Application of a new method to determine times of solar cycle extrema in prediction

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A weighted average method to determine the times of extrema in solar activity is proposed, and applied to the long-term prediction of sunspot numbers. The maxima are found to be correlated (r=-0.72) with cycle lengths three cycles earlier. With this relationship, the maxima are found to have a 14-cycle cyclic shift of about 18. The size of cycle 24 is estimated to be 131+-20.