**Joint APSDEU-13/NAEDEX-25**

**Open Action Items**

**Update 26 May 2014**

**New APSDEU-NAEDEX Actions from May 2014 Meeting – Draft as of 1 September 2014**

***North American Data***

**1.1.4 AVHRR Polar Winds** - New action: timeliness of GTS data from NESDIS, and data from CIMSS, to be investigated

 **ACTION: NESDIS**

**STATUS: OPEN**

**NESDIS Response (Sept 2015):**

N19 AVHRR Polar Winds from NESDIS OSPO: 2-3 hours (time from middle image until availability of product)
N18 AVHRR Polar Winds from NESDIS OSPO: 3-4 hours
N15 AVHRR Polar Winds from NESDIS OSPO: 3-4 hours

N19 AVHRR Polar Winds from NESDIS CIMSS: 2-3 hours (not on GTS)

N18 AVHRR Polar Winds from NESDIS CIMSS: 4-5 hours (not on GTS)

Metop-B AVHRR Polar Winds from NESDIS CIMSS, UW: 2-3 hours (not on GTS)

Metop-A AVHRR Polar Winds from NESDIS CIMSS, UW: 3-4 hours (not on GTS)

S-NPP AMVs from band M15 are also available on the GTS via EUMETSAT dissemination.

Action is closed.

**1.5.2 Terra/Aqua** – New action: investigate availability of MISR AMV products in NRT. **ACTION: NESDIS**

**STATUS: OPEN**

**NESDIS Response (Sept 2015):** MISR CMV products are not available at OSPO. Archived CMVs can be accessed

from the NASA Atmospheric Science Data Center (ASDC) website: https://eosweb.larc.nasa.gov/project/misr/cmv\_new\_table.

Action is closed.

**1.5.2 Terra/Aqua** – New action: investigate timeliness of MODIS polar AMVs from CIMSS. **ACTION: NESDIS**

**STATUS: OPEN**

**NESDIS Response (Sept 2015):** About 4-5 hours

Action is closed.

New: ACTION: Need to investigate possibility to improve timeliness. Action to NESDIS.

**1.7 WINDSAT/Coriolis** – New action: investigate the reduction in availability of WINDSAT data reported by UKMO.

 **ACTION: NOAA**

**STATUS: OPEN**

**NESDIS Response (Sept 2015):** The Naval Research Laboratory (NRL) in Monterey, CA, generates and disseminates WINDSAT data to OSPO for further distribution. At times, there are issues with production of the files and/or the communication link between the two sites that either stops or delays data delivery to OSPO.

Action is closed.

**1.7 WINDSAT/Coriolis** – New action: discuss requirements with member states and determine if there is a need for dissemination. **ACTION: EUMETSAT**

**STATUS: OPEN**

**EUMETSAT Current Status (Oct-2014):** due to the limited lifetime of the mission (end of life in 6 months), it has been classified as priority 3 (lowest) in the proposed 3rd Party Data Services by our Member States. Will probably not be implemented.

Action is CLOSED.

**1.9.2 Suomi-NPP** – New action: clarify what VIIRS data (bands, coverage) is available via the DDS. **ACTION: NESDIS**

**STATUS: OPEN**

**NESDIS Response (Sept 2015):** Due to exceeded capacity on the existing ESPC network, expansion of VIIRS distribution cannot be achieved until the new ESPC network and the new NDE/PDA becomes operational. Once the new ESPC network is in place NESDIS will be able to provide service of new mission data that is significantly larger. That work is in progress and should be realized in 2nd Quarter CY16. On DDS, 3 channels (VIS, SW, LW) Alaska region coverage only, are available in AWIPS format.

Action is closed.

**1.10 Aquarius and SMAP** – New action: to investigate formats and availability from Aquarius and SMAP and report back to the group out of session. **ACTION: NESDIS**

**STATUS: OPEN**

**NESDIS Response (Sept 2015):** SMAP data is in HDF5 format, and NESDIS is working to access and making available, SMAP data to support users' needs for soil moisture. Plan is to make it available on DDS. Follow-up needed for Aquarius.

Status remains open.

**1.12 OCO** – New action: investigate formats and availability from OCO-2 and report back to the group out of session.

 **ACTION: NESDIS**

**STATUS: OPEN**

**NESDIS Response (Aug 2015):** OCO-2 Level 1a, Level 1b, and Level 2 data can be accessed from the NASA Goddard Earth Sciences Data and Information Services Center (GES DISC) at: <http://disc.sci.gsfc.nasa.gov/uui/#/search/OCO+ACOS>

Action is closed.

**1.13 ISS Rapidscat** – New action: investigate with NASA the possibility of making these data available on the GTS for all users, and the potential for making the data available in near-real-time. **ACTION: NESDIS**

**STATUS: OPEN-**

**NESDIS Response (Sept 2015):** Rapidscat is operational at OSPO and the product is available on the GTS.

Action is closed.

**3.7 Multi-sensor Precipitation Product** – New action: clarify what will be provided in terms of a multi-sensor rainfall product from GPM. **ACTION: NESDIS**

**STATUS: OPEN**

**NESDIS Response (Sept 2015):** ​NESDIS currently has both GPM GPROF and IMERG data available on the DDS for user access.

Action is closed.

**3.8 Space Weather Data** – New action: respond to the list of US-operated Space Weather satellites listed in the presentation given by UKMO at NAEDEX-APSDEU 2014. **ACTION: NESDIS**

**STATUS: OPEN**

**NESDIS Response via NWS (Sept 2015):**

*•L1 data from NOAA DSCOVR*
Through SWPC the UKMO today has access to data from NASA ACE and will have access to NOAA DSCOVR once SWPC declares it operational for its use.

*•Future coronograph data (NASA, ESA, wherever)*
Today SWPC pulls these data directly from NASA for use in our operations; we assume the same is true for UKMO.  If NOAA is to get an operational coronagraph, it is assumed that these data would be available to all from NOAA.

*•NASA SunJammer (launch 2015). Obs at closer to the Sun than L1 (this is a research mission, but useful for proof of concept)*
This mission was scrapped by NASA.  There are no current plans for solar sail technology to provide space weather data closer to the sun than L1.

*•GNSS RO –need data with latency of 15-30 mins. NOAA trying to set up network of ground stations for COSMIC II to achieve this*
SWPC has the same latency requirement for these data, however it is unclear whether or not there will be a sufficient number of ground stations to meet this requirement.  COSMIC-2 data will be provided to all from UCAR.

*•SWARM –thermospheric density (currently few/no obs of this). Can exploit this with our recently written DA scheme. But need the SWARM data to be NRT*
SWPC does not have access to these data at this point although they have requested it from ESA.  SWPC would be happy to work with UKMO, and others in Europe, to encourage ESA to release these data publicly.

*•GEO/LEO radiation monitor data (electron/proton flux) –only have GOES 13 and 15; other data are potentially available*
Through SWPC the UKMO today has access to all GOES-NOP space weather data sets.

 Action is closed.

**4.1 NCEP Gridded SST Field** – New action: follow up on quality issues related to 1/12 degree gridded SST products and identify points of contact. **ACTION: NESDIS and Meteofrance (change NOAA assignee to NWS/NCO)**

**STATUS: OPEN**

**NESDIS Response (Sept 2015):** Via NWS/NCO – NWS points of contact are Robert Grumbine, NWS/NCEP/EMC, and Bert Katz, NWS/NCEP. To better respond, NWS is seeking clarification on issues observed.

 Action is closed.

**4.3** – **Conversion from sitename to tail number** -New action: advise KMA on how they (ECMWF) resolved the issue of converting from sitename to tail number.

**ACTION: ECMWF**

**STATUS: OPEN**

For AMDAR data the station identifier in the GTS message contains the tail number. For ACARS ("American AMDAR") the station identifier is an encrypted version of the tail number. But the encryption is unique, so it can be used to distinguish aeroplanes for the bias correction. For old-style AIREP the station identifier contains the route and does not identify the aeroplane. At ECMWF we only bias correct AMDAR and ACARS at the moment due to this issue. We are testing a correction where all AIREP will get the same bias correction. This is likely better than not doing a bias correction. The AIREP are only 5% of the data volume, but they are concentrated in the north-Atlantic region, where they in some areas provide 50% of the data. An alternative is to blacklist AIREP data.

Action is closed.

**4.11 Snow Depth –** New action: investigate the possibility of distributing snow depth data in near real time.

**ACTION: NESDIS**

**STATUS: OPEN**

NESDIS Response (Sept 2015): NESDIS has the capability to develop a near real-time BUFR product for GTS dissemination. To allocate resources for this project, NESDIS requires an official requirement from a NOAA line office.

New action for NCEP to consider making a requirement to NESDIS for this data, on behalf of this group.

Action remains open.

**4.12 Radiosonde Data** – New action: investigate JMA reports of erroneous geopotential height data within radiosonde (TEMP) BUFR records. **ACTION: NESDIS (change NOAA assignee to NWS/NCO)**

**STATUS: OPEN**

NESDIS Response (Sept 2015): Via NWS/NCO – The height errors in the BMT BUFR data for the U.S. were corrected about a year ago. The assumption is that the erroneous heights refer to the TUABUFR BUFR data. In that event, we suggest JMA to check if the BUFR data with the bad heights are also indicating missing values for latitude, longitude, and station elevation. If that is the case, then the data are processed by NWS/NCO Silver Spring’s TUABUFR processor.  The goal is to cease TUABUFR processing due to many observed errors and since the same data are placed in BUFR by the BUFR Management Tool (BMT). (Both BUFR datasets are on the GTS).

To receive improved observations, NWS suggests JMA in the interim to pull the U.S. BMT BUFR raobs off the GTS rather than the U.S. TUABUFR raobs. However, some errors remain in latitude, longitude, and station elevation. It would be prudent to compare the BUFR metadata against the latitudes, longitudes, and elevations from the local station list that is used for TAC data. This checking process is used for all BUFR radiosonde data including the U.S. BMT data.

In the longer term, NWS is developing a methodology for the RRS to deliver high resolution radiosonde BUFR data to the GTS.  The scope of the project includes:

1) Data will be encoded according to the WMO sanctioned 309052 BUFR sequence for high-resolution radiosonde data.

2) For each sounding, an initial file will be delivered once the sounding reaches 100mb, and a second, final file will be delivered once the sounding terminates. The final sounding will contain all of the data from balloon launch through termination.

3) Each file will be made available on the GTS at the same time as the corresponding TEMP messages. The file will replace any legacy BUFR data generated by any other internal NWS processes for the same sounding.

We anticipate the software development piece to be completed by early December and system testing occurring in the January - April 2016 timeframe. We are currently working with the NWS Observations Portfolio on when full deployment will occur.

Actions still OPEN.

**European Data**

**1.2 METOP** – New action: investigate the availability of real-time Microwave Integrated Retrieval System (MIRS) v2.0 products from METOP-2.

**ACTION: NESDIS**

**STATUS: OPEN**

**NESDIS Response (Sept 2015):** ​MiRS Metop-A and -B products are currently operationally available from DDS.​

**1.9 Sentinel -** Follow up action to determine requirements for Sentinel series for all users. (separate out different missions in spreadsheet)

**ACTION: All**

**STATUS: OPEN**

**EUMETSAT Current Status (Oct-2014):** Activities will start with Sentinel-3. For now, nothing is foreseen for Sentinel-1 or 2.

**NESDIS Response (Sept 2015):** For SST and ocean applications:

1) SAR level 1 data from Sentinel 1a and 1b for the high-resolution coastal winds application - STAR is already getting this data and processing it for product development.

2) Sentinel-3 level-2 SSTs from EUMETSAT for use in the blended SST application.

For interpretative analyses:

Satellite Analysis Branch/NESDIS uses Sentinel 1a for oil detection and anticipates using Sentinel 1b even more so. Further they plan to utilize Sentinel 2 and Sentinel 3 for oil detection and fires.

**2.1.6 METEOSAT tropospheric humidity** – New action: NCEP/NCO requests that they be routed from NWS/TOC (still valid).

**ACTION: EUMETSAT**

**STATUS: OPEN**

**EUMETSAT Current Status (Oct-2014):** we suggest to have this action on NOAA (instead of EUMETSAT), as the route needs to be updated on the US side.

**2.1.7 METEOSAT total ozone** – New action: NCEP/NCO requests that they be routed from NWS/TOC (still valid).

**ACTION: EUMETSAT**

**STATUS: OPEN**

**EUMETSAT Current Status (Oct-2014):** we suggest to have this action on NOAA (instead of EUMETSAT), as the route needs to be updated on the US side.

**3.8.3 VAD Radar Winds** – New action: clarify if there is still an issue with access to these data. **ACTION: NOAA**

**STATUS: OPEN**

**3.11 Ozone Soundings** – New action: determine if there is still an unmet requirement for these data.

Asia-Pacific Data **ACTION: NOAA and MSC**

**STATUS: OPEN**

**1.2.1 Fengyun-3 Sounding Mission** – New action: investigate the generation of BUFR and the dissemination of these data via the GTS and CMACast. **ACTION: CMA**

**STATUS: OPEN**

**1.2.1 Fengyun-3 Sounding Mission** – New action: CMA to work with EUMETSAT to come up with a proposal to add the encoding sequence for the sounding products from Fengyun-3 to the WMO Manual on Codes. **ACTION: CMA and EUMETSAT**

**STATUS: OPEN**

**1.2.1 Fengyun-3 Sounding Mission** - There is a requirement for improved timeliness of Fengyun-3 data - to be addressed through the future plans for the RARS/DRARS initiative. **ACTION: All**

**STATUS: OPEN**

**EUMETSAT Current Status (Oct-2014):** new services are currently proposed to our Member States (to be approved at Council in December 2014) for FY-3 data. These would be:

* The Regional FY-3 Sounder Service providing level-1 products from the classical sounder instruments MWTS-II, MWHS-II and IRAS. This service could be available for FY-3C by end 2015.
* The Regional MERSI Service providing level-1 products from MERSI-I and MERSI-II. This service could be available for FY-3C in 2016.

**1.4 HY-2A Altimetry, scatterometer, microwave** – New action: provide details of POC within SOA/NSOAS to participants. Dissemination via GTS and CMACast is not planned.

**ACTION: EUMETSAT**

**STATUS: OPEN**

**EUMETSAT Current Status (Oct-2014):** the POC was provided by Simon during the meeting, and would be:

Dr LIN Mingsen, Dy Director of NSOAS, mslin@nsoas.gov.cn

**1.7 GCOM AMSR-2 BUFR Radiances** – new action: provide an update on the POC in JAXA for this data.

 **ACTION: JMA**

**STATUS: OPEN**

**1.8 HY-1B Ocean Colour** – New action: report back at the next meeting on progress related to HY-1B data.

**ACTION: EUMETSAT**

**STATUS: OPEN**

**EUMETSAT Current Status (Oct-2014):** Simon provided sample data to MyOcean, feedback from them is pending.

2.2 **Fengyun-2 AMVs –** new action: investigate the dissemination of FY-2 AMVs via the GTS. **ACTION: CMA**

**STATUS: OPEN**

**3.1. Wind Profiler Data** – New action: investigate the distribution of wind profiler data on the GTS. See Action 2011-11-10

**ACTION: CMA**

**STATUS: OPEN**

**3.1.**

**3.9 Australian Region SST Analysis** – New action: investigate provision of these data to CMA.

**ACTION: BOM**

**STATUS: OPEN**

**Actions from NAEDEX-23, May 2011**

**N.1.5.2** - NESDIS to investigate if combined TERRA-AQUA MODIS AMVs are available on the GTS.

**ACTION: NESDIS**

26 May 2014: NESDIS Update - STAR, NESDIS’s product developer, is working on updating the software code for AMV production. In July 2014, STAR plans to brief NESDIS management on product development status. We’ll provide another update at that time.

**STATUS: OPEN**

**NESDIS Response (Sept 2015):** Due to the failed water vapor channel on TERRA, the project has been terminated.

**N.1.5.4 AURA: MLS and OMI** – NESDIS to investigate if MLS temperature and moisture and OMI NO2 can be added to the data set via the GTS.

**ACTION: NESDIS**

26 May 2014: NESDIS Update - NESDIS does not currently plan to process these data sets or make them available from its distribution servers. Significant resources would be required to make these data available to the user community.

**STATUS：CLOSED**

**N.4.3 MDCRS data (AMDAR etc)** – NWS/CIO will coordinate with proper individuals to improve the notification process. The further emphasize the need for this notification process, all Centers need to communicate their official requirements on their use of the data.

**ACTION: NWS/CIO & All CENTERS**

ECMWF want to have notifications that will explain sudden changes to AMDAR observation numbers. NWS gateway issues lots of messages. AMDAR information is at:

* Available through MADIS:
	+ <http://madis.noaa.gov/>
* Available through GSD Web Page:
	+ <http://amdar.noaa.gov/java/>
* Additional Information:
	+ GSD:

 <http://amdar.noaa.gov/>

* + WMO AMDAR Program: <http://www.wmo.int/amdar/AMDARResources.html>

**From WMO**

There is now a Global AMDAR Data Monitoring Email list, which would be used for matters of the type that you are indicating. It would be appropriate for all NWP centres to be subscribed to this list. AMDAR Monitoring centres will be providing monthly reports via this email address and it will be used for notification of programme changes. The email address is: wmo-aircraft-observations-data-monitoring@wmo.int

The online forum associated with this Google Group email is at: <https://groups.google.com/a/wmo.int/forum/#!forum/wmo-aircraft-observations-data-monitoring>

Apart from that, the best source of information is the WMO AMDAR website at: <http://www.wmo.int/amdar/> and, particularly, the data statistics page at: <http://www.wmo.int/amdar/AMDARStatistics.html>

It would be best if NWP centres could provide a single email alias (which could have more than one email address associated with it, e.g. amdar\_data\_mon@ecmwf ) for subscribing to the data monitoring forum - that way, they have control over who receives it and they can make changes to it without WMO having to make changes to the forum email list."

26 May 2014: Recommendation is to close this item based upon the notifications already set up.

**STATUS: CLOSED**

**EUMETSAT Current Status (Oct-2014):** agree to close, we have no need/request for these data.

**N.4.9 All Buoy Data** – NWS/CIO to provide status on putting data in BUFR with all Meta data.

**ACTION: NWS/CIO**

NWS report that there is no update at this time (Nov 2012).

26 May 2014: U.S. has not moved forward with migrating to the buoy data to BUFR. Fred will ping TOC on their status of the migration to BUFR efforts.

**STATUS: OPEN**

**N.4.10 Ground-based GPS** – NWS/CIO to contact NOAA/ESRL on format of data and provide most optimal access for availability.

**ACTION: NWS/CIO**

Met Office report that work is ongoing at UCAR to put whole US network into BUFR but BUFR is still not WMO compliant (Nov 2012). Data had been available to up to January 2014 but was ceased due to a coding issue that has not yet been resolved.

26 May 2014: NOAA will check with UCAR and provide an update. (Action: Jean Francois to follow up on this issue from the European side).

**STATUS: OPEN**

**N.1.1.2** – NWS to clarify requirement of the ATOVS level 0 data.

**ACTION: NWS/NCEP**

26 May 2014: EMC no longer has this requirement. Action Item can be closed.

**STATUS: CLOSED**

**E.3.9 –** NWS/CIO & EUMETSAT investigate the timeliness of this space weather data. [Previously numbered N.1.2.9]

**ACTION: NWS/CIO and EUMETSAT**

26 May 2014: This relates to SEM data from Metop. Michelle Mainelli and Simon Elliott to follow up – if this is no longer an issue the Action may be closed.

**STATUS: ~~CLOSED~~ OPEN**

**EUMETSAT Current Status (Oct-2014):** for us the action is still open, on Michelle and Simon to discuss. We’ll keep you informed.

**E.1.4 GPS RO** – NCEP (Jim Yoe) will investigate the availability of SAC-D/ROSA data after launch. [Previously numbered N.1.4]

**ACTION: NWS/NCEP**

26 May 2014: Update from NOAA. No one in NOAA (NCEP, NESDIS, OAR) has had access to the SAC-D ROSA GPSRO data yet. NESDID does not have the resources to process this data. EUMETSAT was looking at the data but there were some issues and everything was moving very slowly. On the DDS, NESDIS makes GPSRO sounder data available from C/NOFS and SAC-C satellites. The data are also available on the GTS. Data are in BUFR, level 1b.

Additional note: SAC-C no longer providing data. IROWG have been following up on the number of GPS-RO missions available with a report available on the IROWG website (insert link).

**STATUS: CLOSED**

**E.1.8 SARAL** – NCEP will need to make a request to NESDIS to receive this data. [Previously numbered N.1.8]

**ACTION: NWS/NCEP**

26 May 2014: Updated from NESDIS. SARAL was launched in 2013. The STAR Altimetry Lab (8x5 support, best effort), <http://www.star.nesdis.noaa.gov/sod/lsa/>, supplies NCEP SARAL/AltiKa wind and wave data. The Sea Surface Height Anomalies used to compute Ocean Heat Content can be accessed from the NESDIS/OSPO DDS with a user subscription. These data cover the North Atlantic and North Pacific.

**STATUS: CLOSED**

**G.1.0 2011**- Action: All Centers make catalogue of satellite products by providing links to all data providers’ products pages. MSC/Gilles will coordinate with ESA. Sentinel series requirements for example. Primary POC: NWS/CIO

**ACTION: NWS/CIO, MSC, ALL Centers**

Action is on satellite product providers.

WMO have done a lot but not on a product-by-product basis since this would duplicate WIS!

Intention is to collect links to providers’ product pages so that users have a single reference point from which they can navigate to all products.

26 May 2014: Updated from NWS/CIO

Web sites:

WMO Data Access and Software Tools:

<http://www.wmo.int/pages/prog/sat/accessandtools_en.php>

WMO Observing Systems Capability Analysis and Review Tool (OSCAR) Space-based home page:

<http://www.wmo-sat.info/oscar/spacecapabilities>

WMO is working on a Product Access Guide:

<http://www.wmo-sat.info/product-access-guide>

Is more needed? Will update further if groups want. This has been added to a Resources block at the end of this document.

26 May 2014: NESDIS is also working on a compilation of products available from the DDS

**STATUS: CLOSED**

**Actions from NAEDEX-24, October 2012.**

**N.1.7** WMO to ask IROWG co-chairs to investigate real time access to ROSA on SAC-D, Oceansat-2 and GPSROS on Megha Tropique and IGOR on Tandem-X.

**ACTION:WMO**

28 May 2014: IROWG has investigated this issue and a report is available on the IROWG website (<http://www.irowg.org>).

**STATUS: CLOSED**

**N.1.7** NESDIS/NWS to investigate improving the timeliness of C-NOFS data.

**ACTION:NESDIS**

26 May 2014: Update from NESDIS - NESDIS believes updates to its networks and data distribution systems have improved the timeliness of CNOF/S data. NWS/NCEP/EMC currently uses CNOF/S GPSRO data for its operations.

28 May 2014: members have reported that data is no longer available on the GTS. Clarification is required in whether there are still issues relating to data access. If not, action can be closed.

**STATUS: OPEN**

**NESDIS Response (Sept 2015):** Looking at our records, there was one incident when data were available after the standard maximum of three hours from real-time since October 2014. We believe timeliness of the data has been optimized. NCEP may know if the data are being provided on the GTS.

**N.1.9** Clarify what NPP data will be available on RARS.

**ACTION:WMO**

28 May 2014: RARS is being replaced by DRARS which covers the expansion to X-band reception and advanced sounder data. The plan is to follow the model of EARS for ATMS and CrIS, and also to work closely with US efforts to support NPP and future satellites.

**STATUS: CLOSED**

**N.3.1** NESDIS to update group when hourly GOES AMVs will become operational.

**ACTION:NESDIS**

26 May 2014: Update from NESDIS: GOES Hourly Winds in BUFR became operational on the GTS on May 6, 2014. Same WMO Headers are being used as previous three hourly winds.

**STATUS: CLOSED**

**N.4.2** Met Office to use FSO to show impacts for US and new Canadian profilers.

**ACTION: Met Office**

28 May 2014: request was related to maintenance regime for profilers and to demonstrate the utility of the data in NWP. MeteoFrance have indicated that FSO impacts are very small and that data quantity from the US profilers appears to be reducing over time. Given the prospects for the network’s future, NOAA to confirm the need for this work. If not required, then the Action may be closed.

Canadian network is small. Impacts on MSC forecasts are small, but positive.

**STATUS: OPEN**

**N.4.7** All Centres to investigate putting soil temperature and moisture observations on the GTS.

**ACTION: All Centres**

26 May 2014: Update from NESDIS: NESDIS has a soil moisture product available on the DDS in NetCDF4 and GRIB2 formats, but not on the GTS.

NOAA has no current plans to put in situ soil moisture observations on the GTS. Other centres to provide an update at the next meeting.

**STATUS: OPEN**

**EUMETSAT Current Status (Oct-2014):** ASCAT SOMO data is on the GTS. Please refer to ASCAT Soil Moisture products in the Product Navigator:

<http://navigator.eumetsat.int/discovery/Start/Explore/Quick.do>

**N.4.10** Met Office to follow up BUFR format issues of US ground based GPS with NOAA/ESRL.

Met Office provided software to NOAA to do the BUFR encoding correctly. NOAA doesn’t have resources until FY 2013 to implement.

See Action N.4.10 under NAEDEX-23 above

**ACTION: Met Office/NOAA-ESRL**

**N.1.7** EUMETSAT to continue to investigate real time access to AMSR-2 data. [Previously numbered N.5.7]

**ACTION: EUMETSAT**

26 May 2014: EUMETSAT have signed an agreement with JAXA and data are available to members states in real time via EUMETCast.

**STATUS: ~~CLOSED~~ OPEN**

**EUMETSAT Current Status (Oct-2014):** we need to check if the SST is included in the agreement.

**A.1.4** EUMETSAT to continue to investigate access to HY-2 data. [Previously numbered N.5.9]

**ACTION: EUMETSAT**

26 May 2014: EUMETSAT have signed an agreement with NSOAS (part of SOA) and data will be available to members states via EUMETCast. Data latency is anticipated to be between 1 and 12 hours. EUMETSAT are working with NSOAS to improve latency through a downlink in northern Europe.

**STATUS: ~~CLOSED~~ OPEN**

**EUMETSAT Current Status (Oct-2014):** Data is not yet flowing (not received regularly yet).

**E.3.6**  To investigate if N. Sea oil rig observations are available. [Previously numbered N.3.2.6]

**ACTION: Met Office**

26 May 2014: Data are not freely available to the international community.

**STATUS: CLOSED**

**NAEDEX\_2012\_NA\_3.4.2**  To monitor AMDAR panel discussions.

**ACTION: NWS**

26 May 2014: Update from NWS/CIO – Fred will prepare a report out from the recent AMDAR related meetings.

**STATUS: OPEN**

**G.1.0 2012** ECMWF to include link to WMO OSCAR site in requirements document. [Previously unnumbered 2012]

 **ACTION: ECMWF**

26 May 2014: Update from NWS/CIO – Fred added this to a Resources block at the end of this document. Fred is not sure this should be in the new requirements spreadsheet. What does the group think? Fred will update as needed.

**STATUS: CLOSED**

**G 2.0 2012** Issue guidelines for research satellites to provide NRT data on best effort basis. [Previously unnumbered 2012]

**ACTION: WMO&FB**

26 May 2014: Updated from NWS/CIO - A guideline has been issued. Fred does not have the link but he or Jerome will follow up.

**STATUS: CLOSED**

**NAEDEX\_2012\_GENERAL** Continue to pursue access to Electro-L2 data. [Previously unnumbered 2012 General]

**ACTION: EUMETSAT**

26 May 2014: Update from NWS/CIO – This should be added to requirements spreadsheet in European section and action re-numbered appropriately.

EUMETSAT have built up some experience in gaining access to Roshydromet satellite data. Data from Electro-L N1 was on EUMETCast whilst satellite was operating.

**STATUS: OPEN**

**Remaining Open Actions from APSDEU-12, October 2012**

**Action 2010-10-05:** The Bureau to consider the generation of polar AMVs from MODIS/VIIRS and distribution to the international community in near real time.

**Lead: BOM**

The Bureau has agreed to do this and has been added to the project plan; however, resources are constrained. Timing cannot be estimated at this time – Target: mid-2012. In progress.

May 2014 update: this work is still planned but hasn’t been done yet. There are issues with the reception systems at Casey and Davis – they will be replaced next SH summer (late 2015).

**STATUS: OPEN**

**Action 2010-10-13:** Draft a process for inter-meeting handover including tracking actions and preparing table of requirements

**Lead: BOM, NOAA/NCEP, EC, NOAA/NWS**

POCs will have a separate discussion on how best to move forward.

STILL OPEN AT THIS MEETING (23-10-2012).

**STATUS: CLOSED**

**Action 2011-11-02:** In reference to global FY3 microwave sounding data – Explore getting the data accessible to North America. Simon Elliott to raise with the GEONETCAST implementation group.

**Lead: EUMETSAT**

October 2012 update: This was done but prior to new agreement between CMA and EUMETSAT. This includes FY3C and is not instrument specific. EUMETSAT haven’t progressed in terms of getting the data and distributing it. It will be discussed at CGMS.

May 2014 Update: EUMETSAT have a new agreement with CMA that covers FY-3C. There is no technical reason this cannot occur but agreement between NOAA and CMA is required.

**STATUS: ~~CLOSED~~ OPEN**

**EUMETSAT Current Status (Oct-2014):** Simon will coordinate.

**Action 2011-11-03:** Formalizing the delivery of global IASI data currently received by the Bureau and KMA from UKMET Office.

**Lead: BOM, UKMET and EUMETSAT**

October 2012 update: This is about getting data from EUMETSAT rather than Met Office. EUMETSAT could arrange for ABoM and KMA to receive the data via CMACast. KMA and ABoM need to request this from CMA. CMA will then request data on Geonetcast.

May 2014 Update: BoM requires Level-1d data for input into UM. The arrangements where BoM obtain data via UKMO can continue.

**STATUS: CLOSED**

**Action 2011-11-04: 1.2.1 AMSU-A1/A2** – Bureau to investigate accessing Metop/AMSU data directly from GTS or CMACAST.

**Lead: BUREAU**

23 October 2012: Open

26 May 2014: As per 2011-11-03 above.

**STATUS: CLOSED**

**Action 2011-11-05: 2.1. METEOSAT –** CMA will examine the possibility of distributing hourly data via CMACAST.

**Lead: CMA**

Some Meteosat data is on CMACAST. But Meteosat data is not yet in the GISC catalogue.

**STATUS: CLOSED**

**Action 2011-11-10 3.1 Wind Profiler Data:** Bureau and KMA to investigate the availability of Australian and Korean wind profile data.

**Lead: Bureau and KMA**

October 2012 update : No progress on ABoM side. KMA has positive impact from these data but they are not on GTS. After quality control, the data may go on the GTS if requested.

May 2014 Update: KMA have 8 profilers. Data is being input to NWP systems. Limited GTS bandwidth is an issue so some work is required within KMA. Update to be provided at next meeting. BoM sites (12) should be available by the next meeting

**STATUS: OPEN**

**Action 2011-11-13 3.6 Ozone Soundings**: Centers to investigate the availability of this data for purposes of distribution on the GTS.

**Lead: Asia/Pacific Centers**

October 2012 update: ABoM has 3 stations sounding once per week but data not on GTS. There are also other countries collecting these data.

May 2014 Update: linked to shift to BUFR for all radiosonde data. Planned for next 12 months. Data to be made available in non-real time immediately.

JMA: no progress.

**STATUS: OPEN**

**Action: General 2.x –** All Centers need to provide an operational exchange of radar data. APSDEU/NAEDEX members will investigate the current availability and the possibility in providing data via GTS. Requirements of the data need to be communicated across organizations.

**Lead: All APSDEU/NAEDEX Members**

October 2012 update: CBS meeting next year to agree data format and exchange mechanisms.

23 October 2012: Open

26 May 2014: WMO have established an Expert Team under CBS to deal with this issue (AR to provide detail). Jean Francois will circulate the minutes of the WMO workshop on this topic and an update will be sought at the next APSDEU/NAEDEX.

**STATUS: CLOSED**

**Action General 4.x –** All Centers to investigate the planning to migrate away from providing data via FTP due to security risks.

**Lead: NWS/CIO**

**23 October 2012: Ongoing activity. The wording on this action ought to be more specific regarding ftp, sftp and ftps.**

26 May 2014: NESDIS Update: The Data Distribution System (DDS) uses FTP for pull users and FTP or FTPS for push users.

NPOESS Data Exploitation (NDE) system uses FTPS for both push or pull.

Product Distribution and Access (PDA) system will allow FTPS or SFTP. Users who use SFTP will be given a lower overall data volume than FTPS method of transmission.

All NESDIS data distribution systems are effectively protected.

**STATUS: OPEN**

**NESDIS Response (Sept 2015):** PDA update provided in slides.

**Action General 5.x –** All Centers to provide previous documentation from previous APSDEU/ NAEDEX Meetings and provide them to NWS – Fred Branski who will centrally compile them into one location.

**Lead: NWS/CIO**

October 2012 update: This documentation seems to be scattered in various personal archives.

26 May 2014: Recommend to close: Documentation can be found at: <http://www.nws.noaa.gov/data_exchange_mtgs/>

**STATUS: CLOSED**

**Action General 6.x –** All Centers to ensure registration of their HRPT stations for protection from frequency allocation in the 1695-1710 MHz band. Also consider registration of their X-band reception stations.

**Lead: all**

23 October 2012: Ongoing progress.

26 May 2014: Open. Fred will follow up with Jerome.

**STATUS: CLOSED**

**EUMETSAT Current Status (Oct-2014):** agree to close, our part is done.

**Action General 7.x** – **Creating Joint APSDEU/NAEDEX Documents**

 1) Propose a document structure and numbering scheme to merge the Asia/Pacific, North America, and Europe Requirement Documentation – Due by 30 September 2011 for 30-day Review by Members.

 2) Leads will revise based on feedback and put together a merged requirement spreadsheet/document as well as a merged action item document – Due by 15 December 2011 followed by 30-day Review

 3) Finalized Documents due by 28 February 2012

**Lead: NWS/Fred, ECMWF/Erik and Bureau/Anthony**

**STATUS: CLOSED**

**APSDEU\_2012\_GENERAL** Only 21 out of 90 Chinese radiosonde stations report significant levels. CMA to investigate for all stations to report significant levels

**ACTION: CMA**

26 May 2014: OPEN - CMA report that most stations are now reporting significant levels. CMA will report on the transition to BUFR which would negate the requirement for significant level data.

**STATUS: OPEN**

**APSDEU\_2012\_GENERAL Investigate where on the GTS circuits the METOP datasets are getting blocked for the Asian region**

**ACTION: CMA, KMA, JMA, BoM, EUMETSAT, Met Office**

**STATUS: ~~CLOSED~~ OPEN**

**EUMETSAT Current Status (Oct-2014):** please keep action open on Simon.

**APSDEU\_2012\_GENERAL Investigate getting hourly Meteosat-IODC data on CMACAST.**

**ACTION: CMA, EUMETSAT**

**STATUS: ~~CLOSED~~ OPEN**

**EUMETSAT Current Status (Oct-2014):** Please keep open, Simon will follow-up. Currently the end of M-7 lifetime is 2017.

Points of Contact for information

I.1 POC at Met Office

Roger Saunders

VAD winds: Myles Turp (Myles.Turp@metoffice.gov.uk)

Further information can be found at: <http://www.metoffice.gov.uk/research/interproj/cwinde/wradar/index.html>

[http://www.metoffice.gov.uk/research/interproj/cwinde/index.html](http://www.metoffice.com/research/interproj/cwinde/index.html)

ATOVS: Nigel Atkinson

TELECOMS: Chris Little

I.2 POC at NOAA/NESDIS

NESDIS Office of Satellite and Product Operations: John Paquette, ~~Vince Tabor~~, Tom Renkevens

NOAA-NESDIS Office of International and Interagency Affairs: Derek Hanson

I.3 POC at NOAA/NWS/NCEP

Michelle Mainelli (Michelle.m.mainelli@noaa.gov )

Sea-ice analysis: Robert Grumbine

SST analysis: Hendrik Tolman

MDCRS: Bradley Ballish

I.4 POC at ECMWF

Erik Andersson,

Satellite data: STEPHEN ENGLISH Gridded products: Dragan Jokic

Observation data formats: Ioannis Mallas

I.5 POC at NOAA/NWS IA

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I.6 POC at NOAA/NWS OPS

TBD

I.7 POC at EUMETSAT

Kenneth Holmlund,

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I.8 POC at MSC

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Gridded outputs and formats: Yves Pelletier

I.9 POC at Meteo France

Jean-Francois Mahfouf

Herve Roquet

I.10 POC at WMO

Jerome Lafeuille

Add Stephan Bojinski.

I.11 POC at DWD

Alexander Cress

Robin Faulwetter

**Resources:**

**WMO Data Access and Software Tools:**

[**http://www.wmo.int/pages/prog/sat/accessandtools\_en.php**](http://www.wmo.int/pages/prog/sat/accessandtools_en.php)

**WMO Observing Systems Capability Analysis and Review Tool (OSCAR) Space-based home page:**

[**http://www.wmo-sat.info/oscar/spacecapabilities**](http://www.wmo-sat.info/oscar/spacecapabilities)

**WMO OSCAR List of All Satellite Programmes:**

[**http://www.wmo-sat.info/oscar/satelliteprogrammes**](http://www.wmo-sat.info/oscar/satelliteprogrammes)