ESP Usage and Requirements in Western Region

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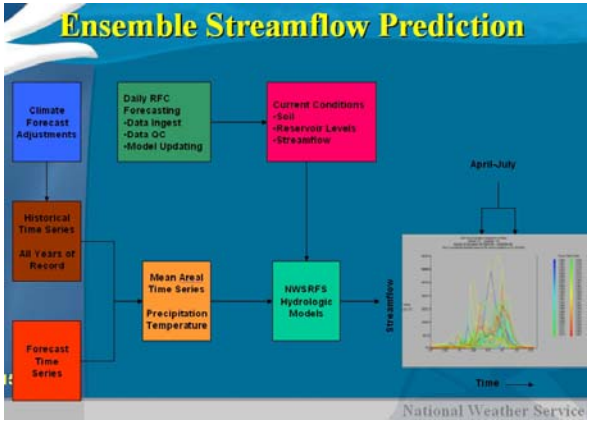
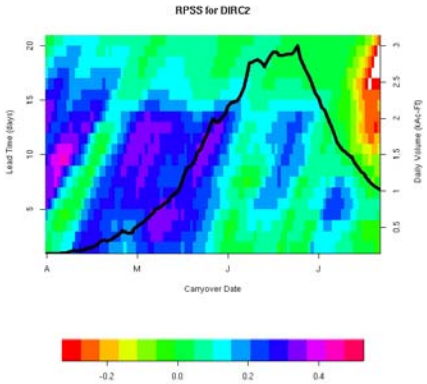
ESP in WR

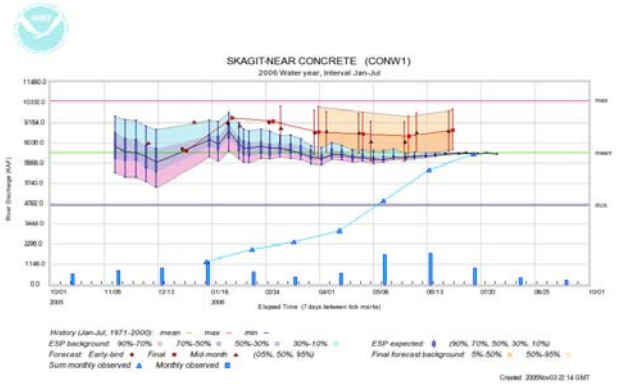
- Water Supply
  - Long-range ESP for current water year
  - Pre-adjustment based on CPC forecasts typically done
  - Used to varying degrees as an input to the water supply forecast process
- Short - Medium Term Ensembles
  - EPP experimental software deployed at CBRFC and CNRFC
  - Both RFCs have ~5 years of short term ensemble capability





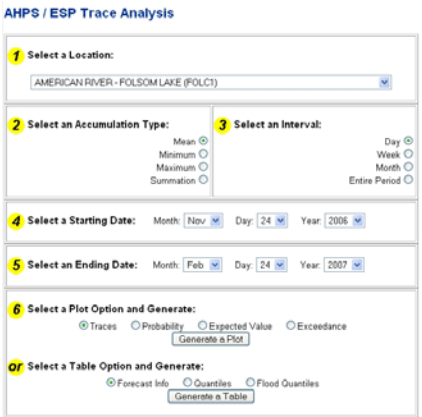
Future Plans

- Add ESP to Western Water Supply web page



Long range ESP prototype plot

Credit: NWRFC

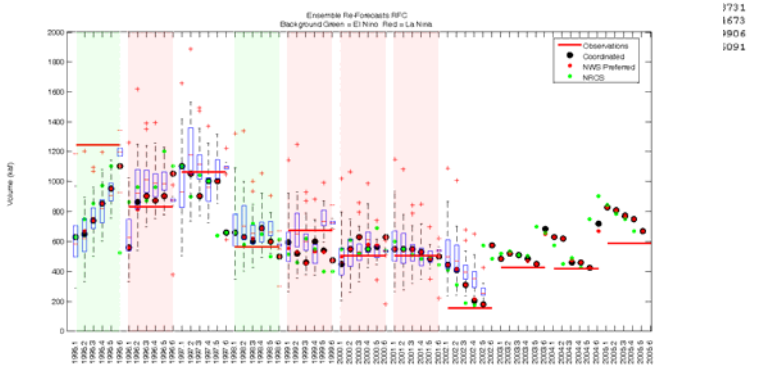
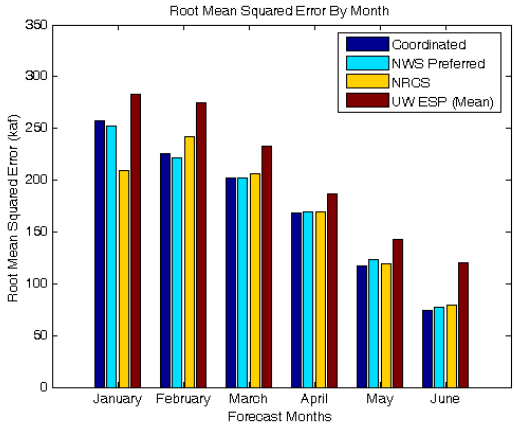


ESP Trace Analysis

Credit: CNRFC

- Add ESPADP interactive on-line capability

Future Plans

- Disseminate ESP ensemble values
- Verify ESP forecasts across timescales and compare with deterministic forecasts

year	month	day	t1981	t1982	t1983	t1984	t1985	t1986	t1987	t1988	t1989	t1990	t1991	t1992	t1993	t1994	t1995	t1996	t19
1981	01	01	298.3001	367.7565	513.6994	570.0328	484.5746	506.7859	378.3822	312.3554	328.2121	403.2093							
1981	02	01	297.0583	303.1310	505.2518	537.5223	442.9250	494.0760	309.3674	212.1259	230.4708	361.7826							
1981	03	01	276.8097	253.4385	408.3127	459.5910	396.6312	299.2829	230.3378	206.9852	172.9983	313.4735							
1981	04	01	283.6914	235.6637	359.1519	421.7364	322.9308	303.8576	231.7814	243.6589	193.9077	352.1233							
1981	05	01	202.5503	151.7404	203.5303	196.2407	101.7014	106.1370	145.7744	152.5836	134.4125	143.6073							
1982	01	01	518.3618	597.0075	775.3400	869.6948	756.7646	784.1633	629.5072	532.5329	541.5743	648.9318							
1982	02	01	653.8921	637.8427	935.2609	1025.2197	869.2866	944.7571	684.4868	511.1067	516.9822	744.9374							
1982	03	01	679.9842	616.1755	865.8952	981.3160	870.7269	709.1220	608.7444	559.0397	476.0987	736.1010							
1982	04	01	753.0944	632.5661	854.0351	983.1269	799.4890	776.4901	656.6320	671.2393	564.8551	855.3430							
1982	05	01	745.8195	597.4025	715.7946	710.3384	684.0011	704.9526	622.4425	629.2188	566.5172	595.8065							
1983	01	01	518.2440	597.3768	774.4395	862.9529	753.5766	783.5450	622.8638	525.8830	538.9147	646.5877							
1983	02	01	519.0635	502.2357	765.4967	821.9259	690.1319	766.8910	533.2969	397.5520	398.2960	596.7244							
1983	03	01	573.5393	521.6306	747.4358	833.6179	743.6118	611.5408	506.5240	460.3244	396.5933	626.4002							
1983	04	01	668.3622	572.3976	769.0171	876.8861	720.8446	699.8584	583.0741	598.4666	502.6470	767.3516							
1983	05	01	752.4067	607.6454	722.5717	711.8159	690.7251	711.1552	628.6188	637.8363	574.9820	603.0872							
1984	01	01	950.8400	1070.0605	1313.3203	1497.7848	1310.1062	1327.9117	1159.8662	1000.9544	1037.1629	1148.2708