**IWDW modeling platform status**

Status = no data; in progress; under review; available; see link; awaiting transfer to DW

Revise to: no data; under review; available (handle other status flags in notes)

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| **2008b** |  | Description/Notes | Status | Date | viking |
| 1. Modeling software | WRF v3.3.1 |  | -not mapped  No data |  |  |
|  | ~~SMOKE Scripts and Executables~~  SMOKE v3.5.1 | SMOKE Scripts and Executables | Available |  | /data1/3SDW/3SAQS/2008/Base08b/EMIS/software |
|  | CAMx v5.4.1 |  | -not mapped  Available |  | /data1/…/2008/Base08b/AQ/CAMx/software |
|  |  |  |  |  |  |
| 2. Emissions Data | ~~Emissions Input Files~~  Base08b Inputs |  | Available |  | /data1/…/2008/Base08b/EMIS/inputs |
|  | Base08b Premerged |  | -not mapped  Available |  | /data1/…/2008/Base08b/EMIS/premerged |
|  | Base08b CAMx |  | -not mapped  Available |  | /data1/…/2008/Base08b/EMIS/CAMx/  /elev/ /low\_12km/ /low\_36km/  /no\_OG/… /elev/ /low\_12km/ /low\_36km/ |
|  | Base20a\_08  inputs |  | -not mapped  Available |  | /data2/…/2008/Base2020\_08a/EMIS/inputs/  3SAQS\_Base20a\_08\_EmissionsData\_21Aug2014.tar.gz |
|  | Base20a\_08  premerged |  | -not mapped  Available |  | /data2/…/2008/Base2020\_08a/EMIS/premerged/ |
|  | Base20a\_08  CAMx | comment | -not mapped  Available |  | /data2/…/2008/Base2020\_08a/EMIS/CAMx/  /elev/ /low\_12km/ /low\_36km/ |
|  |  |  |  |  |  |
| 3.Meteorology Data | WRF | 12km and 36km files available on ftp for JJA. Other months on backup disk. | -not mapped  Available |  | /data1/3SDW/WestJumpAQMS/WRF/12\_36 / |
|  | Base 2008b CAMx | Description: Met files processed for CAMx with WRFCAMx  Notes: updates to zp, cr files | Available |  | /data1/3SDW/3SAQS/2008/Base08b/MET/WRFCAMx/  /12km/ /36km/  /updates\_from\_envirion/12km/  camx.zp.westjump.12km.25lay.20080410.gmt.bin.a0.gz  /updates\_from\_envirion/36km/  camx.cr.westjump.36km.25lay.20071221.gmt.bin.a0.gz  -to-  camx.cr.westjump.36km.25lay.20081230.gmt.bin.a0.gz |
|  |  |  |  |  |  |
| 4. Initial and Boundary Conditions | Base08b | Use for base and future projections | -not mapped  Available |  | /data1/…/2008/Base08b/AQ/CAMx/inputs/icbc/  bc.westjump.36km.cb05.20071222.gmt.bin |
|  |  |  |  |  |  |
| 5. Other Input Data | Chemistry parameters | Use for base and future projections | -not mapped  Available |  | /data1/…/2008/Base08b/AQ/CAMx/inputs/chem/  CAMx5.4.chemparam.6\_CF |
|  | landuse | Use for base and future projections | -not mapped  Available |  | /data1/…/2008/Base08b/AQ/CAMx/inputs/landuse/merge\_lai\_lulc |
|  | O3 columns | Use for base and future projections | -not mapped  Available |  | /data1/…/2008/Base08b/AQ/CAMx/inputs/ahomap/  ahoz.westjump\_3612km.200712.snow\_fix.hazadj.txt |
|  | Total UV columns | Use for base and future projections | -not mapped  Available |  | /data1/…/2008/Base08b/AQ/CAMx/inputs/tuv/  tuv.westjump\_3612km.do\_CB05.200712 |
|  |  |  |  |  | /data1/…/2008/Base08b/AQ/CAMx/inputs/emis/ |
|  |  |  |  |  | /data1/…/2008/Base08b/AQ/CAMx/inputs/met/12km/zp  camx.zp.westjump.12km.25lay.20071216.gmt.bin.a0 |
|  |  |  |  |  | /data1/…/2008/Base08b/AQ/CAMx/inputs/met/36km/ |
|  |  |  |  |  |  |
| 6. Model Performance | AQ MPE report |  | Available |  | 3SAQS\_Base08b\_MPE\_Final\_30Sep2014.pdf |
|  | AQ obs |  | See link |  | http://vibe.cira.colostate.edu/wiki/wiki/1055/monitoring |
|  | Evaluation glossary |  | See link |  | <http://vibe.cira.colostate.edu/wiki/wiki/2076> |
|  | Met MPE report |  | Available |  |  |
|  | Emissions |  | -not mapped  Available |  | 3SAQS\_Emissions\_Modeling\_Report\_v18Feb2015\_Final.pdf |
|  |  |  |  |  |  |
| 7. Output Data | Base11a CAMx |  | Available |  | /data1/3SDW/3SAQS/2008/Base08b/AQ/CAMx |
|  | Base20b\_08 CAMx |  | -not mapped  Available |  | /data2/3SDW/3SAQS/2008/Base2020\_08a/AQ/CAMx |
|  |  |  |  |  |  |
| etc. |  |  |  |  | /3SDW/3SAQS/2008/BaseO8b/.. |

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| **2011a** |  | Description/Notes | Status | Date | viking |
| 1. Modeling software | CAMx v6.10 |  | Available |  | /Base11a/AQ/CAMx/software/ |
|  | CMAQ 5.0.2 |  | No data |  |  |
|  | SMOKE 3.5.1 |  | No data  Available |  | /Base11a/EMIS/software/  3SAQS\_Base11a\_emisutil\_12Nov2014.tar.gz  3SAQS\_Base11a\_SMOKE\_05Aug2015.tar.gz |
|  | WRF 3.5.1 |  | No data |  |  |
|  |  |  |  |  |  |
| 2. Emissions Data | Base 11a Inputs |  | -unmapped  Available |  | /2011/Base11a/EMIS/inputs  3SAQS\_Base11a\_EmissionsData\_12Nov2014.tar.gz |
|  | Base 11a Premerged ~~emissions~~ | ~~unknown~~ | Available |  | /2011/Base11a/EMIS/premerged  /4km/ /12km/ /36km/ /natural/ |
|  | ~~Emissions 2011a CAMx~~  Base 2011a CAMx | Description: 2011 emissions data prepared for CAMx ~~and CMAQ~~ with SMOKE.  Notes: 10.19.2015 - Updated 2011a model-ready CAMx emissions to correct onroad mobile NOx speciation. Incorrect NOx speciation profiles were applied to the Base 2011a onroad mobile emissions resulting in NO emissions that were 15-20% too high. Version 2 of these emissions corrects this error by normalizing the NO and HONO emissions for onroad mobile sources by the molecular weight of NO2.  comment | Available |  | /Base11a/EMIS/CAMx/  /elev/ /low\_4km/ /low\_12km/ /low\_36km/  V2 files:  3SAQS36km.low.base11a\_v2.finals.tar.gz, 3SAQS12km.low.base11a\_v2.finals.tar.gz, and 3SAQS4km.low.base11a\_v2.finals.tar.gz  Add species mapping scripts and source?:  camx2cmaq\_3saqs\_b11a.tar.gz |
|  | ~~Emissions v2011a CMAQ~~  Base 2011a CMAQ | Description: 2011 emissions data prepared for CMAQ with SMOKE.  Notes: 10.19.2015 - CMAQ-ready 4km files with seasalt SO4 emissions removed and MOVES NO molecular weight correction. The previous file will double count sea salt SO4 if the CMAQ in-line seasalt option is used. Since in-line seasalt is the standard approach for running CMAQ, we chose to update the emissions files to remove marine SO4 even though it’s a small source | ~~Awaiting transfer to warehouse~~  Available |  | /Base11a/EMIS/CMAQ/  Files updated on 10.19.2015:  3SAQS4km.abmp\_noSS.base11a.cmaq.tar.gz |
|  | Base20a\_11  Inputs | comment | -not mapped  Available |  | /2011/Base2020a\_11/EMIS/inputs/  3SAQS\_Base2020a\_11\_EmissionsData\_29Jan2015.tar.gz |
|  | Base20a\_1  premerged |  | -not mapped  Available |  | /2011/Base2020a\_11/EMIS/premerged/  /4km/ /12km/ /36km/ |
|  | ~~Emissions v2020a\_11~~  Projections 2020a\_11 CAMx | 2020 emissions data prepared for CAMx with SMOKE  2011a emissions projected to 2020 and prepared for CAMx with SMOKE (say something about how O&G sectors were handled) | -unmapped  Available |  | /2011/Base2020a\_11/EMIS/CAMx/  /elev/ /low\_4km/ /low\_12km/ /low\_36km/ |
|  | Projections 2020a\_11 CMAQ | CMAQ model-ready emissions projections will not be provided in the 2011a modeling platform | -not mapped  No data |  |  |
|  |  |  |  |  |  |
| 3.Meteorology Data | ~~Meteorology v~~2011a WRF ~~Output~~ |  | Available |  | /Base11a/MET/WRF/ |
|  | ~~Meteorology~~ ~~v~~2011a CAMx | Model-ready WRF output prepared for CAMx using WRFCAMx  comment | Available |  | /Base11a/MET/WRFCAMx/ |
|  | ~~Meteorology~~ ~~v~~2011a CMAQ | WRF output processed using MCIP  Notes: On 10/22/2015 the 36km tar files were updated with 25 layer 3d files | Available |  | /Base11a/MET/MCIP |
|  |  |  |  |  |  |
| 4. Initial and Boundary Conditions | MOZART ICBCs CAMx | Description: 2011 Initial/Boundary Conditions from NOAA global GEOS5 MOZART simulations; prepared for CAMx with MZ2CAMx  Notes: Fine and coarse mode dust capped at 10 ug/m3 and sea salt removed to mitigate CAMx total PM2.5 model performance problems. See the wiki for details.  comment | Available |  | /Base11a/AQ/CAMx/inputs/icbc/mozart |
|  | GEOS-Chem ICBCs CAMx |  | Available |  | /Base11a/AQ/CAMx/inputs/icbc/geoschem |
|  | AM3 |  | -not mapped  No data |  |  |
|  |  | ICBCs for CMAQ, projections? |  |  |  |
|  |  |  |  |  |  |
| 5. Other Input Data | Chemistry parameters | Also use for CMAQ, projections? | Available |  | /Base11a/AQ/CAMx/inputs/chem |
|  | landuse |  | Available |  | /Base11a/AQ/CAMx/inputs/landuse |
|  | O3 columns |  | Available |  | /Base11a/AQ/CAMx/inputs/ahomap |
|  | Total UV columns |  | Available |  | /Base11a/AQ/CAMx/inputs/tuv |
|  |  |  |  |  | /Base11a/AQ/CAMx/inputs/met  wrfcamx4.0.3SAQS\_2011a.g04km.2010350.tar.gz |
|  |  |  |  |  |  |
| 6. Model Performance | AQ MPE report |  | Available |  | 3SAQS\_Base11a\_MPE\_Draft\_10Nov2014.docx  Replace with:  3SAQS\_Base11a\_MPE\_Final\_18Jun2015.pdf |
|  | AQ obs |  | See link |  | http://vibe.cira.colostate.edu/wiki/wiki/1055/monitoring |
|  | Evaluation glossary |  | See link |  | <http://vibe.cira.colostate.edu/wiki/wiki/2076> |
|  | Met MPE report |  | Available |  | 3SAQS\_2011\_WRF\_MPE\_v05Mar2015.pdf |
|  | Emissions |  | -not mapped  Available |  | 3SAQS\_Emissions\_Modeling\_Report\_v18Feb2015\_Final.pdf |
|  |  |  |  |  |  |
| 7. Output Data | CAMx Base11a\_AM3BC |  | In progress  No data |  |  |
|  | CAMx Base11a\_GCBC | Sensitivity study using GEOS-Chem boundary conditions. | In progress  No data |  |  |
|  | CAMx Base11a\_MZBC |  | ~~In progress~~  Available |  | /data1/3SDW/3SAQS/2011/Base11a/AQ/CMAQ/output/  /data2/3SDW/3SAQS/2011/Base11a/AQ/CAMx/output/  /36km/ /12km/ /4km/  /combine/  /compressed/  /logs/ |
|  | CAMx Base20a\_11 MZBC | Attainment Test (need better description) | ~~In progress~~  Available |  | /2011/Base2020a\_11/AQ/CAMx/output/  36\_12\_4km/  Combine/ |
|  | CMAQ Base11a\_GCBC |  | ~~In progress~~  No data |  |  |

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| **2011b** |  | Description/Notes | Status | Date | viking |
| 1. Modeling software | WRF 3.5.1 | Same as 2011a |  |  | Link to 2011a WRF source code |
|  | WRF 3.5.1 | Source code used for winter O3 modeling | In Progress |  |  |
|  | SMOKE 3.5.1 |  | In Progress  Available |  | /2011/Base11b/EMIS/software/  WAQS\_Base11b\_emisutil\_20Sep2015.tar.gz  WAQS\_Base11b\_SMOKE\_20Sep2015.tar.gz |
|  | CAMx v6.10 |  | In Progress |  |  |
|  | CMAQ 5.0.2 |  | -not mapped  No data |  |  |
|  |  |  |  |  |  |
| 2. Emissions Data | Inputs |  | -not mapped  Available |  | /2011/Base11b/EMIS/inputs/  WAQS\_Base11b\_EmissionsData\_20Sep2015.tar.gz |
|  | Premerged |  | -unmapped  Available |  | /2011/Base11b/EMIS/premerged/ |
|  | ~~Emissions v2011b~~ 2011b CAMx | Merged and processed for CAMx using cb6 mechanism | Under Review  Available |  | /2011/Base11b/EMIS/CAMx/  WAQS12km.low.3SAQS\_base11b.cb6.camx.tar.gz |
|  | ~~Emissions v2011b~~ 2011b CMAQ |  | No data |  |  |
|  | 2020 projections CAMx |  | -not mapped  No data |  |  |
|  | 2020 projections CMAQ | note | -not mapped  No data |  |  |
|  |  |  |  |  |  |
| 3.Meteorology Data | WRF | Same as 2011a | -not mapped  Available |  | Link to 2011a WRF output |
|  | WRF Winter O3 | WRF simulation configured with WRF-SNODAS to improve winter meteorology related to cold pool formation. Includes files for:   * 30 Nov. 2010 – 31 Mar. 2011 * 2011-2012 winter * 30 Nov. 2012 – 31 Mar. 2013 | -not mapped  Available |  | /2011/Base11b/MET/WinterO3/WRF/ |
|  | ~~Meteorology v2011b~~  CAMx | 2011 meteorology data estimated with WRF and prepared for CAMx with WRFCAMx | Under Review |  | ~~/2011/Base11b/MET/WinterO3/WRF~~ |
|  | CMAQ |  | -not mapped  Not available |  | /MCIP/ |
|  |  |  |  |  |  |
| 4. Initial and Boundary Conditions | ~~MOZART ICBCs~~  CAMx | notes | Under review  Available |  | /2011/Base11b/AQ/CAMx/inputs/icbc |
|  | CMAQ |  | -not mapped  No data |  |  |
|  |  |  |  |  |  |
| 5. Other Input Data | Chemistry parameters |  | No data |  |  |
|  | landuse |  | No data |  |  |
|  | O3 columns |  | No data |  |  |
|  | Total UV columns |  | No data |  |  |
|  |  |  |  |  |  |
| 6. Model Performance | Evaluation glossary | Missing description | See link |  |  |
|  | AQ observations |  | See link |  |  |
|  | Met MPE report |  | See link |  |  |
|  | Emissions |  | -unmapped |  |  |
|  | AQ MPE report |  | In progress |  |  |
|  |  |  |  |  |  |
| 7. Output data | CAMx Base11b | Output data from a 2011 36/12/4-km domain CAMx simulation with MOZAT BCs  Wiki | In progress  No data |  | /2011/Base11b/AQ/CAMx/output/  Incomplete file transfer, 7.5kb total files? |
|  | CAMx Base20b\_11 |  |  |  | /2011/Base2020a\_11/AQ/CAMx/output/  36\_12\_4km/  Combine/ |
|  | CMAQ Base11b |  | In progress  No data |  |  |
|  | CMAQ Base20b\_11 |  | -not mapped  No data |  |  |