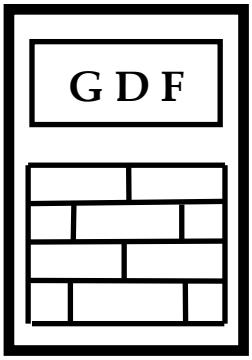
GDF DATA BANKS BULLETIN



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Important announcement about GDF DATABANKS BULLETIN and the website www.gdfdatabanks.ro

At the end of 1992 I registered my own business GDF DATA BANKS srl (Ltd) at the Registry of Commerce in Bucharest, Romania (business code no. 1557493). Its main objective was to apply and develop previous results obtained during over 25 years of research in testing a wide variety of raw materials up to end products and designing original and highly efficient testing techniques. After a long and intensive experience I was able to establish new working principles generally denoted as topoenergetic principles allowing to univocally define the behaviour of a tested system in standard experimental conditions by three parameters only. These parameters can generate databanks for any system tested according to the same standard experimental conditions, so that such databanks can be used to identify and/or to optimize tested systems. Unfortunately, in that period of time Romanian industry, scientific and technological interest vanished abruptly, however I was able to draw attention of some laboratories with the following main original ideas on: (i) viscosity with an original and complex instrument, Visco-Dens-Calorimeter (VDC), progressively improved in 4 versions; (ii) water distillation procedure and device; (iii) temperature calibrator ISOCALT, and (iv) mental test HuPoTest. In February 1997 I was engaged at the Romanian Bureau of Legal Metrology as expert metrologist as a result of my experience in measurements and metrology, so I decided to put on paper some basic principles of good practice in metrology helping my younger colleagues. This was the starting point of GDF DATABANKS BULLETIN and website www.gdfdatabanks.ro. In the moment when I am writing this note, I have strong arguments to say that viscosity measurements and calibrations of almost all quantities are not performing correctly. Some facts are explained in my bulletin.

In July 2005 I and my wife were called by our daughter in Sydney, Australia for helping her by taking care of house and children, so we were forced to interrupt our professional activities, but I continued some of my researches up to now.

In February 2009 I renounced to manage the business, but I kept the authority of my bulletin and website in view to publish my further results. According to one of my initial conviction, editing of these results makes clear their deep significances and defines the next step in research.

Although both the bulletin and website are basically personal blogs, anyone is welcome to contribute with observations, ideas and original results keeping the same editing style and by considering that the authors have the authority and copyright of their contributions after publication first in the bulletin and after posted on the website.

Gheorghe DRAGAN

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DTA study of water freezing.
IV. New facts on energy circuits

Differential thermal analysis (DTA) measurements on water freezing (crystallization) are continued [1-3] by considering different materials as thermal dissipative coupling of water specimen to the crystallization temperature. Polyethylene-terephtalate (PET) cold drawn film has been chosen initially as good thermal coupling (conductivity) material and having small thermal mass (heat capacity), but has been proved as having a better coupling to the mental field than other materials, due by its paracrystalline morphology, even its thermal conductivity is better than of the other tested materials. Paracrystalline or intercrystalline morphology was thoroughly studied [4-6] and was the starting point for research of new forms and sources of energy [7]. For materials with better thermal than mental coupling, the induction crystallization times, ti, are shorter and tend to obey Arrhenius [4] and Universal [8] representations established on topoenergetic principles for thermally driven processes [9], so it was possible to estimate their parameters for water sample considered. Simultaneous DTA measurements were performed by using 4 DTA cells symmetrically disposed on the same dissipative disk. Clear relationships between ti values resulted only for PET disk, so the inner energy circuit could be defined in topoenergetic terms both of water and the external dissipative coupling material to the thermal and mental field. These results open new horizons in developing new materials for capturing and converting mental energy, for more profound studies and new applications. Certainly, some of such applications could be very dangerous for mankind and for life in general.

Experimental details

The experimental dispositions are basically the same as it was described in the previous paper [1]. Figure 1 shows the overall measurement assembly for a single DTA called as 1DTA. Figure 2 shows the signal conditioner of 4DTA measurements and Figures 3 show two versions of 4DTA sensors (diodes) on dissipative disks made from different materials. A 16 bit resolution data logger was used. The water sample was tap water succussed and annealed at room temperature more than 6 months [2].
Crystallization temperature of (-20.2 ; - 19.9) ^{o}C lasting up to 12 hours was realized with approximately 4 liters of a cooling mixture of crushed ice and cooking salt. For longer measurements salted liquid water was removed and added fresh cooling mixture. Bellow are presented and discussed the results obtained for two dissipative materials, namely cold drawn PET film with thickness of 0.27 mm and Printed Circuit Board (PCB) with double layers of copper with the overall thickness of 1.70 mm.

In the previous two papers [2, 3] the results obtained during one week in a house located in a very quiet place and I was as alone all the time were presented. The results in this paper are obtained in the same house when I was also as alone all the time, but in the house next to us (north direction) was recently moved in the meantime a family with three not scholar kids staying home all time. In that period of time they were performing some improvements to their house. The resulted spectrum of ti(Hour Of the Day (HOD)) reveals mainly the activity of this family and by this reason is different from the previous one [3].

1DTA measurements

Figures 4 and 5 show ti(HOD) spectrum resulted by 1DTA measurements on water freezing by using PET and PCB disks, respectively. The ti values for PCB are much smaller than for PET film, although mental field modulates ti values, but weaker. In the following table the values obtained in two consecutive days are given:

Table 1. Data on two series of experiments carried out with 1DTA-PCB.

date of experiements	<ti> ± stdev(ti) (%) , s	no. of experiments	duration of experiments, hours
SAT-29.09.12	91 ± 16 (18)	39	14
SUN-30.09.12	83 ± 11 (14)	21	6

It is to note that ti are a little sensitive to mental field tending to repeatable values over short period of time, so it was possible to check Arrhenius and Universal representations on the temperature range of (-14;-20.4) ^{0}C as it follows:

ARRHENIUS: $\ln(ti*T) = -E / (GC*T) + k$ [4] (1)

E = 176 ± 42 kJ/mol; k = 94 ± 20 ln(s*K);

correl = 0.95; LOC = 68.3%

UNIVERSAL: $\ln(ti) = N*\ln(To - T) + M$ [6, 8, 9] (2)

N = -(0.94 ± 8); M = 6.4 ± 7; To = 260 ± 15 K;

correl = 0.99; LOC = 95.5%

(GC = Gas Constant = 8.315 kJ/(mol*K); LOC = Level Of Confidence)

By comparing ti results for different dissipative materials it is possible to draw the energy circuit of water specimen dissipatively coupled to thermal and mental fields according to the topoenergetic formalism [4, 5,10] (bellow schematic (4)). According to the general conduction (transfer) law (example for electric, heat, mass, etc.):

$$w = \Delta(\text{potential}) / R \quad (3)$$

Energy flow = [w] = [energy] / [time]
Energy resistance of dissipative element = [R] = [potential]*[time] / [energy]
Energy conductance of dissipative element = $\Lambda = 1 / R$
Capacitive element = [C] = [energy] / [potential]
Relaxation time of stored energy = [R*C] = [time]
T = temperature = thermal potential
M = mental potential

Schematic of energy circuit of water specimen in pure dissipative coupling approximation (4)

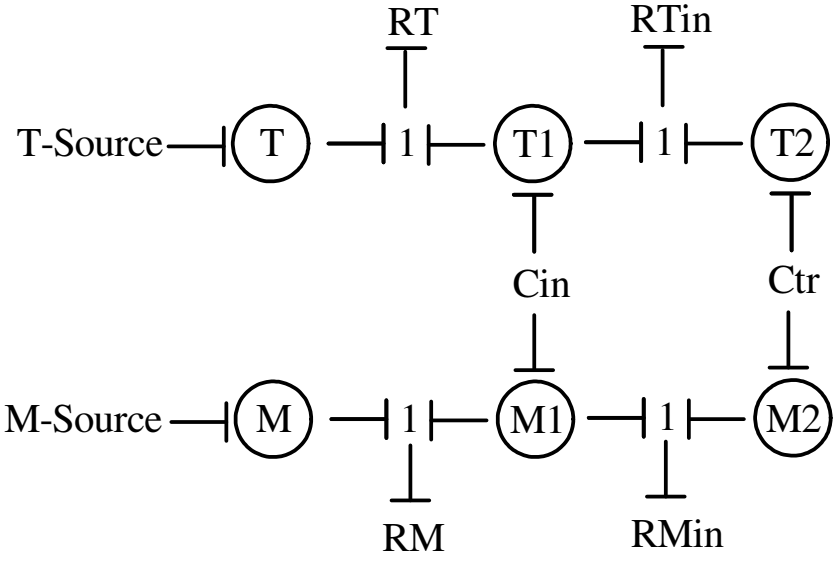

Table 2. Short sketch on the two behaviours for external dissipative material.

external dissipative material	ti ≈ R*Cin	dominant potential
PET disk, #0.27 mm	RT*Cin >> RM*Cin	mental field
disk double layer PCB, #1.70 mm	RT*Cin << RM*Cin	crystallization temperature

It is important to compare the thermal coupling expressed by thermal conductivity (λ) for the two materials:

λ (PET films) ≈ 0.14 – 0.4 W/(m*K) [11] (5)
λ(PCB) ≈ 0.59 W/(m*K) [12] (6).

The ratio between thermal conductance of the two materials used is:

$$\Lambda(\text{PET sheet \#0.27 mm})/\Lambda(\text{PCB sheet \#1.70 mm}) = \quad (7)$$
$$= (0.14/0.59)*(1.70/0.27) = 1.49$$
$$\text{up to } (0.4/0.59)*(1.70/0.27) = 4.27.$$

The value of λ(PET) = 0.4 W/(m*K), even bigger, is more realistic for highly oriented structure resulted by cold drawn.
Figures 6-9 show the 1DTA-PET results obtained in 4 working days. It can observe again that random mental activity induces increasing both of ti values and their dispersion. PET disk acts as an antenna of mental energy focused on water specimen.

4DTA-PET measurements.

4DTA-PET thermograms were performed in view to evidence the mutual interference of simultaneous crystallization process as in the case of precipitation defects in polyethylenes [4, 5, 9]. Crystallization exotherms appear specifically amplified/attenuated and distorted in comparison with 1DTA-PET. However, ti(HOD) spectrum is the same. Distortion consists in interruption of all exothermal peaks in a latent crystallization, i.e. peaks are cut off by a plateau and getting back to the baseline.
All experiments were performed by keeping the same orientation of the DTA sensors relative to the house, to the thermostat and to the geographic directions, namely considering the labels of each DTA sensor (Figure 3) their orientations were the followings:

$$\text{North(4) ; South(2) ; East(1) ; West(3)} \quad (8).$$

Figures 10-12 show the overall ti data. It can observe again that random mental activity induces the increase of ti values and their dispersion, but this process is modulated by magnetic field of the Earth.
Systematic observations were made, so that ti values were in the following order:

$$ti(1) > ti(3) > ti(4) > ti(2) \quad (9).$$

Series of measurements with different orientations of different disks from the same PET sample, but with the same orientation (8) of DTA cells, show the same order (9). Figures 13 and 14 show the variation on HOD of some ratios of ti values. Figure 15 shows the spectrum of the composite, ticomp, and equivalent, tieq, induction times obtained as a combination of the four individual values ti1,2,3,4 according to the following rules:

$$ticom = (1/4)*(ti1^2+ti2^2+ti3^2+ti4^2)^0.5 \quad (10)$$

$$(1/tieq) = ((1/ti1) + (1/ti2) + (1/ti3) + (1/ti4)) \quad (11).$$

It results two distinct groups of parameters which have similar HOD spectra:

ticomp; ti1; ti1/ti2; average(ti); stdev(ti) (12)
tieq; ti2 (13).

4DTA-PCB measurements

These measurements were performed in the same conditions like 4DTA-PET, however ti values appear not be affected by orientation, but they depend firstly on thermal coupling of sensors and on HOD in similar manner as 1DTA-PCB. However, these values are sensitive bigger than the ones obtained by 1DTA-PCB (Table 1) because of the bigger thermal mass (heat capacity) of the PCB disk and differences in thermal coupling of each DTA sensor. The overall average value is:

$$166 \pm 30 \text{ s , LOC(68.3\%), during 8 hours} \quad (14).$$

Conclusions:

(i) oriented materials like PET cold drawn film act as antenna of mental field and good conductor for mental energy due by their intercrystalline composite structure;
(ii) mental field is anisotropic relative to both Earth's magnetic field and orientation of dissipative coupling;
(iii) mental field has a similar coupling with the gravitational field of Earth as it has been observed in the previous experiments on polyethylenes [4, 5, 8, 9] with similar intercrystalline structure like water and aqueous solutions [6];
(iv) the amplification/attenuation and distortion of crystallization exotherms in 4DTA-PET measurements is caused by the combination of at least three processes: (a) energy conversion between thermal and mental energy; (b) mutual interaction (inductive coupling) between the four water specimens, and (c) interaction (coupling) of water specimens with Earth's magnetic and gravitational fields; more experiments with 4DTA cells realized in high accurate conditions can establish the exact units for mental field (potential denoted as M) and more properties;
(v) it appears that so called "mental field" is not generated only by human beings; it exists as generated by other sources with specific values of M-potential. Spiritual Coupling (SC) can be a good measure for human's M-potential [13].

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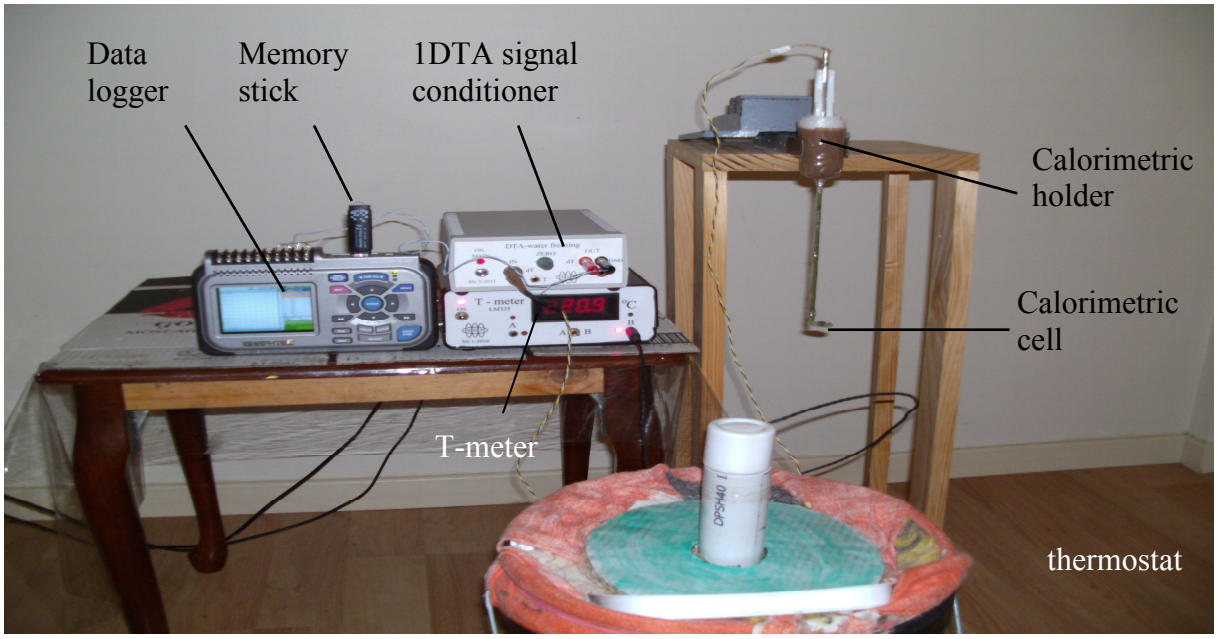

Figure 1. 1DTA assembly for water freezing measurements.

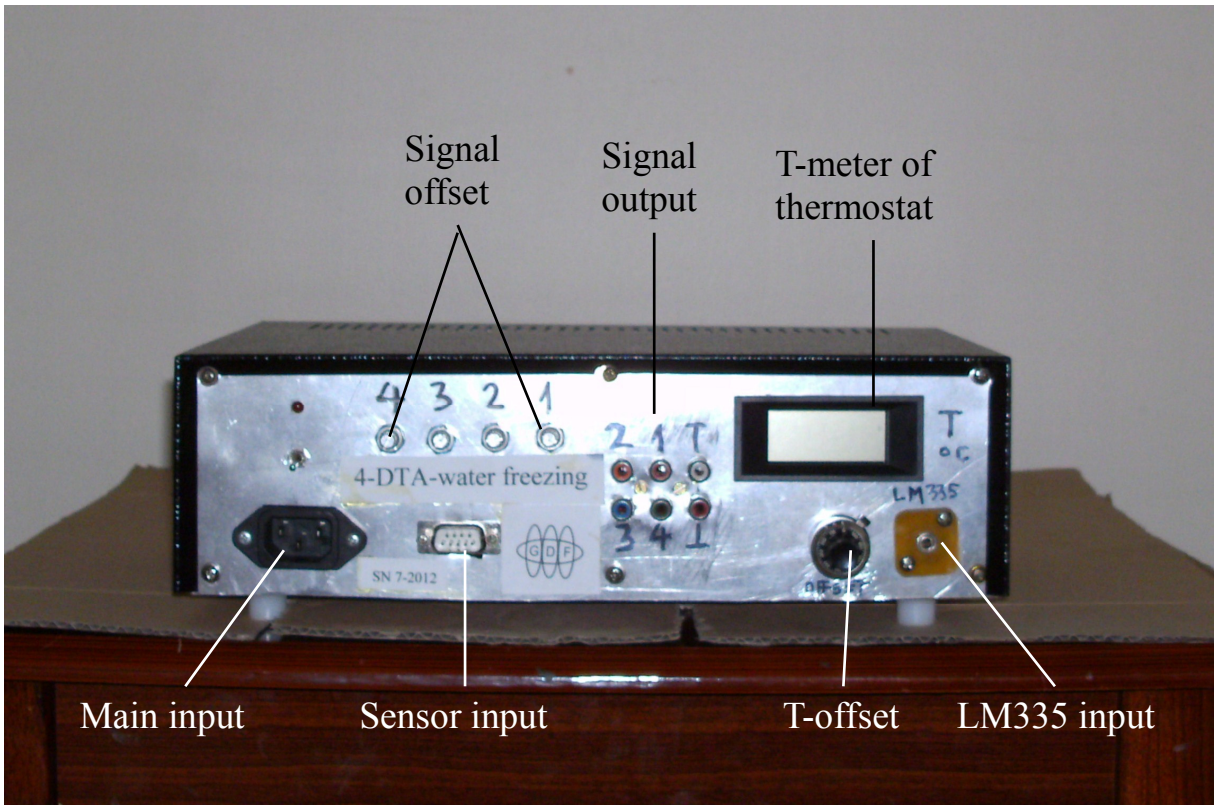

Figure 2. Signal conditioner of 4DTA cell and T-meter of thermostat.

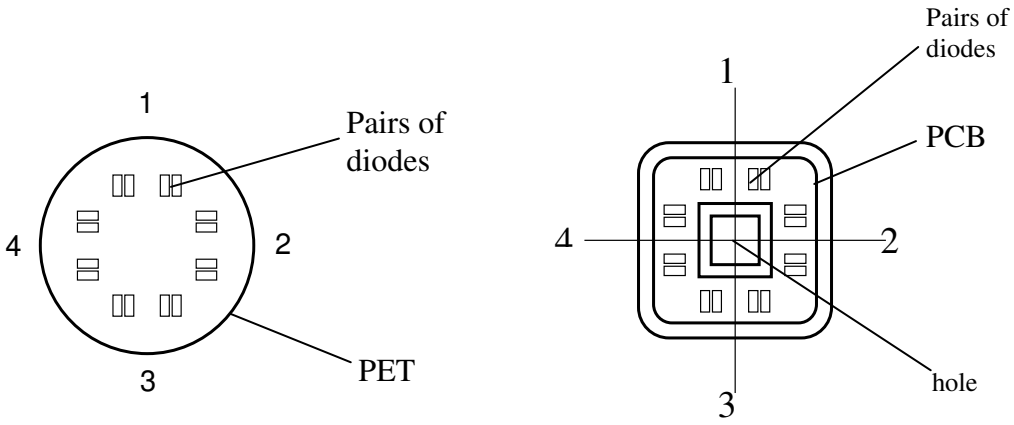

Figure 3. Top view of two versions of schematic for 4DTA cell.

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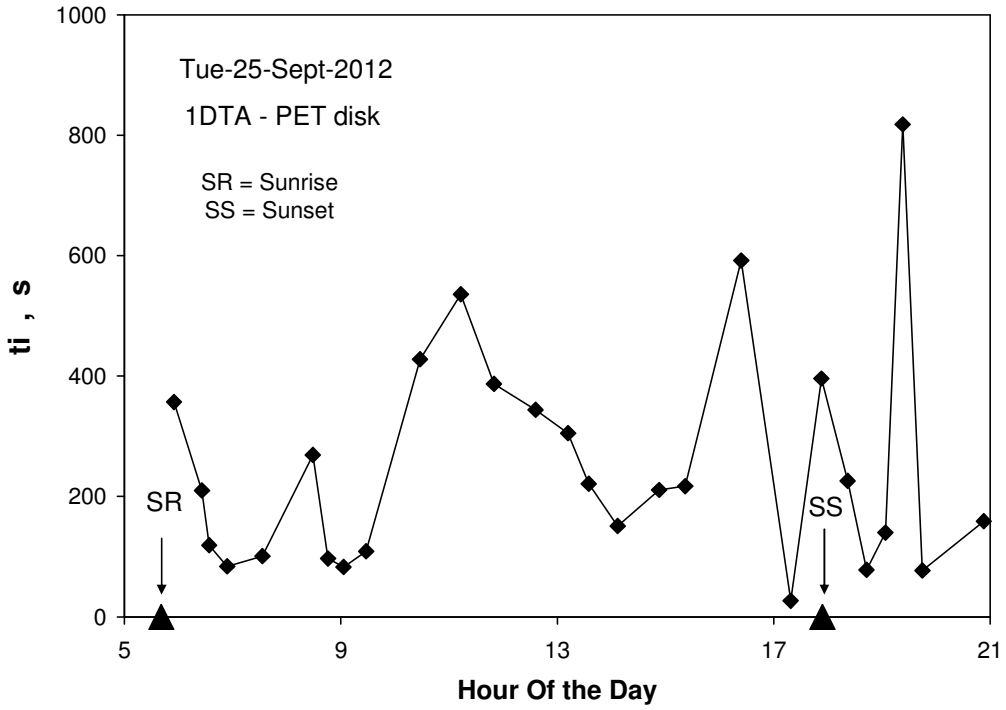


Figure 4.

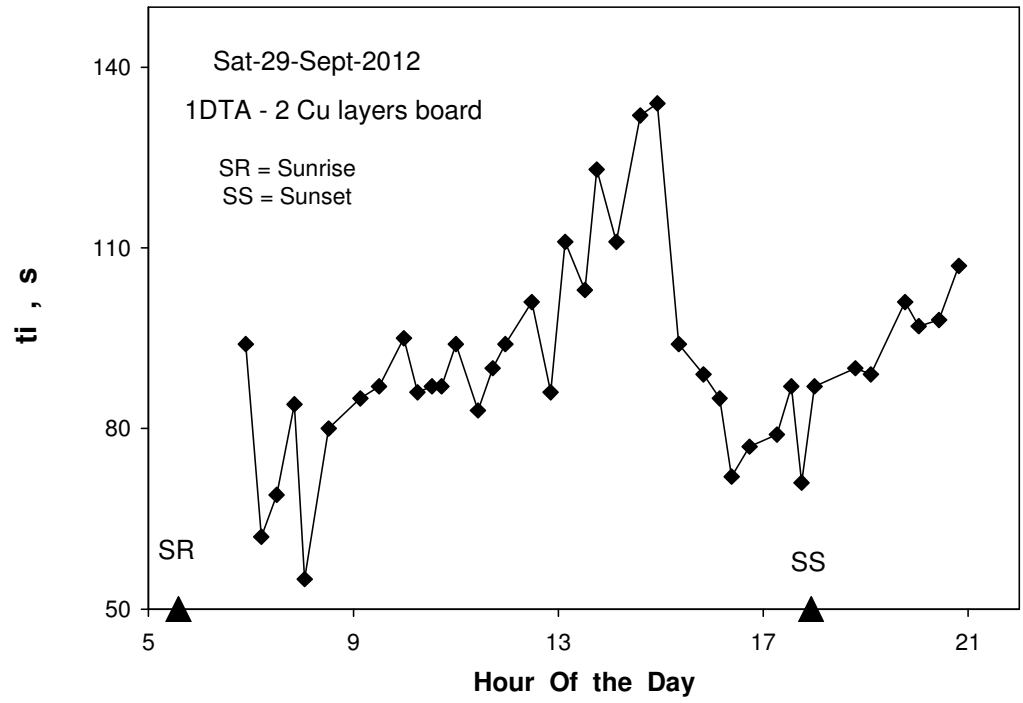
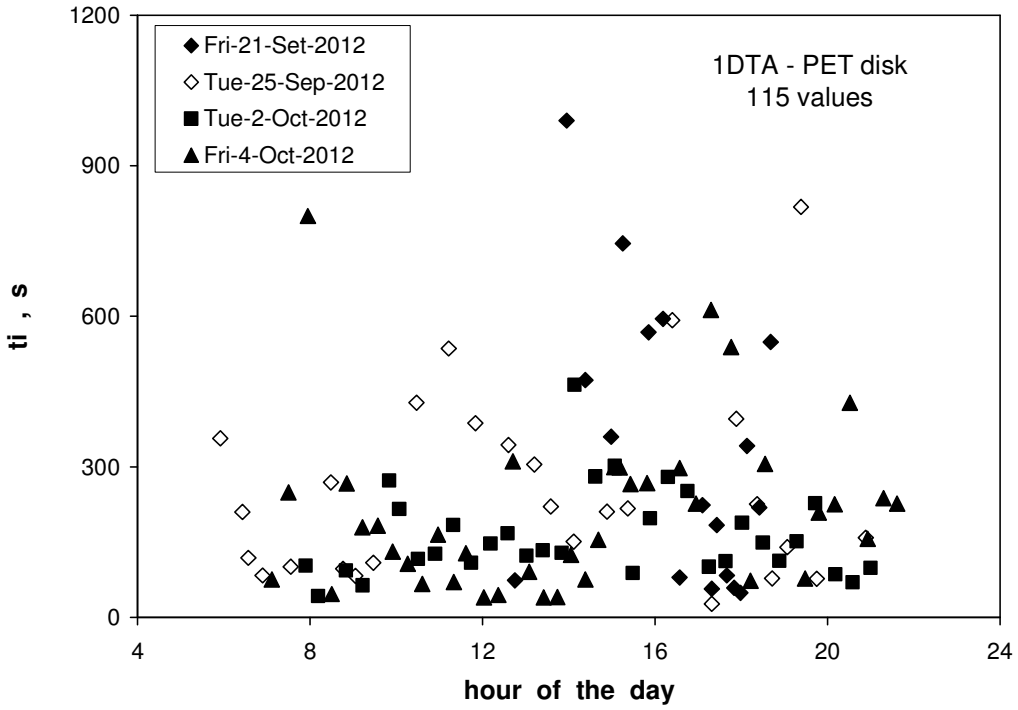


Figure 5.



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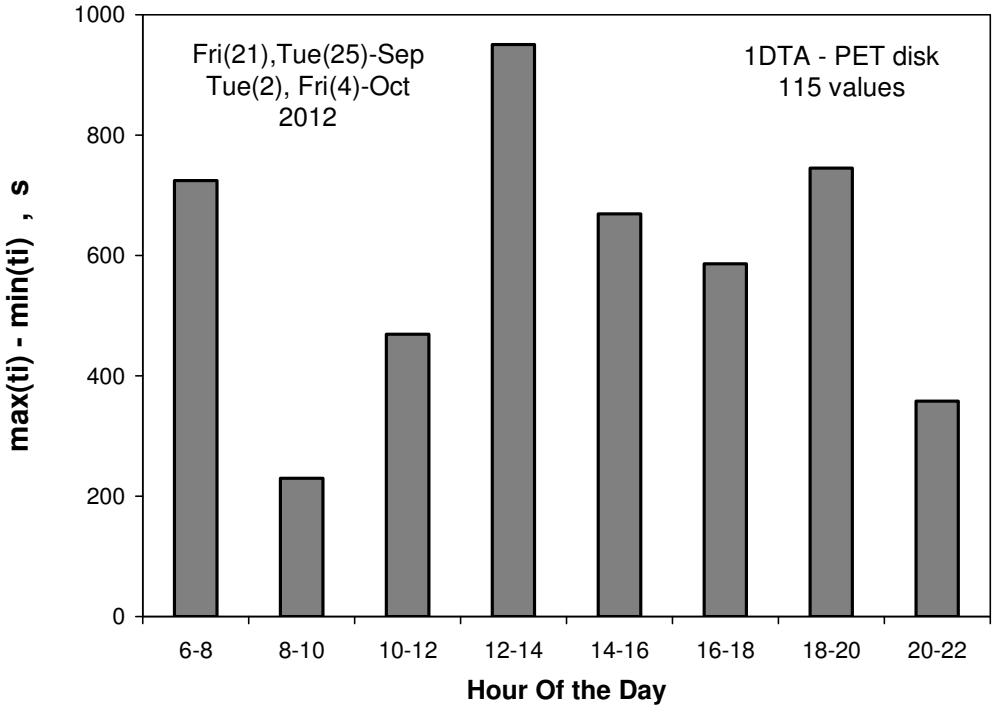

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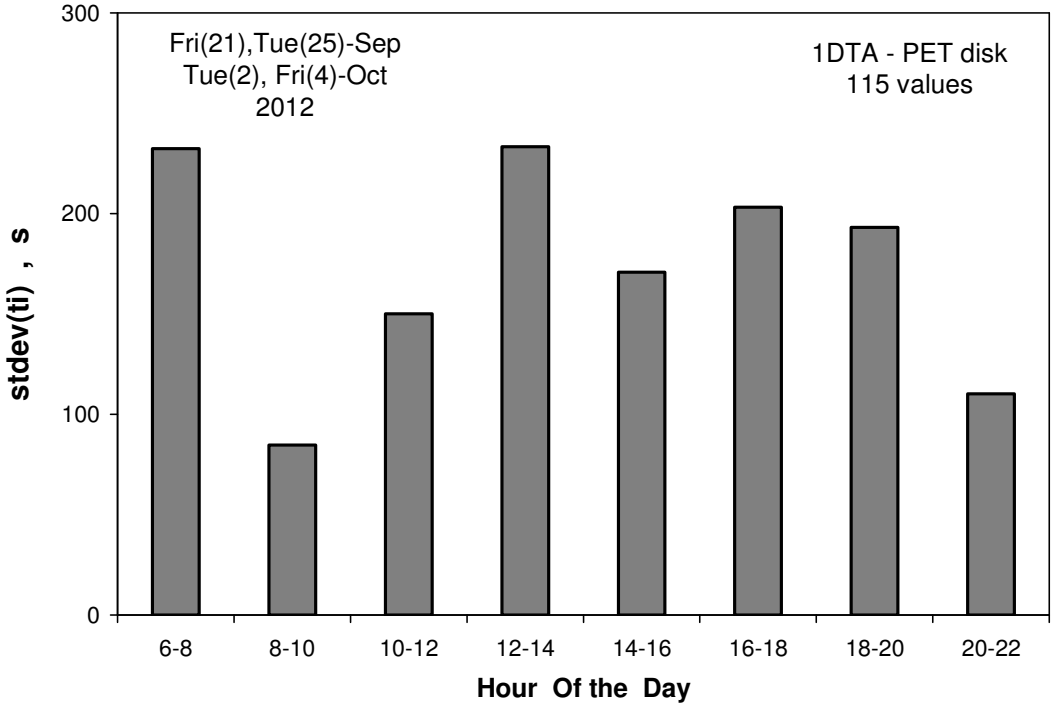

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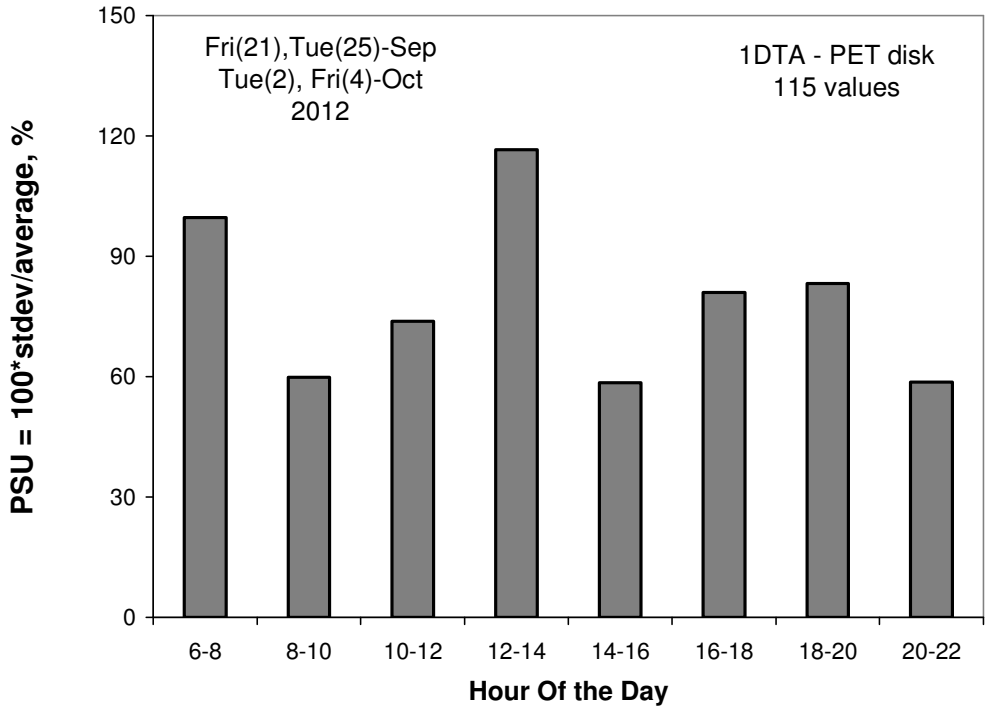

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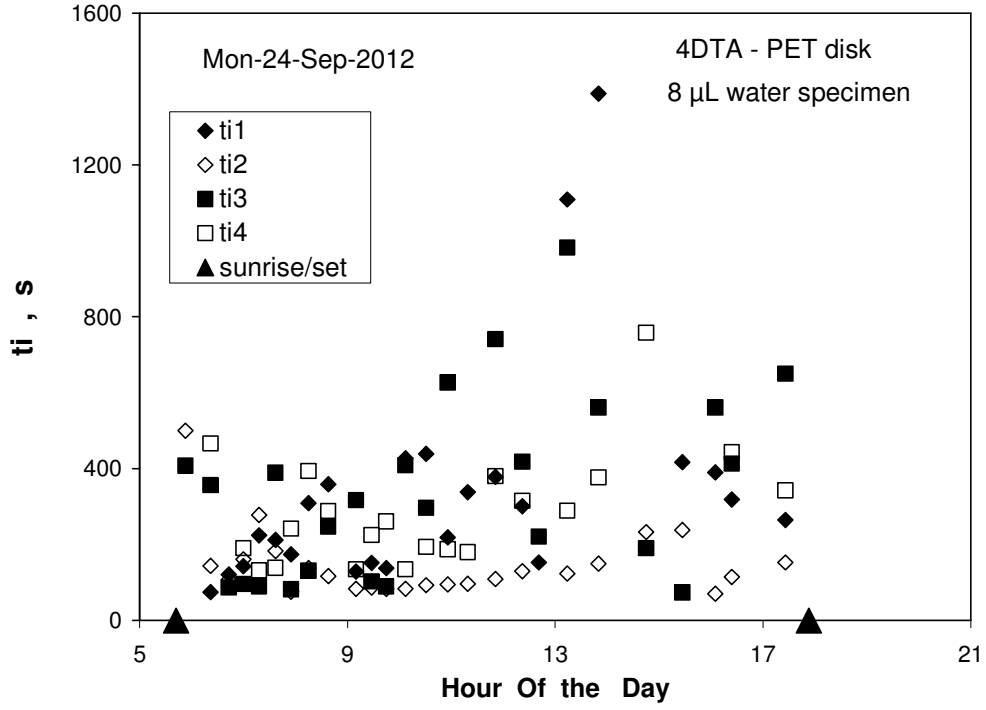

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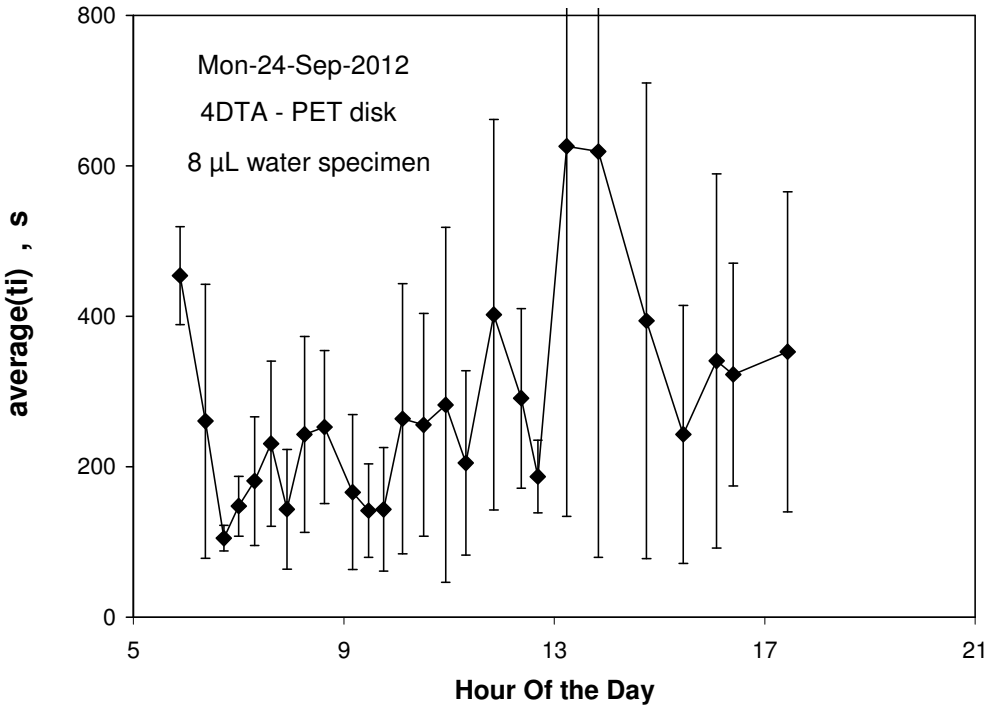

Figure 11.

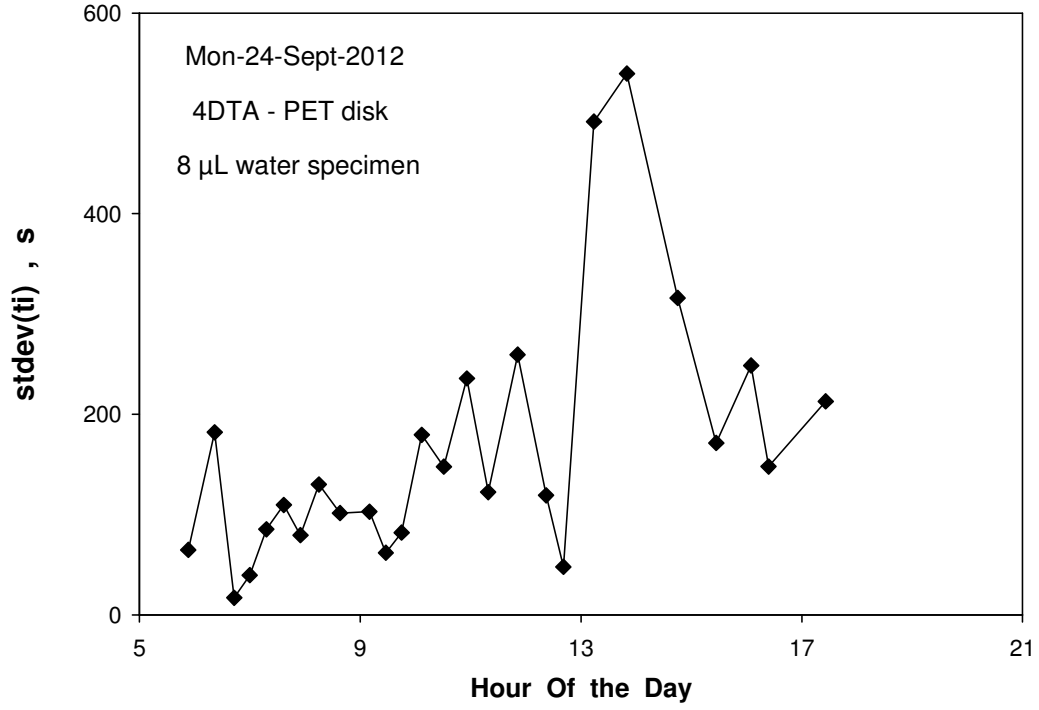

Figure 12.

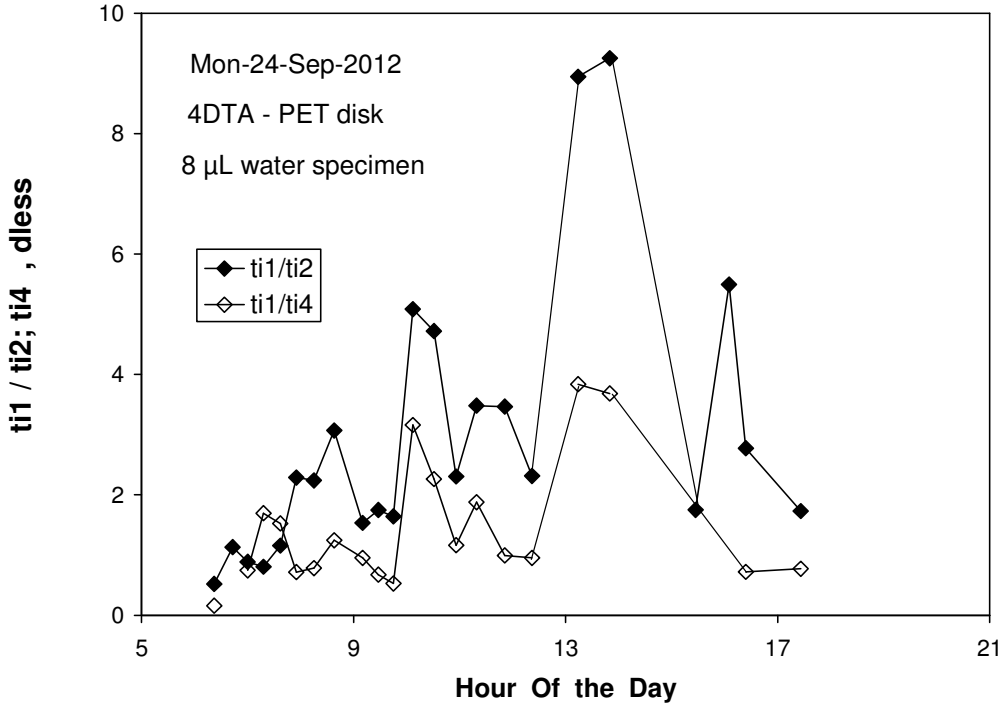

Figure 13.

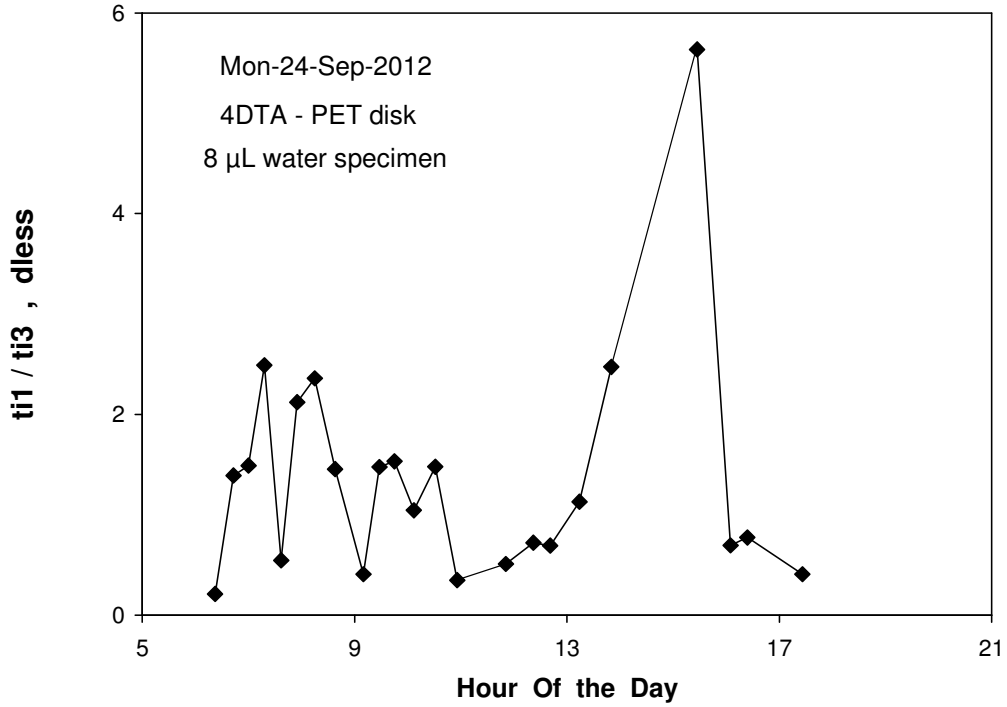

Figure 14.

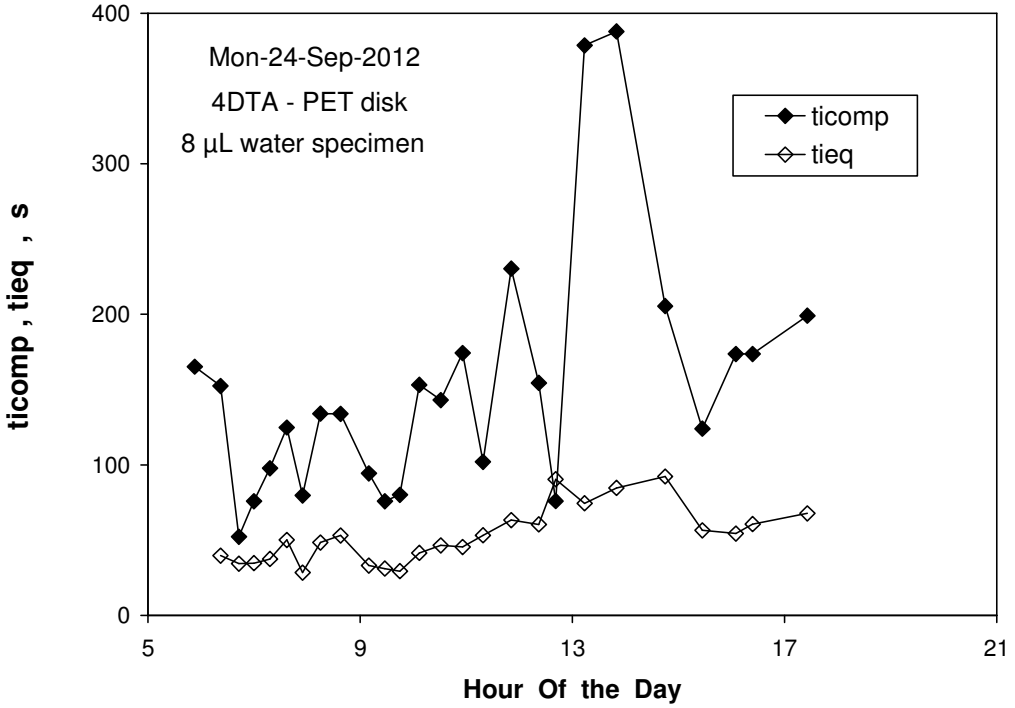

Figure 15.

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1997	1	2	Guide of good practice in metrology (Romanian)	AFI
1998	2	1	Editorial: socio-psychological implications in creation and utilization of a databank (Ioan-Bradu Iamandescu); Behavior in vapor-liquid equilibria (VLE): I. Structural aspects; Behavior in vapor-liquid equilibria: II. Several structures in databanks; Symposium on VDC-4 held on 30 October 1997 at Lubrifin-SA, Brasov (Romania).	F
1998	2	2	Practical course of metrology (Romanian)	AFI
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2000	4	2	Measurement and Calibration.	AFI
2001	5	1	Editorial: Metrology ensures moral and technological progress. Topoenergetic aspects of amorphous-crystalline coupling. I. Composite behavior of water and aqueous solutions (paper presented at nanotubes and Nanostructures 2001, LNF, Frascati, Rome Italy, 17-27 October 2001). Events: Nanotubes and nanostructures 2000.School and workshop, 24 September – 4 October 2000, Cagliari, Italy.	F
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2002	6	1	MOSATOR-01: Topoenergetic databanks for one component molten salts; thermally driven viscosity and electrical conductance.	AFI
2002	6	2	Editorial: HuPoTest - Operator calibration or temporal scale psychic test. MOSATOR: topoenergetic databanks of one component molten salts; thermally driven viscosity and electrical conductance.	F
2002	6	3	Editorial: Quo vadis Earth experiment? ISOCALT® : Report on metrological tests	F
2003	7	1	Editorial: Time – an instrument of the selfish thinking. 1st NOTE: Homoeopathy: upon some efficient physical tests revealing structural modifications of water and aqueous solutions. I. Mixing experiments.	F
2004	8	1	Metrological verification and calibration of thermometers using thermostats type ISOCALT® 21/70/2. Metrological verification and calibration of thermometers using thermostats type ISOCALT® 2.2R.	F
2004	8	2	Aspects of correct measurements of temperature. I. measurement of a fixed point according to ITS-90. Physics and Homoeopathy: some physical requirements for homoeopathic practice.(Plenary lecture at the 19th SRH National Congress, 21-22 September 2004, Bucharest, Romania)	F
2005	9	1	AWARD for ISOCALT® at the International Fair TIB-2004, October 2004, Bucharest. ISOCALT® 3/70/21 was awarded in a selection of 20 products by a commission of experts from the Polytechnic University of Bucharest. Upon some aspects of temperature measurements. (12th International Metrology Congress, 20-23 June 2005, Lyon, France)	F
2005	9	2	A new technique for temperature measurement and calibration. National Society of Measurements (NSM). Important warning for T-calibrator users: MSA has chose metrology well calibrators from Fluke (Hart Scientific).	F
2005	9	3	Universal representation of Cancer Diseases. 1. First sight on NSW-2003 report. Universal representation of Cancer Diseases. 2. UK cancer registrations on 1999-2002. Vital Potential can estimate our predisposition for cancer diseases.	F
2006	10	1	NTC – thermistors -1	AFI
2007	11	1	HuPoTest - 40 years of continuous research Basic rules for preventing and vanishing cancer diseases Climate change = change of mentality Hot nuclear fusion – a project of actual mentality	F
2007	11	2	MT – Introduction to Mental Technology HuPoTest – general procedure, assignments of results, specimen of complete test, order and obtain your complete HuPoTest report	F

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*) F=free, AFI=ask for invoice.

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ERRATA:

VOL	NO	place	was written	must be
15	2	Figure 5	P+	P-
15	3	page 5, row 7 down-to-up	x=2	x=0.2

I encourage readers to advice me any observation.

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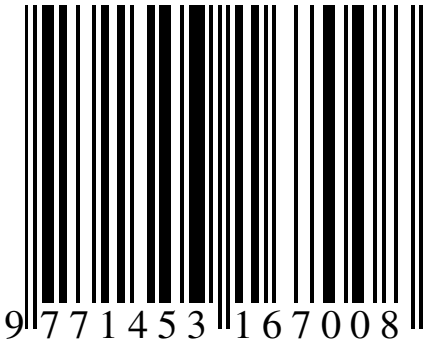

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