GEO-A-CC-3-05-TH -CLIMATOLOGY

#### INTRODUCTION:

In different climate have been created in the different parts of world based on the regional variations of weather and climatic elements. The combined homogeneity of all this elements is called the the climatic classification of the number of the climatic regions divided by different meteorologists around the world.

In the seventies of the 90th centuries oliver' "AIRMASS FREQUENCY MODEL" was appropriately recognized as one of the genetic approaches to the division of the world's various climate. In the statistical airmass model, provided by "JOHN. E. OLIVER" of Columbia university in newyork in 1970, was first published in an article in the journal "Genetic approaches to the climatic classification". This model is based not only on climatic world maps but also on the effects of climatic conditions on the all parts of the globular world and the variation of the world climatic variations based on seasonal variability and different elements consisting of multiple clusters. He has classified climates based on the climatic factors of different parts of Australia, based on observation by climographs and vane-diagram identifying different predominant regions of a certain age and multiple climatic zones.

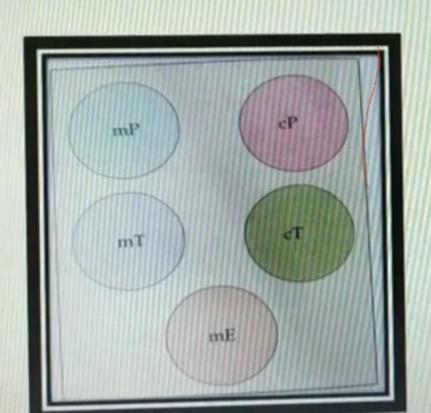
#### ON THE BASIS OF CLIMATIC CLASSIFICATION:-

In the based on global climatic classification, oliver attaches great importances to the dominants and the seasons and the placement the change of climatic seasons. As a just of the natere of airmasses influences the weather and climate of the place, if the airmasses are warm in nature, the temperature of the region increases and when it's cold and it's becomes drier and colder. When the airmass is humid, the area receives a lot of rainfall . therefore as a continental polar airmass are located over the land surface of the of the polar region(cp), the temperature there is always below freezing but there is no seasonal variation. In the seasonal variability is observed over the mediterranean continental region due to influence of marine tropical ainmasses (mt) and continental tropical airmasses (ct) over the seasons

#### DIFFERENT STAGES OF THIS MODELS

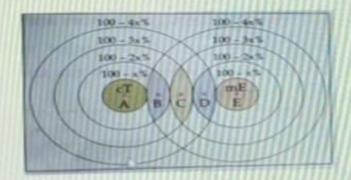
Oliver mentain four types of stages in stability of based on airmasses;

1. Initially oliver identified different airmass regions as dominant where specific air mass are located thoughout the year, oliver has identified the space as the main airmass zone. As he planned to stay in the region and identified it as the location of the five circles major regions.



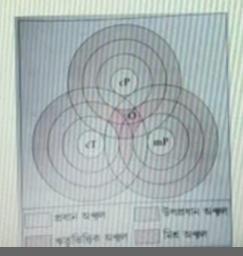
2. In the next stage, he divided the airmass space between A and E into 'cT' and 'mE', respectively by a series of concentric circles at an equal interval from the boundary of the dominant airmass region to the boundary of the dominant airmass region at an intervals of time.

From there it can be seen that the higher the outflow from the centre the lower the predominant rate of the expanse.



Suppose as the distance from the centre increases the effect of airmass decreases by 20% in each class, then in the place of 'B' cT should 60-80%, predominants of the united state 20-40% at mT and in the place of D ct should be 60-80% respectively. This areas are refer to by oliver as sub-dominant, thus space is the city airmass and this space if the sub—prime region of the mT airmass

4. At this stage oliver mention three airmass stages insteed of two .So he said about a new area which don't have any exact existence. this is named compound region according to oliver. O is the place which included in compound region in the given picture. there have some effects on cp.mp.ct but no effect on airmass in any season.



#### MAJOR CLIMATIC REGIONS;

- From the above information, oliver presents a few hypothetical images for the location of the three types of climatic regions that he has presented, through which the climatic zones are arranged in three ways.e.g;
- Dominant & sub- dominant regimes :- when oliver expresses the area dominant by a specific cluster throughout the year with the symbol 'D', then oliver expresses it with the symbol 'd' during most of the year.
- Seasonal regimes ;- where a specific cluster of air dominants for half of the year, oliver expresses it with the symbol of 'S'.
- Compound regimes: there is no definite air mass dominance when three airmasses influence instead of two airmasses. So oliver called it the 'C' symbol.

# CRITICISM:-

Although oliver's airmasses model is different from other climatic model's in other parts of the world ,it has been criticism from different angle:-

- Unlike oliver koppen, he has not been able to classify different climatic zones around the world. He only mentains the area affected by the airmass in this region.
- Oliver has not been able to accurately determine the total climate. In this model refers to the numerous climatic zones of the world.
- Although airmasses control the climate of a place, there are many elements that control the weather and climate but oliver refers to them.
- 4. Although oliver's classification of climate is an incomplete attempt, it presents all the explanation in a hypothetical way, but in reality it cannot point to the region in which the climate is past.
- Although the given model is presented only on a mathematical basis, it is actually irrelevant
  as the areas affected by the mass do not have any geometric arrangement.