Ionospheric Observatory, about 100 radio sources with $-1^\circ < \delta < 38^\circ$ have been observed within 45° of the sun. Most of these were observed at 195, 430, and 611 MHz. About 30 of these sources scintillate. The scintillation index can be normalized to a standard solar elongation, and this allows most of the sources to be ordered in strength of scintillation. This ordering would presumably also be an ordering in effective angular diameter, if all the sources had the same structure. The source 3C273 is used to illustrate some effects of structure on the scintillation phenomenon.

Abundances of Lithium and Beryllium in some F Dwarfs and K Giants. PETER S. CONTI AND I. J. DANZIGER, *California Institute of Technology*.—We have determined the Li and Be abundances in ten F dwarfs and two K giants. The analysis was made using equivalent widths and line strengths predicted from a grid of model atmospheres. Curve-of-growth effects were accounted for in an empirical fashion.

We find, for the F dwarfs, a large range in the Li overabundances, from a factor 100 to less than 10 times the solar value. The Be abundances are similar to the solar value but differ from it in several stars. The Li/Be ratio ranges from about 75 to near unity. It is doubtful that errors in the analysis could account for all this difference. Our Li/Be results, when combined with those for G dwarfs studied by Merchant (*Astrophys. J.* **143**, 336, 1966), suggests Li depletion occurs in main-sequence stars of type F and later. In addition to the above evidence, since some of these stars contain Li^6 , this depletion must be on a "long time scale" so that both Li^6 and Li^7 can be affected at the same rate. There is at present some uncertainty in the expected Li/Be production ratio by spallation.

Of the two K giants studied, α Boo has no detectable Li or Be, so the ratio is unknown. β Gem has much less Li than the sun but about the same Be abundance. This evolved star represents a clear case of depletion of Li but not of Be.

Daytime Observation of the Comet 1965f at the Sacramento Peak Observatory. G. WM. CURTIS AND SACRAMENTO PEAK OBSERVATORY STAFF, *Sacramento Peak Observatory*.—The comet 1965f was seen and observed from the Sacramento Peak Observatory during the daylight hours from 16:22 to 23:19 UT on 20 October 1965 and from 15:56 to 17:42 UT on 21 October 1965. During these periods a coordinated effort was made to utilize a maximum of the solar instruments on the comet. We present a list that includes all of the solar and comet observations. The former, mostly coronal, were made in an attempt to detect any influence of the comet on the corona; the latter to obtain informa-

tion on the comet itself. Coronal green line movies and coronal spectra in the region 4900–7000 Å with dispersions of 9.2 and 2.2 Å/mm were made. Spectra of the comet's head were also obtained in these same spectral regions and with identical dispersion.

The 16-in. coronagraph in combination with a small universal spectrograph (3600–8000 Å; 2.5 Å/mm) was used to obtain spectra of both the head and the tail of the comet. Polarization measurements on the head and tail of the comet were made by placing a polaroid in front of the spectrograph slit. Finally photoelectric scans (dispersion of 5 mm/Å) were taken in the sodium *D* lines region.

A first study of these spectra shows that strong lines such as the *D* lines are shifted to the red in emission and to the blue in absorption. The shifts indicate velocities of at least 100 km/sec. The most conspicuous emission lines besides the Na *D* lines and Ca II *H* and *K* lines are the Fe I lines arising from transitions to terms within one volt of the ground state. These and other results are presented and discussed.

Spectrophotometry of VZ Cancri. I. J. DANZIGER AND J. B. OKE, *California Institute of Technology*.—Spectrophotometric continuum scans and high-dispersion spectra have been obtained around several cycles of the short-period variable star VZ Cancri. The continuum scans when corrected for line blanketing give a minimum temperature very nearly comparable to analogous temperatures for longer-period cluster-type variables such as RR Lyrae and SU Draconis. The phases of temperature, light, velocity and gravity appear to be similar to those observed in other RR Lyrae variables. The gravity obtained from fitting the continuum to model atmosphere fluxes and combined with the ($P\rho^{\frac{1}{3}}=\text{const}$) relationship suggests that VZ Cancri has a significantly lower mass and luminosity than RR Lyrae. A differential curve-of-growth analysis relative to Procyon shows VZ Cancri to be slightly metal deficient but with an overabundance of lithium relative to the sun of +1.4 in the logarithm.

Observations of Jupiter at a Frequency of 610.5 MHz. JOHN R. DICKEL, *University of Illinois*.—A total of 37 measurements of Jupiter have been made at a frequency of 610.5 MHz with the 400-ft radio telescope at the Vermilion River Observatory of the University of Illinois. The results give a mean flux density for the planet of 5.2 ± 1.0 flux units [$10^{-26} \text{ W m}^{-2}(\text{Hz})^{-1}$] for a normalized distance to Jupiter of 4.04 a.u. The telescope receives left-hand circular polarization so that the radiation recorded will not include possible right-hand circularly polarized components which may be generated in the Jovian magnetosphere.