

Brighter Outlook

Use of high-speed computers, both to process satellite images and analyse patterns of data, has made weather forecasts a great deal more accurate than they used to be

The results of many of the most complex data processing tasks are present in our everyday lives, often without us knowing about them. One of the most advanced computer applications, requiring greater data processing capacity than almost any other in the country, gives us daily information about our weather conditions and what we can expect from them. Given the complexity of weather forecasting, it is perhaps surprising that our forecasters come up with the right answers as often as they do. Computer aided prediction is an immense asset to them in dealing with the vast array of possibilities.

The climatographic factors that affect the weather patterns over the British Isles, and to a lesser extent the Atlantic seaboard of the European landmass, are extremely complex. Primarily, they are conditioned by our proximity to both the North Pole and the Atlantic Ocean. Being situated on the eastern side of the Atlantic,

we are more prone to the climatic effects created within its 2,500 mile width, because of the 'Coriolis effect'. This phenomenon is due to the earth's west-to-east spin. It is best understood if we remember that at the equator an object on the earth's surface is travelling at more than 1,600 kilometres per hour (1,000 mph); and this powerful spinning motion, combined with the normal pole-to-equator wind patterns, creates the prevailing westerlies (winds that originate in the west) in the Northern Hemisphere. It is this constant onslaught of wet air — rising and falling according to local variations in temperature — that causes the predominant weather conditions in Britain.

Weather forecasters in the United Kingdom rely primarily on observations from data collection stations spaced at strategic locations in the Atlantic — weather ships, buoys, balloons and patrolling aircraft — to provide them with information about approaching conditions. They

Pictures From Space

The Meteosat 2 weather satellite, launched in June 1981, is in a geostationary orbit (that is, it does not move in relation to the earth) some 35,880 Km (22,300 miles) above the equator, on the zero meridian. It gathers information from a large number of earth stations

