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1985年　地殻傾斜観測資料集
〔関東・東海地域地殻活動観測網〕

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Data Report of Crustal Tilt Observation for 1985

by

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Abstract

National Research Center for Disaster Prevention (NRCDP) constructed an observation network of ground tilting in Kanto-Tokai area, central Japan, for the purpose of earthquake prediction, by using borehole-type tiltmeters. We report the tilt changes at 20 stations of the network, obtained in 1985. The tiltmeters are installed at the bottom of observation wells, the standard depth of which is 100m except three deep wells. Output voltage proportional to ground tilting at each site is transmitted to the NRCDP by PCM telemetry system. The data are recorded on magnetic disk units by real time processors, and stored on magnetic tapes. We show daily means and hourly sampled data of the tilt changes in diagrams. For reference, we also plot daily precipitation at each station.

1. 序

国立防災科学技術センターは，関東・東海地域に於いて孔井用傾斜計（力平衡型振子式）による地殻傾斜観測を行っており，1年毎にその結果を報告している（佐藤・立川，1979；

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佐藤ら，1980；立川ら，1981；立川ら，1982；立川ら，1984；立川ら，1985；立川ら，1986）．今回は，1985年に収録された分について報告する．

2. 観測施設

標準的な観測施設では図1に示すように，深度100 mの観測井孔底に傾斜計等の計器が設置されている（佐藤ら，1980）．ただし，中伊豆観測施設では横坑内のコンクリート台上に，府中・岩槻・下総観測施設では2,000 ～ 3,000 m級の深井戸孔底に設置されている．観測施設の緯度・経度等を表1に示す．また各観測施設の配置を図2に示す．図中，Ⅰ～Ⅴの5つのブロックに分け，このブロック単位に本資料を作成した．傾斜計の直交する2成分は東西・南北方向に向けてある．ただし深井戸の府中・岩槻・下総観測施設ではX・Y成分と称し，図3に示す方向に設置してある．

観測状態における傾斜計等の各観測機器の総合特性を表2に示す．

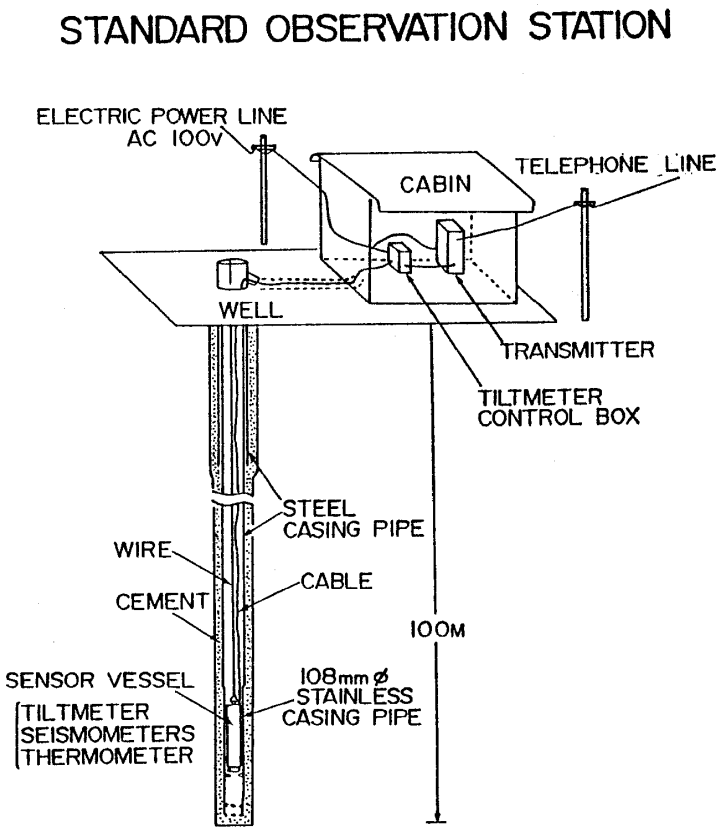

図 1　標準の地殻活動観測施設
Fig.1　Standard observation station.

表 1 観測施設リスト
Table 1 List of observation stations.

観測点名 Station	略称 Code	経度 Longitude(E)	緯度 Latitude(N)	計器標高 Altitude(m)	観測井深度 Well-depth(m)	孔底岩質 Lithology
三ケ日 Mikkabi	MKB	137° 30′ 50.1″	34° 48′ 05.4″	−38	99.3	砂岩・粘板岩（互層） Sandstone, Slate
本川根 Honkawane	HKW	138° 08′ 16.7″	35° 05′ 35.4″	343	106.2	砂岩・頁岩（互層） Sandstone, Shale
静岡 Shizuoka	SIZ	138° 19′ 46.6″	35° 06′ 41.8″	76	102.7	頁岩 Shale
近又 Chikamata	CMT	138° 14′ 55.5″	34° 58′ 19.9″	51	54.2	砂岩 Sandstone
野田沢 Nodazawa	NDZ	138° 16′ 47.0″	34° 57′ 37.7″	82	53.2	頁岩 Shale
岡部 Okabe	OKB	138° 15′ 13.8″	34° 57′ 00.0″	−30	101.8	粘板岩 Slate
大須賀 Ohsuka	OHS	138° 00′ 54.8″	34° 40′ 57.1″	−67	134.8	礫層 Gravel bed
戸田 Heda	HDA	138° 48′ 17.1″	34° 57′ 52.7″	−46	100.6	安山岩溶岩 Andesite lava
中伊豆 Nakaizu	JIZ	138° 59′ 48.4″	34° 54′ 46.4″	263	in a tunnel	凝灰岩質砂岩 Tuffaceous sandstone
下田 Shimoda	SMD	138° 56′ 03.5″	34° 44′ 15.3″	−13	87.7	輝石安山岩 Pyroxene andesite
塩山 Enzan	ENZ	138° 48′ 19.0″	35° 44′ 09.5″	807	88.7	花岡閃緑岩 Granodiorite
山北 Yamakita	YMK	139° 03′ 46.0″	35° 29′ 13.2″	56	100.7	石英閃緑岩 Quartz diorito
愛川 Aikawa	AKW	139° 19′ 04.5″	35° 31′ 12.5″	−10	91	砂岩 Sandstone
南足柄 Minamiashigara	ASG	139° 01′ 40.4″	35° 18′ 49.6″	386	94.4	砂岩 Sandstone
大島 Ohshima	OSM	139° 26′ 33.7″	34° 41′ 16.2″	−44	101.2	溶岩・スコリア Lava, Scoria
勝浦 Katsuura	KTU	140° 16′ 08.1″	35° 10′ 37.3″	−12	108	泥岩 Mudstone
銚子 Choshi	CHS	140° 51′ 18.0″	35° 42′ 08.0″	−42	94	砂岩 Sandstone
府中 Fuchu	FCH	139° 28′ 25.1″	35° 39′ 02.4″	−2707	2751	砂岩・粘板岩 Sandstone, Slate
岩槻 Iwatsuki	IWT	139° 44′ 17.0″	35° 55′ 33.0″	−3501	3510	変成岩類 Metamorphic rock
下総 Shimohsa	SHM	140° 01′ 25.6″	35° 47′ 36.4″	−2277	2300	結晶片岩 Crystalline schist

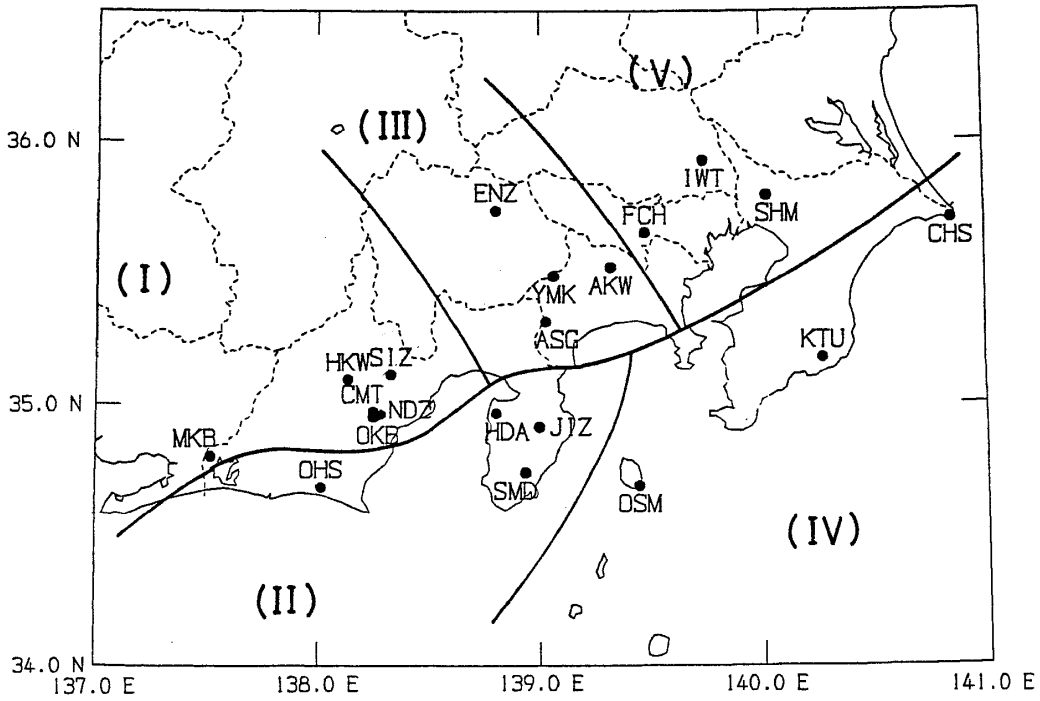

図 2　観測施設の配置
Fig.2　Location of observation stations.

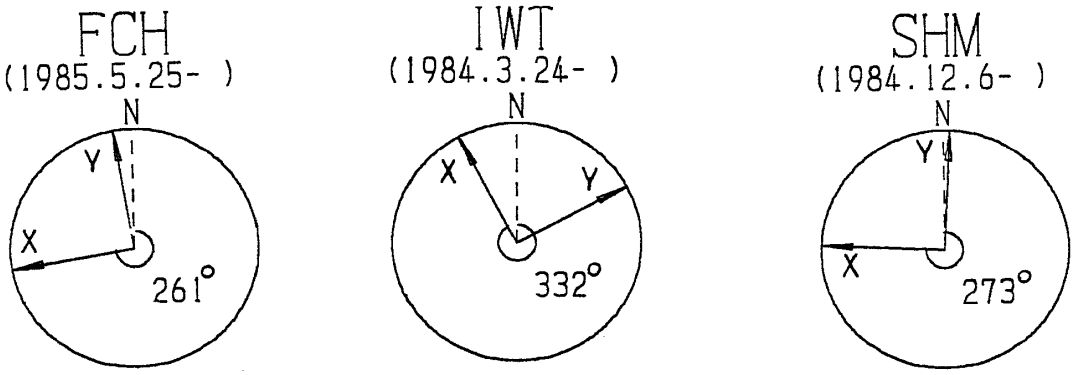

図 3　府中・岩槻・下総の計器設置方向
Fig.3　Directions of tiltmeters at FCH, IWT and SHM.

表 2　計器の総合特性
Table 2　Overall characteristics of instruments.

計器 Instrument	設置場所 Observation position	観測可能範囲 measuring range	精度 Accuracy	分解能 Resolution	温度特性 (傾斜計地上装置及びテレメータ装置) Temperature response
傾斜計 Tiltmeter	各観測井孔底 Bottom of the well	$\pm 2 \times 10^{-4}$ rad		6×10^{-9} rad	10^{-8} rad／℃
温度計 Thermometer	各観測井孔底 Bottom of the well	(設定温度を中心に) ±2.5℃	0.1℃	0.02℃	
気圧計 Barometer	観測棟内 In the cabin	1000±50mb	0.5mb	0.1mb	
雨量計 Rain gauge	観測棟横 Side of the cabin	0 − 100 mm	1 mm	1 mm	

3. データの収録処理方法

観測井孔底に設置された傾斜計の出力信号は，1秒毎にテレメータ装置（ＰＣＭ方式）によってつくば市内の国立防災科学技術センターに搬送され，オンラインのリアルタイムデータ収録監視システムの磁気ディスク記憶装置に毎分1回のサンプリングで記録される（以下，このデータを毎分値と呼ぶことにする）．1週間毎にディスクから磁気テープに書き写し，オンラインのデータ験測解析システムを用いて，この1分毎にサンプリングされたデータ（毎分値）を毎時1回のサンプリングで磁気テープへの編集を行った（以下，このデータを毎時値と呼ぶことにする）．毎分値，毎時値のサンプリングは原則として各々，正分，正時に行われる（詳細は，大久保ら，1982）．現在，収録システムは地震前兆解析システム（ＡＰＥ）に更新され（松村ら，1987），データの蓄積と利用が行われている（島田ら，1987）．本資料集に収録されたデータの整理と作図もＡＰＥによって行われた．データの欠測の原因としては停電・計器故障・テレメータ装置故障・点検調整等がある．今回から，傾斜の毎時値において欠測が3時間以内の場合は，出来る限り内挿補間している．補間データは，5次の多項式を用いて欠測前後のデータから作成している．地震または計器の故障等原因の明らかなステップはオフセットをかけて補正した．

4. 観測状況

最初に，３時間以上の主な欠測期間を図４に示す．次に観測期間中の傾斜データの欠測やステップの補正時刻，さらにその原因を表３にまとめて示す．

地震時のショックによって傾斜ステップが生じることがある．発生した日時，ステップ量および対応する地震の震央，マグニチュードをまとめて表４に示す．

１年間のおおよそのドリフト量を日平均値（毎時値の24時間単純平均）の最初の値と最後の値から見積って表５に示す．新設の観測施設や長期間欠測の観測施設については目安として年間分に換算したドリフト量を記した．また，各観測点の記録の特徴を簡単に表６にまとめて示すことにする．本川根（EW成分）・大島（ＮＳ成分）・大須賀（ＮＳ・EW成分）での傾斜変動は気圧による影響が大きいことを付記しておく．詳しくは，島田・立川（1985）を参照されたい．

今回より，岩井北（ＩWK）の記録は，ノイズが多いため掲載しないことにした．新たに千倉（ＣＫＲ）において12月末より観測を開始したが，期間が短いので次回から報告する予定である．

5. 観測結果

図５(a)－(l)に１年間の地殻変動の日平均値を，図５(m)に野田沢・中伊豆における気圧の日平均値及び近又における日雨量を示す．図６(a)－(j)には傾斜変動の毎時値を月毎に，同じく図６(k)には野田沢・中伊豆における気圧および近又における日雨量を示す．また，各ブロックのほぼ中央に位置する観測施設の日雨量を代表として図の下部に示してある．

図５中，補間していない欠測期間は空白にしており，傾斜変動が作図幅を越えた場合は６μ radian ずらして○印を記してある．また図６に於いては，ステップを補正したところには記号「Ｃ」を記し，さらに欠測と補間の原因が地震に伴う場合は「Ｅ」，計器その他観測システムによる場合は「Ｔ」等表３にならって記してある．また図６では，ドリフトのある複数の傾斜観測データを同一図内に作図するので，原則として２ケ月単位で奇数月の月初めに適宜オフセットを加えた．

最後に，参考のために各観測施設における日雨量をまとめて図７に示す．

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表 3　観測概況
Table 3　Detailed condition of observation.

Periods of lost data over 3 hours are all listed. Some of periods less than 3 hours are also listed. The cause of each event is described, if possible, using following abbreviations.

l : Lack of data.
c : offset Correction.
blank : interpolation.
E : Earthquake.
M : Maintenance.
A : check and Adjustment of the instruments.
P : interruption of Power supply at each station.
PC : interruption of Power supply at NRCDP.
TC : trouble at NRCDP.
TL : trouble of telemetry system.
T : other trouble.
1) data processing unit is stopped.
2) data processing system down.
3) a new cabin is built.
4) tiltmeter test in the vault.

month	MKB	HKW	SIZ
01			EW:01d14h :cE
	EW:06d01h :cE		EW:06d01h :cE
	NS:06d01h :cE		
			EW:07d08h :cE
			EW:11d09h :cE
			EW:25d17h :cE
			EW:27d07h :cE
02		NS:07d11h-21d18h:lT	
		07d11h-07d18h: A	
		08d10h-08d16h: A	
	08d10h-08d11h: P		
		EW:10d20h-16d10h:lTL	
		21d17h-21d19h:lM	
	22d15h-22d16h: M		
	EW:22d16h :cM		
		24d08h-24d16h:lTL	24d08h-24d16h:lTL
		25d15h-25d16h: A	
		26d16h-26d17h: A	
	EW:26d20h :cE	NS:26d20h :cE	
		EW:26d20h :cE	EW:26d21h :cE
			27d14h-27d18h: M
			EW:27d19h :cM
			NS:27d19h :cM
03		03d10h-03d15h:lTL	03d10h-03d15h:lTL
		10d09h-10d12h:lTL	10d09h-10d12h:lTL
			EW:11d13h :cE
			13d09h-13d15h:lP?
			EW:20d15h :cE
			EW:28d13h :cE
			NS:28d13h :cE
04			EW:04d06h :cE
			EW:09d15h :cE
			EW:13d02h :cE

month	MKB	HKW	SIZ
04			EW:17d09h :cE
			EW:22d00h :cE
05			EW:09d02h :cE
			EW:11d20h :cE
		14d23h-15d03h:1TL	14d23h-15d03h:1TL
			EW:23d11h :cE
			EW:28d09h :cE
06			EW:08d02h :cE
			NS:08d02h :cE
			EW:12d02h :cE
07			EW:22d15h :cT
			NS:22d15h :cT
			NS:29d05h :cE
			EW:29d05h :cE
			EW:29d09h :cE
08			EW:05d04h :cE
			EW:09d02h :cE
			EW:12d13h :cE
			NS:12d13h :cE
			EW:27d04h :cE
	27d09h-27d21h:1PC	27d09h-27d21h:1PC	27d09h-27d21h:1PC
			EW:28d09h :cE
09		EW:01d11h :cT	
		NS:01d11h :cT	
			11d16h-11d17h:1?
	12d10h-12d13h:1TC1)	12d10h-12d13h:1TC1)	12d10h-12d13h:1TC1)
			NS:13d08h :cE
	18d05h-18d17h:1TC2)	18d05h-18d17h:1TC2)	18d05h-18d17h:1TC2)
			EW:19d09h :cE
			EW:22d00h :cE
		22d09h-22d15h:1TL?	22d09h-22d15h:1TL?
10	03d00h-03d23h:1PC	03d00h-03d23h:1PC	03d00h-03d23h:1PC
			EW:04d00h :cE
		NS:04d22h :cE	EW:04d22h :cE
		EW:04d23h :cE	NS:04d23h :cE
12			02d17h-02d19h: M
			NS:02d20h :cM
			EW:02d20h :cM
		03d12h-03d16h:1M	
		NS:03d17h :cM	
		EW:03d17h :cM	
	04d14h-04d16h: M		
			EW:16d05h :cE
			EW:21d21h :cE
			EW:27d10h :cE

month	CMT	NDZ	OKB
02	20d17h-	20d17h-	20d16h-
03	20d15h:1T3)	20d15h:1T3)	20d15h:1T3)
	23d10h-23d15h:1M		
		29d11h-29d23h:1M	
07	21d22h-23d10h:1T	21d22h-23d10h:1T	21d22h-23d10h:1T
08	27d09h-27d22h:1PC	27d09h-27d21h:1PC	27d09h-27d22h:1PC
09	12d10h-12d13h:1TC1)	12d10h-12d13h:1TC1)	12d10h-12d13h:1TC1)
09	13d14h-13d16h: P	13d14h-13d16h: P	13d14h-13d16h: P
09	18d05h-18d17h:1TC2)	18d05h-18d17h:1TC2)	18d05h-18d17h:1TC2)
10	03d00h-03d23h:1PC	03d00h-03d23h:1PC	03d00h-03d23h:1PC
11	21d17h-21d21h:1M	21d21h-21d23h:1M	21d11h-21d17h:1M

month	OHS	HDA	JIZ	SMD
01	EW:06d01h :cE			
01			EW:06d01h :cE	
01			EW:07d08h-07d11h:1T	
02		NS:01d04h :cT?		
02			04d-08d:T4)	
02			EW:04d14h-04d17h:1T	
02				04d16h-04d16h: A
02				05d10h-05d17h:1A
02			NS:05d11h-05d23h:1T	
02			EW:05d11h-08d23h:1T	
02				06d10h-06d11h: A
02				07d17h-07d22h:1M
02			NS:08d16h-08d23h:1M	
02			NS:11d09h :cE	
02			22d12h-22d14h: A	
02				24d08h-24d16h:1TL
02				25d15h-25d15h: A
02	NS:26d20h :cE			
02			26d14h-26d20h: A	
02				26d16h-26d16h: A
02			27d11h-27d19h:1A	
03				03d10h-03d15h:1TL
03				10d09h-10d12h:1TL
03	15d15h-15d19h:1T	15d15h-15d19h:1T		
03	18d22h-19d08h:1T	18d22h-19d08h:1T		
03			20d11h-20d14h:1T	
04			EW:11d02h :cE	EW:11d02h :cE
04				NS:11d02h :cE
04			EW:13d02h :cE	
04			16d09h-16d13h:1P	
04			23d09h-23d11h: P	
05				14d23h-15d04h:1TL
05			NS:15d03h :cE	
05			NS:25d15h :cE	
06			03d09h-03d12h:1P	
07			21d22h-23d10h:1T	
08	27d09h-27d21h:1PC	27d09h-27d21h:1PC	27d09h-27d21h:1PC	27d09h-27d21h:1PC
09			06d16h-06d16h:1P	
09				NS:07d04h :cT
09				EW:07d04h :cT
09	12d10h-12d14h:1TC1)	12d10h-12d13h:1TC1)	12d10h-12d14h:1TC1)	12d10h-12d13h:1TC1)
09			EW:13d08h :cE	EW:13d09h :cE
09	18d05h-18d17h:1TC2)	18d05h-18d17h:1TC2)	18d05h-18d17h:1TC2)	18d05h-18d17h:1TC2)
09				22d09h-22d15h:1TL?
10	03d00h-03d23h:1PC	03d00h-03d23h:1PC	03d00h-03d23h:1PC	03d00h-03d23h:1PC
10				NS:04d07h :cE
10	EW:04d22h :cE			NS:04d22h :cE
10	NS:04d22h :cE		NS:04d22h :cE	EW:04d23h :cE
10				NS:18d04h :cE
11			EW:06d01h :cE	
11	29d14h-30d04h:1TL			
12	05d12h-05d15h:1M			
12	09d13h-09d16h:1TL			
12	10d15h-11d08h:1P?			
12			17d11h-17d19h:1M	
12		18d11h-18d23h:1M		
12				19d11h-19d17h:1M
12				EW:19d16h :cM
12			23d09h-23d12h:1P	

month	ENZ	YMK	AKW	ASG
01			NS:06d01h :cE	
			EW:06d01h :cE	
			NS:07d08h :cE	
			EW:07d08h :cE	
	21d12h-23d14h:1T			
				31d08h-01d10h:1P
02	05d14h-05d18h:1M			
			06d12h-06d18h:1M	
			NS:06d19h :cM	
			EW:06d19h :cM	
			EW:07d11h :cE	
			NS:07d11h :cE	
			NS:15d17h :cE	
	NS:19d23h :cT			
	EW:19d23h :cT			
				26d12h-26d16h:1M
03			NS:20d15h :cE	
			EW:20d15h :cE	
	EW:30d17h :cP			
	NS:30d17h :cP			
04			NS:11d03h :cE	
			NS:13d02h :cE	
			EW:13d02h :cE	
		18d08h-18d12h:1T		
05			11d17h-16d17h:1P	
			NS:16d18h :cP	
			EW:16d18h :cP	
06			23d10h-01d19h:1T	
07			08d09h-08d13h:1P	
			NS:15d08h :cE	
			EW:15d08h :cE	
		NS:16d17h :cT		
		EW:16d17h :cT		
	NS:19d17h :cT			
	EW:19d17h :cT			
	20d18h-25d14h:1P			
		21d20h-22d10h:1T		
			EW:29d05h :cE	
			NS:29d05h :cE	
			NS:29d09h :cE	
			EW:29d09h :cE	
08			EW:06d15h :cE	
			NS:06d15h :cE	
			NS:07d11h :cE	
			EW:07d11h :cE	
			EW:08d15h :cE	
			NS:08d15h :cE	
			NS:12d13h :cE	
			EW:12d13h :cE	
	27d09h-27d21h:1PC	27d09h-27d21h:1PC	27d09h-27d21h:1PC	27d09h-27d21h:1PC
09				06d08h-11d11h:1P
	12d10h-12d13h:1TC1)	12d10h-12d13h:1TC1)	12d10h-12d13h:1TC1)	12d10h-12d13h:1TC1)
	18d05h-18d17h:1TC2)	18d05h-18d17h:1TC2)	18d05h-18d17h:1TC2)	18d05h-18d17h:1TC2)
		19d01h-19d04h:1TL?		
		24d17h-25d11h:1TL?		
10	03d00h-03d23h:1PC	03d00h-03d23h:1PC	03d00h-03d23h:1PC	03d00h-03d23h:1PC
		NS:04d07h :cE	NS:04d07h :cE	
			EW:04d07h :cE	
	EW:04d22h :cE			EW:04d22h :cE
	NS:04d22h :cE		NS:04d22h :cE	
		NS:04d23h :cE		
			EW:17d23h :cE	
			NS:17d23h :cE	
			EW:28d22h :cE	
			NS:28d22h :cE	
			NS:29d22h :cE	
			EW:29d22h :cE	
11			EW:06d01h :cE	

month	ENZ	YMK	AKW	ASG
11			NS:06d01h :cE	
				18d13h-18d19h:1M
		19d08h-20d19h:1P		
		19d16h-19d16h:1M		
		NS:20d20h :cT		
		EW:20d20h :cT		
			EW:22d14h :cE	
			NS:22d14h :cE	
	25d13h-25d17h:1M			
12			EW:04d13h :cA	
			NS:04d13h :cA	

month	OSM	KTU	CHS
01	20d09h-20d16h:1P?		
	20d11h :cP?		
02		28d14h-28d18h:1M	
		NS:28d19h :cM	
03			01d10h-01d19h:1M
	04d16h-04d19h:1M		
	NS:04d20h :cM		
	EW:04d20h :cM		
04	NS:09d15h :cE		
	EW:09d15h :cE		
	NS:10d16h :cA		
	NS:11d02h :cE		
		NS:11d03h :cE	
		EW:11d03h :cE	
05		NS:11d20h :cE	
07	01d05h-01d08h:1P?		
			01d06h-01d13h:1P?
		01d07h-01d14h:1P?	
	EW:04d15h :cT		
	NS:04d15h :cT		
		NS:20d17h :cT	
		NS:31d17h :cE	
		EW:31d17h :cE	
08		NS:12d13h :cE	
	27d09h-27d21h:1PC	27d09h-27d21h:1PC	27d09h-27d22h:1PC
09			07d01h-07d02h:1P?
	11d19h-14d14h:1P		
	12d10h-12d13h:1TC1)	12d10h-12d13h:1TC1)	12d10h-12d13h:1TC1)
	18d05h-18d17h:1TC2)	18d05h-18d17h:1TC2)	18d05h-18d17h:1TC2)
	NS:26d10h-26d14h:1T		
10	03d00h-03d23h:1PC	03d00h-03d23h:1PC	03d00h-03d23h:1PC
		EW:04d08h :cE	
		NS:04d08h :cE	
	NS:04d22h :cE	NS:04d22h :cE	NS:04d22h :cE
		EW:04d22h :cE	
11		EW:06d01h :cE	
		NS:06d01h :cE	
		28d13h-28d17h:1M	
			29d14h-29d18h:1M
12	12d01h-12d04h:1TL		
		24d14h-24d16h: A	
		25d10h-25d16h:1A	
		26d10h-26d10h: A	
	26d10h-26d15h:1M		
	EW:26d16h :cM		

month	FCH	IWT	SHM
01		X :07d08h :cE	
		Y :07d08h :cE	
		Y :17d17h :cE	
		X :17d17h :cE	
02		X :03d19h :cE	
		Y :03d20h :cE	
		05d11h-05d14h:1T	
		X :20d14h :cE	
		Y :20d14h :cE	
03		X :11d13h :cE	
		Y :11d13h :cE	
		X :12d10h-12d12h:1T	
		X :20d15h :cE	
		Y :20d15h :cE	
		Y :20d17h :cE	
		X :20d17h :cE	
		X :29d02h :cE	
		Y :29d02h :cE	
		Y :29d19h :cE	
		X :29d19h :cE	
			30d07h-
04			03d15h:1TL
			Y :01d00h :cTL
		Y :11d02h :cE	
		X :11d02h :cE	
		X :13d02h :cE	
		Y :13d03h :cE	
05		02d11h-02d17h:1T	
		02d12h :cT	
		X :03d08h :cE	
		Y :03d08h :cE	
		Y :04d03h :cE	
		X :04d03h :cE	
		X :05d17h :cE	
		Y :05d17h :cE	
			11d11h : A
			X :11d12h :cT
			Y :11d13h :cT
		X :11d20h :cE	
		Y :11d21h :cE	
		12d17h-13d14h:1T	
		X :15d03h :cE	
		Y :15d03h :cE	
			X :16d13h :cT
			Y :16d13h :cT
		X :19d13h :cE	
		X :22d17h :cE	
		Y :22d18h :cE	
	24d:re-installation		
		Y :26d01h :cE	
		X :26d01h :cE	
	27d15h-27d18h:1T		
	27d19h :cT		
		X :28d07h :cE	
		Y :28d07h :cE	
06		X :03d10h :cE	
		Y :03d10h :cE	
	05d18h-05d19h:1T		
	X :05d20h :cT		
		X :14d05h :cE	
		Y :14d05h :cE	
	X :29d15h-29d19h:1T		
	Y :29d15h-29d21h:1T		

month	FCH	IWT	SHM
06	X :29d20h :cT		
	Y :29d22h :cT		
07		Y :12d00h :cE	
		X :12d00h :cE	
		X :15d08h :cE	
		Y :15d08h :cE	
		Y :16d22h :cE	
		X :16d22h :cE	
		21d22h-23d10h:1T	
		X :22d12h :cE	
	25d11h-26d17h:1T		
		X :29d04h :cE	
		Y :29d04h :cE	
		Y :29d05h :cE	
		X :29d05h :cE	
	29d10h-		
08	09d23h:1T		
		X :05d04h :cE	
		Y :05d04h :cE	
		Y :06d15h :cE	
		X :06d15h :cE	
		X :07d14h :cE	
		Y :07d14h :cE	
		Y :07d15h :cE	
	10d00h :cT		
		Y :10d21h :cE	
		X :10d21h :cE	
		X :12d13h :cE	
		Y :12d14h :cE	
		X :13d20h :cE	
		Y :13d21h :cE	
	Y :17d11h-22d11h:1T		
	X :21d00h-22d11h:1T		
		X :23d14h :cE	
		Y :23d15h :cE	
		25d15h-26d23h:1T	
	27d09h-27d21h:1PC	27d09h-27d21h:1PC	27d09h-27d21h:1PC
		Y :30d11h :cE	
		X :30d11h :cE	
		X :31d02h :cE	
		Y :31d02h :cE	
09		Y :01d05h :cE	
		X :01d05h :cE	
		X :02d01h :cE	
		Y :02d01h :cE	
		X :06d01h :cE	
		X :06d02h :cE	
		Y :06d02h :cE	
		Y :06d02h :cE	
		Y :06d10h :cE	
		X :06d10h :cE	
			06d23h-09d12h:1P
			09d00h :cP
		X :08d05h :cE	
		Y :08d05h :cE	
		Y :08d17h :cE	
		X :08d17h :cE	
		X :08d18h :cE	
		Y :08d18h :cE	
		Y :08d21h :cE	
		Y :09d09h :cE	
		X :09d09h :cE	
		X :09d21h :cE	

month	FCH	IWT	SHM
09		Y :09d21h :cE	
		Y :10d16h :cE	
		Y :11d12h :cE	
		X :11d12h :cE	
	12d10h-12d13h:ITC1)	12d10h-12d14h:ITC1)	12d10h-12d13h:ITC1)
		Y :12d15h :cT	
		X :12d15h :cT	
		X :12d21h :cE	
		Y :12d21h :cE	
		Y :13d04h :cE	
		Y :13d22h :cE	
		Y :17d05h :cE	
	18d05h-18d17h:ITC2)	18d05h-18d18h:ITC2)	18d05h-18d17h:ITC2)
		X :18d18h :cT	
		Y :18d19h :cT	
		X :22d13h :cE	
		Y :22d14h :cE	
		Y :23d11h :cE	
		X :23d11h :cE	
		24d11h-25d19h:IT	
		X :26d10h-26d14h:IT	
		Y :26d13h :cE	
		Y :26d23h :cE	
		X :26d23h :cE	
		X :29d09h :cE	
		Y :29d10h :cE	
10		Y :02d15h :cE	
	03d00h-03d23h:IPC	03d00h-03d23h:IPC	03d00h-03d23h:IPC
		Y :04d00h :cE	
		Y :04d07h :cE	
		X :04d07h :cE	
		X :04d22h-05d03h:IT	
		Y :04d22h :cE	04d22h : E
		17d12h-	
		overhaul	

表 4　地震の衝撃による傾斜ステップ
Table 4　Coseismic tilt steps.

JST mon	d	h	m	Station	Comp.	Tilt Step	MAG	Earthquake (JMA) region
JAN	1	13	19	SIZ	EW	-0.05	3.9	WESTERN NAGANO PREF
JAN	6	0	45	MKB	NS	-0.02	5.9	NE WAKAYAMA PREF
				MKB	EW	-0.04		
				SIZ	EW	-0.04		
				OHS	EW	-0.11		
				JIZ	EW	-0.07		
				AKW	NS	-0.04		
				AKW	EW	-0.04		
JAN	7	7	08	SIZ	EW	0.02	4.7	CENTRAL CHIBA PREF
				AKW	NS	-0.05		
				AKW	EW	-0.04		
				IWT	X	-0.26		
				IWT	Y	0.22		
JAN	11	8	57	SIZ	EW	-0.02	3.0	CENTRAL SHIZUOKA PREF
JAN	17	16	32	IWT	X	-0.07	3.7	SW IBARAKI PREF
				IWT	Y	0.05		

JST mon	d	h	m	Station	Comp.	Tilt Step	MAG	Earthquake (JMA) region
JAN	25	16	25	SIZ	EW	-0.02	3.5	WESTERN NAGANO PREF
JAN	27	6	36	SIZ	EW	-0.04	6.0	NORTHERN MIYAZAKI PREF
FEB	3	18	20	IWT	X	0.17	3.8	SW IBARAKI PREF
				IWT	Y	-0.24		
FEB	7	10	07	AKW	NS	0.08	4.3	KANAGAWA PREF
				AKW	EW	-0.07		
FEB	11	8	15	JIZ	NS	-0.05	3.4	E OFF IZU PENINSULA
FEB	15	16	02	AKW	NS	0.03	3.8	EASTERN YAMANASHI PREF
FEB	20	13	03	IWT	X	-0.05	4.2	EASTERN SAITAMA PREF
				IWT	Y	0.05		
FEB	26	19	53	MKB	EW	-0.05	5.0	WESTERN NAGANO PREF
				SIZ	EW	-0.20		
				OHS	NS	-0.02		
				HKW	NS	-0.02		
				HKW	EW	0.09		
MAR	11	12	01	SIZ	EW	-0.11	5.0	E OFF IBARAKI PREF
				IWT	X	-0.18		
				IWT	Y	0.15		
MAR	20	14	53	SIZ	EW	-0.04	4.6	SW IBARAKI PREF
				AKW	NS	-0.02		
				AKW	EW	-0.02		
				IWT	X	-0.18		
				IWT	Y	0.15		
MAR	20	16	33	IWT	X	-0.15	3.5	SW IBARAKI PREF
				IWT	Y	0.11		
MAR	28	12	20	SIZ	NS	-0.04	2.8	CENTRAL SHIZUOKA PREF
				SIZ	EW	-0.05		
MAR	29	1	07	IWT	X	-0.04	6.5	NORTHERN AKITA PREF
				IWT	Y	0.04		
MAR	29	18	47	IWT	X	0.04	4.2	EASTERN SAITAMA PREF
				IWT	Y	-0.04		
APR	4	5	21	SIZ	EW	-0.04	6.6	W OFF OGASAWARA
APR	9	14	15	SIZ	EW	-0.04	5.5	FAR S OFF BOSO PENINSULA
				OSM	NS	-0.04		
				OSM	EW	0.04		
APR	11	1	26	JIZ	EW	0.04	6.8	NEAR TORISHIMA IS
				SMD	NS	0.04		
				SMD	EW	0.02		
				AKW	NS	-0.17		
				OSM	NS	0.02		
				KTU	NS	-0.57		
				KTU	EW	-0.24		
				IWT	X	0.11		
				IWT	Y	-0.15		
APR	13	1	12	SIZ	EW	-0.02	4.5	CENTRAL CHIBA PREF
				JIZ	EW	-0.05		
				AKW	NS	-0.05		
				AKW	EW	-0.04		
				IWT	X	0.44		
				IWT	Y	-0.41		
APR	17	8	09	SIZ	EW	-0.02	2.8	EASTERN SHIZUOKA PREF
APR	21	23	29	SIZ	EW	-0.02	4.5	NORTHERN CHIBA PREF
MAY	3	7	36	IWT	X	0.11	4.0	E OFF IBARAKI PREF
				IWT	Y	0.04		
MAY	4	2	30	IWT	X	0.07	3.5	TOCHIGI GUNMA BORDER
				IWT	Y	-0.04		
MAY	5	16	09	IWT	X	0.11		E OFF FUKUSHIMA PREF
				IWT	Y	-0.04		
MAY	9	11	02	SIZ	EW	-0.05	2.8	CENTRAL SHIZUOKA PREF
MAY	11	19	40	SIZ	EW	-0.03	5.3	E OFF FUKUSHIMA PREF
				KTU	NS	-0.04		

JST mon	d	h	m	Station	Comp.	Tilt Step	Earthquake (JMA) MAG	region
MAY	15	12	29	JIZ	NS	0.04	4.5	EASTERN SAITAMA PREF
				IWT	X	0.04		
				IWT	Y	0.04		
MAY	19	12	23	IWT	X	0.07	2.8	TOKYO PREF
MAY	22	16	27	IWT	X	-0.54	4.3	SW IBARAKI PREF
				IWT	Y	0.30		
MAY	23	10	45	SIZ	EW	-0.04	3.1	CENTRAL SHIZUOKA PREF
MAY	25	14	19	JIZ	NS	-0.04	2.9	E OFF IZU PENINSULA
MAY	26	0	26	IWT	X	-0.07	3.0	SW IBARAKI PREF
				IWT	Y	0.04		
MAY	28	6	53	IWT	X	-0.04	2.8	SW IBARAKI PREF
				IWT	Y	0.02		
MAY	28	9	32	SIZ	EW	-0.02	3.8	WESTERN NAGANO PREF
JUN	3	9	11	IWT	X	-0.02	4.4	E OFF IBARAKI PREF
				IWT	Y	0.02		
JUN	8	1	29	SIZ	NS	-0.02	4.8	CENTRAL CHIBA PREF
				SIZ	EW	-0.05		
JUN	12	1	05	SIZ	EW	-0.03	3.1	MT. FUJI REGION
JUN	14	4	36	IWT	X	-0.05	5.7	FAR S OFF TOKAI DISTRICT
				IWT	Y	0.04		
JUL	11	23	58	IWT	X	-0.05	4.2	SOUTHERN IBARAKI PREF
				IWT	Y	0.05		
JUL	15	7	21	AKW	NS	-0.07	4.3	NORTHERN CHIBA PREF
				AKW	EW	-0.07		
				IWT	X	-0.18		
				IWT	Y	0.18		
JUL	16	21	21	IWT	X	-0.08	3.9	EASTERN SAITAMA PREF
				IWT	Y	0.07		
JUL	22	11	30	IWT	X	0.04	3.7	SW IBARAKI PREF
JUL	29	3	05	IWT	X	-0.11	4.7	E OFF FUKUSHIMA PREF
				IWT	Y	0.07		
JUL	29	4	33	SIZ	NS	0.02	5.5	EASTERN FUKUSHIMA PREF
				SIZ	EW	-0.15		
				AKW	NS	-0.11		
				AKW	EW	-0.07		
				IWT	X	0.61		
				IWT	Y	-0.22		
JUL	29	8	05	SIZ	EW	-0.02	3.6	EASTERN YAMANASHI PREF
				AKW	NS	-0.02		
				AKW	EW	-0.02		
JUL	31	16	29	KTU	NS	-0.05	4.3	SE OFF BOSO PENINSULA
				KTU	EW	-0.02		
AUG	5	3	08	SIZ	EW	-0.04	4.7	CENTRAL YAMAMASHI PREF
				IWT	X	0.17		
				IWT	Y	-0.15		
AUG	6	14	58	AKW	NS	-0.04	5.0	E OFF IBARAKI PREF
				AKW	EW	-0.02		
				IWT	X	0.09		
				IWT	Y	-0.07		
AUG	7	10	32	AKW	NS	-0.05	4.2	CENTRAL CHIBA PREF
				AKW	EW	-0.04		
AUG	7	13	48	IWT	X	0.15	3.7	SW IBARAKI PREF
				IWT	Y	-0.15		
AUG	7	14	10	IWT	Y	0.04	3.8	EASTERN SAITAMA PREF
AUG	8	14	35	AKW	NS	0.07	4.1	KANAGAWA PREF
				AKW	EW	0.05		
AUG	9	1	18	SIZ	EW	-0.04	5.7	JAVA
AUG	10	20	30	IWT	X	0.09	3.4	SW IBARAKI PREF
				IWT	Y	-0.07		
AUG	12	12	49	SIZ	NS	-0.04	6.4	E OFF FUKUSHIMA PREF
				SIZ	EW	-0.04		

JST mon	d	h	m	Station	Comp.	Tilt Step	Earthquake (JMA) MAG	region
				AKW	NS	-0.11		
				AKW	EW	-0.05		
				KTU	NS	-0.07		
				IWT	X	-0.41		
				IWT	Y	0.37		
AUG	13	19	58	IWT	X	0.18	4.0	SW IBARAKI PREF
				IWT	Y	-0.31		
AUG	23	13	27	IWT	X	-0.31	(3.9	32.995N 141.561E 214.0KM)
				IWT	Y	0.35		
AUG	27	3	20	SIZ	EW	-0.05	2.8	AKAISHI MOUNTAINS REG
AUG	28	8	15	SIZ	EW	-0.02	3.8	HAMANAKO LAKE REGION
AUG	30	10	13	IWT	X	0.02	3.5	E OFF IBARAKI PREF
				IWT	Y	0.04		
AUG	31	1	48	IWT	X	0.02		SW IBARAKI PREF
				IWT	Y	0.02		
SEP	1	4	23	IWT	X	0.02	3.2	SOUTHERN IBARAKI PREF
				IWT	Y	0.05		
SEP	2	0	23	IWT	X	0.04	4.4	E OFF BOSO PENINSULA
				IWT	Y	0.05		
SEP	6	0	33	IWT	X	0.07	5.4	FAR S OFF SHIZUOKA PREF
				IWT	Y	0.26		
SEP	6	1	30	IWT	X	0.04	6.0	W OFF OGASAWARA
				IWT	Y	0.05		
SEP	6	9	22	IWT	X	0.05	4.9	FAR E OFF FUKUSHIMA PREF
				IWT	Y	0.11		
SEP	8	4	29	IWT	X	0.04	4.0	NORTHERN CHIBA PREF
				IWT	Y	0.07		
SEP	8	16	37	IWT	X	0.07	(2.3	36.201N 139.792E 56.0KM)
				IWT	Y	0.18		
SEP	8	17	39	IWT	X	-0.18	3.9	TOKYO BAY REGION
				IWT	Y	0.15		
SEP	8	20	59	IWT	Y	0.02	2.4	TOCHIGI GUNMA BORDER
SEP	9	8	54	IWT	X	0.04	3.4	WESTERN FUKUSHIMA PREF
				IWT	Y	0.04		
SEP	9	20	09	IWT	X	0.07	3.7	E OFF IBARAKI PREF
				IWT	Y	0.07		
SEP	10	15	54	IWT	Y	0.07	(4.5	32.398N 139.667E 323.0KM)
SEP	11	11	34	IWT	X	0.04	3.5	WESTERN FUKUSHIMA PREF
				IWT	Y	0.07		
SEP	12	20	03	IWT	X	0.09	3.3	SW IBARAKI PREF
				IWT	Y	0.11		
SEP	13	3	24	IWT	Y	0.02		SOUTHERN BOSO PENINSULA
SEP	13	7	58	SIZ	NS	-0.02	3.9	SOUTHERN SURUGA BAY REG
				JIZ	EW	-0.18		
				SMD	EW	-0.22		
SEP	13	21	53	IWT	Y	0.04	4.6	E OFF FUKUSHIMA PREF
SEP	17	4	10	IWT	Y	0.04		MID FUKUSHIMA PREF
SEP	19	8	11	SIZ	EW	-0.02	(1.6	34.991N 138.409E 24.5KM)
SEP	21	23	43	SIZ	EW	-0.04	3.4	NEAR NIIJIMA ISLAND
SEP	22	12	59	IWT	X	0.12		SOUTHERN IBARAKI PREF
				IWT	Y	0.26		
SEP	23	10	20	IWT	X	-0.04	2.6	SW IBARAKI PREF
				IWT	Y	0.22		
SEP	26	12	39	IWT	Y	0.04		TOKYO PREF
SEP	26	22	24	IWT	X	0.18	3.2	TOKYO PREF
				IWT	Y	0.11		
SEP	29	8	41	IWT	X	-0.07		EASTERN SAITAMA PREF
				IWT	Y	0.26		
OCT	2	14	52	IWT	Y	0.04		NORTHERN TOCHIGI PREF
OCT	3	20	57	SIZ	EW	-0.02	5.1	NW SHIGA PREF
				IWT	Y	0.04		

JST mon	d	h	m	Station	Comp.	Tilt Step	Earthquake (JMA) MAG	region
OCT	4	6	28	SMD	NS	-0.04	5.6	SE OFF BOSO PENINSULA
				YMK	NS	-0.05		
				AKW	NS	-0.11		
				AKW	EW	-0.07		
				KTU	NS	-0.31		
				KTU	EW	0.15		
				IWT	X	-0.14		
				IWT	Y	0.04		
OCT	4	21	25	HKW	NS	-0.09	6.1	SOUTHERN IBARAKI PREF
				HKW	EW	0.33		
				SIZ	NS	-0.33		
				SIZ	EW	-0.15		
				OHS	NS	-0.07		
				OHS	EW	-0.07		
				JIZ	NS	0.04		
				SMD	NS	-0.15		
				SMD	EW	-0.41		
				ENZ	NS	-0.13		
				ENZ	EW	-0.11		
				YMK	NS	-0.26		
				AKW	NS	0.07		
				ASG	EW	-0.09		
				OSM	NS	0.15		
				KTU	NS	-0.17		
				KTU	EW	0.09		
				CHS	NS	0.04		
				IWT	Y	0.04		
				SHM	X	-0.6		
				SHM	Y	1.5		
OCT	17	22	06	AKW	NS	-0.07	4.5	EASTERN SAITAMA PREF
				AKW	EW	-0.07		
OCT	18	3	58	SMD	NS	-0.07	3.4	SOUTHERN IZU PENINSULA
OCT	28	21	18	AKW	NS	-0.09	3.5	EASTERN YAMANASHI PREF
				AKW	EW	-0.09		
OCT	29	21	23	AKW	NS	0.11	3.8	E OFF IZU PENINSULA
				AKW	EW	0.05		
NOV	6	0	30	JIZ	EW	-0.31	5.0	SOUTHERN BOSO PENINSULA
				AKW	NS	-0.04		
				AKW	EW	-0.04		
				KTU	NS	-0.04		
				KTU	EW	-0.05		
NOV	22	13	17	AKW	NS	-0.05	4.9	SW IBARAKI PREF
				AKW	EW	-0.05		
DEC	16	4	35	SIZ	EW	-0.04	4.0	NORTHERN MIE PREF
DEC	21	20	41	SIZ	EW	-0.04	(3.5	34.808N 138.470E 21.0KM)
DEC	27	9	14	SIZ	EW	-0.04	2.9	SOUTHERN SURUGA BAY REG

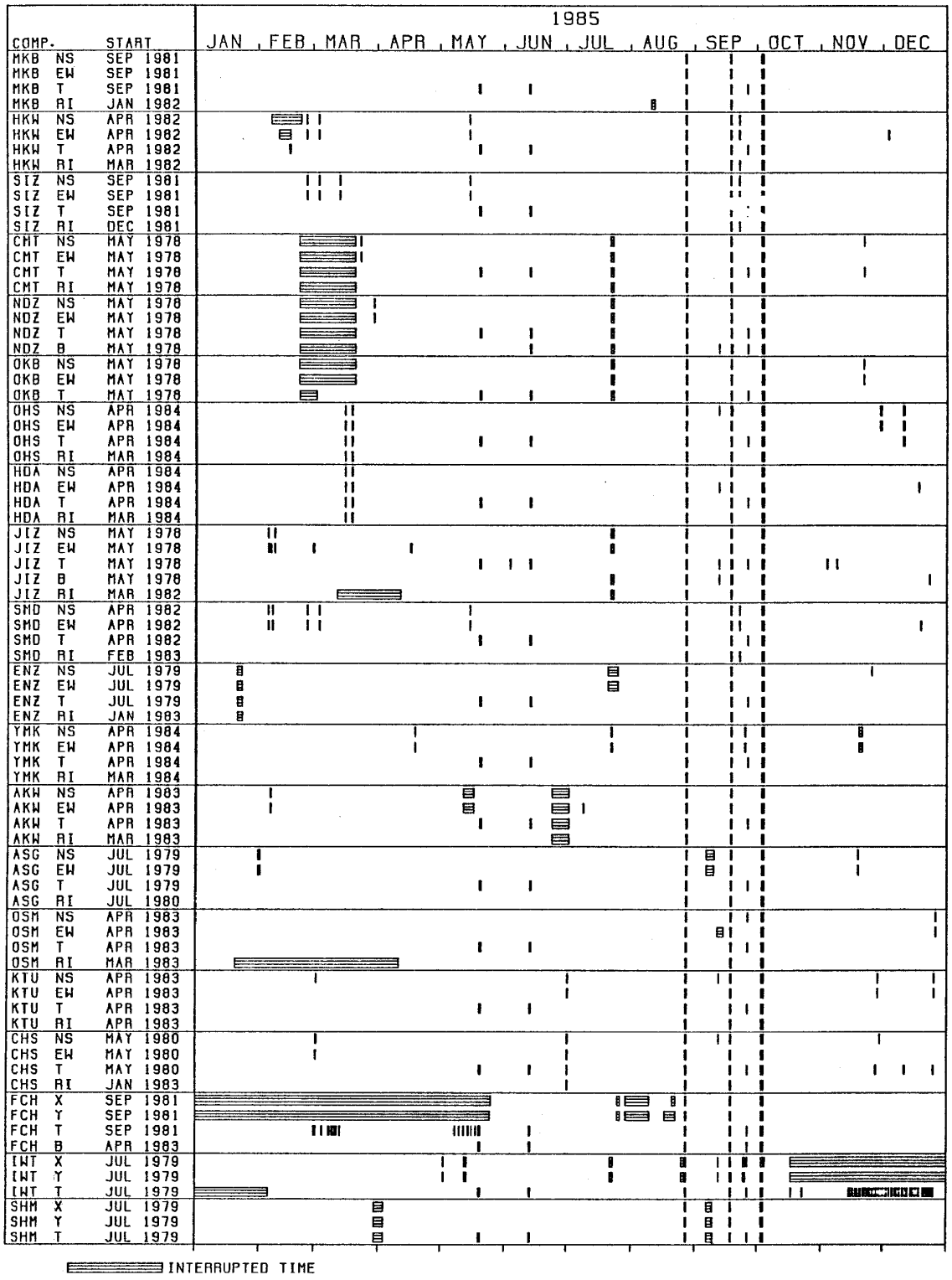


図 4　欠測期間

Fig.4　Interrupted periods over 3 hours of the observation.

表 5 傾斜変化のドリフト量
Table 5 Drifts of observed tilt changes.

(+：N (X), E (Y) down.
Unit：micro－radian／year.)

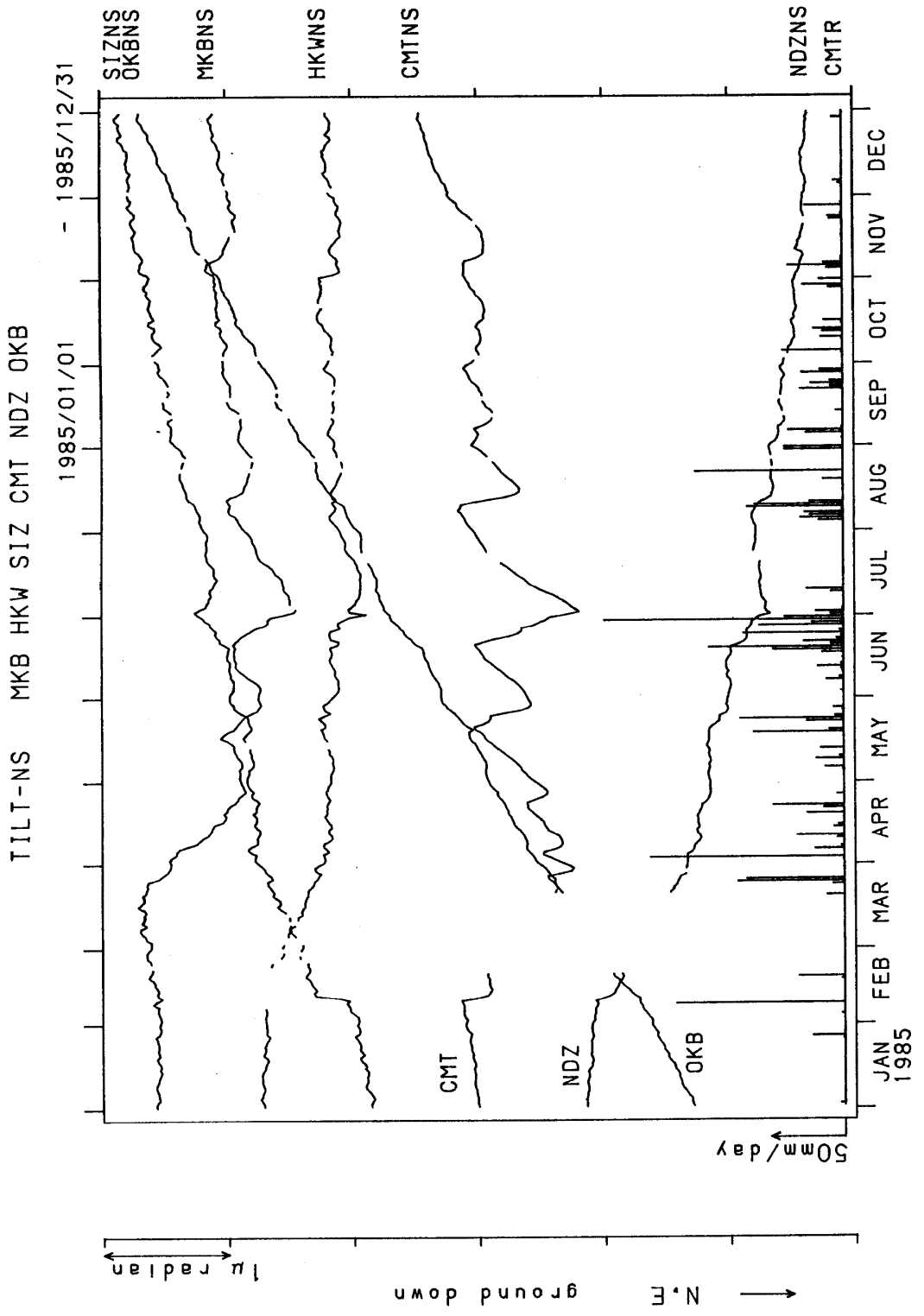
Station	component NS (X)	SW (Y)
MKB	+0.5	−1.2
HKW	+0.5	−1.1
SIZ	−2.0	+1.6
CMT	−0.5	+0.2
NDZ	+1.8	+0.5
OKB	−4.4	+1.6
OHS	−1.2	+3.4
SMD	−3.6	−2.4
HDA	−1.3	+0.1
JIZ	+0.7	0.0
ENZ	−0.7	+0.5
YMK	−0.0	−2.4
AKW	+0.8	+4.9
ASG	+0.7	−1.4
CHS	+0.1	+0.5
KTU	+3.2	−0.6
OSM	−3.1	−3.5
FCH	+57.7	+12.1
IWT	+5.0	+7.2
SHM	+3.5	+1.9

表 6 各観測点での記録状態の特徴
Table 6 Quality of recorded data at each station.

MKB	短周期ノイズ（特にEW成分）
HKW	
SIZ	地震時のステップ多い．EW成分の方が多い．
CMT	EW成分に数分から数十分の時定数を持った不規則な変動．
NDZ	回復性のステップ．EW成分に不規則な変動．
OKB	短周期ノイズ．
OHS	ふらつき．次第に小さくなって年末には目立たなくなる．
HDA	
JIZ	短周期ノイズ．特にEW成分は大きくステップも頻々見られる．
SMD	
ENZ	回復性のステップが多い．
YMK	
AKW	回復性のステップが多い．9月には2，3時間毎に発生． 5，6月ふらつきが大きくなる．
ASG	回復性のステップが多い．時々，ふらついている．
OSM	メンテナンス後1カ月間ほどEW成分にステップが多く出現．
KTU	
CHS	ふらつき．
FCH	7月まではドリフト，ふらつき共に大きい．
IWT	地震時のステップが多い．ふらつきあり．
SHM	短周期ノイズ．10月の地震時のステップの回復時間が長い．

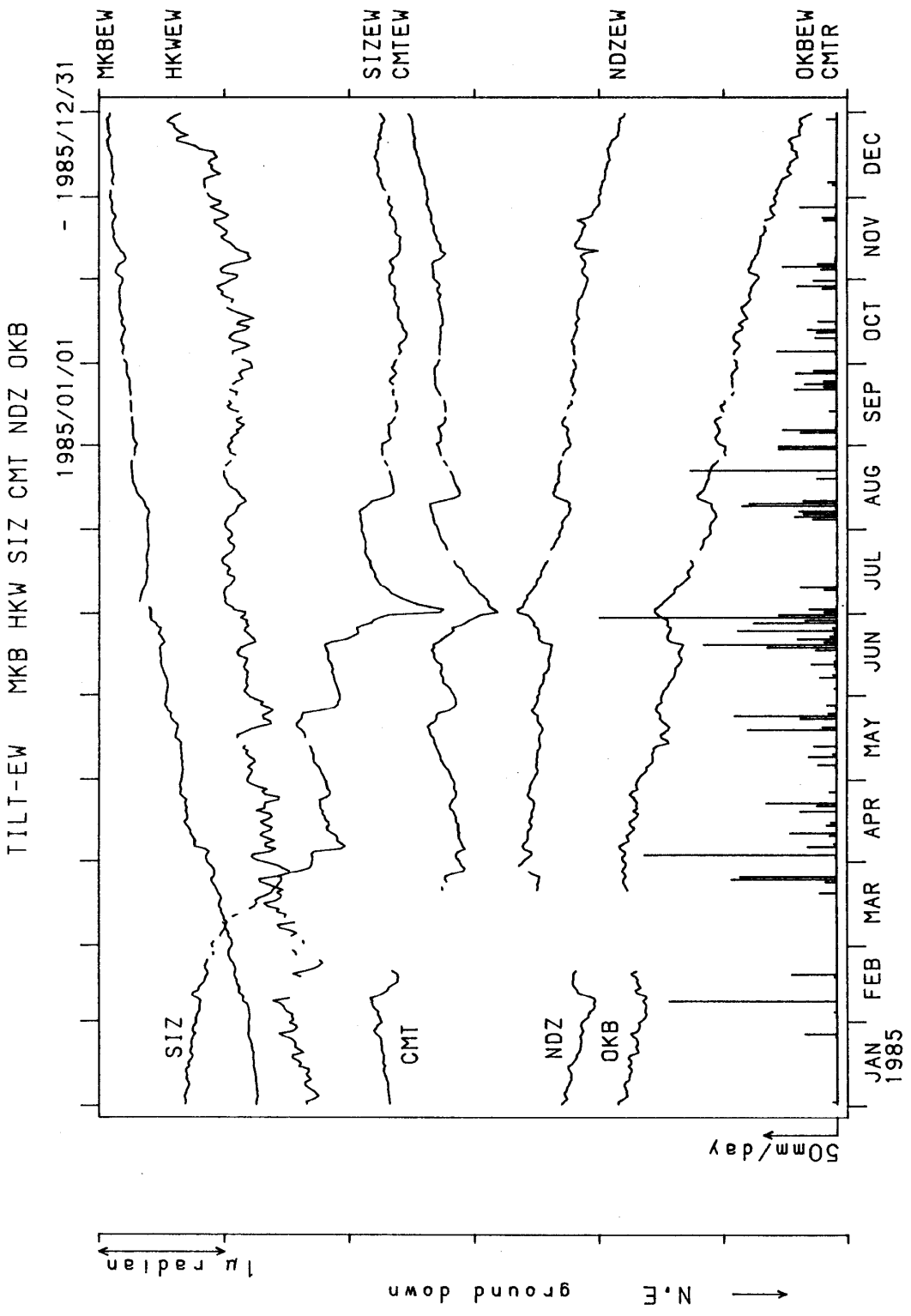
図 5　地殻傾斜の年変化

Fig.5　Daily means of the crustal tilt data.



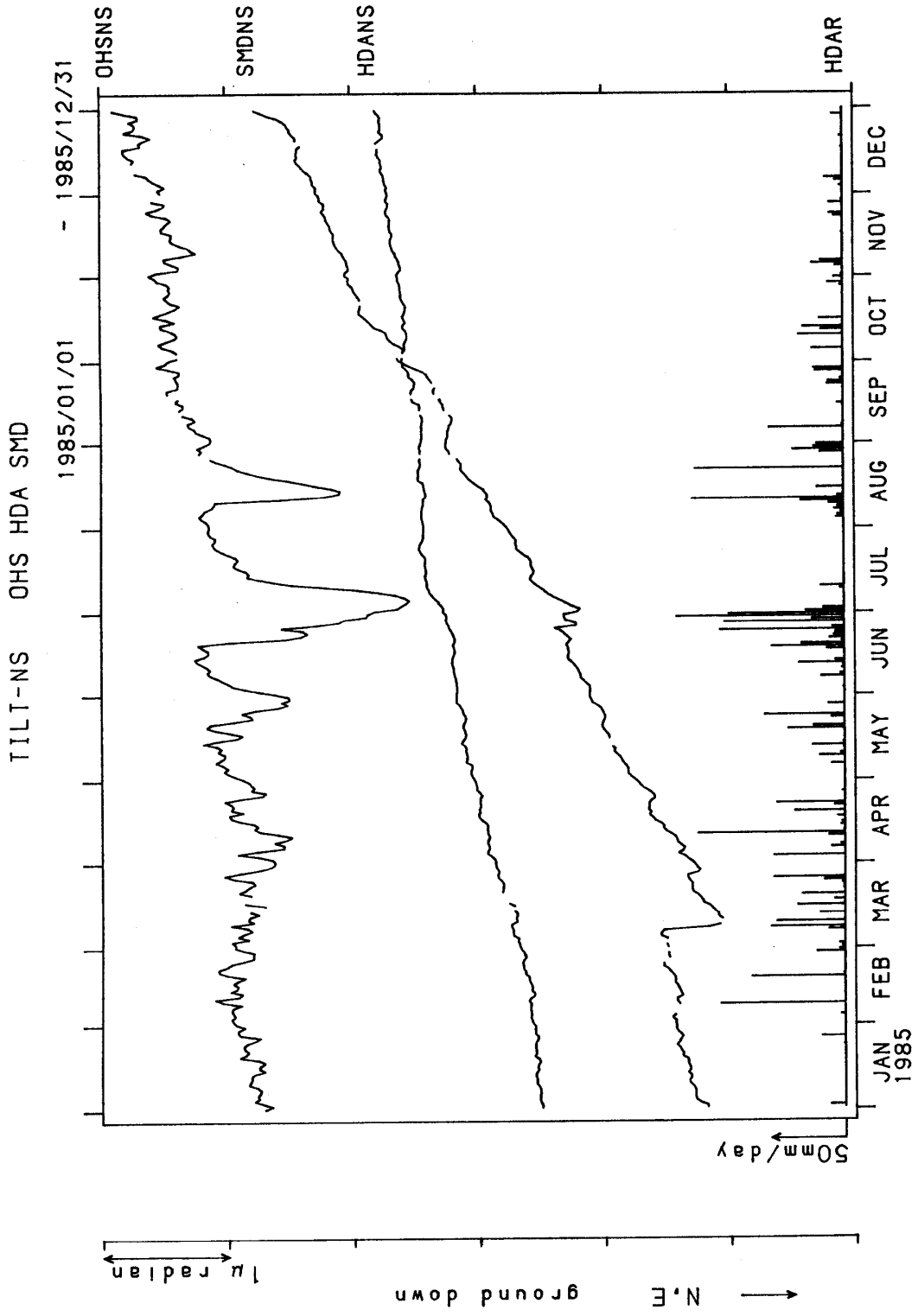
(a)　三ケ日（MKB）・本川根（HKW）・静岡（SIZ）・近又（CMT）・野田沢（NDZ）・岡部（OKB）の傾斜NS成分と近又の日雨量

NS−component of crustal tilt at Mikkabi (MKB), Honkawane (HKW), Shizuoka (SIZ), Chikamata (CMT), Nodazawa (NDZ), Okabe (OKB) and the daily precipitation at Chikamata.

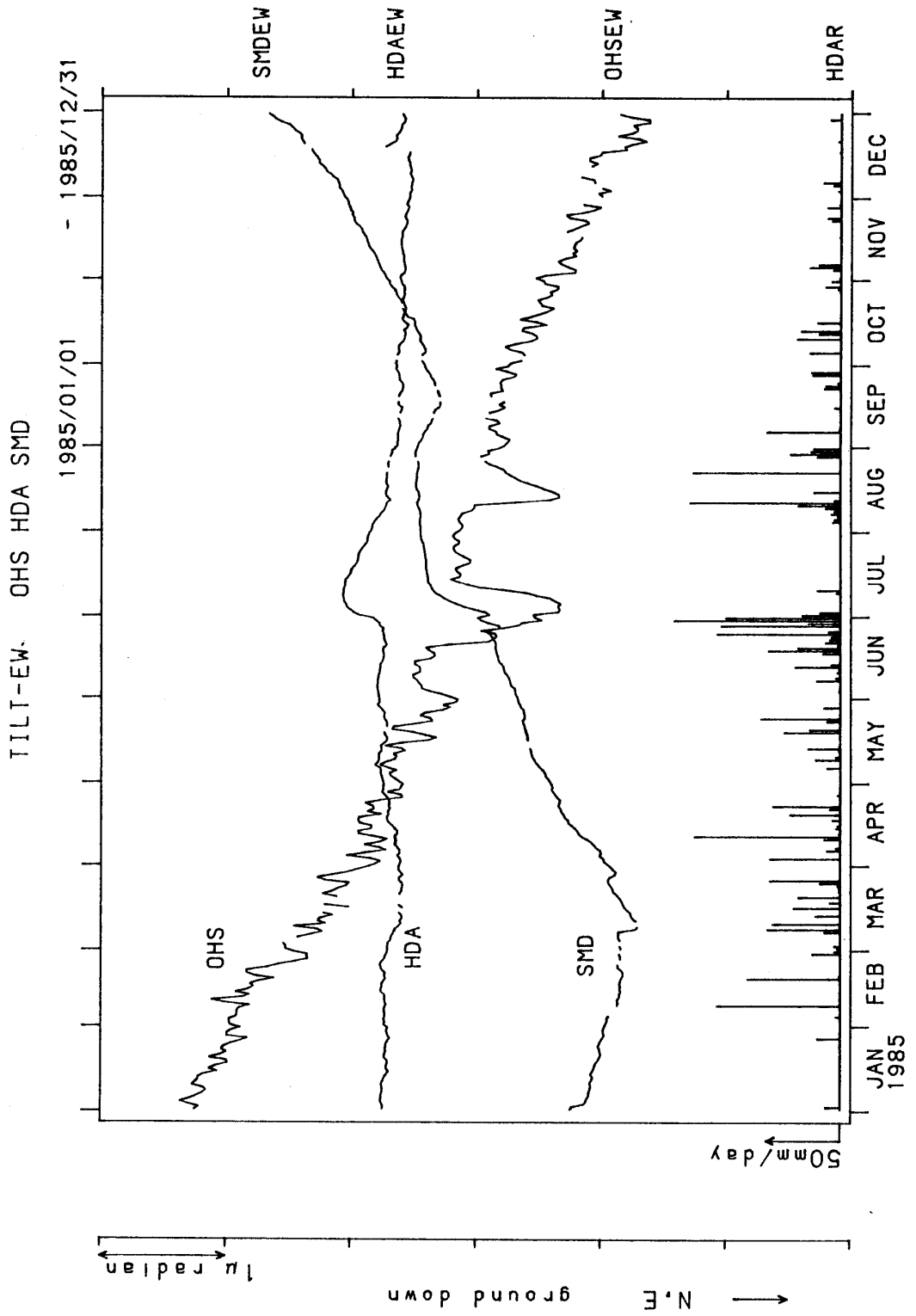


(b) 三ケ日（MKB）・本川根（HKW）・静岡（SIZ）・近又（CMT）・野田沢（NDZ）・岡部（OKB）の傾斜EW成分と近又の日雨量

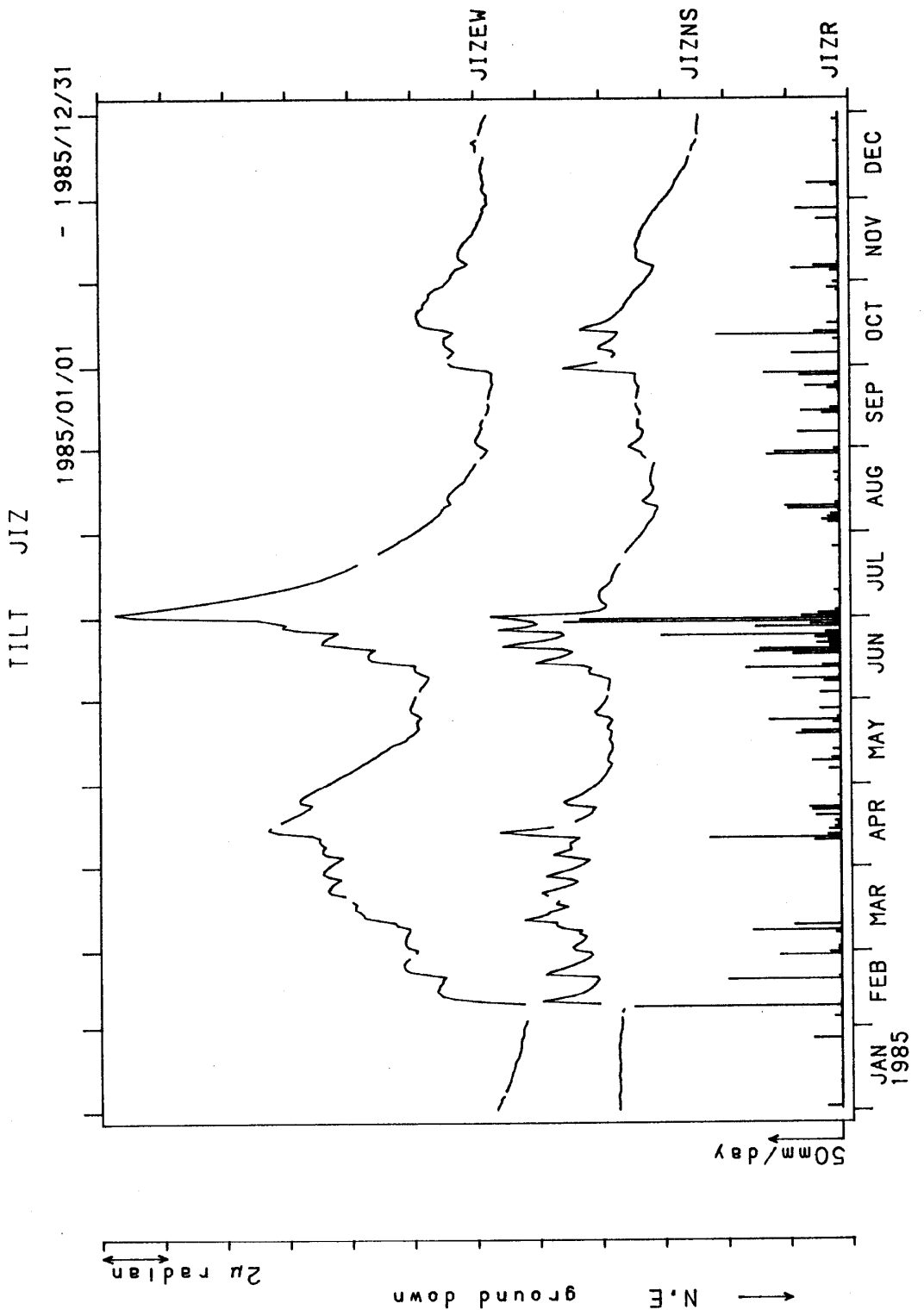
EW-component of crustal tilt at Mikkabi (MKB), Honkawane (HKW), Shizuoka (SIZ), Chikamata (CMT), Nodazawa (NDZ), Okabe (OKB) and the daily precipitation at Chikamata.



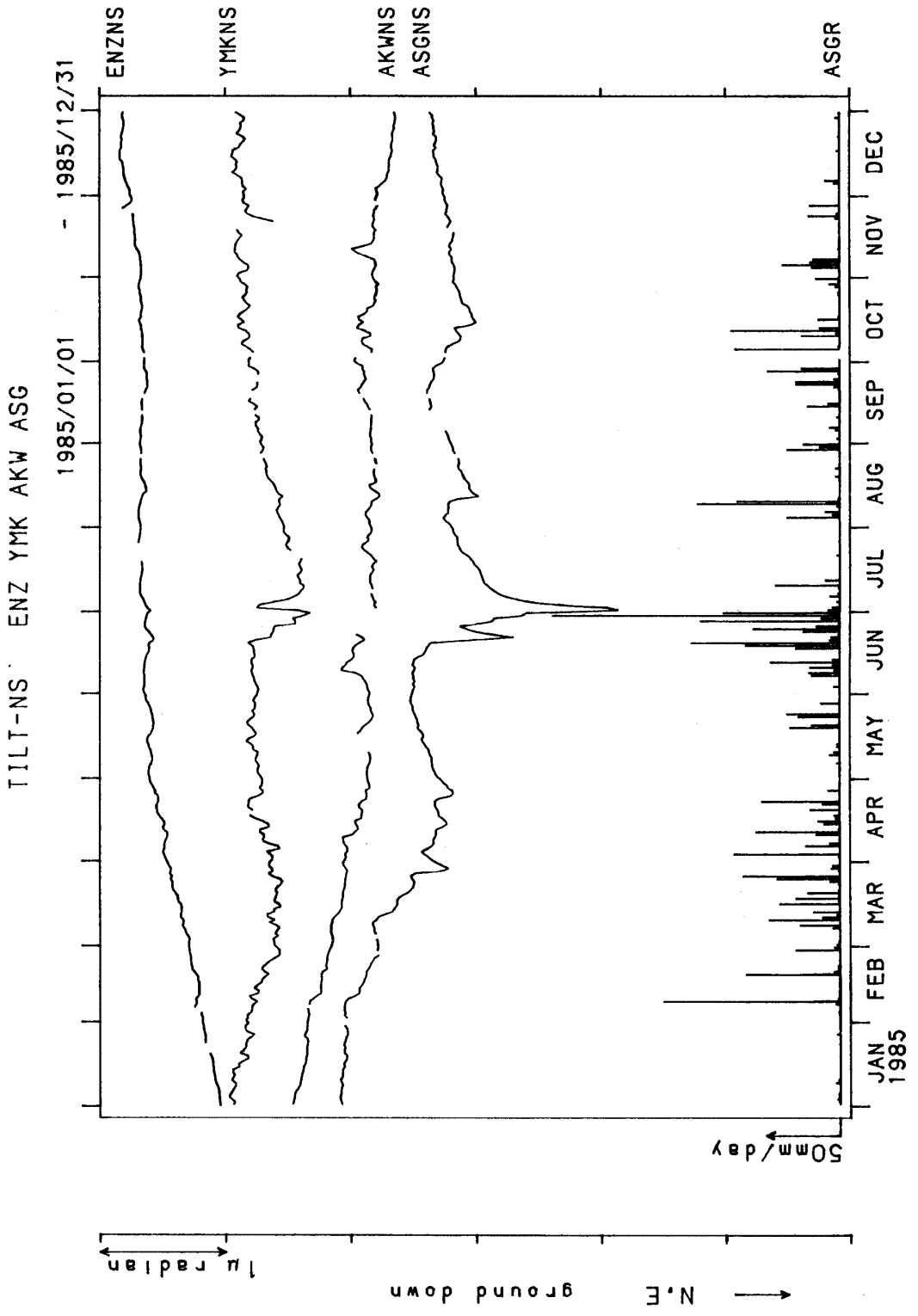
(c) 大須賀（OHS）・戸田（HDA）・下田（SMD）の傾斜NS成分と戸田の日雨量
NS−component of crustal tilt at Ohsuga (OHS), Heda (HDA), Shimoda (SMD) and the daily precipitation at Heda.



(d) 大須賀（OHS）・戸田（HDA）・下田（SMD）の傾斜EW成分と戸田の日雨量
EW−component of crustal tilt at Ohsuga (OHS), Heda (HDA), Shimoda (SMD) and the daily precipitation at Heda.

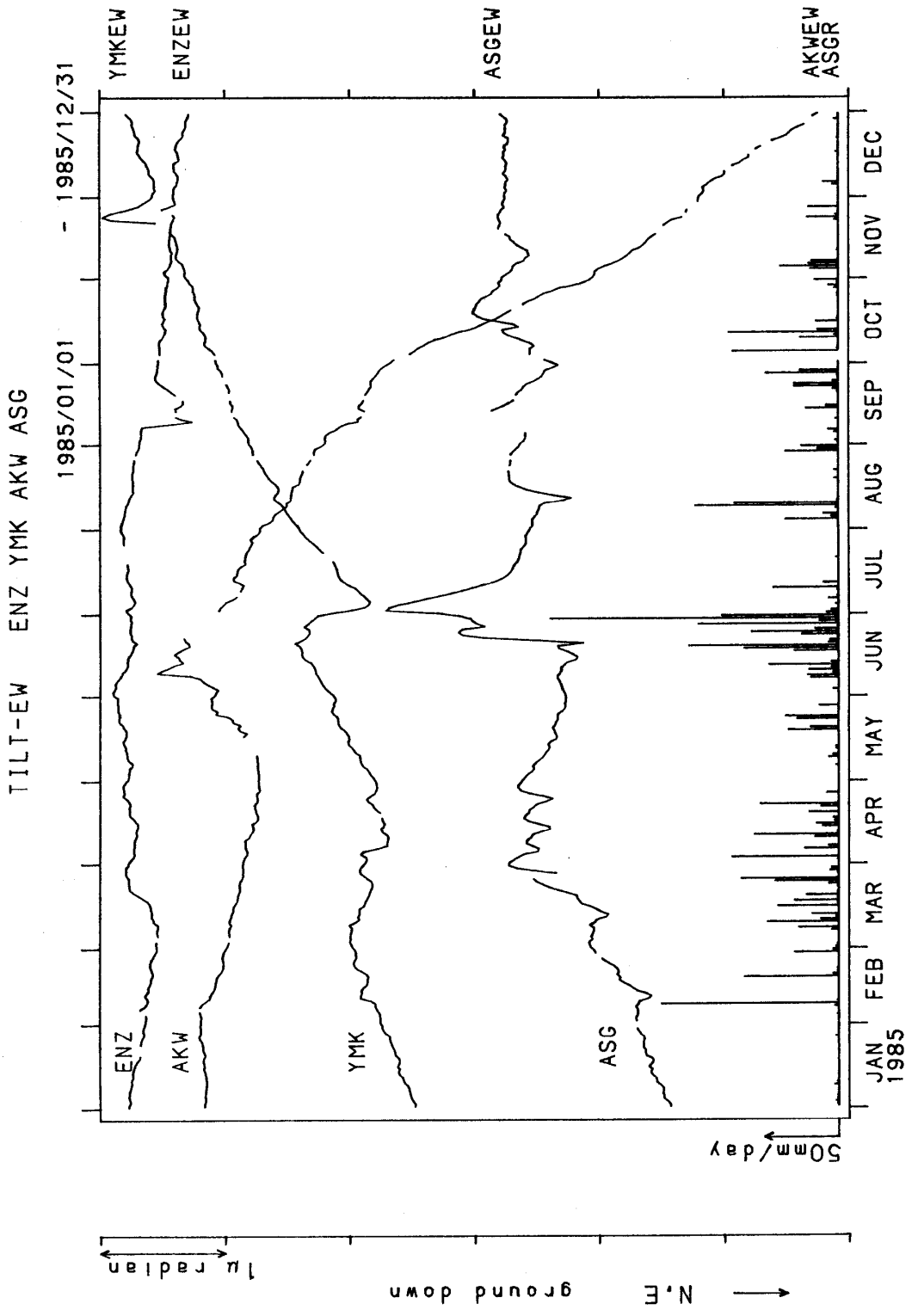


(e) 中伊豆（ＪＩＺ）の傾斜ＮＳ・ＥＷ成分と日雨量
NS and EW components of crustal tilt at Nakaizu (JIZ) and the daily precipitation.



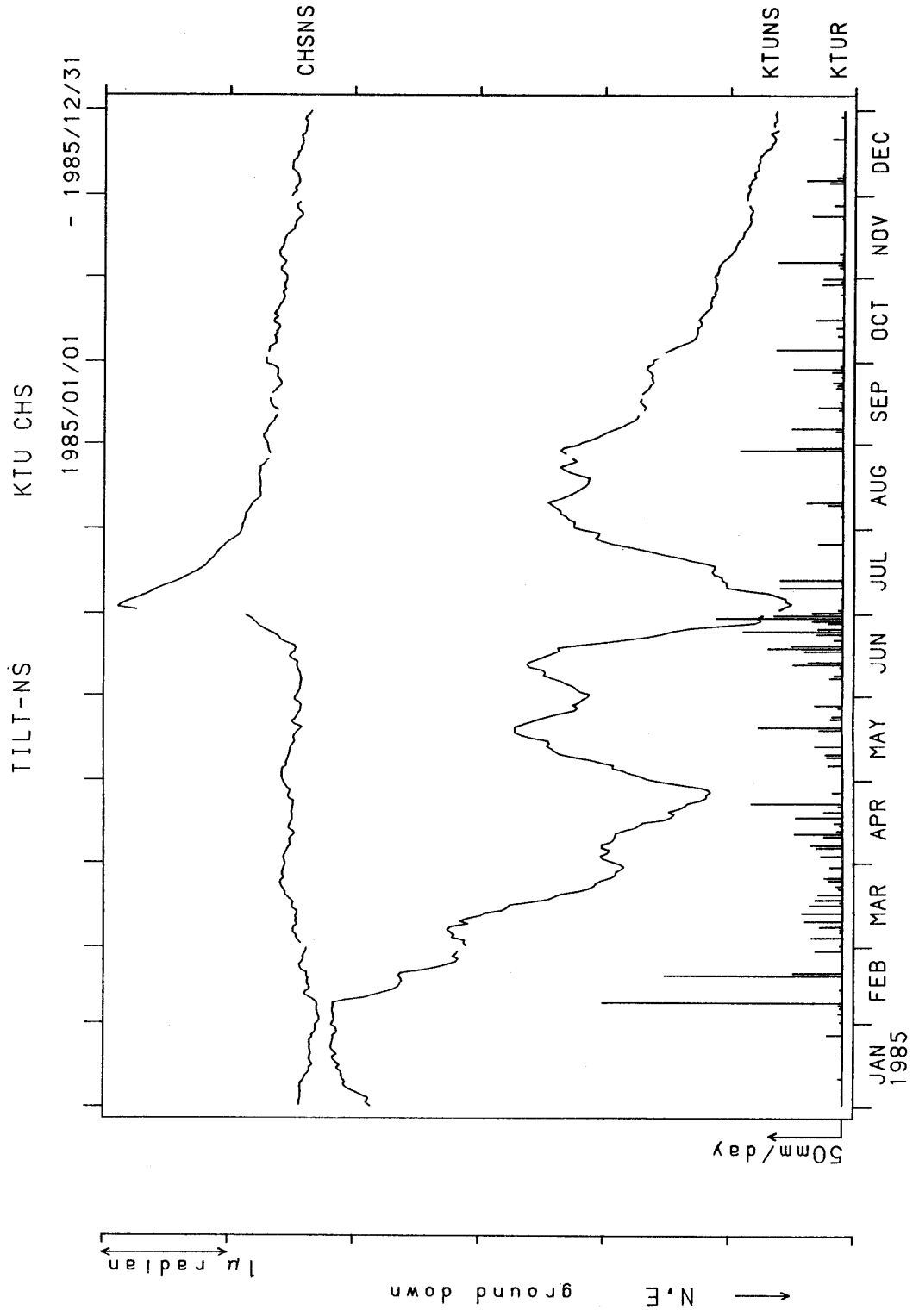
(f) 塩山（ENZ）・山北（YMK）・愛川（AKW）・南足柄（ASG）の傾斜NS成分と南足柄の日雨量

NS−component of crustal tilt at Enzan (ENZ), Yamakita (YMK), Aikawa (AKW), Minamiasigara (ASG) and daily precipitation at Minamiasigara.

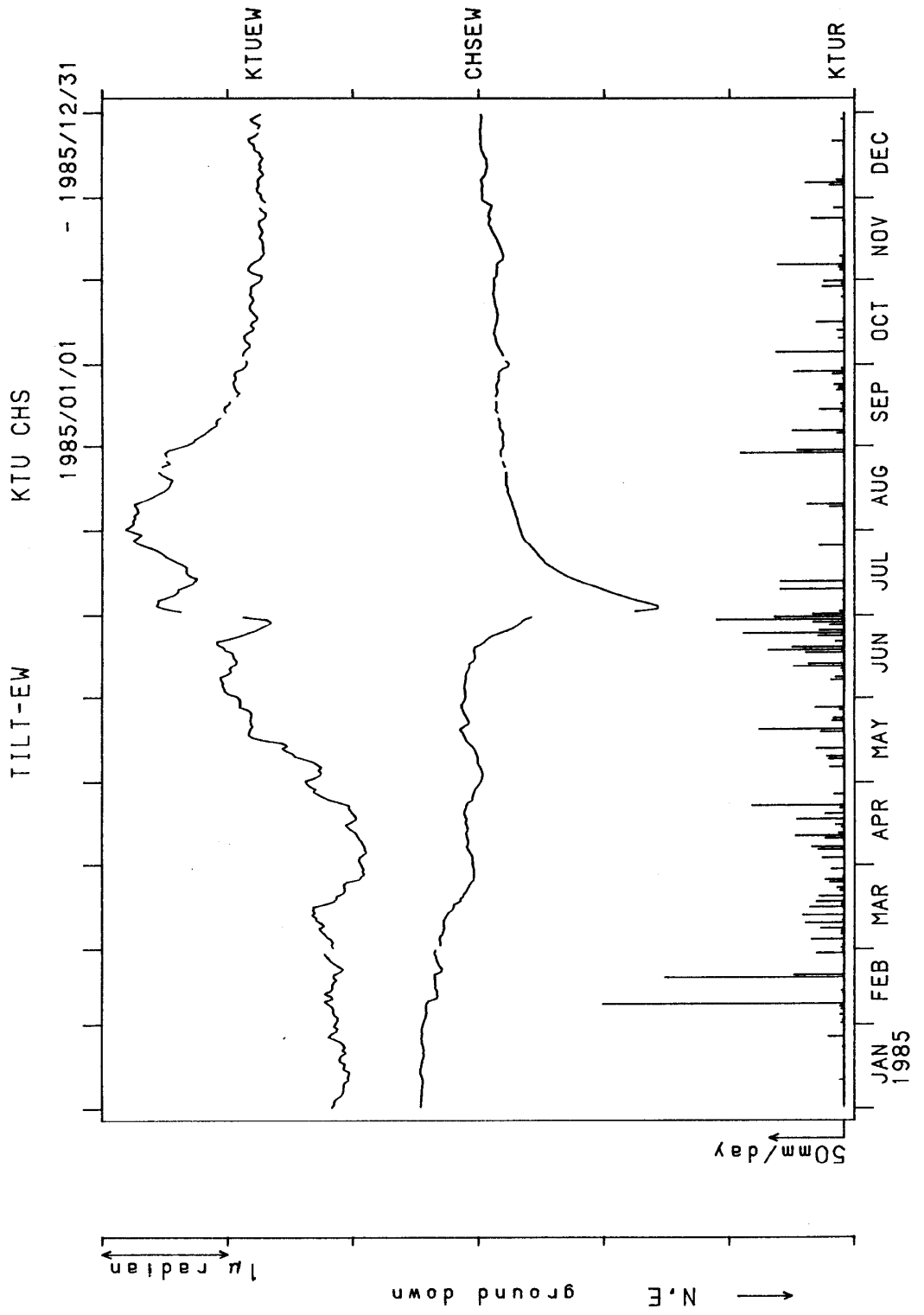


(g) 塩山（ENZ）・山北（YMK）・愛川（AKW）・南足柄（ASG）の傾斜EW成分と南足柄の日雨量

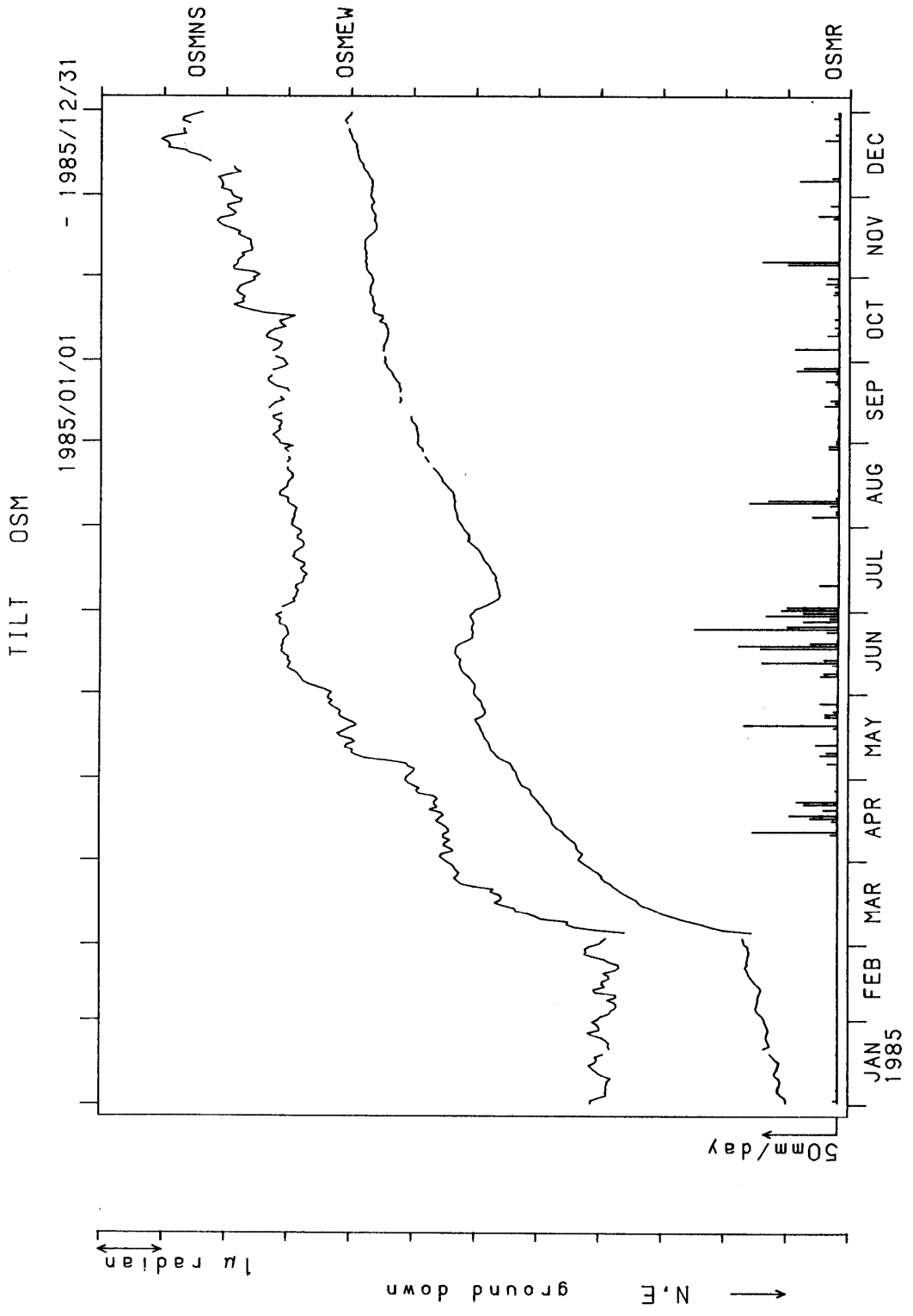
EW−component of crustal tilt at Enzan (ENZ), Yamakita (YMK), Aikawa (AKW), Minamiasigara (ASG) and daily precipitation at Minamiasigara.



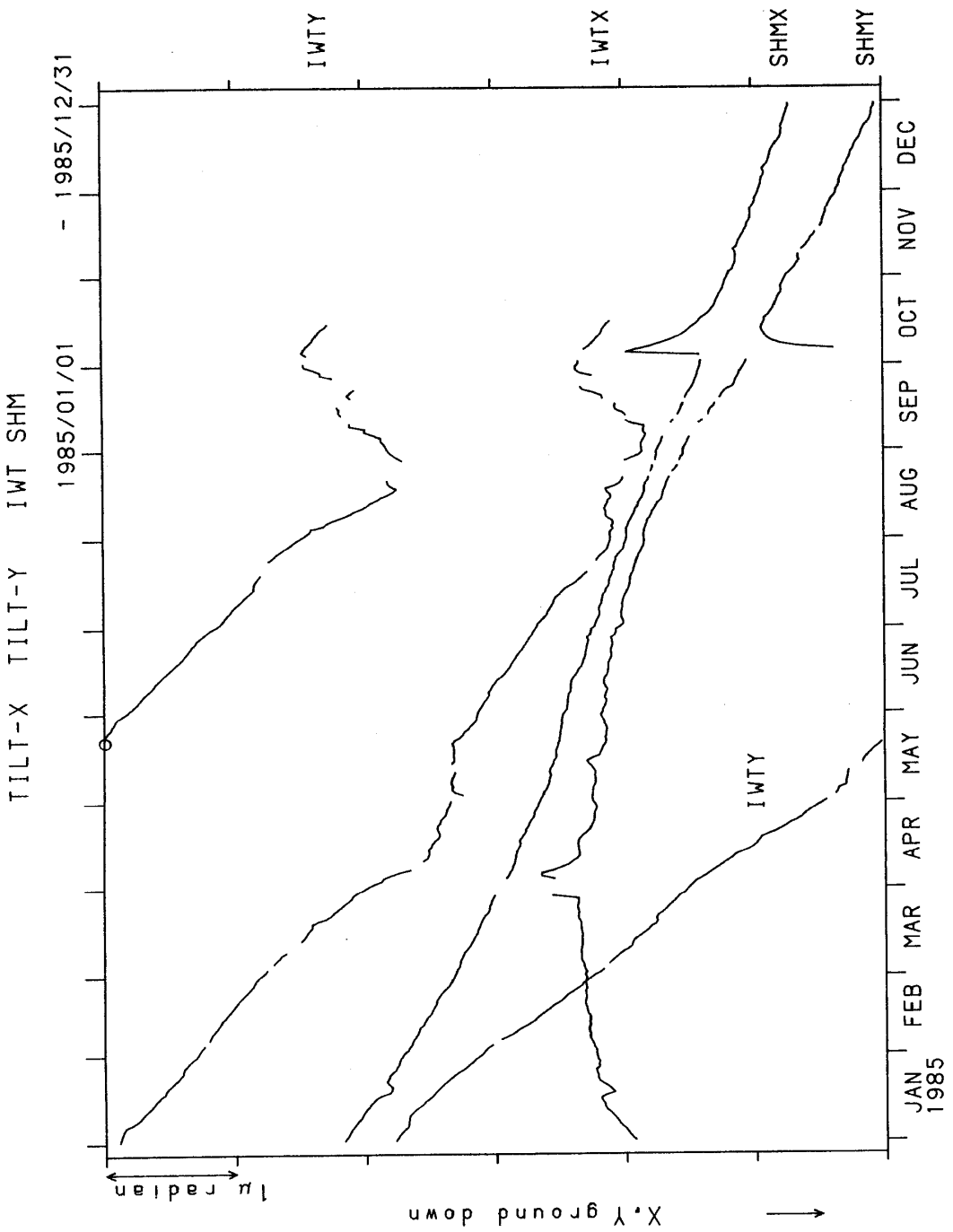
(h) 勝浦（KTU）・銚子（CHS）の傾斜NS成分と勝浦の日雨量
NS−component of crustal tilt at Katsuura (KTU), Chohshi (CHS) and the daily precipitation at Katsuura.



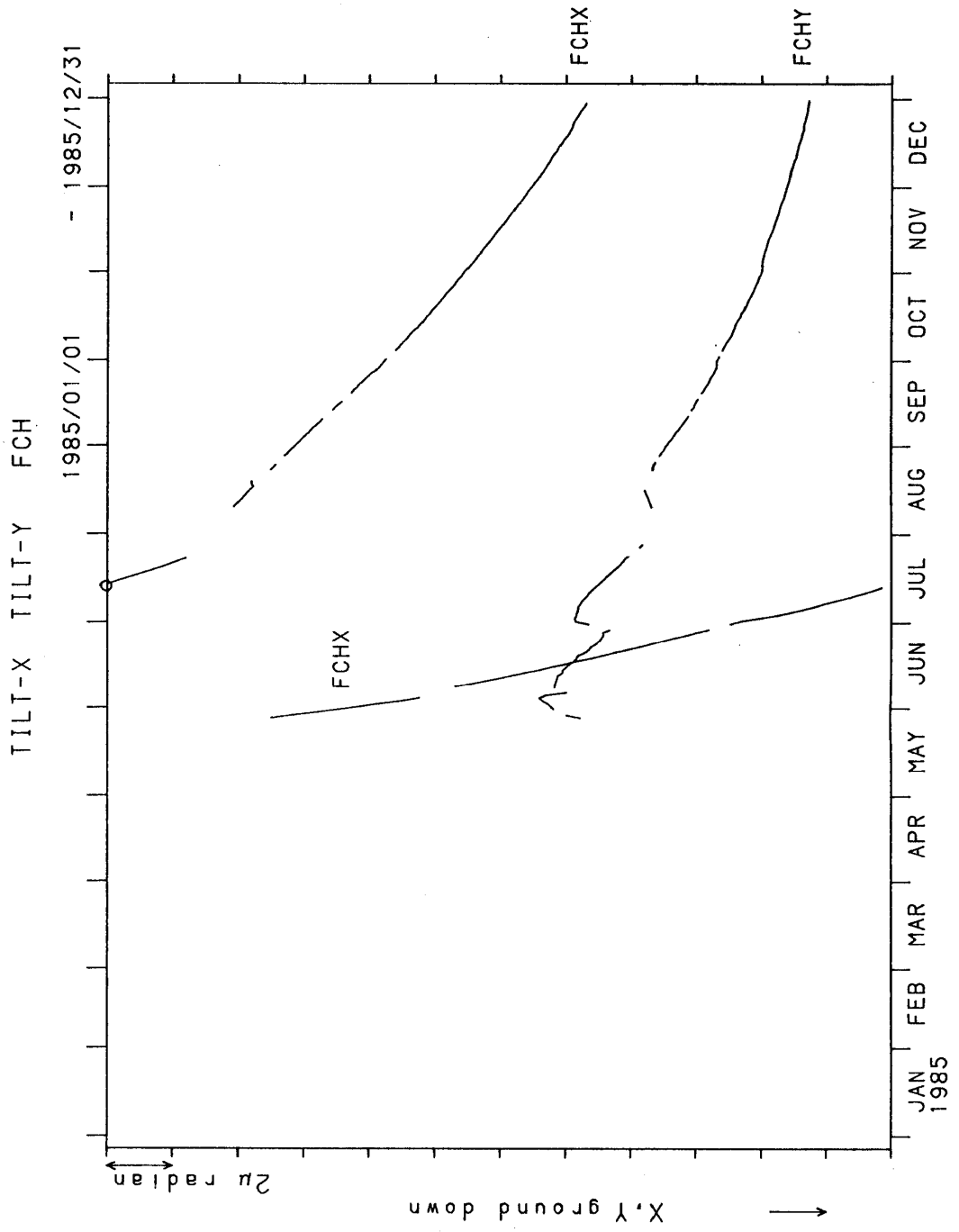
(i) 勝浦（KTU）・銚子（CHS）の傾斜EW成分と勝浦の日雨量
EW−component of crustal tilt at Katsuura (KTU), Chohshi (CHS) and the daily precipitation at Katsuura.



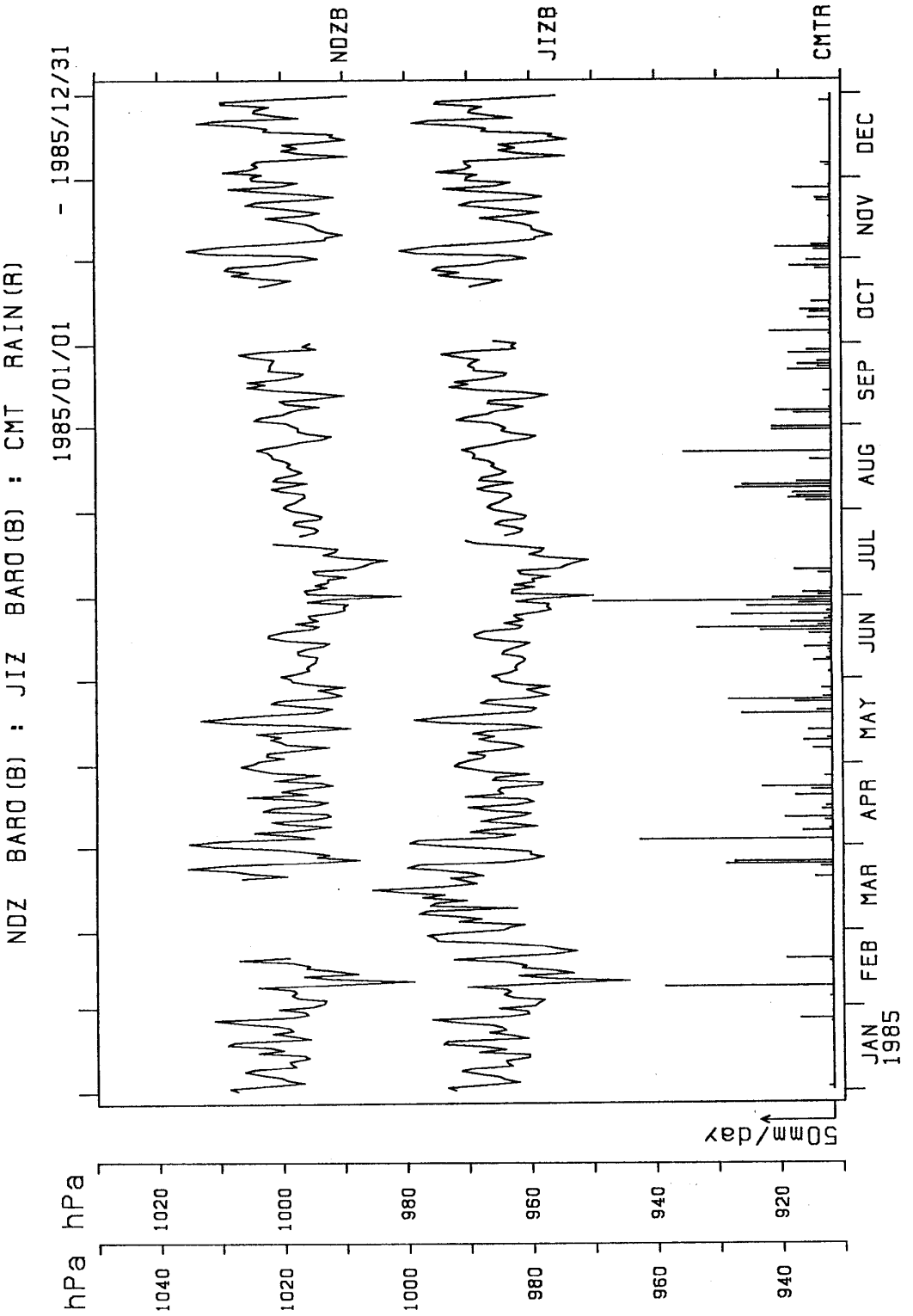
(j) 大島（OSM）の傾斜NS・EW成分と日雨量
NS and EW components of crustal tilt at Ohshima (OSM) and the daily precipitation.



(k) 岩槻（IWT）・下総（SHM）の傾斜X・Y成分
X and Y components of crustal tilt at Iwatsuki (IWT) and Shimohsa (SHM).



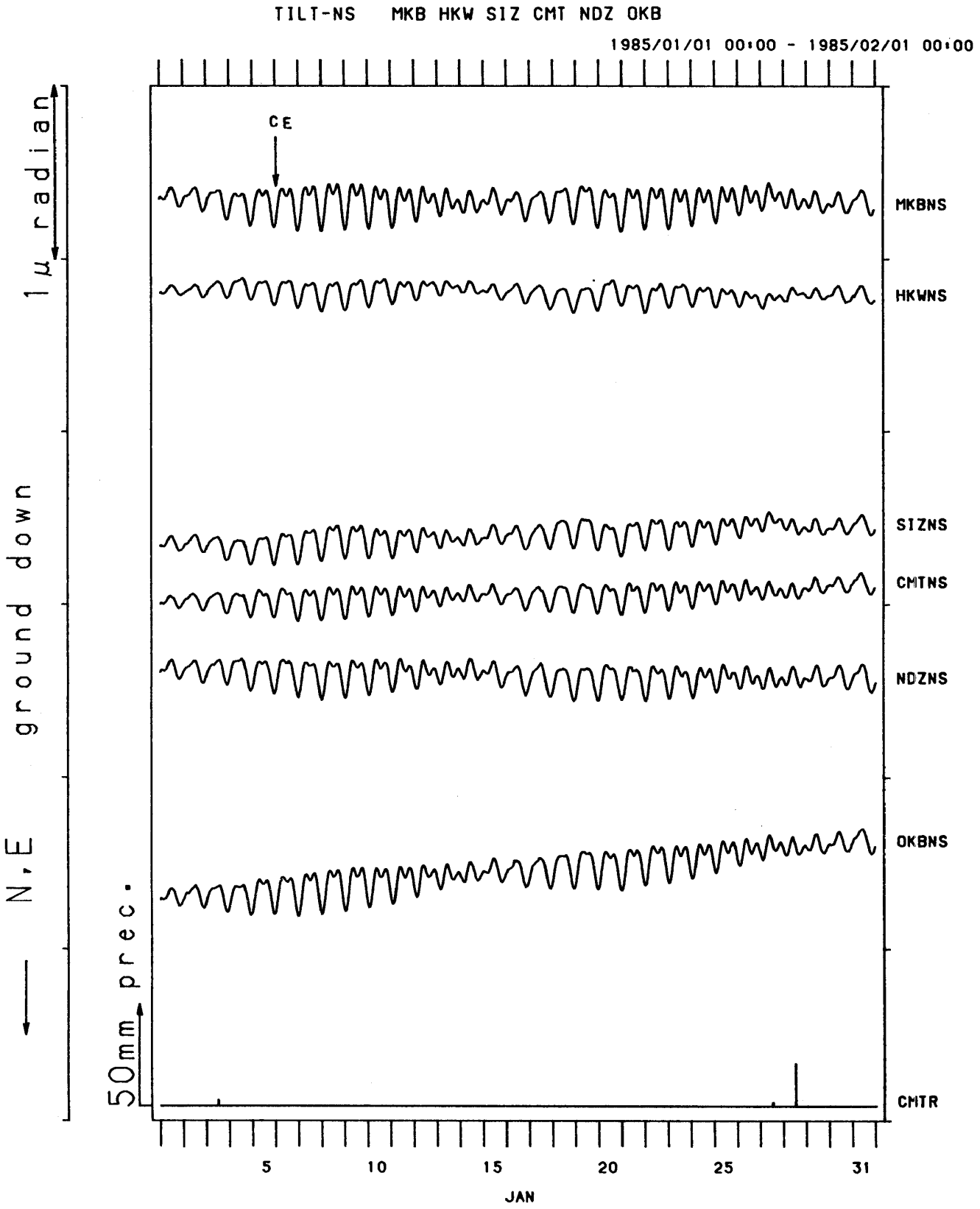
(1) 府中（ＦＣＨ）の傾斜Ｘ・Ｙ成分
X and Y components of crustal tilt at Fuchu (FCH).



(m) 野田沢（NDZ）・中伊豆（JIZ）の気圧と近又（CMT）の日雨量
Barometric pressure at Nodazawa (NDZ) and Nakaizu (JIZ) and daily precipitation at Chikamata.

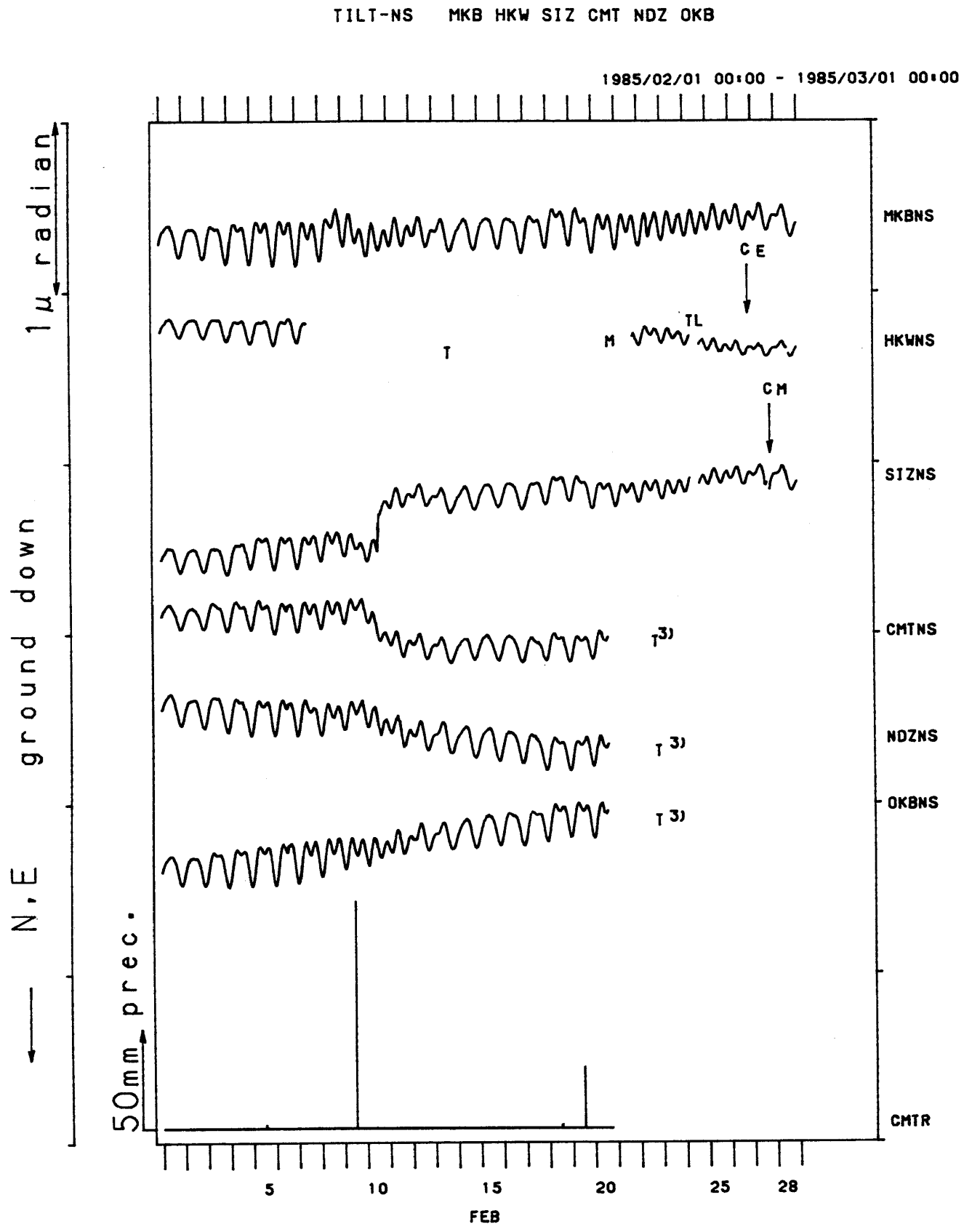
図 6 地殻傾斜の月変化（毎時サンプリング値）

Fig.6 Hourly sampled values of crustal tilt data.



(a) 三ケ日（MKB）・本川根（HKW）・静岡（SIZ）・近又（CMT）・野田沢（NDZ）・岡部（OKB）の傾斜NS成分と近又の日雨量

NS−component of crustal tilt at Mikkabi (MKB), Honkawane (HKW), Shizuoka (SIZ), Chikamata (CMT), Nodazawa (NDZ), Okabe (OKB) and the daily precipitation at Chikamata.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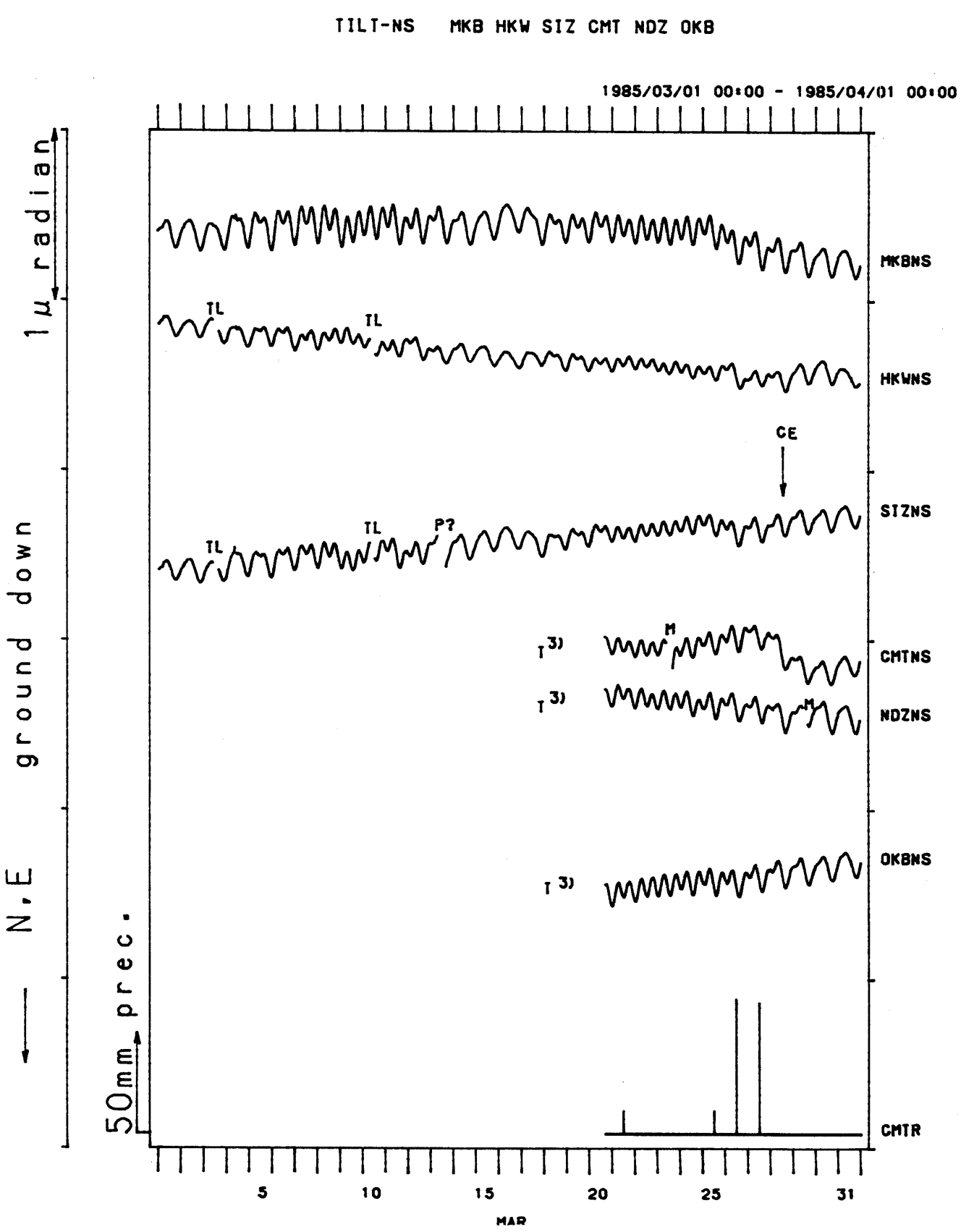
1985/02/01 00:00 - 1985/03/01 00:00
1μ radian
N,E ground down
MKBNS
HKWNS
SIZNS
CMTNS
NDZNS
OKBNS
CMTR
CE
CM
TL
M
T
T3)
50mm prec.
5
10
15
20
25
28
FEB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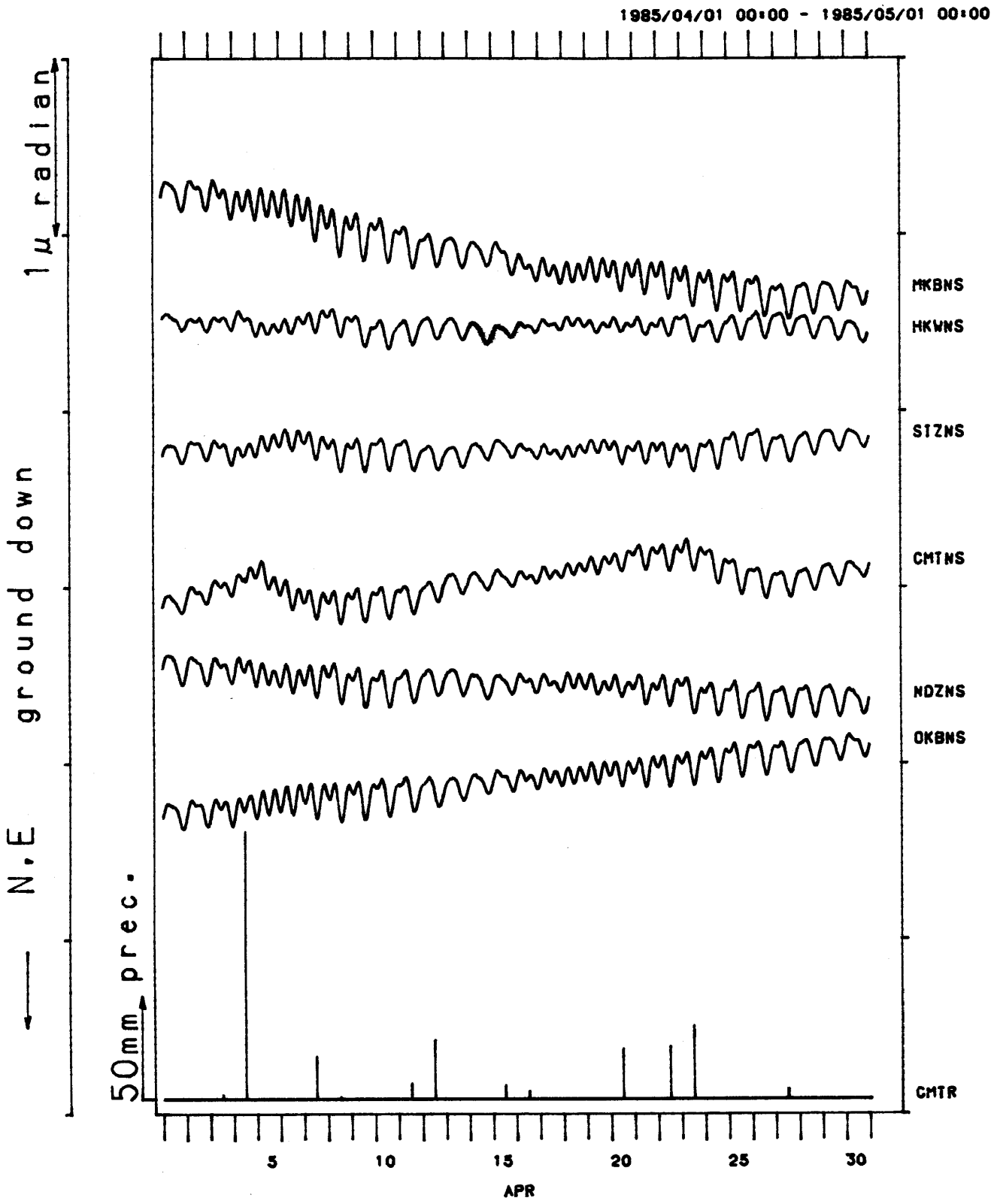
1985/03/01 00:00 - 1985/04/01 00:00
1μ radian
N,E ground down
50mm prec.
MKBNS
HKWNS
SIZNS
CMTNS
NDZNS
OKBNS
CMTR
TL
CE
P?
M
5
10
15
20
25
31
MAR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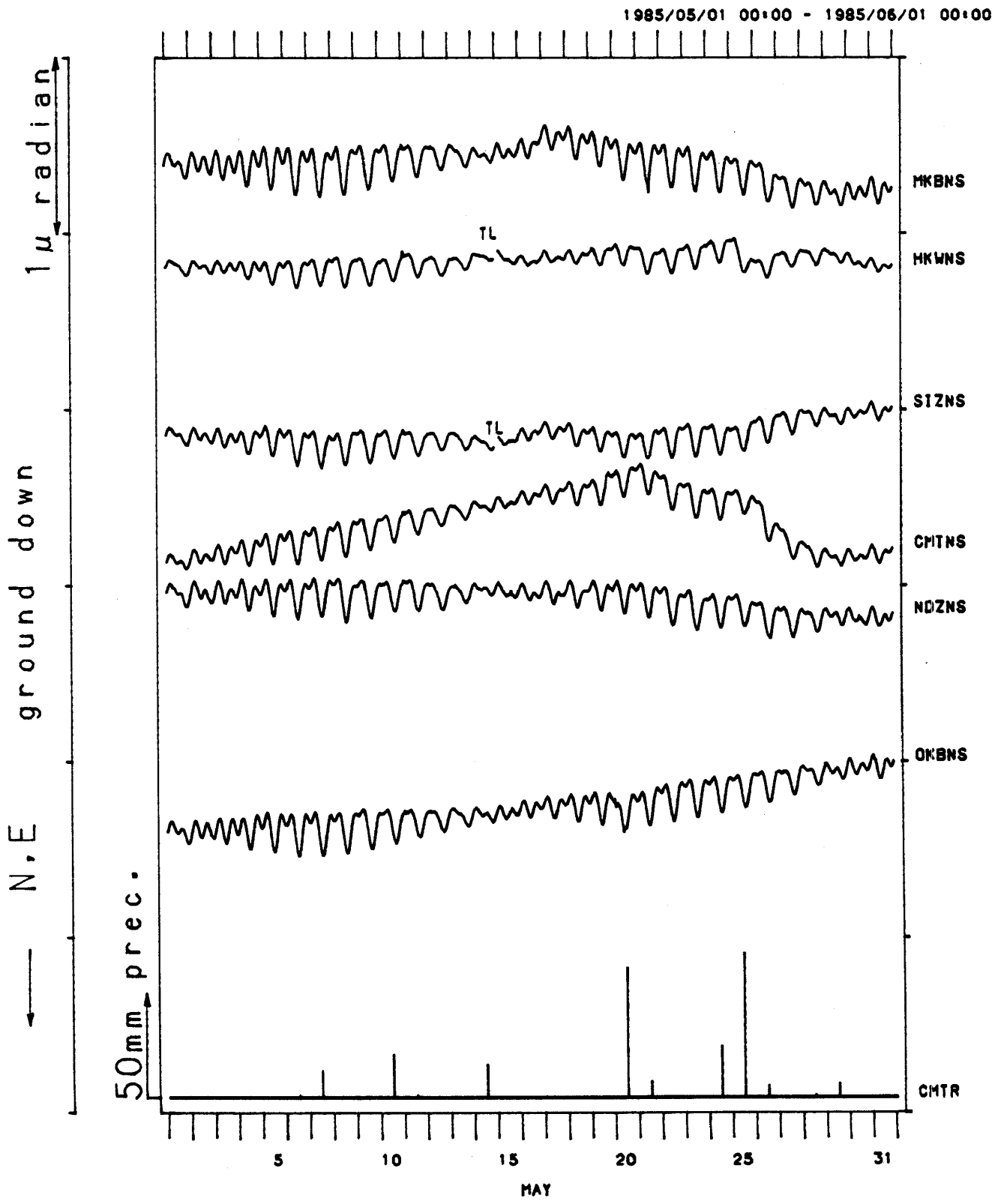
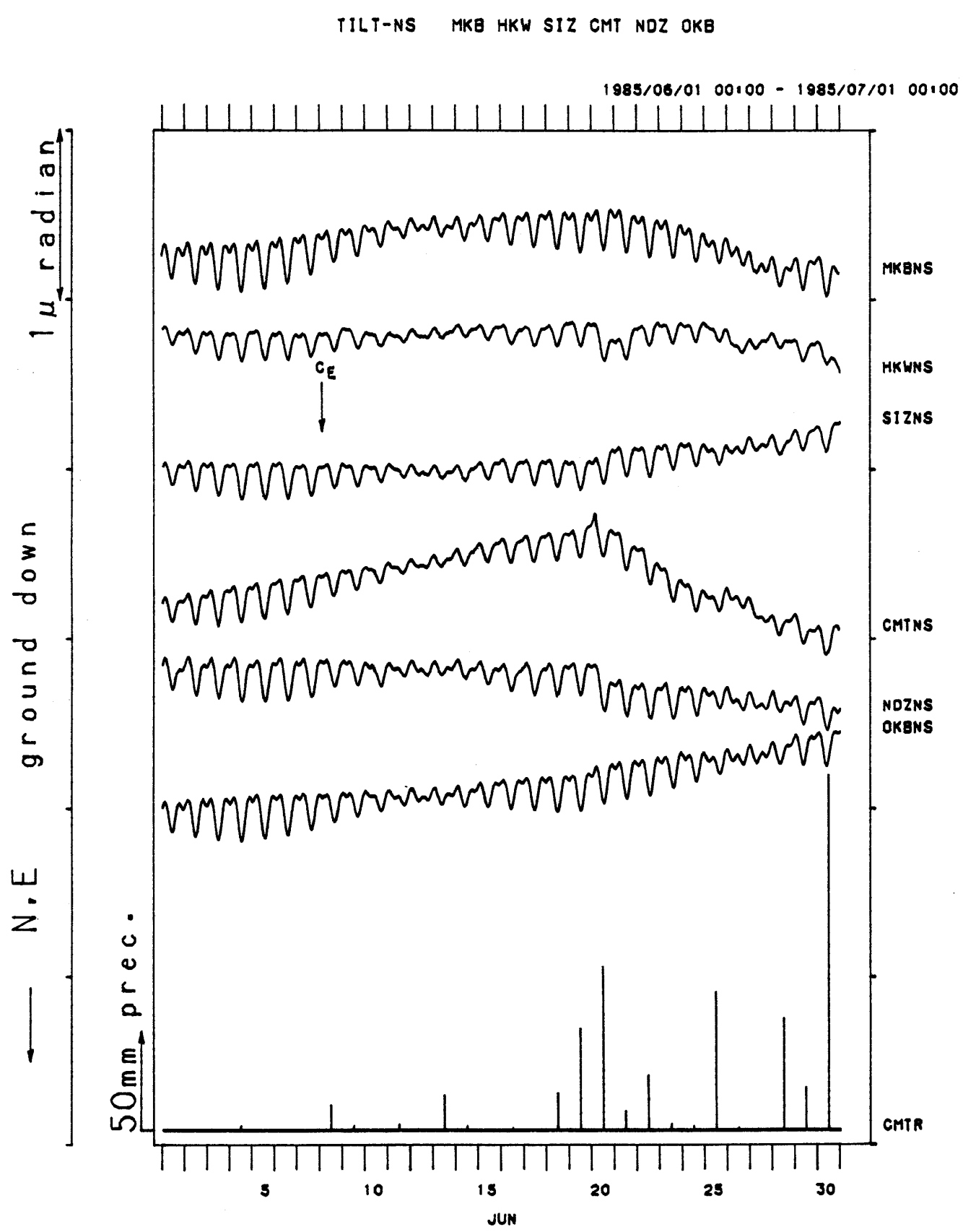
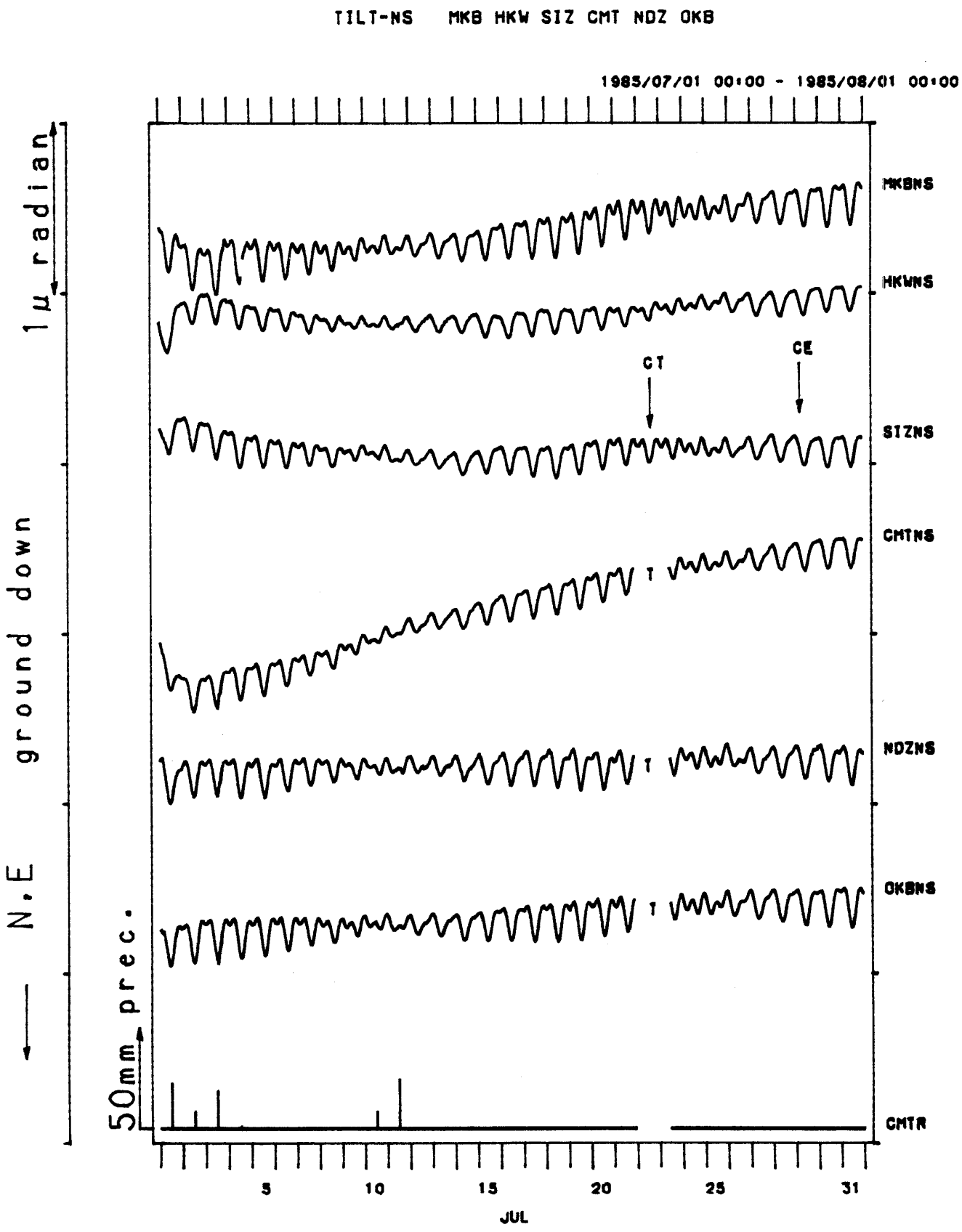
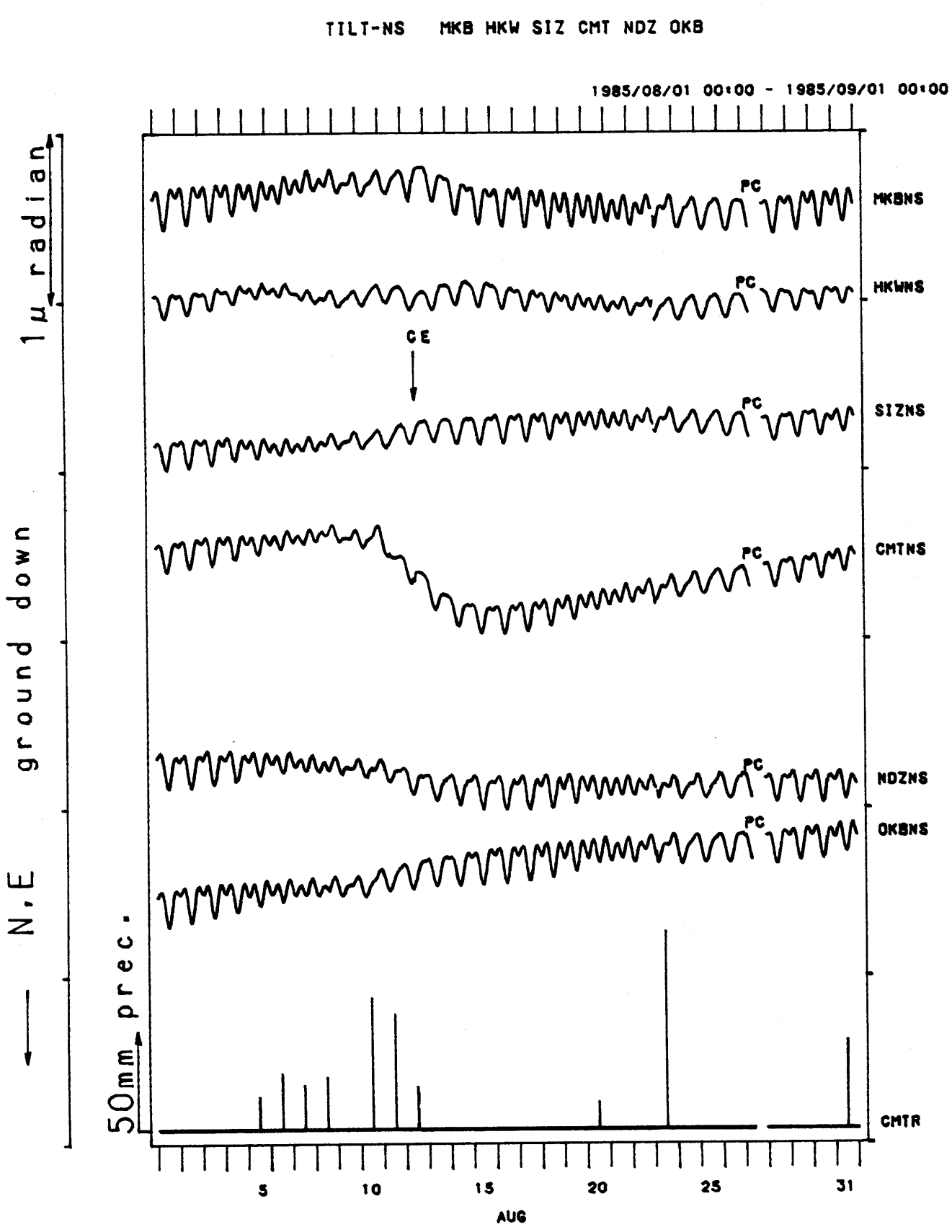
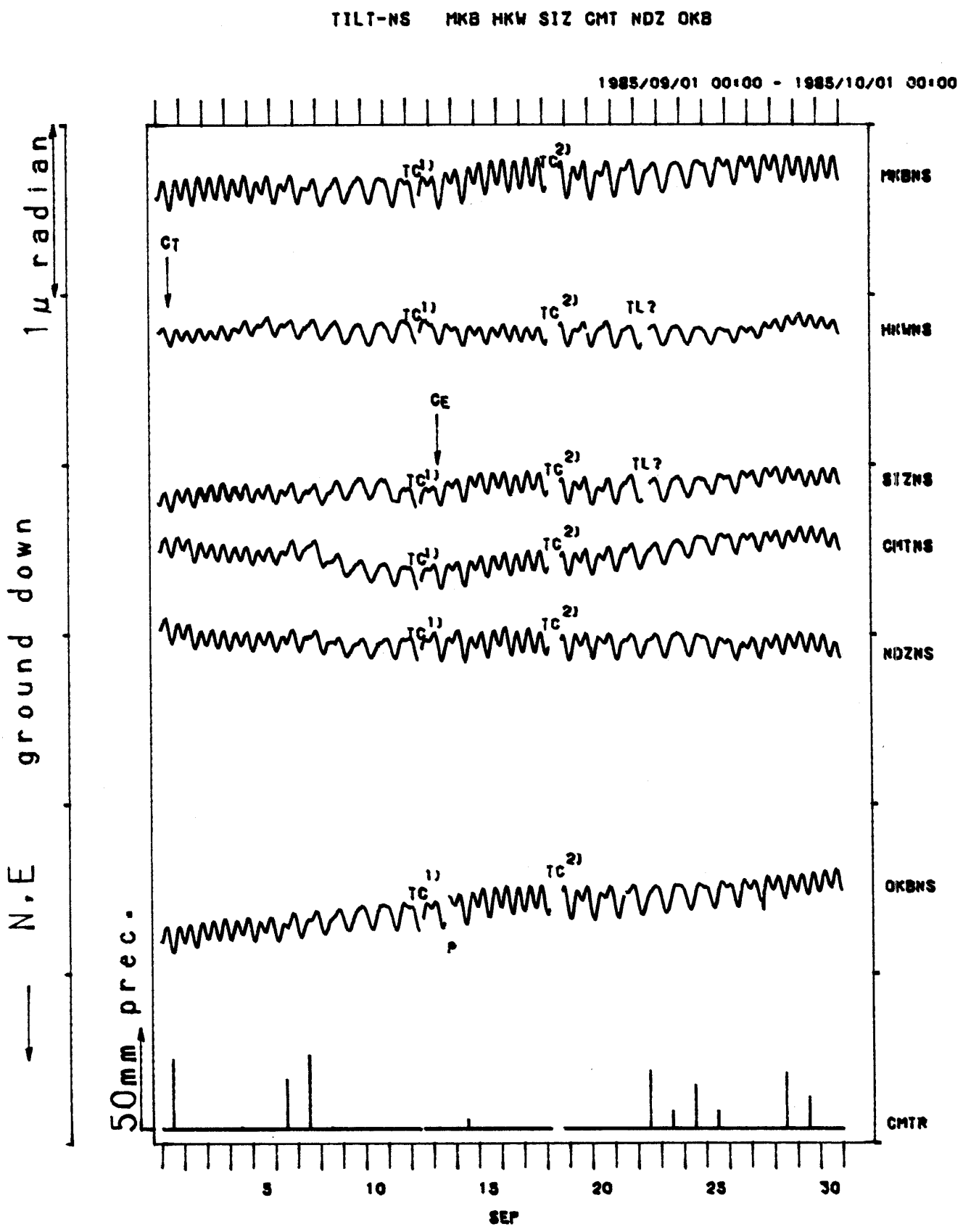
1μ radian
N.E ground down
MKBNS
HKWNS
SIZNS
CMTNS
NDZNS
OKBNS
50mm prec.
CMTR
5
10
15
20
25
30
APR


TILT-NS MKB HKW SIZ CMT NDZ OKB
1985/05/01 00:00 - 1985/06/01 00:00
1μ radian
N,E ground down
MKBNS
HKWNS
SIZNS
CMTNS
NDZNS
OKBNS
CMTR
TL
TL
50mm prec.
5
10
15
20
25
31
MAY


TILT-NS　MKB HKW SIZ CMT NDZ OKB
1985/06/01 00:00 - 1985/07/01 00:00
1μ radian
N.E ground down
MKBNS
HKWNS
SIZNS
CMTNS
NDZNS
OKBNS
CMTR
CE
50mm prec.
5
10
15
20
25
30
JUN


TILT-NS MKB HKW SIZ CMT NDZ OKB
1985/07/01 00:00 - 1985/08/01 00:00
1μ radian
N.E ground down
50mm prec.
MKBNS
HKWNS
CT
CE
SIZNS
CMTNS
NDZNS
OKBNS
CMTR
5
10
15
20
25
31
JUL


TILT-NS　MKB HKW SIZ CMT NDZ OKB
1985/08/01 00:00 - 1985/09/01 00:00
1μ radian
N,E ground down
PC
MKBNS
HKWNS
CE
SIZNS
CMTNS
NDZNS
OKBNS
50mm prec.
CMTR
5
10
15
20
25
31
AUG


TILT-NS MKB HKW SIZ CMT NDZ OKB
1985/09/01 00:00 - 1985/10/01 00:00
1 μ radian
N, E ground down
50mm prec.
MKBNS
HKWNS
SIZNS
CMTNS
NDZNS
OKBNS
CMTR
CT
CE
TC1)
TC2)
TL?
P
5
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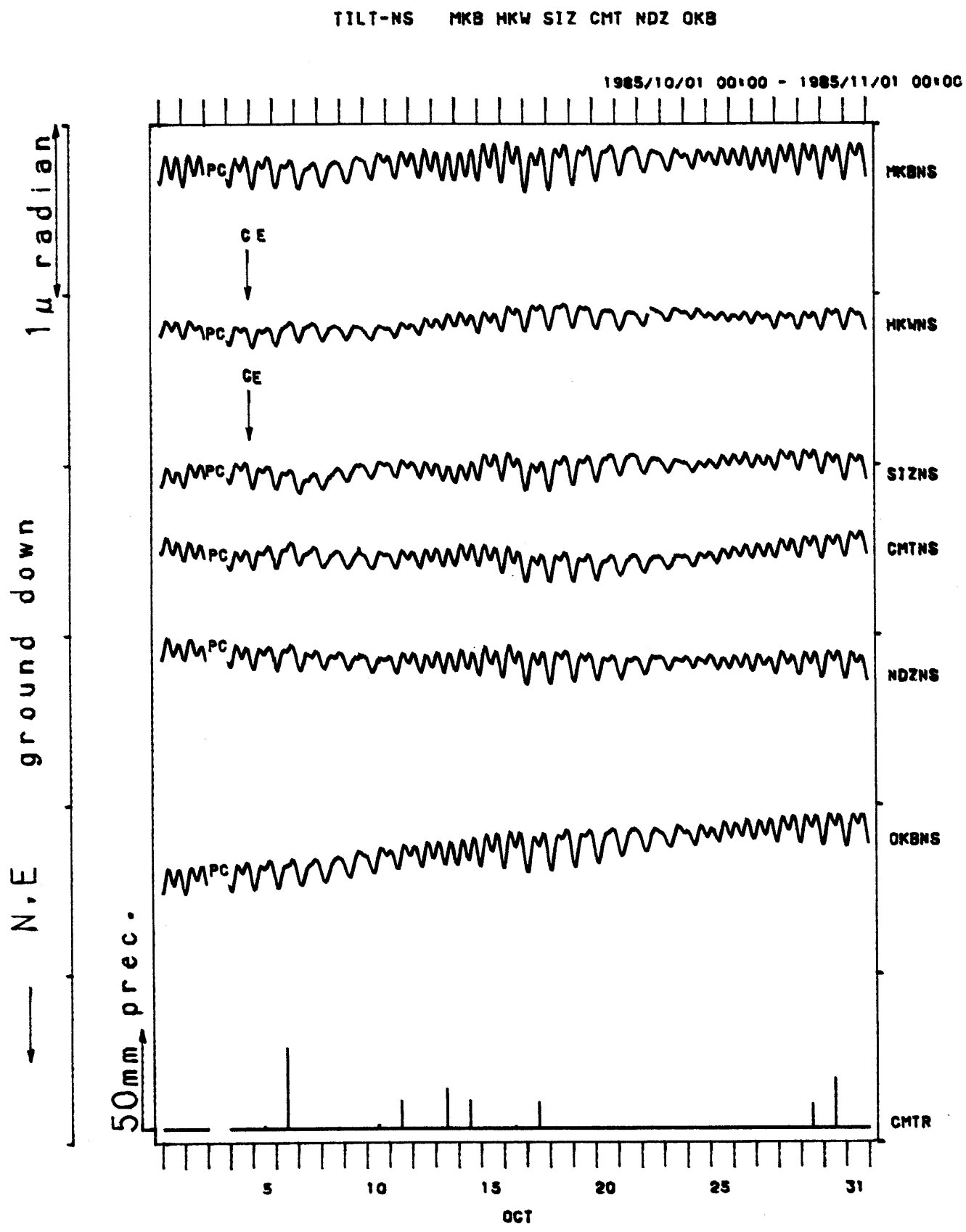
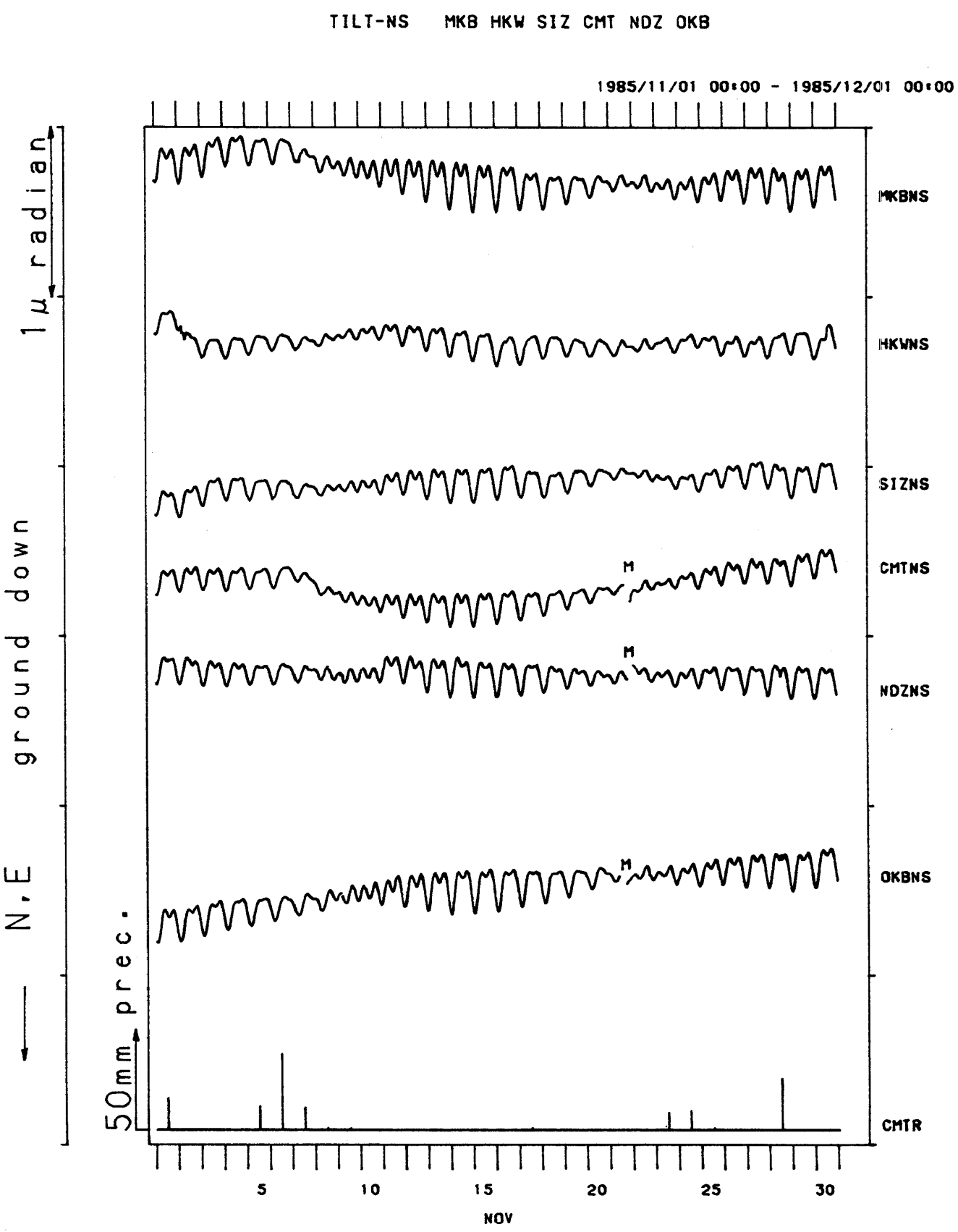
25
30
SEP


TILT-NS　MKB HKW SIZ CMT NDZ OKB
1985/10/01 00:00 - 1985/11/01 00:00
1μ radian
N,E ground down
PC
CE
MKBNS
HKWNS
SIZNS
CMTNS
NDZNS
OKBNS
50mm prec.
CMTR
5
10
15
20
25
31
OCT


TILT-NS MKB HKW SIZ CMT NDZ OKB
1985/11/01 00:00 - 1985/12/01 00:00
1μ radian
N,E ground down
MKBNS
HKWNS
SIZNS
CMTNS
NDZNS
OKBNS
CMTR
50mm prec.
5
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15
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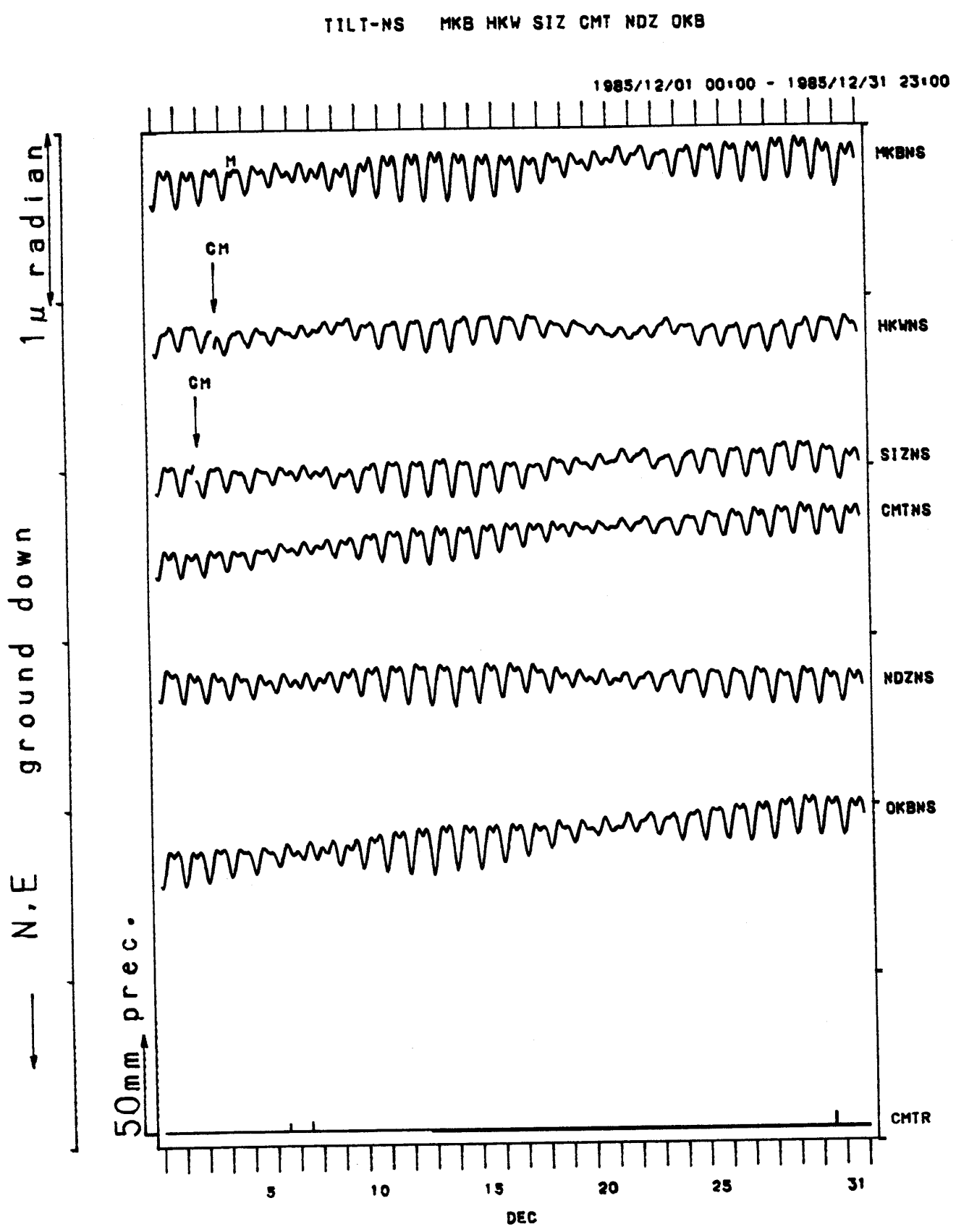
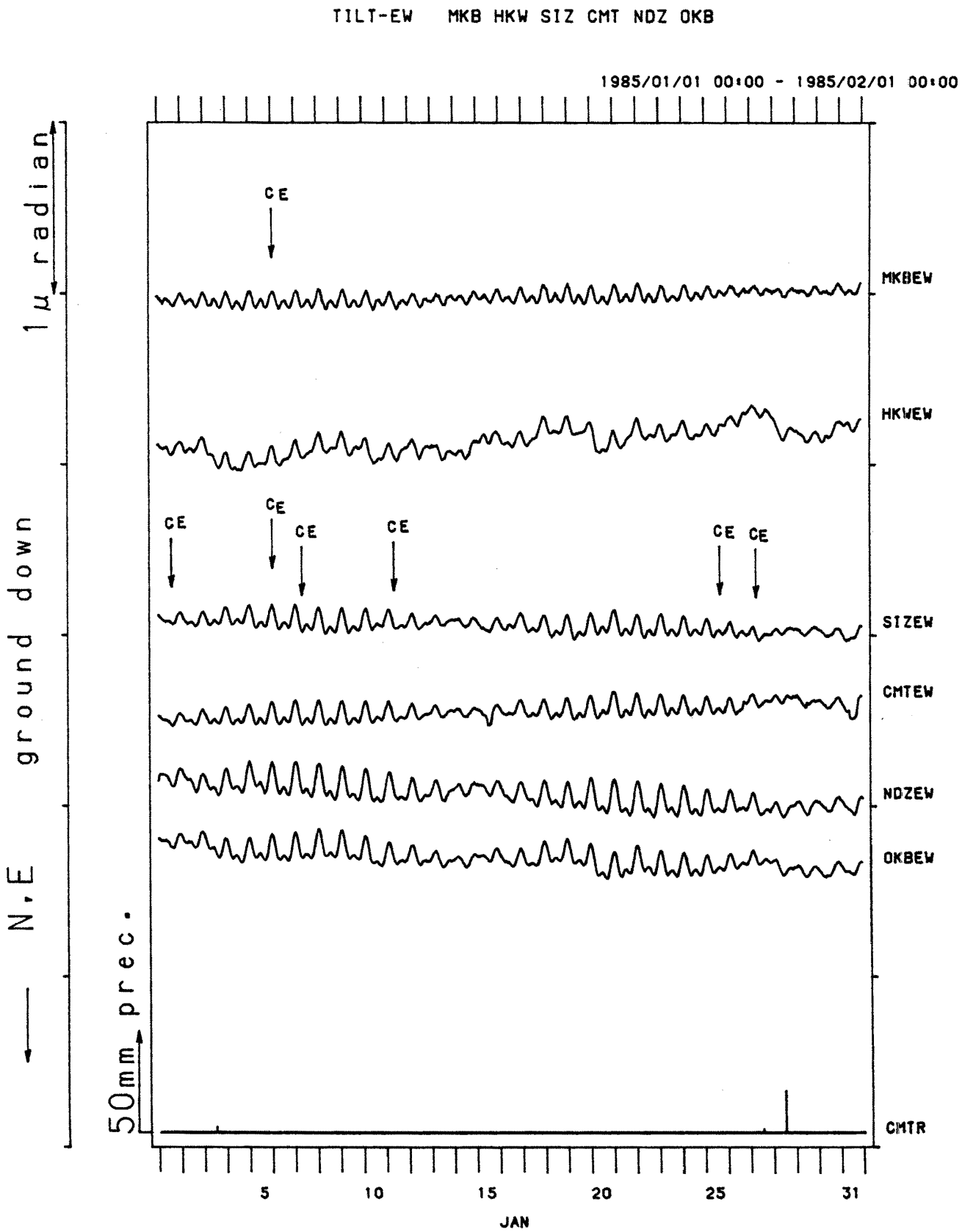
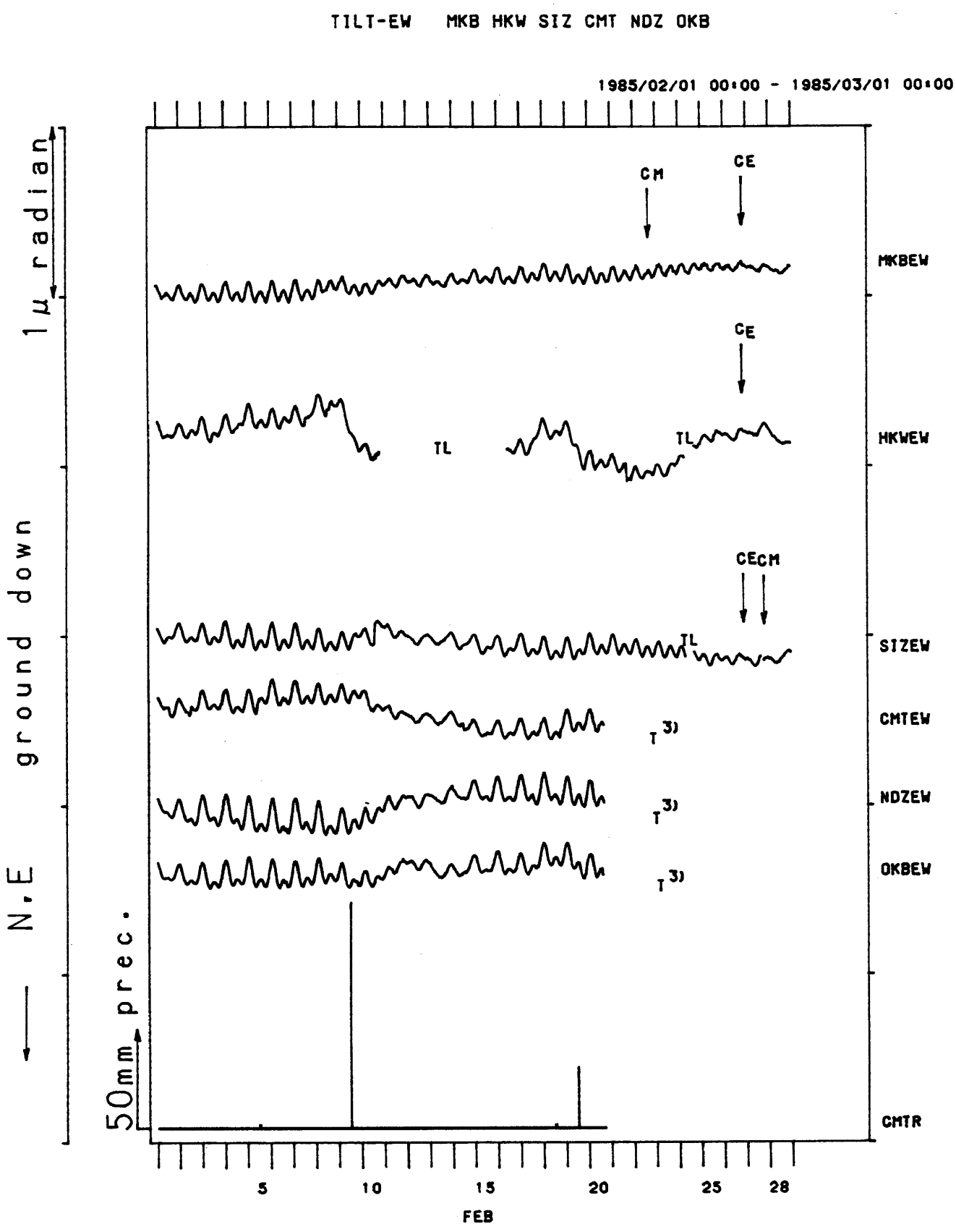
25
30
NOV

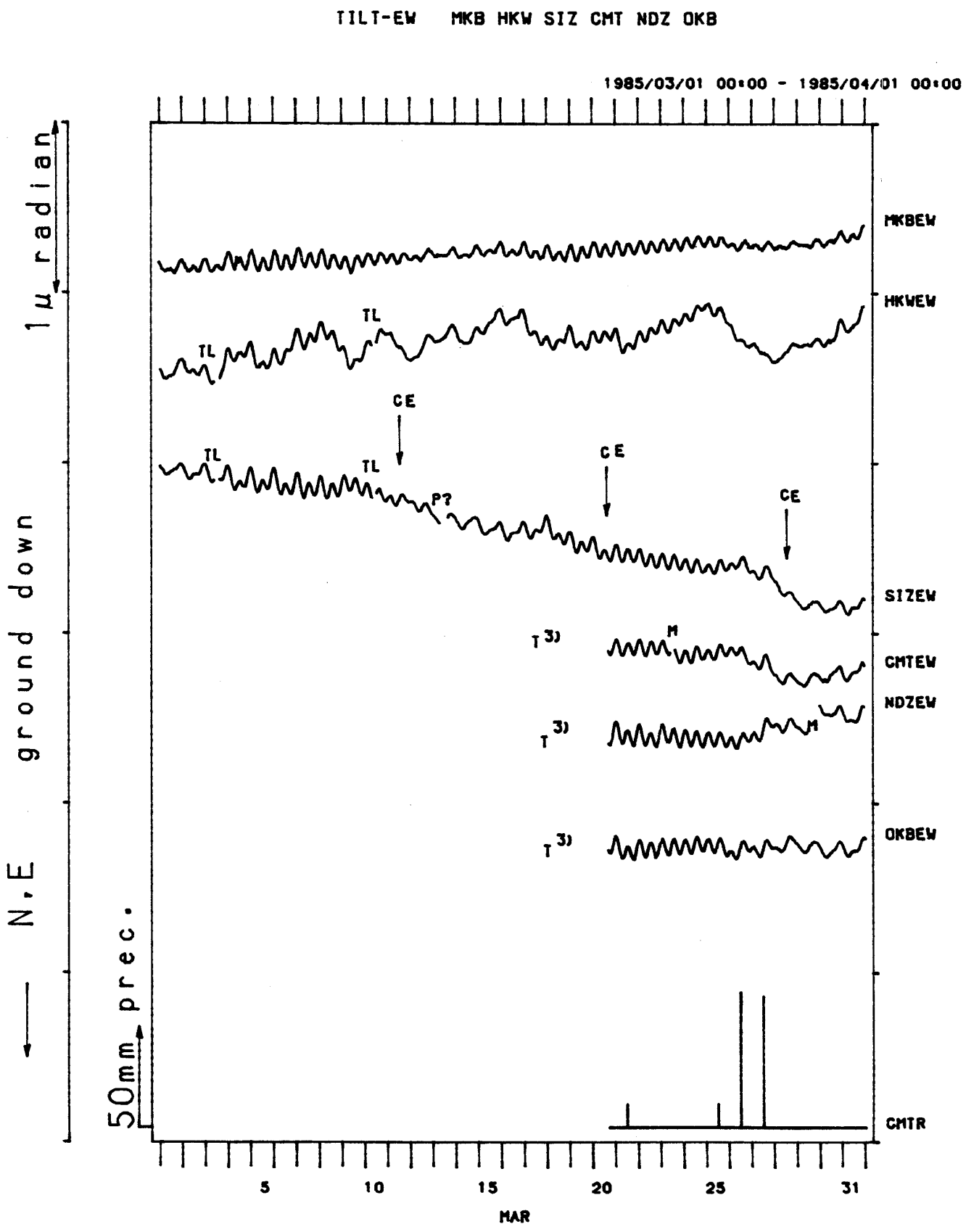

TILT-NS　MKB HKW SIZ CMT NDZ OKB
1985/12/01 00:00 - 1985/12/31 23:00
1μ radian
N,E ground down
50mm prec.
M
CM
CM
MKBNS
HKWNS
SIZNS
CMTNS
NDZNS
OKBNS
CMTR
5
10
15
20
25
31
DEC

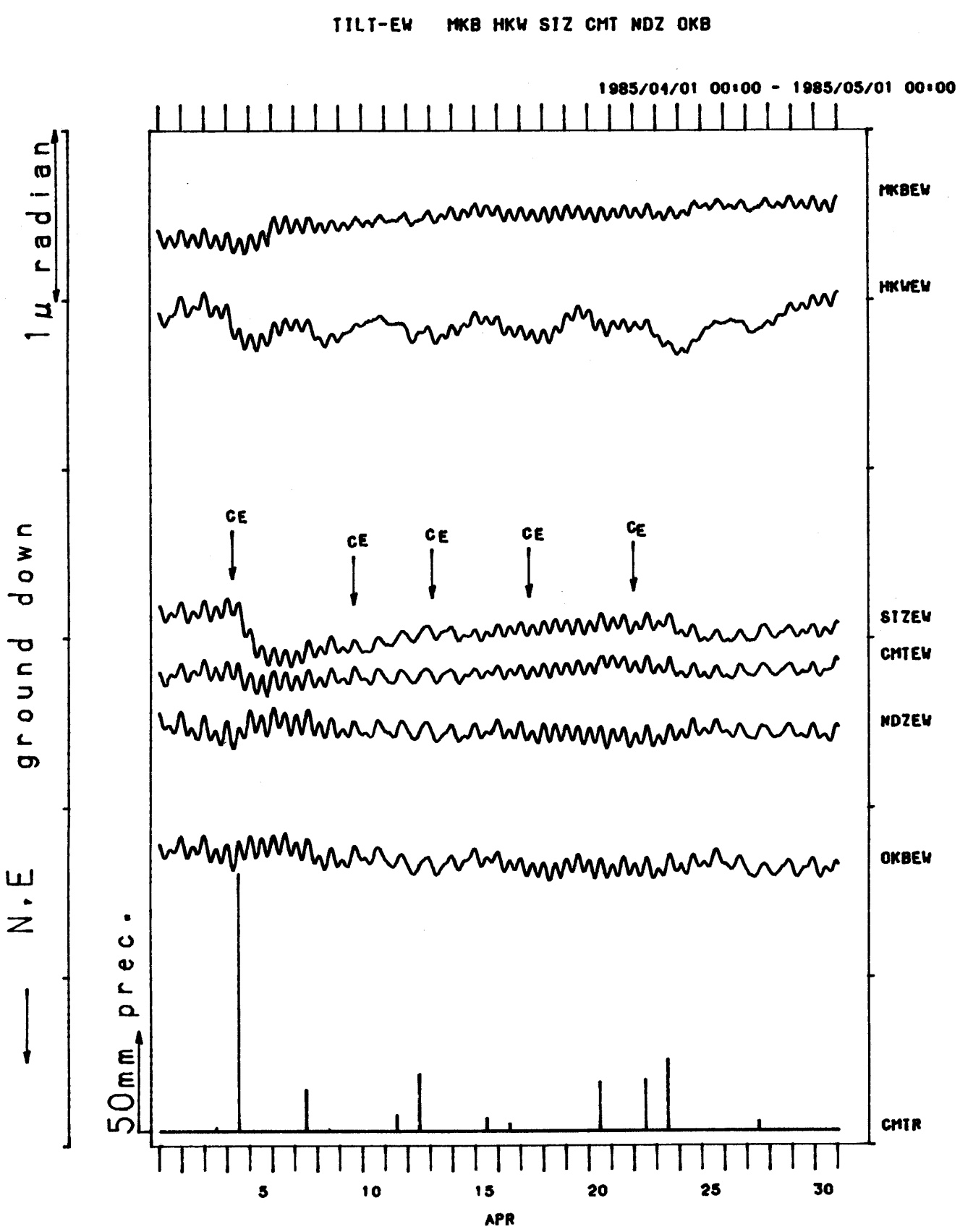


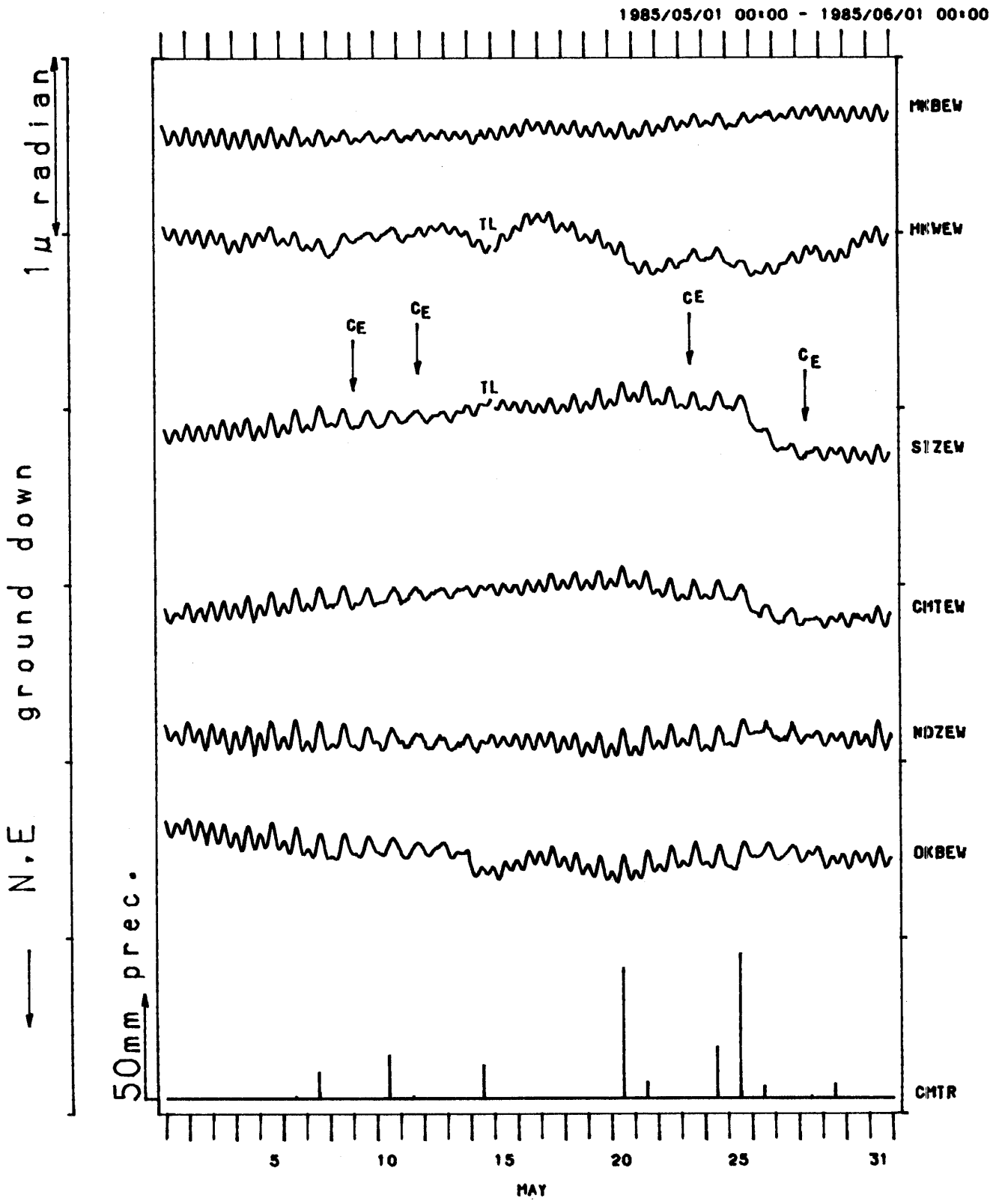
(b) 三ケ日（MKB）・本川根（HKW）・静岡（SIZ）・近又（CMT）・野田沢（NDZ）・岡部（OKB）の傾斜EW成分と近又の日雨量

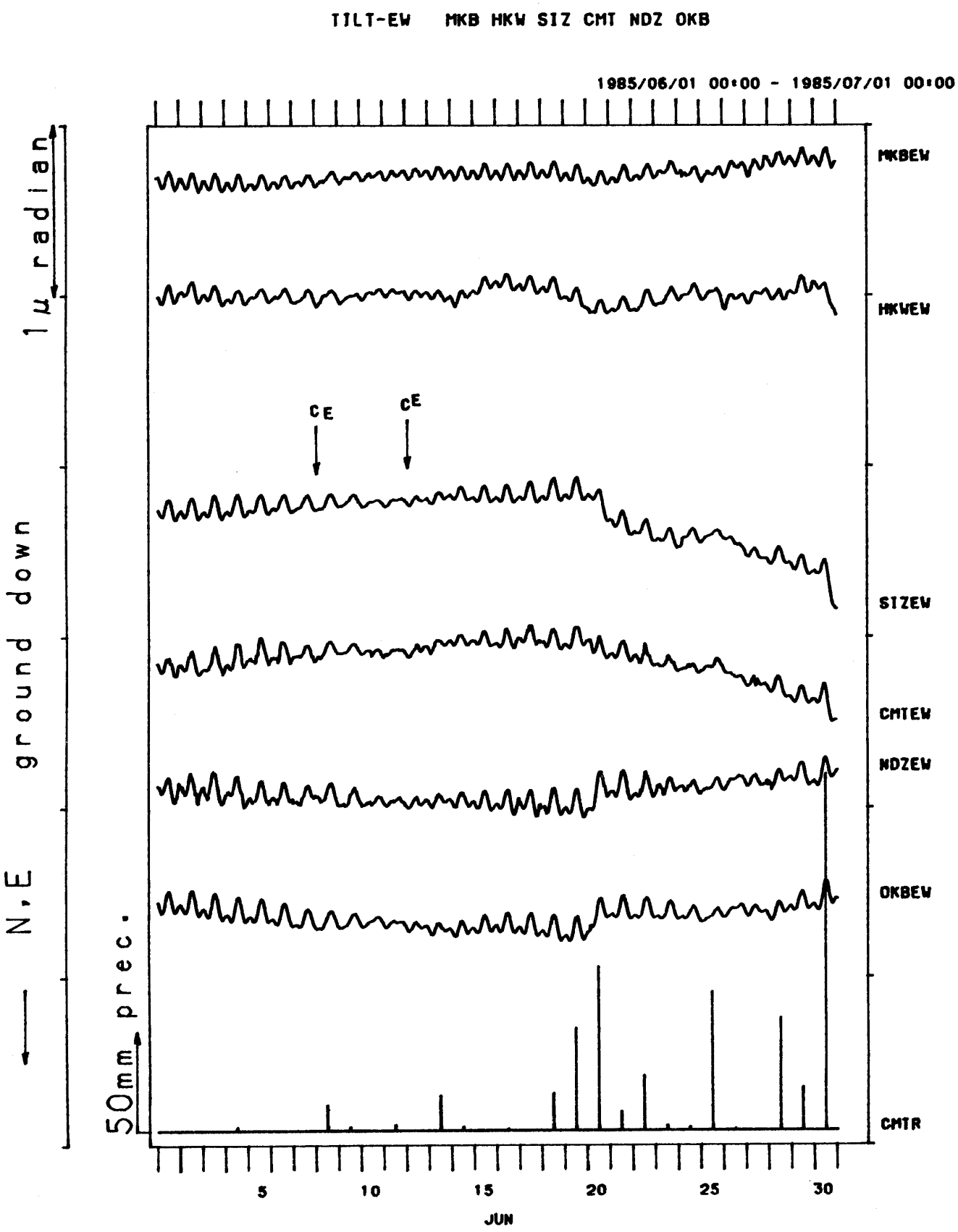
EW−component of crustal tilt at Mikkabi (MKB), Honkawane (HKW), Shizuoka (SIZ), Chikamata (CMT), Nodazawa (NDZ), Okabe (OKB) and the daily precipitation at Chikamata.

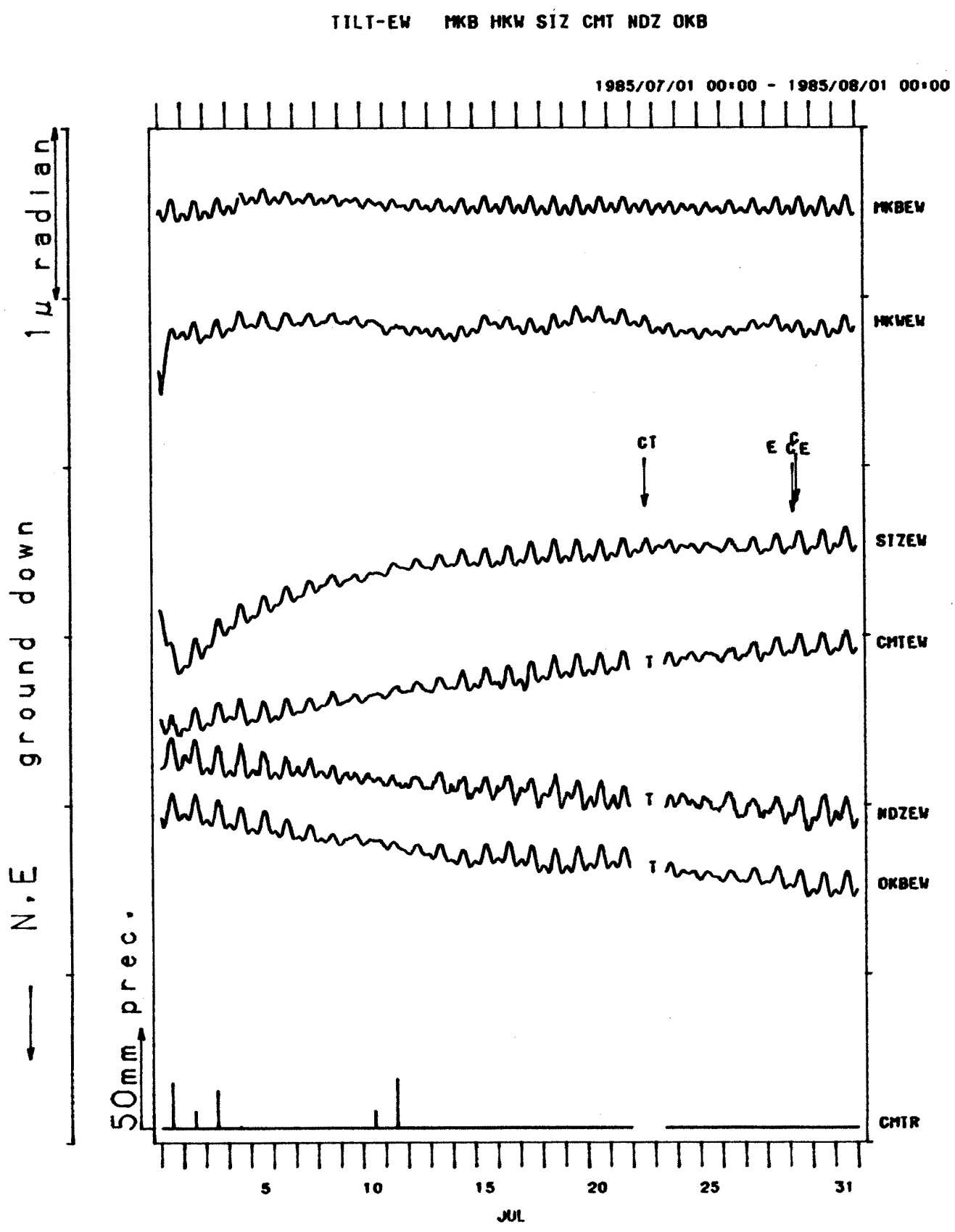

TILT-EW　MKB HKW SIZ CMT NDZ OKB
1985/02/01 00:00 - 1985/03/01 00:00
1μ radian
N.E ground down
CM
CE
MKBEW
CE
TL
TL
HKWEW
CE CM
TL
SIZEW
T 3)
CMTEW
T 3)
NDZEW
T 3)
OKBEW
50mm prec.
CMTR
5
10
15
20
25
28
FEB

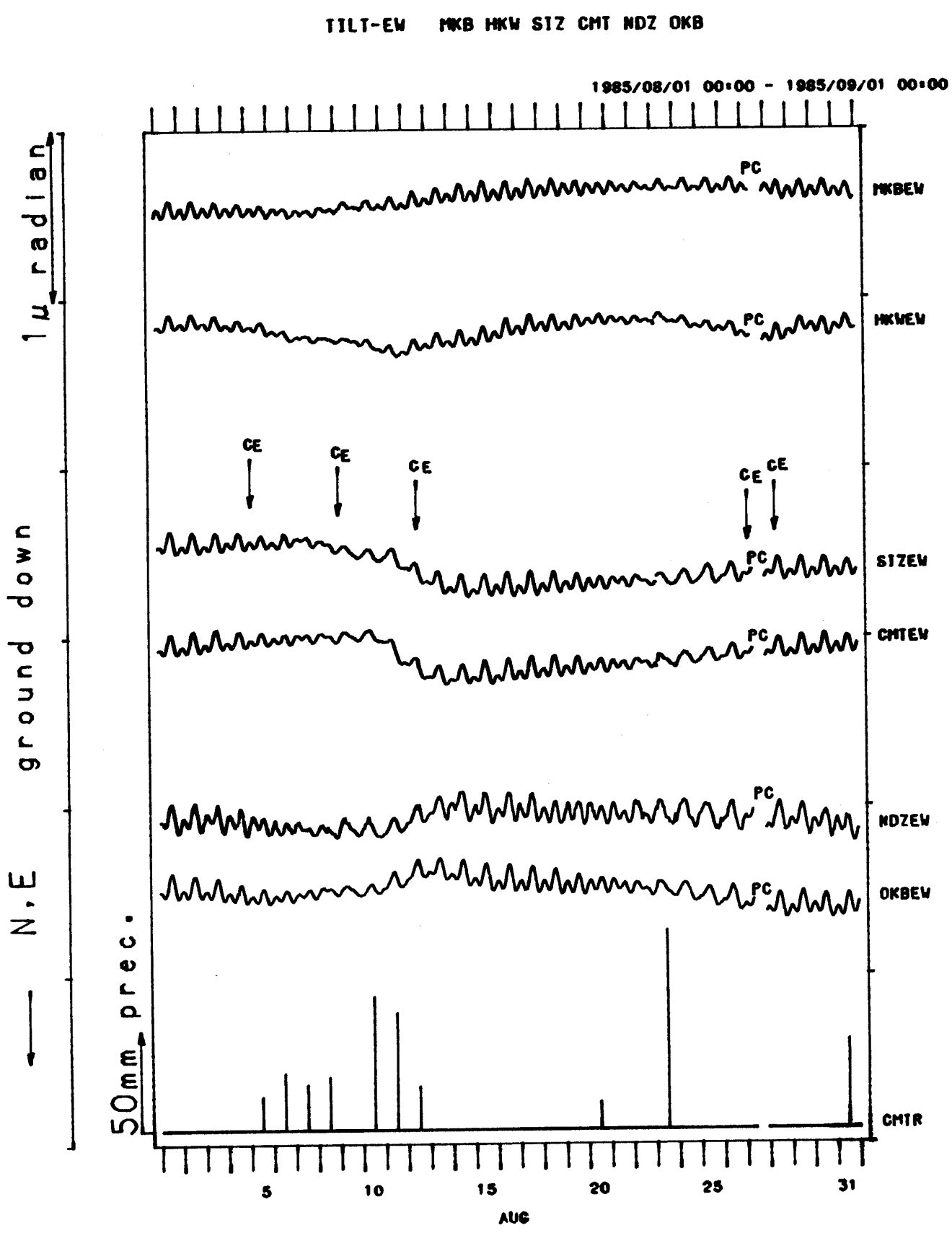

TILT-EW MKB HKW SIZ CMT NDZ OKB
1985/03/01 00:00 - 1985/04/01 00:00
1 μ radian
N, E ground down
50mm prec.
MKBEW
HKWEW
SIZEW
CMTEW
NDZEW
OKBEW
CMTR
TL
CE
P?
M
T 3)
5
10
15
20
25
31
MAR

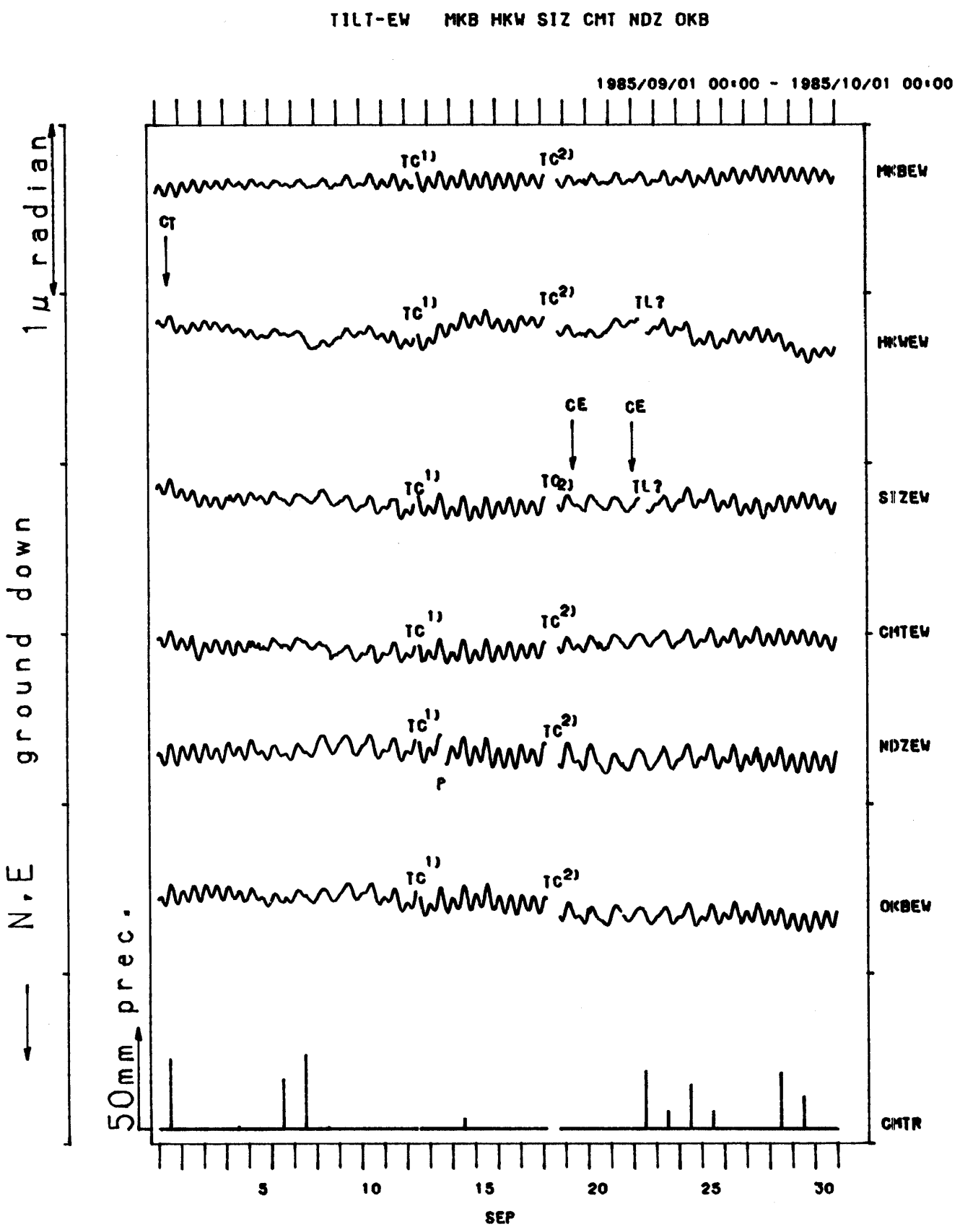

TILT-EW　MKB HKW SIZ CMT NDZ OKB
1985/04/01 00:00 - 1985/05/01 00:00
1μ radian
N.E ground down
50mm prec.
MKBEW
HKWEW
CE
CE
CE
CE
CE
SIZEW
CMTEW
NDZEW
OKBEW
CMTR
5
10
15
20
25
30
APR


TILT-EW MKB HKW SIZ CMT NDZ OKB
1985/05/01 00:00 - 1985/06/01 00:00
1μ radian
N,E ground down
MKBEW
HKWEW
SIZEW
CMTEW
NDZEW
OKBEW
CMTR
TL
TL
CE
CE
CE
CE
50mm prec.
5
10
15
20
25
31
MAY


TILT-EW　MKB HKW SIZ CMT NDZ OKB
1985/06/01 00:00 - 1985/07/01 00:00
1μ radian
N,E ground down
MKBEW
HKWEW
CE
CE
SIZEW
CMTEW
NDZEW
OKBEW
50mm prec.
CMTR
5
10
15
20
25
30
JUN


TILT-EW MKB HKW SIZ CMT NDZ OKB
1985/07/01 00:00 - 1985/08/01 00:00
1μ radian
N, E ground down
MKBEW
HKWEW
CT
E
E
SIZEW
CMTEW
NDZEW
OKBEW
50mm prec.
CMTR
5
10
15
20
25
31
JUL


TILT-EW　MKB MKW SIZ CMT NDZ OKB
1985/08/01 00:00 - 1985/09/01 00:00
1 μ radian
N, E ground down
PC
MKBEW
MKWEW
CE
SIZEW
CMTEW
NDZEW
OKBEW
50mm prec.
CMTR
5
10
15
20
25
31
AUG


TILT-EW MKB HKW SIZ CMT NDZ OKB
1985/09/01 00:00 - 1985/10/01 00:00
1 μ radian
N.E ground down
50mm prec.
MKBEW
HKWEW
SIZEW
CMTEW
NDZEW
OKBEW
CMTR
TC1)
TC2)
CT
TL?
CE
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20
25
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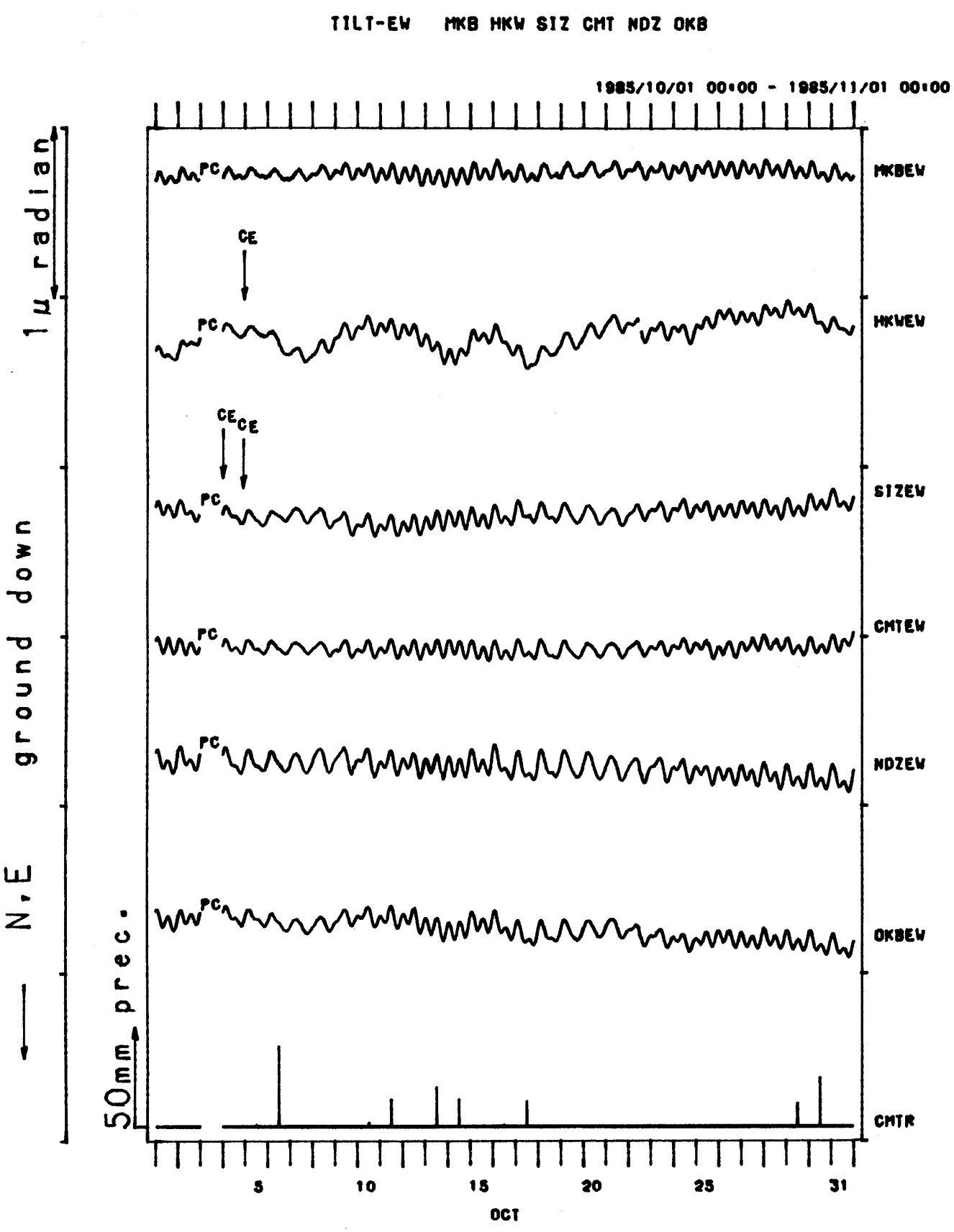
SEP


TILT-EW　MKB HKW SIZ CMT NDZ OKB
1985/10/01 00:00 - 1985/11/01 00:00
1μ radian
N,E ground down
50mm prec.
PC
CE
MKBEW
HKWEW
SIZEW
CMTEW
NDZEW
OKBEW
CMTR
5
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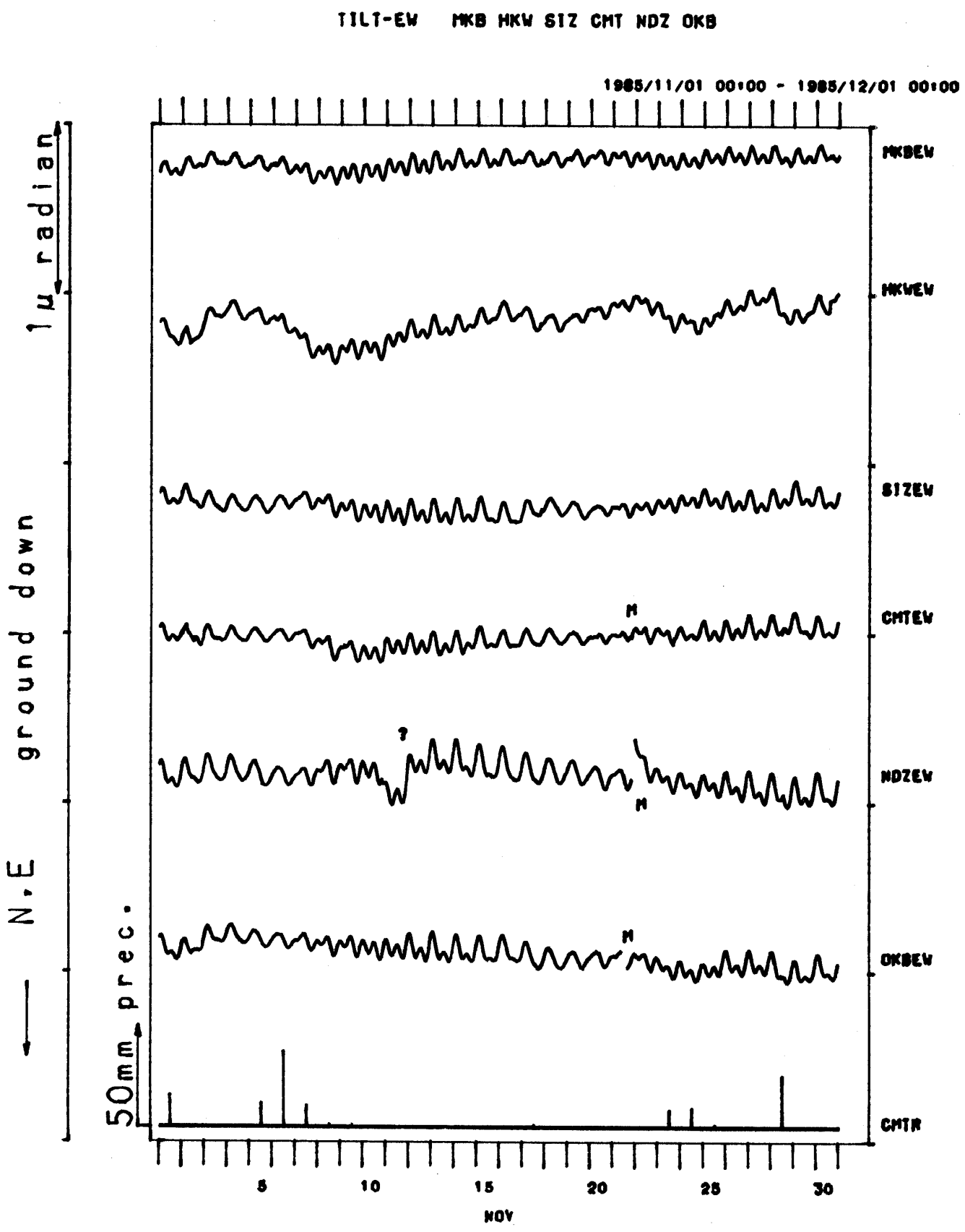
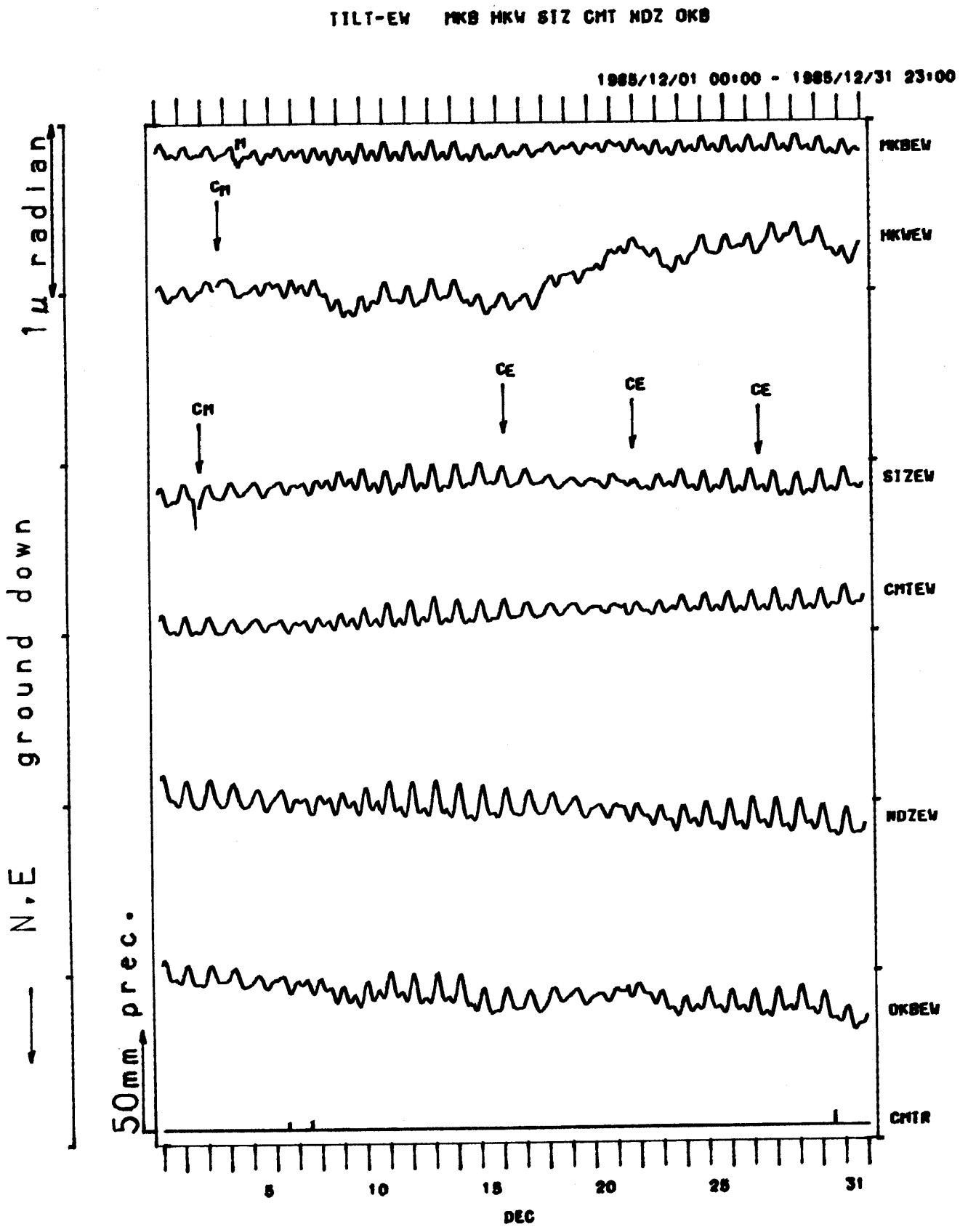
OCT


TILT-EW MKB HKW SIZ CMT NDZ OKB
1985/11/01 00:00 - 1985/12/01 00:00
1μ radian
N.E ground down
MKBEW
HKWEW
SIZEW
CMTEW
NDZEW
OKBEW
CMTR
50mm prec.
M
?
5
10
15
20
25
30
NOV


TILT-EW　MKB HKW SIZ CMT NDZ OKB
1985/12/01 00:00 - 1985/12/31 23:00
1μ radian
ground down
N,E
50mm prec.
MKBEW
HKWEW
SIZEW
CMTEW
NDZEW
OKBEW
CMTR
CM
CE
CE
CE
CM
5
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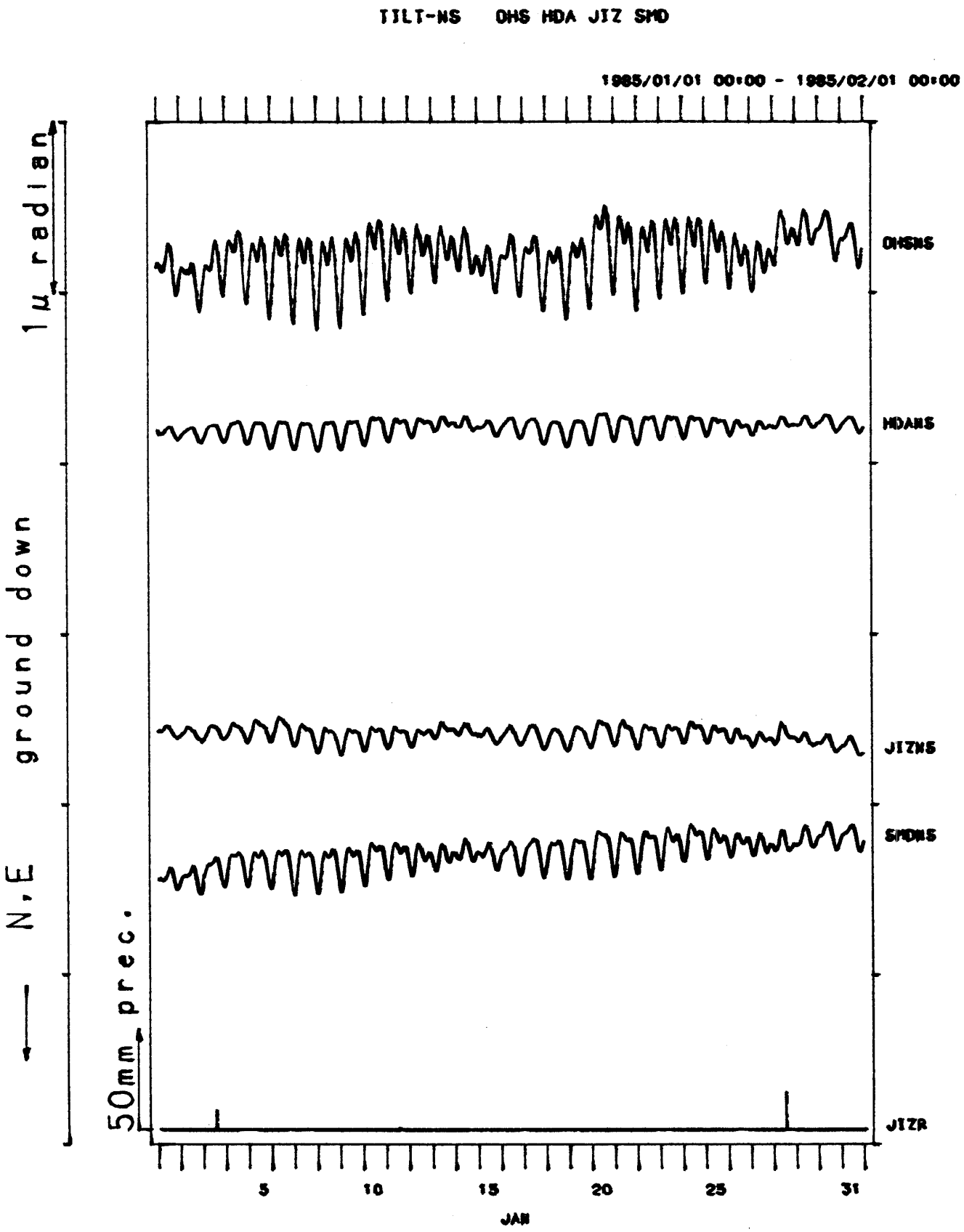
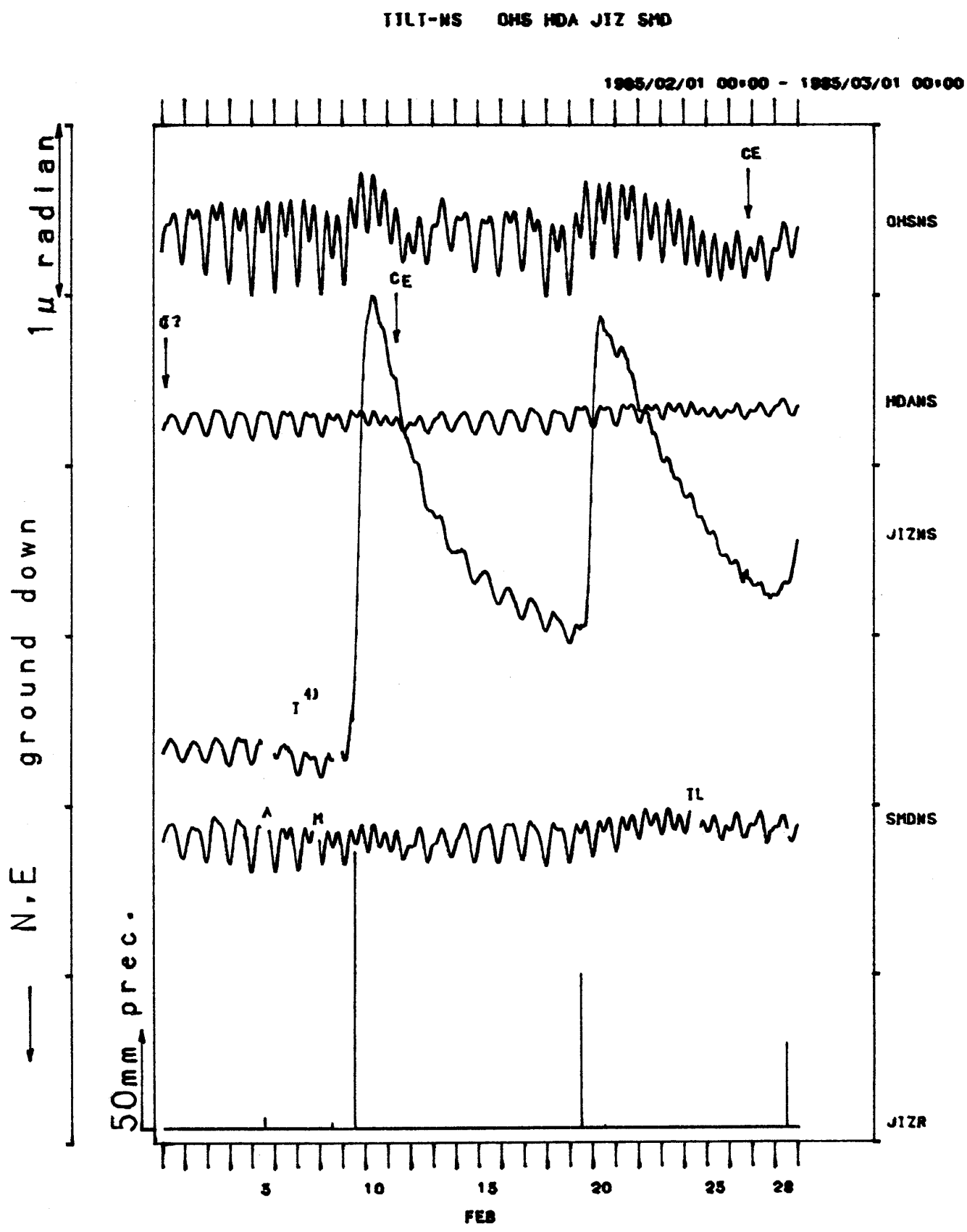
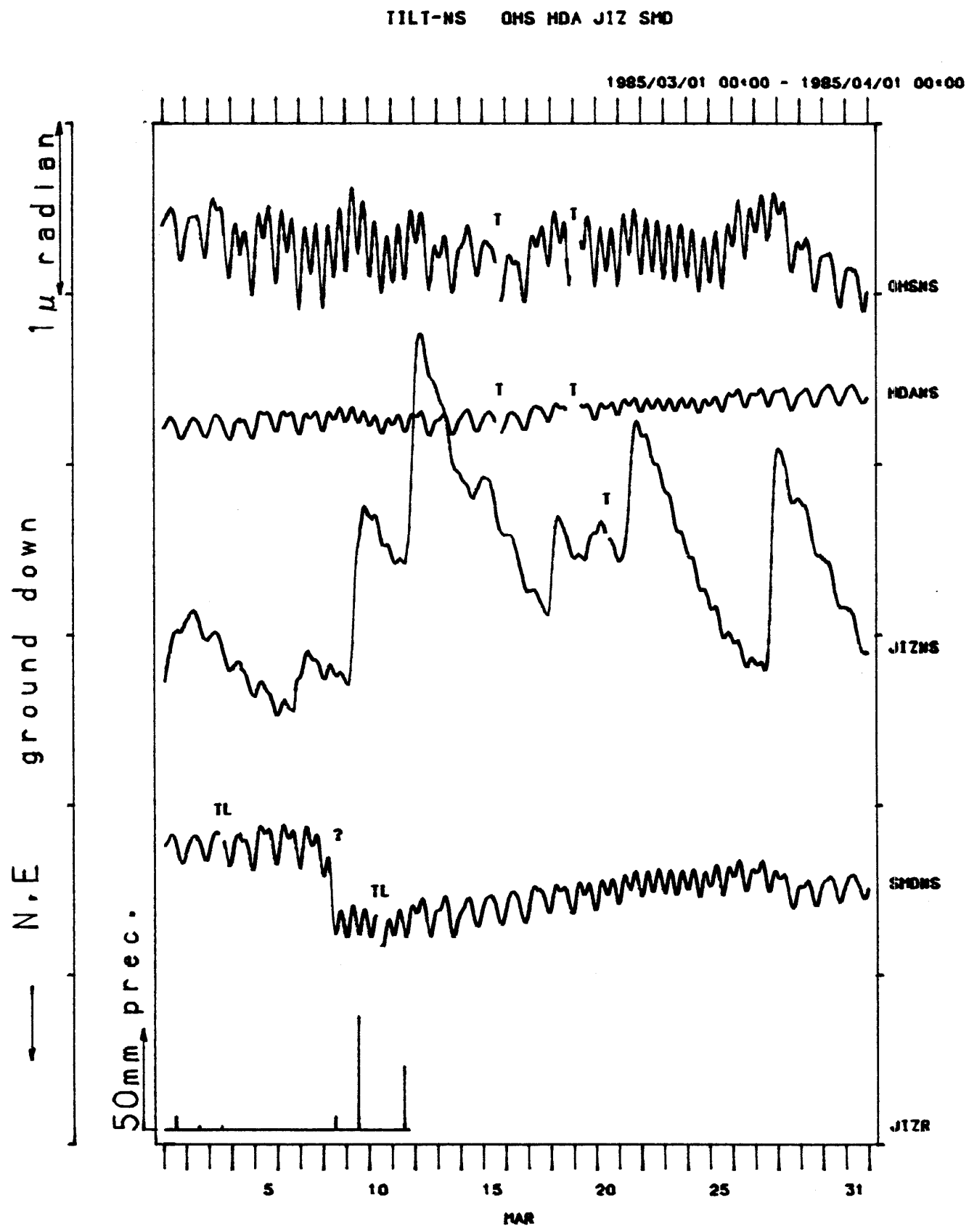
DEC

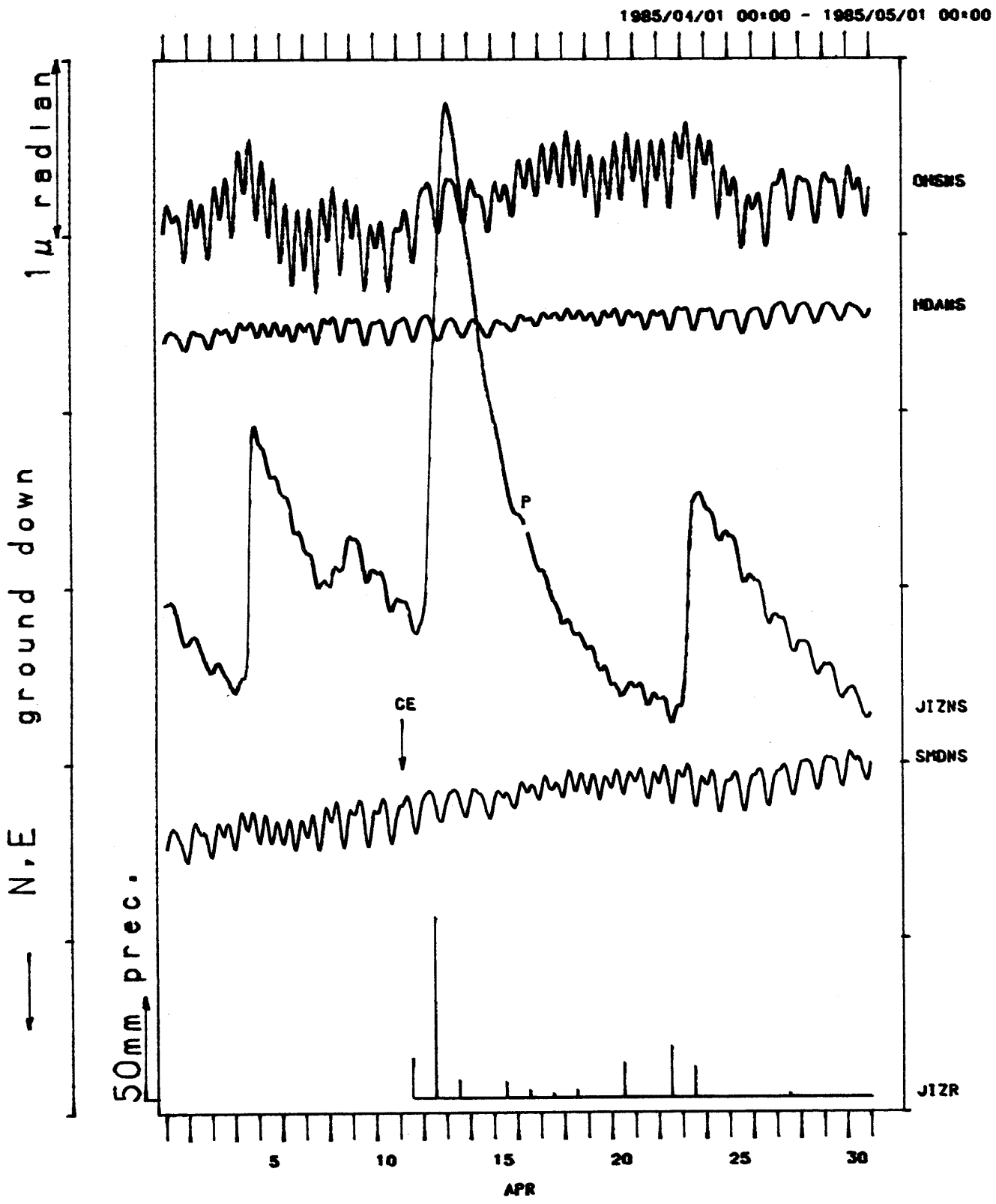


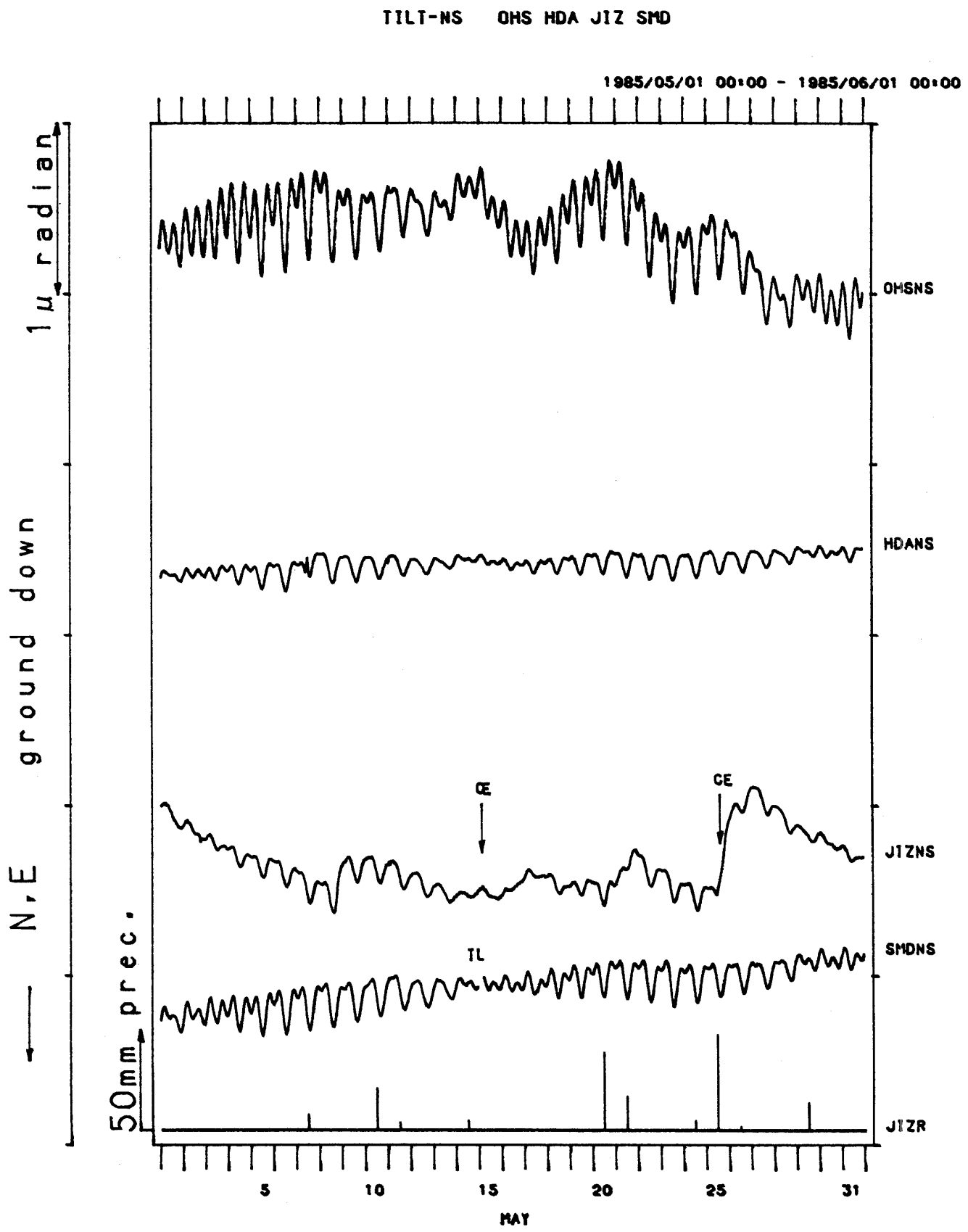
(c) 大須賀（OHS）・戸田（HDA）・中伊豆（JIZ）・下田（SMD）の傾斜NS成分と中伊豆の日雨量

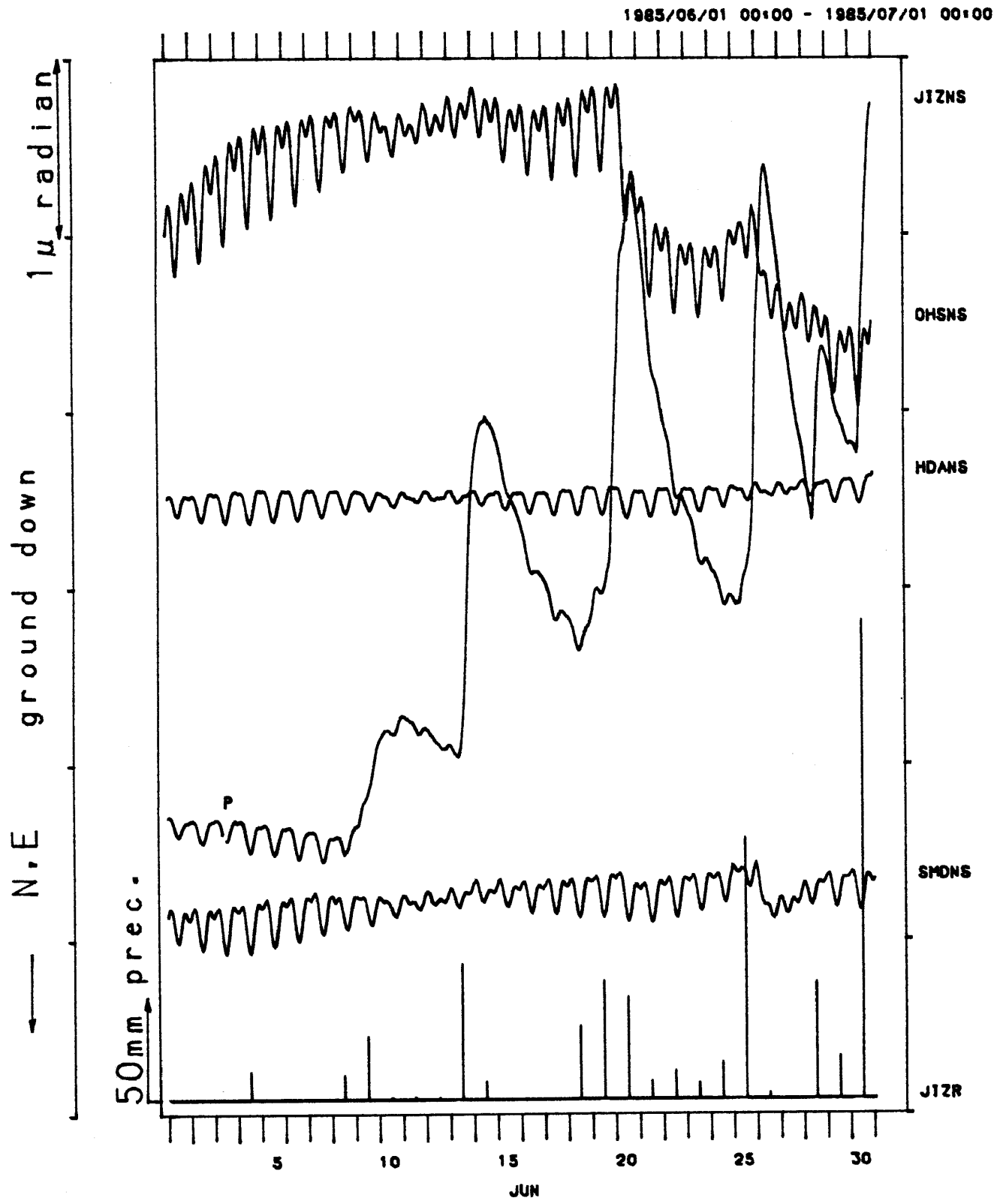
NS−component of crustal tilt at Ohsuga (OHS), Heda (HDA), Nakaizu (JIZ), Shimoda (SMD) and the daily precipitation at Nakaizu.

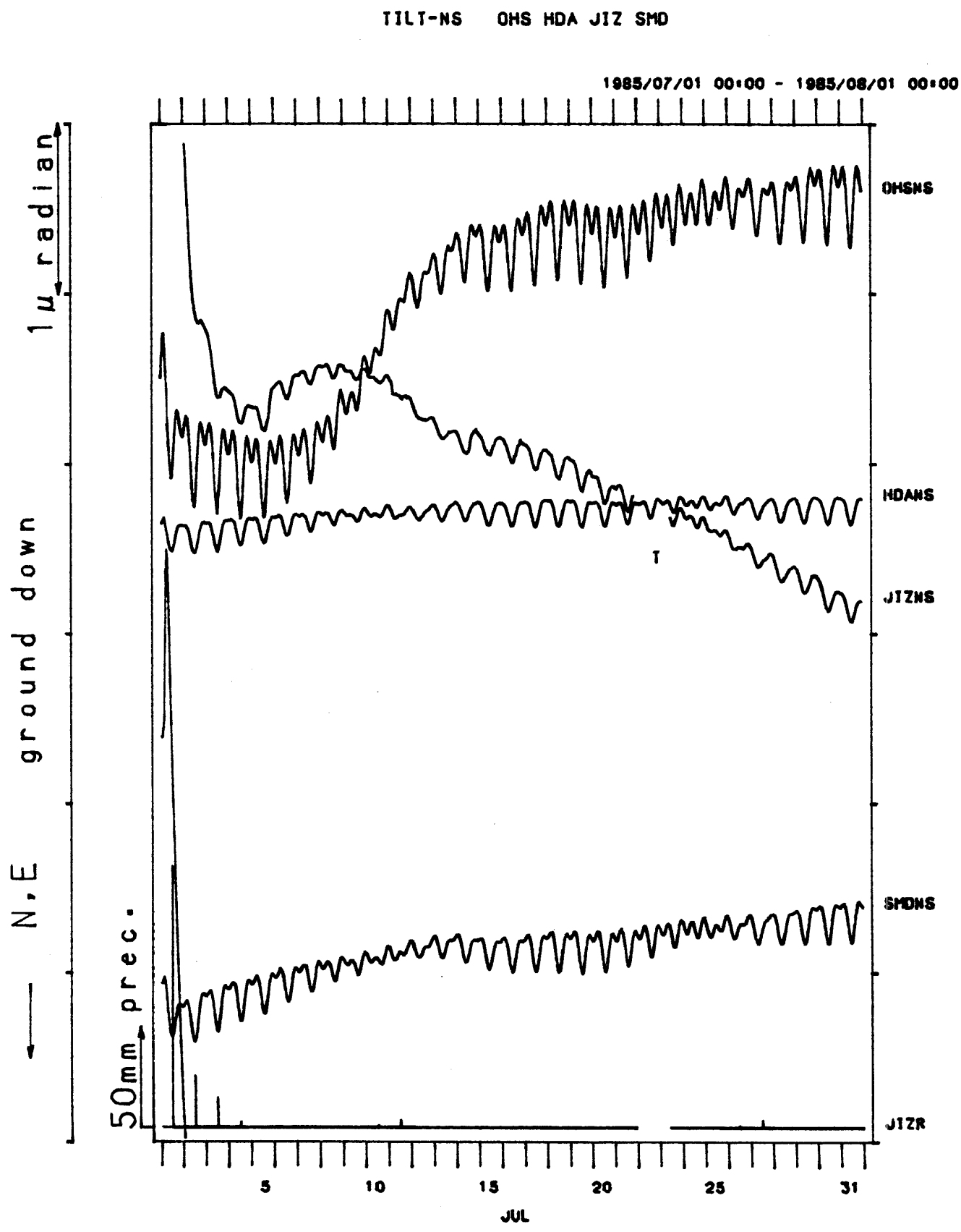

TILT-NS　OHS HDA JIZ SMD
1985/02/01 00:00 - 1985/03/01 00:00
1μ radian
N,E ground down
50mm prec.
CE
CE
G?
T
TL
OHSNS
HDANS
JIZNS
SMDNS
JIZR
5
10
15
20
25
28
FEB


TILT-NS OHS HDA JIZ SMD
1985/03/01 00:00 - 1985/04/01 00:00
1 μ radian
N,E ground down
OHSNS
HDANS
JIZNS
SMDNS
JIZR
T
TL
?
50mm prec.
5
10
15
20
25
31
MAR


TILT-NS　OHS HDA JIZ SMO
1985/04/01 00:00 - 1985/05/01 00:00
1μ radian
N,E ground down
OHSNS
HDANS
P
CE
JIZNS
SMONS
50mm prec.
JIZR
5
10
15
20
25
30
APR


TILT-NS OHS HDA JIZ SMD
1985/05/01 00:00 - 1985/06/01 00:00
1μ radian
N,E ground down
OHSNS
HDANS
CE
CE
JIZNS
TL
SMDNS
50mm prec.
JIZR
5
10
15
20
25
31
MAY


TILT-NS　OHS HDA JIZ SMD
1985/06/01 00:00 - 1985/07/01 00:00
1μ radian
N.E ground down
JIZNS
OHSNS
HDANS
SMDNS
JIZR
P
50mm prec.
5
10
15
20
25
30
JUN


TILT-NS OHS HDA JIZ SMD
1985/07/01 00:00 - 1985/08/01 00:00
1μ radian
N,E ground down
OHSNS
HDANS
JIZNS
SMDNS
JIZR
50mm prec.
T
5
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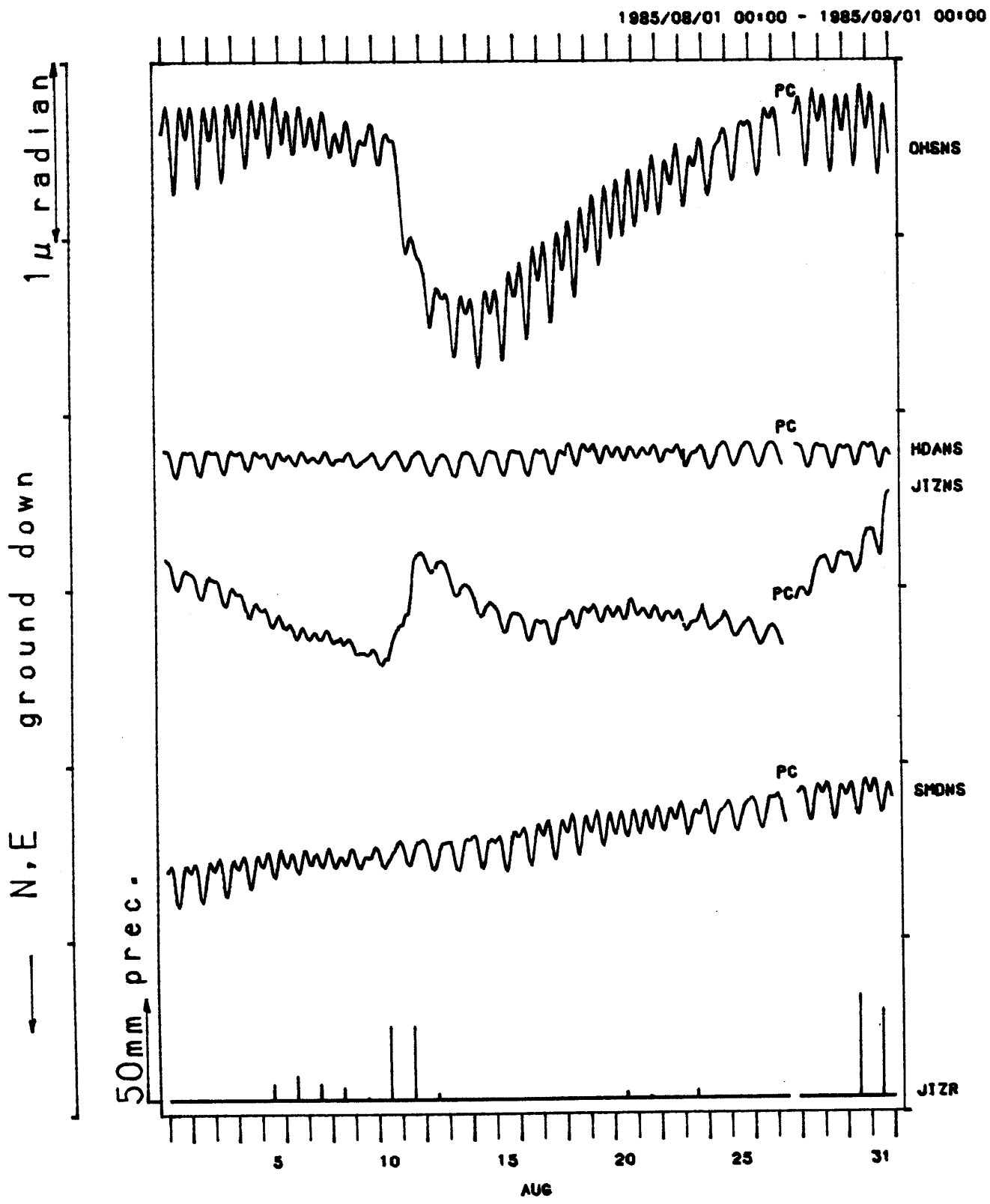
15
20
25
31
JUL


TILT-NS　OHS HDA JIZ SMD
1985/08/01 00:00 - 1985/09/01 00:00
1μ radian
N,E ground down
50mm prec.
PC
OHSNS
HDANS
JIZNS
SMDNS
JIZR
5
10
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20
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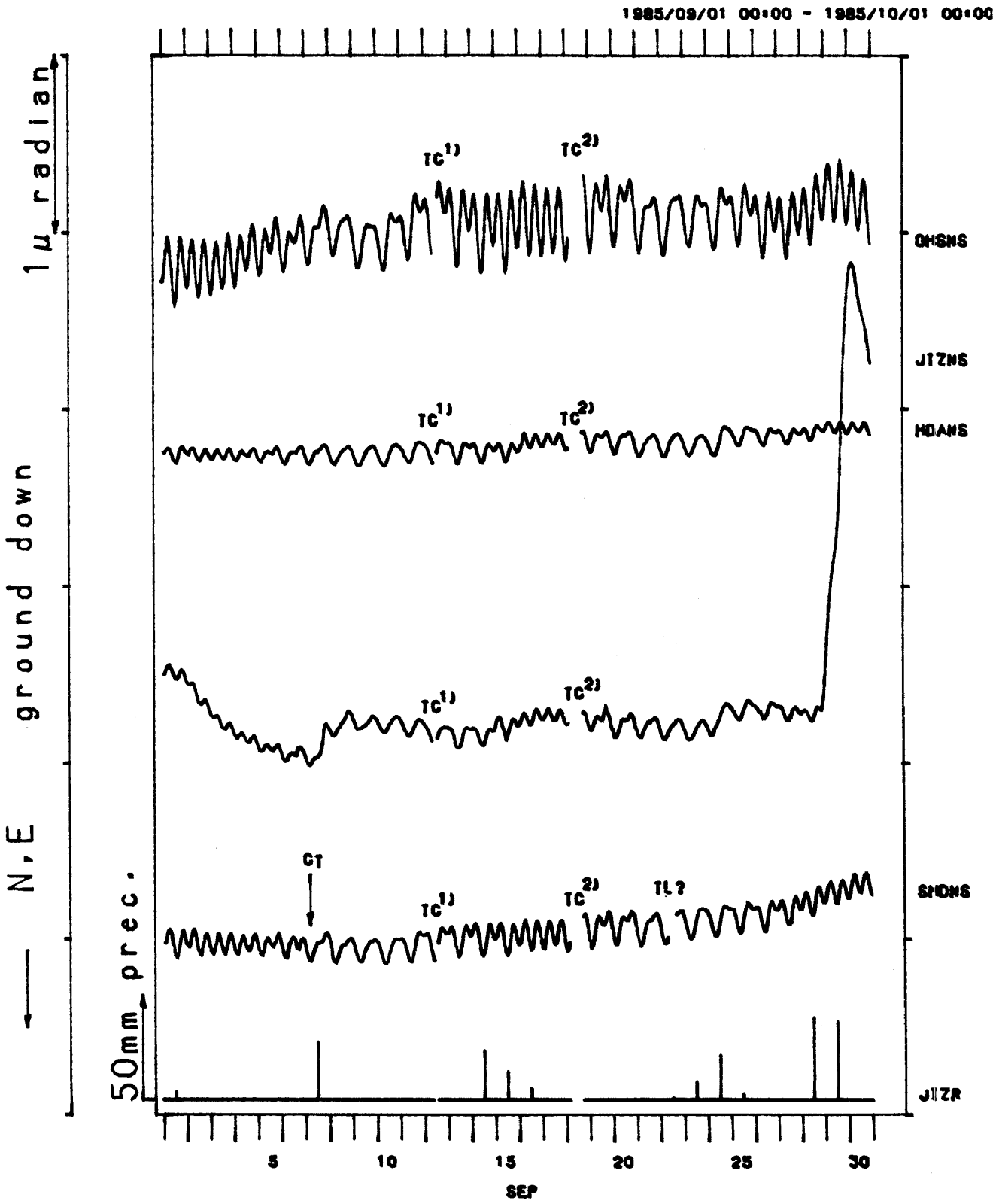
31
AUG


TILT-NS OHS HDA JIZ SMO
1985/09/01 00:00 - 1985/10/01 00:00
1μ radian
N,E ground down
50mm prec.
TC1)
TC2)
CT
TL?
OHSNS
JIZNS
HDANS
SMONS
JIZR
5
10
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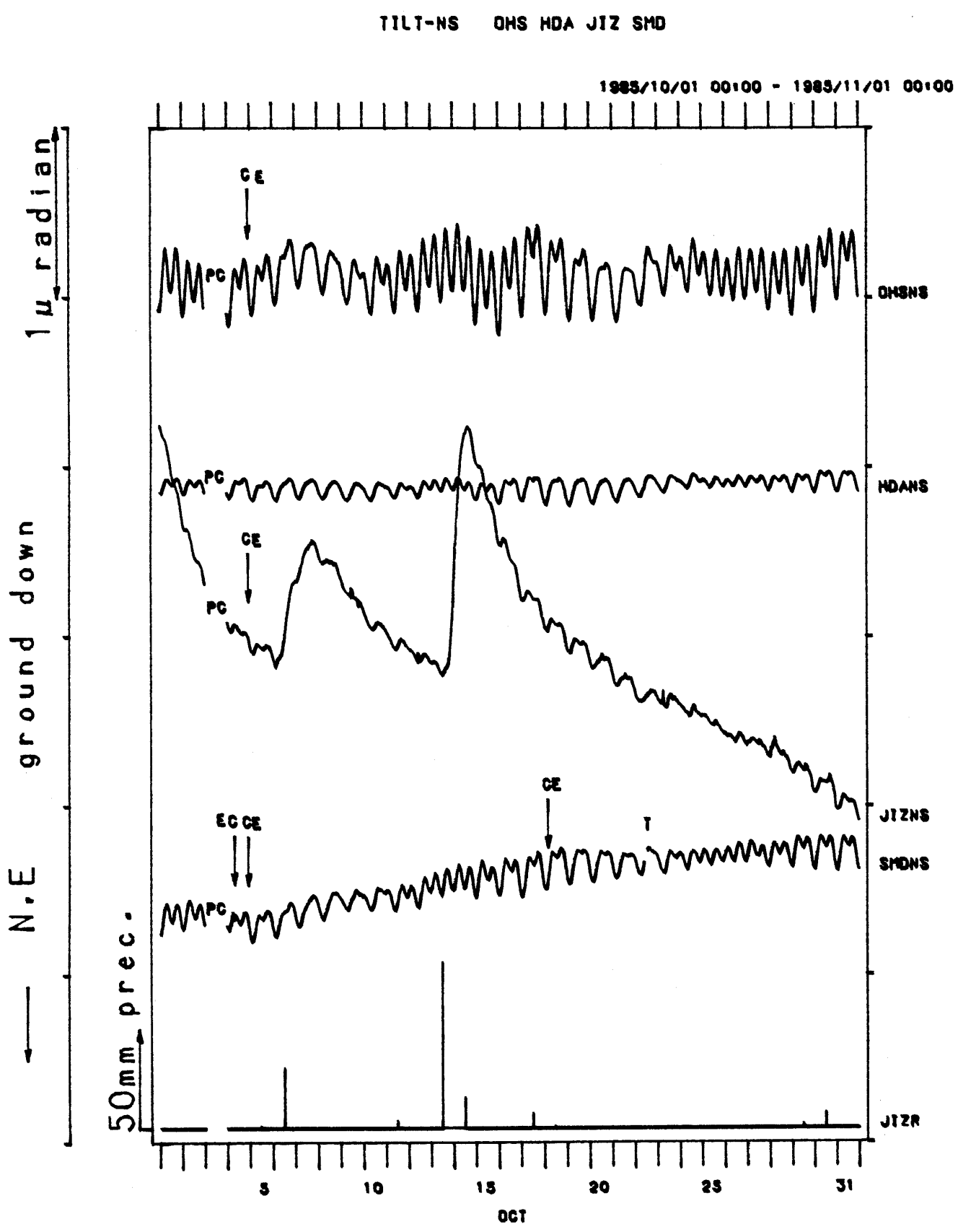
25
30
SEP


TILT-NS　OHS HDA JIZ SMD
1985/10/01 00:00 - 1985/11/01 00:00
1μ radian
N.E ground down
CE
PC
EC
T
OHSNS
HDANS
JIZNS
SMDNS
JIZR
50mm prec.
5
10
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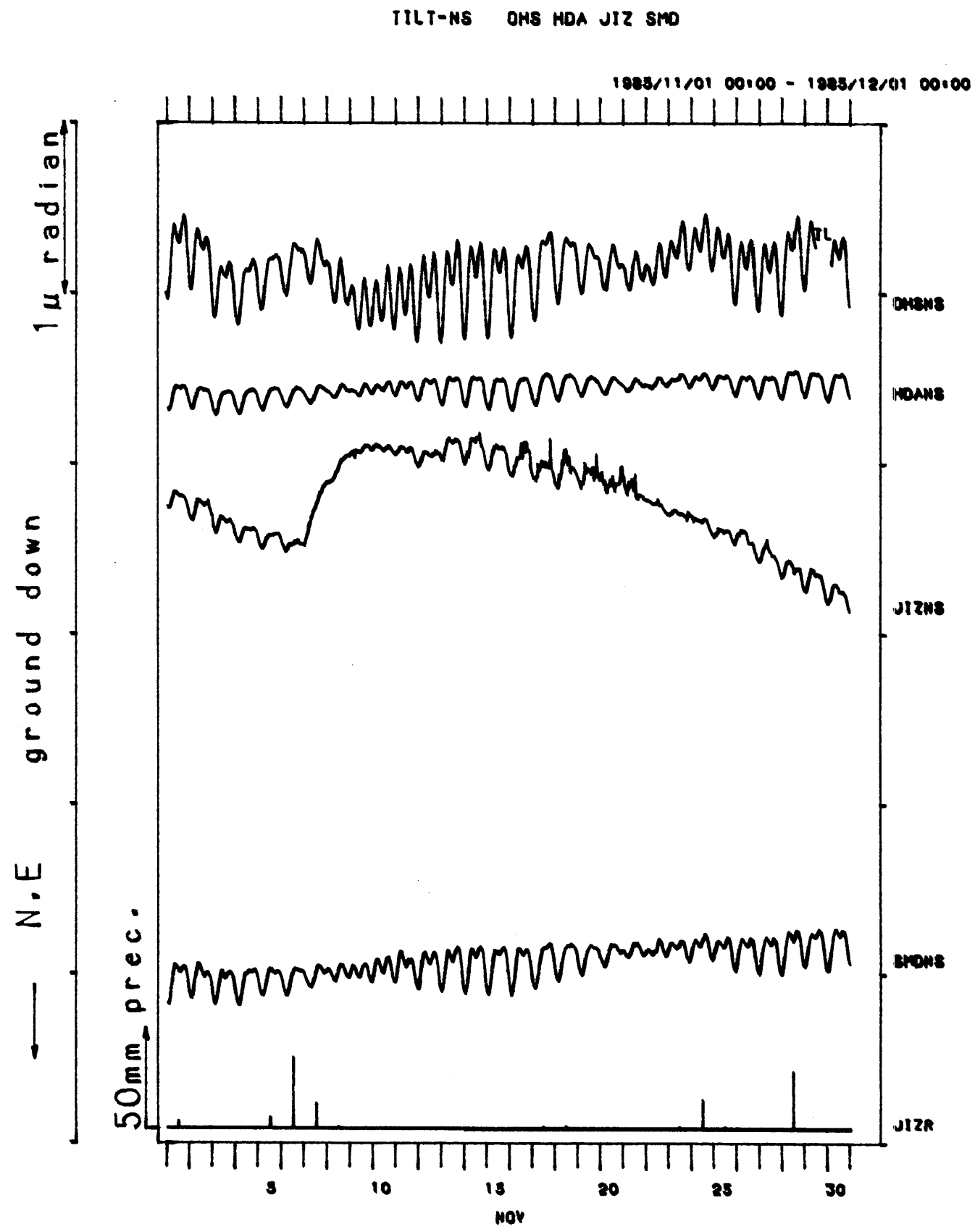
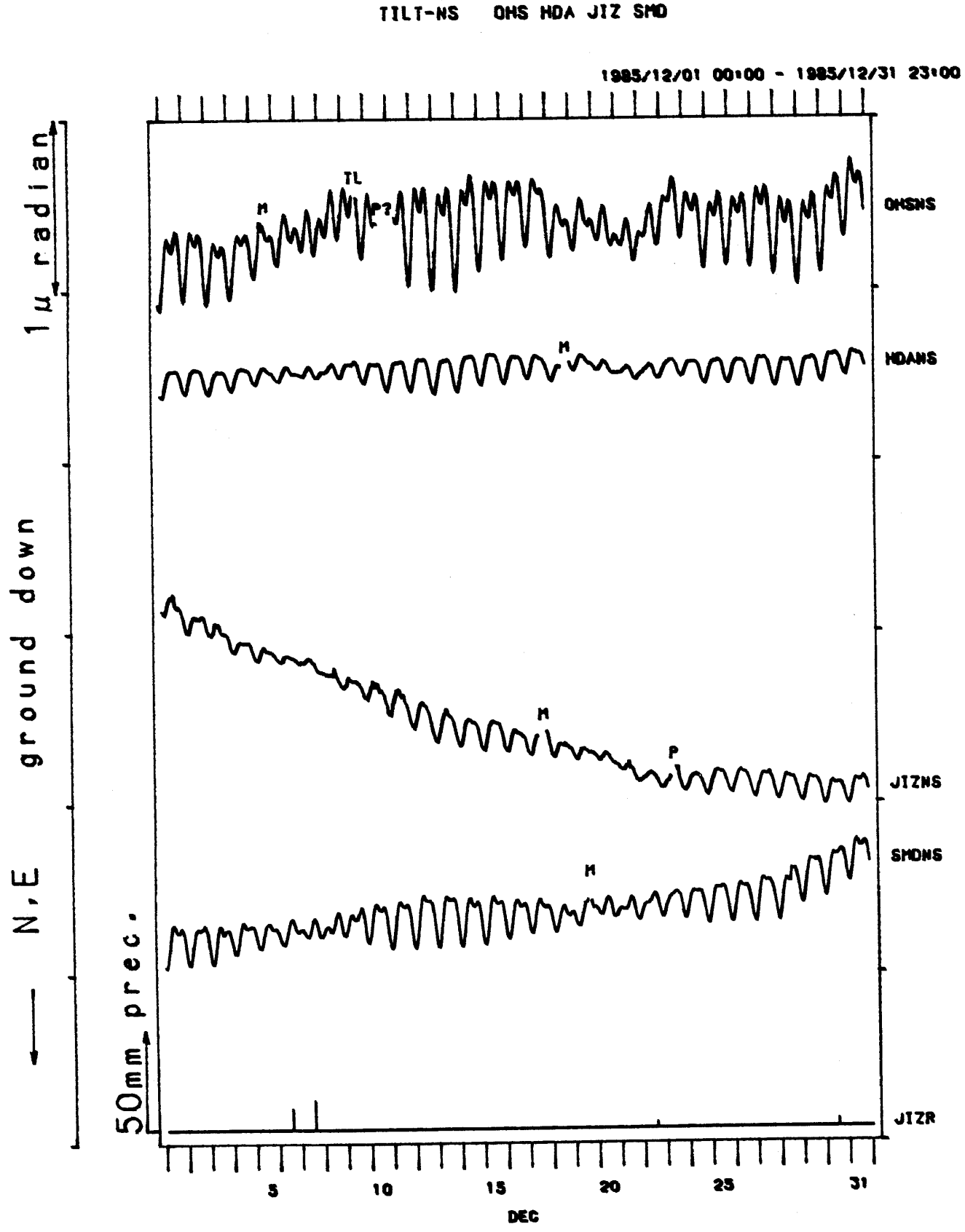
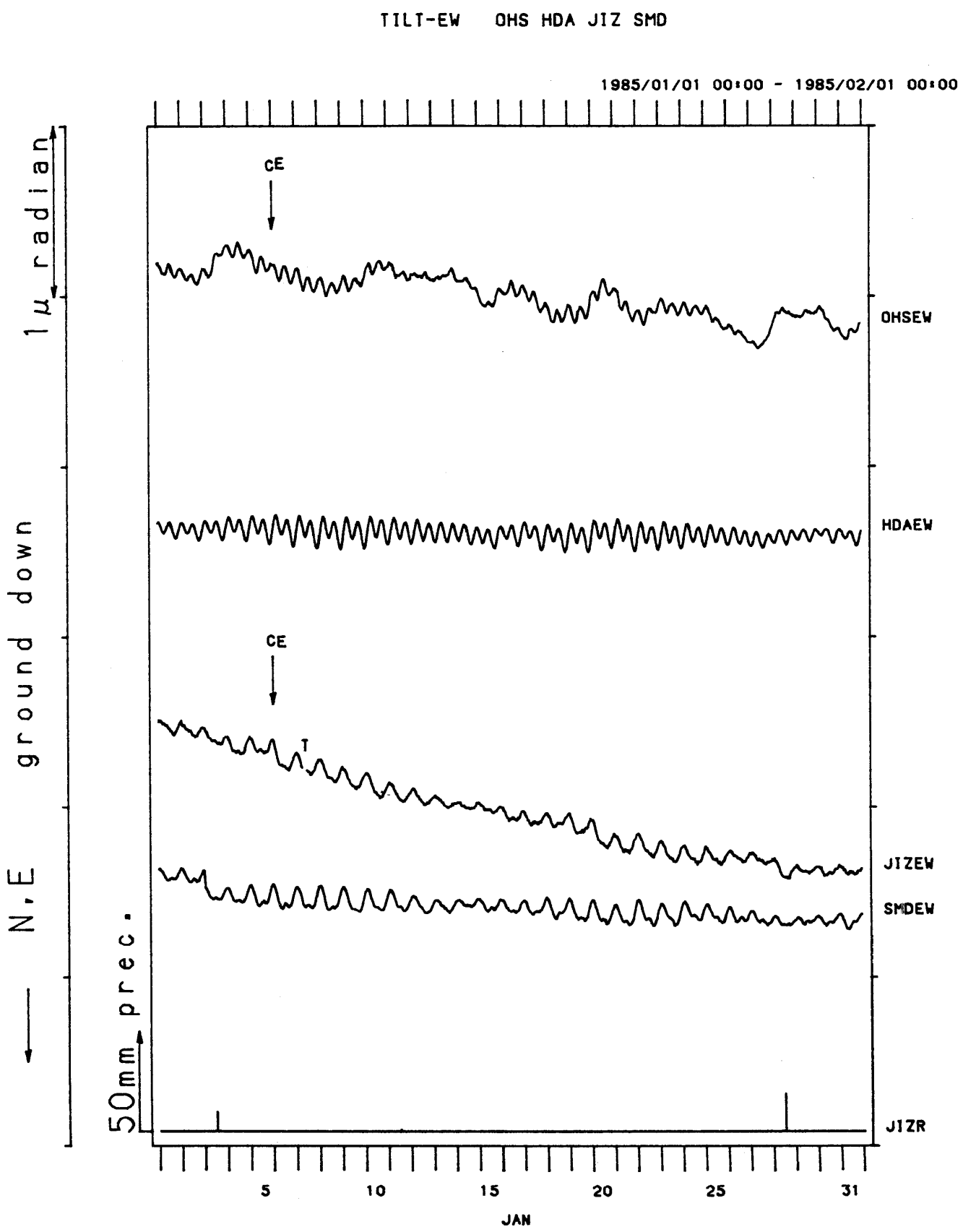
25
31
OCT

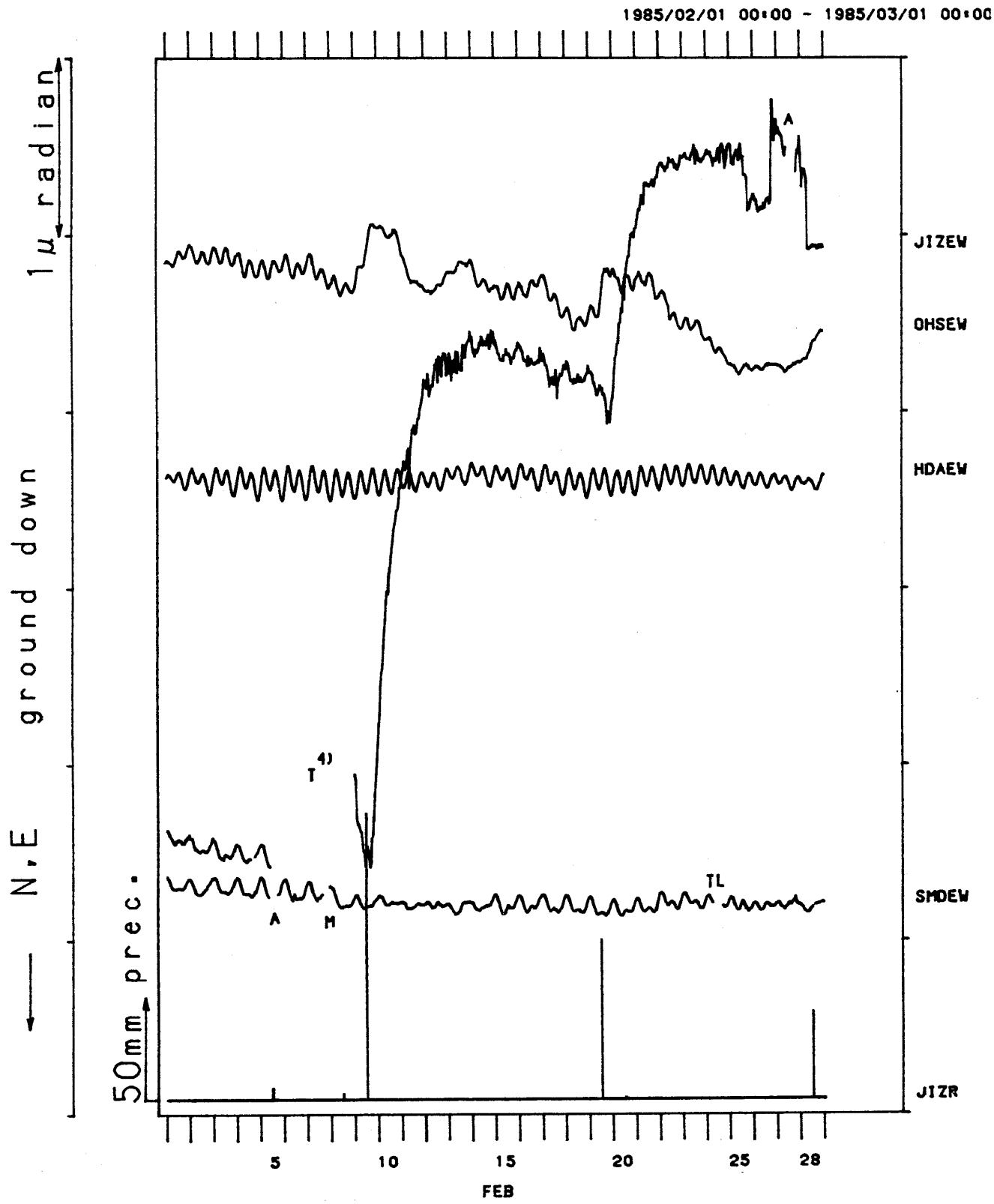

TILT-NS OHS HDA JIZ SMD
1985/11/01 00:00 - 1985/12/01 00:00
1μ radian
N.E ground down
OHSNS
HDANS
JIZNS
SMDNS
50mm prec.
JIZR
5
10
15
20
25
30
NOV

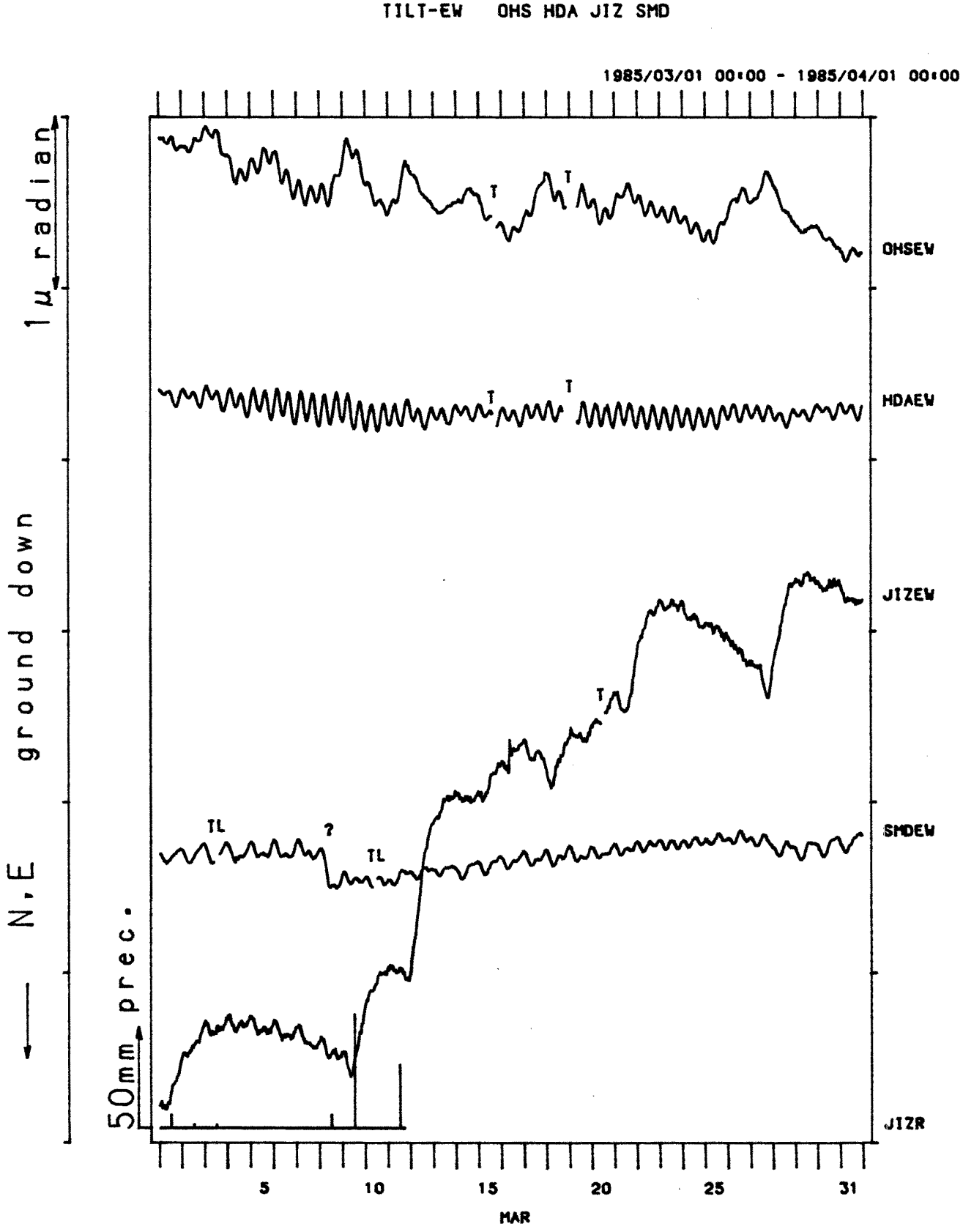

TILT-NS　OHS HDA JIZ SMD
1985/12/01 00:00 - 1985/12/31 23:00
1μ radian
N,E ground down
50mm prec.
TL
M
P?
M
M
P
M
OHSNS
HDANS
JIZNS
SMONS
JIZR
5
10
15
20
25
31
DEC



(d) 大須賀（OHS）・戸田（HDA）・中伊豆（JIZ）・下田（SMD）の傾斜EW成分と中伊豆の日雨量

EW−component of crustal tilt at Ohsuga (OHS), Heda (HDA), Nakaizu (JIZ), Shimoda (SMD) and the daily precipitation at Nakaizu.


TILT-EW　OHS HDA JIZ SMD
1985/02/01 00:00 - 1985/03/01 00:00
1μ radian
N,E ground down
JIZEW
OHSEW
HDAEW
SMDEW
JIZR
A
T 4)
A
M
TL
50mm prec.
5
10
15
20
25
28
FEB


TILT-EW OHS HDA JIZ SMD
1985/03/01 00:00 - 1985/04/01 00:00
1μ radian
N,E ground down
50mm prec.
OHSEW
HDAEW
JIZEW
SMDEW
JIZR
T
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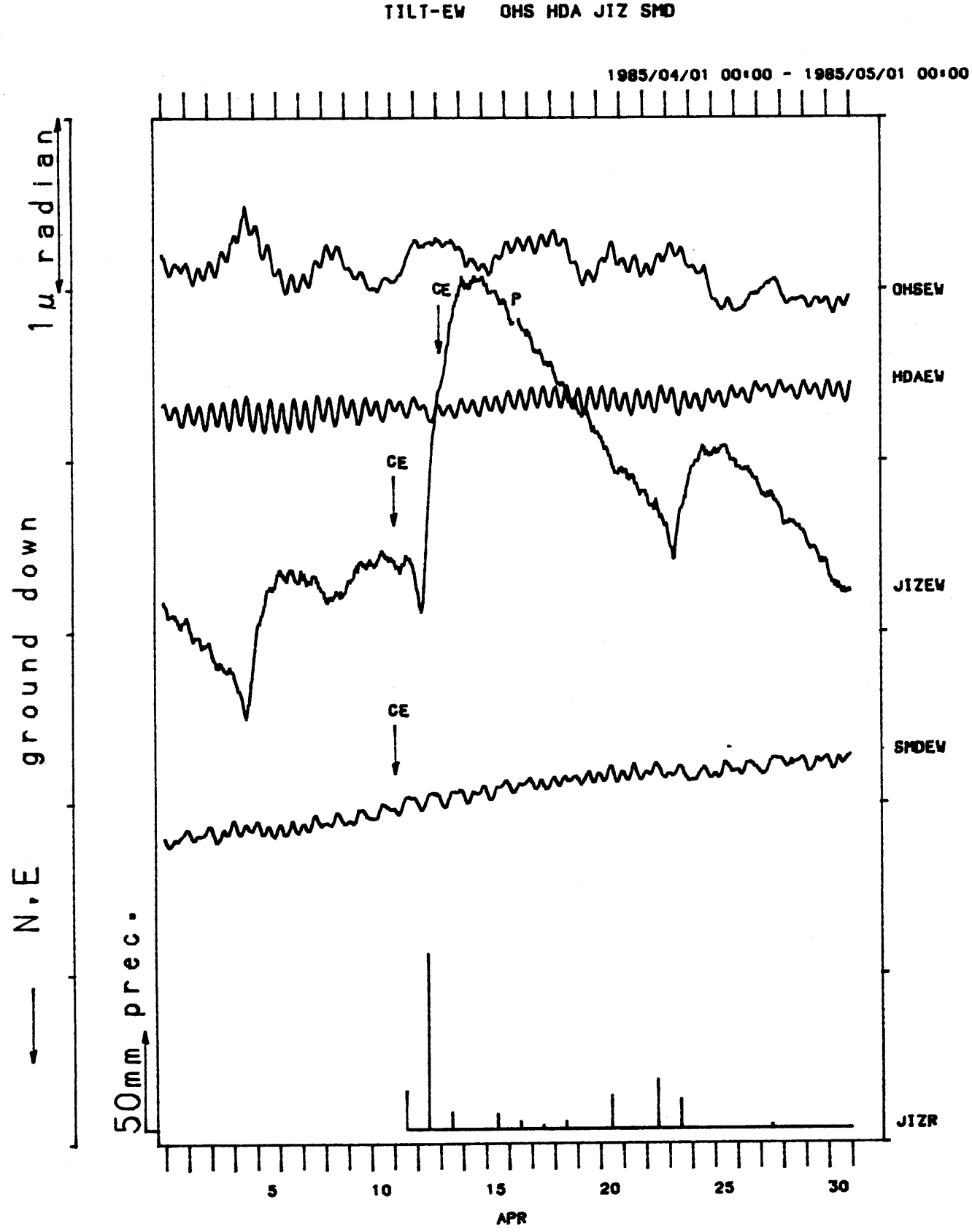
31
MAR


TILT-EW　OHS HDA JIZ SMD
1985/04/01 00:00 - 1985/05/01 00:00
1μ radian
N.E ground down
50mm prec.
CE
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CE
CE
OHSEW
HDAEW
JIZEW
SMDEW
JIZR
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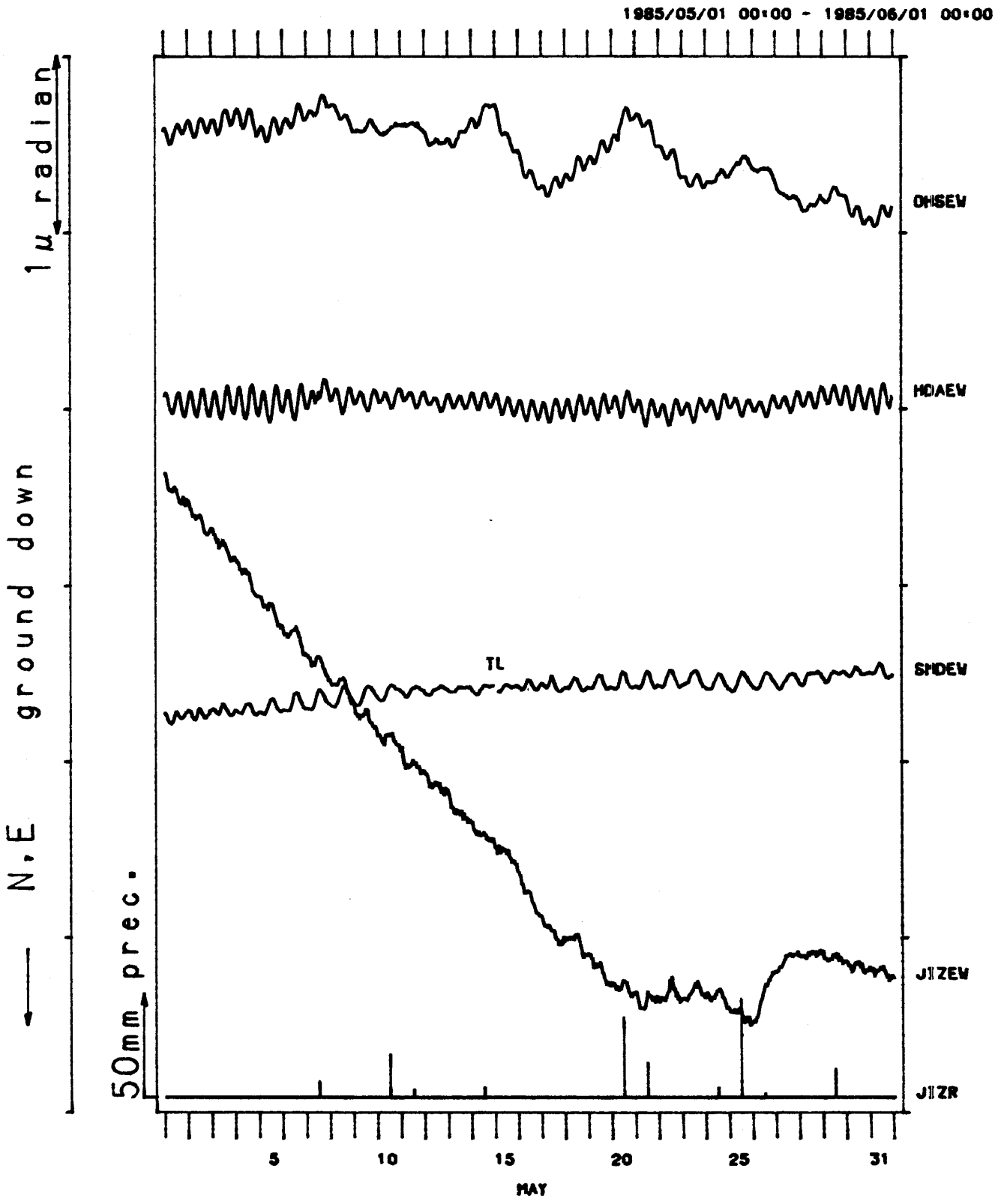
APR


TILT-EW OHS HDA JIZ SMD
1985/05/01 00:00 - 1985/06/01 00:00
1 μ radian
N.E ground down
50mm prec.
OHSEW
HDAEW
TL
SMDEW
JIZEW
JIZR
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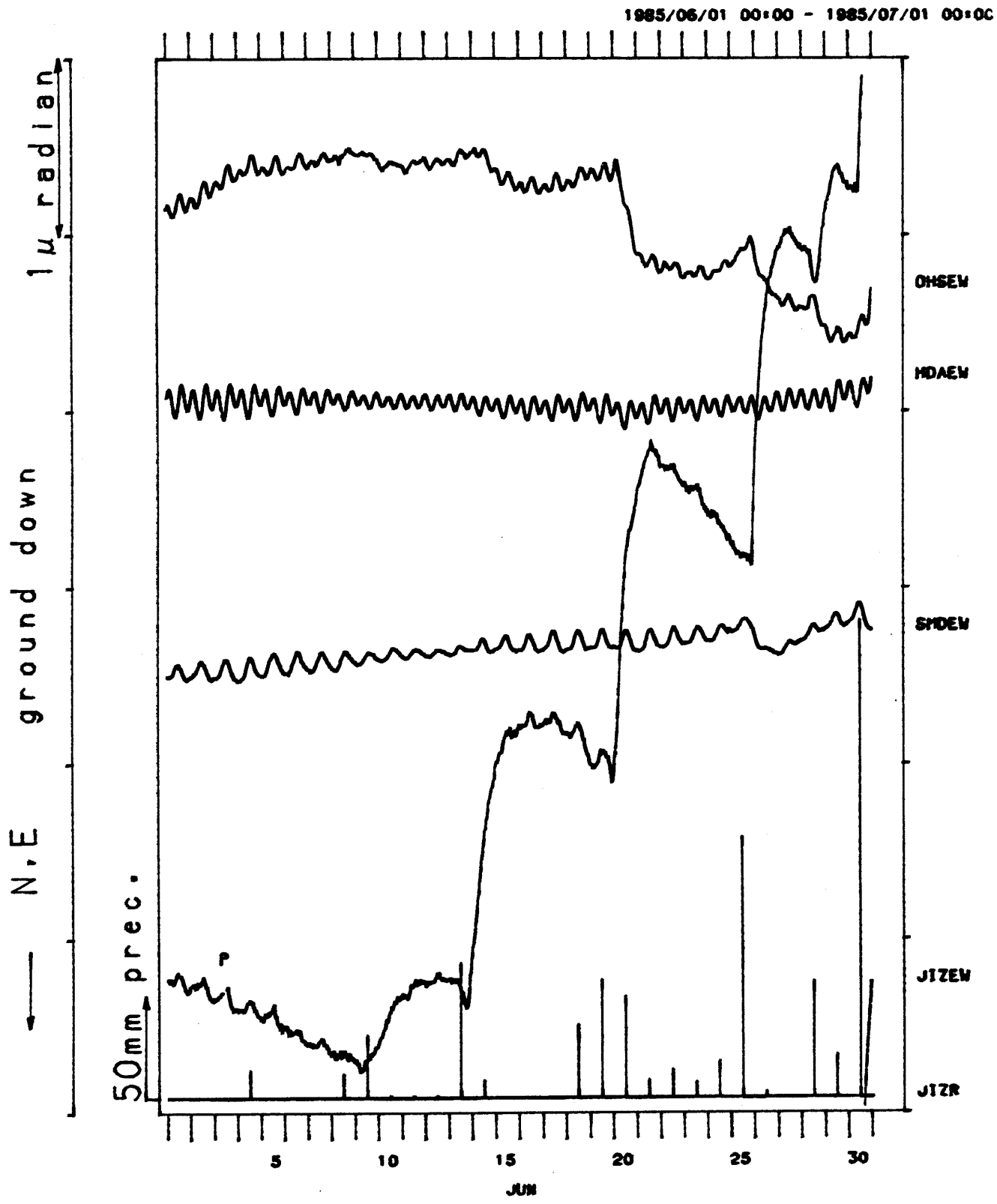
MAY


TILT-EW　OHS HDA JIZ SMD
1985/06/01 00:00 - 1985/07/01 00:00
1μ radian
N,E ground down
OHSEW
HDAEW
SMDEW
JIZEW
JIZR
50mm prec.
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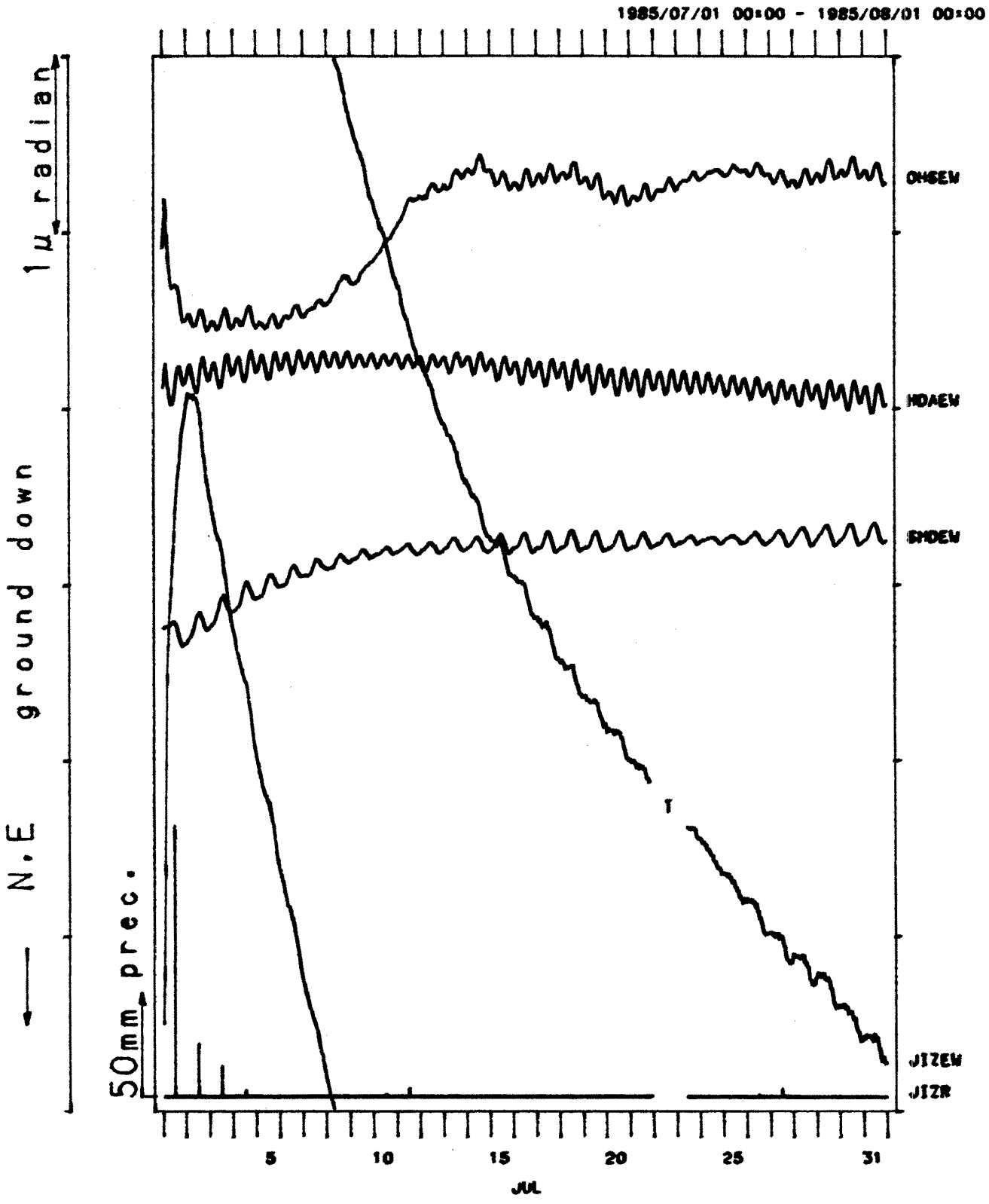
JUN


TILT-EW OHS HDA JIZ SMO
1985/07/01 00:00 - 1985/08/01 00:00
1μ radian
N.E ground down
50mm prec.
OHSEW
HDAEW
SMOEW
JIZEW
JIZR
5
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15
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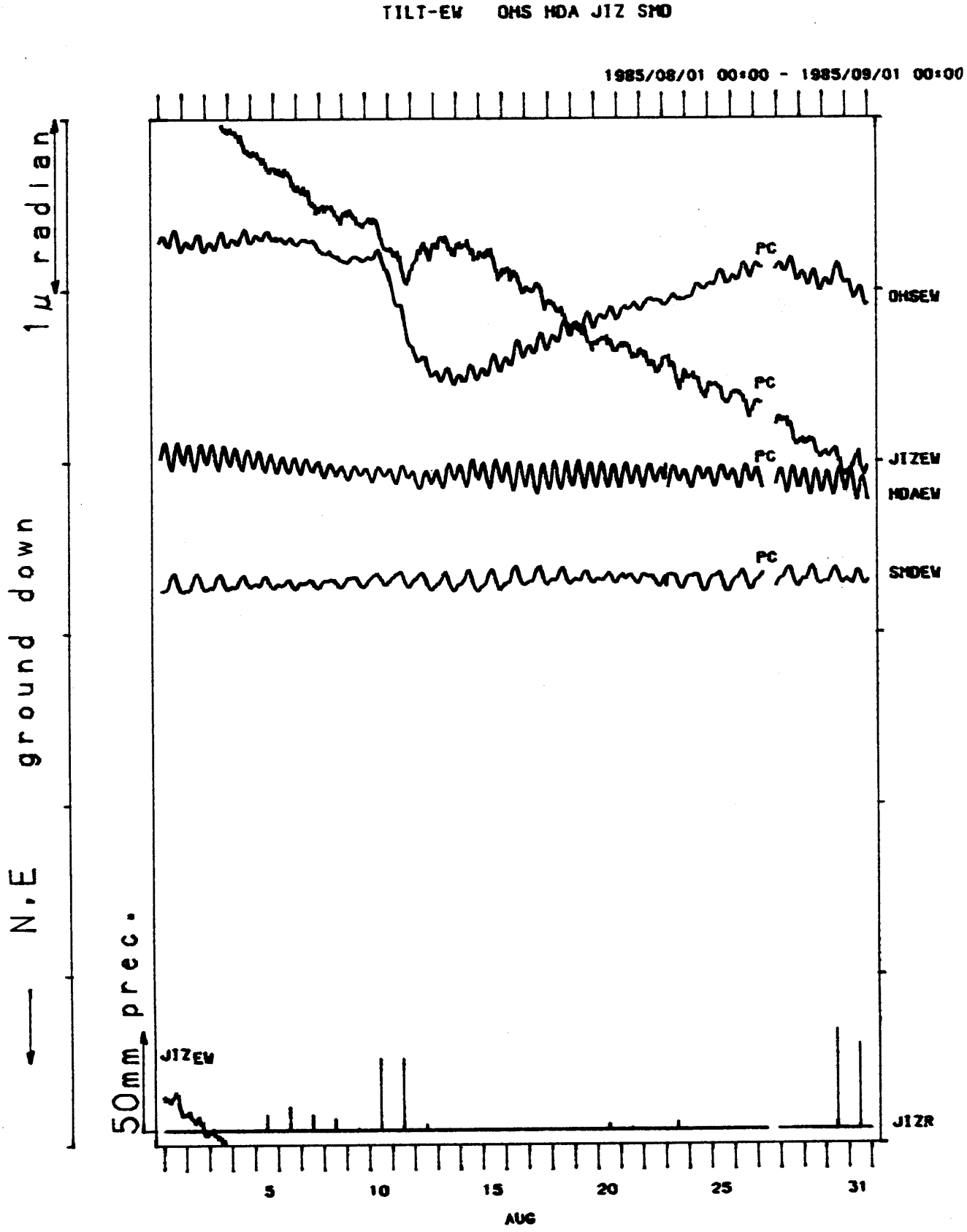
JUL


TILT-EW　OHS HDA JIZ SMD
1985/08/01 00:00 - 1985/09/01 00:00
1μ radian
N.E ground down
PC
OHSEW
JIZEW
HDAEW
SMDEW
50mm prec.
JIZEW
JIZR
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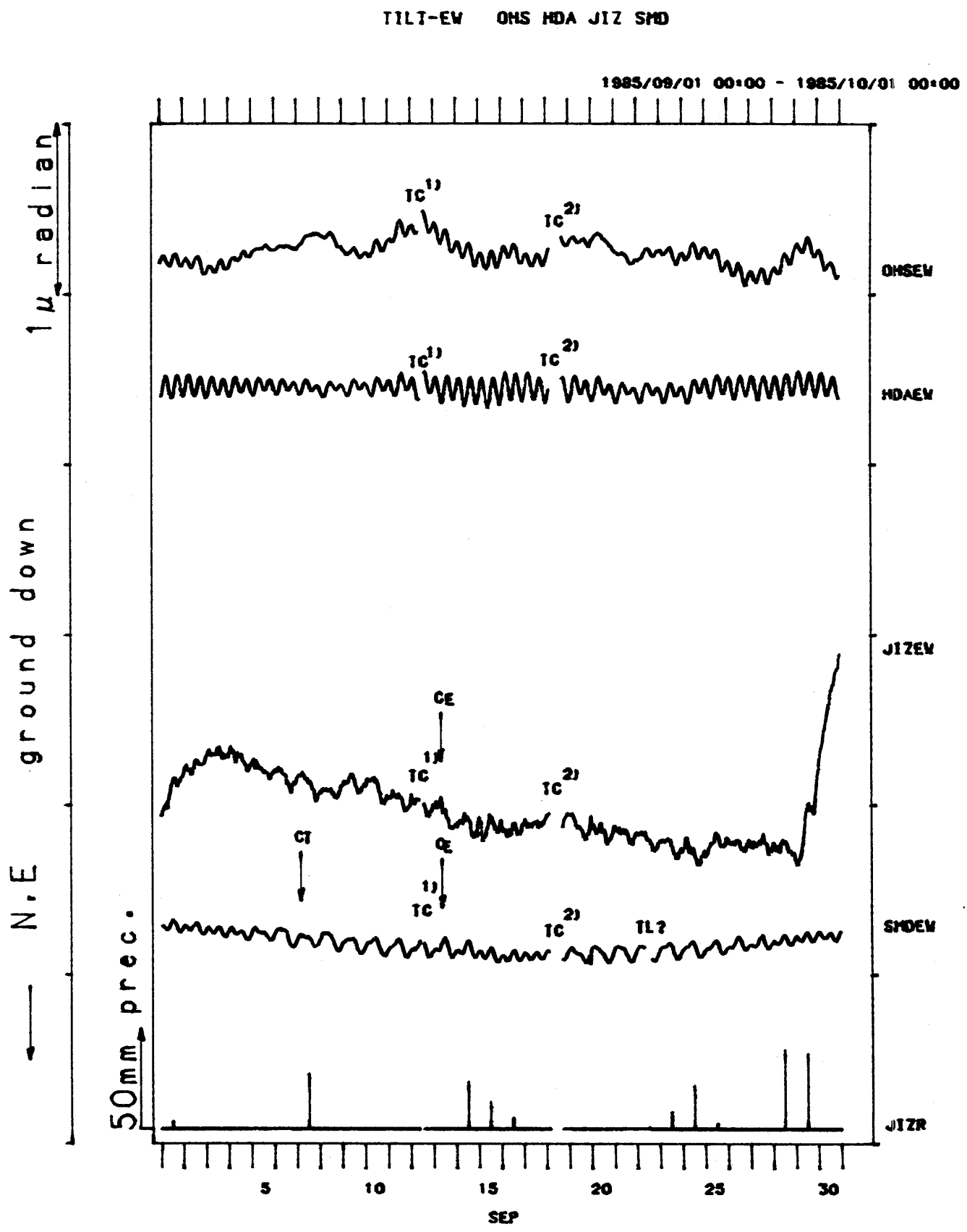
AUG


TILT-EW OHS HDA JIZ SMD
1985/09/01 00:00 - 1985/10/01 00:00
1μ radian
N.E ground down
50mm prec.
TC1)
TC2)
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OHSEW
HDAEW
JIZEW
SMDEW
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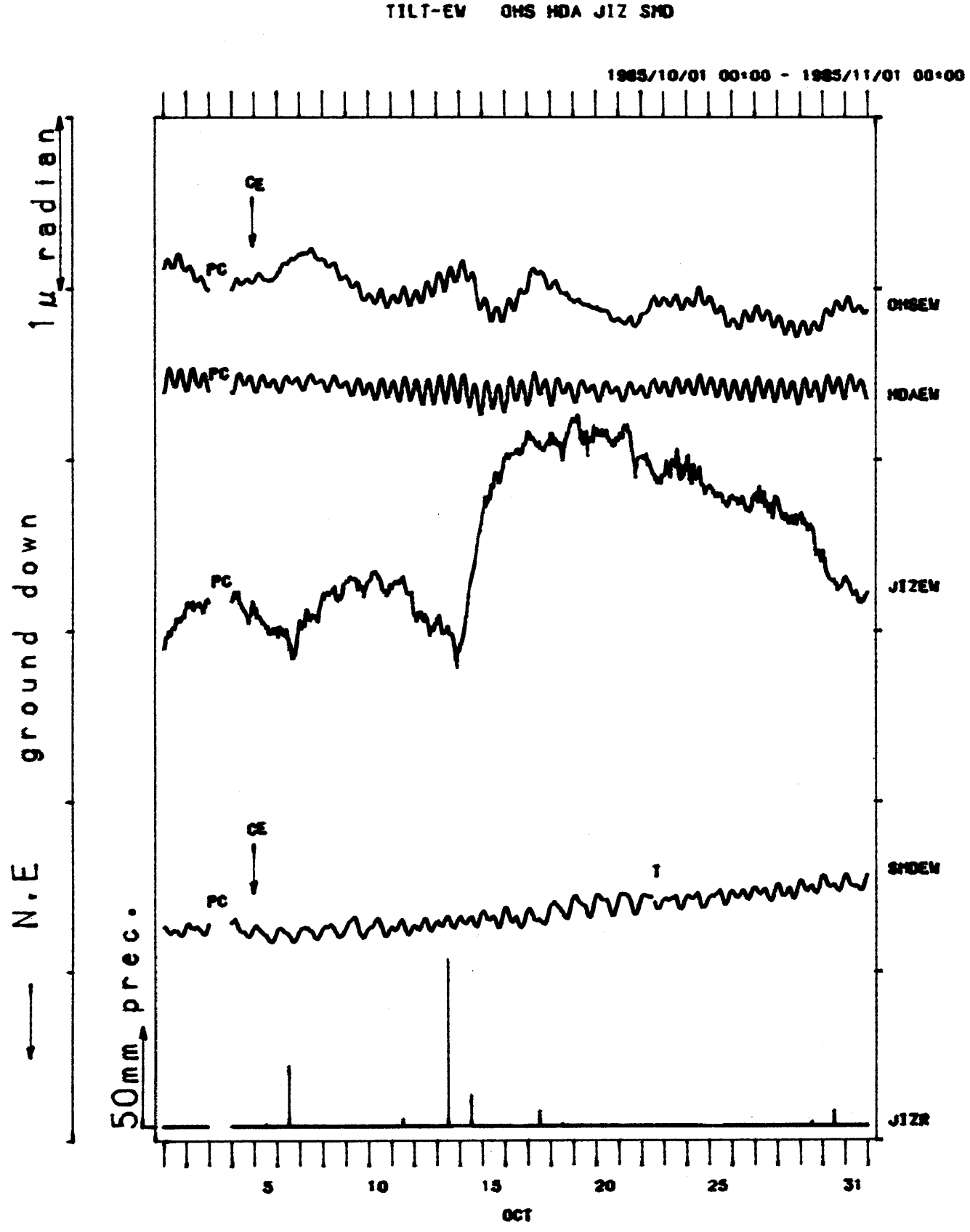
TILT-EW　OHS HDA JIZ SMD
1985/10/01 00:00 - 1985/11/01 00:00
1μ radian
N.E ground down
CE
PC
OHSEW
HDAEW
JIZEW
SMDEW
T
50mm prec.
JIZR
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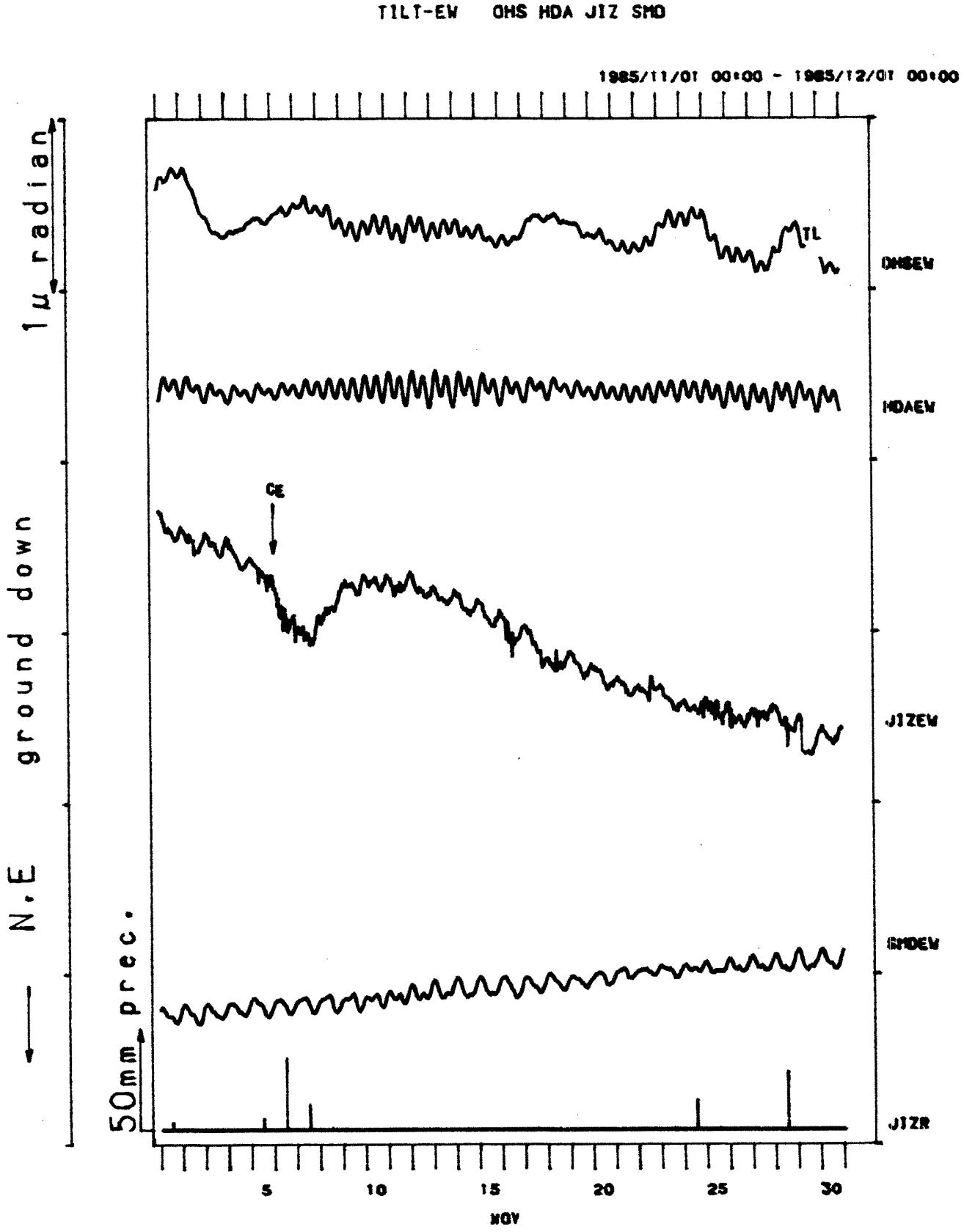
OCT


TILT-EW OHS HDA JIZ SMO
1985/11/01 00:00 - 1985/12/01 00:00
1μ radian
N.E ground down
50mm prec.
TL
CE
OHSEW
HDAEW
JIZEW
SMOEW
JIZR
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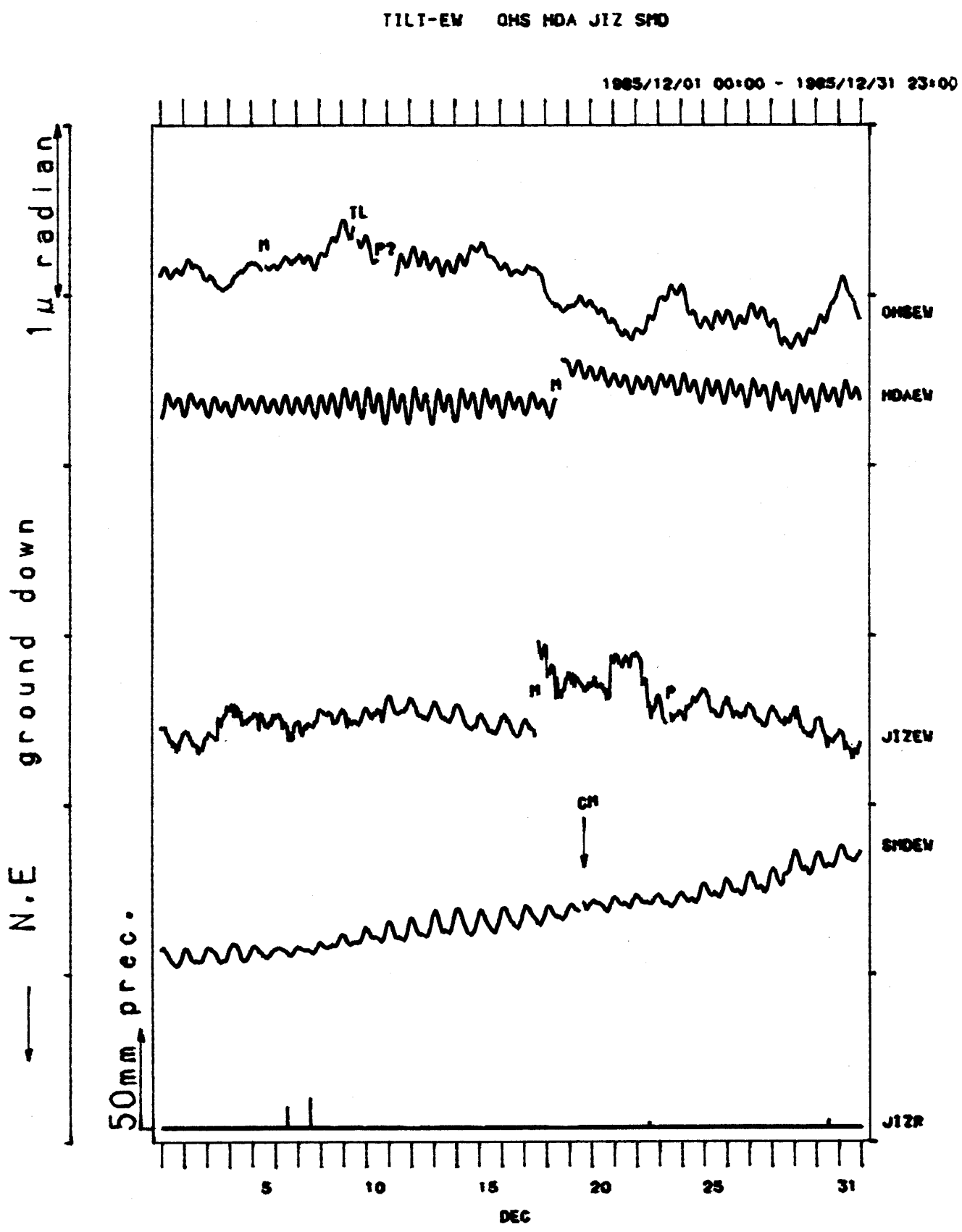
NOV


TILT-EW　OHS HDA JIZ SMD
1985/12/01 00:00 - 1985/12/31 23:00
1μ radian
N.E ground down
50mm prec.
TL
M
P?
OHSEW
HDAEW
JIZEW
CM
SMDEW
JIZR
5
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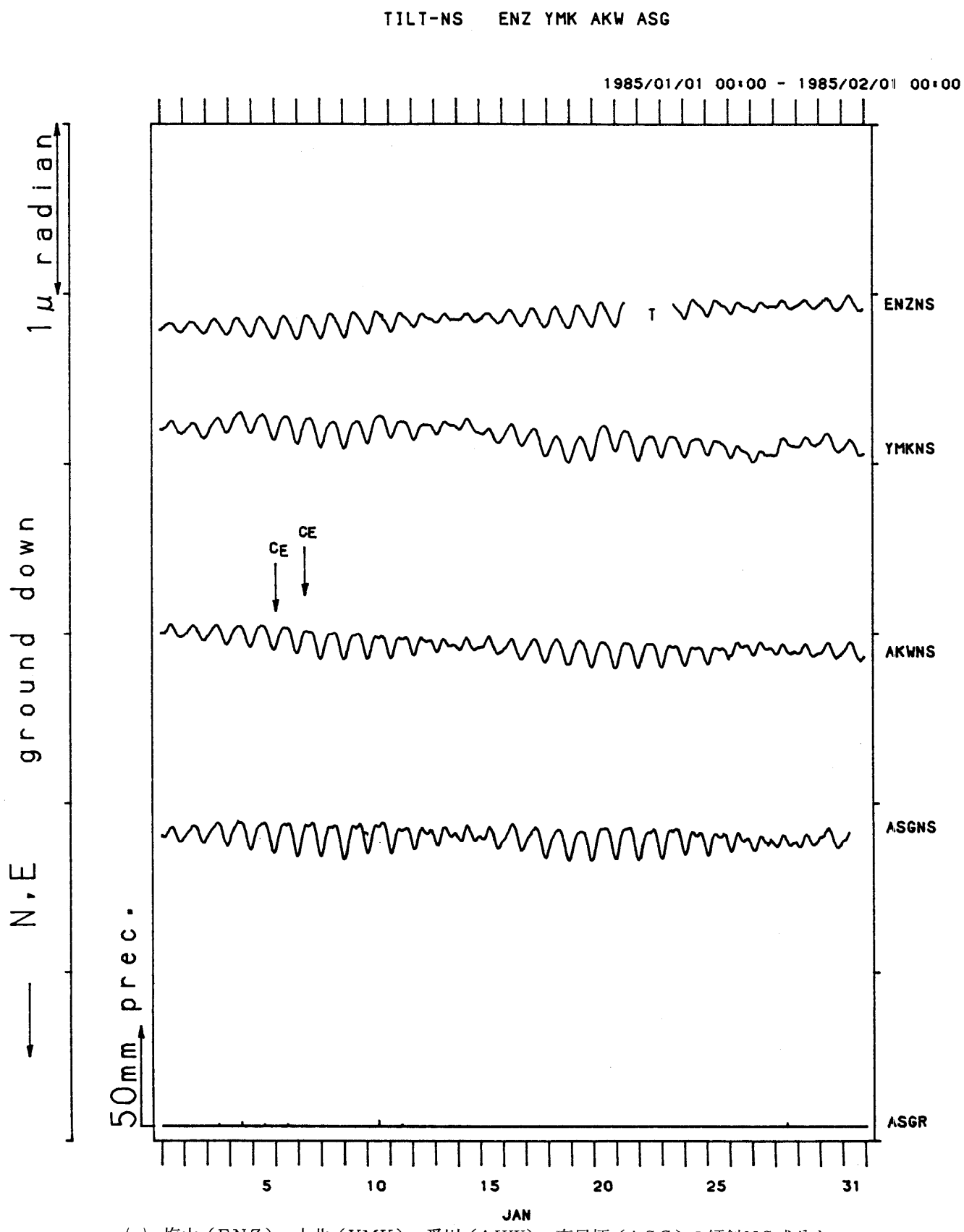
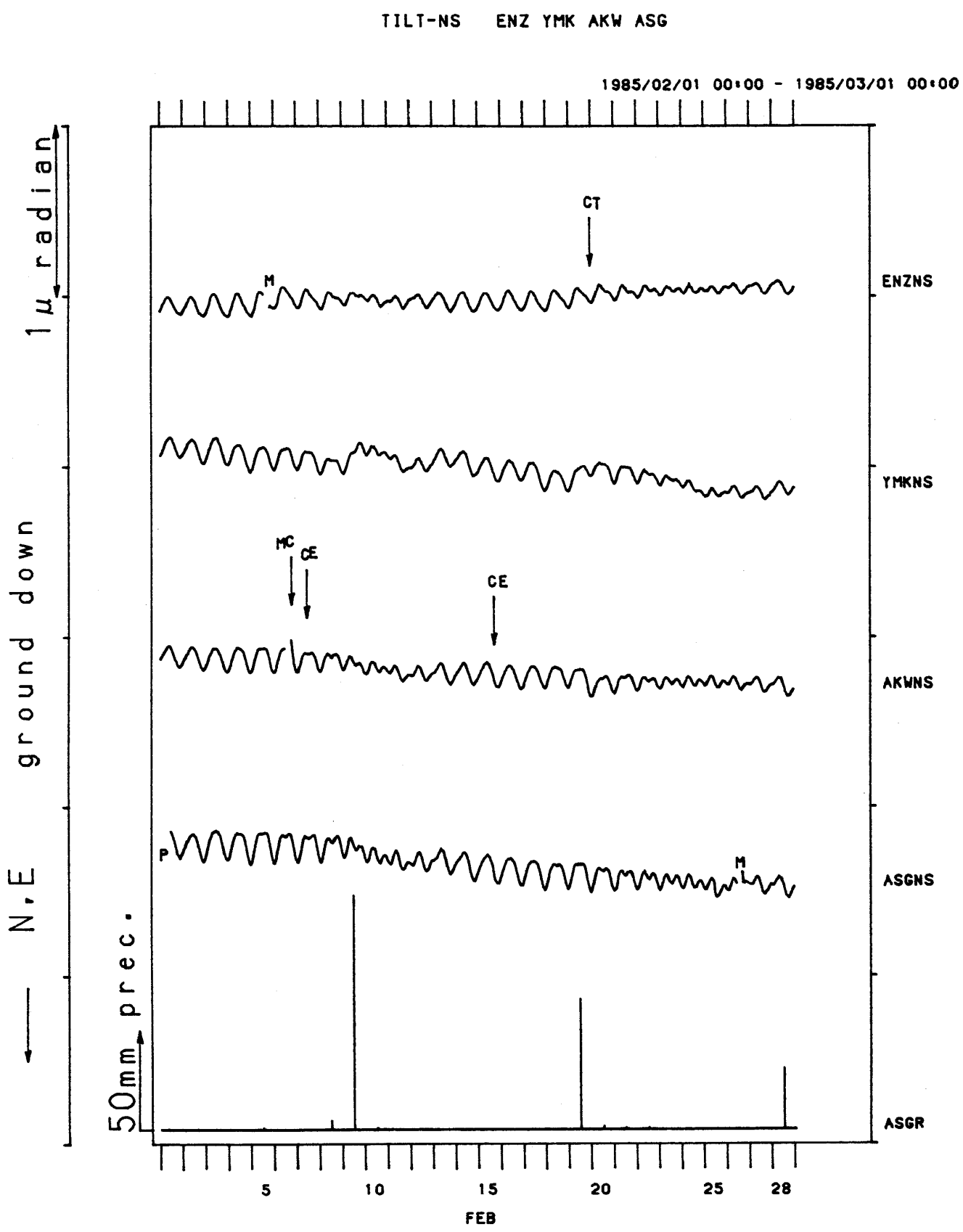
DEC



(e) 塩山（ENZ）・山北（YMK）・愛川（AKW）・南足柄（ASG）の傾斜NS成分と南足柄の日雨量

NS−component of crustal tilt at Enzan (ENZ), Yamakita (YMK), Aikawa (AKW), Minamiasigara (ASG) and daily precipitation at Minamiasigara.


TILT-NS　ENZ YMK AKW ASG
1985/02/01 00:00 - 1985/03/01 00:00
1μ radian
N,E ground down
CT
M
ENZNS
YMKNS
MC
CE
CE
AKWNS
P
M
ASGNS
50mm prec.
ASGR
5
10
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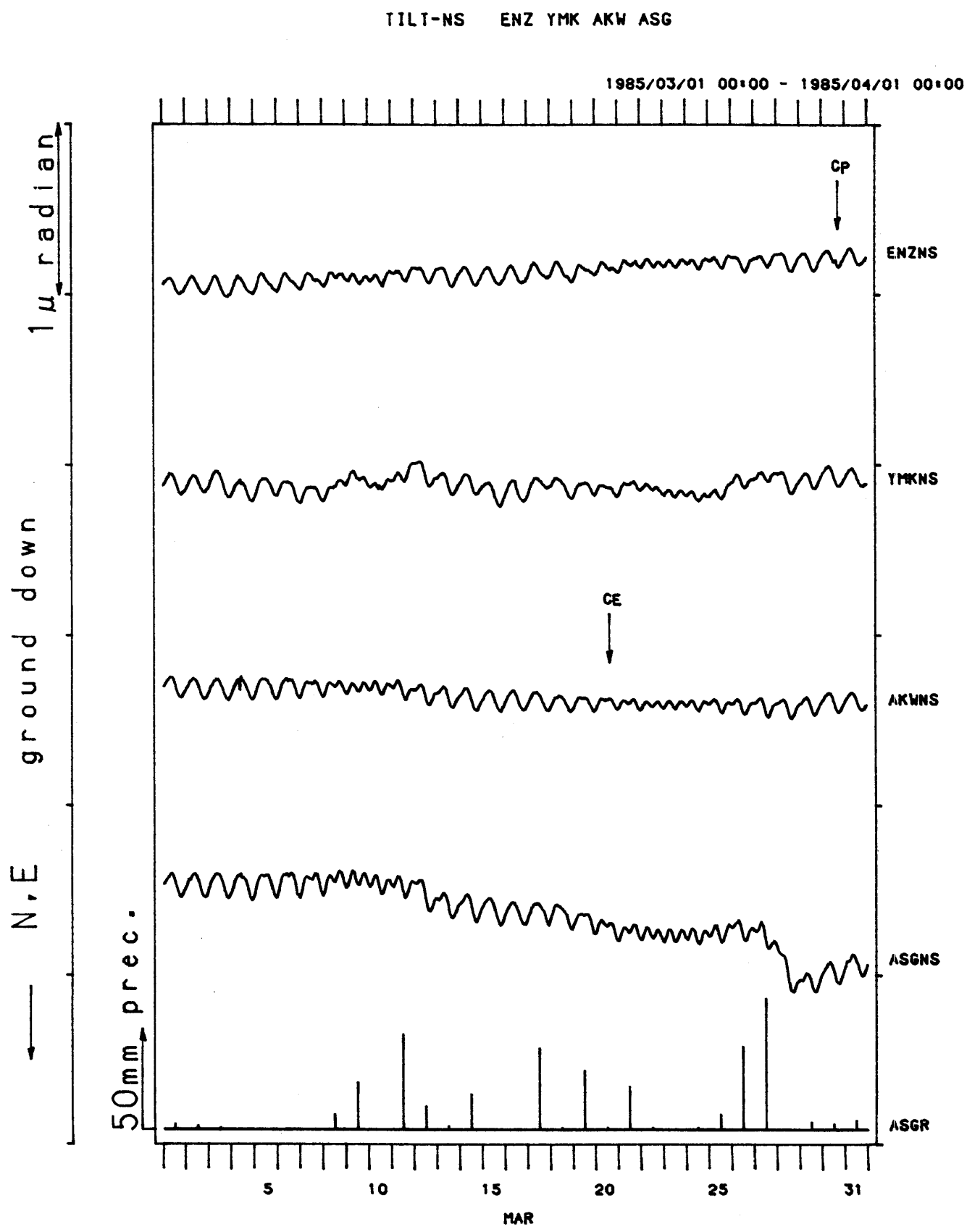
28
FEB


TILT-NS ENZ YMK AKW ASG
1985/03/01 00:00 - 1985/04/01 00:00
CP
CE
ENZNS
YMKNS
AKWNS
ASGNS
ASGR
1μ radian
N,E ground down
50mm prec.
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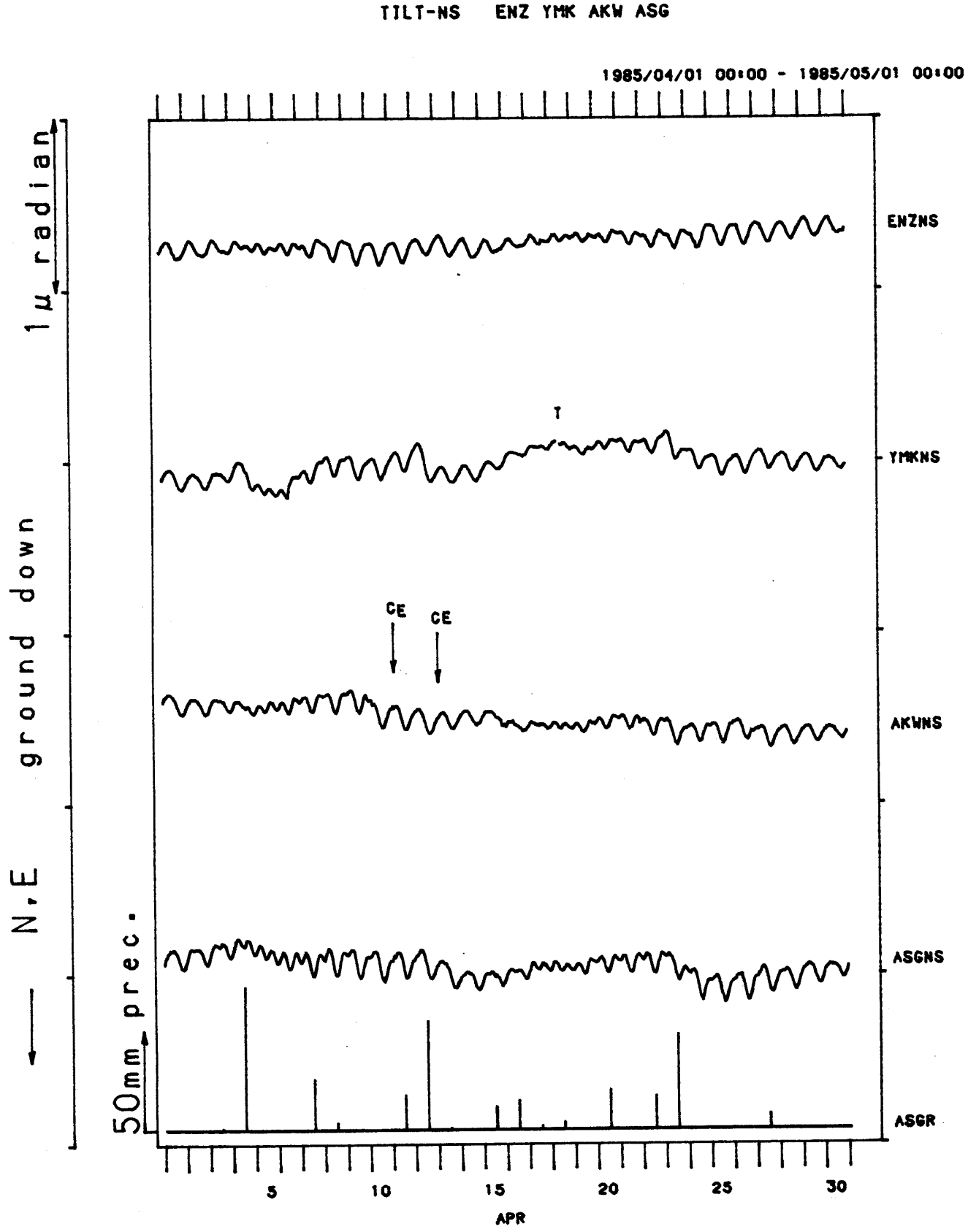
MAR


TILT-NS　ENZ YMK AKW ASG
1985/04/01 00:00 - 1985/05/01 00:00
1μ radian
N,E ground down
ENZNS
T
YMKNS
CE
CE
AKWNS
ASGNS
50mm prec.
ASGR
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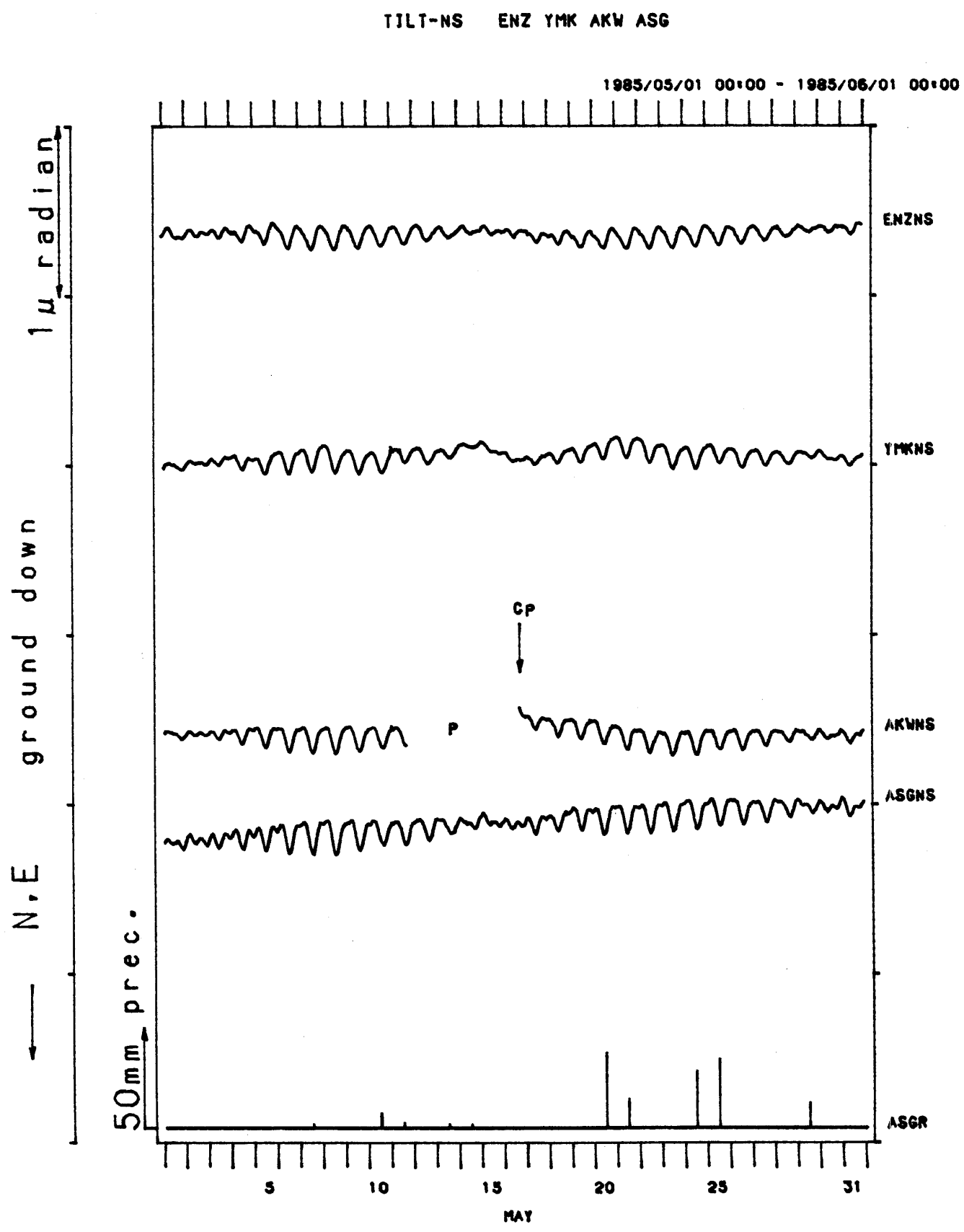
APR


TILT-NS ENZ YMK AKW ASG
1985/05/01 00:00 - 1985/06/01 00:00
1μ radian
N,E ground down
ENZNS
YMKNS
CP
P
AKWNS
ASGNS
50mm prec.
ASGR
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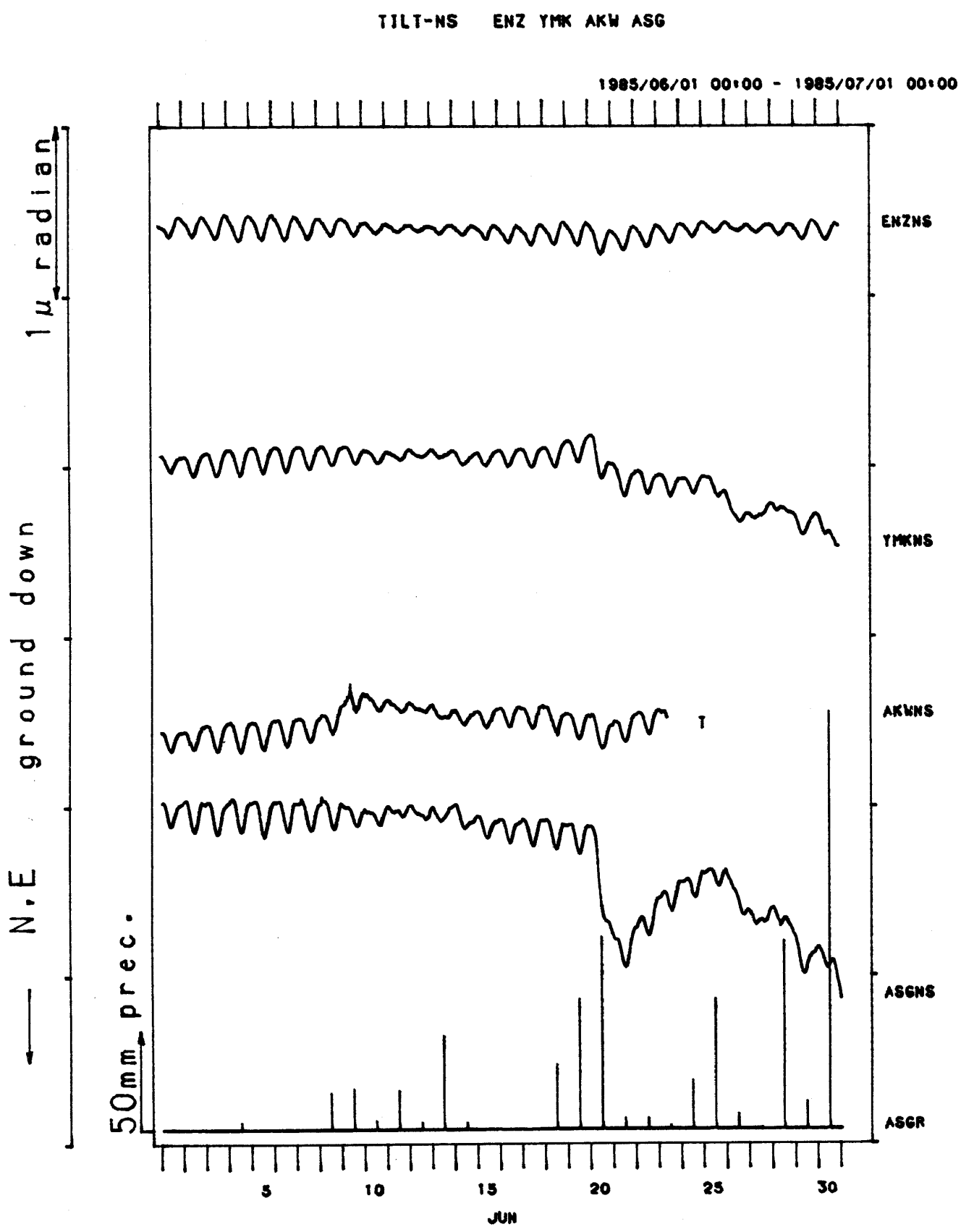
MAY


TILT-NS　ENZ YMK AKW ASG
1985/06/01 00:00 - 1985/07/01 00:00
1μ radian
N.E ground down
50mm prec.
ENZNS
YMKNS
AKWNS
ASGNS
ASGR
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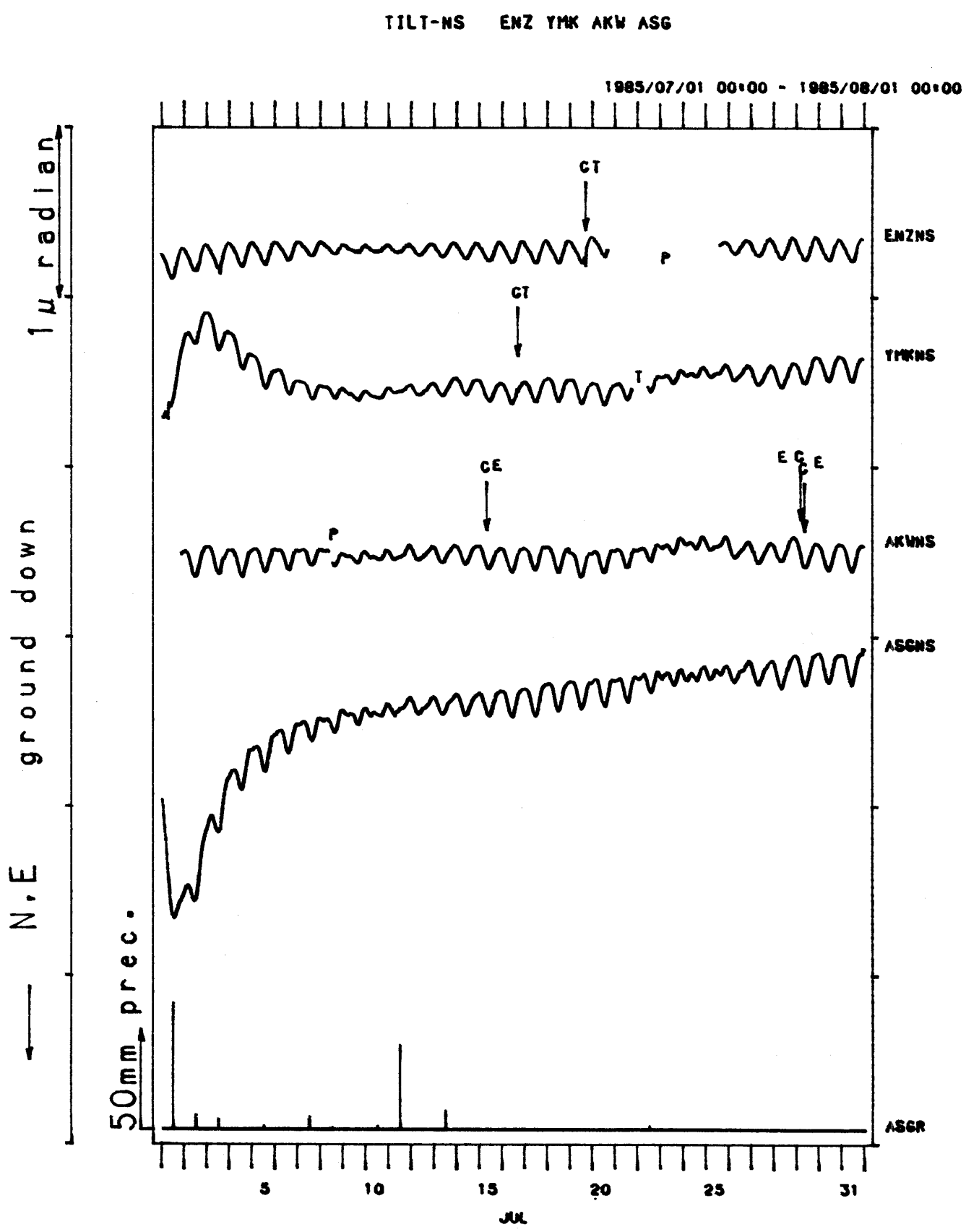
JUN


TILT-NS ENZ YMK AKW ASG
1985/07/01 00:00 - 1985/08/01 00:00
1μ radian
N,E ground down
CT
P
ENZNS
CT
T
YMKNS
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AKWNS
ASGNS
50mm prec.
ASGR
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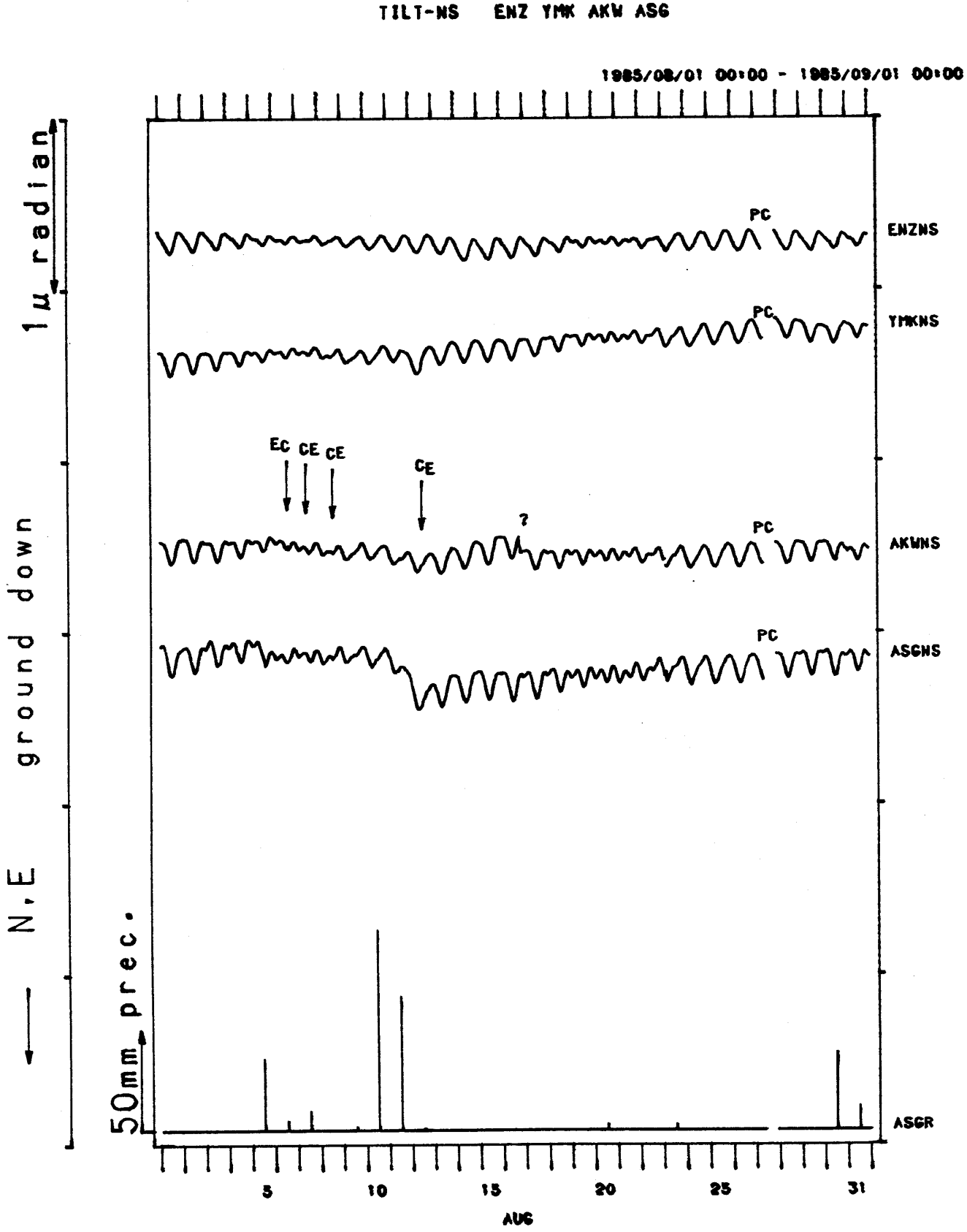
JUL


TILT-NS　ENZ YMK AKW ASG
1985/08/01 00:00 - 1985/09/01 00:00
1μ radian
N,E ground down
PC
ENZNS
YMKNS
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AKWNS
ASGNS
50mm prec.
ASGR
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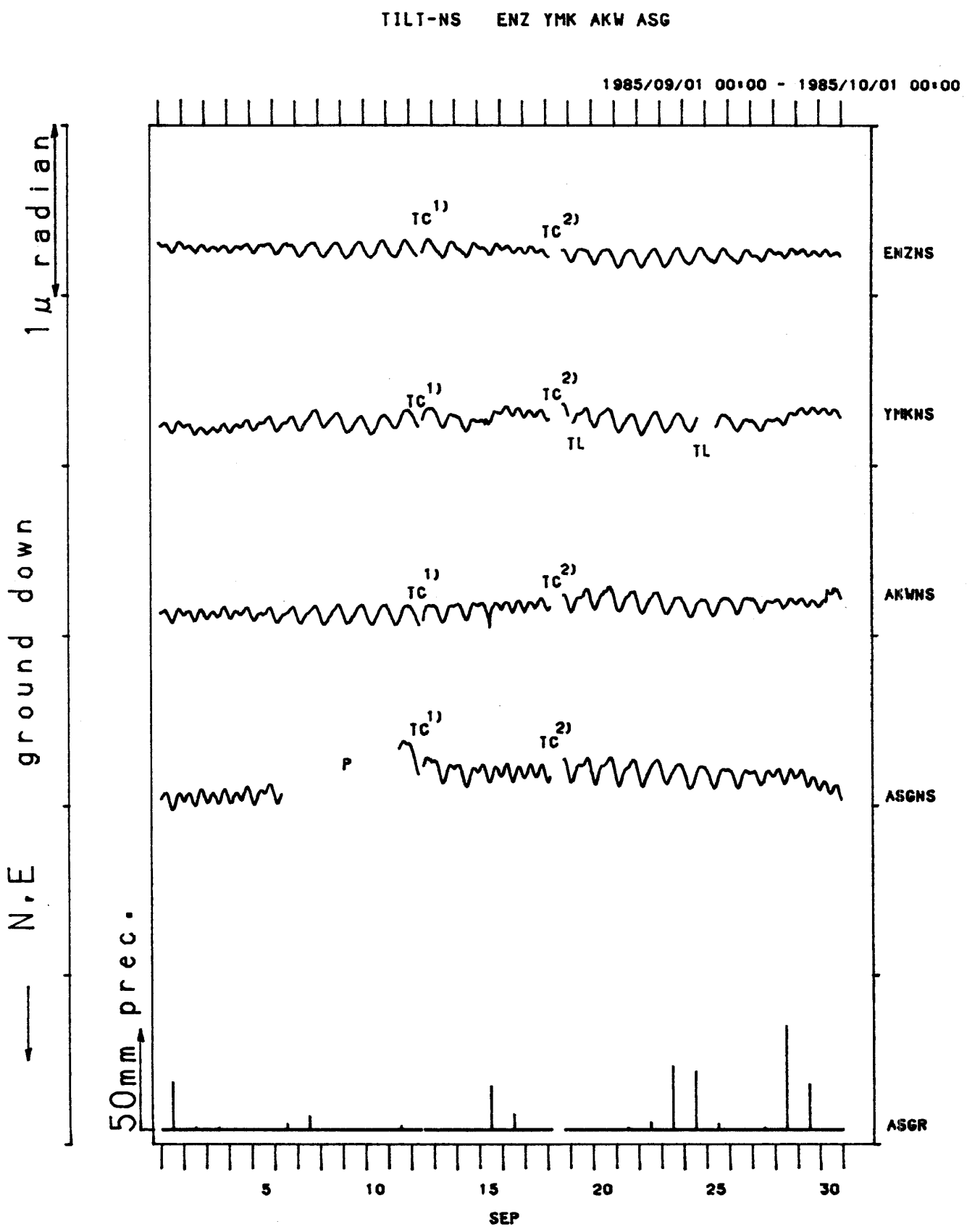
AUG


TILT-NS ENZ YMK AKW ASG
1985/09/01 00:00 - 1985/10/01 00:00
1μ radian
N,E ground down
TC1)
TC2)
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ENZNS
YMKNS
AKWNS
ASGNS
50mm prec.
ASGR
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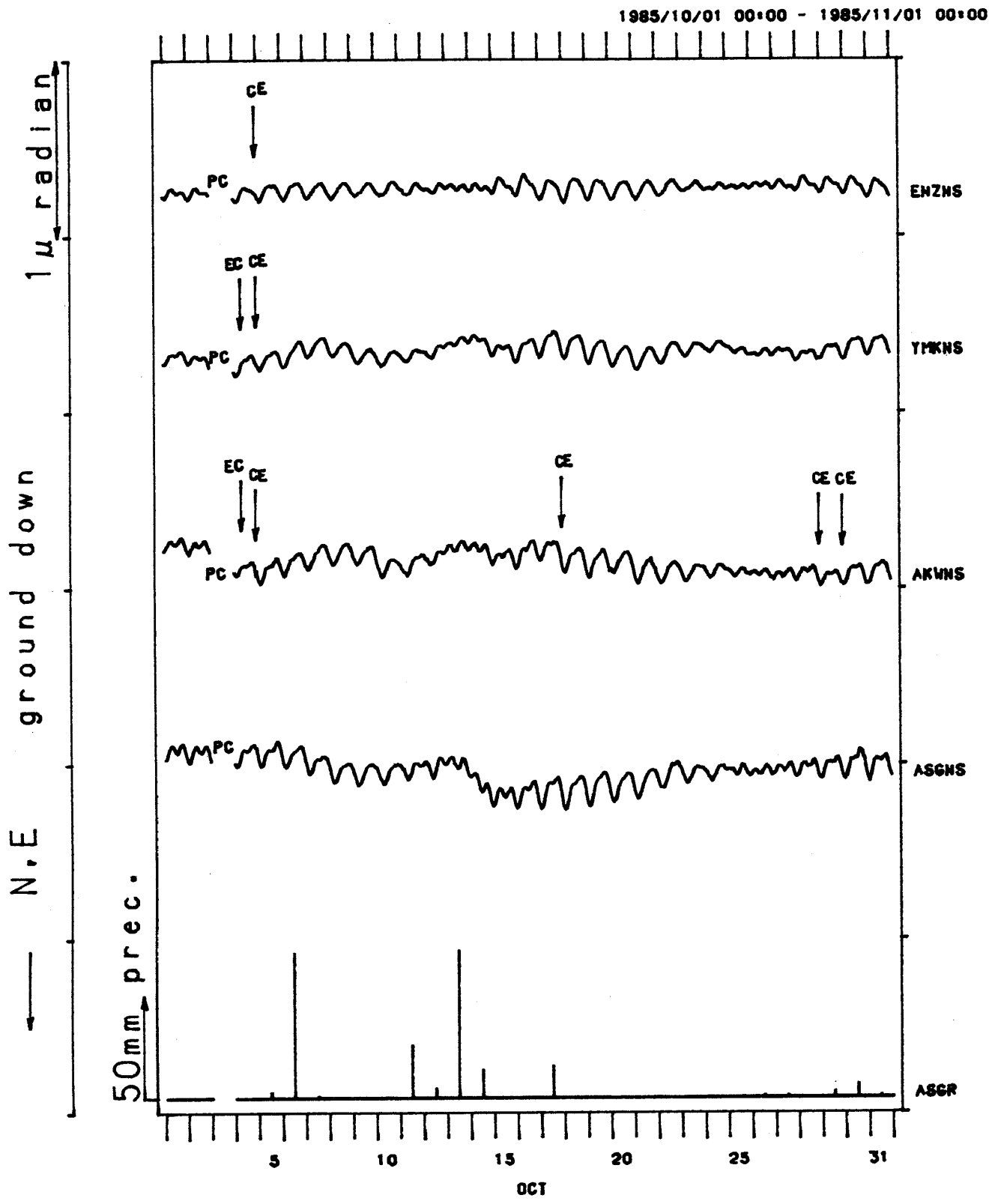
TILT-NS　ENZ YMK AKW ASG
1985/10/01 00:00 - 1985/11/01 00:00
1μ radian
N,E ground down
CE
PC
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ENZNS
YMKNS
AKWNS
ASGNS
ASGR
50mm prec.
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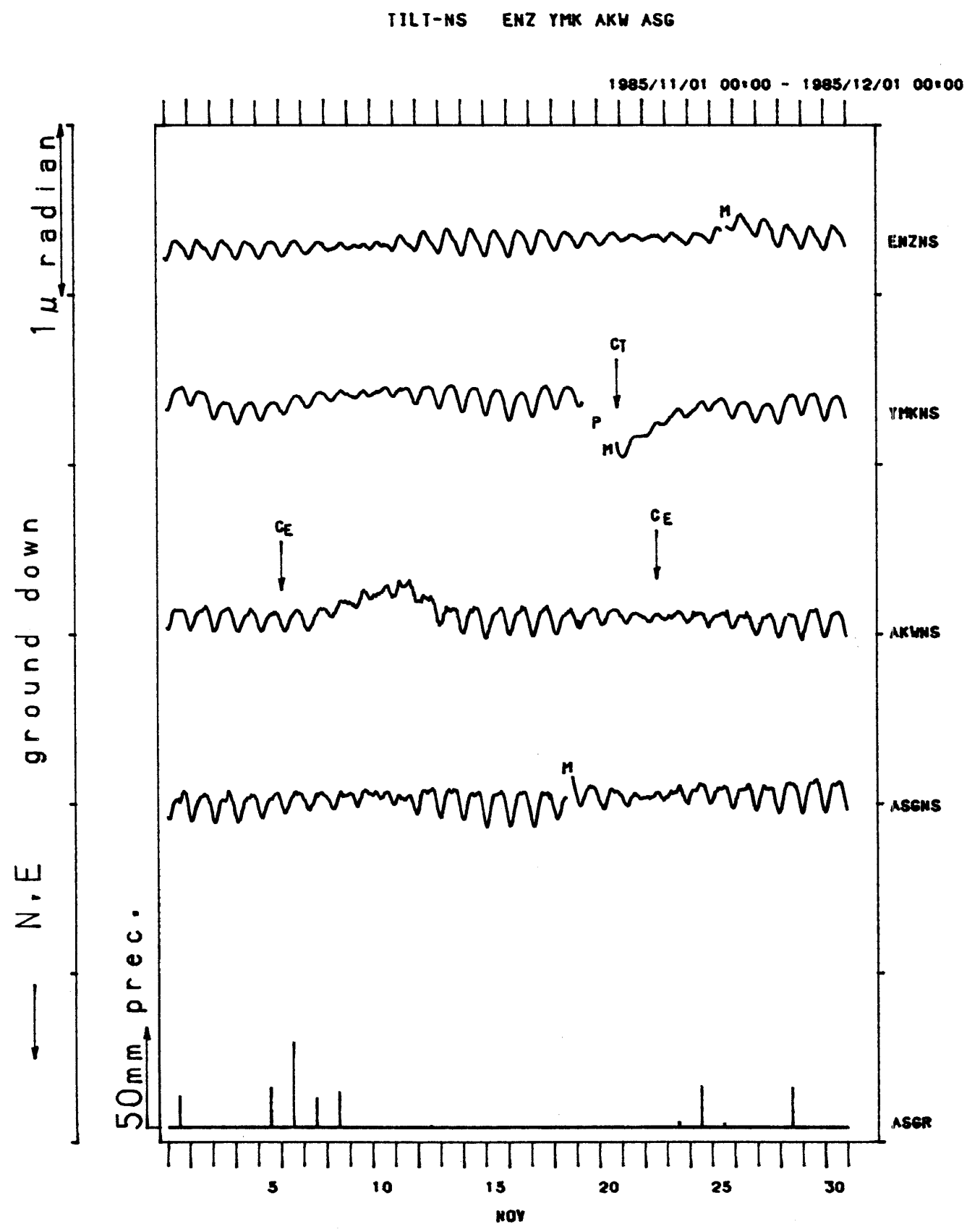
OCT


TILT-NS ENZ YMK AKW ASG
1985/11/01 00:00 - 1985/12/01 00:00
1μ radian
N,E ground down
50mm prec.
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AKWNS
ASGNS
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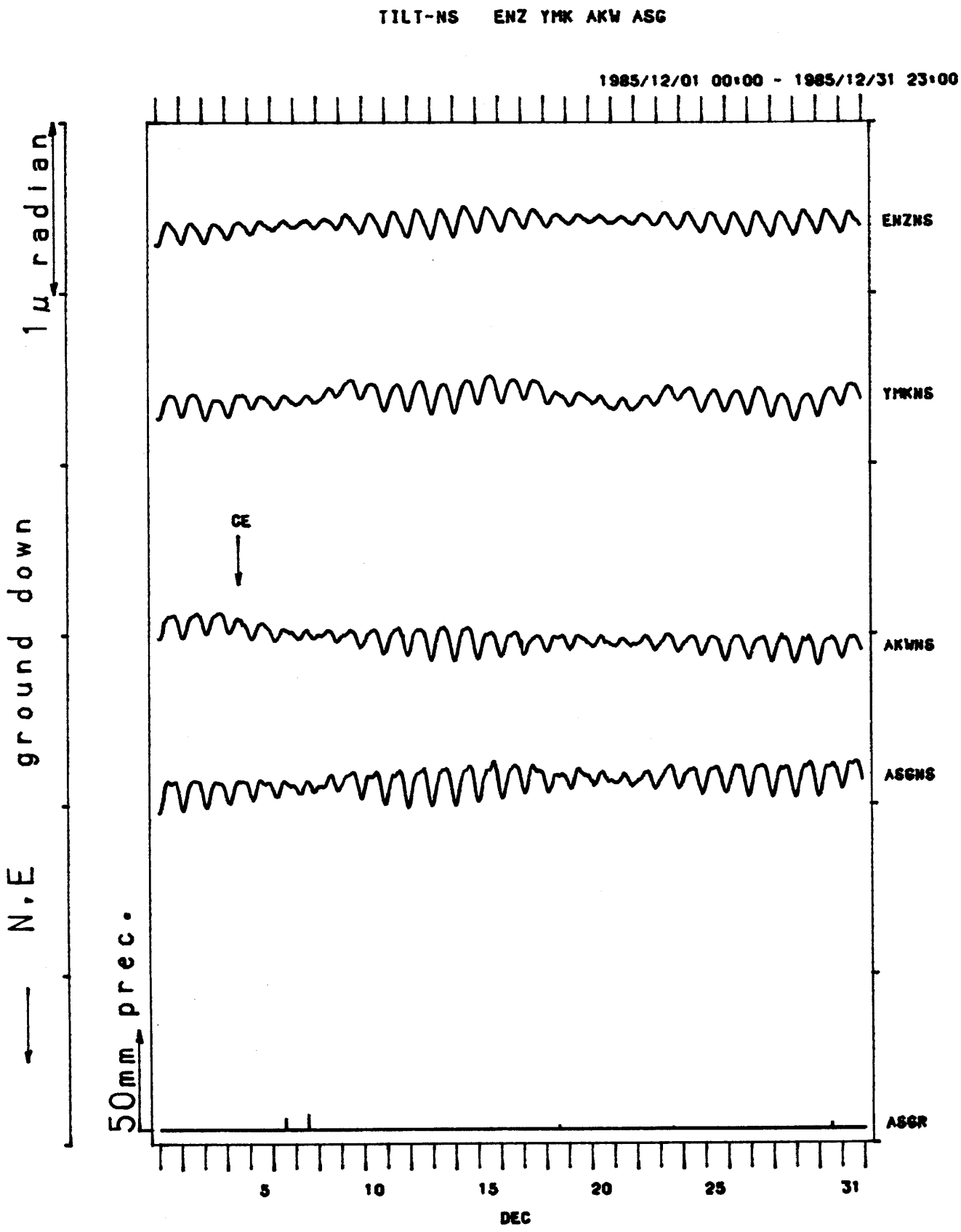
TILT-NS　ENZ YMK AKW ASG
1985/12/01 00:00 - 1985/12/31 23:00
1μ radian
N,E ground down
ENZNS
YMKNS
CE
AKWNS
ASGNS
50mm prec.
ASGR
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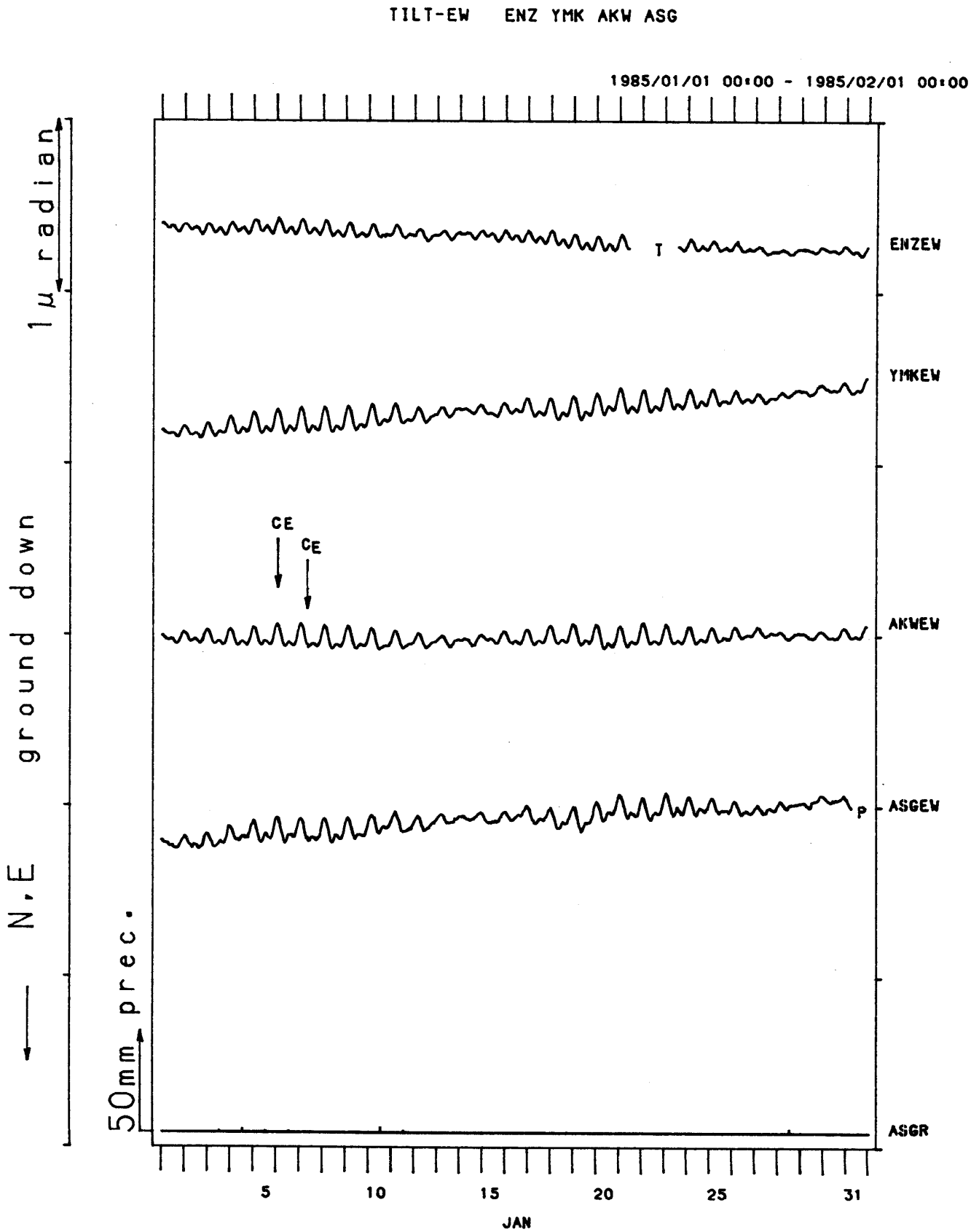
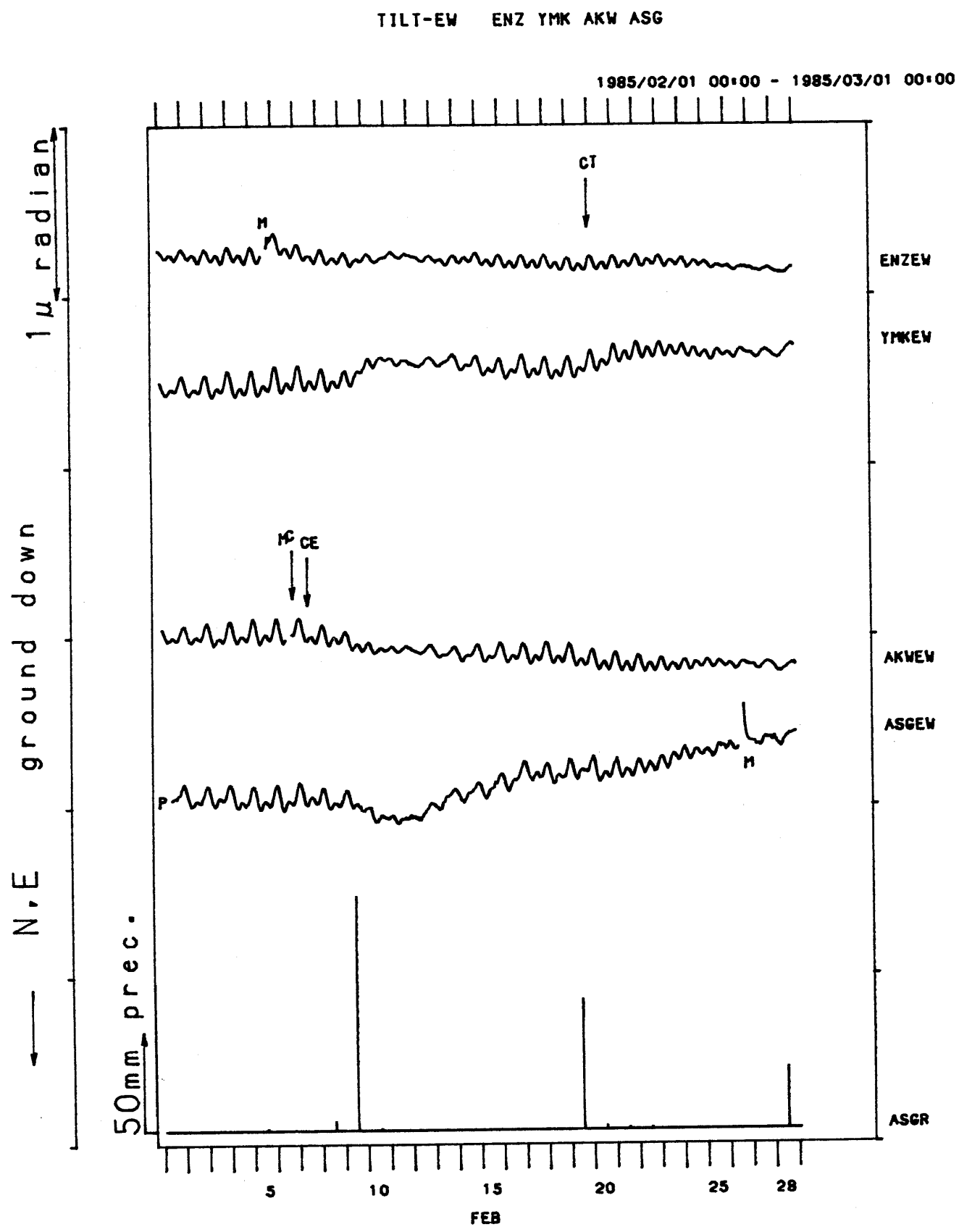
DEC



(f) 塩山（ENZ）・山北（YMK）・愛川（AKW）・南足柄（ASG）の傾斜EW成分と南足柄の日雨量

EW−component of crustal tilt at Enzan (ENZ), Yamakita (YMK), Aikawa (AKW), Minamiasigara (ASG) and daily precipitation at Minamiasigara.


TILT-EW　ENZ YMK AKW ASG
1985/02/01 00:00 - 1985/03/01 00:00
1μ radian
N,E ground down
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ENZEW
YMKEW
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CE
AKWEW
ASGEW
M
P
50mm prec.
ASGR
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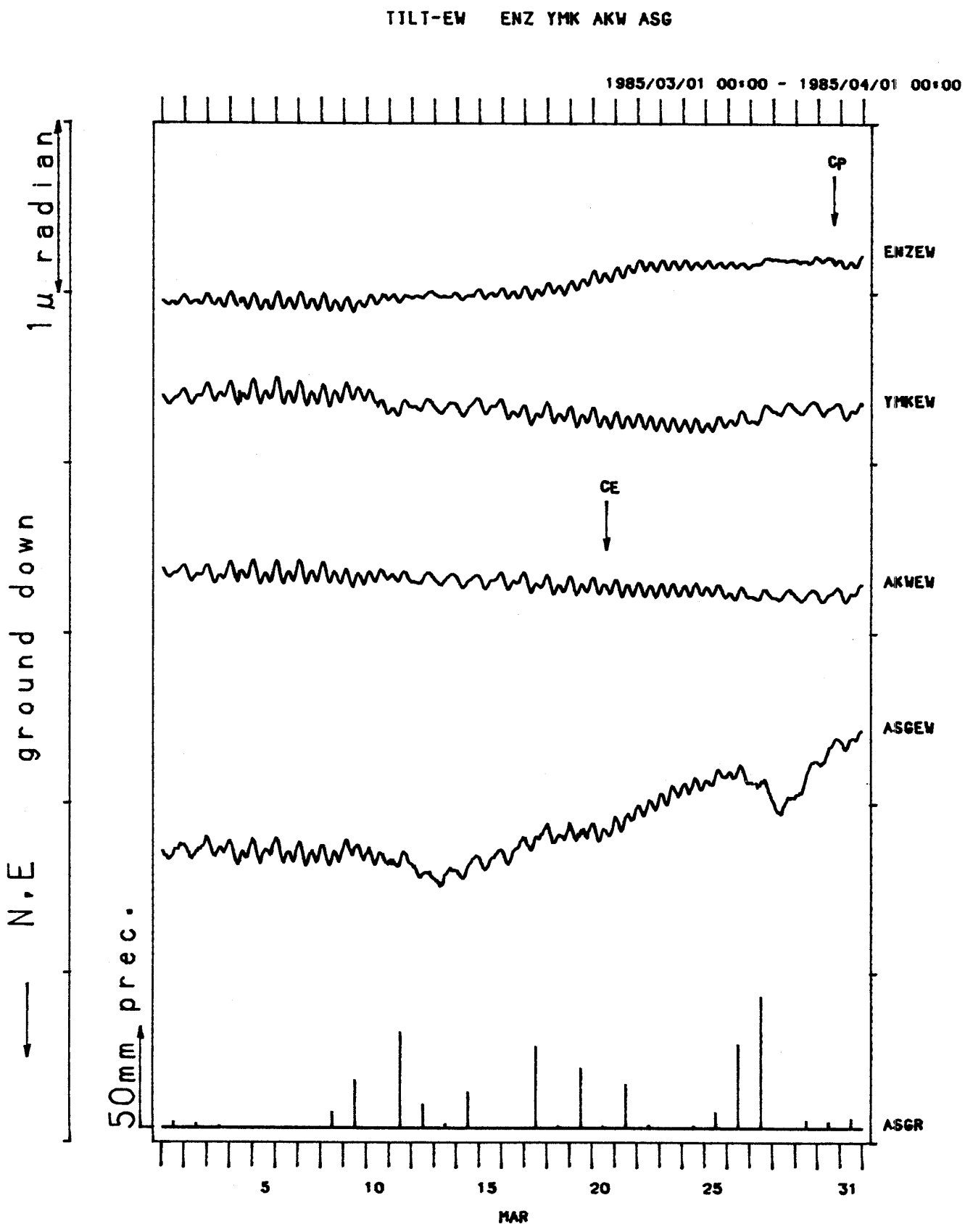
FEB


TILT-EW ENZ YMK AKW ASG
1985/03/01 00:00 - 1985/04/01 00:00
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YMKEW
AKWEW
ASGEW
ASGR
1μ radian
N,E ground down
50mm prec.
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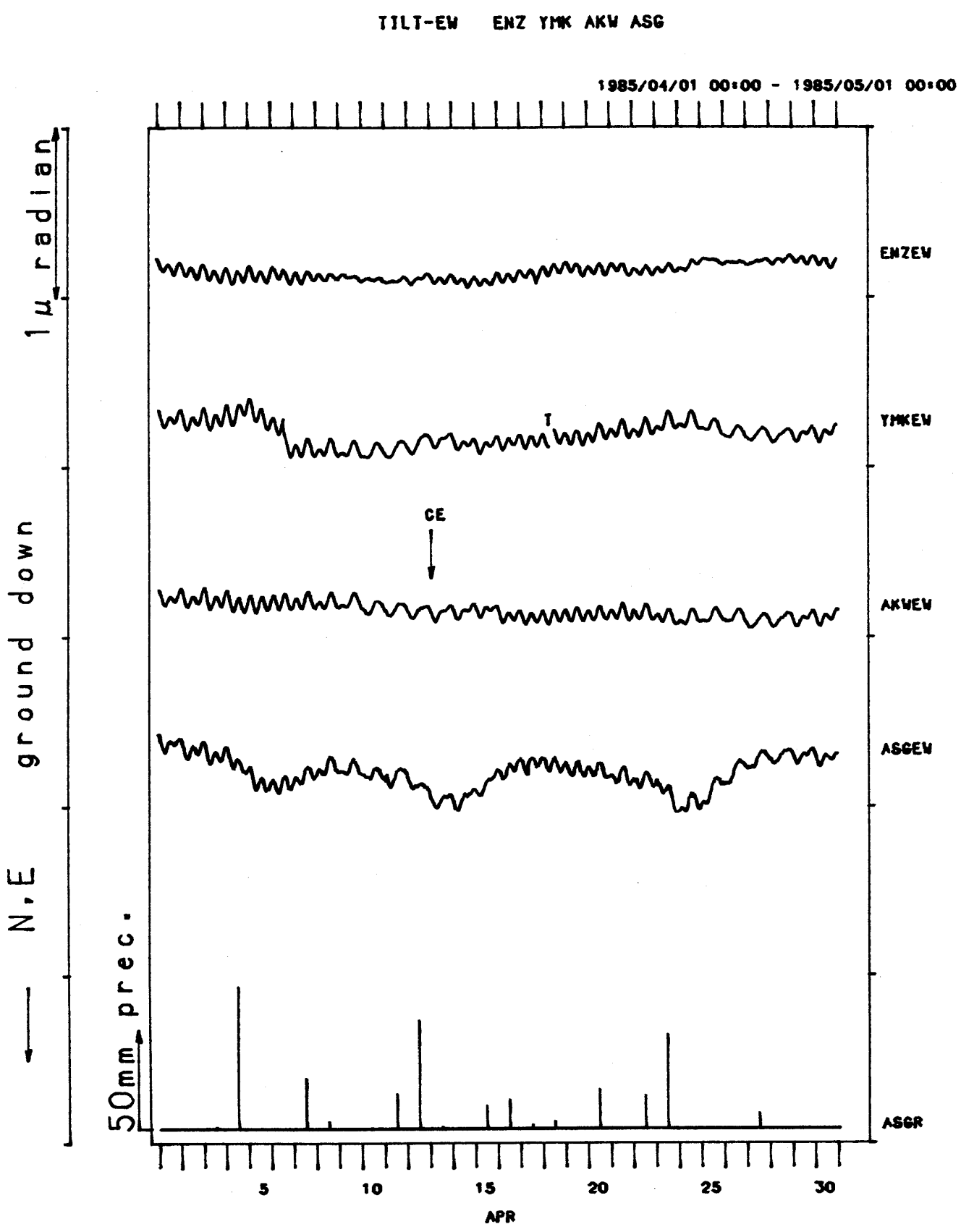
TILT-EW　ENZ YMK AKW ASG
1985/04/01 00:00 - 1985/05/01 00:00
1μ radian
N,E ground down
ENZEW
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ASGEW
50mm prec.
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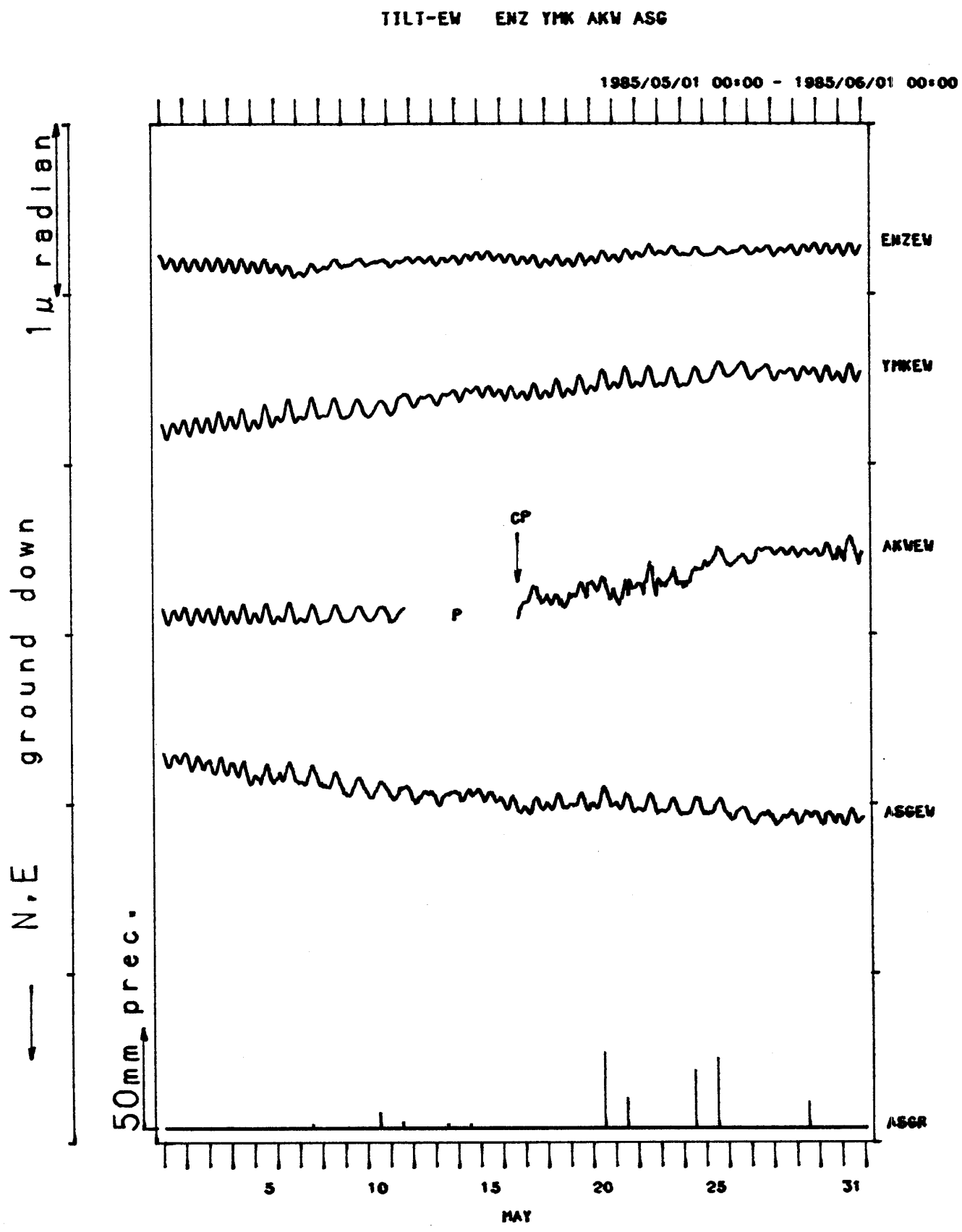
TILT-EW ENZ YMK AKW ASG
1985/05/01 00:00 - 1985/06/01 00:00
1μ radian
N,E ground down
ENZEW
YMKEW
CP
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AKWEW
ASGEW
50mm prec.
ASGR
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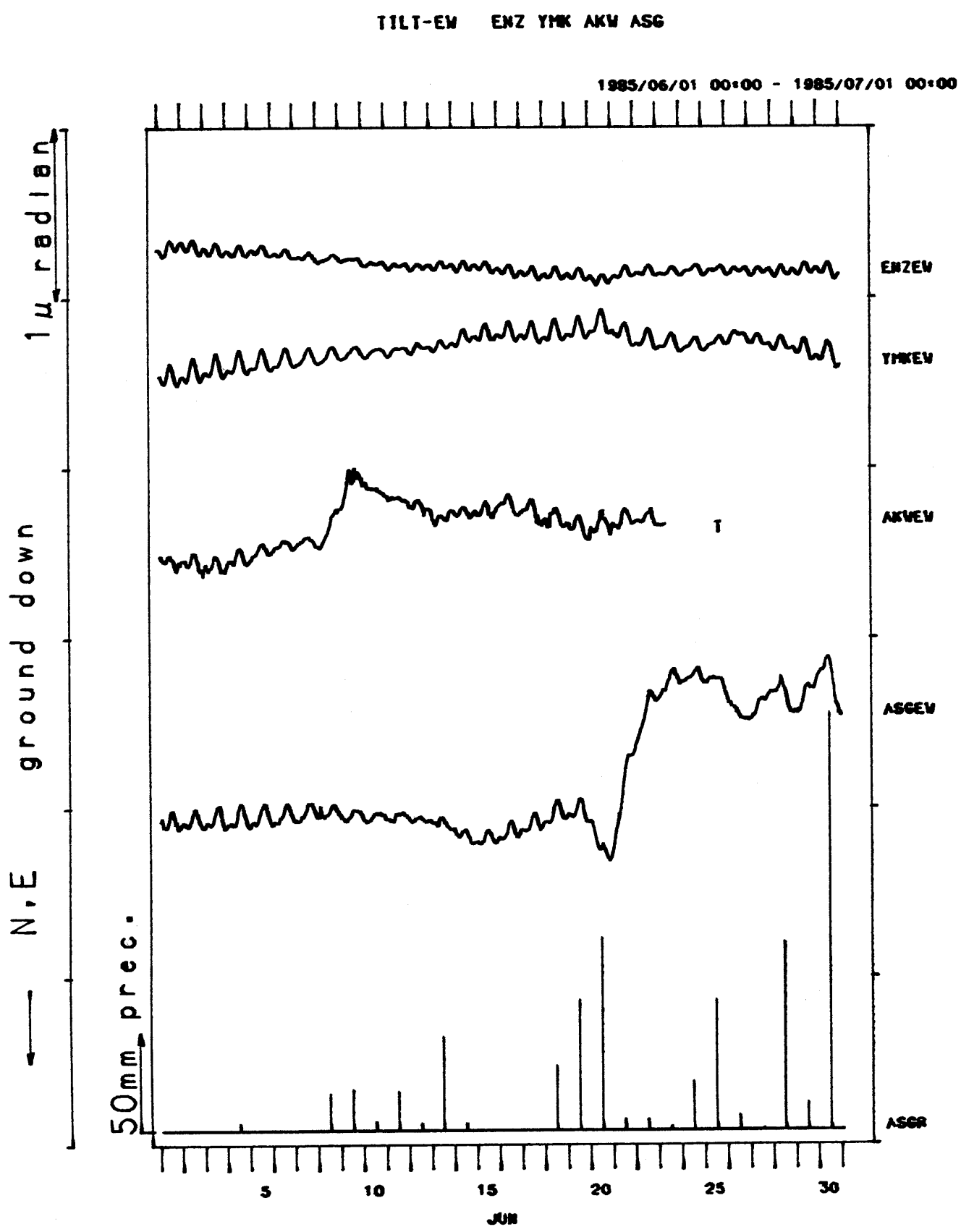
TILT-EW　ENZ YMK AKW ASG
1985/06/01 00:00 - 1985/07/01 00:00
1μ radian
N,E ground down
ENZEW
YMKEW
AKWEW
ASGEW
ASGR
50mm prec.
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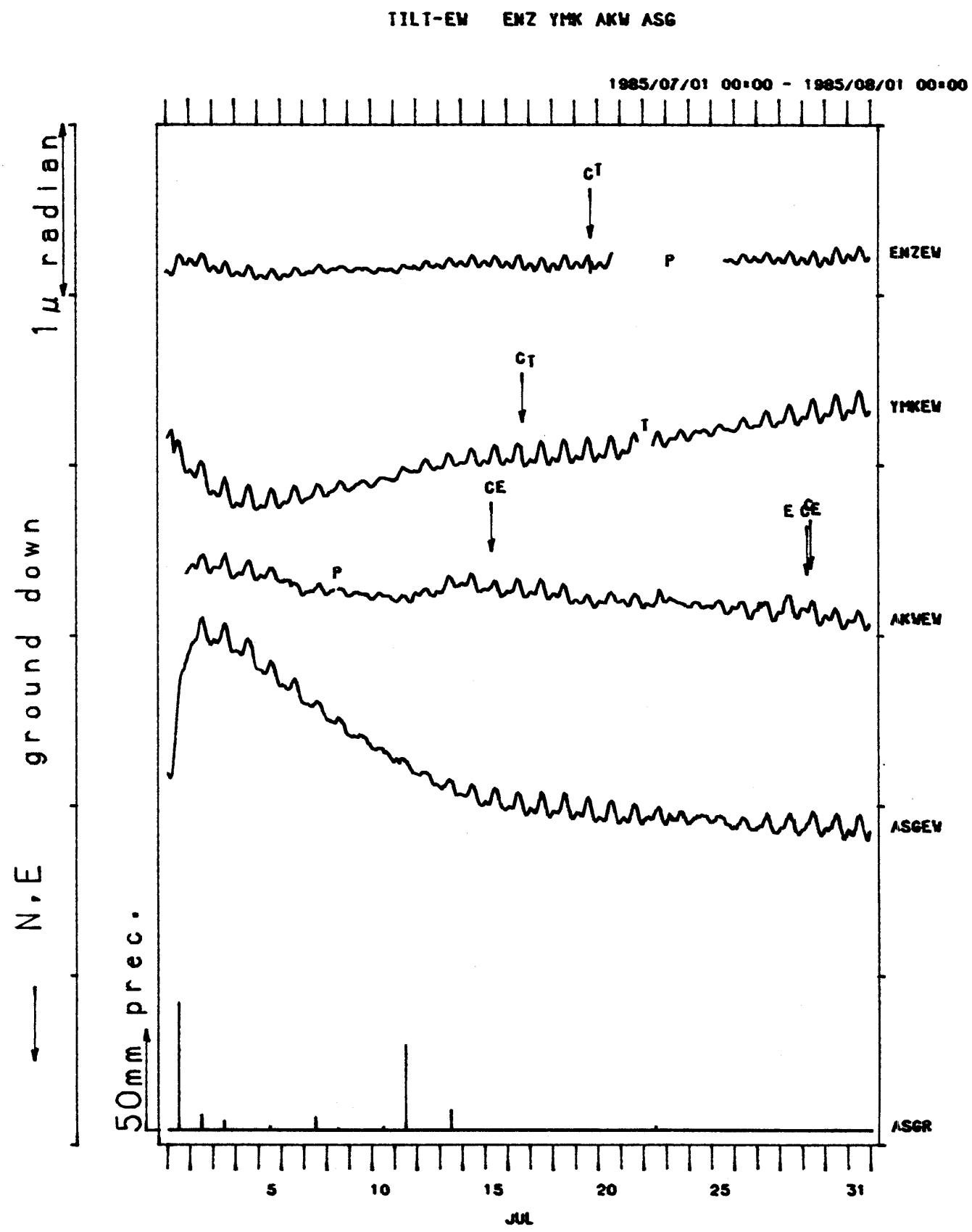
JUN


TILT-EW ENZ YMK AKW ASG
1985/07/01 00:00 - 1985/08/01 00:00
1μ radian
N,E ground down
CT
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ENZEW
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AKWEW
ASGEW
50mm prec.
ASGR
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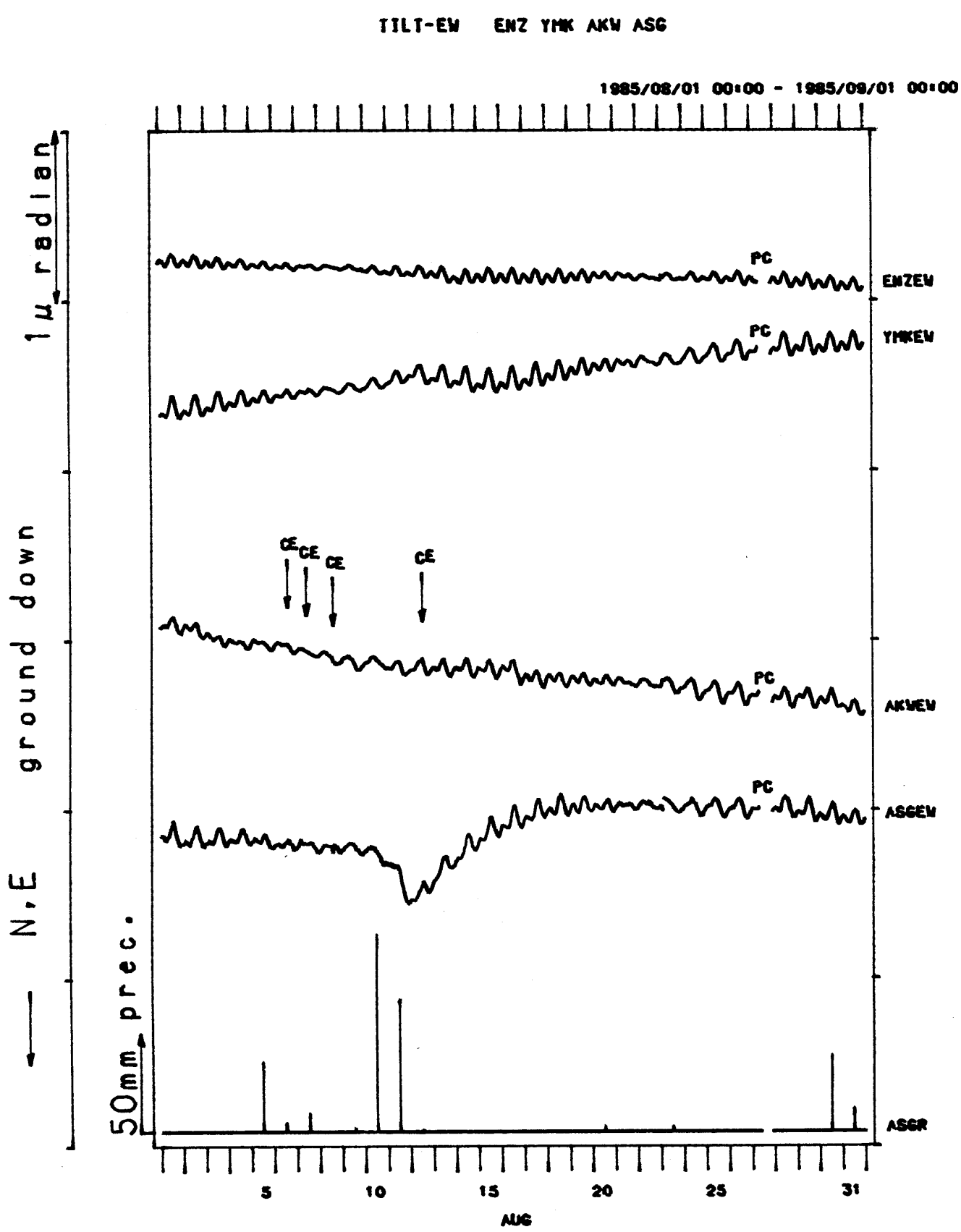
TILT-EW　ENZ YMK AKW ASG
1985/08/01 00:00 - 1985/09/01 00:00
1μ radian
N,E ground down
PC
ENZEW
YMKEW
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CE
AKWEW
ASGEW
50mm prec.
ASGR
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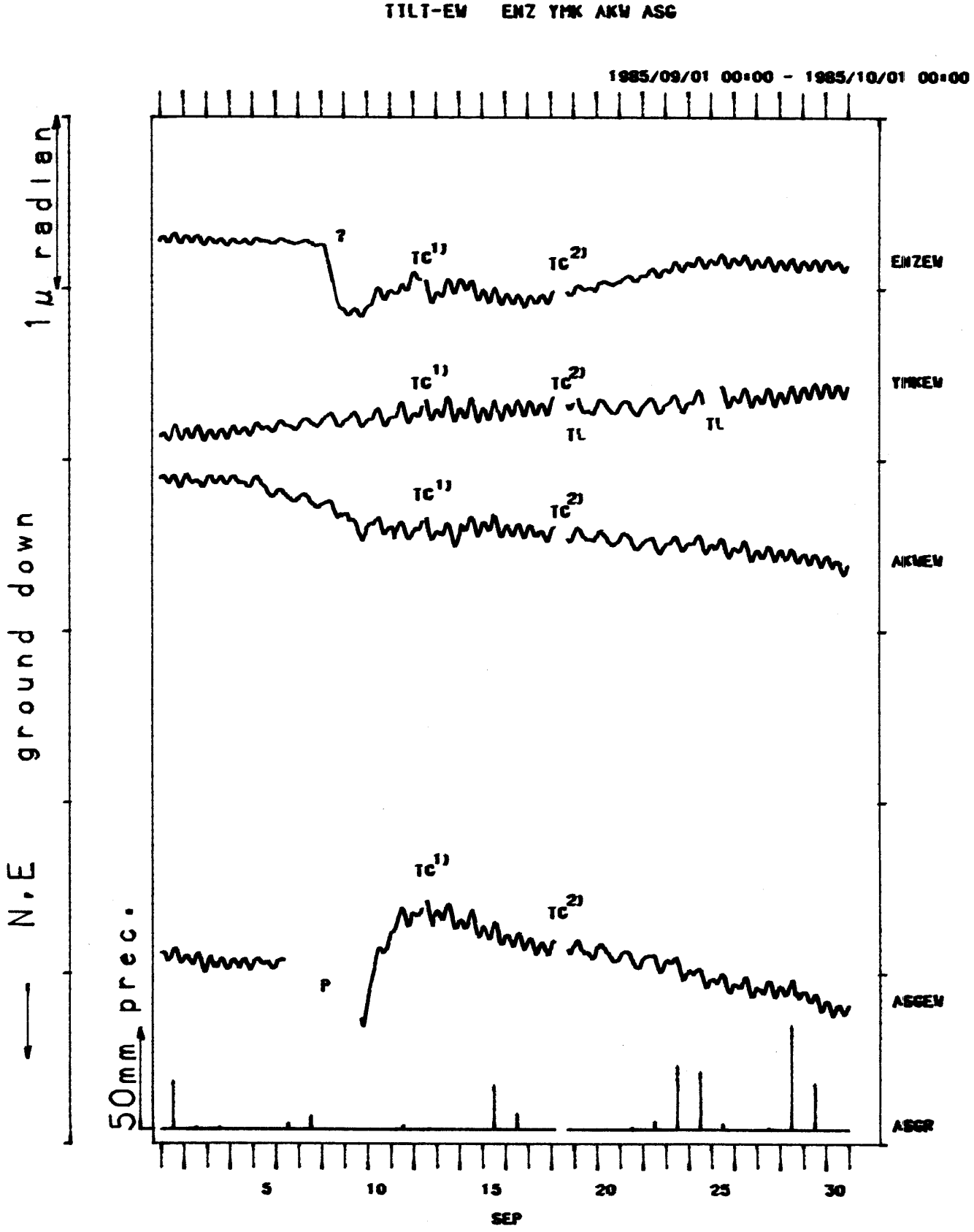
TILT-EW ENZ YMK AKW ASG
1985/09/01 00:00 - 1985/10/01 00:00
1μ radian
N,E ground down
50mm prec.
TC1)
TC2)
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ENZEW
YMKEW
AKWEW
ASGEW
ASGR
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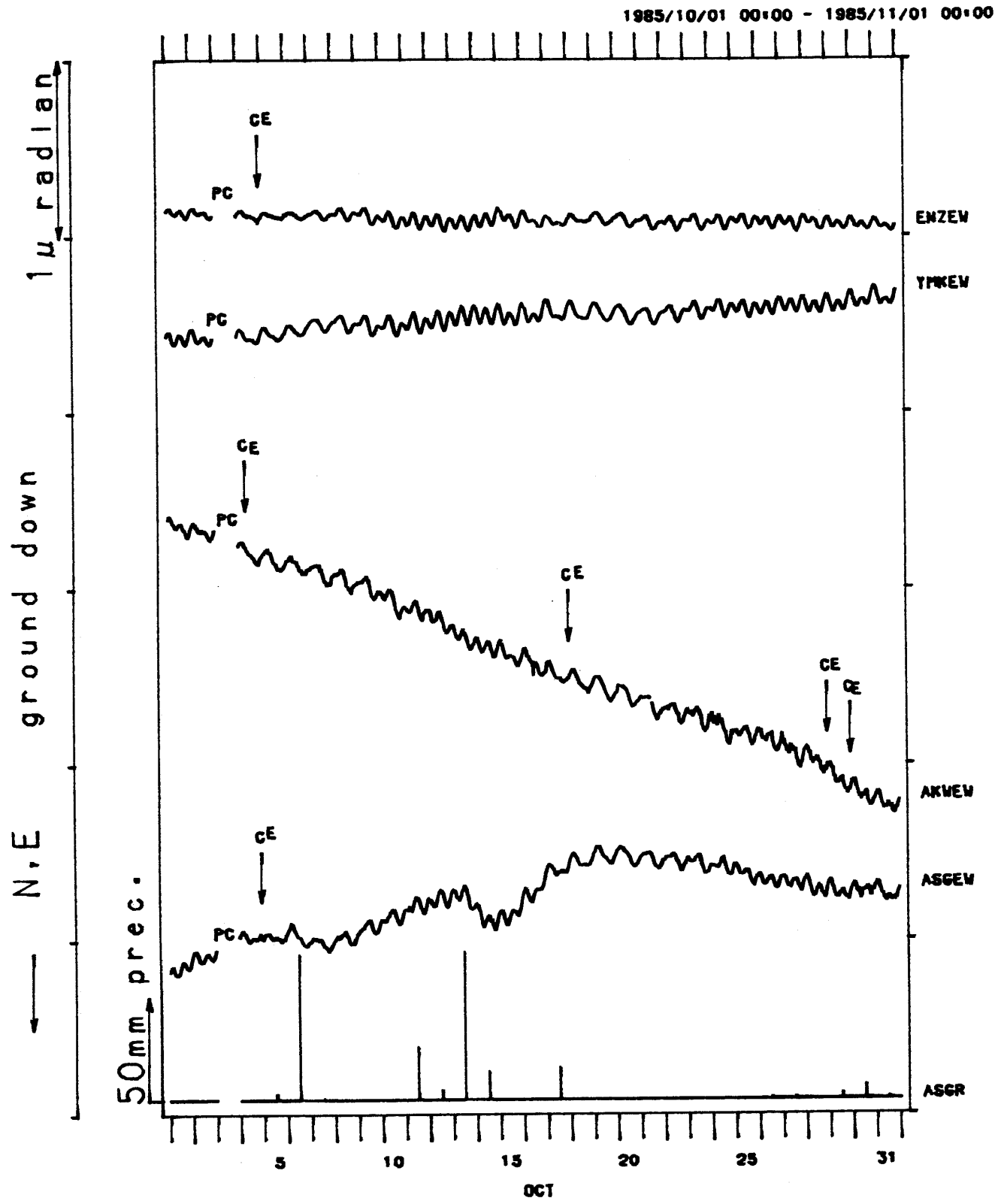
TILT-EW　ENZ YMK AKW ASG
1985/10/01 00:00 - 1985/11/01 00:00
1μ radian
N,E ground down
CE
PC
ENZEW
YMKEW
AKWEW
ASGEW
ASGR
50mm prec.
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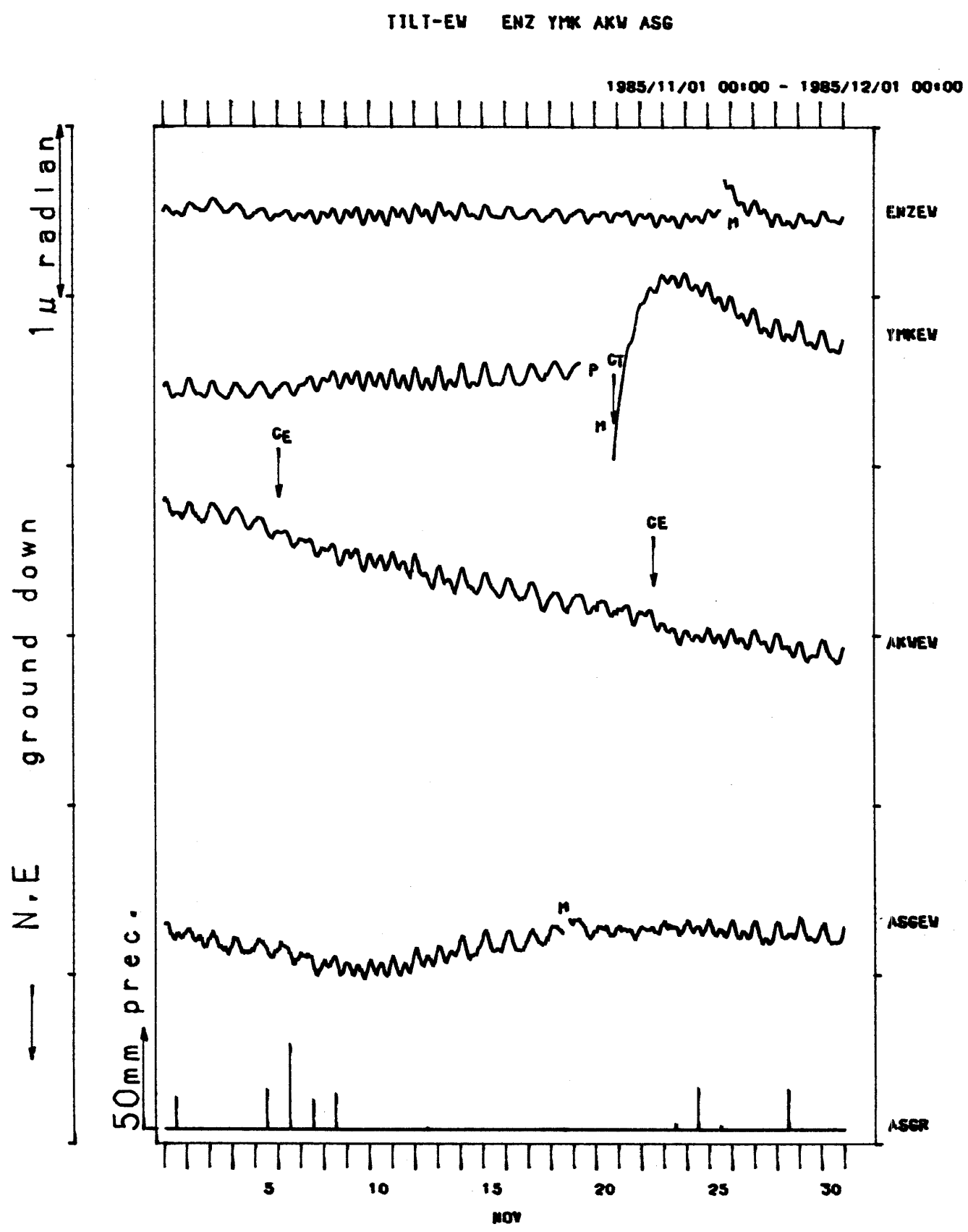
OCT


TILT-EW ENZ YMK AKW ASG
1985/11/01 00:00 - 1985/12/01 00:00
1μ radian
N.E ground down
50mm prec.
ENZEW
YMKEW
AKWEW
ASGEW
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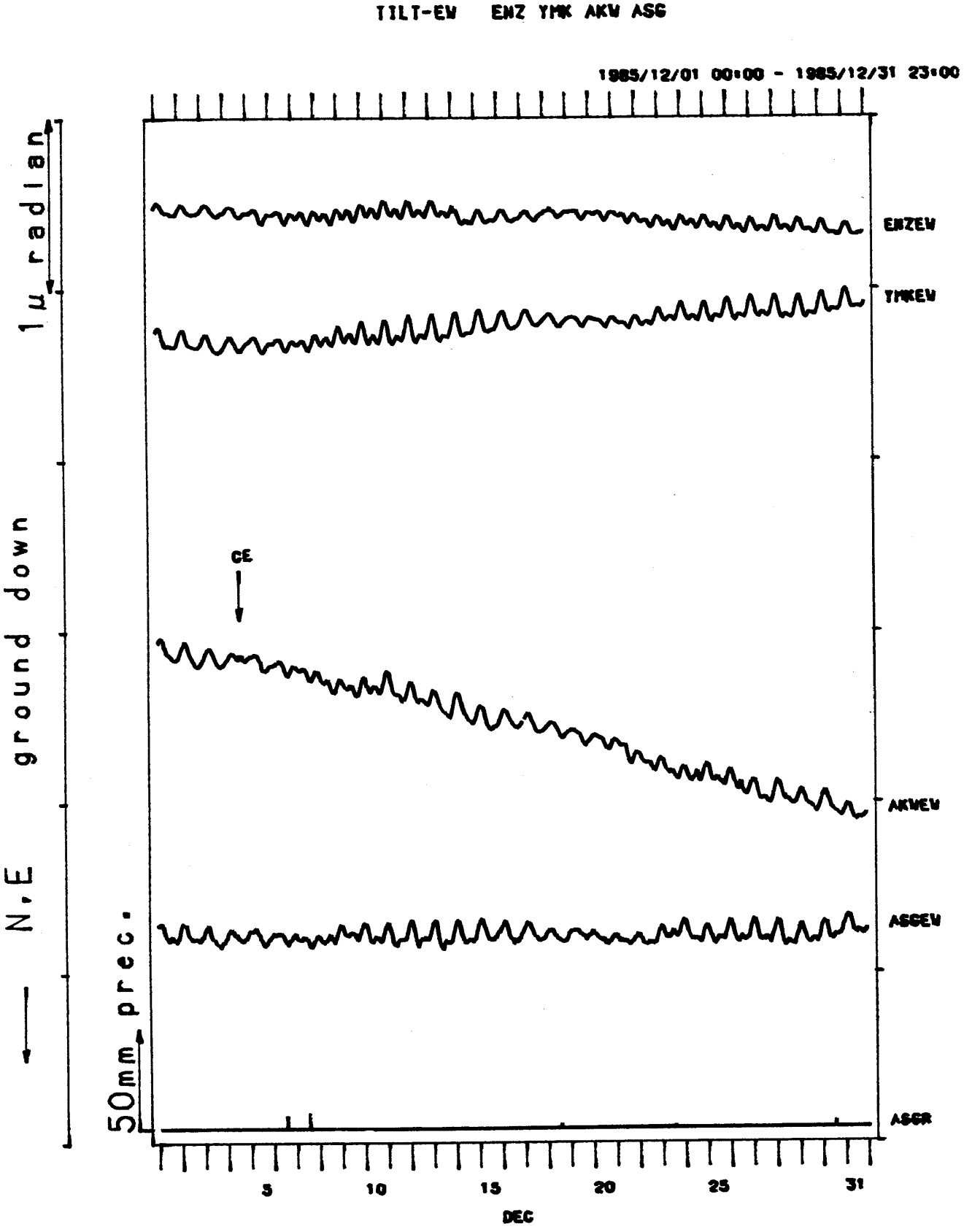
TILT-EW　ENZ YMK AKW ASG
1985/12/01 00:00 - 1985/12/31 23:00
1μ radian
N,E ground down
50mm prec.
ENZEW
YMKEW
CE
AKWEW
ASGEW
ASGR
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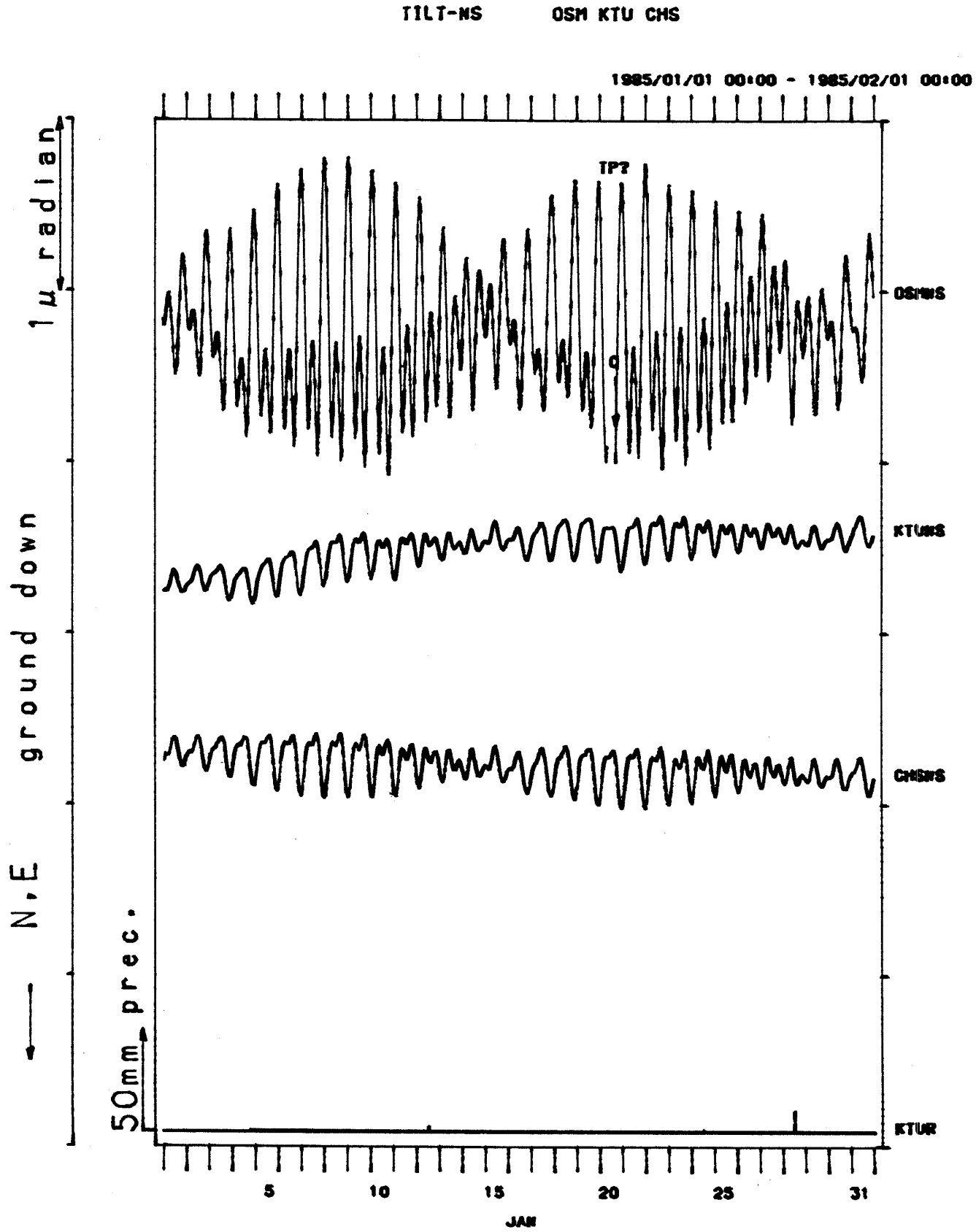
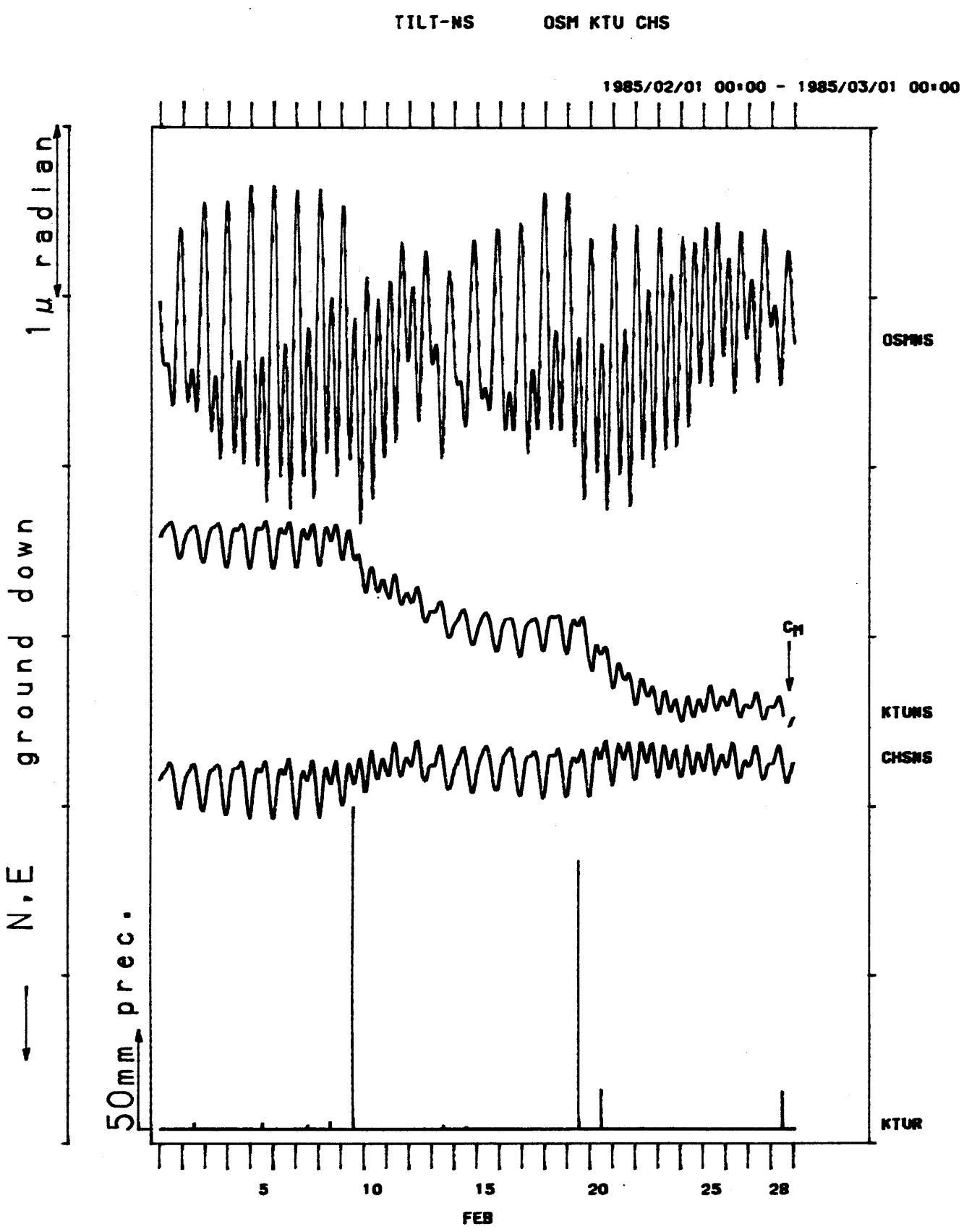
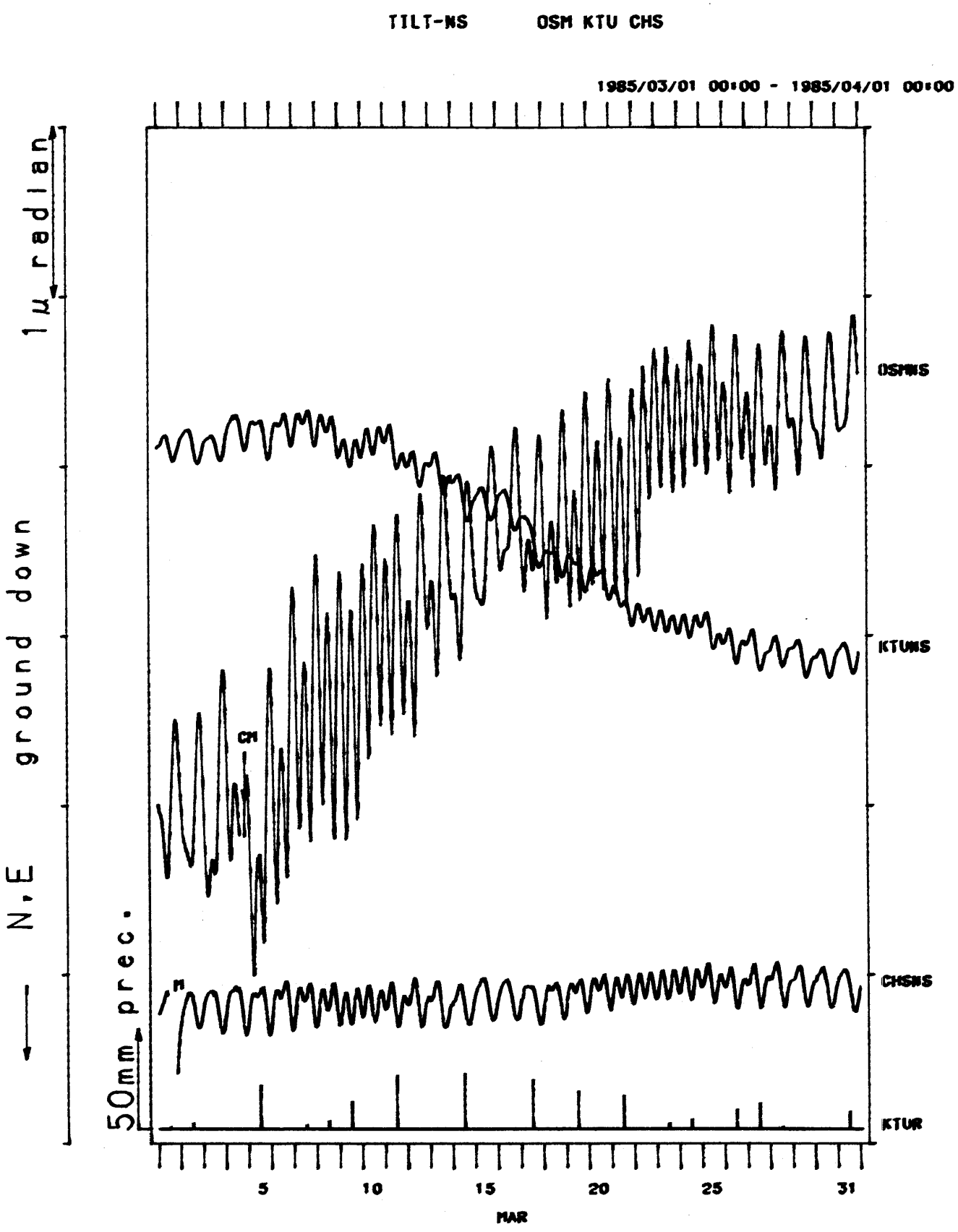
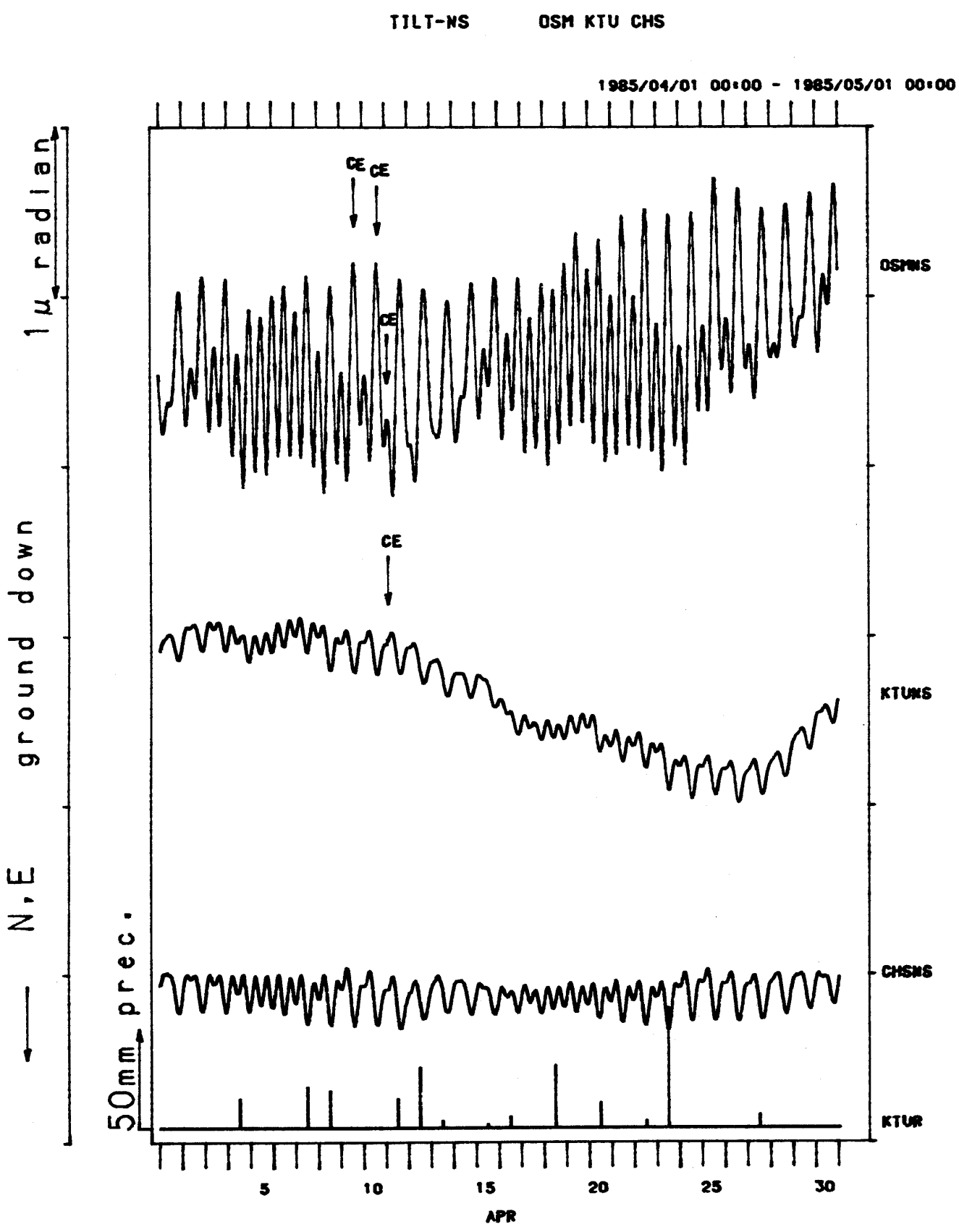
DEC

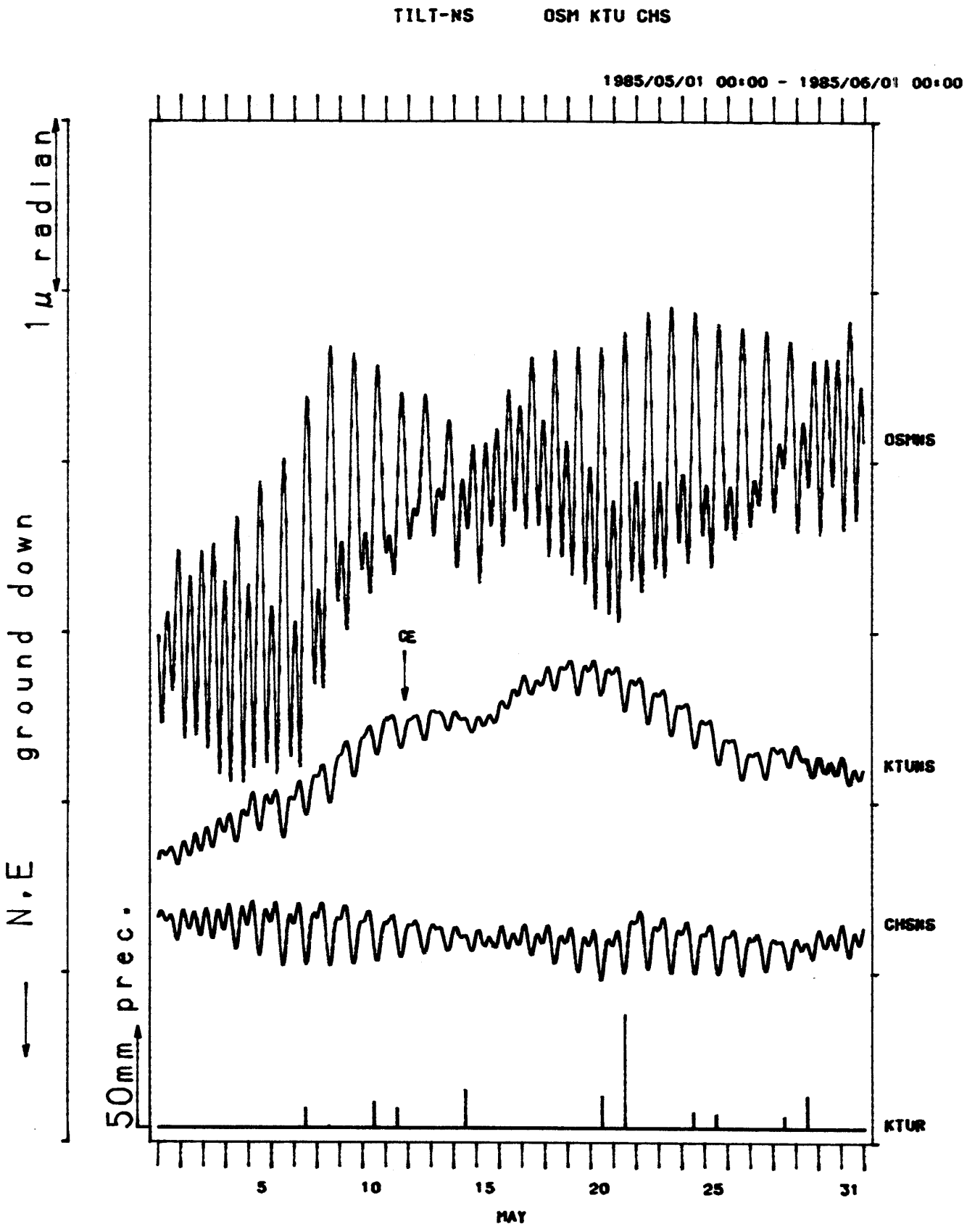


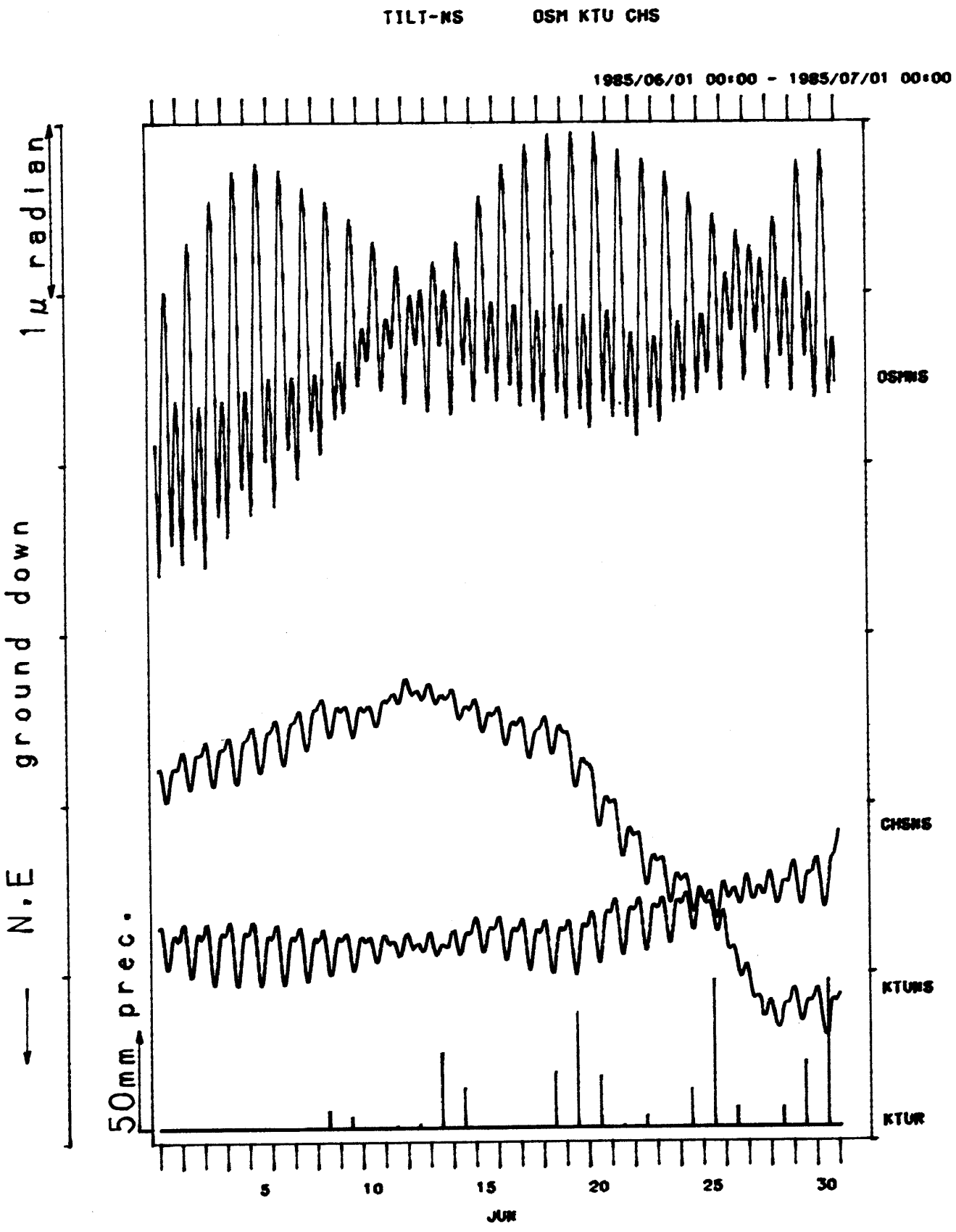
(g) 大島（OSM）・勝浦（KTU）・銚子（CHS）の傾斜NS成分と勝浦の日雨量
NS−component of crustal tilt at Ohshima (OSM), Katsuura (KTU), Chohshi (CHS) and the daily precipitation at Katsuura.

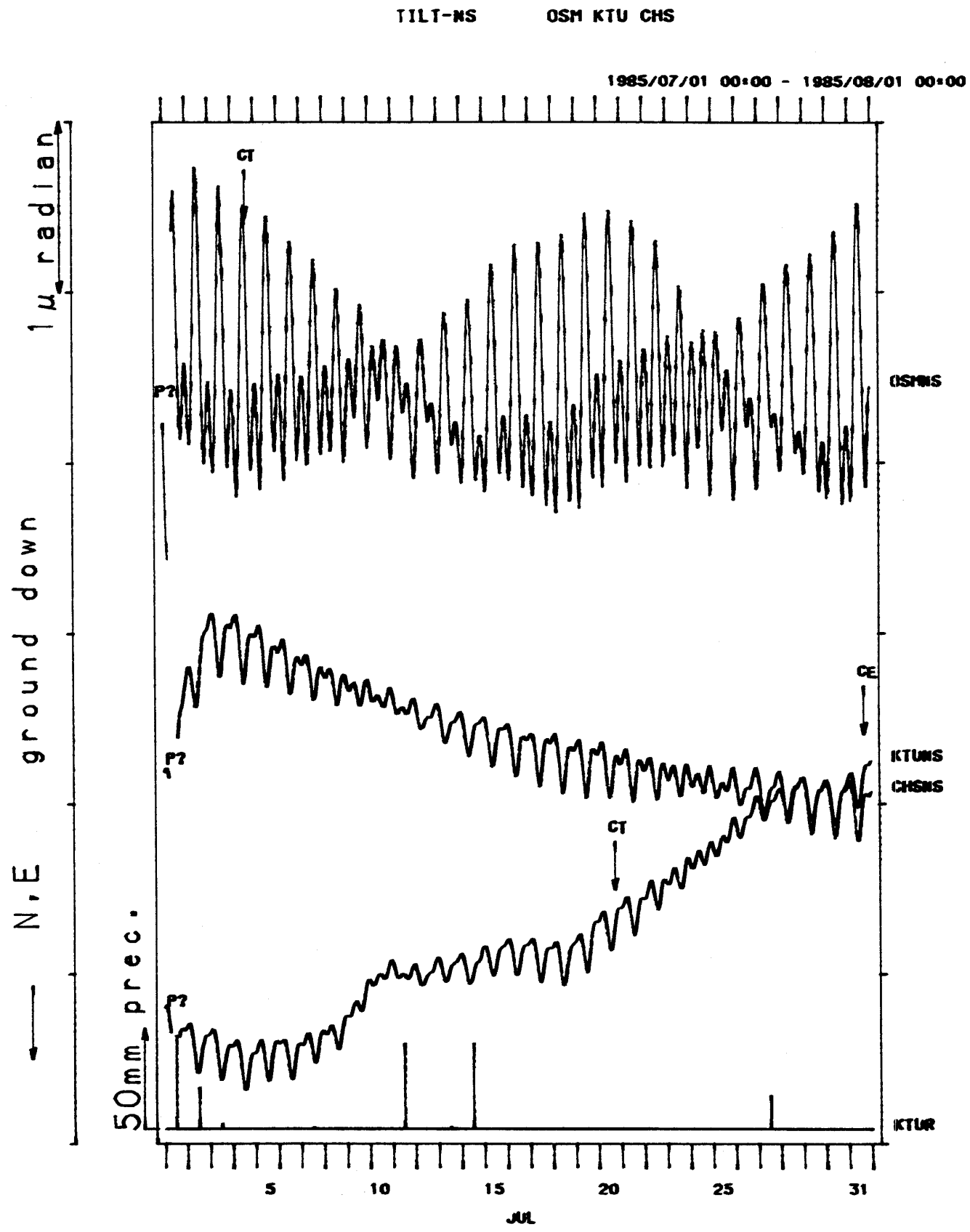

TILT-NS　　OSM KTU CHS
1985/02/01 00:00 - 1985/03/01 00:00
1μ radian
N,E ground down
50mm prec.
OSMNS
KTUNS
CHSNS
KTUR
CM
5
10
15
20
25
28
FEB

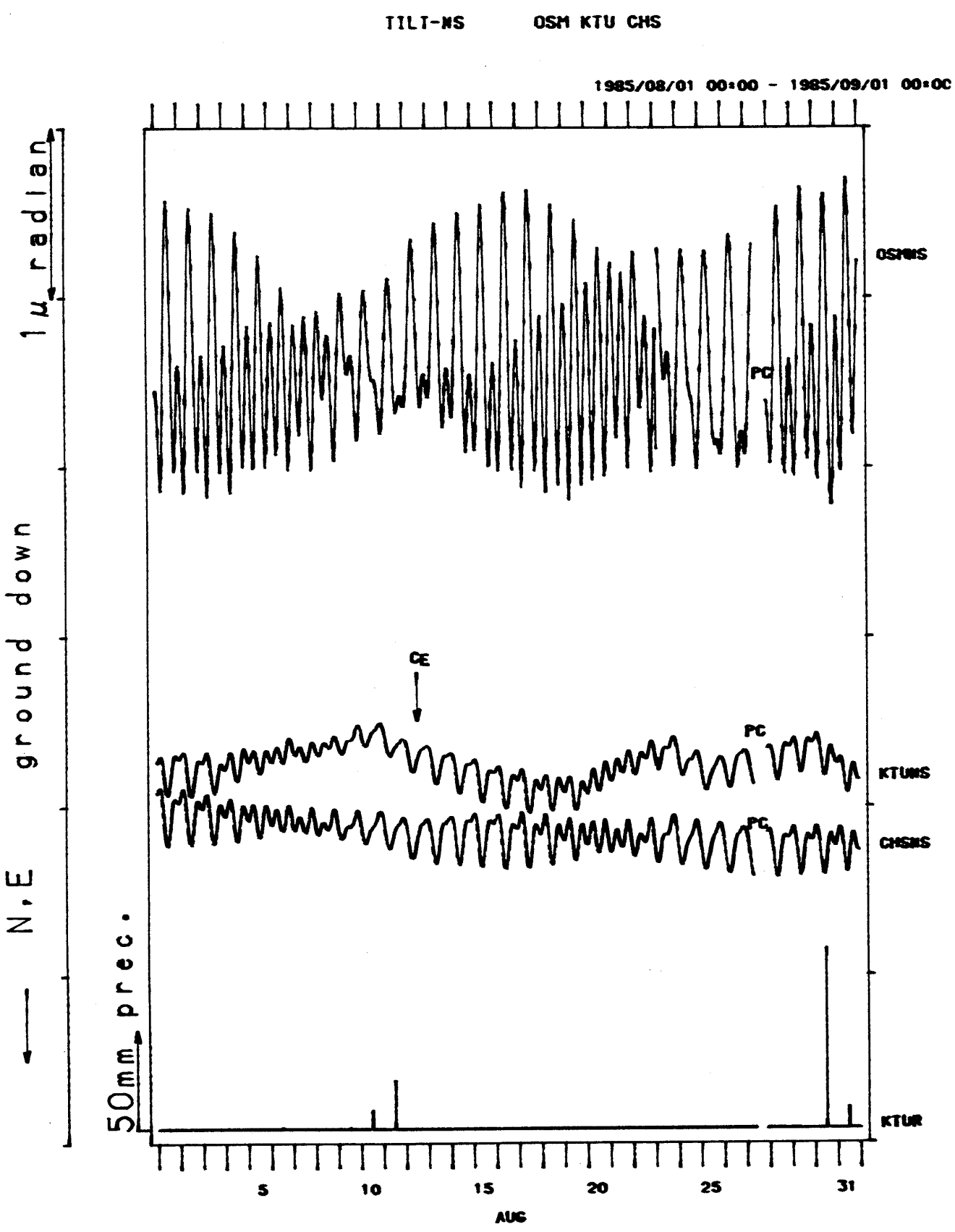

TILT-NS OSM KTU CHS
1985/03/01 00:00 - 1985/04/01 00:00
1μ radian
N,E ground down
50mm prec.
OSMNS
KTUNS
CHSNS
KTUR
CM
5
10
15
20
25
31
MAR

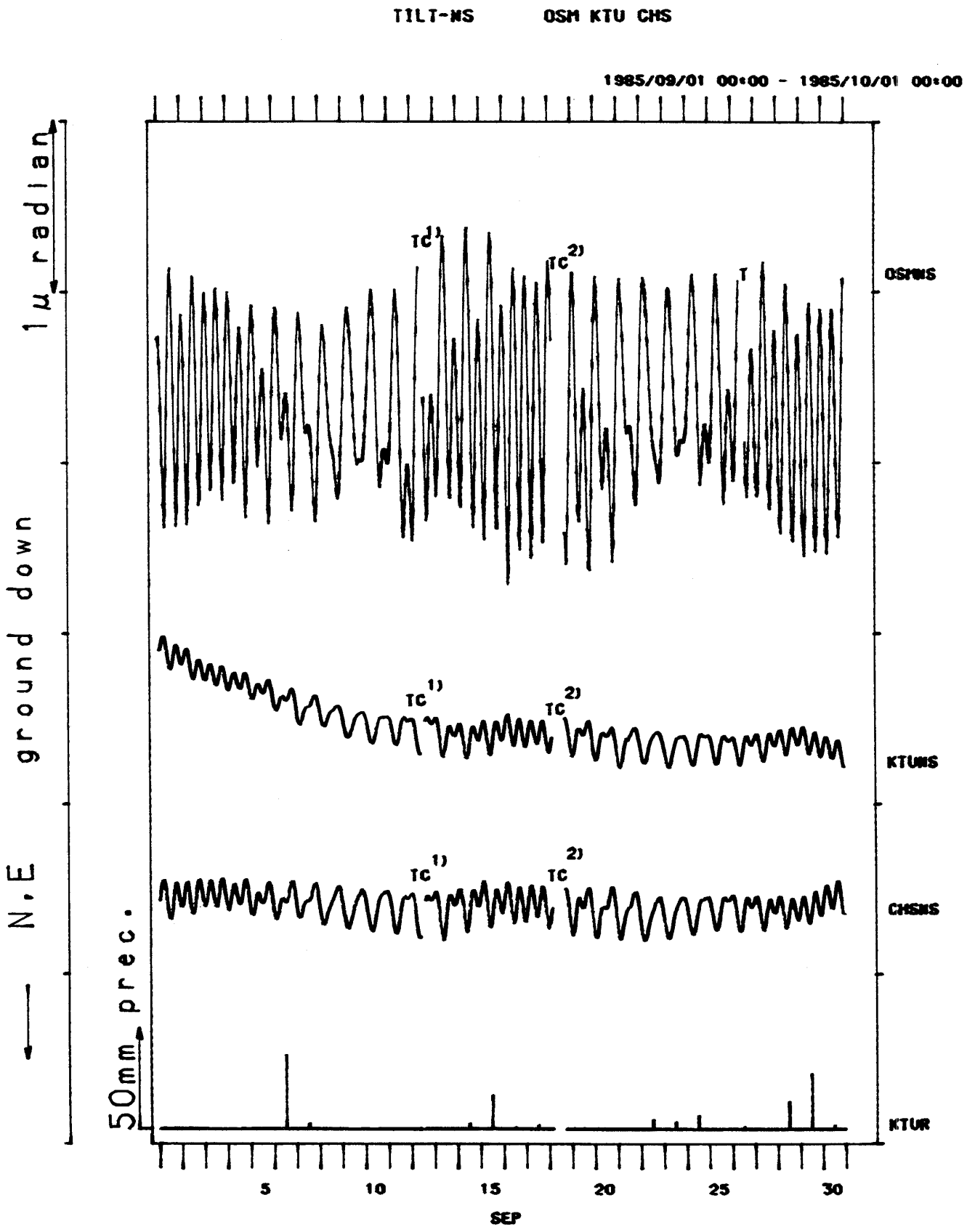

TILT-NS　　OSM KTU CHS
1985/04/01 00:00 - 1985/05/01 00:00
1μ radian
N,E ground down
CE
CE
CE
CE
OSMNS
KTUNS
CHSNS
KTUR
50mm prec.
5
10
15
20
25
30
APR

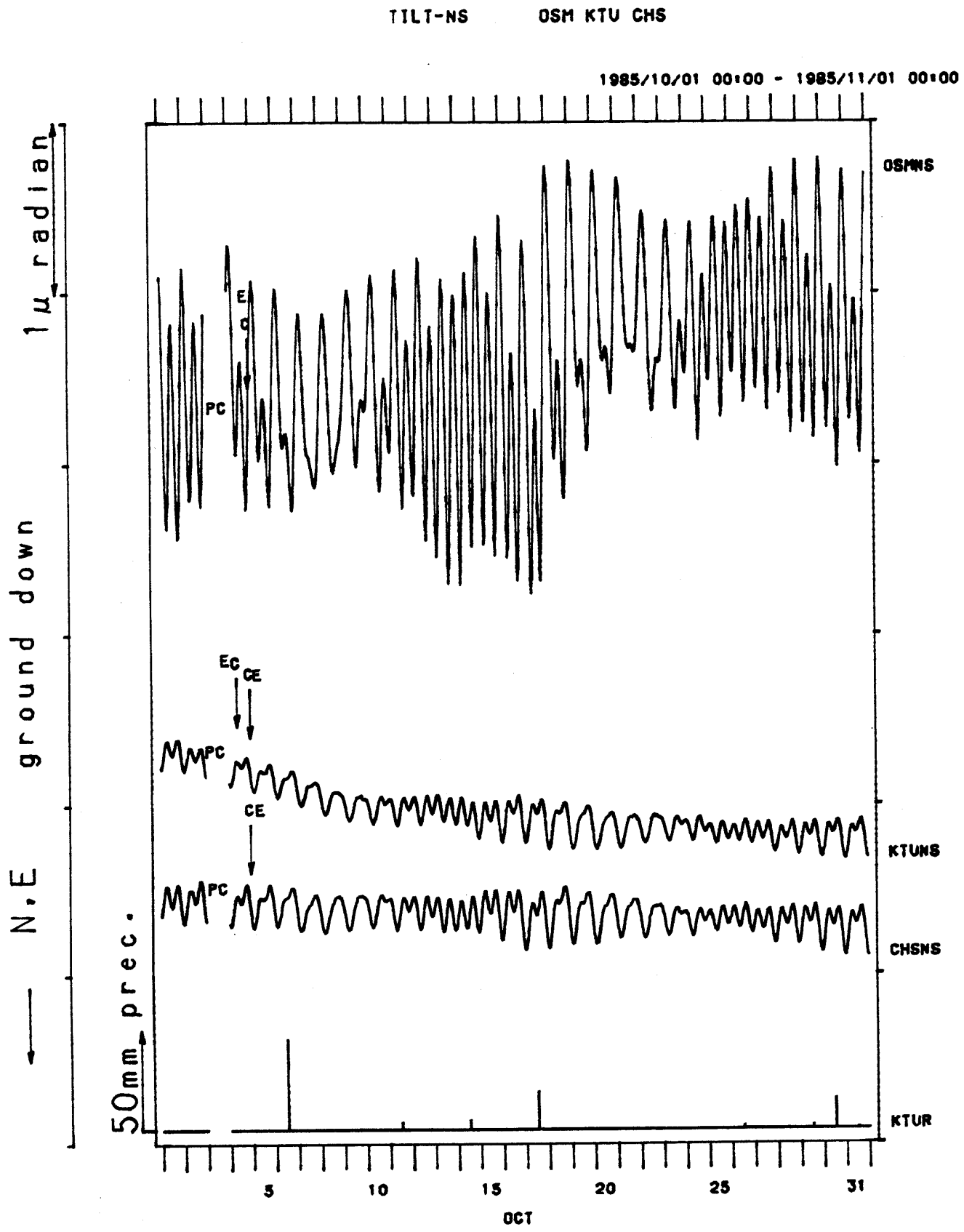

TILT-NS OSM KTU CHS
1985/05/01 00:00 - 1985/06/01 00:00
1 μ radian
N,E ground down
50mm prec.
OSMNS
KTUNS
CHSNS
KTUR
CE
5
10
15
20
25
31
MAY

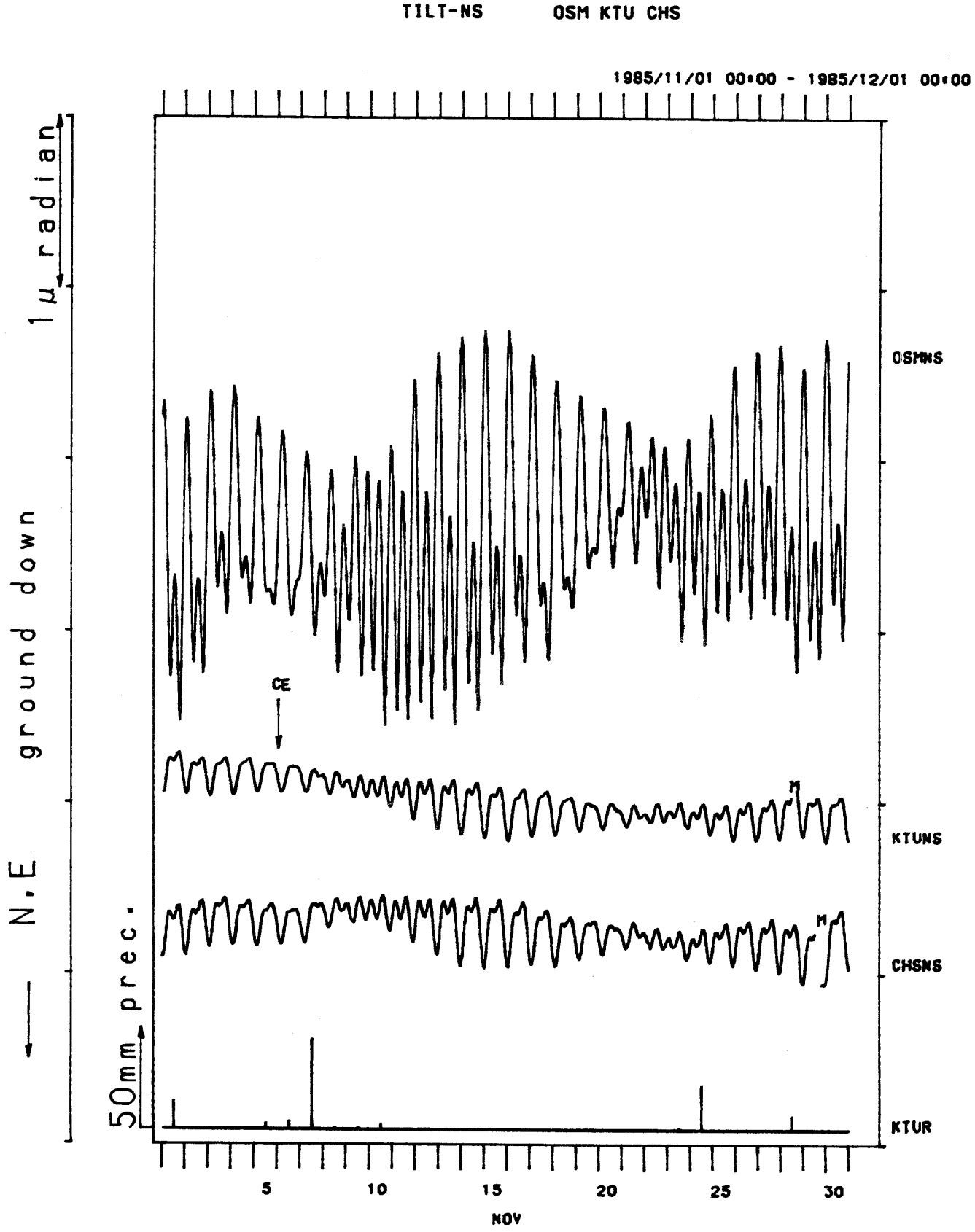

TILT-NS
OSM KTU CHS
1985/06/01 00:00 - 1985/07/01 00:00
1μ radian
N,E ground down
50mm prec.
OSMNS
CHSNS
KTUNS
KTUR
5
10
15
20
25
30
JUN

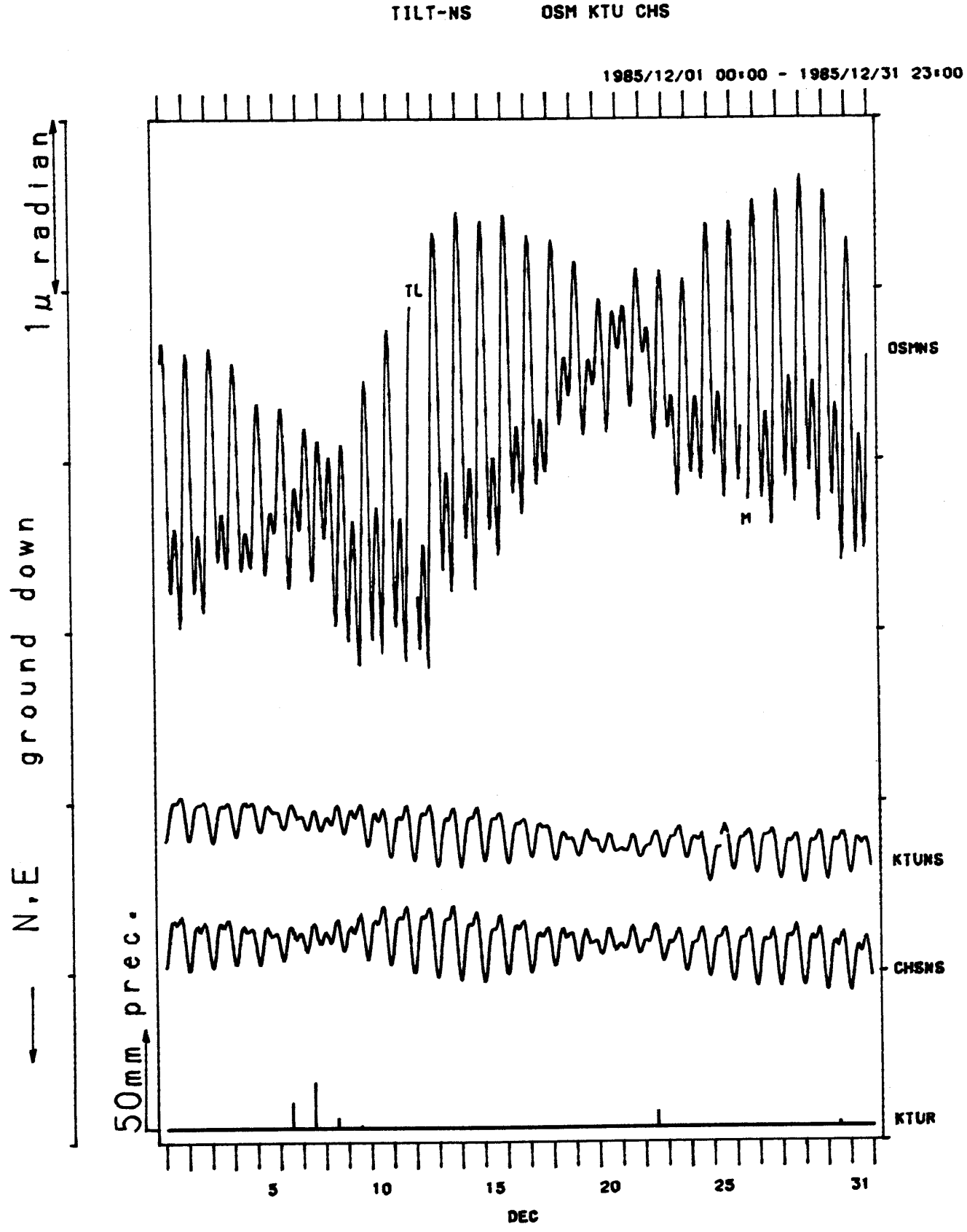

TILT-NS
OSM KTU CHS
1985/07/01 00:00 - 1985/08/01 00:00
1 μ radian
N,E ground down
50mm prec.
CT
P?
CE
OSMNS
KTUNS
CHSNS
KTUR
5
10
15
20
25
31
JUL

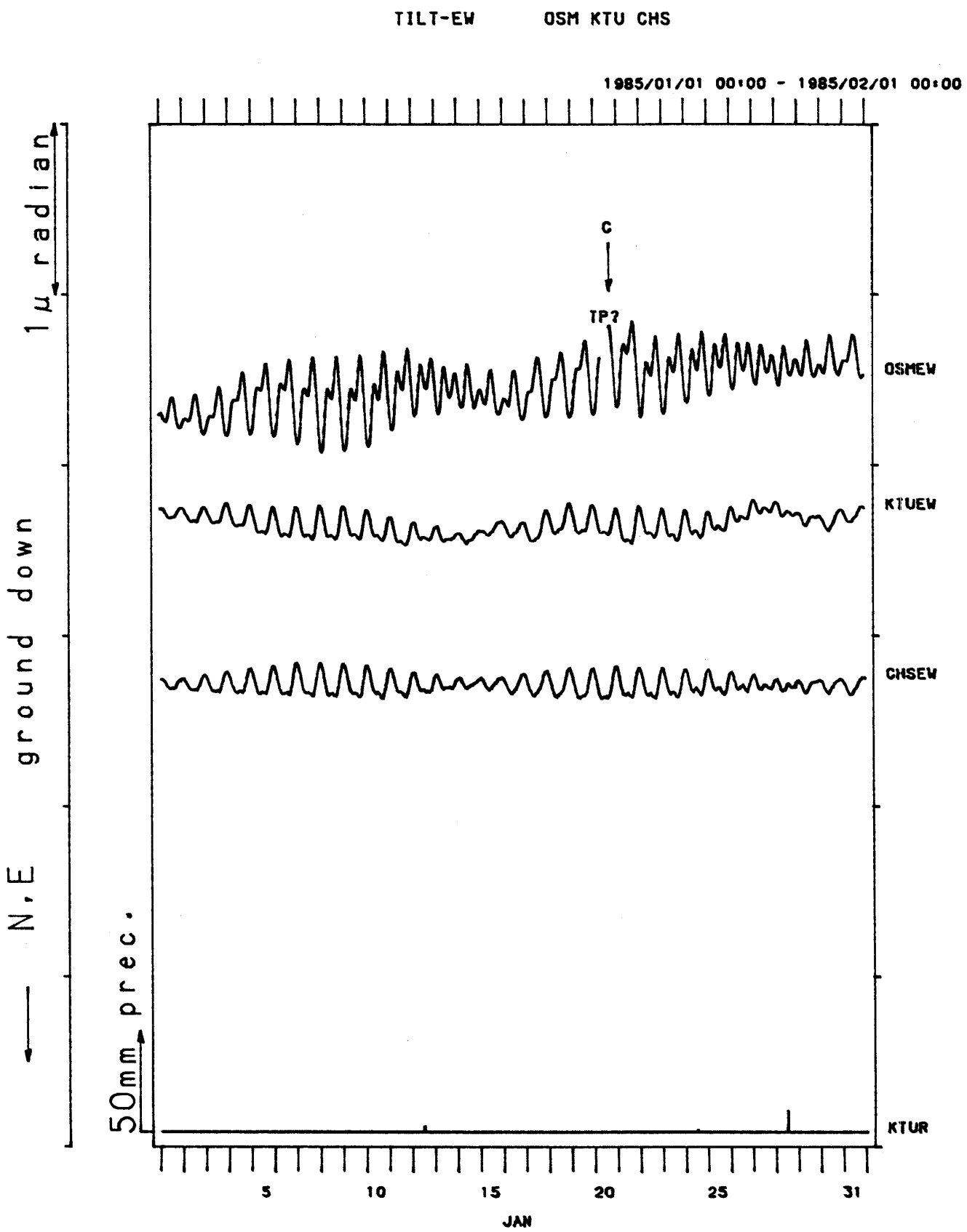

TILT-NS　　OSM KTU CHS
1985/08/01 00:00 - 1985/09/01 00:00
1μ radian
N,E ground down
OSMNS
PC
CE
PC
KTUNS
PC
CHSNS
50mm prec.
KTUR
5
10
15
20
25
31
AUG


TILT-NS OSM KTU CHS
1985/09/01 00:00 - 1985/10/01 00:00
1μ radian
N,E ground down
50mm prec.
TC1)
TC2)
T
OSMNS
KTUNS
CHSNS
KTUR
5
10
15
20
25
30
SEP

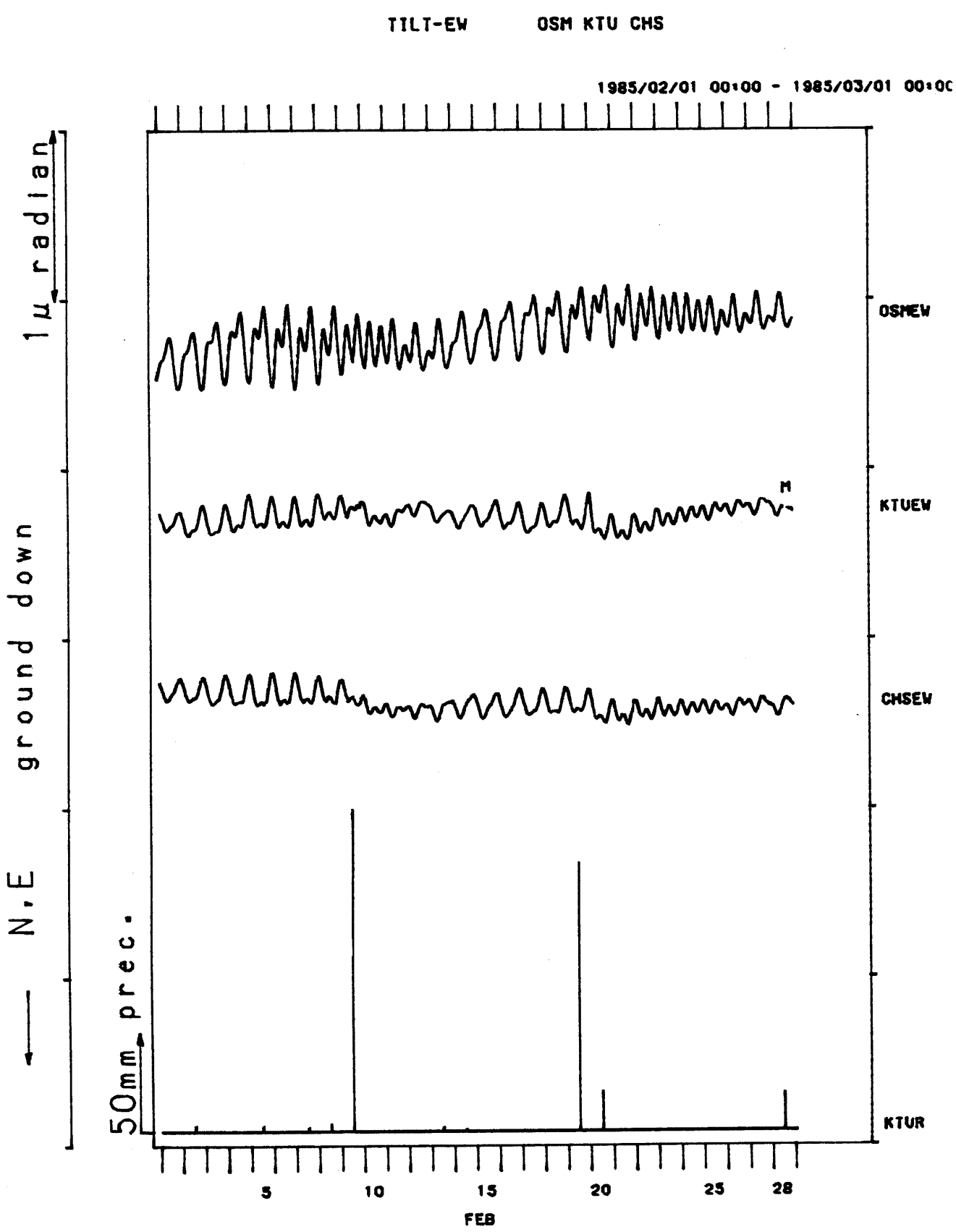

TILT-NS
OSM KTU CHS
1985/10/01 00:00 - 1985/11/01 00:00
OSMNS
KTUNS
CHSNS
KTUR
1μ radian
N.E ground down
50mm prec.
PC
EC
CE
5
10
15
20
25
31
OCT

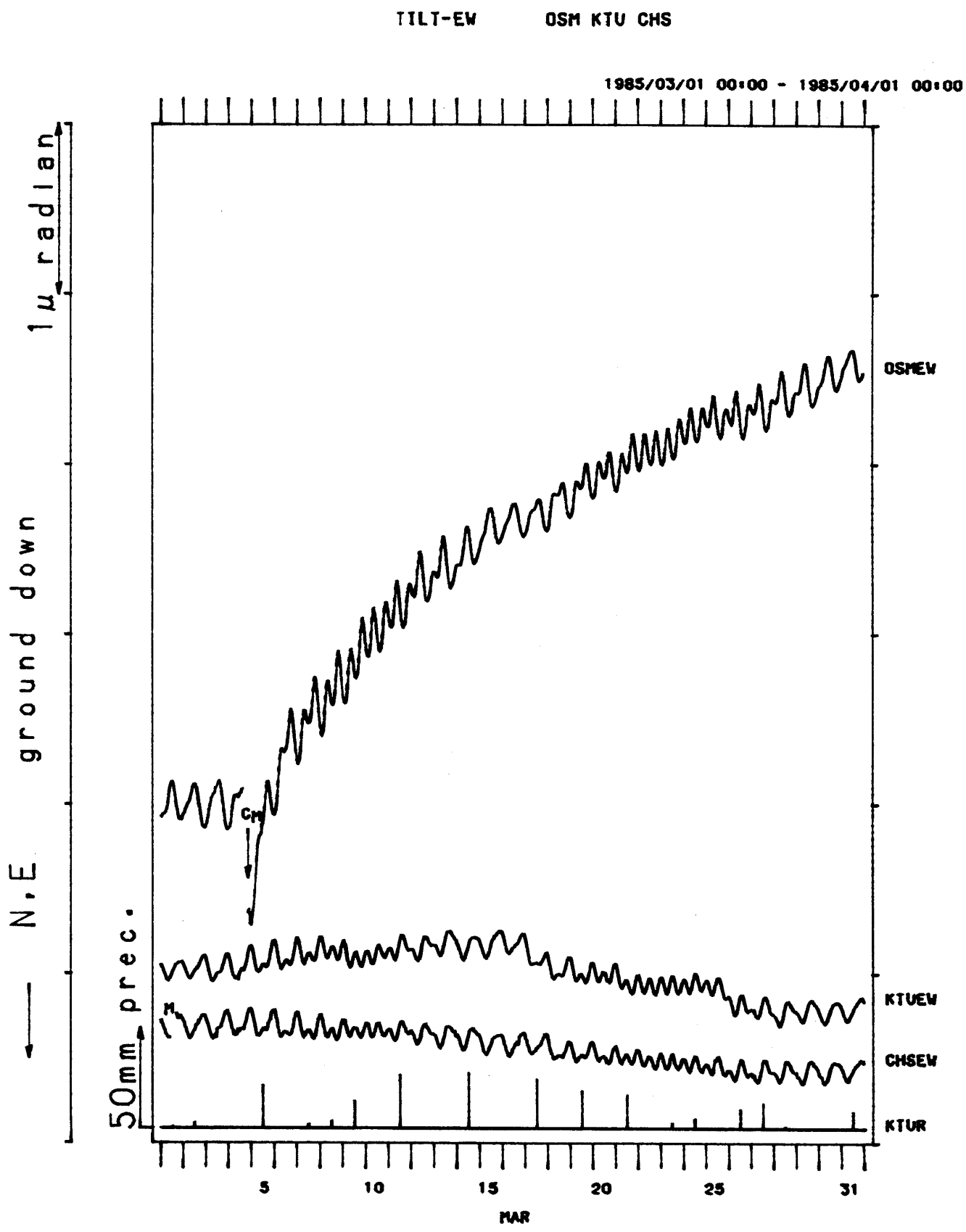

TILT-NS
OSM KTU CHS
1985/11/01 00:00 - 1985/12/01 00:00
1μ radian
N, E ground down
50mm prec.
CE
OSMNS
KTUNS
CHSNS
KTUR
5
10
15
20
25
30
NOV

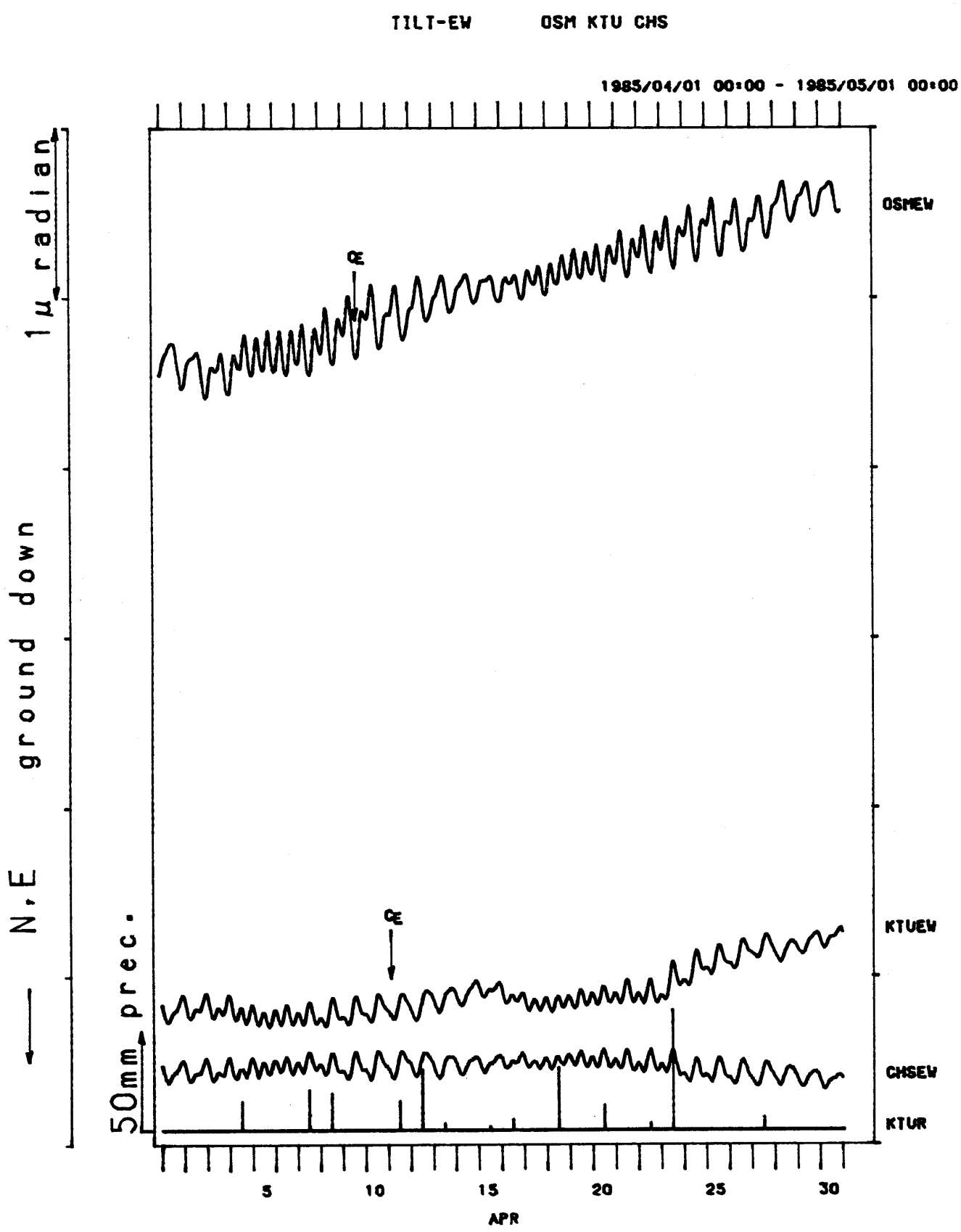

TILT-NS　　OSM KTU CHS
1985/12/01 00:00 - 1985/12/31 23:00
1μ radian
N,E ground down
TL
M
OSMNS
KTUNS
CHSNS
KTUR
50mm prec.
5
10
15
20
25
31
DEC

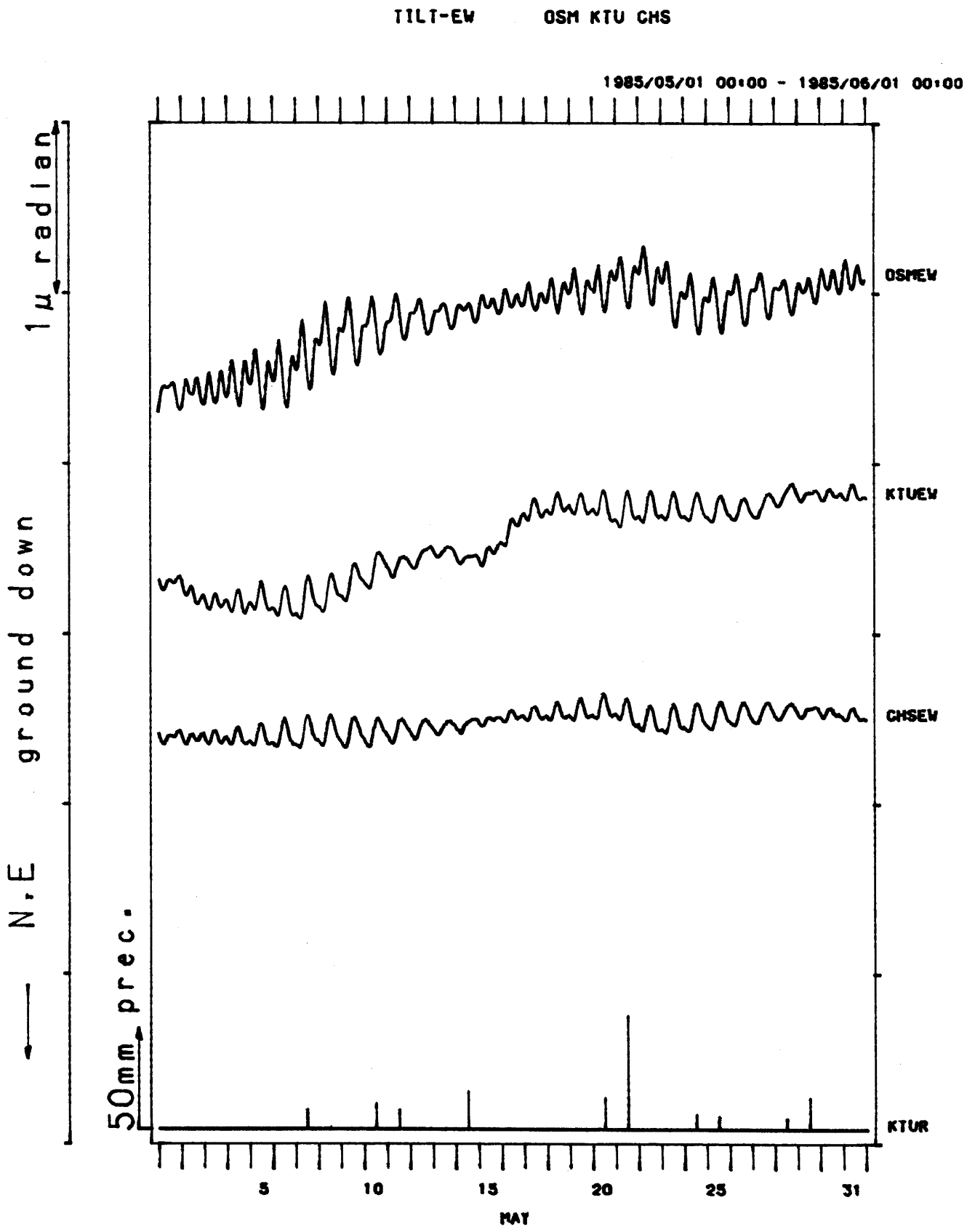


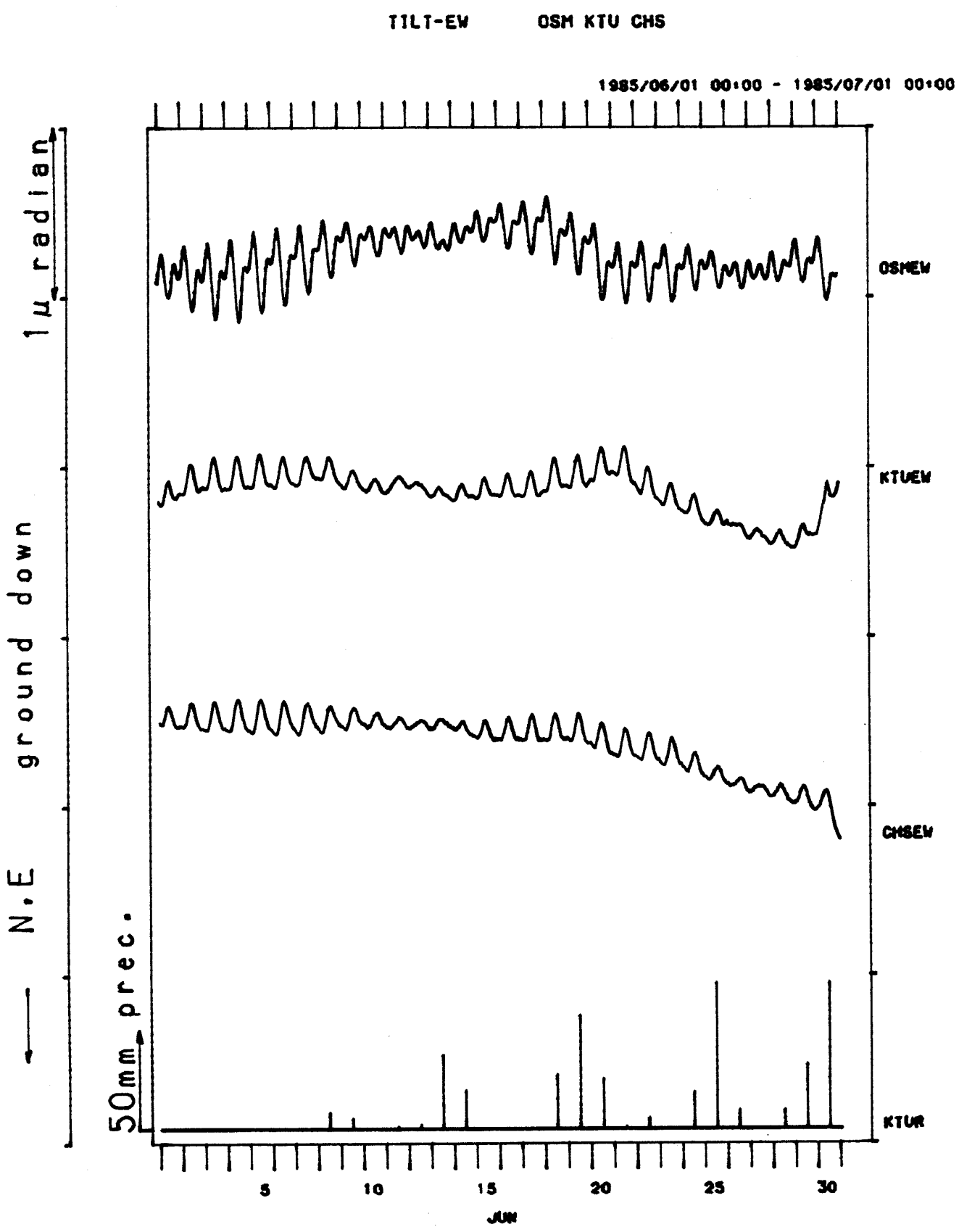
(h) 大島（OSM）・勝浦（KTU）・銚子（CHS）の傾斜EW成分と勝浦の日雨量
EW−component of crustal tilt at Ohshima (OSM), Katsuura (KTU), Chohshi (CHS) and the daily precipitation at Katsuura.

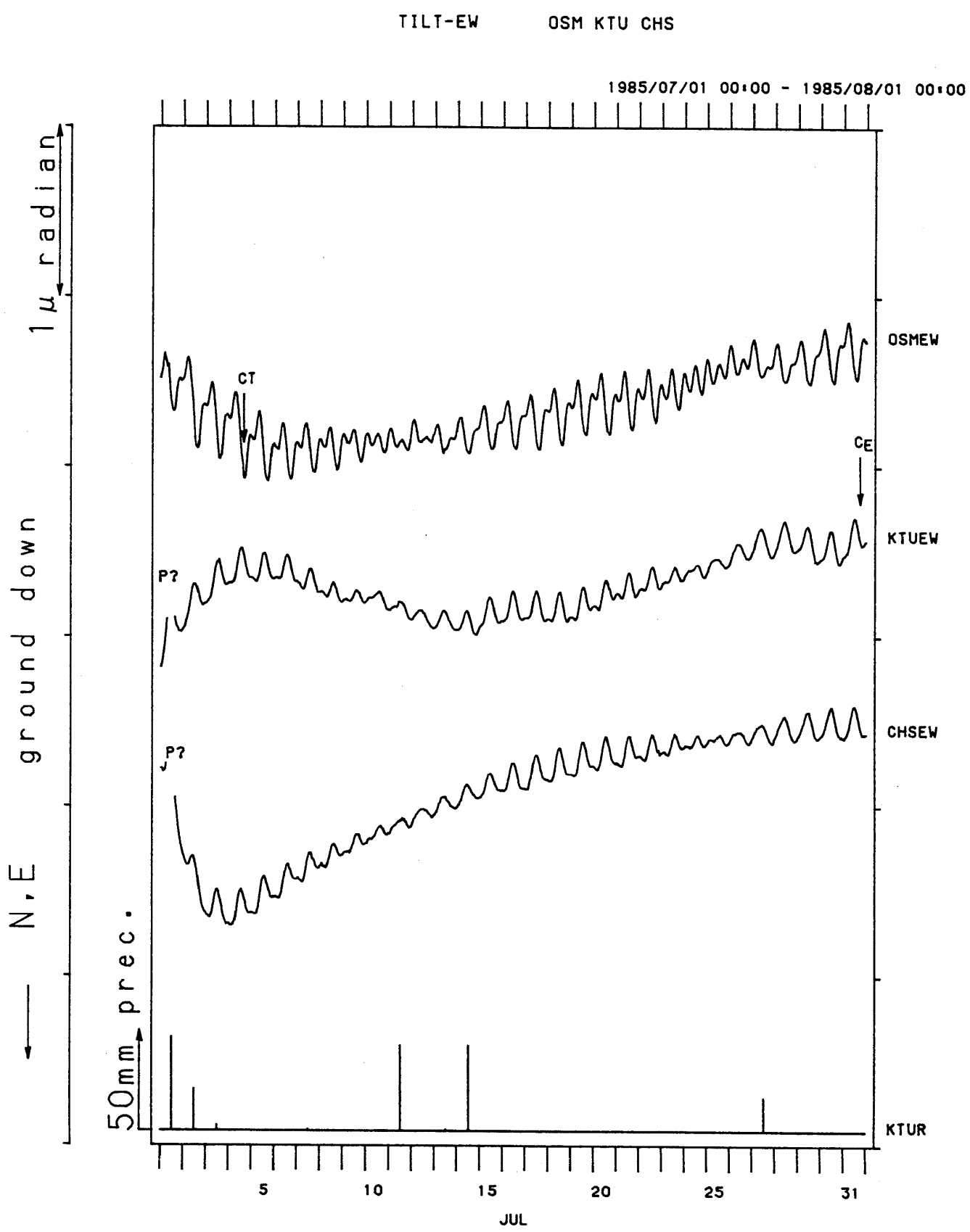

TILT-EW　　OSM KTU CHS
1985/02/01 00:00 - 1985/03/01 00:00
1μ radian
N,E ground down
50mm prec.
OSMEW
KTUEW
CHSEW
KTUR
5
10
15
20
25
28
FEB

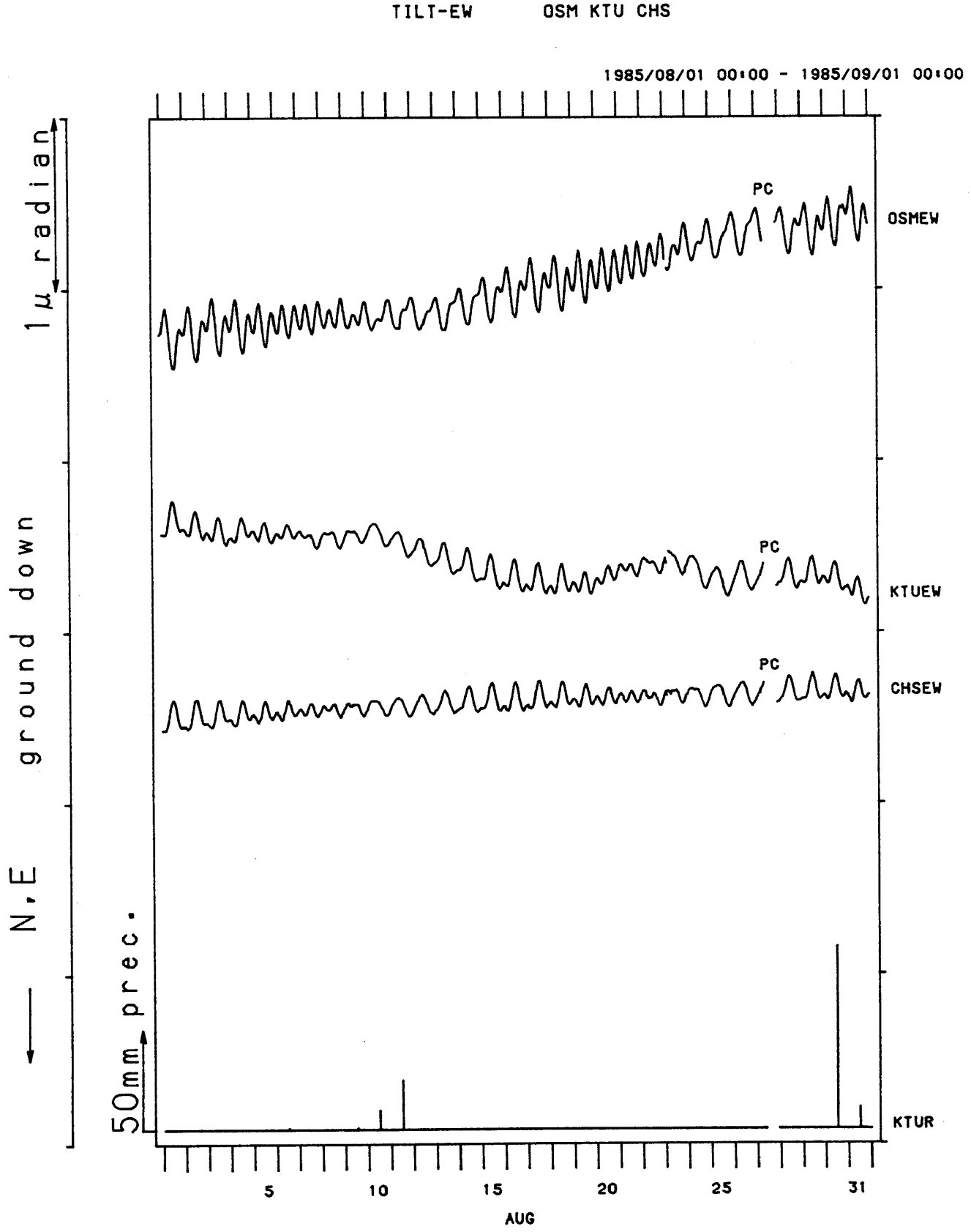

TILT-EW OSM KTU CHS
1985/03/01 00:00 - 1985/04/01 00:00
1μ radian
N,E ground down
50mm prec.
OSMEW
KTUEW
CHSEW
KTUR
Cm
M
5
10
15
20
25
31
MAR

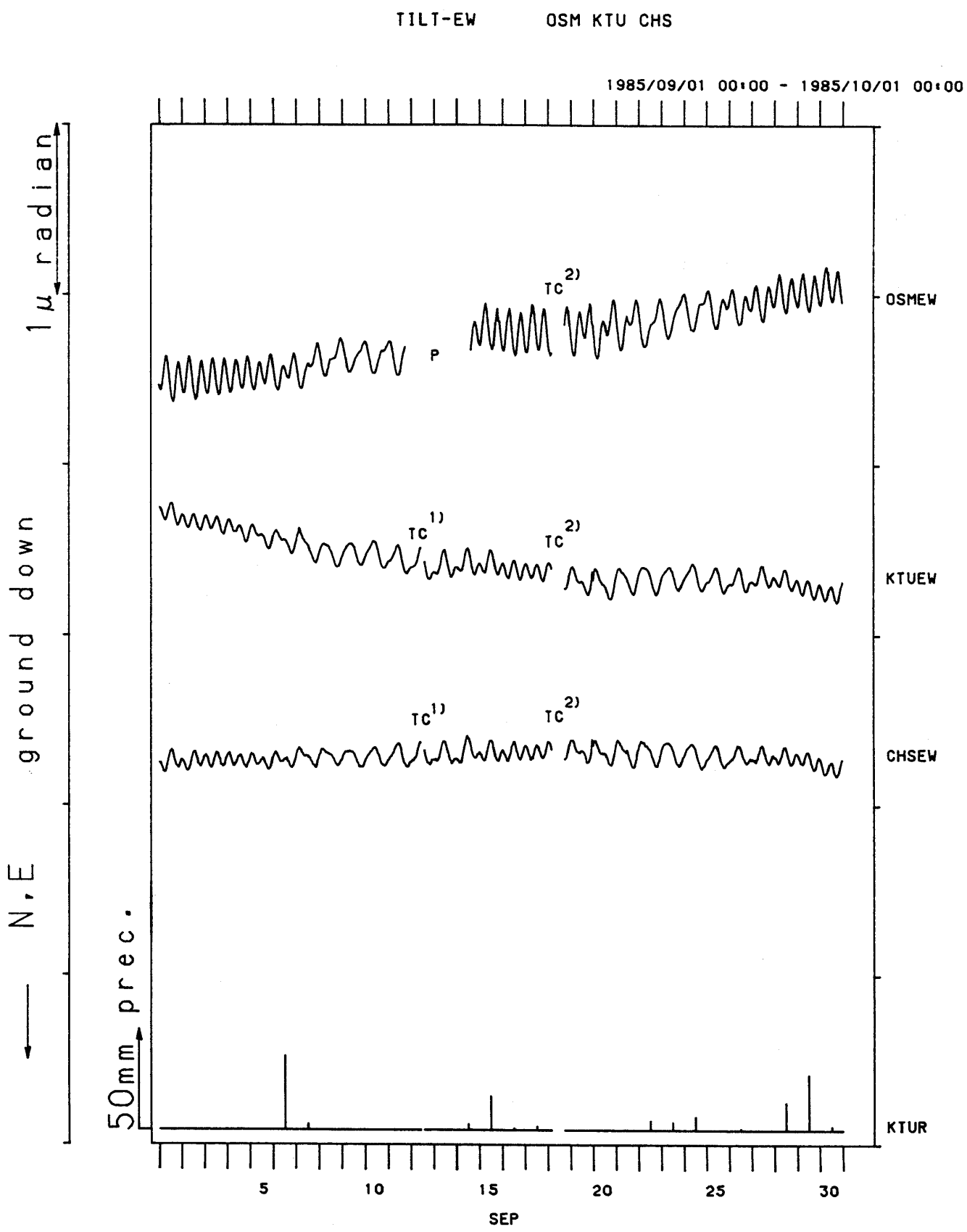

TILT-EW　　OSM KTU CHS
1985/04/01 00:00 - 1985/05/01 00:00
1μ radian
N,E ground down
50mm prec.
OSMEW
KTUEW
CHSEW
KTUR
CE
CE
5
10
15
20
25
30
APR

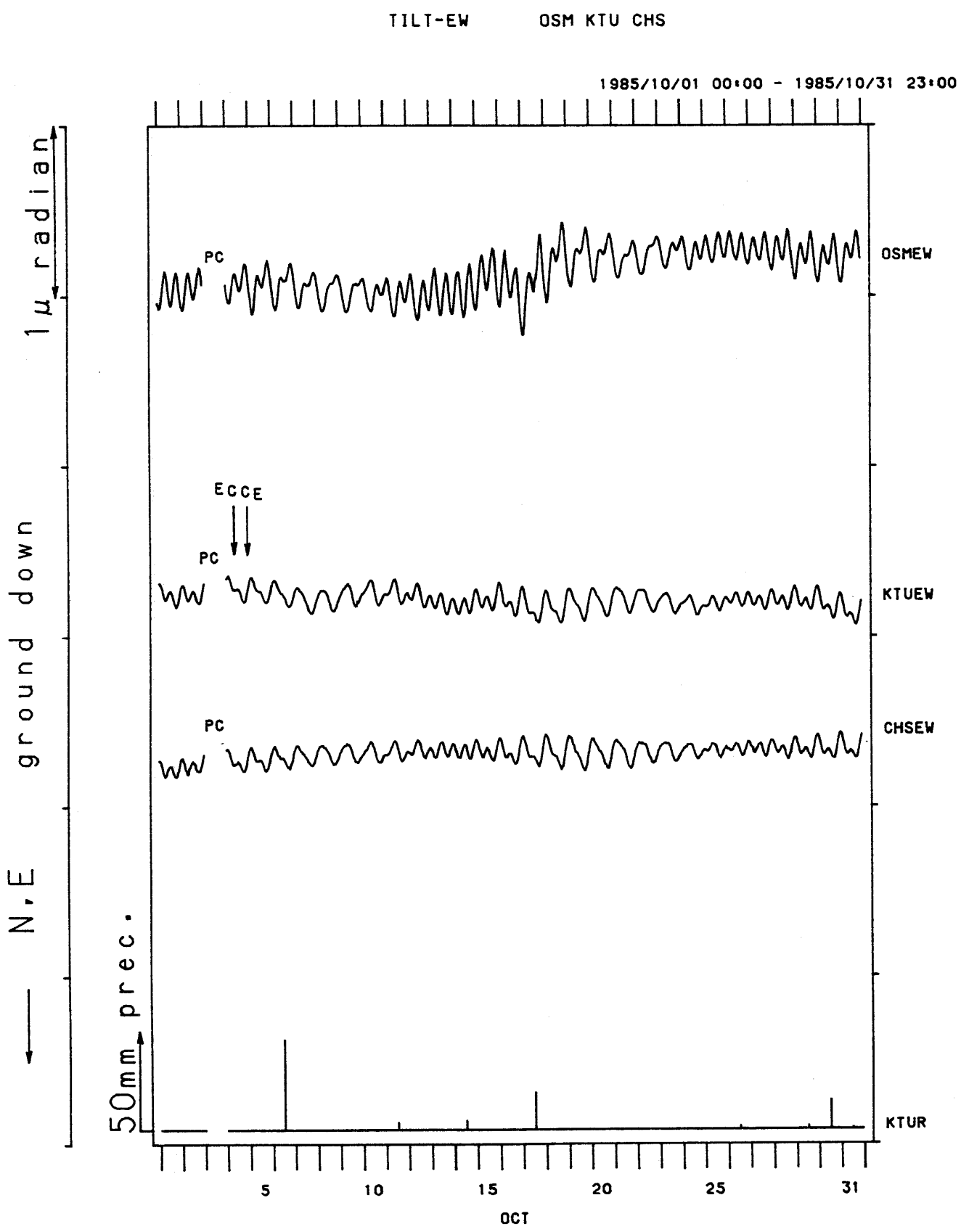

TILT-EW OSM KTU CHS
1985/05/01 00:00 - 1985/06/01 00:00
1μ radian
N,E ground down
OSMEW
KTUEW
CHSEW
50mm prec.
KTUR
5
10
15
20
25
31
MAY

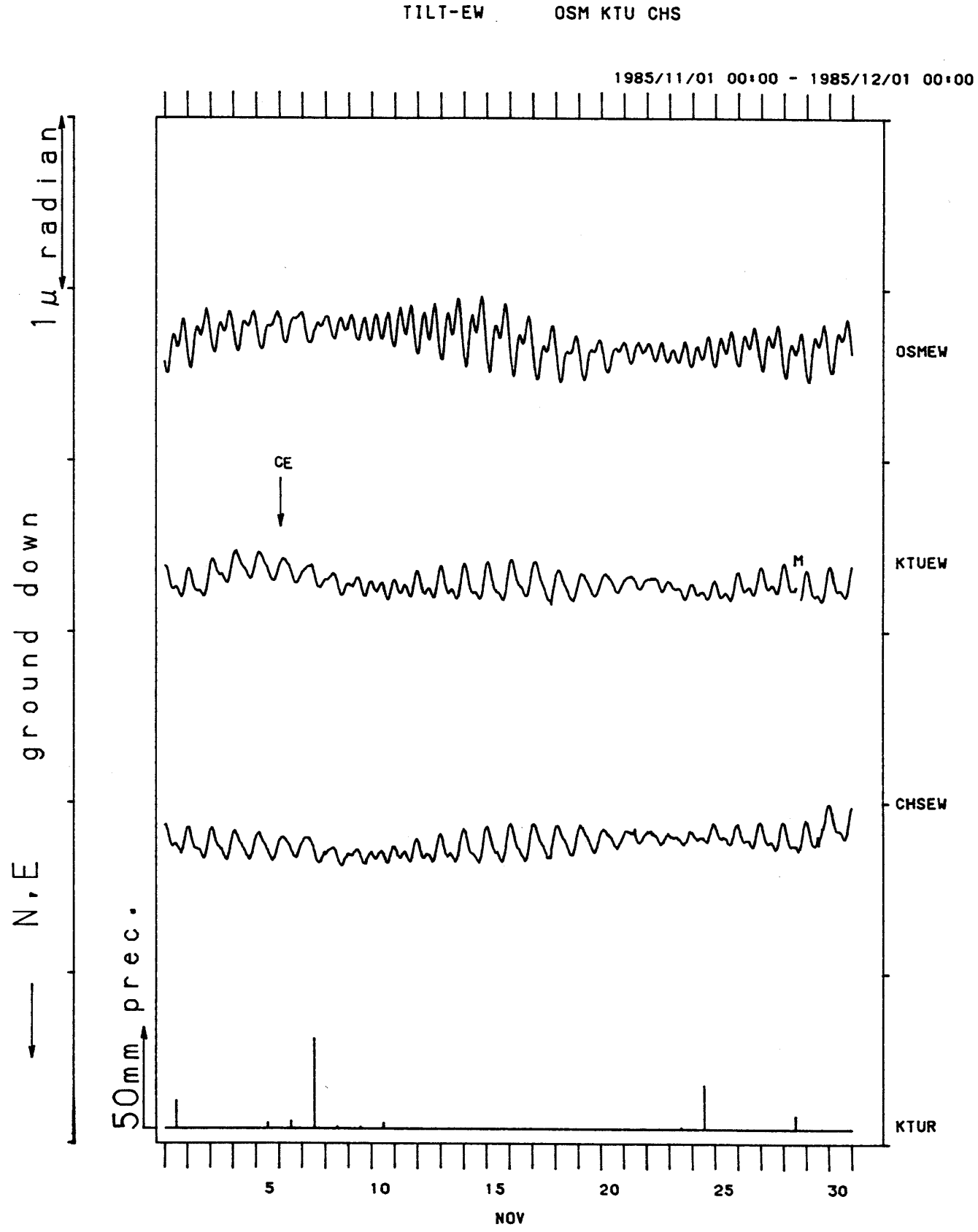

TILT-EW　　OSM KTU CHS
1985/06/01 00:00 - 1985/07/01 00:00
1μ radian
N.E ground down
50mm prec.
OSMEW
KTUEW
CHSEW
KTUR
5
10
15
20
25
30
JUN

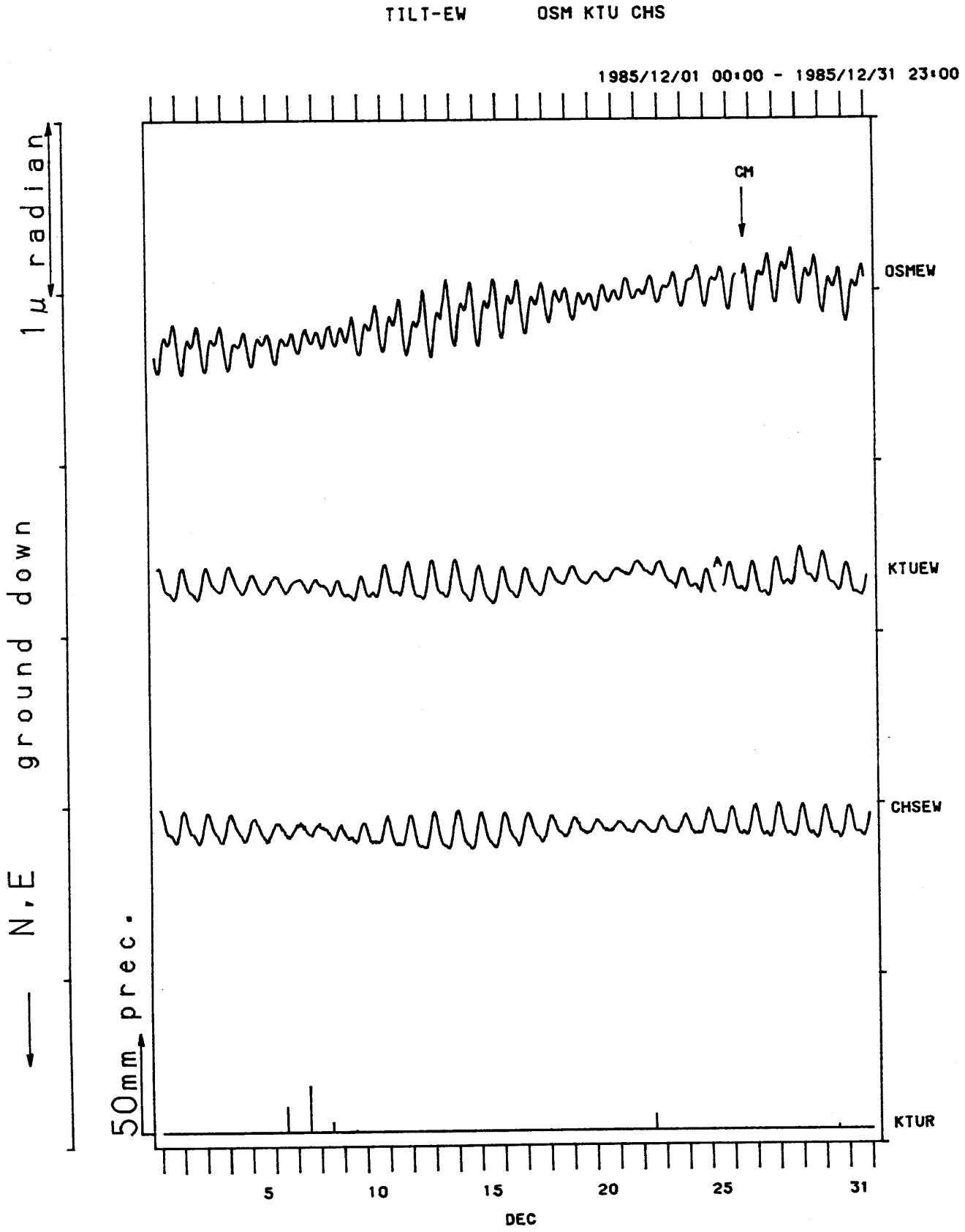

TILT-EW
OSM KTU CHS
1985/07/01 00:00 - 1985/08/01 00:00
1 μ radian
N, E ground down
OSMEW
KTUEW
CHSEW
KTUR
CT
CE
P?
P?
50mm prec.
5
10
15
20
25
31
JUL

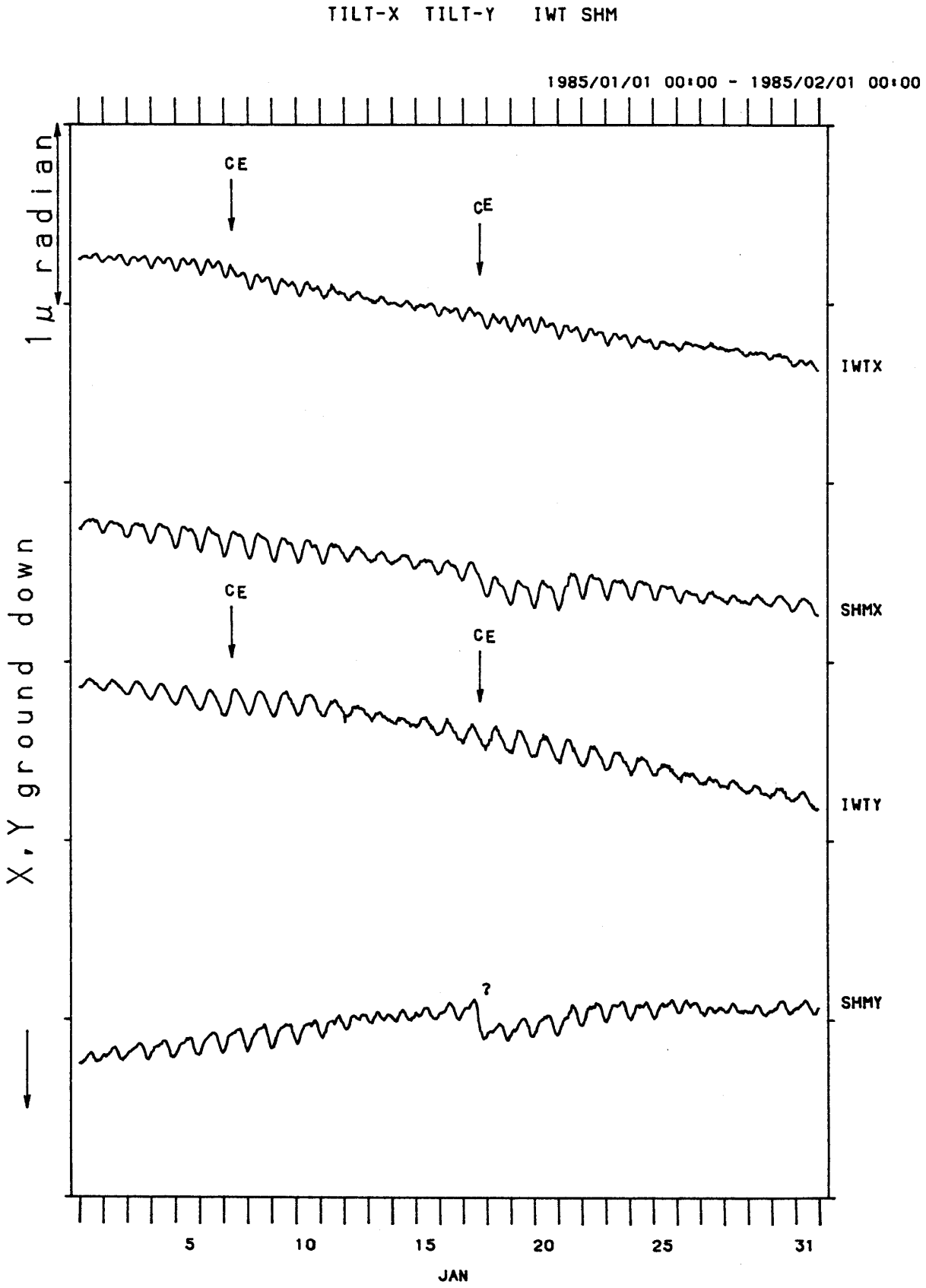

TILT-EW　　OSM KTU CHS
1985/08/01 00:00 - 1985/09/01 00:00
1μ radian
N,E ground down
50mm prec.
PC
OSMEW
PC
KTUEW
PC
CHSEW
KTUR
5
10
15
20
25
31
AUG


TILT-EW
OSM KTU CHS
1985/09/01 00:00 - 1985/10/01 00:00
1μ radian
N, E ground down
50mm prec.
TC 2)
P
OSMEW
TC 1)
TC 2)
KTUEW
TC 1)
TC 2)
CHSEW
KTUR
5
10
15
20
25
30
SEP

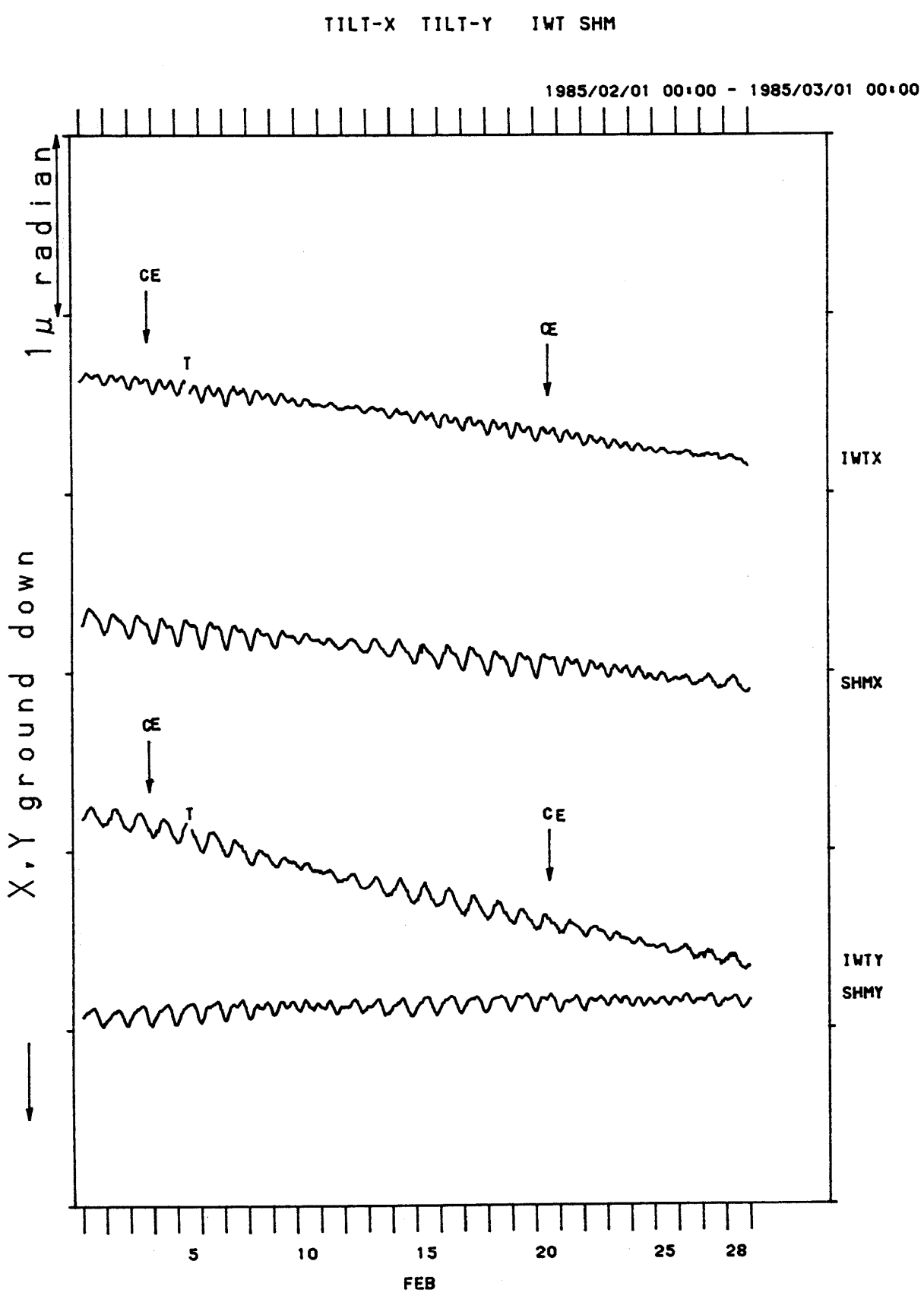

TILT-EW　　OSM KTU CHS
1985/10/01 00:00 - 1985/10/31 23:00
1μ radian
N,E ground down
PC
OSMEW
E C C E
PC
KTUEW
PC
CHSEW
50mm prec.
KTUR
5
10
15
20
25
31
OCT

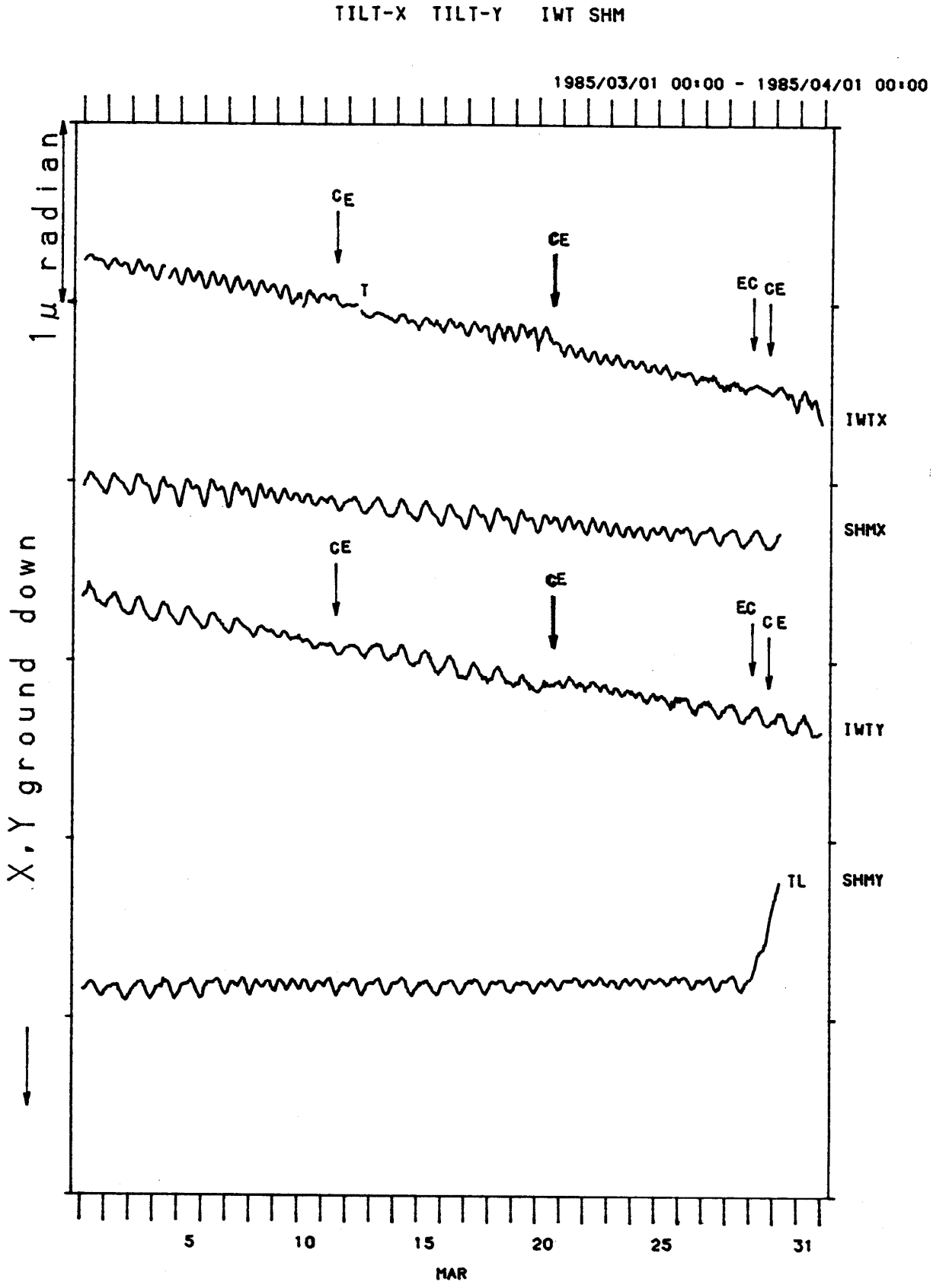

TILT-EW
OSM KTU CHS
1985/11/01 00:00 - 1985/12/01 00:00
1μ radian
N, E ground down
OSMEW
CE
KTUEW
M
CHSEW
50mm prec.
KTUR
5
10
15
20
25
30
NOV

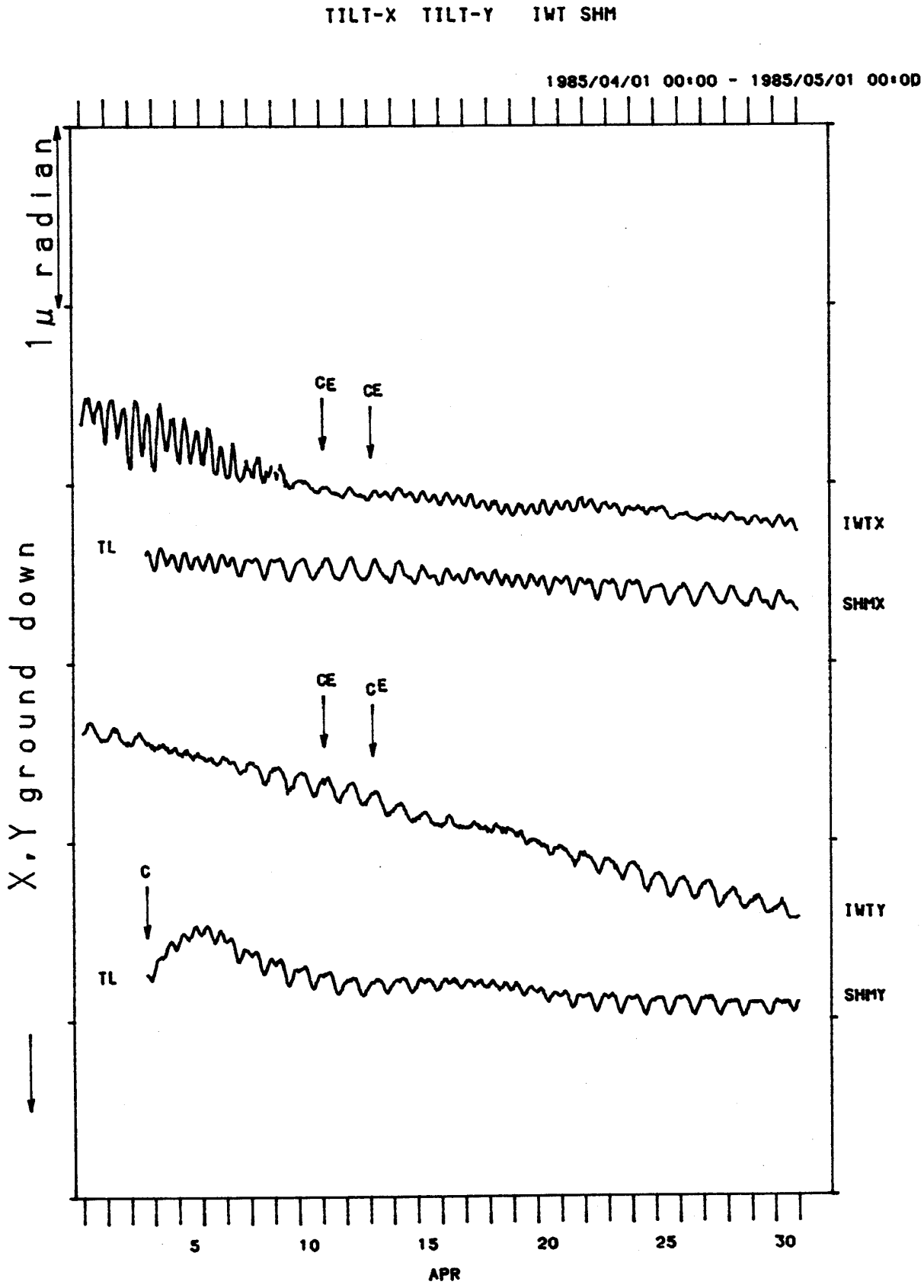

TILT-EW　　OSM KTU CHS
1985/12/01 00:00 - 1985/12/31 23:00
CM
OSMEW
KTUEW
CHSEW
KTUR
1 μ radian
N, E ground down
50mm prec.
5
10
15
20
25
31
DEC

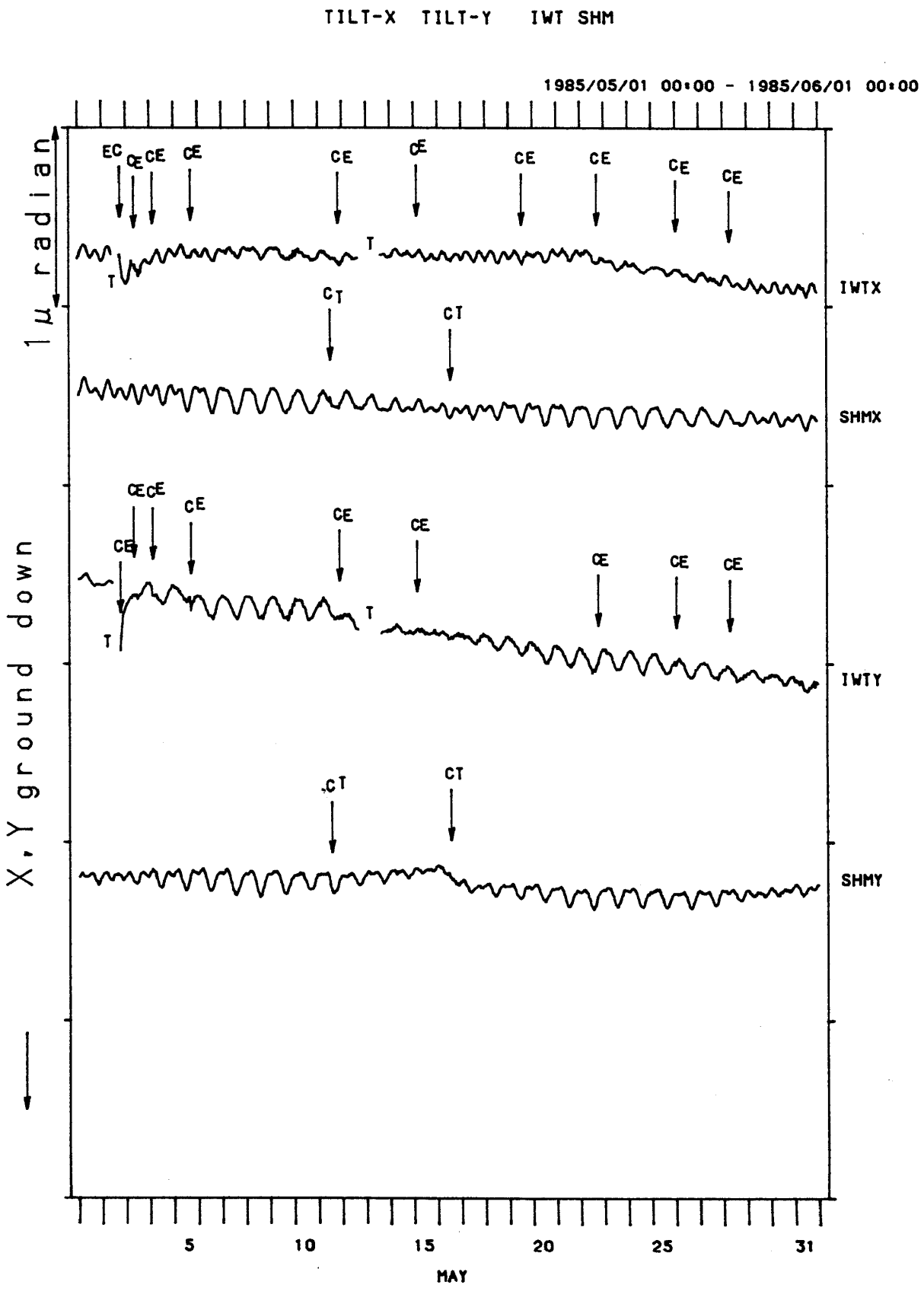


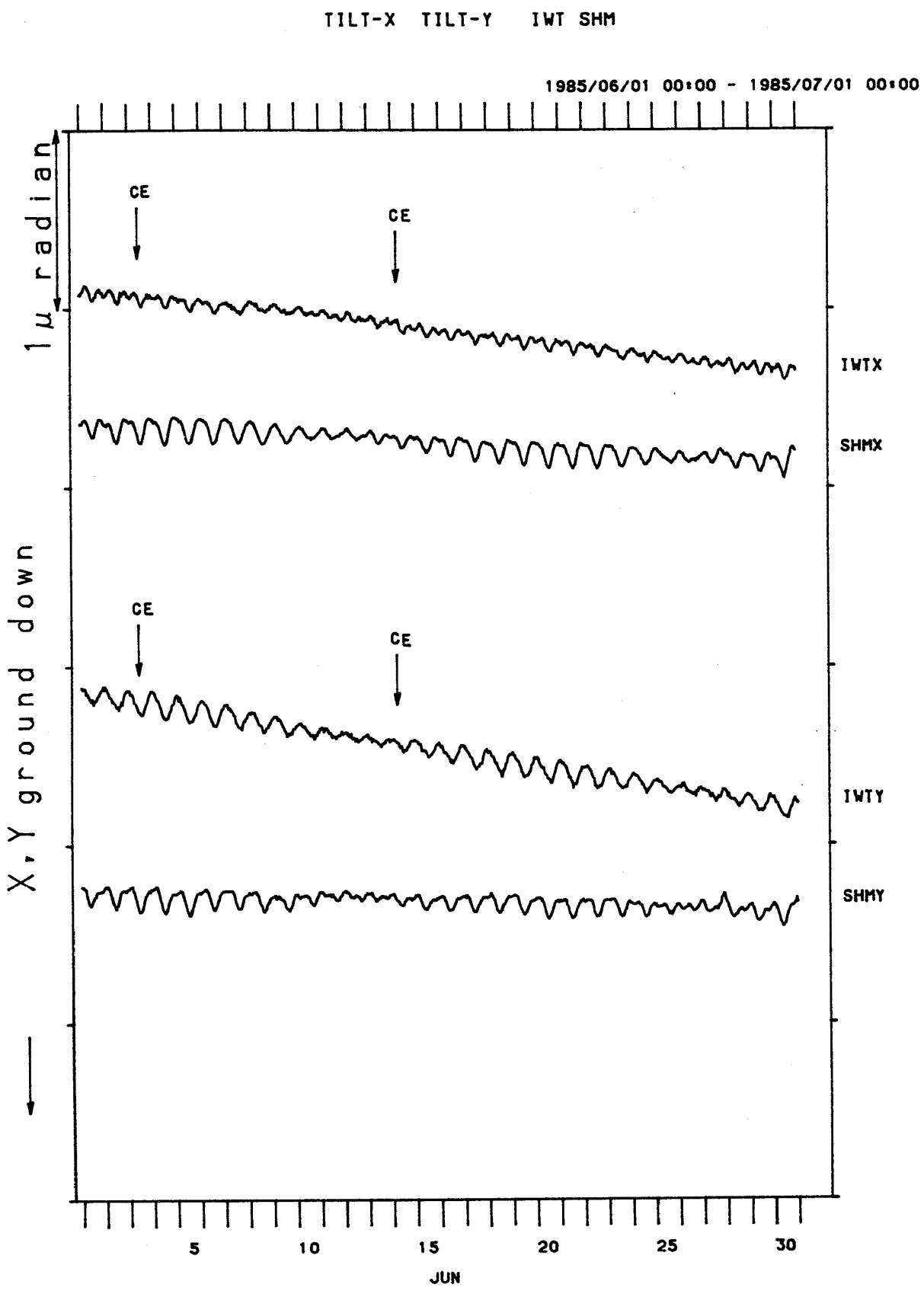
(i) 岩槻（IWT）・下総（SHM）の傾斜X・Y成分
X and Y components of crustal tilt at Iwatsuki (IWT) and Shimohsa (SHM).

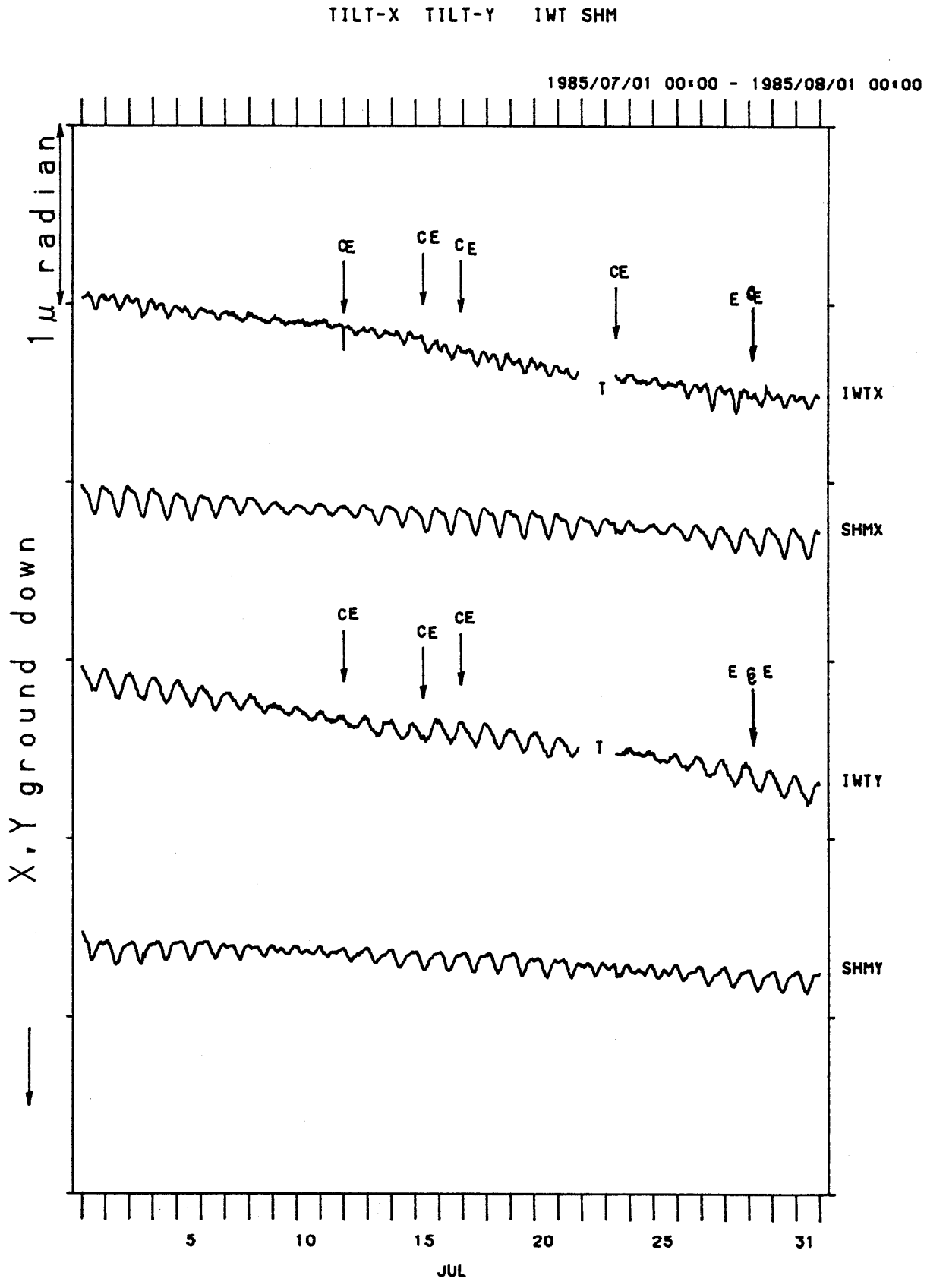

TILT-X TILT-Y IWT SHM
1985/02/01 00:00 - 1985/03/01 00:00
1μ radian
X,Y ground down
CE
T
CE
IWTX
SHMX
CE
T
CE
IWTY
SHMY
5
10
15
20
25
28
FEB

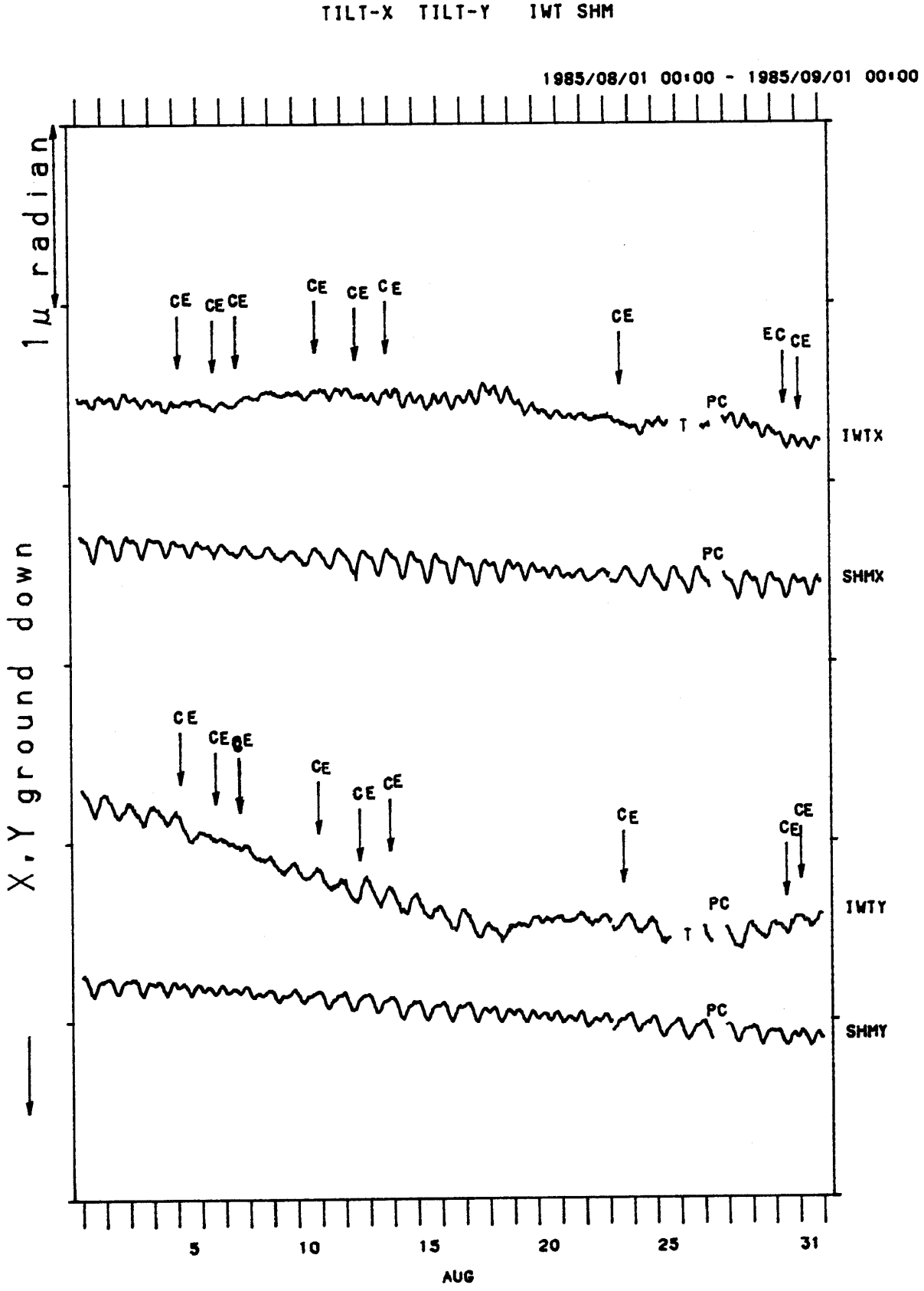

TILT-X TILT-Y IWT SHM
1985/03/01 00:00 - 1985/04/01 00:00
1 μ radian
X, Y ground down
CE
T
EC
IWTX
SHMX
IWTY
TL
SHMY
5
10
15
20
25
31
MAR

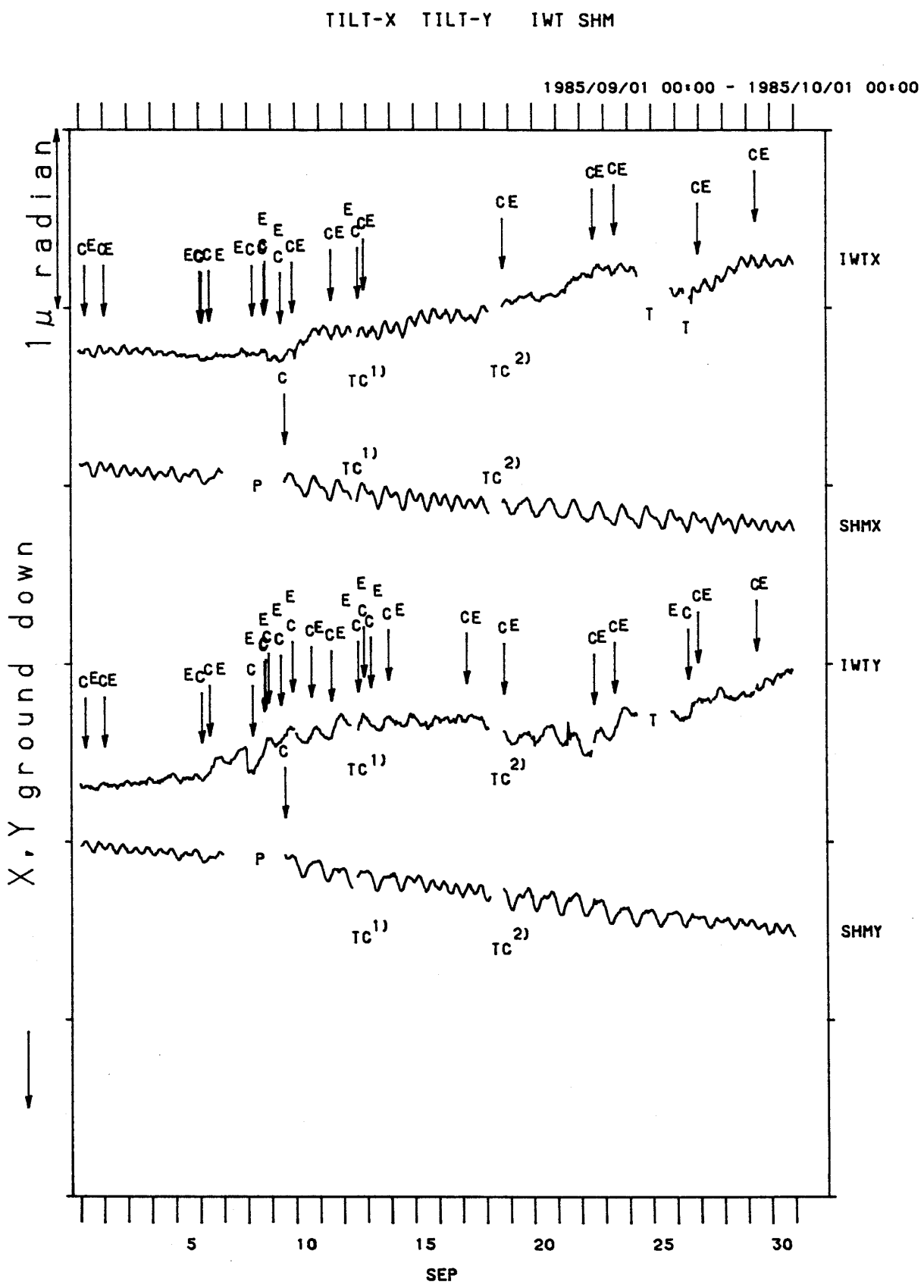

TILT-X TILT-Y IWT SHM
1985/04/01 00:00 - 1985/05/01 00:00
1 μ radian
X,Y ground down
CE
CE
TL
IWTX
SHMX
CE
CE
C
TL
IWTY
SHMY
5
10
15
20
25
30
APR

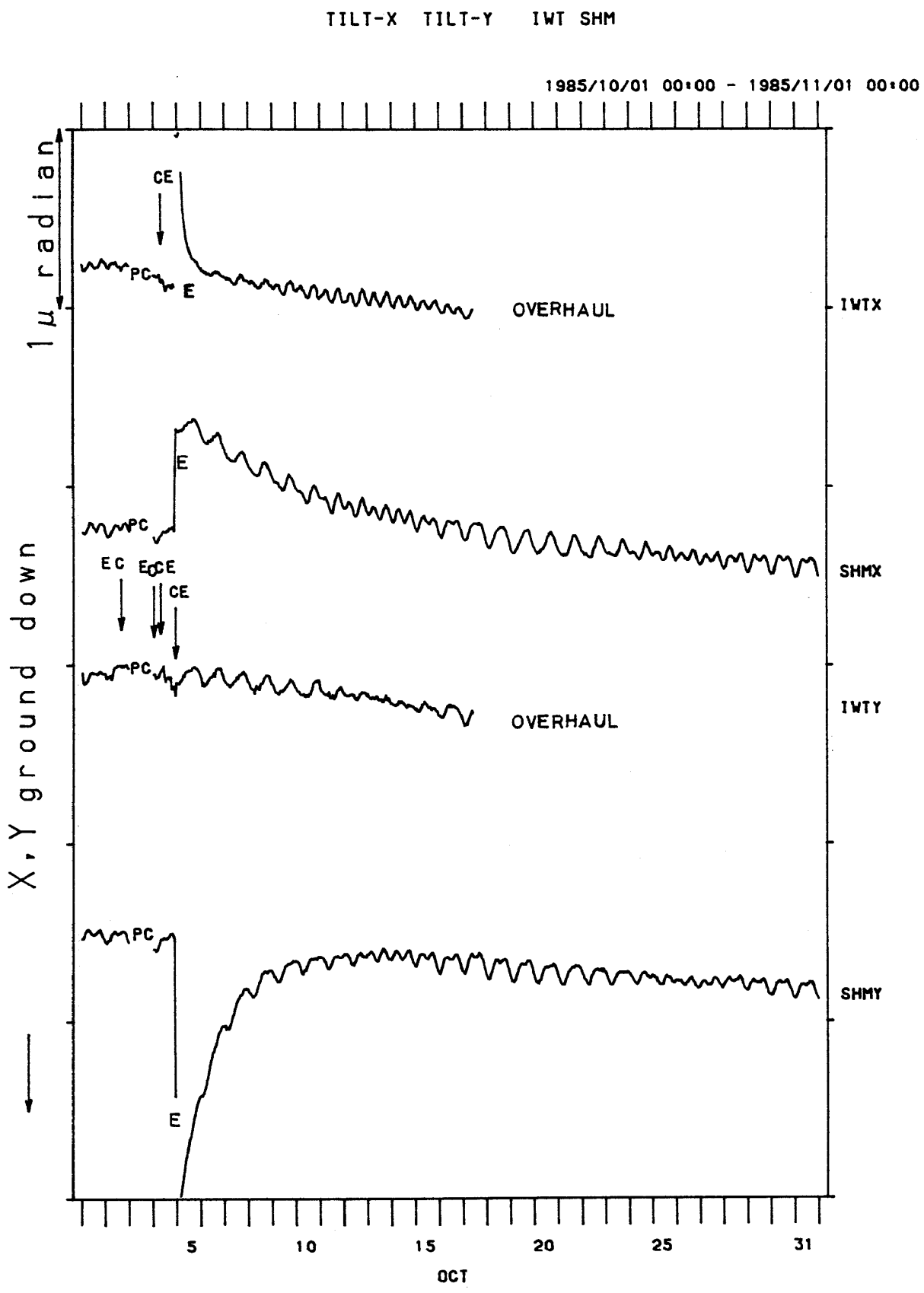

TILT-X TILT-Y IWT SHM
1985/05/01 00:00 - 1985/06/01 00:00
1 μ radian
X, Y ground down
IWTX
SHMX
IWTY
SHMY
5
10
15
20
25
31
MAY

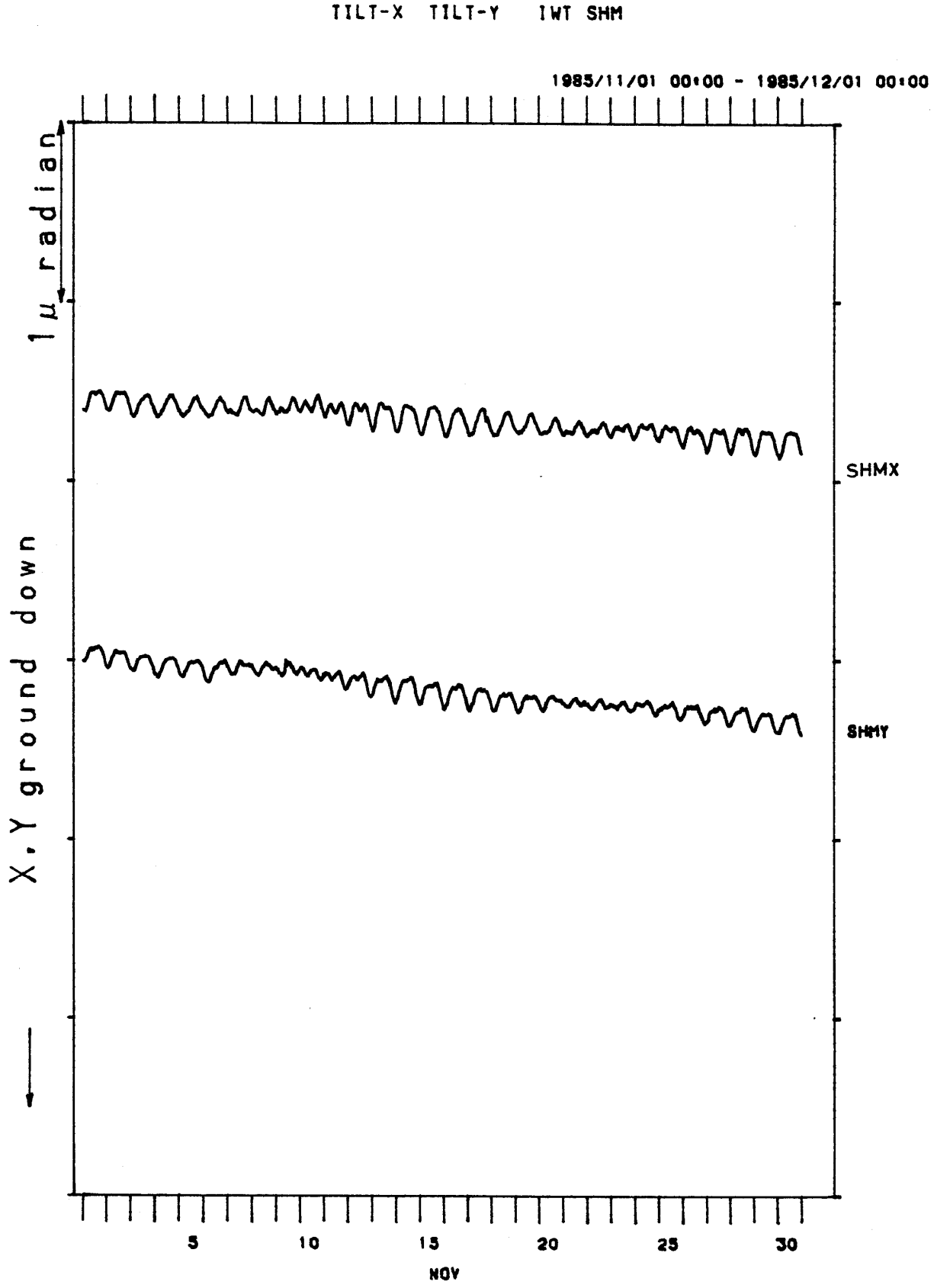

TILT-X TILT-Y IWT SHM
1985/06/01 00:00 - 1985/07/01 00:00
1μ radian
X, Y ground down
CE
CE
CE
CE
IWTX
SHMX
IWTY
SHMY
5
10
15
20
25
30
JUN

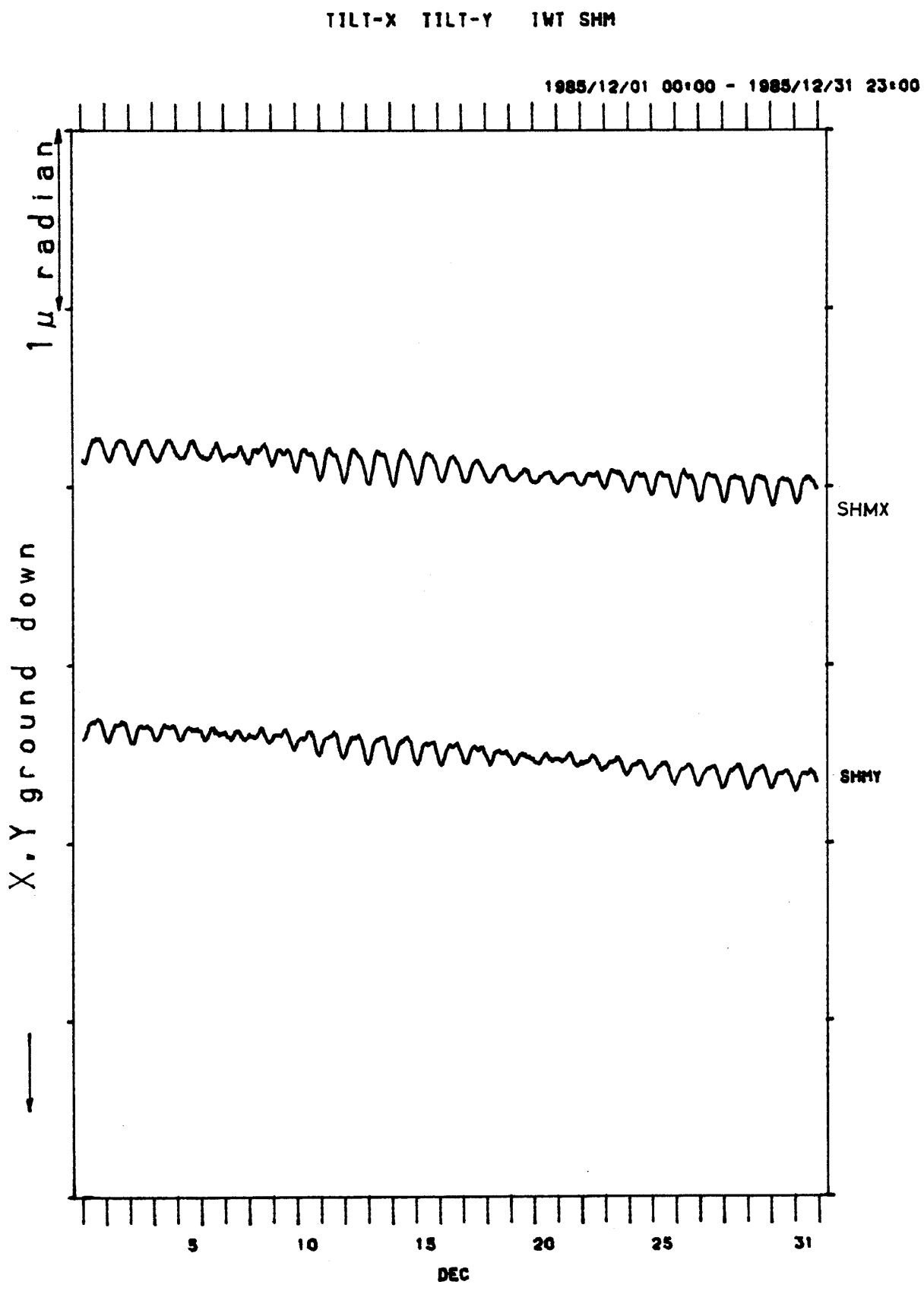

TILT-X TILT-Y IWT SHM
1985/07/01 00:00 - 1985/08/01 00:00
1 μ radian
X, Y ground down
CE
IWTX
SHMX
IWTY
SHMY
5
10
15
20
25
31
JUL

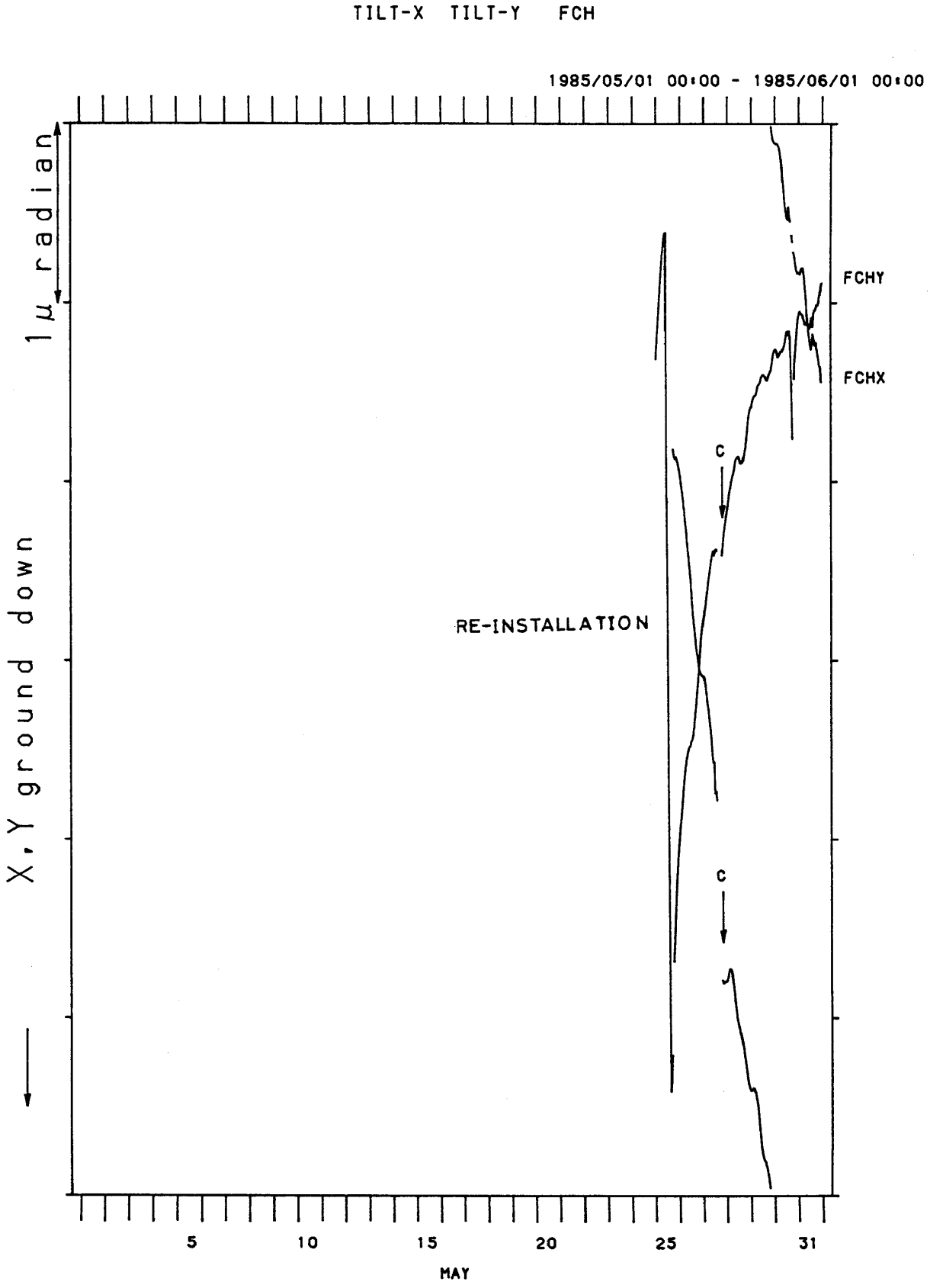

TILT-X TILT-Y IWT SHM
1985/08/01 00:00 - 1985/09/01 00:00
1μ radian
X, Y ground down
CE
EC
PC
IWTX
SHMX
IWTY
SHMY
5
10
15
20
25
31
AUG


TILT-X TILT-Y IWT SHM
1985/09/01 00:00 - 1985/10/01 00:00
1μ radian
X,Y ground down
IWTX
SHMX
IWTY
SHMY
5
10
15
20
25
30
SEP

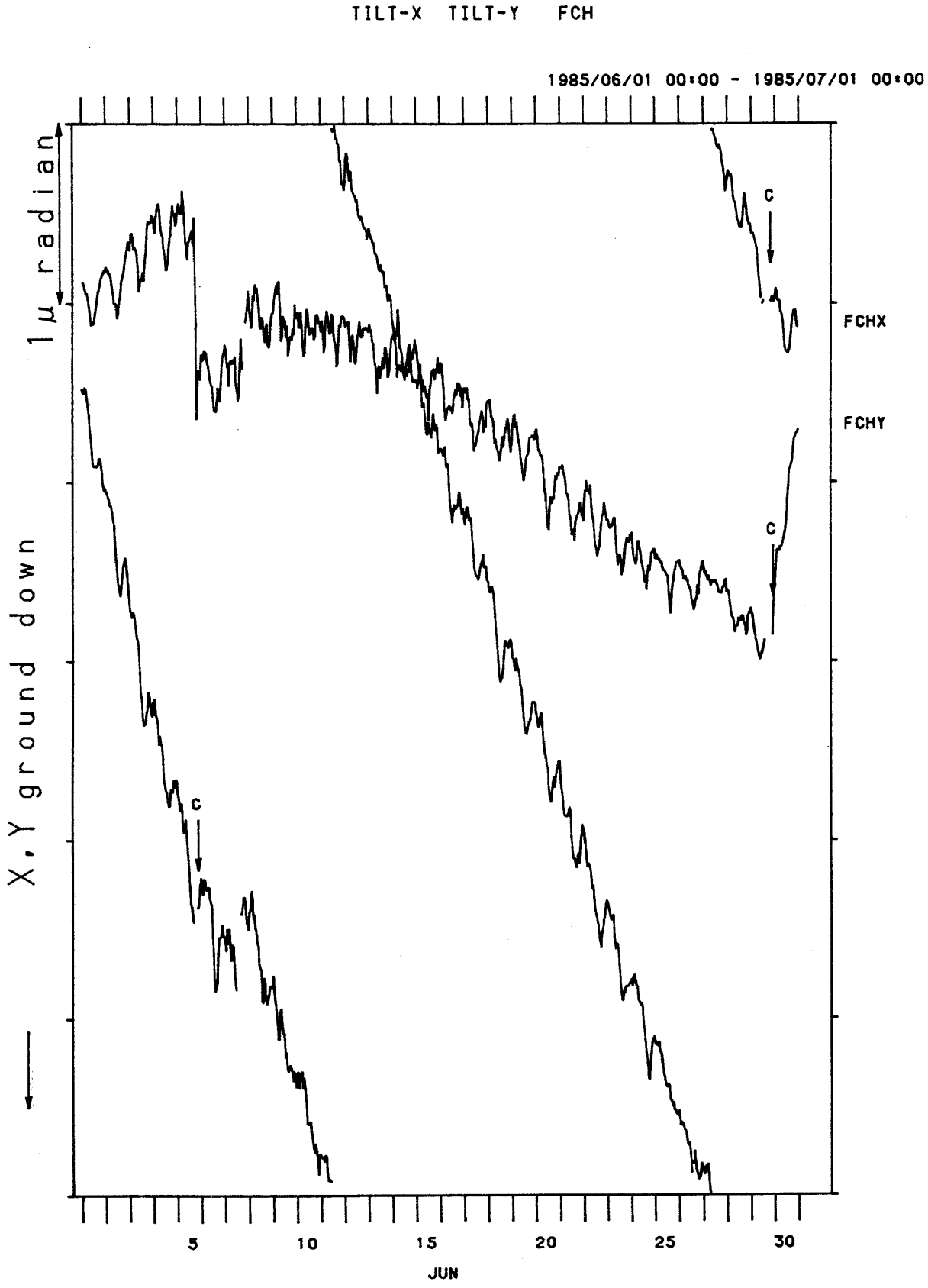

TILT-X TILT-Y IWT SHM
1985/10/01 00:00 - 1985/11/01 00:00
1μ radian
X, Y ground down
CE
PC
E
OVERHAUL
IWTX
SHMX
EC
IWTY
SHMY
5
10
15
20
25
31
OCT

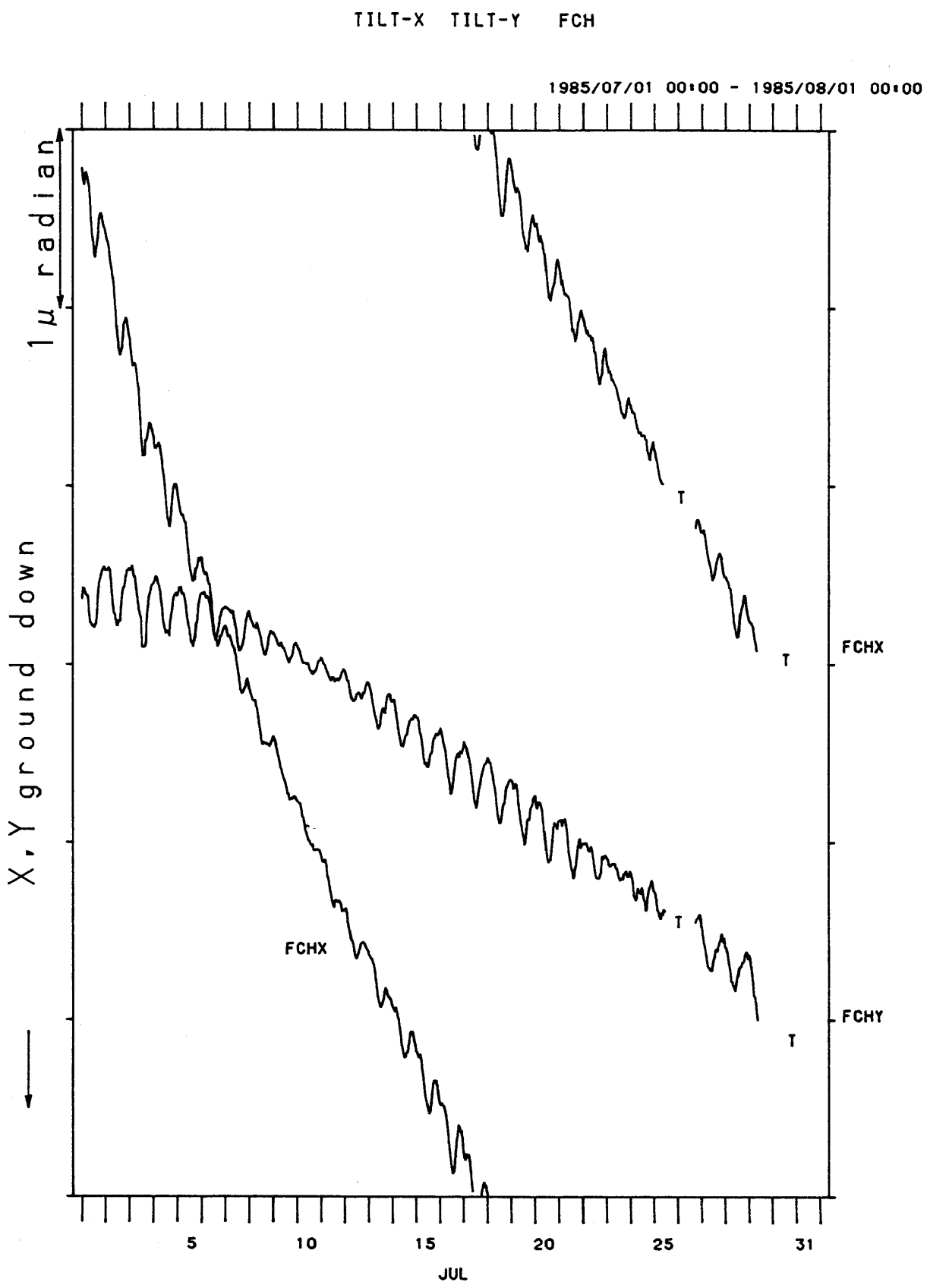

TILT-X TILT-Y IWT SHM
1985/11/01 00:00 - 1985/12/01 00:00
1μ radian
X,Y ground down
SHMX
SHMY
5
10
15
20
25
30
NOV

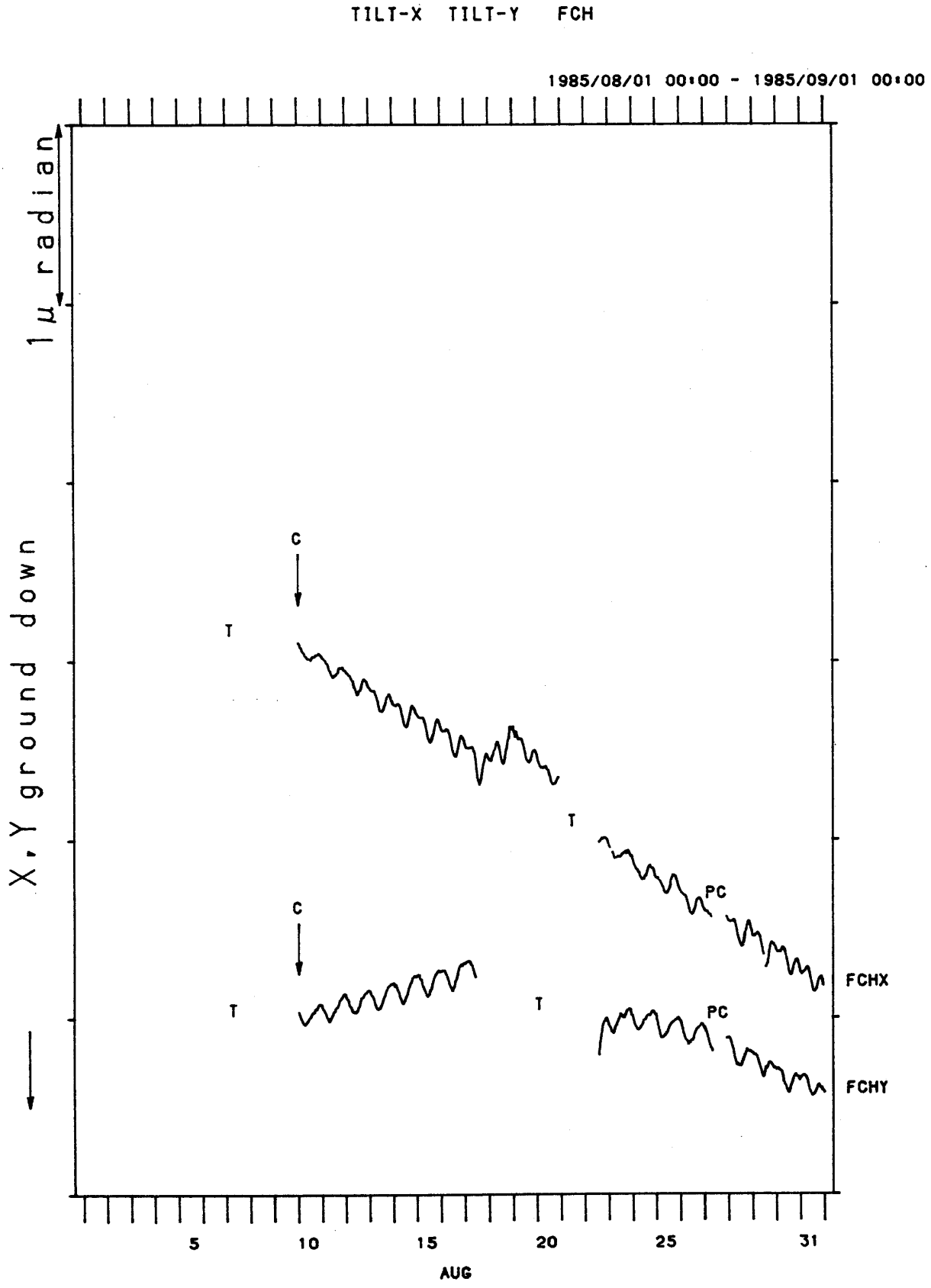

TILT-X TILT-Y IWT SHM
1985/12/01 00:00 - 1985/12/31 23:00
1μ radian
X, Y ground down
SHMX
SHMY
5
10
15
20
25
31
DEC

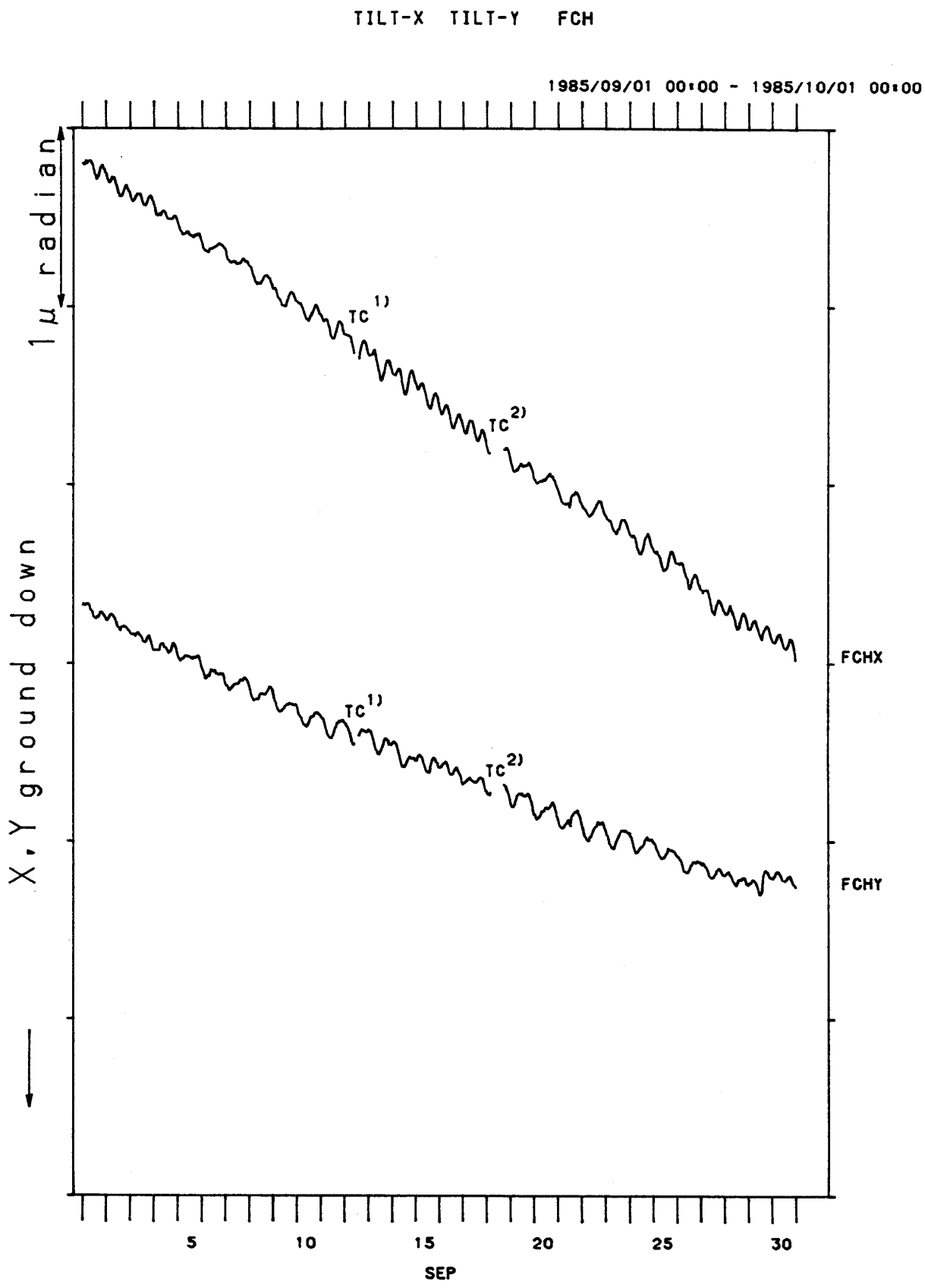


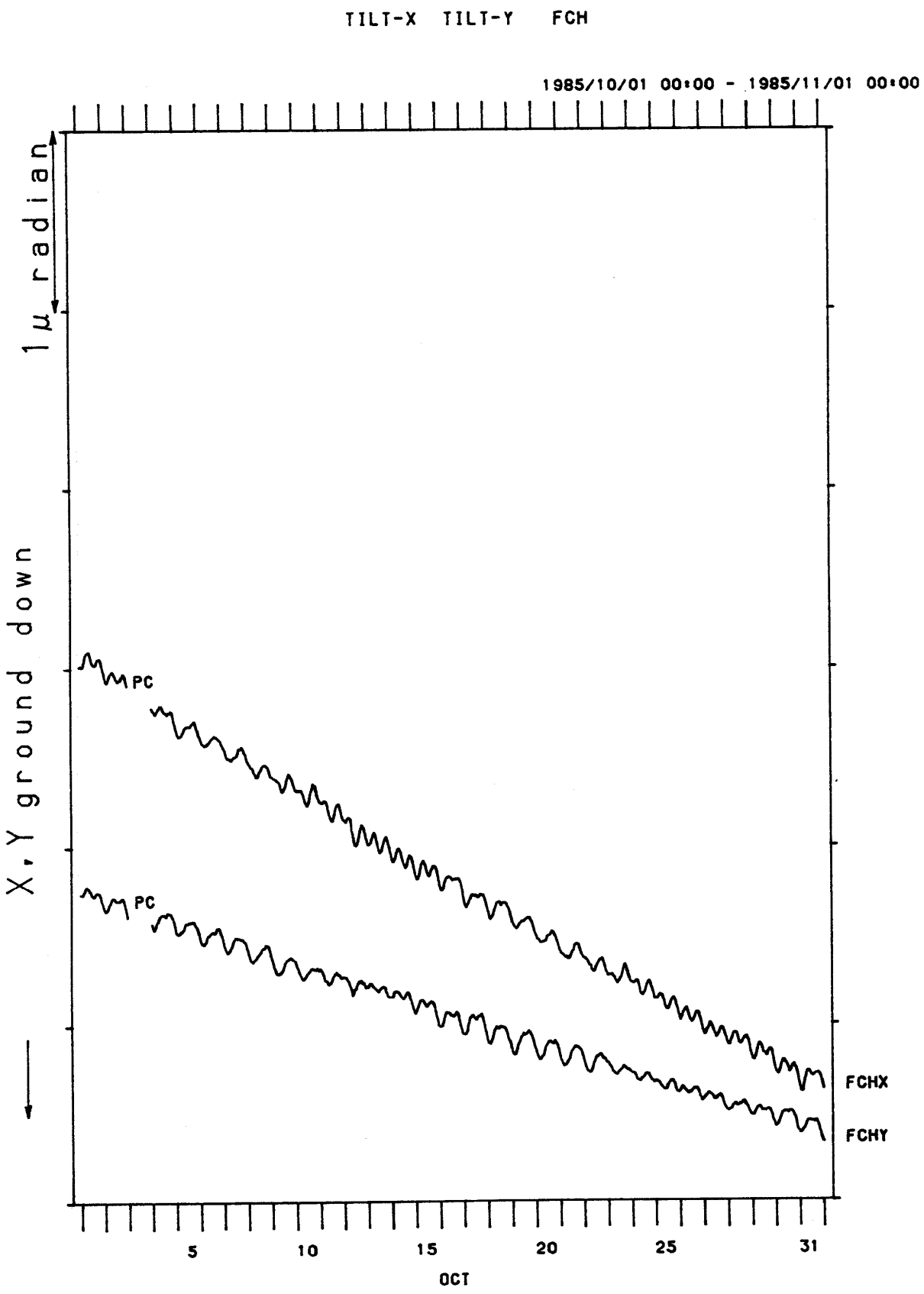
(j) 府中（ＦＣＨ）の傾斜Ｘ・Ｙ成分
X and Y componemts of crustal tilt at Fuchu (FCH).

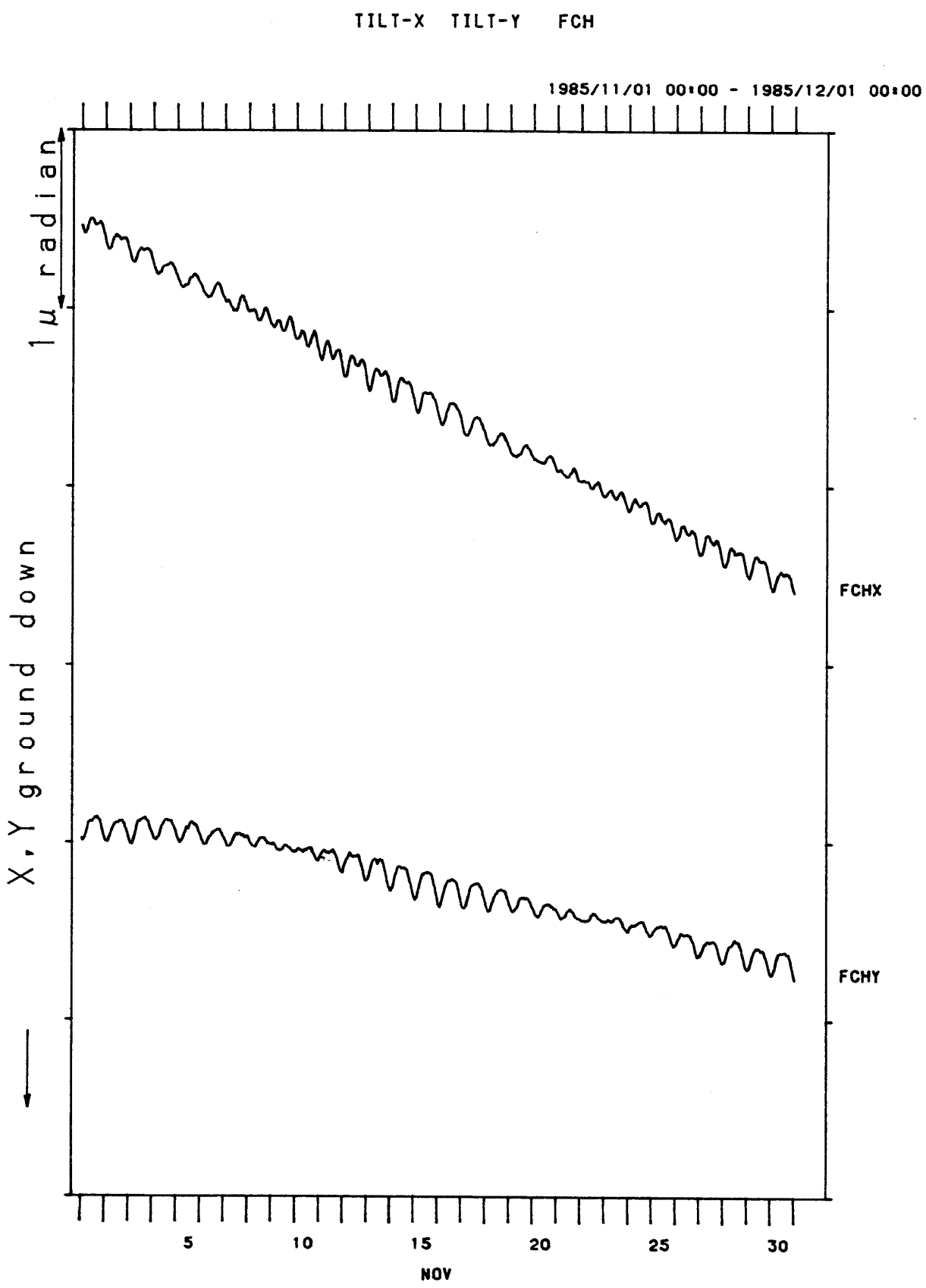

TILT-X TILT-Y FCH
1985/06/01 00:00 - 1985/07/01 00:00
1μ radian
X,Y ground down
FCHX
FCHY
C
C
C
5
10
15
20
25
30
JUN


TILT-X TILT-Y FCH
1985/07/01 00:00 - 1985/08/01 00:00
1 μ radian
X, Y ground down
FCHX
FCHY
T
5
10
15
20
25
31
JUL


TILT-X TILT-Y FCH
1985/08/01 00:00 - 1985/09/01 00:00
1 μ radian
X, Y ground down
C
T
T
PC
FCHX
C
T
T
PC
FCHY
5
10
15
20
25
31
AUG


TILT-X TILT-Y FCH
1985/09/01 00:00 - 1985/10/01 00:00
1 μ radian
X, Y ground down
TC 1)
TC 2)
FCHX
FCHY
5
10
15
20
25
30
SEP


TILT-X TILT-Y FCH
1985/10/01 00:00 - 1985/11/01 00:00
1μ radian
X, Y ground down
PC
PC
FCHX
FCHY
5
10
15
20
25
31
OCT


TILT-X TILT-Y FCH
1985/11/01 00:00 - 1985/12/01 00:00
1 μ radian
X, Y ground down
FCHX
FCHY
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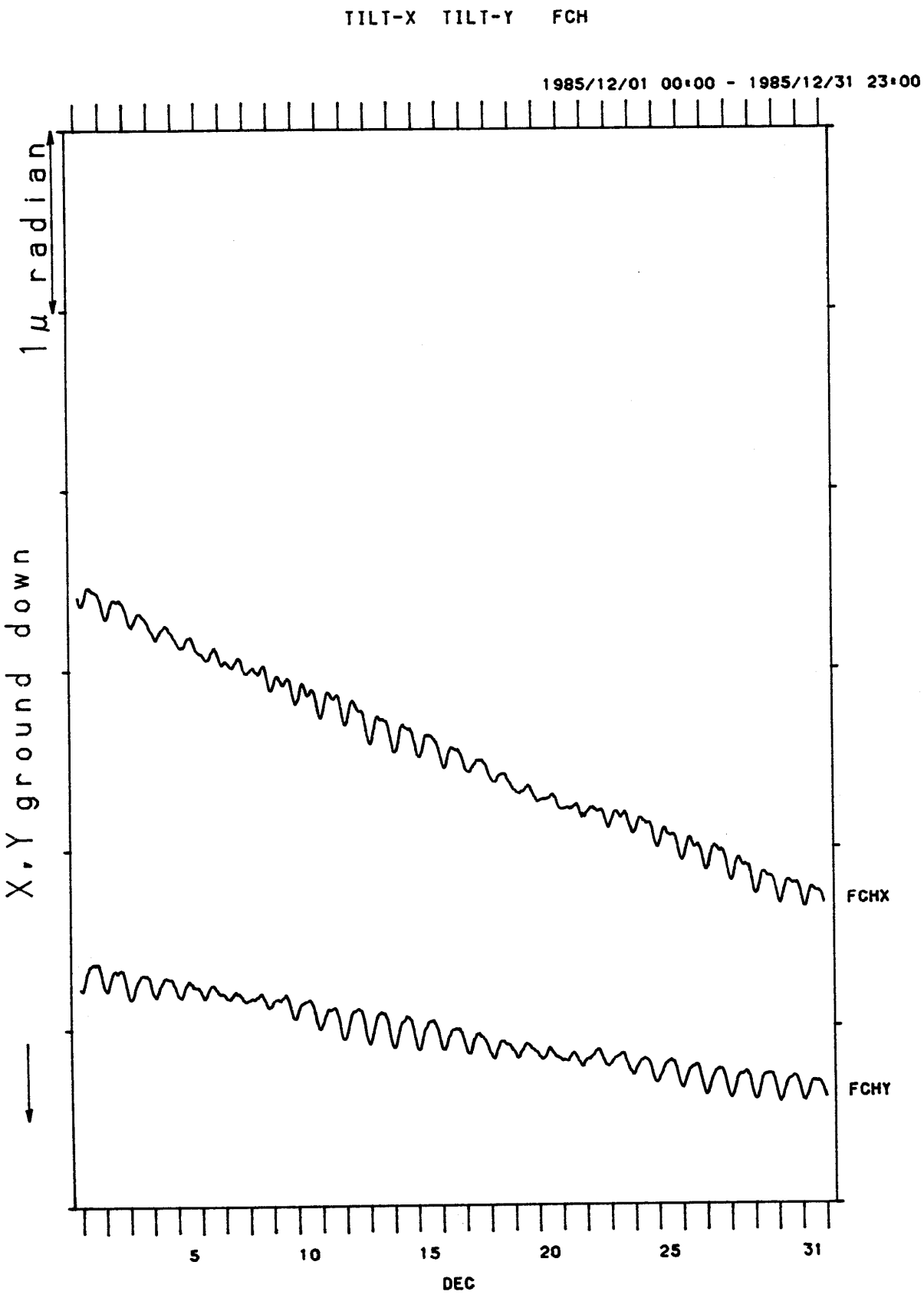
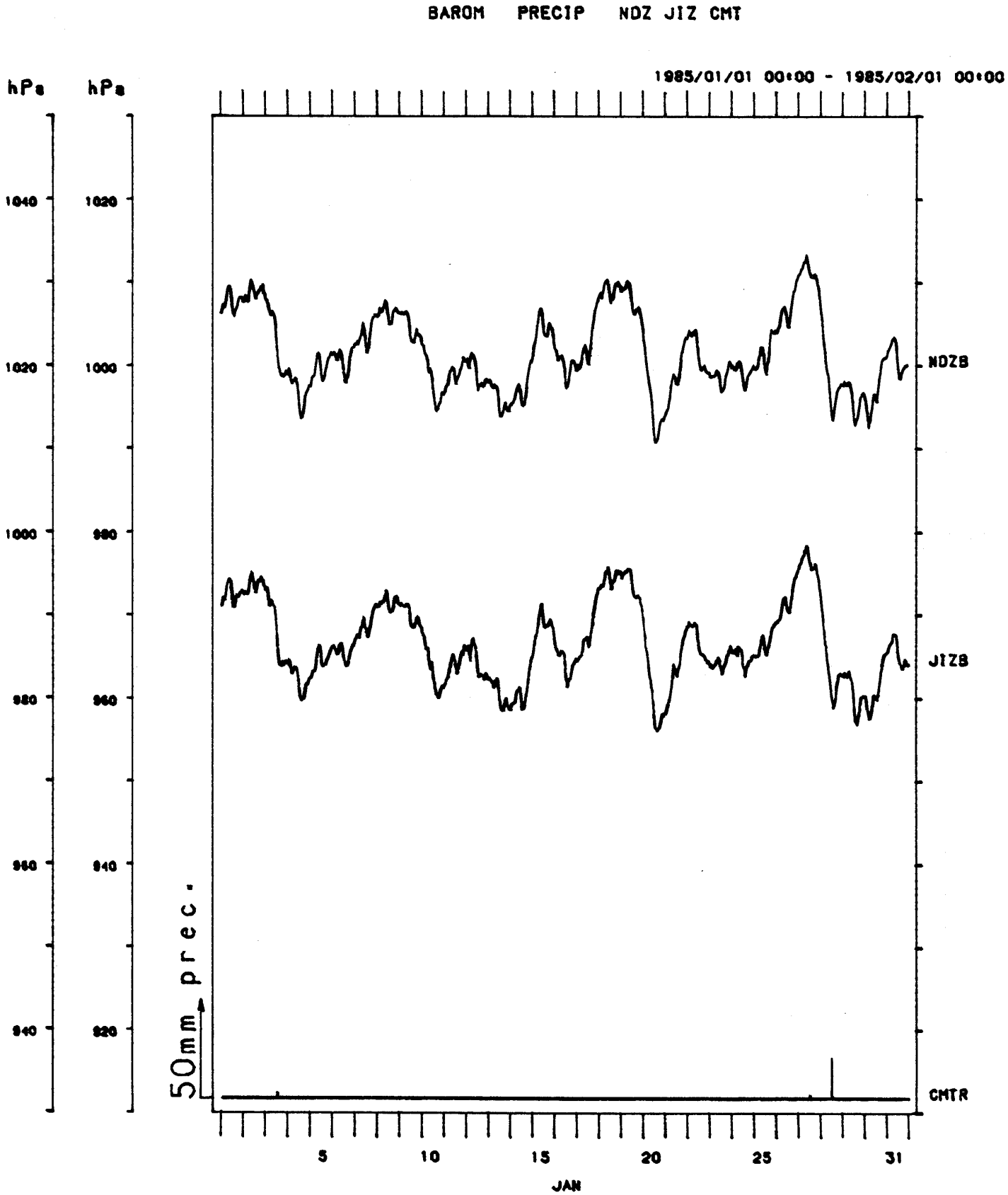
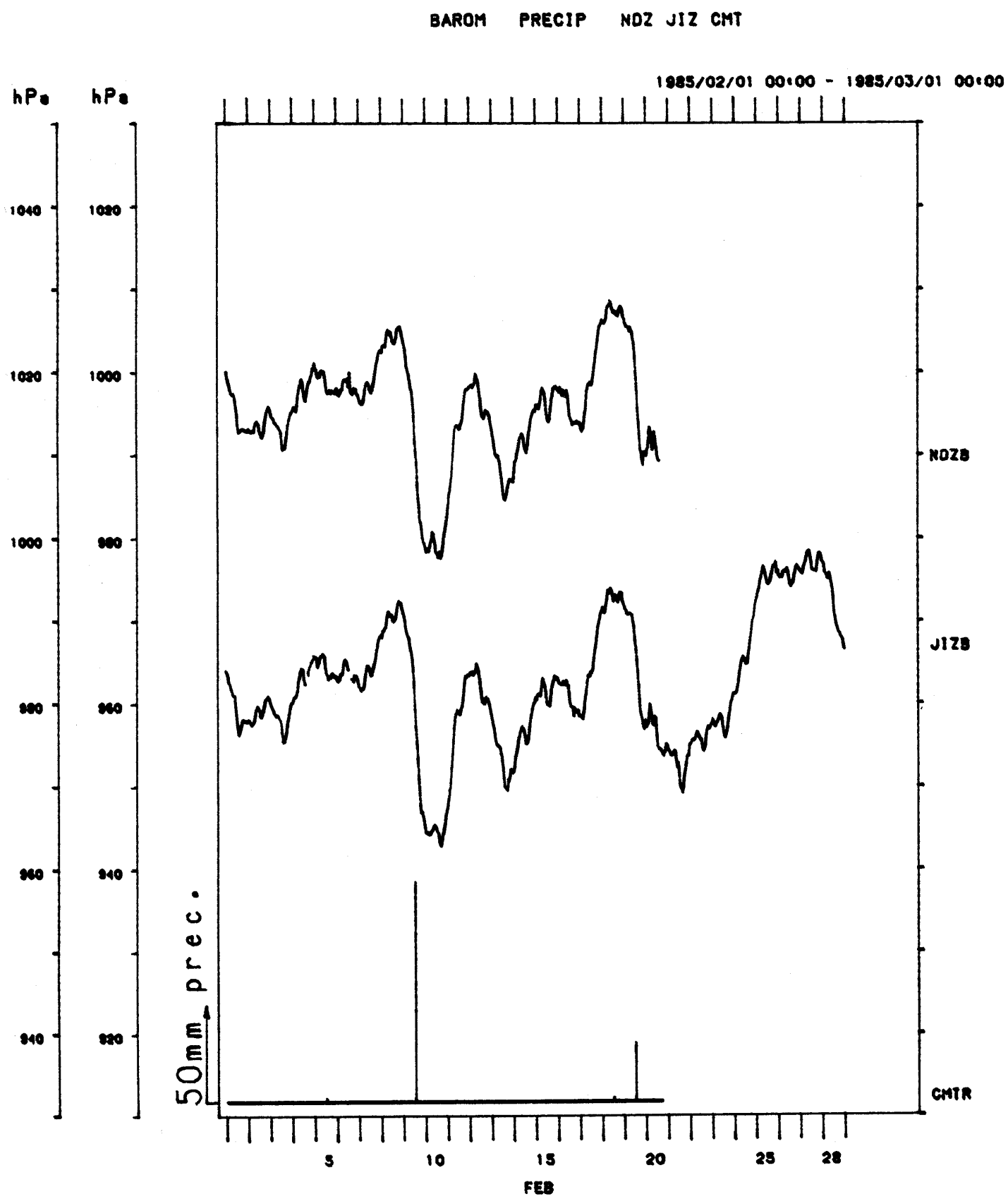
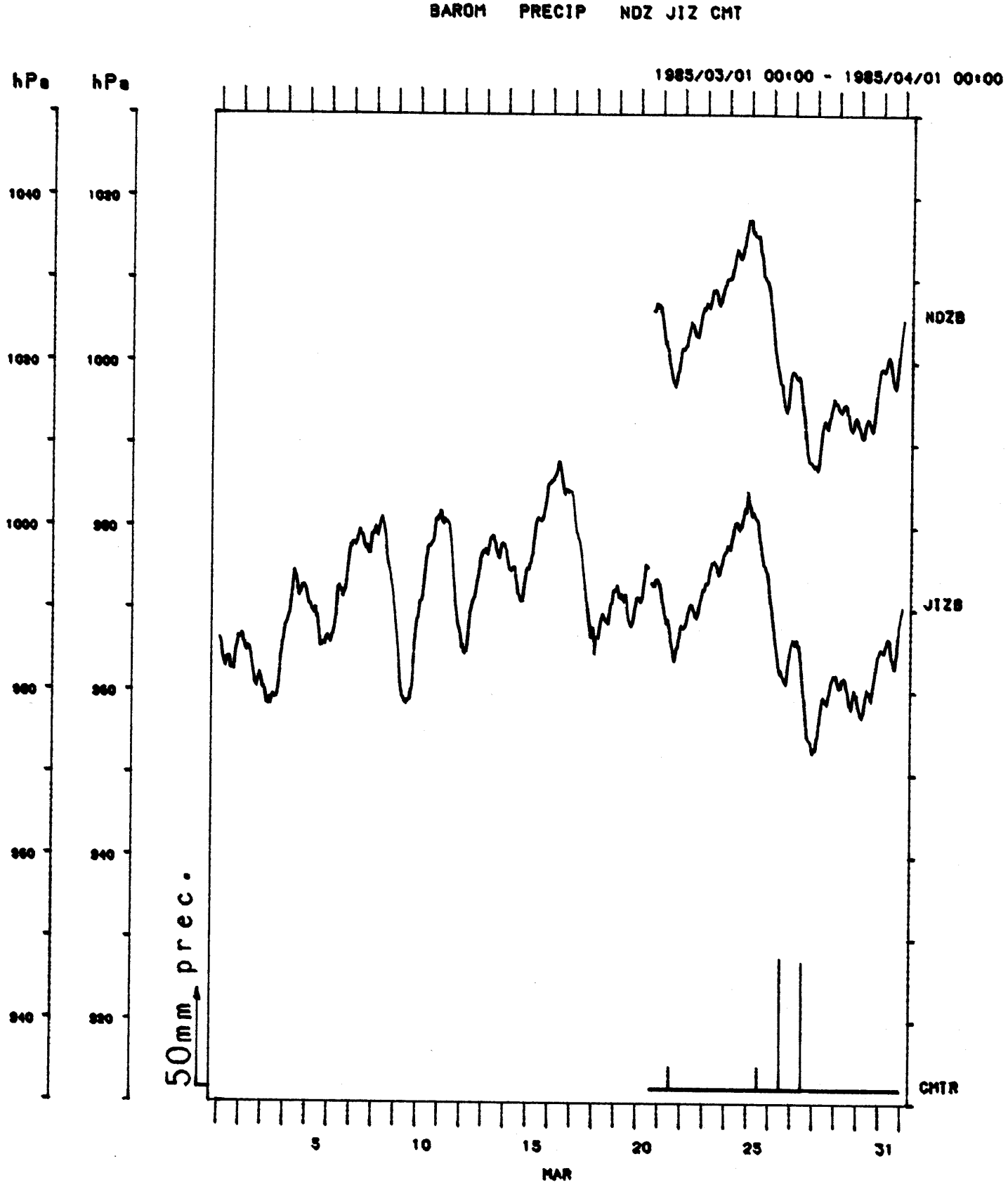
20
25
30
NOV

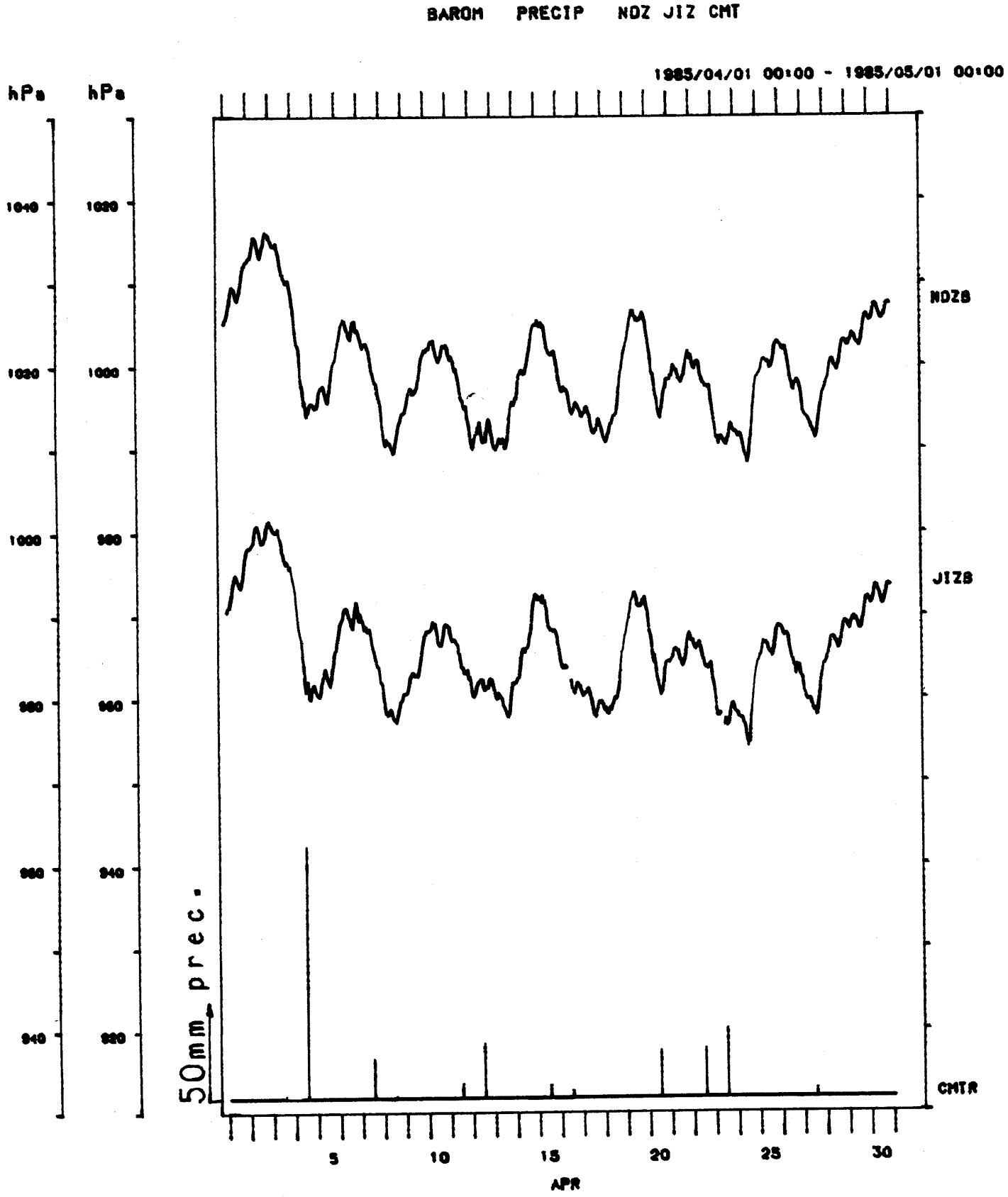

TILT-X TILT-Y FCH
1985/12/01 00:00 - 1985/12/31 23:00
1 μ radian
X, Y ground down
FCHX
FCHY
5
10
15
20
25
31
DEC

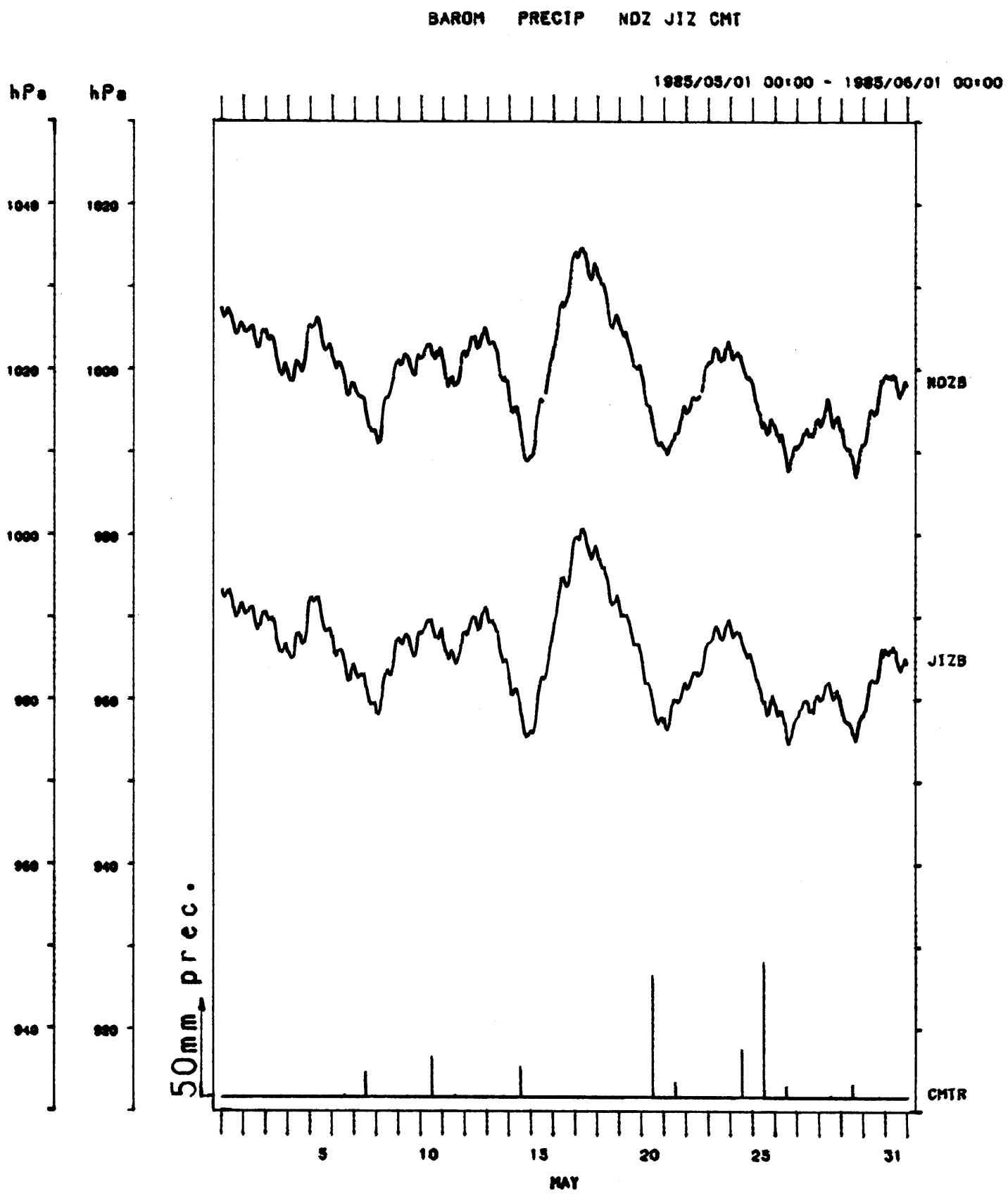


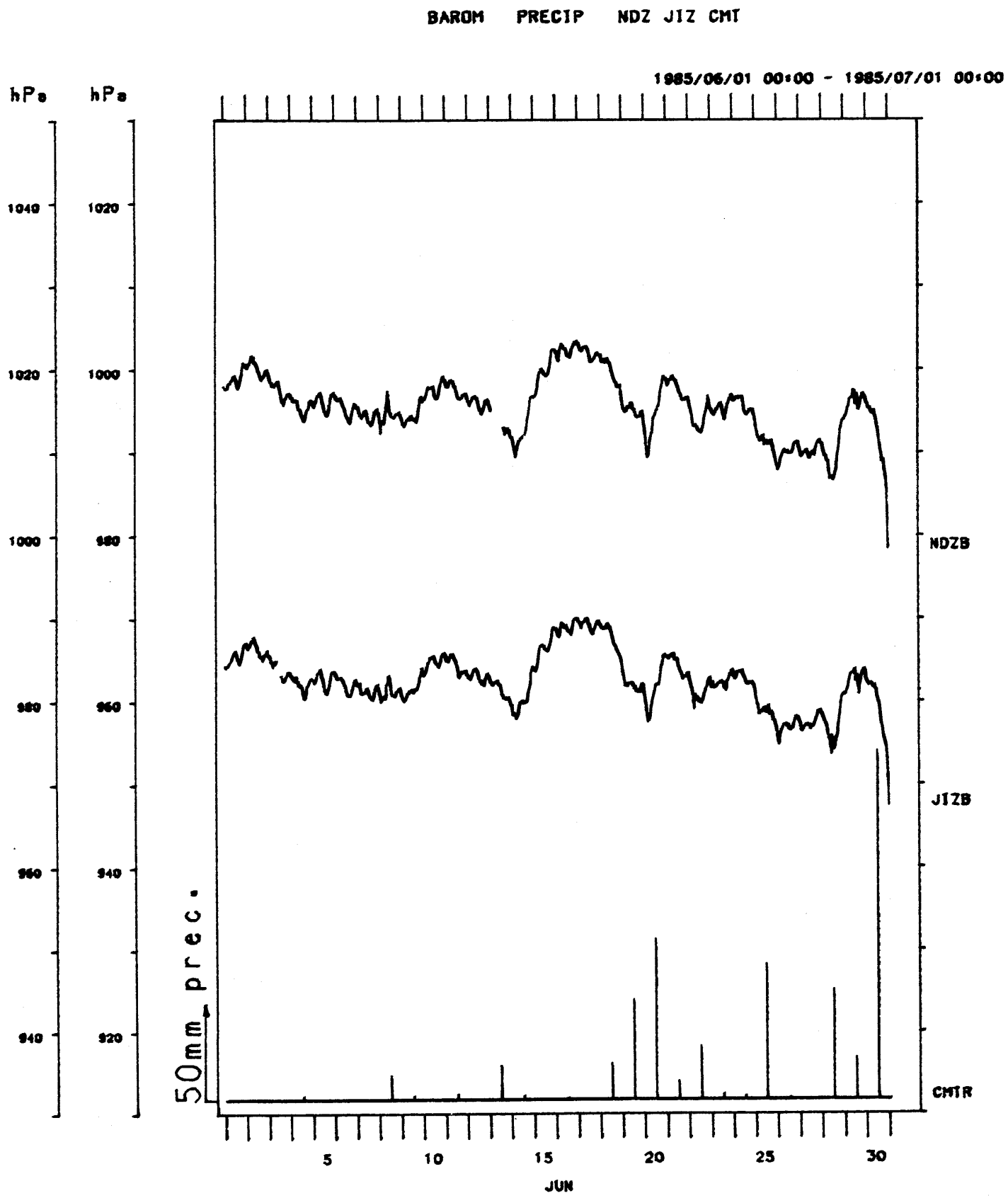
(k) 野田沢（NDZ）・中伊豆（JIZ）の気圧と近又（CMT）の日雨量
Barometric pressure at Nodazawa (NDZ) and Nakaizu (JIZ) and daily precipitation at Chikamata.

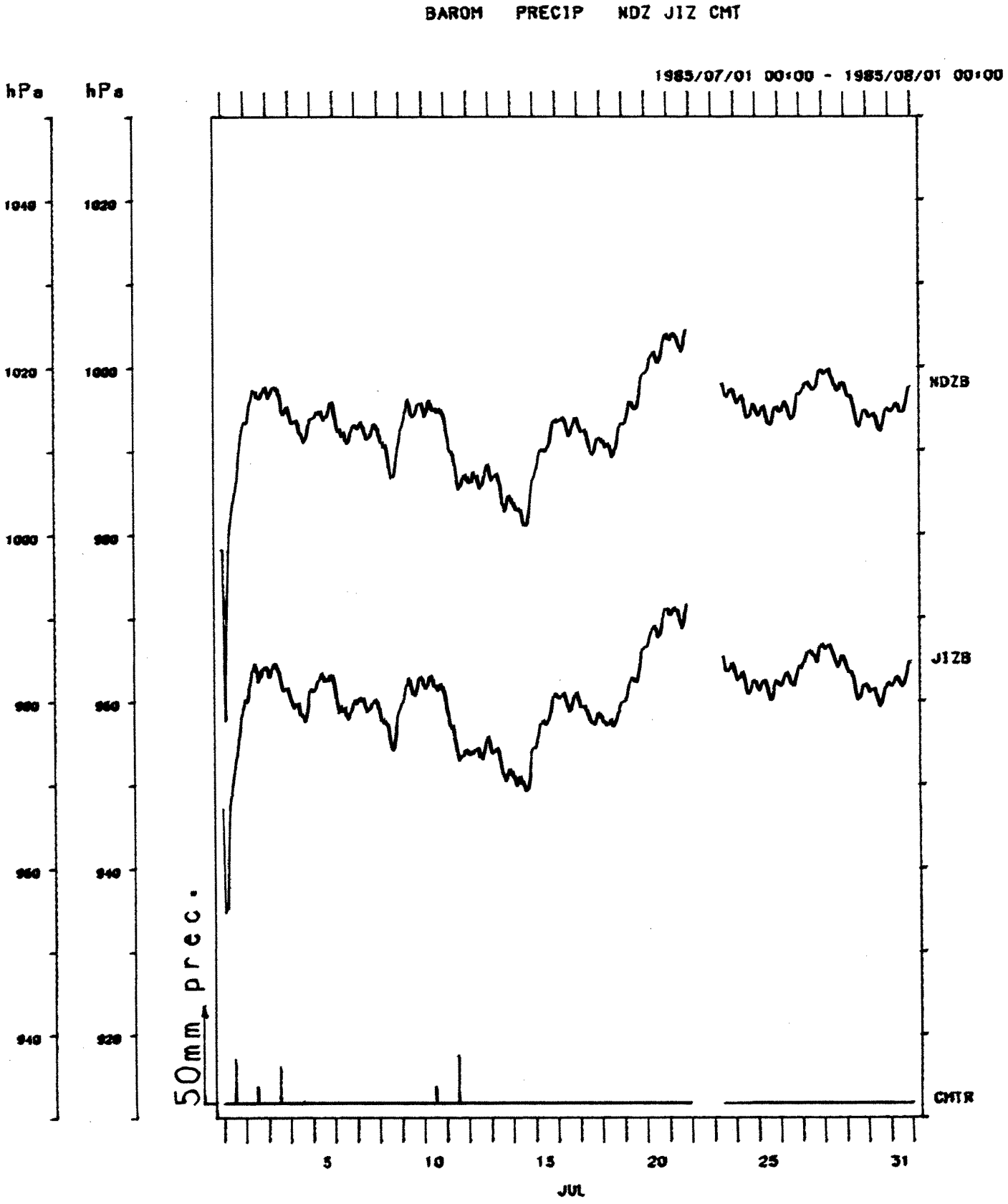

BAROM PRECIP NDZ JIZ CMT
1985/02/01 00:00 - 1985/03/01 00:00
hPa
hPa
1040
1020
1000
980
960
940
1020
1000
980
960
940
920
NDZB
JIZB
CMTR
50mm prec.
5
10
15
20
25
28
FEB

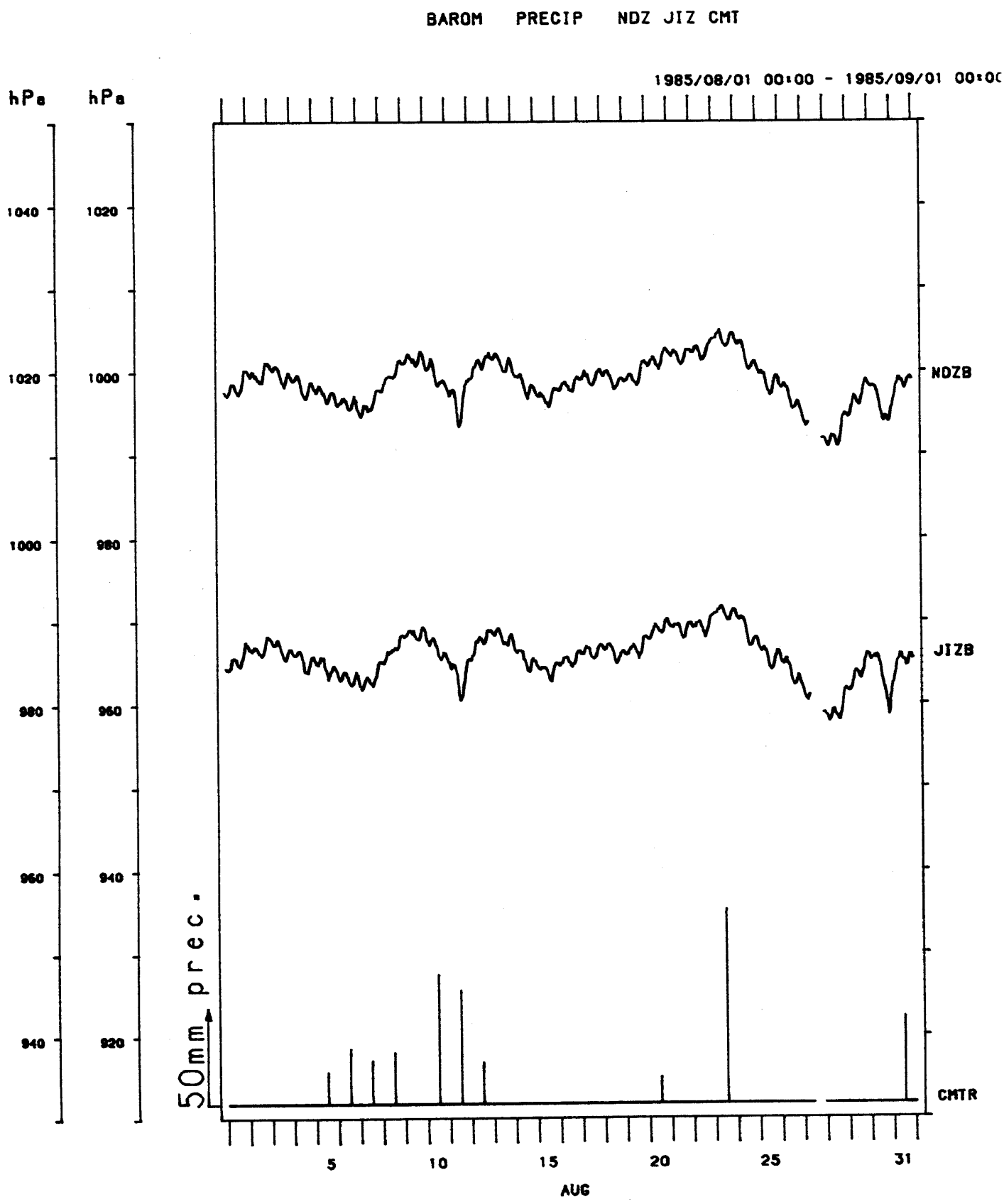

BAROM PRECIP NDZ JIZ CMT
1985/03/01 00:00 - 1985/04/01 00:00
hPa
hPa
1040
1020
1000
980
960
940
920
NDZB
JIZB
CMTR
50mm prec.
5
10
15
20
25
31
MAR

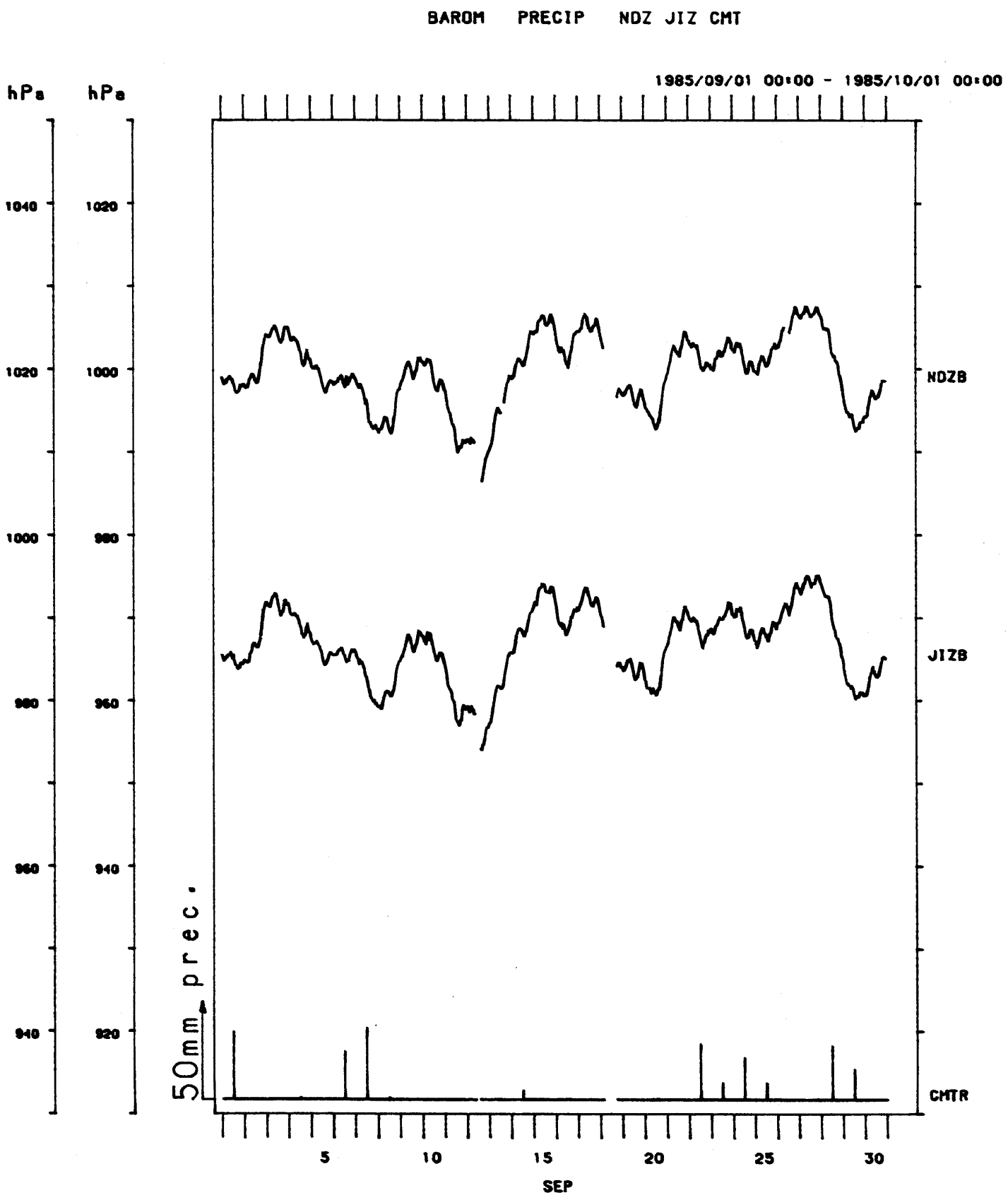

BAROM PRECIP NDZ JIZ CMT
1985/04/01 00:00 - 1985/05/01 00:00
hPa
hPa
1040
1020
1000
980
960
940
1020
1000
980
960
940
920
NDZS
JIZS
CMTR
50mm prec.
5
10
15
20
25
30
APR

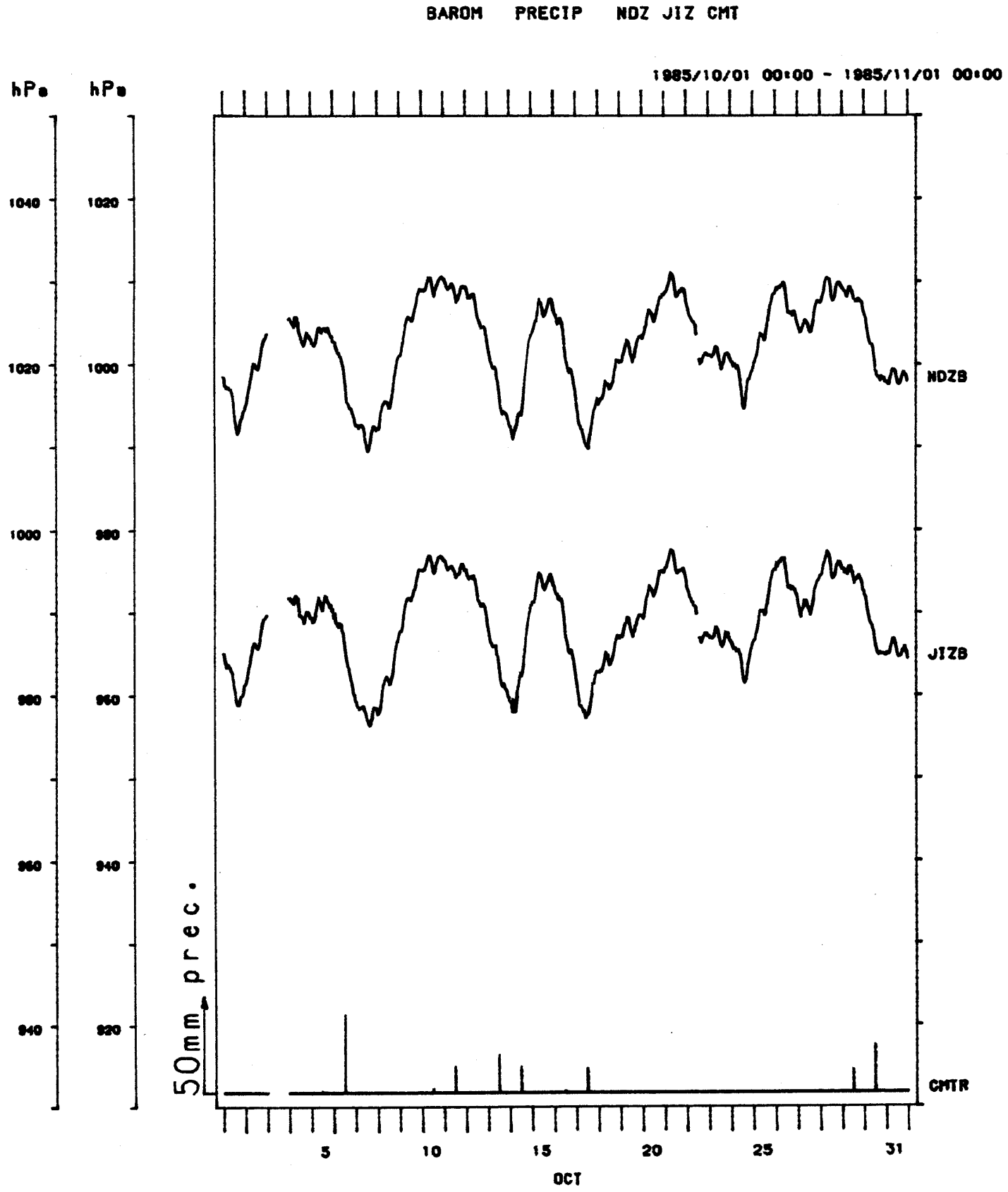

BAROM PRECIP NDZ JIZ CMT
1985/05/01 00:00 - 1985/06/01 00:00
hPa
hPa
1040
1020
1000
980
960
940
1020
1000
980
960
940
920
NDZB
JIZB
CMTR
50mm prec.
5
10
15
20
25
31
MAY

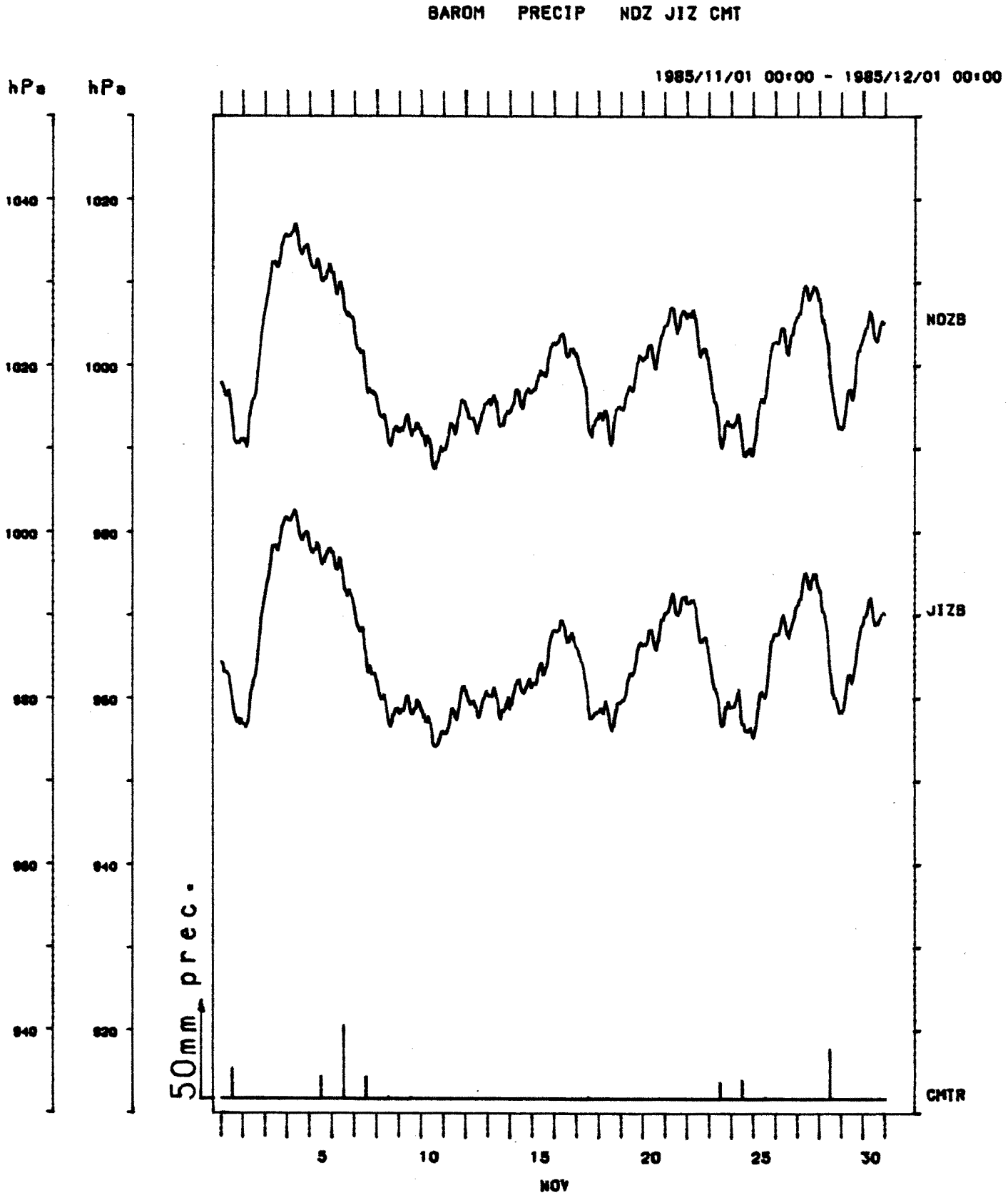

BAROM PRECIP NDZ JIZ CMT
1985/06/01 00:00 - 1985/07/01 00:00
hPa
hPa
1040
1020
1000
980
960
940
1020
1000
980
960
940
920
NDZB
JIZB
CMTR
50mm prec.
5
10
15
20
25
30
JUN


BAROM PRECIP NDZ JIZ CMT
1985/07/01 00:00 - 1985/08/01 00:00
hPa
hPa
1040
1020
1000
980
960
940
1020
1000
980
960
940
920
NDZB
JIZB
CMTR
50mm prec.
5
10
15
20
25
31
JUL


BAROM　PRECIP　NDZ JIZ CMT
1985/08/01 00:00 - 1985/09/01 00:00
hPa
hPa
1040
1020
1000
980
960
940
1020
1000
980
960
940
920
NDZB
JIZB
CMTR
50mm prec.
5
10
15
20
25
31
AUG


BAROM PRECIP NDZ JIZ CMT
1985/09/01 00:00 - 1985/10/01 00:00
hPa
hPa
1040
1020
1000
980
960
940
1020
1000
980
960
940
920
NDZB
JIZB
CMTR
50mm prec.
5
10
15
20
25
30
SEP


BAROM PRECIP NDZ JIZ CMT
1985/10/01 00:00 - 1985/11/01 00:00
hPa
hPa
1040
1020
1000
980
960
940
920
1020
1000
980
960
940
NDZB
JIZB
CMTR
50mm prec.
5
10
15
20
25
31
OCT


BAROM PRECIP NDZ JIZ CMT
1985/11/01 00:00 - 1985/12/01 00:00
hPa
hPa
1040
1020
1000
980
960
940
920
1040
1020
1000
980
960
940
920
NDZB
JIZB
CMTR
50mm prec.
5
10
15
20
25
30
NOV

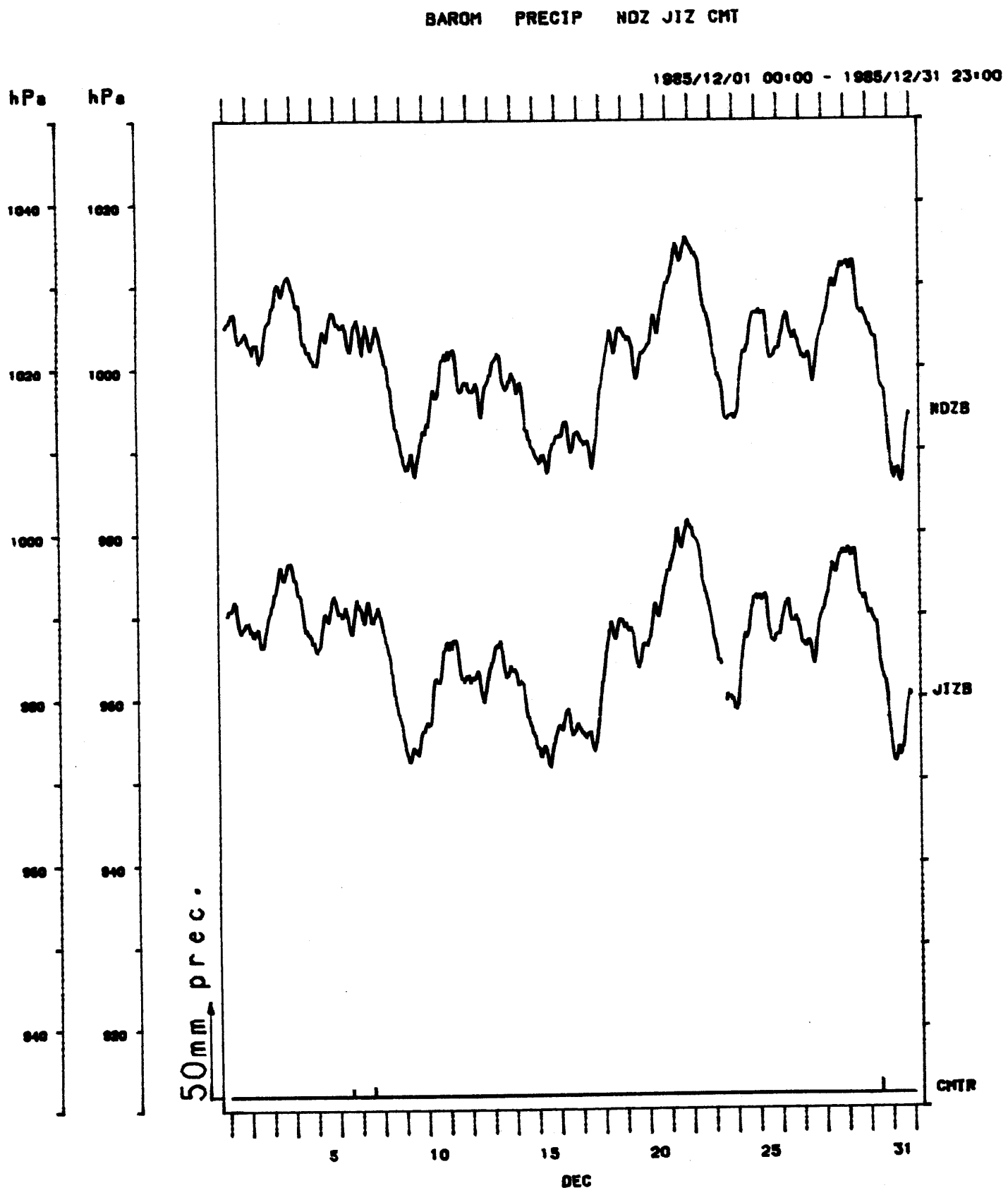
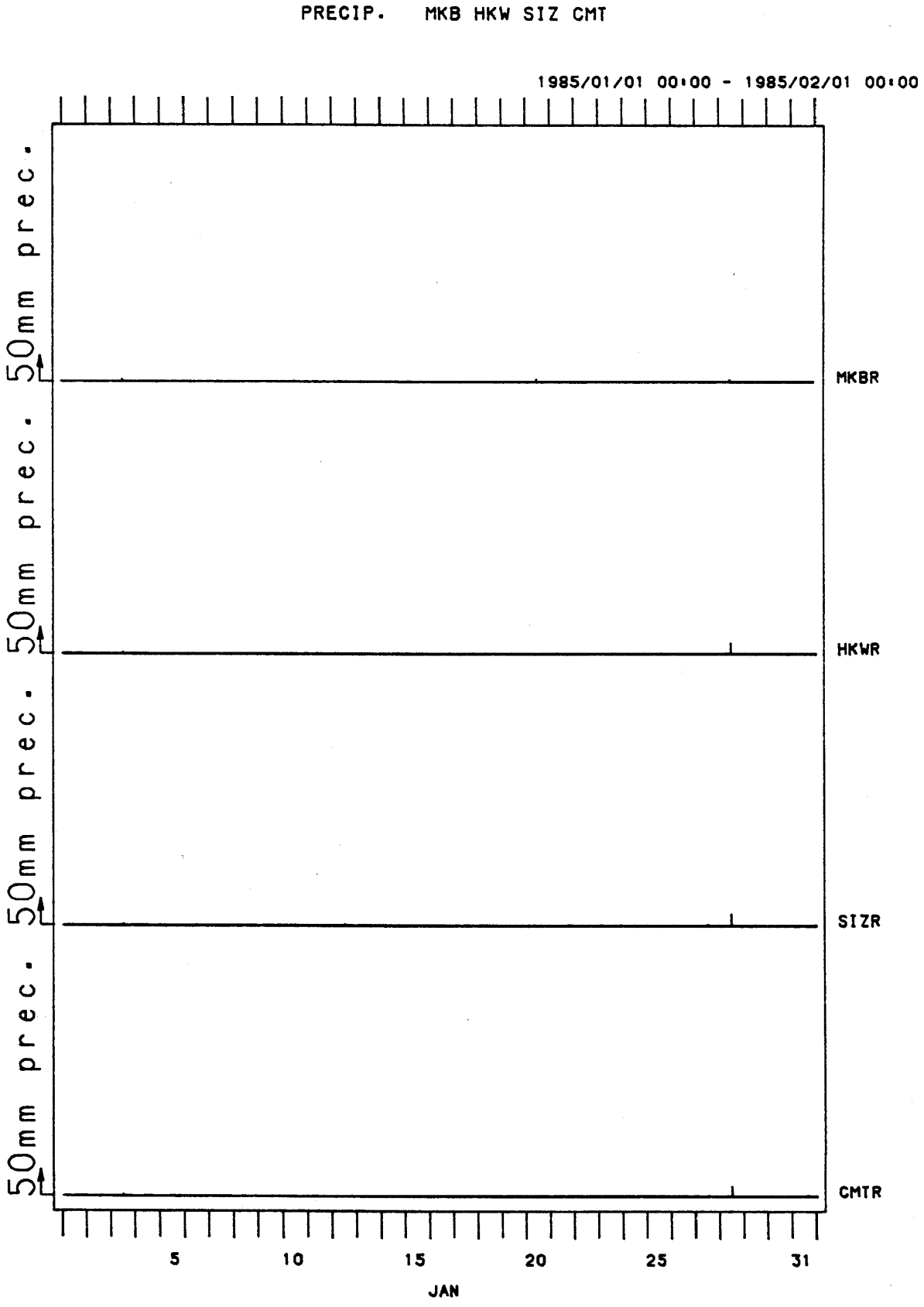
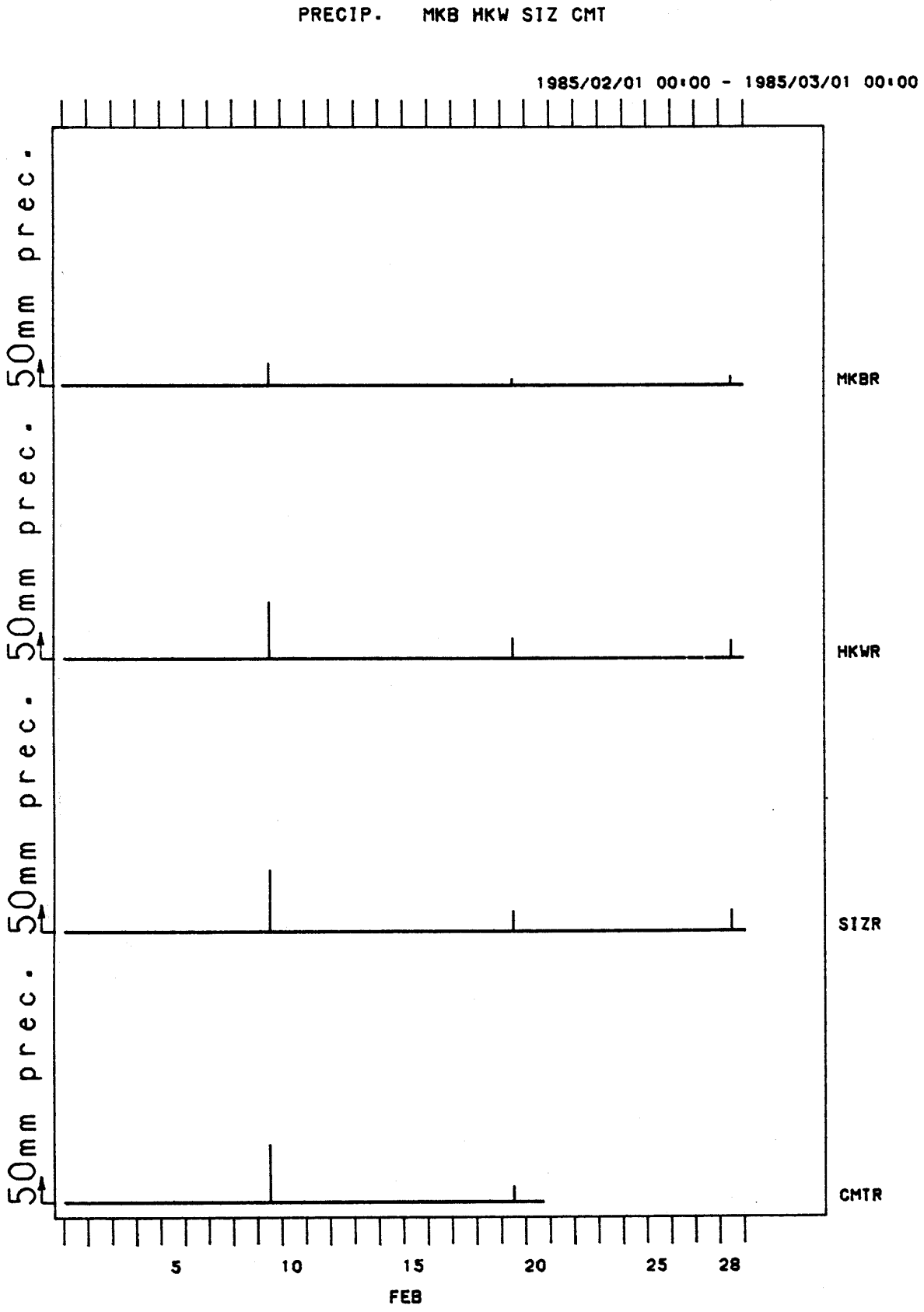

BAROM PRECIP NDZ JIZ CMT
1985/12/01 00:00 - 1985/12/31 23:00
hPa
hPa
1040
1020
1000
980
960
940
920
1020
1000
980
960
940
920
NDZB
JIZB
CMTR
50mm prec.
5
10
15
20
25
31
DEC

図 7　各観測施設の日雨量
Fig.7　Daily precipitation.




PRECIP.　MKB MKW SIZ CMT
1985/02/01 00:00 - 1985/03/01 00:00
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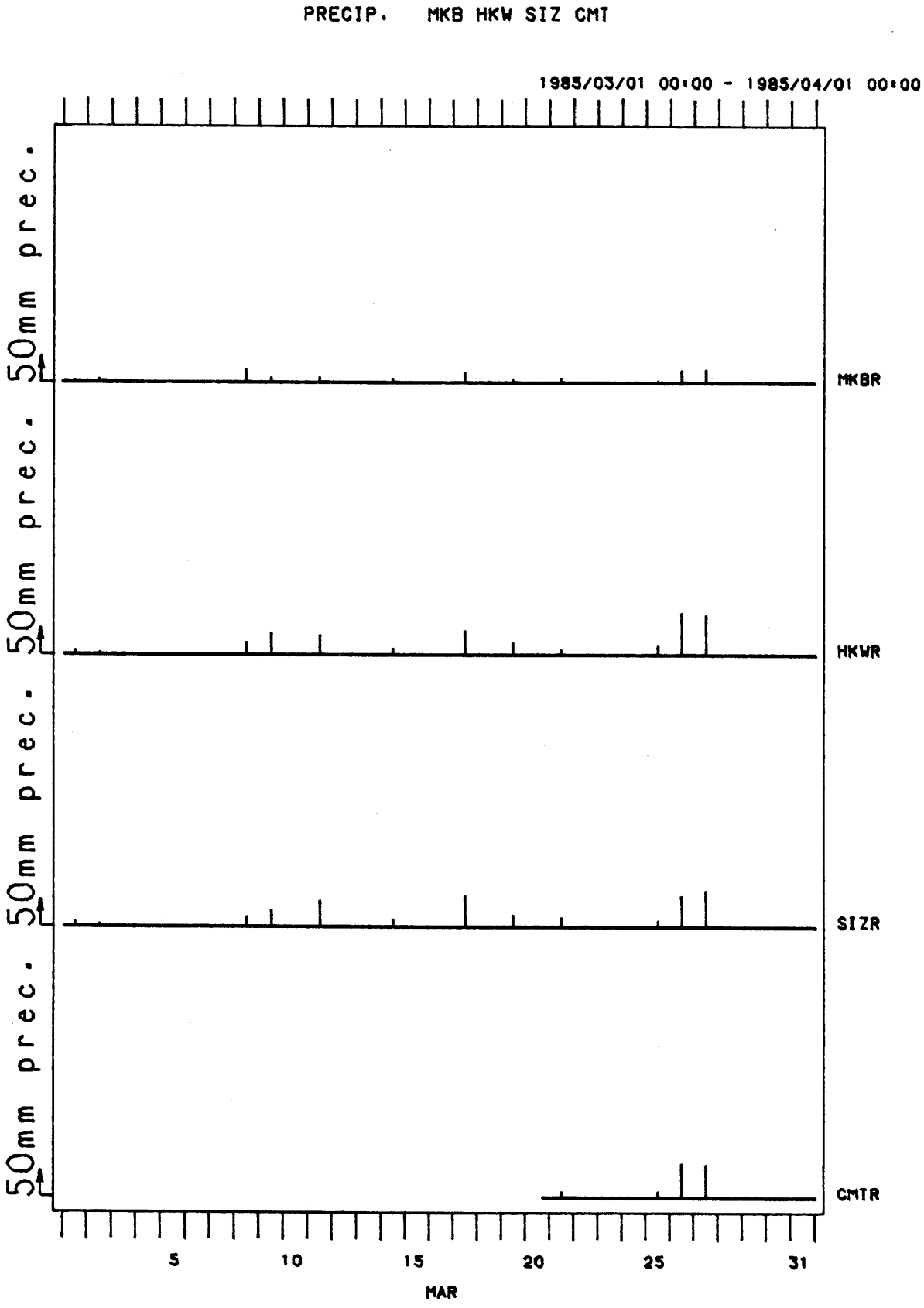
50mm prec.
50mm prec.
50mm prec.
MKBR
MKWR
SIZR
CMTR
5
10
15
20
25
28
FEB


PRECIP. MKB HKW SIZ CMT
1985/03/01 00:00 - 1985/04/01 00:00
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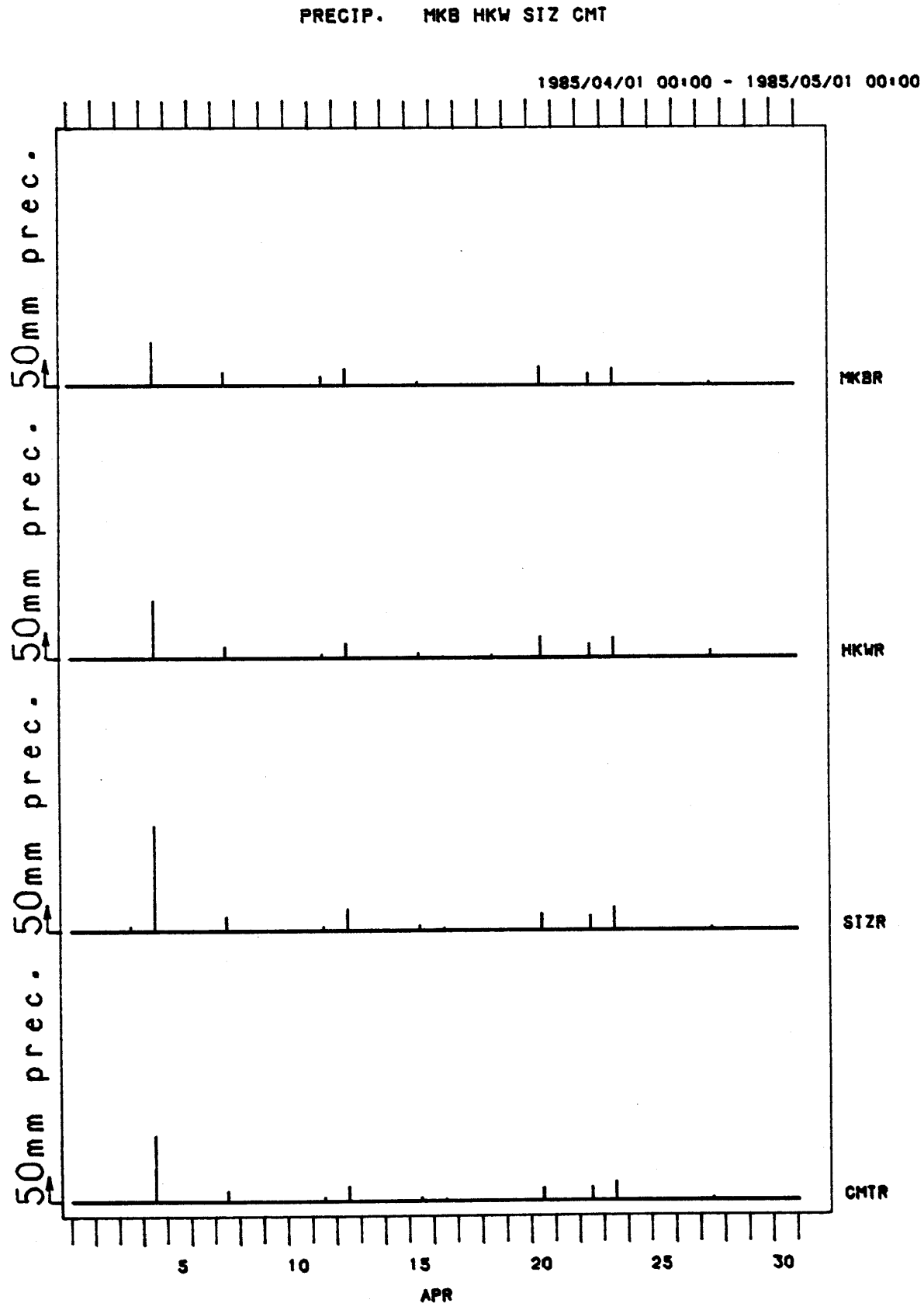
50mm prec.
50mm prec.
50mm prec.
MKBR
HKWR
SIZR
CMTR
5
10
15
20
25
31
MAR


PRECIP.　MKB HKW SIZ CMT
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50mm prec.
50mm prec.
50mm prec.
MKBR
HKWR
SIZR
CMTR
5
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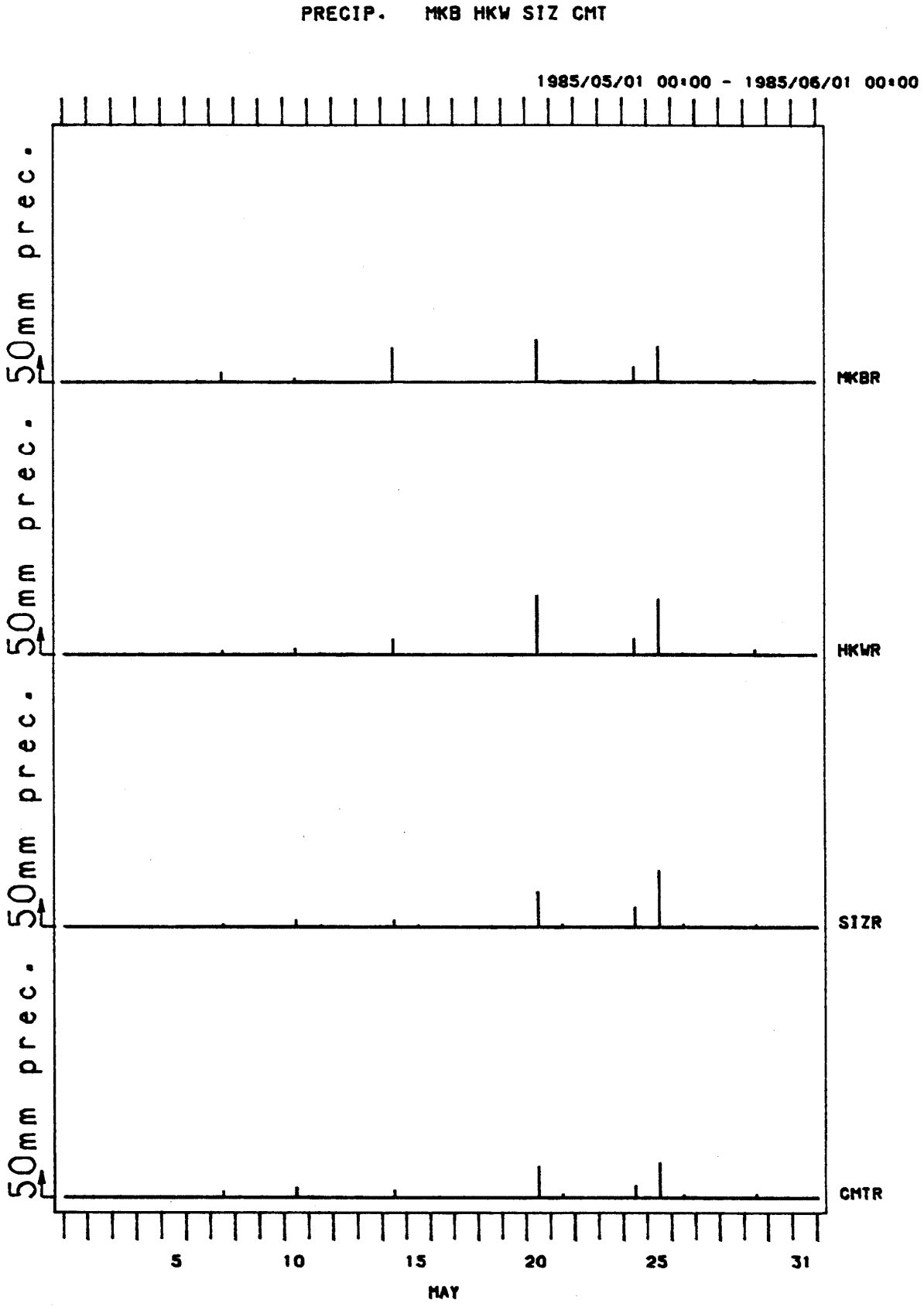
20
25
30
APR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1985/05/01 00:00 - 1985/06/01 00:00
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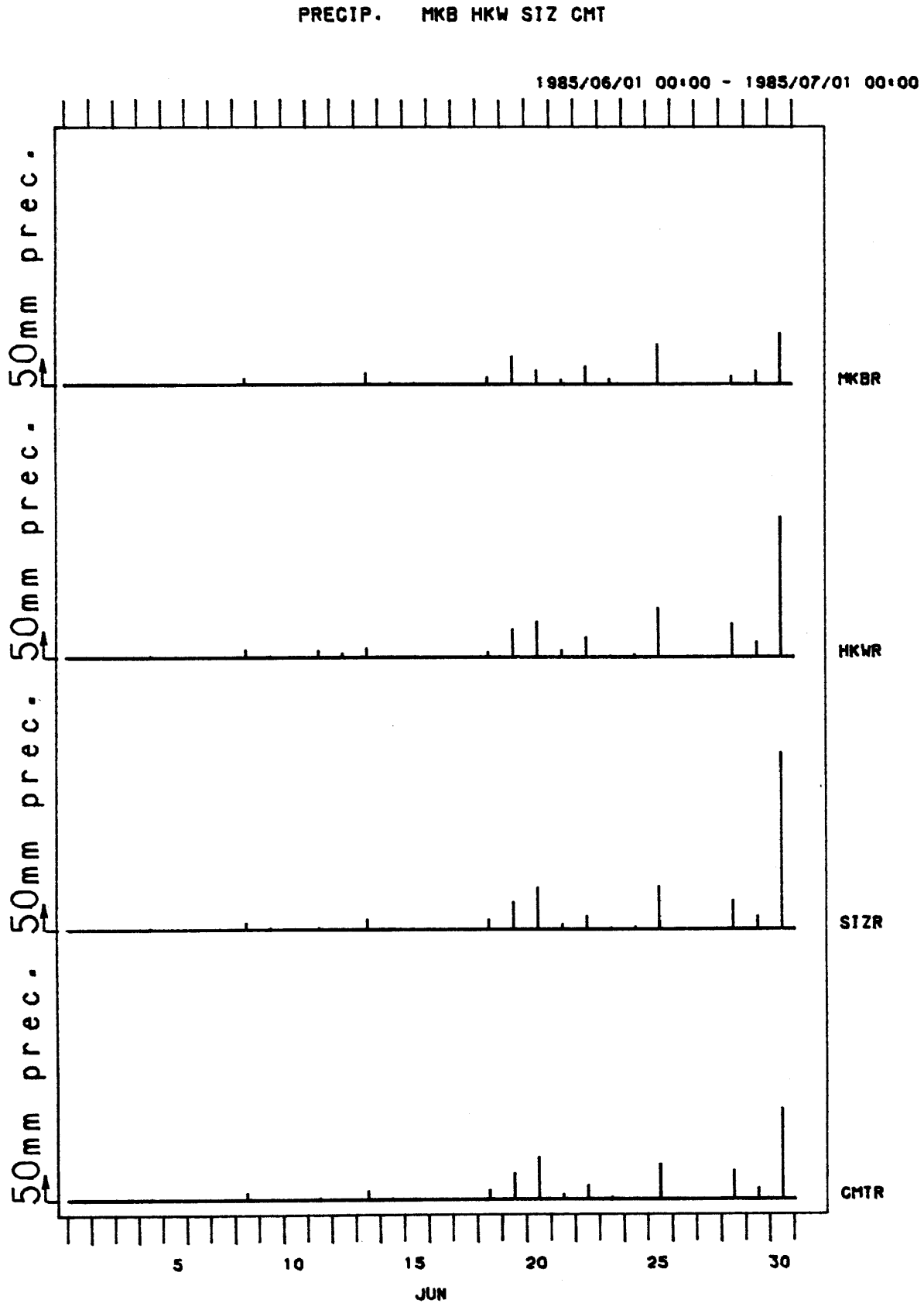
50mm prec.
50mm prec.
50mm prec.
MKBR
HKWR
SIZR
CMTR
5
10
15
20
25
31
MAY


PRECIP.　MKB HKW SIZ CMT
1985/06/01 00:00 - 1985/07/01 00:00
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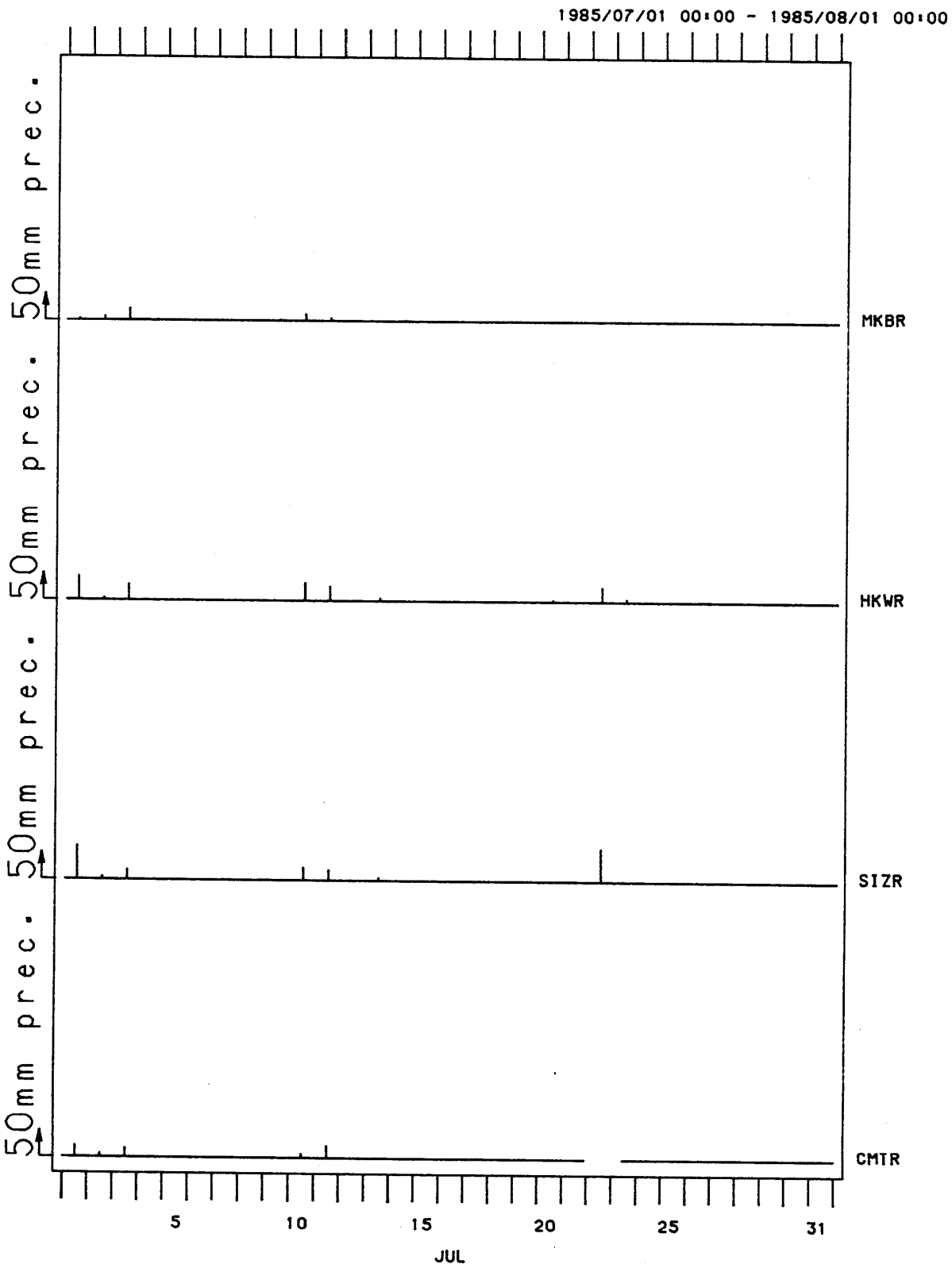
50mm prec.
50mm prec.
50mm prec.
MKBR
HKWR
SIZR
CMTR
5
10
15
20
25
30
JUN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50mm prec.
MKBR
HKWR
SIZR
CMTR
5
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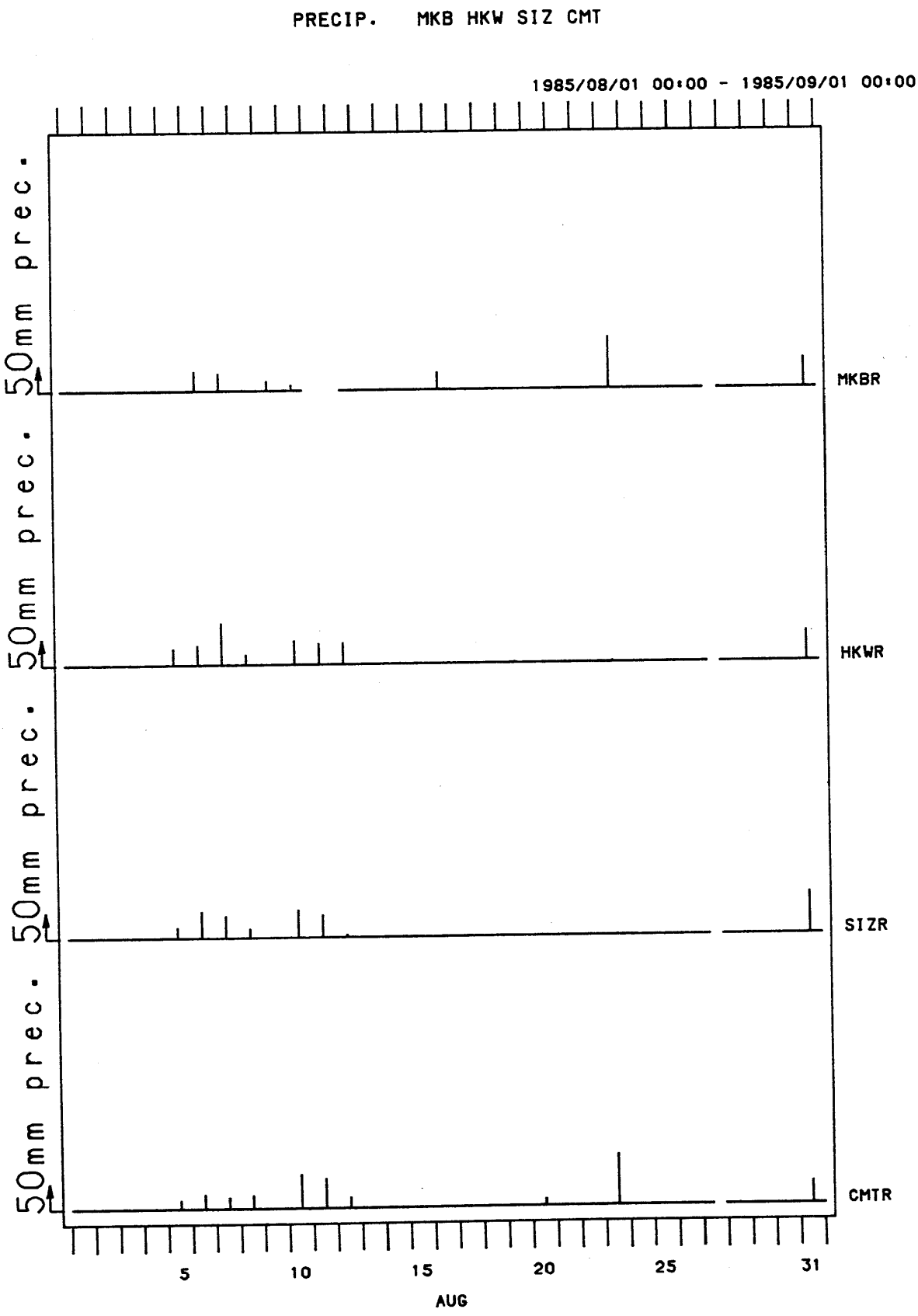
31
JUL


PRECIP.　MKB HKW SIZ CMT
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50mm prec.
MKBR
HKWR
SIZR
CMTR
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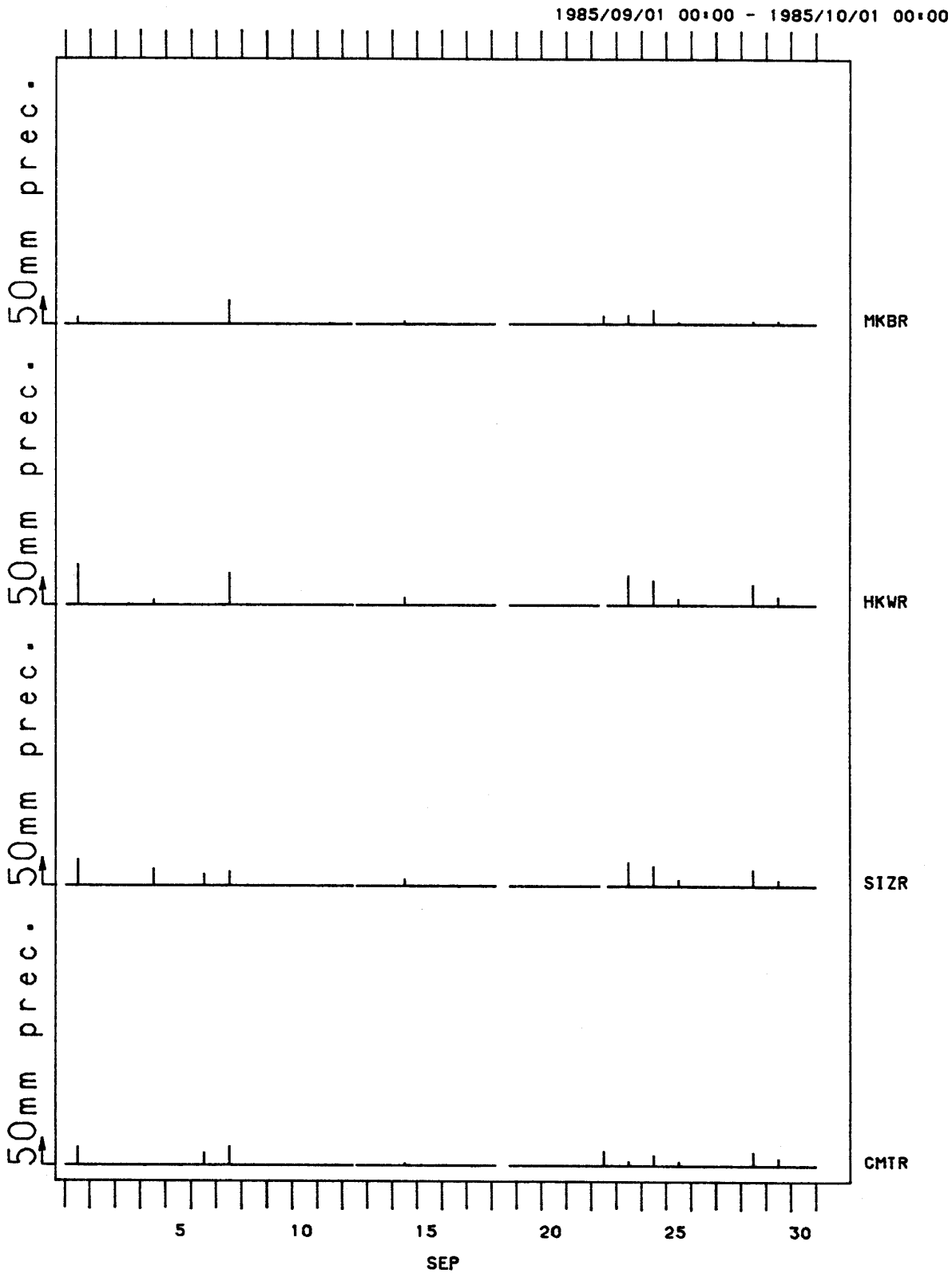
20
25
31
AUG


PRECIP. MKB HKW SIZ CMT
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50mm prec.
MKBR
HKWR
SIZR
CMTR
5
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20
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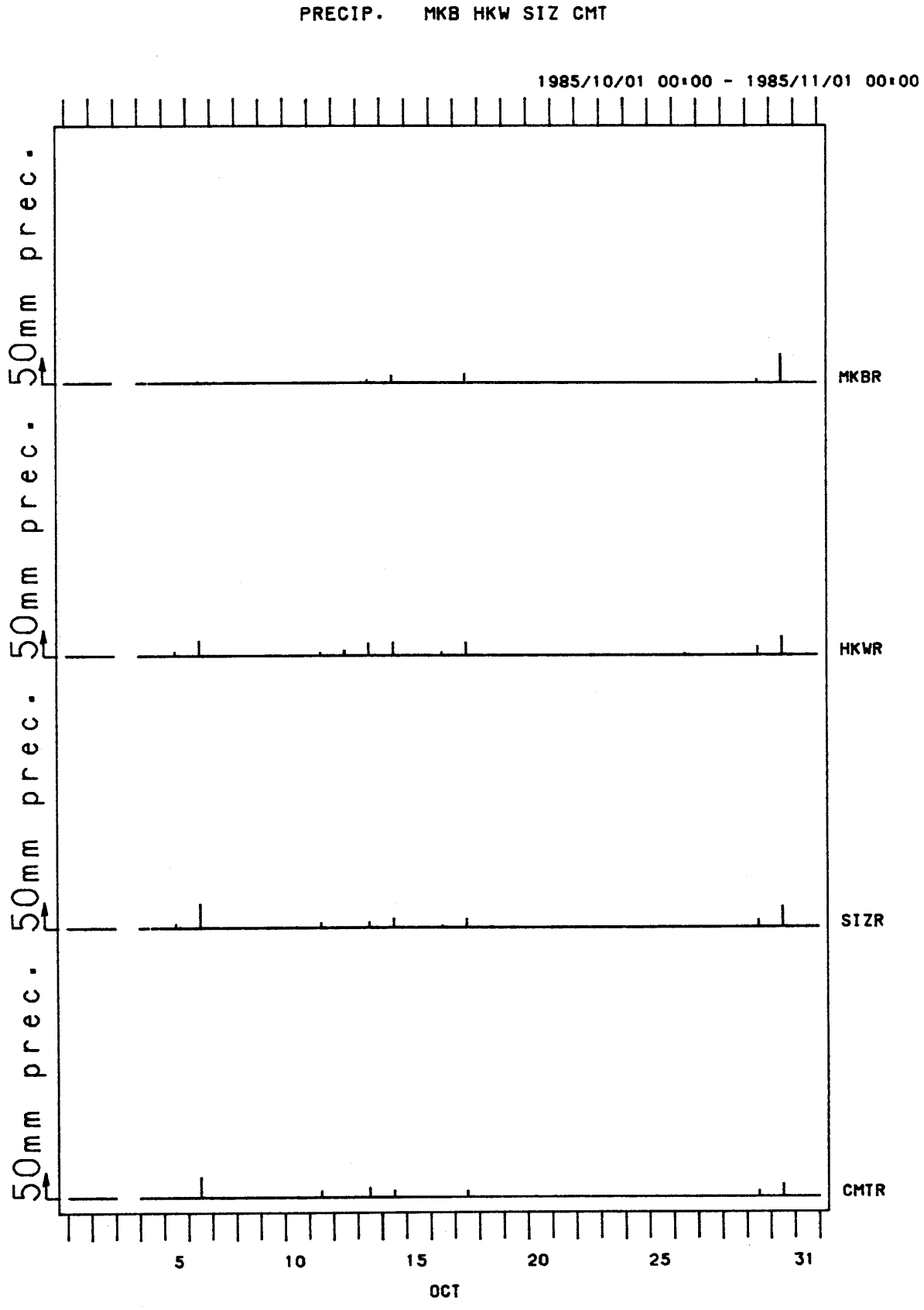
30
SEP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50mm prec.
MKBR
HKWR
SIZR
CMTR
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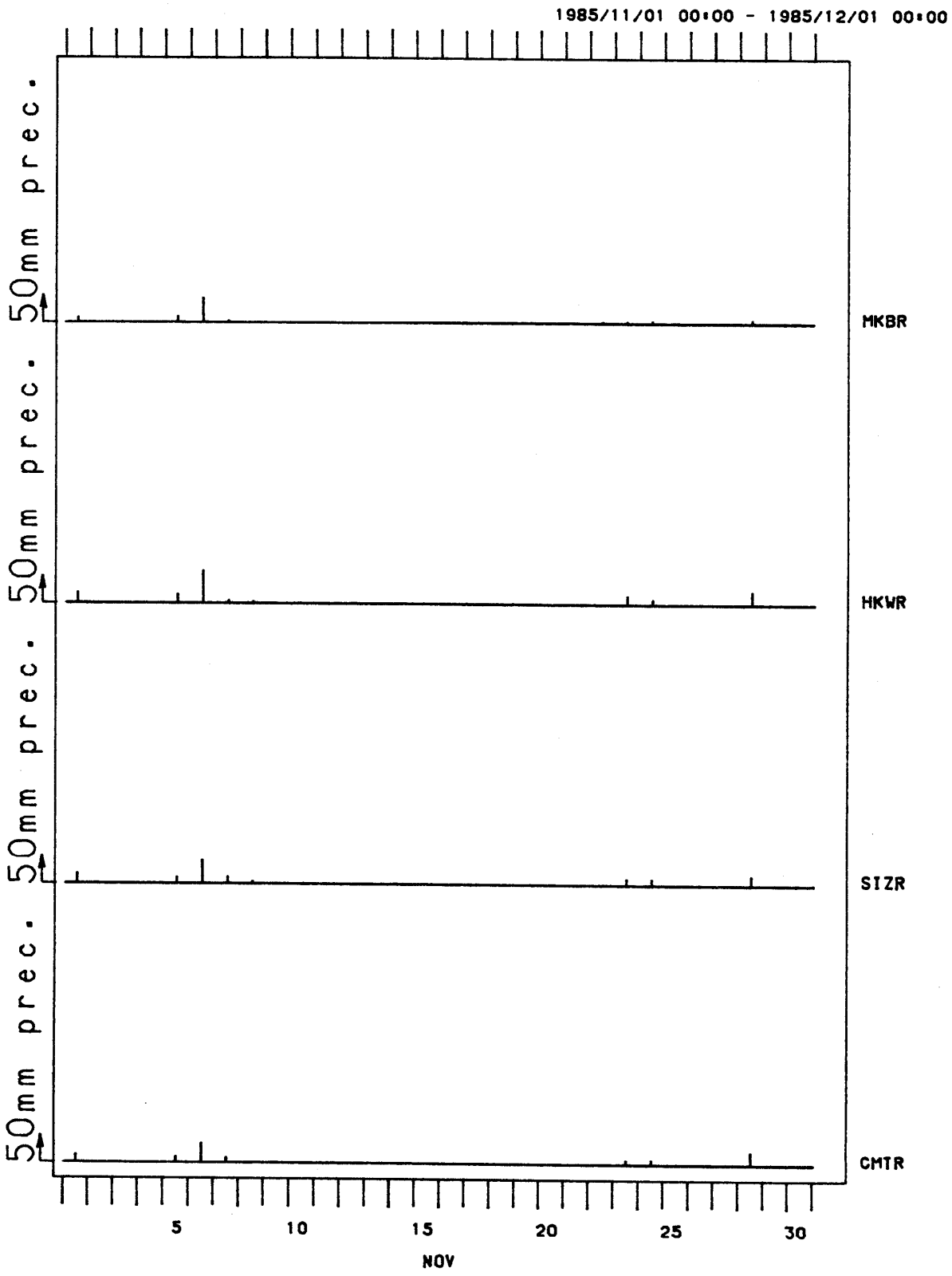
20
25
31
OCT


PRECIP. MKB HKW SIZ CMT
1985/11/01 00:00 - 1985/12/01 00:00
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50mm prec.
50mm prec.
MKBR
HKWR
SIZR
CMTR
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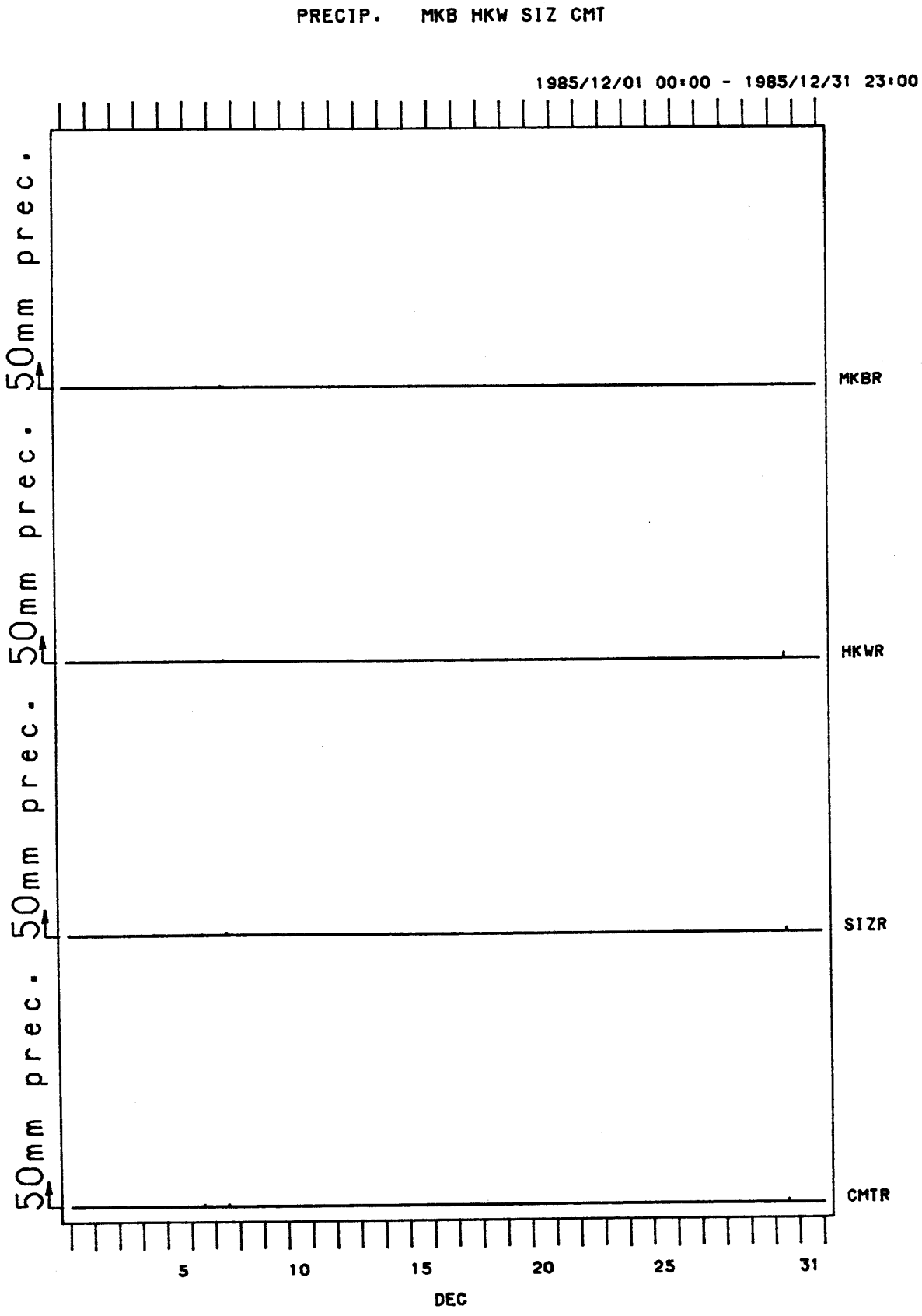
25
30
NOV


PRECIP.　MKB HKW SIZ CMT
1985/12/01 00:00 - 1985/12/31 23:00
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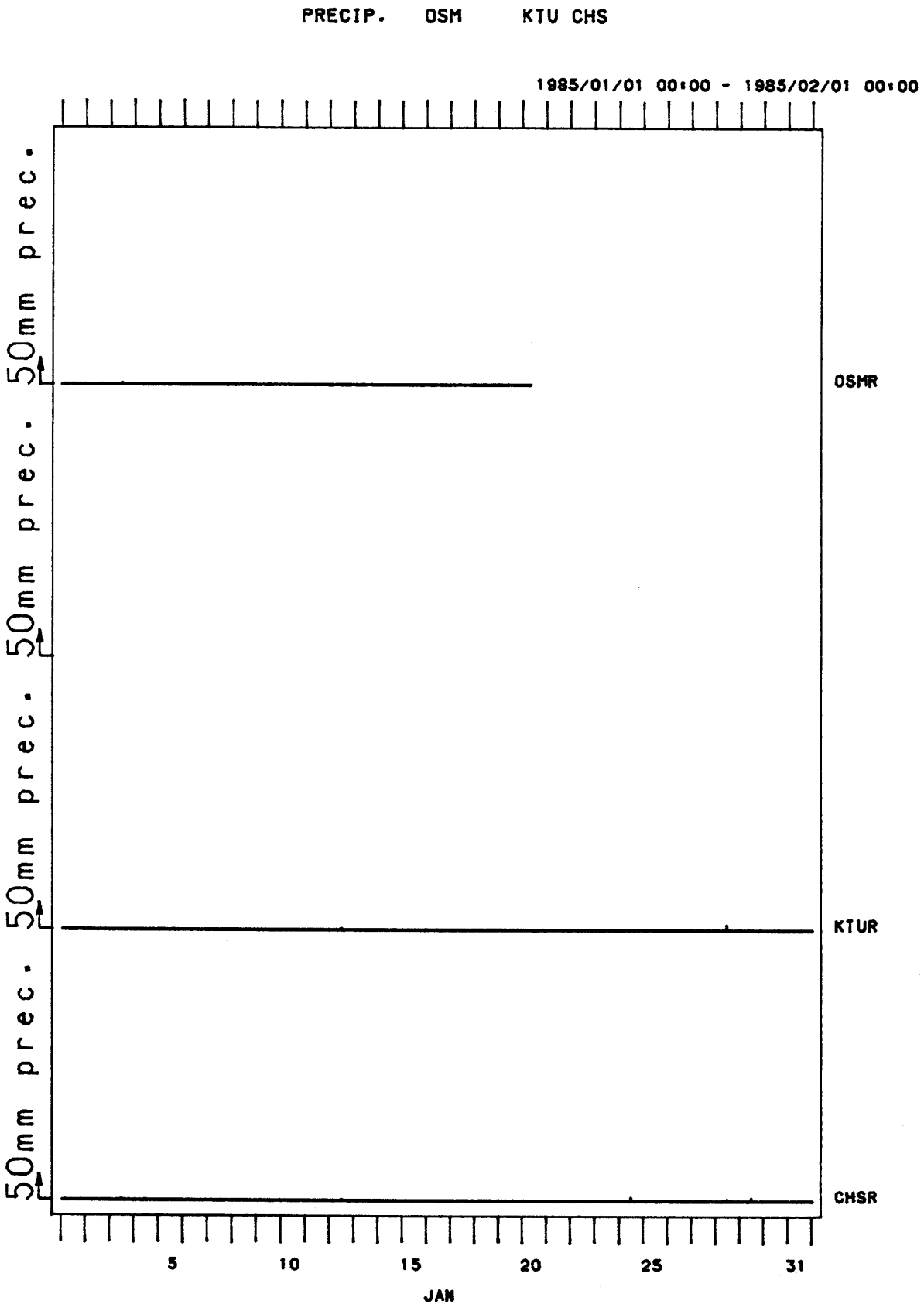
50mm prec.
50mm prec.
50mm prec.
MKBR
HKWR
SIZR
CMTR
5
10
15
20
25
31
DEC


PRECIP. OSM KTU CHS
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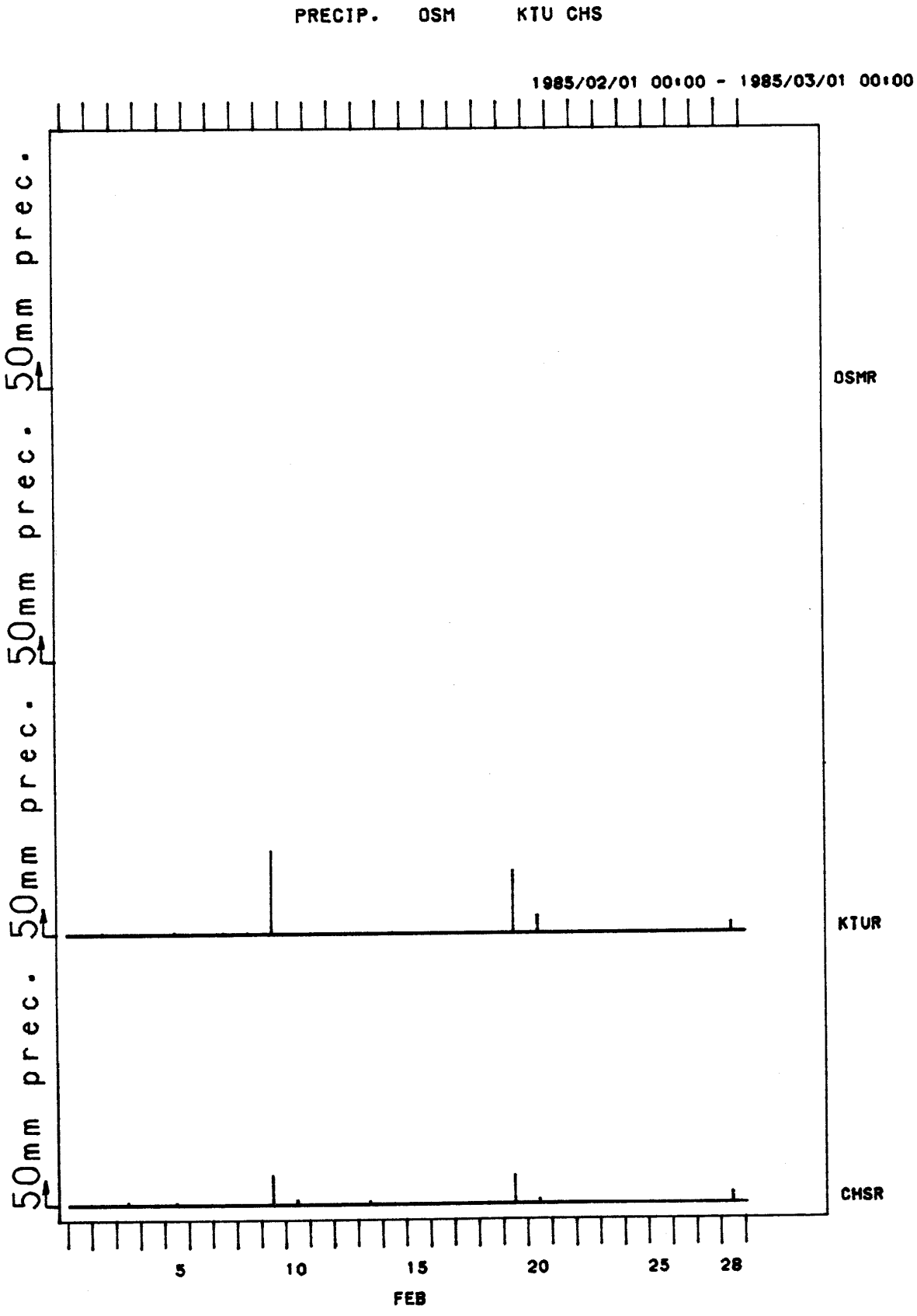
50mm prec.
50mm prec.
50mm prec.
OSMR
KTUR
CHSR
5
10
15
20
25
31
JAN


PRECIP.　OSM　KTU CHS
1985/02/01 00:00 - 1985/03/01 00:00
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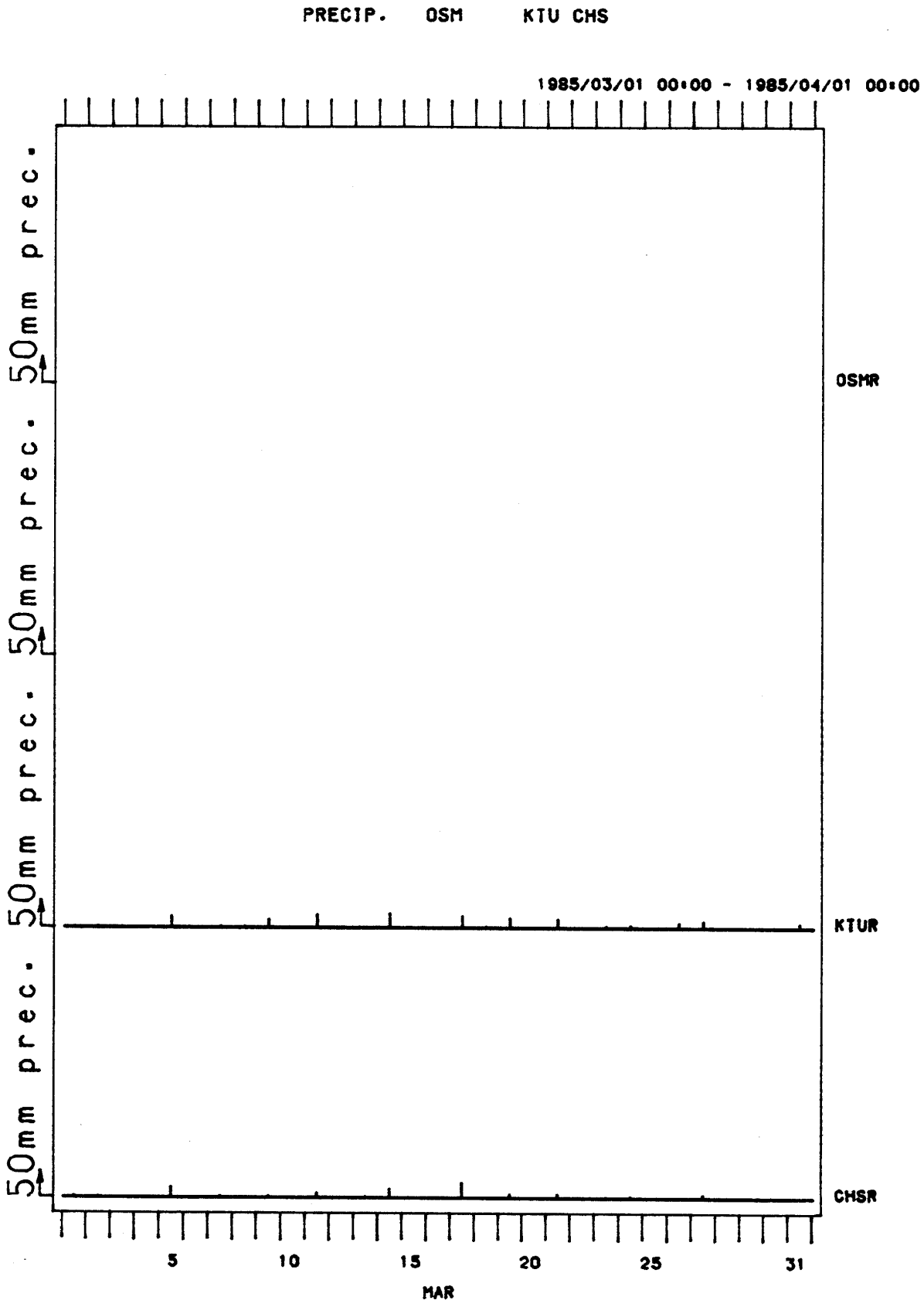
50mm prec.
50mm prec.
OSMR
KTUR
CHSR
5
10
15
20
25
28
FEB


PRECIP. OSM KTU CHS
1985/03/01 00:00 - 1985/04/01 00:00
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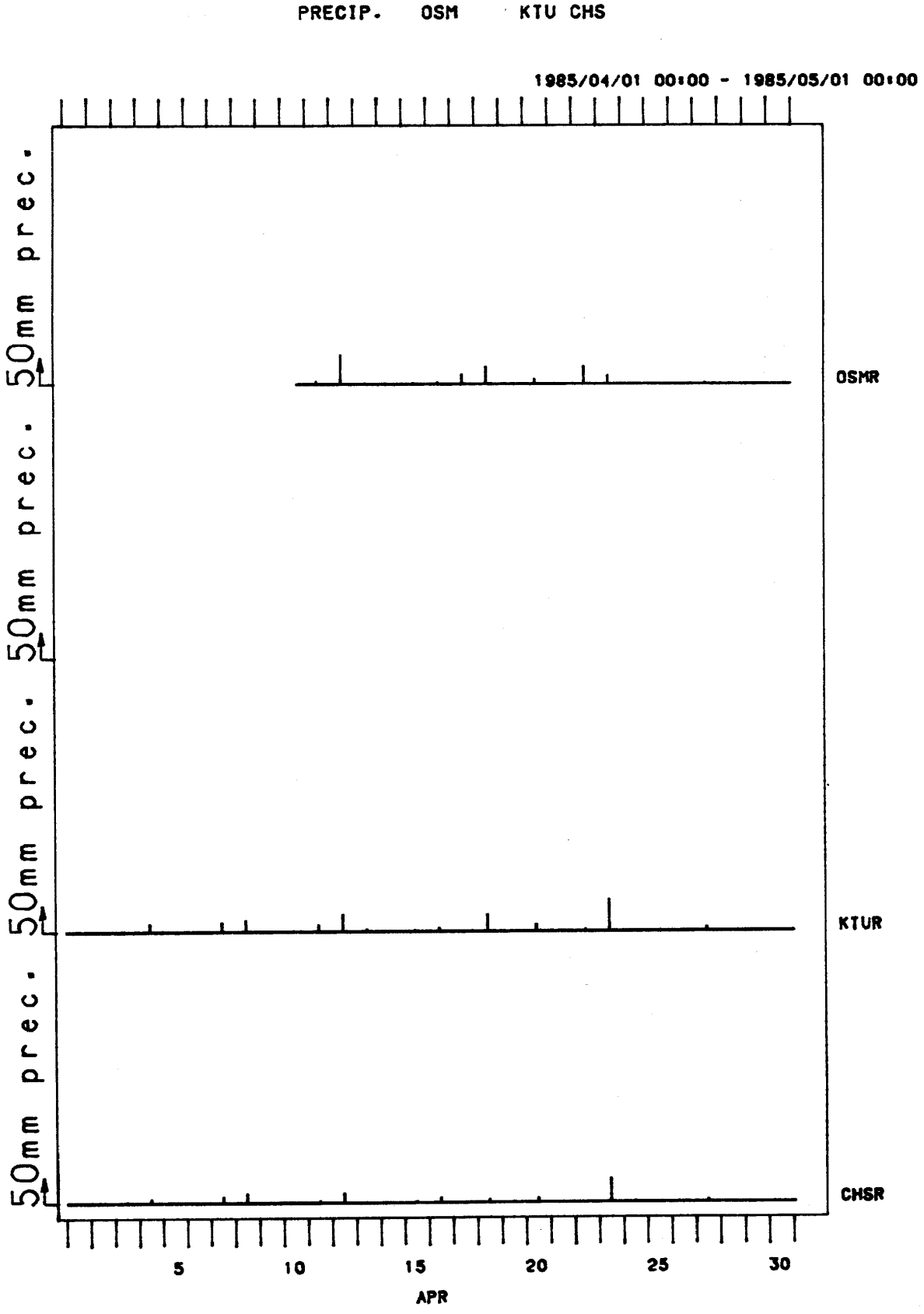
50mm prec.
50mm prec.
50mm prec.
OSMR
KTUR
CHSR
5
10
15
20
25
31
MAR


PRECIP.　OSM　KTU CHS
1985/04/01 00:00 - 1985/05/01 00:00
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50mm prec.
50mm prec.
50mm prec.
OSMR
KTUR
CHSR
5
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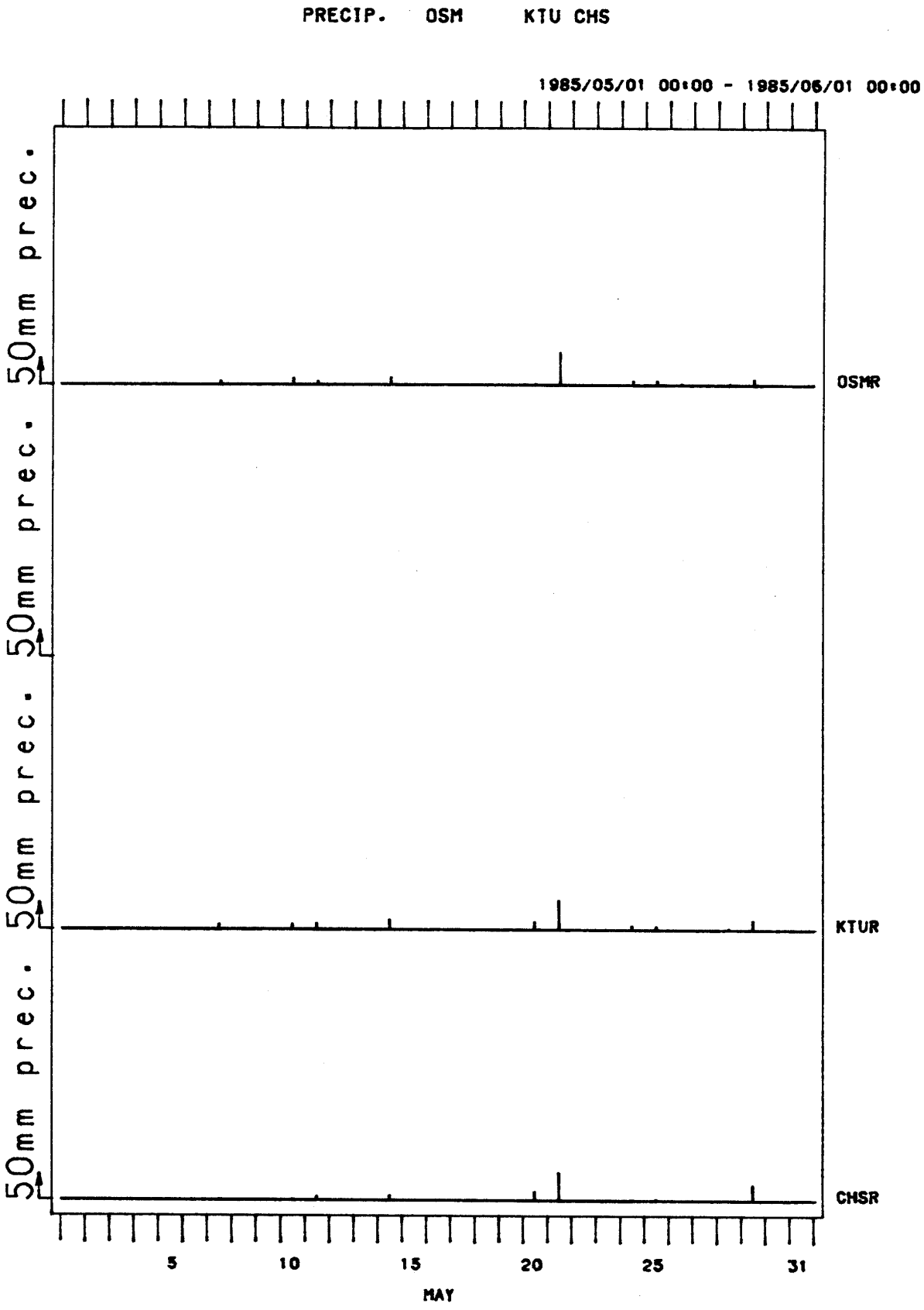
25
30
APR


PRECIP. OSM KTU CHS
1985/05/01 00:00 - 1985/06/01 00:00
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50mm prec.
50mm prec.
50mm prec.
OSMR
KTUR
CHSR
5
10
15
20
25
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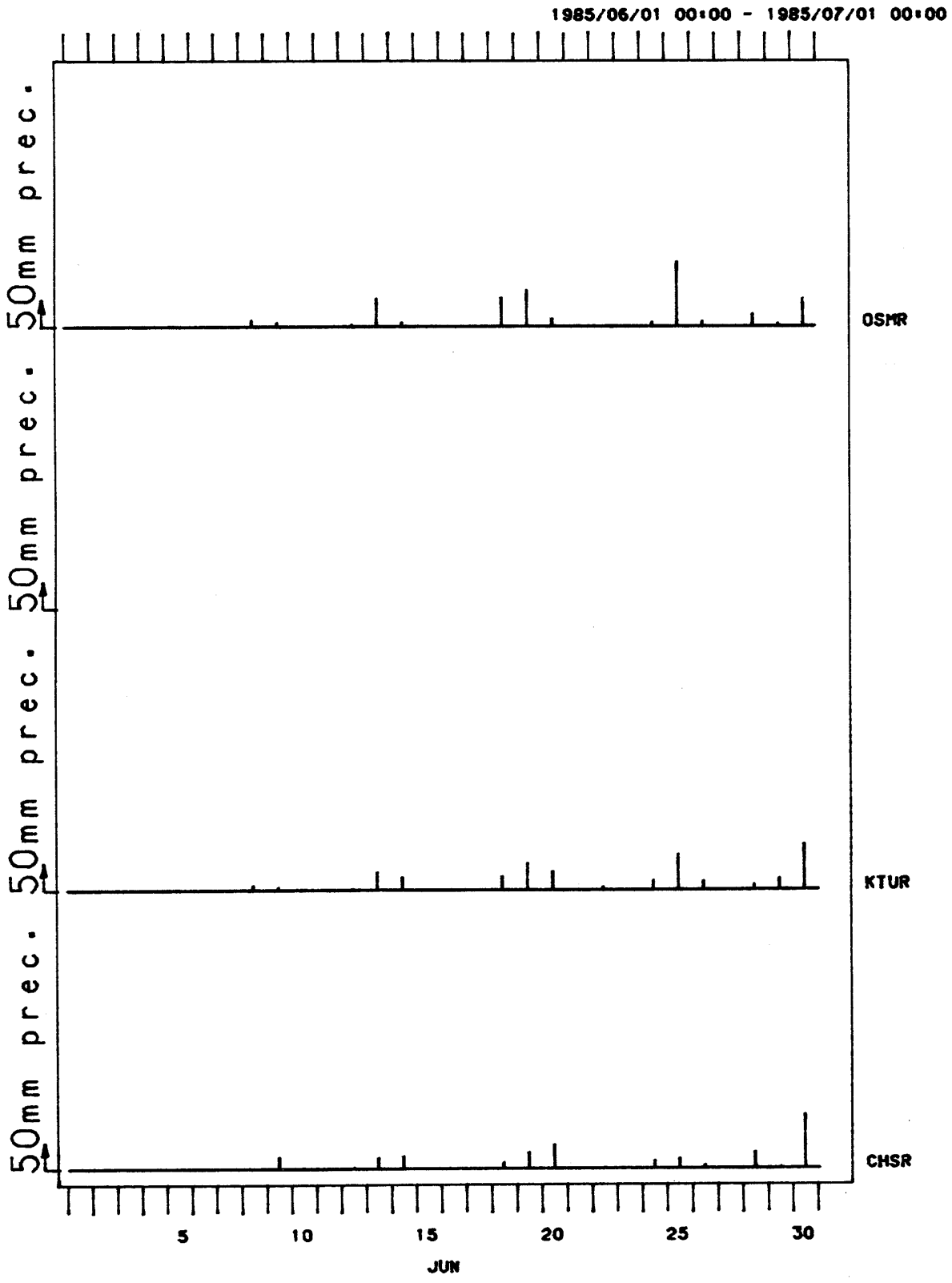
MAY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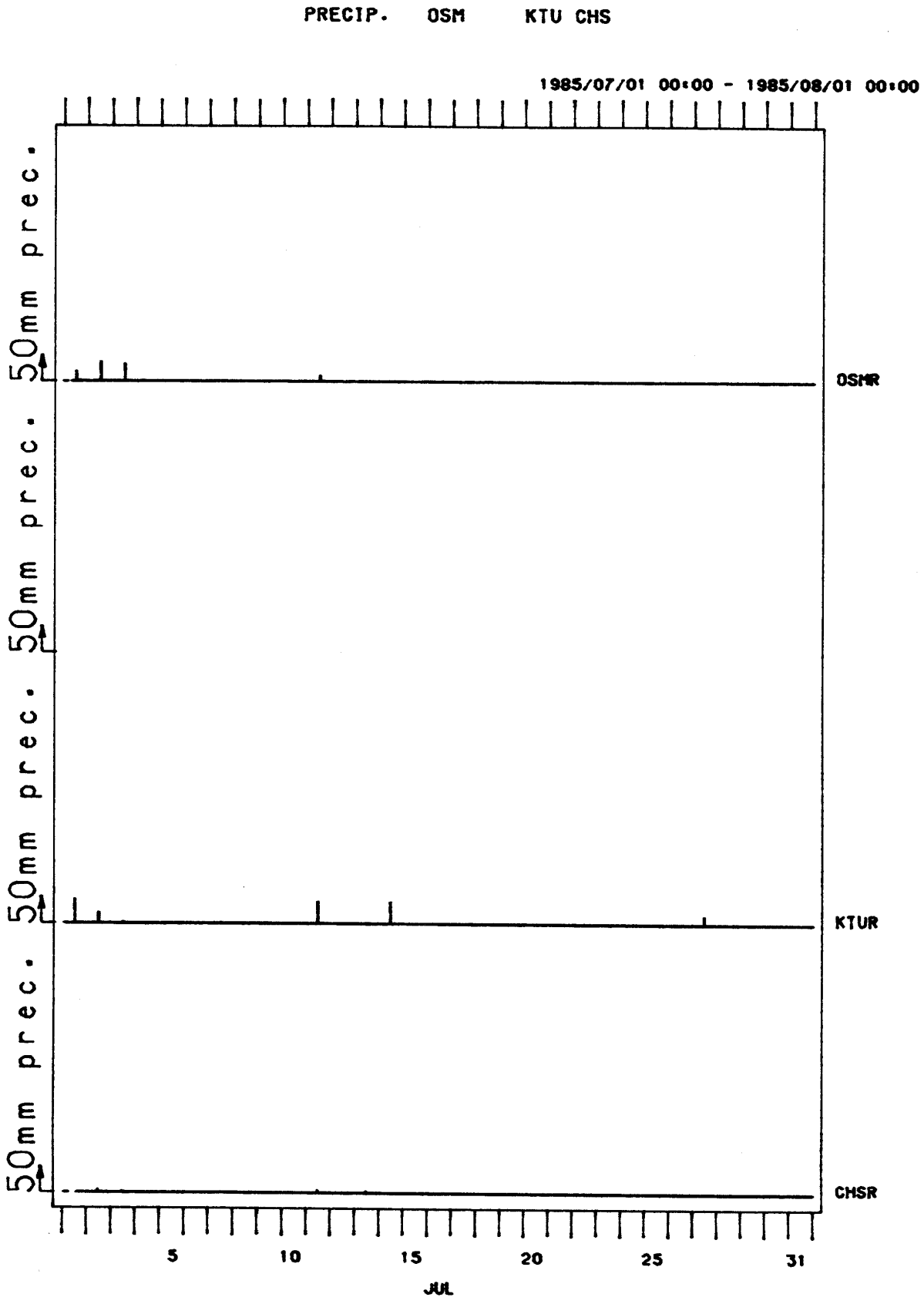
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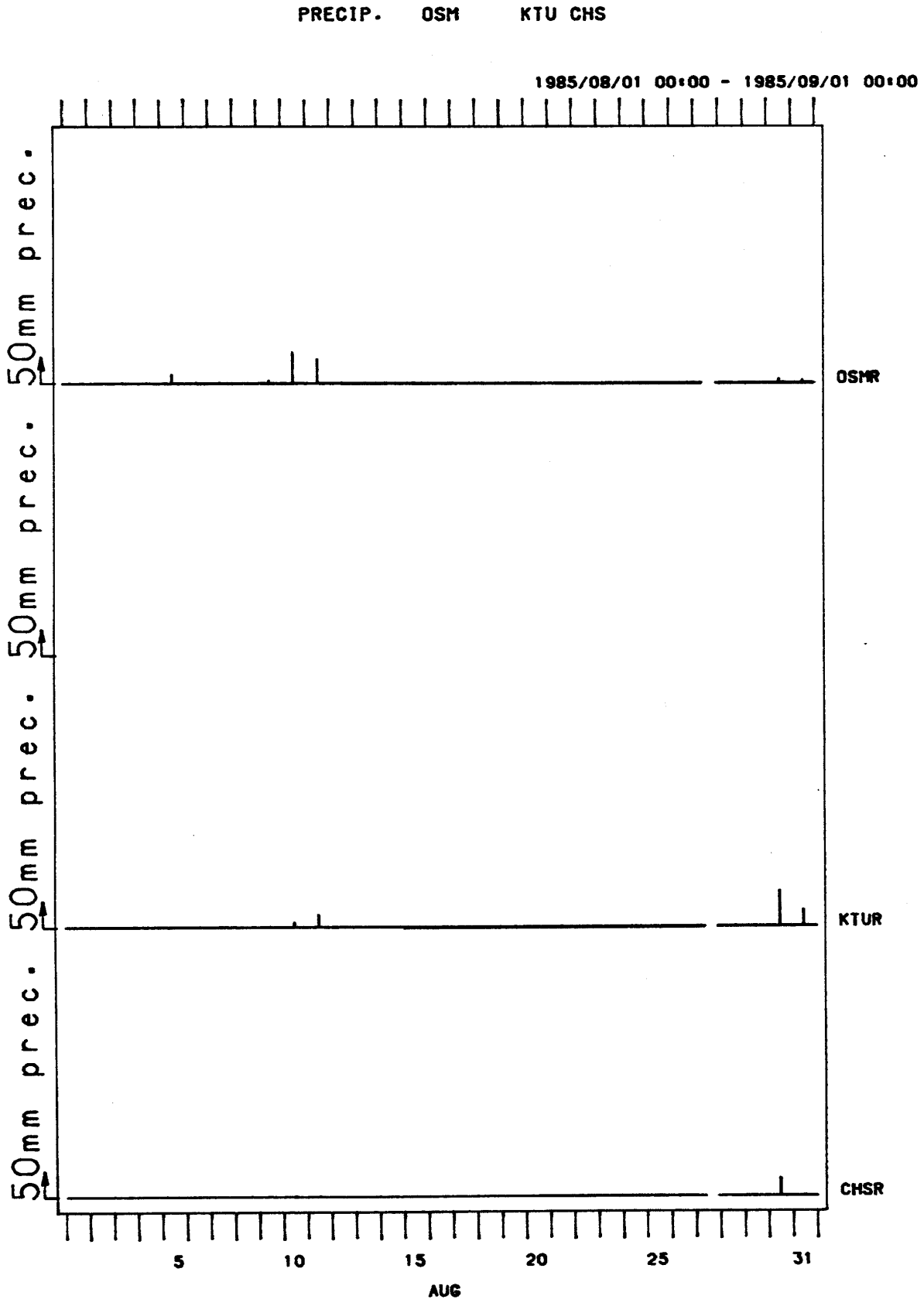
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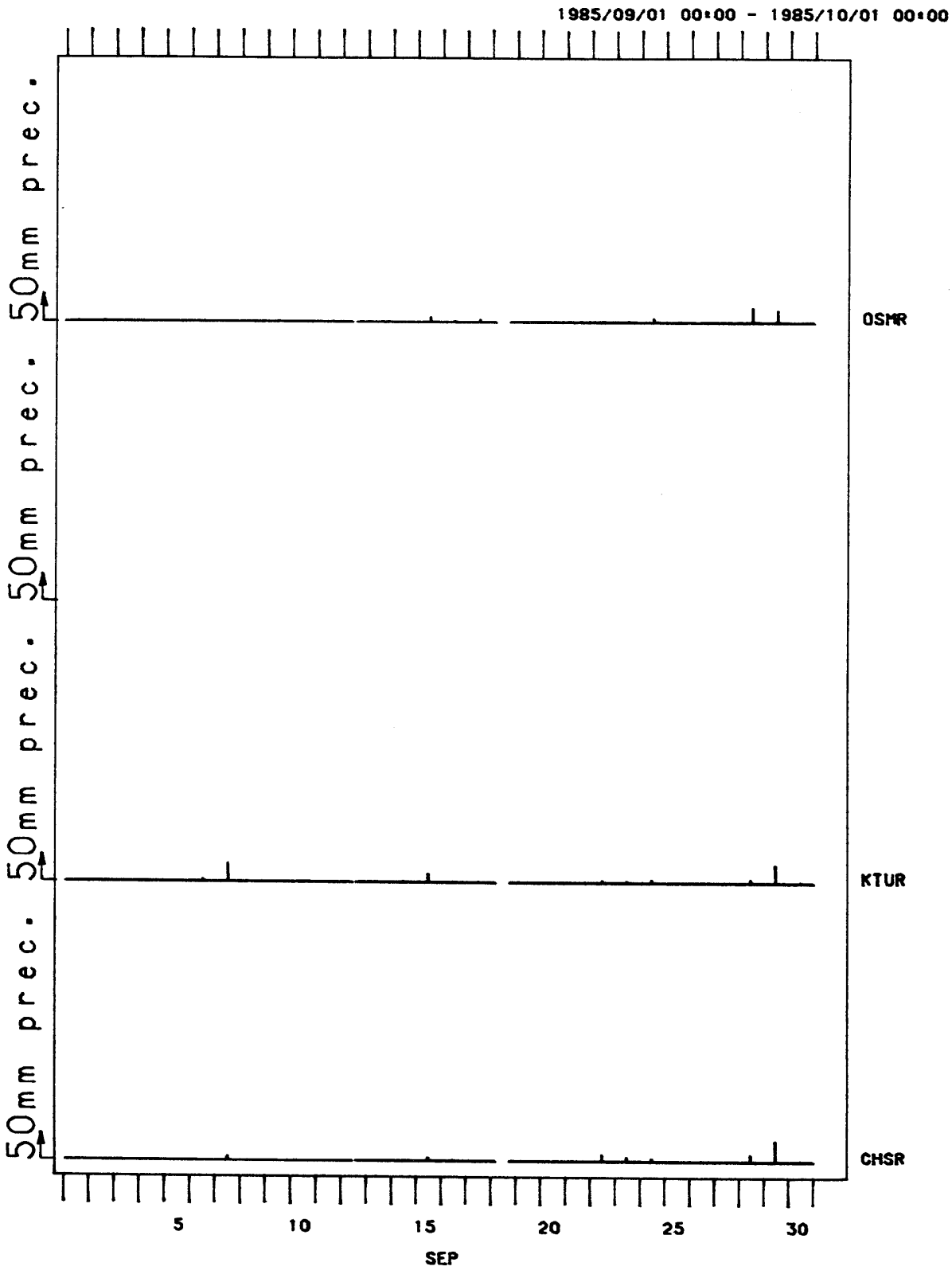
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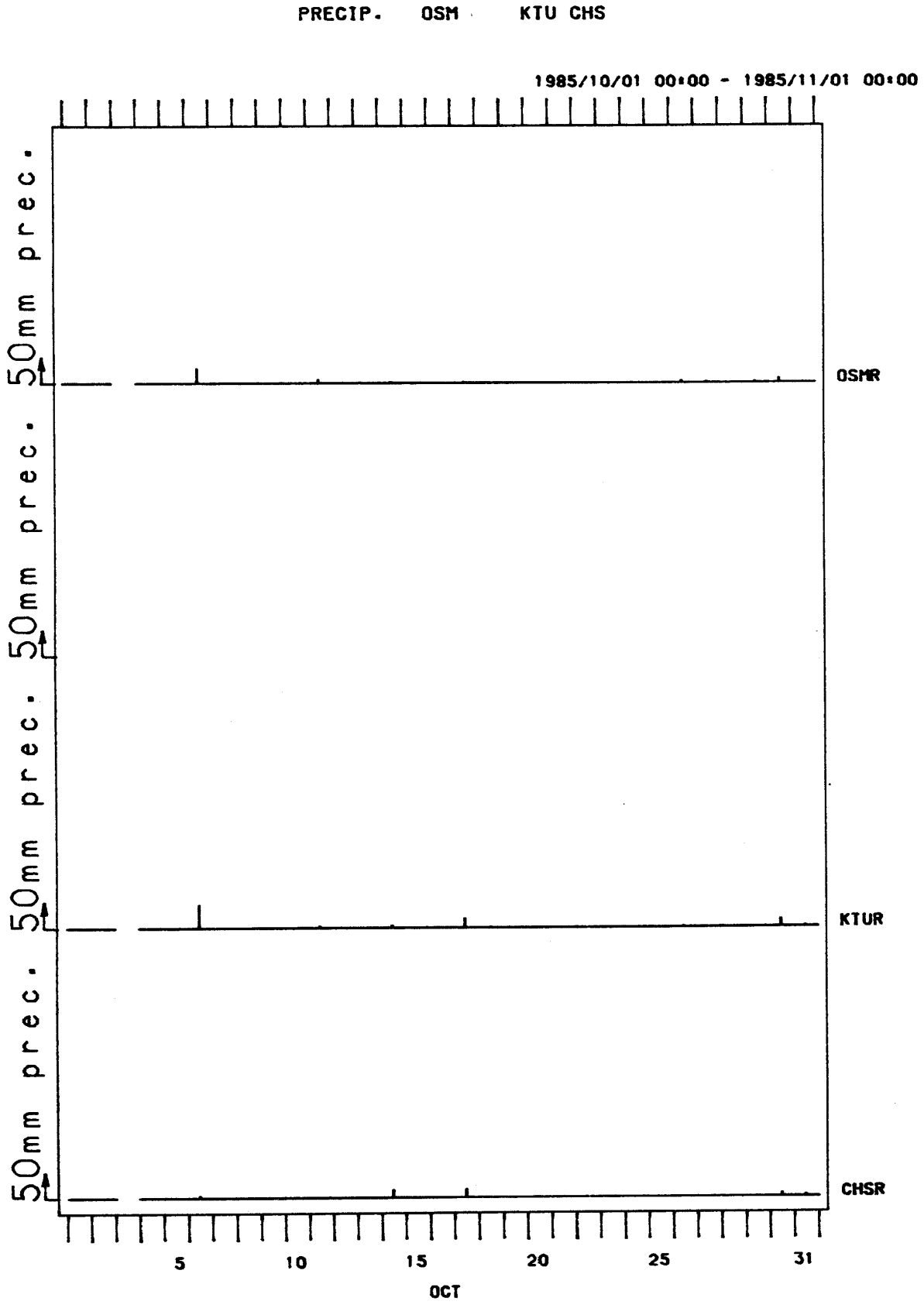
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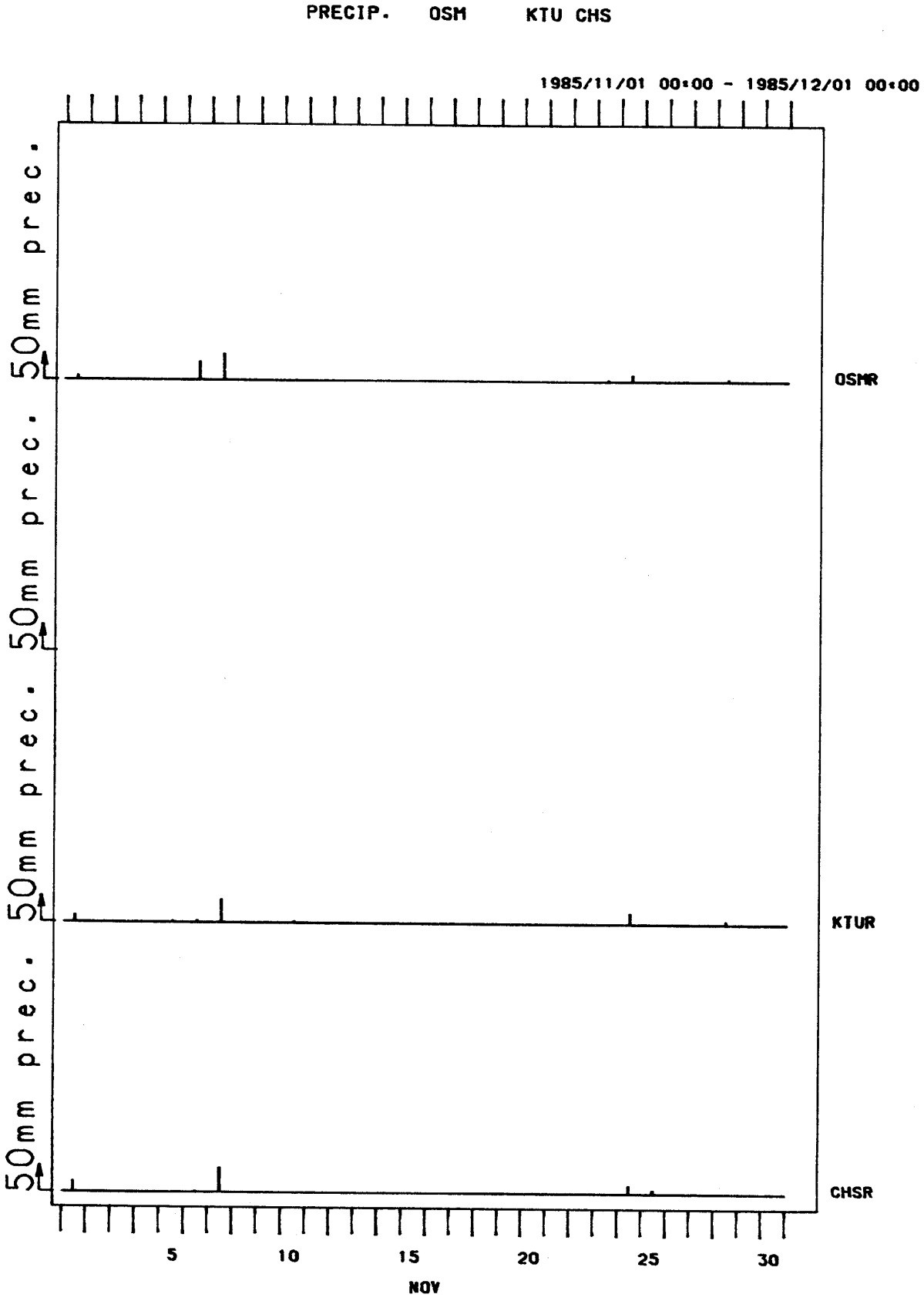
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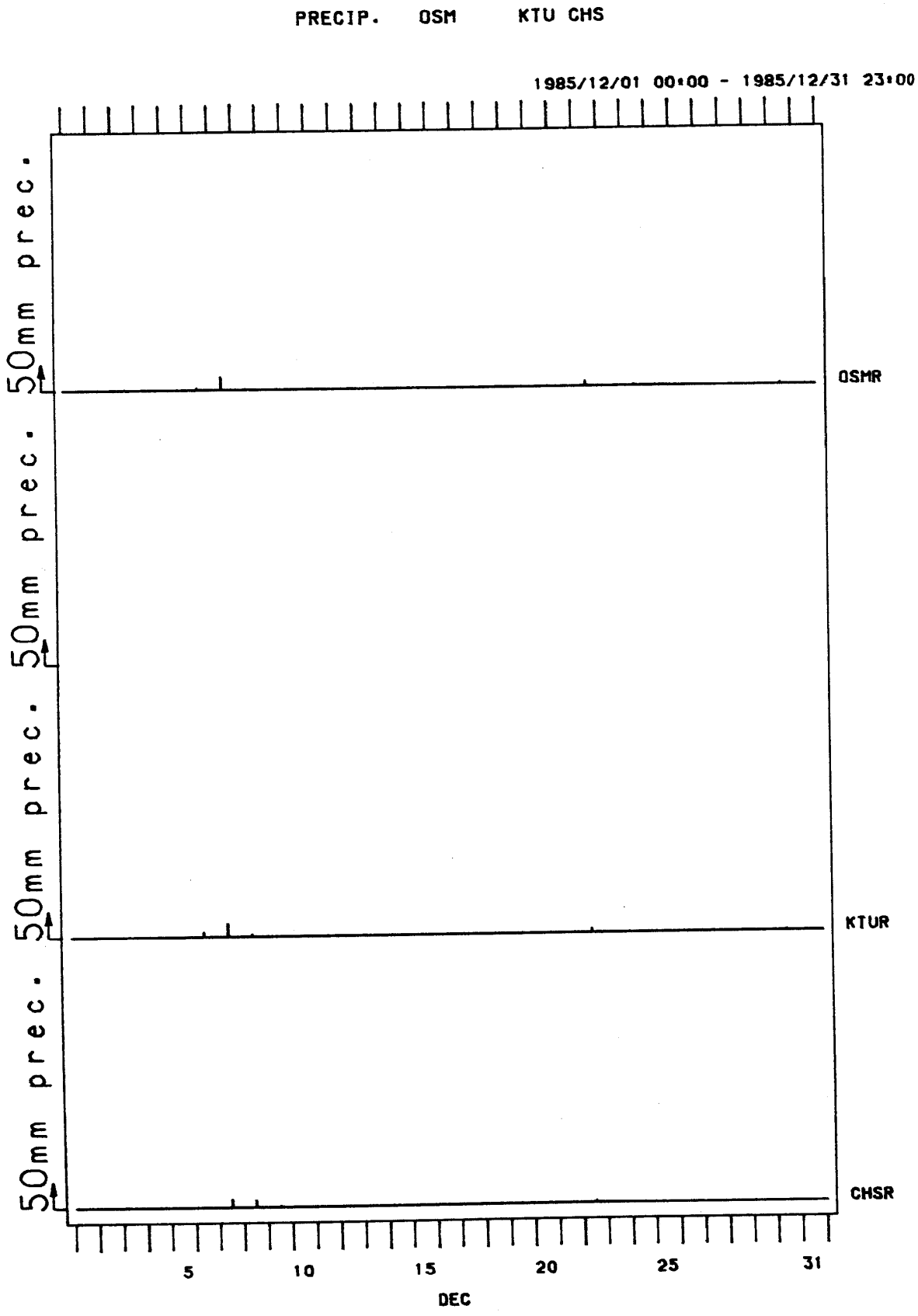
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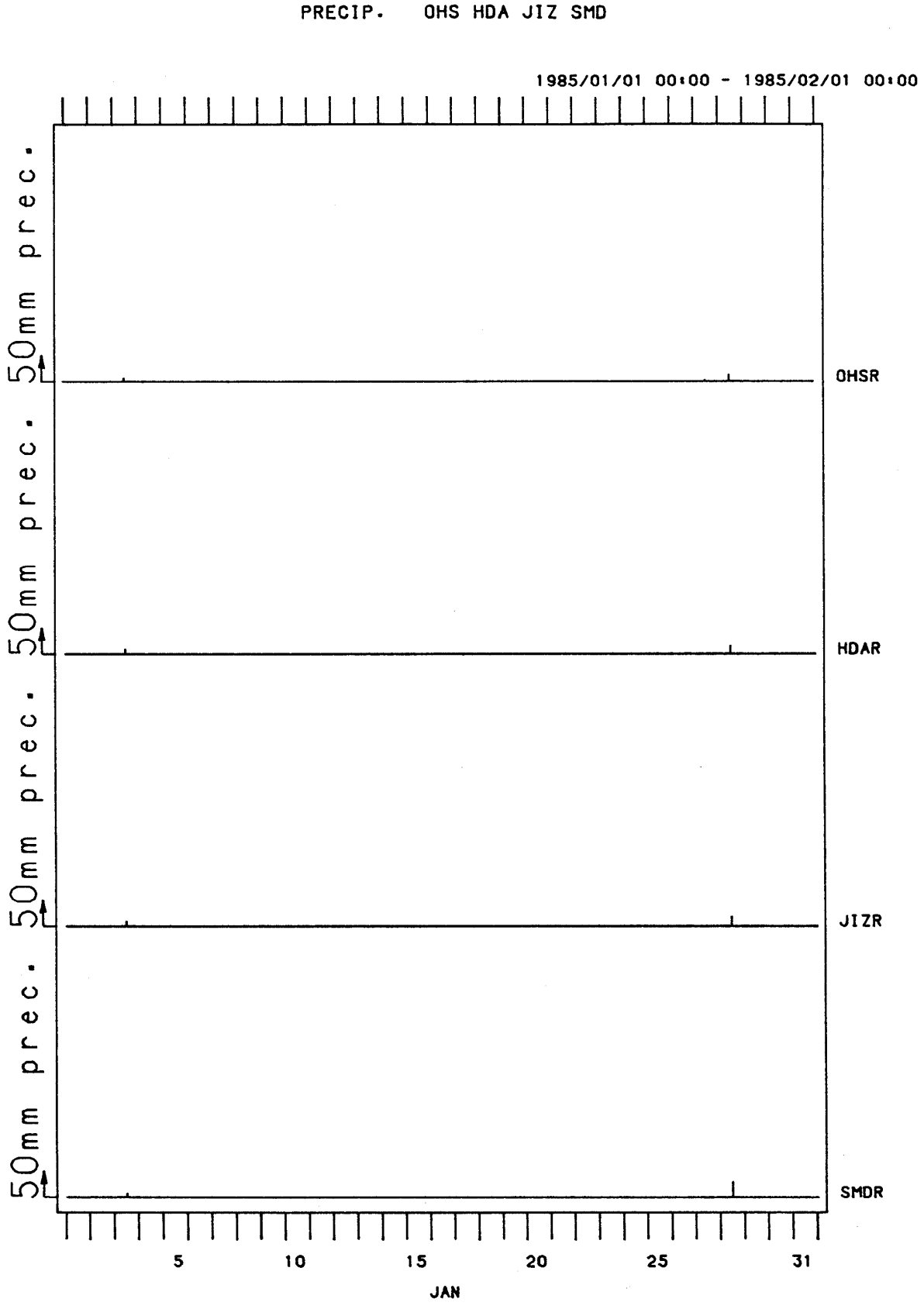
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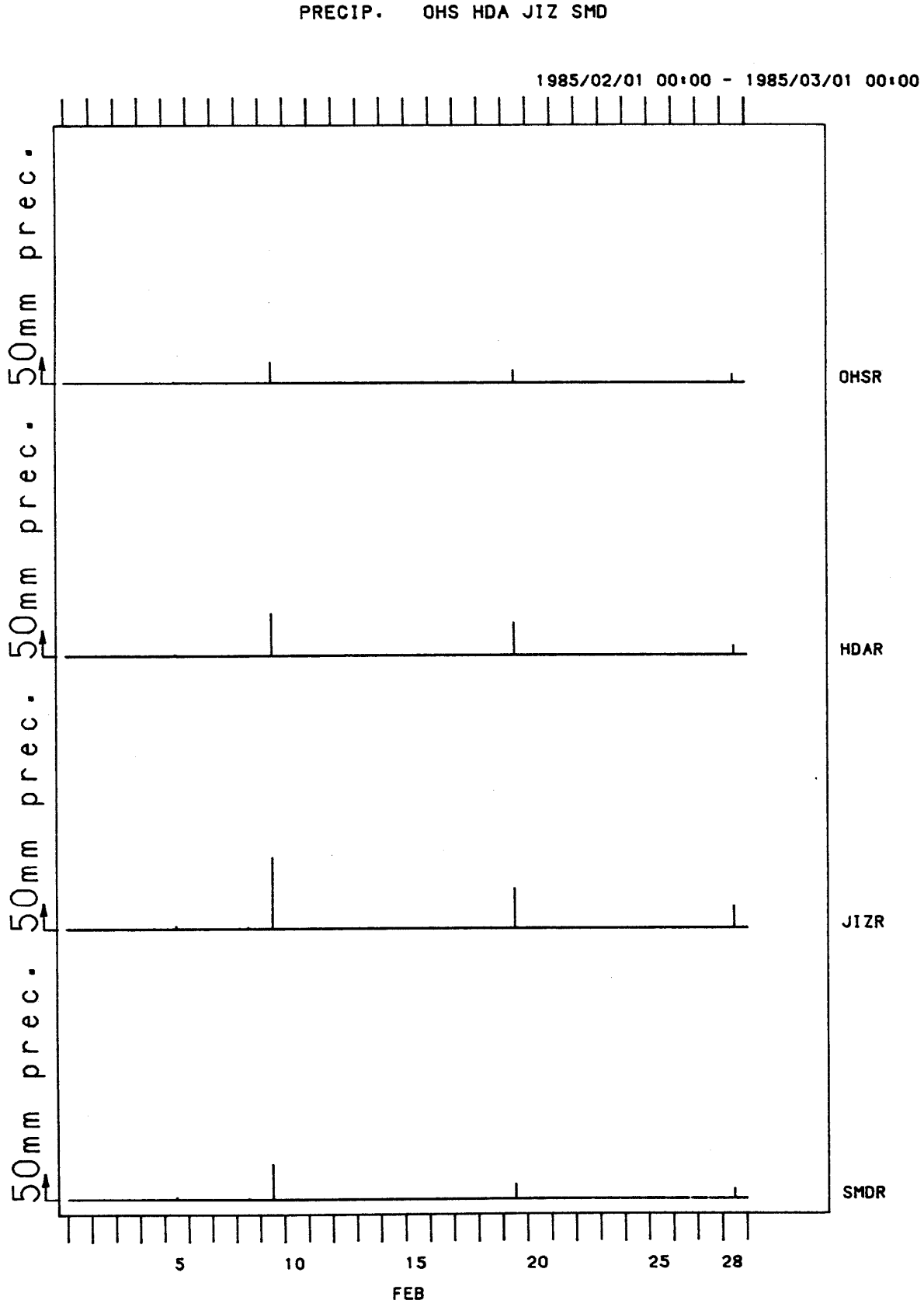
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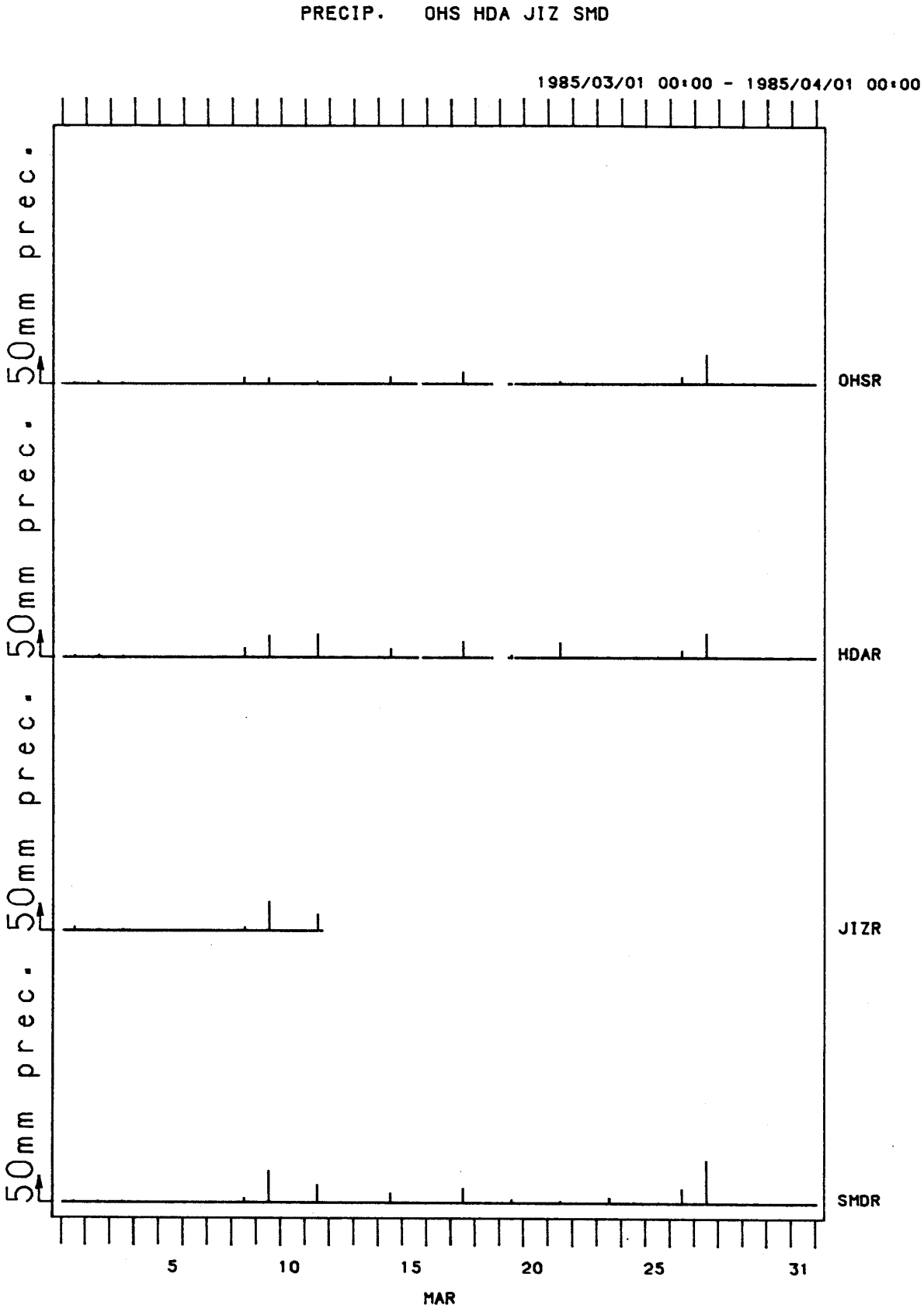
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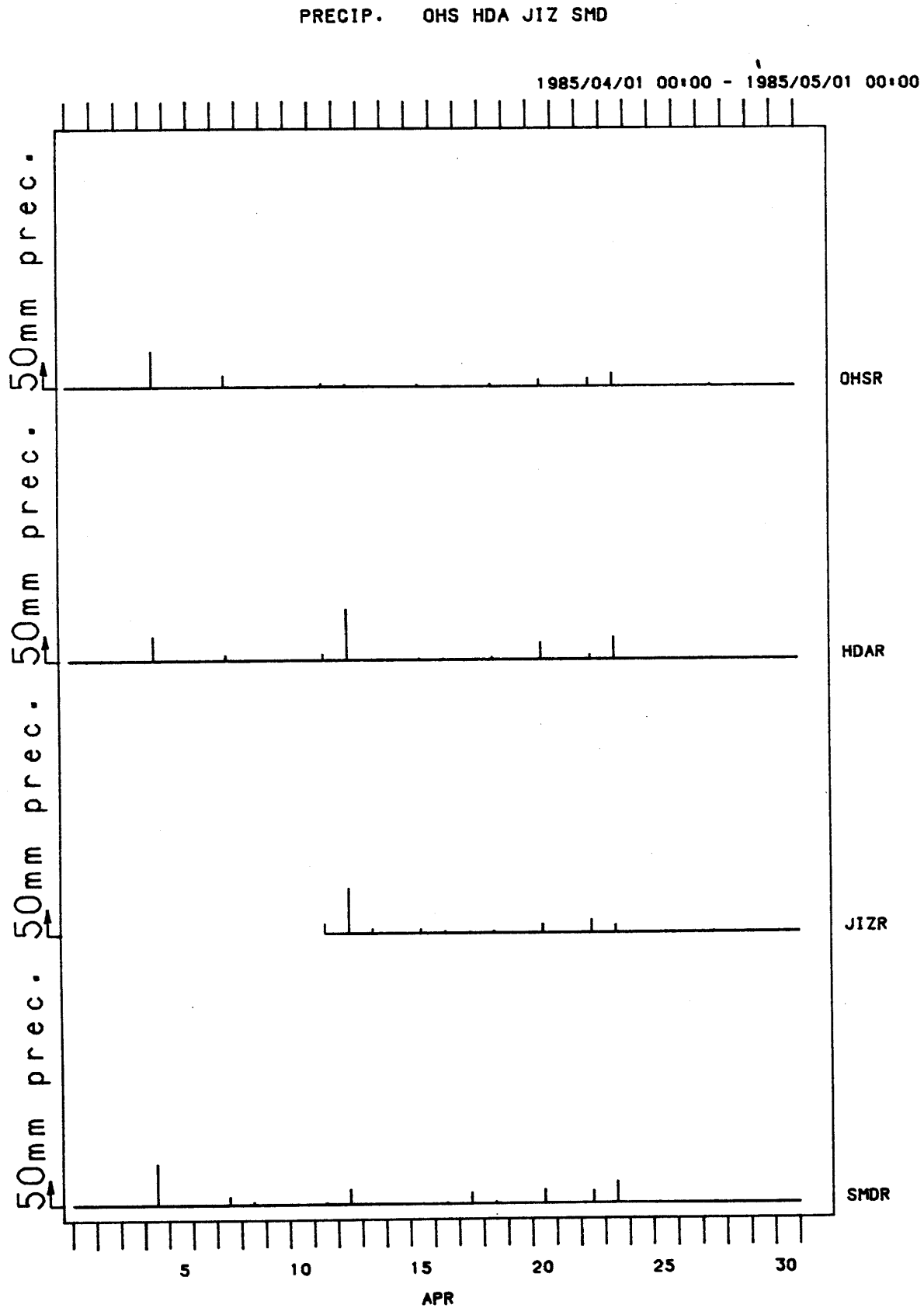
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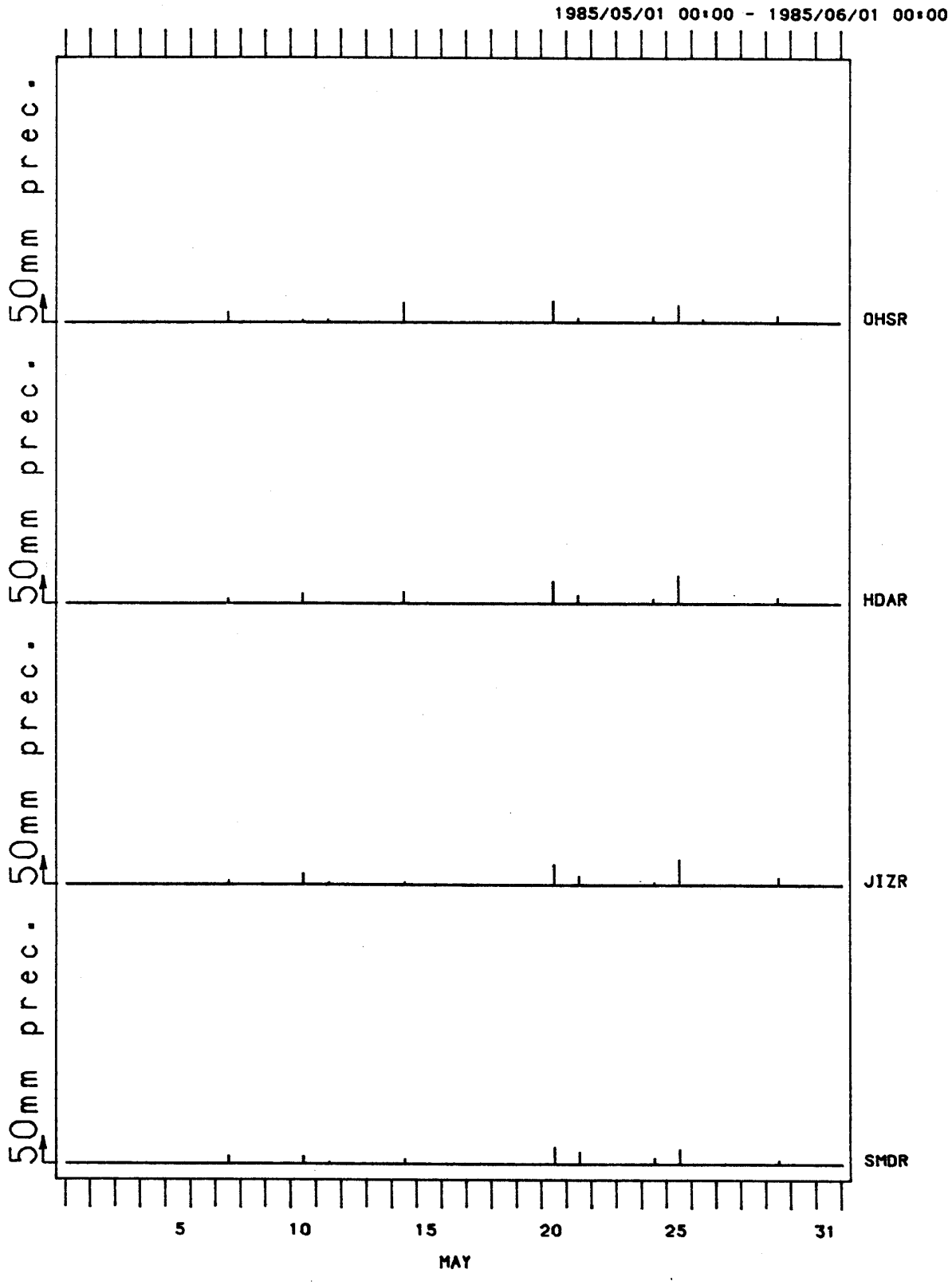
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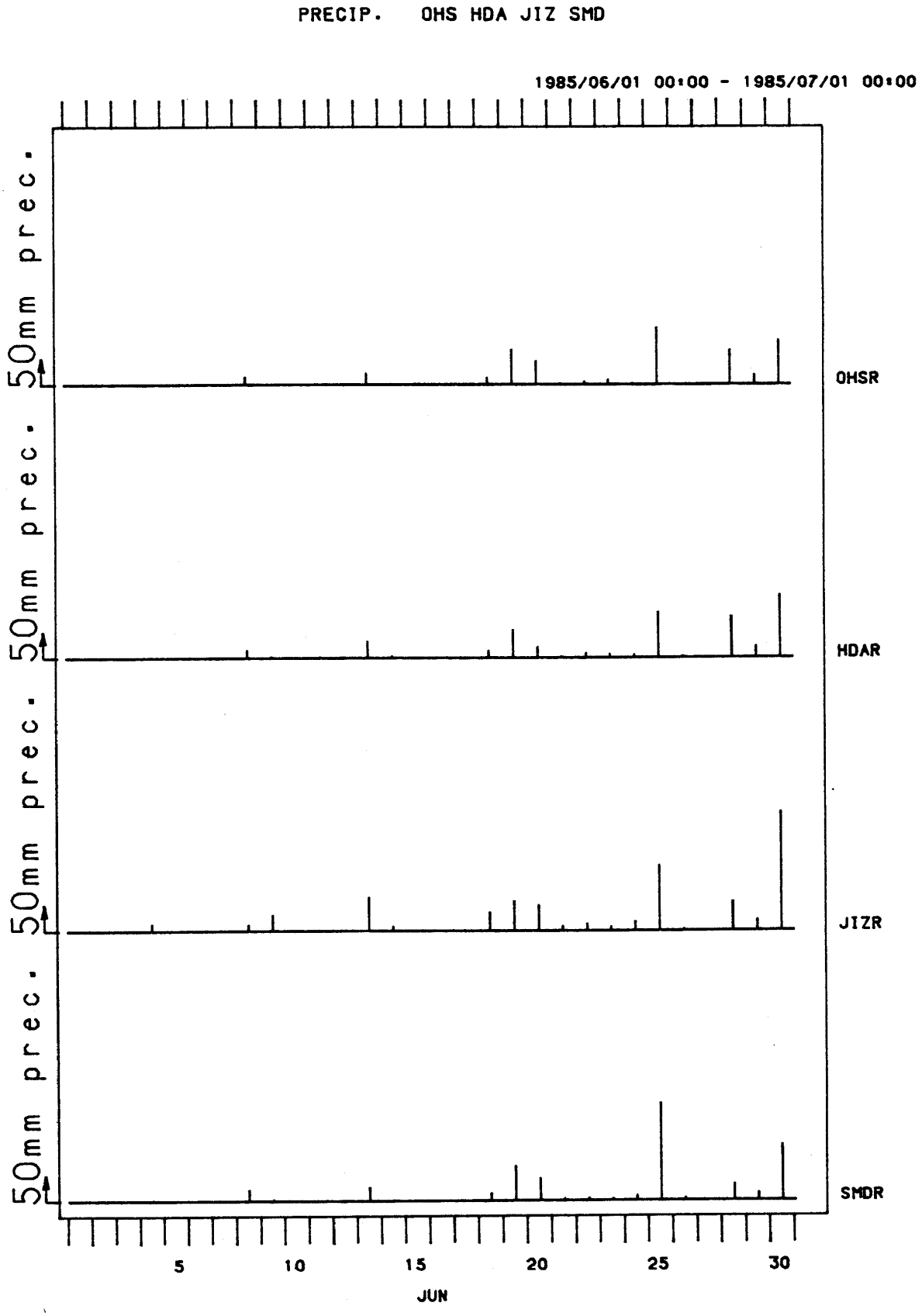
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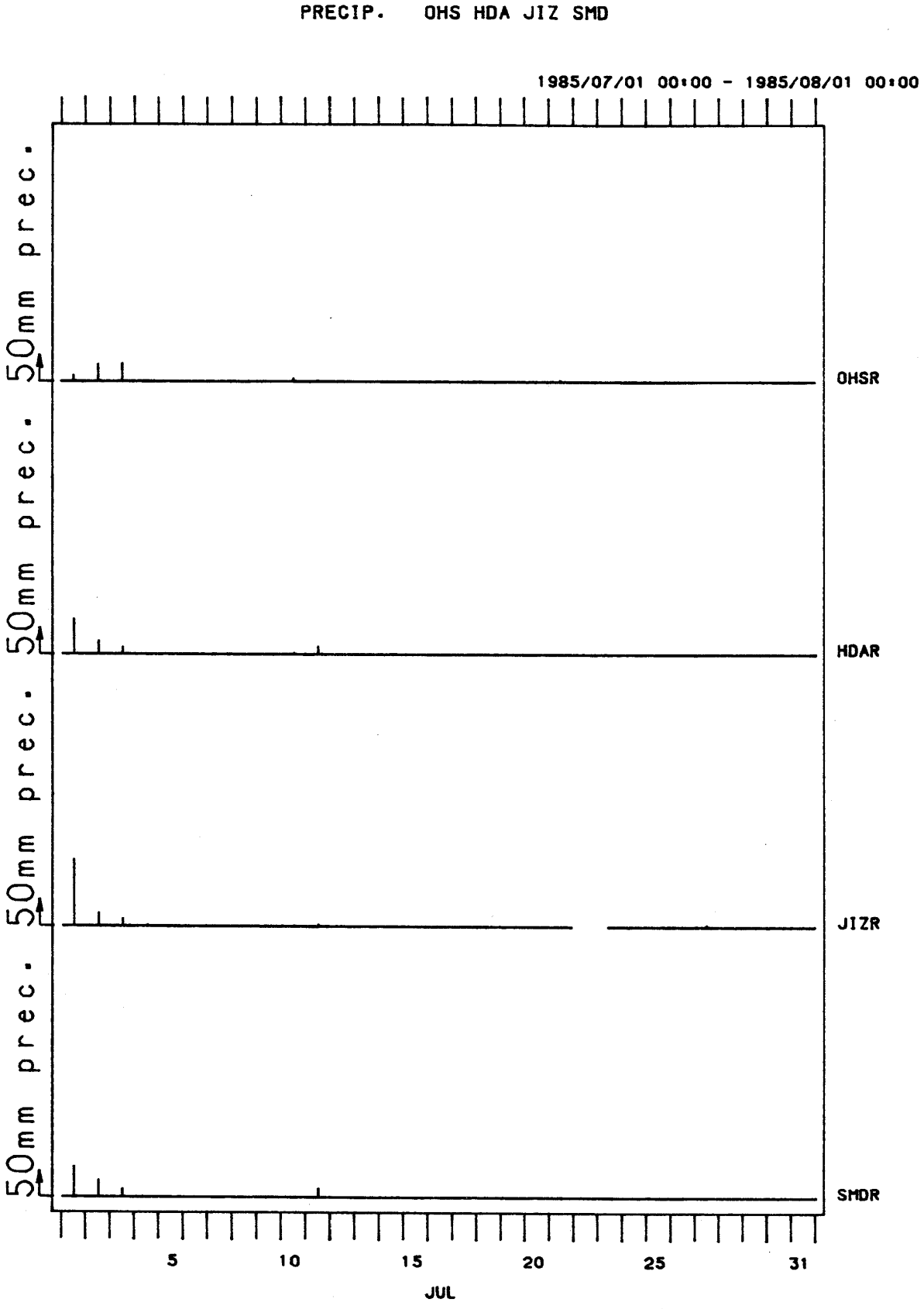
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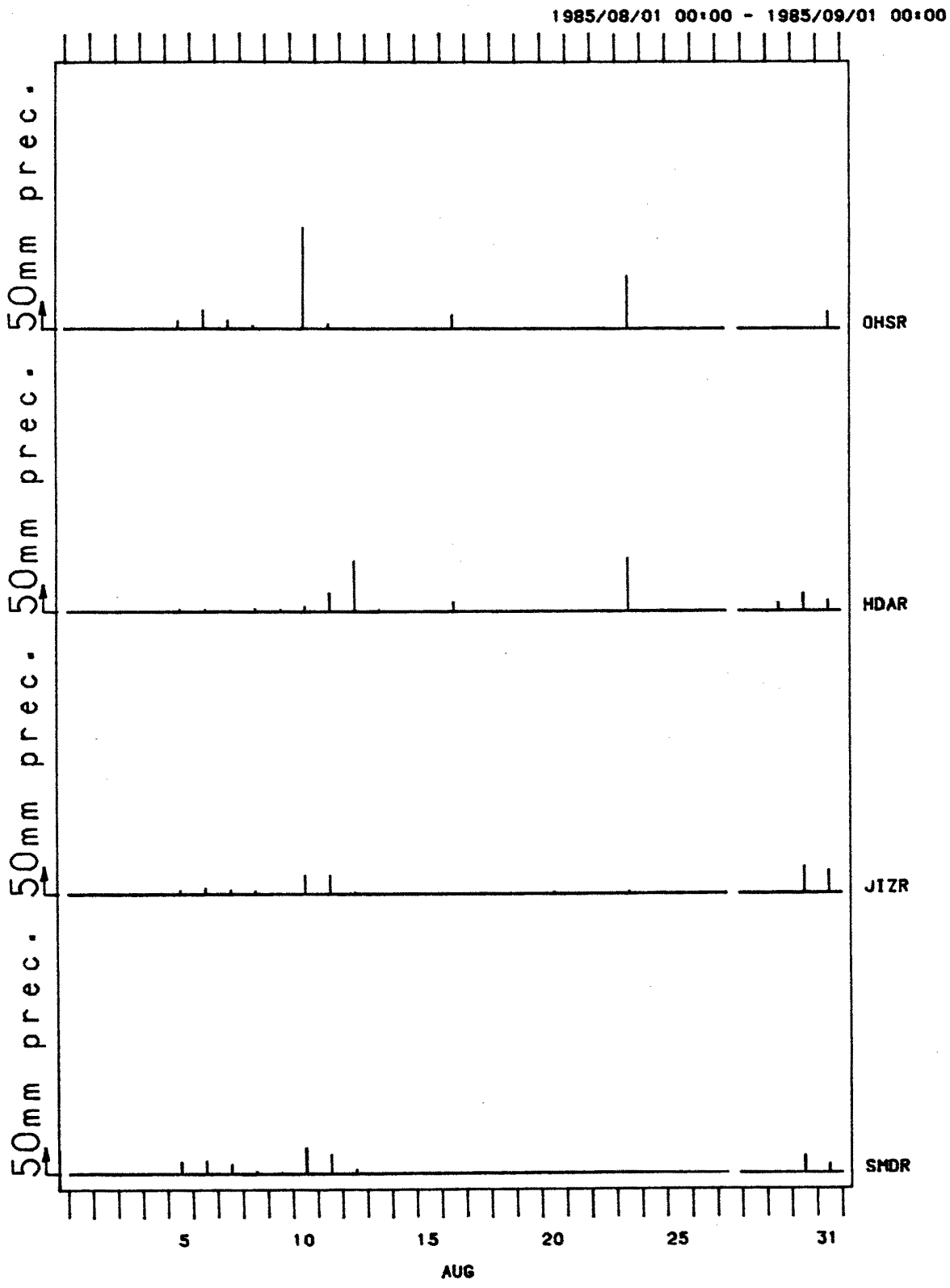
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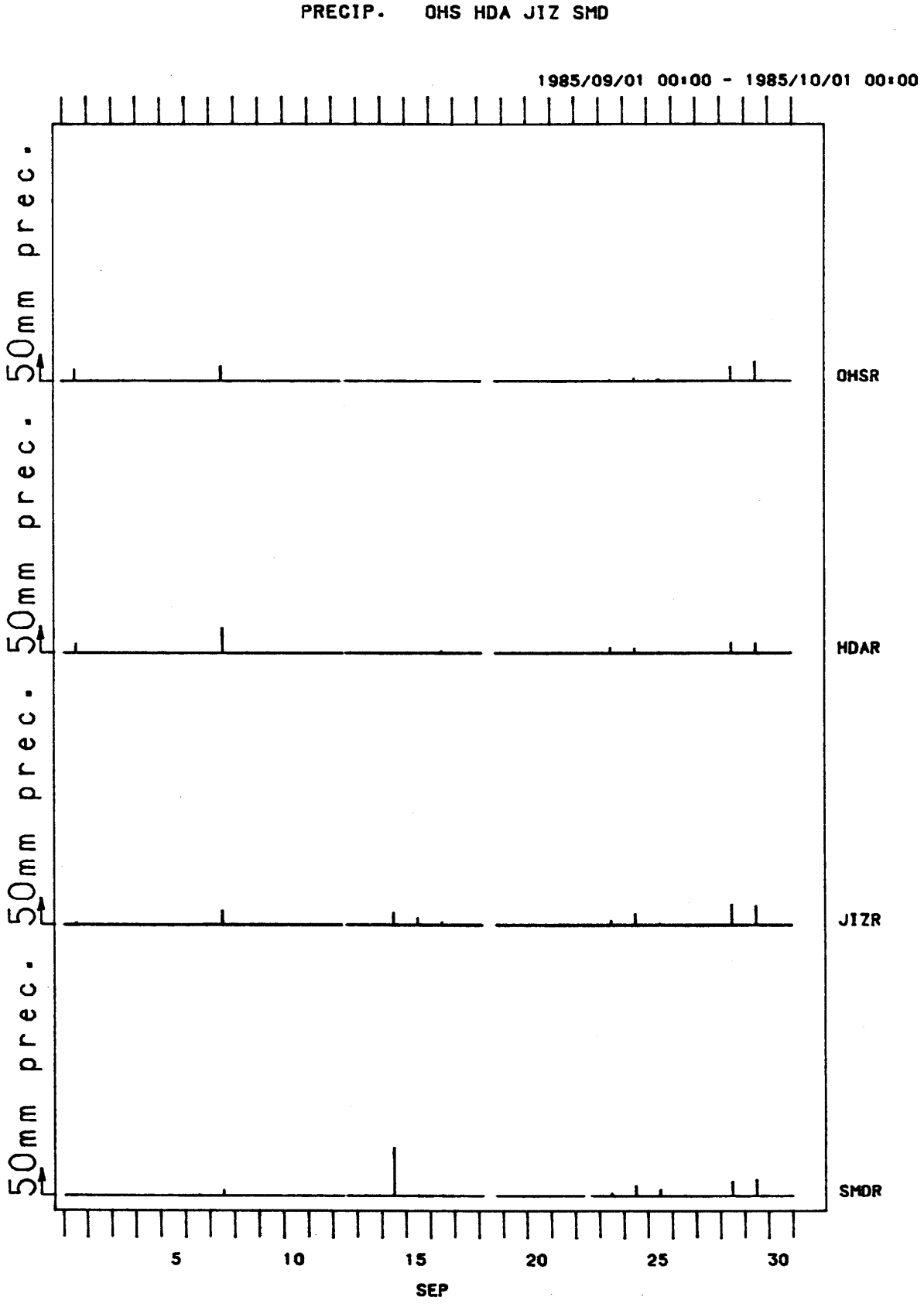
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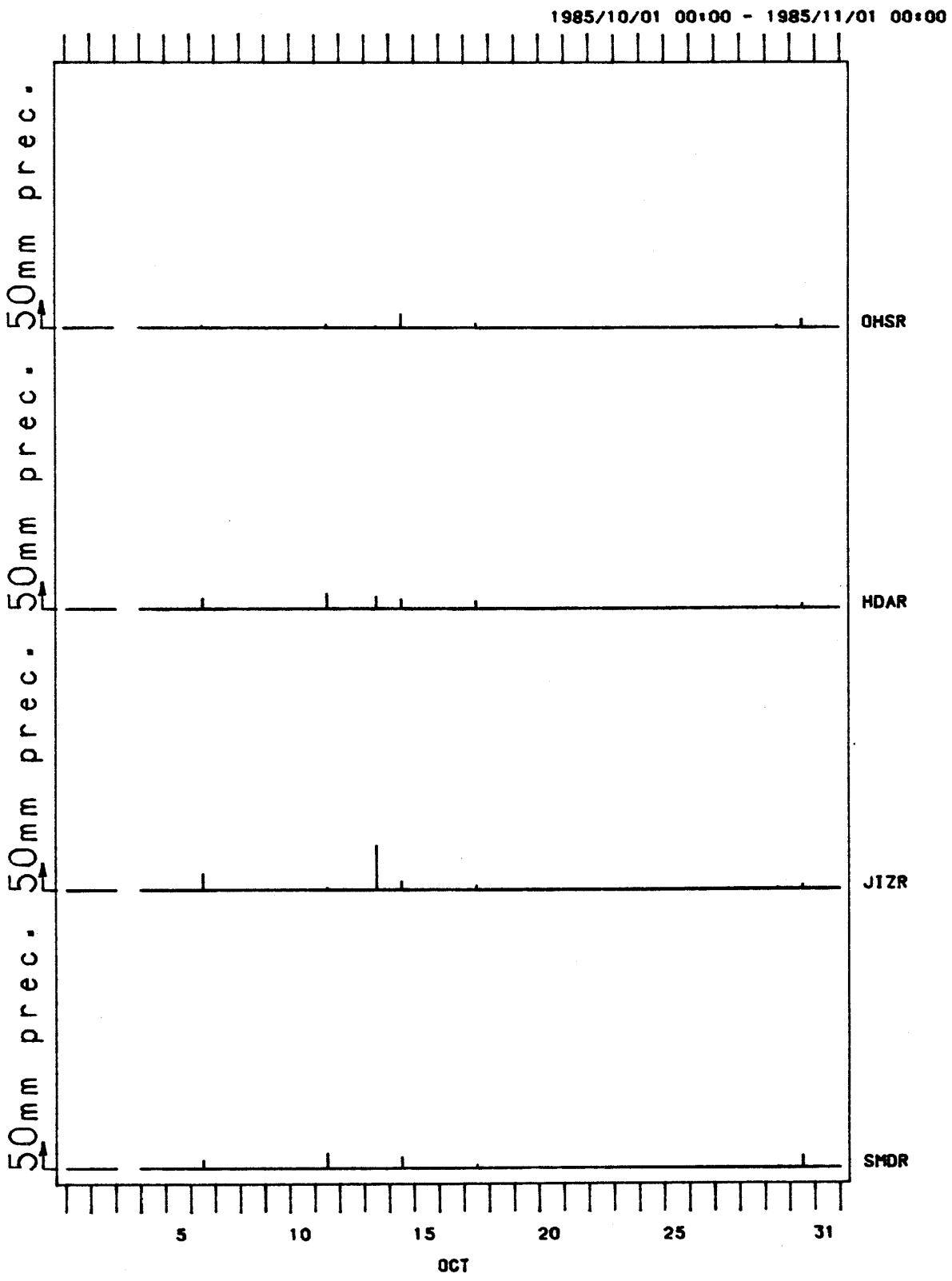
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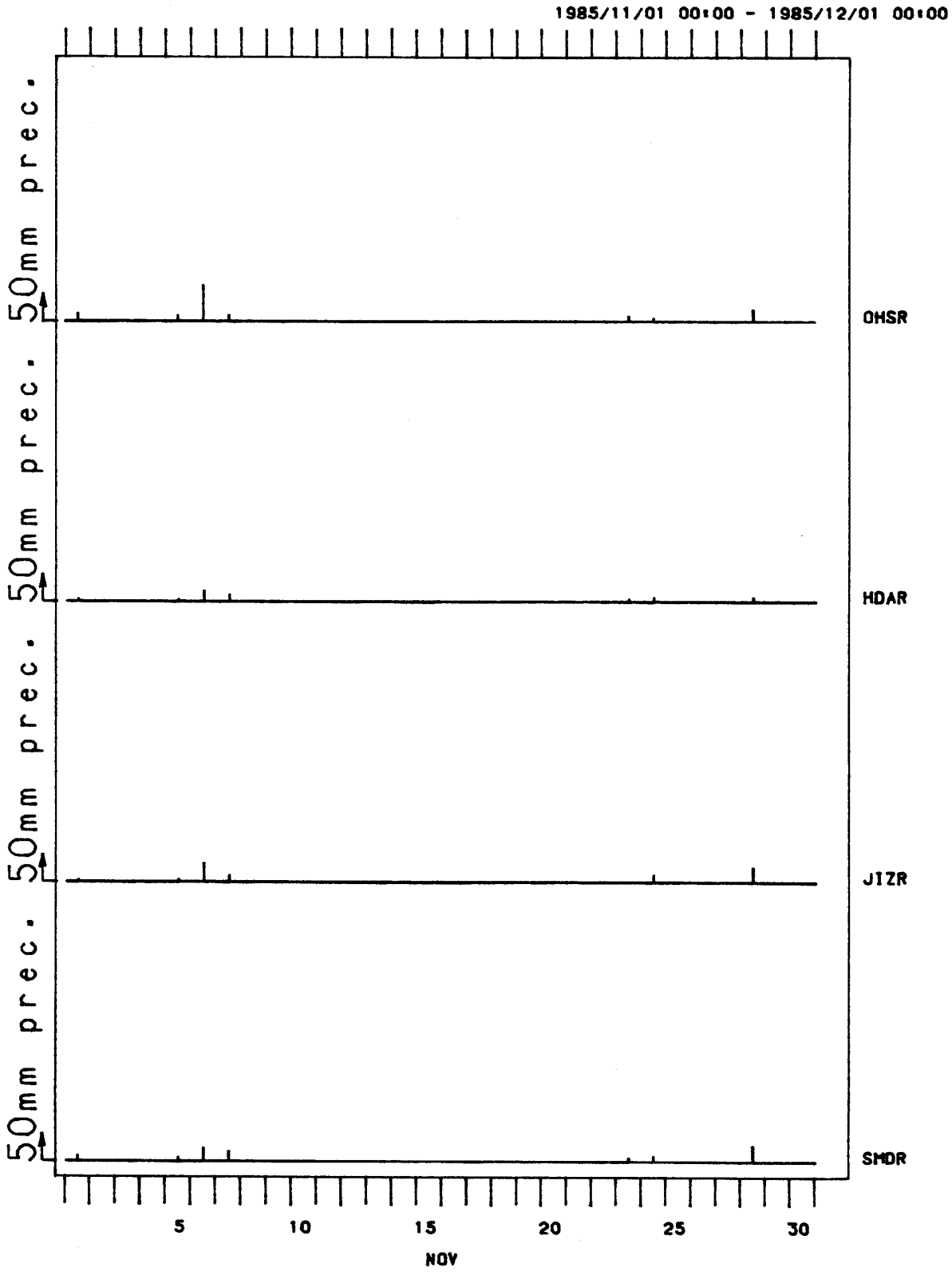
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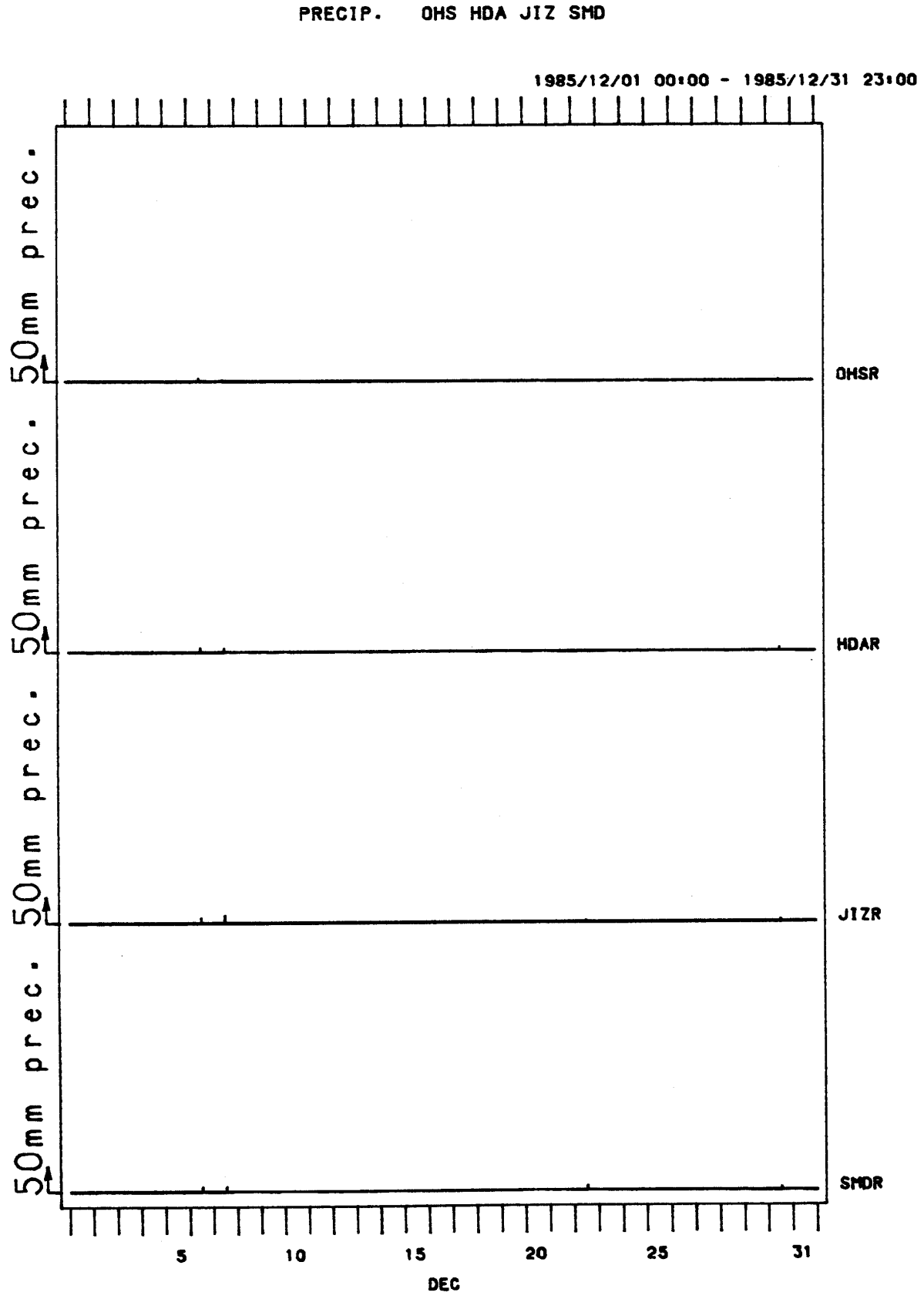
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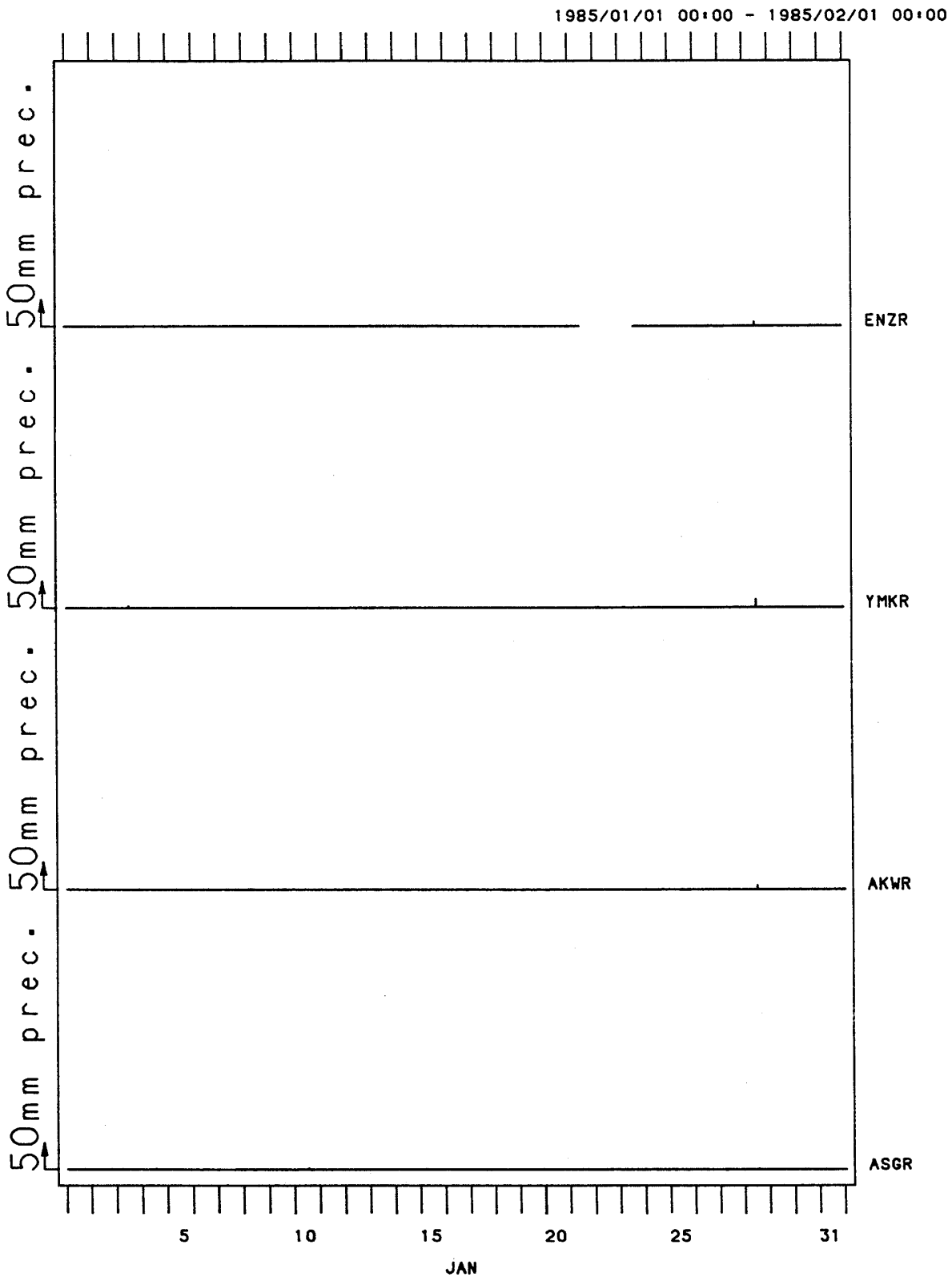
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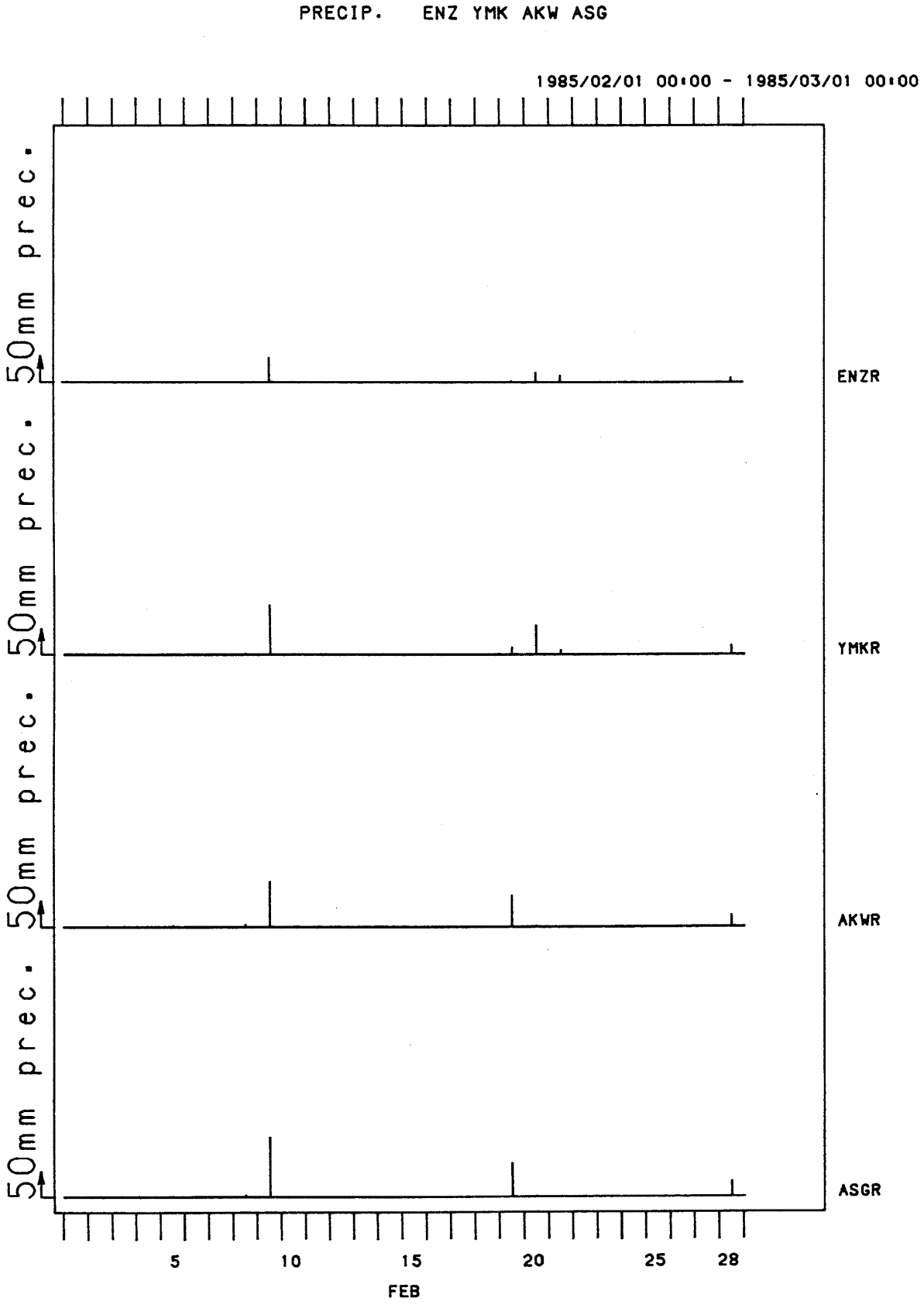
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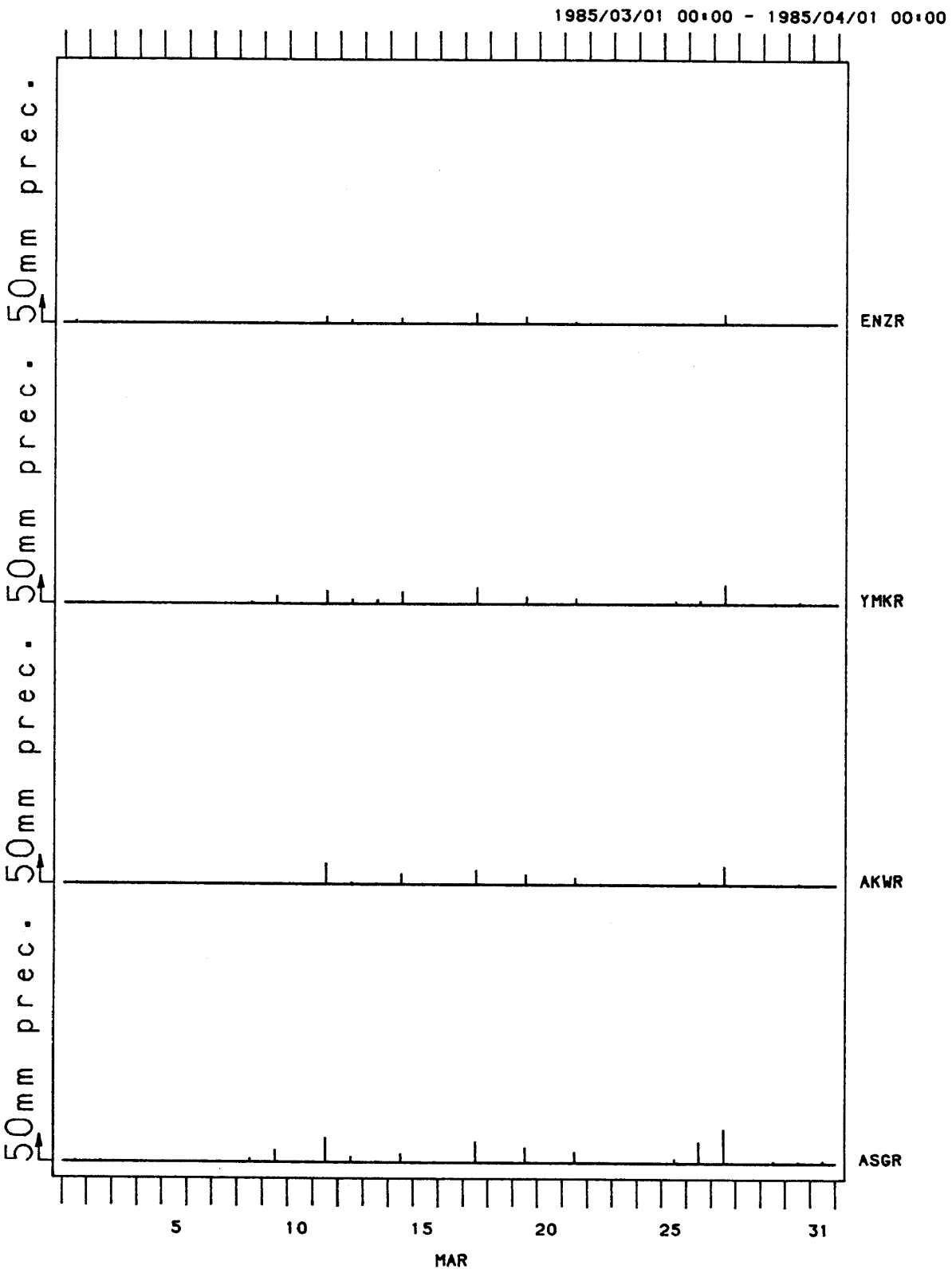
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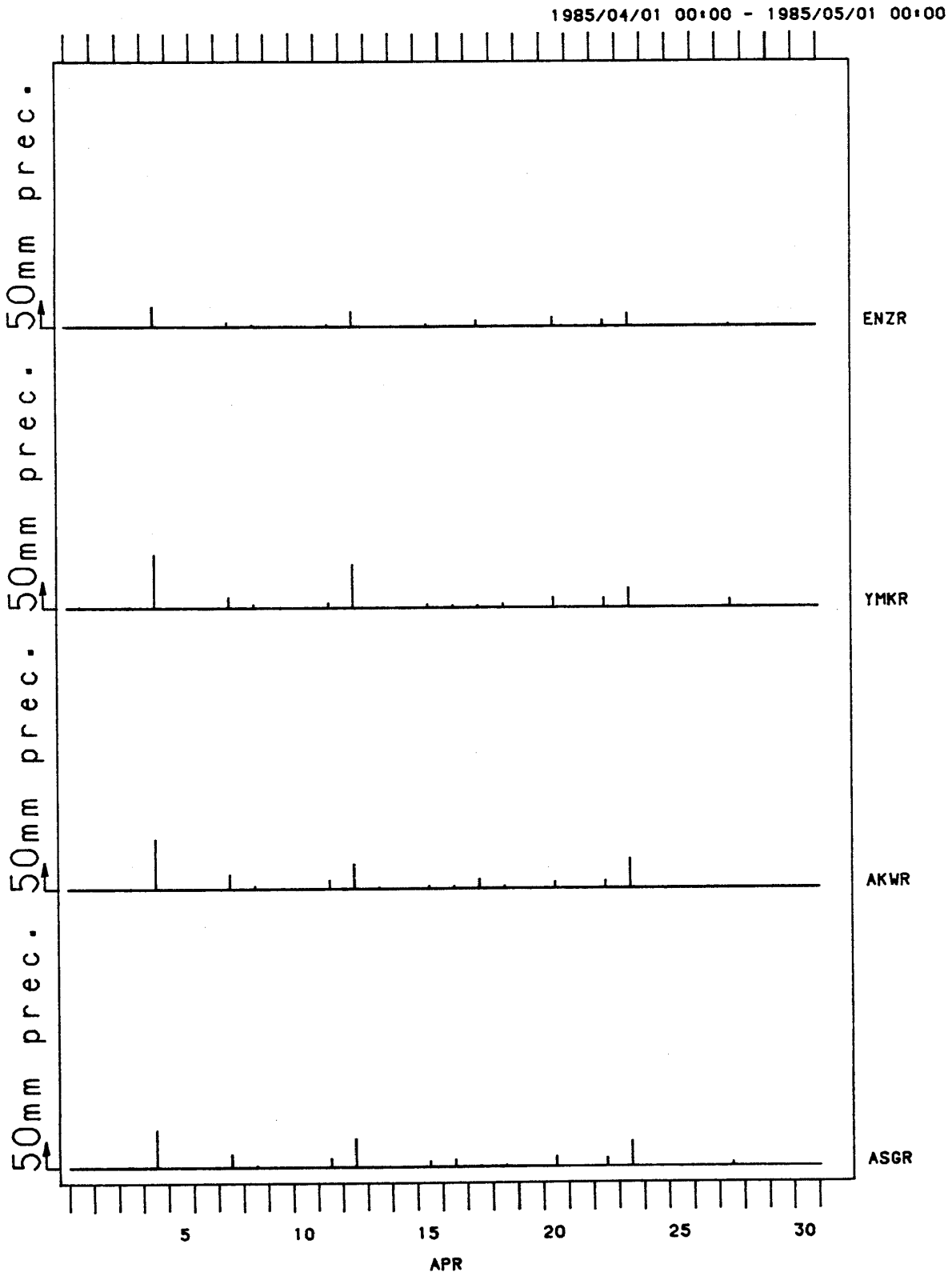
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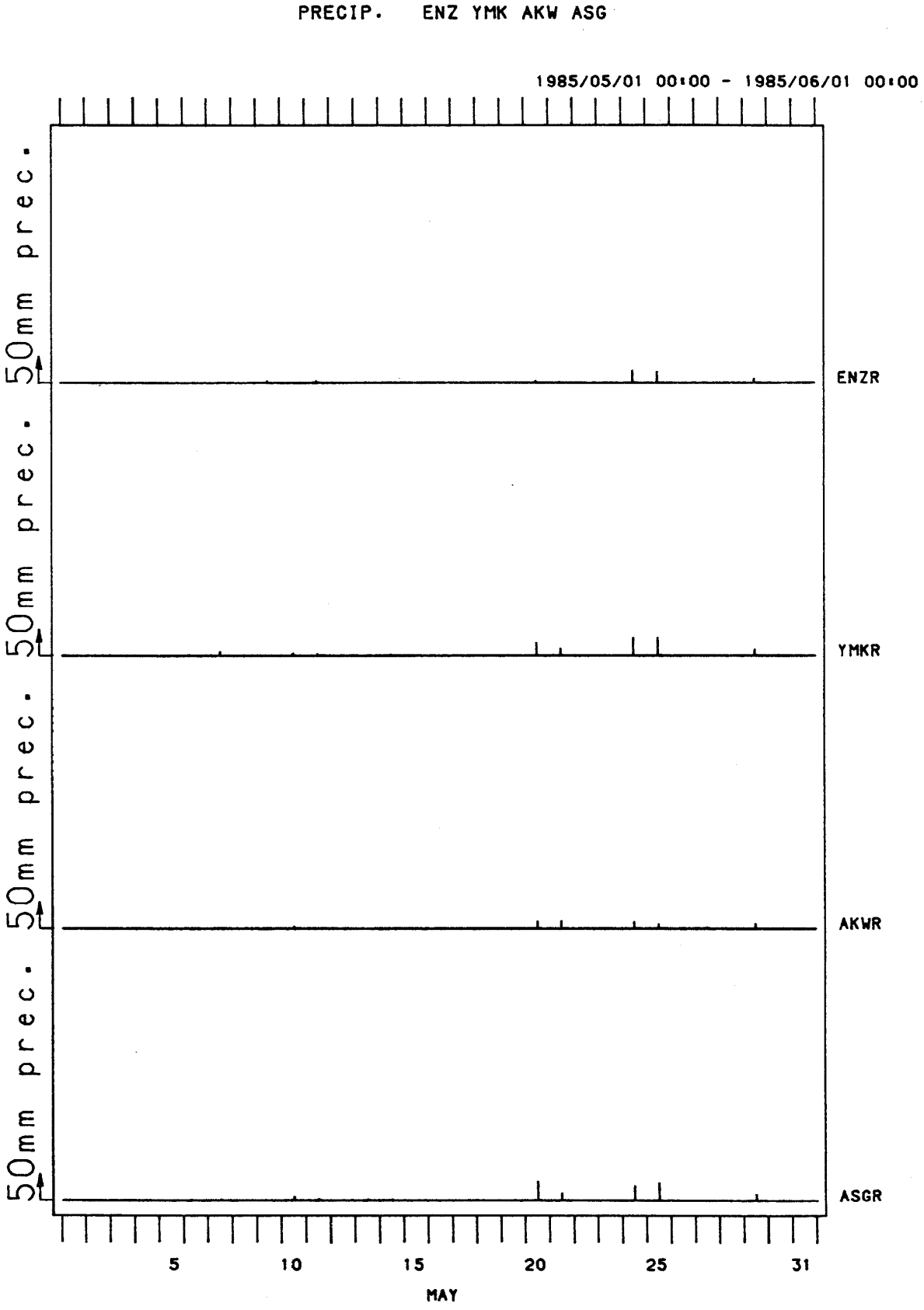
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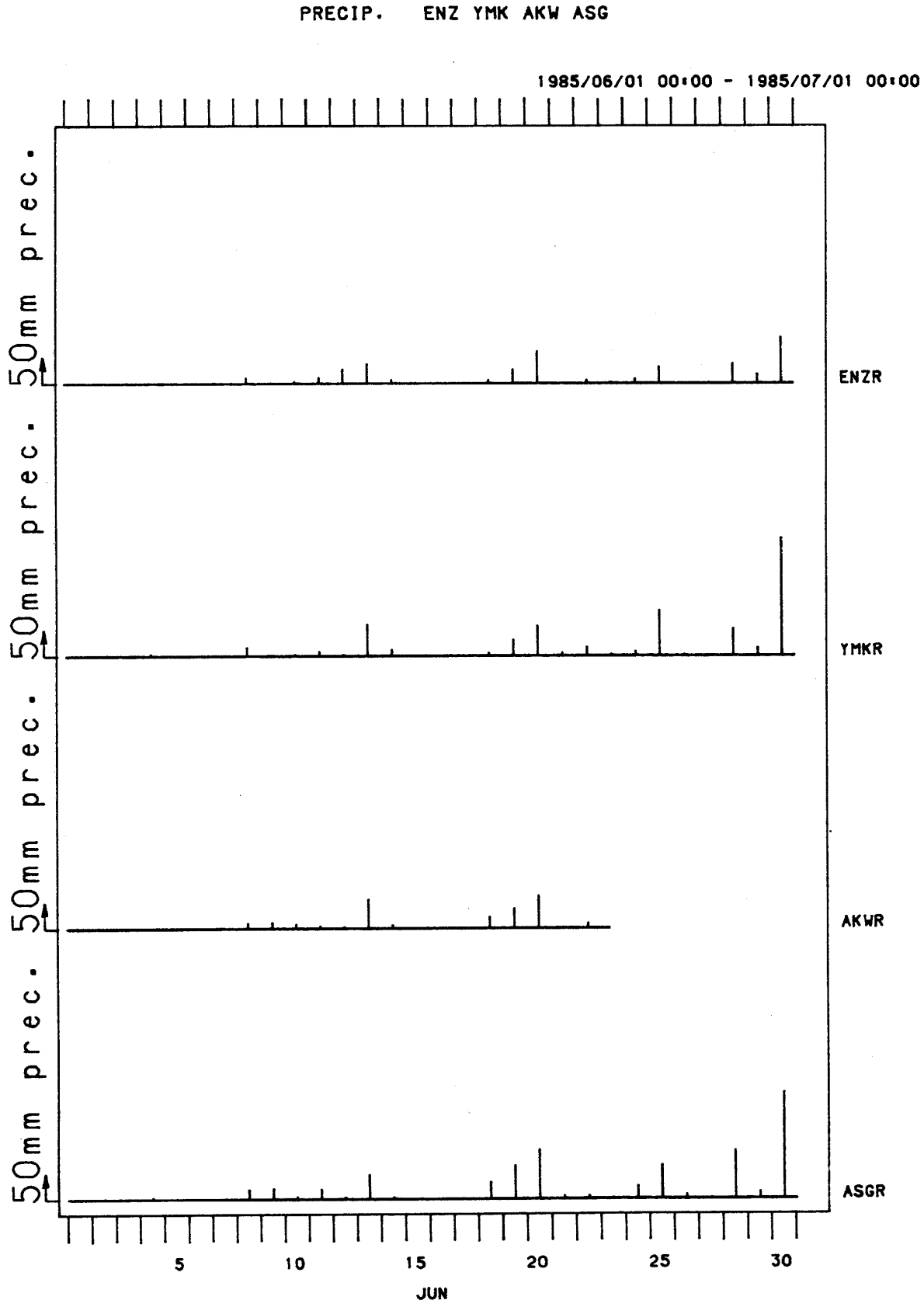
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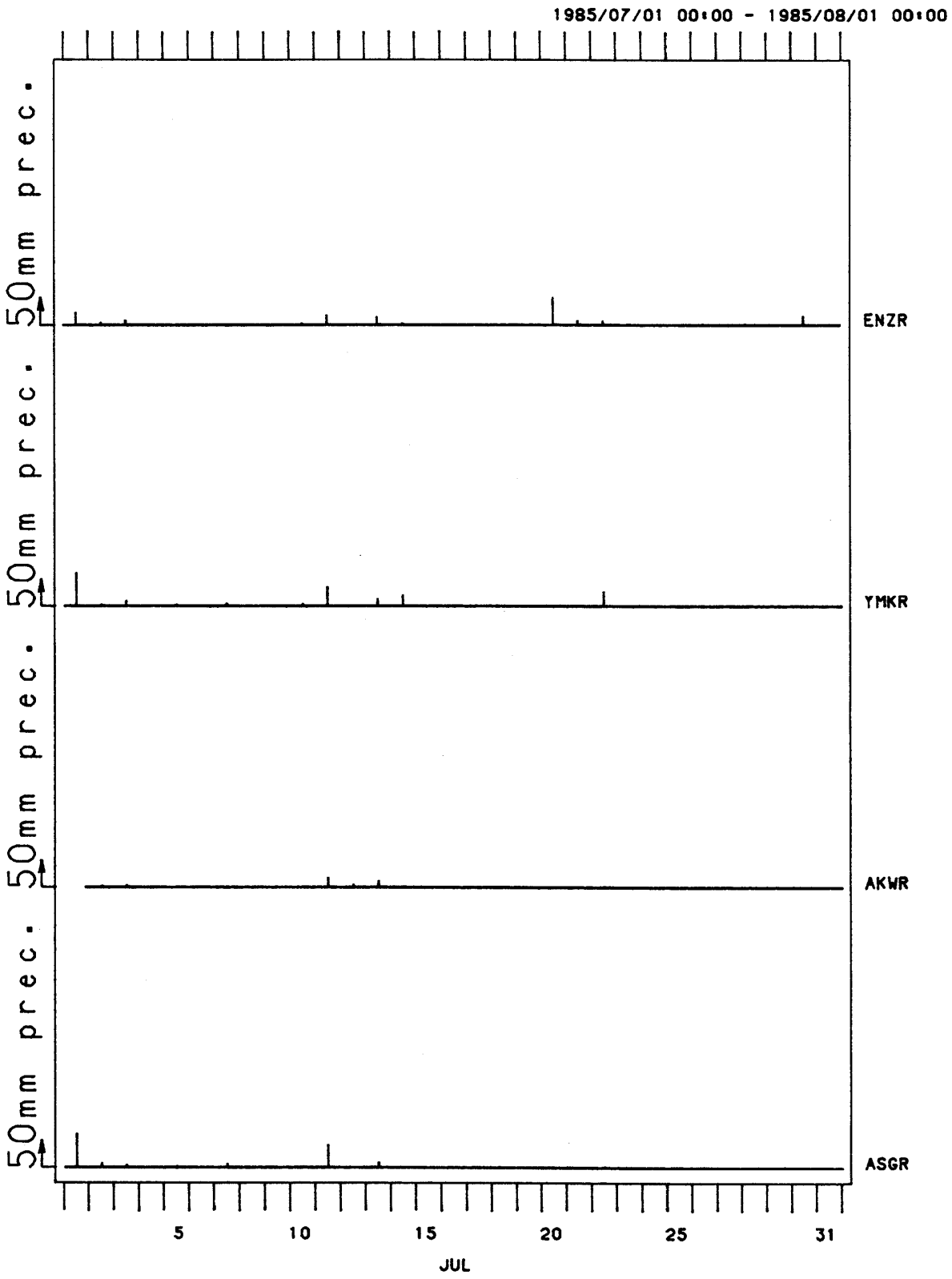
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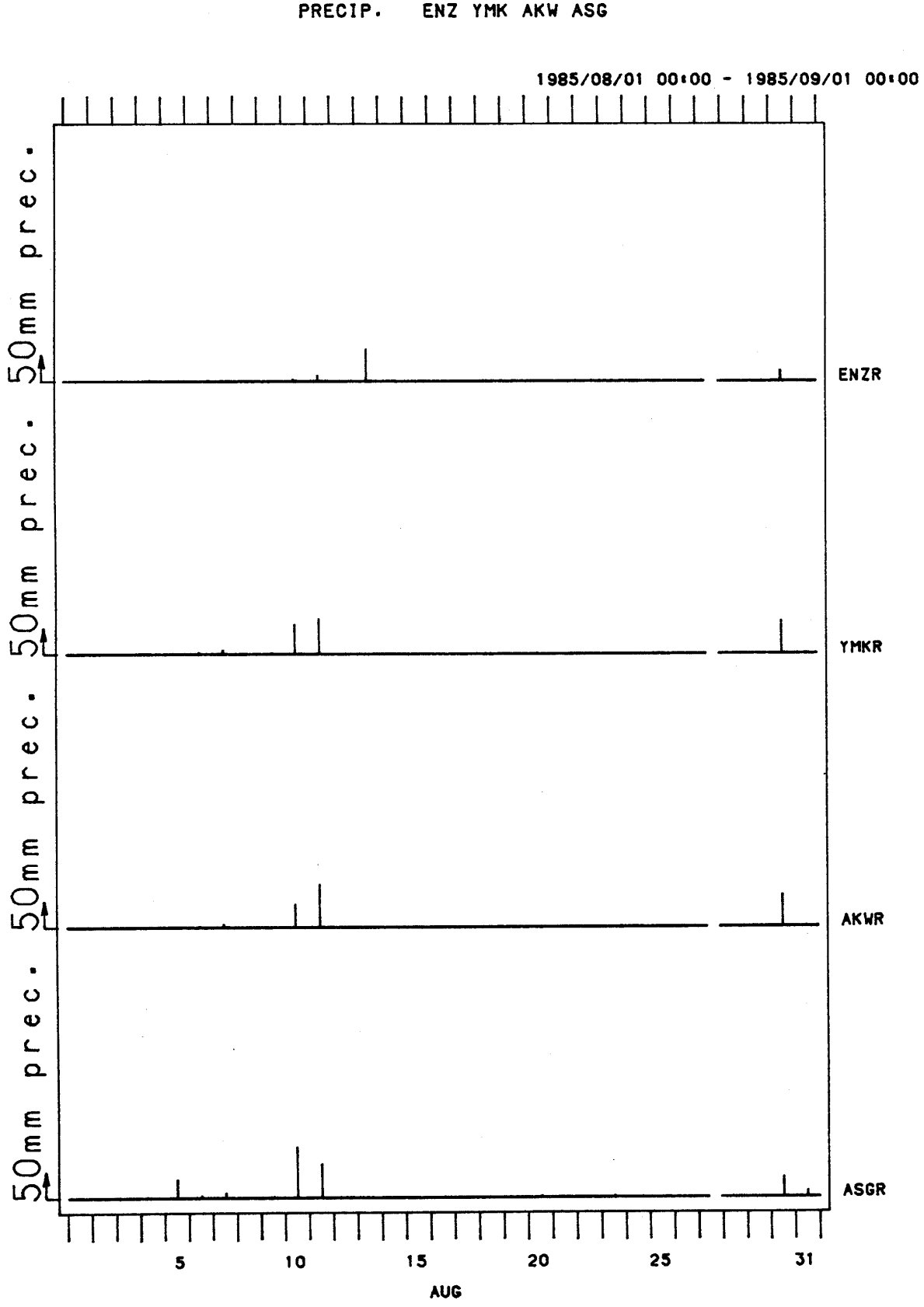
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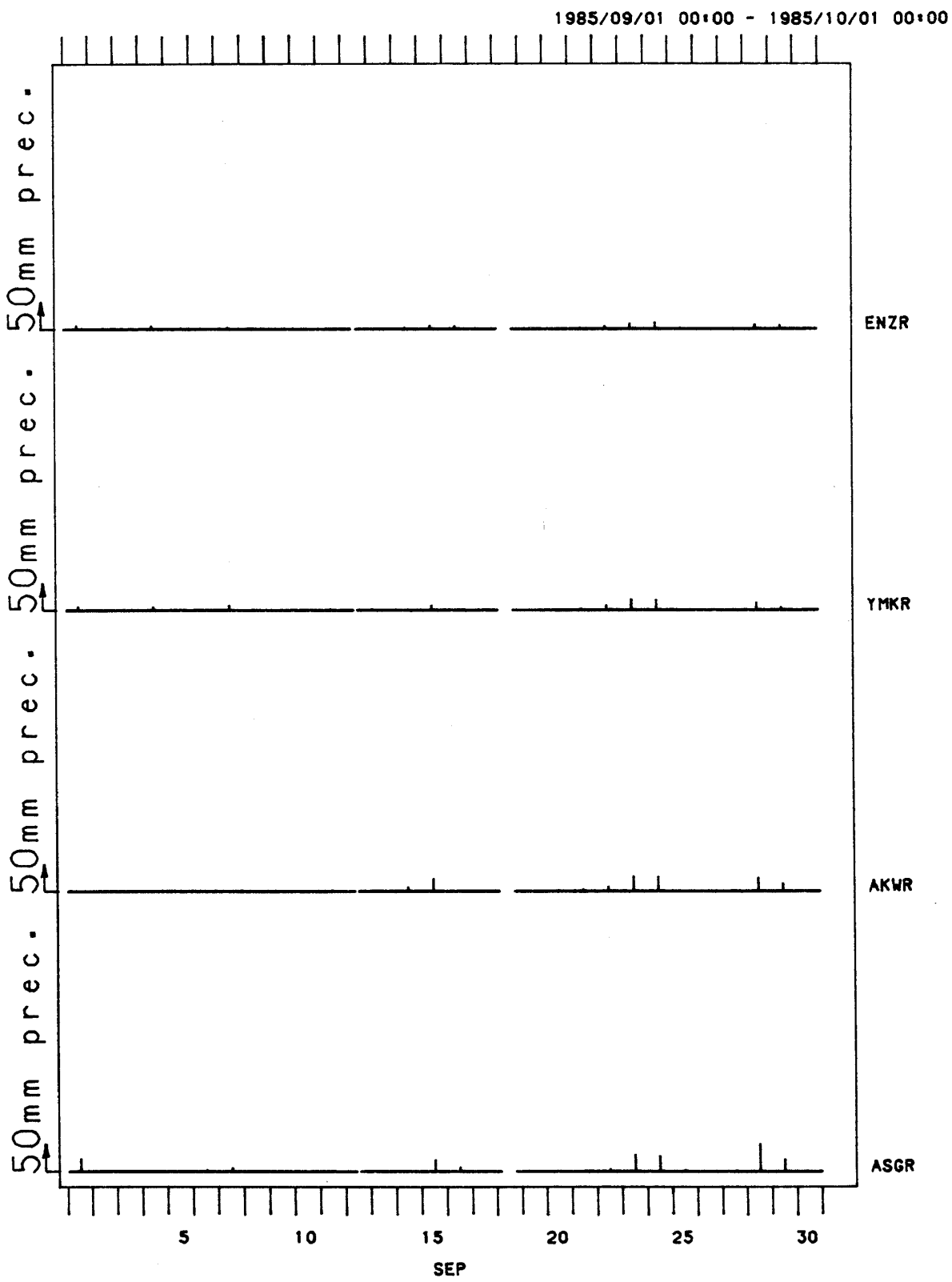
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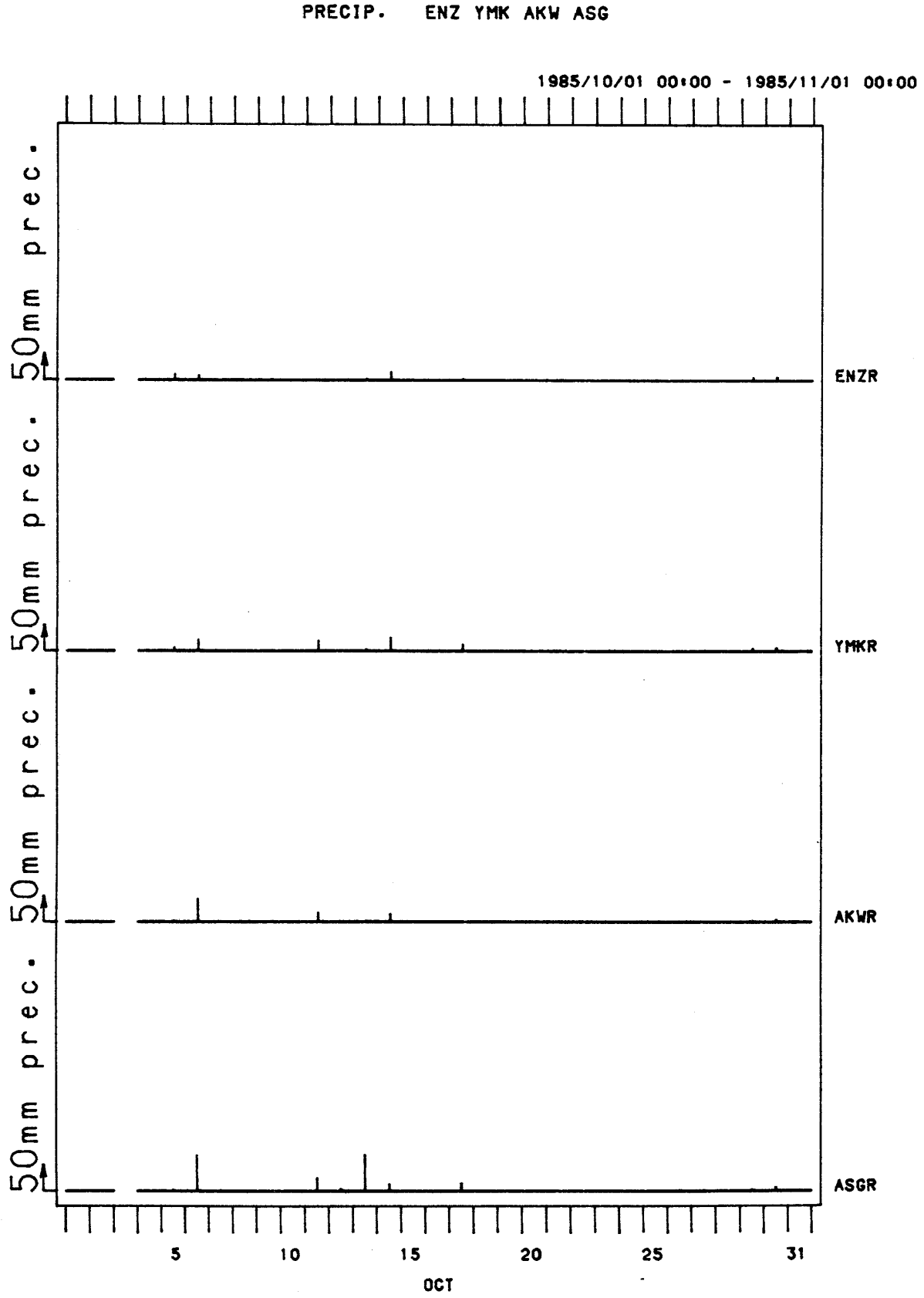
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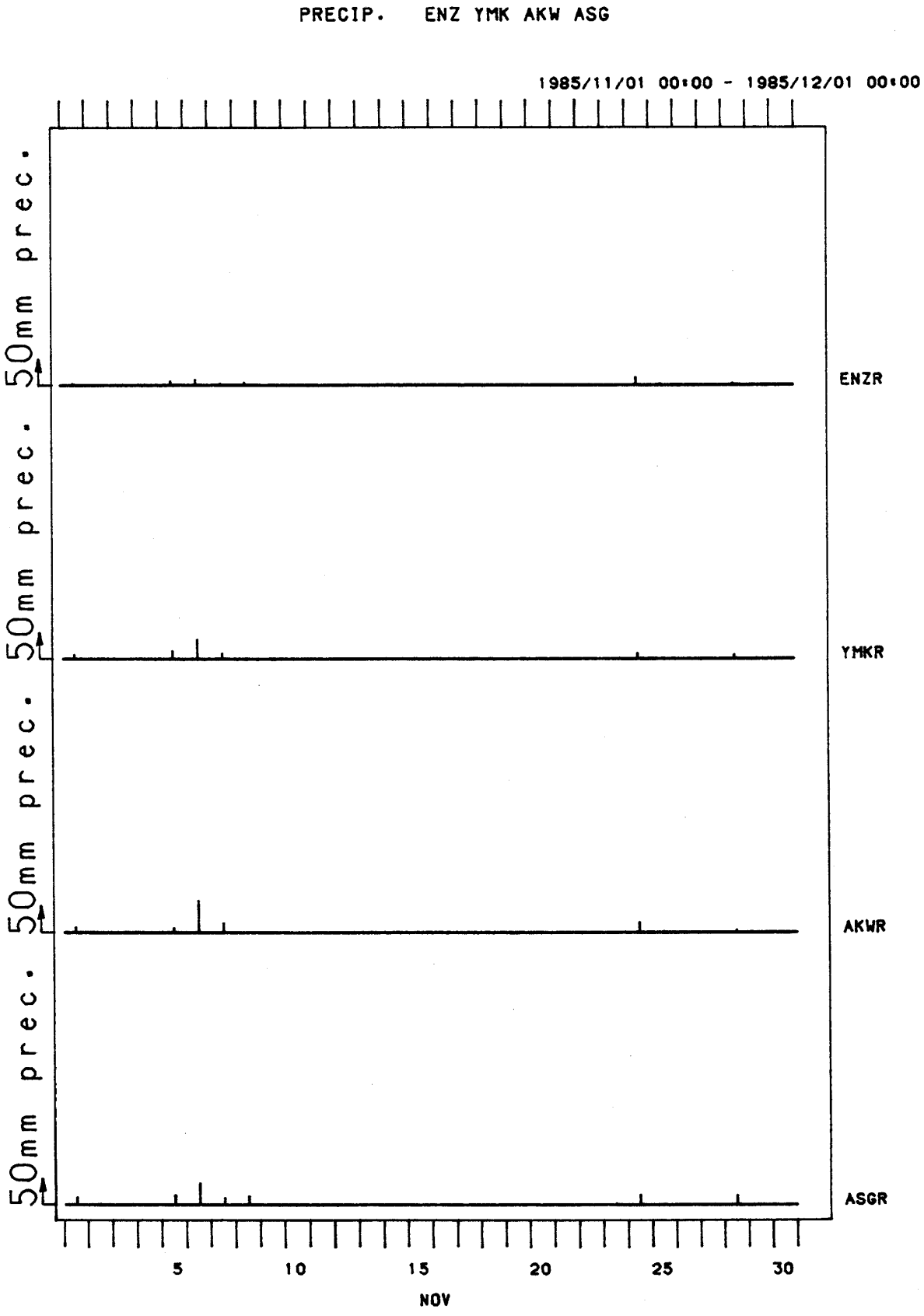
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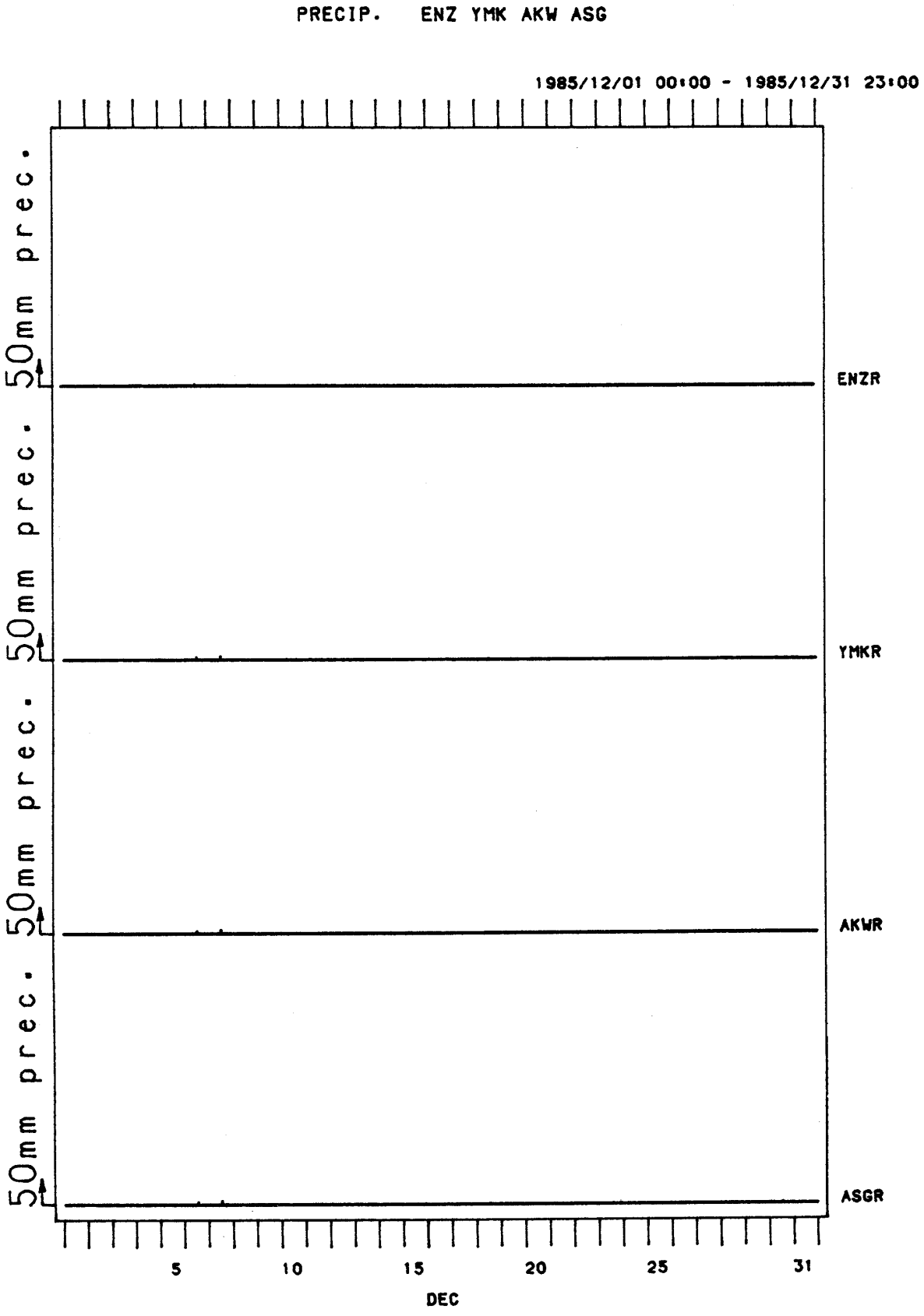
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