

## 基于6S模型的FY-3A/MERSI可见光到近红外波段大气校正

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Atmospheric correction of visible-infrared band FY-3A/MERSI data based on 6S model.

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**摘要** 基于山西省太原市及其周边区域气象台站观测数据, 为6S模型提供所需的大气状态参数, 对晴空状况下FY-3A/MERSI可见光到近红外波段(250 m分辨率)数据进行大气校正. 结果表明: 大气校正后, MERSI可见光到近红外波段数据范围加宽、反射率数据普遍增大, 波峰高移, 各波段反射率的分布更趋平滑; 校正后, 反映植被状况的归一化植被指数的值域比校正前增大、峰值变高, 更接近实际情况; 校正后彩色合成图显现出更丰富的地物信息, 亮度增大, 层次变强, 对比度增强, 地物信息更接近实际.

**关键词:** MERSI 6S模型 大气校正 归一化植被指数

**Abstract:** Based on the observation data from the meteorological stations in Taiyuan City and its surrounding areas of Shanxi Province, the atmosphere parameters for 6S model were supplied, and the atmospheric correction of visible-infrared band (precision 250 meters) FY-3A/MERSI data was conducted. After atmospheric correction, the range of visible-infrared band FY-3A/MERSI data was widened, reflectivity increased, high peak was higher, and distribution histogram was smoother. In the meantime, the threshold value of NDVI data reflecting vegetation condition increased, and its high peak was higher, more close to the real data. Moreover, the color synthesis image of correction data showed more abundant information, its brightness increased, contrast enhanced, and the information reflected was more close to real.

**Key words:** MERSI 6S model atmospheric correction NDVI

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