

Basics of East African Monsoon Time Scale: A review and revisit**Gangadhar**

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Abstract: There are many mysteries and unsolved issues in the monsoonal climate and Weather systems that cannot explain and solve. I proposed and designed the Basics of Monsoon Time Scales for all world global, regional, local monsoon systems along with countries for unraveling the mysteries of climate, weather, monsoons; studying the characteristics of mechanism of climate, weather and monsoons and exercising the benefits of mankind and development of monsoonal climate and weather sciences. According to the researches and studies on the Monsoon Time Scales, it is known that there will be major global climate changes in the coming years "i.e" heavy rains, floods and storms etc. will occur until about 2075 and there will be droughts and famines etc. until about 2150. Through the establishment of Monsoon Time Scales, we can know the future consequences of the climate changes. Plans can be made accordingly. So, scientists can establish the Monsoon Time Scale and predict what is going to happen in the monsoonal climate in the coming years roughly. I call on the world scientists to design and establish the Monsoon Time Scales following the Basics of Monsoon Time Scales outlined below, based on the India Monsoon Time Scale which is successfully proved out in practice. East African monsoon is a key system in global monsoon systems. I have conducted many scientific researches on this monsoon system and as a part these researches, I proposed and designed the Basics of East African Monsoon Time Scale which can help to study the past, present and future conditions of the East African monsoon.

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Introduction:**Basics of Global Monsoon Time Scales:**

After much research, I have proposed some basics regarding method and design of the Monsoon Time Scales for study the global monsoon systems. Monsoon Time Scale is a chronological sequences of events arranged in between the Time and climate with the help of a scale for studying the past's, present and future movements of monsoon systems and its relationship with rainfall and other weather conditions & natural calamities.

Method&design:

Design: Prepare a Monsoon Time Scale having 365 horizontal days from April 1st to next year March 31st (or January 1st to December 31st or March 21st to next year March 20th or according to the chronology of a country's Time and Climate) of 139 year from 1880 to 2027 comprising of a large Time and Climate should be taken and framed into a square graphic scale.

This scale should be designed in three ways i.e Basic scale, Filled scale, Analyzed scale;

Basic Scale: The first one is preliminary basic scale, it explains the structure of the scale.

Filled Scale: This is the second scale that is filled with data and explains how to fill or manage the scale.

Analyzed Scale: And the third one is scientifically analyzed the filled scale by data, it explains monsoon patterns weather conditions of the scale.

Method: There are two methods in formation and process of the Monsoon Time Scales. The first one is in the single form and next one is designed in four parts.

One-line method:

A one-line scale method in the design of Monsoon Time Scales is very useful for observation of monsoons without confusion. These can be designed on tables or walls or on paper according to one's convenience.

Prepare these Monsoon Time Scales having 365 horizontal days from April 1st to next year March 31st (or January 1st to December 31st or March 21st to next year March 20th or according to the chronology of a country's Time and Climate) of 178 years from 1880 to 2058 comprising a large Time and Climate should be taken and framed in a one line

and full-length type square graphic scale on a paper or a Wall or a Table.

Assembly-line method:

The single and full length square graphic scale is to be long. It is not convenient to take it away, to preserve it, to take it to the demonstration or to publish it in the journals. So that it is divided into four parts easy to carry and keep and suitable for publication. I designed to make it into 4 parts and then pasted it into one scale.

Prepare the Monsoon Time Scale having 365 horizontal days from April 1st to next year March 31st (or January 1st to December 31st or March 21st to next year March 20th or according to the chronology of a country's Time and Climate) of 139 year from 1880 to 2027 comprising of a large time and climate should be taken and framed in an one and full length type square graphic scale. But it is divided into four parts as given below

The first part is beginning from 1st April to July 12th.

The second part is from 13 July to October 23rd.

The third part is from 24th October to February 3rd.

And the fourth part is 4th February to March 31st ending.

These separate scales can be pasted into one scale as explained below.

Cut along the edges of dates on the right side of the first part and paste it to along the edges of date of 13th July on left side of the second part.

Cut along the edges of dates on the right side of the second part and paste it to along the edges of date of 24th October on left side of the third part.

Cut along the edges of dates on the right side of the third part and paste it to along the edges of date of 4th February on left side of the fourth part .

When paste this manner, we get long full-length Monsoon Time Scale.

Computerization method:

Monsoon Time Scales can also be computerized. I created the devices manually. If these are developed in the computerization method then the monsoons can be studied more accurately. Besides rather than in manual type scales, if we are able to create a computer model scale which to be the most obvious. I tried to computerize these Global Monsoon Time Scales but could not do it due to lack of money.

Materials&method:

Construction of the Monsoon Time Scales requires enormous data of low pressure systems, depressions tropical cyclones/storms, snowfall and sand storms etc. that formed over and affecting a region should be taken as data to prepare the Monsoon Time Scale. An accurate scale is available if we can collect and analyze the exact climate data.

What should the data be taken?

For example, countries where monsoon occur should taken low pressure systems as data.

Countries where storms occur can be taken storms as data.

European countries can taken Westerlies as data.

Snowy countries of polar climate can take snowfall, snowy rains, graupel, snowpellets as data

Desert or hot climate countries can take sand or dust storm incidents as data.

Scientists can also be taken yearly climate changes as a key data as every year occurs routinely in their countries.

Management:

The main weather events such as monsoon pulses in the form of low pressure systems if any of a monsoon region formed over a region or country have been entering on the scale in stages by 1 for low, 2 for depression, 3 for storm, 4 for severe storm and 5 for severe storm with core of hurricane winds should be entered on the Monsoon Time Scale as per date and month of each and every year. If we can managing the scale in this manner continuously, we can study the past, present and future movements of monsoons of a region or country. I took the numbers to analysis the variations in data. Researchers have to decide what kind of data to take and how to analyze the data.

Results&analysis:

The research and study should be done in the same way as described below in the Indian Monsoon Time Scale and the results should be obtained.

Study&discussion:

The obtained results should be studied and analyzed in the same way as described below in the Indian Monsoon Time Scale.

Indian Monsoon Time Scale:

I have undertaken the Indian Monsoon Time Scale as the model research project following all the rules of Basics of Monsoon Time Scales. The reason I took the Indian Monsoon Time Scale as the model research was because I was in the Indian monsoon region. I know the information about Indian monsoon very well.

The Indian Monsoon Time Scale is a chronological sequence of events arranged in between time and weather with the help of a scale for studying past's, present and future movements of the monsoon of India and its relationship with rainfall and other weather problems and natural calamities. From where to wherever to be taken the time and weather data to analyze, the researcher can decide on his discretion according to available weather data.

Method&design:

Design: For this, I took a period of 365 horizontal days from April 1st to next year March 31st (or January 1st to December 31st or March 21st to next year March 20th or according to the chronology of India's as the time and the data of monsoonal low pressure systems, depressions and storms of 178 years from 1880 to 2058 that were formed over the Indian region taken as the climate, on the whole comprising of a large time and climate took and framed into a square graphic scale. I designed this scale in three ways i.e Basic scale, Filled scale, Analyzed scale as described below.

Basic Scale: The first one is preliminary basic scale, it explains the structure of the scale.

Filled Scale: The second one is filled by data scale, it explains how to fill or manage the scale.

Analyzed Scale: And the third one is filled and analyzed by data, it explains monsoon patterns of the scale.

Method: There are two methods in formation and process of the Indian Monsoon Time Scale. The first one is in the single form and next one is assembly-line form.

One-line method:

A one-line method Scale in the design of Indian monsoon Time Scales is very useful for observation of monsoons without confusion. This can be designed on tables or walls or on paper according to one's convenience.

Prepare these Indian Monsoon Time Scale having 365 horizontal days from April 1st to next year March 31st (or January 1st to December 31st or March 21st to next year March 20th or according to the chronology of a country's Time and Climate) of 178 years from 1880 to 2058 comprising a large Time and Climate should be taken and framed in a one line and full-length type square graphic scale on a paper or a Wall or a Table.

Assembly-line method:

The single and full length square graphic scale is to be long. It is not convenient to take it away, to preserve it, to take it to the demonstration or to publish it in the journals. So that it is divided into four parts easy to carry and keep and suitable for publication. I designed to make it into 4 parts and then pasted it into one scale.

Single & Full length Scale: I prepared the Indian Monsoon Time Scale having 365 horizontal days from April 1st to next year March 31st (or January 1st to December 31st or March 21st to next year March 20th or according to the chronology of India's time and climate) of 178 year from 1880 to 2058 or a required period, comprising of a

large time and climate was taken and framed in a single and full length type square graphic scale. It can be formed on a paper, board, wall or table.

Parts & Paste Scale: The single and full length square graphic scale is to be long. So that it is divided into four parts easy to carry and keep and suitable for publication. I designed to make it into 4 parts and then pasted it into one scale.

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Cut along the edges of dates on the right side of the third part and pasted it to along the edges of date of 4th February on left side of the fourth part.

When pasted in this manner, we get long full length Indian Monsoon Time Scale

Computerization method:

Besides this above two manual scales, I have prepared a computer Indian Monsoon Time Scale generated by the computer system from the year 1888 to 1983 for the period of 1st June to September 30th. If we are able to create a computer model scale which to be the most obvious.

Materials & method: The monsoon pulses in the form of low pressure systems over the Indian region have been taken as the data to the construction of this scale. For this, a lot of enormous data of low pressure systems, depressions and cyclones that formed over the Indian region were taken as the climate from many resources just like Mooley DA, Shukla J(1987); characteristics of the west ward-moving summer monsoon low pressure systems over the Indian region and their relationship with the monsoon rainfall. Centre for Ocean-land Atmospheric interactions, University of Maryland, college park, MD., and from many other resources and from many other resources just like The world's 7 Tropical Cyclone seasons around the world etc.

Management:

The monsoon pulses in the form of low pressure systems over the Indian region are taken and entered on the scale in stages by 1 for low, 2 for

depression, 3 for storm, 4 for severe storm and 5 for severe storm with core of hurricane winds pertaining to the date and month of the each and every year. How the Indian monsoons have been travelling since 1880 onwards are recorded on the Indian Monsoon Time Scale. I took the numerical/statistical method to analysis the variations in data. If we have been managing the scale in this manner continuously, we can study the past, present and future movements of monsoon of India. Researchers have to decide what kind of data to take and how to analyze the data.

Results&analysis:

I did many comprehensive analyzes on the results of research and studies of monsoons and found out many mysteries and its relationship with the movement of the axis of the Earth around the Sun in the universe & its influences on the Earth's atmosphere. Let's study these results and analysis briefly and detailed.

When examine the Global Monsoon Scales, I noticed that several passages path-ways of monsoon pulses it has been some cut-edge paths and splits passing through travelling zigzag cycles systematically in parallel and stacked next to each other in ascending and descending order clearly seen. If the thin arrows along the passages identified on the Indian Monsoon Time Scale are drawn from 1880 to the current year, then the monsoon paths appear. Many other methods can analyze the Indian Monsoon Time Scale. In my research , I have noticed that depending on the incidence of heavy rains & floods in some years and droughts & famines in other year were happened according to the travel of monsoon path. The path of monsoons when travelling over four months from June to September, good rainfall and floods were occurred. And the path when travelling over last months, i.e. July or August or September, low rainfall and droughts were occurred. Particularly, there are two main passages. The first one is the main path or passage South West monsoon of the Indian monsoon and the second one is the path or passage of the North-East monsoon. The first one is on the left side over the months of June, July, August, September, and the second path on the right side over the months of October, November, December are visible in the Indian Monsoon Time Scale.

Complete investigations of the Indian Monsoon Time Scale "I.e" Results and Analysis and Study and discussion are described in the following paragraphs on a sample-by-sample basis in detailed.

Basics of East African Monsoon Time Scale:

The East African Monsoon Time Scales is a chronological sequences of events arranged in between Time and Climate with the help of a scale for studying the past's, present and future movements of the East African monsoon regions and its relationship with rainfall and other weather problem and natural calamities.

Prepare the East African Monsoon Time Scale having 365 horizontal days from March 21st to next year March 20th or a required period comprising of a large time and climate have been taken and framed into a square graphic scale.

The main weather events if any of the East African monsoon region such as low pressure systems, depressions and storms/cyclones etc have been entering on the East African Monsoon Time Scale as per date and month of each and every year.

If we have been managing the East African Monsoon Time Scale in this manner continuously, we can see the image and its past's, present's and future movements of the East African monsoon and study it's originals, climatic changes and futuristic dimensions.

By establishing the East African Monsoon Time Scales which can help to study the movements of the the East African monsoon.

Method and Design:

Design: Prepare a East African Monsoon Time Scale having 365 horizontal days from April 1st to next year March 31st (or January 1st to December 31st or March 21st to next year March 20th or according to the chronology of East African Time and Climate) of 139 year from 1880 to 2027 comprising of a large Time and Climate should be taken and framed into a square graphic scale.

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Analyzed Scale: And the third one is scientifically analyzed the filled scale by data, it explains monsoon patterns weather conditions of the scale.

Method: There are two methods in formation and process of the East African Monsoon Time Scales. The first one is in the single form and next one is designed in four parts.

Single& Full length Scale: Prepare the East African Monsoon Time Scale having 365 horizontal days from April 1st to next

year March 31st (or January 1st to December 31st or March 21st to next year March 20th or according to the chronology of East African's Time and Climate) of 139 year from 1880 to 2027 comprising of a large Time and Climate should be taken and framed in a single and full length type square graphic scale. It can be formed on a paper, board, wall or a Table.

Parts & paste Scale: The single and full length square graphic scale is to be long. So that it is divided into four parts easy to carry and keep and suitable for publication. I designed to make it into 4 parts and then pasted it into one scale.

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When paste this manner, we get long full-scape East African Monsoon Time Scale.

Computer Model:

East African Monsoon Time Scales can also be established as a computer model. Besides rather than in manual type scale, If we are able to create a computer model scale which to be the most obvious.

Material and Data:

Construction of the East African Monsoon Time Scales requires enormous data of low pressure systems, depressions, tropical storms, sand storms etc that affecting a region and formed over a region should be taken as data to prepare the East African Monsoon Time Scale. An accurate scale is available if we can collect and analyze the exact climate data.

Management: The main weather events if any of East African monsoon such as monsoon pulses in the form of low pressure systems if any of a monsoon region formed over the East African monsoon have been entering on East African Monsoon Time Scale in stages by 1 for low, 2 for depression, 3 for storm, 4 for severe storm and 5 for severe storm with core of hurricane winds as per

date and month of each and every year. If we can managing the scale in this manner continuously, we can study the past, present and future movements of East African monsoon.

Researches&results:

The study should be done in the same way as described in the Indian Monsoon Time Scale and the results should be obtained.

Study & discussion:

The obtained results should be studied and analyzed in the same way as described below in the Indian Monsoon Time Scale.

Let us know in detail below the results and analysis, study and discussion of the Indian Monsoon Time Scale. Investigations of the above Monsoon Time Scale should be carried out on the basis of the results and analysis and study and discussion of this Indian Monsoon Time Scale.

Results&analysis:

I did many comprehensive analyzes on the results of research and studies of monsoons and found out many mysteries and its relationship with the movement of the axis of the Earth around the Sun in the universe & its influences on the Earth's atmosphere. Let's study these results and analysis briefly and detailed.

When examine the Global Monsoon Scales, I noticed that several passages path-ways of monsoon pulses it has been some cut-edge paths and splits passing through travelling zigzag cycles systematically in parallel and stacked next to each other in ascending and descending order clearly seen. If the thin arrows along the passages identified on the Indian Monsoon Time Scale are drawn from 1880 to the current year, then the monsoon paths appear. Many other methods can analyze the Indian Monsoon Time Scale. In my research, I have noticed that depending on the incidence of heavy rains & floods in some years and droughts & famines in other year were happened according to the travel of monsoon path. The path of monsoons when travelling over four months from June to September, good rainfall and floods were occurred. And the path when travelling over last months, i.e. July or August or September, low rainfall and droughts were occurred. Particularly, there are two main passages. The first one is the main path or passage South West monsoon of the Indian monsoon and the second one is the path or passage of the North-East monsoon. The first one is on the left side over the months of June, July, August, September, and the second path on the right side over the months of October, November, December are visible in the Indian Monsoon Time Scale.

Keep track the Indian Monsoon Time Scale carefully. When we look at the Indian Monsoon Time Scale, several paths appear. Two of these are important. These the right sided second one can be called as the main path of the monsoon and the left side first one can be called as the pre-path of the main passage of the Indian monsoon. The main path appears clear and its pre-path appears unclear. Due to unavailability of data, it is not known how the pre-path of the Indian monsoon traveled before 1888. But according to the research and studies it is guessed that -

Brief analysis:

Keep track of the Indian Monsoon Time Scale carefully. Briefly describe the travel patterns of the monsoon-by 1888, the monsoons expanded the over 3 months of June, July, August until June 1 and brought heavy rains and floods in most of the country in more years. During 1896-1935's, it was falling increased over June, July until July 25th and brought low rainfall and droughts in most of the country in more years. During 1935-1990's, it was rising again and expanded over the June, July, August, September until 10th June caused heavy rains and floods in most of the country in many years. During 1990-2015s, it was again falling increased over June July until 25th July. From 2015, it is now rising expanding upwards and estimated traveling over the months of June, July, August by 2040 to its peak and will be expanding all over the 4 months June, July, August and September and causing heavy rains and floods most of the country in more years around 2060.

Detailed analysis:

Due to unavailability of data, it is not known how the main path of the Indian monsoon traveled before 1888. But according to the studies, it is known that between 1865-1897, it traveled in the shape of convex direction and caused good rainfall in many years. During this 4-month period of (June, July, August, September) of Indian monsoon season, the line of path of the monsoon was traveled over all these four months. As a result, there were heavy rains and floods in most years.

From 1898 to 1920, the line of path of the Indian monsoon was traveled over the months of August and September in the shape of concave direction. In this 4 month monsoon season, the line was traveled just over two months only. As a result, it rained only two months instead of four months monsoon season and caused low rainfall in most of the country in many years,

From 1920 to 1965, the line of path of the Indian monsoon was traveled over the months of

July, August, and September in the shape of convex direction. In this 4 month monsoon season, the line was traveled over three months. As a result, it rained only three months instead of four months monsoon season and resulted good rainfall in most of the country in more years.

From 1965 to 2015, the passage of the Indian monsoon was traveled over the months of August to mid-August in the shape of deep sloping direction In this 4 month monsoon season, the line was traveled just over two months for a short period only. As a result, it rained only two months instead of four months monsoon season and caused low rainfall and droughts in most of the country in many years.

From 2015, the line of path of the Indian monsoon seems likely to rise over the months of July and to June in future in the shape of upper ascending direction and will be causing heavy rains & floods in most of the country in coming years until around 2060. This is an assessment based on the study of situations from 1888.

Deep analysis:

As of 1888, the monsoons travel at their peak, the pre-path monsoons on June 1 and the main-path of monsoons on July 9 and caused good rainfall in many years.

From about 1891, they traveled steeply downwards, reaching a low peak by 1918.

Between about 1910 and 1927, the Monsoons advanced in the concave direction during the months of August and September at their trough and caused low rainfall and droughts in most of the country in many years.

From about 1918, the monsoon traveled steeply upwards, reaching its peak by 1960.

Between about 1935 and 1985, the monsoons advanced in a convex direction during the months of June and July and caused good rainfall in many years.

From about 1960, the pre-path monsoons travel obliquely downstream, through July 25 and the main-path of monsoon through August 18.

Around 1985-2010 during the low state, pre-path of monsoons in July and main-path of monsoons in August moved forward in concave direction and caused low rainfall and droughts in most of the country in many years.

From 2010, the monsoon is expected to move steeply upwards and reach a peak in intensity by 2040.

Around 2040-2065, the monsoons are expected to move forward in a convex direction, causing heavy rains and floods most of the country in more years.

Study & discussion:

The results obtained as above are studied and discussed as follows.

The Indian Monsoon Time Scale reveals many other secrets of the monsoon & its relationship with rainfall & other weather problems and natural calamities. Some bands, clusters and paths of low pressure systems clearly seen in the Indian Monsoon Time Scale, it have been some cut-edge paths passing through its systematic zigzag cycles in ascending and descending orders which causes heavy rains & floods in some years and droughts & famines in another years according to their travel. And also we can find out many more secrets of the Indian monsoon such as droughts, famines, cyclones, heavy rains, floods, onset & withdrawal of monsoon etc. by keen study of the Indian Monsoon Time Scale. The passages clearly seen in the Indian Monsoon Time Scale are sources of monsoon pulses. The tracking date of main path & other various paths of monsoon etc., of the Indian Monsoon denotes the onset of the monsoon, monsoon pulses or low pressure systems. These observations can mean that pulses of the monsoon are repeatedly determined by the number of repeats.

Furthermore example, the main passage of line of monsoon travel from June to September and September to June are also signs to impending weather conditions of a country. For example, during 1865-1895's, the main path-way of the Indian monsoon was rising over June, July, August. During 1896-1920's, it was falling over August, September. During 1920-1965's, it was rising again over July, August, September. During 1965-2020s, it was falling over September. From 2020, it is now rising upwards and estimated traveling over the months of June, July, August by the 2066.

(There may be a difference of 5 to 10 or more years between those periods. This is because currently it can not be estimated with certainty that the respective period will start or end in the ruling period.)

The tracking date of main path & other various paths of the Indian Monsoon denotes the onset of the monsoon, monsoon pulses or low pressure systems, storms and its consequent secondary hazards and storms etc.. And also we can find out many more secrets of the Indian monsoon such as droughts, famines, cyclones, heavy rains, floods, real images of the Indian Monsoon, and onset & withdrawals of the monsoon etc. by keen study of the Indian Monsoon Time Scale.

For example, the date of tracking ridge of path is the sign to the impending cyclone and its secondary consequent hazard floods, storm surges etc.,

Another example, the thin and thick markers on the upper border line of the Indian Monsoon Time Scale are the signs to the impending heavy rains & floods and droughts & floods. The thick marking of clusters of low pressure systems on the Indian Monsoon Time Scale is the sign to the impending heavy rains and floods and the thin marking of clusters of low pressure systems on the Indian monsoon time scale is the sign to the impending droughts and famines.

These are just some studies of the Indian monsoon. There are many more secrets in the Indian monsoon. Indian scientists should get rid of them. We can find out many more secrets of weather conditions by keen study of the Indian Monsoon Time Scale.

1. Studies on the history:

Many historical texts in the scriptures such as the Bible and the Quran's also reinforce the Global Monsoon Time Scales. For example, the text in the Genesis, chapter 41 similar to that on the Global Monsoon Time Scales it was reported that in the past centuries, the monsoons have been going up and down (Rise and Fall) in ordinary English "there comes seven years of great heavy rains and floods throughout the land of Egypt. And there shall arise after them seven years droughts and famines". These scriptures reinforce the basic principle of Global Monsoon Time Scales.

2. The IIT'S Study and discussion of 100 years of Indian monsoon:

Deficient rainfall led to the collapse of the Mansabdari system, started by Mughal emperor Akbar, in the late 17th century. Similarly, drought interspersed with violent monsoon rains sounded the death knell for the Khmer empire of south-east Asia in the 15th century. A recent study by researchers at Indian Institute of Technology, Kharagpur(IIT-KGP) has revealed that abrupt changes in the Indian monsoon strengthen during last 900 years and their linkages to socio-economic conditions in the Indian subcontinent by nil K. Gupta, Professor at the geology and geophysics, Department of IIT-KGP, highlights that decline of Indian dynasties was linked to weak monsoon and reduced food production.

Rise and fall: Several dynasties, such as the Sena in Bengal, Solanki in Gujarat in the mid-13th century and Paramara and Yadav in the early to mid-14th century-all of which flourished during the dry phases of Indian summer monsoon suggesting role of the climate in the sociopolitical crisis, the study revealed.

The paper published in international journal PALEO 3 highlights three phases in the 900 years stretch-Medieval climate from 950 CE to 1350 CE, Little Ice Age from 1350 CE to 1800 CE and Current Warm Period and phases from 1800 CE until today. The paper highlights strong monsoon during the Medieval Climate Anomaly and Current Warm Period and phases of weak. There can be no doubting the profound impact of the abrupt shifts of rainfall on human history-a fact we need to constantly remind ourselves of in this day and age of irretrievable climate change. Abrupt shifts in the ISM precipitation has similarly impacted history in India, Prof. Gupta said.

For the study on long-term spatio-temporal variability of the ISM, a group of researchers, which also included experts from Wadia Institute of Himalayan Geology, looked at paleoclimate records using oxygen isotope proxy record from speleothems(a structure formed in a cave by deposition of minerals from water) at the Wah Shikar cave Meghalaya.

We took samples from every half millimeter or sometimes even one-third of a mm, and we dated using uranium-thorium time series. Such time sampling of less time interval means we were covering data at two-three years' interval, while most research collects data 20-30 years' interval. We even captured the drought events of last few centuries, Prof. Gupta said. The results showed abrupt shifts in the ISM, he added.

For more recent phases of human history the study suggests that from the beginning of the 19th century, the changes in the ISM became more abrupt with a rise in atmospheric temperature that coincides with the dawn of the Industrial Revolution.

An increase in the frequency of abrupt shifts in the ISM during the last centuries, coincidental with a rise in atmospheric temperature, suggests occurrence of more climatic surprises in future consequent to future rise in the global temperature and subsequently more precipitation in the form of rain at higher altitudes." the paper said.

Prof. Gupta said that they were doing similar work extending their paleoclimate study to 6000 years ago to see the impact of climatic change on Indus Valley civilization and on population migrations.

3. Studies of the Indian Institute of Tropical Meteorology, Pune that strengthened the Global Monsoon Time Scales:

Studies of long time series of the Index of All India area-weighted mean summer monsoon rainfall anomalies during the period 1871-2017 based on

IITM Homogeneous Indian Monthly Rainfall Data Set have revealed the several interesting aspects of the inter-annual and decade-scale variations in the monsoon that strengthened the Global Monsoon Time Scales.

FLOOD YEARS: During the period of 1871-2015, there were 19 major flood years:1874, 1878, 1892, 1893, 1894, 1910, 1916, 1917, 1933, 1942, 1947, 1956, 1959, 1961, 1970, 1975, 1983, 1988, 1994.

DROUGHT YEARS: And in the same period of 1871-2015, there were 26 major drought years: 1873, 1877, 1899, 1901, 1904, 1905, 1911, 1918, 1920, 1941, 1951, 1965, 1966, 1968, 1972, 1974, 1979, 1982, 1985, 1986, 1987, 2002, 2004, 2009, 2014, 2015.

Depending on the data mentioned above, it is interesting to note that there have been alternating periods extending to 3-4 decades with less and more frequent weak monsoons over India.

For example, the 44-year period 1921-64 witnessed just three drought years and happened good rainfall in many years. This is the reason that when looking at the Indian Monsoon Time Scale you may note that during 1920-1965's, the passage of the Indian monsoon had been rising over July, August, September in the shape of concave direction and resulting good rainfall in more years.

During the other periods like that of 1965-87 which had as many as 10 drought years out of 23, This is the reason that when looking at the Indian Monsoon Time Scale you may note that during 1965-2004's the path of the Indian monsoon had been falling over the September in the shape of convex direction and causing low rainfall and droughts in many years.

4. Studies by the Massachusetts Institute of Technology, Cambridge, National Research Foundation, Singapore, Singapore-MIT Alliance for Research and Technology (SMART):

A study of the Massachusetts Institute of Technology, Cambridge supported and in part by the National Science Foundation, the National Research Foundation of Singapore, and the Singapore-MIT Alliance for Research and Technology (SMART) founds that the Indian monsoons, which bring rainfall to the country each year between June and September, have strengthened since 2002. Between 1950 and 2002, they found that north central India experienced a decrease in daily rainfall during the monsoon season. To their surprise, they discovered that since 2002, precipitation in the region has revived, increasing daily rainfall. That heightened monsoon activity has reversed a 50-year drying period during which the monsoon season brought relatively little rain to northern and central India.

Since 2002, the researchers have found, this drying trend has given way to a much wetter pattern, with stronger monsoons supplying much-needed rain, along with powerful, damaging floods, to the populous north central region of India.

A shift in Indian Monsoon Time Scale may explain this increase in monsoon. Consistent with the studies of the above research institutions, this is the reason that when looking at the Indian Monsoon Time Scale you may note that between 1950-2002, the path of the Indian monsoon had been falling over the July and August in the shape of convex direction and decreasing rainfall and since 2002, the Indian monsoon has been rising over July, August, September in the shape of concave direction and precipitation in the region has revived, increasing daily rainfall.

5. Studies on the Milankovitch cycles etc. that Earth spin on its axis around the Sun is the root cause of variations in monsoons, seasons and other climate changes:

Another great source of evidence for the determination of Monsoon Time Scales is the Milankovitch scales. Earth has seasons because its axis of rotation is tilted at an angle of 23.5 degrees relative to our orbital plane—the plane of Earth's orbit around the sun. The collective effects of changes in the Earth's rotation around its axis and revolution around the Sun such as axial tilt etc. may be influenced climatic patterns on the earth. When examining the Global Monsoon Time Scales/ Indian Monsoon Time Scale closely from 1880 to the present, there are many ups and downs in the monsoon cycles. This is the reason for the ups and downs with the monsoons is that the climate changes on the earth forms along the Earth's spin on its axial tilts around the sun. When the Global Monsoon Time Scales/ Indian Monsoon Time Scale is being examined it is known that there are many unknown mysteries in the Earth's spin on its axial tilts around the Sun. Astrophysicists discover the mysteries of the Earth's spin on its axial tilts around the Sun based on the Global Monsoon Time Scales/ Indian Monsoon Time Scale. Global researches around the world such as Milankovitch cycles etc. strengthened that the Earth's spin on its axis around the Sun is the root cause of the variations in the monsoons.

Another great source of evidence for the determination of Monsoon Time Scales is the Milankovitch scales. Milankovitch cycles are a series of periodic changes in the Earth's orbit around the Sun that affect the amount of solar radiation the Earth receives, which in turn influences climate change: These cycles are named after Serbian

scientist Milutin Milankovitch, who hypothesized that they are a major driver of long-term climate change. Milankovitch cycles are believed to have caused Earth to swing between ice ages and warmer periods for millions of years. Scientists can model these cycles and compare their calculations to evidence found in geological sediments.

Milankovitch cycles are a series of periodic changes in the Earth's orbit around the Sun that impact the amount of solar radiation the Earth receives, which in turn influences climate change:

Eccentricity: The shape of the Earth's orbit around the Sun. The Earth's orbit is elliptical, but its shape varies over time. When the orbit is more elliptical, the Earth moves closer and further from the Sun, which impacts the climate.

Obliquity: The angle of the Earth's axis in relation to its orbital plane. The tilt of the Earth's axis changes over time, moving from 22.1° to 24.5° and back again over about 41,000 years. When the tilt increases, summers are warmer and winters are colder.

Precession: The direction Earth's axis of rotation points. The Earth's axis completes a full cycle of precession every about 26,000 years.

Milankovitch cycles are believed to have caused Earth to swing between ice ages and warmer periods for millions of years. Scientists can model these cycles and compare their calculations to evidence found in geological sediments.

According to the Milankovitch cycle, the angle of the Earth's axial tilt (obliquity) regarding the orbital plane (the obliquity of the ecliptic) varies between 22.1° and 24.5°, over a cycle of about 41,000 years. The current tilt is 23.44°, roughly halfway between its extreme values. Milankovitch cycles are a series of periodic changes in the Earth's orbit around the Sun that affect the amount of solar radiation the Earth receives, which in turn influences climate change.

These cyclical orbital movements, which became known as the Milankovitch cycles, cause variations of up to 25 percent in the amount of incoming insolation at Earth's mid-latitudes (the areas of our planet located between about 30 and 60 degrees north and south of the equator). Milankovitch cycles are a series of orbital changes that impact the Earth's climate over thousands to hundreds of thousands of years. These cycles are caused by variations in three factors:

Milankovitch cycles impact the Earth's climate by: Changing the distribution of solar radiation. The amount of solar radiation that reaches the Earth's surface varies seasonally and annually based on

latitude. Influencing the average surface temperature. This can cause exchanges of volatiles between the atmosphere and surface reservoirs. Triggering the beginning and end of glaciation periods. Milankovitch cycles are thought to be a major driver of the Earth's long-term climate. For example, when the Earth's axis is tilted more, the seasons become more extreme, with warmer summers and colder winters. The Earth's axis is currently tilted at 23.5 degrees.

The Earth revolves around the Sun and the Sun revolves around the Milky Way. If you think closely, the reflections of the movements of the Earth and Sun "I.e" the Earth rotates (spins) on its axis once every 24 hours and revolves around (orbits) the Sun once every 365 days. The sun rotates (spins) on its axis once every ~27 days and revolves around (orbits) the center of the Milky Way once every 225–250 million years and other mysteries are clearly reflected on the Global Monsoon Time Scales. Think carefully. Milankovitch cycles are directly related to current climate changes, they are a natural process that has shaped Earth's climate from an 85 year cycle to millions of years.

According to my research and studies, this tilt does not remain constant at 23.44°. It oscillates up and down and slowly moves to 24.5°. These oscillations of up and down will be about 85 years, according to the Global Monsoon Time Scales. That is about 60 years upwards journey and about 25 years downward journey in total oscillating once every about 85 years, latter takes place a little further. In this every oscillation, when it's oscillating towards 22.1° that is descending order low rainfall (droughts and famines) occurs and when it's oscillating towards 24.5°, heavy rainfall (heavy and floods) occurs. Oscillating in this way, it slowly moves forward. All this can be clearly observed in the Global Monsoon Time Scales. If this is true, then we are close to reaching 24.5°, So are there going to be more climate changes in the coming future.

6. Studies on the Heavy rains and floods:

According to the reports Global Monsoon Time Scales, it is known that there will be major global climate changes in the coming years "i.e" heavy rains, floods, and storms etc. will occur until about 2075. As mentioned above, heavy rains and floods are going to occur all over the world in the upcoming seasons. Confirming this, heavy rains and floods will occur all over the world. Examples are mentioned below.

Persian Gulf: Flash flooding in April 2024 affected Oman, the United Arab Emirates, Yemen, Bahrain, Qatar, and Saudi Arabia. Heavy rain caused nearly a

year's worth of rain in some states in a single day. At least 46 people died, including 20 in Oman and 18 in Iran.

East Africa: Flooding and cyclones in 2024 affected Kenya, Tanzania, Uganda, Ethiopia, Burundi, and Somalia. As of May 17, 2025, at least 473 people died, and an estimated 1.6 million people were impacted.

West and Central Africa: As of August 15, 2025, Chad, the Democratic Republic of the Congo, and Nigeria were the most affected countries.

Brazil: Torrential rains in Rio Grande do Sul caused flooding that displaced 160,000 people and killed 100.

Southern Germany: Heavy rain caused deadly flooding in Bavaria and Baden-Württemberg, forcing thousands of people to evacuate.

Afghanistan: Flash floods in northern Afghanistan killed hundreds of people and destroyed homes and livestock.

Oman: Heavy rainfall caused flash flooding in parts of Oman, killing at least 12 people.

Uruguay: Thousands of people evacuated as a river reached record high levels in Florida Department.

Argentina: Flood chaos in Buenos Aires after 130 mm of rain in 24 hours.

Indonesia: Deadly floods and landslides in West Sumatra after 300 mm of rain in 6 hours.

Central Europe: A weather map from Geosphere Austria shows a large band of rain across Central Europe, with Austria bracing for heavy rains and a cold front.

Poland: Four southern provinces in Poland are at the highest risk of flooding.

Nigeria: Floods in northeastern Nigeria have affected one million people, with the collapse of a major dam causing the state's worst flooding in decades.

Vietnam: Typhoon Yagi made landfall in northern Vietnam, causing landslides and floods, and killing more than a dozen people.

India: Monsoon floods have killed dozens in India, with thousands in relief camps.

Other countries: Floods and landslides affected Kyrgyzstan in April 2024, and floods affected Rwanda, Somalia, and Tanzania in April 2024. Flash floods affect Iraq in March 2024, and floods affected Kazakhstan in March 2024.

7. Deserts pouring rains and turning green:

Rains and green plants in deserts in recent times are another example for supporting the Global Monsoon Time Scales. Recently, a rare deluge left parts of the Sahara desert flooded, with dramatic visuals showing palm trees and sand dunes inundated.

These were the first floods in the Sahara in half a century.

According to the reports Global Monsoon Time Scales, it is known that there will be major global climate changes in the coming years “i.e” heavy rains and floods will occur until about 2075. As mentioned above, heavy rains and floods are going to occur all over the world in the upcoming seasons. As a result, multiple deserts around the world are turning green, including the Sahara Desert and the Thar Desert:

The Sahara Desert in West Africa has been turning green as a result of the climate/monsoon cycle traveling towards its peak state. In September 2024, NASA captured images of the Sahara's transformation into a verdant landscape with increased water levels and vegetation growth. The images showed that some areas of the Sahara received five times their usual monthly rainfall, and one of the desert's normally dry lakes filled with water.

A study suggests that the Thar Desert may turn green as a result of the climate/monsoon cycle traveling towards its peak state by the end of the century. The study's authors analyzed weather data from South Asia over the past 50 years and predicted future changes under various greenhouse gas scenarios. The study's results indicate that the Indian monsoon is expanding westward, which could lead to significant agricultural and socio-economic changes in the region.

In the arid landscape of the Saudi desert is turning green as a result of the climate/monsoon cycle traveling towards its peak state.

Scotland's deserts are turning green as a result of the climate/monsoon cycle traveling towards its peak state

China's deserts are turning green as a result of the climate/monsoon cycle traveling towards its peak state.

The UAE deserts, including parts of Dubai, have become greener due to increased rainfall in recent years. This has led to more vegetation, changing some areas from desert to shrubland.”

In this way, the reason why the deserts become green is that the monsoon line is traveling to the higher position. In such situations, it is very important to study the travel patterns of these climate and monsoons. So scientists can set up Monsoon Time Scales and sense the upcoming climate changes in advance.

8. Studies on the presence of Monsoons advancing towards from the Bay of Bengal to the Arabian Sea

and from September to June during journey of monsoon season in recent decades:

Keep track the Monsoon Time Scales carefully. From 2000, it is going to travel upwards in the shape of convex direction. According to it, it is known that there will be major global climate changes in the coming years “i.e” heavy rains, floods, and storms etc. will occur until about 2075. Ensuring this journey of monsoons in the Global Monsoon Time Scales it is known in the studies of the researchers is that the sea surface temperatures (SSTs) in the Arabian Sea that lead to cyclogenesis have increased by 1.2–1.4 °C in recent decades. These studies provide great evidence for the determination of monsoon time scales. Sea surface temperatures (SSTs) leading to cyclogenesis in the Arabian Sea are 1.2–1.4 °C higher in the recent decades, compared to SSTs four decades ago. The intensity of cyclones has increased in the Arabian Sea by 20–40%. During the past four decades, the maximum intensity of cyclones has increased by 40% (from 100 km/hr to 140 km/hr), in the Arabian Sea, during the pre-monsoon season (April–May). The Arabian Sea during the post-monsoon season (October–December) has witnessed a 20% increase in the intensity (from 100 km/hr to 120 km/hr). As a result, the total energy used up by a tropical cyclone during its lifetime (known as the accumulated cyclone energy) has also gone up. The changes in the Bay of Bengal are not significantly large. Lifetime maximum intensity of cyclones (knots) and accumulated cyclone energy (knots²) during the period 1980–1999 and 2000–2019 in the Arabian Sea and the Bay of Bengal basin during the pre-monsoon (April–May) and post-monsoon (October–December) seasons. The data shows that the intensity of cyclones in the Arabian Sea increased by 20% (post-monsoon) to 40% (pre-monsoon). The north Indian Ocean is rapidly warming and has contributed to more than a quarter of the total increase in the ocean heat content globally in the past two decades. In a global warming scenario, an increase in ocean temperatures at a faster rate in the Arabian Sea as compared to the Bay of Bengal is one of the major thermodynamic parameters due to which models are projecting an increase in the frequency of the cyclones in the Arabian Sea. All the studies, described above, determine Global Monsoon Time Scales.

Future:

As discussed above, the convex period of pre-path which traveled between 1918-1981 will be traveled between 2010-2060 and the convex period

of the main-path which traveled between 1926-1981 will be traveled between 2020-2075.

As result, heavy rains and floods are going to occur all over the world countries in the coming years. And also future climate changes are expected to include a warmer atmosphere, a warmer and more acidic ocean, higher sea levels, flooding, storms and more large change in precipitation patterns. Therefore, precipitation including heavy rains, snow, floods will occur. Many cities, Islands, and villages situated on the shore of rivers and seas will get absorbed in the water. Heavy rains, floods, cyclones can lead to disease spread and damage to ecosystems and infrastructures. Human health issues can increase mortality etc. According to an estimate, rivers, lakes, reservoirs, barrages, and dams etc. may full of waters in the coming years.

Scientific theorem:

The cause is unknown but the year-to-year change of movement of the axis of the earth inclined at $23\frac{1}{2}$ degrees from vertical to its path around the sun does play a significant role in the formation of clusters, bands, and paths of the monsoon and stimulates the weather. The intertropical convergence zone at the equator follows the movement of the sun and shifts north of the equator merges with the heat low-pressure zone created by the rising heat of the subcontinent due to direct and converging rays of the summer sun on the India Sub-Continent and develops into the monsoon trough and maintain monsoon circulation.

Conclusion:

We can make many more modifications, thus bringing many more developments in these Global Monsoon Time Scales thus bringing many more developments. So world scientists can develop the Global Monsoon Time Scales to study and predict the climate changes and natural calamities and explore the root causes of disasters by studying my cosmology. I have worked hard to design in manual, and it should be established on the computer systems for accurate predictions. Its construction requires a lot of data of low-pressure systems, depressions, cyclones, or other climate data since 1880 or earlier. Hence, world scientists should take the initiative and establish the Monsoon Time Scales and have to do more research on this scale and computerize them.

Acknowledgements:

In this research, many consultations were made with professors and scientists for their valuable suggestions and advice. There was also taken some information from the Wikipedia. I am grateful to all of them. India Meteorological

Department, Indian Institute of Tropical Meteorology and Indian Institute of Science etc. were provided a lot of valuable information and data in making this scale. My sincere thanks to all of them.

Invention history:

Many researches are being conducted by me on the global monsoon systems from 1980 to till date with an ideal to invent the mysteries of monsoon systems. In 1991, I submitted a research report to Sri G.M.C. Balayogi, Member of Parliament (Lok Sabha) on the importance and necessity of establishing the Monsoon Time Scales for studying the monsoon systems. Sri G.M.C. Balayogi recommended that research proposals to the India Meteorological Department for implementation in the services of the people. In 1994, The Cabinet Secretariat of India recommended this Monsoon Time Scale proposal to the Ministry of Science & Technology, Govt of India for further research and implementation. In 1996, many consultations were made with the Parliament House, President of India and other VVIPs. In 2005, consultations were made with the India Meteorological Department about the Monsoon Time Scale for further research and development in the services of the people. In 2009, The Secretary, Minister of Science and Technology was also recommended these Monsoon Time Scales to the Indian Institute of Tropical Meteorology for further research and development. In 2008, Dr.T.Subbarami Reddy, Hon'ble Union Minister of State for India was made a recommendation the India Meteorological Department for further research and development of the Global Monsoon Time Scales/ Indian Monsoon Time Scale in the services of welfare of the people. In 2008, I sent a representation to the Government of India, India Meteorological Department about the correspondence for further research and development. In 2009, I made an representation to the Government of India, India Meteorological Department about the correspondence for further research and development of the Global Monsoon Time Scales/ Indian Monsoon Time Scale. In 2009, Secretary, Minister of Science and Technology sent a letter to the Indian Institute of Tropical Meteorology for further research and development of the Global Monsoon Time Scales/ Indian Monsoon Time Scale. In 2010, a representation was sent to the India Meteorological Department about the correspondence for further research and development of the Global Monsoon Time Scales/ Indian Monsoon Time Scale. Despite much pleading, Global Monsoon Time Scales were pushed

into the dark, unable to be recognized. But nobody provide me research opportunities. At last, I built a small lab at my house with home-made apparatus, books and other research materials and conducted researches on global monsoon systems. I have proposed and designed Basics of Monsoon Time Scales including other Global Monsoon Time Scales for all the monsoon regions of the world to study the past, present and future movements of the monsoons and predict it's related weather conditions and natural calamities in advance.

Author bio:

I'm a science enthusiast and experimenter with an ambition to serve the humanity. Governments did not support my researches, provide opportunities and give recognition, moreover I was ridiculed, humiliated and pushed out to the gate when I met to provide research opportunities. Society taunted, ostracized and throws away as an untouchable. I am a victim of discrimination & racism and negligence & jealousy. I was oppressed with tortures, prisons and inquisitions, my researches and studies were ignored, suppressed, darkened. Eventually, I built a small lab in my house and conducted researches and studies on the Earth sciences since my childhood in 1969 to till date, and introduced numerous unique ideas and doctrines and tried unsuccessfully to fulfill them.

Among them, Ecological Forecasting Time Scales(1965-70) for studying the inextricable relationship between living things and natural disasters, A New Model of Cosmology (1970-80) for breaking the mysteries of the cosmos, Basics of Geoscope (1980-87)for unlocking the geophysical mysteries and creating innovative missions, Basics of Monsoon Time Scales (1987-91)or studying and predicting climate changes and natural calamities, Astro-Climatic Numerical Periodic Tables (1991-2000)for studying the inextricable relationship between the planetary movements in the space and climate changes on the earth, Designs of Geoscope(2000-2015)for all world countries including all seismic zones, faults, belts, tectonic plates, Designs of Global Monsoon Time Scales (2015-still) for all world countries including all global, regional and local monsoon systems were successfully completed.

While Geogenetic Artificial Rains Project Vision and Mission for creating artificial rains by attracting vaporized sea waters to the desert plains through the sky by geo-magnetizing atmosphere when the weather is surrounded by water molecules during the trough or low-pressure areas, Geogenetic Artificial Storms Project Vision and Mission for pouring

heavy rains and floods over the Reservoirs, dams, Projects; Geogenetic Artificial Underground Waters Project Vision and Mission for increasing ground waters; Geogenetic Invention of Life Project Vision and Mission to revive living beings; Biogenetic Engineering Superhuman Creation Project Vision and Mission to create super humans; Geogenetic Re-creation of Humans of Past Project Vision and Mission for restoring and re-creating people in past by images that are preserved in the earth's magnetic field by new technologies; Geogenetic Bio-Machine Project Vision and Mission for recreating humans of past; Geo-machine for re-creating humans of past; Geogenetic Time-Travel Machine Project Vision and Mission; Geogenetic Past-Travel Geo-Machine Project Vision and Mission for traveling into the past, present future; Spacegenetic Another New Earth in the Space Project Vision and Mission for re-creating the another earth in the space; Geogenetic Microcosm Project Vision and Mission for connecting the worlds of micro organs, atomic-worlds; Geogenetic Macrocosm Project Vision and Mission for connecting the worlds of space and outer space worlds etc. were uncompleted due to lack of support and opportunities.

All these were angered by casteists and fanatics. In addition to all this, the doctrines published in the name of Irlapatism-Irlapati Theory of Universe in 1977 further fueled their anger. All matters pertaining to the cosmos, including the doctrines about creation, the existence of god, the theory of evolution and aforesaid numerous ideas and doctrines were widely discussed and incorporated in this book. These doctrines exposed to the anger of fundamentalists and superstitious, subsequently got into violent altercations. As a result, my lab was destroyed and copies of research notes were burned. I reported these repressions to The Revenue Divisional Officer. Amalapuram in July 1977. The Revenue Divisional Officer was conducted an inquiry about this matter. While returning from the inquiry, I was attacked by a mob, and they took me forces to the village Chavadi, Ryali, there fundamentalists and superstitious people were met and where I was beat up. Followed by altercations about my thoughts in the book, they have beaten and forced me to put signatures on some prepared documents, and an offense falsely framed and foisted against me. After many tortures, I was sent to the Taluk Magistrate, Kothapeta in handcuffs. The fundamentalists and superstitious people succeeded me in sentencing. The Taluk Magistrate was declared me as a "dangerous boy and up to anything" and issued a sentence to punish and

handed over to the Police Station, Ravulapalem. I was arrested on July 21, 1977. A case was registered, and I was kept on remand in Sub-jail and remaining period interrogated periodically. I faced trials, handcuffed and led through streets during the inquiries and court trials/hearings, and imprisoned. The trials were done from April 2, 1979, to November 20, 1979. After many arguments, the Hon'ble Additional Judicial First Class Magistrate Court was found me not guilty and acquitted on November 27, 1979.

However, many efforts and sacrifice did though, I could not get government recognition and social support. My researches and studies were ignored and darkened. I am a victim of racism and discrimination, negligence and jealousy. Throughout my life, I have experienced hardships all my life. I was abused, humiliated and beaten and pushed out when I asked to provide research opportunities. I was insulted by my race. Furthermore, I was tied to a pole and beaten. My thoughts and researches were subjected to the wrath of racists, casteists and fanatics as well as fellow scientists and resulted into oppression of me. My lab was invaded. Illegal cases were framed and foisted against me. I faced trials, handcuffed and led through streets police inquiries and court trials/hearings, and imprisoned. Political recommendations and officials support, cash and caste, region and religion may play a key role in giving support and opportunities, awards and rewards, respect and recognition to depressed communities. But I have none of them. I am now making my life's last journey due to disregard & despair and illness & poverty.

Appeal to the world scientists:

I introduced numerous unique ideas, doctrines and tried unsuccessfully to fulfill them and conquer the creation. But, I was not provided opportunities due to racism, discrimination, negligence; oppressed with tortures, inquisitions, prisons, and my ideas, doctrines were ignored, suppressed, darkened. I am now making my life's last journey due to disregard & despair and ill-health & poverty. Furthermore, I am now suffering from the life-threatening severe asthma related issues and undergoing treatment. Illness weakening my health, my mind slows down and forgetfulness is coming. It is not known how long I will live and when I will die, but I know my time is near. In such situations, I am now making this humble request that if world scientists have invented any technologies in the future that re-

create humans of the past, kindly remember and re-create me to complete my uncompleted goals.

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Dr.D.R.Kothawale, Dr.Jayashree
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1 Letter No. NA-153 Date. October 21,1991 of the Shri G.M.C. Balayogi Member of Parliament to the India Meteorological Department for further research and development of the Global Monsoon Time Scales/ Indian Monsoon Time Scale in the services of welfare of the people

2) D.O. No. NMRF/SKM/30/94 Dated; 17-08-1994 of the Government of India , Ministry of Science & Technology, Department of Science & Technology, New Delhi Cabinet Secretary correspondences about further research and development of the Global Monsoon Time Scales/ Indian Monsoon Time Scale in the services of welfare of the people.

3) Letter No. NA-153 Dated; 28-11-1996 of the Government of India , India Meteorological Department about the correspondence with the Parliament, President of India and other VVIP's of India pertaining to further research and development of the Global Monsoon Time Scales/ Indian Monsoon Time Scale in the services of welfare of the people.

4) Letter No. NA-49106/537 Dated; 25-07-2005 of the Government of India , India Meteorological Department about the correspondence about further

research and development of the Global Monsoon Time Scales/ Indian Monsoon Time Scale in the services of welfare of the people.

5 Letter D.O.No. 209/MOS(M)/PS/2008 Date. October 21,1991 of the Shri Dr.T.Subbarami Reddy Hon'ble Union Minister of State for India to the India Meteorological Department for further research and development of the Global Monsoon Time Scales/ Indian Monsoon Time Scale in the services of welfare of the people.

6) Letter No. GT-021(MISC)/6675 Dt: 13-08-2008 NA-49106/537 of the Government of India , India Meteorological Department about the correspondence for further research and development.

7) Letter No.DST/SECY/288/2009 Dated;June 1,2009 of the Secretary, Minister of Science and Technology recommendation to the Indian Institute of Tropical Meteorology for further research and

development of the Global Monsoon Time Scales/ Indian Monsoon Time Scale.

8) Letter No. F-12016/1/00-NA/100 Dt: 01-12-2009 of the Government of India , India Meteorological Department about the correspondence for further research and development of the Global Monsoon Time Scales/ Indian Monsoon Time Scale.

9) Letter No. F-12016/1/00-NA/100 Dt: 09-07-2010 of the Government of India , India Meteorological Department about the correspondence for further research and development of the Global Monsoon Time Scales/ Indian Monsoon Time Scale.

Phonological Appendes:

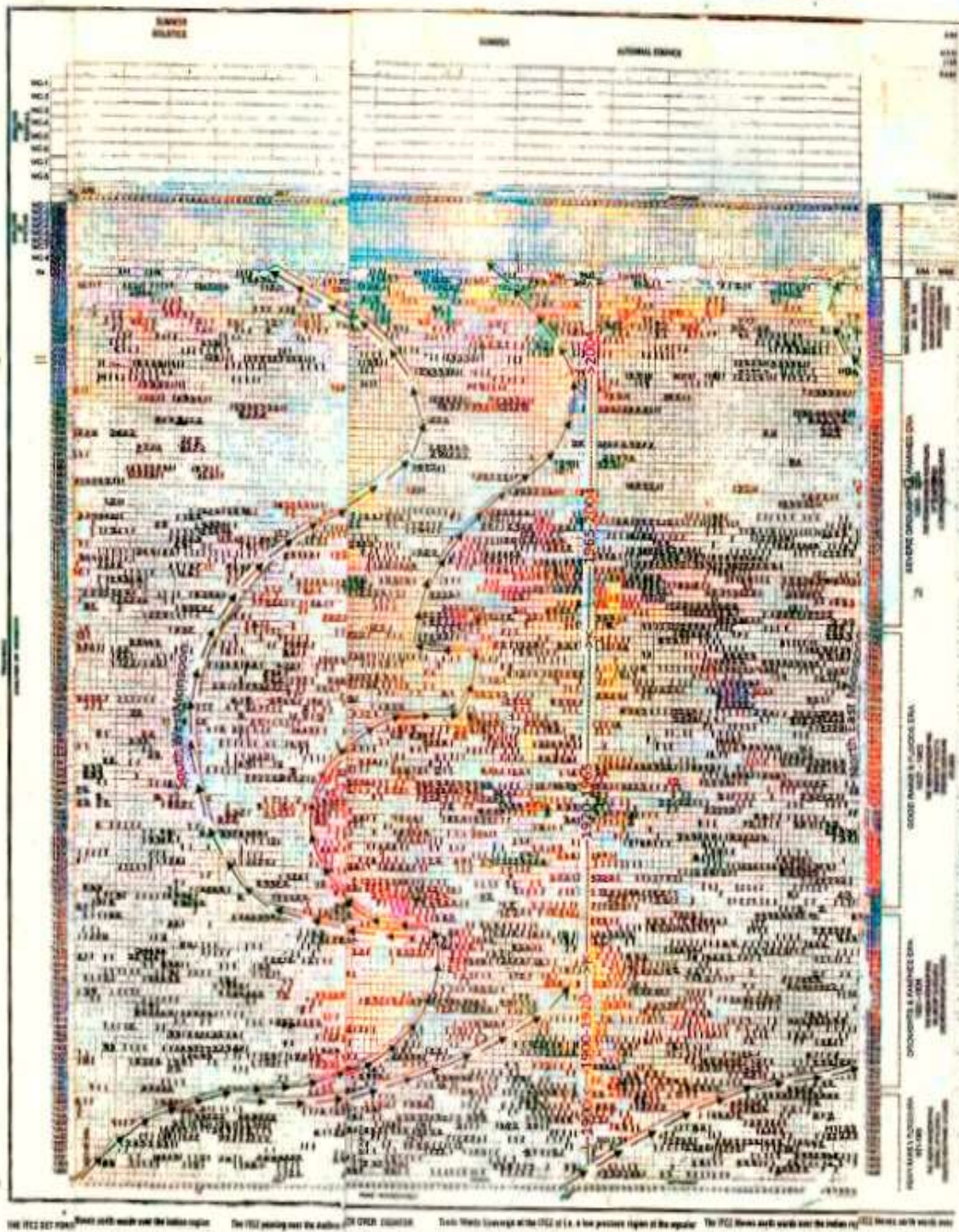
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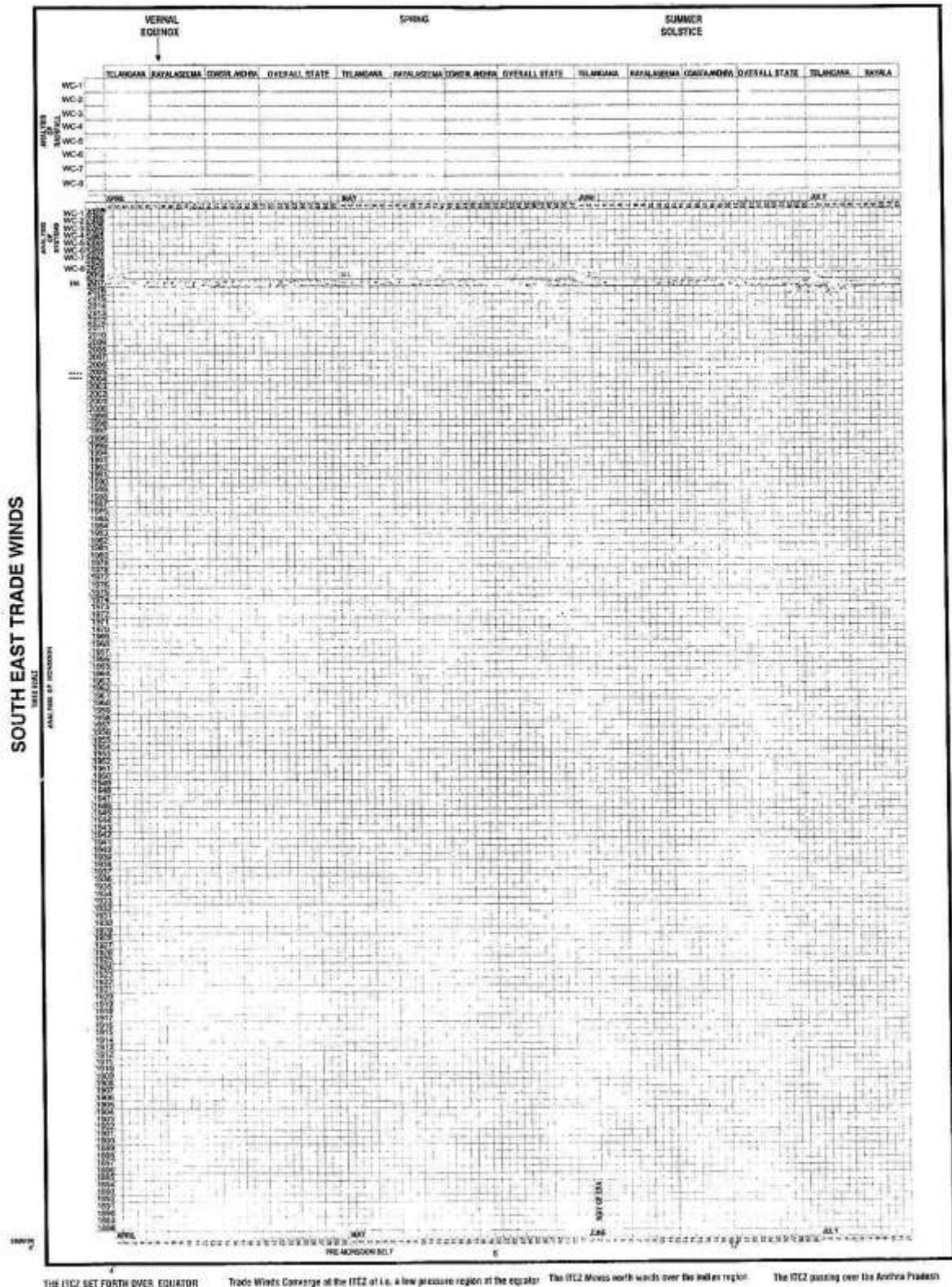
Historical events supported documents:

The documents that supports the events in the history of the invention are enclose

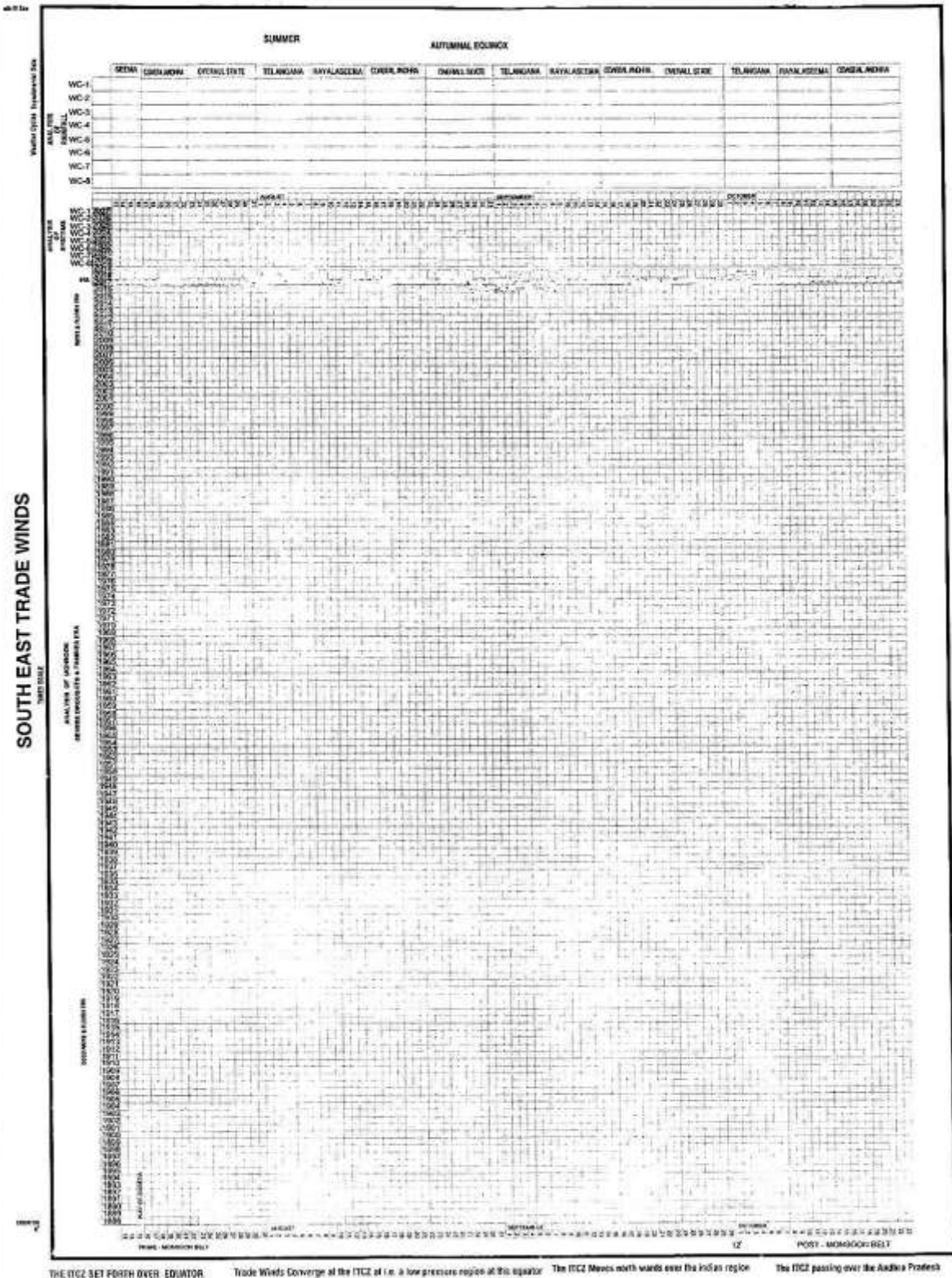
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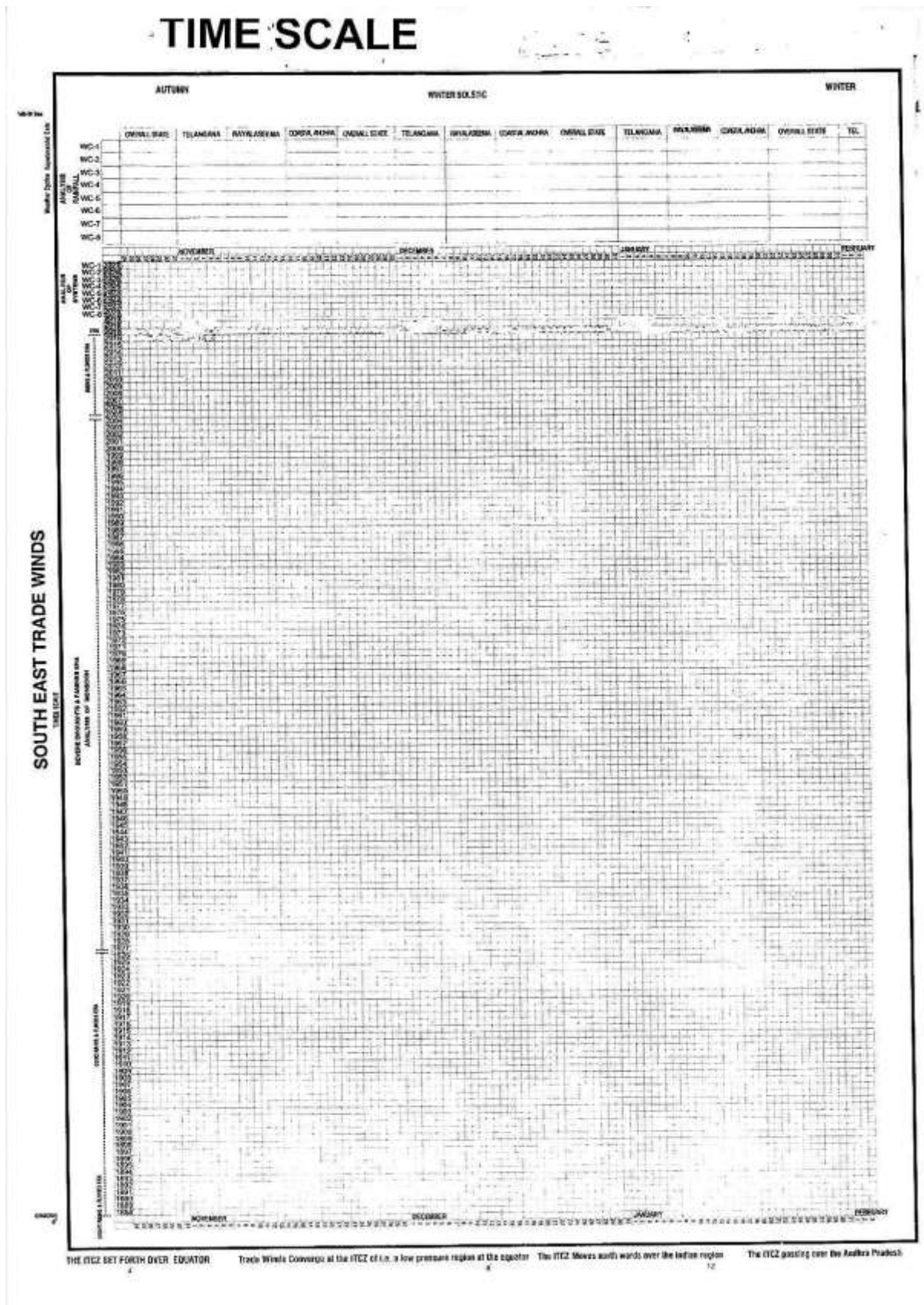
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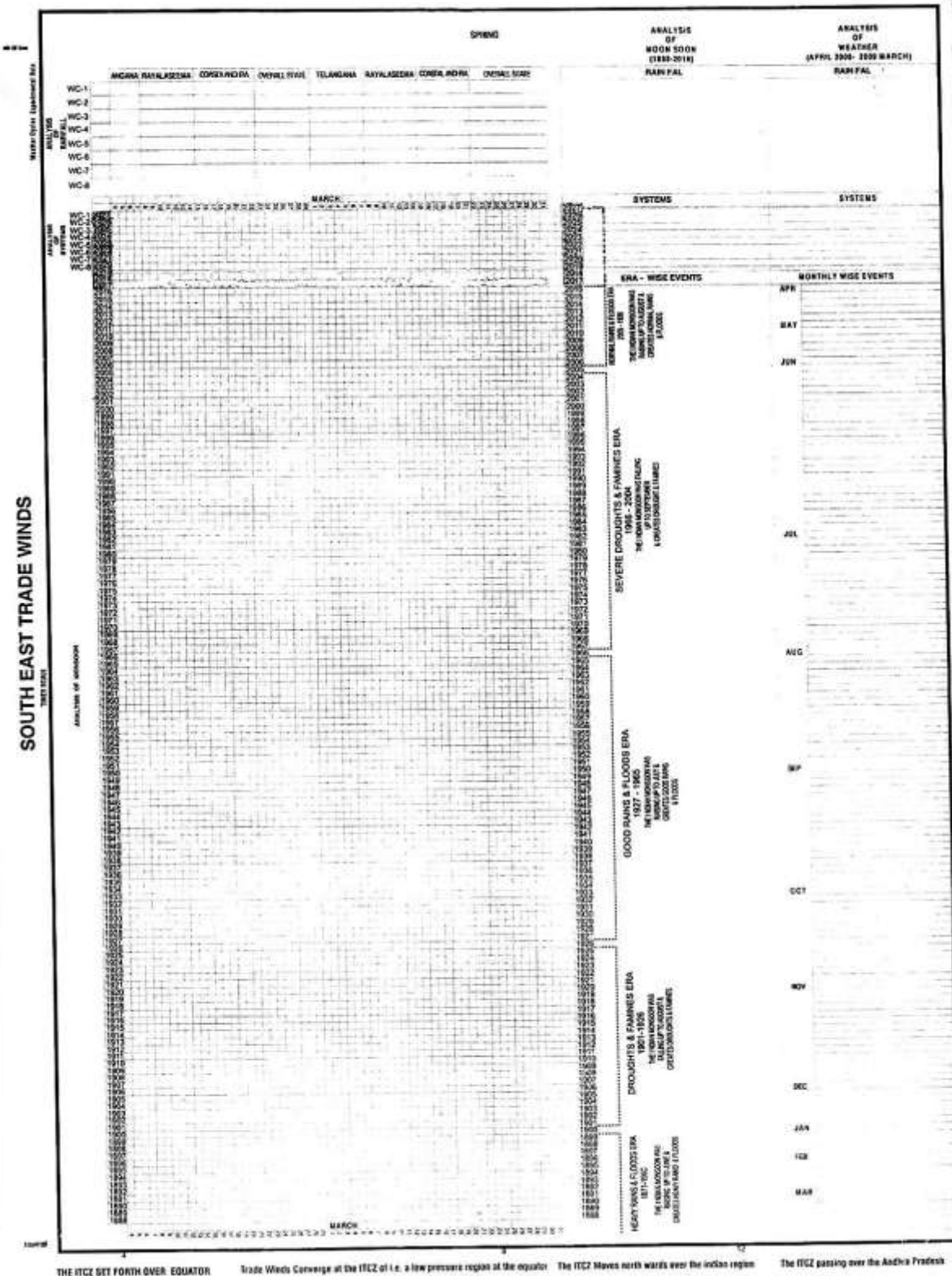


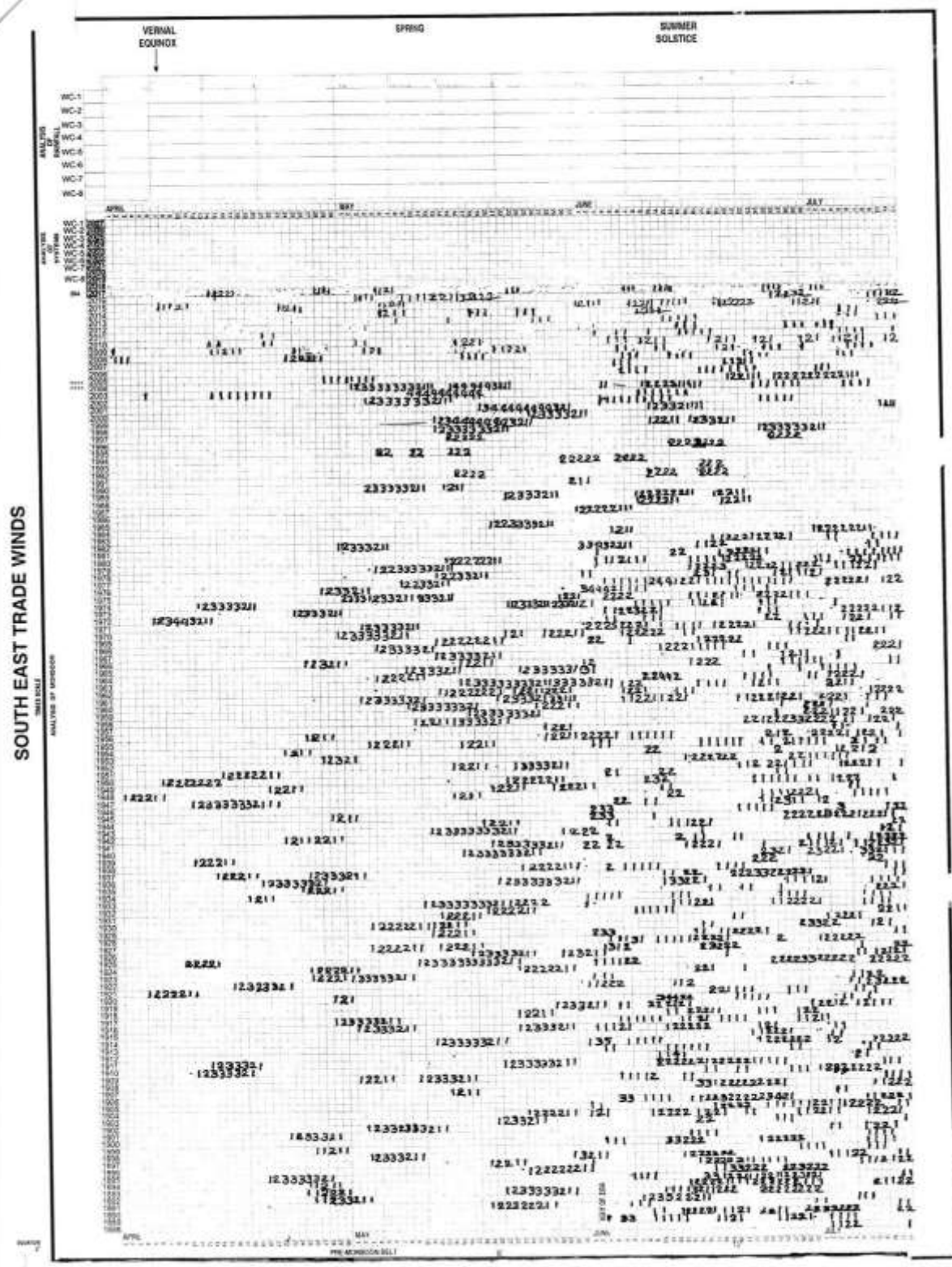


INDIAN MONSOON

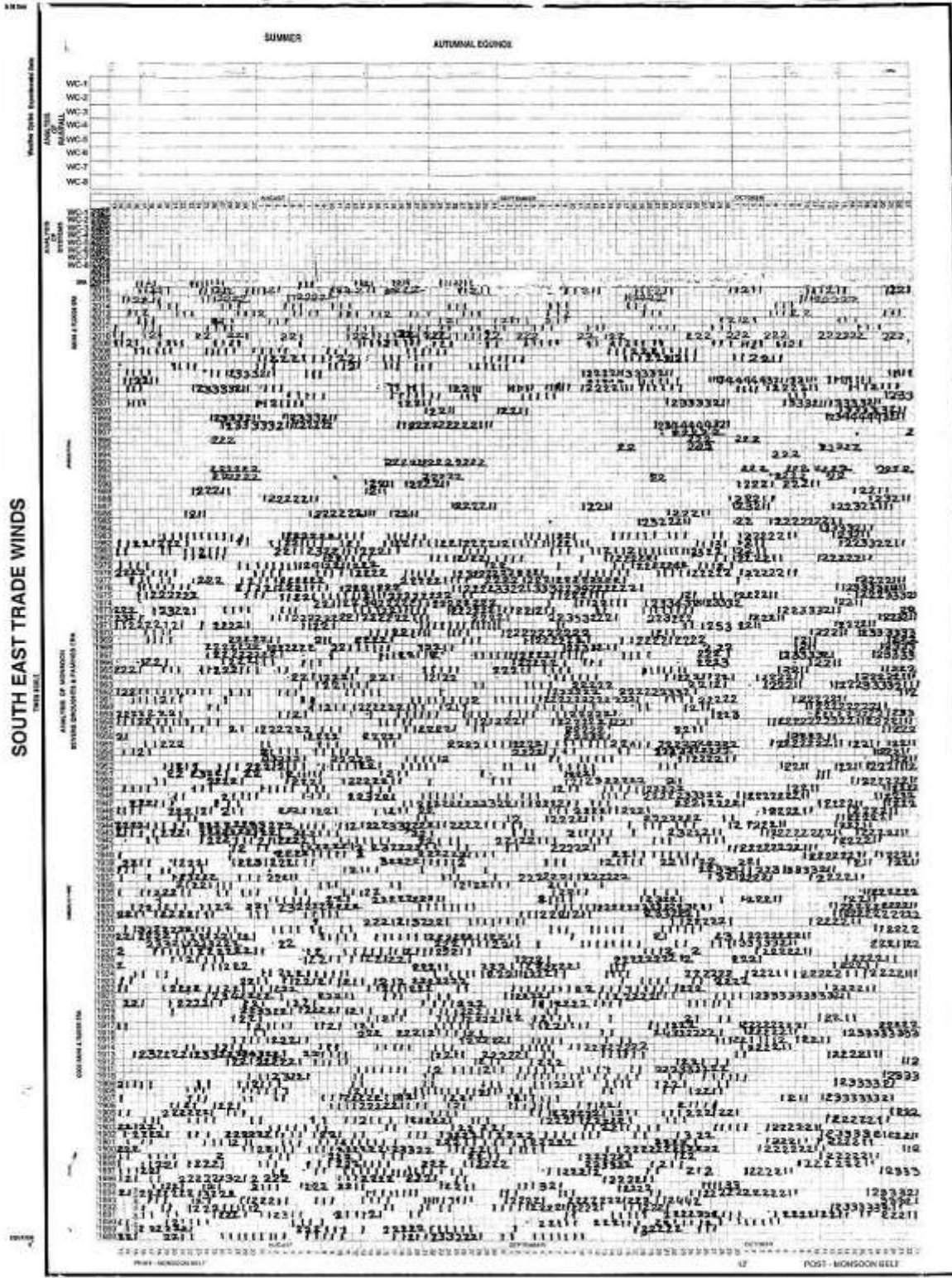






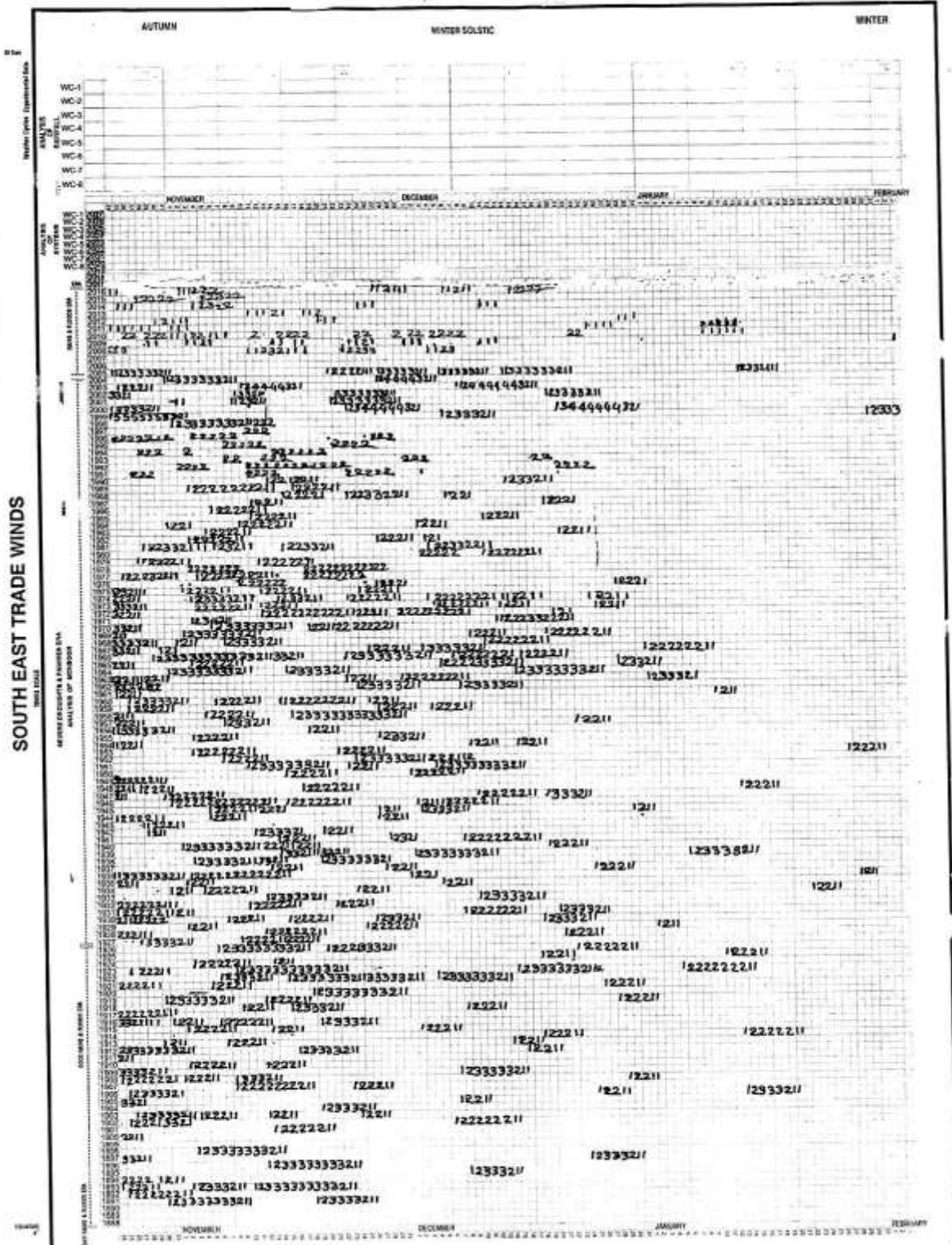


INDIAN MONSOON

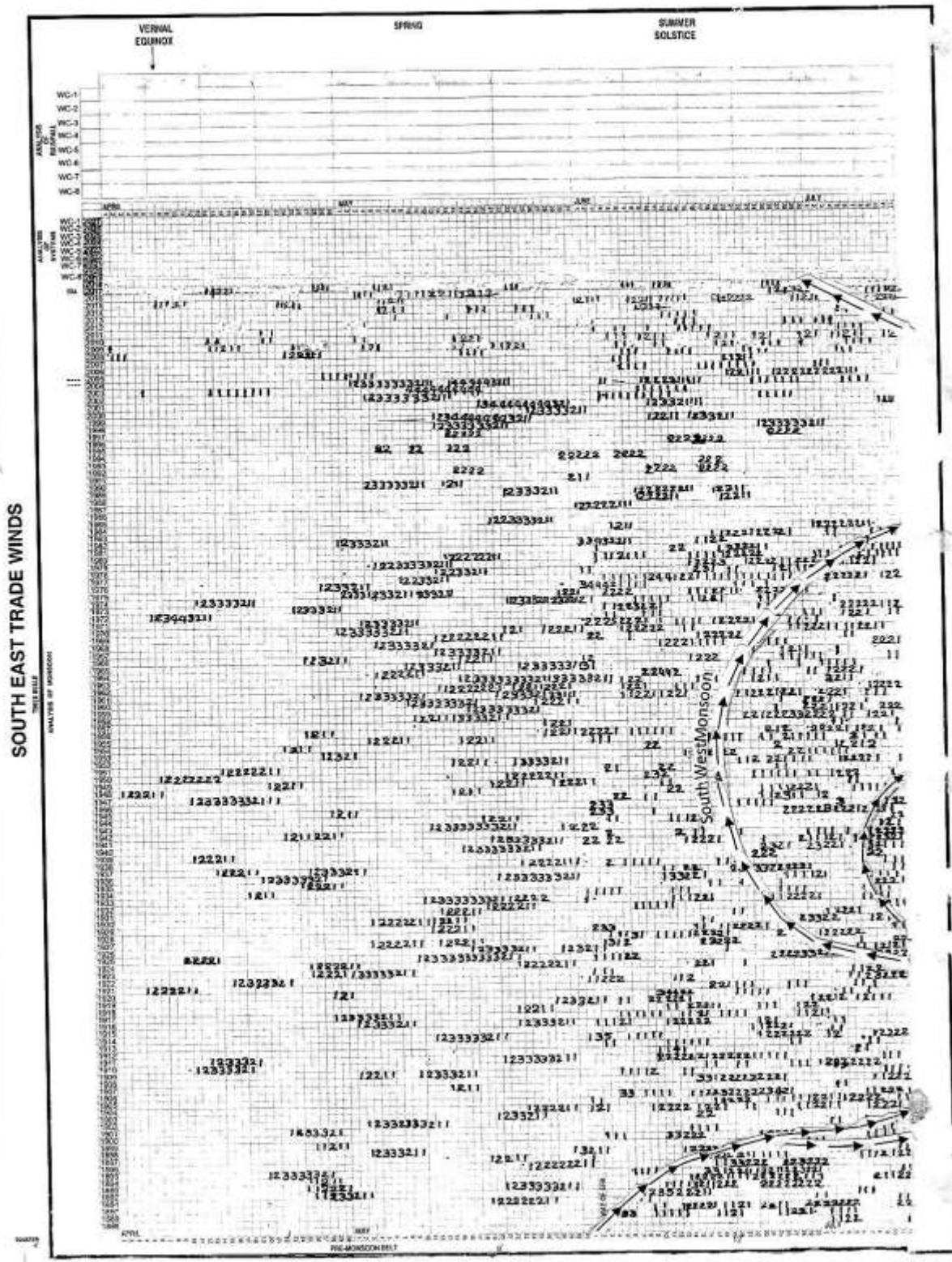


THE ITCZ MOVES NORTHWARDS OVER THE INDIAN REGION. THE ITCZ PASSING OVER THE ANDHRA PRADESH.

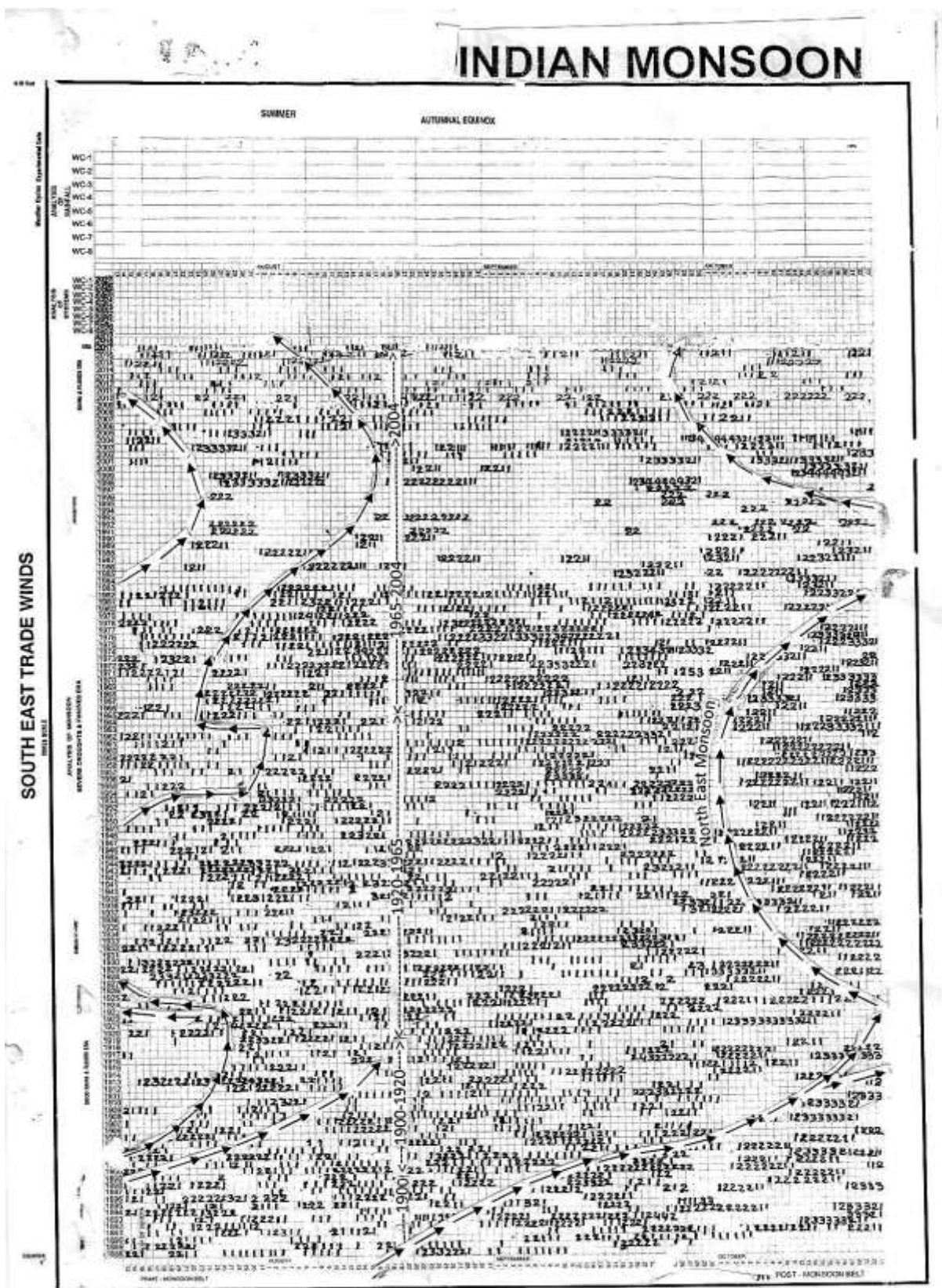
TIME SCALE

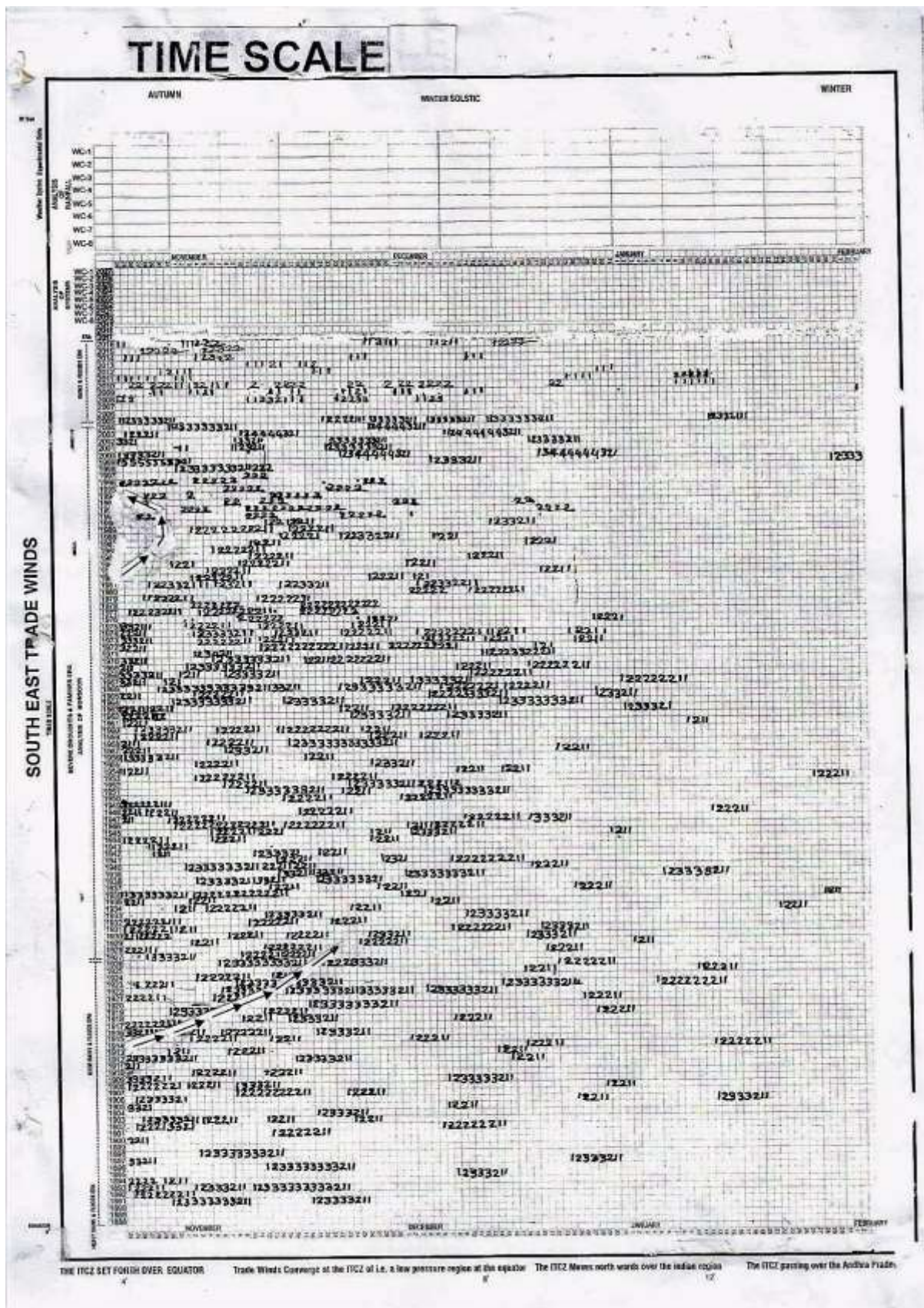


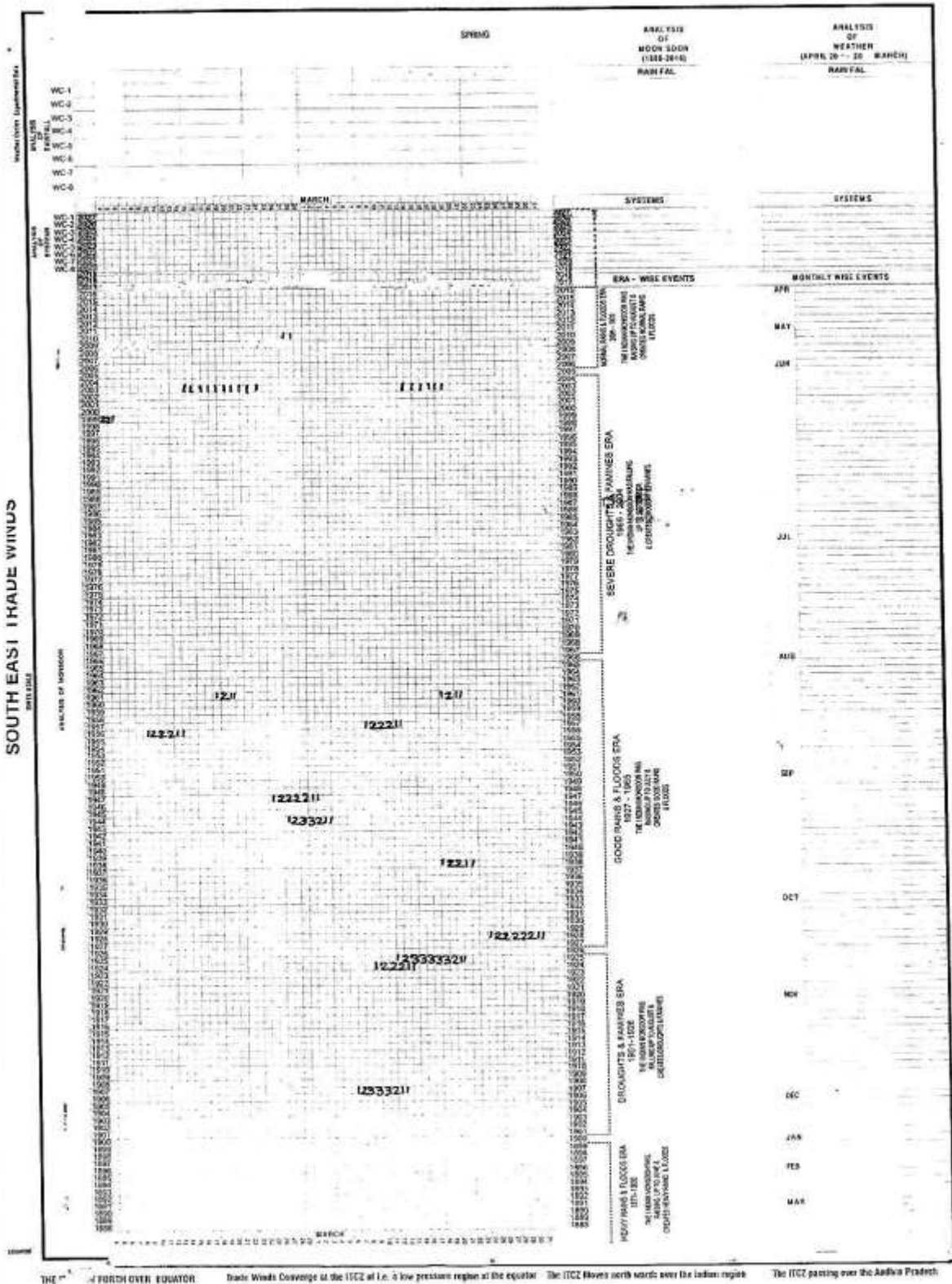
THE ITCZ SET FORTH OVER EQUATOR Trade Winds Converge at the ITCZ i.e. a low pressure region at the equator The ITCZ Moves north wards over the Indian region The ITCZ passing over the Andhra Pradesh



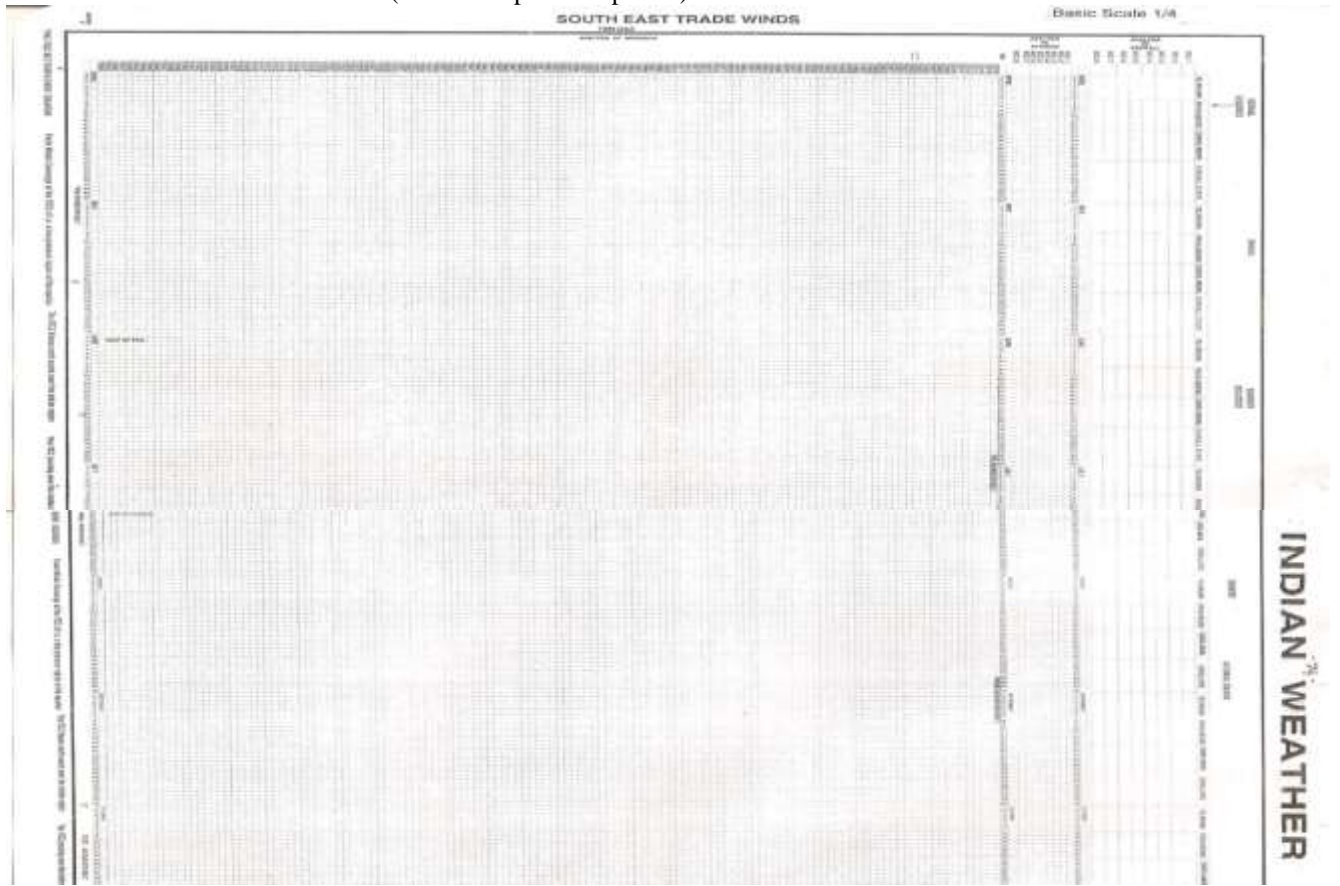
THE ITCZ SET FORTH OVER EQUATOR Trade Winds Converge at the ITCZ at a low pressure region of the equator The ITCZ Moves south wards over the Indian region The ITCZ passing over the Andhra Pradesh

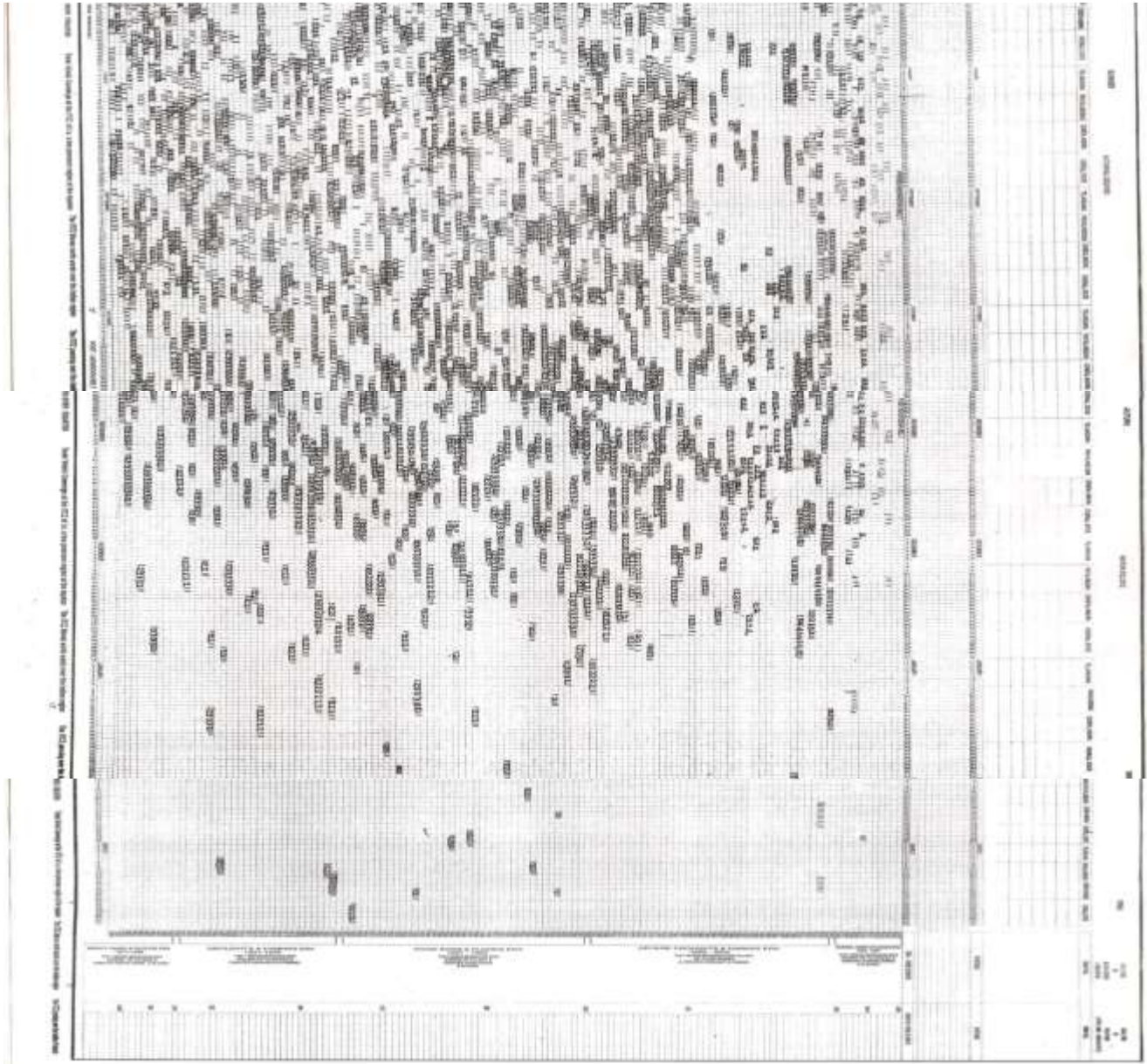


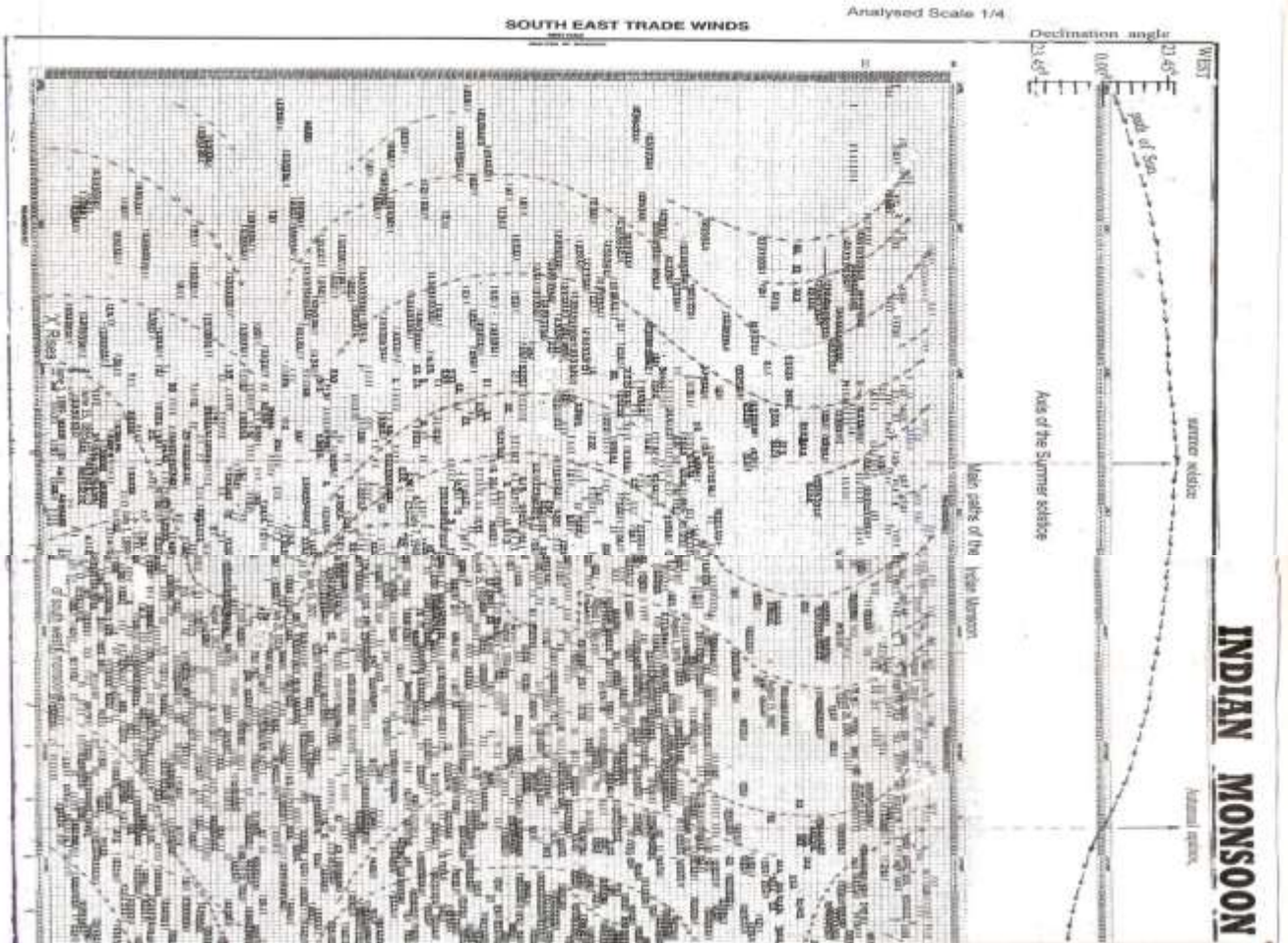


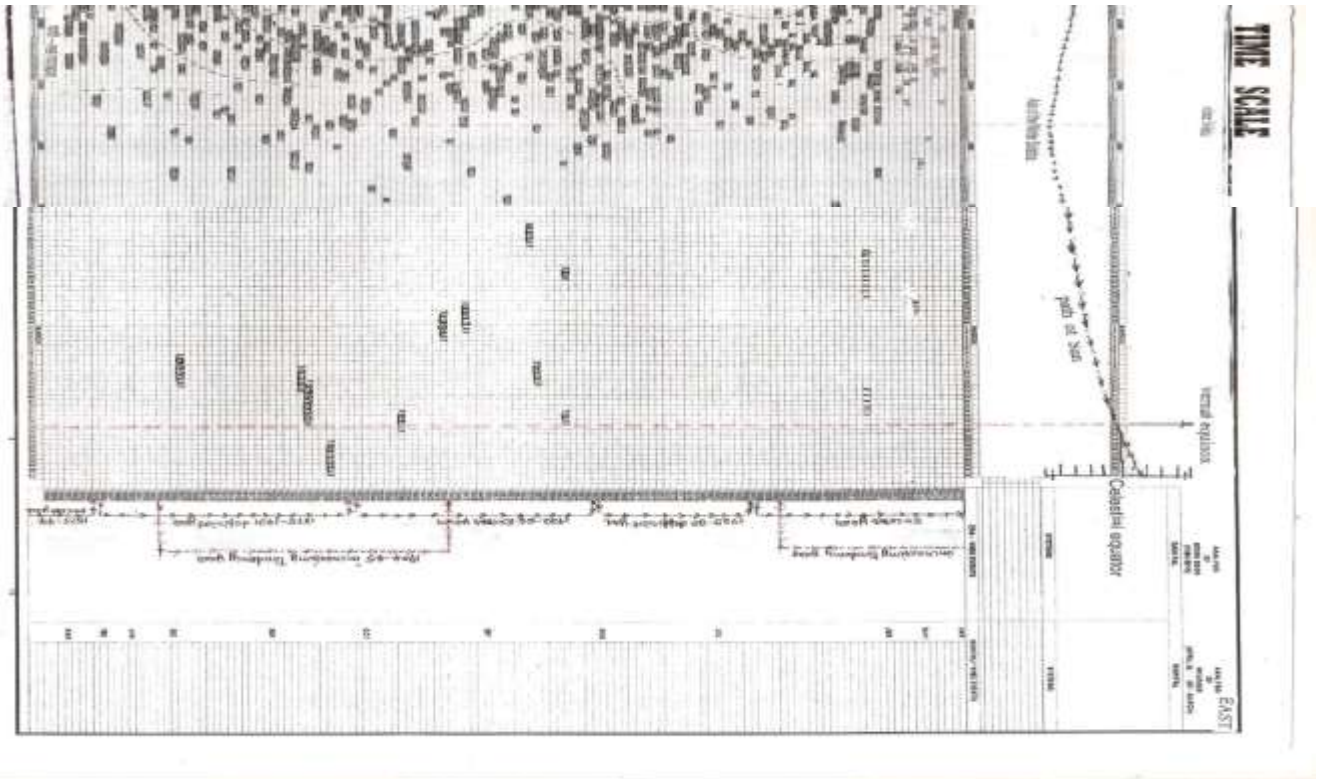


Indian monsoon time scales (when four parts are pasted)

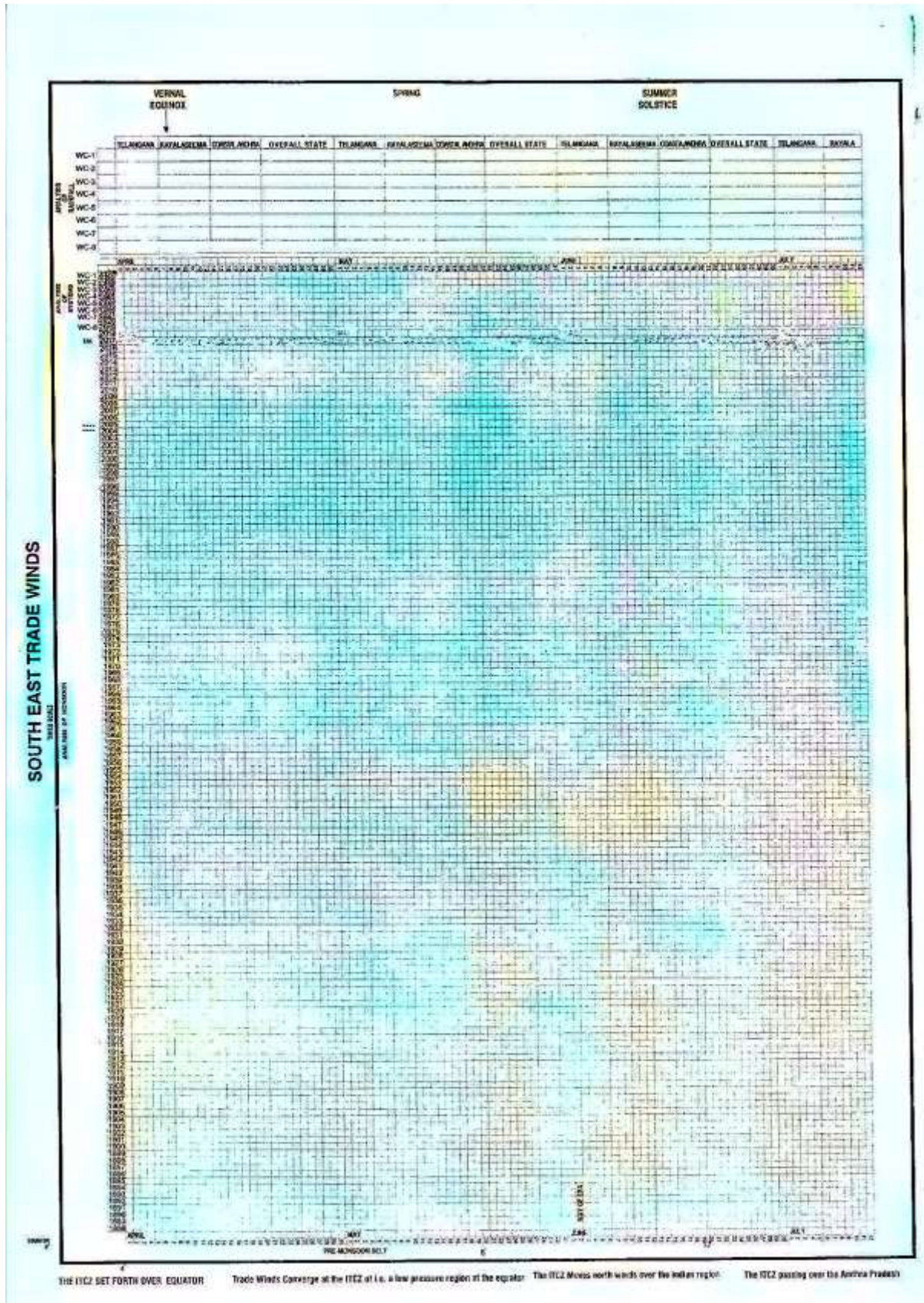


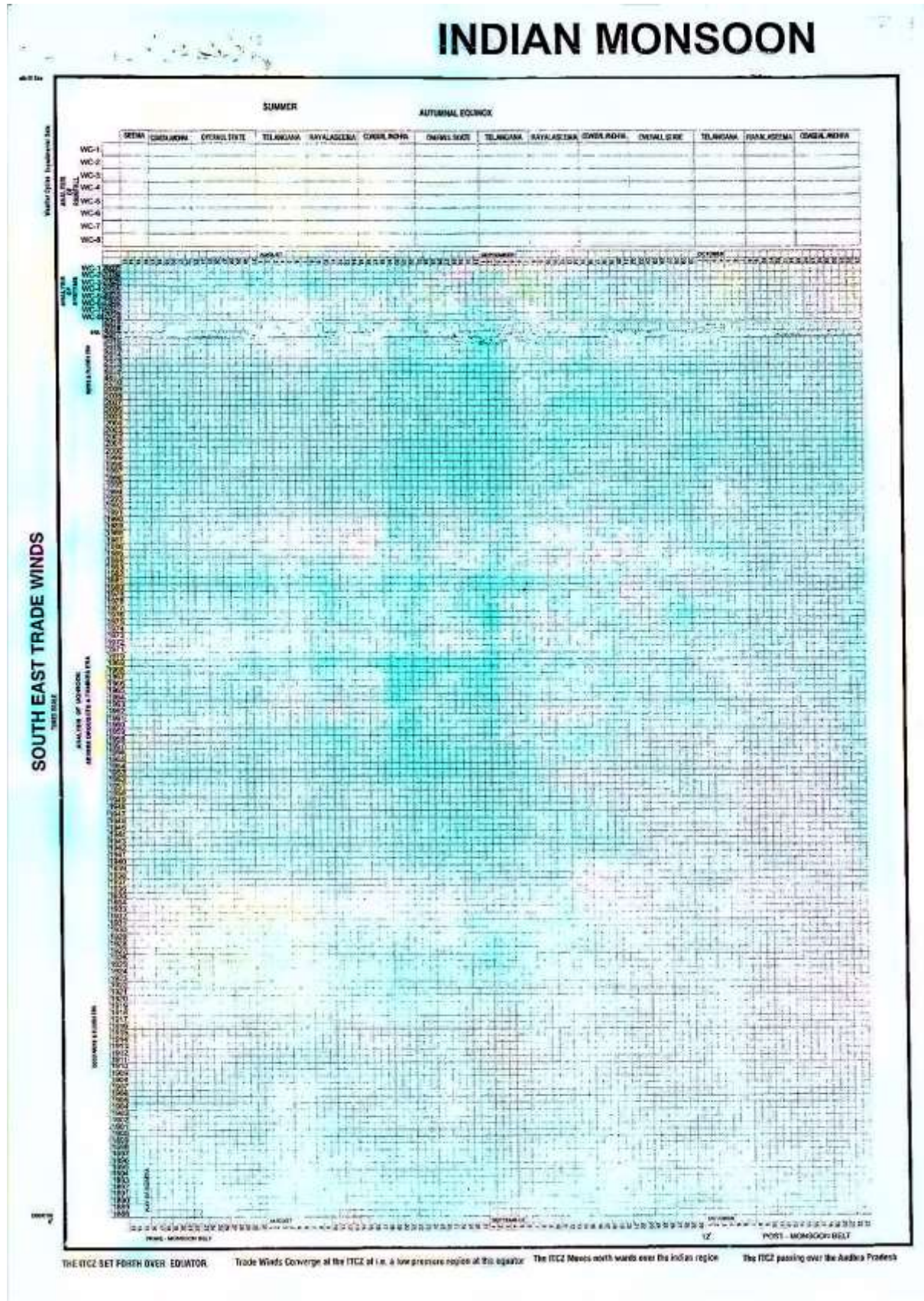


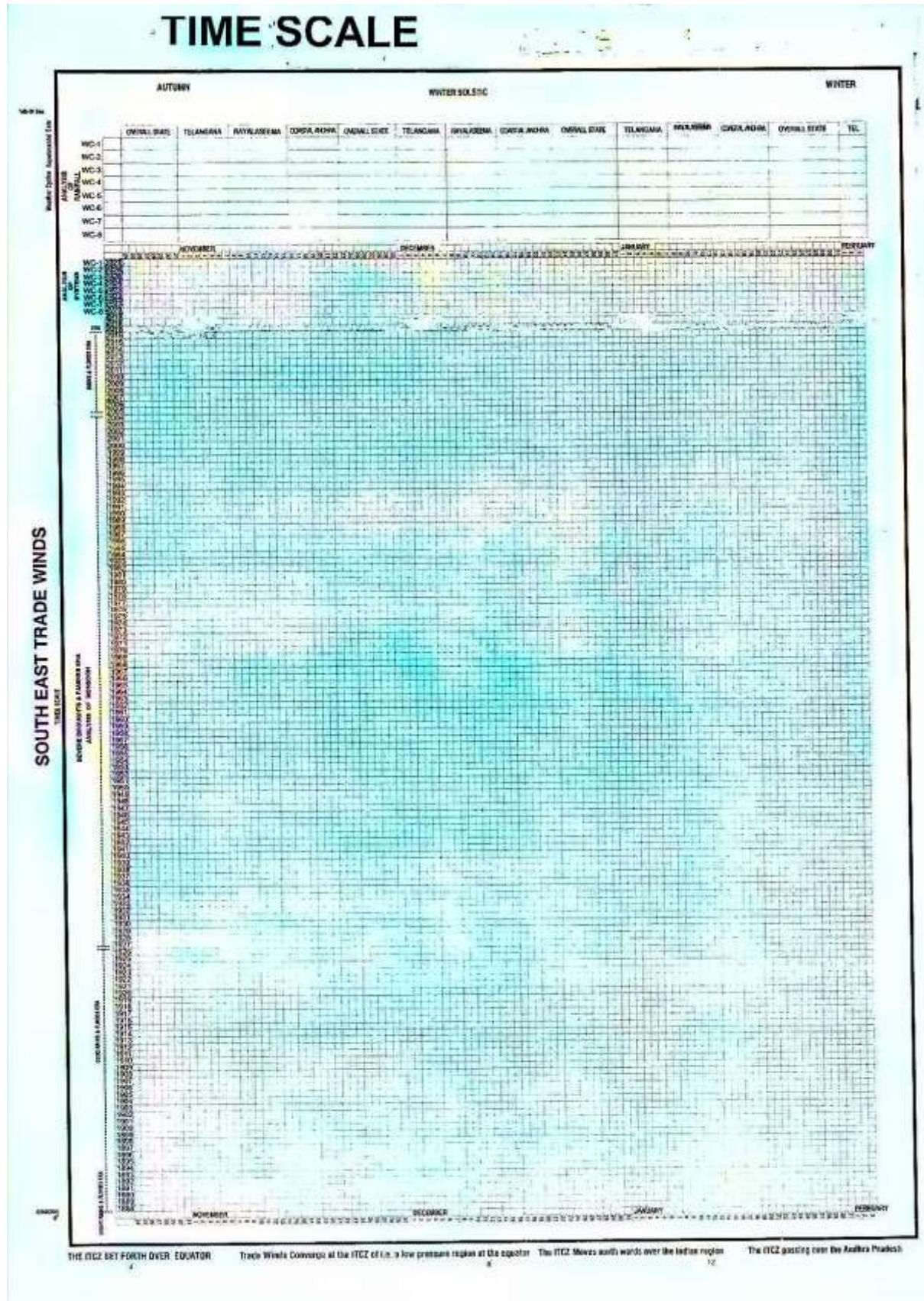


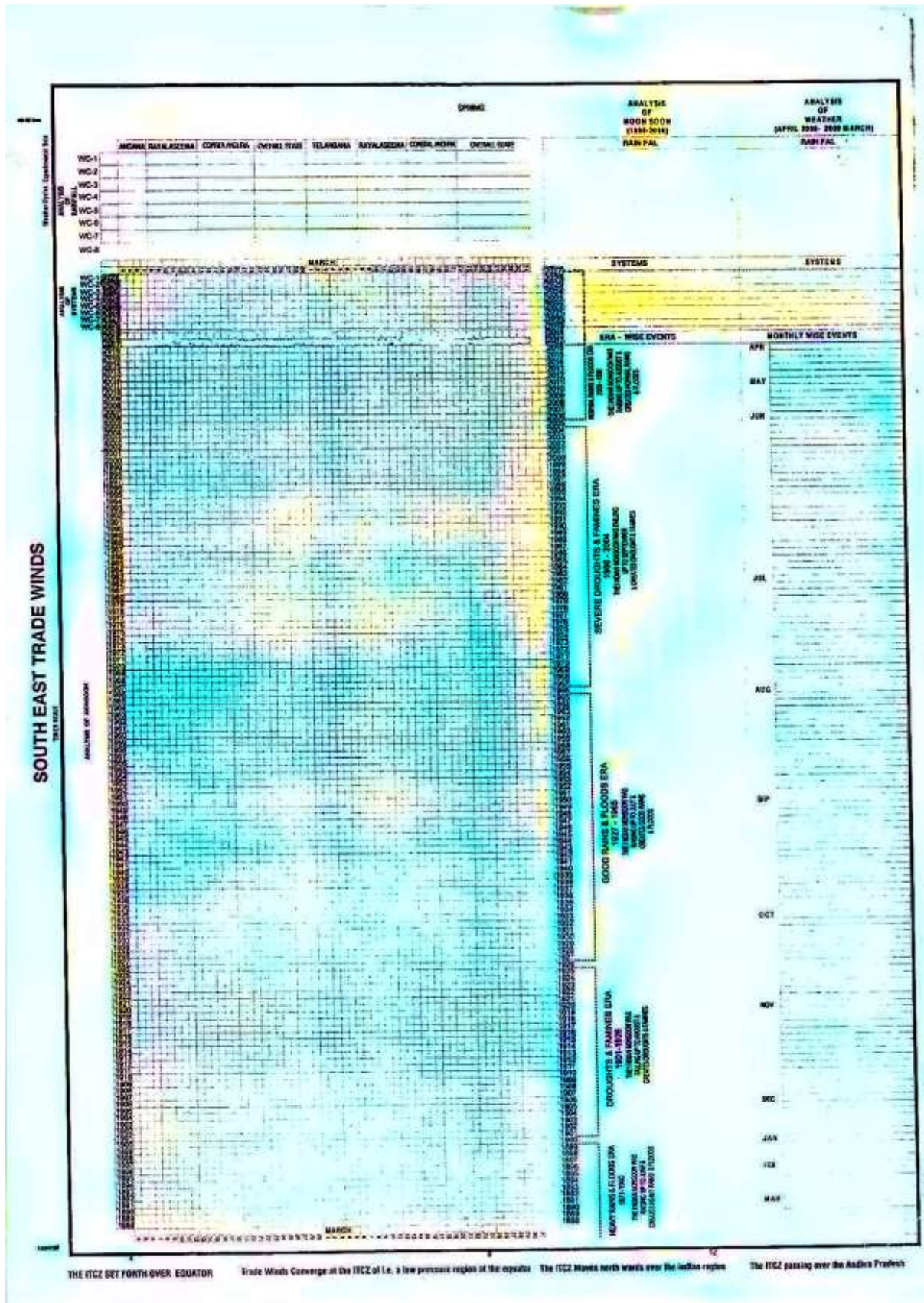


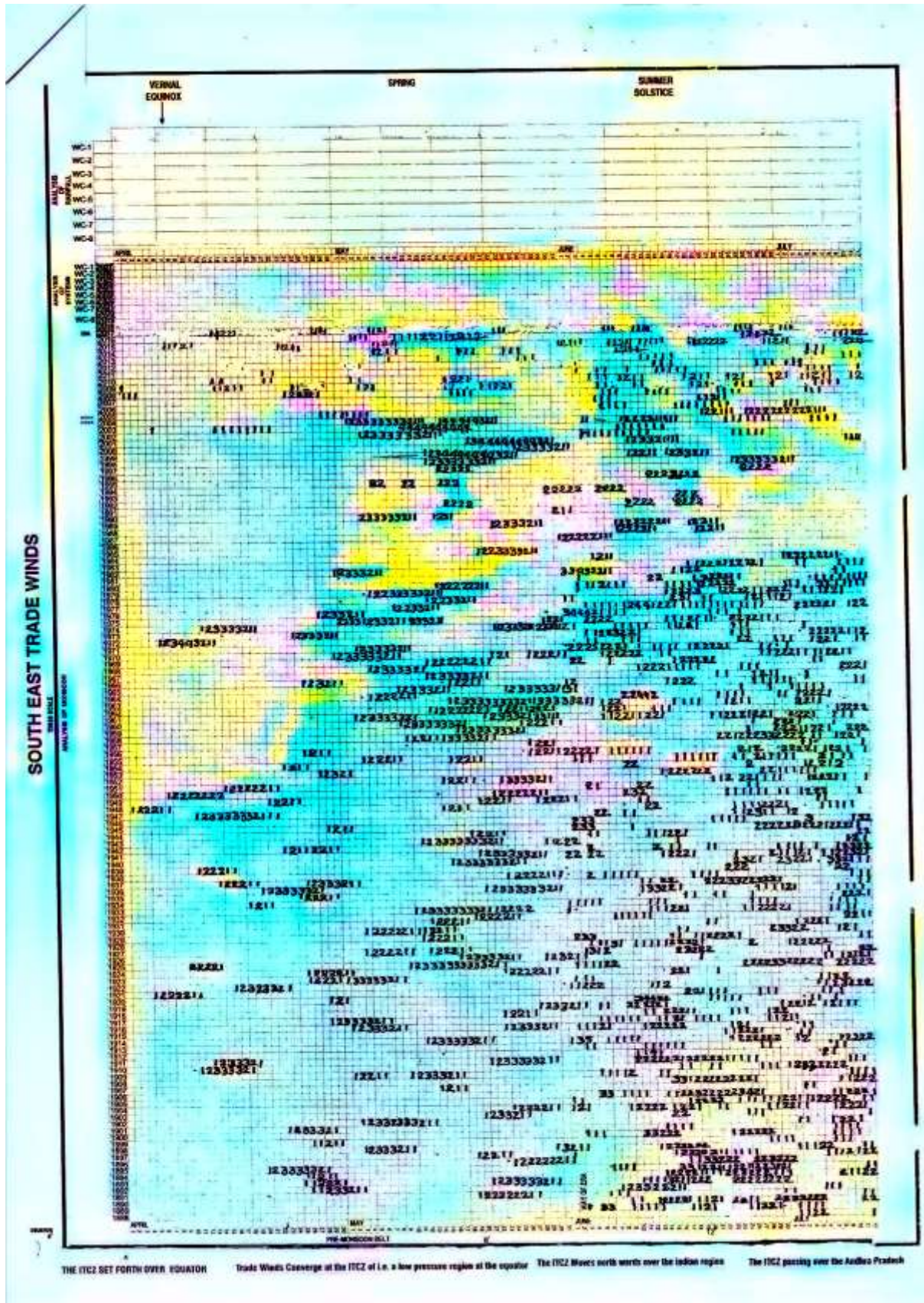
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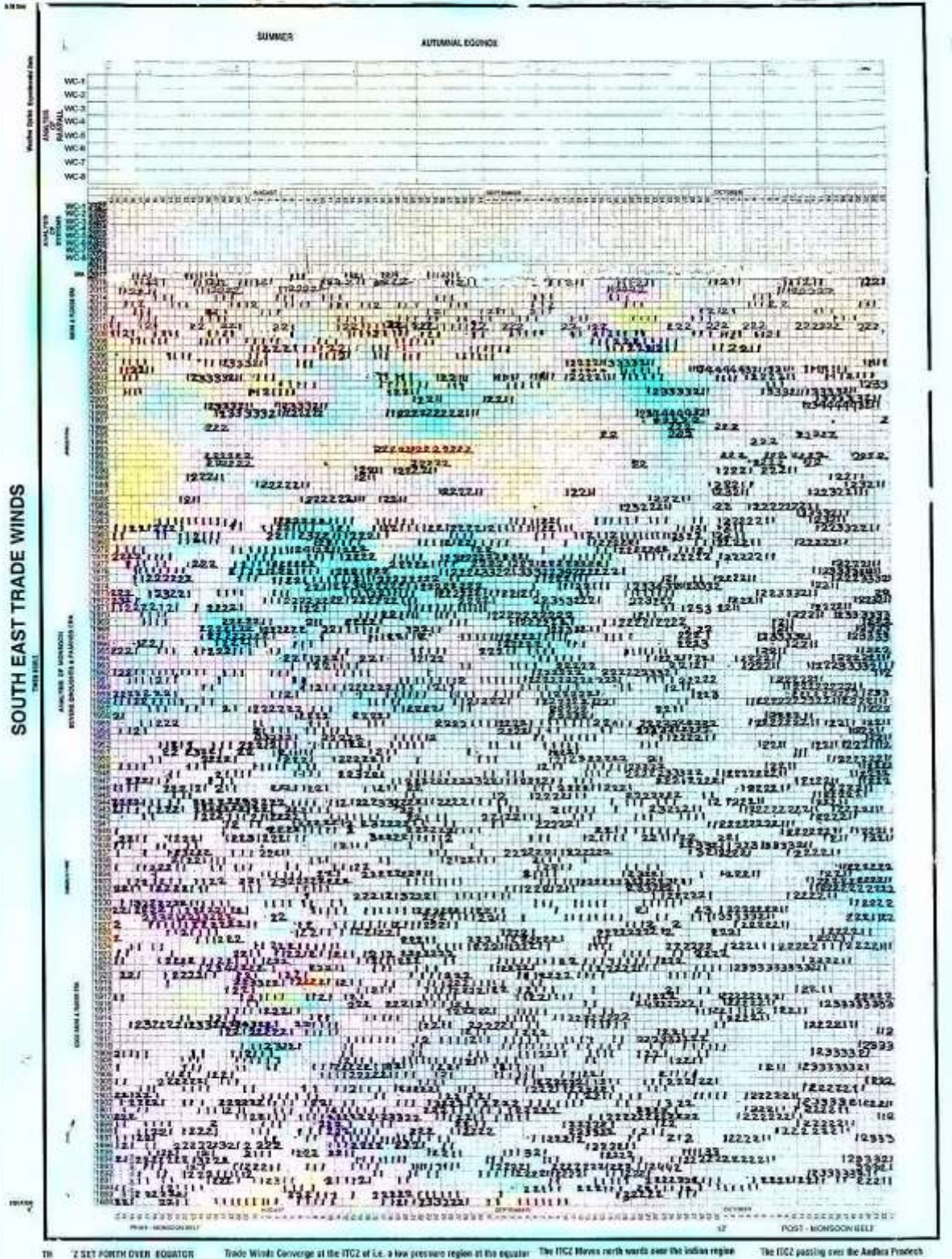




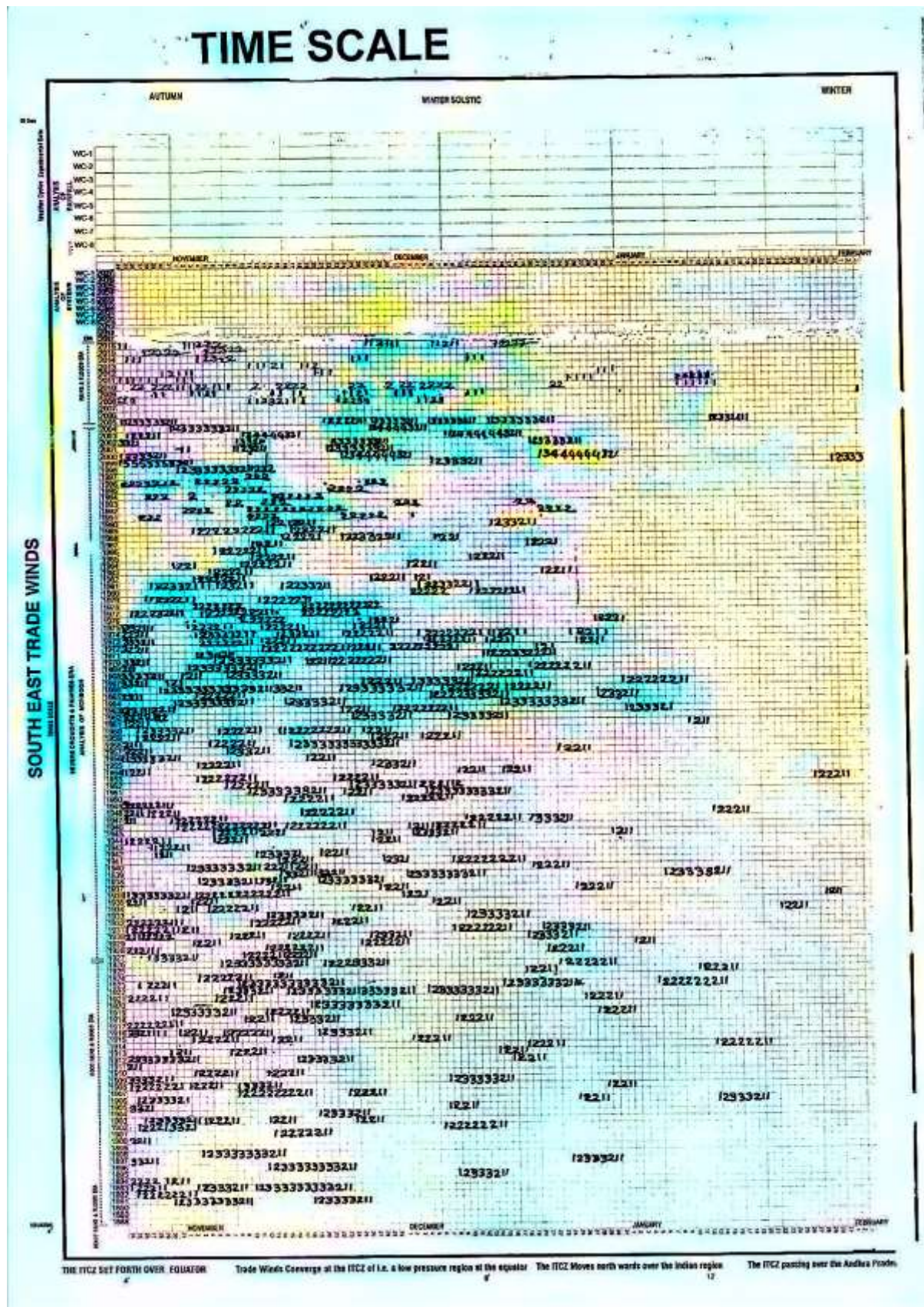


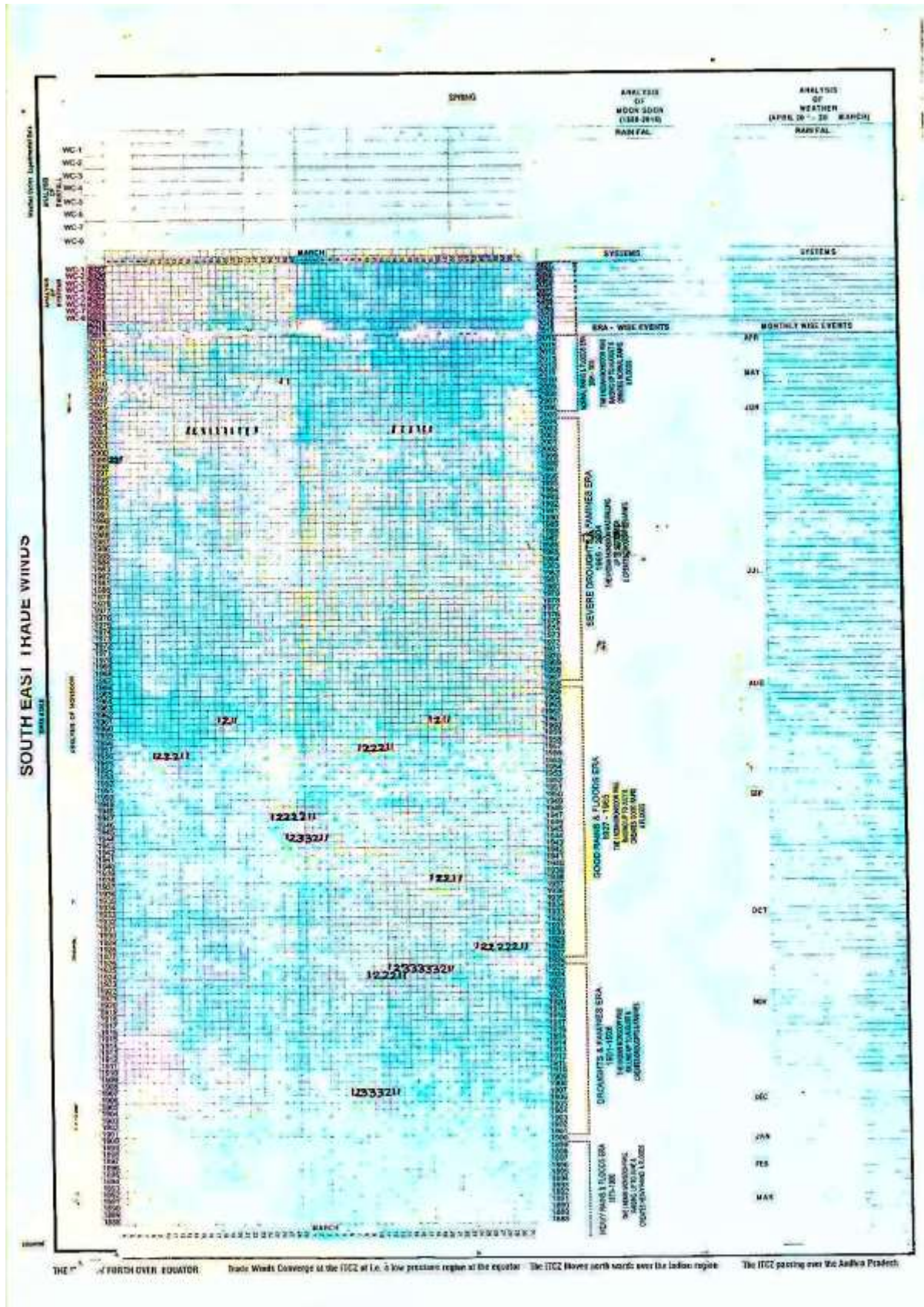


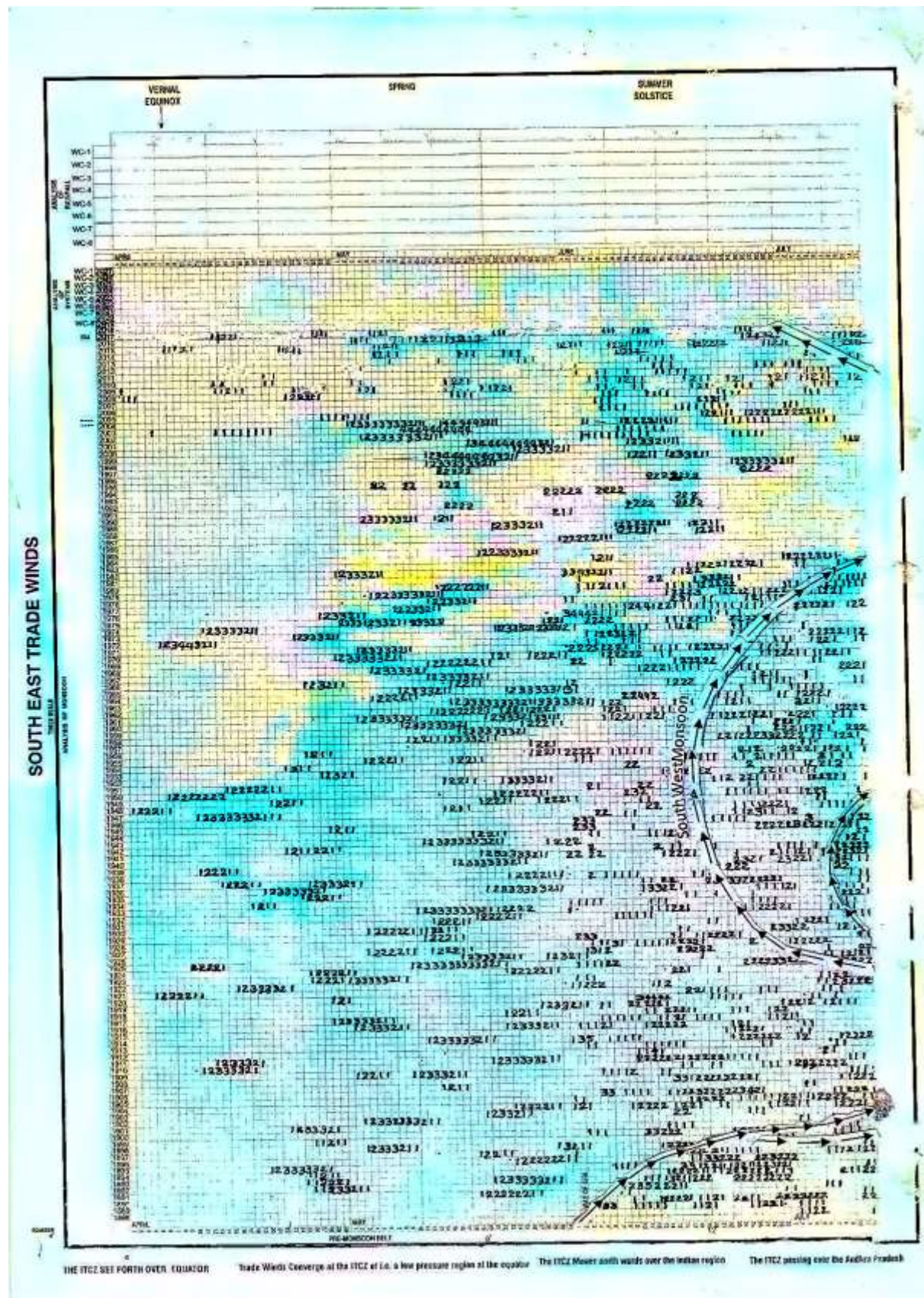
INDIAN MONSOON

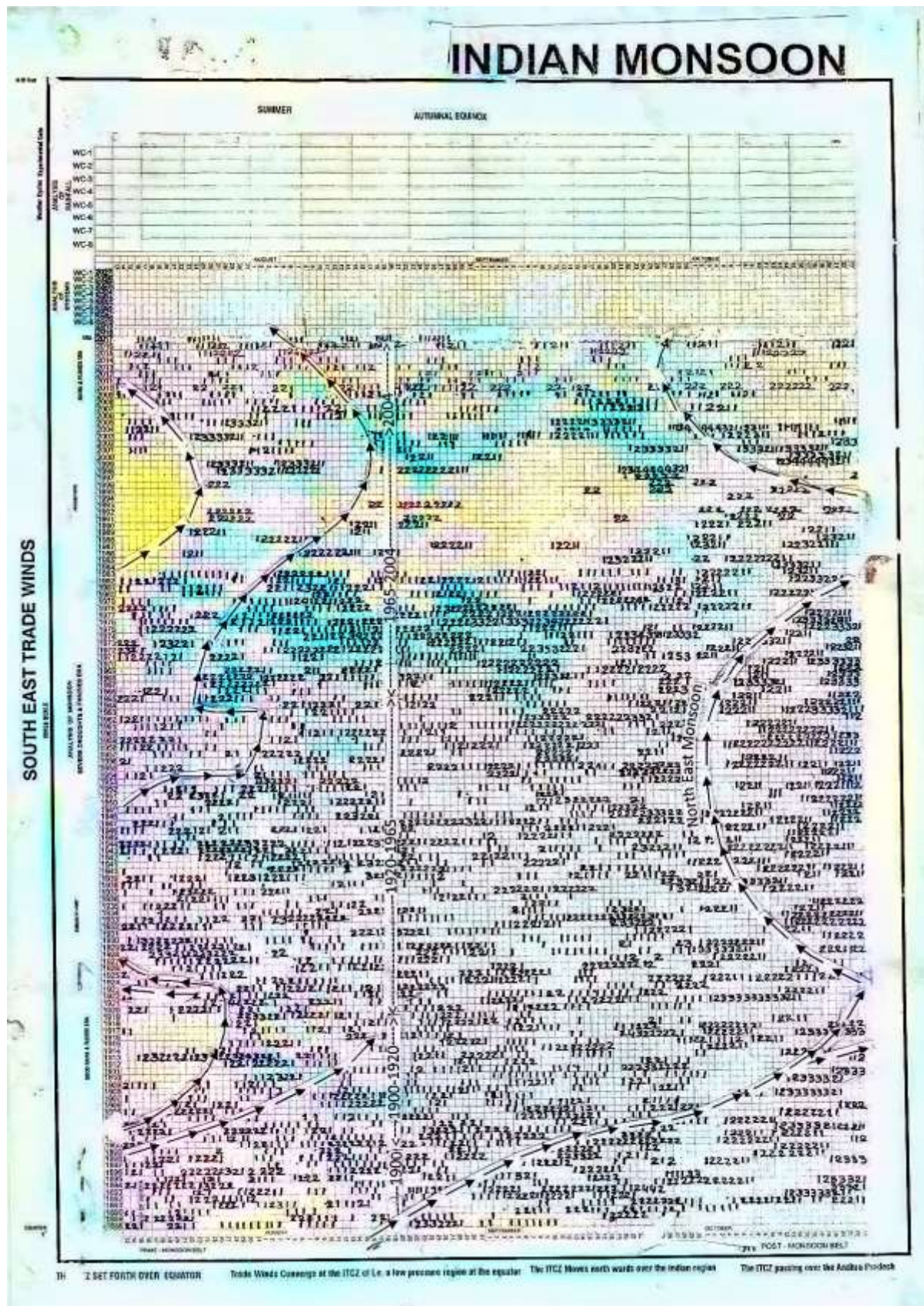


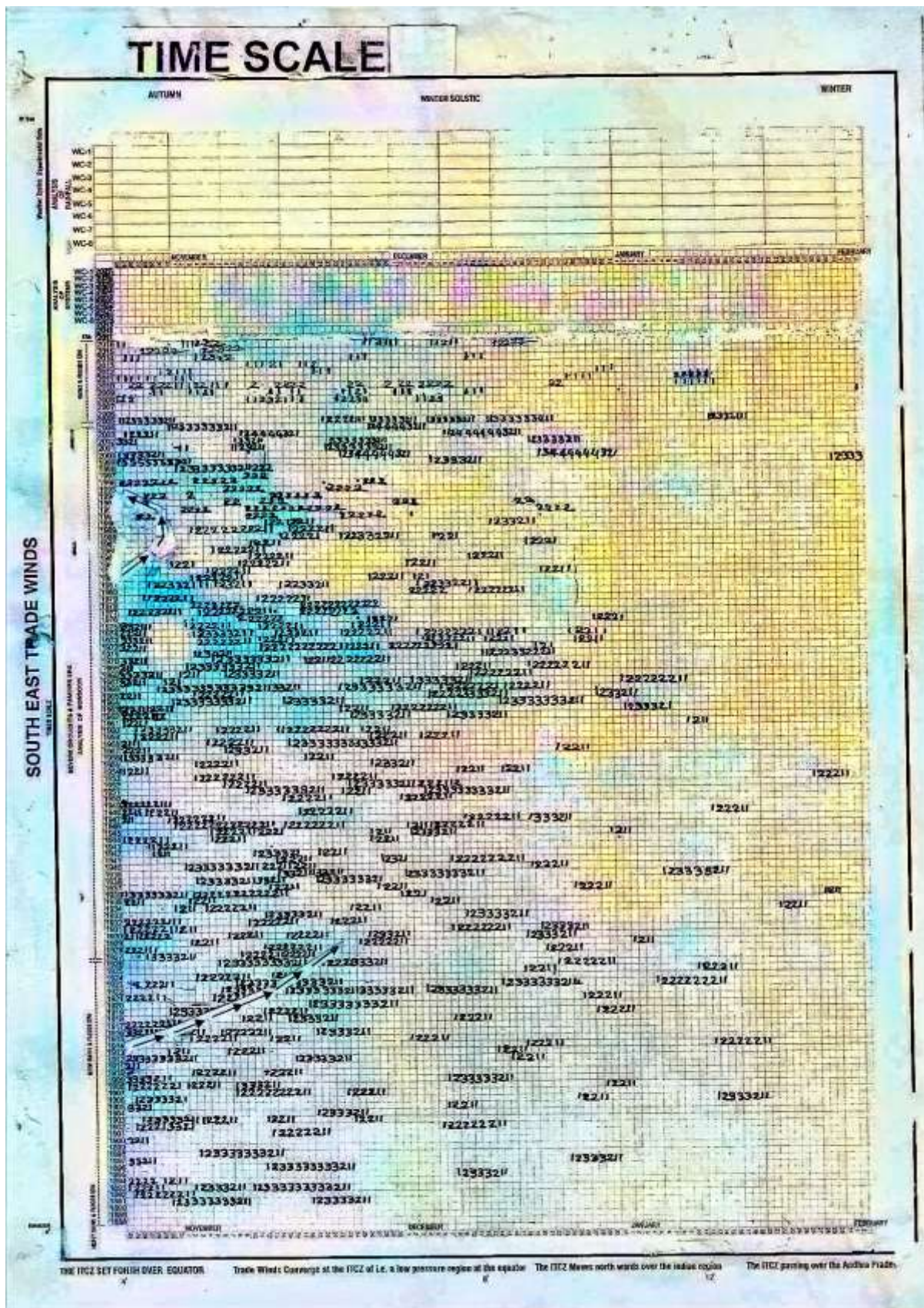
THE ITCZ MOVES NORTHWARDS OVER THE INDIA REGION. THE ITCZ PASSING OVER THE ANDAMAN PROVINCE.

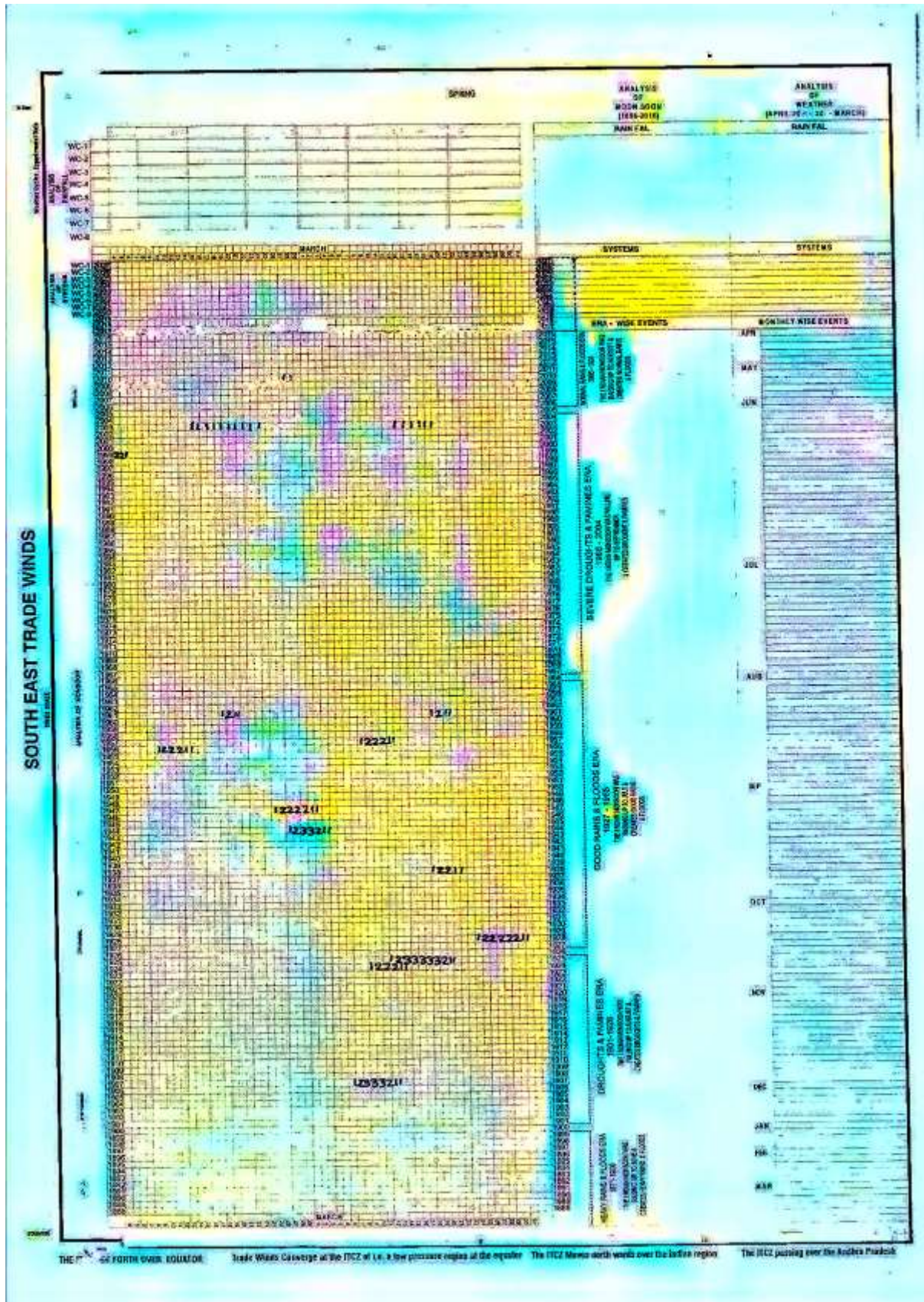


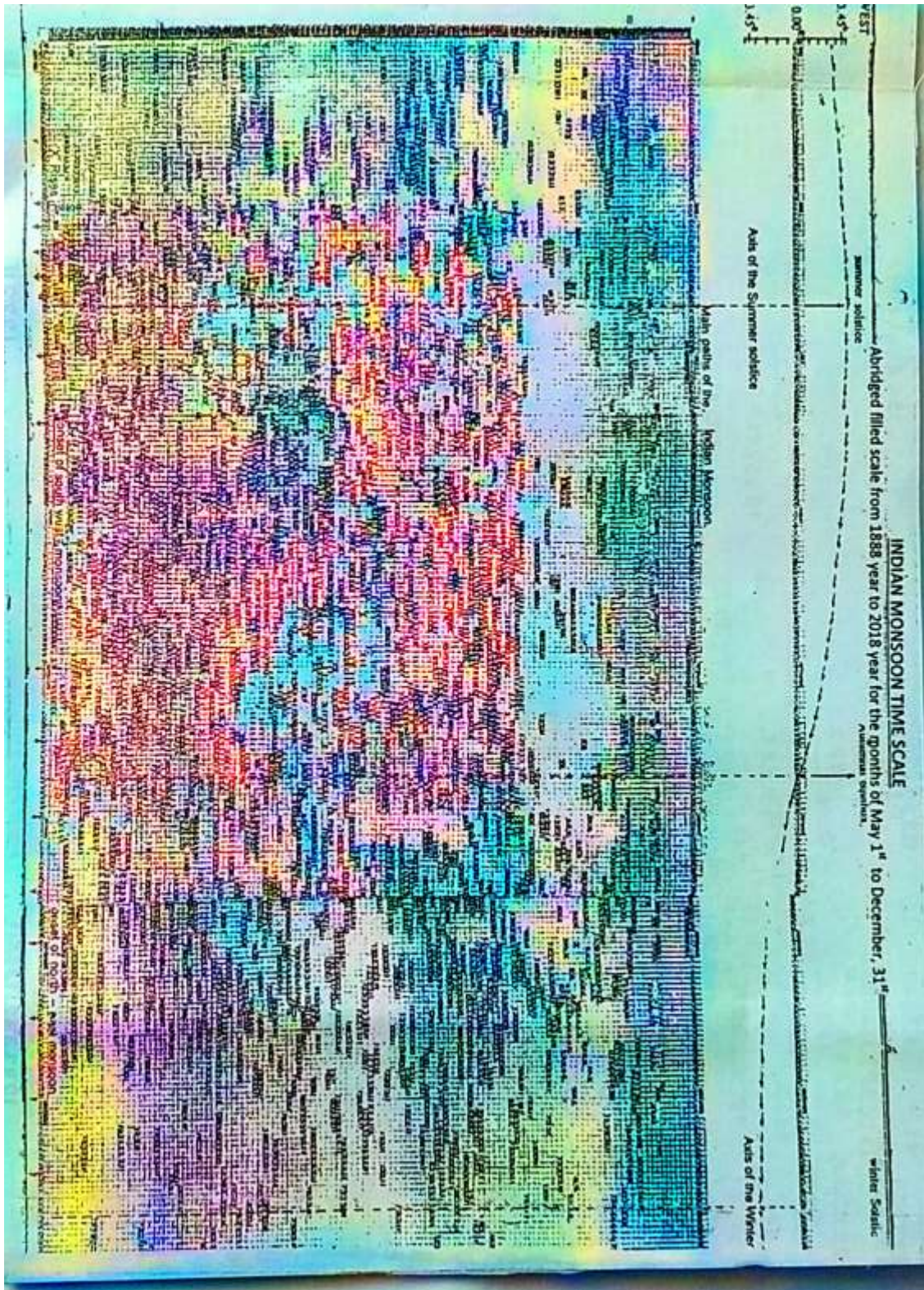


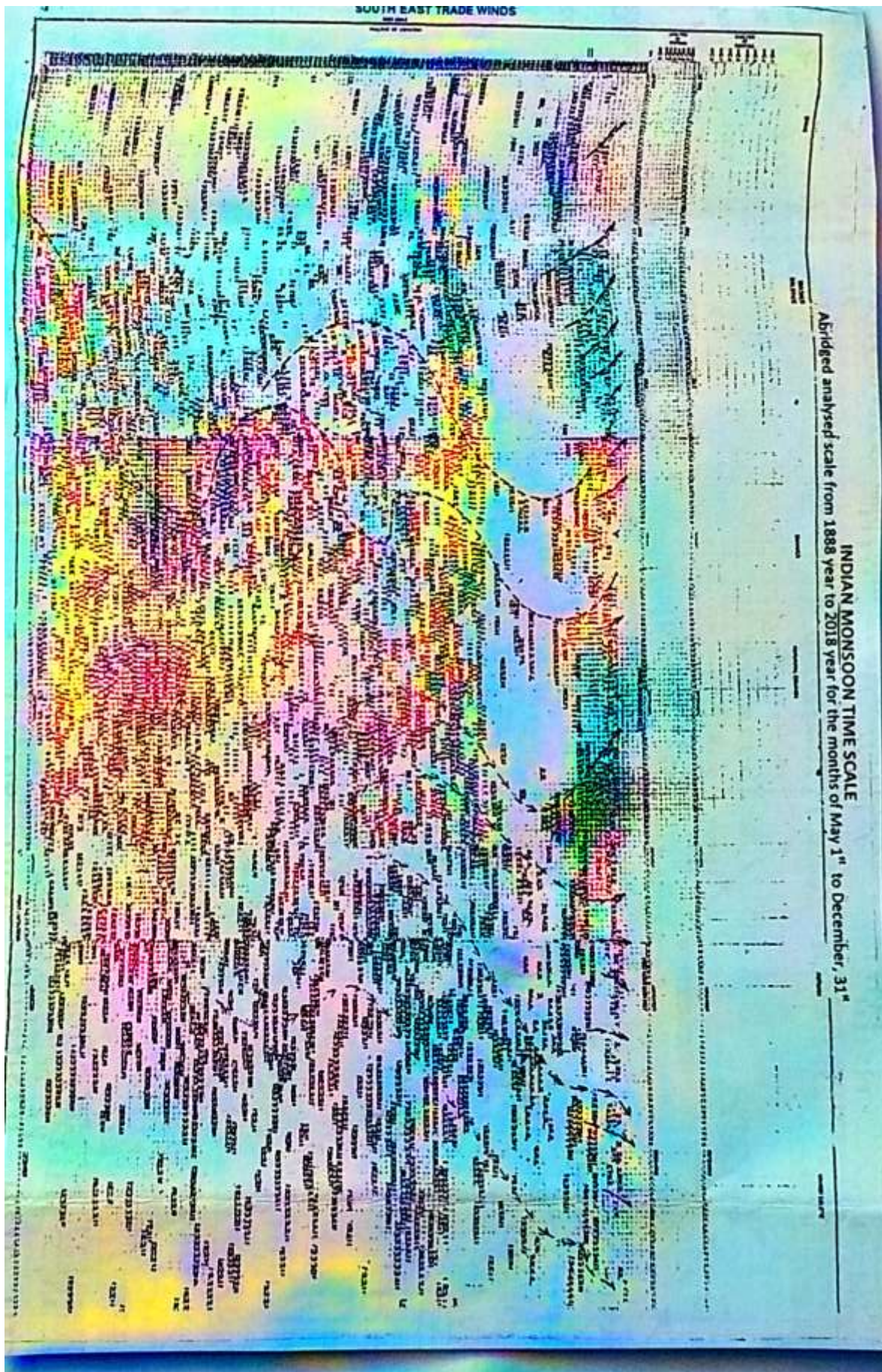


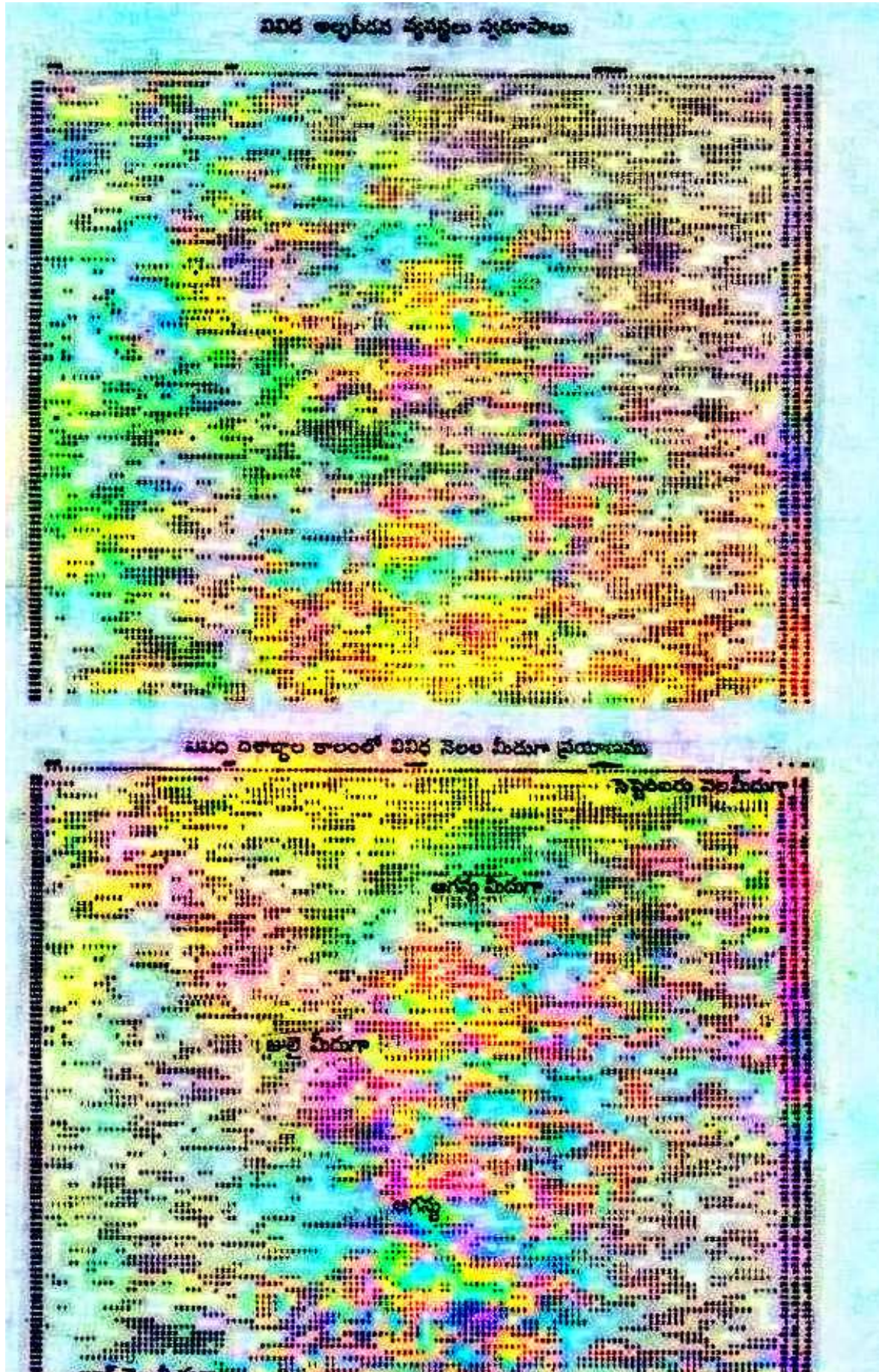












From:
Gangadharā Rao Irāpati,
Merlapalem Village
Vubalanka Post - 522232,
Atrypuram, T.G. District,
Andhra Pradesh.

To - - -
The Director of General of
Meteorology,
India Meteorological Department
New Delhi.

Through : Shri G.M.C. Balayogi
Member of Parliament (LS)
Amalapuram.

Sir,

Sub: Global Monsoon Time-Scales - Indian Monsoon Time Scale -
Requested for further research & development - Reg.,

I am a poor scientist with an ideal to serve the country
research. I have built a small Lab at my house and conducting
research on the Global Monsoon systems. As a part of this, I have
invented the Indian Monsoon Time Scale which can help to study
the past, present and future movements of the Indian Monsoon.

I am request you that kindly accept my Indian Monsoon
Time Scale and Develop in the services of the country.


Merlapalem

15-08-1998.

Yours faithfully,

S. Gangadharā Rao
15-8-98.

सं०
भारत सरकार
भारत मौसम विज्ञान विभाग
मौसम विज्ञान के महानिदेशक का कार्यालय
मौसम भवन, लोदी रोड
नई दिल्ली-११०००३
तार का पता :
महामौसम, नई दिल्ली



NO. NA-153
GOVERNMENT OF INDIA
INDIA METEOROLOGICAL DEPARTMENT,
OFFICE OF THE
DIRECTOR GENERAL OF METEOROLOGY
MAUSAM BHAVAN, LODI ROAD,
NEW DELHI-110003
Telegraphic Address
DIRGENMET, NEW DELHI

दिनांक/Date..Oct...2/.....19 91.

To
✓ Shri Gangadhara Rao Irlapati,
Merlapalem Village,
Vubalanka Post 533237
Atryapuram, E.C. Distt.,
ANDHRA PRADESH

Sir,

Kindly refer to your letter dated 15.8.91 received through Shri G.M.C. Balayogi, M.P. regarding the invention of an instrument by you which can help to forecast cyclones, rains and earthquakes 10 days in advance. In order to examine your proposal further it is requested that you may kindly furnish the following details to this office:

- (i) The scientific principles on which your instrument functions and the type of data obtained through it.
- (ii) Method of analysis of data and the inference drawn from it to forecast cyclones, earthquakes and heavy rain claimed by you.
- (iii) Specific samples of forecast on cyclones, earthquakes and heavy rain you claim to provide 18 days in advance.
- (iv) Verification procedure with specific instances.
- (v) *Scientific* Specification publication, if any, on your instrument. (Give detailed reference)

Yours faithfully,
M.C. Pant
(M.C. PANT) 17/10/91
Director
for Director General of Meteorology.

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-87-

सं०
भारत सरकार
भारत मौसम विज्ञान विभाग
मौसम विज्ञान के महानिदेशक का कार्यालय
मौसम भवन, लोदी रोड
नई दिल्ली-११०००३
तार का पता :
महामौसम, नई दिल्ली



NO. NA-153
GOVERNMENT OF INDIA
INDIA METEOROLOGICAL DEPARTMENT
OFFICE OF THE
DIRECTOR GENERAL OF METEOROLOGY
MAUSAM BHAVAN, LODI ROAD,
NEW DELHI-110003
Telegraphic Address:
DIRGENMET, NEW DELHI

दिनांक/Date NOV.....1996

To

Shri Gangadhar Rao Irlapati,
C/o K. Chiranjeevi,
H.No. 28-3, Saibabanagar,
Judimetta,
Hyderabad.

Subject:- Request for forwarding the copies of representation to President of India and other VVIP.

Sir,

Kindly refer to your letter dated September 12, 1996 addressed to the Secretary, Lok Sabha Secretariat, Parliament House, New Delhi on the subject quoted above.

In this connection, you are requested to kindly refer our earlier letters of even number dated 8.6.95 and 8.1.96 in which you were advised suitably for your weather prediction device and recruitment in the Central Government establishment as well. You may proceed accordingly in your future action.

Yours faithfully,

(S.C. GOYAL)
Director
for Director General of Meteorology



अर्जा श्रीकांत, आई.आर.टी.एम.
ARJA SRI KANTH, IRTS
 Tel.: 23387250
 Fax: 23389025

-90-

2009
 निजी सचिव

खान राज्य मंत्री
 भारत सरकार

शास्त्री भवन, नई दिल्ली-110 001
 PRIVATE SECRETARY TO
 MINISTER OF STATE FOR MINES
 GOVERNMENT OF INDIA
 SHASTRI BHAWAN, NEW DELHI 110 001

24 March 2008


Dear Sh. Ajit Tyagi Ji

Dr.T.Subbarami Reddy, Hon'ble Union Minister of State for Mines directed me to forward a representation received from Sh. I Gangadhara Rao, Hyderabad requesting for considering his proposal of Indian Weather Time Scale. The merits of the proposal may be examined.

A line of action taken may be communicated to apprise Hon'ble Union Minister.

With regards,

Yours sincerely,


 (Arja Srikanth)

AVM Ajit Tyagi
 Director General of Meteorology,
 India Meteorological Department,
 Mausam Bhavan, Lodi Road,
 New Delhi
 Fax:011-24699216

Copy to Sh.I.Gangadhara Rao, Asst Section Officer, AP Public Service Commission, Nampally, Hyderabad 500055.

-53-

No. F-12016/1/00-NA/1070

भारत सरकार
 मौसम विज्ञान विभाग
 मौसम विज्ञान के महाविदेशक का कार्यालय
 मौसम भवन, लोदी रोड, नई दिल्ली-110003
 तार का पता: महामौसम, नई दिल्ली
 दूरभाष: 24611068, 24631913



GOVERNMENT OF INDIA
 INDIA METEOROLOGICAL DEPARTMENT
 OFFICE OF THE
 DIRECTOR GENERAL OF METEOROLOGY
 MAUSAM BHAWAN, LODI ROAD, NEW DELHI-110003
 Telegraphic Address: DIRGENMET, NEW DELHI
 Tel. No. 24611068/24631913, Fax No. 24643128

November, 2009.

1, December

✓
 Shri Gangadhara Rao Irlapati
 A.S.O., A.P.P.S.C., Nampally,
 Beside Gandhi Bhawan,
 Hyderabad - 500 001, A.P.

Subject:- "Indian Weather Time Scale" - regarding.

Sir,

With reference to your letter addressed to Secretary, Ministry of Earth Sciences, regarding forecast relating to prediction of cyclone, monsoon, heavy rainfall etc., you may kindly refer this office letter No. O-49106/537 dated 25/26.7.2005.

However, your dedication and interest in the field of meteorology is highly appreciated.

Thanking you,

Yours faithfully,

T. Kumar
 1.12.09


(Awadhesh Kumar)
 Scientist 'E'

for Director General of Meteorology

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सं
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भारत सरकार
भारत मौसम विज्ञान विभाग
मौसम विज्ञान के महानिदेशक का कार्यालय
मौसम भवन, लोदी रोड,
नई दिल्ली-110003
सार का पता :
महामौसम, नई दिल्ली



NO. 49106/537
GOVERNMENT OF INDIA
INDIA METEOROLOGICAL DEPARTMENT
OFFICE OF THE
DIRECTOR GENERAL OF METEOROLOGY
MAUSAM BHAVAN, LODI ROAD
NEW DELHI-110003
Telegraphic Address :
DIRGENMET, NEW DELHI

दिनांक/Date... 25/07/2005

To:

Shri Gangadhara Rao Iriapati,
H.No.5-30-4/1,
Saibaba Nagar,
Jeedimetla,
Hyderabad.
Andhra Pradesh
Pin.Code No. 500 055.


Sub:- Project proposal to forecast drought, monsoon and rainfall etc.

Sir,

Kindly refer to your letter, regarding the project proposal for forecast the droughts, monsoon positions and rainfall etc. with the help of scale of data. You are requested to submit the project to Deptt. of Science and Technology (DST) through proper channel for necessary action.

M. Satya Kumar
(M. Satya Kumar)
Director Aviation Service
For Director General of Meteorology

- 71 -



भारत सरकार
GOVERNMENT OF INDIA

भारत मौसम विज्ञान विभाग
INDIA METEOROLOGICAL DEPARTMENT

द्वितीय : 25535220, 25535223, 25535254
TELEPHONE : 25535211, 25535245
फैक्स : 091 020 25533201
तेलुगु : 145 7702 OBSR IN (Electronic) भा : पुणे इन्फो, पुणे
TELEX : 0145 7227 MPNA IN TELEGRAM : Weather, Pune

E-mail : adgm@pune @ hotmail.com
मौसम विज्ञान के अपरमहानिदेशक (अनुसंधान)
शिवाजीनगर, पुणे - 411 005
Additional Director General of Meteorology (Research)
Shivajinagar, Pune - 411 005

No. Date

GT-021(MISC) / 6675
DI. 8.08.2008.
13th

TO,
Shri.I.Gangadhara Rao
Asst.Section Officer,
A.P.Public Service Commission,
Beside Gandhi Bhavan,
Nampally,Hyderabad-500055.
Andhra Pradesh.

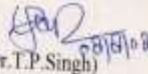
Sub: Project Proposal, " Indian Weather Time Scale" requested for establishment at Met.Centre,
Hyderabad.
Ref : Your letter dated Nil

Sir,

Kindly refer to your letter on the subject cited above .

Your project proposal has been examined by this office and it has been found that the proposal "Indian Weather Time Scale" is without adequate scientific details/ reason. Therefore, this office is unable to evaluate your project.

Thanking you.


(Dr. T.P. Singh)
Meteorologist, Gr. I
For Additional Director General of Meteorology (Research)
Shivajinagar, Pune-5

In the High Court of Andhra Pradesh at Hyderabad.
Special Original Jurisdiction

Wednesday the Sixth day of September
One thousand nine hundred and eighty nine

Present

The Hon'ble Mr. Justice Lakshmana Rao

Writ Petition No. 12355 of 1989

Between:
Irlapati Gangadhara Rao. .. Petitioner

And

1. Union of India, rep. by its Secretary,
Ministry of Science & Technology, Anusandhana
Bhavan, Rafi Marg, New Delhi-1.
2. Council of Scientific & Industrial Research,
rep. by its Director General, Rafi Marg, New Delhi-1.
3. National Geophysical Research Institutes rep.
by its Director, Toranaka, Hyderabad. .. Respondents.

Petition under Art. 226 of the Constitution of India praying
that in the circumstances stated in the affidavit filed herein the
High Court will be pleased to issue an appropriate writ or order or
direction declaring

- i) that the inaction of the respondent authorities in not
considering petitioner's representations for carrying out
research and scientific investigations as arbitrary,
unreasonable and illegal;
- ii) a direction may be issued to the respondents 2 & 3
to consider the petitioner's representations so as to
enable him to carry out scientific investigations in
respondent 3 institution, or any such other appro-
priate direction may be passed;
- iii) Costs be awarded to the petitioner;

For the Petitioner : Mr. K. Ramakrishna Reddi, Advocate
For the respondents : Mr. S. Venkateswara Rao, S.G. for Central Govt.

The Court made the following: ORDER

Heard the learned counsel for the petitioner as well as the
learned Standing counsel for the Central Govt. appearing on behalf
of the respondents.

The relief sought for in this writ petition is a direction
to the respondents to consider the respondent representations
submitted by the petitioner to ~~xxx~~ provide facilities to enable him
to carry out scientific investigations in National Geophysical
Research Institute, Hyderabad and pass appropriate orders thereon.

Having regard to the facts and circumstances of the case, ~~it~~
it is directed that the respondents shall consider the representation
dated 3-6-89 submitted by the petitioner and pass appropriate orders
thereon as early as possible preferably within three months from the
date of receipt of a copy of this order.

The writ petition is accordingly disposed of. No costs.

M/- S. R. Choudhary
Asst. Registrar

//true copy//

Asst. Registrar

To

1. The Secretary, Union of India, Ministry of Science & Technology,
Anusandhana Bhavan, Rafi Marg, NEW DELHI-1.
2. The Director General, Council of Scientific & Industrial Research,
Rafi Marg, NEW DELHI -1.

GOVERNMENT OF ANDHRA PRADESH
REVENUE (DM.III) DEPARTMENT

Letter No.25241/DM.III(3)/2009

dated:08.07.2009

From
Sri.G.Ravi Babu, IAS.,
Addl. Commissioner for Disaster Management &
E.O. Dy. Secretary to Government,
Revenue (DM) Department,
A.P. Secretariat,
HYDERABAD – 500 022.

To
Sri. Gangadhara Rao Irlapati,
H.No.5-30-4/1, Saibaba Nagar,
Jeedimetla, Hyderabad – 500 055.

Sir,

Sub:- Project proposal – Establishment of “Andhra Pradesh State
Weather Time Scale” – Regarding.

Ref:- From Sri.I Gangadhar Rao, Saibaba Nagar, Jeedimetla,
Hyderabad letter dated 11.06.2009.

With reference to your letter cited, you are requested to attend personally in the chambers of Addl. Commissioner for Disaster Management, Revenue (DM) Dept., A.P. Secretariat, Hyderabad on 13.07.2009 at 4.00 p.m. to explain the function of the “Andhra Pradesh State Weather Time Scale” by which the monsoon movements and its weather problems and natural calamities such as heavy rains, floods, droughts, cyclones etc., can be estimated on the Screen of the scale in advance etc.,

Yours faithfully,

M. Mohan Lal
for Addl. Commissioner for Disaster Management &
E.O. Dy. Secretary to Government

This is to certify that the particulars of Gangadhara Rao Irilapati which are given below:-

FAMILY PARTICULARS

Name: Gangadhara Rao
Sir name: Irilapati
Father's Name: Pallayya
Place of Birth: Merlapalem
Date of Birth: 25th, May, 1958

NATIVITY PARTICULARS

Nativity of Village: Merlapalem
Mandal: Atreyyapalem
District: East Godavari
State: Andhra Pradesh

COMMUNITY PARTICULARS

Caste: Scheduled Caste
Sub-Caste: Mala
Religion: Hindu
Nationality: Indian
Social Position: Poor
Special conduct: Good parent

IN THE GRAM PANCHAYAT OF THE MERLAPALEM VILLAGE

CERTIFYING DECISION P. NO. 67

ON THE 13th DAY OF DECEMBER, 1988

PARTICULARS OF GANGADHARA RAO IRILAPATI

ACADEMICAL PARTICULARS

Scientific Qualification: None, Natural Genius
General Education
Elementary School Study: 1 to 5 classes
Upper Primary School Study: 6 to 7 classes
High School Study: 8 to 10 classes
Pre-University course: Intermediate
Graduation: B.A. (Arts)
Post-Graduation:
Technical: F.T. (Trypan)

RESEARCH EXPERIENCE PARTICULARS

Year of starting of research: 1963
Year of continuing of research: 1988
Name of the research: "Role of Vitamin B12 in the
Place of the research: Researcher, Merlapalem
Results of research: discovered Vitamin B12 deficiency
Total period of his service: He has worked his life
to the country for 25 years

PRESENT SITUATION PARTICULARS

Occupation: Un-employed
Health: Poor
Health illness

The above particulars are true and correct as per the enquiry, verification and written witness of senior adults

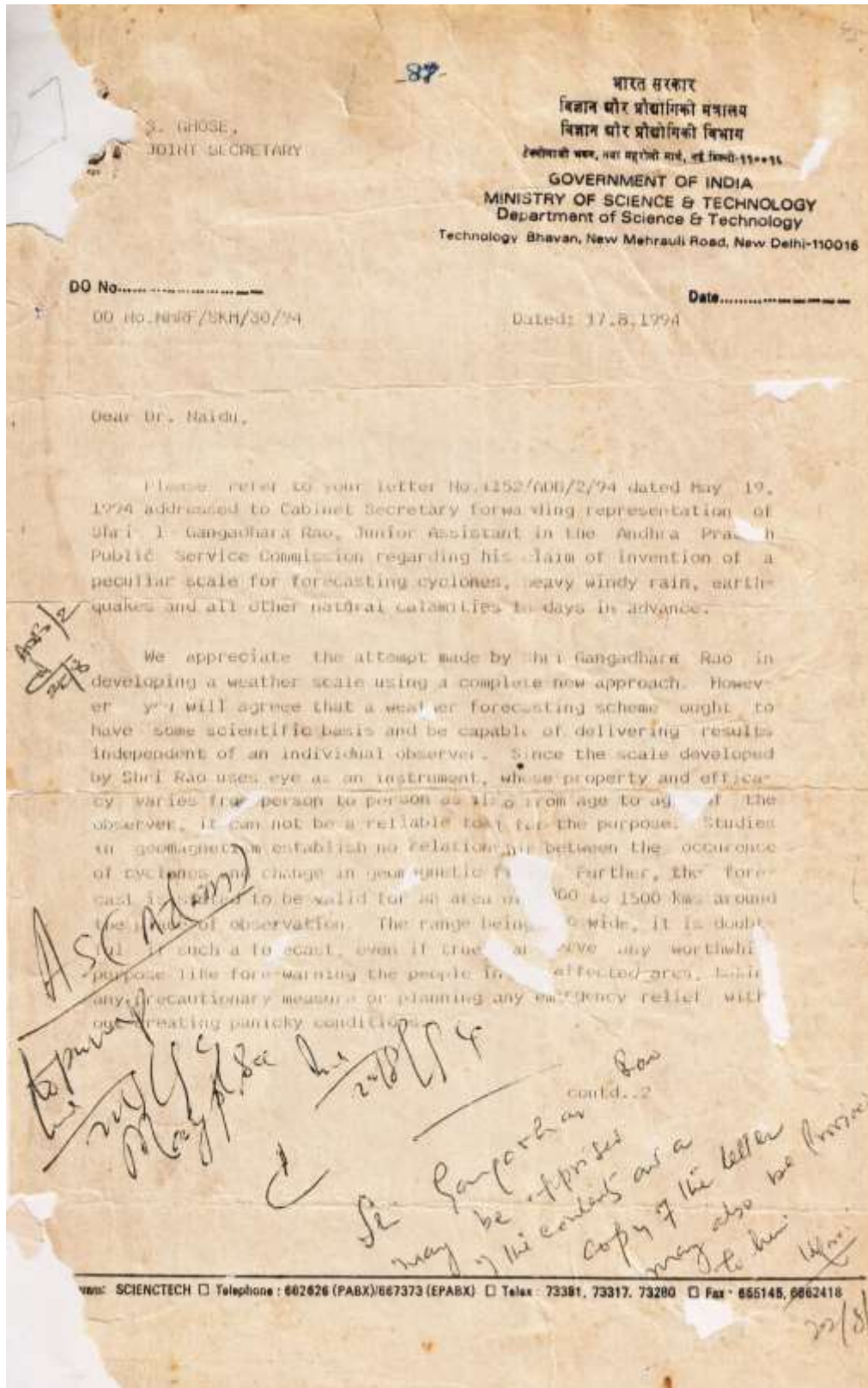
of the Gram Panchayat

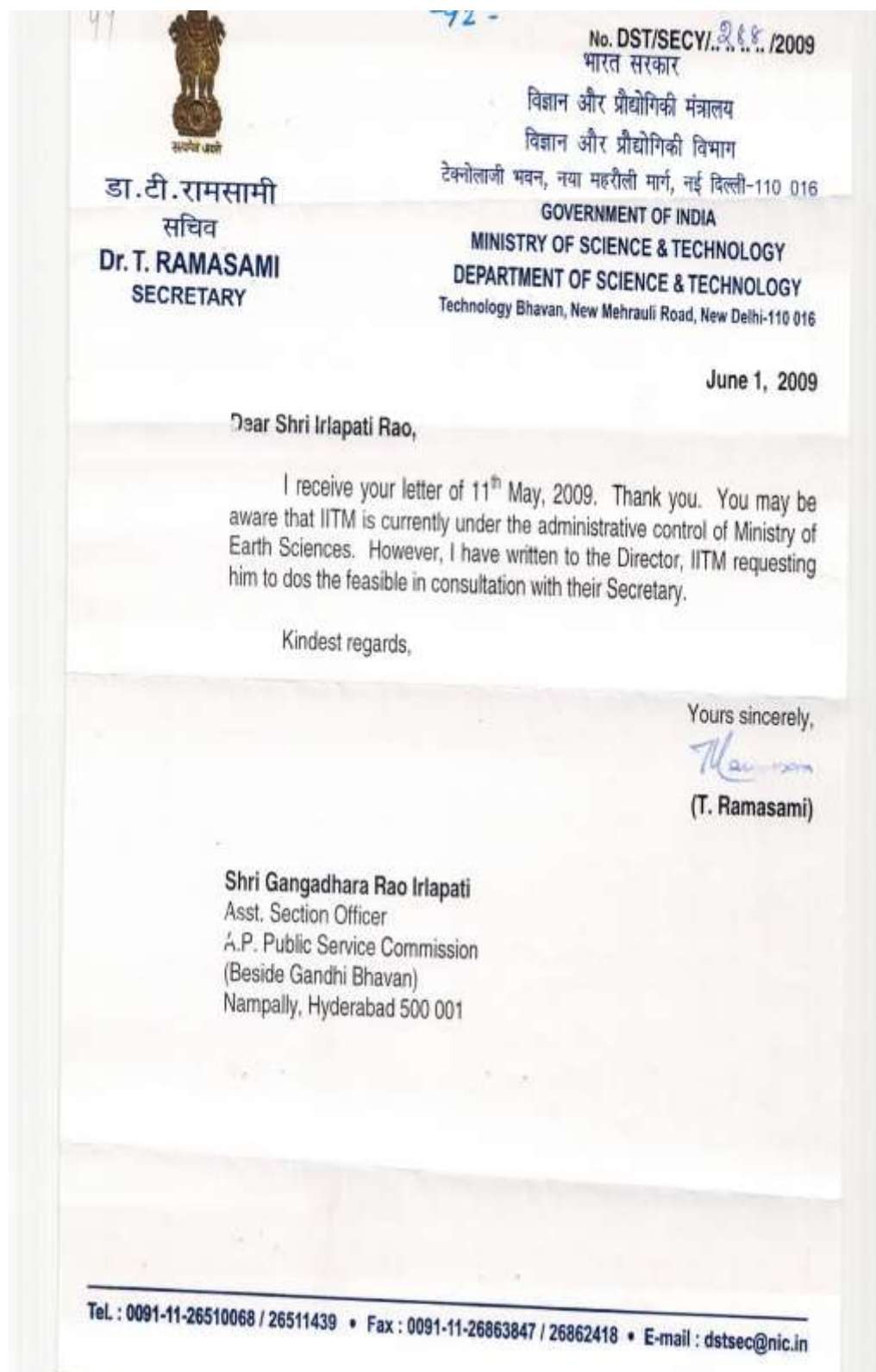


Mr. Suresh Prasad
25/12/88 (Signature)

Signature:
Designation:

G. Rao G. Rao
Gram Panchayat
Merlapalem
12/12/88






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FROM
M.G.GOPAL, I.A.S.,
SECRETARY.



TO
THE COMMISSIONER FOR DISASTS
MANAGEMENT, AND EX.OFFICIO
PRINCIPAL SECRETARY TO
GOVERNMENT,
REVENUE (DM.III) DEPARTMENT,
ANDHRA PRADESH,
HYDERABAD.

LETTER NO:869/ADB/4/2009, DT:15.07.2009.

Sir,

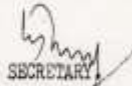
Sub:- A.P.P.S.C. - Estt., - Forwarding the A.P.
State Wather time scale prepared by
Sri I.Gangadhar Rao, A.S.O., A.P.P.S.C.,
Hyderabad - Regarding.

Ref:- Representation of Sri I.Gangadhar Rao,
along with A.P. Weather time scale.

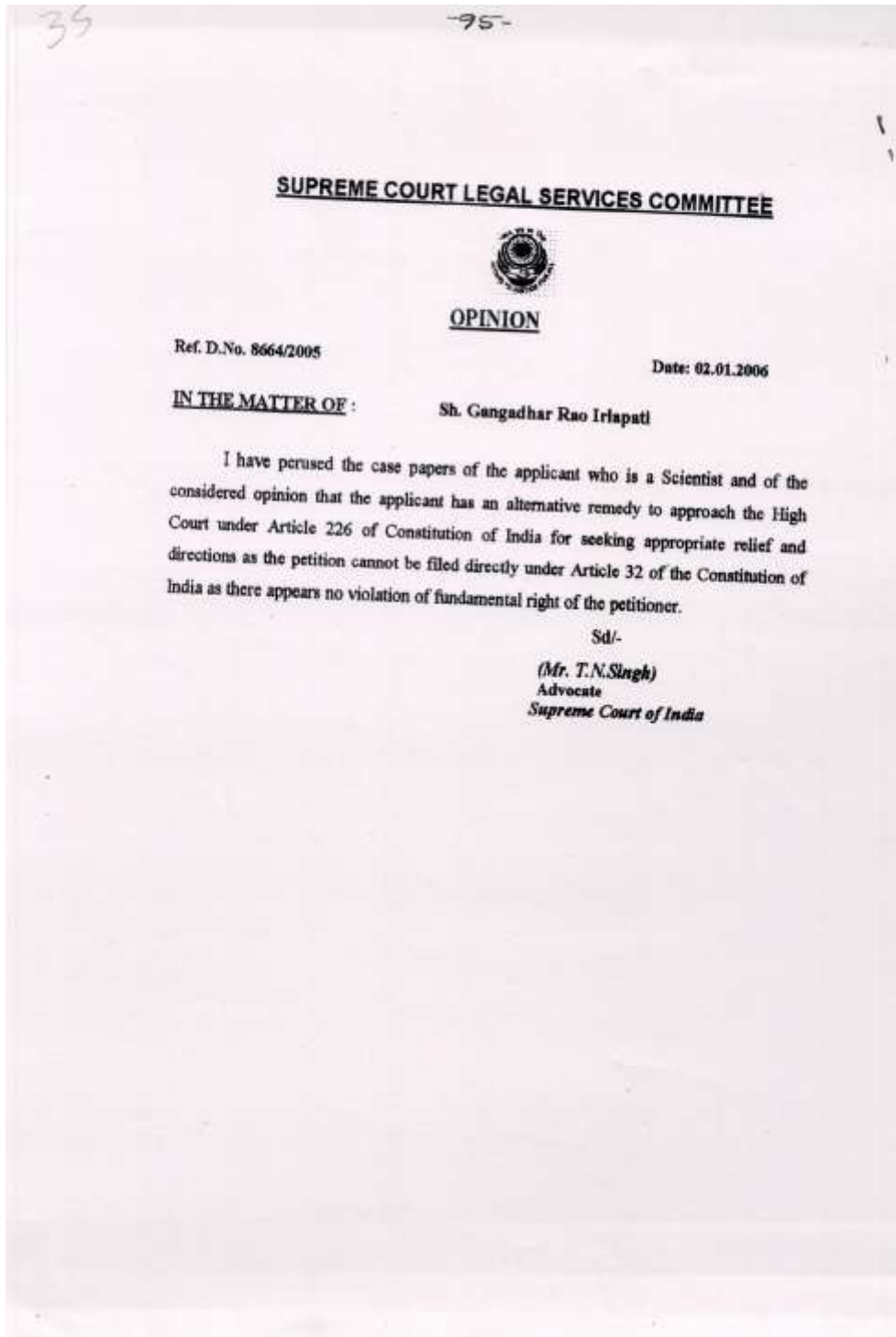
* * *

I am directed to forward herewith the representation
of Sri I.Gangadhar Rao, Assistant Section Officer, O/o Andhra
Pradesh Public Service Commission, Hyderabad along with his
reported research work on Andhra Pradesh State Weather Report
for your consideration and necessary action.

Yours faithfully,



SECRETARY



2/5/2025