

## **Instruments used in Wind Atlas South Africa – Phase 3 (WASA3)**

### **Cup Anemometers**

Model: P2546A-OPR  
Manufacturer: WindSensor, Denmark  
Nominal heights installed: 10 m, 20 m, 40 m, 60 m, 2 and 62 m  
Calibrated by: Svend Ole Hansen ApS, Denmark

### **Potentiometer wind vanes**

Model: W200P-01  
Manufacturer: Vector Instruments, United Kingdom  
Nominal heights installed: 20 m and 60 m  
Calibrated by: Deutsche WindGuard Wind Tunnel Services GmbH, Germany

### **Humidity and Air Temperature Probes**

Model: HMP60  
Manufacturer: Vaisala Oyj, Finland  
Nominal height installed: 60 m  
Calibrated by: Vaisala Oyj, Finland

### **Temperature Gradient Probes**

Model: CS109  
Manufacturer: Campbell Scientific  
Nominal heights installed: 60 m and 10 m  
Calibrated by: Campbell Scientific Africa

### **Barometers**

Model: PTB110  
Manufacturer: Vaisala Oyj, Finland  
Nominal height installed: 30 m  
Calibrated by: Vaisala Oyj, Finland

### **Data loggers/ Compact Flash Module**

Model: CR1000 and CFM100  
Manufacturer: Campbell Scientific, Inc., United Kingdom  
Nominal height installed: 30 m (enclosure IP 65 rating)  
Calibrated by: Campbell Scientific Ltd, United Kingdom

### **Data Capturing**

Data are sampled at a 0.5 Hz cycle. Every 10-minute averages, minima, maxima, and standard deviations are calculated and recorded with date-time stamp.