

## DC and Slow Cortical Potentials with BrainMaster Atlantis

BrainMaster Technologies, Inc. is pleased to announce the initial availability of software capable of recording and training DC (Direct Current) and SCP (Slow Cortical Potentials) with the Atlantis series of hardware, and the 3.2.2 version of the BrainMaster BMT (Basic Modules for Training) software<sup>1</sup>. This capability now provides the ability to record the DC or "standing" offset potential of the EEG leads, and to train using the DC information, or using SCP. The Atlantis hardware includes 2 or 4 high-quality DC-sensitive EEG amplifiers, and all EEG recordings are taken internally with DC "coupling." However, until now, the PC software has only had access to the "conventional" EEG information. The new software (and firmware) now makes it possible for the PC software to access the DC EEG data, and to use it for research in DC/SCP EEG monitoring and training. In addition to providing DC measurements, this capability also provides extended bandwidth EEG training (to 0.01 Hz), and SCP data.

No additional equipment is necessary in order to work with DC and SCP potentials with the BrainMaster Atlantis equipment. It is necessary to use silver/silver chloride sensors, in order to achieve a valid and stable DC recording. Many types of silver/silver chloride sensors are available, including disposable EKG sensors, and disposable or re-usable plastic retainers ("blue" ones) with embedded silver chloride disks. With the use of these sensors,

This DC/SCP capability operates simultaneously with the existing Atlantis capabilities. Therefore, in addition to the DC/SCP data, the complete EEG signal, with all of its component bands and protocol processing, are still operational. The built-in continuous impedance measurement is also operational. The firmware upgrade additionally provides access to all of the impedance data. This provides the sensor impedances for all leads, both active and reference. It is therefore possible to record DC potentials, conventional EEG, and sensor impedances simultaneously, and monitor and train on any of these variables in real time.

