As of May 11, 2011

Count	CDR Variable Name	Essential Climate Variable		Algorithm Name	Collateral Products	Responsible Team Member	Source Data Sensors	Future Source Data Sensor	Spacecraft	Channels	Spatial Resolution		Temporal Resolution			Product Units	Projection	Output Format	Metadata Standard	Other Characteristics	Key publication reference	Existing User Groups	Expected User Groups	Likely Societal Impacts	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 Variables (only, i.e., not for Level 1b): Please use the drop down menus in cells below to enter the ECV, you may also click on the above link and use pg 6 in the *Guideline for the Generation of Satellite-based Datasets and Products meeting GCOS Requirements* pdf document as a reference.		Please include a name 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 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 all channels used for each type of source data sensor.	Please use a new row for each unique resolution (spatial or temporal) -- Please include the units of the resolution (e.g., mbars, km, degrees).	Please use a new row for each unique resolution (spatial or temporal) -- please include the units of the resolution (e.g., mbars, km, degrees)	As applicable, e.g., • early morning • mid-morning • afternoon	Start of Record: Month/Year	End of Record: Month/Year please say "present" if it is ongoing. note any gaps if they exist (e.g., Feb. 2003)	e.g. Reflectance (unitless), degrees Kelvin, Radiance W/m^2/sr, etc...	If gridded, what is your projection?	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 19115-2, 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 likely be interested in the CDR. Who/what is NOAA serving by investing in your work?	Please suggest, at a 40,000 foot level **appropriate for non-technical policy makers**, how society will eventually benefit from your work (e.g., Government can make better informed policy decisions regarding climate change; Economy more reslient due to better climate change adaptation strategies in energy industry; coastal communities become better protected from rising oceans=lives and property protected, disease outbreaks better predicted=saved lives	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 into 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 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 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."
		Domain	**Variable**								**Horizontal**	**Vertical**	**Orbits**	**Start Date**	**End Date**												
1	MSU ch4 (AMSU ch9) brightness temperature					Shu-peng Ben Ho	AMSU brightness tempertures from NOAA 15, 16, 18,and MSU from NOAA 14, and surface radiosonde temperature observations	Aqua AMSU and NPP ATMS	POES	MSU ch4/AMSU ch9	200km	200mb	all POES orbits	1979	2012	degree Kelvin	+/- 15 degrees for satellite nadir viewing angles	hdf4	research	90N-90S	**Ho, S.-P.**, Y. H. Kuo, and S. Sokolovskiy, Improvement of the Temperature and Moisture Retrievals in the Lower Troposphere using AIRS and GPS Radio Occultation Measurements, *Journal of Atmospheric and Oceanic Technique*, 24, doi: 10.1175/JTECH2071.1, 1726-1739, 2007.	Many users inlcude ECMWF, NCEP, etc who use AMSU/MSU and RO data	climate modeling groups, ECMWF, NCEP and reanalysis groups		Satellite climate data records can be used by the scientific comminuity to validate mdoel predictions and enhance our understnanding of the climate forcing mechanisims	These datasets will also benefit the general public by providing reliable climate information to policy and decision makers and resource managers, and supporting public discussion on key climate-related issues and the future planning.	
2	MSU ch3 (AMSU ch7) brightness temperature									MSU ch3/AMSU ch7	200km	200mb		1979	2012	degree Kelvin	+/- 15 degrees for satellite nadir viewing angles	hdf4			**Ho, S.-P.**, Y. H. Kuo, Zhen Zeng and Thomas Peterson, A Comparison of Lower Stratosphere Temperature from Microwave Measurements with CHAMP GPS RO Data, *Geophy. Research Letters,* 34, L15701, doi:10.1029/2007GL030202, 2007.						
3	MSU ch2 (AMSU ch5) brightness temperature									MSU ch2/AMSU ch5	200km	200mb		1979	2012	degree Kelvin	+/- 15 degrees for satellite nadir viewing angles	hdf4			**Ho, S.-P.**, Wenying He, Y.-H. Kuo, Construction of Consistent Temperature Records in the Lower Stratosphere using Global Positioning System Radio Occultation Data and Microwave Sounding Measurements, A.K. Steiner et al. (Eds.), Springer Berlin Heidelberg, 2009, in press.						
																					Ho, S.-P., M. Goldberg, Y.-H. Kuo, C.-Z Zou, W. Schreiner, Calibration of Temperature in the Lower Stratosphere from Microwave Measurements using COSMIC Radio Occultation Data: Preliminary Results, Terr. Atmos. Oceanic Sci., Vol. 20, doi: 10.3319/TAO.2007.12.06.01(F3C), 2009.						
																					He, W., S. Ho, H. Chen, X. Zhou, D. Hunt, and Y. Kuo, Assessment of radiosonde temperature measurements in the upper troposphere and lower stratosphere using COSMIC radio occultation data, Geophys. Res. Lett., 36, L17807, doi:10.1029/2009GL038712, 2009.						
																					Ho, S.-P., G. Kirchengast, S. Leroy, J. Wickert, A. J. Mannucci, A. K. Steiner, D. Hunt, W. Schreiner, S. Sokolovskiy, C. O. Ao, M. Borsche, A. von Engeln, U. Foelsche, S. Heise, B. Iijima, Y.-H. Kuo, R. Kursinski, B. Pirscher, M. Ringer, C. Rocken, and T. Schmidt, Estimating the Uncertainty of using GPS Radio Occultation Data for Climate Monitoring: Inter-comparison of CHAMP Refractivity Climate Records 2002-2006 from Different Data Centers, J. Geophys. Res., doi:10.1029/2009JD011969, 2009.						