

SMOKE Test Case

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Very Brief Instructions

1. Import SMOKE Case
2. Update SMOKE Case
3. Run SMOKE Case

Import SMOKE Case

1. Download the SMOKE test case (SMOKE_test_case.tar.gz) from the EPA's ftp site:
FTP address: scienceftp.epa.gov
login: emfbeta
password: 4aXqKhhu
2. Extract file:

```
$ tar xvfz SMOKE_test_case.tar.gz
```
3. Import the Case files into the EMF.
4. Once the case is imported, you should see a new case named “2005ak Beta Test” under the Case category “Demo”. The Case should have:
 - 54 Jobs
 - 282 Inputs (Note: To see all the inputs, you will need to select “All” from the **Sector** pull-down and select the **Show All** checkbox)
 - 174 Parameters (Note: To see all the inputs, you will need to select “All” from the **Sector** pull-down and select the **Show All** checkbox)
 - 2 Regions (on the **Summary** tab):
 - Continental US 36km (36US1)
 - Eastern US 12km (12EUS1)

Update SMOKE Case

Case

Under the current EMF import process, the Case’s Base Year is not set. You will need to set the value of the **Base Year** field to “2005”.

Jobs

While there are 54 Jobs defined in the Case, not all the Jobs have the requisite Inputs to run completely. Once the Case is configured for your system, the following 9 Jobs should run:

- Annual ag 36US1
- Annual alm_no_c3 36US1
- Annual afdust 36US1
- Annual ptfire onetime steps 36US1
- Annual ptnonipm onetime steps 36US1
- Annual ptnonipm Q1 36US1
- Daily ptfire Q1 36US1

- Sector merge Jan-Jun 36US1
- Annual afdust 12EUS1

As with the previous test Cases, you will need to update the following fields to match your system. (Hint: Select *All* the Jobs and use the **Modify** button to modify all the Jobs at once):

- Host
- Queue Options

In addition to the individual Jobs, you will need to modify the value of the **Output Job Scripts Folder** to match your system. For example:

/data4/smoke_emf/subsys26/smoke26/scripts/cases/\$CASE

Inputs

For each of the 9 Jobs that are configured to run properly with this test Case, it is necessary to have all the Inputs defined for the Job's Sector, as well as all the Inputs for "All Sectors". If the names of the Datasets were named properly prior to the import of the Case, the "linking" *should* be performed automatically. Below is a list of all the Inputs that will be needed to run the 9 Jobs.

Input	Dataset	Sector
Inventory afdust CAP	afdust_2002ad_xportfrac	afdust
Report configuration, ag inventory	repconfig_ag_inv	ag
Inventory ag CAP	ag_cap2002nei	ag
surrogate ratios USA 12km	USA 12km surrogates	All sectors
surrogate ratios MEX 36km	MEX 36km surrogates	All sectors
surrogate ratios USA 36km	USA 36km surrogates	All sectors
surrogate ratios MEX 12km	MEX 12km surrogates	All sectors
surrogate ratios CAN 12km	CAN 12km surrogates	All sectors
surrogate ratios CAN 36km	CAN 36km surrogates	All sectors
Grid Description List	griddesc_lambertonly	All sectors
Country, State, County Information	costcy_for_2002	All sectors
Inventory Table - HAPCAP integration but no toxics	invtable_hapcapintegrate_cb05soa_nomp	All sectors
emf job header	emf_jobheader_generic	All sectors
surrogate descriptions (works for all grids)	srgdesc_36km_revised	All sectors
nonpoint & nonroad surrogate xref	amgref_us_can_allmex3	All sectors
GSPRO speciated MOVES PM	gspro_speciated_pm	All sectors
GSREF speciated PM	gsref_speciated_pm	All sectors
Report configuration, nonpoint default gridded	repconfig_area_invgrid_caphap	All sectors
Report configuration, nonpoint default inventory	repconfig_area_inv_caphap	All sectors
Report configuration, nonpoint default VOCprof	repconfig_area_inv2	All sectors
Elevation Configuration File for Point Sources	pelvconfig_inline_allpts	All sectors
Temporal xref, point default	amptref_v3_3	All sectors
Smkmerge representative dates files	smk_merge_dates_2005	All sectors

Speciation profiles speciated VOC	gspro_speciated_voc	All sectors
Speciation xref HG	gsref_hg	All sectors
Speciation xref for Integrate-HAPs static	gsref_static_integratehap_emv4	All sectors
Speciation xref for NONHAPVOC, year-specific	gsref_nonhapvoc_2005	All sectors
Speciation xref for NONHAPVOC, not year-specific	gsref_nonhapvoc_general_update	All sectors
Speciation xref for VOC, year-specific	gsref_voc_2005	All sectors
Speciation xref for VOC, not year-specific	gsref_voc_general	All sectors
Speciation profiles for INTEGRATE HAPS	gspro_integratehaps_cb05_tx_pf4	All sectors
Speciation profiles for NOX	gspro_nox_hono_pf4	All sectors
Speciation profiles for HG	gspro_hg	All sectors
List of sectors for mrggrid	sectorlist_2005ak_test	All sectors
Speciation profiles for NONHAPTOG	gspro_nonhaptog_cb05_tx_pf4_pretier2	All sectors
Speciation xref for PM2.5 diesel SCCs but do not produce diesel	gsref_no_dieselpm	All sectors
Speciation xref for PM2.5 non-diesel SCCs	gsref_pm25_pf4_nondiesel	All sectors
Speciation xref for SO2-SULF	gsref_sulf	All sectors
Speciation xref static NOX -- HONO for mobile sources	gsref_static_nox_hono_pf4	All sectors
Speciation xref CAP static	gsref_static_cap_pf4	All sectors
Speciation profiles for TOG	gspro_tog_cb05_soa_pf4_pretier2	All sectors
Speciation profiles for SO2-SULF	gspro_sulf	All sectors
Speciation profiles for PM2.5	gspro_pm25	All sectors
Speciation profiles static	gspro_static_cmaq	All sectors
NAICS descriptions	Naicsdesc	All sectors
MACT Description	mactdesc_2002v3	All sectors
Combination profiles	gspro_combo_2005	All sectors
Temporal profiles, all point	amptpro_2005_us_can	All sectors
Temporal xref, onroad mobile default	amptref_v3_3	All sectors
Temporal profiles, onroad default	amptpro_2005_us_can	All sectors
onroad surrogate xref default	amgref_us_can_allmex3	All sectors
SIC descriptions	sic_desc	All sectors
Stack replacement	Pstk	All sectors
ORIS Description	Orisdesc	All sectors
Mobile codes file default	Mcodes	All sectors
GSCNV - pollutant to pollutant conversions	gscnv_cmaq_cb05_tx_pf4	All sectors
Holidays table	Holidays	All sectors
Area-to-point data	artopnt_2002detroit	All sectors
Temporal xref, all nonpoint and nonroad	amptref_v3_3	All sectors
Temporal profiles, all nonpoint and nonroad	amptpro_2005_us_can	All sectors
SCC descriptions	sccdsc_pf31	All sectors
Report configuration, alm_no_c3 inventory	repconfig_alm_inv_caphap	alm_no_c3
NHAPEXCLUDE alm_no_c3	nhapexclude_alm_no_c3_pf4	alm_no_c3
Inventory alm_no_c3 CAP	lm_no_c3_cap2002v3	alm_no_c3

Inventory alm_no_c3 HAP	lm_no_c3_hap2002v4	alm_no_c3
Inventory fire list	ptfire_2005ag_tox	ptfire
Inventory daily fires 12 Dec, CAP/HAP last day	ptfire_nov_lastdayonly_2005ag_tox_nonhapvoc	ptfire
Inventory daily fires 06 Jun, CAP/HAP last day	ptfire_may_lastdayonly_2005ag_tox_nonhapvoc	ptfire
Inventory daily fires 03 Mar, CAP/HAP last day	ptfire_feb_lastdayonly_2005ag_tox_nonhapvoc	ptfire
Inventory daily fires 04 Apr, CAP/HAP last day	ptfire_mar_lastdayonly_2005ag_tox_nonhapvoc	ptfire
Inventory daily fires 07 Jul, CAP/HAP last day	ptfire_jun_lastdayonly_2005ag_tox_nonhapvoc	ptfire
Inventory daily fires 05 May, CAP/HAP last day	ptfire_apr_lastdayonly_2005ag_tox_nonhapvoc_txt	ptfire
Inventory daily fires 08 Aug, CAP/HAP last day	ptfire_jul_lastdayonly_2005ag_tox_nonhapvoc	ptfire
Inventory daily fires 09 Sep, CAP/HAP last day	ptfire_aug_lastdayonly_2005ag_tox_nonhapvoc	ptfire
Inventory daily fires 10 Oct, CAP/HAP last day	ptfire_sep_lastdayonly_2005ag_tox_nonhapvoc	ptfire
Inventory daily fires 11 Nov, CAP/HAP last day	ptfire_oct_lastdayonly_2005ag_tox_nonhapvoc	ptfire
Inventory daily fires 02 Feb, CAP/HAP last day	ptfire_jan_lastdayonly_2005ag_tox_nonhapvoc	ptfire
Inventory daily fires 12 Dec, CAP/HAP	ptfire_dec_2005ag_tox_nonhapvoc	ptfire
Inventory daily fires 11 Nov, CAP/HAP	ptfire_nov_2005ag_tox_nonhapvoc	ptfire
Inventory daily fires 10 Oct, CAP/HAP	ptfire_oct_2005ag_tox_nonhapvoc	ptfire
Inventory daily fires 09 Sep, CAP/HAP	ptfire_sep_2005ag_tox_nonhapvoc	ptfire
Inventory daily fires 08 Aug, CAP/HAP	ptfire_aug_2005ag_tox_nonhapvoc	ptfire
Inventory daily fires 07 Jul, CAP/HAP	ptfire_jul_2005ag_tox_nonhapvoc	ptfire
Inventory daily fires 06 Jun, CAP/HAP	ptfire_jun_2005ag_tox_nonhapvoc	ptfire
Inventory daily fires 05 May, CAP/HAP	ptfire_may_2005ag_tox_nonhapvoc	ptfire
Inventory daily fires 04 Apr, CAP/HAP	ptfire_apr_2005ag_tox_nonhapvoc	ptfire
Inventory daily fires 03 Mar, CAP/HAP	ptfire_mar_2005ag_tox_nonhapvoc	ptfire
Inventory daily fires 02 Feb, CAP/HAP	ptfire_feb_2005ag_tox_nonhapvoc	ptfire
Inventory daily fires 01 Jan, last day CAP/HAP	ptfire_dec_lastdayonly_2005ag_tox_nonhapvoc	ptfire
Inventory daily fires 01 jan, CAP/HAP	ptfire_jan_2005ag_tox_nonhapvoc	ptfire
Inventory Table - noHAPuse sectors, no toxics	invtable_hapcapnohapuse_cb05soa_nomp	ptnonipm
Report configuration, ptnonipm gridded	repconfig_point_invgrid_caphap	ptnonipm
Report configuration, ptnonipm inventory	repconfig_point_inv_caphap	ptnonipm
Report configuration, ptnonipm VOCprof	repconfig_point_inv2	ptnonipm
Inventory ptnonipm CAP	ptnonipm_xportfrac_cap2005v2	ptnonipm
Inventory ptnonipm HAP	ptnonipm_hap2005v2	ptnonipm

If any of the above Inputs do not have a Dataset in the imported Case, you should manually match the Dataset to the Input by editing the specific Input. This mismatch is likely due to a slight inconsistency in the names. The Sectors that you are not running will have missing Inputs.

In addition to the individual Inputs, you will need to modify the value of the **Input Folder** field to match your system. For example:

/data4/smoke_data/inputs/\$CASE

Parameters

Some of the parameters will need to be modified to match your system:

- **SMK_HOME:** Should point to the location of the `smoke_emf` directory referred to in the “Setup SMOKE_EMF Directories” section of the [SMOKE Test Cast Part 1 document](#). For example:
`/data4/smoke_emf`
- **IMD_ROOT:** Should point to the location of SMOKE's `intermed` directory. For example:
`/data4/smoke_data/intermed`
- **DAT_ROOT:** Should point to the location of the `smoke_data`. For example:
`/data4/smoke_data`
- **OUT_ROOT:** Should point to the location of the SMOKE's `output` directory. For example:
`/data4/smoke_data/output`
- **SRGPRO_PATH (multiple):** Should point to the location of your spatial surrogates (and should match the path to the sources for your surrogate Inputs). For example:
`/data4/smoke_data/inputs/ge_dat/36km_surg/`
Note: The trailing slash is required!
- **EMF_QUEUE_OPTIONS:** Modify this parameter as in the previous test Case. As a reminder: If you are using a real process queue, select the parameter and click **Edit**. If you are using the fake queue, the value of the 'EMF queue options' does not matter because it should not be used by your Jobs.

Run SMOKE Case

Jobs

We recommend running the 9 Jobs in the following order:

- Annual ag 36US1
- Annual alm_no_c3 36US1
- Annual afdust 36US1
- Annual ptfire onetime steps 36US1
- Daily ptfire Q1 36US1
- Annual ptnonipm onetime steps 36US1
- Annual ptnonipm Q1 36US1
- Sector merge Jan-Jun 36US1
- Annual afdust 12EUS1

Some of the reasoning behind this is:

- The “Annual ag 36US1” Job is relatively simple and fast to run
- The “Annual afdust 36US1” Job simulates a full year, unlike the other Jobs that simulate one month
- The “Daily ptfire Q1 36US1” Job depends on the “Annual ptfire onetime steps 36US1” Job
- The “Annual ptnonipm Q1 36US1” Job depends on the “Annual ptnonipm onetime steps 36US1” Job
- The “Sector merge Jan-Jun 36US1” Job depends on *all* the 36km Jobs
- The “Annual afdust 12EUS1” Job depends on the “Annual afdust 36US1” Job

In actuality, the following 5 Jobs can be run in parallel (simultaneously) if you choose and your system can handle the load:

- Annual ag 36US1
- Annual alm_no_c3 36US1
- Annual afdust 36US1
- Annual ptfire onetime steps 36US1
- Annual ptnonipm onetime steps 36US1

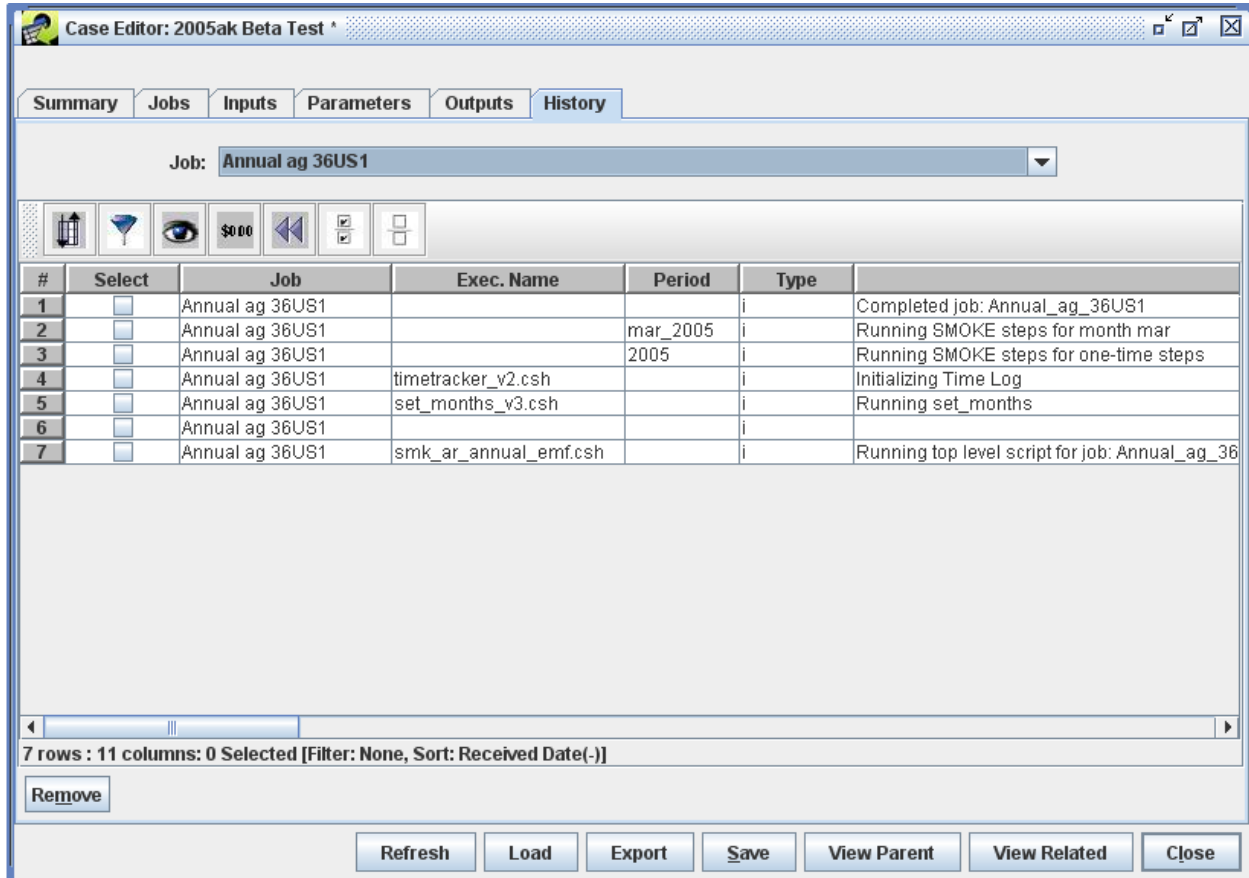
Important Note

After running the first Job (e.g., “Annual ag 36US1”), the EMF will have created the Job folder (e.g., `/data4/smoke_emf/subsys26/smoke26/scripts/cases/2005ak_test`). Before running any of the other jobs (especially the point Sector Jobs), copy the `run_settings_2005ak_test.txt` file contained in the new `additional_datasets.tar.gz` file into the Job folder.

This file controls which parts of SMOKE are *not* run for a specific Sector and grid. For example, this file turns off `Smkinven` for all 12EUS1 Jobs.

History

Below are screenshots of the expected messages from each of the 9 Jobs:



The screenshot shows the 'History' tab of the 'Case Editor: 2005ak Beta Test' application. The 'Job' dropdown is set to 'Annual ag 36US1'. Below the dropdown is a toolbar with icons for various actions. The main area contains a table with 7 rows of job execution history. The table has columns for '#', 'Select', 'Job', 'Exec. Name', 'Period', 'Type', and a description. The rows show various steps like 'Completed job: Annual_ag_36US1', 'Running SMOKE steps for month mar', 'Running SMOKE steps for one-time steps', 'Initializing Time Log', 'Running set_months', and 'Running top level script for job: Annual_ag_36US1'. At the bottom, there is a status bar indicating '7 rows : 11 columns: 0 Selected [Filter: None, Sort: Received Date(-)]' and a 'Remove' button. Below the status bar are buttons for 'Refresh', 'Load', 'Export', 'Save', 'View Parent', 'View Related', and 'Close'.

#	Select	Job	Exec. Name	Period	Type	
1	<input type="checkbox"/>	Annual ag 36US1			i	Completed job: Annual_ag_36US1
2	<input type="checkbox"/>	Annual ag 36US1		mar_2005	i	Running SMOKE steps for month mar
3	<input type="checkbox"/>	Annual ag 36US1		2005	i	Running SMOKE steps for one-time steps
4	<input type="checkbox"/>	Annual ag 36US1	timetracker_v2.csh		i	Initializing Time Log
5	<input type="checkbox"/>	Annual ag 36US1	set_months_v3.csh		i	Running set_months
6	<input type="checkbox"/>	Annual ag 36US1			i	
7	<input type="checkbox"/>	Annual ag 36US1	smk_ar_annual_emf.csh		i	Running top level script for job: Annual_ag_36US1

7 rows : 11 columns: 0 Selected [Filter: None, Sort: Received Date(-)]

Remove

Refresh Load Export Save View Parent View Related Close

Case Editor: 2005ak Beta Test

Summary Jobs Inputs Parameters Outputs History

Job: Annual alm_no_c3 36US1

#	Select	Job	Exec. Name	Period	Type	
1	<input type="checkbox"/>	Annual alm_no_c3 36US1			i	Completed job: Annual_alm_no_c3_36US
2	<input type="checkbox"/>	Annual alm_no_c3 36US1		mar_2005	i	Running SMOKE steps for month mar
3	<input type="checkbox"/>	Annual alm_no_c3 36US1		2005	i	Running SMOKE steps for one-time steps
4	<input type="checkbox"/>	Annual alm_no_c3 36US1	set_months_v3.csh		i	Running set_months
5	<input type="checkbox"/>	Annual alm_no_c3 36US1			i	Submitted job to amber.nesc.epa.gov. Exe
6	<input type="checkbox"/>	Annual alm_no_c3 36US1			i	
7	<input type="checkbox"/>	Annual alm_no_c3 36US1	smk_ar_annual_emf.csh		i	Running top level script for job: Annual_alr

7 rows : 11 columns: 0 Selected [Filter: None, Sort: Received Date(-)]

Remove

Refresh Load Export Save View Parent View Related Close

SummaryJobsInputsParametersOutputsHistory

Job: Annual afdust 36US1

#	Select	Job	Exec. Name	Period	Type	
1	<input type="checkbox"/>	Annual afdust 36US1			i	Completed job: Annual_afdust_36US1
2	<input type="checkbox"/>	Annual afdust 36US1		dec_2005	i	Running SMOKE steps for month dec
3	<input type="checkbox"/>	Annual afdust 36US1		nov_2005	i	Running SMOKE steps for month nov
4	<input type="checkbox"/>	Annual afdust 36US1		oct_2005	i	Running SMOKE steps for month oct
5	<input type="checkbox"/>	Annual afdust 36US1		sep_2005	i	Running SMOKE steps for month sep
6	<input type="checkbox"/>	Annual afdust 36US1		aug_2005	i	Running SMOKE steps for month aug
7	<input type="checkbox"/>	Annual afdust 36US1		jul_2005	i	Running SMOKE steps for month jul
8	<input type="checkbox"/>	Annual afdust 36US1		jun_2005	i	Running SMOKE steps for month jun
9	<input type="checkbox"/>	Annual afdust 36US1		may_2005	i	Running SMOKE steps for month may
10	<input type="checkbox"/>	Annual afdust 36US1		apr_2005	i	Running SMOKE steps for month apr
11	<input type="checkbox"/>	Annual afdust 36US1		mar_2005	i	Running SMOKE steps for month mar
12	<input type="checkbox"/>	Annual afdust 36US1		feb_2005	i	Running SMOKE steps for month feb
13	<input type="checkbox"/>	Annual afdust 36US1		jan_2005	i	Running SMOKE steps for month jan
14	<input type="checkbox"/>	Annual afdust 36US1		2005	i	Running SMOKE steps for one-time steps
15	<input type="checkbox"/>	Annual afdust 36US1	timetracker_v2.csh		i	Initializing Time Log
16	<input type="checkbox"/>	Annual afdust 36US1	set_months_v3.csh		i	Running set_months
17	<input type="checkbox"/>	Annual afdust 36US1			i	
18	<input type="checkbox"/>	Annual afdust 36US1	smk_ar_annual_emf.csh		i	Running top level script for job: Annual_afdust

18 rows : 11 columns: 0 Selected [Filter: None, Sort: Received Date(-)]

Remove

RefreshLoadExportSaveView ParentView RelatedClose

SummaryJobsInputsParametersOutputsHistory

Job: Annual ptfire onetime steps 36US1

#	Select	Job	Exec. Name	Period	Type	
1	<input type="checkbox"/>	Annual ptfire onetime steps 36US1			i	Completed job: Annual_
2	<input type="checkbox"/>	Annual ptfire onetime steps 36US1		2005	i	Running Elevpoint
3	<input type="checkbox"/>	Annual ptfire onetime steps 36US1		2005	i	Running SMOKE steps f
4	<input type="checkbox"/>	Annual ptfire onetime steps 36US1			i	
5	<input type="checkbox"/>	Annual ptfire onetime steps 36US1	smk_pt_annual_onetime_emf.csh		i	Running top level script

5 rows : 11 columns: 0 Selected [Filter: None, Sort: Received Date(-)]

Remove

RefreshLoadExportSaveView ParentView RelatedClose

Case Editor: 2005ak Beta Test

Summary Jobs Inputs Parameters Outputs History

Job: Daily ptfire Q1 36US1

#	Select	Job	Exec. Name	Period	Type	
1	<input type="checkbox"/>	Daily ptfire Q1 36US1			i	Completed job: Dail
2	<input type="checkbox"/>	Daily ptfire Q1 36US1		mar_2005	i	Running SMOKE st
3	<input type="checkbox"/>	Daily ptfire Q1 36US1	set_months_v3.csh		i	Running set_month
4	<input type="checkbox"/>	Daily ptfire Q1 36US1	smk_pt_daily_emf.csh		i	Running top level s
5	<input type="checkbox"/>	Daily ptfire Q1 36US1			i	
6	<input type="checkbox"/>	Daily ptfire Q1 36US1			i	Submitted job to ga

6 rows : 11 columns: 0 Selected [Filter: None, Sort: Received Date(-)]

Remove

Refresh Load Export Save View Parent View Related Close

Case Editor: 2005ak Beta Test

Summary
Jobs
Inputs
Parameters
Outputs
History

Job: Annual ptnonipm onetime steps 36US1

#	Select	Job	Exec. Name	Period	Type	
1	<input type="checkbox"/>	Annual ptnonipm onetime steps 36US1			i	Completed job: Ann
2	<input type="checkbox"/>	Annual ptnonipm onetime steps 36US1		2005	i	Running Elevpoint
3	<input type="checkbox"/>	Annual ptnonipm onetime steps 36US1		2005	i	Running SMOKE st
4	<input type="checkbox"/>	Annual ptnonipm onetime steps 36US1	timetracker_v2.csh		i	Initializing Time Log
5	<input type="checkbox"/>	Annual ptnonipm onetime steps 36US1			i	
6	<input type="checkbox"/>	Annual ptnonipm onetime steps 36US1	smk_pt_annual_onetime_emf.csh		i	Running top level s

6 rows : 11 columns: 0 Selected [Filter: None, Sort: Received Date(-)]

Remove

Refresh
Load
Export
Save
View Parent
View Related
Close

Case Editor: 2005ak Beta Test

Summary Jobs Inputs Parameters Outputs History

Job: Annual ptnonipm Q1 36US1

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#	Select	Job	Exec. Name	Period	Type	
1	<input type="checkbox"/>	Annual ptnonipm Q1 36US1			i	Completed job: Ann
2	<input type="checkbox"/>	Annual ptnonipm Q1 36US1		mar_2005	i	Running SMOKE st
3	<input type="checkbox"/>	Annual ptnonipm Q1 36US1	timetracker_v2.csh		i	Initializing Time Log
4	<input type="checkbox"/>	Annual ptnonipm Q1 36US1	set_months_v3.csh		i	Running set_month
5	<input type="checkbox"/>	Annual ptnonipm Q1 36US1			i	Submitted job to ga
6	<input type="checkbox"/>	Annual ptnonipm Q1 36US1			i	
7	<input type="checkbox"/>	Annual ptnonipm Q1 36US1	smk_pt_annual_byday_emf.csh		i	Running top level sc

7 rows : 11 columns: 0 Selected [Filter: None, Sort: Received Date(-)]

Remove

Refresh Load Export Save View Parent View Related Close

Case Editor: 2005ak Beta Test ^

Summary Jobs Inputs Parameters Outputs History

Job: Sector merge Jan-Jun 36US1

#	Select	Job	Exec. Name	Period	Type	
1	<input type="checkbox"/>	Sector merge Jan-Jun 36US1			i	Completed job: Sector_merge_Jan_J
2	<input type="checkbox"/>	Sector merge Jan-Jun 36US1			i	Completed sector merge for 03/2005
3	<input type="checkbox"/>	Sector merge Jan-Jun 36US1			i	Excluding sector ptipm from mrggrid
4	<input type="checkbox"/>	Sector merge Jan-Jun 36US1			i	Excluding sector ptfire from mrggrid
5	<input type="checkbox"/>	Sector merge Jan-Jun 36US1			i	Excluding sector ocean_cl2 from mrg
6	<input type="checkbox"/>	Sector merge Jan-Jun 36US1			i	Excluding sector hg_volcanic from m
7	<input type="checkbox"/>	Sector merge Jan-Jun 36US1			i	Excluding sector hg_ocean-recycle fr
8	<input type="checkbox"/>	Sector merge Jan-Jun 36US1			i	Excluding sector hg_ocean-direct for
9	<input type="checkbox"/>	Sector merge Jan-Jun 36US1			i	Excluding sector hg_land-recycle for
10	<input type="checkbox"/>	Sector merge Jan-Jun 36US1			i	Excluding sector hg_land-direct from
11	<input type="checkbox"/>	Sector merge Jan-Jun 36US1			i	Excluding sector on_moves_startpm
12	<input type="checkbox"/>	Sector merge Jan-Jun 36US1			i	Excluding sector on_moves_runpm
13	<input type="checkbox"/>	Sector merge Jan-Jun 36US1			i	Excluding sector othar_hg from mrgg
14	<input type="checkbox"/>	Sector merge Jan-Jun 36US1			i	Excluding sector seca_c3 from mrgg
15	<input type="checkbox"/>	Sector merge Jan-Jun 36US1			i	Excluding sector seasalt from mrggri
16	<input type="checkbox"/>	Sector merge Jan-Jun 36US1			i	Excluding sector othpt_hg from mrgg
17	<input type="checkbox"/>	Sector merge Jan-Jun 36US1			i	Excluding sector othpt from mrggrid
18	<input type="checkbox"/>	Sector merge Jan-Jun 36US1			i	Excluding sector othar from mrggrid
19	<input type="checkbox"/>	Sector merge Jan-Jun 36US1			i	Excluding sector othar from mrggrid
20	<input type="checkbox"/>	Sector merge Jan-Jun 36US1			i	Excluding sector on_noadj from mrgg
21	<input type="checkbox"/>	Sector merge Jan-Jun 36US1			i	Excluding sector nonroad from mrggr
22	<input type="checkbox"/>	Sector merge Jan-Jun 36US1			i	Excluding sector nonpt from mrggrid
23	<input type="checkbox"/>	Sector merge Jan-Jun 36US1			i	Excluding sector beis from mrggrid
24	<input type="checkbox"/>	Sector merge Jan-Jun 36US1	set_months_v3.csh		i	Running set_months
25	<input type="checkbox"/>	Sector merge Jan-Jun 36US1			i	Submitted job to amber.nesc.epa.gov
26	<input type="checkbox"/>	Sector merge Jan-Jun 36US1			i	
27	<input type="checkbox"/>	Sector merge Jan-Jun 36US1	smk_sectormerge_emf.csh		i	Running top level script for job: Secto

27 rows : 11 columns: 0 Selected [Filter: None, Sort: Received Date(-)]

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SummaryJobsInputsParametersOutputsHistory

Job: Annual afdust 12EUS1

#	Select	Job	Exec. Name	Period	Type	
1	<input type="checkbox"/>	Annual afdust 12EUS1			i	Completed job: Annual_afdust_12EUS1
2	<input type="checkbox"/>	Annual afdust 12EUS1		mar_2005	i	Running SMOKE steps for month mar
3	<input type="checkbox"/>	Annual afdust 12EUS1		2005	i	Running SMOKE steps for one-time steps
4	<input type="checkbox"/>	Annual afdust 12EUS1	set_months_v3.csh		i	Running set_months
5	<input type="checkbox"/>	Annual afdust 12EUS1			i	
6	<input type="checkbox"/>	Annual afdust 12EUS1			i	Submitted job to amber.nesc.epa.gov. Executi
7	<input type="checkbox"/>	Annual afdust 12EUS1	smk_ar_annual_emf.csh		i	Running top level script for job: Annual_afdust

7 rows : 11 columns: 0 Selected [Filter: None, Sort: Received Date(-)]

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Outputs

Below are screenshots of the expected outputs from each of the 9 Jobs:

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Summary Jobs Inputs Parameters **Outputs** History

Job: Annual ag 36US1

#	Select	Output name	Job	Sector	Dataset Name
1	<input type="checkbox"/>	county Smkreport ag	Annual ag 36US1	ag	rep_ag_2005ak_test_inv_county
2	<input type="checkbox"/>	county/SCC Smkreport ag (External)	Annual ag 36US1	ag	rep_ag_inv_county_scc_2005ak_test (External)
3	<input type="checkbox"/>	grid cell Smkreport ag (External)	Annual ag 36US1	ag	rep_ag_invgrid_cell_36US1_2005ak_test (External)
4	<input type="checkbox"/>	grid cell w/county Smkreport ag (External)	Annual ag 36US1	ag	rep_ag_invgrid_cell_county_36US1_2005ak_test (External)
5	<input type="checkbox"/>	Level 1 log summary ag_2005ak_test_36US1	Annual ag 36US1	ag	rep_logs_ag_2005ak_test_36US1_level1
6	<input type="checkbox"/>	state Smkreport ag	Annual ag 36US1	ag	rep_ag_2005ak_test_inv_state
7	<input type="checkbox"/>	state w/gridding Smkreport ag (External)	Annual ag 36US1	ag	rep_ag_invgrid_state_grid_36US1_2005ak_test (External)
8	<input type="checkbox"/>	state/SCC Smkreport ag	Annual ag 36US1	ag	rep_ag_2005ak_test_inv_state_scc
9	<input type="checkbox"/>	state/SCC/Srgcode Smkreport ag	Annual ag 36US1	ag	rep_ag_2005ak_test_invgrid_state_scc_srgid_36US1
10	<input type="checkbox"/>	state/SIC Smkreport ag (External)	Annual ag 36US1	ag	rep_ag_inv_state_sic_2005ak_test (External)
11	<input type="checkbox"/>	Timelog ag_2005ak_test_36US1 (External)	Annual ag 36US1	ag	SMOKE timelog ag_2005ak_test_36US1

11 rows : 11 columns: 0 Selected [Filter: None, Sort: Sector(+), Output name(+), Job(+)]

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Summary Jobs Inputs Parameters **Outputs** History

Job: Annual alm_no_c3 36US1

#	Select	Output name	Job	Sector	Dataset Name
1	<input type="checkbox"/>	county Smkreport alm_no_c3	Annual alm_no_c3 36US1	alm_no_c3	rep_alm_no_c3_2005ak_test_inv_county
2	<input type="checkbox"/>	county/SCC Smkreport alm_no_c3 (External)	Annual alm_no_c3 36US1	alm_no_c3	rep_alm_no_c3_inv_county_scc_2005ak_test (External)
3	<input type="checkbox"/>	grid cell Smkreport alm_no_c3 (External)	Annual alm_no_c3 36US1	alm_no_c3	rep_alm_no_c3_invgrid_cell_36US1_2005ak_test (External)
4	<input type="checkbox"/>	grid cell w/county Smkreport alm_no_c3 (External)	Annual alm_no_c3 36US1	alm_no_c3	rep_alm_no_c3_invgrid_cell_county_36US1_2005ak_test (External)
5	<input type="checkbox"/>	Level 1 log summary alm_no_c3_2005ak_test_36US1	Annual alm_no_c3 36US1	alm_no_c3	rep_logs_alm_no_c3_2005ak_test_36US1_level1
6	<input type="checkbox"/>	state Smkreport alm_no_c3	Annual alm_no_c3 36US1	alm_no_c3	rep_alm_no_c3_2005ak_test_inv_state
7	<input type="checkbox"/>	state w/gridding Smkreport alm_no_c3 (External)	Annual alm_no_c3 36US1	alm_no_c3	rep_alm_no_c3_invgrid_state_grid_36US1_2005ak_test (External)
8	<input type="checkbox"/>	state/SCC Smkreport alm_no_c3	Annual alm_no_c3 36US1	alm_no_c3	rep_alm_no_c3_2005ak_test_inv_state_scc
9	<input type="checkbox"/>	state/SCC/PM25 profile Smkreport alm_no_c3	Annual alm_no_c3 36US1	alm_no_c3	rep_alm_no_c3_2005ak_test_inv_state_scc_pm25profile
10	<input type="checkbox"/>	state/SCC/Srgcode Smkreport alm_no_c3	Annual alm_no_c3 36US1	alm_no_c3	rep_alm_no_c3_2005ak_test_invgrid_state_scc_srgid
11	<input type="checkbox"/>	state/SCC/VOC profile Smkreport alm_no_c3	Annual alm_no_c3 36US1	alm_no_c3	rep_alm_no_c3_2005ak_test_inv_state_scc_vocprofile
12	<input type="checkbox"/>	state/SIC Smkreport alm_no_c3 (External)	Annual alm_no_c3 36US1	alm_no_c3	rep_alm_no_c3_inv_state_sic_2005ak_test (External)
13	<input type="checkbox"/>	Timelog alm_no_c3_2005ak_test_36US1 (External)	Annual alm_no_c3 36US1	alm_no_c3	SMOKE timelog alm_no_c3_2005ak_test_36US1

13 rows : 11 columns: 0 Selected [Filter: None, Sort: Sector(+), Output name(+), Job(+)]

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Summary Jobs Inputs Parameters **Outputs** History

Job: Annual afdust 36US1

#	Select	Output name	Job	Sector	Dataset Name
1	<input type="checkbox"/>	AQM-ready data afdust	Annual afdust 36US1	afdust	Model-ready CMAQ afdust 2005ak_test
2	<input type="checkbox"/>	county Smkreport afdust	Annual afdust 36US1	afdust	rep_afdust_2005ak_test_inv_county
3	<input type="checkbox"/>	county/SCC Smkreport afdust (External)	Annual afdust 36US1	afdust	rep_afdust_inv_county_scc_2005ak_test (External)
4	<input type="checkbox"/>	grid cell Smkreport afdust (External)	Annual afdust 36US1	afdust	rep_afdust_invgrid_cell_36US1_2005ak_test (External)
5	<input type="checkbox"/>	grid cell w/county Smkreport afdust (External)	Annual afdust 36US1	afdust	rep_afdust_invgrid_cell_county_36US1_2005ak_test (External)
6	<input type="checkbox"/>	Level 1 log summary afdust_2005ak_test_36US1	Annual afdust 36US1	afdust	rep_logs_afdust_2005ak_test_36US1_level1
7	<input type="checkbox"/>	state Smkmerge afdust (External)	Annual afdust 36US1	afdust	Smkmerge afdust 2005ak_test state reports
8	<input type="checkbox"/>	state Smkreport afdust	Annual afdust 36US1	afdust	rep_afdust_2005ak_test_inv_state
9	<input type="checkbox"/>	state totals afdust_2005ak_test_36US1	Annual afdust 36US1	afdust	annual_2005ak_test_afdust_36US1_cmaq_cb05_soa_emf.csv
10	<input type="checkbox"/>	state w/gridding Smkreport afdust (External)	Annual afdust 36US1	afdust	rep_afdust_invgrid_state_grid_36US1_2005ak_test (External)
11	<input type="checkbox"/>	state/MACT Smkreport afdust (External)	Annual afdust 36US1	afdust	rep_afdust_inv_state_mact_2005ak_test (External)
12	<input type="checkbox"/>	state/NAICS Smkreport afdust (External)	Annual afdust 36US1	afdust	rep_afdust_inv_state_naics_2005ak_test (External)
13	<input type="checkbox"/>	state/SCC Smkreport afdust	Annual afdust 36US1	afdust	rep_afdust_2005ak_test_inv_state_scc
14	<input type="checkbox"/>	state/SCC/PM25 profile Smkreport afdust	Annual afdust 36US1	afdust	rep_afdust_2005ak_test_inv_state_scc_pm25prof
15	<input type="checkbox"/>	state/SCC/Srgcode Smkreport afdust	Annual afdust 36US1	afdust	rep_afdust_2005ak_test_invgrid_state_scc_srgid_36US1
16	<input type="checkbox"/>	state/SIC Smkreport afdust (External)	Annual afdust 36US1	afdust	rep_afdust_inv_state_sic_2005ak_test (External)
17	<input type="checkbox"/>	Timelog afdust_2005ak_test_36US1 (External)	Annual afdust 36US1	afdust	SMOKE timelog afdust_2005ak_test_36US1

17 rows : 11 columns: 0 Selected [Filter: None, Sort: Sector(+), Output name(+), Job(+)]

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Summary Jobs Inputs Parameters **Outputs** History

Job: Annual ptfire onetime steps 36US1

#	Select	Output name	Job	Sector	Dataset Name
1	<input type="checkbox"/>	Level 1 log summary ptfire_2005ak_test_36US1_onetime	Annual ptfire onetime steps 36US1	ptfire	rep_logs_ptfire_2005ak_test_36US1_onetime
2	<input type="checkbox"/>	Timelog ptfire_2005ak_test_36US1_onetime (External)	Annual ptfire onetime steps 36US1	ptfire	SMOKE timelog ptfire_2005ak_test_36US1_or

2 rows : 11 columns: 0 Selected [Filter: None, Sort: Sector(+), Output name(+), Job(+)]

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Summary Jobs Inputs Parameters **Outputs** History

Job: Daily ptfire Q1 36US1

#	Select	Output name	Job	Sector	Dataset
1	<input type="checkbox"/>	Level 1 log summary ptfire_2005ak_test_36US1_q1	Daily ptfire Q1 36US1	ptfire	rep_logs_ptfire_2005ak_test_36US1
2	<input type="checkbox"/>	Timelog ptfire_2005ak_test_36US1_q1 (External)	Daily ptfire Q1 36US1	ptfire	SMOKE timelog ptfire_2005ak_test_3

2 rows : 11 columns: 0 Selected [Filter: None, Sort: Sector(+), Output name(+), Job(+)]

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Summary Jobs Inputs Parameters **Outputs** History

Job: Annual ptnonipm onetime steps 36US1

#	Select	Output name	Job	Sector	Dataset
1	<input type="checkbox"/>	county Smkreport ptnonipm	Annual ptnonipm onetime steps 36US1	ptnonipm	rep_ptnonipm_2005ak_test_inv_cour
2	<input type="checkbox"/>	county/plant/ORIS Smkreport ptnonipm (External)	Annual ptnonipm onetime steps 36US1	ptnonipm	rep_ptnonipm_inv_plant_oris_2005a
3	<input type="checkbox"/>	county/SCC Smkreport ptnonipm (External)	Annual ptnonipm onetime steps 36US1	ptnonipm	rep_ptnonipm_inv_county_scc_2005a
4	<input type="checkbox"/>	grid cell Smkreport ptnonipm (External)	Annual ptnonipm onetime steps 36US1	ptnonipm	rep_ptnonipm_invgrid_cell_36US1_2
5	<input type="checkbox"/>	grid cell w/county Smkreport ptnonipm (External)	Annual ptnonipm onetime steps 36US1	ptnonipm	rep_ptnonipm_invgrid_cell_county_36
6	<input type="checkbox"/>	Level 1 log summary ptnonipm_2005ak_test_36US1_onetime	Annual ptnonipm onetime steps 36US1	ptnonipm	rep_logs_ptnonipm_2005ak_test_36
7	<input type="checkbox"/>	plant/cell Smkreport ptnonipm (External)	Annual ptnonipm onetime steps 36US1	ptnonipm	rep_ptnonipm_invgrid_plant_cell_36
8	<input type="checkbox"/>	state Smkreport ptnonipm	Annual ptnonipm onetime steps 36US1	ptnonipm	rep_ptnonipm_2005ak_test_inv_state
9	<input type="checkbox"/>	state w/gridding Smkreport ptnonipm (External)	Annual ptnonipm onetime steps 36US1	ptnonipm	rep_ptnonipm_invgrid_state_grid_36
10	<input type="checkbox"/>	state/MACT Smkreport ptnonipm (External)	Annual ptnonipm onetime steps 36US1	ptnonipm	rep_ptnonipm_inv_state_mact_2005a
11	<input type="checkbox"/>	state/NAICS Smkreport ptnonipm (External)	Annual ptnonipm onetime steps 36US1	ptnonipm	rep_ptnonipm_inv_state_naics_2005
12	<input type="checkbox"/>	state/SCC Smkreport ptnonipm	Annual ptnonipm onetime steps 36US1	ptnonipm	rep_ptnonipm_2005ak_test_inv_state
13	<input type="checkbox"/>	state/SCC/PM25 profile Smkreport ptnonipm	Annual ptnonipm onetime steps 36US1	ptnonipm	rep_ptnonipm_2005ak_test_inv_state
14	<input type="checkbox"/>	state/SCC/VOC profile Smkreport ptnonipm	Annual ptnonipm onetime steps 36US1	ptnonipm	rep_ptnonipm_2005ak_test_inv_state
15	<input type="checkbox"/>	state/SIC Smkreport ptnonipm (External)	Annual ptnonipm onetime steps 36US1	ptnonipm	rep_ptnonipm_inv_state_sic_2005ak
16	<input type="checkbox"/>	Timelog ptnonipm_2005ak_test_36US1_onetime (External)	Annual ptnonipm onetime steps 36US1	ptnonipm	SMOKE timelog ptnonipm_2005ak_te

16 rows : 11 columns: 0 Selected [Filter: None, Sort: Sector(+), Output name(+), Job(+)]

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Summary Jobs Inputs Parameters **Outputs** History

Job: Annual ptnonipm Q1 36US1

#	Select	Output name	Job	Sector	Dataset
1	<input type="checkbox"/>	Level 1 log summary ptnonipm_2005ak_test_36US1_q1	Annual ptnonipm Q1 36US1	ptnonipm	rep_logs_ptnonipm_2005ak_test_36US1_q1
2	<input type="checkbox"/>	Timelog ptnonipm_2005ak_test_36US1_q1 (External)	Annual ptnonipm Q1 36US1	ptnonipm	SMOKE timelog ptnonipm_2005ak_test_36US1_q1

2 rows : 11 columns: 0 Selected [Filter: None, Sort: Sector(+), Output name(+), Job(+)]

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Summary Jobs Inputs Parameters **Outputs** History

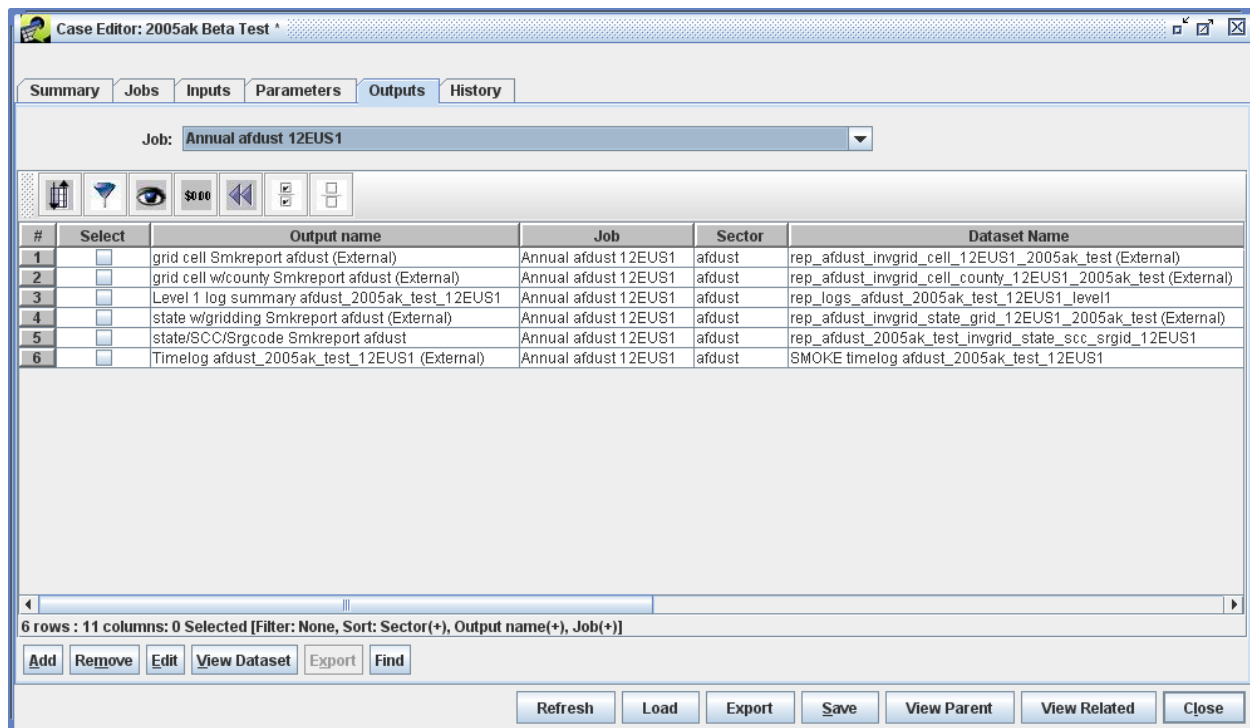
Job: Sector merge Jan-Jun 36US1

#	Select	Output name	Job	Sector	Dataset
1	<input type="checkbox"/>	AQM-ready data 36US1	Sector merge Jan-Jun 36US1	mrgrid	Model-ready CMAQ 2005ak_test_36US1
2	<input type="checkbox"/>	Level 1 log summary mrgrid_2005ak_test_36US1	Sector merge Jan-Jun 36US1	mrgrid	rep_logs_mrgrid_2005ak_test_36US1
3	<input type="checkbox"/>	Timelog mrgrid_2005ak_test_36US1 (External)	Sector merge Jan-Jun 36US1	mrgrid	SMOKE timelog mrgrid_2005ak_test_36US1

3 rows : 11 columns: 0 Selected [Filter: None, Sort: Sector(+), Output name(+), Job(+)]

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Trouble Shooting

If a Job fails (i.e., **Run Status** is "Failed") or did not produce the expected Outputs, the first place to look is in the History tab of the Case. For some errors, the EMF wrapper scripts will send back meaningful error messages.

If the History doesn't adequately diagnose the problem, look at the EMF Job log file corresponding to the specific run (Note: Each run of a Job is distinct and has a unique timestamp in the name). Think of these Job logs as the stdout/stderr from a SMOKE run. This is a good place to diagnose both script errors and SMOKE executable errors. The Job log file is located in (using our directory structure):

```
/data4/smoke_emf/subsys26/smoke26/scripts/cases/2005ak_test/logs
```

If a Job has been run more than once, older Job logs will be located in:

```
/data4/smoke_emf/subsys26/smoke26/scripts/cases/2005ak_test/old_logs
```

Another resource for identifying SMOKE errors is the "Level 1 log summary <Job name>" Output. This Job specific dataset summarizes the warnings and errors from all the SMOKE logs. For more information on this Output, see the README under:

```
/data4/smoke_emf/subsys26/smoke26/scripts/log_analyzer
```

As with earlier Cases, other possible errors are a mismatch of the EMF client user and the SMOKEserver user and too restrictive permissions for the various SMOKE directories or files (see [Directory Permissions](#)).