



PJM RTO Load Forecast Model Accuracy

Load Analysis Subcommittee
October 19, 2016

- Forecast model being evaluated is the current specification that went into effect beginning with the 2016 Load Forecast Report
- Forecast model is solved using up-to-date information, to help separate out the error attributable to forecast variables.
- Accuracy assessment is performed using the discrete forecast adjustments from Table B-9 for each forecast.

- Accuracy results are independent of treatment of solar, and are a measure of forecast performance absent the presence of distributed solar generation. To accomplish this, loads used in both the estimation and forecast period are loads reconstituted with PJM's hourly distributed solar generation estimates.



Forecast Parameter Summary

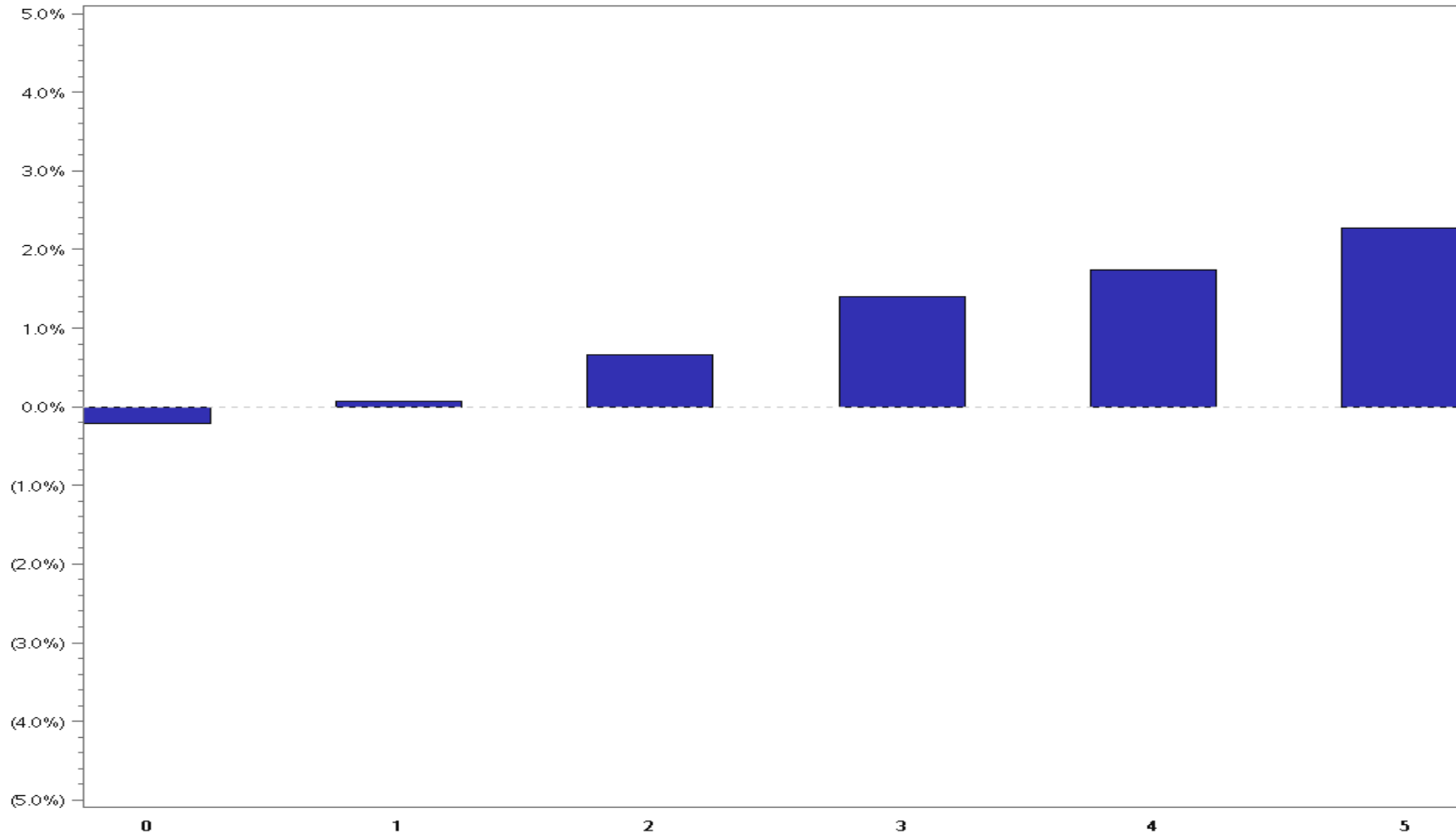
<i>Forecast Vintage</i>	<i>Estimation Through</i>	<i>Economics</i>	<i>Equipment Saturation/Efficiency</i>	<i>Forecast Adjustments</i>
2009	August 2008	September 2016	2016	2009
2010	August 2009	September 2016	2016	2010
2011	August 2010	September 2016	2016	2011
2012	August 2011	September 2016	2016	2012
2013	August 2012	September 2016	2016	2013
2014	August 2013	September 2016	2016	2014
2015	August 2014	September 2016	2016	2015
2016	August 2015	September 2016	2016	2016

	Forecast Years Out					
	Zero	One	Two	Three	Four	Five
2009 Forecast	2009	2010	2011	2012	2013	2014
2010 Forecast	2010	2011	2012	2013	2014	2015
2011 Forecast	2011	2012	2013	2014	2015	2016
2012 Forecast	2012	2013	2014	2015	2016	
2013 Forecast	2013	2014	2015	2016		
2014 Forecast	2014	2015	2016			
2015 Forecast	2015	2016				
2016 Forecast	2016					



Summer 10CP Model Error by Forecast Years Out

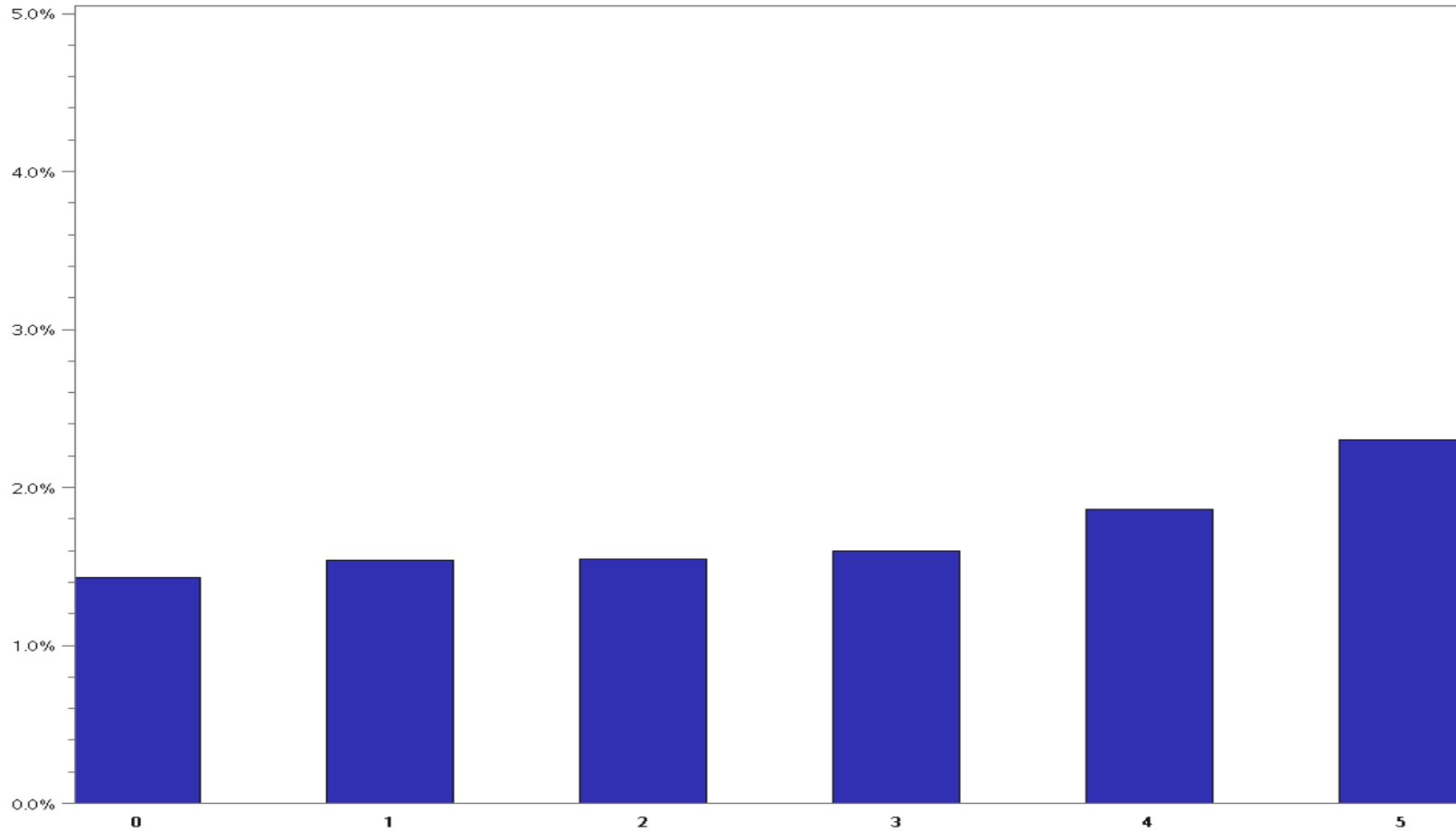
Mean Percent Error





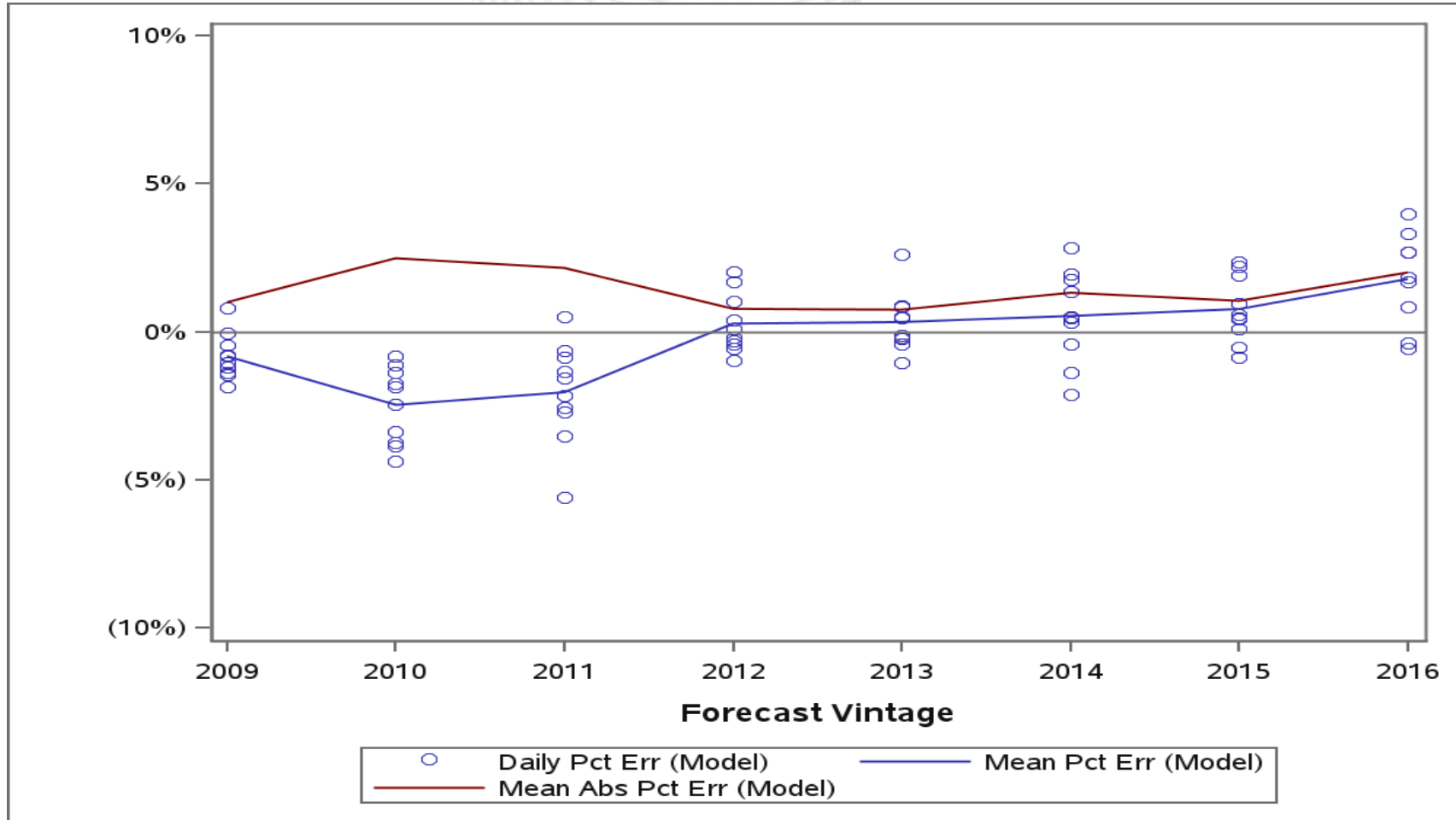
Summer 10CP Model Error by Forecast Years Out

Mean Absolute Percent Error



Summer 10CP Model Error by Forecast Vintage

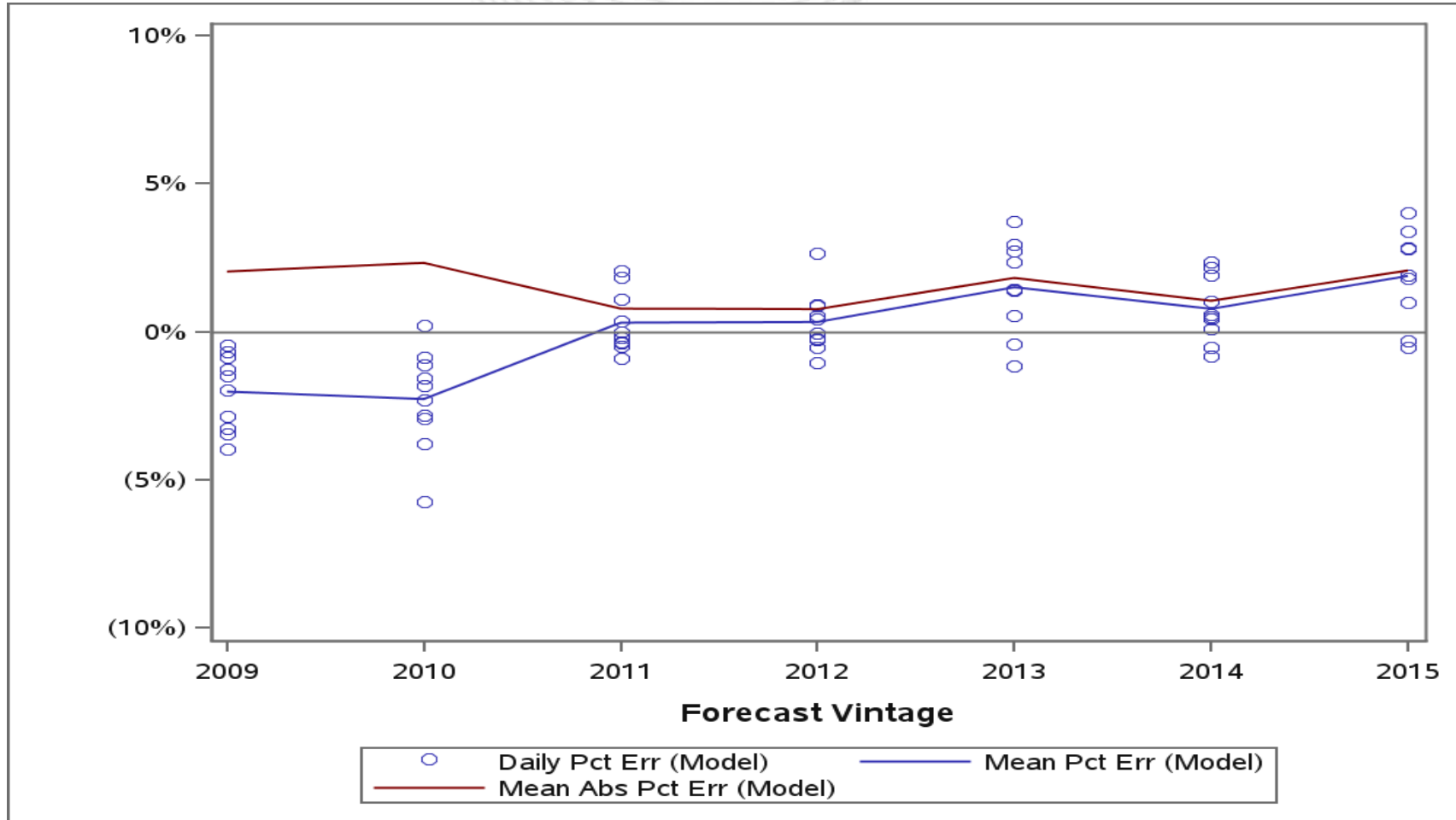
0 Year Out Forecast





Summer 10CP Model Error by Forecast Vintage

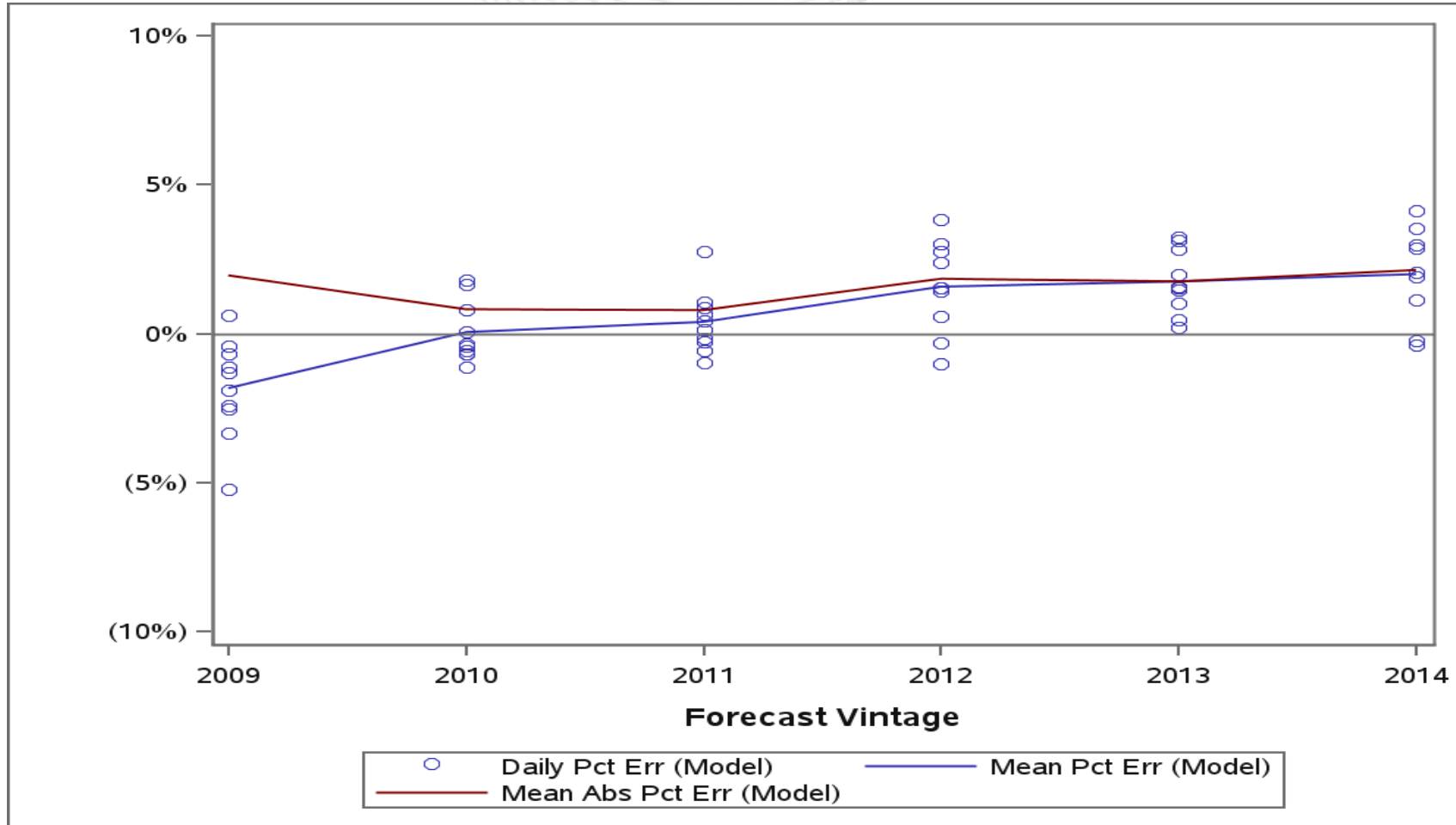
1 Year Out Forecast





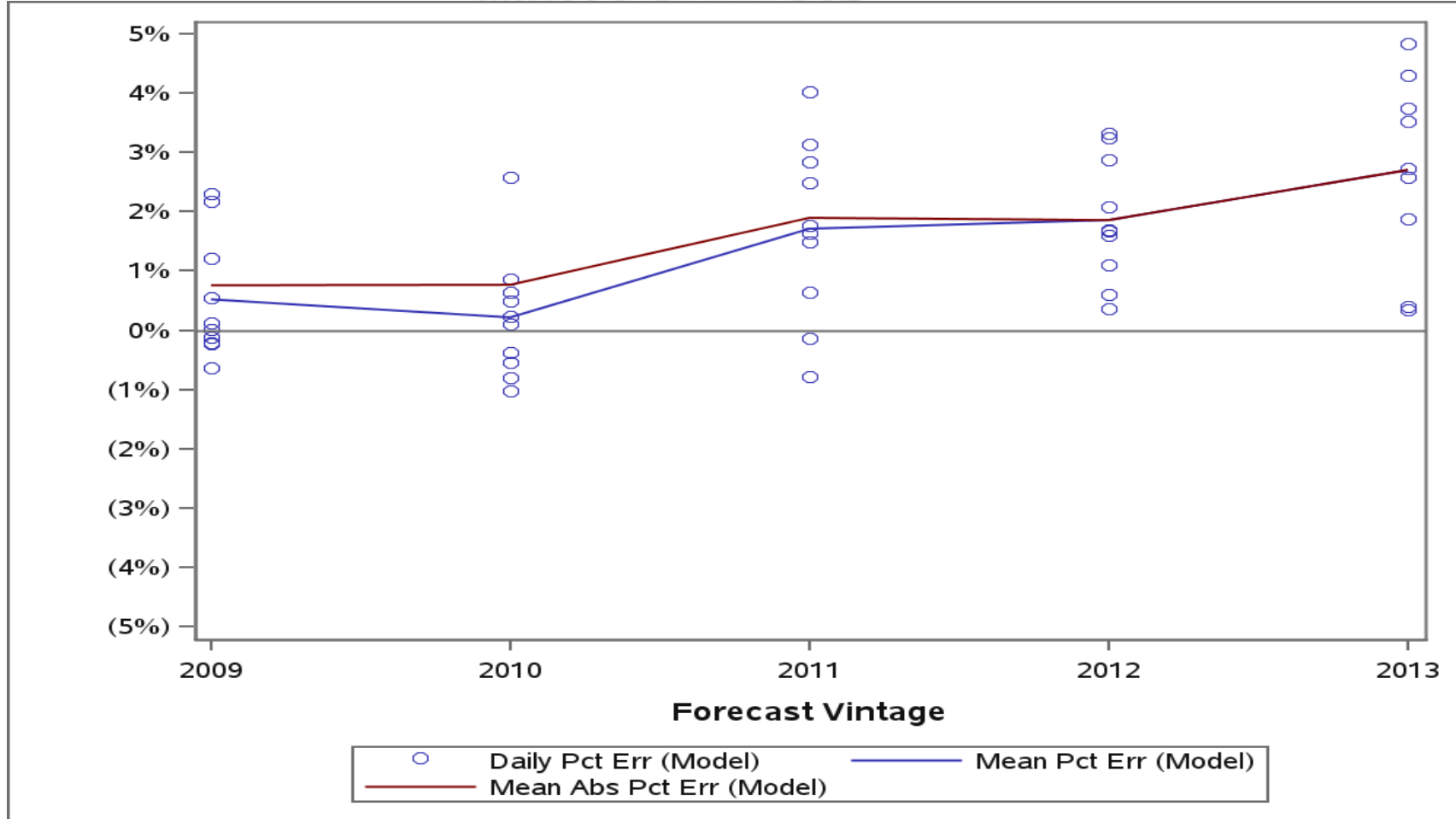
Summer 10CP Model Error by Forecast Vintage

2 Year Out Forecast



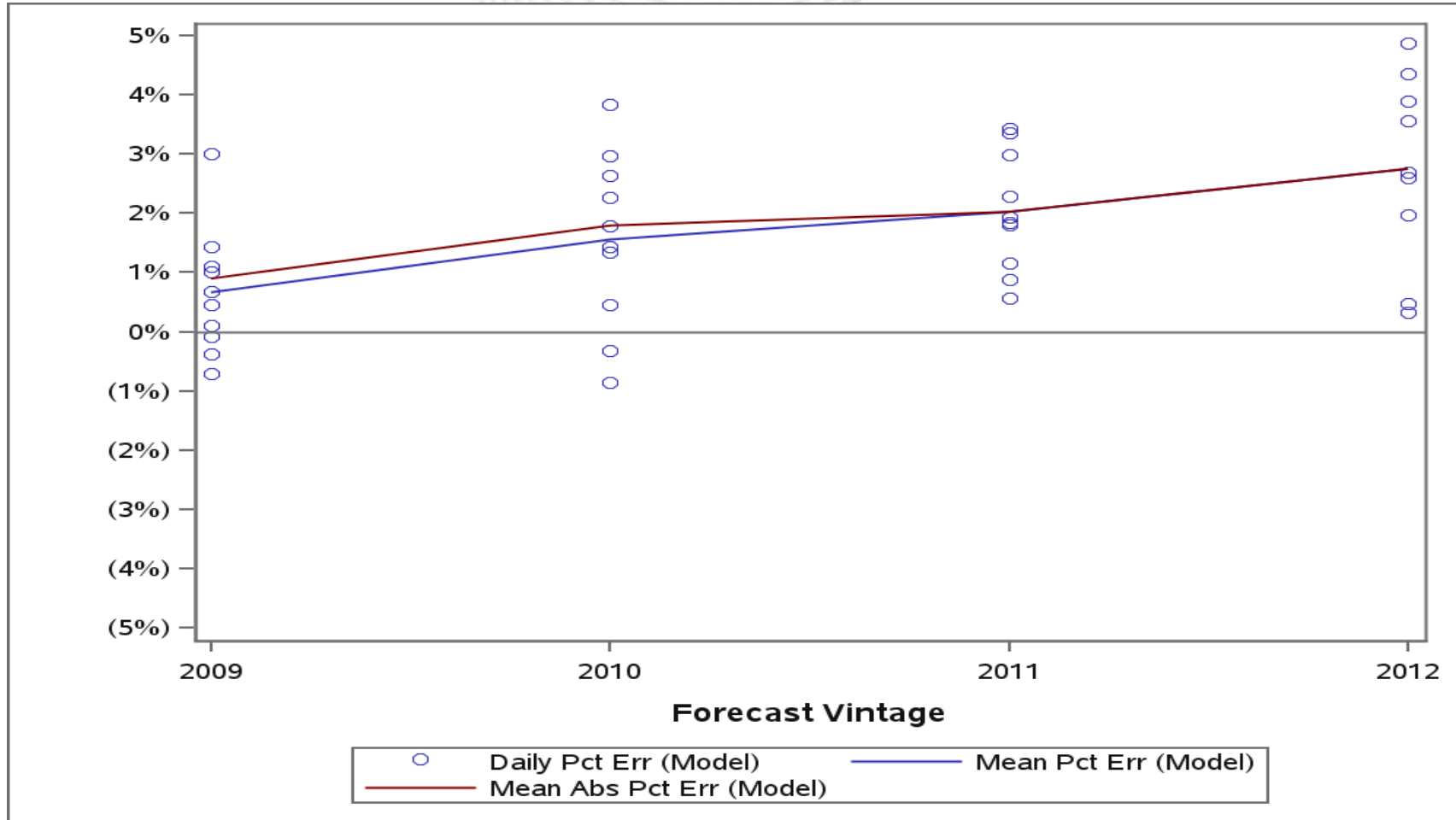
Summer 10CP Model Error by Forecast Vintage

3 Year Out Forecast



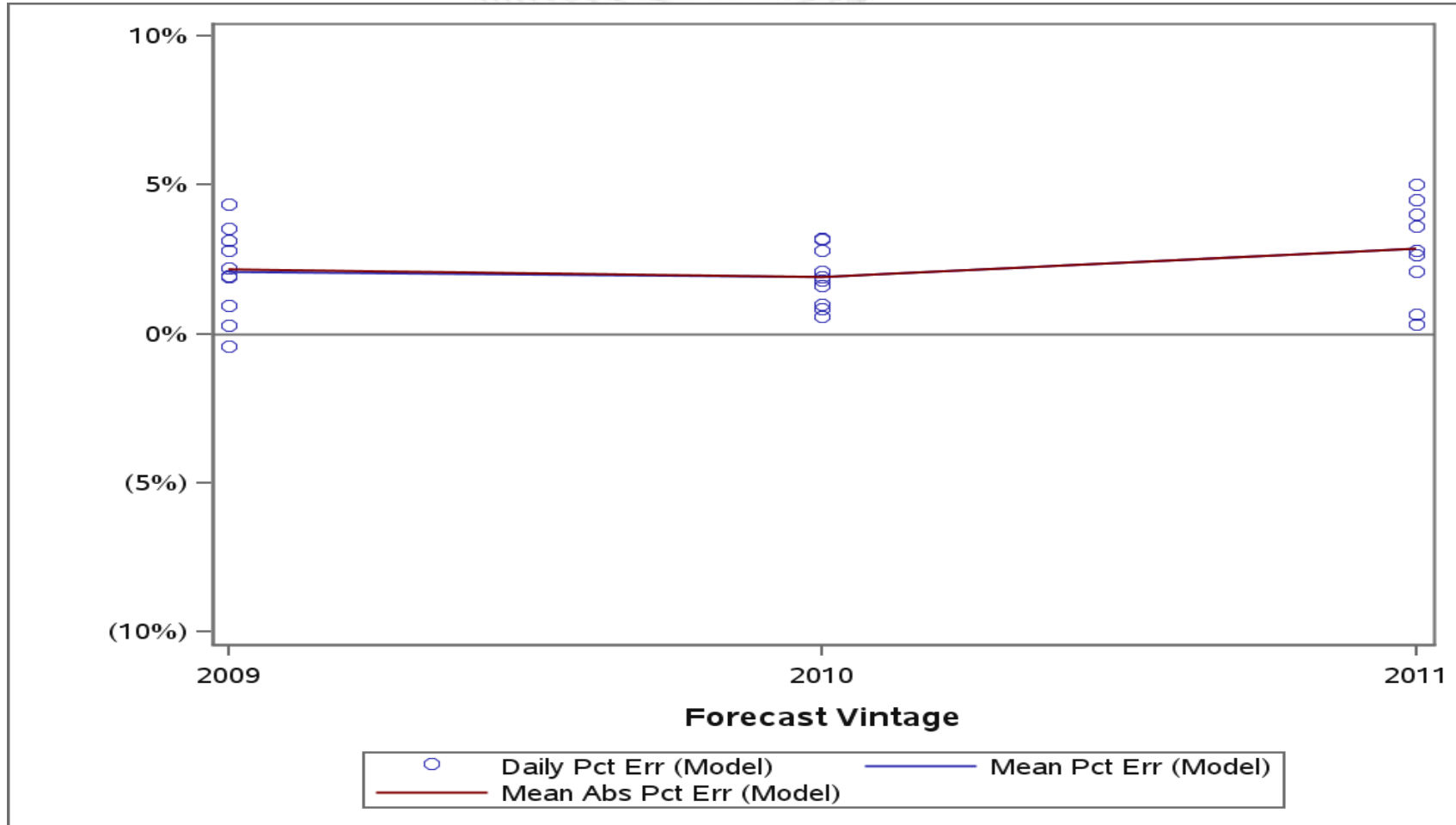
Summer 10CP Model Error by Forecast Vintage

4 Year Out Forecast



Summer 10CP Model Error by Forecast Vintage

5 Year Out Forecast

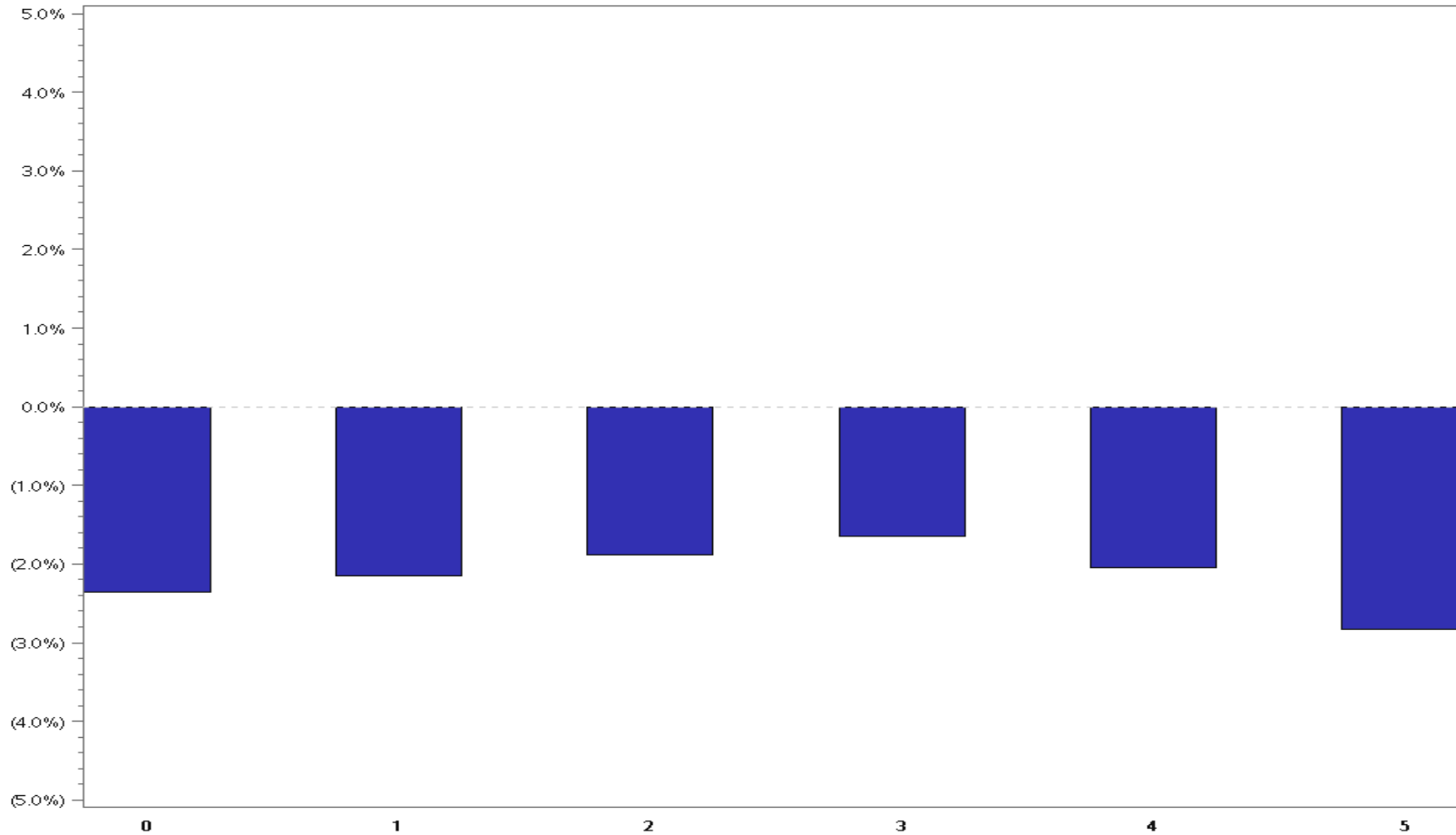


	Forecast Years Out					
	Zero	One	Two	Three	Four	Five
2009 Forecast	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013	2013/2014
2010 Forecast	2009/2010	2010/2011	2011/2012	2012/2013	2013/2014	2014/2015
2011 Forecast	2010/2011	2011/2012	2012/2013	2013/2014	2014/2015	2015/2016
2012 Forecast	2011/2012	2012/2013	2013/2014	2014/2015	2015/2016	
2013 Forecast	2012/2013	2013/2014	2014/2015	2015/2016		
2014 Forecast	2013/2014	2014/2015	2015/2016			
2015 Forecast	2014/2015	2015/2016				
2016 Forecast	2015/2016					



Winter 10CP Model Error by Forecast Years Out

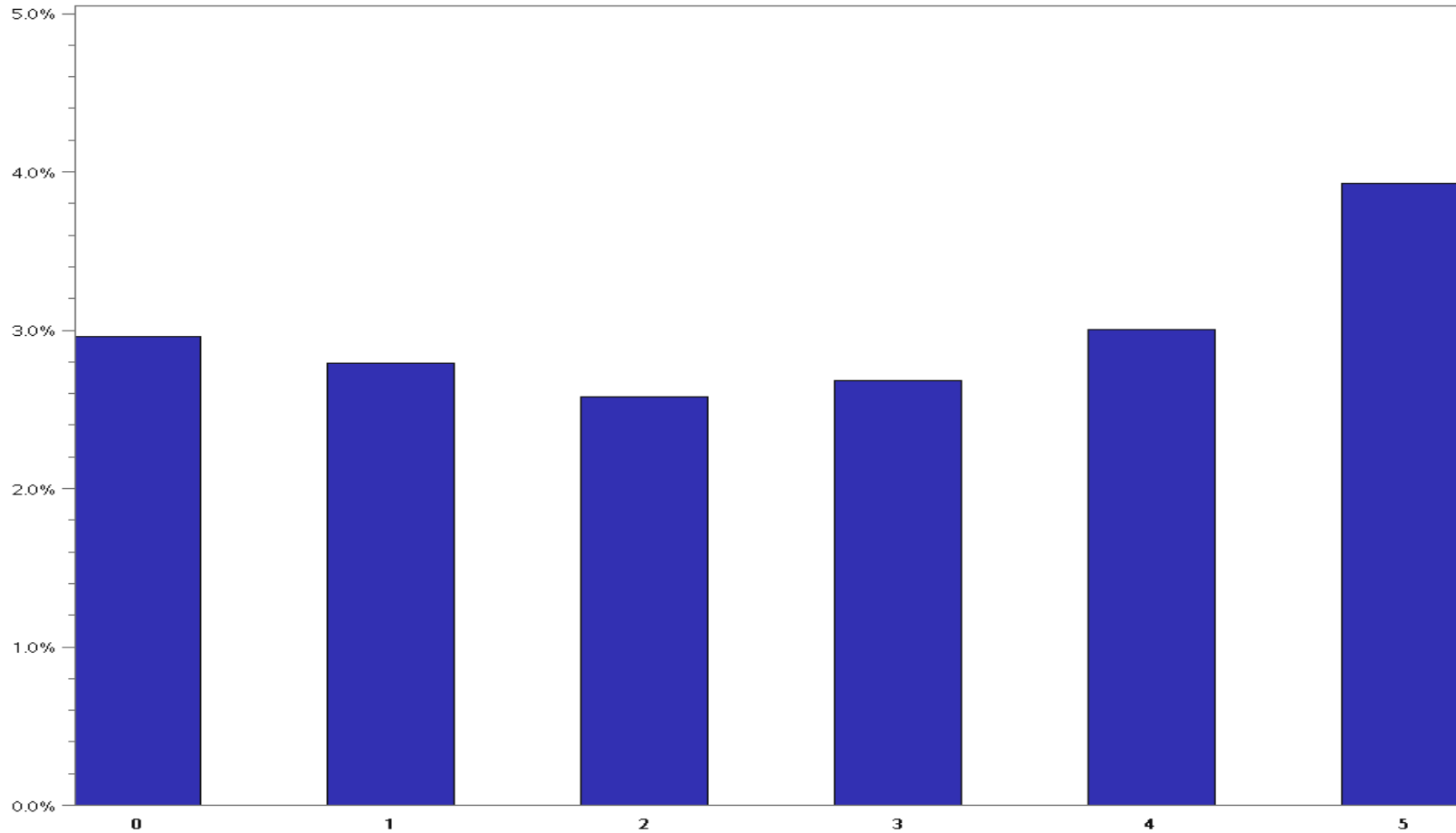
Mean Percent Error





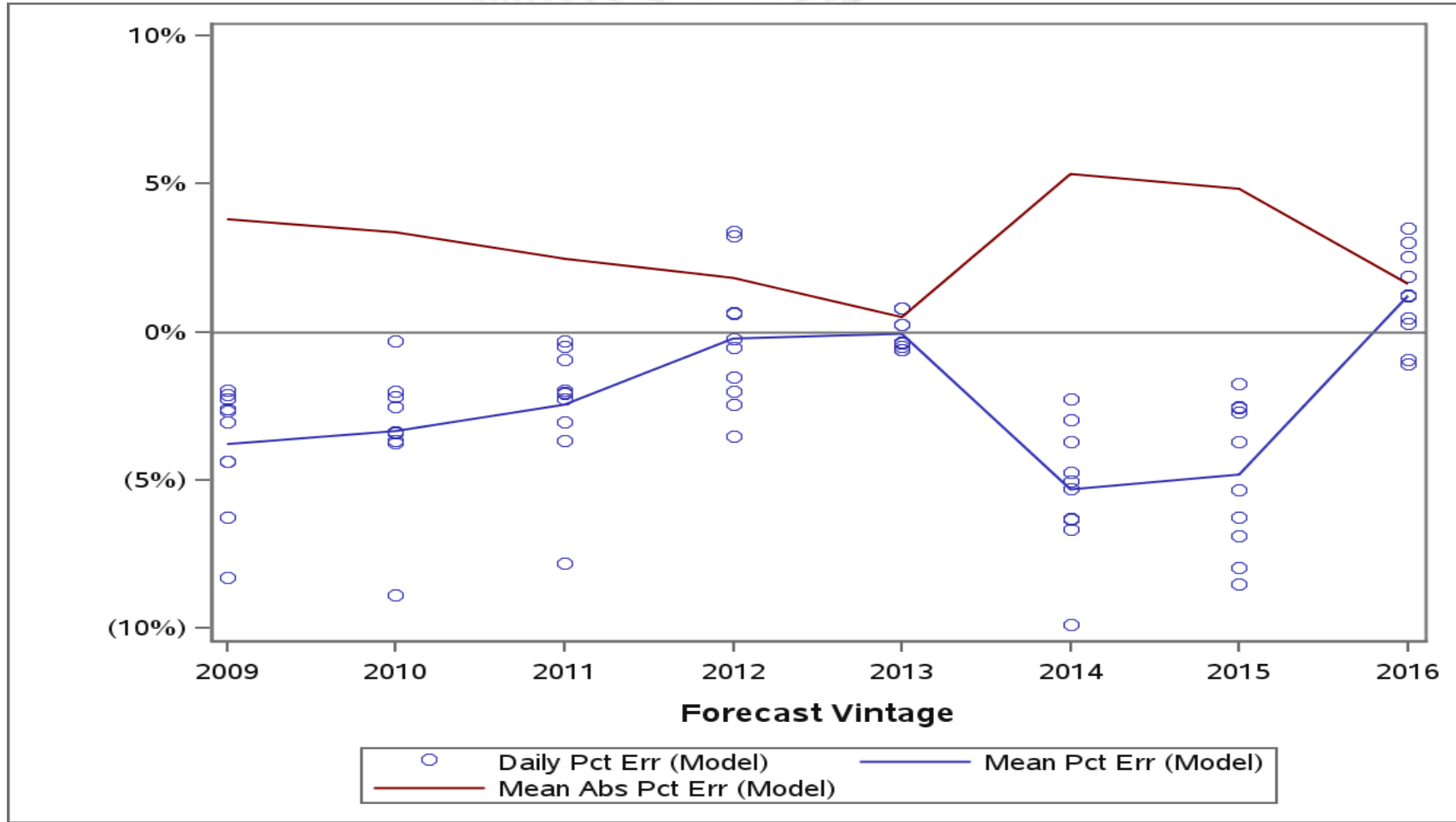
Winter 10CP Model Error by Forecast Years Out

Mean Absolute Percent Error



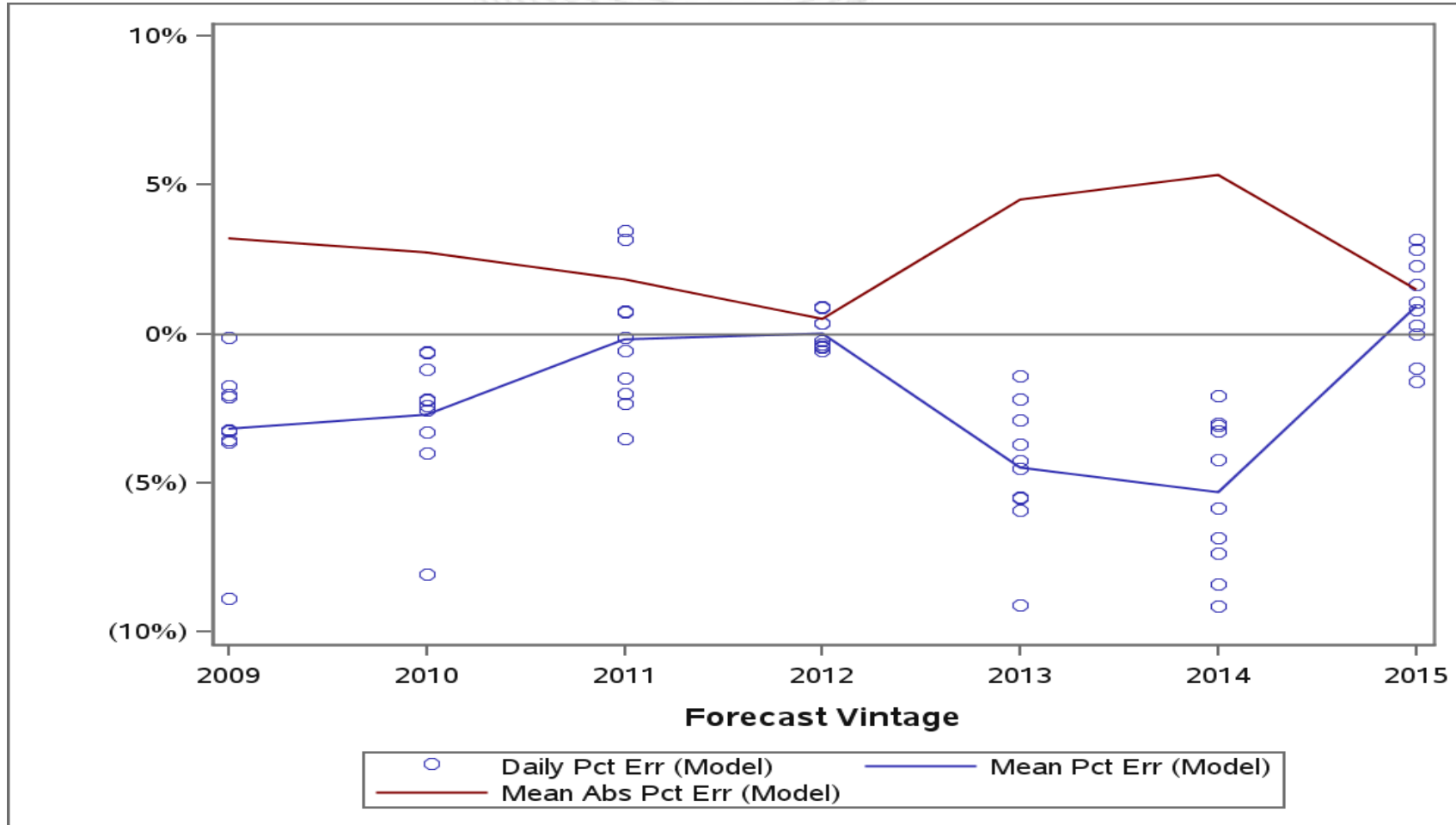
Winter 10CP Model Error by Forecast Vintage

0 Year Out Forecast



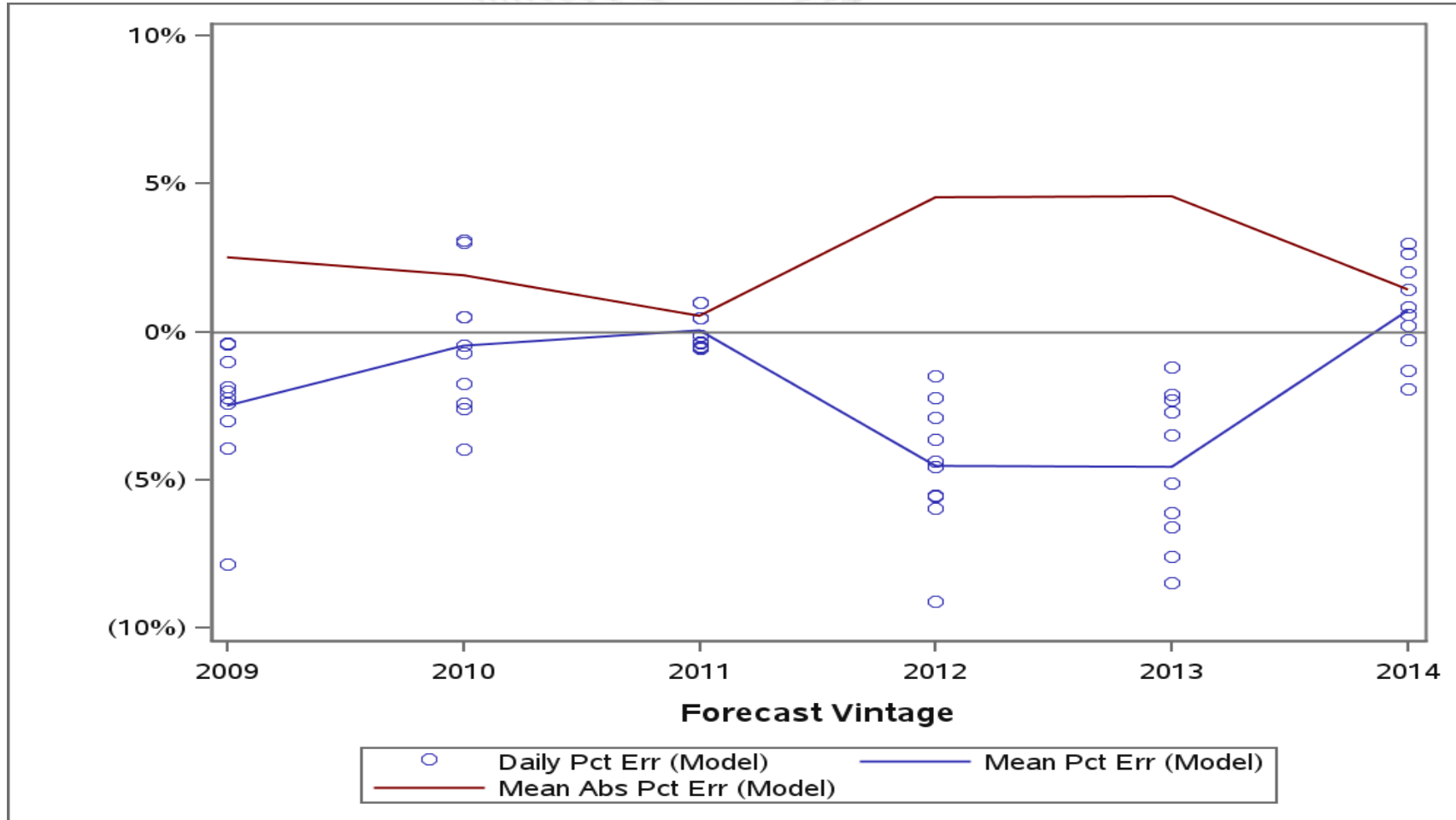
Winter 10CP Model Error by Forecast Vintage

1 Year Out Forecast



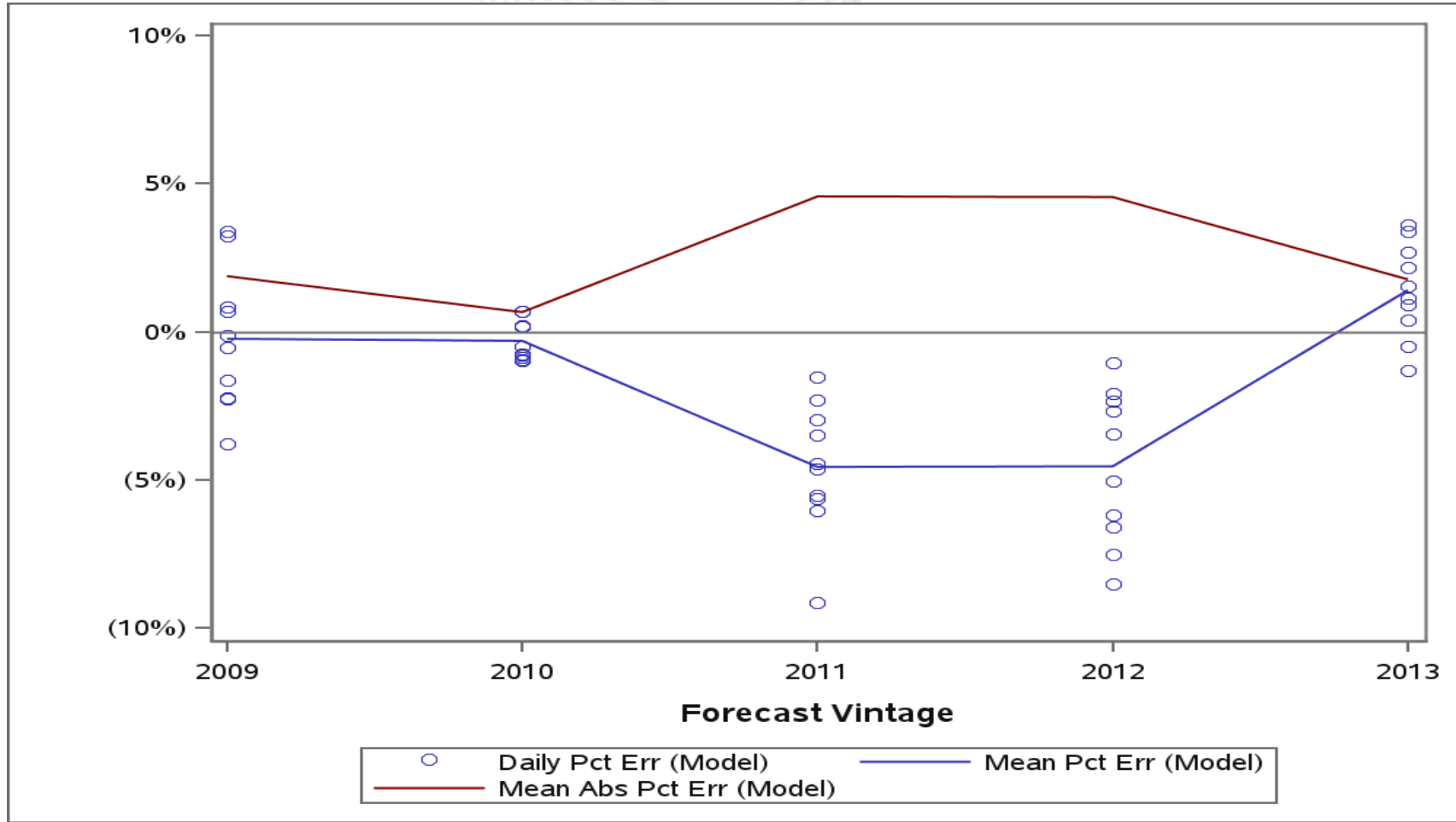
Winter 10CP Model Error by Forecast Vintage

2 Year Out Forecast



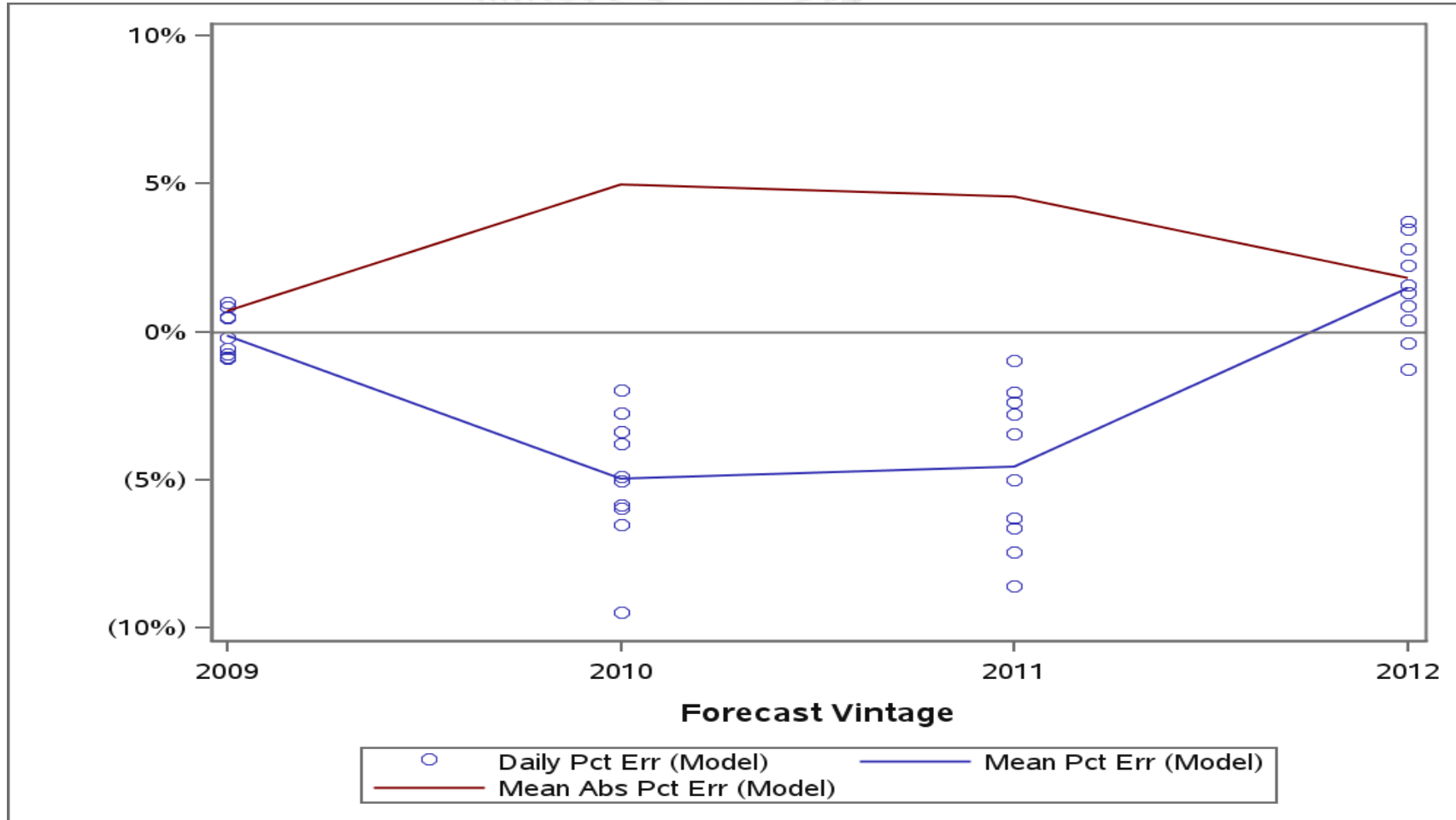
Winter 10CP Model Error by Forecast Vintage

3 Year Out Forecast



Winter 10CP Model Error by Forecast Vintage

4 Year Out Forecast



Winter 10CP Model Error by Forecast Vintage

5 Year Out Forecast

