WMO Headers for ESTOFS Pacific

WMO Header template:
T_1 T_2 A_1 A_2 ii cccc

cccc is **KWBM** and **M** is Ocean Model / Extra Tropical Storm Surge

See ON-388 Appendix A for WMO headers with NCEP Grib information at the following link:
http://www.nco.ncep.noaa.gov/pmb/docs/on388/appendixa.html

T_1 = E

T_2 specifies the parameters as following:

E - ELEV	(Parameter 194)	Ocean Surface Elevation Relative to Geoid
H - ETSRG	(Parameter 193)	Extra Tropical Storm Surge
C - ETCWL	(Parameter 250)	Extra Tropical Storm Surge Combined Surge and Tide

A_1 specifies the grid id as follows:

A is for Alaska
D is for CONUS (west coast)
H is for Hawaii

A_2 specifies the forecast hours as follow:

A=00 ; B=01,02,03; C=04,05,06; D=07,08,09; E=10,11,12; F=13,14,15
G=16,17,18; H=19,20,21,22,23; I=24,25,26,27,28,29; J=30,31,32,33,34,35
K=36,37,38,39,40,41; L=42,43,44,45,46,47;
M=48,49,50,51,52,53,55,56,57,58,59; X=54,57
N=60,61,62,63,64,65,66,68 Y=66, 69; N=70,71
O=72,73,74,75,76,77,78,79,80,81,82,83
P=84,85,86,87,88,89,90,91,92,93,94,95
Q=96,97,98,99,100,101,102,103,104,105,106,107,108,109,110,111,112,113,115,
116,117,118,119; Z=114
R=120,121,122,123,124,125,126,127,128,129,130,131
S=132,133,134,145,136,137,138,139,140,141,142,143
T=144,145,146,147,148,149,150,151,152,153,154,155
U=156,157,158,159,160,161,162,163,164,165,166,167;
V=168,168,170,171,172,173,174;
W=175,176,176,178,179,180

ii specifies level as follows:

88 Land/Water Properties at the Surface of the Earth/Ocean

A list of the WMO headers for ESTOFS Pacific can be found in Tables 1, 2, and 3.

Table 1: ESTOFS Pacific – Alaska WMO Headers

Combined Water Level (cwl) (T_2: parameter 250)	Harmonic Tidal Prediction(htp) (T_2: parameter 194)	Sub-tidal Water Level(cwl-htp) (T_2: parameter 193)
ECAA88 KWBM	EEAA88 KWBM	EHAA88 KWBM
ECAB88 KWBM	EEAB88 KWBM	EHAB88 KWBM
ECAC88 KWBM	EEAC88 KWBM	EHAC88 KWBM
ECAD88 KWBM	EEAD88 KWBM	EHAD88 KWBM
ECAE88 KWBM	EEAE88 KWBM	EHAE88 KWBM
ECAF88 KWBM	EEAF88 KWBM	EHAF88 KWBM
ECAG88 KWBM	EEAG88 KWBM	EHAG88 KWBM
ECAH88 KWBM	EEAH88 KWBM	EHAH88 KWBM
ECAI88 KWBM	EEAI88 KWBM	EHAI88 KWBM
ECAJ88 KWBM	EEAJ88 KWBM	EHAJ88 KWBM
ECAK88 KWBM	EEAK88 KWBM	EHAK88 KWBM
ECAL88 KWBM	EEAL88 KWBM	EHAL88 KWBM
ECAM88 KWBM	EEAM88 KWBM	EHAM88 KWBM
ECAN88 KWBM	EEAN88 KWBM	EHAN88 KWBM
ECAO88 KWBM	EEAO88 KWBM	EHAO88 KWBM
ECAP88 KWBM	EEAP88 KWBM	EHAP88 KWBM
ECAQ88 KWBM	EEAQ88 KWBM	EHAQ88 KWBM
ECAR88 KWBM	EEAR88 KWBM	EHAR88 KWBM
ECAS88 KWBM	EEAS88 KWBM	EHAS88 KWBM
ECAT88 KWBM	EEAT88 KWBM	EHAT88 KWBM
ECAU88 KWBM	EEAU88 KWBM	EHAU88 KWBM
ECAV88 KWBM	EEAV88 KWBM	EHAV88 KWBM
ECAW88 KWBM	EEAW88 KWBM	EHAW88 KWBM
ECAX88 KWBM	EEAX88 KWBM	EHAX88 KWBM
ECAY88 KWBM	EEAY88 KWBM	EHAY88 KWBM
ECAZ88 KWBM	EEAZ88 KWBM	EHAZ88 KWBM

Table 2: ESTOFS Pacific - CONUS (west coast) WMO Headers

Combined Water Level (cwl) (T_2: parameter 250)	Harmonic Tidal Prediction(htp) (T_2: parameter 194)	Sub-tidal Water Level(cwl-htp) (T_2: parameter 193)
ECDA88 KWBM	EEDA88 KWBM	EHDA88 KWBM
ECDB88 KWBM	EEDB88 KWBM	EHDB88 KWBM
ECDC88 KWBM	EEDC88 KWBM	EHDC88 KWBM
ECDD88 KWBM	EEDD88 KWBM	EHDD88 KWBM
ECDE88 KWBM	EEDE88 KWBM	EHDE88 KWBM
ECDF88 KWBM	EEDF88 KWBM	EHDF88 KWBM
ECDG88 KWBM	EEDG88 KWBM	EHDG88 KWBM
ECDH88 KWBM	EEDH88 KWBM	EHDH88 KWBM
ECDI88 KWBM	EEDI88 KWBM	EHDI88 KWBM
ECDJ88 KWBM	EEDJ88 KWBM	EHDJ88 KWBM
ECDK88 KWBM	EEDK88 KWBM	EHDK88 KWBM
ECDL88 KWBM	EEDL88 KWBM	EHDL88 KWBM
ECDM88 KWBM	EEDM88 KWBM	EHDM88 KWBM
ECDN88 KWBM	EEDN88 KWBM	EHDN88 KWBM
ECDO88 KWBM	EEDO88 KWBM	EHDO88 KWBM
ECDP88 KWBM	EEDP88 KWBM	EHDP88 KWBM
ECDQ88 KWBM	EEDQ88 KWBM	EHDQ88 KWBM
ECDR88 KWBM	EEDR88 KWBM	EHDR88 KWBM
ECDS88 KWBM	EEDS88 KWBM	EHDS88 KWBM
ECDT88 KWBM	EEDT88 KWBM	EHDT88 KWBM
ECDU88 KWBM	EEDU88 KWBM	EHDU88 KWBM
ECDV88 KWBM	EEDV88 KWBM	EHDV88 KWBM
ECDW88 KWBM	EEDW88 KWBM	EHDW88 KWBM
ECDX88 KWBM	EEDX88 KWBM	EHDX88 KWBM
ECDY88 KWBM	EEDY88 KWBM	EHDY88 KWBM
ECDZ88 KWBM	EEDZ88 KWBM	EHDZ88 KWBM

Table 3: ESTOFS Pacific - Hawaii WMO Headers

Combined Water Level (cwl) (T_2: parameter 250)	Harmonic Tidal Prediction(htp) (T_2: parameter 194)	Sub-tidal Water Level(cwl-htp) (T_2: parameter 193)
ECHA88 KWBM	EEHA88 KWBM	EHHA88 KWBM
ECHB88 KWBM	EEHB88 KWBM	EHHB88 KWBM
ECHC88 KWBM	EEHC88 KWBM	EHHC88 KWBM
ECHD88 KWBM	EEHD88 KWBM	EHHD88 KWBM
ECHE88 KWBM	EEHE88 KWBM	EHHE88 KWBM
ECHF88 KWBM	EEHF88 KWBM	EHHF88 KWBM
ECHG88 KWBM	EEHG88 KWBM	EHHG88 KWBM
ECHH88 KWBM	EEHH88 KWBM	EHHH88 KWBM
ECHI88 KWBM	EEHI88 KWBM	EHHI88 KWBM
ECHJ88 KWBM	EEHJ88 KWBM	EHHJ88 KWBM
ECHK88 KWBM	EEHK88 KWBM	EHHK88 KWBM
ECHL88 KWBM	EEHL88 KWBM	EHHL88 KWBM
ECHM88 KWBM	EEHM88 KWBM	EHHM88 KWBM
ECHN88 KWBM	EEHN88 KWBM	EHHN88 KWBM
ECHO88 KWBM	EEHO88 KWBM	EHHO88 KWBM
ECHP88 KWBM	EEHP88 KWBM	EHHP88 KWBM
ECHQ88 KWBM	EEHQ88 KWBM	EHHQ88 KWBM
ECHR88 KWBM	EEHR88 KWBM	EHHR88 KWBM
ECHS88 KWBM	EEHS88 KWBM	EHHS88 KWBM
ECHT88 KWBM	EEHT88 KWBM	EHHT88 KWBM
ECHU88 KWBM	EEHU88 KWBM	EHHU88 KWBM
ECHV88 KWBM	EEHV88 KWBM	EHHV88 KWBM
ECHW88 KWBM	EEHW88 KWBM	EHHW88 KWBM
ECHX88 KWBM	EEHX88 KWBM	EHHX88 KWBM
ECHY88 KWBM	EEHY88 KWBM	EHHY88 KWBM
ECHZ88 KWBM	EEHZ88 KWBM	EHHZ88 KWBM