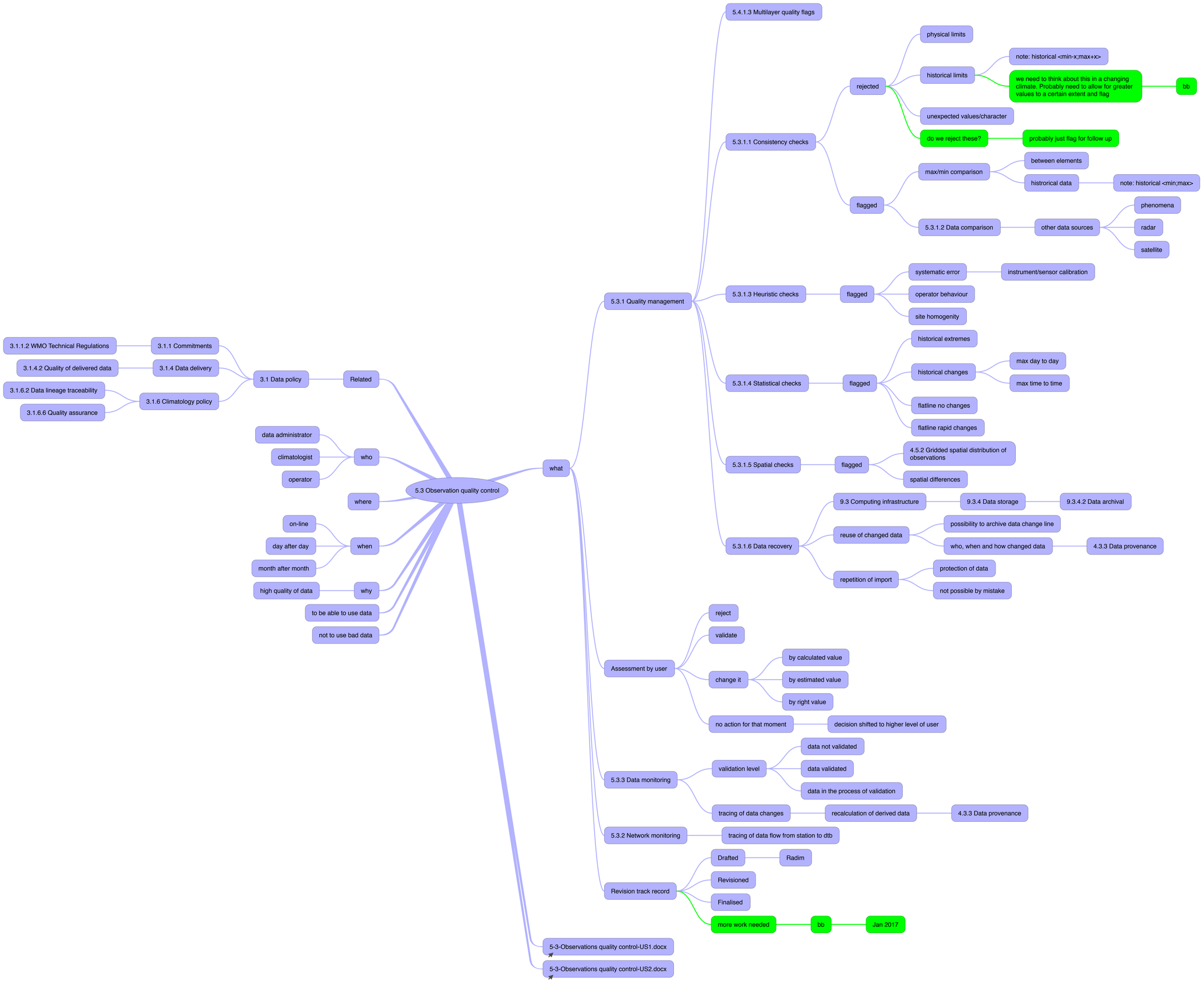
5.3 Observation quality control
Related
3.1 Data policy
3.1.1 Commitments
3.1.1.2 WMO Technical Regulations
3.1.4 Data delivery
3.1.4.2 Quality of delivered data
3.1.6 Climatology policy
3.1.6.2 Data lineage traceability
3.1.6.6 Quality assurance
who
data administrator
climatologist
operator
where
when
on-line
day after day
month after month
why
high quality of data
to be able to use data
not to use bad data
what
5.3.1 Quality management
5.4.1.3 Multilayer quality flags
5.3.1.1 Consistency checks
rejected
physical limits
historical limits
note: historical <min-x;max+x>
we need to think about this in a changing climate. Probably need to allow for greater values to a certain extent and flag
bb
unexpected values/character
do we reject these?
probably just flag for follow up
flagged
max/min comparison
between elements
histrorical data
note: historical <min;max>
5.3.1.2 Data comparison
other data sources
phenomena
radar
satellite
5.3.1.3 Heuristic checks
flagged
systematic error
instrument/sensor calibration
operator behaviour
site homogenity
5.3.1.4 Statistical checks
flagged
historical extremes
historical changes
max day to day
max time to time
flatline no changes
flatline rapid changes
5.3.1.5 Spatial checks
flagged
4.5.2 Gridded spatial distribution of observations
spatial differences
5.3.1.6 Data recovery
9.3 Computing infrastructure
9.3.4 Data storage
9.3.4.2 Data archival
reuse of changed data
possibility to archive data change line
who, when and how changed data
4.3.3 Data provenance
repetition of import
protection of data
not possible by mistake
Assessment by user
reject
validate
change it
by calculated value
by estimated value
by right value
no action for that moment
decision shifted to higher level of user
5.3.3 Data monitoring
validation level
data not validated
data validated
data in the process of validation
tracing of data changes
recalculation of derived data
4.3.3 Data provenance
5.3.2 Network monitoring
tracing of data flow from station to dtb
Revision track record
Drafted
Radim
Revisioned
Finalised
more work needed
bb
Jan 2017
5-3-Observations quality control-US1.docx
5-3-Observations quality control-US2.docx