

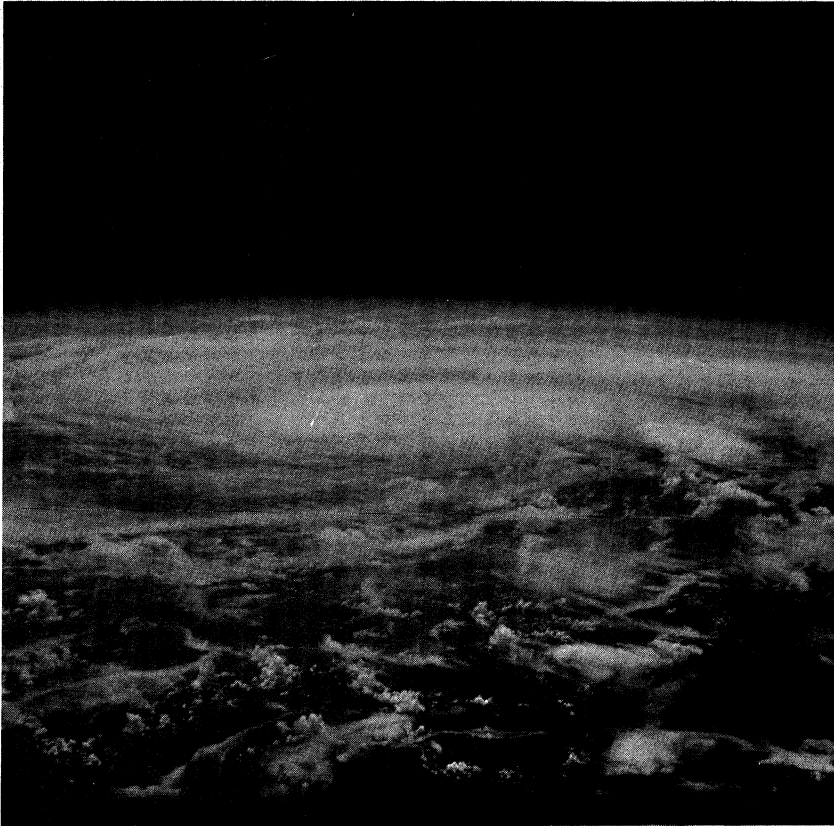


FIGURE 13

Going on from dim light phenomena to stars, we mentioned earlier that you cannot see stars on the ground the same way you can see them in space. For example, here is a photograph or spectrograph from the Earth's surface of a typical star, and, you see, you get to here and you don't get anything else. You have gotten what you call in atmospheric cutoff, simply because the ultraviolet light that is coming from the stars can't get through the atmosphere. These marks here indicate what are the constituents of the stars. This upper photograph was made from Gemini XI, and, as you can see, it is extended further out. With these lines, we find other constituents of the star that we have never been able to measure before, such as iron, magnesium, and other constituents (fig. 20). Not this particular star, but other stars we find have been somewhat wrongly classified, and, so, we have a powerful tool here to further study our stars.

That is a very quick rundown on some of the preliminary Gemini results. As I mentioned, our investigators in many parts of the country are analyzing these data and I suspect it will be another year before we fully reap all the benefits from our Gemini experiments.