

Southeast Alaska Oceanographic Monitoring: Implementing Integrated Data Management

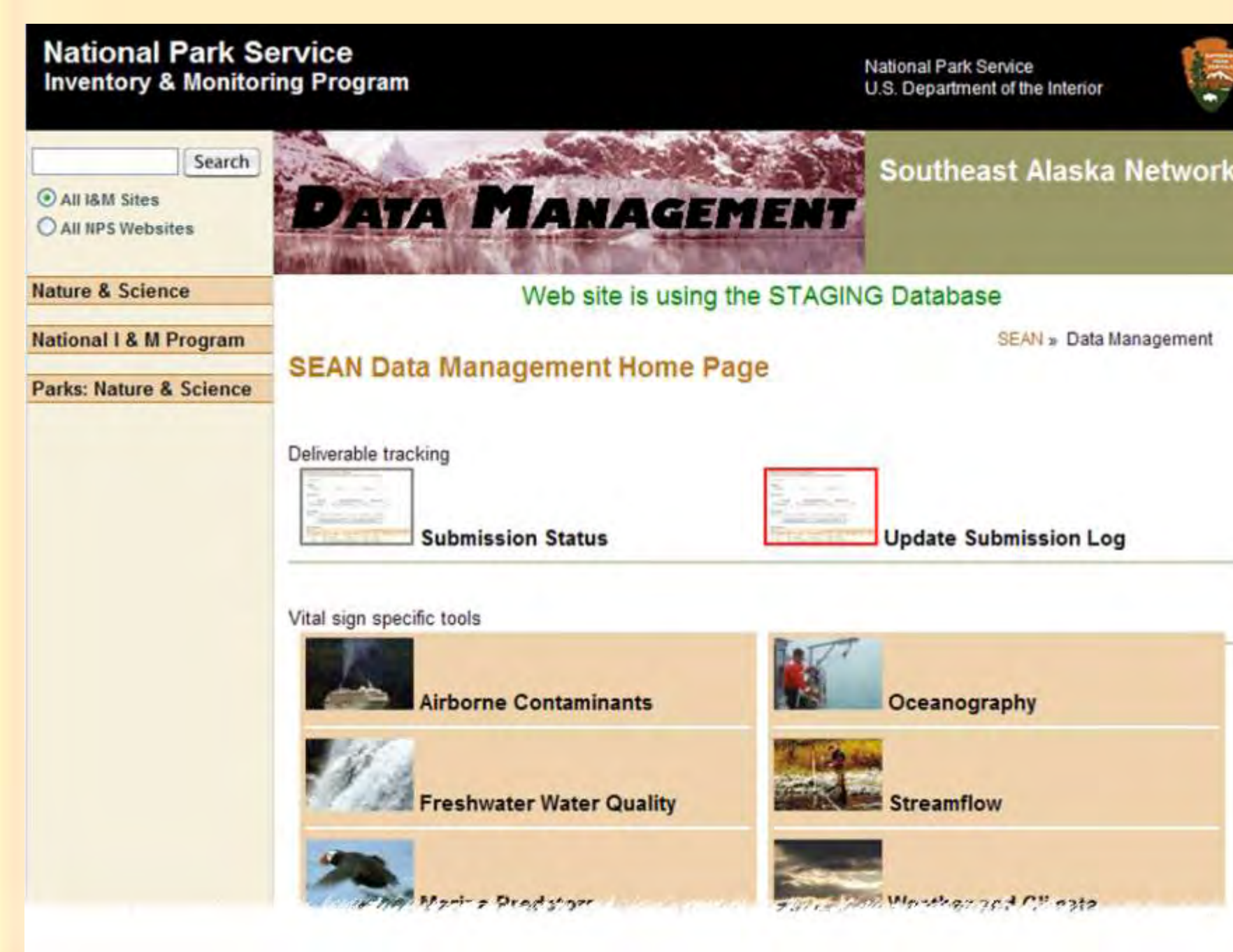
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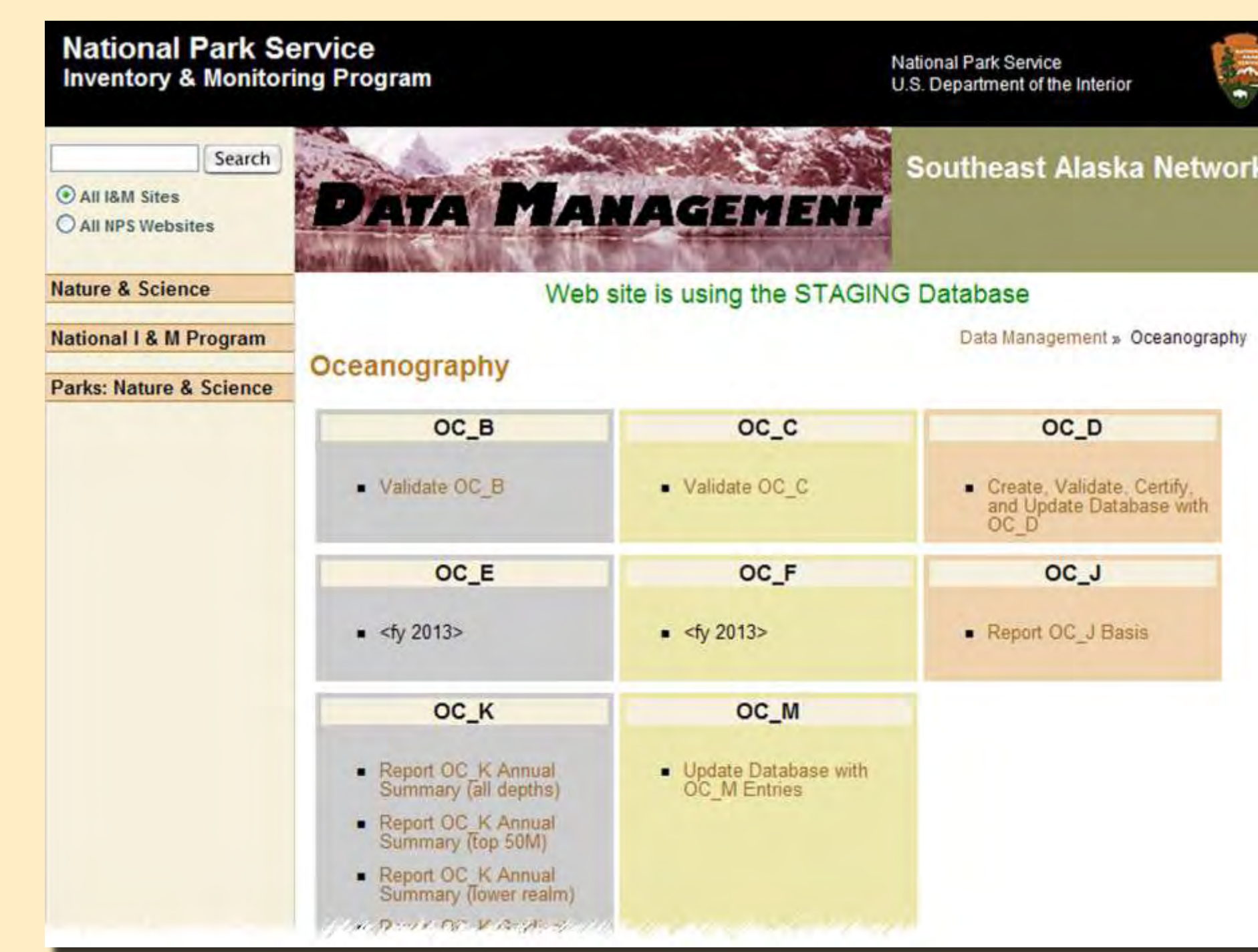
1) Each monitoring protocol formally defines detailed deliverables in advance...

Deliverable	Description	Provided to Customers as	Frequency Produced	Responsibility	SOP
OC_A: CON calibration files	The collection of calibration files used to adjust raw CTD data to standard levels based on the particular sensitivity of each sensor in the instrument array.	Windows files in the proprietary CON format of vendor Sea-Bird Electronics.	Typically, once per year after the annual instrument calibration has been performed. May be done more frequently if CTD is recalibrated due to sensor failure.	Project Leader	3
OC_B: Raw HEX files	The collection of raw CTD data taken in one cast. One HEX file is created per cast. Values represent relative voltages or frequencies sampled from sensors.	Windows files in vendor's ASCII "HEX" format, wrapped into a single ZIP file.	One ZIP file per year.	Project Leader	6
OC_C: Processed CNV files	The collection of raw data processed against calibration factors, binned into one meter segments, and expressed in engineering units. One CNV file is created for each cast.	Windows files in vendor's ASCII "CNV" format, wrapped into a single ZIP file.	One ZIP file per year.	Project Leader	8
OC_D: Cumulative database	A single cumulative database of all certified OC_C data. Customers extract data onto their workstations after specifying filter parameters such as year, depth range, etc.	ASCII CSV files downloaded from web and saved onto local workstations.	Continuously available.	Data Manager	10
OC_E: AOSOS data submission	The data in OC_D are delivered by SEAN to partner AOSOS (Alaska Ocean Observing System), who provide various data visualization and reporting tools.	Various forms, as defined by partner.	Data are updated periodically from the SEAN database as they become certified; typically once per year.	Data Manager	16

2) ...which allows SEAN to build a separate data management web site for automating tasks...



3) ...specific to each vital sign...

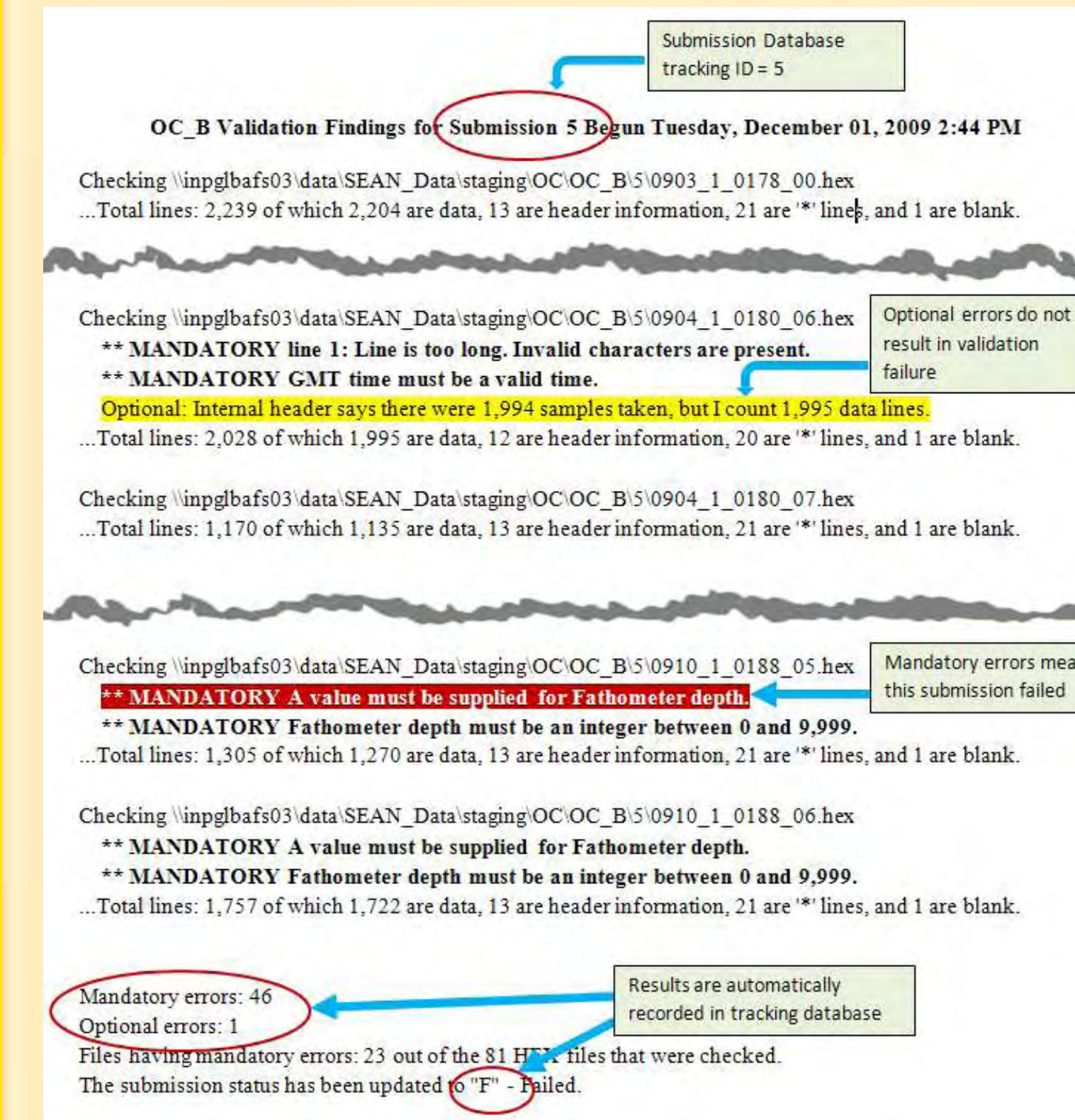


8) ...and all progress is tracked in formal audit trails on a SQL Server database...

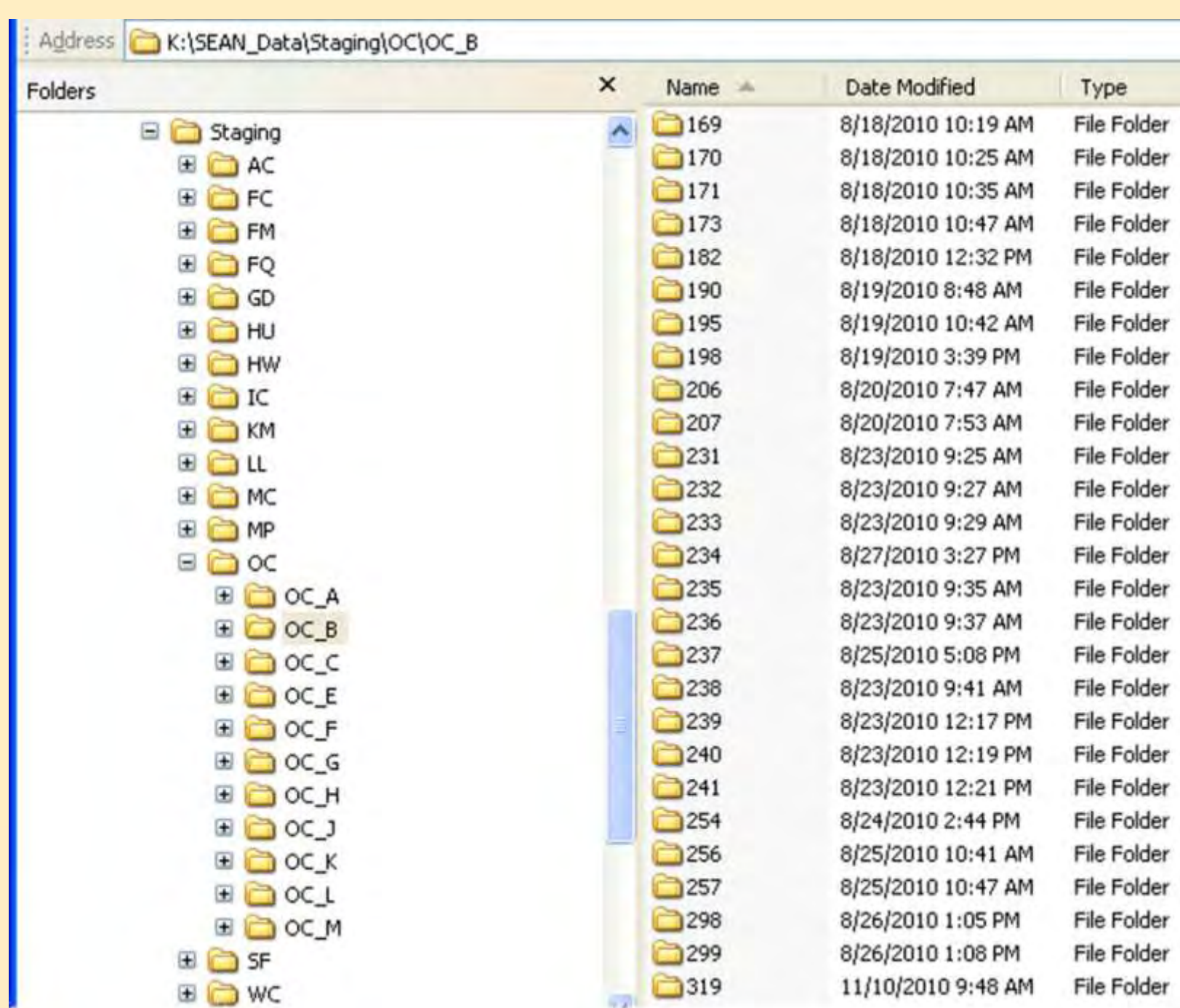
9) ...so everyone always knows their program's exact status.



4) ...supporting things like automated data validation...



7) ...while all versions of submitted data are maintained in a well-defined storage structure...



6) ...used to generate standard report tables...

5) ...as well as automatic cumulative database updates...

