# **Instructions for Launching Simulations**

### Please read before you begin:

- Please read all instructions before you begin the simulation
- There are **several time steps** in the RAC Primer Simulation, please pay attention to the Macro information when starting the simulation
  - You will be asked to play/pause at various time steps.

### I. Launch WES-2 Bridge

- 1. Method 1: Launch from menu (Figure 1)
  - a. Select the "Applications" menu.
  - b. Select "WDTD".
  - c. Select "WES-2 Bridge".

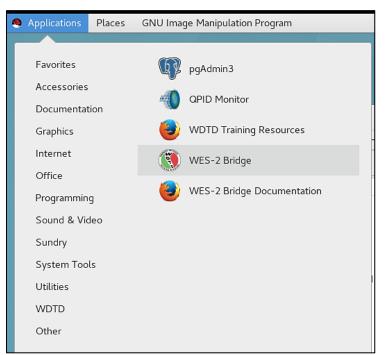


Figure 1. Launching WES-2 Bridge from the menu

### II. Check to see if the case is loaded

- 1. In the "WES II Bridge" window, find the case in the "Available Cases" tab. (i.e., likely titled "2020Apr12JAN\_Primer")
- 2. Check the case's status (Figure 2)
  - i. If status is "Not loaded", then proceed to Step III (Load Case).

ii. If status is "Loaded", note which EDEX is used for this case, then proceed to Step IV (Launch the Simulation).

	🦧 👉 🗟 🞯 🖓 🗖	
Path	Status	
/data1/wes_cases/2013May31_OUN_AFun_FY19	Not loaded	
/data1/wes_cases/2018Dec1ILX	Not loaded	
/data1/wes_cases/WOC-Winter-radar	Not loaded	
/data1/wes_cases/2019Apr30SGF	Not loaded	
/data1/wes_cases/2019May27ILN	Loaded	
/data1/wes_cases/2020Apr12JAN_Primer	Loaded	
	/data1/wes_cases/2013May31_OUN_AFun_FY19 /data1/wes_cases/2018Dec1ILX /data1/wes_cases/WOC-Winter-radar /data1/wes_cases/2019Apr30SGF /data1/wes_cases/2019May27ILN	

Figure 2. Available Cases tab, with case "loaded" (boxed in red)

iii. If status is "Loaded", note which EDEX is used for this case, then proceed to Step IV (Launch the Simulation).

#### III. Load the case

In the "Available Cases" tab, right-click the case name and click "Load Case" (Figure 3).

20190127_CYS_SnowSqu			/data1/wes_cases/20190127_CYS_SnowSquall	Loaded
24Feb2018_PAH	😭 Load Case	Shift+Ctrl+L	/data1/wes_cases/24Feb2018_PAH	Not loaded
GSP_Probsevere	Merge Case Load Case	Ctrl+M	(data1/wes_cases/GSP_Probsevere	Not loaded
Hydro Case WFO Hydro	Launch Script <u>B</u> uilder	Ctrl+B	/data1/wes_cases/KDMX_Hydro	Not loaded
IBW2020	😸 <u>U</u> nload Case	Ctrl+U	/data1/wes_cases/IBW2020	Not loaded
Local_Maps_test	💮 <u>D</u> elete Case	Ctrl+D	/data1/wes_cases/Local_Maps_test	Not loaded
LOT_Rochelle_Fairdale_1	Utilities	>	ata1/wes_cases/LOT_Rochelle_Fairdale_Tornado	Not loaded
PAHDataTest	Simulation	Shift+Ctrl+S	/data1/wes_cases/PAHDataTest	Not loaded
RLX_Flash		Shift+Ctrl+R	/data1/wes_cases/RLX_Flash	Not loaded
SDC2016lun23RLX	🕑 <u>R</u> eview	Shiit+Ctri+R	/data1/wes_cases/SDC2016lun23RLX	Not loaded

Figure 3. Right-click case name and select "Load Case"

a. If a window appears saying "All EDEXs are full" (Figure 4), click OK and unload a loaded case from your "Available Cases" list. Once you do this, try again to "Load Case", as described above.

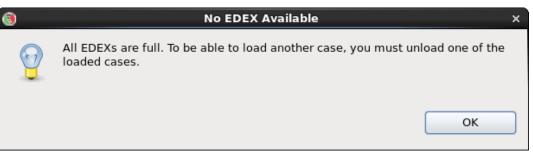


Figure 4. No EDEX Available window

- b. If a window appears saying "Do you want WES to start EDEX?" (Figure 5), click "Yes".
  - i. This will start an EDEX, and then open the "Load Case" tab.

۲	EDEX START CONFIRM	×
<b>?</b>	This EDEX instance EDEX_03 is not running. Do you want WES to start EDEX?	
	Yes No	

Figure 5. EDEX Start Confirm window

- Ensure all details are correct in the "Load Case" tab (Figure 6).
  a. Do NOT change the time window for loading the case!
- 3. Click "Load" (NOTE: it could take up to an hour to load, but normally it is much faster, about 15-30 minutes or so).

🔒 Load Case		
2020Apr12JAN_Prim	er	
Case Information		Load
Name and location of	the case.	
Case Location:	/data1/wes_cases/2020Apr12JAN_Primer	Add WFO
		Add Data Types
Case Name:	2020Apr12JAN_Primer	
Case Description:		1

Figure 6. Load Case window, with "Load" boxed in red

### IV. Launch the simulation

- 1. Once the case is done loading, the status will read "Loaded".
- 2. Right-click the case name again, and click "Simulation" (Figure 7).

20190127_CYS_Snow	😭 Load Case	Shift+Ctrl+L	/data1/wes_cases/20190127_CYS_SnowSquall	Loaded
24Feb2018_PAH	Merge Case	Ctrl+M	/data1/wes_cases/24Feb2018_PAH	Not loaded
GSP_Probsevere			/data1/wes_cases/GSP_Probsevere	Not loaded
Hydro Case WFO Hyd	Launch Script <u>B</u> uilder	Ctrl+B	/data1/wes_cases/KDMX_Hydro	Not loaded
IBW2020	₩ <u>U</u> nload Case	Ctrl+U	/data1/wes_cases/IBW2020	Not loaded
Local_Maps_test	🗑 <u>D</u> elete Case	Ctrl+D	/data1/wes_cases/Local_Maps_test	Not loaded
LOT_Rochelle_Fairdal	Utilities	>	/data1/wes_cases/LOT_Rochelle_Fairdale_Tornado	Not loaded
PAHDataTest	Simulation	Shift+Ctrl+S	/data1/wes_cases/PAHDataTest	Not loaded
RLX_Flash	Beview Simulation		/data1/wes_cases/RLX_Flash	Not loaded
SDC2016Jun23RLX			/data1/wes_cases/SDC2016Jun23RLX	Not loaded

Figure 7. Available Cases tab, with case being run as a "Simulation"

- 3. On the "Simulation" tab, click "Load Macro" (Figure 8).
  - i. You may need to scroll to the far right to see these buttons

Simulate
Save Macro
Load Macro
Reset
Reset Add WFO

Figure 8. "Load Macro" on the right side of the Simulation tab

4. In the Macro Selection GUI, choose the **Primer1** macro for the corresponding simulation application, and press OK (Figure 9).

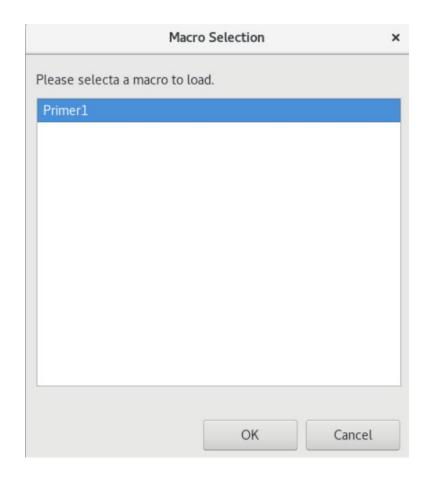


Figure 9. Macro Selection window

- 5. Using Table 1 and Figure 10, ensure all details are correct in the "Simulation" tab for the given simulation application, particularly:
  - i. Simulation Start 2020-04-12 1800
  - ii. Simulation End 2020-04-13 0000
- 6. Click "Simulate" (A pop-up window will appear, and CAVE will open). An "invalid localization" window may pop up saying the selected localization is invalid. Click Yes. A CAVE will pop up, along with a Sim Control.

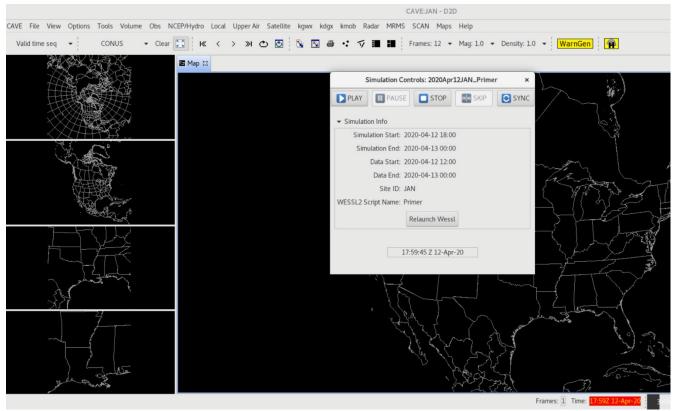


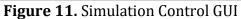
Figure 10. CAVE, WESSL and sim control window.

Simulation (Table 1)				
Macro	RAC Primer Macro			
Simulation Data Time Range	2020-04-12 18:00			
Start Date				
Simulation Data Time Range	2020-04-13 00:00			
End Date				
WESSL Script	None			

### V. Begin the simulation

- 1. Once CAVE has opened, find the Simulations Control GUI (Figure 11). <u>NOTE</u>: While this GUI is often covered by other windows that WES-2 Bridge opens, you can easily find it by clicking on its tab in the bottom panel of your desktop.
- 2. Click Simulate. The simulation will start out in a paused mode at 1759Z on April 12, 2020, as in Figure 11.

Simulation Controls: 2020Apr12JAN_Primer ×							
PLAY PAUSE STOP SKIP SYNC							
Simulation Start: 2020-04-12 18:00							
Simulation End: 2020-04-13 00:00							
Data Start: 2020-04-12 12:00							
Data End: 2020-04-13 00:00							
Site ID: JAN							
WESSL2 Script Name: Primer							
Relaunch Wessl							
17:59:45 Z 12-Apr-20							



## VI. [Simulation Application #2] Open a Text Workstation

- 1. In CAVE, open the "CAVE" menu.
- 2. Select "New".
- 3. Then select "Text Workstation" (Figure 12). <u>NOTE</u>: This MUST be opened in order to use WarnGen!

CAVE	<u>F</u> ile	View	Options	<u>T</u> ools	<u>V</u> olume	<u>O</u> bs	<u>N</u> CEP/	Hydro	Loc	al
					Clear 💽	<b>a</b> 1	// /	>	»	7
New				$\rightarrow$					<i>"</i> 1	`
Pers	pecti	ve		>	Map Pro	jectio	n			
Dat	a Brov	vsers		>	Editor		-			
Dat	a Deli	very		>	Text Wo	rkstat	ion 🔥		_	
Coll	abora	tion			Aviatior	ı	5			
conaboration										

Figure 12. Opening a new text workstation in CAVE