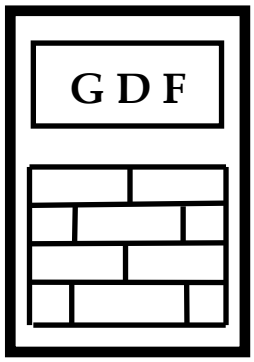
GDF DATA BANKS BULLETIN

THE 20th ANNIVERSARY



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ISSN 1453 - 1674

Content

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GDF DATABANKS BULLETIN, VOL. 20, NO. 8, 2016
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Interaction of quartz crystals with bio-fields. III. Quartz selection and their significances.

New vision on material science opens a new era in the knowledge of Life.

In the previous notes [1, 2] of this series, some important features of dc U-I characteristics of several commercial quartz resonators are evidenced. The most important result obtained in accurate and reproducible conditions is that U-I behavior is sensitive to bio-fields variations over each 24 hours (Hours Of the Day = HOD) as it was evidenced on water and electrolyte aqueous solutions [3-5]. In particular, measured value Udc for quartz resonators shows systematic and abrupt variation at the rising sun moment which triggers in the first stage positive effect of bio-fields on structure of all tested quartz crystals. Differential measuring system on pairs of quartz crystals seems to be the best way to evidence this interaction and is considered again in this note in view to make a better selection and to establish deeper significances of Udc(HOD) variations.

All 8 channels of data logger are used simultaneously for 16 pairs of quartz crystals in different combination of 2 MHz, 4 MHz (both in normal packages), small and medium size watch resonators (Q-ws and Q-wm, respectively) [1]. The measuring circuit was performed carefully, but keeping the same schematics like in the previous note [2]. Ten pairs show the same pattern of Udc(HOD) variation, two others show the same, but with opposite sign (the mirror image of the first ones like it has been presented in Figure 21, reference [2]), and four have low and noisy variations.

The overall amplitude of Udc variation over 24 hours is another important parameter for each tested pair. This is evaluated by:

$$Mm \equiv \max(Udc) - \min(Udc) \qquad (1).$$

Annexed Figures present variation of Udc(HOD) for three selected pairs during the same 6 successive days characterized by great changes of weather and bio-fields associated to flora, fauna and human mental field with activity specific to springtime. Period of time ranges between third quarter of the Moon (29th May) and new Moon (5th June).The significance of Udc variation is given for each pair on the Monday graph. The 2Q-ws pair has the mirror image of the variation for the other two ones, but additionally shows higher sensitivity to changes of weather and bio-fields. This particular behavior has been evidenced also in the previous notes and can be substantiated by significantly small mass of the watch crystals in comparison with the other ones.

Concluding remarks:

The differential measuring system has chosen deliberately with an asymmetry in view to evidence in accurate and reproducible conditions the influence of bio-fields on dc electric conductivity in quartz crystals. However, there are several pairs (4 from 16) for which this asymmetry does not work. As the previous results obtained on water and aqueous solutions, Udc(HOD) reveals the variation of bio-fields around location of measurements mainly as function of weather. The systematic and strong influence of rising Sun appears as a new and important phenomenon. The influence of Moon phases will be revealed in the next measurements. In other words, these measuring systems evidence in specific way these variations. A further analysis of these results will reveal structural significances of positive and negative effects of bio-fields on dc-electric conductivity in quartz crystals.

References

[1] G. Dragan, Interaction of quartz crystals with bio-fields. I. Preliminary experiments on commercial quartz oscillators, GDF Databanks Bull., 20(6), 2016.
[2] G. Dragan, Interaction of quartz crystals with bio-fields. II. Differential measurements on pairs of commercial quartz oscillators, GDF Databanks Bull., 20(7), 2016.
[3] G. Dragan, DTA study of water freezing (I-VII), GDF Databanks Bull., 17(5), 2013.
[4] G. Dragan, Mental field-water interaction as evidenced by Isothermal Convection Flow Calorimetry (ICFC). (I, II), GDF Databanks Bull., 18(2), 2014.
[5] G. Dragan, Evidence of human mental field by ac-electric conductivity in electrolyte solutions. 1. Bio-energy, GDF Databanks Bull., 19(6), 2015.

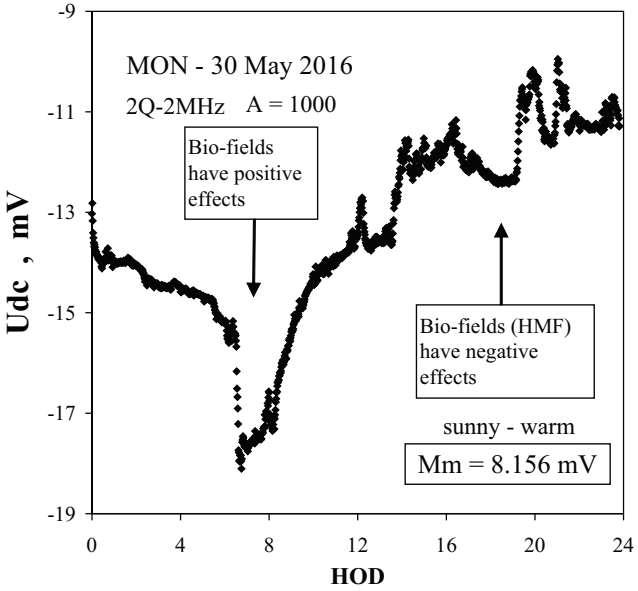


Figure 1.

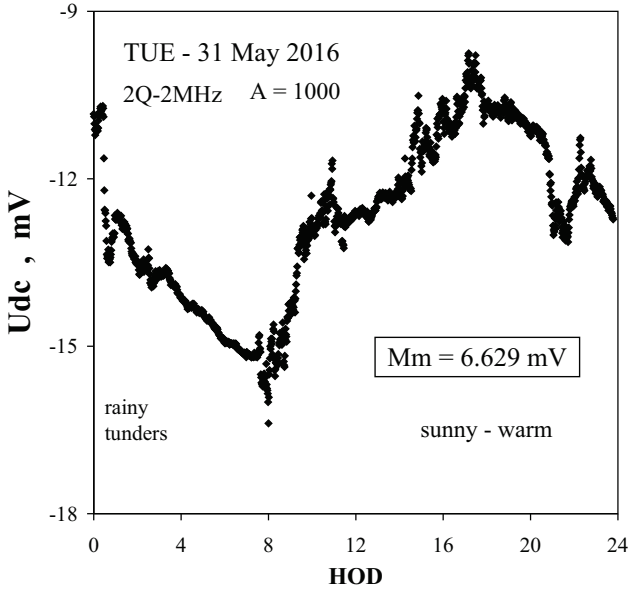


Figure 2.

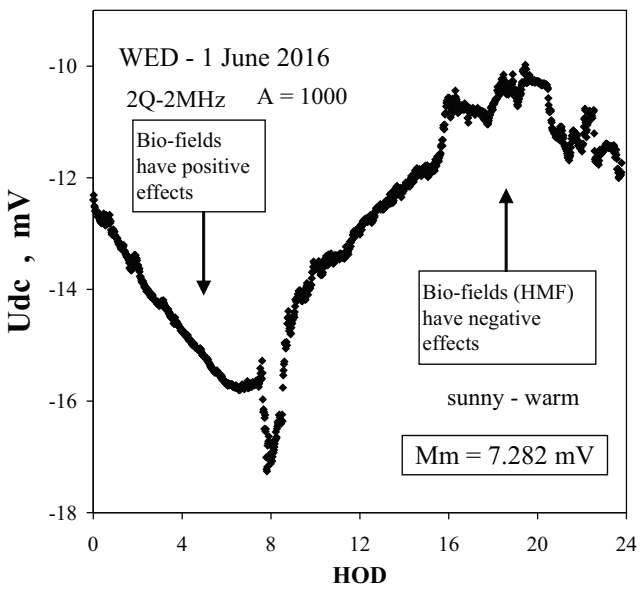
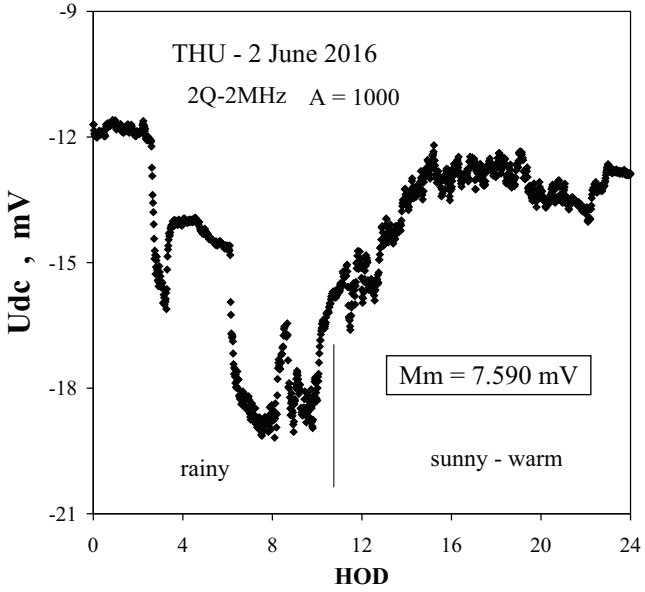


Figure 3.



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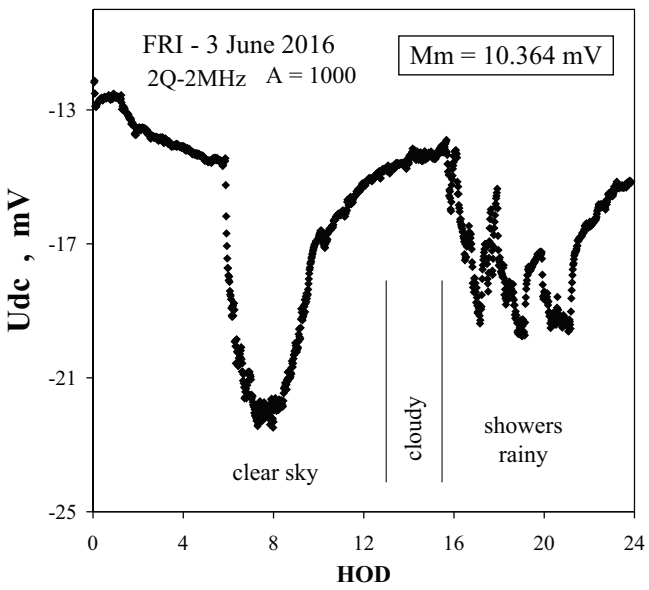

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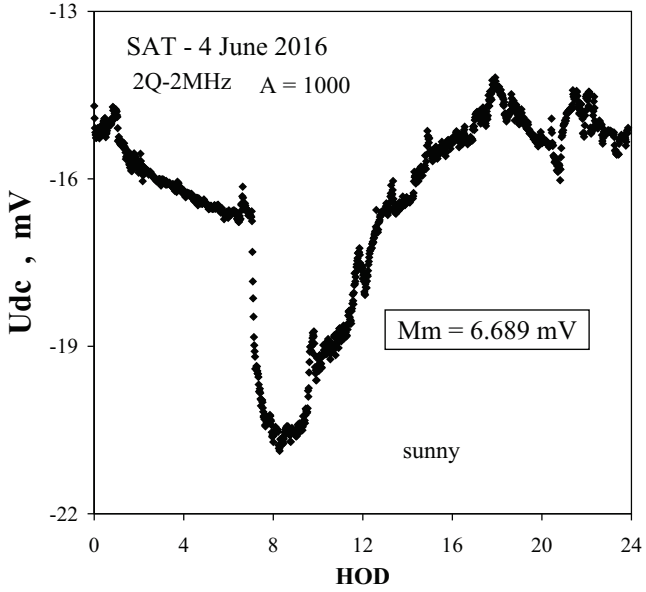

Figure 6.

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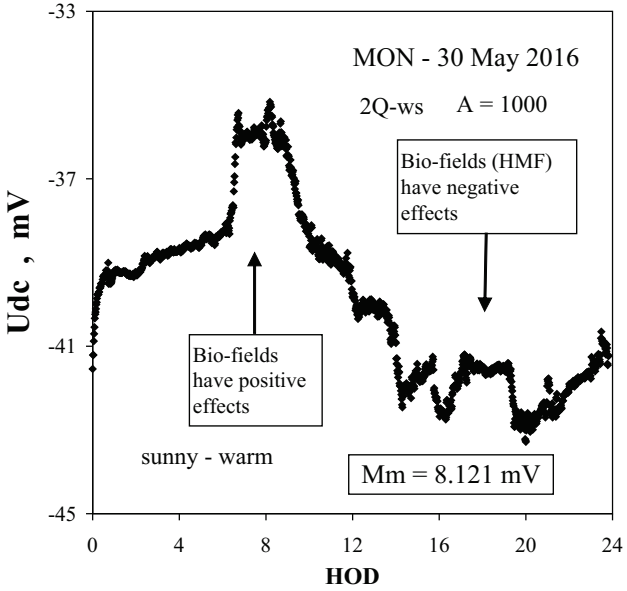

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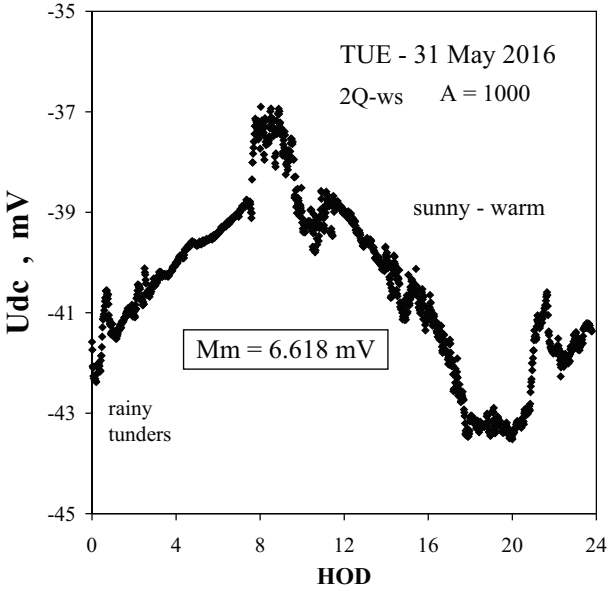

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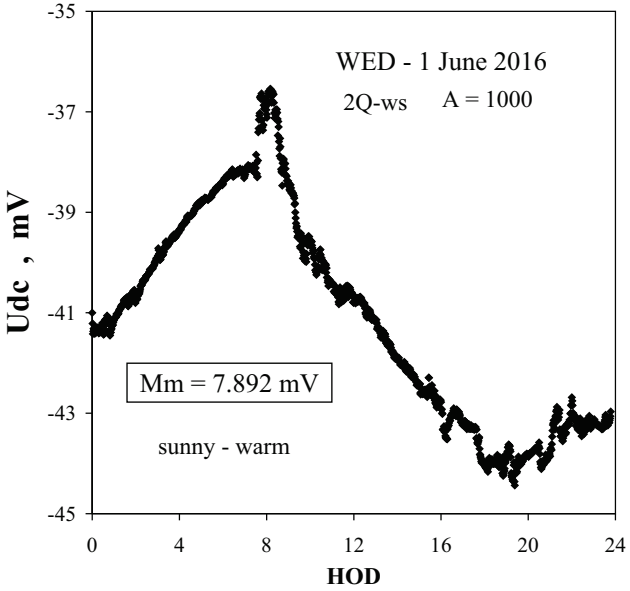

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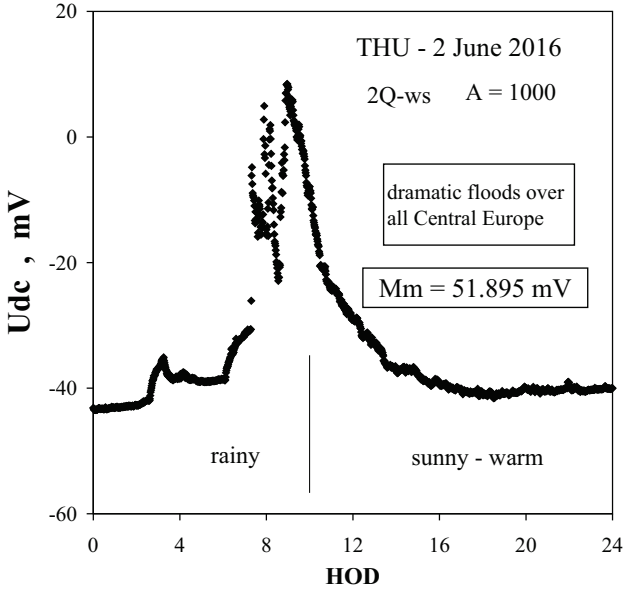

Figure 10.

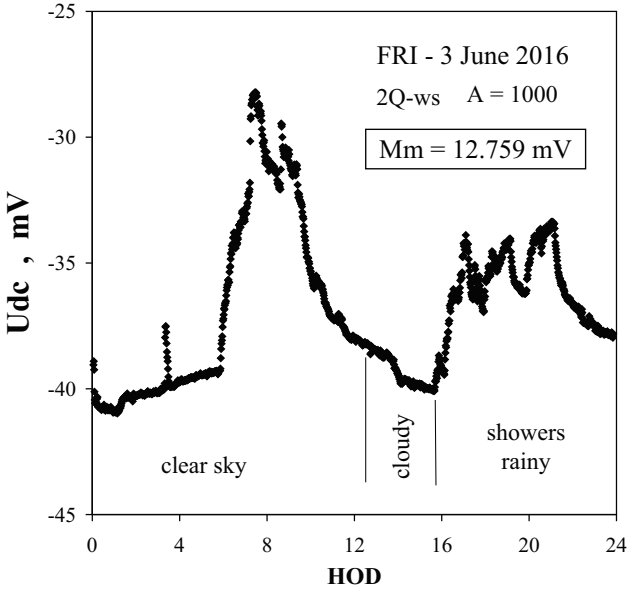

Figure 11.

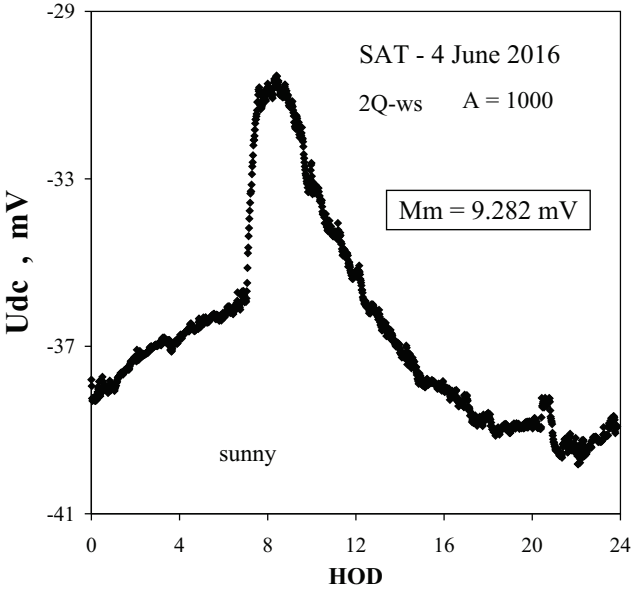

Figure 12.

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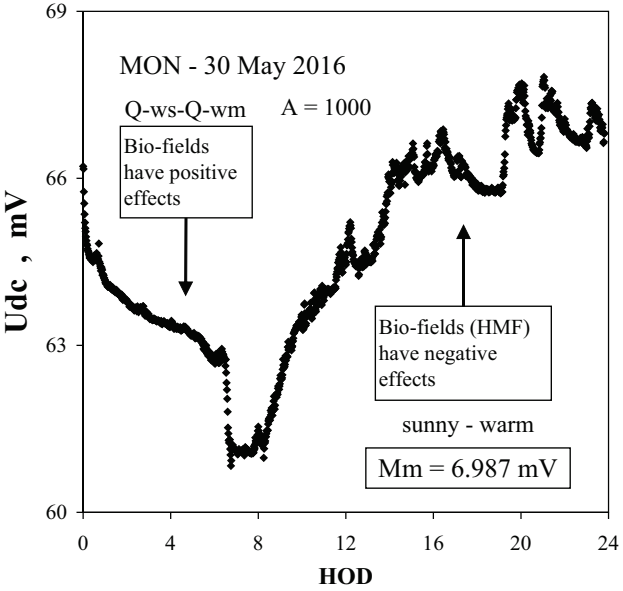

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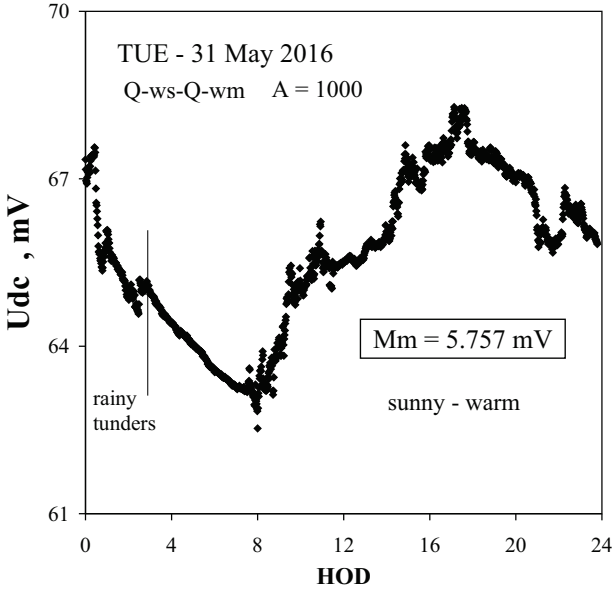

Figure 14.

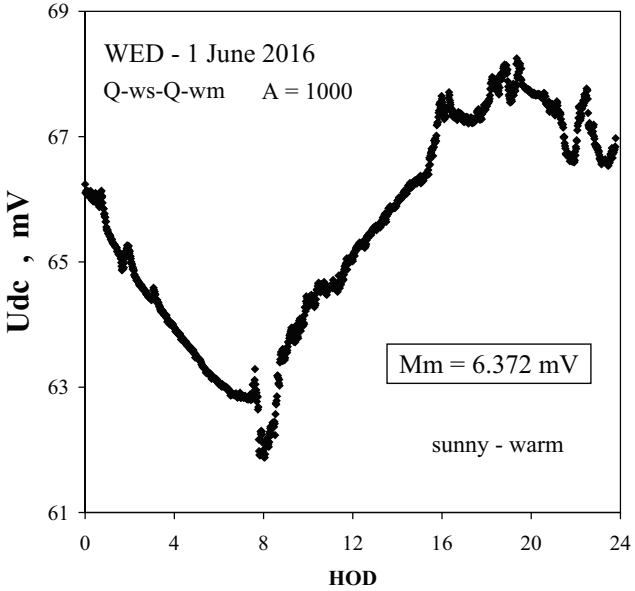

Figure 15.

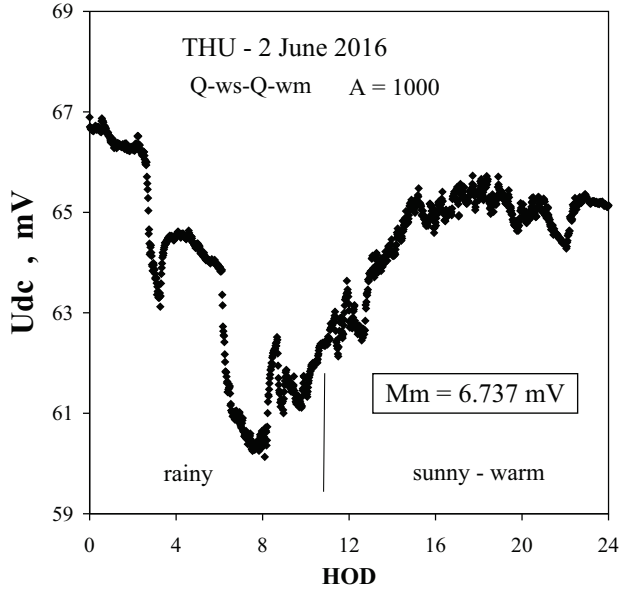

Figure 16.

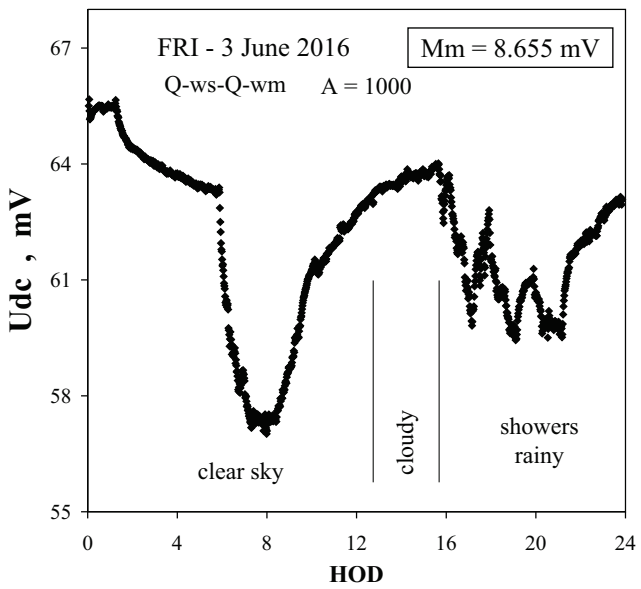

Figure 17.

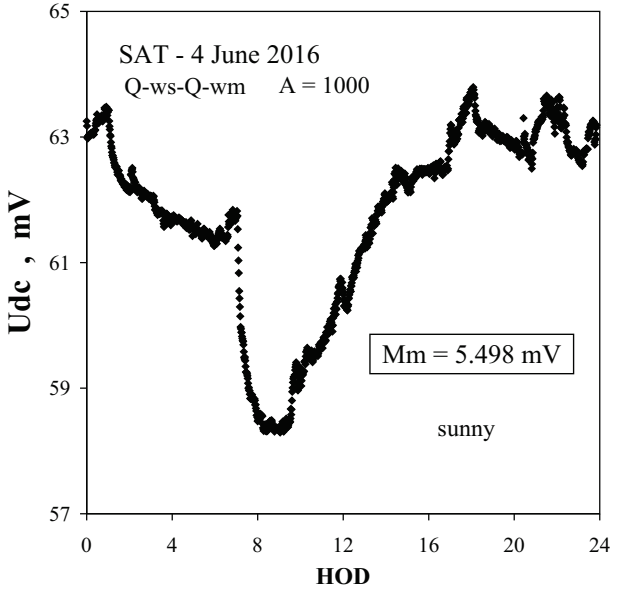

Figure 18.

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Previous issues of GDF DATABANKS BULLETIN

Year	VOL	NO	Content (titles)	$*)
1997	1	1	Editorial: Databanks – the compulsory language. LOGKOW – a Databank of evaluated octanol-water partition coefficients (James Sangster). Solubility behavior introducing topoenergetic working principles. Comments on 1-octanol-water partition of several n-alkane related series.	F
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
1998	2	3	DIFFUTOR-01: Thermally driven diffusion in pure metals	AFI
1998	2	4	VAPORSAT-01: Databanks of thermally driven VLE. The first 100 simple molecules	AFI
1999	3	1	Editorial: New trends in material science: nanostructures (Dan Donescu) DIFFUTOR: Databanks of diffusion kinetics. VAPORSAT: Databanks of vapor-liquid separation kinetics.	F
1999	3	2	Discussions on Applied Metrology	AFI
2000	4	1	Editorial: Laboratory accreditation and inter-laboratory comparisons (Virgil Badescu) Doctoral Theses – important data banks. GDF intends to open new series of experiments on thermo-physical properties. Some comments on uncertainty: global budget and DFT analysis. Events: The 9th International Metrology Congress, Bordeaux, France, 18-21 October 1999.	F
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
2001	5	2	Editorial: Viscosity – a symptomatic problem of actual metrology. Visco-Dens Calorimeter: general features on density and viscosity measurements. New vision on the calibration of thermometers: ISOCALT® MOSATOR: Topoenergetic databanks on molten salts properties driven by temperature and composition.	F
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	F

			practice.(Plenary lecture at the 19th SRH National Congress, 21-22 September 2004, Bucharest, Romania)	
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
2007	11	3	TRESISTOR© - data banks of materials with thermally driven electric and magnetic properties TRESISTOR© - NTC -1 - data bank of NTC thermistors	AFI
2008	12	1	Australian population: life, death and cancer	F
2008	12	2	Pattern of Cancer Diseases	F
2008	12	3	Adiabatic calorimetry – summary description of the demo prototype	F
2008	12	4	Flight QF 30 and even more… Temperature calibration of NTC-thermistors. 1.Preliminary results.	F
2009	13	1	Proposal for interlaboratory comparisons. Calibration of NTC-thermistors (The 14th International Metrology Congress, Paris, France, 22-25 June 2009).	F
2009	13	2	Sudoku – un algoritm de rezolvare. (Sudoku – an algorithm for solution).	AFI
2009	13	3	Cancer and Diabetes – as social diseases. (Open letter to all whom it may concern).	F
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2010	14	2	Measuring tools for subtle potentials; pas-LED: an efficient measuring tool for subtle potentials.	F
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2010	14	4	Cancer as an erosion process in human society.	F
2010	14	5	Cancer erosion in Australian human society: 1982 – 2006.	F
2010	14	6	Cancer erosion in German human society:1980-2008.	F
2011	15	1	Procedures and devices for energy and water saving. (I) (in Romanian).	F
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2013	17	5	DTA study of water freezing. VII. More statistical features on one week of experiments.	F
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2013	17	8	Eurovision song contest. 1.Basic social aspects	F
2013	17	9	Mental field-water interaction as evidenced by Isothermal Convection Flow Calorimetry (ICFC). I. ICFC description and preliminary results.	F
2013	17	10	1. Procedure for defining standard liquids for viscosity based on topoenergetic principles. 2. Topological aspects of flow and deformation in polymer composites, The VIII-th International Congress on Rheology, 1-5 September 1980, Naples, Italy, pp. 375-376. 3. Universal representation of flow behavior based on topoenergetic principles, The IX-th International Congress on Rheology, 8-13 October 1984, Accapulco, Gro. Mexico, pp.369-376. 4. Comments on "Universal representation of flow behavior based on topoenergetic principles", The IX-th International Congress on Rheology, 8-13 October 1984, Accapulco, Gro. Mexico, pp. 369-376. 5. Open letter to BRML and INM.	F
2014	18	1	Adiabatic calorimeter as high accuracy T-calibrator	F
2014	18	2	Mental field-water interaction as evidenced by Isothermal Convection Flow Calorimetry (ICFC). II. Effect of convection flow power.	F
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2015	19	6	Evidence of human mental field by ac-electric conductivity in electrolyte solutions. 1. Bio-energy.	F
2015	19	7	High resolution mixing calorimetry redivivus.IV. Specific heat of crystalline phase of water. WPA2015: International Congress of World Psychiatric Association,Primary care mental health: innovation and transdisciplinarity, Bucharest, 24-27 June 2015, ROMANIA	F
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2016	20	2	Structural aspects revealed by topoenergetic view on ac electric conductivity in HCl/(water + organic solvent)	F
2016	20	3	Stability of amorphous-crystalline coupling in electrolyte aqueous solutions in relation to interaction with bio-fields	F
2016	20	4	Efficient, simple and cheap outdoor extension of exhausting system using Bernoulli and thermal convection effects applied for air forced boilers on natural gas	F
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2016	20	6	Interaction of quartz crystals with bio-fields. I. Preliminary experiments on commercial quartz oscillators.	F
2016	20	7	Interaction of quartz crystals with bio-fields. II. Differential measurements on pairs of commercial quartz oscillators.	F

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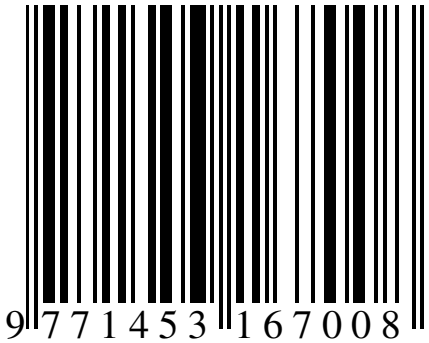

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