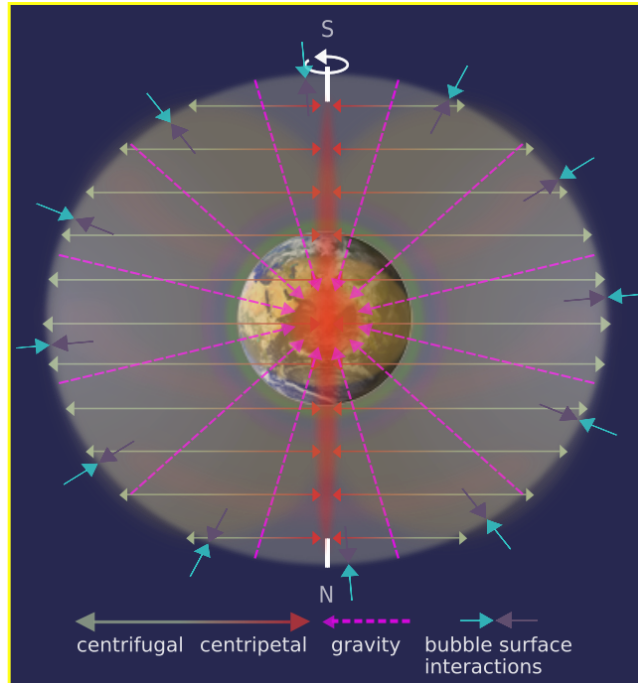


Gravity Differential And Applications Essay

The Potential of Water Cycle Management

短論重力差及水循環應用

Cres Huang



Forces Of Gravity Differential

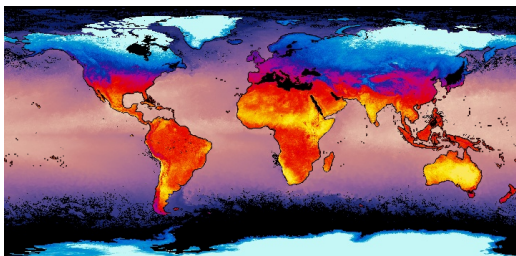
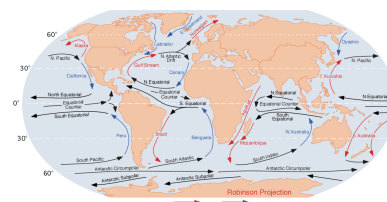


Figure 1: Trade Wind



Ocean Current

ISBN 978-957-43-4899-2



Gravity Differential And Applications Essay
Copyright ©2017 Cres Huang
All rights reserved
Edition: 2017(01)-preview
2017/08

Advice and correction are appreciated.
Please send your correspondence to:
cres@mail.org

Abstract

Earth is a complex structure of different densities baked in the rotisserie of the Sun. It alters the densities of air, water, and ground. And, gravity is our natural home energy. Working with the centrifugal force of spiraling Earth, it drives the circulations of particle, gas, liquid, and matter in a spherical force field of Earth.

Mimicking nature’s circulations of water and energy will benefit all lives greatly. It could be easier than we think.

Contents

Abstract	i
Contents	i
List of Figures	i
1 Introduction	1
2 Gravity Differential	1
2.1 Driving Force of Gravity Differential	3
2.2 Rotisserie of Solar Energy	3
2.3 Convection Effect of Interactions	3
3 Applications of Gravity Differential	5
4 Managing Freshwater Cycle	5
5 Summary	6
References	7

List of Figures

1 Trade Wind	1
2 Flame in Gravity and Micro Gravity	1
3 Falling Apple	2
4 Time Lapse Apple	2
5 Surface Temperature	3
6 Forces of Gravity Differential	4
7 Convection Effect of Differentials	4
8 Ocean Current	5
9 Water Cycle	6

1 Introduction

Earth is a complex structure of different densities baked in the rotisserie of the Sun. It alters the densities of air, water, and ground. And, gravity is our natural home energy. Working with the centrifugal force of spiraling Earth, it drives the circulations of particle, gas, liquid, and matter in a spherical force field of Earth.

Gravity acceleration is uniform regardless of mass, surface, shape, and size. Change of mass density also alters the concentration of gravity. Denser matter would squeeze into smaller space toward gravity center and force lighter matter to go up.

2 Gravity Differential

This intrinsic momentum toward a common center of a body is the function of density and acceleration we call it gravity. It is the contact force we feel as weight when our intrinsic momentum is counteracted by the ground. Analogously, it is a dead-lock collision of our body against the Earth. Additionally, when all elements are squeezing into a tighter space, we feel the compression of air molecules around us. Since we already understand gravitational acceleration is uniform, we only need to focus on density of gravity force.

Strictly speaking, hot air expands but does not go up. It continues to accelerate toward the gravity center, however, it's overtaken by heavier cold air. Here is a screen shot of the video from NASA StationLIFE: Let's Get Physical[8] showing flame shapes in gravity and micro gravity, Figure 2.

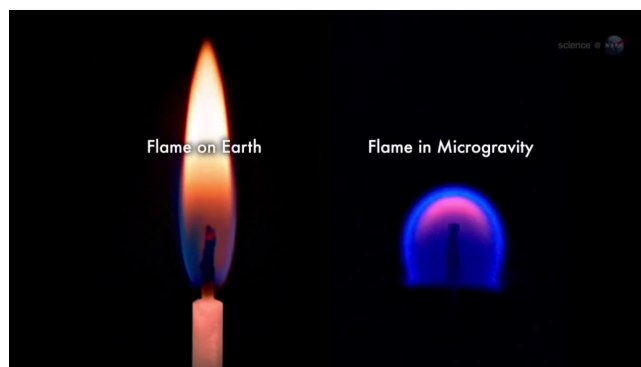


Figure 2: Flame in Gravity and Micro Gravity
Courtesy of StationLIFE, NASA

Similarly, not whole apple falls. Apple is a complex structure. However, only heavier than air elements of apple have strong enough potential to fall. Free lighter than air elements of an apple will rise first even before the fall. Lighter than air elements are trapped by the heavier structure of apple. However, their gravity potential is not strong enough to sink.

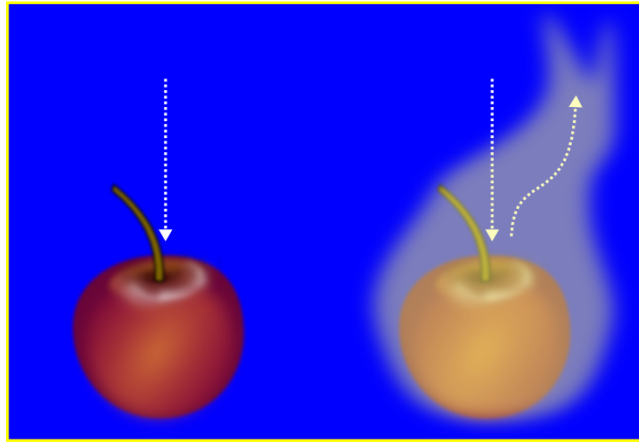


Figure 3: Falling Apple

Here is a screen shot of an actual apple time lapse video by Youtube user canosse.[1]



Figure 4: Time Lapse Apple
Courtesy of Youtube user canosse

An apple can fall fast, however, it could take a long time for it's trapped light ingredients to arise. On the other hand, an apple may lost most of it's lighter than air elements, dried out, before fall. Strictly speaking, only parts of an apple has strong enough potential to fall. Lighter than air elements will be forced up when free from structure. Equally, a meteor releases lighter than air particles to their density layer of Earth. Meteorite is the densest remain. This is also true under water. Only heavier than water elements of a structure have strong enough gravity to sink. Trapped lighter than water elements continue under the force to rise.

Earth is constantly interacting with it's environment. More precisely, the absolute complement of the Earth or the rest of the universe. I believe this is one of the fundamental principle of the universe. Subatomic interactions can not be beyond our detection. However, not at higher level such as Solar Wind. Certainly, we can detect heat from the Sun. Besides, the orbital and rotating force of the Earth will interact with gravity. The interactions cause the redistribution of gravity force. I will call it gravity differential. It drives the reposition of matters. It is shown in the circulation of gas or liquid that we can see clearly. However, I would not say the solid part of the Earth is not affected by it. Solid is thick liquid, and gas thin liquid. They behave differently, however, the underlying principles of force and motion are identical.

All structures on Earth are governed by the gravity of Earth. It is a fight when elements are pushing into tighter space from all directions. Smaller and higher density bodies will push in and force others to move to the side and up.

2.1 Driving Force of Gravity Differential

Boiling a body of water with heat or microwave creates differentials of particle, air, and water molecules. The body expands and some molecules would escape. Escaped molecules would migrate to their density layer of Earth's gravity field.

2.2 Rotisserie of Solar Energy

We are surrounded by natural and man-made vortexes. We know the gyroscopic effect of whirlpool, tornado, cyclone, and so on. The Sun is a powerful nuclear agitator. Accounts for about 99.86% of the total mass of the Solar System, it sends out dominating solar wind. Solar particles, energy, and angular momentum are passed onto all bodies in it's reach. Planet as large as Jupiter does not produce thrust to move forward on it's own. Floating weightlessly in space, wouldn't it be caught by solar storm easily? I believe it is Sun's dominating vortex force field keeping the Solar System together.

Earth is trapped in the Solar Storm. The truth is, the Sun never sets. It is just a perspective view of rotating Earth. This rotisserie does not heat the Earth evenly. It creates moving hot spots and causes the gravity differential of air, liquid, and solid from location to location. Here is a combined map of land and sea surface temperature from NASA[6], Figure 5.

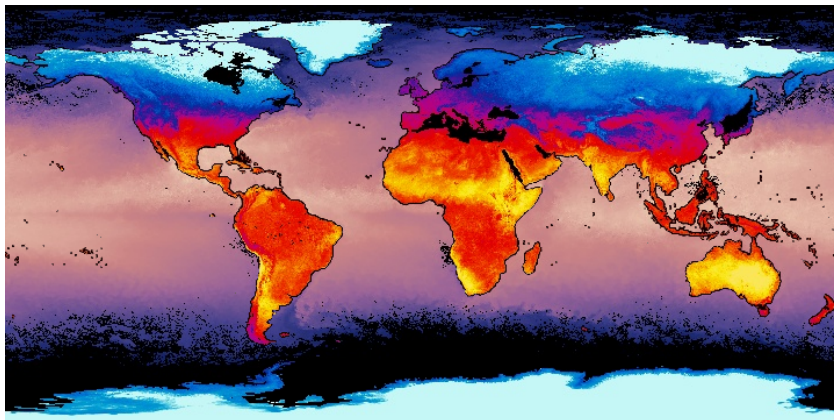


Figure 5: Surface Temperature
Courtesy of NASA's Global Maps

2.3 Convection Effect of Interactions

Additional sources of energy also interact with gravity. For example:

- Centrifugal/centripetal.
- Geothermal.
- Magnetic.
- Radiative.

Earth is a complex structure with layers of different density from plasma to solid separated by its gravity. A simplified illustration of force interactions is shown in Figure 6.

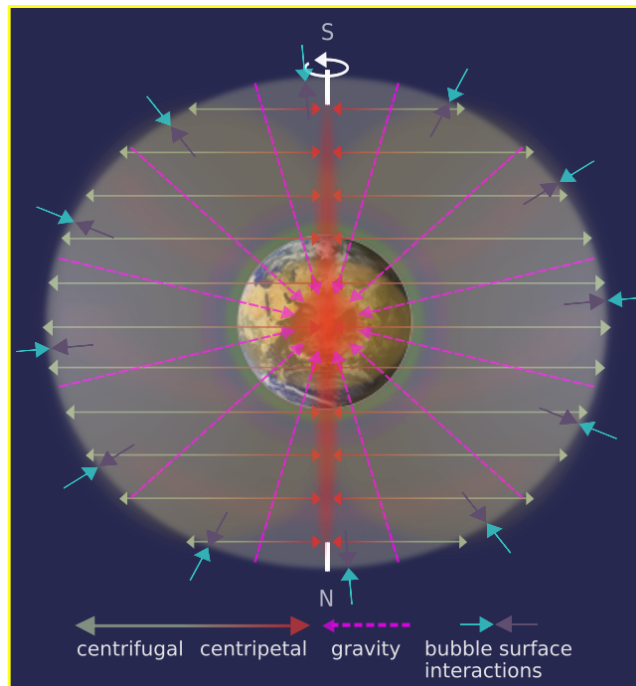


Figure 6: Forces of Gravity Differential

Here is a screen shot of the video showing the convection effect by Don Pettit[9], Figure 7. The equilibrium is disturbed by added energy. It creates the differential among molecules. We can see the convection (circulation) of molecules shown by the white trace particles.



Figure 7: Convection Effect of Differentials
Courtesy of Science off the Sphere - Thin Film Physics, Don Pettit

Isn't it a simplified version of showing how Sun's energy disturbs the molecules of air, liquid, and solid on Earth? Here is a depiction of complex ocean current from Wikipedia.org[7]:

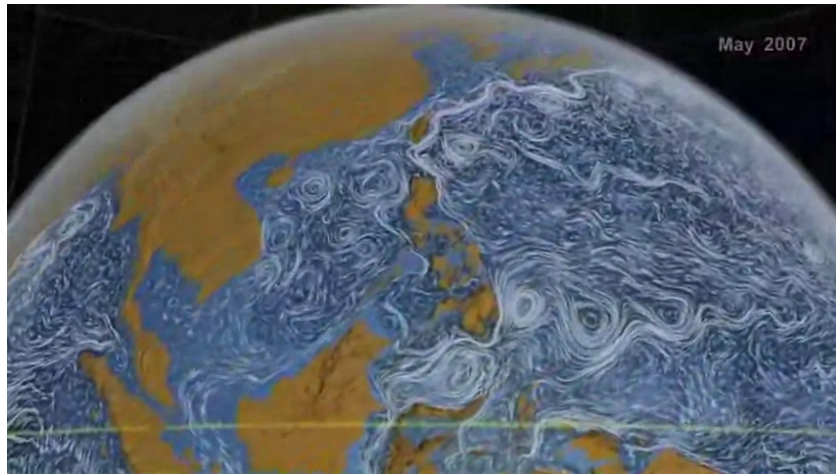


Figure 8: Ocean Current
Courtesy of Ocean Current, Wikipedia.org

Like an apple, particles, gas and liquid are trapped in solid structure of the Earth. I believe the interactions of gravity and other forces create the convection effect. Not only the circulations of particles, air and water above surface, but also the motion of ground structure from crust, mantle, and down to the core. Despite the formations and patterns are different and complex, the underlying force is identical.

3 Applications of Gravity Differential

The differential of gravity is the potential driving the circulations of matters. The motion is driven by the differentials of air, water, and solid. There are many applications we can mimic the nature. For example,

- Water desalination and filtration.
- Electricity generation.
- Water cycle management.
- Energy cycle management.
- Transportation.

4 Managing Freshwater Cycle

Nature shows many cycles of elements from atomic level to life. However, nature does it indiscriminately. All lives are trapped in the cycles of nature. Managing these cycles is the first logical mission of intelligent species. The knowledge and technology of managing cycles set apart advanced civilizations from primitive hunters and gatherers of nature resources. [3]

One cycle I'll emphasize in this study is the process of freshwater cycle. It is a cycle of evaporation, circulation, precipitation, and down flow, Figure 9.[7]

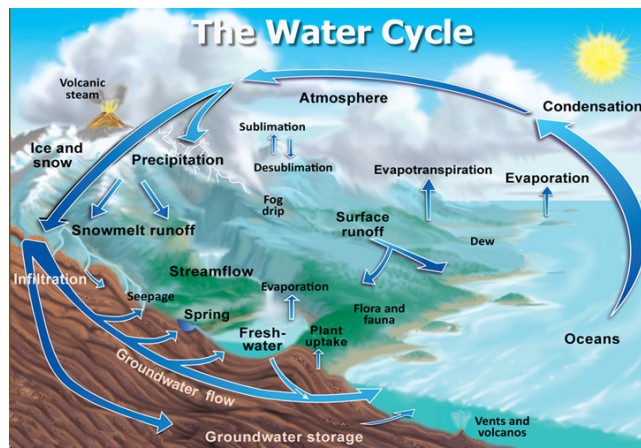


Figure 9: Water Cycle

Courtesy of Water Cycle, by John Evans and Howard Periman, USGS, via Wikimedia Commons

The important of freshwater cycle in nature can't be more emphasized. Water cycle begins when water molecules leave other things behind and arise. Water is purified, incorporated in the atmospheric circulation, form water droplets, flow through landscape, and finally return to ocean. However, nature does not transport water to the locations that is most beneficial for life. Instead, lives have to chase or avoid water under the mercy of nature. Besides, water cycle is also energy cycle. Managing water cycle intelligently would qualify us guardians of the Earth.

I believe managing water cycle is easier than we think. It is possible to utilize gravity differential to mimic the circulation of water in human scale. There'll be great benefits when we have the infrastructure to manage the circulation in place.

5 Summary

Are we making the Earth a chemical reacting globe? It is not too hard to understand the consequence of continuing changing the compositions of the environment. Aren't we forcing all creatures on Earth to corp with the changing environment? I wouldn't say we are intelligently civilized in term of nature. However, I would say, we would remain parasitic if we failed to intelligently managing the resources of nature. Then, we could be classified as an extincted subcivilization by future discovery of Earth, if we had left any trace of our existence.

Anyhow, gravity is clear, free, and perpetual energy, however, misunderstood for centuries. Understanding gravity and mimicking nature's circulations of water will benefit all beings greatly. It is a vital cycle of healthy living environment that I believe no issue can top it. Managing water cycle is easier than we think by utilization of gravity differential. It will provide clean and least expensive water and energy for a healthy environment. It's the very first step of our civilization. We can not continue to deny our mistakes and misdirected objectives. The question is, will we do all right things out of the true love of our children and their future?

References

- [1] Apple - Time Lapse, YouTube user: canosse; *Apple - Time Lapse*
https://www.youtube.com/watch?v=2QIKkQCM_oA
- [2] Brian Cox visits the world's biggest vacuum chamber - Human Universe Episode 4 Preview - BBC Two, NASA-Freefall; *Free fall, NASA's Space Power Facility*
https://www.youtube.com/watch?v=E43-CfukEgs&list=PLrBWchMkYB1D6Dg53t3KGdx2AonTwo_Zq&index=5
- [3] Huang, Cres. *Proposed Civilization Scale* (2015/08). ISBN 978-957-43-2746-1 .
<https://payhip.com/b/IJ0c>
<http://worldlibrary.net/details.aspx?bookid=3972044>
<https://archive.org/details/CivilizationPDF>
- [4] Huang, Cres. *The Refutation of Gravitational Attraction* (2015/12). ISBN 978-957-43-3180-2 .
<https://payhip.com/b/gmPu>
<http://worldlibrary.net/details.aspx?bookid=4102253>
<https://archive.org/details/GravityRefutePDF>
- [5] Galileo Galilei; *Falling bodies*, Galileo Galilei, Wikipedia.org
https://en.wikipedia.org/wiki/Galileo_Galilei
- [6] Global Maps, NASA; *Land Surface Temperature*, NASA <https://earthobservatory.nasa.gov/GlobalMaps/>
- [7] Ocean Current, Wikipedia.org; *Ocean Current*, Wikipedia.org https://en.wikipedia.org/wiki/Ocean_current/
- [8] StationLIFE, NASA; *StationLIFE: Let's Get Physical*, StationLIFE: Let's Get Physical, NASA
 YouTube user NASA Johnson
<https://www.youtube.com/watch?v=KIpbafNpfQ0>
- [9] Don Pettit; *Thin Film Physics*
<http://www.physicscentral.com/explore/sots/episode3.cfm>
- [10] David Scott, Apollo 15, NASA; *The Hammer Feather Drop Experiment*
http://nssdc.gsfc.nasa.gov/planetary/lunar/apollo_15_feather_drop.html
- [11] *Water Cycle*, Wikipedia.org
https://en.wikipedia.org/wiki/Water_cycle
<http://ga.water.usgs.gov/edu/watercycle.html>

Your advices and corrections are appreciated. Please send your correspondence to: cres@mail.org

