As of October 18, 2010																							
Count	CDR Variable Name	<u>Es</u>	sential Climate Variable	Algorithm Name	Collateral Products	Responsible Team Membe	er Source Data Sensors	Future Source Data Sensor	Spacecraft	Channels Spatial Re	esolution	Temporal Resoluti	on P	roduct Units Projec	tion Output Forma	at Metadata Standard	Other Characteristics	Key publication reference	Existing User Groups	Expected User Groups	Outcome	Impact	Community Workshop Status
Sequential i.d. number to count products, 1,2,3 Please list only one variable per row of the spreadsheet.	e.g. Level 1B radiance, albedo, cloud top height, SST, etc	For Geophysical Variable menus in cells below to en pg 6 in the <i>Guideline for t</i> <i>meeting GCO</i>	s (only, i.e., not for Level 1b): Please use the drop ter the ECV, you may also click on the above link a <i>he Generation of Satellite-based Datasets and Pro</i> <i>Requirements</i> pdf document as a reference.	down Please include a name ind use that may be recognizable in the Climate community, e.g. ISCCP, GPCP, GRHSST, PATMOS- x, etc	List all in one cell. Collateral Products are those which are not proposed as CDRs and are not yet considered to be climate quality, but which are routinely generated as secondary/intermediate outputs from the CDR algorithm. NOAA's CDR Program does not ensure or test the availability or reliability of Collateral Products. Users can contact the code developers for further information.	Please identify which member of your team is primarily responsible for development of this particular product.	List the space sensors which provided the raw data from which your product(s) were generated.	If you plan to provide CDR continuity from existing sensors to future sensors (e.g., from JPSS or other missions), please identify the mission and sensors to be used. NOTE: if you did not propose to address future sensors or data sets, please state "N/A"	Please list all spacecraft from a which source data were used (e.g., NOAA-8, EOS Terra, SeaWiFS, GOES- 14). Please follow the order used in the list of source data sensors.	Please identify Please use a all channels new row for used for each each unique type of source resolution data sensor. (spatial or temporal) Please include the units of the resolution (e.g., mbars, km, degrees).	Please use a As ap new row for e.g., each unique • early resolution morni (spatial or • mid temporal) morni please • afte include the resolution (e.g., mbars, km, degrees)	olicable, Start of Record: Er Month/Year Re ng pl ng is noon ((e 20	nd of e.g. ecord: (un lonth/Year Kelv ease say W/r oresent" if it ongoing. ote any gaps they exist .g., Feb. 203)	Reflectance If gridded, what itless), degrees projection? win, Radiance m^2/sr, etc	e.g. NetCDF4, Binary, HDF4, HDF5 etc	Is your Metadata compliant with any standards or conventions? e.g., Climate Forecast (CF) Convention, FGDC Standards, ISO 19115- etc. If not adhering to a standard, please state "research"	e.g., Clear Sky only, latitudinal or longitudinal range, over oceans only, over land only, etc	Please provide a full bibliographic reference for 1 or 2 (only) key publicly- available publications that describe your data set or process, if available.	Please state any existing users (either general communities, e.g., energy, health, climate modeling, or specific group (e.g GFDL, GMAO, FAO, CDC}). This will help us justify future funding.	List the user groups (not already listed previously) that would likel be interested in the CDR. ., Who/what is NOAA serving by investing in your work?	Results that stem from use of the outputs. Unlike output measures, outcomes refer to an event or condition that is external to the program and is of direct importance to the intended beneficiaries (e.g., scientists, agency managers, policy makers, other stakeholders). Examples of outcome metrics are the number of alternative refrigerants introduced to society to reduce the loss of stratospheric ozone and scientific outputs integrated int a new understanding of the causes of the Antarctic ozone hole.	The effect that an outcome has on something else. Impact metrics are outcomes that focus on of long-term societal, economic, or environmental consequences. Examples of impact metrics include the recovery of stratospheric ozone resulting from implementation of the Montreal Protocol and related policies and the increase in public o understanding of the causes and consequences of ozone loss.	Please state whether you have conducted your community workshop (y/n). If so, please provide date/location and URL if web page exists. If not yet held, please state your plans. BACKGROUND: Per the 2009 Announcement of Opportunity, "the Project expects each Product Development Team to conduct an early community workshop (year 1 of funding) in which it will explain the theoretical basis of its algorithm and its proposed CDR development approach. The Team is expected to consider all suggestions and requests for action."
1	Level 1b radiance	Domain 'n/a	n/a	SNO Calibrated		Cheng-Zhi Zou	MSU	AMSU	POSE: TIROS-N through NOAA-14	2, 3, 4 110km	Vertical Orb	ts Start Date E OES 1978 S ts	nd Date ep. 2006 'Ra '(sr	diance: mW n/a m2 cm-1)-1	hdf4	research	global	Zou, et.al.,Recalibration of microwave sounding unit for climate studies using simultaneous nadir overpasses, J. Geophys. Res., 111, D19114, doi:10.1029/2005JD006798	reanalysis developers such as NCEP and GMAO	ECMWF,CM-SAF; Geophysical product developers; GCM modeling groups	 Improved understanding on the root-causes of calibration errors responsible for climate trend uncertainties Bias reduced level-1c radiance FCDR for climate product development • peer- reviewed assessments that quantify calibration errors 	 Improved climate instrument design due to better understanding of instrument errors improved climate reanalysis development to address societal needs in response to climate change 	yes, community workshop was held in Silver Spring, MD on March 22-24, 2010. The URL address for the meeting is http://www.star.nesdis.noaa. gov/star/meeting_MSU_AMS U_SSU2010.php
2	Level 1b radiance	n/a	n/a	SNO Calibrated		Cheng-Zhi Zou	AMSU	ATMS	NOAA-15 through NOAA-19, MetOp-A, EOS AQUA	4-14 45km	N/A All F	OES 1998 p	resent Ra	diance: mW n/a m2 cm-1)-1	hdf4	research	global		CM-SAF	Reanalysis developers; Geophysical product developers, GCM modeling groups	 Improved understanding on the root-causes of calibration errors responsible for climate trend uncertainties Bias reduced level-1c radiance FCDR for climate product development • peer- reviewed assessments that quantify calibration errors 	 Improved climate instrument design due to better understanding of the instrument errors improved climate reanalysis development to address societal needs in response to climate change 	yes, community workshop was held in Silver Spring, MD on March 22-24, 2010. The URL address for the meeting is http://www.star.nesdis.noaa. gov/star/meeting_MSU_AMS U_SSU2010.php
3	Upper-air temperature	Atmospheric	Upper-air temperature	NOAA/STAR dataset		Cheng-Zhi Zou	MSU/AMSU/SSU	ATMS	TIROS-N through NOAA-19 and MetOp-, A, EOS AQUA, JPSS	MSU 2.5 degrees channels of latitude 2-4; by 2.5 AMSU-A degrees of channels longitude 4-14; SSU channels 1-3	s deep- 5-da layer aver and mor aver aver avai	y 1978 p age thly age poth lable	resent Ke	vin equal lat/lo	on text	research	global	Zou, Gao, Goldberg, 2009, Error structure and atmospheric temperature trends in observations from the microwave sounding unit J. Climate, 22, 1661-1681.	Climate analysis and modeling communitie	Climate analysis and s modeling communities; general public interested in global change	 improved understanding of global warming trend improved ability for validating climate model simulations which lead to improved climate prejections 	• improved public understanding of the past climate change•improved policy decisions on prevention, mitigation, and adaptation strategies for global warming.	yes, community workshop was held in Silver Spring, MD on March 22-24, 2010. The URL address for the meeting is http://www.star.nesdis.noaa. gov/star/meeting_MSU_AMS U_SSU2010.php