TOWRPro RPM v23 Content (January 2023)

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There are 3 RPM files. Each site only installs one file after removing any previous version of the TOWR-S RPM.

> Pacific: satVer23-PR
>
> Alaska: satVer23-AR,
>
> all other sites: satVer23.
>
> Install Instruction at: https://vlab.noaa.gov/web/towr-s/rpm

Content:

1. **Prep for DO.11 SBN Changes (see link to this article w/updates on these changes)**
   a. **Cease SH for FD coverage - no changes needed**
   b. **Cease HIREGI, remove menu items, hold until v24**
   c. **GOES-West SCMI American Samoa Sector Band 13**
      i. **25S to 5S, 170E to 160W**
      ii. **Ingest menu / display are in satVer23-PR**
      iii. **ASREGI sector ingest added to GOES-West-Sectors.xml satVer23/satVer23-AR, commented out the menu item.**
   d. **Puerto Rico sector bands 11, 12, 14, 16 will be removed from that sector's menu given cessation of these bands. Not incorporated in v23 but will be added to v24. The following RGBs go away for this sector (will currently show as no-data available):**
      1. **SO2 RGB**
      2. **Split Cloud top phase ch diff**
      3. **Ash RGB**
      4. **Day Cloud Phase Distinction RGB**
      5. **Air Mass RGB**
      6. **Daytime Composite #1 RGB**

      7. **Night Fog Channel Diff (w/11.2 um)**

      8. **Dust RGB**

2. **GOES LightningCast probability products from CIMSS. All configs are added except /common_static/site/<site>/level/mappings/LevelMapping.xml. This file is customized in the Data Add-ons Manager and therefore managed in the DAM. Install instructions walk through how to obtain/manage this file.**

3. **Readiness for GOES GLM Gridded products (FED/TOE/MFA) 1-min (1-min update) on the SBN. The edex configuration will process either the LDM-sourced 1-min GLM (1-min update) or that from the SBN. This package retains configuration for the GLM 5-min aves (1-min update) from the Regional LDM. The 5-min aves will not flow from the SBN but will eventually be generated locally at each site. Until the latter occurs, the 5-min Aves will continue to flow from the Regional LDMs**

4. **GOES Snow cover edex description file and display configs updated for new formats and SBN activation. Retains baseline (b/w) colormap**

5. **GOES Cryosphere Products:**
   a. **GOES Ice concentration and Ice Age & thickness edex description file and display configs added. GOES distribution file updated for the Ice Age and Thickness WMO header (IXTT99 KNES (East), IXTT89 KNES (West) activation**
   b. **GOES Ice Concentration will use the header IXTR99 (East) and IXTR89 (West). This header is already in the base distribution file and LDM config**
   c. **GOES Ice Motion is NOT part of this package as it's in test. The WMO header for GOES Ice Motion will be added in a later update. The header will be IXTV99 (East) and IXTT89 (West)**

6. **New Day Fire RGB from WMO Collaborators (Fall 2022). Moves "Day Land Cloud Fire RGB" to the Old section of the RGB menu**
   a. **Recipe:**

      i.   **Red: 3.9 um, 0-70C, gamma=0.4, but for awips, use gamma=2.5**

     ii.   **Green: 0.86 um. 0-100%, gamma=1.0**

    iii.   **Blue: 0.64 um, 0-100%. gamma=1.0**

    iv.   **Quick-guide in Dev and will follow**

7. **Updates derived Imagery Style rules "abiCh13Alias" to correctly show the degF legend for Band 13**

8. **Adds for Alaska Region a dmw filter, keeping 75N-35N, 155E to 120W; and for Pacific Region uses the dmw filter for 65N-20S, 130E to 30W**

    a. **These regions receive Full disk wind products and this filtering aids in performance. Otherwise there are no dmw filters included in v23 for sites outside this region**

9. **Current VIIRS fire product on LDM cursor sampling fix. i-band fires, update %confidence sampling to (wind dirxn in dmw table) to reflect 7-low, 8-nominal, 9-high confidence versus what FP_confidence used to be in the m-and products--a percent. It is now 7-9 only. Therefore sampling as-is shows "7%", or "8%", instead, 7 values should sample as Low confidence, 8 as nominal, 9 as high confidence. Updates are in the /plotModels dir.**

10. **Updates ASCAT bundle Scatterometer.xml for more precise thresholding near 25kt (per Warren Blier's feedback)**

11. **Updates Plume RGBs entity to be abstract for GOES-16 or GOES-17 or GOES-18 (previously hard-wired to 16 or 17).**

12. **Updates GOES-West-Sectors and GOES-East-Sectors description files. Uses default for WFD/EFD. But, it incorporates both G17 and G18 for geocolor and proxyvis (APP test sites-specific as well as Pacific/Alaska Regions). Updates the PRREGI and AKREGI descriptions for Geocolor**

    a. **Change here for Geocolor assumes the new version of APP uses Full Disk and not FullDisk for the scene_id. Applicable if APP is being used but no impact to sites if APP is not being used**

13. For -AR and -PR adds in the GOES proxyvis styleRule to goesrL2ImageryStyle Rules
14. For Alaska only, include CMORPH menu and bundle (Carl Dierking provided)
    a. Colormap name is slightly different from Carl's, eliminated space in the file name
15. Updated Satellite -> Local Menu Items to read Local + GOES Product Overlays to add visibility to the RGB + product read-out combos
16. Pacific Region updated Himawari imagery menu for H9
17. Pacific Region removed GOES-17 "de-stripe" configs
18. For Alaska, the npr-mirs.xml pointset netcdf description comments out triangulation element. Not needed. Avoids artifact in some product times, ID'd by Carl Dierking for Snow Fall rate in particular.
19. VIIRS Flood Maps dev-ops configurations. Included for special Eval. Menu items are under S-NPP and NOAA-20 (hidden for Pacific Region)
20. For Alaska and Pacific Region, GOES ProxyVis (Full Disk) ingest and display
21. Continuity: Geocolor Ingest and display (data flow to come through APP in future update)
22. Continuity: GOES Cloud top phase edex description update
23. Continuity: GOES Clear Sky Mask edex description
24. Continuity: GOES Fire Hot-spot Mesos ingest/display
25. Continuity: GOES Land Sfc Temp edex description update
26. Continuity: GOES Legacy Moisture and Temperature profiles (reduced level prods) update
27. Continuity: GOES FLS (baselined in 21.3)
28. Continuity: CIMSS GOES Turb prob layer display, includes new colormap
29. Continuity: Plume RGBs
30. Continuity: RGB + L2 Blend menus and bundles

31. Continuity: [Cloud Type RGB](#) retained
32. Continuity: GOES Imagery and Channel differences have the sector (e.g. WCONUS) in the legend
33. Continuity: Global Geost composites (baselined in 21.3)
34. Continuity: GOES Sat menus revamp (products follow sectors vs the other way around), and GOES DMW menus display improvements (display-all feature vs just individual levels)
35. Continuity: Gridded NUCAPS menu/display enhancements (includes the cave gridded nucaps plugin suite from base w/enhancements such as PW in inches, 2-m temp in DegF, adds 3-layer Haines Index (baseline is one layer))
36. Continuity: VIIRS Active fires displays as points (dmw plugin / station plots)
37. Continuity: GOES-R Land Sfc Temp display range-change (capture broader range of temps)
38. Continuity: VIIRS imagery edex descriptor handles additional Moderate bands
39. Continuity: Jason-3 descriptor (dbgeo plugin) modified to handle new hdf5 groupings in the product
40. Continuity: Geostationary Map Scales and Frame Count to 300 (default is 64 frames)
41. Continuity: Blended hydro ingest rules (to be removed v24, this is a baselined item)
42. Continuity: AMSR2 imager and derived products ingest and display/menus (readied for data delivery)
43. Continuity: ATMS 33-min derived products ingest and display/menus (readied for data delivery)
44. Continuity: Mods to VIIRS derived products descriptors (pointset)
45. Continuity: CIMSS CSPP-geo polar description file (GOES-R plugin)
46. Continuity: CIRA 3.9um colormap

47.   Known issue for 20.3.x, not fixed in v23 towr-s RPM: Gridded NUCAPS issue reported by Kris White (HUN) and Emily Berndt (SpORT) in Nov 2022 on Lapse Rate Derived Parameter display.