<?xml version="1.0" ?>

<Simulation verbosity="debug">

<TestInfo>

<name>framework/ROM/timeSeries/ARMA.PreserveCdf</name>

<author>alfoa</author>

<created>2021-04-20</created>

<classesTested>SupervisedLearning.ARMA</classesTested>

<description>

weekly arma (net demand) hourly

</description>

</TestInfo>

<RunInfo>

<WorkingDir>ANL\_ROM</WorkingDir>

<Sequence>

load, typical\_history, train, stats, sample, serialize

</Sequence>

/RunInfo>

<Steps>

<IOStep name="load">

<Input class="Files" type="">input</Input>

<Output class="DataObjects" type="HistorySet">inputRaw</Output>

</IOStep>

<PostProcess name="typical\_history" pauseAtEnd="True">

<Input class="DataObjects" type="HistorySet">inputRaw</Input>

<Model class="Models" type="PostProcessor">TypicalHistory</Model>

<Output class="DataObjects" type="HistorySet">input</Output>

<Output class="OutStreams" type="Print">input</Output>

</PostProcess>

<RomTrainer name="train">

<Input class="DataObjects" type="HistorySet">input</Input>

<Output class="Models" type="ROM">rom</Output>

</RomTrainer>

<IOStep name="stats">

<Input class="Models" type="ROM">rom</Input>

<Output class="DataObjects" type="DataSet">rom</Output>

<Output class="OutStreams" type="Print">rom</Output>

</IOStep>

<MultiRun name="sample">

<Input class="DataObjects" type="PointSet">placeholder</Input>

<Model class="Models" type="ROM">rom</Model>

<Sampler class="Samplers" type="MonteCarlo">mc</Sampler>

<Output class="DataObjects" type="HistorySet">samples</Output>

<Output class="OutStreams" type="Print">samples</Output>

</MultiRun>

<IOStep name="serialize">

<Input class="Models" type="ROM">rom</Input>

<Output class="Files" type="">ROMpk</Output>

</IOStep>

</Steps>

<Files>

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<Input name="ROMpk">ROMpk</Input>

</Files>

<DataObjects>

<PointSet name="placeholder">

<Input>scaling</Input>

</PointSet>

<HistorySet name="inputRaw">

<Input>scaling</Input>

<Output>netLoad,time</Output>

<options>

<pivotParameter>time</pivotParameter>

</options>

</HistorySet>

<HistorySet name="input">

<Input>scaling</Input>

<Output>netLoad,time</Output>

<options>

<pivotParameter>time</pivotParameter>

</options>

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</options>

</HistorySet>

<DataSet name="rom"/>

</DataObjects>

<Models>

<PostProcessor name="TypicalHistory" subType="InterfacedPostProcessor">

<method>TypicalHistoryFromHistorySet</method>

<subseqLen>24</subseqLen>

<outputLen>168</outputLen>

<pivotParameter>time</pivotParameter>

</PostProcessor>

<ROM name="rom" subType="ARMA">

<Target>netLoad,time</Target>

<Features>scaling</Features>

<pivotParameter>time</pivotParameter>

<Fourier>4,12,24</Fourier>

<P>1</P>

<Q>1</Q>

<preserveInputCDF>True</preserveInputCDF>

</ROM>

</Models>

<OutStreams>

<Print name="rom">

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<source>rom</source>

</Print>

<Print name="samples">

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<source>samples</source>

</Print>

<Print name="input">

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</Print>

</OutStreams>

<Samplers>

<MonteCarlo name="mc">

<samplerInit>

<limit>10</limit>

</samplerInit>

<constant name="scaling">1.0</constant>

</MonteCarlo>

</Samplers>

</Simulation>