

Using ROC Station

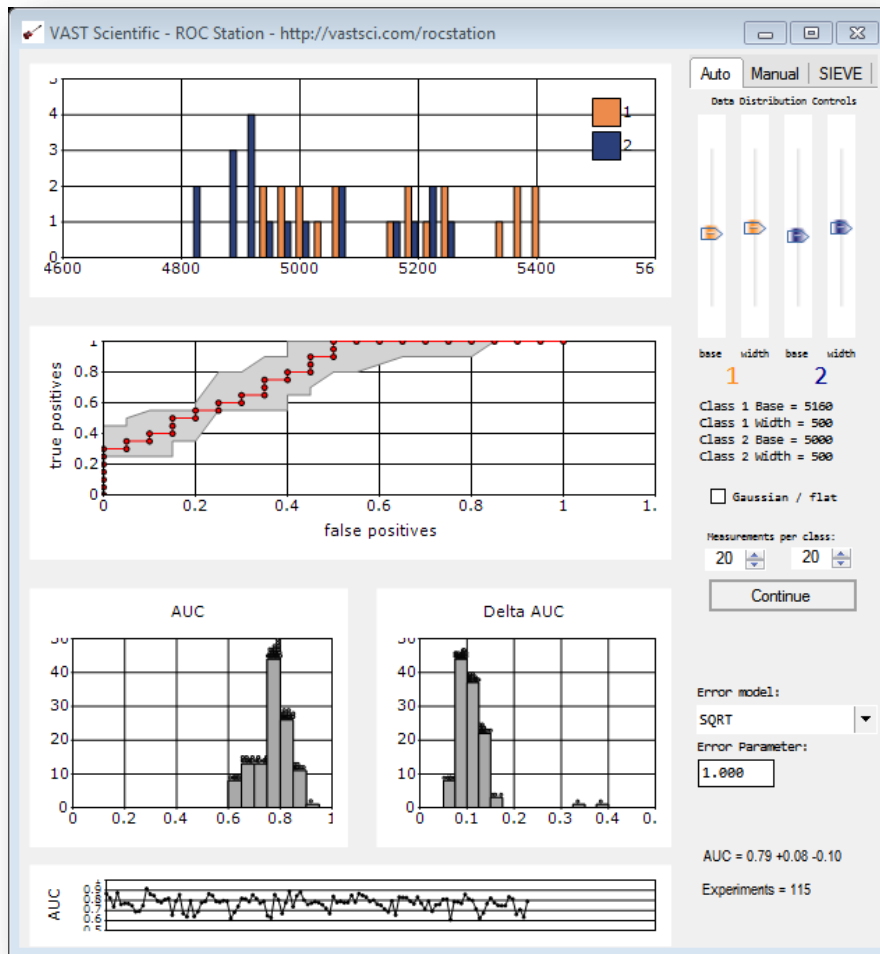
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What is ROC Station - 1

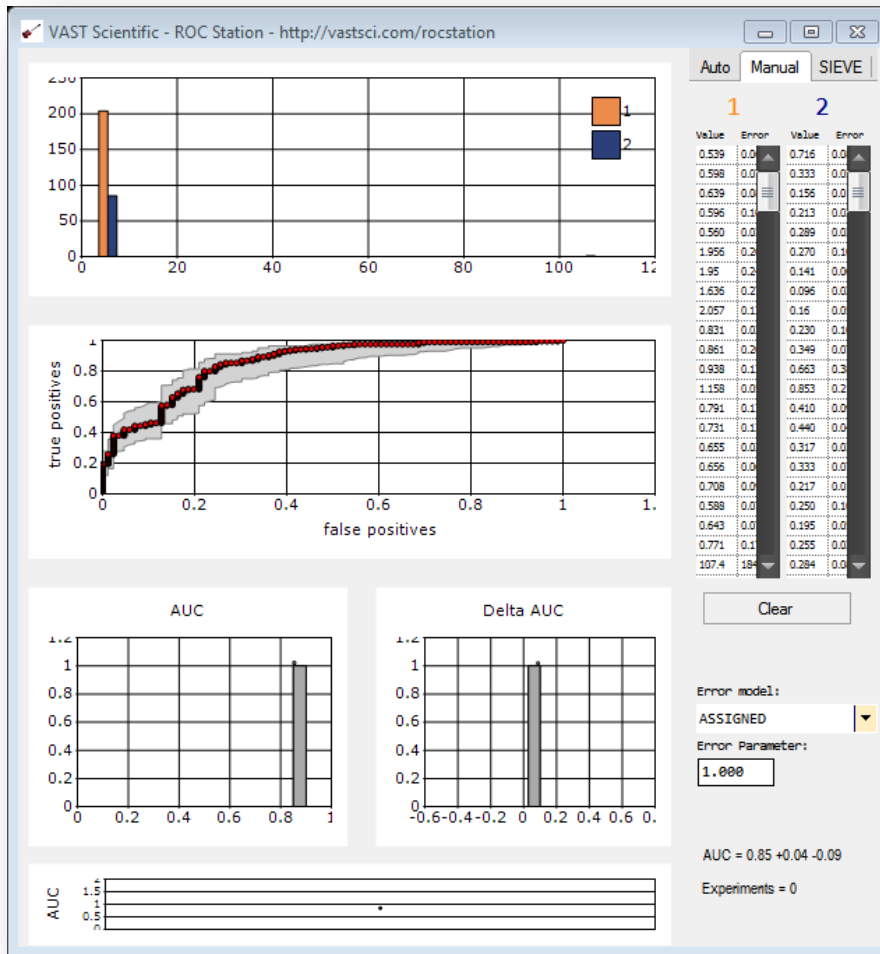


How to ROC – a learning center

Generate synthetic data to understand the effects of:

- Number of measurements
- Measurement data distributions
- Measurement error models
- Accumulated effects over repeated measurements

What is ROC Station - 2

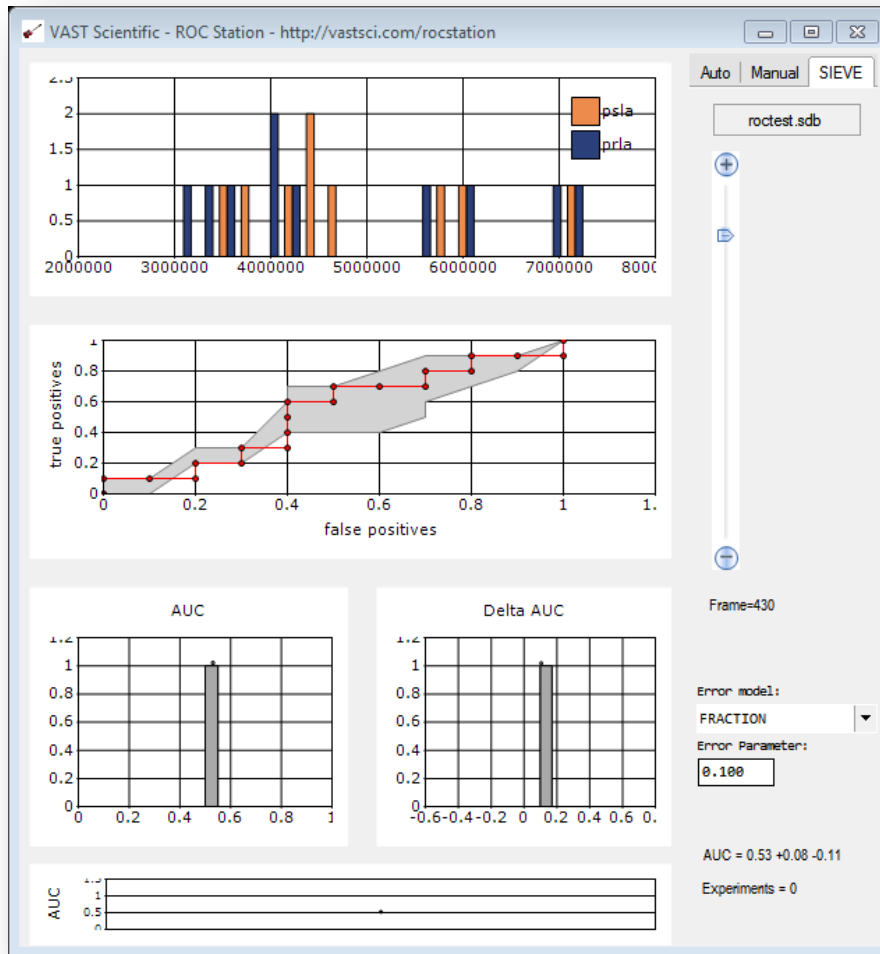


Measure real data

Paste in real measurements

Measurements can include assigned errors

What is ROC Station - 3



Explore SIEVE Results

Open a SIEVE result file

Explore the effects of AUC values with different error models.

Download

ROC Station has been freely contributed to the community by VAST Scientific

For more details, see:

<http://vastscientific.com/rocstation>

Example

MULTI-ROC MEASUREMENT

Data Set

- LS/MS SIEVE measurements from plasma comparing Ischemic vs Hemorrhagic stroke patients
- Look at APO CIII combined with APO AI

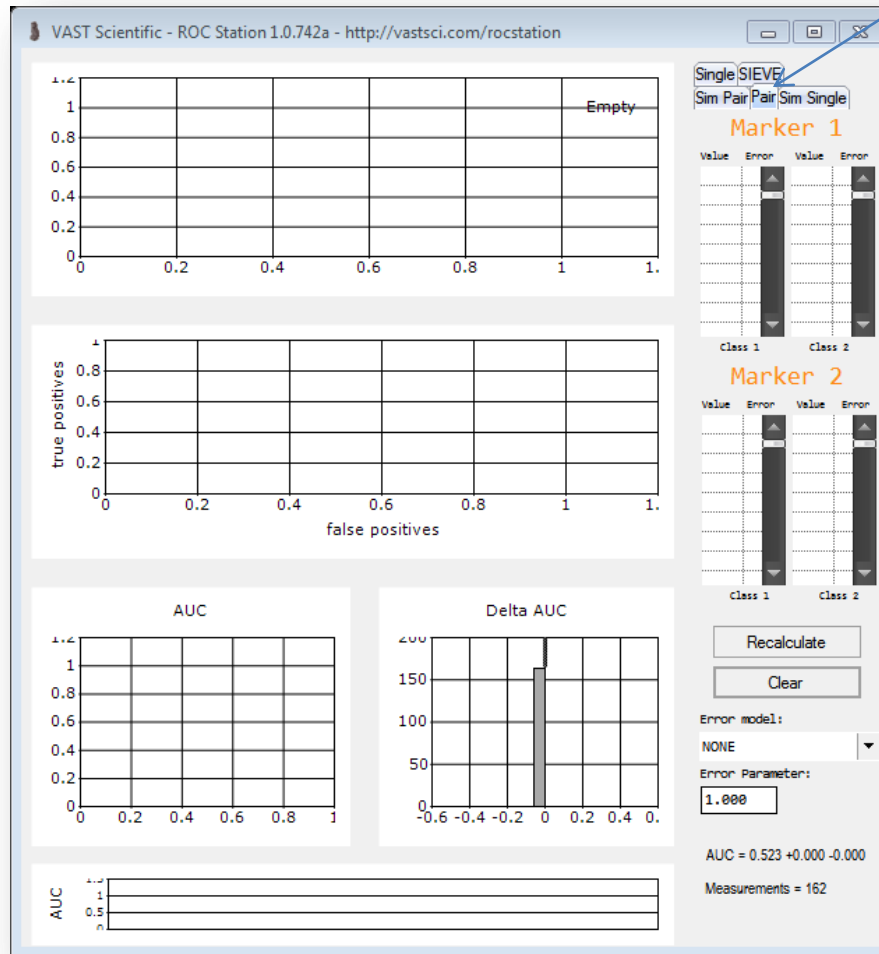
ischemic

RAW Data

condition	HEMORR	Average of C1	StdDev of C1	Average of A1	StdDev of A1	Average of A2	StdDev of A2
A10	0	0.716033333	0.081248774	6.282466667	0.992296929		
B10	0	0.3336	0.050093812	4.654333333	0.50479831		
C10	0	0.1568	0.011957843	4.588	0.055370887		
D10	0	0.213333333	0.030707848	6.953333333	1.427554649		
eA1	0	0.289866667	0.032942425	7.033	0.918651729		
eA2	0	0.270033333	0.10512927	6.408666667	3.372538707		
eA3	0	0.141333333	0.05678282	4.036666667	2.151616214		
eA4	0	0.09499	0.034651394	2.810666667	1.439698695		
eA5	0	0.16	0.051704642	3.036333333	2.288012311		
eA6	0	0.230633333	0.100640953	4.616666667	0.866767898		
eA7	0	0.349633333	0.071202341	6.535	0.9835258		
eA8	0	0.663066667	0.385167422	6.460666667	2.325768762		
eA9	0	0.853333333	0.214110463	7.62	1.3368706		
eB1	0	0.410666667	0.093390381	6.298333333	0.805047906		
eB2	0	0.440266667	0.047250644	7.088333333	1.065493816		
eB3	0	0.317233333	0.02717254	6.379	0.826653313		
eB4	0	0.3333	0.07822642	4.339333333	1.803374707		
eB5	0	0.2177	0.017370089	4.747666667	0.959938192		
eB6	0	0.2528	0.103400725	4.523	1.098211188		
eB7	0	0.195566667	0.053479564	4.161666667	1.678312347		
eB8	0	0.2556	0.035543072	5.428333333	1.347108137		
eB9	0	0.284266667	0.08110859	6.1665	0.45042702		
eC1	0	0.5628	0.1123503	10.66666667	4.978080989		
eC2	0	0.6322	0.03288456	8.389333333	1.261125027		
eC3	0	0.272466667	0.042118919	5.283333333	0.46812406		
eC4	0	0.345633333	0.045998297	8.821333333	0.794873785		
eC5	0	0.189566667	0.01112695	6.943333333	2.02313033		
eC6	0	0.212133333	0.04005131	6.056666667	0.547308262		
eD1	0	0.252066667	0.042901787	4.853666667	0.413367069		
eD2	0	0.2278	0.015629139	5.161	1.050543193		
eD3	0	0.1587	0.010880717	4.020882619			
eD4	0	0.183666667	0.01680962	4.314666667	1.246358429		
eD5	0	0.249133333	0.05516677	5.909333333	0.568493917		
eD7	0	0.382166667	0.120177591	8.093333333	3.288191754		
eD8	0	0.2519	0.01430988	7.683	1.02505366		
eD9	0	0.2746	0.041485793	7.810666667	2.09640195		
eE1	0	0.271866667	0.01832934	4.744666667	1.674373321		
eE2	0	0.283866667	0.050434545	5.022666667	0.8165968		
eE3	0	0.197733333	0.016139806	3.701666667	0.859907166		
eE4	0	0.249566667	0.02094016	3.836666667	1.15741148		
eE5	0	0.320766667	0.04656397	5.769	1.260020778		
eE6	0	0.496633333	0.08051623	4.887666667	0.190536961		
eF1	0	0.2118	0.054527791	5.168333333	0.457202234		
eF2	0	0.2619	0.024043918	7.943666667	1.108629033		
eF3	0	0.2423	0.02833307	6.049	0.421522241		
eF4	0	0.328	0.029230206	6.854	0.74816211		
eF5	0	0.678	0.041221718	10.09066667	0.303707587		
eF6	0	0.6495	0.061097218	10.532	0.872543409		
eF7	0	0.343933333	0.05403752	6.883333333	1.099327236		
eF8	0	0.233666667	0.041707593	6.308666667	1.168941972		
eF9	0	0.198833333	0.005196473	5.648666667	0.812940547		
eG1	0	0.275133333	0.025854805	7.987333333	1.44779656		
eG2	0	0.307266667	0.041137858	6.928333333	1.196472036		
eG3	0	0.293966667	0.050813122	7.549	1.631304042		
eG4	0	0.3314	0.020949977	7.376666667	0.540925701		
eG5	0	0.2702	0.019012627	6.215666667	1.03159176		
eG6	0	0.404233333	0.091963163	7.072	0.598464457		
eG7	0	0.3357	0.042487292	6.299	0.78380118		
eG8	0	0.361933333	0.052896723	9.557333333	1.42587704		
eG9	0	0.316966667	0.030942503	8.426666667	2.159481728		
eH1	0	0.322833333	0.05558927	7.28	2.21012948		
eH2	0	0.3209	0.008608717	5.169	0.61857872		
eH3	0	0.646433333	0.086763003	7.406666667	0.42018369		
eH4	0	0.495666667	0.072416181	11.406333333	2.71788463		
eH5	0	0.442333333	0.04427983	8.982666667	1.089292584		
eH6	0	0.3864	0.08942036	9.443	1.990579564		
eH7	0	0.625633333	0.06370505	10.463333333	2.044401404		
eH8	0	0.924466667	0.161196691	12.46666667	0.747952761		
eH9	0	0.724866667	0.08392071	9.6475	1.700591809		
eI1	0	0.3962	0.050255388	7.748333333	1.347616618		
eI2	0	0.3771	0.062801194	7.443333333	1.713725279		
eI3	0	0.461766667	0.096758273	7.678	1.58574998		
eI4	0	0.298333333	0.050145028	8.490333333	0.78898688		
eI5	0	0.2848	0.05053108	7.503333333	0.75983507		
eI6	0	0.395866667	0.046079883	10.885666667	1.130440769		
eI7	0	0.366766667	0.040649048	8.925666667	2.110246887		
eI8	0	0.537933333	0.024615916	12.56666667	1.025686702		
eI9	0	0.6364	0.035942871	13.146666667	1.469773225		
eI4	0	0.6315	0.081720864	9.509666667	2.048133378		
eJ5	0	0.501933333	0.041525794	8.836	0.692717114		
eJ6	0	0.3988	0.02374448	10.273333333	1.957915508		
eJ7	0	0.288866667	0.026400063	5.715666667	0.99749943		
eJ8	0	0.302033333	0.029498878	7.658333333	1.197740512		
F10	0	1.199933333	0.016274622	5.897666667	0.748797939		
C10	0	0.351466667	0.018244756	6.389333333	0.22597725		
H10	0	0.542266667	0.0651652	7.673	0.656667543		

hemorrhagic

Select Pair Tab

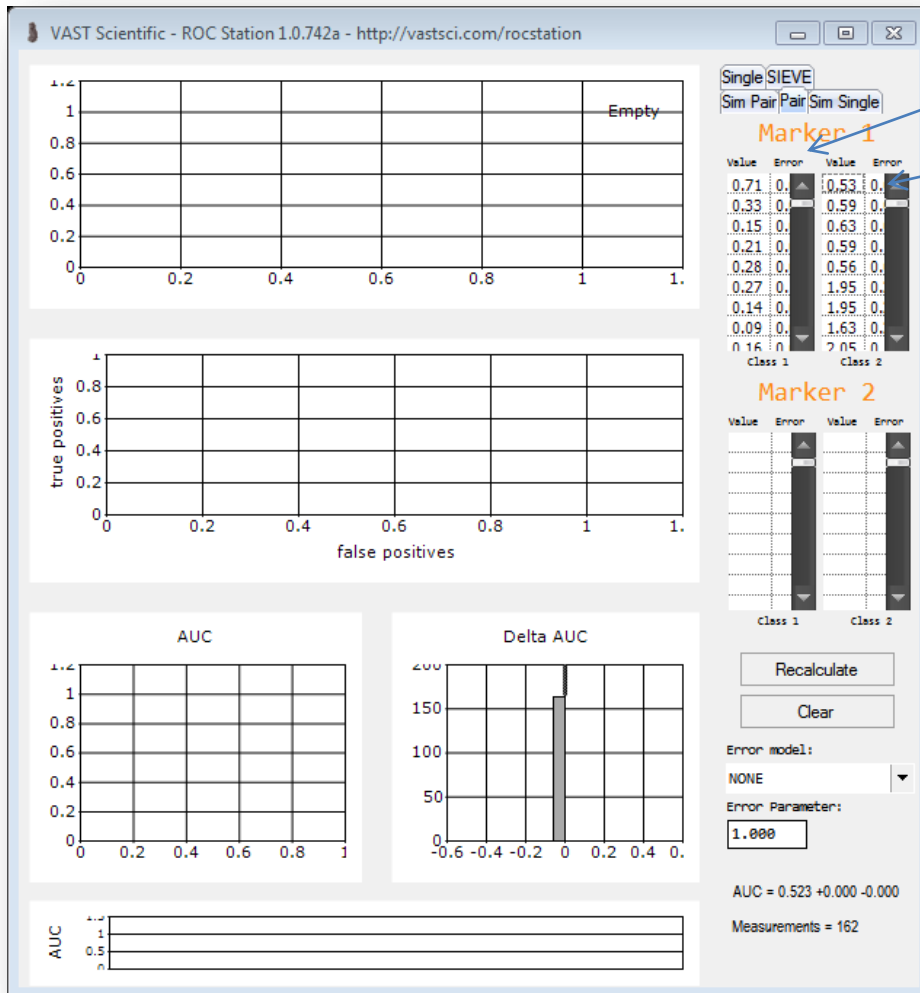


Insert CII values in the top grids

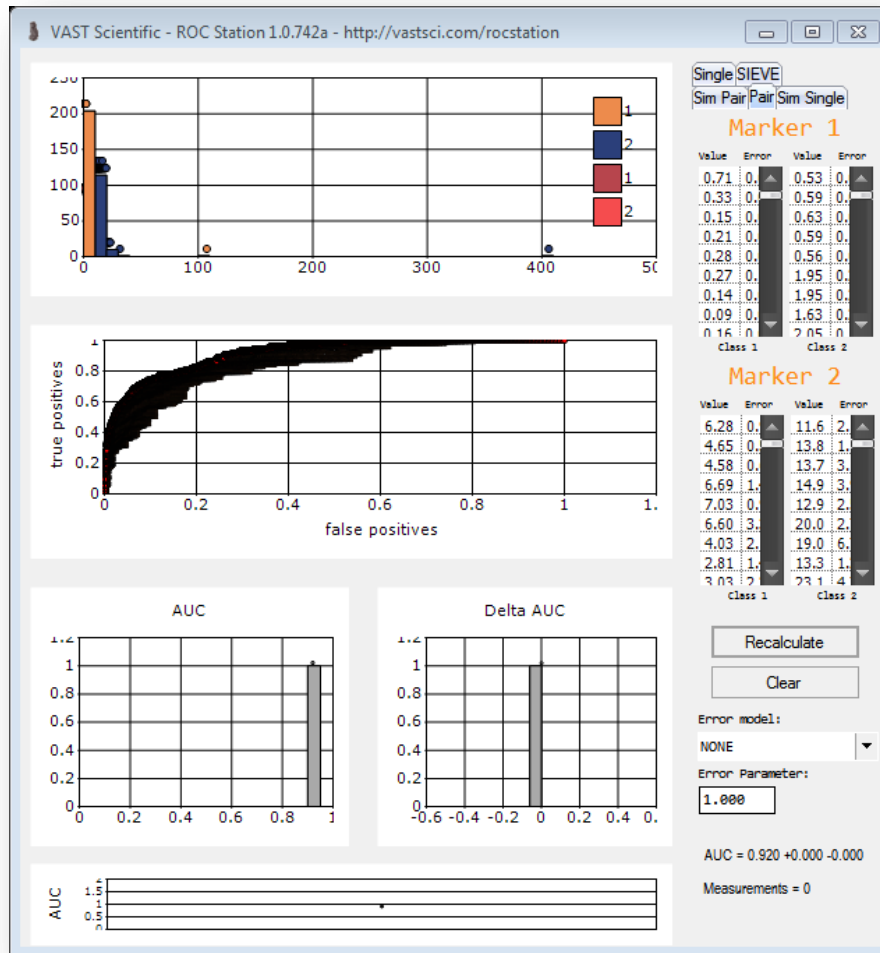
Hemorrhagic cII

Ischemic cII

Just use copy/paste from Excel to ROC Station



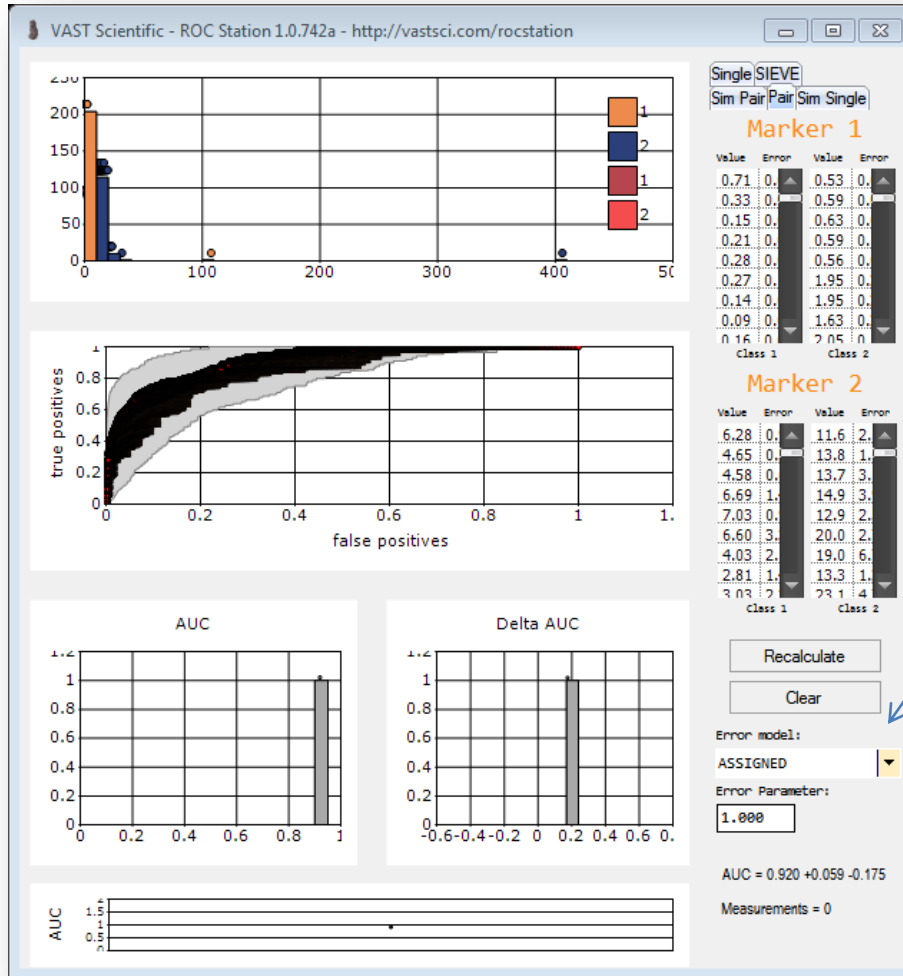
Insert AI values in the bottom grids



*ROC Station
begins to calculate
immediately*

Error Model

Select ASSIGNED to tell ROC Station to use the standard deviations in the grid



AUC Reported here

Questions, comments, complaints

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