

# Biofield Changes from Divine Healing and the Meditation on Twin Hearts

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## Background:

### What is a Biofield?

The National Institute of Health recognized the term biofield beginning in 1994 to describe naturally occurring energy fields of the body. While many believe these fields are electromagnetic in nature, there are a growing number of scientists that believe the biofield to contain additional information that includes nonclassical and quantum energy fields (Rubik, 2002). These fields are believed to interpenetrate and exist outside the physical body. All varieties of Energy Medicine, Energy Psychology and Energy Healing work with these fields in one way or another.

## Biofield Viewer

The Biofield Viewer is software used within a controlled imaging environment to visualize the light photon interactions between the light source and the human biofield (Streeter & Catchpole, 2014). The Biofield Viewer program compares the reflected rays with the incident rays and then re-codes them and produces a biofield image. Thus, it is a digital encoding system and the smallest differences in density of photons is recorded and viewed on a computer screen using color coding. The Chakra Viewer application of the software applies filters which smooth the data into distinct bands. This process allows for closer examination of the chakras and potential emotional, psychological or spiritual aspects of the biofield (Streeter & Catchpole, 2014).



Figure 1: Biofield Viewer Mode



Figure 2: Chakra Viewer Mode

## Objectives:

1. To determine if the biofield changed substantially as a result of completing the THM.
2. To assess whether the biofield of novice and experienced meditators changed differentially.
3. To examine any qualitative and EEG changes that occur during Divine Healing.

## Methods:

12 novice meditators (very little to no history of meditation experience) and 12 experienced THM meditators (at least 1000 hours with THM), had their biofields imaged before and immediately after completed a 30 minute recorded version of the Twin Hearts Meditation for Psychological Self-healing. Images in both the biofield viewer and chakra viewer modes were analyzed for each subject.

Data was analyzed through Image J software to determine the number of red, green and blue pixels in each image.

For the Divine Healing portion of this study, Master Glenn Mendoza engaged in a Divine Healing with a volunteer subject while Biofield Viewer images were taken throughout the process.



Figure 3 and 4: Setting up the Biofield Viewer for the THM study at the Center for Pranic Healing in Lyndhurst, NJ, USA



Figure 5 and 6: Setting up the Biofield Viewer for the THM study and Divine Healing study at the Bovina Arhatya Yoga Ashram, NY, USA.



## Divine Healing Results:

Divine Healing was performed to a single subject. The divine healing lasted around 1min. Below are the Biofield Viewer images of the process.



Figure 11: Biofield Viewer Before and During Divine Healing

## EEG Results Before Divine Healing

The head map images below depict the subject's EEG activity in relation to a normative database. The key shows that areas in the middle of the key (green) are within the average range ( $z = 0$ ). As brainwave activity moves away from average, the colors become brighter or cooler to signify either significant increases or decreases in activity compared to average.



Figure 12: Before Healing brain waves distribution with respect to normative database

Coherence is a measure of the degree of connectivity between specific brain regions. The analysis below is comparing the subject's brainwave activity to a normative database. Connections with significantly more coherence than average are indicated with red lines (hypocoherence). The thicker the line, the more significant the level of hypocoherence. Connections with significantly less coherence than average are depicted with blue lines (hypocoherence).

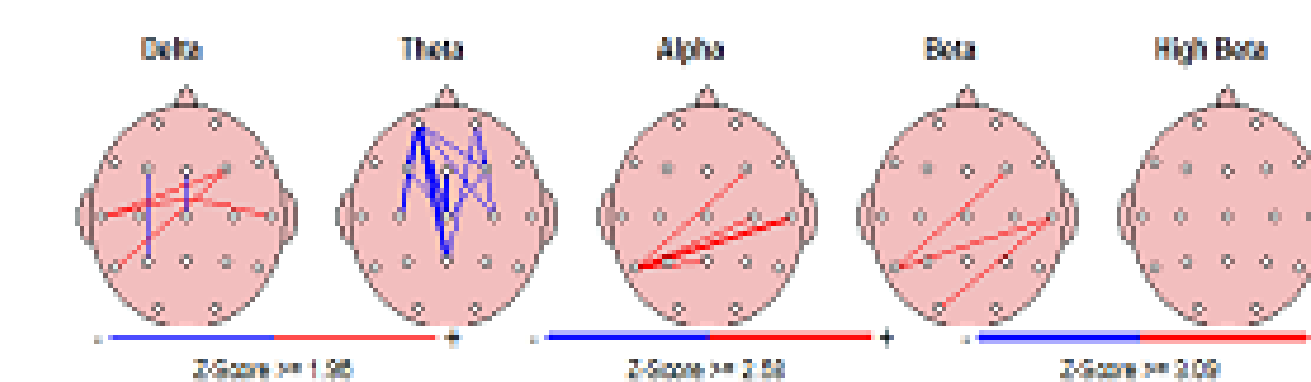


Figure 13: Before Healing Coherence brainwaves compared to a normative database

During the baseline recordings, it is clear that this subject's EEG activity is largely within the average range (green) across all bands (e.g., delta, theta, etc.). There are relatively few coherence patterns outside of the expected range with some theta hypocoherence in frontal areas being the most dominant pattern.

## EEG Results During Divine Healing

While this subject was receiving the Divine Healing (approximately 1 minute), she shows dramatic increases in both fast (beta, high beta) and slow (delta) activity. This activity is predominant in frontal and occipital regions of the brain.



Figure 14: During Healing brain waves distribution with respect to normative database

During the Divine Healing, this subject's coherence pattern changes dramatically, again, mostly in the fast and slow EEG patterns. In the delta range, she shows a great deal of hypocoherence globally, with a focus on frontal regions. The fast activity also shows global hypocoherence, but with a focus in occipital regions.

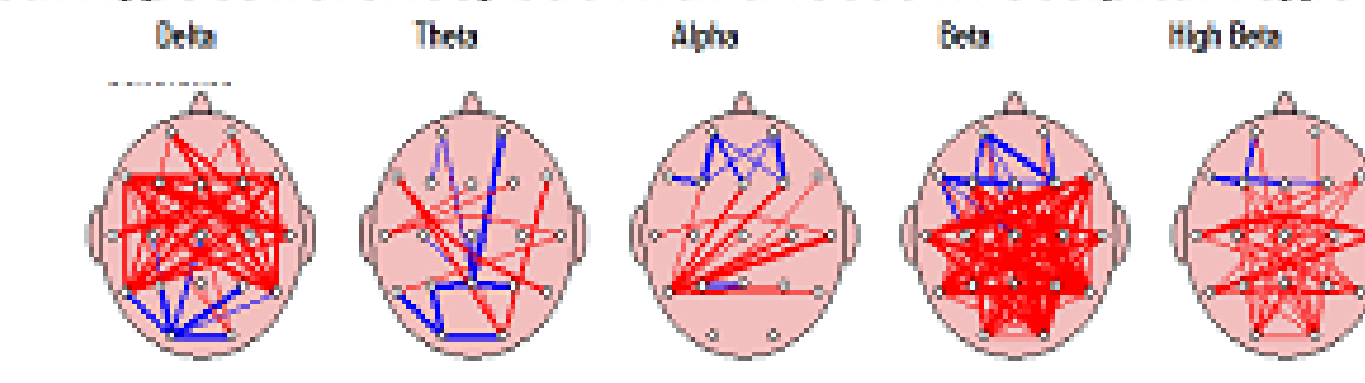


Figure 15: During Healing Coherence brainwaves compared to a normative database

## EEG Results Immediately After Divine Healing

Immediately after the Divine Healing, it is clear that the subject's brain is slowly beginning to return to its baseline condition. However, there continues to be significant increases in both delta, beta and high beta in the same locations.

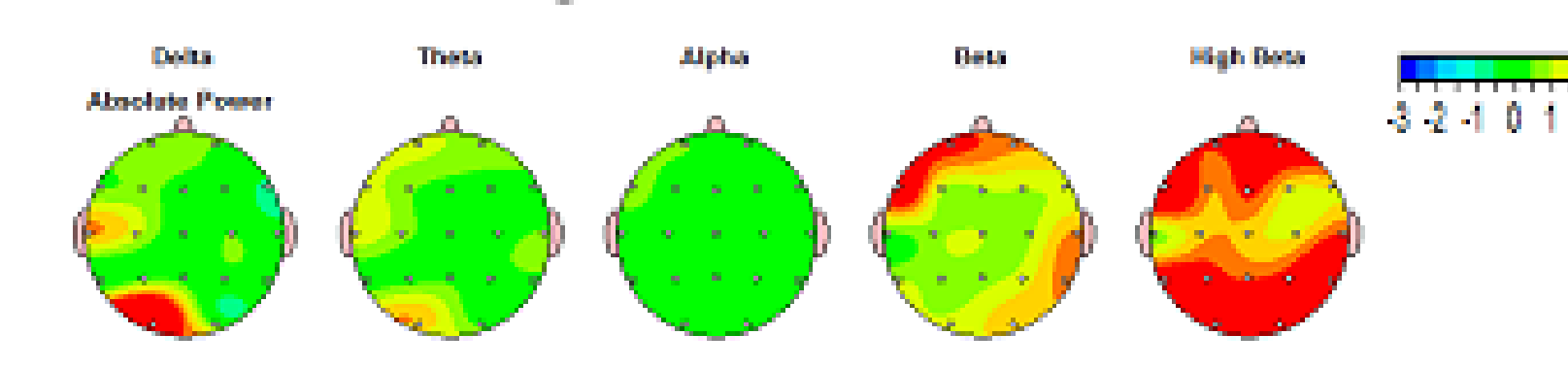


Figure 16: Immediately After Healing brain waves distribution with respect to normative database

The delta hypercoherence clears up relatively quickly after the divine healing as does the high beta hypercoherence. However, it is clear that the beta hypercoherence is continuing to display significantly abnormal patterns.

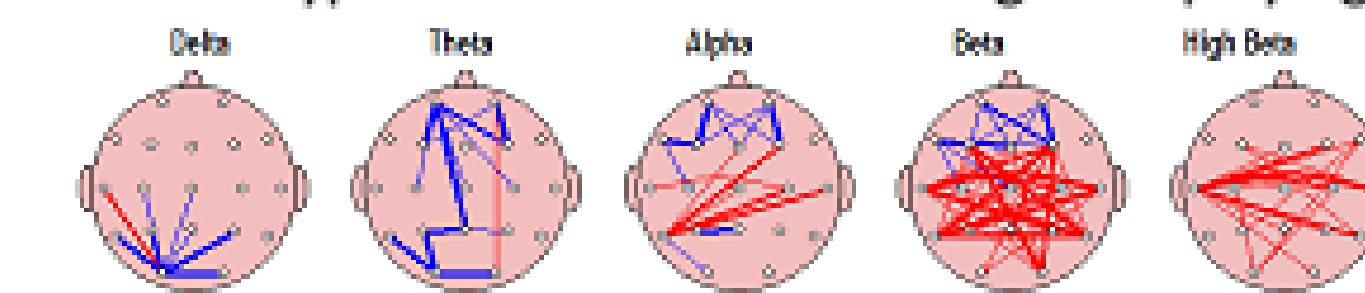


Figure 17: During Healing Coherence brainwaves compared to a normative database

## Twin Hearts Meditation Results:

The Biofield Viewer results before and after the Meditation on Twin Hearts are presented in an aggregated format by mediator group (novice or experienced). In order to have a visual understanding of the changes captured by the Biofield Viewer technology before and after the MTH we present the images of a novice mediator.

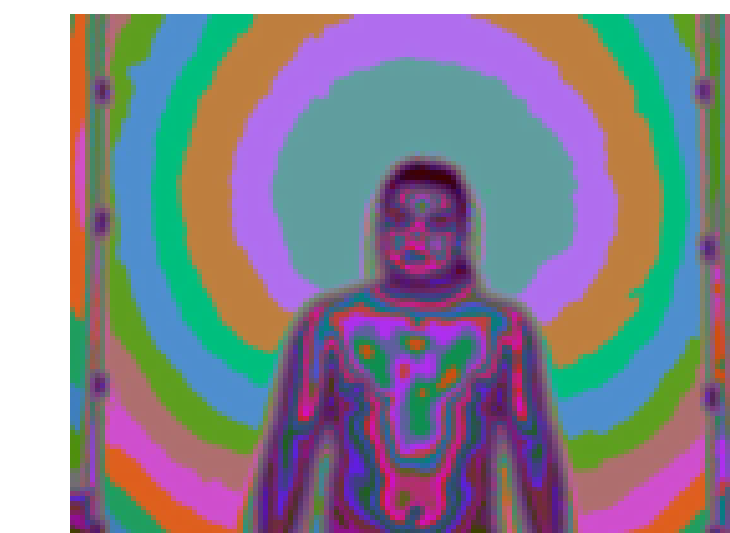


Figure 7: Biofield Novice before THM

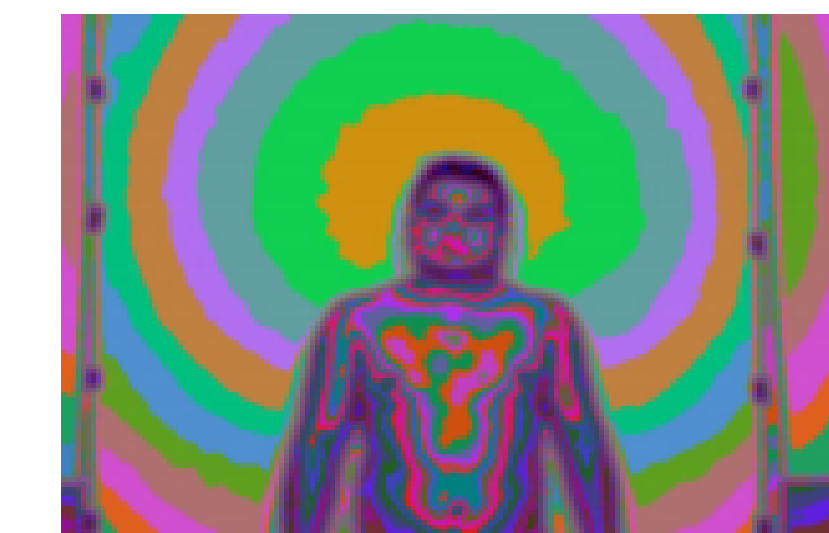


Figure 8: Biofield Novice after THM

Table 1: Biofield Viewer Changes by Mediator Type before and after the THM

	Biofield Viewer						Chakra Viewer					
	Exp Pre	Exp Post	p	Nov Pre	Nov Post	p	Exp pre	Exp post	p	Nov pre	Nov post	p
Red	118.63	118.2	0.4	117.79	120.49	0.08	117.94	117.55	0.41	117.71	121.37	0.04
Green	122.92	123.1	0.47	122.71	123.53	0.26	123.39	123.68	0.45	123.2	123.65	0.36
Blue	122.03	123.92	0.15	121.06	124.55	0.07	122.56	124.05	0.211	120.28	123.46	0.09
RGB	121.19	121.73	0.29	120.5	122.85	0.01	121.29	121.75	0.33	120.38	122.82	0.01
RGBweight	121.53	121.72	0.44	121.03	122.73	0.001	121.65	121.87	0.43	121.2	122.94	0.00

Notes: all values refer to the average amount of pixels in the images examined. RGB is red+green+blue/3; RGBweight is .299R+.587G+.114B/3

The experienced meditators did not show any significant changes pre to post THM on either the Biofield Viewer or Chakra Viewer modes of analysis. The novice meditators showed significant increases in both modes when examining all colors combined. In the chakra viewer mode, there was also a significant increase in red pixels post THM.

These results are consistent with EEG data collected in this study and suggests that the experienced meditators have a more stable or coherent biofield. Having engaged in this and other meditations for more than 1,000 hours previous to this study, it makes sense that another meditation would not do much to alter their biofield. On the other hand, novice meditators, with almost no previous background in meditation showed significant increases in RGB combined as well as red. This may suggest that the THM has a more significant immediate impact on novice meditators while it serves to help experienced meditators maintain their already coherent biofield. This is supported by comparing pre-post changes in individual meditators of both groups.

Notice below the great amount of variability in the red voxels pre and post THM for the novice meditators.

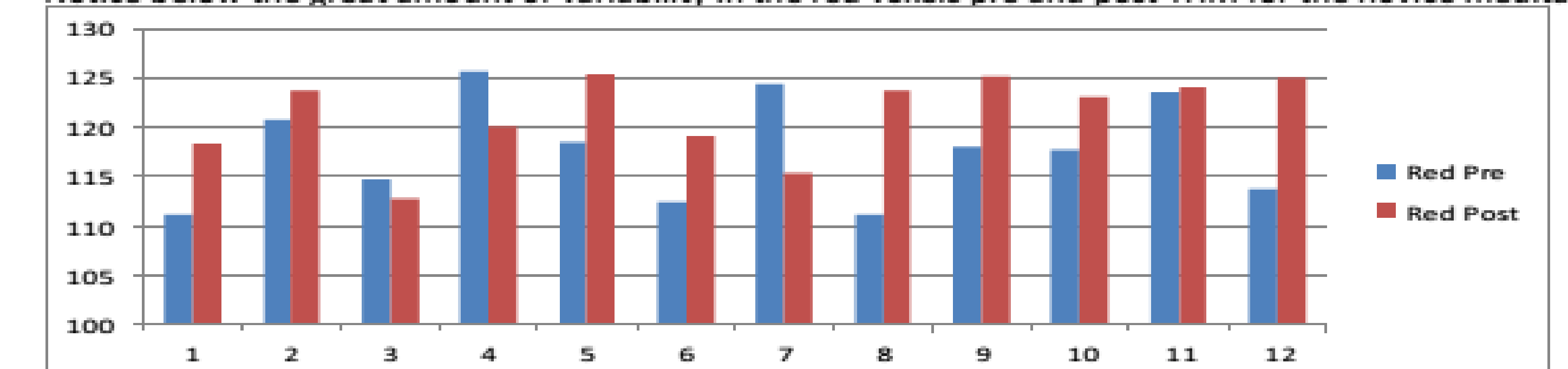


Figure 9: Novice meditators, red voxels, chakra mode, pre and post THM.

Notice the consistency both within and between experienced subjects. This type of qualitative analysis suggests that, as a group, the experienced meditators are very similar and consistent while the novice meditators have much more variability.

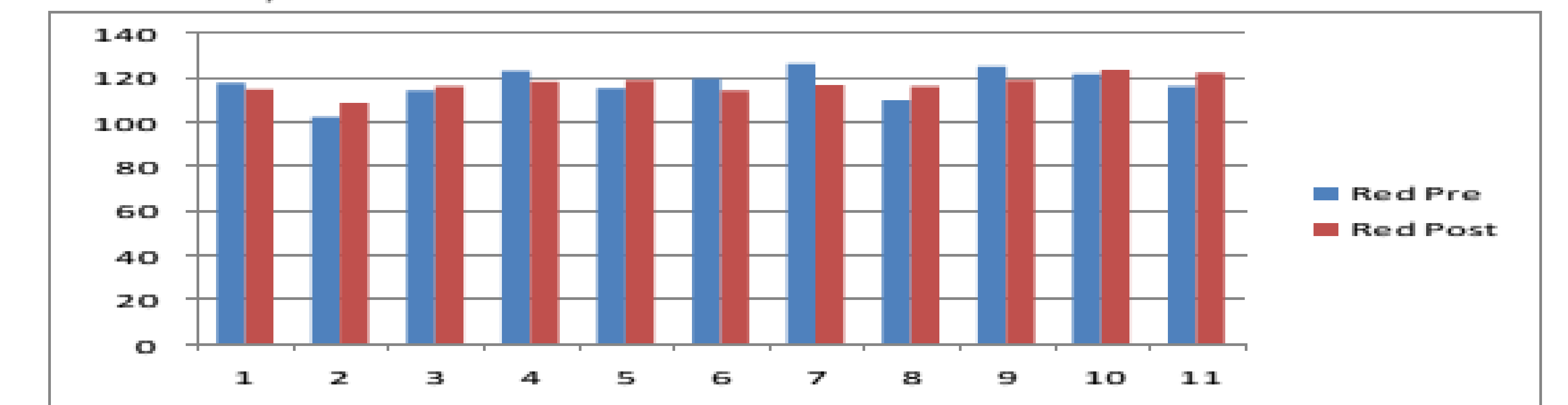


Figure 10: Experienced meditators, red voxels, chakra mode, pre and post THM.

## Conclusions:

The data from the Divine Healing portion of this study clearly shows a dramatic and rapid change in the biofield in and around the subject receiving the Divine Healing. The EEG data from the subject shows dramatic increases in fast and slow brainwave activity during the healing which did not immediately resolve. These preliminary results suggest that the impact of Divine Healing can be measured with both biofield imaging and EEG recordings. Future studies should include a larger subject pool and control biofield imaging for statistical comparisons. The data from the MTH suggests that novice meditators have more variability within their biofield and demonstrate more significant changes after participation in a 30 minute MTH. The experienced meditators showed no significant change and very little variability both within and between subjects, suggesting that the biofield of the experienced meditators is more coherent and stable. It is possible that regular practice of MTH and other PH and AY practices results in the stabilization of the biofield. This concept should be addressed in future biofield studies with these and similar practices.

## References:

- Rubik, B. (2002). The biofield hypothesis: it's biophysical basis and role in medicine. *Journal of Alternative and Complementary Medicine*, Dec; 8 (6): 703-17.  
 Streeter, T. & Catchpole, J. (2014). *Biofield Viewer 3.0 User Manual*