

CGMS-35, NOAA-WP-15 Prepared by J. Bates Agenda Item: II/2 Discussed in WGII

NOAA ARCHIVE REPROCESSING CAPABILITIES TO ALLOW FOR REGENERATION OF DATA SETS WITH IMPROVED QUALITY AND NOAA MECHANISMS TO ALLOW THE RUNNING OF THIRD PARTY ALGORITHMS In response to CGMS Recommendation ... 34.06 & 34.07

NOAA's national data centers have undertaken several efforts to improve information on raw satellite data quality and calibration for their archives of environmental satellite data. NOAA's National Geophysical Data Center (NGDC) has established a project to harvest metadata from existing real-time products. NOAA's National Oceanic Data Center (NODC) is leading efforts to develop and archive a high resolution global sea surface temperature data set.

NOAA's National Climatic Data Center (NCDC) has established a project to provide fundamental climate data records (FCDRs) from NOAA's historic environmental satellite data. These activities can be found at web site: http://www.ncdc.noaa.gov/oa/satellite.html

Recent accomplishments include:

- 1) Rescue of historic data from the NOAA VTPR
- 2) Rescue of International Satellite Cloud Climatology Project data sets

3) Rescue of historic data from the DMSP SSMI instrument and reformatting of the data and metadata

4) Rescue of the historic GOES data dating back to 1978

4) Regular updating of FCDRs from the TOVS and ATOVS data sets

5) Updated users guides and documentation for the NOAA Polar orbiting satellites and improved documentation of the GOES rescue data sets

NOAA is also establishing an operational program for the reprocessing of climate data records by third parties. The goal of the Scientific Data Stewardship (SDS) Program is to provide high quality Climate Data Records (CDRs) for data from the atmosphere, oceans, and land surface, where the data are identified as essential climate variables within the Global Climate Observing System. The SDS program is intended to produce CDRs routinely on an operational basis, with an initial emphasis on the use of satellite observations that can demonstrate high levels of maturity in scientific and preservation attributes as well as high societal benefit.