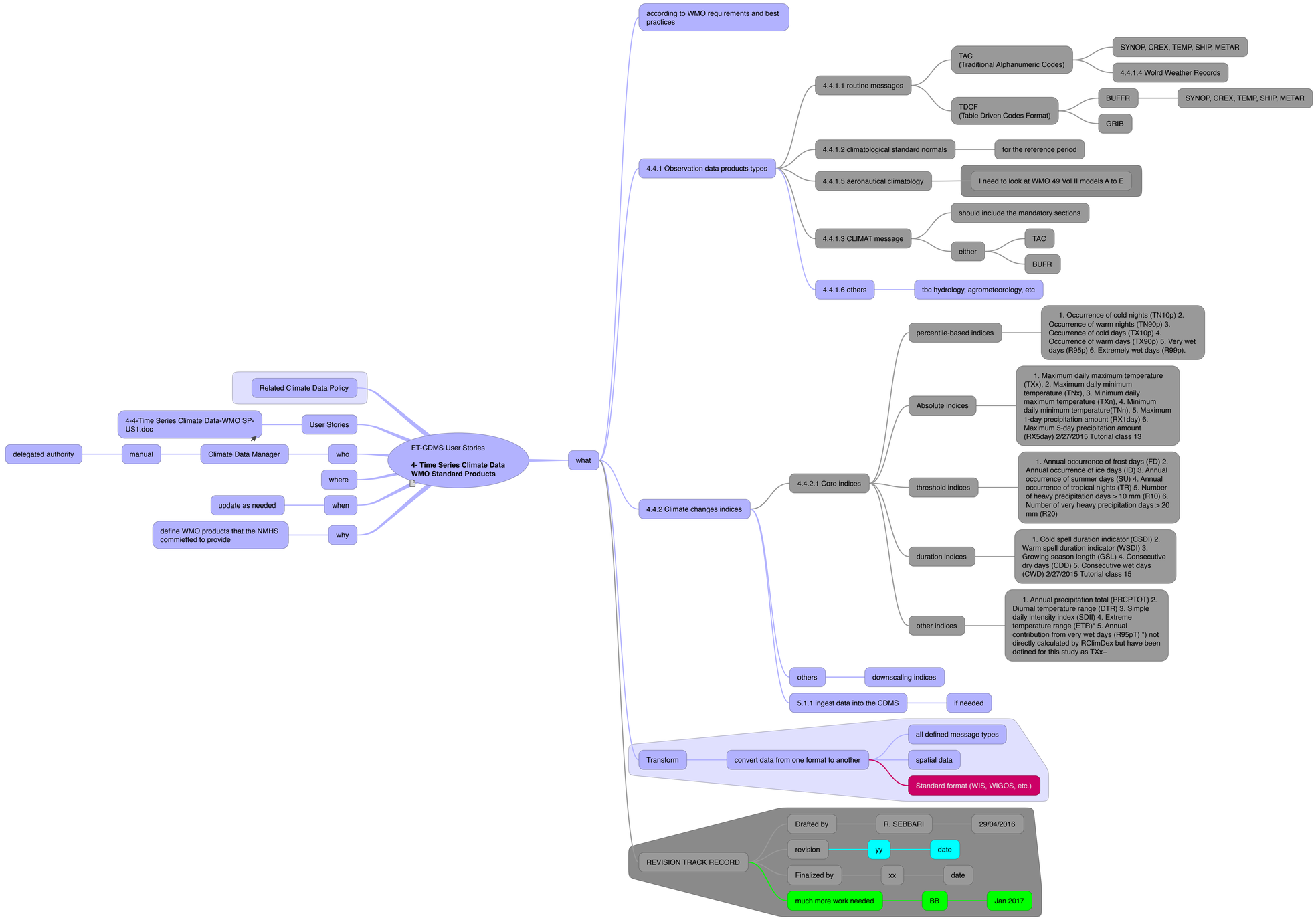
ET-CDMS User Stories
4- Time Series Climate Data WMO Standard Products
Related Climate Data Policy
User Stories
4-4-Time Series Climate Data-WMO SP-US1.doc
who
Climate Data Manager
manual
delegated authority
where
when
update as needed
why
define WMO products that the NMHS commietted to provide
what
according to WMO requirements and best practices
4.4.1 Observation data products types
4.4.1.1 routine messages
TAC (Traditional Alphanumeric Codes)
SYNOP, CREX, TEMP, SHIP, METAR
4.4.1.4 Wolrd Weather Records
TDCF (Table Driven Codes Format)
BUFFR
SYNOP, CREX, TEMP, SHIP, METAR
GRIB
4.4.1.2 climatological standard normals
for the reference period
4.4.1.5 aeronautical climatology
I need to look at WMO 49 Vol II models A to E
4.4.1.3 CLIMAT message
should include the mandatory sections
either
TAC
BUFR
4.4.1.6 others
tbc hydrology, agrometeorology, etc
4.4.2 Climate changes indices
4.4.2.1 Core indices
percentile-based indices
1. Occurrence of cold nights (TN10p) 2. Occurrence of warm nights (TN90p) 3. Occurrence of cold days (TX10p) 4. Occurrence of warm days (TX90p) 5. Very wet days (R95p) 6. Extremely wet days (R99p).
Absolute indices
1. Maximum daily maximum temperature (TXx), 2. Maximum daily minimum temperature (TNx), 3. Minimum daily maximum temperature (TXn), 4. Minimum daily minimum temperature(TNn), 5. Maximum 1-day precipitation amount (RX1day) 6. Maximum 5-day precipitation amount (RX5day) 2/27/2015 Tutorial class 13
threshold indices
1. Annual occurrence of frost days (FD) 2. Annual occurrence of ice days (ID) 3. Annual occurrence of summer days (SU) 4. Annual occurrence of tropical nights (TR) 5. Number of heavy precipitation days > 10 mm (R10) 6. Number of very heavy precipitation days > 20 mm (R20)
duration indices
1. Cold spell duration indicator (CSDI) 2. Warm spell duration indicator (WSDI) 3. Growing season length (GSL) 4. Consecutive dry days (CDD) 5. Consecutive wet days (CWD) 2/27/2015 Tutorial class 15
other indices
1. Annual precipitation total (PRCPTOT) 2. Diurnal temperature range (DTR) 3. Simple daily intensity index (SDII) 4. Extreme temperature range (ETR)* 5. Annual contribution from very wet days (R95pT) *) not directly calculated by RClimDex but have been defined for this study as TXx–
others
downscaling indices
5.1.1 ingest data into the CDMS
if needed
Transform
convert data from one format to another
all defined message types
spatial data
Standard format (WIS, WIGOS, etc.)
REVISION TRACK RECORD
Drafted by
R. SEBBARI
29/04/2016
revision
yy
date
Finalized by
xx
date
much more work needed
BB
Jan 2017

Here we define the WMO standard products to be generated by the CDMS if the NMHS request them