MetaData Information for RBAST 15-min Temperature Data

			Forest Air				
	Stream Temperature	Open Air Temperature	Temperature	Relative Humidity	PAR		
DATA							
COLLECTION							
Instruments Used	HOBO Pro v2 Water	Air Temperature Smart	Air Temperature-RH	Air Temperature-RH	PAR Light Smart		
	Temperature	Sensor (12-bit) with	Datalogger inside	Datalogger inside	Sensor with HOBO		
	dataloggers, Onset	HOBO microstation	solar radiation shield,	solar radiation	microstation		
	Computer Corp.,	datalogger, inside solar	Onset Computer	shield, Onset	datalogger, 400-700		
	www.onsetcomp.com	radiation shield	Corp.,	Computer Corp.,	nm		
			www.onsetcomp.com	www.onsetcomp.co			
				m			
Data Collection	00:00 1 June 2011 to	00:00 1 June 2011 to	00:00 1 June 2011 to	00:00 1 June 2011 to	00:00 1 June 2011		
Timing	24:00 30 September	24:00 30 September	24:00 30 September	24:00 30 September	to 24:00 30		
	2012, every 15 min.	2012, recorded every 1	2012, every 15 min.	2012, every 15 min.	September 2012,		
		min., averaged and			recorded every 1		
		logged every 15 min.			min., averaged and		
					logged every 15		
					min.		
Calibration	Calibrated in ice bath						
	before deployment,						
	temperature correction						
	(to nearest 0.1°C)						
	made to raw values						
	before any calculations	(0.0)	(0.5)				
Units	(°C)	(°C)	(°C)	(%)	microEinsteins per		
					sec		
Instrument	0.02°C at 25°C	0.02°C at 25°C	0.02°C at 25°C				
Resolution							
Site Information	Two stream segments of	approximately 100 m lengt	h in 1-3rd order stream	were marked. Datalogge	ers placed at upstream		
	and downstream end. One segment has forested riparian zone, the other has non-forested riparian zone.						

Data Trimming	Raw data were	Raw data were	Raw data were	Raw data were	Raw data were
	visualized by graphing	visualized by graphing	visualized by	visualized by	visualized by
	over time. Data points	over time. Data points	graphing over time.	graphing over time.	graphing over time.
	were removed if 1) the	were removed if 1) the	Data points were	Data points were	Data points were
	dataloggers appeared	dataloggers appeared to	removed if 1) the	removed if 1) the	removed if 1) the
	to be out of the water	be out of the water	dataloggers appeared	dataloggers	dataloggers
	(tracked air	(tracked air	to be out of the	appeared to be out	appeared to be out
	temperatures closely),	temperatures closely),	water (tracked air	of the water (tracked	of the water
	unlikely spikes	2) unlikely spikes	temperatures	air temperatures	(tracked air
	occurred (> 2C in 15	occurred (> 2C in 15	closely), 2) unlikely	closely), 2) unlikely	temperatures
	min), 3) dataloggers	min), 3) dataloggers	spikes occurred (> 2C	spikes occurred (> 2C	closely), 2) unlikely
	were being	were being downloaded	in 15 min), 3)	in 15 min), 3)	spikes occurred (>
	downloaded (and	(and therefore out of	dataloggers were	dataloggers were	2C in 15 min), 3)
	therefore out of the	the water)	being downloaded	being downloaded	dataloggers were
	water)		(and therefore out of	(and therefore out of	being downloaded
			the water)	the water)	(and therefore out
					of the water)
Data Processing	Raw data files	Raw data files converted	Raw data files	Raw data files	Raw data files
	converted into Excel	into Excel format and	converted into Excel	converted into Excel	converted into Excel
	format and trimmed to	trimmed to 1 June to 30	format and trimmed	format and trimmed	format and trimmed
	1 June to 30	September,	to 1 June to 30	to 1 June to 30	to 1 June to 30
	September,	temperature corrected	September,	September,	September,
	temperature corrected	based on calibration	temperature	temperature	temperature
	based on calibration		corrected based on	corrected based on	corrected based on
			calibration	calibration	calibration