Comparison of the Articulograph AG500 and the Articulograph AG501

|		
Cube/ Transmitter holder		
	Cube with **six** transmitter coils surrounding the subject	Replaced with the transmitter holder containing **nine** transmitter coils, placed right above the subject's head
	Cubical structure surrounding the head	Three-armed structure hanging above the head

|	
System	

| **System with subject** | | |

| **Accuracy:**		
	Precise with some weak points in the measurement area	Very high precision in the whole measurement area; RMS of 0.3mm
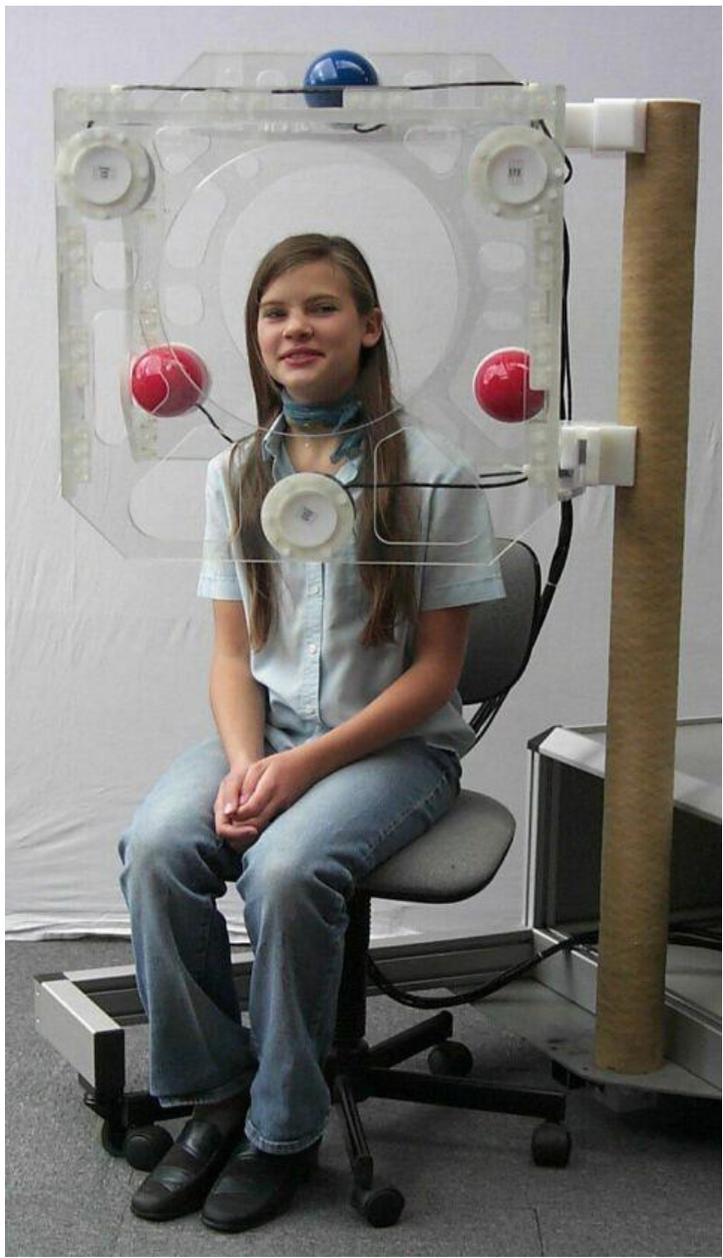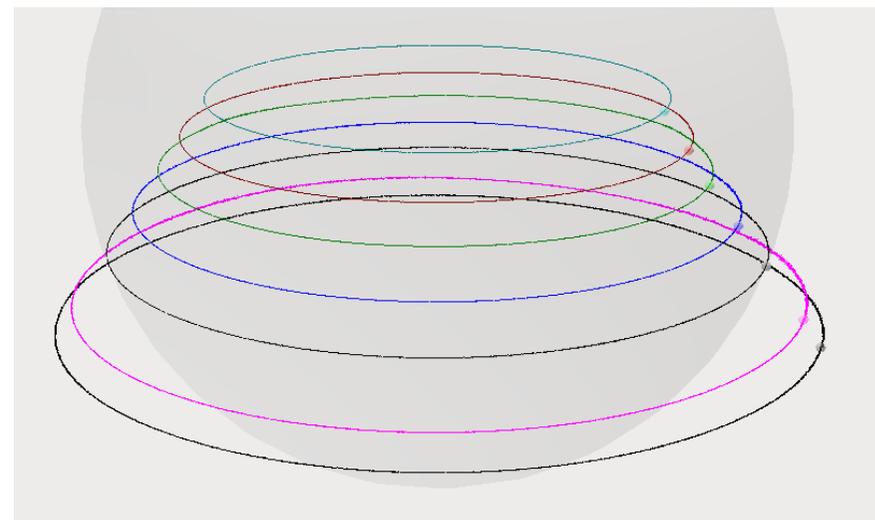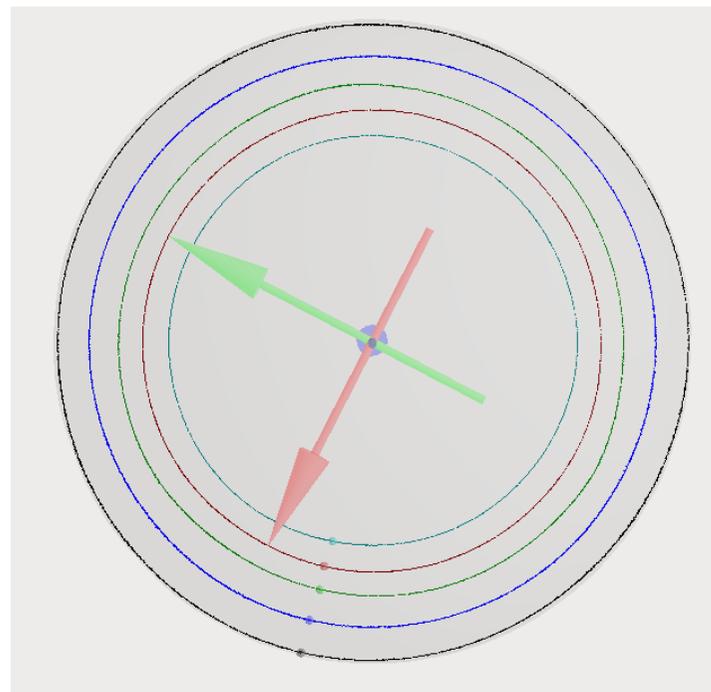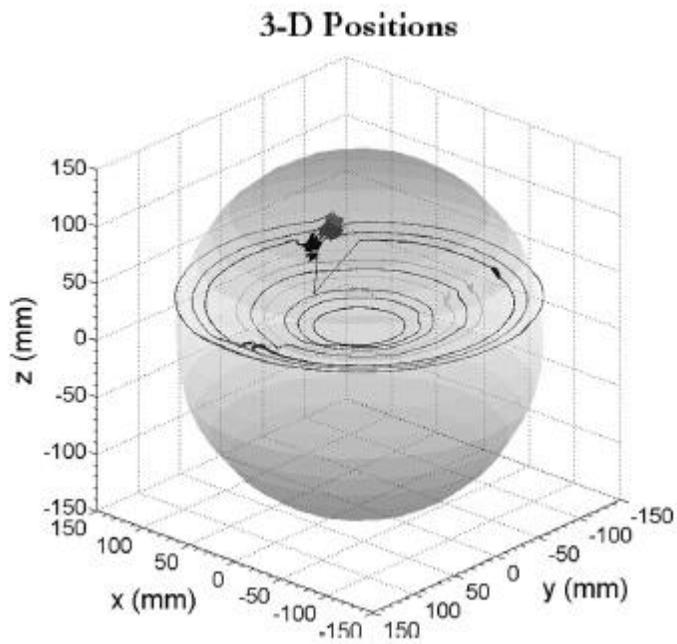
Measurement area:	

pos data after standardization of the rawpos data below in relation to sensor 1 and 4
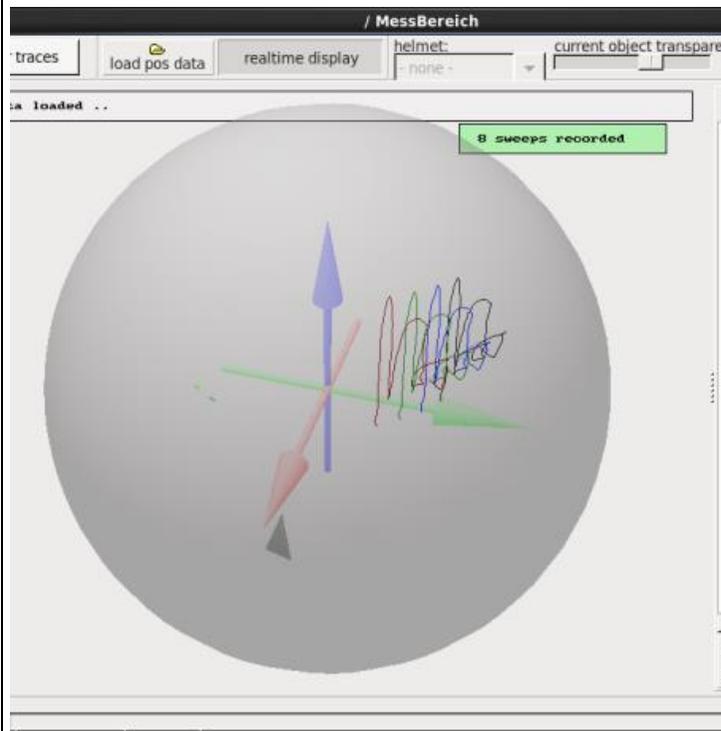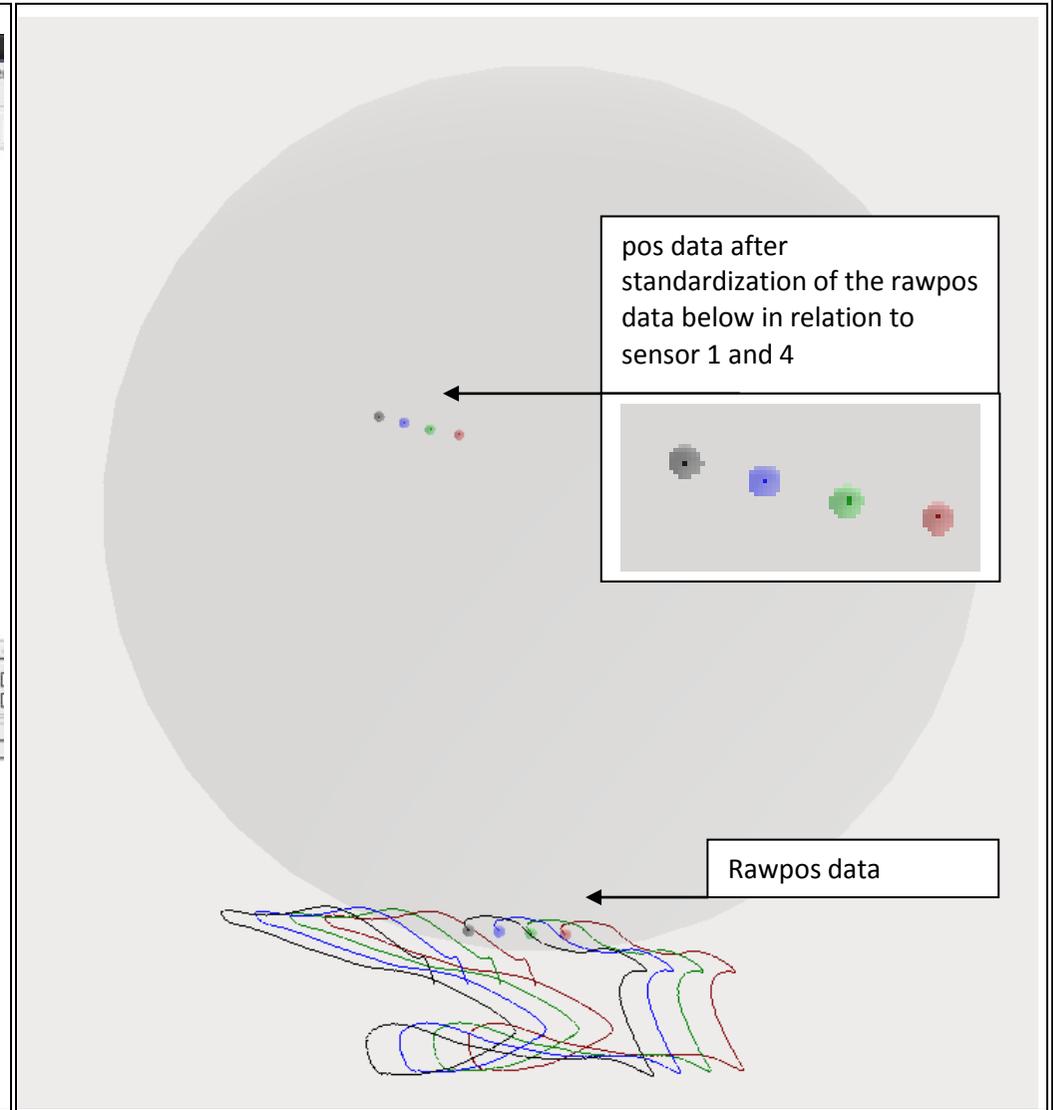
Rawpos data |
| | 300mm spherical measurement space | Guaranteed 300mm spherical measurement space, measuring beyond that area is possible |

Visualization of the data:		
	Real time display and display of the head movement corrected data from the calculated positions	Real time display or the alternative **head movement corrected real time display** Display of reference traces like palate or face are now possible during the recording
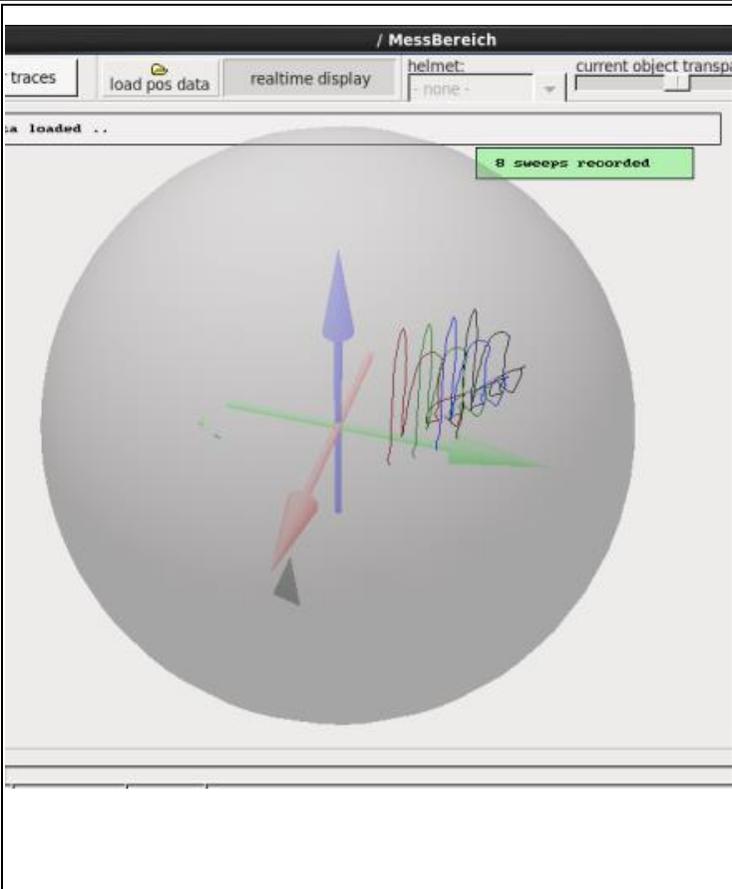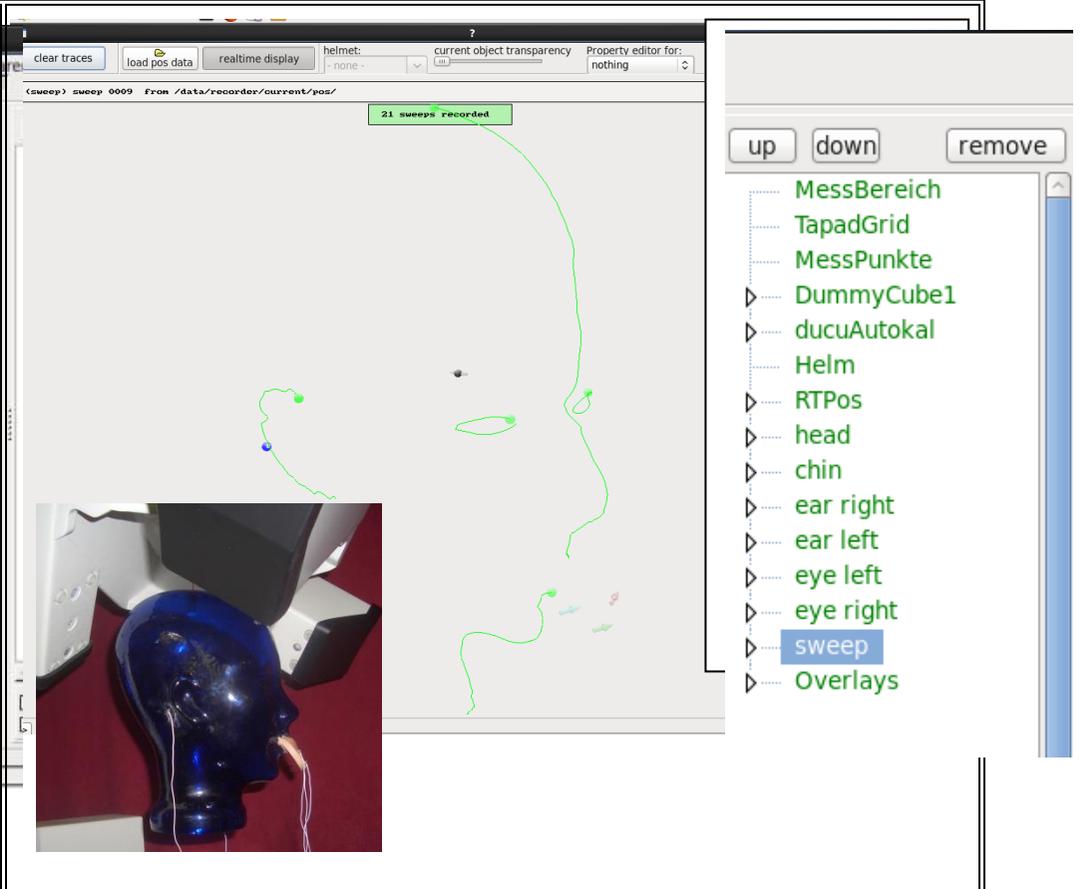
Channels:	8/12 channels	8/16/24 channels
Sampling rate:	200Hz	1250Hz and alternatively 250Hz
Weight:	130kg	65kg
Housing/body:	Carrier, stand with cube holder	No more carrier with Lida computer. The electronics are now within the small red box (39cm * 22,5cm * 9cm) All integrated system
Calibration unit:	External circal	Small integrated circal
Computer:	Internal LIDA-computer Dell Notebook	**No more internal computer**, the signal runs directly via network to the Dell notebook, which is included with the systems
Mobility:	Mobile	Increased mobility due to the reduced weight and the possibility to retract the arm and lower the height: Minimum size: 75cm x 111cm x 136cm
Accoustics:	Quality 16 KHz 12 bit Powered with batteries.	The amplifier is now inserted within the USB sound card Quality 48 KHz 16 bit No batteries needed. Acoustics powered via the control server.
Application:	Calibration requires the user's attention (turning around the sensors) Datatransfer: Getsessionfrom Lida All the procedures need to be performed by the user step-by-step	Calibration runs without any interruption No upside and downside anymore The data are automatically stored within the control Notebook, which is included with the system All procedures run automatically but can also be performed by the user step-by-step
Available data:	Original amplitudes, position data and the head movement corrected position data	Original amplitudes, position data and the head movement corrected position data Furthermore, automatically head movement corrected data - Binary and ASCII
Service:	Free service support by email or skype Log file available for maintenance	**Service friendly:** All electronics within one small box No more Lida computer Small and handy receiver unit, independent modules for 8 channels each Free service support by email or skype Log file available for maintenance
Application:	Calibration requires the user's attention (turning around the sensors) Datatransfer: Getsessionfrom Lida All the procedures need to be performed by the user step-by-step	Calibration runs without any interruption No upside and downside anymore The data are automatically stored within the control Notebook, which is included with the system All procedures run automatically but can also be performed by the user step-by-step
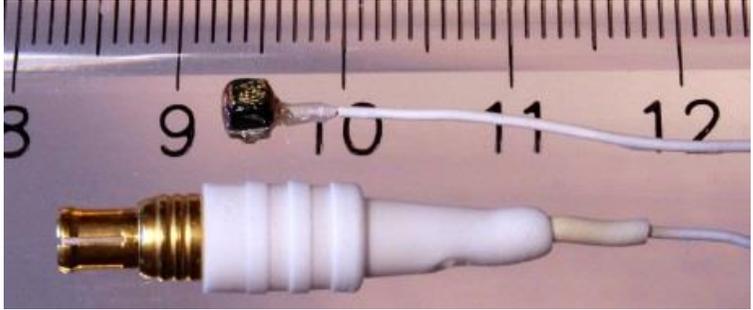
Sensors:		
	Twisted cable	Reduced price by about 40% Well shielded mini coax cable – nosofree coated Easy to use connectors Improved durability, usable about fifteen times

Please note also the study of the Università del Salento, Lecce, Italy, published at the Interspeech 2013 in Lyon

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