

Ash Fall Project
AFP-CS-01, Attachment A – Computer Specifications

April 29, 2016

Organization	No. Needed	Hardware	Software
NOAA System3	1	<p>Workstation</p> <ul style="list-style-type: none"> • OS: RHEL WS v7.0 w/3 YR RHN subscription • Memory: 128 GB (8x 16GB) • Hard Drive: 4x 1.2 TB SAS 10K RPM w/RAID-5 (4x 1.2TB hard drives) • Processor: Dual Intel Xeon E5-2695 v3 (14C, 2.3GHz, 35M) • 3 YR Warranty Services <p>External Network Attached Storage, e.g. Seagate NAS Pro 6-Bay 30 TB Network Attached Storage Drive</p> <p>External USB Drive (backup) e.g. 4 TB USB Hard Drive</p> <p>Intel Fortran and C Compilers</p>	<p>Intel compiler HYSPLIT & related Python Latex Gimp Various libraries (netcdf etc.)</p> <p>- Fortran (ifort) and C (icc) - Perl - MPICH compiled with ifort and icc - /usr/local/mpich - netCDF/usr/local/netCDF4 - NCL - IDL - ImageMagick</p>
EMCBC System4	1	<p>Tower</p> <ul style="list-style-type: none"> • Memory: 32GB (4x8GB) 2133MHz DDR4 RDIMM ECC • Hard Drive: 2TB 3.5” Serial-ATA (7,200 RPM) Hard Drive • 2nd Hard Drive: 2TB 3.5” Serial-ATA (7,200 RPM) Hard Drive • Processor: Intel Xeon Processor E5-2623 v3 (10C, 3.0GHz, Turbo, HT, 10M, 105W) 	<p>MS Office Professional (Excel, Word, PowerPoint, and Access) Adobe</p>

		<p>External Network Attached Storage, e.g. Seagate NAS Pro 6-Bay 30 TB Network Attached Storage Drive</p> <p>Second External Network Attached Storage, e.g. Seagate NAS Pro 6-Bay 30 TB Network Attached Storage Drive</p> <p>Intel Fortran and C Compilers</p>	
<p>USGS System2</p>	<p>1</p>	<p>Tower</p> <ul style="list-style-type: none"> • Memory: 32GB (4x8GB) 2133MHz DDR4 RDIMM ECC • Hard Drive: 1 Tb 2.5” Serial-ATA Solid State Drive • Processor: Intel Xeon Processor E5-2650 v3 (10C, 2.3GHz, Turbo, HT, 25M, 105W) 	<p>Matlab (http://www.mathworks.com/) Used to process the output from Ash3d runs, derive statistics, generate plots used in reports with mapping toolbox.</p> <p>GMT (Generic Mapping Tools: http://gmt.soest.hawaii.edu/) Used to make maps of model output</p> <p>Microsoft Excel (or the Linux equivalent, the Libre Office Spreadsheet Program) Used for calculations of some of the results.</p>
<p>DRI System1</p>	<p>2</p>	<p>Tower</p> <ul style="list-style-type: none"> • Memory: 32GB (4x8GB) 2133MHz DDR4 RDIMM ECC • Hard Drive: 2TB 3.5” Serial-ATA (7,200 RPM) Hard Drive • 2nd Hard Drive: 2TB 3.5” Serial-ATA (7,200 RPM) Hard Drive • Processor: Intel Xeon Processor E5-2623 v3 (10C, 3.0GHz, Turbo, HT, 10M, 105W) 	<p>MS Office Professional (Excel, Word, PowerPoint, and Access) Adobe or Cutepdf</p>