

As of October 18, 2010

Count	CDR Variable Name	Essential Climate Variable	Algorithm Name	Collateral Products	Responsible Team Member	Source Data Sensors	Future Source Data Sensor	Satellite	Channels	Spatial Resolution	Temporal Resolution	Product Units	Projection	Output Format	Metadata Standard	Other Characteristics	Key publication reference	Existing User Groups	Expected User Groups	Outcome	Impact	Community Workshop Status				
		Domain	Variable							Horizontal	Vertical	Orbits	Start Date	End Date												
1	SST	Oceanic	Sea-surface temperature	SeaFlux	Diurnal variability, cloud mask, ice mask	Carol Anne Clayson	AVHRR, TMI, AMSR-E, MODIS	N/A	NOAA-9, NOAA-10, NOAA-11, NOAA-12, NOAA-14, NOAA-15, AVHRR/3, Aqua, TRMM, Terra	AVHRR: Channels 3,4,5; TMI: all; AMSR-E: all; MODIS: Bands 20-23	25km	N/A	All orbits	July 1987	present	degrees Celsius	equal angle	binary	research	oceans only	Clayson, C. A. and D. Weitch, 2007: Variability of tropical diurnal sea surface temperature. J. Climate, 20, 334-352.	SeaFlux community, GEWEX, ISCCP, SRB	GCM modeling groups, Ocean modeling groups, water cycle analysts, heat budget studies	Satellite climate records, community enabled to address societal outcomes and impacts to improved ocean surface temperatures; improved understanding of IPCC model results	Increased public understanding of global warming due to improved ocean surface temperatures; improved understanding of IPCC model results	No. Currently plans are underway considering a joint meeting with the next AMS Air-Sea Interaction Conference, to be held in roughly 18 months from now
2	Surface Air Temperature	Atmospheric	Surface Air Temperature	SeaFlux	Sensible heat flux	Carol Anne Clayson	SSM/I, AMSU-A, AIRS, AMSR-E	N/A	F08, F10, F11, F13, F14, F15, Aqua	SSM/I: all; AMSR-E: all; AMSU-A: Channels 1-8, AIRS Level 2 product	25km	N/A	All orbits	July 1987	present	degrees Celsius	equal angle	binary	research	over oceans only	Roberts, J. B., C. A. Clayson, F. R. Robertson, and D. Jackson, 2010: Predicting near-surface characteristics from SSM/I using neural networks with a first guess approach. J. Geophys. Res., (in press).	SeaFlux community, GEWEX, ISCCP, SRB	GCM modeling groups, Ocean modeling groups, water cycle analysts, heat budget studies	Satellite climate records	Increased public understanding of global warming due to improved near-surface air temperatures; improved understanding of IPCC model results	No. Currently plans are underway considering a joint meeting with the next AMS Air-Sea Interaction Conference, to be held in roughly 18 months from now
3	Surface wind speed	Atmospheric	Surface wind speed	SeaFlux	N/A	Mark Bourassa	SSM/I, NSCAT, SeaWinds (QuikSCAT), SeaWinds (Midon2)	N/A	NSCAT, QuikSCAT, Midon2, F08, F10, F11, F13, F14, F15	SSM/I: all; SeaWinds: all	25km	N/A	All orbits	July 1987	present	m/sec	equal angle	binary	research	over oceans only	Bourassa, M. A., and P. J. Hughes, 2009: Impacts of High Resolution SST Fields on Objective Analyses of Wind Fields, and Practical Constraints Related to Sampling. International GHRSSST User Symposium, 2 p.	SeaFlux community, GEWEX, ISCCP, SRB	GCM modeling groups, Ocean modeling groups, water cycle analysts, heat budget studies	Satellite climate records	Increased public understanding of the water budget and changes to the water cycle; improved understanding of IPCC model results	No. Currently plans are underway considering a joint meeting with the next AMS Air-Sea Interaction Conference, to be held in roughly 18 months from now
4	Surface humidity	Atmospheric	Water Vapor	SeaFlux	Latent heat flux	Carol Anne Clayson	SSM/I, AMSU-A, AIRS, AMSR-E	N/A	F08, F10, F11, F13, F14, F15, Aqua	SSM/I: all; AMSR-E: all; AMSU-A: Channels 1-8, AIRS Level 2 product	25km	N/A	All orbits	July 1987	present	g/kg	equal angle	binary	research	over oceans only	Roberts, J. B., C. A. Clayson, F. R. Robertson, and D. Jackson, 2010: Predicting near-surface characteristics from SSM/I using neural networks with a first guess approach. J. Geophys. Res., (in press).	SeaFlux community, GEWEX, ISCCP, SRB	GCM modeling groups, Ocean modeling groups, water cycle analysts, heat budget studies	Satellite climate records	Increased public understanding of the water budget and changes to the water cycle and heat flux variability; improved understanding of IPCC model results	No. Currently plans are underway considering a joint meeting with the next AMS Air-Sea Interaction Conference, to be held in roughly 18 months from now