

Abstract Details

<u>AOGS 1st Annual Meeting</u> > <u>Interdisciplinary Working Groups</u> > (IWG2) Why Taiwan and its Environs are the ideally and best suited sites - worldwide - for conducting long-lasting >

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Title: (IWG2) Why Taiwan and its Environs are the ideally and best suited sites - worldwide - for conducting long-lasting

Abstract:

Worldwide, medium- to short-term earthquake prediction is becoming ever more essential for safeguarding man due to an un-abating population increase, but hitherto there have been no verifiable methods of reliable earthquake prediction developed - except for a few isolated examples. During the past decade it was proved and shown that it is not possible to derive reliable models for earthquake predictions from crustal movement measurements alone - as valuable and as indispensable those indeed are and that an entirely new approach must be taken and rigorously pursued over years and decades to come, and most likely throughout this twenty-first century. In support of this conclusion, there have been reported throughout the history of man anecdotal historical up to scientifically verifiable earthquake precursor or @seismo-genic@ signatures of various kind @ first biological, geological, geo-chemical and then a rather large plethora of diverse electromagnetic ones - on ground, in air and space, denoted as Seismo-electromagnetic
signatures. The existence of all of these signatures can no longer be denied; and those past signatures be more rigorously assessed in order to develop a strategy for designing and carrying out controlled long-lasting &seismo-genic and &seismo-electromagnetic studies on how to set up world-wide a network of measurement sites for conducting a holistic set of measurements in order for providing an improved understanding on why and how such precursor signatures are generated, and how and where those may best be observed subject to the rather poor signal-to-noise ratio (SNR), requiring much improved digital instrumentation. In comparing the various approaches and especially the local tectonically active regions within which the current studies are being conducted, based on the extensive travels with site assessment, currently Taiwan ranks out to be the best and ideally suited compact region for conducting such integrated Searches for Earthquake Precursor Signatures, and for setting up the pertinent ground-based metrological networks plus conducting aeronomic and satellite imaging studies. The work performed in Taiwan hitherto is well reviewed on the URL of their ongoing 4-year study, and in comparison with other suitable sites, which were visited by WMB � for Establishing Research Monitoring Networks & it was found that Taiwan & is ideally and best suited for studying ERPS in that the island is separated from other continental regions, and there exists the dedication and will power for advancing our knowledge most rapidly. A detailed comparative verification on this conclusion will be presented. Reference: integrated Searches for Earthquake Precursor Signatures: http://www.ss.ncu.edu.tw/~istep

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