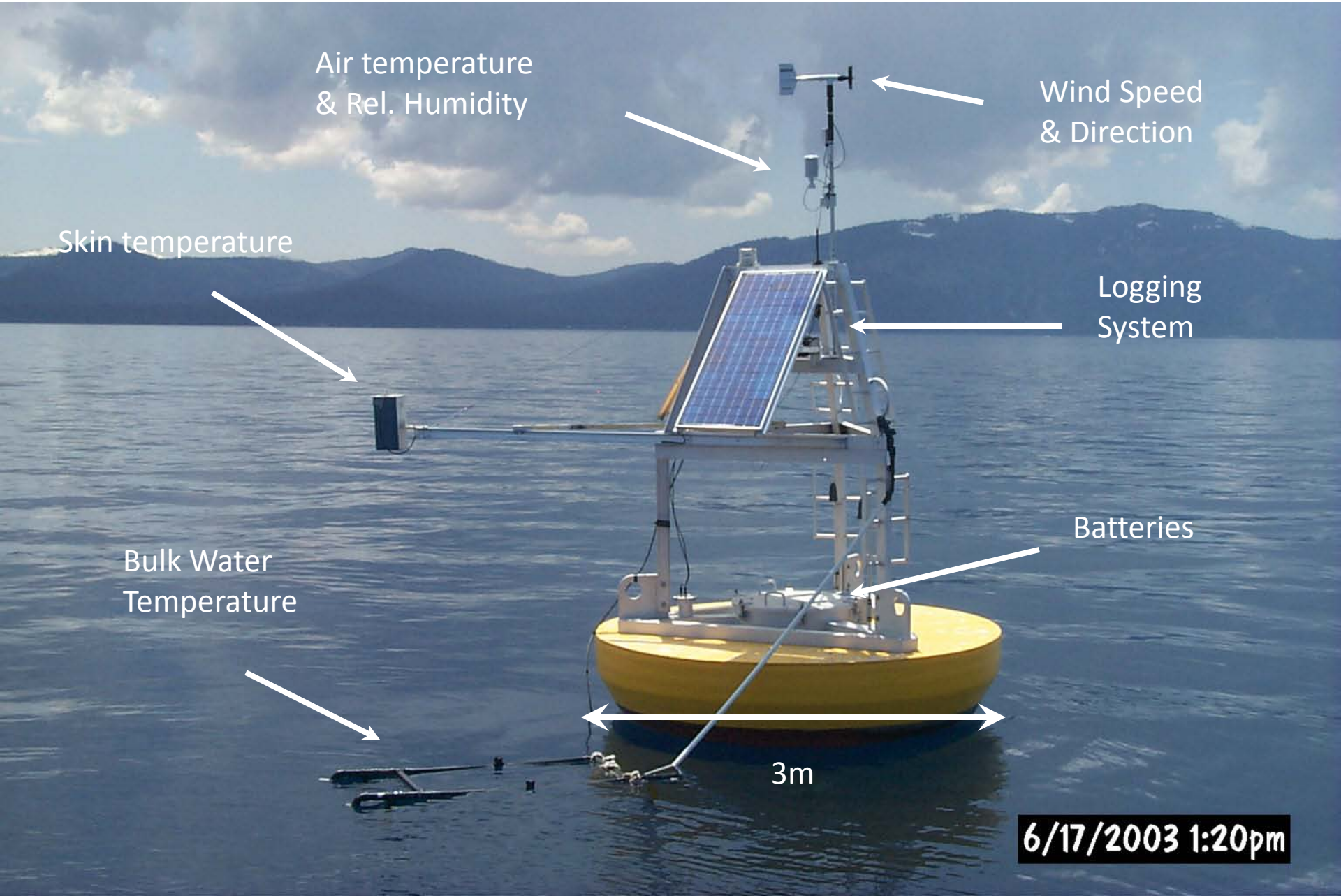
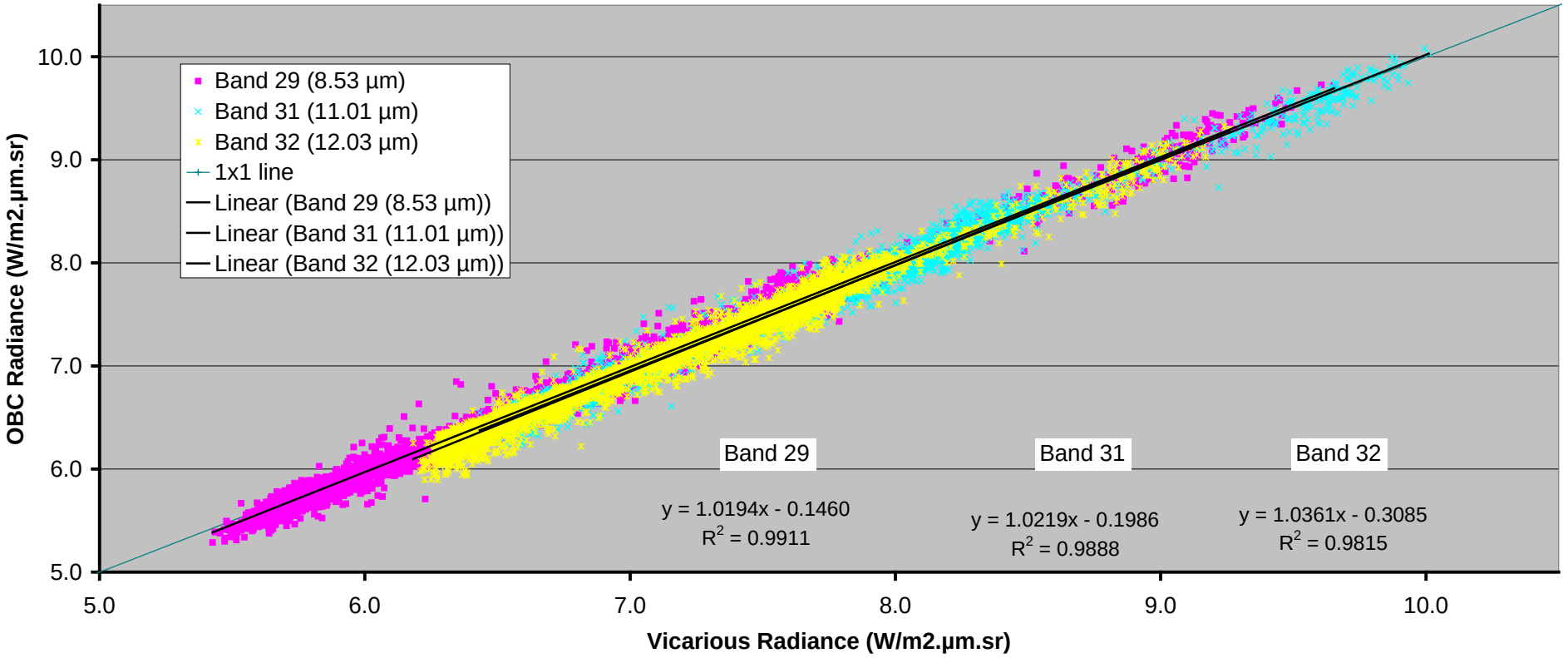
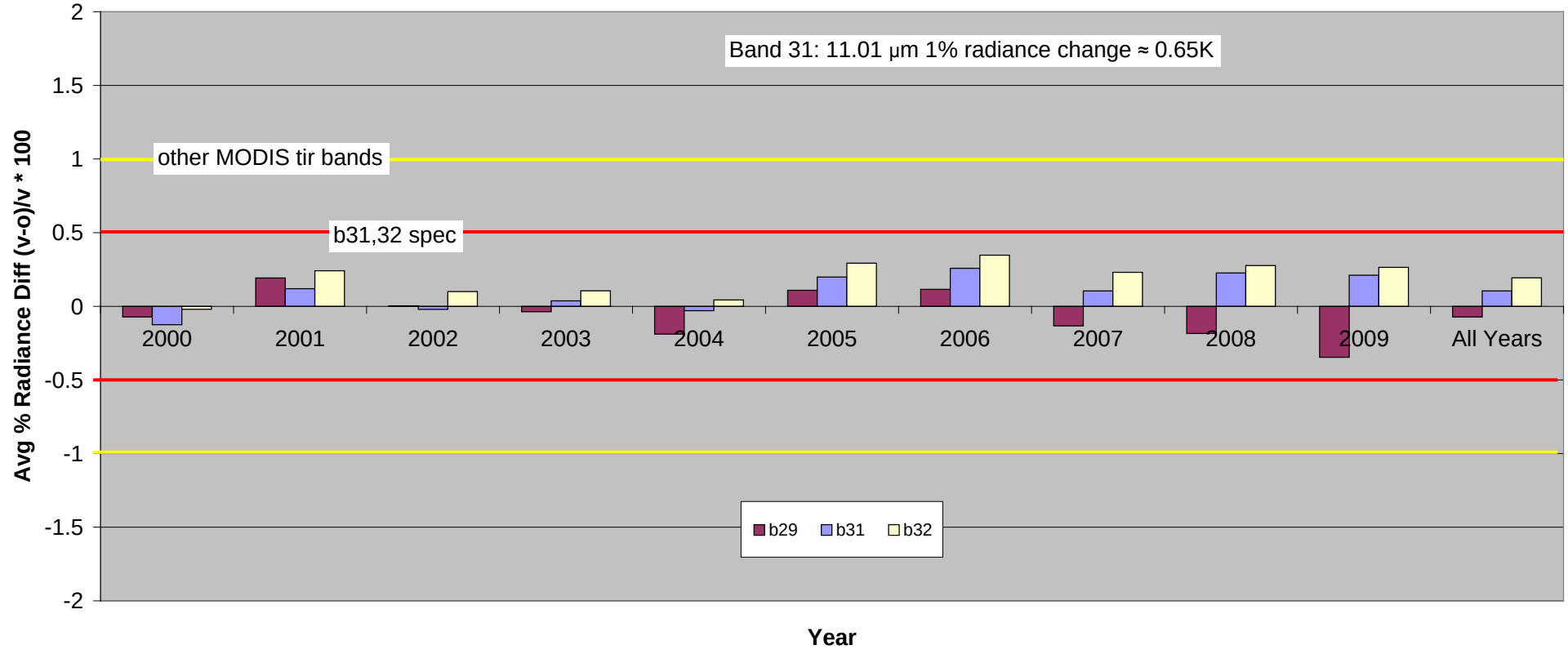

Air temperature
& Rel. Humidity
Wind Speed
& Direction
Skin temperature
Logging
System
Batteries
Bulk Water
Temperature
3m
6/17/2003 1:20pm

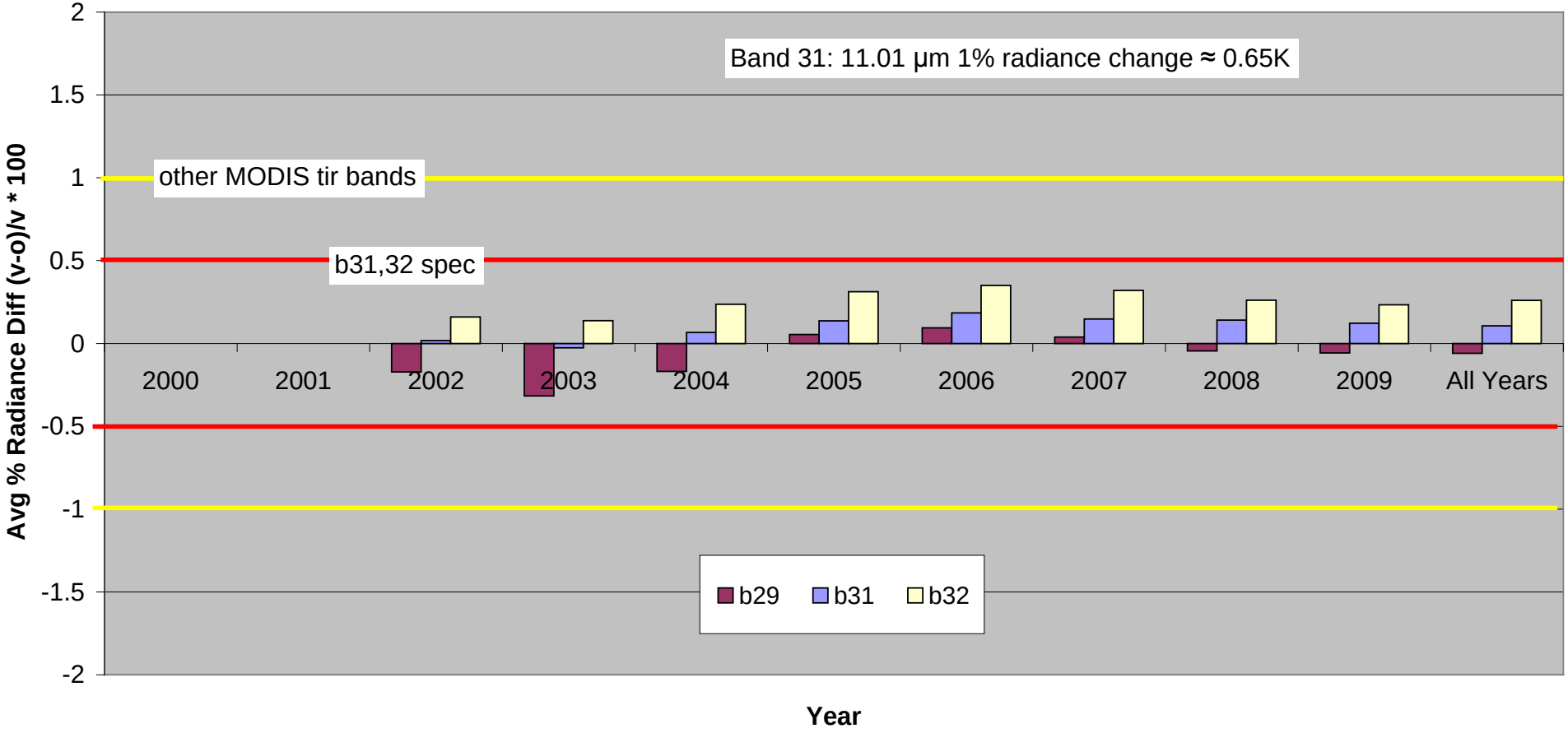
MODIS Terra Vicarious and OBC Thermal Infrared Derived Radiances at Lake Tahoe and Salton Sea CY2000-2009, v4-5.x



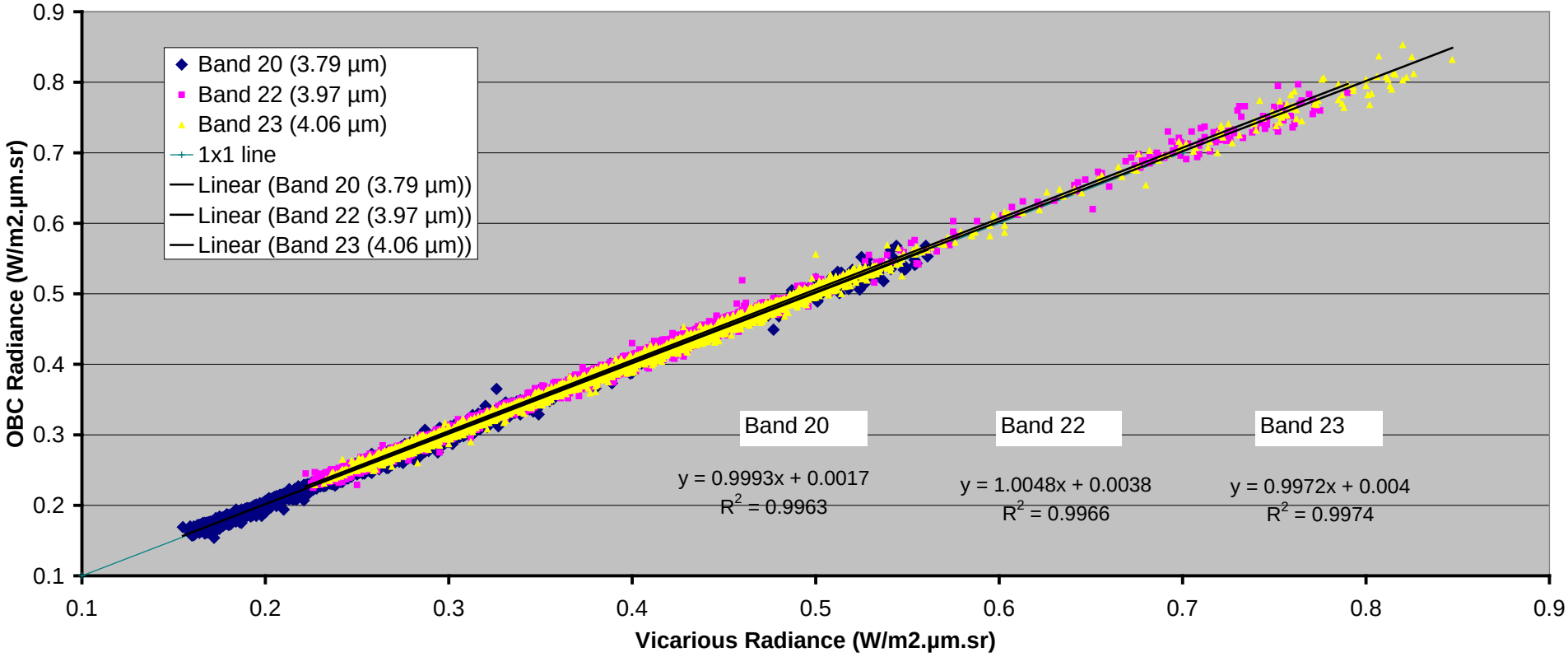
% Radiance Change in TIR Channels for MODIS Terra at Lake Tahoe and Salton Sea CY2000-2009, vz0-30 v4-5.x



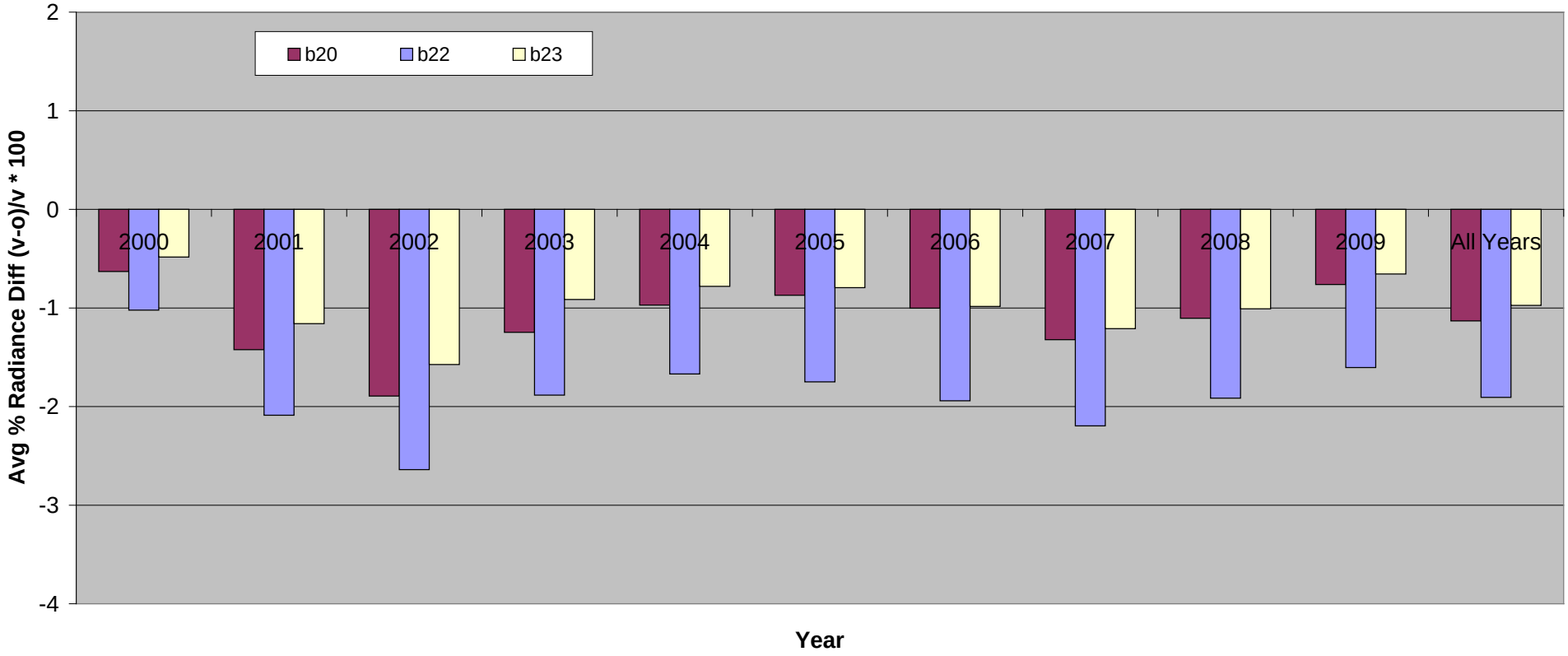
% Radiance Change in TIR Channels for MODIS Aqua at Lake Tahoe and Salton Sea CY2000-2009, vz0-30 v4-5.x



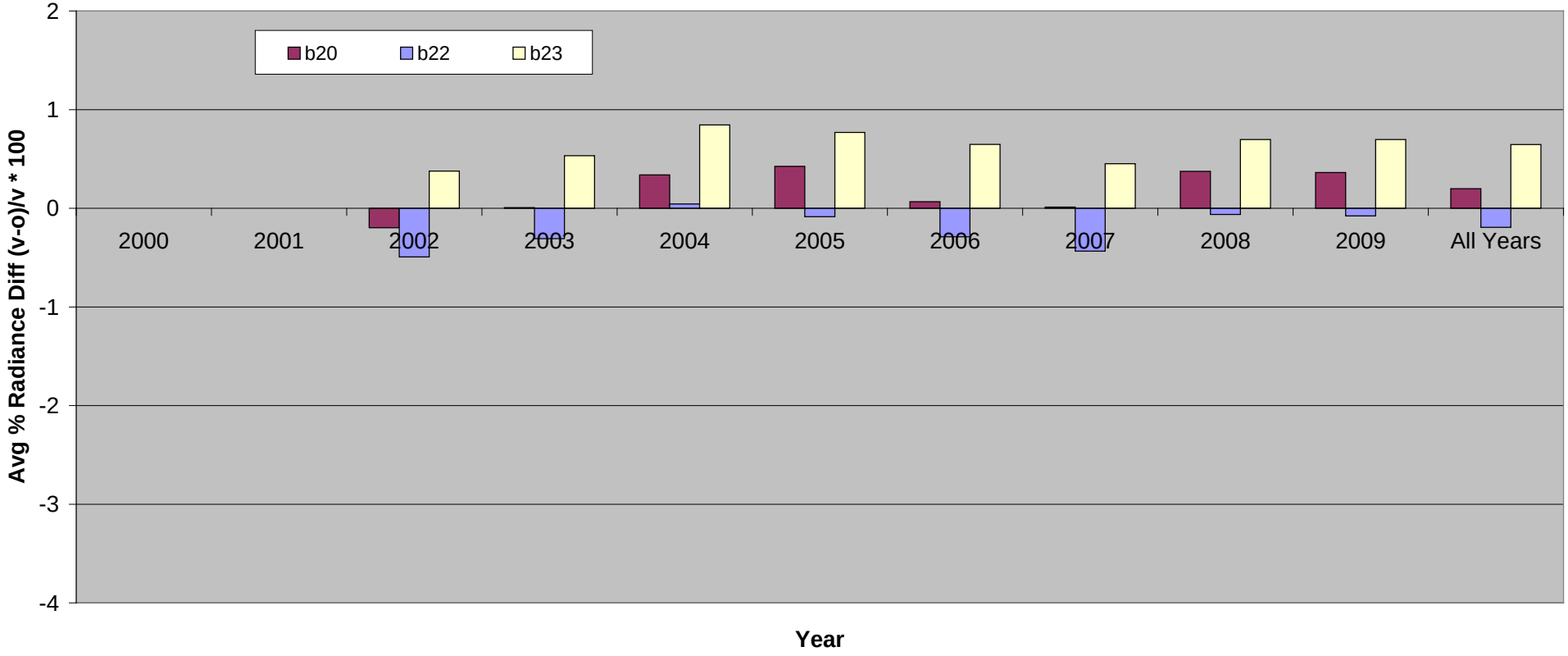
MODIS Terra Night Only Vicarious and OBC Mid Infrared Derived Radiances at Lake Tahoe and Salton Sea CY2000-2009, VZ0-30, v4-5.x



% Radiance Change in MIR Channels for MODIS Terra at Lake Tahoe and Salton Sea CY2000-2009, vz0-30, v4-5.x



% Radiance Change in MIR Channels for MODIS Aqua at Lake Tahoe and Salton Sea CY2000-2009, vz0-30, v4-5.x



Summary and Conclusions

- Established an automated site for validating thermal infrared data at Lake Tahoe CA/NV. Site has been operating since 1999.
- Measurements made at the site include skin- bulk- air-temperature, wind speed, wind direction and net radiation at multiple locations every 2 minutes. Multiple locations (4 buoys) allow validation of several points within a scene.
- Validated data from multiple instruments including, AATSR, ASTER, MODIS (Terra, Aqua), Landsat 5 and Landsat ETM+, MTI.
- Results so far indicate
  - MODIS-Terra at-sensor radiance: TIR, no bias, abs. acc. $\pm$ 0.2K
  - MODIS-Aqua at-sensor radiance: TIR, no bias, abs. acc. $\pm$ 0.2K
  - MODIS-Terra at-sensor radiance: MIR, small bias
  - MODIS-Aqua at-sensor radiance: MIR, no bias, abs. acc. $\pm$ 0.2K