



Basics of North American Monsoon Time Scale

Gangadhara Rao Irlapati

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

E-mail: gangadhar19582058@gmail.com

Google pay A/C No.+91 9989239159

Abstract: There are many mysteries and unsolved issues in the monsoon systems that cannot explain and solve. I proposed and designed the Basics of Monsoon Time Scales for all world monsoon systems for unraveling the mysteries of the monsoon systems, studying the characteristics of mechanism of monsoons and exercising the benefits of mankind and development of monsoon sciences. As a part of these researches, North American Monsoon Time Scale is proposed and designed by me in 1991 as a part of Basics of Global Monsoon Time Scales to study the past, present and future movements of the North American monsoon and its weather conditions and natural calamities in advance. I call on world scientists to establish the North American Monsoon Time Scale and break down the mysteries North American monsoon. I proposed and designed the North American Monsoon Time Scale which can help to study the past, present and future movements of the North American monsoon and its weather changes and natural calamities in advance, break down the mysteries of the North American monsoon and use it for the benefit of mankind and also for a comprehensive study of the North American monsoon.

[Gangadhara Rao Irlapati. **Basics of North American Monsoon Time Scale**. *N Y Sci J* 2023;16(7):38-114]. ISSN 1 554-0200 (print); ISSN 2375-723X (online). <http://www.sciencepub.net/newyork>, 07.doi:10.7537/marsnys160723.07.

Key words: Global Monsoons Time Scales, North American Monsoon Time Scale, North African Monsoon Time Scale, Indian Monsoons Time Scale, East Asian Monsoon Time Scale, Western North Pacific Monsoon Time Scale, South American Monsoon Time Scale, South African Monsoon Time Scale, Australian Monsoon Time Scale, European 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, region or country. Each and every continent, region or country has its own seasonal monsoonal winds.

Monsoon rain gives us respite from the high and intolerable summer heat and brings back life to the living earth. Monsoon also has a role to play in the social-cultural unity of the world. People of world, particularly the farmers, eagerly wait for the monsoon rains. Monsoons cause the natural hazards just like floods, flash floods, cyclones, storms, tidal surges glacial lake outbursts, mudslides, and beach erosion due to monsoonal rains not only cause death and disease but also affect the health infrastructure. So there is a Monsoon Time Scale is required to continuously monitor and study the monsoons.

Major global monsoon systems & proposed global monsoon time scales:

The major monsoon systems in the world consist of the west Africa and Asia -Australian monsoons. The inclusion of the North and South American monsoons with incomplete wind reversal has been debate.

Monsoons can also be divided by Southern monsoon and Northern monsoons, Summer monsoons and Winter monsoons, Continental monsoons and Regional monsoons etc. A monsoon is also served with different names by region and place. For example, the North American monsoon is named after the name of Arizona monsoon and Mexican monsoon. There are also two or three or more branches of one monsoon. Monsoon is also called upon by geographical areas. For example, the Indian monsoon has its two branches, the Arabian branch and Bay of Bengal branch. Each and every continent, region or country has its own monsoonal winds. On the whole, 1.North American monsoon, 2.North African monsoon, 3.Indian Monsoon, 4.East Asian monsoon, 5.Western North Pacific monsoon, 6.South African monsoon, 7.South African monsoon, 8.Australian Monsoon are the main regional monsoons according to Prof Bin Wang. I agree with the opinion of Prof Bin Wang.

Global Monsoon Time Scales:

By establishing the Global Monsoon Time Scale and maintain, a country can be estimated the impending weather conditions and natural calamities such as monsoon movements, rains, floods, landslides, avalanches, blizzard, droughts, famines extreme winter

conditions, heavy rainfall, mudflows, extreme weather, storms, cloud burst, sand storms, hails and winds etc all climate, meteorological and weather related conditions & natural calamities in advance. Surface water resources can also still be found. I have conducted many scientific researches on the global monsoon systems and designed the Basics for Global Monsoon Time Scales including Regional Monsoon Time Scales, Sub-Regional Monsoon Time Scales, Country-Wise Monsoon Time Scales, Northern Monsoon Time Scales, Southern Monsoon Time Scales, Summer Monsoon Time Scales, Winter Monsoon Time Scales for all regions and countries to study the past's, present and future movements of the global monsoon systems and its relationship with rainfall and other weather problem and natural calamities. We can make separate monsoon time scales per each and every individual country. As a part of this, I have proposed and designed Basics of Global Monsoon Time Scales for all countries separately.

Regional monsoons and their monsoon time scales:
Therefore, the main regional Monsoons are eight. Those are 1.North American monsoon, 2.North African monsoon, 3.Indian Monsoon, 4.East Asian monsoon, 5.Western North Pacific monsoon, 6.South African monsoon, 7.South African monsoon, 8.Australian Monsoon. So, first of all I proposed and designed the monsoon time scales for all these regional Monsoon systems.

- North American Monsoon Time Scale**
- North African Monsoon Time Scale**
- Indian Monsoon Time Scale**
- East Asian Monsoon Time Scale**
- Western North Pacific Monsoon Time Scale**
- South American Monsoon Time Scale**
- South African Monsoon Time Scale**
- Australian Monsoon Time Scale**

Associated monsoons and their monsoon time scales:

There are some associated monsoons such as South Asian monsoon, North East Monsoon, East Africa

monsoon, West Africa monsoon. I also proposed and designed monsoon time scales for them.

- South-Asian Monsoon Time Scale**
- North-East Monsoon Time Scale**
- East-African Monsoon Time Scale**
- Indo-china Monsoon Time Scale**
- South East Asian Monsoon Time Scale**
- Indian Indochina Monsoon Time Scale**
- West African Monsoon Time Scale**
- East African Monsoon Time Scale**
- South East African Monsoon Time Scale**
- North West Africa Monsoon Time Scale**
- Major monsoons and their monsoon time scales:**

There are some major or continental monsoons such as South west monsoon, Indo-australian monsoon, Asian-australian monsoon, Malasian-australian monsoon, Australian-indonesian monsoon etc. I also proposed and designed monsoon time scales for them.

- South-West Monsoon Time Scale**
- Indo-Australian Monsoon Time Scale**
- Asian-Australian Monsoon Time Scale**
- Malasian-Australian Monsoon Time Scale**
- Northern-Australian Monsoon Time Scale**
- Australian-Indonesian Monsoon Time Scale**
- Borneo Australian Monsoon Time Scale**
- Maritime Continental Monsoon Time Scale**

Branch-monsoons and their monsoon time scales:
Arabian Monsoon Time Scale
Bay of Bengal Monsoon Time Scale

- Multiname monsoons and their monsoon time scales:**
- New Mexican Monsoon Time Scale**
 - Central American Time Scale**
 - Gulf of California Monsoon Time Scale**
 - South West Monsoon Time Scale**
 - Arizona Monsoon Time Scale**

Other than monsoons and their monsoon time scales:
European Monsoon Time Scale

The aforesaid Monsoons and their proposed scales are listed in the table below.

North American Monsoon	North American Monsoon Time Scale,
North African Monsoon	North African Monsoon Time Scale,
Indian Monsoon	Indian Monsoon Time Scale,
East Asian Monsoon	East Asian Monsoon Time Scale,
Western North Pacific Monsoon	WesternNorthPacificMonsoonTime Scale
South American Monsoon	South American Monsoon Time Scale,
South African Monsoon	South African Monsoon Time Scale,
Australian Monsoon,	Australian Monsoon Time Scale,
European Monsoon	European Monsoon Time Scale,
South Asian Monsoon	South Asian Monsoon Time Scale,
North East Monsoon	North East Monsoon Time Scale,

Asian South West Monsoon	Asian South West Monsoon Time Scale,
USA South West Monsoon	USA South West Monsoon Time Scale,
East African Monsoon	East African Monsoon Time Scale,
West African Monsoon	West African Monsoon Time Scale,
Indo Australian Monsoon	Indo Australian Monsoon Time Scale,
Asian Australian Monsoon	Asian Australian Monsoon Time Scale,
Malasian Australian Monsoon	Malasian Australian Monsoon Time Scale
Northern Australian Monsoon	Northern Australian Monsoon Time Scale
Australian Indonesian Monsoon	Australian Indonesian Monsoon Time Scale,
Arabian Monsoon	Arabian Monsoon Time Scale,
Bay of Bengal Monsoon	Bay of Bengal Monsoon Time Scale,

Country-Wise proposed and designed Global Monsoon Time Scales:

Afghanistan Monsoon Time Scale,	Mozambique Monsoon Time Scale,
Albania Monsoon Time Scale,	Myanmar(Burma) Monsoon Time Scal
Algeria Monsoon Time Scale	Namibia Monsoon Time Scale,
Andorra Monsoon Time Scale,	Nauru Monsoon Time Scale,
Angola Monsoon Time Scale,	Nepal Monsoon Time Scale,
Antigua Barbuda Monsoon Time Sca	Netherlands Monsoon Time Scale,
Argentina Monsoon Time Scale,	New Zealand Monsoon Time Scale,
Armenia Monsoon Time Scale,	Nicaragua Monsoon Time Scale,
Aruba Monsoon Time Scale,	Niger Monsoon Time Scale,
Australia Monsoon Time Scale,	Nigeria Monsoon Time Scale,
Austria Monsoon Time Scale,	North Korea Monsoon Time Scale,
Azerbaijan Monsoon Time Scale,	Norway Monsoon Time Scale,
Bahamas Monsoon Time Scale,	Pakistan Monsoon Time Scale,
Bahrain Monsoon Time Scale,	Palau Monsoon Time Scale,
Bangladesh Monsoon Time Scale,	Palestine State Monsoon Time Scale,
Barbados Monsoon Time Scale,	Panama Monsoon Time Scale,
Belarus Monsoon Time Scale,	Papua New Guinea Monsoon Time Sc
Belgium Monsoon Time Scale,	Paraguay Monsoon Time Scale,
Belize Monsoon Time Scale,	Peru Monsoon Time Scale,
Benin Monsoon Time Scale,	Philippines Monsoon Time Scale,
Bhutan Monsoon Time Scale,	Poland Weather Time Scale,
Bolivia Monsoon Time Scale,	Portugal Monsoon Time Scale
BosniaHerzegovinaMonsoonTime S	South Africa Monsoon Time Scale,
Botswana Monsoon Time Scale,	South Korea Monsoon Time Scale,
Brazil Monsoon Time Scale,	South Sudan Monsoon Time Scale,
Brunei Monsoon Time Scale,	Spain Monsoon Time Scale,
Bulgaria Monsoon Time Scale,,	Sri Lanka Monsoon Time Scale,
Brusina Monsoon Time Scale,	Sudan Monsoon Time Scale,
Burkina Faso Monsoon Time Scale,	Suriname Monsoon Time Scale,
Burundi Monsoon Time Scale,	Somalia Monsoon Time Scale,
Cabo Verde Monsoon Time Scale,	Sweden Monsoon Time Scale
Cambodia Monsoon Time Scale,	Switzerland Monsoon Time Scale
Cameroon Monsoon Time Scale,	Somalia Monsoon Time Scale,
Canada Monsoon Time Scale,	Sweden Monsoon Time Scale,
Cabo verde Monsoon Time Scale,	Switzerland Monsoon Time Scale,
CentralAfricanRepublicMonsoon Ti	Syria Monsoon Time Scale,
Chad Monsoon Time Scale,	Solomon Islands Monsoon Time Scale
Chile Monsoon Time Scale,	Tajikistan Monsoon Time Scale,
China Monsoon Time Scale,	Tanzania Monsoon Time Scale,
Colombia Monsoon Time Scale,	Thailand Monsoon Time Scale,

Comoros Monsoon Time Scale,	Timor -Leste Monsoon Time Scale,
Congo Republic Monsoon Time Scal	Togo Monsoon Time Scale,
Costa Rica Monsoon Time Scale,	Tonga Monsoon Time Scale,
Cote Dilvoria Monsoon Time Scale,	Turkey Monsoon Time Scale,
Croatia Monsoon Time Scale,	Trinidad & Tobago Monsoon Time S
Curacao Monsoon Time Scale,	Turkmenistan Monsoon Time Scale,
Cyprus Monsoon Time Scale,	Tuvalu Monsoon Time Scale,
Czech Republic Monsoon Time Scal	Uganda Monsoon Time Scale,
Denmark Monsoon Time Scale,	Ukraine Monsoon Time Scale,
Djibouti Monsoon Time Scale,	United Arab Emirates Monsoon Time ,
Dominica Monsoon Time Scale,	United Kingdom Monsoon Time Scale,
Democratic Republic Congo MTS	US Monsoon Time Scale,
East Tumor Monsoon Time Scale,	Uruguay Monsoon Time Scale,
Ecuador Monsoon Time Scale,	Uzbekistan Monsoon Time Scale,
Egypt Monsoon Time Scale,	Vanuatu Monsoon Time Scale,
El Salvador Monsoon Time Scale,	Venezuela Monsoon Time Scale,
Equatorial Guinea Monsoon Time S	Vietnam Monsoon Time Scale
Eritrea Monsoon Time Scale,	Yemen Monsoon Time Scale
Estonia Monsoon Time Scale,	Zambia Monsoon Time Scale,
Ethiopia Monsoon Time Scale,	Zimbabwe Monsoon Time Scale,
Fiji Monsoon Time Scale,	
Finland Monsoon Time Scale,	
France Monsoon Time Scale,	Cote d'Ivoire Monsoon Time Scale,
Gabon Monsoon Time Scale,	Democratic Republic of Congo Monsoon Time Scale,
Gambia Monsoon Time Scale,	Eswatini Monsoon Time Scale,
Georgia Monsoon Time Scale,	Oman Monsoon Time Scale,
Germany Monsoon Time Scale,	North Macedonia Monsoon Time Sc
Ghana Monsoon Time Scale,	Qatar Monsoon Time Scale
Greece Monsoon Time Scale,	Romania Monsoon Time Scale
Grenada Monsoon Time Scale,	Russia Monsoon Time Scale
Guatemala Monsoon Time Scale,	Rwanda Monsoon Time Scale
Guinea Monsoon Time Scale,	Saint Kitts And Nevis Monsoon Time S
Guinea – Bissau Monsoon Time Sca	Saint Lucia Monsoon Time Scale
Guyana Monsoon Time Scale	Saint Vincent and the Grenadines MTS
Haiti Monsoon Time Scale,	Samoa Monsoon Time Scale
Holy See Monsoon Time Scale,	San Marino Monsoon Time Scale
Honduras Monsoon Time Scale,	Sao Tome&Principe MonsoonTime Sca
Hongkong Monsoon Time Scale,	Saudi Arabia Monsoon Time Scale
Hungary Monsoon Time Scale	Senegal Monsoon Time Scale
Iceland Monsoon Time Scale,	Serbia Monsoon Time Scale
India Monsoon Time Scale,	Seychelles Monsoon Time Scale
Indonesia Monsoon Time Scale,	Sierra Leone Monsoon Time Scale
Iran Monsoon Time Scale,	Singapore Monsoon Time Scale
Iraq Monsoon Time Scale,	Slovakia Monsoon Time Scale
Ireland Monsoon Time Scale,	Slovenia Monsoon Time Scale
Israel Monsoon Time Scale	
Italy Monsoon Time Scale,	
Jamaica Monsoon Time Scale	
Japan Monsoon Time Scale,	
Jordan Monsoon Time Scale,	
Kazakhstan Monsoon Time Scale,	
Kenya Monsoon Time Scale,	
Kiribati Monsoon Time Scale,	

Kosovo Monsoon Time Scale,	
Kuwait Monsoon Time Scale,	
Kyrgyzstan Monsoon Time Scale,	
Laos Monsoon Time Scale,	
Latvia Monsoon Time Scale,	
Lebanon Monsoon Time Scale,	
Lesotho Monsoon Time Scale	
Liberia Monsoon Time Scale,	
Libya Monsoon Time Scale,	
Liechtenstein Monsoon Time Scale,	
Lithuania Monsoon Time Scale,	
Luxembourg Monsoon Time Scale,	
Macaw Monsoon Time Scale,	
Macedonia Monsoon Time Scale,	
Madagascar Monsoon Time Scale,	
Malawi Monsoon Time Scale,	
Malaysia Monsoon Time Scale,	
Maldives Monsoon Time Scale	
Mali Monsoon Time Scale	
Malta Monsoon Time Scale,	
Marshall Islands Monsoon Time Sca	
Mauritania Monsoon Time Scale,	
Mauritius Monsoon Time Scale,	
Mexico Monsoon Time Scale,	
Micronesia Monsoon Time Scale,	
Moldova Monsoon Time Scale,	
Monaco Monsoon Time Scale,	
Mongolia Monsoon Time Scale,	
Montenegro Monsoon Time Scale,	

Basics of Monsoon Time Scales:

After much research, I have proposed some basics regarding method and design of the Global Monsoon Time Scales for study the global monsoon systems. Global 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 and Design:

Design: Prepare a Global 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 Global 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 Global 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 a single and full length type square graphic scale. It can be formed on a Paper or a 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. 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 Indian Monsoon Time Scale.

Computer Model:

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

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 Global Monsoon Time Scales 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.

Researches & results:

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

Model scale: Before proposed and designed the Basics of North American Monsoon Time Scale, I have undertaken the Indian Monsoon Time Scale as the

model research project following all the rules to be followed in formulating the basics of Basics of Global Monsoon Time Scales including the North American Monsoon Time Scale. The reason I took the Indian Monsoon Time Scale as the model research project was because I was in the Indian monsoon region. I know the information about Indian monsoon very well. Hence a comprehensive study of Indian monsoon incorporating the rules of model research project and I have proposed the basics of the Basics of Global Monsoon Time Scales including the North American Monsoon Time Scale. the following is the summary of the model research project, how the project was implemented, how I did the research, how I analyzed the data and how I obtained results etc. I designed the Indian Monsoon Time Scale as a model scale for Global Monsoon Time Scales including the North American Monsoon Time Scale and successfully proved out in practice. Hence, we can take this Indian Monsoon Time Scale as a model scale to design and innovate the North American Monsoon Time Scale. Based on this the scientists design the North American Monsoon Time Scale.

Study of Indian Monsoon:

The phenomena of Indian 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 South West 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 South West is the outstanding feature of the climate.

The Indian 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 form 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 their 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 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 1st 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 2nd June and standard deviation is 8 days. At Mumbai, the onset date of 10th 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 occasions 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 north is not always a steady march, the activity of monsoon weakens after an advance of 500km and a scientist gangadhar In 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 1st September.

North – East Monsoon:

Onset of north –east monsoon: The onset of northeast monsoon normally takes place over South Peninsula (Tamil Nadu, South Coastal 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. Results Member 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.

Basics of Indian Monsoon Time Scale:

Keeping in view of study of the aforesaid Indian monsoon thoroughly, I have proposed some basics regarding method and design of the Indian Monsoon Time Scale. 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 and design:

Design: In order to design the Basics of North American Monsoon Time Scale, I continued my researches based on the setting up of the Indian Monsoon Time Scale. The Indian Monsoon Time Scale is a chronological sequence 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 Indian monsoon and its relationship with rainfall and other weather problems and natural calamities.

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 time and the data of monsoonal low pressure systems, depressions and storms of 139 years from 1880 to 2027 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 three methods used to design this scale. The first one is the single and full length scale and second one is parts & past scale. The last one is computer model made entirely by computer system.

- a) **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 139 year from 1880 to 2027 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.

- b) **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.

The first part is 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 are pasted into one scale as described below below.

Cut along the edges of dates on the right side of the first part and pasted 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 pasted 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 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

Computer model scale:

Besides this above manual scale, I have prepared a computer Indian Monsoon Time Scale generated by the 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.

Material & 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 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 for the last 140 years 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 comprehensive researches on the Indian Monsoon Time Scale and analyzed many key mysteries related to the monsoonal system. The Indian Monsoon Time Scale reveals many secrets and mysteries of the Indian monsoon and its relationship with movement of axis of the Earth around the Sun in the universe & its influences on the Earth's atmosphere. Let's study the mystery of the Indian monsoon and discuss the rest of other features of the Indian Monsoon Time Scale later.

When examine the scale, I noticed 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. 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 appears. Many other methods can analyze the Indian Monsoon Time Scale. In my researches I have noticed that depending on the incidence of heavy rains & floods in some years and droughts & famines in another years were happened according to the travel of monsoon path. The path of monsoon when travelling over four months from June to September good rainfall or heavy rains 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 main path or passage of the Indian monsoon(Southwest 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(southwest monsoon) and another 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. 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. As a result, it rained only two months instead of four months monsoon season and caused 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. As a result, it rained

only three months instead of four months monsoon season and resulted 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. As a result it rained only two months instead of four months monsoon season. and caused 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 to June in future in the shape of upper ascending direction and will be resulting heavy rains & floods in coming years during 2004-2060. This is an assessment based on the study of situations from 1888.

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 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 & 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 1871-1900's the main path of the Indian Monsoon was rising over June, July, August and created heavy rains and floods in most years. During 1900-1920's it was falling over August, September and caused low rainfall in many years. During 1920-1965s, it was rising again over July, August, September and resulted good rainfall in more years. During 1965-2004's it was falling over September and caused 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.

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.

North American Monsoon Time Scale:

North American Monsoon Time Scale is a chronological sequence 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 North American monsoon and its relationship with rainfall and other weather problem and natural calamities. Let us know a little about the North American monsoon before designing the North American Monsoon Time Scale.

Importance of Study of North American monsoon:

The North American monsoon system (NAMS) is also known as the Southwest United States monsoon, the Mexican monsoon or the Arizona monsoon. There is pronounced increase in rainfall from an extremely dry June to a rainy July until mid-September. The major circulation feature is the Bermuda High and its westward extension. Moisture source for the NAMS is complex with important roles played by the Gulf of Mexico, Pacific Ocean and on a smaller scale by the Gulf of California. The inter-annual variability in monsoon rainfall is partly influenced by the Pacific-North America pattern and to some degree by the El Niño Southern Oscillation phenomenon. This monsoon accounts for at least 50% of the annual rainfall during the summer monsoon period. This monsoon typically occurring between July and mid-September. During the monsoon, thunderstorms are fueled by daytime heating and build up during the late afternoon-early evening.

Typically, these storms dissipate by late night, and the next day starts out fair, with the cycle repeating daily. The monsoon typically loses its energy by mid-September when drier and cooler conditions are reestablished over the region. Geographically, the North American monsoon precipitation region is centered over the Sierra Madre Occidental in the Mexican states of Sinaloa, Durang, Sonora and Chihuahua.

Basics of North American Monsoon Time Scale:

The North American 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 North American monsoon regions and its relationship with rainfall and other weather problem and natural calamities.

Prepare the North American 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 North American monsoon region such as low pressure systems, depressions and storms/cyclones etc have been entering on the North American Monsoon Time Scale as per date and month of each and every year.

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

By establishing the North American Monsoon Time Scales which can help to study the movements of the the North American monsoon.

Method and Design:

Design: Prepare a North American 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 North American 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;

- d) **Basic Scale:** The first one is preliminary basic scale, it explains the structure of the scale.
- e) **Filled Scale:** This is the second scale that is filled with data and explains how to fill or manage the scale.

f) **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 North American Monsoon Time Scales. The first one is in the single form and next one is designed in four parts.

c) **Single & Full length Scale:** Prepare the North American 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 North American'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.

d) **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.

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-scape North American Monsoon Time Scale.

Computer Model:

North American 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 North American 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 North American 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 North American monsoon such as monsoon pulses in the form of low pressure systems if any of a monsoon region formed over the North American monsoon have been entering on the North American 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 North American monsoon. 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.

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.

Evidences that strengthened the Global Monsoon Time Scales:

1. Historical evidences that strengthened the Global Monsoon Time Scales:

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 of 100 years of Indian monsoon that strengthened the Global Monsoon Time Scales:

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 till today. The paper highlights strong monsoon during 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 in this day and age of irremediable 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 palaeoclimatic 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 fine sampling of less time interval means we were covering data at two-three years' interval while most researches collect 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 19 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 palaeoclimatic 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 decadal-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 year.

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

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. Global Monsoon Time Scales strengthens global researches such as Milankovitch cycles etc that Earth spin on it's axis around the Sun is the root cause of variations in monsoons ,seasons and other climate changes:

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.

12.Scientific theorem:

This is a phenomenon of Earth and space sciences and effect 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 the monsoon.

Everything in the universe just like oceans, solid earth, biological, atmosphere, geomagnetism, global and regional geophysical systems and sun, moon, planetary, solar-terrestrial astrophysical systems have many different types of interactions with each other. Many combinations of these simple interactions can lead to surprising emergent phenomena and play a key

role in creation of monsoons and other weather changes and natural calamities on the earth.

Monsoon is traditionally defined as a seasonal reversing winds. The primary cause of monsoons is the difference between annual temperature trends over land and sea. In winter the land is colder than the sea. Most of the time during the summer the land is warmer than the ocean. This causes air to rise over the land and air to blow in from the ocean to fill the void left by the air that rose. However, the physical factors of these monsoon are mainly influenced by the rotations and revolutions of the earth around the sun.

Earth rotates or spins on its axis and it also orbits or revolves west to eastward around the sun. Rotation and revolution are two motions of the Earth. Rotation of the Earth is its turning on its axis. Revolution of Earth is the movement of the Earth around the sun. The Earth rotates about an imaginary line that passes through the North and South poles of the planet. This line is called axis of rotation. Earth rotates about this axis once each day approximately 24 hours. The earth's axis of rotation is tilted by 23.5 degrees from the plane of it's orbit around the sun. The cause is unknown but 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.

Conclusion:

We can make many more modifications thus bringing many more developments in the North American Monsoon Time Scale. I urge world scientists to establish, implement and make further researches on this scale. North American Monsoon Time Scale I invented was a basic invention. I have worked hard to design in manual. It's construction requires a lot of data of low pressure systems, depressions and cyclones since 1880. But such a large amount of data is not available to me. Scientists and research institutes may have the information. Hence, scientists should take the initiative and establish the North American Monsoon Time Scale. Researchers, particularly the American have to do more researches on this scale and create it through computer systems.

Acknowledgement:

In this research, I have consulted many professors of several universities and scientists of various research institutes for their valuable suggestions and advices. 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. These are my acknowledgements to them.

Author bio:

I'm an unfortunate Indian scientist, born on May 25, 1958 in India to a poor depressed community family. The governments did not encourage and provide research opportunities and the society threw away me. They ridiculed and humiliated me when I asked to provide research opportunities. After many rejections and humiliations, I built a small lab in my house and made more than 1000 researches, studies and postulates on the earth and space science from my childhood 1965 to old age 2022. Among them, Bio-forecast(1965-70), Irlapatism-A New Hypothetical Model of Cosmology(1970-77), Inquest and imprisonment(1977-79), Geoscope(1980-87), Basics of Monsoon Time Scales(1987-91), Indian Monsoon Time Scale(1991), Disaster management prevention and mitigation policies(2000-10), Global Monsoon Time Scales(2010-2022) etc. were important and successfully completed. However, Artificial rains for creating normal rains, Artificial storms for pouring heavy rains, Artificial underground waters for increasing ground waters, Time-Travel-Machine for traveling into the past, present future, Geo-machine for re-creating humans of past, Earth-machine for re-creating the another earth in the space, Inventing the life, Microcosm project for connecting and entering the worlds of micro organs, atomic-worlds, Macrocosm project for connecting and entering the worlds of space and outer space worlds and postulates like "photon is a gigantic universe as same as our universe and atom in which there are galaxies, stars, planets similar as in our universe and/or electrons, protons, neutrons similar as in atom; atom is a gigantic universe as same as our universe in which there are galaxies, stars, planets in the form of electrons, protons and neutrons and there are continents, oceans, countries, living beings on some neutrons similar as on the earth; the universe seen around our earth is a tiny atom in another ascending world etc. remains uncompleted due to lack of support and opportunitieopportunities

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 the Indian 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 Indian Monsoon Time Scale along with other Global Monsoon Time Scales for studying the monsoon systems. Sri G.M.C. Balayogi recommended that research report to the India Meteorological

Department for implementation in the services of the people. In 1994, The Cabinet Secretariat of India recommended this Indian Monsoon Time Scale 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 Indian 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 the Indian Monsoon Time Scale to the Indian Institute of Tropical Meteorology for further research and development. 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 Global 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 global monsoons and predict it's related weather conditions and natural calamities in advance.

However, much efforts and sacrifice did tho, I could not get government recognition and social support. My researches 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 when I asked to provide research opportunities. I was pushed out of the gate, when I asked to provide research opportunities. I was insulted by my caste/race. 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 on me. My lab was invaded laboratory. Illegal cases were framed and foisted against me. I faced trials, handcuffed and led through streets police enquiries 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 no of them. I am now making my life's last journey due to disregard and despair and serious illness and severe poverty that's no food to eat, no fabrics to put on and no money to take treatment.

Appeal:

Kindly find out my researches in all social networking websites or can obtain by sending your email to me. These findings are very helpful for research institutions, universities researches. And also these findings can be very helpful for Ph.D students, Postdocs, professors, seniors, scientists and science

enthusiasts who want to innovate. I will send them the valuable information I have.

For example, those who want to design Monsoon Time Scales for their regional or country Monsoons and conduct weather predictions have trouble in making the Monsoon Time Scales, kindly contact me at my email id gangadhar19582058@gmail.com and take my suggestions and assistance. I will send you complete details of this scale. Further if you want, I will create a manual Monsoon Time Scale and send the same to you for study. However for this, data of list of monsoon pulses in the form of monsoonal low pressure systems, depressions and storms formed over their monsoon region or country last 100 & above years since 1880 as cited in the Reference-1 (i.e. 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.) have been taken as the data to establish this scale. I will make and send it and if you have kind heart send an amount as you like in the form of a Bank cheque or to my Googlepay A/C No.+91 9989239159. So, researchers send Monsoon data of their region or country, I will make and send Monsoon Time Scales for their region or country. These monsoon time scales are very helpful for research institutions, universities researches and also these can be very helpful for Ph.D students, Postdocs, professors, seniors, scientists and science enthusiasts who want to conducting researches and studies on climate changes there. Because, through these Monsoon Time Scales it is known in advance that what kind of climate changes have occurred in your country in the past 100 years and what kind of climate changes are going to happen in the coming 100 years.

I am now making my life's last journey in serious illness and poverty with no food to eat, no fabrics to put on and no money to take treatment for cardiovascular asthma. Illness weakening the health and 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. Hence, I humbly request that if world scientists have invented any technology in future that re-create humans of past, kindly remember and re-create me to complete my uncompleted researches as attendant in your research laboratory.

Corresponding Author:

Gangadhara Rao Irlapati
H.No.5-30-4/1,
Saibabanagar, Jeedimetla
Hyderabad, Telangana-500055, India
Telephone: xxx-xxx-xxxx

E-mail: gangadhar19582058@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. Centre for ocean-land atmospheric interactions, university of Maryland, College park, MD.

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

3. Wiki:

North American monsoon. (n.d.). Retrieved from https://en.wikipedia.org/wiki/North_American_Monsoon

4. <http://www.clivar.org/about-monsoon>. North American monsoon.

5. The world's 7 Tropical Cyclone seasons around the world.

6. Wiki: Indian monsoon (n.d.). Retrieved from http://en.wikipedia.org/wiki/Indian_Monsoon_Current.

7. Indian monsoon (n.d.). Retrieved from http://www.britanica.com/science/Indian_Monsoon

8. Indian monsoon have strengthened over past 15 years (n.d.). Retrieved from http://news.mit.edu/Jennifer_chu-mit_net_news

9. Interannual variations of Indian summer monsoon (n.d.). Retrieved from <http://tropmet.res.in/>

References(historical):

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.

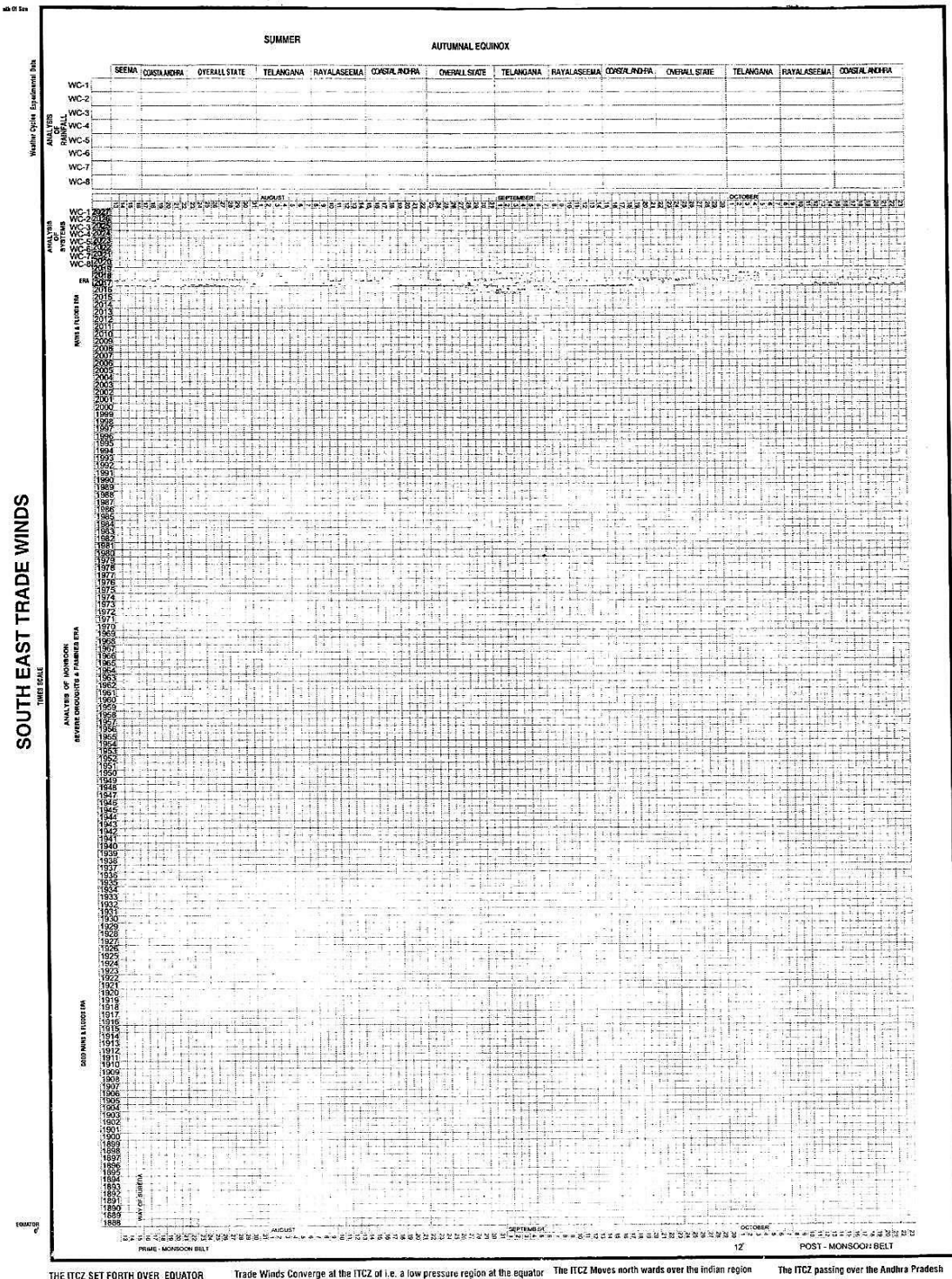
8) Letter No. F-12016/1/00-NA/100 Dt: 01-12-2009 of the Government of India , India Meteorological Department about the correspondence for further research and development of the Global Monsoon Time Scales/ Indian Monsoon Time Scale.

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.

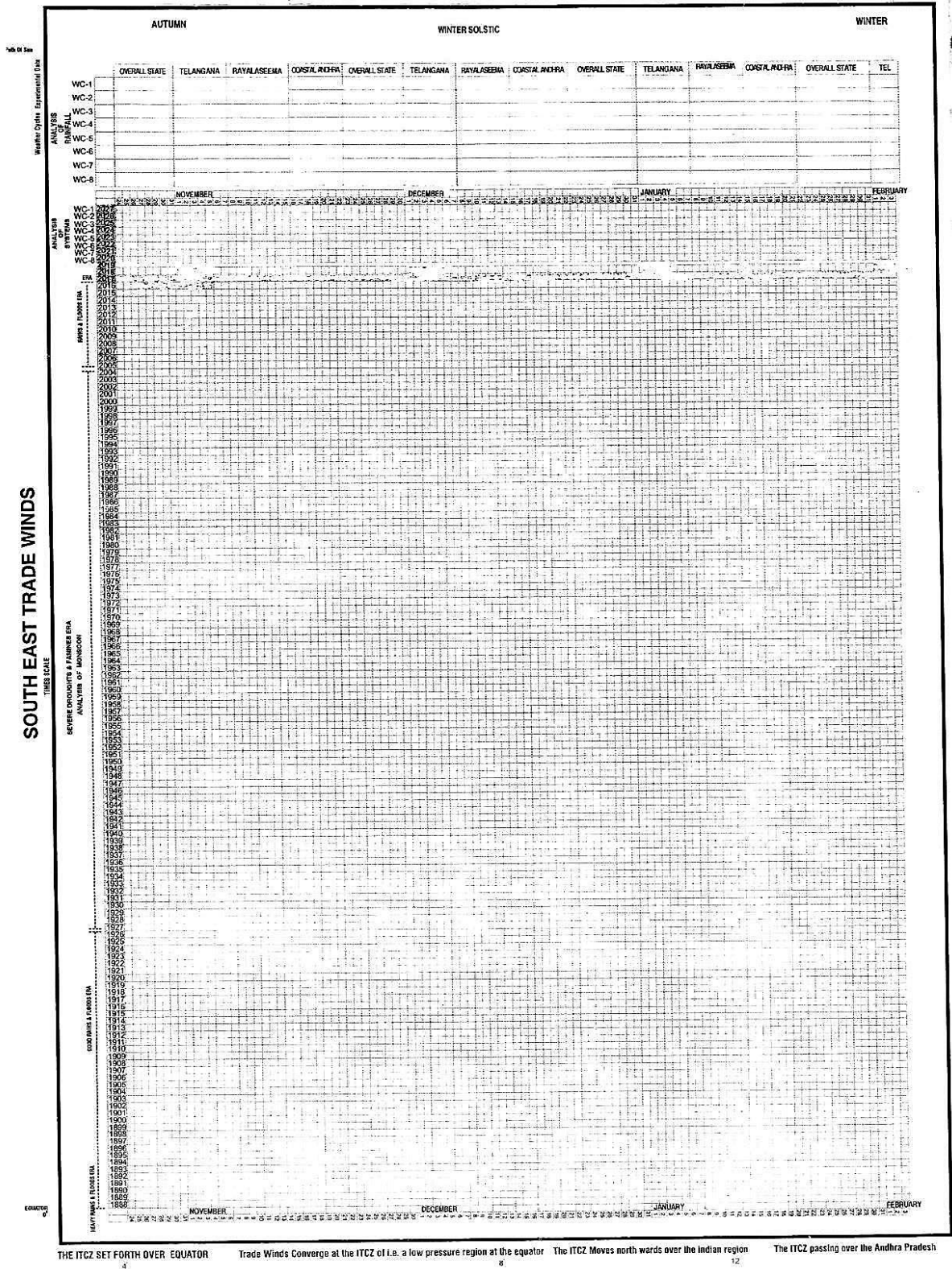
References:(others)

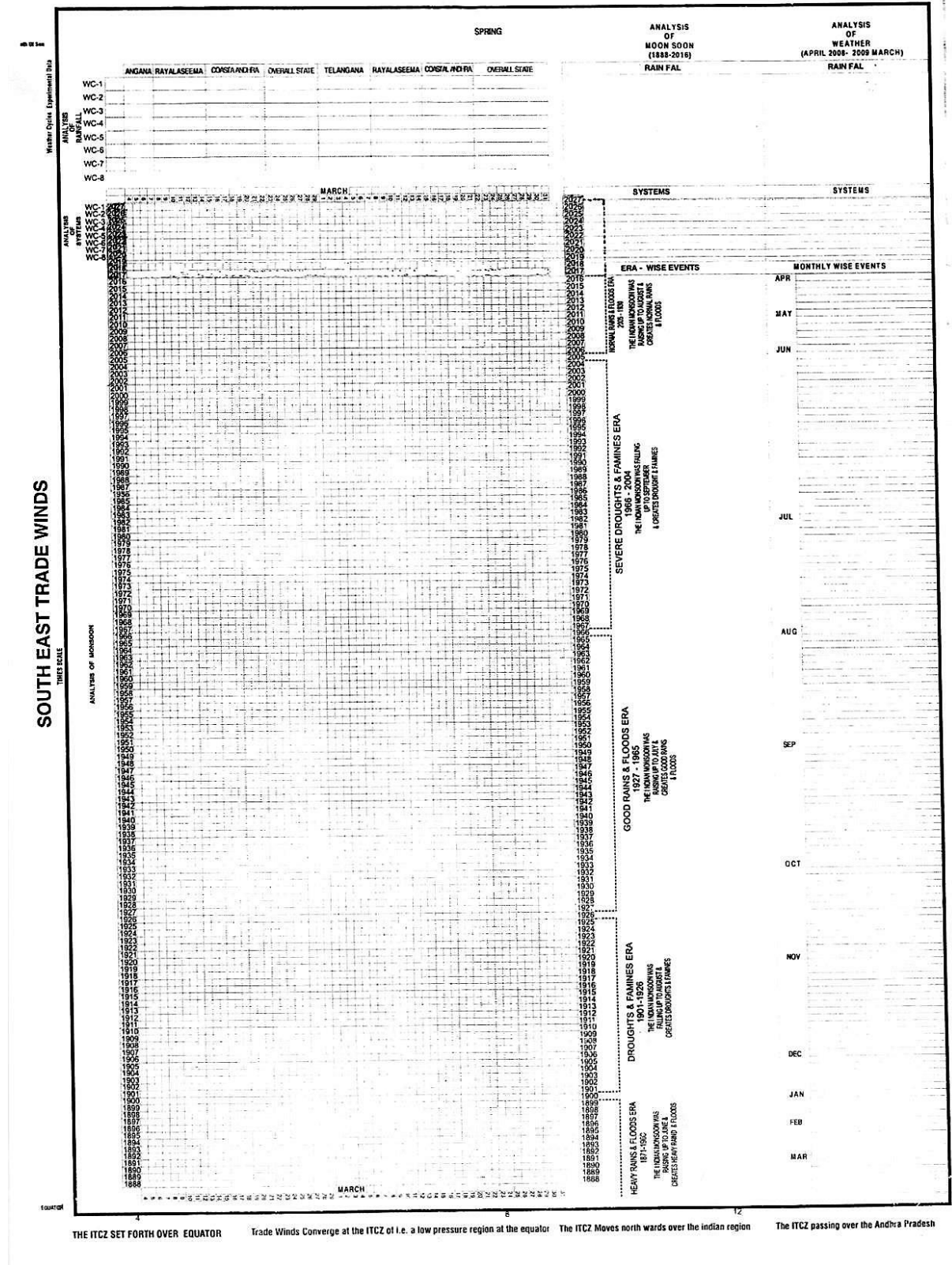
- [1]. Aithabathula Jogeswara Venkata Buchi Maheswara Rao, Member of Parliament (Loksabha), Amalapuram letter dt:08/12/1987.
- [2]. R. Narayanan, Minister of state, Science & Technology, Government of India, letter dt:09/12/1988.
- [3]. G.S.Rao, MLA letter dt:1988.
- [4]. N.T. Rama Rao, Chief Minister of Andhra Pradesh, letter dt:30/01/1989.
- [5]. Order, Hon'ble High Court of Andhra Pradesh W.P. No.12355/1989, dt:06/09/1989.
- [6]. Opinion of Supreme Court Legal Services Committee dt:02/01/2006.
- [7]. India Metrological Department, letter No.S-01416/ prediction dt:11/12/200

INDIAN MONSOON

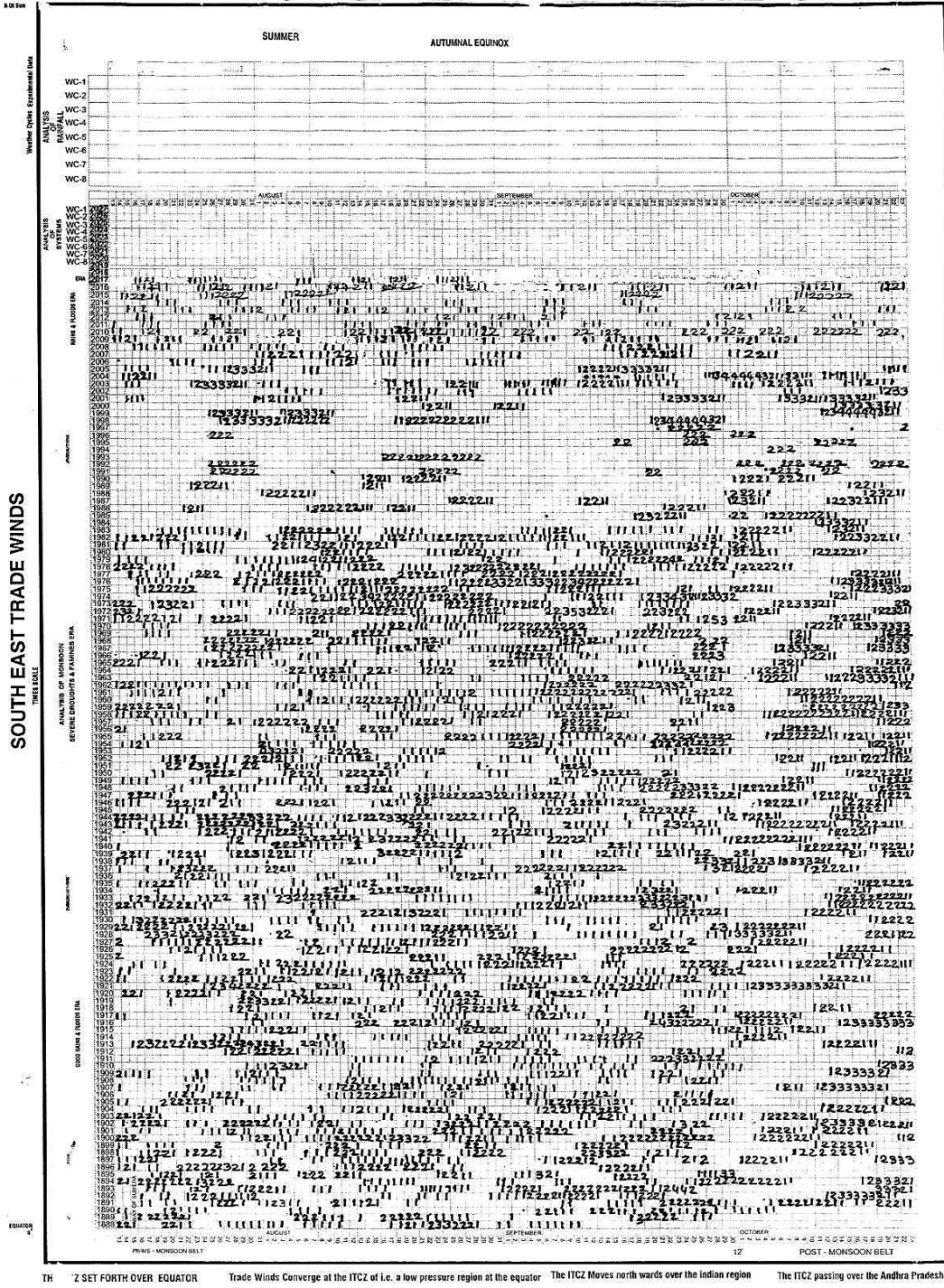


TIME SCALE

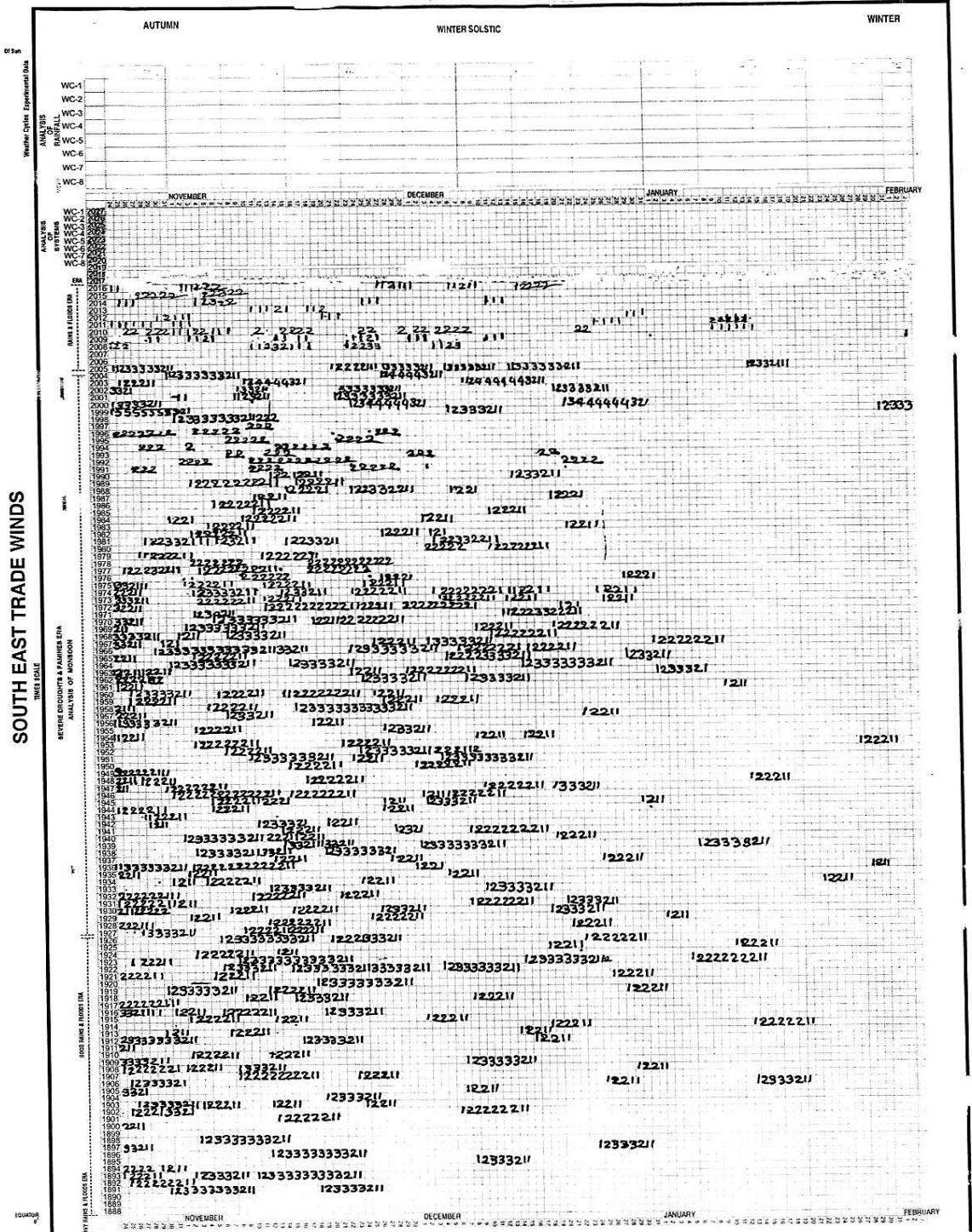




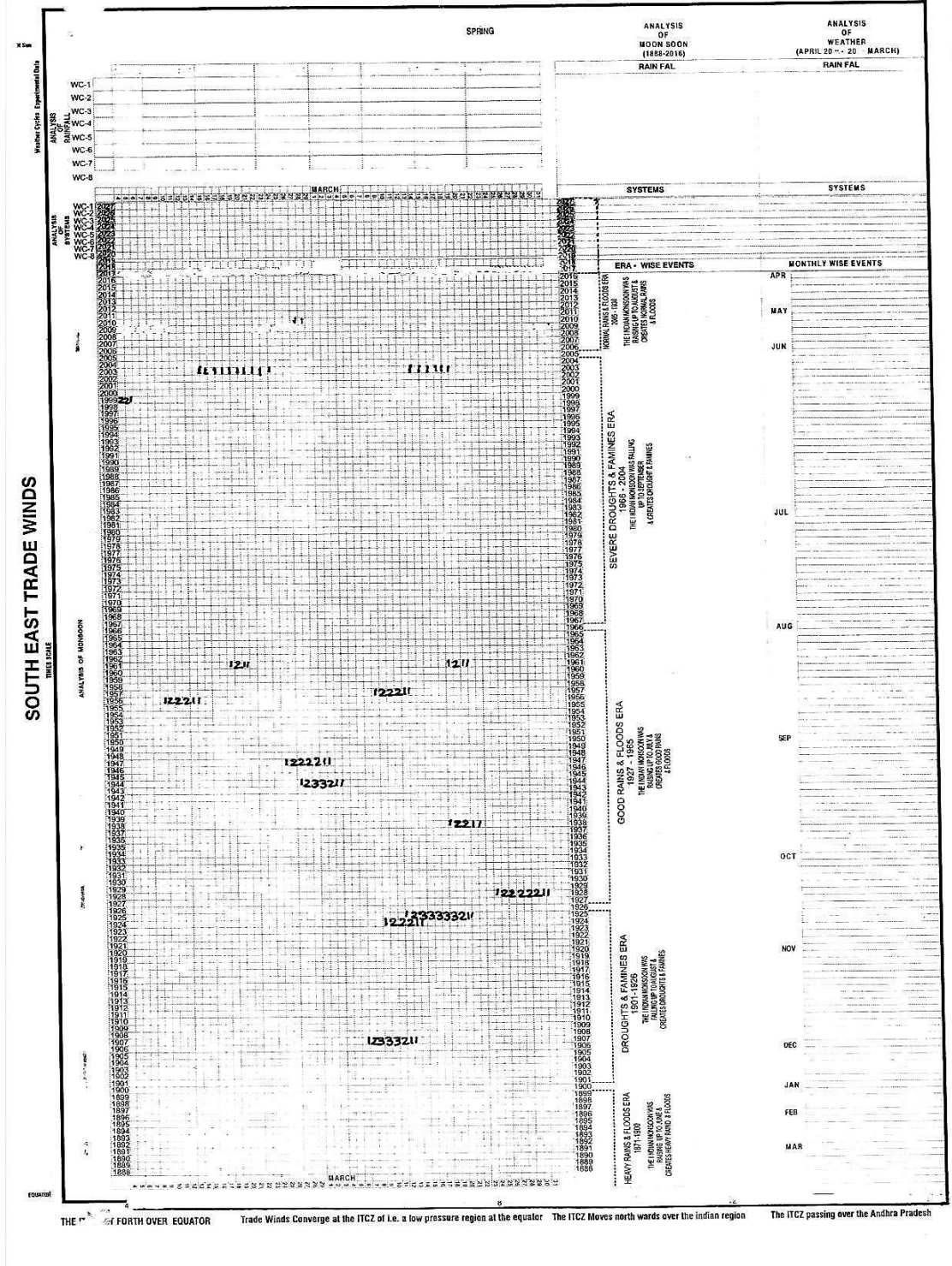
INDIAN MONSOON

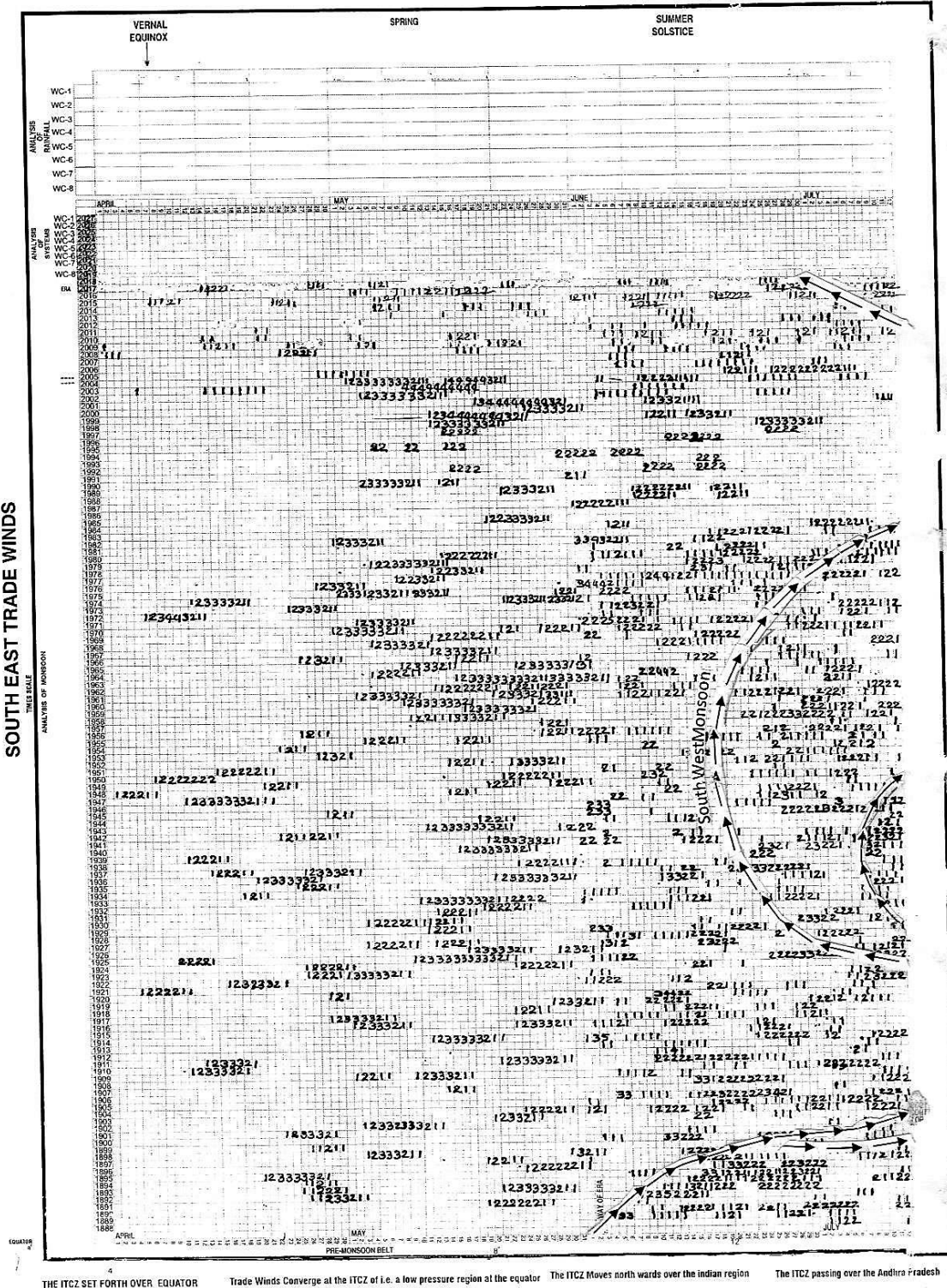


TIME SCALE



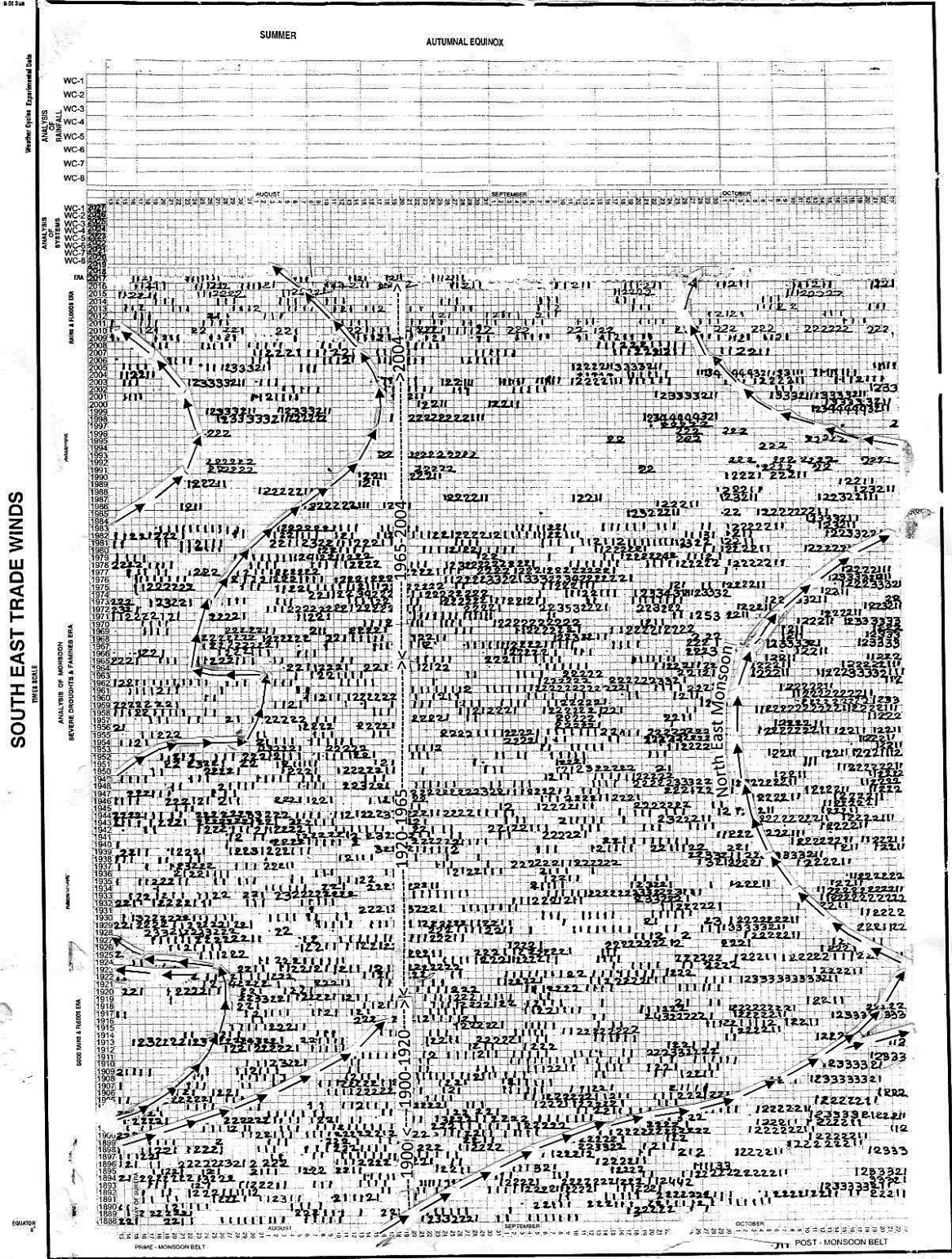
THE ITCZ SET FORTH OVER EQUATOR Trade Winds Converge at the ITCZ of i.e. a low pressure region at the equator The ITCZ Moves north wards over the Indian region The ITCZ passing over the Andhra Pradesh.



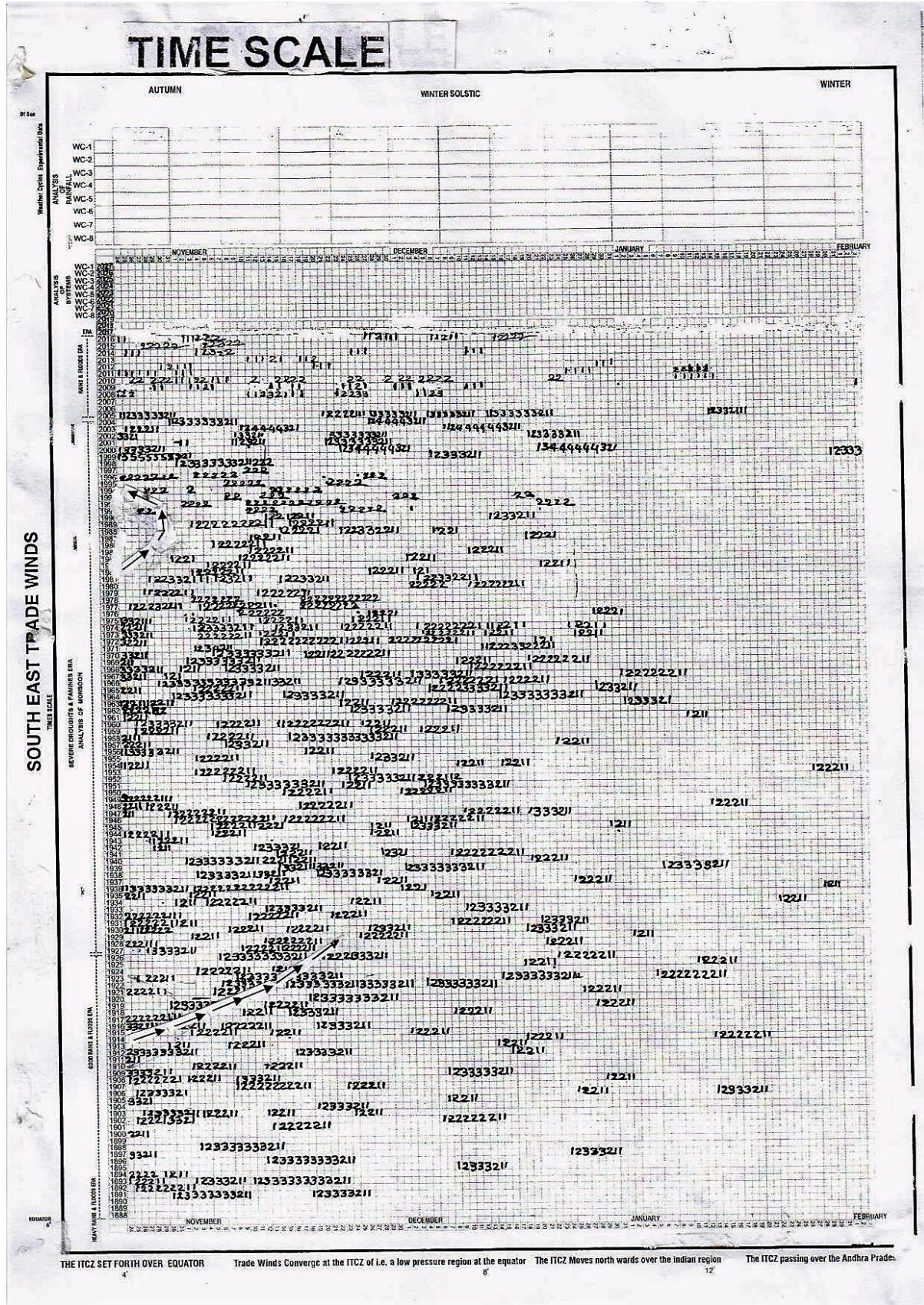


S

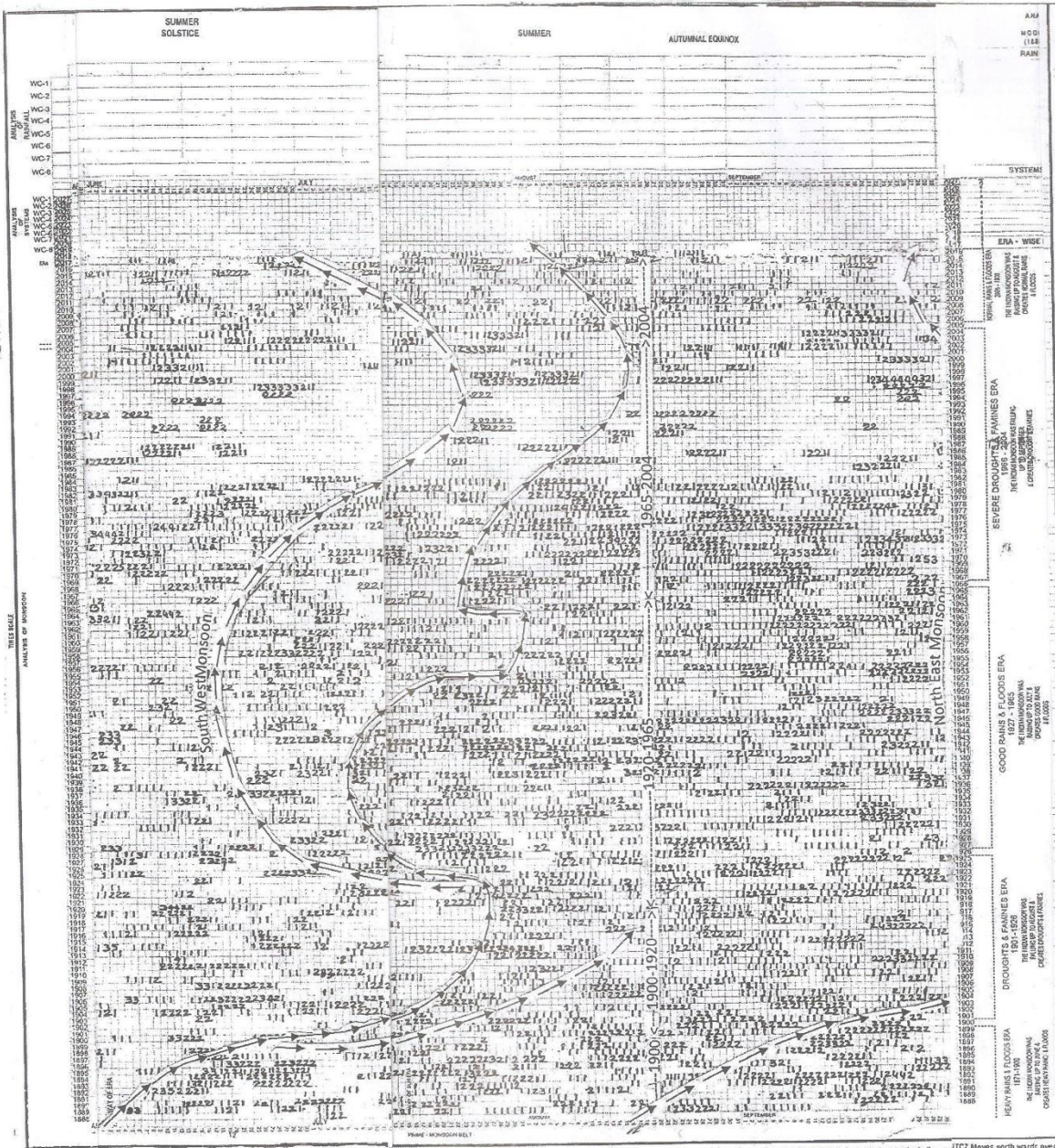
INDIAN MONSOON



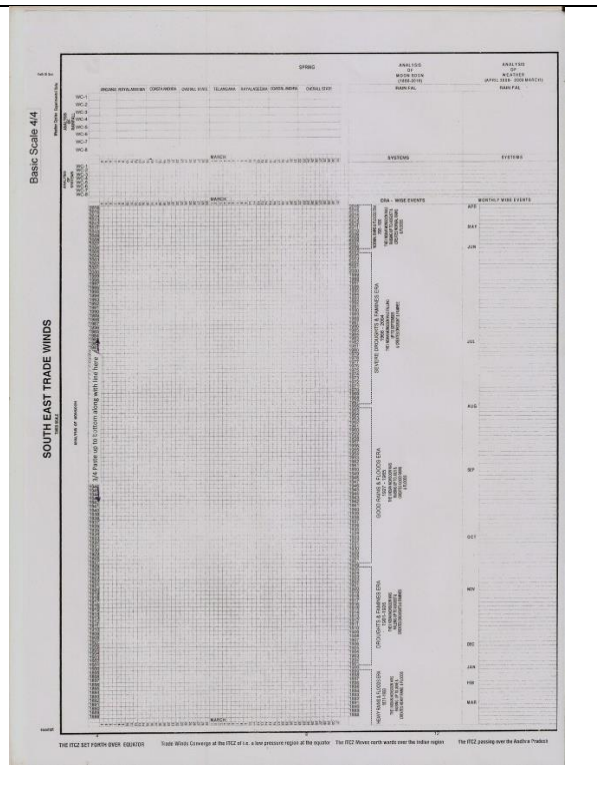
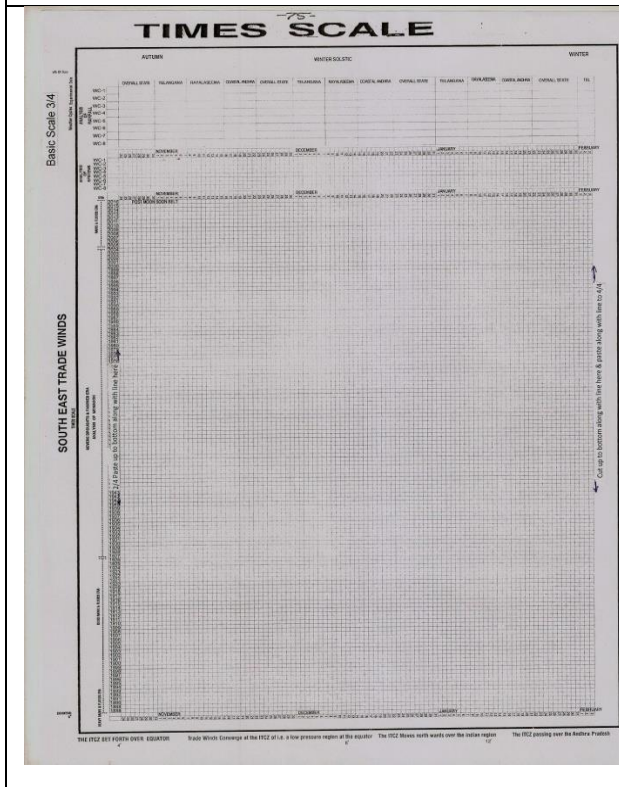
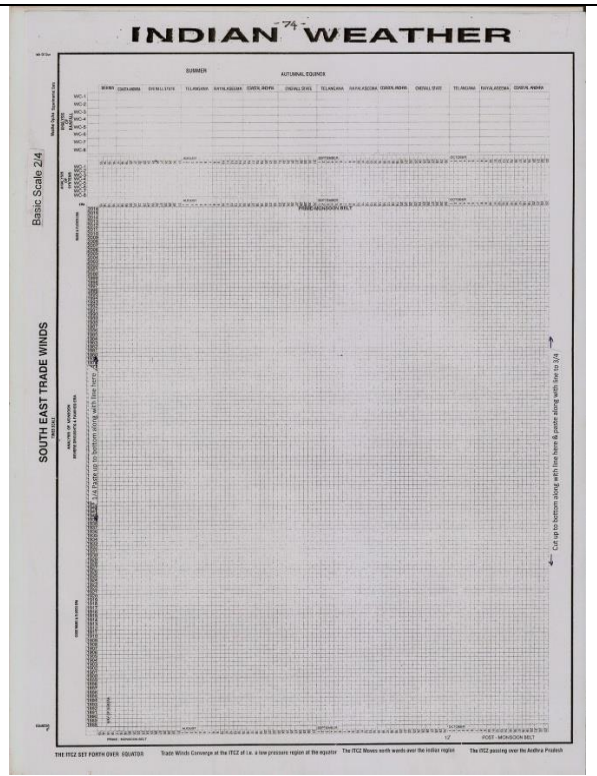
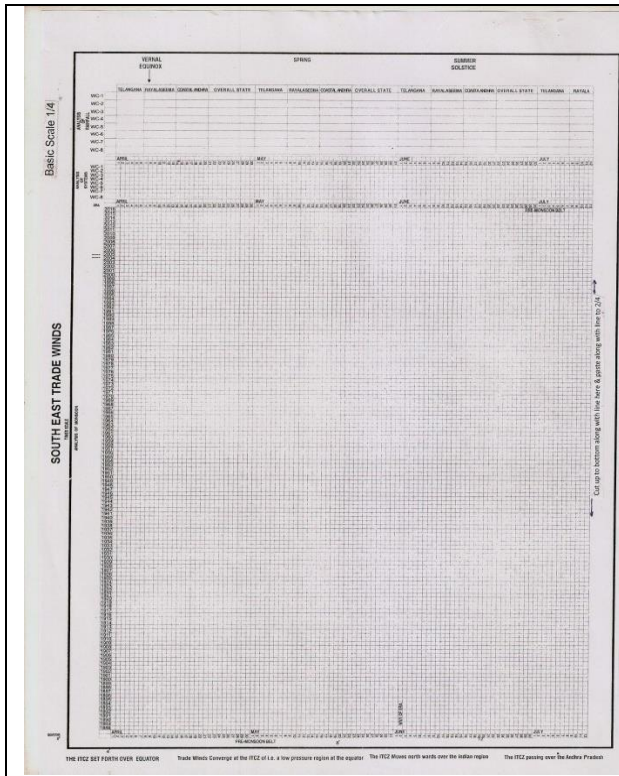
TH ITCZ SET FORTH OVER EQUATOR Trade Winds Converge at the ITCZ of i.e. a low pressure region at the equator The ITCZ Moves north wards over the Indian region The ITCZ passing over the Andhra Pradesh



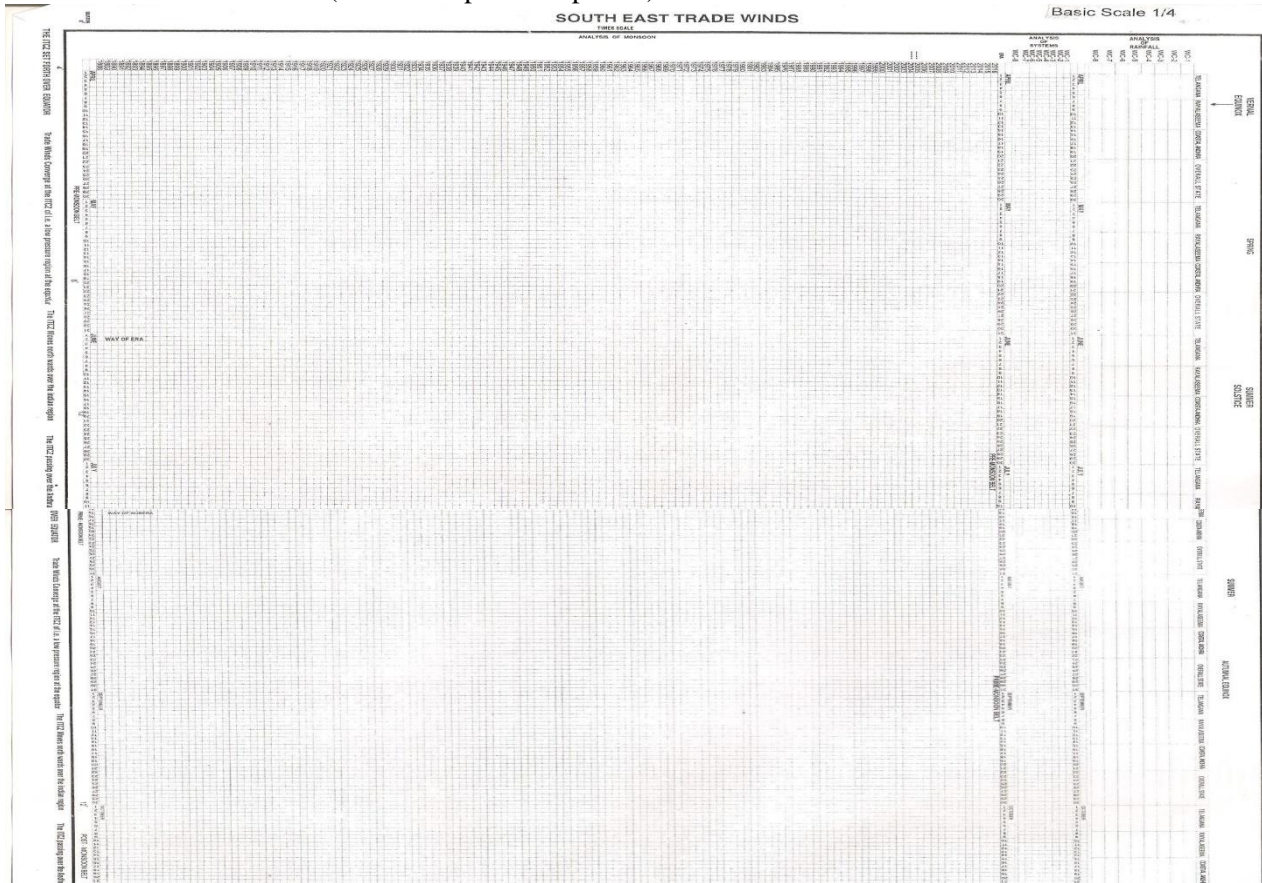
INDIAN MONSOON TIME SCALE

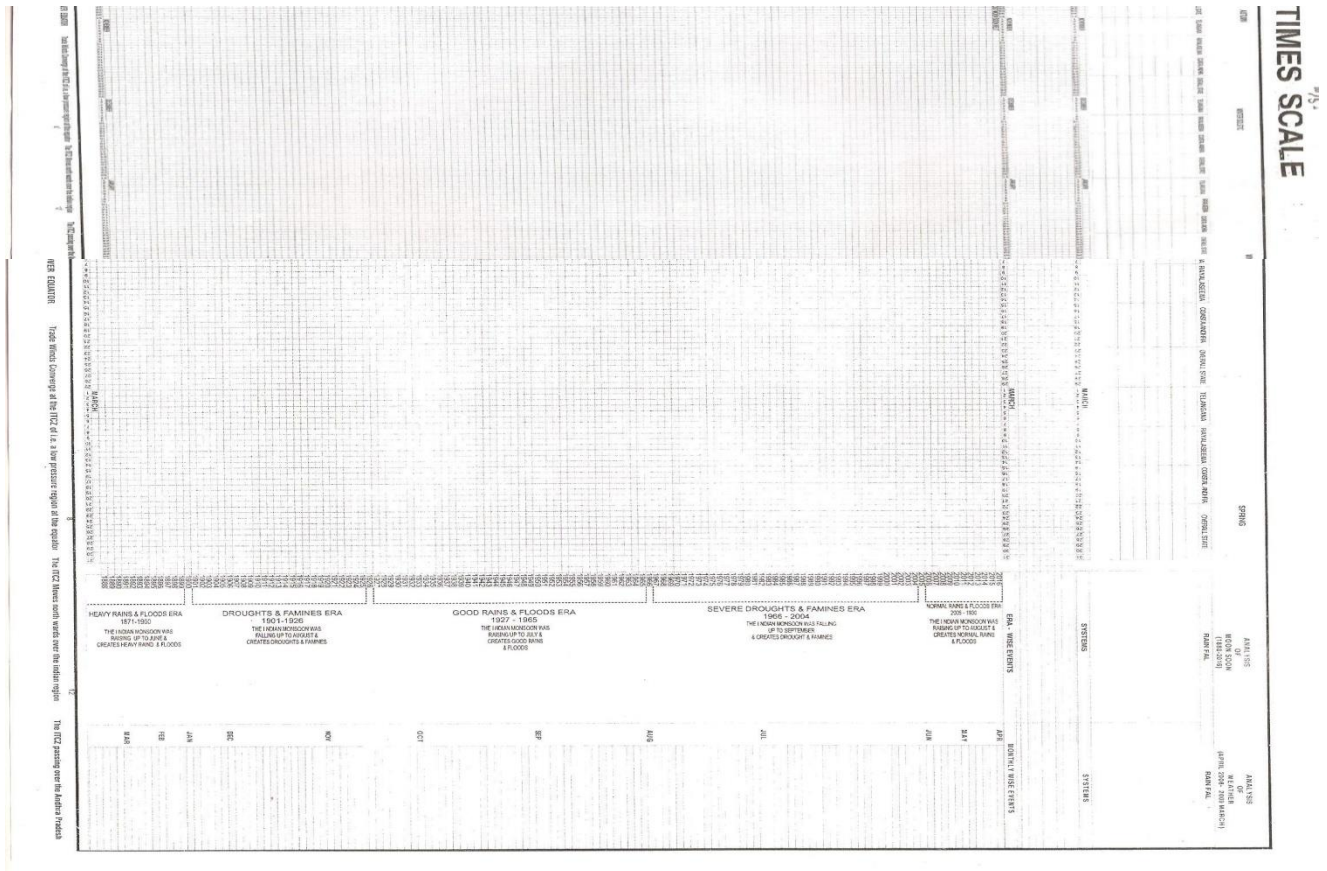


The first one is preliminary basic scale, In this scale the first part is beginning from 1st April to July 12th, the second part is from 13 July to October 23rd, the third part is from 24th October to February 3rd and the fourth part is 4th February to March 31st ending.



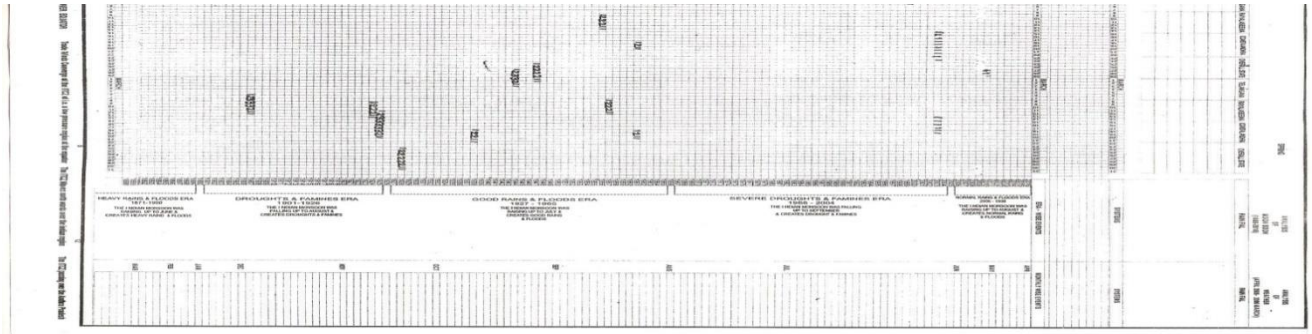
Indian monsoon time scales(when four parts are pasted)





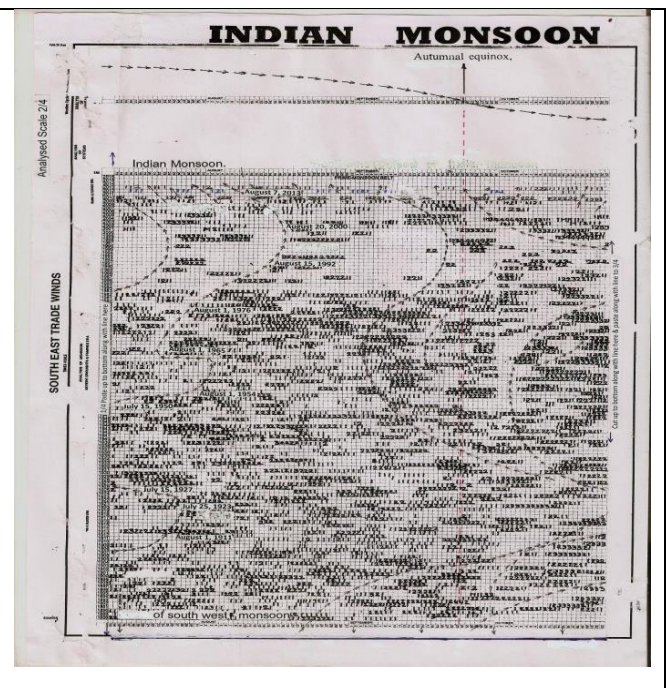
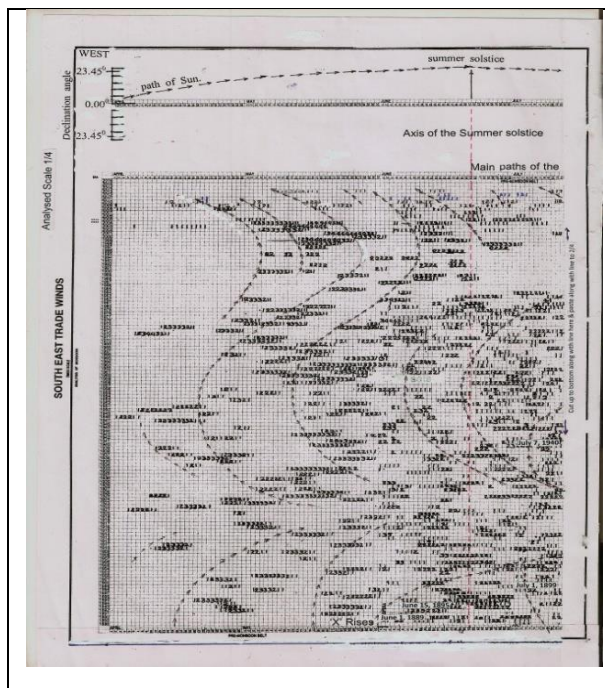
FILLED SCALE

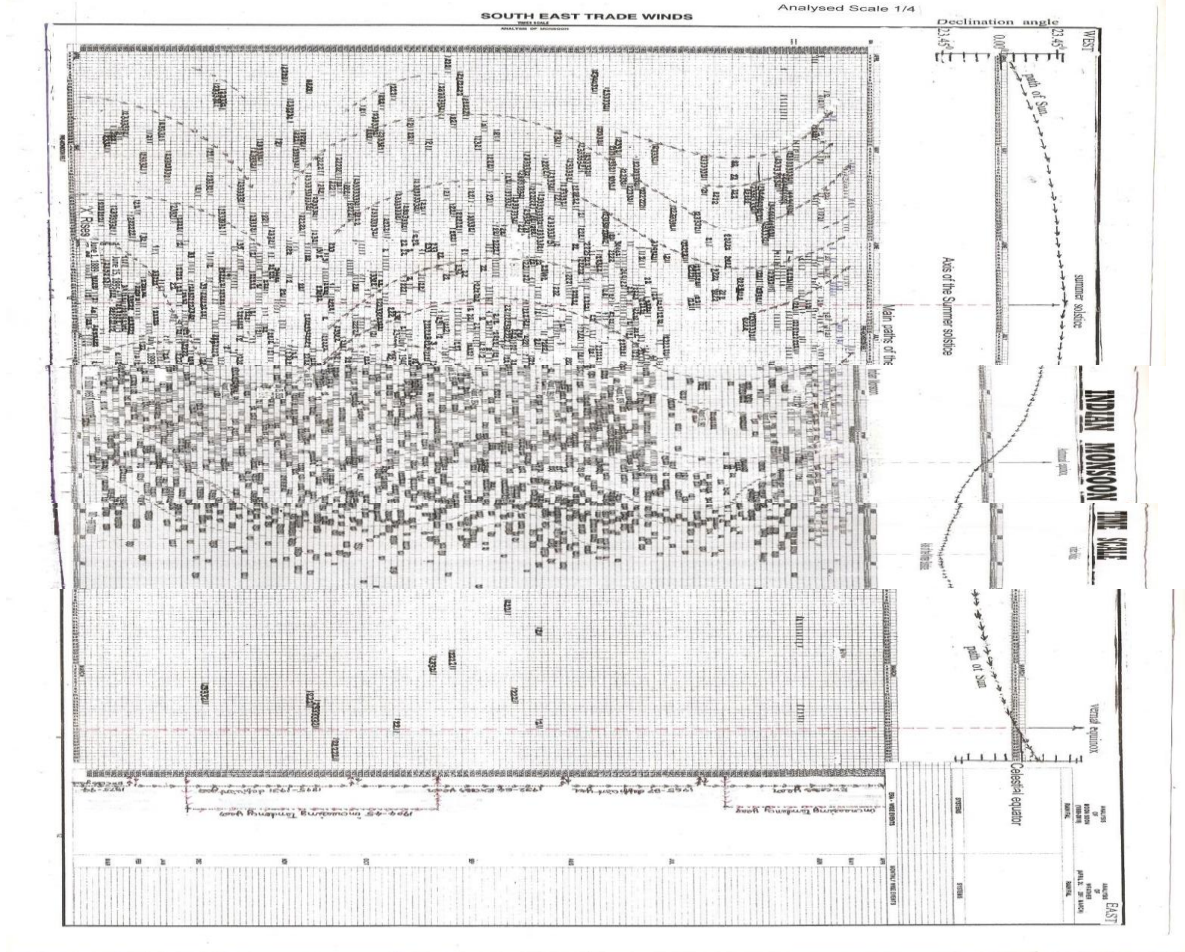
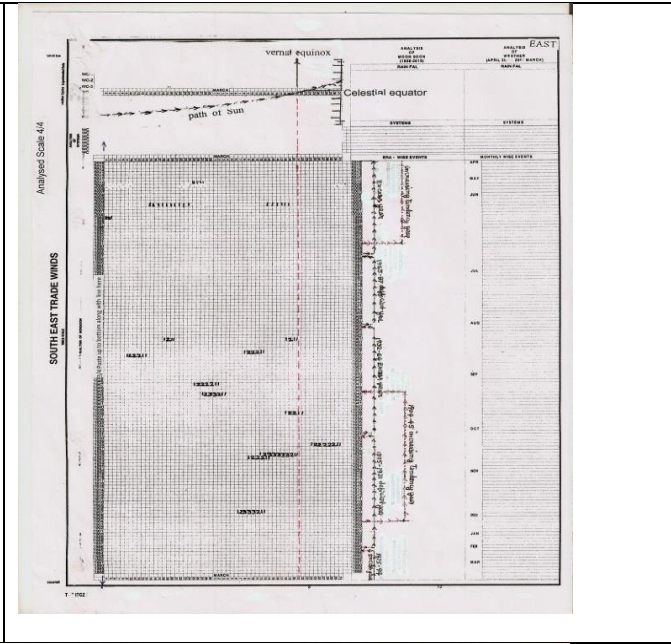
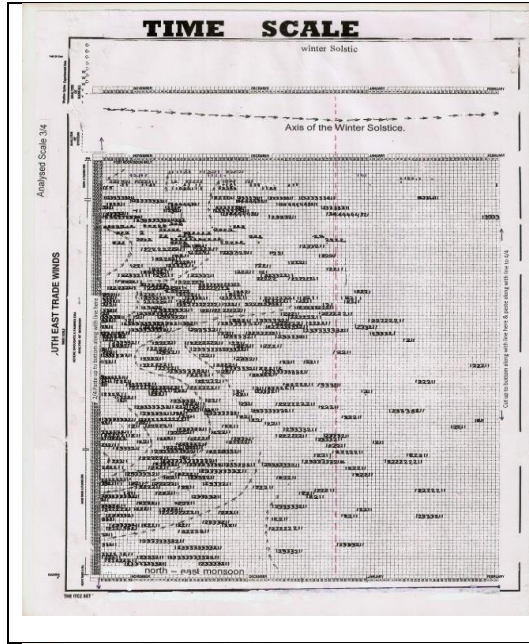
The third one is filled scale. In this scale also the first part is beginning from 1st April to July 12th, the second part is from 13 July to October 23rd, the third part is from 24th October to February 3rd and the fourth part is 4th February to March 31st ending. The monsoon pulses in the form of low 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.

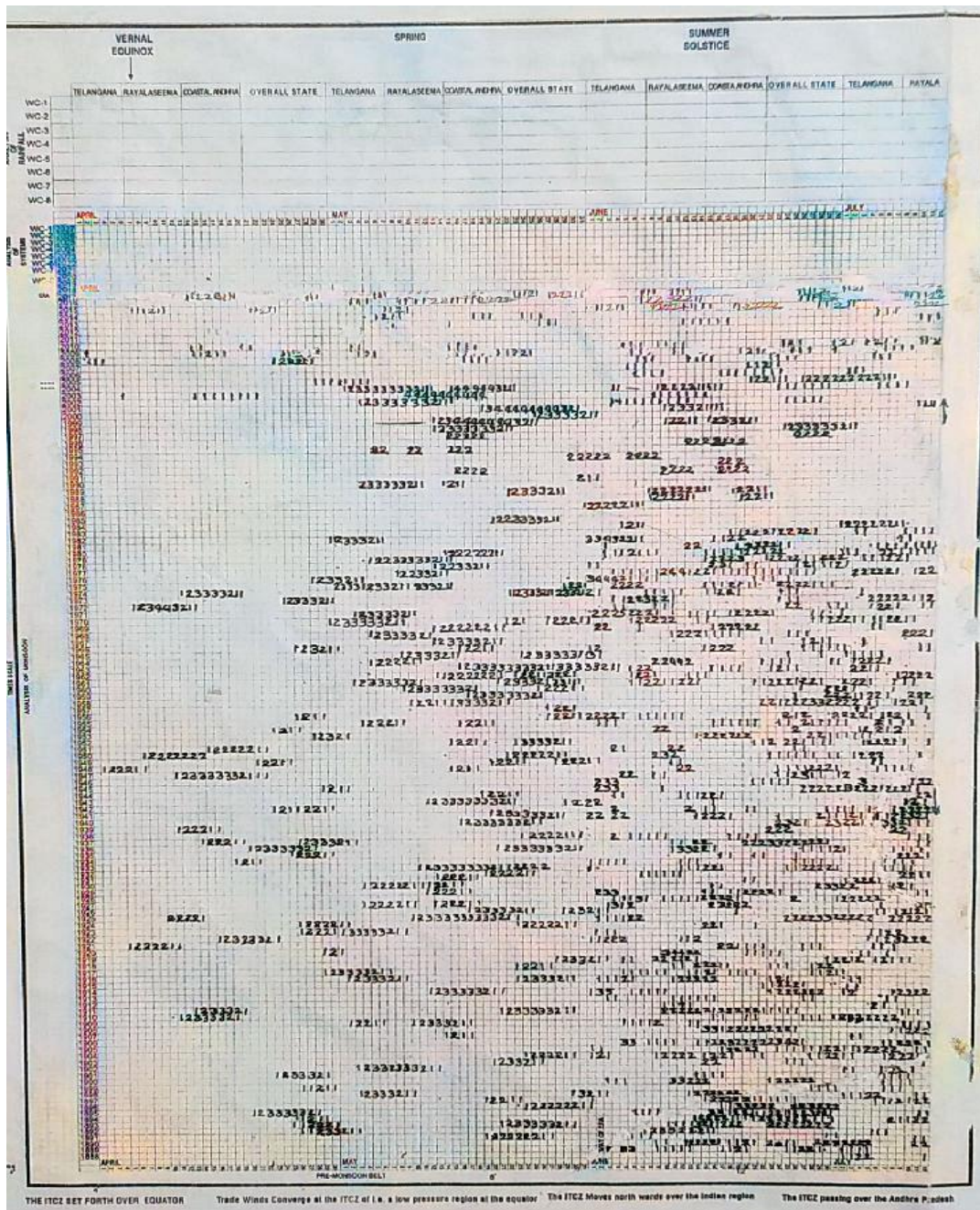


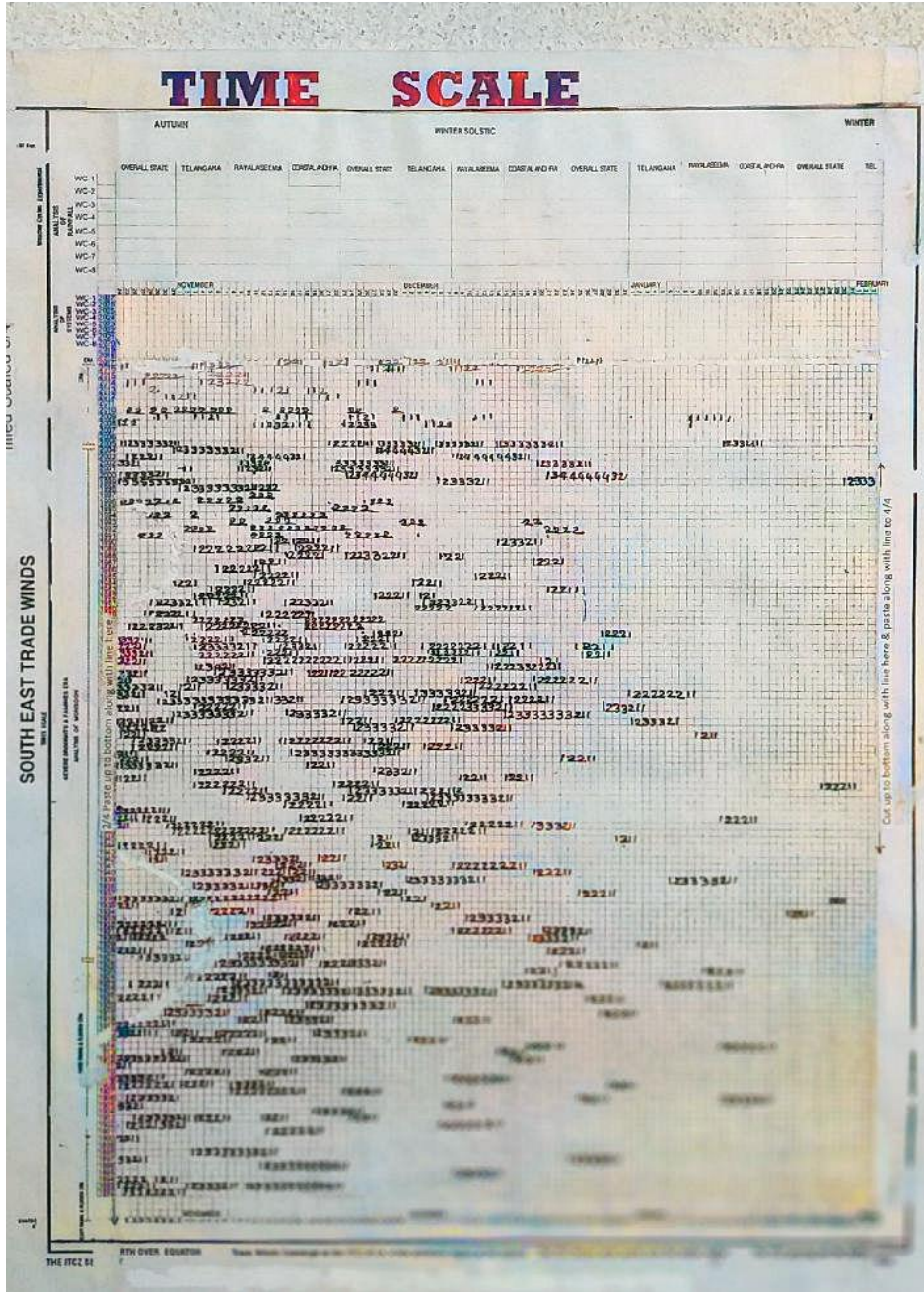
EVALUATED SCALE

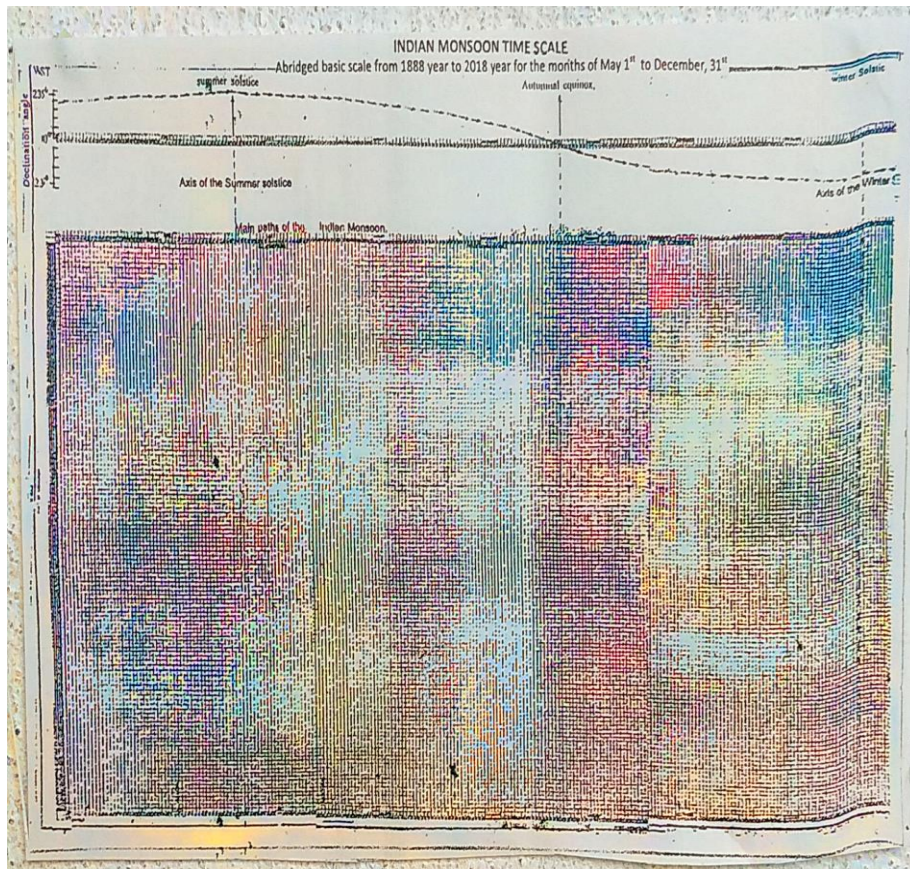
The third one is evaluated scale. In this scale also the first part is beginning from 1st April to July 12th, the second part is from 13 July to October 23rd, the third part is from 24th October to February 3rd and the fourth part is 4th February to March 31st ending. The monsoon pulses in the form of 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 Main severe storm with core of hurricane winds pertaining to the date and month of the each and every year.

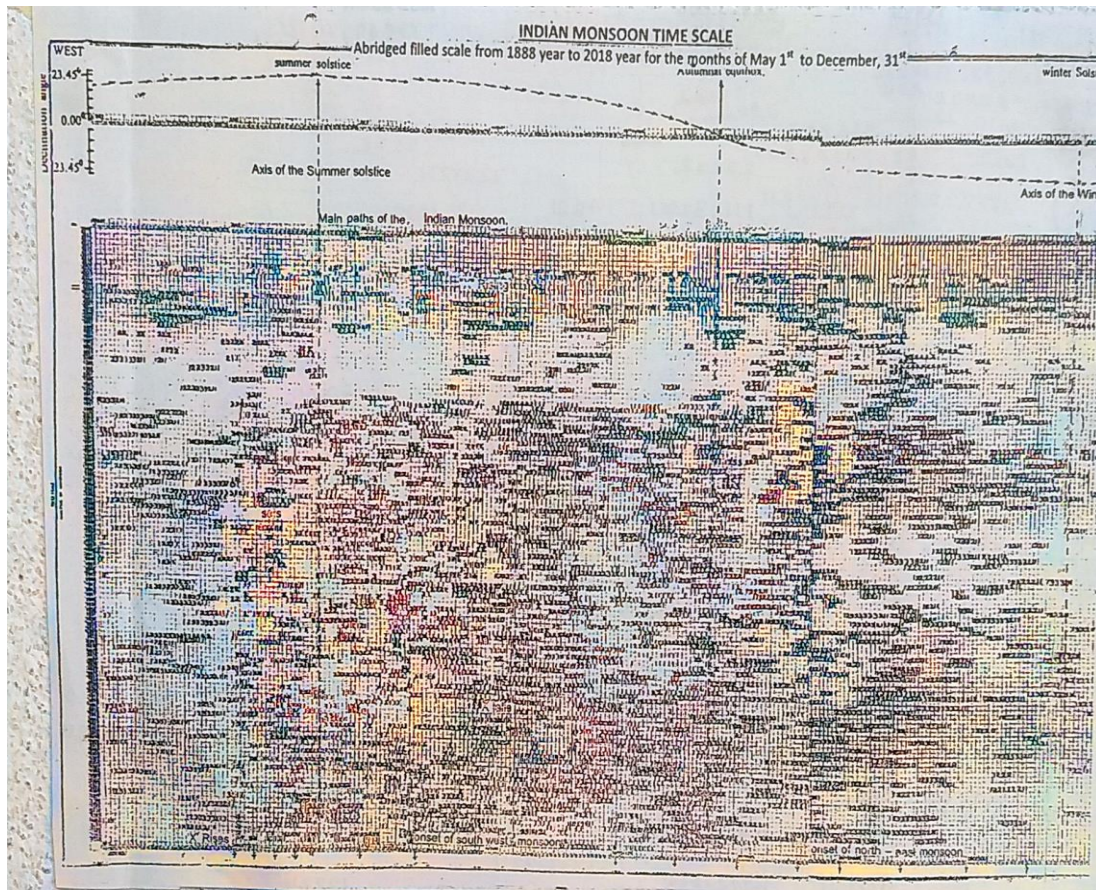


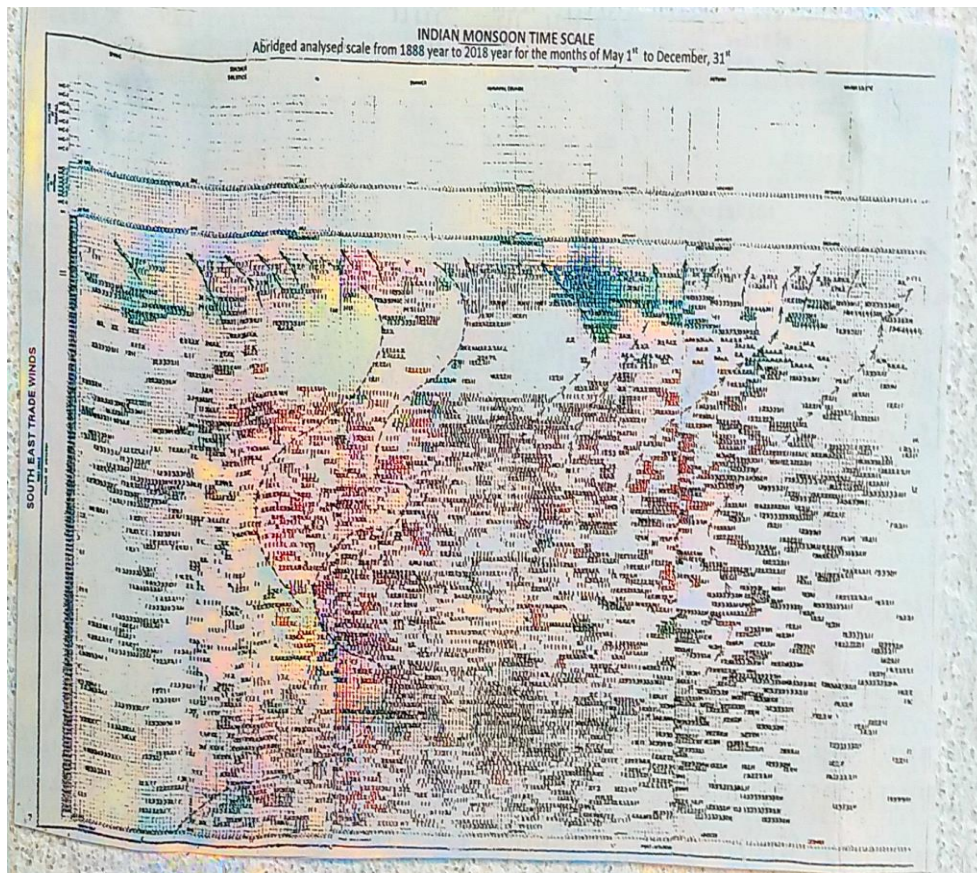


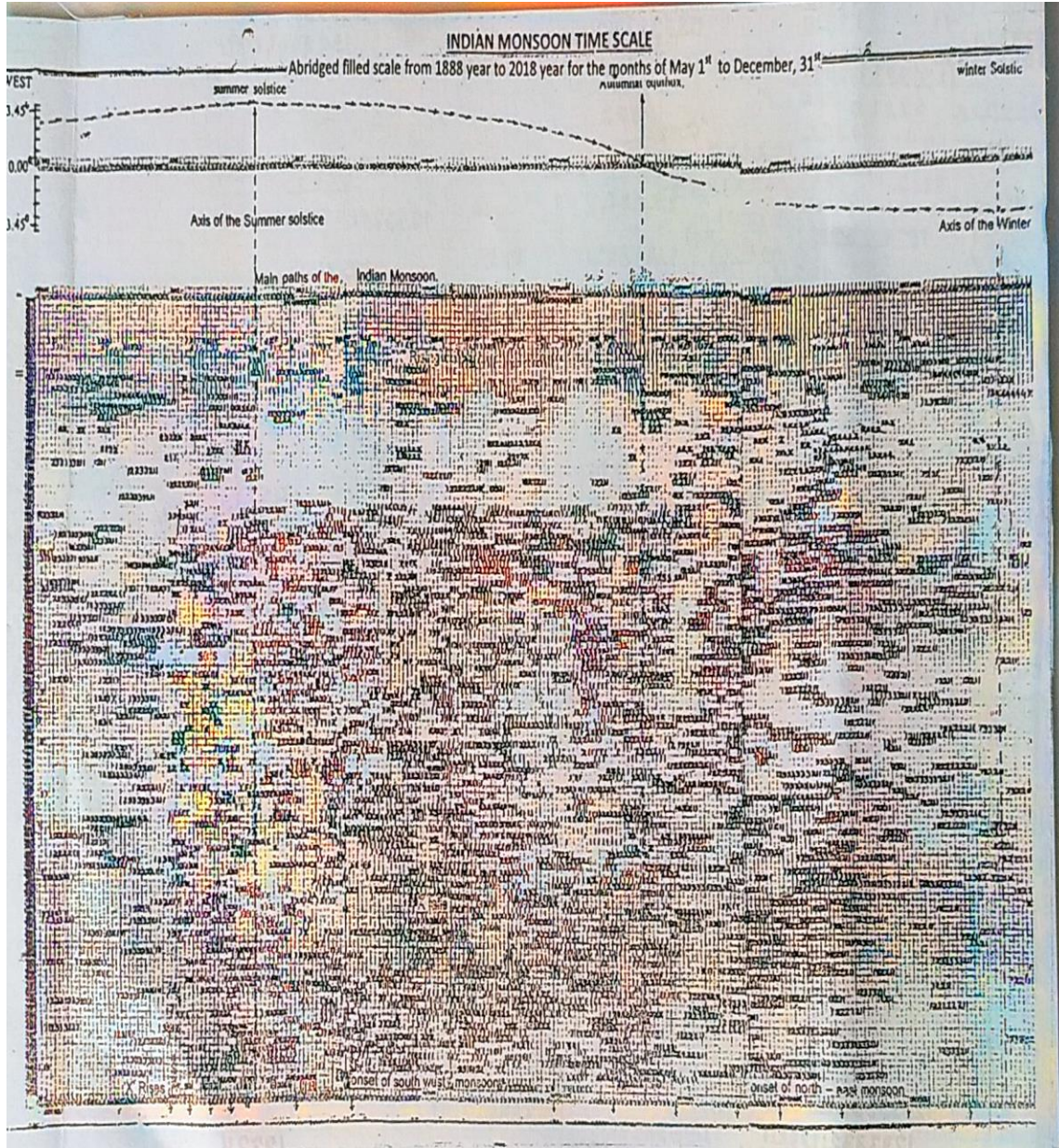


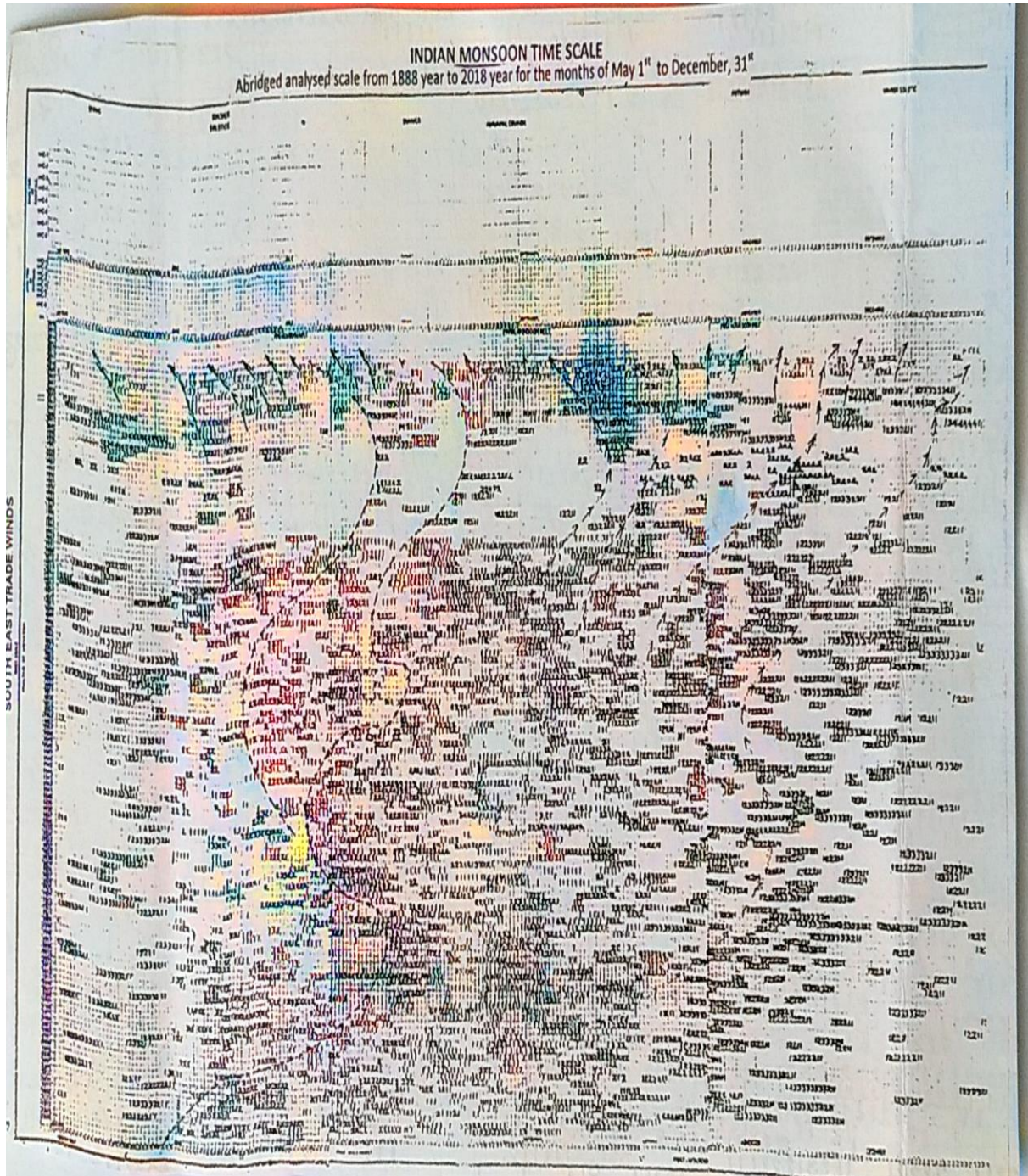




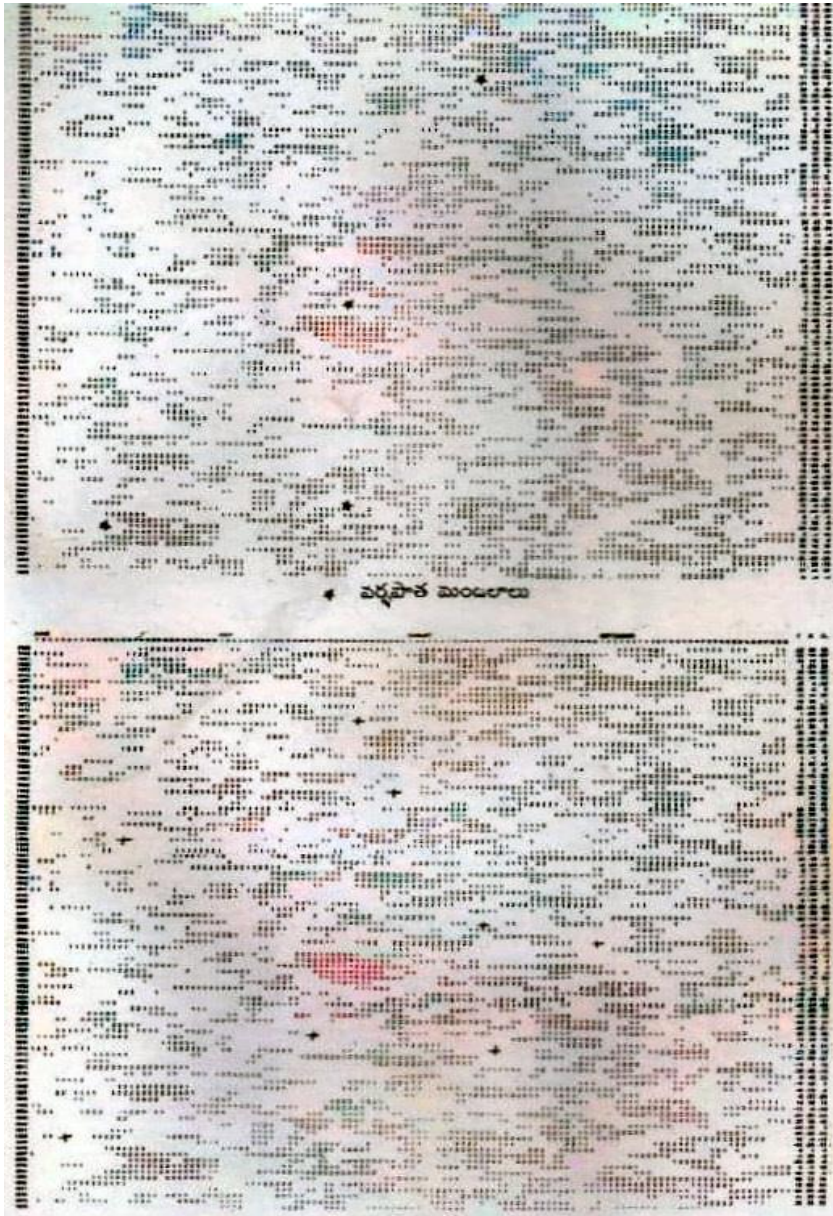


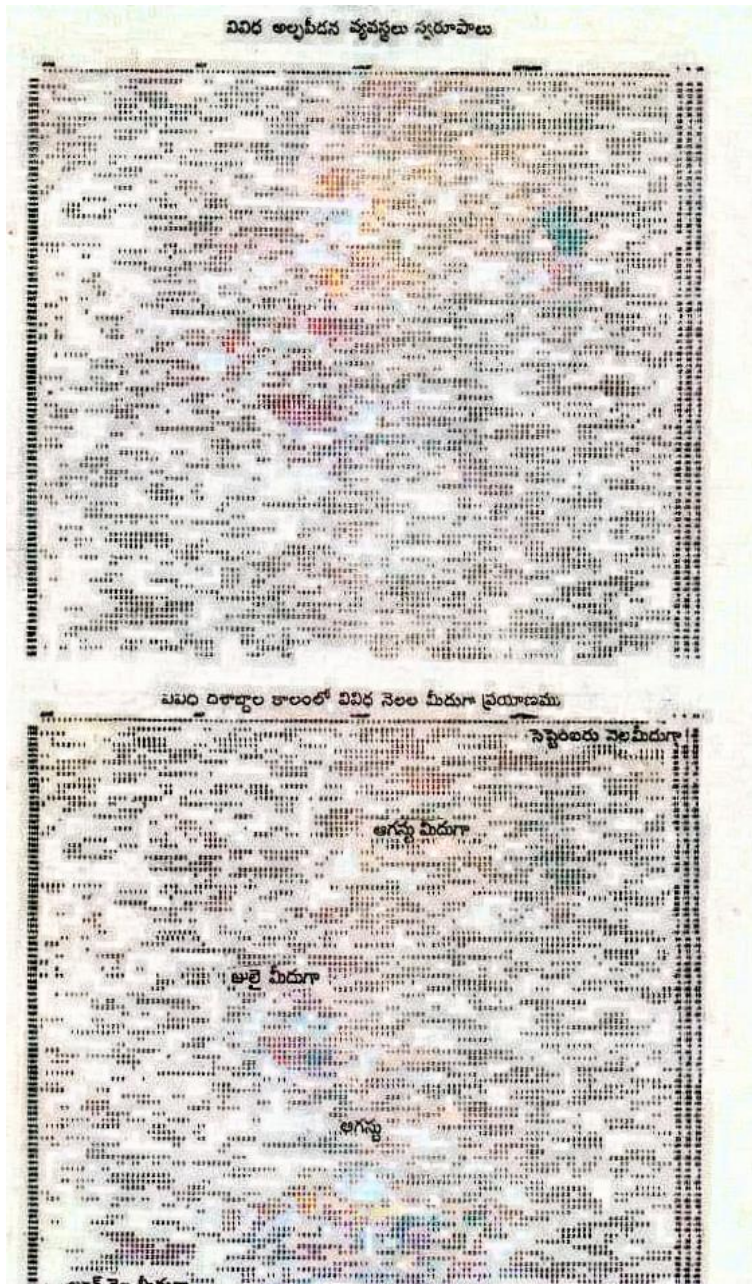


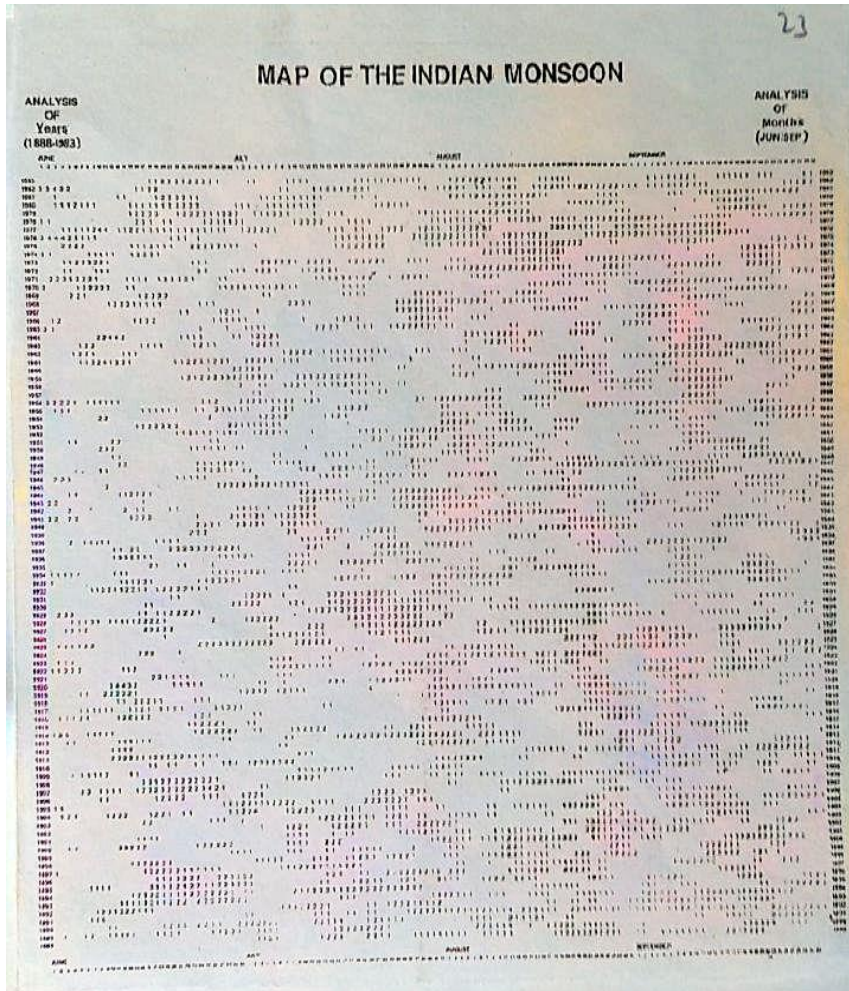


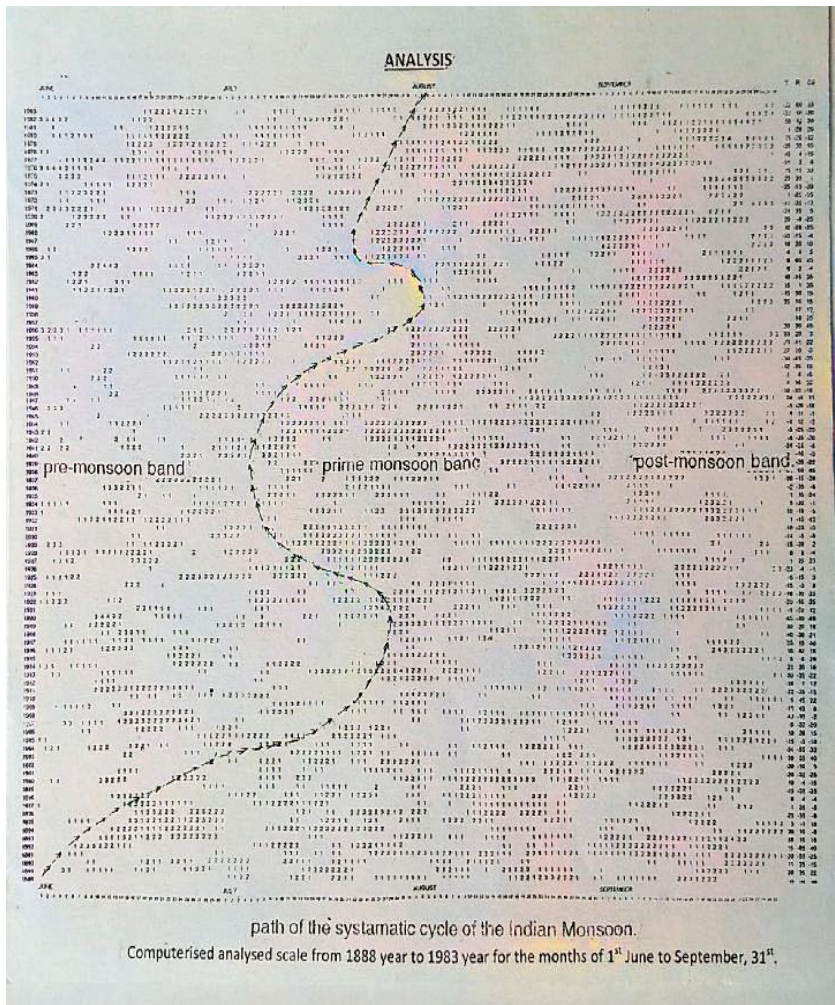


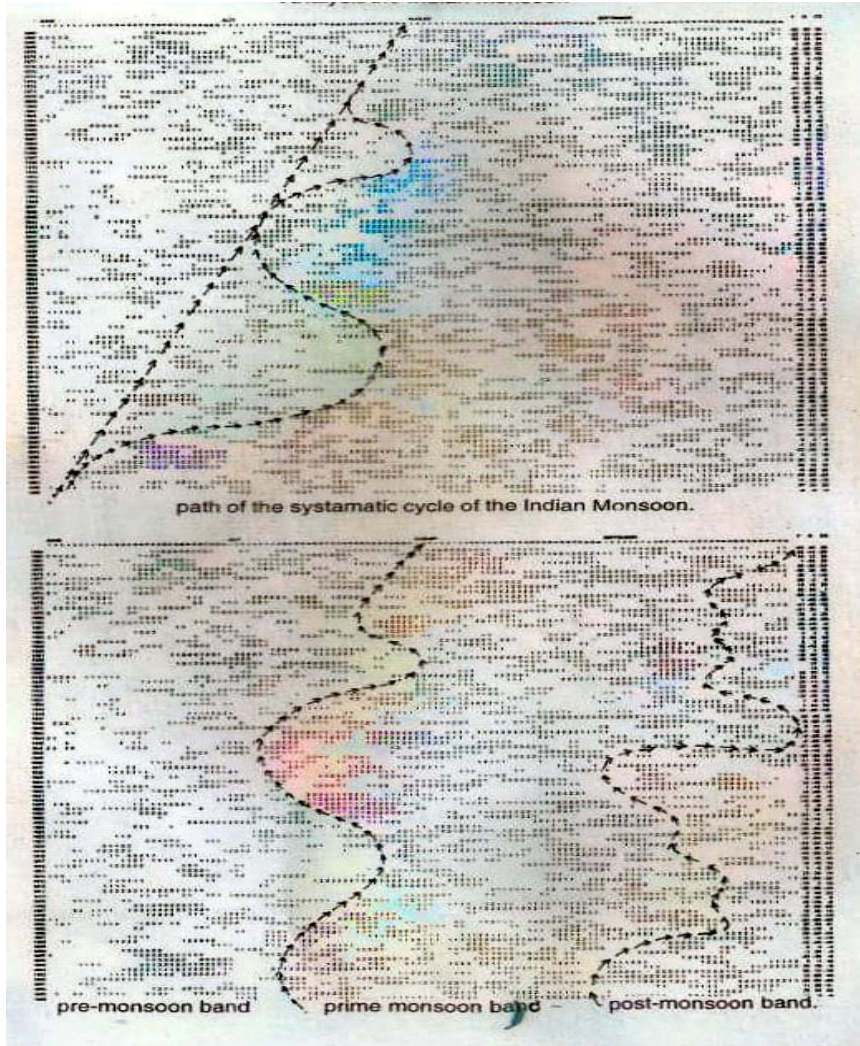
F



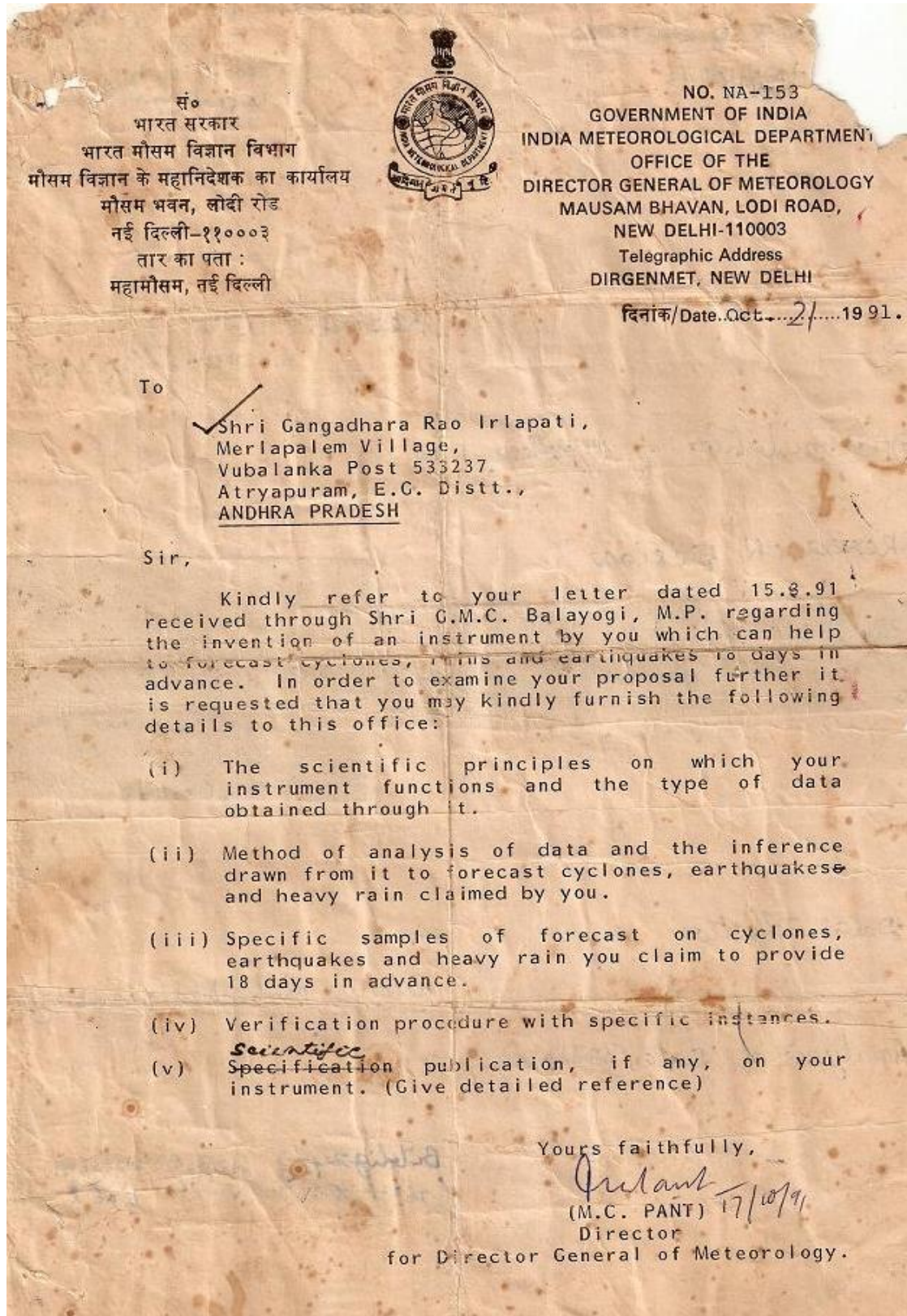












APCOST

Phone : 38587
Grams : APCOS

ANDHRA PRADESH STATE COUNCIL OF SCIENCE & TECHNOLOGY
(CONSTITUTED BY GOVT. OF A. P.)
10-2-289/16, 1st MAIN ROAD, SANTINAGAR, HYDERABAD-500 028.

PROCEEDINGS OF THE MEMBER-SECRETARY, A.P. STATE COUNCIL OF
SCIENCE & TECHNOLOGY: HYDERABAD.

PRESENT: SRI G.VEERACHANDRA RAO.

Proc.No.ADMN/RESEARCH/231/91. Dated:25-06-91.

Sub:- APCOST - Minutes of Evaluation Committee
on 9-4-91.

Ref:- Application of Sri I. Gangadhar Rao,
Date:7-5-91 .

-:-:-

ORDER:

In pursuance of the decision taken in the meeting of
the Member- Secretary, APCOST, held with the Director, SRAC
and the Director, A.P. Science Centre on 9-4-91 in his Chamber,
an amount of Rs.150/- per month is sanctioned towards assistance
to Sri. I. Gangadhar Rao to supply daily data of his work on
measurement of Circular Ring Structures reflected on the Minor
Ball to further explore the inter-connection of Earths Geo-Magne-
tic field with Natural Calamities and their effect on human
impulse. This assistance will be paid for April, May & June 1991.

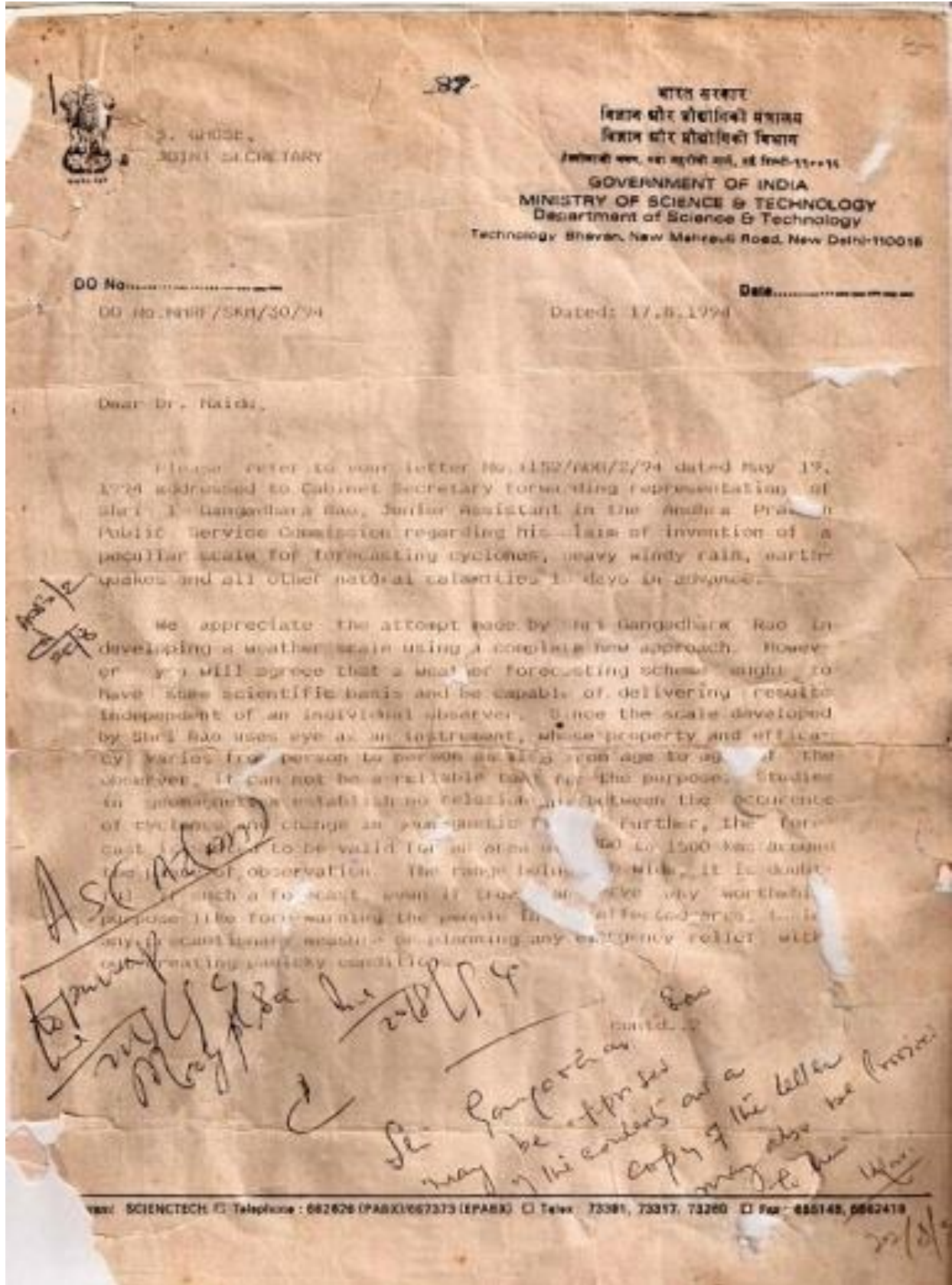
Sd/- G.VEERACHANDRA RAO.
MEMBER- SECRETARY.

//t.c.f.b.o//

[Signature]
ADMINISTRATIVE OFFICER

Copy to individual .
Accounts wing for N.a.
Copy to File.

BNR



-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

COPY OF LETTER NO.558/ADB/2/2003,Dt.25-4-2003 FROM THE
SECRETARY,APPSC,HYDERABAD, ADDRESSED TO THE SPECIAL SECRETARY,
CHIEF MINISTER'S PESHI, A.P.SECRETARIAT, HYDERABAD.

Sub:- Estt. - APPSC - Proposal for combating drought
situation in A.P. submitted by Sri I.Gangadhar,
Sr.Asst., O/o. APPSC,Hyd. - forwarding of -
reg.

Ref:- Letter Dt.19.4.2003 received from Sri I.Gangadhar,
Sr.Asst., O/o. the APPSC,Hyd.

Pursuant to a press note in the month of January,2003
one of the staff member of the Commission's Office,
Sri I.Gangadhar, Senior Assistant, prepared a proposal to
combat the drought situation prevailing in the A.P.State
basing on his personal study. The proposal alongwith his
letter Dt.19-4-2003 is herewith enclosed.

I request you kindly to examine the proposal and
take further necessary action in the matter.

Sd/-ADHAR SINHA,
SECRETARY.

Encl:- As above.

// True copy //

G. Selva
SUPERINTENDENT.
O/o A.P.F.S.G., A.P.
HYDERABAD.

GOVERNMENT OF ANDHRA PRADESH
PLANNING (XI) DEPARTMENT

Letter No.2851/Plg.XI/A2/2004-4.

Dated: 15/10/2004.

From
Sri A.K.Goel, I.A.S.,
Principal Secretary to Government,
Planning Department,
A.P.Secretariat,
Hyderabad.

To
The Secretary,
A.P.Public Service Commission,
Hyderabad.

Sir,

Sub:- Estt - Request of Sri I.Gangadhara Rao, Senior Assistant, O/o.the A.P.Public Service Commission, to consider him for appointment by transfer to the post of Statistical Officer under the control of Director of Economics & Statistics - Regarding.

Ref:- 1.Reprn.from Sri I.Gangadhara Rao, Sr.Asst., O/o.the A.P.P.S.C.,
Hyd., dt.5.2.2004.
2.From the D.E.&S., Hyd., Lr.No.5455/Admn.I/A2/04, dt.2.8.2004.

I am to inform that in the representation first cited Sri I. Gangadhara Rao, Senior Assistant, O/o the A.P.Public Service Commission, Hyderabad, has requested to appoint him by transfer to the post of Statistical Officer under the control of Director of Economics and Statistics.

2. The matter has been examined in consultation with Director of Economics and Statistics who has stated that there are no rules for recruitment of candidates by transfer from other departments to the post of Statistical Officer. I am further to inform that orders were issued in G.O. Ms. No.68, Finance & Planning (Plg. Wing- Estt) Department, dated 30-12-1991 framing special rules for the posts covered under A.P.Economic & Statistical Service. The post of Statistical Officer comes under category-5 of the said rules. According to Rule.3 of the said rules the method of appointment to the post of Statistical Officer is appointment by transfer. I am also to inform that an amendment was issued in G.O. Ms. No.145, Finance & Planning (Plg.XI) Department, dated 28-12-1998, according to which in respect of the appointments to the posts of Statistical Officers, 18 out of 19 substantive vacancies should be filled by transfer from the category of Deputy Statistical Officers of A.P.Economic & Statistical Subordinate Service. The 19th vacancy should be filled up by transfer from the category of Superintendents from Ministerial Service in the subordinate offices under the control of Director of Economics and Statistics. In view of the above, it is clear that there is no provision under the above rules to consider the request of the individual.

3. I am therefore to request you to inform the individual that in view of the rule position set out in para.2 above his request is hereby rejected.

Yours faithfully,

for PRINCIPAL SECRETARY TO GOVT.

I. Gangadhara Rao
Asst. Section Officer
A P Public Service commission
Hyderabad

120

The Secretary
Department of Science & Technology
Ministry of Science & Technology
Government of India
New Delhi

Through : The Secretary,
Andhra Pradesh Public Service Commission,
Hyderabad
L

Sir,

Sub: Project Proposal "SCALE & GEOSCOPE" for Combating natural calamities - requested for establishment & implementation in the services of the nation - reg.

- Ref 1. Letter No.1162/ADB/2/94 dated 19-5-1994 from the Secretary, APPSC, Hyderabad to the Cabinet Secretary, Government of India, New Delhi.
2. U.O.No. 1281/94-CA-V dated 7-7-1994 of the Director, Cabinet Secretariat, Rastrapati Bhavan, New Delhi.
3. D.O.No.NMRF/SKM/30/94 dated 17-8-1994 of the Joint Secretary, Ministry of Science & Technology, New Delhi.

1. I, Gangadhara Rao Irlapati S/o Pullaiah working as an Asst. Section Officer in APPSC, Hyderabad submitting the Project Proposal for your kind consideration.
2. I am a Scientist with an ideal to serve the country through scientific researches. Myself and my Research associate in a combined effort have formulated a project consisting hundreds & thousands of multiple processes for forecast of all natural calamities like season disorders, monsoon failures, droughts, cyclones, Time & Location investigations of Low pressure systems, Hail rains, Lightnings & thunder storms, Heavy rains & floods, Earth Quakes & Tsunamies, Heat Waves, Cold winds, rainfall positions etc. with the help of the unit.
3. I am submitting the project report for your kind consideration. Kindly accept my offers and implement the project. The Government may appoint any personnel to carryout scientific investigations of the project. However, if my services are required in this regard. I may be appointed for this work by transfer in lien period to carryout the scientific investigations since I desire to work as a scientist and also to serve the nation.

Yours faithfully,

Hyderabad

13.10.2005


(I. Gangadhara Rao)

Go No. 1164/ADB/2) 2005 dt 2-12-2005



1/65

श्री
श्री गंगधर राव
राज्य मंत्रालय विभाग
राज्य मंत्रालय के सहायक सचिव का कार्यालय
राज्य मंत्रालय, लोदी रोड,
नई दिल्ली-110003
भारत का भारत ।
सहायक, नई दिल्ली



NO. 48106/537
GOVERNMENT OF INDIA
INDIA METEOROLOGICAL DEPARTMENT
OFFICE OF THE
DIRECTOR GENERAL OF METEOROLOGY
UNLAKSHI BHOWM, LODI ROAD
NEW DELHI-110008
Telegraphic Address :
DEPARTMENT NEW DELHI

Date/Date 25/07/2005
36

To:

Shri Gangaधर Rao Nagar,
H.No.5-50-4/1,
Sulbaha Nagar,
Jandimoola,
Hyderabad,
Andhra Pradesh
Pin Code No. 500 005.

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

Sr,

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

M. Satya Kumar
(M. Satya Kumar)
Director & Liaison Services
For Director General of Meteorology

✓

SUPREME COURT LEGAL SERVICES COMMITTEE



OPINION

Ref. D.No. 8084/2005

Date: 02.01.2006

IN THE MATTER OF **Sh. Gangadhar Rao Irigatti**

I have perused the case papers of the applicant who is a Scientist and of the considered opinion that the applicant has an alternative remedy to approach the High Court under Article 226 of Constitution of India for seeking appropriate relief and directions as the petition cannot be filed directly under Article 32 of the Constitution of India as there appears no violation of fundamental right of the petitioner.

SD-

(Sh. T.N.Singh)
Advocate
Supreme Court of India

158

GOVERNMENT OF ANDHRA PRADESH
ENVIRONMENT, FORESTS, SCIENCE & TECHNOLOGY (S&T)
DEPARTMENT

Letter. No.0393/S&T/2006-1.

Dated: 19-01-2006.

From:
Additional Secretary to Government,
Environment, Forests, Science & Technology Deptt.,
A.P. Secretariat, Hyderabad.

To
Member Secretary,
A.P.State Council of Science & Technology,
12th Floor, Eastern Wing, Ganganvihar,
M.J. Road, Nampally, Hyderabad -500 001.

Madam,

Sub : - Project Proposal "State Weather Study Centre) –
Requested for establishment and implementation – Reg.

Ref : - Representation from P.Lavanya & I.Gangadhar Rao,
Dated: Nil. addressed to the Prl. Secy. to Govt.,
Finance & Planning (Fin) Department, Member,
Adhoc Executive Committee of APCOST Government
of Andhra Pradesh, A.P. Secretariat, Hyderabad.

The joint representations of P.Lavanya & I.Gangadhar Rao (Scientist)
in original together with its enclosures received through the references cited
are herewith forwarded for sending their remarks.

Yours faithfully,


For ADDITIONAL SECRETARY TO GOVERNMENT.Copy to:

P.Lavanya,
H.No.5-30-120,
Saibabanagar,
Jeedimetla,
Hyderabad – 500 055.

I.Gangadhrara Rao,
H.No.5-30-4/1,
Saibabanagar,
Jeedimetla,
Hyderabad – 500 055.

D. SAMBAIAH
M.L.A.
116-SANTHANUTHALAPADU
PRAKASAM DISTRICT



Flat No. 402,
Sri Golden Enclave,
Mangamuru Road,
Ongole, Prakasam District.
Phone : 08592-554484 (R)

Date : 15/04/2006.

TO

Sri Dr. Y.S. Rajasekhara Reddy garki,
The Hon'ble Chief Minister of Andhra Pradesh,
Chief Minister's Office,
A.P. Secretariat,
HYDERABAD.

Respected Sir,

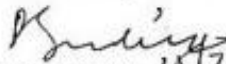
SUB:- Project Proposal "State Weather Study Centre" –
Requested for establishment and implementation in the
services of the State – Regarding.

* * *

I have the Honour to introduce an eminent scientist who proposed the
"State Weather Study Centre" which can help to study forecast, prevent and
mitigate all the weather problems and natural calamities.

Under the above circumstances, I am making this humble request for
your kind consideration. The project may kindly be got examined by the subject
experts and utilised for the greater welfare of the people of the State of Andhra
Pradesh.

Yours faithfully,


(D. SAMBAIAH) 15/4/06

Copy to:

Sri A.K. Goel,
Principal Secretary to Government,
Planning Department,
A.P. Secretariat,
HYDERABAD.

159

GOVERNMENT OF ANDHRA PRADESH
REVENUE (DM.III) DEPARTMENT**Letter No.6524/DM.III(3)/2008****dated:19.02.2008.**

From
Smt.Preeti Sudan IAS.,
Commissioner for Disaster Management &
Ex. Officio Prl. Secretary to Government
Revenue (DM) Department,
A.P. Secretariat,
HYDERABAD – 500 022.


To
Sri.Anil Kumar,
Head of the Branch, Times Foundation
8-2-351,
II Floor, Times House, Road No.3,
Banjara Hills, **HYDERABAD – 500 034**

Sir,

Sub:- A.P. State Weather Time Scale – Remarks – Requested.

A report on A.P. State Weather Time Scale Prepared by
Sri.I.Gangadhara Rao is enclosed. I request the Times Foundation to
examine the Report and offer considered remarks on it at an early date.

Yours faithfully,


for Commissioner for Disaster Management &
E.O. Prl. Secretary to Government

Copy to: Sri.I.Gangadhara Rao,
H.No.5-30-4/1, Saibabanagar,
Jeedimetla, HYDERABAD – 500 055.



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

-90-

क्र.सं. 209

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.



डा. टी. रामसामी
सचिव
Dr. T. RAMASAMI
SECRETARY

- 72 -

No. DST/SECY.1119/2009
सात सप्तर
विज्ञान और प्रौद्योगिकी विभाग
विज्ञान और प्रौद्योगिकी विभाग
टेक्नोलॉजी भवन, नया मेट्रो रोड, नई दिल्ली-110 013
GOVERNMENT OF INDIA
MINISTRY OF SCIENCE & TECHNOLOGY
DEPARTMENT OF SCIENCE & TECHNOLOGY
Technology Bhavan, New Metcoul Road, New Delhi-110 013

June 1, 2009

Dear Shri Irupati Rao,

I receive your letter of 11th May, 2009. Thank you. You may be aware that IITM is currently under the administrative control of Ministry of Earth Sciences. However, I have written to the Director, IITM requesting him to do the feasible in consultation with their Secretary.

Kindest regards,

Yours sincerely,

(T. Ramasami)

Shri Gangadhara Rao Irupati
Asst. Section Officer
A.P. Public Service Commission
(Beside Gandhi Bhawan)
Nampally, Hyderabad 500 001

167

GOVERNMENT OF ANDHRA PRADESH
REVENUE (DM.III) DEPARTMENT

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

dated:05.07.2009

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. Gangadhar Rao Irapati,
H.No.5-10-4/1, Saibaba Nagar,
Jeedimetla, Hyderabad - 500 055.

Sir,

Sub:- Project proposal - Establishment of "Andhra Pradesh State
Weather Time Scale" - Regarding.

Ref:- From Sri.J 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. J. Srinivas
for Addl. Commissioner for Disaster Management &
E.O. Dy. Secretary to Government



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



TO
THE COMMISSIONER FOR DISASTERS
MANAGEMENT, AND EX. OFFICIO
PRINCIPAL SECRETARY TO
GOVERNMENT,
REVENUE (M.S.I) DEPARTMENT,
ANHARA PRADESH,
HYDERABAD.

LETTERS NO:069/AN/A/2009, DATED 07.07.2009,

Sir,

Subj- A.P.P.S.C. - Sett., - Forwarding the A.P.
State Weather time scale prepared by
Sri I. Gopudhar Rao, A.S.O., A.P.P.S.C.,
Hyderabad - Regarding.

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

* * *

I am directed to forward herewith the representation
of Sri I. Gopudhar Rao, Assistant Section Officer, D/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,

[Signature]
SECRETARY

-53-

No. F-12016/1/00-NA/100

भारत सरकार
भारत मौसम विज्ञान विभाग
मौसम विज्ञान के महानिदेशक 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

57

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



No. S-01416/Prediction Dated: 9th December, 2009
Government of India
India Meteorological Department
Office of the
Director General of Meteorology
Mausam Bhavan, Lodi Road, New Delhi-110003
Fax: 011- 24619943
Tel. No. 011-24611305

Shri Gangadhara Rao Irlapati
ASO, APPSC Nampally
Beside Gandhi Bhawan
Hyderabad – 500 001

Sub : Invention of an equipment for fore-warning of earthquakes
Ref : Letter No. Nil dated Nil addressed to Secretary, MoES

Sir,

Kindly refer to the communication cited above on the subject received through the office of Secretary, Ministry of Earth Sciences. In this regard, the following observations/suggestions are made:-

We appreciate your interest in the field of Seismology, particularly relating to geo-chemical changes preceding earthquakes. It may be informed that various high precision seismological and geophysical equipment are already in operation in some seismically active areas of the country to monitor and understand the earthquake precursory phenomena. A lot of data has already been generated and is being processed. For an update on the scientific developments on the subject, you may like to contact National Geophysical Research Institute (NGRI), Uppal Road, Hyderabad – 500 007.

Thanking you,

Yours faithfully,

R S Dattatrayam
Scientist 'E' (Seismology)
for Director General of Meteorology

ACKNOWLEDGEMENT Հոգաբարձու
3/12/87.

Հարգելի Պրոֆ. Մանուկ Մանուկյան
(Գրեթե 30 տարեկան) ընկերացի
և ինձ համար շատ շատ շնորհակալ եմ ձեր
հոգով և անհատական աջակցությամբ
հարգելի. Երբ որևէ անգամ ձեր հոգով եմ
անհոգ և ինձ համար շատ շատ շնորհակալ
եմ ձեր հոգով և անհատական աջակցությամբ

Մանուկ
Մանուկյան
Գրեթե



401 NIE/MOS/8

राज्य मन्त्री
विज्ञान और प्रौद्योगिकी, परमाणु ऊर्जा,
अन्तरिक्ष, इलेक्ट्रॉनिक्स एवं महासागर विकास
भारत सरकार, नई दिल्ली

MINISTER OF STATE
SCIENCE & TECHNOLOGY, ATOMIC ENERGY,
SPACE, ELECTRONICS & OCEAN DEVELOPMENT
GOVERNMENT OF INDIA

9th December, 1988.

Dear Shri Rao,

I have your letter dated 15th November, 1988,
enclosing a petition from Shri Gangadhara Rao
Irlapati.

2. I will try to help.

Yours sincerely,

(K.R. NARAYANAN)

Shri A.J.V.B. Maheswara Rao,
Member of Parliament (LS),
43, North Avenue,
New Delhi.

'Anusandhan Bhavan' Rafi Marg New Delhi-110001

Special Original Jurisdiction
 Wednesday the Sixth day of September
 One thousand nine hundred and eighty nine
 Present
 The Hon'ble Mr. Justice Lakshman 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, Taranaka, 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
 direction declaring

- i) that the inaction of the respondent authorities in not
 considering petitioner's representations for carrying
 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. Ramesh Krishna 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 ~~xxxx~~ provide facilities to enable
 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 is directed that the respondents shall consider the representa-
 dated 3-6-89 submitted by the petitioner and pass appropriate order
 thereon as early as possible preferably within three months from
 date of receipt of a copy of this order.

The writ petition is accordingly disposed of. No costs.

S/- S. R. Choudhary
 Asst. Registrar
 Asst. Registrar

//true copy//

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.
 3. The Director, National Geophysical Research Institute, Taranaka, N
 4. spare copy
 5. 1 CD copy

7/1/2023