THE REPORT

Written in 1992

'Pure logical thinking cannot yield us any knowledge of the empirical world; all knowledge of reality starts from experience and ends in it. Propositions arrived at by purely logical means are completely empty of reality.'

Albert Einstein: *The World as I see it*

Prologue to "The Report', in the context of recent Asteroid trajectory prediction in October 2028

I think, bearing in mind the content of this report, it will be useful to make a few observations based on "common sense" reasoning. This is partly why the report will be re-included in my next book.

In the "report" I have tried to give a "flavour" of how complex computer simulations (and predictions) are based on a cascade of Linear or Non-linear mathematical/scientific tools. "Variance", an erroneous "technical assumption" or "over simplification" of just one element in the series of calculations would give a completely different answer. I think anyone with even minimal exposure to "High School" Mathematics can perceive this.

For instance calculations and "Estimated Time of Arrival", of the "One Mile Across" Asteroid, by the European Space Agency (ESA), yielded a prediction of arrival in October 2028 and an estimate of the Asteroid of passing the Earth at a distance of some 30,000 miles. Their work also gave a prediction of a 1 in 1000 chance of a direct impact with Earth.

The original ESA prediction of 30 thousand miles may be put into context by consideration of the Moon's distance of 250 thousand miles. The very causation of tides on the Earth's oceans may make one perceive that the most precise and accurate prediction of the Moon's true gravitation affect is just one element in a series of calculations that may be crucial as the Asteroid approaches.

It is much publicised in the popular press that the destruction and extinction of the Dinosaurs is attributed to an Asteroid of similar destructive magnitude to that expected, approximately, in the year 2028. Clearly there would be a very united and pronounced public "outcry" across the countries of the world - particularly by younger people who will be "Tomorrow's Voter" and reasonably expect to be alive until at least 2028 or thereabouts.

If one applies the simple principles of what is called "Brainstorming" or "Problem-Solving", features of the most expedient (politically and otherwise) action would be to "produce" one prediction from a highly credible source to dissolve any public anxiety about the Asteroid impacting. If it were desirable to achieve this end then some "new evidence" would have to "present itself" - because European Astrophysicists and Space Scientists are comparably eminent to those of NASA.

There could easily be "presently undetected" bodies that may affect such Asteroids by their gravitational fields bending the trajectory. The ESA prediction of a 1 in 1000 chance is a very high chance of impact in Astronomical terms. An "Assumption" (an educated guess) in just this one element's "variability" may greatly alter the outcome of predictions.

If one continues to consider matters logically, a Government agency might find that at one extreme, too many variables are involved to give any prediction with high certainty of avoiding the Earth. In such a case, depending on Astrophysical "Assumptions" chosen, it is completed ethical to "announce" a prediction that "say" the Asteroid will miss the Earth by at least several thousand miles.

There has been discussion in the media, regarding the Asteroid, of the measures that might destroy or deflect such a huge body in space. What little that has been announced was inaugurated by president Reagan in his Strategic Defence Initiative (SDI), colloquially known as the "Star Wars" program.

Various advances in the Technologies originally proposed have taken place but none has reached the levels of fruition or effectiveness hoped for during the first Reagan presidency. During this time frame also, the major cost projections for full development caused great unrest and discord in the US Congress.

Lightweight chemical lasers (such as Hydrogen-Fluorine types) would be based in orbit. Ground based lasers were to have undergone development "Scale" them for enough power to "knock-out" targets in the upper-Atmosphere. Necessary developments in the Technology for "electrical power generation in space" also did not receive funding. Presently portions of the SDI work is used in the US "Space guard" project. It seems the unscaled ground based lasers facilitate high quality photographs of the "Stars." Moreover an International treaty, decades old, prohibits Nuclear warheads to be based in Earth-Orbit that might be "ready" for smaller Asteroids. (Despite the apparent danger of having such devices in Orbit).

I have written many letters to various US Agencies on topics that concern such an Asteroid eventuality. For instance several unanswered letters, by registered post, to NASA seeking to confirm aspects of the "Space guard" project alluded to in documentaries. I have included, at the end of this note, a "straightforward" letter concerning the "Laser Metrology" via NASA's Moon-based Instruments and laser measurement of changes in the Moon's distance and Orbital mechanics. Such technology is not commercially confidential (laser metrology already has many present uses industry) and is "unclassified" technology. No acknowledgement or reply was ever received on this specific subject.

A few days after the publicity of the European Asteroid prediction NASA announced that they confidently expected the Asteroid to pass no closer than 600 thousand miles to the Earth. Apparently the same Asteroid appears as an incidental observance on existing NASA photographs - enabling the calculation of this new and "heart-warming" prediction. And a subsidiary consequence of the new prediction is, the public's concern being nullified, Major world governments will be spared the expense (driven by public concern) of development of measures to give the Earth protection from such Asteroids. "Common Sense" tells one by the time scientific opinion on both sides is in agreement, there will be no time to build and develop such devices.

Although I do not consider myself capable to fully understand the technical basis of NASA's new predictions, I have not been able to find an even cursory description the assumptions and outline of NASA's "heart-warming" prediction. There are lobby groups with suitable expertise (and access to expertise) such as the "Space Watch" Lobby group. I am puzzled, given their importance, that a set of these Astrophysical calculations are unavailable.

It has been mentioned that one reasonable possibility is that the Asteroid may be influenced by other bodies (say, on oblique trajectories, so they appear to be almost stationary from Earth). The light that appears on celestial photographs may be "bent" by the gravitational pull of bodies that will influence it on its way to Earth. (Gravitational fields may also "speed-up" or "slow-down" the Asteroid itself in its 30 year journey towards Earth's Solar system). For instance Einstein's "General Theory of Relativity" defines a gravitational influence to "bend" the straight

path of light in terms of "1.5 seconds of Arc". (Prior to Einstein's work, and based on "Newton's Laws", this was calculated to be about half this with a gravitational influence of 0.8 seconds of Arc - clearly completely different trajectories would be projected in each case).

I imagine that if so very little is done, in real terms, in the present, for Global Warming, Climate Change and destruction of the Rainforests then future events such as the Asteroid Stellar phenomena will not be political problems after the NASA prediction. Moreover whether or not we have the ability to reverse the destabilisation of the planet's surface or to harness our technology for such Stellar events - then our governments, perhaps understandably, will wish to avoid public unrest and retain the fullest possible control over their goals and activities.

Ann Walker
England
March 1998

FOREWORD TO THE REPORT

This report is the full interpretation of the five drawings given to me on the ship by Michael, Zipper, Bear, Eagle and Alien Girl, together with the equations and information given by Einstein. Although I believe it is directed at the scientists of the world, I want the people to know what it contains.

It was compiled under White Arrow's guidance between February 1992 and February 1993. As I sit down with White Arrow to complete the final part of it, the Aliens come in one by one and gather around me. I do have the full interpretation of their five drawings now, but although the information is together, I have to admit that some of it makes little sense to me. I shall need all the help they can give to take this report to the people. Suddenly I feel a shiver run down my back. I pull my cardigan close around me and cross my arms and White Arrow speaks. He has something more to add. I reach for my pad and pen.

'Grave problems face you all. First I will tell you, the people, in my own words, then we will give you a scientific report. This report, Little One, you will send to the governments of the world.'

I wonder how on earth any government will listen to me, and then I feel the fear again. The ink in my pen is running out and, frustrated, I drop it to the floor and reach for another one. I know already that there is a comet coming and I know that unless we listen to White Arrow and the Aliens, our world will come to an end. With their help we can be saved. If we ignore them, the consequences will be too horrendous to think about: and yet I know that I have to think about them. I have to think about my granddaughter and all our future generations. I cannot let my fear defeat me. Ink finally appears from the new pen to give life to the blind indents and scribbles on my pad.

'It is not easy for me to tell you of bad that will happen. These things I do not wish to bring you. I would have wished to bring you happy news on my return but instead I have to tell you of the troubles that lie ahead. With your help I can save you. Then I can bring the good. Help my father to help you.

'I have already told you that your Earth has moved two degrees out of its orbit. In twenty years time it will move another three degrees because of the rainforest destruction. This will make a five degree change. Already the two degree move has altered the molten fluids beneath the earth's surface. This in turn is causing fault lines to shift, which is why you experience more earthquakes around the world. As the next twenty years come so will you see new fault lines appearing and yet more earthquakes will shake the land. Large areas of the planet will be totally destroyed. Land will submerge. Japan and small islands will disappear. Parts of Russia will disappear. The southern tip of South America will disappear. Many miles of coastline will be submerged into the seas and parts of land will be lost over all the world.

'The Earth is becoming warmer because the damaged ozone layer now allows the sun's rays to heat the planet with greater intensity. The core of the earth is overheating. In thirty years time many species of animal will be lost. Man will find parts of his world changed. Your moon which already affects the tides of the ocean will have an effect twenty times greater by then. Tidal waves that have never been seen by man before will cover the land. The fish that you catch will move to different parts of the ocean and be no longer there to feed you. Your crops will not grow because the weather will change. There will be storms, cyclones and tornadoes in parts of the world where they have never been known. Great rainstorms will flood the land and destroy

not only crops but grazing land as well and the moon, being too close, will have an effect here too. All land will be affected because the earth's atmosphere will be too close to the atmosphere of the moon. They will be too close because of the five degree change.

'The ice caps will melt and the seas will claim the shorelines of many countries. Between thirty and fifty years from now an ice age will appear over many parts of the world while in other parts temperatures will rise to over two hundred degrees. Great fires will destroy more forests and grazing land will be burned. In thirty years there will be few safe areas in the world, yet even these will be of little use to man, for in fifty years no safe place will be left.

'As the trees are being destroyed, so are the grasslands being taken away for roads and buildings. Petrol fumes, among other things, are destroying the ozone layer in your atmosphere and affecting the health of man. In twenty years time, twice as many cars and factories will produce ten times as much pollution, and destruction to the ozone layer will continue causing further heating of the earth's core. We have a formula to help with this problem. We have given all the facts and figures in The Report, but the cause of all this happening lies with your continued destruction of the trees that give you life. As each tree falls so your destruction comes closer. The trees keep you alive. They play an important role in the balance of life. Trees take in carbon dioxide and give out oxygen. Without oxygen you and other breathing life forms cannot survive. Humans take in oxygen and give out carbon dioxide. Without trees you cannot exist. Even the grass you walk on and the flowers you admire give you breath. The rainforests are like a belt around the earth. Even their weight plays an important part in how the earth spins in balance. Removing the trees will cause a five degree change in the planet's orbit around the sun. The trees are also a force field. Winds from one part of the planet are kept away from another part by the trees. They cause a direction that makes it safe. Without the trees the winds are left to follow their own direction causing them to grow stronger and further damage the earth without the force to hold them back. Diseases will be carried from different countries. They will not be contained because the winds and weather will be out of control and the ozone layer will again play a big part in your destruction.

'It is the felling of the rainforests and other things that have mainly caused the problem we see. Man must take responsibility for his actions. His actions are adding to his own destruction in fifty years' time.

'I will now talk about the object that is coming. The comet will not hit your earth. Its pathway has already been mapped out to pass your earth. I know for I have seen this but you must hear: the atmosphere of your earth and your moon will be too close together and so will be in the comet's path. As the comet passes its speed and weight will pull the middle of the earth outwards causing it to erupt. Lands will sink and mountains will come down. Land man has never seen will appear in the place of lands that have gone. No man will walk the earth again for millions of years to come. This is why I have returned to you, to turn back to God and help him to repair the damage before it is too late.

'We have eighteen years only to do this in: ten years to stop the felling of trees and eighteen years now to start replanting the forests. This will bring the earth back from the five degree danger.'

I stop staring at the pad and lift my eyes to where White Arrow's blue eyes are sparkling. Somewhere in the distance I am aware of feelings of fear and disbelief that this is all being placed on my shoulders. I am selfish enough to want White Arrow with me, but not to want his work. Who will listen to Ann Walker? I dismiss the feelings – just brush them away and call them human.

White Arrow and the other Aliens stand in front of me. Their hearts are for the living. There is White Arrow who has given me life and around him those who work with him to help us for no reward other than to see us avert our own destruction. What can I do but take these

words of theirs and pass them onto the world, so that many minds can join together and work towards a hope for our survival? Someone greater than ourselves is behind these words, and if through them we can save our beautiful world, then perhaps we can learn to live in peace for all time, remembering always that God does exist and that he has sent his son once again to save our world.

White Arrow shows me the symbols of the world, and, just as I thought we had finished, he speaks again.

'I want my people to know the truth. You shall show them The Report and they shall know that it was to be for everyone so that everyone will know. With this knowledge that I give, the people can be informed and, once informed, can cause change.'

Please bear in mind that this report was written in 1992 and was sent to the United Nations Intergovernmental Panel on Climate Change in 1992. They subsequently responded and stated that the report was 50% correct. The other 50% has yet to be verified due to the nature of the Report.

The Report:

Global Heat increase and 'Irreversibility of Two State Climate Disintegration'

Foreword

As one looks at the weather it is clear that extremes of weather are becoming more prevalent. The weather is nature's delicately evolved system of balancing and moving heat. It does this through the atmosphere, the seas (and sea floors) and heat is interacted and balanced with the mantle. This system, the weather, is concerned with delicate balances that nature has evolved over 386 million years.

The surface of the earth, the earth's crust, rests on molten fluid of the earth's mantle. The temperature and heat energy stability of the fluid beneath the surface provides stability for the surface itself. Yet as the atmosphere, oceans and the whole surface get hotter, this will change.

As the escalating rate of destruction of features of the environment gets even faster we see government proclamations of key environmental changes that have very reassuring preciseness. For instance only a 2.5 degree temperature increase in global temperature is predicted, and only a 0.5% reduction in atmospheric free oxygen is predicted at worst case. Whilst these predictions involve scientific readings and data they also involve assumptions.

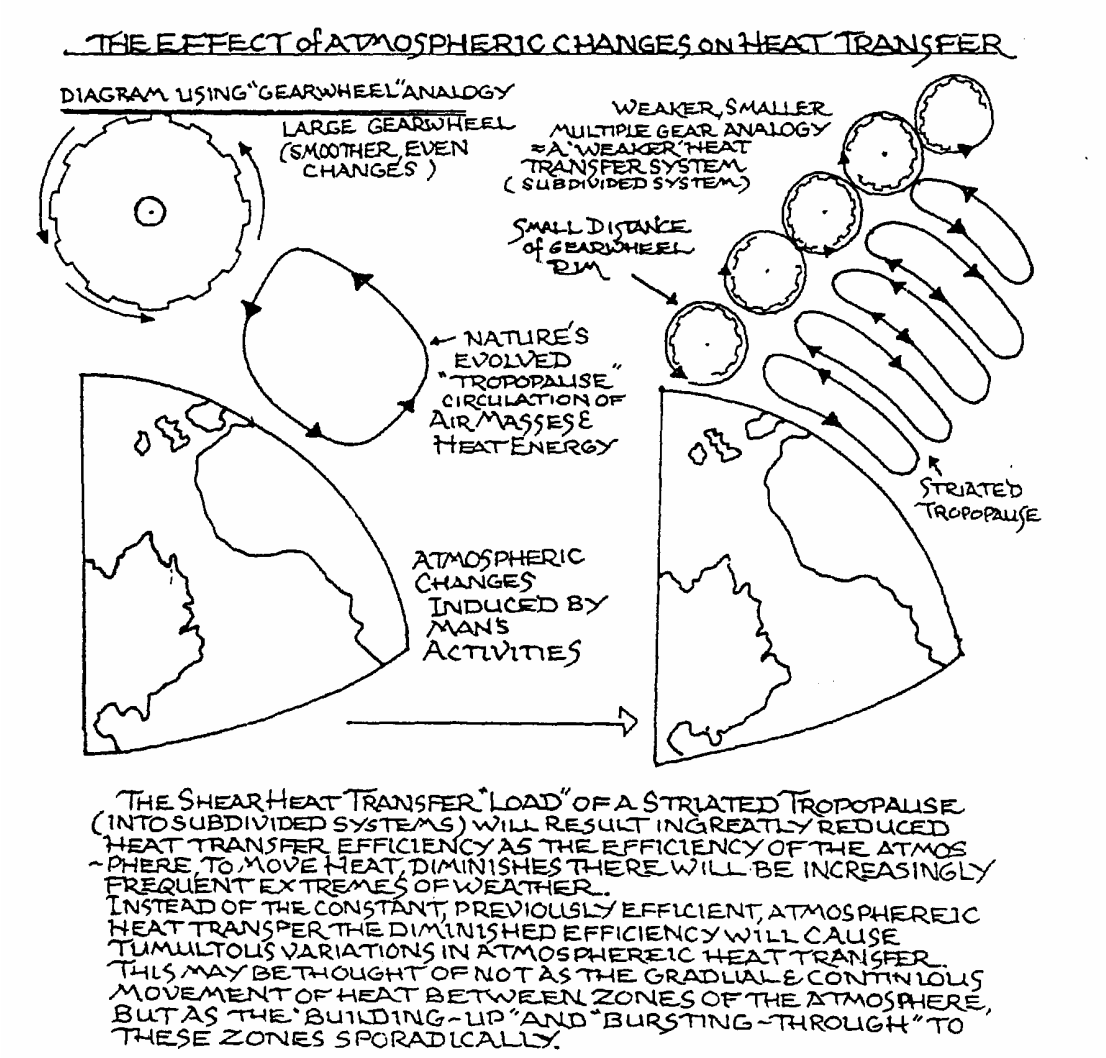
And, despite comforting predictions, something seems to be going wrong at a fundamental 'interactive' level of the earth's climate. As we ourselves wait for more data, for statistical studies for instance, or more deeply technical data, we seem to be overlooking some remarkably fundamental changes we are causing in the atmosphere and environment.

We know the rainforests will be almost completely destroyed in the early portion of the next century if current trends continue. At a similar time, the growth of motor vehicles is 'projected' to match human population. It has been known, for many decades, that there must be a balance between carbon dioxide and oxygen producers. Humans and 'breathing' life consume oxygen and produce carbon dioxide – trees and vegetation consume carbon dioxide and give us oxygen. Cars consume our oxygen and give us carbon dioxide as well as atmospheric pollutants.

As the increasingly unpredictable weather affects the global weather system, we increasingly see hotter summers. As the climate becomes progressively more and more unstable we should realise that the consequences of this disintegration extend far far beyond 'a warmer atmosphere' and increased skin cancers from 'ozone depletion'. The fundamental mechanisms that support oxygen breathing life are being destroyed.

Sequence of diagrams and figures

<u>General overview</u>



The carbon cycle.
Deterioration of the carbon cycle.

2. The main heat and oxygen regulators
   The High Atmosphere.
   The Air Sea interface
   Tropical vegetation
   Continental shelves
   Seasonal Photosynthesis and oxygen production in Northern and Southern hemisphere

3. Increased planetary heat energy and convection current shifts beneath the Earth's crust.
   Heat energy propagation of fault lines
   Computer modelling of system inertia (and parameters)
   Interaction of global warming, density changes, tilt and geothermal activity.
   Effects of planetary body.

4. TREES, heat transfer, changing wind patterns, increasing tropospheric distribution of ozone destroyers

5. Typical changes projected at end of first process stage (20 years)
   The USA
   Australia
   Ice Caps
   Russia
   Central Africa
   Europe and England

6. Heat energy of the planet grows and evolution's delicate heat transfer mechanisms disintegrate!

7. Concluding remarks

References

APPENDIX 1
Maps related to Section 5

APPENDIX 2
Notes on planetary phenomena and orbital mechanics interaction toward second stage of process

APPENDIX 3
Present day planetary climate and dependent phenomena

APPENDIX 4
Representative fauna depletion at end of first process stage

Sequence of diagrams and figures *

Rise in carbon dioxide and 'one' projected temperature increase
Overall oxygenation capacity-table
Table of Radiation – the spectrum of light
Table of worldwide Deforestation and carbon dioxide rates of increase
Structure of Earth's atmosphere
Earth's core and plate tectonics
Earth's core and convection currents
Density, temperature and Pressure variants beneath the Earth's crust
Earth's data and the sun's path
Moon data and moon's affect on Earth's surface
Figure 11 – Effect of planetary body
Seismic waves (and secondary seismic waves)

Appendix 1

Map 1 – process phenomena at 20 years

Map 2 – safety zones at 20 years of process

Map 3 – new land mass emergence

Present land use and economy

Land use by Continent, presently and 20 years into process

Figure 6 – loss of nutrient production at 20 years

Figure 7 – loss of nutrient production at 20 years

Appendix 2

Orbital mechanics notation and diagrams

Appendix 3

Various charts and illustrations of *present* climate and geological activity – full listing in appendix

Charts for fauna depletion and extinction

- Please note that given the draft stage of this outline report, for purposes of scrutiny only, the illustrations to be generated for my final work (to be published) are not ready yet. Therefore similar illustrations may aid one's considerations.

General Overview

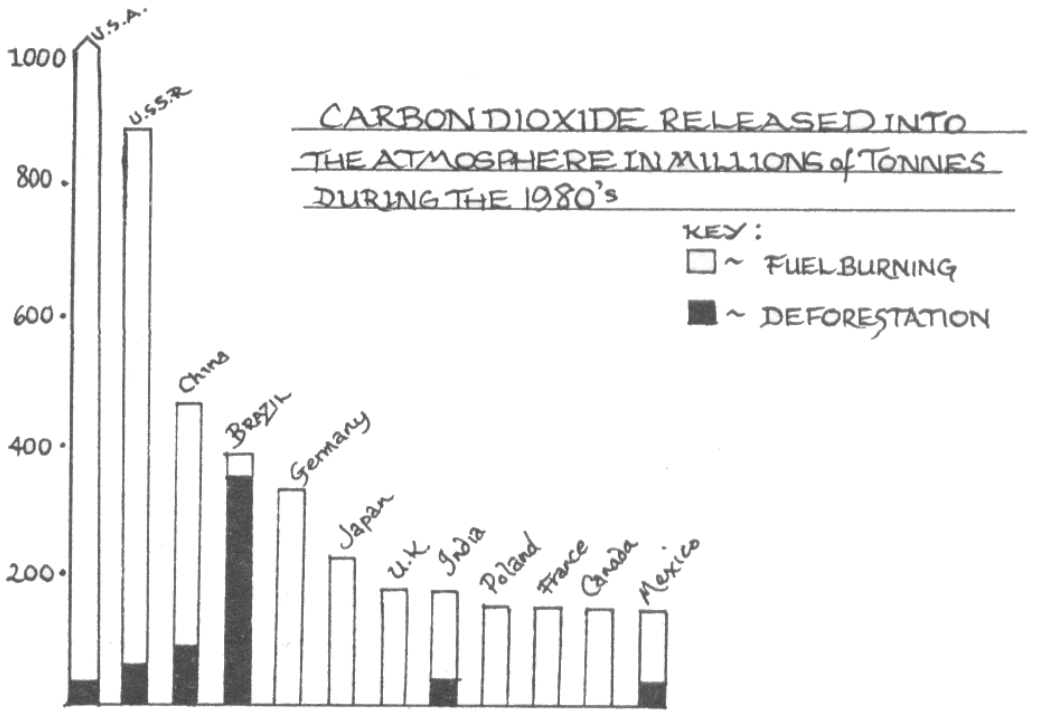
Two concepts within this chapter are key and should be considered interactive. One of these processes, related to the gathering pace of 'inertia', is of catastrophic immediacy. The gathering inertia *affects* individual elements of the Global Climate process, as well as the escalating instability of the Global Climate process.

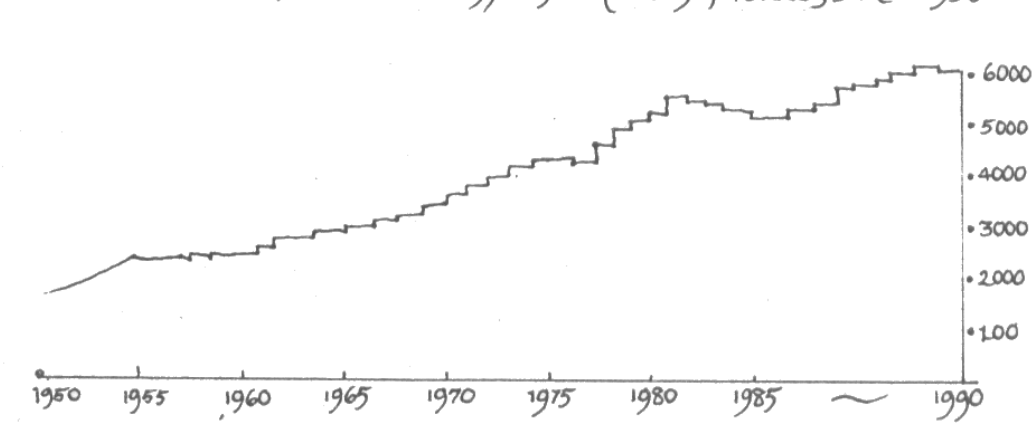
Throughout the various concerns regarding global warming (and ozone layer depletion), the analysis seem to fall short of equating the effects of the planetary systems *overall* level of heat energy. The 'inertial' rate of this increase and the geothermal consequences of this are of prime importance. Moreover, the global warming effects of 'matter' beneath the earth's crust are not considered. This seems to be the case throughout the weather – and climate – based computer models of the effects of global warming.

It also seems to be clear that the ozone layer depletion is openly recognised as being of significance, but primarily because of its link with 'hotter' weather and skin cancers etc. In fact, ozone layer depletion and the consequent admittance of shorter wave lengths of light also has significance in higher magnitudes of heat energy imparted to the earth's surface. Global warming

and ozone layer depletion are *not* seen as critical *interactive* parameters in the 'thermal equilibrium' of the earth. It should be considered that there are critical changes taking place that are part of a fundamental geothermal process, which will yield catastrophic weather and climate consequences.

The effects on the Global Climate process will be irreversible in some twenty years' time. It is considered that although there is one immediate measure that can alleviate certain areas of the crisis, this measure would require a ten year rapid implementation. Although the measure concerned is very simple to implement, only its immediate, rapid and expansive deployment will avoid the termination of all cycles in the process.





Analysis of data shows the existence of a Stochastic Probability Density Function, which underlays the integrated elements of the Global Climate Process. It has been 'identified' that there will be a process juncture, in some twenty years. The probability density function mitigates toward minimal variance in the duration of the second process stage. The second (and final) stage of this process will be final in approximately 50 years. Also, as indicated earlier, the

'inertial' characteristics of increases in the process parameters will render matters irreversible in 20 years' time.

It is considered that in some 20 years' time the exact nature of these parameter changes will be amply apparent. By this time certain phenomena, geothermal in origin, will clearly have evidenced themselves. Although the statistical inertia of the parameters (that govern the process) may *then* indicate some chance of recuperation – there is an as yet unseen event that will overwhelm 'eleventh hour' activity.

Earth's heat energy accumulates – and the planet cannot lose it.

The Greenhouse Effect

Carbon dioxide (presently 0.05% of the atmosphere)*, like the glass of a greenhouse is transparent to most incoming short wave radiation, which passes through it and heats the Earth. However, when the Earth re-transmits that energy in the form of longer wave infra-red radiation, the carbon dioxide behaves as an opaque shield, so that the Earth's surface remains hot, and is subjected to growing levels of heat.

The Earth's surface, which is continually being subjected to ever increasing levels of Heat energy, must obey the basic laws of physics. As the atmosphere and surface gain Heat, this is geothermally *conducted* into the molten fluid *beneath* the continental plates, the molten fluid of the Earth's upper mantle.

*** (1992 figures)**

The Earth's energy balance

It has been considered for some time that the greatest quantities of heat energy have and will always remain at the Earth's very core, without these large magnitudes of geothermal (heat) energies being carried upward (toward the crust) into the mantle's convection currents. It has been accepted for some time, as a basic precept, in the Earth's *energy balance*, that the crust is *only* subject to a modest quantity of heat energy from the molten core. However, this is changing. The heat energy is growing – as the mantle acts as a heat sink.

It is accepted that Earth's crust (and therefore the planet as a whole) receives all of its energy from the sun. If the planet is to remain at constant temperature, it must radiate EXACTLY as much heat as it receives.

The temperature at which equilibrium is reached depends on a multitude of interconnected factors. The TWO main factors are the Earth's index of reflectivity (i.e. relative brightness – ALBEDO) and the heat-trapping capacity of the atmosphere – the Greenhouse Effect.

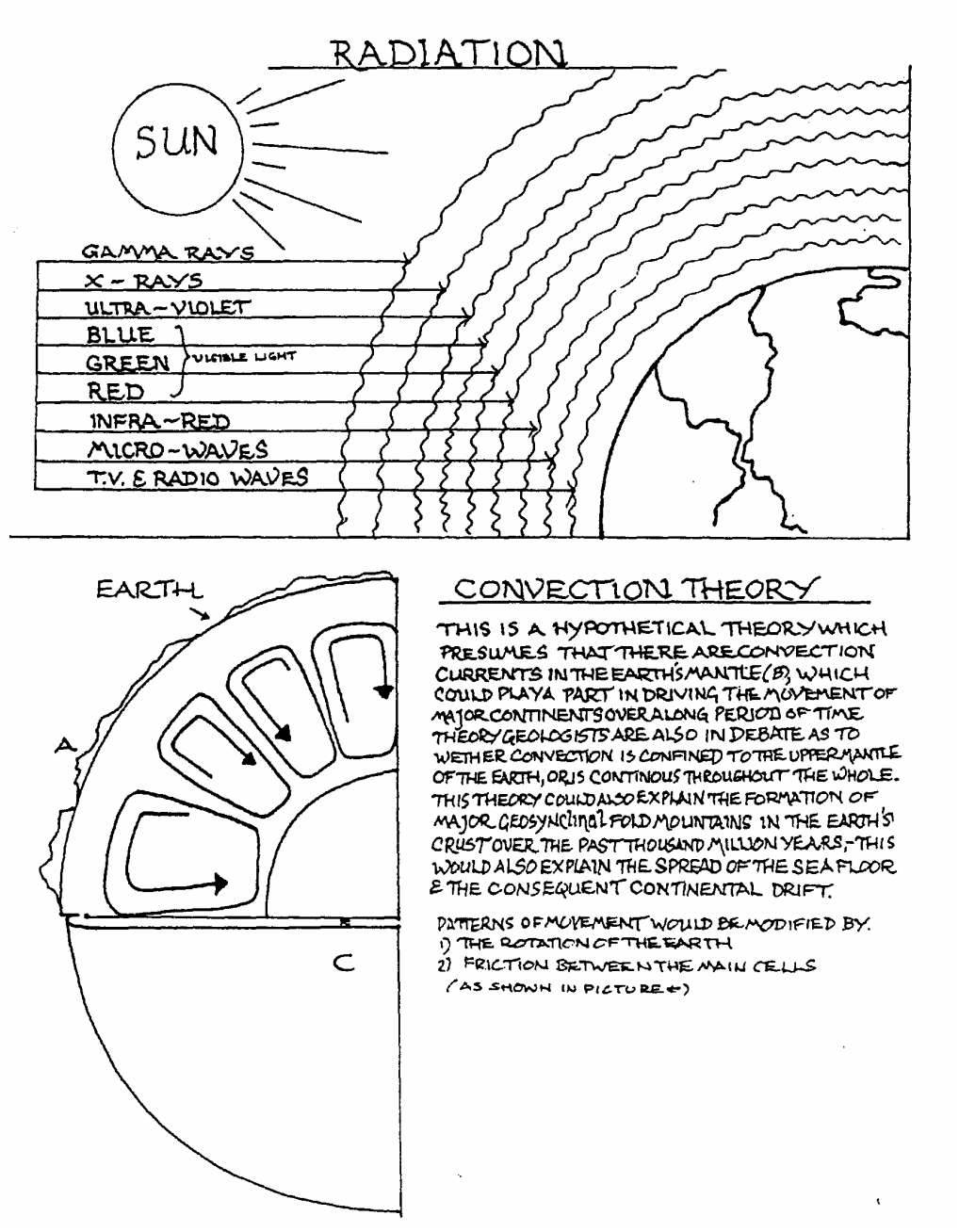
The Carbon Cycle

The Earth has a huge supply of carbon, only a small quantity of which is carbon dioxide gas, in the atmosphere. Some 98% of all Earth's carbon is thought to be dissolved in the sea.

The carbon circulating in the air is now some 355 Parts Per Million. Its capacity as a greenhouse gas is the key regulator of the Earth's temperature. In turn the ecological balance, based on trees, regulates the regulator – keeping carbon dioxide concentrations below danger levels – until now.

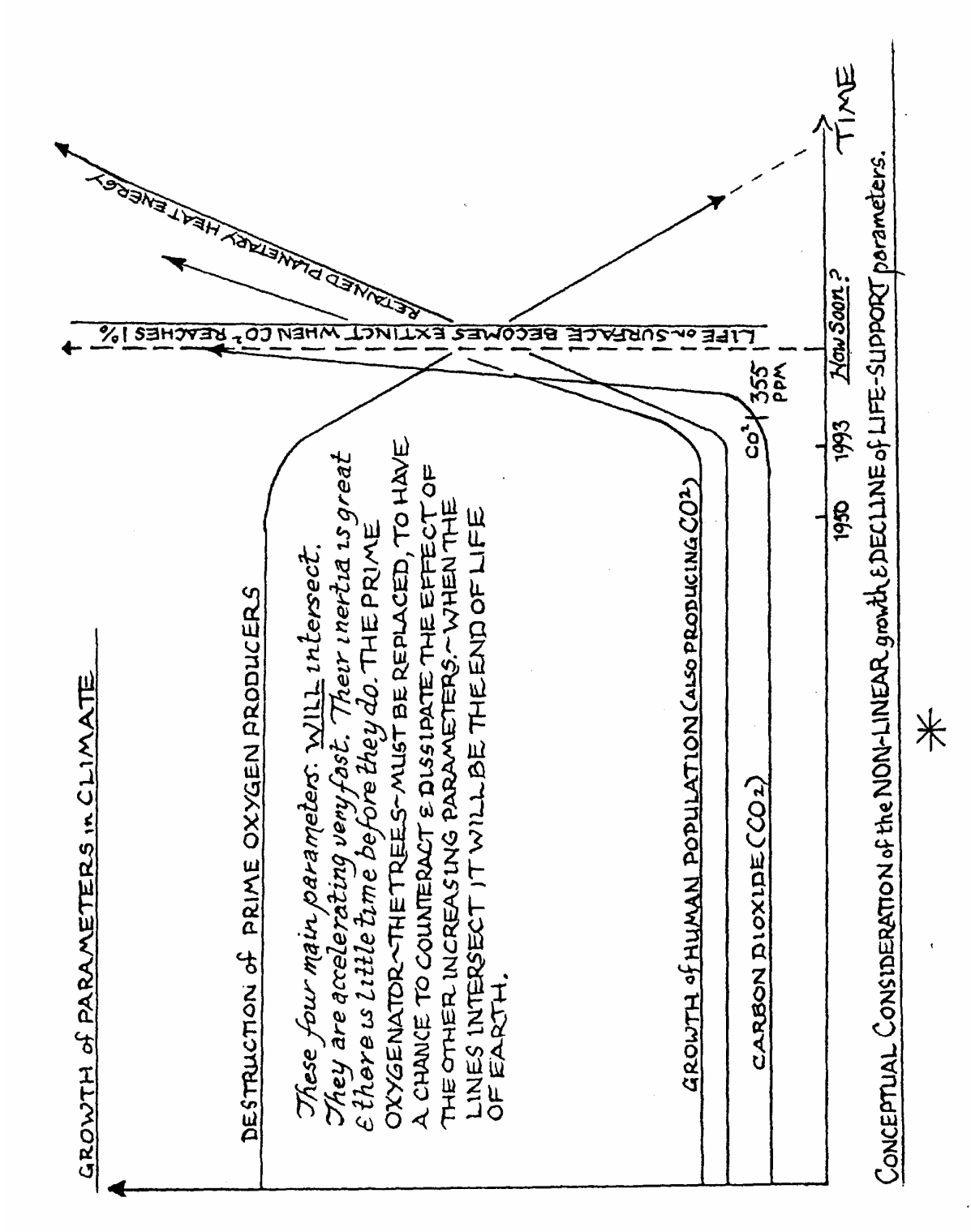
Most of the constituents of the atmosphere *were* kept in constant balance by complex cycles in which the life forms on the Earth plays a dominant part.

All the elements of the carbon cycle must interlock and *balance*. However there is a drastically 'escalating' trend away from this balance in key elements of the carbon process. For instance we humans breathe in oxygen from the air and 'replace' it with carbon dioxide, at the turn of the century there were 2 billion human beings, and at centuries end there will be 7 billion. Trees (and vegetation) consume carbon dioxide and replace it with oxygen. At the turn of the century all the world's major forests were virtually intact. The deterioration of the carbon cycle is not a 'gradual' process, it is an *escalating* process.



The control of carbon dioxide is the most important of all the Earth's biological and geophysical cycles and it must interact in a stable manner.

The so-called carbon cycle has remained stable for millions of years. However, human beings have found various ways to release fixed carbon at a rate far faster than the existing global system can re-circulate. It has taken only a few human generations to disrupt the entire complex regulatory cycle, in a deteriorating trend.


GROWTH of PARAMETERS in CLIMATE
DESTRUCTION of PRIME OXYGEN PRODUCERS
These four main parameters: WILL intersect. They are accelerating very fast. Their inertia is great & there is little time before they do. THE PRIME OXYGENATOR~THE TREES~MUST BE REPLACED, TO HAVE A CHANCE TO COUNTERACT & DISSIPATE THE EFFECT OF THE OTHER INCREASING PARAMETERS.~WHEN THE LINES INTERSECT IT WILL BE THE END OF LIFE OF EARTH.
GROWTH of HUMAN POPULATION (ALSO PRODUCING CO2)
CARBON DIOXIDE (CO2)
CO2 355 PPM
1950
1993
How Soon?
TIME
LIFE on SURFACE BECOMES EXTINCT WHEN CO2 REACHES 1%
RETAINED PLANETARY HEAT ENERGY
CONCEPTUAL CONSIDERATION of the NON-LINEAR growth & DECLINE of LIFE-SUPPORT parameters.

Deterioration of the Carbon Cycle

Since the beginning of the Industrial Revolution, human activity has pumped steadily increasing amounts of carbon dioxide into the atmosphere. Most was absorbed by the Earth's oceans, whose immense 'sink' capacity meant that 170 years were needed for levels to increase from the 'pre-industrial' 280 Parts Per Million to 355 PPM today, which has overwhelmed even the oceanic sink.

Atmospheric concentrations are now rising almost as steeply as carbon dioxide emissions themselves. Today, carbon dioxide emissions are at 355 PPM, yet this is in the context of a drastically increasing trend.

The main heat and oxygen regulators

The High Atmosphere

On the edge of space, the ionized outer atmosphere shields the Earth's surface from high energy radiation, solar particles and meteors. Below this the ozone layer traps high energy ultra-violet radiation. As the ozone layer diminishes, higher energy radiant heat waves will escalate their impact on global warming.

The Air-Sea interface

The ocean surface is the location for most of the great systems of heat exchange that keep the earth functioning properly. In addition, this absorbs and circulates the critical atmospheric gases. However, its effectiveness at '*sinking'* carbon dioxide has diminished, as is noted in the 'deterioration of the carbon cycle'.

Tropical vegetation

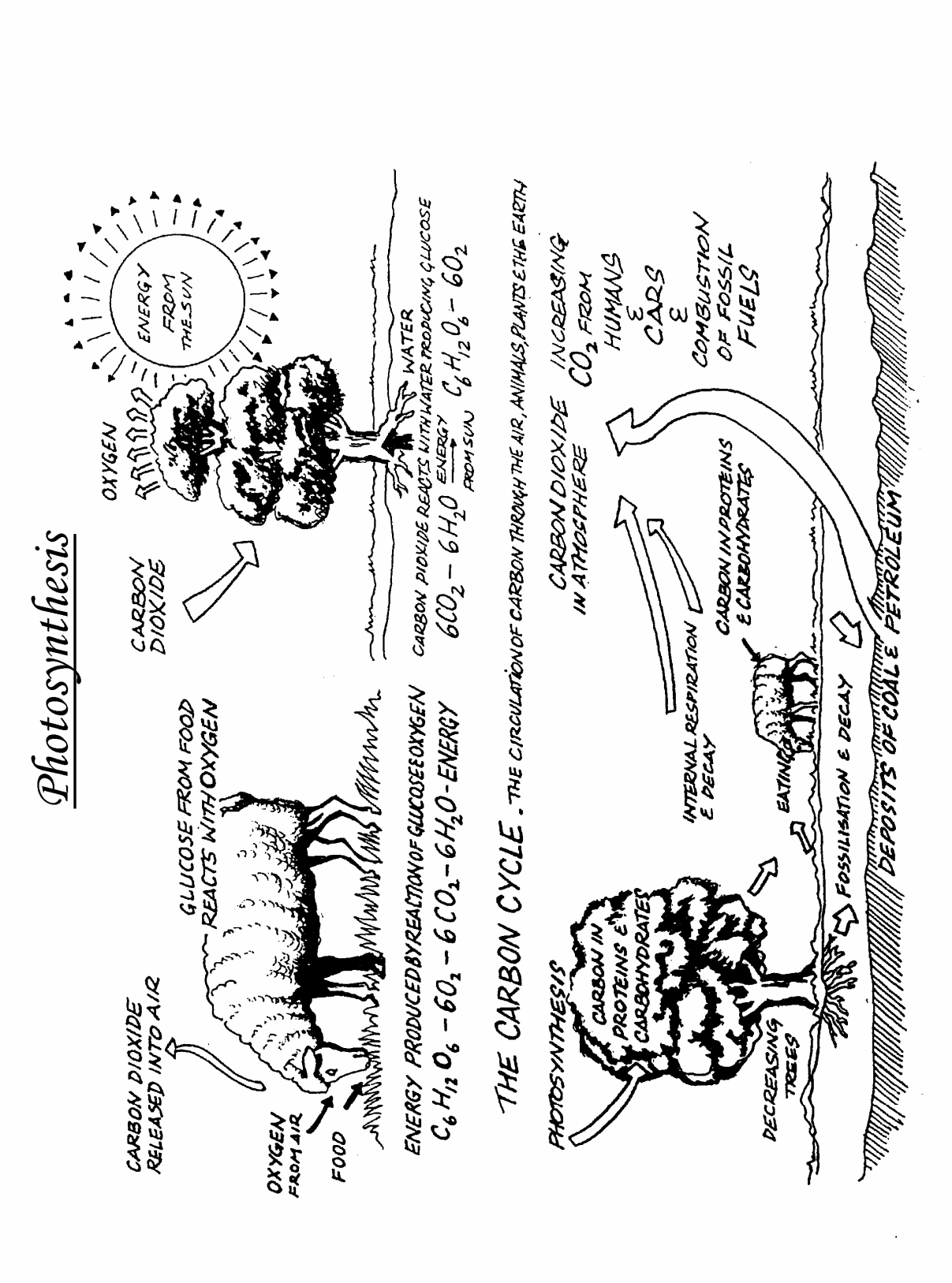
The previously extensive and lush growth of rainforest and other vegetation in the Earth's tropical zones is one of the most important oxygen generators on the planet. Such large scale transpiration influences rainfall and climate patterns both locally and far afield. The destruction of this oxygen production capacity is a key parameter. (The deforestation figure will give an indication of the escalation in the rate of destruction of this regulator).

Continental shelves

The warm, shallow fringes amount to some 21% of the Earth's total ocean area but contain a far higher proportion of its plant and animal life.

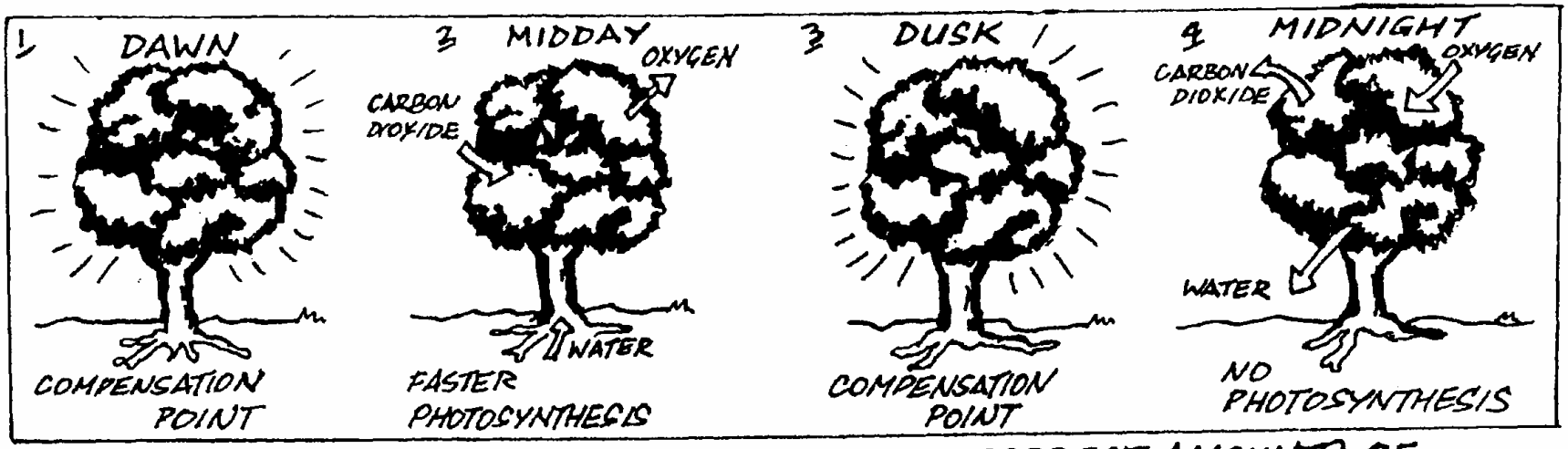
Vulnerable to coastal and marine pollution, plankton and other plants in these waters are KEY ELEMENTS IN THE CARBON AND OXYGEN LIFE CYCLE.

This one topic will be used as a brief example to indicate part of the process that will become irreversible in 20 years' time. It is considered that the oxygenation capacity of the shoreline plankton compares with that of trees and vegetation, in overall production, as follows – and will be reduced as indicated below:

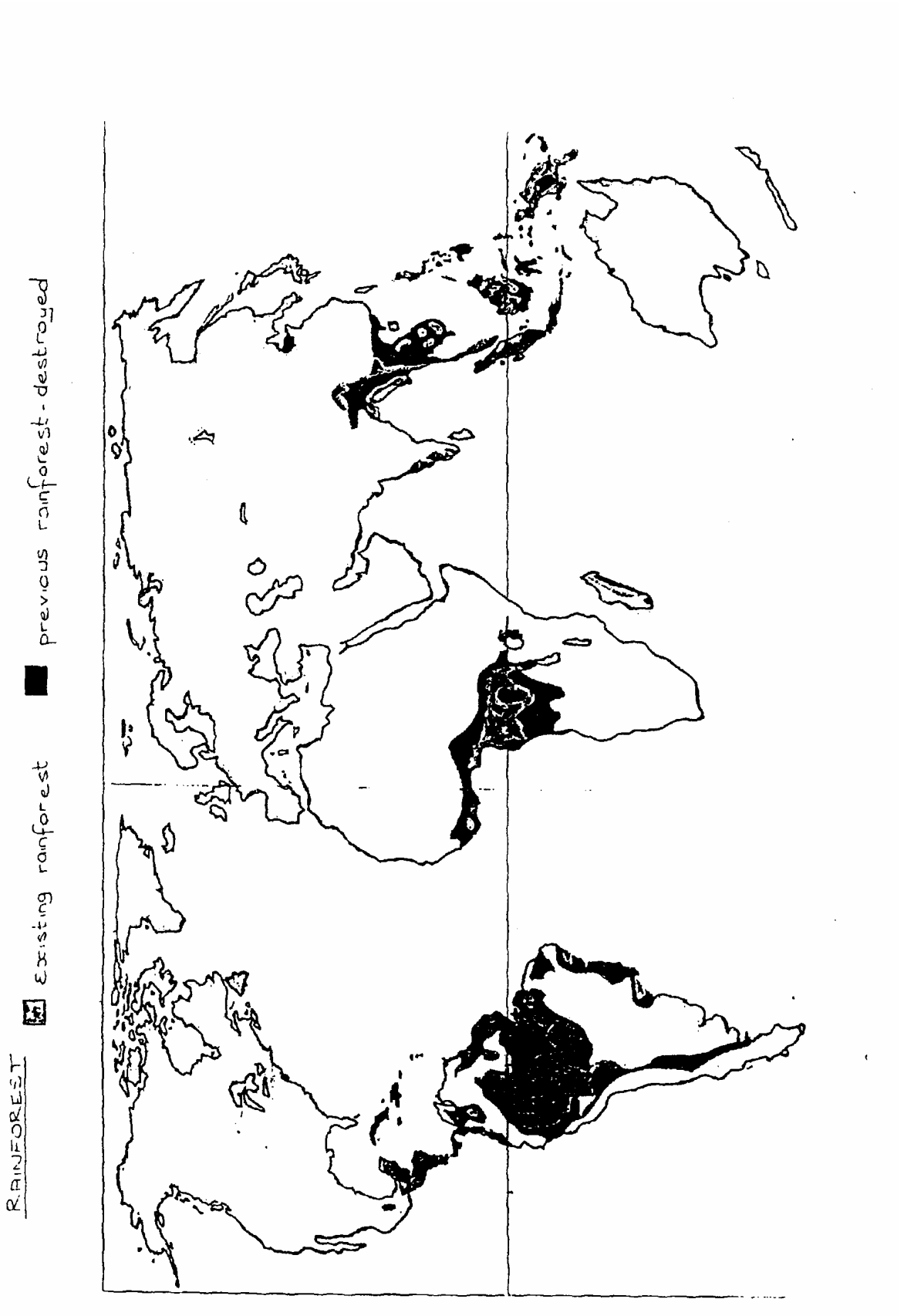

Photosynthesis
ENERGY FROM THE SUN
OXYGEN
CARBON DIOXIDE
WATER
CARBON DIOXIDE RELEASED INTO AIR
GLUCOSE FROM FOOD REACTS WITH OXYGEN
OXYGEN FROM AIR
FOOD
CARBON DIOXIDE REACTS WITH WATER PRODUCING GLUCOSE
$6CO_2 - 6H_2O \xrightarrow[\text{FROM SUN}]{\text{ENERGY}} C_6H_{12}O_6 - 6O_2$
ENERGY PRODUCED BY REACTION OF GLUCOSE & OXYGEN
$C_6H_{12}O_6 - 6O_2 - 6CO_2 - 6H_2O$ - ENERGY
THE CARBON CYCLE. THE CIRCULATION OF CARBON THROUGH THE AIR, ANIMALS, PLANTS & THE EARTH
CARBON DIOXIDE IN ATMOSPHERE
INCREASING CO_2 FROM HUMANS & CARS & COMBUSTION OF FOSSIL FUELS
PHOTOSYNTHESIS
CARBON IN PROTEINS & CARBOHYDRATES
INTERNAL RESPIRATION & DECAY
CARBON IN PROTEINS & CARBOHYDRATES
DECREASING TREES
EATING
FOSSILISATION & DECAY
DEPOSITS OF COAL & PETROLEUM

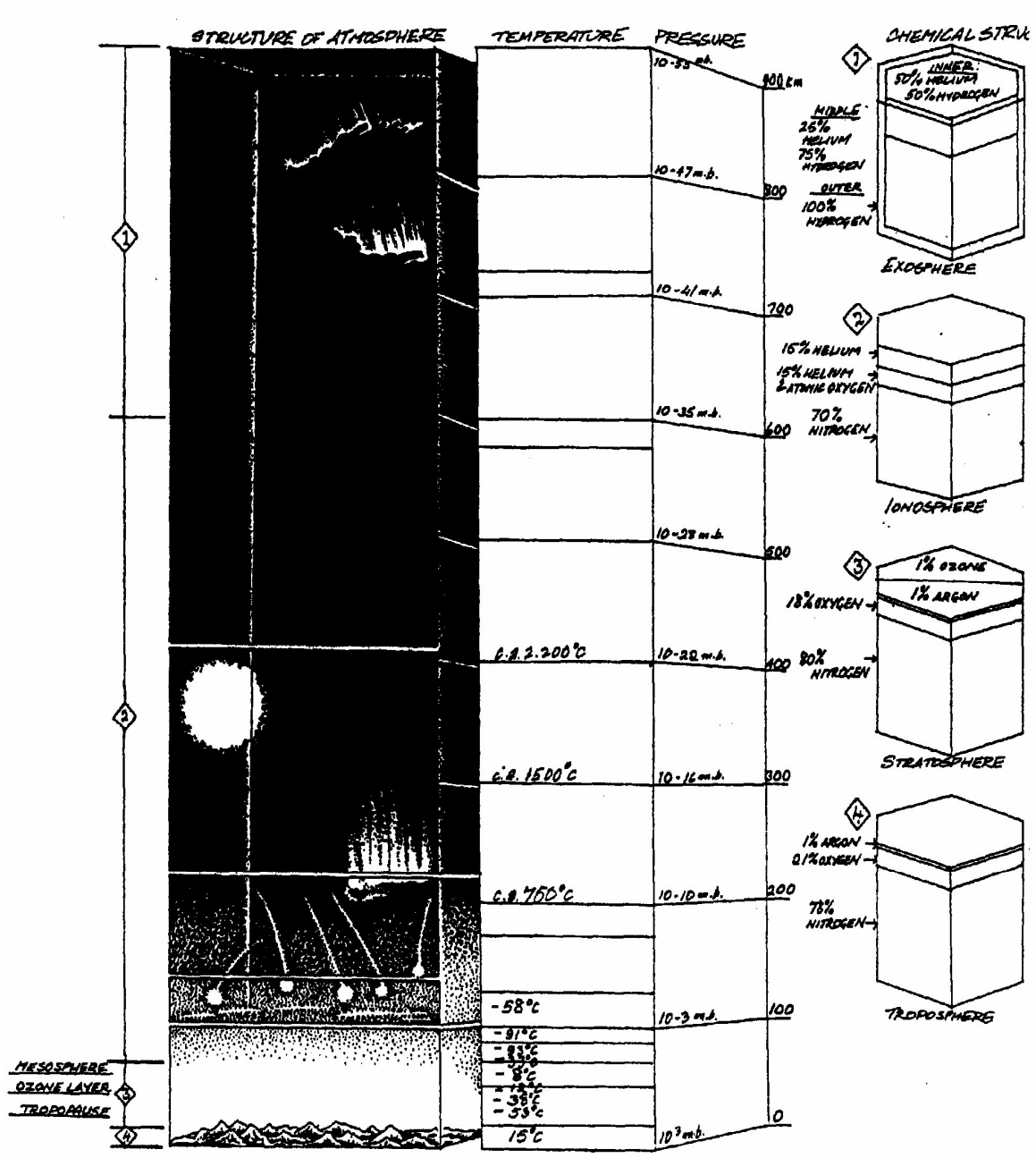
COMPENSATION POINTS

THESE ARE TWO POINTS IN A 24 HOUR PERIOD. (NORMALLY DAWN & DUSK) WHEN THE TWO PROCESSES OF PHOTOSYNTHESIS & INTERNAL RESPIRATION ARE PERFECTLY BALANCED.



PHOTOSYNTHESIS : IS THE PRODUCTION OF THE CORRECT AMOUNTS OF CARBOHYDRATES & OXYGEN FOR INTERNAL RESPIRATION WHICH RESULTS IN THE CORRECT AMOUNTS OF CARBON DIOXIDE & WATER TO COMPLETE THE PHOTOSYNTHESIS CYCLE.


RAINFOREST
existing rainforest
previous rainforest - destroyed



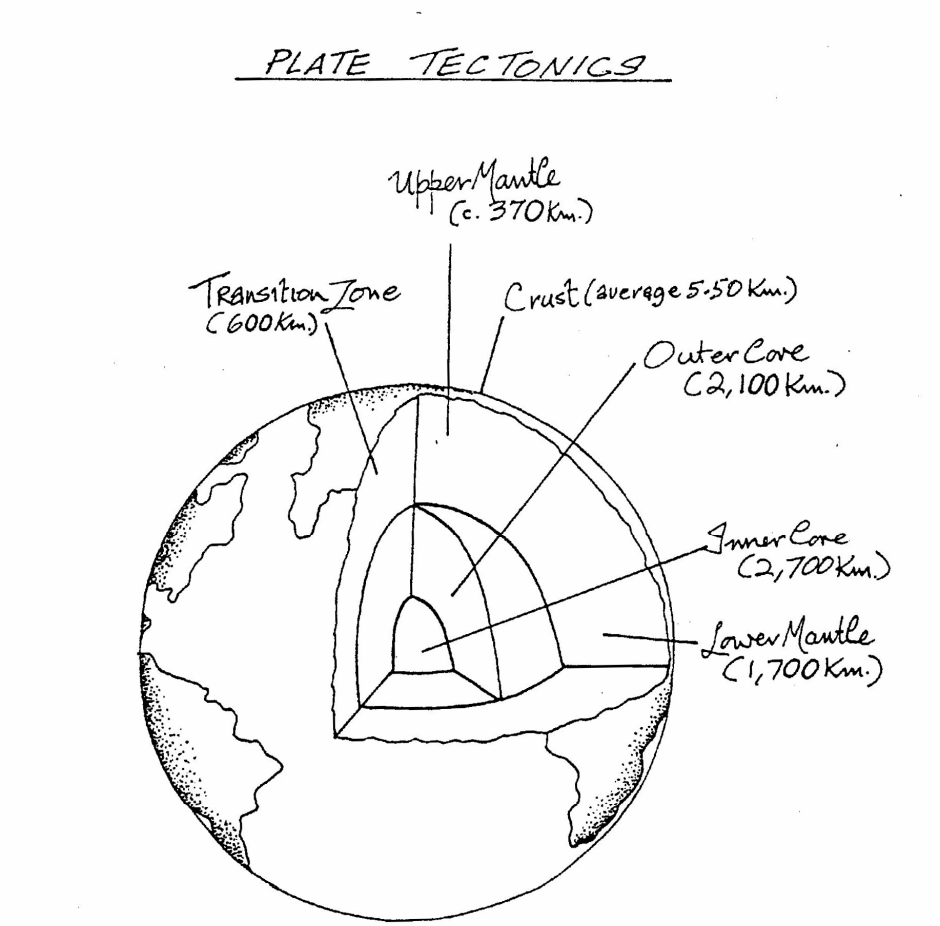
Overall Oxygenation Capacity *

	Trees and vegetation	*Shoreline plankton etc*	*Proportion of present capacity*
Present	70%	30%	= 100%
Capacity reduced @ 20 years	59 ¼ %	19 ¼ %	= 78%
Capacity reduced @ 50 years	53 ½ %	13 ½ %	= 67%

* Note that these figures are derived using the most favourable data and probability density functions.

When carbon dioxide reaches 1%

The oxygen content of the atmosphere will begin to fall away, toward the very end of the process, due to diminishment and increase of various parameters. The oxygen will



steadily combine with atmospheric nitrogen and the volcanic outgassing that will be mentioned later.

In doing so, it would react with the sea (and also carbonaceous rocks, such as limestone) releasing even more carbon dioxide. When the carbon dioxide level reaches approximately 1% of the atmosphere, its greenhouse power will undergo a drastic disproportionate increase. Rising temperatures would speed chemical reactions.

At the end of the process, once all life is extinguished, the temperatures would rise, exceeding the boiling point of water – and in time the Earth's atmosphere would consist of little more than carbon dioxide and superheated water vapour.

Seasonal photosynthesis and oxygen production in Northern and Southern hemispheres

In the conversion of carbon dioxide to oxygen, photosynthesis is a global process that embodies this conversion. Photosynthesis is 'powered' by sunlight. There are seasonal changes in 'daylight hours' and these variations are *directly* related to the duration of photosynthesis.

For a long time a great stabilising feature of atmospheric oxygen was the tropical rainforests. Their tropical location gave them the longest daylight hours throughout the year, with minimal seasonal variation.

Vast tracts of tropical rainforest are destroyed at an ever increasing pace. One conservatively derived estimate shows the complete loss of all tropical rainforests in the earlier part of the next century. This loss is not just the destruction of nature's oxygen producing capacity. The photosynthesis process is integral to balances such as the carbon cycle. As an element in the cycle is diminished, this is analogous to the 'furring-up' of a main artery of a circulatory system, and other arteries would need to *be able* to compensate.

As the tropical rainforests are destroyed, the trees and vegetation of the northern hemisphere would *need* to be increased to compensate for 'lost' photosynthesis capacity. There would need to be another increase *again* for the increase in world population. This artery needs to get *larger* – not what is happening now.

A massive forestation program is required even to balance the lost capacity of the tropical rainforests.

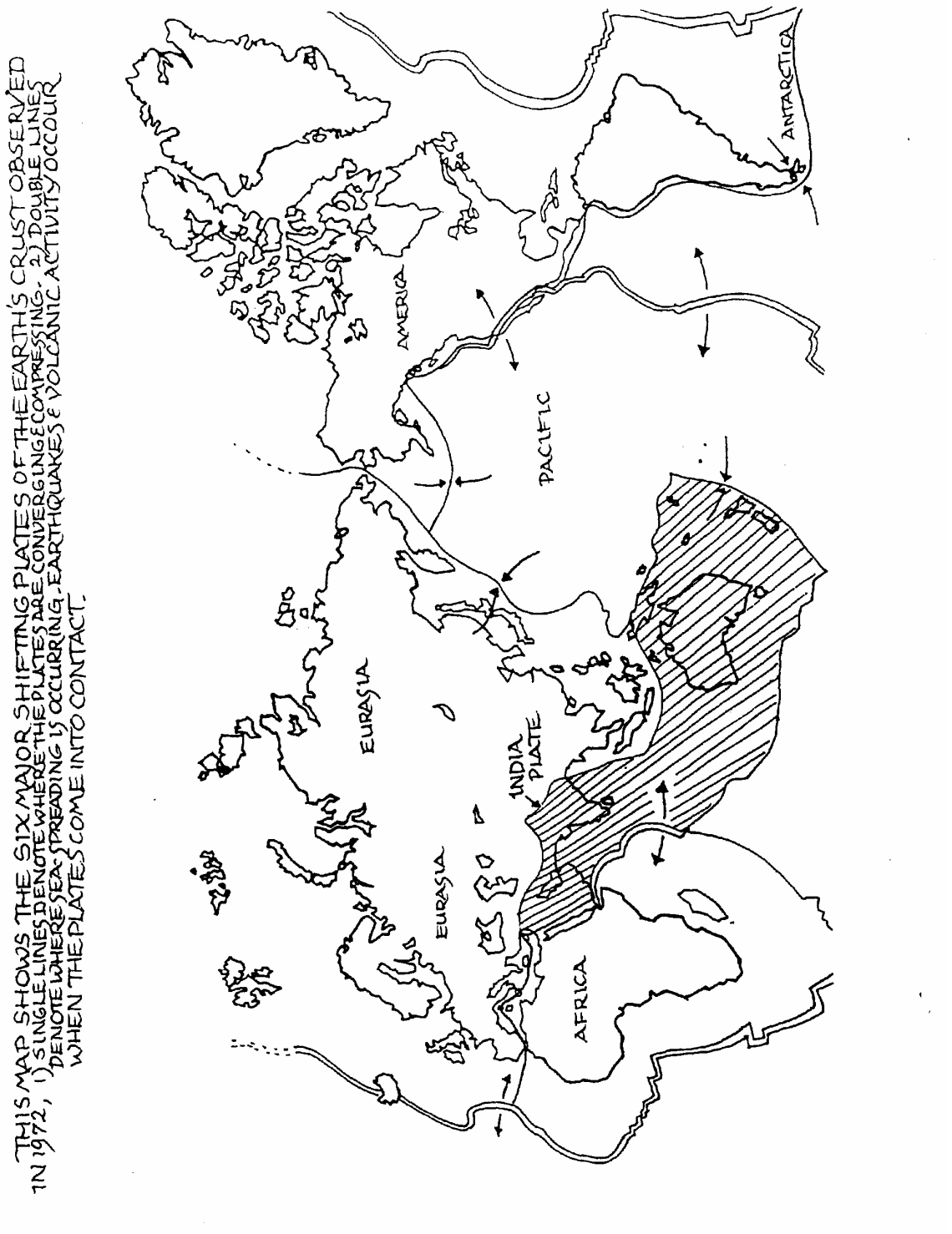
Increased planetary heat energy and convection current shifts beneath the Earth's crust

It is generally considered that depletion of the ozone layer and the general global warming are significant concerns. But there seems to be very little consideration of the effect of global warming in the context of correspondent changes that will take place in the convection currents of the molten material in the mantle, below the Earth's crust.

Today, the volcanic activity that takes place in line with known and studied faults in the surface of the Earth that are related to the current geometry of plate tectonics. However, there are changing environmental parameters that will change the nature of faults in the Earth's crust.

Broadly speaking, there is a casual link between global warming and the new fault lines that will cause phenomenal changes in the behaviour of the Earth's crust. Oxygen depletion, in the atmosphere, is clearly associated with the global warming but will have a subtle effect in the density and striation of the formerly estimated 17,000 million tons of the Earth's atmosphere. Setting aside reassuring government figures the present level of atmospheric oxygen will have diminished by some 20% in twenty years' time.

It should be considered that the disposition of the faults in the geometry of plates is based on a careful balance of forces from above (which will also comprise gravitational attraction from passing bodies) and below the Earth's crust. These forces, that give stability to the Earth's crust, are affected by the parameters of the Earth's heat energy balance – evolved through geological time.


THIS MAP SHOWS THE SIX MAJOR SHIFTING PLATES OF THE EARTH'S CRUST OBSERVED IN 1972, 1) SINGLE LINES DENOTE WHERE THE PLATES ARE CONVERGING & COMPRESSING. 2) DOUBLE LINES DENOTE WHERE SEA-SPREADING IS OCCURRING. EARTHQUAKES & VOLCANIC ACTIVITY OCCOUR WHEN THE PLATES COME INTO CONTACT.
ANTARCTICA
AMERICA
PACIFIC
EURASIA
INDIA PLATE
EURASIA
AFRICA

Heat energy propagation of fault lines

Present day fault lines are heavily dependent on the nature and stability of 'the upper mantle', beneath the Earth's crust.

The effects of global warming (and the gradual absence of the Earth's heat dissipating capacity) together with the elementary laws of heat transfer mitigate towards the gradual increase of heat energy held in the fluid of the mantle. This will, in turn, increasingly perturbate and stress the Earth's crust in *different* patterns. It is generally considered that fault lines and plate movement/activity will correspond to the lines shown in Map 1.

However this is NOT the only parameter feature that relates to heat transfer. The increase in the overall heat energy, and change in the heat transfer characteristics of the upper mantle's convection currents, will clearly cause temperature increases in the lower mantle and outer core. This is beginning to cause the changes that will be fully realised in the some twenty years from now. (1992)

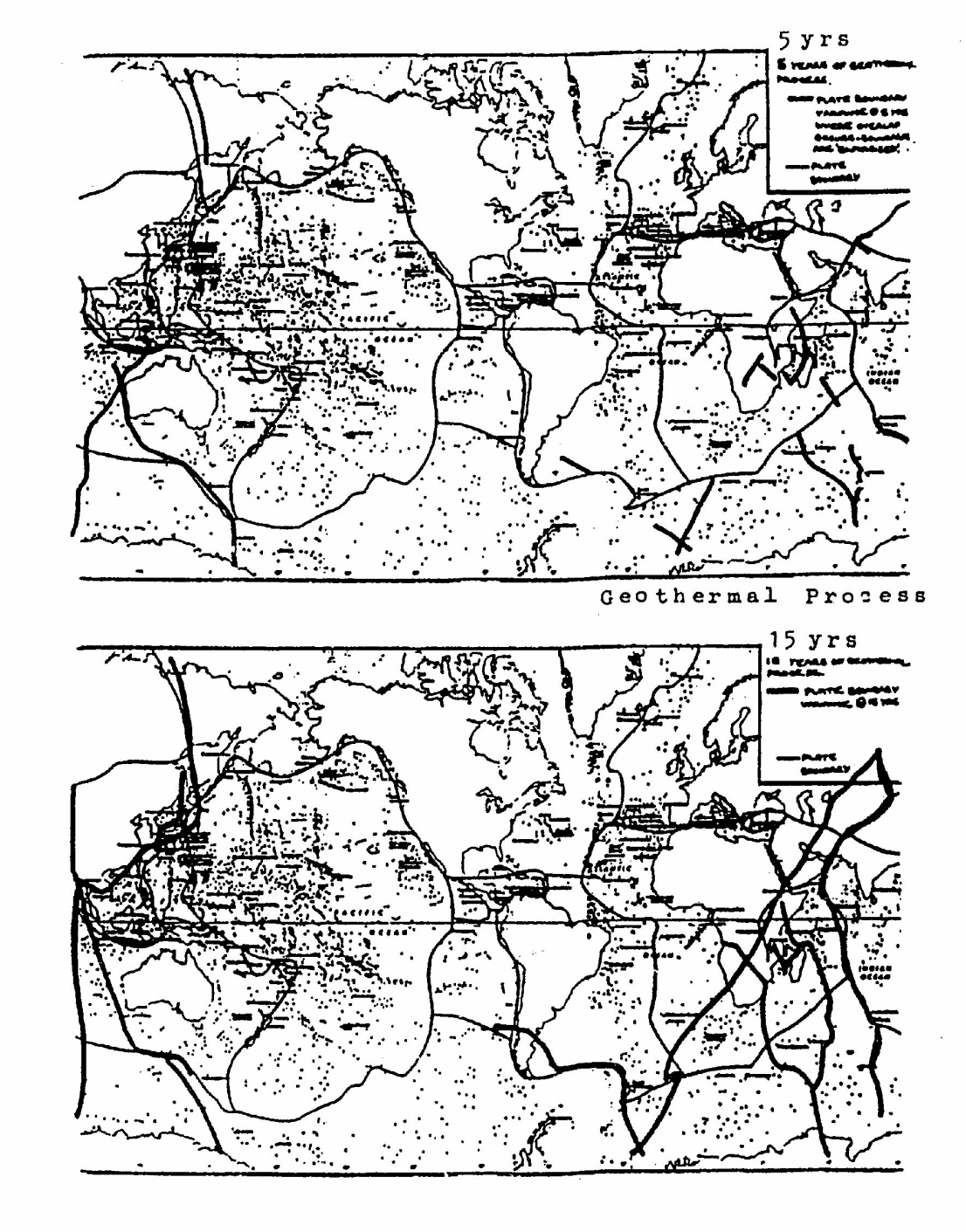
There will be a transition period in which the effect of the 'increased' TOTAL heat energy of the planet will cause an interaction between the 'lower mantle' and the 'outer core'.(* **See Note**)

This process, already beginning, will cause fluid movement from the outer core, up through the lower mantle, into the upper mantle. (The Earth's crust rests on the upper mantle.) Not only will this disturb the thermal equilibrium of the upper mantle, it will have a radical 'further' effect on the convection currents – and hence on the fault lines, plate geometries, plate movements/activity etc.

The overall effect of the 'increasing' temperatures is to give rise to the beginning of massive geological activity (earthquakes, volcanoes, land subsidences, land elevations and massive tidal waves.) THE FORMATION OF THE NEW FAULT LINES IS THE BEGINNING OF THIS CATASTROPHIC PHENOMENON.

One key indicator will be an earthquake that takes place in San Francisco between the years 1998 and 2004. This earthquake will be 'earlier' than its cyclical interval (from past history). Analysis of the seismic data, PARTICULARLY SECONDARY WAVES, will demonstrate changes in refraction patterns (and therefore fluid density changes IN THE MANTLE AND CORE).

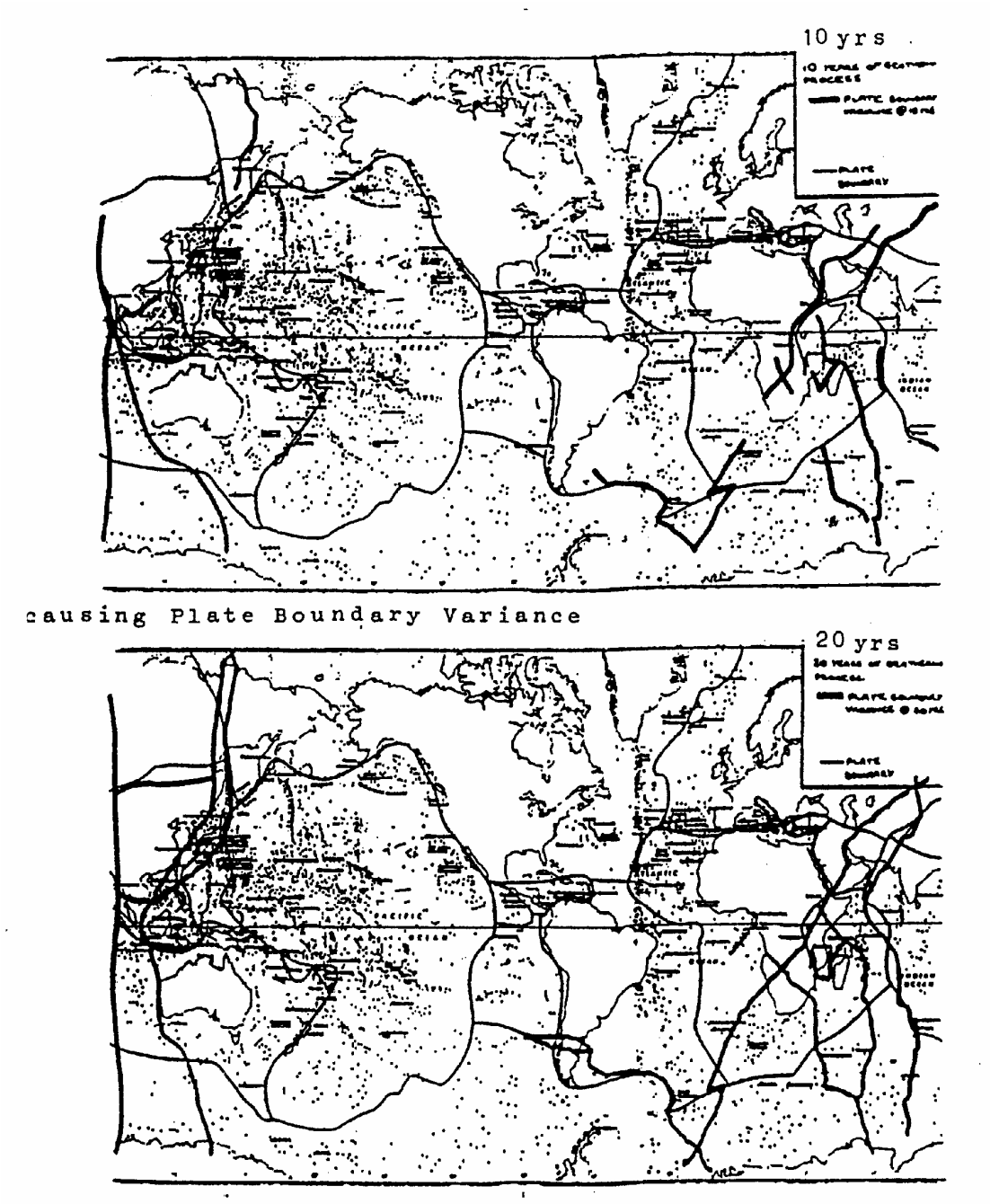
*** A key exposition of the basic factors that will govern behaviour of the interactions of the geothermal energy is reference 1.**



Computer modelling of system INERTIA (and parameters)

The various interactive parameters that contribute to the raising of the planet's retained heat energy are clearly complex – but a process is evident. Moreover attempts to 'lump' parameters or other mathematical simplifications, for purposes of a simple mathematical model, would certainly give dangerously misleading predictions.

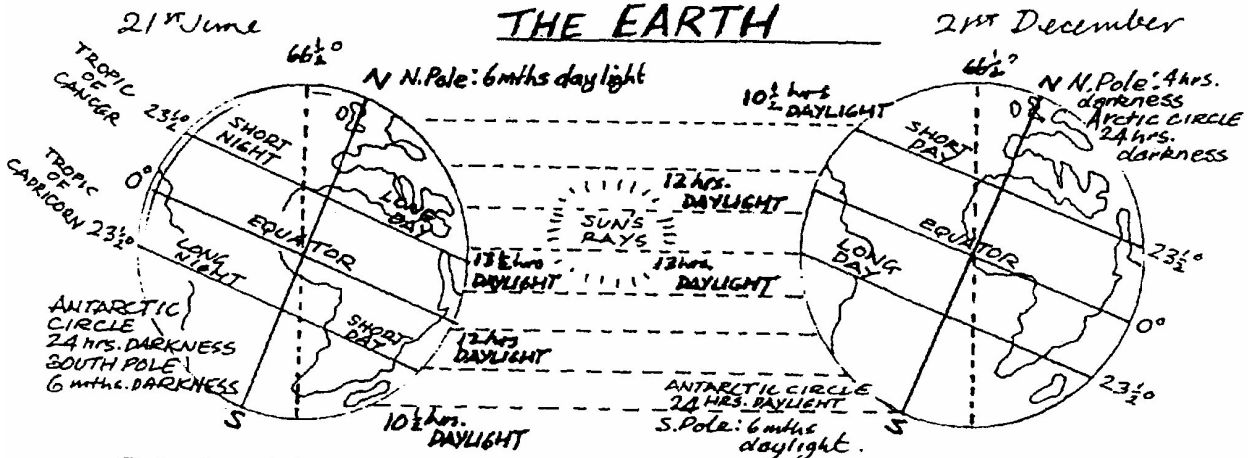
It is evident that to date, only the subsystems have been subjected to modelling attempts. 'Subsystems' may be considered as, say, the very competent ecology models



of Dr Anthony M. Starield (University of Minnesota) and the Arnold Arboretum Institute's model (of Boston Massachusetts), being developed for forest depletion effects.

The effect of each parameter's inertia, in the overall system, will be STOCHASTIC* in nature. And accordingly only models (computer models) which adequately incorporate stochastic probability density functions will be useful tools in perceiving the true nature of inertia changes in the overall system that is associated with global warming.

THE EARTH



DAY & NIGHT

THE EARTH REVOLVES ANT-CLOCKWISE FROM WEST TO EAST AROUND THE SUN, BUT BECAUSE THE SUN IS STATIONARY IN THE SKY, IT APPEARS TO US ON EARTH THAT THE SUN IS MOVING ACROSS THE SKY FROM THE EAST TO THE WEST

AT THE EQUATOR, THE LENGTH OF DAY & NIGHT ARE ALMOST THE SAME ALL YEAR AROUND. ON JUNE 21ST. (SUMMER SOLSTICE) THE ARCTIC HAS A TOTAL OF 24 hrs. OF DAYLIGHT & THE ANTARCTIC HAS 24 hrs. OF TOTAL DARKNESS. THIS SITUATION COMPLETELY REVERSES ON 21ST DECEMBER (WINTER SOLSTICE) WHEN THE OPPOSITE IS TRUE.

THE SEASONS

EACH YEAR, THE EARTH REVOLVES ROUND THE SUN IN AN ANTICLOCKWISE DIRECTION. DURING ITS ORBIT THE EARTH IS TILTED AT A CONSTANT 66½°. THEREFORE IN JUNE, THE NORTHERN HEMISPHERE IS TILTED TOWARDS THE SUN & RECIEVES MORE OF THE SUN'S RAYS IN A DAY RESULTING IN OUR WARMEST SEASON: SUMMER. BY DECEMBER THE EARTH HAS COMPLETED HALF ITS ORBIT ROUND THE SUN SO THAT THE SOUTHERN HEMISPHERE (NOW TILTED TOWARDS THE SUN) HAS ITS SUMMER. E.G. ON JUNE 21ST. THE SUN IS DIRECTLY OVER THE TROPICS OF CANCER (23½°N) & THIS IS MIDSUMMER IN THE NORTHERN HEMISPHERE. SIMILARLY MIDSUMMER IN THE SOUTHERN HEMISPHERE IS ON THE 21ST. DECEMBER, WHEN THE SUN IS DIRECTLY OVER THE TROPIC OF CAPRICORN (23½°S).

EARTH DATA

MASS OF THE EARTH:
5·9 x 10²¹ TONNES.

VOLUME OF THE EARTH:
1,083,230 x 10⁶ cu. Km.

TOTAL SURFACE AREA
510,000,000

LAND AREA (29.2%)
149,000,000 sq. Km.

WATER SURFACE (70.8%)
361,000,000 sq. Km.

RADIUS AT EQUATOR
6,356.9 Km.

EQUATOR DIAMETER
12,756.8 Km.

EQUATOR CIRCUMFERENCE
40,077. Km.

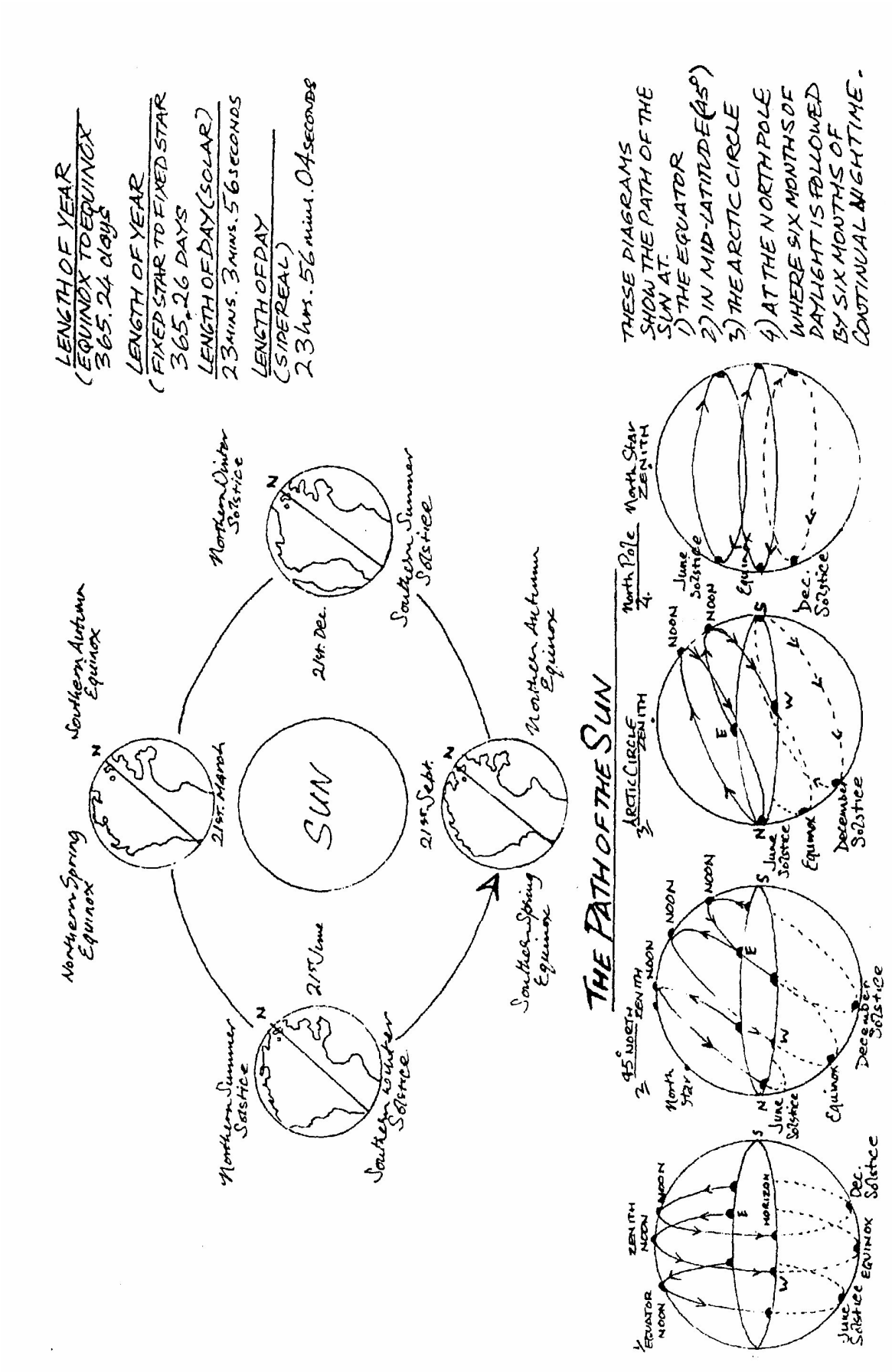
MERIDIONAL CIRCUMFERENCE
40,009 Km.

POLAR DIAMETER
12,713.8 Km.

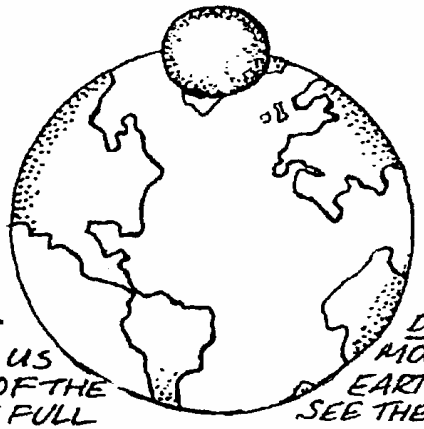
POLAR RADIUS
6,356.9 Km.

NEAREST DISTANCE FROM THE SUN
147,000,830 Km.

FURTHEST DISTANCE FROM THE SUN
152,007,016 Km.


LENGTH OF YEAR
(EQUINOX TO EQUINOX
365.24 days
LENGTH OF YEAR
(FIXED STAR TO FIXED STAR
365.26 DAYS
LENGTH OF DAY (SOLAR)
23HRS. 3MINS. 56 SECONDS
LENGTH OF DAY
(SIDEREAL)
23hrs. 56 mins. 04 seconds
Northern Spring Equinox
Southern Autumn Equinox
Northern Winter Solstice
Southern Summer Solstice
Northern Summer Solstice
Southern Winter Solstice
Southern Spring Equinox
Northern Autumn Equinox
SUN
21st March
21st June
21st Dec.
21st Sept.
THE PATH OF THE SUN
THESE DIAGRAMS SHOW THE PATH OF THE SUN AT:
1) THE EQUATOR
2) IN MID-LATITUDE (45°)
3) THE ARCTIC CIRCLE
4) AT THE NORTH POLE
WHERE SIX MONTHS OF DAYLIGHT IS FOLLOWED BY SIX MONTHS OF CONTINUAL NIGHTTIME.
North Pole
North Star Zenith
Arctic Circle
Zenith
45° North
Equator
Noon
Horizon
June Solstice
December Solstice
Equinox
Dec. Solstice

THE MOON



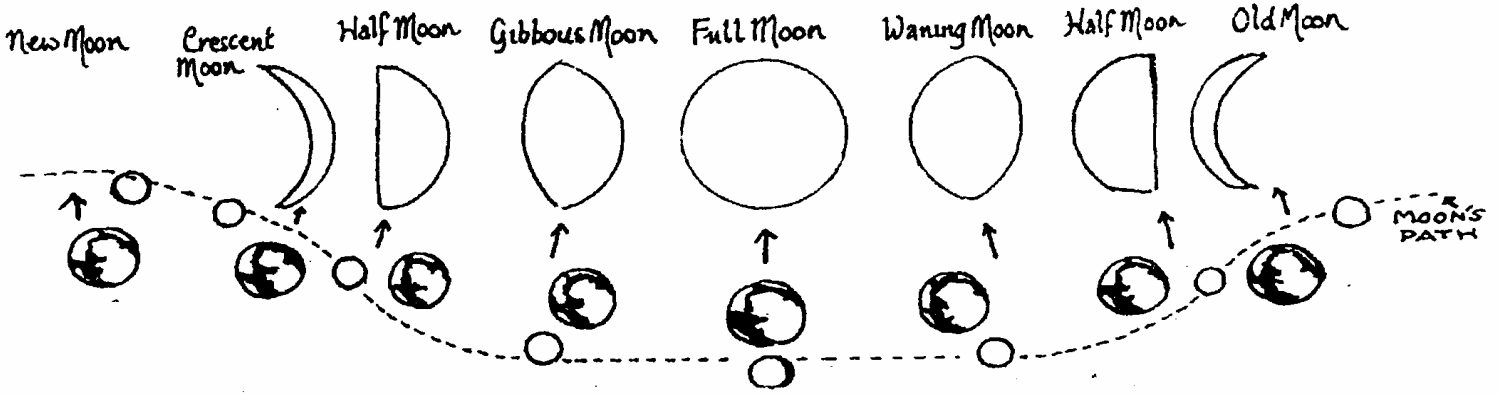
THE MOON ROTATES ONE COMPLETE TURN ON ITS AXIS IN JUST OVER 27 DAYS - SLOWER THAN THE EARTH, BUT SINCE THIS CORRESPONDS TO ITS PERIOD OF REVOLUTION AROUND THE EARTH, IT MEANS THAT THE MOON ALWAYS SHOWS THE SAME HEMISPHERE TO US - SO WE NEVER SEE THE DARK SIDE OF THE MOON!. THE INTERVAL BETWEEN ONE FULL MOON E THE NEXT IS APPROX. 29½ DAYS - A LUNAR MONTH. THE CHANGES IN THE SHAPE OF THE MOON ARE CAUSED BY ITS CHANGING POSITIONS RELATIVE TO US ON EARTH. THE LIGHT OF THE MOON, LIKE THE LIGHT FROM THE PLANETS IS CAUSED BY ITS REFLECTING THE RAYS OF THE SUN.

MOON DATA: DISTANCE FROM EARTH (MEAN) - 384,199.1 Km. AVERAGE SPEED IN RELATION TO EARTH - 3,683 Km/h. SIZE & MASS:- DIAMETER OF THE MOON 3,475.1 Km. MASS - 7348×10^{9} TONNES DENSITY 3·344 times WATER. THE MOON IS APPROX. 400 times SMALLER THAN EARTH, BUT 400 TIMES CLOSER · SO WE SEE THEM FROM EARTH AS THE SAME SIZE.

TEMPRATURES: HOTTEST WITH THE SUN OVERHEAD THE LUNAR EQUATOR - 117.2°C (243°F). SINKING TO - 162.7°C (-261°F) AT NIGHT.

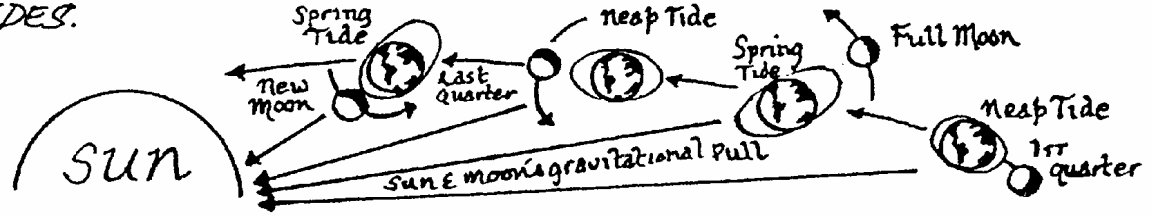
LIGHT & VISIBILITY: - ONLY 59% OF THE MOON'S SURFACE IS EVER VISIBLE FROM EARTH. REFLECTED LIGHT FROM THE MOON TAKES 1·25 SECS TO REACH US.

PHASES OF THE MOON

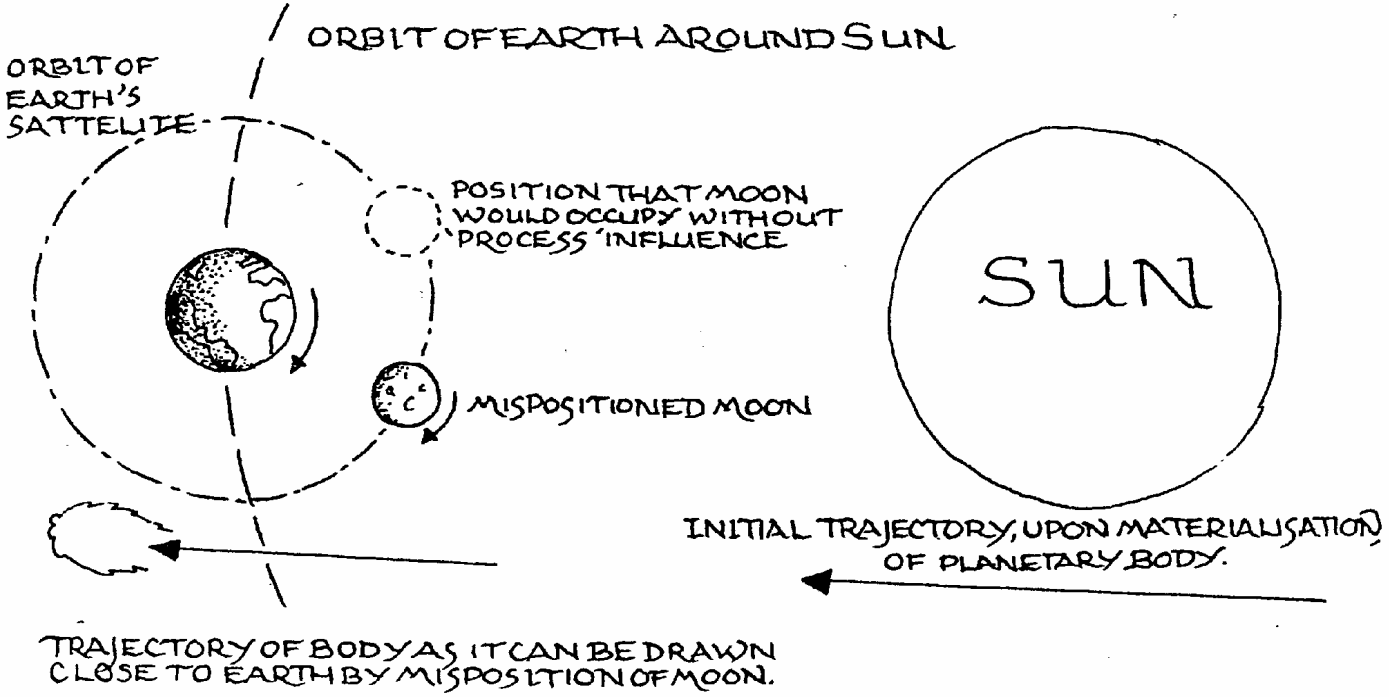


TIDES & THE MOON

THE GRAVITATIONAL PULL OF THE MOON (& THE SUN) - CAUSES THE RISE & FALL OF THE OCEAN'S TIDES (RATIO PULL: MOON-100%: SUN 46.6% of MOON). THIS EFFECT IS GREATEST ON THE EARTH HEMISPHERE FACING THE MOON & CAUSES TIDAL BULGE WHEN THE SUN, MOON & EARTHS GRAVITATIONAL FORCES PULL TOGETHER (NEAR NEW & FULL MOON TIMES) EARTH'S TIDES ARE HIGHEST (SPRING TIDES) & LOWER LOW TIDES; - THE SMALLEST TIDES OCCURING WHEN THE LUNAR & SOLOR FORCES ARE NOT ALLIGNED, RESULTING IN SMALLER NEAP TIDES.



EFFECT OF PLANETARY BODY



The consequences of departure from the planet's thermodynamic equilibrium will be irreversible in 20 years. I repeat: only expansive activity, implementing the solution DURING THE NEXT TEN YEARS, will lessen the drastic future events of this process.

* Please see reference 2 for a concise outline of the basic theory:

Very simply, it should also be realised that 'deterministic' models are not capable of the analysis of such a system. They do not build chance into their basic parameters or subsystems. Stochastic models allow for such parameter variances – however, the average behaviour of many runs of the model is consistent and predictable.

The correct identification of the System's Stochastic Probability Density Function defines whether large or inordinately large matrices are '*inverted*' within the model.

Interaction of global warming, density changes, 'tilt' and geothermal activity.

It is considered that informed sources are already aware of a 'tilt' in the axis of rotation of the Earth. A tilt of the Earth's axis of rotation, some 2 degrees from the *previous* 66 ½ degrees, is of greater significance than initial observations might show. This will increase by a further 3 degrees during the next 20 years, giving a total increase of 5 degrees.

The tilt is an indication that the geothermally induced density changes beneath the Earth's crust are taking place already.

This is a cycle of *increasing process inertia* – ie simply: increased rate of heat retention, therefore more density changes, therefore more stress on the crust *causing* new fault lines and geological activity. However, because of the tilt (and associated 'mass moment of inertia' changes etc. caused by density changes in the Earth) – THE INTERACTIVE ORBITAL PATTERN OF THE EARTH AND MOON WILL CHANGE.

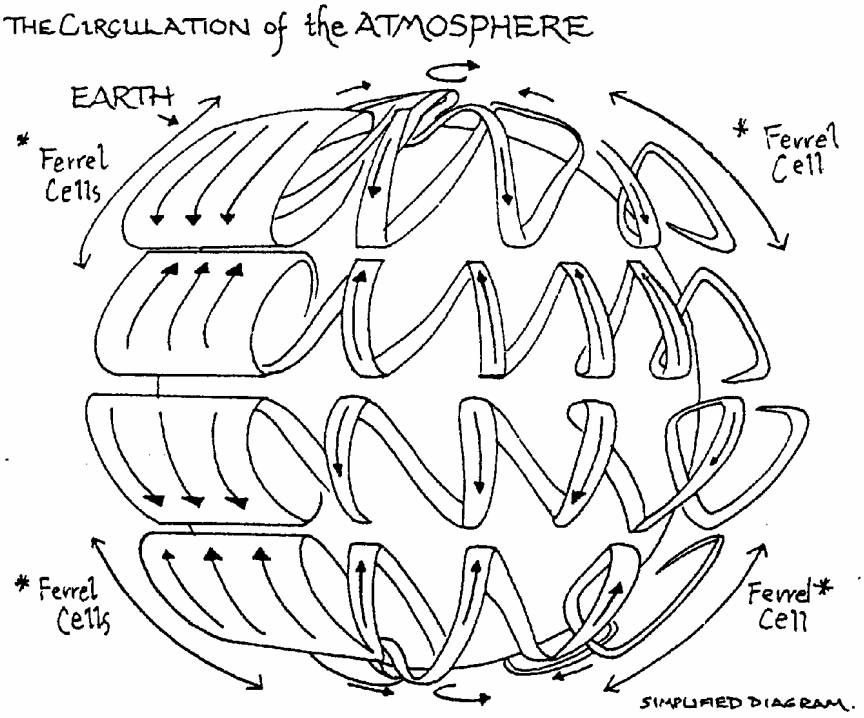
Restating this point:

Density changes, correspondent with the convection current changes, will increase the magnitude of forces pressing the crust outward. Because of these forces, which are consequence of physics of the Earth's interior density shift and rotational speed, the tilt (and mass moment of inertia changes, coriolis effects and so forth – as the Earth spins) WILL CAUSE A SLIGHT CHANGE IN THE ORBIT OF THE MOON.

Effect of a planetary body

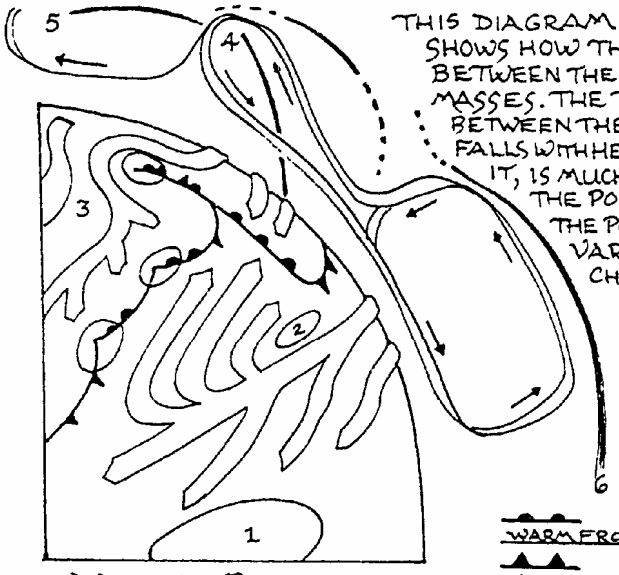
The phenomena described in the next sections are considered to be the outcome of the process already taking place, that is instigated by the global warming process.

However, there is an additional parameter, evident in the calculations of the 19 pages of Einstein's formulae. This is the massive amplification of the devastating effects caused by severe gravitation attraction from a massive planetary body. The analysis identifies the nature of its 'unseen' arrival (within the 50-year process time), and how it will amplify the 'magnitude' of process events greatly. Variance in parameters, between the earth and the moon, will draw this body catastrophically close to the earth.



THE ATMOSPHERE MAINTAINS ITS BALANCE BY THE TRANSFER OF HEAT, MOISTURE & MOMENTUM FROM LOW LEVELS AT LOW LATITUDES TO HIGH LEVELS AT HIGH LATITUDES WHERE THE HEAT IS RADIATED INTO SPACE. THIS CIRCULATION APPEARS TO HAVE THREE DISTINCTIVE "UNITS" IN EACH HEMISPHERE. IN THE POLAR & EQUATORIAL UNITS, THE CIRCULATION IS THERMALLY DIRECT: WARM AIR RISES & COLD AIR SINKS, ~BUT THE MID~ ~LATITUDE CIRCULATION IS DISTORTED BY THE POLAR FRONT. (AS SHOWN). THIS IS KNOWN AS THE Ferrel Cell

FRONTAL SYSTEMS



THIS DIAGRAM OF A PORTION OF THE EARTH, SHOWS HOW THE FRONTAL SYSTEMS DEVELOP BETWEEN THE POLAR & THE TROPICAL AIR MASSES. THE TROPOPAUSE, I.E, THE LINE BETWEEN THE TROPOSPHERE IN WHICH TEMPRATURE FALLS WITH HEIGHT, AND THE STRATOSPHERE ABOVE IT, IS MUCH HIGHER IN THE TROPICS THAN IN THE POLAR CELL. BETWEEN THE CELLS, THE POLAR FRONT CAUSES CONSTANT VARIATIONS OF HOT & COLD FRONTS & ∴ CHANGING WEATHER PATTERNS. SURFACE WINDS (ALSO SHOWN) HELP TO PLAY A MAJOR PART IN RESULTING CLIMATE VARIATIONS.

1) Area of Low Pressure
2) Area of High Pressure
3) Area of Low Pressure
4) Polar Front
5) Polar Cell Tropopause
6) Tropical Tropopause

Trees, heat transfer, changing wind patterns, increasing tropospheric distribution of ozone destroyers

It is already well known that the power and propensity of the earth's atmosphere to *hold* heat energy, is increasing. Whilst this is true for the atmosphere as a whole, there is a greater 'concentration' and effect of this property at certain levels in the atmosphere (and over certain surface areas). For instance in the Northern Hemisphere a new ozone hole is accompanied by abnormally high levels of ozone-destroying catalysts such as Chlorine Monoxide and Bromine trioxide.

It is clearly perceived that the complex nature of the Earth's energy balances have evolved through 'geological time'. It is logical, considering the elementary laws of heat transfer and thermodynamics, that these systems developed after earth's Crust became stable. Clearly the transmission of heat energies between various zones within the earth's core and, eventually, to/from the crust *work at a level of delicacy and complexity that has evolved through geological ages.* Given that this is clearly the case, heat exchange mechanisms, throughout the planet, involve interactions *across* the earth's surface, with the fluid below the crust, and the atmosphere. The oceans, the ice caps and the wind systems were 'key' to the planetary energy balance – whose evolution gave stability to the earth's crust.

The pattern of the winds, and their interaction with the trees, oceans and ice caps is changing rapidly from that 'stabilised' through geological time. The effects of massive acceleration in atmospheric carbon dioxide and tree destruction go *beyond* the narrow perspective of simple 'seasonal' temperature variances. There is a fundamental change, taking place already, in the convection currents (and heat energy level) of the fluid below the crust. The two-degree tilt in the earth and the wind system changes already evident, affect parameters critical to the stability of the earth's crust.

But there is another consideration, relating to the *previously undiminished concentration* of another interactive process feature/element. This 'other' interactive change relates changes in the patterns of winds and the shifting of their sites of stability in the troposphere. This phenomenon is attributable to increasing divergence in temperature extremes in the atmosphere's global heat exchange and the escalating demise of parameters associated with trees (ie when considering these 'system influences', the south-east Asian rainforests are now at one-third of their area 1900-1950. Worldwide, 50 Acres/Minute are lost).

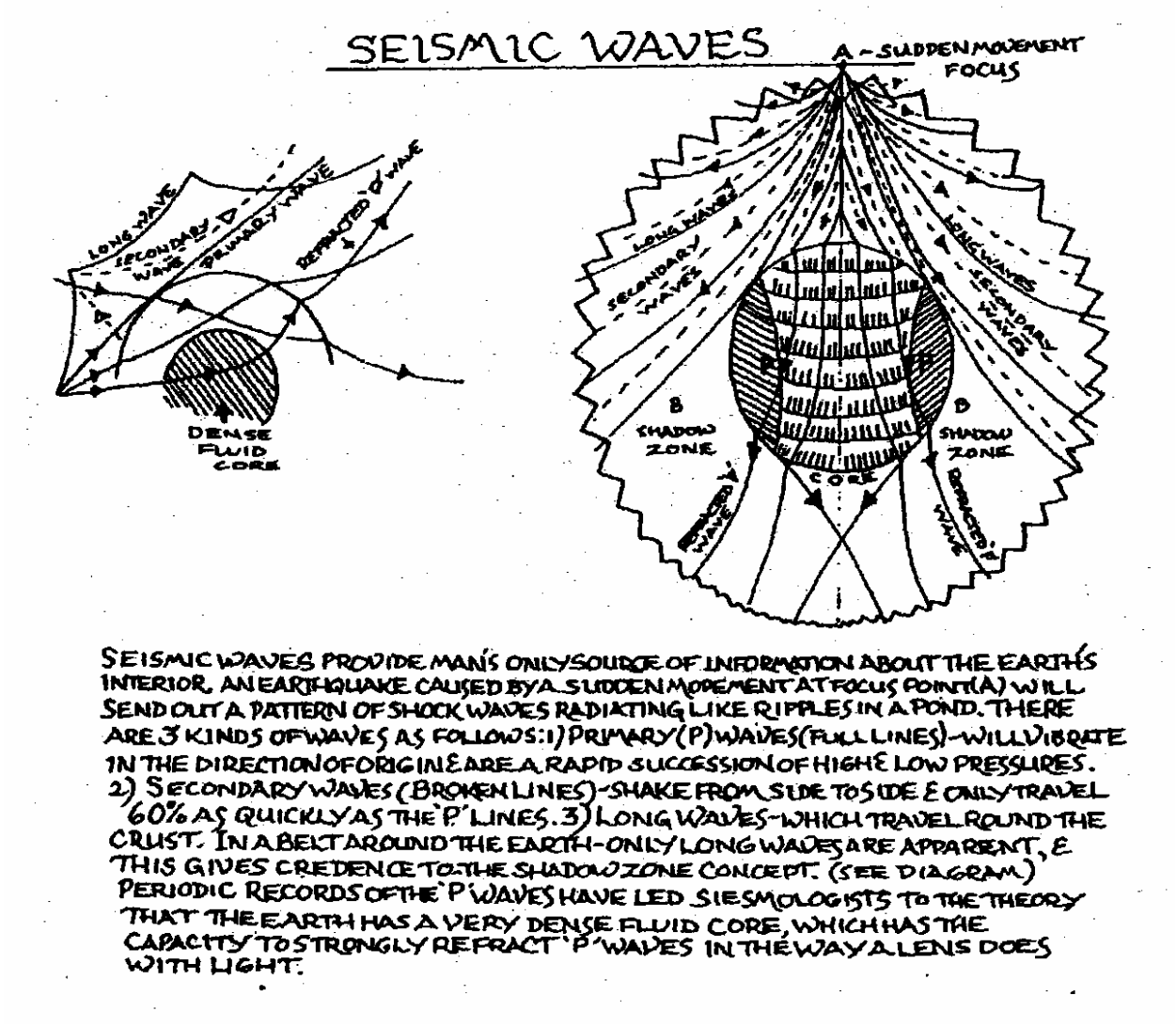
The effect of trees on the climate extends beyond the mere conversion of carbon dioxide into oxygen. They also interact with the winds, and the changes in the winds clearly affect climate. We can already see this changing in weather we experience today.

Subtle changes in the energy balance of the troposphere causes an escalating trend of extreme behaviour in the temperature, velocity and stability of wind patterns on a global scale – these effects have been clearly evidenced in the recent worsening of weather patterns throughout the world. (Subsidiary effects of these changes in wind patterns are increasing levels of Chlorine Monoxide (ClO) and Bromine (BrO_3) in both ozone holes during the warmer seasons.)

Changes in the troposphere's wind patterns mean those winds that would otherwise be 'oxygenated' (and hence have lower heat retaining capacity) have less influence on the overall pattern of global winds – because there are, quite simply, vastly fewer trees in the constant oxygenating zone of the tropics. These wind changes, primarily associated with stable heat exchange systems, are tending to be 'shifted' and are affecting the nature of the atmosphere's global heat exchange with the earth's surface. This means that greater heat energies are 'held' on the surfaces of the crust – which then further participate in the elevation of temperatures in the convection currents of the upper mantle. (Therefore heat transfer characteristics of the upper mantle and crust (1900-1950) which could be characterised by the laplace equation (for the thermodynamic system) equated to zero, are now very different. The atmosphere is equivalent to

a system with internal heat generation capacity (and therefore also the upper mantle), so an advanced Partial Differential Equation (PDE) application of the laplace equation (using closed cycle integrations) cannot be equated to Zero. Adequate representation in a computer model is an immensely difficult task.)

The *change* in the fluid movement of the upper mantle has already caused the two degrees increase in the tilt of the earth, which has a 'knock-on-effect' in the wind patterns of the earth. When the wind patterns change even more this will promote more Chlorine Monoxide etc. YET OXGENATED AIR FROM THE TROPICAL RAINFORESTS SHOULD BE THERE TO *BALANCE* HEAT TRANSFER IN THE TROPOSPHERE, FOR THE SUBTLE BUT CRITICAL, BALANCE OF WINDS *AND* HEAT TRANSFER PATTERNS GLOBALLY – BUT THESE TREES ARE NO LONGER THERE!



SEISMIC WAVES PROVIDE MAN'S ONLY SOURCE OF INFORMATION ABOUT THE EARTH'S INTERIOR. AN EARTHQUAKE CAUSED BY A SUDDEN MOVEMENT AT FOCUS POINT (A) WILL SEND OUT A PATTERN OF SHOCK WAVES RADIATING LIKE RIPPLES IN A POND. THERE ARE 3 KINDS OF WAVES AS FOLLOWS: 1) PRIMARY (P) WAVES (FULL LINES) - WILL VIBRATE IN THE DIRECTION OF ORIGIN & ARE A RAPID SUCCESSION OF HIGH & LOW PRESSURES. 2) SECONDARY WAVES (BROKEN LINES) - SHAKE FROM SIDE TO SIDE & ONLY TRAVEL 60% AS QUICKLY AS THE 'P' LINES. 3) LONG WAVES - WHICH TRAVEL ROUND THE CRUST. IN A BELT AROUND THE EARTH - ONLY LONG WAVES ARE APPARENT, & THIS GIVES CREDENCE TO THE SHADOW ZONE CONCEPT. (SEE DIAGRAM) PERIODIC RECORDS OF THE 'P' WAVES HAVE LED SIESMOLOGISTS TO THE THEORY THAT THE EARTH HAS A VERY DENSE FLUID CORE, WHICH HAS THE CAPACITY TO STRONGLY REFRACT 'P' WAVES IN THE WAY A LENS DOES WITH LIGHT.

As the heat energy increases in the upper mantle (and fluid below) the tilt of the earth will increase. (To 5 degrees at 20 years.)

Trees are required globally to produce oxygen (for humans to breathe) but also to rectify oxygenation/heat transfer characteristics of the troposphere and HENCE ALSO TO RESTORE WIND PATTERNS TO THEIR PREVIOUS ORIENTATIONS.

Typical changes at end of first process stage (20 years)

The USA

Presently, the weather and climate conditions of North America are dominated by the influence of the great land (and ice) mass to the North. This situation can be thought of as cold 'radiating' from the central part of Canada (Manitoba, for instance). Only the mountain ranges (and to some extent the warm gulf of Mexico) distort the present continental influence. Otherwise, minimum temperatures rise in concentric bands, to the subtropical fringes of southern California and Florida.

However, this will change and be very different in 20 years.

Across North America there will be a habitable zone that is correspondent with 'hot/cold lines' of map 1. As a general trend across the world, the higher ground and mountainous areas will be better for survival. The eastern part of the North American continent will be subject to unbearable heat – the animals will migrate toward the western part of the North American continent. It is considered that animal life on this and the other continents will reduce on average by 50%, because of the climate changes that will have taken place after the first twenty years of the process.

The weather will be characterised by storms, cyclones, tornadoes and electrical storms whose extreme magnitude is not presently experienced.

It has already been mentioned that at the juncture 20 years hence, the 'inertia' effects in the weather, climate and geothermal system will be 'irreversible'. At this time the situation will be generally appreciated and understood but it will be too late.

There will be an initial 'ramp-up' of temperatures, at various locations in the United States, which will cause temperatures of 200 F. (A secondary rate of temperature increase will then dominate till the end of the 50-year period, at which time the entire environmental system will have been arrested).

At the end of the 20-year initial period, there would be a side-effect, from the North American climate, that will trigger the cold part of Australia (then at –59F) to begin a further decline into an Ice Age.

Between the years 1998 and 2004 there will be a transition period in which the effect of the increased total heat energy will cause an earthquake in San Francisco. This will be some years before it is expected, on the basis of previous cyclical averages.

There will be perceived lengthening, at the time of this geological activity, of the San Andreas fault. This will also be another indication that previously unperceived phenomena are already causing new behaviour in the interaction of fault lines and plate tectonics. The San Francisco earthquake will be a KEY INDICATOR.

The point here is that this earthquake will be an essential opportunity for the gathering of SEISMIC DATA. The seismic data, particularly with regard to the divergence of secondary waves, will not be as expected, and will correspond to geothermal and density changes, as indicated in this report elsewhere.

Australia

The coastline (indicated map 1) of the cold western part of Australia will be subject to the beginning of a major land subsidence. The subsidence, beginning in the western part of Australia, will eventually cause a reduction of some fifty percent in the total land mass area that exists today. (A higher sea level will be partially responsible.)

The line shown as the intersection between the hot and cold climate zones will contain the habitable areas, because of the lower temperatures that will exist there. There will be large-scale destruction of many species of Australian fauna.

Ice Caps
In line with the considered trend, the ice caps will undergo a severe acceleration in their rate of melting. The full effect of the accelerated melting will be complete by 2025.

The *first* volcanic eruptions will be at the South Pole. There will also be a land mass rise at the start of this volcanic activity.

Russia
It is considered that the major land subsidence indicated, corresponding to the new fault indicated on map 1, will take place in approximately twenty years' time also.

Central Africa
It can be noted from map 1 that there is an intersection to two major fault lines located in Central Africa. There will be major earthquakes (and associated activity) at the intersection of these plate forces. It has been mentioned that the full development of geological parameters, to produce these faults, will be complete in approximately six years. After this time the faults themselves will begin substantive development.

Europe and England
Presently, the overwhelming influences on Europe's climate are the Atlantic Ocean, the cold land-mass of Asia and the warm air mass over the ocean with its warm Gulf stream. The Gulf stream is so effective in elevating temperatures that, mountains apart, where the Atlantic and Saharan influences coincide in southern Spain, winter temperatures presently can be as high as Florida – ten degrees of latitude or 700 miles farther south.

England will be an indication of the severity of upcoming changes that Europe will experience, during process. In the year 2012 there will be nationwide crop losses. The temperature, twenty years hence, in England will begin at 120F and constitute the start of the irreversible stage of temperature increase. Throughout England, at this time, there will be widespread flooding, together with a phenomenon of frequent large-scale fires that may be likened to the spontaneous fires which occur in Canada/North America after prolonged arid conditions.

Heat energy of the planet grows and evolution's delicate heat transfer mechanisms disintegrate!

Total planetary heat energy, weather system heat exchange and progressive weather system instability

The weather systems of the northern hemisphere (and Artic), the southern hemisphere (and Antarctic) and tropical zone have been evolved through geological time.

The transfer of heat energy, *within* and *between* these weather systems clearly interacts with the earth's careful conduction and movement of heat energy.

The delicate heat transfer and heat energy balances have evolved to form a balance between the earth's molten core, the 'apple skin thin' outer layer called the crust and the radiant heat from the sun.

The balances of heat energy involve heat energy transmission through the seas, sea floors, surface land masses, the moving molten fluid below the crust, and the heat energy of the

earth's atmosphere. Through many millions of years the heat balance of the planet has been a *balance* of heat from the sun on the earth's 70% water/30% land surface and the heat *beneath* the earth's surface. The atmosphere has evolved a certain level of efficiency (through geological time) as a 'vehicle' for moving heat to and from different areas of the planet. The atmosphere's role in distributing heat from the warmer to colder areas of the planet is the stabilised pattern of weather that has evolved over many millions of years.

We, all of us, notice that heat moves from 'hot' locations to cold locations. We see this, for example, when the 'heat energy' in our cup of tea is transferred to the colder air that surrounds and is in contact with the tea. We also see heat transfer in our ovens when we notice the greater heat energy level at the top of the oven – warm air rises, of course. We also observe a similar circulation of heat when we 'heat' a pan of water. We see that when heat is added to the water (faster than it can lose it to its surroundings) the water will eventually boil. The ability of different liquids and gases to hold and 'move' heat clearly varies (this is known, simply, as specific heat capacity). As the water's circulation of heat gets faster, approaching boiling, we notice agitation of the liquid increases. We can clearly appreciate such a simple phenomena without resorting to the laws of thermodynamics.

Hence air masses move warm air (and hence transfer heat energy) from the 'warmer' surfaces of the planet to the colder surfaces of the planet. (Also it is logical to realise that there is an obvious connection with the way molten liquid/fluid, beneath the earth's surface, moves.) The weather systems and the other Heat Transfer systems 'above', 'below' and 'at' the surface of the earth are very clearly *interlinked*. There developed a careful balance, over some 386 million years, that not only kept the surface of the earth stable but allowed the evolution of many forms of life.

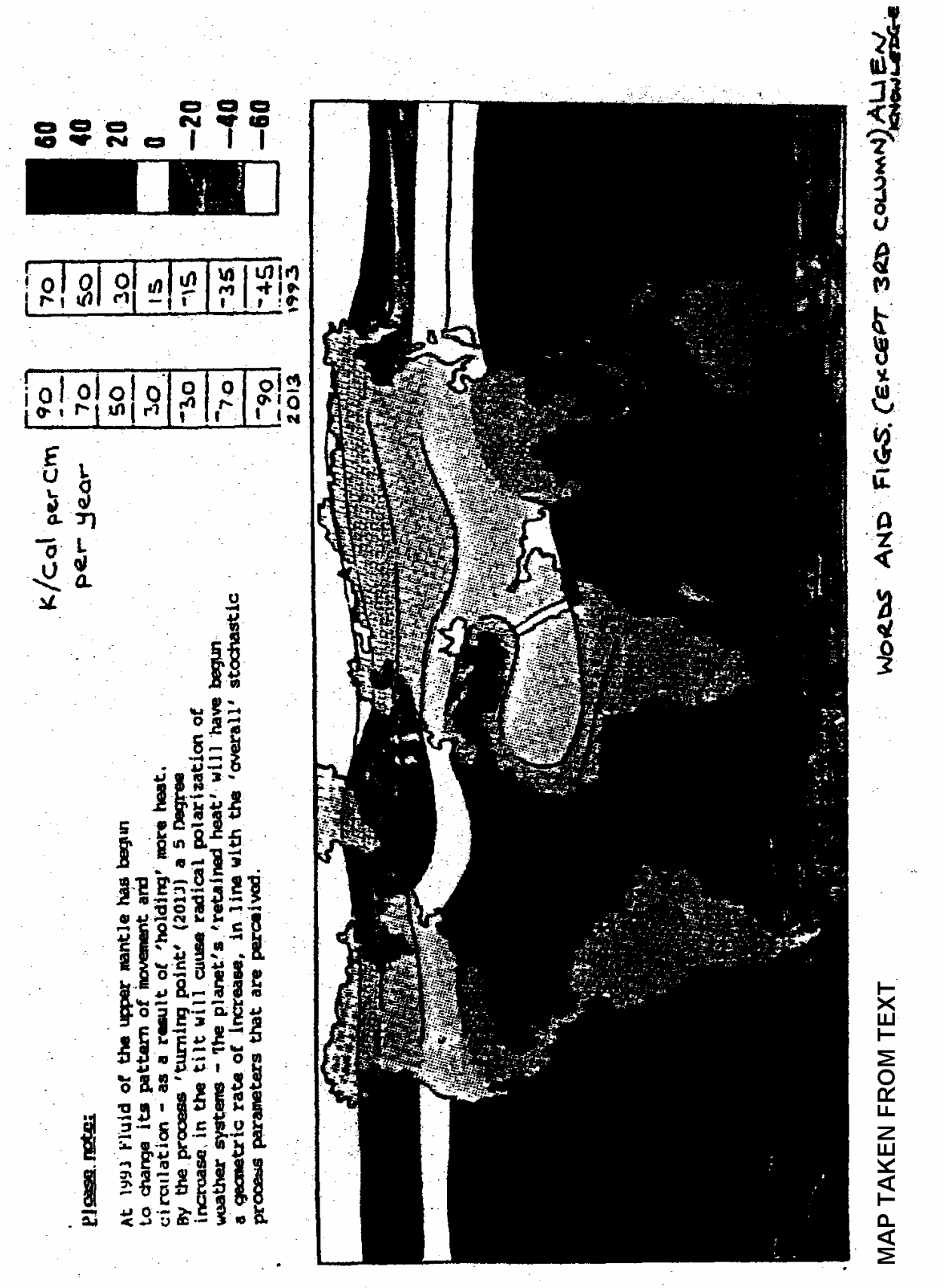
The heat energy from the sun (to the earth) has remained constant. Yet activity on the earth's 'wafer-thin' surface is giving the planet ever increasing amounts of 'extra' heat energy that is unprecedented in the history of the earth's surface and atmosphere. (And if we go back to our very apt analogy of heating a pan of water – we know about the *'agitation'* of the liquid and we know nature cannot remove all this artificially produced heat.) There is nothing in space, around our planet, that can take away the extra heat.

If the maps showing radiated heat, from the earth's surface, are studied we can see the equatorial region of the planet ought to radiate the most heat. It can also be seen that the colder regions of the ice caps 'draw in' heat energy. So a circulation is clear, in the way air masses move, that corresponds to this. So the air 'absorbs' and 'moves' heat energy as a key part of this process.

The oceans also move heat energy in this global heat transfer network. The *effect* of insulatory composites of various pollutants at key ocean bed locations is *yet* to be assessed. However it is easy to see that deficient or partially blocked heat 'outlets', on the ocean bed, will cause this geothermal energy to seek other 'outlets'. This process will 'stress' the earth's crust in new ways. As geothermal forces on the crust 'shift', fissures and plate boundaries will be stressed in new patterns.

Further study of the radiated heat energy shows that the earth's surface has become a great deal warmer in the interval 1973-1993. We can easily see that we have produced a great deal more heat – the carbon dioxide and ozone destruction shows us this. But is there any simple evidence to show that the efficiency of nature's methods of moving heat has diminished?

An obvious indicator of efficient and stable heat transfer is the weather over the last 20 years. The extremes of weather over the last 20 years show that 'something' is certainly causing progressive *'agitation'* of the planet's systems. Although somewhat simplified, the diagrams for polar and tropical weather systems *and* tropopause are useful. It is self-evident a 'stable' nature of air movements is consistent with a constant and *continuous* process of heat circulation.


K/Cal per Cm per Year
90 70 50 30 -30 -70 -90
2013
70 50 30 15 -15 -35 -45
1993
60 40 20 0 -20 -40 -60
Please note:
At 1993 Fluid of the upper mantle has begun to change its pattern of movement and circulation - as a result of 'holding' more heat. By the process 'turning point' (2013) a 5 Degree increase in the tilt will cause radical polarization of weather systems - The planet's 'retained heat' will have begun a geometric rate of increase, in line with the 'overall' stochastic process parameters that are perceived.
WORDS AND FIGS. (EXCEPT 3RD COLUMN) ALIEN KNOWLEDGE
MAP TAKEN FROM TEXT

However if one considers that the specific heat capacity or ability (of different gases) to hold heat energy varies, this can be a factor also. If one considers the map of radiated heat, the tropical regions of the earth have the greatest energy balance *need* to 'transport' heat energy. The radiated heat is closely a phenomenon that takes place throughout the year, irrespective of season. With the vast destruction of the world's tropical rainforests the *oxygenation* of the tropical weather system is, therefore, severely diminished. This has caused the striation of the tropical tropopause into *five*, as it seems, vertical circulations of air mass. (There was previously *one* vertical circulation giving good heat transfer.) This will clearly have a drastic effect on the heat energy *absorption* and *distribution* that has existed previously.

One site of most obvious correlation can be seen at the 40K/cal per cm per year heat interface at the Sahara desert in Africa. Remember the vast destruction of trees that existed previously. The trees had a vast oxygenation property that made the previously stable local atmosphere possible. It is observed that arid conditions and drought have intensified (causing many famines in Africa) in the last 20 years.

Concluding Remarks

Many published papers, relating to 'Climate Change', conclude there will be very minor increases in global temperatures (typically of the order of 2.5 degrees). There are also other 'comforting' predictions regarding the change of key features in the earth's climate system. There seems to be a tendency to 'suspend' conclusions due to the 'need for gaining more data' and, of course, the need for 'a longer period of assessment' is often cited when conclusions are not stated.

Lengthy periods of data collection and analysis, to confirm statistical trends, do seem to be 'sound' practice. However there is a problem – the supposedly 'isolated elements' of the climate process *cannot* be treated as such. *The changes in these parameters are interactive in a way that makes drawing conclusions and acting on them urgent.*

Destruction of the tropical rainforests, carbon dioxide acceleration, acceleration of population growth and the increasing planetary heat energy are just four parameters in climate change. The rates at which these parameters each escalate are *themselves* influenced by changes in *other* environment parameters and the inertia of their escalation. The inertia of many of these environmental elements is, either directly or indirectly, affected by man's activities. (One example being carbon dioxide – we produce it in countless millions of cars; presently seven billion humans produce it when 'breathing out'; and we *destroy* the trees which consume carbon dioxide and give us oxygen.)

The presently accepted computer models that deal with climate change are comforting to the extent that they do not alarm us with projected periods of crisis: 'happily we observe' that nothing really serious or 'irreversible' is likely to take place for *at least* twenty years. But the basis of models that deal with the *interaction of parameters* in the earth's climate system are clearly an immense simplification. The resources of many experienced mathematicians and vast computing capacity (such as the specially cooled CRAY mainframe computer in Cheyenne Mountain, USA) would be required to produce an appropriately adequate computer model. However even the 'writing' of comparatively simple computer models, based on 'straight-forward' mathematical functions, is a lengthy process. Once even a simple model is written, such as those often used for Computer Aided Engineering 'Simulations' (CAE), the process of 'proving out' or validating a model can lead to major changes before the model's simulated predictions conform to actuality.

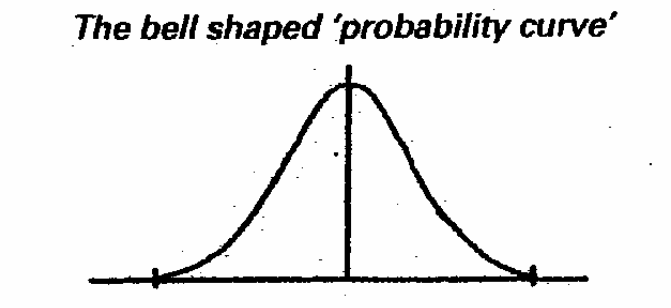
If one were to consider a computer simulation model that could adequately represent nature's heat and energy transfer there would have to be several mathematical equations (or

functions). Each of these equations would represent how heat and energy moved through sea water, different parts of the atmosphere, land, ocean floors etc. Each single equation (or function) would need to be very complex.

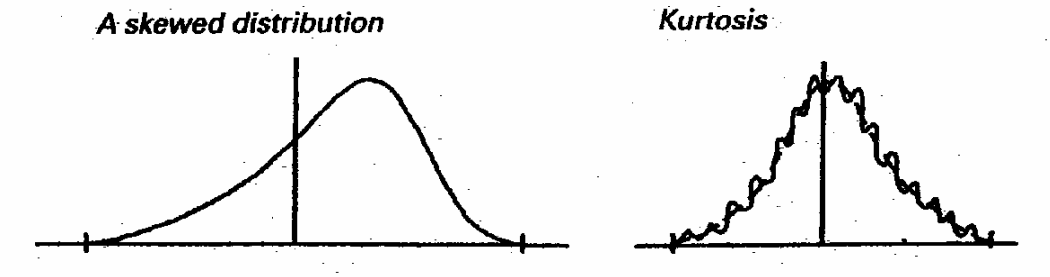
Merely considering oxygenation (and therefore specific heat capacity) of the atmosphere – there will be a *seasonal change* (associated with the seasonal effect on planetary heat circulation) and there will be an on-going *permanent change* (associated with the loss of the prime oxygenators of the rainforests and proliferation of ozone-destroying catalysts which is gradually causing permanent changes in atmospheric 'specific heat capacity'). The equation for 'this' element's property has to represent its variability, as well as how its 'underlying trend' will *decline*. The equation for just this one element needs to be reasonably *accurate* – otherwise it will have a 'knock-on' effect causing ever increasing inaccuracies 'multiplied' throughout the other equations.

A simple analogy for the need for each equation to be reasonably accurate is easy to visualise. Several numbers when multiplied together continuously will give a *particular* answer. However in such a series of numbers if one, *and only one*, is changed, then the final result will radically altered. In the analogy, the numbers are each an 'equation' which represents an element in the *chain* of the earth's Heat Energy Transfers.

If one goes onto think how equations are 'arrived at', it becomes evident that 'raw data' and 'expert deduction' play a large part in the 'estimation' of an equation that is thought to describe a feature of the environment. Often the raw data is 'prepared' statistically using 'the Bell Shaped Curve' (or by Binomial distribution) of elementary statistics. The Bell Shaped Curve is often used and validated in manufacturing industries. (Such as what is known as Statistical Process Control.)



Yet even *simple* industrial processes can produce raw data which does not conform to the 'idealised' predictions of the probability curve. The probability curve is very useful as a starting tool in analysis and is often a primary resort. However, often the true nature of the raw data is biased away from the idealised distribution curve – such as the 'skewed' distributions. Also, the fluctuations in raw data can be a key property – such as Kurtosis.



'Skewness' and 'Kurtosis' often occur in even *simple* processes – and can easily be 'missed' or misinterpreted.

If one considers data fluctuation, such as a 'spiky' trace instead of a nice smooth curve (which lends itself to easy analysis), 'Smoothing Functions' can be used to prepare data. For instance a 'spiky' and convoluted trace, if it is 'smoothed' enough times, will become a straight line! The *selection* of the *correct 'numerical methods'*, in the preparation of data, is a *very important first step*.

It is for these reasons that Scientists and Engineers, constructing computer simulation models, of quite simple systems, with only a few elements, often spend great time and effort redesigning and evolving these computer models to give realistic predictions that agree with known behaviour of the systems they model.

Clearly *practical* considerations of major 'human resource' and 'computing power' will necessitate massive simplification in Models that, say, predict global temperature increase. In these efforts, their spirit of environment consciousness should be commended. However, one must clearly see that if such a model predicts a one or two degree temperature rise in, say, ten years – this is really only *one* possible answer.

For instance, one approach to modelling a temperature-change process is to utilise the 'Physics' analysis of a 'forcing function' and *equate* a 'response' by holding all other climate parameters constant. Such an approach tends to discount many environmental parameters outright as well as ignoring the fact that these may change, escalate – and indeed trigger changes in yet other environmental parameters. Moreover the very real characteristic of the 'inertia' of these changes seems not to be dealt with at all.

Inertia in the behaviour of the individual environmental features and 'inertia' of the whole system of climate change is *critical*. The inertia of the underlying processes which caused an *apparently* sudden ozone depletion was clearly *inadequately* configured into the predictions for ozone depletion.

Can one consider a simple example showing 'inertia'? – The deoxygenation/*deforestation* process is an environmental parameter whose behaviour is influenced by 'inertia' and 'time' dependency.

For inertia, has a basic concept, we may think of a very heavy cylindrical 'roller' in a steel rolling mill. The roller fulfils exactly the same function as a cookery 'rolling pin' – except red/white hot steel ingots are being rolled thinner instead of dough or pastry. It will take a few hundred watts of energy (power) to *gradually* start and accelerate this massive roller to its top speed of rotation. It will take a similar amount of 'breaking' energy to stop the roller in a *similar time* to that of start-up. However, in the steel rolling process, the roller can need to be *reversed* within half a second! This takes approximately half a million watts of power. (There is clearly a major inertia shift which causes a phenomenal increase in energy to counteract the inertia – from a few hundred watts to a half a million watts.)

There is a valid energy analogy to the steel roller, in terms of the *accelerating* rate at which key rainforests are destroyed. It is not widely perceived that these trees are a critical part in nature's 'evolved' pattern of planetary heat transfer – their role is thought of primarily in agricultural terms and habitat for fauna. If the critical nature of these forests becomes widely perceived, *time* dependency of 'inertia' will require – *'Half a million watts of reversal activity' NOT* a *few hundred watts* (there is too little time).

We must understand a little more of *time* and *inertia* in an irreversible process. 'Irreversibility' in a process may be thought of as the 'point of no return' such that the process has achieved its own inertia and cannot effectively be 'switched-off'. To think about this a little more we must observe that many things in nature do not change at a constant rate – many processes start very slowly and finish incredibly fast. 'Inertia' and 'time dependency' will affect simple and complex systems similarly.

A kitchen sink may take two hours (some 7,200 seconds) to fill – if the faucet/tap leaks one drop per second. It is even a simple calculation to predict 'how full' the sink may be at a future time during its filling process. As the sink fills our 'deduced' calculations, for our predictions, seem to fit *very well*. (As we observe the sink filling, we do not know the sink's 'overflow' is blocked. We have observed that there is only a *small* height difference between the overflow and the rim of the sink – however this was not thought to be significant, so it was *not* configured into equations of our computer simulation.)

The *entire* time history of the leaking faucet/tap filling the sink is, say, two hours. From the beginning the deductions (for our computer simulation model) *seem* to be giving us good 'time' and 'water filling' predictions. However, as the water level increases, it will take us a few moments to realise the overflow is blocked! Yet a very few moments later the water *will* 'spill' over the sink's rim (and it will 'spill' *much* more water than one drop per second as we all know). Here we see *time* and *inertia* – at the beginning (7,200 seconds ago) *one* second was *not* a significant time interval. *Yet now, at the end/collapse of the process (the point of overflow, that is) one second is a critical interval!*

We are lucky that our process is based on a sink, it has a large 'plugged' outlet – *we therefore do not need* to generate a *massive* reverse impetus to counteract the high system inertia in the last few moments. (Similar in effect to the massive energy needed to reverse the steel roller in *only* a moment.) *Again we are lucky it's a kitchen sink – we just 'pull the plug' and the water parameter just disappears from the system at phenomenal speed. However the earth does not have such a means of making all of the growing Heat energy disappear through a 'sink plug'.*

At the approach of disintegration of key environmental features, the inertia of all the process changes will not allow sufficient time for reversal. For instance, the critically located rainforests – these could *not* be 'instantly' regenerated and the detrimental effect, through their vast absence, on the climate system will not be instantly reversed. Many of the key environmental features will have reached the stage in their process where they cannot be 'switched off' or reversed.

The consequences at atmospheric and geothermal changes will begin to be perceived in weather and surface events, which will be located throughout the world. Given our escalating impact on environmental processes, particular catastrophic incidents that mark the disintegration of these processes should *not* be called "acts of God" – humans are causing these changes. In fact consequences of atmospheric changes, causing famines etc should not any longer be called "acts of nature".

The Earth is man's home – he has nowhere else to go. The Earth was also the home of many species extinct and yet to be extinct. Many animals protect their environment in a territorial sense. Many animals will often sacrifice their own lives to protect their siblings, and in so doing, their descendants. We must ask ourselves:

Do we care less for our own descendants than they do theirs when we callously disrupt nature's delicate balances, evolved over millions of years?

These delicate balances have permitted the survival of oxygen-breathing life upon a stable earth's crust. If it is the most that you can do to plant just *one* tree, you must at least try to do this, in order to have some chance at averting what seems inevitable.

THE EARTH'S SURFACE IS MAN'S HOME,
WE HAVE NOWHERE ELSE TO GO…..

Appendix 1

Maps related to Section 5.0

Map 1 – process phenomena at 20 years

Map 2 – safety zones at 20 years of process

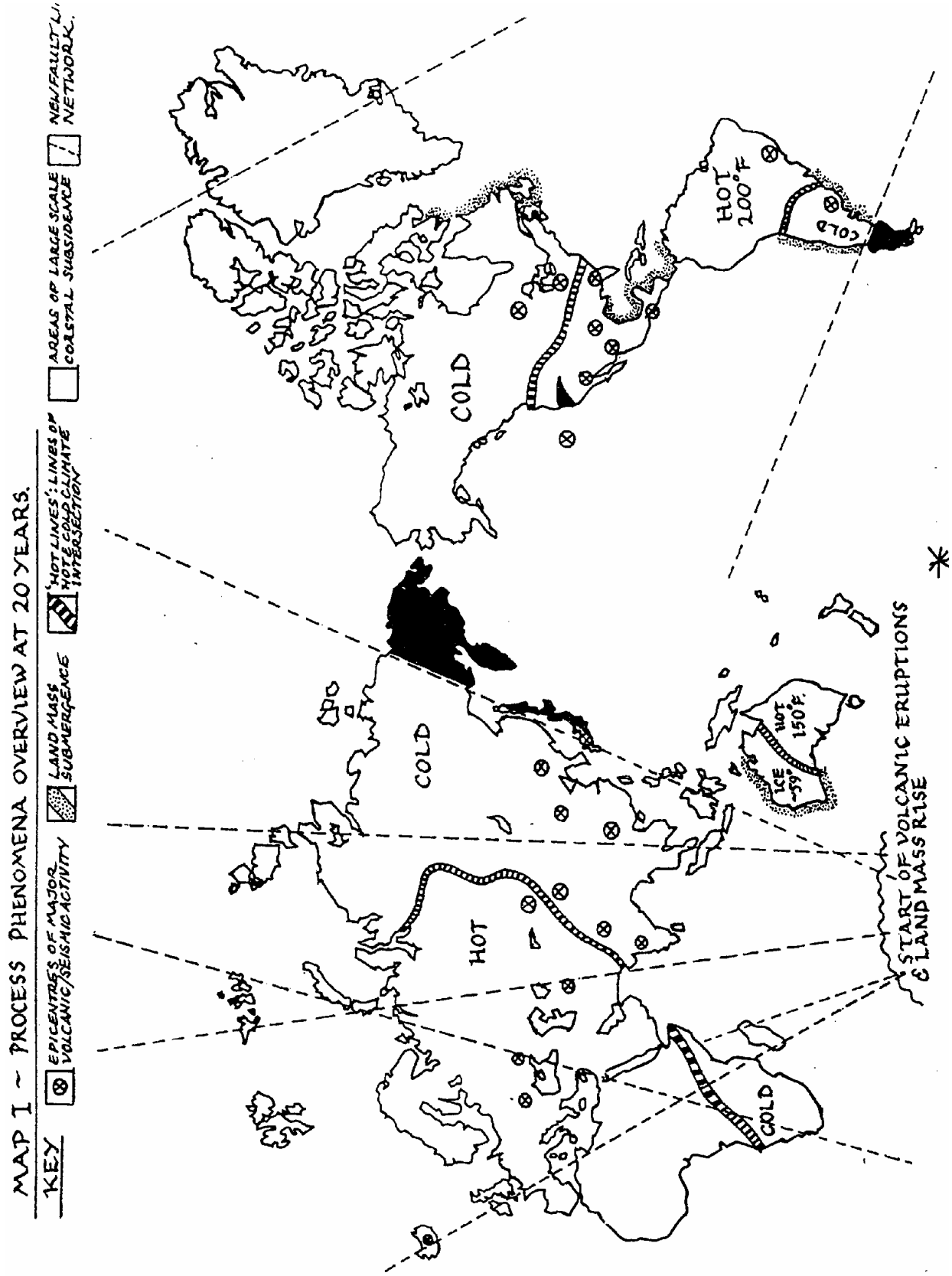
Map 3 – new land mass emergence

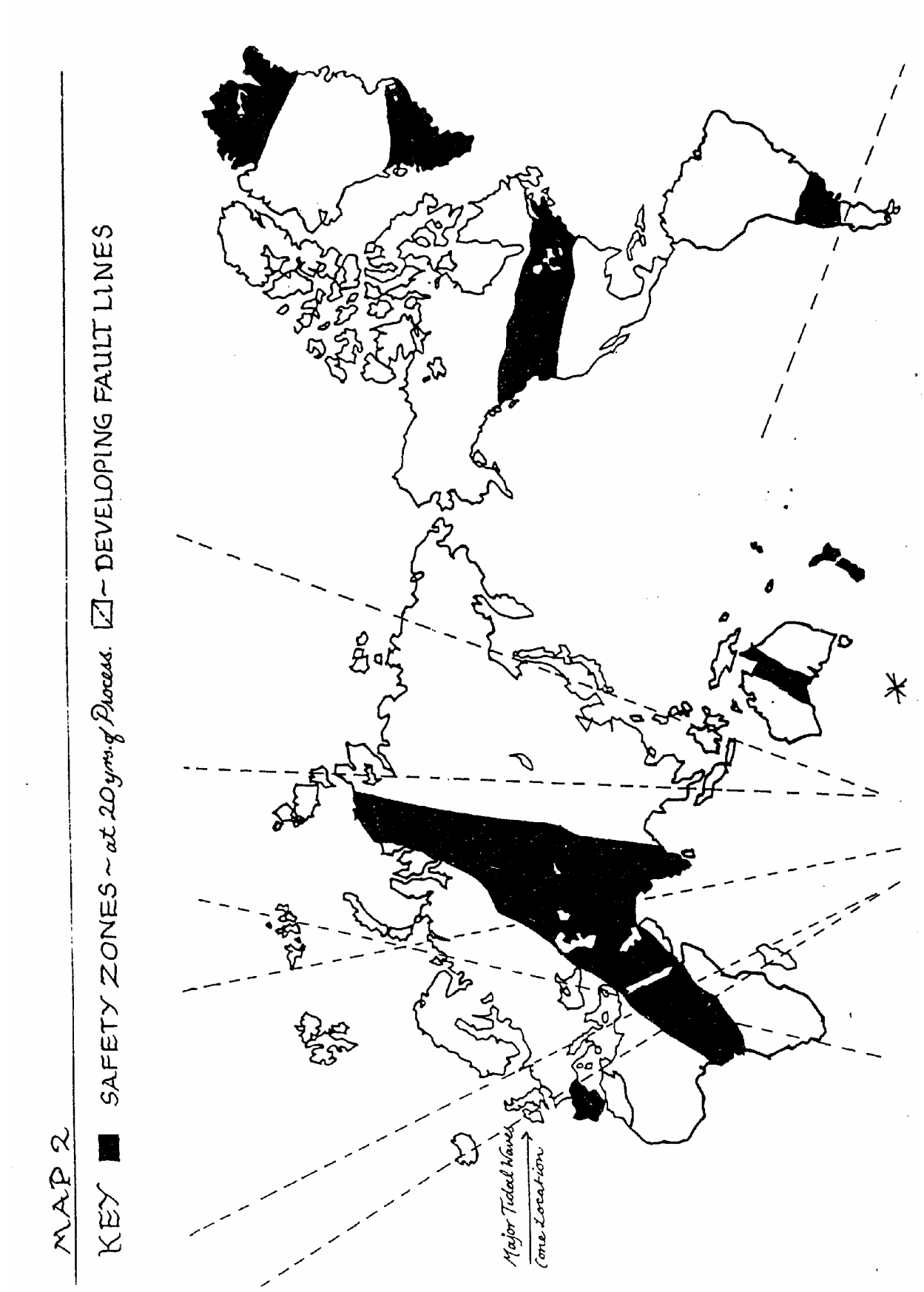
Present land use and economy

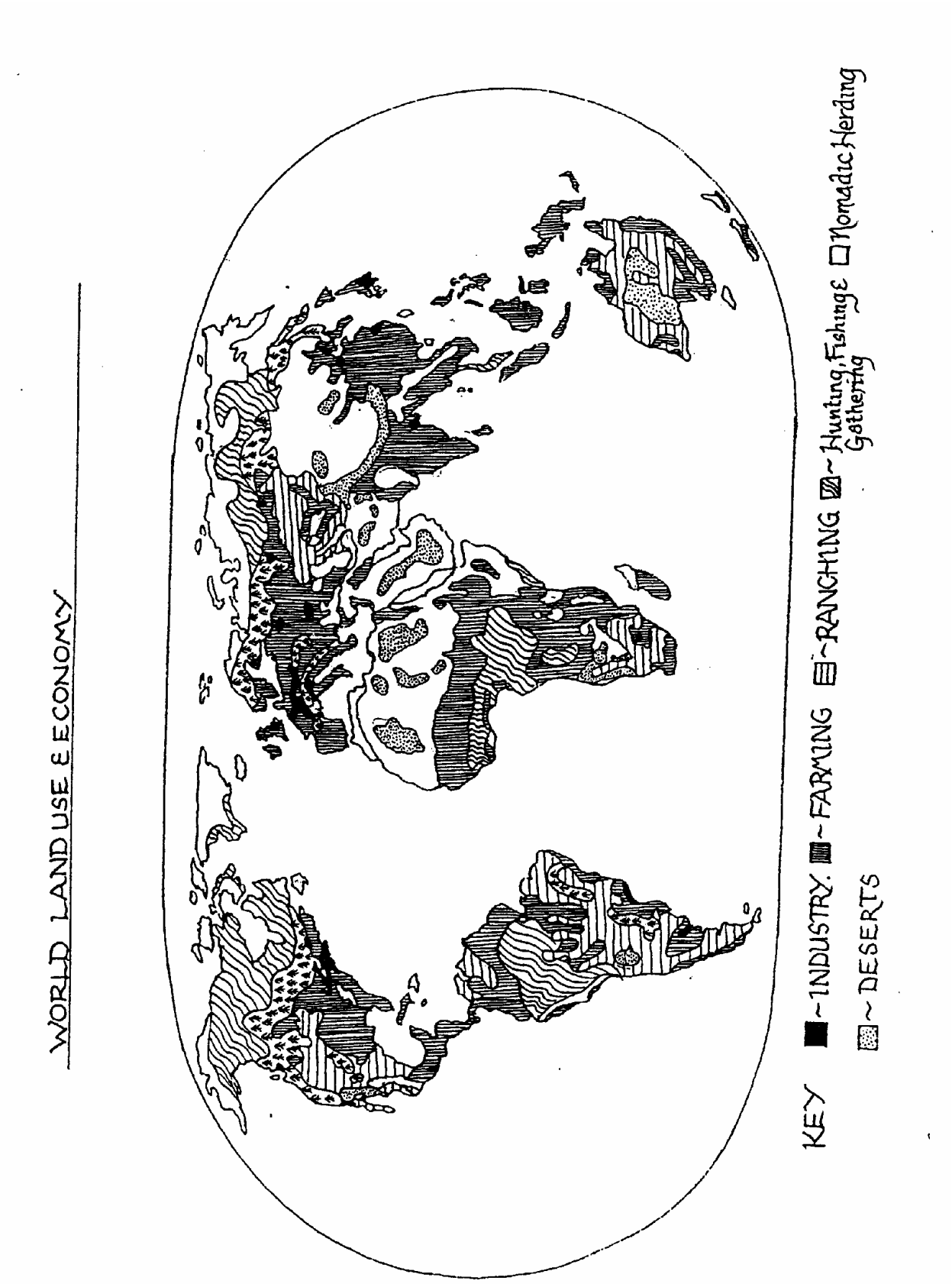
Land use by Continent, presently and 20 years into process

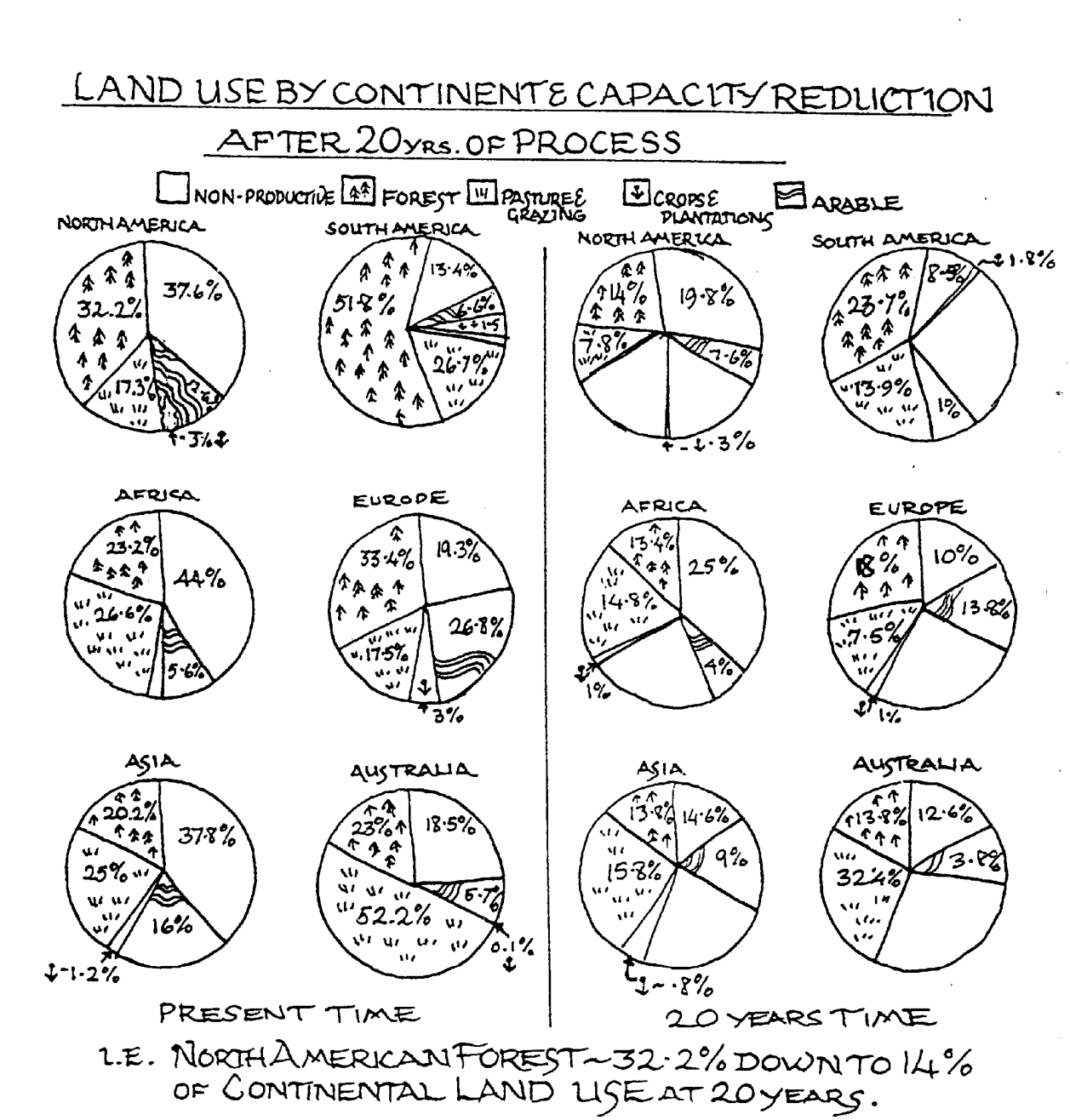
Figure 6 – loss of nutrient production at 20 years

Figure 7 – loss of nutrient production at 20 years


MAP 1 ~ PROCESS PHENOMENA OVERVIEW AT 20 YEARS.
KEY
EPICENTRES OF MAJOR VOLCANIC/SEISMIC ACTIVITY
LAND MASS SUBMERGENCE
'HOT LINES': LINES OF HOT & COLD CLIMATE INTERSECTION
AREAS OF LARGE SCALE COASTAL SUBSIDENCE
NEW FAULT LINE NETWORK.
COLD
HOT 100°F
COLD
COLD
HOT 150°F.
ICE -59°
HOT
COLD
START OF VOLCANIC ERUPTIONS & LAND MASS RISE


MAP 2
KEY ■ SAFETY ZONES ~ at 20yrs. of Process. ▨ ~ DEVELOPING FAULT LINES
Major Tidal Waves
Core Location


WORLD LAND USE & ECONOMY
KEY
~INDUSTRY
~FARMING
~RANCHING
~Hunting, Fishing & Gathering
Nomadic Herding
~DESERTS

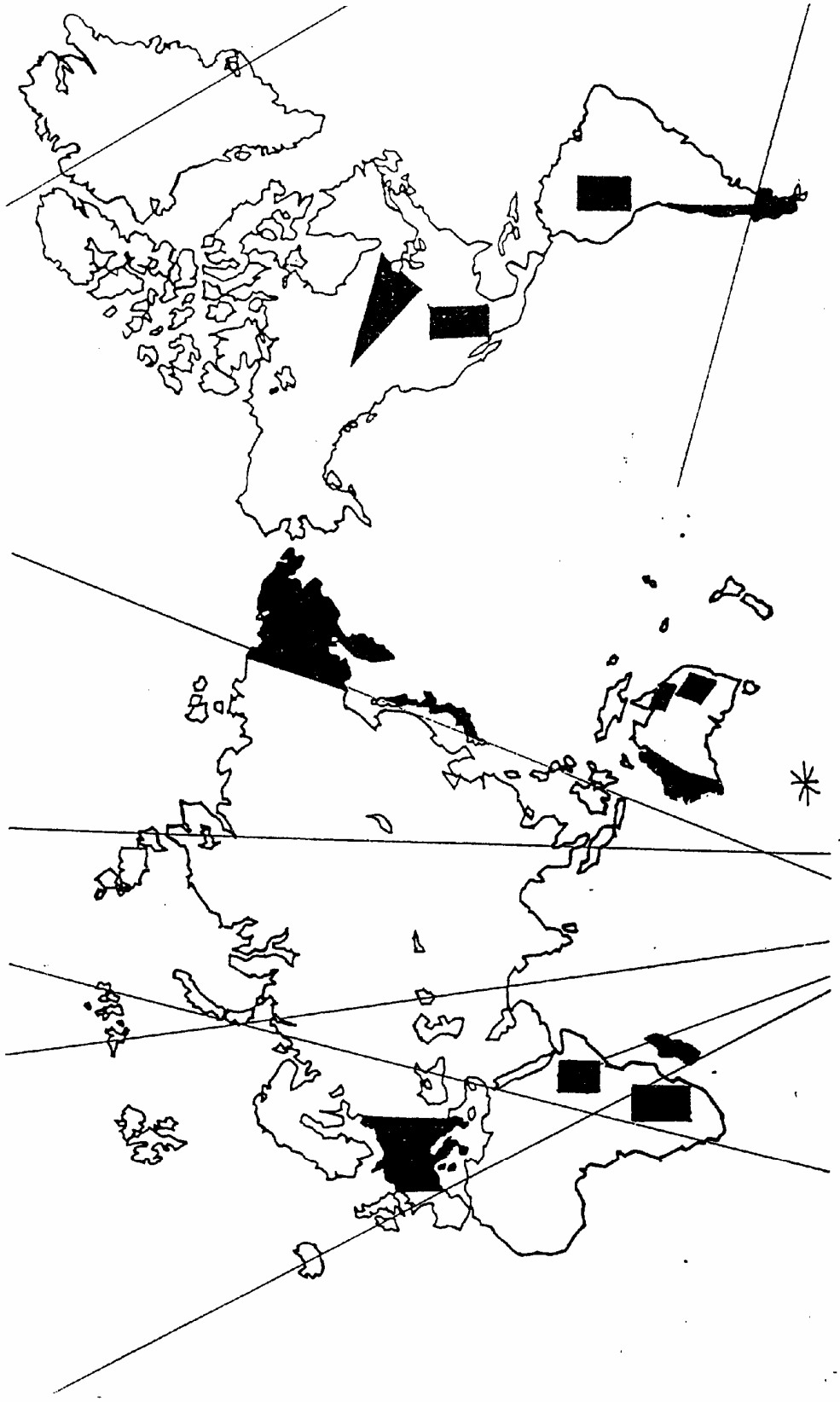


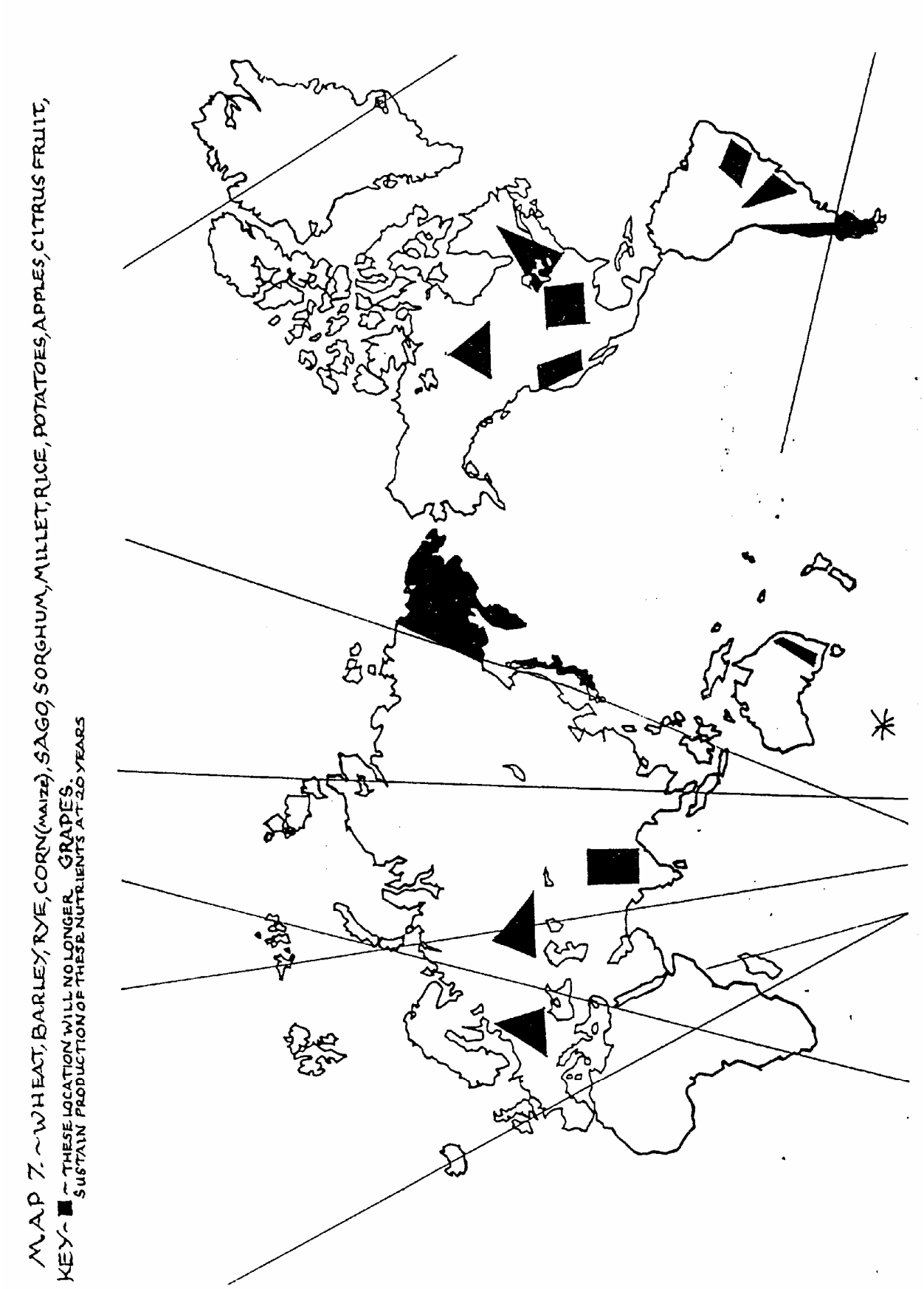
I.E. NORTH AMERICAN FOREST ~32·2% DOWN TO 14% OF CONTINENTAL LAND USE AT 20 YEARS.

MAP 6

KEY ■ ~ THESE LOCATIONS WILL NO LONGER SUSTAIN PRODUCTION OF THE FOLLOWING NUTRIENTS IN 20 YRS. TIME:

BEEF, BEEF & DAIRY PRODUCTS, SHEEP, PIGS, COCONUT, COTTON SEED, HEMP SEED, OLIVES, PALM OIL, SUNFLOWER OIL, SOYA OIL, TUNG OIL, FLAX, PEANUTS, CASTER OIL, POPPY OIL, RAPESEED, BEET SUGAR, CANE SUGAR.




MAP 7. ~WHEAT, BARLEY, RYE, CORN(MAIZE), SAGO, SORGHUM, MILLET, RICE, POTATOES, APPLES, CITRUS FRUIT,
KEY- ■ ~ THESE LOCATION WILL NO LONGER GRAPES.
SUSTAIN PRODUCTION OF THESE NUTRIENTS AT 20 YEARS

Appendix 2

Notes on planetary phenomena and orbital mechanics interaction toward second stage of process

Within the nineteen pages of notes included here (twenty pages in total), that were left in spirit by Albert Einstein are occasional annotations of my own. These are very brief, and may be identified from 'Marker Pen' lines having been drawn around them.

Own annotations - outlined/enclosed in Marker pen:

Page 2 - Comet, in star/planet section

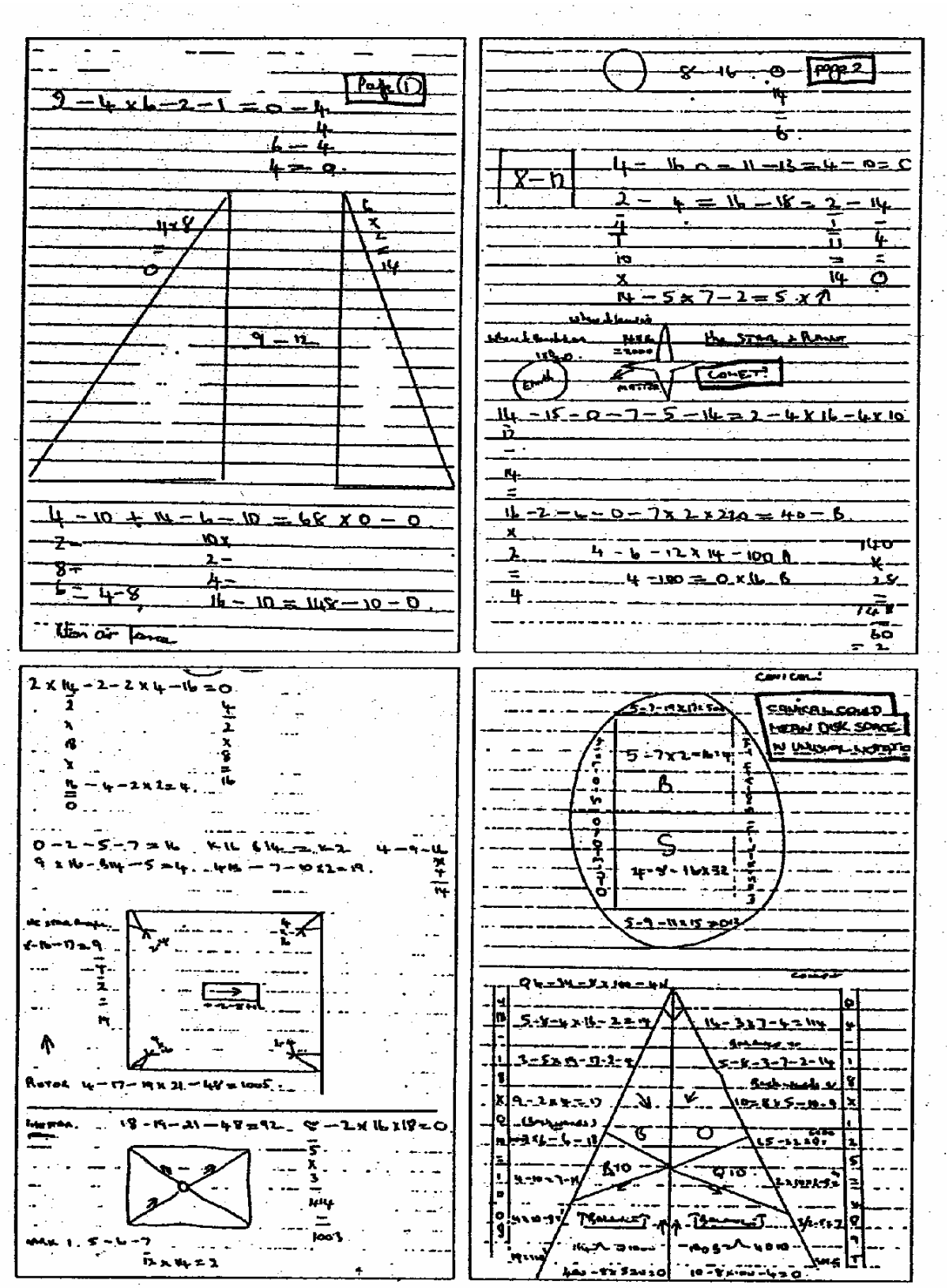
Page 4 - Canonical could mean what is referred to as 'diskspace'

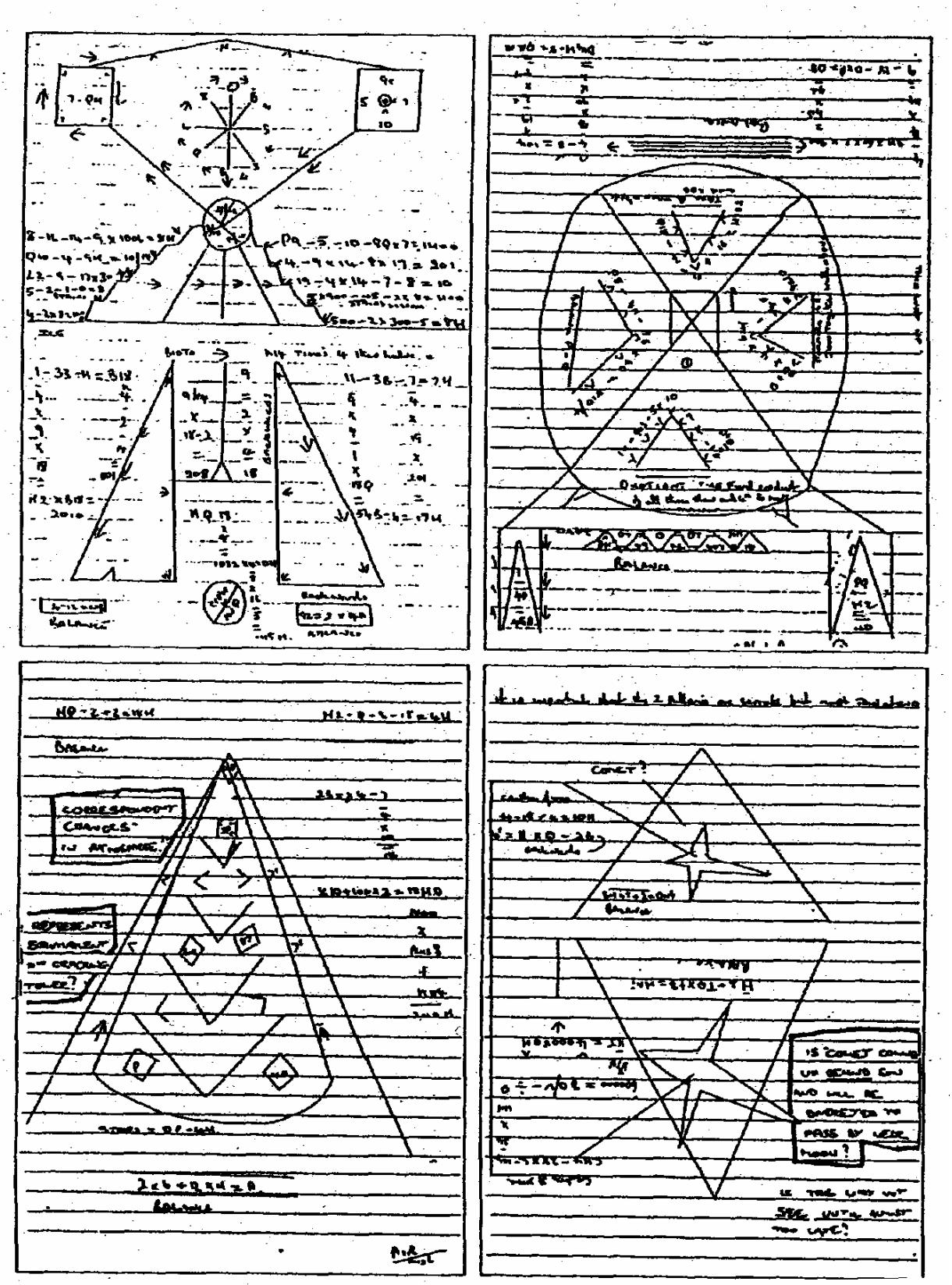
Page 5 - Striation of atmospheric gases, due to oxygen depletion during process

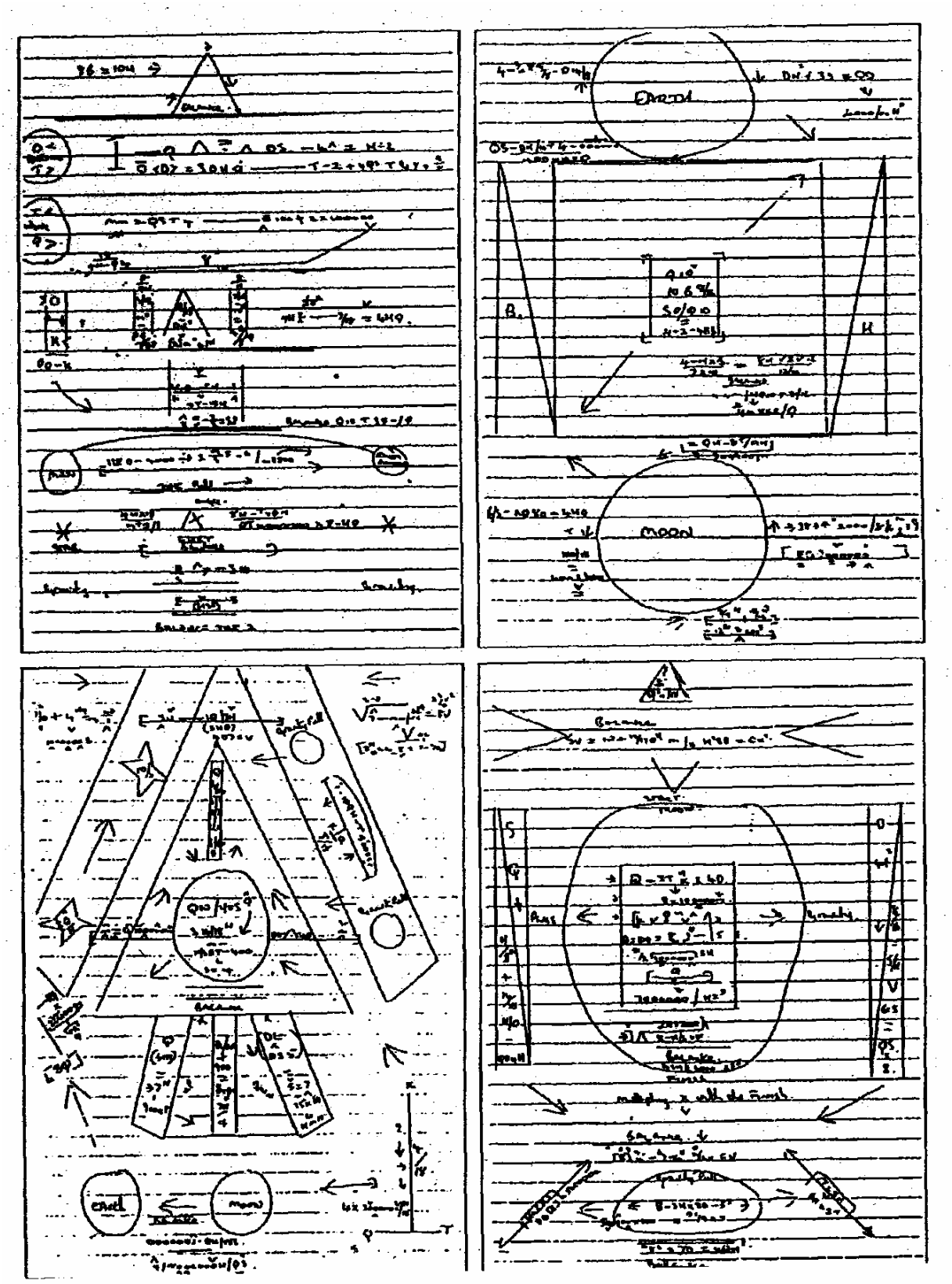
Page 7 - Correspondent to further changes in atmosphere *and* main diagram may be some sort of 'cracking tower' analogy for gaseous striation during oxygen depletion.

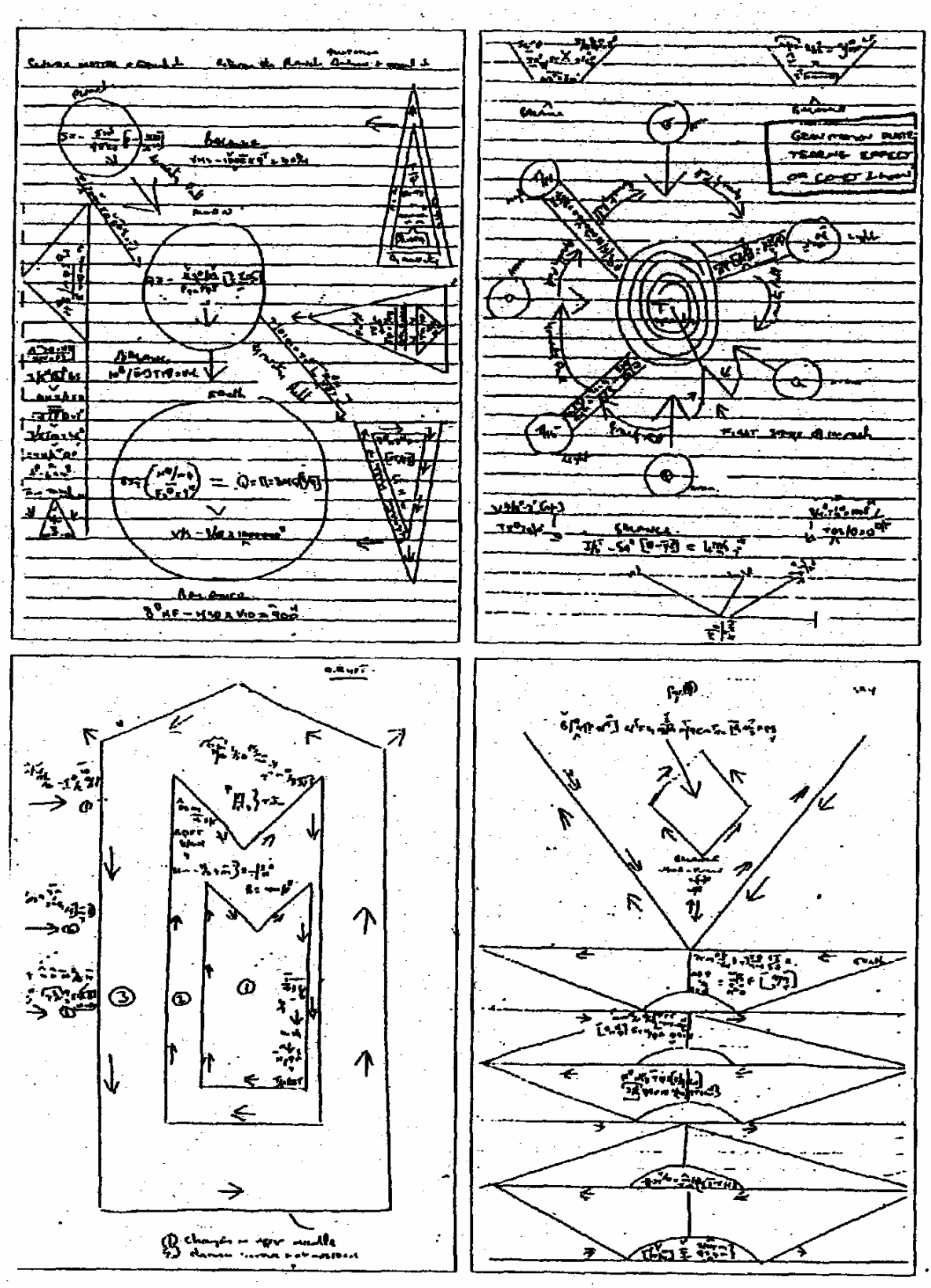
Page 14 - Gravitational tearing effects of comet/star dwarf/planetary body

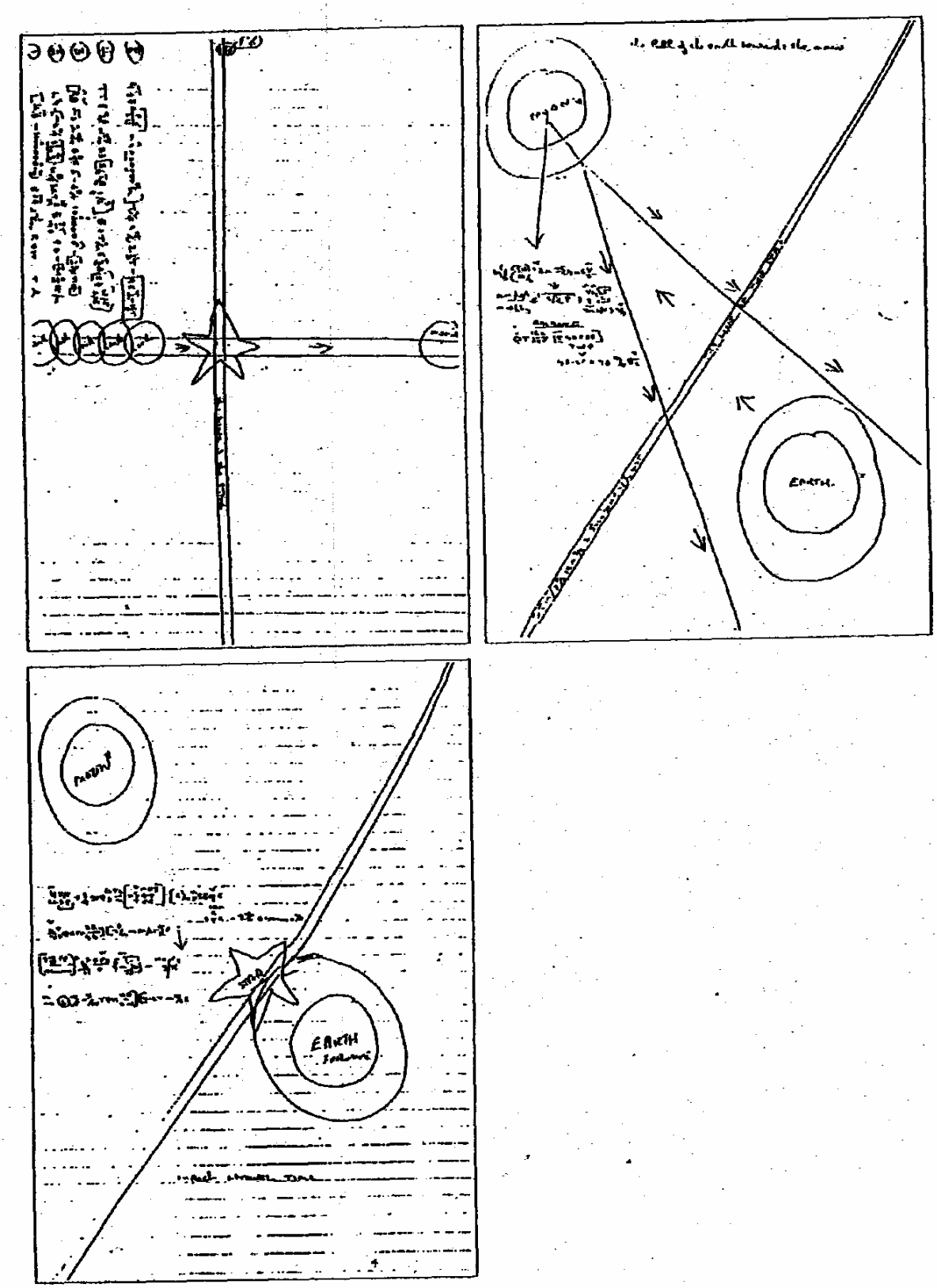
Einstein's figures











NASA

National Aeronautics and
Space Administration

Washington, D.C.
20546

Reply to Attn of

SPS

JUN - 2 1993

Mrs. Ann Walker

ENGLAND

Dear Mrs. Walker:

Thank you for your letter of April 21, 1993, to Dr. Wes Huntress and for the documents regarding "Orbital Mechanics Projected Atmospheric/ Surface Compliance and Distortions" mathematical theories.

These documents seem quite intriguing, even more so if they are in fact copied from Albert Einstein's orginal documents. I have made your orbital mechanics materials available to researchers in the Solar System Exploration and Space Physics Divisions for their review.

Once again, I appreciate your consideration in sharing these documents with NASA. My best wishes for a happy and successful year.

Sincerely,

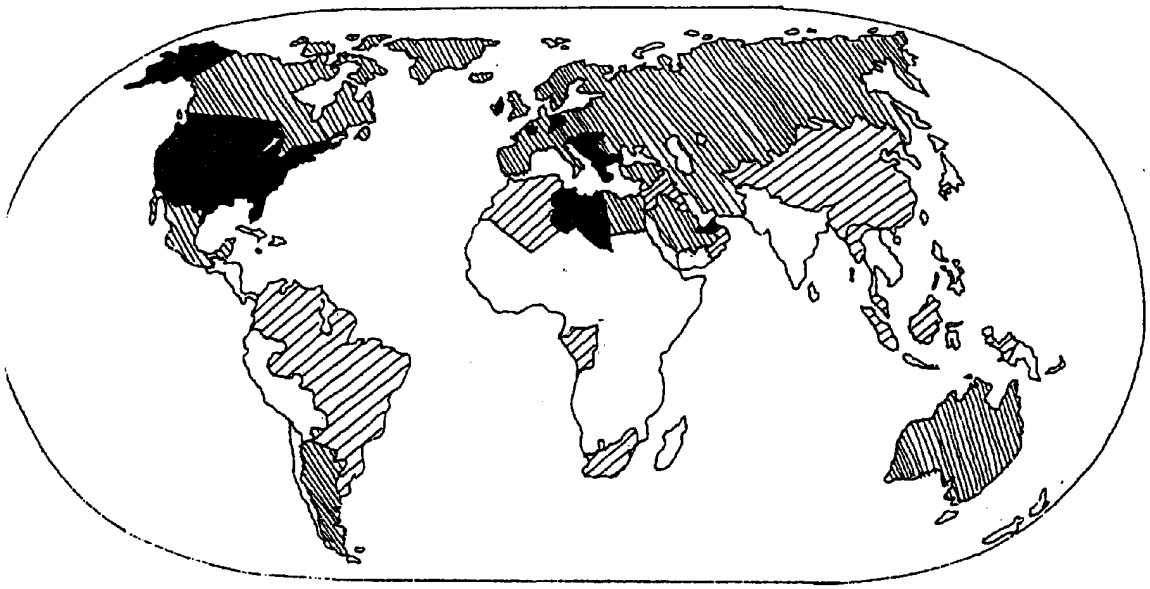
Mark A. Pine
Chief, Policy and Plans Branch
Office of Space Science and Applications

Appendix 3

Present data planetary climate and dependent phenomena

Diagrams

1. Natural vegetation *and* Desertification, reduction and increase, respectively
2. Present climate temperature variances
3. Present climate distributions throughout world
4. Present population by Continent and present world-wide food consumption
5. Present self-sufficiency in food and present world-wide importance of agriculture
6. Present distribution, world-wide, of major volcanoes
7. Present distribution, world-wide, of major earthquakes
8. Present distribution, world-wide, of major rifts, major faults and mid-oceanic ridges



WORLD FOOD CONSUMPTION~AV. DAILY FOOD INTAKE PER PERSON IN KILOCALORIES

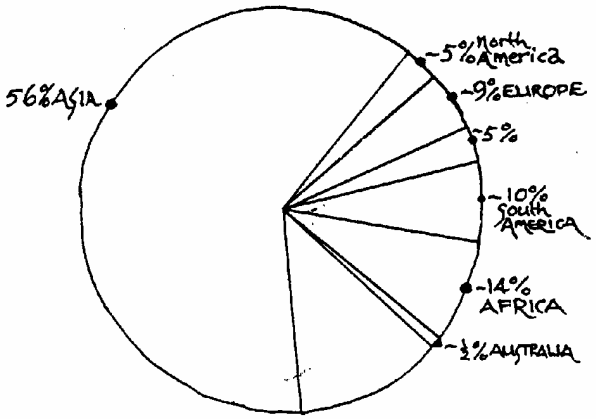
■ OVER 3,500 K.cals.p.p. ▨ 3,000 K.cals.p.p. ▨ 2,500 K.cals.p.p. □ 2000 or LESS K.cals.p.p.

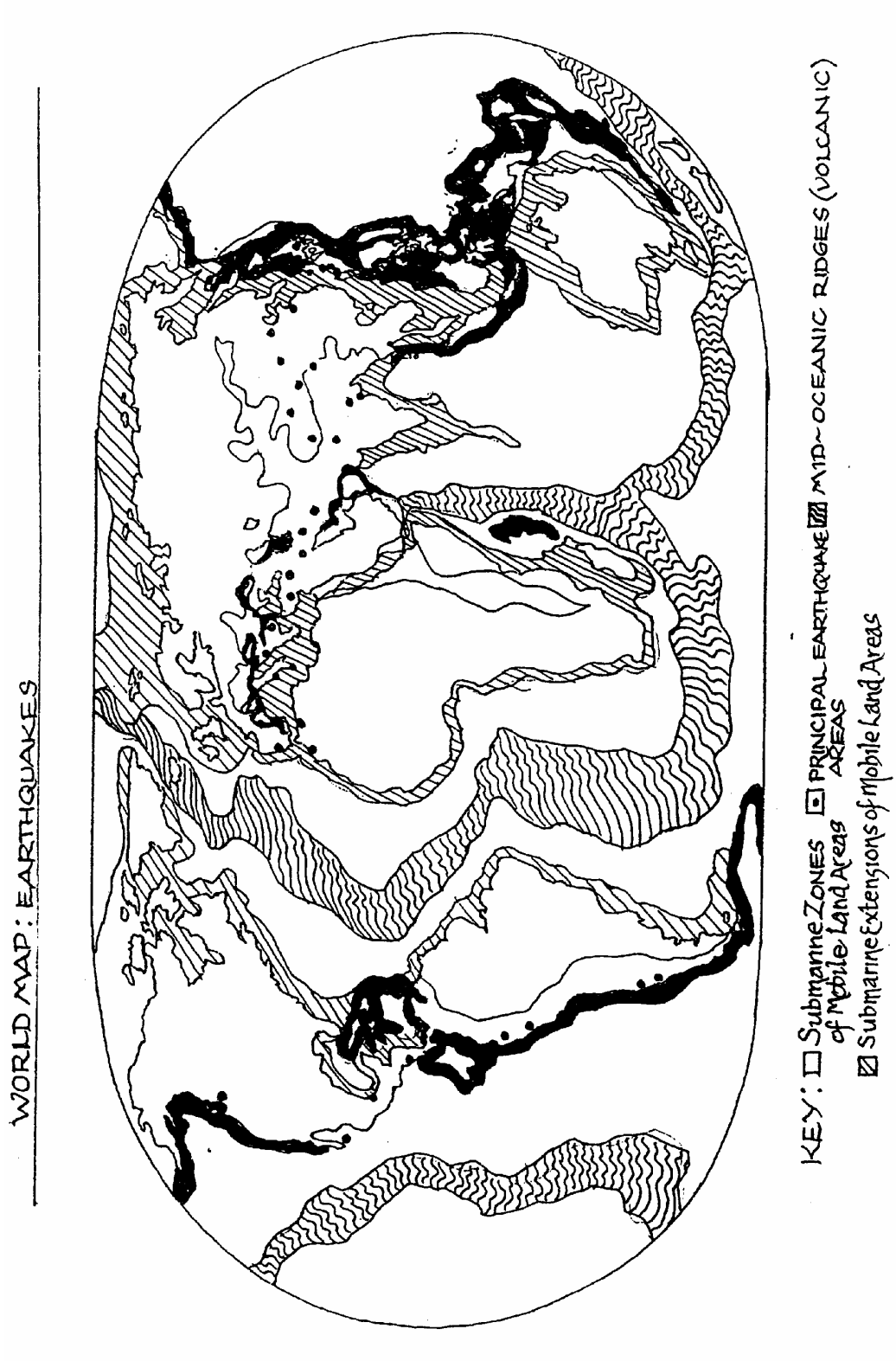
WORLD FOOD INTAKE RATIOS U.S.A~3,645 U.K~3,256

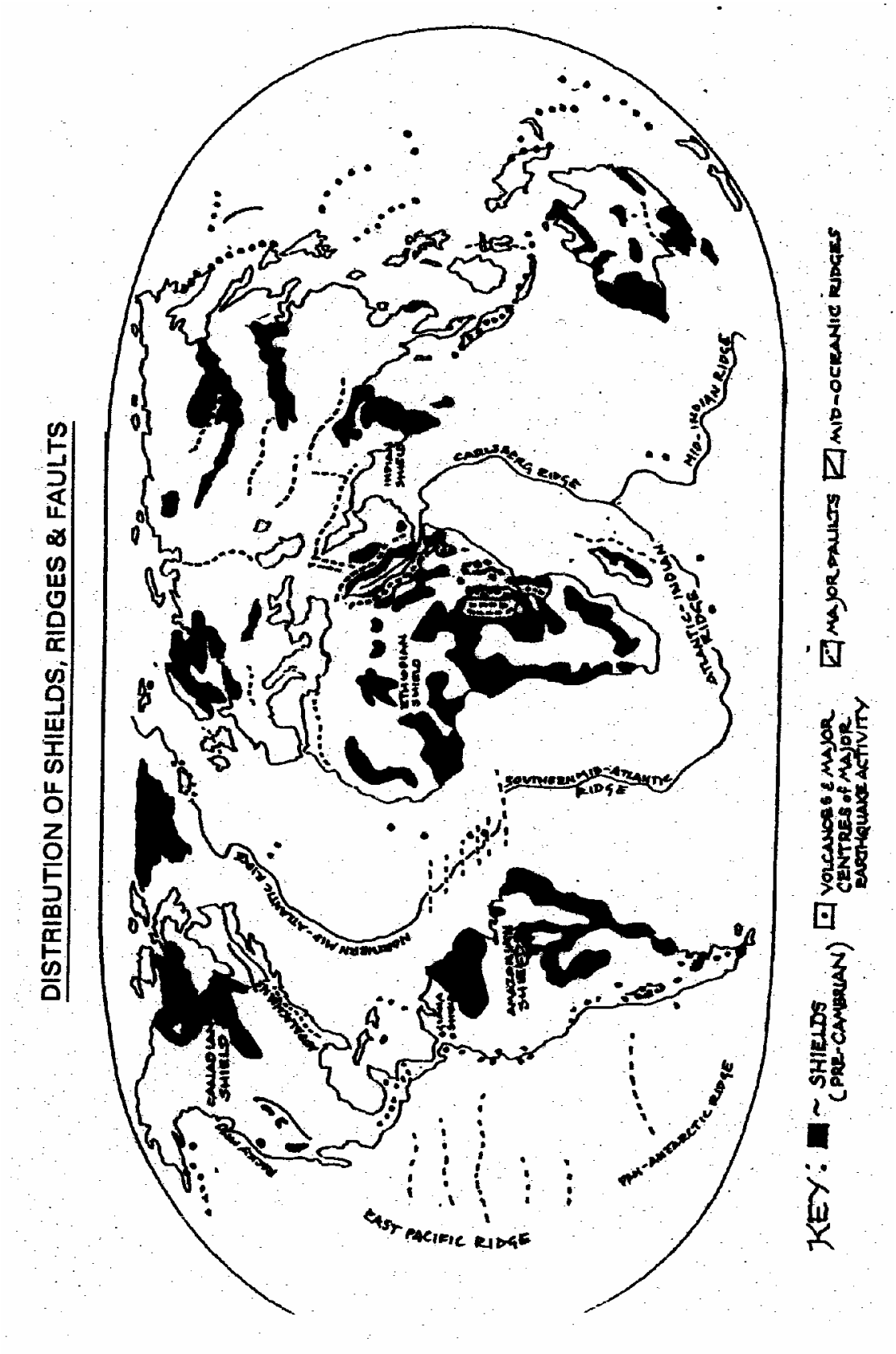
Highest
- EAST GERMANY ~ 3,814
- U.A.E ~ 3,733
- GREECE ~ 3,688
- U.S.A. ~ 3,645
- BULGARIA ~ 3,642

Lowest
- GUINEA ~1,776
- GHANA ~1,759
- ETHIOPIA ~1,749
- CHAD ~1,717
- MOZAMBIQUE ~1,595

WORLD POPULATION BY CONTINENT




WORLD MAP: EARTHQUAKES
KEY: Submarine Zones of Mobile Land Areas
PRINCIPAL EARTHQUAKE AREAS
MID-OCEANIC RIDGES (VOLCANIC)
Submarine extensions of Mobile Land Areas


DISTRIBUTION OF SHIELDS, RIDGES & FAULTS
KEY: ~ SHIELDS (PRE-CAMBRIAN)
VOLCANOES & MAJOR CENTRES of MAJOR EARTHQUAKE ACTIVITY
MAJOR FAULTS
MID-OCEANIC RIDGES
CANADIAN SHIELD
BALTIC SHIELD
INDIAN SHIELD
ETHIOPIAN SHIELD
AMAZONIAN SHIELD
AUSTRALIAN SHIELD
SOUTH AFRICAN SHIELD
MID-INDIAN RIDGE
CARLSBERG RIDGE
ATLANTIC-INDIAN RIDGE
SOUTH ATLANTIC RIDGE
NORTHERN MID-ATLANTIC RIDGE
EAST PACIFIC RIDGE
PAN-ANTARCTIC RIDGE

Appendix 4

Representative fauna depletion at end of first process stage. (Twenty years hence)

1. Based on the standard zoogeographical classification of environments, certain representative fauna will be quoted and a percentage of the population's *reduction* will be quoted.

a) PALAEARCTIC

Roe Deer	- 10%
Fly Catcher	- 90%
Warbler	- 15%
Dunock	- 80%
Wild Ass	- 50%
Hedgehog	- 20%
Edible Dormouse	- 5%
Wild Sheep	- 60%

b) NEARCTIC

Beaver	- 15%
Tiger Salamander	- 10%
Pronghorn	- 50%
Skunk	- 25%
Mocking Bird	- 10%
Bison	- 45%
Turkey	- 30%
Rattlesnake	- 35%

c) ORIENTAL

Gibbon	- 55%
Orang Utan	- 100%
Tree Shrew	- 40%
Tiger	- 90%
Fairy Bluebird	- 90%
Indian Elephant	- 60%
Peacock	- 45%

d) ETHIOPIAN

Secretary Bird	- 90%
Sable	- 60%
African Elephant	- 85%
Potto	- 100%
Zebra	- 60%

e) NEOTROPICAL

Anteater	- 45%
Toucan	- 95%
Howler Monkey	- 90%
Guinea Pig	- 95%
Tapir	- 100%
Sloth	- 90%
Rhea	- 100%

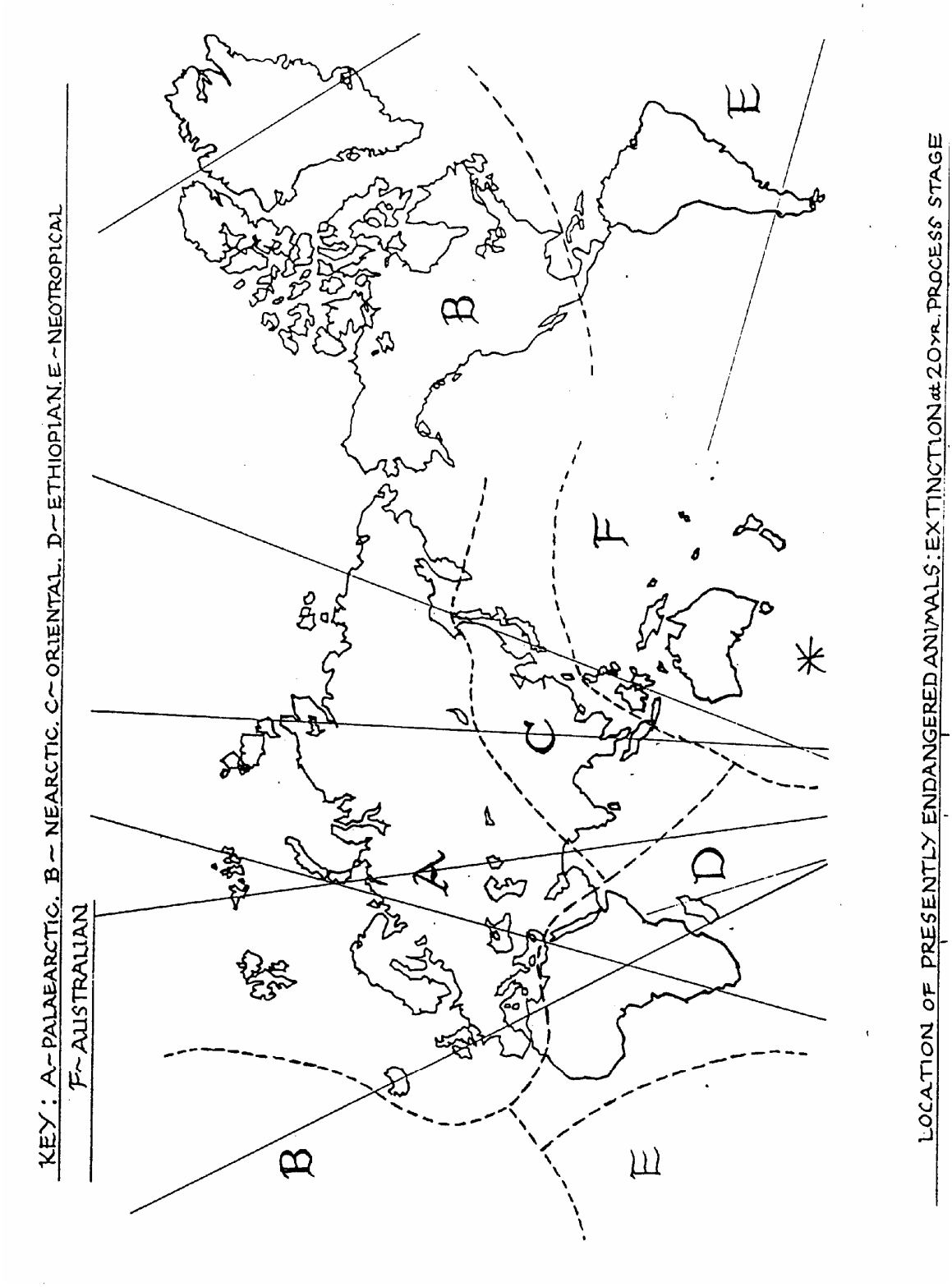
f) AUSTRALIAN

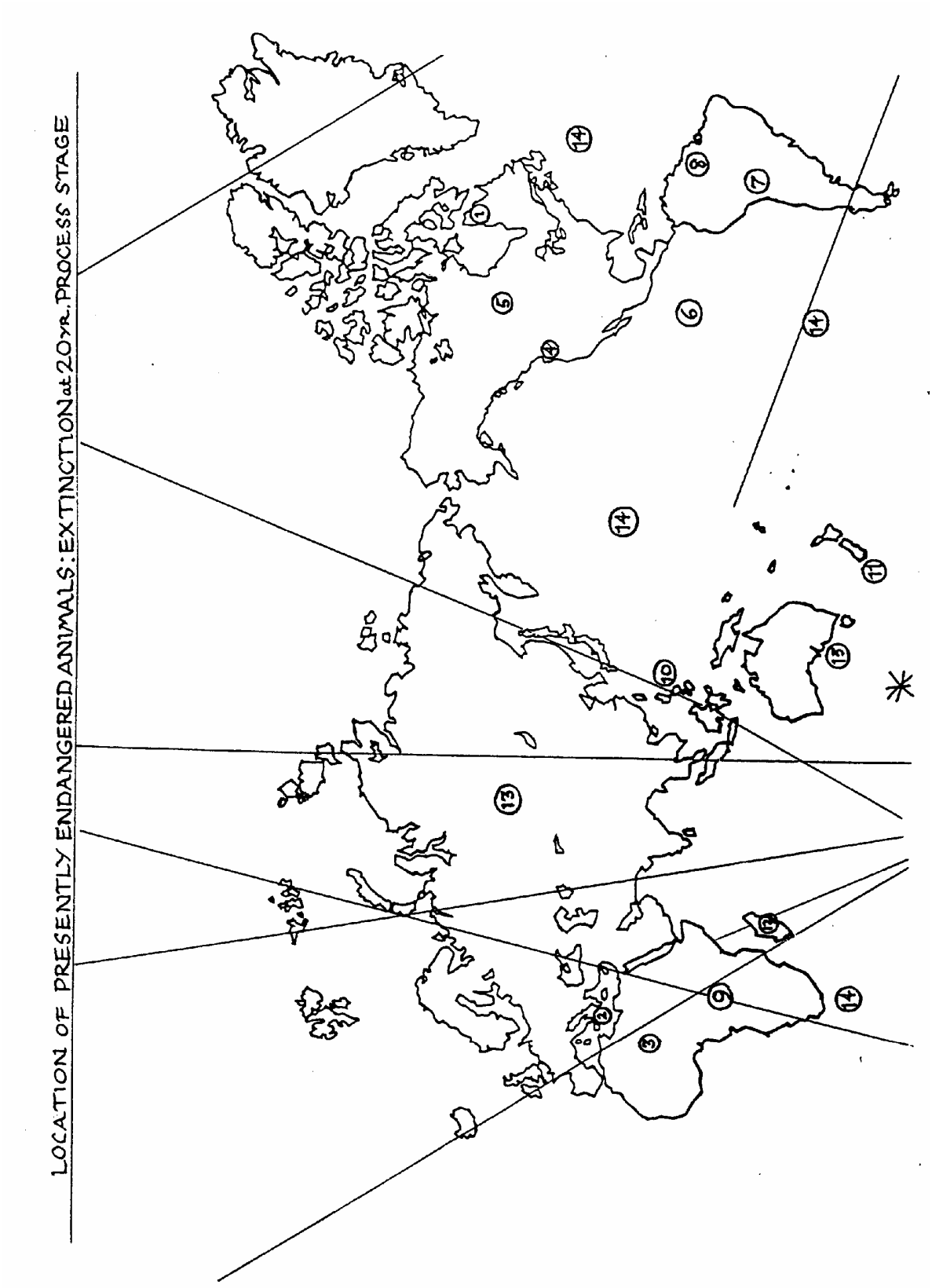
Duck-Billed Platypus	- 80%
Bird of Paradise	- 75%
Kangaroo	- 95 to 100%
Sugar Glider	- 100%
Koala Bear	- 100%
Cassowary	- 100%
Kiwi	- 40%
Tuatara	- 70%

Representative 'endangered animals' extinction at twenty years of process (SEE LOCATION MAP)

(1) Polar Bear (Thalarctos Maritimus) - EXTINCT
(2) Audoulin's Gull (Larus Audouinii) - EXTINCT
(3) Addax (Addax Nasomaculatuo) - EXTINCT
(4) California Condor (Gymnogyps Californianus) - EXTINCT
(5) Whooping Crane (Grus American) - EXTINCT
(6) Galapago Penguin (Spheniscus Mediculus) - EXTINCT
(7) Vicuna (Vicugna Vicugna) - EXTINCT
(8) Giant Otter (Pteronura Brasiliensis) - EXTINCT
(9) Mountain Gorilla (Gorilla gorilla berengei) - EXTINCT
(10) Monkey Eating Eagle (Pilhecophage Jeffereyi) - EXTINCT
(11) Kakapo (Strigops habroptilus) - EXTINCT
(12) Long-tailed Ground Roller (Uratelornis Chimera) - EXTINCT
(13) Snow Leopard (Panthera unica) - EXTINCT
(14) Blue Whale (Balaenoptera Musculus) - LIMITED SURVIVAL *
(15) Thylacine (thylacinus cynocephalus) - EXTINCT

- note *certain* mammals and fish species will survive by finding habitable zones at distances near and far from the hot climate intersection lines.


KEY: A~PALAEARCTIC. B~NEARCTIC. C~ORIENTAL. D~ETHIOPIAN. E~NEOTROPICAL
F~AUSTRALIAN
LOCATION OF PRESENTLY ENDANGERED ANIMALS: EXTINCTION at 20yr. PROCESS STAGE
A
B
B
C
D
E
E
F
F
*



Conclusion to the Report

It is clear to me now, that if the Earth goes out of its orbital axis by another three degrees in the next twenty years we will be five degrees outside our orbital axis. Two main problems will arise from that:

1. Gravity will pull the Earth too close to the moon. This does not mean we will collide, but the pressure this gravity will exert on the inner part of the Earth will cause earthquakes and tidal waves. Our weather will change to the extremes of heat and ice. The fault lines that already exist will be enlarged so that when the comet comes, the destruction will be much worse.

2. When the comet does come in fifty years' time we will be too near its pathway and the devastation and destruction it will cause will leave the Earth uninhabitable.

The rainforests were created by Mother Earth and God for a reason. They keep life and nature in balance. Look at how they form a belt around the middle of our planet. The sheer weight of all those trees, and the geographical position of that weight, is important. Reduce that belt of weight and combine that as one influence with all the others and the planet will not spin in space the way it is meant to: the rainforests form a weight-belt balance around Earth. Change it and she will wobble.

In Africa the past twenty years have brought worse famine and death than ever before. Count how many trees have been cut down in that period. Just in the last ten years, more trees have been destroyed than ever before.

In the past twenty years India has experienced more flooding, more heat and more death and pestilence than ever before. India's rainforests have been cut down.

South America has been plagued by more disease, famine, heat and death in the past twenty years than ever before. It goes without saying that the South American rainforests are the biggest in the world. One whole acre is felled every minute. People think they will not be affected. Think again.

You might believe that living in England, or other countries far from the tropical rainforests, you will be immune to the effects of such destruction. Wrong. The effects will reach us too: Mother Earth drew no national boundaries. Did the radioactive pollution from Chernobyl care where Russia ended and Scotland began? No. Do not doubt it - we too will experience floods, heat waves and inevitably, disease.

Please realise that none of this can be stopped unless the rainforests are put back.

It is the rainforests that keep us in balance. Once they are depleted beyond a certain point, our Earth will move another three degrees out of orbit: life will end.

Life will end.

We live because of the Earth. We stand on the Earth. We are fed by the Earth. We are watered by the Earth.

We must give her back her trees.

We must stop destroying the rainforests.

* * *

I will not be here in fifty years but my grandchildren will, as will yours. They must not be allowed to drown in tidal waves or be crushed to death in earthquakes. They must not live what

lives they have scraping for food and starving. Our children are our responsibility. We have to choose now what world they will live in. It is those of us alive now who can prevent those who will live then from being the last people to walk on this Earth.

We can save ourselves and our planet. It is not too late.

Without the knowledge that is being brought to us from a distant place we would have been too late. It is important that when the time comes, we listen to White Arrow and his friends. White Arrow can not stand under the Earth and tilt her back again, but he *can* help us. Many millions of people have prayed to God and Mother Earth, knowing in their hearts that she cannot sustain us if we continue to make her sick. Those prayers are being answered now. We *decided* to pray. From our own free will we prayed. If help comes in answer to our prayers but in a form we never expected we must decide again. Will we decide to ignore the help because it steps out of a spaceship?

The governments who, so far, have done little to stop the continued rainforest destruction know they are putting profit before survival. They know there is serious danger in allowing it to continue, yet they stay silent. Why? The trees keep falling. Why?

How much is money really worth?

We must ask these people why they still allow the destruction to continue.

We must support any organisation which helps the rainforest as much as we can. An acre of forest costs £25.00. If millions of people gave just a penny each, the rainforests could begin to recover within ten years.

White Arrow's report already shows that we only have ten years left to stop the trees being killed and only eighteen years for the reforestation to have any effect.

I have learnt many things from White Arrow. Some are terrible things that are coming. Some of the things he has shown me are already on this world but are not common knowledge because they are being kept secret from us by those who govern us. By keeping us in ignorance they are only serving to further our destruction.

The Earth is a living planet.

She gives us life.

Give her back her trees.

WE CAN AVOID OUR OWN DESTRUCTION

UNITED NATIONS
NATIONS UNIES

INTERGOVERNMENTAL NEGOTIATING COMMITTEE
FOR A FRAMEWORK CONVENTION ON CLIMATE CHANGE (INC/FCCC)

COMITE INTERGOUVERNEMENTAL DE NEGOCIATION
D'UNE CONVENTION-CADRE SUR LES CHANGEMENTS CLIMATIQUES (CIN/CCCC)

6 January 1993
REF: MZC/CS/fel

Dear Ms. Walker,

The Office of the Secretary-General of the United Nations passed on to this office your draft report on the irreversibility of stochastic climate change process and your letter dated 24 September 1992. We look forward to receiving the final version of the report when it will be available. You may wish to send it also to the Intergovernmental Panel on Climate Change at the following address:

c/o World Meteorological Organization
41, Avenue G. Motta
1211 Geneva 20

Concerning your request for a "position" on new species of trees, we suggest that the FAO is the organization within the UN system best able to brief you on such a specific matter. The address of its Forestry Division is:

Via delle Terme di Caracalla
00100 Rome, Italy

I wish you all success in your undertaking.

Yours sincerely,

Michael Zammit Cutajar
Executive Secretary

Mrs. Ann Walker

England

cc: Mr. P. Civili
Director, EOSG, UNHQ

CLIMATE CHANGE SECRETARIAT
16, Avenue Jean Trembley, 1209 Geneva
Telephone: (41-22) 798.58.50 / 798.84.00
Fax: (41-22) 788.38.23

4th February 1994

Dear Mrs Walker,

Deputy Minister Dan Goodleaf has asked me to reply to your letter of January 4, 1994. He thanks you for providing him with a copy of your book "Heaven Can Come Later" and your recent study on Global Warming. He has passed them onto his Department's Environment Division for study.

Yours sincerely,

Philippe Cousineau
Executive Assistant
Deputy Minister's Office
Indian and Northern Affairs, Canada

Addendum (and update) to the "Report" of 1992

Consideration of two crucial parameters (mentioned in the report) seem 'on-course' and orbital mechanics changes remain *publicly* verifiable.

In the report of 1992 (first published in my book "Little One – Message from Planet Heaven") I tried to give due credence to the interactive nature of basic features, as they were *"given"* to me, which endanger human life on our planet. As a layperson myself I have tried to clearly identify the pattern of concluding events (if *our* behaviour is not modified) yet also give some complexion of the basic processes that underlie matters. For instance computer simulation models based in *linear* mathematics (and *driven* by existing empirical environmental data) might yield very different outcomes for human survival than more *capable* non-linear models. The patterns of human impact on *fauna and flora extinctions, historical degradation to environment and population growth* have been demonstrably non-linear in their nature.

Clearly several chapters of text might have been brought forth as a technical compliment yet I very much hope to convey the overall "flavour" of our world's cataclysmic crisis to the widest readership.

Over the last ten years, as a layperson and grandmother, I am one of very many people dismayed by the tumultuous escalation in *so-called* "freak" environmental extremes. *Some of* the most tragic (and most recent) concern earthquake occurrences are in areas without historical precedence and correlation to previously known fault lines. With the republication of *"the report"* I feel prompted to write a brief addendum. Even without the "weight" of multitudinous environment events, in the intervening years, I hope these additional words shall affirm the continued validity of the imperatives set out in the *report* at its first publication.

I feel that, irrespective of our level of scientific education, we tend to gain a lot of almost subconscious prompts in life that help us decide whether we "really" believe something. Moreover I think those of us who have experienced the latter part of the twentieth century have been forced to realise something about scientific statements, that blithely justify *our* wilful damage to *our* environment. It is that they seem invariably "tied" to highly *vested* industrial and commercial interests. When such scientific arguments nullify the significance of environmental damage (and even advocate continuance, opining no "scientific" evidence to the contrary) I think we must simply recall what *truisms* life has taught us about the *motivations* of callous-minded and self-serving human behaviour.

As a layperson it seems apparent that there is a balance for human beings to change our environment ENOUGH for our survival (and comfort) and changing it to the extent of disrupting critical processes ('natural' balances) and causing extinctions of other species of life. The ability to change (and now decimate) nature has only really been shaped in the last two centuries of the existence of our *single* species.

It might be argued that there is a collective aspect of our HUMAN psyche that reaches a "value judgement" between the *ease* of achieving "ever-increasing" economic prosperity (prosperity is not a bad aim) and how "troubled" we are to seek paths for prosperity without environmental destruction. It seems this "value judgement" finds the disintegration of vast tracts of our environment (and destruction of critical species of life in eco-systems) as an *acceptable*

consequence of continued economic growth in our most powerful economies. This is a value judgement between our immediate (short term) requirements and DISREGARDING the longer term outcomes of many kinds of damage to our environment – with its incumbent natural balances *"evolved"* for the survival of ALL life forms.

It might be further argued that a very disturbing expansion of this "value judgement" process is *being* enacted by National economies (and *"vested interest"* groupings within these). Except such national economies might evaluate a "balance" between the consequences of environmental catastrophes and damage ELSEWHERE in the world AND the political *tedium* of "curbing" domestic greenhouse gas emissions, harmful environmental activities and pollutants.

Again, as a layperson, it is difficult to reconcile such seemingly bizarre cynicism. I believe the implied nature of such *political* determinations are intrinsically rooted in TWO fallacious beliefs.

One of these beliefs, held by many people I think, is that the *"stage of human survival difficulties"* will be reached in a *gradual* process. The most prominent perception is that the disintegration of fundamental biosphere processes will occur over the course of generations. (Perhaps with political family members being part of a financial elite whose resources will *ensure* their survival). There seems to be no consideration in the media of a sudden and drastic reduction in the "break-down" time-scale of many interactive *natural* processes. These processes have been overloaded for several decades and are changing our environment. Media portrayals are often half hour television documentaries. Wherein tornadoes, earthquakes and floods etc are the ferocious and random whims of the almost "malevolent" force of nature – such "sound-bite" documentaries do <u>not</u> suggest a link between the occurrences and human activities, industry and technology. (However there is a link between industrial/technology "lobby groups", allocation of industrial/technology corporations' *television advertising revenue* and television programme makers. The influence of multi-national corporations' advertising revenue would obviously extend to the type of articles permitted in the prominent journals and magazines we read).

The other facilitator of such *political* determinations is an almost irrationally high confidence level in the accuracy of whatever computer simulation models (publicly available or confidential agency developments) were used to support these determinations. There would need to be an absolute *"blinkered"* confidence in successfully modelling (predicting) the culmination (and interaction) of some of the most complex processes known to science. Furthermore an "unswerving" confidence, whatever computer simulation model is being used, that there will be an accurate "measure" on ALL relevant parameters. (In an overall process based in the interaction of multitudinous parameters, whose variation is implicitly non-linear in behaviour). Both of these beliefs support continuing our present disregard for the environment. *The basic* reasoning of both these beliefs is irresponsibly faulty and flawed.

A large part of one's aims, in writing this addendum, are to seek to address the thoughts I have most recently mentioned. I hope this may be achieved by an examination of the most basic forces on the earth's crust – the place where we all live!

The readership will realise that some of the diagrams, included in the "report" to represent "continuous" processes in nature, are somewhat simplified to convey the ethos of these processes. I would like to include a further diagram, very much of a conceptual nature, which

combines some of the prior diagrams. I hope this diagram may help to convey a dilemma most of us would balk at!

For many years now most of us will have noticed news reports tabulating "accelerating rates" of greenhouse gas emission, rainforest destruction, ozone layer depletion and other less publicised parameters in harm to our environment. However if we merely consider the "runaway" process of atmospheric heat retention (which is gaining in its process momentum and "fuelled" by increasing levels of carbon dioxide and other greenhouse gases) we can understand that this heat is also conducted back onto the earth's surface/crust. (The earth's crust comprises continents, oceans and polar ice caps). We know the increased heat energy held in the earth's crust will be conducted into the underlying molten layers – which sometimes breach the earth's crust in the form of volcanoes.

Heat conduction and convection in fluids are elementary physics studies we may recall from school (or notice in our kitchens whilst heating a saucepan of soup). Elementary science informs us that elevation of the 'steady-state' (circulation and convection) temperature of the underlying molten layers will cause increased perturbation/agitation, (For instance as fluids reach their respective boiling points). This agitation will subject the earth's crust to patterns of stress forces quite different to those in the previous ages of mankind's existence.

All species of life *live* on the earth's crust – whether they inhabit the oceans, land masses or polar ice caps. The thickness of the earth's crust is analogous, in proportion, to the thickness of an apple's skin. (The earth's core being dynamically active *molten* material of course). Yet the greatest tracts of the deepest oceans remain mysteries to us. Behavioural changes in the motion of molten fluids beneath the earth's crust are completely beyond our present knowledge, *ability to quantify* and ability to predict or refute. Clearly changes in motion (and momentum) of the molten fluid underlying the earth's crust, *compared to history* before the start of the "runaway" atmospheric heat cycle, could not even be discerned – let alone plans formulated (and adequate technology developed) to counteract an eventual 5 degree increase in our planet's axis of rotation.

However another aspect of matters concerning the molten fluid behaviour, underlying the earth' crust, is equally disturbing. The link with earthquake and volcanic activity is amply apparent. Forthcoming changes in the occurrence of these incidents (for instance away from historically known fault-lines and zones in the earth's crust) are phenomena we cannot even begin to predict. Moreover some scientists, quite recently, seem to feel volcanic activity could be far more significant to atmospheric (gaseous composition) changes than though hitherto. This being so our own greenhouse gas emissions become even more critical.

I think the discussion, even "thus far", begins to show there are *many* environmental parameters of crucial significance to our survival on the earth's crust. For many of these interactive parameters we have no data nor developed *mathematical handling tools* to incorporate them into present or future computer simulation models.

Engineers working on the most advanced computer simulation models in industry tackle subjects incredibly less complex than the necessary extent of computer simulation models for atmospheric climate change and stability. Yet the "predictions" from these models can be assessed against the industrial process for accuracy. There are frequently changes made to the mathematics, that represent parameters in the model, which the computer simulation model is being "validated" (in their *commissioning* process). Moreover if some odd or spurious parameter has been overlooked (or incorrectly "modelled") it does not necessarily imply negligence and it

can be changed during the validation process of the model – *This cannot be done for the climate change computer simulation models which "our" politicians are betting "our future survival chances on!*

An unexpected parameter (or unexpected parameter change) that can suddenly or drastically change the overall behaviour (and outcome) of a process is colloquially known, to computer simulation model builders, as a "feedback". In the recent past there emerged German research concerning "merely" *one single* very drastic "feedback" into the acceleration of climate change. This "feedback" relating to vast (and as yet unquantified) deposits of methane (a greenhouse gas) beneath the ice caps and ocean floors. Clearly this is merely *one single feedback*, yet a critical factor, whose impact on future climate disintegration that can only vaguely be guessed at.

I believe that the majority of "ordinary people" (or laypersons such as myself), that are concerned about the degeneration of environmental processes, perceive a *gradual* process disintegration. There seems to be a "directed awareness" that any survival difficulties will impact upon descendants we will never meet. I also find it worrying that we tend to perceive either our own environmental ravages or increasingly frequent weather and tidal events (whose magnitude and severity seems to escalate also) as "freak" occurrences and our destruction of the rainforests or pollution of the oceans as of an "isolated" significance to the biosphere. However I do believe it is a *hopeful sign* that there seems to be a growing awareness, amongst we ordinary people, that things might be going wrong for us a great deal sooner than some studies prominently proffered in the media suggest. Indeed that the predictions of *"only vaguely possible (and sedate) climate changes",* that multi-national industrial and technology interests find *"comforting"* to their long term "business plans", are only one possible outcome to the changes we induce in our biosphere!

Single environmental processes might be destabilised by a number of possible (various) "feedbacks" to cause a "runaway" effect. Each of these processes impinge on others – as they were devised and "balanced" in evolution over millions of years. The very obvious "common sense" structure of such concepts would concern any *"sensible"* person. Yet it was very much more daunting to be "given", by my spirit guide White Arrow, specific features of our environments crises that quantify *physical* changes (in orbital mechanics) *which do not seem to be considered in any papers.* (Neither as datums or physical parameters to be monitored for variation). Government physicists have access to metrology equipment and instrumentation that is fully capable of measuring diminishment of the moon's lunar orbit and an increase of two degrees in the earth's axis of rotation (as it presently stands).

I believe that people of all backgrounds should endeavour to cultivate a mind set of subjecting proffered "scientific" statements to the consideration that the word "scientific" appearing in a statement does not infer an absolute/sacrosanct/irrevocable truth – different scientific methodologies and computational *tools* can be applied to an analysis. For instance the much abused phrase "scientific evidence" can mean so many different things. Politicians seem to increasingly *employ* this phrase in the hope and expectation that the part of the community, without a *formal* scientific education will switch-off their reasoning skills to a state of lethargic deference and "hypnotic" acceptance. Our life experiences help formulate what standard of proof (or "balance of probabilities") we will find acceptable before modifying our beliefs or actions. I hope that, as time goes on, more people will have the confidence to use *their reasoning and verification skills*. These were instilled over many years, and will help formulate

their own opinions on the *likelihood* of proffered predictions for environmental (biosphere) changes.

I would hope the readership might find a brief example useful to their considerations. It concerns letters sent to various agencies in an attempt to gain verification of a matter. One of these letters appears as an example in this addendum. This letter was first sent to the NASA agency by registered post. (No acknowledgement or reply was ever received).

A concept such as the moon getting closer to the earth (in its elliptical lunar orbit) would understandably seem "odd" at first. One might wonder about the mechanisms that might make this occur. Moreover if the mechanism(s), "driven" by alterations in our terrestial environmental processes, has effected the lunar orbit then this somehow needs to be confirmed, refuted or classified as a "maybe" by agencies with the appropriate equipment.

In seeking to verify the matter above I recalled a television broadcast featuring Astronaut Alan Shephard. As part of his work on the moon's surface, many years ago, he positioned and aligned a laser reflector. This prompted various letters, such as my letter of 25 November 1995 to Dr Holloway at NASA. This laser reflector, over the course of some twenty-five years, would have yielded data that would help us gauge a decay in the lunar orbit. Whilst such data might be obscure it could not reasonably be regarded as a national (or commercial) secret. My letter of 25 November 1995 also sought a qualification of the terms in which the data would be given. I think the inquiry to NASA is coherently expressed. The United States congress approves funding to NASA to the extent of a Public Affairs office. Certainly an acknowledgement, on behalf of the addressee, would have fulfilled the rudiments of courtesy. I do tend to think that "no reply" from this agency is *actually* a type of reply – given this letter was sent to NASA more than once.

As part of the remarks in this addendum I should like to recognise that the matters expounded in *"the report"* are of a dire significance. My motives in this matter being most exactly expressed as those of *"a concerned grandmother"* – rather than someone seeking to cause alarm or distress. I hope *"grandchildren"* in ALL parts of the world, in ALL socio-demographic groups, might have the greatest chance of survival (with long and full lives).

Many "ordinary people" have an interest in the survival of mankind that extends past the duration of our own lives. "We" realise "we" need to be conscientious enough to spend some thought and time to reach "our" own opinion on what is *likely* to be dangerous to *"our"* environment. "We" need to make-up *"our"* minds. This is a matter far too important to receive our opinions by "osmosis" from *vested interest* industrial and technology lobby groups.

In the recent past I was one of many people, throughout the world, saddened by what is seen by many nations as the insidious *"collapsing"* of the Kyoto environmental emissions agreement. The world's most powerful industrialised nation (5 percent of the world's population producing 25 percent of the world's carbon dioxide output) rejected a consensus of many nations with the abandonment of the Kyoto agreement. I was reminded of the faulty *political* reasoning mentioned earlier in this addendum. The adversities caused by environmental extremes are *perceived* as predominantly impacting the *third world* and *developing* nations. However the USA itself is gradually receiving an increasing frequency of these "freak" environmental extremes.

The present US governmental administration has decided to "un-designate" *carbon dioxide from their nomenclature of environmental pollutants. This might be a* politically *expedient "smokescreen" in the US media, yet it will NOT* change *the global consequences of these emissions.*

Yet as human beings we need to recognise and recall *truisms* about the *motivations* of callous-minded and self serving human behaviour. The present US head of state is *merely* being a little "more" forthright. This inasmuch as not disguising the self-serving motivations of the greatest majority of the politicians we choose to elect OR allow to reach power through *"our"* apathy. However powerful industrial and technology *"vested interests"*, in the majority of countries, will NOT be apathetic about supporting political candidates that will serve them best. This is most typically exemplified in the current US presidency.

In the twenty-first century (and the era of the internet) we cannot blame our apathy on politicians. In the same vein it is equally constructive to *unemotionally* "recognise" stealthy media manipulation. The lobby groups of Industrial and technology interests, merely work to bring financially centred business plans to fruition. The media cynicism that can be directed towards environmental issues, quite reasonably, can make many people succumb to a sense of apathy. A somewhat cynical ethos and perception, of environmental issues, seems easy to cultivate and reinforce.

For instance, scientists examining the spectrum of "outcomes" for the degeneration of key atmospheric oxygenation processes might examine "feedbacks". Such "feedbacks" are likely to be diversely based on the forest and rainforest destruction in our world/biosphere. Such "feedbacks" might drastically alter viable free oxygen levels (for breathing) in our atmosphere. Yet the magnitude and importance of such studies may easily *be derided, undermined* or placed in doubt as the actions of "alarmists" or merely the irrational protestations of "tree huggers!"

The various interactive processes and natural balances that have evolved in our Biosphere, are perceived by many people, as a vague "collective" of "the environment". i.e. *"…….the environment is something with "stuff" going on that's causing tornadoes and floods in the third world, a few islands will disappear but it isn't going to trouble "us" over here."*

As an ordinary person I try to follow mainstream articles on environmental issues. In recent years, I believe, a very odd perception/idea has been emerging. This idea concerns the capabilities and dynamism of our mechanical technologies. There seems, as we have mentioned earlier, to be a widespread viewpoint that the disintegration will continue to proceed in a very gradual, *sedate* and REVERSIBLE manner. With these gradual changes being predicted a long time in advance. However in recent times there has been a further, very odd, "wishful thinking" supposition. This supposition seems to have been "clipped" onto the end of this public relations exercise. This idea seems to be that "IF" things become dangerous in our environment (such as a *"runaway heating effect"* in our atmosphere) then our saviour of mechanical technology can always come *"galloping"* to our rescue at the last minute!

We see that technology can do some wonderful things at all levels of our daily lives. Technology will always be applied and administered by "human beings" however. Technology will be subject to our human traits of self interest, greed and personal/organisational "inertia" in our actions. Moreover we must not forget our very special ability of "choosing to believe" *whatever we find* convenient *and makes us feel good about ourselves.*

Conceptual Representation of Variance in ORBITAL MECHANICS' Properties

(THE TILT OF EARTH'S AXIS of ROTATION and LUNAR ORBIT VARIANCE.)

~A major interactive factor on the growing INSTABILITY of the Earth's crust. (ON WHICH WE LIVE), is a complete UNKNOWN. (and cannot be modelled or measured or predicted. BUT these two parameters can be measured

As ordinary people, without being "political", we can notice technological developments in food production enable people in many countries to become dangerously overweight. Yet, in all parts of the world, children suffer and die from malnutrition everyday. It seems we, as human beings, have a very perverse "mind-set" in implementing the earth's resources for the greatest good. Most recently we saw "the dominant global mind-set" give rise to a court case seeking to stop low cost generic drug copies being purchased by South Africa for HIV/AIDS sufferers. The consortium of multi-national pharmaceutical companies had a sudden "wake-up call" of bad publicity and dropped the case at the "eleventh hour", as many people will recall. I mention this because I see it as a very ominous example of the Archetypal "mind-set" of multi-national *vested interest* groups. I think, even without such examples, most of us are possessed of sufficient mental faculties to see that corporate vested interest groups will always place financial profits before people – unless they run into legal measures which hurt them financially. However if we "see" human welfare and human beings are very far down the *corporate list of priorities* – then we really do have to recognise (with the "front" part of our minds) that environmental matters are "really and truly" at the bottom of a very long list. Unless it somehow impinges on profit levels, in which case *cosmetic* "lip service" is always, always the cheapest and most cost-effective commercial solution.

I understand there are presently studies to "look into" producing devices that might one day store large amounts of the carbon, which "we" produce as carbon dioxide, underground. I believe the Engineers that choose to work in this area will have noble ideas and a great sense of humanity. I very much hope these studies shall not be cynically quoted by groups who want us to feel "comforted" and continue escalating our greenhouse gas production. However we do know, from experience, that petroleum (producers) and industrial groups will always lobby FOR whatever gives them the greatest short term profits. (And lobby AGAINST environmental measures that might be financial and administrative "irritants" to them). If they do not operate their business in this manner then many of "us", the shareholders who invest in them, will have the executives changed.

Of course many hours could be spent cataloguing technological devices that might have been implemented for the benefit of humanity, were it not for *"our"* self interest *"habits"* of human behaviour.

There is an analogous case that causes me a great deal of doubt concerning this particular technology device and others that may yet be proffered as "fixes". The misgivings I have concern the implementation of such technologies. Even if they were available now and "ready-to-use" I wonder if they would be applied in time. The analogue example is "renewable energy". This being solar, wind and wave power. There have been viable solar and wind power technologies since the petroleum fuel crisis of the early 1970's. I fear that, merely because its easiest and most profitable for them, fossil fuel producers and industrial groups are very happy to *continue* "guiding us" into retaining our existing patterns of energy use and emission. The very slight implementation of solar and wind power, during the last three decades, is largely due to a few very dedicated people. All I can remember of wave power installations is a handful of articles on working scale models. Yet once we had the dedication of purpose, to implement technology, to allow twelve astronauts to walk on the moon.

The merits of renewable energy were known so long ago (and the implementation of technology "minuscule" compared to mounting space missions) that *the "balance of probabilities"* leave one with the conclusion that there has been very little "honest" political commitment to renewable energy in three decades. Indeed the only serious investment in energy

policies, other than infinite reliance on fossil fuels, is the nuclear energy! Something has been very wrong with our/public level of awareness, of the salient issues, for a very long time!

I worry very much that technology studies such as the underground carbon storage devices (and other possible technology regimes, yet to be brought to media prominence) will be used as placatory (public relations) devices. Typically, "scares" about massive "financial hardships" or "drops in living standard/lifestyle", in the media will be enough to "strip-away" support from environmentalists over changes in energy policy.

For instance, if *"a majority"* of voters became worried that our environmental damage might harm us much, much *"sooner"* than we had been *"told"* to think, we might write to *"a majority"* of feckless politicians. *"A majority"* of politicians might then change energy usage and emission policies – in order to keep their jobs and "limelight". It would placate public worries if we were "conditioned" with a mystical idea/faith that technological solutions to environmental destruction could be "thought-up". Presumably a crisis would permit sufficient time for development and mobilisation of the technological solution(s) IF serious endangerment to our species' global survival occurred – *but since there is no such possibility mentioned in the media, we can just "carry-on" without changing our energy use and pollution habits!*

Following this course of action will have the added advantage that many large and diverse multi-national corporations will find it much easier to "get-on" with their "five year business plans" – running costs and administrative irritants/difficulties will be "minimised" for them!

The cost of our own tacit complicity (or apathy) in the destruction of our global environment, by "allowing" ourselves to be so easily *"led"* has vast implications for our children and descendants. Yet this is NOT something that will appear on the yearly profit forecasts of multi-national corporations. However it may appear on their "business plans" as "tax-deductible" political campaign contributions. (Many people feel this is most clearly exemplified in the aftermath of the last US presidential "election").

As we try to be aware of events around us I think many of us have found the utility of calmly assessing matters, if we believe there could be serious outcome. I think most of us feel happier, even if we disagree with a "fashionable" consensus, if we have "reasoned-things-out" in our own terms.

For instance we use these judgement skills in major financial purchases that might adversely affect us and our families if wrong. We attempt to evaluate matters using all relevant information and due contemplation – *we do not blindly accept statements about something (or some outcome) that "just happens" to be what we will feel comforted with!* In fact, depending on how bothered we are in our future well-being, we make the effort to ask questions so we have a "hands on" understanding of ALL the possible implications of the "fine print!"

Despite reading about environmental damage for years, we have a sacrosanct belief that only a very tight and narrow range of environmental outcomes might occur. The narrow range of predicted outcomes are proffered as the only possible resultant climates. In the many ages after the earth's crust became stable there have been long periods where the atmosphere and climate were stable, but these conditions were outside the narrow range necessary to support human life.

From a "common sense" viewpoint "our" sacrosanct and unremitting faith in a narrow range of computer simulation model predictions is analogous to someone "betting-the-farm" on the outcome of a horse race. A judgement is made on face value data, many factors and variables are involved, the efficacy of the evaluation/calculation process may be the best that can be managed on the available data. Yet the selected prediction (in this analogy case *"which"* horse will win) is one of many possible outcomes!

I believe the world's total population greatly "out-numbers" the people who believe their jobs are DIRECTLY dependent upon various *vested interest* groups. For instance, those whose employment is dependent on the assumption of ever increasing fossil fuel consumption, such as the automobile industry. Therefore their "value judgement" of the "acceptability" of *the escalating rate of carbon dioxide gas emission* will be different to a farmer in the developing world – or at least *until* the "runaway greenhouse effect" is triggered in our planet's atmosphere.

In this addendum I have sought to advocate that *we* should each "get to grips" with the issues that damage our environment and place us at a *"turning-point"* for rapidly increasing crisis. I believe that the issues involved concern a crisis point for all forms of life on our fragile earth. In "taking responsibility" for our actions (if we care) I think we might learn what we can do about the basic processes that sustain life on the earth's crust. This would help each of us make an *informed* choice when we reach our own "value judgements". This choice being whether we want to work together to help curtail the destruction of the conditions that sustain human life.

If we are unsuccessful, the earth will still be "here", as a dark sphere, orbiting the sun for millions of years yet to come. We may only hope some forms of sentient life might eventually evolve again.

Even today I still find it "odd" to see media news reports where phrases using the word "environment" might as well be quoting from a strange language. There seems to be no connection between "this environment thing" and our own survival (both in great swaths of humanity and as a species). We are overloading our atmosphere with carbon dioxide from fossil fuels. Yet in ravaging our environment for short term financial profits we even destroy the Rainforests that contribute so much of the oxygen we ALL need in order to "just" breathe.

As a very young person I can recall awakening on sunny mornings, filled *with "hopes for the future"* and youthful exuberance. (Very much as my granddaughter does today). On such mornings I find it difficult to believe we are executing such mortal damage on *"nature"*.

As a very young person I would find it very difficult to believe very powerful people can find very large bank balances more important than the world we live in. (After all, we cannot take "it" with us). As an adult I have had to accept that some people want *so much*, when so many have *so little,* and do not care *how* they get it.

The *"process"* (described in the title of the *report* of 1992) will not permit the survival of some people, in some part of our world, as it concludes. The ability to initiate colonisation spaceflights and "terra-form" Mars is many decades of technological development beyond us.

Human beings, through *"our"* self-centred cynicism and apathy will have destroyed a world that took many millions of years to evolve. Many species of wonderful and beautiful life will cease with us. Many people have hoped our species might, one day, explore the stars –

perhaps our callous materialistic traits, which we are not born with, will finally "deal out" our OWN DOWNFALL and poetic justice!

* * *

REGISTERED POST

Mrs Ann Walker

Tel:
Fax:

England

24 November 1995

Dr John Holloway
Director
Langley Research Center - NASA
Hampton, VA 23665
USA

Dear Dr Holloway

Subject: Laser Metrology- Instrumentation Data for the Quantification of Long Distance Interference effects.

From the viewpoint of my own studies I am interested in the subject area mentioned above. I am particularly interested in the application of technology principles that are used in the laser technology (and measurement principles) of the Apollo laser reflector that was installed on the lunar surface.

I presume that the Earth 'Sensor' unit and lunar 'Reflector' unit must utilise a methodology that is derived from laser Interferometry. Moreover, I hope to learn of the calibration principles that govern variances atmospheric transmissibility of light and fluctuations in the orbital distance of the moon. (ie one of the features that must affect this is the seasonal variation of the earth's 'Moment of Inertia'. (That is mainly attributed to trees drawing 'up' a mass of water, in the northern hemisphere, for their leaves). This calibration correction may perhaps be empirically based, in conjunction with Atomic Clock data).

I regret that I have not been able to find any relevant references using a convention 'Key Word' literature search, which was quite costly. I am puzzled because one would imagine this cannot be classified technology. I have written to NASA (at 300 E Street, South West, Washington DC 20546) but although this was some time ago I did not receive a reply.

I would be grateful to receive any references you may have for technical papers in this area or any suggestions you may have for an agency that I may contact. I look forward to hearing from you.

Yours sincerely

Ann Walker

REGISTERED POST

Mrs Ann Walker

Tel:
Fax:

England

24 November 1995

Dr Arati Prabhakar
National Institute of Standards and Technology
Gaithersburg, MD 20899
USA

Dear Dr Prabhakar

Subject: Laser Metrology- Instrumentation Data for the Quantification of Long Distance Interference effects.

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Yours sincerely

Ann Walker

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The following list of references was compiled on completion of The Report in order to aid those readers who wish to further understand information summarised in The Report, and to help those already in the field of science to validate White Arrow's words. Further and more precise detail will be contained in the author's next book, in preparation.

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