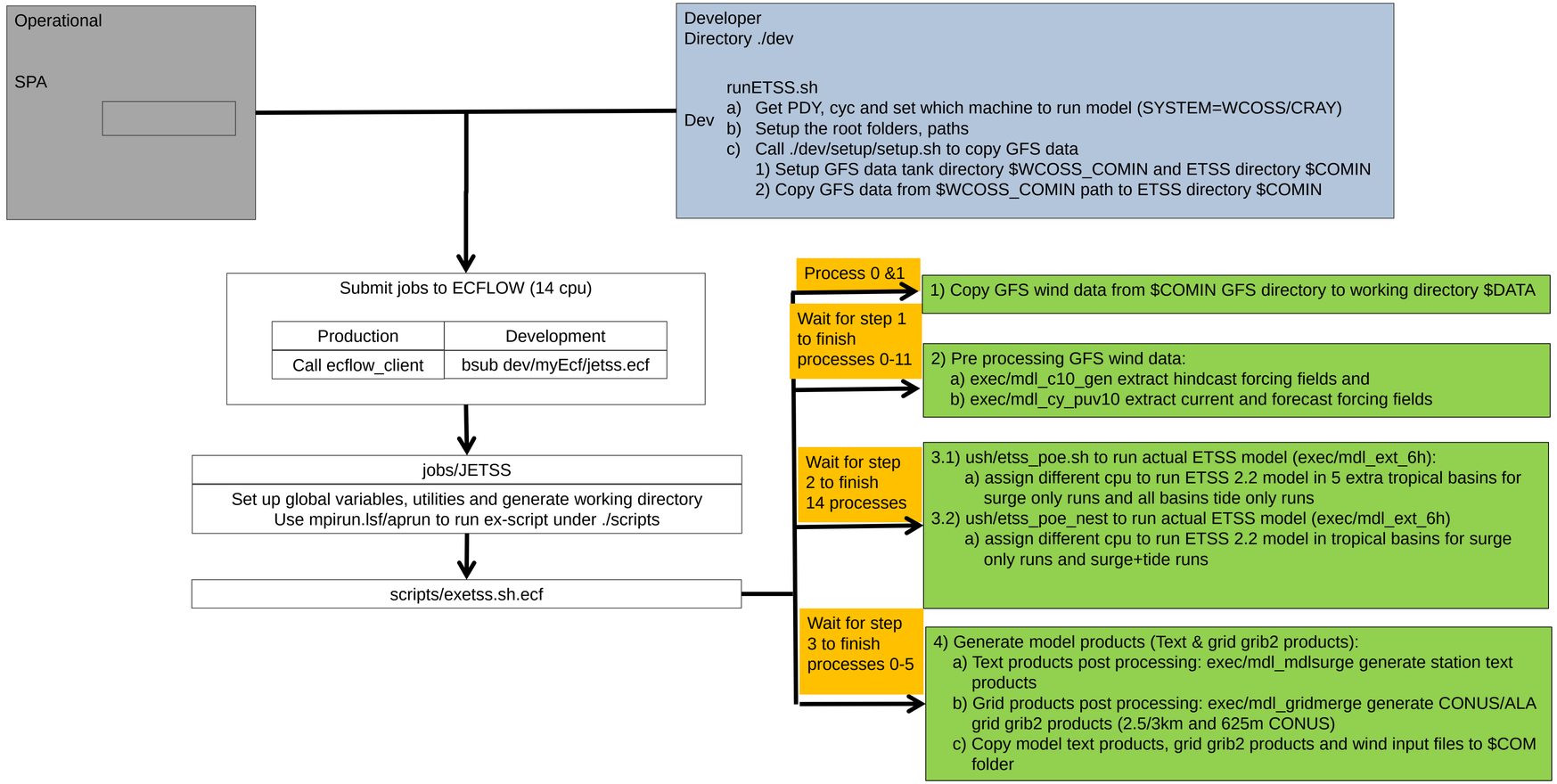

ETSS Model Flow Chart

Operational

SPA

Developer
Directory ./dev

runPost_ETSS.sh
a) Get current PDY, cyc and set which machine to run model (SYSTEM=WCOSS/CRAY)
Dev b) Setup the root folders, paths
c) Call three ecf scripts
1) dev/myEcf/jetss_parsedat.sh.ecf
2) dev/myEcf/jetss_griddat.sh.ecf
3) dev/myEcf/jetss_combdat.sh.ecf

Submit 3 jobs to ECFLOW

First job (6cpus)	
Production	Development
Call ecflow_client	bsub jetss_parsedat.sh.ecf

Second job (3cpus)	
Production	Development
Call ecflow_client	bsub jetss_griddat.sh.ecf

Third job (1cpu)	
Production	Development
Call ecflow_client	bsub jetss_combdat.sh.ecf

Waits for the ETSS job to finish then runs

Waits for the first job to finish then runs

Waits for the second job to finish then runs

jobs/JETSS_PARSEDAT
Set up global variables, utilities and generate working directory
Use mpirun.lsf/aprun to run ex-script under ./scripts

jobs/JETSS_GRIDDAT
Set up global variables, utilities and generate working directory
Use mpirun.lsf/aprun to run ex-script under ./scripts

jobs/JETSS_COMBDAT
Set up global variables, utilities and generate working directory
Use mpirun.lsf/aprun to run ex-script under ./scripts

scripts/exetss_parsedat.sh.ecf

scripts/exetss_griddat.sh.ecf

scripts/exetss_combdat.sh.ecf

1) Prepare data for generating .csv and SHEF products:
a) Copy observed water level data for current data and 1-5 days before to 6 different files
b) Copy ETSS2.2 forecast surge data or current data and 1-5 days before to 6 different files
(surge files will be used in next job)
2) Each of 6 cpus run exec/debufr ${PDYmx}.shef12 (6 different observed tide files)
- Parse the binary BUFR files of observed total water levels into readable obs for
next job to use

Prepare data for generating .csv and SHEF products:
1st cpu: exec/obsAll - Create a grid of observed water levels where each row represents a date and each column represents a station
2nd cpu: exec/surgeAll - Parse surge text products (generate in step 4.1) and create a similar grid of surge values
3rd cpu: exec/tideAll - Calculate tides encompasing the five-day hindcast to the 96-hour forecast and create a grid of those tides

Generate .csv and SHEF products:
a) exec/combAll - Combine tideGrid, obsGrid, and surgeGrid to create output SHEF-encoded files with specially-formatted .csv files
b) copy those SHEF and .csv products and files to $COM folder

ETSS Post-Processing Flow Chart