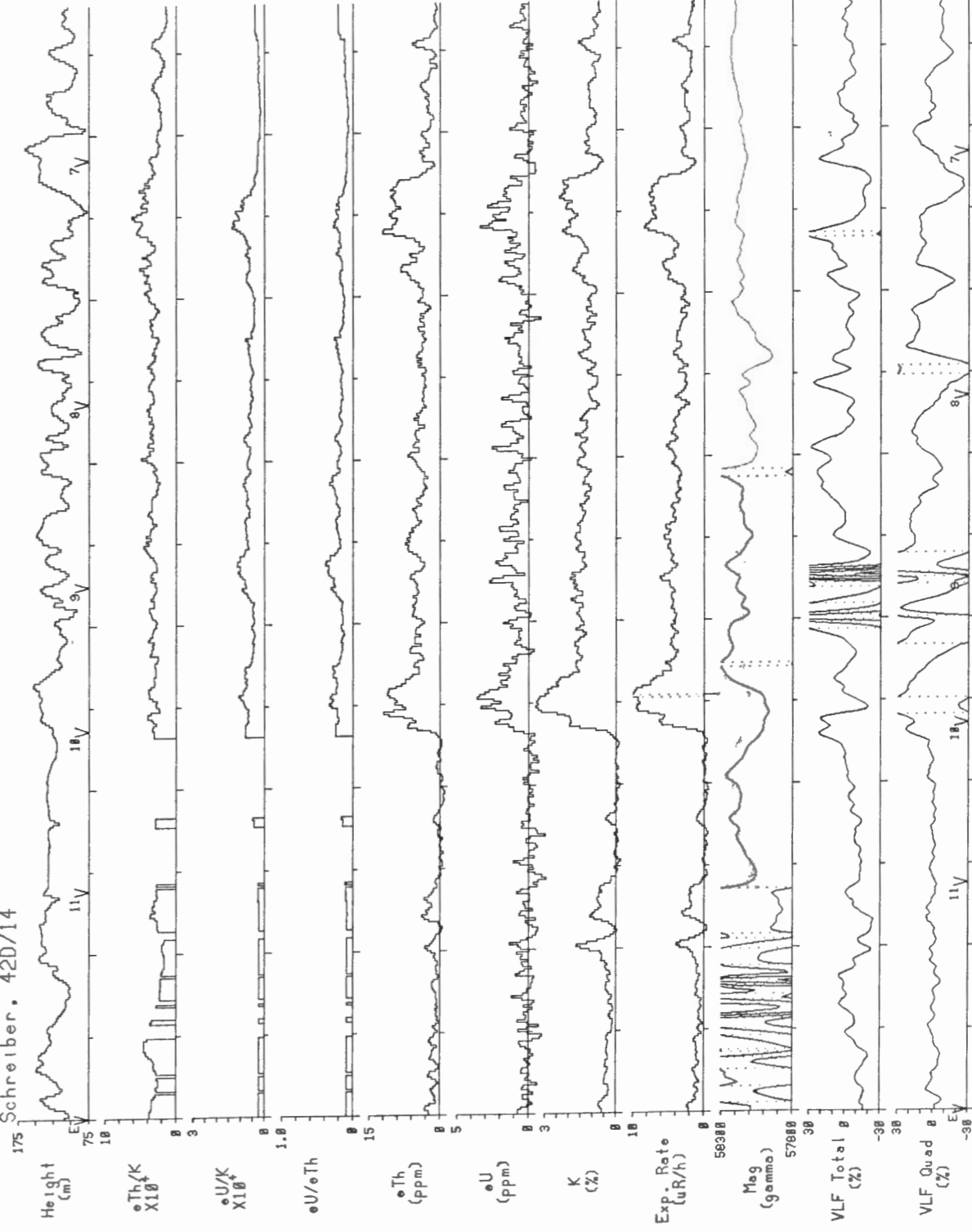


Schreiber Area, Ontario 1991  
Schreiber, 42D/14



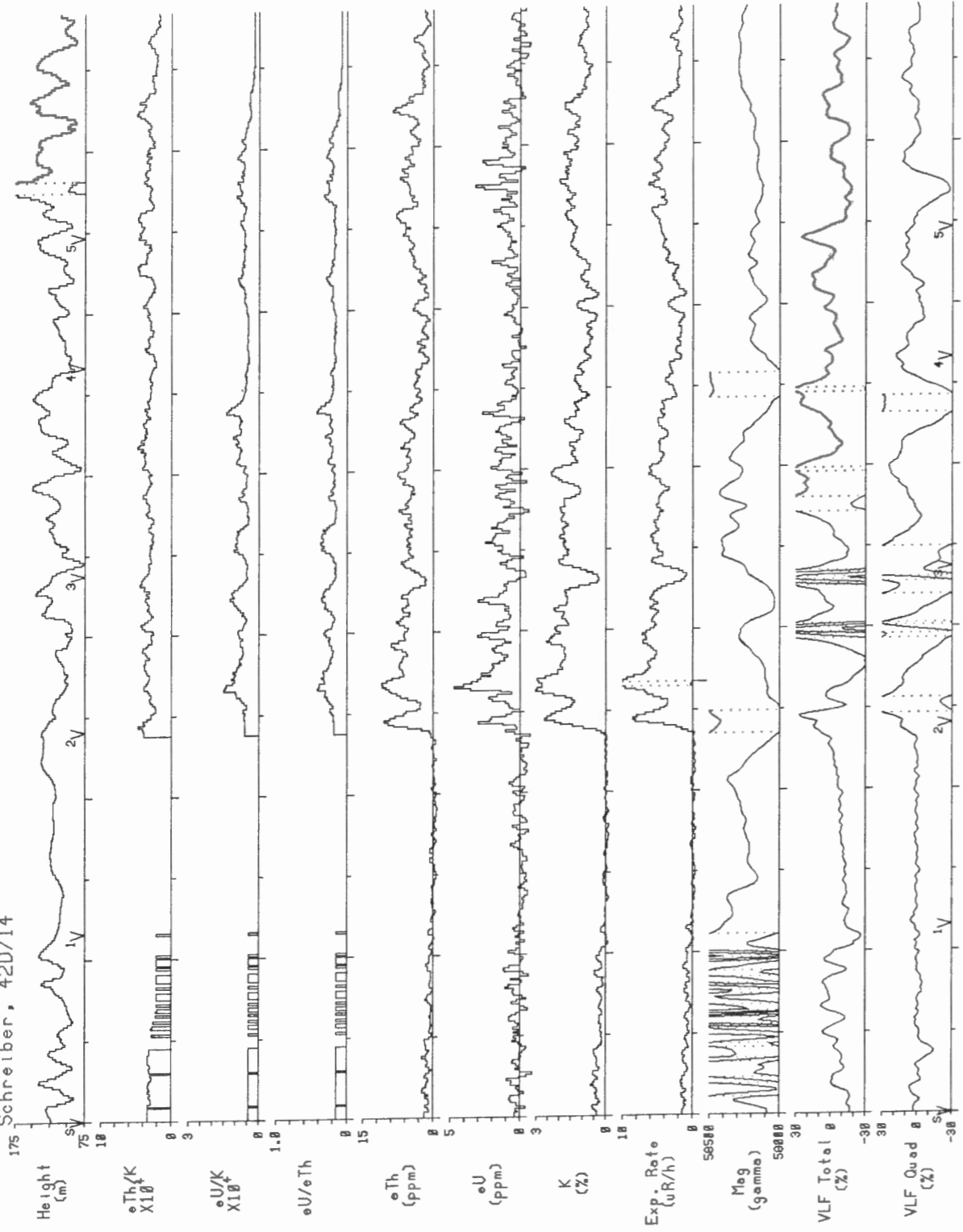
Line 3 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Schreiber, 42D/14



Line 4 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Schreiber, 42D/14



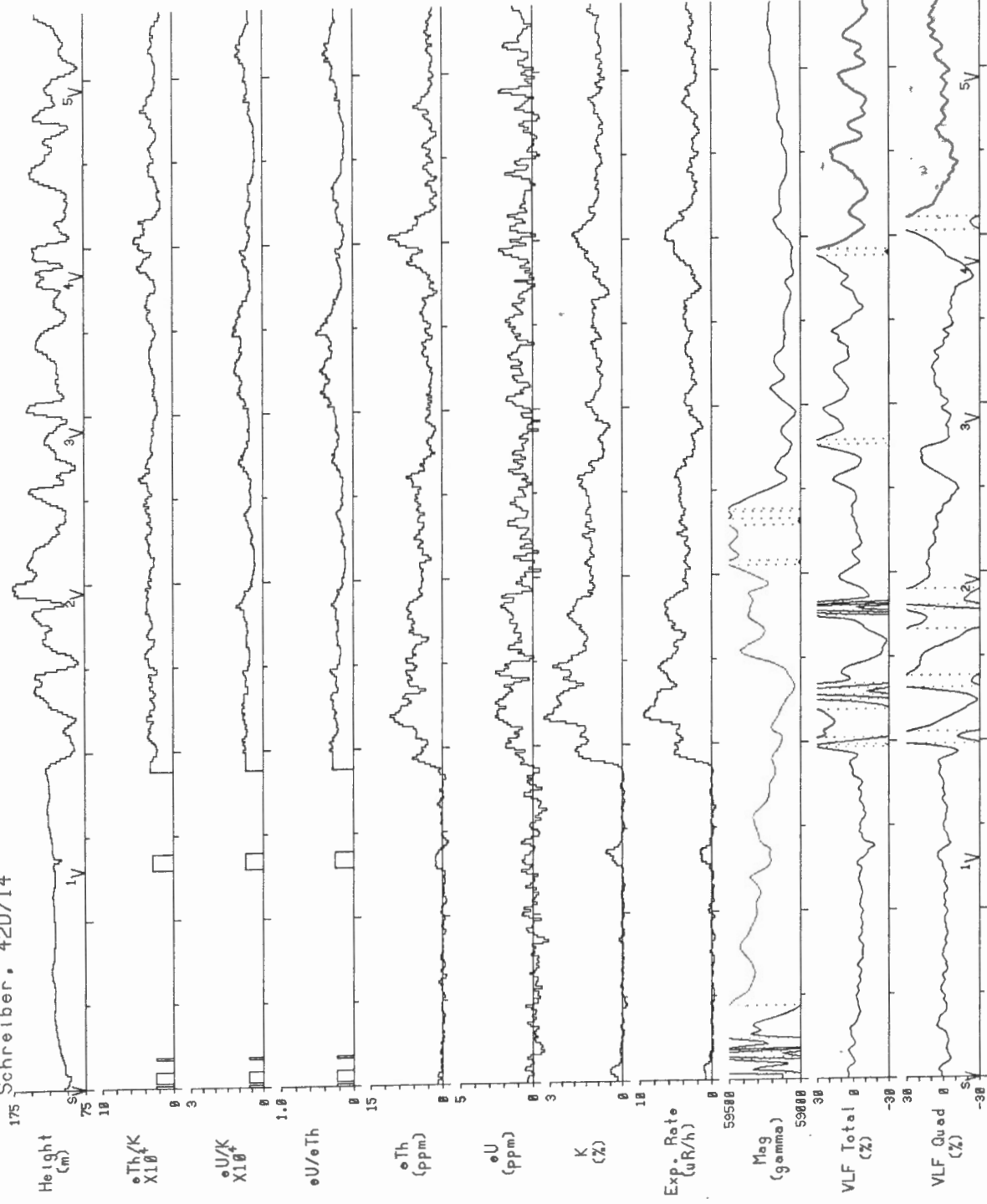
Line 5 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Schreiber, 42D/14



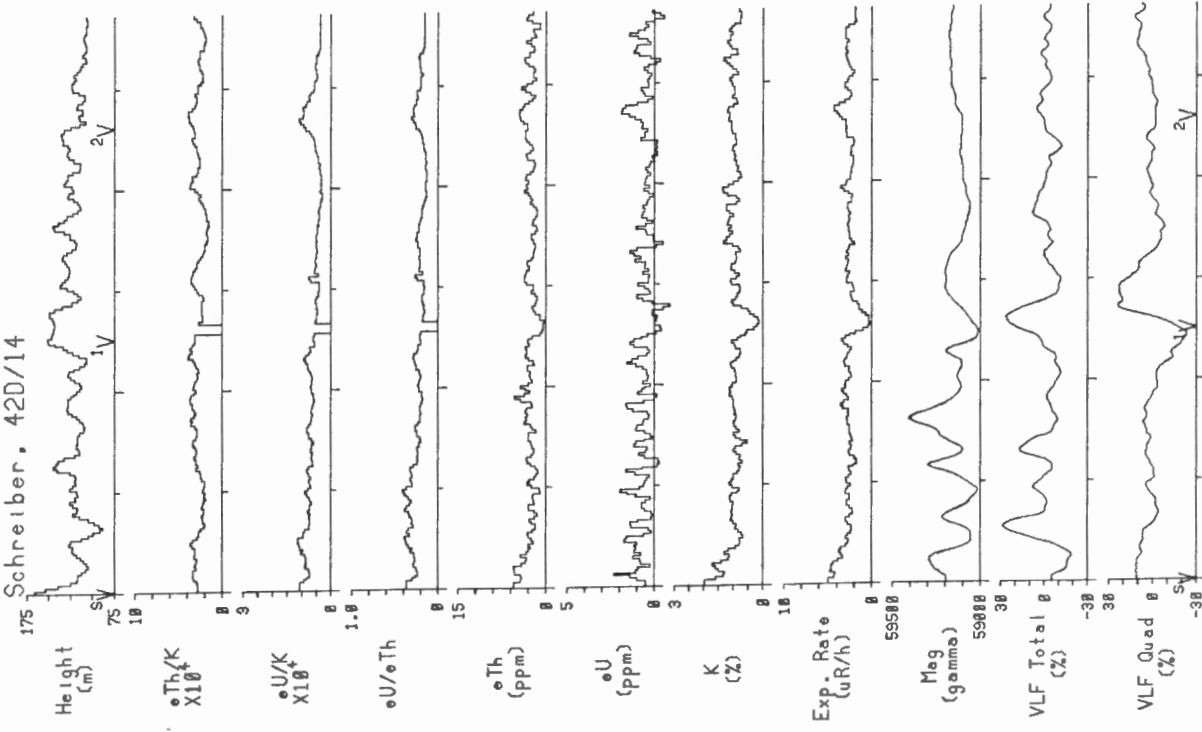
Line 6 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Schreiber, 42D/14



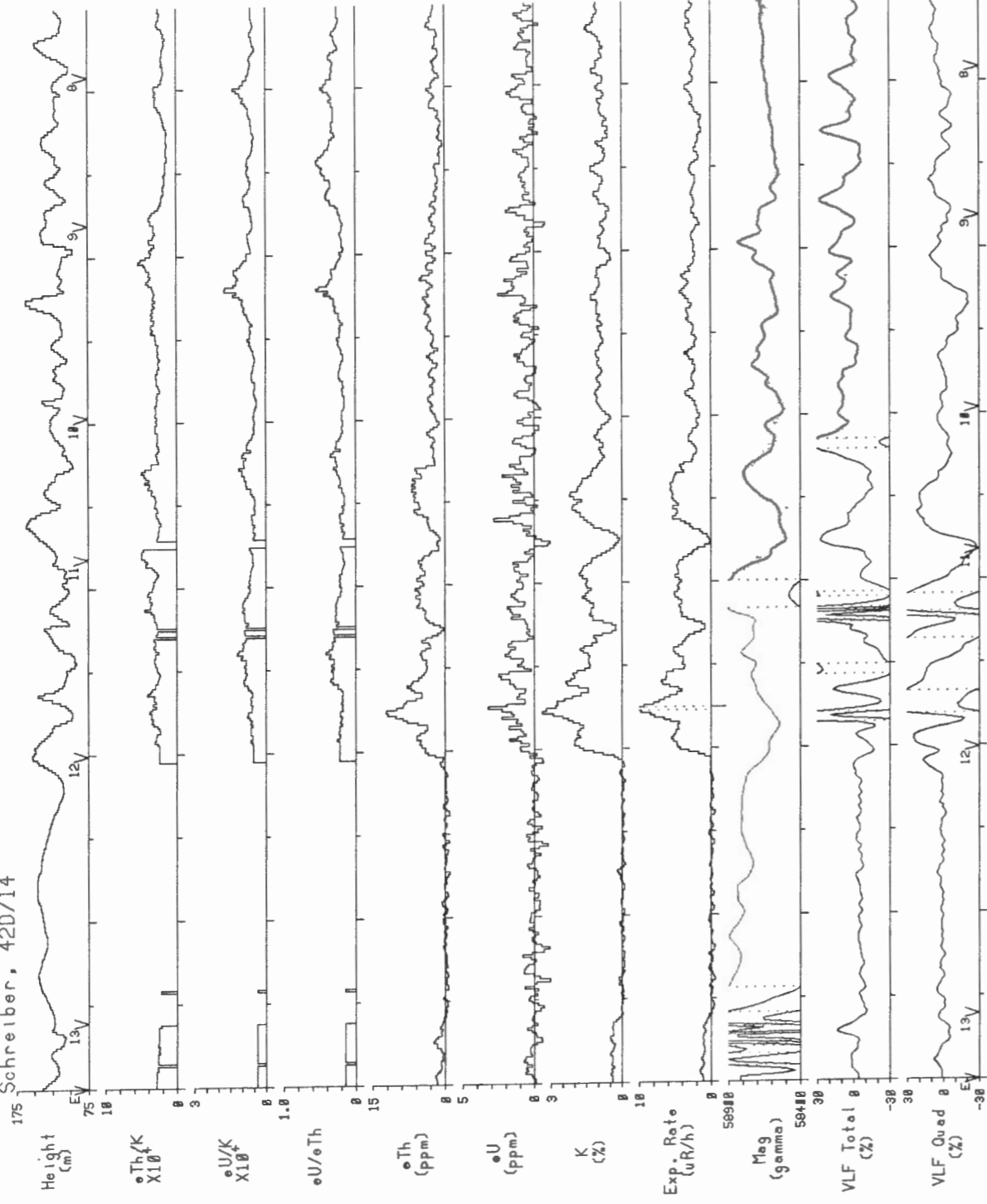
Line 7 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Schreiber, 42D/14



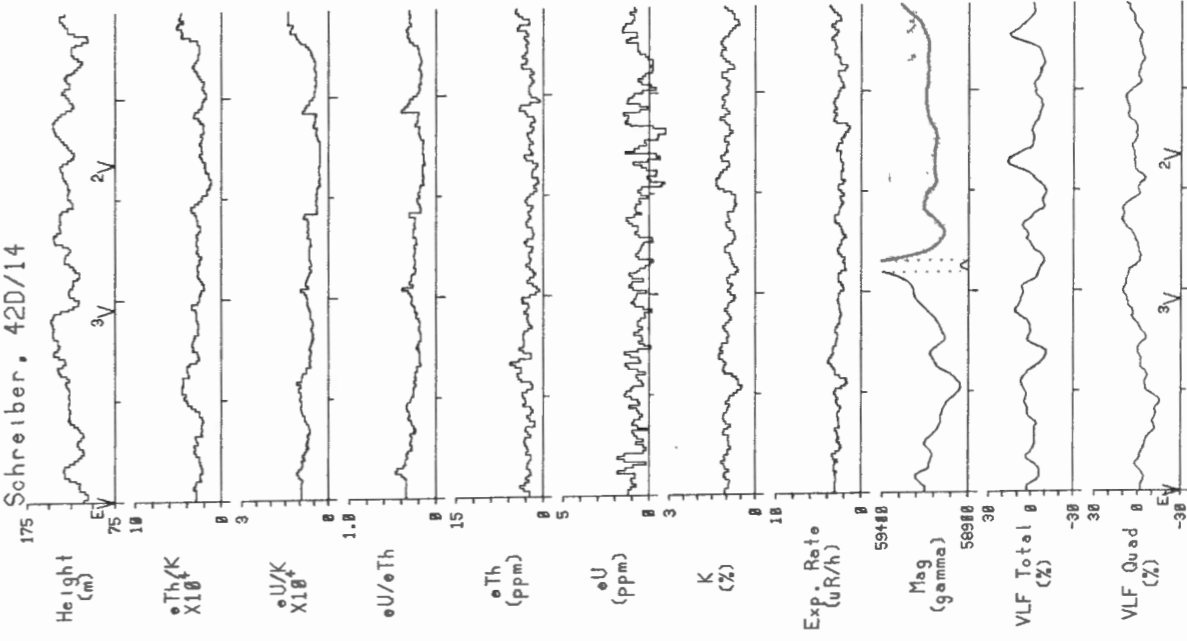
Line 8 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Schreiber, 42D/14



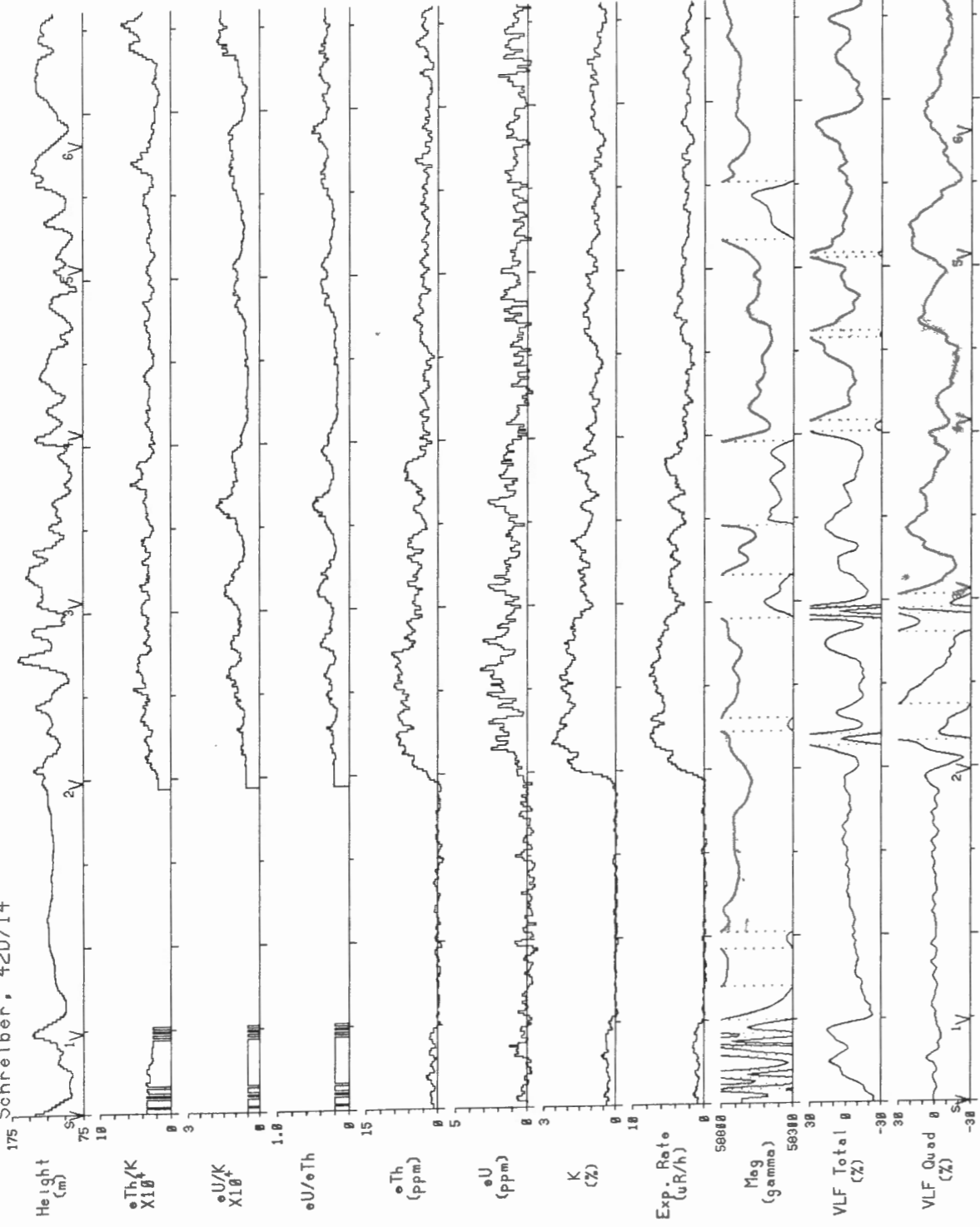
Line 9 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Schreiber, 42D/14



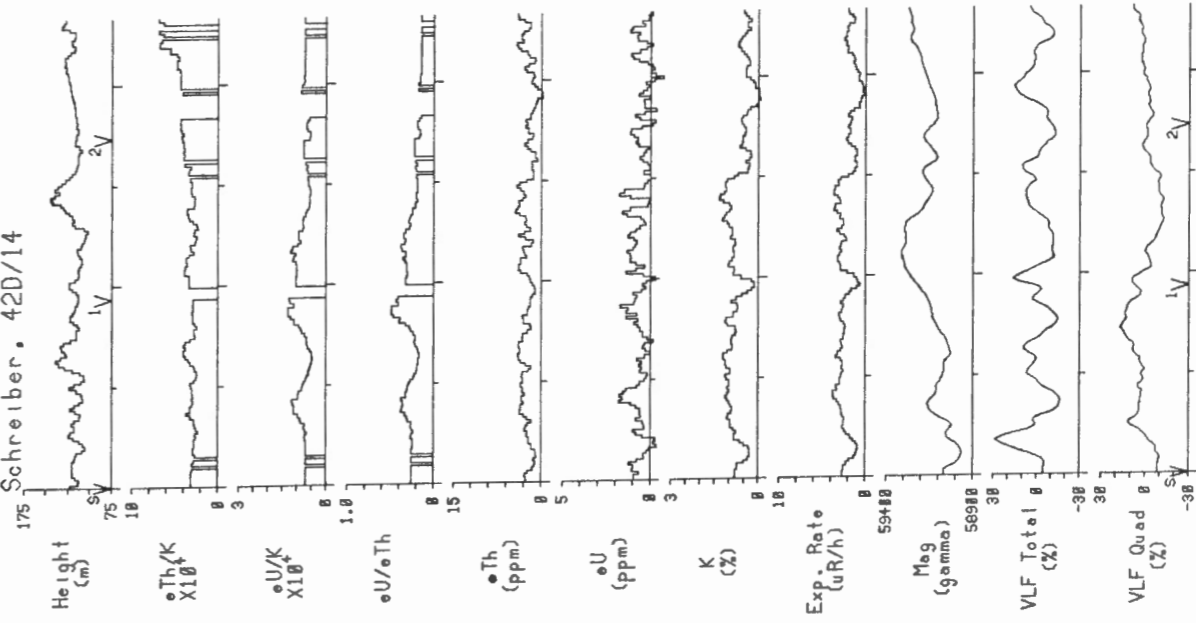
Line 10 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Schreiber, 42D/14



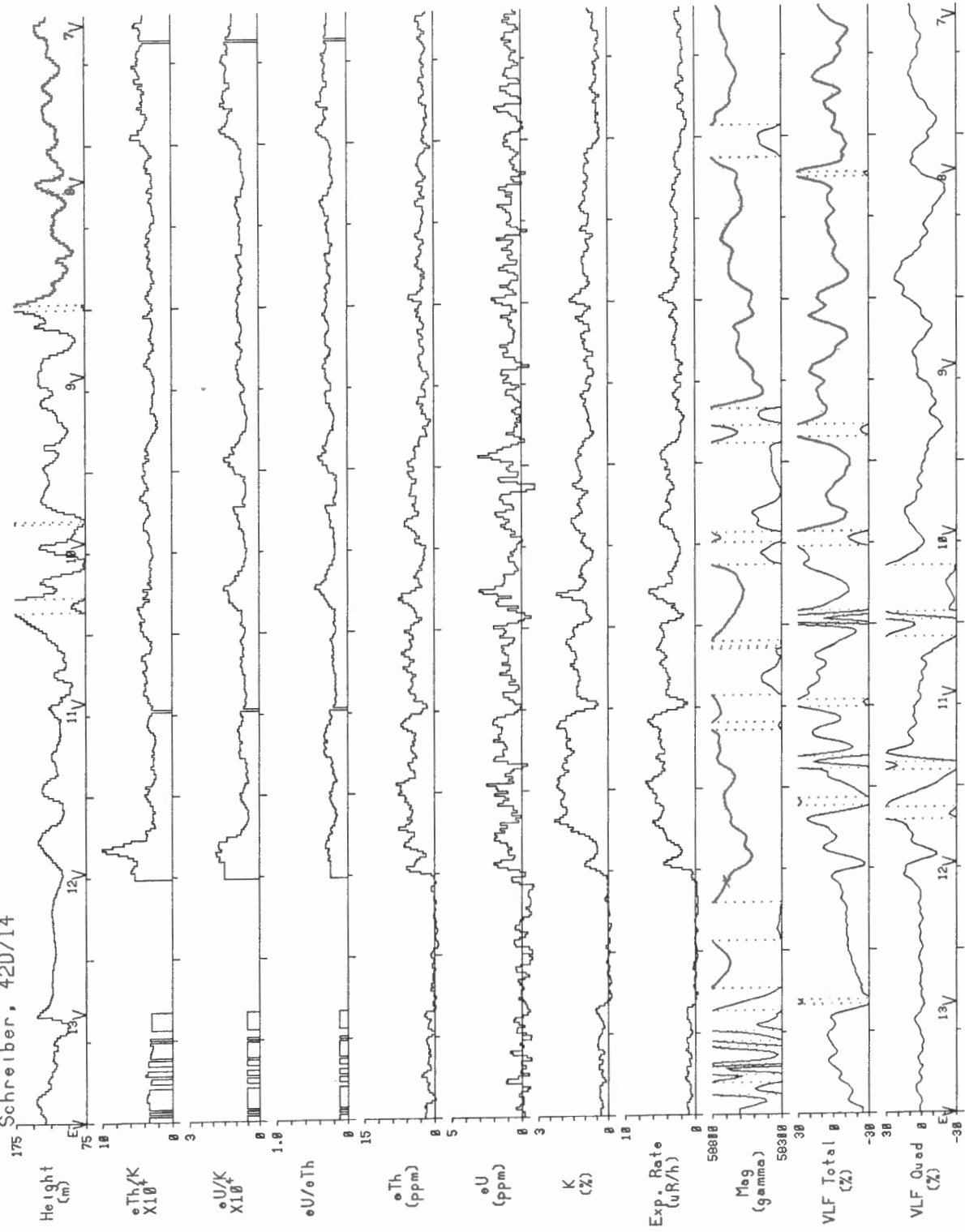
Line 11 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Schreiber, 42D/14



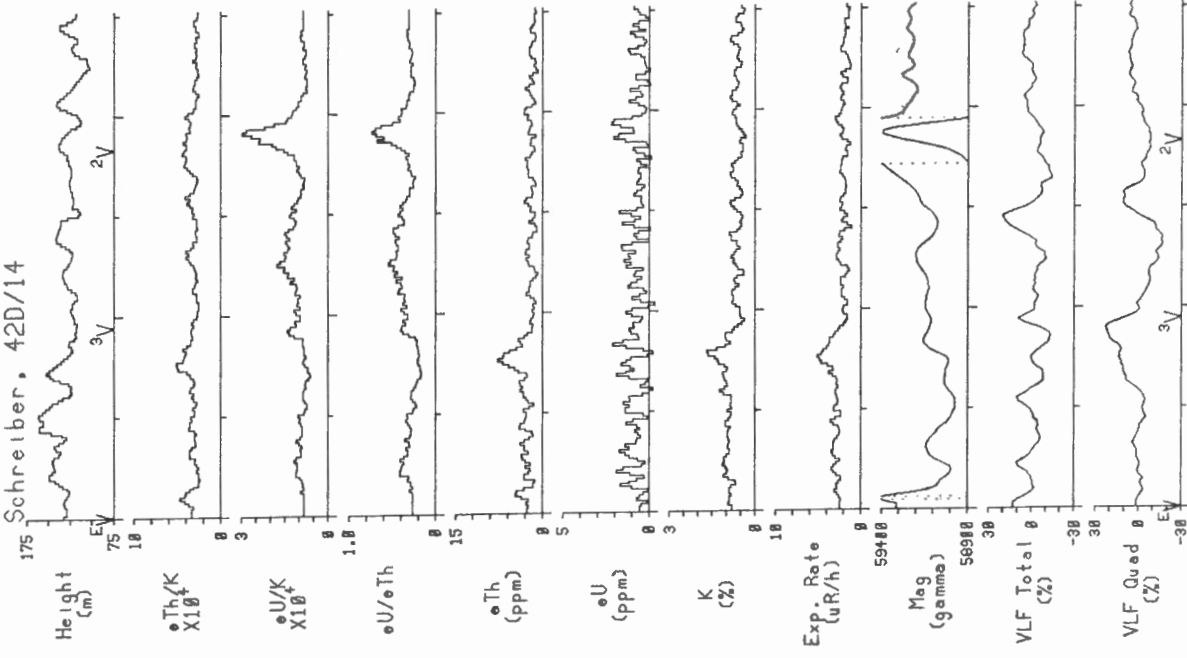
Line 12 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Schreiber, 42D/14



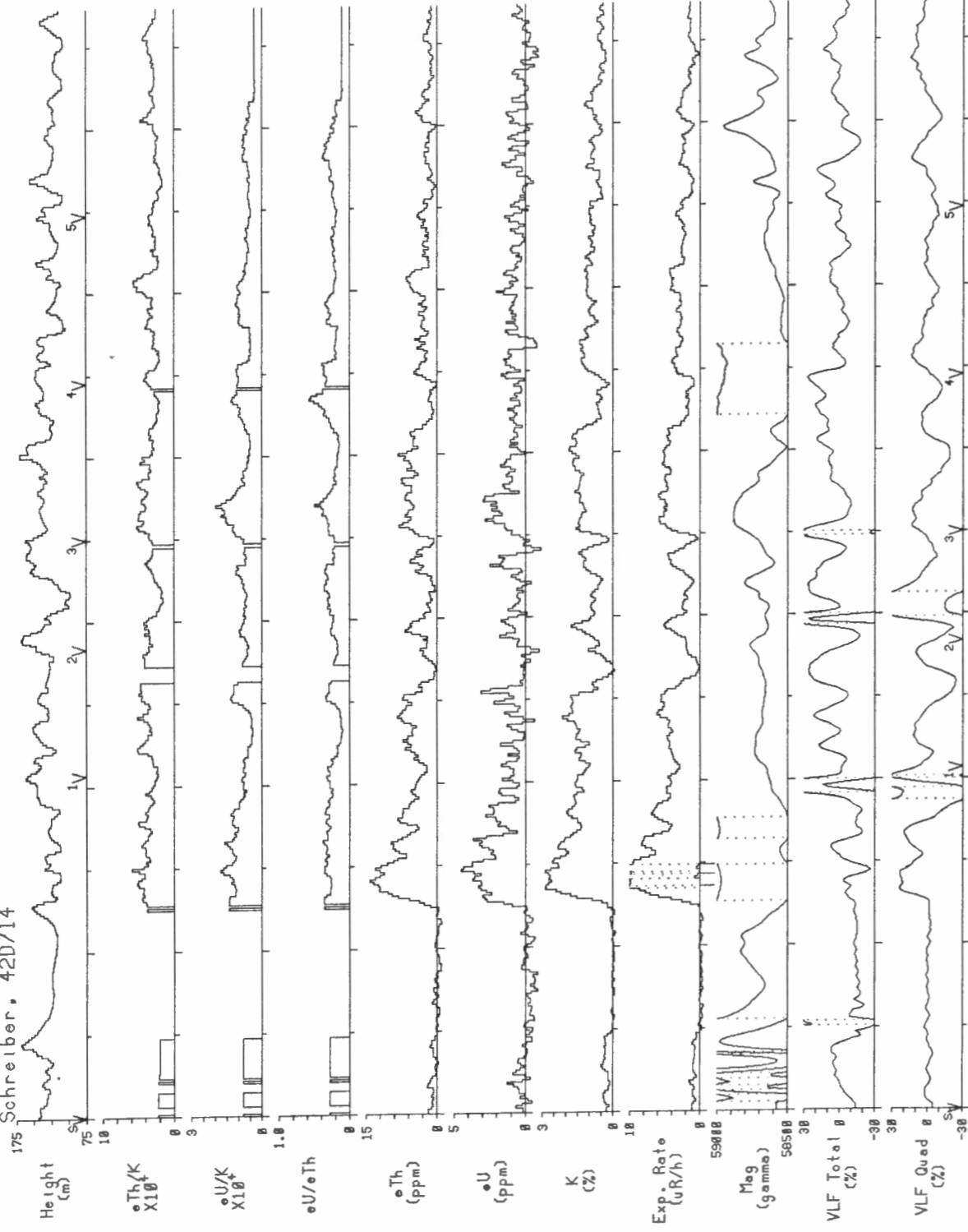
Line 13 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Schreiber, 42D/14



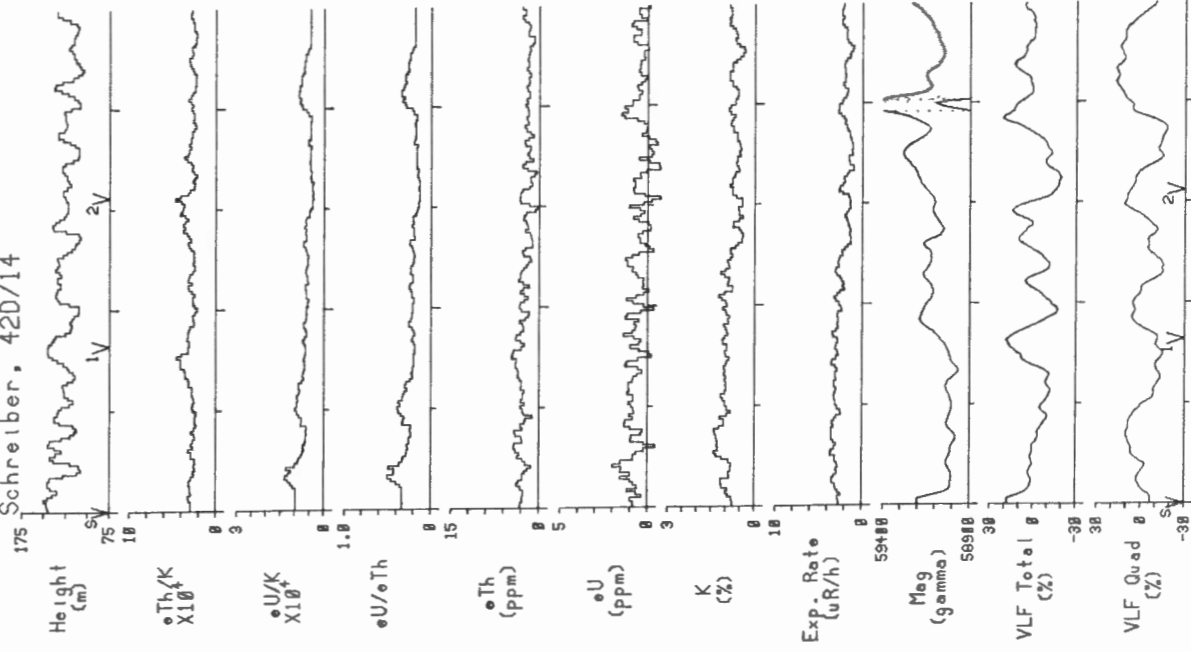
Line 14 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Schreiber, 42D/14



Line 15 | 2 km | Scale 1:150000

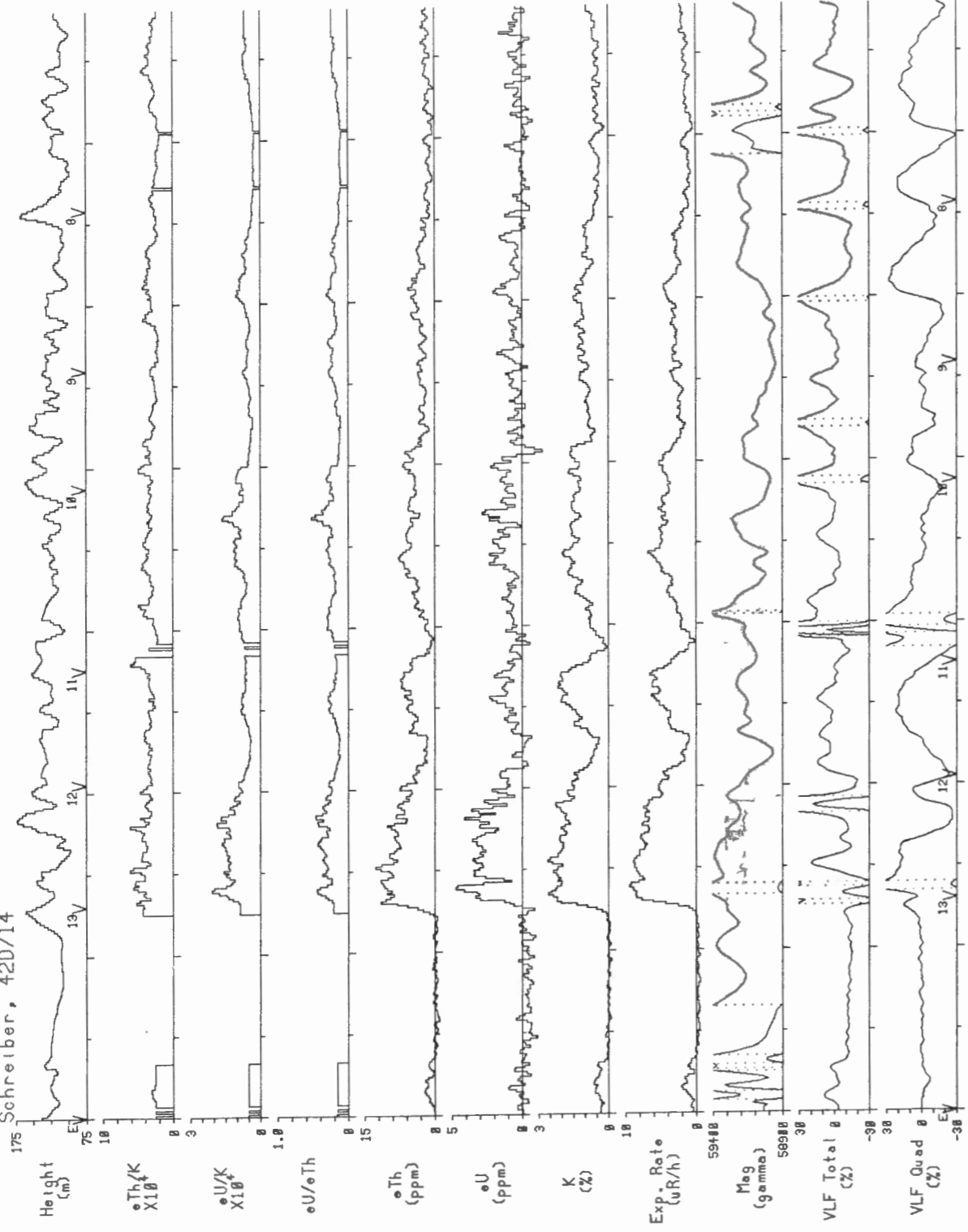
Schreiber Area, Ontario 1991  
Schreiber, 42D/14



Line 16 | 2 km | Scale 1:150000

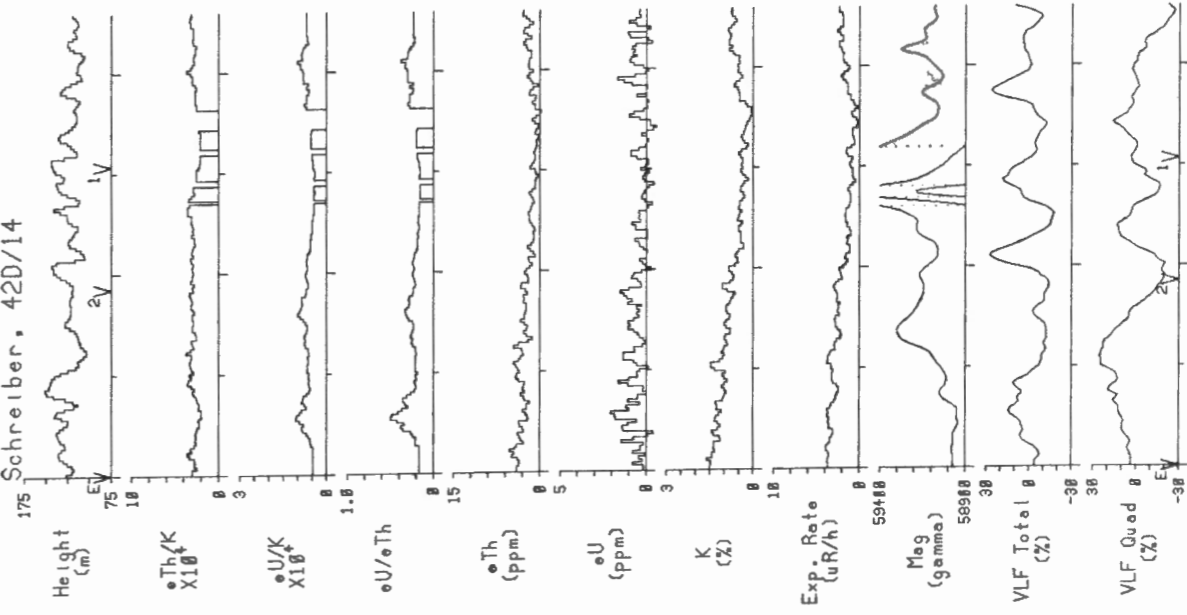


Schreiber Area, Ontario 1991  
Schreiber, 42D/14



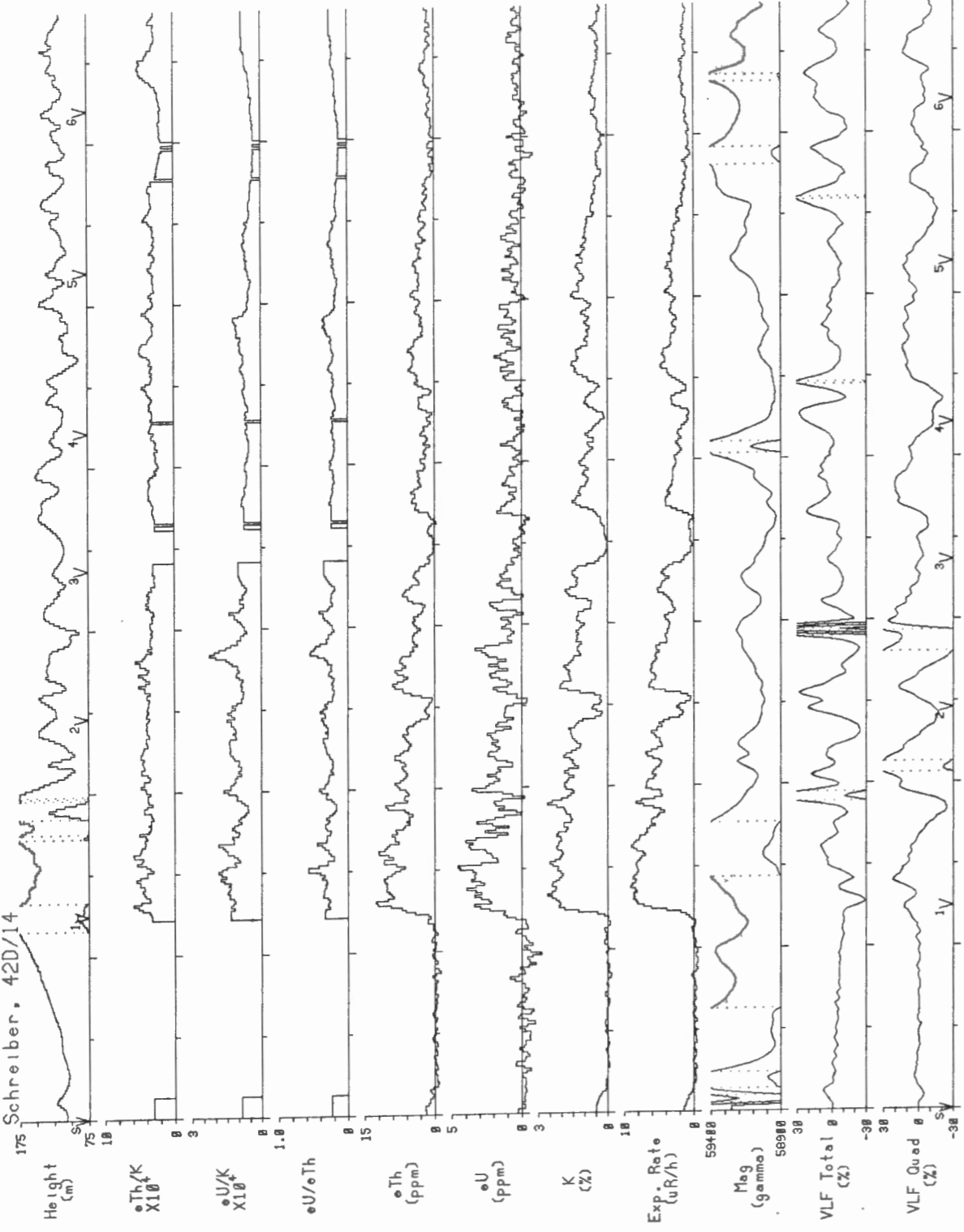
Line 17 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Schreiber, 42D/14

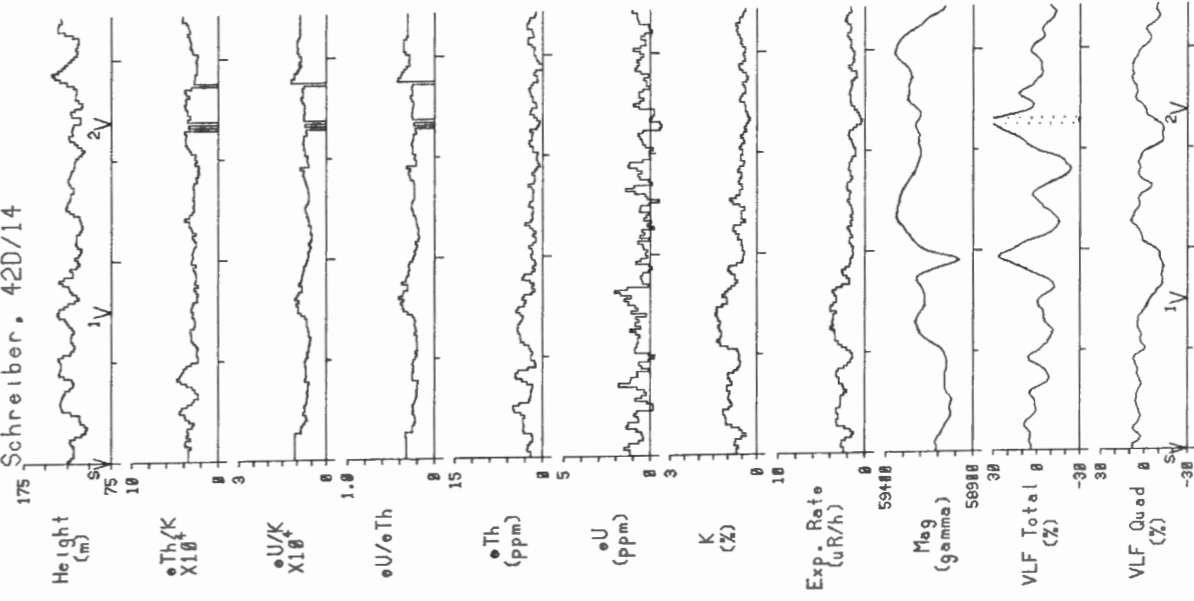


Line 18 | 2 km | Scale 1:150000

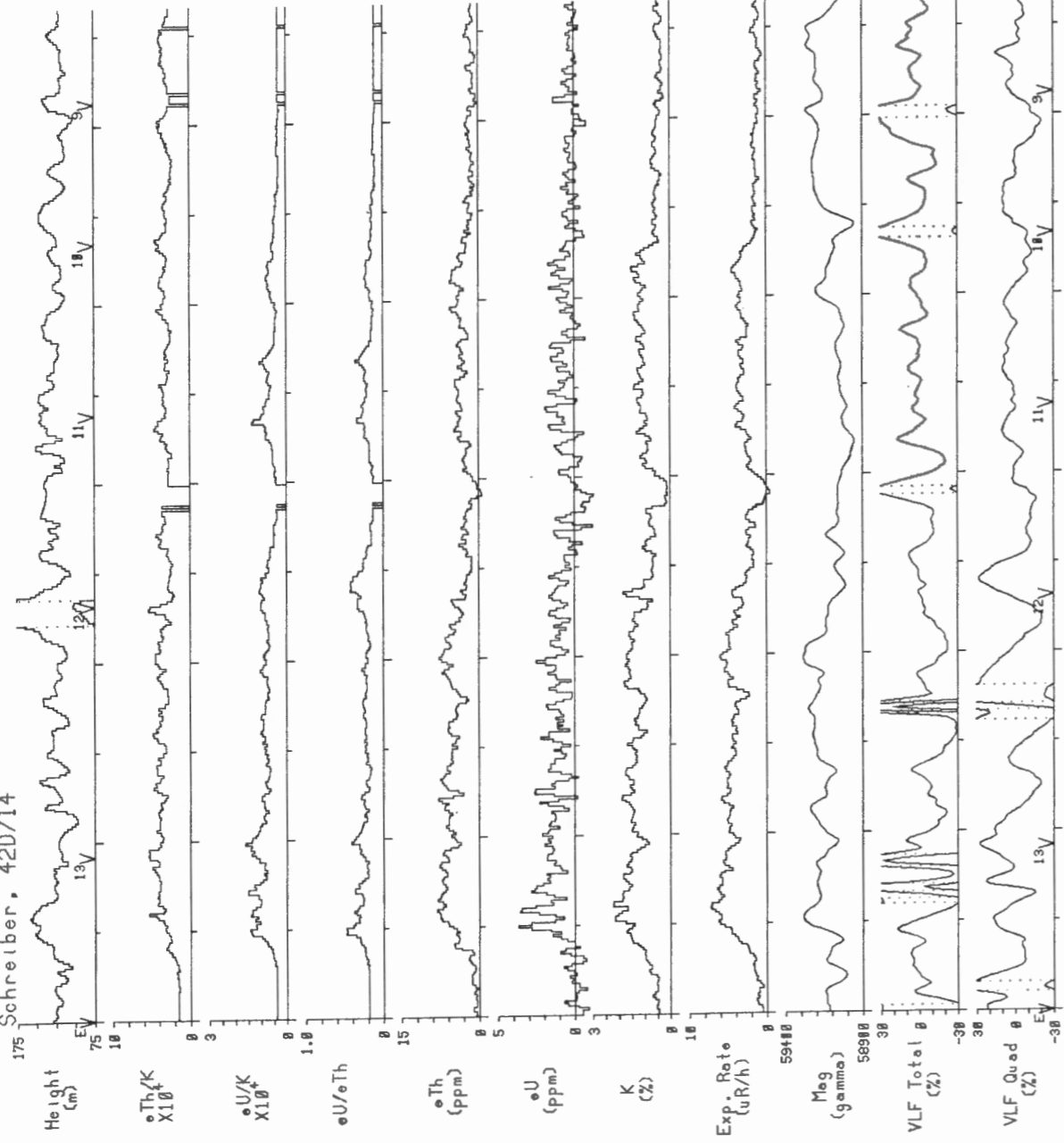
Schreiber Area, Ontario 1991  
Schreiber, 42D/14



Schreiber Area, Ontario 1991  
Schreiber, 42D/14

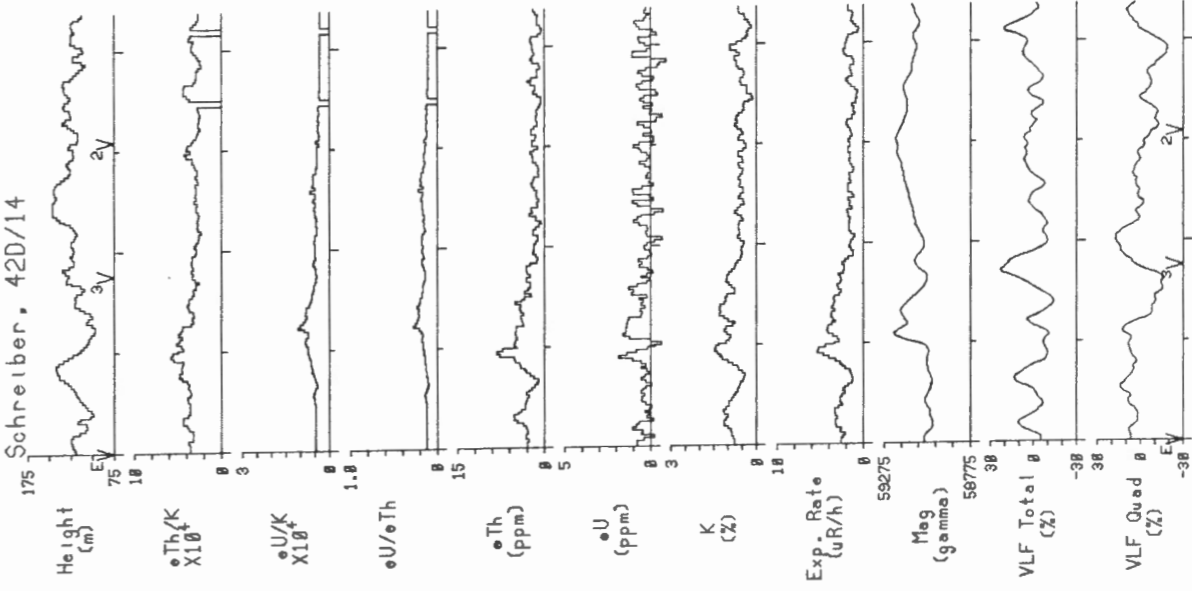


Schreiber Area, Ontario 1991  
Schreiber, 42D/14



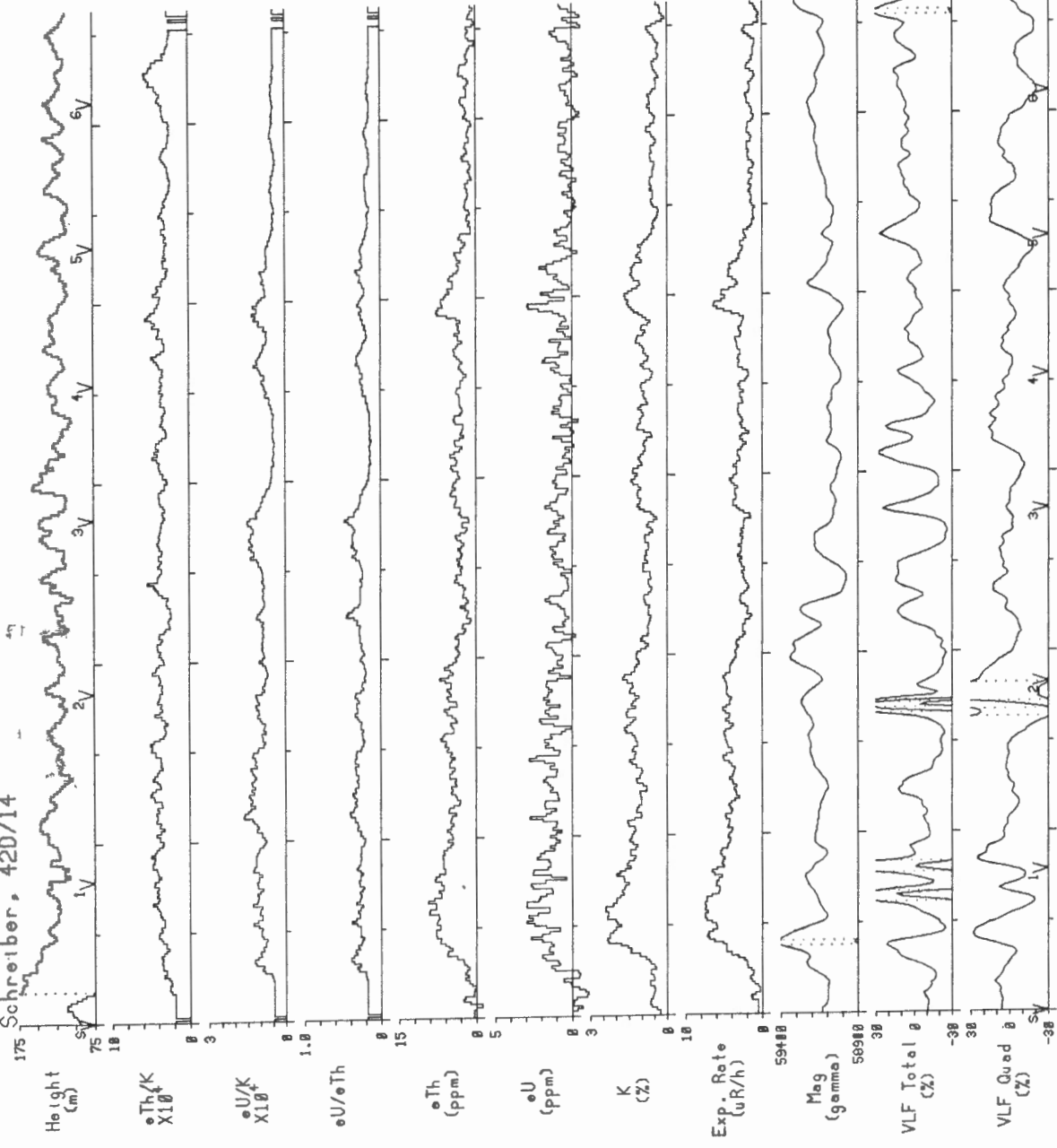
Line 21 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Schreiber, 42D/14



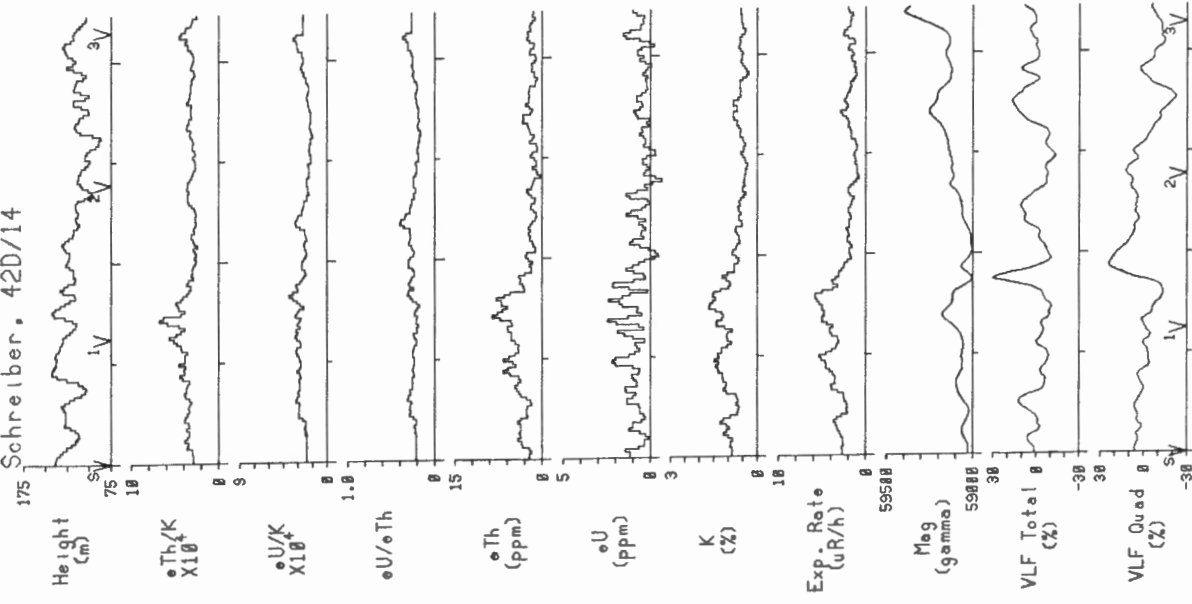
Line 22 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Schreiber, 420/14



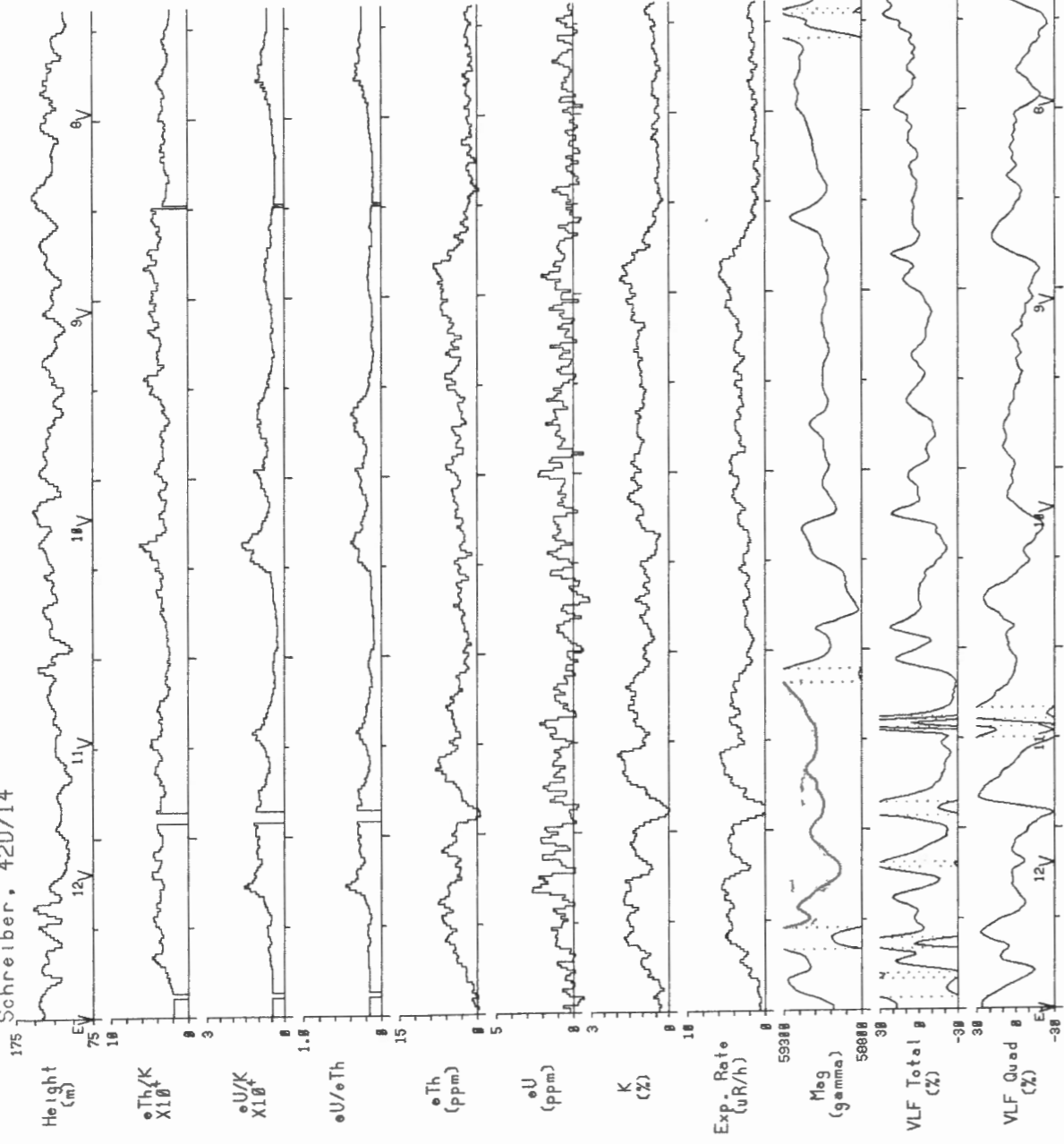
Line 23 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Schreiber, 420/14

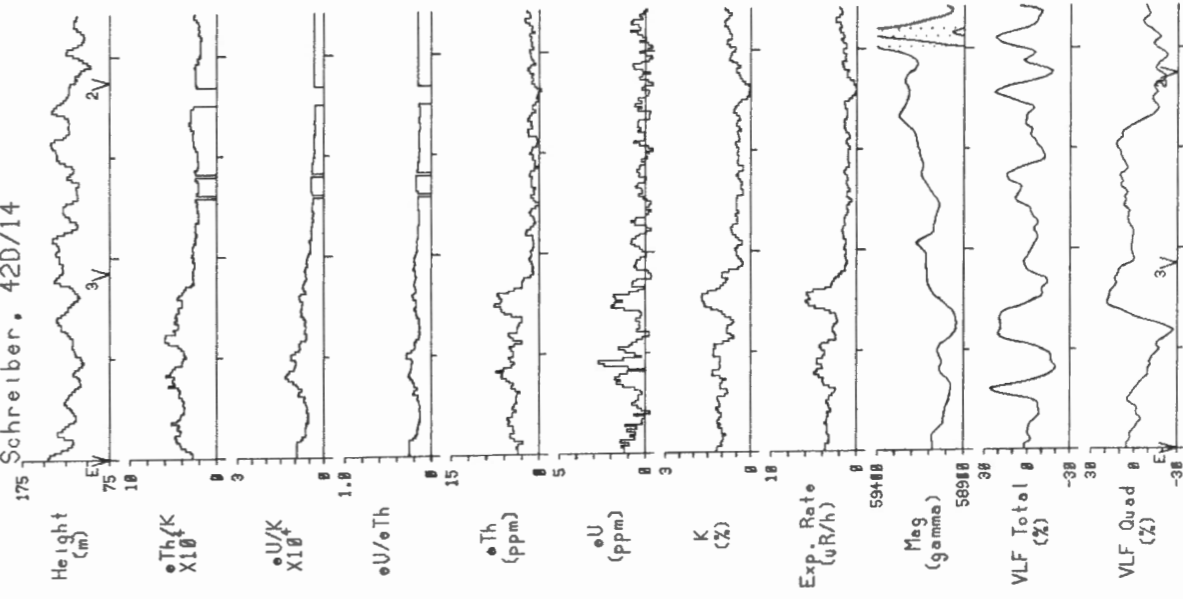


Line 24 | 2 km | Scale 1:150000

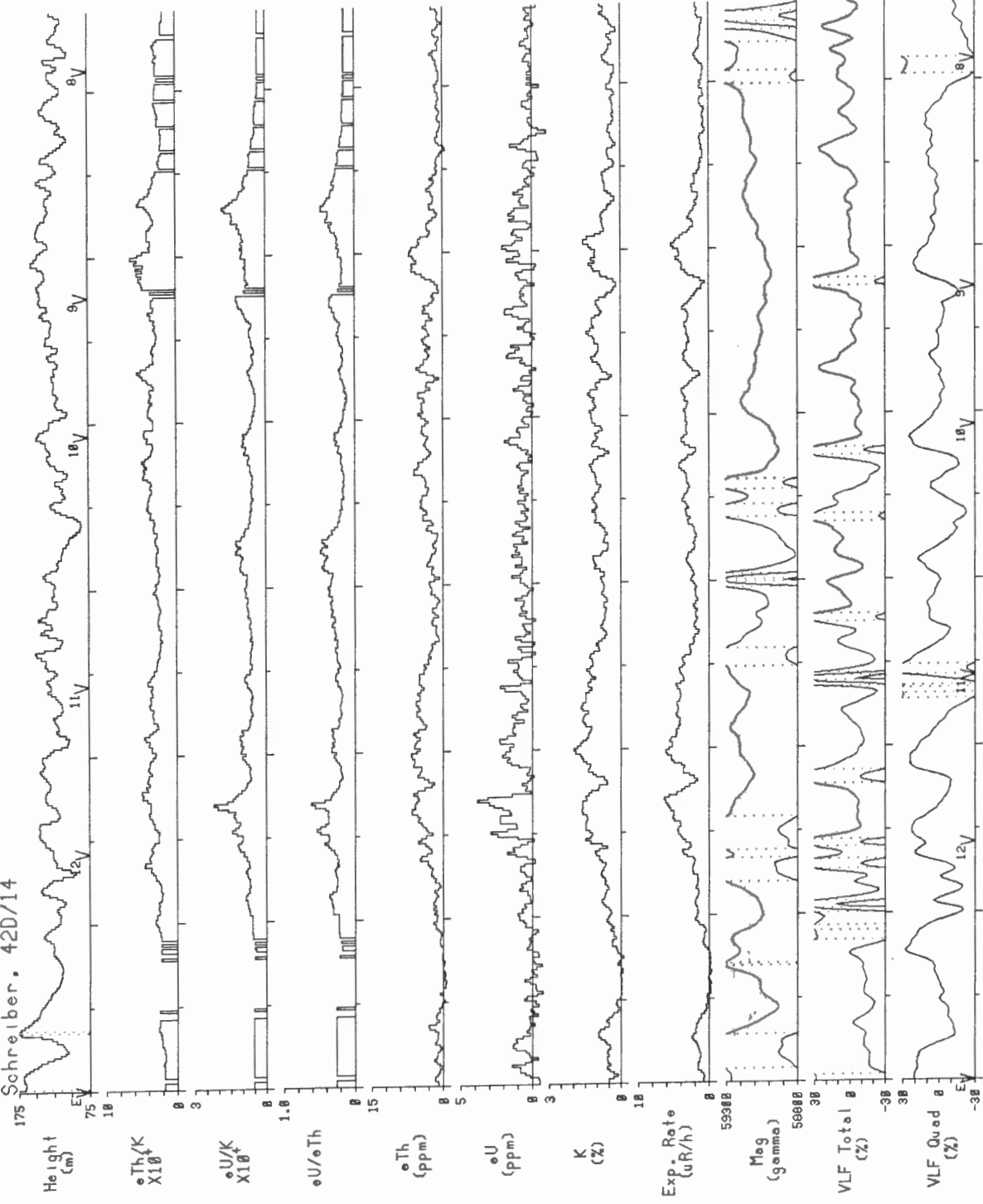
Schreiber Area, Ontario 1991  
Schreiber, 42D/14



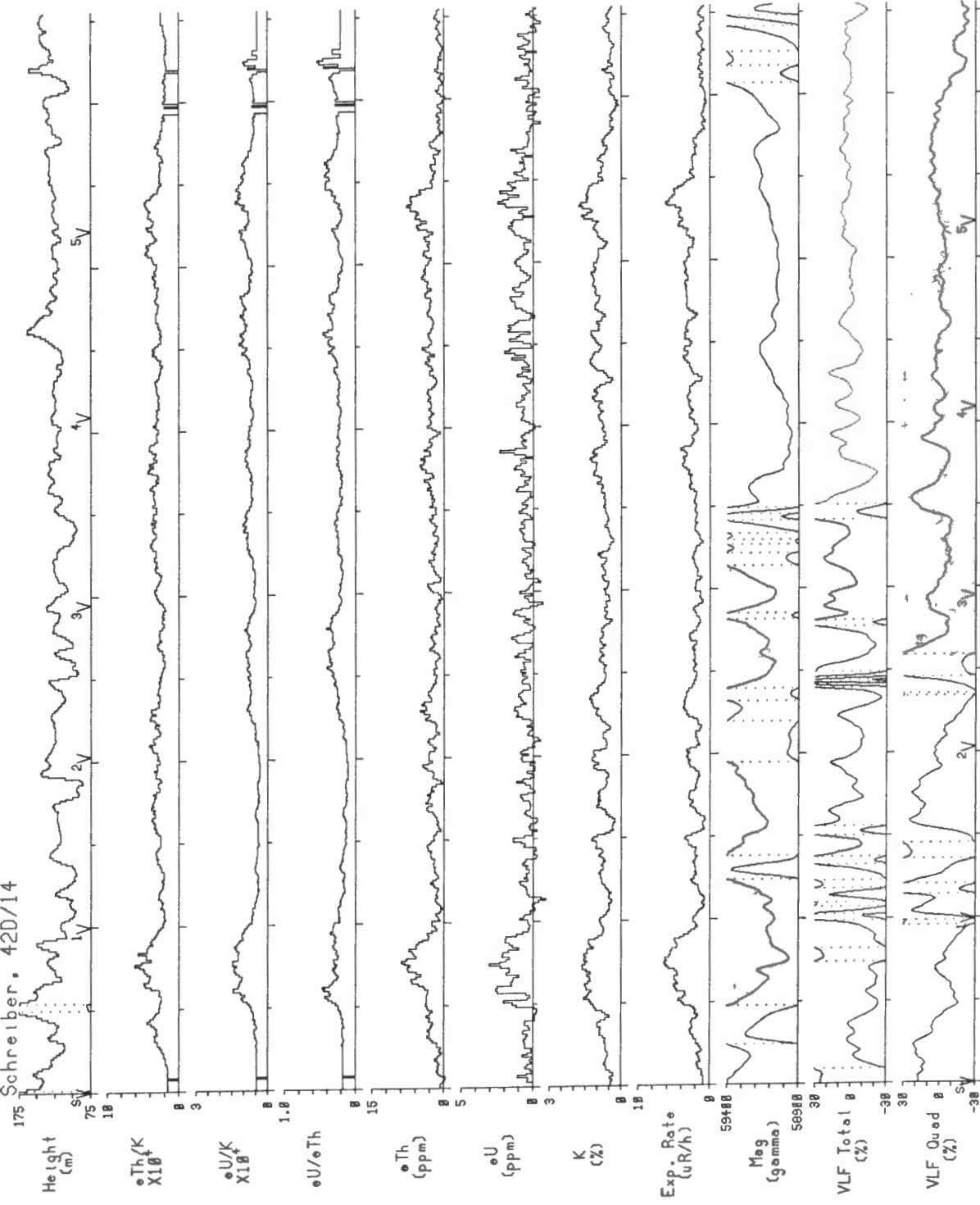
Schreiber Area, Ontario 1991  
Schreiber, 42D/14



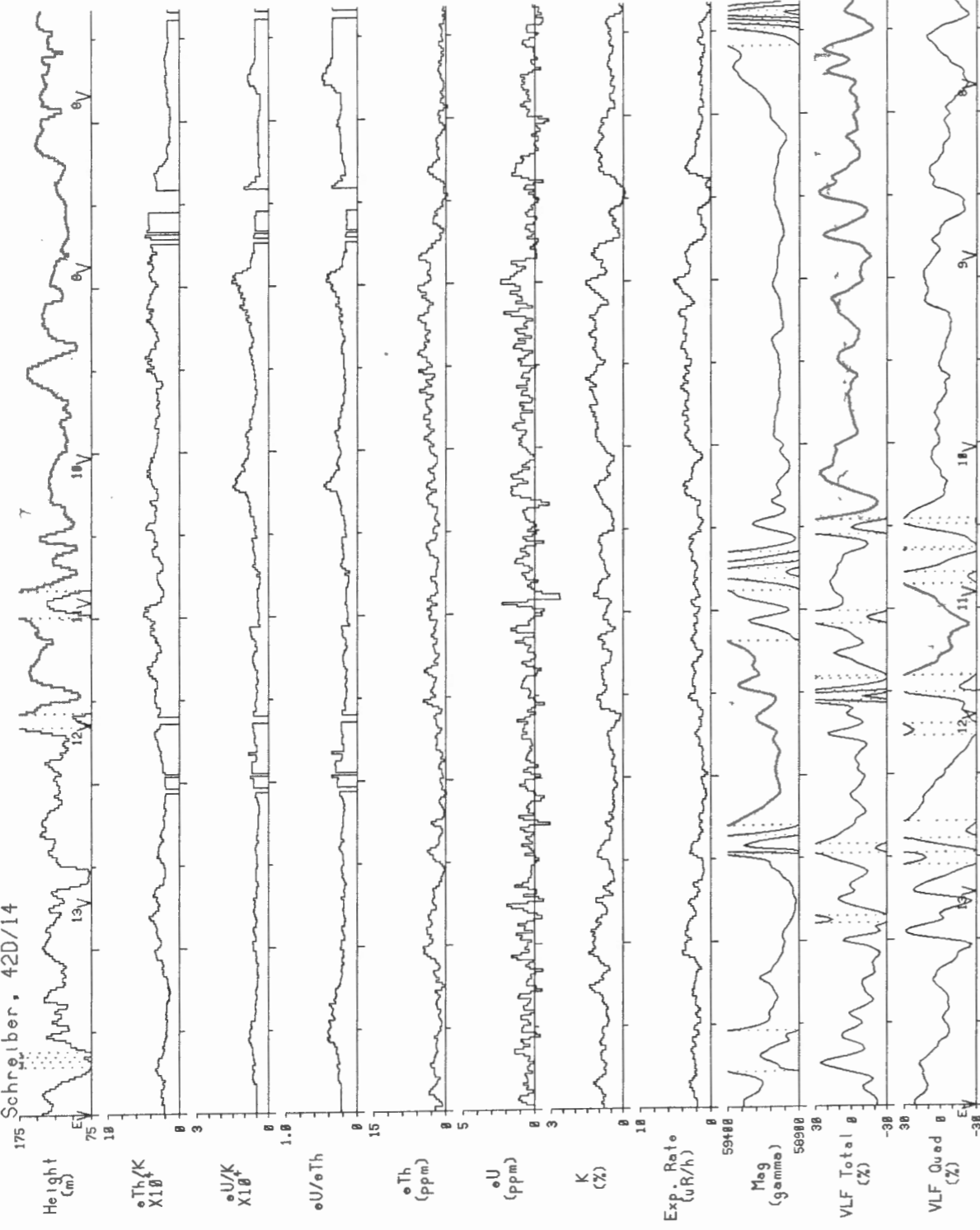
Schreiber Area, Ontario 1991  
Schreiber, 42D/14



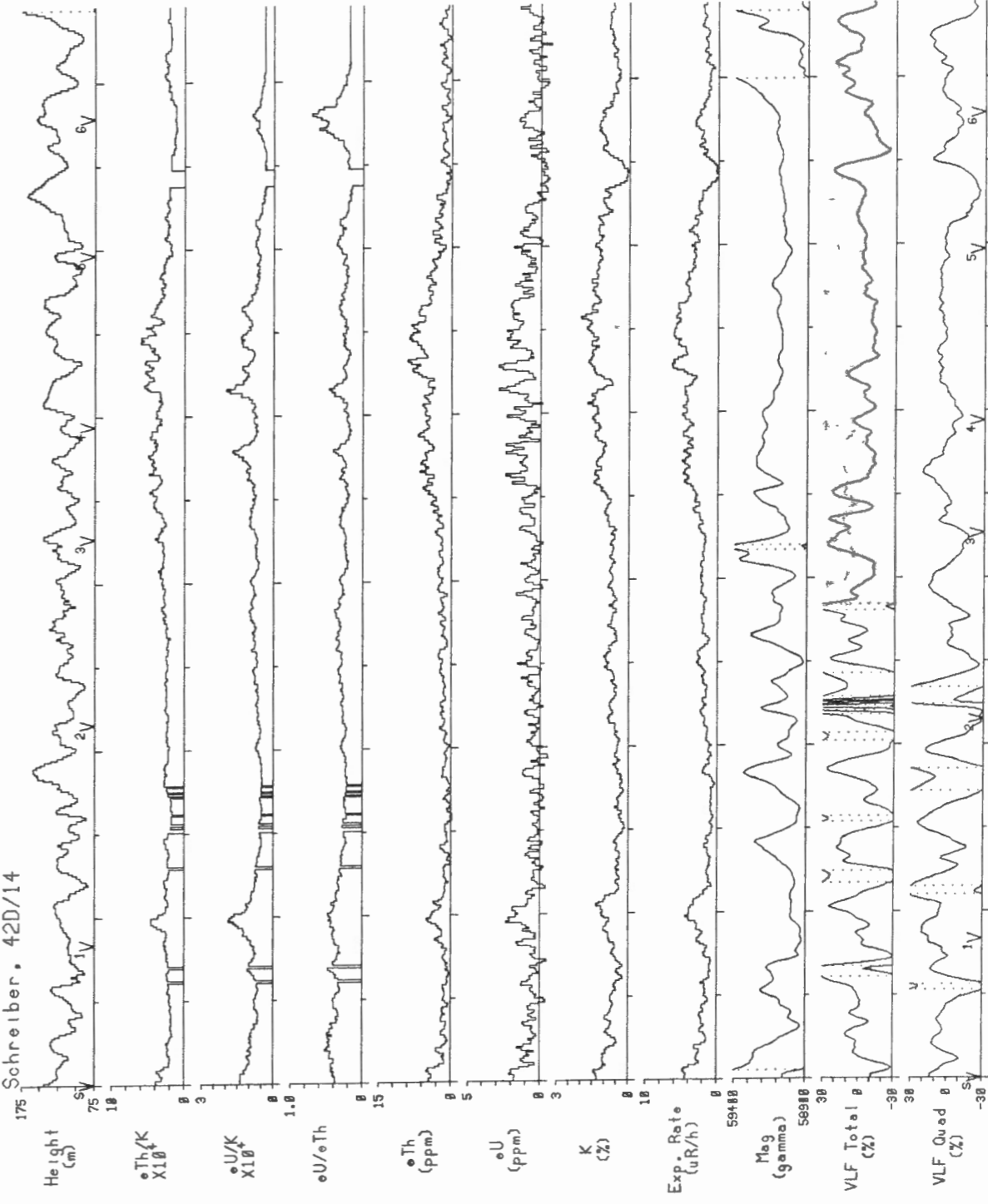
Schreiber Area, Ontario 1991  
Schreiber, 42D/14



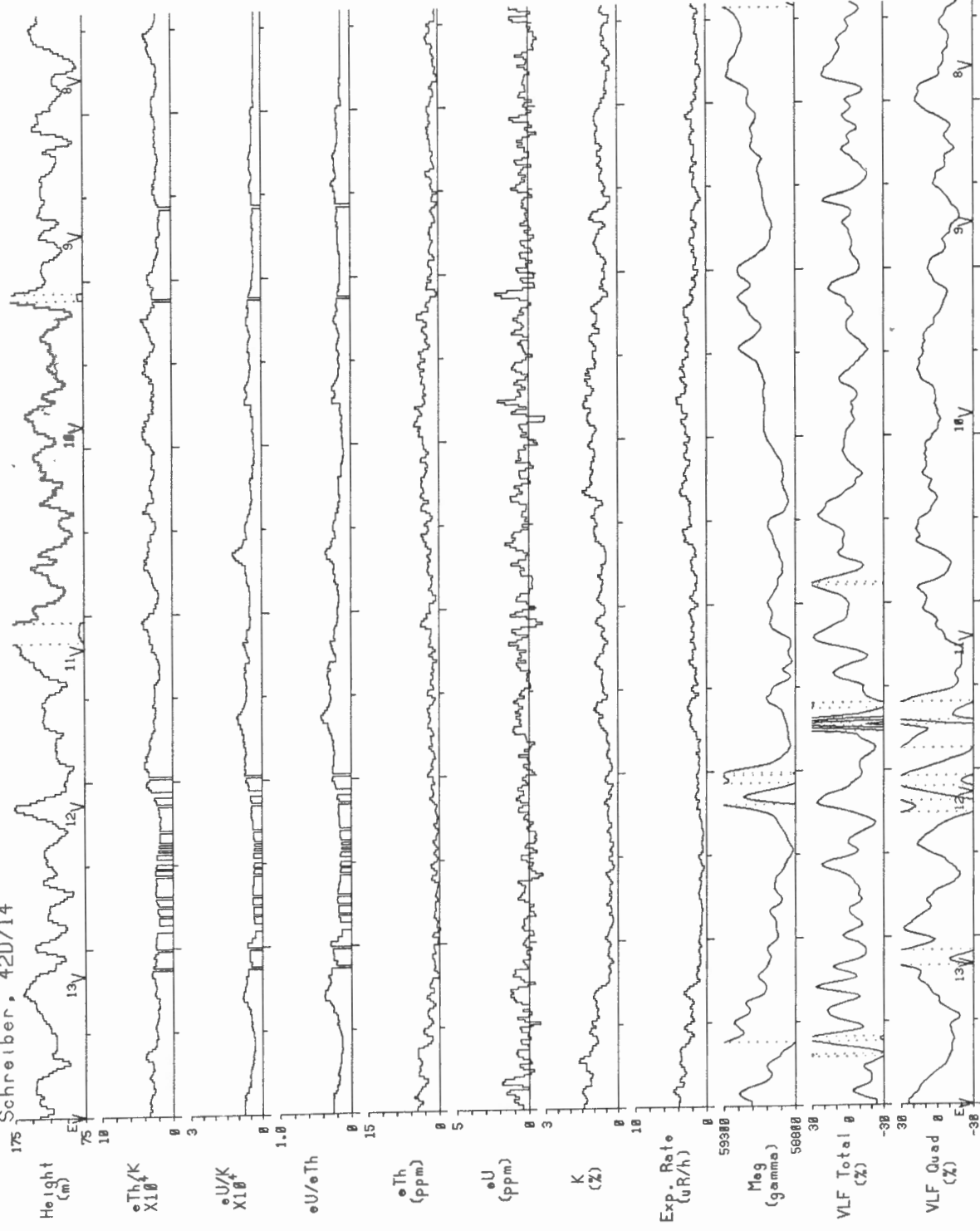
Schreiber Area, Ontario 1991  
Schreiber, 42D/14



Schreiber Area, Ontario 1991  
Schreiber, 42D/14

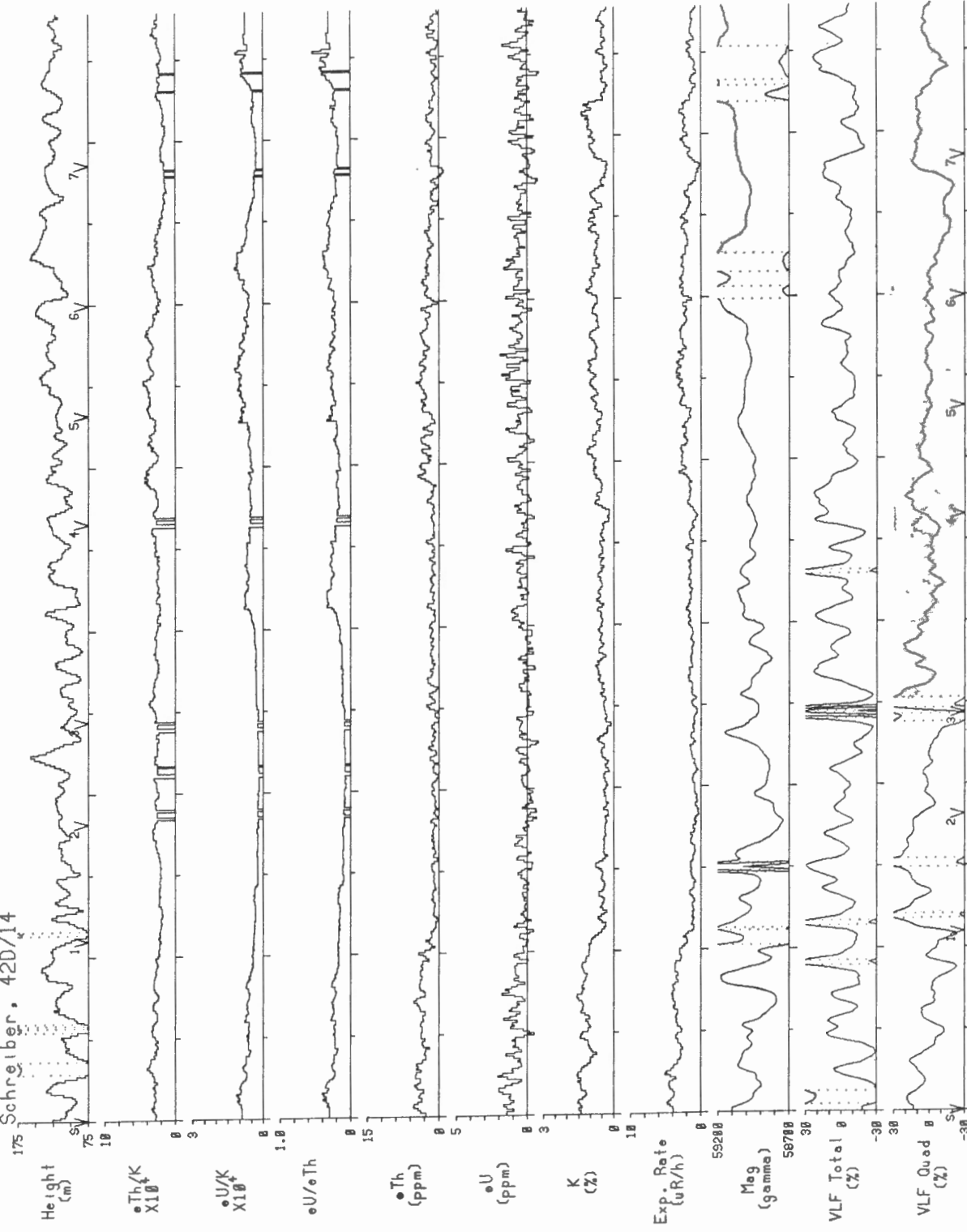


Schreiber Area, Ontario 1991  
Schreiber, 42D/14



Line 31 | 2 km | Scale 1:150000

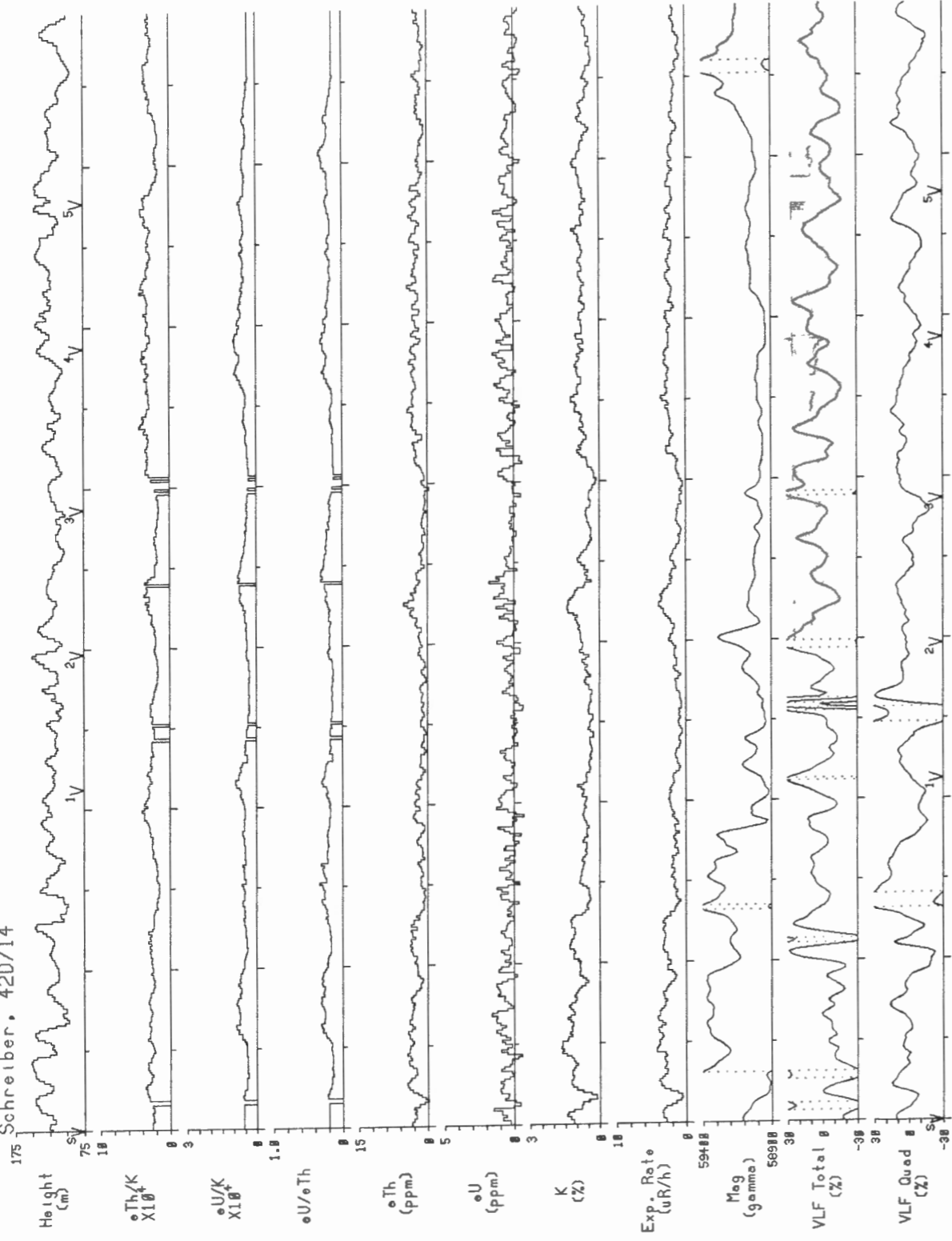
Schreiber Area, Ontario 1991  
Schreiber, 42D/14



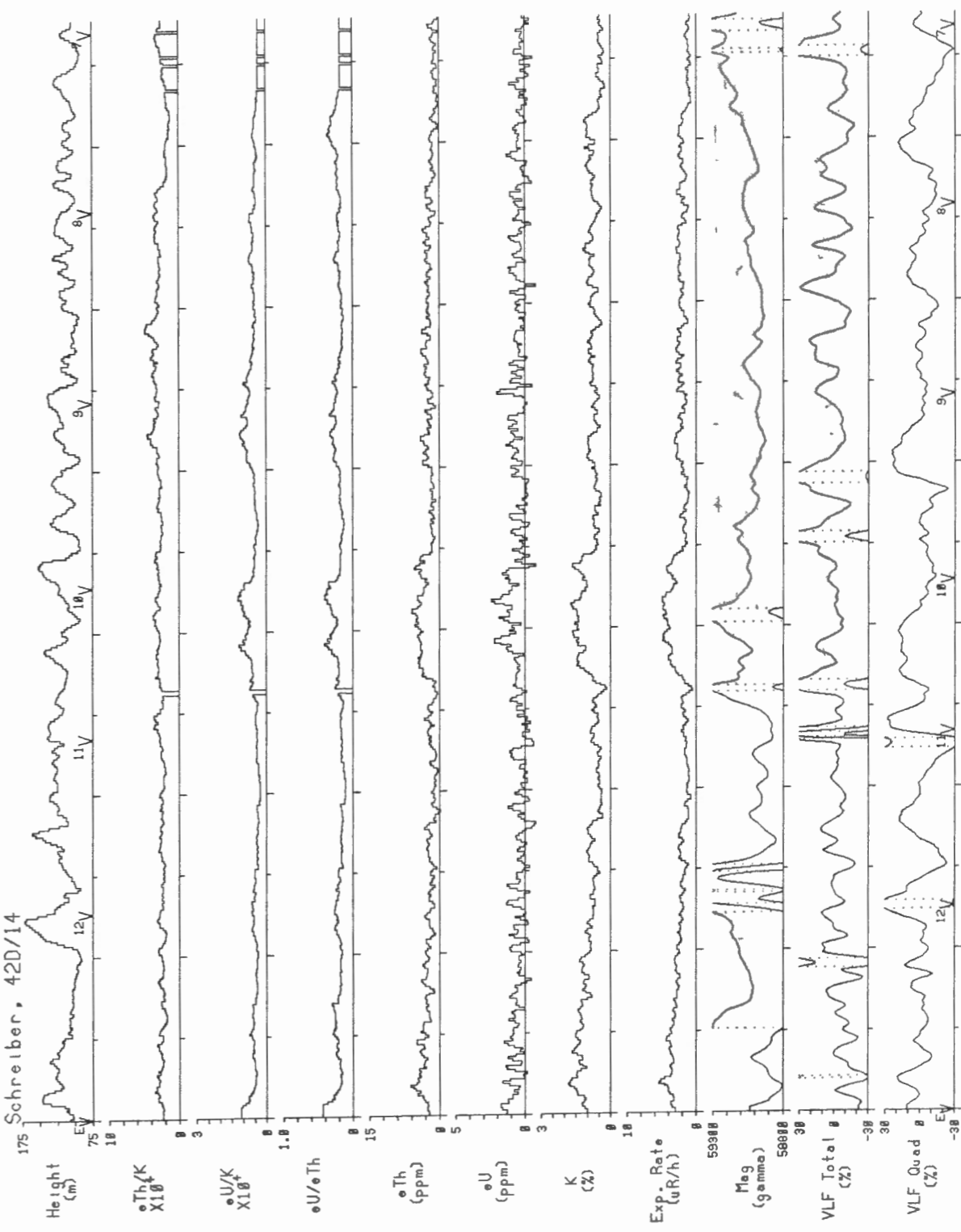
Line 32 | 2 km | Scale 1:150000



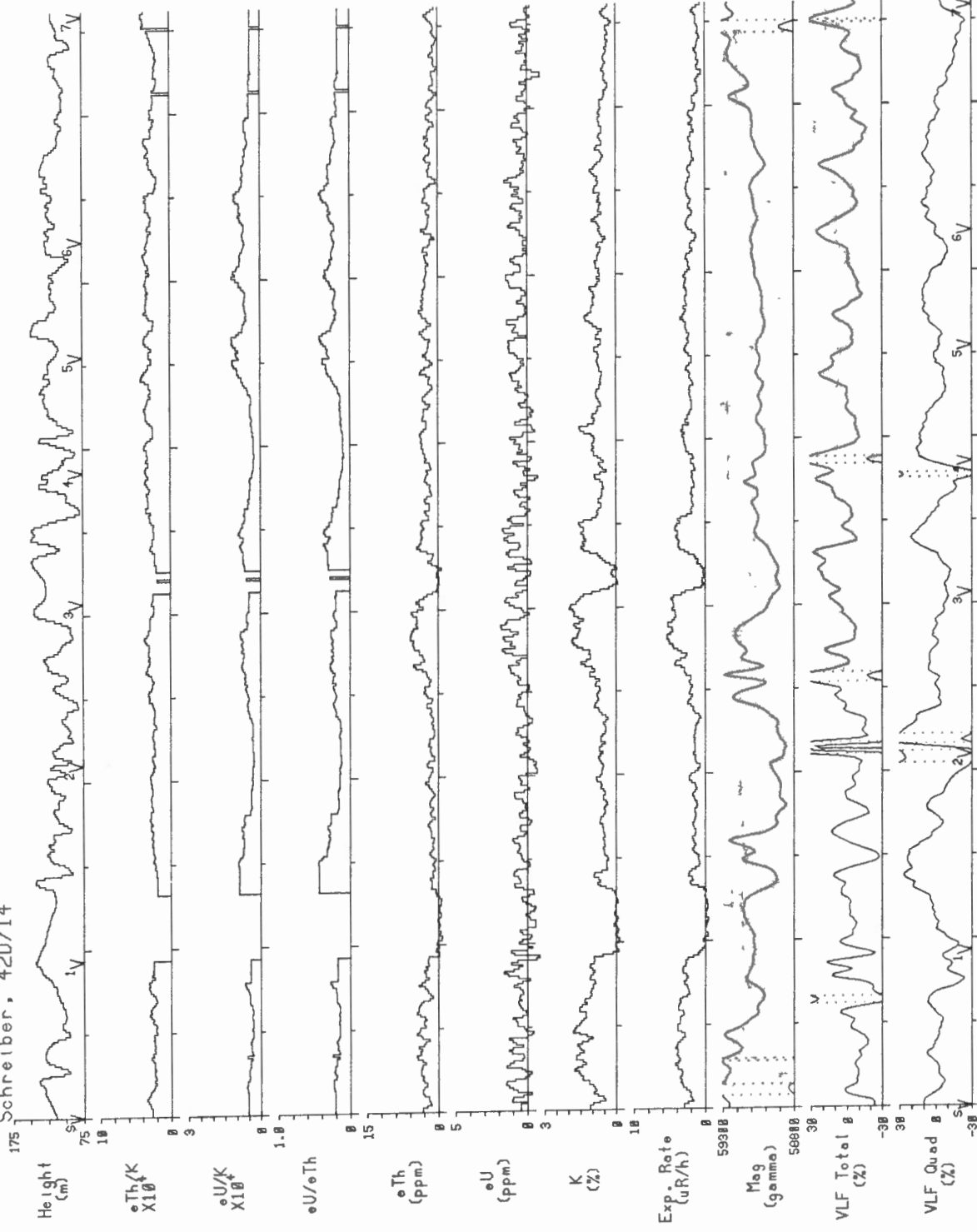
Schreiber Area, Ontario 1991  
Schreiber, 42D/14



Schreiber Area, Ontario 1991  
Schreiber, 42D/14

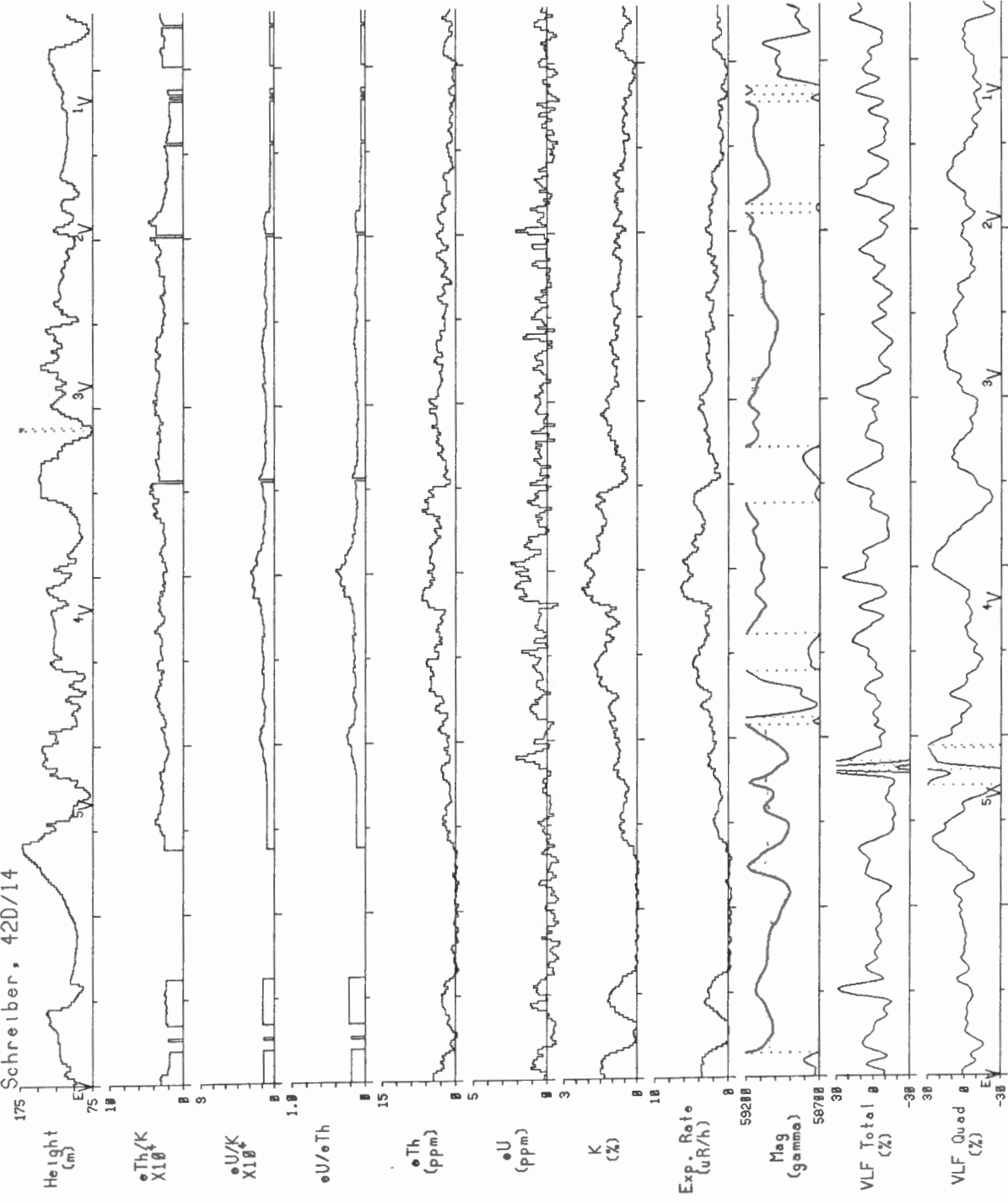


Schreiber Area, Ontario 1991  
Schreiber, 42D/14



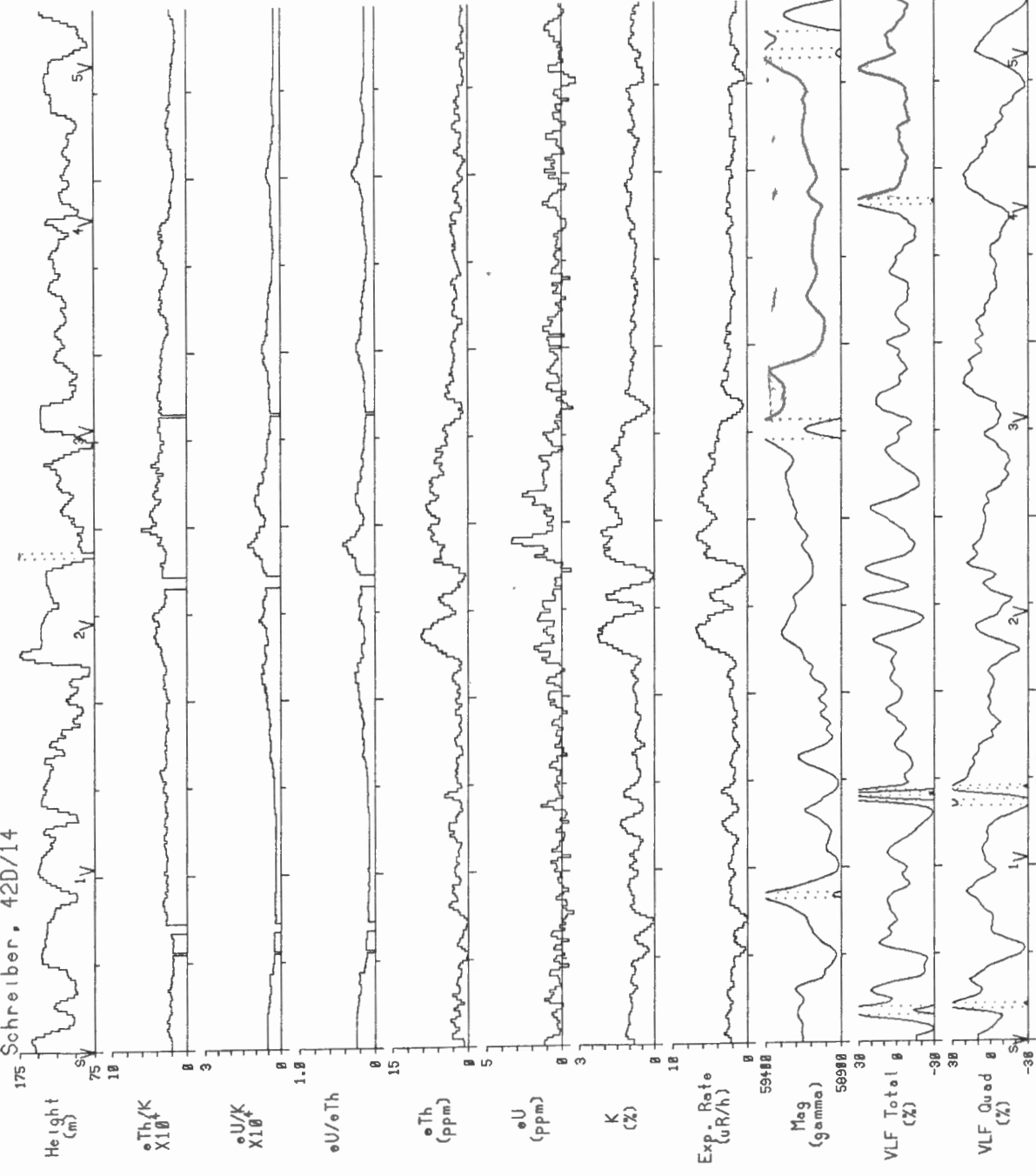
Line 35 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Schreiber, 42D/14



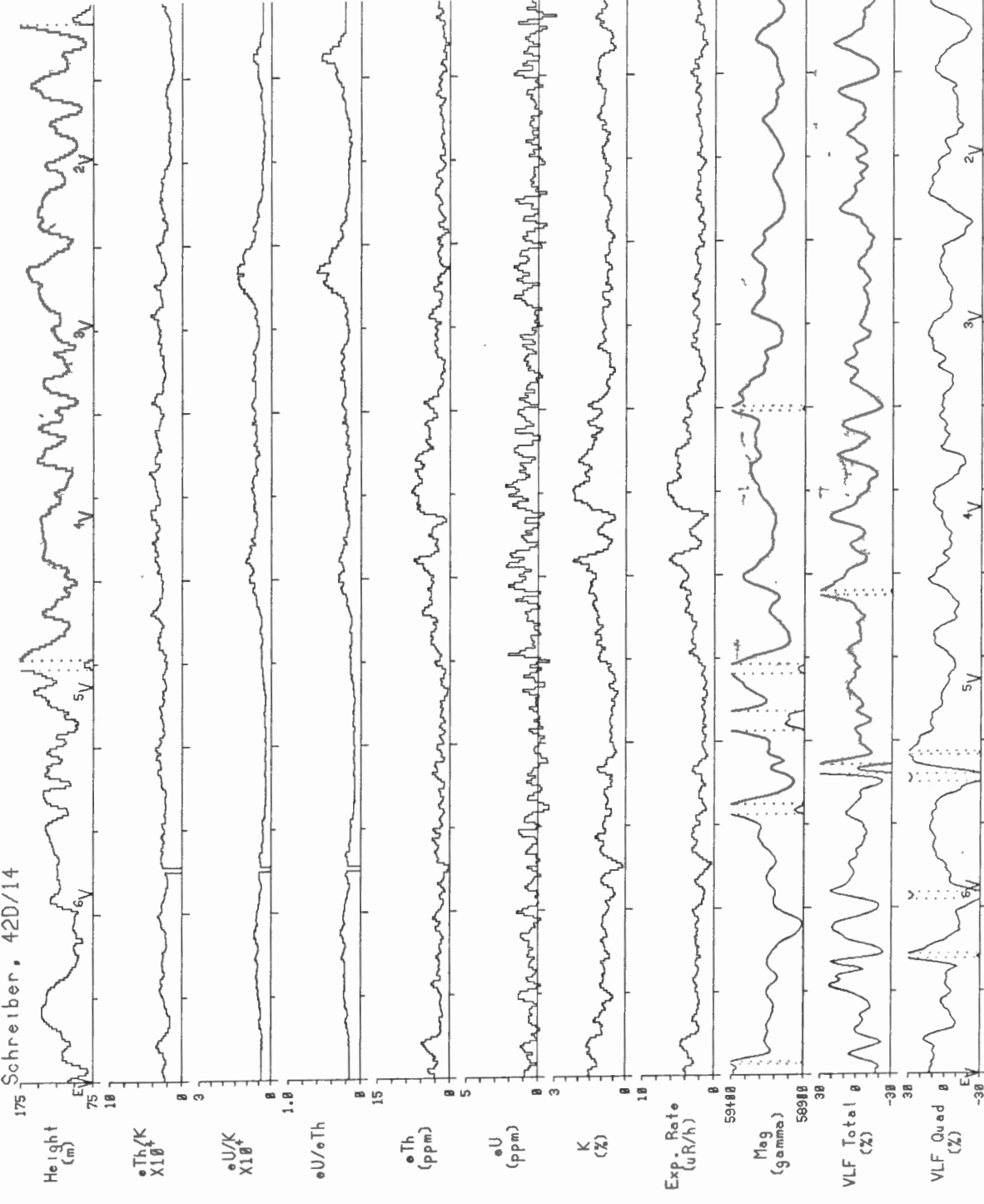
Line 36 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Schreiber, 42D/14



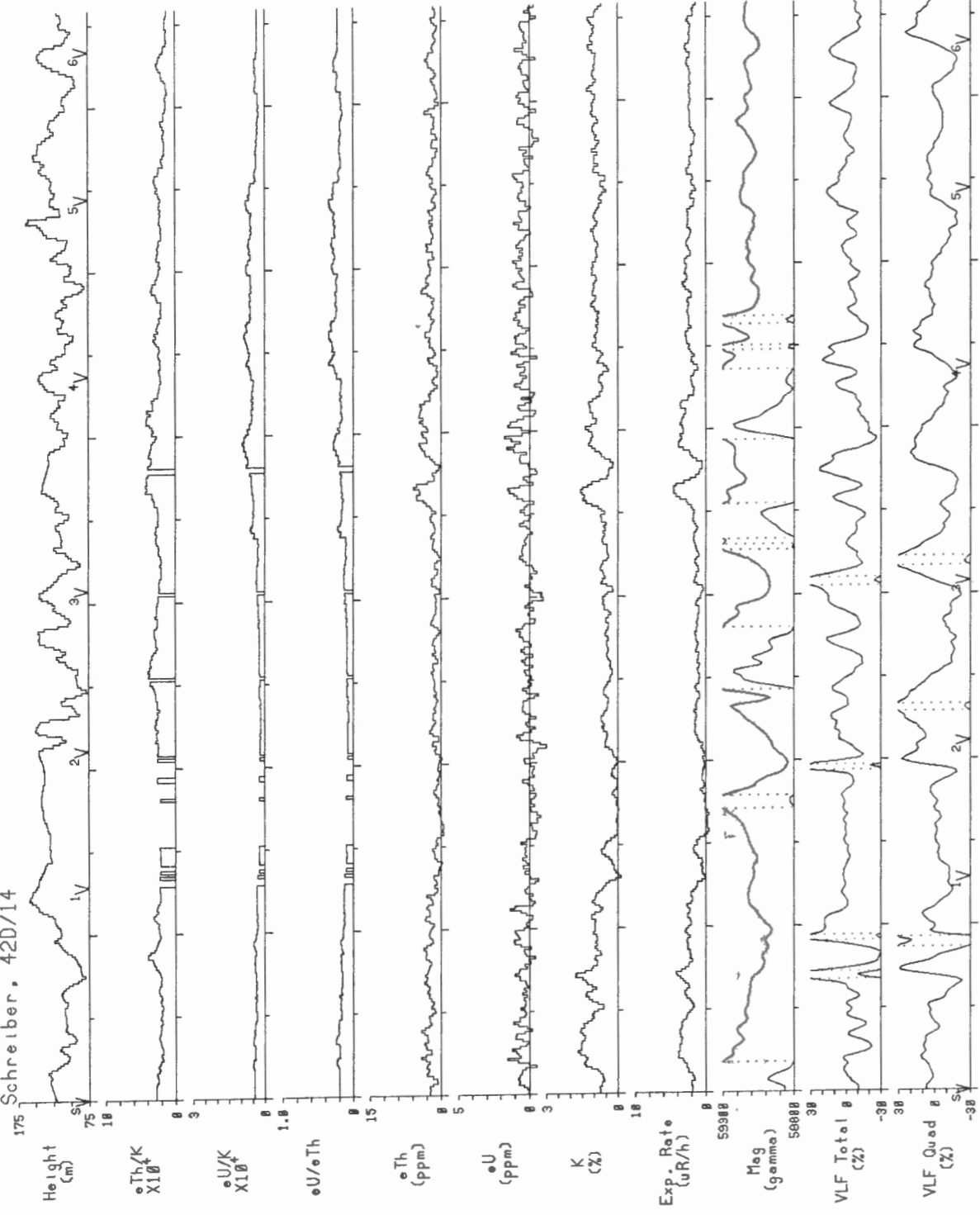
Line 37 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Schreiber, 42D/14



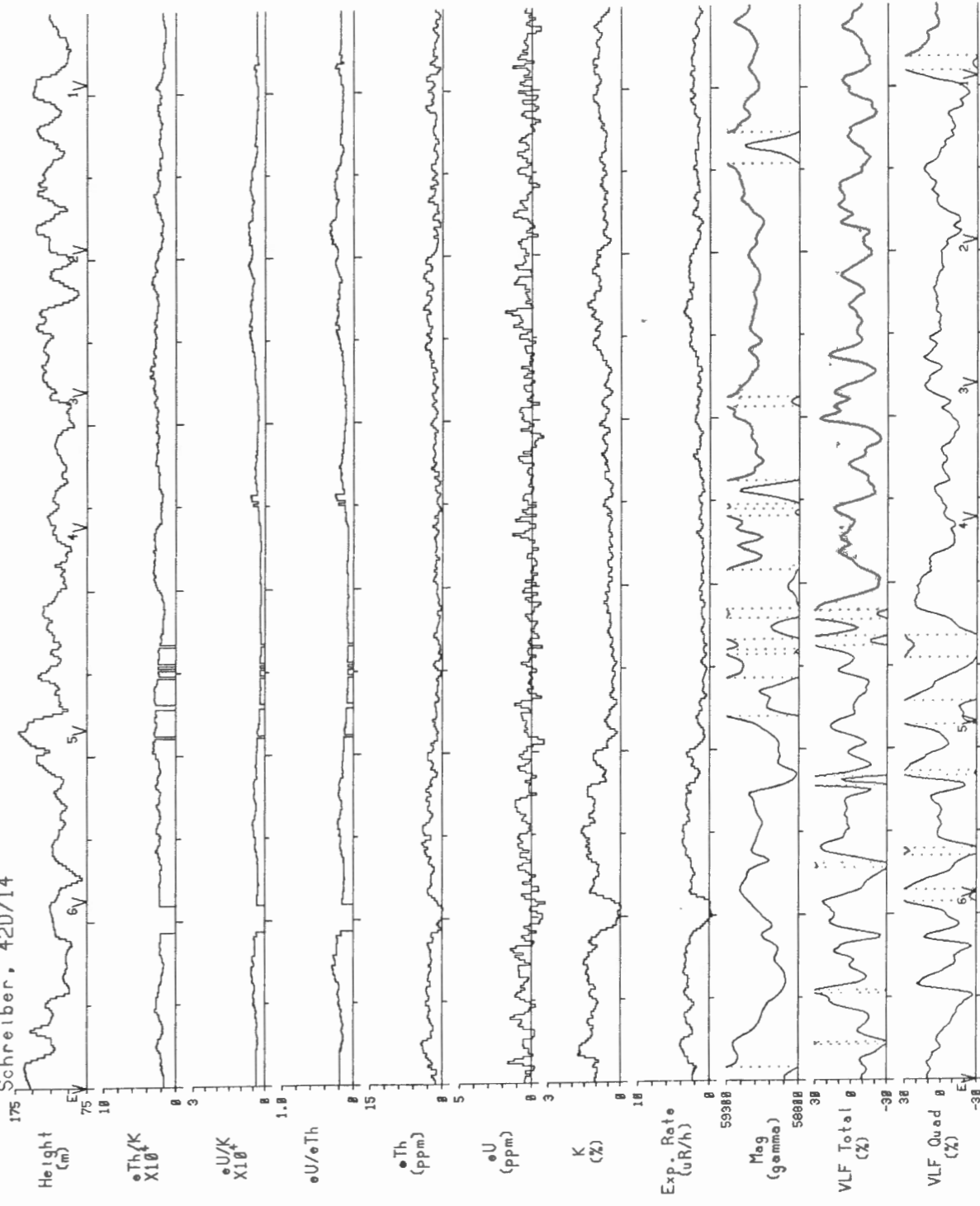
Line 38 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Schreiber, 42D/14



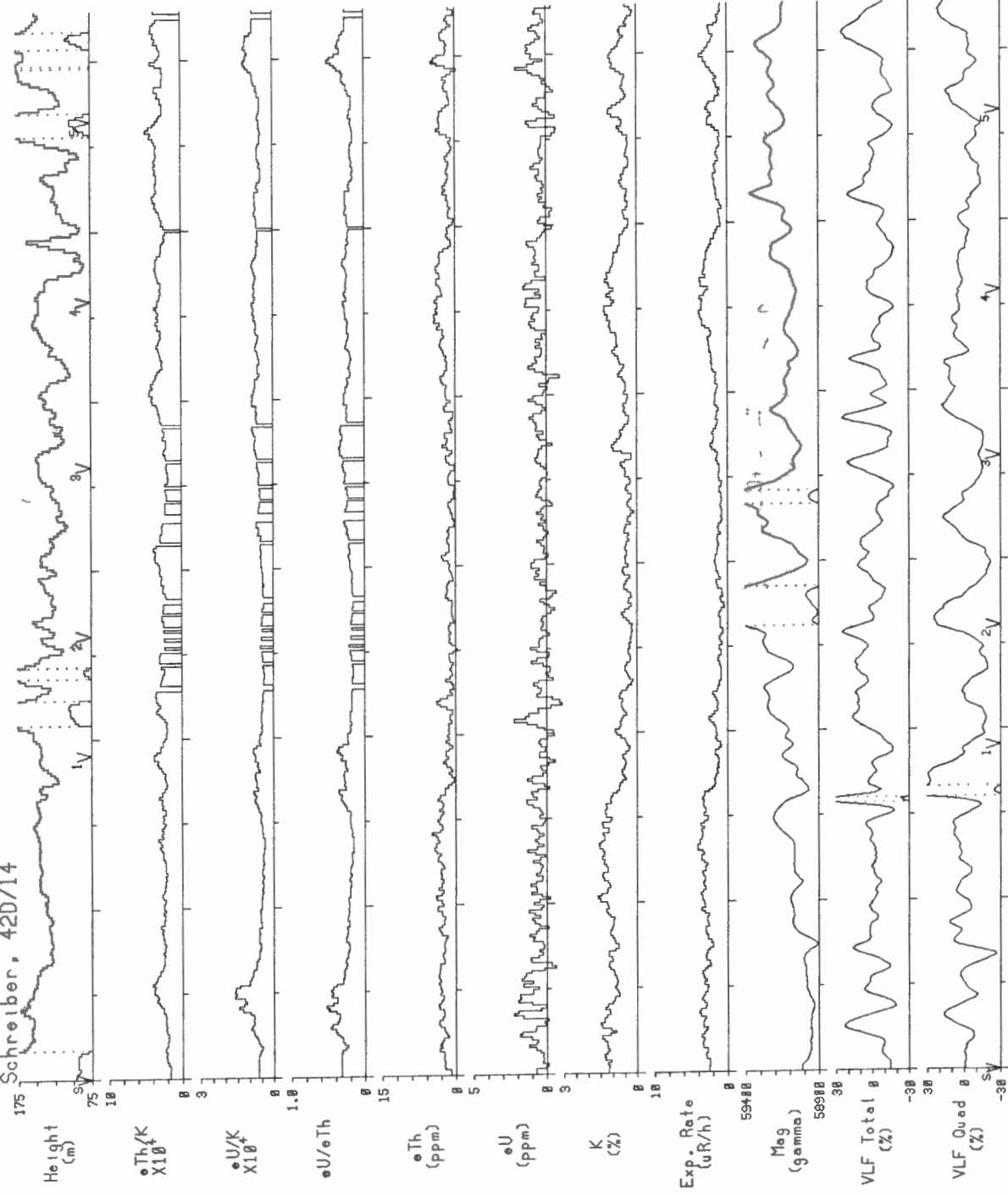
Line 39 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Schreiber, 42D/14



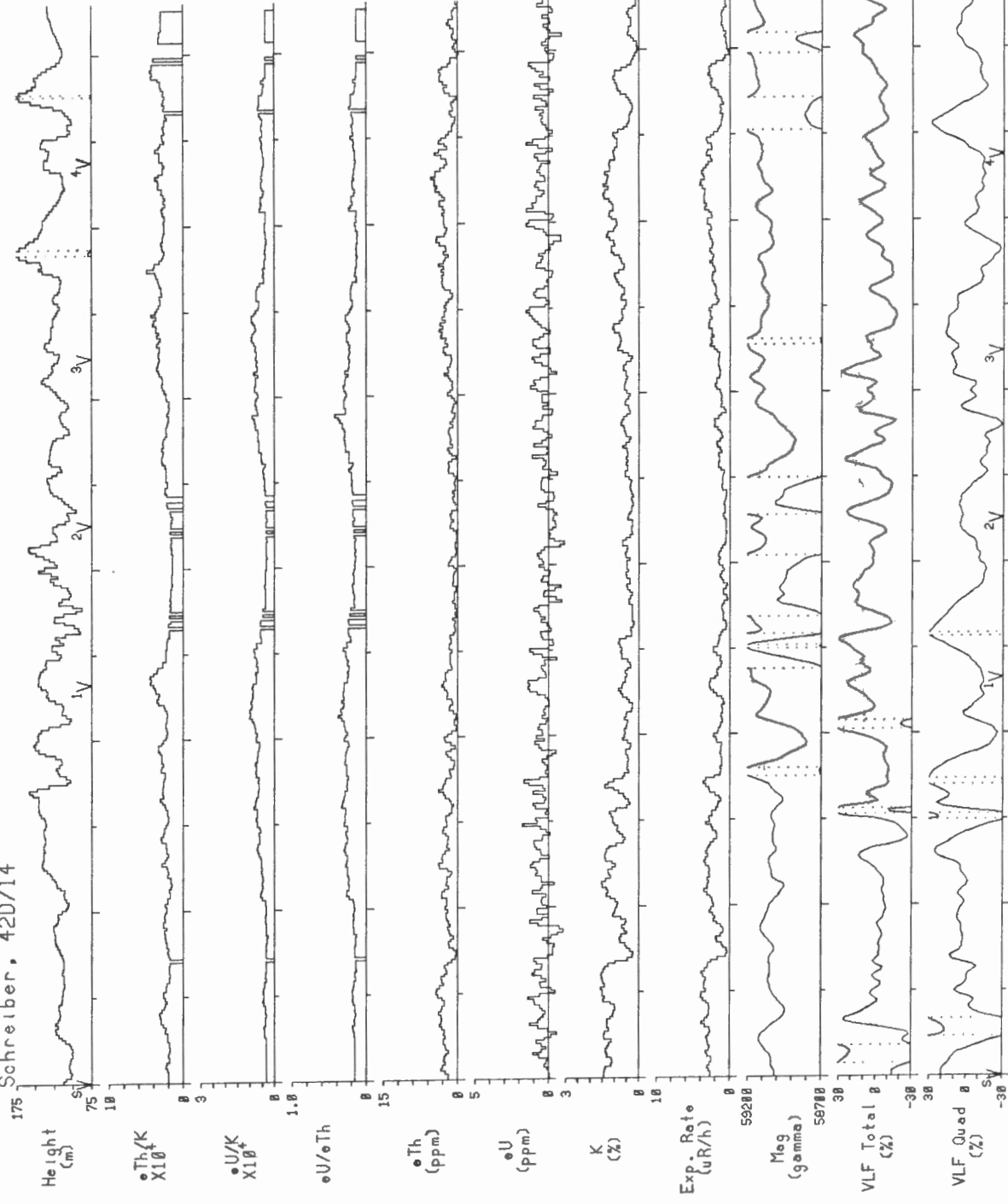
Line 40 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Schreiber, 42D/14



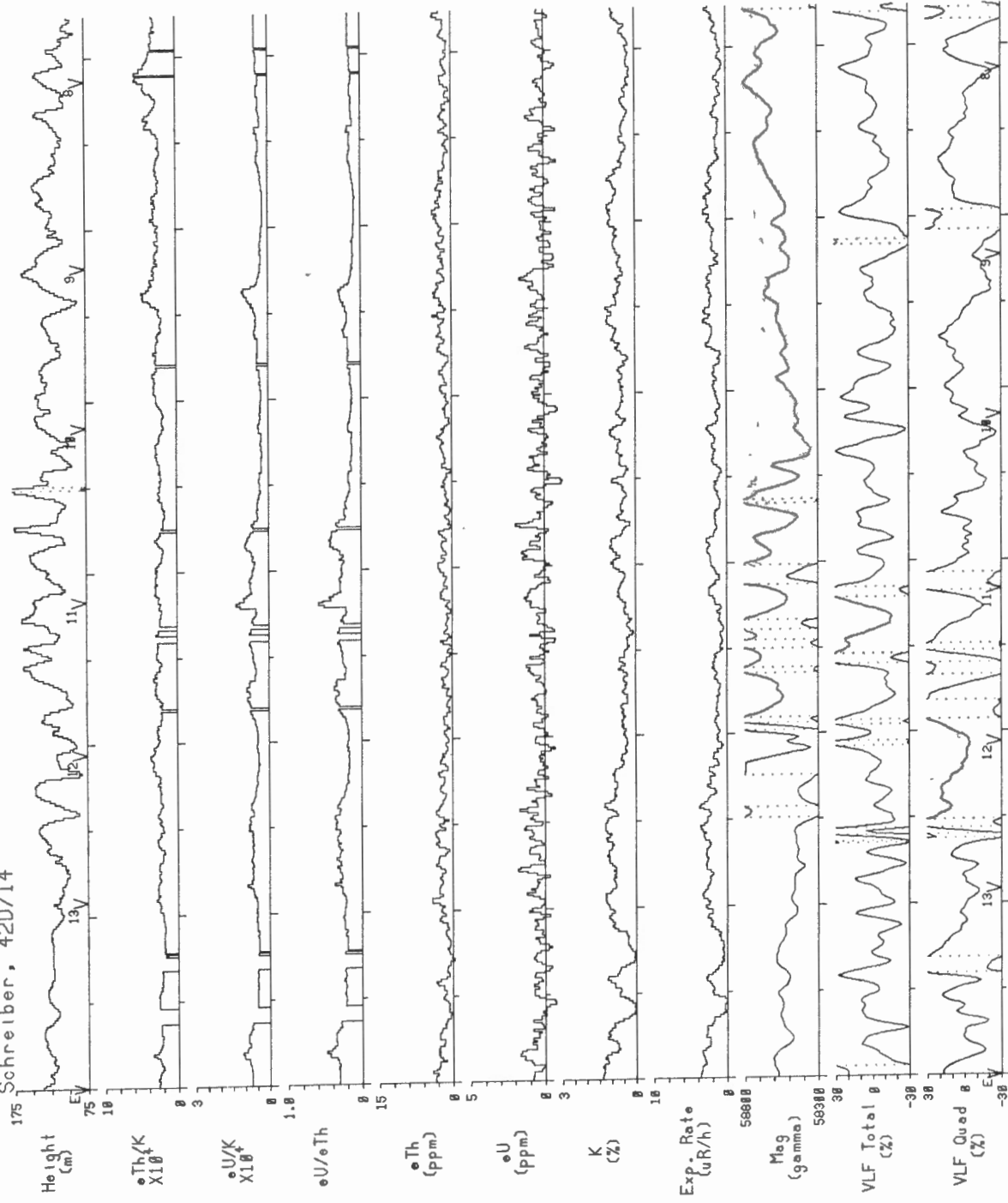
Line 41 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Schreiber, 42D/14



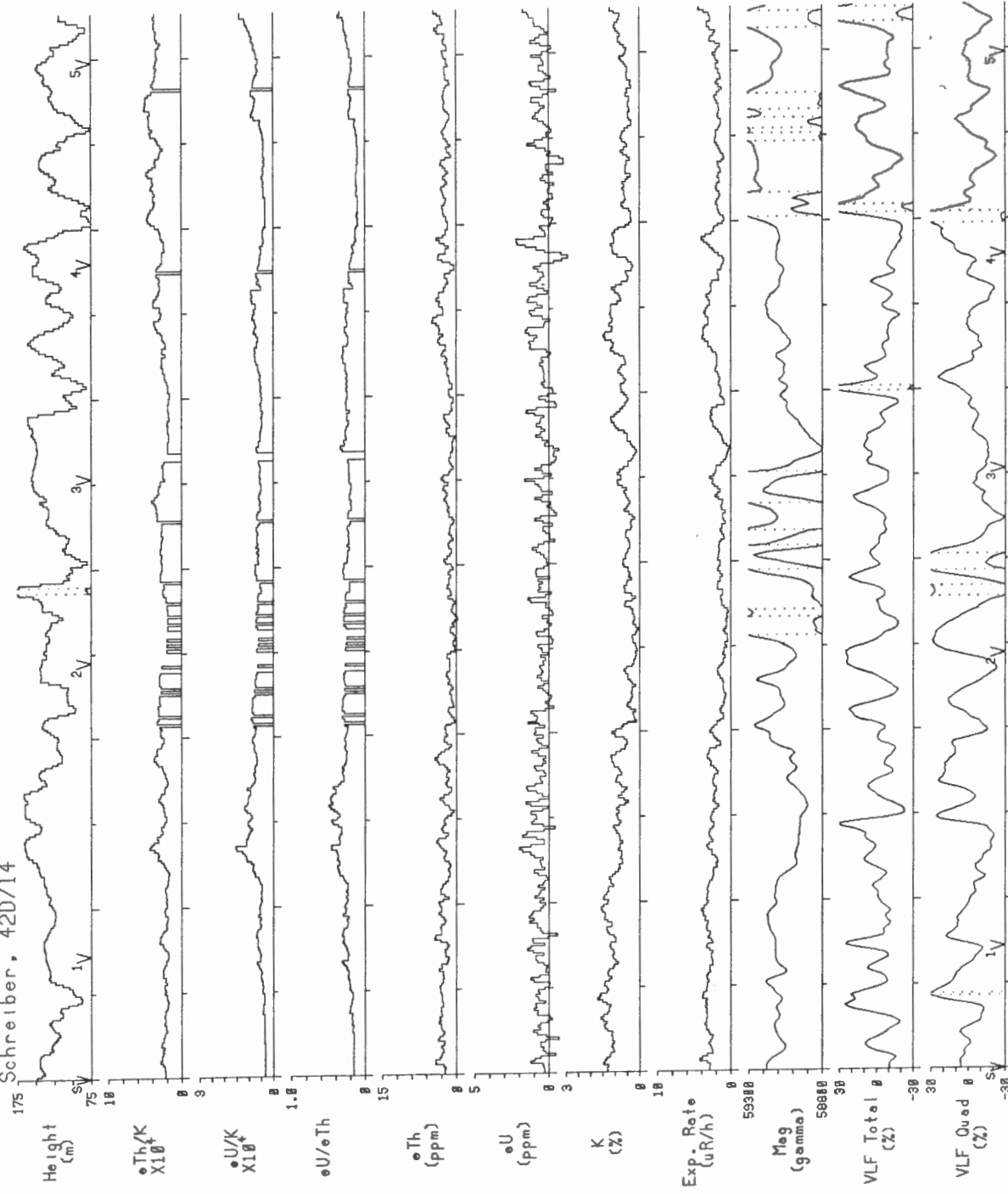
Line 42 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Schreiber, 42D/14



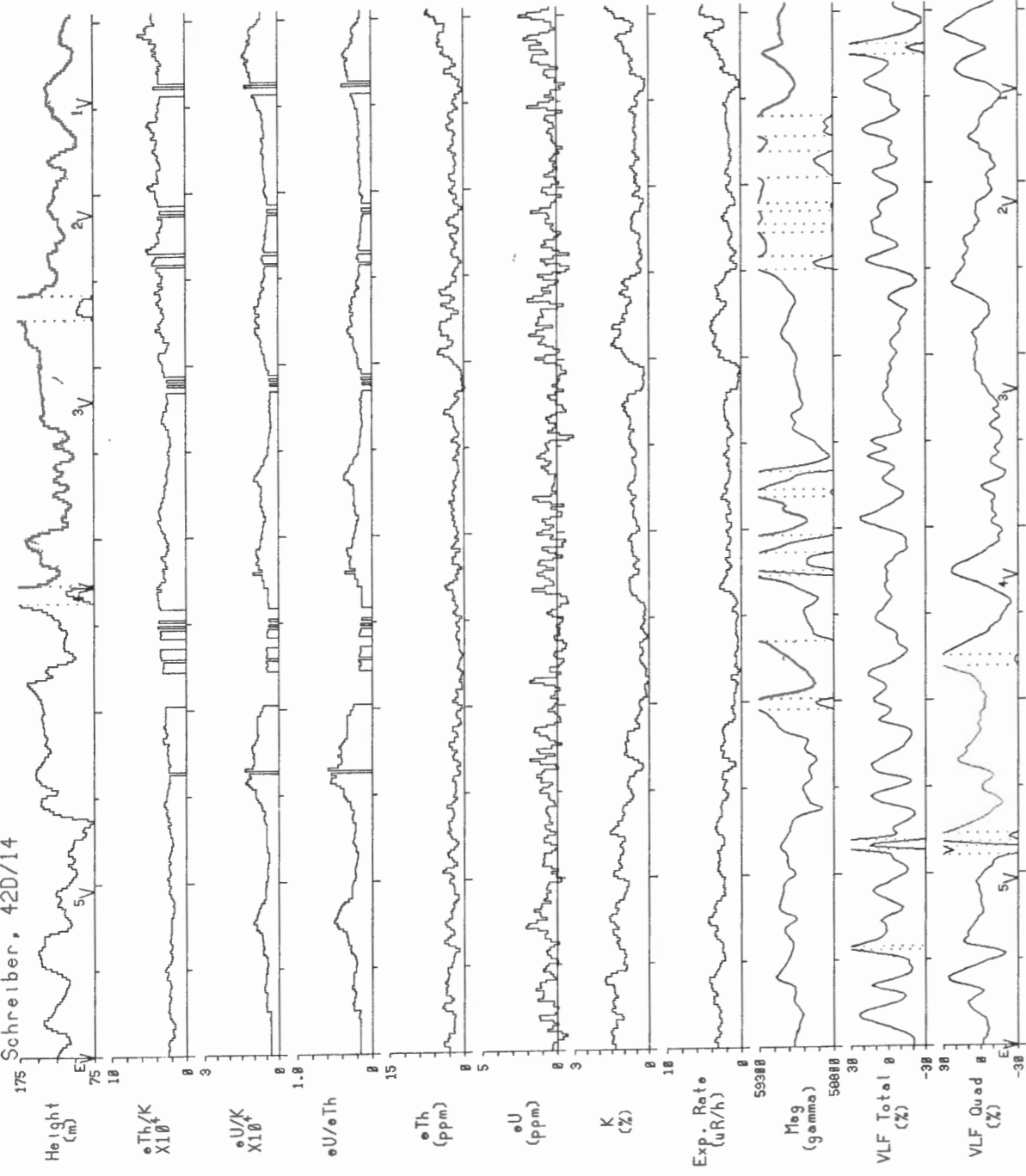
Line 43 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Schreiber, 42D/14



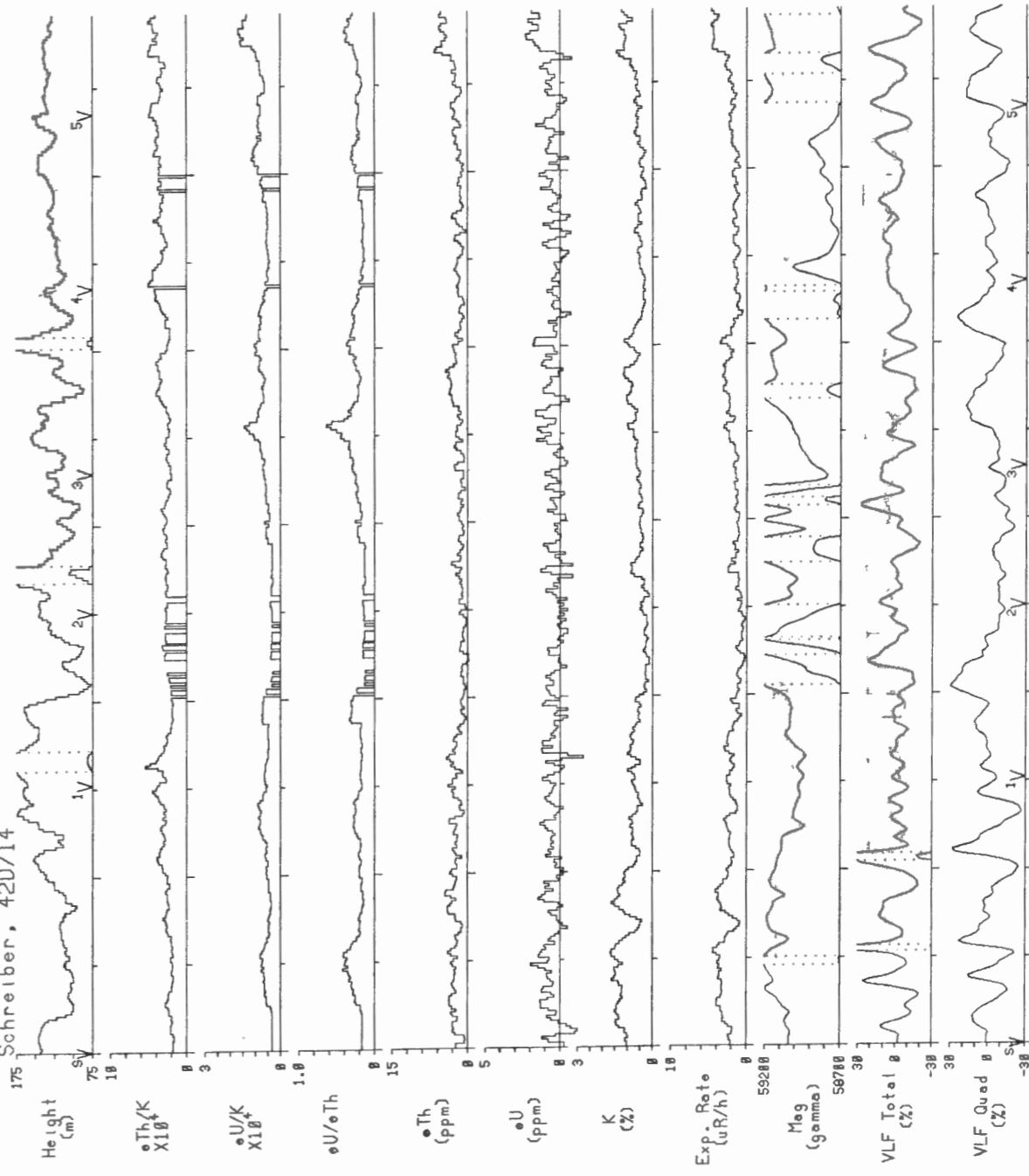
Line 44 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Schreiber, 42D/14



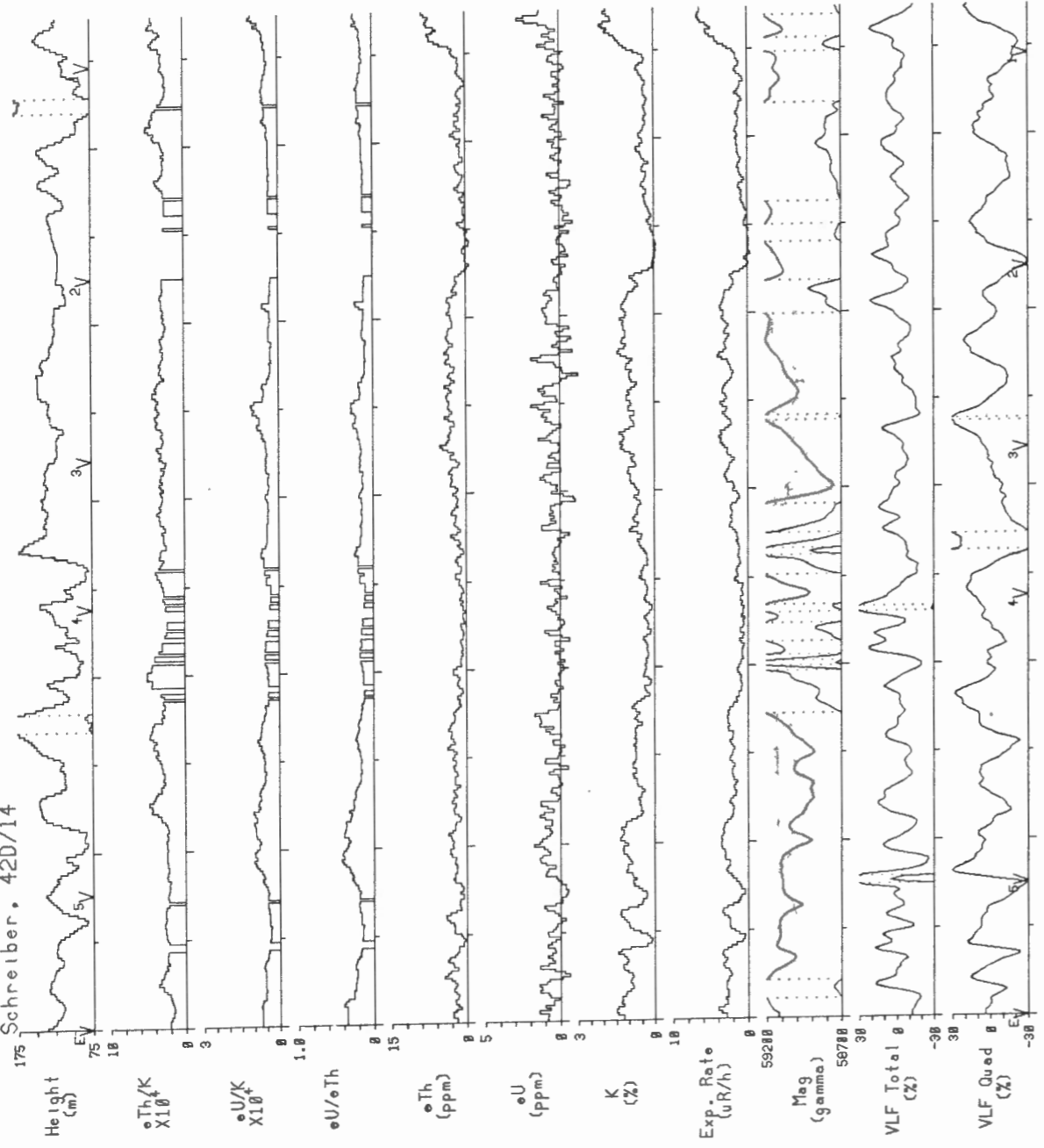
Line 45 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Schreiber, 42D/14



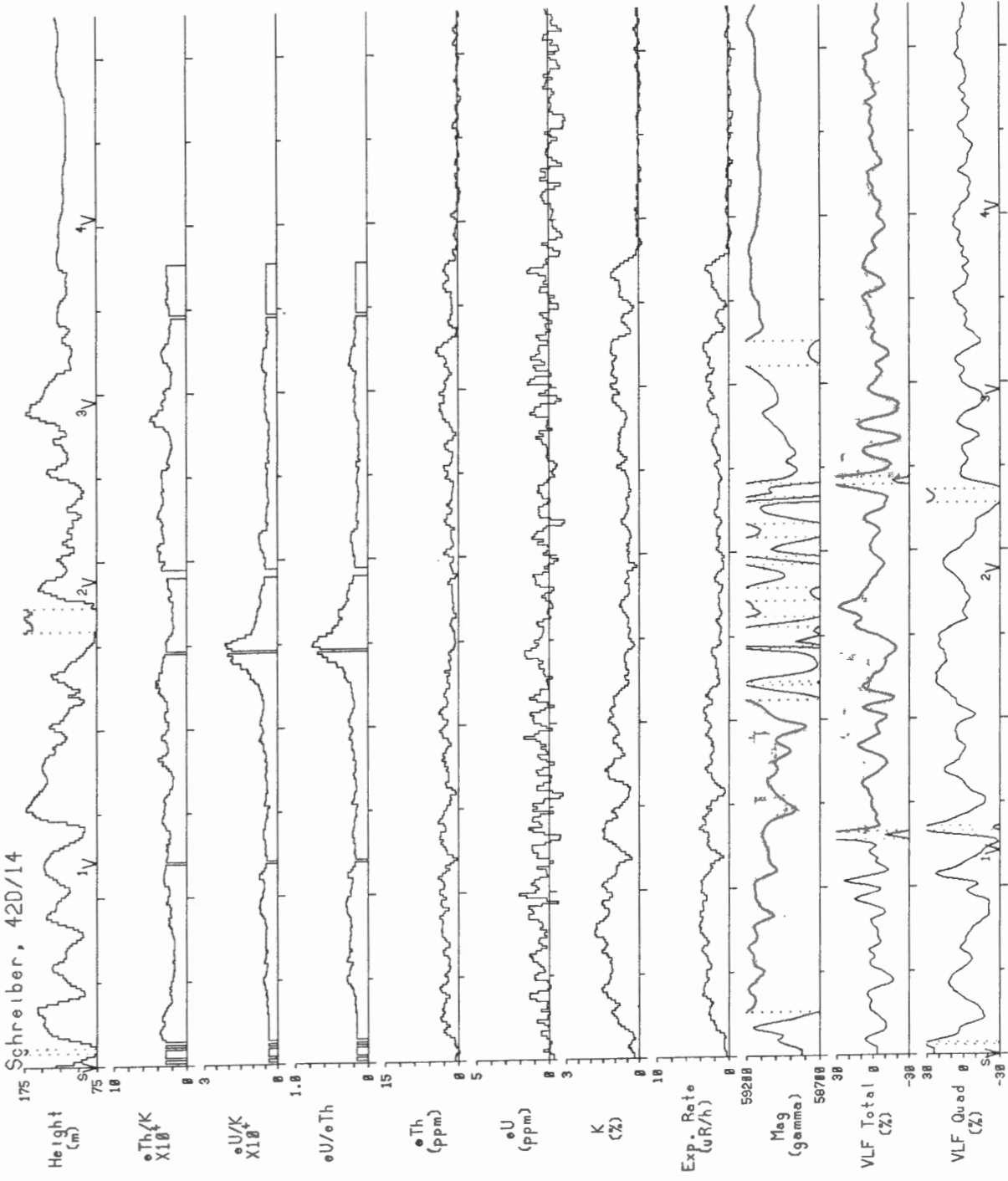
Line 46 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Schreiber, 42D/14



Line 47 | 2 km | Scale 1:150000

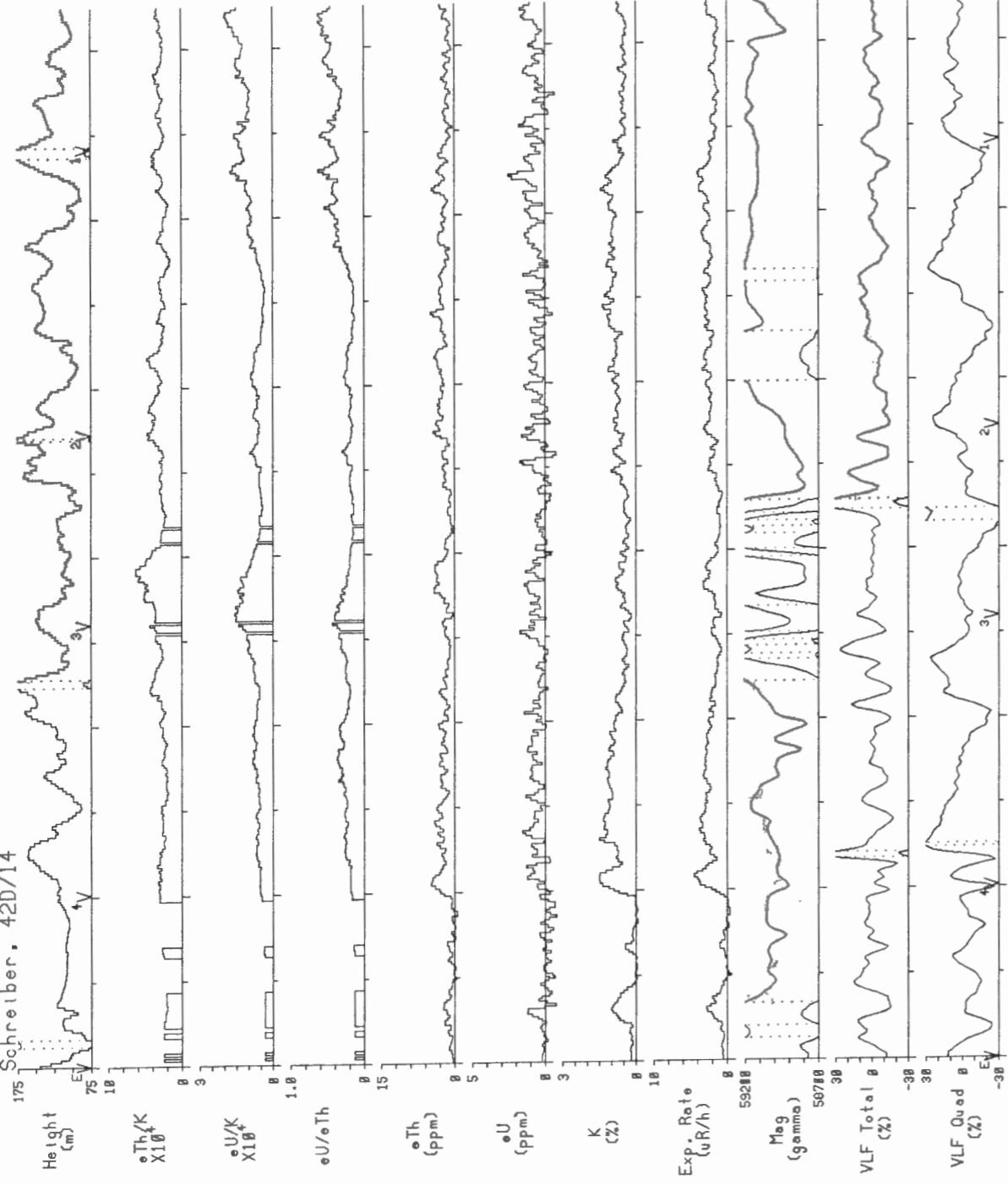
Schreiber Area, Ontario 1991  
Schreiber, 42D/14



Line 48 | 2 km | Scale 1:150000

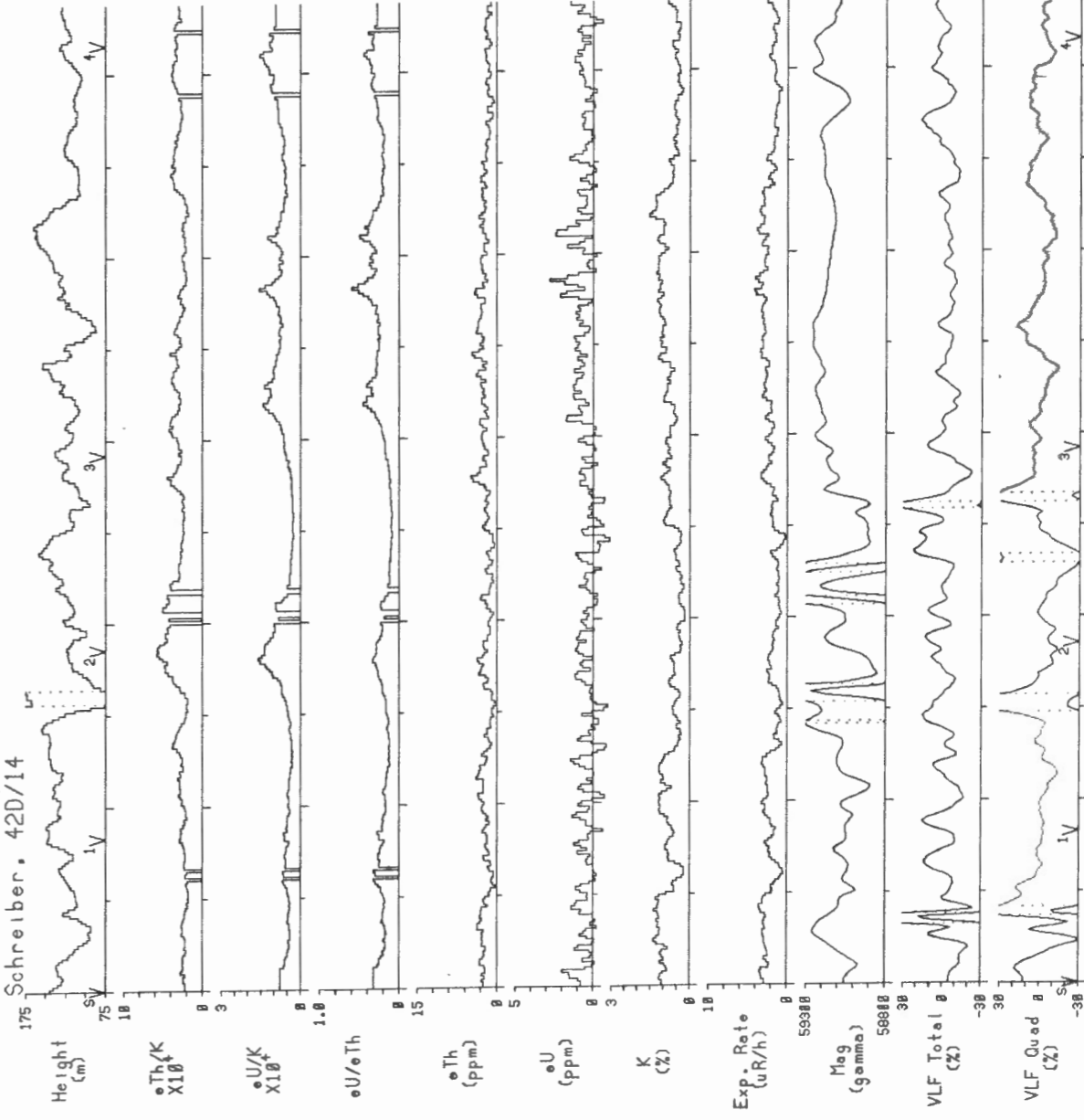


Schreiber Area, Ontario 1991  
Schreiber, 42D/14



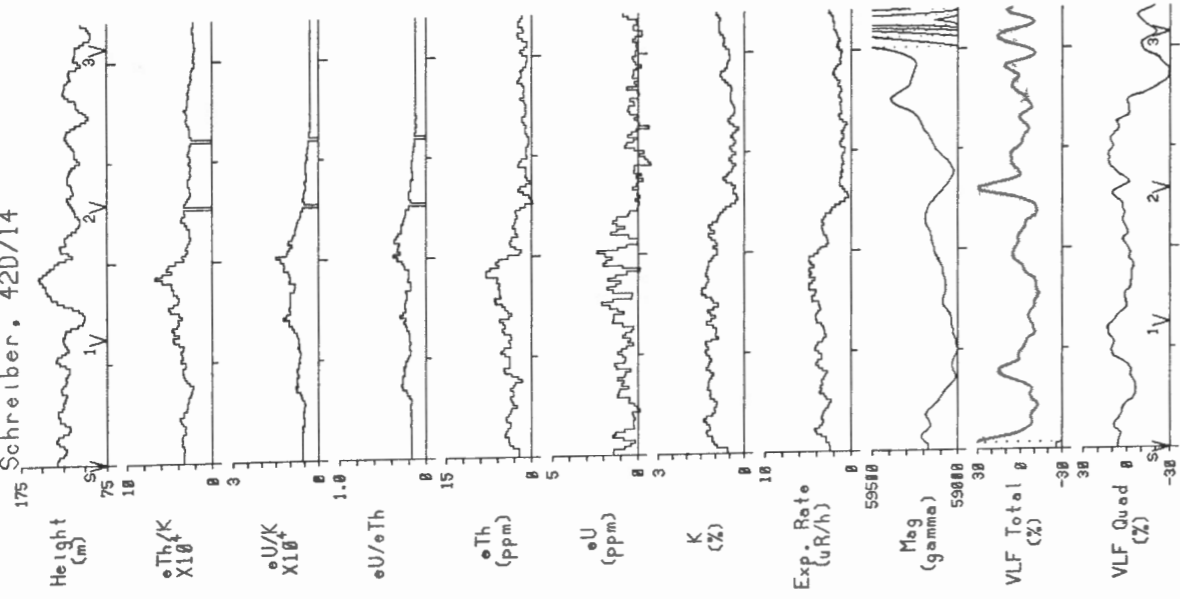
Line 49 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Schreiber, 42D/14



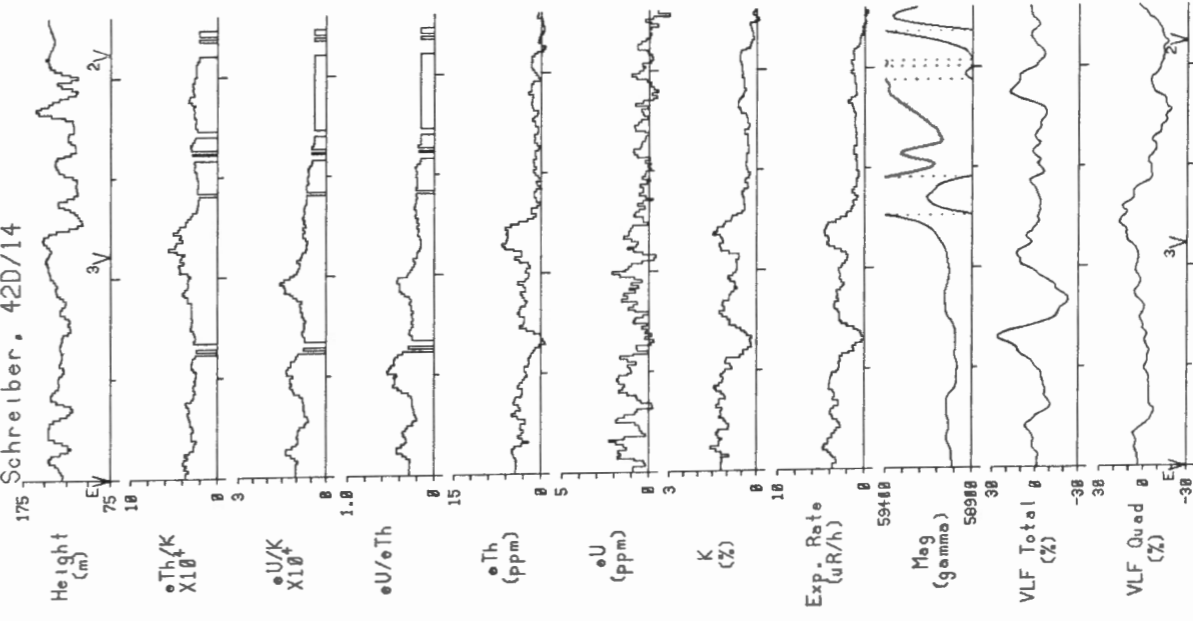
Line 50 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Schreiber, 42D/14



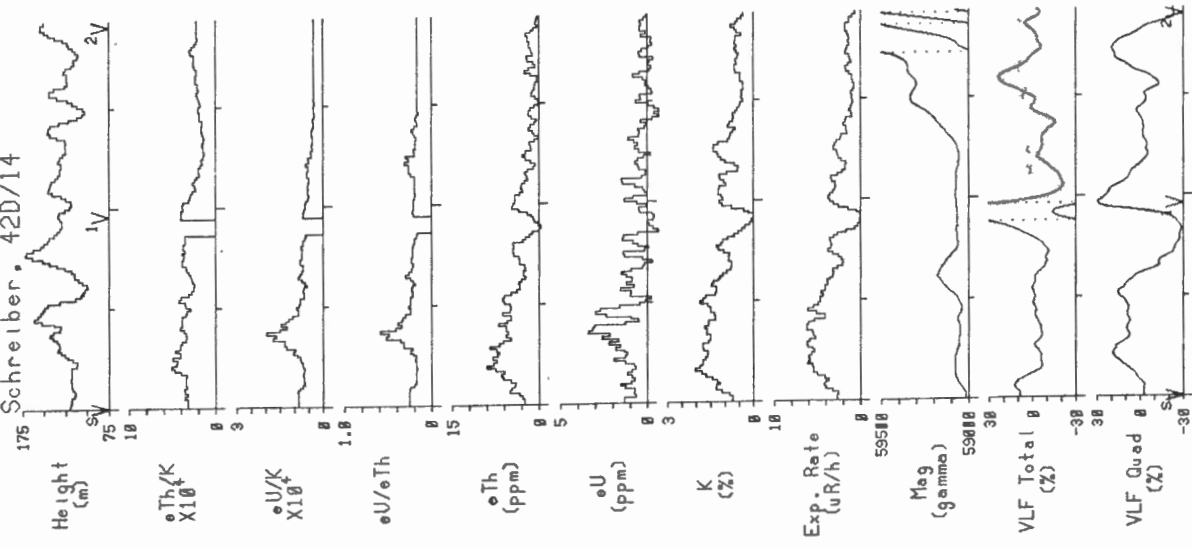
Line 70 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Schreiber, 42D/14



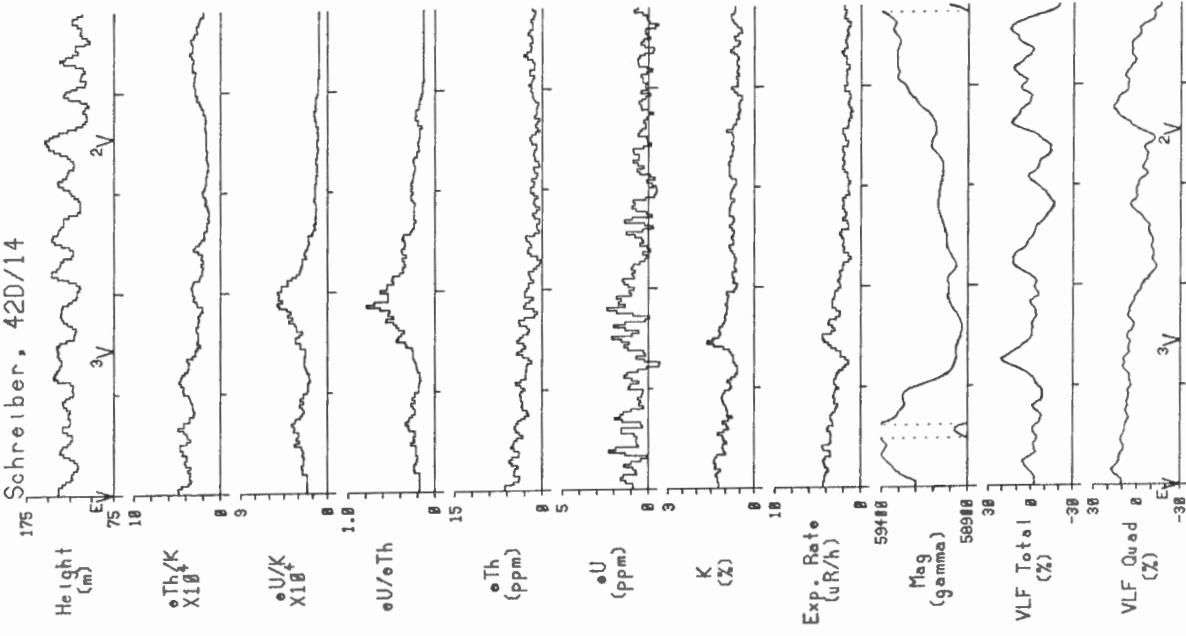
Line 71 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Schreiber, 42D/14



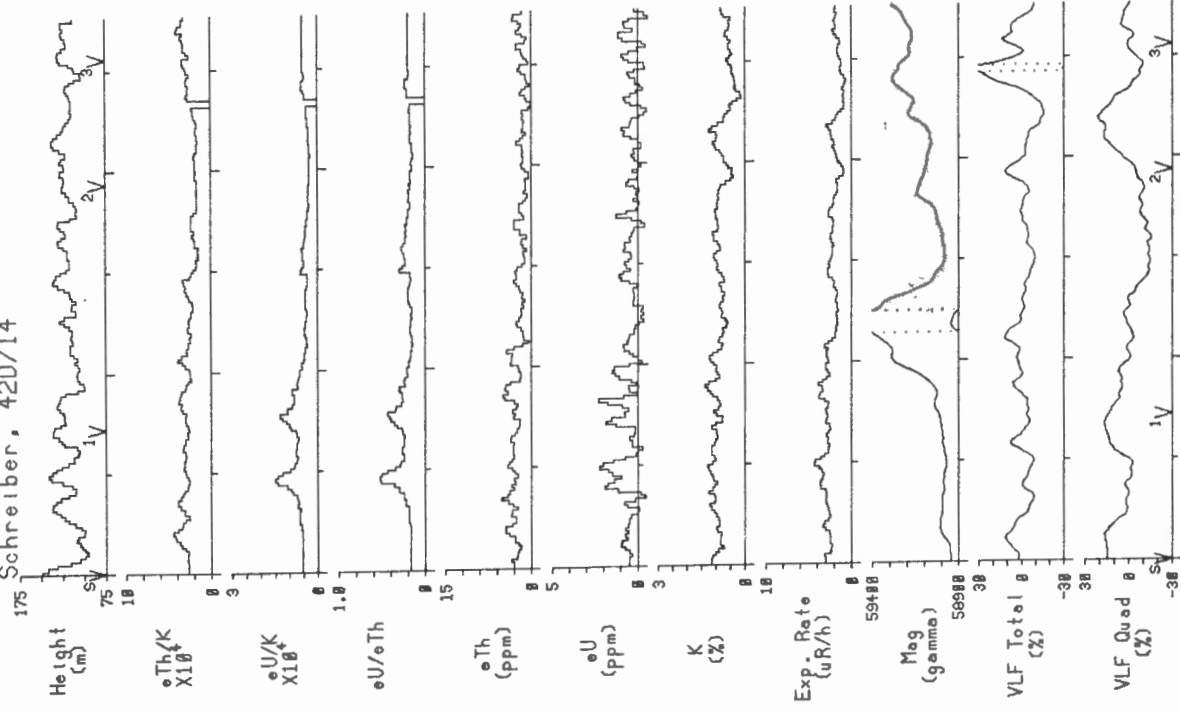
Line 72 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Schreiber, 42D/14



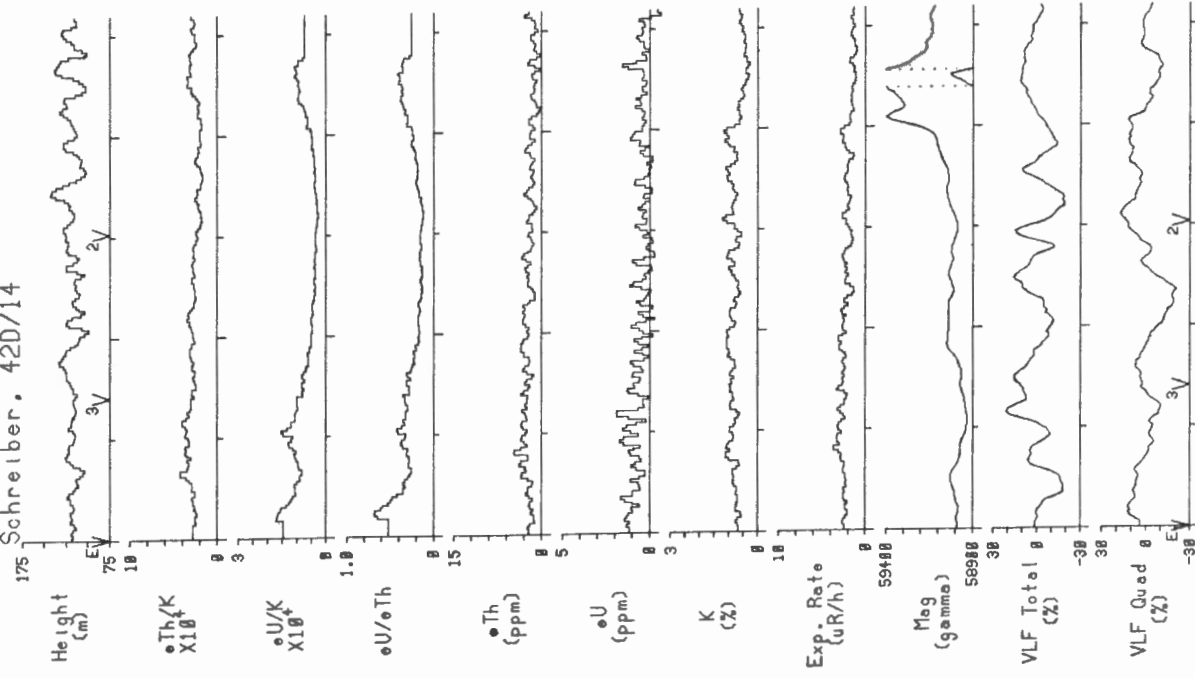
Line 73 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Schreiber, 42D/14



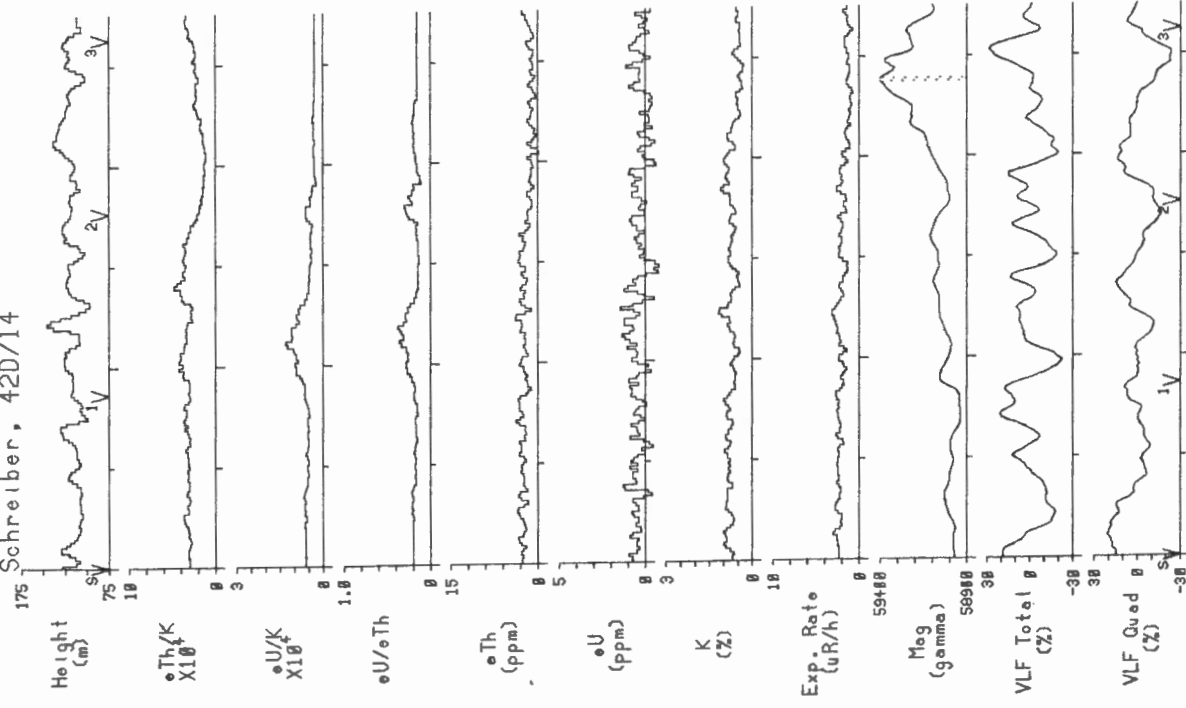
Line 74 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Schreiber, 42D/14



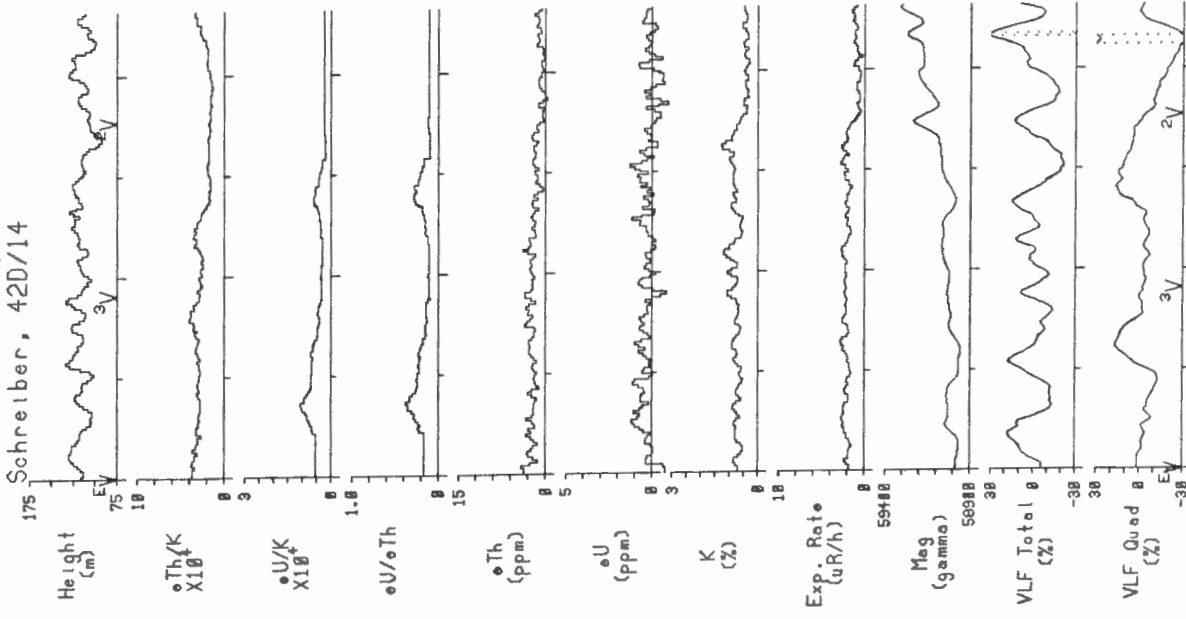
Line 75 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Schreiber, 42D/14



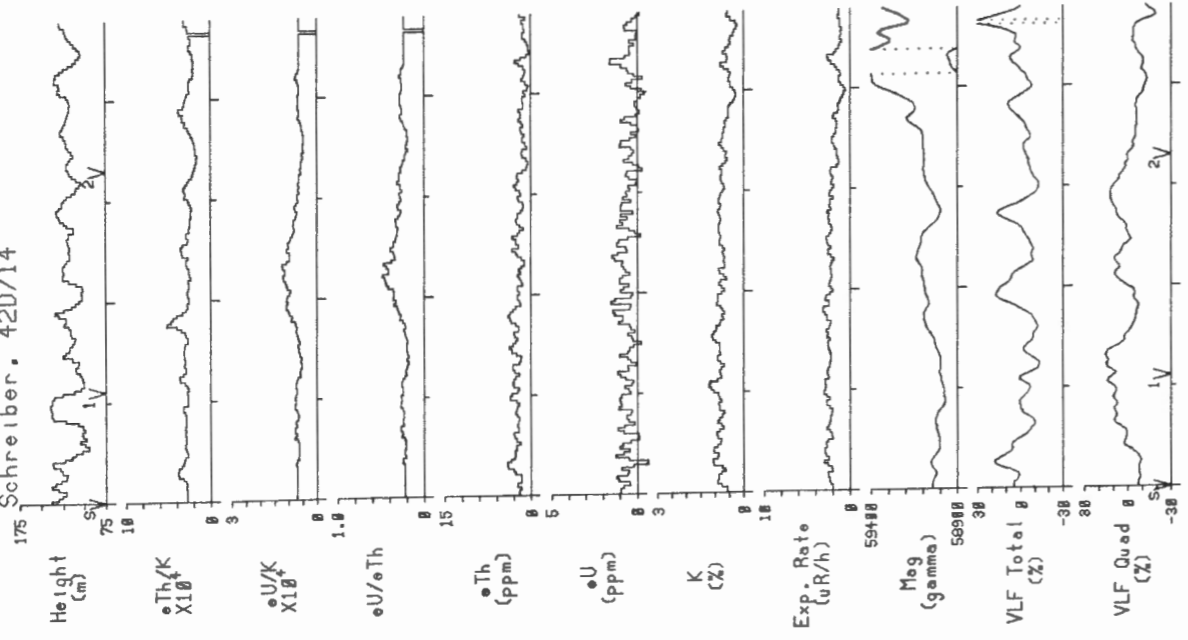
Line 76 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Schreiber, 42D/14



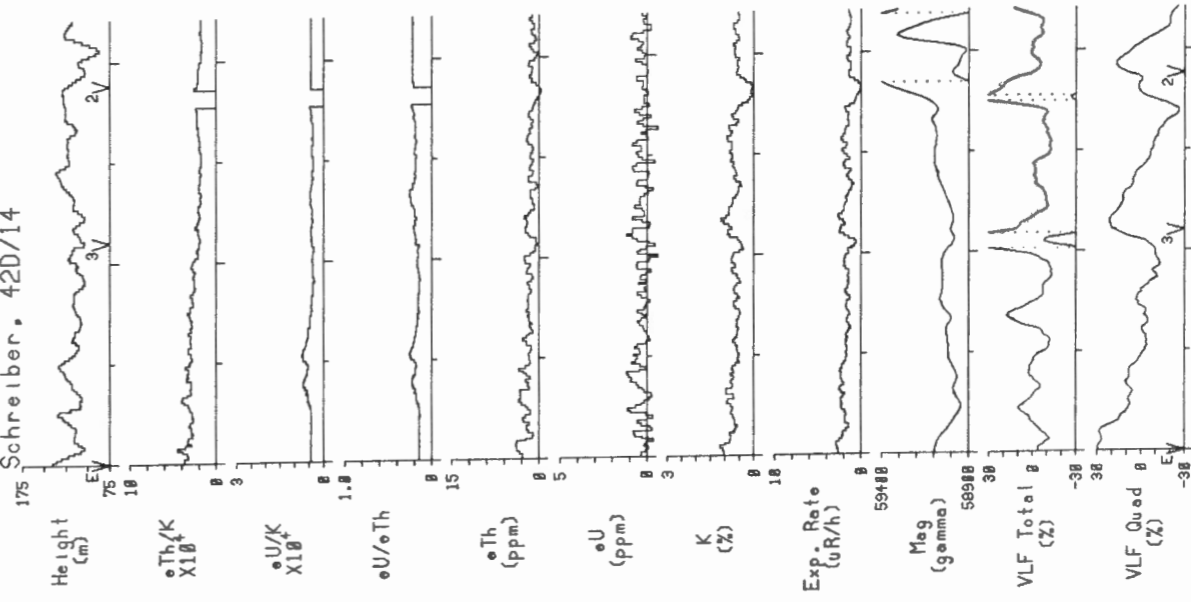
Line 77 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Schreiber. 42D/14



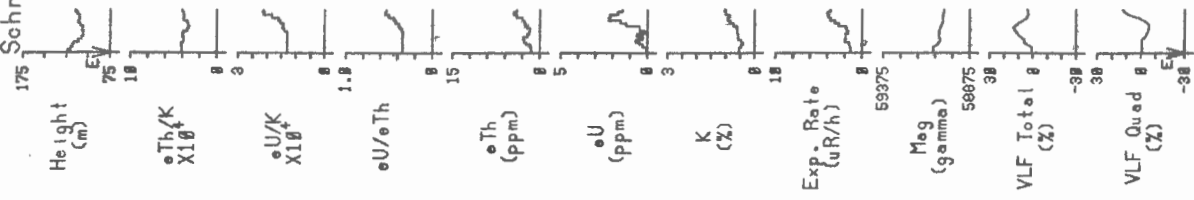
Line 78 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Schreiber. 42D/14



Line 79 | 2 km | Scale 1:150000

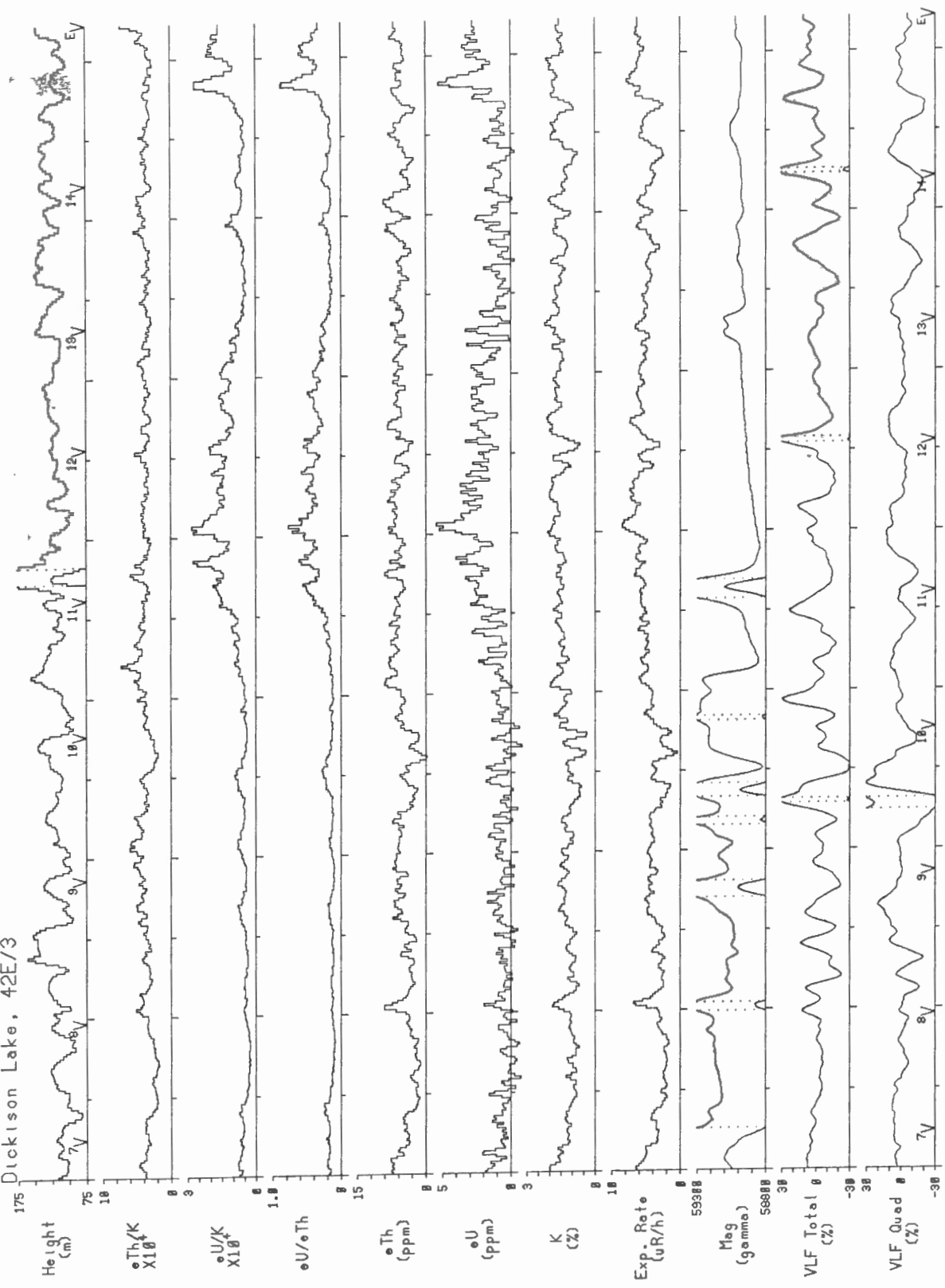
Schreiber Area, Ontario 1991  
Schreiber, 42D/14



Line 80 | 2 km

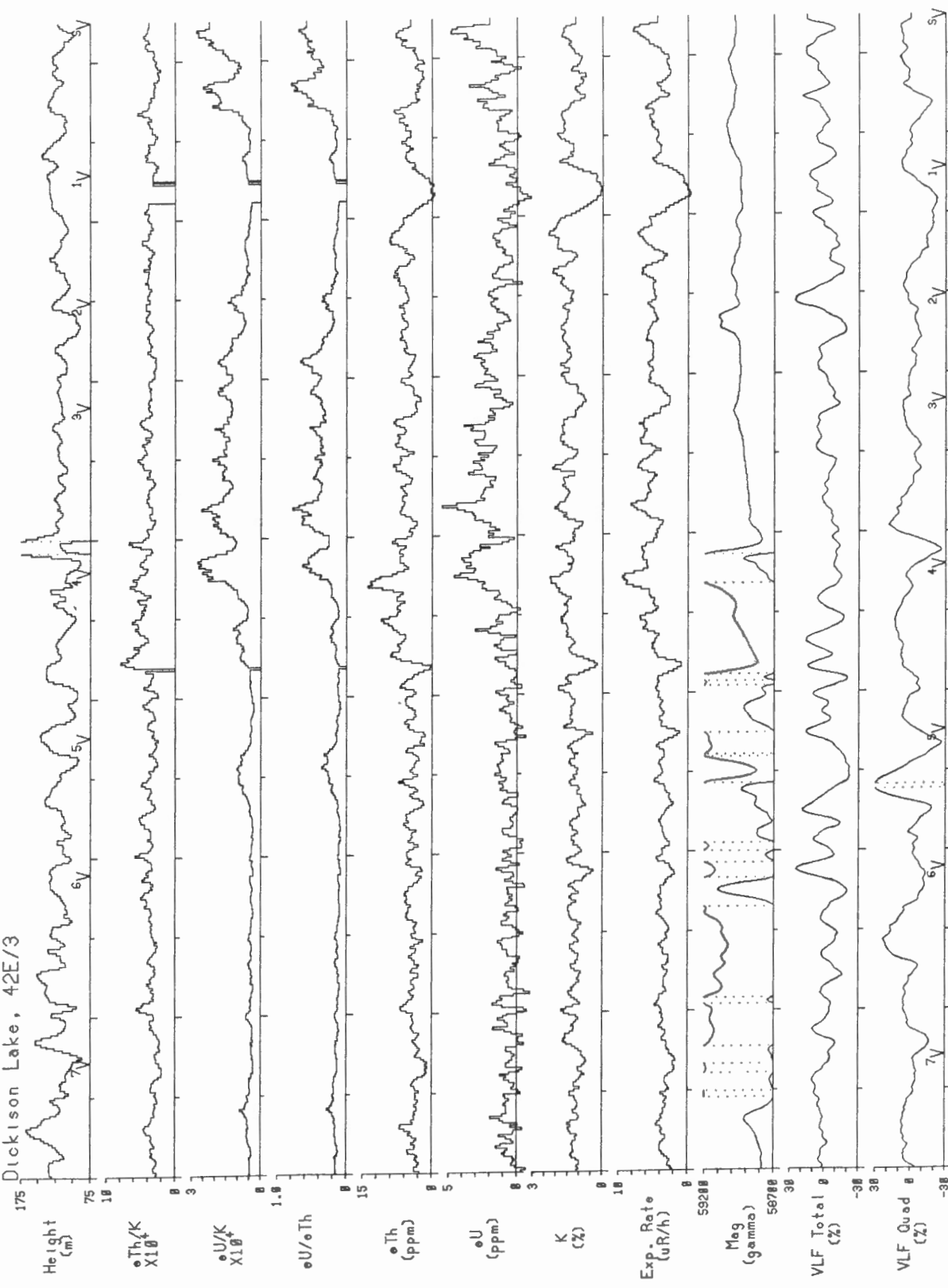
Scale 1:150000

Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3



Line 1 | 2 km | Scale 1:150000

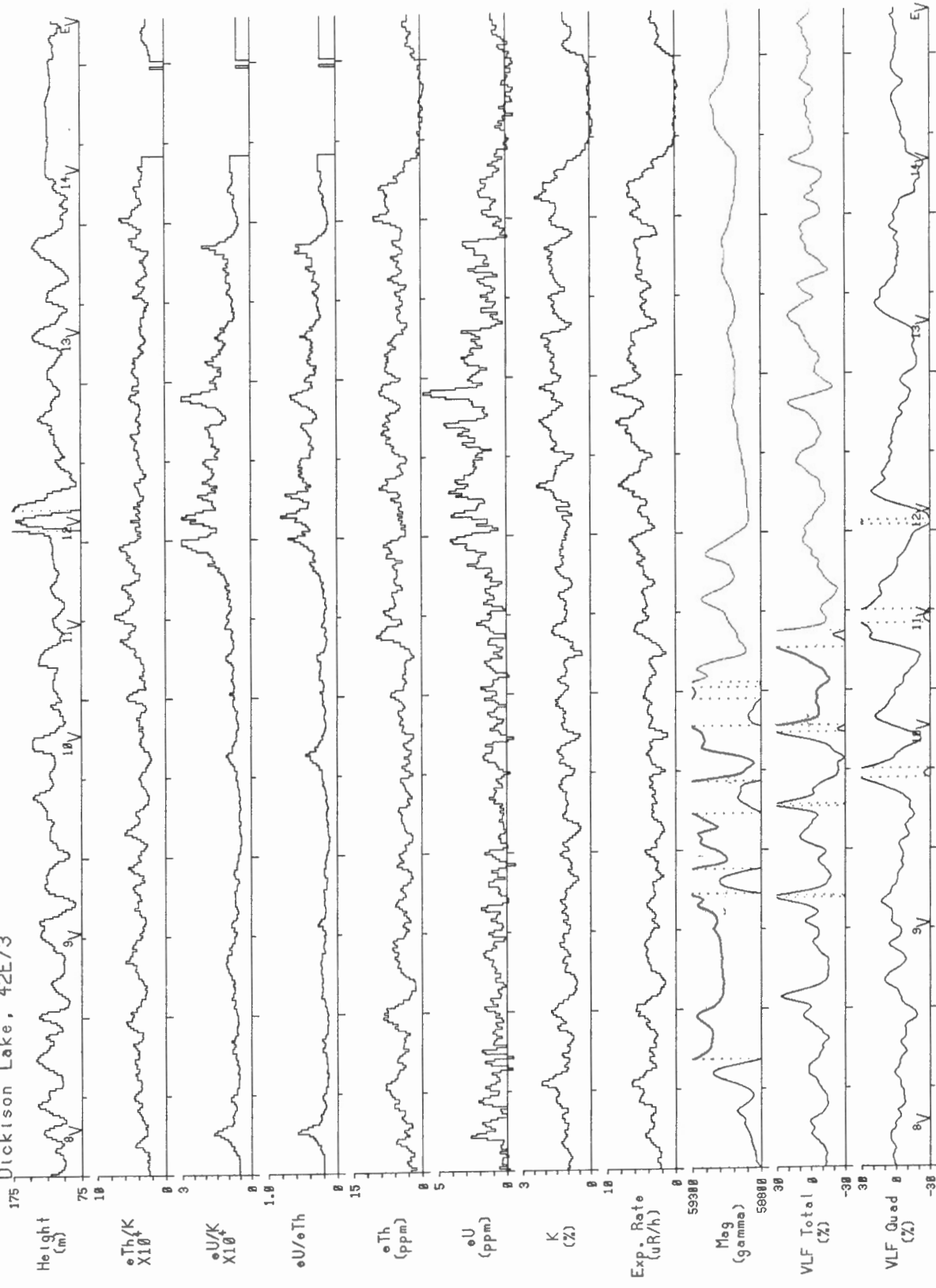
Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3



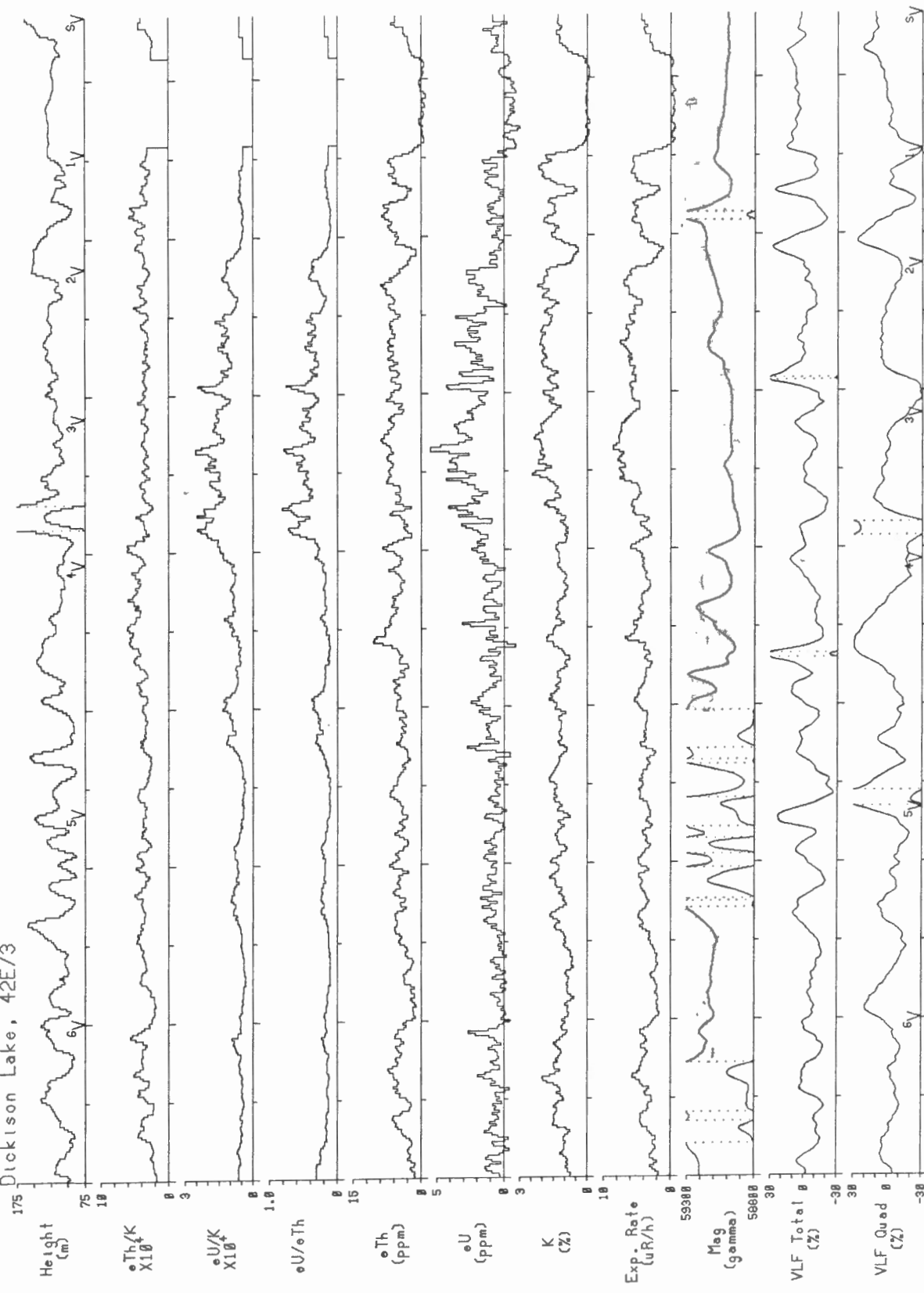
Line 2 | 2 km | Scale 1:150000



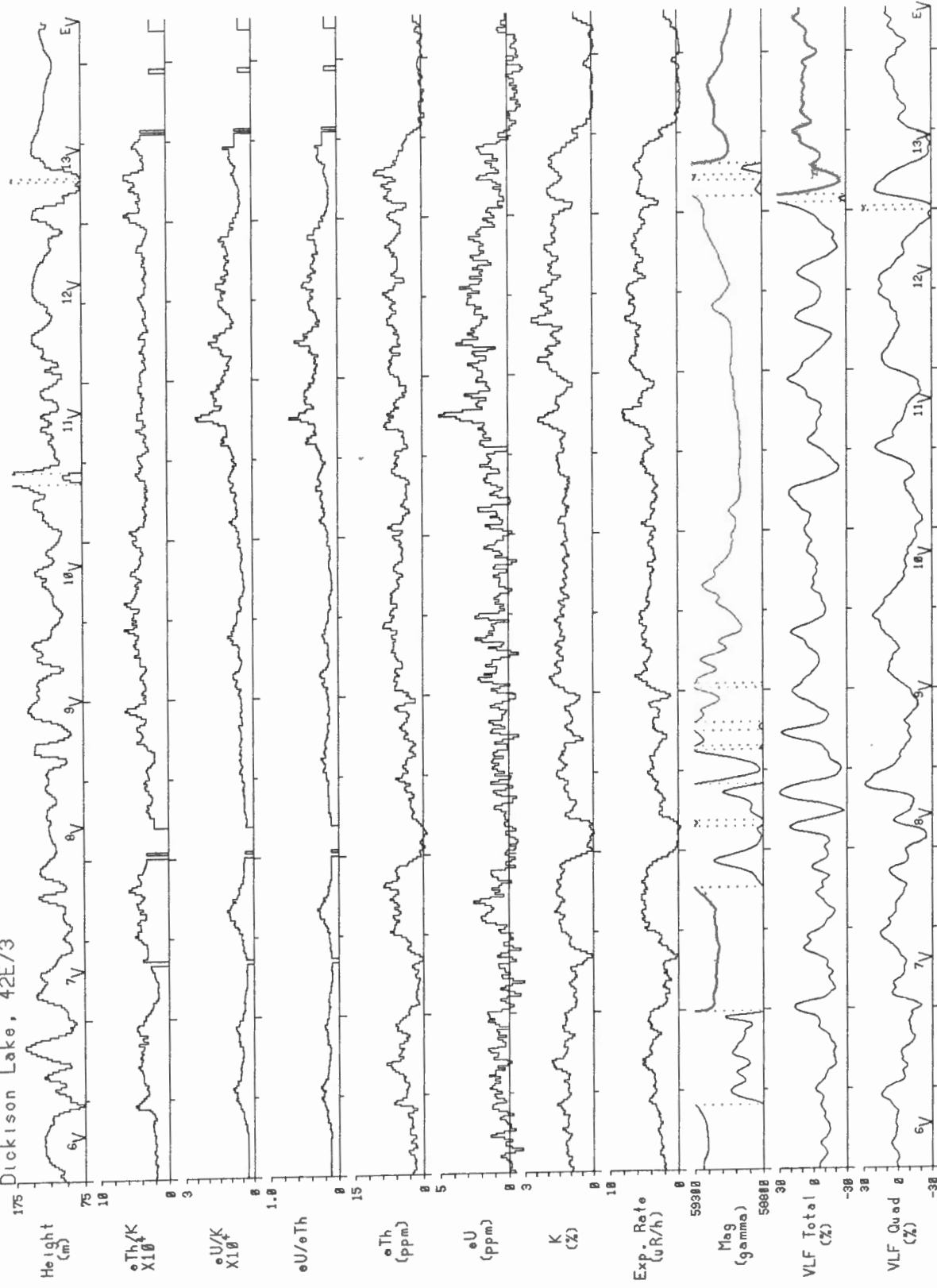
Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3



Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3

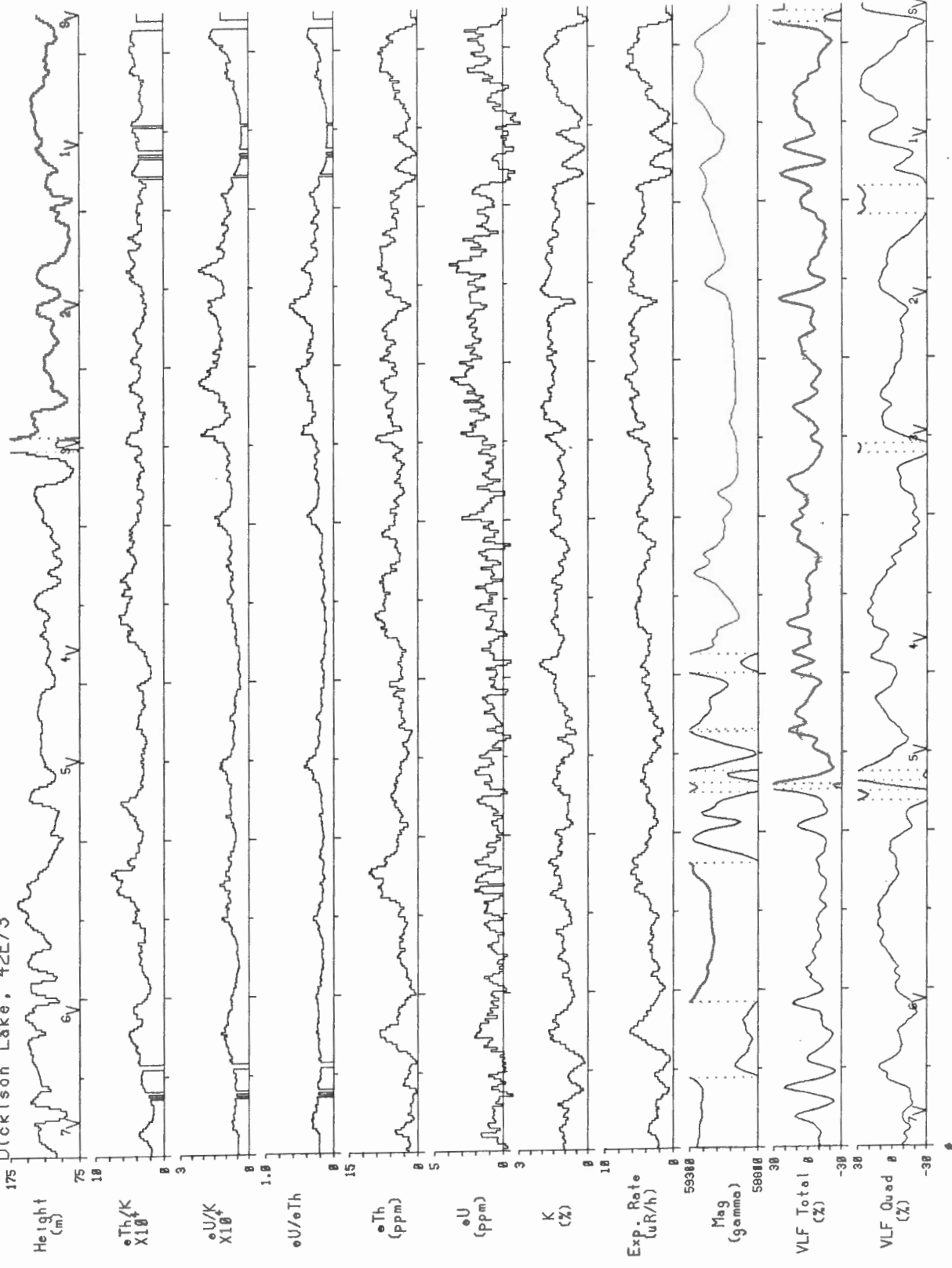


Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3



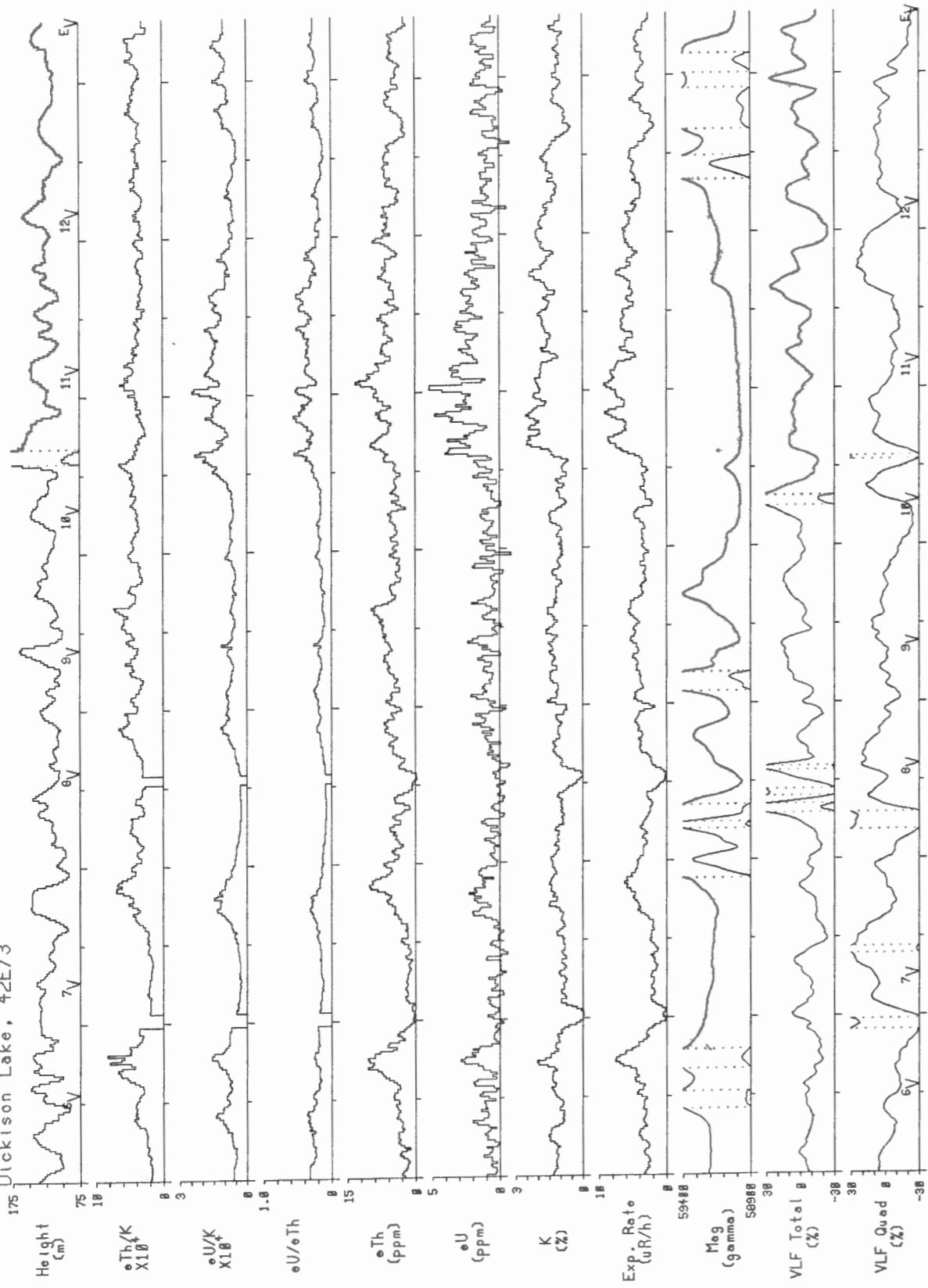
Line 5 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3



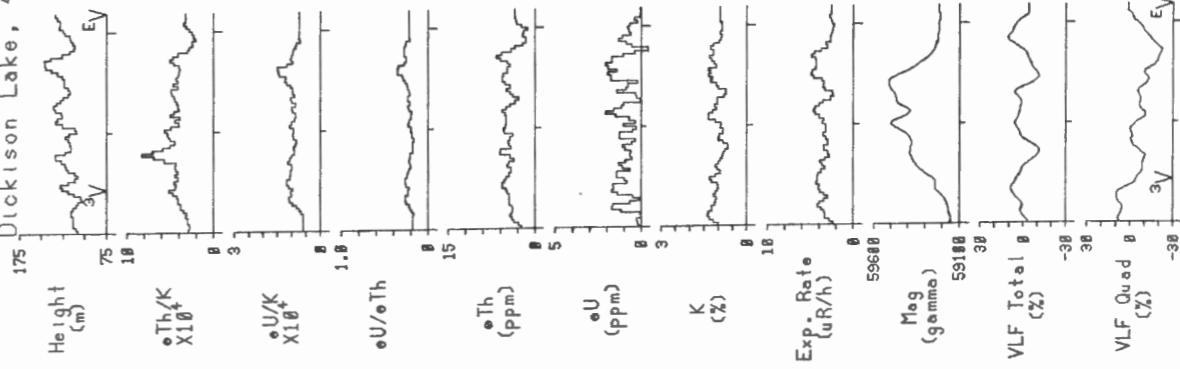
Line 6 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3



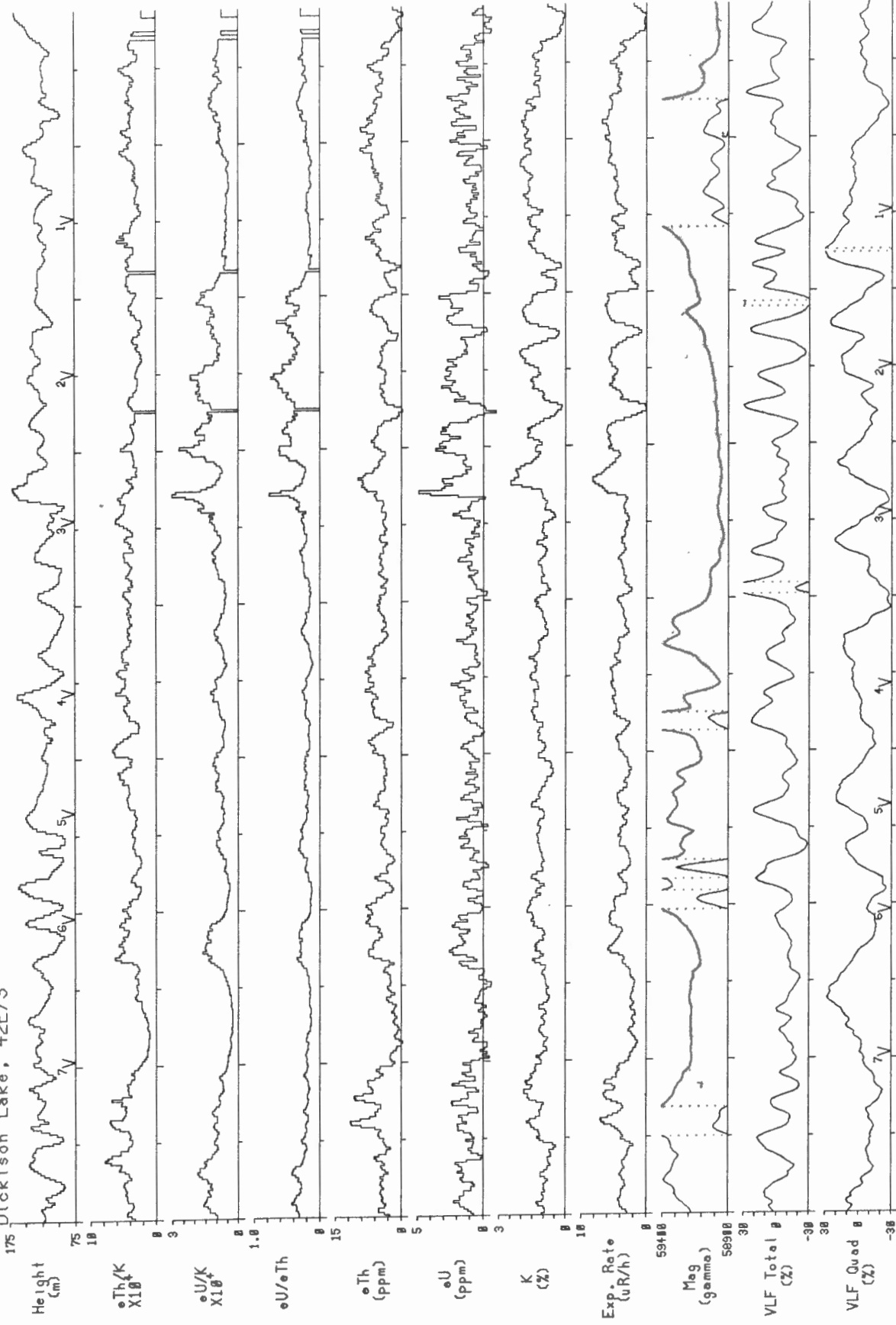
Line 7 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3

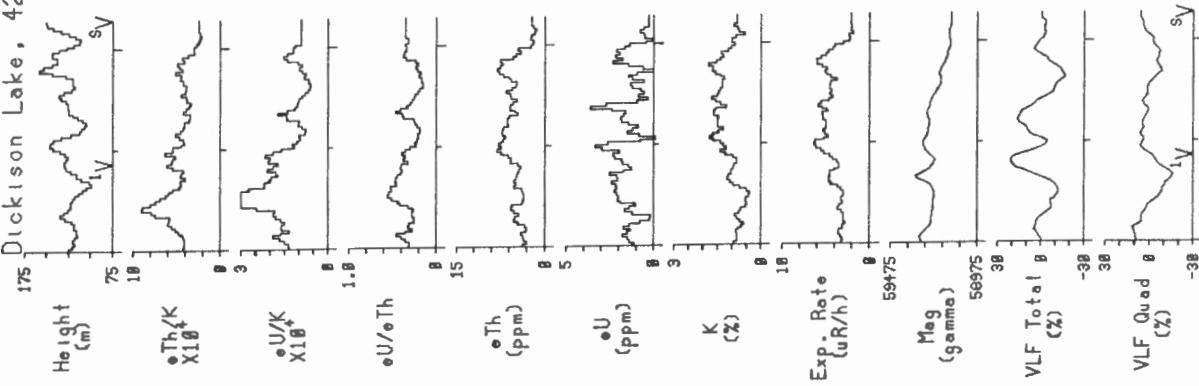


Line 8 | 2 km | Scale 1:150000

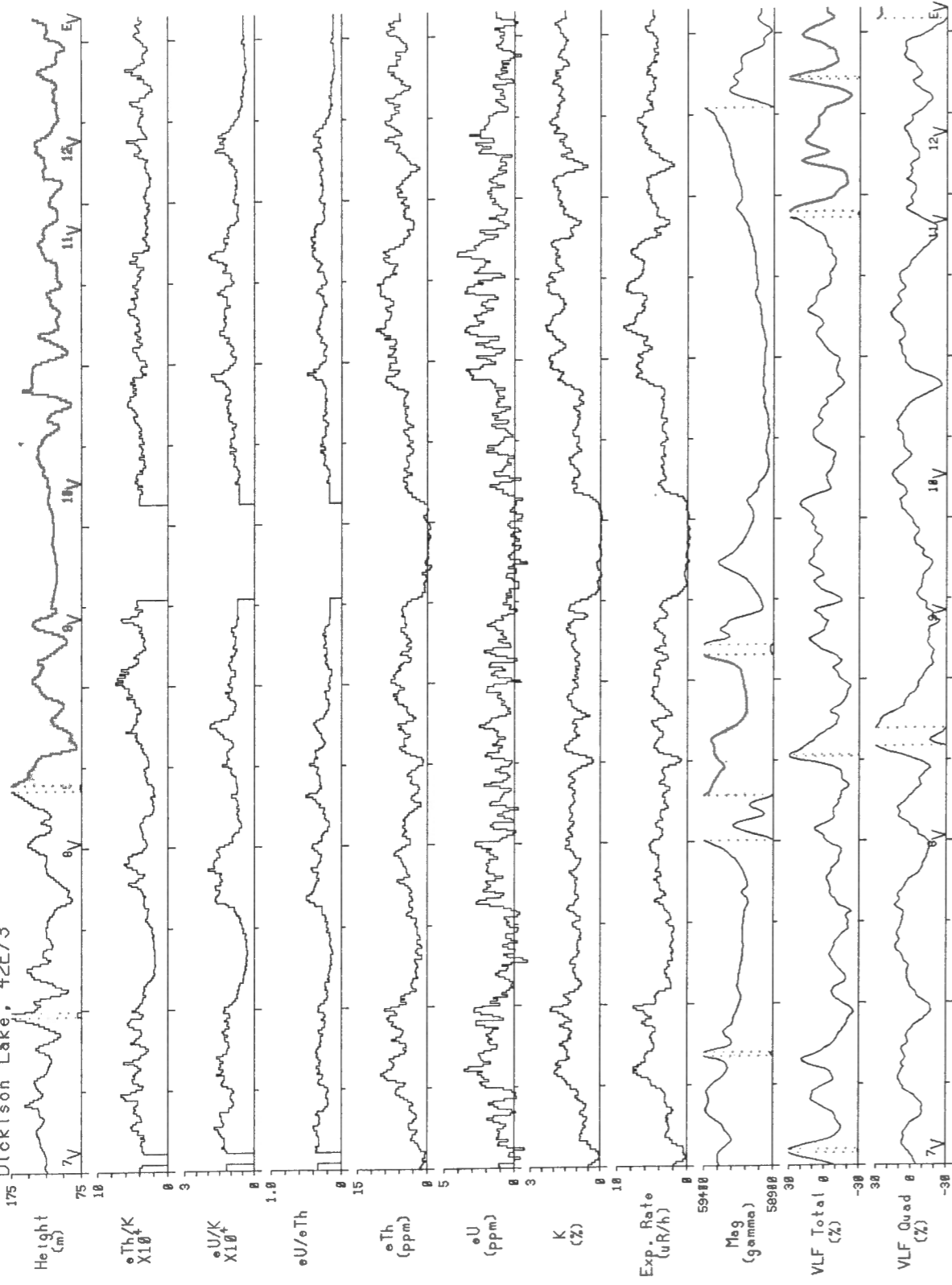
Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3



Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3

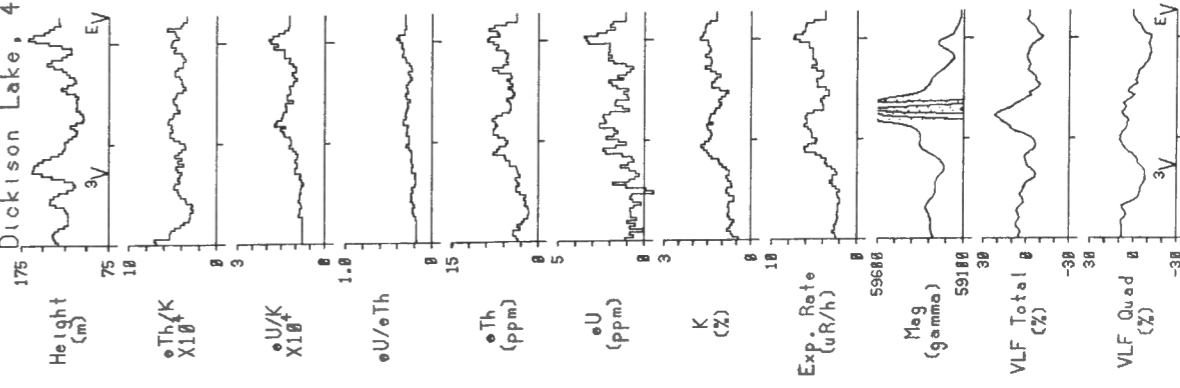


Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3



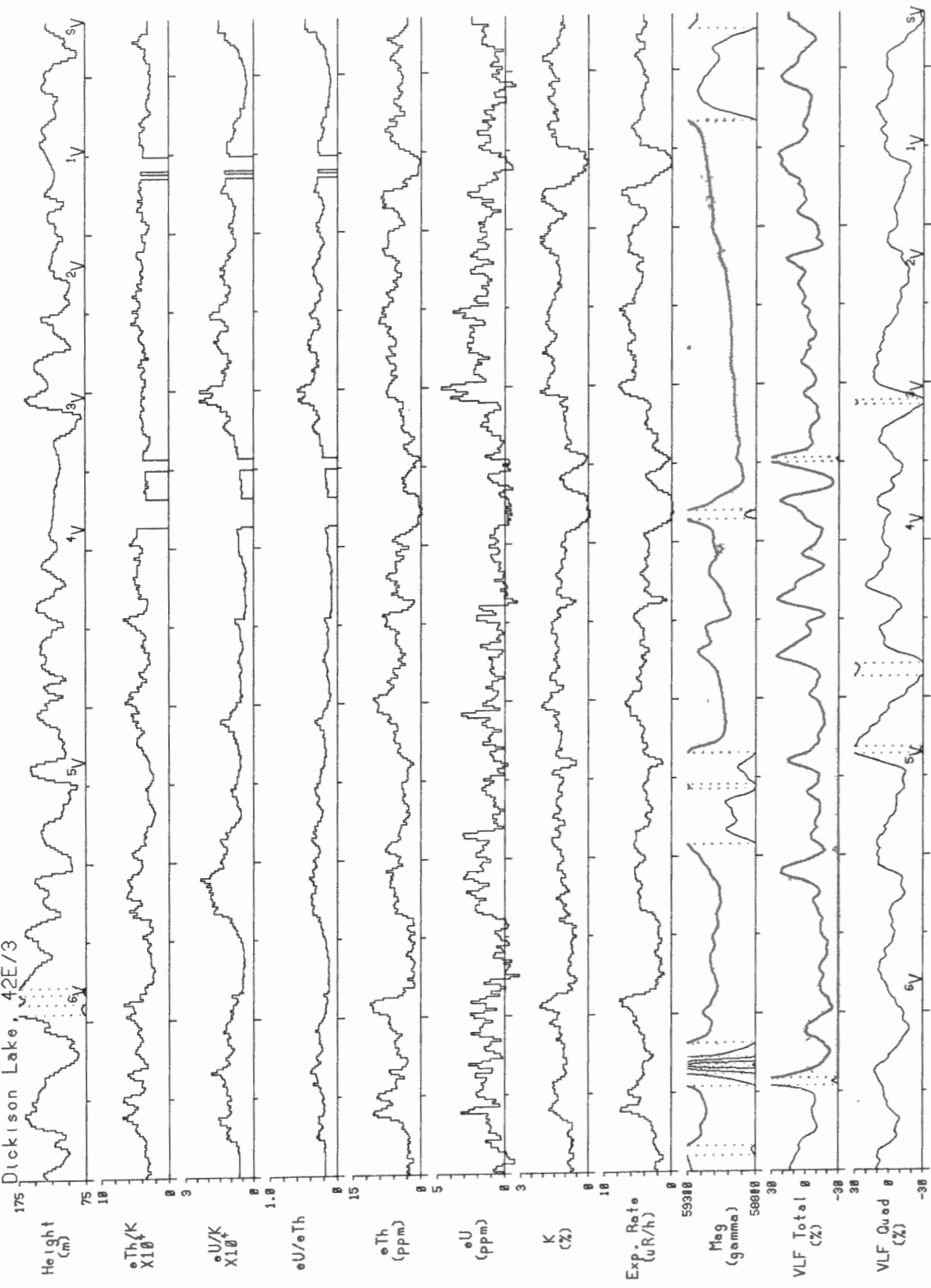
Line 11 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3



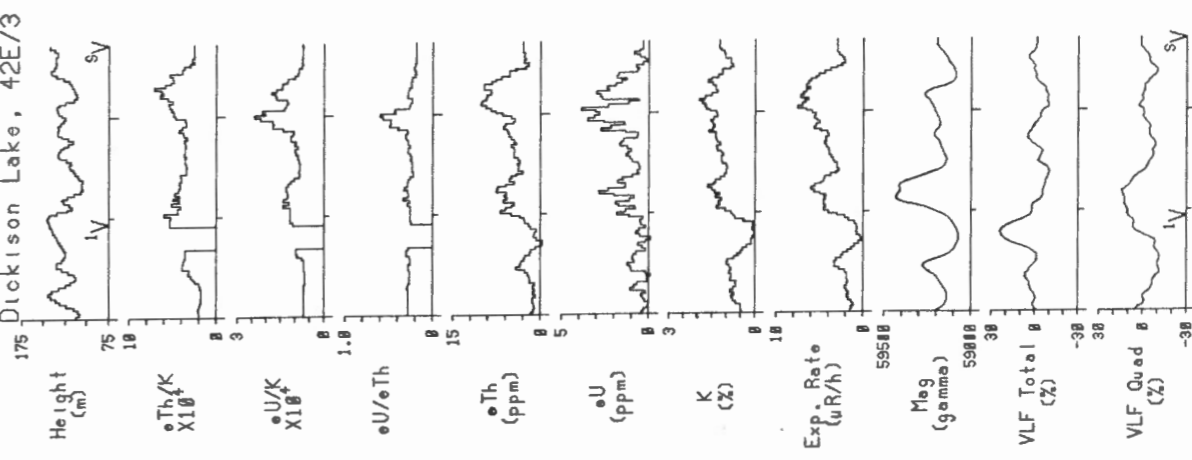
Line 12 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3



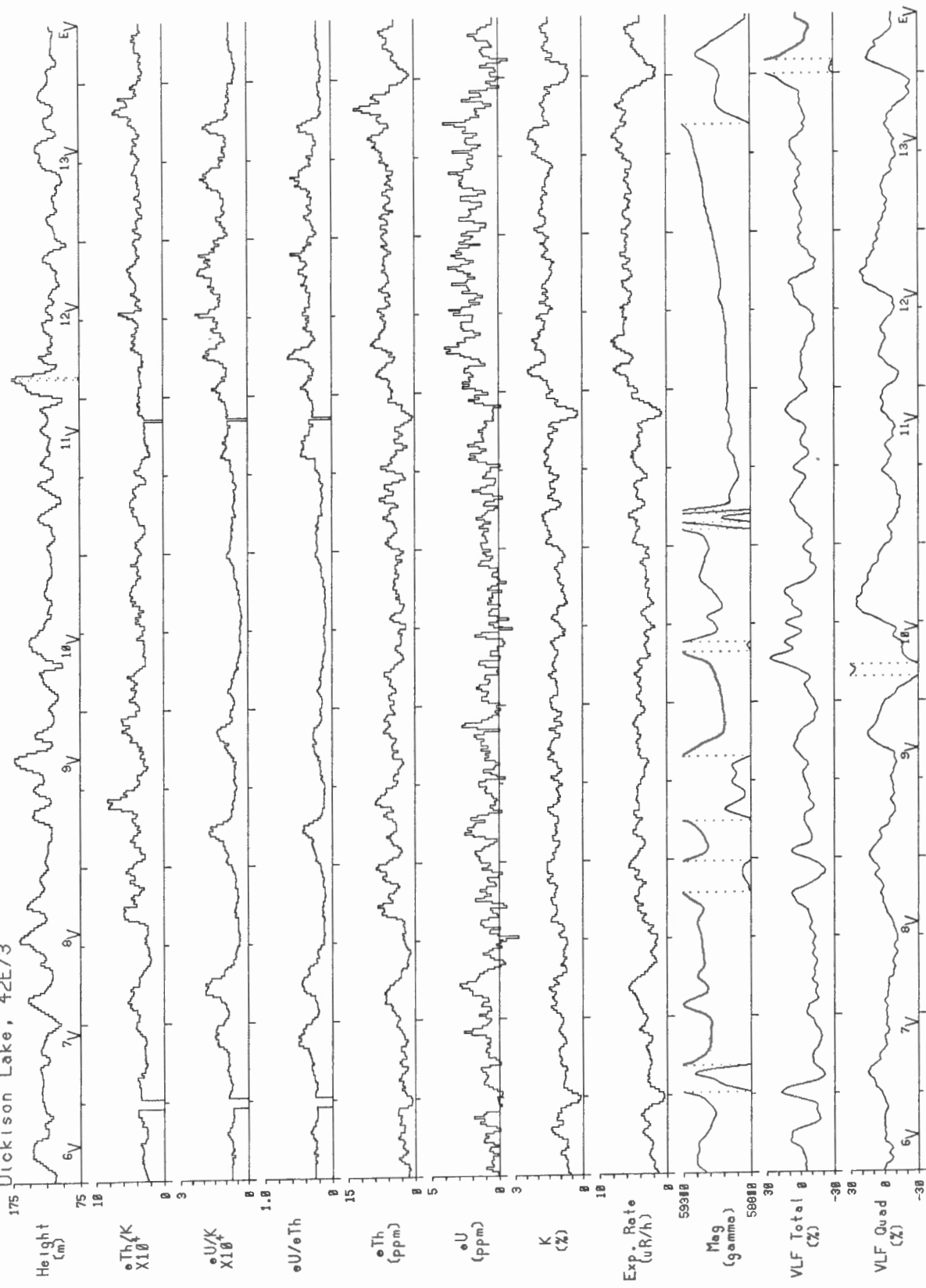
Line 13 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3



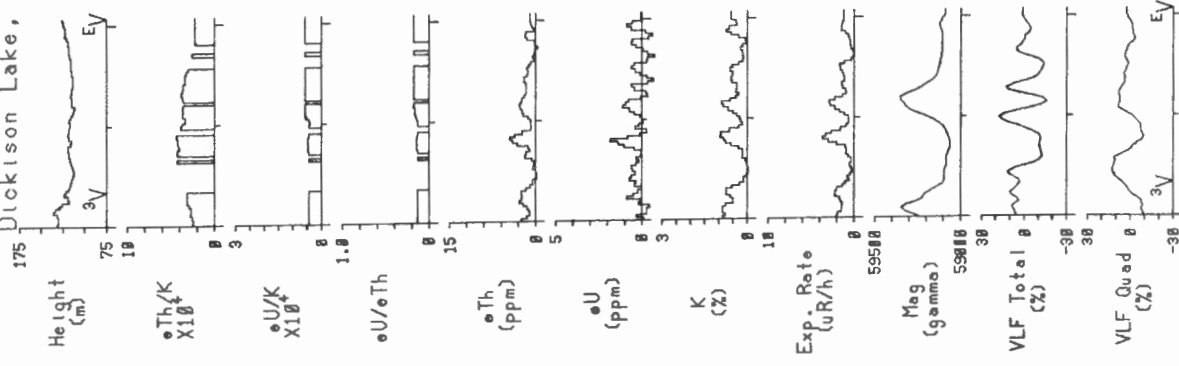
Line 14 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3



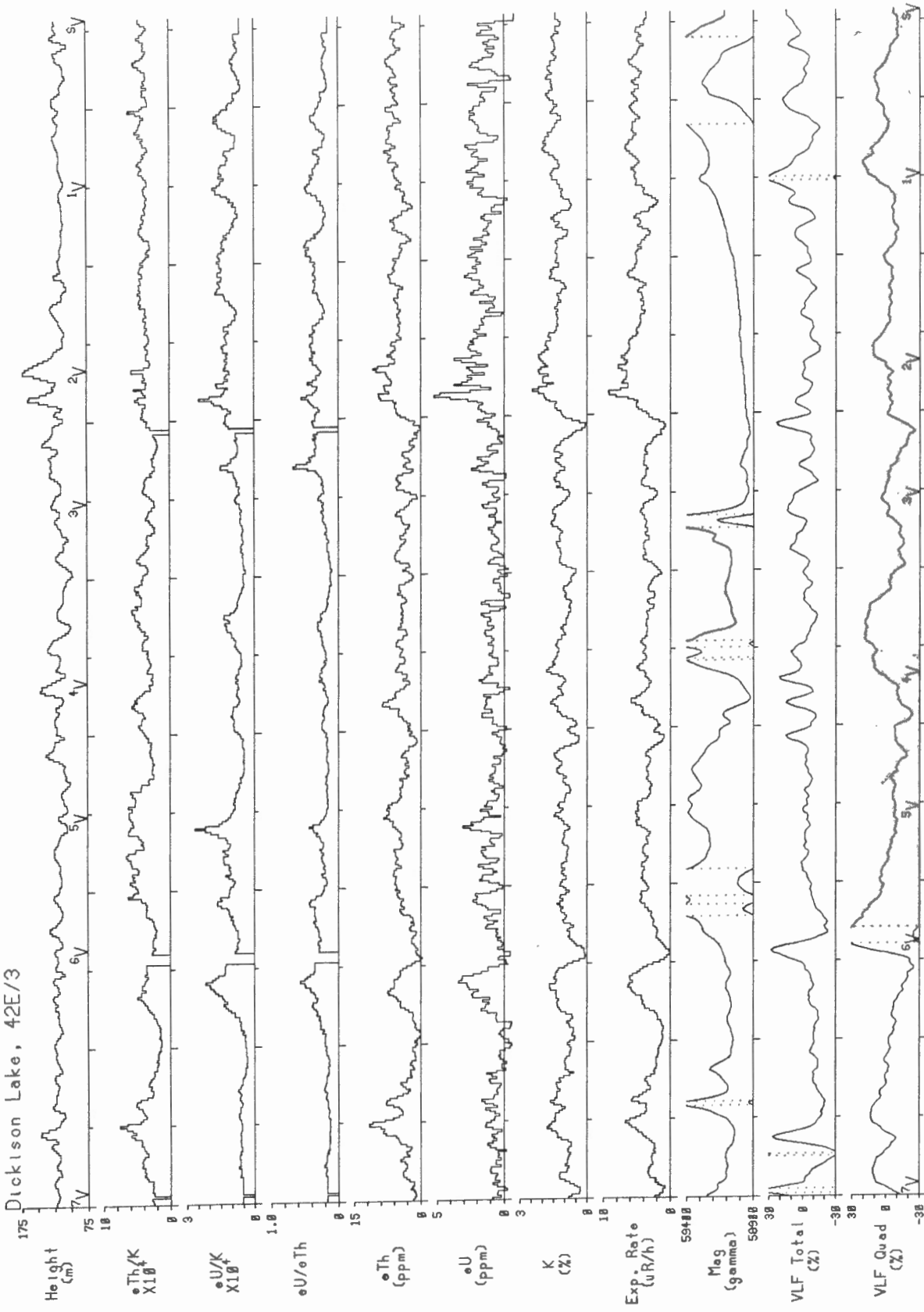
Line 15 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3

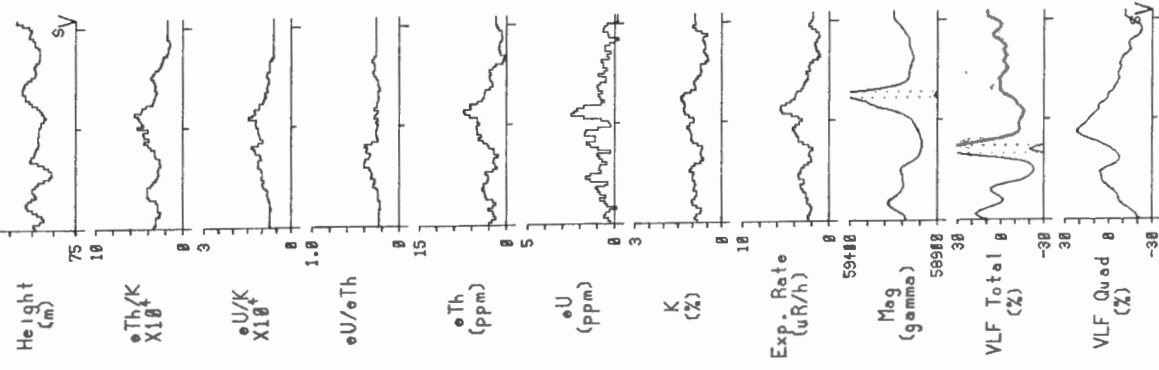


Line 16 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3

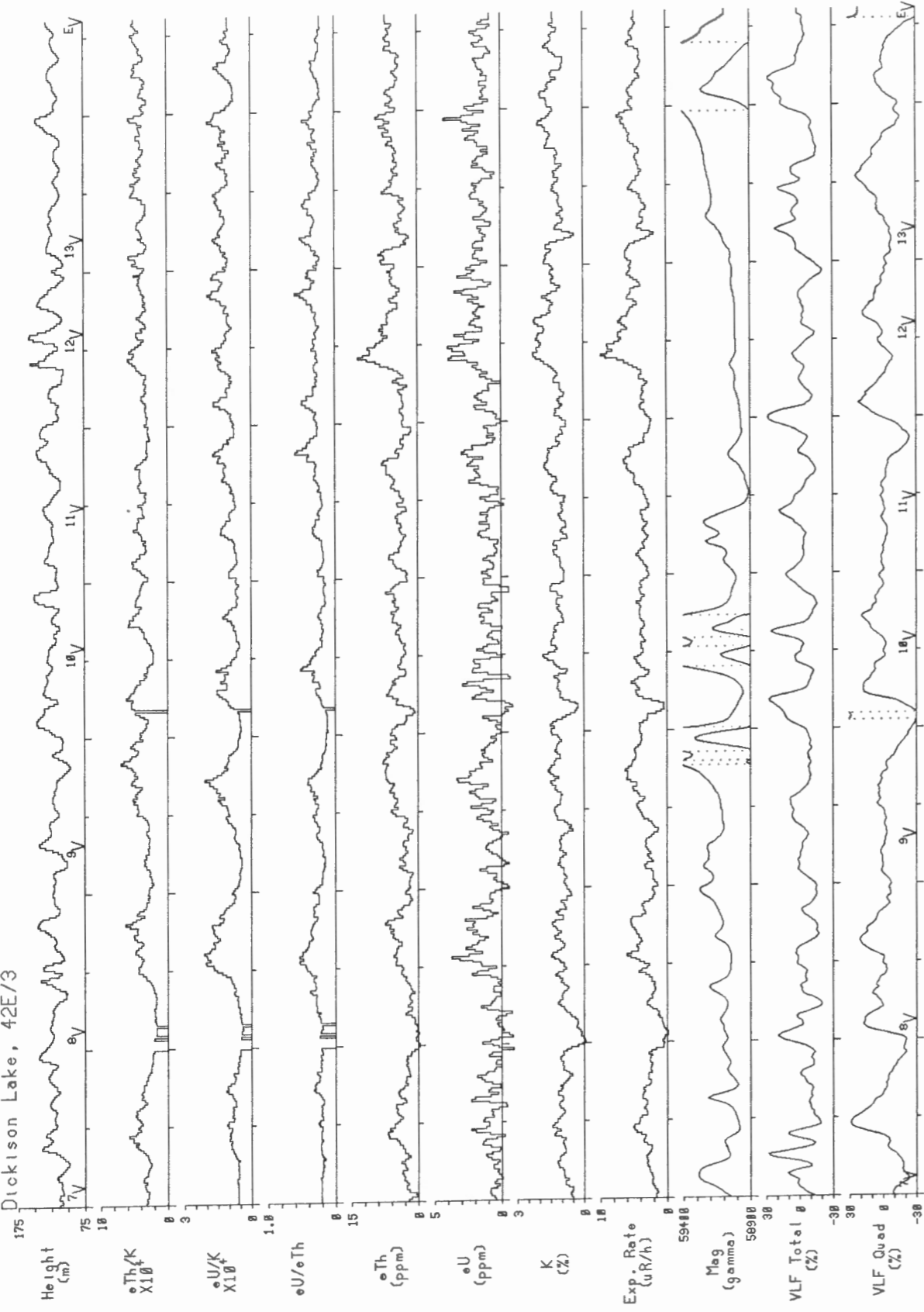


Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3

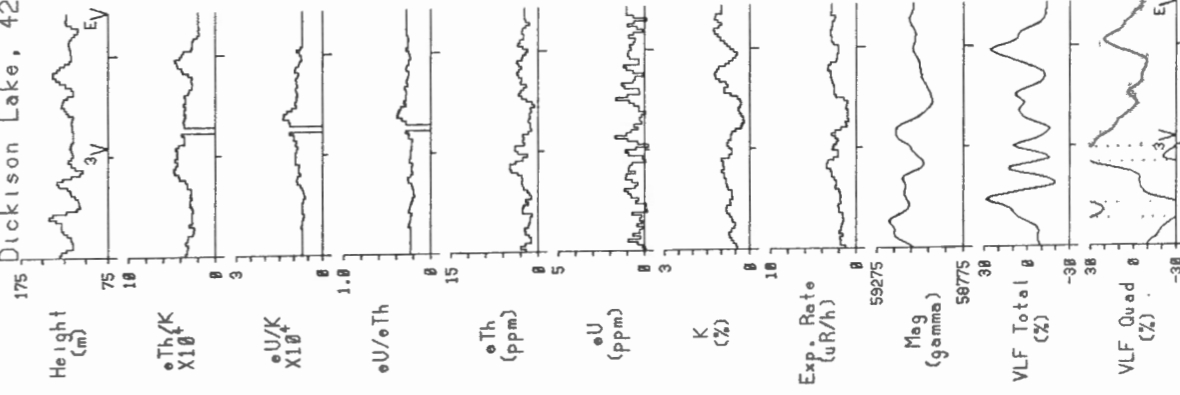




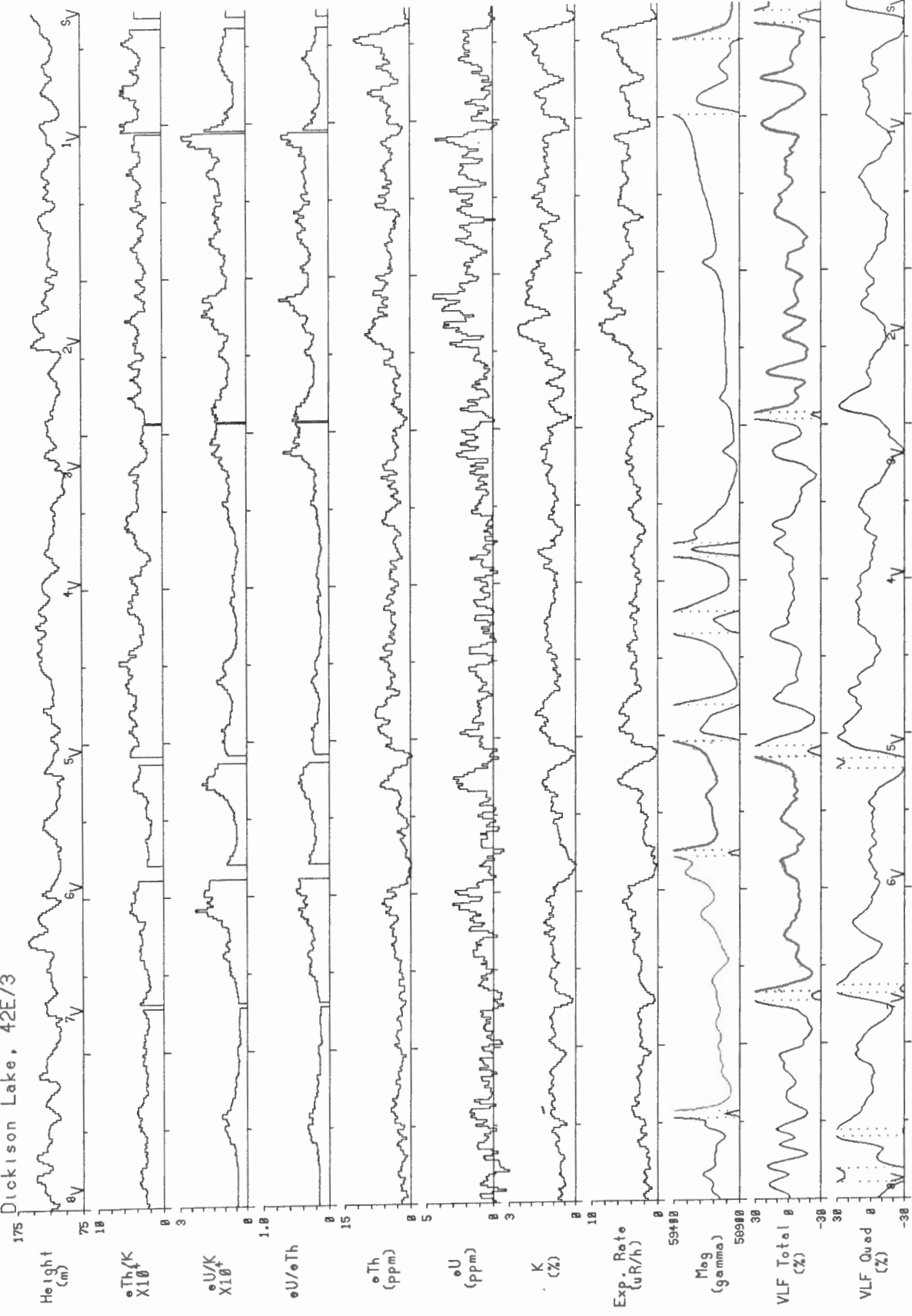
Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3



Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3

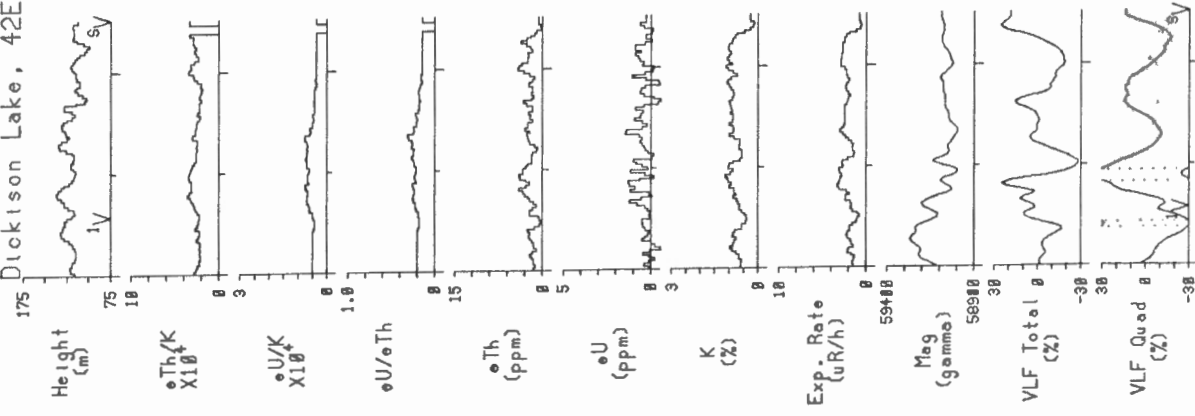


Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3



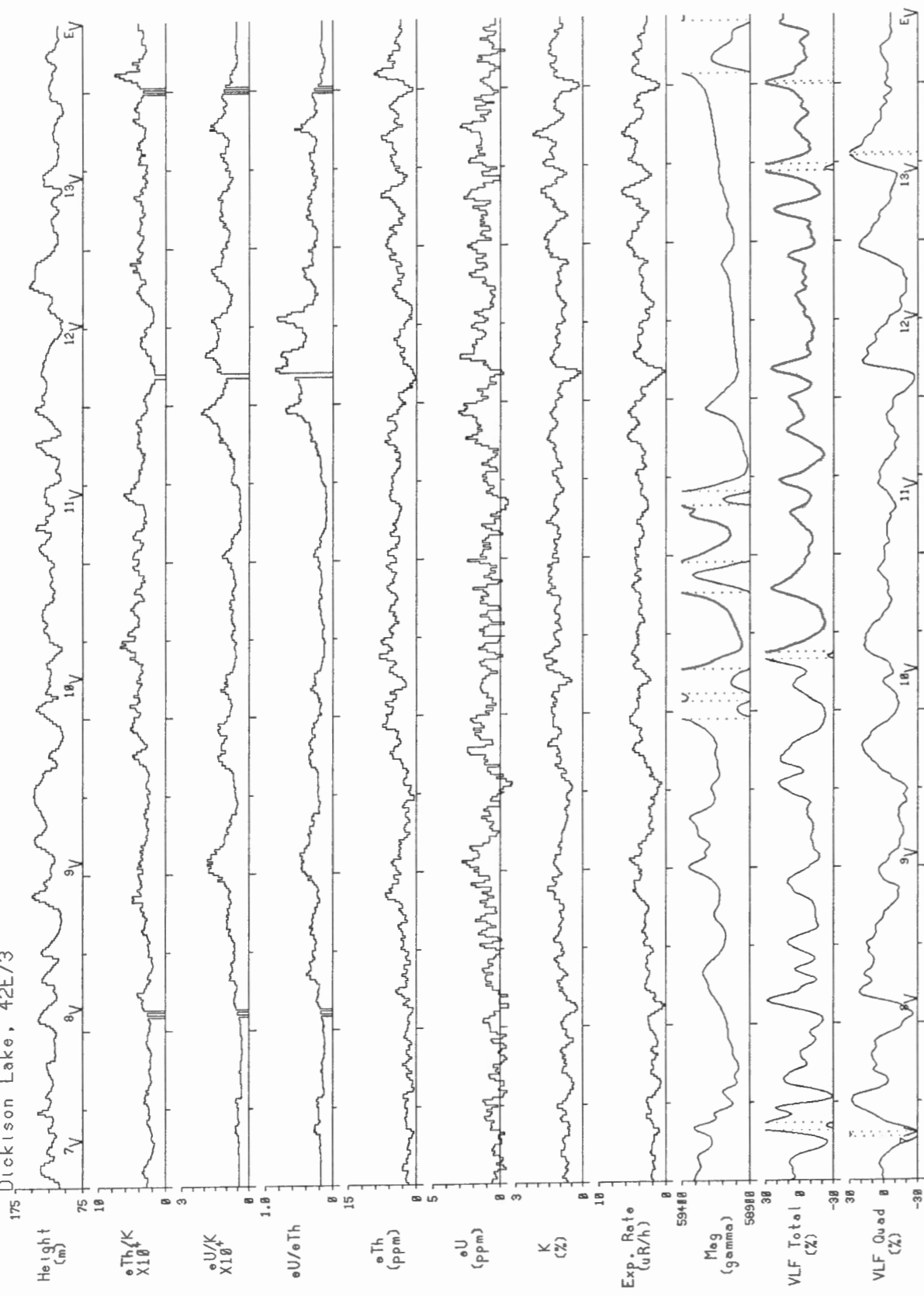
Line 21 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3



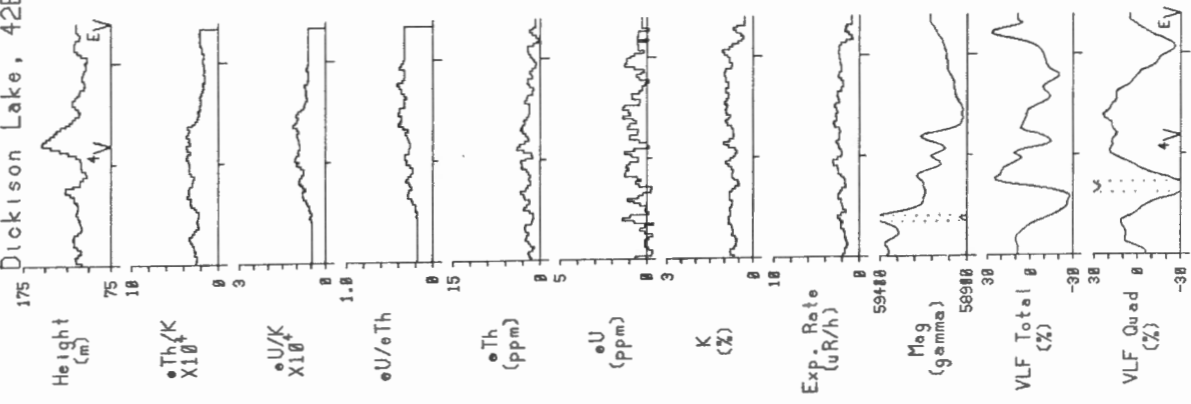
Line 22 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3



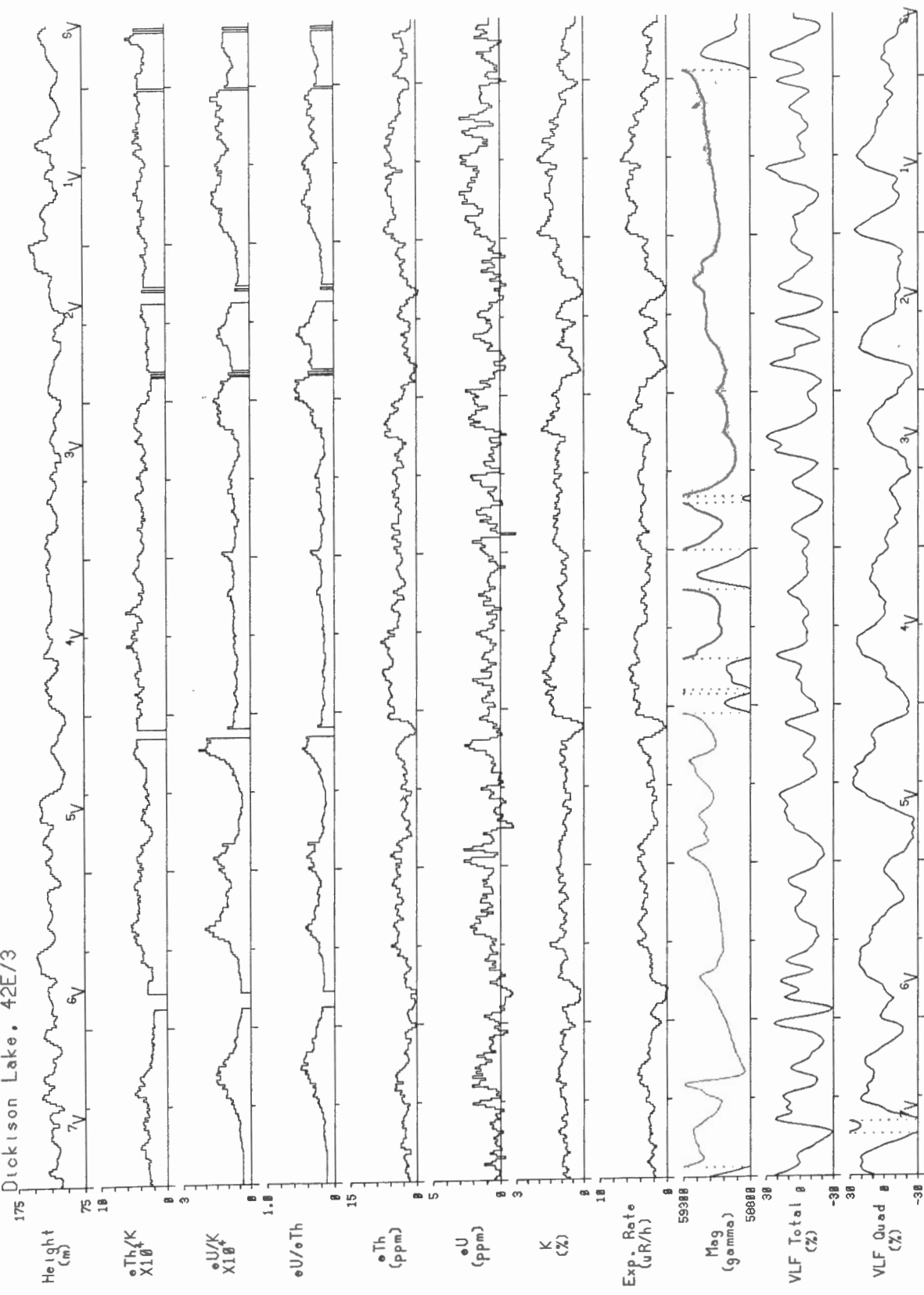
Line 23 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3



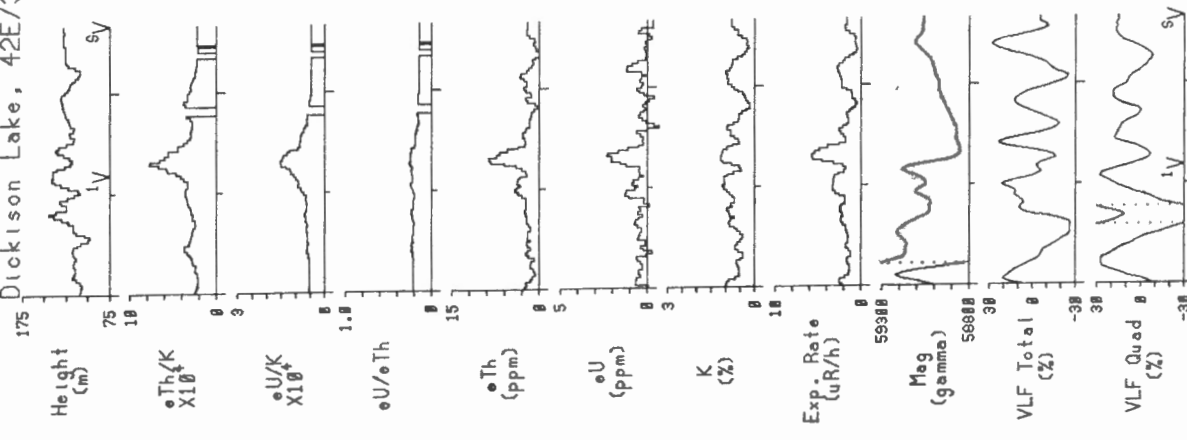
Line 24 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3



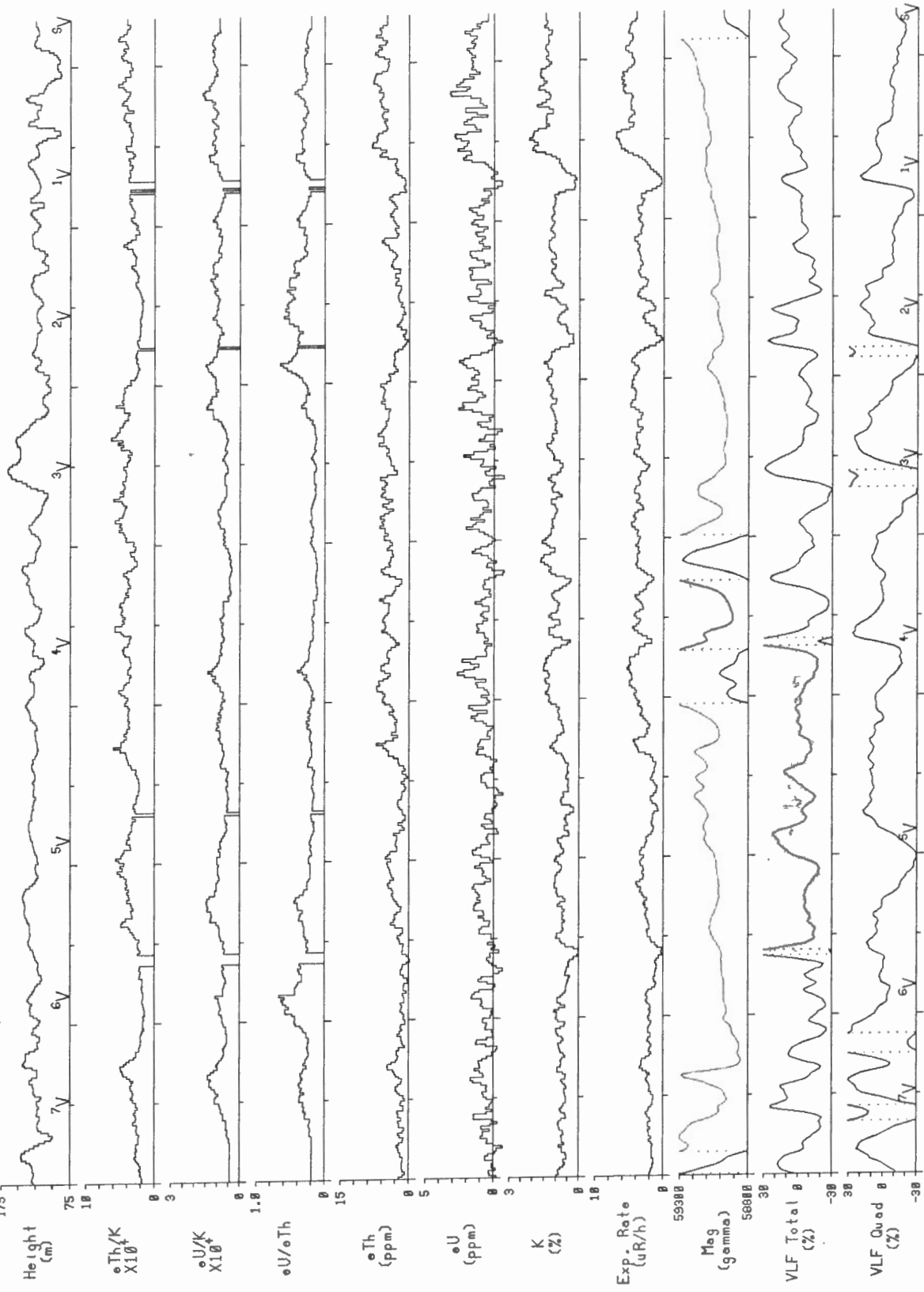
Line 25 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3



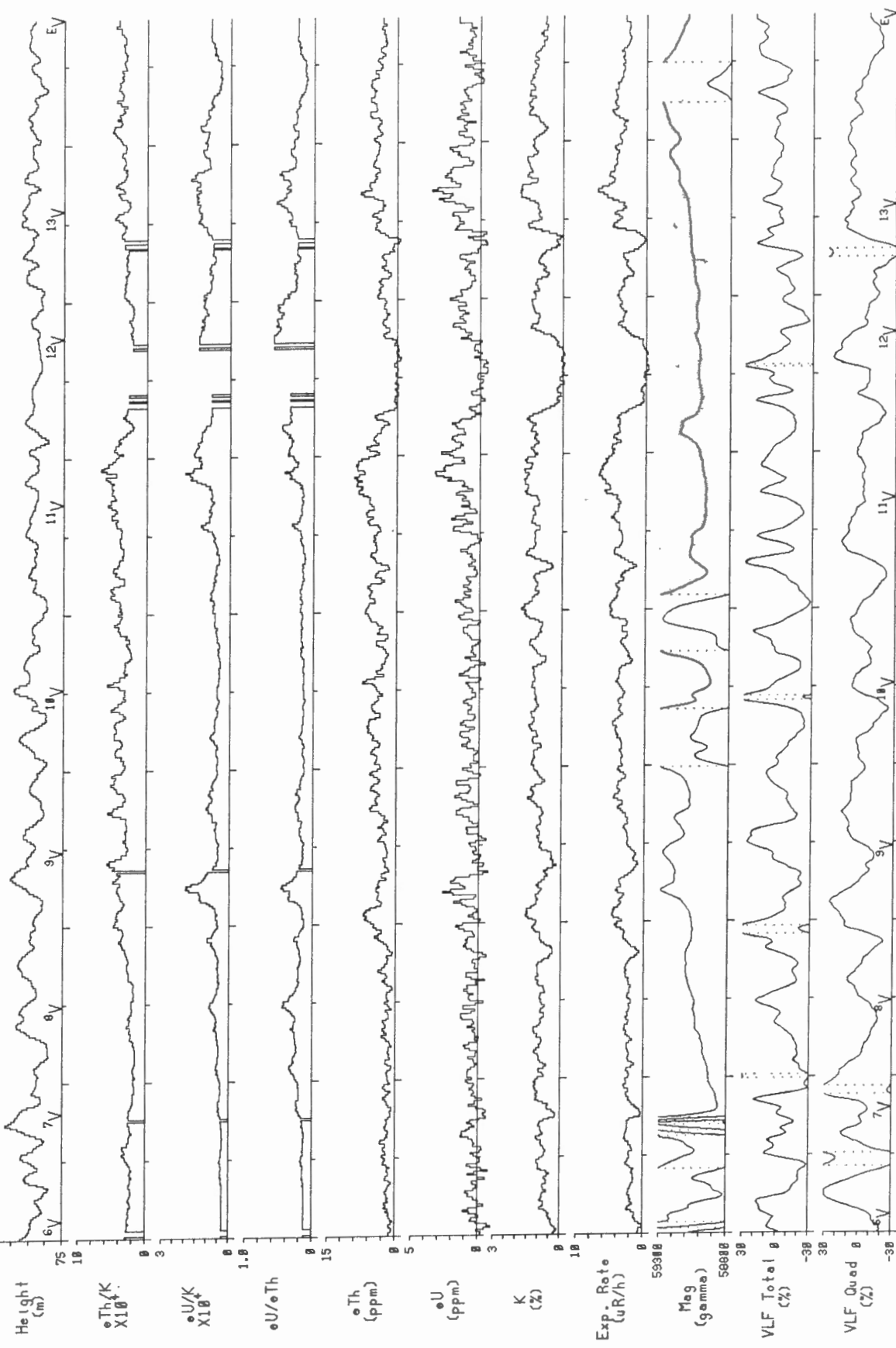
Line 26 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3



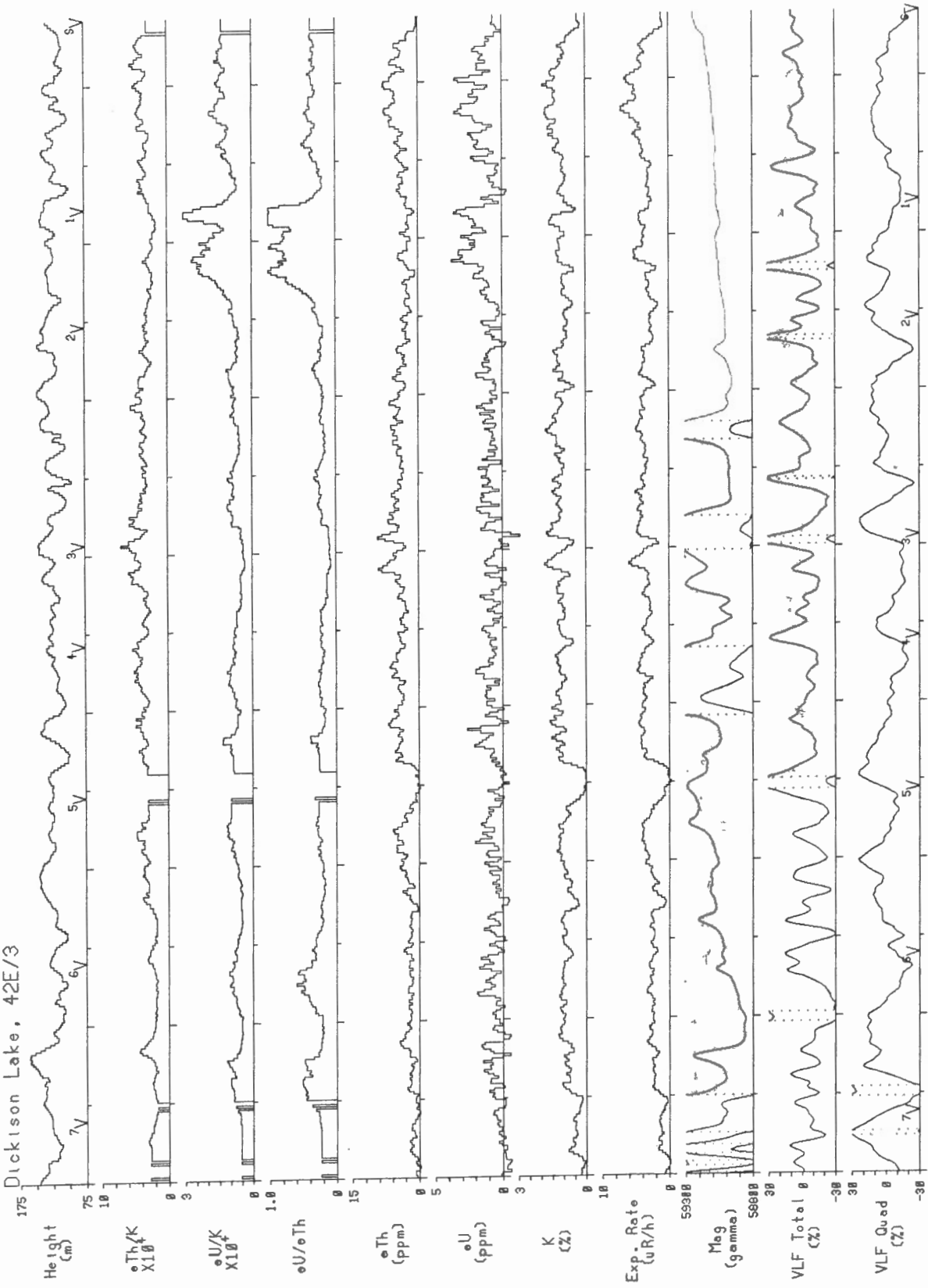
Line 27 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3

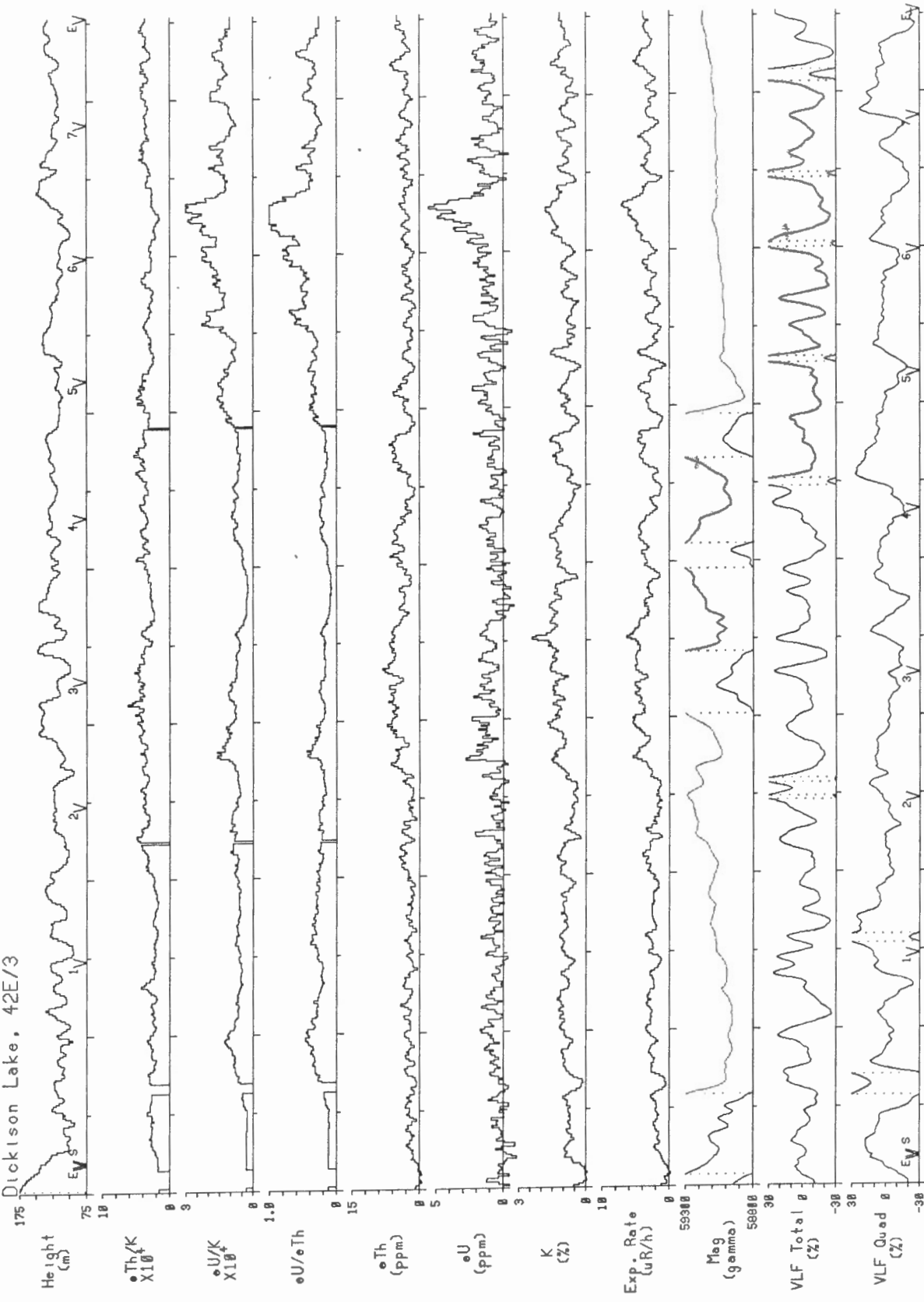


Line 28 | 2 km | Scale 1:150000

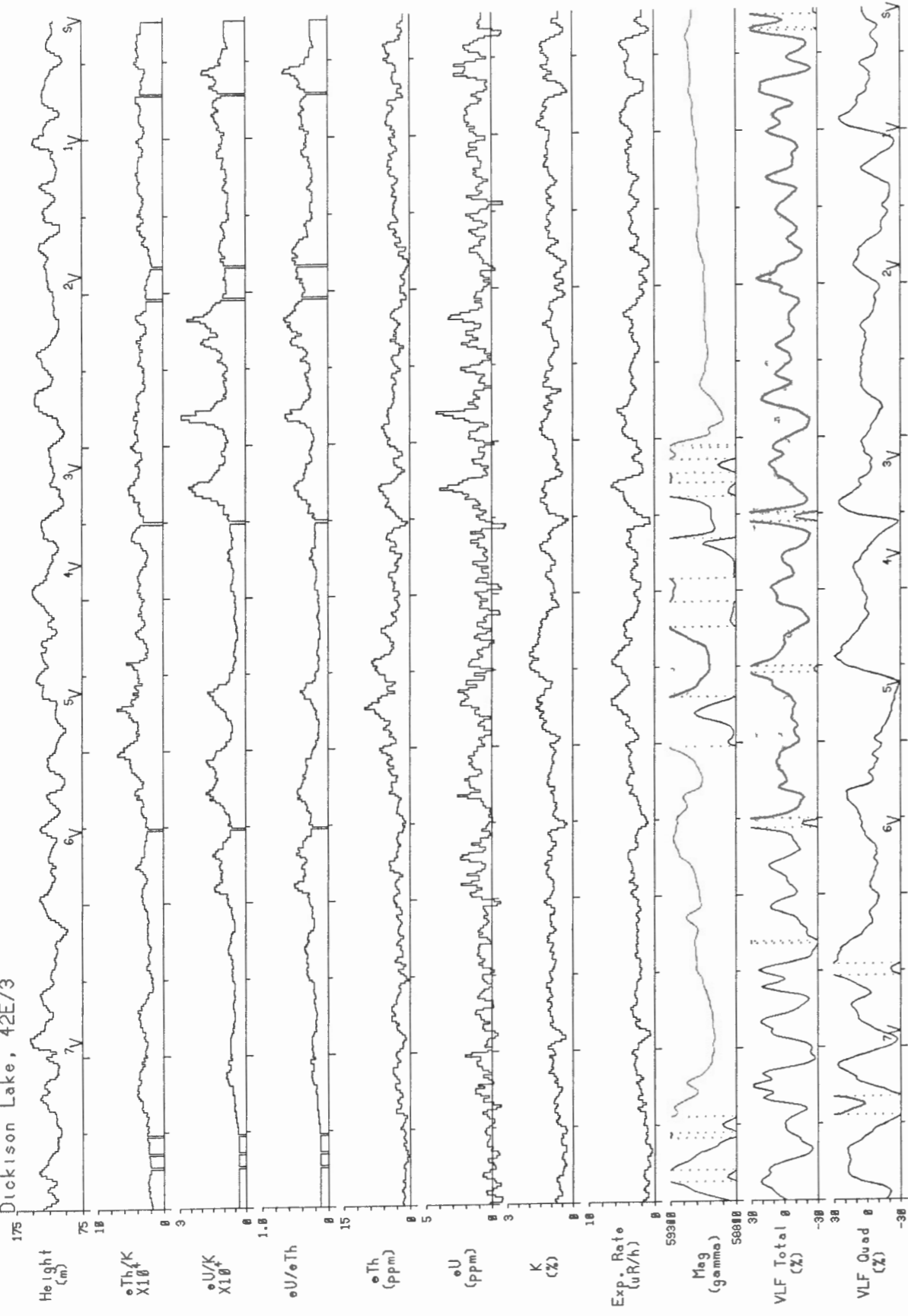
Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3



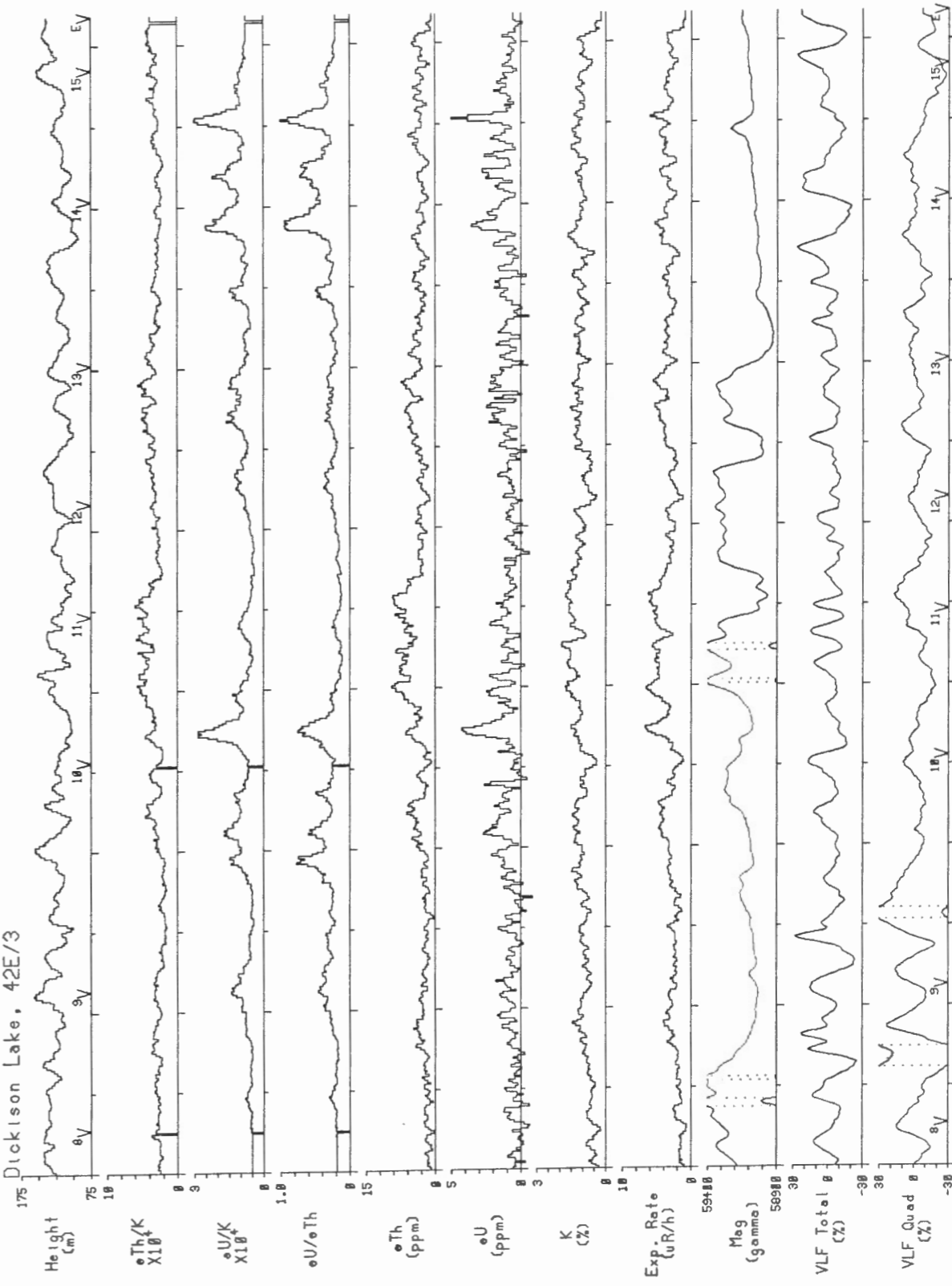
Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3



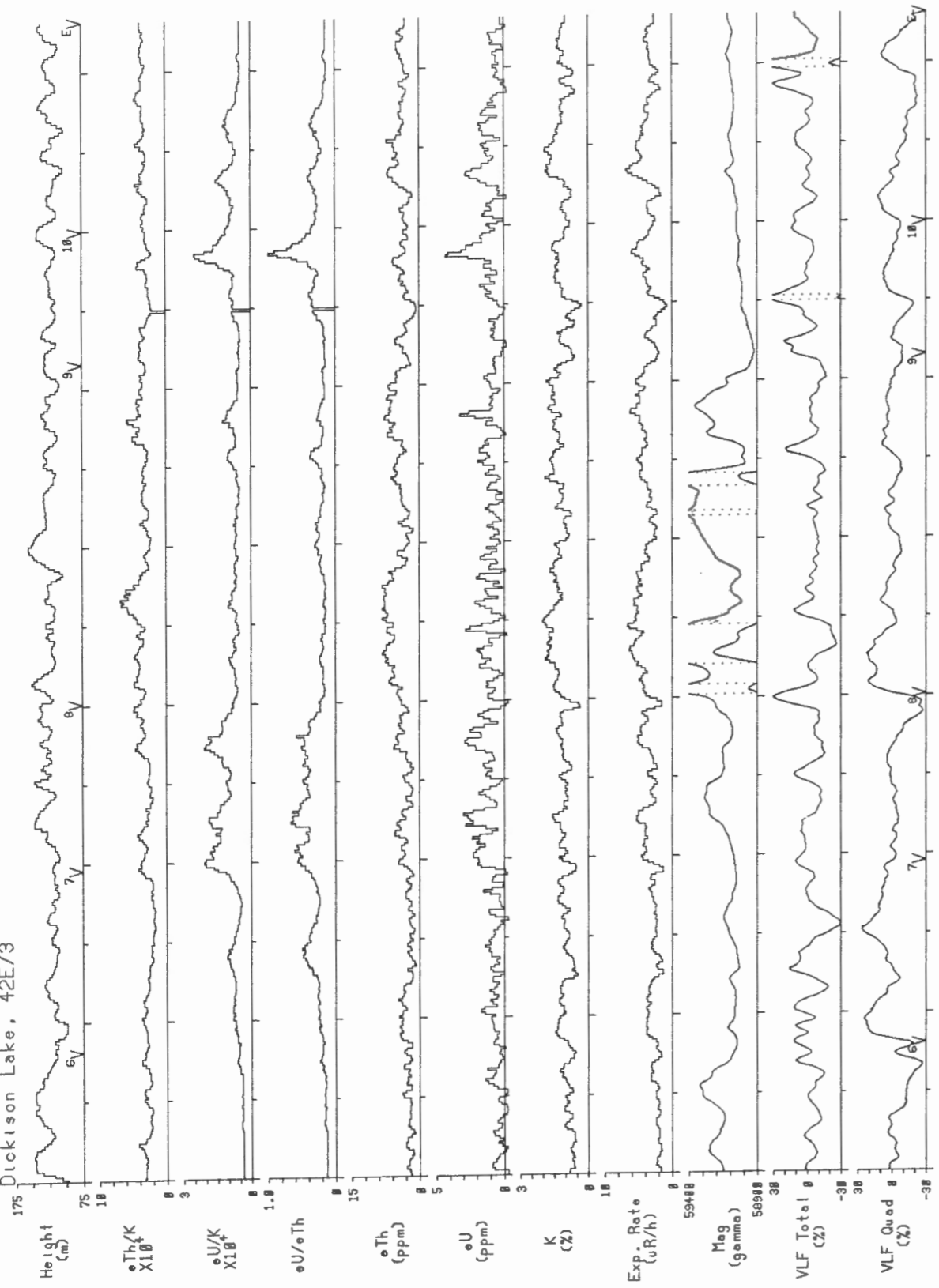
Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3



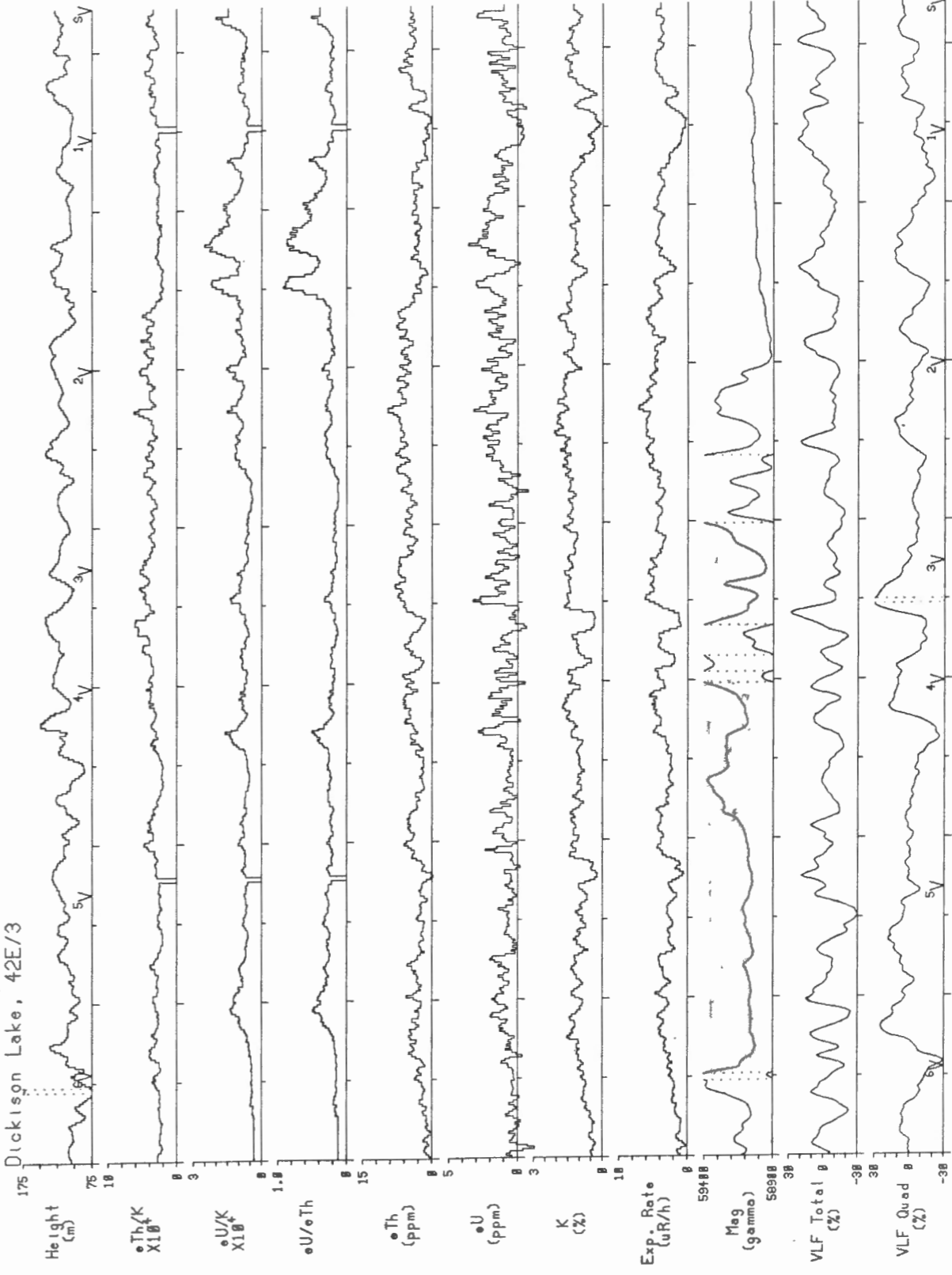
Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3



Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3

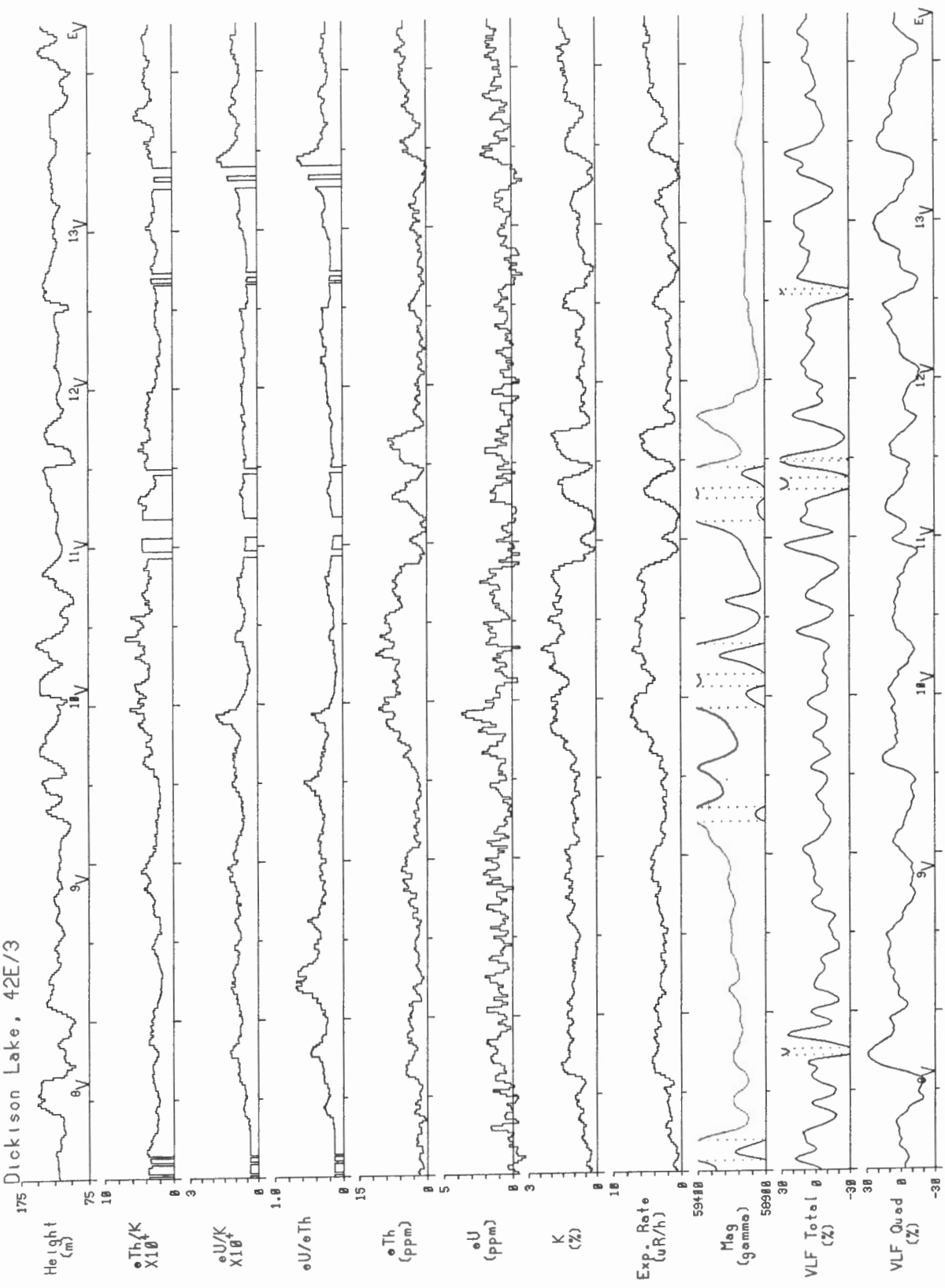


Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3



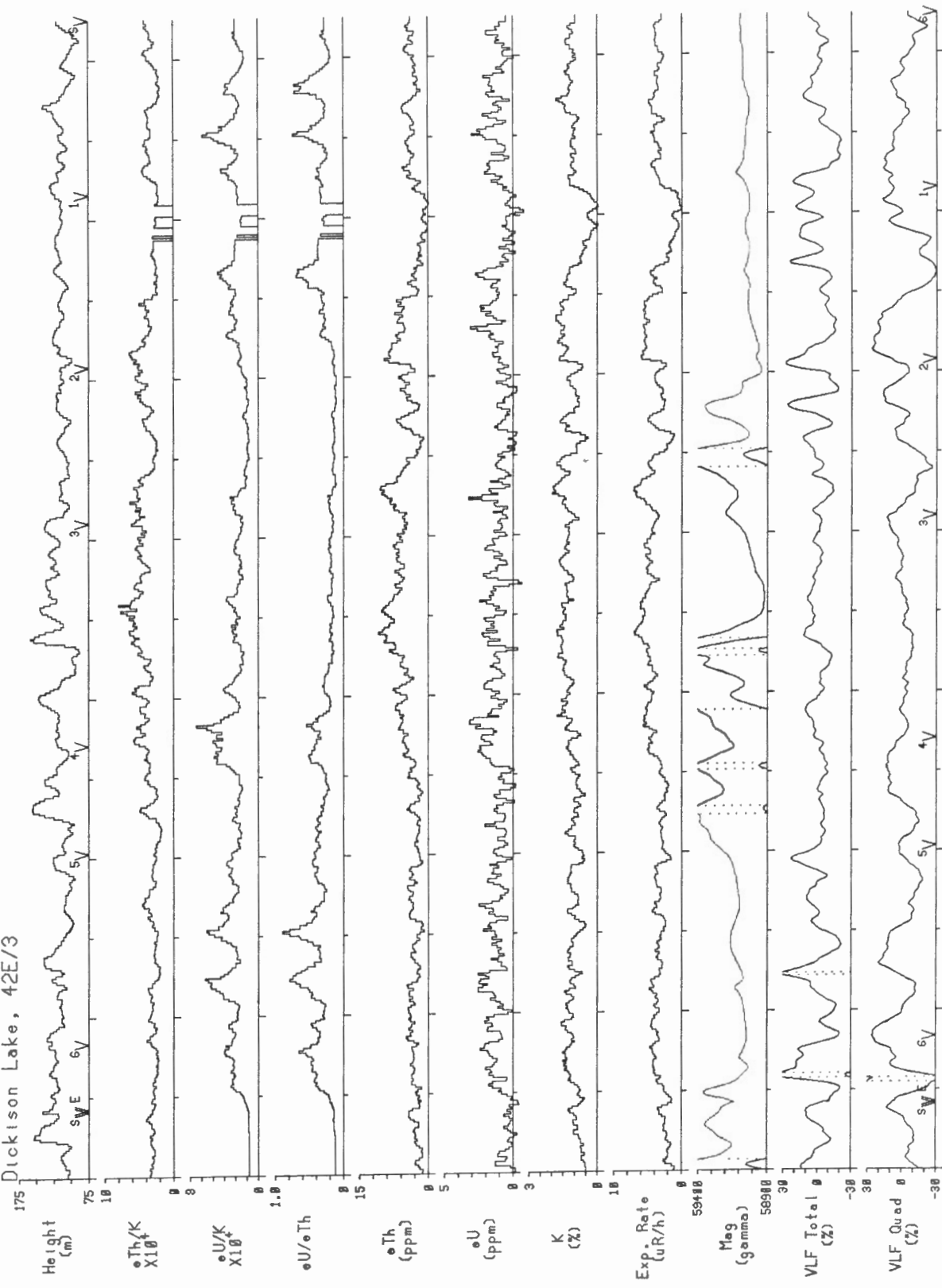


Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3



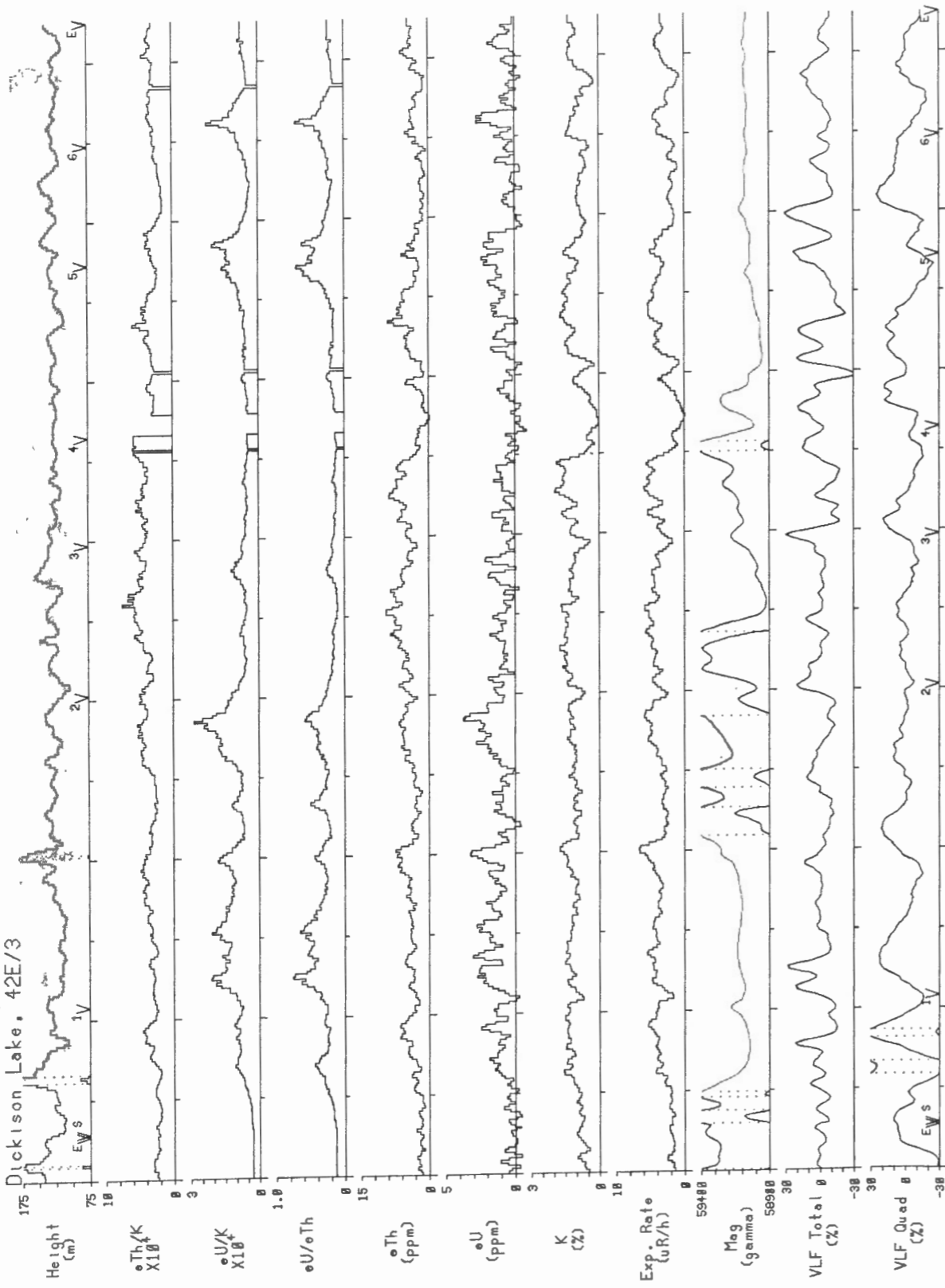
Line 35 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3



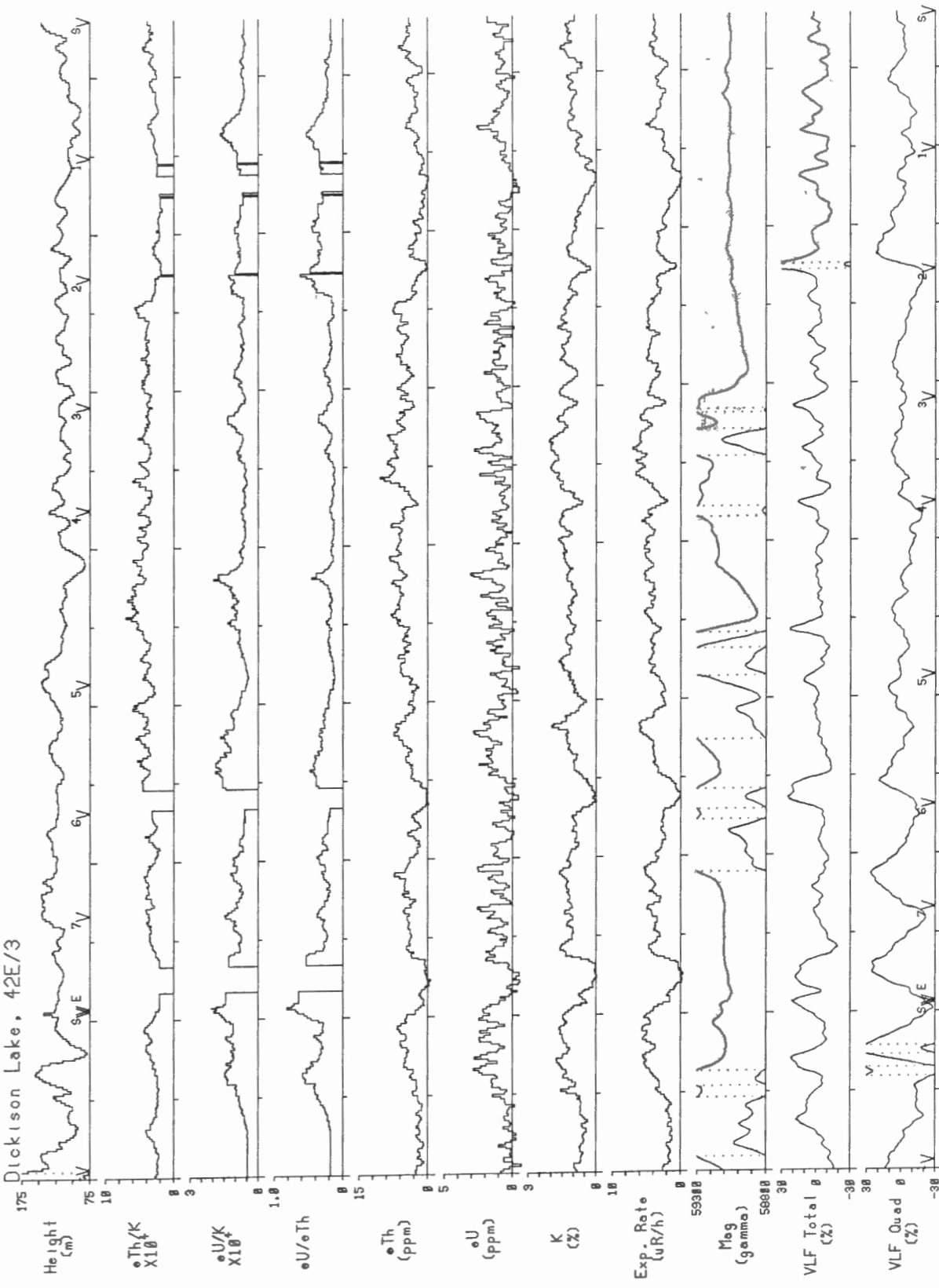
Line 36 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3



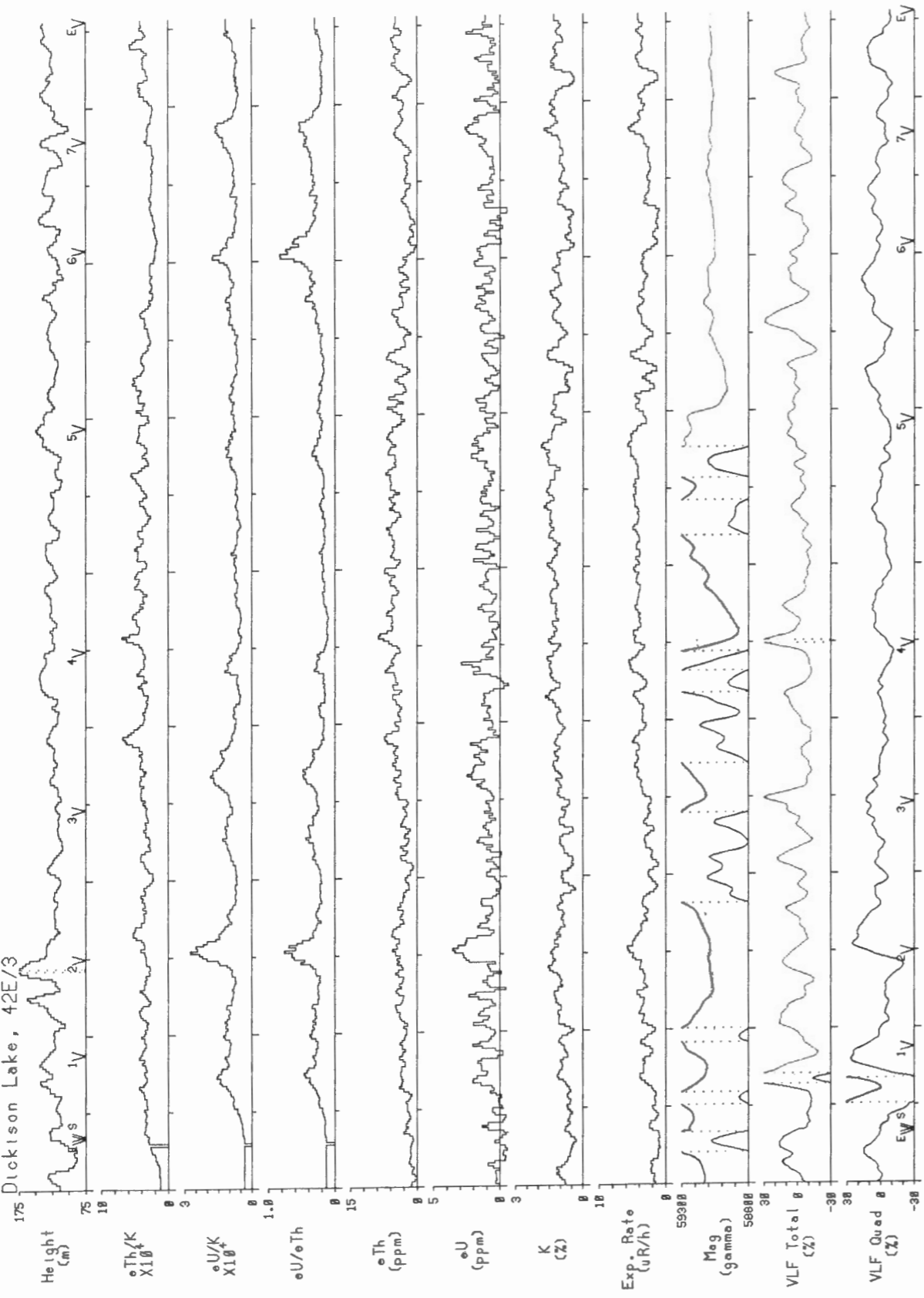
Line 37 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3



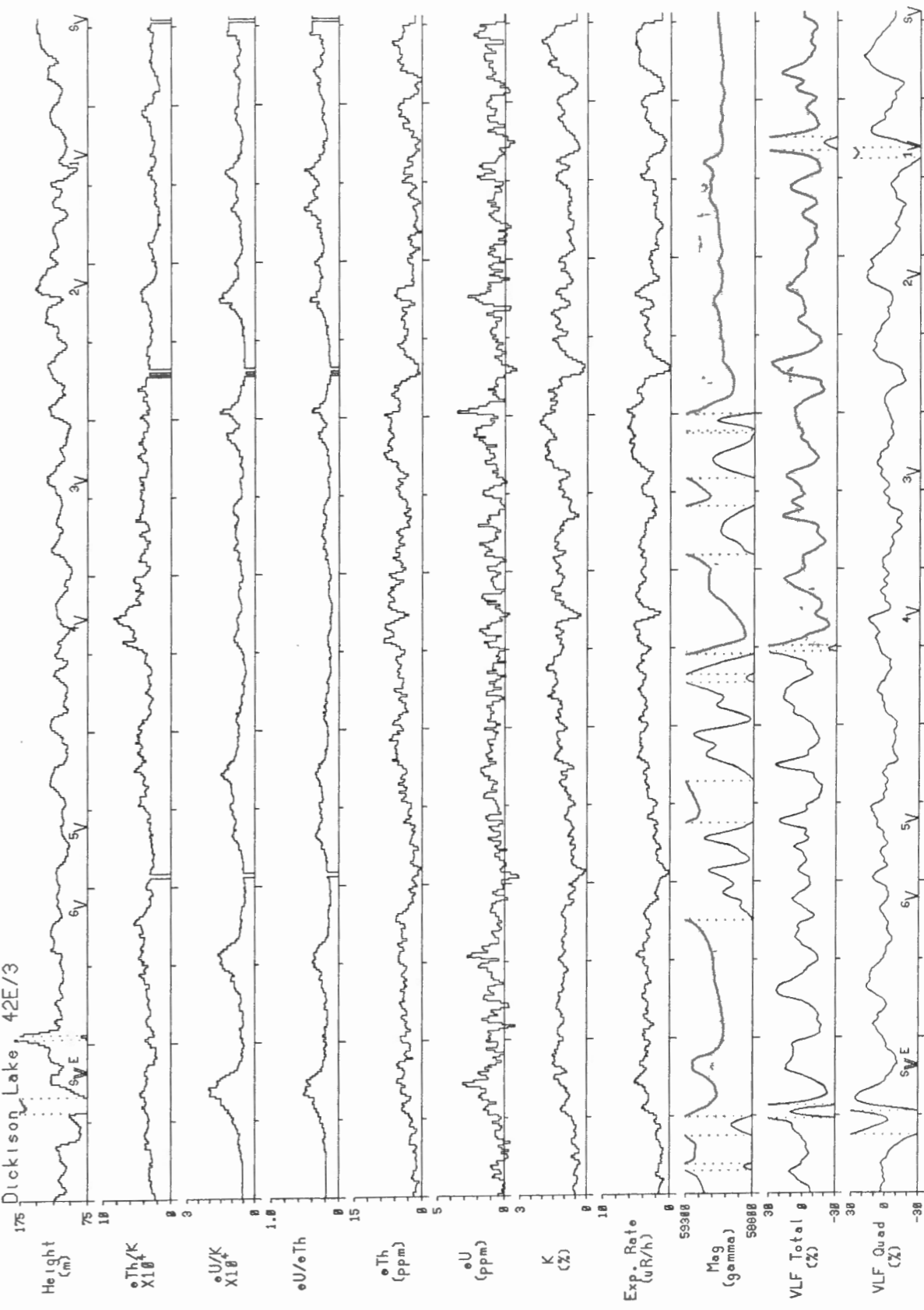
Line 38 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3



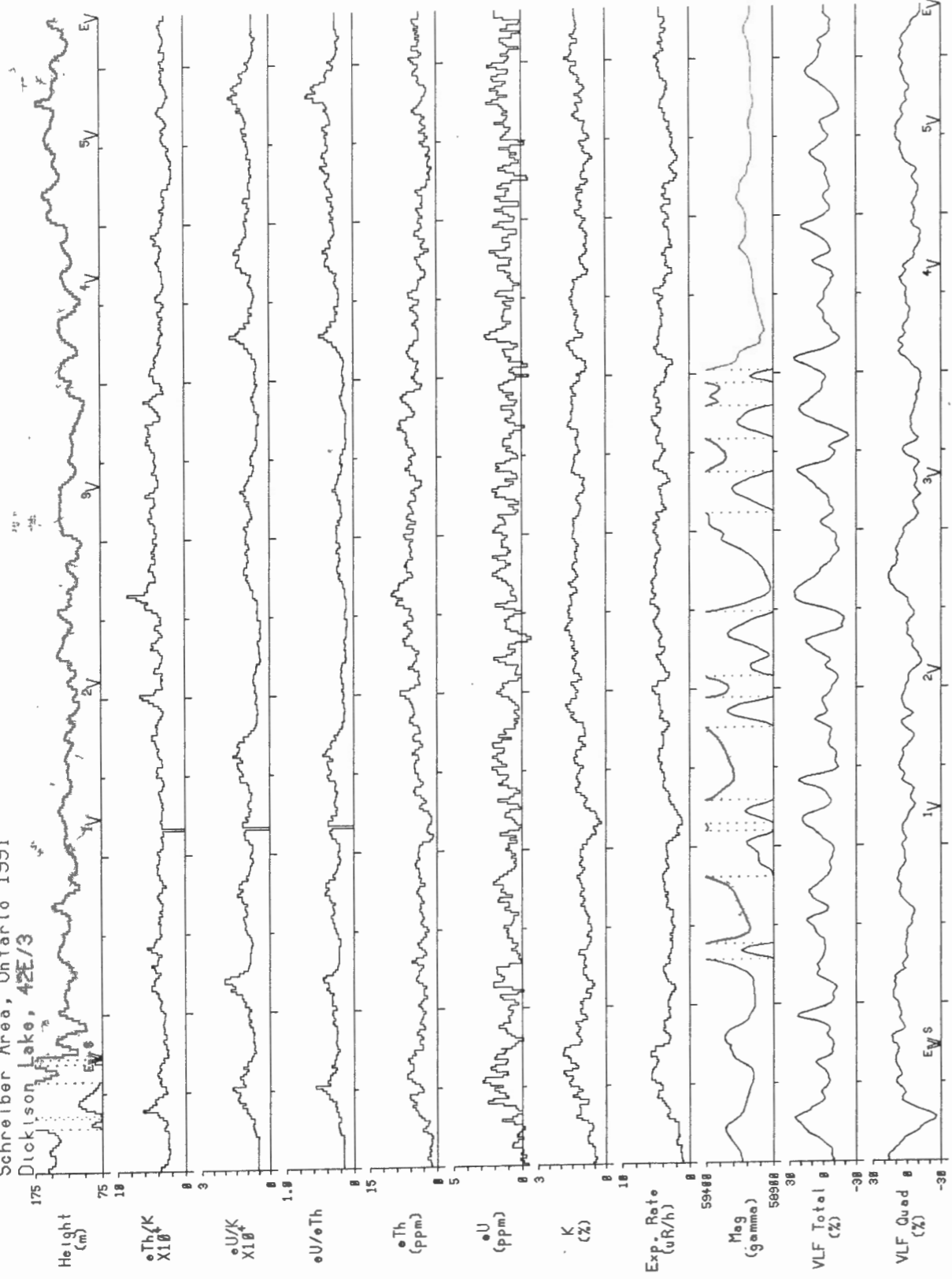
Line 39 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3



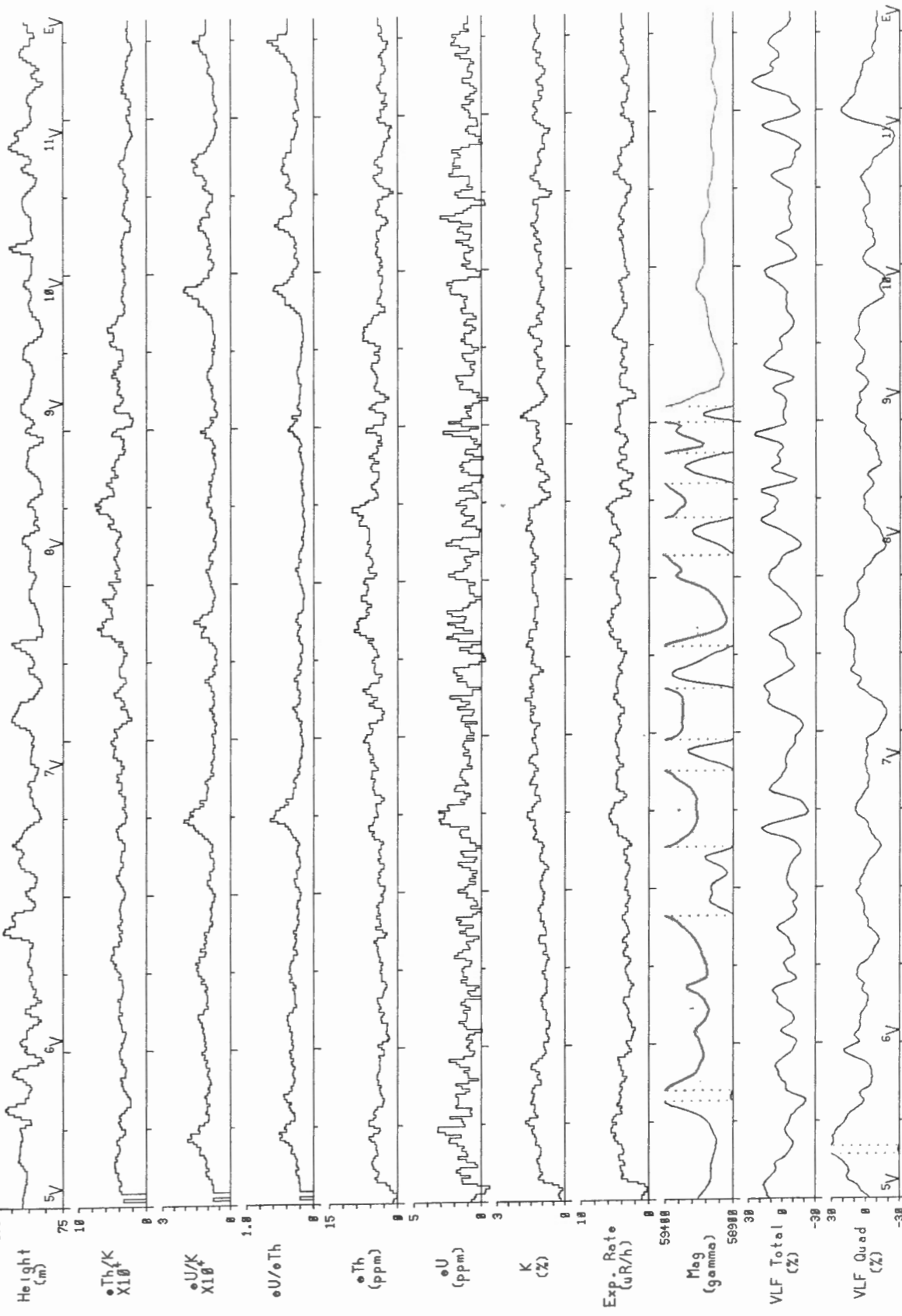
Line 40 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3



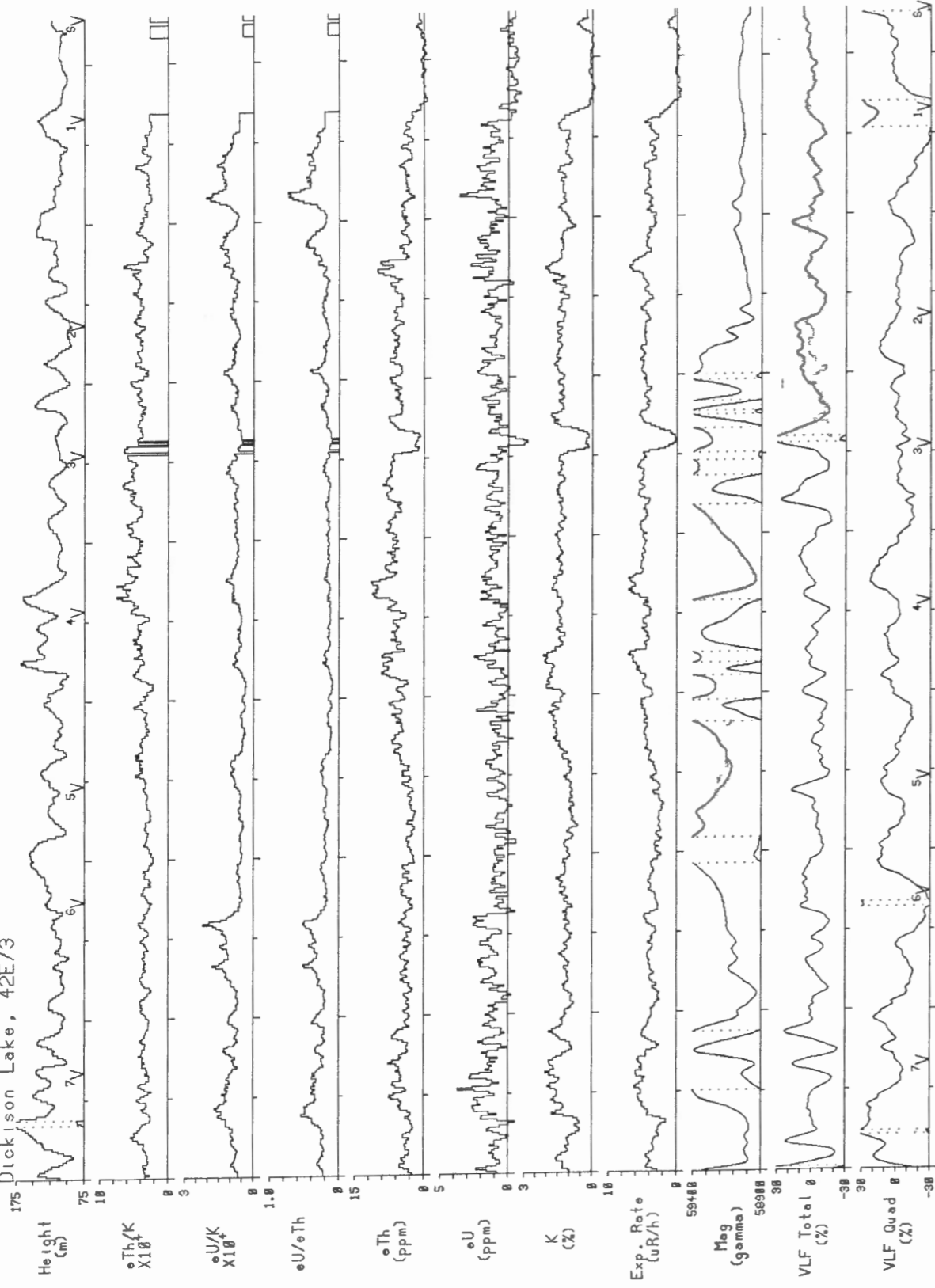
Line 41 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3



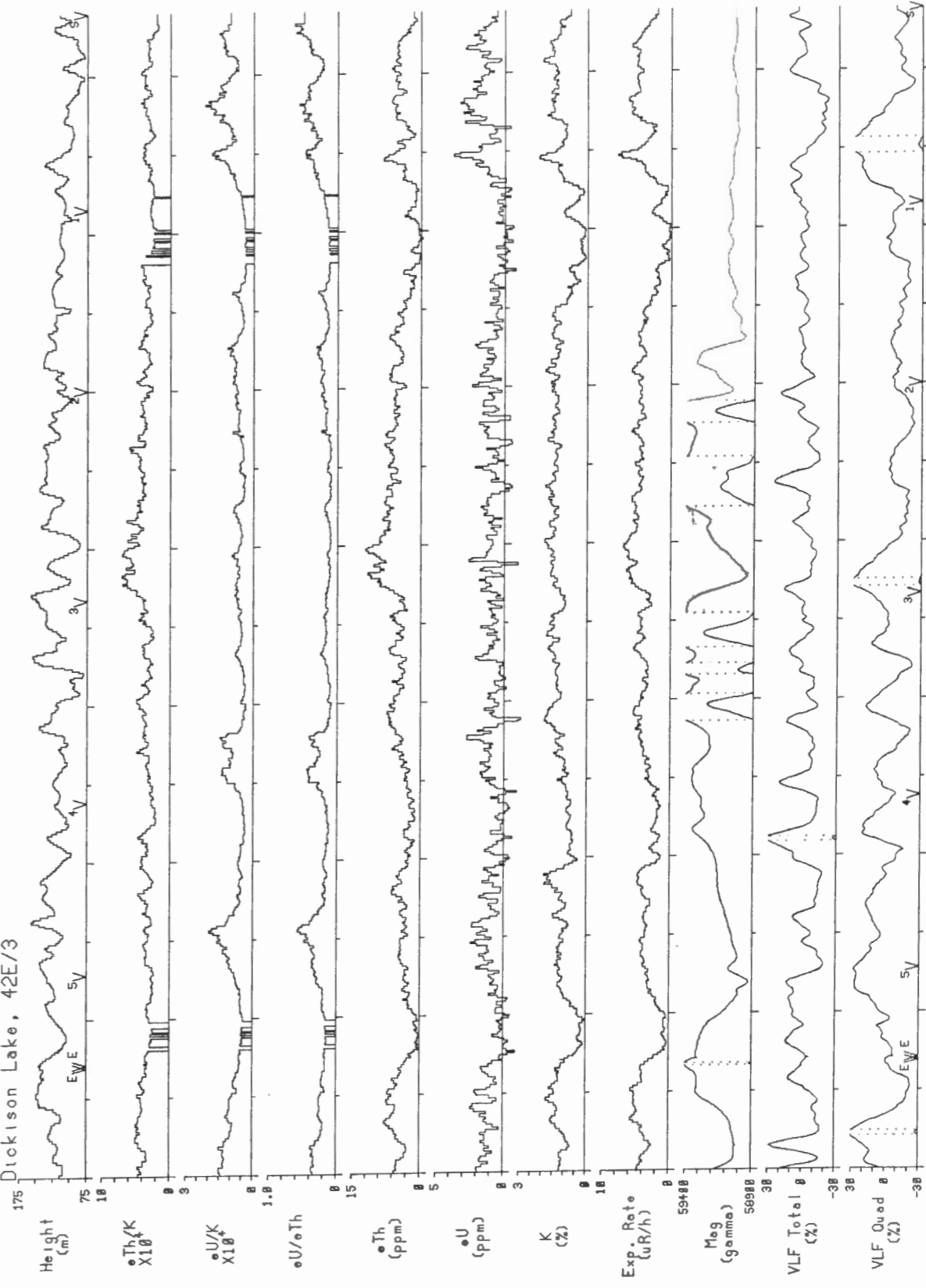
Line 42 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3



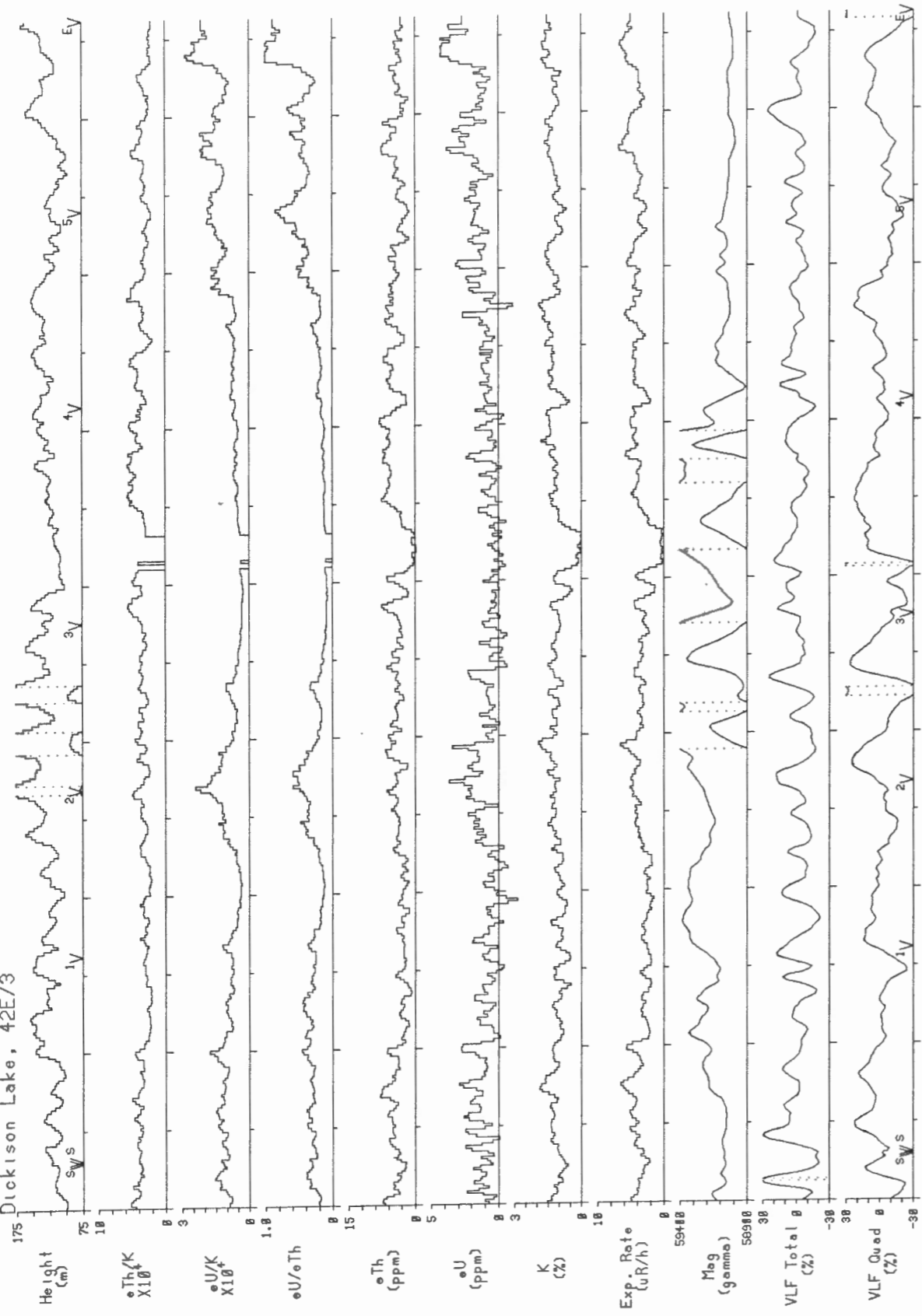
Line 43 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3

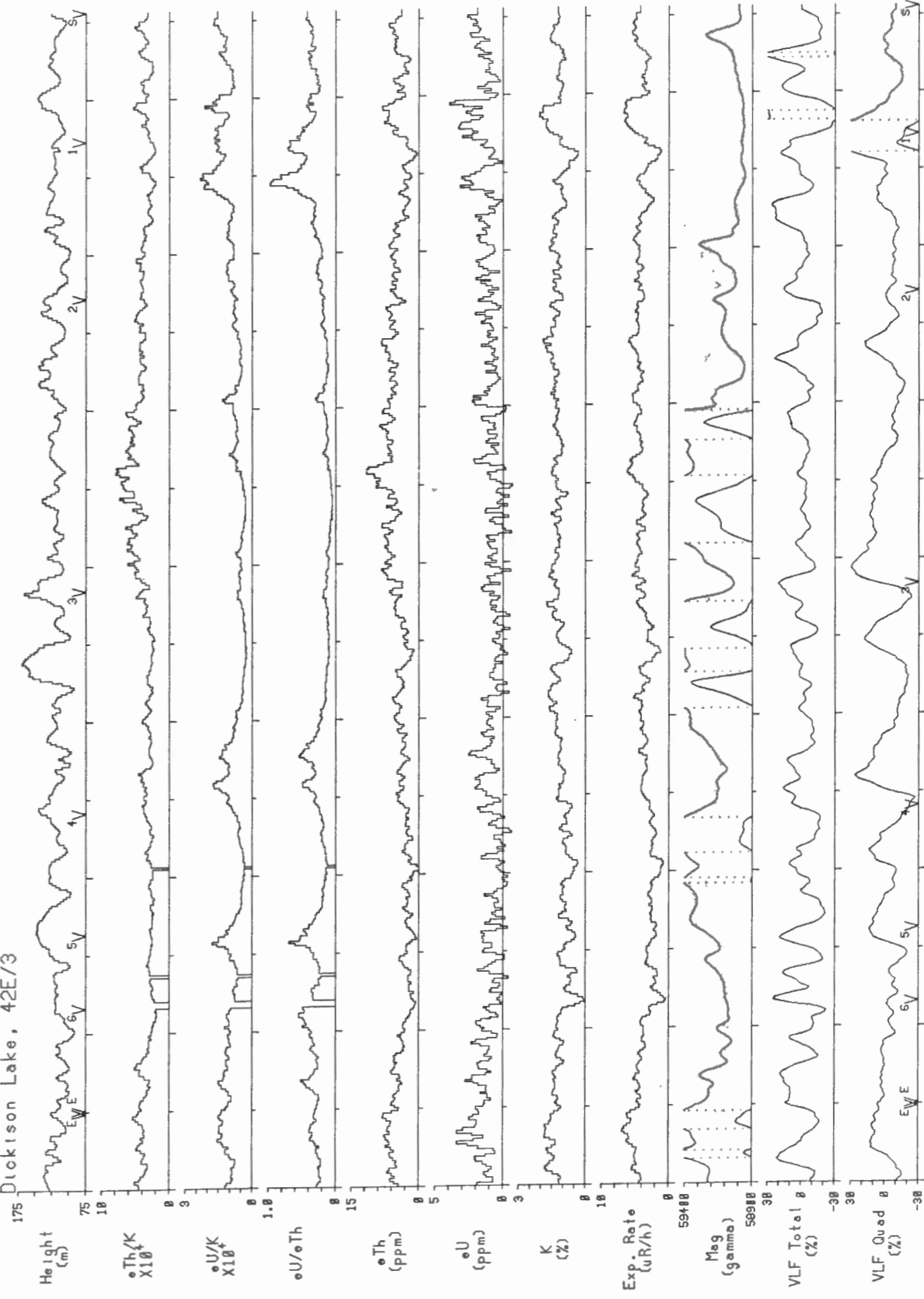


Line 44 | 2 km | Scale 1:150000

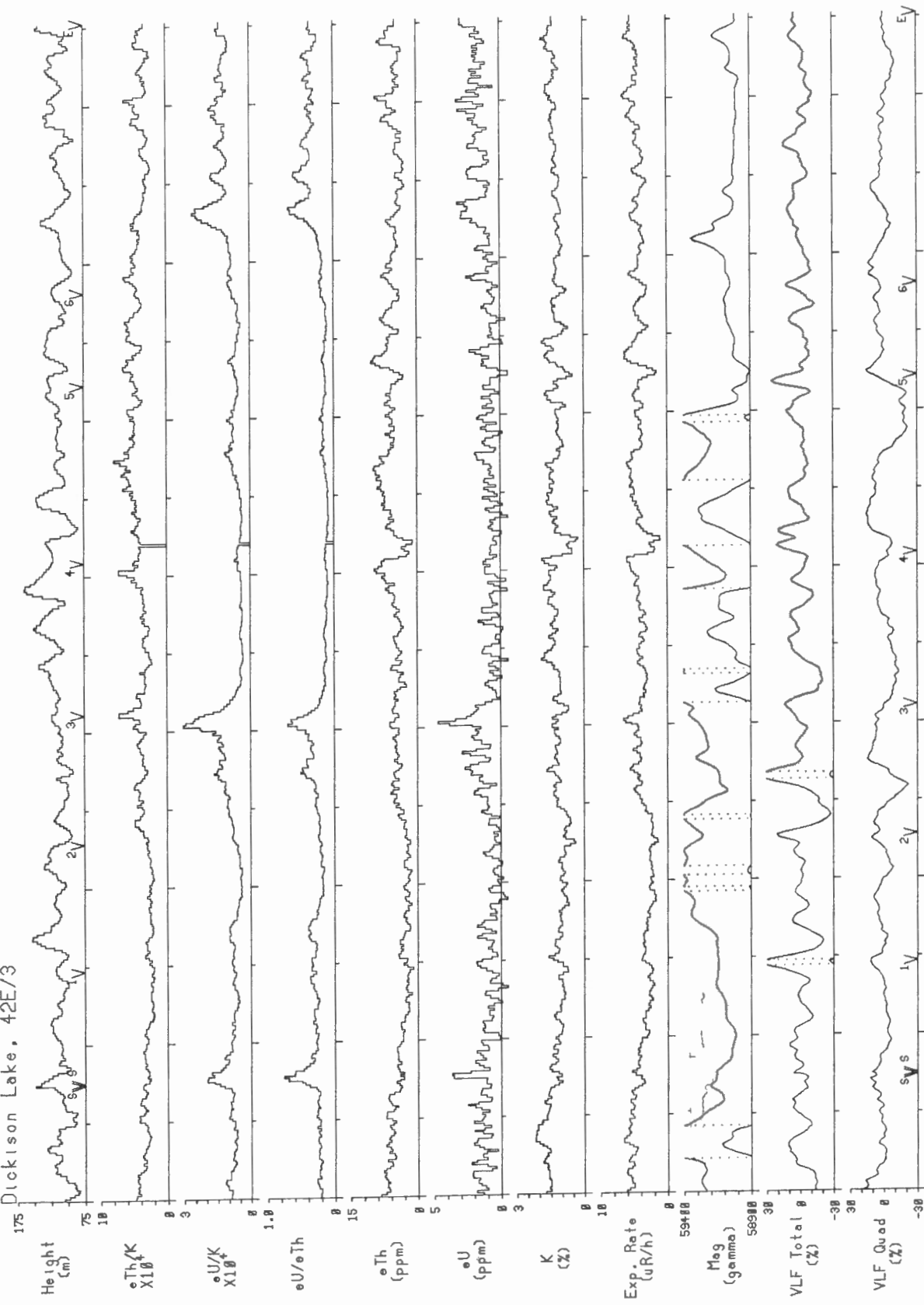
Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3



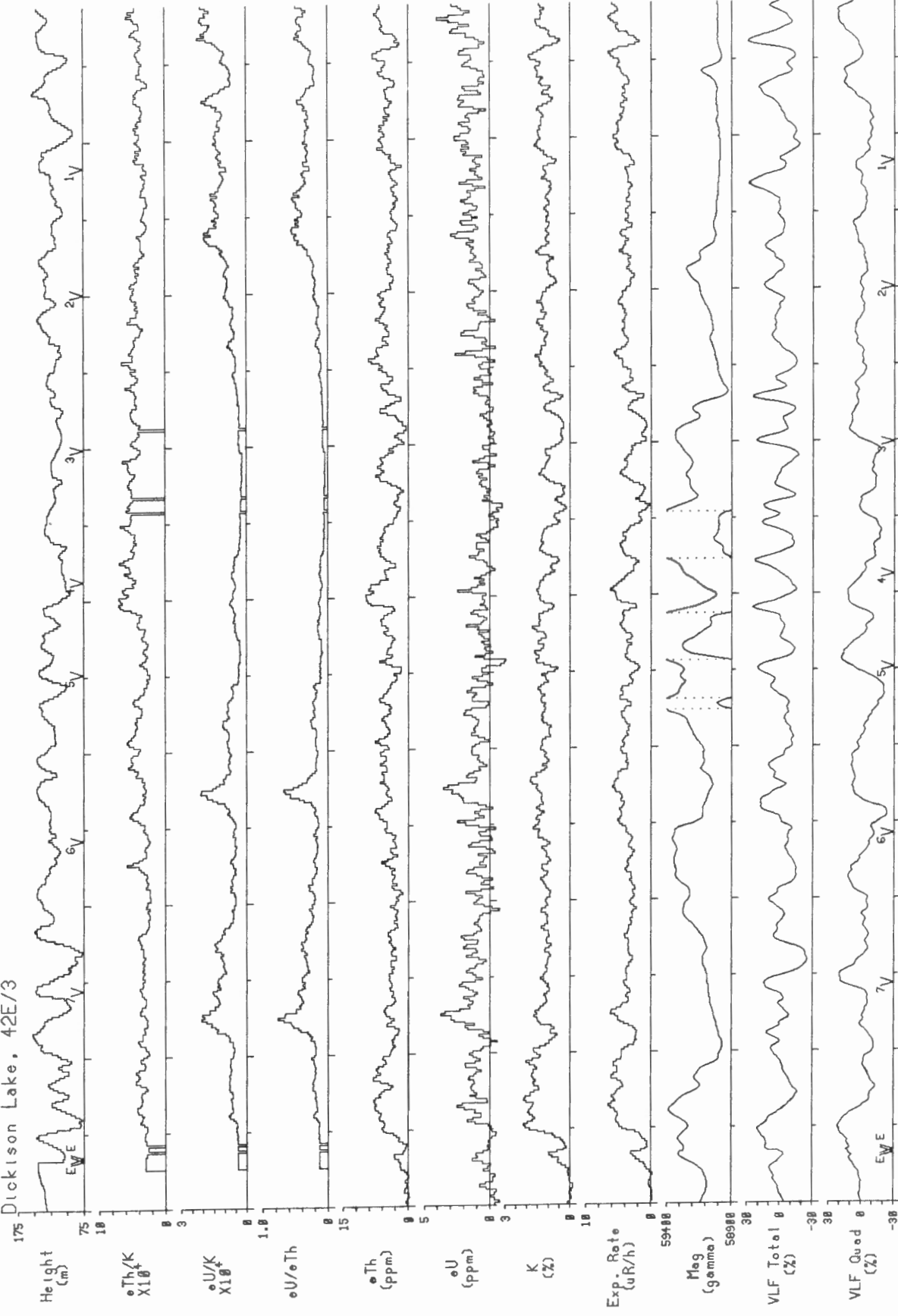
Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3



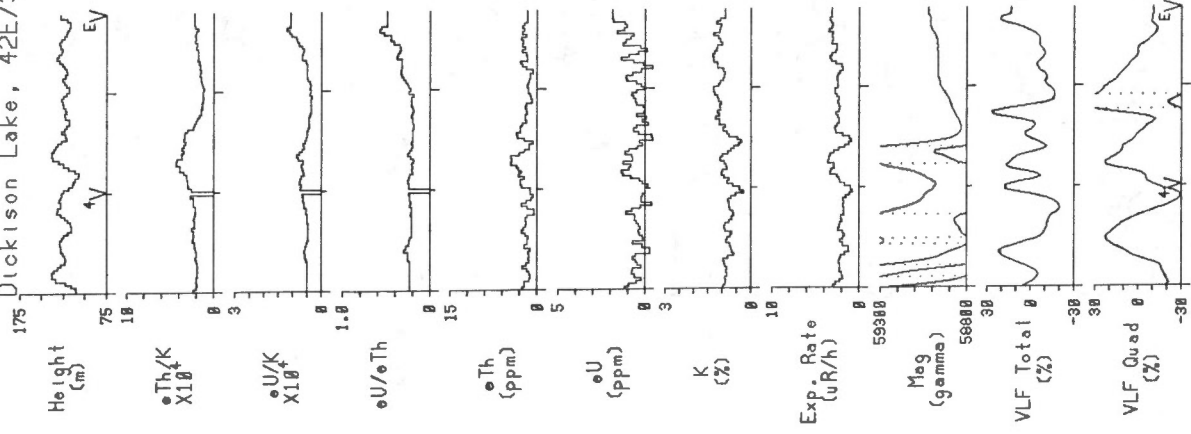
Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3



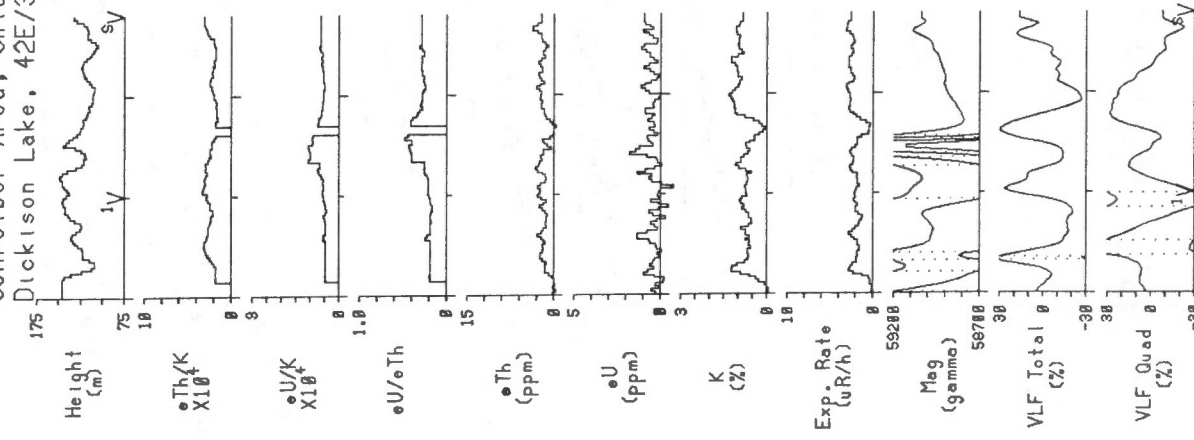
Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3



Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3

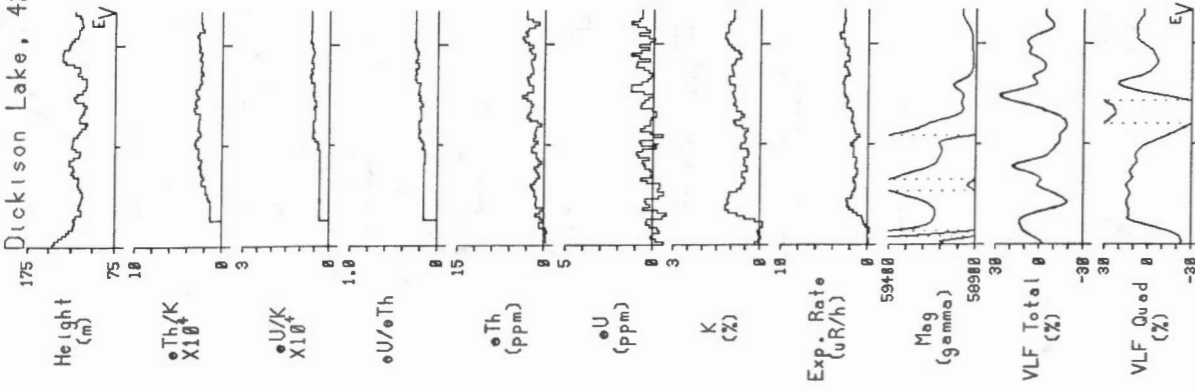


Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3





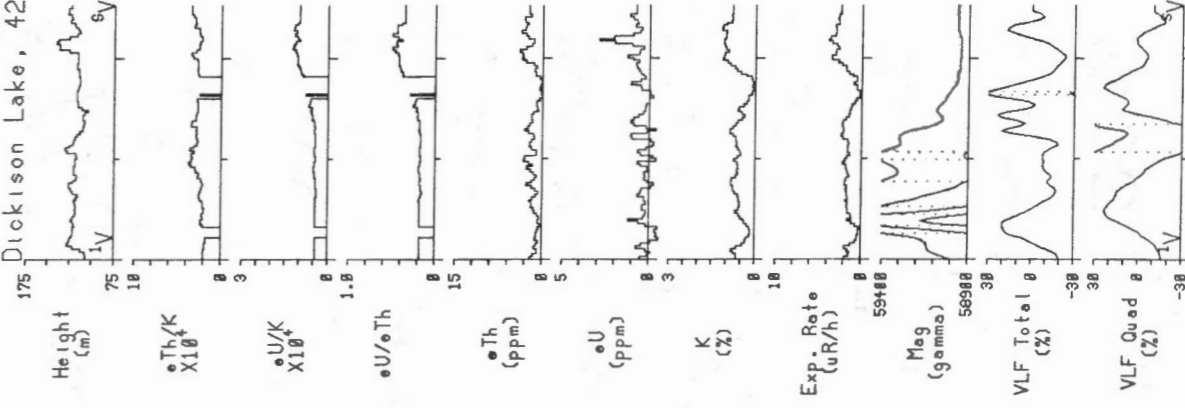
Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3



Line 72 2 km

Scale 1:150000

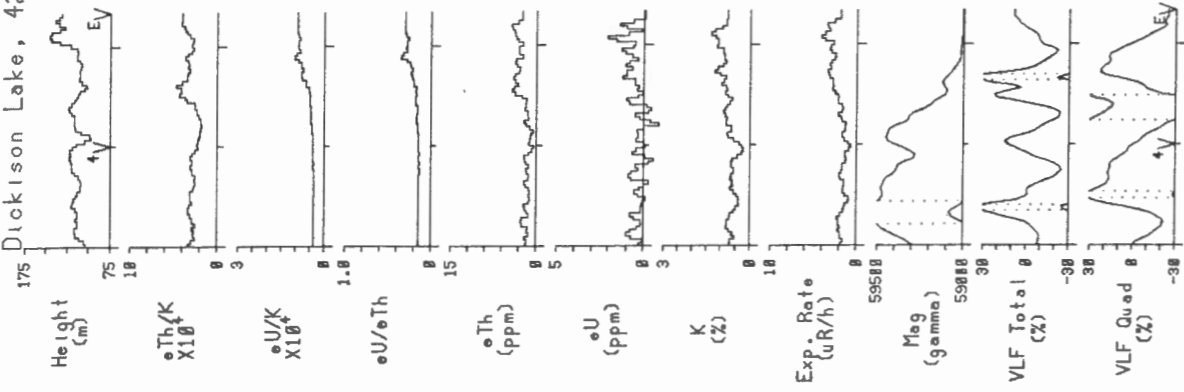
Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3



Line 73 2 km

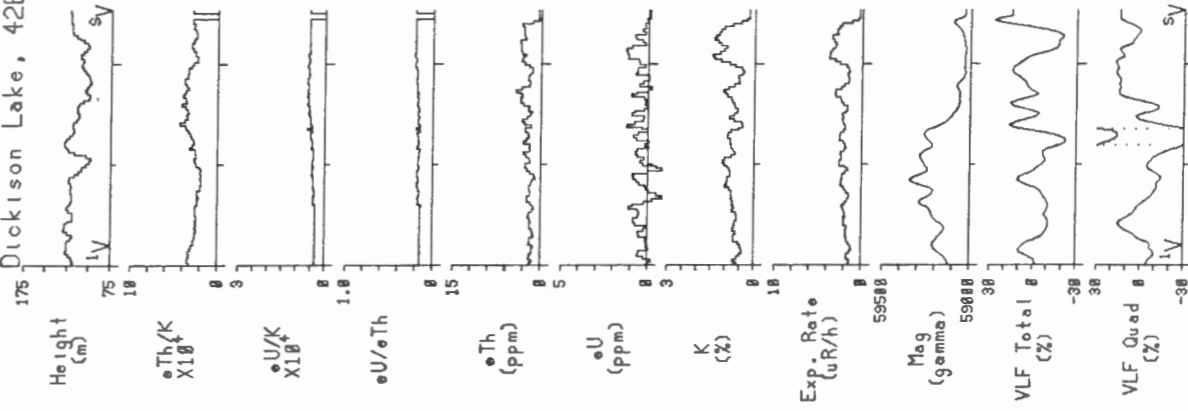
Scale 1:150000

Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3



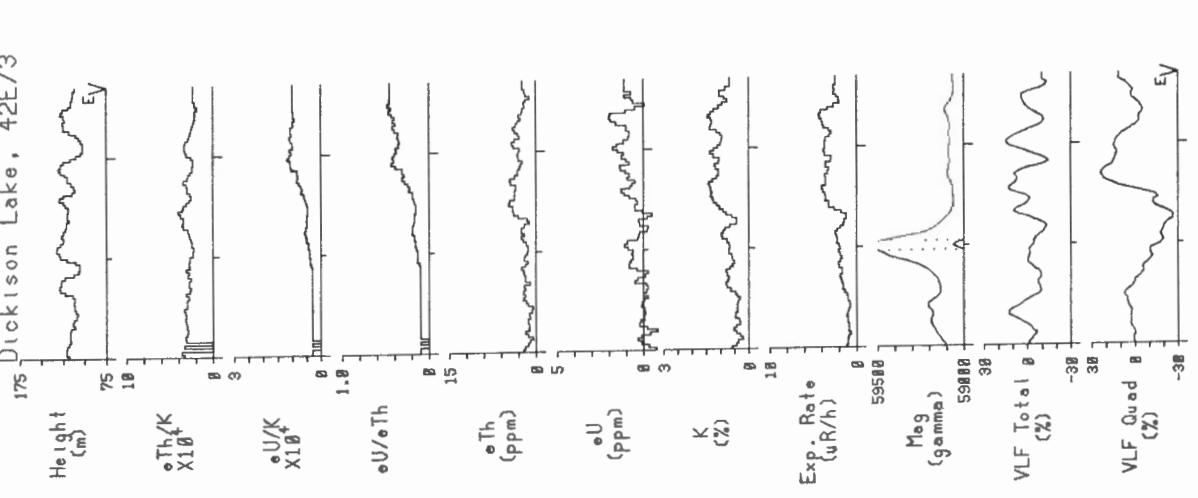
Line 74 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3



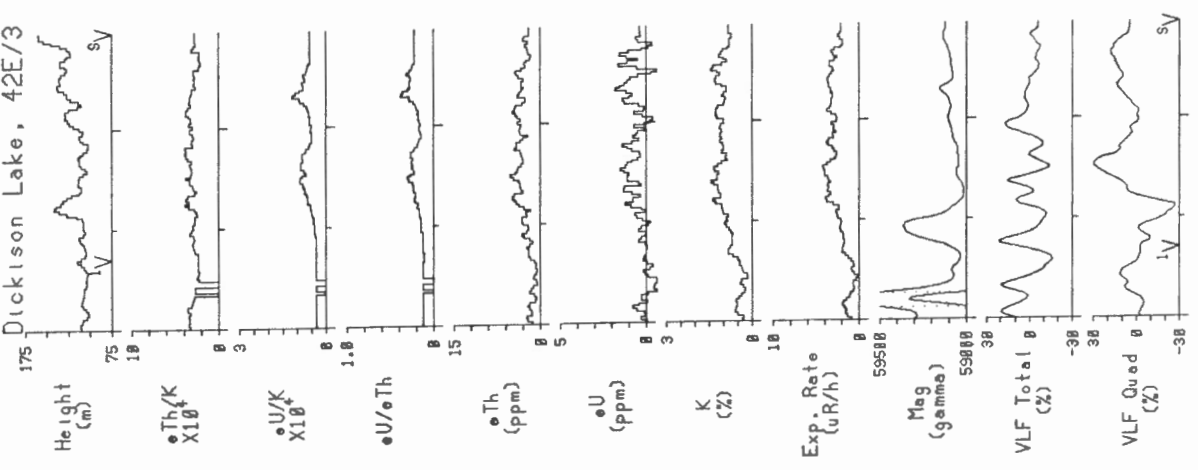
Line 75 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3



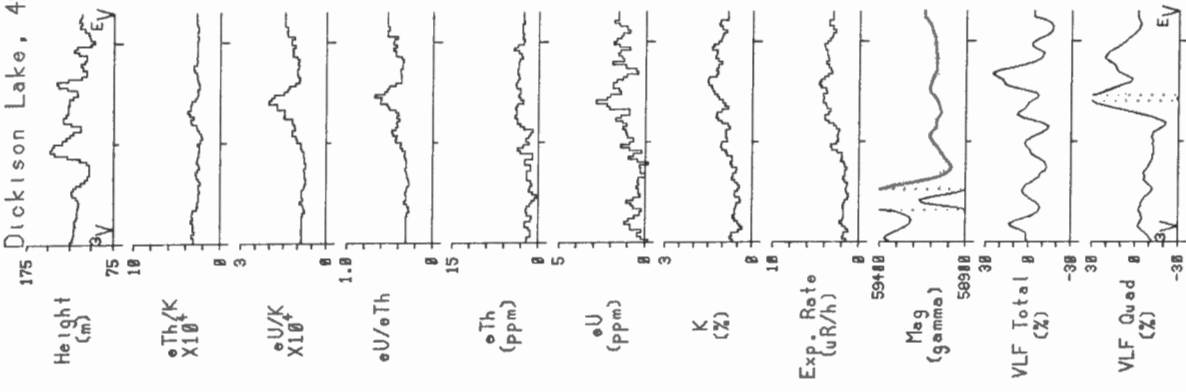
Line 76 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3



Line 77 | 2 km | Scale 1:150000

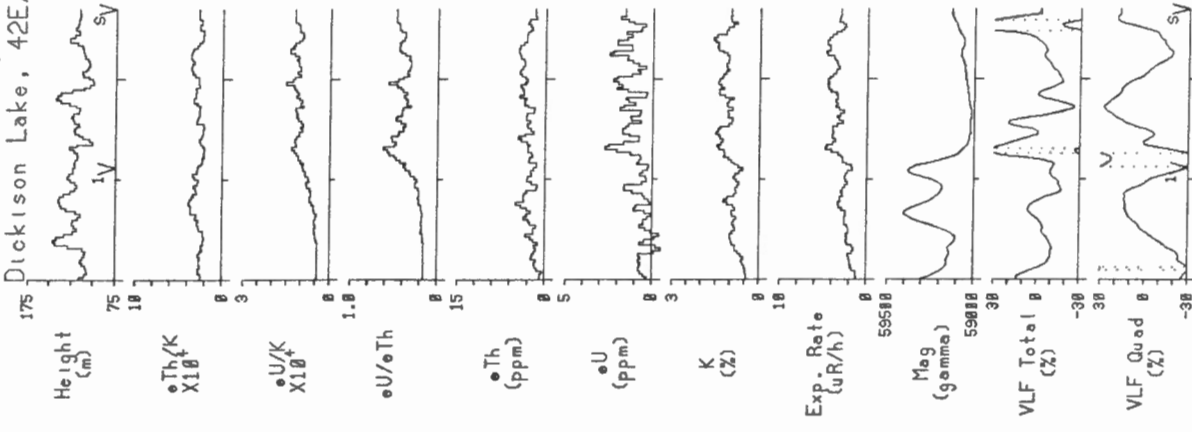
Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3



Line 78 | 2 km

Scale 1:150000

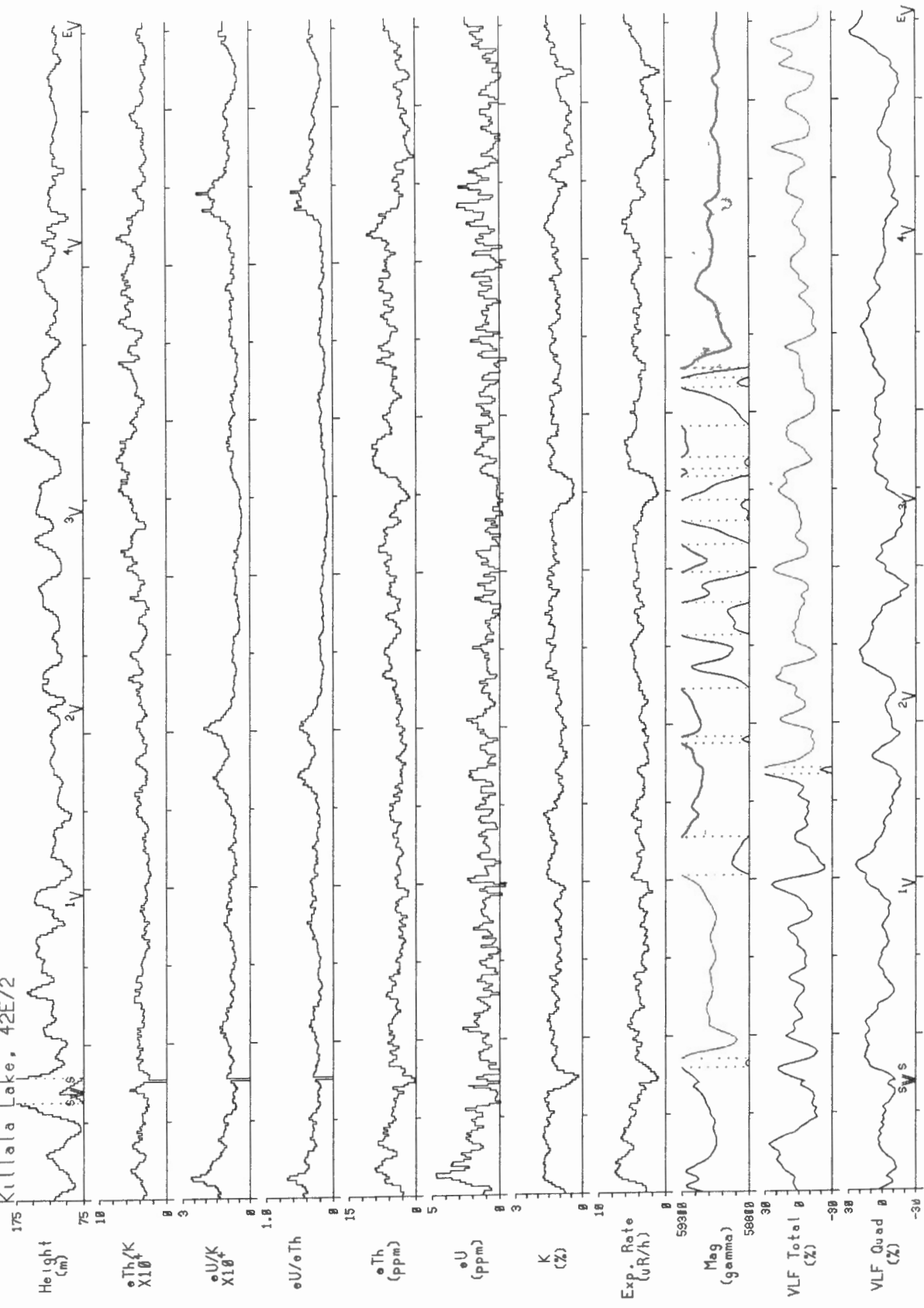
Schreiber Area, Ontario 1991  
Dickinson Lake, 42E/3



Line 79 | 2 km

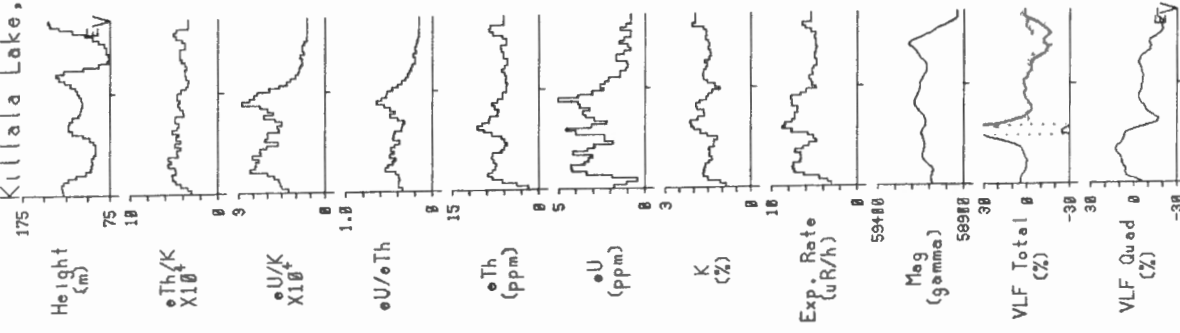
Scale 1:150000

Schreiber Area, Ontario 1991  
Killalala Lake, 42E/2



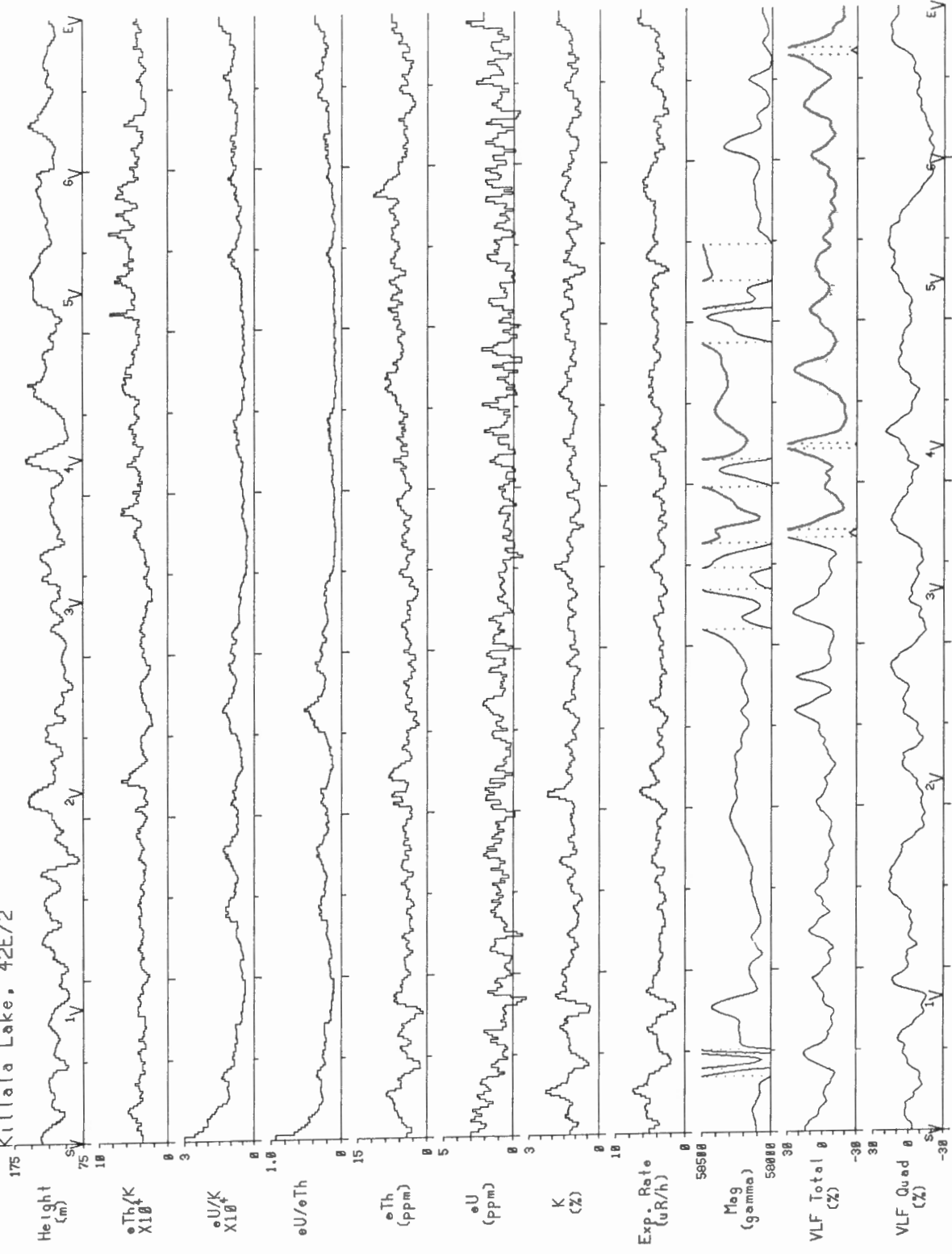
Line 49 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Killalala Lake, 42E/2

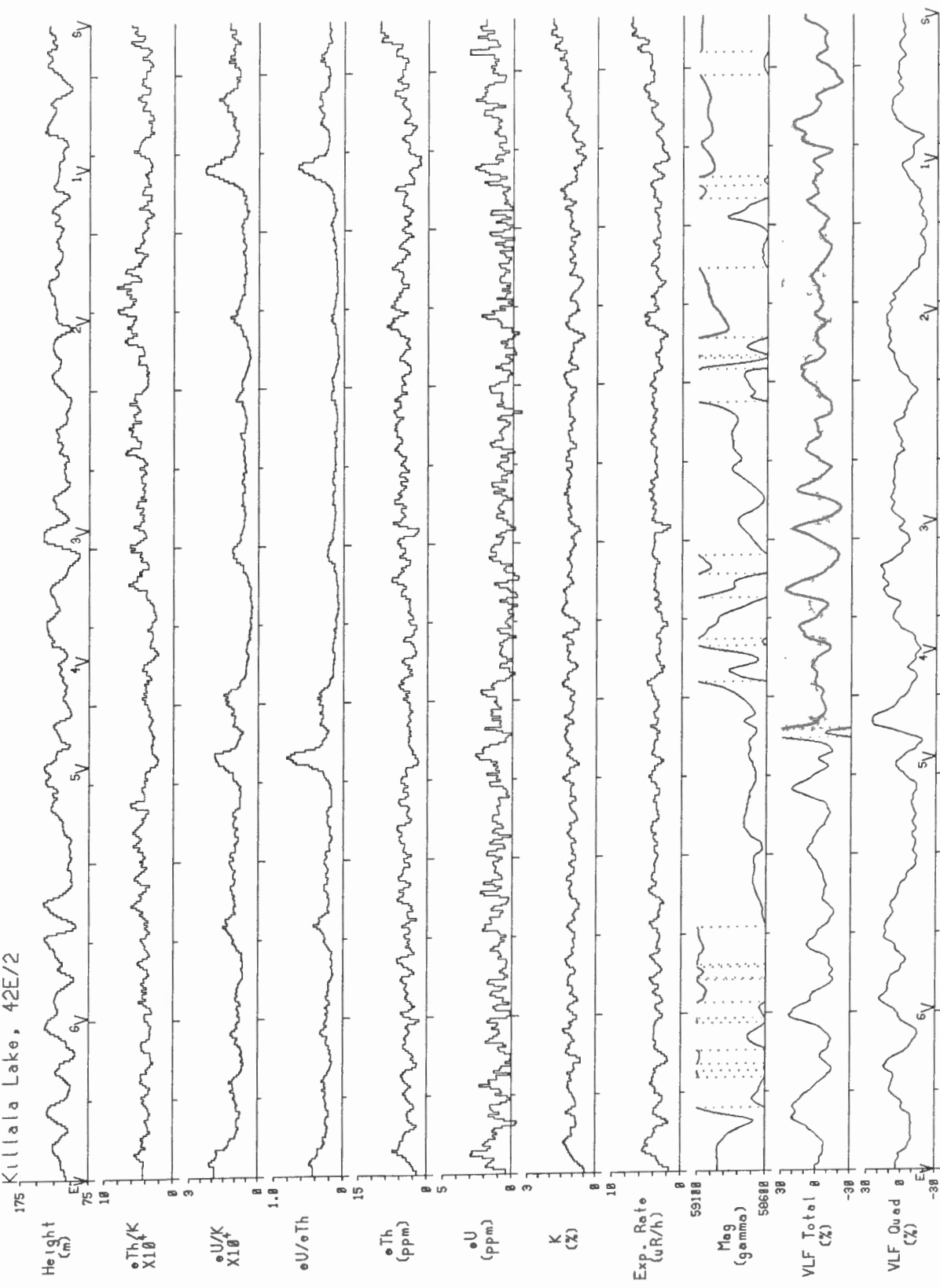


Line 50 | 2 km | Scale 1:150000

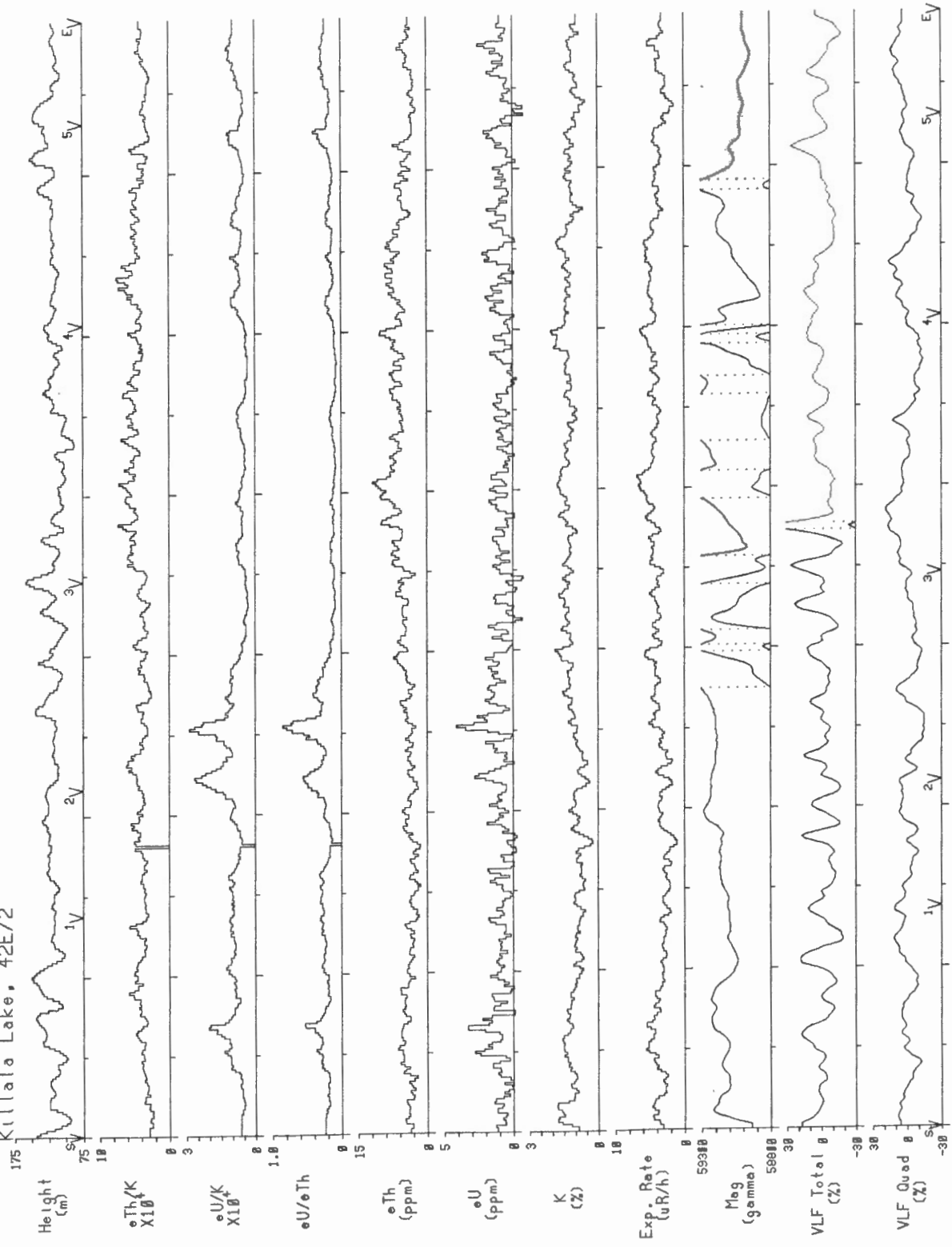
Schreiber Area, Ontario 1991  
Killala Lake, 42E/2



Schreiber Area, Ontario 1991  
Killala Lake, 42E/2

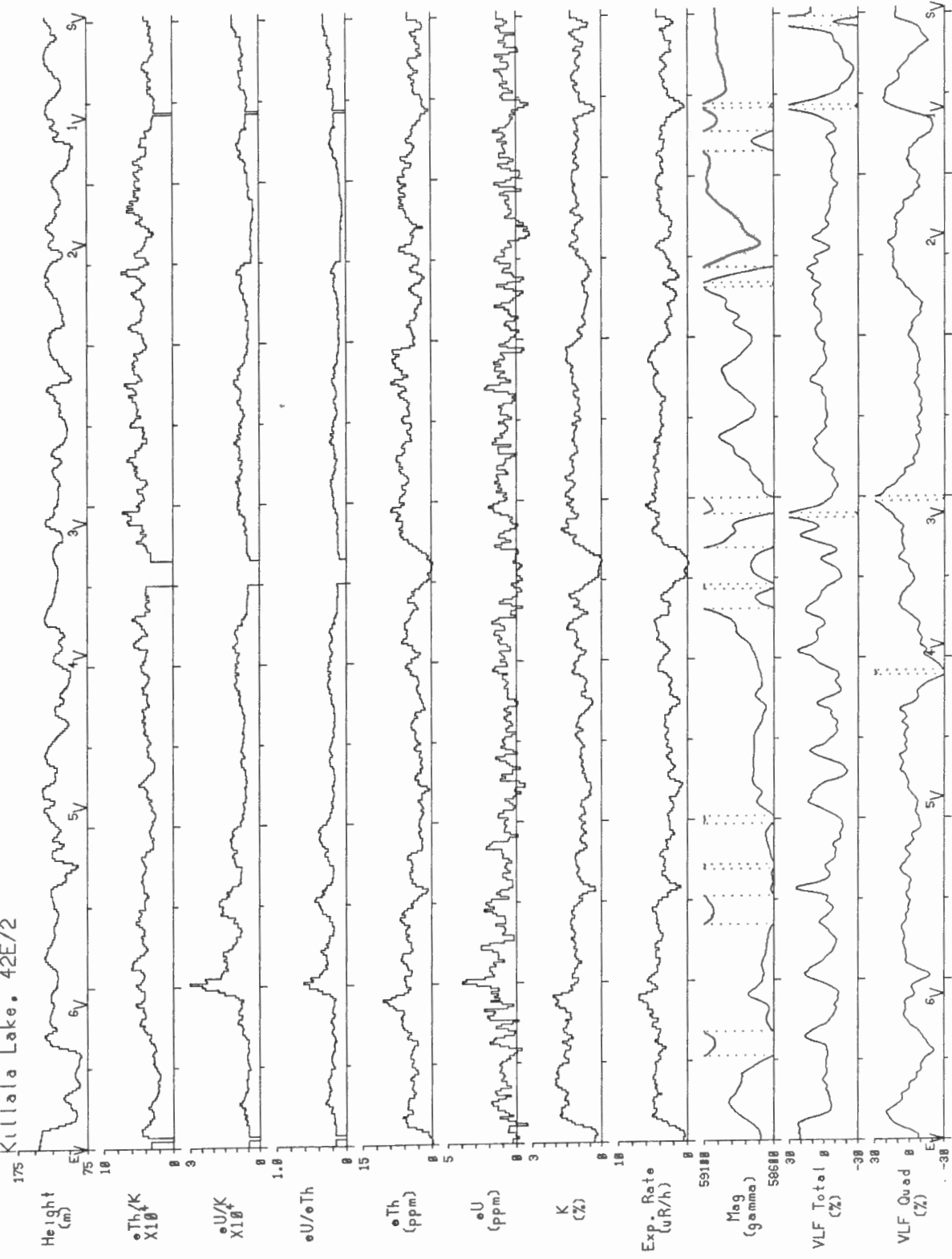


Schreiber Area, Ontario 1991  
Killala Lake, 42E/2



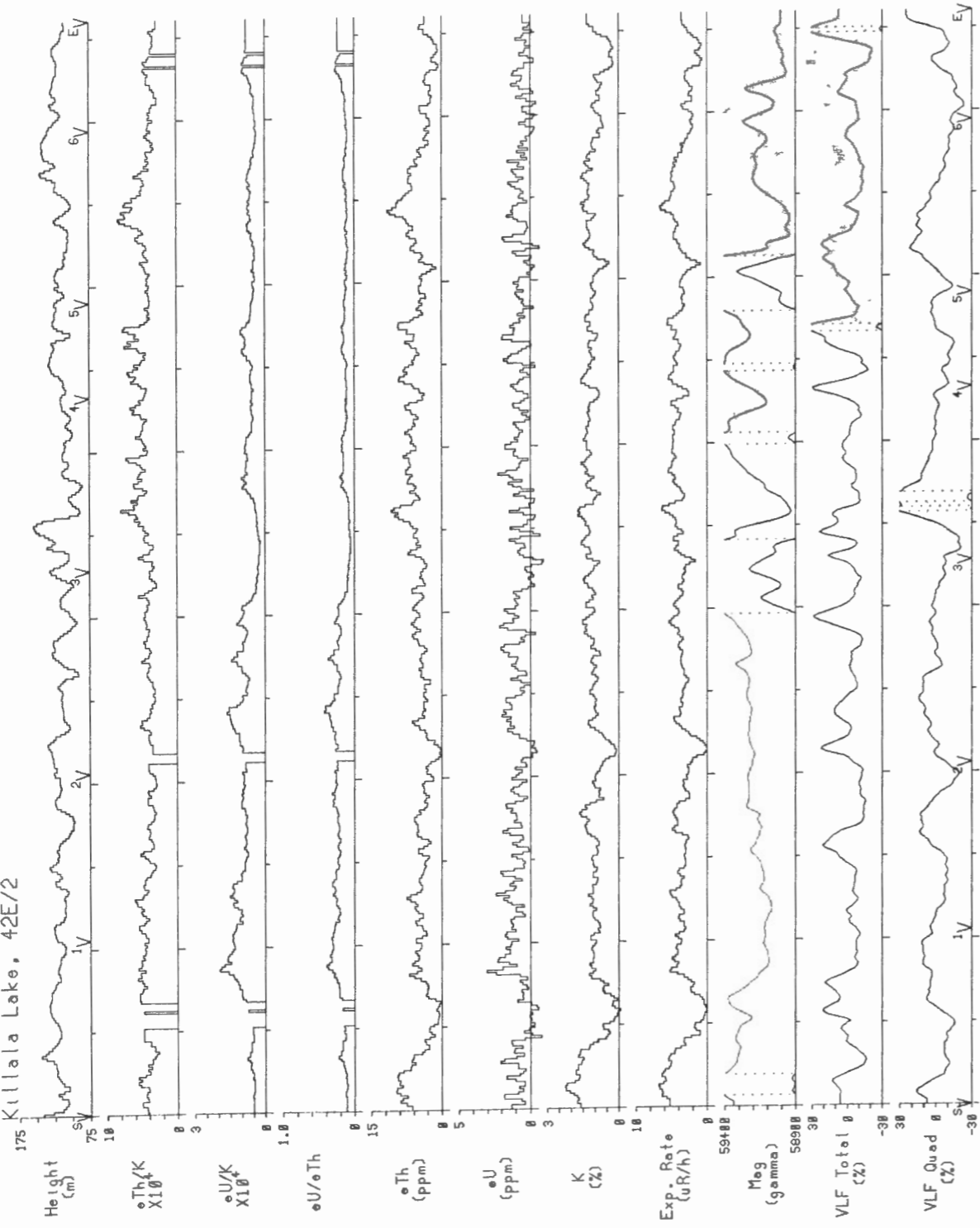
Line 53 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Killala Lake, 42E/2



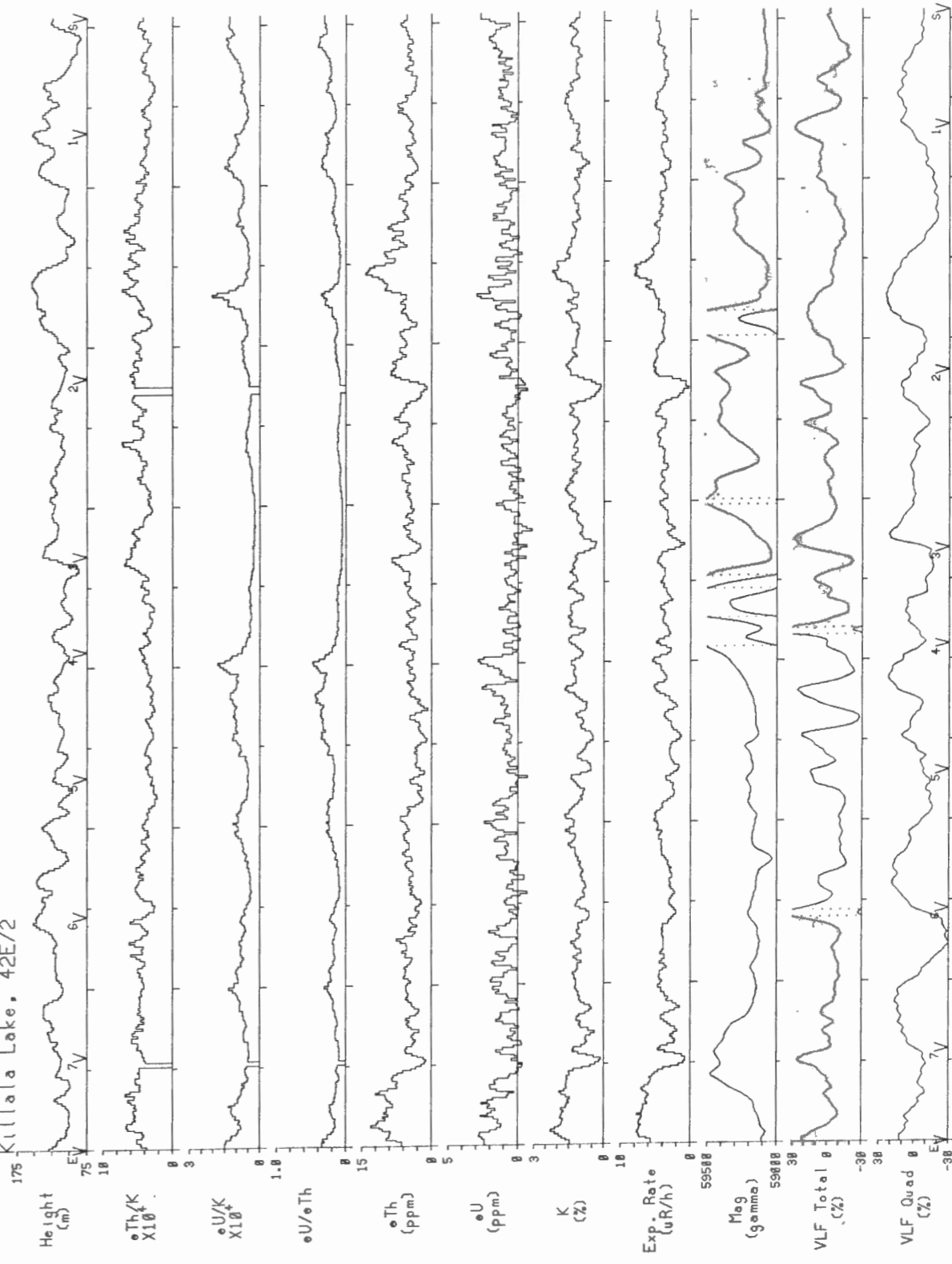
Line 54 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Killala Lake, 42E/2



Line 55 | 2 km | Scale 1:150000

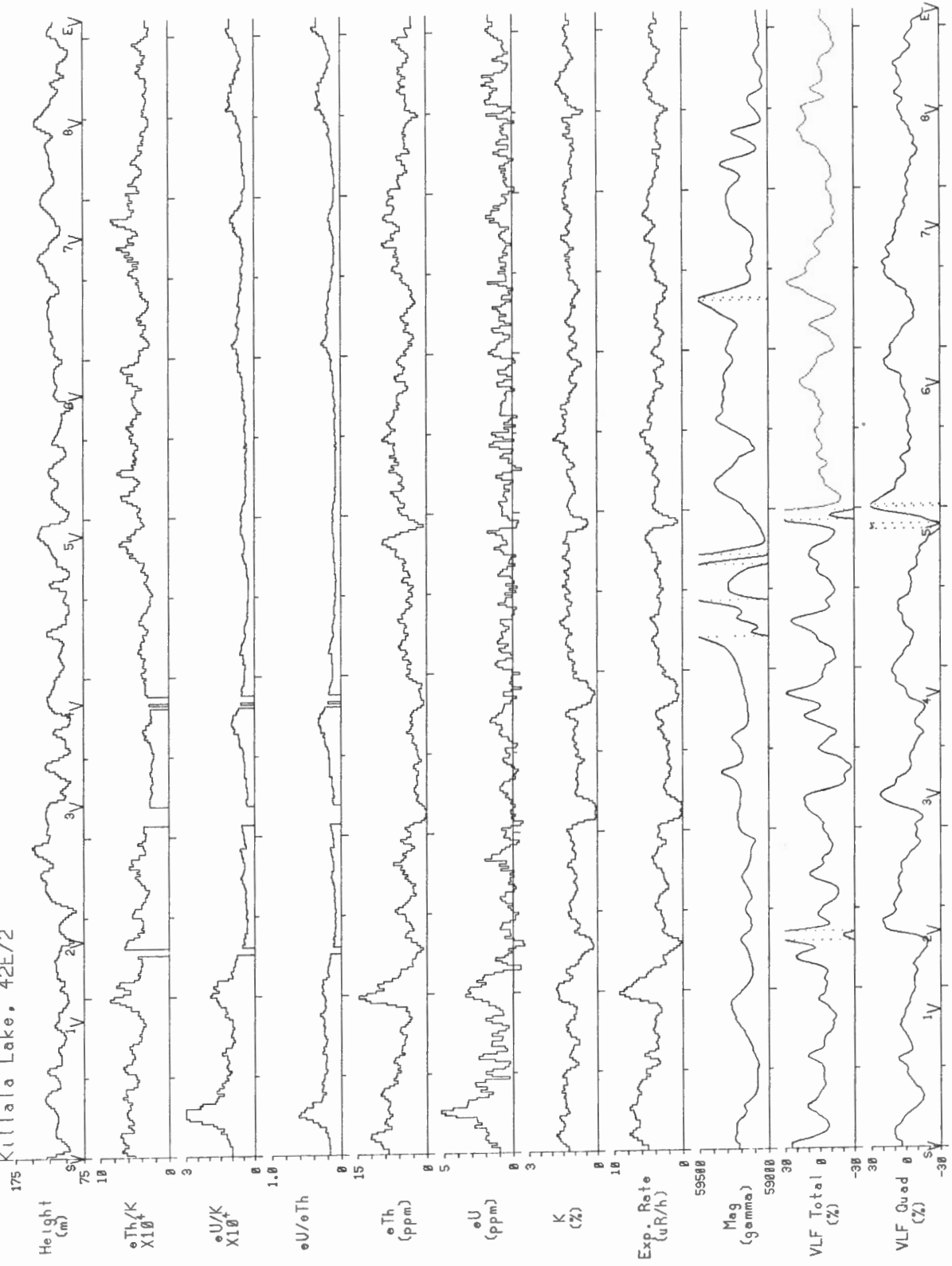
Schreiber Area, Ontario 1991  
Killala Lake, 42E/2



Line 56 | 2 km | Scale 1:150000

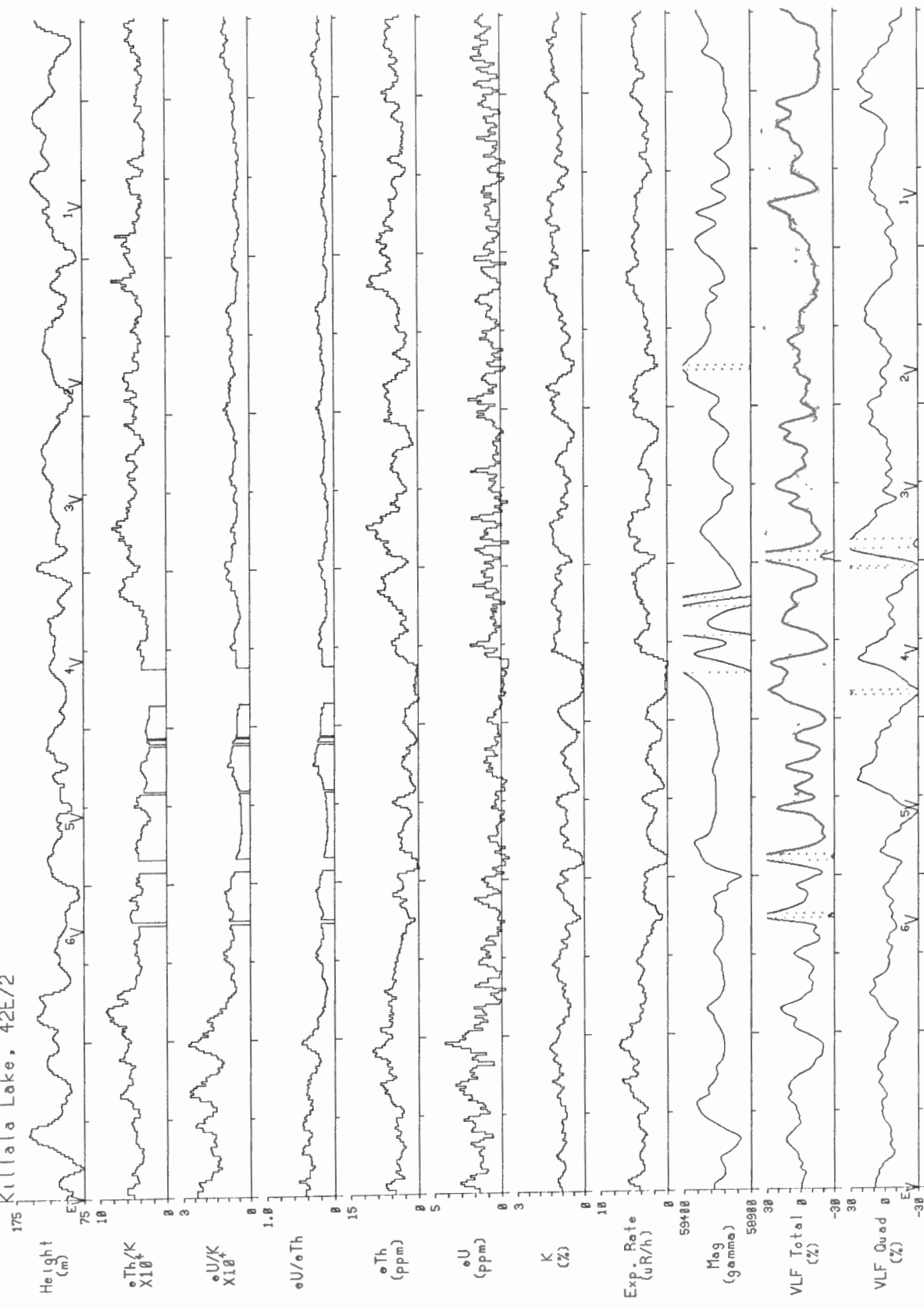


Schreiber Area, Ontario 1991  
Killala Lake, 42E/2



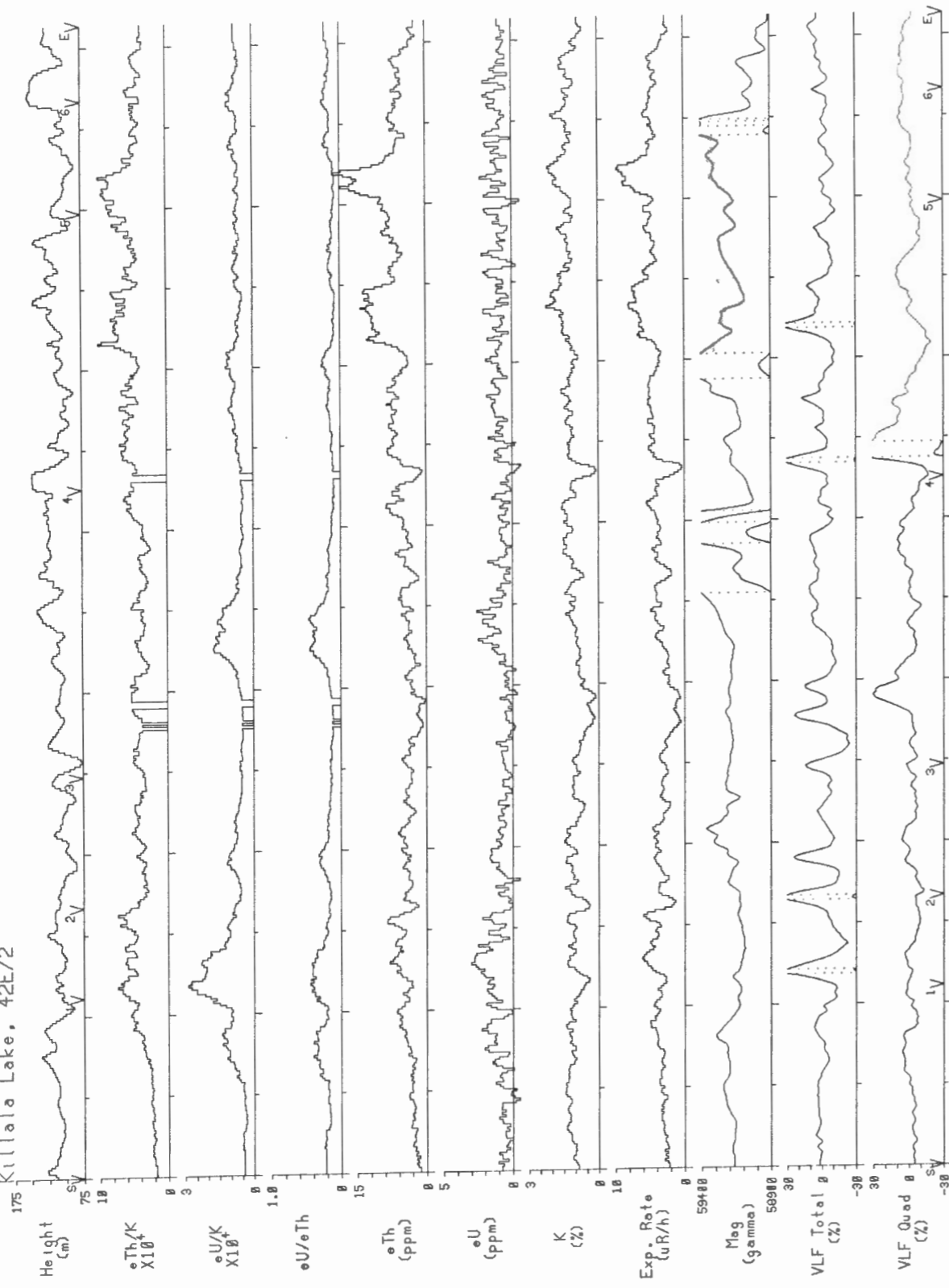
Line 57 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Killala Lake, 42E/2



Line 58 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Killala Lake, 42E/2



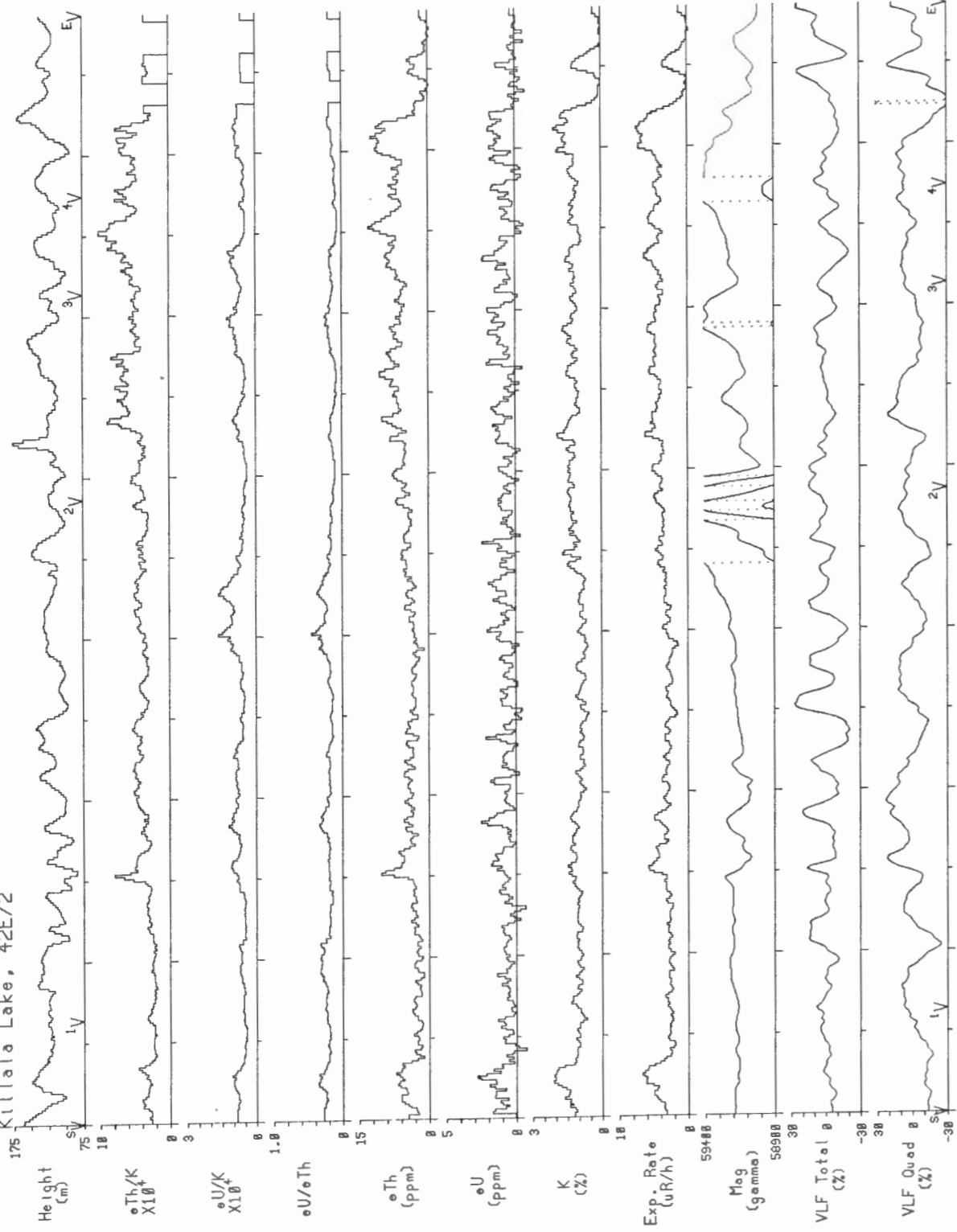
Line 59 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Killala Lake, 42E/2



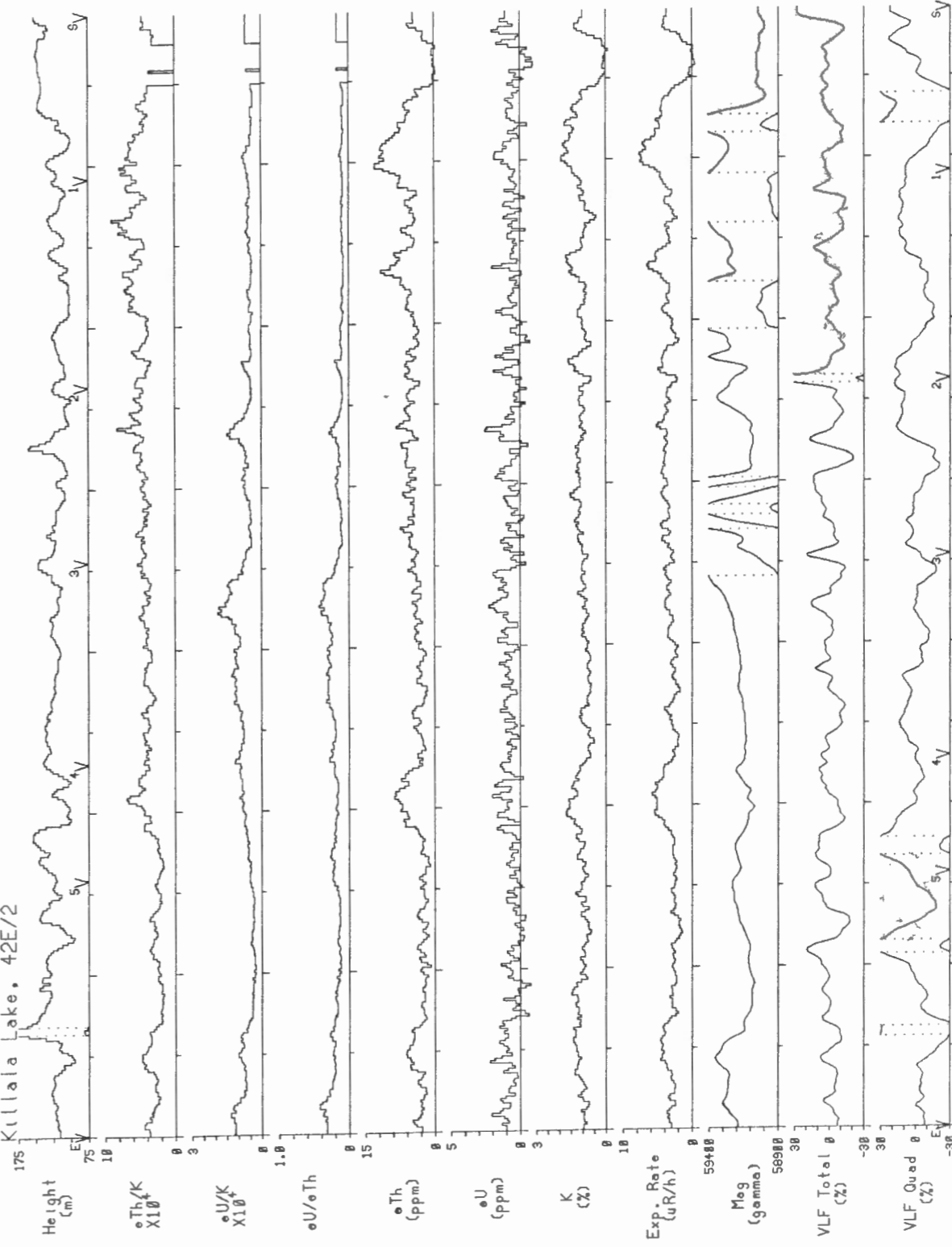
Line 60 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Killala Lake, 42E/2



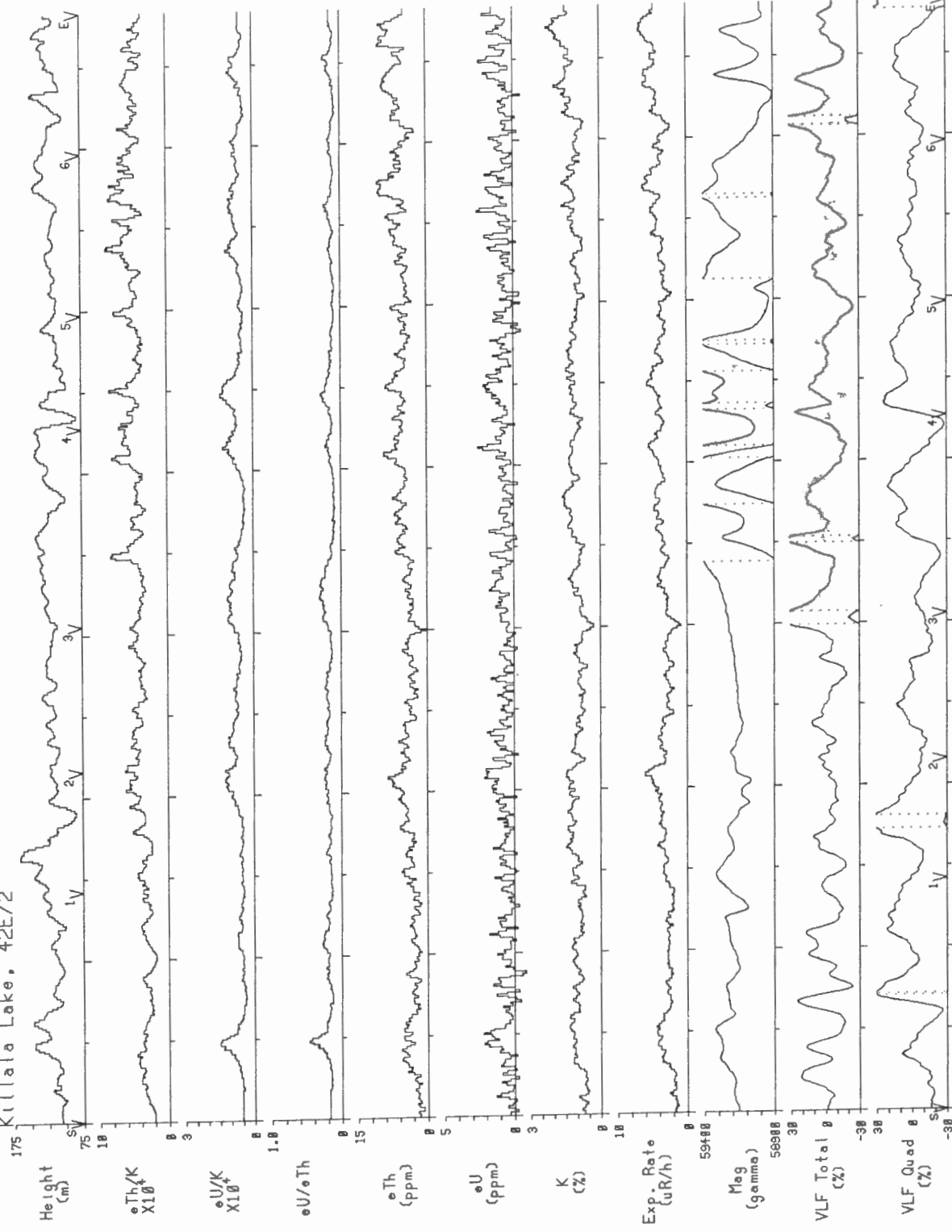
Line 61 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Killala Lake, 42E/2



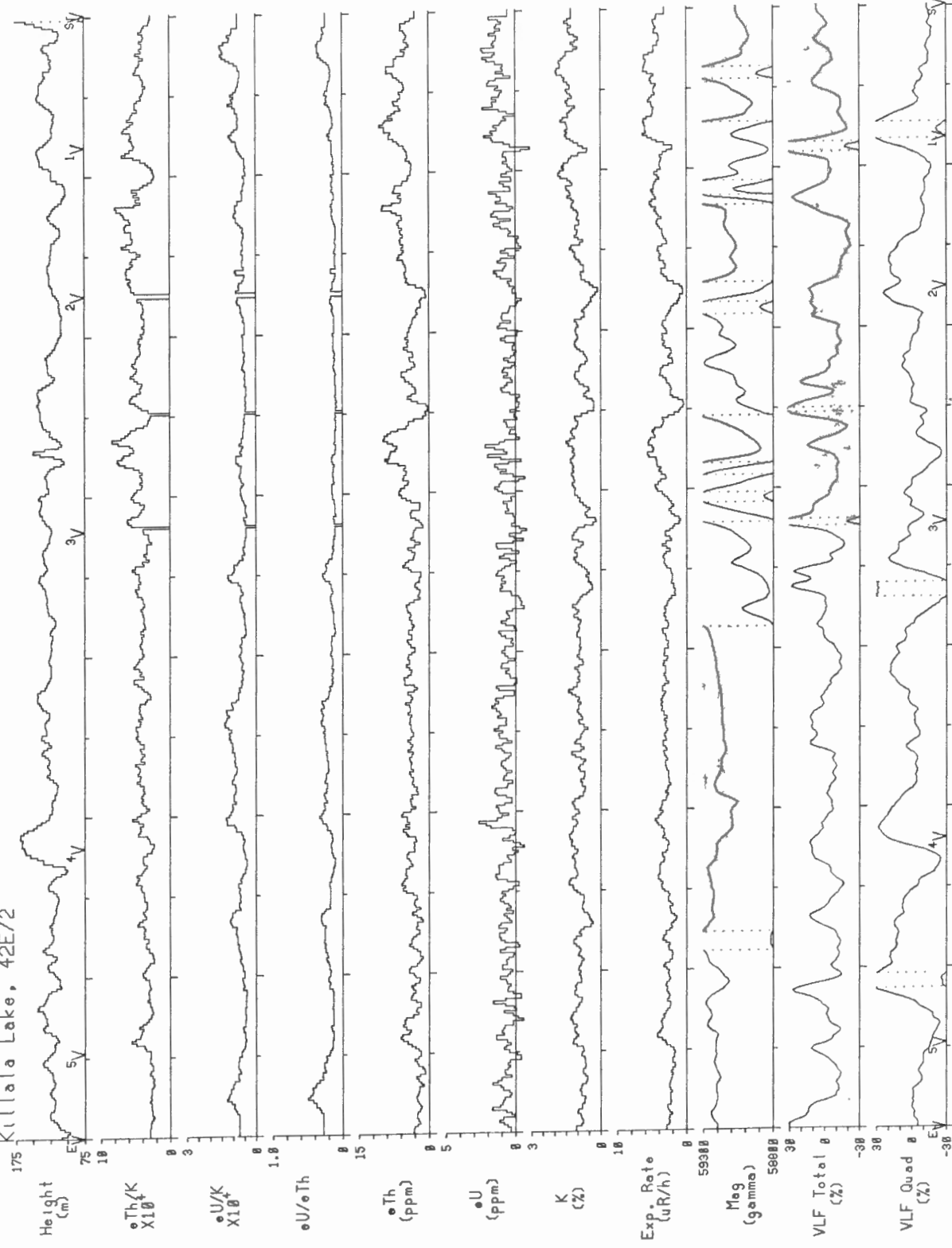
Line 62 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Killala Lake, 42E/2



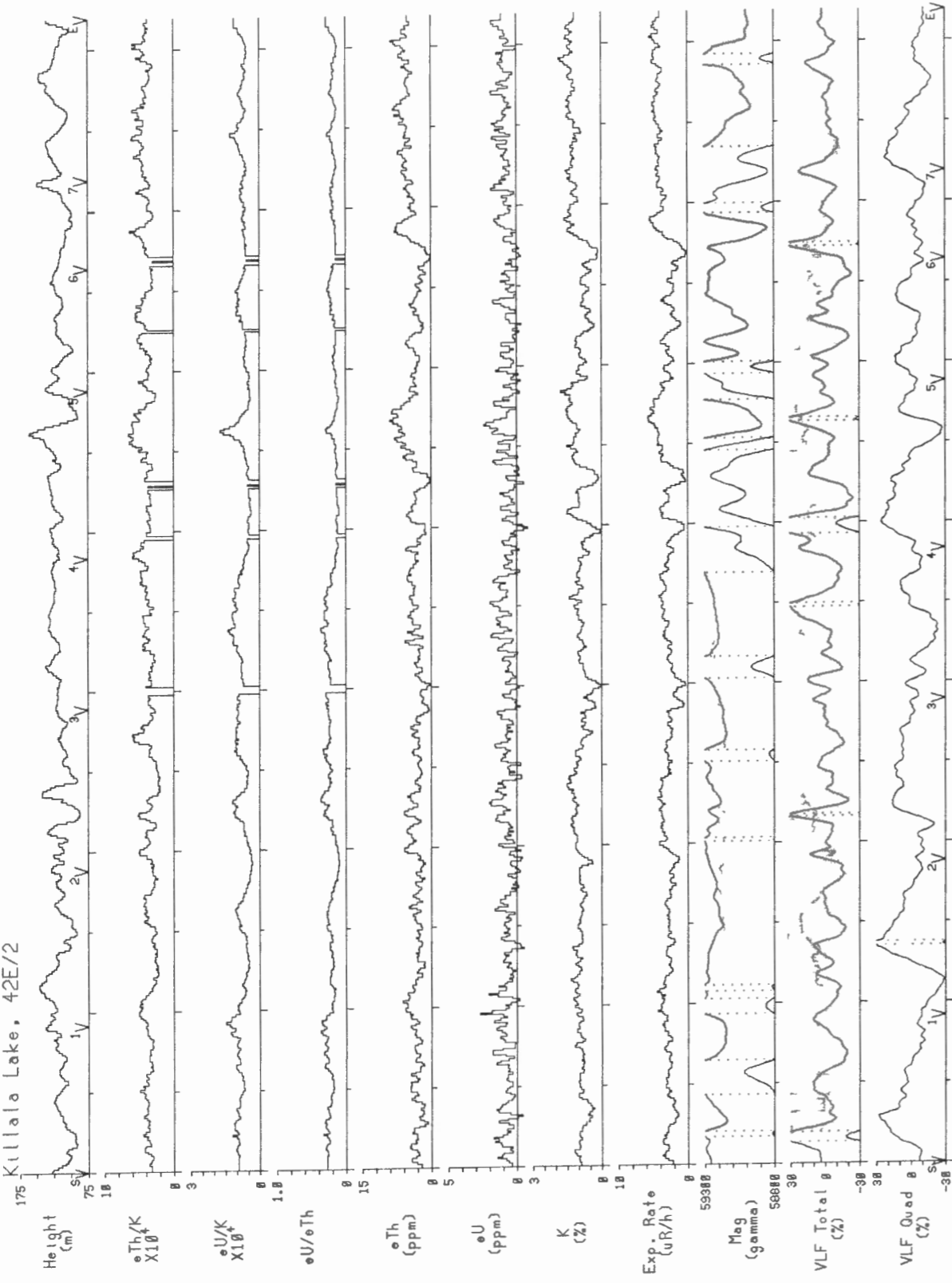
Line 63 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Killala Lake, 42E/2



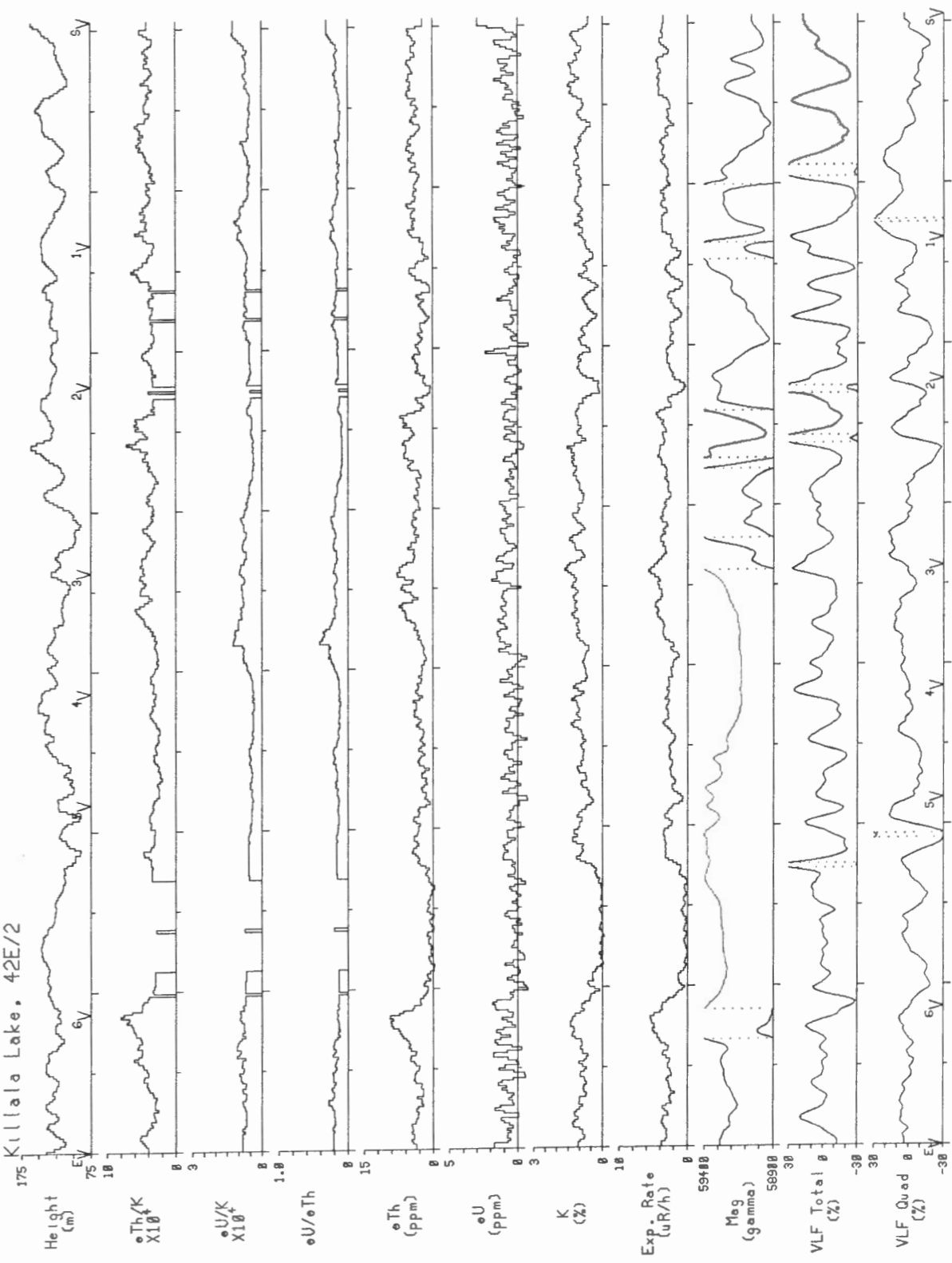
Line 64 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Killala Lake, 42E/2



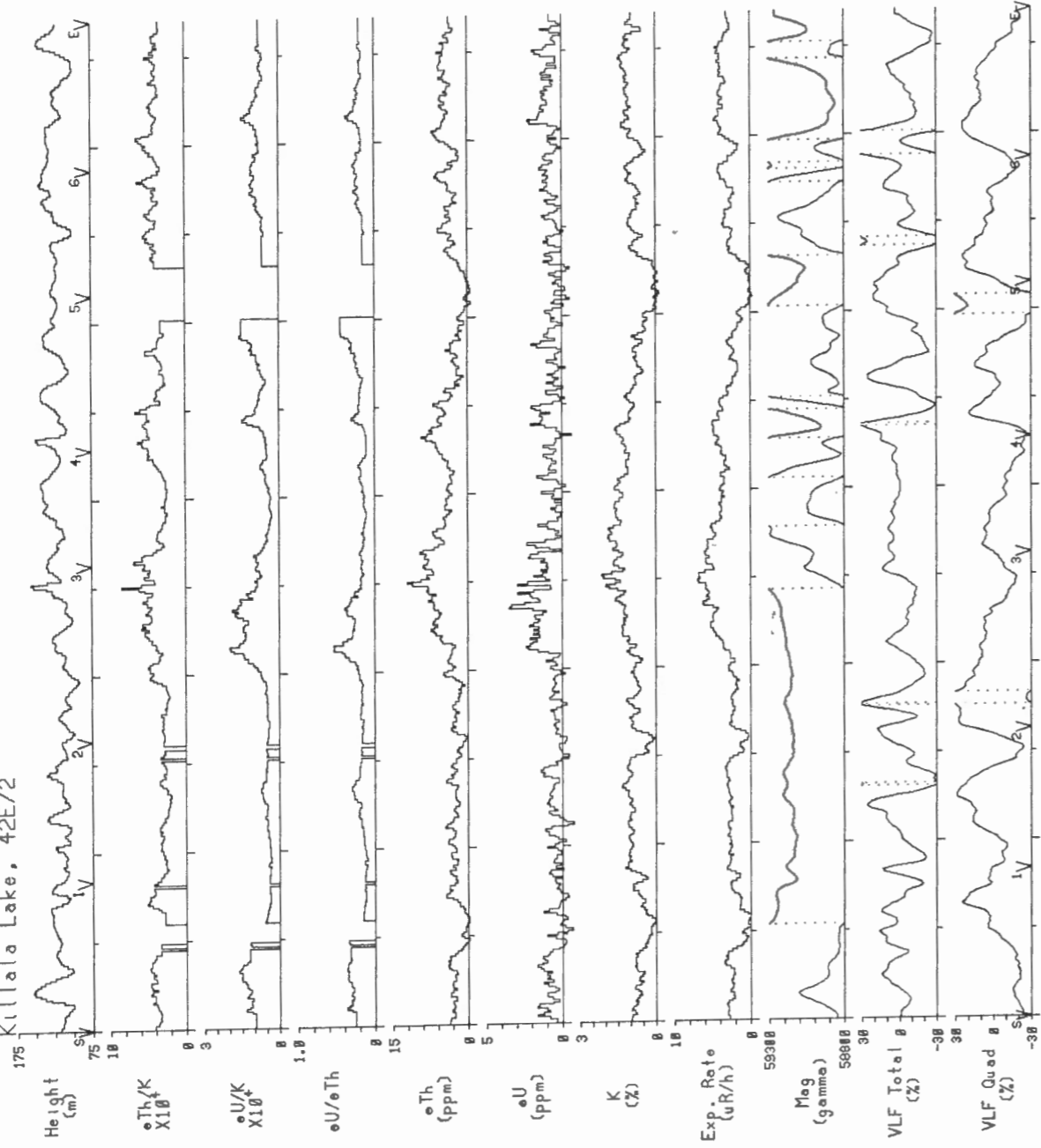
Line 65 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Killala Lake, 42E/2



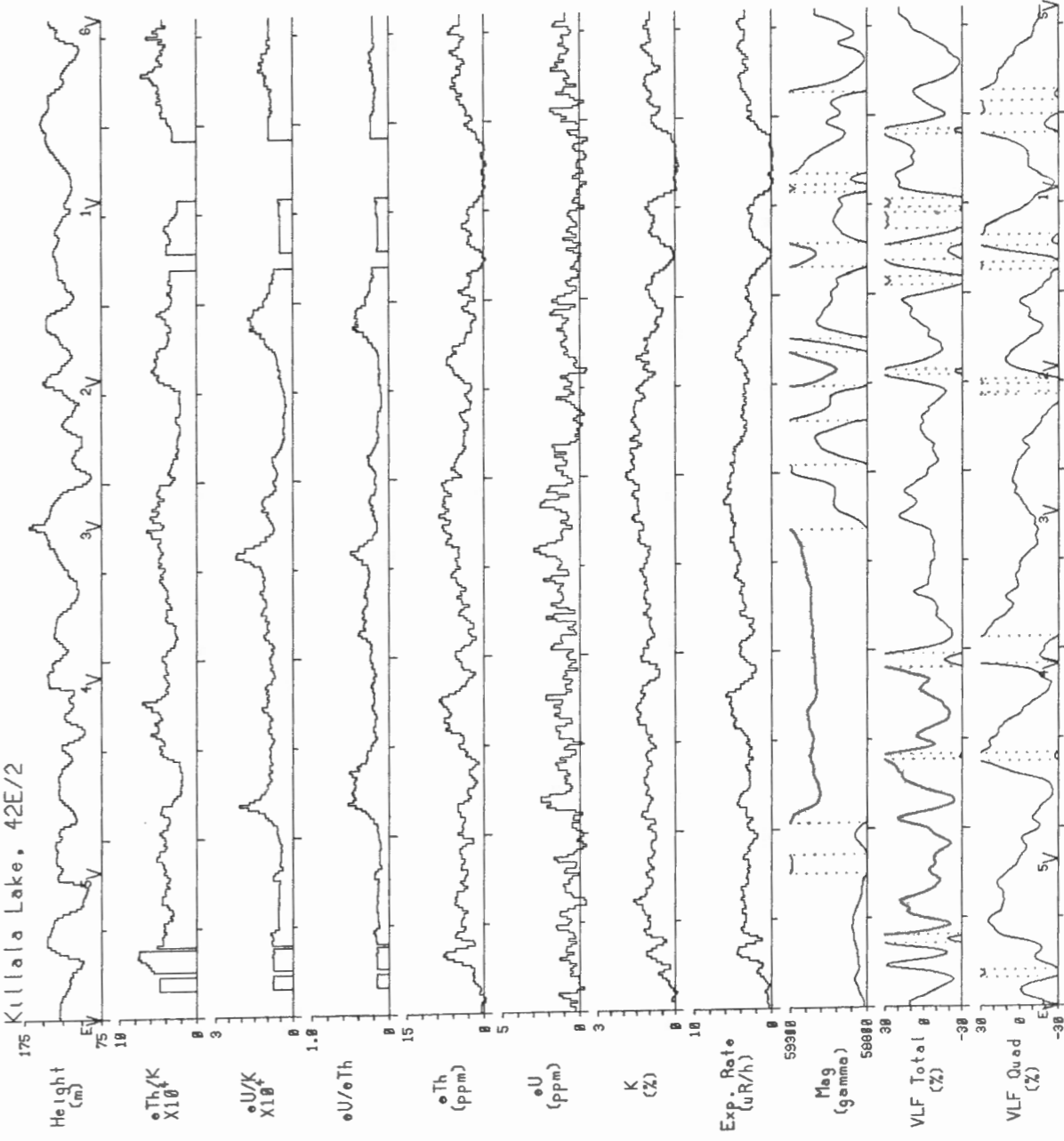
Line 66 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Killala Lake, 42E/2



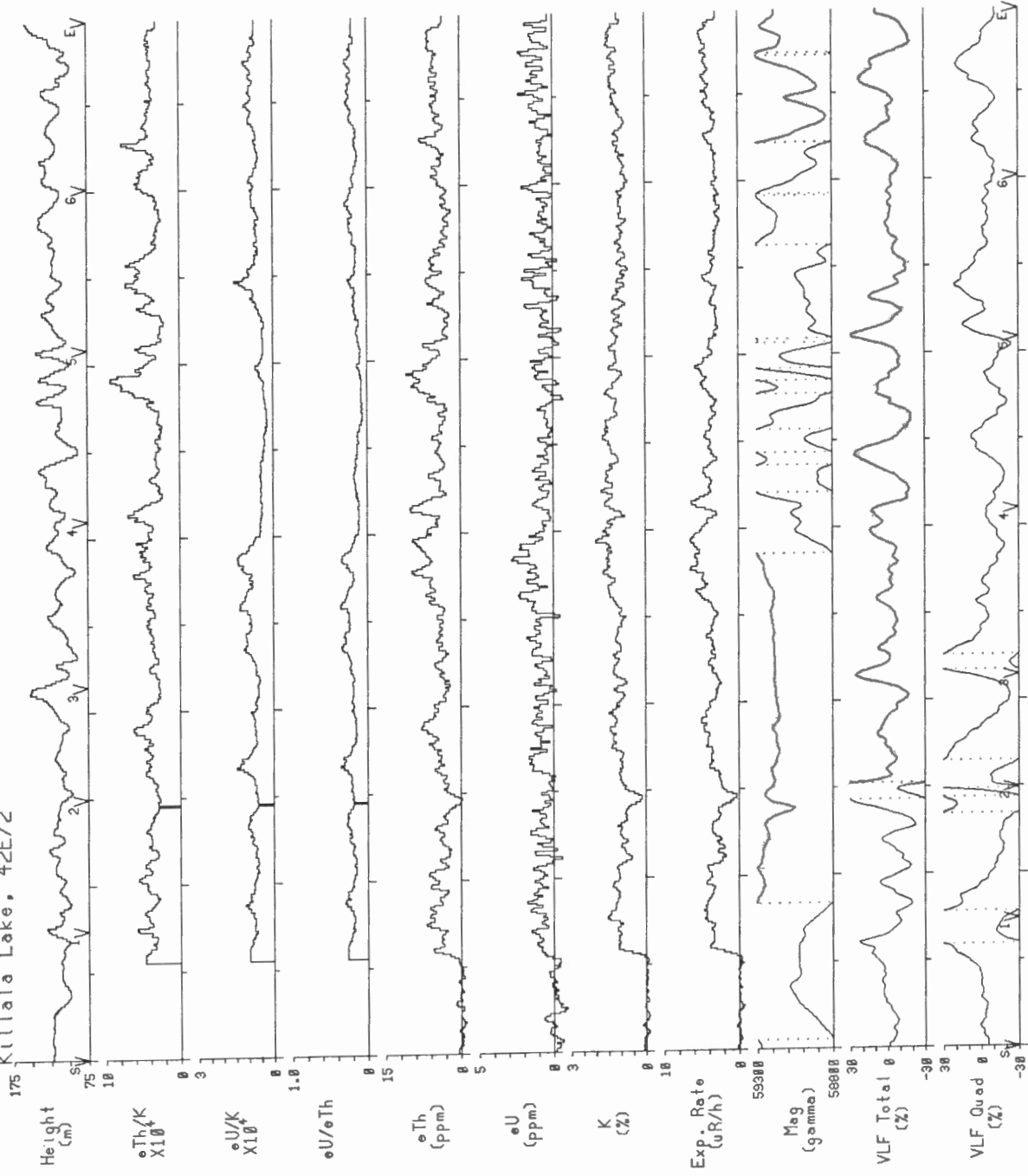
Line 67 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Killala Lake, 42E/2



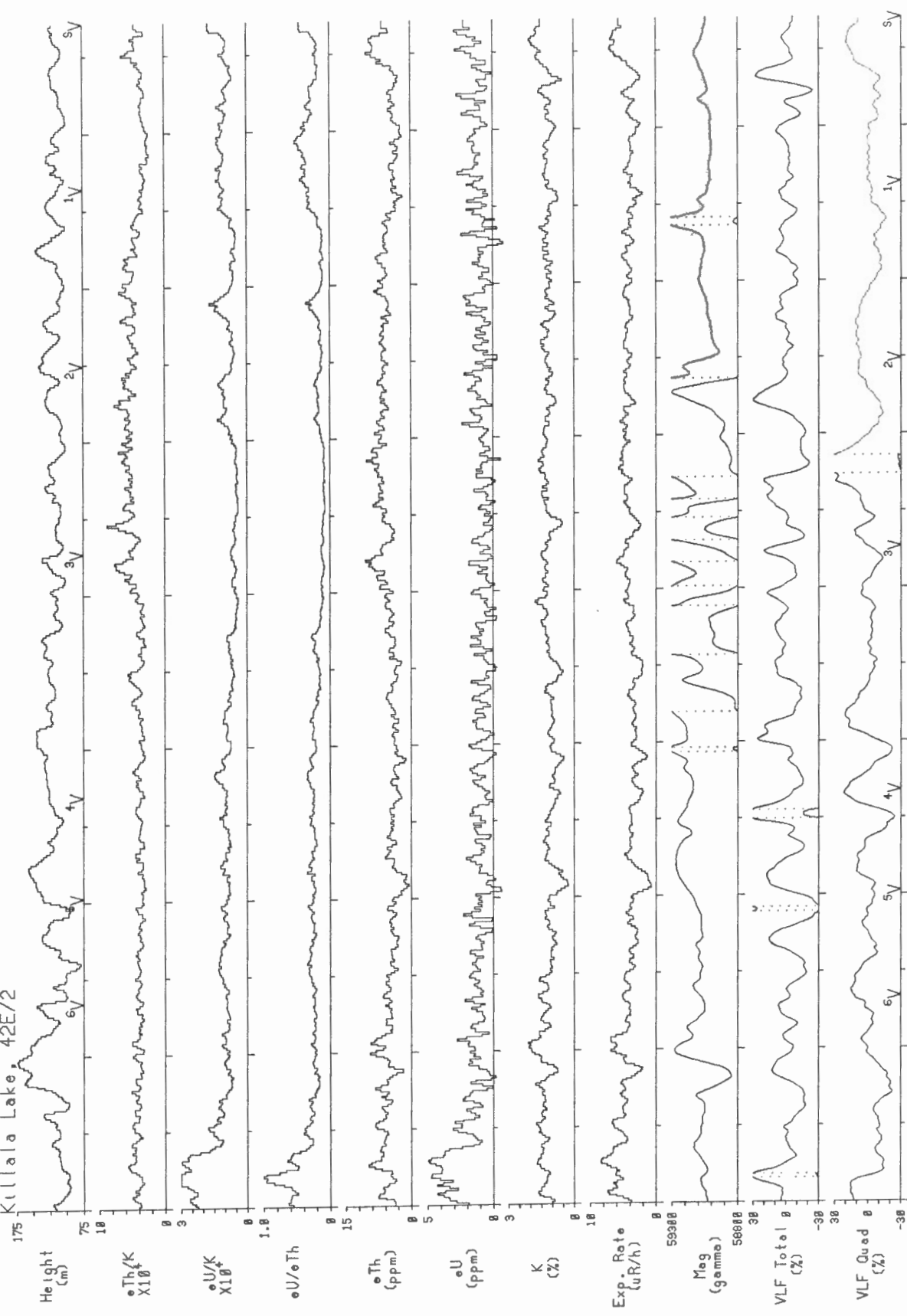
Line 68 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Kullala Lake, 42E/2



Line 69 | 2 km | Scale 1:150000

Schreiber Area, Ontario 1991  
Kullala Lake, 42E/2



Line 80 | 2 km | Scale 1:150000