Command Reference: WriteReclamationHDB()

Write a time series to a Reclamation HDB database

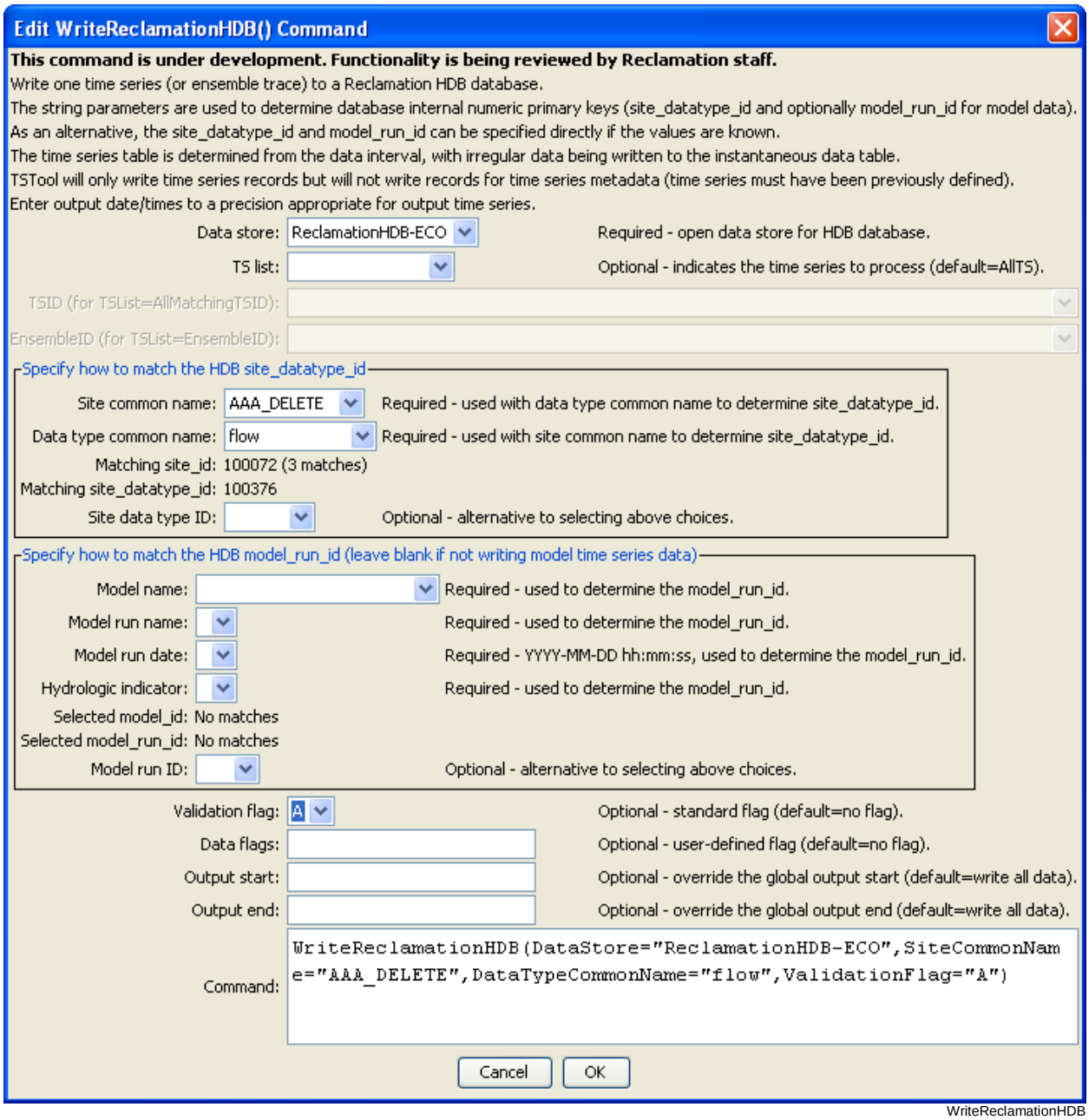
Version 10.06.00, 2012-03-28

This command is under development. Writing is currently disabled while technical issues are resolved.

The `WriteReclamationHDB()` command writes a single time series (which can be part of an ensemble) to a Reclamation HDB database. See the **Reclamation HDB Data Store Appendix** for more information about the database features and limitations. The command will not define a new time series but will update the data records for an existing time series. The time series interval is used to determine the time series table to write, with irregular data being written as instantaneous data with date/time precision to minute. The time series is written to a model time series table if model parameters are specified. The "write_to_hdb" stored procedure is used to write the data. Limitations of this command are as follows:

1. Missing data currently are not written. By convention missing values in HDB are simply not included in the database. Currently the command will not delete previous records if the new value at a date/time is missing. Should delete_from_hdb be called before write_to_hdb – deletes would need to occur for the write period?
2. Data units in the time series are not checked against data units in the database because the units in TSTool data may originally have come from various sources that do not use the same units names as HDB. It is the user's responsibility to ensure that time series that are being written have units that are compatible with HDB.
3. Time zone currently cannot be specified by the command. The default time zone for the database will be used. An alternative would be to use the time zone from the time series date/times; however, time zone names (similar to units) are difficult to standardize.
4. Data flags from the time series are not written to the database. The `ValidationFlag` and `DataFlags` parameters are provided to specify HDB flags. Additional capability may be added in the future.
5. TSTool treats year-interval data generically and does not manage water year (or other types of years) in special fashion, other than when processing data into year interval time series. Water year data can be saved in year interval data but currently there is no way to write to the water-year tables in HDB.
6. Writing model data currently must specify the `ModelRunID` parameter directly. Additional testing is needed to ensure that the editor dialog choices cascade properly, even when some null/blank fields exist in the model run defintions.
7. Need to adjust the hourly data by one hour due to how start/end date are written – need some input on how the SAMPLE_DATE_TIME is specified in the write_to_hdb procedure for hourly data as compared to other intervals.

The following dialog is used to edit the command and illustrates the syntax of the command.



WriteReclamationHDB

WriteReclamationHDB() Command Editor

The command syntax is as follows:

```
WriteReclamationHDB(Parameter=Value,…)
```

Command Parameters

Parameter	Description	Default
`DataStore`	The identifier for the ReclamationHDB data store to use for the database.	None – must be specified.
`TSList`	Indicates the list of time series to be processed, one of: • `AllMatchingTSID` – all time series that match the `TSID` (single TSID or TSID with wildcards) will be processed. • `AllTS` – all time series before the command. • `EnsembleID` – all time series in the ensemble will be processed. • `FirstMatchingTSID` – the first time series that matches the `TSID` (single TSID or TSID with wildcards) will be processed. • `LastMatchingTSID` – the last time series that matches the `TSID` (single TSID or TSID with wildcards) will be processed. • `SelectedTS` – the time series are those selected with the `SelectTimeSeries()` command.	`AllTS`
`TSID`	The time series identifier or alias for the time series to be processed, using the `*` wildcard character to match multiple time series.	Required if `TSList=*TSID`.
`EnsembleID`	The ensemble to be processed, if processing an ensemble.	Required if `TSList=EnsembleID`.
`Site CommonName`	The site common name for the time series location; used with the data type common name to determine the site_datatype_id in the database.	None – must be specified unless `SiteDataTypeID` is specified.
`DataType CommonName`	The data type common name for the time series; used with the site common name to determine the site_datatype_id in the database.	None – must be specified unless `SiteDataTypeID` is specified.
`SiteDataTypeID`	The site_datatype_id value to match the time series. If specified, the value will be used instead of the site_datatype_id determined from `SiteCommonName` and `DataTypeCommonName`.	
`ModelName`	The model name for the time series; used with the model run name, hydrologic indicator(s), and model run date to determine the model_run_id in the database.	None – must be specified unless `ModelRunID` is specified.
`ModelRunName`	The model run name for the time series; used with the model name, hydrologic indicator(s), and model run date to determine the model_run_id in the database.	None – must be specified unless `ModelRunID` is specified.
`ModelRunDate`	The model run date (timestamp) to use for the time series; used with the model name, model run name, and hydrologic indicator(s) to determine the model_run_id in the database.	None – must be specified unless `ModelRunID` is specified.

Parameter	Description	Default
`HydrologicIndicator`	The hydrologic indicator(s) to use for the time series; used with the model name, model run name, and model run date to determine the model_run_id in the database.	None – must be specified unless `ModelRunID` is specified.
`ModelRunID`	The model_run_id value to match the time series. If specified, the value will be used instead of the model_run_id determined from `ModelName` , `ModelRunName`, `ModelRunDate`, and `HydrologicIndicator.`	
`ValidationFlag`	HDB validation flag. Only uppercase characters are supported.	No flag is used.
`DataFlags`	User-defined flags, up to 20 characters.	No flags are used.
`OutputStart`	The date/time for the start of the output.	Use the global output period.
`OutputEnd`	The date/time for the end of the output.	Use the global output period.