

Using VE-Builder with StarCD

1. Launch StarCD

2. Ensure that a *.vrt and *.cel file is written of the region of interest. This region can either be a complete CFD model or a subsection of the model.

3. Analyze data

4. Post-processing > Load data

4.1 In "File(s)" tab, click "open post file"

4.2 In "Data" tab:

--Scalar Data > Turb Kinetic Energy

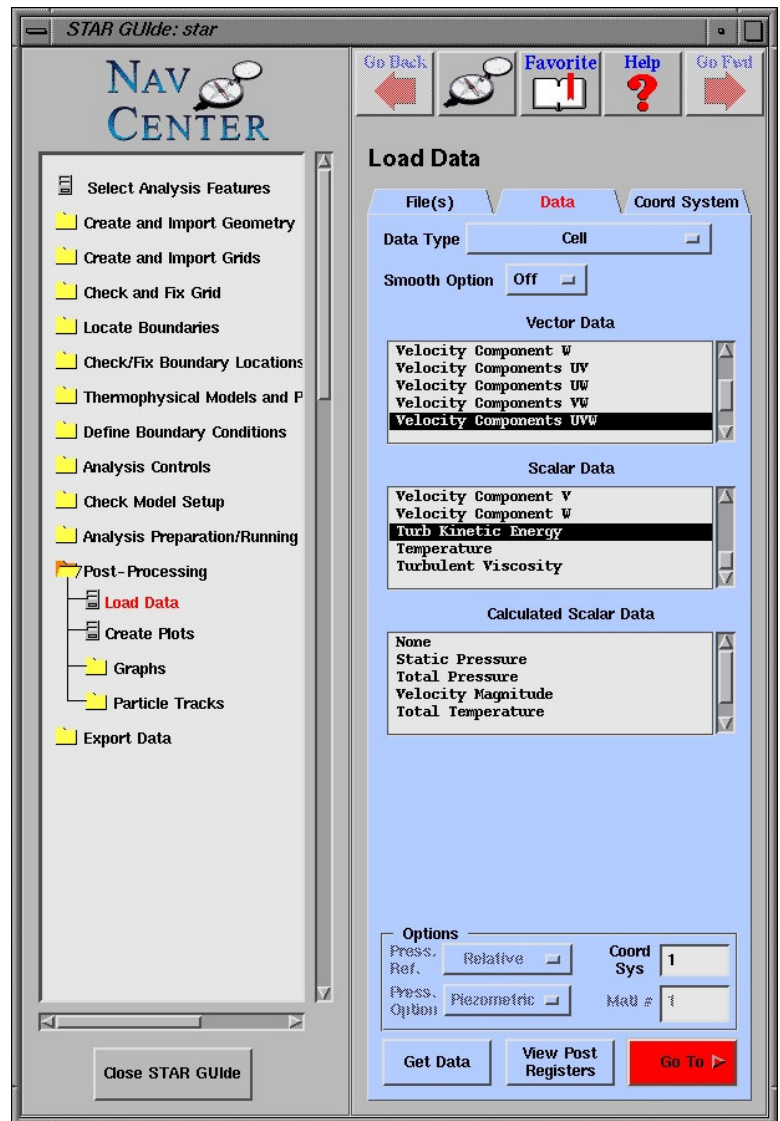
--Vector Data > Velocity Components UVW

5. Click "Get Data"

6. Click "View Post Registers"

7. To add scalars:

7.1 Click "Operate"



Post Register Data

Update List

Close

Show Set Data Only

Show All Data

<-----Vector Data----->

Scalar Data

Register 1

Register 2

Register 3

Register 4

Register 5

Register 6

U

V

W

TE

Set	Cell	Register 1 U	Register 2 V	Register 3 W	Register 4 TE	Register 5	Register 6
*	1	1.19323	-0.00760667	9.21703	0.0117559		
*	2	1.19576	-0.0223717	9.21527	0.0110828		
*	3	1.20911	-0.0548279	9.21542	0.0111432		
*	4	1.24085	-0.0591181	9.1276	0.0113552		
*	5	1.25549	-0.0345348	9.12621	0.0113352		
*	6	1.26118	-0.020473	9.12871	0.0113463		
*	7	1.26326	-0.0120014	9.12906	0.0113519		
*	8	1.26336	-0.00619301	9.13024	0.0113592		
*	9	1.26347	-0.000919711	9.12975	0.0113611		
*	10	1.26282	0.00515485	9.13003	0.0113592		
*	11	1.26113	0.0108381	9.13215	0.0113522		
*	12	1.25892	0.0129159	9.13903	0.0113371		
*	13	1.25688	0.011438	9.14155	0.0113285		
*	14	1.25545	0.00960928	9.14261	0.0113238		
*	15	1.25435	0.00789546	9.14374	0.01132		
*	16	1.25345	0.00568213	9.14564	0.0113165		
*	17	1.25243	0.00377875	9.14611	0.0113163		
*	18	1.25004	0.00114052	9.14263	0.0116929		
*	19	1.565	-0.00686022	9.52426	0.00184805		
*	20	1.56841	-0.0171335	9.52304	0.00160347		
*	21	1.58049	-0.0377592	9.52622	0.00162658		
*	22	1.60801	-0.0409047	9.50223	0.0017007		
*	23	1.62184	-0.0267856	9.5061	0.00171117		

Unsort

Sort (Actual)

Sort (Abs)

Operate...

Change...

Update File

7.2 Function > Load vertex data > turbulent energy (Registers 1-3 must contain vector data. Registers 4-6 must contain vertex data.)

7.3 Select register

Note: Although it is necessary to use vertex data rather than cell data, using vertex data might return an error. To solve this problem, copy the previous command line and add the register number, e.g. "enter oper, getv, te, 5, "

7.4 Ensure that "using relative values" is selected

Post Register Operations		
Operation		
Function	Load Cell Pressure into	Register 5 using Relative Values
Apply		Close

7.5 Click "Apply" to put data in an empty register

7.6 Click "Update list"

7.7 Repeat steps 7.1-7.6 to add data to registers 5 and 6 (pressure and viscosity)

8. The data is now stored.

		<-----Vector Data----->			Scalar Data		
Set	Cell	Register 1 U	Register 2 V	Register 3 W	Register 4 TE	Register 5 P	Register 6 VIS
*	1	1.19323	-0.00760667	9.21703	0.0117559	0	0.000473071
*	2	1.19576	-0.0223717	9.21527	0.0110828	0.177026	0.000449452
*	3	1.20911	-0.0548279	9.21542	0.0111432	0.644832	0.0004514
*	4	1.24085	-0.0591181	9.1276	0.0113552	1.59902	0.000456125
*	5	1.25549	-0.0345348	9.12621	0.0113352	2.15746	0.000454786
*	6	1.26118	-0.020473	9.12871	0.0113463	2.48366	0.000455018
*	7	1.26326	-0.0120014	9.12906	0.0113519	2.6826	0.000455135
*	8	1.26336	-0.00619301	9.13024	0.0113592	2.792	0.000455288
*	9	1.26347	-0.000919711	9.12975	0.0113611	2.84207	0.000455326
*	10	1.26282	0.00515485	9.13003	0.0113592	2.81651	0.00045529
*	11	1.26113	0.0108381	9.13215	0.0113522	2.71162	0.000455142
*	12	1.25892	0.0129159	9.13903	0.0113371	2.54073	0.000454827
*	13	1.25688	0.011438	9.14155	0.0113285	2.38047	0.000454649
*	14	1.25545	0.00960928	9.14261	0.0113238	2.24223	0.000454549
*	15	1.25435	0.00789546	9.14374	0.01132	2.121	0.000454462
*	16	1.25345	0.00568213	9.14564	0.0113165	2.01433	0.000454388
*	17	1.25243	0.00377875	9.14611	0.0113163	1.92833	0.000454385
*	18	1.25004	0.00114052	9.14263	0.0116929	1.83238	0.000466832
*	19	1.565	-0.00686022	9.52426	0.00184805	-7.64784	7.7581e-05
*	20	1.56841	-0.0171335	9.52304	0.00160347	-7.50248	6.66046e-05
*	21	1.58049	-0.0377592	9.52622	0.00162658	-7.19283	6.7439e-05
*	22	1.60801	-0.0409047	9.50223	0.0017007	-6.63333	6.96025e-05
*	23	1.62184	-0.0267856	9.5061	0.00171117	-6.27044	6.98977e-05

In pro-STAR window:

9. Post > save user data

--Registers: all

--File type: coded

--Range: all vertices

13. Click "Apply"

14. Click "Close"

15. Manually close file (enter "close *.usr")

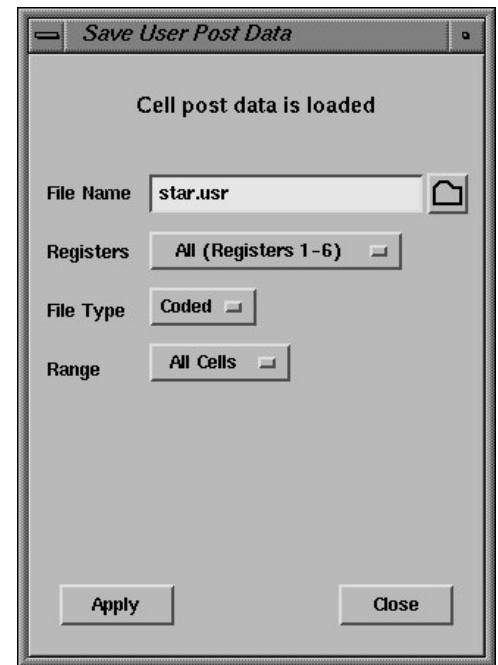
16. File > save as coded

17. Unclick boundary file

18. Click "Apply"

Note: Checked files are written out

19. Enter "close all"



You now have the geometry information and data. It is time to translate.

[Creating a parameter file for translator](#)

