From: Possiel, Norm
To: Palma, Elizabeth
Subject: FOIA
Date: Wednesday, October 10, 2018 9:42:16 AM

-----Original Message-----
From: Gregory Stella [mailto:gms@alpinegeophysics.com]
Sent: Thursday, January 04, 2018 9:46 AM
To: Possiel, Norm <Possiel.Norm@epa.gov>
Cc: Gregory Stella <gms@alpinegeophysics.com>
Subject: Re: Alternate Source Contribution Method

Norm,

Happy New Year!

I was wondering if you all had given the below approach any more thought and had feedback on the process and if you all had run any of your own SA on the final CSAPR update platform that you could share with me. We are still processing the 2023en with OSAT and will be comparing results in the upcoming month.

Thanks in advance,

Greg

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On 11/17/2017 12:07 PM, Gregory Stella wrote:
> Norm,
>
> I confirm this method, by default configuration of SMAT-CE/MATS, would
> select the top 10 days used in the RRF from the 2011 baseline from max
> concentration grid cells in the 3x3.
>
> The contributions may or may not be derived from the grid cell
> containing the monitoring site. The selected days would now, however,
> be consistent with the days and grid cells from where the RRF values
> were selected.
>
> At this time, we've only applied this method in Denver (see:
> https://raqc.egnyte.com/dl/mImTUMw6d9/II.a_2017_Denver_Mod-Forum_Local-Source_2017-11-02v3.pdf_).
>
> When we apply the method to our upcoming 2023 GNS platform, we may
> include a water mask to compare results, as well as look at grid cell

> center results (1x1).
>
> At this time, we don't see reason to include any criteria for the
> future year predictions as this would be inconsistent with the DVf
> calculation that the resultant relative contribution metrics are
> applied (i.e., when OSAT results are scaled to the future year DVf in
> the end).
>
> Greg
>
>
> On 11/17/2017 10:35 AM, Possiel, Norm wrote:
>> Greg,
>>
>> Thanks for sending this along. Sounds like this approach uses the SA
>> outputs as a "control case" by subtracting the 2023 8-hour
>> contribution from the corresponding 2023 MDA8 value, and then this
>> difference is used as the "control case" input file when running
>> MATS/SMAT. In this approach the contributions that get used in the
>> calculations are those that occur on the top 10 days used in the RRF
>> calculations, and these contributions come from the grid cell that
>> had the 3x3 max MDA8 in 2011, right? Thus, depending on the spatial
>> distribution of the 2011 concentration predictions, the contributions
>> may or may not be derived from the grid cell containing the
>> monitoring site, right? Are you including a water mask to exclude
>> data in water grid cells from the 3x3 array for coastal monitors?
>> Do you include any criteria for the future year predictions to avoid
>> using contributions on future year days or in future year grid cells
>> that low concentrations?
>>
>> Norm
>>
>> -----Original Message-----
>> From: Gregory Stella [mailto:gms@alpinegeophysics.com]
>> Sent: Wednesday, November 08, 2017 8:15 AM
>> To: Possiel, Norm <Possiel.Norm@epa.gov>
>> Cc: Gregory Stella <gms@alpinegeophysics.com>
>> Subject: Alternate Source Contribution Method
>>
>> Norm,
>>
>> One of the methods we are using to calculate source contributions to
>> ozone DVs is consistent with the way we project future year ozone
>> Design Values. For example, if you have a 2011 CAMx modeling
>> platform and source apportionment for 2023 future year we do a three
>> step process to get a Source Group's (e.g., a State's anthropogenic
>> VOC and NOx
>> emissions) contribution to a 2023 ozone DV:
>>
>> 1. Use CAMx standard model output for 2011 and 2023 with the
>> MATS/SMAT tool to project current year (2009-2013) ozone DVs to 2023
>> ozone DVs.
>> 2. Subtract the Source Group’s 2023 ozone contribution from the CAMx
>> 2023 standard model ozone concentrations and rerun MATS/SMAT using the
>> 2011 base case and 2023 w/o Source Group’s ozone case to get ozone DVs.
>> 3. Difference in ozone DVs between 1. and 2. above is the Source Group’s
>> 2023 contribution to ozone DVs.

>>
>> The above can be used with APCA or OSAT as the ozone source
>> apportionment technique.
>>