

## Indian Monsoon Time Scale

Gangadhara Rao Irlapati

H. NO.5-30-4/1, Saibabanagar, Jeedimetla, Hyderabad, India-500055

Email: [scientistgangadhar@yahoo.com](mailto:scientistgangadhar@yahoo.com)

**Abstract:** I have conducted many scientific researches on the Global Monsoon Time Scales during the period of 1980-91. As a part these researches, i have invented the Indian Monsoon Time Scale in 1991 which can help to study the past, present and future movements of the Indian Monsoon. In 1991, Sri G.M.C. Balayogi, Member of Parliament (Lok Sabha) recommended the Indian Monsoon Time Scale to the India Meteorological Department for implementation in the services of the country. In 1994, the Cabinet Secretary of India recommended the Indian Monsoon Time Scale to the Ministry of Science & Technology, Govt of India for implementation. During the years of 1991- 1996, many consultations were made with the parliament house, president of India and other VVIPs of India. In 2005, consultations were made with the India Meteorological Department about the Indian Monsoon Time Scale for further research and development in the services of the country. In 2009, the Secretary, Minister of Science and Technology was also recommended the Indian monsoon Time scale to the Indian Institute of tropical Meteorology for research and development. From 2010 to till date, I have been making many consultations with the many Organizations to implement the Global Monsoon Time Scales/Indian Monsoon Time Scale in the services of welfare of the people.

[Gangadhara Rao Irlapati. **Indian Monsoon Time Scale.** *Academ Arena* 2018;10(2s): 140-158]. (ISSN 1553-992X). <http://www.sciencepub.net/academia>. 25. doi:[10.7537/marsaaj1002s1825](https://doi.org/10.7537/marsaaj1002s1825).

**Key Words:** Global Monsoon Time Scales, Indian Monsoon Time Scale.

### **Introduction:**

Monsoon means a seasonal reversing wind accompanied by its corresponding weather changes and natural calamities in precipitation. We cannot be said that a monsoon especially to be relevant to a particular continent, country or region. Each and every continent or region or country has its own monsoon winds. By establishing the Monsoon Time Scale and maintain, the country can be estimated the impending weather conditions and natural calamities such as rains, floods, landslides, avalanches, blizzard and droughts, extreme winter conditions, heavy rainfall, mudflows, extreme weather, cyclones, cloud burst, sand storms, hails and winds etc in advance. Surface water resources can still be found.

### **Construction:**

The Monsoon Time Scale – a Chronological sequence of events arranged in between time and weather with the help of a scale for studying the past's, present and future movements of monsoon of a country and its relationship with rainfall and other weather problem and natural calamities. Prepare the Monsoon Time Scale having 365 horizontal days from March 21<sup>st</sup> to next year March 20<sup>th</sup> of a required period comprising of a large time and weather have been taken and framed into a square graphic scale.

### **Maintanance:**

The main weather events if any of the country have been etering on the scale as per date and month of the each and every year. If we have been managing the scale of a country in this manner continuously, we

can study the past, present and future movements of monsoon of a country.

### **Model monsoon time scale:**

For example, I have prepared a model Monsoon Time Scale for the Indian Monsoon to study and analysis.

**Indian Monsoon:** (*Occurs from June – September*)

The southwest Indian monsoon accounts for roughly 80% of India's rainfall. Part of the reason India gets such an intense monsoon season is due to its elevation. The higher the land mass, the higher the likelihood of the development of a low pressure zone. The Tibetan Plateau to the north of India is one of the largest and highest plateaus on Earth.

The southwest Indian monsoon accounts for roughly 80% of India's rainfall. Part of the reason India gets such an intense monsoon season is due to its elevation. The higher the land mass, the higher the likelihood of the development of a low pressure zone. The Tibetan Plateau to the north of India is one of the largest and highest plateaus on Earth.

The phenomena of monsoon is global in character, affecting a large portion of Asia, parts of Africa (sahel) and northern Australia and other parts of the world. Monsoon is originally winds prevailing in the Indian Ocean, which blow S.W from October to April now generally winds which blow in opposite directions at different seasons of the year. Similar in origin to land and sea breezes, but on well developed over southern and eastern Asia, where the wet summer

monsoon from the S.W is the outstanding feature of the climate.

The monsoon is often referred to seasonal reversal of winds over the Indian ocean especially in the Arabian sea, that blow from the south-west during one half of the year and from the north-east during the other. Almost all the eastern hemisphere of the tropics has a monsoon climate. Summer monsoon is a regular phenomena only in the sense that it comes every year. But its onset, its activity during the season, and its withdrawal are subject to variation that sometimes are large.

Monsoon winds are most pronounced in the summer season of either hemisphere that is during June to September in the northern hemisphere and in January and February in southern hemisphere. Monsoon circulations are mainly owing to: Differential heating of land and ocean. The deflection of wind due to the rotation of earth. The Indian ocean is locked by land to the north by the Asian continent. This geographical feature gives rise to extreme thermal contrast between the land in the north and ocean in the south in both summer and winter which is the crucial factor in the development of the most pronounced circulation in this part of the globe, while the large scale features of the monsoon are repetitive from year to year; large anomalies occur in both in circulation as well as in rainfall. The monsoon region includes almost half of the African continent, South and East Asia and northern Australia.

Normal Dates of onset of monsoon: Summer monsoon of the northern hemisphere has two components. Indian summer monsoon or south-west monsoon and East Asian summer monsoon. The Indian summer monsoon is characterized by south westerly flow in the Arabian sea and south Bay of Bengal and the East Asian monsoon by southerly or south easterly or south easterly flow in the lower troposphere. The onset of summer monsoon takes place over the main land of India by 1<sup>st</sup> June. It gradually proceeds northward and by the middle of July whole of the India comes under the grip of monsoon currents. The onset and progress of monsoon show considerable inter-annual variability. The standard deviation of the dates of onset along the south coast of India, south of 20° N is 6-7 days, whereas, it is 7-8 days over North India. The mean date of onset of monsoon over southern Kerala is 2<sup>nd</sup> June and standard deviation is 8 days. At Mumbai, the onset date of 10<sup>th</sup> June, over Delhi it varies from 15 June, over Delhi it varies from 15 June to 20 July. The mean date of onset over Delhi is 5 July.

The northward advance of monsoon is usually associated with disturbances. There is a pronounced tendency for the formulation of low pressure system at the leading edge of the monsoon current. It was found

that in about 75% of occasion's advance of monsoon associated with some synoptic systems. A feeble trough in the low level depression and the cyclonic storms, it is termed as onset vortex.

The advance of monsoon towards the month the north is not always a steady march, the activity of monsoon weakens after an advance of 500km and a fresh pulse is needed to advance the monsoon further. This fresh pulse is normally in the form of low pressure system like a depression over the bay of Bengal. Over North India, monsoon generally advances from east to west along with the monsoon easterlies which is known as a bay current. A late onset is more harmful over northern India than similar delayed onset of monsoon by more than 10 days over Himachal Pradesh, Jammu and Kashmir in North India and West Rajasthan and Gujarat in North West and western India is likely to cause deficient rainfall over these areas.

#### **Withdrawal:**

The normal date of withdrawal of south-west monsoon from a station is taken as middle date of 5 day period. Such dates of withdrawal are obtained for all the stations and map showing the isoclines of normal dates of withdrawal from western most parts of West Rajasthan commences by 1<sup>st</sup> September.

#### **North – East Monsoon:**

*Onset of north –east monsoon:* The onset of northeast monsoon normally takes place over south peninsula (Tamil Nadu, south costal Andhra Pradesh, Rayalaseema and interior south Karnataka) at about 15 October. The onset does show some variability from year to year. Withdrawal of northeast monsoon from south peninsula is almost complete by mid-December. Northeast monsoon rainfall is important for the growth of rabi crops in south peninsula.

#### **Western Disturbances:**

Primary mid-latitude depressions move across Europe and north Asia. Secondaries and territories of these forms in lower latitudes. The territories affect north and central India during the period mid-November to about end of April. They generally move from west to east. In winter these come to the lowest latitude. These systems which affect the Indian weather have been termed as western disturbances.

A western disturbance is defined as a low or a trough of low pressure at the surface, or a trough or cyclonic circulation in the wind above the surface. December to march is the main period when these affect Indian weather. On an average about 2 such per month may affect the Indian weather during this period. The frequency may be one each in November and April.

The approach of a western disturbance is heralded by high clouds. As the system approaches, the clouds thicken and lower and start giving

precipitation which may be drizzle or light to moderate rain. After some time the rainfall would cease. Later a thundershower may occur the thereafter little clouding or cloud-free skies would be observed. In the rear of these disturbances, cold wave may abate after a couple of days.

#### **Construction:**

Keeping in view of study of the aforesaid Indian Monsoon thoroughly, I have prepared the Indian Monsoon Time Scale. The Indian Monsoon Time Scale – a Chronological sequence of events arranged in between time and weather with the help of a scale for studying the past's, present and future movements of monsoon of a country and its relationship with rainfall and other weather problems and natural calamities. From where to wherever to be taken the time and weather to analyse, the researcher can decide on his discretion according to available data. I have prepared the Indian Monsoon Time Scale having 365 horizontal days from March 21<sup>st</sup> to next year March 20<sup>th</sup> or from 1<sup>st</sup> April to next year March 31<sup>st</sup> of 139 years from 1888 to 2027 of/or a required period comprising of a large time and weather have been taken and framed into a square graphic scale. An accurate scale is available if we can collect and analyse the exact weather data. For example, I did not get complete data from the year of 1964. However, I will try to collect the weather data hardly and complete the scale.

**FIXED TYPE SCALE:** Prepare the Indian Monsoon Time Scale having 365 horizontal days from March 21<sup>st</sup> to next year March 20<sup>th</sup> or from 1<sup>st</sup> April to next year March 31<sup>st</sup> of 139 years from 1888 to 2027 of/or a required period comprising of a large time and weather have been taken and framed into a square graphic scale. All 365 days and 189 years to be analysed in a single and fixed type scale. It can be fixed on a wall or Table.

#### **Parts Type Scale:**

The fixed type 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.

The first part is beginning from 1<sup>st</sup> April to July 12<sup>th</sup>.

The second part is from 13 July to October 23<sup>rd</sup>.

The third part is from 24<sup>th</sup> October to February 3<sup>rd</sup>.

And the fourth part is 4<sup>th</sup> February to March 31<sup>st</sup> ending.

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

Cut along the edges of dates on the rightside of the first part and paste it to along the edges of date of 13th July on leftside of the second part.

Cut along the edges of dates on the rightside of the second part and paste it to along the edges of date of 24<sup>th</sup> October on leftside of the third part.

Cut along the edges of dates on the rightside of the third part and paste it to along the edges of date of 4<sup>th</sup> February on leftside of the fourth part.

When paste this manner, we get long full scape Indian Monsoon Time Scale.

Further the scale has been prepared in three types.

**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.

**Computer Graphic Scale:** Besides the above manual scale, I have prepared a computer graphic scale generated by the system from the year 1888 to 1983 for the period of 1<sup>st</sup> June to September 30<sup>th</sup>. If we are able to create this scale by computer which to be the most obvious scale.

#### **Collection Of Data:**

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 cyclone has been taken 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.

#### **Maintanance:**

The monsoon pulses in the form of low pressure systems over the Indian region 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 pertaining to the date and month of the each and every year. If we have been managing the scale of a country in this manner continuously, we can study the past, present and future movements of monsoon of a country.

#### **Analysis:**

The Indian Monsoon Time Scale reveals many secrets and mysteries about the relationship in between the Global monsoons and astronomical bodies just like movement of axis of the earth around the sun in the universe & its influences on the earth's geophysical atmosphere. Let's study the mystery of the south-west monsoon and discuss the rest of other features of the Indian Monsoon Time Scale later.

#### **Monsoon Path-Lines:**

When examine the scale notice that several passages or path-ways of monsoon pulses it have been

some cut-edge paths and splits passing through its systematic zigzag cycles in a systematic manner in parallel and stacked next to each other in ascending and ascending order clearly seen on the Indian Monsoon Time Scale. By reason of travel of these passages, heavy rains & floods in some years and droughts & famines in another years according to their travel. The path of monsoon when travelling over four months from june to september good rainfall or heavy rains and floods can occur. And the path when travelling over last months i.e july or august or september, low rainfall and droughts can occur. Particularly, there are two main passages. The first one is main path or passage of the south-west monsoon and the second one is path or passage of the north-east monsoon. The first one is on the left side over the months of june, july, august, september (South-west monsoon) and another path on the rightside over the months of october, november, december (north-east monsoon) are visible in the Indian Monsoon Time Scale.

#### **Analysis:**

Keep track the Indian Monsoon Time Scale carefully. During 1871-1900's the main path-way of the Indian monsoon was rising over June, July, August. During 1900-1920's it was falling over August, September. During 1920-1965's, it was rising again over July, August, September. During 1965-2004's it was falling over September. From 2004 it is now rising upwards and estimated traveling over the months of June, July, August by the 2060.

By 1888 the line of path of the Indian Monsoon was started over the month of june and travelled to 1900's in steep descending direction. During this 4 months period of (june, july, august, september) of indian monsoon season. the line of path of the monsoon was travelled over all these four months. As a result, there were heavy rains and floods in most years.

From 1900 to 1920, the line of path of the indian monsoon was travelled over the months of August and September in the shape of concave direction. In this 4 months monsoon season, the line was travelled just over two months only. That means june and july rain was lost during the period, as a result it rained only two months instead of four months monsoon season and causing low rainfall in many years.

From 1920 to 1965, the line of path of the indian monsoon was travelled over the months of july, august and september in the shape of convex direction. In this 4 months monsoon season, the line was travelled over three months. That means one month june rain was lost during the period, as a result it rained only three months instead of four months monsoon season. and resulting good rainfall in more years.

From 1965 to 2004, the passage of the indian monsoon was travelled over the months of august to mid-august in the shape of deep sloping direction, In this 4 months monsoon season, the line was travelled just over two months for a short period only. That means two months i.e june and july rain was lost during the period, as a result it rained only two months instead of four months monsoon season. and causing low rainfall and droughts in many years.

From 2004, the line of path of the indian monsoon seems likely rising over the months of july and june in future in the shape of upper ascending direction and will be resulting heavy rains & floods in coming years during 2004-2060.

#### **Studies:**

During the period 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.

And during the period 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 year.

The Indian Monsoon Time Scale reveals many 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 ascending 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 & withdrawals of south west monsoon and north-east

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 such as south-west monsoon and north-east 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.

These are just some of the analyzes in the study of the indian monsoon. There are many more secrets in the indian monsoon. Indian scientists should get rid of them.

**Principle:**

This is an Astrogophysical/Astrometeorological phenomenon of effects of astronomical bodies and forces on the earth's geophysical atmosphere. The cause is unknown however the year to year change of movement of axis of the earth inclined at 23½ degrees from vertical to its path around the sun does play a significant role in formation of clusters, bands & paths of the Indian Monsoon and stimulates the Indian weather. The inter-tropical 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 sub-continent 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.

**Climate Detection Methods:**

The tracking date of main path & other various paths such as south-west monsoon and north-east monsoon etc., of the Indian Monsoon denotes the onset of the monsoon, monsoon pulses or low pressure systems, storms and its consequent secondary hazard Sand 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 south west monsoon and north-east 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.

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 1871-1900's the main path of the Indian Monsoon was rising over June, July, August and creating heavy rains and floods in most years. During 1900-1920's it was falling over August, September and causing low rainfall in many years. During 1920-1965s, it was rising again over July, August, September and resulting good rainfall in more years. During 1965-2004's it was falling over September and causing low rainfall and droughts in many years. At present it is rising upwards over June, July, August, and will be resulting heavy rains & floods in coming years during 2004-2060 in India.

These are some examples only. We can find out many more secrets of a country weather conditions by keen study of its monsoon time scale.

**Uses:**

Indian Monsoon Time Scale used to forecast the weather changes and natural hazards of a country in advance. All other weather related natural hazards such as avalanches, cyclones, damaging winds, droughts and water shortage, floods, thunderstorms, tornados, tropical cyclones, typhoons etc can be predicted. By establishing the Indian Monsoon Time Scale can help to study the movements of the one's country's monsoon and its monsoon related weather changes and natural hazards.

**Experiments Carried out:**

Many experiments were carried out on the Indian Monsoon Time Scale and Successfully proved out in practice.

**Climate Warning To India:** In the present decades or years rains are shrinking. Rivers, reservoirs, ponds are falling and drying. Some rivers are extinct. Due to this drought conditions, water catchment areas are becoming village and towns as people made houses. However, governments should consider one important thing. Perhaps sometime in the coming decades, the line of path of the Indian Monsoon Time Scale will travel over the months of June, July, August and September similar to 1880! Then there are heavy rains and floods in our country. The rivers, reservoirs and ponds will be filled with waters. People who live in those water catchment areas are trapped in the heavy rains and floods as the water flow into the towns and villages in their former way.

**Conclusions:**

The Indian Monsoon Time Scale invented by me is the fundamental invention and manual only. Researchers, particularly the Indian Institute of Tropical Meteorology and India Meteorological Department have to do more researches on the scale and create it through system. They are provided a lot of valuable information and data in making this scale

free. These are my salutes to them. We can make many more modifications thus bringing many more developments in the Indian Monsoon Time Scales.

#### **Acknowledgement:**

I have received some information in this research paper in the inventing of Global Monsoon Time Scale. Acknowledgements to them. In order to break the mysteries of the monsoons, Global Monsoon Time Scales should be designed for each and every global, regional & sub-regional monsoon winds for welfare of the world people. Give co-operation to my commitment in creating the Global Monsoon Time Scales.

#### **References:**

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.
10. 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.
11. All india monthly and seasonal rainfall series, 1871-1993, B.Parthasarathy, A.AMunot, D.R.Kothawale, Theoretical and applied climatology, 1994, Springer.

**Biography:** Gangadhara Rao Irlapati born on 25,May,1958 at Merlpalem Village in India to pullaiah irlapati and manikyam irlapati. He has acquired all sciences inherently by birth. However, he completed his primary classes 1 to 5 in elementary school, Merlapalem (1963-1968), upper primary classes 6 & 7 in upper primary school, Vubalanka (1969-1971), High School classes 8 to 10 in Zilla Parishad High school, Ravulapalem (1971-1974), and junior college education 11 & 12 in Mahatma junior college, Atryapuram (1974-1976). He did his graduation B.A in economic sciences etc in Andhra university (1985-1989) and post graduation M.Sc in disaster mitigation sciences in Sikkim Manipal University, Gangtok (2001-2003). He was honored with M.Phil (2006) for his researches on world weather and disaster sciences & its forecasting methods and mitigation measures, Ph.D (2010) for his researches on world weather changes and natural hazards & its forecasting methods & mitigation measures and D.Sc. (2015) for his researches on the global monsoons & its effects on weather changes and natural calamities.

He is a science enthusiast and experimenter with an ideal to serve the people from the weather changes and natural hazards and submitted many representations to the government research

organizations for providing research facilities but the government and research organizations did not encourage and provide research opportunities to him. He was envied by Research Institutes, scientists and subjected to incessant verbal insults. He built a lab at his house with available apparatus and books and conducted thousands of researches on weather problems and natural calamities and made hundreds of research papers on weather problems and natural hazards. He invented the Lisposcope, Biolumicells and Bio-forecast In 1967. proposed A New Hypothetical Model of Cosmolgy in 1977. designed the Geoscope in 1989. invented the Indian Monsoon Time Scale in 1991. Mainly he did a lot of work into the design of the Global Monsoon Time Scales and Geoscope projects for the various regions of the world.

However much efforts did tho, he could not get recognition either by government or by society moreover ridiculed and subjected in many ways. Mainly the revolutionary and rational concepts about the cosmology were instantly criticized and exposed to the anger of superstitious, got into violent altercations. He was arrested, tortured and imprisoned. Research organizations and Officials were humiliated him in different ways. His efforts have been criticized. Political recommendations, officials support, publicity, region, religion, cash and community factors may influence in giving recognition, awards, rewards, honor and fame to dalit scientists in India. He is a victim of negligence. racism and discrimination. Now he is in severe crisis, making his life's last journey due to pains & poverty and disregard & despair.

#### **Appeal:**

I humbly request the world scientists and people to recognise me as the INVENTOR OF GLOBAL MONSOON TIME SCALES, ARCHITECT OF GEOSCOPE & GEOSCOPE RESEARCHES AND ORIGINATOR OF THE THEORY OF IRLAPATISM-A NEW HYPOTHETICAL MODEL

OF COSMOLOGY and specify in your research papers by making a reference of discoveries and inventions and bring me into light.

I appeal the world scientists that if the world scientists acquire the science & technology of recreation of organism to recreate the pass away people in future, please remember and recreate me to complete my incompleted goal & ideal.

#### **Acknowledgements:**

I am grateful to Sri Hong who has given valuable advice in this research. Ther was also taken some information from the Wikipedia., I am grateful to them.

#### **Corresponding Author:**

Gangadhara Rao Irlapati  
H.No.5-30-4/1,  
Saibabanagar, Jeedimetla  
Hyderabad, Telangana-500055, India  
Telephone: xxx-xxx-xxxx  
E-mail: irlapatigangadhar255@gmail.com

#### **References:**

1. 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.
2. Wiki: Psychometric assessment. (n.d.). Retrieved from:  
[http://psychology.wikia.com/wiki/psychometric\\_assesmnt](http://psychology.wikia.com/wiki/psychometric_assesmnt).

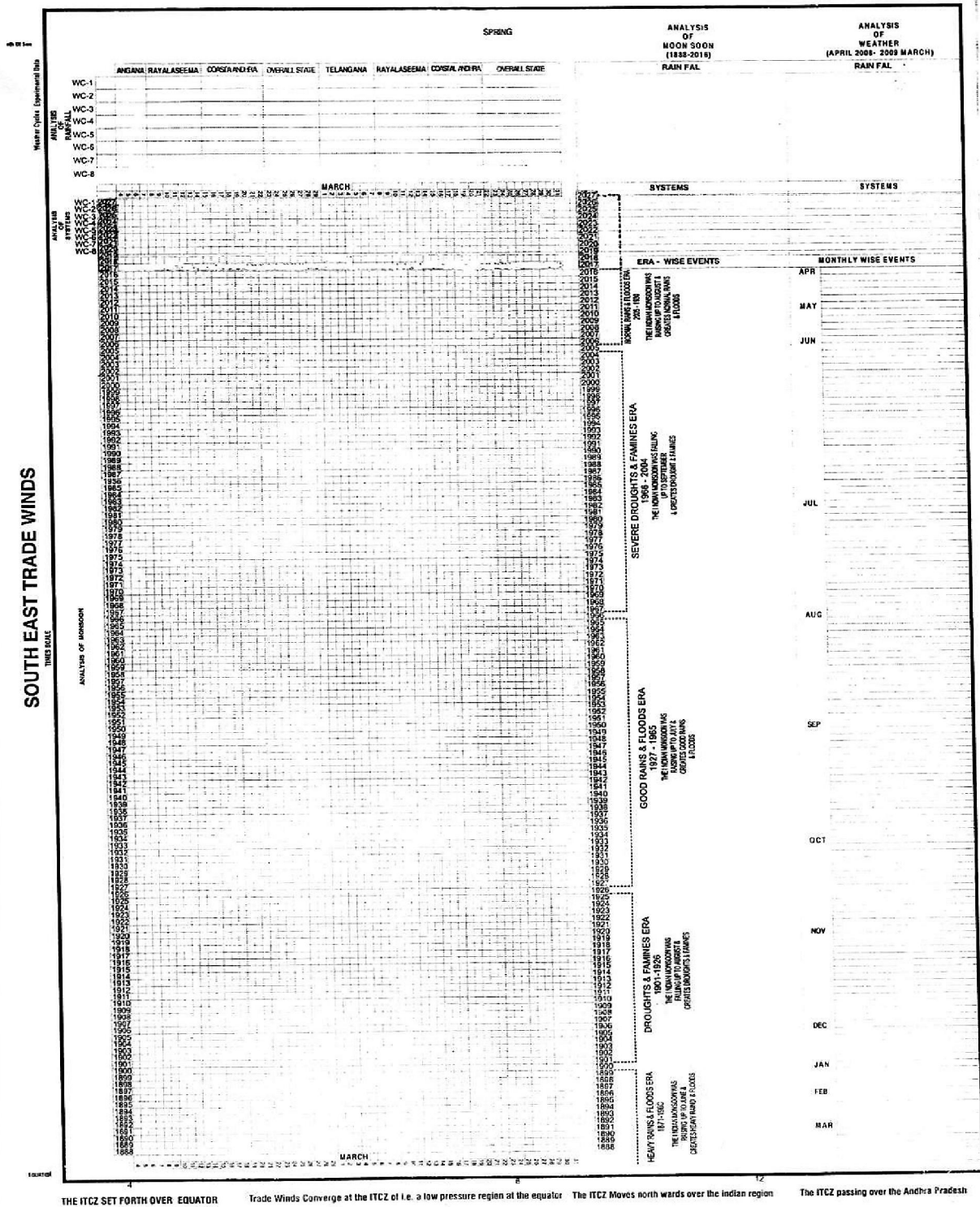
#### **Phonological Appendes:**

The Appendes that describe the contents are enclosed.

#### **Historical events supported documents:**

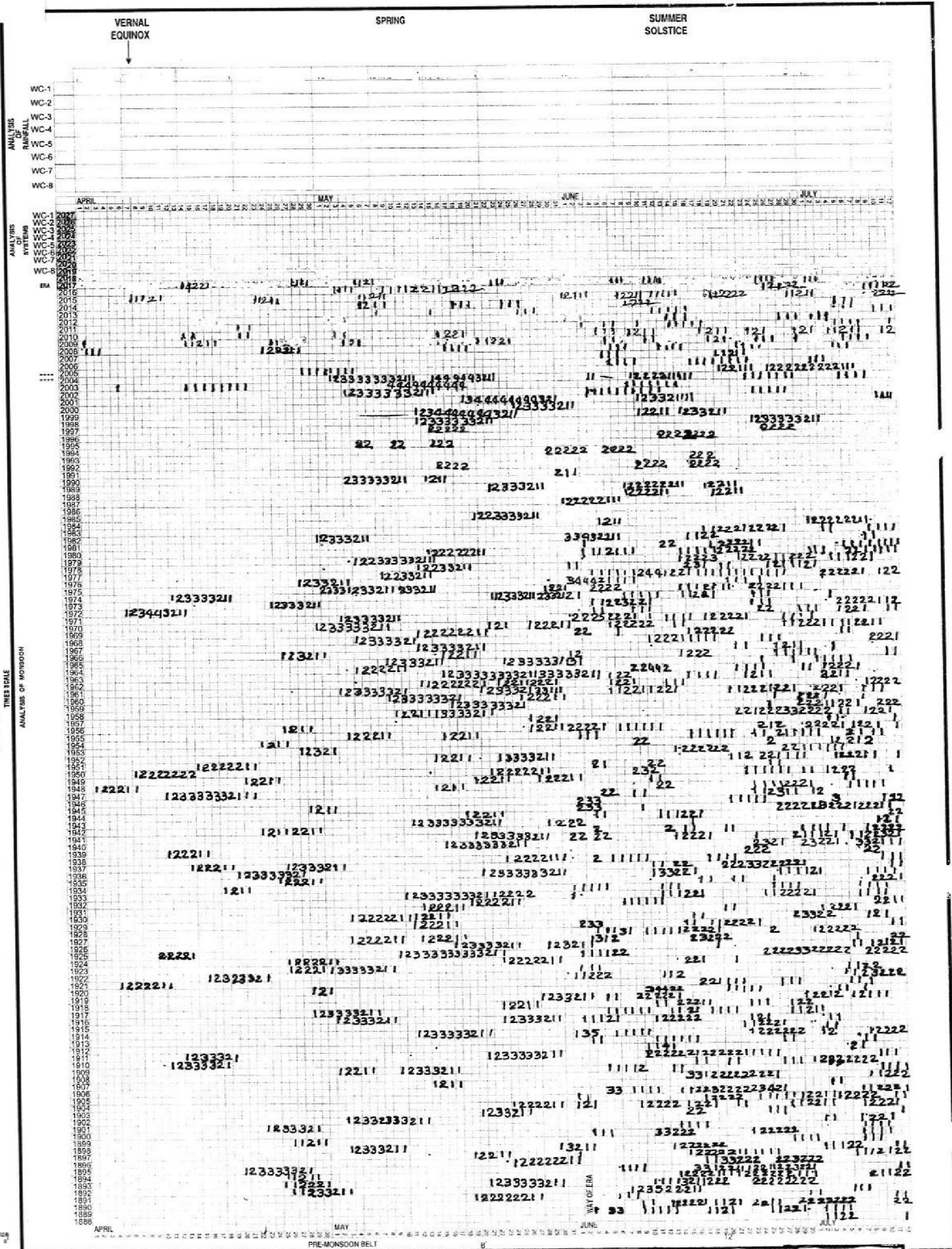
The documents that supports the events in the history of the invention are enclosed.

Appendices:



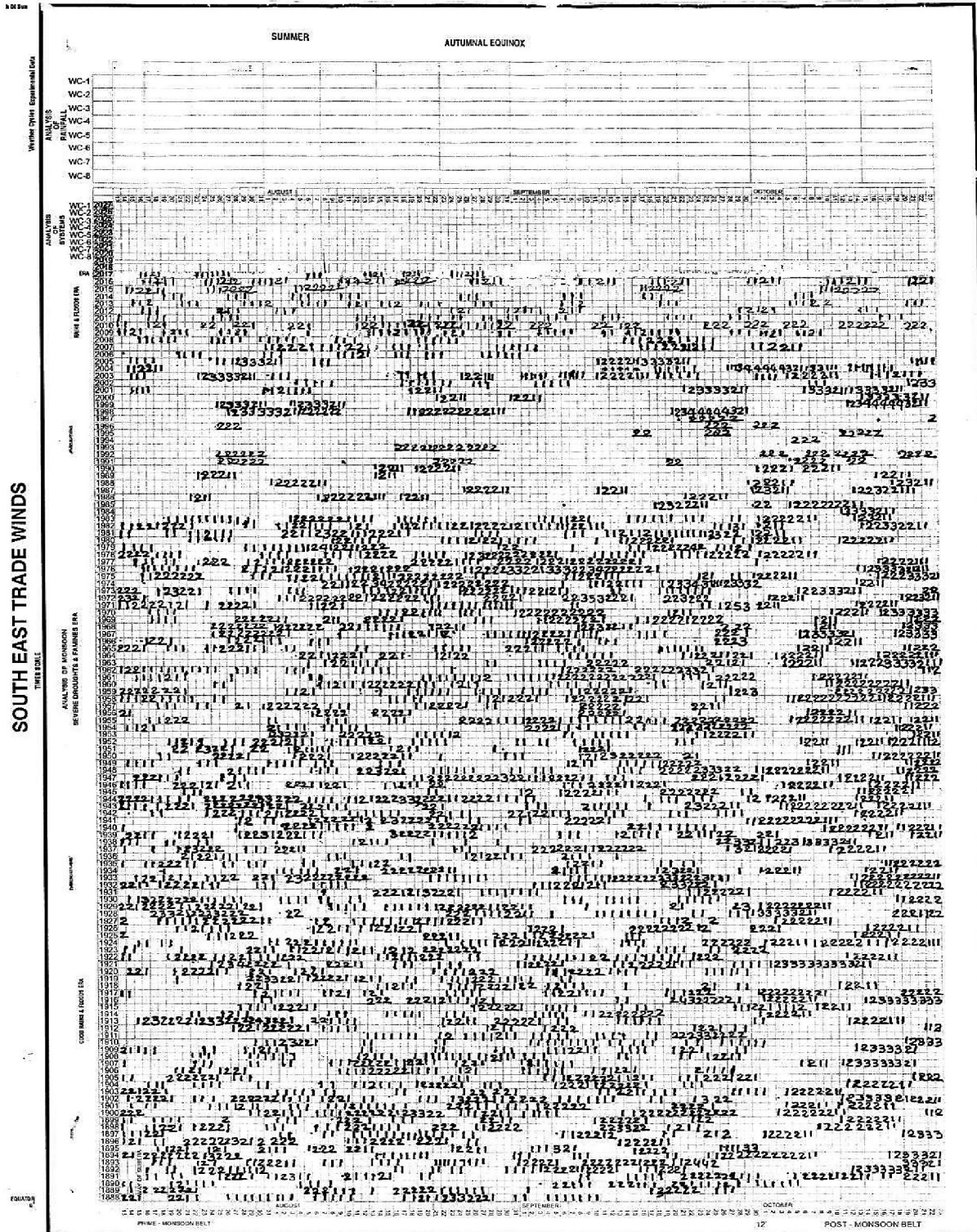


SOUTH EAST TRADE WINDS



THE ITCZ SET FORTH OVER EQUATOR Trade Winds Converge at the ITCZ of 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

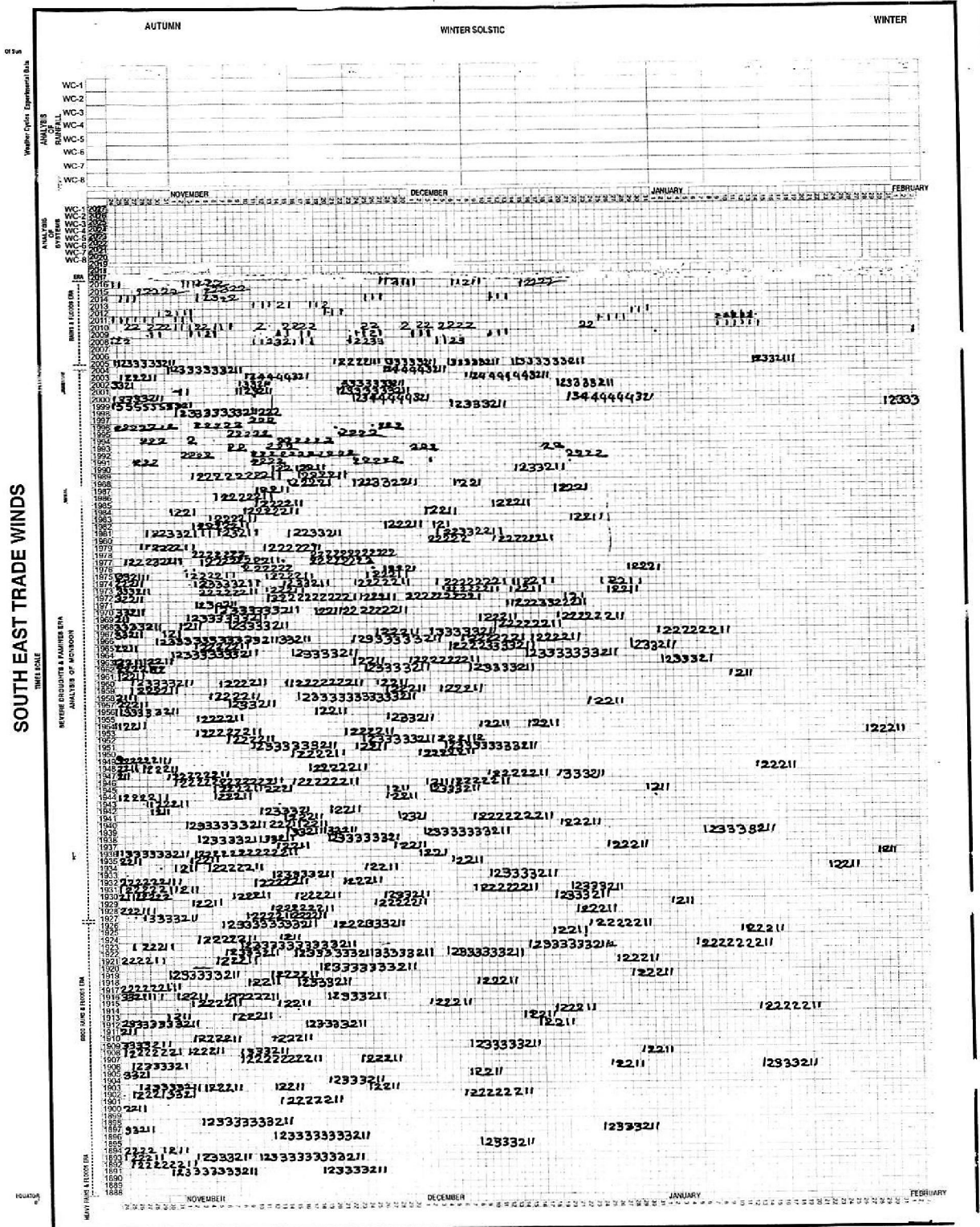
# INDIAN MONSOON



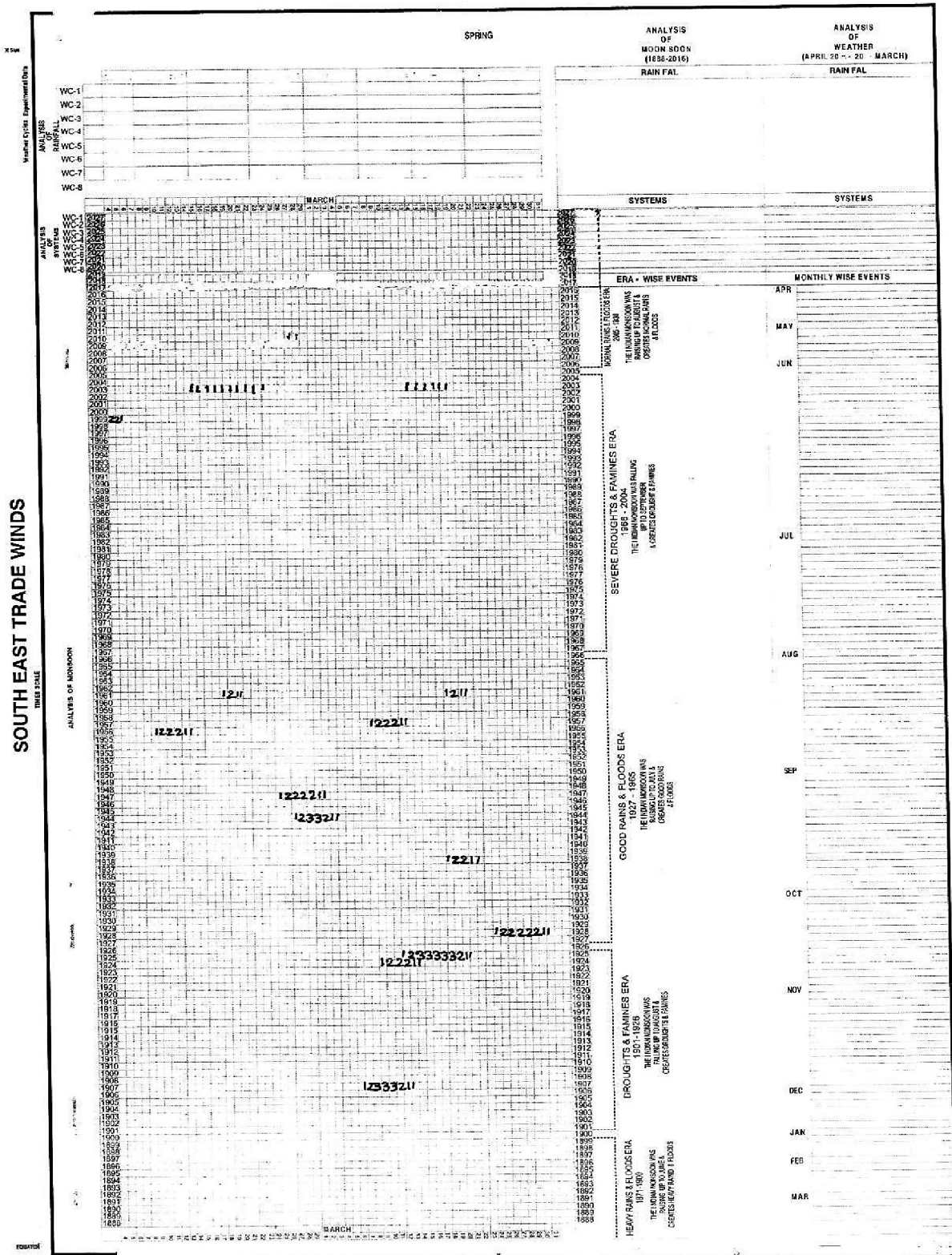
SOUTH EAST TRADE WINDS

TH 2 SET FORTH OVER EQUATOR Trade Winds Converge at the ITCZ of 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

# TIME SCALE

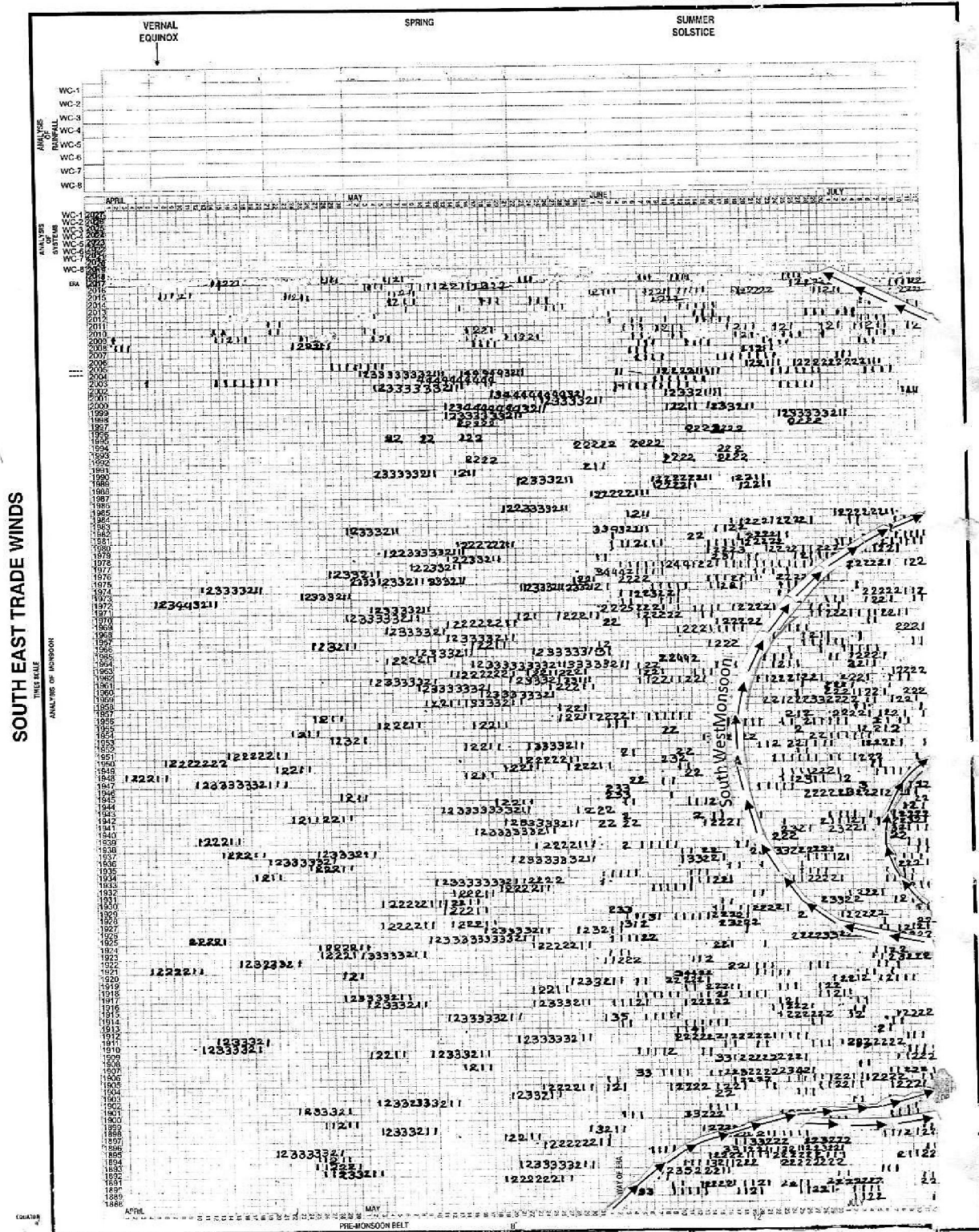


THE ITCZ SET FORTH OVER EQUATOR Trade Winds Converge at the ITCZ of i.e. a low pressure region at the equator The ITCZ Moves north wards over the Indian region The ITCZ passing over the Andhra Pradesh



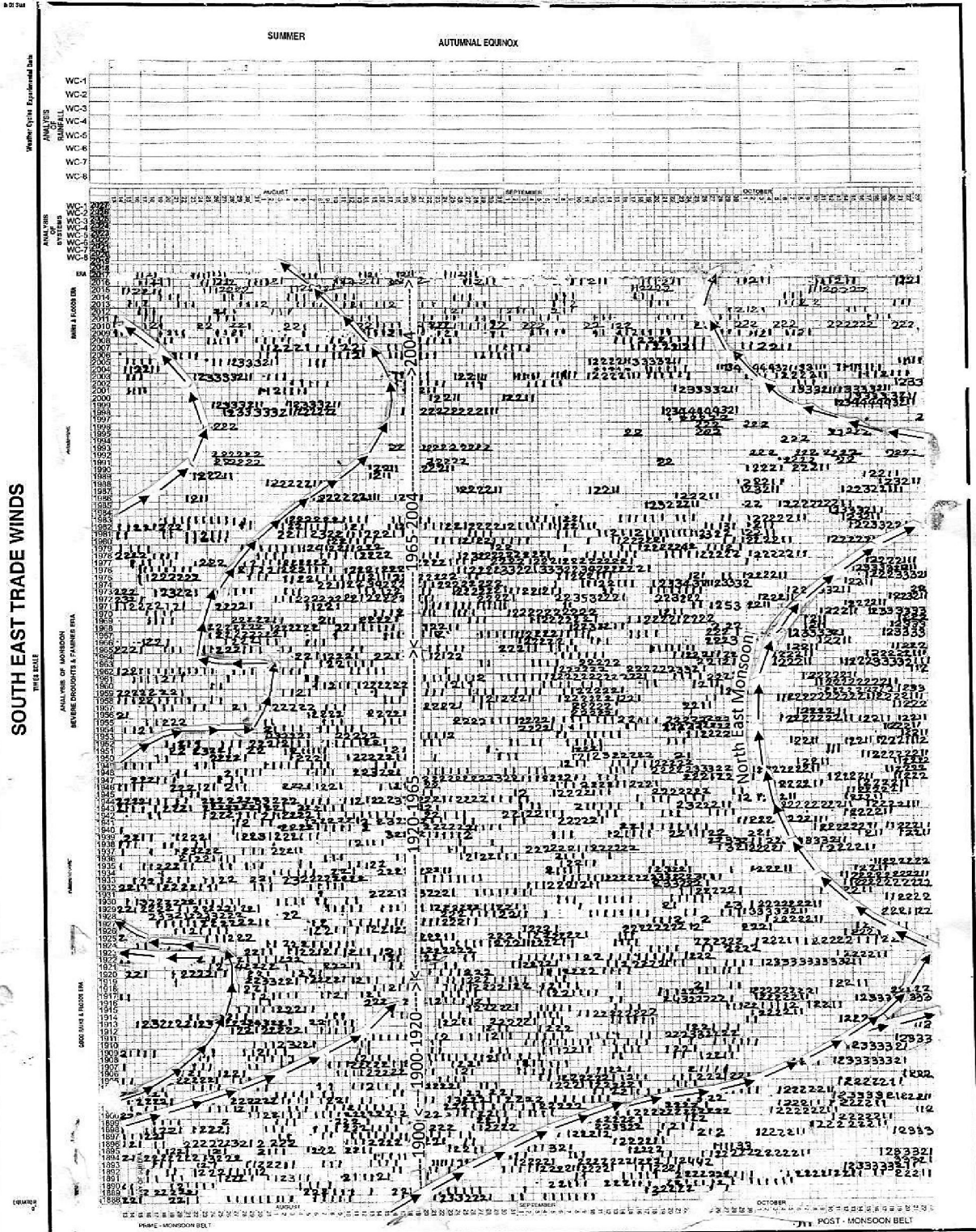
**SOUTH EAST TRADE WINDS**

The ITCZ moves northwards over the Indian region. The ITCZ passing over the Andhra Pradesh. Trace Winds Converge at the ITCZ of low pressure region at the equator. The ITCZ moves northwards over the Indian region. The ITCZ passing over the Andhra Pradesh.

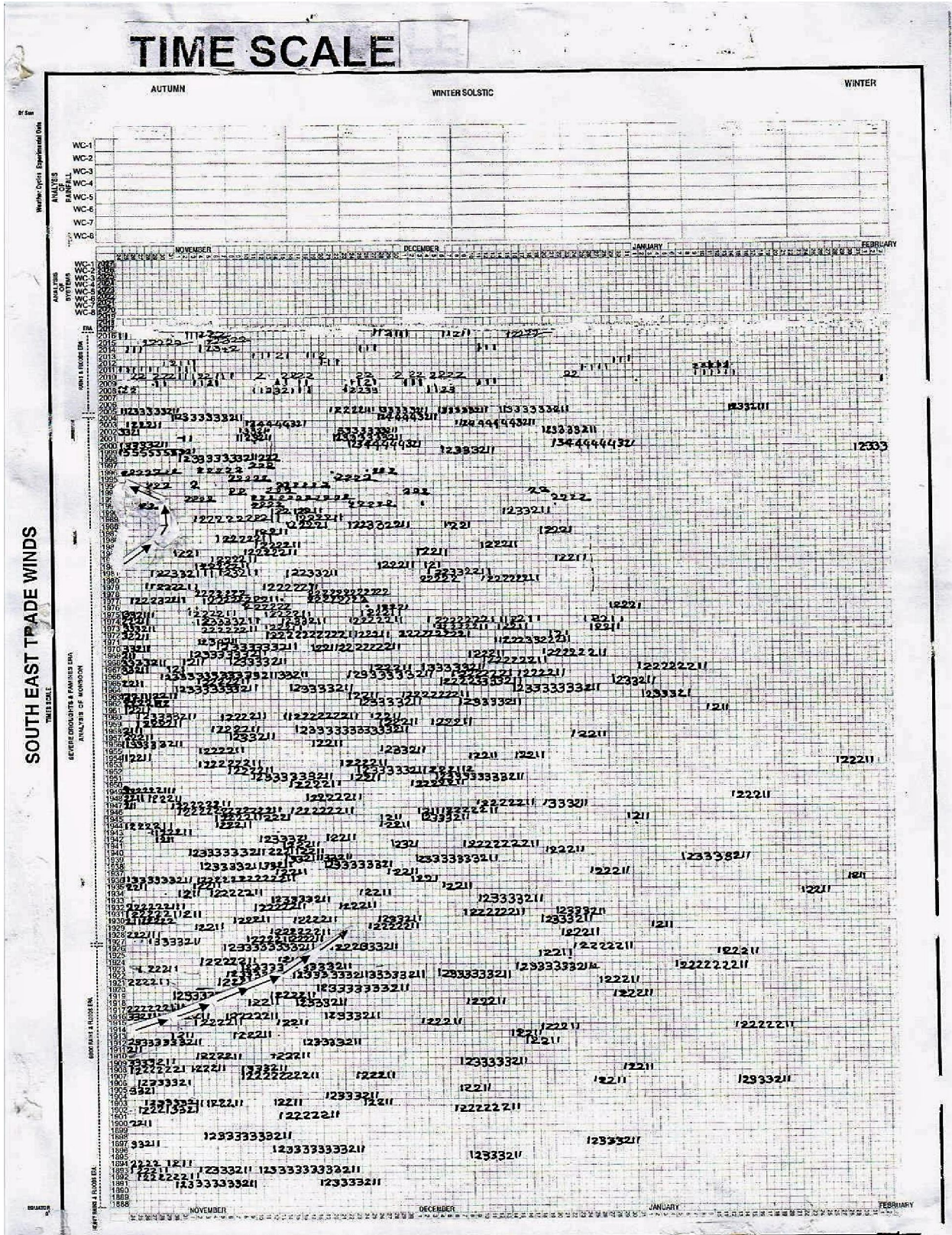


The ITCZ SET FORTH OVER EQUATOR Trade Winds Converge at the ITCZ of i.e. a low pressure region at the equator The ITCZ Moves north wards over the Indian region The ITCZ passing over the Andhra Pradesh

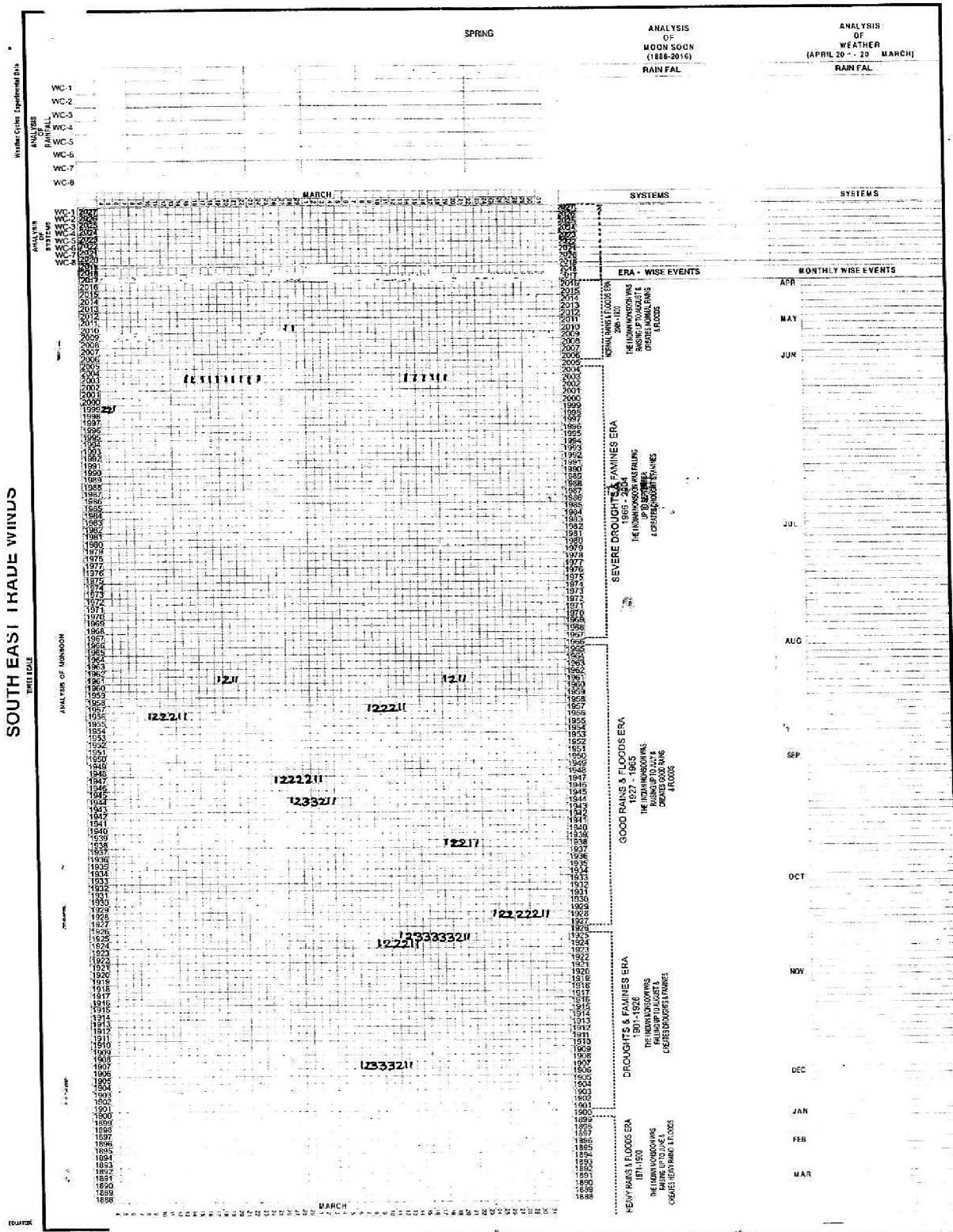
# INDIAN MONSOON



TH Z 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 of 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.

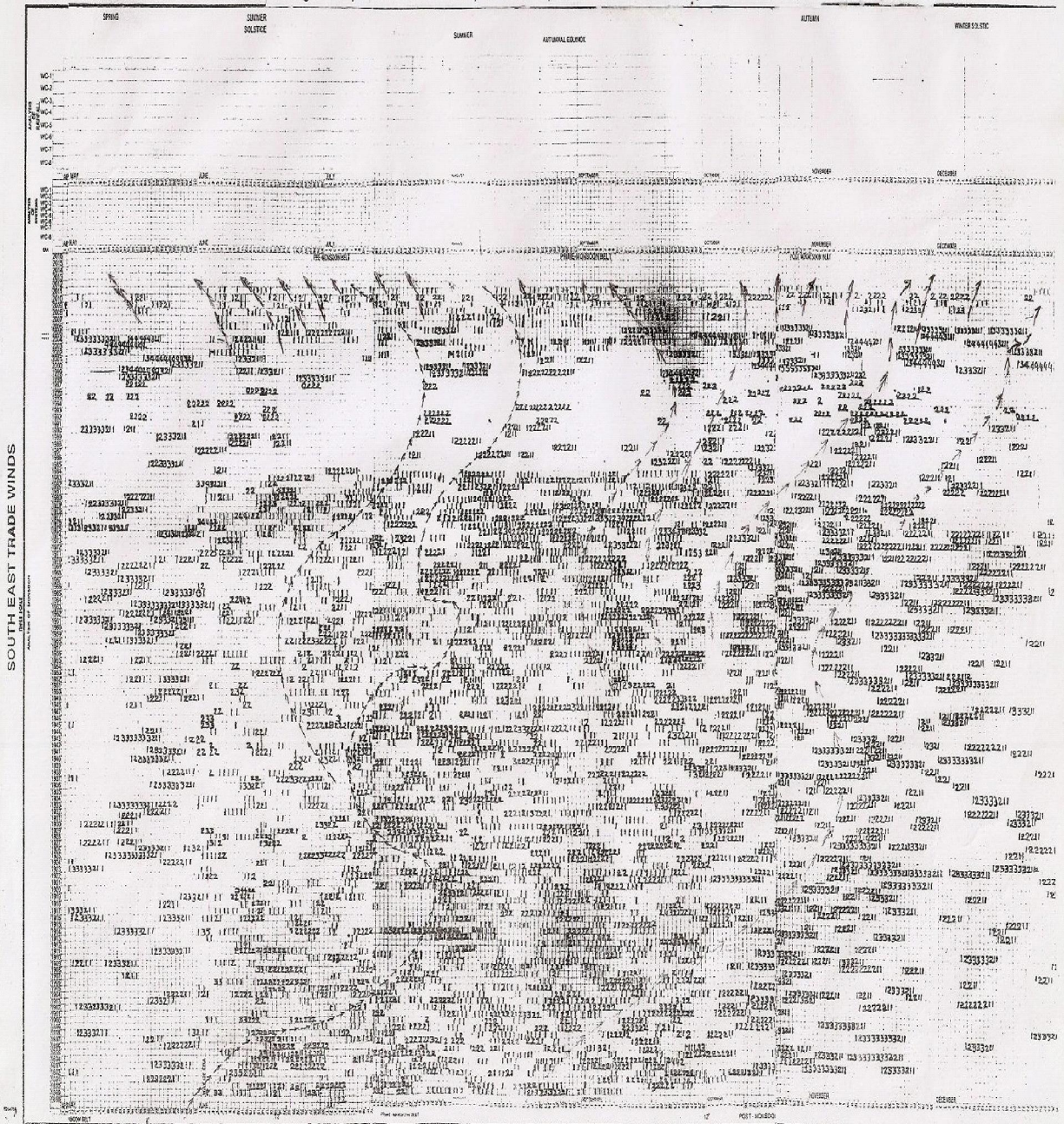


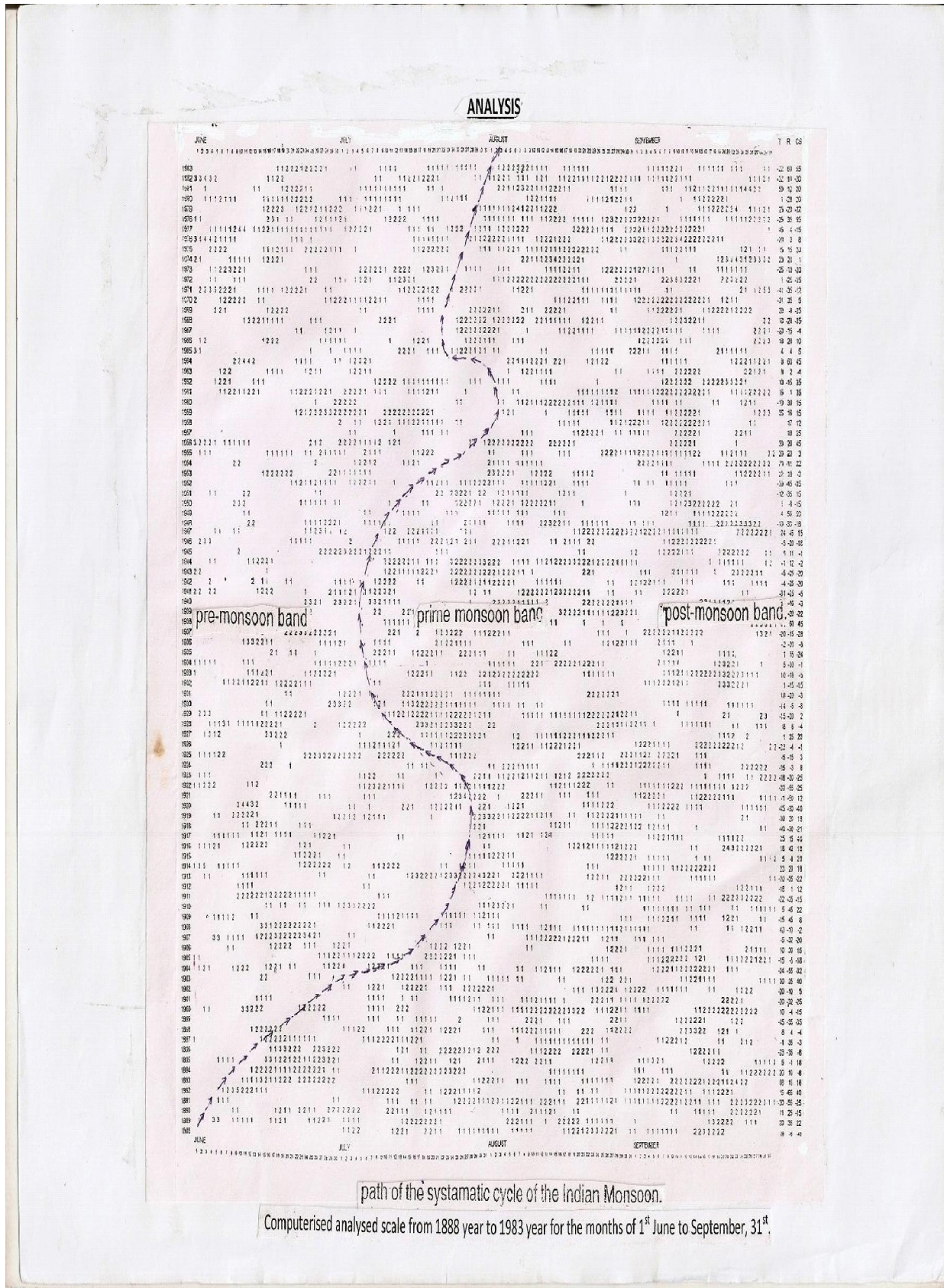
THE EQUATOR MOVES NORTH OVER EQUATOR Trade Winds Converge at the ITCZ of i.e. a low pressure region at the equator The ITCZ Moves north wards over the Indian region The ITCZ passing over the Andhra Pradesh

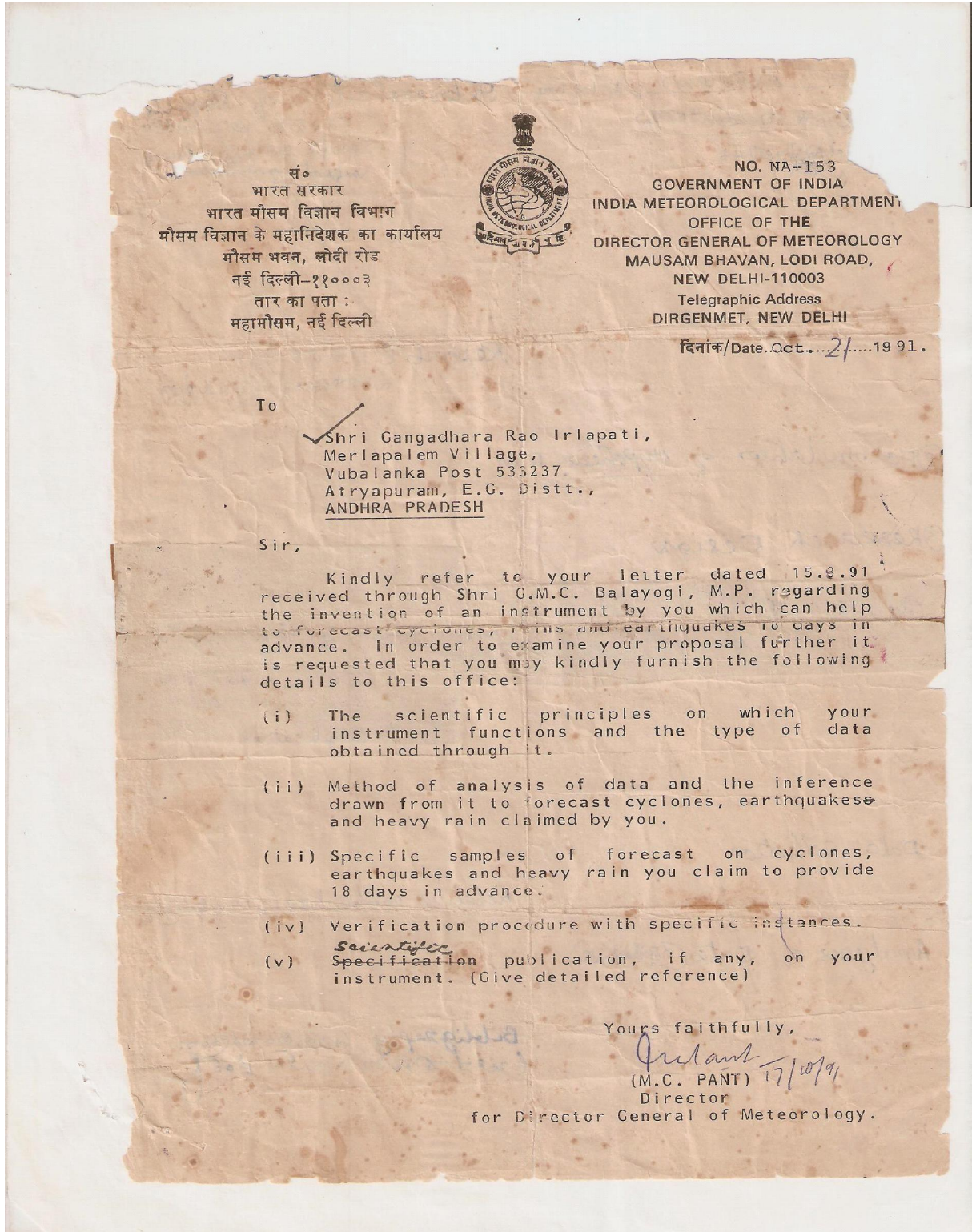


### INDIAN MONSOON TIME SCALE

Abridged analysed scale from 1888 year to 2018 year for the months of May 1<sup>st</sup> to December, 31<sup>st</sup>







2/25/2018